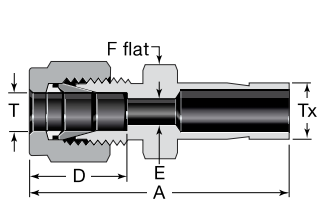
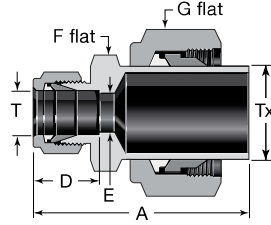


## Straight Fittings

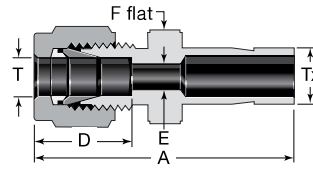
### Reducers



1 in. and Under



Over 1 in.



25 mm and Under

#### Reducer (Fractional)

Tube OD		Basic Ordering Number	Dimensions				
T	Tx		A	D	E	F	G
Dimensions, in.							
1/16	1/8 1/4	-100-R-2 -100-R-4	1.15 1.24	0.34	0.05	5/16	—
1/8	1/16	-200-R-1	1.14	0.50	0.03	7/16	—
	1/8	-200-R-2	1.32		0.08	7/16	
	3/16	-200-R-3	1.35		0.09	7/16	
	1/4	-200-R-4	1.42		0.09	7/16	
	3/8	-200-R-6	1.48		0.09	7/16	
3/16	1/8	-300-R-2	1.37	0.54	0.08	7/16	—
	1/4	-300-R-4	1.46		0.12		
1/4	1/8	-400-R-2	1.45	0.60	0.08	1/2	—
	3/16	-400-R-3	1.48		0.12	1/2	
	1/4	-400-R-4	1.54		0.17	1/2	
	5/16	-400-R-5	1.57		0.19	1/2	
	3/8	-400-R-6	1.60		0.19	1/2	
	1/2	-400-R-8	1.82		0.19	9/16	
	5/8	-400-R-10	1.89		0.19	11/16	
3/4	-400-R-12	1.88	0.19	13/16			
5/16	3/8	-500-R-6	1.65	0.64	0.25	9/16	—
	1/2	-500-R-8	1.87				
3/8	1/4	-600-R-4	1.63	0.66	0.17	5/8	—
	3/8	-600-R-6	1.70		0.27	5/8	
	1/2	-600-R-8	1.91		0.28	5/8	
	5/8	-600-R-10	1.98		0.28	11/16	
	3/4	-600-R-12	1.98		0.28	13/16	
1/2	1/4	-810-R-4	1.77	0.90	0.17	13/16	—
	3/8	-810-R-6	1.84		0.27	13/16	
	1/2	-810-R-8	2.06		0.37	13/16	
	5/8	-810-R-10	2.12		0.41	13/16	
	3/4	-810-R-12	2.12		0.41	13/16	
5/8	3/4	-1010-R-12	2.15	0.96	0.50	15/16	—
	7/8	-1010-R-14	2.21		15/16		
	1	-1010-R-16	2.40		1 1/16		
3/4	1/2	-1210-R-8	2.15	0.96	0.37	1 1/16	—
	1	-1210-R-16	2.46		0.62		
1	1 1/4	-1610-R-20 <sup>①</sup>	3.17	1.23	0.88	1 3/8	1 7/8
	1 1/2	-1610-R-24 <sup>①</sup>	3.51		1 5/8	2 1/4	
	2	-1610-R-32 <sup>①</sup>	4.43		2 1/8	3	
1 1/4	1 1/2	-2000-R-24 <sup>①</sup>	4.10	1.62	1.09	1 3/4	2 1/4
	2	-2000-R-32 <sup>①</sup>	4.93		2 1/8	3	
1 1/2	2	-2400-R-32 <sup>①</sup>	5.17	1.97	1.34	2 1/8	3

① Furnished with nut and preswaged ferrules.

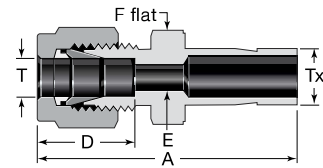
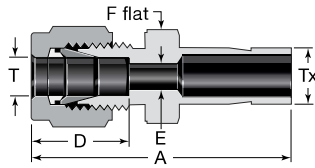
#### Reducer (Metric)

