

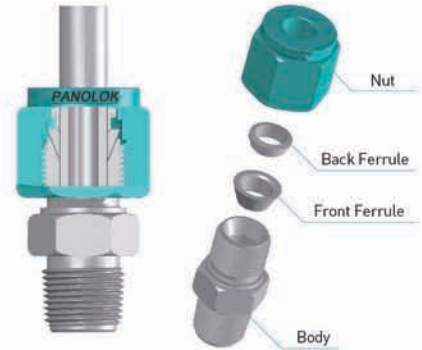


JIAXING PANO FLOW CONTROL CO., LTD
Fittings/Valves/Pressure Regulator

PANOLOK TUBE FITTING FEATURE

PANOLOK flow fitting are manufactured under strict standard. Our products have good interchangeability with premium quality. It is widely used in natural gas, petrochemical, electric power, analyzing equipment and industrial meters, etc. We are capable of supplying diversified fittings with different materials as follow

Material	Bar Stock	Forging
SS 316	ASTM A276 , ASME SA479 , EN1.4401	ASTM A182 , ASME SA182 , EN1.4401
ALLOY 20	ASTM B473	ASTM B462
ALLOY 400	ASTM B164	ASTM B564 , ASME SB564
ALLOY 600	ASTM B166 , ASME SB166	ASTM B564 , ASME SB564
ALLOY 625	ASTM B446③	ASTM B564 , ASME SB564④
ALLOY C-276	ASTM B574	ASTM B564
ALUMINIUM	ASTM B211	ASTM B247
BRASS	ASTM B16 , ASTM B453	ASTM B283
CARBON STEEL	ASTM A108	--
titanium (Grade4)	ASTM B348	ASTM B381



VARIETY CONNECTOR:

1. PANOLOK Double ferrule for tube

The double ferrule tube fitting is composed of ferrule set, front ferrule ,back ferrule, ferrule nut. Size range from 1/16"to 2"(2mm to 50mm), easy to connected with tube directly, without extra torque while when installed. Easy installation , tight sealing with repeatable assembly. We recommend the following maximum pressure for application:

PANOLOK ITEM NO.	TUBE OD (inch)	TUBE wall thickness (inch)															
		0.010	0.012	0.014	0.016	0.020	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120	0.134	0.156	0.188
		Working pressure,psig															
PN1	1/16	5600	6800	8100	9400	12000											
PN2	1/8						8000	10900									
PN3	3/16						5400	7000	10200								
PN4	1/4						4000	5100	7500	10200							
PN5	5/16							4000	5800	8000							
PN6	3/8							3300	4800	6500							
PN8	1/2							2400	3500	4700	6200						
PN10	5/8								2900	4000	5200	6000					
PN12	3/4								2400	3300	4200	4900	5800				
PN14	7/8								2000	2800	3600	4200	4800				
PN16	1									2400	3100	3600	4200	4700			
PN20	1 1/4										2400	2800	3300	3600	4100	4900	
PN24	1 1/2											2300	2700	3000	3400	4000	4900
PN32	2												2000	2200	2500	2900	3600

* Pressure is based on the maximum sustainable pressure of the stainless steel pipe.

PANOLOK ITEM NO.	TUBE OD (mm)	TUBE wall thickness (mm)													
		0.8	1.0	1.2	1.5	1.8	2.0	2.2	2.5	2.8	3.0	3.5	4.0	4.5	5.0
		Working pressure,psig													
PN3M	3mm	670													
PN6M	6mm	310	420	540	710										
PN8M	8mm		310	390	520										
PN10M	10mm		240	300	400	510	580								
PN12M	12mm		200	250	330	410	470								
PN14M	14mm		160	200	270	340	380	430							
PN15M	15mm		150	190	250	310	360	400							
PN16M	16mm		170	230	290	330	370	400							
PN18M	18mm		150	200	260	290	320	370							
PN20M	20mm		140	180	230	260	290	330	380						
PN22M	22mm		120	160	200	230	260	300	340						
PN25M	25mm				180	200	230	260	290	320					
PN28M	28mm						180	200	230	260	280	330			
PN30M	30mm						170	180	210	240	260	310			
PN32M	32mm						160	170	200	220	240	290	330		
PN38M	38mm							140	160	190	200	240	270	310	
PN50M	50mm										190	200	240	270	310

* Pressure is based on the maximum sustainable pressure of the stainless steel pipe.

2.Ferrule adapter

Fit directly with PANOLOK ferrule, enable fast assembly with assured tight sealing, guaranteed right installation angle during installation. Avoids the assembling angle error problem , especially when thread connecting. The differences are shown in the following pictures:



(I)



(II)



(III)



3.NPT thread

NPT thread is following the standard ASME B1.20.1. Well finished thread surface, improving sealing tightness, less friction of installation, less possibility of being blocked. Maximum allowable pressure of NPT Thread as show on the following table:

4.ISO tapered thread

Following standard ISO7, Well finished thread surface, improving sealing tightness, less friction of installation, less possibility of being blocked. Maximum allowable pressure of NPT Thread as show on the following table:

NPT and ISO Size	SS 316				BRASS			
	Male		Female		Male		Female	
	psig	bar	psig	bar	psig	bar	psig	bar
1/16	11000	760	6700	460	5500	380	3300	230
1/8	10000	690	6500	440	5000	340	3200	220
1/4	8000	550	6600	450	40000	270	3300	220
3/8	7800	540	5300	360	3900	270	2600	180
1/2	7700	530	4900	330	3800	260	2400	160
3/4	7300	500	4600	320	3600	250	2300	160
1	5300	370	4400	300	2600	180	2200	150
1 1/4	6000	410	5000	350	3000	200	2500	170
1 1/2	5000	340	4600	310	2500	170	2300	150
2	3900	270	3900	270	1900	130	1900	130

PRODUCT CATALOG

UNION
ELBOW
BULKHEAD UNION

TEE
CROSS
SPARE PART

UNION Page : 6 ~ 23

Male connector	6	BSP taper male connector for tube	8
BSP male connector for tube	9	Thermocouple connector for tube	11
NPT female connector for tube	12	Union for tube	13
Conversion union metric tube to inch tube	14	Reducing union for tube	15
Tube end reducer for tube	16	Port connector for tube	18
Male adapter male NPT to tube For tube	20	Female NPT to tube for tube	21
37° Flare (AN) to tube fitting	23	37. Flare connector for tube	23

BULKHEAD UNION Page : 24 ~ 29

NPT male bulkhead connector for tube	24	NPT female bulkhead connector for tube	26
Bulkhead union for tube	27	Tube end bulkhead adapter for tube	28
37° flare bulkhead connector for tube	29		

90° ELBOW Page : 30 ~ 35

NPT male elbow for tube	30	NPT female elbow for tube	31
Union elbow for tube	34	Drop size elbows for tube	35

TEE Page : 36 ~ 41

NPT male run tee for tube	36	NPT male branch tee for tube	37
NPT female run tee for tube	38	NPT female branch tee for tube	39
Union tee for tube	40	Drop size tee for tube	41

CROSS Page : 43

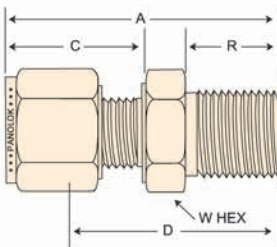
Union cross for fractional tube	43
---------------------------------	----

SPARE PART Page : 44 ~ 49

Tube nut for tube	44	Plug for tube	45
Cap for tube	46	Front ferrule for tube	47
Back ferrule for tube	48	Ferrule set	49

