

Precision Engineered

Fine Quality



Advanced Design



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Ordering Part No. =
(e.g., **BC 1/8 10-32**)

BC

1/8







10-32

Fitting Name	
Branch Tee	BT
Bulkhead Connector	BC
Bulkhead Union	BU
Compact Male Connector	CC
Control Valve (Meter-In Tube)	CI
Control Valve (Meter-Out Tube)	CV
Cross Union	CU
Elbow Reducer	ER
Elbow Union	EU
Extended Elbow	EE
Female Connector	FC
Female Elbow	FE
Flow Control Valve (Inline)	FV
Male Angle	MA
Male Connector	MC
Male Elbow	ME
Male Manifold	MM
Manifold Union	MU
Plug	PG
Plug-In Elbow	PE
Reduced Branch	RB
Reduced Union	RU
Run Tee	RT
Stack Elbow	SE
Stem Coupler	SC
Stem Reducer	SR
Straight Union	SU
Tee Union	TU
Tee Union Reducer	TU
Tube Reducer	TR
Universal Elbow	UE
Y Connector	YC
Y Reducer	YR
Y Union	YU

Tube OD	
Inches	1/8
	5/32
	3/16
	1/4
	5/16
	3/8
	1/2
mm	4
	6
	8
	10
	12
	16





Thread Size / Stem / Tube	
Thread Size: N = NPT R = BSPT (British Standard Taper Thread) G = BSPP (British Standard Parallel Thread) U = Universal Thread (fits NPT, R, & G)	10-32
	N1/8
	N1/4
	N3/8
	N1/2
	M5
	M6
	R1/8
	R1/4
	R3/8
	R1/2
	G1/8
	G1/4
	G3/8
Stem Size	1/8-1/2"
	4-12mm





Options—Release Button Color	
Purple / Metal Finish	(leave blank)
Black	K


Composite Fittings													
Model		Male Connector (with Internal Hex)		Compact Male Connector (with Internal Hex)		Male Elbow		Branch Tee		Run Tee		Y Connector	
		MC		CC		ME		BT		RT		YC	
Tube OD	Pipe Size	Part No.	Unit Price	Part No.	Unit Price	Part No.	Unit Price	Part No.	Unit Price	Part No.	Unit Price	Part No.	Unit Price
1/8	10-32UNF	MC 1/8 10-32 K	\$1.53	CC 1/8 10-32 K	\$1.53	ME 1/8 10-32 K	\$2.19	BT 1/8 10-32 K	\$3.39	RT 1/8 10-32 K	\$3.10	YC 1/8 10-32 K	\$3.10
1/8	NPT1/8	MC 1/8 N1/8 K	\$1.53	CC 1/8 N1/8 K	\$1.53	ME 1/8 N1/8 K	\$2.19	BT 1/8 N1/8 K	\$3.39	RT 1/8 N1/8 K	\$3.41	YC 1/8 N1/8 K	\$3.10
1/8	NPT1/4	MC 1/8 N1/4 K	\$1.53	CC 1/8 N1/4 K	\$1.53	ME 1/8 N1/4 K	\$2.19	BT 1/8 N1/4 K	\$3.39			YC 1/8 N1/4 K	\$3.10
5/32	10-32UNF	MC 5/32 10-32 K	\$1.53	CC 5/32 10-32 K	\$1.62	ME 5/32 10-32 K	\$2.19	BT 5/32 10-32 K	\$3.39	RT 5/32 10-32 K	\$3.10	YC 5/32 10-32 K	\$3.10
5/32	NPT1/8	MC 5/32 N1/8 K	\$1.53	CC 5/32 N1/8 K	\$1.53	ME 5/32 N1/8 K	\$2.19	BT 5/32 N1/8 K	\$3.39	RT 5/32 N1/8 K	\$3.10	YC 5/32 N1/8 K	\$3.10
5/32	NPT1/4	MC 5/32 N1/4 K	\$1.56	CC 5/32 N1/4 K	\$1.53	ME 5/32 N1/4 K	\$2.19	BT 5/32 N1/4 K	\$3.39	RT 5/32 N1/4 K	\$3.41	YC 5/32 N1/4 K	\$3.10
3/16	10-32UNF	MC 3/16 10-32 K	\$1.53			ME 3/16 10-32 K	\$2.19	BT 3/16 10-32 K	\$3.39	RT 3/16 10-32 K	\$3.41	YC 3/16 10-32 K	\$3.41
3/16	NPT1/8	MC 3/16 N1/8 K	\$1.53			ME 3/16 N1/8 K	\$2.19	BT 3/16 N1/8 K	\$3.39	RT 3/16 N1/8 K	\$3.41	YC 3/16 N1/8 K	\$3.41
3/16	NPT1/4	MC 3/16 N1/4 K	\$1.53			ME 3/16 N1/4 K	\$2.19	BT 3/16 N1/4 K	\$3.39	RT 3/16 N1/4 K	\$3.41	YC 3/16 N1/4 K	\$3.41
3/16	NPT3/8	MC 3/16 N3/8 K	\$1.53			ME 3/16 N3/8 K	\$2.19	BT 3/16 N3/8 K	\$3.39	RT 3/16 N3/8 K	\$3.41	YC 3/16 N3/8 K	\$3.41
1/4	10-32UNF	MC 1/4 10-32 K	\$1.53	CC 1/4 10-32 K	\$1.70	ME 1/4 10-32 K	\$2.19	BT 1/4 10-32 K	\$3.39	RT 1/4 10-32 K	\$4.10	YC 1/4 10-32 K	\$3.41
1/4	NPT1/8	MC 1/4 N1/8 K	\$1.53	CC 1/4 N1/8 K	\$1.53	ME 1/4 N1/8 K	\$2.19	BT 1/4 N1/8 K	\$3.42	RT 1/4 N1/8 K	\$4.68	YC 1/4 N1/8 K	\$3.41
1/4	NPT1/4	MC 1/4 N1/4 K	\$1.62	CC 1/4 N1/4 K	\$1.57	ME 1/4 N1/4 K	\$2.19	BT 1/4 N1/4 K	\$3.70	RT 1/4 N1/4 K	\$4.68	YC 1/4 N1/4 K	\$3.69
1/4	NPT3/8	MC 1/4 N3/8 K	\$2.19	CC 1/4 N3/8 K	\$3.26	ME 1/4 N3/8 K	\$2.61	BT 1/4 N3/8 K	\$4.10	RT 1/4 N3/8 K	\$5.12	YC 1/4 N3/8 K	\$4.10
1/4	NPT1/2	MC 1/4 N1/2 K	\$3.61			ME 1/4 N1/2 K	\$5.02						
5/16	NPT1/8	MC 5/16 N1/8 K	\$1.62	CC 5/16 N1/8 K	\$1.57	ME 5/16 N1/8 K	\$2.43	BT 5/16 N1/8 K	\$3.85	RT 5/16 N1/8 K	\$4.26	YC 5/16 N1/8 K	\$3.85
5/16	NPT1/4	MC 5/16 N1/4 K	\$1.70	CC 5/16 N1/4 K	\$2.29	ME 5/16 N1/4 K	\$2.43	BT 5/16 N1/4 K	\$3.85	RT 5/16 N1/4 K	\$4.68	YC 5/16 N1/4 K	\$3.85
5/16	NPT3/8	MC 5/16 N3/8 K	\$2.19	CC 5/16 N3/8 K	\$2.29	ME 5/16 N3/8 K	\$2.77	BT 5/16 N3/8 K	\$4.26	RT 5/16 N3/8 K	\$5.12	YC 5/16 N3/8 K	\$4.26
3/8	NPT1/8	MC 3/8 N1/8 K	\$2.27	CC 3/8 N1/8 K	\$3.26	ME 3/8 N1/8 K	\$2.95	BT 3/8 N1/8 K	\$4.10	RT 3/8 N1/8 K	\$5.12	YC 3/8 N1/8 K	\$4.28
3/8	NPT1/4	MC 3/8 N1/4 K	\$2.35	CC 3/8 N1/4 K	\$3.26	ME 3/8 N1/4 K	\$2.95	BT 3/8 N1/4 K	\$4.28	RT 3/8 N1/4 K	\$5.12	YC 3/8 N1/4 K	\$4.26
3/8	NPT3/8	MC 3/8 N3/8 K	\$3.26	CC 3/8 N3/8 K	\$3.26	ME 3/8 N3/8 K	\$3.47	BT 3/8 N3/8 K	\$4.59	RT 3/8 N3/8 K	\$5.49	YC 3/8 N3/8 K	\$4.52
3/8	NPT1/2	MC 3/8 N1/2 K	\$3.39	CC 3/8 N1/2 K	\$3.26	ME 3/8 N1/2 K	\$5.03	BT 3/8 N1/2 K	\$5.96	RT 3/8 N1/2 K	\$5.94	YC 3/8 N1/2 K	\$5.49
1/2	NPT1/4	MC 1/2 N1/4 K	\$3.26	CC 1/2 N1/4 K	\$4.41	ME 1/2 N1/4 K	\$5.03	BT 1/2 N1/4 K	\$5.49	RT 1/2 N1/4 K	\$5.49	YC 1/2 N1/4 K	\$5.49
1/2	NPT3/8	MC 1/2 N3/8 K	\$3.26	CC 1/2 N 3/8 K	\$4.48	ME 1/2 N3/8 K	\$5.03	BT 1/2 N3/8 K	\$5.62	RT 1/2 N3/8 K	\$5.96	YC 1/2 N3/8 K	\$5.49
1/2	NPT1/2	MC 1/2 N1/2 K	\$3.76	CC 1/2 N1/2 K	\$4.63	ME 1/2 N1/2 K	\$5.03	BT 1/2 N1/2 K	\$6.19	RT 1/2 N1/2 K	\$6.35	YC 1/2 N1/2 K	\$5.94
4 mm	M5X0.8	MC 4 M5 K	\$1.53			ME 4 M5 K	\$2.19	BT 4 M5 K	\$3.10	RT 4 M5 K	\$3.10	YC 4 M5 K	\$3.10
4 mm	M6X1	MC 4 M6 K	\$1.53			ME 4 M6 K	\$2.19	BT 4 M6 K	\$3.10	RT 4 M6 K	\$3.10	YC 4 M6 K	\$3.10
4 mm	R1/8	MC 4 R1/8 K	\$1.53			ME 4 R1/8 K	\$2.19	BT 4 R1/8 K	\$3.39	RT 4 R1/8 K	\$3.10	YC 4 R1/8 K	\$3.10
4 mm	R1/4	MC 4 R1/4 K	\$1.53			ME 4 R1/4 K	\$2.19	BT 4 R1/4 K	\$3.39	RT 4 R1/4 K	\$3.39	YC 4 R1/4 K	\$3.39
6 mm	M5X0.8	MC 6 M5 K	\$1.53			ME 6 M5 K	\$2.19	BT 6 M5 K	\$3.41	RT 6 M5 K	\$4.10	YC 6 M5 K	\$3.41
6 mm	M6X1	MC 6 M6 K	\$1.53			ME 6 M6 K	\$2.19	BT 6 M6 K	\$3.41	RT 6 M6 K	\$4.10	YC 6 M6 K	\$3.41
6 mm	R1/8	MC 6 R1/8 K	\$1.53			ME 6 R1/8 K	\$2.19	BT 6 R1/8 K	\$3.39	RT 6 R1/8 K	\$4.10	YC 6 R1/8 K	\$3.41
6 mm	R1/4	MC 6 R1/4 K	\$1.53			ME 6 R1/4 K	\$2.19	BT 6 R1/4 K	\$3.69	RT 6 R1/4 K	\$4.68	YC 6 R1/4 K	\$3.69
6 mm	R3/8	MC 6 R3/8 K	\$2.19			ME 6 R3/8 K	\$2.61	BT 6 R3/8 K	\$4.10	RT 6 R3/8 K	\$5.12	YC 6 R3/8 K	\$4.10
6 mm	R1/2	MC 6 R1/2 K	\$3.02			ME 6 R1/2 K	\$4.30	BT 6 R1/2 K	\$5.49	RT 6 R1/2 K	\$5.94	YC 6 R1/2 K	\$5.49
8 mm	R1/8	MC 8 R1/8 K	\$1.53			ME 8 R1/8 K	\$2.43	BT 8 R1/8 K	\$3.85	RT 8 R1/8 K	\$4.26	YC 8 R1/8 K	\$3.85
8 mm	R1/4	MC 8 R1/4 K	\$1.53			ME 8 R1/4 K	\$2.43	BT 8 R1/4 K	\$3.85	RT 8 R1/4 K	\$4.68	YC 8 R1/4 K	\$3.85
8 mm	R3/8	MC 8 R3/8 K	\$2.19			ME 8 R3/8 K	\$2.43	BT 8 R3/8 K	\$4.26	RT 8 R3/8 K	\$5.12	YC 8 R3/8 K	\$4.26
8 mm	R1/2	MC 8 R1/2 K	\$2.19			ME 8 R1/2 K	\$2.77	BT 8 R1/2 K	\$4.26	RT 8 R1/2 K	\$5.94	YC 8 R1/2 K	\$5.45
10 mm	R1/8	MC 10 R1/8 K	\$2.27			ME 10 R1/8 K	\$2.77	BT 10 R1/8 K	\$4.10	RT 10 R1/8 K	\$5.12	YC 10 R1/8 K	\$4.26
10 mm	R1/4	MC 10 R1/4 K	\$2.27			ME 10 R1/4 K	\$2.77	BT 10 R1/4 K	\$4.26	RT 10 R1/4 K	\$5.12	YC 10 R1/4 K	\$4.26
10 mm	R3/8	MC 10 R3/8 K	\$3.26			ME 10 R3/8 K	\$3.47	BT 10 R3/8 K	\$4.58	RT 10 R3/8 K	\$5.45	YC 10 R3/8 K	\$4.52
10 mm	R1/2	MC 10 R1/2 K	\$3.03			ME 10 R1/2 K	\$5.03	BT 10 R1/2 K	\$5.94	RT 10 R1/2 K	\$5.94	YC 10 R1/2 K	\$5.49
12 mm	R1/8	MC 12 R1/8 K	\$2.21										
12 mm	R1/4	MC 12 R1/4 K	\$3.24			ME 12 R1/4 K	\$5.03	BT 12 R1/4 K	\$5.49	RT 12 R1/4 K	\$5.49	YC 12 R1/4 K	\$5.49
12 mm	R3/8	MC 12 R3/8 K	\$3.24			ME 12 R3/8 K	\$5.03	BT 12 R3/8 K	\$5.49	RT 12 R3/8 K	\$5.94	YC 12 R3/8 K	\$5.49
12 mm	R1/2	MC 12 R1/2 K	\$3.32			ME 12 R1/2 K	\$5.03	BT 12 R1/2 K	\$5.94	RT 12 R1/2 K	\$6.35	YC 12 R1/2 K	\$5.94

