

# Floating Joint

## Series *SF*

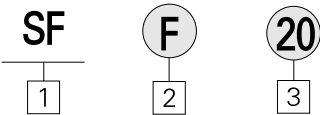
Bore size(Applicable Cylinder) :  $\varnothing 10, \varnothing 16, \varnothing 20, \varnothing 25, \varnothing 32, \varnothing 40, \varnothing 50, \varnothing 63, \varnothing 80, \varnothing 100, \varnothing 125, \varnothing 140, \varnothing 160$



THE FLOATING JOINT ASSEMBLY  
PROTECTS CYLINDER INSTALLATIONS  
FROM ANGULAR AND LATERAL  
MISALIGNMENT

- ACCURATE CYLINDER ALIGNMENT NOT REQUIRED
- INSTALLATION TIME REDUCED
- ACCURATE MACHINING
- COMPACT DESIGN ALLOWS HIGH LOADING

### How to Order



#### 1 Floating Joint

#### 2 Mounting

- Blank : Standard
- \* F : Flange Type
- \*  $\varnothing 10, \varnothing 16$  : Standard Type only.

#### 3 Applicable Tube/Thread Size

| Type | Applicable Cylinder Bore Size | Connection |
|------|-------------------------------|------------|
| 10   | 10                            | M4×0.7     |
| 16   | 16                            | M5×0.8     |
| 20   | 20                            | M8×1.25    |
| 32   | 25,32                         | M10×1.25   |
| 40   | 40                            | M14×1.5    |
| 63   | 50・63                         | M18×1.5    |
| 80   | 80                            | M22×1.5    |
| 100  | 100                           | M26×1.5    |
| 140  | 125・140                       | M30×1.5    |
| 160  | 160                           | M36×1.5    |

### Specifications

|                    |                                                   |
|--------------------|---------------------------------------------------|
| Operating Pressure | Air Cylinder 9.9kgf/cm <sup>2</sup> {0.97MPa}     |
|                    | Hydraulic cylinder 35kgf/cm <sup>2</sup> {3.5MPa} |
| Mounting           | Standard, Flange type                             |

### Cautions

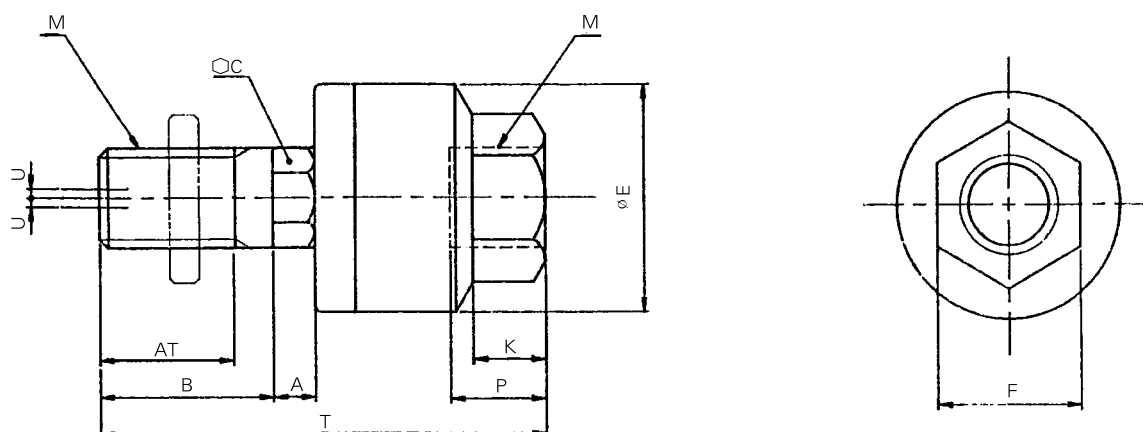
- ① Ambient temperature range 5° to 60° C
- ② Unscrew joint 1 or 2 turns from the end rod thread
- ③ Do not exceed axial misalignment of 5°
- ④ Do not exceed allowable eccentricity or life of joint could be shortened.
- ⑤ For applications other than air cylinder consult factory.
- ⑥ Joint is not suitable for rotation applications.
- ⑦ Cannot be re-used after dismantling.
- ⑧ Sealed and pre-lubricated.

## Model

| Model                  | Cylinder Bore size(mm) | Thread   | Working thrust N(kgf) |             | Allowable eccentricity U(mm) | Angle |
|------------------------|------------------------|----------|-----------------------|-------------|------------------------------|-------|
|                        |                        |          | standard              | flange type |                              |       |
| Standard / Thread size |                        |          |                       |             |                              |       |
| SF10                   | 10                     | M4×0.7   | 5.4(0.054)            | —           | 0.5                          | ±5°   |
| SF16                   | 16                     | M5×0.8   | 12.3(0.123)           | —           | 0.5                          |       |
| SF□20                  | 20                     | M8×1.25  | 110(1.1)              | 110(1.1)    | 0.5                          |       |
| SF□32                  | 25.32                  | M10×1.25 | 250(2.5)              | 250(2.5)    | 0.5                          |       |
| SF□40                  | 40                     | M14×1.5  | 600(6.0)              | 440(4.4)    | 0.75                         |       |
| SF□63                  | 50.63                  | M18×1.5  | 1100(11)              | 1100(11)    | 1                            |       |
| SF□80                  | 80                     | M22×1.5  | 1800(18)              | 1800(18)    | 1.25                         |       |
| SF□100                 | 100                    | M26×1.5  | 2800(28)              | 2800(28)    | 2                            |       |
| SF□125                 | 125.140                | M30×1.5  | 5400(54)              | 3600(36)    | 2.5                          |       |
| SF□160                 | 160                    | M36×1.5  | 7100(71)              | 5500(55)    | 3                            |       |

