

Wide parallel hand (standard/long stroke)

# HMC-HP1 Series

● Operating stroke: Short stroke: 20, 30, 40, 50, 70, 100mm  
 Middle stroke: 40, 60, 80, 100, 120, 160mm  
 Long stroke: 60, 80, 100, 120, 160, 200mm

Double acting



## Specifications

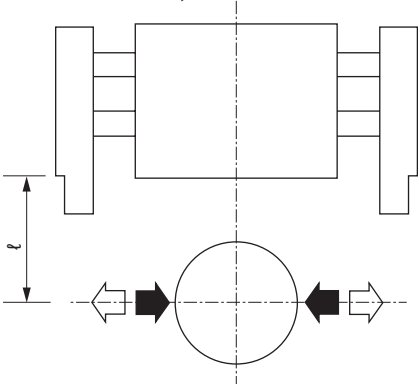
| Item                                | HMC-10         |                         |      | HMC-16 |         |      | HMC-20 |         |      | HMC-25 |         |      | HMC-32 |         |     | HMC-40 |       |     |     |
|-------------------------------------|----------------|-------------------------|------|--------|---------|------|--------|---------|------|--------|---------|------|--------|---------|-----|--------|-------|-----|-----|
|                                     | A              | B                       | C    | A      | B       | C    | A      | B       | C    | A      | B       | C    | A      | B       | C   | A      | B     | C   |     |
| Bore size                           | mm             | ø10x2                   |      |        | ø16 x 2 |      |        | ø20 x 2 |      |        | ø25 x 2 |      |        | ø32 x 2 |     |        | ø40x2 |     |     |
| Actuation                           | Double acting  |                         |      |        |         |      |        |         |      |        |         |      |        |         |     |        |       |     |     |
| Working fluid                       | Compressed air |                         |      |        |         |      |        |         |      |        |         |      |        |         |     |        |       |     |     |
| Max. working pressure               | MPa            | 0.6                     |      |        |         |      |        |         |      |        |         |      |        |         |     |        |       |     |     |
| Min. working pressure               | MPa            | 0.15                    |      |        | 0.1     |      |        |         |      |        |         |      |        |         |     |        |       |     |     |
| Ambient temperature                 | °C             | -10 to 60 (no freezing) |      |        |         |      |        |         |      |        |         |      |        |         |     |        |       |     |     |
| Port size                           | M5             |                         |      |        |         |      |        |         |      |        |         |      | Rc1/8  |         |     |        |       |     |     |
| Operating stroke                    | mm             | 20                      | 40   | 60     | 30      | 60   | 80     | 40      | 80   | 100    | 50      | 100  | 120    | 70      | 120 | 160    | 100   | 160 | 200 |
| Rod diameter                        | mm             | ø6                      |      |        | ø8      |      |        | ø10     |      |        | ø12     |      |        | ø16     |     |        | ø20   |     |     |
| Volumetric capacity (reciprocating) | cm³            | 2.0                     | 4.0  | 6.0    | 9.0     | 18.1 | 24.1   | 18.8    | 37.7 | 47.1   | 37.8    | 75.6 | 90.7   | 84.4    | 145 | 193    | 188   | 302 | 377 |
| Repeatability                       | mm             | ±0.1                    |      |        |         |      |        |         |      |        |         |      |        |         |     |        |       |     |     |
| Weight                              | kg             | 0.28                    | 0.39 | 0.45   | 0.53    | 0.74 | 0.85   | 0.98    | 1.3  | 1.5    | 1.6     | 2.2  | 3.5    | 2.9     | 3.8 | 4.5    | 5.3   | 6.9 | 8.2 |
| Lubrication                         | Not required   |                         |      |        |         |      |        |         |      |        |         |      |        |         |     |        |       |     |     |

## Gripping force

Unit: N

• Gripping force is the thrust (one finger) in the direction of the arrow shown in the figure.

- Open direction (←)
- Close direction (→)



| Bore size (mm) | Double acting |
|----------------|---------------|
| ø10            | 14            |
| ø16            | 45            |
| ø20            | 74            |
| ø25            | 131           |
| ø32            | 228           |
| ø40            | 396           |

\*Supply pressure 0.5MPa, ℓ = 40mm (ø10, 16, 20, 25), 80 mm (ø32, 40), value in stroke center

Refer to the HMC-HP1 Series of "Wide parallel hand HMC-HP1 Series (No.CC-1580A)" for dimentions.