Composite Fittings															
Model		Extended Elbow	Universal Elbow	Female Connector	Female Elbow	Bulkhead Connector	Flow Control Valve (Meter-In Tube)	Flow Control Valve (Meter-Out Tube)							
Tube OD	Pipe Size	EE	UE	FC	FE	BC	CI	CV							
1/8	10-32UNF		UE 1/8 10-32 K	\$3.41	FC 1/8 10-32 K	\$1.92	FE 1/8 10-32 K	\$2.74			CI 1/8 10-32 K	\$9.79	CV 1/8 10-32 K	\$8.43	
1/8	NPT1/8		UE 1/8 N1/8 K	\$3.41	FC 1/8 N1/8 K	\$1.92	FE 1/8 N1/8 K	\$2.74	BC 1/8 N1/8 K	\$3.61	CI 1/8 N1/8 K	\$9.79	CV 1/8 N1/8 K	\$8.43	
5/32	10-32UNF	EE 5/32 10-32 K	\$2.74	UE 5/32 10-32 K	\$3.41	FC 5/32 10-32 K	\$1.92	FE 5/32 10-32 K	\$2.74			CI 5/32 10-32 K	\$9.79	CV 5/32 10-32 K	\$8.43
5/32	NPT1/8	EE 5/32 N1/8 K	\$2.74	UE 5/32 N1/8 K	\$3.41	FC 5/32 N1/8 K	\$1.92	FE 5/32 N1/8 K	\$2.74	BC 5/32 N1/8 K	\$3.62			CV 5/32 N1/8 K	\$8.43
5/32	NPT1/4				FC 5/32 N1/4 K	\$1.92	FE 5/32 N1/4 K	\$2.74						CV 5/32 N1/4 K	\$8.43
3/16	10-32UNF		UE 3/16 10-32 K	\$4.10											
3/16	NPT1/8	EE 3/16 N1/8 K	\$2.74	UE 3/16 N1/8 K	\$4.10					BC 3/16 N1/8 K	\$3.61			CV 3/16 N1/8 K	\$8.43
3/16	NPT1/4	EE 3/16 N1/4 K	\$2.74	UE 3/16 N1/4 K	\$4.10					BC 3/16 N1/4 K	\$3.61				
3/16	NPT3/8	EE 3/16 N3/8 K	\$3.46												
1/4	10-32UNF		UE 1/4 10-32 K	\$4.10			FE 1/4 10-32 K	\$2.74				CI 1/4 10-32 K	\$9.79	CV 1/4 10-32 K	\$8.43
1/4	NPT1/8	EE 1/4 N1/8 K	\$2.74	UE 1/4 N1/8 K	\$4.10	FC 1/4 N1/8 K	\$1.92	FE 1/4 N1/8 K	\$2.74	BC 1/4 N1/8 K	\$4.33	CI 1/4 N1/8 K	\$10.46	CV 1/4 N1/8 K	\$9.11
1/4	NPT1/4	EE 1/4 N1/4 K	\$2.74	UE 1/4 N1/4 K	\$4.68	FC 1/4 N1/4 K	\$2.28	FE 1/4 N1/4 K	\$2.95	BC 1/4 N1/4 K	\$4.95	CI 1/4 N1/4 K	\$10.46	CV 1/4 N1/4 K	\$9.11
1/4	NPT3/8	EE 1/4 N3/8 K	\$3.46					FE 1/4 N3/8 K	\$3.46					CV 1/4 N3/8 K	\$11.61
5/16	NPT1/8	EE 5/16 N1/8 K	\$2.93	UE 5/16 N1/8 K	\$4.26	FC 5/16 N1/8 K	\$2.19	FE 5/16 N1/8 K	\$2.93	BC 5/16 N1/8 K	\$4.50	CI 5/16 N1/8 K	\$10.46	CV 5/16 N1/8 K	\$9.11
5/16	NPT1/4	EE 5/16 N1/4 K	\$2.93	UE 5/16 N1/4 K	\$4.26	FC 5/16 N1/4 K	\$2.57	FE 5/16 N1/4 K	\$2.95	BC 5/16 N1/4 K	\$4.95			CV 5/16 N1/4 K	\$9.11
5/16	NPT3/8	EE 5/16 N3/8 K	\$3.24	UE 5/16 N3/8 K	\$5.12	FC 5/16 N3/8 K	\$2.60	FE 5/16 N3/8 K	\$3.24					CV 5/16 N3/8 K	\$11.61
3/8	NPT1/8		UE 3/8 N1/8 K	\$5.12				FE 3/8 N1/8 K	\$4.07						
3/8	NPT1/4	EE 3/8 N1/4 K	\$4.07	UE 3/8 N1/4 K	\$5.12	FC 3/8 N1/4 K	\$2.92	FE 3/8 N1/4 K	\$4.07	BC 3/8 N1/4 K	\$5.60	CI 3/8 N1/4 K	\$11.30	CV 3/8 N1/4 K	\$9.93
3/8	NPT3/8	EE 3/8 N3/8 K	\$4.07	UE 3/8 N3/8 K	\$5.49	FC 3/8 N3/8 K	\$3.76	FE 3/8 N3/8 K	\$4.07	BC 3/8 N3/8 K	\$5.92	CI 3/8 N3/8 K	\$12.99	CV 3/8 N3/8 K	\$11.61
3/8	NPT1/2	EE 3/8 N1/2 K	\$6.10			FC 3/8 N1/2 K	\$4.45	FE 3/8 N1/2 K	\$6.10			CI 3/8 N1/2 K	\$15.77	CV 3/8 N1/2 K	\$13.85
1/2	NPT1/4	EE 1/2 N1/4 K	\$6.10	UE 1/2 N1/4 K	\$5.94	FC 1/2 N1/4 K	\$4.45								
1/2	NPT3/8	EE 1/2 N3/8 K	\$6.10	UE 1/2 N3/8 K	\$5.94	FC 1/2 N3/8 K	\$4.45	FE 1/2 N3/8 K	\$6.10	BC 1/2 N3/8 K	\$6.70	CI 1/2 N3/8 K	\$14.64	CV 1/2 N3/8 K	\$13.28
1/2	NPT1/2	EE 1/2 N1/2 K	\$7.28	UE 1/2 N1/2 K	\$6.35			FE 1/2 N1/2 K	\$7.62	BC 1/2 N1/2 K	\$6.70	CI 1/2 N1/2 K	\$15.23	CV 1/2 N1/2 K	\$14.01

4 mm	M5X0.8	EE 4 M5 K	\$2.74	UE 4 M5 K	\$3.41			FE 4 M5 K	\$2.74					CV 4 M5 K	\$8.43
4 mm	M6X1	EE 4 M6 K	\$2.74	UE 4 M6 K	\$3.41			FE 4 M6 K	\$2.74					CV 4 M6 K	\$8.43
4 mm	R1/8	EE 4 R1/8 K	\$2.74	UE 4 R1/8 K	\$3.41	FC 4 R1/8 K	\$1.92	FE 4 R1/8 K	\$2.74	BC 4 R1/8 K	\$3.62			CV 4 R1/8 K	\$8.43
4 mm	R1/4	EE 4 R1/4 K	\$2.74	UE 4 R1/4 K	\$4.10	FC 4 R1/4 K	\$1.92	FE 4 R1/4 K	\$2.74	BC 4 R1/4 K	\$3.62			CV 4 R1/4 K	\$9.11
6 mm	M5X0.8	EE 6 M5 K	\$2.74	UE 6 M5 K	\$4.10			FE 6 M5 K	\$2.74					CV 6 M5 K	\$8.43
6 mm	M6X1	EE 6 M6 K	\$2.74	UE 6 M6 K	\$4.10			FE 6 M6 K	\$2.74					CV 6 M6 K	\$8.43
6 mm	R1/8	EE 6 R1/8 K	\$2.74	UE 6 R1/8 K	\$4.10	FC 6 R1/8 K	\$1.92	FE 6 R1/8 K	\$2.74	BC 6 R1/8 K	\$4.33	CI 6 R1/8 K	\$10.46	CV 6 R1/8 K	\$9.11
6 mm	R1/4	EE 6 R1/4 K	\$2.74	UE 6 R1/4 K	\$4.68	FC 6 R1/4 K	\$2.17	FE 6 R1/4 K	\$2.74	BC 6 R1/4 K	\$4.95			CV 6 R1/4 K	\$9.11
6 mm	R3/8	EE 6 R3/8 K	\$3.46	UE 6 R3/8 K	\$5.12	FC 6 R3/8 K	\$2.60	FE 6 R3/8 K	\$3.46	BC 6 R3/8 K	\$5.41			CV 6 R3/8 K	\$11.61
6 mm	R1/2	EE 6 R1/2 K	\$5.41												
8 mm	R1/8	EE 8 R1/8 K	\$2.93	UE 8 R1/8 K	\$4.26	FC 8 R1/8 K	\$2.19	FE 8 R1/8 K	\$2.93	BC 8 R1/8 K	\$4.50			CV 8 R1/8 K	\$9.11
8 mm	R1/4	EE 8 R1/4 K	\$2.93	UE 8 R1/4 K	\$4.26	FC 8 R1/4 K	\$2.19	FE 8 R1/4 K	\$2.93	BC 8 R1/4 K	\$4.95			CV 8 R1/4 K	\$9.11
8 mm	R3/8	EE 8 R3/8 K	\$3.46	UE 8 R3/8 K	\$5.12	FC 8 R3/8 K	\$2.60	FE 8 R3/8 K	\$3.24	BC 8 R3/8 K	\$5.41	CI 8 R3/8 K	\$13.50	CV 8 R3/8 K	\$11.61
8 mm	R1/2	EE 8 R1/2 K	\$5.41	UE 8 R1/2 K	\$5.94	FC 8 R1/2 K	\$4.26			BC 8 R1/2 K	\$6.25			CV 8 R1/2 K	\$11.61
10 mm	R1/8	EE 10 R1/8 K	\$4.07			FC 10 R1/8 K	\$2.92	FE 10 R1/8 K	\$4.07	BC 10 R1/8 K	\$4.95				
10 mm	R1/4	EE 10 R1/4 K	\$4.07	UE 10 R1/4 K	\$5.12	FC 10 R1/4 K	\$2.92	FE 10 R1/4 K	\$4.07	BC 10 R1/4 K	\$5.41			CV 10 R1/4 K	\$9.93
10 mm	R3/8	EE 10 R3/8 K	\$4.07	UE 10 R3/8 K	\$5.49	FC 10 R3/8 K	\$2.92	FE 10 R3/8 K	\$4.07	BC 10 R3/8 K	\$5.83			CV 10 R3/8 K	\$11.61
10 mm	R1/2	EE 10 R1/2 K	\$6.10	UE 10 R1/2 K	\$5.94	FC 10 R1/2 K	\$4.44	FE 10 R1/2 K	\$6.10	BC 10 R1/2 K	\$6.25			CV 10 R1/2 K	\$13.85
12 mm	R1/4	EE 12 R1/4 K	\$6.10	UE 12 R1/4 K	\$5.94	FC 12 R1/4 K	\$4.44	FE 12 R1/4 K	\$6.10	BC 12 R1/4 K	\$5.83			CV 12 R1/4 K	\$13.28
12 mm	R3/8	EE 12 R3/8 K	\$6.10	UE 12 R3/8 K	\$5.94	FC 12 R3/8 K	\$4.44	FE 12 R3/8 K	\$6.10	BC 12 R3/8 K	\$6.25			CV 12 R3/8 K	\$13.28
12 mm	R1/2	EE 12 R1/2 K	\$6.10	UE 12 R1/2 K	\$6.35	FC 12 R1/2 K	\$4.44	FE 12 R1/2 K	\$6.10	BC 12 R1/2 K	\$6.70			CV 12 R1/2 K	\$13.85

