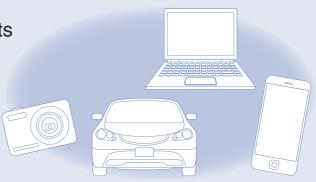
# Series Compatible with Secondary Batteries



Compatible with the various environments of each manufacturing process



Products compatible with the environments of the secondary battery manufacturing process are available, contributing to the improvement of productivity and reduced defects.



### Series Compatible with Secondary Batteries 25A- Series

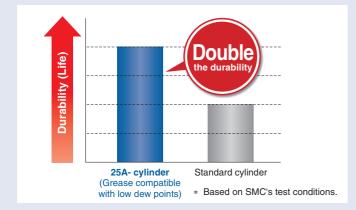


# Improved performance in environments with low dew points

Uses grease compatible with low dew points

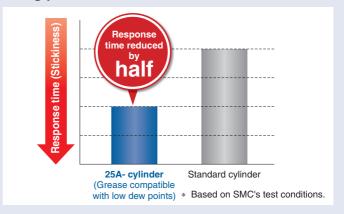
### **Double** the durability

**Durability comparison (Air cylinder)** 



### Response time reduced by half

Comparison of cylinder response times after being pressurized and stored



### **Material Restrictions**

The following materials are not used in order to reduce the number of defective products produced during the secondary battery manufacturing process:

- Metal materials whose main component is either copper or zinc are not used.
  - \* Some of the Aluminium alloy and Aluminium die-cast materials contain traces of copper or zinc as an additive element. If a product with restrictions on the amounts of these additive elements is required, we can accommodate your needs via a special product. Please contact your local sales representative for further details.
- Electrolytic nickel plating with a copper layer or zinc plating
  - \* Electroless nickel plating is used.
- Parts of the piston rod, clevis pin, split pin, etc., of the cylinder are made of carbon steel with hard chrome plating. Therefore, as the processed parts aren't coated, an anti-rust oil coating is applied to these parts before shipment.
  - \* Rust may be generated due to the operating environment. If the generation of rust is a problem, made-to-order options using stainless steel, etc., are available. Please contact your local sales representative for further details..
- The coils of solenoid valves, the circuit boards of electrical equipment, the motors of electric actuators, etc., use copper materials.
  - \* Parts whose materials cannot be easily changed to alternative ones and parts whose functions would be compromised by changing to alternative materials use copper and/or zinc materials. Please contact your local sales representative for further details.



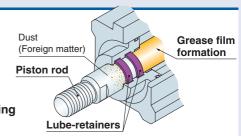
### **Dustproof Products**

Durability is 4 times stronger than the standard model in micro-powder (10 to 100 μm) environments.

(The durability test was conducted in accordance with SMC test conditions.)

Cylinder with Stable Lubrication Function (Lube-retainer)

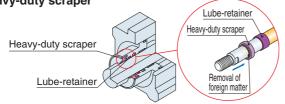
- Double Lube-retainer
- Lube-retainers are mounted at two locations to form a grease film, preventing the entry of dust and foreign matter.
- \* Not compatible with the secondary battery specifications



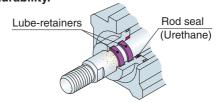
### Applicable Cylinders Air Cylinder RoHS Air Cylinder Air Cylinder **Compact Cylinder** RoHS CM2 Series CG1 Series CA2 Series CQS Series Ø 20 to Ø 40 Ø 20 to Ø 100 Ø 40 to Ø 100 Ø 20 to Ø 25 Air Slide Table **Compact Guide Cylinder Dual Rod Cylinde** Compact Cylinder RoHS RoHS CQ2 Series MXQ A Series MGP Series CXS Series Ø 32 to Ø 100 Ø 6 to Ø 25 Ø 20 to Ø 100 Ø 6 to Ø 32

### Special Products (Please contact your local sales representative for more details.)

- Lube-retainer + Heavy-duty scraper
- Improved dust prevention due to the lube-retainer and heavy-duty scraper



- Double Lube-retainer + Urethane seal
- Material of rod seal has been changed to urethane to improve durability.



### **Explosion-proof Products**

■ Explosion-proof Solenoid Valves

### For Europe (CE marking, ATEX directive)

- Intrinsically Safe Explosion-proof System
- · 5-Port Solenoid Valve/52-SY5000/7000/9000

| Il 2G Ex ia IIC T4...T5 Gb Ta-10 °C to +50 °C | Il 2G Ex ia IIC T6 | Gb Ta-10 °C to +45 °C | Certification no.: DEKRA 11ATEX0273 X |

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
- · 50-VFE/VPE-X60 Series



### For Korea (KOSHA certification)

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
- · 50-VFE/VPE-X100 Series

Ex d IIB T4

### For North America (UL 913/CSA C22.2 No. 157)

- Intrinsically Safe Explosion-proof
- · Pilot Operated 5-Port Solenoid Valve: 53-SY5000/7000/9000 Series

Electrical Entry TT
Hazardous Location
Class I, II, III
Division 1
Groups A, B, C, D, E, F, G

Electrical Entry L and LL
Hazardous Location
Class I
Division 1
Groups A, B, C, D
Groups A, B, C, D

\* Not compatible with the secondary battery specifications



### Restrictions

### Material

### Copper (Cu) Zinc (Zn)

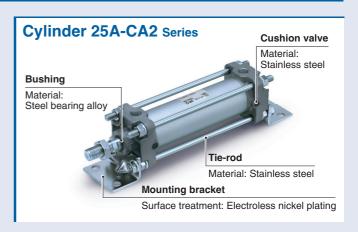
### Surface treatment

- Electrolytic nickel plating with a copper layer
- Zinc plating

(Electroless nickel plating is used.)



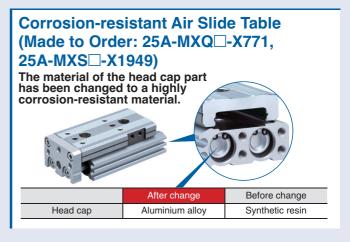
- \* Coils for solenoid valves, connector pins, and lead wires are made of copper.
- \* Manifold terminal block, wiring parts, connector metal parts, and printed circuit board are made of copper.















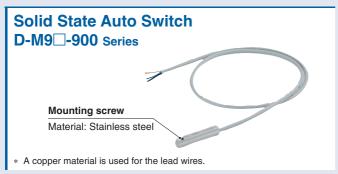
\* Cylinder mounting brackets made of steel are either electroless nickel plated, treated with RAYDENT®, or coated with electrodeposition paint.













- \* The motor magnet contains copper and/or zinc.

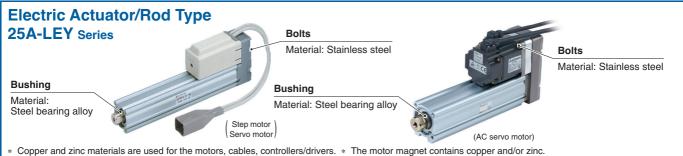








- \* Copper and zinc materials are used for the motors, cables, controllers/drivers.
- \* The motor magnet contains copper and/or zinc.





### **Secondary Battery Manufacturing Process**

### **Electrode Production Process**

# Same for both can types and laminate types

### **1** Mixing and kneading machine

The proper amount of raw materials for positive or negative electrodes are mixed to make electrode slurry.

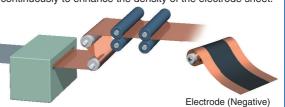




### 2 Coating and rolling

Positive or negative electrode slurry is coated with a metallic foil made from Aluminium, copper, etc.

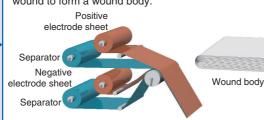
The coated slurry is then compressed with rollers continuously to enhance the density of the electrode sheet.



### **Cell Assembly Process**

### 4 Winder (Winding)

The positive electrode sheet, negative electrode sheet, and separator sheets are laid on top of each other and wound to form a wound body.



### 5 Attaching tabs and an insulating plate and inserting into a case

Current collecting tabs and an insulating plate are bonded to the wound body.

It is then inserted into a case.







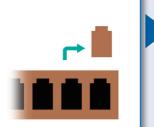
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### 4 Punching electrodes

The rolled positive and negative electrodes are punched according to the battery size.

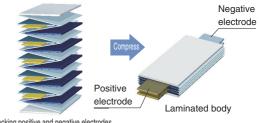






### 5 Stacking (Layering)

Positive and negative electrodes are stacked alternately and accurately at high speed with a separator inserted between them.



Stacking positive and negative electrodes

### **Inspection/Packaging Process**

### 8 Charging/discharging and aging

Standard products are applicable.

Charging and discharging are repeated to activate batteries. Charged battery cells are then left for a certain period of time, and the initial deterioration of batteries is checked to detect defective products.

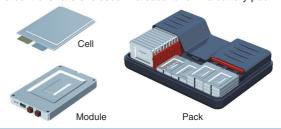


### 9 Packaging

are applicable.

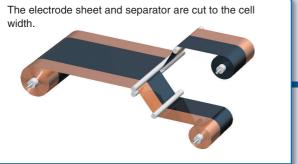
Connected multiple cells are enclosed in a metallic case, and terminals are attached to form a module.

Then, the connected multiple modules with a sensor and a controller are enclosed in a case to form a battery pack.



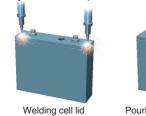
Laminate type

# Slitting



### 6 Welding cell lid and pouring electrolytic solution

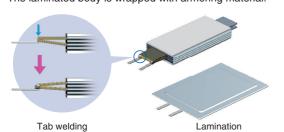
The electrode and lid are laser-welded, and then the entire periphery of the cell case and lid is welded. Electrolytic solution is poured into the cell,





**6** Tab welding and lamination

Current collecting tabs are welded to the laminated body. The laminated body is wrapped with armoring material.



### 7 Pre-charging and welding infusion plug

Pre-charging (formation charging) is performed to remove the gas generated in the initial charging process, and then the infusion plug is welded to seal the cell.



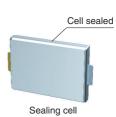


Welding infusion plug

### 7 Pre-charging and sealing cell

Pre-charging (formation charging) is performed to remove the gas generated in the initial charging process, and then heat is applied to seal the cell.













## 25A- Series Applicable Products

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	· O More	25A-VQ2000, 4000 (W)	69
	•	25A-SQ2000	83
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<u> </u>	3-Port Solenoid Valve	25A-VP342, 542, 742 (Body ported)	92
ntre	Solelloid valve	25A-VP344, 544, 744 (Base mounted)	93
ပိ		25A-VP500, 700 (Safety Standard ISO 13849-1)	94
ona		25A-VT317	95
ctic		25A-VG342	96
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	419)	25A-CJ2 (Standard, Air cushion): The air cushion type has been added.	105
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ers		25A-CBJ2 (With end lock)	107
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C		25A-CG1 (Standard)	109
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pac		25A-CQ2 (Long stroke)	124
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0	<b>9</b>	25A-CBQ2 (With end lock)	126
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.ii		25A-MY2C (Cam follower guide)	131
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d G		25A-MY3A (Basic short type, Rubber bumper)	133
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m m	Simple Joint for CQ2	YA (Type A mounting bracket)	*1
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ota :uai		25A-MSQA, MSQB (Rack & Pinion type)	161
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*1 Stan	dard products: Standard products are copper (Cu) and zing		

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Vacuum Equipment	and the second	ZH□□DA (Body ported) (Only the models without connection threads)	*1
Щ		ZH□□BA (Box type) (Only the models without connection threads)	*1
un	In-line Type Vacuum Ejector	ZU□□A (In-line type) (Only the models without connection threads)	*1
acn	In-line Air Filter	ZFC (With One-touch fittings)	*1
Š	Vacuum Pad	ZP (Pad only)	*1
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an Ite			_
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ula		25A-AW-D (Filter regulator)	203
	To the second se	25A-AW□K-D (Filter regulator with backflow function)	203
Mc Pressure	0	25A-AWM-D (Mist separator regulator)	205
es:		25A-AWD-D (Micro mist separator regulator)	205
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<sup>\*1</sup> Standard products: For the standard model, copper (Cu) and zinc (Zn) are not used as main components in the metal materials. Refer to the **Web Catalogue** for details. \*2 Available as simple specials. Please contact your local sales representative for more details.



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:R.L./ I Equipment	Booster Regulator	25A-VBA*4	208
Modular F.R.L./ Pressure Control Equipmen	Pressure Gauge	G43-10-01-X300 (Stud, Bourdon tube, Internal parts: Stainless steel) G46-SRB (Only external parts and wetted parts are made of	*2
Pres	( Coar	stainless steel.)	*3
	Stainless Steel Speed Controller	AS-FG (Elbow/Universal/In-line type)	*1
	Speed Controller with Indicator	AS-FSG (Elbow type)	*1
<u>0</u>	0.5	AS-FPG (Elbow type)	*1
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uipm	One-touch Fittings	KQ2 (One-touch fittings) (Only the type without a connection thread)	*1
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tro	Stainless Steel Fittings	KG (One-touch fittings)	*1
Con	Stainless Steel Fittings	KPG (One-touch fittings)	*1
) MC	& Table	KQG2 (One-touch fittings)	*1
Ĕ		KQ2-G (Stainless steel)	*1
		KFG2 (Insert fittings)	*1
	50 F	MS (Miniature fittings)	*1
		KKA (S Couplers stainless steel type)	*1
	Tubing	T (Nylon)	*1
		TS (Soft nylon)	*1
		TU (Polyurethane)	*1
<u> </u>		TA□ (Antistatic)	*1
Tubing		TL (Fluoropolymer)	*1
F		TH (FEP)	*1
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±1 Stand	dard products: For the standard model, copper (Cu) and zinc (Zn) are	not used as main components in the metal materials. Refer to the <b>Web Catalogue</b> f	or details

- \*1 Standard products: For the standard model, copper (Cu) and zinc (Zn) are not used as main components in the metal materials. Refer to the Web Catalogue for details.
  \*2 Copper (Cu) and zinc (Zn) are not used as main components in the metal materials. Please contact your local sales representative for more details.
  \*3 Standard products: Aside from the external parts and wetted parts, copper (Cu) and zinc (Zn) are used as main components in the metal materials. Refer to the Web Catalogue for details.
  \*4 Pressure gauge mounting: The G43-10-01-X300/G46-SRB pressure gauge cannot be mounted directly to the booster regulator as it will interfere with the booster regulator (25A-VBA10A) handle or the other pressure gauge (for the 25A-VBA20A/40A). In order to mount the pressure gauge, piping which does not cause any interference must be prepared separately.



Description		25A- Series	
	Description	Model (Type)	Page
Detection Switches	Flow Switch	25A-PF2M7 (For air, Integrated display type) 25A-PFM7 (For air, Integrated display type) 25A-PFM5 (For air, Remote type) 25A-PFM3 (For air, Flow monitor) 25A-PFMB7 (For air, Integrated display type) 25A-PF3W7-Z (For water, Integrated display type) 25A-PF3W5-Z (For water, Remote type) 25A-PF3W (For water, Integrated display/Remote type)	217 218 219 220 221 223 224 225
		25A-PF3W (PVC piping, Integrated display/Remote type) 25A-PF3W (For water, Flow monitor)	226 227
Fluid Control Equipment	Direct Operated 2-Port Solenoid Valve  Pilot Operated 2-Port Solenoid Valve  Zero Differential Pressure Type Pilot Operated 2-Port Solenoid Valve	25A-VX2 (For air) 25A-VX2 (For water/medium vacuum) 25A-VXD (For air) 25A-VXD (For water) 25A-VXZ (For air) 25A-VXZ (For water)	229 230 231 232 233 234
Process Gas Equipment	Diaphragm Valve for Ultra High Purity  Diaphragm Valves for General Applications	AZ3542 & 4542□25A (Air operated type)  AK3542 & 4542□25A (Air operated type)	235
Electric Actuators	Electric Actuator	25A-LEFS (Slider type/AC servo motor: Applicable to the JXC\u25A-LEFS (Slider type/AC servo motor: Applicable to the LECS\u2012) 25A-LEFS (Slider type/AC servo motor: Applicable to the LECY\u2012) 25A-LEJS (High rigidity slider type/AC servo motor: Applicable to the LECS\u2012) 25A-LEJS (High rigidity slider type/AC servo motor: Applicable to the LECY\u2012) 25A-LEY (Rod type/Step motor, Servo motor: Applicable to the JXC\u2012/LEC\u2012) 25A-LEY (Rod type/AC servo motor: Applicable to the LECS\u2012) 25A-LEY (Rod type/AC servo motor: Applicable to the LECS\u2012)	239 243 244 245 246 247 251 253
Auto Switches	Solid State Auto Switch  Reed Auto Switch	D-M9□□-900  D-F8□-900  D-Y□□-900  D-G59, G5P, K59-900  D-F79, F7P, J79-900  D-F7□V-900  D-A90-900  D-Z80-900  D-E73A, E76A, E80A	255 and onward 255 and onward

25A- series grease pack\*1 applicable models
\*1 Air cylinders (Except guide unit). For other models, please contact your local sales representative.

Grease pack part no.	Quantity
GR-D-005	5 g
GR-D-010	10 g
GR-D-100	100 g

Contained in a plastic container.



Special Products (Please contact your local sales representative for more details.)

Description		Model (Type)
Directional Control Valves	3-Port Solenoid Valve/ Residual Pressure Release Valve with Detection of Main Valve Position (Safety Standard ISO 13849-1 Certified)	VG342-X87
	Air Cylinder With End Lock	CBM2
		MBB
	Cylinder with Lock	CNG□N
ers		CNA2□N
Air Cylinders	Compact Cylinder with Lock	CLQ
Aiı	Stopper Cylinder	RSQ
	Heavy Duty Stopper Cylinder	RS2H
pment	Vacuum Pad	ZP.
Vacuum Equipment	Non-contact Gripper	XT661
Vacuu	Vacuum Regulator	IRV (Standard)
Vacuum uipment	Aluminium	XLA (Normally closed)
High Vac Equipm	High Vacuum Angle Valve	XLC (Double acting)
· 差'Ш		

### Related Products Consult with SMC for "Copper (Cu) and Zinc (Zn) Restrictions" products.

### 1 Antistatic Equipment

Vacuum

Static electricity

Antistatic performance achieved through conductive measures for a reduction in static-related trouble.

Actuators · Antistatic Air Cylinder

(Made to Order) CM2-X1051 Series

Vacuum Equipment · Vacuum Pad ······ZP Series

### **Fittings and Tubing**

· Antistatic One-touch Fittings ······ KA Series

· Miniature Fittings/Stainless Steel 316 ···· MS Series (Some types only)

### Flow Control Equipment



TA ☐ Series

### Static Neutralization Equipment

lons generated by corona discharge neutralize static electricity.

- · Ionizer/Bar Type IZS4 Series
- Bar Type Ionizer Separate Controller IZT4□ Series
- · Ionizer IZS31 Series
- Nozzle Type Ionizer IZN10E Series

Measurement Equipment | Measures the electrostatic potential.

- · Electrostatic Sensor IZD10/IZE11 Series
- · Handheld Electrostatic Meter · IZH10 Series

### Static electricity









### Temperature Control Equipment

· Thermo-chiller/Standard Type HRS Series

### 4 Electric Actuators

- · Electric Actuator/Slider Type LEFB Series
- · Electric Actuator/Low Profile Slider Type ··· LEM Series
- · Electric Actuator/Guide Rod Slider ..... LEL Series
- · Electric Slide Table LES Series

· Electric Actuator/Miniature Rod Type

/Miniature Slide Table Type



- · Electric Rotary Table LER Series
  · Electric Gripper LEH□ Series
- · Motorless Type Electric Actuator ······· LE Series



LEPS/LEPY Series





LEM Series



LER Series LEHZ Series

### 5 High Purity Chemical Liquid Valves

· High Purity Chemical Liquid Valve/Air Operated Type

LVC/LVA/LVH Series









### **Plug-in Connector Connecting Base**

**D-sub Connector** 

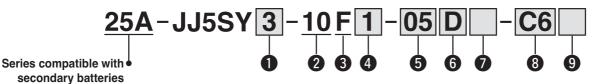
Type 10 Side Ported

# 25A-JSY1000/3000 Series

( E UK ROHS

**Internal Pilot** 

### **How to Order Manifolds**



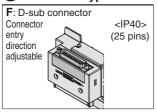
### 1 Series

1	JSY1000
3	JSY3000

### **2** Type

10 Side ported

### 3 Connector type



### 4 Connector entry direction

1: Upward	2: Lateral
0	

### **5** Valve stations

F: D-sub connector (25 pins)		
Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
12	12 stations	
02	2 stations	Charified loveut*2
i	:	Specified layout*2 (Up to 16 solenoids available)
16	16 stations	

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- This also includes the number of blanking plates.

### 6 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B Both sides (2 to 16 station	

### SUP/EXH block assembly

_	Internal pilot	
S	Internal pilot,	
	Built-in silencer	

 The 3/5(E) port is plugged for the built-in silencer type.

### 8A, B port size (Metric/One-touch fitting)

Symbol		A, B port	JSY1000	JSY3000	
C4		Ø 4	•	_	
C6	Straight	Ø6	•	•	
C8	Stra	Ø 8	_	•	0 19319
CM*1		Straight port, mixed sizes	•	•	8
	P, E port size (One-touch fittings)		Ø8	Ø 10	

- \*1 Indicate the sizes on the manifold specification sheet for "CM."
- \* The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

### 9 Mounting and Option

DIN Rail Option		
D□	DIN rail mounting	
_	Direct mounting	
Symbol	Mounting	

### DIN Rail Option — DIN rail mour

_	Din rail mounting (with Din rail)		
0	DIN rail mounting (Without DIN rail)		
3	For 3 stations	Specify a length longer than that of the standard rail	
:	:		
16	For 16 stations		

- \* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown above.)
- Refer to the Web Catalogue for details on securing the DIN rail mounting type manifold.



<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

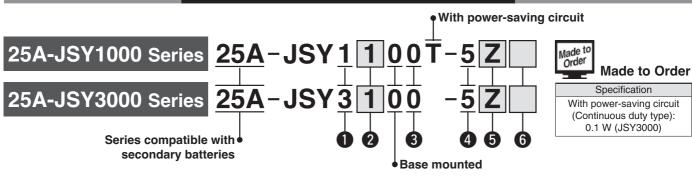
- 25A-JJ5SY3-10F1-05D-C8 ···1 set (Type 10 5-station manifold base part no.) ······2 sets (2-position single part no.) \* 25A-JSY3100-5U ·······
- 25A-JSY3200-5U .....3 sets (2-position double part no.)
  - The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.
- For the valve arrangement, the valve closest to the D side is considered the
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification

**Internal Pilot** 

Manifold base (5 stations) 25A-JJ5SY3-10F1-05D-C8

**How to Order Valves (With mounting screw)** 

Refer to the **Web Catalogue** for valve specifications.



### Series

1	JSY1000
3	JSY3000

### Pilot valve exhaust method

0	Pilot valve individual exhaust

### 4 Rated voltage

5	24 VDC

### Caution

If the JSY3000 series is to be continuously energised, please be sure to select the power-saving circuit (continuous duty type) specification. Refer to "Made to Order."

For the JSY1000 series, only the power-saving circuit specification is available.

### 2 Type of actuation

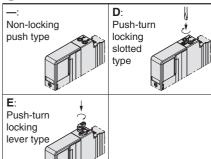
1	2-position	Single
2	2-008111011	Double
3		Closed centre
4	3-position	Exhaust centre
5		Pressure centre
Α	- 4-nosition	N.C./N.C.
В		N.O./N.O.
С	dual o-port	N.C./N.O.

### **5** Light/surge voltage suppressor and common specification

With light	Surge voltage suppressor	Common specification
		Non-polar
•	•	Positive common
		Negative common
		suppressor

- \* Only "Z" and "NZ" types are available for the JSY1000 series.
- When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the Web Catalogue.

### 6 Manual override



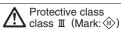
- Push-turn locking lever type "E" is not available for the JSY1000.
- When ordering a valve individually, the base gasket is not included.

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance. Refer to the Web Catalogue for base gasket part numbers

Refer to page 24 for mounting screw part numbers.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.



**多SMC** 

Air Cylinders Related Products

Rotary Actuators

Air Grippers Equipment Vacuum

Preparation Equipment Ą

Air Filters

Modular F.R.L./ Pressure Control Equipment

Detection Switches

Fluid Control Equipment

Gas Equipment Process

Actuators

Auto Switches

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### Plug-in Connector Connecting Base

Terminal Block Box

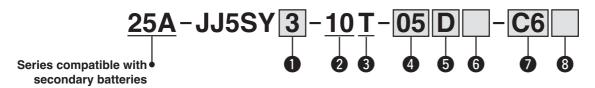
Type 10 Side Ported

# 25A-JSY1000/3000 Series

( E UK ROHS

Internal Pilot

**How to Order Manifolds** 



1 Series

1 JSY1000 3 JSY3000

<b>2</b> Typ	e
10	Side ported

### **3** Wiring

Т	Terminal block box

### 4 Valve stations

T: Terminal block box		
Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
10	10 stations	]
02	2 stations	Charified layout*2
:	:	Specified layout*2 (Up to 16 solenoids available)
16	16 stations	

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \*3 This also includes the number of blanking plates.

### **5** P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
В	Both sides (2 to 16 stations)

### 6 SUP/EXH block assembly

		,
		Internal pilot
	S	Internal pilot, Built-in silencer

- \* The 3/5(E) port is plugged for the built-in silencer type.
- \* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

### 7 A, B port size (Metric/One-touch fitting)

A, B port oize (mound one todon namy)					
Symbol		A, B port	JSY1000	JSY3000	
C4		Ø 4	•	_	
C6	Straight	Ø6	•	•	
C8	Stra	Ø8	_	•	0 85 98
CM*1		Straight port, mixed sizes	•	•	000
		port size uch fittings)	Ø8	Ø 10	

- \*1 Indicate the sizes on the manifold specification sheet for "CM."
- \* The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

### **8** Mounting and Option

Symbol	Mounting
_	Direct mounting
D	DIN rail mounting

- \* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- \* Refer to the **Web Catalogue** for details on securing the DIN rail mounting type manifold.

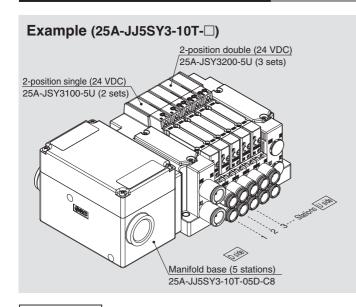
### **DIN Rail Option**

_	DIN rail mounting (With DIN rail)				
0	DIN rail mounting (Without DIN rail)				
3	For 3 stations	Specify a langth langur that			
:	:	Specify a length longer than that of the standard rail.			
16	For 16 stations	that of the standard rail.			



<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

### **How to Order Manifold Assembly**

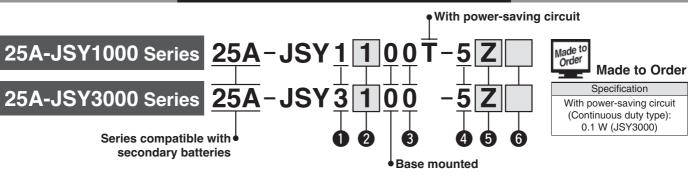


- 25A-JJ5SY3-10T-05D-C8 ······ 1 set (Type 10 5-station manifold base part no.) 25A-JSY3100-5U ......2 sets (2-position single part no.) 25A-JSY3200-5U ······· 3 sets (2-position double part no.)
- The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.
- For the valve arrangement, the valve closest to the D side is considered the
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification

**Internal Pilot** 

**How to Order Valves (With mounting screw)** 

Refer to the Web Catalogue for valve specifications.



### Series

1	JSY1000
3	JSY3000

### 3 Pilot valve exhaust method

0	Pilot valve individual exhaust

C Rat	ed voltage	
5	24 VDC	

### **∕**!∖ Caution

If the JSY3000 series is to be continuously energised, please be sure to select the powersaving circuit (continuous duty type) specification. Refer to "Made to Order."

For the JSY1000 series, only the power-saving circuit specification is available.

### 2 Type of actuation

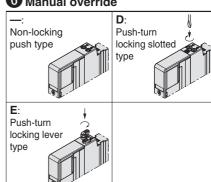
1	2-position	Single		
2		Double		
3		Closed centre		
4	3-position	Exhaust centre		
5		Pressure centre		
Α	A 4-position dual 3-port	N.C./N.C.		
		N.O./N.O.		
		N.C./N.O.		

### **5** Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	
U	•	•	Non-polar	
Z			Positive common	
NZ			Negative common	

- \* Only "Z" and "NZ" types are available for the JSY1000 series.
- When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the Web Catalogue.

### 6 Manual override



- Push-turn locking lever type "E" is not available for the JSY1000.
- When ordering a valve individually, the base gasket is not included.

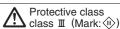
Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.

Refer to the Web Catalogue for base gasket part numbers.

Refer to page 24 for mounting screw part numbers.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.



**多SMC** 

Air Cylinders

Related Products

Rotary Actuators Air Grippers

Equipment Vacuum

Preparation Equipment Air

Air Filters

Modular I Pressure ( Equipm

Detection Switches

Fluid Control Equipment

Gas Equipment Process

Electric Actuators

Auto Switches

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### Plug-in Connector Connecting Base

Type 10 Side Ported

# 25A-JSY1000/3000 Series

( E UK RoHS



**Internal Pilot** 

### **How to Order Manifolds**



Side ported

### Series compatible with secondary batteries

### Series

1	JSY1000
3	JSY3000

### SI unit (Output polarity, Protocol, Number of outputs, Communication connector)

Symbol (Ou Positive common (NPN)	tput polarity) Negative common (PNP)	Protocol	Number of outputs	Communication connector
0	*1	Without	SI unit	
QA	QAN	DeviceNet™	32	M12
QB	QBN	Devicemet	16	IVI I Z
NA	NAN	PROFIBUS	32	M12
NB	NBN	DP	16	IVIIZ
VA	VAN	CC-Link	32	M12
VB	VBN	CC-LIIK	16	
DA	DAN	EtherCAT	32	M12
DB	DBN	EllielCAT	16	IVIIZ
FA	FAN	PROFINET	32	M12
FB	FBN	FROFINE	16	IVITZ
EA	EAN	EtherNet/IP™	32	M12
EB	EBN	Luicine//F	16	

- Without SI unit, the output polarity is decided by the SI unit used. Ensure a match with the common
- specification of the valves to be used DIN rail cannot be mounted without SI unit.

### **5** P, E port entry

	1
U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
В	Both sides (2 to 16 stations)

### 6 SUP/EXH block assembly

_	Internal pilot
S	Internal pilot, Built-in silencer

- \* The 3/5(E) port is plugged for the built-in silencer type.
- When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

### 4 Valve stations

### In the case of the 32-output SI unit

in the case of the 32-output of unit			
Symbol	Stations	Note	
02	2 stations	Double wiring*1	
:	:		
16	16 stations		

### In the case of the 16-output SI unit

_				
-	Symbol	Stations	Note	
	02	2 stations		
	:	:	Double wiring*1	
	80	8 stations		
	02	2 stations	Charified layout*2	
	:	:	Specified layout*2 (Up to 16 solenoids available)	
	16	16 stations	(Op to 10 solelloids available)	

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* This also includes the number of blanking plates.
- For the product without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

### A, B port size (Metric/One-touch fitting)

C 1, 2 port one (mountained of the mountained)						
Symbol		A, B port	JSY1000	JSY3000		
C4	Straight	Ø 4	•	_		
C6		Ø 6	•	•		
C8		Ø 8	_	•	0	
CM*1		Straight port, mixed sizes	•	•	08	
P, E port size (One-touch fittings)			Ø 8	Ø 10		

- \*1 Indicate the sizes on the manifold specification sheet for "CM."
- The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting

### 8 Mounting and Option

	-			
Symbol	Mounting Mounting			
<ul> <li>Direct mounting</li> </ul>				
D□	DIN rail mounting			

- ∗ Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- Refer to the Web Catalogue for details on securing the DIN rail mounting type manifold.
- DIN rail mounting (D□) is not available for the product without the SI unit (S0).

### **DIN Rail Option**

_	DIN rail mounting (With DIN rail)				
0	DIN rail mounting (Without DIN rail)				
3	For 3 stations	Consider a lampath lampay them			
:	:	Specify a length longer than that of the standard rail.			
16	For 16 stations	that of the standard rail.			

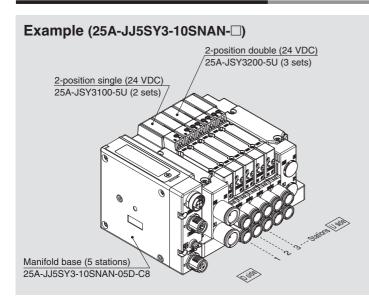
- \* Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to the Web Catalogue for the DIN rail part number.)
- \* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalogue and the Operation Manual. For the part numbers of the SI units to be mounted, refer to the Web Catalogue. Please download the Operation Manual via the SMC website: https://www.smc.eu



### **How to Order Manifold Assembly**

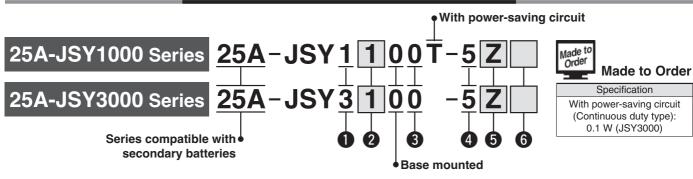


- 25A-JJ5SY3-10SNAN-05D-C8 ··· 1 set (Type 10 5-station manifold base part no.) \* 25A-JSY3100-5U ------2 sets (2-position single part no.) 25A-JSY3200-5U -----3 sets (2-position double part no.)
  - The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.
- For the valve arrangement, the valve closest to the D side is considered the 1st station
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification

**Internal Pilot** 

How to Order Valves (With mounting screw)

Refer to the Web Catalogue for valve specifications.



### Series

1	JSY1000
3	JSY3000

### Pilot valve exhaust method Pilot valve individual exhaust

Hai	led voltage		
5		24 VDC	

### **⚠** Caution

If the JSY3000 series is to be continuously energised, please be sure to select the powersaving circuit (continuous duty type) specification. Refer to "Made to Order."

For the JSY1000 series, only the power-saving circuit specification is available.

### Type of actuation

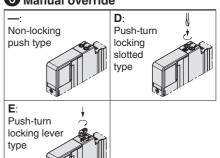
I	2-position	Single	
2	2-003111011	Double	
3		Closed centre	
4	3-position	Exhaust centre	
5		Pressure centre	
Α	4-position dual 3-port	N.C./N.C.	
В		N.O./N.O.	
С		N.C./N.O.	

### 5 Light/surge voltage suppressor and common specification

	Symbol	With light	Surge voltage suppressor	Common specification	
	U		•	Non-polar	
	Z	Positive common			
	NZ	1		Negative common	
	0   1				

- Select "U" or "Z" for the valve when the SI unit output polarity is - (positive common). Select "U" or "NZ" for the valve when the SI unit output polarity is N (negative common).
- Only "Z" and "NZ" types are available for the JSY1000 series.
- When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the Web Catalogue.

### 6 Manual override



- Push-turn locking lever type "E" is not available for the JSY1000.
- When ordering a valve individually, the base gasket is not included.

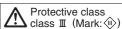
Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.

Refer to the Web Catalogue for base gasket part numbers

Refer to page 24 for mounting screw part numbers.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.





Air Cylinders

Related Products

Rotary Actuators

Air Grippers

Equipment Vacuum

Preparation Equipment Air

Air Filters

Modular I Pressure ( Equipm

Detection Switches

Equipment

Fluid Control Gas

Equipment Process

Actuators Electric

Auto Switches

### Plug-in Connector Connecting Base

Type 10 Side Ported

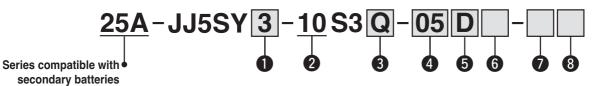
# 25A-JSY1000/3000 Series

( E UK RoHS



**Internal Pilot** 

**How to Order Manifolds** 



### Series

U OC.	103
1	JSY1000
3	JSY3000

### Type

Side ported

### SI unit

0	Without SI unit
Q	DeviceNet™ (Positive common NPN)
V	CC-Link (Positive common NPN)

 Ensure a match with the common specification of the valve to be used.

### 4 Valve stations

Symbol	Stations	Note	
02	2 stations		
:	:	Double wiring*1	
08	8 stations		
02	2 stations	Charified layout*2	
	:	Specified layout*2 (Up to 16 solenoids available)	
16	16 stations	(Op to 10 soleriolds available)	

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- This also includes the number of blanking

### **5** P, E port entry

U	U side (2 to 10 stations)		
D	D side (2 to 10 stations)		
В	Both sides (2 to 16 stations)		

### 6 SUP/EXH block

	Internal pilot
	Internal pilot
S	Internal pilot, Built-in silencer

\* The 3/5(E) port is plugged for the built-in silencer type.

### A, B port size (Metric/One-touch fitting)

Symbol	A, B port		JSY1000	JSY3000	
C4		Ø 4	•	_	
C6	Straight	Ø 6	•	•	
C8		Ø 8	_	•	
CM*1		Straight port, mixed sizes	•	•	0
	P, E port size	(One-touch fittings)	Ø 8	Ø 10	

- \*1 Indicate the sizes on the manifold specification sheet for "CM."
- \* The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

### **8** Mounting and Option

_	
Symbol	Mounting
_	Direct mounting
D	DIN rail mounting

- Enter the number of stations inside ☐ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- Refer to the Web Catalogue for details on securing the DIN rail mounting type manifold.

### **DIN Rail Option**

_	DIN rail mounting (With DIN rail)		
0	DIN rail mounting (Without DIN r		
3	For 3 stations	Charify a langth langur than	
:	:	Specify a length longer than that of the standard rail.	
16	For 16 stations	that of the standard rail.	

\* If the DIN rail must be mounted without an SI unit, select D0. Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to the Web Catalogue for the DIN rail part number.)

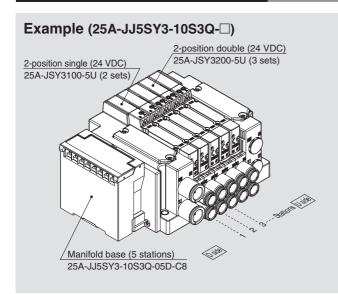
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

For details on the EX120 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalogue and the Operation Manual. For the part numbers of the SI units to be mounted, refer to the Web Catalogue. Please download the Operation Manual via the SMC website: https://www.smc.eu



### **How to Order Manifold Assembly**



25A-JJ5SY3-10S3Q-05D-C8 ··1 set (Type 10 5-station manifold base part no.)

\* 25A-JSY3100-5U ···············2 sets (2-position single part no.)

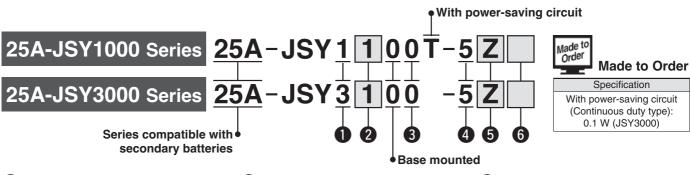
\* 25A-JSY3200-5U ············3 sets (2-position double part no.)

- →The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.
- $\cdot$  For the valve arrangement, the valve closest to the D side is considered the 1st station.
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

**Internal Pilot** 

How to Order Valves (With mounting screw)

Refer to the Web Catalogue for valve specifications.



### 1 Series

1	JSY1000
3	JSY3000

### Pilot valve exhaust method Pilot valve individual exhaust



	ou voitage
5	24 VDC

### **⚠** Caution

If the JSY3000 series is to be continuously energised, please be sure to select the powersaving circuit (continuous duty type) specification.

For the JSY1000 series, only the power-saving circuit specification is available.

### 2 Type of actuation

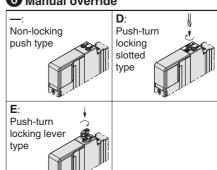
1	2-position	Single	
2	2-008111011	Double	
3		Closed centre	
4	3-position	Exhaust centre	
5		Pressure centre	
Α	4 maniting	N.C./N.C.	
В	4-position dual 3-port	N.O./N.O.	
С		N.C./N.O.	

### 5 Light/surge voltage suppressor and common specification

	Symbol	With light	Surge voltage suppressor	Common specification
	U	•		Non-polar
	Z			Positive common

- \* Only "Z" and "NZ" types are available for the JSY1000 series.
- \* When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the Web Catalogue.

### 6 Manual override



- Push-turn locking lever type "E" is not available for the JSY1000.
- \* When ordering a valve individually, the base gasket is not included.

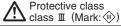
Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.

Refer to the **Web Catalogue** for base gasket part numbers.

Refer to page 24 for mounting screw part numbers.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.



Directional Control Valves

Air Cylinders

Related Products

Air Grippers Actuators

Vacuum Equipment

Air Preparation Equipment

Clean Air Filters

Modular F.R.L./ Pressure Control Equipment

Detection Switches

Fluid Control Equipment

Process Gas F

Electric Actuators

Auto E Switches Ac

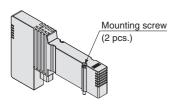
22

# 25A-JSY1000/3000 Series Manifold Options

### ■ Blanking plate assembly

(With two mounting screws)

Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



### **How to Order Blanking Plate Assembly**

25A-JSY 3 1M-26P-1A

Series

1 JSY1000
3 JSY3000

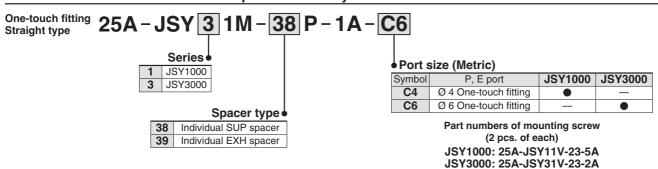
### SI Unit Part Nos

Description	SI unit part no.	Note
	EX260-SPR1-X117	PROFIBUS DP M12 connector, 32 outputs, Negative common (PNP)
	EX260-SPR2-X117	PROFIBUS DP M12 connector, 32 outputs, Positive common (NPN)
	EX260-SPR3-X117	PROFIBUS DP M12 connector, 16 outputs, Negative common (PNP)
	EX260-SPR4-X117	PROFIBUS DP M12 connector, 16 outputs, Positive common (NPN)
	EX260-SDN1-X117	DeviceNet® M12 connector, 32 outputs, Negative common (PNP)
	EX260-SDN2-X117	DeviceNet® M12 connector, 32 outputs, Positive common (NPN)
	EX260-SDN3-X117	DeviceNet® M12 connector, 16 outputs, Negative common (PNP)
	EX260-SDN4-X117	DeviceNet® M12 connector, 16 outputs, Positive common (NPN)
	EX260-SEC1-X117	EtherCAT M12 connector, 32 outputs, Negative common (PNP)
	EX260-SEC2-X117	EtherCAT M12 connector, 32 outputs, Positive common (NPN)
	EX260-SEC3-X117	EtherCAT M12 connector, 16 outputs, Negative common (PNP)
EX260 SI unit	EX260-SEC4-X117	EtherCAT M12 connector, 16 outputs, Positive common (NPN)
EA260 SI UIII	EX260-SMJ1-X117	CC-Link M12 connector, 32 outputs, Negative common (PNP)
	EX260-SMJ2-X117	CC-Link M12 connector, 32 outputs, Positive common (NPN)
	EX260-SMJ3-X117	CC-Link M12 connector, 16 outputs, Negative common (PNP)
	EX260-SMJ4-X117	CC-Link M12 connector, 16 outputs, Positive common (NPN)
	EX260-SPN1-X117	PROFINET M12 connector, 32 outputs, Negative common (PNP)
	EX260-SPN2-X117	PROFINET M12 connector, 32 outputs, Positive common (NPN)
	EX260-SPN3-X117	PROFINET M12 connector, 16 outputs, Negative common (PNP)
	EX260-SPN4-X117	PROFINET M12 connector, 16 outputs, Positive common (NPN)
	EX260-SEN1-X117	EtherNet/IP™ M12 connector, 32 outputs, Negative common (PNP)
	EX260-SEN2-X117	EtherNet/IP™ M12 connector, 32 outputs, Positive common (NPN)
	EX260-SEN3-X117	EtherNet/IP™ M12 connector, 16 outputs, Negative common (PNP)
	EX260-SEN4-X117	EtherNet/IP™ M12 connector, 16 outputs, Positive common (NPN)
EX120 SI unit	EX120-SMJ1-X220	CC-Link (Terminal block, 16 outputs, Positive common (NPN))
EX 120 SI UIIII	EX120-SDN1-X220	DeviceNet® (Terminal block, 16 outputs, Positive common (NPN))

### One-touch Fittings Part Nos.

	Series	25A-JSY1000		25A-JSY3000	Note
Port size	size 6.5 mm pitch		9 mm pitch	25A-0513000	Note
	Ø 4	25A-KQSY10-C4-X1336	25A-KQSY10-C4-X1336 —		
A, B port	Ø6	_	25A-KQSY11-C6-X1336	25A-KQSY30-C6	The part number is for 1 piece
	Ø8	_	_	25A-KQSY30-C8-X1336	The part number is for 1 piece. (Sales unit: 10 pcs.)
P, E port	Ø8	25A-KQSY30-C8-X1336		_	(Gaies ant. 10 pcs.)
Ø 1		_	_	25A-KQSY31-C10-X1336	

### How to Order Individual SUP/EXH Spacer Assembly





### Manifold Options 25A-JSY1000/3000 Series

### Manifold Parts Nos./For the 25A-JJ5SY1-10, 25A-JJ5SY3-10

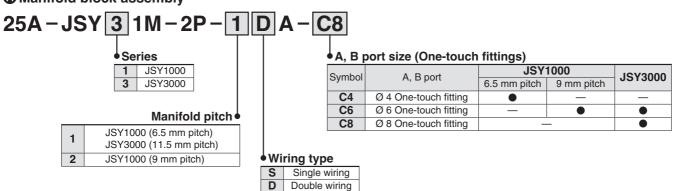
Description	25A-J\$	25A-JSY3000	
Description	6.5 mm pitch	9 mm pitch	25A-0515000
Tie-rod for additional stations	JSY11M-49P-4-1-A	JSY11M-49P-3-1-A	JSY31M-49P-2-1-A
rie-rod for additional stations	(6.5 mm pitch)	(9 mm pitch)	(11.5 mm pitch)
Tie-rod	JSY11M-49P-4-□-A	JSY11M-49P-3-□-A	JSY31M-49P-2-□-A
rie-rod	(6.5 mm pitch)	(9 mm pitch)	(11.5 mm pitch)
Valve mounting screw	25A-JSY1	11V-23-4A	25A-JSY31V-23-1A
valve mounting screw	(M1.4 x 21.5)		(M2 x 25)
Clamp bracket	25A-JSY11M-15P-1A (Refer to the table below.)		25A-SY30M-15-1A
(for connector connecting base) 25A-JSY11M-15P-2A (Refer to the table below.)			25A-5 130W-15-1A

Table. 25A-JSY1000 series clamp bracket

Wiring (JSY1000 series)		25A-JSY11M-15P-1A	25A-JSY11M-15P-2A
F	D-sub connector	•	_
Т	Terminal block box	_	•
S□□	EX260	•	_
S3	EX120	•	_

### **Manifold Parts Nos.**





Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers

Vacuum Equipment

Air Preparation Equipment

Modular F.R.L./ Pressure Control Equipment

Detection Switches

Fluid Control Equipment

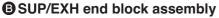
Process Gas F Equipment

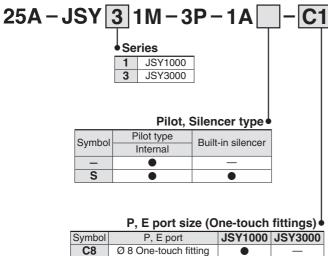
Electric Actuators

Auto Switches

### 25A-JSY1000/3000 Series

### **Manifold Parts Nos.**





● Mounting		
<ul> <li>Direct mounting</li> </ul>		
D0	DIN rail mounting (Without DIN rail)	
D00*1	DIN rail mounting (Without DIN rail)	

\*1 Part number only for the 25A-JSY1000 Part number is different depending on the wiring. Refer to Table 1.

Table 1. JSY1000 series DIN rail mounting

Symbol	Wiring
D0	D-sub connector ( <b>F</b> type) EX260 ( <b>S</b> □□ type) EX120 ( <b>S3</b> type)
D00	Terminal block box (T type)

### **Clamp bracket**

C10

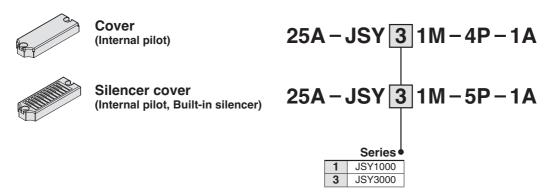
00

•		
Series		Part no.
25A-JSY1000	For <b>D0</b>	25A-JSY11M-15P-1A
25M-0511000	For <b>D00</b>	25A-JSY11M-15P-2A
25A-JSY3000		25A-SY30M-15-1A

Ø 10 One-touch fitting

Plug

### ■ Cover, Silencer cover for SUP/EXH (end) block assembly

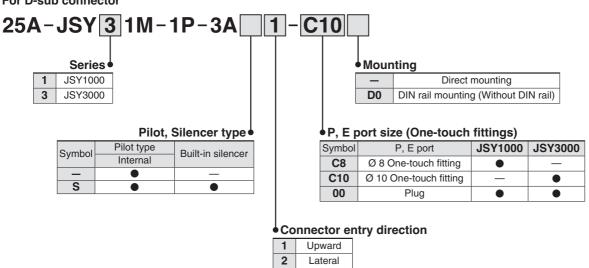


### Manifold Options 25A-JSY1000/3000 Series

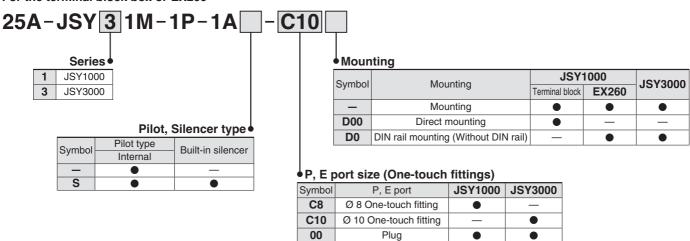
### **Manifold Parts Nos.**

### **©** SUP/EXH block assembly

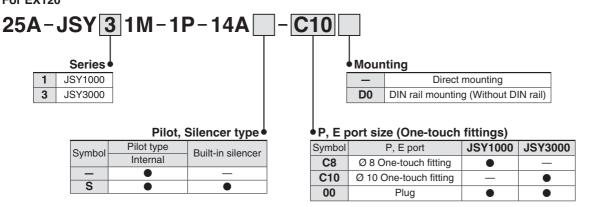
For D-sub connector



For the terminal block box or EX260



For EX120



<sup>\*</sup> Refer to page 25 for clamp bracket part numbers.

Air Cylinders Control Valve

Related Products

Rotary Actuators Air Grippers

Vacuum Equipment

Air Preparation Equipment

Clean Air Filters

Modular F.R.L./ Pressure Control Equipment

Flow Control Equipment/ Fittings

Detection Switches

Fluid Control Equipment

Process Gas | Equipment

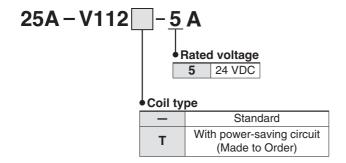
Electric Actuators

Auto Switches



### 25A-JSY1000/3000 Series

### **How to Order Pilot Valves**



### **Pilot cover**

### 25A-SY30V-25AS (For 25A-JSY3000)

\* The pilot valve of the 25A-JSY1000 series cannot be replaced.

Type 40 Side Ported

### Non Plug-in Metal Base

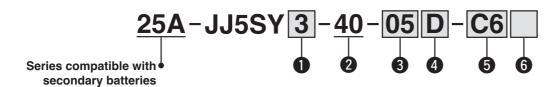
# 25A-JSY1000/3000 Series

( E UK ROHS



**Internal Pilot** 

**How to Order Manifolds** 



Rc

Series JSY1000 JSY3000

6 A, B port size

Thread piping

Symbol

M3

M5

01

2 Type 40 Side ported

6 Thread type

3 Valve stations			
Symbol	Stations		
02	2 stations		
:	÷		
20	20 stations		

4 P, E port entry

U	U side*1
D	D side*1
В	Both sides

\*1 Plugs are mounted on the opposite side of the selected ports.

One-touch fitting (Metric)

A, B port

M3 x 0.5

M5 x 0.8

1/8

S	ymbol	A, B port	JSY1000	JSY3000	
Fixed	C4	Ø 4	•	_	60
ι <u>×</u>	C6	Ø6	_	•	GGG
Φ	KC4	Ø 4	•	_	Type 40 (Side ported)
Replaceable	KC6	Ø6	•	•	(Glac polica)
eplac	KC8	Ø 8	_	•	
ш.	M*1	A, B ports mixed	_	•	
		port size ad piping)	1/8	1/4	
	14/1				.6. 1.

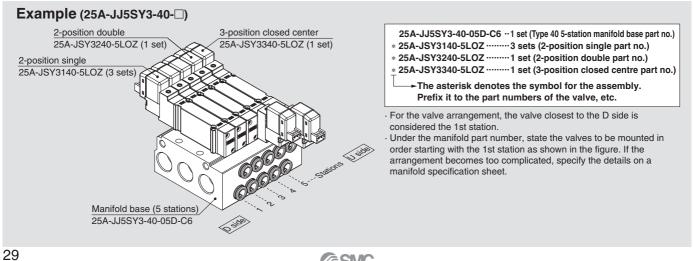
JSY1000 JSY3000

\*1 When ports are mixed sizes, indicate the piping specifications on the manifold specification sheet.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

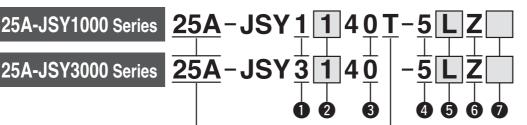
### **How to Order Manifold Assembly**



**♦**With power-saving circuit

**Internal Pilot** 

### How to Order Valves (With two mounting screws)



Made to Order Made to Order

Specification

With power-saving circuit (Continuous duty type): 0.1 W (JSY3000)

Series compatible with

secondary batteries

### Series

1	JSY1000
3	JSY3000

### 2 Type of actuation

1	2-position single		
2	2-position double		
3	3-position closed centre		
4	3-position exhaust centre		
5	3-position pressure centre		
Α	Dual 3-port (N.C./N.C.)		
В	Dual 3-port (N.O./N.O.)		
С	Dual 3-port (N.C./N.O.)		

### 3 Pilot valve exhaust method

Pilot valve individual exhaust

4 Rated voltage

24 VDC

### 6 Light/surge voltage suppressor

7	With light/surge voltage
_	suppressor

### **5** Electrical entry

	L plug co	onnector	M plug connector		
	L	LO	M	MO	
JSY1000	L: With lead wire (300 mm)	LO: Without connector	M: With lead wire (300 mm)	MO: Without connector	
JSY3000	L: With lead wire	LO: Without connector	M: With lead wire (300 mm)	MO: Without connector	

\* Refer to the Web Catalogue for the lead wire length of L and M plug connectors.

### Manual override

	Warida Override						
JSY1000	Non-locking push type	D: Push-turn locking slotted type		E: Push-turn locking lever type			
JSY3000	Non-locking push type	D: Push-turn locking slotted type		E: Push-turn locking lever type			

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

### 

If the JSY3000 series is to be continuously energised, please be sure to select the power-saving circuit (continuous duty type) specification. Refer to "Made to Order."

For the JSY1000 series, only the power-saving circuit specification is available.

Air Cylinders

Related Products

Rotary Actuators

Air Grippers Vacuum Equipment

Air Preparation Equipment

Modular F.R.L./ Pressure Control Equipment

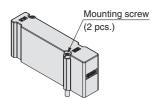
Flow Control Equipment/ Fittings

# 25A-JSY1000/3000 Series Manifold Options

### ■ Blanking plate assembly

(With two mounting screws)

Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



### **How to Order Blanking Plate Assembly**

25A-JSY 3 1M-26-1A

Series

1 JSY1000
3 JSY3000

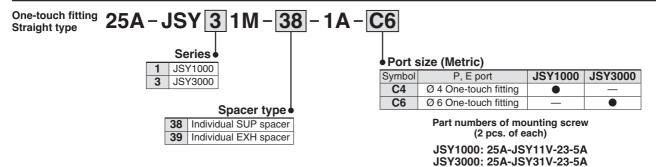
### Valve Mounting Screw Part No.

	•			
Description	Part no.		Note	
25A-JJ5SY1		25A-JJ5SY3		
Round head combination screw	25A-JSY11V-23-4A	25A-JSY31V-23-4A	Part numbers shown on the left are for 10 valves. (20 pcs.)	

### **One-touch Fittings Part Nos.**

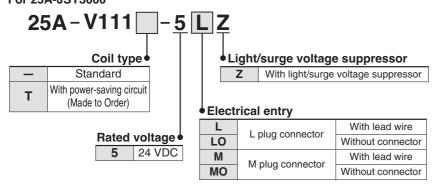
		Port size	25A-JSY1000	25A-JSY3000
		Ø 4 One-touch fitting (Straight type)	25A-KQSY10-C4-X1336	_
A, B port	Metric size	Ø 6 One-touch fitting (Straight type)	25A-KQSY11-C6-X1336	25A-KQSY30-C6
		Ø 8 One-touch fitting (Straight type)	_	25A-KQSY30-C8-X1336

### How to Order Individual SUP/EXH Spacer Assembly



### **How to Order Pilot Valves**

### For 25A-JSY3000



 $<sup>\</sup>ast\,$  For the 25A-JSY1000, the pilot valve is the same as that of the standard model.



ype 10 Side Ported **Type 11 Bottom Ported** 

### **Plug-in Connector Connecting Base**

**D-sub Connector** 

# 25A-SY5000/7000 Series 593 us





### **How to Order Manifolds**



Series compatible with secondary batteries

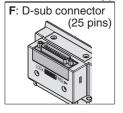
### Series

5	SY5000
7	SY7000

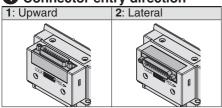
2 Type

10	Side ported
11	Bottom ported

### 3 Connector type



4 Connector entry direction



### Valve stations

F: D-sub connector (25 pins)						
	Stations	Note				
02	2 stations					
:	:	Double wiring*1				
12	12 stations					
02	2 stations					
:	:	(Up to 24 solenoids				
24	24 stations	available)				

\*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If

this is not desired, order with a specified layout.

- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* The blanking plate assembly is included in this number.

### 6 P. E port entry

	1 7
U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
В	Both sides (2 to 24 stations)

### SUP/EXH block assembly

<ul><li>Internal pilot</li></ul>				
S	Internal pilot,			
3	Built-in silencer			

The 3/5(E) port is plugged for the built-in silencer type.

### 8 A, B port size (Metric)

_	<u> </u>						
Symbol	A, B port			e 10/ ported	Type Bottom	e 11/ ported	
			SY5000	SY7000	SY5000	SY7000	
C4		Ø 4	•	_	•	_	W 18785
C6		Ø6	•	•	•	•	
C8	traight	Ø 8	•		•	•	
C10		Ø 10	_	•	_	•	
C12	S	Ø 12	_	•	_	•	Q el sont
CM*1		Straight port, mixed sizes	•			•	
P, E port size (One-touch fittings)		Ø 10	Ø 12	Ø 10	Ø 12		

- \*1 Indicate the sizes on the manifold specification sheet for "CM."
- \* The direction of P, E port fittings is the same as for the A, B port.

### 9 Mounting

Mounting	Opt	tion
Woulding	Name plate	Station number
	_	_
	•	•
inounting	•	_
DIN reil	_	_
mounting		_
	Direct mounting DIN rail mounting	Direct mounting DIN rail

**DIN Rail Option** 

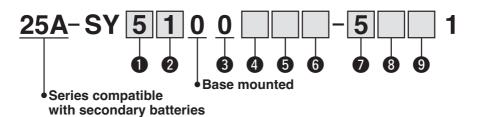
Dirt Hair Option		
_	Direct mounting	
0	Without DIN rail (with bracket)	
3	For 3 stations	Specify a longer rail
	than the total ler	
24	For 24 stations	of specified stations.

- \* Enter the number of stations inside  $\square$  when it is larger than the number of valve stations. (Refer to "DIN Rail Option" above.)
- Only direct mounting is available for the type 11 bottom-ported
  - \* The 25A- series specifications and dimensions are the same as those of the standard model.



Auto Switches

### How to Order Valves (With mounting screw)



### Series

5	SY5000
7	SY7000

2 Type of actuation

2-position single	
2-position double	
3-position closed centre	
3-position exhaust centre	
3-position pressure centre	
4-position dual 3-port valve (N.C./N.C.)	
4-position dual 3-port valve (N.O./N.O.)	
4-position dual 3-port valve (N.C./N.O.)	

3 Seal type

<b>0</b> Rubber seal
----------------------

4 Back pressure check valve (Built-in valve type)

_	None
Н	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

5 Pilot valve option

_	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

6 Coil type

_	Standard
Т	With power-saving circuit (Continuous duty type)

- \* Be sure to select the power-saving circuit type if the valve is to be continuously energised for long periods
- Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalogue.

### Rated voltage

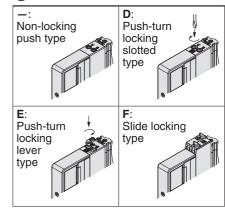
U I I I	ieu voitage
5	24 VDC
6	12 VDC

8 Light/surge voltage suppressor and common specification

_	Without light/surge voltage suppressor (Non-polar)		
R	With surge voltage suppressor (Non-polar)		
U	With light/surge voltage suppressor (Non-polar)		
S	With surge voltage suppressor (Positive common)		
Z	With light/surge voltage suppressor (Positive common)		
NS	With surge voltage suppressor (Negative common)		
NZ	With light/surge voltage suppressor (Negative common)		

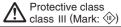
\* Only "Z" and "NZ" types are available with a power-saving circuit.

### Manual override



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.



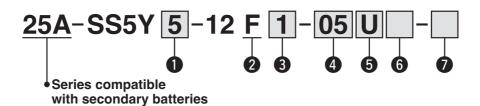
# Plug-in Connector Connecting Base

**D-sub Connector** 

# 25A-SY5000/7000 Series 5 93 us



### **How to Order Manifolds**

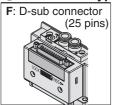


### Series

5	SY5000
7	SY7000

ype 12 op Ported

### 2 Connector type



3 Connector entry direction

1: Upward	2: Lateral

### 4 Valve stations

F: D-sub connector (25 pins)		
Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
12	12 stations	
02	2 stations	Specified layout*2
:	:	Specified layout*2 (Up to 24 solenoids
24	24 stations	available)
		,

\*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not

desired, order with a specified layout.

- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* The blanking plate assembly is included in this number.

**5** P, E port entry

	O i , = port ontry			
	U*1	U side (2 to 10 stations)		
<b>D</b> *1 D side (2.1		D side (2 to 10 stations)		
	В	Both sides (2 to 24 stations)		

\*1 For type "S,"
SUP/EXH block assembly
with a built-in silencer, choose
"U" or "D" for P port entry.

### 6 SUP/EXH block assembly

OCI /EXII BIOOK GOOGIIIBI					
_	Internal pilot				
S	Internal pilot, Built-in silencer				

\* The P and E ports are only available on the U and D sides for the builtin silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)

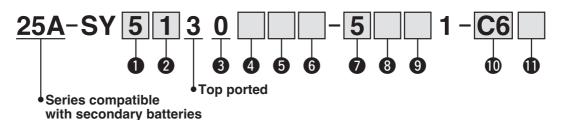
Mounting

• mounting					
_	Direct mounting				
D	DIN rail mounting (With DIN rail)				
D0	DIN rail mounting (Without DIN rail)				
D3	For 3 stations	Chaoify a longth longer than			
:	:	Specify a length longer than that of the standard rail.			
D24	For 24 stations	that of the standard rail.			

 The 25A- series specifications and dimensions are the same as those of the standard model.

Auto Switches

#### How to Order Valves (With mounting screw)



#### Series

5	SY5000
7	SY7000

2 Type of actuation

1	2-position single	
2	2-position double	
3	3-position closed centre	
4	3-position exhaust centre	
5	3-position pressure centre	
Α	4-position dual 3-port valve (N.C./N.C.)	
В	4-position dual 3-port valve (N.O./N.O.)	
С	4-position dual 3-port valve (N.C./N.O.)	

Seal type

0	Rubber seal

Back pressure check valve (Built-in valve type)

	ant in taite type,
_	None
Н	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

#### **5** Pilot valve option

	_	Standard (0.7 MPa)
	В	Quick response type (0.7 MPa)

6 Coil type

_	Standard
Т	With power-saving circuit (Continuous duty type)

- \* Be sure to select the power-saving circuit type if the valve is to be continuously energised for long periods
- Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalogue.

Rated voltage

5	24 VDC
6	12 VDC

#### 8 Light/surge voltage suppressor and common specification

_	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U With light/surge voltage suppres (Non-polar)	
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

\* Only "Z" and "NZ" types are available with a power-saving circuit.

#### Manual override

—:	D.
Non-locking push type	D: Push-turn locking slotted type
E: Push-turn locking lever type	F: Slide locking type

#### A, B port size

Thread piping

micaa piping		
Symbol	Port size	Applicable series
02	1/4	SY7000

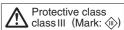
a taugh fitting (Matria)

_	One-touch fitting (wetric)			
S	Symbol	A, B port	SY5000	SY7000
	C4	Ø 4	•	_
	C6	Ø 6	•	•
	C8	Ø 8	•	•
(	C10	Ø 10	_	•
(	C12	Ø 12	_	

Thread type

Till cad type	
_	Rc
F	G
N	NPT
T	NPTF

\* The 25A- series specifications and dimensions are the same as those of the standard model.



Type 10
Side Ported

Type 11
Bottom Ported

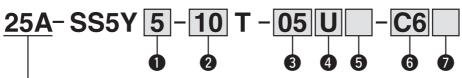
# **Plug-in Connector Connecting Base**

Terminal Block Box

# 25A-SY5000/7000 Series 5 93 us



#### **How to Order Manifolds**



 Series compatible with secondary batteries

#### Series

5	SY5000
7	SY7000

2 Type

10	Side ported
11	Bottom ported

#### 3 Valve stations

Symbol	Stations	Note					
02	2 stations						
:	:	Double wiring*1					
10	10 stations						
02	2 stations	Specified layout*2					
:	:	(Up to 20 solenoids available)					
20	20 stations	(Up to 20 solenoids available)					

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
  - The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* The blanking plate assembly is included in this number.

4 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
В	Both sides (2 to 20 stations)

#### 5 SUP/EXH block assembly

_	Internal pilot
S	Internal pilot, Built-in silencer

- \* The 3/5(E) port is plugged for the builtin silencer type.
- When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

Mounting

Symbol	Mounting	Option			
Syllibol	iviouriting	Name plate	Station number		
_	Direct	_	_		
AA	Direct mounting	•	•		
BA	inounting	•	_		
D□	DIN rail	_	_		
A□	mounting	•	•		
В□	Incurring	•	_		

- Enter the number of stations inside 
   when it is larger than the number of 
   valve stations. (Refer to "DIN Rail 
   Option" below.)
- \* Only direct mounting is available for the type 11 bottom-ported type.

#### **DIN Rail Option**

_	Direct mounting				
0	Without DIN rail (with bracket)				
3	For 3 stations   Specify a longer rail				
	For 3 stations Specify a longer rail than the total length of				
24	For 24 stations	specified stations.			

#### 6 A, B port size (Metric)

	74, B port cizo (motivo)						
Symbol	A, B port		Type 10/ Side ported		Type 11/ Bottom ported		
			SY5000	SY7000	SY5000	SY7000	
<b>C</b> 4		Ø 4	•	_	•	_	<b>~</b> a.
C6	<b>.</b>	Ø6	•	•	•	•	
C8	ig	Ø 8	•	•	•		
C10	Straight	Ø 10	_	•	_		
C12	(O)	Ø 12	_	•	_	•	A law
CM*1		Straight port, mixed sizes	•	•	•	•	
P, E port size (One-touch fittings)		Ø 10	Ø 12	Ø 10	Ø 12		

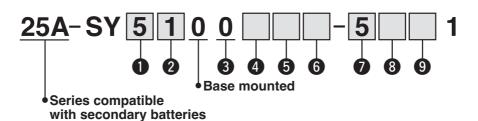
- \*1 Indicate the sizes on the manifold specification sheet for "CM."
- \* The direction of P, E port fittings is the same as for the A, B port.

\* The 25A- series specifications and dimensions are the same as those of the standard model.



Auto Switches

#### How to Order Valves (With mounting screw)



#### Series

5	SY5000
7	SY7000

2 Type of actuation

1	2-position single		
2	2-position double		
3	3-position closed centre		
4	3-position exhaust centre		
5	3-position pressure centre		
Α	4-position dual 3-port valve (N.C./N.C.)		
В	4-position dual 3-port valve (N.O./N.O.)		
С	4-position dual 3-port valve (N.C./N.O.)		

3 Seal type

<b>0</b> Rubber seal		
	0	

Back pressure check valve (Built-in valve type)

_			None		
Н	Built-in				

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

#### 5 Pilot valve option

_	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

6 Coil type

_	Standard
Т	With power-saving circuit (Continuous duty type)

- \* Be sure to select the power-saving circuit type if the valve is to be continuously energised for long periods
- Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalogue.

#### Rated voltage

	tou ronago
5	24 VDC
6	12 VDC

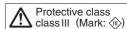
8 Light/surge voltage suppressor and common specification

and common opecation	
_	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

Only "Z" and "NZ" types are available with a power-saving circuit.

> \* The 25A- series specifications and dimensions are the same as those of the standard model.

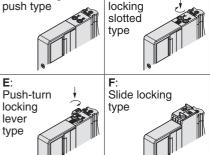
> > For details, refer to the Web Catalogue.



push type

Non-locking

Manual override



Push-turn

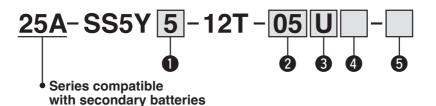
# Plug-in Connector Connecting Base

Terminal Block Box

# 25A-SY5000/7000 Series 573 us



#### **How to Order Manifolds**



### Series

ype 12 op Ported

5	SY5000
7	SY7000

3 P, E port entry

<u> </u>	
U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
В	Both sides (2 to 20 stations)

\*1 4 For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

#### Valve stations

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
10	10 stations	
02	2 stations	Specified layout*2 (Up to 20 solenoids available)
:	:	
20	20 stations	

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
  - The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* The blanking plate assembly is included in this number.

#### SUP/EXH block assembly

-		,
<ul><li>Internal pilot</li></ul>		Internal pilot
	S	Internal pilot, Built-in silencer

- \* The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
- \* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

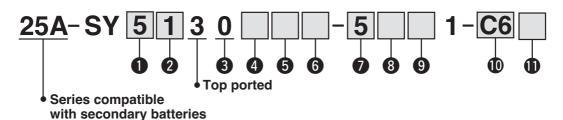
#### **5** Mounting

	_	Direct mounting	
DIN rail mounting (With DIN rail)			
	D0	DIN rail mounting (Without DIN rail)	
	D3	For 3 stations	
	:	:	longer than that of
	D20	For 20 stations	the standard rail.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Auto Switches

#### How to Order Valves (With mounting screw)



#### Series

5	SY5000
7	SY7000

2 Type of actuation

2-position single		
2-position double		
3-position closed centre		
3-position exhaust centre		
3-position pressure centre		
4-position dual 3-port valve (N.C./N.C.)		
4-position dual 3-port valve (N.O./N.O.)		
4-position dual 3-port valve (N.C./N.O.)		

3 Seal type

0	Rubber seal

4 Back pressure check valve (Built-in valve type)

_	None
Н	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

5 Pilot valve option

_	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

6 Coil type

	_	Standard
	Т	With power-saving circuit (Continuous duty type)

- \* Be sure to select the power-saving circuit type if the valve is to be continuously energised for long periods of time.
- Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalogue.

#### Rated voltage

	tou ronago
5	24 VDC
6	12 VDC

8 Light/surge voltage suppressor and common specification

_	Vithout light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	Vith light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
z	Vith light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ V	Vith light/surge voltage suppressor (Negative common)

\* Only "Z" and "NZ" types are available with a power-saving circuit.

#### Manual override

-: Non-locking push type	D: Push-turn locking slotted type
E: Push-turn locking lever type	F: Slide locking type

A, B port size

Thread piping

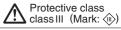
Symbol	Port size	Applicable series
02	1/4	SY7000
One-touch fitting (Metric)		

One-touch fitting (wethe)				
	Symbol	A, B port	SY5000	SY7000
	C4	Ø 4	•	_
	C6	Ø 6	•	•
	C8	Ø 8	•	
	C10	Ø 10	_	•
	C12	Ø 12	_	

Thread type

Tillead type		
	_	Rc
	F	G
	N	NPT
	Т	NPTF

\* The 25A- series specifications and dimensions are the same as those of the standard model.



ype 10 Side Ported **Type 11 Bottom Ported** 

# **Plug-in Connector Connecting Base**

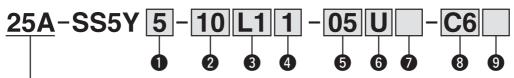
Lead Wire

# 25A-SY5000/7000 Series 5 3 3 Us





#### **How to Order Manifolds**



Series compatible with secondary batteries

#### Series

<u> </u>	
5	SY5000
7	SY7000

#### 3 Number of cores (Lead wire)

L1	34 cores
L2	17 cores
L3	9 cores

#### 2 Type

<u> </u>	<u> </u>
10	Side ported
11	Bottom ported

#### 4 Lead wire length

<u> </u>		
1	0.6 m	
2	1.5 m	
3	3 m	

#### Valve stations

<u>(</u> L1□)				
Symbol	nbol Stations Note			
02	2 stations			
:	:	Double wiring*1		
16	16 stations			
02	2 stations	Specified layout*2		
:	:	(Up to 32 solenoids		
24	24 stations	available)		

(L3[	□)			
Symbol	Stations	Note		
02	2 stations			
:	:	Double wiring*1		
04	4 stations			
02	2 stations	Specified layout*2		
:	:	(Úp to 8 solenoids		
80	8 stations	available)		

#### (L2□)

	Stations	Note	
02	2 stations		
:	:	Double wiring*1	
08	8 stations		
02	2 stations	Specified layout*2	
:	:	(Up to 16 solenoids	
16	16 stations	available)	

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* The blanking plate assembly is included in this number.

#### 6 P F port entry

_				
U	U side (2 to 10 stations)			
D side (2 to 10 stations)				
В	Both sides (2 to 24 stations)			

#### SUP/EXH block assembly

COT/EXIT BIOOK assembly			
<ul><li>Internal pilot</li></ul>			
S	Internal pilot, Built-in silencer		

- \* The 3/5(E) port is plugged for the built-in silencer type.
- When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

#### A. B port size (Metric)

	• 11, 2 port oile (monto)						
Symbol		A P port	Type 10/S	ide ported	Type 11/Bo	ttom ported	
Syllibol		A, B port	SY5000	SY7000	SY5000	SY7000	
C4		Ø 4		_			W 1877 BS
C6	ļ	Ø6	•	•	•		
C8	ight	Ø 8	•	•	•		
C10		Ø 10	_	•	_		
C12	رن	Ø 12	_	•	_		eisse
CM*1		Straight port, mixed sizes	•	•			
(C	P, ne	E port size -touch fittings)	Ø 10	Ø 12	Ø 10	Ø 12	

- \*1 Indicate the sizes on the manifold specification sheet for "CM."
- \* The direction of P, E port fittings is the same as for the A, B port.

#### 9 Mounting

Cymalaal	Mounting	Option		
Symbol		Name plate	Station number	
_	Direct mounting	_	_	
AA		•	•	
BA	mounting	•	_	
D	DIN rail mounting	_	_	
A		•	•	
В□	mounting	•	_	

- \* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)
- \* Only direct mounting is available for the type 11 bottom-ported type.

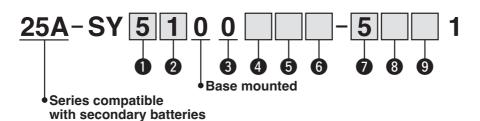
**DIN Rail Option** 

- · · · · · · · · · · · · · · · · · · ·				
_	Direct mounting			
0	Without DIN rail (with bracket)			
3	For 3 stations	Specify a longer rail than		
		the total length of specified		
24	For 24 stations	stations.		

\* The 25A- series specifications and dimensions are the same as those of the standard model.



#### How to Order Valves (With mounting screw)



#### Series

5	SY5000
7	SY7000

2 Type of actuation

1	2-position single		
2	2-position double		
3	3-position closed centre		
4	3-position exhaust centre		
5	3-position pressure centre		
Α	4-position dual 3-port valve (N.C./N.C.)		
В	4-position dual 3-port valve (N.O./N.O.)		
С	4-position dual 3-port valve (N.C./N.O.)		

3 Seal type

0	Rubber sea	ı <b>l</b>

Back pressure check valve (Built-in valve type)

(Built iii vaive type)		
_	None	
Н	Built-in	

The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

6 Pilot valve option

Standard (0.7 MPa)		Standard (0.7 MPa)			
	В	Quick response type (0.7 MPa)			

6 Coil type

_	Standard	
Т	With power-saving circuit (Continuous duty type)	

- \* Be sure to select the power-saving circuit type if the valve is to be continuously energised for long periods
- Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalogue.

#### Rated voltage

Tratou vortago		
5	24 VDC	
6	12 VDC	

8 Light/surge voltage suppressor and common specification

Without light/surge voltage supp (Non-polar)	
R With surge voltage suppress (Non-polar)	
With light/surge voltage suppre (Non-polar)	
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS With surge voltage suppressor (Negative common)	
NZ	With light/surge voltage suppressor (Negative common)

\* Only "Z" and "NZ" types are available with a power-saving circuit.

#### Manual override

-: Non-locking push type	D: Push-turn locking slotted type
E: Push-turn locking lever type	F: Slide locking type

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# **Plug-in Connector Connecting Base**

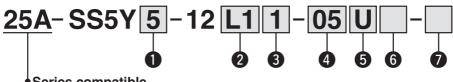
Lead Wire

# 25A-SY5000/7000 Series





#### **How to Order Manifolds**



 Series compatible with secondary batteries

#### Series

5	SY5000
7	SY7000

ype 12 op Ported

# 2 Number of cores (Lead wire)

L1	34 cores
L2	17 cores
L3	9 cores

#### 3 Lead wire length

1	0.6 m
2	1.5 m
3	3 m

#### 4 Valve stations

	<u>(LIU)</u>		
	Stations	Note	
02	2 stations		
:	:	Double wiring*1	
16	16 stations		
02	2 stations	Specified layout*2	
:	:	(Up to 32 solenoids	
24	24 stations	available)	

(L3∟	<b>」</b> )	
Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
04	4 stations	
02	2 stations	Specified layout*2
:	:	(Úp to 8 solenoids
80	8 stations	available)

#### (L2□)

	Stations	Note
02	2 stations	
:	:	Double wiring*1
08	8 stations	
02	2 stations	Specified layout*2
:	:	(Up to 16 solenoids
16	16 stations	available)

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* The blanking plate assembly is included in this number.

**5** P, E port entry

	U*1	U side (2 to 10 stations)
	D*1	D side (2 to 10 stations)
	В	Both sides (2 to 24 stations)

\*1 **6** For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

#### 6 SUP/EXH block assembly

_	Internal pilot
S	Internal pilot, Built-in silencer

- \* The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
- When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

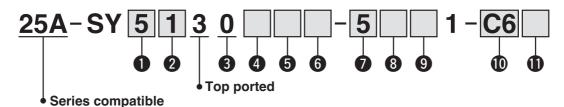
#### Mounting

_	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations	Specify a length
÷	:	longer than that of
D24	For 24 stations	the standard rail.

\* The 25A- series specifications and dimensions are the same as those of the standard model.



#### How to Order Valves (With mounting screw)



#### Series

5	SY5000	
7	SY7000	

2 Type of actuation

2-position single	
2-position double	
3-position closed centre	
3-position exhaust centre	
3-position pressure centre	
4-position dual 3-port valve (N.C./N.C.)	
4-position dual 3-port valve (N.O./N.O.)	
4-position dual 3-port valve (N.C./N.O.)	

3 Seal type

0	Rubber seal

Back pressure check valve (Built-in valve type)

_	None
Н	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

#### Pilot valve option

_	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

6 Coil type

with secondary batteries

	<u> </u>		
	_	Standard	
	Т	With power-saving circuit	
		(Continuous duty type)	

- \* Be sure to select the power-saving circuit type if the valve is to be continuously energised for long periods of time.
- Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalogue.

