## Series Compatible with Secondary Batteries 25AbSentes

Copper (Cu) and Zinc (Zn)

Longer life due to use of grease compatible with low dew points

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

Applicable for use at $-70{ }^{\circ} \mathrm{C}$ 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 $100 \mu \mathrm{~m}$ ) 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 <br> CM2 Series <br> Ø 20 to Ø 40 | Air Cylinder CG1 Series <br> Ø 20 to Ø 100 | Air Cylinder <br> CA2 Series <br> Ø 40 to Ø 100 | Compact Cylinder CQS Series Ø 20 to Ø 25 | ROHS |
| :---: | :---: | :---: | :---: | :---: |
| Compact Cylinder <br> CQ2 Series $\varnothing 32 \text { to } \varnothing 100$ | Air Slide Table <br> MXQ $\square A$ Series <br> Ø 6 to $\varnothing 25$ | Compact Guide Cylinder RoHs <br> MGP Series <br> $\varnothing 20$ to $\varnothing 100$ | Dual Rod Cylinder <br> CXS Series $\varnothing 6 \text { to } \varnothing 32$ | ROHS |

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


■ 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

| Ex II 2G Ex ia IIC T4...T5 Gb Ta $10^{\circ} \mathrm{C}$ to $+50^{\circ} \mathrm{C}$ II 2G Ex ia IIC T6 Gb Ta- $10^{\circ} \mathrm{C}$ to $+45^{\circ} \mathrm{C}$ [Certification no.: DEKRA 11ATEX0273 X] |
| :---: |

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

II 2G Ex db IIC T5 Gb Ta: $-10^{\circ} \mathrm{C} \mathrm{TO}+50^{\circ} \mathrm{C}$
II 2G Ex db IIC T6 Gb Ta: $-10^{\circ} \mathrm{C} \mathrm{TO}+40^{\circ} \mathrm{C}$
II 2D Ex tb IIIC T $100^{\circ} \mathrm{C} \mathrm{Db} \mathrm{Ta:}-10^{\circ} \mathrm{C} \mathrm{TO}+50^{\circ} \mathrm{C}$
II 2D Ex tb IIIC $\mathrm{T} 85^{\circ} \mathrm{C}$ Db Ta:- $10^{\circ} \mathrm{C} \mathrm{TO}+40^{\circ} \mathrm{C}$
[Certification no.: KEMA 09ATEX0024X]

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 | Electrical Entry L and LL |
| :--- | :--- |
| Hazardous Location | Hazardous Location |
| Class I, II, III | Class I |
| Division 1 | Division 1 |
| Groups A, B, C, D, E, F, G | Groups A, B, C, D |

* Not compatible with the secondary battery specifications


## Series Compatible with Secondary Batteries

## Material Copper (Cu) Zinc (Zn) <br> Restrictions <br> Surface treatment <br> - Electrolytic nickel plating with a copper layer <br> - Zinc plating <br> (Electroless nickel plating is used.)



Compact Cylinder 25A-CQ2 Series


* The auto switch magnet contains copper and/or zinc. (Ø 12)


Cylinder 25A-CA2 Series


## Compact Guide Cylinder 25A-MGPM



* The auto switch magnet contains copper and/or zinc. (Ø 12)



## Dual Rod Cylinder/Compact Type

25A-CXSJ Series

## Bolts

Surface treatment
Electroless nickel plating


* The auto switch magnet contains copper and/or zinc. ( $\varnothing$ 6, Ø 10, Ø 15)

Air Gripper 25A-MHZ2 Series


[^0]

## Precision Regulator 25A-IR $\square$-A Series



## Solid State Auto Switch <br> D-M9 $\square$-900 Series



* A copper material is used for the lead wires.

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



## Vacuum Regulator 25A-IRV Series



Screw
Material:
Stainless steel

* A copper material is used for the solenoid coils and lead wires.




## Secondary Battery Manufacturing Process

## Electrode Production Process

## 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.

Positive


## 4) Punching electrodes

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

(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.


Bonding tabs and an insulating plate


Inserting into a case

## 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
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

Standard products
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.


Pack

## 3 Slitting

The electrode sheet and separator are cut to the cell width.

## 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


Welding cell lid


Pouring electrolytic solution

## 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

| Description |  | 25A-Series |  |
| :---: | :---: | :---: | :---: |
|  |  | Model (Type) | Page |
|  | 5-Port Solenoid Valve | 25A-JSY1000/3000 (Plug-in connector connecting base) | 15 |
|  |  | 25A-JSY1000/3000 (Non plug-in metal base) | 29 |
|  |  | 25A-SY5000, 7000 (Plug-in connector connecting base) | 33 |
|  |  | 25A-SY5000, 7000 | 59 |
|  |  | 25A-VQ2000, 4000 (W) | 69 |
|  |  | 25A-SQ2000 | 83 |
|  |  | 25A-VQZ1000 | 87 |
|  | Separate Type <br> Double Check Block | 25A-VQ1000, 2000 (Double check block) | 91 |
|  | 3-Port Solenoid Valve | 25A-VP342, 542, 742 (Body ported) | 92 |
|  |  | 25A-VP344, 544, 744 (Base mounted) | 93 |
|  |  | 25A-VP500, 700 (Safety Standard ISO 13849-1) | 94 |
|  |  | 25A-VT317 | 95 |
|  |  | 25A-VG342 | 96 |
|  | 5-Port <br> Air Operated Valve | 25A-SYA5000, 7000 | 97 |
|  | 3-Port <br> Air Operated Valve | 25A-SYJA500, 700 | 98 |
|  | Finger valve | 25A-VHK $\square$ A | 100 |
|  | Conforming to OSHA Standard Pressure Relief 3-Port Valve with Locking Holes | 25A-VHS20(W), 30(W), 40(W), 50(W)-D | 101 |
|  |  | 25A-VHS20, 30, 40, 50 | 102 |
|  |  | 25A-VHS2510, 3510, 4510, 5510 | 103 |
|  | Air Cylinder | 25A-CJP2 (Standard) | 104 |
|  |  | 25A-CJ2 (Standard, Air cushion): The air cushion type has been added. | 105 |
|  |  | 25A-CJ2K (Standard) | 106 |
|  |  | 25A-CBJ2 (With end lock) | 107 |
|  |  | 25A-CM2 (Standard, Air cushion): The air cushion type has been added. | 108 |
|  |  | 25A-CG1 (Standard) | 109 |
|  |  | 25A-CBG1 (With end lock) | 110 |
|  |  | 25A-MB (Standard) | 111 |
|  |  | 25A-CA2 (Standard) | 112 |
|  |  | 25A-CS2 (Standard) | 113 |
|  | Mini Free Mount Cylinder | 25A-CUJ (Standard) | 114 |
|  | Free Mount Cylinder | 25A-CU (Standard) | 116 |
|  |  | 25A-CUK (Non-rotating rod) | 117 |


| Compact Cylinder | Model (Type) | Page |
| :--- | :--- | :--- | :--- |
|  |  | 118 |



[^1]| Description |  | 25A-Series |  |
| :---: | :---: | :---: | :---: |
|  |  | Model (Type) | Page |
|  | Vacuum Ejector | 25A-ZK2 $\square$ A (Vacuum unit) Single unit only | 175 |
|  | Space Saving Vacuum Ejector | 25A-ZQ $\square$ A (Ejector system) Single unit/Manifold | 180-1 |
|  |  | 25A-ZQ $\square$ A (Vacuum pump system) Single unit/Manifold | 180-4 |
|  |  | 25A-ZQ (Ejector unit) Single unit/Manifold | 181 |
|  |  | 25A-ZQ (Vacuum pump unit) Single unit/Manifold | 185 |
|  |  | ZH $\square \square \mathbf{D A ~ ( B o d y ~ p o r t e d ) ~ ( O n l y ~ t h e ~ m o d e l s ~ w i t h o u t ~ c o n n e c t i o n ~ t h r e a d s ) ~}$ | *1 |
|  |  | ZH $\square \square$ BA (Box type) (Only the models without connection threads) | *1 |
|  | In-line Type Vacuum Ejector | ZU $\square \square \mathbf{A}$ (In-line type) (Only the models without connection threads) | *1 |
|  | In-line Air Filter (0) $2=1$ | ZFC (With One-touch fittings) | *1 |
|  | Vacuum Pad | ZP (Pad only) | *1 |
|  |  | ZPS (With stainless steel adapter) | *1 |
|  | Vacuum Regulator | 25A-IRV | 189 |
|  | Adsorption Plate | SP | *1 |
|  | Membrane Air Dryer | 25A-IDG (Single unit/Standard dew point $-40^{\circ} \mathrm{C} /-60^{\circ} \mathrm{C}$ specifications) | 190 |
|  | Air Preparation Filter | 25A-AFF (Main line filter) | 192 |
|  |  | 25A-AM (Mist separator) | 193 |
|  |  | 25A-AMD (Micro mist separator) | 194 |
|  |  | 25A-AMH (Micro mist separator with pre-filter) | 195 |
|  | Clean Air Filter | SFD100 | *1 |
|  |  | SFD200 | *1 |
|  |  | 25A-AMP (Exhaust cleaner for clean room) | 196 |
|  |  | SFE (Clean exhaust filter) | *1 |
|  | Modular F.R.L. Units | 25A-AC $\square \mathrm{B}-\mathrm{D}, \mathrm{AC} \square \mathrm{C}-\mathrm{D}, \mathrm{AC} \square \mathrm{D}-\mathrm{D}$ | *2 |
|  |  | 25A-AC $\square \mathrm{B}-\mathrm{B}, \mathrm{AC} \square \mathrm{C}-\mathrm{B}, \mathrm{AC} \square \mathrm{D}-\mathrm{B}$ | *2 |
|  | Air Filter Separator | 25A-AF-D (Air filter) | 197 |
|  |  | 25A-AFM-D (Mist separator) | 199 |
|  |  | 25A-AFD-D (Micro mist separator) | 199 |
|  |  | 25A-AF-A (Air filter) | 198 |
|  |  | 25A-AFM-A (Mist separator) | 200 |
|  |  | 25A-AFD-A (Micro mist separator) | 200 |
|  | Regulator | 25A-AR-D (Regulator) | 201 |
|  |  | 25A-AR $\square \mathrm{K}-\mathrm{D}$ (Regulator with backflow function) | 201 |
|  |  | 25A-AW-D (Filter regulator) | 203 |
|  |  | 25A-AW $\square$ K-D (Filter regulator with backflow function) | 203 |
|  |  | 25A-AWM-D (Mist separator regulator) | 205 |
|  |  | 25A-AWD-D (Micro mist separator regulator) | 205 |
|  |  | 25A-AR-B (Regulator) | 202 |
|  |  | 25A-AR $\square \mathrm{K}-\mathrm{B}$ (Regulator with backflow function) | 202 |
|  |  | 25A-AW-B (Filter regulator) | 204 |
|  |  | 25A-AW $\square \mathrm{K}$-B (Filter regulator with backflow function) | 204 |
|  |  | 25A-IR $\square$-A (Precision regulator) | 206 |
|  |  | 25A-ITV (Electro-pneumatic regulator) | 207 |

[^2]| Description |  | 25A-Series |  |
| :---: | :---: | :---: | :---: |
|  |  | Model (Type) | Page |
|  | Booster Regulator | 25A-VBA*4 | 208 |
|  | Pressure Gauge | G43-10-01-X300 (Stud, Bourdon tube, Internal parts: Stainless steel) | *2 |
|  |  | G46-SRB (Only external parts and wetted parts are made of stainless steel.) | *3 |
|  | Stainless Steel Speed Controller | AS-FG (Elbow/Universal/In-line type) | *1 |
|  | Speed Controller with Indicator | AS-FSG (Elbow type) | *1 |
|  |  | AS-FPG (Elbow type) | *1 |
|  | Quick Exhaust Valve | 25A-AQ240F, 340F (Built-in One-touch fittings) | 210 |
|  | Check Valve | 25A-AKH (With One-touch fittings) | 211 |
|  | One-touch Fittings | KQ2 (One-touch fittings) (Only the type without a connection thread) | *1 |
|  | Rectangular Multi-connector | 25A-KDM (Rectangular multi-connector) | 212 |
|  | Stainless Steel Fittings | KG (One-touch fittings) | *1 |
|  |  | KPG (One-touch fittings) | *1 |
|  |  | KQG2 (One-touch fittings) | *1 |
|  |  | KQ2-G (Stainless steel) | *1 |
|  |  | KFG2 (Insert fittings) | *1 |
|  |  | MS (Miniature fittings) | *1 |
|  |  | KKA (S Couplers stainless steel type) | *1 |
| 을을 | Tubing | T (Nylon) | *1 |
|  |  | TS (Soft nylon) | *1 |
|  |  | TU (Polyurethane) | *1 |
|  |  | TA $\square$ (Antistatic) | *1 |
|  |  | TL (Fluoropolymer) | *1 |
|  |  | TH (FEP) | *1 |
|  |  | TD (Soft fluoropolymer) | *1 |
|  |  | TPS (Soft polyolefin) | *1 |
|  |  | IDK (Moisture control tube) | *1 |
|  | Pressure Switch | 25A-ZSE20(F)/ISE20 (3-screen display high-precision) | 213 |
|  |  | 25A-ZSE20A(F)/ISE20A (3-screen display high-precision) | 214 |
|  |  | 25A-ZSE20B(F)/ISE20B (3-screen display high-precision) | 215 |
|  |  | 25A-ZSE20C(F)/ISE20C(H) (3-screen display high-precision, for general fluids) | 216 |

[^3]
25A-Series

| 25A-PF2M7 (For air, Integrated display type) | 217 |
| :--- | :--- |
| 25A-PFM7 (For air, Integrated display type) | 218 |
| 25A-PFM5 (For air, Remote type) | 219 |
| 25A-PFM3 (For air, Flow monitor) | 220 |
| 25A-PFMB7 (For air, Integrated display type) | 221 |
| 25A-PF3W7-Z (For water, Integrated display type) | 223 |
| 25A-PF3W5-Z (For water, Remote type) | 224 |
| 25A-PF3W (For water, Integrated display/Remote type) | 225 |
| 25A-PF3W (PVC piping, Integrated display/Remote type) | 226 |
| 25A-PF3W (For water, Flow monitor) | 227 |



| 25A-VX2 (For air) | 229 |
| :--- | :--- |
| 25A-VX2 (For water/medium vacuum) | 230 |
| 25A-VXD (For air) | 231 |
| 25A-VXD (For water) | 232 |
| 25A-VXZ (For air) | 233 |
| 25A-VXZ (For water) | 234 |



| AZ3542 \& 4542 $\square 25 A$ (Air operated type) | 235 |
| :--- | :---: |
| AK3542 \& 4542 $\square 25 A$ (Air operated type) | 237 |



| 25A-LEFS (Slider type/Step motor, Servo motor: Applicable to the JXC $\square / L E C \square)$ | 239 |
| :--- | :--- |
| 25A-LEFS (Slider type/AC servo motor: Applicable to the LECS $\square)$ | 243 |
| 25A-LEFS (Slider type/AC servo motor: Applicable to the LECY $\square)$ | 244 |
| 25A-LEJS (High rigidity slider type/AC servo motor: Applicable to the LECS $\square$ | 245 |
| 25A-LEJS (High rigidity slider type/AC servo motor: Applicable to the LECY $\square$ | 246 |
| 25A-LEY (Rod type/Step motor, Servo motor: Applicable to the JXC $\square$ LEC $\square)$ | 247 |
| 25A-LEY (Rod type/AC servo motor: Applicable to the LECS $\square)$ | 251 |
| 25A-LEY (Rod type/AC servo motor: Applicable to the LECY $\square)$ | 253 |



| D-M9 $\square \square-900$ |  |
| :--- | :--- |
| D-F8 $\square-900$ |  |
| D-Y $\square \square-900$ |  |
| 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.)


|  | Air Cylinder With End Lock | CBM2 |
| :---: | :---: | :---: |
|  |  | MBB |
|  | Cylinder with Lock | CNG $\square$ N |
|  |  | CNA2 $\square$ N |
|  | Compact Cylinder with Lock | CLQ |
|  | Stopper Cylinder | RSQ |
|  | Heavy Duty Stopper Cylinder | RS2H |


|  | Vacuum Pad |  | ZPロ |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |

## Related Products

## (1) Antistatic Equipment

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


## 2 Static Neutralization Equipment

Ions generated by corona discharge neutralize static electricity.

- Ionizer/Bar Type
- Bar Type Ionizer Separate Controller
- Ionizer
- Nozzle Type lonizer

Fan Type Ionizer

IZS4 $\square$ Series
IZT4 $\square$ Series
IZS31 Series
IZN10E Series
IZF $\square$ Series
Measurement Equipment Measures the electrostatic potential.

- Electrostatic Sensor
- Handheld Electrostatic Meter

IZD10/IZE11 Series
IZH10 Series

Static electricity

(4) Electric Actuators


## 5 High Purity Chemical Liquid Valves

High Purity Chemical Liquid Valve/Air Operated Type LVC/LVA/LVH Series


LVH Series

# Plug-in Connector Connecting Base 

## D-sub Connector

# 25A-JSY1000/3000 Series 




Connector type



4 Connector entry direction

(5) Valve stations
F: D-sub connector (25 pins)

| Symbol | Stations |  |
| :---: | :---: | :---: |
| $\mathbf{0 2}$ | 2 stations |  |
| $\vdots$ | $\vdots$ |  |
| $\mathbf{1 2}$ | 12 stations |  |
| $\mathbf{0 2}$ | 2 stations |  |
| $\vdots$ | $\vdots$ | Double wiring*1 |
| $\mathbf{1 6}$ | 16 stations | Specified layout*2 |
| (Up to 16 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.)

* 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 stations) |

SUP/EXH block assembly

| - | Internal pilot |
| :---: | :---: |
| $\mathbf{S}$ | Internal pilot, <br> Built-in silencer |

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

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

| Symbol |  | A, B port | JSY1000 | JSY3000 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C4 |  | $\varnothing 4$ | - | - |  |
| C6 |  | $\varnothing 6$ | $\bigcirc$ | $\bigcirc$ |  |
| C8 |  | $\varnothing 8$ | - | - |  |
| CM*1 |  | Straight port, mixed sizes | $\bigcirc$ | $\bigcirc$ |  |
| P, E port size (One-touch fittings) |  |  | $\varnothing 8$ | $\varnothing 10$ |  |

*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 C 6 . When CM is selected, the manifold pitch is different depending on the selected fitting.

9 Mounting and Option

| Symbol | Mounting |
| :---: | :---: |
| - | Direct mounting |
| $\mathbf{D} \square$ | DIN rail mounting |

## DIN Rail Option

| - | DIN rail mounting (With DIN rail) |  |
| :---: | :---: | :--- |
| $\mathbf{0}$ | DIN rail mounting (Without DIN rail) |  |
| $\mathbf{3}$ | For 3 stations | Specify a length longer than |
| $\vdots$ | $\vdots$ |  |
| $\mathbf{1 6}$ | For 16stations |  |

* Enter the number of stations inside $\square$ 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.


## $\triangle$ 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.

(5) Light/surge voltage suppressor and common specification

| Symbol | With light | Surge voltage suppressor | Common specification |
| :---: | :---: | :---: | :---: |
| U | $\bigcirc$ | $\bigcirc$ | 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


# Plug-in Connector Connecting Base 

## Terminal Block Box

# 25A-JSY1000/3000 Series 



| (1) Series |
| :--- |
| 1 |
| $\mathbf{\| c \|}$ |
| $\mathbf{3}$ |


| 2 Type |
| :--- |
| 10 |
| 10 Side ported |


| 3 Wiring |
| :---: |
| $\mathrm{T} \quad$ Terminal block box |

## Valve stations

| T: Terminal block box |
| :--- |
| Symbol Stations  <br> $\mathbf{0 2}$ 2 stations Note <br> $\vdots$ $\vdots$  <br> 10 10 stations Double wiring*1 <br> $\mathbf{0 2}$ 2 stations  <br> $\vdots$ $\vdots$ Specified layout*2 <br> $\mathbf{1 6}$ (Up to 16 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.)
*3 This also includes the number of blanking plates.
*1 Indicate the sizes on the manifold specification sheet for "СМ."

* 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.

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

| Symbol |  | A, B port | JSY1000 | JSY3000 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C4 |  | $\varnothing 4$ | - | - |  |
| C6 |  | $\varnothing 6$ | - | - |  |
| C8 |  | $\varnothing 8$ | - | - |  |
| CM*1 |  | Straight port, mixed sizes | $\bigcirc$ | $\bigcirc$ |  |
| P, E port size (One-touch fittings) |  |  | $\varnothing 8$ | $\varnothing 10$ |  |

(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 |
| :---: | :---: |
| $\mathbf{S}$ | 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.

8

| Symbol | Mounting |
| :---: | :---: |
| - | Direct mounting |
| D $\square$ | DIN rail mounting |

* Enter the number of stations inside $\square$ 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) |  |
| :---: | :---: | :--- |
| $\mathbf{0}$ | DIN rail mounting (Without DIN rail) |  |
| $\mathbf{3}$ | For 3 stations | Specify a length longer than |
| $\vdots$ | $\vdots$ |  |
| $\mathbf{1 6}$ | For 16 stations |  |

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


## Example (25A-JJ5SY3-10T- $\square$ )



> 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.) $\begin{gathered}* 25 A-J S Y 3200-5 U ~ . . . . . . . . . . . . . . . . ~ \\ \longrightarrow\end{gathered}$ sets (2-position double part no.) $\begin{aligned} & \text { The asterisk denotes the symbol for the assembly. } \\ & \\ & \text { Prefix it to the part numbers of the valve, etc. }\end{aligned}$

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.

(1) Series

| 1 | JSY 1000 |
| :---: | :---: |
| 3 | JSY 3000 |

Pilot valve exhaust method

> | $\mathbf{0}$ | Pilot valve individual exhaust |
| :--- | :--- |

|  | of actua |  |
| :---: | :---: | :---: |
| 1 | 2-position | Single |
| 2 |  | Double |
| 3 | 3 -position | Closed centre |
| 4 |  | Exhaust centre |
| 5 |  | Pressure centre |
| A | 4-position dual 3-port | N.C./N.C. |
| B |  | N.O./N.O. |
| C |  | N.C./N.O. |

(5 Lightsurge voltage suppressor and common specification

| Symbol | With light | Surge voltage <br> suppressor | Common <br> specification |
| :---: | :---: | :---: | :---: |
| $\mathbf{U}$ |  |  |  |
| $\mathbf{Z}$ |  |  |  |
|  |  |  | Positive common |
| $\mathbf{N Z}$ |  |  | 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.
Protective class class III (Mark: ©ily

# Plug-in Connector Connecting Base 

## EX260

# 25A-JSY1000/3000 Series 

## How to Order Manifolds



Sunit Output polarity, Protocol, Number of outputs, Communication connector)

| Symbol (Output polarity) |  | Protocol | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { outputs } \end{gathered}$ | $\begin{gathered} \text { Commiciation } \\ \text { wonector } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Positive common (NPN) | Negative common (PNP) |  |  |  |
| 0*1 |  | Without SI unit |  |  |
| QA | QAN | DeviceNet ${ }^{\text {TM }}$ | 32 | M12 |
| QB | QBN |  | 16 |  |
| NA | NAN | PROFIBUS DP | 32 | M12 |
| NB | NBN |  | 16 |  |
| VA | VAN | CC-Link | 32 | M12 |
| VB | VBN |  | 16 |  |
| DA | DAN | EtherCAT | 32 | M12 |
| DB | DBN |  | 16 |  |
| FA | FAN | PROFINET | 32 | M12 |
| FB | FBN |  | 16 |  |
| EA | EAN | EtherNet/IP ${ }^{\text {TM }}$ | 32 | M12 |
| EB | EBN |  | 16 |  |

*1 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.

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

| Symbol | A, B port |  | JSY1000 | JSY3000 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C4 | Straight | $\varnothing 4$ | - | - |  |
| C6 |  | $\varnothing 6$ | - | - |  |
| C8 |  | $\varnothing 8$ | - | - |  |
| CM*1 |  | Straight port, mixed sizes | - | - |  |
| P, E port size (One-touch fittings) |  |  | $\varnothing 8$ | 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.


## 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 |
| :---: | :---: |
| $\mathbf{S}$ | 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]How to Order Manifold Assembly

## $\triangle$ 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 | 3-position | Closed centre |
| 4 |  | Exhaust centre |
| 5 |  | Pressure centre |
| A | 4-position dual 3-port | N.C./N.C. |
| B |  | N.O./N.O. |
| C |  | N.C./N.O. |

(5) Light/surge voltage suppressor and common specification

| Symbol | With light | Surge voltage suppressor | Common specification |
| :---: | :---: | :---: | :---: |
| U | $\bigcirc$ | $\bigcirc$ | Non-polar |
| Z |  |  | Positive common |
| NZ |  |  | Negative common |

* 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.

## Plug-in Connector Connecting Base

## EX120



| 1 Series |
| :--- |
| Ser JSY 1000 <br> $\mathbf{3}$ JSY 3000 |

(2) Type

10

Side ported
(3) SI unit

| $\mathbf{0}$ | Without SI unit |
| :---: | :---: |
| $\mathbf{Q}$ | DeviceNet $^{\text {TM }}$ (Positive common NPN) |
| $\mathbf{V}$ | CC-Link (Positive common NPN) |

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


## Valve stations

| Symbol | Stations | Note |
| :---: | :---: | :---: |
| $\mathbf{0 2}$ | 2 stations |  |
| $\vdots$ | $\vdots$ | Double wiring*1 |
| $\mathbf{0 8}$ | 8stations |  |
| $\mathbf{0 2}$ | 2stations |  |
| $\vdots$ | $\vdots$ | Specified layout*2 |
| $\mathbf{1 6}$ | 16 stations | (Up to 16 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.) * This also includes the number of blanking plates.

## Mounting and Option

| Symbol | Mounting |
| :---: | :---: |
| - | Direct mounting |
| $\mathbf{D} \square$ | DIN rail mounting |

* Enter the number of stations inside $\square$ 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

| $\mathbf{-}$ | DIN rail mounting (With DIN rail) |  |
| :---: | :---: | :--- |
| $\mathbf{0}$ | DIN rail mounting (Without DIN rail) |  |
| $\mathbf{3}$ | For 3 stations | Specify a length longer than <br> $\vdots$ |
| $\mathbf{1 6}$ | For 16 stations |  |
| that of the standard rail. |  |  |

* If the DIN rail must be mounted without an SI unit, select DO. 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.)
(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

| - | Internal pilot |
| :---: | :---: |
| $\mathbf{S}$ | Internal pilot, Built-in silencer |

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

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

| Symbol | A, B port |  | JSY1000 | JSY3000 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C4 | Straight | $\varnothing 4$ | - | - | 08 |
| C6 |  | $\varnothing 6$ | - | - | 1 |
| C8 |  | $\varnothing 8$ | - | - | 10 ${ }^{2}$ |
| CM*1 |  | Straight port, mixed sizes | - | - | 0 砤名 |
| P, E port size (One-touch fittings) |  |  | $\varnothing 8$ | $\varnothing 10$ |  |

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

* 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.

> 25A-JJ5SY3-10S3Q-05D-C8 $\cdot 1$ 1 set (Type 105 -station manifold base part no.) * 25A-JSY3100-5U ................ 2 sets (2-position single part no.) $\begin{aligned} & \text { * 25A-JSY3200-5U ................ } 3 \text { sets (2-position double part no.) } \\ & \\ & \\ & \\ & \text { The asterisk denotes the symbol for the assembly. } \\ & \text { Prefix it to the part numbers of the valve, etc. }\end{aligned}$

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 | JSY 1000 |
| :---: | :---: |
| 3 | JSY 3000 |

Pilot valve exhaust method

| $\mathbf{0}$ | Pilot valve individual exhaust |
| :--- | :--- |


|  | of actua |  |
| :---: | :---: | :---: |
| 1 | 2-position | Single |
| 2 |  | Double |
| 3 | 3-position | Closed centre |
| 4 |  | Exhaust centre |
| 5 |  | Pressure centre |
| A | 4-position dual 3-port | N.C./N.C. |
| B |  | N.O./N.O. |
| C |  | N.C./N.O. |

(5) Light/surge voltage suppressor and common specification

| Symbol | With light | Surge voltage <br> suppressor | Common <br> specification |
| :---: | :---: | :---: | :---: |
| $\mathbf{U}$ | - | Non-polar <br>  <br>  <br> $\mathbf{Z}$ |  |
|  |  |  | 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.

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

For the JSY1000 series, only the power-saving circuit specification

## $\triangle$ Caution

 type) specification. is available.Rated voltage
5

| 6 Manual override |
| :--- |
| Non-locking |
| push type |
| * Push-turn locking lever type "E" is not |
| available for the JSY 1000 . |
| * 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 25 A - series specifications and dimensions |
| are the same as those of the standard model. |
| For details, refer to the Web Catalogue. |

## 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


SI Unit Part Nos.

| Description | SI unit part no. | Note |
| :---: | :---: | :---: |
| EX260 SI unit | 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 ${ }^{\circledR}$ M12 connector, 32 outputs, Negative common (PNP) |
|  | EX260-SDN2-X117 | DeviceNet ${ }^{\circledR}$ M12 connector, 32 outputs, Positive common (NPN) |
|  | EX260-SDN3-X117 | DeviceNet ${ }^{\circledR}$ M12 connector, 16 outputs, Negative common (PNP) |
|  | EX260-SDN4-X117 | DeviceNet ${ }^{\circledR}$ 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-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 ${ }^{\text {TM }}$ M12 connector, 32 outputs, Negative common (PNP) |
|  | EX260-SEN2-X117 | EtherNet/IP ${ }^{\text {TM }}$ M12 connector, 32 outputs, Positive common (NPN) |
|  | EX260-SEN3-X117 | EtherNet/IP ${ }^{\text {TM }}$ M12 connector, 16 outputs, Negative common (PNP) |
|  | EX260-SEN4-X117 | EtherNet/IP ${ }^{\text {TM }}$ M12 connector, 16 outputs, Positive common (NPN) |
| EX120 SI unit | EX120-SMJ1-X220 | CC-Link (Terminal block, 16 outputs, Positive common (NPN)) |
|  | EX120-SDN1-X220 | DeviceNet ${ }^{\circledR}$ (Terminal block, 16 outputs, Positive common (NPN)) |

## One-touch Fittings Part Nos.

| Port size Series |  | 25A-JSY1000 |  | 25A-JSY3000 | Note |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6.5 mm pitch | 9 mm pitch |  |  |
| A, B port | $\bigcirc 4$ | 25A-KQSY10-C4-X1336 | - | - | The part number is for 1 piece. (Sales unit: 10 pcs.) |
|  | $\varnothing 6$ | - | 25A-KQSY11-C6-X1336 | 25A-KQSY30-C6 |  |
|  | $\bigcirc 8$ |  |  | 25A-KQSY30-C8-X1336 |  |
| P, E port | Ø8 | 25A-KQSY30-C8-X1336 |  | - |  |
|  | Ø10 | - |  | 25A-KQSY31-C10-X1336 |  |

## How to Order Individual SUP/EXH Spacer Assembly

One-touch fitting Straight type 25A-JSY 3 1M-38P-1A-C6
 Individual EXH spacer

- Port size (Metric)

| Symbol | P, E port | JSY1000 | JSY3000 |
| :---: | :---: | :---: | :---: |
| C4 | $\varnothing 4$ One-touch fitting | - | - |
| C6 | $\varnothing 6$ One-touch fitting | - | - |

Part numbers of mounting screw
(2 pcs. of each)
JSY1000: 25A-JSY11V-23-5A
JSY3000: 25A-JSY31V-23-2A

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

| Description | 25A-JSY1000 |  | 25A-JSY3000 |
| :---: | :---: | :---: | :---: |
|  | 6.5 mm pitch | 9 mm pitch |  |
| Tie-rod for additional stations | JSY11M-49P-4-1-A <br> ( 6.5 mm pitch) | JSY11M-49P-3-1-A <br> ( 9 mm pitch) | JSY31M-49P-2-1-A <br> ( 11.5 mm pitch) |
| Tie-rod | JSY11M-49P-4-■-A <br> ( 6.5 mm pitch) | JSY11M-49P-3-■-A <br> ( 9 mm pitch) | JSY31M-49P-2-■-A <br> ( 11.5 mm pitch) |
| Valve mounting screw | $\begin{gathered} \text { 25A-JSY11V-23-4A } \\ \text { (M1.4 x } 21.5) \\ \hline \end{gathered}$ |  | $\begin{aligned} & \text { 25A-JSY31V-23-1A } \\ & (\mathrm{M} 2 \times 25) \end{aligned}$ |
| Clamp bracket (for connector connecting base) | 25A-JSY11M-15P-1A (Refer to the table below.) 25A-JSY11M-15P-2A (Refer to the table below.) |  | 25A-SY30M-15-1A |

Table. 25A-JSY1000 series clamp bracket

| Wiring <br> (JSY1000 series) |  | 25A-JSY11M-15P-1A | 25A-JSY11M-15P-2A |
| :---: | :---: | :---: | :---: |
| F | D-sub connector | - | - |
| T | Terminal block box | - | - |
| S $\square$ | EX260 | - | - |
| S3 | EX120 | - | - |

Manifold Parts Nos.
A Manifold block assembly


| $\mathbf{1}$ | JSY1000 (6.5 mm pitch) <br> JSY3000 (11.5 mm pitch) |
| :--- | :--- |
| $\mathbf{2}$ | JSY1000 (9 mm pitch) |

- Wiring type

| S | Single wiring |
| :---: | :---: |
| D | Double wiring |

## 25A-JSY1000/3000 Series

## Manifold Parts Nos.

## BSUP/EXH end block assembly

- Mounting

| - | Direct mounting |
| :---: | :---: |
| D0 | DIN rail mounting (Without DIN rail) |
| D00*1 | DIN rail mounting (Without DIN rail) |

Pilot, Silencer type
*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 (F type) <br> EX260 (S $\square \square$ type) <br> EX120 (S3 type) |
| D00 | Terminal block box (T type) |

P, E port size (One-touch fittings) ${ }^{6}$

| Symbol | P, E port | JSY1000 | JSY3000 |
| :---: | :---: | :---: | :---: |
| C8 | $\varnothing 8$ One-touch fitting | $\bullet$ | - |
| C10 | $\varnothing 10$ One-touch fitting | - | $\bullet$ |
| $\mathbf{0 0}$ | Plug | $\bullet$ | $\bullet$ |

Clamp bracket

| Series |  | Part no. |
| :---: | :---: | :---: |
| 25A-JSY1000 | For D0 | 25A-JSY11M-15P-1A |
|  | For D00 | 25A-JSY11M-15P-2A |
| 25A-JSY3000 | 25A-SY30M-15-1A |  |

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


Cover
(Internal pilot)

Silencer cover
(Internal pilot, Built-in silencer)


Manifold Parts Nos.

## OSUP/EXH block assembly

For D-sub connector


For the terminal block box or EX260


For EX120


[^5]
## 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.


# Non Plug-in Metal Base 25A-JSY1000/3000 Series 

## Internal Pilot

## How to Order Manifolds



| $\mathbf{1}$ | JSY1000 |
| :--- | :--- |
| $\mathbf{3}$ | JSY3000 |


(5) A, B port size Thread piping
Thread piping

| Symbol | A, B port | JSY1000 | JSY3000 |
| :---: | :---: | :---: | :---: |
| M3 | M3 $\times 0.5$ |  | - |
| M5 | M5 $\times 0.8$ |  | $\bullet$ |
| 01 | $1 / 8$ | - | $\bullet$ |

One-touch fitting (Metric)

| Symbol |  | A, B port | JSY1000 | JSY3000 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | C4 | $\varnothing 4$ | - | - |  |
|  | C6 | $\varnothing 6$ | - | - |  |
|  | KC4 | $\varnothing 4$ | - | - |  |
|  | KC6 | $\varnothing 6$ | - | - |  |
|  | KC8 | $\varnothing 8$ | - | - |  |
|  | M*1 | A, B ports mixed | - | - |  |
| P, E port size (Thread piping) |  |  | 1/8 | 1/4 |  |

*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

## Example (25A-JJ5SY3-40- $\square$ )



| 3 Valve stations |
| :---: | :---: |
| Symbol Stations <br> $\mathbf{0 2}$ 2 stations <br> $\vdots$ $\vdots$ <br> $\mathbf{2 0}$ 20 stations |

4 P P, E port entry

| U | U side $* 1$ |
| :---: | :---: |
| D | D side $* 1$ |
| B | Both sides |

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

(2) Type of actuation

| $\mathbf{1}$ | 2-position single |
| :---: | :---: |
| $\mathbf{2}$ | 2-position double |
| $\mathbf{3}$ | 3-position closed centre |
| $\mathbf{4}$ | 3-position exhaust centre |
| $\mathbf{5}$ | 3-position pressure centre |
| A | Dual 3-port (N.C./N.C.) |
| B | Dual 3-port (N.O./N.O.) |
| C | Dual 3-port (N.C./N.O.) |


| 3 | Pilot valve exhaust method |
| :---: | :--- |
| 0 | Pilot valve individual exhaust |

5 Electrical entry


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

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

For details, refer to the Web Catalogue.

## $\triangle$ 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.

## 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
$25 A-J S Y O \mathbf{B} 1 \mathrm{M}-26-1 \mathrm{~A}$

| 1 | SSY1000 |
| :--- | :--- |
| 3 | $J S Y 3000$ |

Valve Mounting Screw Part No.

| Description | Part no. |  | Note |
| :---: | :---: | :---: | :---: |
|  | 25A-JSY11V-23-4A-JJ5SY3 | 25A-JSY31V-23-4A |  |

One-touch Fittings Part Nos.

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

How to Order Individual SUP/EXH Spacer Assembly
One-touch fitting Straight type 25A - JSY 31 M - 38 - 1A-C6


- Port size (Metric)

| Symbol | P, E port | JSY1000 | JSY3000 |
| :---: | :---: | :---: | :---: |
| C4 | $\varnothing 4$ One-touch fitting | $\bullet$ | - |
| C6 | $\varnothing 6$ One-touch fitting | - | $\bullet$ |


| 38 | Individual SUP spacer |
| :---: | :--- |
| 39 | Individual EXH spacer |

Part numbers of mounting screw (2 pcs. of each)

JSY1000: 25A-JSY11V-23-5A
JSY3000: 25A-JSY31V-23-5A
How to Order Pilot Valves
For 25A-JSY3000


* For the 25A-JSY1000, the pilot valve is the same as that of the standard model.

| $\begin{aligned} & \text { Auto } \\ & \text { Switches } \end{aligned}$ | Electric Actuators | Process Gas Equipment | Fluid Control Equipment | Detection Switches | Flow Control Equipment/ Fittings | $\begin{array}{\|c\|} \hline \text { Modular F.R.L./. } \\ \text { Pressure Control } \\ \text { Equipment } \end{array}$ | Clean Air Filters | Air Preparation Equipment | Vacuum Equipment | Air Grippers | Rotary Actuators | Related Products | Air Cylinders | Directional Control Valves |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Plug-in Connector Connecting Base

## D-sub Connector

25A-SY5000/7000 Series

How to Order Manifolds
Series

| $\mathbf{5}$ | SY5000 |
| :--- | :--- |
| $\mathbf{7}$ | SY7000 |

Type

| 10 | Side ported |
| :---: | :---: |
| 11 | Bottom ported |

Connector type
F: D

(4) Connector entry direction
1: Upward

## 5 Valve stations

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

*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

| U | U side (2 to 10 stations) |
| :---: | :---: |
| D | D side (2 to 10 stations) |
| B | Both sides (2 to 24 stations) |

7 SUP/EXH block assembly

| - | Internal pilot |
| :---: | :---: |
| $\mathbf{S}$ | Internal pilot, |
| Built-in silencer |  |

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

| Symbol | A, B port | Type 10/ Side ported |  | Type 11/ Bottom ported |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | SY5000 | SY7000 | SY5000 | SY7000 |
| C4 | $\varnothing 4$ | $\bigcirc$ | - | $\bigcirc$ | - |
| C6 | $\varnothing 6$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| C8 | $\varnothing 8$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| C10 $\underset{\sim}{\text { ® }}$ | $\varnothing 10$ | - | $\bigcirc$ | - | $\bigcirc$ |
| C12 | $\bigcirc 12$ | - | $\bigcirc$ | - | $\bigcirc$ |
| CM*1 | Straight port, mixed sizes | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| $\begin{gathered} \text { P, } \\ \text { (One } \end{gathered}$ | E port size touch fittings) | $\varnothing 10$ | $\varnothing 12$ | $\varnothing 10$ | Ø 12 |

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

* The direction of $\mathrm{P}, \mathrm{E}$ port fittings is the same as for the A, B port.


## Mounting

| Symbol | Mounting | Option |  | DIN Rail Option |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Name plate | Station number | - | Direc | t mounting |
| - | Direct mounting | - | - | 0 | Without DI | $N$ rail (with bracket) |
| AA |  | $\bigcirc$ | $\bigcirc$ | 3 | For 3 stations | Specity a longer rail |
| BA |  | $\bigcirc$ | - | : | ! | than the total length |
| D $\square$ | DIN rail mounting | - | - | 24 | For 24 stations | of specified stations. |
| A $\square$ |  | - | $\bigcirc$ |  |  |  |
| B $\square$ |  | - | - |  |  |  |

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

* 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




## Connector type

F: D-sub connector


Connector entry direction

(4) Valve stations

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

5 P, E port entry

| $\mathbf{U}^{* 1}$ | U side (2 to 10 stations) |
| :---: | :---: |
| D*1 | D side (2 t t 10 stations) |
| B | 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 |
| :---: | :---: |
| $\mathbf{S}$ | Internal pilot, <br> 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

| - | Direct mounting |  |
| :---: | :---: | :---: |
| $\mathbf{D}$ | DIN rail mounting (With DIN rail) |  |
| D0 | DIN rail mounting (Without DIN rail) |  |
| D3 | For 3 stations | Specify a length longer than |
| $\vdots$ | $\vdots$ |  |
| D24 | For 24 stations |  |

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


## How to Order Valves (With mounting screw)



| (1) 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 |
| A | 4-position dual 3-port valve (N.C.IN.C.) |
| B | 4-position dual 3-port valve (N.O.IN.O.) |
| C | 4-position dual 3-port valve (N.C.IN.O.) |

## Seal type

| $\mathbf{0}$ | Rubber seal |
| :--- | :--- |

Back pressure check valve (Built-in valve type)

| - | None |
| :---: | :---: |
| $\mathbf{H}$ | 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) |
| :---: | :---: |

6 Coil type

| - | Standard |
| :---: | :---: |
| $\mathbf{T}$ | 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 of time.
* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalogue.


## 7 Rated voltage

| 5 | 24 VDC |
| :---: | :---: |
| 6 | 12 VDC |

(8) Light/surge voltage suppressor and common specification

| - | Without light/surge voltage suppressor <br> (Non-polar) |
| :---: | :---: |
| R | With surge voltage suppressor <br> (Non-polar) |
| $\mathbf{U}$ | With light/surge voltage suppressor <br> (Non-polar) |
| S | Withsurge voltage suppressor <br> (Positive common) <br> Z <br> NS <br> With light/surge voltage suppressor <br> (Positive common) |
| NZ | With surge voltage suppressor <br> (Negative common) |

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



## 10 A, B port size

Thread piping

| Syymbol | Port size | Applicable series |
| :---: | :---: | :---: |
| $\mathbf{0 2}$ | $1 / 4$ | SY7000 |

One-touch fitting (Metric)

| Symbol | A, B port | SY5000 | SY7000 |
| :---: | :---: | :---: | :---: |
| C4 | $\varnothing 4$ | $\bullet$ | - |
| C6 | $\varnothing 6$ | $\bullet$ | $\bullet$ |
| C8 | $\varnothing 8$ | $\bullet$ | $\bullet$ |
| C10 | $\varnothing 10$ | - | $\bullet$ |
| C12 | $\varnothing 12$ | - | $\bullet$ |

(11) Thread type

| - | Rc |
| :---: | :---: |
| $\mathbf{F}$ | G |
| $\mathbf{N}$ | NPT |
| $\mathbf{T}$ | NPTF |

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

For details, refer to the Web Catalogue.
Protective class
class III (Mark: ©il)


# Plug-in Connector Connecting Base 

## Terminal Block Box

25A-SY5000/7000 Series

How to Order Manifolds


Series compatible with secondary batteries


## 3 Valve stations

| Symbol | Stations | Note |
| :---: | :---: | :---: |
| $\mathbf{0 2}$ | 2 stations |  |
| $\vdots$ | $\vdots$ | Double wiring*1 |
| $\mathbf{1 0}$ | 10stations |  |
| $\mathbf{0 2}$ | 2 stations | Specified layout*2 |
| $\vdots$ | $\vdots$ | (Up to 20 solenoids available) |
| $\mathbf{2 0}$ | 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.


P, E port entry

| $\mathbf{U}$ | U side (2 to 10 stations) |
| :---: | :---: |
| $\mathbf{D}$ | D side (2 to 10 stations) |
| B | Both sides (2 to 20 stations) |

## SUP/EXH block assembly

| - | Internal pilot |
| :---: | :---: |
| $\mathbf{S}$ | Internal pilot, Built-in silencer |

* The $3 / 5(\mathrm{E})$ 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.

* 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 |  |
| :---: | :---: | :---: |
| $\mathbf{0}$ | Without DIN rail (with bracket) |  |
| $\mathbf{3}$ | For 3 stations | Specify a longer rail |
| $\vdots$ | $\vdots$ | than the total length of |
| $\mathbf{2 4}$ | For 24 stations | specified stations. |


*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.

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

For details, refer to the Web Catalogue.
Protective class Protective class
class III (Mark: $\langle\bar{\prime}$ )

## Plug-in Connector Connecting Base

## Terminal Block Box

## How to Order Manifolds


(1) Series

| 5 | SY 5000 |
| :---: | :---: |
| 7 | SY7000 |

## 3 P, E port entry

| U*1 | U side (2 to 10 stations) |
| :---: | :---: |
| $\mathbf{D * 1}$ | D side (2 to 10 stations) |
| $\mathbf{B}$ | 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 |
| :---: | :---: | :---: |
| $\mathbf{0 2}$ | 2 stations |  |
| $\vdots$ | $\vdots$ | Double wiring*1 |
| $\mathbf{1 0}$ | 10 stations |  |
| $\mathbf{0 2}$ | 2stations | Specified layout*2 |
| $\vdots$ | $\vdots$ | (Up to 20 solenoids available) |
| $\mathbf{2 0}$ | 20stations |  |

*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 SUP/EXH block assembly

| - | Internal pilot |
| :---: | :---: |
| $\mathbf{S}$ | 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 |  |
| :---: | :---: | :--- |
| D | DIN rail mounting <br> (With DIN rail) |  |
| D0 | DIN rail mounting <br> (Without DIN rail) |  |
| D3 | For 3 stations | Specify a length <br> $\vdots$ |
| D20 | For 20 stations | longer than that of |

* 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 Valves (With mounting screw)



Series compatible with secondary batteries


2 Type of actuation

| $\mathbf{1}$ | 2-position single |
| :---: | :---: |
| $\mathbf{2}$ | 2-position double |
| $\mathbf{3}$ | 3-position closed centre |
| $\mathbf{4}$ | 3-position exhaust centre |
| $\mathbf{5}$ | 3-position pressure centre |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

## Seal type

| $\mathbf{0}$ | Rubber seal |
| :--- | :--- |

Back pressure check valve (Built-in valve type)

| - | None |
| :---: | :---: |
| $\mathbf{H}$ | 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) |
| :---: | :---: |
| B | Quick response type ( 0.7 MPa ) |

## 6) Coil type

- Standard - $\quad$ 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.


## (7) Rated voltage

| 5 | 24 VDC |
| :---: | :---: |
| 6 | 12 VDC |

## 8 Light/surge voltage suppressor and common specification

| - | Without light/surge voltage suppressor <br> (Non-polar) |
| :---: | :---: |
| R | With surge voltage suppressor <br> (Non-polar) |
| $\mathbf{U}$ | With light/surge voltage suppressor <br> (Non-polar) |
| S | With surge voltage suppressor <br> (Positive common) |
| Z | With light/surge voltage suppressor <br> (Positive common) |
| NS | With surge voltage suppressor <br> (Negative common) |
| NZ | With light/surge voltage suppressor <br> (Negative common) |

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


## (9) Manual override



10 A, B port size
Thread piping


One-touch fitting (Metric)

| Symbol | A, B port | SY5000 | SY7000 |
| :--- | :---: | :---: | :---: |
| C4 | $\varnothing 4$ |  | - |
| C6 | $\varnothing 6$ | $\bigcirc$ | $\bigcirc$ |
| C8 | $\varnothing 8$ | $\bigcirc$ | $\bigcirc$ |
| C10 | $\varnothing 10$ | - | $\bigcirc$ |
| C12 | $\varnothing 12$ | - | $\bigcirc$ |


| 11 Thread type |
| :--- |
| ( |
| - |
| R |

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

For details, refer to the Web Catalogue.
Protective class
Protective class
class III (Mark: (II)

## Plug-in Connector Connecting Base

## Lead Wire

 25A-SY5000/7000 Series
## How to Order Manifolds



(3) Number of cores
(Lead wire)

| $\mathbf{L} 1$ | 34 cores |
| :---: | :---: |
| $\mathbf{L 2}$ | 17 cores |
| $\mathbf{L} 3$ | 9 cores |


| 43 |
| :--- |
| Lead wire length |
| $\mathbf{1}$ |
| $\mathbf{2}$ |
| $\mathbf{3}$ |

(5) Valve stations

| (L1口) |  |  |
| :---: | :---: | :---: |
| Symbol | Stations | Note |
| 02 | 2 2stions | Double wiring*1 |
| ! | ! |  |
| 16 | 16 stidions |  |
| 02 | 2stains | Specified layout*2 (Up to 32 solenoids available) |
| ! | $\vdots$ |  |
| 24 | 24 stions |  |
| (L2口) |  |  |
| Symbol | Stations | Note |
| 02 | 2staions | Double wiring*1 |
| $\vdots$ | - |  |
| 08 | 8staions |  |
| 02 | 2sations | Specified layout*2 (Up to 16 solenoids available) |
| ! | $\vdots$ |  |
| 16 | 16 sations |  |

*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

| U | U side (2 to 10 stations) |
| :---: | :---: |
| D | D side (2 to 10 stations) |
| B | Both sides (2 to 24 stations) |

## SUP/EXH block assembly

| - | Internal pilot |
| :--- | :---: |
| $\mathbf{S}$ | 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.
8 A, B port size (Metric)

*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

| Symbol | Mounting | Option |  |
| :---: | :---: | :---: | :---: |
|  |  | Name plate | Station number |
| - | Direct mounting | - | - |
| AA |  | - | $\bigcirc$ |
| BA |  | - | - |
| D $\square$ | DIN rail mounting | - | - |
| A $\square$ |  | - | - |
| B $\square$ |  | - | - |

* 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 |  |
| :---: | :---: | :---: |
| $\mathbf{0}$ | Without DIN rail (with bracket) |  |
| $\mathbf{3}$ | For 3 stations | Specify a longer rail than |
| $\vdots$ | $\vdots$ | the total length of specified |
| $\mathbf{2 4}$ | For 24 stations | stations. |

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



Type of actuation

| $\mathbf{1}$ | 2－position single |
| :---: | :---: |
| $\mathbf{2}$ | 2－position double |
| $\mathbf{3}$ | 3－position closed centre |
| $\mathbf{4}$ | 3－position exhaust centre |
| $\mathbf{5}$ | 3－position pressure centre |
| A | 4－position dual 3－port valve（N．C．／N．C．） |
| $\mathbf{B}$ | 4－position dual 3－port valve（N．O．／N．O．） |
| $\mathbf{C}$ | 4－position dual 3－port valve（N．C．／N．O．） |

Seal type
0
0 Rubber seal

Back pressure check valve （Built－in valve type）

| - | None |
| :---: | :---: |
| $\mathbf{H}$ | 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） |
| :---: | :---: |
| B | Quick response type（0．7 MPa） |

## 6 Coil type

－Standard
＊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．

## （7）Rated voltage

| 5 | 24 VDC |
| :---: | :---: |
| 6 | 12 VDC |

## 8 Light／surge voltage suppressor and common specification

| - | Without light／surge voltage suppressor <br> （Non－polar） |
| :---: | :---: |
| R | With surge voltage suppressor <br> （Non－polar） |
| $\mathbf{U}$ | With light／surge voltage suppressor <br> （Non－polar） |
| S | With surge voltage suppressor <br> （Positive common） |
| Z | With light／surge voltage suppressor <br> （Positive common） |
| NS | With surge voltage suppressor <br> （Negative common） |
| NZ | With light／surge voltage suppressor <br> （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．


## Plug-in Connector Connecting Base

## Lead Wire

How to Order Manifolds


5 P, E port entry

| $\mathbf{U} * 1$ | U side (2 to 10 stations) |
| :---: | :---: |
| $\mathbf{D} * 1$ | D side (2 to 10 stations) |
| B | 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 |
| :---: | :---: |
| $\mathbf{S}$ | 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 $3 / 5(\mathrm{E})$ 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.

| 7 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.