Composite Fittings							
Model	Flow Control Valve (Inline)	Bulkhead Union	Cross Union	Elbow Union	Straight Union	Tee Union	Y Union
Tube OD	FV	BU	CU	EU	SU	TU	YU
1/8	FV 1/8 K \$9.77	BU 1/8 K \$3.56	CU 1/8 K \$4.20	EU 1/8 K \$1.82	SU 1/8 K \$1.82	TU 1/8 K \$2.69	YU 1/8 K \$2.69
5/32	FV 5/32 K \$9.77	BU 5/32 K \$3.56	CU 5/32 K \$4.20	EU 5/32 K \$1.82	SU 5/32 K \$1.82	TU 5/32 K \$2.69	YU 5/32 K \$2.69
3/16	FV 3/16 K \$9.77	BU 3/16 K \$3.56	CU 3/16 K \$4.20	EU 3/16 K \$1.82	SU 3/16 K \$1.82	TU 3/16 K \$2.69	YU 3/16 K \$2.69
1/4	FV 1/4 K \$10.08	BU 1/4 K \$3.56	CU 1/4 K \$4.20	EU 1/4 K \$1.89	SU 1/4 K \$1.89	TU 1/4 K \$2.69	YU 1/4 K \$2.69
5/16	FV 5/16 K \$10.08	BU 5/16 K \$4.30	CU 5/16 K \$4.20	EU 5/16 K \$2.21	SU 5/16 K \$2.17	TU 5/16 K \$2.69	YU 5/16 K \$2.69
3/8	FV 3/8 K \$11.18	BU 3/8 K \$5.20	CU 3/8 K \$5.25	EU 3/8 K \$2.52	SU 3/8 K \$2.52	TU 3/8 K \$3.33	YU 3/8 K \$3.33
1/2	FV 1/2 K \$15.54	BU 1/2 K \$5.35	CU 1/2 K \$6.50	EU 1/2 K \$2.93	SU 1/2 K \$2.92	TU 1/2 K \$4.18	YU 1/2 K \$4.18
4 mm	FV 4 K \$10.08	BU 4 K \$3.56	CU 4 K \$4.20	EU 4 K \$1.82	SU 4 K \$1.82	TU 4 K \$2.69	YU 4 K \$2.68
6 mm	FV 6 K \$10.08	BU 6 K \$3.56	CU 6 K \$4.20	EU 6 K \$1.89	SU 6 K \$1.89	TU 6 K \$2.69	YU 6 K \$2.68
8 mm	FV 08 K \$10.20	BU 8 K \$4.30	CU 8 K \$5.25	EU 8 K \$2.21	SU 8 K \$2.17	TU 8 K \$2.69	YU 8 K \$2.68
10 mm	FV 10 K \$14.73	BU 10 K \$5.20	CU 10 K \$6.21	EU 10 K \$2.52	SU 10 K \$2.52	TU 10 K \$3.33	YU 10 K \$3.33
12 mm	FV 12 K \$16.37	BU 12 K \$5.35	CU 12 K \$6.50	EU 12 K \$2.75	SU 12 K \$2.93	TU 12 K \$4.18	YU 12 K \$4.18

Composite Fittings							
Model	Elbow Reducer (Tube-Stem)	Plug In Elbow	Male Manifold	Manifold Union	Reduced Branch	Reduced Union	Tee Union Reducer
Tube OD	ER	PE	MM	MU	RB	RU	TU
1/8							
5/32	ER 1/4-5/32 K \$3.50	PE 5/32 K \$3.50		MU 5/32X1/8 K \$5.42	RB 5/32-1/8 K \$3.50	RU 5/32-1/8 K \$2.17	
3/16					RB 3/16-5/32 K \$3.33	RU 3/16-5/32 K \$2.17	
1/4	ER 5/16-1/4 K \$3.50 ER 3/8-1/4 K \$2.49	PE 1/4 K \$3.50	MM 1/4-5/32-N1/8 \$6.01	MU 1/4x1/8 K \$5.42 MU 1/4X5/32 K \$5.42	RB 1/4-5/32 K \$3.50 RB 1/4-3/16 K \$3.50	RU 1/4-1/8 K \$2.17 RU 1/4-5/32 K \$2.17 RU 1/4-3/16 K \$2.52	TU 1/4-5/32 K \$3.50
5/16		PE 5/16 K \$3.50	MM 5/16-5/32-N1/4 \$6.16	MU 5/16X5/32 K \$5.42	RB 5/16-1/4 K \$3.50	RU 5/16-1/4 K \$2.52	TU 5/16-1/4 K \$3.50
3/8		PE 3/8 K \$6.21		MU 3/8X1/4 K \$7.51	RB 3/8-1/4 K \$4.18 RB 3/8-5/16 K \$4.18	RU 3/8-1/4 K \$2.92 RU 3/8-5/16 K \$2.92	TU 3/8-1/4 K \$4.18 TU 3/8-5/16 K \$4.18
1/2		PE 1/2 K \$6.21			RB 1/2-3/8 K \$5.00	RU 1/2-3/8 K \$3.33	TU 1/2-3/8 K \$4.99
4 mm	ER 6-4 K \$3.50						
6 mm	ER 8-6 K \$3.50	PE 6 K \$2.84	MM 6-4-R1/8 \$6.16	MU 06-04 K \$5.42	RB 6-4 K \$3.50	RU 6-4 K \$2.17	TU 6-4 K \$3.50
8 mm	ER 10-8 K \$4.18		MM 8-4-R1/4 \$6.16 MM 8-6-R1/4 \$7.97	MU 08-04 K \$5.42 MU 08-06 K \$6.16	RB 8-6 K \$3.50	RU 8-6 K \$2.52	TU 8-6 K \$3.50
10 mm	ER 12-10 K \$4.99		MM 10-8-R3/8 \$8.42	MU 10-6 K \$7.06 MU 10-8 K \$7.06	RB 10-8 K \$4.18	RU 10-6 K \$2.93 RU 10-8 K \$2.93	TU 10-8 K \$4.18
12 mm					RB 12-10 K \$5.00	RU 12-10 K \$3.33	TU 12-10 K \$4.99

Composite Fittings						Model			
Model	Plug	Stem Coupler	Stem Reducer	Tube Reducer (Tube-Stem)	Y Reducer (Tube Stem)	Model	Stack Elbow	Male Angle	
Tube OD	PG	SC	SR	TR	YR	Tube OD	Pipe Size	SE	MA
1/8	PG 1/8 \$0.75					1/8 10-32		MA 1/8 10-32 \$2.42	
5/32	PG 5/32 \$0.75	SC 5/32 \$0.89	SR 5/32-1/4 \$1.19	TR 5/32-1/4 \$2.29	YR 5/32-1/4 \$3.11	1/8 NPT1/8	SE 1/8 N1/8 K \$5.26	MA 1/8 N1/8 \$2.42	
3/16	PG 3/16 \$0.75					5/32 10-32	SE 5/32 10-32 K \$5.26	MA 5/32 10-32 \$2.42	
1/4	PG 1/4 \$0.75	SC 1/4 \$0.89	SR 1/4-5/16 \$1.51	TR 1/4-5/16 \$2.70	YR 1/4-5/16 \$5.78	5/32 NPT1/8	SE 5/32 N1/8 K \$5.26	MA 5/32 N1/8 \$2.42	
1/4				TR 1/4-3/8 \$2.70		5/32 NPT1/4	SE 5/32 N1/4 K \$5.26	MA 5/32 N1/4 \$2.42	
5/16	PG 5/16 \$0.89	SC 5/16 \$1.19	SR 5/16-3/8 \$1.51	TR 5/16-3/8 \$3.79	YR 5/16-3/8 \$7.88	1/4 NPT1/8	SE 1/4 N1/8 K \$4.68	MA 1/4 N1/8 \$2.42	
3/8	PG 3/8 \$0.89	SC 3/8 \$1.19	SR 3/8-1/2 \$1.51	TR 3/8-1/2 \$3.64		1/4 NPT1/4	SE 1/4 N1/4 K \$5.31	MA 1/4 N1/4 \$2.42	
1/2	PG 1/2 \$1.10	SC 1/2 \$1.28				1/4 NPT3/8	SE 1/4 N3/8 K \$5.31	MA1/4 N3/8 \$3.03	
4 mm	PG 4 \$0.75	SC 4 \$0.89				5/16 NPT1/4	SE 5/16 N1/4 K \$5.63	MA 5/16 N1/4 \$1.98	
6 mm	PG 6 \$0.75	SC 6 \$0.89	SR 4-6 \$1.51	TR 4-6 \$2.29		5/16 NPT3/8	SE 5/16 N3/8 K \$5.63		
8 mm	PG 8 \$0.89	SC 8 \$1.19	SR 6-8 \$1.19	TR 6-8 \$2.70		3/8 NPT1/8	SE 3/8 N1/8 K \$5.63	MA 3/8 N1/8 \$3.03	
10 mm	PG10 \$0.89	SC10 \$1.19	SR 8-10 \$1.51	TR 8-10 \$2.70		3/8 NPT1/4	SE 3/8 N1/4 K \$5.63	MA 3/8 N1/4 \$3.03	
12 mm	PG 12 \$0.89	SC 12 \$1.19		TR 10-12 \$3.64		3/8 NPT3/8	SE 3/8 N3/8 K \$5.63	MA 3/8 N3/8 \$3.32	
						1/2 NPT3/8	SE 1/2 N3/8 K \$5.96		
						1/2 NPT1/2	SE 1/2 N1/2 K \$6.34		

A. Installation of Pipe Fittings:

1. Tighten fitting by hand, then turn it 2-3 turns with a wrench until it reaches the desired torque listed. If the fittings are not pre-coated with sealant, or is used and the sealant is not in good condition, apply Teflon sealant tape to the threads.

