



*Poly-Flo fittings & tubing
Push-in metric
Hi-Duty metric
Hi-Seal metric*

- 1) A **two piece** fitting.
One piece nut and sleeve.
No loose sleeve to handle and drop.
- 2) **Installation:**
 - Easy
 - Push in tube against tube stop.
 - Tighten nut until sleeve shears off. A small "give" indicates that the sleeve has been shared from the nut. The sleeve becomes permanently attached to tubing. Continue for approx, one to one and a half additional turns.
 - Fast
 - Average time for installation :
Hi-Duty 11.7 sec.
Compression 18.5 sec.
Time saving 35 % over compression.
 - Safe
 - Sleeve will always be properly aligned on tubing.
 - No need for disassembly to check alignment.
 - Sleeve cannot be mounted in a reversed position.

- 3) Pressure ratings - **BAR**.
The following figures apply to assemblies with both **BSP** and **NPT** bodies.

Tubing material	Fitting Tube size (mm)	Tube OD x Wall (mm)	No. of turns past shear	Max. recommended working pressure (safety factor 4-1)
Copper Dead Soft Seamless	6	6 x 1	1 1/4 to 1 1/2	206
	8	8 x 1	1 1/4 to 1 1/2	129
	10	10 x 1	1 1/4 to 1 1/2	112
	12	12 x 1	1 1/2 to 1 3/4	86
Steel Dead Soft Seamless	6	6 x 1	1 1/4 to 1 1/2	258
	8	8 x 1	1 1/4 to 1 1/2	172
	10	10 x 1	1 1/4 to 1 1/2	129
	12	12 x 1	1 1/2 to 1 3/4	86

- 4) **Deep tube entry** in fitting body:
 - excellent vibration characteristics. Hi-Duty withstands 5 times as much vibration as ordinary compression fittings.
 - Ultra High Vacuum. Holds vacuum of 0,001 Micron / 1×10^{-6} Torr.
- 5) Remake Performance.
Can be **re-used** several times (10-15 times, depending on skill of personnel).
Note: 1/8 additional turn after each remake, once fitting has been disassembled and reassembled more than 2 times.
- 6) Material: Brass.
 - Elbows and Tees: Brass forgings-SAE. CA 37
 - Connectors, Unions, Nuts: Stress relieved brass bar stock. - SAE. CA 360.
- 7) Pipe threads.
 - BSP — male: BSPT (tapered) - RK
 — female: BSPP (parallel) - RZ
 - NPT: Long length dry seal American (National) Standard Taper pipe thread.
- 8) Also available are:
 - Inch tube to NPT pipe thread
 - Inch tube to BSP pipe thread
 - Unions for Inch tubing

See catalog ITE-104 and Bulletin ITE-1047

METRIC TUBE TO NPT THREAD

Description	Tube O.D.	Pipe Thread	Description	Tube O.D.	Pipe Thread	Description	Tube O.D.	Pipe Thread						
66-L BULKHEAD FEMALE CONNECTOR			89-L MALE ELBOW			94-L 45° MALE ELBOW								
	6 mm	1/4"		6 mm x 1/8 6 mm x 1/4 6 mm x 3/8 8 mm x 1/8 8 mm x 1/4 10 mm x 1/8 10 mm x 1/4 10 mm x 3/8 10 mm x 1/2 12 mm x 1/4 12 mm x 3/8 12 mm x 1/2 12 mm x 3/4		6 mm x 1/8 6 mm x 1/4 8 mm x 1/8 8 mm x 1/4 10 mm x 1/8 10 mm x 1/4 10 mm x 3/8 12 mm x 3/8 12 mm x 1/2	Cat. no. 66LB							
76-L TEE							Cat. no. 89LB		Cat. no. 94LB					
	6 mm	1/8"					90-L FEMALE ELBOW			95-L FEMALE BRANCH TEE				
M-81-L NUT								6 mm x 1/8 6 mm x 1/4 8 mm x 1/8 8 mm x 1/4 10 mm x 1/8 10 mm x 1/4 10 mm x 3/8 10 mm x 1/2 12 mm x 1/4 12 mm x 3/8 12 mm x 1/2		6 mm x 1/8 6 mm x 1/4 8 mm x 1/8 8 mm x 1/4 10 mm x 1/8 10 mm x 1/4 10 mm x 3/8 12 mm x 3/8 12 mm x 1/2	Cat. no. M81LB			
83-L BALL CHECK											Cat. no. 90LB		Cat. no. 95LB	
	6 mm	1/8" 8 mm x 1/8 10 mm x 1/4 12 mm x 3/8									91-L MALE RUN TEE			96-L FEMALE RUN TEE
86-L FEMALE CONNECTOR				6 mm x 1/8 6 mm x 1/4 8 mm x 1/8 8 mm x 1/4 10 mm x 1/8 10 mm x 1/4 10 mm x 3/8 12 mm x 3/8 12 mm x 1/2		6 mm x 1/8 6 mm x 1/4 10 mm x 1/8 10 mm x 1/4 10 mm x 3/8 12 mm x 3/8 12 mm x 1/2	Cat. no. 86LB							
88-L MALE CONNECTOR							92-L MALE BRANCH TEE			97-L TUBE END REDUCER				
	6 mm	1/8" 1/4" 3/8" 1/2" 1/8" 1/4" 3/8" 1/8" 1/4" 3/8" 1/8" 1/4" 3/8" 1/2" 1/4" 3/8" 1/2" 3/4"		6 mm x 1/8 6 mm x 1/4 8 mm x 1/8 8 mm x 1/4 10 mm x 1/8 10 mm x 1/4 10 mm x 3/8 12 mm x 3/8 12 mm x 1/2		3/8 x 6 mm 1/2 x 6 mm 1/2 x 10 mm	Cat. no. 88LB							
							Cat. no. 92LB		Cat. no. 97LB					