For details, refer to the Web Catalogue.

## Plug-in Connector Connecting Base

How to Order Valves (With mounting screw)


Series compatible with secondary batteries

(2) Type of actuation

| $\mathbf{1}$ | 2-position single |
| :---: | :---: |
| $\mathbf{2}$ | 2-position double |
| $\mathbf{3}$ | 3-position closed centre |
| $\mathbf{4}$ | 3-position exhaust centre |
| $\mathbf{5}$ | 3-position pressure centre |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| $\mathbf{B}$ | 4-position dual 3-port valve (N.O./N.O.) |
| $\mathbf{C}$ | 4-position dual 3-port valve (N.C./N.O.) |

Seal type

| $\mathbf{0}$ | Rubber seal |
| :--- | :--- |

Back pressure check valve (Built-in valve type)

| - | None |
| :---: | :---: |
| $\mathbf{H}$ | 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

| $\overline{-}$ | Standard (0.7 MPa) |
| :---: | :---: |
| B | Quick response type ( 0.7 MPa ) |

## (6) Coil type

| - | Standard |
| :---: | :---: |
| $\mathbf{T}$ | With power-saving circuit <br> (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.
7 Rated voltage

| 5 | 24 VDC |
| :---: | :---: |
| 6 | 12 VDC |

8 Light/surge voltage suppressor and common specification

| - | Without light/surge voltage suppressor <br> (Non-polar) |
| :---: | :---: |
| R | With surge voltage suppressor <br> (Non-polar) |
| U | With light/surge voltage suppressor <br> (Non-polar) |
| S | Withsurge voltage suppressor <br> (Positive common) <br> Z <br> NS <br> With light/surge voltage suppressor <br> (Positive common) <br> NZ <br> WithSurge voltage suppressor <br> (Negative common) <br> (Negative common) $\mathbf{c}^{\text {(Nurg voltage supressor }}$ |

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


10 A, B port size
Thread piping


One-touch fitting (Metric)

| Symbol | A, B port | SY5000 | SY7000 |
| :---: | :---: | :---: | :---: |
| C4 | $\varnothing 4$ |  | - |
| C6 | $\varnothing 6$ |  | $\bigcirc$ |
| C8 | $\varnothing 8$ |  | $\bigcirc$ |
| C10 | $\varnothing 10$ | - | $\bigcirc$ |
| C12 | $\varnothing 12$ | - | $\bigcirc$ |

## (11) Thread type

| - | Rc |
| :---: | :---: |
| $\mathbf{F}$ | G |
| $\mathbf{N}$ | NPT |
| $\mathbf{T}$ | NPTF |

* 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

# EX260 25A-SY5000/7000 Series 

How to Order Manifolds


Series compatible with secondary batteries

(2) Type

| 10 | Side ported |
| :---: | :---: |
| 11 | Bottom ported |

(3)
SI unit specifications
(Output polarity, Protocol, Number of outputs, Communication connector)

| Symbol (Output polarity) |  | Protocol | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { outputs } \end{aligned}$ | $\begin{gathered} \text { Conmunciaion } \\ \text { cunctor } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Positive common (NPN) | Negative common (PNP) |  |  |  |
| 0 |  | Without SI unit |  |  |
| QA | QAN | DeviceNet ${ }^{\text {® }}$ | 32 | M12 |
| QB | QBN |  | 16 |  |
| NA | NAN | PROFIBUS DP | 32 | M12 |
| NB | NBN |  | 16 |  |
| VA | VAN | CC-Link | 32 | M12 |
| VB | VBN |  | 16 |  |
| DA | DAN | EtherCAT | 32 | M12 |
| DB | DBN |  | 16 |  |
| FA | FAN | PROFINET | 32 | M12 |
| FB | FBN |  | 16 |  |
| EA | EAN | EtherNet/IPTM | 32 | M12 |
| EB | EBN |  | 16 |  |
| - | 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.


## 7 A, B port size (Metric)

(4) Valve stations

In the case of the 32-output SI unit

\begin{tabular}{|c|c|c|}
\hline Symbol \& Stations \& Note \\
\hline 02 \& 2 2stions \& \multirow{3}{*}{Double wiring*1} \\
\hline ! \& \(\vdots\) \& \\
\hline 16 \& 16 staios \& \\
\hline 02 \& 2sations \& \multirow[t]{2}{*}{\begin{tabular}{l}
Specified layout*2 \\
(Up to 32 solenoids available)
\end{tabular}} \\
\hline ¢

24 \& $\vdots$ \& <br>
\hline
\end{tabular}

In the case of the 16-output SI unit

| Symbol | Stations | Note |
| :---: | :---: | :---: |
| 02 | 2stitios | Double wiring*1 |
| ! | ! |  |
| 08 | 8statios |  |
| 02 | 2sadions | Specified layout*2 <br> (Up to 16 solenoids available) |
| ¢ | $\vdots$ |  |

*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 (SO), 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.


## 5 P, E port entry

| $\mathbf{U}$ | U side (2 to 10 stations) |
| :---: | :---: |
| $\mathbf{D}$ | D side (2 to 10 stations) |
| B | Both sides (2 to 24 stations) |

6 SUP/EXH block assembly
Internal pilot
$\overline{\mathbf{S}} \quad$ Internal pilot, Built-in silencer

* The $3 / 5(\mathrm{E})$ 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 |  |
| :---: | :---: | :---: | :---: |
|  |  | Name plate | Station number |
| - | Direct mounting | - | - |
| AA |  | - | $\bigcirc$ |
| BA |  | $\bigcirc$ | - |
| D $\square$ | DIN rail mounting | - | - |
| A $\square$ |  | $\bigcirc$ | $\bigcirc$ |
| B $\square$ |  | $\bigcirc$ | - |

* 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 |  |
| :---: | :---: | :---: |
| $\mathbf{0}$ | Without DIN rail (with bracket) |  |
| $\mathbf{3}$ | For 3 stations | Specify a longer rail <br> than the total length of |
| $\vdots$ | $\vdots$ | the |
| $\mathbf{2 4}$ | For 24 stations | specified stations. |


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

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

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



2 Type of actuation

| $\mathbf{1}$ | 2-position single |
| :---: | :---: |
| $\mathbf{2}$ | 2-position double |
| $\mathbf{3}$ | 3-position closed centre |
| $\mathbf{4}$ | 3-position exhaust centre |
| $\mathbf{5}$ | 3-position pressure centre |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| $\mathbf{B}$ | 4-position dual 3-port valve (N.O./N.O.) |
| $\mathbf{C}$ | 4-position dual 3-port valve (N.C./N.O.) |

## Seal type

0
0 Rubber seal

Back pressure check valve (Built-in valve type)

| - | None |
| :---: | :---: |
| $\mathbf{H}$ | 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

| $\overline{-}$ | Standard (0.7 MPa) |
| :---: | :---: |
| B | Quick response type ( 0.7 MPa ) |

## 6 Coil type

- Standard
* 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.


## 7 Rated voltage

5
24 VDC

## 8 Light/surge voltage suppressor and common specification

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



## Plug-in Connector Connecting Base

EX260
Type 12
Top Ported

How to Order Manifolds


Series compatible with secondary batteries


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

| Symbol (Output polarity) |  | Protocol | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { outputs } \end{gathered}$ | $\begin{aligned} & \text { Connuricatio } \\ & \text { cmedor } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Positive common (NPN) | Negative common (PNP) |  |  |  |
| 0 |  | Without SI unit |  |  |
| QA | QAN | DeviceNet ${ }^{\circledR}$ | 32 | M12 |
| QB | QBN |  | 16 |  |
| NA | NAN | $\begin{gathered} \hline \text { PROFIBUS } \\ \text { DP } \end{gathered}$ | 32 | M12 |
| NB | NBN |  | 16 |  |
| VA | VAN | CC-Link | 32 | M12 |
| VB | VBN |  | 16 |  |
| DA | DAN | EtherCAT | 32 | M12 |
| DB | DBN |  | 16 |  |
| FA | FAN | PROFINET | 32 | M12 |
| FB | FBN |  | 16 |  |
| EA | EAN | EtherNet/IP ${ }^{\text {TM }}$ | 32 | M12 |
| EB | EBN |  | 16 |  |
| - | 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.

3 Valve stations
In the case of the 32-output SI unit

| Symbol | Stations | Note |
| :---: | :---: | :---: |
| 02 | 2 2stions | Double wiring*1 |
| : | : |  |
| 16 | 16 stidions |  |
| 02 | 2staions | Specified layout*2 <br> (Up to 32 solenoids available) |
| 24 | 24 stition |  |

In the case of the 16-output SI unit

| Symbol | Stations | Note |
| :---: | :---: | :---: |
| 02 | 2staions | Double wiring*1 |
| ! | ! |  |
| 08 | 8staions |  |
| 02 | 2staions | Specified layout*2 <br> (Up to 16 solenoids available) |
| ! | $\vdots$ |  |

*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 (SO), 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.


## 4 P, E port entry

| U*1 | U side (2 to 10 stations) |
| :---: | :---: |
| D*1 | D side (2 to 10 stations) |
| B | 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.

5suP/EXH block assembly - $\quad$ 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) DIN rail mounting (Without DIN rail) |  |
| D0 |  |  |
| D3 | For 3 stations |  |
|  |  |  |
| D24 | 24 | 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.

[^6]Plug-in Connector Connecting Base<br>EX260

How to Order Valves (With mounting screw)



| 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 |
| A | 4 -position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

Seal type
0 Rubber seal

Back pressure check valve (Built-in valve type)

| - | None |
| :---: | :---: |
| $\mathbf{H}$ | 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) |
| :---: | :---: |
| B | Quick response type (0.7 MPa) |

(6) Coil type

| - | Standard |
| :---: | :---: |
| $\mathbf{T}$ | 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 of time.
* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalogue.

| 7 Rated voltage |
| :---: |
| 5 24 VDC |

## 8 Light/surge voltage suppressor and common specification

| R | With surge voltage suppressor <br> (Non-polar) |
| :---: | :---: |
| $\mathbf{U}$ | With light/surge voltage suppressor <br> (Non-polar) |
| $\mathbf{S}$ | With surge voltage suppressor <br> (Positive common) |
| $\mathbf{Z}$ | With light/surge voltage suppressor <br> (Positive common) |
| NS | With surge voltage suppressor <br> (Negative common) |
| NZ | With light/surge voltage suppressor <br> (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.


10 A, B port size
Thread piping

| Symbol | Port size | Applicable series |
| :---: | :---: | :---: |
| 02 | $1 / 4$ | SY7000 |

One-touch fitting (Metric)

| Symbol | A, B port | SY5000 | SY7000 |
| :---: | :---: | :---: | :---: |
| C4 | $\varnothing 4$ |  | - |
| C6 | $\varnothing 6$ |  | $\bigcirc$ |
| C8 | $\varnothing 8$ |  | $\bigcirc$ |
| C10 | $\varnothing 10$ | - | $\bigcirc$ |
| C12 | $\varnothing 12$ | - | $\bigcirc$ |

11 Thread type

| - | Rc |
| :---: | :---: |
| $\mathbf{F}$ | G |
| $\mathbf{N}$ | NPT |
| $\mathbf{T}$ | NPTF |

* 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

## 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 |

SI unit

| $\mathbf{0}$ | 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.


## Valve stations

| Symbol | Stations | Note |
| :---: | :---: | :---: |
| $\mathbf{0 2}$ | 2staions |  |
| $\vdots$ | $\vdots$ | Double wiring*1 |
| $\mathbf{0 8}$ | 8stations |  |
| $\mathbf{0 2}$ | 2stionss | Specified layout*2 |
| $\vdots$ | $\vdots$ | (Up to 16 solenoids available) |
| $\mathbf{1 6}$ | 16stations |  |

*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 | U side (2 to 10 stations) |
| :---: | :---: |
| D | D side (2 to 10 stations) |
| B | Both sides (2 to 16 stations) |

SUP/EXH block assembly

| - | Internal pilot |
| :---: | :---: |
| $\mathbf{S}$ | Internal pilot, Built-in silencer |

* The $3 / 5(\mathrm{E})$ 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 number |
| - |  | - | - |
| AA | Direct mounting | - | $\bullet$ |
| BA |  | - | - |
| D $\square$ |  | - | - |
| A $\square$ |  | $\bigcirc$ | $\bigcirc$ |
| B $\square$ |  | - | - |

* 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

| $\mathbf{-}$ | Direct mounting |
| :---: | :---: |
| $\mathbf{0}$ | Without DIN rail (with bracket) |
| $\mathbf{3}$ | For 3staitions |
| $\vdots$ | Specify a longer rail |
| $\vdots$ | $\vdots$ |
| than the total length of |  |
| $\mathbf{2 4}$ | For 24 stations |
| specified stations. |  |


| 7 A, B port (Metric) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Symbol | A, B port | Type 10/ Side ported |  | Type 11/ Bottom ported |  |  |
|  |  | SY5000 | SY7000 | SY5000 | SY7000 |  |
| C4 | $\varnothing 4$ | - | - | - | - |  |
| C6 | $\varnothing 6$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bigcirc$ |  |
| C8 | $\varnothing 8$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |  |
| C10 | Ø10 | - | - | - | - |  |
| C12 | Ø12 | - | $\bullet$ | - | $\bullet$ |  |
| CM ${ }^{1}$ | Straight port, mixed sizes | $\bullet$ | $\bullet$ | $\bigcirc$ | - |  |
| $\begin{array}{r} \text { P, } \\ \text { (One } \end{array}$ | E port size touch fittings) | $\varnothing 10$ | $\varnothing 12$ | $\varnothing 10$ | $\varnothing 12$ |  |

*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.

[^7]* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Back pressure check valve (Built-in valve type)

| - | None |
| :---: | :---: |
| $\mathbf{H}$ | Built-in |

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

5 24 VDC

## 8 Light/surge voltage suppressor

 and common specification| R | With surge voltage suppressor <br> (Non-polar) |
| :---: | :---: |
| U | With light/surge voltage suppressor <br> (Non-polar) |
| S | With surge voltage suppressor <br> (Positive common) |
| $\mathbf{Z}$ | With light/surge voltage suppressor <br> (Positive common) |

* Only "Z" type is available with a powersaving circuit.
(5) Pilot valve option

| $\bar{B}$ | Standard (0.7 MPa) |
| :--- | :---: |

## 6 Coil type

- Standard
* 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.



## 7 Rated voltage

Seal type
0 Rubber seal

## Plug-in Connector Connecting Base <br> EX126

Type 12
Top Ported

How to Order Manifolds


Series compatible with secondary batteries
Series

| $\mathbf{5}$ | SY5000 |
| :--- | :--- |
| $\mathbf{7}$ | SY7000 |


| 2 SI unit |  |
| :---: | :---: |
| $\mathbf{0}$ | Without SI unit |
| $\mathbf{V}$ | 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.

| Symbol | Staions | Note |
| :---: | :---: | :---: |
| 02 | 2 2stions | Double wiring*1 |
| ! | $\vdots$ |  |
| 08 | 8staions |  |
| 02 | 2 2stions | Specified layout*2 <br> (Up to 16 solenoids available) |
| ¢ <br> 16 | $\stackrel{\square}{16}$ |  |

*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*1 | U side (2 to 10 stations) |
| :---: | :---: |
| D*1 | D side (2 to 10 stations) |
| B | Both sides (2 to 16 stations) |

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

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 |  |
| :---: | :---: | :---: |
| $\mathbf{D}$ | DIN rail mounting (With DIN rail) |  |
| D0 | DIN rail mounting (Without DIN rail) |  |
| D3 | For 3 stations | Specify a length <br> longer than that of |
| $\vdots$ | $\vdots$ | long |
| 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.

[^8]Plug-in Connector Connecting Base<br>EX126<br>25A-SY5000/7000 Series

How to Order Valves (With mounting screw)
 with secondary batteries


| 5 | SY5000 |
| :--- | :--- |
| 7 | SY7000 |

(2) Type of actuation

| $\mathbf{1}$ | 2-position single |
| :---: | :---: |
| $\mathbf{2}$ | 2-position double |
| $\mathbf{3}$ | 3-position closed centre |
| $\mathbf{4}$ | 3-position exhaust centre |
| $\mathbf{5}$ | 3-position pressure centre |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| $\mathbf{C}$ | 4-position dual 3-port valve (N.C./N.O.) |


| 3 Seal type |
| :--- |
| $0 \quad$ Rubber seal |Back pressure check valve (Built-in valve type)


| - | None |
| :---: | :---: |
| $\mathbf{H}$ | Built-in |

* The built-in valve type back pressure 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.


## Manifold Options

## 5 Pilot valve option

| - | Standard (0.7 MPa) |
| :---: | :---: |
| B | Quick response type (0.7 MPa) |

6 Coil type

- $\quad$ 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 of time.
* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalogue.
7 Rated voltage

| 5 | 24 VDC |
| :---: | :---: |

## 8 Light/surge voltage suppressor and common specification

| R | With surge voltage suppressor <br> (Non-polar) |
| :---: | :---: |
| U | With light/surge voltage suppressor <br> (Non-polar) |
| S | With surge voltage suppressor <br> (Positive common) |
| Z | With light/surge voltage suppressor <br> (Positive common) |
| * Only "Z" type is available with a power-saving circuit. |  |

## © Caution

Tightening torque for mounting screw
M3: $0.8 \mathrm{~N} \cdot \mathrm{~m}$

(10) A, B port size

Thread piping

| Symbol | Port size | Applicable series |
| :---: | :---: | :---: |
| $\mathbf{0 2}$ | $1 / 4$ | SY7000 |

One-touch fitting (Metric)

| Symbol | A, B port | SY5000 | SY7000 |
| :---: | :---: | :---: | :---: |
| C4 | $\varnothing 4$ |  | - |
| C6 | $\varnothing 6$ |  | $\bigcirc$ |
| C8 | $\varnothing 8$ | $\bigcirc$ | $\bigcirc$ |
| C10 | $\varnothing 10$ | - | $\bigcirc$ |
| C12 | $\varnothing 12$ | - | $\bigcirc$ |

(11) Thread type

| - | Rc |
| :---: | :---: |
| $\mathbf{F}$ | G |
| $\mathbf{N}$ | NPT |
| $\mathbf{T}$ | NPTF |

## 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 SI unit | 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 ${ }^{\text {® }}$ M12 connector, 32 outputs, Negative common (PNP) |
|  | EX260-SDN2-X117 | DeviceNet ${ }^{\circledR}$ M12 connector, 32 outputs, Positive common (NPN) |
|  | EX260-SDN3-X117 | DeviceNet ${ }^{\circledR}$ M12 connector, 16 outputs, Negative common (PNP) |
|  | EX260-SDN4-X117 | DeviceNet ${ }^{\circledR}$ 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-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 ${ }^{\text {TM }}$ M12 connector, 32 outputs, Negative common (PNP) |
|  | EX260-SEN2-X117 | EtherNet/IP ${ }^{\text {TM }}$ M12 connector, 32 outputs, Positive common (NPN) |
|  | EX260-SEN3-X117 | EtherNet/IP ${ }^{\text {TM }}$ M12 connector, 16 outputs, Negative common (PNP) |
|  | EX260-SEN4-X117 | EtherNet/IP ${ }^{\text {TM }}$ 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 | Part no. |  | Note |
| :---: | :---: | :---: | :---: |
|  | SY5000 | SY7000 |  |
| 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 |
| :---: | :---: | :---: | :---: | :---: |
| A, B port | Metric size | $\varnothing 4$ One-touch fitting (Straight type) | 90-VVQ1000-51A-C4 | - |
|  |  | Ø 6 One-touch fitting (Straight type) | 90-VVQ1000-51A-C6 | 25A-KJH06-17-X1607 |
|  |  | $\varnothing 8$ One-touch fitting (Straight type) | 90-VVQ1000-51A-C8 | 90-VVQ2000-51A-C8 |
|  |  | $\varnothing 10$ One-touch fitting (Straight type) | - | 90-VVQ2000-51A-C10 |
|  |  | Ø 12 One-touch fitting (Straight type) | - | 25A-KQ2H12-17-X1607 |
| $\begin{aligned} & \mathrm{P}, \mathrm{E} \\ & \text { port } \end{aligned}$ | Metric size | $\varnothing 10$ One-touch fitting (Straight type) | 90-VVQ2000-51A-C10 | - |
|  |  | Ø 12 One-touch fitting (Straight type) | - | 90-VVQ4000-50B-C12 |

Manifold Options

## How to Order Individual SUP/EXH Spacer Assembly

One-touch fitting Straight type


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 Parts Nos.
AManifold block assembly


BSUP/EXH block assembly
(1)D-sub connector <IP40>

(2) Terminal block box

*4 It can be selected only if no symbol or " S " or " V " or " B " is selected for the pilot and the piping.
*3 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

\author{

* Part number is for one assembly.
}

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

## 25A-SY5000/7000 Series

Manifold Parts Nos.
(3)Lead wire

*1 For silencer (supply side) E port is plugged.
Lead wire connector block assembly

| $\mathbf{1}$ | 34 |
| :---: | :---: |
| $\mathbf{2}$ | 17 |
| $\mathbf{3}$ | 9 |$\quad$| $\mathbf{1}$ | 0.6 |
| :---: | :---: |
| $\mathbf{2}$ | 1.5 |
| $\mathbf{3}$ | 3 |

(4)EX126


Clamp bracket assembly

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

* Part number is for one assembly.

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


## Terminal block plate assembly

25A - VVQC1000-74A - 2
Clamp bracket assembly for EX126 SI unit

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

## 25A - SY30M - 15-6A

* Part number is for one assembly.
(5) EX260

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

* Part number is for one assembly.

*5 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 | $\varnothing 10$ | - | - | Side/Bottom/Top ported <br> Metric size |
| $\mathbf{C 1 2}$ | $\varnothing 12$ | - | - | M/E port entry on one side <br> or Top ported |
| $\mathbf{0 0 * 6}$ | Plug | - | - | or |

*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 |

## Manifold Parts Nos.

■SUP/EXH block assembly
*2 It can be selected only if no symbol or " S " or " V " or " B " is selected for the pilot and the piping.

| Symbol | P, E port | SY5000 | SY7000 | Note |
| :---: | :---: | :---: | :---: | :---: |
| C10 | $\varnothing 10$ | $\bullet$ | - | Side/Bottom/Top ported <br> Metric size |
| C12 | $\varnothing 12$ | - | - | Me <br> $\mathbf{0 0 * 2}$ <br> Plug |

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

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

## Cover assembly <br> (Internal pilot)



P, E port size (One-touch fittings)

| Symbol | P, E port | SY5000 | SY7000 |
| :---: | :---: | :---: | :---: |
| C10 | $\varnothing 10$ | $\bullet$ | - |
| C12 | $\varnothing 12$ | - | - |

Port block assembly
(Top ported, Internal pilot, for silencer (supply side))

Port block assembly (Top ported, Internal pilot)
Silencer cover assembly (Internal pilot, Built-in silencer)

## 25A-SY5000/7000 Series

Valve Replacement Parts

How to Order Pilot Valves
Pilot cover


25A-SY50V-25A

How to Order Port Block Assembly


## Body Cover Assembly

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

| Series |  | Part no. |  |
| :---: | :---: | :---: | :---: |
|  |  | Standard (Valve mounting screw <br> without drop prevention) | Drop prevention type valve <br> mounting screw |
| SY5000 | Internal pilot | 25A-SY50V-16A | $25 A-S Y 50 V-16 A-1$ |
| SY7000 | Internal pilot | 25A-SY70V-16A | $25 A-S Y 70 V-16 A-1$ |

[^9]


Pilot valve option

| - | Standard (0.7 MPa) |
| :---: | :---: |
| B | Quick response type (0.7 MPa) |



* 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.


## (4) Rated voltage

| $\mathbf{5}$ | 24 VDC |
| :--- | :--- |
| $\mathbf{6}$ | 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 suppressor | Common specification |
| :---: | :---: | :---: | :---: |
| - | - | - | Non-polar |
| R | - | $\bigcirc$ |  |
| U | $\bigcirc$ |  |  |
| S | - |  | Positive |
| Z | $\bigcirc$ |  | common |
| NS | - |  | Negative |
| NZ | $\bigcirc$ |  | 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 <br> $(2$ pcs. $)$ | SY7000-221-14A <br> $(3$ pcs. $)$ |

## 25A-SY5000/7000 Series <br> Made to Order

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

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.


Internal pilot type


[^10]
## 25A-SY5000/7000 Series

Plug-in Single Unit/Sub-plate Type [IP67 Compliant]
(Side ported, Botom ported, Top ported)

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

## Seal type

| 0 | Rubber seal |
| :--- | :--- |

Pilot type

| - | Internal pilot |
| :---: | :---: |
| $\mathbf{R}$ | External pilot |

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

| - | None |
| :---: | :---: |
| $\mathbf{H}$ | 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) |
| :---: | :---: |
| B | Quick response type $(0.7 \mathrm{MPa})$ |

## 7 Coil type

| - | Standard |
| :---: | :---: |
| $\mathbf{T}$ | 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.

| 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 |
| - | - | - | Non-polar |
| R | - | $\bigcirc$ |  |
| U | $\bigcirc$ |  |  |
| S | - |  | Positive common |
| Z | $\bigcirc$ |  |  |
| NS | - |  | Negative common |
| NZ | $\bigcirc$ |  |  |
| * Only "Z" and "NZ" types are available with a power saving circuit. |  |  |  |



11 A, B port size (* Top-ported valve only) Thread piping

| Symbol | Port size | Applic | ble series |
| :---: | :---: | :---: | :---: |
| 02 | 1/4 | SY7000 |  |
| Metric size (One-touch fitting) |  |  |  |
| Symbol | A, B port | SY5000 | SY7000 |
| C4 | Ø 4 | - | - |
| C6 | $\varnothing 6$ | $\bigcirc$ | $\bigcirc$ |
| C8 | $\varnothing 8$ | $\bigcirc$ | $\bigcirc$ |
| C10 | Ø 10 | - | $\bigcirc$ |
| C12 | $\bigcirc 12$ | - | $\bigcirc$ |

* 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.


13 Wiring specifications (Sub-plate) | WO | Without M12 connector cable |
| :--- | :--- |
| W5 | With M12 connector cable $(3000 \mathrm{~mm})$ |

* When ordering a product with M12 connector cable, the connector cable is included.
14 Port location (Sub-plate)

| - | Side ported |
| :---: | :---: |
| $\mathbf{B}$ | Bottom ported |
| $\mathbf{V} * 1$ | Top ported (1P, 5EA, 3EB port: Side ported) |

*1 Only available for the valve piping type " 3 " top ported

15 Port size (Sub-plate)

| Symbol | Port size | Applicable series |
| :---: | :---: | :---: |
| $\mathbf{0 2}$ | $1 / 4$ | SY5000 |
| $\mathbf{0 3}$ | $3 / 8$ | SY7000 |

16 Thread type (Sub-plate)

| - | Rc |
| :---: | :---: |
| F | G |

## 25A-SY5000/7000 Series

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

1 Series

| 5 | SY 5000 |
| :---: | :---: |
| 7 | SY7000 |

## Wiring specifications

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)

| $\mathbf{-}$ | Side ported |
| :---: | :---: |
| $\mathbf{B}$ | Bottom ported |
| $\mathbf{V}$ | Top ported $[1(\mathrm{P}), 5(\mathrm{EA}), 3(\mathrm{~EB})$ port: Side ported $]$ |

5 Sub-plate thread type

| - | Rc |
| :---: | :---: |
| $\mathbf{F}$ | G |

Port size (Sub-plate)

| Symbol | Port size | Applicable series |
| :---: | :---: | :---: |
| $\mathbf{0 2}$ | $1 / 4$ | SY5000 |
| $\mathbf{0 3}$ | $3 / 8$ | 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 $\cdots \cdots \cdot 1$ 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\cdots\cdots.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.


# 5-Port Solenoid Valve Body Ported/Single Unit 

## How to Order



Type of actuationd

| $\mathbf{1}$ | 2-position single |
| :---: | :--- |
| $\mathbf{2}$ | 2-position double |
| 3 | 3-position <br> closed centre |
| $\mathbf{4}$ | 3-position <br> exhaust centre |
| 5 | 3-position <br> pressure centre |



* Power-saving circuit is not available in the case of "D" or "Y" type.

| For DC | DC |
| :---: | :---: |
| 5 | 24 VDC |
| 6 | 12 VDC |
| V | 6 VDC |
| S | 5 VDC |
| R | 3 VDC --Rated volt |
| For AC ( $50 \% 0 \mathrm{~Hz}$ ) |  |
| 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 24 VDC.
* AC-type models that are CE/ UKCA-compliant have DIN terminals only.

* "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.


* AC-type models that are CE/UKCA-compliant have DIN terminals only.

| Thread type |  | Bracket |  |
| :---: | :---: | :---: | :---: |
|  |  | - | Without bracket |
|  |  | F1 | With foot bracket (2-position single only) |
| - | Rc |  |  |
| F | G | F2 | With side bracket |

d A, B port size
Thread piping

| Symbol | Port size | Applicable series |
| :---: | :---: | :---: |
| $\mathbf{0 1}$ | $1 / 8$ | SY5000 |
| $\mathbf{0 2}$ | $1 / 4$ | SY7000 |

One-touch fitting (Metric size)

| Symboll | Port size | Applicable series |
| :--- | :---: | :---: |
| C4 | One-touch fitting for Ø 4 | SY5000 |
| C6 | One-touch fitting for Ø 6 |  |
| C8 | One-touch fitting for Ø 8 |  |
| C8 | One-touch fitting for Ø 8 | SY7000 |
| C10 | One-touch fitting for Ø 10 |  |

Manual override

| - : Non-locking |
| :---: | :--- | :--- |
| push type | | D: Push-turn locking |
| :---: |
| slotted type |$\quad$| E: Push-turn locking |
| :---: |
| lever type |

Light/surge voltage suppressor


* 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.

For details, refer to the Web Catalogue.

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

 25A-SY5000/7000 Series

* "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.

* The blanking plate assembly is included in this number.
* 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.

For details, refer to the Web Catalogue.


Coil specifications

| - | Standard |
| :---: | :---: |
| $\mathbf{T}$ | With power-saving circuit (24 VDC, 12 VDC only) |

* Power-saving circuit is not available in the case of "D" or "Y" type.

-CE/UKCA-compliant
* AC-type models that are CE/UKCA-compliant have DIN terminals only.
- A, B port size

Thread piping

| Symbol | Port size | Applicable series |
| :---: | :---: | :---: |
| $\mathbf{0 1}$ | $1 / 8$ | SY5000 |
| $\mathbf{0 2}$ | $1 / 4$ | SY7000 |

One-touch fitting (Metric size)

| Symbol | Port size | Applicable series |
| :--- | :---: | :---: |
| C4 | One-touch fitting for Ø 4 |  |
| C6 | One-touch fitting for Ø 6 |  |
| C8 | One-touch fitting for Ø 8 |  |
| C8 | One-touch fitting for Ø 8 | SY7000 |
| C10 | One-touch fitting for Ø 10 |  |

- Manual override

| $\overline{-}$ | Non-locking push type |
| :---: | :---: |
| $\mathbf{D}$ | Push-turn locking slotted type |
| E | Push-turn locking lever type |

Light/surge voltage suppressor
Electrical entry for G, H, L, M


* There is no " S " type for $A C$ mode, since a rectifier prevents surge voltage generation.
* For " $R$ " and " U ," DC voltage is only available.
* Power-saving circuit is only available in the "Z" type.

Electrical entry for D, Y

| - |  |
| :---: | :---: |
| $\mathbf{S}$ |  |
| $\mathbf{Z}$ | W |

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

* There is no " S " type for AC mode, since a rectifier prevents surge voltage generation.

| Electrical entry ${ }^{\text {d }}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| 24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC |  |  | $\begin{aligned} & 24,12 \mathrm{VDC} / \\ & 100,110,200, \\ & 220 \text { VAC } \end{aligned}$ |
| Grommet | L plug connector | M plug connector | DIN terminal |
| G: With lead wire (Length 300 mm ) <br> H: With lead wire (Length 600 mm ) | L: With lead wire (Length 300 mm ) LN: Without lead wire LO: Without connector | M: With lead wire <br> (Length 300 mm ) MN: Without lead wire MO: Without connector | D: With connector <br> $\mathbf{Y}$ : With 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.

For details, refer to the Web Catalogue.

## Type 41/Compact type



* The blanking plate assembly is included in this number.


One-touch fitting (Metric size)

| Symbol | Port size | Applicable series |
| :--- | :---: | :---: |
| C6 | One-touch fitting for Ø 6 | SY5000 |
| C8 | One-touch fitting for Ø 8 |  |

One-touch fitting (Inch size)

| Symbol | Port size | Applicable series |
| :--- | :---: | :---: |
| N7 | One-touch fitting for $\varnothing 1 / 4^{\prime \prime}$ | SY5000 |
| N9 | One-touch fitting for $\varnothing 5 / 16^{\prime \prime}$ |  |

Type 42/External pilot capable


* 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.

For details, refer to the Web Catalogue.


* AC-type models that are CE/ UKCA-compliant have DIN terminals only.

Manual override

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

Light/surge voltage suppressor
Electrical entry for G, H, L, M

| - | Without light/surge voltage suppressor |
| :---: | :---: |
| $\mathbf{S}$ | With surge voltage suppressor |
| $\mathbf{Z}$ | With light/surge voltage suppressor |
| $\mathbf{R}$ | With surge voltage suppressor (Non-polar type) |
| $\mathbf{U}$ | With light/surge voltage suppressor (Non-polar type) |

* There is no " $S$ " type for AC mode, since a rectifier prevents surge voltage generation.
* For "R" and "U," DC voltage is only available.
* Power-saving circuit is only available in the "Z" type.

Electrical entry for D, Y

| - | Without light/surge voltage suppressor |
| :---: | :---: |
| $\mathbf{S}$ | With surge voltage suppressor (Non-polar type) |
| $\mathbf{Z}$ | With light/surge voltage suppressor (Non-polar type) |

* There is no " $S$ " type for AC mode, since a rectifier prevents surge voltage generation.

For AC ( $5 \% / 60 \mathrm{~Hz}$ )

| $\mathbf{1}$ | 100 VAC |
| :---: | :---: |
| $\mathbf{2}$ | 200 VAC |
| $\mathbf{3}$ | 110 VAC [115 VAC] |
| $\mathbf{4}$ | 220 VAC [230 VAC] |

* 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.
Electrical entry

| 24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC |  |  | $\begin{aligned} & 24,12 \text { VDC/ } \\ & 100,110,200, \\ & 220 \text { VAC } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Grommet | L plug connector | M plug connector | DIN terminal |
| G: With lead wire (Length 300 mm ) <br> H: With lead wire (Length 600 mm ) | L: With lead wire (Length 300 mm ) LN: Without lead wire LO: Without connector | M: With lead wire (Length 300 mm ) MN: Without lead wire MO: Without connector | D: With connector <br> Y: With 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.

For details, refer to the Web Catalogue.

## 25A-SY5000/7000 Series

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

 V115 (DIN terminal) and vice versa when replacing pilot valve assembly only.

[^11]One-touch Fittings Part Nos. for Body Ported

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

* The gasket assembly includes 10 sets of a gasket and mounting screws.

Bracket Assembly Part Nos.

| Description | Part no. |
| :---: | :---: |
| Bracket (For F1) | 25A-SX $\mathbf{7}_{7} 000-16-2 A$ (With mounting screw) |
| Bracket (For F2) | 25A-SX ${ }_{7}^{5000-16-1 A ~(W i t h ~ m o u n t i n g ~ s c r e w) ~}$ |

Port Block Assembly Part Nos.


- A, B port size Thread piping

| Symbol | Port size | Applicable series |
| :---: | :---: | :---: |
| $\mathbf{0 1}$ | $1 / 8$ | $25 A-$ SY5000 |
| $\mathbf{0 2}$ | $1 / 4$ | $25 \mathrm{~A}-$ SY7000 |

One-touch fitting (Metric size)

| Symbol | Port size | Applicable series |
| :---: | :---: | :---: |
| C4 | One-touch fitting for $\varnothing 4$ | 25A-SY5000 |
| C6 | One-touch fitting for $\varnothing 6$ |  |
| C8 | One-touch fitting for $\varnothing 8$ |  |
| C8 | One-touch fitting for $\varnothing 8$ | 25A-SY7000 |
| C10 | One-touch fitting for $\varnothing ~ 10$ |  |

## 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


How to Order
$25 \mathrm{~A}-\mathrm{SY} \underset{{ }_{\text {d Series }}}{5000-26-1 A}$

| $\mathbf{5}$ | SY5000 |
| :--- | :--- |
| $\mathbf{7}$ | SY7000 |

## $\triangle$ 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


Dimensions

| Dimensions |  |  |  |  | $[\mathrm{mm}]$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Series | Manifold <br> type | $\mathbf{W}_{\mathbf{1}}$ | $\mathbf{W}_{\mathbf{2}}$ | $\mathbf{H}_{1}$ | $\mathbf{H}_{2}$ |
| 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


Dimensions

| Dimensions |  |  |  | $[\mathrm{mm}]$ |
| :---: | :---: | :---: | :---: | :---: |
| Series | Manifold <br> type | $\mathbf{W}$ | $\mathbf{H 1}$ | $\mathbf{H 2}$ |
| 25A-SY5000 | Type 41 | 106.4 | 51 | 21.7 |
|  | 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 

## How to Order Manifolds

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


How to Order K Vor 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.

For details, refer to the Web Catalogue.

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



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



* 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) 25A-VQ2000 Series 



[^12]
# Sub-plate Single Unit 25A-VQ2000 Series 



In the case of Sub-plate alone
25A - VQ2000 - PW - 02

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

For details, refer to the Web Catalogue.

## 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 ${ }^{\text {® }}$ |
| EX120 SI unit | EX120-SMJ1-X220 | CC-Link (VQ2000/Without option "W") |
|  | EX120-SDN1-X220 | DeviceNet ${ }^{\circledR}$ (VQ2000/Without option "W") |

One-touch Fittings Part Nos.

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

# Plug-in/Plug Lead: Single Unit Base Mounted 

25A-VQ4000 Series


How to Order Sub-plates
( $\in$
[Option]


W*1 Dust-tight/Water-jet-proof type
*1 It is not necessary for plug lead type.

* 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 F Kit (D-sub connector kit) 25A-VQ4000 Series 

How to Order Manifolds
[Option]
 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.


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



## Plug-in Unit/Base Mounted L Kit (Lead wire cable) 25A-VQ4000 Series



| $\mathbf{- * 1}$ | Standard (0.95 W) |
| :---: | :---: |
| $\mathbf{Y} * 2$ | Low wattage type (0.4 W) |
| $\mathbf{R * 3}$ | 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.

How to Order Valves

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


-CE/UKCA-compliant

-Option

| Symbol | Option |
| :---: | :---: |
| - | None |
| $\mathbf{K} * 1$ | Special wiring specifications |
| $\mathbf{W}$ | (Except double wiring, for 11 stations or more) |

*1 Specify the wiring specifications on the manifold specification sheet.

* When two or more symbols are specified, indicate them alphabetically. Example) -KW mounting SI unit. The number of stations is the number of manifold valves plus 2 stations for SI unit. For 11 stations or more, specify the wiring specifications by means of the manifold specification sheet.

| Stations |  |
| :---: | :---: |
| $\mathbf{0 3}$ | 3 stations |
| $\vdots$ | $\vdots$ |
| $\mathbf{1 8}$ | 18 stations |

Cylinder ports

| C6 | With One-touch fitting for Ø 6 |
| :---: | :---: |
| C8 | With One-touch fitting for Ø 8 |
| C10 | With One-touch fitting for Ø 10 |
| C12 | With One-touch fitting for Ø 12 |
| $\mathbf{0 2}$ | Rc 1/4 |
| $\mathbf{0 3}$ | Rc 3/8 |
| B | Bottom ported Rc $1 / 4$ |
| CM | Mixed |

SI unit

| $\mathbf{0}$ | Without SI unit |
| :---: | :---: |
| $\mathbf{Q}$ | DeviceNet $^{\circledR}$ |
| $\mathbf{V}$ | CC-Link |

- SI unit mounting position

| - | U side mounting |
| :---: | :--- |
| D | D side mounting |

How to Order Valves
[Option]


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.

[^13] are the same as those of the standard model.

## Plug Lead Unit/Base Mounted C Kit (Connector kit) 25A-VQ4000 Series

How to Order Manifolds


How to Order Valves


## 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 |
| :---: | :--- | :--- |
| EX124 SI unit | EX124D-SMJ1-X220 | CC-Link/D side mounting |
|  | EX124D-SDN1-X220 | DeviceNet®/D side mounting |
|  | EX124U-SMJ1-X220 | CC-Link/U side mounting |
|  | EX124U-SDN1-X220 | DeviceNet ${ }^{\circledR} / \mathrm{Side}$ mounting |

One-touch Fittings Part Nos.

| Port size |  |  | One-touch fittings part no. |
| :---: | :---: | :---: | :---: |
| Cylinder port | Metric size | Ø 6 One-touch fitting (Straight type) | 90-VVQ4000-50B-C6 |
|  |  | $\varnothing 8$ One-touch fitting (Straight type) | 90-VVQ4000-50B-C8 |
|  |  | $\varnothing 10$ One-touch fitting (Straight type) | 90-VVQ4000-50B-C10 |
|  |  | Ø 12 One-touch fitting (Straight type) | 90-VVQ4000-50B-C12 |


| $\begin{gathered} \text { Auto } \\ \text { Switches } \end{gathered}$ | Electric Actuators | Process Gas Equipment | Fluid Control Equipment | Detection Switches | Flow Control Equipment/ Fittings | $\begin{array}{\|c\|} \hline \text { Modular F.R.L./. } \\ \text { Pressure Control } \\ \text { Equipment } \end{array}$ | Clean Air Filters | Air Preparation | Vacuum Equipment | Air Grippers | Rotary Actuators | Related Products | Air Cylinders | Directional Control Valves |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Plug-in Unit

[Option]

## 25A-SQ2000 Series

How to Order Manifolds

*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 ${ }^{\circledR}$ | EX140-SDN1-X220 | 84 |
| SDV | CC-Link | EX140-SMJ1-X220 |  |

## Blanking plate assembly

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

*1 For double solenoid specification, the function symbol below is "D."


## - Port plug mounting port

| - | None |
| :---: | :---: |
| A | Port 4(A) |
| B | Port 2(B) |


| C4 | One-touch fittings for $\varnothing 4$ | Side |
| :--- | :--- | :--- |
| C6 | One-touch fittings for $\varnothing 6$ | ported |
| C8 | One-touch fittings for $\varnothing 8$ |  |
| L4 | One-touch fittings for $\varnothing 4$ | Top $* 1$ |
| L6 | One-touch fittings for $\varnothing 6$ | ported |
| L8 | One-touch fittings for $\varnothing 8$ |  |

*1 Can be changed to side ported configuration.
*1 "D" is specified for 2-position double.
*2 For L kit, when the manifold specifies negative common, the valve common should also be negative.
*3 Except dual 3-port valves.

* When two or more symbols are specified, indicate them alphabetically.

| Coil voltage |  |
| :---: | :---: |
| $\mathbf{5}$ | 24 VDC |
| $\mathbf{6}$ | 12 VDC |

* Light/Surge voltage suppressor is built-in
* S kit: 24 VDC only
- Manual override


SI Unit Part Nos.

| Description | SI unit part no. | Note |
| :---: | :---: | :---: |
| EX140 SI unit | EX140-SMJ1-X220 | CC-Link |
|  | EX140-SDN1-X220 | DeviceNet $^{\circledR}$ |

## One-touch Fittings Part Nos.

| Port size |  | One-touch fittings part no. |  |
| :--- | :--- | :--- | :---: |
| Cylinder port | Metric size |  | $90-V V Q 1000-51 A-C 4$ |
|  |  | $Ø 6$ One-touch fitting (Straight type) | $90-V V Q 1000-51 A-C 6$ |
|  |  | $90-V V Q 1000-51 A-C 8$ |  |
| 1 (P), 3 (R) port | Metric size | $\varnothing 10$ One-touch fitting (Straight type) | $90-V V Q 2000-51 A-C 10$ |

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

For details, refer to the Web Catalogue.


## Plug Lead Unit 25A-SQ2000 Series

How to Order Manifolds


[^14]
*1 Indicate "LO" when ordering centralized wiring type manifolds, F, P, and $J$ kits, since the lead wire will be attached to the manifold side.

## One-touch Fittings Part Nos.

| Port size |  |  | One-touch fittings part no. |
| :---: | :---: | :---: | :---: |
| Cylinder port | Metric size | $\varnothing 4$ 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 |
| 1 (P), 3 (R) port | Metric size | Ø10 One-touch fitting (Straight type) | 90-VVQ2000-51A-C10 |

[^15]For details, refer to the Web Catalogue.

## 5-Port Solenoid Valve

## 25A-VQZ1000 Series Single Unit

[Option]

How to Order Valves


Electrical entry

| G: Grommet <br> (DC speci- <br> fication) | L: L-type <br> plug <br> connector <br> with lead <br> wire | LO: L-type <br> plug <br> connector <br> without <br> connector | M: M-type <br> plug <br> connector <br> with lead <br> wire | MO: M-type <br> plug <br> connector <br> without <br> connector |
| :---: | :--- | :--- | :--- | :--- |
|  | With light/ <br> surge voltage <br> suppressor | With light/ <br> surge voltage <br> suppressor | With light/ <br> surge voltage <br> suppressor | With light/ <br> surge voltage <br> suppressor |

Coil voltage

| $\mathbf{1}$ | 100 VAC $(50 / 60 \mathrm{~Hz})$ |
| :---: | :--- |
| $\mathbf{2}$ | 200 VAC $(50 / 60 \mathrm{~Hz})$ |
| $\mathbf{3}$ | 110 VAC $[115 \mathrm{VAC}](50 / 60 \mathrm{~Hz})$ |
| $\mathbf{4}$ | 220 VAC $[230 \mathrm{VAC}](50 / 60 \mathrm{~Hz})$ |
| $\mathbf{5}$ | 24 VDC |
| $\mathbf{6}$ | 12 VDC |

## Caution

Use standard (DC) specification for continuous duty.

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


| Symbol | Port size |
| :---: | :--- |
| $\mathbf{C 4}$ | $\varnothing 4$ One-touch fitting |
| C6 | $Ø 6$ One-touch fitting |
| M5 | M5 thread |
| CM $^{* 1}$ | Mixture of port sizes |

*1 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


## 5-Port Solenoid Valve

## 25A-VQZ1000 Series Single Unit

[Option]

How to Order Valves


Electrical entry


Coil voltage
Function

| Symbol | Specifications | DC | AC |
| :---: | :--- | :---: | :---: |
| - | Standard | $(0.35$ W) | $\bigcirc$ |
| B | High speed response type | $(0.9$ W) | - |


| $\mathbf{1}$ | 100 VAC $(50 / 60 \mathrm{~Hz})$ |
| :---: | :--- |
| $\mathbf{2}$ | 200 VAC $(50 / 60 \mathrm{~Hz})$ |
| $\mathbf{3}$ | 110 VAC $[115 \mathrm{VAC}](50 / 60 \mathrm{~Hz})$ |
| $\mathbf{4}$ | 220 VAC $[230 \mathrm{VAC}](50 / 60 \mathrm{~Hz})$ |
| $\mathbf{5}$ | 24 VDC |
| $\mathbf{6}$ | 12 VDC |

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

For details, refer to the Web Catalogue.