Recommendation of Torque for Tightening Fittings		
Fitting Thread Size	Torque, lb-ft	Torque, kgf/cm
10-32, M5 –M6	1.0 – 1.5	14 – 21
NPT1/8, R1/8	5 – 6.5	70 – 90
NPT1/4, R1/4	8.5 – 10	120 – 140
NPT3/8, R3/8	16 – 17.5	220 – 240
NPT1/2, R1/2	20 – 21.5	280 – 300

B. Installation of Tubing into Fitting:

1. Slowly push a clean and perpendicularly cut tube into the fitting until it comes to a dead stop.
2. Gently pull the tubing back until the Grip Ring or Collet of the fitting grips onto the tubing and has a good seal.
3. Use Polyethylene, Polypropylene, Polyurethane, or Nylon tubing designed for instant fittings.

C. Removal of Tubing from Fitting:

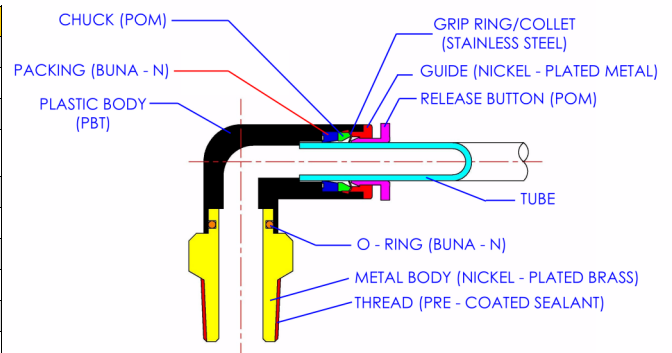
1. Push in evenly on the two long, oval sides of the Release Button.
2. Pull out the tube while depressing the Release Button.
3. To reuse the tubing, cut off the lodged portion of the previously used tubing in an even and perpendicular fashion.

D. Recommended Tubing Material, Size, and Hardness Requirements:

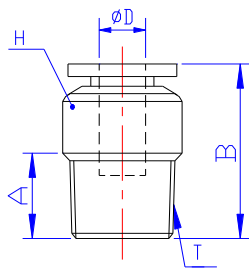
Tubing Material	Specified Size	Hardness (Durometer)
Polyurethane	+/- 0.006" (+/-0.15 mm)	Shore A 85 or higher
Polyethylene	+/- 0.004" (+/-0.1 mm)	Shore D 44—D75
Polypropylene	+/- 0.004" (+/-0.1 mm)	Shore D 44—D75
Nylon	+/- 0.004" (+/-0.1 mm)	Shore D 44—D75
Pre-grooved Metal Tubing	+/- 0.004" (+/-0.1 mm)	

E. Specifications, Materials of Construction, and Schematic of Typical Construction:

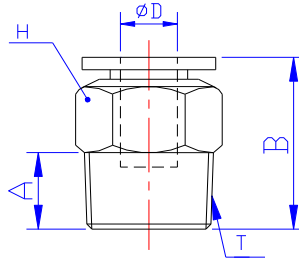
Specifications	
Operating Pressure Range	0 - 180 PSI (0 - 1200 kpa)
Vacuum	0 - 29.5" Hg (750 mm Hg)
Operating Temperature	32 - 140°F (0 - 60 °C)
Recommended Tubing Material	Polyurethane, Nylon, Polyethylene, Polypropylene
Metal Body	Brass, Nickel Plated
Plastic Body	PBT (Polybutylene terephthalate)
Release Button	POM (Poly oxy methylene copolymer)
Grip Ring or Collet	300 series Stainless Steel
O-ring	NBR (Buna-N)
Thread Sealant	Teflon
Service	FOR AIR ONLY



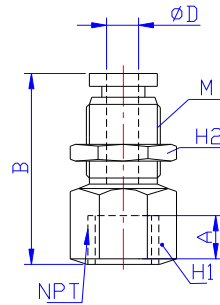
SCHEMATIC OF TYPICAL COMPOSITE FITTING CONSTRUCTION



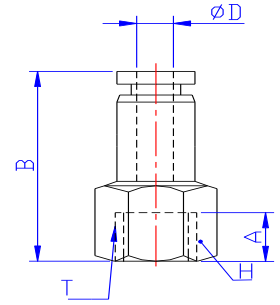
Compact Male Connector (CC)



Male Connector (MC)



Bulkhead Connector (BC)



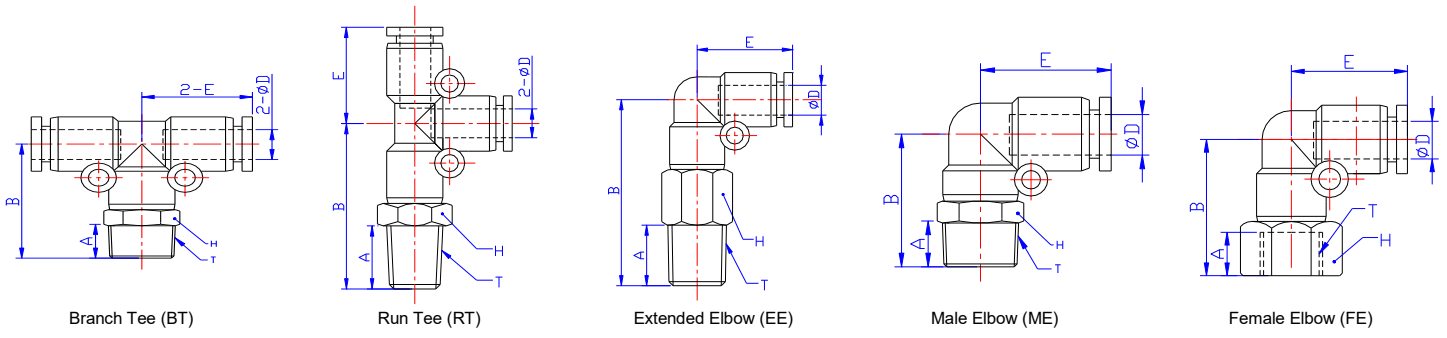
Female Connector (FC)

Model	Compact Male Connector					Male Connector				Bulkhead Connector					Female Connector				
	CC					MC				BC					FC				
ØD	T	Part No.	A	B	H	Part No.	A	B	H	Part No.	M	A	H1	H2	B	Part No.	A	B	H
5/32	10-32UNF	CC 5/32 10-32	3.8	20.3	Ø10	MC 5/32 10-32	3.8	20.3	11.1										
5/32	NPT1/8	CC 5/32 N1/8	7.5	19.8	Ø10	MC 5/32 N1/8	7.5	19.8	11.1	BC 5/32 N1/8	M12	7.5	14.3	14.3	23.8	FC 5/32 N1/8	7.5	23.8	14.3
5/32	NPT1/4	CC 5/32 N1/4				MC 5/32 N1/4	10.5	18.9	14.3							FC 5/32 N1/4	10.5	26.8	17.4
3/16	10-32UNF	CC 3/16 10-32				MC 3/16 10-32	3.8	20.9	11.1										
3/16	NPT1/8	CC 3/16 N1/8				MC 3/16 N1/8	7.5	20.6	11.1	BC 3/16 N1/8	M14	7.5	14.3	17.4	24.7	FC 3/16 N1/8	7.5	24.4	14.3
3/16	NPT1/4	CC 3/16 N1/4				MC 3/16 N1/4	10.5	23.7	14.3	BC 3/16 N1/4	M14	10.5	14.3	17.4	30.4	FC 3/16 N1/4	10.5	27.4	17.4
3/16	NPT3/8	CC 3/16 N3/8				MC 3/16 N3/8	11	21.2	17.4										
1/4	10-32UNF	CC 1/4 10-32	3.8	21.2	Ø12	MC 1/4 10-32	3.8	21.2	12.7										
1/4	NPT1/8	CC 1/4 N1/8	7.5	20.9	Ø12	MC 1/4 N1/8	7.5	20.9	12.7	BC 1/4 N1/8	M14	7.5	17.4	17.4	24.7	FC 1/4 N1/8	7.5	24.9	14.3
1/4	NPT1/4	CC 1/4 N1/4	10.5	23.7	Ø14	MC 1/4 N1/4	10.5	23.7	14.3	BC 1/4 N1/4	M14	10.5	17.4	17.4	30.4	FC 1/4 N1/4	10.5	27.9	17.4
1/4	NPT3/8	CC 1/4 N3/8				MC 1/4 N3/8	11	21.2	17.4										
5/16	NPT1/8	CC 5/16 N1/8	7.5	25.9	Ø14	MC 5/16 N1/8	7.5	25.9	14.3	BC 5/16 N1/8	M16	7.5	17.4	19	27.9	FC 5/16 N1/8	7.5	26.4	14.3
5/16	NPT1/4	CC 5/16 N1/4	10.5	25.9	Ø14	MC 5/16 N1/4	10.5	25.9	14.3	BC 5/16 N1/4	M16	10.5	19	19	35.9	FC 5/16 N1/4	10.5	29.4	17.4
5/16	NPT3/8	CC 5/16 N3/8	11	22.4	Ø17	MC 5/16 N3/8	11	22.4	17.4	BC 5/16 N3/8	M16	11	19	19	35.4	FC 5/16 N3/8	11	29.9	22.2
3/8	NPT1/8	CC 3/8 N1/8				MC 3/8 N1/8	7.5	28.2	17.4										
3/8	NPT1/4	CC 3/8 N1/4	10.5	30.5	Ø17	MC 3/8 N1/4	10.5	30.5	17.4	BC 3/8 N1/4	M20	10.5	22.2	22.2	31.9	FC 3/8 N1/4	10.5	31.2	17.4
3/8	NPT3/8	CC 3/8 N3/8	11	27.5	Ø17	MC 3/8 N3/8	11	27.5	17.4	BC 3/8 N3/8	M20	11	22.2	22.2	34.7	FC 3/8 N3/8	11	31.7	22.2
3/8	NPT1/2	CC 3/8 N1/2	14	25.8	Ø21	MC 3/8 N1/2	14	25.8	22.2										
1/2	NPT1/4	CC 1/2 N1/4	10.5	33.9	Ø21	MC 1/2 N1/4	10.5	33.9	22.2							FC 1/2 N1/4	10.5	34.4	22.2
1/2	NPT3/8	CC 1/2 N3/8	11	30.4	Ø21	MC 1/2 N3/8	11	30.4	22.2	BC 1/2 N3/8	M22	11	25.4	25.4	35.4	FC 1/2 N3/8	11	34.9	22.2
1/2	NPT1/2	CC 1/2 N1/2	14	33.4	Ø21	MC 1/2 N1/2	14	33.4	22.2	BC 1/2 N1/2	M22	14	25.4	25.4	41.4				

