

# Series **ST**

## Polyurethane Tubing

● FOR GENERAL AIR PRESSURE TUBING



### How to Order

**ST0425**

**BU**

1

2

1 Indication of Tube Type

2 Color Indication

- B : Black
- BU : Blue
- Y : Yellow
- C : Clear

### Series Table

◎ - 100m

Description	Metric-size (series ST)							
	ST0402	ST0425	ST0604	ST0805	ST0855	ST1065	ST1208	ST1209
Tube O.Dmm	4	4	6	8	8	10	12	12
Tube I.Dmm	2	2.5	4	5	5.5	6.5	8	9
Weight(kg)	1.1	2.0	2.2	4.0	3.6	6.0	8.0	7.8
Black(B)	◎	◎	◎	◎	◎	◎	◎	◎
Blue(BU)	◎	◎	◎	◎	◎	◎	◎	◎
Yellow(Y)	◎	◎	◎	◎	◎	◎	◎	◎
Clear(C)	◎	◎	◎	◎	◎	◎	◎	◎

### Specifications

Max. Operating Pressure	75 PSI (5kgf/cm <sup>2</sup> )				
Burst Pressure	Refer to burst pressure characteristics curve.				
Note 1) Minimum Bending Radius Inch(mm)	0.39(10)	0.59(15)	0.79(20)	1.07(27)	1.38(35)
Operating Temperature	-20~60 °C (-4~140 °F)				
Material	Polyurethane				

Note 1) The value for bending radius is at a temperature of -21°C (-4°F)  
 (Reference) The inch sizes  $\phi 5/32''$  and  $\phi 5/16''$  are equivalent to  $\phi 4$  and  $\phi 8$  mm

# Series SF

## Floating Joint

Bore size(Applicable Cylinder) : Ø10, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100, Ø125, Ø140, Ø160

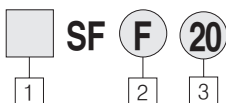


THE FLOATING JOINT ASSEMBLY PROTECTS CYLINDER INSTALLATIONS FROM ANGULAR AND LATERAL MISALIGNMENT

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

- SN
- SP2000
- SP4000
- SQ
- SC
- SP
- SHF · SHS
- DC
- SQ2
- ST
- SF

### How to Order



#### 1 Series

Blank : Rc(PT)  
U : NPT(UNF)

#### 2 Mounting

Blank : Standard  
\* F : Flange Type  
\* φ 10, φ 16 : Standard Type only.

#### 3 Applicable Tube/Thread Size

Type	Applicable Cylinder Bore Size	Connection
10(1)	10(3/8 Nom)	M4×0.7(6-40UNF)
16(2)	16(5/8 Nom)	M5×0.8(10-32UNF)
20(4)	20(3/4 Nom)	M8×1.25(1/4-28UNF)
30(5)	25.30(1, 1 1/4 Nom)	M10×1.25(5/16-24UNF)
40(6)	40(1 1/2 Nom)	M14×1.5(3/8-24UNF)
63(7)	50 · 63(2, 2 1/2 Nom)	M18×1.5(9/16-20UNF)
80(8)	80(3 1/4 Nom)	M22×1.5(1/2-20UNF)
100(12)	100(4 Nom)	M26×1.5(3/4-16UNF)
140(16)	125 · 140(5, 5 1/2 Nom)	M30×1.5(1-12UNF)
160(20)	160(6 3/8 Nom)	M36×1.5(1 1/4-12UNF)

\*U:NPT type.

\*In case of 35kgf/cm<sup>2</sup>(3.5MPa) hydraulic : C cylinder, It is recommended to using within noted tension compression limit.

### Specifications

Operating Pressure	Air Cylinder 0.97Mpa(141psi)
	Hydraulic cylinder 3.5Mpa(498psi)
Mounting	Standard, Flange type

### Cautions

- ① Ambient temperature range 5~60°C(41°F~140°F)
- ② Unscrew joint 1 or 2 turns from the end rod thread
- ③ Do not exceed axial misalignment of 5°(41°F)
- 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 dismantaling.
- ⑧ Sealed and pre-lubricated.