## 5-Port Solenoid Valve

## 25A-VQZ1000 Series Manifold Connector Kit <br> [Option]

How to Order Manifolds


How to Order Valves


[^16]* 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

Double check block


Series compatible with secondary batteries


| IN side port size |  |
| :---: | :---: |
| M5 | M5 thread |
| C3 | $\varnothing 3.2$ One-touch fitting |
| C4 | $\varnothing 4$ One-touch fitting |
| C6 | $\varnothing 6$ One-touch fitting |

- OUT side port size

| M5 | M5 thread |
| :---: | :---: |
| C3 | $\varnothing 3.2$ One-touch fitting |
| C4 | $\varnothing 4$ One-touch fitting |
| C6 | $\varnothing 6$ One-touch fitting |

-Option

| - | None |
| :---: | :---: |
| F | With bracket |
| $\mathbf{D}$ | DIN rail mounting <br> (For manifold) |
| $\mathbf{N}$ | Name plate |

* When two or more symbols are specified, indicate them alphabetically. Example) -DN
Manifold (DIN rail mounting)


## 25A-VVQ1000-FPG-06

- Series compatible with
secondary batteries
When ordering a double check block, order the DIN rail mounting [-D].
-Stations

| 01 | 1 station |
| :---: | :---: |
| $\vdots$ | $\vdots$ |
| $\mathbf{1 6}$ | 16 stations |

<Ordering example>
25A-VVQ1000-FPG-06...6-station manifold

* 25A-VQ1000-FPG-C4M5-D;

3 sets Double

* 25A-VQ1000-FPG-C6M5-D; check block 3 sets

Double check block
 secondary batteries

| IN side port size |  |
| :--- | :--- |
| $\mathbf{0 1}$ | Rc 1/8 |
| $\mathbf{0 2}$ | Rc $1 \mathbf{4}$ |
| C6 | $\varnothing 6$ One-touch fitting |
| C8 | $\varnothing 8$ One-touch fitting |

OUT side port size

| $\mathbf{0 1}$ | Rc 1/8 |
| :--- | :--- |
| $\mathbf{0 2}$ | Rc 1/4 |
| $\mathbf{C 6}$ | $\varnothing 6$ One-touch fitting |
| $\mathbf{C 8}$ | $\varnothing$ 8 One-touch fitting |


| - | None |
| :---: | :---: |
| $\mathbf{D}$ | DIN rail mounting <br> (For manifold) |
| $\mathbf{F}$ | With bracket |
| $\mathbf{N}$ | Name plate |

* When two or more symbols are specified, indicate them alphabetically.
Manifold (DIN rail mounting) Example) -DN


## d Series compatible with secondary batteries

25A-VVQ2000-FPG-06

When ordering a double check block, order the DIN rail mounting [-D].
-Stations

## <Ordering Example>

25A-VVQ2000-FPG-06...6-station manifold

* 25A-VQ2000-FPG-C6C6-D;
3 sets
* 25A-VQ2000-FPG-C8C8-D; 3 sets
Bracket Assembly

| Part no. | Tightening torque |
| :---: | :---: |
| 25A-VQ2000-FPG-FB | 0.8 to $1.0 \mathrm{~N} \cdot \mathrm{~m}$ |

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


## Rubber Seal

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


## - Port size

| Symbol | Port size | VP300 | VP500 | VP700 |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{0 1}$ | $1 / 8$ | $\bigcirc$ | - | - |
| $\mathbf{0 2}$ | $1 / 4$ | $\bigcirc$ | $\bigcirc$ | - |
| $\mathbf{0 3}$ | $3 / 8$ | - | $\bigcirc$ | $\bigcirc$ |
| $\mathbf{0 4}$ | $1 / 2$ | - | - | $\bigcirc$ |

d Light/surge voltage suppressor $\quad \mathrm{DC} \quad \mathrm{AC}$

| - | Without light/surge voltage suppressor | $\bigcirc$ | $\bigcirc$ |
| :---: | :--- | :---: | :---: |
| $\mathbf{S}$ | With surge voltage suppressor | $\bigcirc$ | $-{ }^{* 1}$ |
| $\mathbf{Z}$ | With light/surge voltage suppressor | $\bigcirc$ | $\bigcirc$ |
| $\mathbf{R}$ | With surge voltage suppressor (Non-polar) | $\bigcirc$ | - |
| $\mathbf{U}$ | With light/surge voltage suppressor (Non-polar) | $\bigcirc$ | - |


| -: Non-locking <br> push type | D: Push-turn locking <br> slotted type | E: Push-turn locking <br> lever type |
| :---: | :---: | :---: |

*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.

For details, refer to the Web Catalogue.


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

How to Order

| Base mounted | 25A-VP |  |
| :---: | :---: | :---: |
| Series compatible with secondary batteries |  |  |
|  |  | Series ${ }^{\circ}$ |
|  | 3 | VP300 |
|  | 5 | VP500 |
|  | 7 | VP700 |

## Pilot type

| - | Internal pilot |
| :---: | :---: |
| $\mathbf{R}$ | External pilot |


| Pressure specifications |  |
| :---: | :--- |
| - | Standard $(0.7 \mathrm{MPa})$ |
| $\mathbf{K}$ | High pressure type $(1.0 \mathrm{MPa})$ |

Coil specifications e
-

* Be sure to select the power-saving circuit type if it is to be continuously energised for long periods of time.
* " T " type is only available for DC mode. When "T" is selected, only "Z" type of light/surge voltage suppressor is available.

Rated voltage
AC $(50 / 60 \mathrm{~Hz})$



Port size (Sub-plate) | Symbol | Port size | VP300 | VP500 |
| :---: | :---: | :---: | :---: | VP700

| - | Without sub-plate*1 $^{*}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{0 1}$ | $\mathbf{1} / 8$ | $\bigcirc$ | - | - |
| $\mathbf{0 2}$ | $1 / 4$ | $\bigcirc$ | $\bigcirc$ | - |
| $\mathbf{0 3}$ | $3 / 8$ | - | $\bigcirc$ | $\bigcirc$ |
| $\mathbf{0 4}$ | $1 / 2$ | - | - | $\bigcirc$ |

*1 With a gasket and two mounting bolts.

d Light/surge voltage suppressor $\quad \mathrm{DC}$ AC

| - | Without light/surge voltage suppressor | $\bigcirc$ | $\bigcirc$ |
| :---: | :--- | :---: | :---: |
| $\mathbf{S}$ | With surge voltage suppressor | $\bigcirc$ | *1 $^{\prime}$ |
| $\mathbf{Z}$ | With light/surge voltage suppressor | $\bigcirc$ | $\bigcirc$ |
| $\mathbf{R}$ | With surge voltage suppressor (Non-polar) | $\bigcirc$ | - |
| $\mathbf{U}$ | With light/surge voltage suppressor (Non-polar) | $\bigcirc$ | - |

*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.



# 3-Port Solenoid Valve Direct Operated Poppet Type 25A-VT317 Series 

Rubber Seal



S: With surge voltage suppressor
*1 Refer to the figure below.
Z: With light/surge voltage suppressor
Surge voltage suppressor mounting part (For "G")


## Manifold

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

*1 It is not applied to "Continuous duty type." Refer to the accessories in the Web Catalogue.

* 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 <br> 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)


## 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)

(Refer to pages 61 and 63.)

[^17]25A-SS5YA5-42-03-02 $\cdots .1$ set (Type 42, 3-station manifold base part no.)

* 25A-SYA5140 ................ 1 set (Single air operated valve part no.)
* 25A-SYA5240 $\qquad$ 1 set (Double air operated valve part no.)
* 25A-SY5000-26-1A $\qquad$ 1 set (Blanking plate the assembly part no.)
$\square$ The asterisk denotes the symbol for the assembly.
Prefix it to the part nos. of the solenoid valve, etc.
* 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.)
* The 25A- series specifications and dimensions are the same as those of the standard model.


# 3-Port Air Operated Valve 25A-SYJA500/700 Series 



## 25A-SYJA500/700 Series

Manifold Type for the SYJA500
Type 20

How to Order
25A - SS3YJA5-20-05
dStations

| $\mathbf{0 2}$ | 2 2 stations |
| :---: | :---: |
| $:$ | $:$ |
| $\mathbf{2 0}$ | 20 stations |

Applicable valve 25A-SYJA5 $\square 2$

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

25A - SS3YJA5 - 40 - 05 M5
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 How to Order


Applicable valve 25A-SYJA5 $\square 4$
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 How to Order


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 How to Order


Applicable valve 25A-SYJA7 $\square 4$
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.


Applicable valve 25A-SYJA7 $\square 4$
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.


## Finger Valve

Standard Type


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

| $2(A)$ |  | Applicable tubing O.D. [mm] |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | ø4 | ø6 | ø8 |
|  | $\varnothing 4$ | - |  |  |
|  | $ø 6$ | - | $\bigcirc$ |  |
|  | ø8 |  | - | $\bigcirc$ |



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

| $2(A)$ |  | Applicable tubing O.D. [mm] |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\varnothing 4$ | ø6 | ø8 |
|  | $1 / 8$ | - | $\bigcirc$ | - |
|  | $1 / 4$ |  | $\bigcirc$ | $\bullet$ |
|  | $3 / 8$ |  | $\bigcirc$ | $\bullet$ |



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

| $2(A)$ |  | Port size R |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1/8 | $1 / 4$ | $3 / 8$ |
|  | $\oplus 4$ | $\bullet$ |  |  |
|  | ø6 | $\bullet$ | $\bullet$ | $\bullet$ |
|  | ๑8 | $\bullet$ | $\bullet$ | $\bullet$ |

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

For details, refer to the Web Catalog.

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

## Symbol <br> 

## How to Order

25 A

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

## Option/Part Nos.

| Optional specifications | Model |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | 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 |

*1 The assembly consists of a bracket $A / B$ and 2 mounting screws.
*2 The assembly consists of the element assembly and an O-ring.

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

For details, refer to the Web Catalogue.

## Conforming to OSHA Standard

Pressure Relief 3 -Port Valve with Locking Holes (Single Action) 25A-VHS20/30/40/50 Series

How to Order

Option Part Nos.

| Model | Bracket <br> assembly part no.*1 |
| :--- | :---: |
| 25A-VHS20 | VHS20PW-180AS-6 |
| 25A-VHS30 | VHS30PW-180AS-6 |
| 25A-VHS40 | VHS40PW-180AS-6 |
| 25A-VHS40-06 | VHS40PW-180-06AS-6 |
| 25A-VHS50 | VHS50PW-180AS-6 |

OSHA standard (Occupational Safety and Health Administration Department of Labor)
Single action
Single action 25
Body size -

| Symbol |
| :---: |
| 20 |
| 30 |
| 40 |
| 50 |

## Pressure relief 3-port valved

Single action $\underset{\substack{\text { Series compatible with } \\ \text { secondaray batereies }}}{25}$


| Thread type |  |
| :---: | :---: |
| - | Rc |
| N | NPT |
| F | G |

Symbol


| Symbol |
| :---: |
| - |
| $\mathbf{K}$ |


| K | Handle colour: Black |
| :---: | :---: |
| $\mathbf{R}$ | Flow direction: Right $\rightarrow$ Left |
| Z*1 | psi as unit displayed on label |

*1 Only for the NPT thread

| Symbol | Port size | Body size size |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 20 | 30 | 40 | 50 |  |
| $\mathbf{0 1}$ | $1 / 8$ |  | - | - | - |  |
| $\mathbf{0 2}$ | $1 / 4$ |  | $\bullet$ | $\bullet$ | - |  |
| $\mathbf{0 3}$ | $3 / 8$ | - | $\bullet$ | $\bullet$ | - |  |
| $\mathbf{0 4}$ | $1 / 2$ | - | - | $\bullet$ | - |  |
| $\mathbf{0 6}$ | $3 / 4$ | - | - | $\bullet$ | $\bullet$ |  |
| $\mathbf{1 0}$ | $\mathbf{1}$ | - | - | - | $\bullet$ |  |

- Options

| Symbol | Description |
| :---: | :---: |
| - | - |
| $\mathbf{B}$ | With bracket |

Handle/Bonnet material ${ }^{6}$

| Symbol | Material |
| :---: | :---: |
| A | Flame-resistant PBT |
| B | Aluminium |

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

* The 25A- series specifications and dimensions are the

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.
same as those of the standard model.

For details, refer to the Web Catalogue.


## Conforming to OSHA Standard

## Pressure Relief 3 -Port Valve with Locking Holes (Double Action) 25A-VHS2510/3510/4510/5510 series

How to Order


Option Part Nos.

| Model | Bracket <br> 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 |

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

For safety control, OSHA rule requires energy sources for certain equipment be turned off or disconnected and that

[^18]the device either be locked or labelled with a warning tag.

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

For details, refer to the Web Catalogue.

# Pin Cylinder: Double Acting, Single Rod 25A-CJP2 Series $\varnothing$ 4, Ø 6, Ø 10, Ø 16 <br> RoHS 

How to 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-CDJP2F10-15D

Mounting Bracket Part Nos. for the 25A- Series

| $\begin{gathered} \text { Bore size } \\ {[\mathrm{mm}]} \end{gathered}$ | 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 <br> $[\mathrm{mm}]$ | Single knuckle joint | Double knuckle <br> joint | Knuckle joint pin | Trunnion pin | Mounting nut | Rod end nut |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{4}$ | - | - | - | - | $25 A-S N P S-004$ | $25 A-N T J-004$ |
| $\mathbf{6}$ | $25 A-I-P 006 A$ | $25 A-Y-$ P006A | $25 A-I Y-P 006$ | $25 A-C T-P 006$ | $25 A-S N P-006$ | $25 A-N T P-006$ |
| $\mathbf{1 0}$ | $25 A-I-P 010 A$ | $25 A-Y-$ P010A | $25 A-I Y-P 010$ | $25 A-C T-P 010$ | $25 A-S N P-010$ | $25 A-N T P-010$ |
| $\mathbf{1 6}$ | $25 A-I-P 016 A$ | $25 A-Y-P 016 A$ | $25 A-I Y-P 016$ | $25 A-C T-P 016$ | $25 A-S N P-016$ | $25 A-N T P-016$ |

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


# Air Cylinder: Standard Type Double Acting, Single Rod 25A-CJ2 Series <br> Ø 10, Ø 16 

How to Order


Mounting Bracket Part Nos. for the 25A- Series

| Mounting <br> bracket | Bore size [mm] |  |
| :--- | :---: | :---: |
|  | $\mathbf{1 0}$ | $\mathbf{1 6}$ |
| 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.

For details, refer to the Web Catalogue.

## Air Cylinder: Non-rotating Rod Type Double Acting, Single Rod 25A-CJ2K Series $\varnothing 10, \varnothing 16$ <br> RoHS

How to Order

Series compatible d with secondary batteries

With auto switch

| - | Without magnet <br> for switch*1 |
| :---: | :--- |
| D | With auto switch <br> (Built-in magnet) |

*1 In the case of without magnet for switch, auto switch cannot be mounted.

| Mounting |  |
| :---: | :---: |
| B | Basic |
| E | Double-side bossed |
| D | Double clevis |
| L | Single foot |
| M | Double foot |
| F | Rod flange |
| G | Head flange |

* Mounting brackets are shipped together with the product but do not come assembled.

| Bore size॰ |
| :--- |
| $\mathbf{1 0}$ |
| 10 mm |
| $\mathbf{1 6}$ |

Cylinder standard stroke [mm]

| $\mathbf{1 0}$ | $15,30,45,60,75,100,125,150$ |
| :--- | :--- |
| $\mathbf{1 6}$ | $15,30,45,60,75,100,125,150,175,200$ |

* The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

Mounting Bracket Part Nos. for the 25A- Series

| Mounting <br> bracket | Bore size [mm] |  |
| :--- | :---: | :---: |
|  | $\mathbf{1 0}$ | $\mathbf{1 6}$ |
| 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.

* Double clevis is only available for being perpendicular to axis.
* Double-side bossed type is only available for being perpendicular to axis.
-Head cover port location

| Bore size <br> Sym <br> Symbol | $\varnothing 10, \varnothing 16$ |  |
| :---: | :---: | :---: |
| - | Perpendicular to axis |  |
| R | Axial |  |

# Air Cylinder: With End Lock 25A-CBJ2 Series $\varnothing 16$ 

 25A-Series

| Mounting bracket | Bore size $[\mathrm{mm}]$ |
| :---: | :---: |
|  | 16 |
| Foot bracket | CJ-L016SUS |
| Flange bracket | CJ-F016SUS |

# Air Cylinder: Standard Type Double Acting, Single Rod 25A-CM2 Series <br> Ø 20, Ø 25, Ø 32, Ø 40 

## Built-in Magnet Cylinder Model

| - | Rc |
| :---: | :---: |
| TN | NPT |
| TF | G |

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. <br> order | Bore size $[\mathrm{mm}]$ |  |  | Description (for min. order) |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathbf{2 0}$ | $\mathbf{2 5}$ | $\mathbf{3 2}$ |  |  |
| Axial foot*1 |  | 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 <br> (with pin) | 1 | $25 A-C M-D 020 B$ | $25 A-C M-D 032 B$ | $25 A-C M-D 040 B$ | 1 double clevis, 3 liners, <br> 1 clevis pin, 2 retaining rings |  |
| Trunnion (with nut) | 1 | $25-C M-T 020 B$ | $25-C M-T 032 B$ | $25-C M-T 040 B$ | 1 trunnion, 1 trunnion nut |  |

[^19]*3 A clevis pin and retaining rings (split pins for $\varnothing$ 40) are attached.

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


# Air Cylinder: Standard Type Double Acting, Single Rod 25A-CG1 Series Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63, Ø 80, Ø 100 

How to Order

(Example) 25A-CDG1FN32-100Z
Mounting Bracket Part Nos. for the 25A-Series

| Mounting bracket | Min. order | Bore size [mm] |  |  |  |  |  |  |  | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 |  |
| 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 $\times 8$ |
| 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 $\times 1$, Mounting bolt $\times 4$ |
| Trunnion pin | 1 | 25-CG-T020 | 25-CG-T025 | 25-CG-T032 | 25-CG-T040 | 25-CG-T050 | 25-CG-T063 | - | - | Trunnion pin $\times 2$, 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 | 25-CG-D063 | 25-CG-D080 | 25-CG-D100 | Clevis $\times 1$, Mounting bolt $\times 4$, Clevis pin $\times 1$, Retaining ring $\times 2$ |
| 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 |

[^20]* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

# Air Cylinder: With End Lock 

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

| Mounting <br> bracket | Min. <br> order | $\mathbf{2 0}$ | $\mathbf{2 5}$ | $\mathbf{3 2}$ | $\mathbf{4 0}$ | $\mathbf{5 0}$ | 63 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

[^21]
# Air Cylinder: Single Rod 25A-MB Series Ø 32, Ø 40, Ø 50, Ø 63, Ø 80, Ø 100 

How to Order


## Built-in Magnet Cylinder Model

f 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 <br> $[\mathrm{mm}]$ | $\mathbf{3 2}$ | $\mathbf{4 0}$ | $\mathbf{5 0}$ | $\mathbf{6 3}$ | $\mathbf{8 0}$ | $\mathbf{1 0 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Foot*1 | 25-MB-L03 | 25-MB-L04 | 25-MB-L05 | 25-MB-L06 | 25-MB-L08 | $25-M B-L 10$ |
| Flange | MB-F03-XC7 | MB-F04-XC7 | MB-F05-XC7 | MB-F06-XC7 | MB-F08-XC7 | MB-F10-XC7 |
| Single clevis | $25-M B-C 03$ | $25-M B-C 04$ | $25-M B-C 05$ | $25-M B-C 06$ | $25-M B-C 08$ | $25-M B-C 10$ |
| Double clevis | 25-MB-D03 | 25-MB-D04 | 25-MB-D05 | $25-M B-D 06$ | $25-M B-D 08$ | $25-M B-D 10$ |

*1 Two foot brackets required for one cylinder.

* 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 

How to Order

## 25A-C DA2 L 50-100 Z-M9BW

Series compatible with $\quad$ secondary batteries

| With auto switch d |  |
| :---: | :---: |
| - | Without magnet for swith** |
| D | With auto switch (Built-in magnet) |

*1 In the case of without magnet for switch, auto switch cannot be mounted.


Auto switch

- Without auto switch
* Refer to page 255 for applicable auto switch models.
- Cylinder stroke [mm]

| 40 | $25,50,75,100,125,150,175,200,250$, <br> $300,350,400,450,500$ |
| :---: | :--- |
| 50,63 | $25,50,75,100,125,150,175,200,250$, <br> $300,350,400,500,600$ |
| $\mathbf{8 0 , 1 0 0}$ | $25,50,75,100,125,150,175,200,250$, <br> $300,350,400,450,500,600,700$ |

* Intermediate strokes not listed above are produced upon receipt of order.

Bore sized

| $\mathbf{4 0}$ | 40 mm |
| ---: | ---: |
| $\mathbf{5 0}$ | 50 mm |
| $\mathbf{6 3}$ | 63 mm |
| $\mathbf{8 0}$ | $\mathbf{8 0} \mathbf{~ m m}$ |
| $\mathbf{1 0 0}$ | 100 mm |

## 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 <br> $[\mathrm{mm}]$ | $\mathbf{4 0}$ | $\mathbf{5 0}$ | $\mathbf{6 3}$ | $\mathbf{8 0}$ | $\mathbf{1 0 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Axial foot*1 | 90-CA2-L04 | 90-CA2-L05 | 90-CA2-L06 | 90-CA2-L08 | $90-\mathrm{CA} 2-\mathrm{L} 10$ |
| Flange | 25A-CA2-F04 | 25A-CA2-F05 | 25A-CA2-F06 | 25A-CA2-F08 | $25 A-C A 2-F 10$ |
| Single clevis | 25A-CA2-C04 | 25A-CA2-C05 | 25A-CA2-C06 | 25A-CA2-C08 | $25 A-C A 2-C 10$ |
| Double clevis*2 | 25A-CA2-D04 | 25A-CA2-D05 | 25A-CA2-D06 | 25A-CA2-D08 | $25 A-C A 2-D 10$ |

[^22]
# Air Cylinder: Standard Type Double Acting, Single Rod 25A-CS2 Series 

How to Order

## $\underset{\substack{\text { mpatible with } \\ \text { batteries }}}{25 A-C}$

With auto switch

| - | Without magnet <br> for switch*1 |
| :---: | :--- |
| D | With auto switch <br> (Built-in magnet) |

*1 In the case of without magnet for switch, auto switch cannot be mounted.

| Mounting |  |
| :---: | :---: |
| B | Basic |
| L | Foot |
| F | Rod flange |
| G | Head flange |
| C | Single clevis |
| D | Double clevis |
| T | Centre trunnion |

Bore size

| $\mathbf{1 2 5}$ | 125 mm |
| :--- | :--- |
| $\mathbf{1 4 0}$ | 140 mm |
| $\mathbf{1 6 0}$ | 160 mm |

secondary batteries


Number of auto switches

| - | Rc |
| :---: | :---: |
| TN | NPT |
| TF | G |

## 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

| Bore size <br> $[\mathrm{mm}]$ | $\mathbf{1 2 5}$ | 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 | $25 A-C S 2-D 14$ | $25 A-C S 2-D 16$ |

*1 Order two foot brackets per cylinder.
*2 A clevis pin and split pins are shipped together with double clevis.


## 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.



[^23][^24] 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 

How to Order

Series compatible with ${ }^{\circ}$ secondary batteries

- Number of auto switches

| With auto switch |  |  |
| :---: | :--- | :---: |

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Bore size

| $\mathbf{1 0}$ | 10 mm |
| :--- | :--- |
| $\mathbf{1 6}$ | 16 mm |
| $\mathbf{2 0}$ | 20 mm |
| $\mathbf{2 5}$ | 25 mm |
| $\mathbf{3 2}$ | 32 mm |



| $\mathbf{-}$ | 2 |
| :---: | :---: |
| $\mathbf{S}$ | 1 |

-Auto switch

- Without auto switch
* Refer to page 256 for applicable auto switches.
- Action

D Double acting

- Cylinder stroke [mm]

| Bore size | Standard stroke | Long stroke |
| :---: | :---: | :---: |
| $\mathbf{1 0 , 1 6}$ | $5,10,15,20,25,30$ | $40,50,60$ |
| $\mathbf{2 0 , 2 5 , 3 2}$ | $5,10,15,20,25,30,40,50$ | $60,70,80,90,100$ |

## 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-CDU20-25D

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

For details, refer to the Web Catalogue.

## Free Mount Cylinder: Non-rotating Rod Type Double Acting, Single Rod

 25A-CUK Series Ø 10, Ø 16, Ø 20, Ø 25, Ø 32How to Order

Series compatible with ${ }^{\circ}$ secondary batteries

| With auto switch |  |
| :---: | :---: |
| - | Without magnet <br> for switch*1 |
| D | With auto switch <br> (Built-in magnet) |

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Non-rotating rod type d

Bore size

| Bore sized |  |
| :---: | :---: |
| $\mathbf{1 0}$ | 10 mm |
| $\mathbf{1 6}$ | 16 mm |
| $\mathbf{2 0}$ | 20 mm |
| $\mathbf{2 5}$ | 25 mm |
| $\mathbf{3 2}$ | 32 mm |

$$
30 \mathrm{D}-\mathrm{M9BW}
$$



Cylinder stroke [mm]

| Bore size | Standard stroke | Long stroke |
| :--- | :---: | :---: |
| $\mathbf{1 0 , 1 6}$ | $5,10,15,20,25,30$ | $40,50,60$ |
| $\mathbf{2 0 , 2 5 , 3 2}$ | $5,10,15,20,25,30,40,50$ | $60,70,80,90,100$ |

## 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-CDUK20-25D

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

For details, refer to the Web Catalogue.

## Compact Cylinder: Standard Type Double Acting, Single Rod 25A-CQS Series

 Ø 12, Ø 16, Ø 20, Ø 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-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 <br> $[\mathrm{mm}]$ | Foot*1 | Compact foot*1 | Flange | Double clevis |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 2}$ | 25A-CQS-L012 | 25A-CQS-LC012 | $25 A-C Q S-F 012$ | $25-C Q S-D 012$ |
| $\mathbf{1 6}$ | 25A-CQS-L016 | 25A-CQS-LC016 | $25 A-C Q S-F 016$ | $25-C Q S-D 016$ |
| $\mathbf{2 0}$ | 25A-CQS-L020 | 25A-CQS-LC020 | $25 A-C Q S-F 020$ | $25-C Q S-D 020$ |
| $\mathbf{2 5}$ | 25A-CQS-L025 | 25A-CQS-LC025 | $25 A-C Q S-F 025$ | $25-C Q S-D 025$ |

[^25]
# Compact Cylinder: Standard Type Double Acting, Double Rod 25A-CQSW Series $\varnothing 12, \varnothing 16, \varnothing 20, \varnothing 25$ 

How to Order


Mounting Bracket Part Nos. for the 25A- Series

| Bore size <br> $[\mathrm{mm}]$ | Foot*1 | Compact foot*1 | Flange |
| :---: | :---: | :---: | :---: |
| $\mathbf{1 2}$ | 25A-CQS-L012 | 25A-CQS-LC012 | 25A-CQS-F012 |
| $\mathbf{1 6}$ | 25A-CQS-L016 | 25A-CQS-LC016 | 25A-CQS-F016 |
| $\mathbf{2 0}$ | 25A-CQS-L020 | 25A-CQS-LC020 | 25A-CQS-F020 |
| $\mathbf{2 5}$ | 25A-CQS-L025 | 25A-CQS-LC025 | 25A-CQS-F025 |

[^26]
## 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

# Compact Cylinder: Anti-lateral Load Type 25A-CQS $\square S$ Series <br> Ø 12, Ø 16, Ø 20, Ø 25 <br> RoHS 

How to Order



-Auto switch

- Without auto switch
* Refer to page 256 for applicable auto switch models.
-Body option

| C | With rubber bumper |
| :---: | :---: |
| Rod end female thread (Standard) |  |
| CM | With rubber bumper <br> Rod end male thread |

## -Action

D $\quad$ 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 <br> $[\mathrm{mm}]$ | Foot*1 | Compact foot*1 | Flange | Double clevis |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 2}$ | 25A-CQS-L012 | 25A-CQS-LC012 | 25A-CQS-F012 | $25-C Q S-D 012$ |
| $\mathbf{1 6}$ | 25A-CQS-L016 | 25A-CQS-LC016 | $25 A-C Q S-F 016$ | $25-C Q S-D 016$ |
| $\mathbf{2 0}$ | 25A-CQS-L020 | 25A-CQS-LC020 | $25 A-C Q S-F 020$ | $25-C Q S-D 020$ |
| 25 | $25 A-C Q S-L 025$ | $25 A-C Q S-L C 025$ | $25 A-C Q S-F 025$ | $25-C Q S-D 025$ |

[^27]
# Compact Cylinder: Standard Double Acting, Single Rod 25A-CQ2 Series 

 $012,016, \varnothing 20, \varnothing 25, \varnothing 32, \varnothing 40,050, \varnothing 63,080,0100$
*1 In the case of without magnet for switch, auto switch cannot be mounted.

|  | Mounting • |
| :---: | :---: |
| B | Through-hole (Standard) |
| A | Both ends tapped |
| L | Foot |
| LC | Compact foot |
| F | Rod flange |
| G | Head flange |
| D | Double clevis |

* Mounting brackets are shipped together with the product but do not come assembled.
* Cylinder mounting bolts are not included.


## 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

| 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 |
|  | With auto switch | 25A-CQ-LZ12 | 25A-CQ-LCZ12 |  |  |
| 16 | Without auto switch | 25A-CQ-L016 | 25A-CQ-LC016 | 25A-CQ-F016 | 25-CQ-D016 |
|  | With auto switch | 25A-CQ-LZ16 | 25A-CQ-LCZ16 |  |  |
| 20 | Without auto switch | 25A-CQ-L020 | 25A-CQ-LC020 | 25A-CQ-F020 | 25-CQ-D020 |
|  | With auto switch | 25A-CQ-LZ20 | 25A-CQ-LCZ20 |  |  |
| 25 | Without auto switch | 25A-CQ-L025 | 25A-CQ-LC025 | 25A-CQ-F025 | 25-CQ-D025 |
|  | With auto switch | 25A-CQ-LZ25 | 25A-CQ-LCZ25 |  |  |
|  | 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 When ordering foot and compact foot brackets, the required quantity will be different depending on the bore size.
$\varnothing 12$ to $\varnothing 25$ :

- 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)
$\varnothing 32$ to $\varnothing 100$ :
- 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
Simple Joint (Standard)/ Part Nos.

| Bore size $[\mathrm{mm}]$ | Joint | Type A mounting <br> bracket | Type B mounting <br> bracket |
| :---: | :---: | :---: | :---: |
| $\mathbf{3 2 , 4 0}$ | YU-03 | YA-03 | YB-03 |
| $\mathbf{5 0 , 6 3}$ | YU-05 | YA-05 | YB-05 |
| $\mathbf{8 0}$ | YU-08 | YA-08 | YB-08 |
| $\mathbf{1 0 0}$ | $Y U-10$ | YA-10 | YB-10 |

## <Ordering>

- Joints are not included with type A or B mounting brackets.

Order them separately.
(Example)
Bore size $\varnothing 40 \quad$ Part no.

- Type A mounting bracket ..........YA-03
- Joint..........................................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

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

For details, refer to the Web Catalogue.

# Compact Cylinder: Long Stroke Double Acting, Single Rod 25A-CQ2 Series $\varnothing$ 32, Ø 40, Ø 50, Ø 63, Ø 80, Ø 100 

How to Order

## $\xrightarrow[\substack{\text { compatible with } \\ \text { dary batteries }}]{\text { 25A-C }}$ <br> - Series compatible w secondary batteries

| With auto switch |  |
| :---: | :---: |
| - | Without magnet <br> for switch*1 |
| D | With auto switch <br> (Built-in magnet) |

*1 In the case of without magnet for switch, auto switch cannot be mounted

|  | Mounting |
| :---: | :---: |
| A | Both ends tapped |
| L | Foot |
| LC | Compact foot |
| F | Rod flange |
| G | Head flange |
| D | Double clevis |

* Mounting brackets are shipped together with the product but do not come assembled.


## Built-in Magnet Cylinder Model



If a built-in magnet cylinder without an auto switch is required, there is no need

- Cylinder stroke [mm] to enter the symbol for the auto switch.
(Example) 25A-CDQ2L40-200DCZ

| Bore size | Standard stroke |
| :---: | :---: |
| $\mathbf{3 2 , 4 0 , 5 0}$ | $125,150,175,200,250,300$ |
| $\mathbf{6 3 , 8 0}, \mathbf{1 0 0}$ |  |

## Simple Joint (Standard)/Part Nos.

| Bore size [mm] | Joint | Type A mounting <br> bracket | Type B mounting <br> bracket |
| :---: | :---: | :---: | :---: |
| $\mathbf{3 2 , 4 0}$ | YU-03 | YA-03 | YB-03 |
| $\mathbf{5 0 , 6 3}$ | YU-05 | YA-05 | YB-05 |
| $\mathbf{8 0}$ | YU-08 | YA-08 | YB-08 |
| $\mathbf{1 0 0}$ | 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
* 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 $[\mathrm{mm}]$ | Foot*1 | Compact foot*1 | Flange | Double clevis |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{3 2}$ | 25A-CQ-L032 | 25A-CQ-LC032 | $25 A-C Q-F 032$ | $25-C Q-D 032$ |
| $\mathbf{4 0}$ | $25 A-C Q-L 040$ | $25 A-C Q-L C 040$ | $25 A-C Q-F 040$ | $25-C Q-D 040$ |
| $\mathbf{5 0}$ | $25 A-C Q-L 050$ | $25 A-C Q-L C 050$ | $25 A-C Q-F 050$ | $25-C Q-D 050$ |
| $\mathbf{6 3}$ | $25 A-C Q-L 063$ | $25 A-C Q-L C 063$ | $25 A-C Q-F 063$ | $25-C Q-D 063$ |
| $\mathbf{8 0}$ | $25 A-C Q-L 080$ | $25 A-C Q-L C 080$ | $25 A-C Q-F 080$ | $25-C Q-D 080$ |
| $\mathbf{1 0 0}$ | $25 A-C Q-L 100$ | $25 A-C Q-L C 100$ | $25 A-C Q-F 100$ | $25-C Q-D 100$ |

[^28]
# Compact Cylinder: Anti-lateral Load 25A-CQ2 $\square S$ Series $\varnothing$ 32, Ø 40, Ø 50, Ø 63, Ø 80, Ø 100 RoHs 

## $\xrightarrow[\substack{\text { es compatible } \\ \text { secondary }}]{25 A-C}$ with secondary

 batteriesWith auto switch

| - | Without magnet <br> for switch*1 |
| :---: | :--- |
| D | With auto switch <br> (Built-in magnet) |

*1 In the case of without magnet for switch, auto switch cannot be mounted.

|  |  |
| :---: | :---: |
| B | Through-hole (Standard) |
| A | Both ends tapped |
| L | Foot |
| LC | Compact foot |
| F | Rod flange |
| G | Head flange |
| D | Double clevis |

* Mounting brackets are shipped together with the product but do not come assembled.
* Cylinder mounting bolts are not included.

Type

| $\mathbf{S}$ | Anti-lateral load |
| :--- | :--- |

Bore size

| $\mathbf{3 2}$ | 32 mm |
| :---: | :---: |
| $\mathbf{4 0}$ | 40 mm |
| $\mathbf{5 0}$ | 50 mm |
| $\mathbf{6 3}$ | 63 mm |
| $\mathbf{8 0}$ | 80 mm |
| $\mathbf{1 0 0}$ | $\mathbf{1 0 0 ~ \mathrm { mm }}$ |



- Number of auto switches

| - | 2 |
| :---: | :---: |
| $\mathbf{S}$ | 1 |
| $\mathbf{n}$ | n |

## - Auto switch

- Without auto switch
* Refer to page 256 for applicable auto switch models.
- Auto switch mounting groove | $\mathbf{Z}$ | 4 surfaces |
| :--- | :--- |

Body option - $\quad$ Standard (Rod end female thread) M Rod end male thread

- Cushion

C Rubber bumper

## Action

D Double acting

- Cylinder stroke [mm]

| Bore size | Standard stroke |
| :--- | :--- |
| $\mathbf{3 2 , 4 0}$ | $5,10,15,20,25,30,35,40,45,50,75,100$ |
| $\mathbf{5 0 , 6 3}, \mathbf{8 0 , 1 0 0}$ | $10,15,20,25,30,35,40,45,50,75,100$ |

- Port thread type

| - | 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-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 $[\mathrm{mm}]$ | Foot*1 | Compact foot*1 | Flange | Double clevis |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{3 2}$ | $25 A-C Q-L 032$ | $25 A-C Q-L C 032$ | $25 A-C Q-F 032$ | $25-C Q-D 032$ |
| $\mathbf{4 0}$ | $25 A-C Q-L 040$ | $25 A-C Q-L C 040$ | $25 A-C Q-F 040$ | $25-C Q-D 040$ |
| $\mathbf{5 0}$ | $25 A-C Q-L 050$ | $25 A-C Q-L C 050$ | $25 A-C Q-F 050$ | $25-C Q-D 050$ |
| $\mathbf{6 3}$ | $25 A-C Q-L 063$ | $25 A-C Q-L C 063$ | $25 A-C Q-F 063$ | $25-C Q-D 063$ |
| $\mathbf{8 0}$ | $25 A-C Q-L 080$ | $25 A-C Q-L C 080$ | $25 A-C Q-F 080$ | $25-C Q-D 080$ |
| $\mathbf{1 0 0}$ | $25 A-C Q-L 100$ | $25 A-C Q-L C 100$ | $25 A-C Q-F 100$ | $25-C Q-D 100$ |

[^29]
# Compact Cylinder: With End Lock 25A-CBQ2 Series Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63, Ø 80, Ø 100 

 with condary batteries

With auto switch (Built-in magnet)

Mounting

| $\varnothing$ 20, $\varnothing 25$ |  | $\varnothing 32$ to $\varnothing 100$ |  |
| :---: | :---: | :---: | :---: |
| B | Through-hole/Both ends tapped common (Standard) | B | Through-hole (Standard)*1 |
| L | Foot | A | 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 $\varnothing 80, \varnothing 100$, both ends tapped (A) is the standard. Through-hole $(\mathrm{B})$ is not available.

* Mounting brackets are shipped together with the product but do not come assembled.

| Bore size |  |  | re size | Port thread type ${ }^{\text {d }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20 | 20 mm | 50 | 50 mm | M thread | Ø20, $\varnothing 25$ |
| 25 | 25 mm | 63 | 63 mm - | Rc | $\varnothing 32$ to Ø 100 |
| 32 | 32 mm | 80 | 80 mm TN | NPT |  |
| 40 | 40 mm | 100 | 100 mm TF | G |  |
| Cylinder stroke [mm] |  |  |  |  |  |
|  |  | Bore size |  | Standard stroke |  |
|  |  | 20, 25, 32, 40, 50, 63 |  | 10, 15, 20, 25, 50, 75, 100 |  |
|  |  | 80, 100 |  | 25, 50, 75, 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-CDBQ2L32-30DC-RN

Mounting Bracket Part Nos. for the 25A- Series

| Bore size $[\mathrm{mm}]$ | Foot*1 | Compact foot*1 | Flange | Double clevis |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0}$ | 25A-CQS-L020 | 25A-CQS-LC020 | 25A-CQS-F020 | $25-C Q S-D 020$ |
| $\mathbf{2 5}$ | $25 A-C Q S-L 025$ | $25 A-C Q S-L C 025$ | $25 A-C Q S-F 025$ | $25-C Q S-D 025$ |
| $\mathbf{3 2}$ | $25 A-C Q-L 032$ | $25 A-C Q-L C 032$ | $25 A-C Q-F 032$ | $25-C Q-D 032$ |
| $\mathbf{4 0}$ | $25 A-C Q-L 040$ | $25 A-C Q-L C 040$ | $25 A-C Q-F 040$ | $25-C Q-D 040$ |
| $\mathbf{5 0}$ | $25 A-C Q-L 050$ | $25 A-C Q-L C 050$ | $25 A-C Q-F 050$ | $25-C Q-D 050$ |
| $\mathbf{6 3}$ | $25 A-C Q-L 063$ | $25 A-C Q-L C 063$ | $25 A-C Q-F 063$ | $25-C Q-D 063$ |
| $\mathbf{8 0}$ | $25 A-C Q-L 080$ | $25 A-C Q-L C 080$ | $25 A-C Q-F 080$ | $25-C Q-D 080$ |
| $\mathbf{1 0 0}$ | $25 A-C Q-L 100$ | $25 A-C Q-L C 100$ | $25 A-C Q-F 100$ | $25-C Q-D 100$ |

[^30]
# Plate Cylinder: Double Acting, Single Rod 25A-MU Series 

 Ø 25, Ø 32, Ø 40, Ø 50, Ø 63

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

For details, refer to the Web Catalogue.

# Mechanically Jointed Rodless Cylinder Basic Type 25A-MY1B Series Ø 16, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63 

How to Order


[^31]
# Mechanically Jointed Rodless Cylinder Slide Bearing Guide Type 25A-MY1M Series Ø 16, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63 

## RoHS

How to Order
Series compatible with secondary batteries
Slide bearing guide type

|  | Bore size |
| :---: | :---: |
| $\mathbf{1 6}$ | 16 mm |
| $\mathbf{2 0}$ | 20 mm |
| $\mathbf{2 5}$ | 25 mm |
| $\mathbf{3 2}$ | 32 mm |
| $\mathbf{4 0}$ | 40 mm |
| $\mathbf{5 0}$ | 50 mm |
| $\mathbf{6 3}$ | 63 mm |


|  | Without auto switch |
| :---: | :---: |

* Refer to page 256 for applicable auto switch

| Port thread typed |  |  |
| :---: | :---: | :---: |
| Symbol | Type | Bore size |
|  | M thread | Ø16, $\varnothing 20$ |
|  | Rc | $\varnothing 25, \varnothing 32$, |
| TN | NPT | $\varnothing 40, \varnothing 50$, |
| TF | G | $\varnothing 63$ |

Piping

| - | Standard type |
| :---: | :---: |
| $\mathbf{G}$ | Centralized piping type |


| Bore size | Standard stroke* | Long stroke | Maximum manufacturable stroke |
| :---: | :---: | :---: | :---: |
| 16 | $\begin{aligned} & 100,200,300,400,500,600, \\ & 700,800,900,1000,1200,1400 \\ & 1600,1800,2000 \end{aligned}$ | Strokes of 2001 to 3000 mm (1 mm increments) exceeding the standard stroke | 3000 |
| $\begin{aligned} & 20,25 \\ & 32,40 \\ & 50,63 \end{aligned}$ | * The stroke can be manufactured in 1 mm increments from 1 mm stroke. | Strokes of 2001 to 5000 mm ( 1 mm increments) exceeding the standard stroke | 5000 |



# Mechanically Jointed Rodless Cylinder Cam Follower Guide Type 25A-MY1C Series $\varnothing 16, \varnothing 20, \varnothing 25, \varnothing 32, \varnothing 40, \varnothing 50$, Ø 63 

How to Order


20, 25, 32
40, 50, 63
Ordering example

* Long stroke can be ordered the same as the standard stroke. 25A-MY1C20-3000L-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 symbold

|  |  |  | Right side stroke adjustment unit |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Without unit | A: With adjustment bolt |  |  | L: With low load shock absorber <br> + Adjustment bolt |  |  | H: With high load shock absorber <br> + Adjustment bolt |  |  |
|  |  |  |  | With short spacer | With long spacer |  | With short spacer | With long spacer |  | With short spacer | With long spacer |
| \# |  | hout unit |  | - | SA | SA6 | SA7 | SL | SL6 | SL7 | SH | SH6 | SH7 |
| $\stackrel{1}{\Sigma}$ | A: With a | adjustment bolt | AS | A | AA6 | AA7 | AL | AL6 | AL7 | AH | AH6 | AH7 |
|  |  | With short spacer | A6S | A6A | A6 | A6A7 | A6L | A6L6 | A6L7 | A6H | A6H6 | A6H7 |
| $\stackrel{5}{9}$ |  | With long spacer | A7S | A7A | A7A6 | A7 | A7L | A7L6 | A7L7 | A7H | A7H6 | A7H7 |
| - | L: With low loa | bad shock absorber + | LS | LA | LA6 | LA7 | L | LL6 | LL7 | LH | LH6 | LH7 |
|  | Adjustment | With short spacer | L6S | L6A | L6A6 | L6A7 | L6L | L6 | L6L7 | L6H | L6H6 | L6H7 |
| $\stackrel{y}{\omega}$ |  | With long spacer | L7S | L7A | L7A6 | L7A7 | L7L | L7L6 | L7 | L7H | L7H6 | L7H7 |
| $\stackrel{\square}{\circ}$ | H: With high | load shock absorber + | HS | HA | HA6 | HA7 | HL | HL6 | HL7 | H | HH6 | HH7 |
| A | Adjustment | With short spacer | H6S | H6A | H6A6 | H6A7 | H6L | H6L6 | H6L7 | H6H | H6 | H6H7 |
| $\pm$ | boll | With long spacer | H7S | H7A | H7A6 | H7A7 | H7L | H7L6 | H7L7 | H7H | H7H6 | H7 |

Stroke adjustment unit mounting diagram
Stroke adjustment unit Intermediate fixing spacer

Example of H6H7 attachment


* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.
* Stroke adjustment unit H is not available for 25A-MY1C16.
* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.


# Mechanically Jointed Rodless Cylinder Linear Guide Type 25A-MY1H Series $\varnothing 16, \varnothing 20, \varnothing 25, \varnothing 32$, Ø 40 

How to Order


[^32]* The 25A- series specifications and dimensions are the same as those of the standard model.


# Mechanically Jointed Rodless Cylinder Cam Follower Guide Type 25A-MY2C Series Ø 16, Ø 25, Ø 40 

How to Order


Example of L6L7 attachment

[^33]* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

## Mechanically Jointed Rodless Cylinder Linear Guide Type

 25A-MY2H/HT SeriesØ 16, Ø 25, Ø 40

# Mechanically Jointed Rodless Cylinder/Basic Type 25A-MY3A/3B Series Ø 16, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63 

How to Order


[^34]* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.


# Mechanically Jointed Rodless Cylinder Slide Bearing Guide Type RoHS 

 25A-MY3M Series Ø 16, Ø 25, Ø 40, Ø 63

# Magnetically Coupled Rodless Cylinder/Basic Type 25A-CY3B Series 

Ø 6, Ø 10, Ø 15, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63

Series compatible with secondary batteries

How to Order


Standard stroke [mm]

| Bore size | Standard stroke | Max. manufacturable stroke |
| :---: | :---: | :---: |
| 6 | 50, 100, 150, 200 | 300 |
| 10 | 50, 100, 150, 200, 250, 300 | 500 |
| 15 | $\begin{aligned} & 50,100,150,200,250,300,350 \\ & 400,450,500 \end{aligned}$ | 1000 |
| 20 |  | 1500 |
| 25 | $\begin{aligned} & 100,150,200,250,300,350 \\ & 400,450,500,600,700,800 \end{aligned}$ | 2000 |
| 32 |  |  |
| 40, 50, 63 | $100,150,200,250,300,350,400$ $450,500,600,700,800,900,1000$ |  |

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

For details, refer to the Web Catalogue.

# 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 

How to Order

[^35]* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

# Compact Slide 25A-MXH Series 

 Ø 6, Ø 10, Ø 16, Ø 20Series compatible with secondary batteries

Compact slide

| Bore size |  |
| :---: | ---: |
| $\mathbf{6}$ | 6 mm |
| $\mathbf{1 0}$ | 10 mm |
| $\mathbf{1 6}$ | 16 mm |
| $\mathbf{2 0}$ | 20 mm |

- Number of auto switches


Auto switch
$-\quad$ Without auto switch (Built-in magnet)

* For applicable auto switch models, refer to page 258.

Cylinder stroke [mm]

> | $\mathbf{6}, \mathbf{1 0}, \mathbf{1 6}, \mathbf{2 0}$ | $\begin{array}{l}5,10,15,20,25,30,40 \\ 50,60\end{array}$ |
| :--- | :--- |

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

For details, refer to the Web Catalogue.

## Air Slide Table

25A-MXS Series Ø 6, Ø 8, Ø 12, Ø 16, Ø 20, Ø 25


# Air Slide Table Double-ported Type <br> RoHS 25A-MXQ $\square A$ Series Ø 6, Ø 8, Ø 12, Ø 16, Ø 20, Ø 25 

## How to Order

## 

 secondary batteries| Bore size | (2) Body option: Double-ported type A | (3) 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 |

## 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

- $\quad$ Without auto switch (Built-in magnet)
* For applicable auto switches, refer to page 258.

Adjuster options/Functional option combinations

| Symbol | Adjuster type*6 |  |  |  | Adjuster mounting position*1 |  | Functional option combination |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | - | 1 | 2 | 3 | 4 | 5 |
|  |  |  |  |  | Extension stroke end | Retraction stroke end | Without functional option | $\begin{gathered} * 2 * 7 \\ \text { With } \end{gathered}$ buffer | With end lock | $\begin{gathered} \text { Axial } \\ \text { piping } \end{gathered}$ | $* 2 * 7$ With buffer, end lock | $* 2 * 5 * 7$ With buffer, axial piping |
| Z | Without adjuster |  |  |  |  |  |  |  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| ZA | Metal stopper with bumper |  |  |  | - | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZB |  |  |  |  | $\bigcirc$ |  | $\bigcirc$ | $\times$ | $\bigcirc$ | $\bigcirc$ | $\times$ | $\times$ |
| ZC |  |  |  |  |  | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZD | Rubber stopper |  |  |  | - | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZE |  |  |  |  | $\bigcirc$ |  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| ZF |  |  |  |  |  | $\bigcirc$ | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZG | Shock absorber/RJ |  |  |  | - | $\bigcirc$ | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZH |  |  |  |  | - |  | $\bigcirc$ | $\times$ | $\bigcirc$ | $\bigcirc$ | $\times$ | $\times$ |
| ZJ |  |  |  |  |  | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZK | Metal stopper |  |  |  | - | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZL |  |  |  |  | $\bigcirc$ |  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| ZM |  |  |  |  |  | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZN | Shorter total length type*3 |  | $\begin{aligned} & \stackrel{1}{\Phi} \\ & \stackrel{1}{ \pm} \\ & \stackrel{N}{2} \end{aligned}$ | Without adjuster |  |  | $\bigcirc$ | O*4 | $\times$ | $\bigcirc$ | $\times$ | $\bigcirc * 4$ |
| ZP |  |  | Rubber stopper | - |  | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZQ |  |  | Shock absorber/RJ | $\bigcirc$ |  | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZS |  |  | Metal stopper with bumper | - |  | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZT |  |  | Metal stopper | - |  | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZBF |  | Metal stopper with bumper |  | n | Rubber stopper | - | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZBJ |  |  |  |  | Shock absorber/RJ | - | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZBM |  |  |  |  | Metal stopper | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZEC |  | Rubber stopper |  | $\begin{aligned} & 0 \\ & \frac{0}{0} \\ & \frac{0}{\omega} \\ & \frac{1}{\omega} \\ & \end{aligned}$ | Metal stopper with bumper | - | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZEJ |  |  | Shock absorber/RJ |  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZEM |  |  | Metal stopper |  | - | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZHC | ¢ | Shock absorber/RJ |  | Metal stopper with bumper | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZHF |  |  |  | Rubber stopper | - | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZHM |  |  |  | Metal stopper | - | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZLC |  | Metal stopper |  |  | Metal stopper with bumper | - | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZLF |  |  |  |  | Rubber stopper | - | - | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |
| ZLJ |  |  |  |  | Shock absorber/RJ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\times$ | $\times$ | $\bigcirc$ | $\times$ | $\times$ |

- 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.
*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 $\varnothing 6$.
*7 As there is no magnet in the buffer mechanism, auto switches cannot be used on the buffer part.


## Adjuster Mounting Position



[^36] 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.