ØD	T	Part No.	A	B	H	Part No.	A	B	H	Part No.	M	A	H1	H2	B	Part No.	A	B	H
4	M5	CC 4 M5	3.8	20.1	Ø10	MC 4 M5	3.8	20.1	10										
4	M6	CC 4 M6	4.5	20.8	Ø10	MC 4 M6	4.5	20.8	10										
4	R1/8	CC 4 R1/8	7	19.3	Ø10	MC 4 R1/8	7	19.3	10	BC 4 R1/8	M12	7	14	14	23.3	FC 4 R1/8	7	22.3	14
4	R1/4	CC 4 R1/4	9.5	17.9	Ø14	MC 4 R1/4	9.5	17.9	14	BC 4 R1/4	M12	9	17	14	25.4	FC 4 R1/4	9	25.3	17
6	M5	CC 6 M5	3.8	21	Ø12	MC 6 M5	3.8	21.2	12										
6	M6	CC 6 M6	4.5	21.7	Ø12	MC 6 M6	4.5	21.7	12										
6	R1/8	CC 6 R1/8	7	20.4	Ø12	MC 6 R1/8	7	20.4	12	BC 6 R1/8	M14	7	17	17	24.2	FC 6 R1/8	7	24.4	14
6	R1/4	CC 6 R1/4	9.5	22.7	Ø14	MC 6 R1/4	9.5	22.7	14	BC 6 R1/4	M14	9	17	17	29.2	FC 6 R1/4	9	26.4	17
6	R3/8	CC 6 R3/8	10.5	20.7	Ø17	MC 6 R3/8	10.5	20.7	17	BC 6 R3/8	M14	10	19	17	30.2	FC 6 R3/8	10	27.4	19
6	R1/2					MC 6 R1/2	13.5	24.7	21										
8	R1/8	CC 8 R1/8	7	25.4	Ø14	MC 8 R1/8	7	25.4	14	BC 8 R1/8	M16	7	19	19	27.4	FC 8 R1/8	7	25.9	14
8	R1/4	CC 8 R1/4	9.5	24.9	Ø14	MC 8 R1/4	9.5	24.9	14	BC 8 R1/4	M16	9	19	19	34.4	FC 8 R1/4	9	27.9	17
8	R3/8	CC 8 R3/8	10.5	21.9	Ø17	MC 8 R3/8	10.5	21.9	17	BC 8 R3/8	M16	10	19	19	34.4	FC 8 R3/8	10	28.9	19
8	R1/2	CC 8 R1/2	13.5	25.9	Ø21	MC 8 R1/2	13.5	25.9	21	BC 8 R1/2	M16	12	24	19	36.4	FC 8 R1/2	12	30.9	24
10	R1/8	CC 10 R1/8	7	27.7	Ø17	MC 10 R1/8	7	27.7	17	BC 10 R1/8	M20	7	21	24	28.4	FC 10 R1/8	7	27.7	17
10	R1/4	CC 10 R1/4	9.5	29.5	Ø17	MC 10 R1/4	9.5	29.5	17	BC 10 R1/4	M20	9	21	24	30.4	FC 10 R1/4	9	29.7	17
10	R3/8	CC 10 R3/8	10.5	27	Ø17	MC 10 R3/8	10.5	27	17	BC 10 R3/8	M20	10	21	24	33.7	FC 10 R3/8	10	30.7	19
10	R1/2	CC 10 R1/2	13.5	25.3	Ø21	MC 10 R1/2	13.5	25.3	21	BC 10 R1/2	M20	12	24	24	35.7	FC 10 R1/2	12	32.7	24
12	R1/4	CC 12 R1/4	9.5	32.9	Ø20	MC 12 R1/4	9.5	32.9	20	BC 12 R1/4	M22	9	24	27	33.5	FC 12 R1/4	9	32.9	20
12	R3/8	CC 12 R3/8	10.5	29.9	Ø20	MC 12 R3/8	10.5	29.9		BC 12 R3/8	M22	10	24	27	34.4	FC 12 R3/8	10	33.9	20
12	R1/2	CC 12 R1/2	13.5	32.9	Ø21	MC 12 R1/2	13.5	32.9	21	BC 12 R1/2	M22	12	24	27	39.4	FC 12 R1/2	12	35.9	24

Units in mm

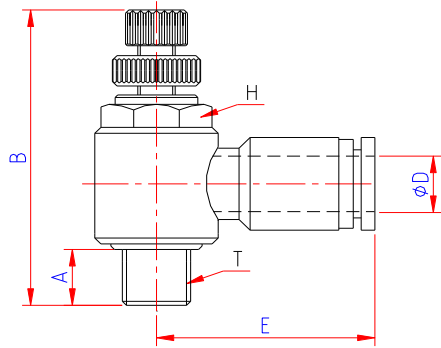
Composite Push-In Air Fittings Dimensions



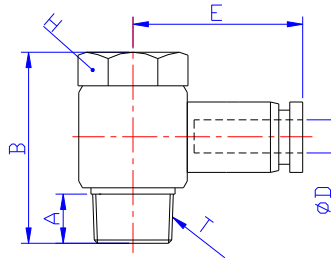
Model	Branch Tee & Run Tee								Extended Elbow				Male Elbow				Female Elbow							
	BT / RT		EE		ME		FE																	
ΦD	T	Part No.	Part No.	A	B	E	H	Part No.	A	B	E	H	Part No.	A	B	E	H	Part No.	A	B	E	H		
5/32	10-32UNF	BT 5/32 10-32	RT 5/32 10-32	3.8	23	18.5	11.1	EE5/32 10-32	3.8	33.5	17.5	11.1	ME 5/32 10-32	3.8	22	17.5	11.1	FE 5/32 10-32						
5/32	NPT1/8	BT 5/32 N1/8	RT 5/32 N1/8	7.5	25	18.5	11.1	EE 5/32 N1/8	7.5	36	17.5	11.1	ME 5/32 N1/8	7.5	24	17.5	11.1	FE 5/32 N1/8	7.5	23.5	17.5	14.3		
5/32	NPT1/4	BT 5/32 N1/4	RT 5/32 N1/4	10.5	29	18.5	14.3						ME 5/32 N1/4	10.5	28	17.5	14.3	FE 5/32 N1/4						
3/16	10-32UNF	BT 3/16 10-32	RT 3/16 10-32	3.8	23	18.8	11.1						ME 3/16 10-32	3.8	22	17.8	11.1	FE 3/16 10-32						
3/16	NPT1/8	BT 3/16 N1/8	RT 3/16 N1/8	7.5	25.5	18.8	11.1	EE 3/16 N1/8		36	17.8	11.1	ME 3/16 N1/8	7.5	24.5	17.8	11.1	FE 3/16 N1/8	7.5	23.8	17.8	14.3		
3/16	NPT1/4	BT 3/16 N1/4	RT 3/16 N1/4	10.5	29	18.8	14.3	EE 3/16 N1/4	10.5	39.5	17.8	14.3	ME 3/16 N1/4	10.5	28	17.8	14.3	FE 3/16 N1/4	10.5	26.5	17.8	17.4		
3/16	NPT3/8	BT 3/16 N3/8	RT 3/16 N3/8	11	30	18.8	17.4	EE 3/16 N3/8	11	40.5	17.8	17.4	ME 3/16 N3/8	11	29	17.8	17.4							
1/4	10-32UNF	BT 1/4 10-32	RT 1/4 10-32	3.8	24.7	19.3	12.7						ME 1/4 10-32	3.8	24.4	19	12.7	FE 1/4 10-32						
1/4	NPT1/8	BT 1/4 N1/8	RT 1/4 N1/8	7.5	26	19.3	12.7	EE 1/4 N1/8	7.5	39.7	19	12.7	ME 1/4 N1/8	7.5	25.7	19	12.7	FE 1/4 N1/8	7.5	24.9	19	14.3		
1/4	NPT1/4	BT 1/4 N1/4	RT 1/4 N1/4	10.5	29.5	19.3	14.3	EE 1/4 N1/4	10.5	43.2	19	14.3	ME 1/4 N1/4	10.5	29.2	19	14.3	FE 1/4 N1/4	10.5	27.9	19	17.4		
1/4	NPT3/8	BT 1/4 N3/8	RT 1/4 N3/8	11	30.5	19.3	17.4	EE 1/4 N3/8	11	44.2	19	17.4	ME 1/4 N3/8	11	30.2	19	17.4	FE 1/4 N3/8						
5/16	NPT1/8	BT 5/16 N1/8	RT 5/16 N1/8	7.5	29.45	22.75	14.3	EE 5/16 N1/8	7.5	42.2	22.8	14.3	ME 5/16 N1/8	7.5	27	22.8	14.3	FE 5/16 N1/8	7.5	25	22.8	14.3		
5/16	NPT1/4	BT 5/16 N1/4	RT 5/16 N1/4	10.5	32.45	22.75	14.3	EE 5/16 N1/4	10.5	45.3	22.8	14.3	ME 5/16 N1/4	10.5	30	22.8	14.3	FE 5/16 N1/4	10.5	28.5	22.8	17.4		
5/16	NPT3/8	BT 5/16 N3/8	RT 5/16 N3/8	11	33.45	22.75	17.4	EE 5/16 N3/8	11	46.3	22.8	17.4	ME 5/16 N3/8	11	31	22.8	17.4	FE 5/16 N3/8	11	29.5	22.8	22.2		
3/8	NPT1/8	BT 3/8 N1/8	RT 3/8 N1/8	7.5	35	27	17.4						ME 3/8 N1/8	7.5	30	26.3	17.4							
3/8	NPT1/4	BT 3/8 N1/4	RT 3/8 N1/4	10.5	38	27	17.4	EE 3/8 N1/4	10.5	52	26.3	17.4	ME 3/8 N1/4	10.5	33	26.3	17.4	FE 3/8 N1/4	10.5	31	26.3	17.4		
3/8	NPT3/8	BT 3/8 N3/8	RT 3/8 N3/8	11	38.5	27	17.4	EE 3/8 N3/8	11	53.5	26.3	17.4	ME 3/8 N3/8	11	33.5	26.3	17.4	FE 3/8 N3/8	11	31.5	26.3	22.2		
3/8	NPT1/2	BT 3/8 N1/2	RT 3/8 N1/2	14	42	27	22.2	EE 3/8 N1/2	14	57	26.3	22.2	ME 3/8 N1/2	14	37	26.3	22.2	FE 3/8 N1/2						
1/2	NPT1/4	BT 1/2 N1/4	RT 1/2 N1/4	10.5	39.5	29.6	22.2	EE 1/2 N1/4	10.5	59.5	29.6	22.2	ME 1/2 N1/4	10.5	36.5	29.6	22.2							
1/2	NPT3/8	BT 1/2 N3/8	RT 1/2 N3/8	11	40	29.6	22.2	EE 1/2 N3/8	11	60	29.6	22.2	ME 1/2 N3/8	11	37	29.6	22.2	FE 1/2-N3/8	11	34.5	29.6	22.2		
1/2	NPT1/2	BT 1/2 N1/2	RT 1/2 N1/2	14	43	29.6	22.2	EE 1/2 N1/2	14	63	29.6	22.2	ME 1/2 N1/2	14	40	29.6	22.2	FE 1/2-N1/2	14	37.5	29.6	25.4		