## Basic Type/Series SF

SF 10~160



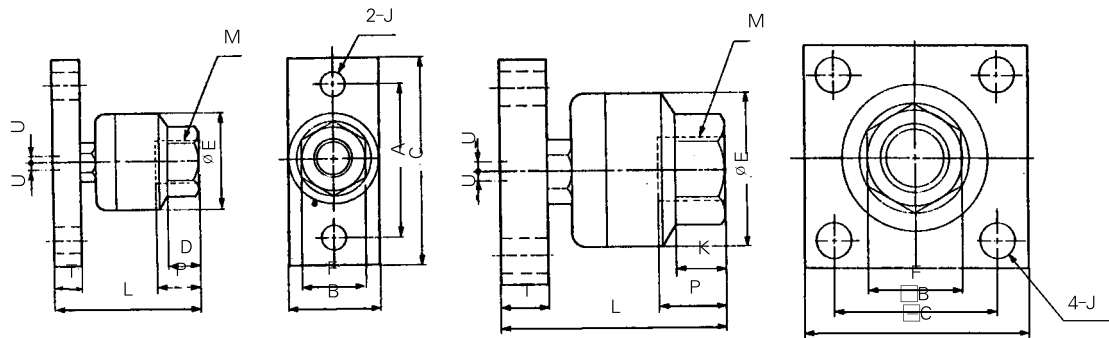
(mm)

| Cylinder Size (mm) | Model | M         |       | T   | AT | B    | A   | C  | K   | E  | F  | P   | U    | N(Kgf)      |
|--------------------|-------|-----------|-------|-----|----|------|-----|----|-----|----|----|-----|------|-------------|
|                    |       | Port size | Pitch |     |    |      |     |    |     |    |    |     |      |             |
| 10                 | SF10  | M4        | 0.7   | 26  | 9  | 10   | 1.5 | 5  | 4.6 | 12 | 7  | 5.5 | 0.5  | 5.4(0.054)  |
| 16                 | SF16  | M5        | 0.8   | 34  | 12 | 14   | 2   | 6  | 5.6 | 16 | 10 | 7   | 0.5  | 12.3(0.123) |
| 20                 | SF20  | M8        | 1.25  | 45  | 15 | 16.5 | 5   | 7  | 6   | 21 | 13 | 8   | 0.5  | 110(1.1)    |
| 25.32              | SF32  | M10       | 1.25  | 47  | 17 | 18   | 5   | 8  | 8   | 24 | 17 | 9   | 0.5  | 250(2.5)    |
| 40                 | SF40  | M14       | 1.5   | 62  | 20 | 22   | 6   | 11 | 11  | 31 | 22 | 13  | 0.75 | 600(6.0)    |
| 50.63              | SF63  | M18       | 1.5   | 75  | 25 | 26   | 6.5 | 14 | 13  | 41 | 27 | 15  | 1    | 1100(11)    |
| 80                 | SF80  | M22       | 1.5   | 89  | 27 | 29   | 7   | 19 | 16  | 50 | 32 | 18  | 1.25 | 1800(18)    |
| 100                | SF100 | M26       | 1.5   | 110 | 34 | 36   | 11  | 24 | 21  | 59 | 41 | 24  | 2    | 2800(28)    |
| 125,140            | SF125 | M30       | 1.5   | 153 | 42 | 46   | 14  | 30 | 22  | 79 | 46 | 38  | 2.5  | 5400(54)    |
| 160                | SF160 | M36       | 1.5   | 179 | 52 | 56   | 16  | 36 | 24  | 96 | 55 | 42  | 3    | 7100(71)    |

Flange Type/Series SFF

SFF20~40

SFF50~160



| Cylinder Size<br>(mm) | Model  | M         |       | L    | B  | A   | C   | K    | E    | F  | T  | J   | P  | U    | N(kgf)   |
|-----------------------|--------|-----------|-------|------|----|-----|-----|------|------|----|----|-----|----|------|----------|
|                       |        | Port Size | Pitch |      |    |     |     |      |      |    |    |     |    |      |          |
| 20                    | SFF20  | M8        | 1.25  | 33   | 19 | 36  | 48  | 7    | 21   | 13 | 6  | 6.6 | 8  | 0.5  | 110(1.1) |
| 25,32                 | SFF32  | M10       | 1.25  | 36   | 25 | 40  | 52  | 8    | 24   | 17 | 6  | 6.6 | 9  | 0.5  | 250(2.5) |
| 40                    | SFF40  | M14       | 1.5   | 50   | 32 | 52  | 70  | 11   | 31   | 22 | 9  | 9   | 13 | 0.75 | 440(4.4) |
| 50,63                 | SFF63  | M18       | 1.5   | 62   | -  | 45  | 65  | 13.4 | 41   | 27 | 12 | 9   | 15 | 1    | 1100(11) |
| 80                    | SFF80  | M22       | 1.5   | 76.5 | -  | 55  | 75  | 16   | 50   | 32 | 16 | 11  | 18 | 1.25 | 1800(18) |
| 100                   | SFF100 | M26       | 1.5   | 94   | -  | 65  | 90  | 20   | 69.5 | 41 | 19 | 11  | 24 | 2    | 2800(28) |
| 125,140               | SFF125 | M30       | 1.5   | 132  | -  | 82  | 125 | 22   | 79   | 46 | 24 | 18  | 38 | 2.5  | 3600(36) |
| 160                   | SFF160 | M36       | 1.5   | 154  | -  | 100 | 150 | 24   | 96   | 55 | 29 | 22  | 42 | 3    | 5500(55) |