INSTRUMENT VALVES

Male connector for fractional tube

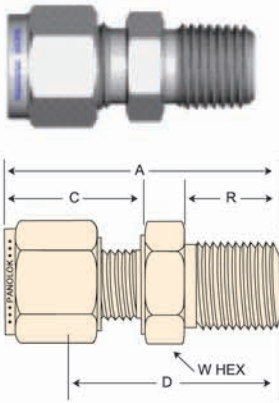


PANOLOK PART NO.	INTER CHANGES WITH	INCHES						
		TUBE	NPT PIPE THREAD	A	C	D	R	W
2-MC-2	200-1-2	1/8	1/8	1.20	0.60	0.94	0.38	7/16
2-MC-4	200-1-4	1/8	1/4	1.40	0.60	1.14	0.56	9/16
2-MC-6	200-1-6	1/8	3/8	1.42	0.60	1.16	0.56	11/16
2-MC-8	200-1-8	1/8	1/2	1.67	0.60	1.41	0.75	7/8
3-MC-2	300-1-2	3/16	1/8	1.23	0.64	0.97	0.38	7/16
3-MC-4	300-1-4	3/16	1/4	1.43	0.64	1.17	0.56	9/16
4-MC-2	400-1-2	1/4	1/8	1.29	0.70	1.00	0.38	1/2
4-MC-4	400-1-4	1/4	1/4	1.49	0.70	1.20	0.56	9/16
4-MC-6	400-1-6	1/4	3/8	1.51	0.70	1.22	0.56	11/16
4-MC-8	400-1-8	1/4	1/2	1.76	0.70	1.47	0.75	7/8
4-MC-12	400-1-12	1/4	3/4	1.82	0.70	1.53	0.75	1-1/16
5-MC-2	500-1-2	5/16	1/8	1.34	0.73	1.05	0.38	9/16
5-MC-4	500-1-4	5/16	1/4	1.52	0.73	1.23	0.56	9/16
5-MC-6	500-1-6	5/16	3/8	1.55	0.73	1.25	0.56	11/16
5-MC-8	500-1-8	5/16	1/2	1.79	0.73	1.50	0.75	7/8
6-MC-2	600-1-2	3/8	1/8	1.38	0.76	1.09	0.38	5/8
6-MC-4	600-1-4	3/8	1/4	1.57	0.76	1.28	0.56	5/8
6-MC-6	600-1-6	3/8	3/8	1.57	0.76	1.28	0.55	11/16
6-MC-8	600-1-8	3/8	1/2	1.82	0.76	1.53	0.75	7/8
6-MC-12	600-1-12	3/8	3/4	1.88	0.76	1.59	0.75	1-1/16
8-MC-2	810-1-2	1/2	1/8	1.53	0.87	1.13	0.38	13/16
8-MC-4	810-1-4	1/2	1/4	1.71	0.87	1.31	0.56	13/16
8-MC-6	810-1-6	1/2	3/8	1.71	0.87	1.31	0.56	13/16
8-MC-8	810-1-8	1/2	1/2	1.93	0.87	1.53	0.75	7/8
8-MC-12	810-1-12	1/2	3/4	1.99	0.87	1.59	0.75	1-1/16
8-MC-16	810-1-16	1/2	1	2.28	0.87	1.88	0.94	1-3/8
10-MC-6	1010-1-6	5/8	3/8	1.74	0.87	1.34	0.56	15/16
10-MC-8	1010-1-8	5/8	1/2	1.93	0.87	1.53	0.75	15/16
10-MC-12	1010-1-12	5/8	3/4	1.99	0.87	1.59	0.75	1-1/16
12-MC-8	1210-1-8	3/4	1/2	1.99	0.87	1.59	0.75	1-1/16
12-MC-12	1210-1-12	3/4	3/4	1.99	0.87	1.59	0.75	1-1/16
12-MC-16	1210-1-16	3/4	1	2.28	0.87	1.88	0.94	1-3/8
14-MC-12	1410-1-12	7/8	3/4	1.99	0.87	1.59	0.75	1-3/16
14-MC-16	1410-1-16	7/8	1	2.28	0.87	1.88	0.94	1-3/8
16-MC-8	1610-1-8	1	1/2	2.27	1.05	1.78	0.75	1-3/8
16-MC-12	1610-1-12	1	3/4	2.27	1.05	1.78	0.75	1-3/8
16-MC-16	1610-1-16	1	1	2.46	1.05	1.97	0.94	1-3/8

Male connector for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS						
		TUBE O.D.	NPT THREAD	A	C	D	R	W HEX
3MO-MC-2	3MO-1-2	3	1/8	29,7	15,3	23,1	9,5	12,0
3MO-MC- 4	3MO-1-4	3	1/4	35,3	15,3	28,7	14,3	14,0
4MO-MC- 2	4MO-1-2	4	1/8	31,2	16,1	24,6	9,5	12,0
4MO-MC- 4	4MO-1-4	4	1/4	36,3	16,1	29,7	14,3	14,0
6MO-MC-2	6MO-1-2	6	1/8	32,9	17,7	25,4	9,5	14,0
6MO-MC- 4	6MO-1-4	6	1/4	38,1	17,7	30,6	14,3	14,0
6MO-MC- 6	6MO-1-6	6	3/8	38,5	17,7	31,0	14,3	18,0
6MO-MC- 8	6MO-1-8	6	1/2	44,8	17,7	37,3	19,1	22,0
8MO-MC-2	8MO-1-2	8	1/8	34,2	18,6	26,7	9,5	15,0
8MO-MC- 4	8MO-1-4	8	1/4	38,8	18,6	31,3	14,3	15,0
8MO-MC- 6	8MO-1-6	8	3/8	39,3	18,6	31,8	14,3	18,0
8MO-MC- 8	8MO-1-8	8	1/2	45,6	18,6	38,1	19,1	22,0
10MO-MC-2	10MO-1-2	10	1/8	36,1	19,5	28,6	9,5	18,0
10 MO-MC- 4	10MO-1-4	10	1/4	40,9	19,5	33,3	14,3	18,0
10MO -MC-6	10MO-1-6	10	3/8	40,9	19,5	33,3	14,3	18,0
10MO -MC-8	10MO-1-8	10	1/2	47,5	19,5	38,9	19,1	22,0
10MO -MC-12	10MO-1-12	10	3/4	46,4	19,5	38,9	19,1	27,0
10MO -MC-16	10MO-1-16	10	1	55,0	19,5	47,5	23,8	35,0
12MO-MC-4	12MO-1-4	12	1/4	43,4	22,0	33,3	14,3	22,0
12MO -MC-6	12MO-1-6	12	3/8	43,4	22,0	33,3	14,3	22,0
12MO -MC-8	12MO-1-8	12	1/2	49,0	22,0	38,9	19,1	22,0
12MO -MC-12	12MO-1-12	12	3/4	50,5	22,0	40,4	19,1	27,0
14 MO-MC-4	14MO-1-4	14	1/4	44,2	22,0	34,1	14,3	24,0
14 MO-MC-6	14MO-1-6	14	3/8	44,2	22,0	34,1	14,3	24,0
14MO-MC-8	14MO-1-8	14	1/2	49,0	22,0	38,9	19,1	24,0
14MO -MC-8	15MO-1-8	15	1/2	49,0	22,0	38,9	19,1	24,0
16MO -MC-6	16MO-1-6	16	3/8	44,1	22,0	34,01	14,3	24,0
16 MO-MC-8	16MO-1-8	16	1/2	49,0	22,0	38,9	19,1	24,0
16 MO-MC-12	16MO-1-12	16	3/4	50,5	22,0	40,5	19,1	27,0
18MO -MC-8	18MO-1-8	18	1/2	50,6	22,0	40,5	19,1	27,0
18MO -MC-12	18MO-1-12	18	3/4	50,6	22,0	40,5	19,1	27,0
20 MO-MC-8	20MO-1-8	20	1/2	50,6	22,0	42,2	19,1	30,0
20 MO-MC-12	20MO-1-12	20	3/4	52,3	22,0	42,2	19,1	30,0
20 MO-MC-16	20MO-1-16	20	1	57,7	22,0	47,6	23,8	35,0
22MO -MC-8	22MO-1-8	22	3/4	52,3	22,0	42,2	19,1	35,0
25 MO -MC-8	25MO-1-8	25	1/2	57,5	22,0	45,3	19,1	35,0
25 MO -MC-12	25MO-1-12	25	3/4	57,5	22,0	45,2	19,1	35,0
25 MO -MC-16	25MO-1-16	25	1	62,3	22,0	50,0	23,8	35,0

BSP taper male connector for fractional tube

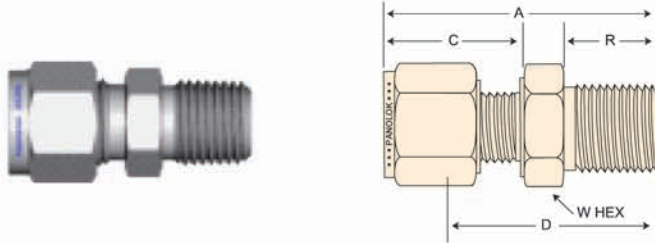


PANOLOK PART NO.	INTER CHANGES WITH	INCHS							
		TUBE O.D.	BSPT THREAD	A	C	D	R	W HEX	BORE
5-MC-2RT	500-1-2RT	5/16	1/8	1.34	0.73	1.05	0.38	9/16	0.19
5-MC-4RT	500-1-4RT	5/16	1/4	1.52	0.73	1.23	0.56	9/16	0.19
6-MC-2RT	600-1-2RT	3/8	1/8	1.39	0.76	1.09	0.38	5/8	0.19
6-MC-4RT	600-1-4RT	3/8	1/4	1.57	0.76	1.28	0.56	5/8	0.28
6-MC-6RT	600-1-6RT	3/8	3/8	1.57	0.76	1.28	0.56	11/16	0.28
6-MC-8RT	600-1-8RT	3/8	1/2	1.82	0.76	1.53	0.75	7/8	0.28
8-MC-4RT	810-1-4RT	1/2	1/4	1.69	0.86	1.31	0.56	13/16	0.28
8-MC-6RT	810-1-6RT	1/2	3/8	1.69	0.86	1.31	0.56	13/16	0.38
8-MC-8RT	810-1-8RT	1/2	1/2	1.91	0.86	1.53	0.75	7/8	0.41