ΦD	Pipe Size	Part No.	Part No.	A	B	E	H	Part No.	A	B	E	H	Part No.	A	B	E	H	Part No.	A	B	E	H
4	M5	BT 4 M5	RT 4 M5	3.8	22.3	18.5	10	EE 4 M5	3.8	29.3	17.5	8	ME 4 M5	3.8	17.3	17.5	8	FE 4 M5	4.5	19.5	17.5	10
4	M6	BT 4 M6	RT 4 M6	4.5	23	18.5	10	EE 4 M6	4.5	30	17.5	8	ME 4 M6	4.5	18	17.5	8	FE 4 M6	5	20	17.5	10
4	R1/8	BT 4 R1/8	RT 4 R1/8	7	24.5	18.5	10	EE 4 R1/8	7	35.5	17.5	10	ME 4 R1/8	7	23.5	17.5	10	FE 4 R1/8	7	23	17.5	14
4	R1/4	BT 4 R1/4	RT 4 R1/4	9.5	28	18.5	14	EE 4 R1/4	9.5	39	17.5	14	ME 4 R1/4	9.5	27	17.5	14	FE 4 R1/4	9	25	17.5	17
6	M5	BT 6 M5	RT 6 M5	3.8	23.3	19.3	12	EE 6 M5	3.8	31.3	19	8	ME 6 M5	3.8	17.3	19	8	FE 6 M5	4.5	20.7	19	12
6	M6	BT 6 M6	RT 6 M6	4.5	24	19.3	12	EE 6 M6	4.5	32	19	8	ME 6 M6	4.5	18	19	8	FE 6 M6	5	21.2	19	12
6	R1/8	BT 6 R1/8	RT 6 R1/8	7	25.5	19.3	12	EE 6 R1/8	7	39.2	19	12	ME 6 R1/8	7	25.2	19	12	FE 6 R1/8	7	24.4	19	14
6	R1/4	BT 6 R1/4	RT 6 R1/4	9.5	28.5	19.3	14	EE 6 R1/4	9.5	42.2	19	14	ME 6 R1/4	9.5	28.2	19	14	FE 6 R1/4	9	26.4	19	17
6	R3/8	BT 6 R3/8	RT 6 R3/8	10.5	30	19.3	17	EE 6 R3/8	10.5	43.7	19	17	ME 6 R3/8	10.5	29.7	19	17	FE 6 R3/8	10	27.7	19	19
6	R1/2	BT 6 R1/2	RT 6 R1/2	13.5	33.5	19.3	21	EE 6 R1/2	13.5	47.2	19	21	ME 6 R1/2	13.5	33.2	19	21					
8	R1/8	BT 8 R1/8	RT 8 R1/8	7	29	22.75	14	EE 8 R1/8	7	41.8	22.8	14	ME 8 R1/8	7	26.5	22.8	14	FE 8 R1/8	7	24.8	22.8	14
8	R1/4	BT 8 R1/4	RT 8 R1/4	9.5	31.45	22.75	14	EE 8 R1/4	9.5	44.3	22.8	14	ME 8 R1/4	9.5	29	22.8	14	FE 8 R1/4	9	27	22.8	17
8	R3/8	BT 8 R3/8	RT 8 R3/8	10.5	32.95	22.75	17	EE 8 R3/8	10.5	45.8	22.8	17	ME 8 R3/8	10.5	30.5	22.8	17	FE 8 R3/8	10	28.5	22.8	19
8	R1/2	BT 8 R1/2	RT 8 R1/2	13.5	36.45	22.75	21	EE 8 R1/2	13.5	49.3	22.8	21	ME 8 R1/2	13.5	34	22.8	21	FE 8 R1/2	12	30.5	22.8	24
10	R1/8	BT 10 R1/8	RT 10 R1/8	7	34.5	27	17	EE 10 R1/8	7	49.5	26.3	17	ME 10 R1/8	7	29.5	26.3	17	FE 10 R1/8	7	23	26.3	17
10	R1/4	BT 10 R1/4	RT 10 R1/4	9.5	37	27	17	EE 10 R1/4	9.5	52	26.3	17	ME 10 R1/4	9.5	32	26.3	17	FE 10 R1/4	9	29.5	26.3	17
10	R3/8	BT 10 R3/8	RT 10 R3/8	10.5	38	27	17	EE 10 R3/8	10.5	53	26.3	17	ME 10 R3/8	10.5	33	26.3	17	FE 10 R3/8	10	31	26.3	19
10	R1/2	BT 10 R1/2	RT 10 R1/2	13.5	41.5	27	21	EE 10 R1/2	13.5	56.5	26.3	21	ME 10 R1/2	13.5	36.5	26.3	21	FE 10 R1/2	12	33.5	26.3	24
12	R1/4	BT 12 R1/4	RT 12 R1/4	9.5	38.5	29.6	20	EE 12 R1/4	9.5	58.5	29.6	20	ME 12 R1/4	9.5	36.5	29.6	20	FE 12 R1/4	9	26	29.6	21
12	R3/8	BT 12 R3/8	RT 12 R3/8	10.5	39.5	29.6	20	EE 12 R3/8	10.5	59.5	29.6	20	ME 12 R3/8	10.5	36.5	29.6	20	FE 12 R3/8	10	34	29.6	21
12	R1/2	BT 12 R1/2	RT 12 R1/2	13.5	42.5	29.6	21	EE 12 R1/2	13.5	62.5	29.6	21	ME 12 R1/2	13.5	39.5	29.6	21	FE 12 R1/2	12	36.5	29.6	24

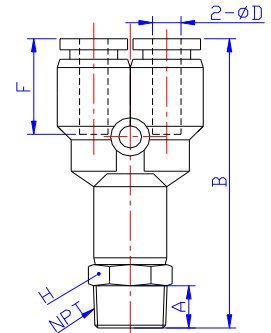
Units in mm



CI = Air Control Valve (Meter-In)
CV = Air Control Valve (Meter-Out)



Universal Elbow (UE)

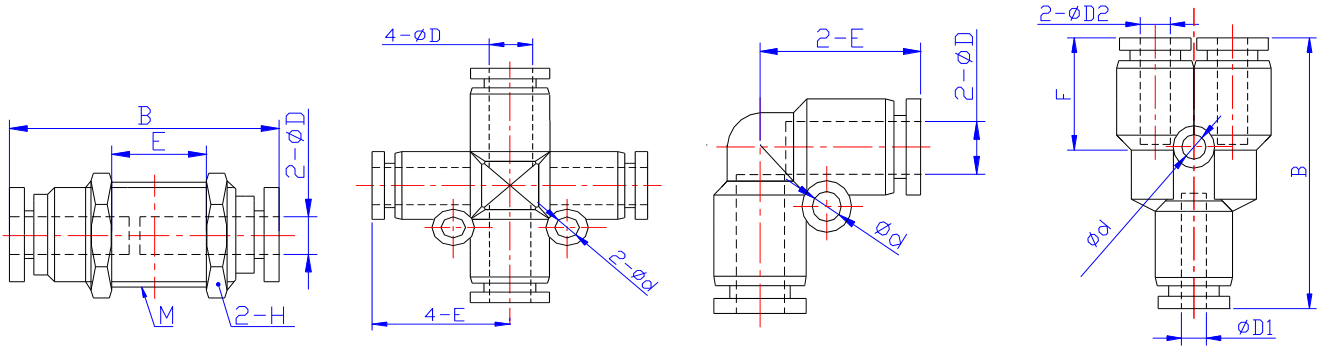


Y Connector (YC)

Model					Control Valve (Meter-In & Meter-Out)		Universal Elbow		Y Connector				
ØD	T	A	E	H	CI / CV		UE		YC				
					Part No. (CI/CV)	B	Part No.	B	Part No.	A	B	F	H
5/32	10-32	3.8	20	8	CV 5/32 10-32	29.3	UE 5/32 10-32	17.8	YC 5/32 10-32	3.8	40	14	11.1
5/32	NPT1/8	7.5	22.6	11.1	CV 5/32 N1/8	40.1	UE 5/32 N1/8	23.5	YC 5/32 N1/8	7.5	42	14	11.1
5/32	NPT1/4								YC 5/32 N1/4	10.5	46	14	14.3
3/16	10-32	3.8	20.3	8			UE 3/16 10-32	17.8	YC 3/16 10-32	3.8	40.3	14.3	11.1
3/16	NPT1/8	7.5	22.6	11.1			UE 3/16 N1/8	23.5	YC 3/16 N1/8	7.5	42.8	14.3	11.1
3/16	NPT1/4	10.5	24.3	14.3			UE 3/16 N1/4	27.3	YC 3/16 N1/4	10.5	46.3	14.3	14.3
3/16	NPT3/8								YC 3/16 N3/8	11	47.3	14.3	17.4
1/4	10-32	3.8	22	8	CV 1/4 10-32	29.3			YC 1/4 10-32	3.8	42.5	14.8	12.7
1/4	NPT1/8	7.5	23.1	11.1	CV 1/4 N1/8	40.1	UE 1/4 N1/8	23.5	YC 1/4 N1/8	7.5	43.8	14.8	12.7
1/4	NPT1/4	10.5	25.1	14.3	CV 1/4 N1/4	47.2	UE 1/4 N1/4	27.3	YC 1/4 N1/4	10.5	47.3	14.8	14.3
1/4	NPT3/8	11	26.8	19	CV 1/4 N3/8	53.9			YC 1/4 N3/8	11	48.3	14.8	17.4
5/16	NPT1/8	7.5	25.6	11.1	CV 5/16 N1/8	40.1	UE 5/16 N1/8	23.5	YC 5/16 N1/8	7.5	47.1	18.2	14.3
5/16	NPT1/4	10.5	28.6	14.3	CV 5/16 N1/4	47.2	UE 5/16 N1/4	27.3	YC 5/16 N1/4	10.5	50.1	18.2	14.3
5/16	NPT3/8	11	29.6	19	CV 5/16 N3/8	53.9	UE 5/16 N3/8	32.4	YC 5/16 N3/8	11	51.1	18.2	17.4
3/8	NPT1/8								YC 3/8 N1/8	7.5	55.1	19.5	17.4
3/8	NPT1/4	10.5	31	14.3	CV 3/8 N1/4	47.2	UE 3/8 N1/4	27.3	YC 3/8 N1/4	10.5	58.1	19.5	17.4
3/8	NPT3/8	11	31.6	19	CV 3/8 N3/8	53.9	UE 3/8 N3/8	32.4	YC 3/8 N3/8	11	58.6	19.5	17.4
3/8	NPT1/2	14	34.6	25.4	CV 3/8 N1/2	58.4			YC 3/8 N1/2	14	62.1	19.5	22.2
1/2	NPT1/4								YC 1/2 N1/4	10.5	63.1	21.6	22.2
1/2	NPT3/8	11	35.6	19	CV 1/2 N3/8	53.9	UE 1/2 N3/8	32.4	YC 1/2 N3/8	11	63.6	21.6	22.2
1/2	NPT1/2	14	36.6	25.4	CV 1/2 N1/2	58.4	UE 1/2 N1/2	39.1	YC 1/2 N1/2	14	66.6	21.6	22.2

ØD	T	A	E	H	Part No. (CV/CI)	B	Part No.	B	Part No.	A	B	F	H
4	M5	4	20	8	CV 4 M5	29.3	UE 4 M5	18	YC 4 M5	3.8	39.3	14	10
4	M6	4.5					UE 4 M6	18.5	YC 4 M6	4.5	40	14	10
4	R1/8	7	22.3	10	CV 4 R1/8	39.7	UE 4 R1/8	23	YC 4 1/8	7	41.5	14	10
4	R1/4	9.5	24.1	14	CV 4 R1/4	46.4	UE 4 R1/4	26.3	YC 4 R1/4	9.5	45	14	14
6	M5	4	21.9	8	CV 6 M5	29.3	UE 6 M5	18	YC 6 M5	3.8	41.1	14.8	12
6	M6	4.5					UE 6 M6	18.5	YC 6 M6	4.5	41.8	14.8	12
6	R1/8	7	23.1	10	CV 6 R1/8	39.7	UE 6 R1/8	23	YC 6 R1/8	7	43.3	14.8	12
6	R1/4	9.5	25.1	14	CV 6 R1/4	46.4	UE 6 R1/4	26.3	YC 6 R1/4	9.5	46.3	14.8	14
6	R3/8	10.5	26.8	19	CV 6 R3/8	53.4	UE 6 R3/8	31.9	YC 6 R3/8	10.5	47.8	14.8	17
6	R1/2	13.5	29.8	24	CV 6 R1/2	57.9			YC 6 R1/2	13.5	51.3	14.8	21
8	R1/8	7	25.6	10	CV 8 R1/8	39.7	UE 8 R1/8	23	YC 8 R1/8	7	46.6	18.2	14
8	R1/4	9.5	28.6	14	CV 8 R1/4	46.4	UE 8 R1/4	26.3	YC 8 R1/4	9.5	49.1	18.2	14
8	R3/8	10.5	29.6	19	CV 8 R3/8	53.4	UE 8 R3/8	31.9	YC 8 R3/8	10.5	50.6	18.2	17
8	R1/2	13.5	32.6	24	CV 8 R1/2	57.9	UE 8 R1/2	38.6	YC 8 R1/2	13.5	54.1	18.2	21
10	R1/8	7	28.8	10	CV 10 R1/8	39.7			YC 10 R1/8	7	54.6	19.5	17
10	R1/4	9.5	31	14	CV 10 R1/4	46.4	UE 10 R1/4	26.3	YC 10 R1/4	9.5	57.1	19.5	17
10	R3/8	10.5	31.6	19	CV 10 R3/8	53.4	UE 10 R3/8	31.9	YC 10 R3/8	10.5	58.1	19.5	17
10	R1/2	13.5	34.6	24	CV 10 R1/2	57.9	UE 10 R1/2	38.6	YC 10 R1/2	13.5	61.6	19.5	21
12	R1/4	9.5	33.5	14	CV 12 R1/4	46.4	UE 12 R1/4	26.3	YC 12 R1/4	9.5	62.1	21.6	21
12	R3/8	10.5	35.6	19	CV 12 R3/8	53.4	UE 12 R3/8	31.9	YC 12 R3/8	10.5	63.1	21.6	21
12	R1/2	13.5	36.6	24	CV 12 R1/2	57.9	UE 12 R1/2	38.6	YC 12 R1/2	13.5	66.1	21.6	21