UNIONS FOR METRIC TUBING

Description	Catalog Number	Tube O.D. to O.D. mm	Tube O.D. to O.D. mm	Description	Catalog Number	Tube O.D. to O.D. mm	Tube O.D. to O.D. mm
52-L CROSS 	52 LB 6 mm	6	6	84-L UNION TEE 	84 LB 6 mm	6	6
	52 LB 8 mm	8	8		84 LB 8 mm	8	8
	52 LB 10 mm	10	10		84 LB 10 mm	10	10
			84 LB 12 mm		12	12	
72-L BULKHEAD UNION 	72 LB 6 mm	6	6	85-L UNION ELBOW 	85 LB 6 mm	6	6
	72 LB 8 mm	8	8		85 LB 8 mm	8	8
	72 LB 10 mm	10	10		85 LB 10 mm	10	10
	72 LB 12 mm	12	12		85 LB 12 mm	12	12
82-L UNION 	82 LB 6 mm	6	6	87-L REDUCING UNION 	87 LB 8 mm - 6 mm	8	6
	82 LB 8 mm	8	8		87 LB 10 mm - 6 mm	10	6
	82 LB 10 mm	10	10		87 LB 12 mm - 6 mm	12	6
	82 LB 12 mm	12	12		87 LB 12 mm - 10 mm	12	10

METRIC TUBE TO BSP THREAD

Description	Catalog Number	Tube O.D. mm	Pipe Thread	Description	Catalog Number	Tube O.D. mm	Pipe Thread
M-81-L NUT 	M-81-LB-6M	6		M-89-L MALE ELBOW Tube to British standard Taper Male Pipe 	M-89-LB-6M x 2B	6	1/8
	M-81-LB-8M	8			M-89-LB-6M x 4B	6	1/4
	M-81-LB-10M	10			M-89-LB-8M x 2B	8	1/8
	M-81-LB-12M	12			M-89-LB-8M x 4B	8	1/4
M-86-L FEMALE CONNECTOR Tube to British standard Parallel Female Pipe 	M-86-LB-6M x 2BP	6	1/8	M-90-L FEMALE ELBOW Tube to British standard Parallel Female Pipe 	M-90-LB-6M x 2BP	6	1/8
	M-86-LB-6M x 4BP	6	1/4		M-90-LB-6M x 4BP	6	1/4
	M-86-LB-8M x 2BP	8	1/8		M-90-LB-8M x 2BP	8	1/8
	M-86-LB-8M x 4BP	8	1/4		M-90-LB-8M x 4BP	8	1/4
	M-86-LB-10M x 4BP	10	1/4		M-90-LB-10M x 4BP	10	1/4
	M-86-LB-10M x 6BP	10	3/8		M-90-LB-10M x 6BP	10	3/8
M-86-LB-12M x 6BP	12	3/8	M-90-LB-12M x 6BP	12	3/8		
M-86-LB-12M x 8BP	12	1/2	M-90-LB-12M x 8BP	12	1/2		
M-88-L MALE CONNECTOR Tube to British standard Taper Male Pipe 	M-88-LB-6M x 2B	6	1/8	M-92-L MALE BRANCH TEE Tube to British standard Taper Male Pipe 	M-92-LB-6M x 2B	6	1/8
	M-88-LB-6M x 4B	6	1/4		M-92-LB-6M x 4B	6	1/4
	M-88-LB-8M x 2B	8	1/8		M-92-LB-8M x 4B	8	1/4
	M-88-LB-8M x 4B	8	1/4		M-92-LB-10M x 4B	10	1/4
	M-88-LB-10M x 4B	10	1/4		M-92-LB-10M x 6B	10	3/8
	M-88-LB-10M x 6B	10	3/8		M-92-LB-12M x 6B	12	3/8
	M-88-LB-12M x 6B	12	3/8		M-92-LB-12M x 8B	12	1/2
M-88-LB-12M x 8B	12	1/2					