BSP taper male connector for metric tube

PANOLOK PART NO.	INTER CHANGES	MILLIMETERS							
		TUBE O.D.	BSP TR THREAD	A	C	D	R	W HEX	
3M O-MC-2RT	3MO-1-2RT	3	1/8	29,7	15,3	23,1	9,5	12,0	
3M O-MC-4RT	3MO-1-4RT	3	1/4	35,3	15,3	28,7	14,2	14,0	
4M O-MC-2RT	4MO-1-2RT	4	1/8	31,2	16,1	24,6	9,5	12,0	
4M O-MC-4RT	4MO-1-4RT	4	1/4	36,3	16,1	29,7	14,2	14,0	
6M O-MC-2RT	6MO-1-2RT	6	1/8	32,9	17,7	25,4	9,7	14,0	
6M O-MC-4RT	6MO-1-4RT	6	1/4	40,0	17,7	30,5	14,2	14,0	
6M O-MC-6RT	6MO-1-6RT	6	3/8	38,5	17,7	31,0	14,2	18,0	
6M O-MC-8RT	6MO-1-8RT	6	1/2	45,6	17,7	38,1	19,1	22,0	
8M O-MC-2RT	8MO-1-2RT	8	1/8	33,9	18,6	26,4	9,5	15,0	
8MO-MC-4RT	8MO-1-4RT	8	1/4	38,7	18,6	31,2	14,2	15,0	
8MO-MC-6RT	8MO-1-6RT	8	3/8	39,3	18,6	31,8	14,2	18,0	
8MO-MC-8RT	8MO-1-8RT	8	1/2	45,6	18,6	38,1	19,1	22,0	
10MO-MC-2RT	10MO-1-2RT	10	1/8	36,2	19,5	28,6	9,5	18,0	
10MO-MC-4RT	10MO-1-4RT	10	1/4	40,9	19,5	33,3	14,2	18,0	
10MO-MC-6RT	10MO-1-6RT	10	3/8	40,9	19,5	33,3	14,2	18,0	
10MO-MC-8RT	10MO-1-8RT	10	1/2	46,5	19,5	38,9	19,1	22,0	
12MO-MC-4RT	12MO-1-4RT	12	1/4	43,4	22,0	33,3	14,2	22,0	
12MO-MC-6RT	12MO-1-6RT	12	3/8	43,4	22,0	33,3	14,2	22,0	
12MO-MC-8RT	12MO-1-8RT	12	1/2	49,0	22,0	33,3	19,1	22,0	
12M O-MC-12RT	12MO-1-12RT	12	3/4	49,5	22,0	40,4	19,1	27,0	
15M O-MC-8RT	15MO-1-8RT	15	1/2	49,0	22,0	38,9	19,1	24,0	
16M O-MC-6RT	16MO-1-6RT	16	3/8	44,2	22,0	34,1	14,2	24,0	
16M O-MC-8RT	16MO-1-8RT	16	1/2	49,0	22,0	38,9	19,1	24,0	
16M O-MC-12RT	16MO-1-12RT	16	3/4	49,5	22,0	40,5	19,1	24,0	
18M O-MC-1-8RT	18MO-1-8RT	18	1/2	50,6	22,0	40,4	19,1	27,0	
18M O-MC-1-12RT	18MO-1-12RT	18	3/4	50,6	22,0	40,4	19,1	27,0	
20M O-MC-1-8RT	20MO-1-8RT	20	1/2	52,3	22,0	42,2	19,1	30,0	
20M O-MC-1-12RT	20MO-1-12RT	20	3/4	52,3	22,0	42,2	19,1	30,0	
22M O-MC-1-12RT	22MO-1-12RT	20	3/4	52,3	22,0	42,2	19,1	30,0	
25M O-MC-12RT	25MO-1-12RT	25	3/4	57,5	26,5	45,2	19,1	35,0	
25MO-MC-16RT	25MO-1-16RT	25	1	62,3	26,5	50,0	23,9	35,0	

BSPP male connector for fractional tube

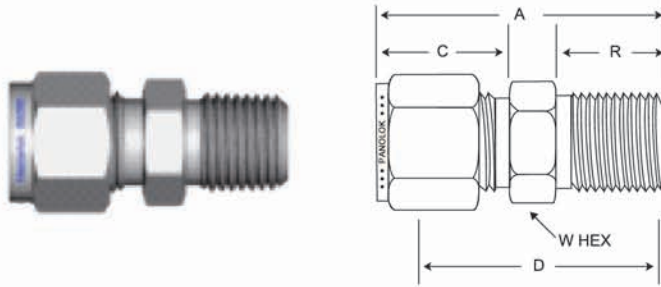


PANOLOK PARTNO.	INTER CHANGES WITH	INCHES								
		TUBE O.D.	BSPT THREAD	A	C	D	R	X	W HEX	BORE
2-MC-2RS	200-1-2RS	1/8	1/8	1.18	0.60	.922	0.28	0.54	9/16	0.16
2-MC-4RS	200-1-4RS	1/8	1/4	1.27	0.60	1.13	0.44	0.70	3/4	0.09
2-MC-6RS	200-1-6RS	1/8	3/8	1.46	0.60	1.172	0.44	0.86	7/8	0.28
4-MC-6RS	400-1-6RS	1/4	1/8	1.28	0.70	.98	0.28	0.54	9/16	0.16
4-MC-4RS	400-1-4RS	1/4	1/4	1.49	0.70	1.19	0.44	0.70	3/4	0.19
4-MC-6RS	400-1-6RS	1/4	3/8	1.55	0.70	1.25	0.44	0.86	7/8	0.19
4-MC-8RS	400-1-8RS	1/4	1/2	1.77	0.70	1.47	0.56	1.01	1-1/16	0.19
6-MC-2RS	600-1-2RS	3/8	1/8	1.35	0.76	1.06	0.28	0.54	5/8	0.16
6-MC-4RS	600-1-4RS	3/8	1/4	1.54	0.76	1.25	0.44	0.70	3/4	0.25
6-MC-6RS	600-1-6RS	3/8	3/8	1.57	0.76	1.28	0.44	0.86	7/8	0.28
6-MC-8RS	600-1-8RS	3/8	1/2	1.82	0.76	1.53	0.56	1.01	1-1/16	0.28
8-MC-4RS	810-1-4RS	1/2	1/4	1.66	0.86	1.28	0.44	0.70	13/16	0.25
8-MC-6RS	810-1-6RS	1/2	3/8	1.69	0.86	1.31	0.44	0.86	7/8	0.31
8-MC-8RS	810-1-8RS	1/2	1/2	1.91	0.86	1.53	0.56	1.01	1-1/16	0.41
12-MC-8RS	1210-1-8RS	3/4	1/2	1.93	0.86	1.531	0.56	1.01	1-1/16	0.41
12-MC-12RS	1210-1-12RS	3/4	3/4	2.07	0.86	1.69	0.63	1.25	1-3/8	0.63
16-MC-8RS	1610-1-8RS	1	1/2	2.21	1.04	1.719	0.56	1.01	1-3/8	0.41
16-MC-16RS	1610-1-16RS	1	1	2.35	1.04	1.88	0.72	1.52	1-5/8	0.88

BSPP male connector for metric tube

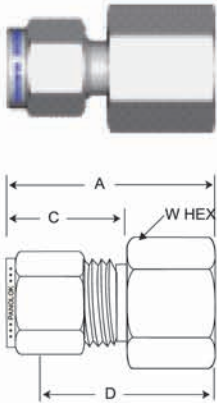
PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS							
		TUBE O.D.	BSPT THREAD	A	C	D	R	X	W HEX
2M O-MC-2RS	2MO-1-2RS	2	1/8	28,4	15,3	21,8	7,1	14,0	13,7
3MO-MC-2RS	3MO-1-2RS	3	1/8	30,0	15,3	23,4	7,1	13,7	14,0
3MO-MC-4RS	3MO-1-4RS	3	1/4	35,3	15,3	28,7	11,2	17,8	19,0
6MO-MC-2RS	6MO-1-2RS	6	1/8	32,5	17,7	25,0	7,1	13,7	14,0
6MO-MC-4RS	6MO-1-4RS	6	1/4	37,7	17,7	30,2	11,2	17,8	19,0
6M O-MC-6RS	6MO-1-6RS	6	3/8	39,0	17,7	31,5	11,2	21,8	22,0
6M O-MC-8RS	6MO-1-8RS	6	1/2	45,6	17,7	38,1	14,2	25,7	27,0
8MO-MC-2RS	8MO-1-2RS	8	1/8	33,1	18,6	25,6	7,1	15,0	13,7
8MO-MC-4RS	8MO-1-4RS	8	1/4	38,5	18,6	31,0	11,2	17,8	19,0
8MO-MC-6RS	8MO-1-6RS	8	3/8	39,8	18,6	32,3	11,2	21,8	22,0
8MO-MC-8RS	8MO-1-8RS	8	1/2	45,6	18,6	38,1	14,2	25,7	27,0
10MO-MC-4RS	10MO-1-4RS	10	1/4	39,4	19,5	31,8	11,2	17,8	19,0
10MO-MC-6RS	10MO-1-6RS	10	3/8	40,6	19,5	33,0	11,2	21,8	22,0
10MO-MC-8RS	10MO-1-8RS	10	1/2	46,5	19,5	38,9	14,2	25,7	27,0
12MO-MC-4RS	12MO-1-4RS	12	1/4	42,6	22,0	32,5	11,2	17,8	22,0
12M O-MC-6RS	12MO-1-6RS	12	3/8	43,1	22,0	33,0	11,2	21,8	22,0
12M O-MC-8RS	12MO-1-8RS	12	1/2	49,0	22,0	38,9	14,2	25,7	27,0
12M O-MC-12RS	12MO-1-12RS	12	3/4	52,8	22,0	42,7	16,0	31,8	35,0
16MO-MC-6RS	16MO-1-6RS	16	3/8	43,5	22,0	33,4	11,2	22,0	21,8
16MO-MC-8RS	16MO-1-8RS	16	1/2	49,0	22,0	38,9	14,2	26,0	27,0
18MO-MC-8RS	18MO-1-8RS	18	1/2	49,0	22,0	38,9	14,2	26,0	27,0
18MO-MC-12RS	18MO-1-12RS	18	3/4	53,1	22,0	43,0	16,0	35,0	32,0
20MO-MC-8RS	20MO-1-8RS	20	1/2	50,5	22,0	40,4	14,2	30,0	25,7
20MO-MC-12RS	20MO-1-12RS	20	3/4	52,8	22,0	42,7	16,0	32,0	35,0
22MO-MC-12RS	22MO-1-12RS	20	3/4	52,8	22,0	42,7	16,0	32,0	35,0
25MO-MC-12RS	25MO-1-12RS	25	3/4	59,5	26,5	47,6	16,0	35,0	31,8
25MO-MC-16RS	25MO-1-16RS	25	1	60,1	26,5	47,6	18,3	39,0	41,0