### type

### Rated voltage

5	24 VDC
6	12 VDC
•	

#### 8 Light/surge voltage suppressor and common specification

	NACH PRODUCT	
_	Without light/surge voltage suppressor	
	(Non-polar)	
R	With surge voltage suppressor	
n	(Non-polar)	
U	With light/surge voltage suppressor	
U	(Non-polar)	
S	With surge voltage suppressor	
3	(Positive common)	
Z	With light/surge voltage suppressor	
	(Positive common)	
NC	With surge voltage suppressor	
NS	(Negative common)	
NIZ	With light/surge voltage suppressor	
NZ	(Negative common)	
0 1 ((3)) 1 ((1))		

\* Only "Z" and "NZ" types are available with a power-saving circuit.

## A, B port size

Manual override

Non-locking push type

E:

Push-turn

locking

lever

Push-turn

Slide locking

locking

slotted

type

type

#### Thread piping

Symbol	Port size	Applicable series
02	1/4	SY7000

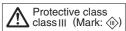
#### One-touch fitting (Metric)

One	One-touch fitting (wethe)							
Symbol	A, B port	SY5000	SY7000					
C4	Ø 4		_					
C6	Ø 6	•	•					
C8	Ø 8	•	•					
C10	Ø 10	_	•					
C12	Ø 12	_	•					

#### Thread type

• ····································				
_	Rc			
F	G			
N	NPT			
Т	NPTF			

\* The 25A- series specifications and dimensions are the same as those of the standard model.



ype 10 Side Ported Type 11 **Bottom Ported** 

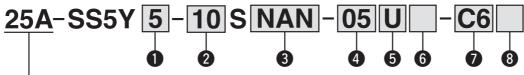
# **Plug-in Connector Connecting Base**

# 25A-SY5000/7000 Series 5 93 us





#### **How to Order Manifolds**



Series compatible with secondary batteries

#### Series

5	SY5000
7	SY7000

2 Type

10	Side ported
11	Bottom ported

SI unit specifications (Output polarity, Protocol, Number of outputs, Communication connector)

, ,	tput polarity) Negative common (PNP)	Protocol	Number of outputs	Communication connector	
, ,	· ,				
	)	Without	SI unit		
QA	QAN	DeviceNet®	32	M12	
QB	QBN	Devicemen	16	IVIIZ	
NA	NAN	PROFIBUS	32	M12	
NB	NBN	DP	16	IVITZ	
VA	VAN	CC-Link	32	M12	
VB	VBN	CC-LIIIK	16		
DA	DAN	EtherCAT	32	M12	
DB	DBN	EllielCAT	16	IVI 12	
FA	FAN	PROFINET	32	M12	
FB	FBN	ITIOTINE	16	IVITZ	
EA	EAN	EtherNet/IP™	32	M12	
EB	EBN	Luienve(ii	16	10112	
_	KAN	IO-Link	32	M12	

- Without SI unit, the output polarity is decided by the SI unit used. Ensure a match with the common specification of the valves to be used.
- DIN rail cannot be mounted without SI unit.
- For IO-Link, only the negative common (PNP) type and the 32 outputs type are available.

#### 4 Valve stations

In the case of the 32-output SI unit

Symbol	Stations	Note					
02	2 stations						
:	:	Double wiring*1					
16	16 stations						
02	2 stations	Charified layout*2					
:	:	Specified layout*2 (Up to 32 solenoids available)					
24	24 stations	(Op to 32 soleriolds available)					

#### In the case of the 16-output SI unit

Symbol	Stations	Note			
02	2 stations				
:	:	Double wiring*1			
80	8 stations				
02	2 stations	Charified layout*2			
:	:	Specified layout*2 (Up to 16 solenoids available			
16	16 stations	(Op to 10 solelloids available			

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single
  - solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- The blanking plate assembly is included in this number.
- For the model without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

6 P. E port entry

	_  -  -  -  -  -  -  -  -  -  -  -  -  -
U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
В	Both sides (2 to 24 stations)

#### 6 SUP/EXH block assembly

_	Internal pilot
S	Internal pilot, Built-in silencer

- The 3/5(E) port is plugged for the builtin silencer type.
- When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

8 Mounting

Symbol	Mounting	Option  Name plate   Station numb	
Symbol	iviouriting	Name plate	Station number
_	Direct mounting		_
AA		•	•
BA		•	_
D	DIN soil	_	_
A	DIN rail mounting	•	•
В□	inounting	•	_

- \* Enter the number of stations inside  $\square$  when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)
- Only direct mounting is available for the type 11 bottom-ported type.

#### **DIN Rail Option**

_	Direct mounting					
0	Without DIN rail (with bracket)					
3	For 3 stations Specify a longer rail					
	than the total length of					
24	For 24 stations	specified stations.				

A. B port size (Metric)

	• 7 t, 2 port oile (incare)									
Cumhal		A B port	Type 10/Side ported Type 11		Type 11/Bo	ttom ported				
Symbol		A, B port	SY5000	SY7000	SY5000	SY7000				
C4		Ø 4		_	•	_				
C6	<u>.</u>	Ø6		•						
C8	Straight	Ø 8								
C10	itra	Ø 10	_		_					
C12	(0)	Ø 12	_	•	_	•	O DESERVE			
CM*1		Straight port, mixed sizes		•	•	•				
P, E port size (One-touch fittings)			Ø 10	Ø 12	Ø 10	Ø 12				

\*1 Indicate the sizes on the manifold specification sheet for "CM."

\* The 25A- series specifications and dimensions are the same as those of the standard model.

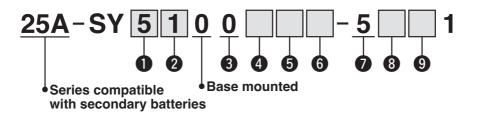
For details, refer to the Web Catalogue.

For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalogue and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalogue. Please download the Operation Manual via the SMC website: https://www.smc.eu



# Auto Switches

#### How to Order Valves (With mounting screw)



#### Series

5	SY5000
7	SY7000

2 Type of actuation

1	2-position single	
2	2-position double	
3	3-position closed centre	
4	3-position exhaust centre	
5	3-position pressure centre	
Α	4-position dual 3-port valve (N.C./N.C.)	
В	4-position dual 3-port valve (N.O./N.O.)	
С	4-position dual 3-port valve (N.C./N.O.)	

3 Seal type

0	Rubber seal

4 Back pressure check valve (Built-in valve type)

	, , , , , , , , , , , , , , , , , , ,
_	None
Н	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

5 Pilot valve option

a)
ć

6 Coil type

_	Standard
Т	With power-saving circuit (Continuous duty type)
. Do o	ire to coloct the newer coving

- Be sure to select the power-saving circuit type if the valve is to be continuously energised for long periods
- Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalogue.

#### Rated voltage

5	24 VDC

8 Light/surge voltage suppressor and common specification

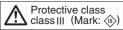
<b>.</b>		
R	With surge voltage suppressor (Non-polar)	
U	With light/surge voltage suppressor (Non-polar)	
S	With surge voltage suppressor (Positive common)	
Z	With light/surge voltage suppressor (Positive common)	
NS	With surge voltage suppressor (Negative common)	
NZ	With light/surge voltage suppressor (Negative common)	

- Select "R," "U," "S," or "Z" for the valve when the SI unit output polarity is — (positive common). Select "R," "U," "NS," or "NZ" for the valve when the SI unit
- output polarity is N (negative common). Only "Z" and "NZ" types are available with a power-saving circuit.

## 9 Manual override

-: Non-locking push type	D: Push-turn locking slotted type
E: Push-turn locking lever type	F: Slide locking type

\* The 25A- series specifications and dimensions are the same as those of the standard model.



### Type 12 op Ported

# **Plug-in Connector Connecting Base**

25A-SY5000/7000 Series 5 93 us





#### **How to Order Manifolds**



Series compatible with secondary batteries

#### Series

5	SY5000
7	SY7000

#### SI unit specifications (Output polarity, Protocol, Number of outputs, Communication connector)

Symbol (Output polarity)			Number	Communication
Positive common (NPN)	Negative common (PNP)	Protocol	of outputs	connector
0		Without SI unit		
QA	QAN	DeviceNet®	32	M12
QB	QBN	Devicemen	16	IVIIZ
NA	NAN	PROFIBUS	32	M12
NB	NBN	DP	16	IVIIZ
VA	VAN	CC-Link	32	M12
VB	VBN	CC-LINK	16	IVITZ
DA	DAN	EtherCAT	32	M12
DB	DBN	EllielCAT	16	IVIIZ
FA	FAN	PROFINET	32	M12
FB	FBN		16	IVIIZ
EA	EAN	EtherNet/IP™	32	M12
EB	EBN	Luicine/IF	16	IVIIZ
_	KAN	IO-Link	32	M12

- \* Without SI unit, the output polarity is decided by the SI unit used. Ensure a match with the common specification of the valves to be used.
- \* DIN rail cannot be mounted without SI
- For IO-Link, only the negative common (PNP) type and the 32 outputs type are àvailable.

#### 3 Valve stations

#### In the case of the 32-output SI unit

Symbol	Stations	Note	
02	2 stations		
:	:	Double wiring*1	
16	16 stations		
02	2 stations	Charified layout*2	
:	:	Specified layout*2 (Up to 32 solenoids available)	
24	24 stations	(Op to 32 soleriolds available)	

#### In the case of the 16-output SI unit

Symbo	Stations	Note
02	2 stations	
:		Double wiring*1
08	8 stations	
02	2 stations	Specified layout*2
:	1	(Up to 16 solenoids available)
16	16 stations	(Op to 10 soleriolds available)

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a
- specified layout. Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- The blanking plate assembly is included in this number.
- For the model without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

#### A P F nort entry

T , E port critiny	
U*1	U side (2 to 10 stations)
<b>D</b> *1	D side (2 to 10 stations)
В	Both sides (2 to 24 stations)

\*1 5 For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

#### **5**SUP/EXH block assembly

_	Internal pilot
S	Internal pilot, Built-in silencer

- The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
- When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

#### **6** Mounting

_	Dire	ct mounting
D	DIN rail mou	nting (With DIN rail)
D0	DIN rail moun	ting (Without DIN rail)
D3	For 3 stations	Specify a length
•	:	longer than that of
D24	For 24 stations	the standard rail.

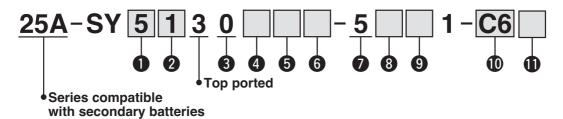
- If the DIN rail must be mounted without an SI unit, select D0. Then, refer to L3 of the dimensions for the DIN rail length and order separately.
- \* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalogue and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalogue. Please download the Operation Manual via the SMC website: https://www.smc.eu



#### How to Order Valves (With mounting screw)



#### A Sarias

	1100
5	SY5000
7	SY7000

2 Type of actuation

1	2-position single
2	2-position double
3	3-position closed centre
4	3-position exhaust centre
5	3-position pressure centre
Α	4-position dual 3-port valve (N.C./N.C.)
В	4-position dual 3-port valve (N.O./N.O.)
С	4-position dual 3-port valve (N.C./N.O.)

3 Seal type

Back pressure check valve (Built-in valve type)

(Built-iii vaive type)	
_	None
Н	Built-in

The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

6 Pilot valve option

_	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

6 Coil type

_	Standard
Т	With power-saving circuit (Continuous duty type)

- \* Be sure to select the power-saving circuit type if the valve is to be continuously energised for long periods of time.
- \* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalogue.

Rated voltage

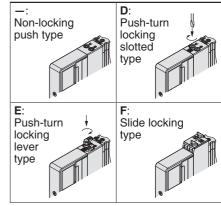
24 VDC	5 24 VD
--------	---------

8 Light/surge voltage suppressor and common specification

R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

- \* Select "R," "U," "S," or "Z" for the valve when the SI unit output polarity is — (positive common). Select "R," "U," "NS," or "NZ" for the valve when the SI unit
- output polarity is N (negative common). Only "Z" and "NZ" types are available with a power-saving circuit.

#### Manual override



A, B port size Thread piping

Applicable series Port size 02 1/4 SY7000

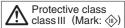
#### One touch fitting (Matric)

·	One-touch litting (wetric)					
S	ymbol	A, B port	SY5000	SY7000		
	C4	Ø 4	•	_		
	C6	Ø 6	•			
	C8	Ø 8	•	•		
	210	Ø 10	_	•		
C	<b>C12</b>	Ø 12	_	•		

Thread type

Timoda typo				
_	Rc			
F	G			
N	NPT			
Т	NPTF			

\* The 25A- series specifications and dimensions are the same as those of the standard model.



Type 10
Side Ported

Type 11
Bottom Ported

# **Plug-in Connector Connecting Base**

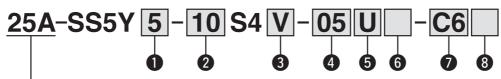
**EX126** 

# 25A-SY5000/7000 Series





#### **How to Order Manifolds**



Series compatible with secondary batteries

#### Series

5	SY5000
7	SY7000

#### 2 Type

10	Side ported
11	Bottom ported

#### 3 SI unit

0	Without SI unit
V	CC-Link (Positive common NPN)

 Only a terminal block plate is mounted for the valve without SI unit.
 For SI unit part numbers, refer to page 53.

#### **5** P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B Both sides (2 to 16 stations)	

#### 6 SUP/EXH block assembly

_	Internal pilot		
S	Internal pilot, Built-in silencer		

- \* The 3/5(E) port is plugged for the builtin silencer type.
- When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

#### 8 Mounting

Mounting	Option			
	Name plate	Station number		
	_	_		
	•	•		
inounting		_		
DIN soil	_	_		
	•	•		
linounting		_		
	Mounting Direct mounting DIN rail mounting	Direct mounting  DIN rail		

- \* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)
- \* Only direct mounting is available for the type 11 bottom-ported type.

#### **DIN Rail Option**

_	Direct mounting				
0	Without DIN rail (with bracket)				
3	For 3 stations Specify a longer rail				
	:	than the total length of specified stations.			
24	For 24 stations				

#### 4 Valve stations

Symbol	Stations	Note				
02	2 stations					
:	:	Double wiring*1				
08	8 stations					
02	2 stations	Specified layout*2 (Up to 16 solenoids available)				
:	:					
16	16 stations					

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal.
  - will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* The blanking plate assembly is included in this number.

#### A, B port (Metric)

A, B port (wetric)							
Symbol	A, B port			e 10/ ported	Type Bottom	e 11/ ported	
			SY5000	SY7000	SY5000	SY7000	
C4		Ø 4	•		•	_	
C6		Ø 6	•		•	•	
C8	igh	Ø 8	•		•	•	
C10	Straight	Ø 10	_		_		
C12	(0)	Ø 12	_		_	•	ol Bases
CM*1		Straight port, mixed sizes	•		•	•	
(C	P, E port size (One-touch fittings)			Ø 12	Ø 10	Ø 12	

- \*1 Indicate the sizes on the manifold specification sheet for "CM."
- \* The direction of P, E port fittings is the same as for the A, B port.
  - The 25A- series specifications and dimensions are the same as those of the standard model.

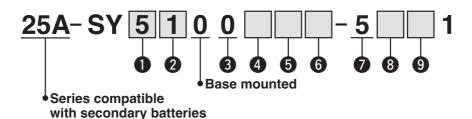
For details, refer to the Web Catalogue.

For details on the EX126 Integrated Type (For Output) Serial Transmission System, refer to the **Web Catalogue** and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalogue. Please download the Operation Manual via the SMC website: https://www.smc.eu



Auto Switches

#### How to Order Valves (With two mounting screws)



#### Series

5	SY5000
7	SY7000

2 Type of actuation

2-position single
2-position double
3-position closed centre
3-position exhaust centre
3-position pressure centre
4-position dual 3-port valve (N.C./N.C.)
4-position dual 3-port valve (N.O./N.O.)
4-position dual 3-port valve (N.C./N.O.)

Seal type

0	Rubber seal

Back pressure check valve (Built-in valve type)

(Built-III valve type)		
	_	None
	Н	Built-in

The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

#### 5 Pilot valve option

_	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

6 Coil type

_	Standard
T	With power-saving circuit (Continuous duty type)

- \* Be sure to select the power-saving circuit type if the valve is to be continuously energised for long periods
- Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalogue.

#### Rated voltage

5	24 VDC

8 Light/surge voltage suppressor and common specification

and common opcomoduon	
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)

Only "Z" type is available with a powersaving circuit.

#### 9 Manual override

-: Non-locking push type	D: Push-turn locking slotted type
E: Push-turn locking lever type	F: Slide locking type

\* The 25A- series specifications and dimensions are the same as those of the standard model.

ype 12 op Ported **Plug-in Connector Connecting Base** 

**EX126** 

25A-SY5000/7000 Series





#### **How to Order Manifolds**



 Series compatible with secondary batteries

#### Series

5	SY5000
7	SY7000

#### 2 SI unit

0	Without SI unit
V	CC-Link (Positive common NPN)

 Only a terminal block plate is mounted for the valve without SI unit.
 For SI unit part numbers, refer to page 53.

#### 3 Valve stations

Symbol	Stations	Note
02	2 stations	
:	:	Double wiring*1
08	8 stations	_
02	2 stations	Specified layout*2 (Up to 16 solenoids available)
:	:	
16	16 stations	

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
  - The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* The blanking plate assembly is included in this number.

#### 4 P, E port entry

- ,	_ p =
U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
В	Both sides (2 to 16 stations)

\*1 **5** For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

#### 5 SUP/EXH block assembly

_	Internal pilot
S	Internal pilot, Built-in silencer

- \* The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
- \* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

#### 6 Mounting

_	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations   Specify a length	
÷	i longer than that of	
D16	For 16 stations	the standard rail.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

For details on the EX126 Integrated Type (For Output) Serial Transmission System, refer to the **Web Catalogue** and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalogue. Please download the Operation Manual via the SMC website: https://www.smc.eu



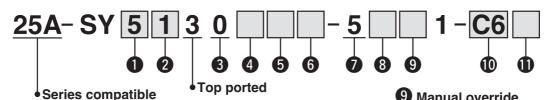
Detection Switches

**Process Gas** Equipment

Electric Actuators

Auto Switches

#### How to Order Valves (With mounting screw)



#### Series

5	SY5000
7	SY7000

#### 2 Type of actuation

1	2-position single	
2	2-position double	
3	3-position closed centre	
4	3-position exhaust centre	
5	3-position pressure centre	
Α	4-position dual 3-port valve (N.C./N.C.)	
В	4-position dual 3-port valve (N.O./N.O.)	
С	4-position dual 3-port valve (N.C./N.O.)	

#### 3 Seal type

0	Rubber seal	

#### Back pressure check valve (Built-in valve type)

	_	None	
Н		Built-in	
* The built-in valve type back pressu			

check valve is not available for the 3-position type or the SY7000.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

#### 6 Pilot valve option

<ul><li>Standard (0.7 MPa)</li></ul>		Standard (0.7 MPa)
	В	Quick response type (0.7 MPa)

#### 6 Coil type

with secondary batteries

	<b>7</b> 1	
_	Standard	
Т	With power-saving circuit (Continuous duty type)	

- \* Be sure to select the power-saving circuit type if the valve is to be continuously energised for long periods of time.
- Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalogue.

#### Rated voltage

5	24 VDC

#### 8 Light/surge voltage suppressor and common specification

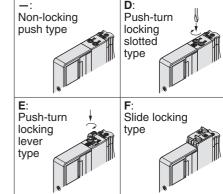
	R	With surge voltage suppressor (Non-polar)	
U With		With light/surge voltage suppressor (Non-polar)	
	S	With surge voltage suppressor (Positive common)	
	Z	With light/surge voltage suppressor (Positive common)	

\* Only "Z" type is available with a power-saving circuit.

#### **∧** Caution

Tightening torque for mounting screw		
M3: 0.8 N⋅m		

#### Manual override



#### A, B port size

i ili cau pipilig		
Symbol	Port size	Applicable series
02	1/4	SY7000

#### One-touch fitting (Metric)

One-touch nitting (metho)					
Symbol	A, B port	SY5000	SY7000		
C4	Ø 4	•	_		
C6	Ø 6		•		
C8	Ø 8	•	•		
C10	Ø 10	_			
C12	Ø 12	_	•		

#### Thread type

_	Rc
F	G
N	NPT
T	NPTF

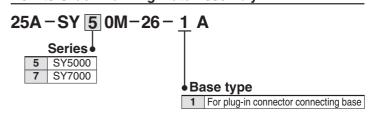
#### Manifold Options

#### ■Blanking plate assembly

(With mounting screw) Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



#### **How to Order Blanking Plate Assembly**



\* The 25A- series specifications and dimensions are the same as those of the standard model.

### 25A-SY5000/7000 Series

#### SI Unit Part Nos.

Description	SI unit part no.	Note
	EX260-SPR1-X117	PROFIBUS DP M12 connector, 32 outputs, Negative common (PNP)
	EX260-SPR2-X117	PROFIBUS DP M12 connector, 32 outputs, Positive common (NPN)
	EX260-SPR3-X117	PROFIBUS DP M12 connector, 16 outputs, Negative common (PNP)
	EX260-SPR4-X117	PROFIBUS DP M12 connector, 16 outputs, Positive common (NPN)
	EX260-SDN1-X117	DeviceNet® M12 connector, 32 outputs, Negative common (PNP)
	EX260-SDN2-X117	DeviceNet® M12 connector, 32 outputs, Positive common (NPN)
	EX260-SDN3-X117	DeviceNet® M12 connector, 16 outputs, Negative common (PNP)
	EX260-SDN4-X117	DeviceNet® M12 connector, 16 outputs, Positive common (NPN)
	EX260-SEC1-X117	EtherCAT M12 connector, 32 outputs, Negative common (PNP)
	EX260-SEC2-X117	EtherCAT M12 connector, 32 outputs, Positive common (NPN)
	EX260-SEC3-X117	EtherCAT M12 connector, 16 outputs, Negative common (PNP)
	EX260-SEC4-X117	EtherCAT M12 connector, 16 outputs, Positive common (NPN)
EX260 SI unit	EX260-SMJ1-X117	CC-Link M12 connector, 32 outputs, Negative common (PNP)
	EX260-SMJ2-X117	CC-Link M12 connector, 32 outputs, Positive common (NPN)
	EX260-SMJ3-X117	CC-Link M12 connector, 16 outputs, Negative common (PNP)
	EX260-SMJ4-X117	CC-Link M12 connector, 16 outputs, Positive common (NPN)
	EX260-SPN1-X117	PROFINET M12 connector, 32 outputs, Negative common (PNP)
	EX260-SPN2-X117	PROFINET M12 connector, 32 outputs, Positive common (NPN)
	EX260-SPN3-X117	PROFINET M12 connector, 16 outputs, Negative common (PNP)
	EX260-SPN4-X117	PROFINET M12 connector, 16 outputs, Positive common (NPN)
	EX260-SEN1-X117	EtherNet/IP™ M12 connector, 32 outputs, Negative common (PNP)
	EX260-SEN2-X117	EtherNet/IP™ M12 connector, 32 outputs, Positive common (NPN)
	EX260-SEN3-X117	EtherNet/IP™ M12 connector, 16 outputs, Negative common (PNP)
	EX260-SEN4-X117	EtherNet/IP™ M12 connector, 16 outputs, Positive common (NPN)
	EX260-SIL1-X117	IO-Link M12 connector, 32 outputs, Negative common (PNP)
EX126 SI unit	EX126D-SMJ1-X220	CC-Link (Terminal block, 16 outputs, Positive common (NPN))

#### Valve Mounting Screw Part No.

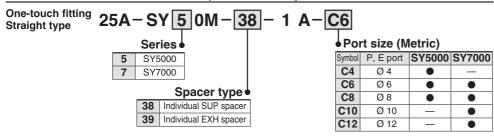
Description	Pari	t no.	Note	
Description	SY5000	SY7000	Note	
Round head combination screw	SY5000-223-1A	SY7000-224-1A	Part numbers shown on the left are for 10 valves. (20 pcs.)	

#### **One-touch Fittings Part Nos.**

		Port size	25A-SY5000 25A-SY7000	
		Ø 4 One-touch fitting (Straight type)	90-VVQ1000-51A-C4	_
Λ B	A, B port size 0 8 One-touch fitting (Straight type) 90-VVQ1000-51A-C8 0 10 One-touch fitting (Straight type) —	25A-KJH06-17-X1607		
,		Ø 8 One-touch fitting (Straight type)	90-VVQ1000-51A-C8	90-VVQ2000-51A-C8
port		Ø 10 One-touch fitting (Straight type)	(Straight type) —	90-VVQ2000-51A-C10
		Ø 12 One-touch fitting (Straight type)	<u> </u>	25A-KQ2H12-17-X1607
P, E	Metric	Ø 10 One-touch fitting (Straight type)	90-VVQ2000-51A-C10	_
port	size	Ø 12 One-touch fitting (Straight type)	_	90-VVQ4000-50B-C12

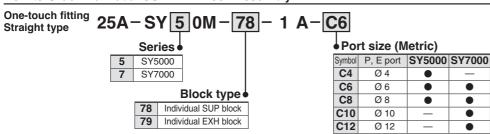
#### **Manifold Options**

#### How to Order Individual SUP/EXH Spacer Assembly



Part numbers of mounting screw SY5000: SY5000-223-2A (2 pcs. of each) SY7000: SV1000-136-12A (3 pcs. of each)

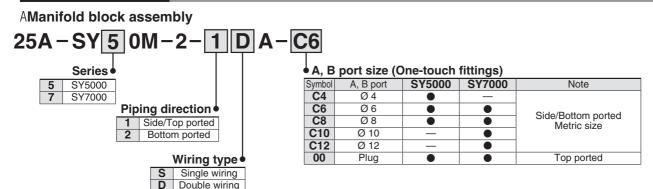
#### How to Order Individual SUP/EXH Block Assembly





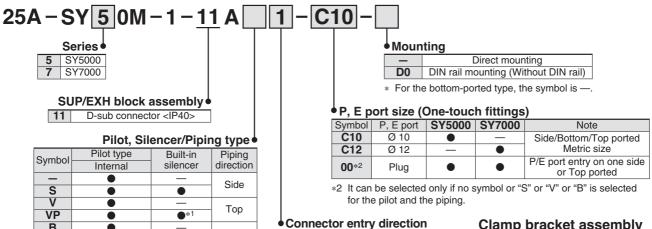
### Manifold Options 25A-SY5000/7000 Series

#### **Manifold Parts Nos.**



#### **BSUP/EXH block assembly**

1) D-sub connector <IP40>



Upward

Lateral

#### Clamp bracket assembly

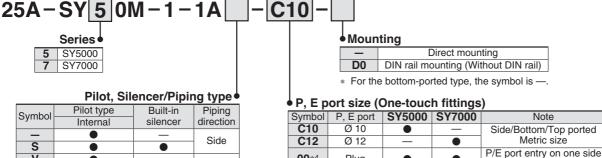
Series	Part no.
25A-SY5000/7000	25A-SY50M-15-3A

Part number is for one assembly.

**2**Terminal block box

B

BS



00\*4

Plug

**多SMC** 

for the pilot and the piping.

\*4 It can be selected only if no symbol or "S" or "V" or "B" is selected

**Bottom** 

Symbol	Pilot type	Built-in	Piping
Symbol	Internal	silencer	direction
_	•	_	Side
S	•	•	Side
V	•	_	Тор
VP	•	<b>●</b> *3	ТОР
В	•	_	Bottom
BS	•	•	BOLLOITI

<sup>\*3</sup> For silencer (supply side) E port is plugged.

Terminal block box housing assembly

25A-VVQC1000-T0-1

Clamp bracket assembly for terminal block box

#### 25A-SY30M-15-6A

\* Part number is for one assembly.

#### Clamp bracket assembly

Series	Part no.
25A-SY5000/7000	25A-SY50M-15-3A

Part number is for one assembly.

or Top ported

**Air Cylinders** Related Products

Rotary Actuators

Air Grippers

Equipment Vacuum

Preparation Equipment Air

Clean Air Filters

Modular F.R.L./ Pressure Control Equipment

Flow Control Equipment/ Fittings

Detection Switches

Fluid Control Equipment

Process Gas Equipment

Electric Actuators

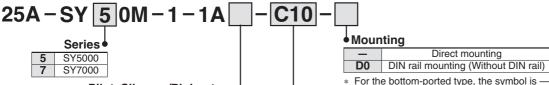
Auto Switches

<sup>\*1</sup> For silencer (supply side) E port is plugged.

### 25A-SY5000/7000 Series

#### **Manifold Parts Nos.**





Pilot, Silencer/Piping type

Symbol	Pilot type	Built-in	Piping
Syllibol	Internal	silencer	direction
_	•	_	Side
S	•	Sic	Side
V	•	_	Тор
VP	•	<b>●</b> *1	ТОР
В	•	_	Bottom
BS	•	•	Bolloili
B2			

\*1 For silencer (supply side) E port is plugged.

For the bottom-ported type, the symbol is -

P, E port size (One-touch fittings)

Symbol	P, E port	SY5000	SY7000	Note
C10	Ø 10	•	_	Side/Bottom/Top ported
C12	Ø 12	_	•	Metric size
00*2	Plug	•	•	P/E port entry on one side or Top ported

\*2 It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

#### Lead wire connector block assembly



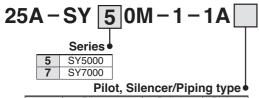
Number of cores

Lead wire length [m]

Mounting

	aa miio
1	0.6
2	1.5
3	3

(4)EX126



Symbol	Pilot type	Built-in	Piping
Syllibol	Internal	silencer	direction
_	•	_	Side
S	•	•	Side
V	•	_	Тор
VP	•	<b>●</b> *3	тор
В	•	_	Bottom
BS		•	DOMOIN

\*3 For silencer (supply side) E port is plugged.

#### Clamp bracket assembly

<u> </u>	•	
Series	Part no.	
25A-SY5000/7000	25A-SY50M-15-3A	

\* Part number is for one assembly.

### 25A-VVQC1000-74A-2

Clamp bracket assembly for EX126 SI unit

#### 25A-SY30M-15-6A

Terminal block plate assembly

\* Part number is for one assembly.

♠ P, E port size (One-touch fittings)						
Symbol P, E port   SY5000   SY7000   Note						
C10	Ø 10		_	Side/Bottom/Top ported		
C12	Ø 12	_	•	Metric size		
				D/E t t		

For the bottom-ported type, the symbol is —.

Direct mounting

DIN rail mounting (Without DIN rail)

P/E port entry on one side 00\*4 Plug or Top ported \*4 It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

### Clamp bracket assembly

Series	Part no.
25A-SY5000/7000	25A-SY50M-15-3A

\* Part number is for one assembly.

#### (5)EX260 25A-SY | 5 | 0M-1-1A |

**Series** SY5000 SY7000

Pilot, Silencer/Piping type

ind, endicate iping type					
Symbol	Pilot type	Built-in	Piping		
Symbol	Internal	silencer	direction		
_	•	_	Side		
S	•	•	Side		
V	•	_	Ton		
VP	•	<b>●</b> *5	Тор		
В	•	_	Bottom		
BS	•	•	BOLLOITI		

\*5 For silencer (supply side) E port is plugged.

Mounting				
	_	Direct mounting		
	D0	DIN rail mounting (Without DIN rail)		

\* For the bottom-ported type, the symbol is -

P, E port size (One-touch fittings)

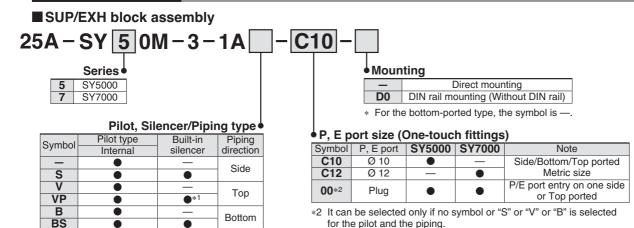
Symbol	P, E port	SY5000	SY7000	Note	
C10	Ø 10	•	_	Side/Bottom/Top ported	
C12	Ø 12	_	•	Metric size	
00*6	Plug	•	•	P/E port entry on one side or Top ported	

\*6 It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

#### Clamp bracket assembly

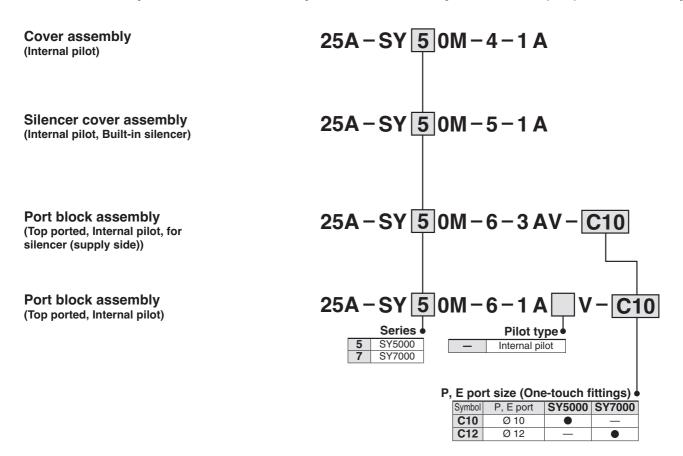
Series	Part no.	
25A-SY5000/7000	25A-SY50M-15-3A	





<sup>\*1</sup> For silencer (supply side) E port is plugged.

#### ■ Cover assembly/Silencer cover assembly/Port block assembly for SUP/EXH (end) block assembly

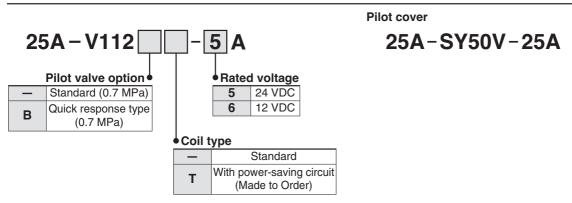


■ Name plate bracket assembly (For SY5000 only)

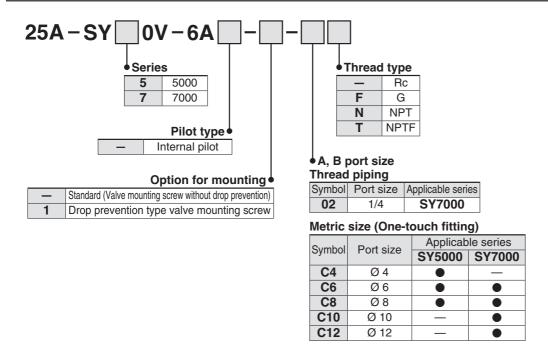
25A-SY50M-85-1A

# 25A-SY5000/7000 Series Valve Replacement Parts

#### **How to Order Pilot Valves**



#### **How to Order Port Block Assembly**



#### **Body Cover Assembly**

\* Used when the top-ported type is changed to the side or bottom-ported type

		Part no.		
	Series	Standard (Valve mounting screw	Drop prevention type valve	
		without drop prevention)	mounting screw	
SY5000	Internal pilot	25A-SY50V-16A	25A-SY50V-16A-1	
SY7000	Internal pilot	25A-SY70V-16A	25A-SY70V-16A-1	

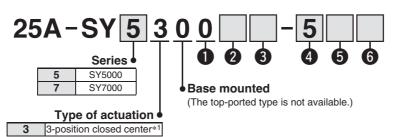
<sup>\*</sup> The part number is not indicated on the product.



Auto Switches

# 25A-SY5000/7000 Series With Residual Pressure Release Valve

#### How to Order (With mounting screw)



\*1 Only the closed center type is available.

# With residual pressure release valve

E With residual pressure release valve\*2

\*2 Mounting screw types, hexagon socket head cap screw B and drop prevention type K, H are not available.



Seal type

0 Rubber seal

2 Pilot valve option

_	Standard (0.7 MPa)
В	Quick response type (0.7 MPa)

3 Coil type

	71
_	Standard
Т	With power saving circuit (Continuous duty type)

- Be sure to select the power saving circuit type if the valve is to be continuously energized for long periods of time.
- Be careful of the energizing time when the power saving circuit is selected. Refer to the Web Catalog for details.

Rated voltage

• Hatea Fertage					
5	24 VDC				
6	12 VDC				

 The applicable rated voltage varies depending on the manifold wiring type. Refer to the "How to Order Manifolds" pages.

# 5 Light/surge voltage suppressor and common specification

	Symbol With light		Surge voltage	Common
3	syrribor	vvitii ligiit	suppressor	specification
	_		_	
	R	_		Non-polar
	U	•		
	S		•	Positive
	Z	•		common
	NS			Negative
	NZ	•		common

\* Only "Z" and "NZ" types are available with a power saving circuit.

#### 6 Manual override

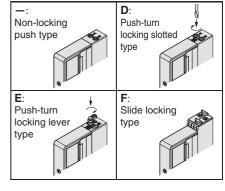


Table 1. Valve mounting screw

SY5000	SY7000
SY5000-221-9A	SY7000-221-14A
(2 pcs.)	(3 pcs.)

# 25A-SY5000/7000 Series

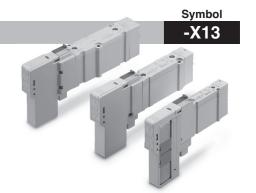
# **Made to Order**

Please contact SMC for detailed dimensions, specifications, and lead times.

1 With Safety Slide Locking Manual Override

A safety lock is added to the slide locking manual override.

**■** Entry is the same as 25A-standard products. Specifications and performance are the same as standard products.



**Symbol** 

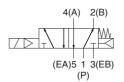
-X350

2 2-Position Single Solenoid Valve with Built-in Return Spring

A 2-position single solenoid valve with a spring built into the main valve The main valve returns to origin (the OFF position) via the spring when it is not pressurized.

**♦** Entry is the same as 25A-standard products. Specifications and performance are the same as standard products.

Internal pilot type



\* The manual option is only applicable to the non-locking push type.

A, B port thread type (Thread piping) Rc

Wiring specifications (Sub-plate) WO Without M12 connector cable

cable, the connector cable is included.

\*1 Only available for the valve piping type "3"

Port location (Sub-plate)

Port size (Sub-plate)

Port size

1/4

Thread type (Sub-plate)

top ported

02

03

With M12 connector cable (3000 mm) When ordering a product with M12 connector

Side ported

Bottom ported

Top ported (1P, 5EA, 3EB port: Side ported)

Rc

Applicable series

SY5000

SY7000

### 25A-SY5000/7000 Series

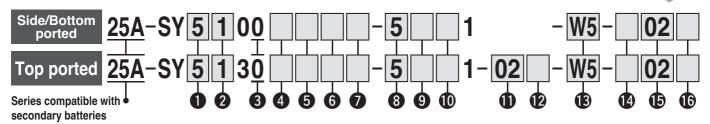
# Plug-in Single Unit/Sub-plate Type [IP67 Compliant]

(Side ported, Bottom ported, Top ported)

E CA CAL US **RoHS** 

**How to Order** 

In the case of (Valve) + (Sub-plate) (Built-in valve type part no.)



#### Series

5	SY5000
7	SY7000

#### 2 Type of actuation

1	2-position	Single
2		Double
3		Closed center
4	3-position	Exhaust center
5		Pressure center
Α	4-position dual 3-port	N.C./N.C.
В		N.O./N.O.
С		N.C./N.O.

#### 8 Rated voltage

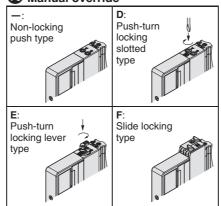
_	
5	24 VDC
6	12 VDC

#### 9 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
_		_	
R			Non-polar
U	•		
S			Positive
Z	•	_	common
NS	_		Negative
NZ	•		common

\* Only "Z" and "NZ" types are available with a power saving circuit.

#### Manual override



#### A, B port size (\* Top-ported valve only)

#### Thread piping

	J13	
Symbol	Port size	Applicable series
02	1/4	SY7000

#### Metric size (One-touch fitting)

metric size (one todori nitting)			
Symbol	A, B port	SY5000	SY7000
C4	Ø 4	•	
C6	Ø 6	•	•
C8	Ø 8	•	•
C10	Ø 10	_	•
C12	Ø 12	_	•

## 3 Seal type

0	Rubber seal

#### Pilot type

_	Internal pilot
R	External pilot

#### Back pressure check valve (Built-in valve type

Daci	t pressure check valve (Dullt-III valve type
_	None
Н	Built-in

The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

#### 6 Pilot valve option

_	Standard (0.7 MPa)	
В	Quick response type (0.7 MPa)	

#### Coil type

Oon type		
_	Standard	
Т	With power saving circuit (Continuous duty type)	

- Be sure to select the power saving circuit type if the valve is to be continuously energized for long periods of time.
- Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog
- \* The 25A- series specifications and dimensions are the same as those of the standard model.
- When mounting a special order (including Made-to-Order specification) valve or manifold option (spacer, etc.) on the sub-plate, add the valve part number or spacer part number under the sub-plate part number to place an order. For details, refer to the ordering example on page 57-4.

Related Products

Air Grippers

### 25A-SY5000/7000 Series

#### **How to Order**

In the case of Sub-plate (Sub-plate single unit part no.)

\* Without valve





Valve mounting screws are not included.

Series compatible with secondary batteries

#### Series

• • • • • • • • • • • • • • • • • • • •		
	5	SY5000
	7	SY7000

**2** Wiring specifications

	3 -1
WO	Without M12 connector cable
W5	With M12 connector cable (3000 mm)

- Refer to the table below for connector cable part numbers.
- When ordering a product with M12 connector cable, the connector cable is included.

3 Port location (Sub-plate)

O i dit iddation (das plato)			
_	Side ported		
B Bottom ported			
V	Top ported [1(P), 5(EA), 3(EB) port: Side ported]		

5 Sub-plate thread type

Sub-plate tillead type			
_	Rc		
F	G		

4 Port size (Sub-plate)

Symbol	Port size	Applicable series
02	1/4	SY5000
03	3/8	SY7000

How to Order when mounting a special order (including Made-to-Order specification) valve on the sub-plate (Ordering example: X350)

25A-SY50M-27-1-W5-02······1 set (Sub-plate single unit part no.) \*25A-SY5100-5U1-X350·······1 set (Built-in return spring specification)

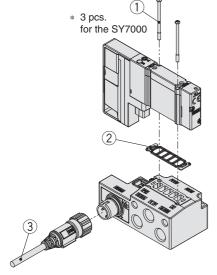
Ordering example when mounting a manifold option (spacer, etc.)

25A-SY50M-27-1-W5-02 ······ 1 set (Sub-plate single unit part no.)

\*25A-SY5400-5U1 ············· 1 set (3-position exhaust center part no.)

\*25A-SY50M-39-1A-C6 ········· 1 set (Individual EXH spacer part no.)

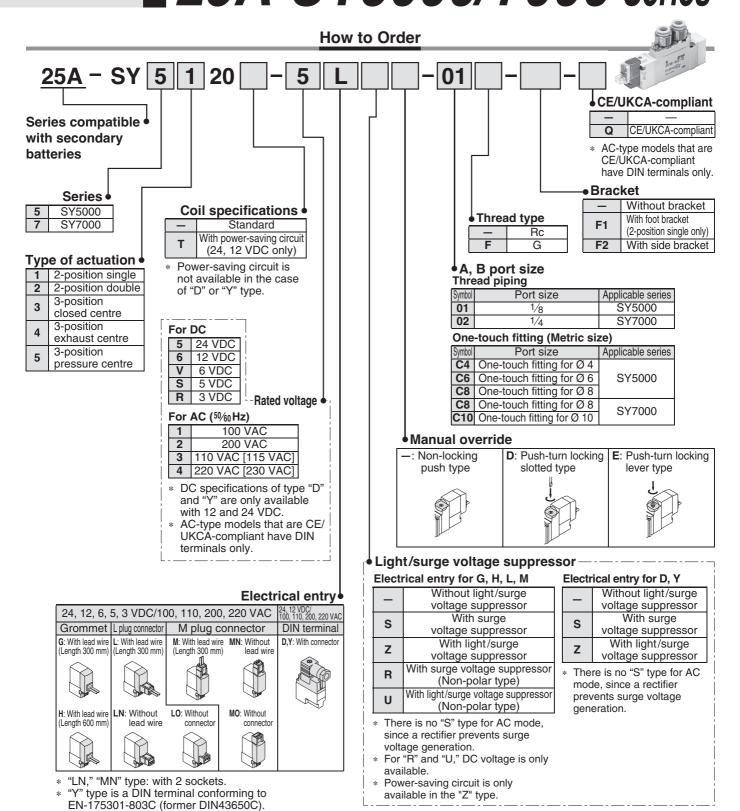
#### Sub-plate Parts Nos.



No.	Description	Part no.		Note
INO.		SY5000	SY7000	Note
1	Round head combination screw	<b>SY5000-223-1A</b> (M3 x 32.5)	<b>SY7000-224-1A</b> (M3 x 36.5)	Part numbers shown on the left are for 10 valves (20 pcs.). (30 pcs. for the SY7000)
2	Base gasket (for sub-plate)	SY50M-11-1A	SY70M-11-1A	Part numbers shown on the left are for 10 valves (10 pcs.).
3	M12 waterproof connector cable	90-ZS-37-A-X258		Cable length: 3000 mm



# 5-Port Solenoid Valve Body Ported/Single Unit 25A-SY5000/7000 Series



- \* When placing an order for body ported solenoid valve as a single unit, mounting screw for manifold and gasket are not attached. Order them separately, if necessary.
  - \* The 25A- series specifications and dimensions are the same as those of the standard model.

Refer to the standard products for the lead wire

assembly with cover for L and M plug connector.

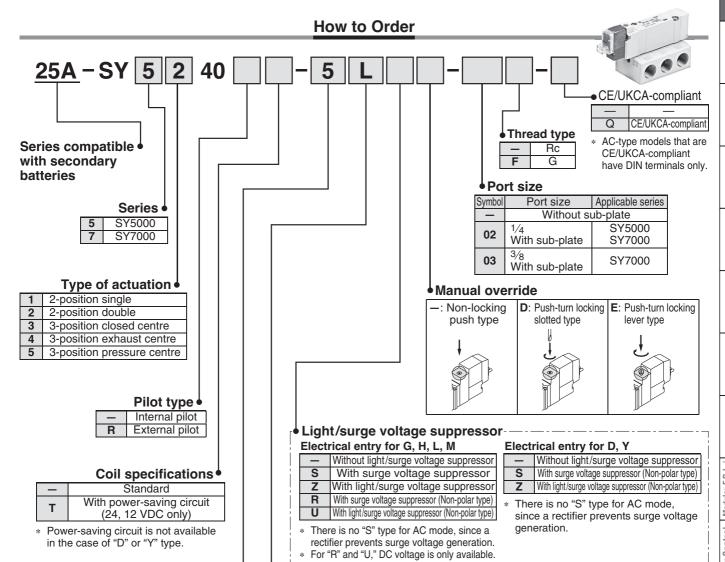
length of L and M plug connectors and the connector

Air Cylinders

# Auto Switches

# 5-Port Solenoid Valve **Base Mounted/Single Unit**

# 25A-SY5000/7000 Series



Rated voltage

	For DC
5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

#### For AC (50/60 Hz)

	1	100 VAC
   	2	200 VAC
	3	110 VAC [115 VAC]
	4	220 VAC [230 VAC]

- \* DC specifications of type "D" and "Y" are only available with 12 and
- AC-type models that are CE/UKCAcompliant have DIN terminals only.

Electrical entry

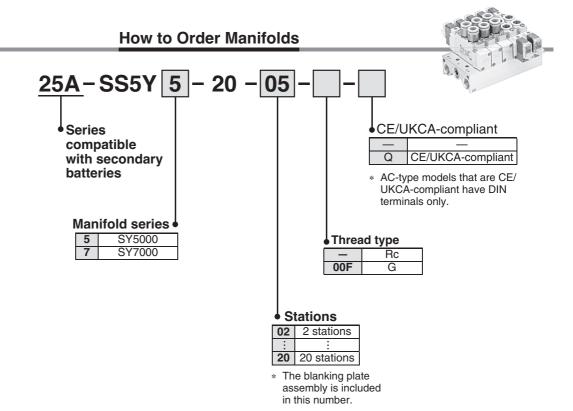
24, 12, 6	24, 12, 6, 5, 3 VDC / 100, 110, 200, 220 VAC					
Grommet	L plug connector	M plug co	onnector	DIN terminal		
G: With lead wire (Length 300 mm)		M: With lead wire (Length 300 mm)		D,Y: With connector		
H: With lead wire			MO: Without			
(Length 600 mm)	lead wire	connector	connector			

Power-saving circuit is only available in the "Z" type.

- "LN," "MN" type: with 2 sockets.
- "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
- Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.
- \* The 25A- series specifications and dimensions are the same as those of the standard model.

# Туре 20

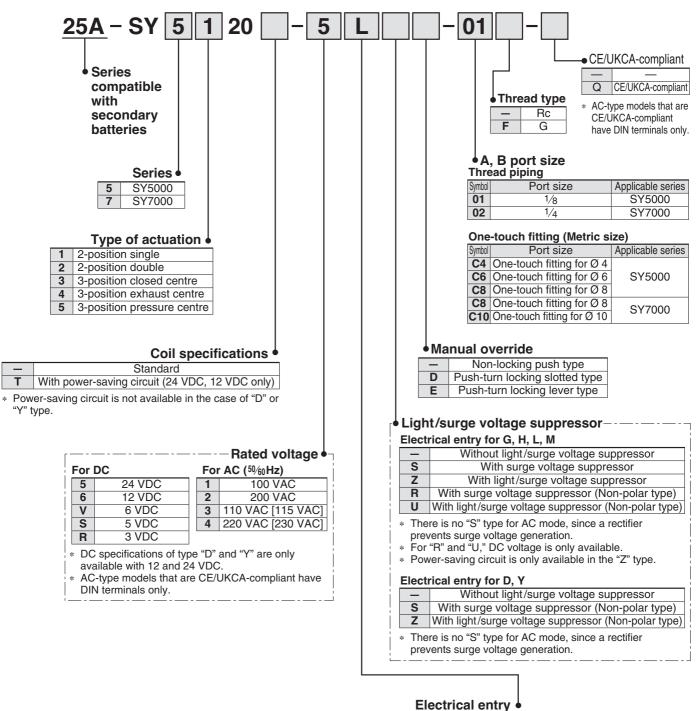
# 5-Port Solenoid Valve Body Ported Manifold Bar Stock Type/Individual Wiring 25A-SY5000/7000 Series



\* The 25A- series specifications and dimensions are the same as those of the standard model. However, the blanking plate assembly has different dimensions. Refer to page 67.



**How to Order Valves** 



24, 12, 6	s, 5, 3 VDC/100, 110, 200	100, 110, 200, 220 VAC	
met	L plug connector	DIN terminal	
d wire	L: With lead wire	M: With lead wire	<b>D</b> : With connector
300 mm) (Length 300 mm)		(Length 300 mm)	Y: With connector
d wire <b>LN</b> : Without lead wire		MN: Without lead wire	

24, 12 VDC/

"LN," "MN" type: with 2 sockets.

Grommet

(Length 300 mm) H: With lead wire

G: With lead wire

"Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).

(Length 600 mm) **LO**: Without connector

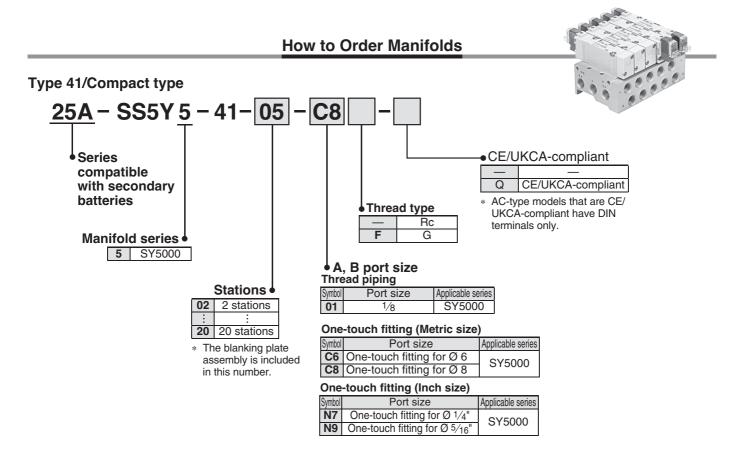
\* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

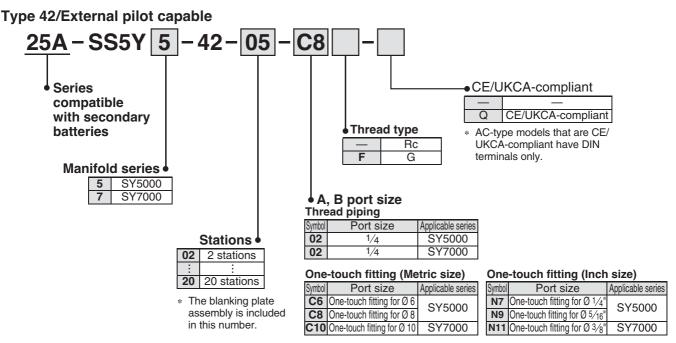
> \* The 25A- series specifications and dimensions are the same as those of the standard model.

MO: Without connector



# 5-Port Solenoid Valve Base Mounted Manifold Bar Stock Type/Individual Wiring 25A-SY5000/7000 Series



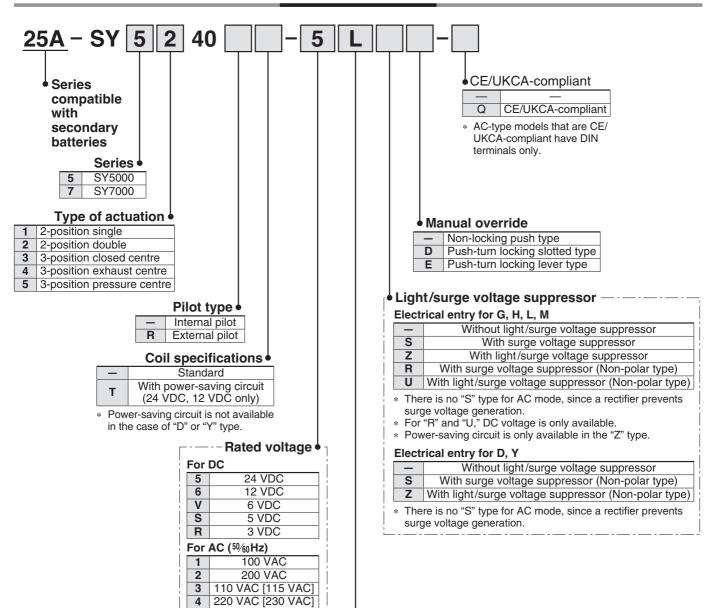


\* The 25A- series specifications and dimensions are the same as those of the standard model. However, the blanking plate assembly has different dimensions. Refer to page 67.



## C C UK [Option]

#### **How to Order Valves**

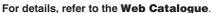


#### Electrical entry

DC specifications of type "D" and "Y" are only available with 12 and 24 VDC.
AC-type models that are CE/UKCA-compliant have DIN terminals only.

24, 12, 6	24, 12 VDC/ 100, 110, 200, 220 VAC		
Grommet	L plug connector	M plug connector	DIN terminal
G: With lead wire L: With lead wire		M: With lead wire	<b>D</b> : With connector
(Length 300 mm)			Y: With connector
H: With lead wire	LN: Without lead wire	MN: Without lead wire	
(Length 600 mm)	LO: Without connector	MO: Without connector	

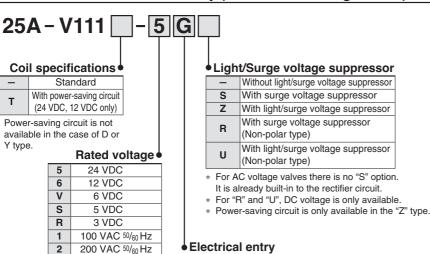
- \* "LN," "MN" type: with 2 sockets.
- \* "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
- \* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.
  - \* The 25A- series specifications and dimensions are the same as those of the standard model.





### 25A-SY5000/7000 Series

#### How to Order Pilot Valve Assembly (With two mounting screws)



CE/UKCA-compliant: For DC only.

3

110 VAC 50/60 Hz

[115 VAC 50/60 Hz] 220 VAC 50/60 Hz [230 VAC 50/60 Hz]

#### **♦** Electrical entry

G		Grommet, 300 mm lead wire		
Н		Grommet, 600 mm lead wire		
L		Ladica	With lead wire	
LN	1	L plug connector	Without lead wire	
LC	)		Without connector	
M	M .	Madua	With lead wire	
MI	- 1	M plug connector	Without lead wire	
M	MO		Without connector	

# **DIN terminal type** 25A - V115 - 5 D

#### Rated voltage 24 VDC 6 12 VDC 1 100 VAC 50/60 Hz 200 VAC 50/60 Hz 2 110 VAC 50/60 Hz 3 [115 VAC 50/60 Hz] 220 VAC 50/60 Hz [230 VAC 50/60 Hz]

\* DC specifications of type D and Y is only available with 12 and 24 VDC.

#### Light/Surge voltage suppressor

_	Without light/surge voltage suppressor
S	With surge voltage suppressor (Non-polar type)
	With light/surge voltage suppressor (Non-polar type)

- DOZ and YOZ are not available.
- \* For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.

#### Electrical entry

D	DIN terminal	With connector		
DO	(Type D)	Without connector		
Υ	DIN terminal	With connector		
YO	(Type Y)	Without connector		

Do not replace V111 (G, H, L, M) to V115 (DIN terminal) and vice versa when replacing pilot valve assembly only.

\* Since V111 and V115 are CE/UKCA-compliant as standard, the suffix "-Q" is not necessary.

# Bar Stock Type/Individual Wiring 25A-SY5000/7000 Series

#### **One-touch Fittings Part Nos. for Body Ported**

Port size		25A-SY5000	25A-SY7000	
Cylinder port	Metric size	Ø 4 One-touch fitting (Straight type)	90-VVQ1000-51A-C4	
		Ø 6 One-touch fitting (Straight type)	90-VVQ1000-51A-C6	
		Ø 8 One-touch fitting (Straight type)	90-VVQ1000-51A-C8	90-VVQ2000-51A-C8
		Ø 10 One-touch fitting (Straight type)		90-VVQ2000-51A-C10

#### **Gasket Assembly Part Nos.**

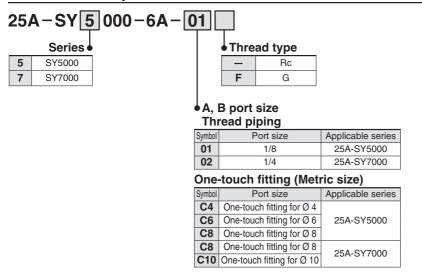
Valve model	Manifold type	25A-SY5000	25A-SY7000
Body ported	Type 20	SY5000-GS-3	SY7000-GS-3
Base mounted	Type 41/42	SY5000-GS-4 (-Q)	SY7000-GS-4 (-Q)

<sup>\*</sup> The gasket assembly includes 10 sets of a gasket and mounting screws.

#### **Bracket Assembly Part Nos.**

Description	Part no.
Bracket (For F1)	25A-SX <sup>5</sup> 000-16-2A (With mounting screw)
Bracket (For F2)	25A-SX <sub>7</sub> <sup>5</sup> 000-16-1A (With mounting screw)

#### Port Block Assembly Part Nos.





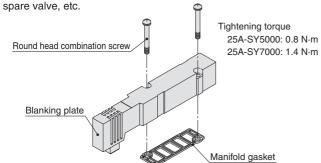
### 25A-SY5000/7000 Series

#### **Manifold Options**

#### ■Blanking plate assembly

(Mounting screw: 2 pcs., with gasket)

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



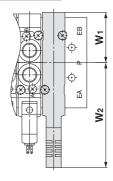
#### **How to Order**

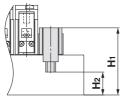
#### **⚠** Caution

When mounted on a type 20 manifold, only the P port is plugged. In addition, it cannot be used for the type 20 CE/UKCA-compliant manifold.

#### **Dimensions**

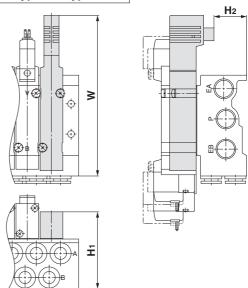
#### Manifold type/For type 20





<b>Dimensions</b> [mm					
Series	Manifold type	W1	W2	H <sub>1</sub>	H <sub>2</sub>
25A-SY5000	Type 20	33.3	69.6	44.5	15.2
25A-SY7000	Type 20	39.4	76.4	41.1	18.3

#### Manifold type/For type 41/42



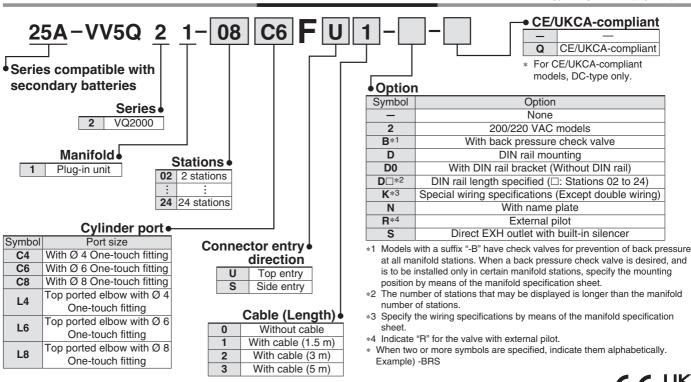
<b>Dimensions</b> [mm				
Series	Manifold type	W	H <sub>1</sub>	H <sub>2</sub>
25A-SY5000	Type 41	106.4	51	21.7
25A-515000	Type 42	107.6	56	26.7
25A-SY7000	Type 42	118.1	55.6	32.8

# Plug-in Unit/Base Mounted F Kit (D-sub connector kit) 25A-VQ2000 Series

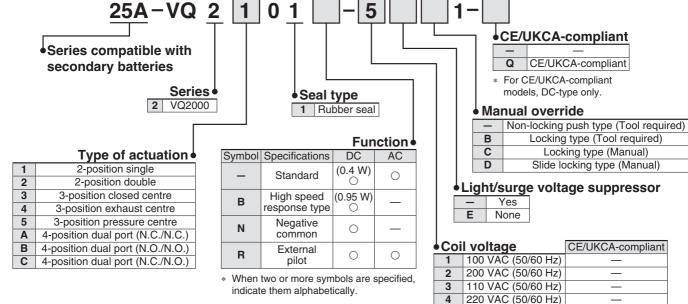


 For CE/UKCA-compliant models, DC-type only.









## **△** Caution

Use the standard (DC) specification when continuously energizing for long periods of time.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

24 VDC

12 VDC

5 6

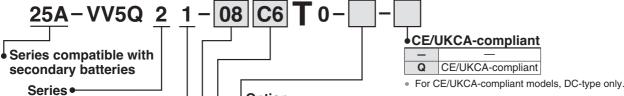


## Plug-in Unit/Base Mounted T Kit (Terminal block box kit) 25A-VQ2000 Series



\* For CE/UKCA-compliant models, DC-type only





Plug-in unit **Stations** 02 2 stations 20 20 stations

Manifold •

## Cylinder port

Symbol	Port size	
C4	With Ø 4 One-touch fitting	
C6	With Ø 6 One-touch fitting	
C8	With Ø 8 One-touch fitting	
L4	Top ported elbow with Ø 4 One-touch fitting	
L6	Top ported elbow with Ø 6 One-touch fitting	
L8	Top ported elbow with Ø 8 One-touch fitting	

VQ2000

Option Symbol Option None With back pressure check valve D DIN rail mounting With DIN rail bracket D0 (Without DIN rail) DIN rail length specified **D**□\*2 (□: Stations 02 to 20) Special wiring spec. **K**\*3 (Except double wiring) N With name plate R\*4 External pilot S Direct EXH outlet with built-in silencer Enclosure: Dust-tight, W Water-jet-proof (IP65)

- \*1 Models with a suffix "-B" have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.
- \*2 The number of stations that may be displayed is longer than the manifold number of stations.
- Specify the wiring specifications by means of the manifold specification sheet.
- \*4 Indicate "R" for the valve with external pilot.
- When two or more symbols are specified, indicate them alphabetically. Example) -BRS
- Specify the mounting position by means of the manifold specification sheet.

## **How to Order Valves**

models, DC-type only.

25A-VQ 2 Series • Series compatible with VQ2000 secondary batteries Type of actuation

	z-position single	
2	2-position double	
3	3-position closed centre	
4	3-position exhaust centre	
5	3-position pressure centre	
Α	4-position dual port (N.C./N.C.)	
В	4-position dual port (N.O./N.O.)	
С	4-position dual port (N.C./N.O.)	

#### Seal type 1 Rubber seal

#### Function

Specifications	DC	AC	
Standard	(0.4 W)	0	
	(0.95 W)		
response type	0	_	
Negative			
common		_	
External			
pilot		0	
	High speed response type Negative common External	Standard (0.4 W)  High speed (0.95 W) response type O  Negative common External	

When two or more symbols are specified, indicate them alphabetically. Combination of "B" and "K" is not possible.

\* For CE/UKCA-compliant

	<b>♦CE/UKCA-compliant</b>		
		_	_
		Q	CE/UKCA-compliant
* For CE/UKCA-compliant models, DC-type only.		'	
Enclosure			
_	Dustproof		
	Dust-	tight/W	ater-jet-proof type

(IP65)

## Manual override

_	Non-locking push type (Tool required)
В	Locking type (Tool required)
С	Locking type (Manual)
D	Slide locking type (Manual)

#### Light/surge voltage suppressor Yes

			CE/UKCA-compliant
Γ	1	100 VAC (50/60 Hz)	_
	3	110 VAC (50/60 Hz)	_
	5	24 VDC	•
Г	6	12 VDC	

None

Ε

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

## 

Use the standard (DC) specification when continuously energizing for long periods of time.

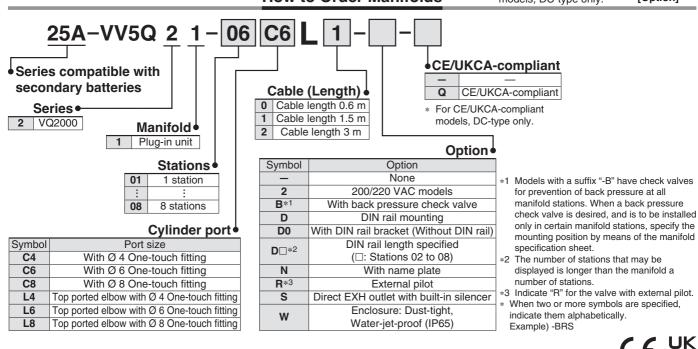


## Plug-in Unit/Base Mounted L Kit (Lead wire) 25A-VQ2000 Series

## **How to Order Manifolds**

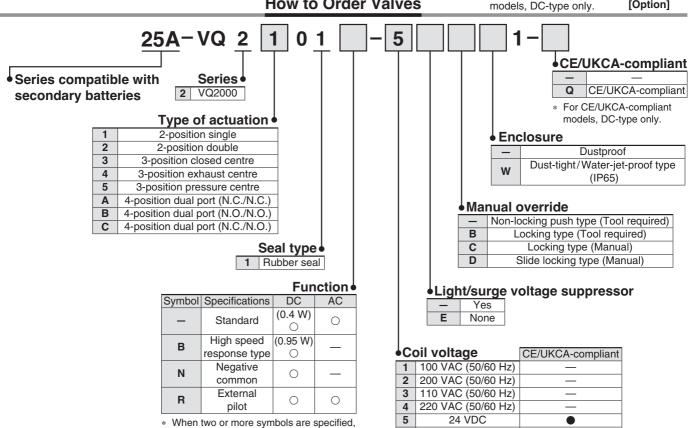
\* For CE/UKCA-compliant models, DC-type only.





## **How to Order Valves**

For CE/UKCA-compliant



<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.

indicate them alphabetically.

12 VDC

6

## Directional Control Valves

Air Cylinders

Related Products

Air Grippers Actuators

Vacuum Equipment Ai

Air Preparation Equipment

Clean Air Filters

Modular F.R.L./ Pressure Control Equipment

n Flow Cont Equipments

Detection Switches

as Fluid Control

Process Gas Equipment

Electric Actuators

Auto Switches

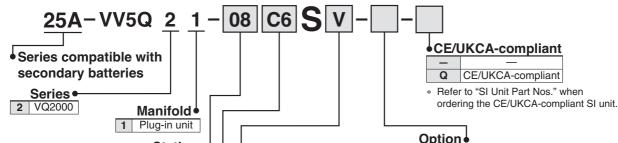
## Plug-in Unit/Base Mounted S Kit (Serial transmission)

## 25A-VQ2000 Series



 Refer to "SI Unit Part Nos."
 when ordering the CE/ UKCA-compliant SI unit.





 Stations

 02
 2 stations

 :
 :

 16\*1
 16 stations

\*1 Max. 16 stations. (Specify a model with 9 to 16 stations by means of the manifold specification sheet.)

### Cylinder port

Symbol	Port size	
C4	With Ø 4 One-touch fitting	
C6	With Ø 6 One-touch fitting	
C8	With Ø 8 One-touch fitting	
L4	Top ported elbow with Ø 4 One-touch fitting	
L6	Top ported elbow with Ø 6 One-touch fitting	
L8	Top ported elbow with Ø 8 One-touch fitting	

SI unit specifications

Symbol	Protocol	Stations
0	Without SI unit —	
Q	DeviceNet®	Max.16
V	CC-Link	stations

Symbol	Option
_	None
B*1	With back pressure check valve
D	DIN rail mounting
<b>D</b> □*2	DIN rail length specified
D□*²	(□: Stations 02 to 16)
<b>K</b> *3	Special wiring specifications
K, o	(Except double wiring)
N	With name plate
R*4	With external pilot
6	Direct EXH outlet
3	with built-in silencer
	Enclosure: Dust-tight

SI Unit Part Nos.

Symbol	Protocol	SI unit part no.
Q	DeviceNet®	EX120-SDN1-X220
V	CC-Link	EX120-SMJ1-X220

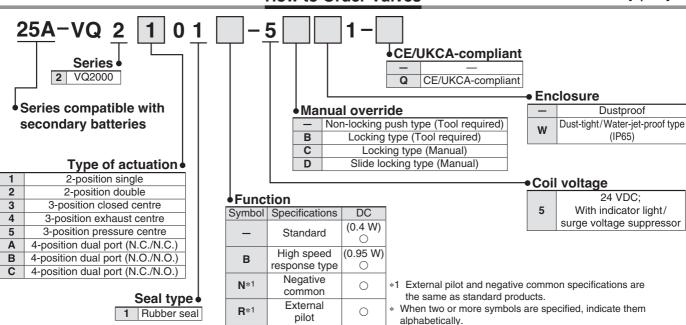
Water-jet-proof (IP65)

- \*1 Models with a suffix "-B" have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.
- \*2 The number of stations that may be displayed is longer than the manifold number of stations.
- \*3 Specify the wiring specifications by means of the manifold specification sheet.
- \*4 Indicate "R" for the valve with external pilot.
- \*5 Refer to "Dimensions" of the standard products for SI unit and valve, in case of "W" (Dust-tight, Water-jet-proof).
- When two or more symbols are specified, indicate them alphabetically.
   Example) -BRS.

### SI Unit Part Nos. (With option W)

		·	
Symbol	Protocol	SI unit part n	Ю.
Q	DeviceNet®	EX124D-SDN1-	X220
V	CC-Link	EX124D-SMJ1-	X220

## **How to Order Valves**

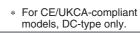


\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.

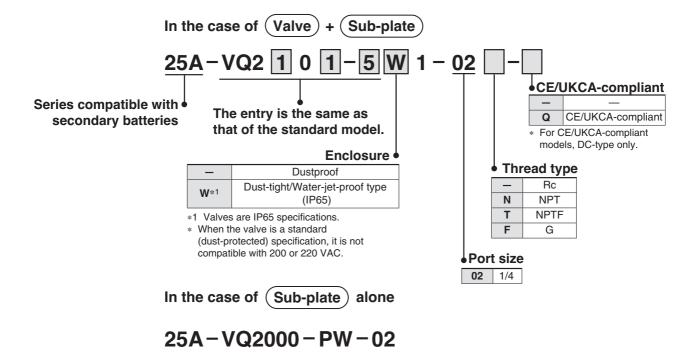


## Sub-plate Single Unit 25A-VQ2000 Series

**How to Order** 







\* The 25A- series specifications and dimensions are the same as those of the standard model.

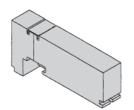
## Sub-plate Single Unit 25A-VQ2000 Series

## **Manifold Options**

### Blanking plate assembly

#### 25A-VVQ2000V-10A-1

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



\* The 25A- series specifications and dimensions are the same as those of the standard model.

## For details, refer to the Web Catalogue.

### SI Unit Part Nos.

Description	SI unit part no.	Note
EX124 SI unit	EX124D-SMJ1-X220	CC-Link
	EX124D-SDN1-X220	DeviceNet®
EX120 SI unit	EX120-SMJ1-X220	CC-Link (VQ2000/Without option "W")
EX120 SI UIIII	EX120-SDN1-X220	DeviceNet® (VQ2000/Without option "W")

#### **One-touch Fittings Part Nos.**

	Port	One-touch fitting part no.	
Cylinder port Metric size	Ø 4 One-touch fitting (Straight type)	90-VVQ1000-51A-C4	
	Metric size	Ø 6 One-touch fitting (Straight type)	90-VVQ1000-51A-C6
		Ø 8 One-touch fitting (Straight type)	90-VVQ1000-51A-C8
1 (P), 3 (R) port	Metric size	Ø 10 One-touch fitting (Straight type)	90-VVQ2000-51A-C10

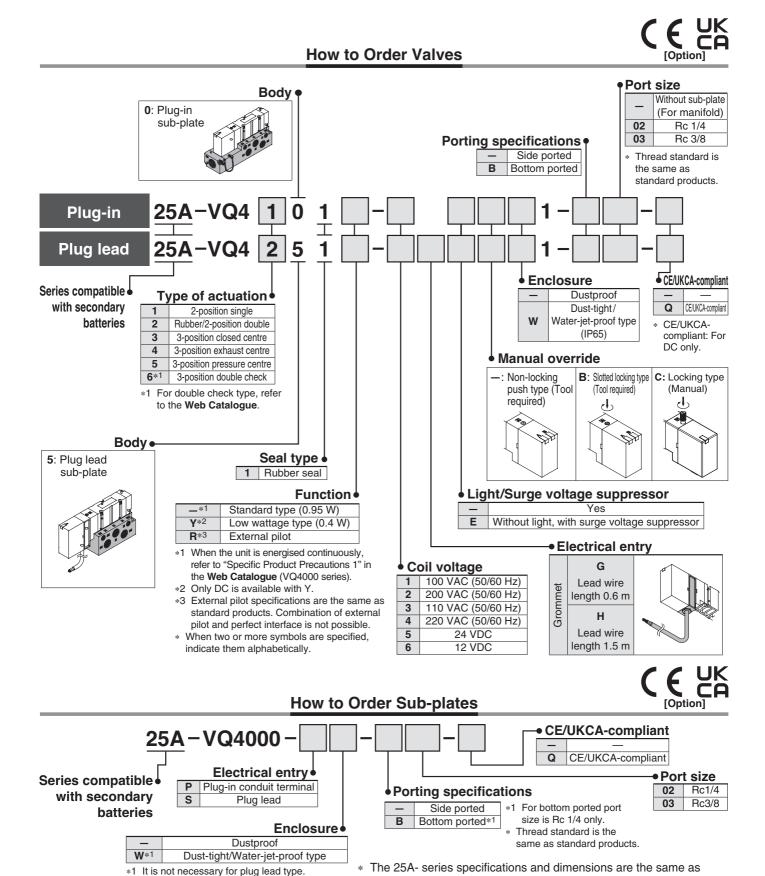
Air Cylinders Control Valves



## Plug-in/Plug Lead: Single Unit

**Base Mounted** 

## 25A-VQ4000 Series



those of the standard model. For details, refer to the Web Catalogue.

Air Cylinders Control Valv

Related Products

Rotary Actuators Air Grippers

Equipment Vacuum

Air Preparation Equipment

Detection Switches

Fluid Control Equipment

**Process Gas** Equipment

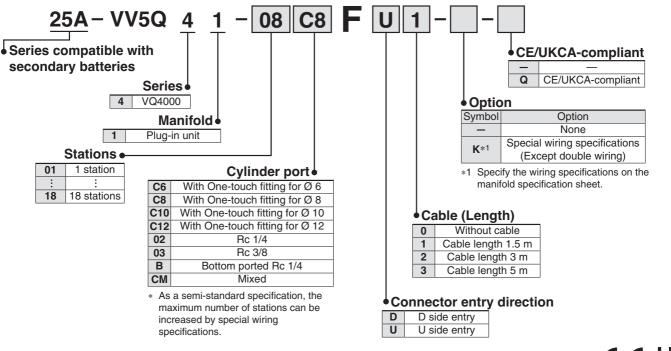
Electric Actuators

Auto Switches

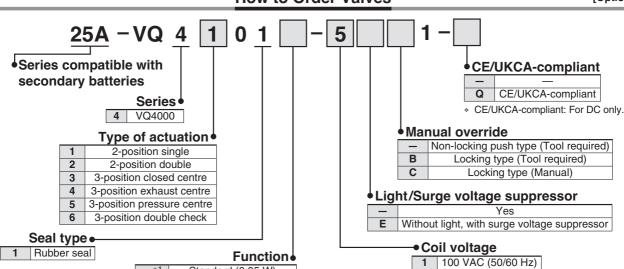
Plug-in Unit/Base Mounted F Kit (D-sub connector kit)

## 25A-VQ4000 Series





## **How to Order Valves**



Standard (0.95 W) Low wattage type (0.4 W) **R**\*3 External pilot

- \*1 When the unit is energised continuously, refer to "Specific Product Precautions 1" in the Web Catalogue (VQ4000 series).
- \*2 Only DC is available with Y.
- \*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.
- \* When two or more symbols are specified, indicate them alphabetically.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

200 VAC (50/60 Hz)

110 VAC (50/60 Hz)

220 VAC (50/60 Hz)

24 VDC

12 VDC

3

4

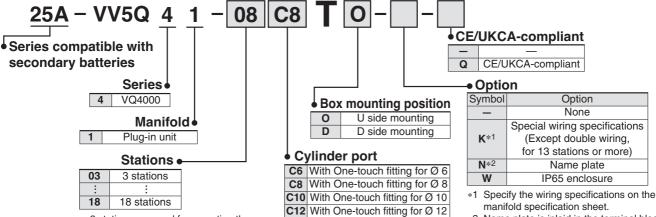
5

6

## Plug-in Unit/Base Mounted T Kit (Terminal block box kit) 25A-VQ4000 Series

## **How to Order Manifolds**





02

03

В

CM

2 stations are used for mounting the terminal block box. The number of stations is the number of manifold valves plus 2 stations for the terminal block box. For 13 stations or more. specify the wiring specifications by means of the manifold specification

\*2 Only DC is available with Y.

interface is not possible.

alphabetically.

\*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect

\* When two or more symbols are specified, indicate them

As a semi-standard specification, the maximum number of stations can be increased by special wiring specifications

Rc 1/4

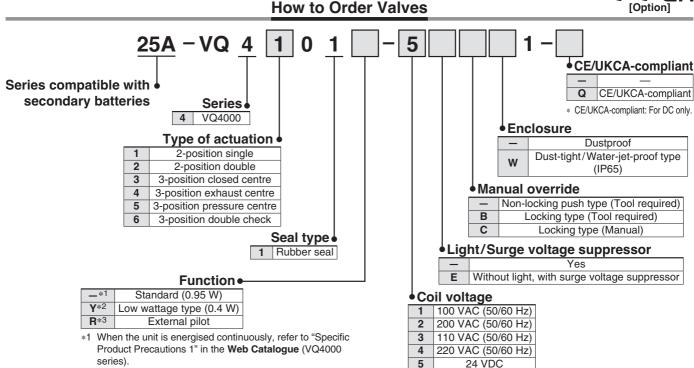
Rc 3/8

Bottom ported Rc 1/4

Mixed

- \*2 Name plate is inlaid in the terminal block cover.
- \* When two or more symbols are specified, indicate them alphabetically. Example) -KM





\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.