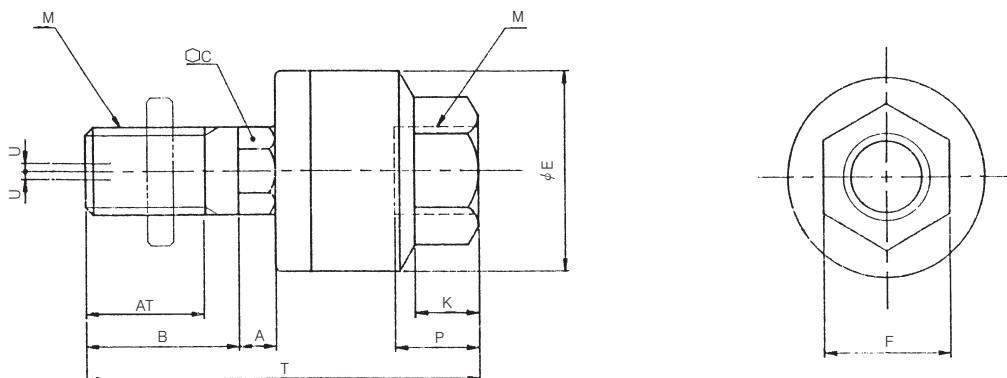
# Series SF

## Model

Model	Cylinder Bore mm	Thread Rc(PT)/NPT	Working thrust kgf(×0.01KN)		Allowable eccentricity Umm	Angle
			standard	flange type		
Standard / Thread size						
SF10	10	M4×0.7(6-40UNF)	5.4(0.054)	-	0.5	±5°
SF16	16	M5×0.8(10-32UNF)	12.3(0.123)	-	0.5	
SF□20	20	M8×1.25(1/4-28UNF)	110(1.1)	110(1.1)	0.5	
SF□30	25.30	M10×1.25(5/16-24UNF)	250(2.5)	250(2.5)	0.5	
SF□40	40	M14×1.5(3/8-24UNF)	600(6.0)	440(4.4)	0.75	
SF□63	50.63	M18×1.5(7/16-20UNF)	1100(11)	1100(11)	1	
SF□80	80	M22×1.5(1/2-20UNF)	1800(18)	1800(18)	1.25	
SF□100	100	M26×1.5(3/4-16UNF)	2800(28)	2800(28)	2	
SF□125	125.140	M30×1.5(1-12UNF)	5400(54)	3600(36)	2.5	
SF□160	160	M36×1.5(1 1/4-12UNF)	7100(71)	5500(55)	3	

## Basic Type/Series SF

SF 10~160



(mm)

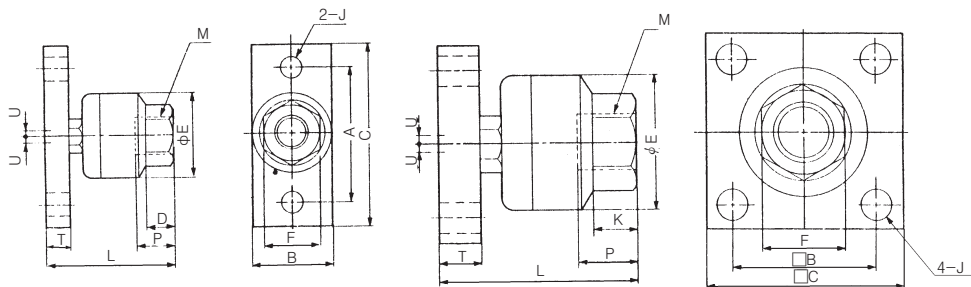
Cylinder Size (mm)	Model	M		T	AT	B	A	C	K	E	F	P	U	kgf(KN)
		Port size	Pitch											
10	SF10	M4	0.7	26	9	10	1.5	5	4.6	12	7	5.5	0.5	5.4(0.054)
16	SF16	M5	0.8	34	12	14	2	6	5.6	16	10	7	0.5	12.3(0.123)
20	SF20	M8	1.25	45	15	16.5	5	7	7	21	13	8	0.5	110(1.1)
25.30	SF30	M10	1.25	47	17	18	5	8	8	24	17	9	0.5	250(2.5)
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	13.4	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	20	59.5	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)