Thermocouple connector for fractional tube



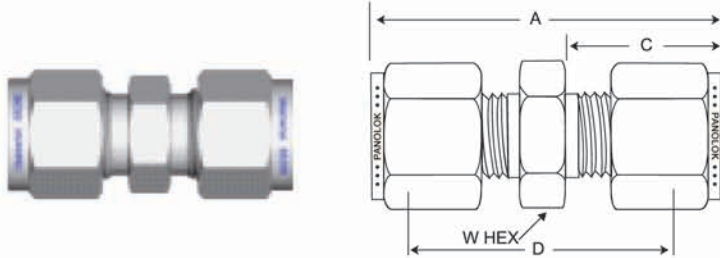
PANOLOK PART NO.	INTER CHANGES WITH	INCHES						
		TUBE O.D	NPT PIPE THREAD	A	C	D	R	W HEX
2-M TC-2BT	200-1-2BT	1/8	1/8	1.20	0.60	0.94	0.38	7/16
2-M TC-4BT	200-1-4BT	1/8	1/4	1.40	0.60	1.14	0.56	9/16
3-M TC-2BT	300-1-2BT	3/16	1/8	1.23	0.64	0.97	0.38	7/16
3-M TC-4BT	300-1-4BT	3/16	1/4	1.43	0.64	1.17	0.56	9/16
4-M TC-2BT	400-1-2BT	1/4	1/8	1.29	0.70	1.00	0.38	1/2
4-M TC-4BT	400-1-4BT	1/4	1/4	1.49	0.70	1.20	0.56	9/16
4-M TC-6BT	400-1-6BT	1/4	3/8	1.60	0.70	1.22	0.56	11/16
4-M TC-8BT	400-1-8BT	1/4	1/2	1.87	0.70	1.47	0.75	7/8
5-M TC-4BT	500-1-4BT	5/16	1/4	1.52	0.73	1.22	0.56	9/16
6-M TC-4BT	600-1-4BT	3/8	1/4	1.57	0.76	1.28	0.56	5/8
6-M TC-6BT	600-1-6BT	3/8	3/8	1.57	0.76	1.28	0.56	11/16
6-M TC-8BT	600-1-8BT	3/8	1/2	1.82	0.76	1.53	0.75	7/8
6-M TC-12BT	600-1-12BT	3/8	3/4	1.83	0.76	1.59	0.75	1-1/16
8-M TC-8BT	810-1-8BT	1/2	1/2	1.93	0.87	1.53	0.76	7/8
8-M TC-12BT	810-1-12BT	1/2	3/4	1.99	0.87	1.59	0.75	1-1/16
10-M TC-12BT	1010-1-12BT	5/8	3/4	1.99	0.87	1.59	0.75	1-1/16
12-M TC-12BT	1210-1-12BT	3/4	3/4	1.99	0.87	1.59	0.75	1-1/16
16-M TC-16BT	1610-1-16BT	1	1	2.46	1.05	1.97	0.94	1-3/8

NPT female connector for fractional tube



PANOLOK PART NO.	INTER CHANGES WITH	INCHES					
		TUBE O.D.	NPT PIPE THREAD	A	C	D	W HEX
2-FC-2	200-7-2	1/8	1/8	1.14	0.60	0.88	9/16
2-FC-4	200-7-4	1/8	1/4	1.32	0.60	1.06	3/4
3-FC-2	300-7-2	3/16	1/8	1.17	0.64	0.91	9/16
3-FC-4	300-7-4	3/16	1/4	1.35	0.64	1.09	3/4
4-FC-2	400-7-2	1/4	1/8	1.23	0.70	0.94	9/16
4-FC-4	400-7-4	1/4	1/4	1.42	0.70	1.13	3/4
4-FC-6	400-7-6	1/4	3/8	1.48	0.70	1.19	7/8
4-FC-8	400-7-8	1/4	1/2	1.67	0.70	1.38	1-1/16
5-FC-2	500-7-2	5/16	1/8	1.27	0.73	0.97	9/16
5-FC-4	500-7-4	5/16	1/4	1.46	0.73	1.16	3/4
5-FC-6	500-7-6	5/16	3/8		0.73	1.219	7/8
6-FC-2	600-7-2	3/8	1/8	1.29	0.76	1.00	5/8
6-FC-4	600-7-4	3/8	1/4	1.48	0.76	1.19	3/4
6-FC-6	600-7-6	3/8	3/8	1.54	0.76	1.25	7/8
6-FC-8	600-7-8	3/8	1/2	1.73	0.76	1.44	1-1/16
6-FC-12	600-7-12	3/8	3/4	1.85	0.76	1.56	1-1/4
8-FC-4	810-7-4	1/2	1/4	1.59	0.87	1.19	13/16
8-FC-6	810-7-6	1/2	3/8	1.65	0.87	1.25	7/8
8-FC-8	810-7-8	1/2	1/2	1.84	0.87	1.44	1-1/16
8-FC-12	810-7-12	1/2	3/4	1.96	.87	1.56	1-1/4
10-FC-6	1010-7-6	5/8	3/8	1.65	0.87	1.25	15/16
10-FC-8	1010-7-8	5/8	1/2	1.84	0.87	1.44	1-1/16
10-FC-12	1010-7-12	5/8	3/4	1.96	0.87	1.56	1-3/8
12-FC-8	1210-7-8	3/4	1/2	1.84	0.87	1.44	1-1/16
12-FC-12	1210-7-12	3/4	3/4	1.96	0.87	1.56	1-3/8
14-FC-12	1410-7-12	7/8	3/4	1.96	0.87	1.56	1-3/8
16-FC-12	1610-7-12	1	3/4	2.1 5	1.05	1.66	1-3/8
16-FC-16	1610-7-16	1	1	2.46	1.05	1.97	1-5/8

Union for fractional tube

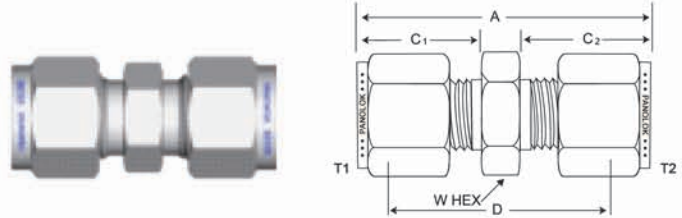


PANOLOK PART NO.	INTER CHANGES WITH	INCHES				
		TUBE O.D.	A	C	D	W HEX
2-UN	200-6	1/8	1.39	0.60	0.88	7/16
3-UN	300-6	3/16	1.48	0.64	0.95	7/16
4-UN	400-6	1/4	1.62	0.70	1.03	1/2
5-UN	500-6	5/16	1.70	0.73	1.11	9/16
6-UN	600-6	3/8	1.77	0.76	1.19	5/8
8-UN	810-6	1/2	2.02	0.87	1.22	13/16
10-UN	1010-6	5/8	2.05	0.87	1.25	15/16
12-UN	1210-6	3/4	2.11	0.87	1.31	1-1/16
14-UN	1410-6	7/8	2.18	0.87	1.38	1-1/16
16-UN	1610-6	1	2.57	1.05	1.59	1-3/8

Union for metric tube

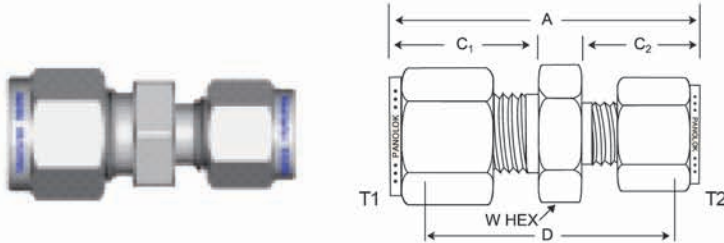
MASTERLOK PART NO.	INTER CHANGES WITH	MILLIMETERS				
		TUBE O.D.	A	C	D	W HEX
3M O-UN	3MO-6	3	35,3	15,3	22,1	12,0
4M O-UN	4MO-4	4	37,4	16,1	24,2	12,0
6M O-UN	6MO-6	6	41,2	17,7	26,2	14,0
8M O-UN	8MO-6	8	43,2	18,6	28,2	15,0
10M O-UN	10MO-6	10	46,2	19,5	31,0	18,0
12M O-UN	12MO-6	12	51,2	22,0	31,0	22,0
14M O-UN	14MO-6	14	52,0	22,0	31,8	24,0
15M O-UN	15MO-6	15	52,0	22,0	31,8	24,0
16M O-UN	16MO-6	16	52,0	22,0	31,8	24,0
18M O-UN	18MO-6	18	53,5	22,0	33,3	27,0
20M O-UN	20MO-6	20	55,0	22,0	34,8	30,0
22M O-UN	22MO-6	22	55,0	22,0	34,8	30,0
25M O-UN	25MO-6	25	65,1	26,5	40,5	35,0