6

12 VDC

Air Cylinders Control Val

Related Products

Rotary Actuators

Air Grippers Equipment Vacuum

Air Preparation

Detection Switches

Fluid Control Equipment

Process Gas | Equipment

Electric Actuators

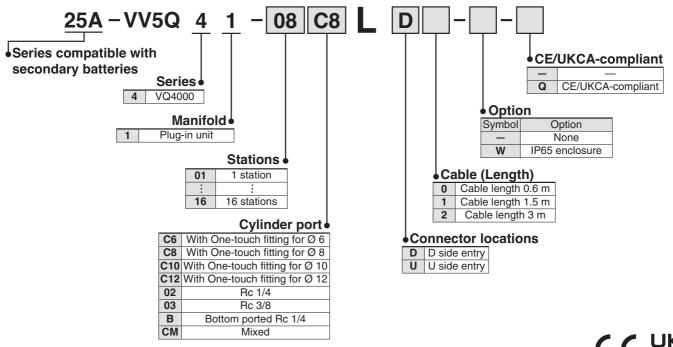
Auto Switches

## Plug-in Unit/Base Mounted L Kit (Lead wire cable)

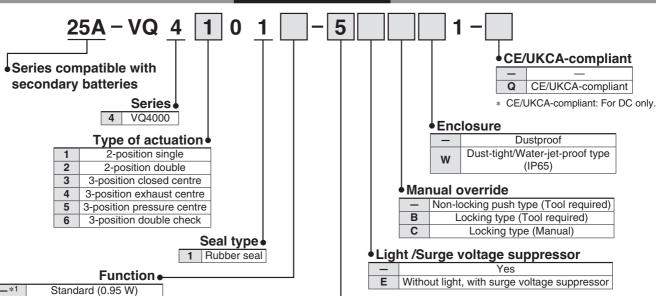
## 25A-VQ4000 Series







## **How to Order Valves**



Standard (0.95 W) **Y**\*2 Low wattage type (0.4 W) **R**\*3 External pilot

- When the unit is energised continuously, refer to "Specific Product Precautions 1" in the Web Catalogue (VQ4000 series)
- \*2 Only DC is available with Y.
- \*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.
- \* When two or more symbols are specified, indicate them alphabetically

100 VAC (50/60 Hz) 200 VAC (50/60 Hz) 110 VAC (50/60 Hz) 3 220 VAC (50/60 Hz) 5 24 VDC 12 VDC 6

Coil voltage

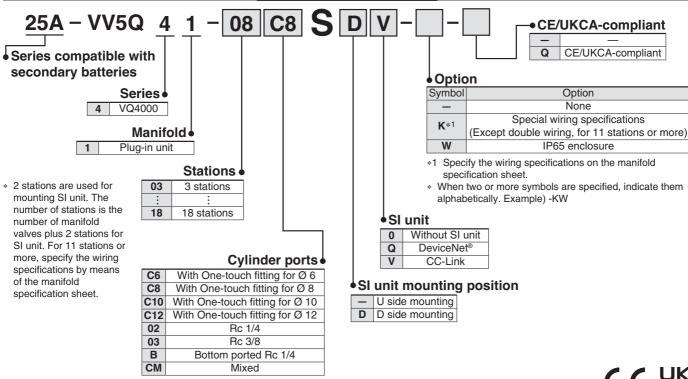
\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.

# Plug-in Unit/Base Mounted S Kit (Serial transmission unit) 25A-VQ4000 Series

## **How to Order Manifolds**

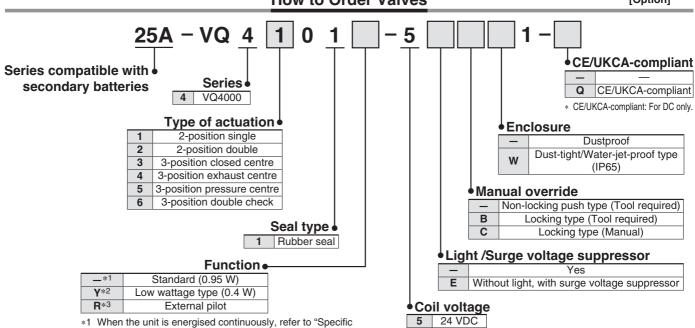
 Refer to "SI Unit Part Nos." when ordering the CE/ UKCA-compliant SI unit.





## **How to Order Valves**





\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.



Product Precautions 1" in the Web Catalogue (VQ4000 series).

\*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.

When two or more symbols are specified, indicate them

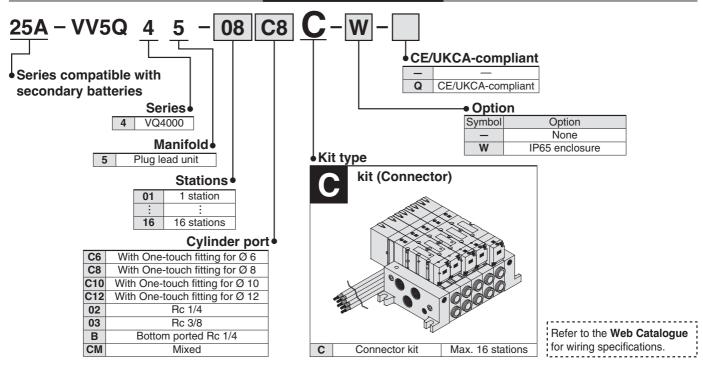
\*2 Only DC is available with Y.

alphabetically.

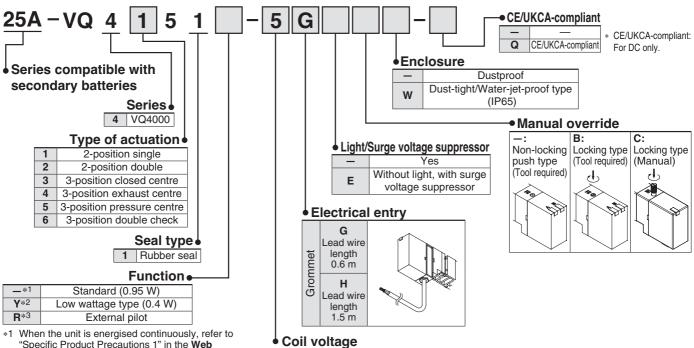
## Plug Lead Unit/Base Mounted C Kit (Connector kit)

## 25A-VQ4000 Series





### **How to Order Valves**



- "Specific Product Precautions 1" in the Web Catalogue (VQ4000 series).
- \*2 Only DC is available with Y.
- External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.
- When two or more symbols are specified, indicate them alphabetically.
- 100 VAC (50/60 Hz) 4 220 VAC (50/60 Hz) 200 VAC (50/60 Hz) 5 24 VDC 12 VDC 3 110 VAC (50/60 Hz)
  - \* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.



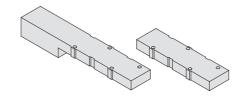
## 25A-VQ4000 Series

## **Manifold Options**

Blanking plate assembly

25A-VVQ4000-10A-1 (Plug-in type) 25A-VVQ4000-10A-5 (Plug lead type)

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

### SI Unit Part Nos.

Description	SI unit part no.	Note
	EX124D-SMJ1-X220	CC-Link/D side mounting
EX124 SI unit	EX124D-SDN1-X220	DeviceNet®/D side mounting
LX 124 SI UIII	EX124U-SMJ1-X220	CC-Link/U side mounting
	EX124U-SDN1-X220	DeviceNet®/U side mounting

#### **One-touch Fittings Part Nos.**

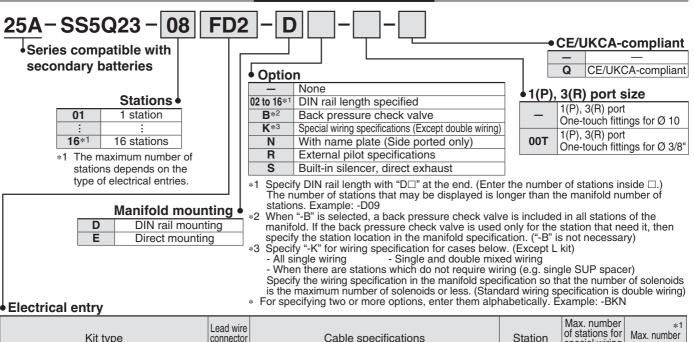
One-touch rittings rait Nos.					
			ort size	One-touch fittings part no.	
			Ø 6 One-touch fitting (Straight type)	90-VVQ4000-50B-C6	
	Cylinder port	Metric size	Ø 8 One-touch fitting (Straight type)	90-VVQ4000-50B-C8	
	Cylinder port   Wethic Size	Metric Size	Ø 10 One-touch fitting (Straight type)	90-VVQ4000-50B-C10	
			Ø 12 One-touch fitting (Straight type)	90-VVQ4000-50B-C12	



Auto Switches

## Plug-in Unit 25A-SQ2000 Series

## **How to Order Manifolds**



Licetifear Cittiy						
Kit type		Lead wire connector location	Cable specifications	Station	Max. number of stations for special wiring specifications	*1 Max. number of solenoids
The electric parts are made of copper.  D-sub D side connector kit Mounting screw: Stainless steel U side One-touch fitting Boty. Stainless steel Boty. Stainless steel	FD0 FD1 FD2 FD3	D side	D-sub connector (25P) kit, without cable D-sub connector (25P) kit, with 1.5 m cable D-sub connector (25P) kit, with 3.0 m cable D-sub connector (25P) kit, with 5.0 m cable	1 to 12 stations	16 stations	24
Terminal block box kit	TD0	D side	Terminal block box kit	1 to 10 stations	16 stations	16
kit Mounting screw: Stainless steel	LD0 LU0	D side U side	Lead wire kit with 0.6 m cable			
	LD1 LU1	D side U side	Lead wire kit with 1.5 m cable	1 to 12 stations	_	_
One-touch fitting Body: Stainless steel	LD2 LU2	D side U side	Lead wire kit with 3.0 m cable			
Mounting screw:Stainless steel  The electric parts are made	SDQ	D side	DeviceNet <sup>®</sup>	1 to 8 stations	16 stations	16
of copper. One-touch fitting Body: Stainless steel Serial transmission kit EX140 integrated-type (for output) serial transmission system*2	SDV	D Side	CC-Link	1 to 8 stations	16 stations	16

- \*1 The maximum number of stations should not be more than the maximum number of solenoids. (The number of solenoids are counted as: 1 for single solenoids and 2 for type 3P and 4P double solenoids.)
- \*2 Refer to the **Web Catalogue** for the details of EX140 integrated-type (for output) serial transmission system. Refer to "SI unit part nos." below when ordering the CE/UKCA-compliant SI unit.

#### SI unit part nos.

Symbol	Protocol type	SI unit part no.	Page
SDQ	DeviceNet®	EX140-SDN1-X220	84
SDV	CC-Link	EX140-SMJ1-X220	04

Blanking plate assembly

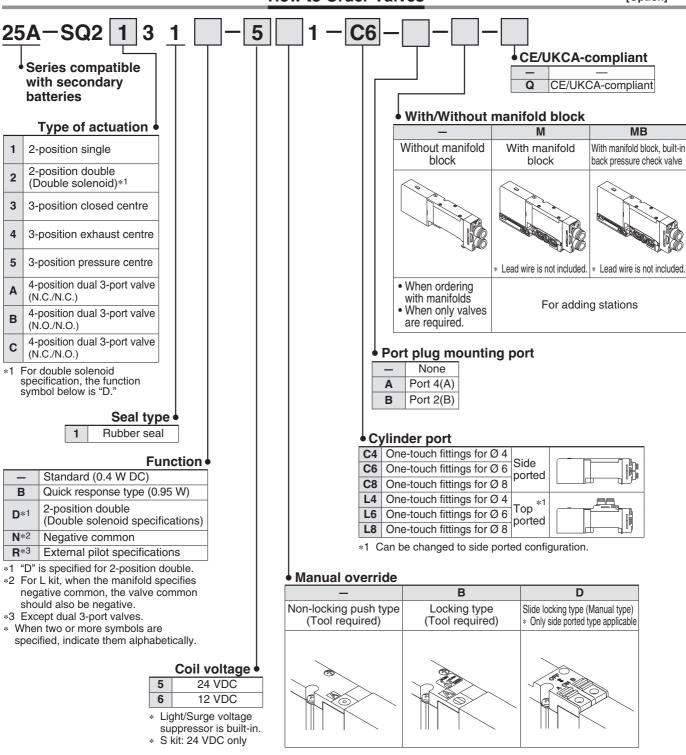
25A-SSQ2000-10A-3

\* The 25A- series specifications and dimensions are the same as those of the standard model.



Auto Switches

**How to Order Valves** 



#### SI Unit Part Nos.

Description	SI unit part no.	Note
EX140 SI unit	EX140-SMJ1-X220	CC-Link
LX 140 St utill	EX140-SDN1-X220	DeviceNet®

One-touch Fittings Part Nos.

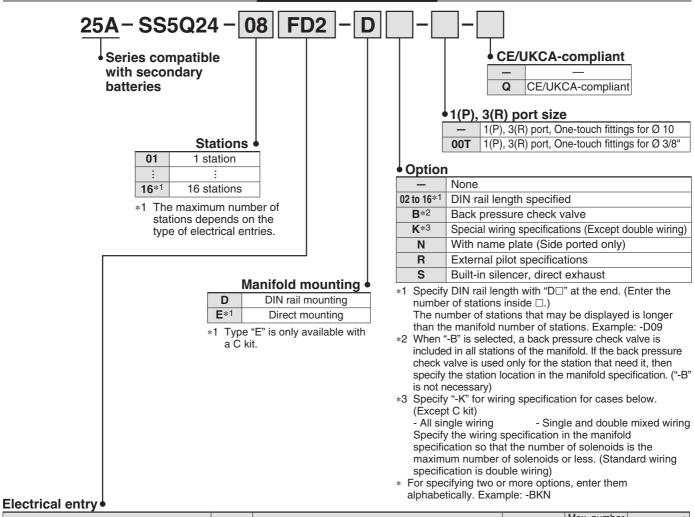
		Port size	One-touch fittings part no.
		Ø 4 One-touch fitting (Straight type)	90-VVQ1000-51A-C4
Cylinder port	Metric size	Ø 6 One-touch fitting (Straight type)	90-VVQ1000-51A-C6
		Ø 8 One-touch fitting (Straight type)	90-VVQ1000-51A-C8
1 (P), 3 (R) port	Metric size	Ø 10 One-touch fitting (Straight type)	90-VVQ2000-51A-C10

**SMC** 

\* The 25A- series specifications and dimensions are the same as those of the standard model.

## Plug Lead Unit 25A-SQ2000 Series

## **How to Order Manifolds**

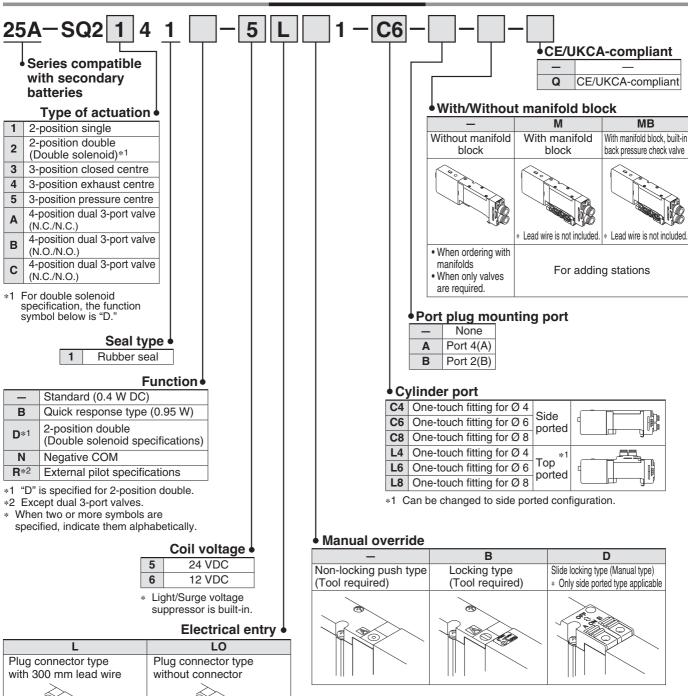


Kit type		Lead wire connector location	Cable specifications	Stations	Max. number of stations for special wiring specifications	Max. number
Mounting screw: Stainless steel	FD0		D-sub connector (25P) kit, without cable			
The electric	FD1	D side	D-sub connector (25P) kit, with 1.5 m cable	1 to 12 stations	16 stations	24
parts are made D side of copper.	FD2	D Side	D-sub connector (25P) kit, with 3.0 m cable	1 10 12 314110113	10 314110113	
D-sub connector kit One-touch fitting Body: Stainless steel	FD3		D-sub connector (25P) kit, with 5.0 m cable			
C kit  Mounting screw: Stainless steel  One-touch fitting Body: Stainless steel	С	_	Connector kit	1 to 16 stations		_

<sup>\*1</sup> The maximum number of stations should not be more than the maximum number of solenoids. (The number of solenoids are counted as: 1 for single solenoids and 2 for type 3P and 4P double solenoids.)

\* Refer to the Web Catalogue for manifold spare parts.

## **How to Order Valves**



For F, P, J kit manifolds\*

#### **One-touch Fittings Part Nos.**

		Port size	One-touch fittings part no.
		Ø 4 One-touch fitting (Straight type)	90-VVQ1000-51A-C4
Cylinder port	Metric size	Ø 6 One-touch fitting (Straight type)	90-VVQ1000-51A-C6
		Ø 8 One-touch fitting (Straight type)	90-VVQ1000-51A-C8
1 (P), 3 (R) port	Metric size	Ø 10 One-touch fitting (Straight type)	90-VVQ2000-51A-C10

\* The 25A- series specifications and dimensions are the same as those of the standard model.

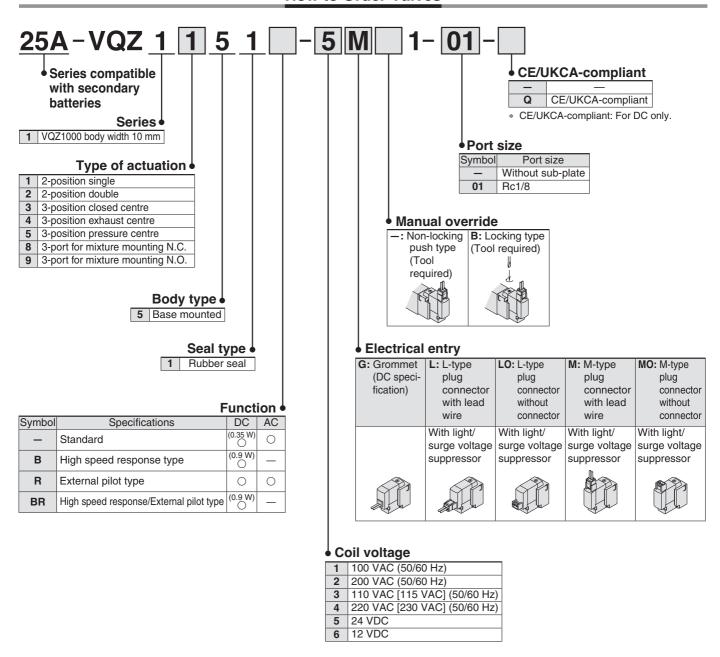
<sup>\*1</sup> Indicate "LO" when ordering centralized wiring type manifolds, F, P, and J kits, since the lead wire will be attached to the manifold side.

## **Base Mounted**

**Plug Lead Unit** 

# 5-Port Solenoid Valve 25A-VQZ1000 Series Single Unit

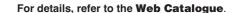
## **How to Order Valves**





Use standard (DC) specification for continuous duty.

\* The 25A- series specifications and dimensions are the same as those of the standard model.





## **Base Mounted**

**Plug Lead Unit** 

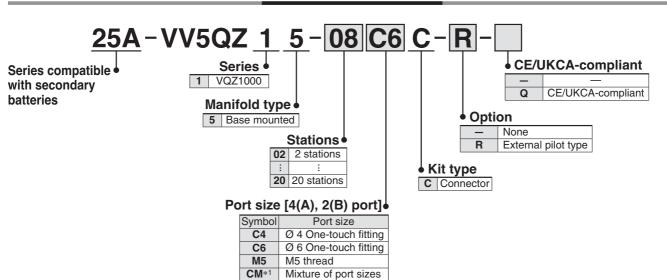
## **5-Port Solenoid Valve**

## 25A-VQZ1000 Series

Manifold Connector Kit

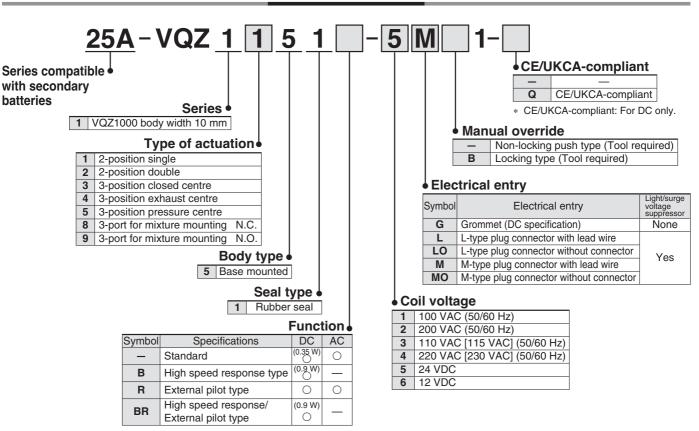


## **How to Order Manifolds**



<sup>\*1</sup> Specify port mixture/with port plug by the manifold specification sheet. Port mixture and port plug are available only for One-touch fitting type.

#### **How to Order Valves**



**⚠** Caution

Use standard (DC) specification for continuous duty.

 The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Directional Control Valves

Air Cylinders G

Related Products

S Actuators

Vacuum Equipment Air Grippers

Air Preparation V Equipment Eq

Clean A

Modular F.R.L./
Pressure Control
Equipment

Iow Control
Equipment/ F
Fittings

Detection Switches

Fluid Control Equipment

Process Gas F

Electric Actuators

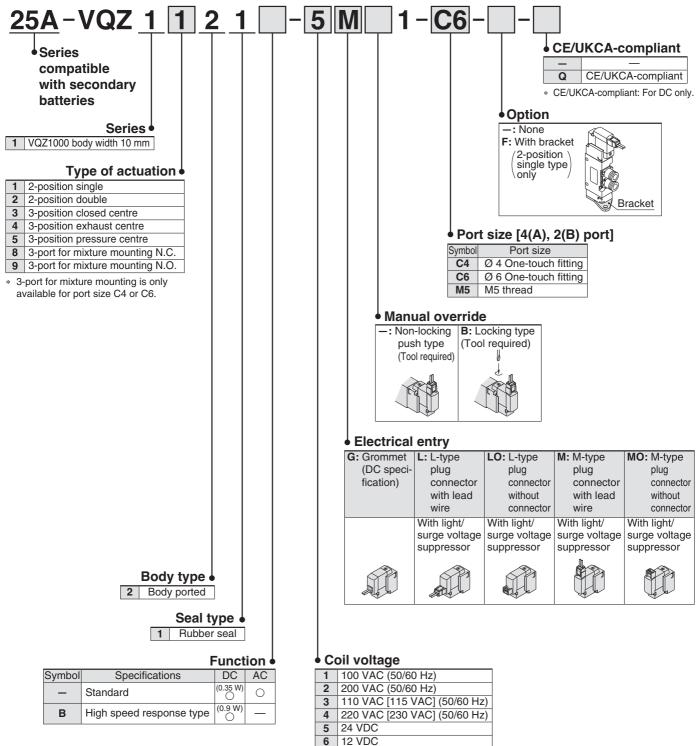
Auto Switches

## **Body Ported**

**Plug Lead Unit** 

# 5-Port Solenoid Valve 25A-VQZ1000 Series Single Unit (€ ₩

## **How to Order Valves**





Use standard (DC) specification for continuous duty.

\* The 25A- series specifications and dimensions are the same as those of the standard model.



## **Body Ported**

**Plug Lead Unit** 

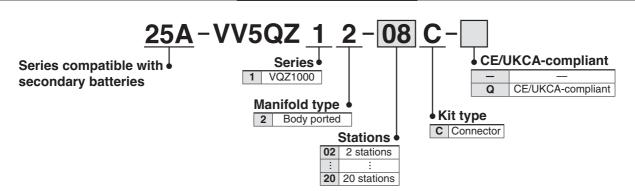
## **5-Port Solenoid Valve**

## 25A-VQZ1000 Series

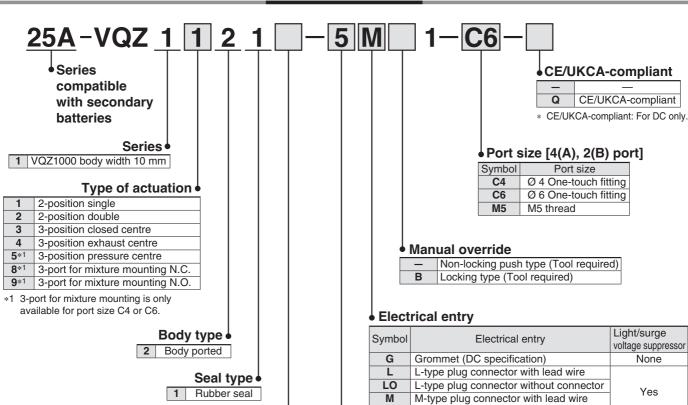
Manifold Connector Kit







## **How to Order Valves**



F	unct	ion

	-		
Symbol	Specifications	DC	AC
1	Standard	(0.35 W)	0
В	High speed response type	(0.9 W)	

## **⚠** Caution

Use standard (DC) specification for continuous duty.

Cc	Coil voltage					
1	100 VAC (50/60 Hz)					
2	200 VAC (50/60 Hz)					
3	110 VAC [115 VAC] (50/60 Hz)					
4	220 VAC [230 VAC] (50/60 Hz)					
5	24 VDC					

6 12 VDC

SMC

M-type plug connector without connector

Urrectional Control Valves

S Air Cylinders

Related Products

Air Grippers Actuators

Vacuum Equipment

Air Preparation Equipment

Air Filters

Modular F.K.L./ Pressure Control Equipment

Flow Control Equipment/ Fittings

Detection Switches

Fluid Control Equipment

Process Gas Flu Equipment E

Electric Actuators

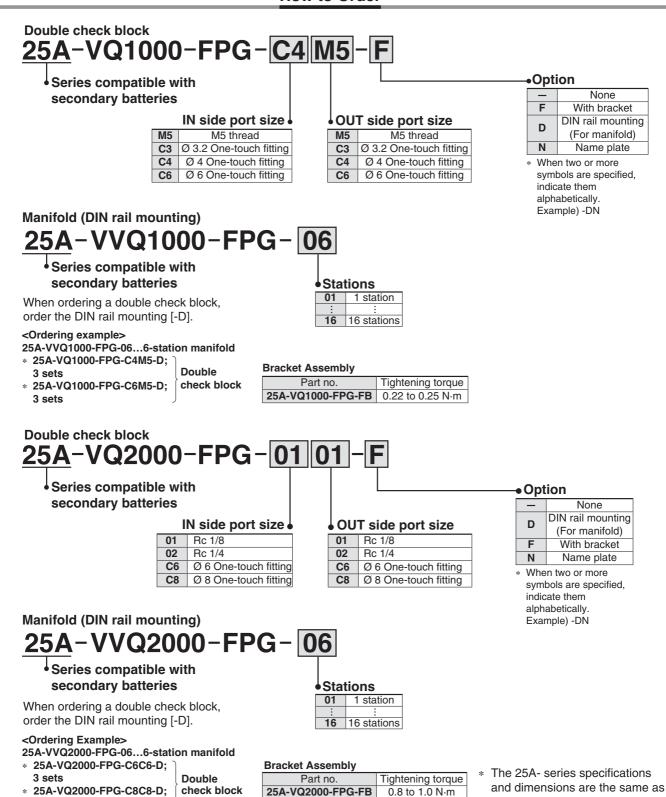
ies Acti

Auto Switches

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

# Plug-in Unit Base Mounted 25A-VQ1000/2000 Series Double check block (Separated)

### **How to Order**



3 sets

## Directional Ontrol Valves

Air Cylinders

Related Products

Air Grippers Actuators

Vacuum Equipment

Air Preparation Equipment

> Clean Air Filters

Modular F.R.L./ Pressure Control Equipment

Flow Control Equipment/ Fittings

Detection Switches

Fluid Control Equipment

Process Gas Fl Equipment E

Electric Pl Actuators E

Auto Switches

# Rubber Seal 3-Port/Pilot Poppet Type 25A-VP342/542/742 Series

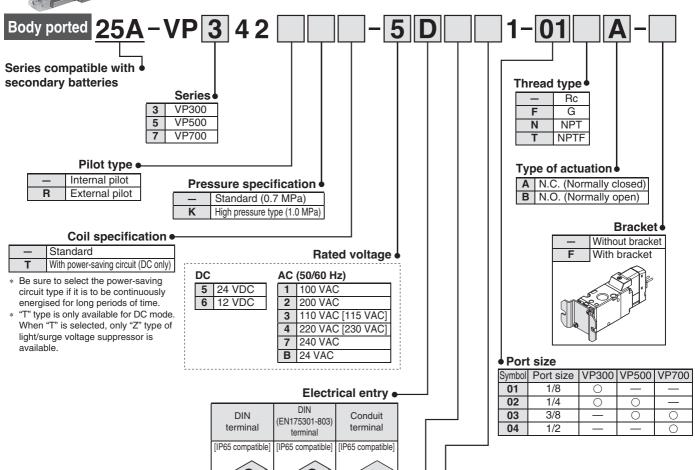


How to Order

(€ CA UK

\* Only DIN and conduit terminal types are available for AC mode.

Refer to the electrical entry for details.



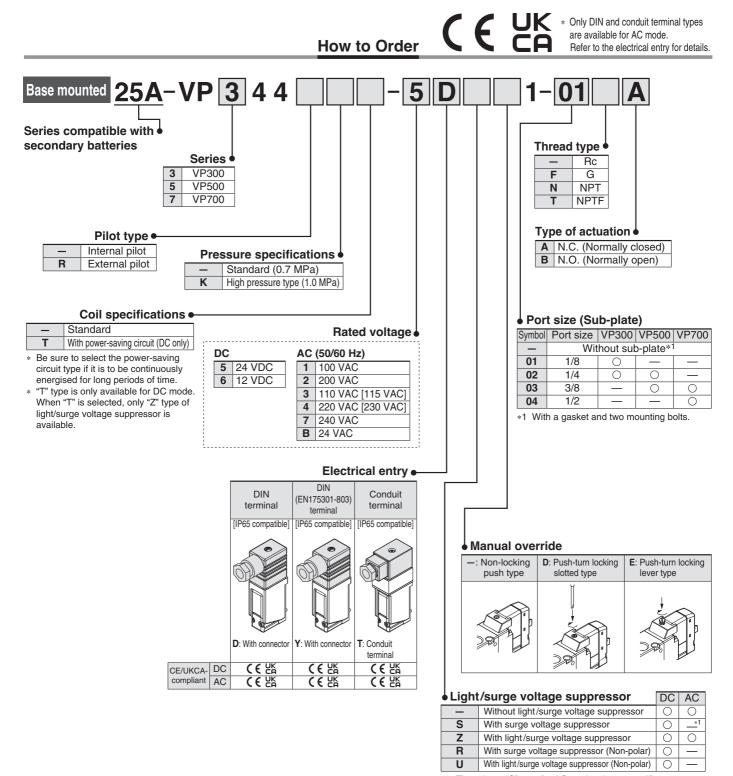
## Manual override

-: Non-locking push type	D: Push-turn locking slotted type	E: Push-turn locking lever type

Light/surge voltage suppressor						
_	Without light/surge voltage suppressor					
S	With surge voltage suppressor	0	_*1			
Z	With light/surge voltage suppressor	0	0			
R	R With surge voltage suppressor (Non-polar)		_			
U	0	_				
∗1 Thor	1. There is no "S" type for AC mode, since a rectifier prevents					

- \*1 There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.
- \* The 25A- series specifications and dimensions are the same as those of the standard model.

# Rubber Seal 3-Port/Pilot Poppet Type 25A-VP344/544/744 Series



- \*1 There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.
  - \* The 25A- series specifications and dimensions are the same as those of the standard model.



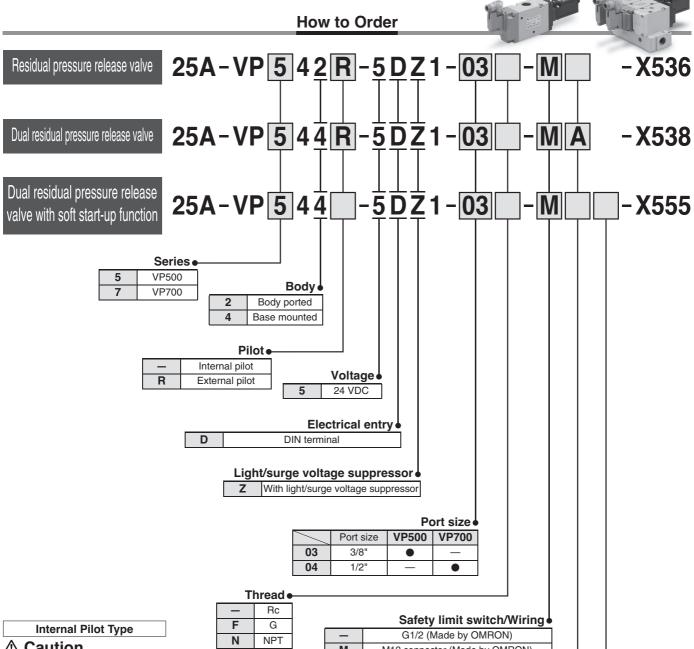
(RoHS)

Electric Actuators

Auto Switches

3-Port Solenoid Valve/Residual Pressure Release Valve with Detection of Main Valve Position 25A-VP500/700-X536, X538, X555

Safety Standard ISO 13849-1 Certified



### Caution

Valve may not operate properly when air supply to P port is not adequate and the supply pressure to the valve is lower than 0.25 MPa, the minimum operating pressure. Be careful with insufficient supply pressure.

## Piping for External Pilot Type

#### 

The product may not operate when the external pilot pressure is insufficient due to simultaneous operation or restricted air piping. In this case, use the check valve (AKH series) with the external pilot port, change the piping size or adjust the set pressure to provide a constant pressure of 0.25 MPa or more.

	I	G1/2 (Made by OMRON)
M		M12 connector (Made by OMRON)
S1 M12 connector (Made by Rockwell Automa		M12 connector (Made by Rockwell Automation)

## With check valve (Only external pilot) ●

	Check	Applicable		Thread	
	valve	tube O.D.	Rc	G	NPT
-	None	_	•	•	•
Α	Yes	Ø6	•	_	_
В	168	Ø 1/4"	_	_	•

\* For the internal pilot, the symbol is ---

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.

Variable throttle

Ø 1 fixed orifice

Ø 1.5 fixed orifice

Ø 2 fixed orifice

• Throttle

\*1 VP700 only

10

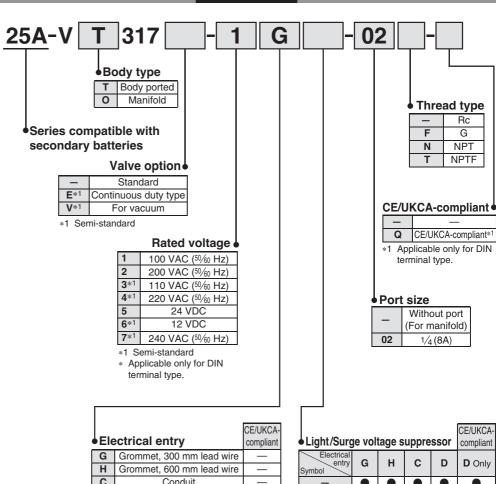
## 3-Port Solenoid Valve **Direct Operated Poppet Type**

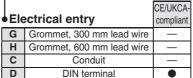
## 25A-VT317 Series

**Rubber Seal** 

\* CE/UKCA-compliant: For DIN terminal type.

### **How to Order**

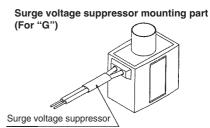




S: With surge voltage suppressor

S

- \*1 Refer to the figure below.
- Z: With light/surge voltage suppressor



#### Manifold

Model	Applicable manifold type	Accessory
VO317(-Q)	Common or individual exhaust	O-ring (KA00066, 4 pcs.)*1 Bolts (XT012-25C#1, 2 pcs.)

<sup>\*1</sup> It is not applied to "Continuous duty type." Refer to the accessories in the Web Catalogue.



<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

## 3-Port Solenoid Valve **Direct Operated Poppet Type** 25A-VG342 Series **Rubber Seal**

## Low power consumption

4.8 W DC (Standard type) 2 W DC (Energy-saving type)

## No lubrication required Possible to use in vacuum or under low pressures

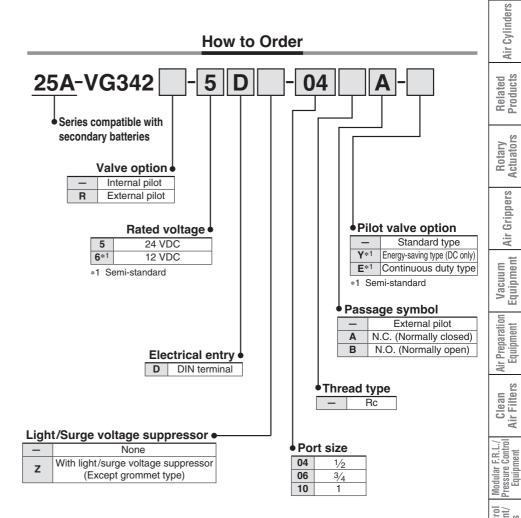
External pilot Vacuum: Up to -101.2 kPa Low pressure: 0 to 0.2 MPa

## Changeable actuation: N.C., N.O., or external pilot

Can be used as a selector or divider valve (External pilot)







\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Electric Actuators Auto Switches 96

Equipment

Equipment

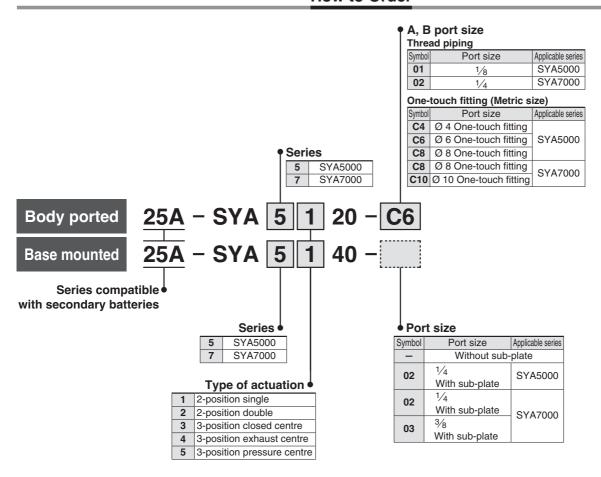
Detection Switches

Fluid Control Equipment

Process Gas | Equipment

## 5-Port Air Operated Valve 25A-SYA5000/7000 Series

#### **How to Order**



#### **How to Order Manifold Base**

Same manifolds as the SY series (Non plug-in type) are prepared. (For 20, 41 and 42 Types)

**25A-SS5YA**<sub>7</sub> Fill the same as 25A-SS5Y <sub>7</sub> .

(Refer to pages 61 and 63.)

- \* Specify the part numbers for valves and options together beneath the manifold base part number.
- <Example>

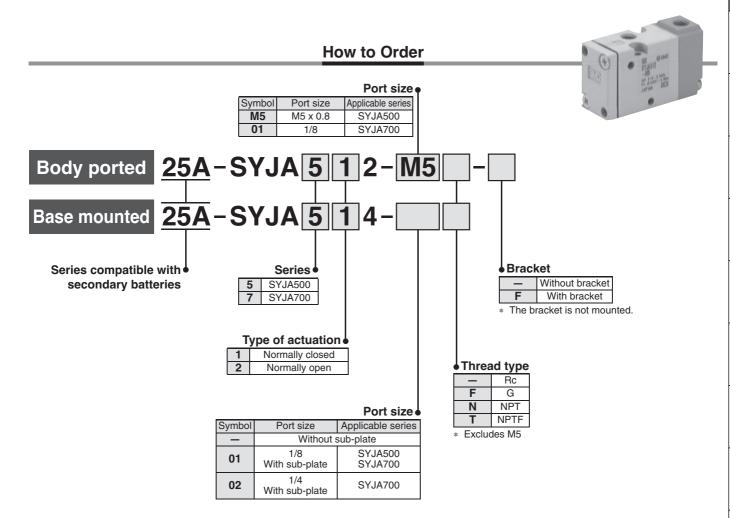
 When single body ported air operated valves are ordered, manifold mounting screws and gaskets are not included. Order them separately if necessary.
 (For details, refer to page 66.)

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

Auto Switches

## 3-Port Air Operated Valve

## 25A-SYJA500/700 Series



\* The 25A- series specifications and dimensions are the same as those of the standard model.

## 25A-SYJA500/700 Series

## Manifold Type for the SYJA500

Type 20

How to Order 25A - SS3YJA5 - 20 - 05

Stations

02 2 stations
: :
20 20 stations

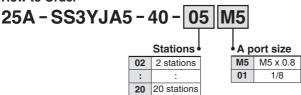
Applicable valve 25A-SYJA5□2

Applicable blanking plate assembly 25A-SYJ500-10-1A

\* For more than 6 stations, supply air to both sides of P port and exhaust air from both sides of R port.

Type 40

**How to Order** 

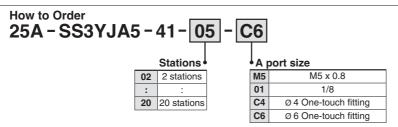


Applicable valve 25A-SYJA5□4

Applicable blanking plate assembly 25A-SYJ500-10-3A

\* For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

Type 41



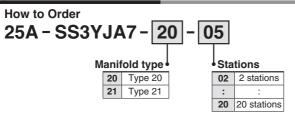
Applicable valve 25A-SYJA5□4

Applicable blanking plate assembly 25A-SYJ500-10-3A

\* For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

## **Manifold Type for the SYJA700**

Type 20/21

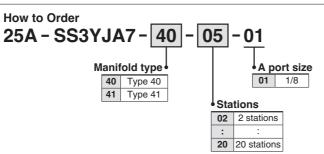


Applicable valve 25A-SYJA7□2

Applicable blanking plate assembly 25A-SYJ700-10-1A

If there are more than 6 stations for type 20, or more than 9 stations for type 21, supply air to both sides of P port and exhaust air from both sides of R port.

Type 40/41



Applicable valve 25A-SYJA7□4

Applicable blanking plate assembly 25A-SYJ700-10-2A

\* If there are more than 6 stations for type 40, or more than 9 stations for type 41, supply air to both sides of P port and exhaust air from both sides of R port.

Type 42

Applicable valve 25A-SYJA7□4

Applicable blanking plate assembly 25A-SYJ700-10-2A

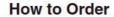
\* For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

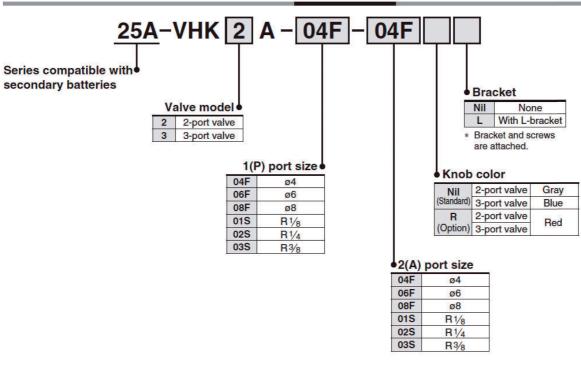


Auto Switches

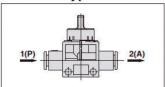
**Finger Valve** 

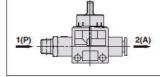
## 25A-VHK A Series

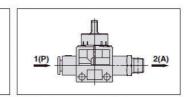




### **Standard Type**







1(P): One-touch fitting 2(A): Male thread

ø8

1(P): One-touch fitting 2(A): One-touch fitting

	2(A)	Applicab	le tubing C	).D. [mm]
1(P	)	ø4	ø6	ø8
tubing Im]	ø4	•		
olicable tub O.D. [mm]	ø6	•	•	
Applic	ø8		•	•

1(P): Male thread 2(A): One-touch fitting

	2(A)	Applicab	le tubing C	D. [mm]
1(P	)	ø4	ø6	ø8
H	1/8	•	•	•
Port size R	1/4		•	•
Por	3/8		•	•

	2(A)	P	ort size	R
1(P		1/8	1/4	3/8
tubing nm]	ø4	•		
able to	ø6	•	•	•

\* The 25A- series specifications and dimensions are the same as those of the standard model.

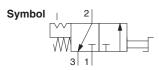
## **OSHA Standard Compliant Pressure Relief 3-Port Valve with Locking Holes**

**Single Action** 

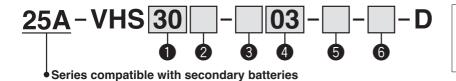
## 25A-VHS20/30/40/50-D Series

**Double Action** 

## 25A-VHS20W/30W/40W/50W-D Series



## **How to Order**



· Option/Semi-standard: Select one each for **a to f**.

· Option/Semi-standard symbol:

When more than one specification is required, indicate in alphanumeric order.

RoHS

Example) 25A-VHS30-N03-BS-RZ-D

		_	Symbol			(		
				Description		Body	/ size	
					20	30	40	50
2	Ш	andle operation	_	Single action	•	•	•	•
	110	andie operation	W	Double action	•	•	•	•
			+					
			_	Rc*1	•	•	•	•
3	Р	ipe thread type	N	NPT	•	•		•
			F	G	•	•		•
			+					
			01	1/8	•	_	_	_
			02	1/4	•	•		_
4		Port size	03	3/8	_			_
9		Port size		1/2	_	_		_
			06	3/4	_	_		•
			10	1	_	_	_	•
			+					
	а	Mounting	_	Without mounting option	•	•	•	•
_   5	5		В	With bracket	•	•		•
<b>5 5</b>			+					
0	)   b	Silencer	_	Without silencer	•	•	•	•
		Ollericei	S	With built-in silencer (for EXH port)	•	•		•
			+					
	c Handle	Handle colour	_	Red	•	•		•
		Tiaridie colodi	K	Black	•	•		•
			+					
ard	d d	Handle material	_	Resin	•	•	•	•
_   2	u	i ianule material	M	Metal	•	•	•	•
Semi-standard	55		+					
. Ė	e	Flow direction	_	Flow direction: Left to right	•	•		
S.	3	1 TOW UITECTION	R	Flow direction: Right to left	•	•	•	•
			+					
		Pressure unit		Product label in SI units: MPa	•	•	•	
	f	Fressure unit	<b>Z</b> *2	Product label in imperial units: psi	O*3	○*3	○*3	O*3

- \*1 The pipe thread type for the EXH port is G.
- \*2 For the pipe thread type: NPT only.
- \*3 O: For the pipe thread type: NPT only

#### Option/Part Nos.

Optiois: ait itoo.					
Ontional appoifications			Model		
Optional specifications	25A-VHS20-D	25A-VHS30-D	25A-VHS40-D	25A-VHS40-06-D	25A-VHS50-D
Bracket assembly*1	25A-VHS24P-180AS	25A-VHS34P-180AS	25A-VHS44P-180AS	25A-VHS44P-180AS	25A-VHS54P-180AS
Silencer assembly*2	VHS24P-190AS	VHS34P-190AS	VHS44P-190AS	VHS54P-190AS	VHS54P-190AS

<sup>\*1</sup> The assembly consists of a bracket A/B and 2 mounting screws.



<sup>\*2</sup> The assembly consists of the element assembly and an O-ring.

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

## Directional ontrol Valves

Air Cylinders

Related Products

Air Grippers Actuators

Vacuum Equipment A

Air Preparation Equipment

ntrol Clean

rtrol Modular F. ent/ Pressure Co is Equipme

Flow Conti Equipmer Fittings

Detection Switches

Fluid Control Equipment

Process Gas | Equipment

Electric |

Auto Switches

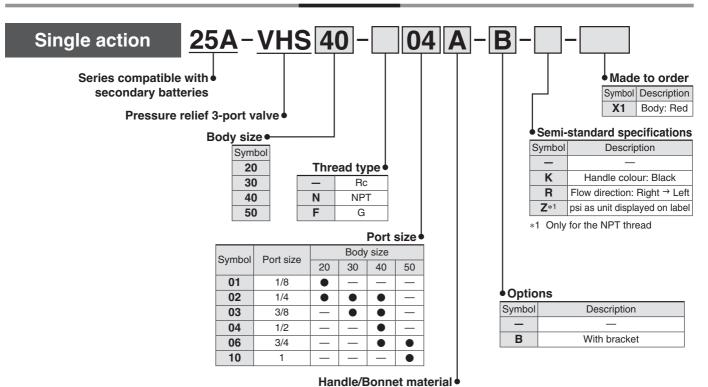
## **Conforming to OSHA Standard**

**Pressure Relief 3-Port Valve with Locking Holes (Single Action)** 

25A-VHS20/30/40/50 Series

**RoHS** 

**How to Order** 



Symbol

В

## Option Part Nos.

Option rait Nos.				
Bracket assembly part no.*1				
VHS20PW-180AS-6				
VHS30PW-180AS-6				
VHS40PW-180AS-6				
VHS40PW-180-06AS-6				
VHS50PW-180AS-6				

\*1 Bracket/1 pc., Mounting screw/2 pcs.

## OSHA standard (Occupational Safety and Health Administration Department of Labor)

For safety control, OSHA rule requires energy sources for certain equipment be turned off or disconnected and that the device either be locked or labelled with a warning tag.

Material Flame-resistant PBT

Aluminium

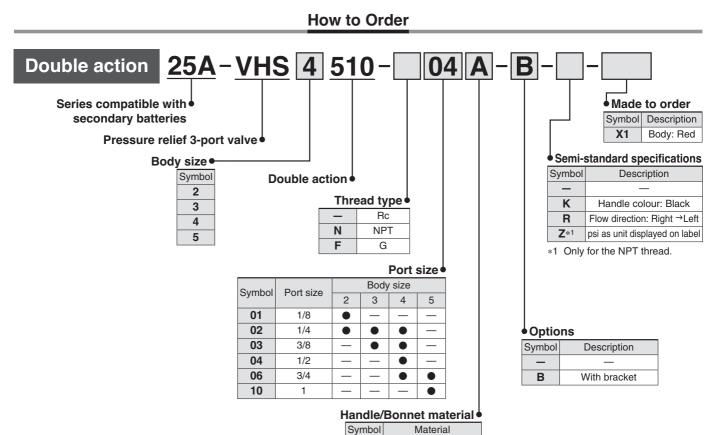
\* The 25A- series specifications and dimensions are the same as those of the standard model.

## **Conforming to OSHA Standard**

**Pressure Relief 3-Port Valve with Locking Holes (Double Action)** 

## 25A-VHS2510/3510/4510/5510 Series





В

#### **Option Part Nos.**

Model	Bracket assembly part no.*1			
25A-VHS2510	VHS20PW-180AS-6			
25A-VHS3510	VHS30PW-180AS-6			
25A-VHS4510	VHS40PW-180AS-6			
25A-VHS4510-06	VHS40PW-180-06AS-6			
25A-VHS5510	VHS50PW-180AS-6			

<sup>\*1</sup> Bracket/1 pc., Mounting screw/2 pcs.

## OSHA standard (Occupational Safety and Health Administration Department of Labor)

For safety control, OSHA rule requires energy sources for certain equipment be turned off or disconnected and that the device either be locked or labelled with a warning tag.

Flame-resistant PBT

Aluminium

\* The 25A- series specifications and dimensions are the same as those of the standard model.

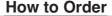


### Pin Cylinder: Double Acting, Single Rod

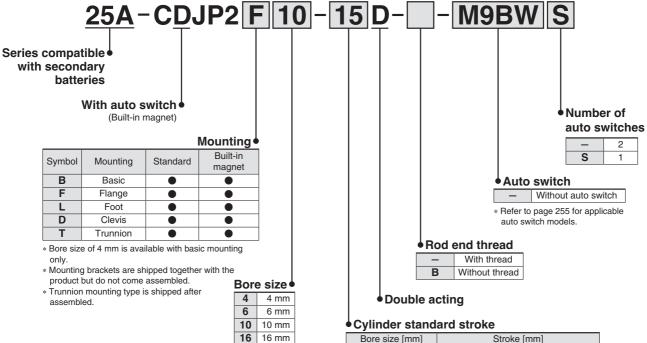
# 25A-CJP2 Series

Ø 4, Ø 6, Ø 10, Ø 16









Bore size [mm]	Stroke [mm]	
4	5, 10, 15, 20* <sup>1</sup>	
6	5, 10, 15, 20, 25	
10, 16	5, 10, 15, 20, 25, 30, 35, 40	

<sup>\*1 20</sup> stroke of bore size 4 mm is standard type only.

#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDJP2F10-15D

#### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Flange	Foot	Trunnion
6	25A-CP-F006A	25A-CP-L006A	25A-CP-T006A
10	25A-CP-F010A	25A-CP-L010A	25A-CP-T010A
16	25A-CP-F016A	25A-CP-L016A	25A-CP-T016A

#### Accessory Bracket Part Nos. for the 25A- Series

Bore size [mm]	Single knuckle joint	Double knuckle joint	Knuckle joint pin	Trunnion pin	Mounting nut	Rod end nut
4	_	_	_	_	25A-SNPS-004	25A-NTJ-004
6	25A-I-P006A	25A-Y-P006A	25A-IY-P006	25A-CT-P006	25A-SNP-006	25A-NTP-006
10	25A-I-P010A	25A-Y-P010A	25A-IY-P010	25A-CT-P010	25A-SNP-010	25A-NTP-010
16	25A-I-P016A	25A-Y-P016A	25A-IY-P016	25A-CT-P016	25A-SNP-016	25A-NTP-016

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

S Control Valves

Air Cylinders

Related Products

Rotary Actuators

ent Air Grippers

on Vacuum

Air Preparation Equipment

Clean ir Filters

Todular F.R.L./ ressure Control Fruitnment

> Flow Control Equipment/ Fittings

> > Detection Switches

Fluid Control Equipment

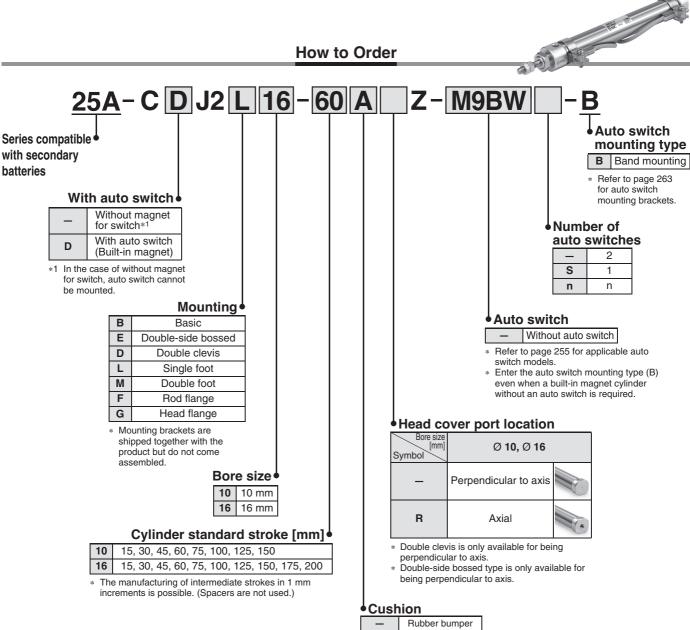
Process Gas | Equipment

Electric Actuators

### Air Cylinder: Standard Type Double Acting, Single Rod

### 25A-CJ2 Series ROHS $\emptyset$ 10, $\emptyset$ 16





#### Mounting Bracket Part Nos. for the 25A- Series

Mounting	Bore size [mm]		
bracket	10	16	
Foot bracket	25A-CJ-L010B	CJ-L016SUS	
Flange bracket	25A-CJ-F010B	CJ-F016SUS	

\* The 25A- series specifications and dimensions are the same as those of the standard model.

Air cushion

# Air Cylinder: Non-rotating Rod Type Double Acting, Single Rod

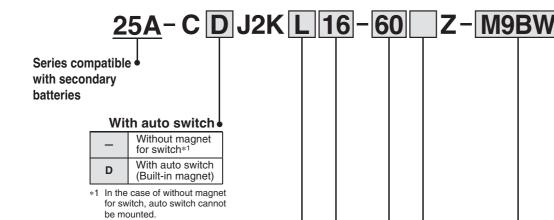
# 25A-CJ2K Series

Ø 10, Ø 16

RoHS







Auto switch mounting type

**B** Band mounting

 Refer to page 263 for auto switch mounting brackets.

Number of auto switches

-	-	2
- ;	S	1
I	n	n

#### 

Without auto switch

- \* Refer to page 255 for applicable auto switch models.
- Enter the auto switch mounting type (B) even when a built-in magnet cylinder without an auto switch is required.

#### Head cover port location

Thead cover port location		
Bore size [mm] Symbol	Ø 10, Ø 16	
1	Perpendicular to axis	P
R	Axial	F

- Double clevis is only available for being perpendicular to axis.
- Double-side bossed type is only available for being perpendicular to axis.

### Mounting (

	В	Basic	
	Е	Double-side bossed	
	D	Double clevis	
ſ	Г	Single foot	
Γ	M	Double foot	
Γ	F	Rod flange	
	G	Head flange	

 Mounting brackets are shipped together with the product but do not come assembled.

### Bore size

10	10 mm
16	16 mm

#### Cylinder standard stroke [mm]

	15, 30, 45, 60, 75, 100, 125, 150
16	15, 30, 45, 60, 75, 100, 125, 150, 175, 200

\* The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

#### Mounting Bracket Part Nos. for the 25A- Series

Mounting	Bore size [mm]	
bracket	10	16
Foot bracket	CJ-L016SUS	CJK-L016SUS
Flange bracket	CJ-F016SUS	CJK-F016SUS

 The 25A- series specifications and dimensions are the same as those of the standard model. (Excluding the foot and flange plate thickness)

For details, refer to the Web Catalogue.

**SMC** 

Rotary Related Actuators Products

Directional Control Valves

Air Grippers

Vacuum Equipment

Air Preparation Equipment

Clean Air Filte

Nodular F.R.L./ ressure Control Equipment

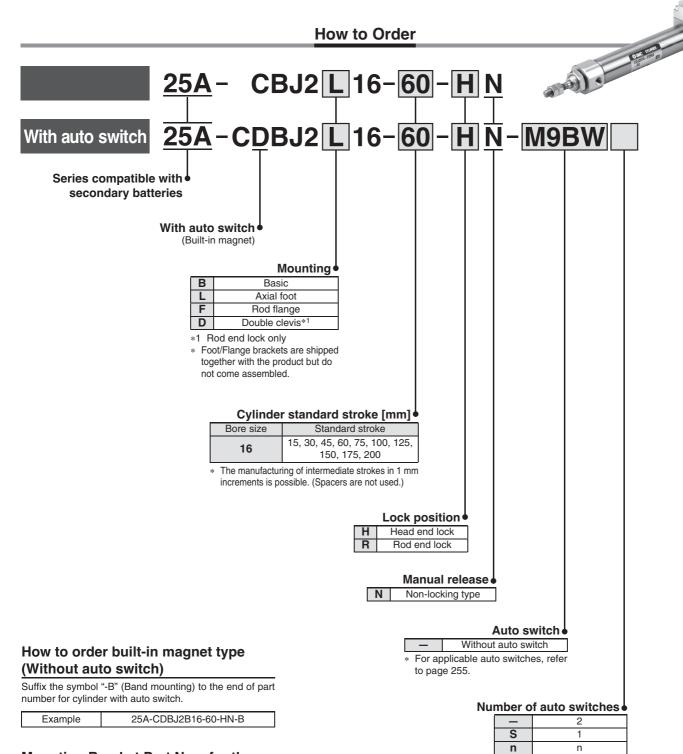
ow Control quipment/ Fittings

> Detection Switches

### **Air Cylinder: With End Lock**

# 25A-CBJ2 Series

**RoHS** 



#### Mounting Bracket Part Nos. for the 25A- Series

Mounting bracket	Bore size [mm]
	16
Foot bracket	CJ-L016SUS
Flange bracket	CJ-F016SUS

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model. 107

### Air Cylinder: Standard Type Double Acting, Single Rod

25A-CM2 Series

 $\emptyset$  20,  $\emptyset$  25,  $\emptyset$  32,  $\emptyset$  40

**RoHS** 

Directional Control Valves

Air Cylinders

Rotary Actuators

Air Grippers

Equipment

Vacuum

Preparation

#### **How to Order**

150|A|



Series compatible with secondary batteries

#### With auto switch

ı	Without magnet for switch*1	
D	With auto switch (Built-in magnet)	

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

	Mounting •
В	Basic
L	Axial foot
F	Rod flange
G	Head flange
С	Single clevis
D	Double clevis
U	Rod trunnion
Т	Head trunnion
Е	Integrated clevis
٧	Integrated clevis (90°)
BZ	Boss-cut/Basic
FZ	Boss-cut/
. 2	Rod flange
117	Boss-cut/
02	Rod trunnion

25A-C D M2 L 40

#### Rore size

DOIC SIZE			
20	20 mm		
25	25 mm		
32	32 mm		
40	40 mm		

Number of auto switches

_	2
S	1
n	n

#### Auto switch

Refer to page 255 for applicable auto switch models.

Without auto switch

#### Rod end thread

_	Male rod end
F	Female rod end

Z-M9BW

#### Cushion

_	Rubber bumper
Α	Air cushion

#### Cylinder Stroke [mm]

Bore size	Standard stroke*1	Maximum stroke
20		1000
25	25, 50, 75, 100, 125, 150	1500
32	200, 250, 300	2000
40		2000

- \*1 Other intermediate strokes can be manufactured upon receipt of order. The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)
- \* When exceeding 300 strokes, the allowable maximum stroke length is determined by the stroke selection table (Web Catalogue).

#### Port thread type

SMC

_	Rc
TN	NPT
TF	G

#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDM2F32-100AZ

#### Mounting Bracket Part Nos. for the 25A- Series

Mounting bracket	Min.	Bore size [mm]				Description (for min. order)
Woulding bracket	order	20	25	32	40	Description (for min. order)
Axial foot*1	2	CM-L020B-XB12	CM-L032B-XB12		CM-L040B-XB12	2 foots, 1 mounting nut
Flange	1	CM-F020BSUS	CM-F032BSUS		CM-F040BSUS	1 flange
Single clevis*2	1	CM-C020B	CM-C032B		CM-C040B	1 single clevis, 3 liners
Double clevis*2*3 (with pin)	1	25A-CM-D020B	25A-CM-D032B		25A-CM-D040B	1 double clevis, 3 liners, 1 clevis pin, 2 retaining rings
Trunnion (with nut)	1	25-CM-T020B	25-CM-T032B		25-CM-T040B	1 trunnion, 1 trunnion nut

- \*1 Order 2 foot brackets for each cylinder unit.
- \*2 3 liners are attached with a clevis bracket for adjusting the mounting angle. \*3 A clevis pin and retaining rings (split pins for Ø 40) are attached.
- \* The 25A- series specifications and dimensions are the same as those of the standard model.

Fluid Control Equipment

Process Gas | Equipment

### Air Cylinder: Standard Type **Double Acting, Single Rod**



# 25A-CG1 Series

 $\emptyset$  20,  $\emptyset$  25,  $\emptyset$  32,  $\emptyset$  40,  $\emptyset$  50,  $\emptyset$  63,  $\emptyset$  80,  $\emptyset$  100

#### **How to Order**

25A-CDG1LN25 Z-M9BW -100

Series compatible with secondary batteries

#### With auto switch

_	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

#### **Mounting**

В	Basic		
<b>Z</b> *1	Basic (without trunnion mounting female thread)		
L	Axial foot		
F	Rod flange		
G	Head flange		
<b>U</b> *1	Rod trunnion		
<b>T</b> *1	Head trunnion		
D	Clevis		

\*1 Not available for Ø 80 or Ø 100.

**Built-in Magnet Cylinder Model** If a built-in magnet cylinder without an auto

switch is required, there is no need to enter the

symbol for the auto switch. (Example) 25A-CDG1FN32-100Z

- Mounting brackets are shipped together with the product but do not come assembled.
- The cylinder for F, G, L, D mounting types is Z: Basic (without trunnion mounting female thread).

#### Type •

N	Rubber bumper
Α	Air cushion

#### Bore size

DOIC 312C			
20	20 mm		
25	25 mm		
32	32 mm		
40	40 mm		
50	50 mm		
63	63 mm		
80	80 mm		
100	100 mm		

20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

#### Number of auto switches

_	2
S	1
n	n

#### Auto switch

Without auto switch

Refer to page 255 for applicable auto switch models.

#### Rod end thread

_	Rod end male thread
F	Rod end female thread

#### Cvlinder stroke [mm]

Bore size [mm]	Standard stroke*1 [mm]	Long stroke*2 [mm]
20	25, 50, 75, 100, 125, 150, 200	201 to 1500
25		
32		
40	25, 50, 75, 100, 125,	301 to 1500
50, 63	150, 200, 250, 300	001101300
80		
100		

- \*1 Other intermediate strokes can be manufactured upon receipt of order. The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)
- \*2 For details on the maximum stroke that can be used for each mounting bracket, refer to the stroke selection table (Web Catalogue).

#### 

Rubber bumper

_	Rc	Ø 20 to Ø 100
TN	NPT	Ø 20 to Ø 100
TF	M5 x 0.8	Ø 20, Ø 25
11	G	Ø 32 to Ø 100

#### Air cushion

M5 x 0.8	Ø 20, Ø 25
Rc	Ø 32 to Ø 100
NPT*1	Ø 32 to Ø 100
G*1	Ø 32 to Ø 100

<sup>\*1</sup> Not available for Ø 20 and Ø 25

#### Mounting Bracket Part Nos. for the 25A- Series

Mounting	Min.		Bore size [mm]						Description	
bracket	order	20	25	32	40	50	63	80	100	Description
Foot	2*1	90-CG-L020	90-CG-L025	90-CG-L032	90-CG-L040	90-CG-L050	25-CG-L063	25-CG-L080	25-CG-L100	Foot x 2, Mounting bolt x 8
Flange	1	90-CG-F020	90-CG-F025	90-CG-F032	90-CG-F040	90-CG-F050	25-CG-F063	25-CG-F080	25-CG-F100	Flange x 1, Mounting bolt x 4
Trunnion pin	1	25-CG-T020	25-CG-T025	25-CG-T032	25-CG-T040	25-CG-T050	25-CG-T063	-	-	Trunnion pin x 2, Trunnion bolt x 2, Flat washer x 2
Clevis			25-CG-D025						25-CG-D100	Cievis pin x 1, Retaining ring x 2
Pivot bracket	1	25-CG-020-24A	25-CG-025-24A	25-CG-032-24A	25-CG-040-24A	25-CG-050-24A	25-CG-063-24A	25-CG-080-24A	25-CG-100-24A	Pivot bracket x 1

<sup>\*1</sup> Order two foot brackets per cylinder.



<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

# 25A-CBG1 Series

 $\emptyset$  20,  $\emptyset$  25,  $\emptyset$  32,  $\emptyset$  40,  $\emptyset$  50,  $\emptyset$  63

Air Cylinder: With End Lock

Directional Control Valves

Air Cylinders

Related Products

Rotary Actuators

Air Grippers Equipment Vacuum

Preparation Air

Air Filters

Flow Control Equipment/ Fittings

Detection Switches

Fluid Control Equipment

**Process Gas** Equipment

Electric Actuators

Auto Switches

**How to Order** 25A- CBG1 L N 25-100-H N 25A-CDBG1 L N 25-100-H N-M9BW Number of Series compatible auto switches with secondary batteries S With auto switch (Built-in magnet) Mounting n Basic L Axial foot **Auto switch** F Rod flange Without auto switch Head flange G For applicable auto switches,  $|| | | |^{1}$ Rod trunnion refer to page 255. Head trunnion D Clevis Manual release The trunnion cannot be attached on the side to which N Non-locking type an end lock is attached. Mounting brackets are shipped Lock position together with the product but Head end lock do not come assembled. Н R Rod end lock Type Double end lock N Rubber bumper Bore size 20 20 mm 25 25 mm 32 32 mm 40 mm 40 50 50 mm 63 mm Cylinder stroke [mm] Bore size Standard stroke\*1 Long stroke\*2 20 25, 50, 75, 100, 125, 150, 200 201 to 1500 25

#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDBG1FN32-100-RN

#### Mounting Bracket Part Nos. for the 25A- Series

25, 50, 75, 100, 125,

150, 200, 250, 300

bracket, refer to the stroke selection table (Web Catalogue).

\*1 Other intermediate strokes can be manufactured upon receipt of order.

\*2 For details on the maximum stroke that can be used for each mounting

The manufacturing of intermediate strokes in 1 mm increments is possible.

32

40

50, 63

(Spacers are not used.)

Modifiling	woulding bracket rait 1403. for the 20A- belies							
Mounting	Min.	Bore size [mm]					Description	
bracket	order	20	25	32	40	50	63	Description
Foot	2*1	90-CG-L020	90-CG-L025	90-CG-L032	90-CG-L040	90-CG-L050	25-CG-L063	Foot x 2, Mounting bolt x 8
Flange	1	90-CG-F020	90-CG-F025	90-CG-F032	90-CG-F040	90-CG-F050	25-CG-F063	Flange x 1, Mounting bolt x 4
Trunnion pin	1	25-CG-T020	25-CG-T025	25-CG-T032	25-CG-T040	25-CG-T050	25-CG-T063	Trunnion pin x 2, Trunnion bolt x 2, Flat washer x 2
Clevis	1	25-CG-D020	25-CG-D025	25-CG-D032	25-CG-D040	25-CG-D050	1 25-CG-D063	Clevis x 1, Mounting bolt x 4, Clevis pin x 1, Retaining ring x 2
Pivot bracket	1	25-CG-020-24A	25-CG-025-24A	25-CG-032-24A	25-CG-040-24A	25-CG-050-24A	25-CG-063-24A	Pivot bracket x 1

301 to 1500

<sup>\*1</sup> Order two foot brackets per cylinder. \* The 25A- series specifications and dimensions (excluding the cap) are the same as those of the standard model.

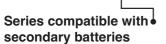
### Air Cylinder: Single Rod

## 25A-MB Series $\emptyset$ 32, $\emptyset$ 40, $\emptyset$ 50, $\emptyset$ 63, $\emptyset$ 80, $\emptyset$ 100



#### **How to Order**





#### With auto switch

Without magne for switch*1			
D	With auto switch (Built-in magnet)		

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

#### Mounting •

В	Basic			
L	Axial foot			
F	Rod flange			
G				
С	C Single clevis			
D	D Double clevis			
Т	Centre trunnion			

#### Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

#### Number of auto switches

_	2
S	1
3	3
n	n

#### Auto switch

Without auto switch

Refer to page 255 for applicable auto switch models.

#### Cylinder stroke [mm]

Bore [mm]	Standard stroke [mm]
32	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
40	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
50	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600
63	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600
80	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800
100	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800

Intermediate strokes are available. (No spacer is used.)

#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-MDBB40-100Z

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

#### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	32	40	50	63	80	100
Foot*1	25-MB-L03	25-MB-L04	25-MB-L05	25-MB-L06	25-MB-L08	25-MB-L10
Flange	MB-F03-XC7	MB-F04-XC7	MB-F05-XC7	MB-F06-XC7	MB-F08-XC7	MB-F10-XC7
Single clevis	25-MB-C03	25-MB-C04	25-MB-C05	25-MB-C06	25-MB-C08	25-MB-C10
Double clevis	25-MB-D03	25-MB-D04	25-MB-D05	25-MB-D06	25-MB-D08	25-MB-D10

<sup>\*1</sup> Two foot brackets required for one cylinder.



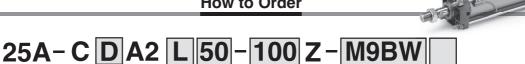
<sup>\*</sup> Accessories for each mounting bracket are as follows: Foot, flange, single clevis/body mounting bolt, double clevis/body mounting bolt, clevis pin, flat washers and split pins.

### Air Cylinder: Standard Type Double Acting, Single Rod

## 25A-CA2 Series Ø 40, Ø 50, Ø 63, Ø 80, Ø 100

RoHS

#### How to Order



Series compatible with secondary batteries

#### With auto switch

_	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

#### Mounting •

В	Basic			
L	Axial foot			
F	Rod flange			
G	Head flange			
С	Single clevis			
D	Double clevis			
Т	Centre trunnion			

#### Rore size

	0 0.10
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

#### Number of auto switches

_	2
S	1
3	3
n	n

#### Auto switch

Without auto switch

\* Refer to page 255 for applicable auto switch models.

#### Cvlinder stroke [mm]

- ymus caete [mm]				
40	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500			
50, 63	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 500, 600			
80, 100	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700			

\* Intermediate strokes not listed above are produced upon receipt of order.

#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch (Example) 25A-CDA2L40-100Z

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

#### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	40	50	63	80	100
Axial foot*1	90-CA2-L04	90-CA2-L05	90-CA2-L06	90-CA2-L08	90-CA2-L10
Flange	25A-CA2-F04	25A-CA2-F05	25A-CA2-F06	25A-CA2-F08	25A-CA2-F10
Single clevis	25A-CA2-C04	25A-CA2-C05	25A-CA2-C06	25A-CA2-C08	25A-CA2-C10
Double clevis*2	25A-CA2-D04	25A-CA2-D05	25A-CA2-D06	25A-CA2-D08	25A-CA2-D10

\*1 When axial foot brackets are used, two pieces should be ordered for each cylinder.

\*2 A clevis pin, flat washers and split pins are shipped together with double clevis.

Directional Control Valves

Related Products

Rotary Actuators

Air Grippers

Vacuum Equipment

Air Preparation Equipment

Detection Switches

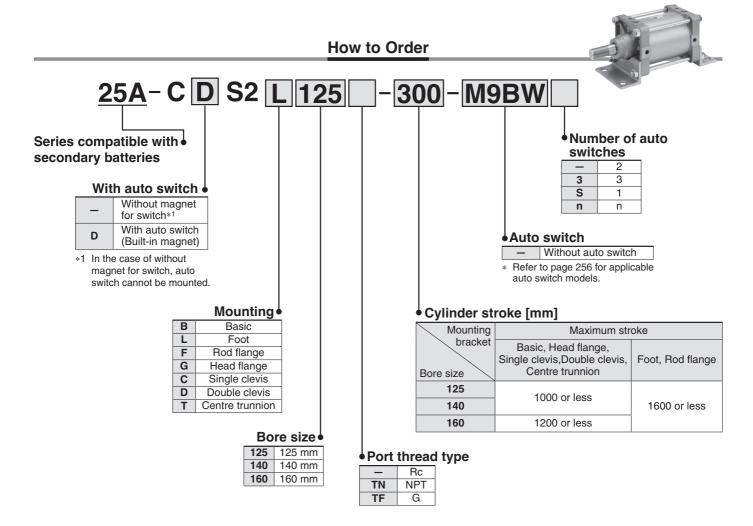
Process Gas Fluid Control Equipment Equipment

# Air Cylinder: Standard Type Double Acting, Single Rod

# 25A-CS2 Series

Ø 125, Ø 140, Ø 160





#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without auto switch is required, there is no need to enter the symbol for auto switch. (Example) 25A-CS2B125-100

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

#### Mounting Bracket Part Nos. for the 25A- Series

mounting Bracket i art 1403. for the 25A- oches					
Bore size [mm]	125	140	160		
Axial foot*1	CS2-L12	CS2-L14	CS2-L16		
Flange	CS2-F12	CS2-F14	CS2-F16		
Single clevis	CS2-C12	CS2-C14	CS2-C16		
Double clevis*2	25A-CS2-D12	25A-CS2-D14	25A-CS2-D16		

<sup>\*1</sup> Order two foot brackets per cylinder.



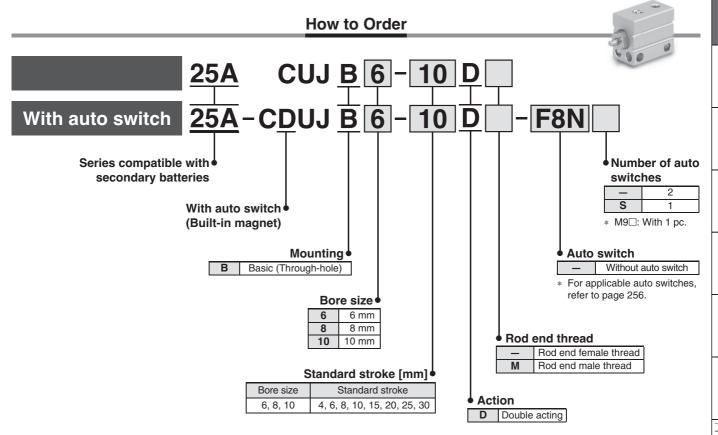
<sup>\*2</sup> A clevis pin and split pins are shipped together with double clevis.

### **Mini Free Mount Cylinder**

# 25A-CUJ Series

 $\emptyset$  6,  $\emptyset$  8,  $\emptyset$  10





#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDUJB8-15DM

\* The 25A- series specifications are the same as those of the standard model.

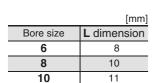
For details, refer to the Web Catalogue.

**Dimensions** (Dimensions other than those shown below are the same as the standard model.)

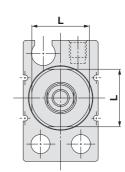
For details, refer to the Web Catalogue.

25A-C□UJB 8 10

 $\ast\,$  The position of the width across flats may not be parallel to the cylinder tube



1	



Air Cylinders Control Valves

Related At

rs Prod

Air Grippers Actuators

Vacuum Equipment

Air Preparation Equipment

Modular F.R.L./
Pressure Control
Equipment Air

Flow Control N Equipment/P Fittings

> Detection Switches

Fluid Control Equipment

Process Gas F

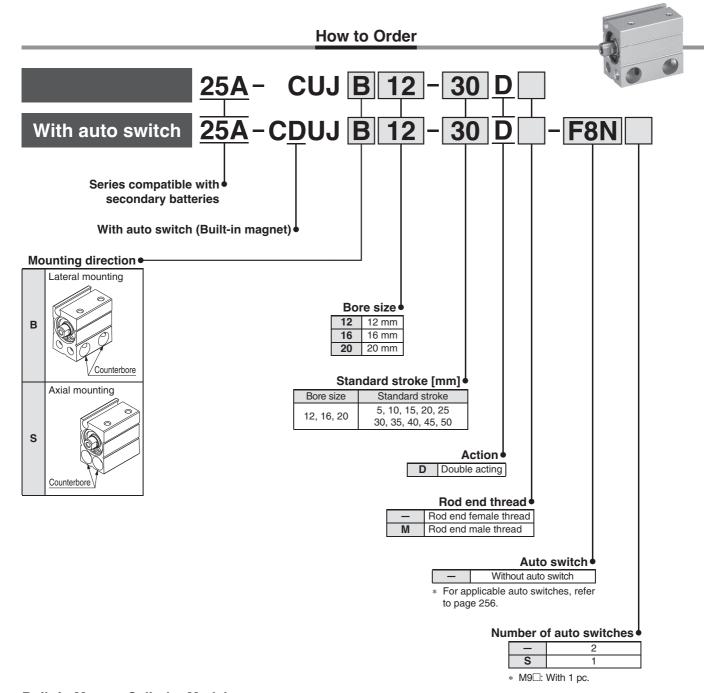
Electric Actuators

### **Mini Free Mount Cylinder**

# 25A-CUJ Series

Ø 12, Ø 16, Ø 20

RoHS



#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDUJB12-15DM

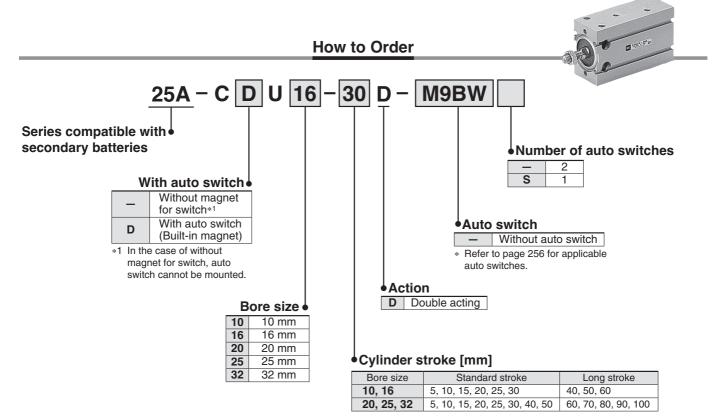


<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

# Free Mount Cylinder Double Acting, Single Rod

## 25A-CU Series Ø 10, Ø 16, Ø 20, Ø 25, Ø 32





#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDU20-25D

> \* The 25A- series specifications and dimensions are the same as those of the standard model.

> > For details, refer to the Web Catalogue.

Directional Control Valves

Air Cylinders

Related Products

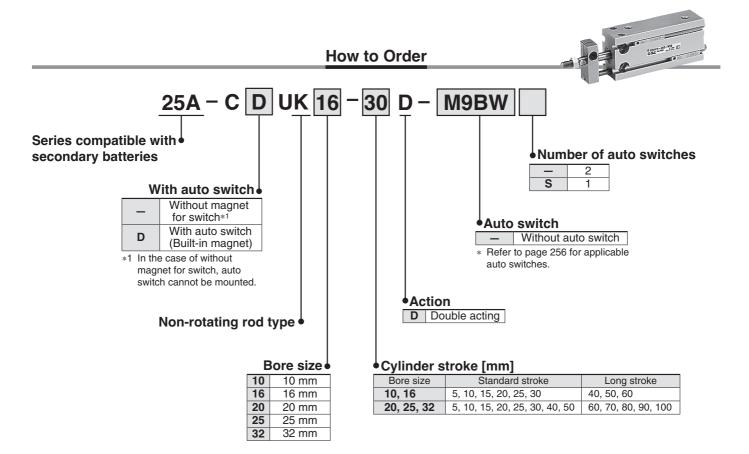
Rotary Actuators

Air Grippers Vacuum Equipment

Air Preparation Equipment

# Free Mount Cylinder: Non-rotating Rod Type Double Acting, Single Rod

**25A-CUK Series** Ø 10, Ø 16, Ø 20, Ø 25, Ø 32 RoHS



#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDUK20-25D

\* The 25A- series specifications and dimensions are the same as those of the standard model.