Tube OD		Basic Ordering Number	Dimensions				
T	Tx		A	D	E	F	
Dimensions, mm							
2	3	-2M0-R-3M	33.5	12.9	1.7	12	
3	4	-3M0-R-4M	35.0	12.9	2.4	12	
	6	-3M0-R-6M	36.1			14	
4	6	-3M0-R-10M	38.4	13.7	2.4	12	
	6	-4M0-R-6M	37.1			14	
6	3	-6M0-R-3M	36.9	15.3	1.9	14	
	8	-6M0-R-8M	39.9		4.8	14	
	10	-6M0-R-10M	40.7		4.8	14	
	12	-6M0-R-12M	46.3		4.8	14	
8	18	-6M0-R-18M	49.6	16.2	4.8	22	
	6	-8M0-R-6M	40.3		4.1	15	
10	10	-8M0-R-10M	42.0	17.2	6.4		
	12	-8M0-R-12M	47.6		6.4		
	6	-10M0-R-6M	42.4		4.1	18	
	8	-10M0-R-8M	43.4		5.6	18	
12	12	-10M0-R-12M	49.8	22.8	7.9	18	
	15	-10M0-R-15M	51.3		7.9	18	
	18	-10M0-R-18M	51.3		7.9	22	
	6	-12M0-R-6M	44.9		4.1	22	
14	8	-12M0-R-8M	45.9	24.4	5.6	22	
	10	-12M0-R-10M	46.7		7.1	22	
	16	-12M0-R-16M	46.7		9.5	22	
	18	-12M0-R-18M	53.8		9.5	22	
	20	-12M0-R-20M	53.8		9.5	22	
	22	-12M0-R-22M	56.1		9.5	24	
	25	-12M0-R-25M	56.1		9.5	27	
16	12	-14M0-R-12M	53.0	24.4	8.8	24	
	15	-15M0-R-12M	53.0		8.8	24	
	16	-16M0-R-12M	53.0		8.8	24	
	12	-18M0-R-12M	54.6		26.0	8.8	27
	16	-18M0-R-16M	56.1			12.0	
20	-18M0-R-20M	57.6	15.1				
22	-18M0-R-22M	57.6	15.1				
25	-18M0-R-25M	62.4	15.1				
18	16	-20M0-R-16M	57.9	26.0	12.0	30	
	18	-20M0-R-18M	57.9		13.9		
	22	-20M0-R-22M	59.4		15.9		
	25	-20M0-R-25M	64.2		15.9		
20	18	-22M0-R-18M	57.9	26.0	13.9	30	
	20	-22M0-R-20M	59.4		15.5		
	25	-22M0-R-25M	64.2		18.3		
22	18	-25M0-R-18M	63.1	31.3	13.9	35	
	20	-25M0-R-20M	64.6		15.5		

Refer to Installation Instructions, beginning on page 69.

## Straight Fittings

### Reducers



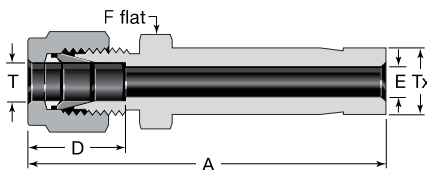
**Reducer (Metric to Fractional)**

Tube OD		Basic Ordering Number	Dimensions			
T	Tx, in.		A	D	E	F
Dimensions, mm						
2	1/8	-2M0-R-2	33.5	12.9	1.7	12
3	1/8	-3M0-R-2	33.5	12.9	2.0	12
	1/4	-3M0-R-4	36.1		2.4	
4	1/4	-4M0-R-4	37.1	13.7	2.4	12
6	1/8	-6M0-R-2	36.9	15.3	2.0	14
	1/4	-6M0-R-4	39.2		4.4	
	5/16	-6M0-R-5	39.9		4.8	
	3/8	-6M0-R-6	40.7		4.8	
	1/2	-6M0-R-8	46.3		4.8	
8	1/4	-8M0-R-4	40.3	16.2	4.4	15
	3/8	-8M0-R-6	42.0		6.4	
	1/2	-8M0-R-8	47.6		6.4	
10	3/8	-10M0-R-6	44.2	17.2	6.8	18
	1/2	-10M0-R-8	49.8		7.9	
12	1/2	-12M0-R-8	52.3	22.8	9.3	22
	3/4	-12M0-R-12	53.8		9.5	
18	3/4	-18M0-R-12	56.1	24.4	14.7	27
	1	-18M0-R-16	62.4		15.1	
25	1	-25M0-R-16	69.5	31.3	20.2	35

**Reducer (Fractional to Metric)**

Tube OD		Basic Ordering Number	Dimensions			
T	Tx, mm		A	D	E	F
Dimensions, in.						
1/8	6	-200-R-6M	1.42	0.50	0.09	7/16

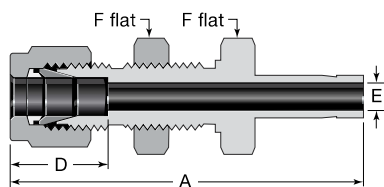
### Long Reducer



Tube OD		Basic Ordering Number	Dimensions			
T	Tx		A	D	E	F
Dimensions, in.						
3/8	1/2	-600-RF-8	2.57	0.66	0.25	5/8

Use only long reducers in female Swagelok end connections.

### Bulkhead Reducer



Tube OD	Basic Ordering Number	Dimensions					
		A	D	E	F	Panel Hole Size	Max Panel Thickness
Dimensions, in.							
1/8	-200-R1-2	1.95	0.50	0.08	1/2	21/64	0.50
1/4	-400-R1-4	2.20	0.60	0.17	5/8	29/64	0.40
3/8	-600-R1-6	2.41	0.66	0.27	3/4	37/64	0.44
1/2	-810-R1-8	2.87	0.90	0.37	15/16	49/64	0.50
5/8	-1010-R1-10	2.96	0.96	0.47	1 1/16	57/64	0.50
3/4	-1210-R1-12	3.21	0.96	0.58	1 3/16	1 1/64	0.66
1	-1610-R1-16	3.95	1.23	0.80	1 5/8	1 21/64	0.75

Refer to Installation Instructions, beginning on page 69.