Conversion union metric tube to inch tube



PANOLOK PART NO.	INTER CHANGES WITH	TUBE O.D.		MILLIMETERS				
		T1	T2	A	C1	C2	D	W HEX
3M O-UN-2	3MO-6-2	3	1/8	36,3	15,3	15,3	22,6	12,0
4M O-UN-2	4MO-6-2	4	1/8	36,5	16,1	15,3	23,6	12,0
4M O-UN-4	4MO-6-4	4	1/4	39,3	16,1	17,7	26,4	14,0
6M O-UN-2	6MO-6-2	6	1/8	38,5	17,7	15,3	24,6	14,0
6M O-UN-4	6MO-6-4	6	1/4	41,1	17,7	17,7	25,9	14,0
6M O-UN-5	6MO-6-5	6	5/16	42,3	17,7	18,8	27,2	14,0
8M O-UN-4	8MO-6-4	8	1/4	42,3	18,6	17,7	27,2	15,0
8M O-UN-6	8MO-6-6	8	6	44,0	18,6	19,3	19,1	15,0
10M O-UN-2	10MO-6-2	10	1/8	41,8	19,5	15,3	27,9	18,0
10M O-UN-4	10MO-6-4	10	1/4	44,5	19,5	17,7	29,2	18,0
10M O-UN-6	10MO-6-6	10	3/8	46,0	19,5	19,3	30,7	18,0
12M O-UN-6	12MO-6-6	12	3/8	48,1	22,0	19,3	30,7	22,0
12M O-UN-8	12MO-6-8	12	1/2	51,1	22,0	21,8	31,0	22,0
15M O-UN-8	15MO-6-8	15	1/2	52,0	22,0	21,8	32,0	24,0
16M O-UN-6	16MO-6-6	16	3/8	52,0	22,0	19,8	34,3	24,0
18M O-UN-12	18MO-6-12	18	3/4	53,5	22,0	21,8	33,5	27,0

Reducing union for fractional tube

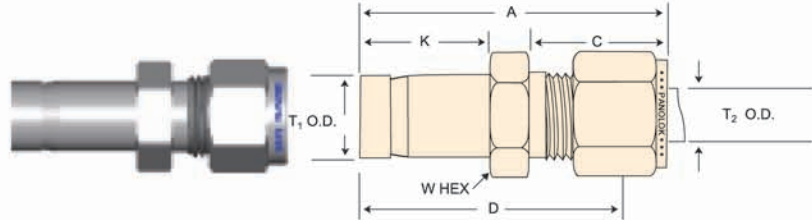


PANOLOK PART NO.	INTER CHANGES WITH	INCHES						
		T ₁ TUBE O.D.	T ₂ TUBE O.D.	A	D	C ₁	C ₂	W HEX
3-RU-2	300-6-2	3/16	1/8	1.44	0.92	0.64	0.60	7/16
4-RU-2	400-6-2	1/4	1/8	1.52	0.97	0.70	0.60	1/2
4-RU-3	400-6-3	1/4	3/16	1.55	1.00	0.70	0.64	1/2
5-RU-2	500-6-2	5/16	1/8	1.58	1.03	0.73	0.60	9/16
5-RU-4	500-6-4	5/16	1/4	1.67	1.08	0.73	0.70	9/16
6-RU-2	600-6-2	3/8	1/8	1.61	1.06	0.76	0.60	5/8
6-RU-4	600-6-4	3/8	1/4	1.71	1.13	0.76	0.70	5/8
6-RU-5	600-6-5	3/8	5/16	1.75	1.16	0.76	0.73	5/8
8-RU-2	810-6-2	1/2	1/8	1.75	1.09	0.87	0.60	13/16
8-RU-4	810-6-4	1/2	1/4	1.85	1.16	0.87	0.70	13/16
8-RU-6	810-6-6	1/2	3/8	1.91	1.22	0.87	0.76	13/16
10-RU-6	1010-6-6	5/8	3/8	1.94	1.25	0.87	0.76	15/16
10-RU-8	1010-6-8	5/8	1/2	2.05	1.25	0.87	0.87	15/16
12-RU-4	1210-6-4	3/4	1/4	1.95	1.25	0.87	0.76	1-1/16
12-RU-6	1210-6-6	3/4	3/8	2.00	1.31	0.87	0.76	1-1/16
12-RU-8	1210-6-8	3/4	1/2	2.11	1.31	0.87	0.87	1-1/16
12-RU-10	1210-6-10	3/4	5/8	2.11	1.31	0.87	0.87	1-1/16
16-RU-8	1610-6-8	1	1/2	2.39	1.50	1.05	0.87	1-3/8
16-RU-12	1610-6-12	1	3/4	2.39	1.50	1.05	0.87	1-3/8

Reducing union for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS						
		T ₁ TUBE O.D.	T ₂ TUBE O.D.	A	C ₁	C ₂	D	W HEX
3M O-RU-2M O	3MO-6-2M	3	2	35,8	15,3	15,3	22,6	12,0
6M O-RU-2M O	6MO-6-2M	6	2	38,7	17,7	15,3	24,6	14,0
6M O-RU-3M O	6MO-6-3M	6	3	38,7	17,7	15,3	24,6	14,0
6M O-RU-4M O	6MO-6-4M	6	4	39,5	17,7	16,1	25,4	14,0
8M O-RU-6M O	8MO-6-6M	8	6	42,4	18,6	17,7	27,4	15,0
10M O-RU-6M O	10MO-6-6M	10	6	44,5	19,5	17,7	29,4	18,0
10M O-RU-8M O	10MO-6-8M	10	8	44,5	19,5	18,6	29,4	18,0
12M O-RU-8M O	12MO-6-8M	12	6	47,0	22,0	17,7	29,4	22,0
12M O-RU-8M O	12MO-6-8M	12	8	47,8	22,0	18,6	30,2	22,0
12M O-RU-10M O	12MO-6-10M	12	10	48,7	22,0	19,5	31,0	22,0
16M O-RU-10M O	16MO-6-10M	16	10	49,5	22,0	19,5	31,8	24,0
16M O-RU-12M O	16MO-6-12M	16	12	52,0	22,0	22,0	31,8	24,0
18M O-RU-12M O	18MO-6-12M	18	12	53,5	22,0	22,0	33,3	27,0
25M O-RU-18M O	25MO-6-18M	25	18	60,5	26,5	22,0	38,1	35,0
25M O-RU-20M O	25MO-6-20M	25	20	62,3	26,5	22,0	39,9	35,0

Tube end reducer for fractional tube



PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS				INCH
		TUBE O.D.	A	C	L	W HEX
3M O-UC	3MO-4	3	44,7	22,3	15,7	7/16
4M O-UC	4MO-4	4	50,8	25,4	18,8	1/2
6M O-UC	6MO-6	6	53,9	27,0	19,6	1/2
8M O-UC	8MO-8	8	59,7	29,9	22,4	5/8
10M O-UC	10MO-10	10	67,0	33,5	25,9	13/16
12M O-UC	12MO-12	12	72,0	36,0	25,9	13/16
16M O-UC	16MO-16	16	74,0	37,0	26,9	15/16
18M O-UC	18MO-18	18	16,6	38,3	28,2	1-1/16

Tube end converter for metric tube

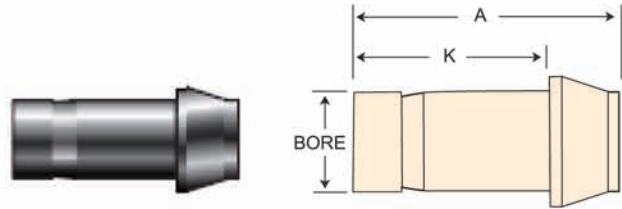
PANOLOK PART NO.	INTER CHANGES WITH	TUBE O.D.		MILLIMETERS					
		T 1INCH	T 2MM	A	C	D	K	W HEX	BORE
3M O-RD-2	3MO-R-2	1/8	3	34,3	15,3	27,7	13,5	12,0	1,4
3M O-RD-4	3MO-R-4	1/4	3	36,1	15,3	29,5	16,0	12,0	4,8
6M O-RD-4	6MO-R-4	1/4	6	39,3	17,7	31,8	16,0	14,0	4,8
6M O-RD-5	6MO-R-5	5/16	6	40,0	17,7	32,5	16,8	14,0	6,4
6M O-RD-6	6MO-R-6	3/8	6	40,8	17,7	33,3	17,5	14,0	7,1
6M O-RD-8	6MO-R-8	1/2	6	46,4	17,7	38,9	23,1	14,0	9,9
8M O-RD-6	8MO-R-6	3/8	8	42,0	18,6	34,5	17,5	15,0	7,1
8M O-RD-8	8MO-R-8	1/2	8	47,5	18,6	40,1	23,1	15,0	9,9
10M O-RD-6	10MO-R-6	3/8	10	44,4	19,5	36,8	17,5	18,0	7,1
10M O-RD-8	10MO-R-8	1/2	10	47,6	19,5	41,4	23,1	18,0	9,9
12M O-RD-8	12MO-R-8	1/2	12	52,3	22,0	42,2	23,1	22,0	9,9
12M O-RD-12	12MO-R-12	3/4	12	53,8	22,0	43,7	24,6	22,0	15,1
18M O-RD-12	18MO-R-12	3/4	18	57,5	22,0	47,5	24,6	27,0	15,1