## Switch specifications

| Item                     | 2-wire proximity                     |                                         | 3-wire proximity                      |                          |
|--------------------------|--------------------------------------|-----------------------------------------|---------------------------------------|--------------------------|
|                          | T2H/T2V                              | T2HR3/T2VR3<br>(Lead wire bending type) | T3H/T3V                               | T3PH/T3PV                |
| Applications             | Programmable<br>Controller dedicated |                                         | Programmable<br>For controller, relay |                          |
| Output method            | -                                    | -                                       | NPN output                            | PNP output               |
| Power supply voltage     | -                                    | -                                       | 10 to 28 VDC                          |                          |
| Load voltage/<br>current | 10 to 30 VDC<br>5 to 20mA (*1)       | 10 to 30 VDC<br>5 to 20 mA              | 30 VDC or less<br>100 mA or less      |                          |
| Indicator lamp           | Red LED (Lit when ON)                | Red LED (Lit when ON)                   | Red LED (Lit when ON)                 | Yellow LED (Lit when ON) |
| Leakage current          | 1 mA or less                         | 1 mA or less                            | 10 μA or less                         |                          |
| Shock resistance         | 980m/s <sup>2</sup>                  |                                         |                                       |                          |
| Weight                   | g<br>1m:18g 3m:49g 5m:80g            |                                         |                                       |                          |

\*1: The above max. load current is 20 mA at 25°C. If the operating ambient temperature around the switch is higher than 25°C, the current is lower than 20 mA. (5 to 10 mA at 60°C)

|        |                                        |
|--------|----------------------------------------|
| SCPD3  | Long service life cylinder             |
| CMK2   |                                        |
| SCM    |                                        |
| SSD2   |                                        |
| MDC2   |                                        |
| MSD    |                                        |
| MSDG-L |                                        |
| SMG    |                                        |
| LCR    |                                        |
| LCG    |                                        |
| STM    | Environment-resistant cylinder         |
| STG    |                                        |
| STR2   |                                        |
| SCPD3  |                                        |
| CMK2   |                                        |
| SCM    |                                        |
| SCG    |                                        |
| SSD2   |                                        |
| SMG    |                                        |
| LCR    |                                        |
| STG    | Linear Slide Hand                      |
| STS    |                                        |
| STL    |                                        |
| LSH    |                                        |
| LSHL   |                                        |
| LSHM   |                                        |
| LST    |                                        |
| LSTM   |                                        |
| HMC    |                                        |
| CKW    | Chuck                                  |
| ABP2   |                                        |
| SCPD3  |                                        |
| CMK2   |                                        |
| SCM    |                                        |
| SSD2   |                                        |
| MSD    |                                        |
| MSDG-L |                                        |
| SMG    |                                        |
| STG    |                                        |
| STM    | Compatible with rechargeable batteries |
| LCR    |                                        |
| LCG    |                                        |
| STR2   |                                        |
| LSH    |                                        |
| LSHL   |                                        |
| SCPD3  |                                        |
| CMK2   |                                        |
| SCM    |                                        |
| SCG    |                                        |
| SSD2   | Supports food mfg. processes           |
| STG    |                                        |

# HMC-HP1 Series

## How to order

Without switch (built-in magnet for switch)

**HMC - 32 A** — HP1

With switch (built-in magnet for switch)

**HMC - 32 A - T2H - R** - HP1

**A** Bore size (mm)

**B** Stroke

**C** Switch model No.

**D** Switch quantity

| Code                  |                       | Description |         |    |                                      |           |
|-----------------------|-----------------------|-------------|---------|----|--------------------------------------|-----------|
| A Bore size (mm)      |                       |             |         |    |                                      |           |
| 10                    | ø10                   |             |         |    |                                      |           |
| 16                    | ø16                   |             |         |    |                                      |           |
| 20                    | ø20                   |             |         |    |                                      |           |
| 25                    | ø25                   |             |         |    |                                      |           |
| 32                    | ø32                   |             |         |    |                                      |           |
| 40                    | ø40                   |             |         |    |                                      |           |
| B Stroke              |                       |             |         |    |                                      |           |
| A                     | Short stroke          |             |         |    |                                      |           |
| B                     | Middle stroke         |             |         |    |                                      |           |
| C                     | Long stroke           |             |         |    |                                      |           |
| C Switch model No.    |                       |             |         |    |                                      |           |
| Lead wire<br>Straight | Lead wire<br>L-shaped | Contact     | Voltage |    | Indicator                            | Lead wire |
|                       |                       |             | AC      | DC |                                      |           |
| T2H*                  | T2V*                  | Proximity   |         | ●  | 1-color LED                          | 2-wire    |
| T3H*                  | T3V*                  |             |         | ●  |                                      | 3-wire    |
| T2HR3                 | T2VR3                 |             |         | ●  | 1-color LED bend resistant lead wire | 2-wire    |
| T3PH*                 | T3PV*                 |             |         | ●  | 1-color LED (made to order)          | 3-wire    |
| * Lead wire length    |                       |             |         |    |                                      |           |
| Blank                 | 1 m (standard)        |             |         |    |                                      |           |
| 3                     | 3 m (option)          |             |         |    |                                      |           |
| 5                     | 5 m (option)          |             |         |    |                                      |           |
| D Switch quantity     |                       |             |         |    |                                      |           |
| R                     | 1 on open side        |             |         |    |                                      |           |
| H                     | 1 on closed side      |             |         |    |                                      |           |
| D                     | 2                     |             |         |    |                                      |           |

[Example of model No.]

**HMC-32A-T2H-R-HP1**

**A** Bore size (mm) : ø32

**B** Strokes : Short strokes

**C** Switch model No. : Proximity T2H switch, lead wire 1 m

**D** Switch quantity : 1 on open side

## How to order switch

**SW - T2H**

Switch model No.  
(above Item **C**)