## Air Slide Table

## How to Order



|  | （2）Body option |  | （3）Standard stroke［mm］ |
| :---: | :---: | :---: | :---: |
|  | $\frac{\text { Standard type }}{\text { B }}$ | Symmetric type BL |  |
| 6 |  |  | 10，20，30，40，50， 75 |
| 8 |  |  | 10，20，30，40，50，75， 100 |
| 12 |  |  | 10，20，30，40，50，75，100， 125 |
| 16 |  | －＊1 | $10,20,30,40,50,75,100,125,150$ |
| 20 |  |  | 10，20，30，40，50，75，100，125， 150 |

＊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＊3 |  |  |  | Adjuster mounting position＊1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Exersiosistceend | Priadionstoleeno |
| Z | Without adjuster |  |  |  |  |  |
| ZA | Metal stopper with bumper |  |  |  | $\bullet$ | － |
| ZB |  |  |  |  | $\bullet$ |  |
| ZC |  |  |  |  |  | $\bullet$ |
| ZD | Rubber stopper |  |  |  | － | $\bullet$ |
| ZE |  |  |  |  | － |  |
| ZF |  |  |  |  |  | $\bullet$ |
| ZG | Shock absorber／RJ |  |  |  | $\bullet$ | $\bullet$ |
| ZH |  |  |  |  | $\bullet$ |  |
| ZJ |  |  |  |  |  | $\bullet$ |
| ZK | Metal stopper |  |  |  | $\bullet$ | $\bullet$ |
| ZL |  |  |  |  | $\bullet$ |  |
| ZM |  |  |  |  |  | $\bullet$ |
| ZN | Shorter total length type＊2 |  | $\begin{aligned} & \overline{ \pm} \\ & \stackrel{y}{5} \end{aligned}$ | Without adjuster |  |  |
| ZP |  |  | Rubber stopper | － |  |
| ZQ |  |  | Shock absorber／RJ | $\bullet$ |  |
| ZS |  |  | Metal stopper with bumper | $\bullet$ |  |
| ZT |  |  | Metal stopper | $\bullet$ |  |
| ZBF |  | Metal stopper with bumper |  |  | Rubber stopper | $\bullet$ | $\bullet$ |
| ZBJ |  |  |  |  | Shock absorber／RJ | $\bullet$ | $\bullet$ |
| ZBM |  |  |  |  | Metal stopper | $\bullet$ | $\bullet$ |
| ZEC |  | Rubber stopper |  |  | Metal stopper with bumper | $\bullet$ | $\bullet$ |
| ZEJ |  |  | Shock absorber／RJ |  | $\bullet$ | $\bullet$ |
| ZEM | $\begin{array}{r} \frac{0}{\circ} \\ -\frac{⿳ 亠 二 口 丿}{*} \end{array}$ |  | Metal stopper |  | － | － |
| ZHC |  | Shock absorber／RJ |  | Metal stopper with bumper | － | $\bullet$ |
| ZHF |  |  |  | Rubber stopper | $\bullet$ | $\bullet$ |
| ZHM |  |  |  | Metal stopper | $\bullet$ | $\bullet$ |
| ZLC |  | Metal stopper |  | Metal stopper with bumper | － | $\bullet$ |
| ZLF |  |  |  | Rubber stopper | $\bullet$ | $\bullet$ |
| ZLJ |  |  |  | Shock absorber／RJ | $\bullet$ | $\bullet$ |

## （5）Auto switch

－$\quad$ Without auto switch（Built－in magnet）
＊For applicable auto switches，refer to page 258.

## 6 Number of auto switches

| $\mathbf{Z}$ | 2 |
| :---: | :---: |
| $\mathbf{S}$ | 1 |
| $\mathbf{n}$ | n |

1 －Shipped together with the product，but not assembled
Without any symbol for the adjuster mounting position：The adjuster can be mounted afterward．
＊2 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table．
＊3 The metal stopper with bumper option is not available for $\varnothing 6$ ．

Adjuster Mounting Position



Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table．
＊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．

For details，refer to the Web Catalogue．

## How to Order

##  secondary batteries

|  | 2 Body option |  |  |
| :---: | :---: | :---: | :---: |
| Bore size | $\begin{gathered} \text { Standard type } \\ \text { C } \end{gathered}$ | Symmetric type CL |  |
| 8 | Swich mounting grove | Swith mounting grove Port | 10, 20, 30, 40, 50, 75 |
| 12 |  |  | $\begin{aligned} & 10,20,30,40,50,75 \\ & 100 \end{aligned}$ |

Functional options

| Symbol | Functional option |
| :---: | :--- |
| - | Without functional option |
| $\mathbf{1}$ | 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 applicable auto switches, refer to page 258.


## (7) Number of auto switches

| - | 2 |
| :---: | :---: |
| $\mathbf{S}$ | 1 |
| $\mathbf{n}$ | n |

Adjuster options/Functional option combinations

*1 - 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.
*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



[^37]* 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

##  secondary batteries


＊1 Not available，as the standard model has piping ports and auto switch mounting grooves on both sides．Please use the standard type．


Functional options

Symbol Functional option | Symul | Fithout functional option |
| :---: | :--- |
| - |  | 1 With buffer

With end lock Axial piping
With buffer，end lock
With buffer，axial piping

## （ Auto switch

－$\quad$ Without auto switch（Built－in magnet）
＊For applicable auto switches，refer to page 258

## Adjuster options／Functional option combinations



## Adjuster Mounting Position

$\xrightarrow{$|  Retraction stroke adjuster  |
| :--- |
|  end  |$}$

＊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．

# Air Slide Table 

RoHS
25A-MXQ Series
Ø 6, Ø 8, Ø 12, Ø 16, Ø 20, Ø 25

How to Order


- Adjuster option

| - | Without adjuster |
| :---: | :--- |
| AS | Extension end rubber stopper |
| AT | Retraction end rubber stopper |
| A | Both ends rubber stopper |
| BS | Extension end absorber |
| BT | Retraction end absorber |
| B | Double absorber |
| CS | Extension end metal stopper |
| CT | Retraction end metal stopper |
| C | 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 | 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.


## Corrosion Resistant Air Slide Table

(Made to order: 25A-MXQ $\square-X 771$ )
The material of the head cap part has been changed to a highly corrosion-resistant material.


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

For details, refer to the Web Catalogue.

# Low Profile Slide Table 25A-MXF Series Ø 8, Ø 12, Ø 16, Ø 20 

Series compatible with secondary batteries

## 25A - MXF 12-50-M9BW

imensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

# Air Slide Table 25A-MXW Series Ø 8, Ø 12, Ø 16, Ø 20, Ø 25 

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 Slide Table 25A-MXP Series Ø 6, Ø 8, Ø 10, Ø 12, Ø 16 



[^38]* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

# Miniature Guide Rod Cylinder 25A-MGJ Series <br> Ø 6, $\varnothing 10$ 

How to Order


Table (1) Standard Strokes

| Bore size [mm] | Standard stroke $[\mathrm{mm}]$ |
| :---: | :---: |
| $\mathbf{6}$ | $5,10,15$ |
| $\mathbf{1 0}$ | $5,10,15,20$ |

Table (2) Intermediate Stroke (by the 1 mm stroke)

| Bore size [mm] | Applicable stroke [mm] |
| :---: | :---: |
| $\mathbf{6}$ | 1 to 15 (Spacer type) |
| $\mathbf{1 0}$ | 1 to 20 (Spacer type) |
| Example | Installing a 1 mm width spacer for 25A-MGJ6-10 <br> External size: same as 25A-MGJ6-10 |

* When mounting an auto switch, the min. stroke is 4 mm .

However, only 1 auto switch can be mounted in this case.

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

For details, refer to the Web Catalog.

# Compact Guide Cylinder <br> RoHS <br> 25A-MGP Series <br> $\varnothing 12, \varnothing 16, \varnothing 20, \varnothing 25, \varnothing 32, \varnothing 40, \varnothing 50, \varnothing 63, \varnothing 80, \varnothing 100$ 

How to Order


Port thread type

| - | M5 $\times 0.8$ |
| :---: | :---: |
|  | Rc |
| TN | NPT |
| TF | G |

* For bore sizes $\varnothing 12$ and $\varnothing 16$, 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.

# Compact Guide Cylinder/With Air Cushion 25A-MGP Series 

Ø 16, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63, Ø 80, Ø 100


How to Order


- Port thread type
 M5 $\times 0.8$ is available.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

# Compact Guide Cylinder 25A-MGPK Series Ø 12, Ø 16, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50 

How to Order

## 25A-MGPK AM 32

Series compatible with secondary batteries

Compact guide cylinder


| Bearing typed |  |  | e sized |
| :---: | :---: | :---: | :---: |
| M | Slide be | ring |  |
| Bore size ${ }^{\text {d }}$ |  |  |  |
| 12 | 12 mm | 32 | 32 mm |
| 16 | 16 mm | 40 | 40 mm |
| 20 | 20 mm | 50 | 50 mm |
| 25 | 25 mm |  |  |
| Port thread type |  |  |  |
|  |  | - | M5 x 0.8 |
|  |  |  | Rc |
|  |  | TN | NPT |
|  |  | TF | G |

* For bore sizes 12 and 16 , only $\mathrm{M} 5 \times 0.8$ is available.


# Slide Unit: Built-in Shock Absorber Slide Bearing Type 



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

For details, refer to the Web Catalogue.

# Dual Rod Cylinder/Compact Type 25A-CXSJ Series 

$\varnothing$ 6, Ø 10, $\varnothing ~ 15, ~ \varnothing ~ 20, ~ \varnothing ~ 25, ~ \varnothing ~ 32 ~$

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.

# Dual Rod Cylinder Basic Type 

25A-CXS Series
$\varnothing$ 6, Ø 10, Ø 15, Ø 20, Ø 25, Ø 32 ROHS

How to Order


## Slide <br> bearing type

25A-CXSM 25

Series compatible with secondary batteries
Bearing type

| $\mathbf{M}$ | Slide bearing |
| :---: | :---: |
|  |  |
| Bore size/Stroke [mm] |  |


| Bore size | Standard stroke [mm] |
| :---: | :--- |
| $\mathbf{6}$ | $10,20,30,40,50$ |
| $\mathbf{1 0}$ | $10,15,20,25,30,35,40,45$, <br> $50,60,70,75$ |
| $\mathbf{1 5 , 2 0}$ | $10,15,20,25,30,35,40,45$, <br> $\mathbf{2 5 , 3 2}$ <br> $50,60,70,75,80,90,100$ |



- $\quad$ Without auto switch (Built-in magnet)
* Refer to page 258 for applicable auto switches.
* 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.

For details, refer to the Web Catalogue.

# Guide Cylinder 25A-MGG Series Ø 20, Ø 25, Ø 32, Ø 40, Ø 50 



| - | 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.

For details, refer to the Web Catalogue.

# Rotary Clamp Cylinder: Standard 25A-MK Series Ø 12, Ø 16, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50, Ø 63 

How to Order

Series compatible with ${ }^{\circ}$ secondary batteries

## 25A - MKB 20




| - | M thread | $\varnothing 12$ to $\varnothing 25$ |
| :---: | :---: | :---: |
|  | Rc | 032 to $\varnothing 63$ |
| TN | NPT |  |
| TF | G |  |

Clamp stroke

| Symbol | Clamp stroke | Applicable bore size |
| :---: | :---: | :---: |
| $\mathbf{1 0}$ | 10 mm | $\varnothing 12$ to $\varnothing 63$ |
| $\mathbf{2 0}$ | 20 mm |  |
| $\mathbf{3 0}$ | 30 mm |  |
| $\mathbf{5 0}$ | 50 mm | $\varnothing 32$ |



* The coil scraper is not built-in.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

# Stopper Cylinder/Fixed Mounting Height 25A-RSQ Series $\varnothing 12, \varnothing 16, \varnothing 20, \varnothing 32, \varnothing 40, \varnothing 50$ RoHs 




* 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 |  | Bore size [mm] |  |  |  |  |  | Contents |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 8 | 10 | 12 | 16 | 20 | 25 |  |
|  | Rod end nut | C85NT08A-S |  | C85NT10A-S |  | C85NT20A-S | C85NT25A-S | 1 rod end nut |
|  | Mounting nut | C85NT08B-S |  | C85NT10B-S |  | C85NT20B-S |  | 1 mounting nut |
| \% | Foot (1 pc.) | 25A-C85L10A |  | 25A-C85L16A |  | 25A-C85L25A |  | 1 foot bracket |
| 遃 | Foot (2 pcs. with 1 mounting nut) | 25A-C85L10B |  | 25A-C85L16B |  | 25A-C85L25B |  | 2 foot brackets, 1 mounting nut |
| 을 | Foot (1 pc. with 1 mounting nut) | 25A-C85L10C |  | 25A-C85L16C |  | 25A-C85L25C |  | 1 foot bracket, 1 mounting nut |
| ¢ | Flange | 25A-C85F10 |  | 25A-C85F16 |  | 25A-C85F25 |  | 1 flange |
| $\Sigma$ | Trunnion | C85T10 |  | C85T16 |  | C85T25 |  | 1 trunnion |
|  | Clevis | 25A-C85C10 |  | 25A-C85C16 |  | 25A-C85C25 |  | 1 clevis pivot bracket, 1 clevis pin, 2 pin retaining rings |

Replacement Parts: For Standard Type

| Bore size [mm] | Part no. | Note |
| :---: | :---: | :---: |
| 20 | $25 A-C 85 A-20 P S$ | Every set includes: <br> 1 rod seal <br> 1 flat washer <br> 1 retaining ring |
| 25 | $25 A-C 85 A-25 P S$ | $*$ |

When replacing the seals, use grease (GR-S-010: ordered separately) on the sliding parts.

## How to Order



* 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.

For details, refer to the Web Catalogue.

How to Order


* Aside from the standard strokes, intermediate strokes are also available in 1 mm increments and are produced upon receipt of order.

[^39]For details, refer to the Web Catalogue.


## How to Order



Mounting Bracket Part Nos. for the 25A-Series

| Bore size [mm] | Foot*1 | Flange | Single clevis*2 |
| :---: | :---: | :---: | :---: |
| $\mathbf{2 0}$ | 25A-C55-L020 | 25A-C55-F020 | 25A-C55-C020 |
| $\mathbf{2 5}$ | 25A-C55-L025 | 25A-C55-F025 | 25A-C55-C025 |
| $\mathbf{3 2}$ | 25A-C55-L032 | 25A-C55-F032 | - |
| $\mathbf{4 0}$ | 25A-C55-L040 | 25A-C55-F040 | - |
| $\mathbf{5 0}$ | 25A-C55-L050 | 25A-C55-F050 | - |
| $\mathbf{6 3}$ | 25A-C55-L063 | 25A-C55-F063 | - |
| $\mathbf{8 0}$ | 25A-C55-L080 | 25A-C55-F080 | - |
| $\mathbf{1 0 0}$ | 25A-C55-L100 | 25A-C55-F100 | - |

[^40]
# Shock Absorber Soft Type 

RoHS
25A-RJ Series
Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

|  |  | Thread size |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | M6 | M8 | M10 | M14 | M20 | 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 |
|  | With cap |  | 25-RBC08S | 25-RBC10S | 25-RBC14S | 25-RBC20S | 25-RBC27S |

[^41]* The 25A- series specifications and dimensions are the same as those of the standard model.
For details, refer to the Web Catalogue.


## 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 |  |
|  | Basic type | 25-RB08S | 25-RB10S | 25-RB14S |
|  | 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.

For details, refer to the Web Catalogue.

## Shock Absorber



Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

|  |  | Thread size |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | M8 | M10 | M14 | M20 | M27 |
| Hexagon nut |  | 25-RB08J | 25-RB10J | 25-RB14J | 25-RB20J | 25-RB27J |
| Stopper nut | Basic type | 25-RB08S | 25-RB10S | 25-RB14S | 25-RB20S | 25-RB27S |
|  | With cap | 25-RBC08S | 25-RBC10S | 25-RBC14S | 25-RBC20S | 25-RBC27S |

[^42]* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

# Floating Joint <br> 25A-J $\square$ Series 

 secondary batteries
Stainless steel type
Applicable bore size [mm]

| Nominal <br> thread size | Applicable cylinder <br> nominal thread size |
| :---: | :---: |
| $\mathbf{4 - 0 7 0}$ | $\mathrm{M} 4 \times 0.7$ |
| $\mathbf{5 - 0 8 0}$ | $\mathrm{M} 5 \times 0.8$ |
| $\mathbf{8 - 1 2 5}$ | $\mathrm{M} 8 \times 1.25$ |
| $\mathbf{1 0 - 1 2 5}$ | $\mathrm{M} 10 \times 1.25$ |
| $\mathbf{1 4 - 1 5 0}$ | $\mathrm{M} 14 \times 1.5$ |
| $\mathbf{1 8 - 1 5 0}$ | $\mathrm{M} 18 \times 1.5$ |


| Symbol | Applicable <br> bore size $[\mathrm{mm}]$ |
| :---: | :---: |
| 10 | 10 |
| 16 | 10,16 |
| 20 | 20 |
| 32 | 25,32 |
| 40 | 40 |
| 63 | 50,63 |

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

For details, refer to the Web Catalogue.

# Rotary Table: Vane Type 25A-MSUB Series 

Size: 1, 3, 7, 20

How to Order


Available with side ported only, when equipped with auto switch unit.

| Without auto switch |
| :--- |
| With auto switch 25 |
| Series compatible with |
| secondary batteries |
| With |
| (Buit |
| Nominal size (Torque) e |
| 1 MSUB 1 <br> 3 MSUB 3 <br> 7 MSUB 7 <br> 20 MSUB20 |

```
25A-M
With auto switch (Built-in magnet)
``` 25A- M D SUB


Series compatible with secondary batteries
\begin{tabular}{|c|c|c|}
\multicolumn{2}{c|}{ Rotating angle } \\
\hline Application & Symbol & Rotating angle \\
\hline \begin{tabular}{c} 
Single \\
vane
\end{tabular} & 90 & \(90^{\circ}\) \\
\hline & \(\mathbf{1 8 0}\) & \(180^{\circ}\) \\
\hline \begin{tabular}{c} 
Double \\
vane
\end{tabular} & 90 & \(90^{\circ}\) \\
\hline
\end{tabular}

Rotation adjustment range
Single vane: Both ends \(\pm 5^{\circ}\) each Double vane: Both ends \(\pm 2.5^{\circ}\) each

Vane type


Number of auto switches
\begin{tabular}{|c|c|}
\hline \(\mathbf{S}\) & \(1 * 1\) \\
\hline- & \(2 * 2\) \\
\hline
\end{tabular}
*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
- \(\quad\) 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.

\title{
Rotary Table/Rack \& Pinion Type 25A-MSQ Series \\ Size: 10, 20, 30, 50
}

* Zinc is used in part of deep groove ball bearing and seal washer.
* 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

secondary batteries
\begin{tabular}{|c|}
\hline 1 Size \\
\hline 10 \\
\hline 20 \\
\hline 30 \\
\hline 50 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline 2 & Cushion type \\
\hline A & Cushion pad \\
\hline D & Bumper \\
\hline
\end{tabular}
3 Auto switch
\begin{tabular}{|l|l|}
\hline- & Without auto switch (Built-in magnet) \\
\hline
\end{tabular}
* For applicable auto switches, refer to page 259.

6 Made to order
\begin{tabular}{|c|c|}
\hline- & None \\
\hline \(\mathbf{B}\) & With interchangeable table \\
\hline
\end{tabular}

\footnotetext{
* Zinc is used in part of deep groove ball bearing and seal washer.
}
* 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

\section*{Dimensions}

\begin{tabular}{c|r|r|r|l}
\hline & & \multicolumn{1}{c}{} & {\([\mathrm{mm}]\)} \\
\hline Size & AU & AY & HU & SU \\
\hline \(\mathbf{1 0}\) & 6.5 & 6 & 18 & 24 \\
\hline \(\mathbf{2 0}\) & 7.5 & 8 & 26 & 34 \\
\hline \(\mathbf{3 0}\) & 7.5 & 8 & 24 & 32 \\
\hline \(\mathbf{5 0}\) & 10 & 10 & 34 & 45.5 \\
\hline
\end{tabular}
* Dimensions other than those shown above are identical to the standard products.

For details, refer to the Web Catalogue

With vacuum port 25A-MSQ \(\square\) A-X251


Bumper
25A-MSQ \(\square D-X 251\)

\begin{tabular}{c|c|r|c|c|c|c|c|c|c}
\hline \multicolumn{9}{|c|}{} & Size \\
\hline SU & AU & AY & DG & H & HU & R & SB & SU & UU \\
\hline \(\mathbf{1 0}\) & 6.5 & 6 & 35 h 9 & 14.2 & 18 & 5 & 47.2 & 24 & 48.7 \\
\hline \(\mathbf{2 0}\) & 7.5 & 8 & 42 h 9 & 14 & 26 & 6 & 59.9 & 34 & 51 \\
\hline \(\mathbf{3 0}\) & 7.5 & 8 & 48 h 9 & 14 & 24 & 6 & 65.3 & 32 & 58 \\
\hline \(\mathbf{5 0}\) & 10 & 10 & 54 h 9 & 14 & 34 & 7 & 77.7 & 45.5 & 64 \\
\hline
\end{tabular}
* 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


\section*{MSQ Series}

\section*{Made to Order}

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

\section*{1 With Interchangeable Table and Plate}

Applicable Rotary Table
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Model} & \multicolumn{3}{|c|}{Made to order} & \multirow[b]{2}{*}{Note} \\
\hline & With interchangeable & \begin{tabular}{l}
With interchangeable \\
table
\end{tabular} & With interchangeable
plate & \\
\hline 25A-MSQ & \(\bigcirc\) & 0 & \(\bigcirc\) & \\
\hline 25A-MSQ-B-X251 & - & \(\bigcirc\) & - & \\
\hline
\end{tabular}

\section*{How to Order}

\section*{Standard model no.}


Made to order
\begin{tabular}{|l|l|}
\hline A & With interchangeable table and plate \\
\hline B & With interchangeable table \\
\hline
\end{tabular}
With interchangeable table
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)
\begin{tabular}{|c|c|l|}
\hline \multirow{2}{*}{ Size } & \multirow{2}{*}{ Part no. } & \multicolumn{1}{c|}{ Contents } \\
& Description (Qty.) \\
\hline \(\mathbf{1 0}\) & P891010-53 & \begin{tabular}{l} 
- Interchangeable table (1) \\
- Parallel pin (1) \\
- Hexagon socket head cap screw (4) \\
- Interchangeable plate (1) \\
- Cross recessed head machine \\
screw for precision instruments (2)
\end{tabular} \\
\hline \(\mathbf{3 0}\) & P891020-53 & P891030-53 \\
\hline \(\mathbf{5 0}\) & P891050-53 &
\end{tabular}

Interchangeable B Unit (With Interchangeable Table)
\begin{tabular}{|c|c|c|}
\hline \multirow{2}{*}{ Size } & \multirow{2}{*}{ Part no. } & \multicolumn{1}{|c|}{ Contents } \\
& & Description (Qty.) \\
\hline \(\mathbf{1 0}\) & P891010-54 & \\
\hline \(\mathbf{2 0}\) & P891020-54 & - - Parallel pin (1) \\
\hline \(\mathbf{3 0}\) & P891030-54 & - Hexagon socket head cap screw (4) \\
\hline \(\mathbf{5 0}\) & P891050-54 & \\
\hline
\end{tabular}

Interchangeable C Unit (With Interchangeable Plate)
\begin{tabular}{|c|c|c|}
\hline \multirow{2}{*}{ Size } & \multirow{2}{*}{ Part no. } & Contents \\
& P891010-55 & Description (Qty.) \\
\hline \(\mathbf{1 0}\) & . Interchangeable plate (1) \\
\hline \(\mathbf{2 0}\) & P891020-55 & . Cross recessed head machine \\
\hline \(\mathbf{3 0}\) & P891030-55 & screw for precision instruments (2) \\
\hline \(\mathbf{5 0}\) & P891050-55 & \\
\hline
\end{tabular}

* 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 \(\square\)-B-X251 with a vacuum port.

Dimencions * Mounting diagram of the interchangeable table
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 \(\square A-B-X 251\)


\section*{Bumper}

25A-MSQ■D-B-X251

\begin{tabular}{c|r|r|c|c|c|c|c|c|c}
\hline \multicolumn{13}{c|}{} \\
\hline Size & AU & AY & DG & H & HU & R & SB & SU & UU \\
\hline \(\mathbf{1 0}\) & 6.5 & 6 & 35 h 9 & 21 & 18 & 5 & 47.2 & 24 & 55.7 \\
\hline \(\mathbf{2 0}\) & 7.5 & 8 & 42 h 9 & 23 & 26 & 6 & 59.9 & 34 & 60 \\
\hline \(\mathbf{3 0}\) & 7.5 & 8 & 48 h 9 & 23 & 24 & 6 & 65.3 & 32 & 67 \\
\hline \(\mathbf{5 0}\) & 10 & 10 & 54 h 9 & 26 & 34 & 7 & 77.7 & 45.5 & 75.5 \\
\hline
\end{tabular}

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.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Auto Switches & Electric Actuators & Process Gas Equipment & Fluid Control Equipment & Detection Switches & \[
\begin{gathered}
\text { Flow Control } \\
\text { Equipment/ } \\
\text { Fittings }
\end{gathered}
\] & \[
\begin{array}{|c|}
\hline \text { Modular F.R.L./. } \\
\text { Pressure Control } \\
\text { Equipment }
\end{array}
\] & Clean Air Filters & Air Preparation Equipment & Vacuum Equipment & Air Grippers & Rotary Actuators & Related Products & Air Cylinders & Directional Control Valves \\
\hline
\end{tabular}

\title{
Rotary Table/Rack \& Pinion Type 25A-MSQ Series Size: 10, 20, 30, 50, 70, 100, 200
}

*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.


\section*{Dimensions}

\section*{25A-MSQB \(\square\) A}


25A-MSQB \(\square A X-X 251\)

\begin{tabular}{c|r|c|c|c|c|c|c|c}
\hline \multicolumn{8}{c}{} & Hm] \\
\hline Size & AY & DG & FD & H & HA & HB & SU & UU \\
\hline \(\mathbf{1 0}\) & 6 & 35h9 & 11.5 & 20 & 5.5 & 5 & 23.7 & 59 \\
\hline \(\mathbf{2 0}\) & 8 & 40 h 9 & 11.5 & 22 & 5.5 & 6 & 33 & 65 \\
\hline \(\mathbf{3 0}\) & 8 & 48 h 9 & 11.5 & 22 & 5.5 & 6 & 33 & 68 \\
\hline \(\mathbf{5 0}\) & 10 & 54 h 9 & 11.5 & 24 & 5.5 & 7 & 42.9 & 77 \\
\hline \(\mathbf{7 0}\) & 16 & 50 h 9 & 12 & 25 & 6 & 7 & 44.2 & 85 \\
\hline \(\mathbf{1 0 0}\) & 16 & 52 h 9 & 12 & 27 & 6 & 7 & 44.3 & 93 \\
\hline \(\mathbf{2 0 0}\) & 21 & 64 h 9 & 15 & 32 & 7.5 & 8 & 52.2 & 114 \\
\hline
\end{tabular}
* 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.

\section*{For details, refer to the Web Catalogue.}

\title{
3-Position Rotary Table 25A-MSZ Series
} Size: 10, 20, 30, 50

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

For details, refer to the Web Catalogue.

Compact Type Parallel Style Air Gripper

\section*{25A-JMHZ2 Series}

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

\section*{How to Order}

\section*{Bore Size}

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

\section*{Bore Size}

\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{1 Number of fingers}} & \multicolumn{2}{|l|}{(2) Bore size} \\
\hline & & 8 & 8 mm \\
\hline 2 & 2 & 12 & 12 mm \\
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{}} & 16 & 16 mm \\
\hline & & 20 & 20 mm \\
\hline
\end{tabular}

* 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.

\section*{Bore Size}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{4}{|c|}{Ø 8 to Ø 20 Made to Order} & \multicolumn{2}{|r|}{\multirow[t]{2}{*}{JM-H2}} & \multicolumn{2}{|l|}{\[
2-5
\]} & \multicolumn{2}{|l|}{M98M} & \multicolumn{2}{|l|}{460} \\
\hline \multicolumn{4}{|r|}{Series compatible with secondary batteries} & & & & \[
23
\] & & 6 & & auto mounting \\
\hline \multicolumn{2}{|r|}{\multirow[t]{2}{*}{Number of fingers}} & \multicolumn{2}{|l|}{(2) Bore size} & \multicolumn{2}{|l|}{(3) Action} & \multicolumn{2}{|l|}{(4) Finger option} & \multicolumn{2}{|l|}{(5) Auto switch} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{6 Number of auto switches}} \\
\hline & & 8 & 8 mm & D & Double acting & - & Standard & \multirow[t]{2}{*}{} & \multirow[t]{2}{*}{Without auto switch (Built-in magnet)} & & \\
\hline 2 & 2 & 12 & 12 mm & & & 1 & Side tapped mounting & & & - & 2 \\
\hline \multicolumn{4}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{|l|l|}
\hline \(\mathbf{1 6}\) & 16 mm \\
\hline \(\mathbf{2 0}\) & 20 mm \\
\hline
\end{tabular}}} & & & \multirow[t]{2}{*}{2} & \multirow[t]{2}{*}{Through-holes in opening/ closing direction} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{* Refer to page 260 for applicable auto switch models.}} & S & 1 \\
\hline & & & & & & & & & & & \\
\hline
\end{tabular}
* 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.

\section*{Parallel Type Air Gripper Standard Type} 25A-MHZ2 Series \(\varnothing 10, \varnothing 16, \varnothing 20, \varnothing 25, \varnothing 32, \varnothing 40\) ROHS

How to Order
Bore size

\section*{Ø 16 to \(\varnothing 25\) 25A-MHZ2-16 D}

Series compatible with secondary batteries

Number of fingers
\begin{tabular}{|l|l|}
\hline 2 & 2 fingers \\
\hline
\end{tabular}
Bore size
\begin{tabular}{|l|l|}
\hline \(\mathbf{1 0}\) & 10 mm \\
\hline \(\mathbf{1 6}\) & 16 mm \\
\hline \(\mathbf{2 0}\) & 20 mm \\
\hline \(\mathbf{2 5}\) & 25 mm \\
\hline
\end{tabular}

Action
D \(\quad\) Double acting


\section*{Bore size}


Series compatible with secondary batteries

Number of fingers


Action
D \(\quad\) Double acting

- Auto switch
- \(\quad\) Without auto switch (Built-in magnet)
* Refer to page 260 for applicable auto switch models.
- Finger option
\begin{tabular}{|llll|}
\hline [Standard] \\
-: \\
Basic type
\end{tabular} \begin{tabular}{c} 
1: Side tapped \\
mounting
\end{tabular}\(\quad\)\begin{tabular}{l} 
2: Through-holes \\
in opening/ \\
closing direction
\end{tabular}\(\quad\)\begin{tabular}{c} 
3: Flat type \\
fingers
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

\title{
Parallel Type Air Gripper Long Stroke Type 25A-MHZL2 Series Ø 10, Ø 16, Ø 20, Ø 25
}

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.

\section*{Parallel Type Air Gripper with Dust Cover}

* Sizes Ø 32 and Ø 40 of the 25A- series have the same specifications and dimensions as those of the MHZJ2-X6100 (made-to-order individual specifications).

For details, refer to the Web Catalogue.
Long Stroke Type/ With Dust Cover (Made to Order)

* The 25A- specifications and dimensions are the same as those of the MHZL2-X6110 (made to order individual specifications).

\title{
Low Profile Air Gripper 25A-MHF2 Series Ø 8, Ø 12, Ø 16, Ø 20
}

\section*{25A-MHF 2-12 D \\ Number of fingers \\ 2 2 fingers \\ - Series compatible with secondary batteries}
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|c|}{ Bore size \([\mathrm{mm}]\)} \\
\hline \(\mathbf{8}\) & 8 \\
\hline \(\mathbf{1 2}\) & 12 \\
\hline \(\mathbf{1 6}\) & 16 \\
\hline \(\mathbf{2 0}\) & 20 \\
\hline
\end{tabular}

Action
D Double acting

Stroke
\begin{tabular}{|c|l|}
\hline- & Short stroke \\
\hline \(\mathbf{1}\) & Medium stroke \\
\hline \(\mathbf{2}\) & Long stroke \\
\hline
\end{tabular}
\(\square\)

Number of auto switches
\begin{tabular}{|c|c|}
\hline- & 2 \\
\hline \(\mathbf{S}\) & 1 \\
\hline \(\mathbf{n}\) & n \\
\hline
\end{tabular}

\section*{-Auto switch}
- Without auto switch (Built-in magnet)
* Refer to page 261 for applicable auto switch models.
- Body option
-: Axial piping type


R: Side piping type

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

For details, refer to the Web Catalogue.

\title{
Parallel Type Air Gripper: Wide Type 25A-MHL2 Series
} \(\varnothing 10, \varnothing 16, \varnothing 20, \varnothing 25, \varnothing 32, \varnothing 40\) RoHS

How to Order

\begin{tabular}{|l|l|}
\hline \(\mathbf{1 0}\) & 10 mm \\
\hline \(\mathbf{1 6}\) & 16 mm \\
\hline \(\mathbf{2 0}\) & 20 mm \\
\hline \(\mathbf{2 5}\) & 25 mm \\
\hline \(\mathbf{3 2}\) & 32 mm \\
\hline \(\mathbf{4 0}\) & 40 mm \\
\hline
\end{tabular}
* Refer to page 261 for applicable auto switch models.
Opening/Closing stroke
\begin{tabular}{|c|c|c|r|r|r|r|}
{\([\mathrm{Cm}]\)} \\
\hline Symbol & \(\varnothing 10\) & \(\varnothing 16\) & \(\varnothing 20\) & \(\varnothing 25\) & \(\varnothing 32\) & \(\varnothing 40\) \\
\hline- & 20 & 30 & 40 & 50 & 70 & 100 \\
\hline \(\mathbf{1}\) & 40 & 60 & 80 & 100 & 120 & 160 \\
\hline \(\mathbf{2}\) & 60 & 80 & 100 & 120 & 160 & 200 \\
\hline
\end{tabular}

\section*{Action}

D \(\quad\) Double acting
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Series compatible with secondary batteries

- Number of auto switches
\begin{tabular}{|c|c|}
\hline- & 2 \\
\hline \(\mathbf{S}\) & 1 \\
\hline \(\mathbf{n}\) & n \\
\hline
\end{tabular}
-Auto switch
- \(\quad\) Without auto switch (Built-in magnet)
* Refer to page 261 for applicable auto switch models.
-Opening/Closing stroke [mm]
\begin{tabular}{|c|c|c|r|r|r|r|}
\hline Symbol & \(\varnothing 10\) & \(\varnothing 16\) & \(\varnothing 20\) & \(\varnothing 25\) & \(\varnothing 32\) & \(\varnothing 40\) \\
\hline \(\mathbf{1}\) & 20 & 30 & 40 & 50 & 70 & 100 \\
\hline \(\mathbf{1}\) & 40 & 60 & 80 & 100 & 120 & 160 \\
\hline \(\mathbf{2}\) & 60 & 80 & 100 & 120 & 160 & 200 \\
\hline
\end{tabular}

Action \({ }^{\circ}\)
\begin{tabular}{|l|l|}
\hline D & Double acting \\
\hline
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

\title{
Parallel Type Air Gripper 25A-MHS \(\square\) Series Ø 16, Ø 20, Ø 25, Ø 32
}
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

Series compatible with secondary batteries

Number of fingers
\begin{tabular}{|l|l|}
\hline 3 & 3 fingers \\
\hline 4 & 4 fingers \\
\hline
\end{tabular}

\section*{ \\ 25A-MHS 3-20D-M9BW}

Bore size
\begin{tabular}{|l|l|}
\hline \(\mathbf{1 6}\) & 16 mm \\
\hline \(\mathbf{2 0}\) & 20 mm \\
\hline \(\mathbf{2 5}\) & 25 mm \\
\hline \(\mathbf{3 2}\) & 32 mm \\
\hline
\end{tabular}

\section*{Auto switch}
- Without auto switch (Built-in magnet)
* Refer to page 261 for applicable auto switch models.
- Action

D Double acting


\title{
Parallel Type Air Gripper 3-Finger Type with Dust Cover 25A-MHSJ3 Series Ø 16, Ø 20, Ø 25, Ø 32
}

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.

\title{
\(180^{\circ}\) Angular Type Air Gripper Cam Type 25A-MHY2 Series Ø 10, Ø 16, Ø 20, Ø 25 \\ 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.

\section*{\(180^{\circ}\) Angular Type Air Gripper Rack \& Pinion Type 25A-MHW2 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.

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

For details, refer to the Web Catalogue.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \[
\begin{aligned}
& \text { Auto } \\
& \text { Switches }
\end{aligned}
\] & Electric Actuators & Process Gas Equipment & Fluid Control
Equipment & Detection Switches & Flow Control
Equipment/
Fittings & \[
\begin{array}{|c|}
\hline \text { Modular F.R.L./. } \\
\text { Pressure Control } \\
\text { Equipment }
\end{array}
\] & Clean
Air Filters & \begin{tabular}{|c} 
Air Preparation \\
Equipment
\end{tabular} & Vacuum Equipment & Air Grippers & Rotary Actuators & Related Products & Air Cylinders & Directional
Control Valves \\
\hline
\end{tabular}

\title{
Ejector System Vacuum Unit 25A ZK2 A
}
\(25 A-Z K 2 \square A\) Series

\section*{Single Unit Ejector + With Valve + Without Energy Saving Function}

How to Order

\section*{}

*1 With exhaust port when (2) is 12 or 15
Rated voltage (Supply valve/Release valve)
\begin{tabular}{|c|c|}
\hline Symbol & Voltage \\
\hline \(\mathbf{5}\) & 24 VDC \\
\hline \(\mathbf{6}\) & 12 VDC \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow{3}{*}{Symbol} & \multirow{3}{*}{Type} & \multirow{3}{*}{Pressure range [kPa]} & \multicolumn{3}{|r|}{Specifications} \\
\hline & & & NPN & PNP & With unit selection \\
\hline & & & \multicolumn{2}{|l|}{2 outputs} & \\
\hline A & \multirow{8}{*}{} & \multirow{4}{*}{0 to -101} & \(\bullet\) & - & \(\bullet\) \\
\hline B & & & \(\bullet\) & - & None (SI unit only) \\
\hline C & & & - & \(\bullet\) & \(\bullet\) \\
\hline D & & & - & \(\bullet\) & None (SI unit only) \\
\hline E & & \multirow{4}{*}{-100 to 100} & \(\bullet\) & - & \(\bullet\) \\
\hline F & & & \(\bullet\) & - & None (SI unit only) \\
\hline H & & & - & \(\bullet\) & \(\bullet\) \\
\hline J & & & - & \(\bullet\) & None (SI unit only) \\
\hline P & \multirow[t]{2}{*}{Pressure sensor} & 0 to -101 & \multicolumn{3}{|r|}{\multirow[t]{2}{*}{Analogue output 1 to 5 V}} \\
\hline T & & -100 to 100 & & & \\
\hline N & Without p & essure switch & rvacu & m/pres & sure sensor \\
\hline
\end{tabular}
*3 The unit for the type without the unit selection function is fixed as kPa .
\begin{tabular}{|c|c|}
\hline 7 Vacuum (V) port \\
\begin{tabular}{|c|c|}
\hline Symbol & Vacuum (V) port \\
\hline 06 & \(\varnothing 6\) \\
\hline 08 & \(\varnothing 8\) \\
\hline
\end{tabular}
\end{tabular}

* 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
\begin{tabular}{|c|c|c|c|}
\hline \multirow{2}{*}{ Symbol } & \multicolumn{2}{|c|}{ Supply valve } & Release valve \\
\cline { 2 - 4 } & N.C. & Self-holding & N.C. \\
\hline \(\mathbf{K}\) & \(\bullet\) & - & \(\bullet\) \\
\hline \(\mathbf{J}\) & \(\bullet\) & - & - \\
\hline \(\mathbf{R}\) & - & \(\bullet * 2\) & \(\bullet\) \\
\hline
\end{tabular}
*2 Supply valve maintains vacuum by energization ( 20 ms or more). Stopping the vacuum turns on the release valve.

\section*{6 Connector (Supply valve/Release valve/Pressure switch for vacuum)}
\begin{tabular}{|c|c|c|c|c|}
\hline 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 \\
\hline L & - & \multicolumn{2}{|c|}{\(\bigcirc\)} & \multirow[t]{2}{*}{Cannot be selected when 5 is N} \\
\hline L1 & None & \multicolumn{2}{|c|}{\(\bigcirc\)} & \\
\hline L2 & \(\bigcirc\) & \multicolumn{2}{|c|}{None} & \multirow[t]{2}{*}{Cannot be selected when 5 is P or T} \\
\hline L3 & None & \multicolumn{2}{|c|}{None} & \\
\hline
\end{tabular}
*4 For the connector length other than 300 mm , select L 1 or L 3 , and order the connector assembly on page 178 separately.

8 Option*5 (For details on the Function/Application, refer to page 179.)

*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 \(\varnothing\) 6.2)
* The 25A- series specifications and dimensions are the same as those of the standard model.

\title{
Ejector System Vacuum Unit

} 25A-ZK2 \(\square A\) Series


\title{
Ejector System Vacuum Unit \\ 25A-ZK2 \(\square A\) Series \\ \(\in\) ©
}


*1 With exhaust port when (2) is 12 or 15
\begin{tabular}{|c|c|}
\hline 2 & Nominal nozzle size \\
\hline Symbol & Nominal nozzle size \\
\hline \(\mathbf{0 7}\) & \(\varnothing 0.7\) \\
\hline \(\mathbf{1 0}\) & \(\varnothing 1.0\) \\
\hline \(\mathbf{1 2}\) & \(\varnothing 1.2\) \\
\hline \(\mathbf{1 5}\) & \(\varnothing 1.5\) \\
\hline
\end{tabular}
* 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 Pressure switch for vacuum/Pressure sensor
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow{3}{*}{Symbol} & \multirow{3}{*}{Type} & \multirow{3}{*}{Pressure range [kPa]} & \multicolumn{3}{|r|}{Specifications} \\
\hline & & & NPN & PNP & \multirow[t]{2}{*}{With unit selection function*2} \\
\hline & & & \multicolumn{2}{|l|}{2 outputs} & \\
\hline A & \multirow{8}{*}{} & \multirow{4}{*}{0 to -101} & \(\bigcirc\) & - & - \\
\hline B & & & \(\bigcirc\) & - & None (SI unit only) \\
\hline C & & & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline D & & & - & \(\bigcirc\) & None (SI unit only) \\
\hline E & & \multirow{4}{*}{-100 to 100} & \(\bigcirc\) & - & \(\bigcirc\) \\
\hline F & & & \(\bigcirc\) & - & None (SI unit only) \\
\hline H & & & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline J & & & - & \(\bigcirc\) & None (SI unit only) \\
\hline P & \multirow[t]{2}{*}{Pressure sensor} & 0 to -101 & \multicolumn{3}{|r|}{\multirow[b]{2}{*}{Analogue output 1 to 5 V}} \\
\hline T & & -100 to 100 & & & \\
\hline N & \multicolumn{5}{|l|}{Without pressure switch for vacuum/pressure sensor} \\
\hline
\end{tabular}
*2 The unit for the type without the unit selection function is fixed as kPa .

5 Vacuum (V) port
\begin{tabular}{|c|c|}
\hline Symbol & Vacuum (V) port \\
\hline 06 & \(\boxed{ } 6\) \\
\hline 08 & \(\varnothing 8\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline Symbol & & Type & Note \\
\hline - & Without option & & - \\
\hline B & Mounting bracket for single unit (nuts and bolts are included) &  & - \\
\hline W & With exhaust interference prevention valve &  & Install the release valve or vacuum breaker in the middle of the vacuum piping \\
\hline
\end{tabular}

\footnotetext{
*3 When more than one option is selected, list the option symbols in alphabetical order. (Example -BW)
}

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

For details, refer to the Web Catalogue.

\section*{vacuum Unit 25A-ZK2 \(\square A\) Series}

\section*{Replacement Parts for Single Unit / How to Order}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|l|}{Valve assembly} \\
\hline \multirow[t]{2}{*}{25A-ZK2 - VA} & \multicolumn{3}{|l|}{A K 5 L A-A} & & \\
\hline & & 2 & & & \\
\hline (1) Applicable system & \multicolumn{3}{|l|}{(2) Valve type} & \multicolumn{2}{|l|}{(3) Rated voltage} \\
\hline \multirow[t]{3}{*}{A Ejector system} & K & Supply vave & V., Release vave: N.C. & 5 & \({ }^{24 \mathrm{VDC}}\) \\
\hline & R & Supply val
vave line & : Self.holding release & & 12 VDC \\
\hline & & Supop wave & 1.C. Reaseasevave: None & & \\
\hline
\end{tabular}

\section*{(4) Wiring}
\begin{tabular}{|c|c|}
\hline L & \begin{tabular}{c} 
Individual wiring: With connector assembly \\
(Lead wire length: 300 mm )
\end{tabular} \\
\hline LO & Individual wiring: Without connector assembly \\
\hline
\end{tabular}

Select the 25A-ZK2VAAK \(\square\) LOA-A for a switch with energy saving function.
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{Connector assembly} \\
\hline \multicolumn{4}{|c|}{ZK2 - LV W} \\
\hline \multicolumn{2}{|l|}{Applicable valve typed} & \multicolumn{2}{|l|}{Lead wire length} \\
\hline W & Valve type K/R & - & 300 mm \\
\hline S & Valve type J & 6 & 600 mm \\
\hline \multicolumn{2}{|l|}{\multirow[t]{3}{*}{}} & 10 & 1000 mm \\
\hline & & 20 & 2000 mm \\
\hline & & 30 & 3000 mm \\
\hline
\end{tabular}

Sound absorbing material (10 pcs. per set)


Vacuum port adapter assembly (Purchasing order is available in units of 1 piece.)


Filter element (10 pcs. per set)


Body gasket*1 (10 pcs. per set)
ZK2 - BG5 - \begin{tabular}{|c}
\(\sqrt[1]{\text { oApplicable type }}\)
\end{tabular}
One check valve type
\begin{tabular}{|c|c|}
\hline \(\mathbf{1}\) & \begin{tabular}{c} 
One check valve type \\
(All specifications other than vacuum switch with \\
energy saving function and exhaust interference \\
prevention valve)
\end{tabular} \\
\hline \(\mathbf{2}\) & \begin{tabular}{c} 
Two check valve type \\
(Vacuum switch with energy saving function and \\
exhaust interference prevention valve)
\end{tabular} \\
\hline
\end{tabular}

\footnotetext{
*1 When ZK2-BG5-2-A is mounted, the workpiece cannot be removed until
} vacuum is released

Filter case*1

*1 Vacuum port adapter assembly is not included.
Pressure switch for vacuum assembly (With 2 mounting screws)

(1) Rated pressure range and function
\begin{tabular}{|c|c|c|c|}
\hline \(\mathbf{E}\) & 0 to -101 kPa & Pressure switch for vacuum & Open collector 2 outputs \\
\hline F & -100 to 100 kPa & \\
\hline V & -100 to 100 kPa & Pressure swith hor vacuum with energy saving function & Open collector 1 output \\
\hline
\end{tabular}

*1 Fixed unit: kPa
(4) Lead wire with connector


\section*{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
\[
\begin{aligned}
& \text { ZK2-LW A } 20 \text {-A } \\
& \text { - Output } \\
& \text { A NPN open collector } \\
& \text { PNP open collector }
\end{aligned}
\]

Pressure sensor assembly (With 2 mounting screws)


High-noise reduction silencer case assembly
ZK2-SC3-4-A
\({ }^{\text {Applicable nozzle size }}\)
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

Optional Specifications/Functions/Applications

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \[
\begin{aligned}
& \text { Auto } \\
& \text { Switches }
\end{aligned}
\] & Electric Actuators & Process Gas
Equipment & Fluid Control
Equipment & Detection Switches & Flow Control
Equipment/
Fittings & \(\left|\begin{array}{c}\text { Modular F.R.L./. } \\ \text { Pressure Control } \\ \text { Equipment }\end{array}\right|\) & Clean Air Filters & Air Preparation Equipment & Vacuum Equipment & Air Grippers & Rotary Actuators & Related Products & Air Cylinders & \[
\left\lvert\, \begin{gathered}
\text { Directional } \\
\text { Control Valves }
\end{gathered}\right.
\] \\
\hline
\end{tabular}

\title{
Ejector System Compact Vacuum Unit \\ With Energy Saving Function
}

\section*{Single Unit Part Number}

How to Order

\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|c|}{ Electrical entry } \\
\hline LO & \begin{tabular}{c} 
L plug connector (Without connector) \\
With light/surge voltage suppressor
\end{tabular} \\
\hline
\end{tabular}
\begin{tabular}{l}
6 Manual override \\
\hline ( \\
\hline B \\
\hline Bon-locking push type \\
\hline
\end{tabular}
Vacuum pressure switch (With suction filter*1)
\begin{tabular}{|c|c|c|}
\hline Symbol & Pressure range [kPa] & \multicolumn{1}{c|}{ Output } \\
\hline VA & \multirow{2}{*}{-100 to 100} & NPN 1 output + Energy saving function \\
\cline { 1 - 1 } & & PNP 1 output + Energy saving function \\
\hline
\end{tabular}
*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.

10 Fitting (V port)
\begin{tabular}{|c|c|}
\hline Symbol & Applicable tubing O.D. \\
\hline \(\mathbf{0}\) & Without fitting (M5 x 0.8) \\
\hline
\end{tabular} ar
\begin{tabular}{|c|c|}
\hline 0 & Without fitting (M5 x 0.8) \\
\hline
\end{tabular}


Lead wire
\begin{tabular}{c|c|} 
- & Without lead wire with connector \\
W & \(\begin{array}{c}\text { Lead wire for switch with energy saving } \\
\text { function (Length: } 2 \mathrm{~m} \text { ) (Included) }\end{array}\) \\
\hline
\end{tabular}
(11) Fitting (P port)
\begin{tabular}{|c|c|c|}
\hline Symbol & Applicable tubing O.D. & Specification \\
\hline- & Without port & Manifold \\
\hline \(\mathbf{0}\) & Without fitting (M5 \(\times 0.8\) ) & Single unit \\
\hline
\end{tabular}
12 Option
\begin{tabular}{|c|c|c|}
\hline \multirow{3}{*}{} & Bracket for single unit \\
\cline { 2 - 3 } & Single unit & Manifold \\
\hline- & With & Without \\
\hline \(\mathbf{N}\) & Without & Not available \\
\hline
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

\title{
\(25 A-Z Q \square A\) Series
}

How to Order


\section*{Manual override}
\begin{tabular}{|c|c|}
\hline & Non-locking push type \\
\cline { 2 - 2 } & \begin{tabular}{c} 
Latching: \\
Push-locking slotted type
\end{tabular} \\
\hline \(\mathbf{B}^{* 2}\) & Locking slotted type \\
\hline
\end{tabular}
*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 .
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{7 Vacuum pressure switch (With suction filter*3)} \\
\hline Symbol & Pressure range [kPa] & Output \\
\hline EA & \multirow{4}{*}{0 to -100} & NPN 2 outputs \\
\hline EB & & PNP 2 outputs \\
\hline EC & & NPN 1 output + Analogue voltage \\
\hline EE & & PNP 1 output + Analogue voltage \\
\hline FA & \multirow{4}{*}{-100 to 100} & NPN 2 outputs \\
\hline FB & & PNP 2 outputs \\
\hline FC & & NPN 1 output + Analogue voltage \\
\hline FE & & PNP 1 output + Analogue voltage \\
\hline F*4 & & on filter only \\
\hline
\end{tabular}
*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 8 and \(\boldsymbol{9}\).