# Compact Cylinder: Standard Type Double Acting, Single Rod

# 25A-CQS Series

 $\emptyset$  12,  $\emptyset$  16,  $\emptyset$  20,  $\emptyset$  25

RoHS

#### **How to Order**

522

Series compatible with secondary batteries

With auto switch

	Without magnet				
_	for switch*1				
D	With auto switch				
U	(Built-in magnet)				

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

#### Mounting

25A-CDQSB20-30D

	В	Through-hole/Both ends			
	_	tapped common (Standard)			
	L	Foot			
L	C	Compact foot			
	F	Rod flange			
(	G	Head flange			
	D	Double clevis			

- \* In the case of long strokes, use either ends tapped mounting or bracket mounting.
- \* Mounting brackets are shipped together with the product but do not come assembled.
- Cylinder mounting bolts are not included.

#### Bore size

12	12 mm
16	16 mm
20	20 mm
25	25 mm

### Number of auto switches

_	2
S	1
n	n

#### Auto switch

Without auto switch

\* Refer to page 256 for

 Refer to page 256 for applicable auto switch models.

#### Body option <Standard stroke>

-	Standard
С	With rubber bumper
M	Rod end male thread

M9BW

Combination of body options is available.

	CLUTIG STICKE	
		With rubber bumper
r	С	Rod end female
d		thread (Standard)
	СМ	With rubber bumper
	CIVI	Rod end male thread

I and strakes

 Rubber bumper is standard equipment for long stroke type.

Action

**D** Double acting

**♦**Cylinder stroke [mm]

Bore size	Standard stroke	Long stroke
12, 16	5, 10, 15, 20, 25, 30 5, 10, 15, 20, 25, 30, 35, 40, 45, 50	35, 40, 45, 50, 75, 100, 125, 150, 175, 200
20		75, 100, 125, 150, 175, 200
25		75, 100, 125, 150, 175, 200, 250, 300

#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDQSL25-30D

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

#### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis
12	25A-CQS-L012	25A-CQS-LC012	25A-CQS-F012	25-CQS-D012
16	25A-CQS-L016	25A-CQS-LC016	25A-CQS-F016	25-CQS-D016
20	25A-CQS-L020	25A-CQS-LC020	25A-CQS-F020	25-CQS-D020
25	25A-CQS-L025	25A-CQS-LC025	25A-CQS-F025	25-CQS-D025

- $\ast 1$  When ordering foot and compact foot brackets, order 2 pieces per cylinder.
- Parts included with each type of bracket are as follows.
   Foot, Compact foot, Flange: Body mounting bolts
   Double clevis type: Clevis pin, Type C retaining ring for axis, Body mounting bolt

**SIVIC** 

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Directional Control Valves

Air Cylinders

Related Products

Rotary Actuators

nent Air Grippers

ation Vacuum ent Equipment

Air Preparation S Equipment

ular F.R.L./ sure Control Ai

> row Control Equipment/ Fittings

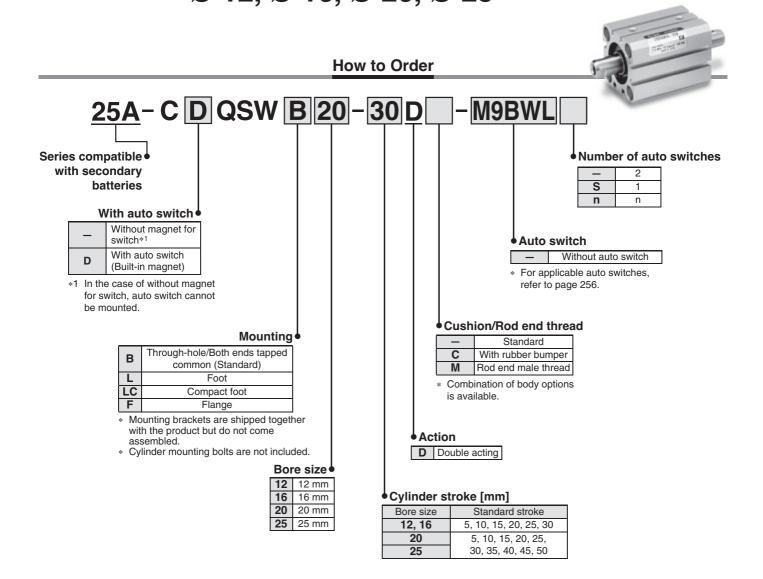
Detection Switches

Fluid Control Equipment

Process Gas F Equipment

> Electric Actuators

# Compact Cylinder: Standard Type Double Acting, Double Rod 25A-CQSV Series Ø 12, Ø 16, Ø 20, Ø 25



#### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange
12	25A-CQS-L012	25A-CQS-LC012	25A-CQS-F012
16	25A-CQS-L016	25A-CQS-LC016	25A-CQS-F016
20	25A-CQS-L020	25A-CQS-LC020	25A-CQS-F020
25	25A-CQS-L025	25A-CQS-LC025	25A-CQS-F025

- \*1 When ordering foot and compact foot brackets, order 2 pieces per cylinder.
- Body mounting bolts are included for each bracket.

#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQSWL25-30D

\* The 25A- series specifications and dimensions are the same as those of the standard model.



Directional Control Valves

Related Products

Rotary Actuators

Air Grippers Equipment Vacuum

Preparation Air

Detection Switches

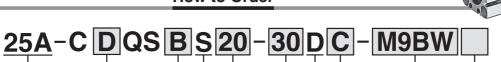
Fluid Control Equipment

Process Gas Equipment

Electric Actuators

Auto Switches

#### **How to Order**



Series compatible with secondary batteries

#### With auto switch

_	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

#### Mounting •

Through-hole/Both ends tapped common (Standard)	
Foot	
Compact foot	
Rod flange	
Head flange	
Double clevis	

- Mounting brackets are shipped together with the product but do not come assembled.
- Cylinder mounting bolts are not included.

#### Cushion •

S Anti-lateral load type

#### Bore size

•		
	12	12 mm
	16	16 mm
	20	20 mm
	25	25 mm

#### Cylinder stroke [mm]

	Oynnaci Stroke [inini]
Bore size	Standard stroke
12, 16	5, 10, 15, 20, 25, 30
20. 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50

#### Number of auto switches

_	2
S	1
n	n

#### Auto switch

Without auto switch

Refer to page 256 for applicable auto switch models.

#### Body option

С	With rubber bumper Rod end female thread (Standard)
СМ	With rubber bumper Rod end male thread

Action

**D** Double acting

#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQSLS12-25DC

\* With cushion only.

The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

#### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis		
12	25A-CQS-L012	25A-CQS-LC012	25A-CQS-F012	25-CQS-D012		
16	25A-CQS-L016	25A-CQS-LC016	25A-CQS-F016	25-CQS-D016		
20	25A-CQS-L020	25A-CQS-LC020	25A-CQS-F020	25-CQS-D020		
25	25A-CQS-L025	25A-CQS-LC025	25A-CQS-F025	25-CQS-D025		

- \*1 When ordering foot and compact foot brackets, order 2 pieces per cylinder.
- Parts included with each type of bracket are as follows. Foot, Compact foot, Flange: Body mounting bolts

Double clevis type: Clevis pin, Type C retaining ring for axis, Body mounting bolt



### **Compact Cylinder: Standard** Double Acting, Single Rod



# 25A-CQ2 Series

 $\emptyset$  12,  $\emptyset$  16,  $\emptyset$  20,  $\emptyset$  25,  $\emptyset$  32,  $\emptyset$  40,  $\emptyset$  50,  $\emptyset$  63,  $\emptyset$  80,  $\emptyset$  100

#### **How to Order**



Number of

S

n

auto switches

n

Series compatible with secondary batteries

#### With auto switch

25A - C D Q2 B 20

	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

#### Mounting •

В	Through-hole (Standard)	
Α	Both ends tapped	
L Foot		
LC	Compact foot	
F	Rod flange	
G	Head flange	
D	D Double clevis	

- \* Mounting brackets are shipped together with the product but do not come assembled.
- Cylinder mounting bolts are not included.

#### Bore size

12	12 mm	40	40 mm
16	16 mm	50	50 mm
20	20 mm	63	63 mm
25	25 mm	80	80 mm
32	32 mm	100	100 mm

#### Port thread type

	M thread	Ø 12 to Ø 25
	Rc	
TN	NPT	Ø 32 to Ø 100
TF	G	

	M thread	Ø 12 to Ø 25
_	Rc	
TN	NPT	Ø 32 to Ø 100
TF	G	

#### Cylinder stroke [mm]

**D** Double acting

C

M

Action

**Body option** 

12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50 to 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

Auto switch

Without auto switch Refer to page 256 for

Auto switch mounting groove

"Z" is not available for Ø 12 to Ø 25 without auto switches.

Standard (Rod end female thread)

With rubber bumper

Rod end male thread

Combination of body options is available.

applicable auto switch

The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDQ2L32-25DZ

#### Mounting Bracket Part Nos for the 25A- Series

IVIO	Mounting Bracket Part Nos. for the 25A- Series				
Bore size [mm]		Foot*1	Compact foot*1	Flange	Double clevis
12	Without auto switch	25A-CQ-L012	25A-CQ-LC012	25A-CQ-F012	25-CQ-D012
12	With auto switch	25A-CQ-LZ12	25A-CQ-LCZ12	25A-CQ-F012	25-CQ-D012
16	Without auto switch	25A-CQ-L016	25A-CQ-LC016	25A-CQ-F016	05 CO D016
10	With auto switch	25A-CQ-LZ16	25A-CQ-LCZ16	25A-CQ-F016	25-CQ-D016
20	Without auto switch	25A-CQ-L020	25A-CQ-LC020	25A-CQ-F020	25-CQ-D020
20	With auto switch	25A-CQ-LZ20	25A-CQ-LCZ20	25A-CQ-F020	25-CQ-D020
25	Without auto switch	25A-CQ-L025	25A-CQ-LC025	25A-CQ-F025	25-CQ-D025
25	With auto switch	25A-CQ-LZ25	25A-CQ-LCZ25	25A-CQ-F025	
32		25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032	25-CQ-D032
40		25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040	25-CQ-D040
50		25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050	25-CQ-D050
63		25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063	25-CQ-D063
80		25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080	25-CQ-D080
100		25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100	25-CQ-D100

When ordering foot and compact foot brackets, the required quantity will be different depending on the bore size. • With auto switch: Order 1 piece per cylinder.
• With auto switch: Order 1 piece per cylinder.

Ø 32 to Ø 100:
• Order 2 pieces per cylinder.

Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

#### Simple Joint (Standard)/ Part Nos.

	, ,		
Bore size [mm]	Joint	Type A mounting bracket	Type B mounting bracket
32, 40	YU-03	YA-03	YB-03
50, 63	YU-05	YA-05	YB-05
80	YU-08	YA-08	YB-08
100	YU-10	YA-10	YB-10

<Ordering>

 Joints are not included with type A or B mounting brackets. Order them separately.

(Example)

Bore size Ø 40

• Type A mounting bracket ······YA-03 • Joint------YU-03



Auto Switches

25A-CQ2W Series

 $\varnothing$  12,  $\varnothing$  16,  $\varnothing$  20,  $\varnothing$  25,  $\varnothing$  32,  $\varnothing$  40,  $\varnothing$  50,  $\varnothing$  63, Ø 80, Ø 100

30 D



Z-M9BW

Series compatible with secondary batteries

#### With auto switch

_	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

- \* Mounting brackets are shipped together with the product but do not come assembled.
- Cylinder mounting bolts are not included.

	Mounting	
В	Through-hole (Standard)	
A Both ends tapped		
L	Foot	
LC	Compact foot	
F	Flange	

25A - C D Q2W B 20

#### Bore size

	12	12 mm	40	40 mm
	16	16 mm	50	50 mm
	20	20 mm	63	63 mm
ĺ	25	25 mm	80	80 mm
	32	32 mm	100	100 mm

#### Mounting Bracket Part Nos. for the 25A- Series

IVIO	Modifiling Bracket Fait 1103: 101 the 20A Oction					
E	Bore size [mm]	Foot*1	Compact foot*1	Flange		
12	Without auto switch	25A-CQ-L012	25A-CQ-LC012	25A-CQ-F012		
12	With auto switch	25A-CQ-LZ12	25A-CQ-LCZ12	25A-CQ-F012		
16	Without auto switch	25A-CQ-L016	25A-CQ-LC016	25A-CQ-F016		
10	With auto switch	25A-CQ-LZ16	25A-CQ-LCZ16	25A-CQ-F010		
20	Without auto switch	25A-CQ-L020	25A-CQ-LC020	25A-CQ-F020		
20	With auto switch	25A-CQ-LZ20	25A-CQ-LCZ20	25A-CQ-F020		
25	Without auto switch	25A-CQ-L025	25A-CQ-LC025	25A-CQ-F025		
25	With auto switch	25A-CQ-LZ25	25A-CQ-LCZ25	25A-CQ-F025		
	32	25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032		
	40	25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040		
50		25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050		
63		25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063		
80		25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080		
	100	25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100		

- \*1 When ordering foot and compact foot brackets, the required quantity will be different depending on the bore size.
  - Ø 12 to Ø 25:
  - · Without auto switch: Order 2 pieces per cylinder.
  - · With auto switch: Order 1 piece per cylinder. (Part number for a set of 2 foot brackets) Ø 32 to Ø 100:
  - Order 2 pieces per cylinder.
- \* Body mounting bolts are included for each bracket.

#### Number of auto switches

_	2
S	1
n	n

#### **Auto switch**

Without auto switch

For applicable auto switches, refer to page 256.

#### Auto switch mounting groove

	Ø 12 to Ø 25	
	Ø 32 to Ø 100	4 surfaces

\* "Z" is not available for Ø 12 to Ø 25 without auto switches.

#### Body option

	_	Standard (Rod end female thread)
	With rubber bumper	
	M	Rod end male thread

\* Combination of body options is available.

#### Action

**D** Double acting

#### **♦** Cylinder stroke [mm]

12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50 to 100	10. 15. 20. 25. 30. 35. 40. 45. 50. 75. 100

#### Port thread type

	M thread	Ø 12 to Ø 25		
_	Rc			
TN	NPT	Ø 32 to Ø 100		
TF	G			

#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required. there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQ2WL32-25DZ

\* The 25A- series specifications and dimensions are the same as those of the standard model.

#### For details, refer to the Web Catalogue.

#### Simple Joint (Standard)/Part Nos.

Bore size [mm]	Joint	Type A mounting bracket	Type B mounting bracket		
32, 40	YU-03	YA-03	YB-03		
50, 63	YU-05	YA-05	YB-05		
80	YU-08	YA-08	YB-08		
100	YU-10	YA-10	YB-10		

<Ordering>

Joints are not included with type A or B mounting brackets. Order them separately. (Example)

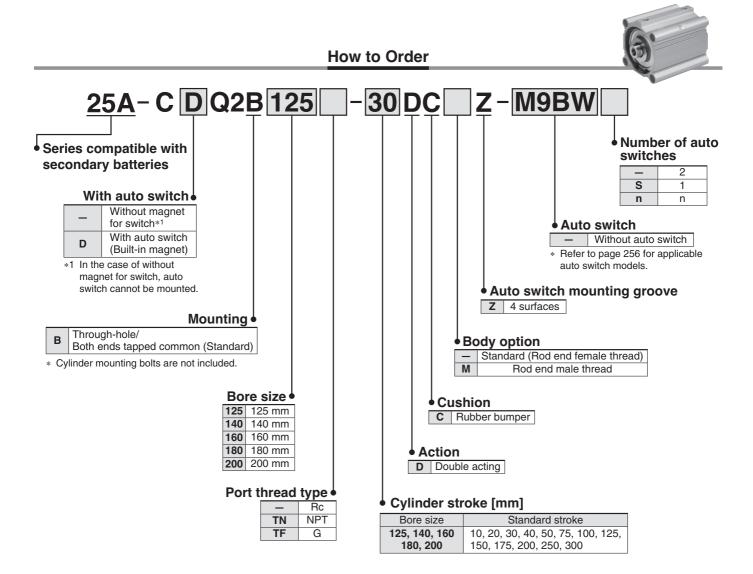
Bore size Ø 40

Part no Type A mounting bracket ..... YA-03 .....YU-03

# **Compact Cylinder: Large Bore Size Double Acting, Single Rod**

**25A-CQ2** Series Ø 125, Ø 140, Ø 160, Ø 180, Ø 200





#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDQ2B140-30DCZ

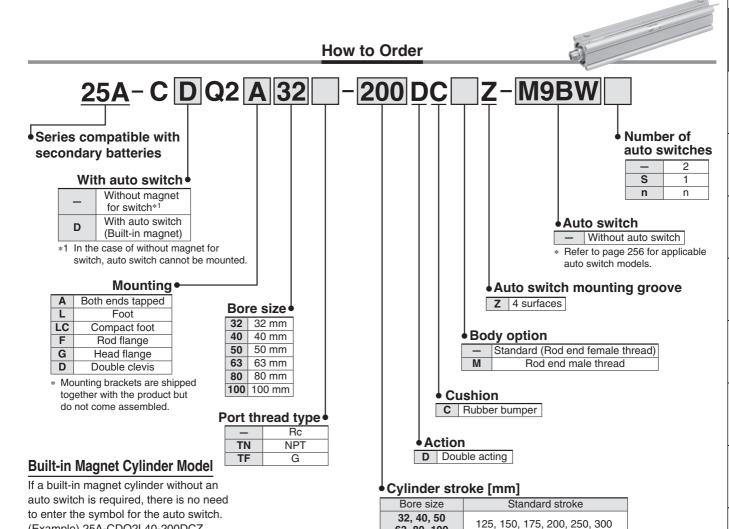


<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

### Compact Cylinder: Long Stroke Double Acting, Single Rod **RoHS**

25A-CQ2 Series

Ø 32, Ø 40, Ø 50, Ø 63, Ø 80, Ø 100



63, 80, 100

Simple Joint (Standard)/Part Nos.

	11 ( 0 1011 1 01011 01	,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Bore size [mm]	Joint	Type A mounting bracket	Type B mounting bracket
32, 40	YU-03	YA-03	YB-03
50, 63	YU-05	YA-05	YB-05
80	YU-08	YA-08	YB-08
100	YU-10	YA-10	YB-10

<Ordering>

• Joints are not included with type A or B mounting brackets. Order them separately. (Example)

Bore size Ø 40 Part no. • Type A mounting bracket ..... YA-03 Joint-------YU-03

(Example) 25A-CDQ2L40-200DCZ

Mounting Bracket Part Nos. for the 25A- Series

mountaing Draokot i dit itool for the 2011 Oction				
Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis
32	25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032	25-CQ-D032
40	25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040	25-CQ-D040
50	25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050	25-CQ-D050
63	25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063	25-CQ-D063
80	25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080	25-CQ-D080
100	25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100	25-CQ-D100

\*1 Order 2 pieces per cylinder.

Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Directional Control Valves

Air Cylinders

Related Products

Rotary Actuators

Air Grippers

Equipment Vacuum

Preparation Air

Detection Switches

Fluid Control Equipment

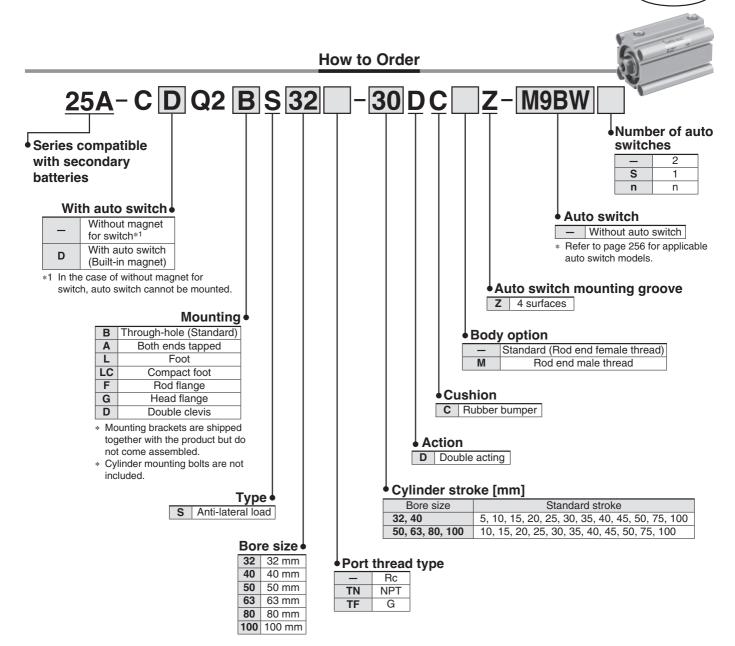
Process Gas | Equipment

Electric Actuators



Parts included with each type of bracket are as follows.

# Compact Cylinder: Anti-lateral Load 25A-CQ2 Series $\emptyset$ 32, $\emptyset$ 40, $\emptyset$ 50, $\emptyset$ 63, $\emptyset$ 80, $\emptyset$ 100 RoHS



#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDQ2LS40-30DCZ

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

#### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis	
32	25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032	25-CQ-D032	
40	25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040	25-CQ-D040	
50	25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050	25-CQ-D050	
63	25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063	25-CQ-D063	
80	25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080	25-CQ-D080	
100	25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100	25-CQ-D100	

<sup>\*1</sup> Order 2 pieces per cylinder.

Parts included with each type of bracket are as follows.
 Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

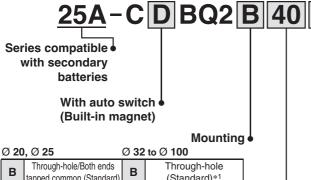
### **Compact Cylinder: With End Lock**

# 25A-CBQ2 Series

Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63, Ø 80, Ø 100







В	Through-hole/Both ends tapped common (Standard)	В	Through-hole (Standard)*1
L	Foot	Α	Both ends tapped
LC	Compact foot	L	Foot
F	Rod flange	LC	Compact foot
G	Head flange	F	Rod flange
D	Double clevis	G	Head flange
		D	Double clevis

- \*1 At the 75 and 100 mm strokes with Ø 80, Ø 100. both ends tapped (A) is the standard. Through-hole (B) is not available.
- \* Mounting brackets are shipped together with the product but do not come assembled.

		Во	re size
20	20 mm	50	50 mm
25	25 mm	63	63 mm
32	32 mm	80	80 mm

**40** 40 mm **100** 100 mm

	Port th	read type
	M thread	Ø 20, Ø 25
	Rc	
TN	NPT	Ø 32 to Ø 100
TF	G	1

#### Cylinder stroke [mm]

0
Standard stroke
10, 15, 20, 25, 50, 75, 100
25, 50, 75, 100

#### **How to Order**

A men
-

-30 D C - H N - M9BW

Manual release type N Non-lock type

Lock position H Head end lock

Rod end lock

Body option Rod end female thread M Rod end male thread

Cushion

C Rubber bumper

Action

D Double acting

Auto switch

Without auto switch For applicable auto switches, refer to page 256.

#### Number of auto switches

 or or ac	ato owntone
_	2
S	1
n	n

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDBQ2L32-30DC-RN

#### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm] Foot*1		Compact foot*1	Flange	Double clevis
20	25A-CQS-L020	25A-CQS-LC020	25A-CQS-F020	25-CQS-D020
25	25A-CQS-L025	25A-CQS-LC025	25A-CQS-F025	25-CQS-D025
32	25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032	25-CQ-D032
40	25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040	25-CQ-D040
50	25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050	25-CQ-D050
63	25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063	25-CQ-D063
80	25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080	25-CQ-D080
100	25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100	25-CQ-D100

\*1 Order 2 pieces per cylinder.

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers

Equipment Vacuum Preparation

Air

Modular F.R.L./ Pressure Control Equipment

Flow Control Equipment/ Fittings

Detection Switches

Fluid Control Equipment

Process Gas | Equipment

Electric Actuators

Auto Switches

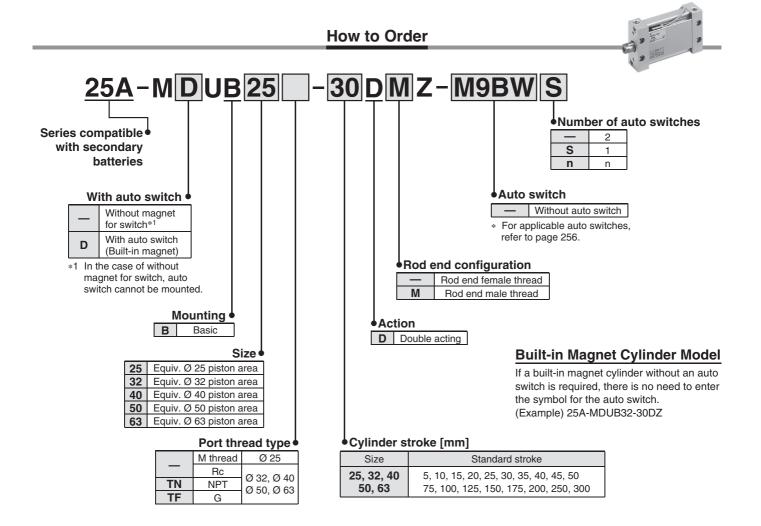
126

<sup>\*</sup> Parts included with each type of bracket are as follows: Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

### Plate Cylinder: Double Acting, Single Rod

# **25A-MU Series** Ø 25, Ø 32, Ø 40, Ø 50, Ø 63





<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

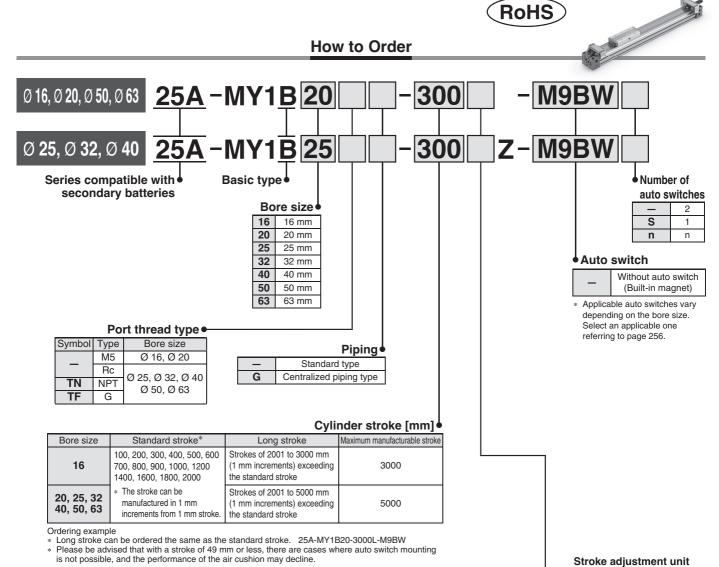




# **Mechanically Jointed Rodless Cylinder Basic Type**

# 25A-MY1B Series

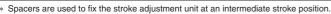
Ø 16, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63



#### •

#### Stroke adjustment unit symbo

Fc	or Ø 16 to Ø 40 Stroke adjustment unit symbol										mbol •		
				Right side stroke adjustment unit									
		Without	A: With adjustment bolt			L: With low load shock absorber + Adjustment bolt			H: With high load shock absorber + Adjustment bolt				
			unit		With short spacer	With long spacer		With short spacer	With long spacer		With short spacer	With long spacer	
пit	Wit	thout unit	_	SA	SA6	SA7	SL	SL6	SL7	SH	SH6	SH7	
ustment unit	A: With a	: With adjustment bolt		Α	AA6	AA7	AL	AL6	AL7	AH	AH6	AH7	
ner		With short spacer	A6S	A6A	A6	A6A7	A6L	A6L6	A6L7	A6H	A6H6	A6H7	
usti		With long spacer	A7S	A7A	A7A6	A7	A7L	A7L6	A7L7	A7H	A7H6	A7H7	
adj	L: With low lo	oad shock absorber +	LS	LA	LA6	LA7	L	LL6	LL7	LH	LH6	LH7	
stroke	Adjustment bolt	With short spacer	L6S	L6A	L6A6	L6A7	L6L	L6	L6L7	L6H	L6H6	L6H7	
stro	DOIL	With long spacer	L7S	L7A	L7A6	L7A7	L7L	L7L6	L7	L7H	L7H6	L7H7	
de		load shock absorber +	HS	HA	HA6	HA7	HL	HL6	HL7	Н	HH6	HH7	
ft si	Adjustment bolt	With short spacer	H6S	H6A	H6A6	H6A7	H6L	H6L6	H6L7	Н6Н	H6	Н6Н7	
Left	DUIL	With long spacer	H7S	H7A	H7A6	H7A7	H7L	H7L6	H7L7	H7H	H7H6	H7	

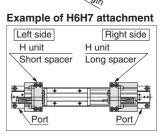


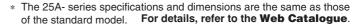
The 25A-MY1B50 and 63 are not available with the stroke adjustment unit.

Intermediate fixing spacer

Stroke adjustment uni

mounting diagram







<sup>\*</sup> The stroke adjustment unit H unit is not available for the 25A-MY1B16.

# **Mechanically Jointed Rodless Cylinder**

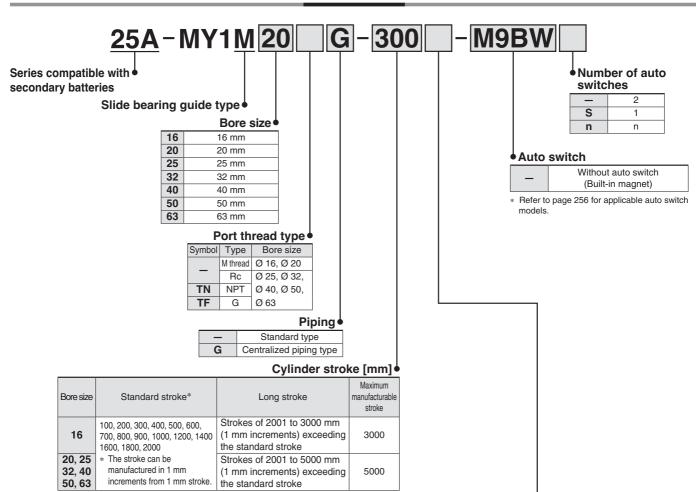
### Slide Bearing Guide Type

# 25A-MY1M Series

 $\emptyset$  16,  $\emptyset$  20,  $\emptyset$  25,  $\emptyset$  32,  $\emptyset$  40,  $\emptyset$  50,  $\emptyset$  63



#### **How to Order**



#### Ordering example

- Long stroke can be ordered the same as the standard stroke. 25A-MY1M20-3000L-M9BW
- Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

	Stroke adjustment unit symbol •													
				Right side stroke adjustment unit										
		Without	A: With adjustment bolt			L: With low load shock absorber + Adjustment bolt			H: With high load shock absorber + Adjustment bolt					
			unit		With short spacer	With long spacer		With short spacer	With long spacer		With short spacer	With long spacer		
Ħ	Wit	thout unit	_	SA	SA6	SA7	SL	SL6	SL7	SH	SH6	SH7		
ı n	A: With a	djustment bolt	AS	Α	AA6	AA7	AL	AL6	AL7	AH	AH6	AH7		
mer		With short spacer	A6S	A6A	A6	A6A7	A6L	A6L6	A6L7	A6H	A6H6	A6H7		
adjustment u		With long spacer	A7S	A7A	A7A6	A7	A7L	A7L6	A7L7	A7H	A7H6	A7H7		
adj		oad shock absorber +	LS	LA	LA6	LA7	L	LL6	LL7	LH	LH6	LH7		
ş	Adjustment bolt	With short spacer	L6S	L6A	L6A6	L6A7	L6L	L6	L6L7	L6H	L6H6	L6H7		
stroke	DOIL	With long spacer	L7S	L7A	L7A6	L7A7	L7L	L7L6	L7	L7H	L7H6	L7H7		
side		load shock absorber +	HS	HA	HA6	HA7	HL	HL6	HL7	Н	HH6	HH7		
	Adjustment bolt	With short spacer	H6S	H6A	H6A6	H6A7	H6L	H6L6	H6L7	Н6Н	H6	Н6Н7		
Left	DOIL	With long spacer	H7S	H7A	H7A6	H7A7	H7L	H7L6	H7L7	H7H	H7H6	H7		

SMC

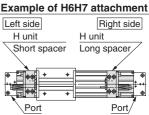
#### H unit H unit Short spacer Long spacer

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Stroke adjustment unit mounting diagram

Stroke adjustment unit Intermediate fixing spacer Spacer length



Directional Control Valves Air Cylinders

Related Products

Rotary Actuators

Air Grippers

Equipment Vacuum

Preparation Air

Detection Switches

Fluid Control Equipment

Process Gas

Electric Actuators

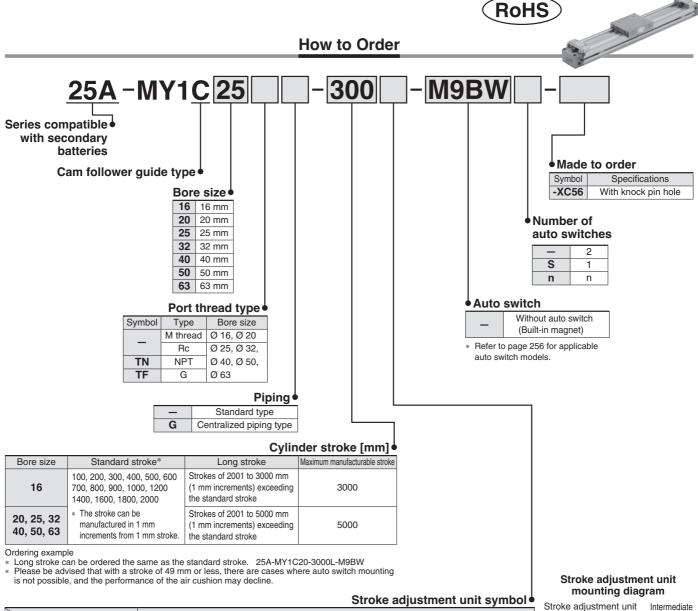
Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

Stroke adjustment unit H is not available for 25A-MY1M16

### **Mechanically Jointed Rodless Cylinder** Cam Follower Guide Type

# 25A-MY1C Series

Ø 16, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63



								Stro	ке ааји	stmeni	unit sy	/mboi •	
			Right side stroke adjustment unit										
			Without	A: With	A: With adjustment bolt		L: With low load shock absorber + Adjustment bolt			H: With high load shock absorber + Adjustment bolt			
			unit		With short spacer	With long spacer		With short spacer	With long spacer		With short spacer	With long spacer	
:	With	thout unit	_	SA	SA6	SA7	SL	SL6	SL7	SH	SH6	SH7	
	A: With a	djustment bolt	AS	Α	AA6	AA7	AL	AL6	AL7	AH	AH6	AH7	
		With short spacer	A6S	A6A	A6	A6A7	A6L	A6L6	A6L7	A6H	A6H6	A6H7	
1	Ha: With a	With long spacer	A7S	A7A	A7A6	A7	A7L	A7L6	A7L7	A7H	A7H6	A7H7	
170	L: With low lo	oad shock absorber +	LS	LA	LA6	LA7	L	LL6	LL7	LH	LH6	LH7	
13	Adjustment	With short spacer	L6S	L6A	L6A6	L6A7	L6L	L6	L6L7	L6H	L6H6	L6H7	
	Adjustment bolt	With long spacer	L7S	L7A	L7A6	L7A7	L7L	L7L6	L7	L7H	L7H6	L7H7	
	H: With high	load shock absorber +	HS	HA	HA6	HA7	HL	HL6	HL7	Н	HH6	HH7	
	Adjustment bolt	With short spacer	H6S	H6A	H6A6	H6A7	H6L	H6L6	H6L7	Н6Н	H6	Н6Н7	
-	ם מסונ	With long spacer	H7S	H7A	H7A6	H7A7	H7L	H7L6	H7L7	H7H	H7H6	H7	



Stroke adjustment unit H is not available for 25A-MY1C16

fixing spacer

Right side

Long spacer

**Example of H6H7 attachment** 

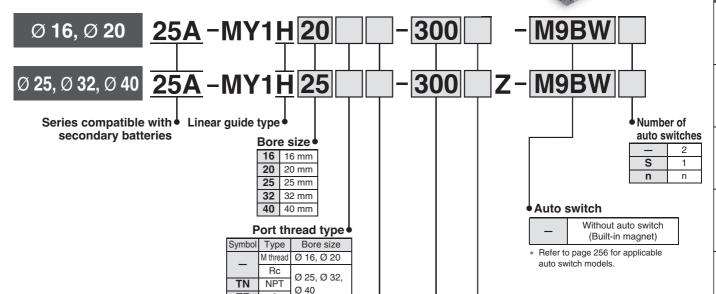
Left side H unit Short spacer

### **Mechanically Jointed Rodless Cylinder** Linear Guide Type

### 25A-MY1H Series $\emptyset$ 16, $\emptyset$ 20, $\emptyset$ 25, $\emptyset$ 32, $\emptyset$ 40



How to Order



Cylinder stroke [mm]

SMC

**Piping** Standard type G Centralized piping type

Bore size	Standard stroke	Intermediate stroke	Long stroke	Maximum manufacturable stroke
16, 20	50, 100, 150 200, 250, 300	Strokes of 51 to 599 mm	Strokes of 601 to 1000 mm (1 mm increments) exceeding the standard stroke	1000
25, 32, 40		(1 mm increments) other than standard strokes	Strokes of 601 to 1500 mm (1 mm increments) exceeding the standard stroke	1500

TE

G

Intermediate stroke can be ordered the same as the standard stroke. 25A-MY1H20-60-M Long stroke can be ordered the same as the standard stroke. 25A-MY1H20-800L-M9BW 25A-MY1H20-60-M9BW

#### Stroke adjustment unit mounting diagram

Intermediate

fixing spacer

Stroke adjustment unit Stroke adjustment unit symbol • Right side stroke adjustment unit L: With low load shock absorber H: With high load shock absorber A: With adjustment bolt + Adjustment bolt Adjustm ent bolt Without unit With short With long With short With long With short With long spacer spacer spacer spacer spacer Without unit SA SA6 SA7 SL SL<sub>6</sub> SL7 SH SH<sub>6</sub> SH7 A: With adjustment bolt AS AA6 AA7 ΑL AL6 AL7 AΗ AH6 AH7 Α With short spacer
With long spacer

L: With low load shock absorber + With short spacer A6S A6A **A6** A6A7 A6L A6L6 A6L7 A6H **A6H6 A6H7 A7A** A7A6 **A7** A7L A7L6 A7L7 A7H A7H6 A7H7 A7S LA6 LL6 LL7 1.9 LA7 LH LH6 LH7 LA Adjustment With short spacer stroke L6A6 L6L7 L6H6 L6S L<sub>6</sub>A L6A7 L6L L6 L6H L6H7 bolt L7L6 L7L 17 L7S L7A L7A6 L7A7 L7H **L7H6** L7H7 With long spacer Left side HL7 HS HA HA6 HA7 HL HL6 Н HH6 HH7 H: With high load shock absorber + Adjustment With short spacer H6S H6A H6A6 H6A7 H<sub>6</sub>L H6L6 H6L7 H6H H6 **H6H7** bolt With long spacer H7S H7A H7A6 H7A7 H7L H7L6 H7L7 H7H **H7H6 H7** 

Place the protruding section on the stroke adjusting unit side Example of L6L7 attachment Left side Right side L unit L unit Short space Long space

Spacers are used to fix the stroke adjustment unit at an intermediate stroke position

H: With high load shock absorber + Adjustment bolt is not available for 25A-MY1H16

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Directional Control Valves Air Cylinders

Related Products

Rotary Actuators

Air Grippers

Equipment Vacuum

Preparation Air

Clean Air Filters

Flow Control Equipment/ Fittings

Detection Switches

Fluid Control Equipment

**Process Gas** Equipment

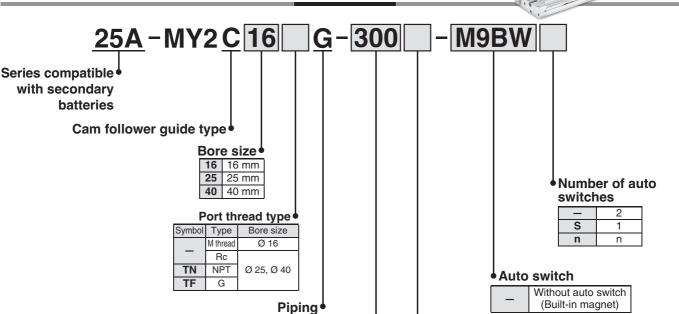
Electric Actuators

### **Mechanically Jointed Rodless Cylinder Cam Follower Guide Type**

## 25A-MY2C Series

 $\emptyset$  16,  $\emptyset$  25,  $\emptyset$  40

#### **How to Order**



Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]*1	Max. manufacturable stroke [mm]
16	100, 200, 300, 400, 500, 600, 700, 800,	3000
25, 40	900, 1000, 1200, 1400, 1600, 1800, 2000	5000

**G** Centralized piping type (Standard)

- \*1 Strokes are manufacturable in 1 mm increments, up to the maximum stroke. However, please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.
- \* Long stroke can be ordered the same as the standard stroke. 25A-MY2C25G-3000L-M9BW

#### Stroke adjustment unit symbol

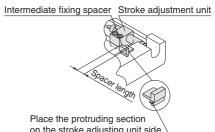
				Rig	jht side st	troke adj	ustment i	unit	
			Without	L: With absorbe		ow load shock r		H: With high load absorber	
			unit		With short spacer	With long spacer		With short spacer	With long spacer
	Wit	thout unit	_	SL	SL6	SL7	SH	SH6	SH7
nit &	L: With low load shock		LS	L	LL6	LL7	LH	LH6	LH7
stroke nt unit		With short spacer	L6S	L6L	L6	L6L7	L6H	L6H6	L6H7
side sti stment		With long spacer	L7S	L7L	L7L6	L7	L7H	L7H6	L7H7
S	H: With high load shock		HS	HL	HL6	HL7	Н	HH6	HH7
Left	absorber	With short spacer	H6S	H6L	H6L6	H6L7	Н6Н	H6	Н6Н7
		With long spacer	H7S	H7L	H7L6	H7L7	H7H	H7H6	H7

<sup>\*</sup> Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

#### Stroke adjustment unit mounting diagram

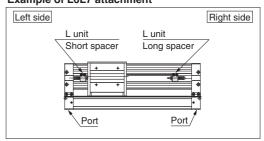
Refer to page 256 for applicable

auto switch models.



on the stroke adjusting unit side

#### Example of L6L7 attachment



<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

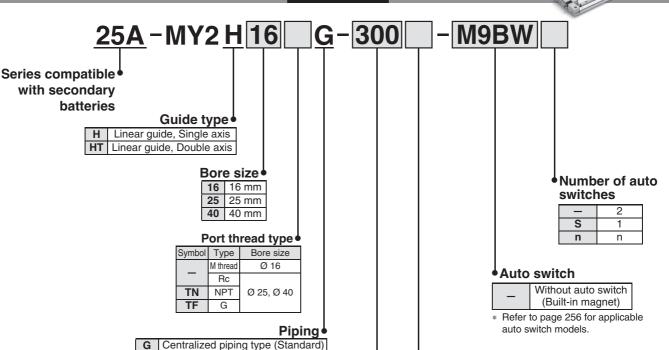
### **Mechanically Jointed Rodless Cylinder Linear Guide Type**

# 25A-MY2H/HT Series

Ø 16, Ø 25, Ø 40

RoHS





#### Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]*1	Max. manufacturable stroke [mm]
16	50, 100, 150, 200, 250, 300,	1000
25, 40	350, 400, 450, 500, 550, 600	1500

- \*1 Strokes are manufacturable in 1 mm increments, up to the maximum stroke.
- Intermediate stroke can be ordered the same as the standard stroke.
   25A-MY2H16G-80-M9BW
- \* Long stroke can be ordered the same as the standard stroke. **25A-MY2H25G-800L-M9BW**

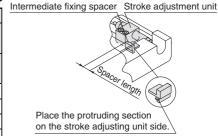
#### Stroke adjustment unit symbol

SMC

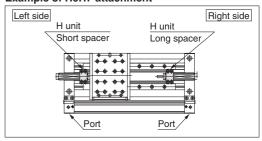
		Right side stroke adjustment unit							
		Without	L: With low load shock absorber		H: With high load shock absorber		shock		
		unit		With short spacer	With long spacer		With short spacer	With long spacer	
	Without unit		_	SL	SL6	SL7	SH	SH6	SH7
nit e		w load shock	LS	L	LL6	LL7	LH	LH6	LH7
stroke nt unit	absorber	With short spacer	L6S	L6L	L6	L6L7	L6H	L6H6	L6H7
de			L7S	L7L	L7L6	L7	L7H	L7H6	L7H7
		gh load shock	HS	HL	HL6	HL7	Н	HH6	HH7
		With short spacer	H6S	H6L	H6L6	H6L7	Н6Н	H6	Н6Н7
		With long spacer	H7S	H7L	H7L6	H7L7	H7H	H7H6	H7

<sup>\*</sup> Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

#### Stroke adjustment unit mounting diagram



#### **Example of H6H7 attachment**



\* The 25A- series specifications and dimensions are the same as those of the standard model.

Air Cylinders Control Valves

Related Products

Rotary Actuators

Vacuum Equipment Air Grippers

Air Preparation Equipment

ol Air Filte

I Modular F.R Pressure Cor Equipmen

Flow Cont Equipmed Fittings

Detection Switches

Fluid Control Equipment

Process Gas | Equipment

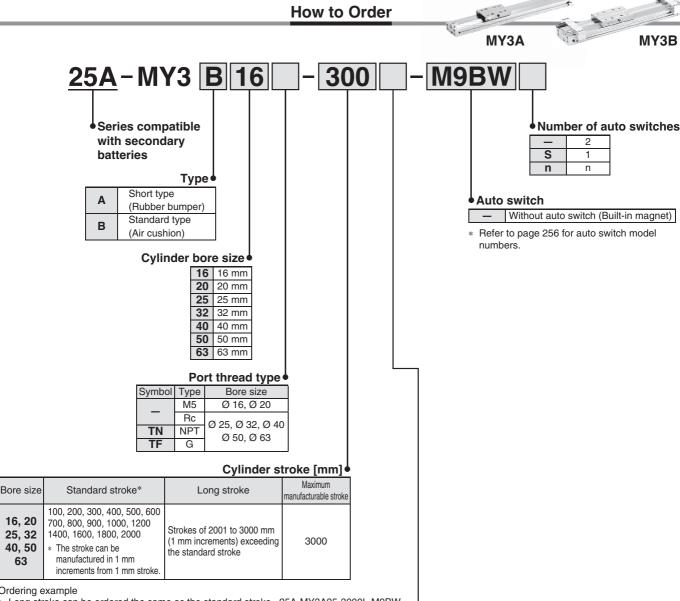
Electric Actuators

### Mechanically Jointed Rodless Cylinder/Basic Type

# 25A-MY3A/3B Series

Ø 16, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63





#### Ordering example

63

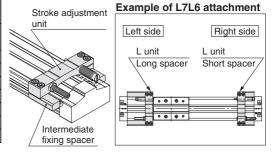
- Long stroke can be ordered the same as the standard stroke. 25A-MY3A25-3000L-M9BW
- Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

#### Stroke adjustment unit symbol

		Right side stroke adjustment unit							
		Without	L: With low load shock absorber + Adjustment bolt		H: With high load shock absorber + Adjustment bolt				
		unit		With short spacer	With long spacer		With short spacer	With long spacer	
a +-	Without unit		_	SL	SL6	SL7	SH	SH6	SH7
S.E.	L: With low lo	ad shock absorber +	LS	L	LL6	LL7	LH	LH6	LH7
side stroke istment unit	Adjustment	With short spacer	L6S	L6L	L6	L6L7	L6H	L6H6	L6H7
ne ge	bolt	With long spacer	L7S	L7L	L7L6	L7	L7H	L7H6	L7H7
স দ্র H: With high loa		oad shock absorber +	HS	HL	HL6	HL7	Н	HH6	HH7
Left	Adjustment	With short spacer	H6S	H6L	H6L6	H6L7	Н6Н	H6	Н6Н7
bolt الم		With long spacer	H7S	H7L	H7L6	H7L7	H7H	H7H6	H7

#### \* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.



Stroke adjustment unit mounting diagram



### **Mechanically Jointed Rodless Cylinder** Slide Bearing Guide Type (RoHS)

M9BW

25A-MY3M Series

 $\emptyset$  16,  $\emptyset$  25,  $\emptyset$  40,  $\emptyset$  63

**How to Order** 

300



Number of auto switches

2

1 n

Without auto switch (Built-in magnet)

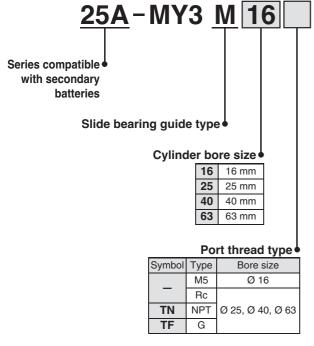
Refer to page 256 for auto switch model

S

n

**Auto switch** 

numbers



Cylinder stroke [mm]

Bore size	Standard stroke*	Long stroke	Maximum manufacturable stroke
16, 25 40, 63	100, 200, 300, 400, 500, 600 700, 800, 900, 1000, 1200 1400, 1600, 1800, 2000 * The stroke can be manufactured in 1 mm increments from 1 mm stroke.	Strokes of 2001 to 3000 mm (1 mm increments) exceeding the standard stroke	3000

#### Ordering example

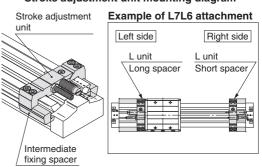
- Long stroke can be ordered the same as the standard stroke. 25A-MY3M25-3000L-M9BW
- Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

#### Stroke adjustment unit symbol

		Right side stroke adjustment unit							
		Without	L: With low load shock absorber + Adjustment bolt		H: With high load shock absorber + Adjustment bolt				
		unit		With short spacer	With long spacer		With short spacer	With long spacer	
	Without unit		_	SL	SL6	SL7	SH	SH6	SH7
a it		ad shock absorber +	LS	L	LL6	LL7	LH	LH6	LH7
stro nt u	Adjustment bolt	With short spacer	L6S	L6L	L6	L6L7	L6H	L6H6	L6H7
ge	With long s		L7S	L7L	L7L6	L7	L7H	L7H6	L7H7
Left side stroke adjustment unit	H: With high load shock absorber +		HS	HL	HL6	HL7	Н	HH6	HH7
Lef	Adjustment   bolt	With short spacer	H6S	H6L	H6L6	H6L7	Н6Н	H6	Н6Н7
DOIL		With long spacer	H7S	H7L	H7L6	H7L7	Н7Н	H7H6	H7

\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

#### Stroke adjustment unit mounting diagram



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

SMC

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers

Vacuum Equipment

Air Preparation Equipment

Detection Switches

Fluid Control Equipment

Process Gas | Equipment

Electric Actuators

Auto Switches

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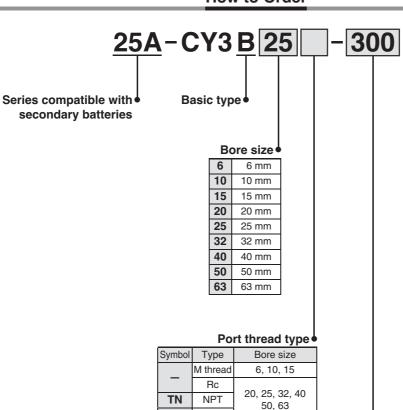
### Magnetically Coupled Rodless Cylinder/Basic Type

# 25A-CY3B Series

 $\emptyset$  6,  $\emptyset$  10,  $\emptyset$  15,  $\emptyset$  20,  $\emptyset$  25,  $\emptyset$  32,  $\emptyset$  40,  $\emptyset$  50,  $\emptyset$  63



#### **How to Order**



#### Standard stroke [mm]

	Otani	uaru stroke [mm]
Bore size	Standard stroke	Max. manufacturable stroke
6	50, 100, 150, 200	300
10	50, 100, 150, 200, 250, 300	500
15	50, 100, 150, 200, 250, 300, 350 400, 450, 500	1000
20	100 150 000 050 000 050	1500
25	100, 150, 200, 250, 300, 350 400, 450, 500, 600, 700, 800	
32	100, 100, 000, 000, 700, 000	2000
40, 50, 63	100, 150, 200, 250, 300, 350, 400 450, 500, 600, 700, 800, 900, 1000	2000

TF

G

- \* Please contact SMC if the maximum stroke is exceeded.
- \* The longer the stroke, the larger the amount of deflection in a cylinder tube. Pay attention to the mounting bracket and clearance value.
- \* Intermediate stroke is available in 1 mm increments.

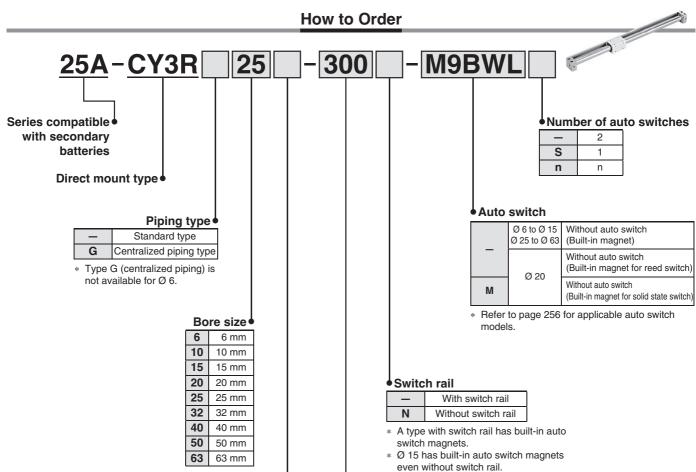


<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

### Magnetically Coupled Rodless Cylinder/Direct Mount Type

# 25A-CY3R Series

Ø 6, Ø 10, Ø 15, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63



#### Port thread type

Symbol	Type	Bore size			
	M thread	6, 10, 15			
_	Rc	00 05 00 40			
TN	NPT	20, 25, 32, 40 50, 63			
TF	G	50, 60			

#### Cylinder stroke [mm]

Bore size	Standard stroke	Max. stroke without switch	Max. stroke with switch
6	50, 100, 150, 200	300	300
10	50, 100, 150, 200, 250, 300	500	500
15	50, 100, 150, 200, 250, 300 350, 400, 450, 500	1000	750
20	100 150 000 050 000 050	1500	1000
25	100, 150, 200, 250, 300, 350 400, 450, 500, 600, 700, 800	1300	1200
32	100, 100, 000, 000, 700, 000		
40, 50, 63	100, 150, 200, 250, 300, 350 400, 450, 500, 600, 700, 800 900, 1000	2000	1500
		_	

Centralized piping type (G) is not available without switch rail (N).

- The longer the stroke, the larger the amount of deflection in a cylinder tube. Pay attention to the mounting bracket and clearance value.
- Intermediate stroke is available in 1 mm increments.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers

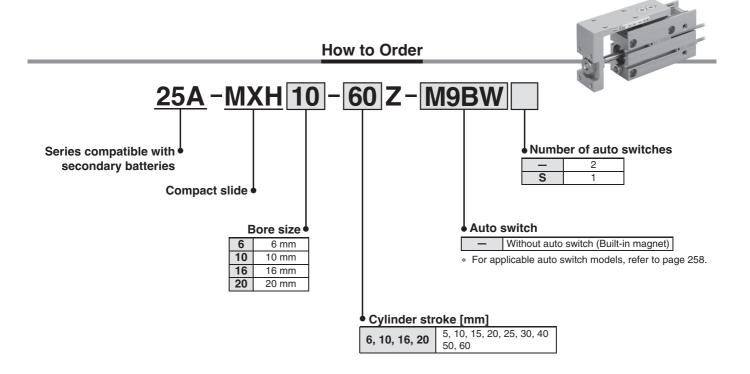
Equipment Vacuum

Air Preparation

Fluid Control Equipment Process Gas F Equipment

Electric Actuators

# Compact Slide 25A-NXH Series $\emptyset$ 6, $\emptyset$ 10, $\emptyset$ 16, $\emptyset$ 20



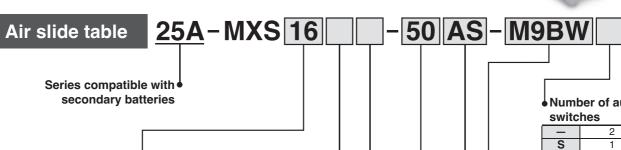
\* The 25A- series specifications and dimensions are the same as those of the standard model.

#### Air Slide Table

## **25A-MXS Series** Ø 6, Ø 8, Ø 12, Ø 16, Ø 20, Ø 25

#### **How to Order**





#### Port thread type M thread Ø 6 to Ø 16 Rc NPT Ø 20, Ø 25

#### Symmetric type Standard type Symmetric type

#### Bore size (Standard stroke [mm])

TN

TF

	(**************************************
6	10, 20, 30, 40, 50
8	10, 20, 30, 40, 50, 75
12	10, 20, 30, 40, 50, 75, 100
16	10, 20, 30, 40, 50, 75, 100, 125
20	10, 20, 30, 40, 50, 75, 100, 125, 150
25	10, 20, 30, 40, 50, 75, 100, 125, 150

G

Number of auto

SWILCITES				
_	2			
S	1			
n	n			

#### Auto switch

— (Built-in magnet)
---------------------

Refer to page 258 for auto switch model numbers.

#### **Adjuster option**

_	Without adjuster		
AS Adjuster on extension end			
AT	AT Adjuster on retraction end		
Α	Adjuster on both ends		
BS	Absorber on extension end		
BT Absorber on retraction end			
В	Absorber on both ends		
ASBT	Adjuster on extension end + Absorber on retraction end		
BSAT	Absorber on extension end + Adjuster on retraction end		

- \* With shock absorber is not available in the 25A-MXS6 series.
- \* When the adjuster option with shock absorber is used, metal-to-metal collisions occur, and may generate dust particles.

#### **Corrosion Resistant Air Slide Table**

(Made to order: 25A-MXS□-X1949)

The material of the head cap part has been changed to a highly corrosion-resistant material.

Please contact your local sales representative for more details.



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

**SMC** 

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Directional Control Valves

Air Cylinders

Related Products

Rotary Actuators

Air Grippers

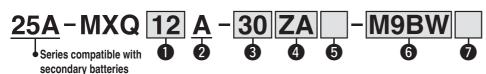
Vacuum Equipment Preparation

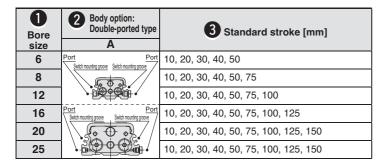
## Air Slide Table Double-ported Type



Ø 6, Ø 8, Ø 12, Ø 16, Ø 20, Ø 25

#### **How to Order**





#### **5** Functional options

Symbol	Functional option	
_	Without functional option	
1	With buffer	
2	With end lock	
3	Axial piping	
4	With buffer, end lock	
5 With buffer, axial piping		

#### Number of auto switches

_	2
S	1
n	n

#### 6 Auto switch

Without auto switch (Built-in magnet)

 For applicable auto switches, refer to page 258.

#### 4 Adjuster options/Functional option combinations

				mounting		Functi	onal opti	on comb	ination			
			posit	tion*1	_	1	2	3	4	5		
Symbol					Retraction stroke end	Without functional option	*2*7 With buffer	With end lock		*2*7 With buffer, end lock	*2*5*7 With buffer axial piping	
Z	W	Without adjuster					0	0	0	0	0	0
ZA					•	•	0	×	×	0	×	×
ZB	Me	Metal stopper with bumper				0	×	0	0	×	×	
ZC		··· ·					0	×	×	0	×	×
ZD			•	•	0	×	×	0	×	×		
ZE	Rι	Rubber stopper				0	0	0	0	0	0	
ZF							0	×	×	0	×	×
ZG							0	×	×	0	×	×
ZH	Sh	Shock absorber/RJ				0	×	0	0	×	×	
ZJ						0	×	×	0	×	×	
ZK					0	×	×	0	×	×		
ZL	Me	Metal stopper				0	0	0	0	0	0	
ZM					0	×	×	0	×	×		
ZN				Without adjuster	] /		0	○*4	×	0	×	○*4
ZP	Sh	norter total		Rubber stopper	] /		0	×	×	0	×	×
ZQ	_	length type*3		Shock absorber/RJ	] /		0	×	×	0	×	×
ZS	iengin type**		ter	Metal stopper with bumper	] /		0	×	×	0	×	×
ZT			adjuster	Metal stopper	/		0	×	×	0	×	×
ZBF	7	Metal		Rubber stopper			0	×	×	0	×	×
ZBJ	adjuste	stopper with	end	Shock absorber/RJ			0	×	×	0	×	×
'BM	djū	bumper	9 6	Metal stopper			0	×	×	0	×	×
ZEC		Rubber	stroke	Metal stopper with bumper			0	×	×	0	×	×
ZEJ	end	stopper		Shock absorber/RJ			0	×	×	0	×	×
ZEM		оторрог	on	Metal stopper			0	×	×	0	×	×
ZHC	stroke	Shock	Cţi	Metal stopper with bumper	•	•	0	×	×	0	×	×
ZHF		absorber/RJ	etraction	Rubber stopper	•	•	0	×	×	0	×	×
ZHM.	=xtension	absorber/110	Re	Metal stopper			0	×	×	0	×	×
ZLC	Sue	Metal		Metal stopper with bumper	•		0	×	×	0	×	×
ZLF	ž	stopper		Rubber stopper	•	•	0	×	×	0	×	×
ZLJ	ш	grobbei		Shock absorber/RJ	•	•	0	×	×	0	×	×

- \*1 •: Shipped together with the product, but not assembled Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
- \*3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- \*4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
- \*5 There is no piping port on the side surface of the product.
- \*6 The metal stopper with bumper option is not available for Ø 6.
- \*7 As there is no magnet in the buffer mechanism, auto switches cannot be used on the buffer part.

#### **Adjuster Mounting Position**



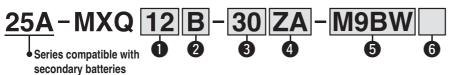
- \* When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
- \* When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.
- \* The 25A- series specifications and dimensions are the same as those of the standard model.

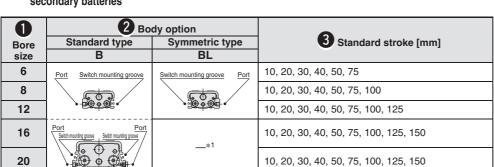
Air Cylinders Control Valves

Air Slide Table Low Thrust with High Rigidity Type RoHS

6, Ø 8, Ø 12, Ø 16, Ø 20

**How to Order** 





\*1 Not available, as the standard model has piping ports and auto switch mounting grooves on both sides. Please use the standard type.

#### 4 Adjuster options

Symbol	Adjuster type* <sup>3</sup>				Adjuster mounting position*1		
					Extension stroke end	Retraction stroke end	
Z	Wit	hout adjuster					
ZA					•	•	
ZB	Me	tal stopper with bum	per		•		
ZC				•			
ZD			•	•			
ZE	Rul	bber stopper			•		
ZF						•	
ZG					•	•	
ZH	Sho	ock absorber/RJ	•				
ZJ				•			
ZK				•	•		
ZL	Me	tal stopper		•			
ZM			1	I Men . P .	<u> </u>	•	
ZN				Without adjuster	. /		
ZP	Shorter total length type* <sup>2</sup>			Rubber stopper Shock absorber/RJ		•	
ZQ					-	•	
ZS			ter	Metal stopper with bumper	1/	•	
ZT		1		Metal stopper Rubber stopper			
ZBF	J.	Metal stopper with	ac	Shock absorber/RJ		•	
ZBJ ZBM	ıste	bumper	etraction stroke end adjuster	Metal stopper			
ZEC	adju		ě	Metal stopper with bumper	_		
ZEJ	end adjuster	Rubber stopper	tro	Shock absorber/RJ	•	•	
ZEM	e er	nubber stopper		Metal stopper	•	•	
ZHC	oke		당	Metal stopper with bumper			
ZHF	str	Shock absorber/RJ	tra	Rubber stopper		•	
ZHM	ion	550K aboorbol/110	Re	Metal stopper			
ZLC	ens		1	Metal stopper with bumper	_	•	
ZLF	Extension stroke	Metal stopper		Rubber stopper	•	•	
ZLJ	Ш			Shock absorber/RJ	•	•	

4 Auto switch

Without auto switch (Built-in magnet)

For applicable auto switches, refer to page 258.

#### 6 Number of auto switches

_	2
S	1
n	n

- •: Shipped together with the product, but not assembled
- Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- The metal stopper with bumper option is not available for Ø 6.

#### **Adjuster Mounting Position**



- When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
- \* The 25A- series specifications and dimensions are the same as those of the standard model.

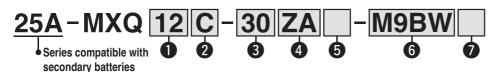
## **Air Slide Table Single Side-ported Type**



## 25A-MXQ\(\subseteq\) C Series

 $\emptyset$  8,  $\emptyset$  12

#### **How to Order**





0	2 Bod	y option	3
Bore size	Standard type C	Symmetric type CL	Standard stroke [mm]
8	Port Switch mounting groove	Switch mounting groove Port	10, 20, 30, 40, 50, 75
12			10, 20, 30, 40, 50, 75, 100

#### **5** Functional options

Symbol	Functional option
_	Without functional option
1	With buffer
2	With end lock
3	Axial piping
4	With buffer, end lock
5	With buffer, axial piping

#### 6 Auto switch

	_	Without auto switch (Built-in magnet)
*	For ap	plicable auto switches, refer to
	page 2	258.

#### Number of auto switches

_	2
S	1
n	n

#### 4 Adjuster options/Functional option combinations

					Adjuster mounting Functional option combinat					ination		
			posit	tion*1	_	1	2	3	4	5		
Symbol						Retraction stroke end	Without functional option	*2*6 With buffer	With end lock	Axial piping	With buffer,	*3*5*6 With buffer axial piping
Z	W	ithout adjuste	r				0	0	0	0	0	0
ZA					•	•	0	×	×	0	×	×
ZB	Me	etal stopper v	vith	bumper	•		0	×	0	0	×	×
ZC						•	0	×	×	0	×	×
ZD					•	•	0	×	×	0	×	×
ZE	Rι	ıbber stoppeı	•		•		0	0	0	0	0	0
ZF						•	0	×	×	0	×	×
ZG					•	•	0	×	×	0	×	×
ZH	Sh	ock absorbe	r/R	J	•		0	×	0	0	×	×
ZJ						•	0	×	×	0	×	×
ZK					•		0	×	×	0	×	×
ZL	Metal stopper			•		0	0	0	0	0	0	
ZM						0	×	×	0	×	×	
ZN				Without adjuster	/		0	○*4	×	0	×	○*4
ZP	Сh	orter overall		Rubber stopper		•	0	×	×	0	×	×
ZQ		gth type*3		Shock absorber/RJ	] /		0	×	×	0	×	×
ZS	ici	ingth type	ter	Metal stopper with bumper	] /	•	0	×	×	0	×	×
ZT			adjuster	Metal stopper	/		0	×	×	0	×	×
ZBF	_	Metal		Rubber stopper	•	•	0	×	×	0	×	×
ZBJ	ster	stopper with	end	Shock absorber/RJ	•		0	×	×	0	×	×
ZBM	adju	bumper	ē	Metal stopper	•	•	0	×	×	0	×	×
ZEC		Rubber	쑭	Metal stopper with bumper	•		0	×	×	0	×	×
ZEJ	end	stopper	stroke	Shock absorber/RJ	•	•	0	×	×	0	×	×
ZEM		Stopper		Metal stopper	•	•	0	×	×	0	×	×
ZHC	stroke	Shock	Retraction	Metal stopper with bumper	•	•	0	×	×	0	×	×
ZHF		ਰੀ Snock ⊆ absorber/RJ ਰਿ	tra	Rubber stopper	•	•	0	×	×	0	×	×
ZHM	sion	absorber/nu	Re	Metal stopper	•	•	0	×	×	0	×	×
ZLC	SUE	Metal		Metal stopper with bumper	•	•	0	×	×	0	×	×
ZLF	Exten			Rubber stopper	•	•	0	×	×	0	×	×
ZLJ	Ш	stopper		Shock absorber/RJ	•	•	0	×	×	0	×	×

- Shipped together with the product, but not assembled Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
- \*3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- \*4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
- \*5 There is no piping port on the side surface of the product.
- 6 As there is no magnet in the buffer mechanism, auto switches cannot be used on the buffer part.

#### **Adjuster Mounting Position**



- \* When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
- \* When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

\* The 25A- series specifications and dimensions are the same as those of the standard model.



#### **RoHS**

## 25A-MXQ Series

Ø 6, Ø 8, Ø 12, Ø 16, Ø 20, Ø 25

**How to Order** 

**Height Interchangeable Type** 

25A-MXQ 12 Series compatible with secondary batteries

**Air Slide Table** 



0	2 Bod	y option				
Bore	Standard type	Symmetric type	3 Standard stroke [mm]			
size	-	L				
6	Port Switch mounting groove	Switch mounting groove Port	10, 20, 30, 40, 50			
8			10, 20, 30, 40, 50, 75			
12			10, 20, 30, 40, 50, 75, 100			
16	Switch mounting groove Switch mounting groove		10, 20, 30, 40, 50, 75, 100, 125			
20		<u>*</u> *1	10, 20, 30, 40, 50, 75, 100, 125, 150			
25	Port Port		10, 20, 30, 40, 50, 75, 100, 125, 150			

\*1 Not available, as the standard model has piping ports and auto switch mounting grooves

#### 5 Functional options

	<del>-</del>
Symbol	Functional option
_	Without functional option
1	With buffer
2	With end lock
3	Axial piping
4	With buffer, end lock
5	With buffer, axial piping

Number of

auto switches				
_	2			
S	1			
n	n			

#### 6 Auto switch

Without auto switch (Built-in magnet)

\* For applicable auto switches, refer to page 258.

#### 4 Adjuster options/Functional option combinations

on both sides. Please use the standard type

				mounting		Functi	ional optic	on combi	ination				
				posit	tion*1	_	1	2	3	4	5		
ymbol		Adjuster type <sup>*6</sup>		Extension stroke end	Retraction stroke end	Without functional option	*2*7 With buffer	With end lock	Axial piping	*2*7 With buffer, end lock	*2*5*7 With buffer axial piping		
Z	W	ithout adjuste	r				0	0	0	0	0	0	
ZA					•	•	0	×	×	0	×	×	
ZB	Me	etal stopper v	vith	bumper	•		0	×	0	0	×	×	
ZC						•	0	×	×	0	×	×	
ZD					•	•	0	×	×	0	×	×	
ZE	Rι	ıbber stoppeı	r		•		0	0	0	0	0	0	
ZF						•	0	×	×	0	×	×	
ZG					•	•	0	×	×	0	×	×	
ZH	Sr	ock absorbe	r/R	J	•		0	×	0	0	×	×	
ZJ						•	0	×	×	0	×	×	
ZK		Metal stopper			•	•	0	×	×	0	×	×	
ZL	Me				•		0	0	0	0	0	0	
ZM						•	0	×	×	0	×	×	
ZN				Without adjuster	] /		0	○*4	×	0	×	0*4	
ZP	Q.	orter total		Rubber stopper	/	•	0	×	×	0	×	×	
ZQ	_	ngth type*3		Shock absorber/RJ	/	•	0	×	×	0	×	×	
ZS	101	igiii type	adjuster	Metal stopper with bumper	/	•	0	×	×	0	×	×	
ZT			jus	Metal stopper	/	•	0	×	×	0	×	×	
BF	_	Metal		Rubber stopper	•	•	0	×	×	0	×	×	
BJ	adjuster	stopper with	end	Shock absorber/RJ	•	•	0	×	×	0	×	×	
BM	등	bumper		Metal stopper	•	•	0	×	×	0	×	×	
EC		Rubber	stroke	Metal stopper with bumper	•	•	0	×	×	0	×	×	
ΈJ	end	stopper		Shock absorber/RJ	•	•	0	×	×	0	×	×	
EM	ê		stopper		Metal stopper	•	•	0	×	×	0	×	×
HC	stroke	Š Shock	Retraction	Metal stopper with bumper	•	•	0	×	×	0	×	×	
HF		absorber/RJ		Rubber stopper	•	•	0	×	×	0	×	×	
HM	Extension	22001201/110	ľĸ	Metal stopper	•	•	0	×	×	0	×	×	
LC	ens	Metal		Metal stopper with bumper	•	•	0	×	×	0	×	×	
<u>'LF</u>	ΙŘ	stopper		Rubber stopper	•	•	0	×	×	0	×	×	
ZLJ	Ι"	оторрог		Shock absorber/RJ	•	•	0	×	×	0	×	×	

- Shipped together with the product, but not assembled Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- 2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
- 3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward
- There is no piping port on the side surface of the product.
- The metal stopper with bumper option is not available for Ø 6.
- As there is no magnet in the buffer mechanism, auto switches cannot be used on the buffer part.

#### **Adjuster Mounting Position**



SMC

- When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
- When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.
- \* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Directional Control Valves

Air Cylinders

Related Products

Rotary Actuators

Air Grippers Vacuum Equipment

Air Preparation

Clean Air Filters

Modular F.R.L./ Pressure Control Equipment

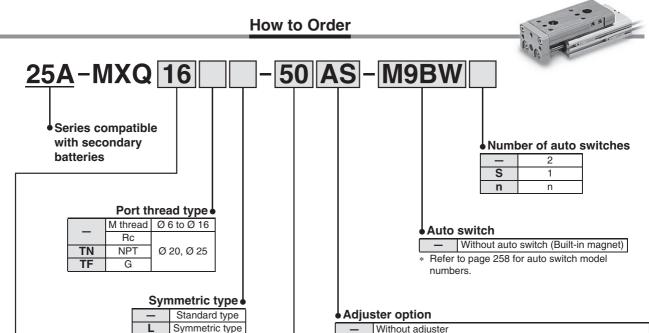
Detection Switches

Fluid Control Equipment

Equipment Process Gas

Electric Actuators

## Air Slide Table 25A-MXQ Series $\emptyset$ 6, $\emptyset$ 8, $\emptyset$ 12, $\emptyset$ 16, $\emptyset$ 20, $\emptyset$ 25

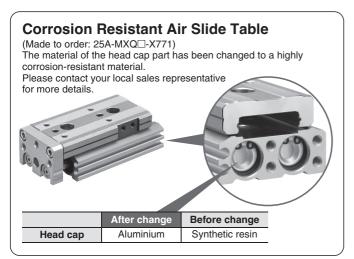


#### Bore size (Standard stroke [mm])

6	10, 20, 30, 40, 50
8	10, 20, 30, 40, 50, 75
12	10, 20, 30, 40, 50, 75, 100
16	10, 20, 30, 40, 50, 75, 100, 125
20	10, 20, 30, 40, 50, 75, 100, 125, 150
25	10, 20, 30, 40, 50, 75, 100, 125, 150

_	Without adjuster	
AS	Extension end rubber stopper	
AT	Retraction end rubber stopper	
Α	Both ends rubber stopper	
BS	Extension end absorber	
BT	Retraction end absorber	
В	Double absorber	
CS	Extension end metal stopper	
CT	Retraction end metal stopper	
С	Double metal stopper	
ASBT	Extension end adjustor + Retraction end absorber	
ASCT	Extension end adjustor + Retraction end metal stopper	
BSAT	Extension end absorber + Retraction end adjuster	
BSCT	Extension end absorber + Retraction end metal stopper	
CSAT	CSAT Extension end metal stopper + Retraction end adjuster	
CSBT	Extension end metal stopper + Retraction end absorber	

- \* With shock absorber is not available in the 25A-MXQ6 series.
- When the adjuster option with shock absorber or metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.



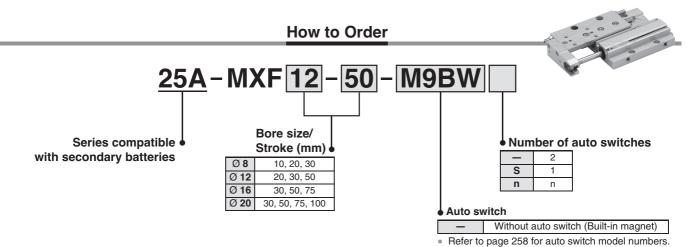
 The 25A- series specifications and dimensions are the same as those of the standard model.

#### Low Profile Slide Table

## 25A-MXF Series

Ø 8, Ø 12, Ø 16, Ø 20

**RoHS** 



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Directional Control Valves

Air Cylinders

Related Products

Rotary Actuators

Air Grippers Vacuum Equipment

Air Preparation Equipment

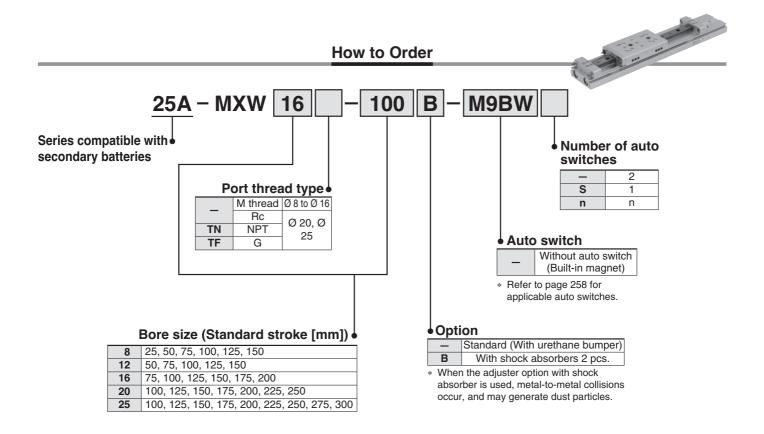
Flow Control Equipment/ Fittings

Detection Switches

Process Gas Fluid Control Equipment Equipment

Electric Actuators

## Air Slide Table 25A-NXVV Series $\emptyset$ 8, $\emptyset$ 12, $\emptyset$ 16, $\emptyset$ 20, $\emptyset$ 25

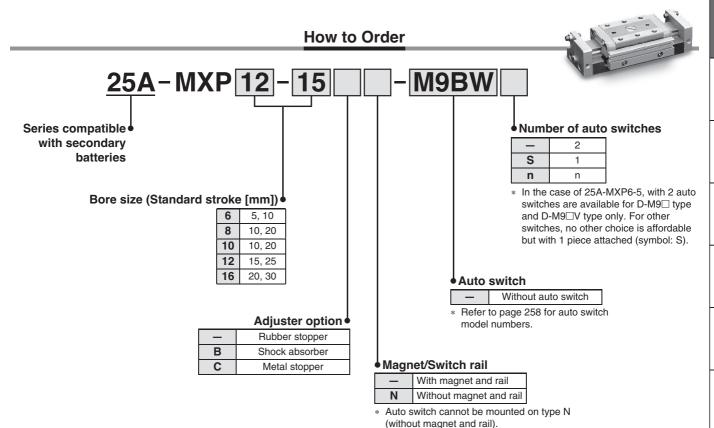


\* The 25A- series specifications and dimensions are the same as those of the standard model.