Tube end converter for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	INCHES							
		T1TUBE O.D.	T2TUBE O.D.	A	C	D	K	W HEX	BORE
2-RD-2	200-R-2	1/8	1/8	1.34	0.43	1.09	0.54	7/16	0.07
2-RD-2	200-R-3	3/16	1/8	1.35	0.60	1.09	0.58	7/16	0.09
2-RD-4	200-R-4	1/4	1/8	1.42	0.60	1.16	0.63	7/16	0.09
2-RD-6	200-R-6	3/8	1/8	1.48	0.60	1.22	0.69	7/16	0.09
2-RD-8	200-R-8	1/2	1/8	1.74	0.60	1.48	0.91	9/16	0.09
3-RD-2	300-R-2	1/8	3/16	1.37	0.63	1.11	0.53	7/16	0.08
3-RD-4	300-R-4	1/4	3/16	1.46	0.63	1.20	0.63	7/16	0.13
4-RD-2	400-R-2	1/8	1/4	1.45	0.70	1.16	0.53	1/2	0.08
4-RD-2	400-R-3	3/16	1/4	1.48	0.60	1.19	0.56	1/2	0.12
4-RD-4	400-R-4	1/4	1/4	1.54	0.70	1.25	0.63	1/2	0.19
4-RD-5	400-R-5	5/16	1/4	1.57	0.70	1.28	0.66	1/2	0.19
4-RD-6	400-R-6	3/8	1/4	1.60	0.70	1.31	0.69	1/2	0.19
4-RD-8	400-R-8	1/2	1/4	1.82	0.70	1.53	0.91	9/16	0.19
4-RD-10	400-R-10	5/8	1/4	1.89	0.70	1.60	0.97	11/16	0.19
4-RD-12	400-R-12	3/4	1/4	1.88	0.70	1.59	0.97	13/16	0.19
5-RD-6	500-R-6	3/8	5/16	1.65	0.73	1.36	0.69	9/16	0.25
5-RD-8	500-R-8	1/2	5/16	1.87	0.73	1.58	0.91	9/16	0.25
6-RD-4	600-R-4	1/4	3/8	1.63	0.76	1.34	0.63	5/8	0.19
6-RD-6	600-R-6	3/8	3/8	1.70	0.76	1.41	0.69	5/8	0.28
6-RD-8	600-R-8	1/2	3/8	1.91	0.76	1.62	0.91	5/8	0.28
6-RD-10	600-R-10	5/8	3/8	1.98	0.76	1.69	0.97	11/16	0.28
6-RD-12	600-R-12	3/4	3/8	1.98	0.76	1.69	0.97	13/16	0.28
8-RD-4	810-R-4	1/4	1/2	1.77	0.87	1.37	0.63	13/16	0.19
8-RD-6	810-R-6	3/8	1/2	1.84	0.87	1.44	0.69	13/16	0.19
8-RD-10	810-R-10	5/8	1/2	2.12	0.87	1.72	0.97	13/16	0.41
8-RD-12	810-R-12	3/4	1/2	2.12	0.87	1.72	0.97	13/16	0.41
8-RD-16	810-R-16	1	1/2	2.37	0.87	1.97	1.22	1-1/16	0.41
10-RD-12	1010-R-12	3/4	5/8	2.15	0.87	1.75	0.97	15/16	0.50
10-RD-14	1010-R-14	7/8	5/8	2.21	0.87	1.81	1.03	15/16	0.50
10-RD-16	1010-R-16	1	5/8	2.40	0.87	2.00	1.22	1-1/16	0.50
12-RD-8	1210-R-8	1/2	3/4	2.15	0.87	1.75	0.91	1-1/16	0.39
12-RD-16	1210-R-16	1	3/4	2.46	0.87	2.06	1.22	1-1/16	0.63
16-RD-24	1610-R-24	1-1/2	1	3.5 2	1.05	3.03	2.05	1-5/8	0.88

Port connector for fractional tube

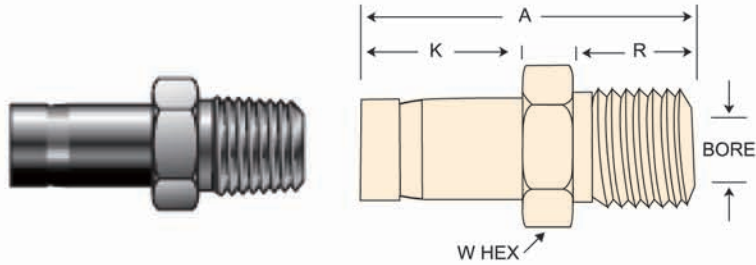


PANOLOK PART NO.	INTER CHANGES WITH	INCHES			
		TUBE O.D.	A	K	BORE
2-PO-2	201-PC	1/8	0.95	0.54	.078
2-PO-4	401- PC -2	1/8-1/4	1.05	0.54	.078
2-PO-6	601-PC-2	1/8-3/8	1.09	0.54	.031
3-PO-3	301-PC	3/16	.981	0.67	0.116
4-PO-4	401-PC	1/4	1.07	0.76	.156
4-PO-6	601-PC-4	1/4-3/8	1.15	0.64	0.156
4-PO-8	811-PC-4	1/4-1/2	1.36	0.64	0.156
6-PO-6	601-PC	3/8	1.16	0.84	0.281
6-PO-8	811-PC-6	3/8-1/2	1.40	0.72	0.281
8-PO-8	811-PC	1/2	1.59	1.11	0.375
8-PO-12	1211-PC-8	1/2-3/4	1.72	0.91	0.375
12-PO-12	1211-PC	3/4	1.65	1.16	0.578
16-PO-16	1611-PC	1	2.12	1.44	0.813

Port connector for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS				
		TUBE O.D.		A	K	BORE
		T1	T2			
3M O-PO	3M1-PC	3	3	22,2	15,7	1,6
6M O-PO	6M1-PC	6	6	24,6	18,7	3,0
8M O-PO	8M1-PC	8	8	25,9	20,0	5,0
10M O-PO	10M1-PC	10	10	26,1	20,0	6,0
12M O-PO	12M1-PC	12	12	35,8	26,0	8,0
12M O-PO	16M1-PC	16	16	40,5	27,7	12,0
18M O-PO	18M1-PC	18	18	40,8	27,7	13,0
6M O-PO-3MO	6M1-PC-3M	3	6	22,6	13,5	1,6
8M O-PO-6MO	8M1-PC-6M	6	8	25,5	16,1	3,0
10MO-PO-6MO	10M1-PC-6M	6	10	25,5	16,1	3,0
10MO-PO-6MO	12M1-PC-6M	6	12	31,2	16,1	3,0
10MO-PO-8MO	10M1-PC-8M	8	10	29,5	16,8	5,0
12MO-PO-8MO	12M1-PC-8M	8	12	31,4	16,8	5,0

Male adapter male NPT to tube for fractional tube

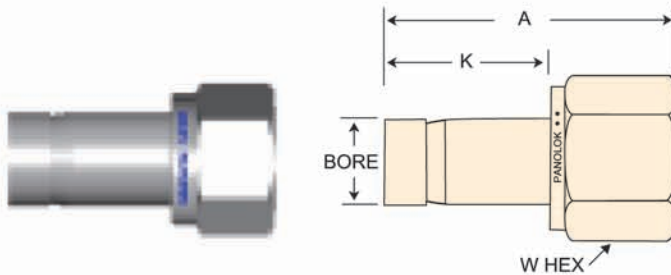


PANOLOK PART NO.	INTER CHANGES WITH	INCHES						
		TUBE O.D.	NPT PIPE THREAD	A	R	K	W HEX	BORE
2-MAD-2	2-TA-1-2	1/8	1/8	1.16	0.38	0.54	7/16	0.078
2-MAD-4	2-TA-1-4	1/8	1/4	1.38	0.56	0.54	9/16	0.078
3-MAD-2	3-TA-1-2	3/16	1/8	1.20	0.38	0.58	7/16	0.116
3-MAD-4	3-TA-1-4	3/16	1/4	1.42	0.56	0.58	9/16	0.116
4-MAD-2	4-TA-1-2	1/4	1/8	1.25	0.38	0.63	7/16	0.156
4-MAD-4	4-TA-1-4	1/4	1/4	1.46	0.56	0.63	9/16	0.156
4-MAD-6	4-TA-1-6	1/4	3/8	1.49	0.56	0.63	11/16	0.156
4-MAD-8	4-TA-1-8	1/4	1/2	1.71	0.75	0.63	7/8	0.156
5-MAD-2	5-TA-1-2	5/16	1/8	1.29	0.38	0.66	7/16	0.219
5-MAD-4	5-TA-1-4	5/16	1/4	1.50	0.56	0.66	9/16	0.219
5-MAD-6	5-TA-1-6	5/16	3/8	1.53	0.56	0.66	11/16	0.219
5-MAD-8	5-TA-1-8	5/16	1/2	1.74	0.75	0.66	7/8	0.219
6-MAD-2	6-TA-1-2	3/8	1/8	1.32	0.38	0.69	7/16	0.281
6-MAD-4	6-TA-1-4	3/8	1/4	1.53	0.56	0.69	9/16	0.281
6-MAD-6	6-TA-1-6	3/8	3/8	1.56	0.56	0.69	11/16	0.281
6-MAD-8	6-TA-1-8	3/8	1/2	1.78	0.75	0.69	7/8	0.281
8-MAD-4	8-TA-1-4	1/2	1/4	1.75	0.56	0.91	9/16	0.281
8-MAD-6	8-TA-1-6	1/2	3/8	1.78	0.56	0.91	11/16	0.375
8-MAD-8	8-TA-1-8	1/2	1/2	2.00	0.75	0.91	7/8	0.375
10-MAD-8	10-TA-1-8	5/8	1/2	2.06	0.75	0.97	7/8	0.469
12-MAD-8	12-TA-1-8	3/4	1/2	2.06	0.75	0.97	7/8	0.469
12-MAD-12	12-TA-1-12	3/4	3/4	2.06	0.75	0.97	1-1/16	0.579
12-MAD-16	12-TA-1-16	3/4	1	2.41	0.94	0.97	1-3/8	0.813
16-MAD-12	16-TA-1-12	1	3/4	2.31	0.75	1.22	1-1/16	0.813
16-MAD-16	16-TA-1-16	1	1	2.68	0.94	1.22	1-3/8	0.813