\section*{(9) Lead wire}
\begin{tabular}{|c|c|}
\hline- & \begin{tabular}{c} 
Without lead wire with \\
connector
\end{tabular} \\
\hline \(\mathbf{G}\) & \begin{tabular}{c} 
Lead wire with connector \\
(Length: 2 m ) (Included)
\end{tabular} \\
\hline
\end{tabular}

*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 " 1 U ", or 3 is " J 1 ", " J 2 ", or "Q2"

\section*{\(\triangle\) Warning}
- Cannot be used for vacuum retention
- Use a release valve. Without a release valve, a workpiece may not be released.
11 Fitting (V port)
\begin{tabular}{|c|}
\hline Symbol \\
\hline \(\mathbf{A p p l i c a b l e}\) tubing O.D. \\
\hline \(\mathbf{0}\) \\
Without fitting (M5 \(\times 0.8\) ) \\
\hline
\end{tabular}

\section*{(12) Fitting (P port)}
\begin{tabular}{|c|c|c|}
\hline Symbol & Applicable tubing O.D. & Specification \\
\hline- & Without port & Manifold \\
\hline \(\mathbf{0}\) & Without fitting (M5 x 0.8) & Single unit \\
\hline
\end{tabular}

3 Option
For Single Unit (2: 1U)
\begin{tabular}{|c|c|c|}
\hline Symbol & \begin{tabular}{c} 
Bracket \\
assembly
\end{tabular} & \begin{tabular}{c} 
Converter assembly \\
for solenoid valve* 8
\end{tabular} \\
\hline- & 0 & - \\
\hline N & - & - \\
\hline C & - & 0 \\
\hline D & O & 0 \\
\hline
\end{tabular}

For Manifold (2: 3M)
\begin{tabular}{|c|c|c|}
\hline Symbol & \begin{tabular}{c} 
Release pressure \\
supply (PD) port*9
\end{tabular} & \begin{tabular}{c} 
Converter assembly \\
for solenoid valve*8
\end{tabular} \\
\hline- & - & - \\
\hline S & \(\bigcirc\) & - \\
\hline C & - & \(\bigcirc\) \\
\hline E & \(\bigcirc\) & \(\bigcirc\) \\
\hline
\end{tabular}
*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 .

\title{
Ejector System Compact Vacuum Unit \(25 A-Z Q \square A\) Series
}

Manifold Part Number

How to Order

\begin{tabular}{l}
\hline Stations \({ }^{* 1}\) \\
\begin{tabular}{|c|c|}
\hline \(\mathbf{0 1}\) & 1 station \\
\hline \(\mathbf{0 2}\) & 2 stations \\
\hline\(\vdots\) & \(\vdots\) \\
\hline \(\mathbf{0 8}\) & 8 stations \\
\hline
\end{tabular}
\end{tabular}
*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
\begin{tabular}{|c|c|}
\hline \begin{tabular}{c} 
Nominal nozzle \\
size
\end{tabular} & \begin{tabular}{c} 
Max. number of stations that \\
can operate simultaneously
\end{tabular} \\
\hline \(\mathbf{0 . 5}\) & 8 stations \\
\hline \(\mathbf{0 . 7}\) & 6 stations \\
\hline \(\mathbf{1 . 0}\) & 4 stations \\
\hline
\end{tabular}
*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
Air pressure supply (P) port location
\begin{tabular}{|c|c|}
\hline B & Both sides \\
\hline
\end{tabular}

Release pressure supply (PD) port
\begin{tabular}{|c|c|}
\hline B & \begin{tabular}{c} 
None (Release pressure: Commonly \\
supplied from the P port)
\end{tabular} \\
\hline \(\mathbf{C} * 3\) & \begin{tabular}{c} 
Provided (Release pressure: Supplied \\
from the PD port)
\end{tabular} \\
\hline
\end{tabular}
*3 If the individual unit does not have the energy saving function, select " S " or " E " in \((13\) for the single unit part number on page 180-2.
* 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

\section*{25A-ZZQ104A-BSB}
\(\qquad\) 1 pc.
* 25A-ZQ053MA-K15L-EAG-0 \(\cdots 2\) pcs. \(\rightarrow\) Stations 1 and 2
* 25A-ZQ103MA-K15L-F-0

2 pcs. \(\rightarrow\) Stations 3 and 4
* When the manifold is viewed from the vacuum \((\mathrm{V})\) port, the first station starts from the left.
25A-ZQ053MA-K15L-EAG-0 (2 pcs.) and 25A-ZQ103MA-K15L-F-0 (2 pcs.) are arranged from the first station.

\section*{© Caution when ordering manifold}


I The asterisk (*) denotes the symbol for the assembly
I Prefix it to the single unit part number.
I If "*" is not entered, the manifold and single unit will be shipped without being assembled.
I 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.
I There is nothing else to arrange additionally.

\title{
Vacuum Pump System Compact Vacuum Unit \\ \(25 A-Z Q \square A\) Series \\ G 自 RoHS
}

Single Unit Part Number

How to Order

1 Body type
\begin{tabular}{|c|c|}
\hline \(\mathbf{U}\) & For Single unit \\
\hline \(\mathbf{M}\) & For Manifold \\
\hline
\end{tabular}
2) Solenoid valve combination
\begin{tabular}{|c|c|}
\hline K1 & Supply valve (N.C.), Release valve (N.C.) \\
\hline K2 & Supply valve (N.O.), Release valve (N.C.) \\
\hline \(\mathbf{J 1 * 1}^{* 1}\) & Supply valve (N.C.) \\
\hline \(\mathbf{J 2}^{* 1}\) & Supply valve (N.O.) \\
\hline Q1*2 & Supply valve (Latching), Release valve (N.C.) \\
\hline Q2*1 *2 & Supply valve (Latching) \\
\hline
\end{tabular}
*1 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.
*2 Latching (+ common)

\section*{Solenoid valve rated voltage} \begin{tabular}{|l|l|}
\hline \(\mathbf{5}\) & 24 VDC \\
\hline
\end{tabular}

Electrical entry
\begin{tabular}{|c|c|}
\hline \(\mathbf{L}\) & \begin{tabular}{c} 
L plug connector (Lead wire length: 0.3 m ) \\
With light/surge voltage suppressor
\end{tabular} \\
\hline LO & \begin{tabular}{c} 
L plug connector (Without connector) \\
With light/surge voltage suppressor
\end{tabular} \\
\hline
\end{tabular}

\section*{Manual override}
\begin{tabular}{|c|c|}
\hline \multirow{2}{*}{-} & Non-locking push type \\
\cline { 2 - 2 } \(\mathbf{B} * 3\) & Latching: Push-locking slotted type \\
\hline
\end{tabular}
*3 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 .
7 Unit
\begin{tabular}{|c|c|}
\hline- & With unit switching function \\
\hline \(\mathbf{M}\) & SI unit only (kPa) \\
\hline \(\mathbf{P}\) & With unit switching function (Initial value: psi) \\
\hline
\end{tabular}

6 Vacuum pressure switch (With suction filter**)
\begin{tabular}{|c|c|c|}
\hline Symbol & Pressure range [kPa] & Output \\
\hline EA & \multirow{4}{*}{0 to -100} & NPN 2 outputs \\
\hline EB & & PNP 2 outputs \\
\hline EC & & NPN 1 output + Analogue voltage \\
\hline EE & & PNP 1 output + Analogue voltage \\
\hline FA & \multirow{4}{*}{-100 to 100} & NPN 2 outputs \\
\hline FB & & PNP 2 outputs \\
\hline FC & & NPN 1 output + Analogue voltage \\
\hline FE & & PNP 1 output + Analogue voltage \\
\hline F*5 & \multicolumn{2}{|c|}{Suction filter only} \\
\hline
\end{tabular}
*4 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.
*5 It is not necessary to select the items for \(\mathbf{7}\) and 8 .
8 Lead wire
- \(\quad\) Without lead wire with connector
G Lead wire with connector (Length: 2 m ) (Included)

10 Fitting (PS/PV port)
\begin{tabular}{|c|c|c|}
\hline Symbol & Applicable tubing O.D. & Specification \\
\hline \(\boldsymbol{-}\) & Without port & Manifold \\
\hline \(\mathbf{0}\) & Without fitting (M5 \(\times 0.8\) ) & Single unit \\
\hline
\end{tabular}

11 Option
For Single Unit (1): U)
\begin{tabular}{|c|c|c|}
\hline Symbol & \begin{tabular}{c} 
Bracket \\
assembly
\end{tabular} & \begin{tabular}{c} 
Converter assembly \\
for solenoid valve*7
\end{tabular} \\
\hline- & \(O\) & - \\
\hline \(\mathbf{N}\) & - & - \\
\hline C & - & \(O\) \\
\hline \(\mathbf{D}\) & O & \(O\) \\
\hline
\end{tabular}

For Manifold (1): M)
\begin{tabular}{|c|c|c|}
\hline Symbol & \begin{tabular}{l} 
Release pressure \\
supply (PD) port*8
\end{tabular} & \begin{tabular}{c} 
Converter assembly \\
for solenoid valve*7
\end{tabular} \\
\hline- & - & - \\
\hline S & \(\bigcirc\) & - \\
\hline C & - & \(\bigcirc\) \\
\hline E & \(\bigcirc\) & \(\bigcirc\) \\
\hline
\end{tabular}
*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.
*8 Select "C" for \(\mathbf{3}\) for the manifold part number on page 180-5. "J1", "J2", or "Q2" cannot be selected in 2.
* The 25A- series specifications and dimensions are the same as those of the standard model.

\title{
Vacuum Pump System Compact Vacuum Unit \(25 A-Z Q \square A\) Series \\ \(\in\) UK RoHS
}

How to Order

\begin{tabular}{l}
\hline 1 Stations \\
\begin{tabular}{|c|c|}
\hline \(\mathbf{0 1}\) & 1 station \\
\hline \(\mathbf{0 2}\) & 2 stations \\
\hline\(\vdots\) & \(\vdots\) \\
\hline \(\mathbf{0 8}\) & 8 stations \\
\hline
\end{tabular}
\end{tabular}

2 Vacuum pressure supply (PV) port location* \({ }^{*}\)
\begin{tabular}{|c|c|}
\hline \(\mathbf{L}\) & Left side \\
\hline \(\mathbf{R}\) & Right side \\
\hline
\end{tabular}
*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.
\begin{tabular}{|c|c|}
\hline 3 Release pressure supply (PD) port \\
\hline B & \begin{tabular}{c} 
None (Release pressure: Commonly \\
supplied from the PS port)
\end{tabular} \\
\hline C*2 & \begin{tabular}{c} 
Provided (Release pressure: \\
Supplied from the PD port)
\end{tabular} \\
\hline
\end{tabular}
*2 Select "S" or "E" for (1) for the single unit part number on page 180-4.

Shipping configuration
\begin{tabular}{|c|c|}
\hline- & Assembled as a vacuum unit \\
\hline A*3 & Manifold unit only \\
\hline
\end{tabular}
*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
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{(2) PV port location} & \multirow[b]{2}{*}{(3) PD port} & \multicolumn{3}{|r|}{Left side with the V port facing the front} & \multicolumn{3}{|l|}{Right side with the V port facing the front} \\
\hline & & PS port & PV port & PD port & PS port & PV port & PD port \\
\hline \multirow[b]{2}{*}{L} & B & - & \(\bigcirc\) & - & \(\bigcirc\) & - & - \\
\hline & C & - & - & - & - & - & \(\bigcirc\) \\
\hline \multirow[b]{2}{*}{R} & B & \(\bigcirc\) & - & - & - & - & - \\
\hline & C & \(\bigcirc\) & - & \(\bigcirc\) & - & - & - \\
\hline
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

\section*{Manifold Order Example}

25A-ZZQ104A-ROB 1 pc.
* 25A-ZQ000MA-K15L-EAG-0 ... 2 pcs. \(\rightarrow\) Stations 1 and 2
* 25A-ZQ000MA-K15L-F-0 \(\cdots \cdots .2\) pcs. \(\rightarrow\) Stations 3 and 4
* When the manifold is viewed from the vacuum (V) port, the first station starts from the left.
25A-ZQ000MA-K15L-EAG-0 (2 pcs.) and 25A-ZQ000MA-K15L-F-0 (2 pcs.) are arranged from the first station.


\section*{Caution when ordering manifold}

I Prefix it to the single unit part number.
I If "*" is not entered, the manifold and single unit will be shipped without being assembled.
I 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.
I There is nothing else to arrange additionally.

Construction
Vacuum ejector
(N.O. specification)


Vacuum pump system (N.C. specification)


Component Parts
\begin{tabular}{|c|c|c|c|}
\hline No. & Description & Material & Note \\
\hline 1 & Body & PBT & Aluminium alloy is also used. \\
\hline 2 & Supply valve / Release valve assembly & POM/Aluminium alloy/Stainless steel & \\
\hline 3 & Nozzle & PBT & \\
\hline 4 & Diffuser & PBT & \\
\hline 5 & Bushing & Aluminium alloy & \\
\hline 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.) \\
\hline 7 & Check valve & HNBR & Refer to 6 on page 180-8 for how to order. \\
\hline 8 & Vacuum release flow adjusting needle & Stainless steel & \\
\hline 9 & Lock nut & Aluminium alloy (Anodized) & \\
\hline 10 & Filter case & PC (Refer to the precautions in the Web Catalog.) & \\
\hline 11 & Tension bolt & Stainless steel & Refer to 4 on page 180-8 for how to order. \\
\hline 12 & Filter element & PVA sponge & Refer to 5 on page 180-8 for how to order. \\
\hline 13 & Pilot supply valve / Pilot valve (for release) & - & Refer to 1 on page 180-7 for how to order. \\
\hline 14 & Vacuum pressure switch & - & Refer to 2 on page 180-7 for how to order. \\
\hline 15 & Vacuum (V) port M5 bushing & Aluminium alloy (Anodized) & \\
\hline 16 & Bracket assembly & Steel (Electroless nickel plating), Stainless steel & Refer to 7 on page 180-8 for how to order. \\
\hline - & Seal material (0-ring, etc.) & NBR/HNBR & \\
\hline - & Screws for assembly & Steel (Electroless nickel plating), Stainless steel & \\
\hline
\end{tabular}

How to Order Replacement Parts for Single Unit

\section*{Solenoid Valve}
(Recommended torque for replacement: 0.054 to \(0.08 \mathrm{~N} \cdot \mathrm{~m}\) )


2 Manual override


Supply Valves



Lead Wire with Connector Assembly for Solenoid Valve


Connector and Socket for Solenoid Valve


\section*{SY100-30-A}
* With connector and
(Number of sockets: 2)

AXT661 - 12A
(Number of sockets: 3)

How to Order Replacement Parts for Single Unit


4 Filter Case Assembly : One filter element is included.
ZQ1 - FC1 - A

7 Bracket Assembly


\title{
Compact Vacuum Unit/25A-ZQ \(\square A\) Series Manifold Exploded View
}


Component Parts
\begin{tabular}{|c|c|c|c|}
\hline No. & Description & Material & Note \\
\hline 1 & Clamp rod assembly & Steel (Electroless nickel plating) & Refer to 1 below for how to order. \\
\hline 2 & End block L & PBT, POM, PET, Steel, Aluminium alloy, Stainless steel & Left side with the vacuum (V) port facing the front \\
\hline 3 & End block R & PBT, POM, PET, Steel, Aluminium alloy, Stainless steel & Right side with the vacuum (V) port facing the front \\
\hline 4 & Sound absorbing material (For Manifold) & Non-woven fabric (PET) & Refer to 2 below for how to order. \\
\hline 5 & Silencer block assembly & PBT & Refer to 3 below for how to order. \\
\hline 6 & Body gasket for manifold & NBR & Refer to 4 below for how to order. \\
\hline 7 & Exhaust block gasket & NBR & Refer to 5 below for how to order. \\
\hline 8 & Washer assembly & Stainless steel & Refer to 6 below for how to order. \\
\hline 9 & Port block assembly & Aluminium alloy, Steel (Electroless nickel plating), NBR & Refer to 7 below for how to order. \\
\hline
\end{tabular}

\section*{How to Order Replacement Parts for Manifold}

Clamp Rod Assembly (2 pcs. per set)


4 Body Gasket for Manifold (10 pcs. per set)
ZQ-3-005-10AS

\section*{5 Exhaust Block Gasket (10 pcs. per set)}
ZQ-3-009-10AS
6 Washer Assembly (4 pos. per set)

(1) Size
\begin{tabular}{|l|l|}
\hline 3 & For M3 (Without release pressure supply port) \\
\hline 4 & For M4 (With
\end{tabular}
4 For M4 (With release pressure supply port)

\section*{Port Block Assembly}
(2 pcs. per set)
25A - ZQ1 - EP2 - A


Recommended tightening torque: 0.25 to \(0.31 \mathrm{~N} \cdot \mathrm{~m}\)
[Option]

\title{
Space Saving Vacuum Ejector 25A-ZQ Series
}

\section*{Ejector Unit}


\section*{(1) Nozzle nominal size}

\section*{(2) Exhaust type}
\begin{tabular}{|l|ll|}
\hline \(\mathbf{0 5}\) & \(\varnothing 0.5\) \\
\hline \(\mathbf{0 7}\) & \(\varnothing 0.7\) \\
\hline \(\mathbf{1 0}\) & \(\varnothing 1.0\) \\
\hline
\end{tabular}
\begin{tabular}{|l|l|}
\hline 1U & With silencer for single unit \\
\hline 3M & With silencer for manifold \\
\hline
\end{tabular}
(3) Solenoid valve combination (Refer to Table (1).)
\begin{tabular}{|c|c|c|}
\hline Symbol & Supply valve & Vacuum release valve \\
\hline K1 & Normally closed & Normally closed \\
\hline K2** \(^{*}\) & Normally open & Normally closed \\
\hline \(\mathbf{J 1}\) & Normally closed & None \\
\hline \(\mathbf{J 2}^{* 1}\) & Normally open & None \\
\hline Q1 & Latching positive common & Normally closed \\
\hline Q2 & Latching positive common & None \\
\hline N1 & Latching negative common & Normally closed \\
\hline N2 & Latching negative common & None \\
\hline
\end{tabular}
*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.

\section*{(4) Pilot valve (Refer to Table (1).)}
\begin{tabular}{|c|c|}
\hline- & Standard (DC: 1 W\()^{* 2}\) \\
\hline \(\mathbf{Y}\) & DC low wattage type \((0.5 \mathrm{~W})^{* 2}\) \\
\hline
\end{tabular}
*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).)
\begin{tabular}{|c|c|c|}
\hline & & CE/UKCAcompliant \\
\hline 1*3 & 100 VAC (50/60 Hz) & - \\
\hline 2*3 & 200 VAC (50/60 Hz) & - \\
\hline 3*3 & 110 VAC (50/60 Hz) & - \\
\hline 4*3 & 220 VAC (50/60 Hz) & - \\
\hline 5 & 24 VDC & \(\bigcirc\) \\
\hline 6 & 12 VDC & \(\bigcirc\) \\
\hline
\end{tabular}
*3 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
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Combination no.} & \multirow[t]{2}{*}{Solenoid valve combination symbol} & \multirow[t]{2}{*}{Pilot valve symbol} & \multicolumn{6}{|c|}{Applicable power supply voltage [V]} \\
\hline & & & 100 AC & 200 AC & 110 AC & 220 AC & 24 DC & 12 DC \\
\hline (1) & K1 & - & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline (2) & K1 & Y & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline (3) & K2 & - & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline (4) & J1 & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline (5) & J1 & Y & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline (6) & J2 & - & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline (7) & Q1 & - & - & - & - & - & - & - \\
\hline (8) & Q2 & - & \(\bullet\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline (9) & N1 & - & - & - & - & - & - & - \\
\hline (1) & N2 & - & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline
\end{tabular}

\footnotetext{
* Combinations (1) to (10) in the above table are the only possible options.
}

\section*{(6) Electrical entry}
L \begin{tabular}{l|l|l|}
\hline LO-type plug connector, with 0.3 m lead wire, \\
with light/surge voltage suppressor
\end{tabular}\(\quad\)\begin{tabular}{l} 
L-type plug connector, without connector, \\
with light/surge voltage suppressor
\end{tabular}
(7) Manual override \({ }^{* 4}\)
\begin{tabular}{|c|c|}
\hline- & \begin{tabular}{c} 
Non-locking push type \\
Latching type: Push-locking type
\end{tabular} \\
\hline B & Locking type (Q1/Q2/N1/N2: Not applicable) \\
\hline
\end{tabular}
*4 Latching type supply valve: Available in "-" only. In this case, the supply valve and release valve come with a push-locking type.

\section*{8) Vacuum pressure switch suction filter*5}
\begin{tabular}{|c|c|}
\hline EA & 0 to \(-101 \mathrm{kPa} / \mathrm{NPN}\) open collector 2 outputs, with suction filter \\
\hline EB & 0 to \(-101 \mathrm{kPa} /\) PNP open collector 2 outputs, with suction filter \\
\hline EC & 0 to \(-101 \mathrm{kPa} / \mathrm{NPN}\) open collector 1 output + analogue voltage, with suction filter \\
\hline EE & 0 to \(-101 \mathrm{kPa} / \mathrm{PNP}\) open collector 1 output + analogue voltage, with suction filter \\
\hline FA & 100 to \(-100 \mathrm{kPa} / \mathrm{NPN}\) open collector 2 outputs, with suction filter \\
\hline FB & 100 to \(-100 \mathrm{kPa} /\) PNP open collector 2 outputs, with suction filter \\
\hline FC & 100 to \(-100 \mathrm{kPa} / \mathrm{NPN}\) open collector 1 output + analogue voltage, with suction filter \\
\hline FE & 100 to \(-100 \mathrm{kPa} /\) PNP open collector 1 output + analogue voltage, with suction filter \\
\hline F & Suction filter only \\
\hline
\end{tabular}
*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.

\section*{\(\triangle\) 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 atmosphere.
9) Vacuum pressure switch unit specifications
\begin{tabular}{|c|c|}
\hline- & With unit switching function \\
\hline \(\mathbf{M}\) & Fixed SI unit*6 \\
\hline \(\mathbf{P}\) & \begin{tabular}{c} 
With unit switching function \\
(Initial value psi)
\end{tabular} \\
\hline
\end{tabular}
*6 Fixed unit: kPa
(10) Vacuum pressure switch lead wire specifications
\begin{tabular}{|c|c|}
\hline- & Without connector \\
\hline G & \begin{tabular}{c} 
Lead wire with connector \\
(Lead wire length 2 m ) \\
With connector cover
\end{tabular} \\
\hline
\end{tabular}

\section*{(11) Check valve*8}
\begin{tabular}{|c|c|}
\hline- & None \\
\hline \(\mathbf{K}\) & With check valve \\
\hline
\end{tabular}
*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.

\section*{12) Fitting (V port)}
\begin{tabular}{|c|c|}
\hline Symbol & Applicable tubing O.D. \\
\hline \(\mathbf{0}\) & Without fitting (M5 \(\times 0.8\) ) \\
\hline
\end{tabular}
(13) Fitting (P port)
\begin{tabular}{|c|c|c|}
\hline Symbol & Applicable tubing O.D. & Object spec. \\
\hline- & Without port & Manifold \\
\hline \(\mathbf{0}\) & Without fitting \((M 5 \times 0.8)\) & Single unit \\
\hline
\end{tabular}
(14) CE/UKCA-compliant
\begin{tabular}{|c|c|}
\hline- & - \\
\hline \(\mathbf{Q}\) & CE/UKCA-compliant \\
\hline
\end{tabular}
* CE/UKCA-compliant: For DC only.

\section*{\(\triangle\) Warning}
(1) Cannot be used for vacuum retention.
(2) Use a release valve. (Without a release valve, a workpiece may not be released.)
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.


Vacuum release pressure supply port (PD port)
\begin{tabular}{|c|c|}
\hline B & (Release pressure is supplied from the P port.) \\
\hline C & Provided \\
(Air can be alternatively supplied from the P port.) \\
\hline
\end{tabular}
* 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

\section*{Solenoid valve}

\section*{\begin{tabular}{|c|c|}
\multicolumn{1}{c}{ Actuation } \\
\hline 1 & Normally closed \\
\hline
\end{tabular}}

25A-ZQ1-VQ1 10 25A-ZQ1-VQ1 20

Actuation
, Actuation
2 Normally open
\begin{tabular}{l} 
Pilot valve d \\
\hline- \\
\hline
\end{tabular}
Pilot valve
\begin{tabular}{|c|l|}
\hline- & Standard (DC: 1 W\()\) \\
\hline \(\mathbf{Y}\) & \begin{tabular}{l} 
DC low wattage type \((0.5 \mathrm{~W})\) \\
\\
* AC type: Not applicable
\end{tabular} \\
\hline L & Latching positive common \\
\hline \(\mathbf{N}\) & Latching negative common \\
\hline
\end{tabular}

Solenoid valve rated voltage d
\begin{tabular}{|c|c|}
\hline 5 & 24 VDC \\
\hline 6 & 12 VDC \\
\hline
\end{tabular}
-Solenoid valve rated voltage
\begin{tabular}{|c|c|}
\hline \(\mathbf{1}\) & 100 VAC \((50 / 60 \mathrm{~Hz})\) \\
\hline \(\mathbf{2}\) & 200 VAC \((50 / 60 \mathrm{~Hz})\) \\
\hline \(\mathbf{3}\) & 110 VAC \((50 / 60 \mathrm{~Hz})\) \\
\hline \(\mathbf{4}\) & 220 VAC \((50 / 60 \mathrm{~Hz})\) \\
\hline \(\mathbf{5}\) & 24 VDC \\
\hline \(\mathbf{6}\) & 12 VDC \\
\hline
\end{tabular}

Manual override**
\begin{tabular}{|c|c|}
\hline- & Non-locking push type \\
Latching type: Push-locking type
\end{tabular}
B Locking type
*1 Latching type: Available in "-" only
- Electrical entry*2
L \begin{tabular}{l} 
L-type plug connector, \\
with 0.3 m lead wire
\end{tabular}
*2 Mounting screws are attached.


\section*{25A-ZQ1-ZS}


Vacuum pressure switch specifications
0 to -101 kPa/NPN open collector 2 outputs, with suction filter
\begin{tabular}{|l|}
\hline EA \\
\hline EB \\
\hline
\end{tabular} 0 to \(-101 \mathrm{kPa} / \mathrm{PNP}\) open collector 2 outputs, with suction filter
0 to \(-101 \mathrm{kPa} / \mathrm{NPN}\) open collector 1 output + analogue voltage, with suction filter
0 to \(-101 \mathrm{kPa} / \mathrm{PNP}\) open collector 1 output + analogue voltage, with suction filter
100 to \(-100 \mathrm{kPa} /\) NPN open collector 2 outputs, with suction filter
\begin{tabular}{|l|l|}
\hline FA \\
\hline FB & \\
\hline FC & \\
\hline
\end{tabular}
C 100 to - \(100 \mathrm{kPa} / \mathrm{NPN}\) open collector 1 output + analogue voltage, with suction filter
FE 100 to \(-100 \mathrm{kPa} /\) PNP open collector 1 output + analogue voltage , with suction filter

\section*{Vacuum pressure switch unit specifications \({ }^{\circ}\)}
\begin{tabular}{|c|c|}
\hline- & With unit switching function \\
\hline \(\mathbf{M}\) & Fixed SI unit*1 \\
\hline \(\mathbf{P}\) & \begin{tabular}{c} 
With unit switching function \\
(Initial value psi)
\end{tabular} \\
\hline
\end{tabular}
*1 Fixed unit: kPa

Vacuum pressure switch lead wire specifications
\begin{tabular}{|c|c|}
\hline- & Without connector \\
\hline G & \begin{tabular}{c} 
Lead wire with connector \\
(lead wire length 2 m ) \\
With connector cover
\end{tabular} \\
\hline
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

\title{
Space Saving Vacuum Pump System 25A-ZQ Series
}

\section*{Vacuum pump unit}


Series compatible with secondary batteries

Body type
\begin{tabular}{|c|c|}
\hline \(\mathbf{U}\) & For single unit \\
\hline \(\mathbf{M}\) & For manifold \\
\hline
\end{tabular}
(2) Solenoid valve combination (Refer to Table (1).)
\begin{tabular}{|c|c|c|}
\hline Symbol & Supply valve & Vacuum release valve \\
\hline K1 & Normally closed & Normally closed \\
\hline K2 \(^{* 1}\) & Normally open & Normally closed \\
\hline \(\mathbf{J 1 ~}^{*}\) & Normally closed & None \\
\hline \(\mathbf{J 2 * 1}^{* 1}\) & Normally open & None \\
\hline Q1 & Latching positive common & Normally closed \\
\hline Q2 & Latching positive common & None \\
\hline N1 & Latching negative common & Normally closed \\
\hline N2 & Latching negative common & None \\
\hline
\end{tabular}
\(\widehat{\text { The air in the adsorption section of this product is not }}\) 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).)
\begin{tabular}{|c|c|}
\hline- & Standard (DC: 1 W\()^{* 2}\) \\
\hline \(\mathbf{Y}\) & DC low wattage type \((0.5 \mathrm{~W})^{* 2}\) \\
\hline
\end{tabular}
*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).)
\begin{tabular}{|c|c|c|}
\hline & & CE/UKCAcompliant \\
\hline 1*3 & 100 VAC (50/60 Hz) & - \\
\hline 2*3 & 200 VAC (50/60 Hz) & - \\
\hline 3*3 & 110 VAC (50/60 Hz) & - \\
\hline 4*3 & 220 VAC (50/60 Hz) & - \\
\hline 5 & 24 VDC & \(\bigcirc\) \\
\hline 6 & 12 VDC & \(\bigcirc\) \\
\hline
\end{tabular}
*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
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Combination no.} & \multirow[t]{2}{*}{Solenoid valve combination symbol} & \multirow[t]{2}{*}{Pilot valve symbol} & \multicolumn{6}{|c|}{Applicable power supply voltage [V]} \\
\hline & & & 100 AC & 200 AC & 110 AC & 220 AC & 24 DC & 12 DC \\
\hline (1) & K1 & - & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline (2) & K1 & Y & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline (3) & K2 & - & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline (4) & J1 & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline (5) & J1 & Y & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline (6) & J2 & - & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline (7) & Q1 & - & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline (8) & Q2 & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline (9) & N1 & - & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline (10) & N2 & - & - & - & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline
\end{tabular}

\footnotetext{
* Combinations (1) to (10) in the above table are the only possible options.
}

\section*{(5) Electrical entry}
L \begin{tabular}{c} 
L-type plug connector, with 0.3 m lead \\
wire, with light/surge voltage suppressor
\end{tabular}

\section*{(6) Manual override*4}
\begin{tabular}{|c|c|}
\hline- & \(\begin{array}{c}\text { Non-locking push type } \\
\text { Latching type: Push-locking type }\end{array}\) \\
\hline B & Locking type (Q1/Q2/N1/N2: Not applicable) \\
\hline
\end{tabular}
*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
\begin{tabular}{|c|c|}
\hline EA & 0 to \(-101 \mathrm{kPa} / \mathrm{NPN}\) open collector 2 outputs, with suction filter \\
\hline EB & 0 to \(-101 \mathrm{kPa} /\) PNP open collector 2 outputs, with suction filter \\
\hline EC & 0 to \(-101 \mathrm{kPa} / \mathrm{NPN}\) open collector 1 output + analogue voltage, with suction filter \\
\hline EE & 0 to \(-101 \mathrm{kPa} /\) PNP open collector 1 output + analogue voltage, with suction filter \\
\hline FA & 100 to \(-100 \mathrm{kPa} / \mathrm{NPN}\) open collector 2 outputs, with suction filter \\
\hline FB & 100 to \(-100 \mathrm{kPa} /\) PNP open collector 2 outputs, with suction filter \\
\hline FC & 100 to \(-100 \mathrm{kPa} / \mathrm{NPN}\) open collector 1 output + analogue voltage, with suction filter \\
\hline FE & 100 to \(-100 \mathrm{kPa} /\) PNP open collector 1 output + analogue voltage, with suction filter \\
\hline F & Suction filter only \\
\hline
\end{tabular}
*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.

\section*{\(\triangle\) 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 atmosphere.8) Vacuum pressure switch unit specifications
\begin{tabular}{|c|c|}
\hline- & With unit switching function \\
\hline \(\mathbf{M}\) & Fixed SI unit*6 \\
\hline \(\mathbf{P}\) & \begin{tabular}{c} 
With unit switching function \\
(Initial value psi)
\end{tabular} \\
\hline
\end{tabular}
*6 Fixed unit: kPa
(9) Vacuum pressure switch lead wire specifications
\begin{tabular}{|c|c|}
\hline- & Without connector \\
\hline G & \begin{tabular}{c} 
Lead wire with connector \\
(Lead wire length 2 m ) \\
With connector cover
\end{tabular} \\
\hline
\end{tabular}

Fitting (V port)*8
\begin{tabular}{|c|c|}
\hline Symbol & Applicable tubing O.D. \\
\hline \(\mathbf{0}\) & Without fitting (M5 \(\times 0.8\) ) \\
\hline
\end{tabular}
(11) Fitting (PS / PV port)**
\begin{tabular}{|c|c|c|c|}
\hline Symbol & Applicable tubing O.D. & Part no. & Object spec. \\
\hline- & Without port & - & Manifold \\
\hline \(\mathbf{0}\) & Without fitting (M5 x 0.8) & - & Single unit \\
\hline
\end{tabular}

\section*{CE/UKCA-compliant}
\begin{tabular}{|c|c|}
\hline \hline- & - \\
\hline \(\mathbf{Q}\) & CE/UKCA-compliant \\
\hline
\end{tabular}
* 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.

For details, refer to the Web Catalogue.


Table (1) Air Pressure Supply Port Location on the Manifold
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{PD port} & \multirow[t]{2}{*}{\begin{tabular}{l}
\(\qquad\) \\
Port location
\end{tabular}} & \multicolumn{3}{|c|}{Left} & \multicolumn{3}{|c|}{Right} \\
\hline & & PS & PV & PD & PS & PV & PD \\
\hline \multirow[t]{2}{*}{B} & L (Left side) & - & \(\bigcirc\) & - & * * & - & - \\
\hline & R (Right side) & * 1 & - & - & - & \(\bigcirc\) & - \\
\hline \multirow[t]{2}{*}{C} & L (Left side) & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) \\
\hline & R (Right side) & \(\bigcirc\) & - & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline
\end{tabular}
*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) d
B \(\quad\) None (Release pressure is supplied from the PS port.)
\begin{tabular}{|l|l|}
\hline \(\mathbf{C}\) & Provided (Air can be alternatively supplied from the PS port.) \\
\hline
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

\section*{How to Order}

\section*{Solenoid valve}
- Solenoid valve rated voltage
\begin{tabular}{|c|c|}
\hline \(\mathbf{1}\) & \(100 \mathrm{VAC}(50 / 60 \mathrm{~Hz})\) \\
\hline \(\mathbf{2}\) & \(200 \mathrm{VAC}(50 / 60 \mathrm{~Hz})\) \\
\hline \(\mathbf{3}\) & \(110 \mathrm{VAC}(50 / 60 \mathrm{~Hz})\) \\
\hline \(\mathbf{4}\) & \(220 \mathrm{VAC}(50 / 60 \mathrm{~Hz})\) \\
\hline \(\mathbf{5}\) & 24 VDC \\
\hline \(\mathbf{6}\) & 12 VDC \\
\hline
\end{tabular}

\begin{tabular}{|c|c|}
\hline- & Non-locking push type \\
Latching type: Push-locking type \\
\hline B & Locking type \\
\hline
\end{tabular}
*1 Latching type: Available in "-" only
- Electrical entry*2
\begin{tabular}{|c|c|c|}
\hline L & L-type plug connector, with 0.3 m lead wire &  \\
\hline LO & L-type plug connector, without connector &  \\
\hline G & Grommet, with 0.3 m lead wire (Latching/AC type: Not applicable) &  \\
\hline
\end{tabular}
*2 Mounting screws are attached.

\section*{Vacuum pressure switch}


Vacuum pressure switch specifications
\begin{tabular}{|c|c|}
\hline EA & 0 to \(-101 \mathrm{kPa} / \mathrm{NPN}\) open collector 2 outputs, with suction filter \\
\hline EB & 0 to \(-101 \mathrm{kPa} /\) PNP open collector 2 outputs, with suction filter \\
\hline EC & 0 to \(-101 \mathrm{kPa} / \mathrm{NPN}\) open collector 1 output + analogue voltage, with suction filter \\
\hline EE & 0 to \(-101 \mathrm{kPa} /\) PNP open collector 1 output + analogue voltage, with suction filter \\
\hline FA & 100 to \(-100 \mathrm{kPa} / \mathrm{NPN}\) open collector 2 outputs, with suction filter \\
\hline FB & 100 to \(-100 \mathrm{kPa} /\) PNP open collector 2 outputs, with suction filter \\
\hline FC & 100 to \(-100 \mathrm{kPa} / \mathrm{NPN}\) open collector 1 output + analogue voltage, with suction filter \\
\hline FE & 100 to \(-100 \mathrm{kPa} /\) PNP open collector 1 output + analogue voltage, with suction filter \\
\hline
\end{tabular}

Vacuum pressure switch unit specifications \({ }^{\circ}\)
\begin{tabular}{|c|c|}
\hline- & With unit switching function \\
\hline \(\mathbf{M}\) & Fixed SI unit** \\
\hline \(\mathbf{P}\) & \begin{tabular}{c} 
With unit switching function \\
(Initial value psi)
\end{tabular} \\
\hline
\end{tabular}
*1 Fixed unit: kPa
Vacuum pressure switch
lead wire specifications
\begin{tabular}{|c|c|}
\hline- & Without connector \\
\hline G & \begin{tabular}{c} 
Lead wire with connector \\
(Lead wire length 2 m\()\) \\
With connector cover
\end{tabular} \\
\hline
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.

\section*{Vacuum Regulator \\ RoHS 25A-IRV10/20 Series}

Standard connections
\begin{tabular}{|l|l|}
\multicolumn{1}{r}{} & Body size \\
\hline \(\mathbf{1 0}\) & Max. flow \(140 \mathrm{l} / \mathrm{min}\) (ANR) \\
\hline 20 & Max. flow \(240 \mathrm{l} / \mathrm{min}\) (ANR) \\
\hline
\end{tabular}

Series compatible with secondary batteries
\begin{tabular}{|c|c|}
\hline- & None*1 \\
\hline \(\mathbf{G N}\) & Gauge nut assembly*2 \\
\hline
\end{tabular}
*1 Two plug nuts are mounted on the gauge port. When the Rc1/8 port is required, please order the optional gauge nut assembly P601010-130 separately.
*2 One plug nut, one gauge nut (Rc1/8), and two clips are included.
The pressure gauge and digital pressure switch are not included.
- Accessory (1) [Supplied with product]

Connection tubing O.D.
\begin{tabular}{|c|c|c|c|c|}
\hline Symbol & \multicolumn{2}{|l|}{Tubing O.D.} & IRV10 & IRV20 \\
\hline C06 & \multirow{3}{*}{Metric} & \(\varnothing 6\) & - & - \\
\hline C08 & & \(\varnothing 8\) & - & - \\
\hline C10 & & \(\bigcirc 10\) & - & \(\bigcirc\) \\
\hline
\end{tabular}

\section*{Single sided connections}

Series compatible with 6 secondary batteries

* 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.

For details, refer to the Web Catalogue.

\title{
Membrane Air Dryer 25A-/DG Series Single Unit/Standard Dew Point \(-40^{\circ} \mathrm{C} /-60^{\circ} \mathrm{C}\) Specifications
}

\section*{Piping materials}

Piping to the outlet side with piping made of water-absorbent or hydrophilic material (nylon, etc.) may result in a rising dew point on the outlet side. Therefore, be sure to use either stainless steel or fluoropolymer piping and fittings.

Port size
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow{2}{*}{ Symbol } & \multirow{2}{*}{ Bore } & \multicolumn{5}{|c|}{ Size } \\
\cline { 3 - 7 } & \(\mathbf{3 0}\) & \(\mathbf{5 0}\) & \(\mathbf{6 0}\) & \(\mathbf{7 5}\) & \(\mathbf{1 0 0}\) \\
\hline \(\mathbf{0 2}\) & \(\mathrm{Rc} 1 / 4\) & \(\bullet\) & \(\bullet\) & - & - & - \\
\hline \(\mathbf{0 3}\) & \(\mathrm{Rc} 3 / 8\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline \(\mathbf{0 4}\) & \(\mathrm{Rc} 1 / 2\) & - & - & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline
\end{tabular}

\section*{Bracket Assembly (Accessory) Part Nos.}
\begin{tabular}{|c|c|}
\hline Part no. & Applicable model \\
\hline 25A-BM64 & 25A-IDG30LA, 50LA \\
\hline 25A-BM65 & 25A-IDG60LA, 75LA, 100LA \\
\hline
\end{tabular}
* 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.

\section*{25A-IDG Series}

\section*{Dimensions}

25A-IDG30LA 25A-IDG50LA
\begin{tabular}{c|c|c}
\hline Model & A & B \\
\hline 25A-IDG30LA & 361 & 302 \\
\hline 25A-IDG50LA & 400 & 341 \\
\hline
\end{tabular}
(Maintenance space 100 mm or more)

Purge air for dew point indicator

e)

Purge air discharge tubing


Purge air discharge tubing port
for dehumidification
Applicable tubing O.D.: Ø 12

\section*{25A-IDG60LA}

Purge air for dew
point indicator


Purge air discharge tubing port for dew point indicator port for dew point indicator

\begin{tabular}{c|c|c}
\hline Model & A & B \\
\hline 25A-IDG60LA & 426 & 367 \\
\hline 25A-IDG75LA & 495 & 436 \\
\hline 25A-IDG100LA & 560 & 501 \\
\hline
\end{tabular}

\title{
Main Line Filter
}
\begin{tabular}{l} 
Bracket Assembly Part Nos. \({ }^{* 3}\) \\
\hline Applicable model \\
\hline 25A-AFF2C \\
\hline 25Art no. \\
\hline 25A-AFF4C \\
\hline 25A-AFF8C \\
\hline 25A-AM-BM101 \\
\hline 25A-AFF11C \\
\hline 25A-AFF2M-BM102 \\
\hline
\end{tabular}
*3 The assembly consists of a bracket and 2 mounting screws.

Thread type
\begin{tabular}{|c|c|}
\hline Symbol & Type \\
\hline- & Rc \\
\hline \(\mathbf{F}\) & \(G\) \\
\hline \(\mathbf{N}\) & NPT \\
\hline
\end{tabular}

Option

*5 Drain piping and piping for a stop valve such as ball valve are required.
- Auto drain*4
\begin{tabular}{|c|c|}
\hline Symbol & Description \\
\hline- & Drain cock (Without auto drain) \\
\hline C & N.C. auto drain \\
\hline D & N.O. auto drain \\
\hline
\end{tabular}
*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.

\section*{Accessory}
\begin{tabular}{|c|c|}
\hline Symbol & Description \\
\hline- & - \\
\hline B & Bracket \({ }^{* 2}\) \\
\hline
\end{tabular}

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.

\section*{25A-AFF37B/75B}

*5 Drain piping and piping for a stop valve such as ball valve are required.
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{3}{c|}{ Port size • } \\
\hline \multirow{2}{*}{ Symbol } & \multirow{2}{*}{ Size } & \multicolumn{2}{|c|}{ Applicable body size } \\
\cline { 3 - 4 } & & \(37 B\) & \(75 B\) \\
\hline \(\mathbf{1 0}\) & 1 & & - \\
\hline 14 & \(11 / 2\) & & - \\
\hline 20 & 2 & - & \(\bigcirc\) \\
\hline
\end{tabular}
Bracket Assembly Part Nos.*3
\begin{tabular}{|c|c|}
\hline Applicable model & Part no. \\
\hline 25A-AFF37B & 25A-BM56 \\
\hline 25A-AFF75B & 25A-BM57 \\
\hline
\end{tabular}
*3 The assembly consists of a bracket and 2 mounting screws.
\begin{tabular}{c|c|} 
& Accessory \\
\hline Symbol & Description \\
\hline- & - \\
\hline B & Bracket *1 \\
\hline
\end{tabular}
*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.
* 25A-AM850 only

25A-AM Series


\section*{25A-AM650/850}


Port size \(\cdot\)
\begin{tabular}{|c|c|c|c|}
\hline \multirow{2}{*}{ Symbol } & \multirow{2}{*}{ Size } & \multicolumn{2}{|c|}{ Applicable body size } \\
\cline { 3 - 4 } & & 650 & \(\mathbf{8 5 0}\) \\
\hline 10 & 1 & & - \\
\hline 14 & \(11 / 2\) & & \(\bigcirc\) \\
\hline 20 & 2 & - & \(\bigcirc\) \\
\hline
\end{tabular}

Bracket Assembly Part Nos.*3
\begin{tabular}{|c|c|}
\hline Applicable model & Part no. \\
\hline 25A-AM650 & 25A-BM56 \\
\hline 25A-AM850 & 25A-BM57 \\
\hline
\end{tabular}

\footnotetext{
*3 The assembly consists of a bracket and 2 mounting screws.
}
\begin{tabular}{|c|c|} 
& Accessory \\
\hline Symbol & Description \\
\hline- & - \\
\hline B & Bracket \(^{* 1}\) \\
\hline
\end{tabular}
*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.
*5 Drain piping and piping for a stop valve such as ball valve are required.
dAuto drain*4
\begin{tabular}{|c|c|}
\hline Symbol & Description \\
\hline- & Drain cock (Without auto drain) \({ }^{* 2}\) \\
\hline \(\mathbf{D}\) & N.O. auto drain (650 only) \\
\hline
\end{tabular}
*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.

\title{
Micro Mist Separator 25A-AMD Series
}


Bracket Assembly Part Nos.*3
\begin{tabular}{|c|c|}
\hline Applicable model & Part no. \\
\hline 25A-AMD650 & 25A-BM56 \\
\hline 25A-AMD850 & 25A-BM57 \\
\hline
\end{tabular}
*3 The assembly consists of a bracket and 2 mounting screws.

*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
\begin{tabular}{|c|c|}
\hline Symbol & Description \\
\hline- & - \\
\hline \(\mathbf{J} * 4, * 5\) & Drain guide 1/4 female threaded (650 only) \\
\hline \(\mathbf{R}\) & IN-OUT reversal direction \\
\hline \(\mathbf{T}\) & With element service indicator \\
\hline
\end{tabular}

5 Drain piping and piping for a stop valve such as ball valve are required.
dAuto drain*4
\begin{tabular}{|c|c|}
\hline Symbol & Description \\
\hline- & Drain cock (Without auto drain) 2 \\
\hline D & N.O. auto drain (650 only) \\
\hline
\end{tabular}
*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.

\title{
Micro Mist Separator with Pre-filter
} 25A-AMH Series


25A-AMH650/850

\begin{tabular}{|c|c|c|c|}
\multicolumn{3}{c|}{ Port size • } \\
\hline \multirow{2}{*}{ Symbol } & \multirow{2}{c|}{ Size } & Applicable body size \\
\cline { 3 - 4 } & & 650 & 850 \\
\hline \(\mathbf{1 0}\) & 1 & & - \\
\hline 14 & \(11 / 2\) & & - \\
\hline \(\mathbf{2 0}\) & 2 & - & \\
\hline
\end{tabular}

Bracket Assembly Part Nos.* \({ }^{3}\)
\begin{tabular}{|c|c|}
\hline Applicable model & Part no. \\
\hline 25A-AMH650 & 25A-BM56 \\
\hline 25A-AMH850 & 25A-BM57 \\
\hline
\end{tabular}
*3 The assembly consists of a bracket and 2 mounting screws.
\begin{tabular}{c|c|} 
& Accessory \\
\hline Symbol & Description \\
\hline- & - \\
\hline B & Bracket \({ }^{* 1}\) \\
\hline
\end{tabular}
*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.
*5 Drain piping and piping for a stop valve such as ball valve are required.
duto drain*4
\begin{tabular}{|c|c|}
\hline Symbol & Description \\
\hline- & Drain cock (Without auto drain) *2 \\
\hline D & N.O. auto drain (650 only) \\
\hline
\end{tabular}
*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.

\title{
Exhaust Cleaner for Clean Room 25A-AMP 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.
\begin{tabular}{|c|c|}
\multicolumn{2}{|c|}{ Bracket Assembly Part Nos. \({ }^{* 2}\)} \\
\hline Applicable model & Part no. \\
\hline 25A-AMP220 & 25A-BM66 \\
\hline 25A-AMP320 & 25A-BM67 \\
\hline 25A-AMP420 & 25A-BM68 \\
\hline
\end{tabular}
*2 The assembly consists of a bracket and 2 mounting screws.

Semi-standard specifications
\begin{tabular}{|c|c|}
\hline Symbol & Description \\
\hline- & None \\
\hline \(\mathbf{R}\) & Flow direction Right \(\rightarrow\) Down*3 \\
\hline \(\mathbf{T}\) & With element service indicator \\
\hline
\end{tabular}
*3 Flow direction when the nameplate is viewed from the front.
Indicate RT when combining.
- Accessories
\begin{tabular}{|c|c|}
\hline Symbol & Name \\
\hline- & None \\
\hline \(\mathbf{B}\) & With bracket*1 \\
\hline
\end{tabular}
*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.

\title{
Air Filter \\ 25A-AF20-D to 25A-AF60-D
}

\section*{How to Order}


\footnotetext{
- Semi-standard: Select one each for \(\mathbf{a}\) and \(\mathbf{b}\).
- Semi-standard symbol: When more than one
specification is required, indicate in alphanumeric order. Example) 25A-AF30-N03B-RZ-D
}

\begin{tabular}{|c|c|c|c|}
\hline \multirow{3}{*}{(2)} & \multirow{3}{*}{Pipe thread type} & - & Rc \\
\hline & & N & NPT \\
\hline & & F & G \\
\hline \multicolumn{4}{|c|}{+} \\
\hline \multirow{6}{*}{(3)} & \multirow{6}{*}{Port size} & 01 & 1/8 \\
\hline & & 02 & 1/4 \\
\hline & & 03 & 3/8 \\
\hline & & 04 & 1/2 \\
\hline & & 06 & 3/4 \\
\hline & & 10 & 1 \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{(4) 등} & \multirow[t]{2}{*}{Mounting} & - & Without mounting option \\
\hline & & B*1 & With bracket \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{5}{*}{} & \multirow[t]{5}{*}{} & \multirow[b]{2}{*}{a} & \multirow[t]{2}{*}{Flow direction} & - & Flow direction: Left to right \\
\hline & & & & R & Flow direction: Right to left \\
\hline & & \multicolumn{4}{|c|}{+} \\
\hline & & \multirow[t]{2}{*}{b} & \multirow[t]{2}{*}{Unit} & - & Unit on product label: \(\mathrm{MPa},{ }^{\circ} \mathrm{C}\) \\
\hline & & & & Z*2 & Unit on product label: \(\mathrm{psi},{ }^{\circ} \mathrm{F}\) \\
\hline
\end{tabular}

*1 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.
*2 \(\bigcirc\) : For pipe thread type: NPT.

\section*{Bracket, Bowl Assembly Part Nos. for the 25A- Series}
\begin{tabular}{|l|c|c|c|c|c|c|}
\hline \multicolumn{2}{|c|}{\multirow{2}{*}{ Option }} & \multicolumn{4}{c|}{ Model } \\
\cline { 2 - 7 } & 25A-AF20-D & 25A-AF30-D & 25A-AF40-D & 25A-AF40-06-D & 25A-AF50-D & 25A-AF60-D \\
\hline Bracket assembly*1 & 25A-AF24P-070AS & 25A-AF34P-070AS & 25A-AF44P-070AS & 25A-AF49P-070AS & 25A-AF54P-070AS \\
\hline Bowl assembly & 25A-C2SF-D & 25A-C3SF-D & \multicolumn{4}{|c|}{ 25A-C4SF-D } \\
\hline
\end{tabular}
*1 The assembly consists of an \(A\) and \(B\) bracket and 2 mounting screws.