### Air Slide Table 25A-MXP Series Ø 6, Ø 8, Ø 10, Ø 12, Ø 16

**RoHS** 



- \* Adjuster for 25A-MXP6 series is available for one side only
- Shock absorber is not available in 25A-MXP6 and 25A-MXP8 series.
- \* When the adjuster option with shock absorber or metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Rotary Actuators

Directional Control Valves

Air Cylinders

Related Products

Air Grippers

Equipment Vacuum

Air Preparation

Modular F.R.L./ Pressure Control Equipment

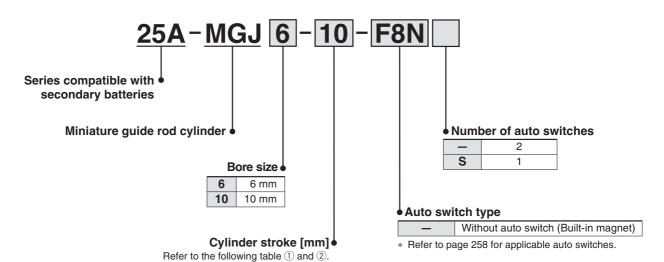
#### **Miniature Guide Rod Cylinder**

## 25A-MGJ Series

Ø 6, Ø 10



#### **How to Order**



**Table 1 Standard Strokes** 

Bore size [mm]	Standard stroke [mm]
6	5, 10, 15
10	5, 10, 15, 20

Table 2 Intermediate Stroke (by the 1 mm stroke)

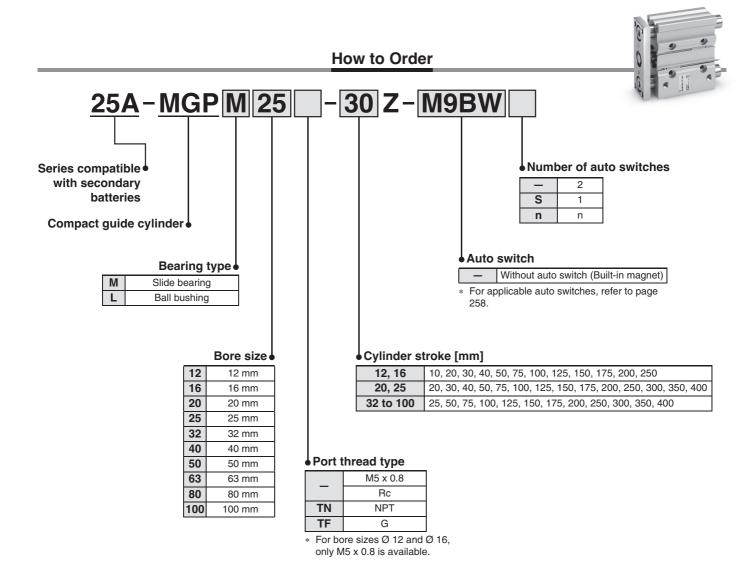
Bore size [mm]	Applicable stroke [mm]		
6	6 1 to 15 (Spacer type)		
10	1 to 20 (Spacer type)		
Example	Model no.: 25A-MGJ6-9 Installing a 1 mm width spacer for 25A-MGJ6-10 External size: same as 25A-MGJ6-10		

<sup>\*</sup> When mounting an auto switch, the min. stroke is 4 mm. However, only 1 auto switch can be mounted in this case.

st The 25A- series specifications and dimensions are the same as those of the standard model.



## Compact Guide Cylinder 25A-NGP Series 0 12, 0 16, 0 20, 0 25, 0 32, 0 40, 0 50, 0 63, 0 80, 0 100

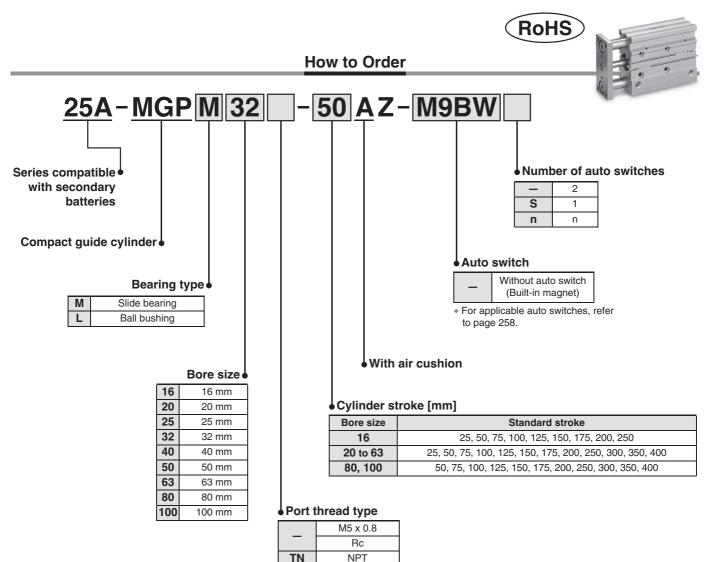


 The 25A- series specifications and dimensions are the same as those of the standard model.



## Compact Guide Cylinder/With Air Cushion 25A-NGP Series

Ø 16, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63, Ø 80, Ø 100



\* For bore size 16, only M5 x 0.8 is available.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Directional Control Valves

Air Cylinders <sub>G</sub>

Related Products

Rotary Actuators

Air Grippers

Vacuum Equipment

Air Preparation Equipment

Clean Air Filters

Modular F.R.L./ Pressure Control Equipment

-low Control Equipment/ Fittings

Detection Switches

Fluid Control Equipment

Process Gas F Equipment

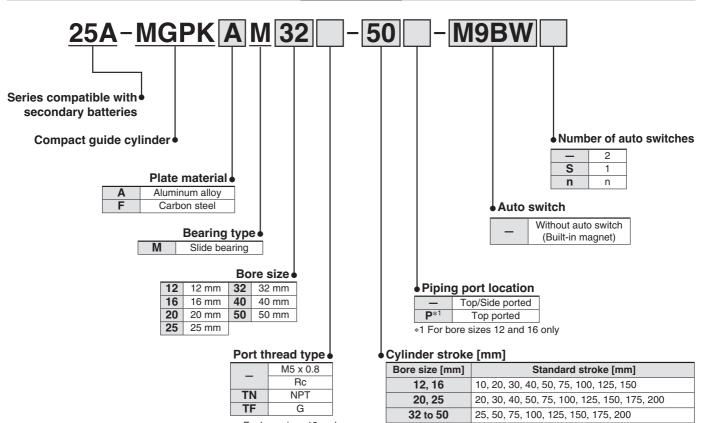
Electric Actuators

#### **Compact Guide Cylinder**

### **25A-MGPK Series** Ø 12, Ø 16, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50



#### **How to Order**

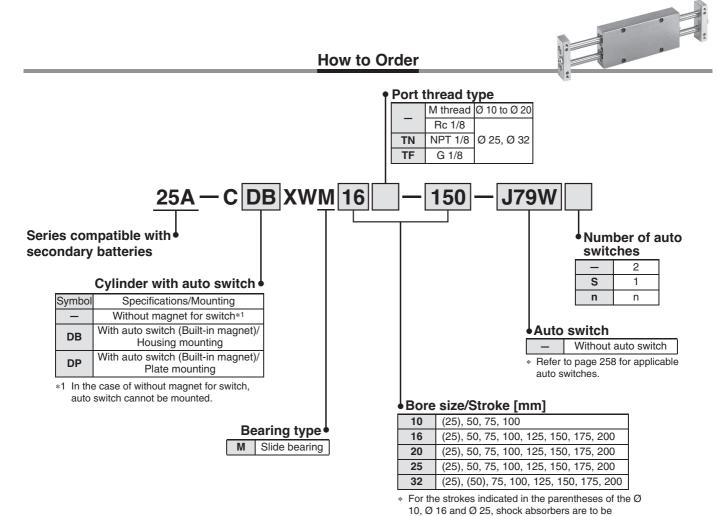


<sup>\*</sup> For bore sizes 12 and 16, only M5 x 0.8 is available.





#### Slide Unit: Built-in Shock Absorber **Slide Bearing Type** 25A-CXWM Series Ø 10, Ø 16, Ø 20, Ø 25, Ø 32



#### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDPXWM20-100

mounted on both sides of the plate. For the strokes indicated in the parentheses of the Ø 20 and Ø 32, a shock absorber is to be mounted on single side of the plate. For the strokes other than those indicated above,

refer to the Web Catalogue.

For Ø 16, Ø 20 and Ø 25, strokes up to 300, and for Ø 32, strokes up to 250 are available as Made-to-Order.

> \* The 25A- series specifications and dimensions are the same as those of the standard model.



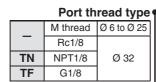
#### **Dual Rod Cylinder/Compact Type**

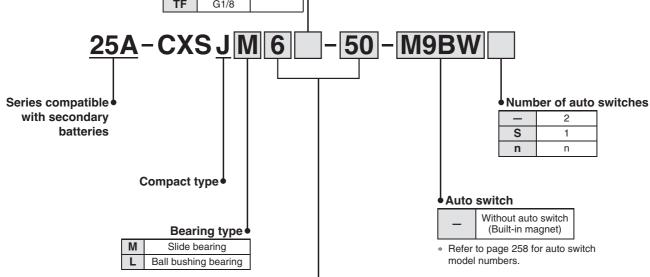
## 25A-CXSJ Series

Ø 6, Ø 10, Ø 15, Ø 20, Ø 25, Ø 32

**How to Order** 







**Bore size/Stroke [mm]** 

Dore Size/Stroke [illin]				
Bore size	Standard stroke			
6	10, 20, 30, 40, 50			
10	10, 20, 30, 40, 50, 75			
15				
20	10, 20, 30, 40, 50, 75, 100			
25	10, 20, 30, 40, 30, 73, 100			
32				

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Directional Control Valves

RoHS

#### **Dual Rod Cylinder Basic Type**

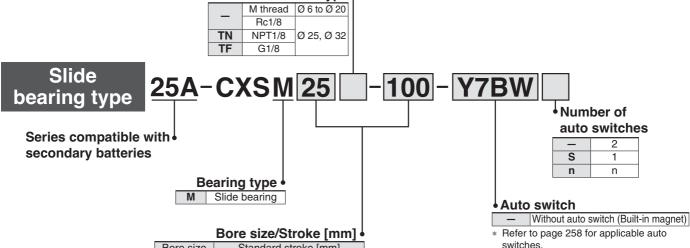
25A-CXS Series  $\varnothing$  6,  $\varnothing$  10,  $\varnothing$  15,  $\varnothing$  20,  $\varnothing$  25,  $\varnothing$  32  $^{\bigcirc \mathsf{RoHS}}$ 



#### **How to Order**

Port thread type §

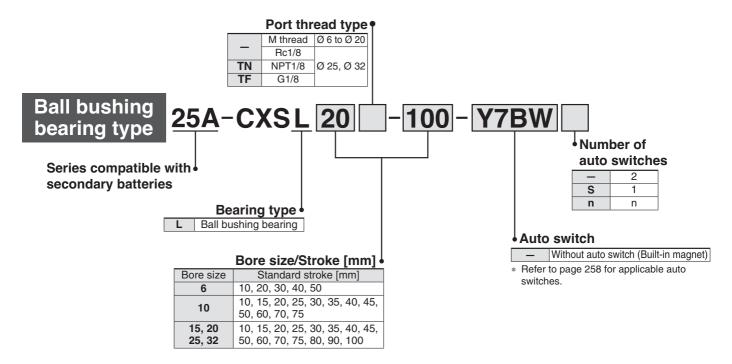




Standard stroke [mm] Bore size 10, 20, 30, 40, 50 10, 15, 20, 25, 30, 35, 40, 45, 10 50, 60, 70, 75 10, 15, 20, 25, 30, 35, 40, 45, 15, 20 25, 32 50, 60, 70, 75, 80, 90, 100

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.



\* The 25A- series specifications and dimensions are the same as those of the standard model.



## **RoHS**

### 25A-MGG Series $\emptyset$ 20, $\emptyset$ 25, $\emptyset$ 32, $\emptyset$ 40, $\emptyset$ 50

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers Vacuum Equipment

Air Preparation

Flow Control Equipment/ Fittings

Detection Switches

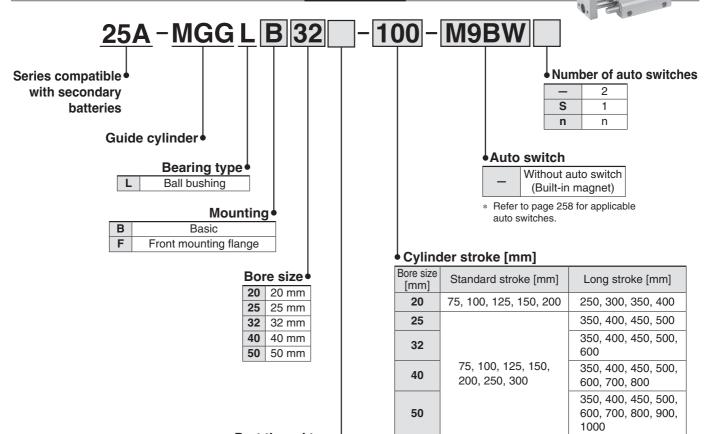
Process Gas Fluid Control Equipment Equipment

Electric Actuators

Auto Switches

#### **How to Order**

**Guide Cylinder** 



Port thread type

_	Rc
TN	NPT
TF	G

Intermediate strokes and short strokes other than those listed above are produced upon receipt of order.

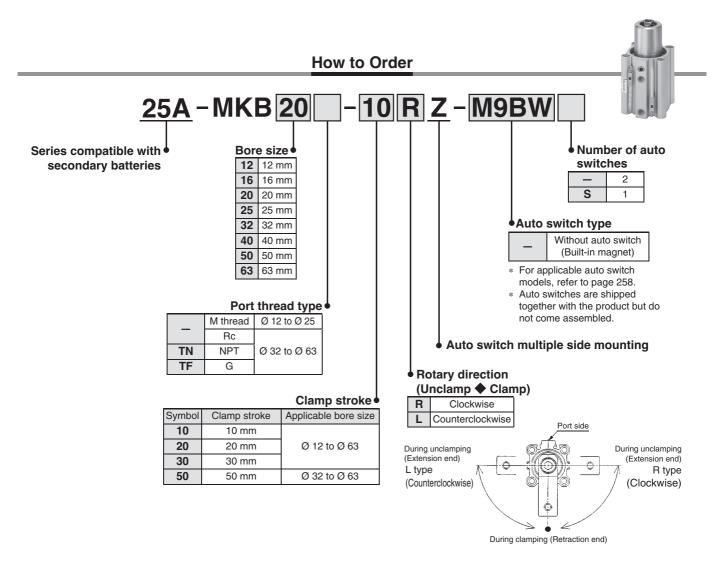
> \* The 25A- series specifications and dimensions are the same as those of the standard model.

#### **Rotary Clamp Cylinder: Standard**

## 25A-MK Series



Ø 12, Ø 16, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63

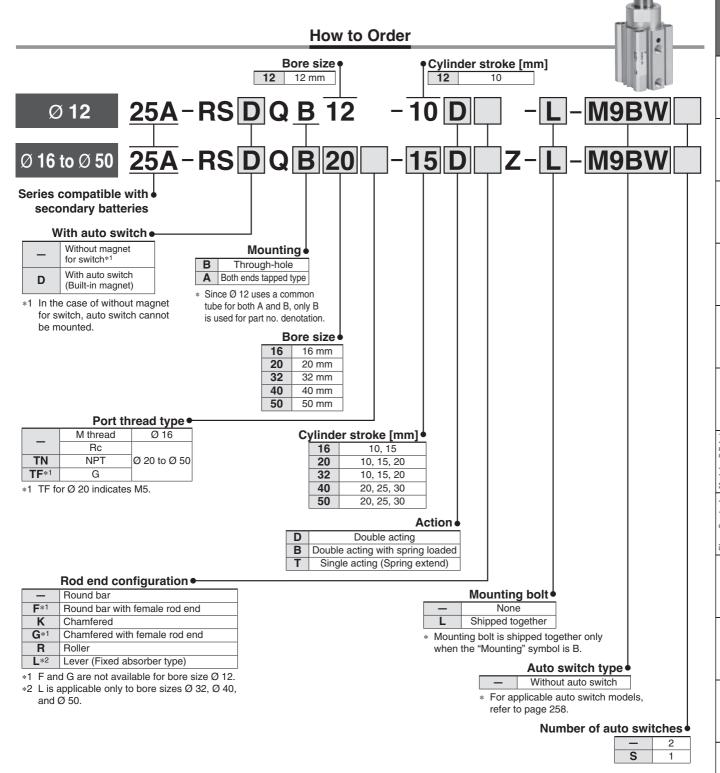


- $\ast\,$  The coil scraper is not built-in.
- \* The 25A- series specifications and dimensions are the same as those of the standard model.

#### **Stopper Cylinder/Fixed Mounting Height**

## 25A-RSQ Series

Ø 12, Ø 16, Ø 20, Ø 32, Ø 40, Ø 50 RoHS



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Directional Control Valves Air Cylinders

Related Products

Rotary Actuators

Air Grippers Equipment Vacuum

Preparation Air

Flow Control Equipment/ Fittings

Detection Switches

Fluid Control Equipment

Process Gas | Equipment

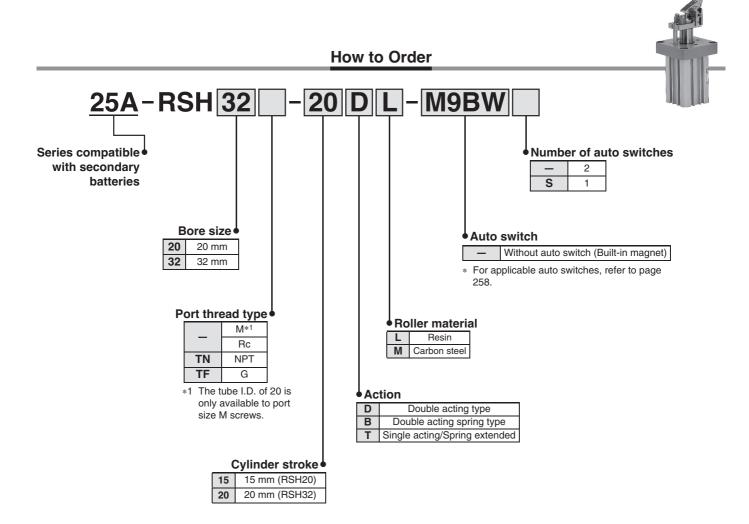
Electric Actuators

#### Heavy Duty Stopper Cylinder



## 25A-RSH Series

 $\emptyset$  20,  $\emptyset$  32



\* The 25A- series specifications and dimensions are the same as those of the standard model.

#### ISO Standard (6432)

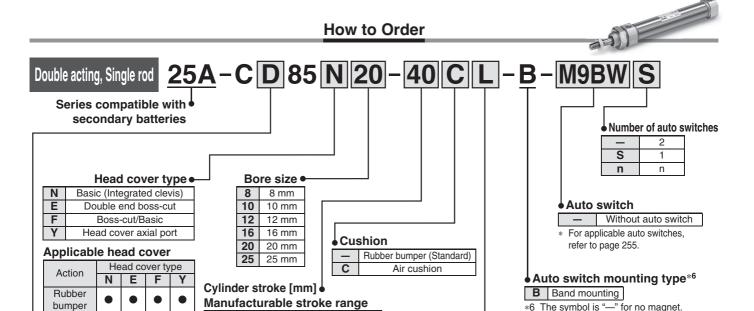
#### ISO Cylinder: Standard



## 25A-C85 Series

 $\ \ \, \overline{\varnothing} \, \, 8, \ \ \, \emptyset \, \, 10, \ \ \, \emptyset \, \, 12, \ \ \, \emptyset \, \, 16, \ \ \, \varnothing \, \, 20, \ \ \, \varnothing \, \, 25$ 





\*1 Excluding Ø 8

Air cushion

#### **Built-in magnet**

-	None	
D	Built-in magnet	

25	
----	--

Bore size

[mm]

8\*1

10 12

16 20 Manufacturable stroke range

[mm]\*2, \*3, \*4

5 to 200

5 to 400

5 to 1000

- \*1 Not available with air cushion.
  \*2 The minimum stroke with air cushion is 25 mm.
- \*3 The min. stroke of the type with a magnet varies depending on the switch.
- \*4 Applicable strokes differ depending on the usage conditions and mounting brackets. For details, refer to the "Stroke Selection" section of the C85 series in the Web Catalogue.

#### Mounting bracket\*⁵

Didoket				
_	None			
L	Single foot			
M	Double foot			
G	Flange			
U	Trunnion			
N	Clevis			

- Mounting bracket is shipped together with the product.
- \*5 Refer to Mounting Brackets for details of mounting brackets.

#### Applicable mounting bracket

	<u> </u>					
Action	Head	N	/lount	ting b	racke	et
ACTION	cover type	L	M	G	U	N
Rubber bumper	N	•	•	•	•	•
	E	•	•	•	•	_
	F	•	_	•	•	_
	Υ	•	_	•	•	_
Air cushion	<b>N</b> * <sup>7</sup>	•	•	•	•	•

\*7 Excluding Ø 8

#### Mounting Bracket Part Nos. for the 25A- Series

IVIC	Modifiling Bracket Fait Nos. for the 25A- Series							
	Mounting bracket			Bore siz	ze [mm]			Contents
	wounting bracket	8 10 12 16		20	25	Contents		
	Rod end nut	C85NT08A-S		C85NT	10A-S	C85NT20A-S	C85NT25A-S	1 rod end nut
	Mounting nut	C85NT	C85NT08B-S C85NT10B-S		C85N1	720B-S	1 mounting nut	
cket	Foot (1 pc.)	25A-C8	35L10A	25A-C8	35L16A	25A-C	35L25A	1 foot bracket
bra	Foot (2 pcs. with 1 mounting nut)	25A-C8	35L10B	25A-C8	35L16B	25A-C	35L25B	2 foot brackets, 1 mounting nut
ing	Foot (1 pc. with 1 mounting nut)	25A-C8	35L10C	25A-C8	35L16C	25A-C	35L25C	1 foot bracket, 1 mounting nut
onut	Flange	25A-C	85F10	25A-C	85F16	25A-C	85F25	1 flange
ĭ	Trunnion	C85	T10	C85	T16	C85	T25	1 trunnion
	Clevis	25A-C	85C10	25A-C	85C16	25A-C	85C25	1 clevis pivot bracket, 1 clevis pin, 2 pin retaining rings

**Replacement Parts: For Standard Type** 

Bore size [mm]	Part no.	Note			
20	25A-C85A-20PS	Every set includes: 1 rod seal			
25	25A-C85A-25PS	1 flat washer 1 retaining ring			

When replacing the seals, use grease (GR-S-010: ordered separately) on the sliding parts.

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.



#### ISO Standard (15552)

#### ISO Cylinder: Standard

**Double Acting, Single Rod** 

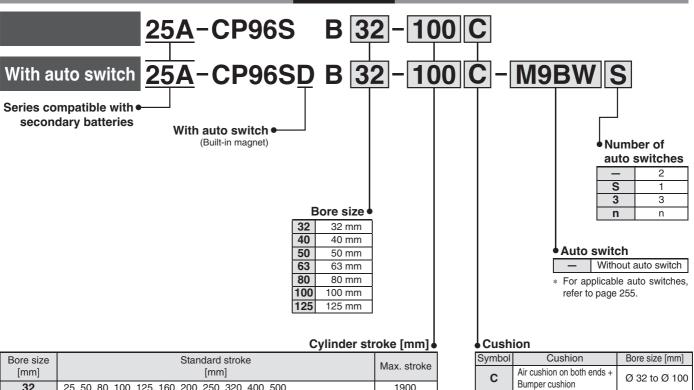


### 25A-CP96 Series

 $\varnothing$  32,  $\varnothing$  40,  $\varnothing$  50,  $\varnothing$  63,  $\varnothing$  80,  $\varnothing$  100,  $\varnothing$  125



#### **How to Order**



Bore size	Standard stroke	Max. stroke
[mm]	[mm]	
32	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	1900
40	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	1900
50	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	1900
63	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	1900
80	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600 700, 800	1900
100	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600 700, 800	1850
125	-	1850

<sup>\*</sup> Aside from the standard strokes, intermediate strokes are also available in 1 mm increments and are produced upon receipt of order.

For details, refer to the Web Catalogue.

Air cushion

Ø 125



<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

#### ISO Standard (15552)

#### ISO Cylinder: Standard

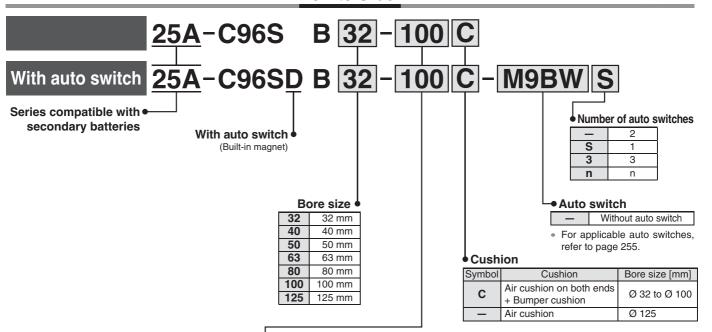
**Double Acting, Single Rod** 



Ø 32, Ø 40, Ø 50, Ø 63, Ø 80, Ø 100, Ø 125



#### **How to Order**



#### Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]	Max. stroke
32	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	1000
40	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	1900
50	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	1900
63	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	1900
80	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600 700, 800	1900
100	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600 700, 800	1850
125	-	1850

<sup>\*</sup> Aside from the standard strokes, intermediate strokes are also available in 1 mm increments and are produced upon receipt of order.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

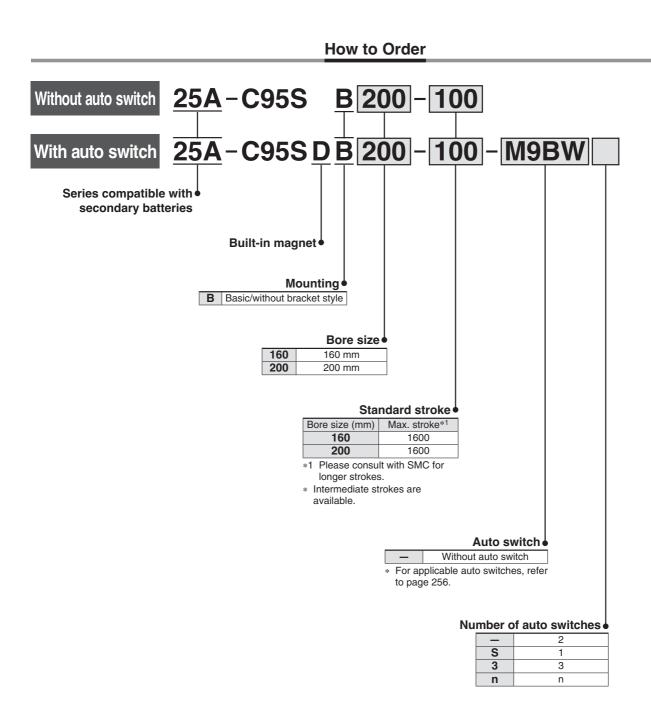


#### ISO/VDMA Cylinder: Large Bore Size Type

#### **Double Acting, Single Rod**

## **25A-C95** Series Ø 160, Ø 200





\* The 25A- series specifications and dimensions are the same as those of the standard model.



#### ISO Standard (21287)

Compact Cylinder: Double Acting, Single Rod RoHS

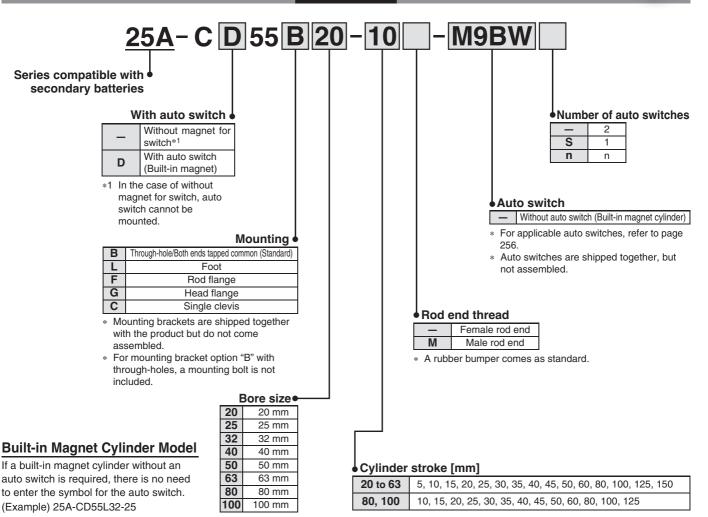


## 25A-C55 Series

Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63, Ø 80, Ø 100



#### **How to Order**



Mounting Bracket Part Nos. for the 25A- Series					
Bore size [mm]	Foot*1	Flange	Single clevis*2		
20	25A-C55-L020	25A-C55-F020	25A-C55-C020		
25	25A-C55-L025	25A-C55-F025	25A-C55-C025		
32	25A-C55-L032	25A-C55-F032	_		
40	25A-C55-L040	25A-C55-F040	_		
50	25A-C55-L050	25A-C55-F050	_		
63	25A-C55-L063	25A-C55-F063	_		
80	25A-C55-L080	25A-C55-F080	_		
100	25A-C55-L100	25A-C55-F100	_		

- \*1 Foot bracket part number contains two foot brackets
- \*2 The single clevis is only applicable to bore sizes Ø 20 and Ø 25.
- \* Mounting bolts are also included with bracket.
- \* The 25A- series specifications and dimensions are the same as those of the standard model.





25A-RJ Series



#### **How to Order**

#### Ontion

#### O.D. thread size/Stroke

Symbol	O.D. thread	Stroke
0604	6 mm	4 mm

	Option
Symbol	Hexagon nut
_	2 pcs.
N	_

25A - RJ

25A - RJ 0806 H U

Series compatible with secondary batteries

Shock absorber/Soft type

#### O.D. thread size/Stroke

Symbol	O.D. thread	Stroke
0806	8 mm	6 mm
1007	10 mm	7 mm
1412	14 mm	12 mm
2015	20 mm	15 mm
2725	27 mm	25 mm

Option

-				
Symbol	Hexagon nut	Stopper nut		
_	2 pcs.	_		
J	3 pcs.			
N				
S	2 pcs.	1 pc.		
SJ	3 pcs.	1 pc.		
SN	_	1 pc.		

With cap

_	Basic type	
U	With urethane cap	

#### Collision speed range

Н	0.05 to 2 m/s
L	0.05 to 1 m/s

RJ0604: 0.05 to 1.0 m/s

\* RJ2725H: 0.05 to 1.5 m/s

Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

		Thread size					
		М6	M6 M8 M10 M14 M20 M27				M27
Hexagon nut		25A-RJ06J	25-RB08J	25-RB10J	25-RB14J	25-RB20J	25-RB27J
Stopper nut	Basic type	_	25-RB08S	25-RB10S	25-RB14S	25-RB20S	25-RB27S
Stopper nut	With cap	_ [	25-RBC08S	25-RBC10S	25-RBC14S	25-RBC20S	25-RBC27S

Material: Special steel

Treatment: Electroless nickel plating

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Directional Control Valves

Air Cylinders

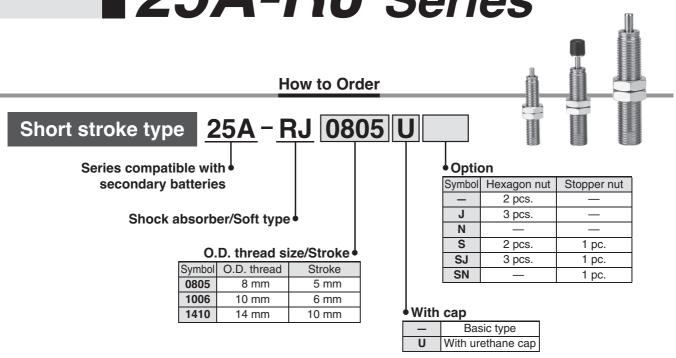
Air Grippers Vacuum Equipment

Air Preparation Equipment

## **Shock Absorber Short Stroke Type**



25A-RJ Series



#### Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

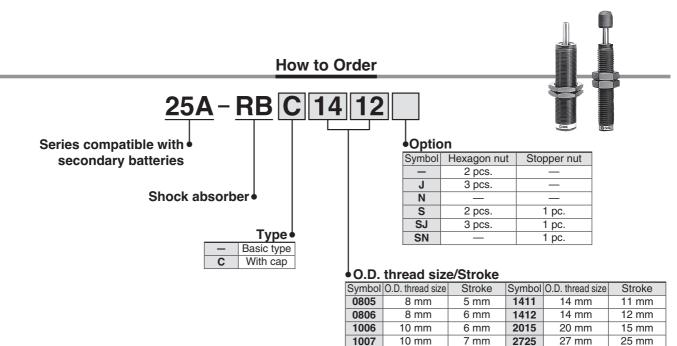
			Thread size	
		M8	M10	M14
Hexagon nut		25-RB08J	25-RB10J	25-RB14J
Stopper nut	Basic type	25-RB08S	25-RB10S	25-RB14S
Stopper Hut	With cap	25-RBC08S	25-RBC10S	25-RBC14S

Material: Special steel Treatment: Electroless nickel plating

\* The 25A- series specifications and dimensions are the same as those of the standard model.



#### **Shock Absorber** RoHS 25A-RB/RBC Series



Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

				Thread size		
M8 M10 M14 M20 M			M27			
Hexagon nut		25-RB08J	25-RB10J	25-RB14J	25-RB20J	25-RB27J
Stonnor nut	Basic type	25-RB08S	25-RB10S	25-RB14S	25-RB20S	25-RB27S
Stopper nut	With cap	25-RBC08S	25-RBC10S	25-RBC14S	25-RBC20S	25-RBC27S

Material: Special steel

Treatment: Electroless nickel plating

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers Vacuum Equipment

Air Preparation Equipment

Flow Control Equipment/ Fittings

#### **Floating Joint**

## 25A-J Series



#### **How to Order**

#### Standard type

25A-JA 80 - 22-150

Series compatible with secondary batteries

Applicable bore size [mm]

Model	Symbol	Applicable	
Model		bore size [mm]	
Standard	80	80	
Staridard	100	100	

 For Ø 63 or less, please consider using the stainless steel type 25A-JS series.

#### **♦ Thread nominal size (Standard)**

Nominal	Applicable cylinder
thread size	nominal thread size
22-150	M22 x 1.5
26-150	M26 x 1.5

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.



#### **How to Order**

#### For compact cylinders 25A – J B 40 –

Series compatible with secondary batteries

For compact cylinders/Female thread

Applicable bore size [mm]

Symbol	Applicable			
	bore size [mm]			
12	12			
16	16			
20	20			
25	25			
40	32, 40			
63	50, 63			
80	80			
100	100			

#### Thread nominal size

Nominal	Applicable cylinder
thread size	nominal thread size
3-050	M3 x 0.5
4-070	M4 x 0.7
5-080	M5 x 0.8
6-100	M6 x 1
8-125	M8 x 1.25
10-150	M10 x 1.5
16-200	M16 x 2
20-250	M20 x 2.5

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

#### **How to Order**

#### Stainless steel type 25A - J S 32 - 10-125

Series compatible with secondary batteries

Stainless steel type

Applicable bore size [mm]

Symbol	Applicable
	bore size [mm]
10	10
16	10, 16
20	20
32	25, 32
40	40
63	50, 63

#### Thread nominal size

Till Cad Hollillai Sizc				
Nominal	Applicable cylinder			
thread size	nominal thread size			
4-070	M4 x 0.7			
5-080	M5 x 0.8			
8-125	M8 x 1.25			
10-125	M10 x 1.25			
14-150	M14 x 1.5			
18-150	M18 x 1.5			

\* The 25A- series specifications and dimensions are the same as those of the standard model.



25A-MSUB Series

Size: 1, 3, 7, 20

RoHS

#### **How to Order**

#### Connection • port location

_	Side ported	
E	Axial ported	
A 21 1 1 2 2 1 1 1		

Available with side ported only, when equipped with auto switch unit.

SUB 20 Without auto switch 25A - M

With auto switch 25A- M D SUB 20 90

Series compatible with secondary batteries

> With auto switch (Built-in magnet)

Nominal size (Torque) ●

1	MSUB 1
3	MSUB 3
7	MSUB 7
20	MSUB20

Rotating angle

Application	Symbol	Rotating angle
Single	90	90°
vane	180	180°
Double	90	90°
vane	90	90

Rotation adjustment range Single vane: Both ends ±5° each Double vane: Both ends ±2.5° each

#### Vane type • Single vane Double vane

#### Number of auto switches

S	<b>1</b> *1
_	2*2

- \*1 S (1 auto switch) is shipped with a right-hand auto switch.
- \*2 (2 auto switches) is shipped with a right-hand and a left-hand switch.

#### Electrical entry/ Lead wire length

_	Grommet/Lead wire: 0.5 m
L	Grommet/Lead wire: 3 m

#### Auto switch

Without auto switch	
(Built-in magnet)	

\* Refer to page 259 fors applicable auto switches.

- \* The 25A- series specifications and dimensions are the same as those of the standard model.
- \* Zinc is used in part of deep groove ball bearing.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves

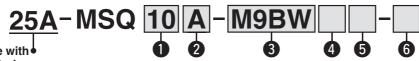
#### **Rotary Table/Rack & Pinion Type**

## 25A-MSQ Series

Size: 10, 20, 30, 50

#### **How to Order**





Series compatible with secondary batteries

U Siz	е
10	
20	
30	
50	

2	Cushion	type
	0 1:	

<u> </u>	Oddinon type	
Α	Cushion pad	
D	Bumper	

NPTF1/8

3 Au	to switch
	Without auto switch (Built in magnet)

ı		vviiliout a	auto Switch	(Dulit-III I	nayne	1)
	* For ann	licable au	to switches	refer to	nage	250

4 Number of auto switches s

End port type	
_	M5
Nil	Rc1/8
-XF	G1/8
-XN	NPT1/8

6 Port type

<sup>6</sup> Made to order

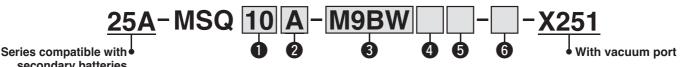
_	None
Α	With interchangeable table and plate
В	With interchangeable table
С	With interchangeable plate

\* Zinc is used in part of deep groove ball bearing and seal washer.

n

\* Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 160-2 for details. Other specifications are the same as those of the standard model.

For details, refer to the Web Catalogue



Size

10, 20

30, 50

secondary batteries

1 Siz	e
10	
20	
30	
50	

2 Cushion type

A Cushion pad	
D	Bumper

3 Auto switch

	_	Without auto switch (Built-in magnet)
*	For app	licable auto switches, refer to page 259

4 Number of

auto switche		
_	2	
S	1	
n	n	

5 Port type

End port type		Size	
_	M5	10, 20	
_	Rc1/8		
-XF	G1/8	20 50	
-XN	NPT1/8	30, 50	
-XT	NPTF1/8		

6 Made to order

_	None		
В	With interchangeable table		



<sup>\*</sup> Zinc is used in part of deep groove ball bearing and seal washer.

<sup>\*</sup> Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 160-2 for details. Other specifications are the same as those of the standard model.

#### **Dimensions**

#### **Basic type** 25A-MSQ□A

## Max.≈ **SU**

#### **Bumper** 25A-MSQ□D

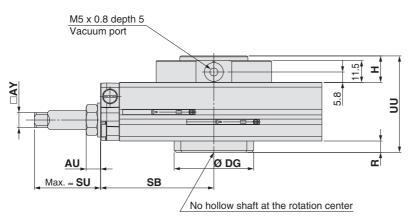


				[mm
Size	AU	AY	HU	SU
10	6.5	6	18	24
20	7.5	8	26	34
30	7.5	8	24	32
50	10	10	34	45.5

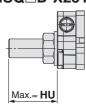
\* Dimensions other than those shown above are identical to the standard products.

For details, refer to the Web Catalogue

#### With vacuum port 25A-MSQ□A-X251



Bumper	
25A-MSQ□D-X25	1



									[mm]
Size	AU	AY	DG	Н	HU	R	SB	SU	UU
10	6.5	6	35h9	14.2	18	5	47.2	24	48.7
20	7.5	8	42h9	14	26	6	59.9	34	51
30	7.5	8	48h9	14	24	6	65.3	32	58
50	10	10	54h9	14	34	7	77.7	45.5	64

- \* Dimensions other than those shown above are identical to the standard products.
- \* The product with the vacuum port has no hollow shaft at its rotation center.

For details, refer to the Web Catalogue



Air Cylinders Control Valves

Related Products

Air Grippers Vacuum Equipment

Air Preparation Equipment

#### MSQ Series

#### **Made to Order**

Please contact SMC for detailed dimensions, specifications, and delivery times.



#### 1 With Interchangeable Table and Plate

Symbol -A. -B. -C

#### **Applicable Rotary Table**

Model	With interchangeable table and plate	With interchangeable table	With interchangeable plate	Note
25A-MSQ	iable and plate	lable	plate	
25A-MSQ□-B-X251		0		
ZOA-IVIOQU-D-AZOI	_		_	

#### **How to Order**



#### Made to order

Α	With interchangeable table and plate
В	With interchangeable table
С	With interchangeable plate

- The interchangeable table and plate can be ordered separately. For details, refer to the tables below.
- \* The interchangeable table and plate are assembled before shipment.

#### Part Nos. of Interchangeable Parts

Interchangeable A Unit (With Interchangeable Table and Plate)

Size	Part no.	Contents				
Size		Description (Qty.)				
10	P891010-53	· Interchangeable table (1)				
20	P891020-53	Parallel pin (1) Hexagon socket head cap screw (4)				
30	P891030-53	Interchangeable plate (1)     Cross recessed head machine				
50	P891050-53	screw for precision instruments (2)				

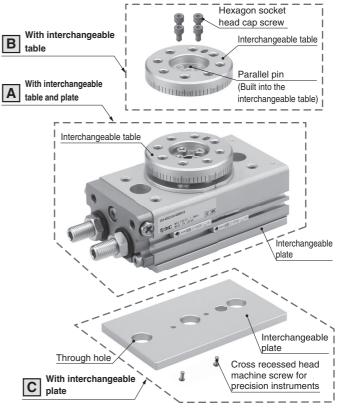
#### Interchangeable B Unit (With Interchangeable Table)

Size	Part no.	Contents			
Size		Description (Qty.)			
10	P891010-54	Interchange able table (1)			
20	P891020-54	· Interchangeable table (1) · Parallel pin (1)			
30	P891030-54	Hexagon socket head cap screw (4)			
50	P891050-54	(4)			

#### Interchangeable C Unit (With Interchangeable Plate)

Size	Part no.	Contents			
Size		Description (Qty.)			
10	P891010-55	Interchange chie plate (1)			
20	P891020-55	Interchangeable plate (1)     Cross recessed head machine     screw for precision instruments (2)			
30	P891030-55				
50	P891050-55				

\* Mounting diagram of the interchangeable table



\* To position the product, use the knock pin holes on the body instead of the through holes that are empty in the interchangeable plate.

Dimensions: The dimensions of the 25A-MSQ are the same as those of the standard product.

Refer below for the dimensions of the 25A-MSQ\(\sigma\)-B-X251 with a vacuum port.

\* Refer to page 31 for the tightening torque of the interchangeable parts.

#### **Dimensions**

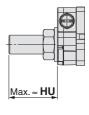
Dimensions other than those shown below are the same as those of the basic type. Refer to the Web Catalog for details.

#### With vacuum port/With interchangeable table 25A-MSQ□A-B-X251

# M5 x 0.8 depth 5 Vacuum port AU Max. ~ SU SB No hollow shaft at the rotation center

							(111111)			
ĺ	Size	AU	AY	DG	Н	HU	R	SB	SU	UU
	10	6.5	6	35h9	21	18	5	47.2	24	55.7
	20	7.5	8	42h9	23	26	6	59.9	34	60
	30	7.5	8	48h9	23	24	6	65.3	32	67
ĺ	50	10	10	54h9	26	34	7	77.7	45.5	75.5

#### Bumper 25A-MSQ□D-B-X251



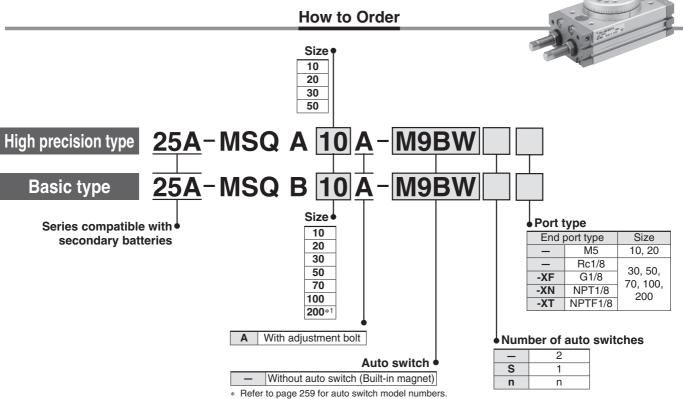
- Dimensions other than those shown above are identical to the standard products.
- \* The product with the vacuum port has no hollow shaft at its rotation center.

# Rotary Table/Rack & Pinion Type

# 25A-MSQ Series

Size: 10, 20, 30, 50, 70, 100, 200

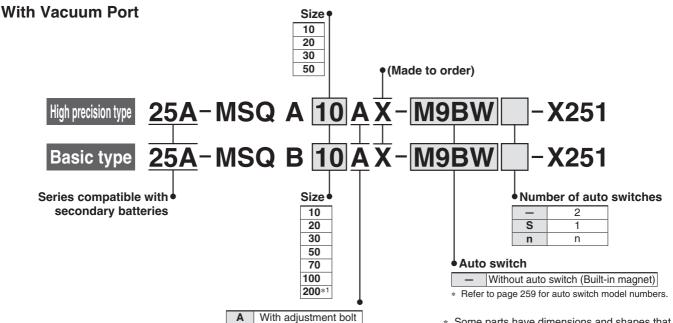
RoHS



- \*1 Size 200 is produced upon receipt of order.
- Zinc is used in part of deep groove ball bearing and seal washer.
- \* Side port cannot be used.

\* Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 162 for details. Other specifications are the same as those of the standard model.

For details, refer to the Web Catalogue.



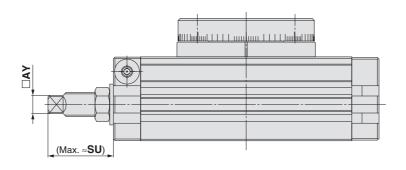
- \*1 Size 200 is produced upon receipt of order.
- \* Zinc is used in part of deep groove ball bearing and seal washer.
- \* Side port cannot be used.



<sup>\*</sup> Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 162 for details. Other specifications are the same as those of the standard model.

#### **Dimensions**

#### 25A-MSQB□A

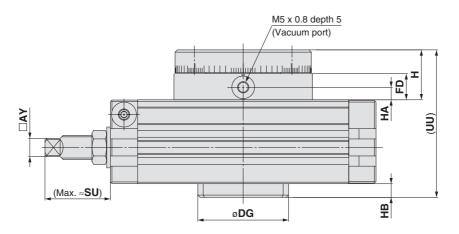


		[mm
Size	AY	SU
10	6	23.7
20	8	33
30	8	33
50	10	42.9
70	16	44.2
100	16	44.3
200	21	52.2

\* Dimensions other than those shown above are identical to the standard products.

For details, refer to the Web Catalogue.

#### 25A-MSQB AX-X251



								[mm]
Size	AY	DG	FD	Н	HA	HB	SU	UU
10	6	35h9	11.5	20	5.5	5	23.7	59
20	8	40h9	11.5	22	5.5	6	33	65
30	8	48h9	11.5	22	5.5	6	33	68
50	10	54h9	11.5	24	5.5	7	42.9	77
70	16	50h9	12	25	6	7	44.2	85
100	16	52h9	12	27	6	7	44.3	93
200	21	64h9	15	32	7.5	8	52.2	114

- The product with the vacuum port has no hollow shaft at its rotation centre.
- Dimensions other than those shown above are identical to the standard products.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves

Related Products

Air Grippers

Vacuum Equipment

Air Preparation Equipment

Clean Air Filters

Modular F.R.L./ Pressure Control Equipment

Flow Control Equipment/ Fittings

Detection Switches

Process Gas Fluid Control Equipment Equipment

Electric Actuators

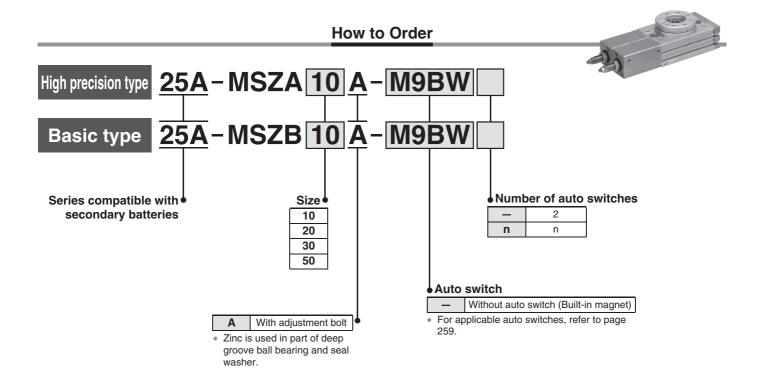


## **3-Position Rotary Table**

# 25A-MSZ Series

Size: 10, 20, 30, 50

RoHS



\* The 25A- series specifications and dimensions are the same as those of the standard model.



Compact Type Parallel Style Air Gripper/With Positioning Pins on the Lateral Mounting Surface

25A-JMHZ2-X6900(A, B) (Made to Order) Compact Type Parallel Style Air Gripper/Lateral Auto Switch Mounting

25A-JMHZ2-X7460 (Made to Order)

Ø 8, Ø 12, Ø 16, Ø 20

**How to Order** 

#### **Bore Size**

Ø 8 to Ø 20

Series compatible with

secondary batteries Number of fingers

2 Bore size		
8	8 mm	
12	12 mm	
16	16 mm	
20	20 mm	

**Action** Double acting

4 Finger option		
_	Standard	
1	Side tapped mounting	
2	Through-holes in opening/ closing direction	

Auto switch Without auto switch

		(Built-iii iiiagilet)
*	Refer to	page 260 for
	applicat	ble auto switch models.

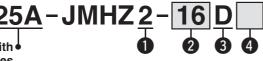
6 Number of auto switches S n

The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.

#### **Bore Size**

Ø 8 to Ø 20 **Made to Order** 

Series compatible with secondary batteries



With positioning pins on the lateral mounting surface

Number

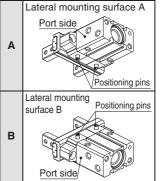
	of fingers	
2	2	

Bore size		
8	8 mm	
12	12 mm	
16	16 mm	
20	20 mm	

Action **D** Do

tion	4 Finger option		
uble acting	_	Standard	
	1	Side tapped mounting	
	2	Through-holes in opening/ closing direction	

Direction of pin projection



5 Auto switch

Without auto switch (Built-in magnet)
---------------------------------------

Refer to page 260 for applicable auto switch models

mber of auto itches
2

_	2
S	1
n	n

The 25A- series have the same specifications and dimensions as those of the JMHZ2-X6900(A, B) (made-to-order individual specifications). For details, refer to the Web Catalogue.

#### **Bore Size**

Ø **8** to Ø

\_ateral auto switch mounting

Series compatible with secondary batteries

Number of fingers

2 Bore size		
8	8 mm	
12	12 mm	
16	16 mm	
20	20 mm	

3 Action **D** Double acting

	4 Finger option			
<ul><li>Standard</li></ul>				
,	1	Side tapped mounting		
	2	Through-holes in opening/ closing direction		

6 Auto switch Without auto switch (Built-in magnet)

*	Refer to page 260 for
	applicable auto switch models.

	mber of auto
_	2

\* The 25A- series have the same specifications and dimensions as those of the JMHZ2-X7460 (made-to-order individual specifications). For details, refer to the Web Catalogue.

Air Cylinders Control Valves

Related Products

Air Grippers

Vacuum Equipment

Air Preparation Equipment

Clean Air Filters

Detection Switches

Fluid Control Equipment

Process Gas | Equipment

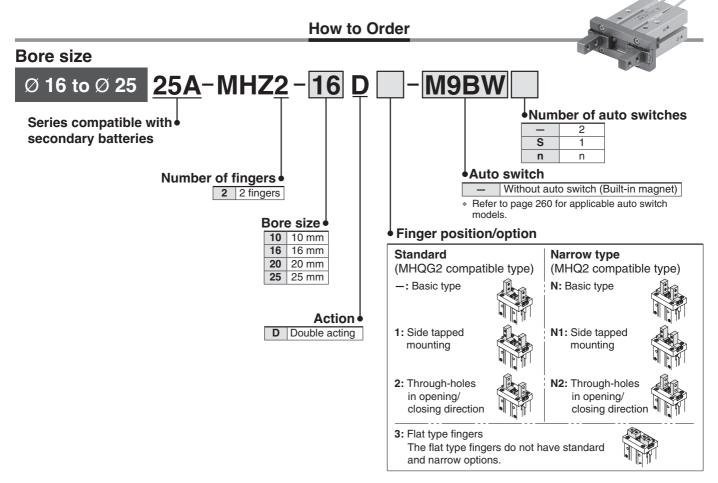
Electric Actuators

## **Parallel Type Air Gripper Standard Type**

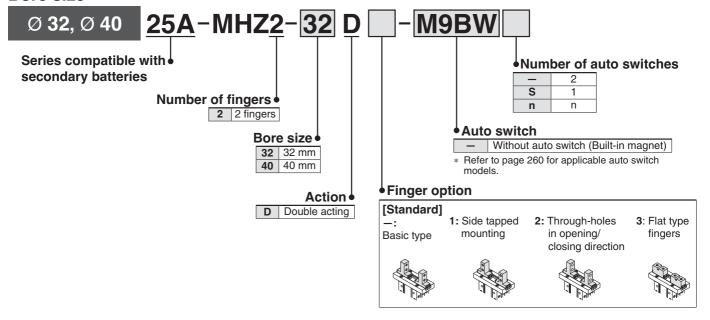
# 25A-MHZ2 Series

 $\emptyset$  10,  $\emptyset$  16,  $\emptyset$  20,  $\emptyset$  25,  $\emptyset$  32,  $\emptyset$  40 RoHS







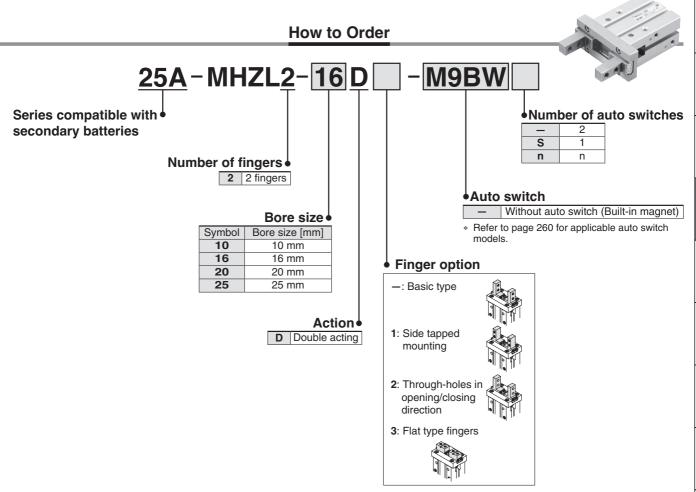


 The 25A- series specifications and dimensions are the same as those of the standard model.

# Parallel Type Air Gripper Long Stroke Type

25A-MHZL2 Series Ø 10, Ø 16, Ø 20, Ø 25





The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

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Air Cylinders Control Valves

Related Products

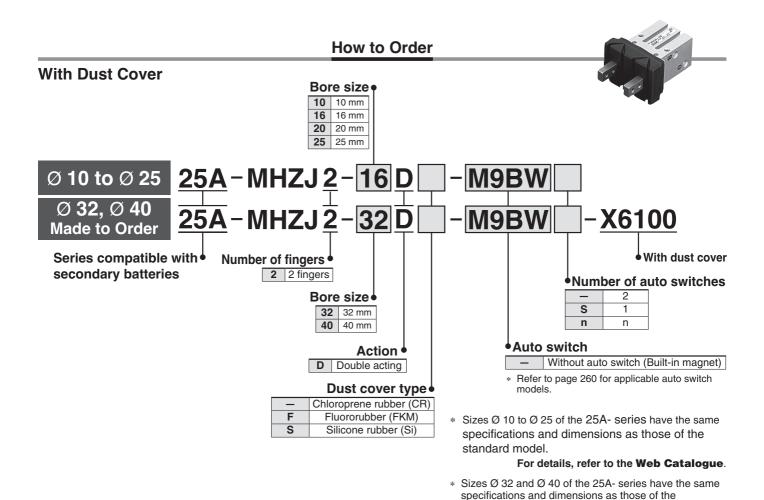
Rotary Actuators

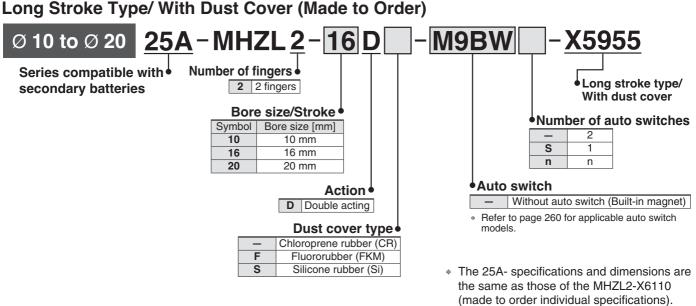
Air Grippers Vacuum Equipment

Air Preparation

Flow Control Equipment/ Fittings







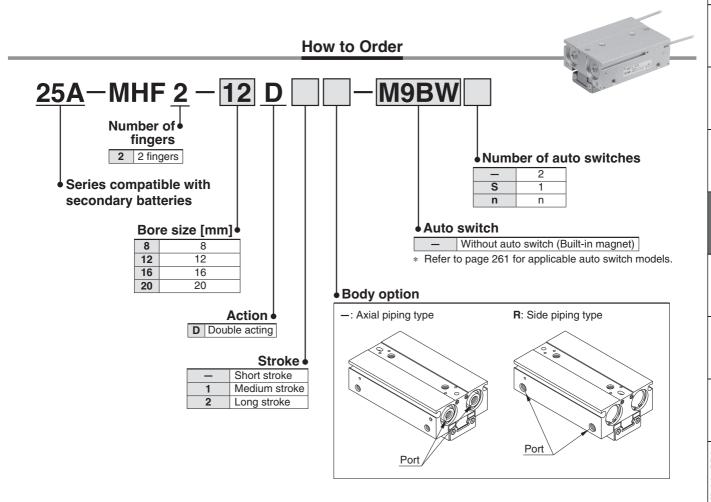


MHZJ2-X6100 (made-to-order individual specifications).

# **Low Profile Air Gripper** 25A-MHF2 Series

Ø 8, Ø 12, Ø 16, Ø 20





\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves

Related Products

Rotary Actuators

**Air Grippers** Vacuum Equipment

Air Preparation Equipment

Clean Air Filters

Flow Control Equipment/ Fittings

Detection Switches

Process Gas Fluid Control Equipment Equipment

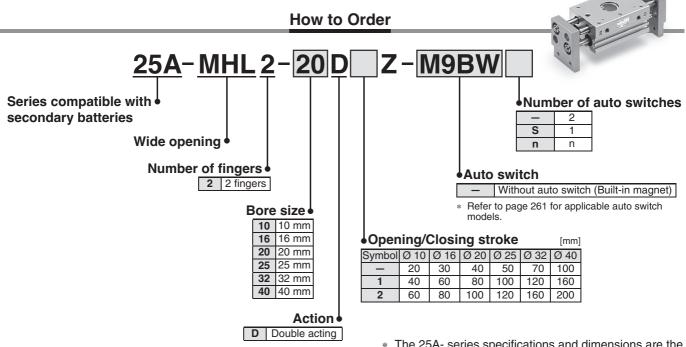
Electric Actuators

## Parallel Type Air Gripper: Wide Type

# 25A-MHL2 Series

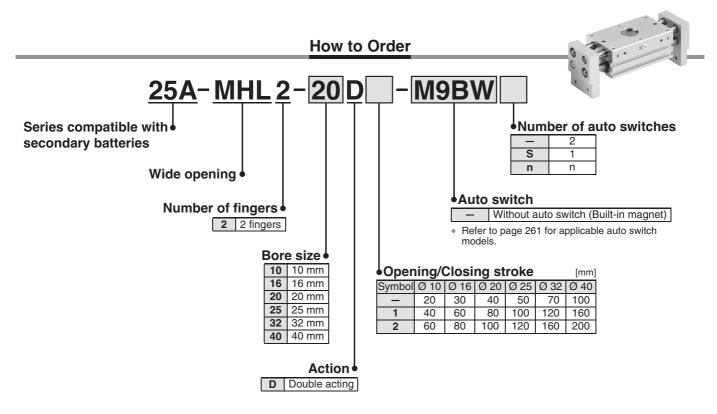
 $\varnothing$  10,  $\varnothing$  16,  $\varnothing$  20,  $\varnothing$  25,  $\varnothing$  32,  $\varnothing$  40 RoHS





\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.



\* The 25A- series specifications and dimensions are the same as those of the standard model.



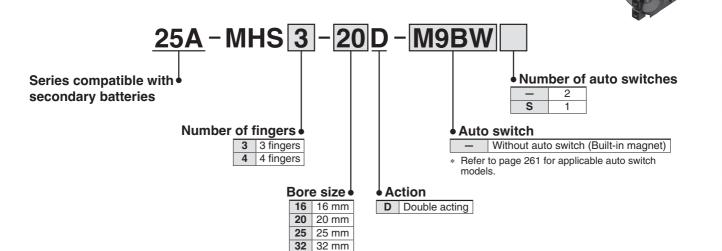
# Parallel Type Air Gripper

# 25A-MHS□ Series

Ø 16, Ø 20, Ø 25, Ø 32

RoHS

#### **How to Order**



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers

Vacuum Equipment

Air Preparation Equipment

Clean Air Filters

Flow Control Equipment/ Fittings

Detection Switches

Process Gas Fluid Control Equipment Equipment

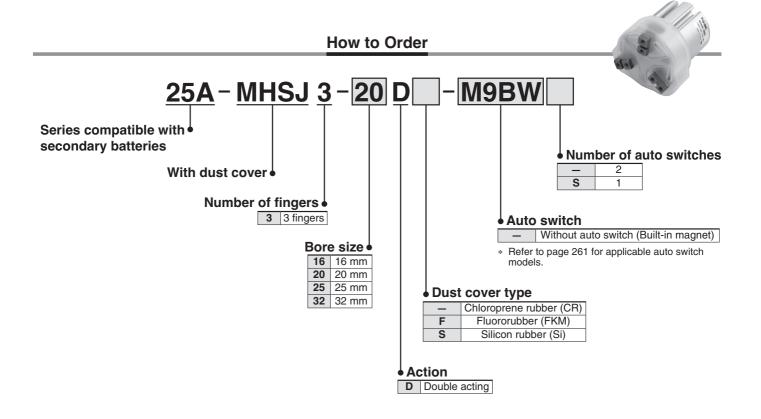
Electric Actuators

# Parallel Type Air Gripper 3-Finger Type with Dust Cover

# 25A-MHSJ3 Series

Ø 16, Ø 20, Ø 25, Ø 32

RoHS



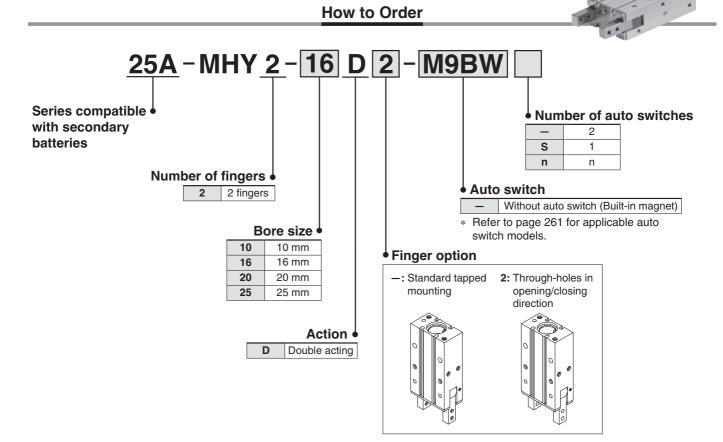
\* The 25A- series specifications and dimensions are the same as those of the standard model.

## 180° Angular Type Air Gripper Cam Type

# 25A-MHY2 Series

Ø 10, Ø 16, Ø 20, Ø 25





\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers Vacuum Equipment

Air Preparation Equipment

Modular F.R.L./ Pressure Control Equipment

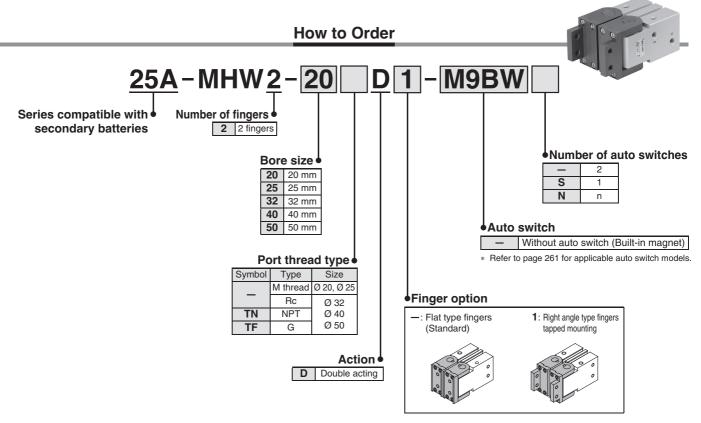
Flow Control Equipment/ Fittings

Detection Switches

Process Gas Fluid Control Equipment Equipment

Electric Actuators

# 180° Angular Type Air Gripper Rack & Pinion Type 25A-NHV2 Series Ø 20, Ø 25, Ø 32, Ø 40, Ø 50



- \* Change of material and surface treatment are not available for the bearing or the parallel key.
- \* As metal-to-metal collision occurs when the fingers are fully closed, dust particles may be generated.

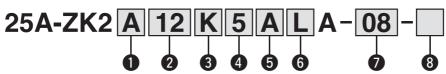
\* The 25A- series specifications and dimensions are the same as those of the standard model.

## **Ejector System Vacuum Unit**

# 25A-ZK2 A Series ROHS

Single Unit Ejector + With Valve + Without Energy Saving Function

#### **How to Order**





#### 1 Body/Exhaust type

$\check{-}$	Dody/ Exhaust type				
Symbol	Body	Exhaust type			
A	Single unit	Silencer exhaust*1			
В		Port exhaust exhaust			
G		High-noise reduction silencer exhaust			

\*1 With exhaust port when 2 is 12 or 15

#### 4 Rated voltage (Supply valve/Release valve)

Symbol	Voltage	
5	24 VDC	
6	12 VDC	

#### Pressure switch for vacuum/Pressure sensor

	Туре	Pressure range [kPa]	Specifications		
Symbol			NPN	PNP	With unit selection
			2 ou	tputs	function*3
Α			•	_	•
В	for	0 to -101	•	_	None (SI unit only)
С	Pressure switch for vacuum	0 10 - 10 1	_	•	•
D				•	None (SI unit only)
Е			•	-	•
F		–100 to 100	•	_	None (SI unit only)
Н	Pre		_	•	•
J				•	None (SI unit only)
Р	Pressure	0 to -101	- Analogue output 1 to 5 V		
Т	sensor	-100 to 100			
N	Without pressure switch for vacuum/pressure sensor				

\*3 The unit for the type without the unit selection function is fixed as kPa.

#### Vacuum (V) port

	· / / I
Symbol	Vacuum (V) port
06	Ø6
80	Ø 8

#### 2 Nominal nozzle size

Symbol	Nominal nozzle size
07	Ø 0.7
10	Ø 1.0
12	Ø 1.2
15	Ø 1.5

\* The standard supply pressure of each nozzle diameter is the same as that of the corresponding standard product. For details, refer to the Web Catalogue.

## 3 Combination of supply valve and release valve

Symbol	Supply valve		Release valve
	N.C.	Self-holding	N.C.
K	•	_	•
J	•	_	_
R	_	<b>●</b> *2	•

\*2 Supply valve maintains vacuum by energization (20 ms or more). Stopping the vacuum turns on the release valve.

#### 6 Connector (Supply valve/Release valve/Pressure switch for vacuum)

Symbol	For supply valve/ release valve: 300 mm (Connector assembly)*4	For pressure switch for vacuum: 2 m (Lead wire with connector)  Pressure sensor assembly: 3 m (With lead wire)		Note
L	•	•		Cannot be selected
L1	None	•		when <b>5</b> is N
L2	•	None		Cannot be selected
L3	None	None		when <b>5</b> is P or T

\*4 For the connector length other than 300 mm, select L1 or L3, and order the connector assembly on page 178 separately.

#### **Option**\*<sup>5</sup> (For details on the Function/Application, refer to page 179.)

Symbol	Type Note			
_	Without option —			
В	Mounting for single (nuts and	-		
D		vidual release PD port supply (PD) port (M3)*6	Cannot be selected when 3 is J	
E	k flow edle	Screwdriver operation type long lock nut	Cannot be selected when 3	
J	Vacuum break flow adjusting needle	Round lock nut Lock nut	is J Can be selected only for the	
K	Vacu adju	Screwdriver operation type Vacuum break flow adjusting needle	combination of J and K	
w	With exhauntering interferent prevention	ice Exhaust interference	When J is selected for <b>3</b> , install the release valve or vacuum breaker in the middle of the vacuum piping.	

- \*5 When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)
- \*6 Use a One-touch fitting or barb fitting for piping. (O.D.: Within Ø 6.2)
- \* The 25A- series specifications and dimensions are the same as those of the standard model.





Single Unit Ejector + With Valve + With Energy Saving Function

**How to Order** 

25A-ZK2 A 12 K 5 K W A - 08

Body/Exhaust type

Symbol	Body	Exhaust type
Α		Silencer exhaust*1
В	Single unit	Port exhaust exhaust
G		High-noise reduction silencer exhaust

5 Pressure switch for vacuum with energy saving function

1 output

NPN

Specifications

With unit selection

function\*2

None (SI unit only)

None (SI unit only)

PNP

\*1 With exhaust port when 2 is 12 or 15

Pressure range

[kPa]

-100 to 100

Symbo

K Q

R

S

#### Nominal nozzle size

Symbol		Nominal nozzle size
	07	Ø 0.7
	10	Ø 1.0
	12	Ø 1.2
	15	Ø 1.5

The standard supply pressure of each nozzle diameter is the same as that of the corresponding standard product. For details, refer to the Web Catalogue.

#### 4 Rated voltage (Supply valve/Release valve)

	Symbol	Voltage
	5	24 VDC
	6	12 VDC

#### **6** Connector

Symbol	For pressure switch for vacuum with energy saving function: 2 m (Lead wire with connector)
W	•
L3	None

#### Combination of supply valve and release valve

		aive aila ic	nouse varv
	Symbol	Supply valve	Release valve
		N.C.	N.C.
	K	•	•

Symbol	For pressure switch for vacuum with energy saving function: 2 m (Lead wire with connector)
W	•
L3	None

#### Vacuum (V) port

Symbol	Vacuum (V) port
06	Ø6
08	Ø 8

\*2 The unit for the type without the unit selection function is fixed as kPa.

	<b>Option</b> *3 (For details on the Function/Application, refer to page 179.)					
Symbol		Type Note				
_	Without o	option	_			
В	Mounting bracket for single unit (nuts and bolts are included)					
D	With individual release PD port pressure supply (PD) port (M3)*4					
E	eak flow needle	Screwdriver operation type long lock nut	Can be selected			
J	Vacuum break flow adjusting needle	Round lock nut Lock nut	only for the combination of J and K			
K	Vacui	Screwdriver operation type Vacuum break flow adjusting needle	and K			

\*3 When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)

\*4 Use a One-touch fitting or barb fitting for piping. (O.D.: Within Ø 6.2)

The manifold type is available as a special order.

The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers

Air Preparation Equipment

Process Gas Fluid Control Equipment Equipment

Electric Actuators

# Ejector System Vacuum Unit ( E UK 25A-ZK2 A Series RoHS)

Single Unit Ejector + Without Valve + Without Energy Saving Function

#### **How to Order**





Symbol	Body		Exhaust type
Α		Silencer exhaust*1	Silencer exhaust
В	Single unit	Port exhaust	Port exhaust
G		High-noise reduction silencer exhaust	High-noise reduction silencer exhaust

\*1 With exhaust port when 2 is 12 or 15

#### 2 Nominal nozzle size

Symbol	Nominal nozzle size
07	Ø 0.7
10	Ø 1.0
12	Ø 1.2
15	Ø 1.5

 The standard supply pressure of each nozzle diameter is the same as that of the corresponding standard product.
 For details, refer to the Web Catalogue.

#### 4 Connector

_	• • • • • • • • • • • • • • • • • • • •			
Symbol	For pressure switch for vacuum: sensor 2 m (Lead wire assembly: 3 m with connector) (With lead wire)	Note		
Υ	•	Cannot be selected when 3 is N		
Y1	None	Cannot be selected when is P, T, or N		
N	None	When "N" is selected for 3		

#### 3 Pressure switch for vacuum/Pressure sensor

			Pressure range [kPa]	Specifications		
S	Symbol	Type		NPN	PNP	With unit selection
				2 ou	tputs	function*2
	Α		0 to -101	•	_	•
	В	for		•	_	None (SI unit only)
	С	Pressure switch for vacuum		_	•	•
	D	ure swit vacuum		_	•	None (SI unit only)
	Е	ure /act	-100 to 100	•	_	•
	F	v V		•	_	None (SI unit only)
	Н	Pre	-100 to 100	_	•	•
	J			_	•	None (SI unit only)
	Р	Pressure	0 to -101	Analogue autout 1 to 5 V		
	Т	sensor	-100 to 100	Analogue output 1 to 5 V		
	N	Without p	hout pressure switch for vacuum/pressure sensor		sure sensor	

<sup>\*2</sup> The unit for the type without the unit selection function is fixed as kPa.

#### **5** Vacuum (V) por

Symbol	Vacuum (V) port
06	Ø6
08	Ø8

#### 6 Option\*3 (For details on the Function/Application, refer to page 179.)

Symbol	Т	Туре	
_	Without option	***	_
В	Mounting bracket for single unit (nuts and bolts are included)	Bracket	_
w	With exhaust interference prevention valve	Exhaust interference prevention valve	Install the release valve or vacuum breaker in the middle of the vacuum piping.

<sup>\*3</sup> When more than one option is selected, list the option symbols in alphabetical order. (Example -BW)

The manifold type is available as a special order.

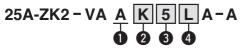
For details, refer to the Web Catalogue.

\* The 25A- series specifications and dimensions are the same as those of the standard model.



#### Replacement Parts for Single Unit / How to Order

Valve assembly





Valve type	
K	Supply valve: N.C., Release valve: N.C.
R	Supply valve: Self-holding release valve linked, Release valve: N.C.
	Supply valve: N.C. Poloaco valve: None

<b>3</b> R	ated voltage
5	24 VDC
6	12 VDC

4 Wiring

	L	Individual wiring: With connector assembly (Lead wire length: 300 mm)	
LO Individual wiring: Without connector asser			

Select the 25A-ZK2VAAK□LOA-A for a switch with energy saving function.

Connector assembly



Lead wire length

W	Valve type K/R
S	Valve type J

_	300 mm
6	600 mm
10	1000 mm
20	2000 mm
30	3000 mm

Sound absorbing material (10 pcs. per set)

Vacuum port adapter assembly (Purchasing order is available in units of 1 piece.)

#### One-touch fitting size

6	Ø 6 One-touch fitting	Metric
8	Ø 8 One-touch fitting	size

Filter element (10 pcs. per set)

#### Nominal filtration rating

**3** 30 μm

Body gasket\*1 (10 pcs. per set)

• Applicable type	
1	One check valve type (All specifications other than vacuum switch with energy saving function and exhaust interference prevention valve)
2	Two check valve type (Vacuum switch with energy saving function and exhaust interference prevention valve)

\*1 When ZK2-BG5-2-A is mounted, the workpiece cannot be removed until vacuum is released.

#### Filter case\*1

ZK2-FC

#### Port for the pressure switch or sensor

	Symbol	Port for the pressure switch or sensor	Filter case
Symbol Fort for the pressure switch		Torrior the pressure switch or sensor	colour
	Р	With port (type with pressure switch or sensor)	Smoke
	Т	Without port (type without pressure switch or sensor)	Clear

\*1 Vacuum port adapter assembly is not included.

Pressure switch for vacuum assembly (With 2 mounting screws)



#### Rated pressure range and function

	E	0 to -101 kPa	Pressure switch for vacuum	Open collector 2 outputs
Į				
	٧	-100 to 100 kPa	Pressure switch for vacuum with energy saving function	Open collector 1 output

## A Autout

<b>G</b> Output	
Α	NPN
В	PNP

Unit		
_	Unit selection function	
M	SI unit only*1	

\*1 Fixed unit: kPa

#### 4 Lead wire with connector

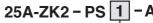
_	None	
_		When <b>①</b> is E or F···For pressure switch for vacuum, Lead wire with connector (Length 2 m)
G		When <b>1</b> is V···For pressure switch for vacuum with energy saving function, Lead wire with connector (Length 2 m)

#### Lead wire with connector

(When individual lead wire is necessary, order with the part number below.)

- Lead wire with connector for pressure switch for vacuum ZS - 39 - 5G
- Lead wire with connector for pressure switch for vacuum with energy saving function

Pressure sensor assembly (With 2 mounting screws)



#### Rated pressure range

1	0 to -101 kPa, Output: 1 to 5 \ Accuracy: ± 2 % F.S.	
3	$-100$ to 100 kPa, Output: 1 to 5 V, Accuracy: $\pm$ 2 % F.S.	



#### High-noise reduction silencer case assembly

#### Applicable nozzle size

4	For nozzle size 07, 10
6	For nozzle size 12, 15

Release lever (10 pcs. per set)

ZK2 - RL1 - A

Lock nut (10 pcs. per set)

25A-ZK2 - LN1 - A

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers

Preparation

Air

## **25A-ZK2**□**A** Series

### Optional Specifications/Functions/Applications

Symbol			Туре	Function/Application
В	Mounting bracket for single unit (nuts and bolts are included)  Bracket		Bracket	· Use when a single unit is mounted to the floor in an upright position is requested. If only ordering the bracket, the product number is as follows: 25A-ZK2-BK1-A (includes nuts and bolts).
D	With individual release pressure supply (PD) port (M3)		PD port	Use when supply pressure for vacuum release is individually requested.
E		Screwdriver operation type long lock nut	Screwdriver operation type long lock nut	· Used when the needle adjustment operation is difficult
J	Vacuum break flow adjusting needle	Round lock nut	Lock nut	Thicker than standard hexagon type. More suitable for hand tightening.     Round lock nut improves operability when the port exhaust type is used.
К		Screwdriver operation type	Vacuum break flow adjusting needle	Slotted type improves fine adjustment performance when the port exhaust type is used.
w	With exhaust interference prevention valve		Exhaust interference prevention valve	When ejectors are operated individually, exhausted air may flow backward from the V port of ejectors that are turned off. Exhaust interference prevention valve prevents backflow.

# Ejector System Compact Vacuum Unit With Energy Saving Function

25A-ZQ A Series

Single Unit Part Number

#### **How to Order**



#### Nominal nozzle size

05	0.5
07	0.7
10	1.0

2	Body	type

11	J	For Single unit
31	/	For Manifold

#### 3 Solenoid valve combination

K1	Supply valve (N.C.), Release valve (N.C.)

<b>4</b> s	olenoid valve rated voltage
5	24 VDC

**RoHS** 

#### **5** Electrical entry

10	L plug connector (Without connector) With light/surge voltage suppressor
LU	With light/surge voltage suppressor

#### 6 Manual override

	_	Non-locking push type
	В	Locking slotted type

#### Vacuum pressure switch (With suction filter\*1)

Symbol	Pressure range [kPa]	Output
VA	-100 to 100	NPN 1 output + Energy saving function
VB	-100 to 100	PNP 1 output + Energy saving function

\*1 The filter used in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please consider using in combination with an air suction filter of the ZFC series, etc.

#### 8 Unit

_	With unit switching function
M	SI unit only (kPa)

#### 9 Lead wire

_	Without lead wire with connector
W	Lead wire for switch with energy saving function (Length: 2 m) (Included)

#### Fitting (V port)

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

#### Fitting (P port)

Symbol	Applicable tubing O.D.	Specification
_	Without port	Manifold
0	Without fitting (M5 x 0.8)	Single unit

**12** Option

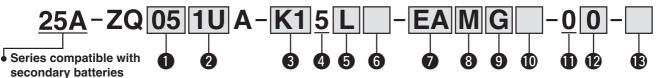
	Bracket for single unit			
	Single unit	Manifold		
_	With	Without		
N	Without	Not available		

\* The 25A- series specifications and dimensions are the same as those of the standard model.

## **Ejector System Compact Vacuum Unit** Without Energy Saving Function RoHS

Single Unit Part Number

#### **How to Order**



#### Nominal nozzle size

05	0.5
07	0.7
10	1.0

#### Body type

1U	For Single unit			
3M	For Manifold			

#### Solenoid valve combination

K1	Supply valve (N.C.), Release valve (N.C.)
K2	Supply valve (N.O.), Release valve (N.C.)
J1	Supply valve (N.C.)
J2	Supply valve (N.O.)
Q1*1	Supply valve (Latching), Release valve (N.C.)
Q2*1	Supply valve (Latching)

#### \*1 Latching (+ common)

#### 4 Solenoid valve rated voltage

_	_	_	 	_	-	 		_	_	_	
5						2	4 \	/Г	)(	;	

#### 5 Electrical entry

_	
1	L plug connector (Lead wire length: 0.3 m)
_	With light/surge voltage suppressor
LO	L plug connector (Without connector)
LU	With light/surge voltage suppressor

#### 6 Manual override

Non-locking push type  Latching:			
<b>B</b> *2	B*2 Locking slotted type		

\*2 When "Q1" is selected in 3, the locking slotted type is only available in the release valve.