# Series SF

## Flange Type/Series SFF

SFF20~40

SFF50~160



- SN
- SP2000
- SP4000
- SQ
- SC
- SP
- SHF · SHS
- DC
- SQ2
- ST
- SF

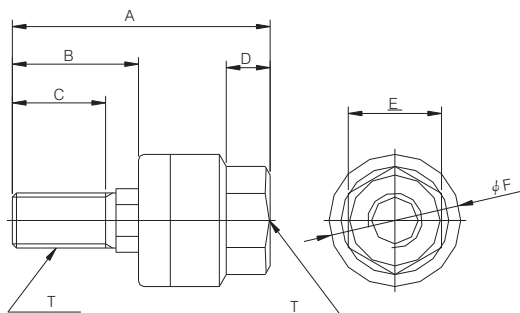
(mm)

Cylinder Size (mm)	Model	M		L	B	A	C	K	E	F	T	J	P	U	kgf(KN)
		Port Size	Pitch												
20	SFF20	M8	1.25	33	19	36	48	7	21	13	6	6.6	8	0.5	110(1.1)
25,30	SFF30	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	59.5	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)

# Series SF

## Basic Type/Series USF

USF1 ~USF20

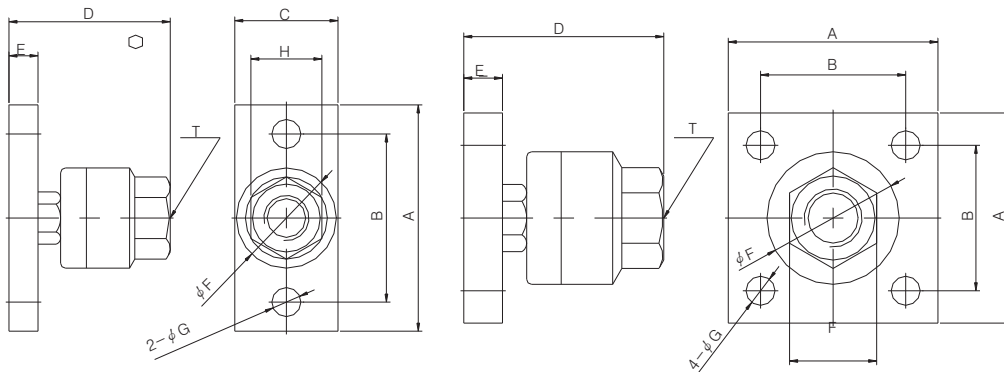


(inch)

Model	T	A	B	C	D	E	F
USF1	6-40UNF	1.02	0.45	0.35	0.22	0.28	0.47
USF2	10-32UNF	1.36	0.63	0.49	0.28	0.39	0.63
USF4	1/4-28UNF	1.77	0.85	0.59	0.31	0.51	0.83
USF5	5/16-24UNF	1.77	0.85	0.59	0.31	0.51	0.83
USF6	3/8-24UNF	1.95	0.91	0.669	0.35	0.67	0.94
USF7	7/16-20UNF	2.44	1.11	0.79	0.51	0.87	1.22
USF8	1/2-20UNF	2.95	1.28	0.98	0.59	1.06	1.61
USF12	3/4-16UNF	3.50	1.47	1.06	0.71	1.26	1.97
USF16	1-12UNF	4.33	1.85	1.34	0.94	1.61	2.32
USF20	1 1/4-12UNF	6.02	2.36	1.65	1.50	1.81	3.11

USFF4 ~USFF7

USFF8 ~USFF20



(inch)

Model	T	A	B	C	D	E	FG	H
USF4	1/4-28UNF	1.89	1.42	0.75	1.29	0.24	0.83	0.26
USF5	5/16-24UNF	1.89	1.42	0.75	1.29	0.24	0.83	0.26
USF6	3/8-24UNF	2.05	1.57	0.98	1.41	0.24	0.94	0.26
USF7	7/16-20UNF	2.76	2.05	1.26	1.96	0.35	1.22	0.35
USF8	1/2-20UNF	2.56	1.77	-	2.44	0.47	1.61	0.43
USF12	3/4-16UNF	2.95	2.17	-	3.01	0.63	1.97	0.43
USF16	1-12UNF	3.54	2.56	-	3.70	0.75	2.74	0.71
USF20	1 1/4-12UNF	4.92	3.23	-	5.19	0.94	3.11	0.51