Units in mm



Bulkhead Union (BU)

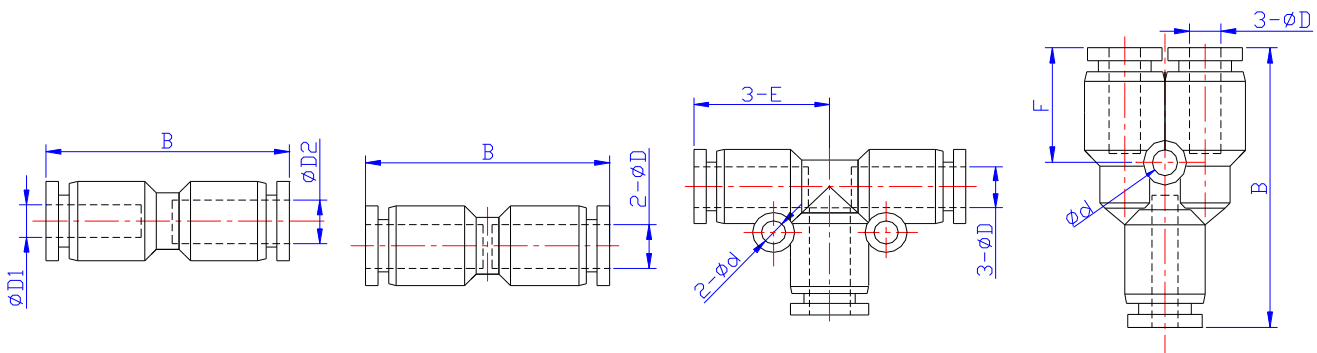
Cross Union (CU)

Elbow Union (EU)

Reduced Branch (RB)

Model	Bulkhead Union					Cross Union			Elbow Union			Reduced Branch					
	Model	B	E	H	M	Model	∅d	E	Model	E	∅d	Model	∅D1	∅D2	∅d	B	F
5/32	BU 5/32	30.1	9.7	14.3	M12	CU 5/32	3.2	17.5	EU 5/32	17.5	3.2	RB 3/16-5/32	3/16	5/32	3.2	35.8	14.0
3/16	BU 3/16	31.8	7.5	17.4	M14	CU 3/16	3.2	17.8	EU 3/16	17.8	3.2	RB 1/4-5/32	1/4	5/32	3.2	36.8	14.5
1/4	BU 1/4	31.8	7.5	17.4	M14	CU 1/4	3.2	19.3	EU 1/4	19	3.2	RB 1/4-3/16	1/4	3/16	3.2	37.1	14.8
5/16	BU 5/16	35.3	6.8	19.0	M16	CU 5/16	3.2	22.75	EU 5/16	22.8	3.2	RB 5/16-1/4	5/16	1/4	3.2	39.9	17.7
3/8	BU 3/8	36.4	8.9	22.2	M20	CU 3/8	4.2	27	EU 3/8	26.3	4.2	RB 3/8-5/16	3/8	5/16	4.2	47.9	20.3
1/2	BU 1/2	45.3	12.8	25.4	M22	CU 1/2	4.3	29.6	EU 1/2	29.6	4.3	RB 1/2-3/8	1/2	3/8	4.2	51.6	20.0
4	BU 4	30.1	9.7	14.0	M12	CU 4	3.2	17.5	EU 4	17.5	3.2						
6	BU 6	31.8	7.5	17.0	M14	CU 6	3.2	19.3	EU 6	19	3.2	RB 6-4	6	4	3.2	36.8	14.5
8	BU 8	35.3	6.8	19.0	M16	CU 8	3.2	22.75	EU 8	22.8	3.2	RB 8-6	8	6	3.2	39.9	17.7
10	BU 10	39	11.5	24.0	M20	CU 10	4.2	27	EU 10	26.3	4.2	RB 10-8	10	8	4.2	47.9	20.3
12	BU 12	45.3	12.8	27.0	M22	CU 12	4.3	29.6	EU 12	29.6	4.3	RB 12-10	12	10	4.2	51.6	20

Units in mm



Reduced Union, RU

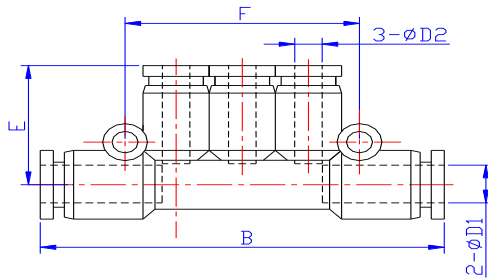
Straight Union, SU

Tee Union, TU

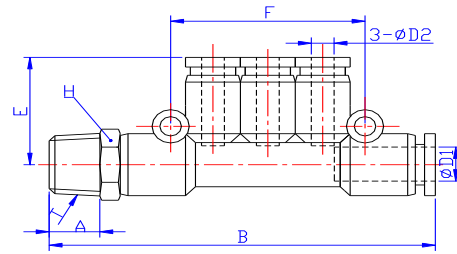
Y Union, YU

Reduced Union				Straight Union			Tee Union				Y Union				
RU				SU			TU				YU				
Part No.	∅D1	∅D2	B	Part No.	∅D	B	Part No.	∅D	∅d	E	Part No.	∅D	∅d	B	F
				SU 5/32	5/32	33	TU 5/32	5/32	3.2	18.5	YU 5/32	5/32	3.2	35.5	14.0
RU 3/16-5/32	3/16	5/32	33.3	SU 3/16	3/16	33.6	TU 3/16	3/16	3.2	18.8	YU 3/16	3/16	3.2	36.1	14.3
RU 1/4-5/32	1/4	5/32	34.9	SU 1/4	1/4	35.2	TU 1/4	1/4	3.2	19.3	YU 1/4	1/4	3.2	37.1	14.8
RU 1/4-3/16	1/4	3/16	35.2												
RU 5/16-1/4	5/16	1/4	38.6	SU 5/16	5/16	39.1	TU 5/16	5/16	3.2	22.75	YU 5/16	5/16	3.2	40.4	18.2
RU 3/8-1/4	3/8	1/4		SU 3/8	3/8	45.2	TU 3/8	3/8	4.2	27	YU 3/8	3/8	4.2	47.1	19.5
RU 3/8-5/16	3/8	5/16	47.3												
RU 1/2-3/8	1/2	3/8	48.9	SU 1/2	1/2	49.2	TU 1/2	1/2	4.3	29.6	YU 1/2	1/2	4.2	53.2	21.6
				SU 4	4	33	TU 4	4	3.2	18.5	YU 4	4	3.2	35.5	14
RU 6-4	4	6	33.6	SU 6	6	35.2	TU 6	6	3.2	19.3	YU 6	6	3.2	37.1	14.8
RU 8-6	6	8	36.1	SU 8	8	39.1	TU 8	8	3.2	22.75	YU 8	8	3.2	40.4	18.2
RU 10-8	8	10	41.8	SU 10	10	45.2	TU 10	10	4.2	27	YU 10	10	4.2	47.1	19.5
RU 12-10	10	12	46.1	SU 12	12	49.2	TU 12	12	4.3	29.6	YU 12	12	4.2	53.2	21.6

Units in mm

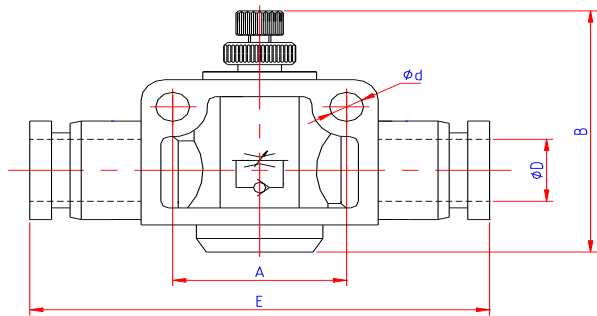


Manifold Union (MU)



Male Manifold (MM)

Manifold Union					Manifold Union					Male Manifold									
MU					MU					MM									
Part No.	ØD	F	E	B	Part No.	ØD1	ØD2	B	E	F	Part No.	ØD1	ØD2	T	A	B	E	F	H
MU 5/32	5/32	36	19	57	MU 3/16X5/32	3/16	5/32	57.6	19	36	MM 3/16-5/32-N1/8	3/16	5/32	NPT 1/8	7.5	64.3	19	36	11.1
MU 3/16	3/16	36	19.3	57.6	MU 1/4X5/32	1/4	5/32	57.6	19	36	MM 1/4-5/32-N1/8	1/4	5/32	NPT 1/8	7.5	64.3	19	36	12.7
MU 1/4	1/4	42	20.3	61.6	MU 5/16X5/32	5/16	5/32	62.6	20	42	MM 5/16-5/32-N1/4	5/16	5/32	NPT 1/4	10.5	72.3	20	42	14.3
MU 5/16	5/16	48	24.3	81.6	MU 5/16X3/16	5/16	3/16	62.6	20.3	42	MM 5/16-3/16-N1/4	5/16	3/16	NPT 1/4	10.5	72.3	20.3	42	14.3
					MU 5/16X1/4	5/16	1/4	62.6	20.3	42	MM 5/16-1/4-N1/4	5/16	1/4	NPT 1/4	10.5	72.3	20.3	42	14.3
MU 4	4	36	19	57	MU 3/8X1/4	3/8	1/4	80	23.8	48	MM 3/8-5/16-N3/8	3/8	5/16	NPT 3/8	11	91.5	24.3	48	17.4
MU 6	6	42	20.3	61.6	MU 3/8X5/16	3/8	5/16	80	24.3	48									
MU 8	8	48	24.3	81.6															
					MU 6-4	6.0	4.0	57.6	19.0	36	MM 6-4-R1/8	6.0	4.0	R1/8	7	63.8	19	36	12
					MU 8-4	8.0	4.0	62.6	20.0	42	MM 8-4-R1/4	8.0	4.0	R1/4	9.5	71.3	20	42	14
					MU 8-6	8.0	6.0	62.6	20.3	42	MM 8-6-R1/4	8.0	6.0	R1/4	9.5	71.3	20.3	42	14
					MU 10-6	10.0	6.0	80.0	23.8	48									
					MU 10-8	10.0	8.0	80.0	24.3	48	MM10-8-R3/8	10.0	8.0	R3/8	10.5	91	24.3	48	17

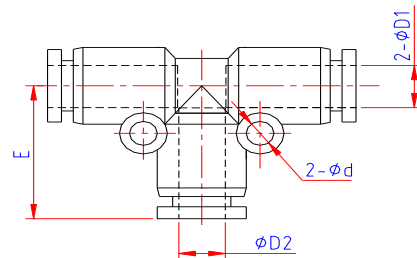


Air Flow Control Valve (FV)

Air Flow Control Valve					
FV					
Part No.	ØD	Ød	A	B	E
FV 5/32	5/32	3.2	14	28.8	39.5
FV 3/16	3/16	3.2	14	28.8	40.1
FV 1/4	1/4	4.3	20	42.6	47.6
FV 5/16	5/16	4.3	22	44.3	52.6
FV 3/8	3/8	4.3	26	53.4	60.5
FV 1/2	1/2	4.3	32	55.6	74.2

FV 4	4	3.2	14	28.8	39.5
FV 6	6	4.3	20	42.6	47.6
FV 8	8	4.3	22	44.3	52.6
FV 10	10	4.3	26	53.4	60.5
FV 12	12	4.3	32	55.6	74.2