This option cannot be chosen when "Q2" is selected in 3.

#### Vacuum pressure switch (With suction filter\*3)

Symbol	Pressure range [kPa]	Output
EA		NPN 2 outputs
EB	0 to -100	PNP 2 outputs
EC	0 10 - 100	NPN 1 output + Analogue voltage
EE		PNP 1 output + Analogue voltage
FA		NPN 2 outputs
FB	-100 to 100	PNP 2 outputs
FC	-100 to 100	NPN 1 output + Analogue voltage
FE		PNP 1 output + Analogue voltage
<b>F</b> *4	Suction	on filter only

- \*3 The filter used in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please consider using in combination with an air suction filter of the ZFC series, etc.
- \*4 It is not necessary to select the items for 3 and 9

#### 8 Unit

_	<ul> <li>With unit switching function</li> </ul>	
M	SI unit only (kPa)	
Р	With unit switching function (Initial value: psi)	

#### 9 Lead wire

	Without lead wire with
_	connector
G	Lead wire with connector
G	(Length: 2 m) (Included)

#### 10 Check valve\*6

	_	None	
	<b>K</b> * <sup>7</sup>	With check valve	

\*6 The check valve has a function to prevent the exhaust air from the exhaust unit overflowing to the vacuum port side when a manifold is used, but it cannot prevent overflow of the exhaust air completely. During usage, please inspect thoroughly with actual machine.

Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to avoid interference from the ejector's exhaust unit.

\*7 Cannot be selected when 2 is "1U", or 3 is "J1", "J2", or "Q2"

#### Warning

- · Cannot be used for vacuum retention
- · Use a release valve. Without a release valve, a workpiece may not be released.

#### Fitting (V port)

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

#### Fitting (P port)

Symbol	Applicable tubing O.D.	Specification
_	Without port	Manifold
0	Without fitting (M5 x 0.8)	Single unit

#### (B) Option

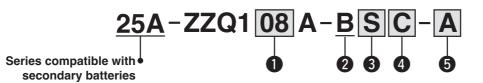
For Single Unit (2: 10)			ror iviai	11101a ( <b>2</b> : 3141)	
Symbol	Bracket	Converter assembly	Symbol	Release pressure	Converter assembly
Symbol	assembly	for solenoid valve*8	Symbol	supply (PD) port*9	for solenoid valve*8
_	0 –		_	_	_
N	_	_	S	0	_
С	_	0	С	_	0
D	0	0	Е	0	0

- \*8 A converter assembly for attaching the VQ100 lead wire assembly with a connector to the ZQ-A is included. Refer to the "Converter assembly for solenoid valve" in the Web Catalogue. "Q2" cannot be selected in 3. Select "LO" in 5.
- \*9 Select "C" for 4 for the manifold part number on page 180-3. "J1", "J2", or "Q2" cannot be selected in 3.

\* The 25A- series specifications and dimensions are the same as those of the standard model.



#### **How to Order**



#### 1 Stations\*1

01	1 station	
02	2 stations	
÷	:	
80	8 stations	

\*1 Number of stations varies according to nominal nozzle size during simultaneous operation. (Table 1)

#### Table 1. Max. Number of Stations that Can Operate Simultaneously\*2

Nominal nozzle size	Max. number of stations that can operate simultaneously
0.5	8 stations
0.7	6 stations
1.0	4 stations

\*2 For any of the nominal nozzle sizes, the max. number of stations that can be mounted is 8. However, please ensure that the max. number of stations that are operated simultaneously comply with the values above.

#### 2 Air pressure supply (P) port location

В	Both sides

#### 4 Release pressure supply (PD) port

В	None (Release pressure: Commonly supplied from the P port)
<b>C</b> *3	Provided (Release pressure: Supplied from the PD port)

\*3 If the individual unit does not have the energy saving function, select "S" or "E" in (18) for the single unit part number on page 180-2.

#### 3 Exhaust

S	Silencer exhaust (Both sides)
P	Port exhaust (Both sides)

#### 5 Shipping configuration

	<u> </u>
_	Assembled as a vacuum unit
<b>A</b> *4	Manifold unit only

\*4 A set of end blocks and the clamp rod assembly is included in this manifold unit. (Used for the maintenance of the end block)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

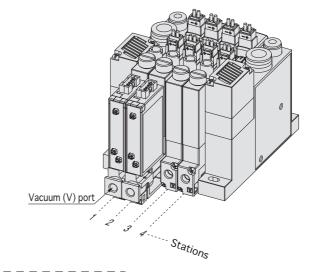
For details, refer to the **Web Catalogue**.

#### **Manifold Order Example**

#### 25A-ZZQ104A-BSB----- 1 pc.

- \* 25A-ZQ053MA-K15L-EAG-0··· 2 pcs. → Stations 1 and 2
- \* 25A-ZQ103MA-K15L-F-0 ······ 2 pcs. → Stations 3 and 4
- \* When the manifold is viewed from the vacuum (V) port, the first station starts from the left.

 $25A\hbox{-}ZQ053MA\hbox{-}K15L\hbox{-}EAG\hbox{-}0$  (2 pcs.) and  $25A\hbox{-}ZQ103MA\hbox{-}K15L\hbox{-}F\hbox{-}0$  (2 pcs.) are arranged from the first station.



#### **∧** Caution when ordering manifold

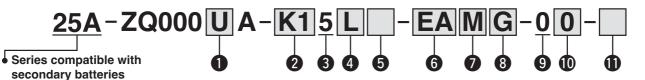
- The asterisk (\*) denotes the symbol for the assembly.
- I Prefix it to the single unit part number.
- If "\*" is not entered, the manifold and single unit will be shipped without being assembled.
- When the manifold and the units are not assembled, please assemble them by referring to
- I "How to increase/decrease manifold stations" in the Web Catalogue.
- There is nothing else to arrange additionally.



# Vacuum Pump System Compact Vacuum Unit 25A-ZQ A Series ROHS

Single Unit Part Number

#### **How to Order**



#### Body type

U	For Single unit
M	For Manifold

#### 2 Solenoid valve combination

K1	Supply valve (N.C.), Release valve (N.C.)			
K2 Supply valve (N.O.), Release valve (N.				
J1*1 Supply valve (N.C.)				
J2*1	Supply valve (N.O.)			
Q1*2	Supply valve (Latching), Release valve (N.C.)			
Q2*1 *2 Supply valve (Latching)				

<sup>\*1</sup> The air in the adsorption section of this product is not released to the atmosphere at the vacuum suspension state. Devise the circuit for the vacuum release additionally.

#### Solenoid valve rated voltage

5	24 VDC
---	--------

#### 4 Electrical entry

	,
L	L plug connector (Lead wire length: 0.3 m) With light/surge voltage suppressor
LO	L plug connector (Without connector) With light/surge voltage suppressor

#### **5** Manual override

_		Non-locking push type
	_	Latching: Push-locking slotted type
B*3 Locking slotted type		Locking slotted type

<sup>\*3</sup> When "Q1" is selected in 2, the locking slotted type is only available in the release valve. This option cannot be chosen when "Q2" is selected in 2

#### Vacuum pressure switch (With suction filter\*4)

Symbol	Pressure range [kPa]	Output	
EA		NPN 2 outputs	
EB	0 to −100	PNP 2 outputs	
EC	0 10 - 100	NPN 1 output + Analogue voltage	
EE		PNP 1 output + Analogue voltage	
FA		NPN 2 outputs	
FB	-100 to 100	PNP 2 outputs	
FC	-100 to 100	NPN 1 output + Analogue voltage	
FE		PNP 1 output + Analogue voltage	
<b>F</b> *5	Suction filter only		

<sup>\*4</sup> The filter used in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please consider using in combination with an air suction filter of the ZFC series, etc.

#### Unit

<ul> <li>With unit switching function</li> </ul>			
M SI unit only (kPa)			
P With unit switching function (Initial value:			

#### 8 Lead wire

_	Without lead wire with connector
G	Lead wire with connector (Length: 2 m) (Included)

#### 9 Fitting (V port)

_	O ,
Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

#### Titting (PS/PV port)

Symbol	Applicable tubing O.D.	Specification
_	Without port	Manifold
0	Without fitting (M5 x 0.8)	Single unit

#### (I) Option

For Sin	gle Unit ( <b>1</b> : U)		For Mar	nifold (1: M)	
Symbol	Bracket assembly	Converter assembly for solenoid valve*7	Symbol	Release pressure supply (PD) port*8	Converter assembly for solenoid valve*7
_	0	_	_	_	_
N	_	_	S	0	_
С	_	0	С	_	0
_					

E \*7 A converter assembly for attaching the VQ100 lead wire assembly with a connector to the ZQ-A is included. Refer to the "Converter Assembly for Solenoid Valve" in the **Web Catalogue**. "Q2" cannot be selected in 2. Select "LO" in 4.



<sup>\*2</sup> Latching (+ common)

<sup>\*5</sup> It is not necessary to select the items for ② and ③.

<sup>\*8</sup> Select "C" for 3 for the manifold part number on page 180-5. "J1", "J2", or "Q2" cannot be selected in 2.

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

#### **How to Order**



#### 1 Stations

01	1 station		
02	2 stations		
:	:		
08	8 stations		

## 2 Vacuum pressure supply (PV) port location\*1

L	Left side
R	Right side
R	Right side

\*1 The position of the vacuum pressure supply (PV) port when the vacuum (V) port is facing front. The pilot pressure supply (PS) port is on the opposite side. Refer to the "Table 1" for details.

#### 3 Release pressure supply (PD) port

	В	None (Release pressure: Commonly supplied from the PS port)
	<b>C</b> *2	Provided (Release pressure: Supplied from the PD port)

\*2 Select "S" or "E" for **1** for the single unit part number on page 180-4.

#### 4 Shipping configuration

_	Asser	nbled as a	a vacuum unit
<b>A</b> *3	N	lanifold ι	unit only

\*3 A set of end blocks and the clamp rod assembly is included in this manifold unit. (Used for the maintenance of the end block)

#### **Table 1. Location of Each Port**

2 PV port location	3 PD port	Left side with the V port facing the front		Right side with the V port facing the front			
		PS port	PV port	PD port	PS port	PV port	PD port
L	В	_	•	_	•	_	_
	С	_	•	•	•	_	•
D	В	•	_	_	_	•	_
n	С	•	_	•	_	•	•

\* The 25A- series specifications and dimensions are the same as those of the standard model.

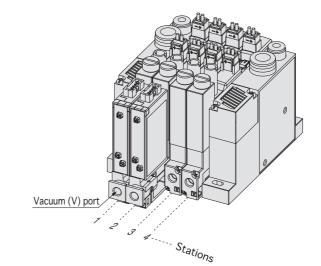
For details, refer to the **Web Catalogue**.

#### **Manifold Order Example**

25A-ZZQ104A-ROB ...... 1 pc.

- \* 25A-ZQ000MA-K15L-EAG-0  $\cdots$  2 pcs.  $\rightarrow$  Stations 1 and 2
- \* 25A-ZQ000MA-K15L-F-0 ······ 2 pcs. → Stations 3 and 4
  - \* When the manifold is viewed from the vacuum (V) port, the first station starts from the left.

 $25A\hbox{-}ZQ000MA\hbox{-}K15L\hbox{-}EAG\hbox{-}0$  (2 pcs.) and  $25A\hbox{-}ZQ000MA\hbox{-}K15L\hbox{-}F-0$  (2 pcs.) are arranged from the first station.

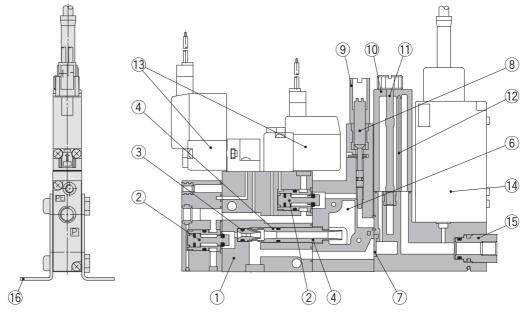


#### **↑** Caution when ordering manifold

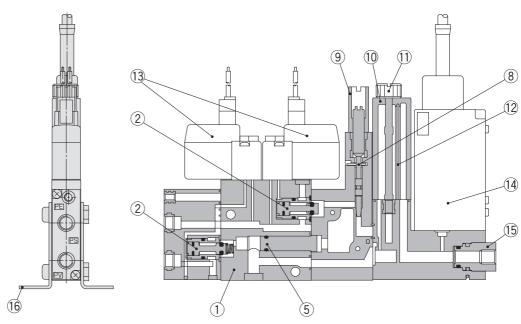
- The asterisk (\*) denotes the symbol for the assembly.
- Prefix it to the single unit part number.
- If "\*" is not entered, the manifold and single unit will be shipped without being assembled.
- When the manifold and the units are not assembled, please assemble them by referring to
- I "How to increase/decrease manifold stations" in the Web Catalogue.
- There is nothing else to arrange additionally.

#### Construction

Vacuum ejector (N.O. specification)



Vacuum pump system (N.C. specification)



**Component Parts** 

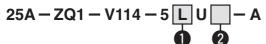
	iponent i arto		
No.	Description	Material	Note
1	Body	PBT	Aluminium alloy is also used.
2	Supply valve / Release valve assembly	POM/Aluminium alloy/Stainless steel	
3	Nozzle	PBT	
4	Diffuser	PBT	
5	Bushing	Aluminium alloy	
6	Sound absorbing material	Non-woven fabric (PET)	Refer to 3 on page 180-8 for how to order. (When replacing the sound absorbing material, order a silencer plate assembly.)
7	Check valve	HNBR	Refer to 6 on page 180-8 for how to order.
8	Vacuum release flow adjusting needle	Stainless steel	
9	Lock nut	Aluminium alloy (Anodized)	
10	Filter case	PC (Refer to the precautions in the <b>Web Catalog</b> .)	Refer to 4 on page 180-8 for how to order.
11	Tension bolt	Stainless steel	heler to 4 on page 160-6 for flow to order.
12	Filter element	PVA sponge	Refer to 5 on page 180-8 for how to order.
13	Pilot supply valve / Pilot valve (for release)	_	Refer to 1 on page 180-7 for how to order.
14	Vacuum pressure switch	<del>-</del>	Refer to 2 on page 180-7 for how to order.
15	Vacuum (V) port M5 bushing	Aluminium alloy (Anodized)	
16	Bracket assembly	Steel (Electroless nickel plating), Stainless steel	Refer to 7 on page 180-8 for how to order.
_	Seal material (O-ring, etc.)	NBR/HNBR	
_	Screws for assembly	Steel (Electroless nickel plating), Stainless steel	

#### **How to Order Replacement Parts for Single Unit**

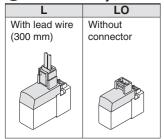
1 Solenoid Valve

(Recommended torque for replacement: 0.054 to 0.08 N·m)

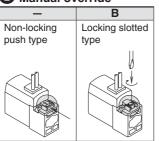




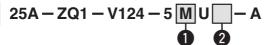
Electrical entry



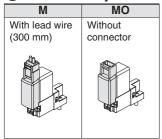
#### 2 Manual override



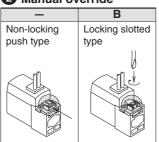
N.O. Pilot Supply Valves



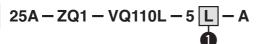
Electrical entry



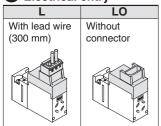




Latching Pilot Supply Valves



#### Electrical entry



#### Lead Wire with Connector Assembly for Solenoid Valve



SY100 - 30 - 4 A - 6





3000 mm

5000 mm

## Connector and Socket for Solenoid Valve



SY100 - 30 - A

 With connector and sockets only

30

50



AXT661 - 12A

(Number of sockets: 3)

(Number of sockets: 2)

2 Vacuum Pressure Switch (With Suction Filter)
(Recommended torque for replacement: 0.11 to 0.13 N·m)

25A - ZQ - ZS EA M G - 0 - A

1 2 3 4 5

#### Vacuum pressure switch

	•	
Symbol	Pressure range [kPa]	Output
EA		NPN 2 outputs
EB	0 to -100	PNP 2 outputs
EC	0 10 - 100	NPN 1 output + Analogue voltage
EE		PNP 1 output + Analogue voltage
FA		NPN 2 outputs
FB	-100 to 100	PNP 2 outputs
FC		NPN 1 output + Analogue voltage
FE		PNP 1 output + Analogue voltage
<b>VA</b> *1		NPN 1 output + Energy saving control
VB*1		PNP 1 output + Energy saving control

\*1 It is not possible to replace the vacuum pressure switch from the specification without energy saving function to the specification with energy saving function.

#### 2 Unit

_	With unit switching function
M	SI unit only (kPa)
<b>P</b> *2	With unit switching function (Initial value: psi)

\*2 Cannot be selected when 1 is "VA" or "VB"

#### **3** Lead wire

_	Without lead wire with connector	
G	Lead wire with connector (Length: 2 m) (Included)	
W	Lead wire for switch with energy saving function (Length: 2 m) (Included)	

#### 4 Check valve\*4

Olieck valve		
_	None	
<b>K</b> *5	With check valve	

- \*4 The check valve has a function to prevent the exhaust air from the exhaust unit overflowing to the vacuum port side when a manifold is used, but it cannot prevent overflow of the exhaust air completely. During usage, please inspect thoroughly with actual machine. Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to
- avoid interference from the ejector's exhaust unit.

  \*5 When "VA" or "VB" is specified for ①, the check valve is already built in.

#### **№** Warning

- 1. Cannot be used for vacuum retention
- 2. Use a release valve. Without a release valve, a workpiece may not be released.

#### Fitting (V port)

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

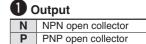
#### Lead Wire with Connector Assembly for Vacuum Pressure Switch

(When an individual lead wire is necessary, order with the part numbers below.)

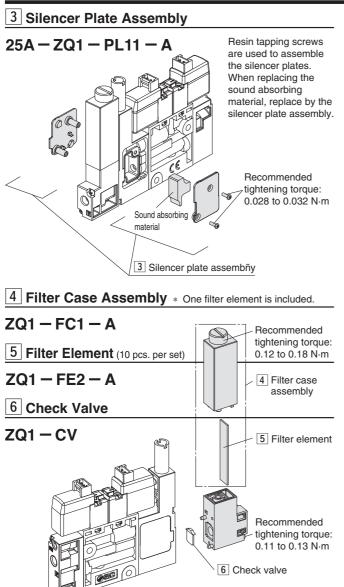
· Lead wire with connector for vacuum pressure switch

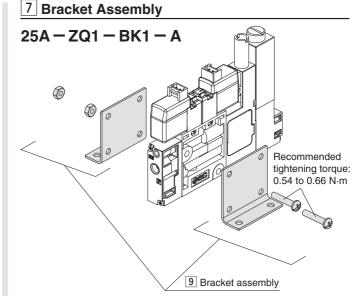
$$ZS - 39 - 5G$$

· Lead wire with connector for pressure switch with energy saving function

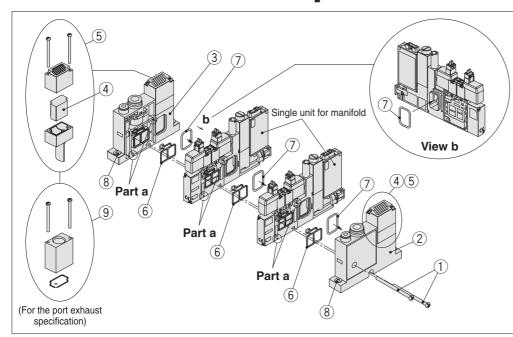


#### **How to Order Replacement Parts for Single Unit**





# Compact Vacuum Unit/25A-ZQ\(\subseteq\) A Series Manifold Exploded View



## How to increase/decrease manifold stations

#### Disassembly

- 1. Remove 2 clamp rods 1.
- 2. Remove end block L ②. (Be careful not to drop the gasket.)

#### **Assembly**

- Confirm that the body gasket for manifold (§) is attached to the gasket groove on each single unit and that the exhaust block gasket (⑦) is also attached to the outer side of the raised part. (See View b.)
- Confirm that the body gasket for manifold (6) is attached to the gasket groove on end block R (3).
- 4. Put together the single units for manifold, end block R ③, and end block L ② using the positioning pins (at two "a" locations), and assemble them using the clamp rods ①. Tightening torque: 0.54 to 0.66 N·m

**Component Parts** 

	iponone i di to		
No.	Description	Material	Note
1	Clamp rod assembly	Steel (Electroless nickel plating)	Refer to 1 below for how to order.
2	End block L	PBT, POM, PET, Steel, Aluminium alloy, Stainless steel	Left side with the vacuum (V) port facing the front
3	End block R	PBT, POM, PET, Steel, Aluminium alloy, Stainless steel	Right side with the vacuum (V) port facing the front
4	Sound absorbing material (For Manifold)	Non-woven fabric (PET)	Refer to 2 below for how to order.
5	Silencer block assembly	PBT	Refer to 3 below for how to order.
6	Body gasket for manifold	NBR	Refer to 4 below for how to order.
7	Exhaust block gasket	NBR	Refer to 5 below for how to order.
8	Washer assembly	Stainless steel	Refer to 6 below for how to order.
9	Port block assembly	Aluminium alloy, Steel (Electroless nickel plating), NBR	Refer to 7 below for how to order.

#### **How to Order Replacement Parts for Manifold**



1 Stations

Otationo			
01	01 For 1 station		
02	For 2 stations		
:	:		
NΩ	For 8 stations		

2 Sound Absorbing Material (For Manifold)

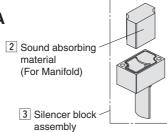
(2 pcs. per set)

ZQ1 - SE2 - A

Recommended / tightening torque: 0.25 to 0.31 N·m

Silencer Block Assembly (2 pcs. per set)

25A - ZQ1 - SC1 - A



4 Body Gasket for Manifold (10 pcs. per set)

$$ZQ - 3 - 005 - 10AS$$

5 Exhaust Block Gasket (10 pcs. per set)

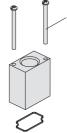
$$ZQ - 3 - 009 - 10AS$$

6 Washer Assembly (4 pcs. per set)



- For M3 (Without release pressure supply port)For M4 (With release pressure supply port)
- 7 Port Block Assembly
  (2 pcs. per set)

25A - ZQ1 - EP2 - A



Recommended tightening torque: 0.25 to 0.31 N·m

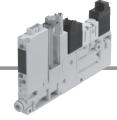




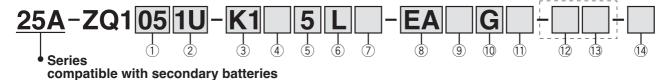


# **Space Saving Vacuum Ejector** 25A-ZQ Series

#### **How to Order**



#### **Ejector Unit**



#### 1) Nozzle nominal size

#### 2 Exhaust type

05	Ø 0.5
07	Ø 0.7
10	Ø 1.0

<b>1U</b>	With silencer for single unit
3M	With silencer for manifold

#### (3) Solenoid valve combination (Refer to Table (1).)

Symbol	Supply valve	Vacuum release valve
K1	Normally closed	Normally closed
K2*1	Normally open	Normally closed
J1	Normally closed	None
J2*1	Normally open	None
Q1	Latching positive common	Normally closed
Q2	Latching positive common	None
N1	Latching negative common	Normally closed
N2	Latching negative common	None

<sup>\*1</sup> In cases when "K2" or "J2" (supply valve normally open) is selected for the solenoid valve combination, when vacuum is stopped for long periods of time (10 minutes or more), do not continue to energize the supply valve, and shut off the air

#### 4 Pilot valve (Refer to Table (1).)

_	Standard (DC: 1 W)*2
Υ	DC low wattage type (0.5 W)*2

\*2 Avoid energizing the solenoid valve for long periods of time. (Refer to Design and Selection in the Specific Product Precautions.)

#### 5 Solenoid valve rated voltage (Refer to Table (1).)

		CE/UKCA-
		compliant
<b>1</b> *3	100 VAC (50/60 Hz)	_
<b>2</b> *3	200 VAC (50/60 Hz)	_
<b>3</b> *3	110 VAC (50/60 Hz)	_
<b>4</b> *3	220 VAC (50/60 Hz)	_
5	24 VDC	•
6	12 VDC	

<sup>\*3</sup> CE/UKCA-compliant products are not available for "1," "2," "3" and "4."

#### Table (1) Combination of Solenoid Valve, Pilot Valve and Power Supply Voltage

Combination	COMPINATION		Applicable power supply voltage [V]					
no.	symbol	symbol	100 AC	200 AC	110 AC	220 AC	24 DC	12 DC
1	K1	_	_	_	_	_	•	•
2	K1	Υ	_	_	_	_	•	•
3	K2	_	_	_	_	_		
4	J1	_			•			
5	J1	Υ	_					
6	J2	_	_					
7	Q1	_	_		_			
8	Q2	_						
9	N1	_	_					
10	N2	_	_	_	_	_	•	•

<sup>\*</sup> Combinations ① to ⑩ in the above table are the only possible options.

Auto Switches

#### 6 Electrical entry

_		
L	L-type plug connector, with 0.3 m lead wire, with light/surge voltage suppressor	
LO	L-type plug connector, without connector, with light/surge voltage suppressor	
G	Grommet, with 0.3 m lead wire (Latching/AC type: Not applicable)	8

#### Manual override\*4

_	Non-locking push type Latching type: Push-locking type
В	Locking type (Q1/Q2/N1/N2: Not applicable)

\*4 Latching type supply valve: Available in "--" only. In this case, the supply valve and release valve come with a push-locking type.

#### 8 Vacuum pressure switch suction filter\*5

EA	0 to -101 kPa/NPN open collector 2 outputs, with suction filter		
EB	0 to -101 kPa/PNP open collector 2 outputs, with suction filter		
EC	0 to -101 kPa/NPN open collector 1 output + analogue voltage, with suction filter		
EE	0 to -101 kPa/PNP open collector 1 output + analogue voltage, with suction filter		
FA	100 to -100 kPa/NPN open collector 2 outputs, with suction filter		
FB	100 to -100 kPa/PNP open collector 2 outputs, with suction filter		
FC	100 to -100 kPa/NPN open collector 1 output + analogue voltage, with suction filter		
FE	100 to −100 kPa/PNP open collector 1 output + analogue voltage, with suction filter		
F	Suction filter only		

\*5 The filter included in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please make additional use of an air suction filter of the ZFA, ZFB or ZFC series.

#### **△** Warning

The filter case of this suction filter is made of nylon. Contact with alcohol or similar chemicals may cause it to be damaged. Also, do not use the filter when these chemicals are present in the

#### 11) Check valve\*8

_	None
K	With check valve

\*8 The check valve has a function to prevent the exhaust air from the silencer overflowing to the vacuum port side when a manifold is used. However, depending on usage conditions, it does not always suppress air overflow to the desired extent. During usage, please inspect thoroughly with actual machine. Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to avoid interference from the ejector's exhaust unit.

#### △ Warning

- Cannot be used for vacuum retention.
- 2 Use a release valve. (Without a release valve, a workpiece may not be released.)

#### 12 Fitting (V port)

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

#### 13 Fitting (P port)

Symbol	Object spec	
-	Without port	Manifold
0	Without fitting (M5 x 0.8)	Single unit

#### 9 Vacuum pressure switch unit specifications

_	With unit switching function	
M	Fixed SI unit*6	
Р	With unit switching function (Initial value psi)	

\*6 Fixed unit: kPa

#### 10 Vacuum pressure switch lead wire specifications

<ul><li>Without conne</li></ul>		Without connector
Lead wire with co		Lead wire with connector
	G	(Lead wire length 2 m)
		With connector cover

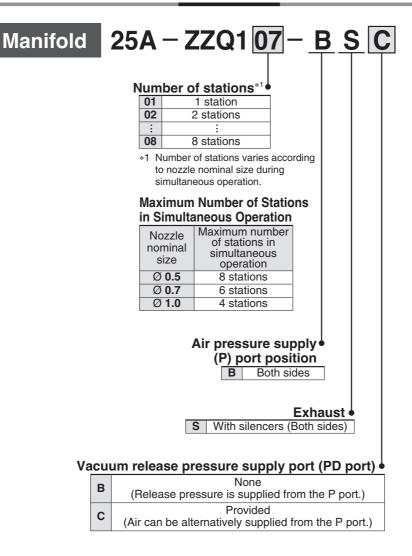
#### 14 CE/UKCA-compliant

_	_	
Q	CE/UKCA-compliant	
OF/UKOA		

CE/UKCA-compliant: For DC only.

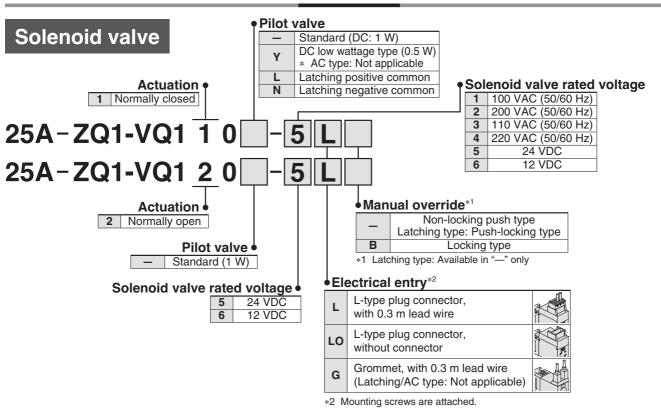
\* The 25A- series specifications and dimensions are the same as those of the standard model.

#### **How to Order**



\* The 25A- series specifications and dimensions are the same as those of the standard model.

#### **How to Order**



Vacuum pressure switch

25A-ZQ1-ZS

#### Vacuum pressure switch specifications

EA	0 to −101 kPa/NPN open collector 2 outputs, with suction filter		
EB	0 to -101 kPa/PNP open collector 2 outputs, with suction filter		
EC	0 to -101 kPa/NPN open collector 1 output + analogue voltage, with suction filter		
EE	0 to -101 kPa/PNP open collector 1 output + analogue voltage, with suction filter		
FA	100 to -100 kPa/NPN open collector 2 outputs, with suction filter		
FB	100 to -100 kPa/PNP open collector 2 outputs, with suction filter		
FC	100 to -100 kPa/NPN open collector 1 output + analogue voltage with suction filter		

FE 100 to -100 kPa/PNP open collector 1 output + analogue voltage, with suction filter

Vacuum pressure switch unit specifications

_	<ul> <li>With unit switching function</li> </ul>	
M	Fixed SI unit*1	
Р	With unit switching function (Initial value psi)	

\*1 Fixed unit: kPa

#### Vacuum pressure switch lead wire specifications

Without connector			
G	Lead wire with connector (lead wire length 2 m) With connector cover		

Symbol Applicable tubing O.D.

O Without fitting (M5 x 0.8)

Fitting (V port)

#### Check valve\*3

_	None	
K	With check valve	

\*3 The check valve has a function to prevent the exhaust air from the silencer overflowing to the vacuum port side when a manifold is used, but it is incapable of completely preventing overflow. During usage, please inspect thoroughly with actual machine.

Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to avoid interference from the ejector's

#### **△Warning**

- Cannot be used for vacuum retention.
- 2 Use a vacuum release valve. (Without a vacuum release valve, the workpiece may not be released.)

Lead wire with connector part no.	Note	
ZS-39-5G	Lead wire length 2 m (With connector cover)	

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers

Air Preparation Equipment

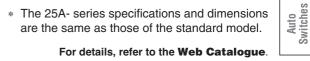
Clean Air Filters

Flow Control Equipment/ Fittings

Detection Switches

Process Gas Fluid Control Equipment Equipment Process Gas

Electric Actuators





## **Space Saving Vacuum Pump System**

# 25A-ZQ Series

#### **How to Order**

#### Vacuum pump unit

25A - ZQ1000 U - K1 5 L - EA G - T Series compatible with secondary batteries

#### 1 Body type

U	For single unit	
M	For manifold	

## ② Solenoid valve combination (Refer to Table (1).)

Symbol	Supply valve	Vacuum release valve	
K1 Normally closed		Normally closed	
K2*1	Normally open	Normally closed	
J1	Normally closed	None	
J2*1 Normally open		None	
Q1	Latching positive common	n Normally closed	
Q2	Q2 Latching positive common None		
N1	N1 Latching negative common Normally clos		
N2	Latching negative common	None None	

The air in the adsorption section of this product is not released to the atmosphere at the vacuum suspension state.

As for "K1," "K2," "Q1" and "N1," use the vacuum release valve when a workpiece is detached.

Concerning "J1," "J2," "Q2" and "N2," devise the circuit for the vacuum release additionally when a workpiece is detached.

\*1 In cases when "K2" or "J2" (supply valve normally open) is selected for the solenoid valve combination, when vacuum is stopped for long periods of time (10 minutes or more), do not continue to energize the supply valve, and shut off the air supply.

#### ③ Pilot valve (Refer to Table (1).)

_	Standard (DC: 1 W)*2	
Υ	DC low wattage type (0.5 W)*	

\*2 Avoid energizing the solenoid valve for long periods of time. (Refer to Specific Product Precautions; Caution on Design and Selection.)

## (4) Solenoid valve rated voltage (Refer to Table (1).)

		CE/UKCA-
		compliant
<b>1</b> *3	100 VAC (50/60 Hz)	_
<b>2</b> *3	200 VAC (50/60 Hz)	_
<b>3</b> *3	110 VAC (50/60 Hz)	_
<b>4</b> *3	220 VAC (50/60 Hz)	
5	24 VDC	
6	12 VDC	•

\*3 CE/UKCA-compliant products are not available for "1," "2," "3" and "4."

#### Table (1) Combination of Solenoid Valve, Pilot Valve and Rated Voltage

Combination	Solenoid valve combination symbol	Pilot valve symbol	Applicable power supply voltage [V]					
no.			100 AC	200 AC	110 AC	220 AC	24 DC	12 DC
1	K1	_	_	_	_	_		•
2	K1	Υ	_	_	_	_		
3	K2	_	_		_	_		
4	J1	_						
5	J1	Υ	_	_	_	_		
6	J2	_	_	_	_	_		
7	Q1	_	_	_	_	_		•
8	Q2	_						
9	N1	_	_	_	_	_		
10	N2	_	_	_	_	_		•

 $<sup>\</sup>ast$  Combinations 1 to 10 in the above table are the only possible options.

Auto Switches

### ⑤ Electrical entry

L	L-type plug connector, with 0.3 m lead wire, with light/surge voltage suppressor	
LO	L-type plug connector, without connector, with light/surge voltage suppressor	
G	Grommet, with 0.3 m lead wire (Latching/AC type: Not applicable)	8

### 6 Manual override\*4

	_	Non-locking push type
		Latching type: Push-locking type
	В	Locking type (Q1/Q2/N1/N2: Not applicable)

\*4 Latching type supply valve: Available in "-" only. In this case, the supply valve and release valve come with a push-locking type.

### 7 Vacuum pressure switch suction filter\*5

EA	0 to -101 kPa/NPN open collector 2 outputs, with suction filter	
EB	0 to -101 kPa/PNP open collector 2 outputs, with suction filter	
EC	0 to -101 kPa/NPN open collector 1 output + analogue voltage, with suction filter	
EE	0 to -101 kPa/PNP open collector 1 output + analogue voltage, with suction filter	
FA	100 to −100 kPa/NPN open collector 2 outputs, with suction filter	
FB	100 to −100 kPa/PNP open collector 2 outputs, with suction filter	
FC	100 to -100 kPa/NPN open collector 1 output + analogue voltage, with suction filter	
FE	100 to -100 kPa/PNP open collector 1 output + analogue voltage, with suction filter	
F	Suction filter only	

<sup>\*5</sup> The filter included in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please make additional use of an air suction filter of the ZFA, ZFB or ZFC series.

### **△Warning**

The filter case of this suction filter is made of nylon. Contact with alcohol or similar chemicals may cause it to be damaged. Also, do not use the filter when these chemicals are present in the

### **8 Vacuum pressure switch** unit specifications

_	With unit switching function
M	Fixed SI unit*6
Р	With unit switching function (Initial value psi)

\*6 Fixed unit: kPa

### 9 Vacuum pressure switch lead wire specifications

_	Without connector
	Lead wire with connector
G	(Lead wire length 2 m)
	With connector cover

### 10 Fitting (V port)\*8

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

### 11) Fitting (PS / PV port)\*8

Symbol	Applicable tubing O.D.	Part no.	Object spec.
_	Without port	_	Manifold
0	Without fitting (M5 x 0.8)	_	Single unit

### 12 CE/UKCA-compliant

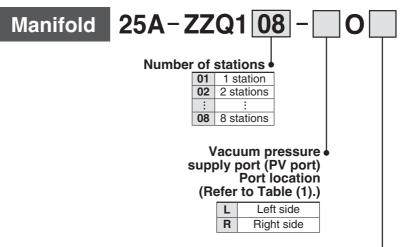
_	_
Q	CE/UKCA-compliant

\* CE/UKCA-compliant: For DC only.

\*8 For filter only (Without vacuum pressure switch) When neither V port fitting nor PS/PV port fitting are needed, enter nothing or -00 in the dotted line "How to Order".

> \* The 25A- series specifications and dimensions are the same as those of the standard model.

### **How to Order**



### Table (1) Air Pressure Supply Port Location on the Manifold

	DD nort	Manifold		Manifold Left		Right		
	r D port	Port location	PS	PV	PD	PS	PV	PD
ĺ	В	L (Left side)	_		_	*1	_	_
	ь	R (Right side)	*1	_	_	_		_
	С	L (Left side)	_			•	_	
		R (Right side)		_		_		

\*1 The position of each port is shown as right and left sides viewed from the front side of the vacuum port.

Release pressure is commonly supplied from the PS port.

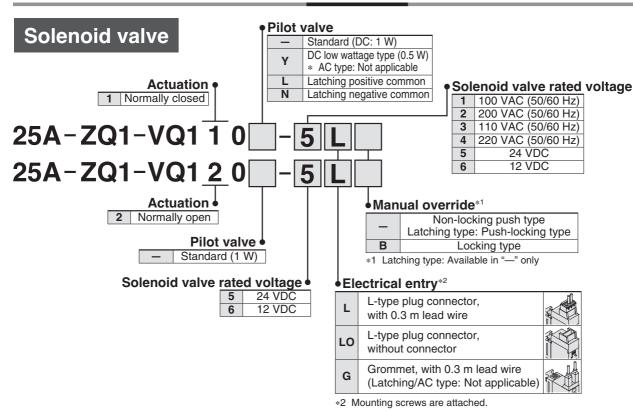
 PS: Pilot pressure supply port, PV: Vacuum pressure supply port, PD: Release pressure supply port

### Release pressure supply port (PD port)

B None (Release pressure is supplied from the PS port.)
 C Provided (Air can be alternatively supplied from the PS port.)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

### **How to Order**



Vacuum pressure switch

	vacuum pressure switch specifications
EA	0 to −101 kPa/NPN open collector 2 outputs, with suction filter
EB	0 to −101 kPa/PNP open collector 2 outputs, with suction filter
EC	0 to -101 kPa/NPN open collector 1 output + analogue voltage, with suction filter
EE	0 to -101 kPa/PNP open collector 1 output + analogue voltage, with suction filter
FA	100 to −100 kPa/NPN open collector 2 outputs, with suction filter
FB	100 to –100 kPa/PNP open collector 2 outputs, with suction filter
FC	100 to -100 kPa/NPN open collector 1 output + analogue voltage, with suction filter
FE	100 to -100 kPa/PNP open collector 1 output + analogue voltage, with suction filter

Vacuum pressure switch unit specifications

_	With unit switching function	
M Fixed SI unit*1		
Р	With unit switching function (Initial value psi)	

\*1 Fixed unit: kPa

### Vacuum pressure switch lead wire specifications

<ul> <li>Without connector</li> </ul>	
G	Lead wire with connector (Lead wire length 2 m) With connector cover

**多SMC** 

Fitting (V port)

	3 ( 1: - 7	
Symbol	Applicable tubing O.D.	
0	Without fitting (M5 x 0.8	)

### Check valve\*3 None With check valve

\*3 The check valve has a function to prevent the exhaust air from the silencer overflowing to the vacuum port side when a manifold is used, but it is incapable of completely preventing overflow. During usage, please inspect thoroughly with actual machine.

Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to avoid interference from the ejector's exhaust unit.

### **\_**Marning

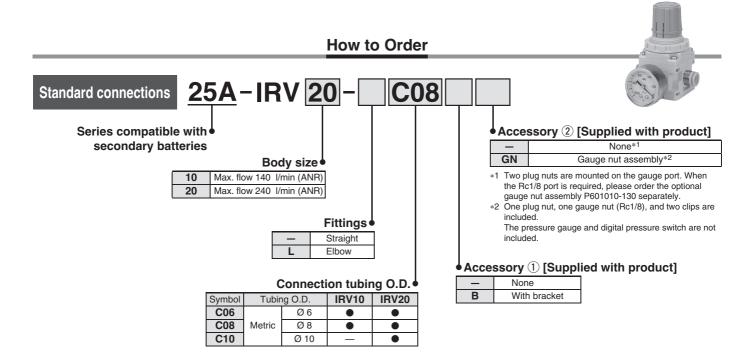
- $\ensuremath{\bigcirc}$  Cannot be used for vacuum retention.
- ② Use a vacuum release valve. (Without a vacuum release valve, the workpiece may not be released.)

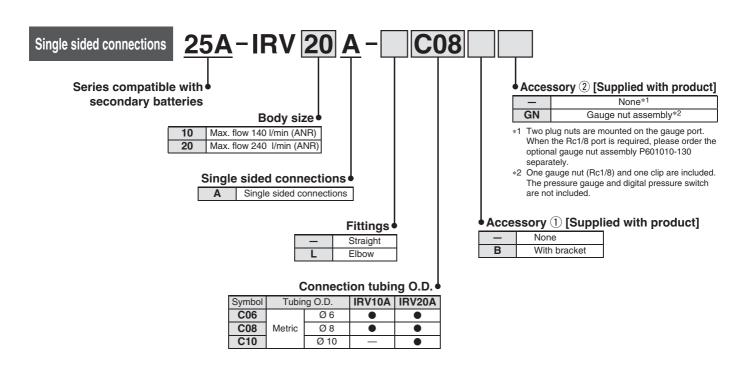
connector part no.	Note	
ZS-39-5G Lead (With	wire length 2 m connector cover)	

\* The 25A- series specifications and dimensions are the same as those of the standard model.

Air Cylinders Control Valves

# Vacuum Regulator 25A-IRV10/20 Series





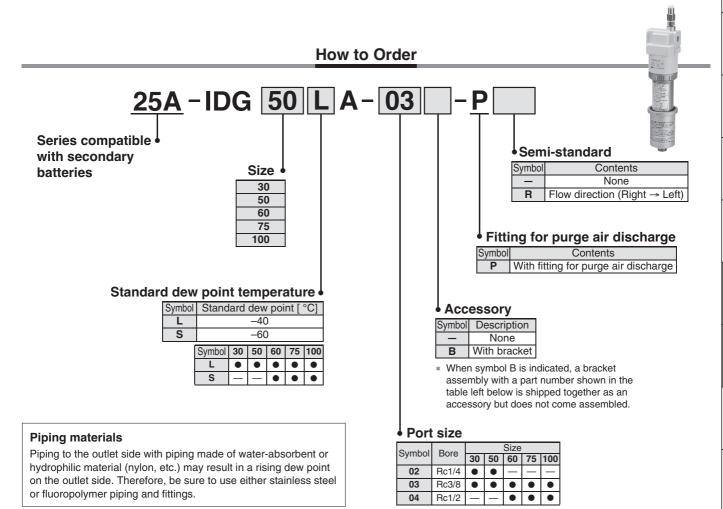
- \* This product cannot be used in environments containing chemical agents such as hydrofluoric acid, etc.
- \* The 25A- series specifications and dimensions are the same as those of the standard model.



### **Membrane Air Dryer**

# **25A-IDG Series**Single Unit/Standard Dew Point –40 °C/–60 °C Specifications

**RoHS** 



Bracket Assembly (Accessory) Part Nos.

Part no.	Applicable model
25A-BM64	25A-IDG30LA, 50LA
25A-BM65	25A-IDG60LA, 75LA, 100LA

\* The assembly consists of a bracket and 2 mounting screws.

\* Some parts have dimensions that are different from those of the standard model. Refer to page 191 for details. Other specifications are the same as those of the standard model.

For details, refer to the Web Catalogue.

Air Cylinders Control Valve

Related Products

Rotary Actuators

Equipment Air Grippers

Modular F.R.L./ Pressure Control Equipment

Flow Control Equipment/ Fittings

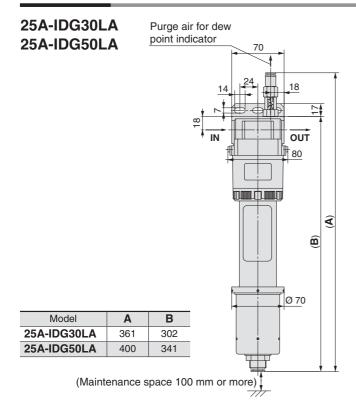
Detection Switches

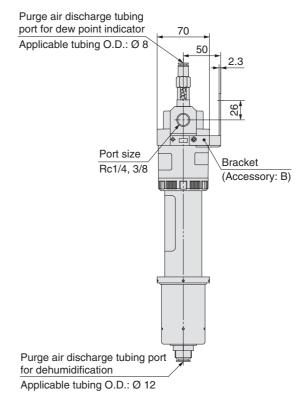
Process Gas Fluid Control Equipment Equipment

Electric Actuators

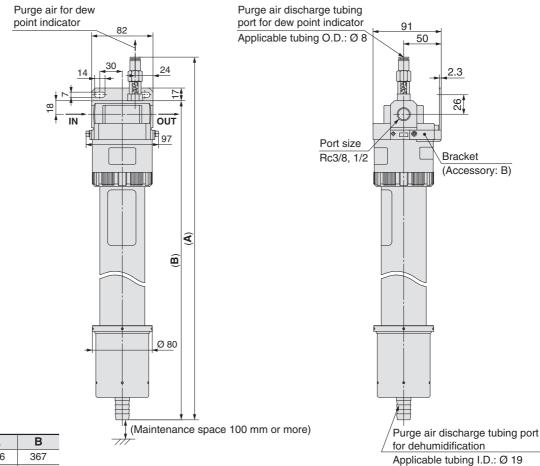
### 25A-IDG Series

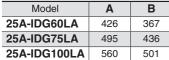
### **Dimensions**





25A-IDG60LA 25A-IDG75LA 25A-IDG100LA







### **Main Line Filter** 25A-AFF Series RoHS

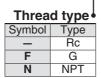


### 25A-AFF2C to 25A-AFF22C

25A - AFF 22C

Series compatible with secondary batteries

### Body size 4C 8C 11C 22C



#### Option Symbol Description J\*4,\*5 Drain guide 1/4 female threaded IN-OUT reversal direction With element service indicator

\*5 Drain piping and piping for a stop valve such as ball valve are required.

### Auto drain\*4

Symbol	Description
_	Drain cock (Without auto drain)
С	N.C. auto drain
D	N.O. auto drain

\*4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

### Bracket Assembly Part Nos.\*3

Applicable model	Part no.
25A-AFF2C	25A-AM-BM101
25A-AFF4C	25A-AM-BM102
25A-AFF8C	25A-AM-BM103
25A-AFF11C	25A-AM-BM104
25A-AFF22C	25A-AM-BM105

\*3 The assembly consists of a bracket and 2 mounting screws.

#### Port size

Cymbol	Size	Applicable body size				
Syllibol		2C	4C	8C	11C	22C
01	1/8		_	_	_	_
02	1/4					_
03	3/8	_			_	_
04	1/2	_	_			-
06	3/4	_	_	_		
10	1	_	_		_	

#### Accessory

Symbol	Description
_	_
В	Bracket *2

\*2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled

Description

IN-OUT reversal direction

With element service indicator

J\*4,\*5 Drain guide 1/4 female threaded (37B only)

\*5 Drain piping and piping for a stop valve such as ball

### 25A-AFF37B/75B

25A - AFF 37B Series compatible Option Symbol

with secondary batteries Size 37B 75B

Thread type			
Symbol	Type		
_	Rc		
F	G		
N	NPT		

### Port size

Symbol	Sizo		Applicable body size
Symbol	Size	37B	75B
10	1	•	_
14	11/2	•	•
20	2	_	•

### **Bracket Assembly Part Nos.\*3**

Applicable model	Part no.
25A-AFF37B	25A-BM56
25A-AFF75B	25A-BM57

\*3 The assembly consists of a bracket and 2 mounting screws.

#### **Accessory**

Symbol	Description
_	_
В	Bracket *1

\*1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

### ♣ Auto drain\*4

Symbol			
<ul> <li>Drain cock (Without auto drain)</li> </ul>			
D	N.O. auto drain (37B only)		

valve are required.

- \*2 Body size 75B is equipped with a ball valve (Rc 3/8 female threaded).
- \*4 Body size 37B: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.
  - \* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Related Products Rotary Actuators

Directional Control Valves

Air Cylinders

Air Grippers

Equipment Vacuum

Clean Air Filters

Modular F.R.L./ Pressure Control Equipment

Flow Control Equipment/ Fittings

Detection Switches

Fluid Control Equipment

Equipment **Process Gas** 

Electric Actuators

Auto Switches

192

### **Mist Separator**



Applicable body size

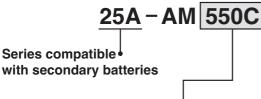
150C 250C 350C 450C 550C



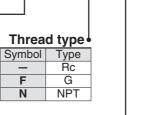


### **How to Order**

### 25A-AM150C to 25A-AM550C



### Body size 150C 250C 350C 450C 550C



Port size

Symbol Size

1/8

1/4

3/8

1/2

3/4

1

01

02

03

04

06

10

#### Option Symbol Description J\*4,\*5 Drain guide 1/4 female threaded IN-OUT reversal direction With element service indicator

\*5 Drain piping and piping for a stop valve such as ball valve are required.

### Auto drain\*<sup>4</sup>

Symbol	Description	
_	Drain cock (Without auto drain)	
С	N.C. auto drain	
D	N.O. auto drain	

\*4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

### Bracket Assembly Part Nos.\*3

	•
Applicable model	Part no.
25A-AM150C	25A-AM-BM101
25A-AM250C	25A-AM-BM102
25A-AM350C	25A-AM-BM103
25A-AM450C	25A-AM-BM104
25A-AM550C	25A-AM-BM105

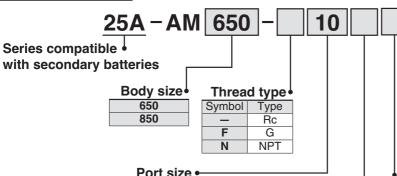
<sup>\*3</sup> The assembly consists of a bracket and 2 mounting screws.

### Accessory

Symbol	Description
_	_
В	Bracket *2

\*2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

### 25A-AM650/850



			1 011 0120
Cymbol	Sizo	Applicable body size	
Symbol S	Size	650	850
10	1	•	_
14	11/2	•	•
20	2	_	•

### **Bracket Assembly Part Nos.\*3**

Applicable model	Part no.
25A-AM650	25A-BM56
25A-AM850	25A-BM57

\*3 The assembly consists of a bracket and 2 mounting screws.

Accessory 4

Symbol	Description
_	_
В	Bracket *1

\*1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

### Option

Symbol	Description
_	_
<b>J</b> *4,*5	Drain guide 1/4 female threaded (650 only)
R	IN-OUT reversal direction
Т	With element service indicator

\*5 Drain piping and piping for a stop valve such as ball valve are required.

#### Auto drain\*⁴

Symbol		
_	Drain cock (Without auto drain) *2	
D	N.O. auto drain (650 only)	

- \*2 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded).
- \*4 Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.
  - \* The 25A- series specifications and dimensions are the same as those of the standard model.

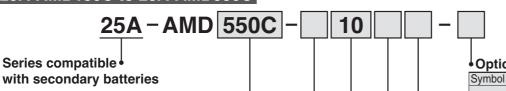


### Micro Mist Separator 25A-AMD Series





### 25A-AMD150C to 25A-AMD550C



### Rody cizo

Dody Size
150C
250C
350C
450C
550C

Thread type

Symbol	Туре
_	Rc
F	G
N	NPT

Size

1/8

1/4

3/8

1/2

3/4

Port size

Symbol

01

02

03

04

06

### Option

Symbol	Description
_	
<b>J</b> *4,*5	Drain guide 1/4 female threaded
R	IN-OUT reversal direction
Т	With element service indicator

\*5 Drain piping and piping for a stop valve such as ball valve are required.

### Auto drain\*4

Description
Drain cock (Without auto drain)
N.C. auto drain
N.O. auto drain

\*4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

### Bracket Assembly Part Nos.\*3

Applicable model	Part no.
25A-AMD150C	25A-AM-BM101
25A-AMD250C	25A-AM-BM102
25A-AMD350C	25A-AM-BM103
25A-AMD450C	25A-AM-BM104
25A-AMD550C	25A-AM-BM105

\*3 The assembly consists of a bracket and 2 mounting screws.

Applicable body size

150C 250C 350C 450C 550C

<ul> <li>Accessory</li> </ul>							
Symbol	Description						
_	_						
В	Bracket *2						

\*2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

### 25A-AMD650/850

25A - AMD | 650 Series compatible with secondary batteries Thread type Symbol Type Body size Rc

N

G

NPT

Symbol

В

Port size Applic 650

cable body size					
)	850				
	_				
	•				

650

850

### Bracket Assembly Part Nos.\*3

Symbol

10

14

20

Size

11/2

2

	,
Applicable model	Part no.
25A-AMD650	25A-BM56
25A-AMD850	25A-BM57

\*3 The assembly consists of a bracket and 2 mounting screws.

### Accessory Description

Bracket\*

\*1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

### Option

	Symbol	Description			
	_	_			
	<b>J</b> *4,*5	Drain guide 1/4 female threaded (650 only)			
R IN-OUT reversal direction					
	Т	With element service indicator			

\*5 Drain piping and piping for a stop valve such as ball valve are required.

#### Auto drain\*⁴

Symbol Description				
_	Drain cock (Without auto drain) *2			
D N.O. auto drain (650 only)				

- \*2 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded).
- \*4 Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.

Directional Control Valves Air Cylinders

Related Products

Rotary Actuators

Air Grippers Equipment

Vacuum

Clean Air Filters

Modular F.R.L./ Pressure Control Equipment Flow Control Equipment/ Fittings

Detection Switches

Fluid Control Equipment

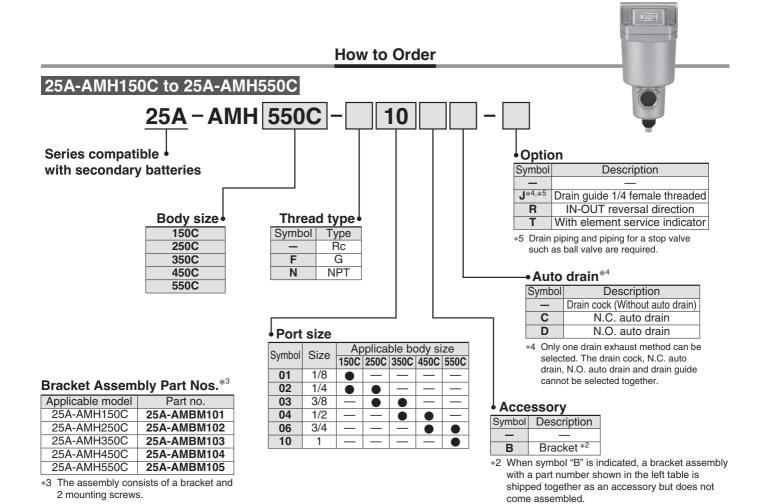
**Process Gas** Equipment

Electric Actuators

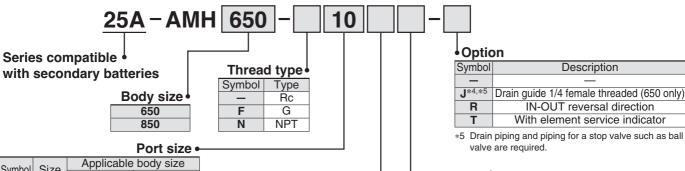
### 







### 25A-AMH650/850



Symbol	Sizo	Applicable body size			
Symbol	Size	650	850		
10	1	•	_		
14	11/2	•	•		
20	2	_	•		

### Bracket Assembly Part Nos.\*3

Applicable model	Part no.
25A-AMH650	25A-BM56
25A-AMH850	25A-BM57

\*3 The assembly consists of a bracket and 2 mounting screws.

#### Accessory 4 Description Symbol В Bracket \*1 When symbol "B" is

indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

### Auto drain\*4

Symbol Description					
<ul> <li>Drain cock (Without auto drain) **</li> </ul>					
D	N.O. auto drain (650 only)				

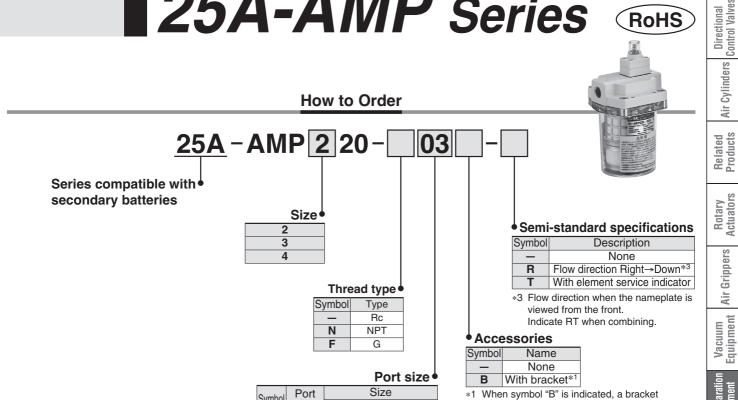
- \*2 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded).
- Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue. 195

## **Exhaust Cleaner for Clean Room**

25A-AMP Series





Symbol

02

03

04

size

1/4

3/8

1/2

3/4

2

3

•

4

Bracket Assembly Part Nos.\*2

Applicable model	Part no.					
25A-AMP220	25A-BM66					
25A-AMP320	25A-BM67					
25A-AMP420	25A-BM68					

\*2 The assembly consists of a bracket and 2 mounting screws

\* The 25A- series specifications and dimensions are the same as those of the standard model.

assembly with a part number shown in

the left table is shipped together as an

accessory but does not come assembled.

For details, refer to the Web Catalogue.

Process Gas Fluid Control Equipment Equipment

Modular F.R.L./ Pressure Control Equipment

Flow Control Equipment/ Fittings

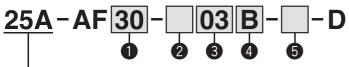
Detection Switches

Electric Actuators

# Air Filter 25A-AF20-D to 25A-AF60-D



### **How to Order**



Series compatible with secondary batteries

- $\bullet$  Semi-standard: Select one each for  ${\bf a}$  and  ${\bf b}.$
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
   Example) 25A-AF30-N03B-RZ-D

S						0		
		Symbol	Description	Body size				
				20	30	40	50	60
		_	Rc		•	•	•	•
2	Pipe thread type	N	NPT	•	•	•	•	•
		F	G	•	•	•	•	•
		+			•	•	•	
		01	1/8	•	_	_	_	_
	Port size	02	1/4	•	•	•	_	_
3		03	3/8	_	•	•	_	_
9		04	1/2	_	_	•	_	_
		06	3/4	_	_	•	•	_
		10	1	_	_	_	•	
		+						
4	Mounting	_	Without mounting option					•
4	B*1		With bracket					•
		+						
	a Flow direction	_	Flow direction: Left to right					
		R	Flow direction: Right to left	•				•
<b>5</b>	sta	+						
	a Flow direction  b Unit	_	Unit on product label: MPa, °C					
	S S	<b>Z</b> *2	Unit on product label: psi, °F	O*2	O*2	O*2	O*2	O*2

<sup>\*1</sup> Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of brackets and 2 mounting screws.

#### Bracket, Bowl Assembly Part Nos. for the 25A- Series

Option	Model						
Ориоп	25A-AF20-D	25A-AF30-D	25A-AF40-D	25A-AF40-06-D	25A-AF50-D	25A-AF60-D	
Bracket assembly*1	25A-AF24P-070AS	25A-AF34P-070AS	25A-AF44P-070AS	25A-AF49P-070AS	25A-AF54P-070AS		
Bowl assembly	25A-C2SF-D	25A-C3SF-D	F-D 25A-C4SF-D				

<sup>\*1</sup> The assembly consists of an A and B bracket and 2 mounting screws.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

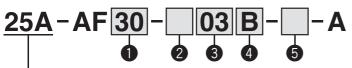


<sup>\*2 :</sup> For pipe thread type: NPT.

## **Air Filter** 25A-AF20-A to 25A-AF60-A



### **How to Order**



Series compatible with secondary batteries

- Semi-standard: Select one each for a and b.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order. Example) 25A-AF30-N03B-RZ-A

						0			
			Symbol	Description			Body size	Э	
						30	40	50	60
			_	Rc					
2	Р	ipe thread type	N	NPT	•	•	•	•	
		. ,,	F	G	•	•	•	•	•
			+			•		•	
			01	1/8		_	_	_	_
		Port size	02	1/4	•			_	_
3			03	3/8	_	•	•	_	_
9			04	1/2	_	_		_	_
				3/4	_	_		•	_
			10	1	_	_	_	•	•
			+						
4	ion	Mounting	_	Without mounting option				•	•
•	Option	Mounting	B*1	With bracket					
			+						
	ard	a Flow direction	_	Flow direction: Left to right					
_	nd	a I low direction	R	Flow direction: Right to left					
6	Semi-standard		+						
	i.	<b>b</b> Pressure unit	_	Name plate and caution plate for bowl in SI units: MPa		•	•		
	Se	i lessure unit	<b>Z</b> *2	Name plate and caution plate for bowl in imperial units: psi, °F	O*2	O*2	O*2	O*2	○*2

<sup>\*1</sup> A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.

### Bracket, Bowl Assembly Part Nos. for the 25A- Series

Option	25A-AF20-A	25A-AF30-A	25A-AF40-A	25A-AF40-06-A	25A-AF50-A 25A-AF60-A
Bracket assembly*1	25A-AF22P-050AS	25A-AF32P-050AS	25A-AF42P-050AS	25A-AF42P-070AS	25A-AF52P-050AS
Bowl assembly	25A-C2SF-A	25A-C3SF-A		25A-C4SF-A	

<sup>\*1</sup> The assembly consists of a bracket and 2 mounting screws.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves

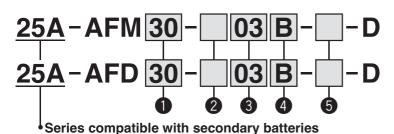
<sup>\*2</sup> O: For pipe thread type: NPT.

# Mist Separator 25A-AFM20-D to 25A-AFM40-06-D Micro Mist Separator 25A-AFD20-D to 25A-AFD40-06-D

- 25A-AFM Series Nominal filtration rating: 0.3 μm
- 25A-AFD Series Nominal filtration rating: 0.01 μm

### **How to Order**





- Semi-standard: Select one each for a and b.
  Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
  Example) 25A-AFM30-N03B-RZ-D
- 0 Description Symbo Body size 20 30 40 Rc 2 Pipe thread type N NPT F G 1/8 01 02 1/4 3 Port size 03 3/8 04 1/2 06 3/4 Without mounting option Mounting **B**\*1 With bracket Flow direction: Left to right Flow direction -standar Flow direction: Right to left R 6 Unit on product label: MPa, Semi Unit b Unit on product label: psi, °F

### Bracket, Bowl Assembly Part Nos. for the 25A- Series

	Model							
Option	25A-AFM20-D	25A-AFM30-D	25A-AFM40-D	25A-AFM40-06-D				
	25A-AFD20-D	25A-AFD30-D	25A-AFD40-D	25A-AFD40-06-D				
Bracket assembly*1	25A-AF24P-070AS	25A-AF34P-070AS	25A-AF44P-070AS	25A-AF49P-070AS				
Bowl assembly	25A-C2SF-D	25A-C3SF-D	25A-C4SF-D					

 $<sup>\</sup>ast 1$  The assembly consists of an A and B bracket and 2 mounting screws.

\* The 25A- series specifications and dimensions are the same as those of the standard model.



<sup>\*1</sup> Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of brackets and 2 mounting screws.

<sup>\*2 ○:</sup> For pipe thread type: NPT.

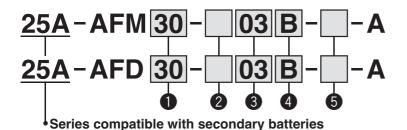
### **Mist Separator**

### 25A-AFM20-A to 25A-AFM40-A **Micro Mist Separator**

### 25A-AFD20-A to 25A-AFD40-A

- 25A-AFM Series Nominal filtration rating: 0.3 μm
- 25A-AFD Series Nominal filtration rating: 0.01 μm

### **How to Order**



· Semi-standard: Select one each for a and b. • Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order. Example) 25A-AFM30-N03B-RZ-A

		0 1 1	· · ·		0	
		Symbol	Description		Body size	
				20	30	40
		_	Rc	•	•	•
2	Pipe thread type	N	NPT	•	•	•
		F	G	•	•	•
		+				•
		01	1/8	•	_	_
		02	1/4	•	•	•
3	Port size	03	3/8	_	•	•
		04	1/2	_	_	•
		06	3/4	_	_	•
		+			•	•
	io Mounting	_	Without mounting option	•	•	•
4	Mounting Mounting	<b>B</b> *1	With bracket	•	•	•
		+			•	•
	D Flow direction	_	Flow direction: Left to right	•	•	•
	हि   a   Flow direction	R	Flow direction: Right to left	•	•	•
6	a Flow direction  b Pressure unit	+	-		•	•
	E Drossurs unit	_	Name plate and caution plate for bowl in SI units: MPa	•	•	•
	b Pressure unit	<b>Z</b> *2	Name plate and caution plate for bowl in imperial units: psi, °F	O*2	O*2	O*2

<sup>\*1</sup> A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.

### Bracket, Bowl Assembly Part Nos. for the 25A- Series

Option	25A-AFM20-A 25A-AFD20-A	25A-AFM30-A 25A-AFD30-A	25A-AFM40-A 25A-AFD40-A	25A-AFM40-06-A 25A-AFD40-06-A
Bracket assembly*1	25A-AF22P-050AS	25A-AF32P-050AS	25A-AF42P-050AS	25A-AF42P-070AS
Bowl assembly	25A-C2SF-A	25A-C3SF-A	25A-C	4SF-A

<sup>\*1</sup> The assembly consists of a bracket and 2 mounting screws.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers Vacuum Equipment

Air Preparation Equipment

Flow Control Equipment/ Fittings

Detection Switches

Fluid Control Equipment

Process Gas | Equipment

Electric Actuators

<sup>\*2 ○:</sup> For pipe thread type: NPT.

### Regulator

### 25A-AR20-D to 25A-AR60-D

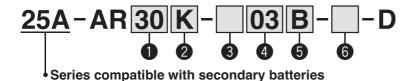
**Regulator with Backflow Function** 

### 25A-AR20K-D to 25A-AR60K-D



 $\bigcirc *5$ 

### **How to Order**



- Semi-standard: Select one each for a to e.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
   Example) 25A-AR30K-03B-1NR-D
- 0 Symbol Description Body size 20 30 40 50 60 With backflow Without backflow function 2 **K**\*1 function With backflow function + Rc N NPT (3) Pipe thread type F G 01 1/8 1/4 02 3/8 03 4 Port size 04 1/2 06 3/4 10 1 + Without mounting option Mounting **B**\*3 With bracket With set nut (For panel fitting) Н 0.05 to 0.85 MPa setting а Set pressure 0.02 to 0.2 MPa setting + Relieving type Exhaust mechanism N Non-relieving type Semi-standard Flow direction: Left to right Flow direction R Flow direction: Right to left + Downward d Knob Upward Unit on product label: MPa, Pressure gauge in SI units: MPa е Unit
- \*1 Set the inlet pressure to at least 0.05 MPa higher than the set pressure.
- \*2 Options B and H are not assembled and supplied loose at the time of shipment.
- \*3 The assembly consists of a bracket and set nuts.
- \*4 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.

Unit on product label: psi, Pressure gauge: MPa/psi dual scale

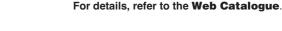
\*5 O: For pipe thread type: NPT.

### Bracket, Set Nut Part Nos. for the 25A- Series

Option		Model							
Option	25A-AR20(K)-D	25A-AR30(K)-D	25A-AR40(K)-D	25A-AR40(K)-06-D	25A-AR50(K)-D	25A-AR60(K)-D			
Bracket assembly*1	25A-AR23P-270AS	25A-AR33P-270AS	25A-AR4	3P-270AS	25A-AR54	P-270AS			
Set nut	AR23P-260S	AR33P-260S	AR43F	P-260S	_	*2			

**多SMC** 

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.



<sup>\*1</sup> The assembly consists of a bracket and set nuts. For the 25A-AR50(K)-D and 25A-AR60(K)-D, the assembly consists of an A and B bracket and 2 mounting screws.

<sup>\*2</sup> Please contact SMC regarding the set nuts for the 25A-AR50(K)-D and 25A-AR60(K)-D.

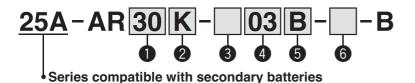
### 25A-AR20-B to 25A-AR60-B

**Regulator with Backflow Function** 

### 25A-AR20K-B to 25A-AR60K-B



### **How to Order**



- Semi-standard: Select one each for a to e.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order. Example) 25A-AR30K-03B-1NR-B

	_	_									
				Symbol	Description				/ size	,	
						20	25	30	40	50	60
2			h backflow	_	Without backflow function		•				
9			function	K	With backflow function						
				+							
					Rc			•	•		
3	ŀ	Pipe	thread type	N	NPT		•		•		
				F	G						
				+	4/0				1		
				01 02	1/8 1/4			_	_		
				02	3/8		•	•	•		_
4		F	Port size	03	3/8 1/2	$\vdash$			•	$\vdash =$	
				06	3/4		+=			•	
				10	1	-	$+ \equiv -$				
				+	·		1				
	*1			<u> </u>	Without mounting option						
6	ion	Mounting	<b>B</b> *2	With bracket							
	Option *			Н	With set nut (For panel fitting)					_	
				+	, , , , , , , , , , , , , , , , , , ,					1	
		_	0-4	_	0.05 to 0.85 MPa setting						
		а	Set pressure	1*3	0.02 to 0.2 MPa setting						
				+					•		
		b	Exhaust	_	Relieving type						
	5	D	mechanism	N	Non-relieving type				•		
	da			+		. \					
6	an		Flow direction	_	Flow direction: Left to right						
<b>U</b>	i-st	ر ا ر	riow direction	R	Flow direction: Right to left						
	Semi-standard			+							
	Š	d	Knob	_	Downward		•			•	
		a	KIIOD	Υ	Upward						
				+							
		6	Pressure unit		Name plate in SI units: MPa		•				
		е	1 1633ule ullit	<b>Z</b> *4	Name plate in imperial units: psi	O*4	O*4	O*4	O*4	O*4	O*4

- \*1 Options B and H are not assembled and supplied loose at the time of shipment.
- \*2 The assembly consists of a bracket and set nuts (25A-AR20(K) to 25A-AR40(K)). Including 2 mounting screws for the 25A-AR50(K) and 25A-AR60(K).
- \*3 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
- \*4 O: For pipe thread type: NPT.

### Bracket, Set Nut Part Nos. for the 25A- Series

Option	25A-AR20(K)-B	25A-AR25(K)-B	25A-AR30(K)-B	25A-AR40(K)-B	25A-AR50(K)-B 25A-AR60(K)-B
Bracket assembly*1	25A-AR23P-270AS	25A-AR28P-270AS	25A-AR33P-270AS	25A-AR43P-270AS	25A-AR52P-270AS*2
Set nut	AR23P-260S	AR28P-260S	AR33P-260S	AR43P-260S	*3

- \*1 The assembly consists of a bracket and set nuts.
- \*2 The assembly consists of a bracket and 2 mounting screws.
- \*3 Please contact SMC regarding the set nuts for the 25A-AR50(K) and 25A-AR60(K).
  - \* The 25A- series specifications and dimensions are the same as those of the standard model.

Related Products

Rotary Actuators

Air Grippers Vacuum Equipment

Air Preparation

Detection Switches

Fluid Control Equipment

Process Gas Equipment

Actuators

### Filter Regulator

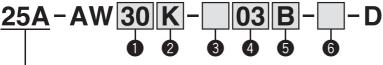
### 25A-AW20-D to 25A-AW60-D

**Filter Regulator with Backflow Function** 

### 25A-AW20K-D to 25A-AW60K-D



### How to Order



Series compatible with secondary batteries

- $\bullet$  Semi-standard: Select one each for  $\boldsymbol{a}$  to  $\boldsymbol{d}.$
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
- Example) 25A-AW30K-03B-1N-D

	_	_							
				Symbol	Description			size	
						20	30	40	60
	14/34	th h	ackflow function	_	Without backflow function	•	•	•	•
2	VVII	III Da	acknow function	<b>K</b> *1	With backflow function	•	•	•	•
				+					
				_	Rc	•	•	•	•
3	<b>3</b> P		thread type	N	NPT	•	•	•	
				F	G	•		•	
				+					
				01	1/8	•	_	_	_
		Port size		02	1/4			•	_
4				03	3/8	_		•	_
•				04	1/2	_	_	•	_
				06	3/4	_	_	•	
				10	1	_	_	1	
				+			,		
	*2	Mounting			Without mounting option	•	•	•	•
6	[[윤]			<b>B</b> *3	With bracket	•	•	•	
	ŏ			Н	With set nut (For panel fitting)	•			_
				+	1			_	
		а	Set pressure		0.05 to 0.85 MPa setting	•	•	•	•
			Cot procedure	1*4	0.02 to 0.2 MPa setting	•			•
				+	1				
	arc	b	Exhaust	_	Relieving type	•	•	•	•
	-standard		mechanism	N	Non-relieving type	•			
6	-ste			+					_
	Semi	С	Flow direction	_	Flow direction: Left to right	•	•		•
	Se			R	Flow direction: Right to left	•			
			1	+					
		d	Unit		Unit on product label: MPa, °C, Pressure gauge in SI units: MPa	O+5	O #5	0.15	O #5
		Ļ		<b>Z</b> *5	Unit on product label: psi, °F, Pressure gauge: MPa/psi dual scale	○*5	○*5	○*5	○*5

- \*1 Set the inlet pressure to at least 0.05 MPa higher than the set pressure
- \*2 Options B and H are not assembled and supplied loose at the time of shipment.
- \*3 The assembly consists of a bracket and set nuts
- \*4 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
- \*5  $\bigcirc$ : For pipe thread type: NPT.

### Bracket, Set Nut. Bowl Assembly Part Nos. for the 25A- Series

Bracket, Cot Hat, Bo	Wi Moodinbiy i air	11001 101 1110 2071	001100					
Option	Model							
Орион	25A-AW20(K)-D	25A-AW30(K)-D	25A-AW40(K)-D	25A-AW40(K)-06-D	25A-AW60(K)-D			
Bracket assembly*1	25A-AW23P-270AS	25A-AR33P-270AS	25A-AR4	25A-AR43P-270AS				
Set nut	AR23P-260S	AR33P-260S	AR43F	AR43P-260S				
Bowl assembly	25A-C2SF-D	25A-C3SF-D		25A-C4SF-D				



<sup>\*1</sup> The assembly consists of a bracket and set nuts.
\*2 For the 25A-AW60(K)-D, the assembly consists of an A and B bracket and 2 mounting screws. Please contact SMC regarding the set nuts for the 25A-AW60(K)-D.

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

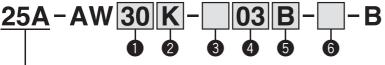
### 25A-AW20-B to 25A-AW60-B

Filter Regulator with Backflow Function

### 25A-AW20K-B to 25A-AW60K-B



### **How to Order**



Series compatible with secondary batteries

- Semi-standard: Select one each for a to d.
- · Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

Example) 25A-AW30K-03B-1N-B

	\	_						D	
				Symbol	Description		Body	/ size	
						20	30	40	60
2	\	h ha	ackflow function	_	Without backflow function	•	•	•	•
4	VVII	אלוו וו	acknow function	K	With backflow function		•	•	•
				+					
				_	Rc		•	•	•
3	F	Pipe	thread type	N	NPT	•	•	•	•
	, ,,		F	G		•	•	•	
				+					
				01	1/8		_	_	
		Port size		02	1/4		•		_
4				03	3/8	_	•		_
4				04	1/2	_	_		_
				06	3/4	_	_		
				10	1	_	_	_	
				+			_	_	
	*1	Mounting			Without mounting option		•	•	•
5	Option			<b>B</b> *2	With bracket		•	•	•
	Ŏ			Н	With set nut (For panel fitting)				_
				+					
		а	Set pressure		0.05 to 0.85 MPa setting		•	•	•
		-	001 p. 000 a 0	<b>1</b> *3	0.02 to 0.2 MPa setting				
	$\overline{}$		Ī	+				1	
	arc	b	Exhaust		Relieving type		•	•	•
	ano	-	mechanism	N	Non-relieving type		•		
6	-ste		Ī	+				1	
	Semi-standard	С	Flow direction		Flow direction: Left to right			•	
	Se			R	Flow direction: Right to left				
				+					
		d	Pressure unit		Name plate and caution plate for bowl in SI units: MPa	0	•	•	0
			i ressure utili	<b>Z</b> *4	Name plate and caution plate for bowl in imperial units: psi, °F	○*4	○*4	○*4	○*4

- \*1 Options B and H are not assembled and supplied loose at the time of shipment
- \*2 The assembly consists of a bracket and set nuts (25A-AW20(K) to 25A-AW40(K)). Including 2 mounting screws for the 25A-AW60(K).
- \*3 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.

\*4  $\bigcirc$ : For pipe thread type: NPT.

### Bracket, Set Nut. Bowl Assembly Part Nos. for the 25A- Series

Option	25A-AW20(K)-B	25A-AW30(K)-B	25A-AW40(K)-B	25A-AW60(K)-B
Bracket assembly*1	25A-AW23P-270AS	25A-AR33P-270AS	25A-AR43P-270AS	25A-AW62P-270AS*2
Set nut	AR23P-260S	AR33P-260S	AR43P-260S	*3
Bowl assembly 25A-C2SF-A 25A-C3SF-A 25A-C4S				4SF-A

SMC

The assembly consists of a bracket and set nuts.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

Related Products

Rotary Actuators

Air Grippers Vacuum Equipment

Air Preparation

Detection Switches

Fluid Control Equipment

Process Gas | Equipment

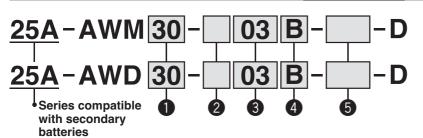
<sup>\*2</sup> The assembly consists of a bracket and 2 mounting screws. \*3 Please contact SMC regarding the set nuts for the 25A-AW60(K).

### **Mist Separator Regulator**

### 25A-AWM30, AWM40-D Micro Mist Separator Regulator 25A-AWD30, AWD40-D

- 25A-AWM Series Nominal filtration rating: 0.3 µm
  - der 25A-AWM30-D 25A-AWD30-D





25A-AWD Series Nominal filtration rating: 0.01 μm

Semi-standard: Select one each for a to d.
 Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
 Example) 25A-AWM30-F03B-1NR-D

	_	_					<u> </u>	
				Symbol	Description	Body	size	
					30	40		
				_	Rc	•	•	
2	F	Pipe	thread type	N	NPT	•	•	
				F	G	•	•	
				+				
			<u> </u>	02	1/4	•	•	
3		Port size 03 04		03	3/8	•	•	
				04	1/2		•	
				+				
	*1		Mounting	_	Without mounting option	•	•	
4	Option			<b>B</b> *2	With bracket	•	•	
	Ö			Н	With set nut (for panel mount)	•	•	
				+				
		а	Set pressure*3	_	0.05 to 0.85 MPa setting	•	•	
		а	Set pressure	1	0.05 to 0.2 MPa setting	•	•	
				+				
	rd	b	Exhaust	_	Relieving type	•	•	
	nde	D	mechanism	N	Non-relieving type	•	•	
<b>5</b>	sta			+				
	Semi-standard	С	Flow direction	_	Flow direction: Left to right	•	•	
	Se	C	i low direction	R	Flow direction: Right to left	•	•	
				+				
		d	Unit	_	Unit on product label: MPa, °C	•	•	
			a	Offic	<b>Z</b> *4	Unit on product label: psi, °F	_*5	○*5

- \*1 Options B and H are not assembled and supplied loose at the time of shipment.
- \*2 The assembly consists of a bracket and set nuts
- \*3 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
- \*4 For the pipe thread type: NPT
- \*5 O: For the pipe thread type: NPT only

### Bracket, Set Nut, Bowl Assembly Part Nos. for the 25A- Series

	•	
	Mo	odel
Optional specifications	25A-AWM30-D	25A-AWM40-D
	25A-AWD30-D	25A-AWD40-D
Bracket assembly*1	25A-AR33P-270AS	25A-AR43P-270AS
Set nut	AR33P-260S	AR43P-260S
Bowl assembly	25A-C3SF-D	25A-C4SF-D

<sup>\*1</sup> The assembly consists of a bracket and set nuts.