For details, refer to the Web Catalogue.

\section*{How to Order}


*1 A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.
*2 ○: For pipe thread type: NPT.

Bracket, Bowl Assembly Part Nos. for the 25A- Series
\begin{tabular}{|l|c|c|c|c|c|}
\hline Option Model & 25A-AF20-A & 25A-AF30-A & 25A-AF40-A & 25A-AF40-06-A & \begin{tabular}{c} 
25A-AF50-A \\
25A-AF60-A
\end{tabular} \\
\hline Bracket assembly*1 & 25A-AF22P-050AS & 25A-AF32P-050AS & 25A-AF42P-050AS & 25A-AF42P-070AS & 25A-AF52P-050AS \\
\hline Bowl assembly & 25A-C2SF-A & 25A-C3SF-A & & 25A-C4SF-A \\
\hline
\end{tabular}
*1 The assembly consists of a bracket and 2 mounting screws.

\title{
25A-AFM20-D to 25A-AFM40-06-D
}

Micro Mist Separator 25A-AFD2O-D to 25A-AFD40-06-D
-25A-AFM Series Nominal filtration rating: \(0.3 \mu \mathrm{~m}\)
- 25A-AFD Series Nominal filtration rating: \(0.01 \mu \mathrm{~m}\)

How to Order

-Series compatible with secondary batteries
- Semi-standard: Select one each for \(\mathbf{a}\) and \(\mathbf{b}\).
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order. Example) 25A-AFM30-N03B-RZ-D

\begin{tabular}{|c|c|c|c|}
\hline \multirow{3}{*}{2} & \multirow{3}{*}{ Pipe thread type } & - & Rc \\
\cline { 3 - 4 } & \(\mathbf{N}\) & NPT \\
\cline { 3 - 4 } & \(\mathbf{F}\) & G \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|}
\hline \multirow{4}{*}{3} & \multirow{3}{*}{ Port size } & 01 & \(1 / 8\) \\
\cline { 3 - 4 } & 02 & \(1 / 4\) \\
\cline { 3 - 4 } & 03 & \(3 / 8\) \\
\cline { 3 - 4 } & 04 & \(1 / 2\) \\
\cline { 3 - 4 } & 06 & \(3 / 4\) \\
\hline
\end{tabular}

*1 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. *2 \(\bigcirc\) : For pipe thread type: NPT.

Bracket, Bowl Assembly Part Nos. for the 25A- Series
\begin{tabular}{|l|c|c|c|c|}
\hline \multirow{3}{*}{\multicolumn{2}{|c|}{ Option }} & \multicolumn{4}{|c|}{ Model } \\
\cline { 2 - 6 } & 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 \\
\hline Bracket assembly*1 & 25A-AF24P-070AS & 25A-AF34P-070AS & 25A-AF44P-070AS & 25A-AF49P-070AS \\
\hline Bowl assembly & 25A-C2SF-D & 25A-C3SF-D & \multicolumn{2}{c|}{ 25A-C4SF-D } \\
\hline
\end{tabular}

\footnotetext{
*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.

For details, refer to the Web Catalogue.

-Series compatible with secondary batteries
- Semi-standard: Select one each for \(\mathbf{a}\) and \(\mathbf{b}\).
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order. Example) 25A-AFM30-N03B-RZ-A
\begin{tabular}{|c|c|c|c|}
\hline \multirow{4}{*}{3} & 01 & \(1 / 8\) \\
\cline { 3 - 4 } & \multirow{3}{*}{ Port size } & 02 & \(1 / 4\) \\
\cline { 3 - 4 } & 03 & \(3 / 8\) \\
\cline { 3 - 4 } & 04 & \(1 / 2\) \\
\cline { 3 - 4 } & 06 & \(3 / 4\) \\
\hline
\end{tabular}

\begin{tabular}{|c|}
\hline- \\
\hline\(B^{* 1}\) \\
\hline
\end{tabular}
Without mounting option With bracket
\begin{tabular}{|l|l|c|l|}
\hline \multirow{2}{*}{\(\mathbf{a}\)} & \multirow{2}{*}{ Flow direction } & - & Flow direction: Left to right \\
\cline { 3 - 5 } & R & Flow direction: Right to left \\
\hline \multirow{2}{*}{ b } & \multirow{2}{*}{ Pressure unit } & - & Name plate and caution plate for bowl in SI units: MPa \\
\cline { 3 - 5 } & & \(\mathbf{Z}^{* 2}\) & Name plate and caution plate for bowl in imperial units: psi, \({ }^{\circ} \mathrm{F}\) \\
\hline
\end{tabular}

*1 A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws. *2 \(\bigcirc\) : For pipe thread type: NPT.

Bracket, Bowl Assembly Part Nos. for the 25A-Series
\begin{tabular}{|l|c|c|c|c|}
\hline \multirow{2}{*}{ Option Model } & \begin{tabular}{c} 
25A-AFM20-A \\
25A-AFD20-A
\end{tabular} & \begin{tabular}{c} 
25A-AFM30-A \\
25A-AFD30-A
\end{tabular} & \begin{tabular}{c} 
25A-AFM40-A \\
25A-AFD40-A
\end{tabular} & 25A-AFM40-06-A \\
25A-AFD40-06-A
\end{tabular}
*1 The assembly consists of a bracket and 2 mounting screws.

Regulator

\section*{25A-AR20-D to 25A-AR60-D}

\section*{Regulator with Backflow Function}

25A-AR20K-D to 25A-AR60K-D

\section*{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
\begin{tabular}{|c|c|c|c|}
\hline & & Symbol & Description \\
\hline \multirow[t]{2}{*}{2} & \multirow[t]{2}{*}{With backflow function} & - & Without backflow function \\
\hline & & K*1 & With backflow function \\
\hline \multicolumn{4}{|c|}{+} \\
\hline \multirow{3}{*}{3} & \multirow{3}{*}{Pipe thread type} & - & Rc \\
\hline & & N & NPT \\
\hline & & F & G \\
\hline \multicolumn{4}{|c|}{+} \\
\hline \multirow{6}{*}{4} & \multirow{6}{*}{Port size} & 01 & 1/8 \\
\hline & & 02 & 1/4 \\
\hline & & 03 & 3/8 \\
\hline & & 04 & 1/2 \\
\hline & & 06 & 3/4 \\
\hline & & 10 & 1 \\
\hline
\end{tabular}


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 O: For pipe thread type: NPT.

Bracket, Set Nut Part Nos. for the 25A- Series
\begin{tabular}{|l|c|c|c|c|}
\hline \multicolumn{2}{|c|}{ Option } & \multicolumn{4}{c|}{ Model } \\
\cline { 2 - 6 } & 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 \\
\hline Bracket assembly*1 & 25A-AR23P-270AS & 25A-AR33P-270AS & 25A-AR43P-270AS & 25A-AR54P-270AS \\
\hline Set nut & AR23P-260S & AR33P-260S & AR43P-260S & -*2 \\
\hline
\end{tabular}
*1 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.
*2 Please contact SMC regarding the set nuts for the 25A-AR50(K)-D and 25A-AR60(K)-D.
* The 25A- series specifications and dimensions are the same as those of the standard model.

Regulator

\section*{25A-AR20-B to 25A-AR60-B}

Regulator with Backflow Function 25A-AR20K-B to 25A-AR60K-B

\section*{How to Order}

 25A-AR 30 K- 03 B- \(\square\)-B
- 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
Series compatible with secondary batteries

*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 \(\bigcirc\) : For pipe thread type: NPT.

Bracket, Set Nut Part Nos. for the 25A- Series
\begin{tabular}{|l|c|c|c|c|c|}
\hline Option Model & 25A-AR20(K)-B & 25A-AR25(K)-B & 25A-AR30(K)-B & 25A-AR40(K)-B & \begin{tabular}{c} 
25A-AR50(K)-B \\
25A-AR60(K)-B
\end{tabular} \\
\hline Bracket assembly*1 & 25A-AR23P-270AS & 25A-AR28P-270AS & 25A-AR33P-270AS & 25A-AR43P-270AS & 25A-AR52P-270AS*2 \\
\hline Set nut & AR23P-260S & AR28P-260S & AR33P-260S & AR43P-260S & -*3 \\
\hline
\end{tabular}
*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).

Filter Regulator

\section*{25A-AW20-D to 25A-AW60-D}

Filter Regulator with Backflow Function
25A-AW20K-D to 25A-AW60K-D

How to Order

- 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-D
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{4}{|l|}{\multirow[t]{3}{*}{}} & \multirow{3}{*}{Symbol} & \multirow{3}{*}{Description} & \multicolumn{4}{|c|}{(1)} \\
\hline & & & & & & \multicolumn{4}{|c|}{Body size} \\
\hline & & & & & & 20 & 30 & 40 & 60 \\
\hline \multirow[t]{2}{*}{(2)} & \multicolumn{3}{|l|}{\multirow[t]{2}{*}{With backflow function}} & - & Without backflow function & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & K*1 & With backflow function & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline \multicolumn{10}{|c|}{+} \\
\hline \multirow{3}{*}{(3)} & \multicolumn{3}{|r|}{\multirow{3}{*}{Pipe thread type}} & - & Rc & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & N & NPT & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & F & G & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline \multicolumn{10}{|c|}{+} \\
\hline \multirow{6}{*}{4} & \multicolumn{3}{|r|}{\multirow{6}{*}{Port size}} & 01 & 1/8 & \(\bigcirc\) & - & - & - \\
\hline & & & & 02 & 1/4 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - \\
\hline & & & & 03 & 3/8 & - & \(\bigcirc\) & \(\bigcirc\) & - \\
\hline & & & & 04 & 1/2 & - & - & \(\bigcirc\) & - \\
\hline & & & & 06 & 3/4 & - & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & 10 & 1 & - & - & - & \(\bigcirc\) \\
\hline \multicolumn{10}{|c|}{+} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{3}{*}{}} & \multicolumn{2}{|r|}{\multirow{3}{*}{Mounting}} & - & Without mounting option & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & B*3 & With bracket & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & H & With set nut (For panel fitting) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - \\
\hline \multicolumn{10}{|l|}{+} \\
\hline \multirow{11}{*}{6} & \multirow{11}{*}{} & & & - & 0.05 to 0.85 MPa setting & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & a & Set pressure & 1*4 & 0.02 to 0.2 MPa setting & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & \multicolumn{4}{|c|}{+} & & & & \\
\hline & & & Exhaust & - & Relieving type & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & 0 & mechanism & N & Non-relieving type & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & \multicolumn{4}{|c|}{+} & & & & \\
\hline & & & & - & Flow direction: Left to right & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & c & Flow direction & R & Flow direction: Right to left & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & \multicolumn{4}{|c|}{+} & & & & \\
\hline & & \multirow[t]{2}{*}{d} & \multirow[t]{2}{*}{Unit} & - & Unit on product label: MPa , \({ }^{\circ} \mathrm{C}\), Pressure gauge in SI units: MPa & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & Z*5 & Unit on product label: psi, \({ }^{\circ} \mathrm{F}\), Pressure gauge: \(\mathrm{MPa} / \mathrm{psi}\) dual scale & ○*5 & \(\bigcirc * 5\) & \(\bigcirc * 5\) & \(\bigcirc * 5\) \\
\hline
\end{tabular}
*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
\begin{tabular}{|l|c|c|c|c|c|}
\hline \multicolumn{2}{|c|}{ Option } & \multicolumn{5}{|c|}{ Model } \\
\cline { 2 - 6 } & 25A-AW20(K)-D & 25A-AW30(K)-D & 25A-AW40(K)-D & 25A-AW40(K)-06-D & 25A-AW60(K)-D \\
\hline Bracket assembly*1 & 25A-AW23P-270AS & 25A-AR33P-270AS & 25A-AR43P-270AS & 25A-AR54P-270AS \\
\hline Set nut & AR23P-260S & AR33P-260S & AR43P-260S & -*2 \\
\hline Bowl assembly & 25A-C2SF-D & 25A-C3SF-D & & 25A-C4SF-D & \\
\hline
\end{tabular}
*1 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.

Filter Regulator

\section*{25A-AW20-B to 25A-AW60-B}

Filter Regulator with Backflow Function
25A-AW20K-B to 25A-AW60K-B

How to Order

- 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
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{4}{|l|}{\multirow[t]{3}{*}{}} & \multirow{3}{*}{Symbol} & \multirow{3}{*}{Description} & \multicolumn{4}{|c|}{(1)} \\
\hline & & & & & & \multicolumn{4}{|c|}{Body size} \\
\hline & & & & & & 20 & 30 & 40 & 60 \\
\hline \multirow[t]{2}{*}{\((2)\)} & \multicolumn{3}{|l|}{\multirow[t]{2}{*}{With backflow function}} & - & Without backflow function & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & K & With backflow function & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline \multicolumn{10}{|c|}{+} \\
\hline \multirow{3}{*}{(3)} & \multicolumn{3}{|r|}{\multirow{3}{*}{Pipe thread type}} & - & Rc & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & N & NPT & \(\bigcirc\) & - & - & - \\
\hline & & & & F & G & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline \multicolumn{10}{|c|}{+} \\
\hline \multirow{6}{*}{4} & \multicolumn{3}{|r|}{\multirow{6}{*}{Port size}} & 01 & 1/8 & \(\bigcirc\) & - & - & - \\
\hline & & & & 02 & 1/4 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - \\
\hline & & & & 03 & 3/8 & - & - & - & - \\
\hline & & & & 04 & 1/2 & - & - & - & - \\
\hline & & & & 06 & 3/4 & - & - & - & \(\bigcirc\) \\
\hline & & & & 10 & 1 & - & - & - & \(\bigcirc\) \\
\hline \multicolumn{10}{|c|}{+} \\
\hline \multicolumn{2}{|l|}{\multirow[t]{3}{*}{(5) \begin{tabular}{c}
\(\frac{1}{ㅁ}\) \\
\(\frac{\grave{1}}{\circ}\) \\
\hline
\end{tabular}}} & \multicolumn{2}{|r|}{\multirow{3}{*}{Mounting}} & - & Without mounting option & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) \\
\hline & & & & B*2 & With bracket & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) \\
\hline & & & & H & With set nut (For panel fitting) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - \\
\hline \multicolumn{10}{|c|}{+} \\
\hline \multirow{11}{*}{\[
6
\]} & \multirow{11}{*}{} & a & Set pressure & - & 0.05 to 0.85 MPa setting & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & a & Set press & 1*3 & 0.02 to 0.2 MPa setting & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & \multicolumn{4}{|r|}{+} & & & & \\
\hline & & b & Exhaust & - & Relieving type & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & b & mechanism & N & Non-relieving type & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & \multicolumn{4}{|c|}{+} & & & & \\
\hline & & c & Flow direction & - & Flow direction: Left to right & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & c & Flow direction & R & Flow direction: Right to left & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & \multicolumn{4}{|c|}{+} & & & & \\
\hline & & \multirow[t]{2}{*}{d} & \multirow[t]{2}{*}{Pressure unit} & - & Name plate and caution plate for bowl in SI units: MPa & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & Z*4 & Name plate and caution plate for bowl in imperial units: psi, \({ }^{\circ} \mathrm{F}\) & ○*4 & ○* & \(\bigcirc * 4\) & ○* \\
\hline
\end{tabular}
*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 0 : For pipe thread type: NPT.

Bracket, Set Nut, Bowl Assembly Part Nos. for the 25A- Series
\begin{tabular}{|l|c|c|c|c|}
\hline Option Model & 25A-AW20(K)-B & 25A-AW30(K)-B & 25A-AW40(K)-B & 25A-AW60(K)-B \\
\hline Bracket assembly*1 & 25A-AW23P-270AS & 25A-AR33P-270AS & 25A-AR43P-270AS & 25A-AW62P-270AS*2 \\
\hline Set nut & AR23P-260S & AR33P-260S & AR43P-260S & -*3 \\
\hline Bowl assembly & 25A-C2SF-A & 25A-C3SF-A & 25A-C4SF-A \\
\hline
\end{tabular}
*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-AW60(K).

\section*{Mist Separator Regulator}

\section*{25A-AWM30, AWM40-D \\ Micro Mist Separator Regulator 25A-AWD30, AWD40-D}
-25A-AWM Series Nominal filtration rating: \(0.3 \mu \mathrm{~m}\)
- 25A-AWD Series Nominal filtration rating: \(0.01 \mu \mathrm{~m}\)

How to Order


25A-AWM30-D

- 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
\begin{tabular}{|c|c|c|c|c|}
\hline & & & Symbol & Description \\
\hline \multirow{3}{*}{(2)} & \multicolumn{2}{|r|}{\multirow{3}{*}{Pipe thread type}} & - & Rc \\
\hline & & & N & NPT \\
\hline & & & F & G \\
\hline \multicolumn{5}{|c|}{+} \\
\hline \multirow{3}{*}{3} & & \multirow{3}{*}{Port size} & 02 & 1/4 \\
\hline & & & 03 & 3/8 \\
\hline & & & 04 & 1/2 \\
\hline & & & + & \\
\hline \multicolumn{2}{|l|}{\multirow[t]{3}{*}{}} & \multirow{3}{*}{Mounting} & - & Without mounting option \\
\hline & & & B*2 & With bracket \\
\hline & & & H & With set nut (for panel mount) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|c|}{(1)} \\
\hline \multicolumn{2}{|c|}{Body size} \\
\hline 30 & 40 \\
\hline - & \(\bigcirc\) \\
\hline - & \(\bigcirc\) \\
\hline - & \(\bigcirc\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline\(\ominus\) & \(\ominus\) \\
\hline\(\ominus\) & \(\ominus\) \\
\hline- & \(\bullet\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline\(\ominus\) & \(\ominus\) \\
\hline\(\ominus\) & \(\ominus\) \\
\hline\(\ominus\) & \(\bullet\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline & & & Set pressure*3 & - & 0.05 to 0.85 MPa setting \\
\hline & & a & Set pressure*3 & 1 & 0.05 to 0.2 MPa setting \\
\hline & & & & + & \\
\hline & & & Exhaust & - & Relieving type \\
\hline & \% & b & mechanism & N & Non-relieving type \\
\hline (5) & 踢 & & & + & \\
\hline & \(\stackrel{1}{\bar{E}}\) & c & Flow direction & - & Flow direction: Left to right \\
\hline & & c & Flow direction & R & Flow direction: Right to left \\
\hline & & & & + & \\
\hline & & d & Unit & - & Unit on product label: MPa, \({ }^{\circ} \mathrm{C}\) \\
\hline & & d & Unit & Z*4 & Unit on product label: psi, \({ }^{\circ} \mathrm{F}\) \\
\hline
\end{tabular}

*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

\section*{Bracket, Set Nut, Bowl Assembly Part Nos. for the 25A- Series}
\begin{tabular}{|l|c|c|}
\hline \multirow{3}{*}{ Optional specifications } & \multicolumn{2}{|c|}{ Model } \\
\cline { 2 - 3 } & 25A-AWM30-D & 25A-AWM40-D \\
& 25A-AWD30-D & 25A-AWD40-D \\
\hline Bracket assembly*1 & 25A-AR33P-270AS & 25A-AR43P-270AS \\
\hline Set nut & AR33P-260S & AR43P-260S \\
\hline Bowl assembly & 25A-C3SF-D & 25A-C4SF-D \\
\hline
\end{tabular}
*1 The assembly consists of a bracket and set nuts.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

\section*{Precision Regulator 25A-R1000010000/3000-A Series}


\section*{Electro-Pneumatic Regulator 25A-ITV1000/2000/3000 Series}

\begin{tabular}{|c|c|}
\hline \(\mathbf{1}\) & Analogue output 1 to 5 VDC \\
\hline \(\mathbf{2}\) & Switch output/NPN output \\
\hline \(\mathbf{3}\) & Switch output/PNP output \\
\hline \(\mathbf{4}\) & Analogue output 4 to 20 mADC (Sink type) \\
\hline \(\mathbf{-}\) & None (For 4 points preset input) \\
\hline
\end{tabular}
* The bracket is made with a special black chromium treatment. The bracket is shipped with the product.

Port size
\begin{tabular}{|l|l|}
\hline \(\mathbf{1}\) & \(1 / 8\) (1000 type) \\
\hline \(\mathbf{2}\) & \(1 / 4\) (1000, 2000, 3000 type) \\
\hline \(\mathbf{3}\) & \(3 / 8\) (2000, 3000 type) \\
\hline \(\mathbf{4}\) & \(1 / 2\) (3000 type) \\
\hline
\end{tabular}
-Thread type
\begin{tabular}{|c|c|}
\hline- & Rc \\
\hline \(\mathbf{N}\) & NPT \\
\hline \(\mathbf{T}\) & NPTF \\
\hline \(\mathbf{F}\) & G \\
\hline
\end{tabular}

\footnotetext{
* 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.

\title{
Booster Regulator 25A-VBA Series
}


Combination of Thread Type and Options
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Body size} & \multirow[t]{2}{*}{Thread type} & \multicolumn{5}{|c|}{Option} \\
\hline & & - & N & S & LN & LS \\
\hline \multirow{4}{*}{10A} & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & F & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) \\
\hline & N & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & - \\
\hline & T & \(\bigcirc\) & \(\bigcirc\) & - & - & - \\
\hline \multirow{4}{*}{20A} & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & & \\
\hline & F & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & & \\
\hline & N & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & & \\
\hline & T & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & & \\
\hline \multirow{4}{*}{40A} & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & & \multirow[t]{4}{*}{} \\
\hline & F & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & & \\
\hline & N & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) &  & \\
\hline & T & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) &  & \\
\hline
\end{tabular}

\section*{© 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.

\section*{Air Tank Compatibility Chart}
\begin{tabular}{|c|c|c|c|}
\hline \begin{tabular}{r} 
Booster \\
regulator
\end{tabular} & 25A-VBA10A & 25A-VBA20A & 25A-VBA40A \\
\hline 25A-VBAT05A1 & & - & - \\
\hline 25A-VBAT05S1 & & - & - \\
\hline 25A-VBAT10A1 & & & - \\
\hline 25A-VBAT10S1 & & & \\
\hline 25A-VBAT20A1 & - & & \\
\hline 25A-VBAT20S1 & - & & \\
\hline 25A-VBAT38A1 & - & & \\
\hline 25A-VBAT38S1 & & & \\
\hline
\end{tabular}
* Refer to page 209 for details on air tanks.

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

\section*{Quick Exhaust Valve with One-touch Fittings}

RoHS 25A-AQ240F/340F Series

Series compatible with secondary batteries

Quick exhaust valve \({ }^{\circ}\)
IN, OUT port applicable tubing O.D.

Body size
\begin{tabular}{|l|l|}
\hline 3 & \(1 / 8\) \\
\hline
\end{tabular}
IN, OUT port
applicable tubing O.D.
\begin{tabular}{|l|l|}
\hline 04 & \(\varnothing 4\) \\
\hline
\end{tabular}
\(06 \quad \varnothing 6\)
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue

\title{
Check Valve with One-touch Fittings 25A-AKH Series
}

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

For details, refer to the Web Catalogue.

\title{
Rectangular Multi-connector 25A-KDM Series
}

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

For details, refer to the Web Catalogue.

\title{
1 Output \\ 3-Screen Display High-Precision Digital Pressure Switch
}

ated pressure range
\begin{tabular}{|l|c|}
\hline ZSE20 & 0 to -101 kPa \\
\hline ZSE20F & -100 to 100 kPa \\
\hline
\end{tabular}

Unit specification
\begin{tabular}{|c|l|}
\hline Symbol & \multicolumn{1}{|c|}{ Description } \\
\hline- & Units selection function \\
\hline \(\mathbf{M}\) & SI unit only*1 \\
\hline \(\mathbf{P}\) & Units selection function (Initial value psi) \\
\hline
\end{tabular}
*1 Fixed unit: \(\mathrm{kPa}, \mathrm{MPa}\)


Option 3
\begin{tabular}{|c|c|c|}
\hline Symbol & Operation manual & Calibration certificate \\
\hline- & 0 & - \\
\hline \(\mathbf{Y}\) & - & - \\
\hline \(\mathbf{K}\) & 0 & 0 \\
\hline \(\mathbf{T}\) & - & 0 \\
\hline
\end{tabular}


\section*{Options/Part Nos.}

When only optional parts are required, order with the part numbers listed below.
\begin{tabular}{|l|c|c|}
\hline \multicolumn{1}{|c|}{ Description } & Part no. & Note \\
\hline Panel mount adapter & ZS-46-B & - \\
\hline Panel mount adapter + Front protection cover & ZS-46-D & - \\
\hline Lead wire with connector & ZS-46-3L & \begin{tabular}{c} 
3-core, 2 m, Non-waterproof \\
(Without waterproof cover)
\end{tabular} \\
\hline Front protection cover & ZS-27-01 & - \\
\hline
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue

\begin{tabular}{|l|c|} 
& secondary batteries \\
\hline 1 Rated pressure range \\
\hline ZSE20A & 0 to -101 kPa \\
\hline ZSE20AF & -100 to 100 kPa \\
\hline
\end{tabular}
2 Output specification
\begin{tabular}{|c|l|}
\hline Symbol & Description \\
\hline \(\mathbf{R}\) & NPN open collector 2 outputs + Analogue voltage output*1 \\
\hline \(\mathbf{S}\) & NPN open collector 2 outputs + Analogue current output*1 \\
\hline \(\mathbf{T}\) & PNP open collector 2 outputs + Analogue voltage output*1 \\
\hline \(\mathbf{V}\) & PNP open collector 2 outputs + Analogue current output*1 \\
\hline \(\mathbf{X}\) & NPN open collector 2 outputs + Copy function \\
\hline \(\mathbf{Y}\) & PNP open collector 2 outputs + Copy function \\
\hline *1 & Can be switched to auto-shift or copy function \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{4 Piping specification} \\
\hline Symbol & Description \\
\hline M5 & M5 female thread \\
\hline 01 &  \\
\hline
\end{tabular}


7
Option 3
\begin{tabular}{|c|c|c|}
\hline Symbol & Operation manual & Calibration certificate \\
\hline- & 0 & - \\
\hline \(\mathbf{Y}\) & - & - \\
\hline \(\mathbf{K}\) & 0 & 0 \\
\hline \(\mathbf{T}\) & - & 0 \\
\hline
\end{tabular}

\section*{Options/Part Nos.}
When only optional parts are required, order with the part numbers listed below.
\begin{tabular}{|l|c|c|}
\hline \multicolumn{1}{|c|}{ Description } & Part no. & Note \\
\hline Panel mount adapter & ZS-46-B & - \\
\hline Panel mount adapter + Front protection cover & ZS-46-D & - \\
\hline Lead wire with connector & ZS-46-5L & \begin{tabular}{c}
\(5-c o r e, ~ 2 ~ m, ~ N o n-w a t e r p r o o f ~\) \\
(Without waterproof cover)
\end{tabular} \\
\hline Front protection cover & ZS-27-01 & - \\
\hline
\end{tabular}


secondary batteries
\begin{tabular}{l} 
(1) Rated pressure range \\
\hline ZSE20B \\
\hline ZSE20BF \\
\hline
\end{tabular}\(-100\) to to 100 kPa kPa |
2 Output specification
\begin{tabular}{|c|c|}
\hline Symbol & \multicolumn{1}{c|}{ Description } \\
\hline R & NPN open collector 2 outputs + Analogue voltage output*1 \\
\hline S & NPN open collector 2 outputs + Analogue current output*1 \\
\hline T & PNP open collector 2 outputs + Analogue voltage output*1 \\
\hline V & PNP open collector 2 outputs + Analogue current output*1 \\
\hline X & NPN open collector 2 outputs + Copy function \\
\hline Y & PNP open collector 2 outputs + Copy function \\
\hline *1 Can be switched to auto-shift or copy function \\
\hline
\end{tabular}

3 Unit specification
\begin{tabular}{|c|l|}
\hline Symbol & \multicolumn{1}{|c|}{ Description } \\
\hline- & Units selection function \\
\hline \(\mathbf{M}\) & SI unit only*1 \\
\hline \(\mathbf{P}\) & Units selection function (Initial value psi) \\
\hline
\end{tabular}
*1 Fixed unit: kPa, MPa

(5) Option 1


Option 3
\begin{tabular}{|c|c|c|}
\hline Symbol & Operation manual & Calibration certificate \\
\hline- & 0 & - \\
\hline \(\mathbf{Y}\) & - & - \\
\hline \(\mathbf{K}\) & 0 & 0 \\
\hline \(\mathbf{T}\) & - & 0 \\
\hline
\end{tabular}


\section*{Options/Part Nos.}

When only optional parts are required, order with the part numbers listed below.
\begin{tabular}{|l|c|c|}
\hline \multicolumn{1}{|c|}{ Description } & Part no. & Note \\
\hline Panel mount adapter & ZS-46-B & - \\
\hline Panel mount adapter + Front protection cover & ZS-46-D & - \\
\hline Lead wire with connector & ZS-46-5F & \begin{tabular}{c} 
5-core, 2 m, Waterproof \\
(With waterproof cover)
\end{tabular} \\
\hline Front protection cover & ZS-27-01 & - \\
\hline
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.

7 Option 3
\begin{tabular}{|c|c|c|}
\hline Symbol & Operation manual & Calibration certificate \\
\hline- & 0 & - \\
\hline Y & - & - \\
\hline K & 0 & 0 \\
\hline \(\mathbf{T}\) & - & \(O\) \\
\hline
\end{tabular}

Options/Part Nos.
When only optional parts are required, order with the part numbers listed below.
\begin{tabular}{|l|c|c|}
\hline \multicolumn{1}{|c|}{ Description } & Part no. & Note \\
\hline Panel mount adapter & ZS-46-B & Rear ported \\
\hline Panel mount adapter + Front protection cover & ZS-46-D & Rear ported \\
\hline Lead wire with connector & ZS-46-5F & \begin{tabular}{c} 
5-core, 2 m, Waterproof \\
(With waterproof cover)
\end{tabular} \\
\hline Front protection cover & ZS-27-01 & Rear ported \\
\hline
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.


\section*{2-Colour Display}


\section*{Output specification}
\begin{tabular}{|c|c|c|}
\hline Symbol & OUT1 & OUT2 \\
\hline \(\mathbf{A}\) & NPN & NPN \\
\hline \(\mathbf{B}\) & PNP & PNP \\
\hline \(\mathbf{C}\) & NPN & Analogue 1 to 5 V \(\Leftrightarrow\) Analogue 0 to \(10 \mathrm{~V}^{* 1}\) \\
\hline D & NPN & Analogue 4 to 20 mA \\
\hline E & PNP & Analogue 1 to 5 V \(\Leftrightarrow\) Analogue 0 to \(10 \mathrm{~V}^{* 1}\) \\
\hline F & PNP & Analogue 4 to 20 mA \\
\hline
\end{tabular}
*1 1 to 5 V or 0 to 10 V can be selected by pressing the button. The default setting is 1 to 5 V .

\section*{(5) Option 1}
W
Coad wire with connector (2 m)
\(+\quad+\) (Silicone rubber)

Unit specification
\begin{tabular}{|c|c|}
\hline M & SI unit only*2 \\
\hline- & Unit selection function*3 \\
\hline
\end{tabular}
*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: \(\mathrm{I} / \mathrm{min} \Leftrightarrow \mathrm{cfm}\)
Accumulated flow: \(\mathrm{L} \Leftrightarrow \mathrm{ft}^{3}\)
8 Calibration certificate*4
\begin{tabular}{|c|c|}
\hline- & None \\
\hline \(\mathbf{A}\) & Yes \\
\hline
\end{tabular}
*4 Made to order
(7) Option 2
\begin{tabular}{|c|c|c|}
\hline - & R & T \\
\hline Without bracket & \begin{tabular}{l}
Bracket \\
(For the type without a flow adjustment valve) \\
25A-ZS-33-M \\
* Interchangeable with the existing PFM series
\end{tabular} & \begin{tabular}{l}
Panel mount adapter \\
(For the type without a flow adjustment valve) \\
ZS-33-2J
\end{tabular} \\
\hline
\end{tabular}
* 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.

\title{
2-Colour Display Digital Flow Switch \\ Integrated display
}
* 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.

\section*{2-Colour Display}

\section*{Digital Flow Switch Remote sensor unit}


Piping entry direction \({ }^{\circ}\)
\begin{tabular}{|c|c|}
\hline- & Straight \\
\hline \(\mathbf{L}\) & Bottom \\
\hline
\end{tabular}

Output specification
\begin{tabular}{|c|c|c|}
\hline No. & Description & Applicable display unit \\
\hline \(\mathbf{1}\) & Analogue output (1 to 5 V) & \(25 A-P F M 30 \square\) \\
\hline \(\mathbf{2}\) & Analogue output (4 to 20 mA\()\) & \(25 A-\) PFM31 \(\square\) \\
\hline
\end{tabular}

\section*{- Port size}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow{2}{*}{ Symbol } & \multirow{2}{*}{ Description } & \multicolumn{4}{|c|}{ Flow rate range } \\
\hline & & 10 & 25 & 50 & 11 \\
\hline \(\mathbf{0 1}\) & Rc1/8 & \(\bullet\) & \(\bullet\) & \(\bullet\) & \\
\hline \(\mathbf{0 2}\) & Rc1/4 & & & & \(\bullet\) \\
\hline N01 & NPT1/8 & \(\bullet\) & \(\bullet\) & & \\
\hline N02 & NPT1/4 & & & & \(\bullet\) \\
\hline F01 & G1/8*1 & \(\bullet\) & \(\bullet\) & \(\bullet\) & \\
\hline F02 & G1/4*1 & & & & \(\bullet\) \\
\hline C6 & \(\varnothing\) 6 One-touch fitting & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline C8 & \(\varnothing 8\) (5/16") One-touch fitting & & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline
\end{tabular}
*1 ISO 228-1 compliant
- Options are shipped together with the
product but do not come assembled.

Piping Variations
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{} & \multicolumn{2}{|l|}{With One-touch fittings (C6, C8)} & \multicolumn{2}{|l|}{Female thread (01, 02, N01, N02, F01, F02)} \\
\hline & Straight (-) & Bottom (L) & Straight (-) & Bottom (L) \\
\hline Without flow adjustment valve (-) &  &  &  &  \\
\hline
\end{tabular}

\title{
Flow Sensor Monitor \\ 25A-PFM3 Series
}

\section*{Options/Part Nos.}
\begin{tabular}{|l|c|c|}
\hline \multicolumn{1}{|c|}{ Description } & Part no. & Note \\
\hline Power supply/Output connector (2 m) & ZS-28-A & \\
\hline Sensor connector & ZS-28-C-1 & 1 pc. \\
\hline Panel mount adapter & ZS-46-B & \\
\hline \begin{tabular}{l} 
Panel mount adapter + \\
Front protective cover
\end{tabular} & ZS-46-D & \\
\hline
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.

\title{
Digital Flow Switch \\ 25A-PFMB7 Series
}

\begin{tabular}{|c|c|c|c|}
\hline & OUT1 & OUT2 & Applicable monitor unit model \\
\hline A & NPN & NPN & - \\
\hline B & PNP & PNP & - \\
\hline C & NPN & Analogue 1 to 5 V & PFG300 series \\
\hline D & NPN & Analogue 4 to 20 mA & PFG310 series \\
\hline \(\mathbf{E}^{* 1}\) & PNP & Analogue 1 to 5 V & PFG300 series \\
\hline F \(^{* 1}\) & PNP & Analogue 4 to 20 mA & PFG310 series \\
\hline \(\mathbf{G}^{* 1}\) & NPN & External input *2 & - \\
\hline \(\mathbf{H}^{* 1}\) & PNP & External input *2 & - \\
\hline
\end{tabular}
* 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.

Option 1/Part Nos.
\begin{tabular}{|c|c|c|c|}
\hline Option & Part no. & Qty. & Note \\
\hline Lead wire with connector & ZS-33-D & 1 & Lead wire: 2 m \\
\hline Rubber cover (Silicone rubber) & ZS-33-F & 1 & For connector \\
\hline
\end{tabular}

Option 2/Part Nos.
\begin{tabular}{|l|c|c|c|}
\hline \multicolumn{1}{|c|}{ Option } & Part no. & Qty. & \multicolumn{1}{c|}{ Note } \\
\hline Bracket (for PFMB7201) & 25A-ZS-33-M & 1 & With 2 tapping screws (3 x 6) \\
\hline Panel mount adapter (for PFMB7201) & ZS-33-J & 1 & \\
\hline Bracket (for PFMB7501/7102) & 25A-ZS-42-C & 1 & With 4 tapping screws (3 x 6) \\
\hline Bracket (for PFMB7202) & 25A-ZS-42-D & 1 & With 4 tapping screws (3 x 6) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \[
\begin{aligned}
& \text { Auto } \\
& \text { Switches }
\end{aligned}
\] & Electric Actuators & Process Gas Equipment & Fluid Control Equipment & Detection Switches & \[
\begin{aligned}
& \hline \text { Flow Control } \\
& \text { Equipment/ } \\
& \text { Fittings }
\end{aligned}
\] & \[
\begin{array}{|c|}
\hline \text { Modular F.R.L./. } \\
\text { Pressure Control } \\
\text { Equipment }
\end{array}
\] & Clean Air Filters & \begin{tabular}{|c} 
Air Preparation \\
Equipment
\end{tabular} & Vacuum Equipment & Air Grippers & Rotary Actuators & Related Products & Air Cylinders & Directional Control Valves \\
\hline
\end{tabular}

\title{
3-Colour Display Digital Flow Switch for Water RoHs 25A-PF3W7-Z Series
}

\section*{How to Order}

2 Rated flow range (Flow
\begin{tabular}{|c|c|}
\hline Symbol & Rated flow range \\
\hline \(\mathbf{0 4}\) & 0.5 to \(4 \mathrm{l} / \mathrm{min}\) \\
\hline \(\mathbf{2 0}\) & \(\mathbf{2}\) to 16 l min \\
\hline \(\mathbf{4 0}\) & 5 to \(40 \mathrm{l} / \mathrm{min}\) \\
\hline \(\mathbf{1 1}\) & 10 to \(100 \mathrm{l} / \mathrm{min}\) \\
\hline
\end{tabular}

3 Flow adjustment valve
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow{2}{|c|}{ Symbol } & \(\begin{array}{l}\text { With/4ithout flow } \\
\text { adjustment valve }\end{array}\) & \(\mathbf{0 4}\) Rated flow range \\
\hline- & None & \(\mathbf{2 0}\) & \(\mathbf{4 0}\) & \(\mathbf{1 1}\) \\
\hline S & Yes & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline \multirow{2}{*}{\(100 \mathrm{l} /\) min type with flow adjustment valve is not }
\end{tabular} available.
* The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.
(5) Port size
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow{2}{*}{ Symbol } & \multirow{5}{|c|}{\begin{tabular}{c} 
Port \\
size
\end{tabular}} & \multicolumn{4}{|c|}{ Rated flow range } \\
\cline { 3 - 6 } & \(\mathbf{0 4}\) & \(\mathbf{2 0}\) & \(\mathbf{4 0}\) & \(\mathbf{1 1}\) \\
\hline \(\mathbf{0 3}\) & \(3 / 8\) & & & & - \\
\hline \\
\hline \(\mathbf{0 4}\) & \(1 / 2\) & - & & - & - \\
\hline \(\mathbf{0 6}\) & \(3 / 4\) & - & - & & - \\
\hline \(\mathbf{1 0}\) & \(1 / 1\) & - & - & - & - \\
\hline
\end{tabular}

Lead wire (Option)
\begin{tabular}{|l|l|}
\hline \multicolumn{1}{|c|}{-} & \multicolumn{1}{|c|}{} \\
\hline With lead wire with M8 \\
connector \((3 \mathrm{~m})\) \\
\hline
\end{tabular}

Output specification/Temperature sensor
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Symbol} & OUT1 & & UT2 & \multirow[t]{2}{*}{Temperature sensor} \\
\hline & Flow rate & Flow rate & Temperature & \\
\hline A & NPN & NPN & - & \multirow{8}{*}{None} \\
\hline B & PNP & PNP & - & \\
\hline C & NPN & Analogue 1 to 5 V & - & \\
\hline D & NPN & Analogue 4 to 20 mA & - & \\
\hline E & PNP & Analogue 1 to 5 V & - & \\
\hline F & PNP & Analogue 4 to 20 mA & - & \\
\hline G & NPN & External input*1 & - & \\
\hline H & PNP & External input*1 & - & \\
\hline AT & NPN & (NPN) & \(\xrightarrow{2} \mathrm{NPN}\) & \multirow{6}{*}{With temperature sensor} \\
\hline BT & PNP & (PNP) & \(\xrightarrow{* 2}\) PNP & \\
\hline CT & NPN & (Analogue 1 to 5 V ) & \(\xrightarrow{* 2}\) Analogue 1 to 5 V & \\
\hline DT & NPN & \multicolumn{2}{|l|}{(Analogue 4 to 20 mA ) \(\stackrel{* 2}{\longleftrightarrow}\) Analogue 4 to 20 mA} & \\
\hline ET & PNP & \multicolumn{2}{|l|}{(Analogue 1 to 5 V ) \(\stackrel{* 2}{\longleftrightarrow}\) Analogue 1 to 5 V} & \\
\hline FT & PNP & \multicolumn{2}{|l|}{(Analogue 4 to 20 mA ) \(\stackrel{* 2}{\longleftrightarrow}\) Analogue 4 to 20 mA} & \\
\hline
\end{tabular}
*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.
\begin{tabular}{|c|c|c|c|}
\hline Symbol & Instantaneous flow & Accumulated flow & Temperature \\
\hline M & 1/min & L & \({ }^{\circ} \mathrm{C}\) \\
\hline G & \(\mathrm{gal} / \mathrm{min}\) & gal & \({ }^{\circ} \mathrm{C}\) \\
\hline F & \(\mathrm{gal} / \mathrm{min}\) & gal & \({ }^{\circ} \mathrm{F}\) \\
\hline J & \(1 / \mathrm{min}\) & L & \({ }^{\circ} \mathrm{F}\) \\
\hline
\end{tabular}
* G, F, J: Made to order

Reference: \(1[1 / \mathrm{min}] \leftrightarrow 0.2642[\mathrm{gal} / \mathrm{min}]\)
\(1[\mathrm{gal} / \mathrm{min}] \leftrightarrow 3.785[1 / \mathrm{min}]\)
\({ }^{\circ} \mathrm{F}=9 / 5^{\circ} \mathrm{C}+32\)


\section*{10 Calibration certificate (Only for flow rate) \\ \begin{tabular}{c|c|}
\hline- & None \\
A & With calibration certificate \\
\hline
\end{tabular}}
* Units with temperature sensor can only display the flow rate.

\section*{Options/Part Nos.}

When only optional parts are required, order with the part numbers listed below.
\begin{tabular}{|c|c|c|c|c|}
\hline Description & Part no. & Qty. & \multicolumn{2}{c|}{ Note } \\
\hline \multirow{3}{*}{ Bracket*1 \(^{*}\)} & 25A-ZS-40-K & 1 & For PF3W704/720/504/520 & With 4 tapping screws (3 x 8) \\
\cline { 2 - 6 } & 25A-ZS-40-L & 1 & For PF3W740/540 & With 4 tapping screws (3 \(\times 8)\) \\
\cline { 2 - 6 } & 25A-ZS-40-M & 1 & For PF3W711/511 & With 4 tapping screws (4 x 10) \\
\hline Lead wire with M8 connector & 25A-ZS-40-A & 1 & \multicolumn{2}{|c|}{ Lead wire length: 3 m} \\
\hline
\end{tabular}

\footnotetext{
*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.

\title{
3-Colour Display Digital Flow Switch for Water \\ RoHS \\ 25A-PF3W5-Z Series
}


\section*{(5) Port size}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow{2}{*}{ Symbol } & \multirow{5}{|c|}{\begin{tabular}{c} 
Port \\
size
\end{tabular}} & \multicolumn{4}{|c|}{ Rated flow range } \\
\cline { 3 - 6 } & \(\mathbf{0 4}\) & \(\mathbf{2 0}\) & \(\mathbf{4 0}\) & \(\mathbf{1 1}\) \\
\hline \(\mathbf{0 3}\) & \(3 / 8\) & \(\bullet\) & \(\bullet\) & - & - \\
\hline \(\mathbf{0 4}\) & \(1 / 2\) & - & \(\bullet\) & \(\bullet\) & - \\
\hline 06 & \(3 / 4\) & - & - & \(\bullet\) & \(\bullet\) \\
\hline 10 & \(1 / 1\) & - & - & - & \(\bullet\) \\
\hline
\end{tabular}

Lead wire (Option)
\begin{tabular}{c|l}
- & With lead wire with M8 connector (3 m) \\
\hline \(\mathbf{N}\) & With
\end{tabular}
N Without lead wire with M8 connector

10 Calibration certificate (Only for flow rate)
\begin{tabular}{|c|c|}
\hline- & None \\
\hline \(\mathbf{A}\) & With calibration certificate \\
\hline
\end{tabular}
* Units with temperature sensor can only display the flow rate.

\section*{6) Output specification/Temperature sensor}
\begin{tabular}{|c|c|c|c|}
\hline \multirow{2}{*}{ Symbol } & OUT1 & OUT2 & \begin{tabular}{c} 
Temperature \\
sensor
\end{tabular} \\
\cline { 2 - 3 } \(\mathbf{1}\) & Flow rate & Temperature & \multirow{2}{*}{ None } \\
\hline \(\mathbf{2}\) & Analogue 1 to 5 V & - & \\
\hline \(\mathbf{1 T}\) & Analogue 1 to 5 V & Analogue 1 to 5 V & With temperature sensor \\
\hline
\end{tabular}
* To use in combination with remote monitor (PF3W3 series), select analogue output of 1 to 5 V of flow rate (output symbol "-1" or " -1 T ").
8 Remote sensor unit/Unit printed on label
\begin{tabular}{|c|c|c|}
\hline Symbol & Instantaneous flow & Temperature \\
\hline- & \(1 / \mathrm{min}\) & \({ }^{\circ} \mathrm{C}\) \\
\hline G & \(1 / \mathrm{min}(\mathrm{gal} / \mathrm{min})\) & \({ }^{\circ} \mathrm{C} /{ }^{\circ} \mathrm{F}\) \\
\hline
\end{tabular}
* G: Made to order

Reference: \(1[1 / \mathrm{min}] \leftrightarrow 0.2642[\mathrm{gal} / \mathrm{min}]\)
\[
1[\mathrm{gal} / \mathrm{min}] \leftrightarrow 3.785[1 / \mathrm{min}]
\]
\({ }^{\circ} \mathrm{F}=9 / 5^{\circ} \mathrm{C}+32\)
9 Bracket (Option)
\begin{tabular}{|c|c|}
\hline- & None \\
\hline \(\mathbf{R}\) & With bracket \\
\hline
\end{tabular}

\title{
3-colour display \\ Digital Flow Switch for Water

}

\section*{How to Order}

Remote sensor unit/Unit printed on label
\begin{tabular}{|c|c|c|}
\hline Symbol & \begin{tabular}{c} 
Instantaneous \\
flow rate
\end{tabular} & Temperature \\
\hline- & \(1 / \mathrm{min}\) & \({ }^{\circ} \mathrm{C}\) \\
\hline \(\mathbf{G}\) & \begin{tabular}{c}
\(\mathrm{I} / \mathrm{min}\) \\
\((\mathrm{gal} / \mathrm{min})\)
\end{tabular} & \({ }^{\circ} \mathrm{C} /{ }^{\circ} \mathrm{F}\) \\
\hline
\end{tabular}
* G: Made to Order

Reference: \(1[1 / \mathrm{min}] \leftrightarrow 0.2642\) [gal/min]
\(1[\mathrm{gal} / \mathrm{min}] \leftrightarrow 3.785[1 / \mathrm{min}]\)
\({ }^{\circ} \mathrm{F}=9 / 5^{\circ} \mathrm{C}+32\)
* 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").

\section*{Remote \\ sensor unit \\ Integrated display} 25A-PF3W 5 \(504-\square 03-1 \mathrm{~T}\) 25A-PF3W \(704 \square-\square 03-\) AT


Rated flow range (Flow range)
\begin{tabular}{|c|c|}
\hline Symbol & Rated flow range \\
\hline \(\mathbf{0 4}\) & 0.5 to \(4 \mathrm{l} / \mathrm{min}\) \\
\hline \(\mathbf{2 0}\) & 2 to \(16 \mathrm{l} / \mathrm{min}\) \\
\hline \(\mathbf{4 0}\) & 5 to \(40 \mathrm{l} / \mathrm{min}\) \\
\hline \(\mathbf{1 1}\) & 10 to \(100 \mathrm{l} / \mathrm{min}\) \\
\hline \(\mathbf{2 1}\) & 50 to \(250 \mathrm{l} / \mathrm{min}\) \\
\hline
\end{tabular}

Flow adjustment valve
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow{2}{*}{ Symbol } & \begin{tabular}{c} 
With/without flow \\
adjustment valve
\end{tabular} & \multicolumn{5}{|c|}{ Rated flow rate } \\
\cline { 3 - 8 } & 04 & \(\mathbf{2 0}\) & \(\mathbf{4 0}\) & \(\mathbf{1 1}\) & \(\mathbf{2 1}\) \\
\hline- & None & \(\mathbf{}\) & \(\mathbf{}\) & \(\mathbf{}\) & \(\mathbf{O}\) & \(\mathbf{O}\) \\
\hline \(\mathbf{S}\) & Yes & & & & & - \\
\hline
\end{tabular}
* 100 and \(250 \mathrm{l} / \mathrm{min}\) 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.


Integrated display
Output specification/d 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.
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow{2}{*}{ Symbol } & OUT1 & \multicolumn{2}{|c|}{ OUT2 } & Temperature \\
slonsor
\end{tabular}\(|\)

\section*{Options/Part Nos.}

When only optional parts are required, order with the part numbers listed below.
\begin{tabular}{|c|c|c|c|l|}
\hline Description & Part no & Qty. & \multicolumn{2}{c|}{ Note } \\
\hline \multirow{3}{*}{ Bracket*1 } & \(25 A-Z S-40-K\) & 1 & For PF3W704/720/504/520 & With 4 tapping screws (3 x 8) \\
\cline { 2 - 5 } & \(25 A-Z S-40-L\) & 1 & For PF3W740/540 & With 4 tapping screws (3 x 8) \\
\cline { 2 - 5 } & \(25 A-Z S-40-M\) & 1 & For PF3W711/511 & With 4 tapping screws (4 x 10) \\
\hline Lead wire with M8 connector & \(25 A-Z S-40-A\) & 1 & \multicolumn{2}{|c|}{ Lead wire length (3 m) } \\
\hline
\end{tabular}
*1 For units with flow adjustment valve, 2 brackets are required.

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

For details, refer to the Web Catalogue.

\section*{3-colour display \\ Digital Flow Switch for PVC Piping 25A-PF3W Series C \(\subset\) 능}

How to Order
\begin{tabular}{c} 
Remote sensor unit \\
Output specification \\
\begin{tabular}{c} 
Symbol \\
\hline 1 \\
OUT1 \\
\hline 2 \\
\hline 2
\end{tabular} Analogue 1 to 5 V \\
\hline
\end{tabular}
* To use in combination with remote monitor (PF3W3 series), select analogue output of 1 to 5 V of flow rate (output symbol "-1").