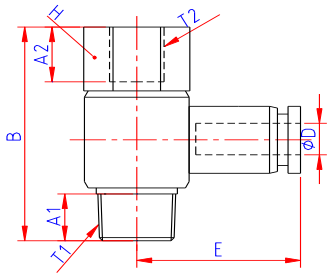
Units in mm



Tee Union Reducer (TU)

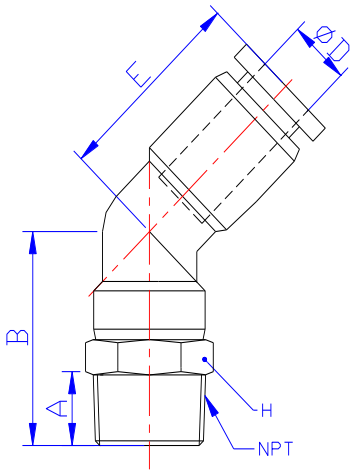
Tee Union Reducer				
TU				
Part No.	ØD1	ØD2	Ød	E
TU 1/4-5/32	1/4	5/32	3.2	19.0
TU 5/16-1/4	5/16	1/4	3.2	22.3
TU 3/8-5/16	3/8	5/16	3.2	27.8
TU 1/2-3/8	1/2	3/8	4.2	29.3

TU 6-4	6	4	3.2	19.5
TU 8-6	8	6	3.2	20.3
TU 10-8	10	8	4.2	24.8
TU 12-10	12	10	4.2	28.5



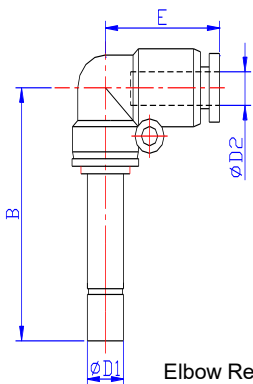
Stack Elbow (SE)

Stack Elbow								
SE								
ØD	T1	T2	Part No.	A1	A2	H	B	E
5/32	10-32UNF	10-32UNF	SE 5/32 10-32	3.8	5.5	11.1	19.5	20
	NPT1/8	NPT1/8	SE 5/32 N1/8	7.5	7.5	14.3	30	22.3
3/16	10-32UNF	10-32UNF	SE 3/16 10-32	3.8	5.5	11.1	19.5	20.3
	NPT1/8	NPT1/8	SE 3/16 N1/8	7.5	7.5	14.3	30	22.6
	NPT1/4	NPT1/4	SE 3/16 N1/4	10.5	10.5	17.4	35.8	24.3
1/4	NPT1/8	NPT1/8	SE 1/4 N1/8	7.5	7.5	14.3	30	23.1
	NPT1/4	NPT1/4	SE 1/4 N1/4	10.5	10.5	17.4	35.8	25.1
5/16	NPT1/8	NPT1/8	SE 5/16 N1/8	7.5	7.5	14.3	30	25.6
	NPT1/4	NPT1/4	SE 5/16 N1/4	10.5	10.5	17.4	35.8	28.6
	NPT3/8	NPT3/8	SE 5/16 N3/8	11	11	22.2	40.9	29.6
3/8	NPT1/4	NPT1/4	SE 3/8 N1/4	10.5	10.5	17.4	35.8	31
	NPT3/8	NPT3/8	SE 3/8 N3/8	11	11	22.2	40.9	31.6
1/2	NPT3/8	NPT3/8	SE 1/2 N3/8	11	11	22.2	40.9	35.6
	NPT1/2	NPT1/2	SE 1/2 N1/2	14	14	25.4	49	36.6



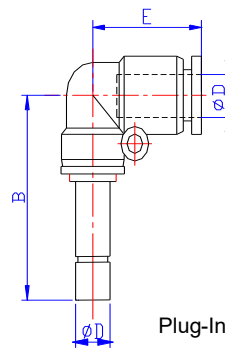
Male Angle (MA)

Male Angle						
MA						
ØD	NPT	Part No.	A	B	E	H
5/32	10-32UNF	MA 5/32 10-32	3.8	20.7	16.2	11.1
	NPT1/8	MA 5/32 N1/8	7.5	22.7	16.2	11.1
	NPT1/4	MA 5/32 N1/4	10.5	26.7	16.2	14.3
3/16	10-32UNF	MA 3/16 10-32	3.8	20.7	16.5	11.1
	NPT1/8	MA 3/16 N1/8	7.5	23.2	16.5	11.1
	NPT1/4	MA 3/16 N1/4	10.5	26.7	16.5	14.3
	NPT3/8	MA 3/16 N3/8	11	27.7	16.5	17.4
1/4	10-32UNF	MA 1/4 10-32	3.8	23.1	17.7	12.7
	NPT1/8	MA 1/4 N1/8	7.5	24.4	17.7	12.7
	NPT1/4	MA 1/4 N1/4	10.5	27.9	17.7	14.3
	NPT3/8	MA 1/4 N3/8	11	28.9	17.7	17.4
5/16	NPT1/8	MA 5/16 N1/8	7.5	27.6	20.9	14.3
	NPT1/4	MA 5/16 N1/4	10.5	30.6	20.9	14.3
	NPT3/8	MA 5/16 N3/8	11	31.6	20.9	17.4
3/8	NPT1/8	MA 3/8 N1/8	7.5	30.2	22.2	17.4
	NPT1/4	MA 3/8 N1/4	10.5	33.2	22.2	17.4
	NPT3/8	MA 3/8 N3/8	11	33.7	22.2	17.4
	NPT1/2	MA 3/8 N1/2	14	37.2	22.2	22.2
1/2	NPT1/4	MA 1/2 N1/4	10.5	36.2	26.3	22.2
	NPT3/8	MA 1/2 N3/8	11	36.7	26.3	22.2
	NPT1/2	MA 1/2 N1/2	14	39.7	26.3	22.2



Elbow Reducer (ER)

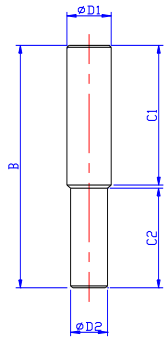
Elbow Reducer				
ER				
Part No.	ØD1	ØD2	B	E
ER 5/32-3/16	5/32	3/16	33	17.5
ER 1/4-5/32	1/4	5/32	35	17.5
ER 3/16-1/4	3/16	1/4	35	17.5
ER 5/16-1/4	5/16	1/4	39.2	19
ER 3/8-5/16	3/8	5/16	42.5	22.8
ER 1/2-3/8	1/2	3/8	52.8	26.3
ER 6-4	6	4	35	17.5
ER 8-6	8	6	39.2	19
ER 10-8	10	8	44	22.8
ER 12-10	12	10	48.5	26.3



Plug-In Elbow (PE)

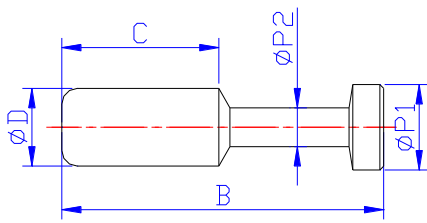
Plug-In Elbow			
PE			
Part No.	ØD	B	E
PE 5/32	5/32	33	17.5
PE 3/16	3/16	33	17.8
PE 1/4	1/4	36.2	19
PE 5/16	5/16	42.5	22.8
PE 3/8	3/8	50.8	26.3
PE 1/2	1/2	54.5	29.6

Units in mm



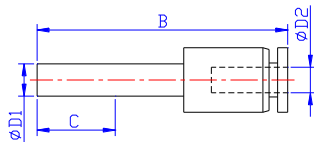
Stem Reducer (SR)

Stem Reducer					
SR					
Part No.	ØD1	ØD2	C1	C2	B
SR 3/16-5/32	3/16	5/32	18	17	36
SR 1/4-5/32	1/4	5/32	18	17	36
SR 1/4-3/16	1/4	3/16	18	17	36
SR 5/16-1/4	3/16	1/4	20	18	39
SR 3/8-5/16	3/8	5/16	25	20	46
SR 1/2-3/8	1/2	3/8	27	26	54



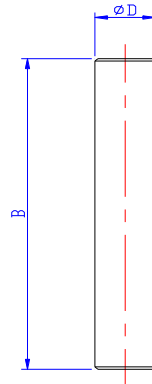
Plug (PG)

Plug					
PG					
Part No.	ØD	B	ØP1	ØP2	C
PG 5/32	5/32	28	5	3	15
PG 3/16	3/16	28	5	3	15
PG 1/4	1/4	33	7	3	17
PG 5/16	5/16	37	9	4	18
PG 3/8	3/8	42	11	5	20.5
PG 1/2	1/2	44	13	6	23



Tube Reducer (TR)

Tube Reducer				
TR				
Part No.	ØD1	ØD2	B	C
TR 5/32-1/4	1/4	5/32	39.5	16
TR 5/32-5/16	5/16	5/32	41.5	18.6
TR 1/4-5/16	5/16	1/4	41.8	18.6
TR 1/4-3/8	3/8	1/4	46.5	20
TR 5/16-3/8	3/8	5/16	46.5	20
TR 1/4-1/2	1/2	1/4	51.8	23.5
TR 5/16-1/2	1/2	5/16	52.3	23.5
TR 3/8-1/2	1/2	3/8	51.5	23.5

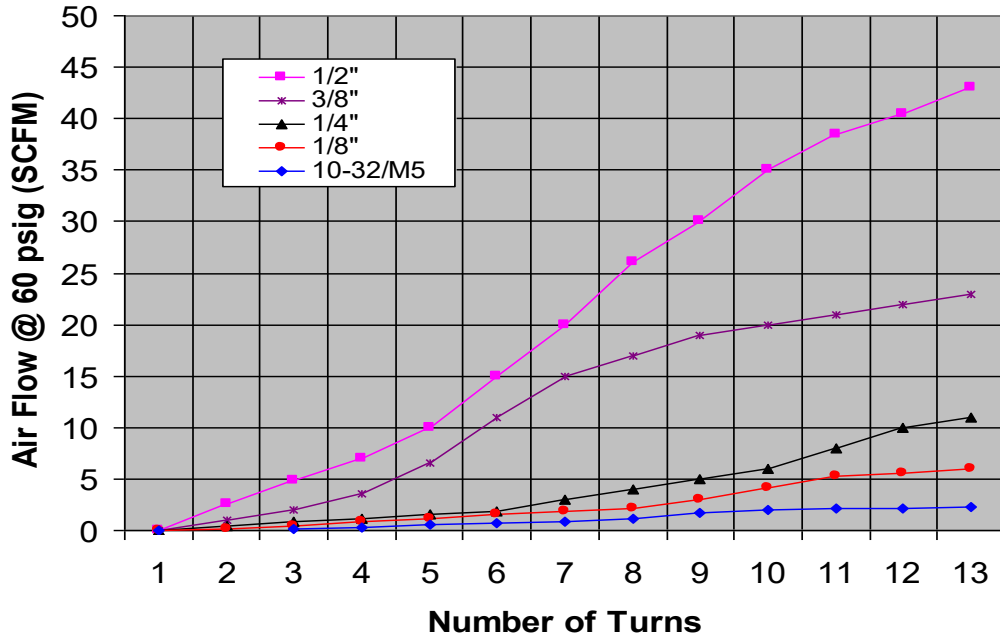


Stem Coupling (SC)

Stem Coupling		
SC		
Part No.	ØD	B
SC 5/32	5/32	35
SC 3/16	3/16	35
SC 1/4	1/4	37
SC 5/16	5/16	41
SC 3/8	3/8	51
SC 1/2	1/2	54

Units in mm

STC FLOW CONTROL VALVES AIR FLOW CHARACTERISTICS



Special Features:

- Complete rotation of the valve body around the bolt allows for optimum positioning of tubing
- Compact size provides space saving installations
- Special adjustment needle design allows large adjustment with high precision
- Adjustment needles and banjo bodies are retained, preventing accidental loss of needle or lock nut.