<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

## **Precision Regulator** 25A-IR1000/2000/3000-A Series



Air Cylinders Control Valves

Related Products

Air Grippers Vacuum Equipment

Air Preparation Equipment

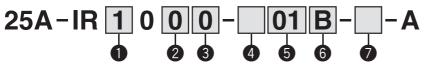
Fluid Control Equipment

Process Gas F Equipment

Electric Actuators

Auto Switches

### **How to Order**





- Option/Semi-standard: Select one each for a, b, and c.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

			Symbol	Description		Body size	
				·	1	2	3
			0	0.005 to 0.2 MPa	•	•	_
2	Cat n	roccure renge	U	0.01 to 0.2 MPa	_	_	•
9	Set p	ressure range	1	0.01 to 0.4 MPa	•	•	•
			2	0.01 to 0.8 MPa	•	•	•
			+				
			0	Bottom exhaust	•	•	•
8	Exh	aust direction	1	Front exhaust	_	_	•
			2	Rear exhaust	_	_	•
			+				
				Rc		•	•
4	Pipe	e thread type	N	NPT	•	•	•
			F	G	•	•	•
			+	4/0		T	
		01		1/8 1/4	•	_	
5		Port size	02	•	_	•	•
			03 04	3/8 1/2			•
			+	1/2		_	
	1		<u> </u>	Without mounting option		•	
	a	Mounting	<b>B</b> *2	With bracket			
	"	Wiodriting	Н	With hexagon panel nut (for panel mount)			
*1		+		Thirmoxagem parier mat (for parier meant)			
Option			EA	NPN open collector 1 output		•	•
ő	11.	With digital	EB	PNP open collector 1 output	•	•	•
	b	pressure switch		NPN open collector 2 outputs + Analogue voltage output	•	•	•
			ED	NPN open collector 2 outputs + Analogue current output	•	•	•
		•	+	· · · · · · · · · · · · · · · · · · ·		'	
	С	Flow direction	_	Flow direction: Left to right	•	•	•
		Flow direction	R	Flow direction: Right to left	•	•	•
ard			+				
nd	d	Knob	_	Upward	•	•	•
Semi-standard	u	KIIOD	V	Downward	•	•	•
. <u>F</u>			+				
Sel			_	Name plate and pressure gauge in imperial units: MPa	•	•	•
	е	Pressure unit*3	Z	Name plate and pressure gauge in imperial units: psi	•	•	•
			ZA	Digital pressure switch: With unit conversion function	•	•	•

Options are shipped together with the product but do not come assembled. B and H cannot be selected at the same time. The current bracket cannot be used for this product.

- \*2 The assembly consists of a bracket and set nuts
- \*3 See pressure unit table below.

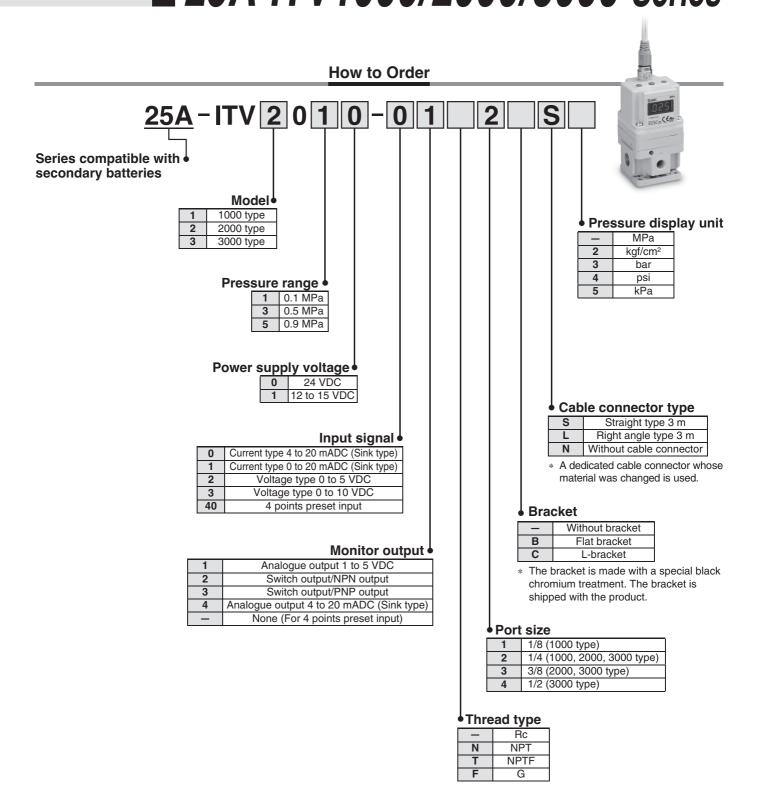
To doe procedie unit table below.					
	Pipe thread	Name plate in	Pressure switch in imperial units		
	type	imperial units	EA, EB, EC, ED		
	Rc				
_	NPT	MPa	Fixed SI unit		
	G				
	Rc	_	_		
<b>Z</b> *4	NPT	psi	With unit conversion function (Initial value psi)		
	G	_	_		
	Rc				
<b>ZA</b> *5	NPT	MPa	With unit conversion function		
	G				

- \*4 For pipe thread type: NPT
- \*5 For options: EA, EB, EC, ED

\* The 25A- series specifications and dimensions are the same as those of the standard model.



# Electro-Pneumatic Regulator 25A-ITV1000/2000/3000 Series



- \* Since the lead wires and electrical circuits are used, this product is not completely copper-free. Only the wetted parts are copper-free.
- \* Copper and zinc materials are used for solenoid valve coils, connector pins, and lead wire substrate.
- \* The 25A- series specifications and dimensions are the same as those of the standard model.



### **Booster Regulator**

# 25A-VBA Series ROHS



### **How to Order**

25A - VBA 40A

Series compatible with secondary batteries

10A	1/4", Handle-operated type
20A	3/8", Handle-operated type
40A	1/2", Handle-operated type

Pressure increase ratio: Twice

Body size

Thread type\*1

Symbol	Thread type
_	Rc
F	G
N	NPT
Т	NPTF

\*1 Thread types apply to the IN, OUT, and EXH ports of the VBA10A and to the IN. OUT. EXH, and gauge ports of the VBA20A and VBA40A. The gauge ports of the VBA10A are Rc thread type regardless of the thread type indication.

#### Port size

Symbol	Port size	Applicable series
02	1/4	VBA10A
03	3/8	VBA20A
04	1/2	VBA40A

Option

Symbol	Option
_	None
N	Silencer
S	High-noise reduction silencer*1
LN	Elbow silencer*1
LS	Elbow high-noise reduction silencer*1

- \*1 Refer to "Combination of Thread Type and Options."
- \* Pressure gauge is not available as an option.





Elbow silencer

### Combination of Thread Type and Options

Combination of Throad Typo and Options						
Pody size	Thread	Option				
Body size	type	_	N	S	LN	LS
	_	•	•	•	•	•
10A	F	•	•	•	•	•
IUA	N	•	•	_	•	_
	Т	•	•	_	•	_
	_	•	•	•		
20A	F	•	•	•		
20A	N	•	•	•	1	
	Т	•	•	•		
	_	•	•	•		
404	F	•	•	•		
40A	N	•	•	•	//	
	Т					

### **⚠** Caution

- Not compatible with a low dew point
- VBA10A: Due to the close proximity of the IN and OUT sides of the gauge port and the handle of the booster regulator, a G43-10-01-X300/G46-SRB pressure gauge cannot be mounted as it will interfere with the handle. VBA20A/40A: The G43-10-01-X300/G46-SRB pressure gauge cannot be mounted as the mounting pitch of the IN and OUT sides of the gauge port of the booster regulator is smaller than the diameter of the pressure gauge. In order to mount the pressure gauge, piping which does not cause any interference must be prepared separately.

#### Air Tank Compatibility Chart

	an rank compatibility chart				
Booster regulator	25A-VBA10A	25A-VBA20A	25A-VBA40A		
Air tank					
25A-VBAT05A1					
25A-VBAT05S1		_	_		
25A-VBAT10A1			_		
25A-VBAT10S1					
25A-VBAT20A1					
25A-VBAT20S1	_				
25A-VBAT38A1					
25A-VBAT38S1	_				

Refer to page 209 for details on air tanks.

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.

208

Vacuum Equipment Air Preparation

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers

Fluid Control Equipment

Process Gas | Equipment

Electric Actuators

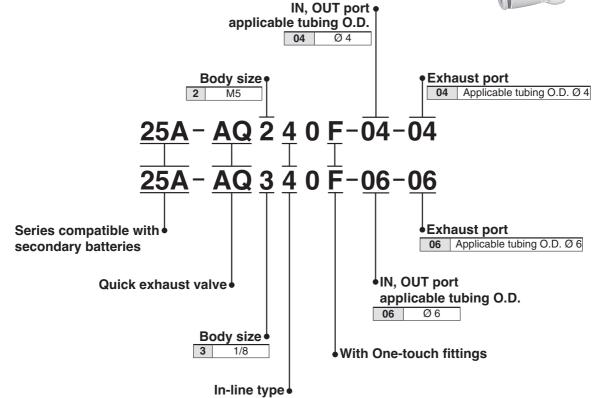
### **Quick Exhaust Valve** with One-touch Fittings



# 25A-AQ240F/340F Series

### **How to Order**





\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers Vacuum Equipment

Air Preparation Equipment

Detection Switches

Process Gas Fluid Control Equipment Equipment

# **Check Valve**with One-touch Fittings

# 25A-AKH Series



### **How to Order**

Straight type

**25A**-AKH**04**-00

Series compatible with secondary batteries

Applicable tubing O.D.

04	Ø 4
06	Ø6
08	Ø8
10	Ø 10
12	Ø 12

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

## **Rectangular Multi-connector** 25A-KDM Series

No. of Connecting Tubes: 20



**How to Order** 

25A-KDM 20-06

Series compatible with secondary batteries

No. of connecting tubes

### **Applicable Tubing**

**♦** Tubing O.D.

#### **Metric size**

Symbol	Size	Colour of release button		
23	Ø 3.2			
04	Ø 4	Blue		
06	Ø 6			

#### Inch size

Symbol	Size	Colour of release button
01	Ø 1/8"	
03	Ø 5/32"	Red
07	Ø 1/4"	

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves

Rotary Actuators

Air Grippers

Vacuum Equipment

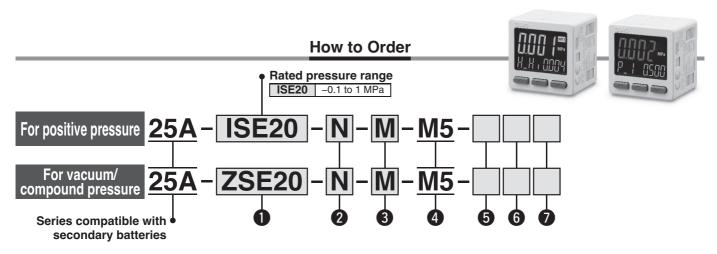
Air Preparation Equipment

Clean Air Filters

Process Gas Fluid Control Equipment Equipment







### Rated pressure range

	·
ZSE20	0 to -101 kPa
ZSE20F	-100 to 100 kPa

### 2 Output specification

Symbol	Description	
N	NPN open collector 1 output	
Р	PNP open collector 1 output	

### 3 Unit specification

Symbol	Description	
_	Units selection function	
M	SI unit only*1	
Р	Units selection function (Initial value psi)	

<sup>\*1</sup> Fixed unit: kPa, MPa

### 4 Piping specification

Symbol	Description		
M5	M5 female thread  Piping port		
01	R1/8 Piping adapter ZS-46-N1		

**5** Option 1

Symbol	Description		
_	Without lead	wire	
L	Lead wire with connector (3-core, 2 m lead wire)	ZS-46-3L Without waterproof cover	

Option 3

Symbol	Operation manual	Calibration certificate
_	0	_
Υ	_	_
K	0	0
Т	-	0

### 6 Option 2

<b>O</b> option <b>2</b>			
Symbol	Description		
_	None		
В	Panel mount adapter	ZS-46-B	
D	Panel mount adapter + Front protection cover	ZS-46-D	

### Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

when only optional parts are required, order with the part humbers listed below.			
Description	Part no.	Note	
Panel mount adapter	ZS-46-B	_	
Panel mount adapter + Front protection cover	ZS-46-D	_	
Lead wire with connector	ZS-46-3L	3-core, 2 m, Non-waterproof (Without waterproof cover)	
Front protection cover	ZS-27-01	_	

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

3-Screen Display High-Precision

**Digital Pressure Switch** 

**IP40** 25A-ZSE20A(F)/ISE20A Series

RoHS

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers Equipment Vacuum

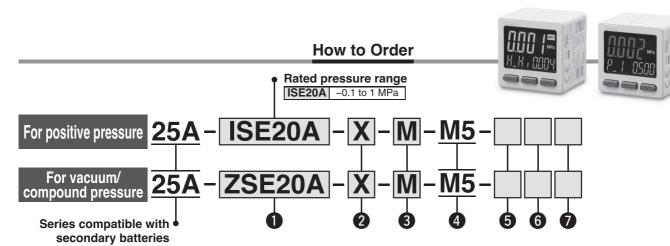
Air Preparation

Clean Air Filters

Process Gas Fluid Control Equipment Equipment

Electric Actuators

Auto Switches



Rated pressure range

ZSE20A	0 to -101 kPa
ZSE20AF	-100 to 100 kPa

2 Output specification

Symbol	Description	
R	NPN open collector 2 outputs + Analogue voltage output *1	
S	NPN open collector 2 outputs + Analogue current output *1	
T PNP open collector 2 outputs + Analogue voltage output		
V	PNP open collector 2 outputs + Analogue current output *1	
X	NPN open collector 2 outputs + Copy function	
Υ	PNP open collector 2 outputs + Copy function	

<sup>\*1</sup> Can be switched to auto-shift or copy function

Unit specification

9 0	nt opcomoduon	
Symbol	Description	
_	Units selection function	
M	SI unit only*1 Units selection function (Initial value psi)	
Р		

<sup>\*1</sup> Fixed unit: kPa, MPa

### 4 Piping specification

T iping opcomoduon		
Symbol	Description	
M5	M5 female thread  Piping port	
01	R1/8 Piping adapter ZS-46-N1	

Option 1

Symbol	Description	
_	Without lead	wire
J	Lead wire with connector (5-core, 2 m lead wire)	ZS-46-5L Without waterproof cover

Option 3

Symbol	Operation manual	Calibration certificate
_	0	_
Υ	_	_
K	0	0
T	_	0

6 Option 2

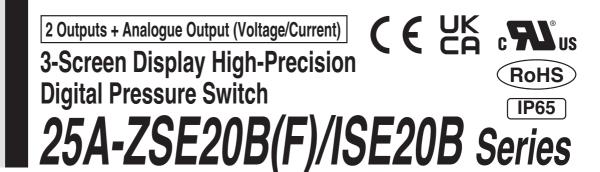
Symbol	Description		
_	None		
В	Panel mount adapter	ZS-46-B	
D	Panel mount adapter + Front protection cover	ZS-46-D	

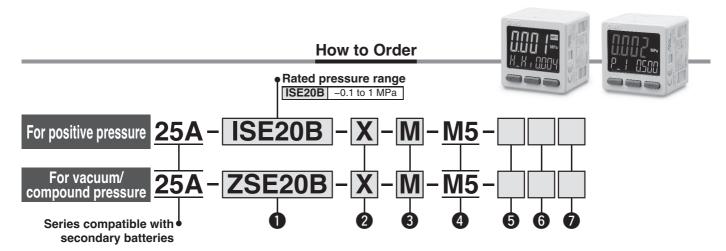
### Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

	'	
Description	Part no.	Note
Panel mount adapter	ZS-46-B	_
Panel mount adapter + Front protection cover	ZS-46-D	_
Lead wire with connector	ZS-46-5L	5-core, 2 m, Non-waterproof (Without waterproof cover)
Front protection cover	ZS-27-01	_

\* The 25A- series specifications and dimensions are the same as those of the standard model.





### Rated pressure range

ZSE20B	0 to -101 kPa
ZSE20BF	-100 to 100 kPa

### 2 Output specification

Symbol	Description	
R	NPN open collector 2 outputs + Analogue voltage output *1	
S	NPN open collector 2 outputs + Analogue current output *1	
Т	PNP open collector 2 outputs + Analogue voltage output *1	
V	PNP open collector 2 outputs + Analogue current output *1	
X	NPN open collector 2 outputs + Copy function	
Υ	PNP open collector 2 outputs + Copy function	

<sup>\*1</sup> Can be switched to auto-shift or copy function

### **3** Unit specification

Symbol	Description	
-	Units selection function	
M	SI unit only*1	
Р	Units selection function (Initial value psi)	

<sup>\*1</sup> Fixed unit: kPa, MPa

### 4 Piping specification

Symbol	Description	
M5	M5 female thread	
01	R1/8 Piping adapter ZS-46-N1	

### **5** Option 1

Symbol	Description		
-	Without lead	wire	
w	Lead wire with connector (5-core, 2 m lead wire, With waterproof cover)	With waterproof cover	ZS-46-5F

### Option 3

Symbol	Operation manual	Calibration certificate
_	0	_
Υ	_	_
K	0	0
Т	<u> </u>	0

### 6 Option 2

Symbol	[	Description
_	None	
В	Panel mount adapter	ZS-46-B
D	Panel mount adapter + Front protection cover	ZS-46-D

### Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

o, opinoniai paino ano roquinou, oraor mini ano part maniboro notos boroni		
Description	Part no.	Note
Panel mount adapter	ZS-46-B	_
Panel mount adapter + Front protection cover	ZS-46-D	_
Lead wire with connector	ZS-46-5F	5-core, 2 m, Waterproof (With waterproof cover)
Front protection cover	ZS-27-01	_

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

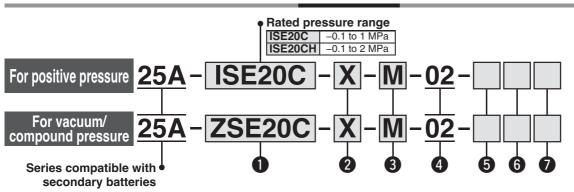
Digital Pressure Switch for General Fluids

# 25A-ZSE20C(F)/ISE20C(H) Series

RoHS

**IP65** 

### **How to Order**



Rated pressure range

ZSE20C	0 to -101 kPa
ZSE20CF	-100 to 100 kPa

2 Output specification

Symbol	Description
R	NPN open collector 2 outputs + Analogue voltage output*1
S	NPN open collector 2 outputs + Analogue current output*1
Т	PNP open collector 2 outputs + Analogue voltage output*1
V	PNP open collector 2 outputs + Analogue current output*1
	NPN open collector 2 outputs + Copy function
Υ	PNP open collector 2 outputs + Copy function

\*1 Can be switched to auto-shift or copy function

### 3 Unit specification

Symbol	Description	
_	Units selection function	
M	SI unit only*1	
Р	Units selection function (Initial value psi)	

\*1 Fixed unit: kPa, MPa

### 4 Piping specification

	bing cheemenanen
Symbol	Description
02	R1/4 (M5 female threaded)

**5** Option 1

Symbol	Description	
_	Without lead	wire
w	Lead wire with connector, 5-core (2 m lead wire, With waterproof cover)	ZS-46-5F With waterproof cover

Option 3

Symbol	Operation manual	Calibration certificate
_	0	_
Υ	_	_
K	0	0
Т	_	0

### 6 Option 2

Symbol	Description	
_		None
В	Panel mount adapter	ZS-46-B
D	Panel mount adapter + Front protection cover	ZS-46-D

### Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	ZS-46-B	Rear ported
Panel mount adapter + Front protection cover	ZS-46-D	Rear ported
Lead wire with connector	ZS-46-5F	5-core, 2 m, Waterproof (With waterproof cover)
Front protection cover	ZS-27-01	Rear ported

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers

Vacuum Equipment

Air Preparation Equipment

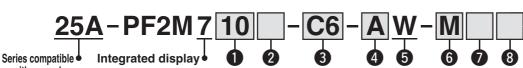
Clean Air Filters

Process Gas Fluid Control Equipment Equipment

Electric Actuators

# 2-Colour Display Digital Flow Switch 25A-PF2N7 Series





with secondary batteries

Rated flow range

01	0.01 to 1 l/min
02	0.02 to 2 l/min
05	0.05 to 5 l/min
10	0.1 to 10 l/min

25	0.3 to 25 l/min
50	0.5 to 50 l/min
11	1 to 100 l/min
21	2 to 200 l/min

min	50	0.5 to 50 l/min
min	11	1 to 100 l/min
min	21	2 to 200 l/min

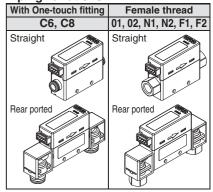
2	<b>Piping</b>	entry	direction
	D: :		D-4

Symbol	Piping entry Rated flow range								
Symbol	direction	1	2	5	10	25	50	100	200
_	Straight	•	•	•	•	•	•	•	•
L	Rear ported	•	•	•	•	•	•	•	•

t size
t size

Symbol	Port size		R	ate	d flo	ı wo	anç	ge	
Syllibol	I OIT SIZE	1	2	5	10	25	50	100	200
01	Rc1/8	•	•	•	•	•	•		_
N1	NPT1/8	•	•	•	•	•	•	_	_
F1	G1/8	•		•				$\overline{}$	_
02	Rc1/4		_	_	_	_	_	•	•
N2	NPT1/4		_	$\overline{}$	_	_	_	•	•
F2	G1/4		_	_	_	_	_	•	
C6	Ø6								
C8	Ø 8	_						•	

**Piping variations** 

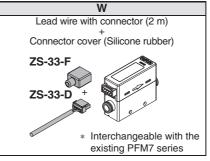


4 Output specification

	<u> </u>				
Symbol	OUT1	OUT2			
Α	NPN	NPN			
В	PNP	PNP			
С	NPN	Analogue 1 to 5 V ⇔ Analogue 0 to 10 V*1			
D	NPN	Analogue 4 to 20 mA			
E	PNP	Analogue 1 to 5 V ⇔ Analogue 0 to 10 V*1			
F	PNP	Analogue 4 to 20 mA			

1 to 5 V or 0 to 10 V can be selected by pressing the button. The default setting is 1 to 5 V.

### **⑤** Option 1



### 6 Unit specification

	_	-
M SI unit only		SI unit only*2
		Unit selection function*3

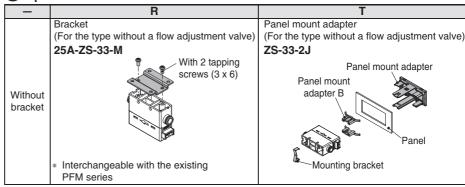
- \*2 Fixed unit: Instantaneous flow: I/min Accumulated flow: L
- \*3 This product is for overseas use only. (The SI unit type is provided for use in Japan in accordance with the New Measurement Act.) The unit can be changed. Instantaneous flow: I/min ⇔ cfm Accumulated flow: L ⇔ ft3

### 8 Calibration certificate\*4

_	None
Α	Yes

\*4 Made to order

### Option 2



Options are shipped together with the product but do not come assembled.

\* The 25A- series specifications and dimensions are the same as those of the standard model.



### 2-Colour Display Digital Flow Switch Integrated display C E UK

# 25A-PFM7 Series

**How to Order** 



## display

Integrated 25A-PFM710-C6 -A-M

Series compatible with secondary batteries

Type • 7 Integrated display

Rated flow range (Flow rate range)

10 0.2 to 10 (5) I/min 25 0.5 to 25 (12.5) I/min **50** 1 to 50 (25) I/min 2 to 100 (50) I/min

): Fluid: CO2

#### Port size

Symbol	Description	Flow rate range					
Cyrribor	Description	10	25	50	11		
01	Rc1/8	•	•	•			
02	Rc1/4	_	_	_			
N01	NPT1/8				_		
N02	NPT1/4	_	_	_	•		
F01	G1/8				_		
F02	G1/4	_	_	_			
C6	Ø 6 One-touch fitting	•	•	•	•		
C8	Ø 8 (5/16") One-touch fitting	_					

### Piping entry direction

_	Straight
L	Bottom

#### Output specifications

Α	2 NPN outputs
В	2 PNP outputs
С	1 NPN output + Analogue output (1 to 5 V)
D	1 NPN output + Analogue output (4 to 20 mA)
Е	1 PNP output + Analogue output (1 to 5 V)
F	1 PNP output + Analogue output (4 to 20 mA)
G	1 NPN output + External input*3
Н	1 PNP output + External input*3

\*3 User can select from accumulated value external reset, auto-shift and auto-shift zero.

#### Unit specifications

-	With unit switching function			
M	Fixed SI unit*1			

\*1 Fixed unit: Instantaneous flow: I/min Accumulated flow: L

### Option 1 Lead wire with connector (2 m) Rubber cover for connector (Silicon rubber)

### 

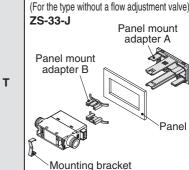
_	None
Α	With calibration certificate

### Operation manual

	With operation manual	
_	(Japanese and English)	
N	None	

### Option 2

_	None
R	Bracket (For the type without a flow adjustment valve) 25A-ZS-33-M  Mounting screw (Accessory)
	Panel mount adapter (For the type without a flow adjustment valve)



- \* The 25A- series specifications and dimensions are the same as those of the standard model.
- \* Digital flow switch with flow adjustment valve is not standard product. It can be supplied as Made-to-Order separately.

For details, refer to the Web Catalogue.

Air Cylinders Control Valves Related Products

Rotary Actuators

Air Grippers

Equipment Vacuum Air Preparation

Clean Air Filters

Fluid Control Equipment

Equipment Process Gas

Electric Actuators

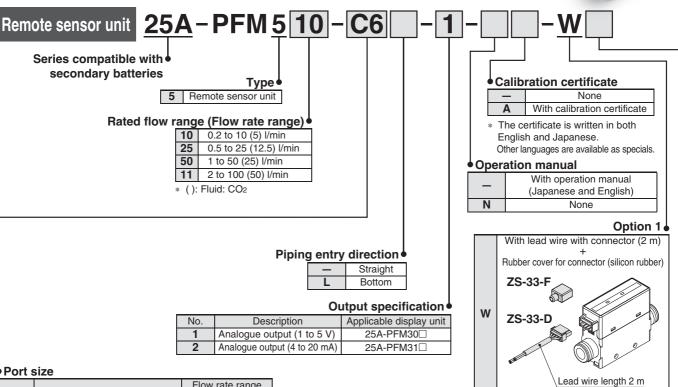
### 2-Colour Display



### Digital Flow Switch Remote sensor unit

# 25A-PFM5 Series

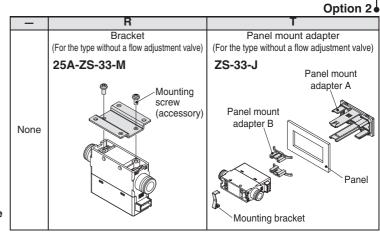
### **How to Order**



#### Port size

Symbol	Description		Flow rate range			
Syllibol	Description	10	25	50	11	
01	Rc1/8	•	•	•		
02	Rc1/4				•	
N01	NO1 NPT1/8		•	•		
N02	NPT1/4				•	
F01	G1/8* <sup>1</sup>	•	•	•		
F02	G1/4* <sup>1</sup>				•	
C6	C6 Ø 6 One-touch fitting		•	•	•	
C8	Ø 8 (5/16") One-touch fitting		•	•	•	

<sup>\*1</sup> ISO 228-1 compliant



· Options are shipped together with the product but do not come assembled.

#### **Piping Variations**

	With One-touch fittings (C6, C8)		Female thread (01, 02, N01, N02, F01, F02)	
	Straight (-)	Bottom (L)	Straight (-)	Bottom (L)
Without flow adjustment valve (-)				

RoHS

### **Flow Sensor Monitor**

# 25A-PFM3 Series

### **How to Order**



Output specification 2 NPN outputs + 1 to 5 V output 2 NPN outputs + 4 to 20 mA output 2 NPN outputs + External input\*1 2 PNP outputs + 1 to 5 V output 3 2 PNP outputs + 4 to 20 mA output 2 PNP outputs + External input\*

\*1 User can select from accumulated value external reset, auto-shift and auto-shift

Operation manual

With operation manual (Japanese and English)

Calibration certificate None With calibration certificate

25A-PFM3 0 0 - M Series compatible

with secondary batteries

		input specification	
Symbol Conte		Content	Applicable remote type sensor unit
	0	Voltage input	25A-PFM5□□-□-1-□
	1	Current input	25A-PFM5□□-□-2-□

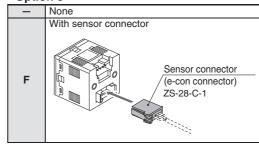
3 Remote display unit

### Unit specification •

_	With unit switching function
M	Fixed SI unit*1

\*1 Fixed unit: Instantaneous flow: I/min Accumulated flow: L

Option 3



The connector does not come connected, but it is shipped together with the product.

#### Option 1

**多SMC** 

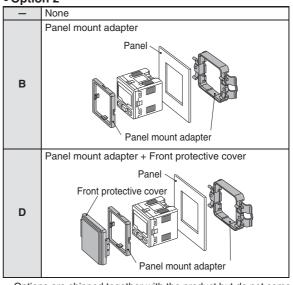
_	None
L	Power supply/Output connector  Power supply/ Output connector  ZS-28-A

\* The cable does not come connected, but it is shipped together with the product.

### **Options/Part Nos.**

Description	Part no.	Note
Power supply/Output connector (2 m)	ZS-28-A	
Sensor connector	ZS-28-C-1	1 pc.
Panel mount adapter	ZS-46-B	
Panel mount adapter + Front protective cover	ZS-46-D	

Option 2



Options are shipped together with the product but do not come assembled.

> \* The 25A- series specifications and dimensions are the same as those of the standard model.

> > For details, refer to the Web Catalogue.

Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers Equipment Vacuum

Air Preparation Equipment

Fluid Control

Equipment Process Gas

Electric Actuators

### **Digital Flow Switch**



# 25A-PFMB7 Series

### **How to Order**



25A-PFMB7501-04-AW-M Series compatible with

secondary batteries Rated flow range (Flow rate range)

u	<u>9</u> ~ (.	now rate range,
	501	5 to 500 l/min
	102	10 to 1000 l/min
	202	20 to 2000 l/min

### Thread type

I	Rc	
N	NPT	
F	G *1	

\*1 ISO 228 compliant

#### Port size

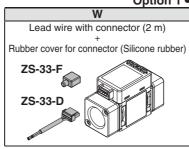
	Port	Rated flow range		
	size	501 102		202
04	1/2	•	•	_
06	3/4	_	_	•

Output specification

	OUT1	OUT2	Applicable monitor unit model
Α	NPN	NPN	_
В	PNP	PNP	_
С	NPN	Analogue 1 to 5 V	PFG300 series
D	NPN	Analogue 4 to 20 mA	PFG310 series
E*1	PNP	Analogue 1 to 5 V	PFG300 series
F*1	PNP	Analogue 4 to 20 mA	PFG310 series
G*1	NPN	External input *2	_
H*1	PNP	External input *2	_

- \*1 Made to order
- \*2 Accumulated flow value, peak/bottom flow value can be reset by external signal input.

### Option 1



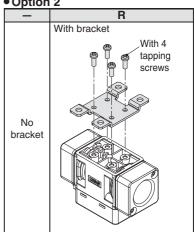
When only optional parts are required, refer to Option 1/Part Nos. below.

### Calibration certificate

_	None		
$\mathbf{A}^{*1}$	With calibration certificate		

\*1 Made to order

Option 2



Options are shipped together with the product but do not come assembled. When only optional parts are required, refer to Option 2/Part Nos. below.

### Unit specification

M	SI unit only *1
_	Units selection function *2

- \*1 Fixed unit: Instantaneous flow: I/min Accumulated flow: L
- \*2 The unit can be changed. Instantaneous flow: I/min  $\Leftrightarrow$  cfm Accumulated flow: L ⇔ ft3

### Option 1/Part Nos.

Option	Part no.	Qty.	Note
Lead wire with connector	ZS-33-D	1	Lead wire: 2 m
Rubber cover (Silicone rubber)	ZS-33-F	1	For connector

### Option 2/Part Nos.

Option	Part no.	Qty.	Note
Bracket (for PFMB7201)	25A-ZS-33-M	1	With 2 tapping screws (3 x 6)
Panel mount adapter (for PFMB7201)	ZS-33-J	1	
Bracket (for PFMB7501/7102)	25A-ZS-42-C	1	With 4 tapping screws (3 x 6)
Bracket (for PFMB7202)	25A-ZS-42-D	1	With 4 tapping screws (3 x 6)





# **Integrated Display**

# 

3-Colour Display Digital Flow Switch for Water RoHS



# 25A-PF3W7-Z Series





25A-PF3W7 04 Series compatible with secondary batteries

Type

7 Integrated display

Rated flow range (Flow range)

Symbol	Rated flow range
04	0.5 to 4 l/min
20	2 to 16 l/min
40	5 to 40 l/min
11	10 to 100 l/min

3 Flow adjustment valve

Symbol	With/without flow	F	Rated flow range		Э
Symbol	adjustment valve	04	20	40	11
_	None	•	•	•	•
S	Yes	•	•	•	_

- \* 100 l/min type with flow adjustment valve is not available.
- The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

Thread type

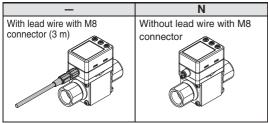
_	Rc
N	NPT
F	G*1

\*1 ISO 228 compliant

#### 6 Port size

Symbol	Port	F	Rated flow range			
Syllibol	size	04	20	40	11	
03	3/8	•	•	_	_	
04	1/2	_	•	•	_	
06	3/4	_	_	•	•	
10	1/1	_	_	_	•	

# Lead wire (Option)



# Output specification/Temperature sensor

Symbol	OUT1	OU	Temperature	
Syllibol	Flow rate	Flow rate	Temperature	sensor
Α	NPN	NPN	_	
В	PNP	PNP	_	
С	NPN	Analogue 1 to 5 V	_	
D	NPN	Analogue 4 to 20 mA	_	None
E	PNP	Analogue 1 to 5 V	_	None
F	PNP	Analogue 4 to 20 mA	_	
G	NPN	External input*1	_	
Н	PNP	External input*1	_	
AT	NPN	(NPN) <u></u> <u>*</u>		
BT	PNP	(PNP) <u></u> <u>*</u>	<sup>2</sup> → PNP	With
CT	NPN	(Analogue 1 to 5 V) 🚓	Analogue 1 to 5 V	temperature
DT	NPN	(Analogue 4 to 20 mA)	2 Analogue 4 to 20 mA	sensor
ET	PNP	(Analogue 1 to 5 V) 🚓		CONCO
FT	PNP	(Analogue 4 to 20 mA)	2 Analogue 4 to 20 mA	

- \*1 External input: The accumulated value, peak value, and bottom value can be reset.
- \*2 For units with temperature sensor, only OUT2 can be set as either temperature output or flow rate output. Setting when shipped is for temperature output.

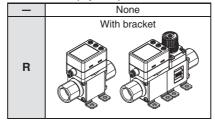
### 8 Integrated display/Unit specification

Symbol	Instantaneous flow	Accumulated flow	Temperature
M	l/min	L	°C
G	gal/min	gal	°C
<b>F</b> gal/min		gal	°F
J I/min		L	°F

G, F, J: Made to order Reference: 1 [l/min] ← 0.2642 [gal/min]

1 [gal/min] ← 3.785 [l/min] °F = 9/5 °C + 32

## 9 Bracket (Option)



## Calibration certificate (Only for flow rate)

_	None
Α	With calibration certificate

Units with temperature sensor can only display the flow rate.

# **Options/Part Nos.**

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Qty.	Note		
	25A-ZS-40-K	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)	
Bracket*1	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)	
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)	
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire length: 3 m		

\*1 For units with flow adjustment valve, 2 brackets are required.

The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.



3-Colour Display Digital Flow Switch for Water RoHS

# 25A-PF3W5-Z Series

## **How to Order**



25A-PF3W 5 04 Series compatible with secondary batteries

Type Type

Remote sensor unit

Rated flow range (Flow range)

Symbol Rated flow range			
04	0.5 to 4 l/min		
20	2 to 16 l/min		
40	5 to 40 l/min		
11	10 to 100 l/min		

#### Some state of the second secon

Cymbol	With/without flow adjustment valve	F	Rated flow range		Э
Symbol	adjustment valve	04	20	40	11
_	None	•	•	•	•
S	Yes	•	•	•	_

- \* 100 l/min type with flow adjustment valve is not available.
  - The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

4 Thread type

	71
_	Rc
N	NPT
F	G*1

\*1 ISO 228 compliant

## 5 Port size

Symbol	Port	Rated flow range				
Symbol	size	04	20	40	11	
03	3/8	•	•	_	_	
04	1/2	_	•	•	_	
06	3/4	_	_	•	•	
10	1/1	_	_	_	•	

# Lead wire (Option)

_	With lead wire with M8 connector (3 m)
N	Without lead wire with M8 connector

# 6 Output specification/Temperature sensor

	Symbol	OUT1	OUT2	Temperature
Symbol		Flow rate	Temperature	sensor
	1	Analogue 1 to 5 V	_	None
	2	Analogue 4 to 20 mA	_	None
	1T	Analogue 1 to 5 V	Analogue 1 to 5 V	With temperature sensor

To use in combination with remote monitor (PF3W3 series), select analogue output of 1 to 5 V of flow rate (output symbol "-1" or "-1T").

#### Remote sensor unit/Unit printed on label

Symbol	Instantaneous flow	Temperature
_	l/min	°C
G	l/min (gal/min)	°C/°F

G: Made to order

Reference: 1 [l/min] ← 0.2642 [gal/min] 1 [gal/min] ↔ 3.785 [l/min]

°F = 9/5 °C + 32

# Bracket (Option)

_	( - 1 )
_	None
R	With bracket

#### Calibration certificate (Only for flow rate)

	,
_	None
Α	With calibration certificate

Units with temperature sensor can only display the flow rate.

# **Options/Part Nos.**

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Qty.	Note	
	25A-ZS-40-K	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)
Bracket*1	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire length: 3 m	

\*1 For units with flow adjustment valve, 2 brackets are required.

The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

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Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers Vacuum Equipment

Preparation Air

# 3-colour display

# **Digital Flow Switch for Water**

# 25A-PF3W Series (€ ĽK



#### **How to Order**

#### Remote sensor unit

#### Output specification/Temperature sensor •

Symbol	OUT1	OUT2	Temperature sensor
Symbol	Flow rate	Temperature	Temperature sensor
1	Analogue 1 to 5 V	_	None
2	Analogue 4 to 20 mA	_	None
1T	Analogue 1 to 5 V	Analogue 1 to 5 V	With temperature sensor

To use in combination with remote monitor (PF3W3 series), select analogue output of 1 to 5 V of flow rate (output symbol "-1" or "-1T").

Symbol

03

04

06

10 12 14

1 1/2

#### Remote sensor unit/Unit printed on label

Symbol	Instantaneous flow rate	Temperature
_	l/min	°C
G	l/min (gal/min)	°C/°F

G: Made to Order

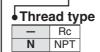
Reference: 1 [l/min] ← 0.2642 [gal/min] 1 [gal/min] ↔ 3.785 [l/min] = 9/5 °C + 32



25A-PF3W 5 04 ensor unit

# Integrated display

Series compatible with 5 Remote sensor unit





Symbol	Rated flow range
04	0.5 to 4 l/min
20	2 to 16 l/min
40	5 to 40 l/min
11	10 to 100 l/min
21	50 to 250 l/min

#### Flow adjustment valve

Symbol	With/without flow		Rate	d flov	v rate	,
Symbol	adjustment valve	04	20	40	11	21
_	None					
S	Yes					_

- 100 and 250 I/min types with flow adjustment valves are not available.
- The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

Port size

_	Rc	
N	NPT	
F	G	

Port Rated flow range					
ize	21				
3/8			_	_	_
1/2	_			_	_
3/4	_	_			_
1/1	_	_	_		_
1//					

#### Integrated display

#### Output specification/ Temperature sensor

- \* The 25A- series specifications and dimensions are the same as those of the standard model.
- For details, refer to the Web Catalogue
- \*1 External input: The accumulated value peak value, and bottom value can be reset.
- \*2 For units with temperature sensor, OUT2 can be set as either temperature output or flow rate output. Setting when shipped is for temperature output.

	Symbol	OUT1	OL	JT2	Temperature
	Flow rate Flow rate		Flow rate	Temperature	sensor
	Α	NPN	NPN	_	
	В	PNP	PNP	_	
	С	NPN	Analogue 1 to 5 V	_	
). [	D	NPN	Analogue 4 to 20 mA	_	None
	Е	PNP	Analogue 1 to 5 V	_	None
	F	PNP Analogue 4 to 20 mA		_	
۱ [	G	NPN	External input*1	_	
	Н	PNP	External input*1	_	
	AT	NPN		<sup>2</sup> → NPN	
	BT	PNP		PNP	With
t	CT	NPN	(Analogue 1 to 5 V)	$\stackrel{2}{\rightarrow}$ Analogue 1 to 5 V	temperature
	DT	NPN	(Analogue 4 to 20 mA) *	Analogue 4 to 20 mA	sensor
	ET	PNP	(Analogue 1 to 5 V) *	$\stackrel{2}{\longrightarrow}$ Analogue 1 to 5 V	3611301
	FT	PNP	(Analogue 4 to 20 mA) *	Analogue 4 to 20 mA	

#### **Options/Part Nos.**

When only optional parts are required, order with the part numbers listed below.

, ,	•			
Description	Part no	Qty.	No	ote
	25A-ZS-40-K	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)
Bracket*1	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire l	ength (3 m)

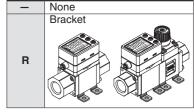
\*1 For units with flow adjustment valve, 2 brackets are required.

#### **Calibration certificate** (Only flow sensor)

	()
_	None
Α	With calibration certificate

\* Integrated display type with temperature sensor can only display flow rate.

#### Bracket (Option)



With bracket is not available for 250 l/min type.

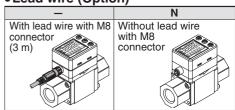
#### Integrated display/Unit specification

	<u> </u>		
Symbol	Instantaneous flow rate	Accumulated flow	Temperature
M	l/min	L	°C
G	gal/min	gal	°C
F	gal/min	gal	°F
J	l/min	L	°F

G, F, J: Made to Order

Reference: 1 [l/min] ← 0.2642 [gal/min] 1 [gal/min] ↔ 3.785 [l/min]

Lead wire (Option)



 The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

# **Digital Flow Switch for PVC Piping**

# 25A-PF3W Series (€ ĽK



#### **How to Order**

#### Remote sensor unit Output specification •

Symbol	OUT1
1	Analogue 1 to 5 V
2	Analogue 4 to 20 mA

\* To use in combination with remote monitor (PF3W3 series), select analogue output of 1 to 5 V of flow rate (output symbol "-1").

Premote sensor unit/Unit printed on label

Symbol	Instantaneous flow rate
_	l/min
G	l/min (gal/min)

G: Made to Order Reference: 1 [l/min] ↔ 0.2642 [gal/min] 1 [gal/min] ↔ 3.785 [l/min]

#### Calibration certificate 9 (Only flow sensor)

None With calibration certificate



Remote sensor unit

Integrated display

<u>25A</u>-PF3W <u>5 11</u>-<u>U</u> <u>25</u>

25A - PF3W 7 11 - U 25 Series compatible with

secondary batteries



	Type
5	Remote sensor unit
7	Integrated display

#### Rated flow range (Flow range)

	• •	
Symbol	Rated flov	v range
11	10 to 100	) l/min
21	30 to 25	0 I/min

#### Connection type PVC pipe

PVC	pipe U.D.●
ow range	Pipe O.D.*1
01	Tipe O.D.

Symbol	Port	Rated flow range		Pipe O.D.*1
Symbol	size	11	21	Tipe O.D.
25	25A	•		32 mm
30	30A	_	•	38 mm

\*1 JIS K 6742 equivalent

#### Integrated display Output specification

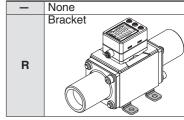
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Symbol	OUT1	OUT2	
Α	NPN	NPN	
В	PNP	PNP	
С	NPN	Analogue 1 to 5 V	
D	NPN	Analogue 4 to 20 mA	
		Analogue 1 to 5 V	
		Analogue 4 to 20 mA	
G	NPN	External input*1	
Н	PNP	External input*1	

\*1 External input: The accumulated value, peak value, and bottom value can be reset.

# Bracket (Option)



With bracket is not available for 250 l/min type.

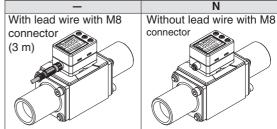
# Integrated display/Unit specification

Symbol	Instantaneous	Accumulated		
Syllibol	flow rate	flow		
M	l/min	L		
G	gal/min	gal		
0.14 1 1 0 1				

\* G: Made to Order

Reference: 1 [l/min] ← 0.2642 [gal/min] 1 [gal/min] ← 3.785 [l/min]

#### 



# **Options/Part Nos.**

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Qty.	Note
Bracket	25A-ZS-40-M	1	For PF3W711/511 With 4 tapping screws (4 x 10)
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire length (3 m)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

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Air Cylinders Control Valves

Related Products

Rotary Actuators Air Grippers

Vacuum Equipment

Preparation Air

Pressure ( Equipn

Fluid Control Equipment

Process Gas | Equipment

Electric Actuators

# For 25A-PF3W5(-Z) 3-Colour Display ( CA

# Digital Flow Monitor for Water RoHS



# 25A-PF3W Series

#### **How to Order**

# 25A-PF3W 30 A

Series compatible with secondary batteries

3 Remote monitor unit

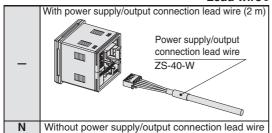
For remote sensor units, select the analogue output 1 to 5 V type. Applicable sensors: PF3W5□□-□□-1(T)

#### **Output specification**

Symbol	OUT1	OUT2
Α	NPN	NPN
В	PNP	PNP
С	NPN	Analogue 1 to 5 V
D	NPN	Analogue 4 to 20 mA
Е	PNP	Analogue 1 to 5 V
F	PNP	Analogue 4 to 20 mA
G	NPN	External input
Н	PNP	External input
J	Analogue 1 to 5 V	Analogue 1 to 5 V
K	Analogue 4 to 20 mA	Analogue 4 to 20 mA

In combination with remote sensor unit with temperature sensor, only OUT2 can be set for temperature sensor output.

#### Lead wire



The lead wire does not come connected, but it is shipped together with the product.

#### Remote monitor unit/Unit specification

Symbol	Instantaneous flow	Accumulated flow	Temperature
M	l/min	L	°C
G	gal/min	gal	°C
F	gal/min	gal	°F
J	l/min	L	°F

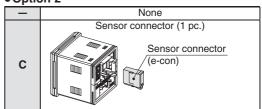
\* G, F, J: Made to order

Reference: 1 [l/min] ← 0.2642 [gal/min] 1 [gal/min] ← 3.785 [l/min] °F = 9/5 °C + 32

# Calibration certificate (Only flow monitor)

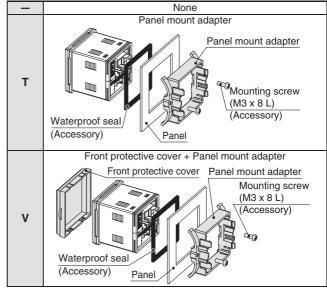
None With calibration certificate

#### Option 2



The connector does not come connected, but it is shipped together with the product.

#### Option 1



# **Options/Part Nos.**

When only optional parts are required, order with the part numbers listed below.

Description Part no.		Note
Panel mount adapter	25A-ZS-26-B	With waterproof seal and screws
Front protective cover + Panel mount adapter	25A-ZS-26-C	With waterproof seal and screws
Front protective cover only	ZS-26-01	Separately order panel mount adapter, etc.
Power supply/output connection lead wire	ZS-40-W	Lead wire length: 2 m
Sensor connector (e-con)	ZS-28-CA-4	1 pc.
Lead wire with connector for copying	ZS-40-Y	Connect up to 10 copy destination units

\* The 25A- series specifications and dimensions are the same as those of the standard model.



# **Direct Operated 2-Port Solenoid Valve** 25A-VX21/22/23 Series





**How to Order (Single Unit)** 

25A-VX2 1 0 A

Series compatible with secondary batteries

Fluid • For air

**Common Specifications** Valve type Seal material NBR Coil insulation type Class B Thread type Rc

Voltage/Electrical entry					
Symbol	Voltage	Electrical entry			
A	24 VDC	Grommet			
В	100 VAC	Grommet			
С	110 VAC	With surge voltage			
D	200 VAC	\suppressor/			
Е	230 VAC				
F	24 VDC				
G	24 VDC	DIN terminal			
Н	100 VAC	With surge voltage			
J	110 VAC	suppressor			
K	200 VAC				
L	230 VAC				
M	24 VDC	Conduit terminal			
N	100 VAC	With surge voltage			
Р	110 VAC	\suppressor//			
Q	200 VAC				
R	230 VAC				
S	24 VDC	Conduit			
Т	100 VAC	/With surge voltage			
U	110 VAC	suppressor			
V	200 VAC				
W	230 VAC				
Y	24 VDC	Flat terminal			
Z	Other v	oltages and electrical options			

SIZ	e valve t	ype		Dod	y illate	Hall Fort Size/Office	ulailletei	
ymbol	Size	Valve type	S	Symbol	Body material	Port size	Orifice diameter	

			_				
Size	/Valve t	уре	•	Bod	y mate	erial/Port size/Orifice	diameter
Symbol	Size	Valve type	S	Symbol	Body material	Port size	Orifice diameter
				Α			2
				В		1/8	3
				С	Aluminium		5
				D	Alullillillilli		2
		0		Е		1/4	3
1	Size 1	Single unit		F			5
'	0120 1	N.C.		Н			2
				J		Ø 6 One-touch fitting	3
				K	Resin		5
				L			2
				M		Ø 8 One-touch fitting	3
			LL	N			5
				Α		1/4	4
				В	Aluminium		7
		Single unit N.C.		D		3/8	4
2	Size 2			Е			7
_	OIZE Z			Н		Ø 8 One-touch fitting	4
				J	Resin		7
				L		Ø 10 One-touch fitting	4
			LL	M			7
				Α			5
				В		1/4	8
				С			10
				D	Aluminium		5
				Е		3/8	8
	<b>3</b> Size 3	Single		F			10
3		unit		G		1/2	10
	N.C.		Н			5	
			J		Ø 10 One-touch fitting	8	
			K	Resin		10	
			L	L	163111		5
				M		Ø 12 One-touch fitting	8
				N			10

For other specia	For other special options, refer to the standard products.					
	24 VAC	Low concentration ozone resistant (Seal material: FKM)				
	48 VAC	Seal material: EPDM				
Special voltage	220 VAC	Oil-free				
	240 VAC	G thread				
	12 VDC	NPT thread				
DIN terminal with lig	ht	With bracket (Aluminium body only)				
Conduit terminal with	n light	Mounting holes on the bottom side of the body (Aluminium body only				
Without DIN connect	tor	Special electrical entry direction				
. Haine the ail free enseities	tion in a law daw naint anvisons	nont may recult in the reduced consider life of the product				

<sup>\*</sup> Using the oil-free specification in a low dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.



<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

# For Water Single Unit **Direct Operated 2-Port Solenoid Valve** For Medium Vacuum Single Unit

25A-VX21/22/23 Series



RoHS

**How to Order (Single Unit)** 

25A - VX2 1 4 H A

Series compatible with secondary batteries

> **Fluid** 2 For water 4 For medium vacuum

Sizo/Valva typa

•Size/valve type			<ul><li>Rodh</li></ul>	material/P	ort size/Urii	rice diameter	
Symbol	Size	Valve type		Symbol	Body material	Port size	Orifice diameter
			l	Н			2
				J		1/8	3
1	Size 1	Single		K	Stainless		5
'	Size i	unit N.C.		L	steel		2
				M		1/4	3
			N			5	
			T :	Н			4
		Single		J	Ctainless	1/4	7
2	Size 2 unit N.C.			J Stainless steel		4	
		N.C.			3/8	7	
			L	IVI			,
				Н			5
				J	Stainless steel	1/4	8
		Single		K			10
3	<b>3</b> Size 3	unit		L			5
		N.C.		M		3/8	8
				N			10
				Р		1/2	10

#### other enecial ontions, refer to the standard products

For other spec	iai options, reie	i to the standard products.
	24 VAC	Applicable to deionized water (Seal material: FKM)
Special voltage	48 VAC	Seal material: EPDM
	220 VAC	Oil-free
	240 VAC	G thread
	12 VDC	NPT thread
DIN terminal with	light	With bracket
Conduit terminal v	vith light	Mounting holes on the bottom side of the body
Without DIN conne	ector	Special electrical entry direction

Using the oil-free specification in a low dew point environment may result in the reduced service life of the product.

Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.



обинион оробии	on openione				
Valve type	N.C.				
Seal material	NBR (For water)				
Sear material	FKM (For medium vacuum)				
Coil insulation type	Class B				
Thread type	Rc				

Vol	tage/Electi	rical entry			
Symbol	Voltage	Electrical entry			
A	24 VDC	Grommet			
В	100 VAC	Grommet			
С	110 VAC	/With surge voltage			
D	200 VAC	\suppressor/			
Е	230 VAC				
F	24 VDC				
G	24 VDC	DIN terminal			
Н	100 VAC	/With surge voltage			
J	110 VAC	\suppressor/			
K	200 VAC				
L	230 VAC				
M	24 VDC	Conduit terminal			
N	100 VAC	With surge voltage			
Р	110 VAC	\suppressor /			
Q	200 VAC				
R	230 VAC				
S	24 VDC	Conduit			
Т	100 VAC	/With surge voltage			
U	110 VAC	\suppressor/			
V	200 VAC				
W	230 VAC	<b>→</b>			
Υ	24 VDC	Flat terminal			
Z	Other voltages and electrical options				

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.



Air Cylinders Control Valves

Related Products

Rotary Actuators

Air Grippers

Vacuum Equipment

Air Preparation Equipment

Electric Actuators

# **Pilot Operated 2-Port Solenoid Valve**

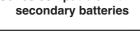
# For Air

# 25A-VXD Series



#### **How to Order**









#### **Common Specifications**

Common opcomoduciono						
Seal material	NBR					
Coil insulation type	Class B					
Thread type	Rc					

Size — Valve type Body material/Port size/Orifice diameter

		- 7			,		
Symbol	Size	Valve type		Symbol	Body material	Port size	Orifice diameter
3	8A	N.C.		Α		1/4	
_	10A			В	Aluminium	3/8	10
Α	15A	N.O.		С		1/2	
4	10A	N.C.		J	Stainless	3/8	15
В	15A	N.O.		K	steel	1/2	10
5 C	20A	N.C.		M	Stainless steel	3/4	20
11.0.							
6	25A	N.C.		Р	Stainless	1	25
D	23A	N.O.		Г	steel	ı	23

Voltage/Electrical entry							
Symbol	Voltage	Electrical entry					
A	24 VDC	Grommet					
В	100 VAC	Grommet					
С	110 VAC	With surge voltage					
D	200 VAC	\suppressor/					
Ε	230 VAC						
F	24 VDC						
G	24 VDC	DIN terminal /With surge \					
Н	100 VAC	voltage					
J	110 VAC	\suppressor/					
K	200 VAC						
L	230 VAC						
M	24 VDC	Conduit terminal /With surge \					
N	100 VAC	voltage					
Р	110 VAC	\suppressor/					
Q	200 VAC						
R	230 VAC						
S	24 VDC	Conduit /With surge \					
Т	100 VAC	voltage					
U	110 VAC	\suppressor/					
V	200 VAC						
W	230 VAC						
Υ	24 VDC	Flat terminal					
Z	Other special options						

All other special options are the same as those of the standard model.

	24 VAC					
	48 VAC					
Special voltage	220 VAC					
	240 VAC					
	12 VDC					
DIN terminal with lig	ght					
Conduit terminal with light						
Without DIN connector						
Low concentration ozone resistant						
(Seal material: FKM)						
Seal material: EPDM						
Oil-free						
G thread	G thread					
NPT thread						
With bracket	With bracket					
Special electrical entry direction						
* Using the oil-free specification in a low						

dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.



<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

# **Pilot Operated 2-Port Solenoid Valve**

# **For Water**

# 25A-VXD Series



#### **How to Order**



Series compatible with secondary batteries

◆Size — Valve type

Fluid 2 For Water



#### Common Specifications

Common opecine	
Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

Body material/Port size/Orifice diameter

		7   -			,		
Symbol	Size	Valve type		Symbol	Body material	Port size	Orifice diameter
3	8A	N.C.		D	Stainless steel	1/4	
_	10A		4	E		3/8	10
Α	15A	N.O.		F		1/2	
4	10A	N.C.		J	Stainless	3/8	15
В	15A	N.O.		K	steel	1/2	15
		NO					ı
5	20A	N.C.		М	Stainless	3/4	20
С	20/1	N.O.			steel	<i>5/</i> 1	20
_				_			
6 D	25A	N.C.		Р	Stainless steel	1	25
		14.0.	L				

Symbol	Voltage	Electrical entry			
A	24 VDC	Grommet			
В	100 VAC	Grommet			
С	110 VAC	/With surge voltage			
D	200 VAC	\suppressor/	, ,		
Е	230 VAC				
F	24 VDC				
G	24 VDC	DIN terminal			
Н	100 VAC	/With surge voltage			
J	110 VAC	\suppressor/			
K	200 VAC				
L	230 VAC				
M	24 VDC	Conduit terminal			
N	100 VAC	/With surge voltage			
Р	110 VAC	\suppressor/	J		
Q	200 VAC				
R	230 VAC				
S	24 VDC	Conduit	_		
Т	100 VAC	/With surge voltage			
U	110 VAC	\suppressor/	′ ≥		
٧	200 VAC				
W	230 VAC	01			
Υ	24 VDC	Flat terminal			

All other special options are the same as those of the standard model.

	24 VAC					
	48 VAC					
Special voltage	220 VAC					
	240 VAC					
	12 VDC					
DIN terminal with lig	ght					
Conduit terminal with light						
Without DIN connector						
Applicable to deionized water						
(Seal material: FKM)						
Seal material: EPDM						
Oil-free	Oil-free					
G thread	G thread					
NPT thread	NPT thread					
With bracket						
Special electrical entry direction						
Using the oil-free specification in a low						

dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

Air Cylinders Control Valves

Related Products

Rotary Actuators Air Grippers

Vacuum Equipment

**Process Gas** 

Electric Actuators

# **Zero Differential Pressure Type**

# Pilot Operated 2-Port Solenoid Valve/For Air ( E CA 25A-VXZ Series RoHS)



## How to Order (Single Unit)







#### **Common Specifications**

Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

Body material/Port size/Orifice diameter Size/Valve type

0.20	" raite ty	P 0			y materias	. 011 0120 0111100 1	aidiiiotoi
Symbol	Body size	Valve type		Symbol	Body material	Port size	Orifice diameter
3	10A	N.C.		Α	Aluminium	1/4	10
Α	10/1	N.O.	L	В		3/8	
4 B	15A	N.C.		G	Stainless steel	1/2	15
5 C	20A	N.C.		J	Stainless steel	3/4	20
6 D	25A	N.C. N.O.		L	Stainless steel	1	25

Voltage/Electrical entry

Symbol	Voltage	Electrical entry			
A	24 VDC	Grommet			
В	100 VAC	Grommet			
С	110 VAC	With surge voltage			
D	200 VAC	\suppressor /			
Е	230 VAC				
F	24 VDC				
G	24 VDC	DIN terminal			
Н	100 VAC	With surge voltage			
J	110 VAC	\suppressor /			
K	200 VAC				
L	230 VAC				
M	24 VDC	Conduit terminal			
N	100 VAC	With surge voltage			
Р	110 VAC	\suppressor / \suppressor			
Q	200 VAC				
R	230 VAC				
S	24 VDC	Conduit			
Т	100 VAC	With surge voltage			
U	110 VAC	\suppressor /			
٧	200 VAC				
W	230 VAC				
Υ	24 VDC	Flat terminal			
Z	Other voltages				

#### All other special options are the same as those of the standard model.

	24 VAC					
	48 VAC					
Special voltage	220 VAC					
	240 VAC					
	12 VDC					
DIN terminal with lig	ght					
Conduit terminal wi	th light					
Without DIN connector						
Low concentration ozone resistant						
(Seal material: FKM)						
Seal material: EPDM						
Oil-free						
G thread	G thread					
NPT thread						
With bracket (Stand	With bracket (Standard for resin body)					
Special electrical entry direction						
Using the oil-free specification in a low						

dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.



<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

# **Zero Differential Pressure Type**

# Pilot Operated 2-Port Solenoid Valve/For Water ( E CA 25A-VXZ Series RoHS)



**How to Order (Single Unit)** 



Series compatible with secondary batteries

> Fluid For Water

#### mmon Specifications

Common Specifications				
Seal material	NBR			
Coil insulation type	Class B			
Thread type	Rc			

Size/Valve type **■** Body material/Port size/Orifice diameter

Symbol	Body size	Valve type		Symbol	Body material	Port size	Orifice diameter
3	10A	N.C.		С	Stainless	1/4	10
Α	TUA	N.O.	<u> </u>	D	steel	3/8	10
4 B	15A	N.C. N.O.		G	Stainless steel	1/2	15
5 C	20A	N.C. N.O.		J	Stainless steel	3/4	20
6 D	25A	N.C. N.O.		L	Stainless steel	1	25

Voltage/Electrical entry				
Symbol	Voltage	Electrical entry		
A	24 VDC	Grommet		
В	100 VAC	Grommet		
С	110 VAC	/ With surge voltage		
D	200 VAC	\suppressor /		
Е	230 VAC			
F	24 VDC			
G	24 VDC	DIN terminal		
Н	100 VAC	(With surge voltage		
J	110 VAC	suppressor		
K	200 VAC			
L	230 VAC			
М	24 VDC	Conduit terminal		
N	100 VAC	/ With surge voltage		
Р	110 VAC	suppressor		
Q	200 VAC			
R	230 VAC			
S	24 VDC	Conduit		
Т	100 VAC	/ With surge voltage		
U	110 VAC	\suppressor /		
V	200 VAC			
W	230 VAC			
Υ	24 VDC	Flat terminal		
Z		Other voltages		

All other special options are the same as those of the standard model.

Same as mose or a	ic standard inoden.		
	24 VAC		
	48 VAC		
Special voltage	220 VAC		
	240 VAC		
	12 VDC		
DIN terminal with lig	ght		
Conduit terminal wi	th light		
Without DIN connector			
Applicable to deionized water			
(Seal material: FKM)			
Seal material: EPDM			
Oil-free			
G thread			
NPT thread			
With bracket			
Special electrical er	Special electrical entry direction		
* Using the oil-free specification in a low			

dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

Air Cylinders Control Valves

Rotary Actuators

Air Grippers

Vacuum Equipment

Air Preparation

**Process Gas** 

Electric Actuators

# **Diaphragm Valve for Ultra High Purity**

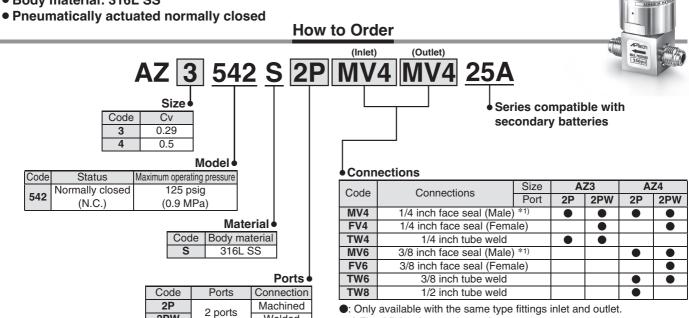
**Air Operated Type** 

Welded

RoHS

AZ3542 & 4542 25A Series

- Suitable for UHP gas supply line
- Body material: 316L SS



Only available with the same type fittings inlet and outlet.

# **Specifications**

Operating Parameters	AZ3542□25A	AZ4542□25A
Weight	0.26	kg *1)

2PW

 Some parts have sizes and shapes that are different from the standard products.

For details, refer to the Web Catalogue.

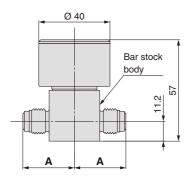
<sup>\* 1)</sup> Fixed fitting (no rotating nut)

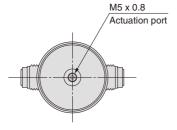
Weight for AZ3542S2PMV4MV4 including individual boxed weight. It may vary depending on connections or options

#### **Dimensions**

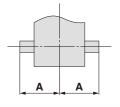
AZ3542 & 4542

Ports: 2P (Machined)

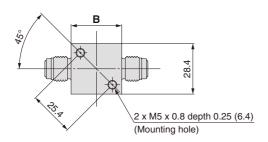




Connections: MV□

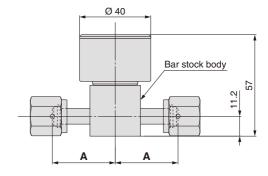


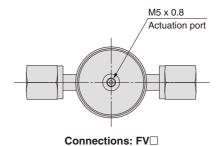
Connections: TW□

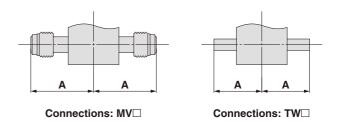


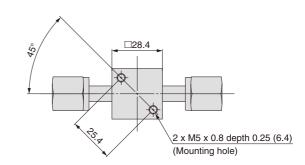
Ports	Connections	Α	В
	MV4	1.14 (29.0)	1.12 sq. (28.4)
O.D.	TW4	0.875 (22.2)	1.12 Sq. (20.4)
2P (Machined)	MV6	1.5 (38.1)	1.48 sq. (37.6)
(Machinea)	TW6	0.875 (22.2)	1.12 sq. (28.4)
	TW8	1.125 (28.6)	1.12 Sy. (20.4)

#### Ports: 2PW (Welded)









Connections	Α	
MV4	1.39 (35.3)	
FV4	1.39 (33.3)	
TW4	1.06 (26.9)	
MV6	1.93 (49.0)	
FV6		
TW6	1.325 (33.7)	
	MV4 FV4 TW4 MV6 FV6	

Clean Air Filters Modular F.R.L./ Pressure Control Equipment

Flow Control Equipment/ Fittings

Detection Switches

Fluid Control Equipment

Electric Actuators

# Diaphragm Valves for General Applications Air Operated Type AK3542 & 4542 25A Series

Body material: 316 SS Normally closed **How to Order** (Outlet) AK 3 542 S 2P Series compatible with Size secondary batteries Code Cv 3 0.29 4 0.5 Model e Connections Code Status Maximum operating pressure AK3 AK4 Code Connections 542 Normally closed (N.C.) 125 psig (0.9 MPa) 4T 1/4 inch compression 4BR Rc 1/4 4BRN R 1/4 **Material** 4 NPT 1/4 female Code Body material 4N NPT 1/4 male 316 SS **6T** 3/8 inch compression 6BR Rc 3/8 **Ports** 6BRN R 3/8 Ports 6 NPT 3/8 female 2P 2 ports 6N NPT 3/8 male

outlet.

Note) Only available with same type fittings inlet and

For details, refer to the Web Catalogue.

<sup>\*</sup> Specifications and dimensions are the same as those of the standard model.

**SMC** 

# **Electric Actuator/Slider Type**

Ball Screw Drive Secondary Battery Compatible

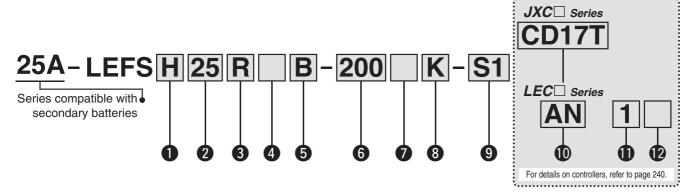
Refer to the "CE/UKCA/UL-compliance List" in the **Web Catalogue**.

**25A-LEFS Series** LEFS16, 25, 32, 40

(RoHS)

Refer to the Web Catalogue for model selection.

How to Order



#### Accuracy

_	Basic type
Н	High-precision type

# Motor mounting

_	In-line
R	Right side parallel
L	Left side parallel

position

# 4 Motor type

Symbol	Type	Applicable size			Compatible	)	
Symbol	Туре	LEFS16	LEFS25	LEFS32	LEFS40	Compatible controllers/dri	vers
-	Step motor (Servo/24 VDC)	•	•	•	•	JXCE1 LEC JXC91 LEC JXCP1 JXCD1 JXCL1 JXCM1 JXC51 JXC61	
Α	Servo motor (24 VDC)	•	•	_	_	LECA6	

#### 6 Lead [mm]

Symbol	LEFS16	LEFS25	LEFS32	LEFS40
Α	10	12	16	20
B	5	6	8	10

#### 6 Stroke\*1 [mm]

Stroke		Note
Siloke	Size	Applicable stroke
50 to 500	16	50, 100, 150, 200, 250, 300, 350, 400, 450, 500
50 to 600	25	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600
50 to 800	32	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800
150 to 1000	40	150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000

# **7** Motor option

_	Without option
В	With lock

#### 8 Positioning pin hole

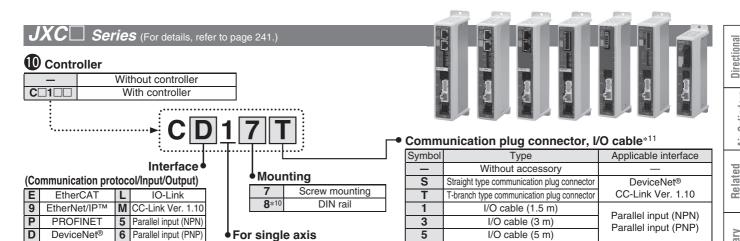
_	Housing B bottom*2	Housing B bottom
К	Body bottom 2 locations	Body bottom

# 9 Actuator cable type/length\*4

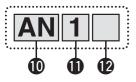
Standard	cable [m]	1	Roboti	c cable	,	[m]
_	None	ſ	R1	1.5	RA	10* <sup>3</sup>
S1	1.5* <sup>6</sup>	ſ	R3	3	RB	15* <sup>3</sup>
S3	3*6	Ī	R5	5	RC	20*3
S5	5* <sup>6</sup>	[	R8	8*3		

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.









#### Controller/Driver type\*5

_	Without controller/driver				
6N	LECA6	NPN			
6P	(Step data input type)	PNP			
1N	LECP1*6	NPN			
1P	(Programless type)	PNP			
AN	LECPA*6 *7	NPN			
AP	(Pulse input type)	PNP			

# I/O cable length\*8

_	Without cable (Without communication plug connector)
1	1.5 m
3	3 m* <sup>9</sup>
5	5 m* <sup>9</sup>



_	Screw mounting
D	DIN rail*10

- \*1 Please contact SMC for non-standard strokes as they are produced as special orders.
- \*2 Refer to the body mounting example in the Web Catalogue for the mounting method.
- \*3 Produced upon receipt of order (Robotic cable only)
- \*4 The standard cable should only be used on fixed parts. For use on moving parts, select the robotic cable. Refer to the Web Catalogue if only the actuator cable is required.
- \*5 For details on controllers/drivers and compatible motors, refer to the compatible controllers/drivers on the next page.
- \*6 Only available for the motor type "Step motor
- \*7 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) separately. (Refer to the Web Catalogue.)
- \*8 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. If an I/O cable is required, order the cable separately for each series. (For details, refer to the Web Catalogue.)
- \*9 When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables usable with open collector \*10 The DIN rail is not included. It must be ordered separately.
- \*11 Select "-" for anything other than DeviceNet®, CC-Link, or parallel input.

Select "-," "S," or "T" for DeviceNet® or CC-Link. Select "-," "1," "3," or "5" for parallel input.

## 

#### [CE/UKCA-compliant products]

- ① EMC compliance was tested by combining the electric actuator LEF series and the controller LEC/JXC series.
  - The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.
- 2 For the servo motor ( 2 4 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to the Web Catalogue for the noise filter set. Refer to the LECA series Operation Manual for installation.

#### [UL-compliant products (For the LEC series)]

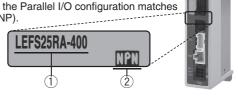
When compliance with UL is required, the electric actuator and controller/ driver should be used with a UL1310 Class 2 power supply.

#### The actuator and controller/driver are sold as a package.

Confirm that the combination of the controller/driver and actuator is correct.

### <Check the following before use.>

- 1 Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
- ② Check that the Parallel I/O configuration matches (NPN or PNP).



Refer to the Operation Manual for using the products. Please download it via our website: https://www.smc.eu

Related Products

Control Valves

Air Cylinders

Rotary Actuators Air Grippers

Equipment Vacuum

Preparation

Air

Clean Air Filters

Modular F.R.L./ Pressure Control Equipment

#### **Compatible Controllers/Drivers**

	Step data input type	Step data input type	Programless type	Pulse input type
Туре	Gase ::	O SAC 25		
Series	JXC51 JXC61	LECA6	LECP1	LECPA
Features	Parallel I/O	Parallel I/O	Capable of setting up operation (step data) without using a PC or teaching box	Operation by pulse signals
Compatible motor	Step motor (Servo/24 VDC)	Servo motor (24 VDC)		motor 24 VDC)
Max. number of step data	64 p	oints	14 points	_
Power supply voltage		24 \	VDC	

Туре	EtherCAT direct input type	EtherNet/IP™ direct input type	PROFINET direct input type	DeviceNet® direct input type	IO-Link direct input type	CC-Link direct input type			
Series	JXCE1	JXC91	JXCP1	JXCD1	JXCL1	JXCM1			
Features	EtherCAT direct input	EtherNet/IP™ direct input	PROFINET direct input	DeviceNet® direct input	IO-Link direct input	CC-Link direct input			
Compatible motor		Step motor (Servo/24 VDC)							
Max. number of step data		64 points							
Power supply voltage			24 \	/DC					

# **Electric Actuator/Slider Type**

Ball Screw Drive Secondary Battery Compatible

The LECSB-S, LECSC-S, and LECSS-S electric actuator drivers are to be discontinued. The LECSB-T, LECSC-T and LECSS-T drivers are available as substitutes. In the product number, select T.6 instead of S6, T7 instead of S7, or T8 instead of S8 for the 4 Motor type, and select B2 instead of B1, C2 instead of C1, or S2 instead of S1 for the **1** Driver type.

Refer to the Web Catalogue for model selection.

LECY□ Series p. 244

**How to Order** 

**25A-LEFS Series** LEFS25, 32, 40

Refer to the "CE/UKCA/UL-compliance List" in the Web Catalogue



<b>25A-LEFS</b>	H	32	R	<b>S3</b>	B-	200		K-	-S	2	<b>A2</b>	
Series compatible with secondary batteries	0	2	3	4	6	6	7	8	9	10	•	12

Accuracy

Basic type ligh-precision type

2 Size 3 Motor mounting position

_	In-line
R	Right side parallel
L	Left side parallel
L	Left side paralle

5	Lead	[mm]

Symbol	25A- LEFS25	25A- LEFS32	25A- LEFS40
Α	12	16	20
В	6	8	10

6 Stroke [mm]

	<b>9</b> 30	ove filling		IVIO	toi op		
	50 50 to to			_	Withou		
				В	With		
	1000	1000					
	* For details, refer to the applicable stroke table below.						

Motor option

_	Without option
В	With lock

Motor type

141	otor type			•	
Symbol	Type	Output [W]	Actuator size	Compatible drivers	UL-compliant
S2*1	AC servo motor	100	25	LECSA□-S1	•
S3	(Incremental	200	32	LECSA□-S3	•
S4	encoder)	400	40	LECSA2-S4	•
S6*1		100	25	LECSB□-S5 LECSC□-S5 LECSS□-S5	
<b>S</b> 7	AC servo motor (Absolute encoder)	200	32	LECSB□-S7 LECSC□-S7 LECSS□-S7	_
S8		400	40	LECSB2-S8 LECSC2-S8 LECSS2-S8	_
T6*2		100	25	LECSB2-T5 LECSC2-T5 LECSN2-T5-□	
				LECSS2-T5	•
<b>T</b> 7	AC servo motor (Absolute encoder)	200	32	LECSB2-T7 LECSC2-T7 LECSN2-T7-□	_
				LECSS2-T7	•
Т8		400	40	LECSB2-T8 LECSC2-T8 LECSN2-T8-□	_
				LECSS2-T8	

For motor type S 2 and S 6, the compatible driver part number suffixes are S1 and S5 respectively.

\*2 For motor type T6, the compatible driver part number is LECS 2-T5.

100 150 200 250 300 350

25A-LEFS25 • • • • • • • • • • •

# 8 Positioning pin hole

-	Housing B bottom*1	Housing B bottom		
K Body bottom 2 locations		Body bottom		
1 Defer to the hady mounting example for the				

Refer to the body mounting example for the mounting method. (Refer to the Web Catalogue.)

#### 9 Cable type\*1 \*2

_	Without cable
S	Standard cable
R	Robotic cable (Flexible cable)

- \*1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- Standard cable entry direction is · Parallel: (A) Axis side
  - · In-line: (B) Counter axis side

#### Cable length\*1 [m]

_	Without cable
2	2
5	5
Α	10

The length of the encoder, motor, and lock cables are the same.

# I/O cable length [m]∗3

|650|700|750|800|850|900|950

_	Without cable
Н	Without cable (Connector only)
1	1.5

When "-: Without driver" is selected for the driver type, only "-: Without cable" can be selected. If an I/O cable is required, refer to the "Options" page in the Web Catalogue.

> Standard Manufacturable

stroke range

[mm]

50 to 600

50 to 800

150 to 1000

# Driver type

	Compatible	Power supply	Size		
	drivers	voltage [V]	25	32	40
_	Without driver	_	•	•	•
A1	LECSA1-S□	100 to 120	•	•	_
A2	LECSA2-S□	200 to 230	•	•	•
B1	LECSB1-S□	100 to 120	•	•	—
B2	LECSB2-S□	200 to 230	•	•	•
52	LECSB2-T□	200 to 240	•	•	•
C1	LECSC1-S□	100 to 120	•	•	—
C2	LECSC2-S□	200 to 230	•	•	•
02	LECSC2-T□	200 10 230	•	•	•
S1	LECSS1-S□	100 to 120	•	•	—
S2	LECSS2-S□	200 to 230	•	•	•
32	LECSS2-T□	200 to 240	•	•	•
N2	LECSN2-T□	200 to 240	•	•	•
92	LECSN2-T□-9	200 to 240	•	•	•
E2	LECSN2-T□-E	200 to 240	•	•	
P2	LECSN2-T□-P	200 to 240			

When a driver type is selected, a cable is included. Select the cable type and cable length. Example) S2S2: Standard cable (2 m) + Driver (LECSS2)

S2: Standard cable (2 m)

-: Without cable and driver

The 25A- series specifications and dimensions are the same as those of the standard model.

#### Please contact SMC for non-standard strokes as they are produced as special orders.

•

400 450 500 550 600

• • •

•

#### Compatible Drivers\*1

**Applicable Stroke Table** 

25A-LEFS32 • • • • •

[mm]

#### For details, refer to the Web Catalogue.

on particle brivers								
Driver type	Pulse input type/ Positioning type	Pulse input type	CC-Link direct input type	SSCNET III type	Pulse input type	CC-Link direct input type	type	Network card type
Series	LECSA	LECSB	LECSC	LECSS	LECSB-T	LECSC-T	LECSS-T	LECSN-T
Number of point tables*2	Up to 7	_	Up to 255 (2 stations occupied)	1	Up to 255	Up to 255 (2 stations occupied)	1	Up to 255
Pulse input	0	0	_	1	0	_	1	_
Applicable network	_	_	CC-Link	SSCNET3	_	CC-Link	SSCNET #/H	PROFINET EtherCAT EtherNet/IP™
Control encoder	Incremental 17-bit encoder	Absolute 18-bit encoder	Absolute 18-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder	Absolute 22-bit encoder
Communication function	USB communication	USB communication,	RS422 communication	USB communication	USB communication,	RS422 communication	USB communication	USB communication
Power supply voltage [V]	100 to 120	VAC (50/60 Hz)	, 200 to 230 VAC	(50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)

\*1 Copper and zinc materials are used for the motors, cables, controllers/drivers. \*2 The LECSN-T only supports PROFINET and EtherCAT.

# **Electric Actuator/Slider Type**

Ball Screw Drive Secondary Battery Compatible

**25A-LEFS Series** LEFS25, 32, 40

Refer to the Web Catalogue for model selection.