Remote sensor unit/Unit printed on label
\begin{tabular}{|c|c|}
\hline \begin{tabular}{c} 
Symbol
\end{tabular} & \begin{tabular}{c} 
Instantaneous \\
flow rate
\end{tabular} \\
\hline- & \(1 / \mathrm{min}\) \\
\hline \(\mathbf{G}\) & \begin{tabular}{c}
\(\mathrm{I} / \mathrm{min}\) \\
\((\mathrm{gal} / \mathrm{min})\)
\end{tabular} \\
\hline
\end{tabular}
* G: Made to Order

Reference: \(1[1 / \mathrm{min}] \leftrightarrow 0.2642[\mathrm{gal} / \mathrm{min}]\) \(1[\mathrm{gal} / \mathrm{min}] \leftrightarrow 3.785[1 / \mathrm{min}]\)

\begin{tabular}{|c} 
Remote \\
sensor unit \\
\hline Integrated \\
display \\
\hline
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.


Series compatible with \({ }^{\circ}\) secondary batteries

Rated flow range (Flow range)
\begin{tabular}{|c|c|}
\hline Symbol & Rated flow range \\
\hline \(\mathbf{1 1}\) & 10 to \(100 \mathrm{I} / \mathrm{min}\) \\
\hline 21 & 30 to \(250 \mathrm{I} / \mathrm{min}\) \\
\hline
\end{tabular}

Connection typed
U PVC pipe
PVC pipe O.D.d
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow{2}{*}{ Symbol } & \begin{tabular}{c} 
Port \\
size
\end{tabular} & \multicolumn{2}{|c|}{ Rated flow range } & \multirow{2}{*}{ Pipe O.D.*1 } \\
\cline { 3 - 4 } & 11 & 21 & \\
\hline \(\mathbf{2 5}\) & 25 A & - & - & 32 mm \\
\hline \(\mathbf{3 0}\) & 30 A & - & - & 38 mm \\
\hline
\end{tabular}
*1 JIS K 6742 equivalent
Integrated display Output specification
\begin{tabular}{|c|c|c|}
\hline Symbol & OUT1 & OUT2 \\
\hline A & NPN & NPN \\
\hline B & PNP & PNP \\
\hline C & NPN & Analogue 1 to 5 V \\
\hline D & NPN & Analogue 4 to 20 mA \\
\hline E & PNP & Analogue 1 to 5 V \\
\hline F & PNP & Analogue 4 to 20 mA \\
\hline G & NPN & External inpu**1 \\
\hline H & PNP & External input* \({ }^{*}\) \\
\hline
\end{tabular}
*1 External input: The accumulated value, peak value, and bottom value can be reset.

\section*{Options/Part Nos.}

When only optional parts are required, order with the part numbers listed below.
\begin{tabular}{|c|c|c|c|}
\hline Description & Part no. & Qty. & Note \\
\hline Bracket & 25A-ZS-40-M & 1 & For PF3W711/511 With 4 tapping screws (4 x 10) \\
\hline Lead wire with M8 connector & 25A-ZS-40-A & 1 & Lead wire length (3 m) \\
\hline
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.

\title{
For 25A-PF3W5(-Z) \\ 3-Colour Display \\ UK Digital Flow Monitor for Water 25A-PF3W Series
}


\section*{Options/Part Nos.}

When only optional parts are required, order with the part numbers listed below.
\begin{tabular}{|c|c|c|}
\hline Description & Part no. & Note \\
\hline Panel mount adapter & 25A-ZS-26-B & With waterproof seal and screws \\
\hline Front protective cover + Panel mount adapter & 25A-ZS-26-C & With waterproof seal and screws \\
\hline Front protective cover only & ZS-26-01 & Separately order panel mount adapter, etc. \\
\hline Power supply/output connection lead wire & ZS-40-W & Lead wire length: 2 m \\
\hline Sensor connector (e-con) & ZS-28-CA-4 & 1 pc. \\
\hline Lead wire with connector for copying & ZS-40-Y & Connect up to 10 copy destination units \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Auto
Switches & Electric Actuators & Process Gas Equipment & Fluid Control Equipment & Detection Switches & Flow Control
Equipment/
Fittings & \[
\begin{array}{|c|}
\hline \text { Modular F.R.L.I./ } \\
\text { Pressure Control } \\
\text { Euupment }
\end{array}
\] & Clean Air Filters & Air Preparation Equipment & Vacuum Equipment & Air Grippers & Rotary Actuators & Related Products & Air Cylinders & Directional
Control Valves \\
\hline
\end{tabular}

\title{
Direct Operated 2-Port Solenoid Valve 25A-VX21/22/23 Series
}

\section*{25A-VX2 10 A}

Series compatible with secondary batteries
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multicolumn{5}{|r|}{secondary batteries} & \multicolumn{2}{|l|}{Fluid} \\
\hline \multicolumn{3}{|l|}{\multirow[b]{2}{*}{- Size/Valve type}} & & & 0 F For & air \\
\hline & & & \multicolumn{4}{|l|}{. Body material/Port size/Orifice diameter} \\
\hline Symbol & Size & Valve type & Symbol & Body material & Port size & \[
\begin{array}{c|}
\hline \text { Orifice } \\
\text { diameter }
\end{array}
\] \\
\hline \multirow{12}{*}{1} & \multirow{12}{*}{Size 1} & \multirow{12}{*}{Single unit N.C.} & A & \multirow{6}{*}{Aluminum} & \multirow{3}{*}{1/8} & 2 \\
\hline & & & B & & & 3 \\
\hline & & & C & & & 5 \\
\hline & & & D & & \multirow{3}{*}{1/4} & 2 \\
\hline & & & E & & & 3 \\
\hline & & & F & & & 5 \\
\hline & & & H & \multirow{6}{*}{Resin} & \multirow{3}{*}{\(\varnothing 6\) One-touch fitting} & 2 \\
\hline & & & J & & & 3 \\
\hline & & & K & & & 5 \\
\hline & & & L & & \multirow{3}{*}{\(\varnothing 8\) One-touch fitting} & 2 \\
\hline & & & M & & & 3 \\
\hline & & & N & & & 5 \\
\hline \multirow{8}{*}{2} & \multirow{8}{*}{Size 2} & \multirow{8}{*}{Single unit N.C.} & A & \multirow{4}{*}{Aluminum} & 1/4 & 4 \\
\hline & & & B & & 1/4 & 7 \\
\hline & & & D & & \multirow[t]{2}{*}{3/8} & 4 \\
\hline & & & E & & & 7 \\
\hline & & & H & \multirow{4}{*}{Resin} & \multirow[t]{2}{*}{\(\varnothing 8\) One-touch fitting} & 4 \\
\hline & & & J & & & 7 \\
\hline & & & L & & \multirow[t]{2}{*}{Ø 10 One-touch fitting} & 4 \\
\hline & & & M & & & 7 \\
\hline \multirow{13}{*}{3} & \multirow{13}{*}{Size 3} & \multirow{13}{*}{Single unit N.C.} & A & \multirow{7}{*}{Aluminum} & \multirow{3}{*}{1/4} & 5 \\
\hline & & & B & & & 8 \\
\hline & & & C & & & 10 \\
\hline & & & D & & \multirow{3}{*}{3/8} & 5 \\
\hline & & & E & & & 8 \\
\hline & & & F & & & 10 \\
\hline & & & G & & 1/2 & 10 \\
\hline & & & H & \multirow{6}{*}{Resin} & \multirow{3}{*}{\(\varnothing 10\) One-touch fitting} & 5 \\
\hline & & & J & & & 8 \\
\hline & & & K & & & 10 \\
\hline & & & L & & \multirow{3}{*}{\(\varnothing 12\) One-touch fitting} & 5 \\
\hline & & & M & & & 8 \\
\hline & & & N & & & 10 \\
\hline
\end{tabular}

For other special options, refer to the standard products.
\begin{tabular}{|c|c|c|}
\hline \multirow{5}{*}{Special voltage} & 24 VAC & Low concentration ozone resistant (Seal material: FKM) \\
\hline & 48 VAC & Seal material: EPDM \\
\hline & 220 VAC & Oil-free \\
\hline & 240 VAC & G thread \\
\hline & 12 VDC & NPT thread \\
\hline \multicolumn{2}{|l|}{DIN terminal with light} & With bracket (Aluminium body only) \\
\hline \multicolumn{2}{|l|}{Conduit terminal with light} & Mounting holes on the bottom side of the body (Aluminium body only) \\
\hline \multicolumn{2}{|l|}{Without DIN connector} & Special electrical entry direction \\
\hline
\end{tabular}
* 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.

For details, refer to the Web Catalogue.

\title{
Direct Operated 2-Port Solenoid Valve 25A-VX21/22/23 Series
}

\section*{How to Order (Single Unit)}

\section*{25A-VX2 1 4 4 A}

Series compatible with d secondary batteries
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multicolumn{3}{|l|}{\multirow[b]{4}{*}{-Size/Valve type}} & \multicolumn{4}{|c|}{Fluid \({ }^{\text {d }}\)} \\
\hline & & & \multicolumn{4}{|c|}{\multirow[t]{2}{*}{\begin{tabular}{|c|c}
\(\mathbf{2}\) & For water \\
\hline 4 & For medium vacuum \\
\hline
\end{tabular}}} \\
\hline & & & & & & \\
\hline & & & \multicolumn{4}{|l|}{-Body materia//Port size/Orifice diameter} \\
\hline Symbol & Size & Valve type & Symbol & Body material & Port size & Orifice diameter \\
\hline \multirow{6}{*}{1} & \multirow{6}{*}{Size 1} & \multirow{6}{*}{Single unit N.C.} & H & \multirow{6}{*}{Stainless steel} & \multirow{3}{*}{1/8} & 2 \\
\hline & & & J & & & 3 \\
\hline & & & K & & & 5 \\
\hline & & & L & & \multirow{3}{*}{1/4} & 2 \\
\hline & & & M & & & 3 \\
\hline & & & N & & & 5 \\
\hline \multirow{4}{*}{2} & \multirow{4}{*}{Size 2} & \multirow{4}{*}{\[
\begin{aligned}
& \text { Single } \\
& \text { unit } \\
& \text { N.C. }
\end{aligned}
\]} & H & \multirow{4}{*}{\[
\begin{array}{|c|}
\hline \text { Stainless } \\
\text { steel }
\end{array}
\]} & \multirow[t]{2}{*}{1/4} & 4 \\
\hline & & & J & & & 7 \\
\hline & & & L & & \multirow[t]{2}{*}{3/8} & 4 \\
\hline & & & M & & & 7 \\
\hline \multirow{7}{*}{3} & \multirow{7}{*}{Size 3} & \multirow{7}{*}{\[
\begin{gathered}
\text { Single } \\
\text { unit } \\
\text { N.C. }
\end{gathered}
\]} & H & \multirow{7}{*}{Stainless steel} & \multirow{3}{*}{1/4} & 5 \\
\hline & & & J & & & 8 \\
\hline & & & K & & & 10 \\
\hline & & & L & & \multirow{3}{*}{3/8} & 5 \\
\hline & & & M & & & 8 \\
\hline & & & N & & & 10 \\
\hline & & & P & & 1/2 & 10 \\
\hline
\end{tabular}

For other special options, refer to the standard products.
\begin{tabular}{|c|c|c|}
\hline \multirow{5}{*}{Special voltage} & 24 VAC & Applicable to deionized water (Seal material: FKM) \\
\hline & 48 VAC & Seal material: EPDM \\
\hline & 220 VAC & Oil-free \\
\hline & 240 VAC & G thread \\
\hline & 12 VDC & NPT thread \\
\hline \multicolumn{2}{|l|}{DIN terminal with light} & With bracket \\
\hline \multicolumn{2}{|l|}{Conduit terminal with light} & Mounting holes on the bottom side of the body \\
\hline \multicolumn{2}{|l|}{Without DIN connector} & Special electrical entry direction \\
\hline
\end{tabular}
* 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.

Common Specifications
\begin{tabular}{|l|c|}
\hline Valve type & N.C. \\
\hline \multirow{2}{*}{ Seal material } & NBR (For water) \\
\cline { 2 - 2 } & FKM (For medium vacuum) \\
\hline Coil insulation type & Class B \\
\hline Thread type & Rc \\
\hline
\end{tabular}
- Voltage/Electrical entry
\begin{tabular}{|c|c|c|}
\hline Symbol & Voltage & Electrical entry \\
\hline A & 24 VDC & Grommet \\
\hline B & 100 VAC & \multirow[t]{5}{*}{Grommet (With surge) voltage suppressor)} \\
\hline C & 110 VAC & \\
\hline D & 200 VAC & \\
\hline E & 230 VAC & \\
\hline F & 24 VDC & \\
\hline G & 24 VDC & \multirow[t]{5}{*}{DIN terminal With surge voltage suppressor} \\
\hline H & 100 VAC & \\
\hline J & 110 VAC & \\
\hline K & 200 VAC & \\
\hline L & 230 VAC & \\
\hline M & 24 VDC & \multirow[t]{5}{*}{Conduit terminal (With surge) voltage suppressor} \\
\hline N & 100 VAC & \\
\hline P & 110 VAC & \\
\hline Q & 200 VAC & \\
\hline R & 230 VAC & \\
\hline S & 24 VDC & \multirow[t]{5}{*}{Conduit (With surge) voltage suppressor)} \\
\hline T & 100 VAC & \\
\hline U & 110 VAC & \\
\hline V & 200 VAC & \\
\hline W & 230 VAC & \\
\hline Y & 24 VDC & Flat terminal \\
\hline Z & \multicolumn{2}{|r|}{Other voltages and electrical options} \\
\hline
\end{tabular}

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

For details, refer to the Web Catalogue.


\title{
Pilot Operated 2-Port Solenoid Valve For Air
} 25A-VXD Series
All other special options are the same as those of the standard model.
\begin{tabular}{|c|c|}
\hline \multirow{5}{*}{Special voltage} & 24 VAC \\
\hline & 48 VAC \\
\hline & 220 VAC \\
\hline & 240 VAC \\
\hline & 12 VDC \\
\hline \multicolumn{2}{|l|}{DIN terminal with light} \\
\hline \multicolumn{2}{|l|}{Conduit terminal with light} \\
\hline \multicolumn{2}{|l|}{Without DIN connector} \\
\hline \multicolumn{2}{|l|}{Low concentration ozone resistant (Seal material: FKM)} \\
\hline \multicolumn{2}{|l|}{Seal material: EPDM} \\
\hline \multicolumn{2}{|l|}{Oil-free} \\
\hline \multicolumn{2}{|l|}{G thread} \\
\hline \multicolumn{2}{|l|}{NPT thread} \\
\hline \multicolumn{2}{|l|}{With bracket} \\
\hline Special electrical & direction \\
\hline
\end{tabular}
* 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.

Common Specifications
\begin{tabular}{|l|c|}
\hline Seal material & NBR \\
\hline Coil insulation type & Class B \\
\hline Thread type & Rc \\
\hline
\end{tabular}
- Voltage/Electrical entry


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

For details, refer to the Web Catalogue.

\title{
Pilot Operated 2-Port Solenoid Valve For Water
} 25A-VXD Series

All other special options are the same as those of the standard model.
\begin{tabular}{|l|c|}
\hline \multirow{3}{*}{ Special voltage } & 24 VAC \\
& 48 VAC \\
& 220 VAC \\
& 240 VAC \\
\hline DIN terminal with light \\
\hline Conduit terminal with light \\
\hline Without DIN connector \\
\hline \begin{tabular}{l} 
Applicable to deionized water \\
(Seal material: FKM)
\end{tabular} \\
\hline Seal material: EPDM \\
\hline Oil-free \\
\hline G thread \\
\hline NPT thread \\
\hline With bracket \\
\hline Special electrical entry direction \\
\hline
\end{tabular}
* 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.

For details, refer to the Web Catalogue.

\title{
Zero Differential Pressure Type Pilot Operated 2-Port Solenoid Valve/For Air 25A-VXZ Series
}
All other special options are the same as those of the standard model.
\begin{tabular}{|l|c|}
\hline \multirow{3}{*}{ Special voltage } & 24 VAC \\
\cline { 2 - 2 } & 48 VAC \\
& 220 VAC \\
& 240 VAC \\
\hline DIN terminal with light \\
\hline Conduit terminal with light \\
\hline Without DIN connector \\
\hline \begin{tabular}{l} 
Low concentration ozone resistant \\
(Seal material: FKM) \\
\hline Seal material: EPDM \\
\hline Oil-free \\
\hline G thread \\
\hline NPT thread \\
\hline With bracket (Standard for resin body) \\
\hline Special electrical entry direction \\
\hline
\end{tabular} \\
\hline
\end{tabular}
* 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.
Common Specifications
\begin{tabular}{|l|c|}
\hline Seal material & NBR \\
\hline Coil insulation type & Class B \\
\hline Thread type & Rc \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Symbol & Body size & Valve type & Symbol & Body material & Port size & Orifice diameter \\
\hline 3 & \multirow[b]{2}{*}{10A} & N.C. & A & \multirow[b]{2}{*}{Aluminium} & 1/4 & \multirow[b]{2}{*}{10} \\
\hline A & & N.O. & B & & 3/8 & \\
\hline 4 & \multirow[b]{2}{*}{15A} & N.C. & \multirow[b]{2}{*}{G} & \multirow[t]{2}{*}{Stainless steel} & \multirow[b]{2}{*}{1/2} & \multirow[b]{2}{*}{15} \\
\hline B & & N.O. & & & & \\
\hline 5 & \multirow[b]{2}{*}{20A} & N.C. & \multirow[b]{2}{*}{J} & \multirow[t]{2}{*}{Stainless steel} & \multirow[b]{2}{*}{3/4} & \multirow[b]{2}{*}{20} \\
\hline C & & N.O. & & & & \\
\hline 6 & \multirow[b]{2}{*}{25A} & N.C. & \multirow[b]{2}{*}{L} & \multirow[t]{2}{*}{Stainless steel} & \multirow[b]{2}{*}{1} & \multirow[b]{2}{*}{25} \\
\hline D & & N.O. & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|l|l|l|}
\hline Symbol & Voltage & \\
\hline
\end{tabular}

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

For details, refer to the Web Catalogue.

\title{
Zero Differential Pressure Type
}

\section*{Pilot Operated 2-Port Solenoid Valve/For Water
} 25A-VXZ Series frors


All other special options are the same as those of the standard model.
\begin{tabular}{|l|c|}
\hline \multirow{3}{*}{ Special voltage } & 24 VAC \\
& 48 VAC \\
& 220 VAC \\
& 240 VAC \\
\hline DIN terminal with light \\
\hline Conduit terminal with light \\
\hline Without DIN connector \\
\hline \begin{tabular}{l} 
Applicable to deionized water \\
(Seal material: FKM)
\end{tabular} \\
\hline Seal material: EPDM \\
\hline Oil-free \\
\hline G thread \\
\hline NPT thread \\
\hline With bracket \\
\hline Special electrical entry direction \\
\hline
\end{tabular}
* 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.

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

For details, refer to the Web Catalogue

\title{
Diaphragm Valve for Ultra High Purity Air Operated Type AZ3542 \& 4542 25 A Series
}
- Suitable for UHP gas supply line

\section*{- Body material: 316L SS}
- Pneumatically actuated normally closed

How to Order


Model
\begin{tabular}{|c|c|c|}
\hline Code & Status & Maximum operating pressure \\
\hline \multirow{2}{*}{542} & Normally closed & 125 psig \\
& (N.C.) & \((0.9 \mathrm{MPa})\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|r|}{Material \({ }^{\text {d }}\)} \\
\hline Code & \multicolumn{2}{|l|}{Body material} \\
\hline S & 316 & \\
\hline \multicolumn{3}{|r|}{Ports} \\
\hline Code & Ports & Connection \\
\hline 2P & \multirow[b]{2}{*}{2 ports} & Machined \\
\hline 2PW & & Welded \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Code} & \multirow[b]{2}{*}{Connections} & Size & \multicolumn{2}{|c|}{AZ3} & \multicolumn{2}{|c|}{AZ4} \\
\hline & & Port & 2P & 2PW & 2P & 2PW \\
\hline MV4 & 1/4 inch face seal (Male) & & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline FV4 & 1/4 inch face seal (Femal & & & \(\bigcirc\) & & \(\bigcirc\) \\
\hline TW4 & 1/4 inch tube weld & & \(\bigcirc\) & \(\bigcirc\) & & \\
\hline MV6 & 3/8 inch face seal (Male) & & & & \(\bigcirc\) & \(\bigcirc\) \\
\hline FV6 & \(3 / 8\) inch face seal (Femal & & & & & \(\bigcirc\) \\
\hline TW6 & 3/8 inch tube weld & & & & \(\bigcirc\) & \(\bigcirc\) \\
\hline TW8 & \(1 / 2\) inch tube weld & & & & \(\bigcirc\) & \\
\hline
\end{tabular}

\section*{Specifications}
\begin{tabular}{|l|c|c|}
\hline Operating Parameters & AZ3542 \(\square\) 25A & AZ4542 \(\square\) 25A \\
\hline Weight & \(0.26 \mathrm{~kg}{ }^{* 11}\) \\
\hline
\end{tabular}
*1) Weight for AZ3542S2PMV4MV4 including individual boxed weight. It may vary depending on connections or options.
* Some parts have sizes and shapes that are different from the standard products.

For details, refer to the Web Catalogue.

\section*{Dimensions}

AZ3542 \& 4542

Ports: 2P (Machined)


Connections: MV \(\square\)


Connections: TW \(\square\)

\begin{tabular}{c|c|c|c}
\hline Ports & Connections & A & B \\
\hline \multirow{4}{*}{\begin{tabular}{c} 
2P \\
(Machined)
\end{tabular}} & MV4 & \(1.14(29.0)\) & \multirow{2}{*}{1.12 sq. (28.4) } \\
\cline { 2 - 3 } & TW4 & \(0.875(22.2)\) & \\
\cline { 2 - 3 } & MV6 & \(1.5(38.1)\) & 1.48 sq. (37.6) \\
\cline { 2 - 3 } & TW6 & \(0.875(22.2)\) & \multirow{2}{*}{1.12 sq. (28.4) } \\
\cline { 2 - 3 } & TW8 & \(1.125(28.6)\) & \\
\hline
\end{tabular}

Ports: 2PW (Welded)


Connections: FV \(\square\)


Connections: MV \(\square\)

\begin{tabular}{c|c|c}
\hline Ports & Connections & A \\
\hline \multirow{4}{*}{\begin{tabular}{c} 
2PW \\
(Welded)
\end{tabular}} & MV4 & \multirow{2}{*}{\(1.39(35.3)\)} \\
\cline { 2 - 2 } & FV4 & \\
\cline { 2 - 2 } & TW4 & \(1.06(26.9)\) \\
\cline { 2 - 2 } & MV6 & \(1.93(49.0)\) \\
\cline { 2 - 2 } & FV6 & TW6 \\
\hline
\end{tabular}


\title{
Diaphragm Valves for General Applications Air Operated Type AK3542 \& 4542 \(\square 25 A\) Series
}
- Body material: 316 SS
- Normally closed

How to Order

\begin{tabular}{|c|c|c|}
\hline Code & Status & Maximum operating pressure \\
\hline \(\mathbf{5 4 2}\) & Normally closed (N.C.) & 125 psig ( 0.9 MPa ) \\
\hline
\end{tabular}

Connections
\begin{tabular}{|c|c|c|c|}
\hline Code & Connections & AK3 & AK4 \\
\hline 4T & 1/4 inch compression & \multirow{5}{*}{\(\bigcirc\)} & \multirow{5}{*}{-} \\
\hline 4BR & Rc 1/4 & & \\
\hline 4BRN & R 1/4 & & \\
\hline 4 & NPT 1/4 female & & \\
\hline 4N & NPT 1/4 male & & \\
\hline 6 T & 3/8 inch compression & \multirow{5}{*}{-} & \multirow{5}{*}{\(\bigcirc\)} \\
\hline 6BR & Rc 3/8 & & \\
\hline 6BRN & R 3/8 & & \\
\hline 6 & NPT 3/8 female & & \\
\hline 6N & NPT 3/8 male & & \\
\hline
\end{tabular} outlet.
* Specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalogue.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Auto
Switches & Electric Actuators & Process Gas Equipment & Fluid Control
Equipment & Detection Switches & \[
\begin{gathered}
\hline \text { Flow Control } \\
\text { Equipment/ } \\
\text { Fittings }
\end{gathered}
\] & \[
\begin{array}{|c|}
\hline \text { Modular F.R.L./. } \\
\text { Pressure Control } \\
\text { Equipment }
\end{array}
\] & Clean Air Filters & Air Preparation Equipment & Vacuum Equipment & Air Grippers & Rotary Actuators & Related Products & Air Cylinders & Directional Control Valves \\
\hline
\end{tabular}

\title{
Electric Actuator/Slider Type Ball Screw Drive
}


For details on controllers, refer to page 240.


(6) Stroke \({ }^{* 1}\) [mm]
\begin{tabular}{|c|c|c|}
\hline \multirow[b]{2}{*}{Stroke} & \multicolumn{2}{|r|}{Note} \\
\hline & Size & Applicable stroke \\
\hline \[
\begin{aligned}
& 50 \text { to } \\
& 500
\end{aligned}
\] & 16 & \[
\begin{aligned}
& 50,100,150,200,250,300,350,400,450 \text {, } \\
& 500
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& 50 \text { to } \\
& 600
\end{aligned}
\] & 25 & \[
\begin{aligned}
& 50,100,150,200,250,300,350,400,450 \\
& 500,550,600
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& 50 \text { to } \\
& 800
\end{aligned}
\] & 32 & \[
\begin{aligned}
& 50,100,150,200,250,300,350,400,450 \\
& 500,550,600,650,700,750,800
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& 150 \text { to } \\
& 1000
\end{aligned}
\] & 40 & \(150,200,250,300,350,400,450,500,550\),
\(600,650,700,750,800,850,900,950\),
1000 \\
\hline
\end{tabular}

Motor option
\begin{tabular}{|c|c|}
\hline- & Without option \\
\hline \(\mathbf{B}\) & With lock \\
\hline
\end{tabular}

Positioning pin hole

(9) Actuator cable type/length*4
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Standard cable [m]} & \multicolumn{3}{|l|}{Robotic cable} & [m] \\
\hline - & None & R1 & 1.5 & RA & 10*3 \\
\hline S1 & 1.5*6 & R3 & 3 & RB & 15*3 \\
\hline S3 & 3*6 & R5 & 5 & RC & 20*3 \\
\hline S5 & 5*6 & R8 & 8*3 & & \\
\hline
\end{tabular}

\title{
Electric Actuator/Slider Type \\ Ball Screw Drive \\ 25A-LEFS
}

\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{10 Controller/Driver type*5} \\
\hline - & \multicolumn{2}{|l|}{Without controller/driver} \\
\hline 6N & LECA6 & NPN \\
\hline 6P & (Step data input type) & PNP \\
\hline 1N & \multirow[t]{2}{*}{\begin{tabular}{l}
LECP1*6 \\
(Programless type)
\end{tabular}} & NPN \\
\hline 1P & & PNP \\
\hline AN & \multirow[t]{2}{*}{\begin{tabular}{l}
LECPA* 6 * 7 \\
(Pulse input type)
\end{tabular}} & NPN \\
\hline AP & & PNP \\
\hline
\end{tabular}
11 I/O cable length*8
\begin{tabular}{|c|c|}
\hline- & \begin{tabular}{c} 
Without cable \\
(Without communication plug connector)
\end{tabular} \\
\hline \(\mathbf{1}\) & 1.5 m \\
\hline \(\mathbf{3}\) & \(3 \mathrm{~m}^{* 9}\) \\
\hline \(\mathbf{5}\) & \(5 \mathrm{~m}^{* 9}\) \\
\hline
\end{tabular}
12 Controller/Driver mounting
\begin{tabular}{|c|c|}
\hline - & Screw mounting \\
\hline \(\mathbf{D}\) & DIN rail*10 \\
\hline
\end{tabular}
*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- \(\square\) ) separately. (Refer to the Web Catalogue.)

\section*{\(\triangle\) Caution}

\section*{[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 ( 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.
*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 \({ }^{\circledR}\), CC-Link, or parallel input.
Select "-," "S," or "T" for DeviceNet \({ }^{\circledR}\) or CC-Link.
Select "-," "1," "3," or " 5 " for parallel input.

\section*{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).


\footnotetext{
* Refer to the Operation Manual for using the products. Please download it via our website: https://www.smc.eu
}

\section*{25A-LEFS Series}

Step Motor (Servo/24 VDC)

\section*{Compatible Controllers/Drivers}
\begin{tabular}{|c|c|c|c|c|}
\hline Type & Step data input type & Step data input type & Programless type & Pulse input type \\
\hline Series & \[
\begin{aligned}
& \text { JXC51 } \\
& \text { JXC61 }
\end{aligned}
\] & LECA6 & LECP1 & LECPA \\
\hline 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 \\
\hline Compatible motor & Step motor (Servo/24 VDC) & Servo motor (24 VDC) & \multicolumn{2}{|c|}{Step motor (Servo/24 VDC)} \\
\hline Max. number of step data & \multicolumn{2}{|c|}{64 points} & 14 points & - \\
\hline Power supply voltage & \multicolumn{4}{|c|}{24 VDC} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Type & EtherCAT direct input type & EtherNet/IPTM direct input type & \begin{tabular}{l}
PROFINET \\
direct input type
\end{tabular} & DeviceNet \({ }^{\circledR}\) direct input type & IO-Link direct input type & CC-Link direct input type \\
\hline Series & JXCE1 & JXC91 & JXCP1 & JXCD1 & JXCL1 & JXCM1 \\
\hline Features & EtherCAT direct input & EtherNet/IPTM direct input & PROFINET direct input & DeviceNet \({ }^{\circledR}\) direct input & IO-Link direct input & CC-Link direct input \\
\hline Compatible motor & \multicolumn{6}{|c|}{Step motor (Servo/24 VDC)} \\
\hline Max. number of step data & \multicolumn{6}{|c|}{64 points} \\
\hline Power supply voltage & \multicolumn{6}{|c|}{24 VDC} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \[
\begin{aligned}
& \text { Auto } \\
& \text { Switches }
\end{aligned}
\] & Electric Actuators & Process Gas
Equipment & Fluid Control
Equipment & Detection Switches & \[
\begin{gathered}
\text { Flow Control } \\
\text { Equipment/ } \\
\text { Fittings }
\end{gathered}
\] & \begin{tabular}{|c|}
\hline Modular F.R.L././ \\
Pressure Control \\
Equipment
\end{tabular} & Clean
Air Filters & Air Preparation & Vacuum Equipment & Air Grippers & Rotary Actuators & Related Products & Air Cylinders & Directional Control Valves \\
\hline
\end{tabular}

\title{
Electric Actuator/Slider Type
}
 25A-LEFS Series LeFs25, 32, 40

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 subsitutues. In the product number, select \(T 6\) instead of \(S 6\), \(T 7\) instead of \(S 7\), or \(T 8\) instead of \(S 8\) for the \(\boldsymbol{\theta}\) Motor type, and select B2 instead of B1, C2 instead of C 1 , or S 2 instead of S 1 for the (1) Driver type.

Refer to the Web Catalogue for model selection.
LECY \(\square\) Series >p. 244
RoHS

\begin{tabular}{|c|c|c|c|c|c|}
\hline Symbol & Type & Output[W] & Actuator size & Compatible drivers & UL-compliant \\
\hline S2*1 & \multirow[t]{3}{*}{AC servo motor (Incremental encoder)} & 100 & 25 & LECSAD-S1 & - \\
\hline S3 & & 200 & 32 & LECSAD-S3 & - \\
\hline S4 & & 400 & 40 & LECSA2-S4 & - \\
\hline S6*1 & \multirow{3}{*}{AC servo motor (Absolute encoder)} & 100 & 25 & LECSB \(\square-S 5\)
LECSC■-S5
LECSS \(\square\)-S5 & - \\
\hline S7 & & 200 & 32 & \[
\begin{aligned}
& \text { LECSB } \square \text {-S7 } \\
& \text { LECSC } \square \text {-S7 } \\
& \text { LECSS } \square \text {-S7 }
\end{aligned}
\] & - \\
\hline S8 & & 400 & 40 & \[
\begin{aligned}
& \text { LECSB2-S8 } \\
& \text { LECSC2-S8 } \\
& \text { LECSS2-S8 }
\end{aligned}
\] & - \\
\hline T6*2 & \multirow{6}{*}{\(A C\) servo motor (Absolute encoder)} & 100 & 25 & LECSB2-T5
LECSC2-T5
LECSN2-T5- & - \\
\hline & & & & LECSS2-T5 & \(\bigcirc\) \\
\hline \multirow[t]{2}{*}{T7} & & 200 & 32 & \[
\begin{aligned}
& \text { LECSB2-T7 } \\
& \text { LECSC2-T7 } \\
& \text { LECSN2-T7- } \square
\end{aligned}
\] & - \\
\hline & & & & LECSS2-T7 & \(\bigcirc\) \\
\hline \multirow[t]{2}{*}{T8} & & \multirow[t]{2}{*}{400} & \multirow[t]{2}{*}{40} & LECSB2-T8
LECSC2-T8
LECSN2-T8- - & - \\
\hline & & & & LECSS2-T8 & - \\
\hline
\end{tabular}
*1 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 \(\square 2-T 5\).


Positioning pin hole
\begin{tabular}{|c|c|c|}
\hline - & Housing B bottom*1 & Housing B bottom \\
\hline K & Body bottom 2 locations &  \\
\hline
\end{tabular}
*1 Refer to the body mounting example for the mounting method. (Refer to the Web Catalogue.)

6 Stroke [mm]
\begin{tabular}{|c|c|}
\hline 50 & 50 \\
\hline to & to \\
\hline 1000 & 1000 \\
\hline
\end{tabular}
* For details, refer to the applicable stroke table below.

\section*{}
\begin{tabular}{|c|c|}
\hline- & Without cable \\
\hline \(\mathbf{S}\) & Standard cable \\
\hline \(\mathbf{R}\) & \begin{tabular}{c} 
Robotic cable \\
(Flexible cable)
\end{tabular} \\
\hline
\end{tabular}
*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

11 Driver type
\begin{tabular}{|c|c|}
\hline- & Without cable \\
\hline 2 & 2 \\
\hline 5 & 5 \\
\hline \(\mathbf{A}\) & 10 \\
\hline
\end{tabular}
*1 The length of the encoder, motor, and lock cables are the same.
12 I/O cable length [m]*3
\begin{tabular}{|c|c|}
\hline- & Without cable \\
\hline \(\mathbf{H}\) & Without cable (Connector only) \\
\hline \(\mathbf{1}\) & 1.5 \\
\hline
\end{tabular}
*3 When "一: 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 Manufacuurable stroke range [mm] 50 to 600 50 to 800 150 to 1000
* Please contact SMC for non-standard strokes as they are produced as special orders.

\section*{Compatible Drivers*1}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline 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 &  & Network card type \\
\hline Series & LECSA & LECSB & LECSC & LECSS & LECSB-T & LECSC-T & LECSS-T & LECSN-T \\
\hline Number of point tables*2 & Up to 7 & - & Up to 255 (2stations occupied) & - & Up to 255 & Up to 255 (2stations occupied) & - & Up to 255 \\
\hline Pulse input & \(\bigcirc\) & \(\bigcirc\) & - & - & \(\bigcirc\) & - & - & - \\
\hline Applicable network & - & - & CC-Link & SSCNET3 & - & CC-Link & SSCNET \#/H & PROFINET
EtherCAT
EtherNet/IPTM \\
\hline 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 \\
\hline Communication function & USB communication & USB communication, & RS422 communication & USB communication & USB communication, & RS422 communication & USB communication & USB communication \\
\hline Power supply voltage [V] & 100 to 120 & VAC ( \(50 / 60 \mathrm{~Hz}\) ) & 200 to 230 VAC & ( \(50 / 60 \mathrm{~Hz}\) ) & 200 to 240 VAC ( 50160 Hz ) & 200 to \(230 \mathrm{VAC}(50160 \mathrm{~Hz}\) ) & 200 to \(240 \mathrm{VAC}(50160 \mathrm{~Hz})\) & 200 to \(240 \mathrm{VAC}(50160 \mathrm{~Hz})\) \\
\hline
\end{tabular} are the same as those of the standard model. are the same as those of the standard model.
When a driver type is selected, a cable is included. Select the cable type and cable length. Example) S2S2: Standard cable (2m) + Driver (LECSS2)

S2: Standard cable (2 m) -: Without cable and driver
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{} & \multirow[t]{2}{*}{Compatible drivers} & \multirow[t]{2}{*}{Power supply voltage [V]} & \multicolumn{3}{|c|}{Size} \\
\hline & & & 25 & 32 & \\
\hline & Without driver & & & & \\
\hline A1 & LECSA1-S & 0 to 1 & & & \\
\hline & ECSA2-S[ & 00 & & & \\
\hline B1 & LECSB1-S[ & 100 to 1 & & & \\
\hline \multirow[t]{2}{*}{} & LECSB2-S & 00 to 2 & & & \\
\hline & LECSB2-TD & 200 to 24 & & & \\
\hline & LECSC1-S[ & 100 to 12 & & & \\
\hline \multirow[t]{2}{*}{C2} & LECSC2-S & & & & \\
\hline & LECSC2-T■ & & & & \\
\hline & LECSS1-S[ & 00 to 12 & & & \\
\hline \multirow[t]{2}{*}{S2} & LECSS2-S & 200 to 23 & & & \\
\hline & LECSS2-T] & 200 to 24 & & & \\
\hline N & LECSN2-TD & 200 to & & & \\
\hline 92 & LECSN2-TD- & 200 to 2 & & & \\
\hline E2 & LECSN2-TD- & 200 to & & & \\
\hline P2 & LECSN2-T & 200 t & & & \\
\hline \multicolumn{6}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline
\end{tabular}

The 25A- series specifications and dimensions

\title{
Electric Actuator/Slider Type
}

Ball Screw Drive Semenay siavicompaibe

\section*{25A-LEFS Series Lefs25, 32, 40}

Refer to the Web Catalogue for model selection.
LECS \(\square\) Series \(>\) p. 243

RoHS

4 Motor type
\begin{tabular}{|c|c|c|c|c|}
\hline Symbol & Type & Output [W] & Size & Compatible drivers \\
\hline V6*1 & AC servo motor & 100 & 25 & LECYM2-V5/LECYU2-V5 \\
\hline V7 & solu & 200 & 32 & LECYM2-V7/LECYU2-V7 \\
\hline V8 & encoder) & 400 & 40 & LECYM2-V8/LECYU2-V8 \\
\hline
\end{tabular}
*1 For motor type V6, the compatible driver part number suffix is V5.
\begin{tabular}{|c|c|}
\hline 10 Cable length*1 \([\mathrm{m}]\) \\
\hline \(\mathbf{-}\) & Without cable \\
\hline \(\mathbf{3}\) & 3 \\
\hline \(\mathbf{5}\) & 5 \\
\hline A & 10 \\
\hline C & 20 \\
\hline
\end{tabular}
*1 The length of the encoder, motor, and lock cables are the same.

Applicable Stroke Table
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{22}{|l|}{Applicable Stroke Table O: Standard} \\
\hline  & 50 & 100 & 150 & 200 & 250 & 300 & 350 & 400 & 450 & 500 & 550 & 600 & 650 & 700 & 750 & 800 & 850 & 900 & 950 & 1000 & Manufacturable stroke range [mm] \\
\hline 25A-LEFS25 & - & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & - & - & \(\bigcirc\) & - & - & \(\bigcirc\) & - & - & - & - & - & - & - & - & - & 50 to 600 \\
\hline 25A-LEFS32 & - & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & - & - & - & - & - & - & - & - & 50 to 800 \\
\hline 25A-LEFS40 & - & - & - & - & - & - & - & - & - & - & - & - & - & - & - & - & - & - & - & - & 150 to 1000 \\
\hline
\end{tabular}
* Please contact SMC for non-standard strokes as they are produced as special orders.

Compatible Drivers
\begin{tabular}{|c|c|c|}
\hline Driver type & II MECHATROLINK-II type & II MECHATROLINK-III type \\
\hline Series & LECYM & LECYU \\
\hline Applicable network & MECHATROLINK-II & MECHATROLINK-III \\
\hline Control encoder & \multicolumn{2}{|r|}{Absolute 20-bit encoder} \\
\hline Communication device & \multicolumn{2}{|r|}{USB communication, RS-422 communication} \\
\hline Power supply voltage [V] & \multicolumn{2}{|r|}{200 to 230 VAC (50/60 Hz)} \\
\hline
\end{tabular}

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

* Refer to the applicable stroke table.

\section*{8 Positioning pin hole \\  \\ *1 Refer to the body mounting example in the Web Catalogue for the mounting method.}
(11) Driver type
\begin{tabular}{|c|c|c|}
\hline & \begin{tabular}{c} 
Compatible \\
drivers
\end{tabular} & \begin{tabular}{c} 
Power supply \\
voltage [V]
\end{tabular} \\
\hline- & Without driver & - \\
\hline M2 & LECYM2-V \(\square\) & 200 to 230 \\
\hline U2 & LECYU2-V \(\square\) & 200 to 230 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline 9 Cable type \({ }^{* 1}\) *2 \\
\hline\(\overline{\mathbf{S}}\) & Without cable \\
\hline \(\mathbf{S}\) & Standard cable \\
\hline \(\mathbf{R}\) & \begin{tabular}{c} 
Robotic cable \\
(Flexible cable)
\end{tabular} \\
\hline
\end{tabular}
*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

12 I/O cable length [m]*3
\begin{tabular}{|c|c|}
\hline- & Without cable \\
\hline \(\mathbf{H}\) & Without cable (Connector only) \\
\hline \(\mathbf{1}\) & 1.5 \\
\hline
\end{tabular}
*3 When "-: Without driver" is selected for the driver type, only "一: Without cable" can be selected.
Refer to the Web Catalogue if an I/O cable is required.
* Copper and zinc materials are used for the motors, cables, controllers/drivers.

\title{
Electric Actuator／High Rigidity Slider Type
} Ball Screw Drive smemparievomaide 25A－LEJS Series LEJs40， 63

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 T6 instead of S6，or T7 instead of S7 for the 3 Motor type， and select B 2 instead of \(\mathrm{B} 1, \mathrm{C} 2\) instead of C 1 ， or S 2 instead of S 1 for the \(\boldsymbol{0}\) Driver type．


3 Motor type
\begin{tabular}{|c|c|c|c|c|c|}
\hline Symbol & Type & Output ［W］ & Actuator size & \[
\begin{aligned}
& \text { Compatible*3 } \\
& \text { drivers }
\end{aligned}
\] & \[
\begin{array}{c|}
\hline \text { UL- } \\
\text { compliant }
\end{array}
\] \\
\hline S2＊1 & AC servo motor （Incremental encoder） & 100 & 40 & LECSA \(\square\)－S1 & \(\bigcirc\) \\
\hline S3 & AC servo motor （Incremental encoder） & 200 & 63 & LECSA \(\square\)－S3 & \(\bigcirc\) \\
\hline S6＊1 & AC servo motor （Absolute encoder） & 100 & 40 & \[
\begin{aligned}
& \text { LECSB } \square-S 5 \\
& \text { LECSC口-S5 } \\
& \text { LECSS } \square \text {-S5 }
\end{aligned}
\] & － \\
\hline S7 & AC servo motor （Absolute encoder） & 200 & 63 & \[
\begin{aligned}
& \text { LECSBD-S7 } \\
& \text { LECSCD-S7 } \\
& \text { LECSS■-S7 }
\end{aligned}
\] & － \\
\hline \multirow[t]{2}{*}{T6＊2} & \multirow{4}{*}{AC servo motor （Absolute encoder）} & \multirow[t]{2}{*}{100} & \multirow[t]{2}{*}{40} & \[
\begin{aligned}
& \text { LECSB2-T5 } \\
& \text { LECSC2-T5 } \\
& \text { LECSN2-T5- }
\end{aligned}
\] & － \\
\hline & & & & LECSS2－T5 & \(\bigcirc\) \\
\hline \multirow[t]{2}{*}{T7} & & \multirow[t]{2}{*}{200} & \multirow[t]{2}{*}{63} & \[
\begin{aligned}
& \text { LECSB2-T7 } \\
& \text { LECSC2-T7 } \\
& \text { LECSN2-T7-■ }
\end{aligned}
\] & － \\
\hline & & & & LECSS2－T7 & \(\bigcirc\) \\
\hline
\end{tabular}
＊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 \(\square 2-\) T5．

\section*{Cable type \({ }^{* 5, * 6, ~ * 7}\)}
\begin{tabular}{c|c}
\(\bar{S}\) & Without cable \\
\(\mathbf{S}\) & Standard cable
\end{tabular}
＊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．＂
Applicable Stroke Table＊4

8 Cable length［m］\({ }^{* 5, ~ * 8}\)
\begin{tabular}{|c|c|}
\hline \(\mathbf{-}\) & Without cable \\
\hline \(\mathbf{2}\) & 2 \\
\hline \(\mathbf{5}\) & 5 \\
\hline \(\mathbf{A}\) & 10 \\
\hline
\end{tabular}
＊8 The length of the motor， encoder，and lock cables are the same．
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \({ }_{\text {Model }} \quad\)\begin{tabular}{c} 
Stroke \\
{\([\mathrm{mm}]\)}
\end{tabular} & 200 & 300 & 400 & 500 & 600 & 700 & 800 & 900 & 1000 & 1200 & 1500 \\
\hline 25A－LEJS40 & \(\bigcirc\) & － & － & － & － & － & － & － & － & － & － \\
\hline 25A－LEJS63 & － & \(\bigcirc\) & \(\bigcirc\) & － & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline
\end{tabular}
＊4 Please contact SMC for non－standard strokes as they are produced as special orders．
（4）Lead［mm］
\begin{tabular}{|c|c|c|}
\hline Symbol & 25A－LEJS40 & 25A－LEJS63 \\
\hline \(\mathbf{H}\) & 24 & 30 \\
\hline \(\mathbf{A}\) & 16 & 20 \\
\hline \(\mathbf{B}\) & 8 & 10 \\
\hline
\end{tabular}

\section*{（9）Driver type＊5}
\begin{tabular}{|c|c|c|}
\hline & Compatible drivers & Power supply voltage［V］ \\
\hline- & Without driver & - \\
\hline A1 & LECSA1－S \(\square\) & 100 to 120 \\
\hline A2 & LECSA2－S \(\square\) & 200 to 230 \\
\hline B1 & LECSB1－S \(\square\) & 100 to 120 \\
\hline B2 & LECSB2－S \(\square\) & 200 to 230 \\
\cline { 2 - 3 } & LECSB2－T \(\square\) & 200 to 240 \\
\hline C1 & LECSC1－S \(\square\) & 100 to 120 \\
\hline C2 & LECSC2－S \(\square\) & \multirow{2}{*}{200 to 230} \\
\cline { 2 - 3 } & LECSC2－T \(\square\) & 100 to 120 \\
\hline S1 & LECSS1－S \(\square\) & 200 to 230 \\
\hline S2 & LECSS2－S \(\square\) & 200 to 240 \\
\cline { 2 - 3 } & LECSS2－T \(\square\) & 200 to 240 \\
\hline N2 & LECSN2－T \(\square\) & 200 to 240 \\
\hline 92 & LECSN2－T \(\square-9\) & 200 to 240 \\
\hline E2 & LECSN2－T \(\square-E\) & 200 to 240 \\
\hline P2 & LECSN2－T \(\square-P\) & Pa \\
\hline
\end{tabular}
＊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
10 I／O cable length［m］＊9
\begin{tabular}{c|c}
\hline- & Without cable \\
\hline \(\mathbf{H}\) & Without cable（Connector only） \\
\hline \(\mathbf{1}\) & 1.5
\end{tabular}
＊9 When＂一：Without driver＂is selected for the driver type，only＂一：Without cable＂can be selected． Refer to the Web Catalogue if an I／O cable is required．

For auto switches，refer to page 262.

\section*{Compatible Drivers＊10}
＊The 25A－series specifications and dimensions are the same as those of the standard model．

\title{
Electric Actuator/High Rigidity Slider Type

}

\section*{25A-LEJS Series LEJs40,63}

Refer to the Web Catalogue for model selection.
RoHS
LECS \(\square\) Series \(>\) p. 245
*1 For motor type V6, the compatible driver part number suffix is V5.

\section*{Cable type \({ }^{* 5, * 6, * 7}\)}
\begin{tabular}{|c|c|}
\hline- & Without cable \\
\hline \(\mathbf{S}\) & Standard cable \\
\hline \(\mathbf{R}\) & Robotic cable (Flexible cable) \\
\hline
\end{tabular}
*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 " \((\mathrm{A})\) Axis side."

\section*{8 Cable length [m] *5, *6}
\begin{tabular}{|c|c|}
\hline \(\mathbf{-}\) & Without cable \\
\hline \(\mathbf{3}\) & 3 \\
\hline \(\mathbf{5}\) & 5 \\
\hline \(\mathbf{A}\) & 10 \\
\hline \(\mathbf{C}\) & 20 \\
\hline
\end{tabular}
*6 The length of the motor, encoder and lock cables are the same.

\section*{10 I/O cable length [m]*9}
\begin{tabular}{|c|c|}
\hline- & Without cable \\
\hline \(\mathbf{H}\) & Without cable (Connector only) \\
\hline \(\mathbf{1}\) & 1.5 \\
\hline
\end{tabular}
*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 required.

Refer to the "CE/UKCA/
UL-compliance List" in the Web Catalogue.

Applicable Stroke Table*4

*4 Please contact SMC for non-standard strokes as they are produced as special orders.

(4) Lead [mm]
\begin{tabular}{|c|c|c|}
\hline Symbol & 25A-LEJS40 & 25A-LEJS63 \\
\hline \(\mathbf{H}\) & 24 & 30 \\
\hline \(\mathbf{A}\) & 16 & 20 \\
\hline \(\mathbf{B}\) & 8 & 10 \\
\hline
\end{tabular}

\section*{(5) Stroke [mm]*3}
\begin{tabular}{|c|}
\hline 200 \\
\hline to \\
\hline 1500 \\
\hline
\end{tabular}
*3 Refer to the applicable stroke


1500 table for details.
(9) Driver type *5
\begin{tabular}{|c|c|c|}
\hline & Compatible drivers & Power supply voltage [V] \\
\hline- & Without driver & - \\
\hline M2 & LECYM2-V \(\square\) & 200 to 230 \\
\hline U2 & LECYU2-V \(\square\) & 200 to 230 \\
\hline
\end{tabular}
*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

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.

\section*{Compatible Drivers}
\begin{tabular}{|c|c|c|}
\hline Driver type & RMECHATROLINK-II type & IAMECHATROLINK-III type \\
\hline Series & LECYM & LECYU \\
\hline Applicable network & MECHATROLINK-II & MECHATROLINK-III \\
\hline Control encoder & \multicolumn{2}{|r|}{Absolute 20-bit encoder} \\
\hline Communication device & \multicolumn{2}{|r|}{USB communication, RS-422 communication} \\
\hline Power supply voltage [V] & \multicolumn{2}{|r|}{200 to 230 VAC ( \(50 / 60 \mathrm{~Hz}\) )} \\
\hline
\end{tabular}

\footnotetext{
* Copper and zinc materials are used for the motors, cables, controllers/drivers.
}

\title{
Electric Actuator

}

Refer to the Web Catalogue for model selection.