Male adapter male NPT to tube for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS						
		TUBE O.D.	NPT THREAD	A	K	R	W HEX	BORE
3M O-MAD-2	3-MTA-1-2	3	1/8	29,4	13,5	9,7	12,0	1,8
4M O-MAD-2	4-MTA-1-2	4	1/8	29,4	14,3	9,7	12,0	2,0
6M O-MAD-2	6-MTA-1-2	6	1/8	31,0	15,9	9,7	12,0	4,0
6M O-MAD-4	6-MTA-1-4	6	1/4	35,7	15,9	14,2	14,0	4,0
6M O-MAD-6	6-MTA-1-6	6	3/8	36,5	16,1	14,2	18,0	3,0
6M O-MAD-8	6-MTA-1-8	6	1/2	42,1	16,1	19,1	22,0	3,0
8M O-MAD-4	8-MTA-1-4	8	1/4	37,3	16,7	14,2	14,0	6,4
8M O-MAD-6	8-MTA-1-6	8	3/8	38,3	16,7	14,2	12,0	6,4
10M O-MAD-4	10-MTA-1-4	10	1/4	38,1	17,5	14,2	14,0	7,1
10M O-MAD-6	10-MTA-1-6	10	3/8	43,7	17,5	14,2	18,0	7,5
10M O-MAD-8	10-MTA-1-8	10	1/2	44,5	17,5	19,1	22,0	7,5
12M O-MAD-4	12-MTA-1-4	12	1/4	43,7	23,0	14,2	14,0	7,1
12M O-MAD-6	12-MTA-1-6	12	3/8	44,5	23,0	14,2	27,0	9,1
12M O-MAD-8	12-MTA-1-8	12	1/2	49,2	23,0	19,1	22,0	9,1
16M O-MAD-8	16-MTA-1-8	16	1/2	50,8	24,6	19,1	22,0	12,7
16M O-MAD-12	16-MTA-1-12	16	3/4	51,6	24,6	19,1	27,0	12,7
18M O-MAD-8	18-MTA-1-8	18	1/2	50,8	24,6	19,1	22,0	12,7
18M O-MAD-12	18-MTA-1-12	18	3/4	51,6	24,6	19,1	27,0	14,0
20M O-MAD-8	20-MTA-1-8	20	1/2	51,8	25,6	19,1	22,0	15,0
20M O-MAD-12	20-MTA-1-12	20	3/4	52,4	25,4	19,1	27,0	15,1
25M O-MAD-16	25-MTA-1-16	25	1	65,9	31,8	23,9	35,0	19,8

Female NPT to tube for fractional tube

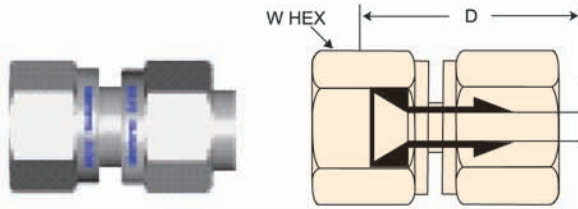


PANOLOK PART NO.	INTER CHANGES WITH	INCHES					
		TUBE O.D.	NPT PIPE THREAD	A	K	W HEX	BORE
2-FAD-2	2-TA-7-2	1/8	1/8	1.23	0.53	9/16	0.093
2-FAD-4	2-TA-7-4	1/8	1/4	1.38	0.53	3/4	0.093
3-FAD-2	3-TA-7-2	3/16	1/8	1.25	0.56	9/16	0.116
3-FAD-4	3-TA-7-4	3/16	1/4	1.42	0.56	3/4	0.116
4-FAD-2	4-TA-7-2	1/4	1/8	1.31	0.63	9/16	0.188
4-FAD-4	4-TA-7-4	1/4	1/4	1.47	0.63	3/4	0.188
4-FAD-6	4-TA-7-6	1/4	3/8	1.56	0.63	7/8	0.188
4-FAD-8	4-TA-7-8	1/4	1/2	1.80	0.63	1-1/16	0.188
5-FAD-2	5-TA-7-2	5/16	1/8	1.34	0.63	9/16	0.219
5-FAD-4	5-TA-7-4	5/16	1/4	1.50	0.66	3/4	0.219
5-FAD-6	5-TA-7-6	5/16	3/8	1.59	0.66	7/8	0.219
6-FAD-2	6-TA-7-2	3/8	1/8	1.36	0.69	9/16	0.281
6-FAD-8	6-TA-7-4	3/8	1/4	1.55	0.69	3/4	0.281
6-FAD-6	6-TA-7-6	3/8	3/8	1.59	0.69	7/8	0.281
6-FAD-8	6-TA-7-8	3/8	1/2	1.84	0.69	1-1/16	0.281
8-FAD-4	8-TA-7-4	1/2	1/4	1.72	0.91	3/4	0.391
8-FAD-6	8-TA-7-6	1/2	3/8	1.80	0.91	7/8	0.391
9-FAD-8	8-TA-7-8	1/2	1/2	2.10	0.91	1-1/16	0.390
10-FAD-6	10-TA-7-6	5/8	3/8	1.86	0.97	7/8	0.469
10-FAD-8	10-TA-7-8	5/8	1/2	2.09	0.97	1-1/16	0.469
12-FAD-8	12-TA-7-8	3/4	1/2	2.10	0.97	1-1/16	0.578
12-FAD-12	12-TA-7-12	3/4	3/4	2.16	0.97	1-1/4	0.578
12-FAD-16	12-TA-7-16	3/4	1	2.30	0.97	1-5/8	0.578
14-FAD-12	14-TA-7-12	7/8	3/4	2.22	1.02	1-5/16	0.578
16-FAD-12	16-TA-7-21	1	3/4	2.41	1.22	1-5/16	0.813
16-FAD-16	16-TA-7-16	1	1	2.54	1.22	1-5/8	0.813

Female adapter:Female NPT to tube for metric tube

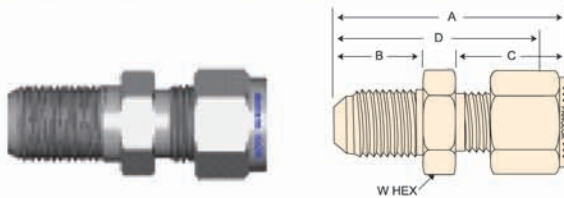
PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS					
		TUBE O.D.	NPT THREAD	A	K	W HEX	BORE
3M O-FAD-2	3-MTA-7-2	3	1/8	31,3	13,5	14,0	1,3
4M O-FAD-2	4-MTA-7-2	4	1/8	29,4	14,3	14,0	2,0
6M O-FAD-2	6-MTA-7-2	6	1/8	29,4	15,9	14,0	4,0
6M O-FAD-4	6-MTA-7-4	6	1/4	34,1	15,9	19,0	4,0
8M O-FAD-2	8-MTA-7-2	8	1/8	35,5	16,7	14,0	6,4
8M O-FAD-4	8-MTA-7-4	8	1/4	35,1	16,7	19,0	6,4
8M O-FAD-6	8-MTA-7-6	8	3/8	36,5	16,7	22,0	6,4
10M O-FAD-4	10-MTA-7-4	10	1/4	37,3	17,5	19,0	7,5
10M O-FAD-6	10-MTA-7-6	10	3/8	37,3	17,5	22,0	7,5
10M O-FAD-8	10-MTA-7-8	10	1/2	42,1	17,5	27,0	7,5
12M O-FAD-4	12-MTA-7-4	12	1/4	41,3	23,0	19,0	9,1
12M O-FAD-6	12-MTA-7-6	12	3/8	42,9	23,0	22,0	9,1
12M O-FAD-8	12-MTA-7-8	12	1/2	47,6	23,0	27,0	9,1
16M O-FAD-8	16-MTA-7-8	16	1/2	49,2	24,6	27,0	12,7
18M O-FAD-12	18-MTA-7-12	18	3/4	52,4	24,6	33,0	14,0
20M O-FAD-8	20-MTA-7-8	20	1/2	50,0	25,6	27,0	15,0
20M O-FAD-12	20-MTA-7-12	20	3/4	53,2	25,4	33,0	15,1
25M O-FAD-16	25-MTA-7-16	25	1	66,7	31,8	41,0	19,8

37° flare (AN) to tube fitting for fractional tube



PANOLOK PART NO.	INTER CHANGES WITH	INCHES		
		TUBE O.D.	D	W HEX
2-AN-2F	200-A-2 ANF	1/8	0.88	3/8
4-AN-4F	400-A-4 ANF	1/4	0.96	9/16
6-AN-6F	600-A-6 ANF	3/8	1.07	11/16
8-AN-8F	810-A-8 ANF	1/2	1.37	7/8
12-AN-12F	1210-A-12 ANF	3/4	1.49	1-1/4
16-AN-16F	1610-A-16 ANF	1	1.80	1-1/2