LECS□ Series p. 243

How to Order

RoHS

UL-compliance List" in the Web Catalogue

# 25A-LEFS H 32 R Series compatible with secondary batteries

Accuracy

Basic type High-precision type 2 Size

40

**3** Motor mounting position

_	In-line
R	Right side parallel
L	Left side parallel

Lead [mm]

Symbol	LEFS25	LEFS32	LEFS40
Α	12	16	20
В	6	8	10

6 Stroke [mm]

	50	50
	to	to
	1000	1000
	D-4	ta dia a anadira di la

Refer to the applicable stroke table.

Motor option Without option With lock

4 Motor type

Symbol	Type	Output [W]	Size	Compatible drivers
V6*1	AC servo motor	100	25	LECYM2-V5/LECYU2-V5
V7	(Absolute	200	32	LECYM2-V7/LECYU2-V7
V8	encoder)	400	40	LECYM2-V8/LECYU2-V8

\*1 For motor type V6, the compatible driver part number suffix is V5.

Cable length\*1 [m]

Without cable
3
5
10
20

The length of the encoder, motor, and lock cables are the

8 Positioning pin hole

— Housing B bottom*1	Housing B bottom
K Body bottom 2 locations	Body bottom

\*1 Refer to the body mounting example in the Web Catalogue for the mounting method.

Driver type

_	, ·	
	Compatible	Power supply
	drivers	voltage [V]
_	Without driver	_
M2	LECYM2-V□	200 to 230
U2	LECYU2-V□	200 to 230

Applicab	le S	Stro	ke	Tab	le															●:	Standard
Stroke [mm] Model		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	Manufacturable stroke range [mm]
25A-LEFS25	•	•	•	•	•	•	•	•	•	•	•	•	_	_	_	_	_	_	_	_	50 to 600
25A-LEFS32	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	_	_	_	_	50 to 800
25A-LEFS40	_	_				•	•	•										•			150 to 1000

Please contact SMC for non-standard strokes as they are produced as special orders.

9 Cable type\*1 \*2

_	Without cable
S	Standard cable
R	Robotic cable
n	(Flexible cable)

- \*1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- \*2 Standard cable entry direction is
  - · Parallel: (A) Axis side
  - · In-line: (B) Counter axis side

# 1/O cable length [m]\*3

_	Without cable
Н	Without cable (Connector only)
1	1.5

\*3 When "-: Without driver" is selected for the driver type, only -: Without cable" can be selected.

Refer to the Web Catalogue if an I/O cable is required.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

#### Compatible Drivers

Driver type

	For details, refer	to the <b>Web Catalogue</b> .
MECHATROLINK-II type	MECHATROLINK-III type	

Series	LECYM	LECYU
Applicable network	MECHATROLINK-II	MECHATROLINK-III

Absolute Control encoder 20-bit encoder Communication device

USB communication, RS-422 communication Power supply voltage [V] 200 to 230 VAC (50/60 Hz)

Copper and zinc materials are used for the motors, cables, controllers/drivers



Directional Control Valves

Air Cylinders

Related Products

Rotary Actuators

Air Grippers

Equipment Vacuum Preparation

Air

Air Filters

Flow Control Equipment/ Fittings

Detection Switches

Fluid Control

Process Gas

# Electric Actuator/High Rigidity Slider Type

Ball Screw Drive Secondary Battery Compatible

25A-LEJS Series

LEJS40, 63

electric actuator drivers are to be discontinued. The LECSB-T, LECSC-T, and LECSS-T drivers are available as substitutes. In the product number, select T6 instead of S6, or T7 instead of S7 for the 3 Motor type, and select B2 instead of B1. C2 instead of C1. or S2 instead of S1 for the 9 Driver type

Refer to the Web Catalogue for model selection.

LECY□ Series p. 246

**How to Order** 

Refer to the "CE/UKCA/UL-compliance List" in the Web Catalogue



#### Accuracy

_	•
_	Basic type
Н	High-precision type

2 Size 40

Stroke [mm]\*3



\*3 Refer to the applicable stroke table for details.

## 6 Motor option

_	Without option
В	With lock

<b>1</b> Motor type	U	Mo	tor	ty	pe	3
---------------------	---	----	-----	----	----	---

Symbol	Туре	Output Actuator [W] size		Compatible*3 drivers	UL- compliant
S2*1	AC servo motor (Incremental encoder)	100	40	LECSA□-S1	•
S3	AC servo motor (Incremental encoder)	200	63	LECSA□-S3	•
S6*1	AC servo motor (Absolute encoder)	100	40	LECSB□-S5 LECSC□-S5 LECSS□-S5	_
<b>S7</b>	AC servo motor (Absolute encoder)	200	63	LECSB□-S7 LECSC□-S7 LECSS□-S7	_
T6*2		100	40	LECSB2-T5 LECSC2-T5 LECSN2-T5-□	_
	AC servo motor			LECSS2-T5	
T7	(Absolute encoder)	200	63	LECSB2-T7 LECSC2-T7 LECSN2-T7-□	_
				LECSS2-T7	

- \*1 For motor type S2 and S6, the compatible driver part number suffixes are S1 and S5 respectively.
- \*2 For motor type T6, the compatible driver part number is LECS□2-T5.

#### Cable type\*5, \*6, \*7

_	Without cable								
S	Standard cable								
R	Robotic cable (Flexible cable)								

- \*6 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- \*7 Standard cable entry direction is "(A) Axis side."

#### 8 Cable length [m]\*5, \*8

	<u> </u>
_	Without cable
2	2
5	5
Α	10

- \*8 The length of the motor, encoder, and lock cables are the same.
- Applicable Stroke Table\*4

#### : Standard

Stroke Model [mm]	200	300	400	500	600	700	800	900	1000	1200	1500
25A-LEJS40	•		•		•	•	•	•		•	_
25A-LEJS63	_										

\*4 Please contact SMC for non-standard strokes as they are produced as special orders.

### 4 Lead [mm]

Symbol	25A-LEJS40	25A-LEJS63			
Н	24	30			
Α	16	20			
В	8	10			

# 9 Driver type\*5

_				
	Compatible drivers	Power supply voltage [V]		
<ul><li>Without driver</li></ul>		_		
A1	LECSA1-S□	100 to 120		
A2	LECSA2-S□	200 to 230		
B1	LECSB1-S□	100 to 120		
B2	LECSB2-S□	200 to 230		
DZ	LECSB2-T□	200 to 240		
C1	LECSC1-S□	100 to 120		
C2	LECSC2-S□	200 to 230		
	LECSC2-T□	200 10 230		
S1	LECSS1-S□	100 to 120		
S2	LECSS2-S□	200 to 230		
32	LECSS2-T□	200 to 240		
N2	LECSN2-T□	200 to 240		
92	LECSN2-T□-9	200 to 240		
E2	LECSN2-T□-E	200 to 240		
P2	LECSN2-T□-P	200 to 240		

\*5 When a driver type is selected, a cable is included. Select the cable type and cable length.

S2S2: Standard cable (2 m) + Driver (LECSS2)

- S2: Standard cable (2 m)
- -: Without cable and driver

#### I/O cable length [m]\*9

_	Without cable
Н	Without cable (Connector only)
1	1.5

\*9 When "-: Without driver" is selected for the driver type, only "-: Without cable" can be selected. Refer to the Web Catalogue if an I/O cable is

For auto switches, refer to page 262.

For details, refer to the Web Catalogue

\* The 25A- series specifications and dimensions are the same as those of the standard model.

## Compatible Drivers\*10

To details, refer to the trea satisfact.								
Driver type	Pulse input type/ Positioning type	Pulse input type	CC-Link direct input type	SSCNETIII type	Pulse input type	CC-Link direct input type	type The state of	Network card type
Series	LECSA	LECSB	LECSC	LECSS	LECSB-T	LECSC-T	LECSS-T	LECSN-T
Number of point tables*11	Up to 7	_	Up to 255	_	Up to 255	Up to 255 (2 stations occupied)	_	Up to 255
Pulse input	0	0	_	_	0	_	_	_
Applicable network	_	_	CC-Link	SSCNET III	_	CC-Link	SSCNET#/H	PROFINET EtherCAT EtherNet/IP™
Control encoder	Incremental	Absolute	Absolute	Absolute	Absolute	Absolute	Absolute	Absolute
Control encoder	17-bit encoder	18-bit encoder	18-bit encoder	18-bit encoder	22-bit encoder	18-bit encoder	22-bit encoder	22-bit encoder
Communication function	USB communication	USB communication,	RS422 communication		,			USB communication
Power supply voltage [V]	100 to 120	VAC (50/60 Hz),	200 to 230 VAC	(50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)

\*11 The LECSN-T only supports PROFINET and EtherCAT. \*10 Copper and zinc materials are used for the motors, cables, controllers/drivers.

# **Electric Actuator/High Rigidity Slider Type**

Ball Screw Drive Secondary Battery Compatible

25A-LEJS Series LEJS40, 63

LECS□ Series p. 245

Refer to the Web Catalogue for model selection.

**How to Order** 

Refer to the "CE/UKCA/ UL-compliance List" in the Web Catalogue.

RoHS

25A-LEJS	Н	40	Vb	<b>A</b>  -	-500	-	-
Series compatible with secondary batteries	0	2	8	4	5	6	7

Accuracy

Basic type High-precision type

	2 Siz	e
I	40	
I	63	

<u> </u>	Мо	tor	type	*1	

Symbol	Туре	Output [W]	Actuator size	Compatible drivers
V6	AC servo motor (Absolute encoder)	100	40	LECYM2-V5 LECYU2-V5
<b>V</b> 7	AC servo motor (Absolute encoder)	200	63	LECYM2-V7 LECYU2-V7
_				

<sup>\*1</sup> For motor type V6, the compatible driver part number suffix is V5.

# 4 Lead [mm]

Symbol	25A-LEJS40	25A-LEJS63			
Н	24	30			
Α	16	20			
В	8	10			

5 Stroke [mm]\*3

200	*3	Refer to the	
to		applicable stroke	
1500		table for details.	

6 Motor option Without option With lock

7 Cable	type*5,	<b>*</b> 6,	*7
---------	---------	-------------	----

_	Without cable					
S	S Standard cable					
R	Robotic cable (Flexible cable)					

- \*6 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- \*7 Standard cable entry direction is "(A) Axis side."

#### 8 Cable length [m] \*5, \*6

_	Without cable
3	3
5	5
Α	10
С	20

\*6 The length of the motor, encoder, and lock cables are the same.

# 9 Driver type \*5

	Compatible drivers	Power supply voltage [V]			
_	Without driver	_			
M2	LECYM2-V□	200 to 230			
U2	LECYU2-V□	200 to 230			

\*5 When a driver type is selected, a cable is included. Select the cable type and cable length. Example)

S2S2: Standard cable (2 m) + Driver (LECSS2)

S2: Standard cable (2 m)

-: Without cable and driver

# 1/O cable length [m]\*9

_	Without cable	
Н	Without cable (Connector only)	
1	1.5	l

\*9 When "-: Without driver" is selected for the driver type, only "-: Without cable" can be selected. Refer to the Web Catalogue if an I/O cable is

#### Applicable Stroke Table\*4

4	Applicable Stroke Table*4 •: Standard											
ĺ	Stroke Model [mm]		300	400	500	600	700	800	900	1000	1200	1500
	25A-LEJS40	•	•	•	•			•	•	•		_
ĺ	25A-LEJS63	_	•		•		•				•	

\*4 Please contact SMC for non-standard strokes as they are produced as special orders.

Solid state auto switches should be ordered separately. For details on auto switches, refer to page 262.

Applicable auto switches D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

\* The 25A- series specifications and dimensions are the same as those of the standard model.

#### **Compatible Drivers**

#### For details, refer to the Web Catalogue.

Driver type	MECHATROLINK-II type	MECHATROLINK-III type			
Series	LECYM	LECYU			
Applicable network	MECHATROLINK-II	MECHATROLINK-III			
Control encoder	Absolute 20-bit encoder				
Communication device	USB communication, RS-422 communication				
Power supply voltage [V]	200 to 23	0 VAC (50/60 Hz)			

Copper and zinc materials are used for the motors, cables, controllers/drivers.



Related Products

Air Cylinders | Control Valves

Rotary Actuators

Air Grippers

Equipment Vacuum

Air Preparation

Detection Switches

Fluid Control Equipment

Process Gas | Equipment

# **Electric Actuator** Rod Type Secondary Battery Compatible

Refer to the "CE/UKCA/UL-compliance

List" in the Web Catalogue.

**25A-LEY Series** LEY16, 25, 32, 40



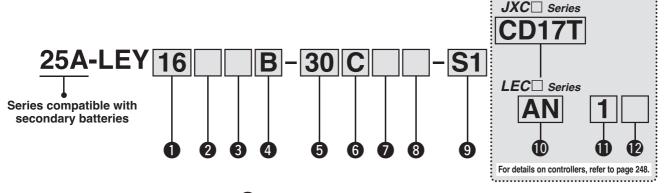
Refer to the Web Catalogue for model selection.

**How to Order** 



Motor mounting position: **Parallel** 

Motor mounting position: In-line



# 1 Size

012	`
16	
25	
32	
40	

#### 2 Motor mounting position

p c c i i i i					
_	Top side parallel				
R	Right side parallel				
L	Left side parallel				
D	In-line				

# Motor type

O IVIO	• Motor type								
Symbol	Туре	4	Compatible controllers/						
Syllibol		LEY16	LEY25	LEY32/40		drivers			
-	Step motor (Servo/24 VDC)	•	•	•	JXCE1 JXC91 JXCP1 JXCD1 JXCL1	JXCM1 JXC51 JXC61	LECP1 LECPA		
Α	Servo motor (24 VDC)	•	•	_		LECA6			

# 4 Lead [mm]

Symbol	LEY16	LEY25	LEY32/40
Α	10	12	16
В	5	6	8
С	2.5	3	4

# Stroke [mm]

30	30	С	With
to	to	W	With loc
500	500	• • •	************

#### For details, refer to the applicable stroke table below.

## 6 Motor option\*2

С	With motor cover
W	With lock/motor cover

•	
Motor	

#### 7 Rod end thread

_	Rod end female thread					
M	Rod end male thread					
	(1 rod end nut is included.)					

# 8 Mounting\*5

Symbol	Type	Motor mounting position				
Syllibol	туре	Parallel	In-line			
_	Ends tapped/Body bottom tapped*6	•	•			
L	Foot	•	_			
F	Rod flange*6	●*8	•			
G	Head flange*6	●*9	_			
D	Double clevis*7	•	_			

#### Actuator cable type/length\*11

Standard cable [m]			
_	None		
S1	1.5*12		
S3	3*12		
S5	5*12		

Roboti		[m]	
R1	1.5	RA	10* <sup>10</sup>
R3	3	RB	15* <sup>10</sup>
R5	5	RC	20*10
R8	8*10		

#### Mounting Bracket Part Nos. for the 25A- Series\*4

Applicable size	Foot*3	Flange	Double clevis
16	25-LEY-L016	25-LEY-F016	25-LEY-D016
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
32, 40	25-LEY-L032	25-LEY-F032	25-LEY-D032
Surface treatment	RAYDENT®	RAYDENT®	Coating (Size 16: Electroless nickel plating)

Solid state auto switches should be ordered separately. For details on auto switches, refer to page 262.

Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900

D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

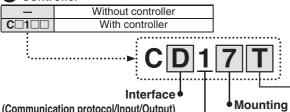
#### 

Applicable Stroke	e i ai	oie*										: Standard
Stroke		50	100	150	200	250	300	350	400	450	500	Manufacturable
Model [mm]	00	30	100	100	200	200	000	000	700	450	500	stroke range
25A-LEY16	•	•	•	•	•	•	•	_	_	_	_	10 to 300
25A-LEY25	•	•	•	•	•	•	•	•	•	_	_	15 to 400
25A-LEY32/40	•	•	•	•	•	•	•	•	•	•	•	20 to 500

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.





(Communication protocol/Input/Output)

E	EtherCAT	L	IO-Link
9			CC-Link Ver. 1.10
Р	PROFINET	5	Parallel input (NPN)
D	DeviceNet®	6	Parallel input (PNP)

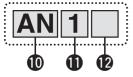
For single axis

7	Screw mounting
<b>8</b> *17	DIN rail

Communication plug connector, I/O cable\*18

Symbol	Type	Applicable interface	
_	Without accessory	_	
S	Straight type communication plug connector	DeviceNet <sup>®</sup>	
Т	T-branch type communication plug connector	CC-Link Ver. 1.10	
1	I/O cable (1.5 m)	Dorollol input (NIDNI)	
3	I/O cable (3 m)	Parallel input (NPN) Parallel input (PNP)	
5	I/O cable (5 m)	i araner iriput (i ivi )	

# Series (For details, refer to page 249.)



# 10 Controller/Driver type\*12

_	Without controller/driver	
6N	LECA6	NPN
6P	(Step data input type)	PNP
1N	LECP1*13	NPN
1P	(Programless type)	PNP
AN	LECPA*13 *14	NPN
AP	(Pulse input type)	PNP

# I/O cable length\*15

_	Without cable (Without communication plug connector)
1	1.5 m
3	3 m* <sup>16</sup>
5	5 m* <sup>16</sup>

# Controller/Driver mounting

<b>D</b>	introller/Briver infoanting
_	Screw mounting
D	DIN rail* <sup>17</sup>

- Please contact SMC for non-standard strokes as they are produced as
- special orders.

  \*2 When "With lock" or "With lock/motor cover" is selected for the top/ right/left side parallel motor types, the motor body will stick out from the end of the body for size 16/40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model
- \*3 When ordering foot brackets, order 2 pieces per actuator.
- \*4 Parts included with each type of bracket are as follows. Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt
- The mounting bracket is shipped together with the product but does not come assembled.
- \*6 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range. LEY25: 200 mm or less · LEY32/40: 100 mm or less
- \*7 For the mounting of the double clevis type, use the actuator within the following stroke range.

  LEY16: 100 mm or less · LEY25: 200 mm or less · LEY32/40: 200 mm or less

  \*8 The rod flange type is not available for the LEY16/40 with a 30 mm stroke and motor option "With lock," "With lock/motor cover."

  \*9 The head flange type is not available for the LEY32/40.

- \*10 Produced upon receipt of order (Robotic cable only)

- The standard cable should only be used on fixed parts. For use on moving parts, select the robotic cable. Refer to the Web Catalogue if only the actuator cable is required.
- For details on controllers/drivers and compatible motors, refer to the compatible controllers/drivers on the next page.
- \*13 Only available for the motor type "Step motor
- \*14 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) separately. (Refer to the **Web Catalogue**.) \*15 When "Without controller/driver" is selected for controller/driver types,
- I/O cable cannot be selected. If an I/O cable is required, order the cable separately for each series. (For details, refer to the Web Catalogue.)
- \*16 When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables usable with open collector
  \*17 The DIN rail is not included. It must be ordered separately.
- \*18 Select "-" for anything other than DeviceNet®, CC-Link, or parallel input.

Select "—," "S," or "T" for DeviceNet® or CC-Link. Select "—," "1," "3," or "5" for parallel input.

#### 

#### [CE/UKCA-compliant products]

① EMC compliance was tested by combining the electric actuator LEY series and the controller LEC/JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

② For the servo motor (24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to the Web Catalogue for the noise filter set. Refer to the LECA series Operation Manual for installation.

#### [UL-compliant products (For the LEC series)]

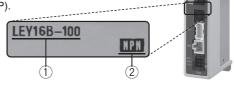
When compliance with UL is required, the electric actuator and controller/ driver should be used with a UL1310 Class 2 power supply.

#### The actuator and controller/driver are sold as a package. Confirm that the combination of the controller/driver and

actuator is correct.

#### <Check the following before use.>

- 1 Check the actuator label for the model number (after "25A-") This number should match that of the controller/driver.
- 2 Check that the Parallel I/O configuration matches (NPN or PNP).



Refer to the Operation Manual for using the products. Please download it via our website: https://www.smc.eu

#### **Compatible Controllers/Drivers**

	Step data input type	Step data input type	Programless type	Pulse input type	
Туре	GSAC TO THE SECOND SECO	OOC 25			
Series	JXC51 JXC61	LECA6	LECP1	LECPA	
Features	Parallel I/O	Parallel I/O	Parallel I/O Capable of setting up operation (step data) without using a PC or teaching box		
Compatible motor	Step motor (Servo/24 VDC)	Servo motor (24 VDC)		motor 24 VDC)	
Max. number of step data	64 p	oints	14 points —		
Power supply voltage	24 VDC				

Туре	EtherCAT direct input type	EtherNet/IPTM direct input type	PROFINET direct input type	DeviceNet® direct input type	IO-Link direct input type	CC-Link direct input type
Series	JXCE1	JXC91	JXCP1	JXCD1	JXCL1	JXCM1
Features	EtherCAT direct input	EtherNet/IP™ direct input	PROFINET direct input	DeviceNet <sup>®</sup> direct input	IO-Link direct input	CC-Link direct input
Compatible motor		Step motor (Servo/24 VDC)				
Max. number of step data		64 points				
Power supply voltage		24 VDC				

# Electric Actuator Rod Type Secondary Battery Compatible

The LECSB-S, LECSC-S, and LECSS-S electric actuator drivers are to be discontinued. The LECSB-T, LECSC-T, and LECSS-T drivers are available as substitutes. In the product number, select T 6 instead of S6, or T7 instead of S7 for the 4 Motor type, and select B2 instead of B1. C2 instead of C1. or S2 instead of S1 for the Driver type.

A/UL-compliance List" in the Web Catalogue.

25A-LEY Series

LEY25, 32 Size

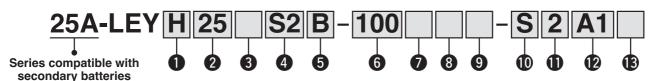
25.32

RoHS

LECY□ Series p. 253

Refer to the Web Catalogue for model selection.

How to Order



4 Motor type\*1

# Accuracy

Basic type High-precision type 2 Size

25	
32	

## Motor mounting position

_	Top side parallel		
R	Right side parallel		
L	Left side parallel		
D	In-line		

## 5 Lead [mm]

6 Stroke [mm]

30

to

500

Symbol	LEY25	LEY32*1
Α	12	16 (20)
В	6	8 (10)
С	3	4 (5)

\*1 The values shown in ( ) are the leads for the size 32 top/right/left side parallel motor types. (Equivalent leads which include the pulley ratio [1.25:1])

30

to

500

For details, refer to the applicable stroke table

# **Motor option**

_	Without option
В	With lock*1
. 1 \//ban	"\A/!+b look" is solooted for the top /vielst/lof

When "With lock" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 25 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.

# Motor

Symbol	Type	Output [W]	Actuator size	Compatible drivers*3	UL- compliant
S2*1	AC servo motor	100	25	LECSA□-S1	•
S3	(Incremental encoder)	200	32	LECSA□-S3	
S6*1	AC servo motor	100	25	LECSB□-S5 LECSC□-S5 LECSS□-S5	_
S7	(Absolute encoder)	200	32	LECSB□-S7 LECSC□-S7 LECSS□-S7	_
T6*2		100	25	LECSB2-T5 LECSC2-T5 LECSN2-T5-□	_
	AC servo motor			LECSS2-T5	
Т7	(Absolute encoder)	200	32	LECSB2-T7 LECSC2-T7 LECSN2-T7-□	_

- \*1 For motor type S2 and S6, the compatible driver part number suffixes are S1 and S5 respectively.
- \*2 For motor type T6, the compatible driver part number is LECS□2-T5.
- \*3 For details on the driver, refer to the Web Catalogue.

# 8 Rod end thread

_	Rod end female thread
М	Rod end male thread (1 rod end nut is included.)

#### Mounting Bracket Part Nos. for the 25A- Series

Applicable size		Foot*1	Flange	Double clevis
	25	25-LEY-L025	25-LEY-F025	25-LEY-D025
	32	25-LEY-L032	25-LEY-F032	25-LEY-D032
Surface treatment RAYDENT		RAYDENT®	RAYDENT®	Coating (Size 16: Electroless nickel plating)

- \*1 When ordering foot brackets, order 2 pieces per actuator.
- \* Parts included with each type of bracket are as follows. Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

#### **Applicable Stroke Table**

: Standard Stroke 100 150 200 250 300 350 400 450 500 30 50 Model stroke range [mm] 25A-LEY25 15 to 400 25A-LEY32 20 to 500

Please contact SMC for non-standard strokes as they are produced as special orders.

#### 9 Mounting\*1

Symbol	Type	Motor mounting position			
Syllibol	туре	Parallel	In-line		
-	Ends tapped/ Body bottom tapped *2	•	•		
L	Foot	•	_		
F	Rod flange*2	<b>●</b> *4	•		
G	Head flange*2	<b>●</b> *5			
D Double clevis*3		•	_		

LECSS2-T7

- \*1 The mounting bracket is shipped together with the product but does not come assembled.
- \*2 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
  - · 25A-LEY25: 200 mm or less
  - 25A-LEY32: 100 mm or less
- \*3 For the mounting of the double clevis type, use the actuator within the following stroke range.
  - · 25A-LEY25: 200 mm or less
  - 25A-LEY32: 200 mm or less
- \*4 The rod flange type is not available for the 25A-LEY25 with a 30 mm stroke and motor option "With lock."
- The head flange type is not available for the 25A-LEY32

Solid state auto switches should be ordered separately. For details on auto switches, refer to page 262.

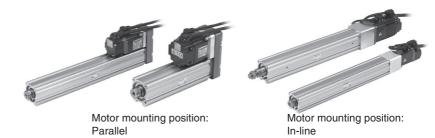
Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900

D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.





## Cable type\*1 \*2

_	Without cable			
S	Standard cable			
R	Robotic cable (Flexible cable)			

- \*1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- \*2 Standard cable entry direction is
  - · Parallel: (A) Axis side
  - · In-line: (B) Counter axis side

# I/O cable length [m]\*1

<ul><li>Without cable</li></ul>	
Н	Without cable (Connector only)
1	1.5

\*1 When "-: Without driver" is selected for the driver type, only "--: Without cable" can be selected.

Refer to the Web Catalogue if an I/O cable is required.

## Cable length\*1 [m]

_	Without cable
2	2
5	5
Α	10

The length of the encoder, motor, and lock cables are the same.

# Driver type\*1

	Compatible drivers	Power supply voltage [V]		
_	Without driver	_		
A1	LECSA1-S□	100 to 120		
A2	LECSA2-S□	200 to 230		
B1	LECSB1-S□	100 to 120		
B2	LECSB2-S□	200 to 230		
62	LECSB2-T□	200 to 240		
C1	LECSC1-S□	100 to 120		
C2	LECSC2-S□	200 to 230		
C2	LECSC2-T□	200 10 230		
S1	LECSS1-S□	100 to 120		
S2	LECSS2-S□	200 to 230		
32	LECSS2-T□	200 to 240		
N2 LECSN2-T□ 20		200 to 240		
92	LECSN2-T□-9	200 to 240		
E2	LECSN2-T□-E	200 to 240		
P2	LECSN2-T□-P	200 to 240		

\*1 When a driver type is selected, a cable is included. Select the cable type and cable length. Example)

S2S2: Standard cable (2 m) + Driver (LECSS2)

S2: Standard cable (2 m)

-: Without cable and driver

#### Compatible Drivere\*1

Companible Driv	Compatible Drivers*							
	Pulse input type/ Positioning type	Pulse input type	CC-Link direct input type	SSCNETIII type	Pulse input type	CC-Link direct input type	SSCNETIII/H SIRVO SI'STEUI CONTROLAGRI RETWOODS  type	Network card type
Driver type								
Series	LECSA	LECSB	LECSC	LECSS	LECSB-T	LECSC-T	LECSS-T	LECSN-T
Number of point tables*2	Up to 7	_	Up to 255 (2 stations occupied)	_	Up to 255	Up to 255 (2 stations occupied)	_	Up to 255
Pulse input	0	0	_	_	0	_	_	_
Applicable network	_	_	CC-Link	SSCNETIII	_	CC-Link	SSCNETIII/H	PROFINET EtherCAT EtherNet/IP™
Control encoder	Incremental 17-bit encoder	Absolute 18-bit encoder	Absolute 18-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder	Absolute 22-bit encoder
Communication function	USB communication	USB communication,	RS422 communication	USB communication	USB communication,	RS422 communication	USB communication	USB communication
Power supply voltage [V] 100 to 120 VAC (50/60 Hz), 200 to 230 VAC (50/60 Hz)		C (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)		

- \*1 Copper and zinc materials are used for the motors, cables, controllers/drivers.
- \*2 The LECSN-T only supports PROFINET and EtherCAT.



# **Electric Actuator** Rod Type Secondary Battery Compatible

25A-LEY Series LEY25, 32 Size

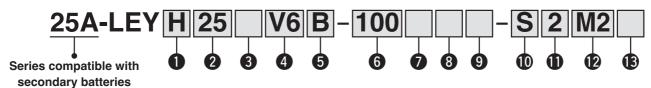
25, 32



LECS□ Series p. 251

Refer to the Web Catalogue for model selection.

#### How to Order



# Accuracy

Basic type High-precision type

#### Motor mounting position

_	Top side parallel
R	Right side parallel
L	Left side parallel
D	In-line

## Lead [mm]

Symbol	25A-LEY25	25A-LEY32*1	
Α	12	16 (20)	
В	6	8 (10)	
С	3	4 (5)	

<sup>\*1</sup> The values shown in ( ) are the leads for the size 32 top/right/left side parallel motor types. (Equivalent leads which include the pulley ratio [1.25:1])

#### 8 Rod end thread

_	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

#### 4 Motor type

Symbol	Туре	Output [W]	Size	Compatible drivers
V6*1	AC servo motor	100	25	LECYM2-V5 LECYU2-V5
V7	(Absolute encoder)	200	32	LECYM2-V7 LECYU2-V7

<sup>\*1</sup> For motor type V6, the compatible driver part number suffix is V5.

#### 6 Stroke [mm]

30	30
to	to
500	500

<sup>\*</sup> For details, refer to the applicable stroke table below.

## Motor option

_		
_	Without option	
В	With lock*1	

\*1 When "With lock" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 25 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.

# 9 Mounting\*1

Symbol	Type	Motor moun	ting position	
Syllibol	туре	Parallel	In-line	
_	Ends tapped/ Body bottom tapped *2	•	•	
L	Foot	•	_	١
F	Rod flange*2	●*4	•	
G	Head flange*2	<b>●</b> *5	_	
D	Double clevis*3	•	_	

#### \*1 The mounting bracket is shipped together with the product but does not come assembled.

- \*2 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
- · LEY25: 200 mm or less · LEY32: 100 mm or less \*3 For the mounting of the double clevis type, use the actuator within the following stroke range.
- · LEY25: 200 mm or less · LEY32: 200 mm or less \*4 The rod flange type is not available for the LEY25 with a 30 mm stroke and motor option "With lock."
- \*5 The head flange type is not available for the LEY32.

#### Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot*1	Flange	Double clevis
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
32	25-LEY-L032	25-LEY-F032	25-LEY-D032
Surface treatment	RAYDENT®	RAYDENT®	Coating (Size 16: Electroless nickel plating)

\*1 When ordering foot brackets, order 2 pieces per actuator.

Parts included with each type of bracket are as follows.

Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Solid state auto switches should be ordered separately. For details on auto switches, refer to page 262.

Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900

D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

#### **Applicable Stroke Table**

: Standard

												•. •
Stroke [mm]		50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range [mm]
25A-LEY25	•	•	•	•	•	•	•	•	•	_	_	15 to 400
25A-LEY32	•	•	•	•	•	•		•	•		•	20 to 500

<sup>\*</sup> Please contact SMC for non-standard strokes as they are produced as special orders.

<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.

Auto Switches

Motor mounting position: Motor mounting position: Parallel In-line

# Cable type\*1 \*2

_	Without cable
S	Standard cable
R	Robotic cable (Flexible cable)

- \*1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
- \*2 Standard cable entry direction is
  - · Parallel: (A) Axis side
  - · In-line: (B) Counter axis side

# Cable length [m]\*1

_	Without cable
3	3
5	5
Α	10
С	20

\*1 The length of the motor and encoder cables are the same. (For with lock)

## 12 Driver type

	Compatible drivers	Power supply voltage [V]
_	Without driver	_
M2	LECYM2-V□	200 to 230
U2	LECYU2-V□	200 to 230

\* When a driver type is selected, a cable is included. Select the cable type and cable length.

# I/O cable length [m]\*1

_	Without cable
Н	Without cable (Connector only)
1	1.5

When "-: Without driver" is selected for the driver type, only "--: Without cable" can be selected.

Refer to the Web Catalogue if an I/O cable is required.

#### **Compatible Drivers**

Driver type	MECHATROLINK-II type	MECHATROLINK-III type
Series	LECYM	LECYU
Applicable network	MECHATROLINK-III	MECHATROLINK-III
Control encoder		encoder
Communication device	USB communication,	RS-422 communication
Power supply voltage [V]	200 to 230 V	AC (50/60 Hz)

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.



# 25A- Series

# **Applicable Auto Switches**

# **Applicable Cylinder Series**

				Auto	o switches	3										Air	cylind	lers					
					Electrical			diua	المصمطا	. [mal	Pre-wired	CD ID2	CD(B)J2	0	085	т —	CD(I		MDB	C/D/066D	CDAG	CDCa	
Type	Special		Indicator	Wiring	entry	Auto switch			length		connector	CDJP2	CDJ2K	CL	700	CDIVIZ	CD(I	b)G1	IVIDE	C(P)303D	CDAZ	CD32	
. , , , ,	function	entry	light	(Output)	direction	model	0.5 Nil		3 L	5 Z		ø4 to ø16	ø10, ø16	ø8 to ø12	016 to 02	5 ø20 to ø40	ø20 to ø63	ø80, ø100	ø32 to ø100	ø32 to ø125	ø40 to ø100	ø125 to ø160	
				3-wire (NPN)		D-M9N-900	1411	•	•	0	_	•	•			•		_	•	•		•	
				3-wire (NT N)		D-M9P-900	•	•	•	0			•				•	$\vdash \equiv$	•	•			
				2-wire	111-11110	D-M9B-900	•	•	•	0	_		•				•		•	•			
	_			3-wire (NPN)		D-M9NV-900	•	•	•	0			•				•		•	•			
				. , ,	Pornondicular	D-M9PV-900	•	•	•	0			•				•		•	•			
				2-wire	i erpenulculai	D-M9BV-900	•	•		0			•			•	•	$\vdash$	•	•			
		-		3-wire (NPN)		D-M9NW-900	•	•	•	0			•				•	$\vdash \equiv$	•	•			
				3-wire (PNP)		D-M9PW-900	•	•	•	0	_		•			•	•		•	•			
	Diagnostic			2-wire	1	D-M9BW-900	•	•	•	0	0		•			•	•		•	•			
	indication			3-wire (NPN)		D-M9NWV-900		•	•	0			•			•	•	$\vdash$	•	•			
	(2-color indicator)			. ,	1	D-M9PWV-900		•	•	0			•			•	•	$\vdash \equiv$	•	•	•	•	
				2-wire	i erpendiculai	D-M9BWV-900		•	•	0	0		•						•	•			
				3-wire (NPN)		D-W9DWV-900 D-Y59A-900	•	_		0	_		_	_			_	H			_		
				3-wire (NFN)	1	D-139A-900 D-Y7P-900	•	_	•	0				$\vdash \equiv$	$\perp =$								
				2-wire	111-11110	D-177-300 D-Y59B-900	•			0													
	_			3-wire (NPN)		D-Y69A-900	•		•	0						_							
				, ,	Pernendicular	D-Y7PV-900	•		•	0			-		<u> </u>	-							
				2-wire	1 cipolidiculai	D-Y69B-900	•	_	•	0			-		-	+-	_	-	_	_	_	_	
				3-wire (NPN)		D-Y7NW-900	•		•	0	_					_							
				3-wire (PNP)	In-line	D-Y7PW-900	•		•	0						-							
Solid	Diagnostic			2-wire	111-11116	D-Y7BW-900	•		•	0													
state	indication			3-wire (NPN)		D-Y7NWV-900	•		•	0	_					_							
auto	(2-color indicator)	Grommet	Yes	. , ,		D-Y7PWV-900	•	_	•	0	_					-						_	
switch				2-wire	i erpendiculai	D-Y7BWV-900	•		•	0													
				3-wire (NPN)		D-G59-900	•	_	•	0	_					-		•					
				3-wire (PNP)	-	D-G5P-900	•			0									_				
				2-wire		D-K59-900	•	_	•	0	_					-		•					
	Diagnostic			3-wire (NPN)	In-line	D-G59W-900	•			0								•					
	indication			3-wire (PNP)		D-G5PW-900	•		•	0			-		<del> </del>	+_			_				
	(2-color indicator)			2-wire		D-K59W-900	•		•	0	0					-		•					
	(= ooioi midiodiol)			3-wire (NPN)		D-K39W-900 D-F79-900	•		•	0	_		$\vdash$	=	-	+=			_				
				3-wire (NT N)		D-F79-900 D-F7P-900	•			0			$\vdash$			$+ \equiv$							
				2-wire		D-J79-900	•		•	0			$\vdash$	$\vdash$	$\vdash$	$+ \equiv$			$\vdash$				
	_			3-wire (NPN)		D-673-300 D-F7NV-900	•		•	0				+	<u> </u>	$+ \equiv$							
						D-F7PV-900	•			0	_	_		+	<del> </del>	+_	_	<del>-</del>	+_	_	_		
				2-wire	i erberiuicuidi	D-F7BV-900	•		•	0			=	+ =					+=			_	
				3-wire (NPN)		D-F79W-900	•			0		_			<del>-</del>	+							
	Diagnostic			3-wire (NP)		D-F7PW-900				0				$\vdash$	+	$\pm$							
	Diagnostic			2-wire	111-11116	D-J79W-900	•		•	0			$\vdash$	+ =	$\perp =$	+ =		$\vdash$					
	(2-color indicator)			3-wire (NPN)		D-675W-300 D-F7NWV-900	•		•	0	_		$\vdash$	$\vdash \equiv$	$\vdash$							_	
	(= solo: nidiodiol)			2-wire	-	D-F7BWV-900	•		•	0			$\vdash$	+ =	+ =			+=	_	+=		_	
				I	Pernendicular	D-F8N-900	•		•	0			$\vdash$		$\vdash$	+ =							
	_			3-wire (PNP)	. orportuloulai	D-F8P-900	•			0		_		+_	<del> </del>		_	<del>-</del>	_	<u> </u>	_		
				2-wire	-	D-F8B-900	•		•	0				$\vdash \equiv$	$\vdash$							_	
				2 44116		D-A90-900			•	_		<b>•</b> *1	•	$\pm$	•	•	•		•	•	•	•	
Reed	_		No	2-wire	In-line	D-Z80-900					_			+-			_	<del>-</del>	_	_	_	_	
auto		Grommet		3-wire (NPN equiv.)		D-E76A	•		•					$\vdash$	$\vdash$							_	
switch	_	S. S. Millot	Yes	o mio (in it oquit.)	In-line	D-E73A	•		•		_	_	<del>  _  </del>	<del>  _  </del>	<u> </u>	+_	_	<u> </u>		_	_	_	
			No	2-wire		D-E80A	•		•			_		+-	<del> </del>	-	_	-	+_				
	1		140	I	I	PLOOM																	I

<sup>\*1</sup> The D-A90L-900 cannot be mounted on Ø 4. \* Solid state auto switches marked with a "O" are produced upon receipt of order.

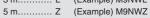
#### **Ordering the Auto Switches**

Please be aware that the order part numbers for the cylinder mounted and individual auto switches are different. (Example) Part number for ordering D-M9BWL-900:

- Cylinder mounted type: 25A-CDJ2L16-60Z-M9BWL-B (Omit the first "D-" and the last "-900" or "-901".)
- Individual auto switch: D-M9BWL-900

(Place the order with the part number for auto switch shown in the table above.)

- \* Lead wire length symbols: 0.5 m......
  - (Example) M9NW
  - 3 m..... L (Example) M9NWL





					mpact	cylinde	ers									Rodle	ss cyl	inders					
C95SD	CDUJ	CDU	CDUK	CDQS(W)	CDQ	2(W)	CDI	BQ2	MDU	CD55	- 1	MY1E	}	MY	1M	MY	1C	MY1H	MY2C	MY2H/HT	МҮЗ	CY	'3R
ø160, ø200	ø6 to ø20	ø10 to ø32	ø16 to ø32	ø12 to ø25	ø12 to ø100	ø125 to ø200	ø <b>20</b> , ø <b>25</b>	ø32 to ø100	ø25 to ø63	ø20 to ø100	ø16 to ø40	ø <b>50</b>	ø <b>63</b>	ø16, ø20	ø25 to ø63	ø16, ø20	25 to ø63	ø16 to ø40	ø16, ø25, ø40	ø16, ø25, ø40	ø16 to ø63	ø6 to ø20	ø <b>25 to</b>
•	•	•	•	•	•	•	•	•	•	•	•	_	•	•	•	•	•	•	•	•	•	•	•
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# 25A- Series

# **Applicable Cylinder Series**

					uto switches						Pre-wired
T	Special	Electrical	Indicator	Wiring	Electrical	A	L	ead wire	length [n	n]	connector
Type	function	entry	light	(Output)	entry direction	Auto switch model	0.5	1 M	3 L	5 Z	SDPC
				3-wire (NPN)		D-M9N-900	•	•	-	0	
				3-wire (PNP)	In-line	D-M9P-900	•	•	•	0	<del>                                     </del>
				2-wire	1	D-M9B-900	•	•	•	0	
	_			3-wire (NPN)		D-M9NV-900	•	•	•	0	
				3-wire (PNP)	Perpendicular		•	•	•	0	
				2-wire		D-M9BV-900	•	•	•	0	
		1		3-wire (NPN)		D-M9NW-900	•	•	•	0	
	Diagnostic			3-wire (PNP)	In-line	D-M9PW-900	•	•	•	0	
	indication			2-wire		D-M9BW-900	•	•	•	0	0
	(2-colour			3-wire (NPN)		D-M9NWV-900	•	•	•	0	
	indicator)			3-wire (PNP)	Pernendicular	D-M9PWV-900	•	•	•	0	+ _ +
	,			2-wire	i orportatoular	D-M9BWV-900	•	•	•	0	0
		-		3-wire (NPN)		D-Y59A-900	•	_	•	0	_
				3-wire (PNP)	In-line	D-Y7P-900	•	_	•	0	
				2-wire		D-Y59B-900	•		•		
	_			3-wire (NPN)		D-Y69A-900	•		•	0	
				3-wire (PNP)	Pernendicular	D-Y7PV-900	•		•	0	
				2-wire	i erberiulculai	D-Y69B-900	•		•	0	
		-		3-wire (NPN)		D-Y7NW-900	•		•	0	$+$ $\pm$ $+$
	Diamantia			3-wire (NFN)	In-line	D-Y7PW-900	•		•	0	+-=+
	Diagnostic			2-wire	111-11116	D-Y7BW-900	•			0	
olid state	indication			3-wire (NPN)		D-Y7NWV-900			•		
	(2-colour indicator)	Grommet	Yes	` '	Damaaallaulau		•	_	•	0	
uto switch	indicator)			3-wire (PNP)	Perpendicular	D-Y7PWV-900	•	_	•	0	
		-		2-wire		D-Y7BWV-900	•	_	•	0	
				3-wire (NPN)		D-G59-900	•	_	•	0	+-+
	_			3-wire (PNP)		D-G5P-900	•	_	•	0	
	Diagnostia	-		2-wire	In-line	D-K59-900	•	_	•	0	
	Diagnostic indication			3-wire (NPN)		D-G59W-900	•	_	•	0	
	(2-colour			3-wire (PNP)		D-G5PW-900	•	_	•	0	
	indicator)	_		2-wire		D-K59W-900	•	_	•	0	0
				3-wire (NPN)		D-F79-900	•	_	•	0	
				3-wire (PNP)	In-line	D-F7P-900	•	_	•	0	
	_			2-wire		D-J79-900	•	_	•	0	
				3-wire (NPN)	_	D-F7NV-900	•	_	•	0	
				3-wire (PNP)	Perpendicular	D-F7PV-900	•	_	•	0	-
				2-wire		D-F7BV-900	•	_	•	0	_
	Diagnostic			3-wire (NPN)		D-F79W-900	•	_	•	0	
	indication			3-wire (PNP)	In-line	D-F7PW-900		_	•	0	$\perp$ $ \perp$
	(2-colour			2-wire		D-J79W-900	•	_	•	0	
	indicator)			3-wire (NPN)		D-F7NWV-900	•	_	•	0	
				2-wire		D-F7BWV-900	•	_	•	0	_
				3-wire (NPN)	Perpendicular	D-F8N-900	•	_	•	0	
	_			3-wire (PNP)		D-F8P-900	•	_	•	0	
				2-wire	]	D-F8B-900	•	_	•	0	
			NI-	O vertice-	In Pro-	D-A90-900	_	_	•	<u> </u>	-
laad asste	_		No	2-wire	In-line	D-Z80-900	_	<u> </u>	•	<u> </u>	
Reed auto		Grommet		3-wire (NPN equiv.)		D-E76A	•	_	•	<u> </u>	<u> </u>
switch	_		Yes		In-line	D-E73A	•	_	•	<u> </u>	
			No	2-wire		D-E80A	•	_	•	<u> </u>	

<sup>\*</sup> The D-A90-900 reed auto switch is only compatible with bore sizes Ø 16 to Ø 50.

		Tab	ole cylind	lers						Gui	de cylind	ders				Cla	mp/Stop	per
МХН	MXS	MXQ□	MXQ	MXF	MXW	MXP	MGJ	MGP	MGPK	MGG	CXSJ	cxs	CDI	BXW	CDBPXW	MK	RSQ	RSI
ø6 to ø2	0 ø6 to ø25	ø6 to ø25	ø <b>6 to</b> ø <b>25</b>	ø <b>8 to</b> ø <b>20</b>	ø <b>8 to</b> ø <b>25</b>	ø <b>6 to</b> ø16	ø <b>6</b> , ø <b>10</b>	ø12 to ø100	ø12 to ø50	ø <b>20 to</b> ø <b>50</b>	ø6 to ø32	ø6 to ø32	ø10	ø16 to ø32	ø10 to ø32	ø12 to ø63	ø12 to ø50	ø <b>20</b> , ø
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Air Cylinders Control Valves

Related Products

Rotary Actuators Air Grippers

Vacuum Equipment

Air Preparation Equipment

Clean Air Filters Modular F.R.L./ Pressure Control Equipment

Flow Control Equipment/ Fittings

Detection Switches

Process Gas Fluid Control Equipment Equipment

Electric Actuators



## **Applicable Rotary Actuator Series**

				Au	to switches								Rotary a	ctuators	3
T	Special	Electrical	Indicator	Wiring	Electrical	Auto switch	Lea	ad wire	length	[m]	Pre-wired connector	MSQA MSQB	MSQ MSZ	MD	SUB
Type	function	entry	light	(Output)	entry direction	model	0.5	1 M	3 L	5	SDPC	10 to 200	10 to 50	1, 3	7, 20
				3-wire (NPN)		D-M9N-900	•	•	•	_	_	•	•	_	_
				3-wire (PNP)	In-line	D-M9P-900	•	•	•	_	_	•	•		_
				2-wire		D-M9B-900	•	•	•	0	<u> </u>	•	•		_
	_			3-wire (NPN)		D-M9NV-900	•	•	•	0	_	•	•	_	l _
				3-wire (PNP)	Perpendicular	D-M9PV-900	•	•	•	0	_	•	•	_	_
				2-wire		D-M9BV-900	•	•	•	0	_	•	•	_	_
				3-wire (NPN)		D-M9NW-900	•	•	•	0	_	•	•	_	<u> </u>
	Diagnostic			3-wire (PNP)	In-line	D-M9PW-900	•	•	•	0	_	•	•	_	l —
	indication			2-wire		D-M9BW-900	•	•	•	0	0	•	•	_	<u> </u>
	(2-colour			3-wire (NPN)		D-M9NWV-900	•	•	•	0	_	•	•	_	_
	indicator)			3-wire (PNP)	Perpendicular	D-M9PWV-900	•	•	•	0	<u> </u>	•	•	_	_
				2-wire		D-M9BWV-900	•	•	•	0	0	•	•	_	_
				3-wire (NPN)		D-Y59A-900	•	_	•	0	_	_	_	_	_
				3-wire (PNP)	In-line	D-Y7P-900	•	_	•	0	_	_	_	_	_
				2-wire		D-Y59B-900	•	_	•	0	_	_	_	_	_
				3-wire (NPN)		D-Y69A-900	•	_	•	0	_	_	_	_	_
	Diagnostic indication			3-wire (PNP)	Perpendicular	D-Y7PV-900	•	_	•	0	_	_	_	_	_
				2-wire		D-Y69B-900	•	_	•	0	_	_	_	_	_
				3-wire (NPN)		D-Y7NW-900		_		0	_	_		_	
Solid state indication 2-wire D-Y7BW-900 — —	•	0	_	_	_	_	-								
Solid state	indication	3-wire (NPN)   3-wire (NPN)   3-wire (NPN)   1n-line   D-Y7NW-900   0   0   0   0   0   0   0   0   0	_	_											
auto switch	,	arommet	163	3-wire (NPN)		D-Y7NWV-900	•	_	•	0	SDPC 10 to 200 10 to 50 10 to	_	-		
	indicator)			3-wire (PNP)	Perpendicular			_	•	0	_	_	_	_	_
				2-wire		D-Y7BWV-900	•	_	•		_	_	_	_	_
				3-wire (NPN)		D-S991-901*1			•		_		_	•	_
				o uno (rui ru)		D-S992-901*1			•	0	_	_	—	•	_
				3-wire (PNP)	In-line	D-S9P1-901*1		_	•	0	_	_	—	•	_
				0 Will (1 Will)		D-S9P2-901*1			•		_	_	_	•	_
				2-wire		D-T991-901*1	•	_	•	_	_		_		_
						D-T992-901*1			•	0	<u> </u>		_	•	_
				3-wire (NPN)		D-S99V1-901*1		_	•		_	_	_	•	_
				,		D-999V2-901*1	•		•	_	_	_	_		_
	_			3-wire (PNP)	Perpendicular	D-S9PV1-901*1	•		•		_		_		_
				, , ,		D-S9PV2-901*1	•		•		_	_	_		_
				2-wire		D-T99V1-901*1	•	_	•	-	-	_	_		_
				_		D-T99V2-901*1	•	_	•	_	-	_	_	•	_
				3-wire (NPN)		D-S791-901*1	•		•	_	-		_		•
				<u> </u>		D-S792-901*1	•		•	_	_				•
				3-wire (PNP)	In-line	D-S7P1-901*1	•		•	_	1				•
						D-S7P2-901*1	•	_	•	_	+				•
				2-wire		D-T791-901*1	•		•		_				•
						D-T792-901*1	•		•		-		_		•
Reed auto switch	_	Grommet	No	2-wire	In-line	D-A90-900	_	_	•	-	_	•	•	_	-

<sup>\*</sup> Solid state auto switches marked with a "O" are produced upon receipt of order.

#### **Ordering the Auto Switches**

Please be aware that the order part numbers for the rotary actuator mounted and individual auto switches are different. (Example) Part number for ordering D-M9BWL-900:

- Rotary actuator mounted type: 25A-MSQB-10A-M9BWL (Omit the first "D-" and the last "-900" or "-901".)
- \* Lead wire length symbols: 0.5 m...... (Example) M9NW 1 m...... M (Example) M9NWM
- Individual auto switch: D-M9BWL-900 (Place the order with the part number for auto switch shown in the table above.)
- 3 m.....L (Example) M9NWL 5 m....Z (Example) M9NWZ

<sup>\*1</sup> Lead wire for a solid state auto switch with "-901" at the end of part number has been changed to a cable for a robot use.



<sup>\*</sup> Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2). When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator.

<sup>\*</sup> When the MHZ2-10, MHZL2-10, MHL2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper. When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets (90-BMG2-012) are required. Order them separately. For details, refer to page 265.

## **Applicable Air Gripper Series**

				Δι	ıto switche	96									Air ar	ippers			
				710	Electrical	.5	1	at	l tl-	f1	Pre-wired		IMU72	JMHZ2				MU7 12	MHZL2
Туре	Special	Electrical	Indicator	Wiring	entry	Auto switch		d wire			connector	JMHZ2	-X6900	-X7460	MHZ2	MHZL2	MHZJ2	-X6100	-X5955
1,750	function	entry	light	(Output)	direction	model	0.5	M	3 L	5 Z	SDPC	8 to 20	8 to 20	8 to 20	10 to 40	10 to 25	10 to 25	32. 40	10 to 20
				3-wire (NPN)		D-M9N-900		•	-	0	_	•	•	•		•		•	•
				3-wire (PNP)	In-line	D-M9P-900	•	•	•	0	_	•	•	•	•	•	•	•	•
				2-wire		D-M9B-900	•	•	•	0	_	•	•	•	•	•	•	•	•
	_			3-wire (NPN)		D-M9NV-900	•	•	•	0	_	•	•	•	•	•	•	•	•
				3-wire (PNP)	Perpendicular	D-M9PV-900	•	•	•	0	_	•	•	•	•	•	•	•	•
				2-wire	·	D-M9BV-900	•	•	•	0	_	•	•	•	•	•	•	•	•
				3-wire (NPN)		D-M9NW-900		•	•	0	_	•	•	•	•	•	•	•	•
	Diagnostic			3-wire (PNP)	In-line	D-M9PW-900	•	•	•	0	_	•	•	•	•	•	•	•	•
	indication			2-wire		D-M9BW-900	•	•	•	0	0	•	•	•	•	•	•	•	•
	(2-colour			3-wire (NPN)		D-M9NWV-900	•	•	•	0	_	•	•	•	•	•	•	•	•
	indicator)			3-wire (PNP)	Perpendicular	D-M9PWV-900	•	•	•	0	_	•	•	•	•	•	•	•	•
				2-wire		D-M9BWV-900	•	•	•	0	0	•	•	•	•	•	•	•	•
				3-wire (NPN)		D-Y59A-900	•	_	•	0	_	_	_	_	•	•	<u> </u>	_	
				3-wire (PNP)	In-line	D-Y7P-900	•	_	•	0	_	_	_	_	•	•	_	_	
				2-wire		D-Y59B-900	•	_	•	0	_	_	_	_	•	•	_	_	
	_			3-wire (NPN)		D-Y69A-900	•	_	•	0	_	_	_	_	•	•	_	_	
				3-wire (PNP)	Perpendicular	D-Y7PV-900	•	_	•	0	_	_	_	_	•	•	_	_	
	Diagnostic			2-wire		D-Y69B-900		_	•	0	_	_	_	_	•	•	_	_	_
			3-wire (NPN)		D-Y7NW-900	•	_	•	0	_	-	_	_		•	—	_		
Calid				3-wire (PNP)	In-line	D-Y7PW-900	•	_	•	0	_	_	_	_	•	•	_	_	—
Solid state auto	indication	Grommet	Vac	2-wire		D-Y7BW-900	•	_	•	0	_	_	_	_	•	•	_	_	
switch	(2-colour	aronninet	163	3-wire (NPN)		D-Y7NWV-900	•	_	•	0	_	_	—	_		•	_	_	_
	indicator)			3-wire (PNP)		D-Y7PWV-900	•	_	•	0	_	_	_	_	•	•	_	_	
				2-wire		D-Y7BWV-900	•	_	•	0	_	_	_	_	•	•	_	_	
				3-wire (NPN)		D-S991-901*1	•	_	•	0	_	_	_	_	_	_	_	_	
				5-Wile (IVI IV)		D-S992-901*1	•		•	0	_	_	_	_	_	_	_	_	
				3-wire (PNP)	In-line	D-S9P1-901*1	•	_		0	_	_	_	_	_	_	_	_	_
				o wile (i ivi )		D-S9P2-901*1	•	_	•	0	_	_	_	_	_	_	_	_	
				2-wire		D-T991-901*1	•	_	•	0	_	_	_	_	_	_	_	_	
				wiic		D-T992-901*1	•	_	•	0	_	_		_	_			_	
				3-wire (NPN)		D-S99V1-901*1	•	_		0	_	_	_	_	_	_	_	_	
				o uno (ru ru)		D-999V2-901*1	•		•	0	_	_						_	
	_			3-wire (PNP)	Pernendicular	D-S9PV1-901*1	•		•	0	_		_	_	-		-		$\perp$
				- mio (i 141 )		D-S9PV2-901*1	•		•	0	_		_	_	_		_		$\perp$
				2-wire		D-T99V1-901*1	•	_	•	0	_	_	_	_	_	_	_	_	
						D-T99V2-901*1	•		•	0	_		—	_	-				$\perp$
				3-wire (NPN)		D-S791-901*1	•		•	0			_	_	-		-		$\perp$
				(141 14)		D-S792-901*1	•		•	0	_		_	_	_	_	_	_	
				3-wire (PNP)	In line	D-S7P1-901*1	•		•	0	_	_	_	_	_	_	-	_	
				( )		D-S7P2-901*1	•		•	0	_	_	_	_	_	_	_	_	
				2-wire		D-T791-901*1	•		•	0	_	_	_	_	_	_	_	_	
						D-T792-901*1	•		•	0	_		_	_	-	_	_	_	
Reed auto switch	_	Grommet	No	2-wire	In-line	D-A90-900	_	-	•	_	_	_	_	_	_	_	_	_	

- \* Solid state auto switches marked with a "O" are produced upon receipt of order.
- \* Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2). When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator.
- \* When the MHZ2-10, MHZL2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper. When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets (90-BMG2-012) are required. Order them separately. For details, refer to page 265.

#### Ordering the Auto Switches

Please be aware that the order part numbers for the air gripper mounted and individual auto switches are different. (Example) Part number for ordering D-M9BWL-900:

 Air gripper mounted type: 25A-MHZ2-16D-M9BWL (Omit the first "D-" and the last "-900" or "-901".)

• Individual auto switch: D-M9BWL-900

- (Place the order with the part number for auto switch shown in the table above.)



Air Cylinders Control Valves

Related s Products

Air Grippers Actuators

ition Vacuum A

n Air Preparation ters Equipment

Modular F.R.L./
Pressure Control
Equipment Air F

Flow Control M Equipment/ Prr Fittings

(Example) M9NWZ

## **Applicable Air Gripper Series**

				Αι	ıto switche	s								Ai	r grippe	ers		
	Special	Electrical	Indicator	Wiring	Electrical	Auto switch	Lea	d wire	length	[m]	Pre-wired	MHL2-Z	MHL2	MHF2	MHS3 MHS4	MHSJ3	MHY2	MHW2
Type	function	entry	light	(Output)	entry direction	model	0.5	1	3	5	connector							
				3-wire (NPN)	unection	D-M9N-900	-	M	L	<b>Z</b>	2DPC	10 10 40	10 to 40	8 10 20	10 10 32	16 to 32	10 10 25	20 10 5
				3-wire (NT N)	In-line	D-M9P-900	•	•	•	0	+ = +	•	•	•	•		•	•
				2-wire		D-M9B-900	•		•	0				•	•			
	_			3-wire (NPN)		D-M9NV-900	•	•	•	0	-	•	•	•	•		•	•
				` '		D-M9PV-900	•		•	0				•	•			•
				2-wire		D-M9BV-900	•	•	•	0	_	•	•	•	•	•	•	•
				3-wire (NPN)		D-M9NW-900	•	•	•	0	_	•	•	•	•	•	•	•
	Diagnostic			3-wire (PNP)	In-line	D-M9PW-900	•	•	•	0	_	•	•	•	•	•	•	•
	indication			2-wire		D-M9BW-900	•	•	•	0	0	•	•	•	•	•	•	•
	(2-colour			3-wire (NPN)		D-M9NWV-900	•	•	•	0	† —	•	•	•	•	•	•	•
	indicator)			3-wire (PNP)	Perpendicular	D-M9PWV-900	•	•	•	0		•	•	•	•	•	•	•
				2-wire		D-M9BWV-900	•	•	•	0	0	•	•	•	•	•	•	•
		1		3-wire (NPN)		D-Y59A-900	•	_	•	0	T —	•	•	_	_	_	_	•
				3-wire (PNP)	In-line	D-Y7P-900	•	_	•	0	1 —	•	•	<u> </u>		_	_	•
				2-wire		D-Y59B-900	•	_	•	0		•	•	_	_	_	_	•
	_			3-wire (NPN)		D-Y69A-900	•	_	•	0	_	•	•	_	_	_	_	•
				3-wire (PNP)	Perpendicular	D-Y7PV-900	•	_ [	•	0		•	•	_	_	_	_	•
				2-wire		D-Y69B-900	•	_	•	0	-	•	•	_	_	_	_	•
				3-wire (NPN)		D-Y7NW-900	•	_	•	0		•	•	_	_	_	_	•
Solid	Diagnostic			3-wire (PNP)	In-line	D-Y7PW-900	•	_	•	0		•	•	_	_	_	_	•
state auto	indication	Grommet	Yes	2-wire		D-Y7BW-900	•	_	•	0		•	•	_	_	_	_	•
switch	(2-colour	aroninict	100	3-wire (NPN)		D-Y7NWV-900	•	_	•	0		•	•	_	_	_	_	•
	indicator)					D-Y7PWV-900	•	_	•	0		•	•		_	_	_	•
				2-wire		D-Y7BWV-900	•	_	•	0		•	•			_		•
				3-wire (NPN)		D-S991-901*1	•	_	•	0					_	_		_
				0 11110 (111 11)		D-S992-901*1	•	_	•	0	-	_	_	_	_	_	_	_
				3-wire (PNP)	In-line	D-S9P1-901*1	•	_	•	0		_	_	_	_	_	_	_
				( ,		D-S9P2-901*1	•	_	•	0	_	_	_	_	_	_	_	_
				2-wire		D-T991-901*1	•	_	•	0				_	_	_	_	_
						D-T992-901*1	•	_	•	0		_		_	_	_	_	_
				3-wire (NPN)		D-S99V1-901*1	•	_	•	0	_	_	_	_	_	_	_	_
				. ,		D-999V2-901*1	•	_	•	0								
	_			3-wire (PNP)	Perpendicular	D-S9PV1-901*1	•	_	•	0				_	_			_
						D-S9PV2-901*1	•	_	•	0	<u> </u>			_	_	_		_
				2-wire		D-T99V1-901*1 D-T99V2-901*1	•		•	0	+-		_	_	_	_	_	_
							•	_	•	0				_	_		_	_
				3-wire (NPN)		D-S791-901*1	•	_	•	0	-			_			_	_
						D-S792-901*1 D-S7P1-901*1	•	_	•	0	-				_	_		_
				3-wire (PNP)	In-line	D-S7P1-901*1	•		•	0							_	
						D-57P2-901*1	•		•	0						_	_	
				2-wire		D-1791-901*1	•		•	0	_					H		
Dood and						ויים 1 1 32-30 ויים	•	_	•		+			_		_	_	
Reed auto switch	_	Grommet	No	2-wire	In-line	D-A90-900	_	_	•	_	_	_	_	_	_	_	_	_

<sup>\*</sup> Solid state auto switches marked with a "O" are produced upon receipt of order.

#### Ordering the Auto Switches

Please be aware that the order part numbers for the air gripper mounted and individual auto switches are different. (Example) Part number for ordering D-M9BWL-900:

 Air gripper mounted type: 25A-MHZ2-16D-M9BWL (Omit the first "D-" and the last "-900" or "-901".)

• Individual auto switch: D-M9BWL-900

- \* Lead wire length symbols: 0.5 m......— (Example) M9NW

  1 m...... M (Example) M9NWM
  3 m...... L (Example) M9NWL
  above.) 5 m...... Z (Example) M9NWZ



<sup>\*</sup> Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2). When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator.

<sup>\*</sup> When the MHZ2-10, MHZL2-10, MHL2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper. When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets (90-BMG2-012) are required. Order them separately. For details, refer to page 265.

## **Applicable Electric Actuator Series**

				Αι	ıto switches							Electric a	actuators
Type	Special	Electrical	Indicator	Wiring	Electrical entry	Auto switch		ad wire	length		Pre-wired connector	LEJS	LEY
Туре	function	entry	light	(Output)	direction	model	0.5	1 M	3 L	5 <b>Z</b>	SDPC	40 to 63	16 to 40
				3-wire (NPN)		D-M9N-900	•	•	•	0	_	•	•
				3-wire (PNP)	In-line	D-M9P-900	•	•	•	0	_	•	•
				2-wire		D-M9B-900	•	•	•	0	_	•	•
	_			3-wire (NPN)		D-M9NV-900	•	•	•	0	_	•	•
				3-wire (PNP)	Perpendicular	D-M9PV-900	•	•	•	0	_	•	•
Solid state		Grommet	Yes	2-wire		D-M9BV-900	•	•	•	0	_	•	•
auto switch		Grommet	165	3-wire (NPN)		D-M9NW-900	•	•	•	0	_	•	•
	Diagnostic			3-wire (PNP)	In-line	D-M9PW-900	•	•	•	0	_	•	•
	indication			2-wire	1	D-M9BW-900	•	•	•	0	0	•	•
	(2-colour			3-wire (NPN)		D-M9NWV-900	•	•	•	0	_	•	•
	indicator)			3-wire (PNP)	Perpendicular	D-M9PWV-900	•	•	•	0	_	•	•
				2-wire		D-M9BWV-900	•	•	•	0	0	•	•

- $\ast\,$  Solid state auto switches marked with a "O" are produced upon receipt of order.
- Auto switches cannot be ordered with the actuator part number. They should be ordered separately. Please refer below for ordering. One each of the right-hand-type and the left-hand-type are shipped together with the actuator.

#### **Ordering the Auto Switches**

• Individual auto switch: D-M9BWL-900 (Place the order with the part number for auto switch shown in the table above.)

\* Lead wire length symbols: 0.5 m..... (Example) M9NW 1 m..... M (Example) M9NWM 3 m..... L (Example) M9NWL 5 m..... Z (Example) M9NWZ

# 25A- Series

# **Auto Switch Mounting**

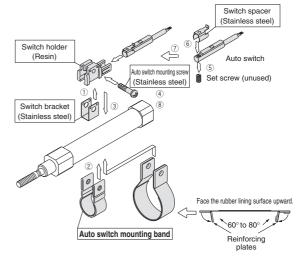
## **Band Mounting Type**

Applicable cylinder series: 25A-CDJ2, 25A-CDJ2K, 25A-CDBJ2, 25A-CDB5, 25A-CDM2, 25A-CDG1, 25A-CDBG1, 25A-MGG Applicable auto switches: D-M9□-900, D-M9□W-900, D-M9BWSDPC-900, D-M9BWVSDPC-900, D-A90-900

#### **Auto Switch Mounting Bracket Part Nos.**

Cylinder					Α	pplicable bo	ore size [mm	1]				
series	8	10	12	16	20	25	32	40	50	63	80	100
25A-CDJ2 25A-CDJ2K 25A-CDBJ2	_	*1 25A-BJ7-010S	_	*1 25A-BJ7-016S	_	_	_	_	_	_	_	_
25A-CD85*4	25A-BJ7-008S	25A-BJ7-010S	25A-BJ7-012S	25A-BJ7-016S	25A-BM6-020S	25A-BM6-025S	_	_	_	_	_	_
25A-CDM2	_	_	_	_	*2 25A-BM6-020S	*2 25A-BM6-025S	*2 25A-BM6-032S	*2 25A-BM6-040S	_	_	_	_
25A-CDG1 25A-CDBG1	_	_	_	_	*3 25A-BMA4-020S	*3 25A-BMA4-025S	*3 25A-BMA4-032S	*3 25A-BMA4-040S	*3 25A-BMA4-050S	*3 25A-BMA4-063S	_	_
25A-MGG	_	_	_	_	*3 25A-BMA4-020S	*3 25A-BMA4-025S	*3 25A-BMA4-032S	*3 25A-BMA4-040S	*3 25A-BMA4-050S	*3 25A-BMA4-063S	_	_

- \*1 The combination of the auto switch mounting band (BJ2-□□□S/with a stainless steel screw) and the holder set (BJ3-1).
- \*2 The combination of the auto switch mounting band (for BM2-□□□) and stainless steel screw (BBA4), and the holder set (BJ3-1).
- \*3 The combination of the auto switch mounting band (for BMA2-□□□) and stainless steel screw (BBA4), and the holder set (BJ3-1).
- \*4 D-A90L-900 auto switches cannot be mounted on bore size Ø 8, Ø 10, or Ø 12 cylinders.



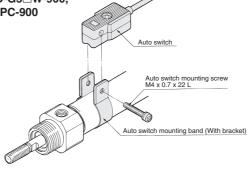
25A-BM6, 25A-BMA4

Applicable cylinder series: 25A-CDG1, 25A-CDBG1

Applicable auto switches : D-G5□-900, D-K59-900, D-G5□W-900, D-K59W-900, D-K59WSDPC-900

#### **Auto Switch Mounting Bracket Part Nos.**

Cylinder	Applicable bo	ore size [mm]
series	80	100
25A-CDG1 25A-CDBG1	BA-08S	BA-10S



# **Tie-rod Mounting Type**

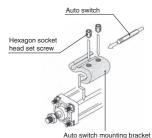
Applicable cylinder series: 25A-MDB, 25A-CDA2, 25A-CDS2, 25A-C(P)96SD

Applicable auto switches: D-M9□-900, D-M9□V-900, D-M9□W-900, D-M9□WV-900, D-M9BWSDPC-900, D-M9BWVSDPC-900

: D-A90-900

#### **Auto Switch Mounting Bracket Part Nos.**

Cylinder				Ap	oplicable bo	ore size [mi	m]			
series	32	40	50	63	80	100	125	140	160	200
25A-MDB	90-BMB5-032	90-BMB5-032	90-BA7-040	90-BA7-040	90-BA7-063	90-BA7-063	_	_	_	_
25A-C96SD	90-BMB5-032	90-BMB5-032	90-BA7-040	90-BA7-040	90-BA7-063	90-BA7-063	90-BA7-080	_	_	_
25A-CDA2	_	90-BA7-040	90-BA7-040	90-BA7-063	90-BA7-080	90-BA7-080	_	_	_	_
25A-CDS2	_	_	_	_	_	_	25A-BS6-125	25A-BS6-125	25A-BS6-160	_
25A-C95SD	_	_	_	_	_	_	_	_	25A-BS6-160	25A-BS6-160



**SMC** 

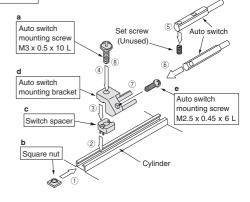
Applicable cylinder series: 25A-CDBQ2

Applicable auto switches: D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900, D-M9NW(V)-900, D-M9PW(V)-900,

D-M9BW(V)-900, D-M9NA(V)-900, D-M9PA(V)-900, D-M9BA(V)-900, D-A90-900

#### **Auto Switch Mounting Bracket Part No.**

Cylinder			Д	Applicable bo	ore size [mn	ո]		
series	20	25	32	40	50	63	80	100
25A-CDBQ2	_	_	2	25A-BQ2-03	2	_	_	_



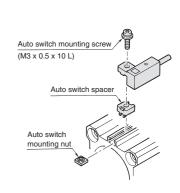
Applicable auto switches: D-F79-900, D-F7P-900, D-J79-900, D-F7NV-900,

D-F7PV-900, D-F7BV-900, D-F79W-900, D-F7PW-900,

D-J79W-900, D-F7NWV-900, D-F7BWV-900

#### Auto Switch Mounting Bracket Part No.

Cylinder			A	Applicable bo	ore size [mm	າ]		
series	20	25	32	40	50	63	80	100
25A-CDBQ2	_	_			25A-	BQ-2		



## **Direct Mounting Type**

Applicable cylinder series: 25A-CDJP2, 25A-MDU, 25A-MY1B, 25A-MY1M,

25A-MY1C, 25A-MY1H, 25A-MY3 $\square$ , 25A-CY3R,

25A-MGP-Z, 25A-MGP-AZ, 25A-RSH

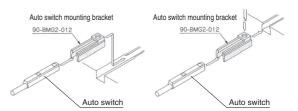
Applicable air gripper series: 25A-MHZ(L)2, 25A-MHL2, 25A-MHS3, 25A-MHS4

Applicable auto switches  $\,:$  D-M9 $\square$ -900, D-M9 $\square$ V-900, D-M9 $\square$ W-900,

D-M9 WV-900, D-M9BWSDPC-900,

D-M9BWVSDPC-900

: D-A90L-900



#### **Auto Switch Mounting Bracket Part Nos.**

Cylinder series						Ар	plicable be	ore size [m	nm]					
Air gripper series	4	6	10	12	15	16	20	25	32	40	50	63	80	100
25A-CDJP2	Not required	Not required	Not required	_	_	Not required	_	_	_	_	_	_	_	_
25A-MDU	_	_	_	_	_	_	_	MUZ-025	MUZ-025	MUZ-025	MUZ-025	MUZ-025	_	_
25A-MY1B	_	_	_	_	_	Not required	Not required	BMY3-016	BMY3-016	BMY3-016	_	90- BMG2-012	_	_
25A-MY1M	_	_	_	_	_	Not required	Not required	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	_	_
25A-MY1C	_	_	_	_	_	Not required	Not required	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	_	_
25A-MY1H	_	_	_	_	_	Not required	Not required	BMY3-016	BMY3-016	BMY3-016	_	_	_	_
25A-MY3□	_	_	_	_	_	BMY3-016	_	_						
25A-CY3R	_	_	_	_	Not required	_	Not required	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	_	_
25A-MGP-Z 25A-MGP-AZ	_	_	_	Not required	_	Not required	Not required	Not required						
25A-MGPK	_	_	_	Not required		Not required	_	_	_					
25A-RSH	_	_	_	_		_	90- BMG2-012	_	90- BMG2-012	_	_	_	_	_
25A-MHZ2	_	_	90- BMG2-012	_		*1	*1	*1	*1	*1	_	_	_	_
25A-MHZL2	_	_	90- BMG2-012		_	*1	*1	*1		_	_	_	_	_
25A-MHL2	_	_	90- BMG2-012	_	_	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	90- BMG2-012	_	_	_	_
25A-MHS3 25A-MHS4	_	_	_	_	_	Not required	Not required	Not required	90- BMG2-012	_	_	_	_	_

<sup>\*1</sup> When mounting D-M9 type of auto switch onto the square groove of the side of the air gripper, the auto switch mounting bracket (90-BMG2-012) is required.

Applicable cylinder series: 25A-CDUJ, 25A-MGJ

Applicable auto switches: D-F8N-900, D-F8P-900, D-F8B-900

Auto switch mounting brackets are not required.



Be sure to read this before handling products.

#### **Precautions**

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#### Change of material

For the 25A- series, there is a restriction on the use of copper and zinc as main components in the metal materials used. Keep in mind that the Aluminium alloy, Aluminium die cast, and some of the stainless steel materials contain traces of copper (Cu) and/or zinc (Zn) as an additive element.

However, copper is used in some parts—the coils of solenoid valves, the circuit boards, connector pins, and lead wires of electrical equipment and auto switches, and the motors, cables, and drivers of electric actuators—whose materials cannot be easily changed to alternative materials.

In addition, some magnets (including the surface treatment) contain copper (Cu) and/or zinc (Zn). However, due to their magnetic characteristics, it is impossible to use alternative materials.

#### ■ Particle generation (metallic contaminants)

Usage of metal stoppers and/or shock absorbers on an air slide table produces metal-to-metal collision and contact, and may generate wear particles. Do not use metal stoppers and/or shock absorbers in an environment where wear particles are problem.

When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

The following models of air gripper may generate dust particles, as metal-to-metal collisions occur when fingers are fully closed.

- · MHZ2
- · MHZL2 (Except -X5955)
- · MHF2
- · MHY2
- · MHW2

#### Static electricity

Refrain from using the electrical equipments including detection switches (e.g., pressure switches and flow switches) in electrostatically-charged environments. Otherwise, they may cause the system to fail or to malfunction.

#### Piping

Usage of nylon tubing and polyurethane tubing in environments with a low dew point may affect dew points of ambient air and inside of piping. Use fluoropolymer tubing (TL series) or stainless steel tubing (Supply it on your own) in environments with a low dew point.

#### Chemical environment

Refrain from using the products in such environments as exposed to chemicals. Otherwise, resin parts may deteriorate. If you want SMC to test the products for the effects of chemicals attached to them, send the products back to SMC after thoroughly cleaning them.

Consult your SMC sales representative for further details.

#### ■ Trademark

DeviceNet® is a registered trademark of ODVA, Inc. EtherNet/IP® is a registered trademark of ODVA, Inc

EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.



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These safety instructions are intended to prevent hazardous situations and/or equipment damage. These instructions indicate the level of potential hazard with the labels of "Caution," "Warning" or "Danger." They are all important notes for safety and must be followed in addition to International Standards (ISO/IEC) 1), and other safety regulations.

Danger indicates a hazard with a high level of risk Danger: which, if not avoided, will result in death or serious

Warning indicates a hazard with a medium level of risk **∧** Warning:

which, if not avoided, could result in death or serious

Caution indicates a hazard with a low level of risk **∧** Caution:

which, if not avoided, could result in minor or moderate

1) ISO 4414: Pneumatic fluid power - General rules and safety requirements for systems and their components.

ISO 4413: Hydraulic fluid power - General rules and safety requirements for systems and their components.

IEC 60204-1: Safety of machinery - Electrical equipment of machines. (Part 1: General requirements)

ISO 10218-1: Robots and robotic devices - Safety requirements for industrial robots - Part 1: Robots.

etc

## Warning

1. The compatibility of the product is the responsibility of the person who designs the equipment or decides its specifications.

Since the product specified here is used under various operating conditions, its compatibility with specific equipment must be decided by the person who designs the equipment or decides its specifications based on necessary analysis and test results. The expected performance and safety assurance of the equipment will be the responsibility of the person who has determined its compatibility with the product. This person should also continuously review all specifications of the product referring to its latest catalogue information, with a view to giving due consideration to any possibility of equipment failure when configuring the equipment.

2. Only personnel with appropriate training should operate machinery

The product specified here may become unsafe if handled incorrectly. The assembly, operation and maintenance of machines or equipment including our products must be performed by an operator who is appropriately trained and experienced.

- 3. Do not service or attempt to remove product and machinery/ equipment until safety is confirmed.
  - 1. The inspection and maintenance of machinery/equipment should only be performed after measures to prevent falling or runaway of the driven objects have been confirmed.
  - 2. When the product is to be removed, confirm that the safety measures as mentioned above are implemented and the power from any appropriate source is cut, and read and understand the specific product precautions of all relevant products carefully.
  - 3. Before machinery/equipment is restarted, take measures to prevent unexpected operation and malfunction.
- 4. Our products cannot be used beyond their specifications. Our products are not developed, designed, and manufactured to be used under the following conditions or environments. Use under such conditions or environments is not covered.
  - 1. Conditions and environments outside of the given specifications, or use outdoors or in a place exposed to direct sunlight.
  - 2. Use for nuclear power, railways, aviation, space equipment, ships, vehicles, military application, equipment affecting human life, body, and property, fuel equipment, entertainment equipment, emergency shut-off circuits, press clutches, brake circuits, safety equipment, etc., and use for applications that do not conform to standard specifications such as catalogues and operation manuals.
  - 3. Use for interlock circuits, except for use with double interlock such as installing a mechanical protection function in case of failure. Please periodically inspect the product to confirm that the product is operating properly.

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We develop, design, and manufacture our products to be used for automatic control equipment, and provide them for peaceful use in manufacturing industries.

Use in non-manufacturing industries is not covered.

Products we manufacture and sell cannot be used for the purpose of transactions or certification specified in the Measurement Act.

The new Measurement Act prohibits use of any unit other than SI units in Japan.

# Limited warranty and **Disclaimer/Compliance** Requirements

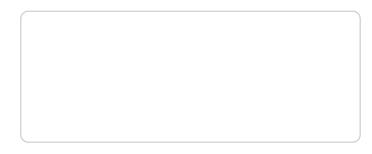
The product used is subject to the following "Limited warranty and Disclaimer" and "Compliance Requirements". Read and accept them before using the product.

#### **Limited warranty and Disclaimer**

- 1. The warranty period of the product is 1 year in service or 1.5 years after the product is delivered, whichever is first. 2) Also, the product may have specified durability, running distance or replacement parts. Please consult your nearest sales branch.
- 2. For any failure or damage reported within the warranty period which is clearly our responsibility, a replacement product or necessary parts will be provided. This limited warranty applies only to our product independently, and not to any other damage incurred due to the failure of the product
- 3. Prior to using SMC products, please read and understand the warranty terms and disclaimers noted in the specified catalogue for the particular products.
- 2) Vacuum pads are excluded from this 1 year warranty. A vacuum pad is a consumable part, so it is warranted for a year after it is delivered. Also, even within the warranty period, the wear of a product due to the use of the vacuum pad or failure due to the deterioration of rubber material are not covered by the limited

#### **Compliance Requirements**

- 1. The use of SMC products with production equipment for the manufacture of weapons of mass destruction (WMD) or any other weapon is strictly prohibited.
- 2. The exports of SMC products or technology from one country to another are governed by the relevant security laws and regulations of the countries involved in the transaction. Prior to the shipment of a SMC product to another country, assure that all local rules governing that export are known and followed



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