Specifications

Ending

| Descriptions |  | SCM-T |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bore size | mm | $\phi 20$ | ¢ 25 | $\phi 32$ | $\phi 40$ | $\phi 50$ | $\phi 63$ | $\phi 80$ | $\phi 100$ |
| Actuation |  | Double acting heat resistance type |  |  |  |  |  |  |  |
| Working fluid |  | Compressed air |  |  |  |  |  |  |  |
| Max. working pressure MPa |  | 1.0 |  |  |  |  |  |  |  |
| Min. working pressure MPa |  | 0.1 |  |  |  | 0.05 |  |  |  |
| Withstanding pressure MPa |  | 1.6 |  |  |  |  |  |  |  |
| Ambient temperature ${ }^{\circ} \mathrm{C}$ |  | 5 to 120 |  |  |  |  |  |  |  |
| Port size |  | Rc1/8 |  |  |  | Rc1/4 |  | Rc3/8 | Rc1/2 |
| Stroke tolerance mm |  | $+{ }_{0}^{+1.8}(\text { up to } 1000)$ |  |  | $+{ }_{0}^{+1.8}(\text { up to 1500) }$ | $+1.4 \text { (up to 1000), }{ }_{0}^{+1.8}(\text { up to } 1500)$ |  |  |  |
| Working piston speed mm/s |  | 30 to 1000 (Use within the allowable energy absorption.) |  |  |  |  |  |  |  |
| Cushion |  | Rubber cushion |  |  |  | Air cushion |  |  |  |
| Lubrication Note 1 |  | Not available |  |  |  |  |  |  |  |
| Allowable energy absorption J | Rubber custioned | 0.1 | 0.2 | 0.5 | 0.9 | - | - | - | - |
|  | Air cushioned | - | - | - | - | 8.0 | 14.4 | 25.4 | 45.6 |
|  | No cushion | - | - | - | - | 0.057 | 0.057 | 0.112 | 0.153 |

Note 1: Regularly apply heat-resistant grease.
Note 2: Refer to Ending 73 for the absorption energy of the type without cushion.
Note 3: If "No cushion" is selected for the allowable absorption energy, when the air cushion symbol "R" is selected, the head side has no cushion, and the indicated allowable absorption energy is applied. When the air cushion symbol " H " is selected, the rod side has no cushion, and the indicated allowable absorption energy is applied.
Note 4: If "No cushion" is selected, the large energy generated by the external load cannot be absorbed. So an external shock absorber should be used.
Stroke length

| Bore size (mm) | Standard stroke length (mm) | Max. stroke length (mm) | Min. stroke length (mm) |
| :---: | :---: | :---: | :---: |
| $\phi 20$ | $\begin{aligned} & 25,50,75 \\ & 100,125,150 \\ & 200,250,300 \end{aligned}$ | 1000 | 10 |
| $\phi 25$ |  |  |  |
| $\phi 32$ |  |  |  |
| $\phi 40$ |  |  |  |
| $\phi 50$ |  |  |  |
| ¢ 63 |  | 1500 |  |
| $\phi 80$ |  |  |  |
| ¢ 100 |  |  |  |

Note 1: Custom stroke length is available per 1 mm increment.
Cylinder weight
(Unit: kg)

| Descripions/mounting style | Product weight when stroke length (S) = 0 mm |  |  |  |  | Additional weight per $S=10 \mathrm{~mm}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Port size | Basic type | Axial foot type | Flange type | Clevis type | Trunnion type |  |
| $\phi 20$ | 0.10 | 0.21 | 0.13 | 0.15 | 0.11 | 0.010 |
| ¢ 25 | 0.17 | 0.30 | 0.21 | 0.25 | 0.19 | 0.014 |
| ¢ 32 | 0.25 | 0.41 | 0.31 | 0.40 | 0.28 | 0.018 |
| ¢ 40 | 0.40 | 0.62 | 0.48 | 0.63 | 0.45 | 0.030 |
| $\phi 50$ | 0.75 | 1.23 | 1.09 | 1.15 | 0.89 | 0.044 |
| ¢ 63 | 1.05 | 1.77 | 1.55 | 1.73 | 1.19 | 0.052 |
| $\phi 80$ | 2.02 | 2.98 | 2.73 | 2.73 | - | 0.070 |
| $\phi 100$ | 3.14 | 4.89 | 4.49 | 4.42 | - | 0.098 |
| $\text { Product weight of SCM-T-LB-40-100 }\left\{\begin{aligned} & \text { Product weight when } S=0 \mathrm{~mm} \cdots \cdots \cdots \cdots 0.62 \mathrm{~kg} \\ & \text { Additional weight when } \mathrm{S}=100 \mathrm{~mm} \cdots \cdots \cdots 0.030 \times \frac{100}{10}=0.30 \mathrm{~kg} \\ & \text { Product weight } \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots 0.62 \mathrm{~kg}+0.30 \mathrm{~kg} \\ &=0.92 \mathrm{~kg} \end{aligned}\right.$ |  |  |  |  |  |  |