\section*{How to Order}

Motor mounting position:
Parallel
Motor mounting position: In-line
JxCD Serese
\(\mathrm{CD17T}\)


For details on controllers, refer to page 248.
\begin{tabular}{l}
\begin{tabular}{|c|}
\hline Size
\end{tabular} \\
\begin{tabular}{|c|c|}
\hline 16 \\
\hline 25 \\
\hline 32 \\
\hline 40 \\
\hline
\end{tabular} \\
\begin{tabular}{cc}
2 Motor mounting \\
position
\end{tabular} \\
\hline- \\
\hline R \\
\hline L \\
\hline R \\
\hline
\end{tabular}
(3) Motor type
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Symbol} & \multirow[b]{2}{*}{Type} & \multicolumn{3}{|c|}{Applicable size} & \multicolumn{3}{|l|}{\multirow[t]{2}{*}{Compatible controllers/ drivers}} \\
\hline & & LEY16 & LEY25 & LEY32/40 & & & \\
\hline - & Step motor (Servo/24 VDC) & - & - & \(\bigcirc\) & \begin{tabular}{l}
JXCE1 \\
JXC91 \\
JXCP1 \\
JXCD1 \\
JXCL1
\end{tabular} & JXCM1 JXC51 JXC61 & LECP1 LECPA \\
\hline A & Servo motor (24 VDC) & - & \(\bigcirc\) & - & & LECA6 & \\
\hline
\end{tabular}

\section*{(5) Stroke [mm]}
\begin{tabular}{|c|c|}
\hline 30 & 30 \\
\hline to & to \\
\hline 500 & 500 \\
\hline
\end{tabular}
* For details, refer to the applicable stroke table below.

8 Mounting*5
\begin{tabular}{|c|c|c|c|}
\hline \multirow{2}{*}{ Symbol } & \multirow{2}{*}{ Type } & \multicolumn{2}{|c|}{ Motor mounting position } \\
\cline { 3 - 4 } & & Parallel & In-line \\
\hline- & \begin{tabular}{l} 
Ends tapped/Body \\
bottom tapped*6
\end{tabular} & \(\bullet\) & \(\bullet\) \\
\hline \(\mathbf{L}\) & Foot & \(\bullet\) & - \\
\hline \(\mathbf{F}\) & Rod flange \({ }^{* 6}\) & \(\bullet * 8\) & \(\bullet\) \\
\hline \(\mathbf{G}\) & Head flange*6 & \(\bullet^{* 9}\) & - \\
\hline \(\mathbf{D}\) & Double clevis*7 & \(\bullet\) & - \\
\hline
\end{tabular}

Actuator cable type/length*11 Standard cable [m] Robotic cable
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Standard cable [m]} & \multicolumn{3}{|l|}{Robotic cable} & [m] \\
\hline - & None & R1 & 1.5 & RA & 10*10 \\
\hline S1 & 1.5*12 & R3 & 3 & RB & 15*10 \\
\hline S3 & 3*12 & R5 & 5 & RC & 20*10 \\
\hline S5 & 5*12 & R8 & 8*10 & & \\
\hline
\end{tabular}

Mounting Bracket Part Nos. for the 25A-Series*4
\begin{tabular}{|c|c|c|c|}
\hline Applicable size & Foot*3 & Flange & Double clevis \\
\hline 16 & \(25-\) LEY-L016 & 25-LEY-F016 & \(25-\) LEY-D016 \\
\hline 25 & \(25-\) LEY-L025 & 25-LEY-F025 & \(25-\) LEY-D025 \\
\hline 32,40 & \(25-\) LEY-L032 & \(25-\) LEY-F032 & \(25-\) LEY-D032 \\
\hline \begin{tabular}{c} 
Surface \\
treatment
\end{tabular} & RAYDENT \({ }^{\circledR}\) & RAYDENT \({ }^{\circledR}\) & \begin{tabular}{c} 
Coating \\
(Size 16: Electroless nickel plating)
\end{tabular} \\
\hline
\end{tabular}

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*1
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline  & 30 & 50 & 100 & 150 & 200 & 250 & 300 & 350 & 400 & 450 & 500 & Manufacturable stroke range \\
\hline 25A-LEY16 & - & \(\bigcirc\) & - & - & - & - & - & - & - & - & - & 10 to 300 \\
\hline 25A-LEY25 & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - & - & 15 to 400 \\
\hline 25A-LEY32/40 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - & - & \(\bigcirc\) & - & - & \(\bigcirc\) & \(\bigcirc\) & 20 to 500 \\
\hline
\end{tabular}
* The 25A- series specifications and dimensions are the same as those of the standard model.
For details, refer to the Web Catalogue.

\section*{10 Controller}
Communication plug connector, I/O cable*18
\begin{tabular}{|c|c|c|}
\hline Symbol & Type & Applicable interface \\
\hline \(\mathbf{-}\) & Without accessory & - \\
\hline \(\mathbf{S}\) & Straight type communication plug connector & DeviceNet \({ }^{\circledR}\) \\
\hline \(\mathbf{T}\) & T-branch type communication plug connector & CC-Link Ver. 1.10 \\
\hline \(\mathbf{1}\) & I/O cable (1.5 m) & \multirow{2}{*}{ Parallel input (NPN) } \\
\hline \(\mathbf{3}\) & I/O cable \((3 \mathrm{~m})\) & Parallel input (PNP) \\
\hline \(\mathbf{5}\) & I/O cable \((5 \mathrm{~m})\) & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{10 Controller/Driver type*12} \\
\hline - & \multicolumn{2}{|l|}{Without controller/driver} \\
\hline 6N & LECA6 & NPN \\
\hline 6P & (Step data input type) & PNP \\
\hline 1N & \multirow[t]{2}{*}{\begin{tabular}{l}
LECP1*13 \\
(Programless type)
\end{tabular}} & NPN \\
\hline 1P & & PNP \\
\hline AN & \multirow[t]{2}{*}{LECPA*13*14 (Pulse input type)} & NPN \\
\hline AP & & PNP \\
\hline
\end{tabular}
11 I/O cable length \({ }^{* 15}\)
\begin{tabular}{|c|c|}
\hline- & Without cable \\
(Without communication plug connector) \\
\hline \(\mathbf{1}\) & 1.5 m \\
\hline 3 & \(3 \mathrm{~m}^{* 16}\) \\
\hline 5 & \(5 \mathrm{~m}^{* 16}\) \\
\hline
\end{tabular}

*1 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
*5 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)
*11 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.
*12 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- \(\square\) ) 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 \({ }^{\circledR}\), CC-Link, or parallel input.
Select "-," "S," or "T" for DeviceNet \({ }^{\circledR}\) or CC-Link.
Select "-," "1," "3," or " 5 " for parallel input.

\section*{1 Caution}

\section*{[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.

\section*{[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.

\section*{The actuator and controller/driver are sold as a package.}

Confirm that the combination of the controller/driver and actuator is correct.

\section*{<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

\section*{25A-LEY Series}

Step Motor (Servo/24 VDC)
Servo Motor (24 VDC)
Secondary Battery Compatible

\section*{Compatible Controllers/Drivers}
\begin{tabular}{|c|c|c|c|c|}
\hline Type & Step data input type & Step data input type & Programless type & Pulse input type \\
\hline Series & \[
\begin{aligned}
& \text { JXC51 } \\
& \text { JXC61 }
\end{aligned}
\] & LECA6 & LECP1 & LECPA \\
\hline 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 \\
\hline Compatible motor & Step motor (Servo/24 VDC) & Servo motor (24 VDC) & \multicolumn{2}{|c|}{Step motor (Servo/24 VDC)} \\
\hline Max. number of step data & \multicolumn{2}{|c|}{64 points} & 14 points & - \\
\hline Power supply voltage & \multicolumn{4}{|c|}{24 VDC} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Type & EtherCAT direct input type & EtherNet/IPTM direct input type & \begin{tabular}{l}
PROFINET \\
direct input type
\end{tabular} & DeviceNet \({ }^{\circledR}\) direct input type & IO-Link direct input type & CC-Link direct input type \\
\hline Series & JXCE1 & JXC91 & JXCP1 & JXCD1 & JXCL1 & JXCM1 \\
\hline Features & EtherCAT direct input & EtherNet/IPTM direct input & PROFINET direct input & DeviceNet \({ }^{\circledR}\) direct input & IO-Link direct input & CC-Link direct input \\
\hline Compatible motor & \multicolumn{6}{|c|}{Step motor (Servo/24 VDC)} \\
\hline Max. number of step data & \multicolumn{6}{|c|}{64 points} \\
\hline Power supply voltage & \multicolumn{6}{|c|}{24 VDC} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \[
\begin{aligned}
& \text { Auto } \\
& \text { Switches }
\end{aligned}
\] & Electric Actuators & Process Gas Equipment & Fluid Control Equipment & Detection Switches & \[
\begin{gathered}
\text { Flow Control } \\
\text { Equipment// } \\
\text { Fittings }
\end{gathered}
\] & \[
\begin{array}{|c|}
\hline \text { Modular F.R.L./. } \\
\text { Pressure Control } \\
\text { Equipment }
\end{array}
\] & Clean Air Filters & Air Preparation
Equipment & Vacuum Equipment & Air Grippers & Rotary Actuators & Related Products & Air Cylinders & Directional Control Valves \\
\hline
\end{tabular}

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 subsitutes. In the product number, select \(T 6\) instead of \(S 6\), or 77 instead of \(S 7\) for the \(\Theta\) Motor type, and select \(B 2\) instead of \(\mathrm{B} 1, \mathrm{C} 2\) instead of C 1 , or S2 instead of S 1 for the (1) Driver type.


Refer to the "CE/UKCA/UL-compliance List" in the Web Catalogue.
Size 25, 32
RoHS

\section*{How to Order}



Lead [mm]
\begin{tabular}{|c|c|c|}
\hline Symbol & LEY25 & LEY32*1 \\
\hline A & 12 & \(16(20)\) \\
\hline B & 6 & \(8(10)\) \\
\hline C & 3 & \(4(5)\) \\
\hline
\end{tabular}
*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])

\section*{6 Stroke [mm]}
\begin{tabular}{|c|c|}
\hline \(\mathbf{3 0}\) & 30 \\
\hline to & to \\
\hline 500 & 500 \\
\hline
\end{tabular}
* For details, refer to the applicable stroke table below.

\section*{8 Rod end thread}
\begin{tabular}{|c|c|}
\hline- & Rod end female thread \\
\hline\(M\) & \begin{tabular}{c} 
Rod end male thread \\
\((1\) rod end nut is included.)
\end{tabular} \\
\hline
\end{tabular}

Mounting Bracket Part Nos. for the 25A- Series
\begin{tabular}{|c|c|c|c|}
\hline Applicable size & Foot*1 & Flange & Double clevis \\
\hline \(\mathbf{2 5}\) & \(25-\) LEY-L025 & \(25-\) LEY-F025 & \(25-\) LEY-D025 \\
\hline \(\mathbf{3 2}\) & \(25-\) LEY-L032 & \(25-\) LEY-F032 & \(25-\) LEY-D032 \\
\hline \begin{tabular}{c} 
Surface \\
treatment
\end{tabular} & RAYDENT \({ }^{\circledR}\) & RAYDENT \({ }^{\circledR}\) & (Size 16: Electroless nickel plating) \\
\hline
\end{tabular}
*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

\section*{Applicable Stroke Table}
- Standard
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Model & 30 & 50 & 100 & 150 & 200 & 250 & 300 & 350 & 400 & 450 & 500 & Manufacturable stroke range [mm] \\
\hline 25A-LEY25 & \(\bigcirc\) & \(\bigcirc\) & - & - & - & - & - & - & - & - & - & 15 to 400 \\
\hline 25A-LEY32 & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & 20 to 500 \\
\hline
\end{tabular}
* Please contact SMC for non-standard strokes as they are produced as special orders.
(4) Motor type*1

\section*{Motor option}
\begin{tabular}{|c|c|}
\hline- & Without option \\
\hline B & With lock*1 \\
\hline
\end{tabular}
*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.

\begin{tabular}{|c|c|c|c|c|c|}
\hline Symbol & Type & \begin{tabular}{l}
Output \\
[W]
\end{tabular} & Actuator size & Compatible drivers*3 & ULcompliant \\
\hline S2*1 & \multirow[t]{2}{*}{AC servo motor (Incremental encoder)} & 100 & 25 & LECSA \(\square\)-S1 & \(\bigcirc\) \\
\hline S3 & & 200 & 32 & LECSA \(\square\)-S3 & \(\bigcirc\) \\
\hline S6*1 & \multirow{4}{*}{AC servo motor (Absolute encoder)} & 100 & 25 & LECSB \(\square\)-S5
LECSC \(\square\)-S5
LECSS \(\square\)-S5 & - \\
\hline \multirow{3}{*}{S7} & & \multirow{3}{*}{200} & \multirow{3}{*}{32} & LECSB \(\square\)-S7 & \multirow{3}{*}{-} \\
\hline & & & & LECSC \(\square\)-S7 & \\
\hline & & & & LECSS \(\square\)-S7 & \\
\hline \multirow[t]{2}{*}{T6*2} & \multirow{4}{*}{AC servo motor (Absolute encoder)} & \multirow[t]{2}{*}{100} & \multirow[t]{2}{*}{25} & \[
\begin{aligned}
& \text { LECSB2-T5 } \\
& \text { LECSC2-T5 } \\
& \text { LECSN2-T5- }
\end{aligned}
\] & - \\
\hline & & & & LECSS2-T5 & \(\bigcirc\) \\
\hline \multirow[t]{2}{*}{T7} & & \multirow[t]{2}{*}{200} & \multirow[t]{2}{*}{32} & \[
\begin{aligned}
& \text { LECSB2-T7 } \\
& \text { LECSC2-T7 } \\
& \text { LECSN2-T7- }
\end{aligned}
\] & - \\
\hline & & & & LECSS2-T7 & \(\bigcirc\) \\
\hline
\end{tabular}
*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 \(\square 2-\mathrm{T} 5\).
*3 For details on the driver, refer to the Web Catalogue.

\title{
Electric Actuator Rod Type \\ 25A-LEY Series \\ AC Servo Motor \\ Size 25, 32 \\ Secondary Battery Compatible
}


Motor mounting position:
Parallel


Motor mounting position: In-line

Cable type \({ }^{* 1 * 2}\)
\begin{tabular}{|c|c|}
\hline- & Without cable \\
\hline \(\mathbf{S}\) & Standard cable \\
\hline \(\mathbf{R}\) & Robotic cable (Flexible cable) \\
\hline
\end{tabular}
*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

\section*{13 I/O cable length [m]*1}
\begin{tabular}{|c|c|}
\hline- & Without cable \\
\hline \(\mathbf{H}\) & Without cable (Connector only) \\
\hline \(\mathbf{1}\) & 1.5 \\
\hline
\end{tabular}
*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.

\section*{11 Cable length \({ }^{* 1}\) [m]}
\begin{tabular}{|c|c|}
\hline- & Without cable \\
\hline 2 & 2 \\
\hline \(\mathbf{5}\) & 5 \\
\hline \(\mathbf{A}\) & 10 \\
\hline
\end{tabular}
*1 The length of the encoder, motor, and lock cables are the same.

Driver type*1
\begin{tabular}{|c|c|c|}
\hline & Compatible drivers & Power supply voltage [V] \\
\hline \(\mathbf{-}\) & Without driver & - \\
\hline A1 & LECSA1-S \(\square\) & 100 to 120 \\
\hline A2 & LECSA2-S \(\square\) & 200 to 230 \\
\hline B1 & LECSB1-S \(\square\) & 100 to 120 \\
\hline \multirow{2}{*}{ B2 } & LECSB2-S \(\square\) & 200 to 230 \\
\cline { 2 - 3 } & LECSB2-T \(\square\) & 200 to 240 \\
\hline C1 & LECSC1-S \(\square\) & 100 to 120 \\
\hline C2 & LECSC2-S \(\square\) & \multirow{2}{*}{200 to 230} \\
\cline { 2 - 2 } & LECSC2-T \(\square\) & \\
\hline S1 & LECSS1-S \(\square\) & 100 to 120 \\
\hline S2 & LECSS2-S \(\square\) & 200 to 230 \\
\cline { 2 - 3 } & LECSS2-T \(\square\) & 200 to 240 \\
\hline N2 & LECSN2-T \(\square\) & 200 to 240 \\
\hline 92 & LECSN2-T \(\square-9\) & 200 to 240 \\
\hline E2 & LECSN2-T \(\square-E\) & 200 to 240 \\
\hline P2 & LECSN2-T \(\square-P\) & 200 to 240 \\
\hline
\end{tabular}
*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

\section*{Compatible Drivers*1}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline 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 & SSCNETIIIH type & Network card type \\
\hline Series & LECSA & LECSB & LECSC & LECSS & LECSB-T & LECSC-T & LECSS-T & LECSN-T \\
\hline Number of point tables*2 & Up to 7 & - & Up to 255 (2stations occupied) & - & Up to 255 & Up to 255 (2stations occupied) & - & Up to 255 \\
\hline Pulse input & \(\bigcirc\) & \(\bigcirc\) & - & - & \(\bigcirc\) & - & - & - \\
\hline Applicable network & - & - & CC-Link & SSCNETIII & - & CC-Link & SSCNETIII/H & PROFINET EtherCAT EtherNet/IPтм \\
\hline 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 \\
\hline Communication function & USB communication & USB communication, & RS422 communication & USB communication & USB communication, P & RS422 communication & USB communication & USB communication \\
\hline Power supply voltage [V] & 100 to 120 V & AC ( \(50 / 60 \mathrm{~Hz}\) ), & 200 to 230 VAC & \((50 / 60 \mathrm{~Hz})\) & \[
\begin{aligned}
& 200 \text { to } 240 \\
& \text { VAC } \\
& (50 / 60 \mathrm{~Hz})
\end{aligned}
\] & \[
\begin{aligned}
& 200 \text { to } 230 \\
& \text { VAC } \\
& (50 / 60 \mathrm{~Hz})
\end{aligned}
\] & \[
\begin{aligned}
& 200 \text { to } 240 \\
& \text { VAC } \\
& (50 / 60 \mathrm{~Hz})
\end{aligned}
\] & \[
\begin{aligned}
& 200 \text { to } 240 \\
& \text { VAC } \\
& (50 / 60 \mathrm{~Hz})
\end{aligned}
\] \\
\hline
\end{tabular}
*1 Copper and zinc materials are used for the motors, cables, controllers/drivers.
*2 The LECSN-T only supports PROFINET and EtherCAT.

\title{
Electric Actuator \\ Rod Type semenay biter Compaide 25A-LEY Series \\ LEY25, 32
}
 secondary batteries

Motor mounting
position
\begin{tabular}{|c|c|}
\hline- & Top side parallel \\
\hline \(\mathbf{R}\) & Right side parallel \\
\hline \(\mathbf{L}\) & Left side parallel \\
\hline \(\mathbf{D}\) & In-line \\
\hline
\end{tabular}

Lead [mm]
\begin{tabular}{|c|c|c|}
\hline Symbol & 25A-LEY25 & 25A-LEY32*1 \\
\hline A & 12 & \(16(20)\) \\
\hline B & 6 & \(8(10)\) \\
\hline C & 3 & \(4(5)\) \\
\hline
\end{tabular}
*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])
\begin{tabular}{l}
6 Stroke [mm] \\
\begin{tabular}{|c|c|}
\hline 30 & 30 \\
\hline to & to \\
\hline 500 & 500 \\
\hline
\end{tabular} \\
\hline
\end{tabular}

For details, refer to the applicable stroke table below.

Motor option
\begin{tabular}{|c|c|}
\hline- & Without option \\
\hline B & With lock*1 \\
\hline
\end{tabular}
*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.


\section*{Mounting*1}
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{Symbol} & \multirow[b]{2}{*}{Type} & \multicolumn{2}{|l|}{Motor mounting position} \\
\hline & & Parallel & In-line \\
\hline - & Ends tapped/ Body bottom tapped \({ }^{* 2}\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline L & Foot & \(\bigcirc\) & - \\
\hline F & Rod flange*2 & *4 & \(\bigcirc\) \\
\hline G & Head flange*2 & *5 & - \\
\hline D & Double clevis*3 & \(\bigcirc\) & - \\
\hline
\end{tabular}
*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.

\section*{Mounting Bracket Part Nos. for the 25A-Series}
\begin{tabular}{|c|c|c|c|}
\hline Applicable size & Foot*1 & Flange & Double clevis \\
\hline \(\mathbf{2 5}\) & \(25-\) LEY-L025 & \(25-\) LEY-F025 & \(25-\) LEY-D025 \\
\hline \(\mathbf{3 2}\) & \(25-\) LEY-L032 & \(25-\) LEY-F032 & \(25-\) LEY-D032 \\
\hline \begin{tabular}{c} 
Surface \\
treatment
\end{tabular} & RAYDENT® & RAYDENT \({ }^{\circledR}\) & \begin{tabular}{c} 
Coating \\
(Size 16: Electroless nickel plating)
\end{tabular} \\
\hline
\end{tabular}

> Solid state auto switches should be ordered separately. For details on auto switches, refer to page 262 .
*1 When ordering foot brackets, order 2 pieces per actuator.
* Parts included with each type of bracket are as follows.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900
Body mounting bolt
Applicable Stroke Table
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{13}{|l|}{Applicable Stroke Table} \\
\hline \begin{tabular}{ll} 
Model & \begin{tabular}{r} 
Stroke \\
{\([\mathrm{mm}]\)}
\end{tabular} \\
\hline
\end{tabular} & 30 & 50 & 100 & 150 & 200 & 250 & 300 & 350 & 400 & 450 & 500 & Manufacturable stroke range [mm] \\
\hline 25A-LEY25 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - & - & - & \(\bigcirc\) & - & - & 15 to 400 \\
\hline 25A-LEY32 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & 20 to 500 \\
\hline
\end{tabular}

\footnotetext{
* Please contact SMC for non-standard strokes as they are produced as special orders.
}

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

\title{
Electric Actuator \\ Rod Type \\ 25A-LEY Series \\ AC Servo Motor size
}


Motor mounting position:
Motor m
Parallel


10 Cable type*1*2
\begin{tabular}{|c|c|}
\hline- & Without cable \\
\hline \(\mathbf{S}\) & Standard cable \\
\hline \(\mathbf{R}\) & Robotic cable (Flexible cable) \\
\hline
\end{tabular}
*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

\section*{(13) ro cable length \([\mathrm{m}]^{* 1}\)}
\begin{tabular}{|c|c|}
\hline- & Without cable \\
\hline \(\mathbf{H}\) & Without cable (Connector only) \\
\hline \(\mathbf{1}\) & 1.5 \\
\hline
\end{tabular}
*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.

11 Cable length [m]*1
\begin{tabular}{|c|c|}
\hline- & Without cable \\
\hline \(\mathbf{3}\) & 3 \\
\hline \(\mathbf{5}\) & 5 \\
\hline \(\mathbf{A}\) & 10 \\
\hline \(\mathbf{C}\) & 20 \\
\hline
\end{tabular}
*1 The length of the motor and encoder cables are the same. (For with lock)

12 Driver type
\begin{tabular}{|c|c|c|}
\hline & Compatible drivers & Power supply voltage [V] \\
\hline- & Without driver & - \\
\hline M2 & LECYM2-V \(\square\) & 200 to 230 \\
\hline U2 & LECYU2-V \(\square\) & 200 to 230 \\
\hline
\end{tabular}
* When a driver type is selected, a cable is included. Select the cable type and cable length.

\section*{Compatible Drivers}
\begin{tabular}{|c|c|c|}
\hline Driver type & AMECHATROLINK-II type & IA MECHATROLINK-III type \\
\hline Series & LECYM & LECYU \\
\hline Applicable network & MECHATROLINK-III & MECHATROLINK-III \\
\hline Control encoder & \multicolumn{2}{|r|}{Absolute 20-bit encoder} \\
\hline Communication device & \multicolumn{2}{|r|}{USB communication, RS-422 communication} \\
\hline Power supply voltage [V] & \multicolumn{2}{|r|}{200 to 230 VAC (50/60 Hz)} \\
\hline
\end{tabular}
* Copper and zinc materials are used for the motors, cables, controllers/drivers.

\section*{25A- Series}

\title{
Applicable Auto Switches
}

Applicable Cylinder Series

*1 The D-A90L-900 cannot be mounted on \(\varnothing\) 4. * Solid state auto switches marked with a " \(\bigcirc\) " are produced upon receipt of order.

\section*{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:


\title{
Applicable Auto Switches 25A-Series
}

Compact cylinders


\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & O & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - \\
\hline \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - \\
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\hline \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - \\
\hline \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - \\
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\hline
\end{tabular}

\section*{25A- Series}

\section*{Applicable Cylinder Series}


\footnotetext{
* The D-A90-900 reed auto switch is only compatible with bore sizes \(\varnothing 16\) to \(\varnothing 50\).
}

\title{
Applicable Auto Switches 25A-Series
}


\section*{25A- Series}

Applicable Rotary Actuator Series

* Solid state auto switches marked with a " \(\bigcirc\) " are produced upon receipt of order.
* Note that the individual auto switch with part number of "S \(\square \square\) " and "T \(\square \square\) " have the right-hand-type ( \(\square \square \square 1\) ) and the left-hand-type ( \(\square \square \square 2\) ).

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, 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.

\section*{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:

*1 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.

\title{
Applicable Auto Switches
}

\section*{Applicable Air Gripper Series}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{12}{|c|}{Auto switches} & \multicolumn{8}{|c|}{Air grippers} \\
\hline \multirow[b]{2}{*}{Type} & \multirow[t]{2}{*}{Special function} & \multirow[b]{2}{*}{\[
\left|\begin{array}{c}
\text { Electrical } \\
\text { entry }
\end{array}\right|
\]} & \multirow[b]{2}{*}{\[
\begin{array}{|l|l|}
\hline \text { Indicator } \\
\text { light }
\end{array}
\]} & \multirow[t]{2}{*}{Wiring (Output)} & \multirow[t]{2}{*}{Electrical entry direction} & \multirow[t]{2}{*}{Auto switch model} & \multicolumn{4}{|l|}{Lead wire length [m]} & \multirow[t]{2}{*}{Prearied} & JMHZ2 & \multicolumn{2}{|l|}{\[
\left\lvert\, \begin{array}{|l|l|}
\hline \text { JMHZ2 } & \text { JMHZ2 } \\
-\mathrm{X} 6900 & -\mathrm{X} 7460 \\
\hline
\end{array}\right.
\]} & MHZ2 & MHZL2 & \multirow[t]{2}{*}{MHZJ2} & \[
2{ }_{2}{ }_{-X 6100}
\] & \[
{ }_{-\times-X 5955}^{2 H Z L 2}
\] \\
\hline & & & & & & & 0.5 & M & \({ }^{3}\) & \% & & 8 to 20 & & -X7460 & 10 to 40 & 10 to 25 & & -×6200 & - 10 to 20 \\
\hline \multirow{42}{*}{Solid state auto switch} & & \multirow{42}{*}{Grommet} & \multirow{42}{*}{Yes} & 3 -wire (NPN) & \multirow{3}{*}{In-line} & D-M9N-900 & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bigcirc\) & - & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & - & \(\bullet\) & \(\bullet\) \\
\hline & & & & 3 -wire (PNP) & & D-M9P-900 & \(\bullet\) & \(\bullet\) & \(\bullet\) & 0 & - & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline & & & & 2-wire & & D-M9B-900 & \(\bullet\) & \(\bullet\) & \(\bullet\) & 0 & - & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline & & & & 3 -wire (NPN) & \multirow{3}{*}{Perpendicular} & D-M9NV-900 & \(\bullet\) & \(\bullet\) & \(\bullet\) & 0 & - & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline & & & & 3 -wire (PNP) & & D-M9PV-900 & \(\bullet\) & \(\bullet\) & \(\bullet\) & 0 & - & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline & & & & 2-wire & & D-M9BV-900 & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bigcirc\) & - & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline & & & & 3 -wire (NPN) & \multirow{3}{*}{In-line} & D-M9NW-900 & \(\bullet\) & \(\bullet\) & \(\bullet\) & 0 & - & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline & Diagnostic & & & 3 -wire (PNP) & & D-M9PW-900 & \(\bullet\) & \(\bullet\) & \(\bullet\) & 0 & - & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline & indication & & & 2-wire & & D-M9BW-900 & \(\bullet\) & \(\bullet\) & \(\bullet\) & 0 & \(\bigcirc\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline & (2.colour & & & 3 -wire (NPN) & \multirow{3}{*}{Perpendicular} & D-M9NWV-900 & \(\bullet\) & \(\bullet\) & \(\bullet\) & 0 & - & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline & & & & 3 -wire (PNP) & & D-M9PWV-900 & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bigcirc\) & - & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline & & & & 2-wire & & D-M9BWV-900 & \(\bullet\) & \(\bullet\) & \(\bullet\) & 0 & \(\bigcirc\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline & & & & 3 -wire (NPN) & \multirow{3}{*}{In-line} & D-Y59A-900 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & \(\bullet\) & \(\bullet\) & - & - & - \\
\hline & & & & 3 -wire (PNP) & & D-Y7P-900 & \(\bullet\) & - & \(\bullet\) & \(\bigcirc\) & - & - & - & - & \(\bullet\) & \(\bullet\) & - & - & - \\
\hline & & & & 2-wire & & D-Y59B-900 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & \(\bullet\) & \(\bullet\) & - & - & - \\
\hline & & & & 3 -wire (NPN) & \multirow{3}{*}{Perpendicular} & D-Y69A-900 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & \(\bullet\) & \(\bullet\) & - & - & - \\
\hline & & & & 3 -wire (PNP) & & D-Y7PV-900 & \(\bullet\) & - & \(\bullet\) & \(\bigcirc\) & - & - & - & - & \(\bullet\) & \(\bullet\) & - & - & - \\
\hline & & & & 2-wire & & D-Y69B-900 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & \(\bullet\) & - & - & - & - \\
\hline & \multirow{6}{*}{Diagnostic indication (2.colour indiciacor)} & & & 3 -wire (NPN) & \multirow{3}{*}{In-line} & D-Y7NW-900 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & \(\bullet\) & \(\bullet\) & - & - & - \\
\hline & & & & 3 -wire (PNP) & & D-Y7PW-900 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & \(\bullet\) & \(\bullet\) & - & - & - \\
\hline & & & & 2-wire & & D-Y7BW-900 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & \(\bullet\) & \(\bullet\) & - & - & - \\
\hline & & & & 3 -wire (NPN) & \multirow{3}{*}{Perpendicular} & D-Y7NWV-900 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & \(\bullet\) & \(\bullet\) & - & - & - \\
\hline & & & & 3 -wire (PNP) & & D-Y7PWV-900 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & \(\bullet\) & \(\bullet\) & - & - & - \\
\hline & & & & 2-wire & & D-Y7BWV-900 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & \(\bullet\) & \(\bullet\) & - & - & - \\
\hline & \multirow{18}{*}{-} & & & & \multirow{6}{*}{In-line} & D-S991-901*1 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & - & - & - & - & - \\
\hline & & & & 3-wire (NPN) & & D-S992-901*1 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & - & - & - & - & - \\
\hline & & & & & & D-S9P1-901*1 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & - & - & - & - & - \\
\hline & & & & 3 -wire (PNP) & & D-S9P2-901*1 & \(\bullet\) & - & \(\bullet\) & \(\bigcirc\) & - & - & - & - & - & - & - & - & - \\
\hline & & & & 2-wire & & D-T991-901*1 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & - & - & - & - & - \\
\hline & & & & 2-wire & & D-T992-901*1 & \(\bullet\) & - & \(\bullet\) & \(\bigcirc\) & - & - & - & - & - & - & - & - & - \\
\hline & & & & & \multirow{6}{*}{Perpendicular} & D-S99V1-901*1 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & - & - & - & - & - \\
\hline & & & & 3-wire (NPN) & & D-999V2-901*1 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & - & - & - & - & - \\
\hline & & & & 3 -wire (PNP) & & D-S9PV1-901*1 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & - & - & - & - & - \\
\hline & & & & 3 -wire (PNP) & & D-S9PV2-901*1 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & - & - & - & - & - \\
\hline & & & & & & D-T99V1-901*1 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & - & - & - & - & - \\
\hline & & & & & & D-T99V2-901*1 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & - & - & - & - & - \\
\hline & & & & & \multirow{6}{*}{In-line} & D-S791-901*1 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & - & - & - & - & - \\
\hline & & & & 3-wire (NPN) & & D-S792-901*1 & \(\bullet\) & - & \(\bullet\) & \(\bigcirc\) & - & - & - & - & - & - & - & - & - \\
\hline & & & & 3 -wire (PNP) & & D-S7P1-901*1 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & - & - & - & - & - \\
\hline & & & & 3 -wire (PNP) & & D-S7P2-901*1 & \(\bullet\) & - & \(\bullet\) & 0 & - & - & - & - & - & - & - & - & - \\
\hline & & & & \multirow[t]{2}{*}{2-wire} & & D-T791-901*1 & \(\bullet\) & - & \(\bullet\) & \(\bigcirc\) & - & - & - & - & - & - & - & - & - \\
\hline & & & & & & D-T792-901*1 & \(\bullet\) & - & \(\bullet\) & \(\bigcirc\) & - & - & - & - & - & - & - & - & - \\
\hline \[
\begin{gathered}
\text { Reed auto } \\
\text { switch }
\end{gathered}
\] & - & Grommet & No & 2-wire & In-line & D-A90-900 & - & - & \(\bullet\) & - & - & - & - & - & - & - & - & - & - \\
\hline
\end{tabular}
* Solid state auto switches marked with a "○" are produced upon receipt of order.
* Note that the individual auto switch with part number of "S \(\square \square\) " and "T \(\square \square\) " have the right-hand-type ( \(\square \square \square 1\) ) and the left-hand-type ( \(\square \square \square 2\) ).

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, 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.

\section*{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:

*1 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.

\section*{Applicable Air Gripper Series}

* Solid state auto switches marked with a "○" are produced upon receipt of order.
* Note that the individual auto switch with part number of "S \(\square \square\) " and "T \(\square \square\) " have the right-hand-type ( \(\square \square \square 1\) ) and the left-hand-type ( \(\square \square \square 2\) ).

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, 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.

\section*{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:

*1 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.

\section*{Applicable Auto Switches}

\section*{Applicable Electric Actuator Series}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{12}{|c|}{Auto switches} & \multicolumn{2}{|l|}{Electric actuators} \\
\hline \multirow[b]{2}{*}{Type} & \multirow[t]{2}{*}{Special function} & \multirow[t]{2}{*}{Electrical entry} & \multirow[t]{2}{*}{\[
\begin{array}{|c|}
\hline \text { Indicator } \\
\text { light }
\end{array}
\]} & \multirow[t]{2}{*}{Wiring (Output)} & \multirow[t]{2}{*}{Electrical entry direction} & \multirow[t]{2}{*}{Auto switch model} & \multicolumn{4}{|c|}{Lead wire length [m]} & \multirow[t]{2}{*}{Pre-wired connector SDPC} & LEJS & LEY \\
\hline & & & & & & & 0.5 & M & L & Z & & 40 to 63 & 16 to 40 \\
\hline \multirow{12}{*}{Solid state auto switch} & \multirow{6}{*}{-} & \multirow{12}{*}{Grommet} & \multirow{12}{*}{Yes} & 3-wire (NPN) & \multirow{3}{*}{In-line} & D-M9N-900 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - & - \\
\hline & & & & 3-wire (PNP) & & D-M9P-900 & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - & \(\bigcirc\) \\
\hline & & & & 2-wire & & D-M9B-900 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - & \(\bigcirc\) \\
\hline & & & & 3-wire (NPN) & \multirow{3}{*}{Perpendicular} & D-M9NV-900 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - & \(\bigcirc\) \\
\hline & & & & 3-wire (PNP) & & D-M9PV-900 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & 2-wire & & D-M9BV-900 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline & \multirow{6}{*}{Diagnostic indication (2-colour indicator)} & & & 3-wire (NPN) & \multirow{3}{*}{In-line} & D-M9NW-900 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - & \(\bigcirc\) \\
\hline & & & & 3-wire (PNP) & & D-M9PW-900 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & 2-wire & & D-M9BW-900 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & 3-wire (NPN) & \multirow{3}{*}{Perpendicular} & D-M9NWV-900 & - & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & - \\
\hline & & & & 3-wire (PNP) & & D-M9PWV-900 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & \(\bigcirc\) & \(\bigcirc\) \\
\hline & & & & 2-wire & & D-M9BWV-900 & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & \(\bigcirc\) & - & - \\
\hline
\end{tabular}
* Solid state auto switches marked with a "○" 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.

\section*{Ordering the Auto Switches}
\(\left.\begin{array}{lll}\text { - Individual auto switch: D-M9BWL-900 }\end{array}\right]\)

\section*{\begin{tabular}{c|c|l|c|}
\hline Rotary \\
Actuators & \(\begin{array}{c}\text { Related } \\
\text { Products }\end{array}\) & Air Cylinders & \(\begin{array}{c}\text { Directional } \\
\text { Control Valves }\end{array}\) \\
\hline
\end{tabular}}

\section*{25A- Series \\ Auto Switch Mounting}

\section*{Band Mounting Type}

Applicable cylinder series: 25A-CDJ2, 25A-CDJ2K, 25A-CDBJ2, 25A-CD85, 25A-CDM2, 25A-CDG1, 25A-CDBG1, 25A-MGG Applicable auto switches : D-M9 \(\square-900\), D-M9 \(\square W-900, ~ D-M 9 B W S D P C-900, ~ D-M 9 B W V S D P C-900, ~ D-A 90-900 ~\)

\section*{Auto Switch Mounting Bracket Part Nos.}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Cylinder series} & \multicolumn{12}{|c|}{Applicable bore size [mm]} \\
\hline & 8 & 10 & 12 & 16 & 20 & 25 & 32 & 40 & 50 & 63 & 80 & 100 \\
\hline \[
\begin{aligned}
& \hline \text { 25A-CDJ2 } \\
& \text { 25A-CDJ2K } \\
& \text { 25A-CDBJ2 }
\end{aligned}
\] & - & \[
\begin{gathered}
* 1 \\
25 A-B J 7-010 S
\end{gathered}
\] & - & \[
\begin{gathered}
* 1 \\
25 A-B J 7-016 S
\end{gathered}
\] & - & - & - & - & - & - & - & - \\
\hline 25A-CD85*4 & 25A-BJ7-008S & 25A-BJ7-010S & 25A-BJ7-012S & 25A-BJ7-016S & 25A-BM6-020S & 25A-BM6-025S & - & - & - & - & - & - \\
\hline 25A-CDM2 & - & - & - & - & \[
\begin{gathered}
* 2 \\
25 A-B M 6-020 S
\end{gathered}
\] & \[
\begin{gathered}
* 2 \\
25 A-B M 6-025 S
\end{gathered}
\] & \[
\begin{gathered}
* 2 \\
25 A-B M 6-032 S
\end{gathered}
\] & \[
\begin{gathered}
* 2 \\
25 A-B M 6-040 S
\end{gathered}
\] & - & - & - & - \\
\hline \[
\begin{aligned}
& \text { 25A-CDG1 } \\
& \text { 25A-CDBG1 }
\end{aligned}
\] & - & - & - & - & \(* 3\)
\(25 A-B M A 4-020 S\) & \(* 3\)
25A-BMA4-025S & \begin{tabular}{l}
*3 \\
25A-BMA4-032S
\end{tabular} & \(* 3\)
25A-BMA4-040S & \[
\begin{array}{c|}
* 3 \\
25 A-B M A 4-050 S \\
\hline
\end{array}
\] & \(* 3\)
25A-BMA4-063S & - & - \\
\hline 25A-MGG & - & - & - & - & \[
\begin{gathered}
* 3 \\
25 A-B M A 4-020 S
\end{gathered}
\] & \[
\begin{gathered}
* 3 \\
25 A-B M A 4-0255
\end{gathered}
\] & \[
\begin{gathered}
* 3 \\
25 A-B M A 4-032 S
\end{gathered}
\] & \[
\begin{gathered}
* 3 \\
25 A-B M A 4-040 S
\end{gathered}
\] & \[
\begin{gathered}
* 3 \\
25 A-B M A 4-O 50 S
\end{gathered}
\] & \[
\begin{gathered}
* 3 \\
25 A-B M A 4-063 S
\end{gathered}
\] & - & - \\
\hline
\end{tabular}
*1 The combination of the auto switch mounting band (BJ2- \(\square \square \square \mathrm{S} /\) with a stainless steel screw) and the holder set (BJ3-1).
*2 The combination of the auto switch mounting band (for BM2- \(\square \square \square\) ) and stainless steel screw (BBA4), and the holder set (BJ3-1).
*3 The combination of the auto switch mounting band (for BMA2- \(\square \square\) ) 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 \(\varnothing 12\) cylinders.


Applicable cylinder series: 25A-CDG1, 25A-CDBG1
25A-BM6, 25A-BMA4
Applicable auto switches: D-G5 \(\square-900\), D-K59-900, D-G5 \(\square\) W-900, D-K59W-900, D-K59WSDPC-900
Auto Switch Mounting Bracket Part Nos.
\begin{tabular}{|l|c|c|}
\hline \multirow{2}{*}{\begin{tabular}{c} 
Cylinder \\
series
\end{tabular}} & \multicolumn{2}{|c|}{ Applicable bore size \([\mathrm{mm}]\)} \\
\cline { 2 - 3 } 25A-CDG1 & BA-08S & BA-10S \\
\hline
\end{tabular}


\section*{Tie-rod Mounting Type}

Applicable cylinder series: 25A-MDB, 25A-CDA2, 25A-CDS2, 25A-C(P)96SD
 : D-A90-900

Auto Switch Mounting Bracket Part Nos.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Cylinder series} & \multicolumn{10}{|c|}{Applicable bore size [mm]} \\
\hline & 32 & 40 & 50 & 63 & 80 & 100 & 125 & 140 & 160 & 200 \\
\hline 25A-MDB & 90-BMB5-032 & 90-BMB5-032 & 90-BA7-040 & 90-BA7-040 & 90-BA7-063 & 90-BA7-063 & - & - & - & - \\
\hline 25A-C96SD & 90-BMB5-032 & 90-BMB5-032 & 90-BA7-040 & 90-BA7-040 & 90-BA7-063 & 90-BA7-063 & 90-BA7-080 & - & - & - \\
\hline 25A-CDA2 & - & 90-BA7-040 & 90-BA7-040 & 90-BA7-063 & 90-BA7-080 & 90-BA7-080 & - & - & - & - \\
\hline 25A-CDS2 & - & - & - & - & - & - & 25A-BS6-125 & 25A-BS6-125 & 25A-BS6-160 & - \\
\hline 25A-C95SD & - & - & - & - & - & - & - & - & 25A-BS6-160 & 25A-BS6-160 \\
\hline
\end{tabular}


\section*{Auto Switch Mounting 25A- Series}

\section*{Rail Mounting Type}

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.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow{2}{*}{\begin{tabular}{c} 
Cylinder \\
series
\end{tabular}} & \multicolumn{9}{|c|}{ Applicable bore size [mm] } \\
\cline { 2 - 10 } & \(\mathbf{2 0}\) & \(\mathbf{2 5}\) & \(\mathbf{3 2}\) & \(\mathbf{4 0}\) & \(\mathbf{5 0}\) & 63 & \(\mathbf{8 0}\) & 100 \\
\hline 25A-CDBQ2 & - & - & \multicolumn{3}{|c|}{\(25 A-B Q 2-032\)} & - & - \\
\hline
\end{tabular}


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.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow{2}{c|}{\begin{tabular}{c} 
Cylinder \\
series
\end{tabular}} & \multicolumn{9}{|c|}{ Applicable bore size [mm] } \\
\hline & \(\mathbf{2 0}\) & 25 & 32 & 40 & 50 & 63 & 80 & 100 \\
\hline \(25 A-C D B Q 2\) & - & - & \multicolumn{7}{|c|}{\(25 \mathrm{~A}-\mathrm{BQ}-2\)} \\
\hline
\end{tabular}


\section*{25A- Series}

\section*{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 \(\square W V-900\), D-M9BWSDPC-900, D-M9BWVSDPC-900
: D-A90L-900


\section*{Auto Switch Mounting Bracket Part Nos.}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Cylinder series Air gripper series} & \multicolumn{14}{|c|}{Applicable bore size [mm]} \\
\hline & 4 & 6 & 10 & 12 & 15 & 16 & 20 & 25 & 32 & 40 & 50 & 63 & 80 & 100 \\
\hline 25A-CDJP2 & Not required & Not required & Not required & - & - & Not required & - & - & - & - & - & - & - & - \\
\hline 25A-MDU & - & - & - & - & - & - & - & MUZ-025 & MUZ-025 & MUZ-025 & MUZ-025 & MUZ-025 & - & - \\
\hline 25A-MY1B & - & - & - & - & - & Not required & Not required & BMY3-016 & BMY3-016 & BMY3-016 & - & \[
\begin{array}{c|}
\hline 90- \\
\text { BMG2-012 }
\end{array}
\] & - & - \\
\hline 25A-MY1M & - & - & - & - & - & Not required & Not required & \[
\begin{array}{c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \[
\begin{array}{c|}
\hline 90- \\
\text { BMG2-012 }
\end{array}
\] & - & - \\
\hline 25A-MY1C & - & - & - & - & - & Not required & Not required & \[
\begin{array}{c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \[
\begin{gathered}
90- \\
\text { BMG2-012 }
\end{gathered}
\] & - & - \\
\hline 25A-MY1H & - & - & - & - & - & Not required & Not required & BMY3-016 & BMY3-016 & BMY3-016 & - & - & - & - \\
\hline 25A-MY3 \(\square\) & - & - & - & - & - & BMY3-016 & BMY3-016 & BMY3-016 & BMY3-016 & BMY3-016 & BMY3-016 & BMY3-016 & - & - \\
\hline 25A-CY3R & - & - & - & - & Not required & - & Not required & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \(90-\)
BMG2-012 & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & - & - \\
\hline \[
\begin{aligned}
& \text { 25A-MGP-Z } \\
& \text { 25A-MGP-AZ }
\end{aligned}
\] & - & - & - & Not required & - & Not required & Not required & Not required & Not required & Not required & Not required & Not required & Not required & Not required \\
\hline 25A-MGPK & - & - & - & Not required & - & Not required & Not required & Not required & Not required & Not required & Not required & - & - & - \\
\hline 25A-RSH & - & - & - & - & - & - & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & - & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & - & - & - & - & - \\
\hline 25A-MHZ2 & - & - & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & - & - & *1 & *1 & *1 & *1 & *1 & - & - & - & - \\
\hline 25A-MHZL2 & - & - & \[
\begin{array}{c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & - & - & *1 & *1 & *1 & - & - & - & - & - & - \\
\hline 25A-MHL2 & - & - & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & - & - & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \[
\begin{array}{c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \[
\begin{array}{c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & \[
\begin{gathered}
90- \\
\text { BMG2-012 }
\end{gathered}
\] & \[
\begin{array}{|c|}
\hline 90- \\
\text { BMG2-012 } \\
\hline
\end{array}
\] & - & - & - & - \\
\hline \[
\begin{aligned}
& \text { 25A-MHS3 } \\
& \text { 25A-MHS4 }
\end{aligned}
\] & - & - & - & - & - & Not required & Not required & Not required & \[
\begin{gathered}
90- \\
\text { BMG2-012 }
\end{gathered}
\] & - & - & - & - & - \\
\hline
\end{tabular}
*1 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.

\section*{25A-Series}

\section*{Be sure to read this before handling products.}

\section*{Precautions}

\section*{\(\triangle\) Caution}

\section*{\(\square\) 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 \((\mathrm{Zn})\) 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.

\section*{- 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.

\section*{- 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.

\section*{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.

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\section*{Safety Instructions}

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) \({ }^{11}\), and other safety regulations.

Danger:
Danger indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.
Warning indicates a hazard with a medium level of risk
Warning: which, if not avoided, could result in death or serious injury.
Caution indicates a hazard with a low level of risk
Caution:
which, if not avoided, could result in minor or moderate injury.

\section*{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 and equipment.
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.
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.

\section*{Caution}

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.

\section*{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.

\section*{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 warranty.

\section*{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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\end{tabular}```


[^0]:    * Cylinder mounting brackets made of steel are either electroless nickel plated, treated with RAYDENT ${ }^{\circledR}$, or coated with electrodeposition paint.

[^1]:    *1 Standard products: Standard products are copper (Cu) and zinc $(\mathrm{Zn})$ free. Refer to the Web Catalogue for details.
    SSMC

[^2]:    *1 Standard products: For the standard model, copper ( Cu ) and zinc $(\mathrm{Zn})$ 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.

[^3]:    *1 Standard products: For the standard model, copper (Cu) and zinc $(\mathrm{Zn})$ 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 $(\mathrm{Zn})$ 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.

[^4]:    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

[^5]:    * Refer to page 25 for clamp bracket part numbers.

[^6]:    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

[^7]:    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

[^8]:    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

[^9]:    * The part number is not indicated on the product.

[^10]:    * The manual option is only applicable to the non-locking push type.

[^11]:    * Since V111 and V115 are CE/UKCA-compliant as standard, the suffix "-Q" is not necessary.

[^12]:    * The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalogue.

[^13]:    * The 25A- series specifications and dimensions

[^14]:    *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.)

    * Refer to the Web Catalogue for manifold spare parts.

[^15]:    * The 25A- series specifications and dimensions are the same as those of the standard model.

[^16]:    Use standard (DC) specification for continuous duty.

[^17]:    * Specify the part numbers for valves and options together beneath the manifold base part number.
    <Example>

[^18]:    *1 Bracket/1 pc., Mounting screw/2 pcs.

[^19]:    *1 Order 2 foot brackets for each cylinder unit.
    *2 3 liners are attached with a clevis bracket for adjusting the mounting angle.

[^20]:    *1 Order two foot brackets per cylinder.

[^21]:    *1 Order two foot brackets per cylinder. * The 25A- series specifications and dimensions (excluding the cap) are the same as those of the standard model.

[^22]:    *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.

[^23]:    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

[^24]:    * The 25A- series specifications and dimensions

[^25]:    *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

[^26]:    *1 When ordering foot and compact foot brackets, order 2 pieces per cylinder.

    * Body mounting bolts are included for each bracket.

[^27]:    *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

[^28]:    *1 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

[^29]:    *1 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

[^30]:    *1 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

[^31]:    * Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.
    * The 25A-MY1B50 and 63 are not available with the stroke adjustment unit.
    * The stroke adjustment unit H unit is not available for the 25A-MY1B16.

[^32]:    * 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

[^33]:    * Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

[^34]:    * Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

[^35]:    * 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.

[^36]:    * 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

[^37]:    * 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.

[^38]:    * 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.

[^39]:    * The 25A- series specifications and dimensions are the same as those of the standard model.

[^40]:    *1 Foot bracket part number contains two foot brackets
    *2 The single clevis is only applicable to bore sizes $\varnothing 20$ and $\varnothing 25$.

    * Mounting bolts are also included with bracket.

[^41]:    Material: Special steel
    Treatment: Electroless nickel plating

[^42]:    Material: Special steel
    Treatment: Electroless nickel plating