## Dimensions

The dimensions are the same as for the standard and single rod. Refer to pages 230 to 243.

How to order

## How to order

Without switch


| B Bore size (mm) |  |
| :--- | :--- |
| $\mathbf{2 0}$ | $\phi 20$ |
| $\mathbf{2 5}$ | $\phi 25$ |
| $\mathbf{3 2}$ | $\phi 32$ |
| $\mathbf{4 0}$ | $\phi 40$ |
| $\mathbf{5 0}$ | $\phi 50$ |
| $\mathbf{6 3}$ | $\phi 63$ |
| 80 | $\phi 80$ |
| $\mathbf{1 0 0}$ | $\phi 100$ |

Bore size


Port thread type


Blank Rc thread

| N | NPT thread (custom order) | Air cushioned is $\phi 32$ and over. |
| :--- | :--- | :--- |
| G | G thread (custom order) | Air cushioned is $\phi 32$ and over. |

(D) Cushion

| Bore size $(\phi)$ |  | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B | Both sides air cushioned |  |  |  |  | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| R | Rod end air cushioned |  |  |  |  | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| H | Head end air cushioned |  |  |  |  | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| D | Both sides rubber cushioned | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |  |  |  |  |

E Stroke length (mm)

| Bore size | Stroke length | Custom stroke length |
| :---: | :---: | :---: |
| $\phi 20$ to $\phi 32$ | $\mathbf{1 0}$ to $\mathbf{1 0 0 0}$ | Per $\mathbf{1} \mathbf{~ m m}$ |
| $\phi 40$ to $\phi 100$ | $\mathbf{1 0}$ to $\mathbf{1 5 0 0}$ |  |

## $\Theta$ Option

|  |  | Max. ambient'Max. instantaneous |  |
| :---: | :--- | :---: | :---: |
| L | Bellows material, silicone rubber glass cloth | $250^{\circ} \mathrm{C}$ | $400^{\circ} \mathrm{C}$ |
| M | Piston rod material (stainless steel) |  |  |



## How to order mounting bracket

| Bore size (mm) | $\phi 20$ | $\phi 25$ | $\phi 32$ | $\phi 40$ | $\phi 50$ | $\phi 63$ | $\phi 80$ | $\phi 100$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mounting bracket | SCM-LB-20 | SCM-LB-25 | SCM-LB-32 | SCM-LB-40 | SCM-LB-50 | SCM-LB-63 | SCM-LB-80 | SCM-LB-100 |
| Foot (LB) | SCM-FA-20 | SCM-FA-25 | SCM-FA-32 | SCM-FA-40 | SCM-FA-50 | SCM-FA-63 | SCM-FA-80 | SCM-FA-100 |
| Flange (FA/FB) | SCM |  |  |  |  |  |  |  |
| Eye (CA) | SCM-CA-20 | SCM-CA-25 | SCM-CA-32 | SCM-CA-40 | SCM-CA-50 | SCM-CA-63 | - | - |
| Clevis (CB) | - | - | - | - | - | - | SCM-CB-80 | SCM-CB-100 |
| Trunnion (TA/TB) | SCM-TA-20 | SCM-TA-25 | SCM-TA-32 | SCM-TA-40 | SCM-TA-50 | SCM-TA-63 | - | - |

[^0]
[^0]:    Note 1: Mounting bolts are attached to each mounting bracket.
    Note 2: 2 piece/set is applied for a foot type mounting bracket.