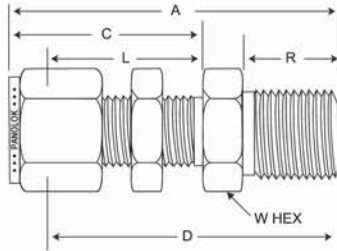
37° flare connector for fractional tube



PANOLOK PART NO.	INTER CHANGES WITH	INCHES						
		FLARE END	TUBE O.D.	A	B	C	D	W HEX
2-AN-2	200-6-2 AN	1/8	1/8	1.28	0.45	0.60	1.02	7/16
2-AN-4	200-6-4 AN	1/4	1/8	1.39	0.55	0.60	1.13	1/2
3-AN-3	300-6-3 AN	3/16	3/16	1.32	0.48	0.64	1.06	7/16
4-AN-4	400-6-4 AN	1/4	1/4	1.48	0.55	0.70	1.19	1/2
5-AN-5	500-6-5 AN	5/16	5/16	1.52	0.55	0.73	1.22	9/16
6-AN-4	600-6-4 AN	1/4	3/8	1.56	0.55	0.76	1.27	5/8
	600-6-6 AN							
6-AN-6	810-6-8 AN	3/8	3/8	1.56	0.56	0.76	1.27	5/8
8-AN-8	1010-6-10 AN	1/2	1/2	1.81	0.66	0.87	1.41	13/16
10-AN-10	1210-6-12 AN	5/8	5/8	1.93	0.76	0.87	1.53	13/16
12-AN-12	AN	3/4	3/4	2.11	0.86	0.87	1.70	1-1/8
16-AN-16	AN	1	1	2.43	0.91	1.05	1.94	1-3/8
	1610-6-16 AN							

BULKHEAD UNION

NPT male bulkhead connector for fractional tube

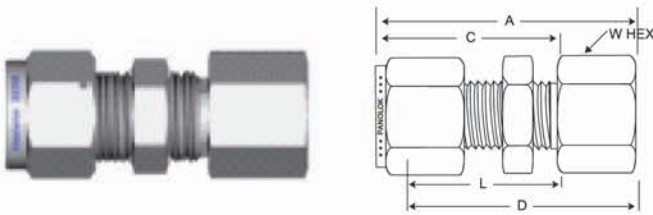


PANOLOK PART NO.	INTER CHANGES WITH	INCHES							
		TUBE O.D.	NPT PIPE THREAD	A	C	D	L	R	W HEX
1-MBC-1	100-11-1	1/16	1/16	1.19	0.68	1.038	0.53	0.38	5/16
1-MBC-2	100-11-2	1/16	1/8	1.27	0.68	1.116	0.53	0.38	7/16
2-MBC-2	200-11-2	1/8	1/8	1.83	1.23	1.571	0.97	0.38	1/2
3-MBC-2	300-11-2	3/16	1/8	1.89	1.26	1.634	1.00	0.38	9/16
4-MBC-2	400-11-2	1/4	1/8	1.95	1.31	1.655	1.02	0.38	5/8
4-MBC-4	400-11-4	1/4	1/4	2.132	1.31	1.842	1.02	0.56	5/8
4-MBC-6	400-11-6	1/4	3/8	1.162	1.31	1.872	1.02	0.56	11/16
4-MBC-8	400-11-8	1/4	1/2	2.374	1.31	2.084	1.02	0.75	7/8
5-MBC-2	500-11-2	5/16	1/8	2.08	1.42	1.779	1.12	0.38	11/16
5-MBC-4	500-11-4	5/16	1/4	2.27	1.42	1.966	1.12	0.56	11/16
6-MBC-2	600-11-2	3/8	1/8	2.08	1.44	1.788	1.15	0.38	3/4
6-MBC-4	600-11-4	3/8	1/4	2.265	1.44	1.975	1.15	0.56	3/4
6-MBC-6	600-11-6	3/8	3/8	2.265	1.44	1.975	1.15	0.56	3/4
6-MBC-8	600-11-8	3/8	1/2	2.48	1.44	2.219	1.15	0.75	7/8
8-MBC-4	810-11-4	1/2	1/4	2.494	1.65	2.094	1.25	0.56	15/16
8-MBC-6	810-11-6	1/2	3/8	2.494	1.65	2.094	1.25	0.56	15/16
8-MBC-8	810-11-8	1/2	1/2	2.712	1.65	2.312	1.25	0.75	15/16
8-MBC-12	810-11-12	1/2	3/4	2.722	1.65	2.322	1.25	0.75	1-1/8
10-MBC-6	1010-11-6	5/8	3/8	2.628	1.68	2.228	1.28	0.56	1-1/16
10-MBC-8	1010-11-8	5/8	1/2	2.816	1.68	2.416	1.28	0.75	1-1/16
12-MBC-8	1210-11-8	3/4	1/2	3.00	1.87	2.601	1.47	0.75	1-3/16
12-MBC-12	1210-11-12	3/4	3/4	3.00	1.87	2.601	1.47	0.75	1-3/16
14-MBC-12	1410-11-12	7/8	3/4	3.31	2.09	2.913	1.69	0.75	1-3/8
16-MBC-12	1610-11-12	1	3/4	3.54	2.27	3.006	1.78	0.75	1-5/8
16-MBC-16	1610-11-16	1	1	3.72	2.27	3.194	1.78	0.94	1-5/8

NPT male bulkhead connector for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS									
		TUBE O.D.	NPT THREAD	A	C	D	L	R	W HEX	BHEAD HOLE DRILL	MAX. BHEAD THICK.
6MO-MBC-2	6MO-11-2	6	1/8	49,6	33,7	42,1	26,2	9,5	16,0	11,5	10,2
6MO-MBC-2	6MO-11-4	6	1/4	53,5	33,7	46,0	26,2	14,3	16,0	11,5	10,2
8MO-MBC-2	8MO-11-2	8	1/8	52,3	36,0	44,8	28,5	9,5	18,0	13,1	11,2
8MO-MBC-4	8MO-11-4	8	1/4	57,5	36,0	50,0	28,5	14,3	18,0	13,1	11,2
10MO-MBC-4	10MO-11-4	10	1/4	58,4	37,0	50,8	29,4	14,3	22,0	16,3	11,2
10MO-MBC-6	10MO-11-6	10	3/8	58,4	37,0	50,8	29,4	14,3	22,0	16,3	11,2
10MO-MBC84	10MO-11-8	10	1/2	63,1	37,0	55,5	29,4	19,0	22,0	16,3	11,2
12MO-MBC-4	12MO-11-4	12	1/4	63,3	10,1	53,2	31,8	14,3	24,0	19,5	12,7
12MO-MBC-6	12MO-11-6	12	3/8	64,5	10,1	54,4	31,8	14,3	24,0	19,5	12,7
12MO-MBC-8	12MO-11-8	12	1/2	67,5	10,1	57,4	31,8	19,0	24,0	19,5	12,7

NPT female bulkhead connector for fractional tube

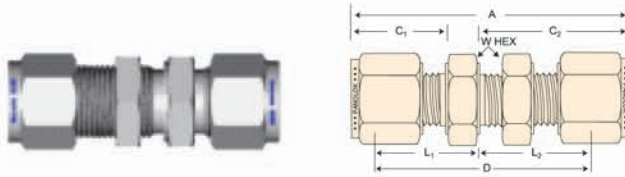


PANOLOK PART NO.	INTER CHANGES WITH	INCHES						
		TUBE O.D.	NPT PIPE THREAD	A	C	D	L	W HEX
2-FBC-2	200-71-2	1/8	1/8	1.76	1.23	1.50	0.97	9/16
3-FBC-2	300-71-2	3/16	1/8	1.79	1.26	1.53	1.00	9/16
4-FBC-2	400-71-2	1/4	1/8	1.86	1.31	1.56	1.02	5/8
4-FBC-4	400-71-4	1/4	1/4	2.04	1.31	1.75	1.02	3/4
5-FBC-2	500-71-2	5/16	1/8	1.96	1.42	1.66	1.12	11/16
5-FBC-8	500-71-8	5/16	1/2	2.38	1.42	2.08	1.12	1-1/16
6-FBC-4	600-71-4	3/8	1/4	2.17	1.44	1.88	1.15	3/4
8-FBC-6	810-71-6	1/2	3/8	2.43	1.65	2.03	1.25	15/16
8-FBC-8	810-71-8	1/2	1/2	2.62	1.65	2.22	1.25	1-1/16
10-FBC-8	1010-71-8	5/8	1/2	2.65	1.68	2.25	1.28	1-1/16
12-FBC-12	1210-71-12	3/4	3/4	2.90	1.87	2.50	1.47	1-3/8
14-FBC-12	1410-71-12	7/8	3/4	3.18	2.09	2.78	1.69	1-3/8
16-FBC-16	1610-71-16	1	1	3.68	2.27	3.19	1.78	1-5/8

NPT female bulkhead connector for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS								
		TUBE O.D.	NPT THREAD	A	C	D	L	W HEX	B'HEAD HOLE DRILL SIZE	MAX. B'HEAD THICK
6MO-FBC-2	6MO-71-2	6	1/8	47,2	33,7	39,7	26,2	16,0	11,5	10,2
6MO-FBC-4	6MO-71-4	6	1/4	52,0	33,7	44,5	26,2	19,0	11,5	10,2
8MO-FBC-2	8MO-71-2	8	1/8	49,6	36,1	42,1	28,5	18,0	13,1	11,2
10MO-FBC-4	10MO-71-4	10	1/4	55,2	37,0	47,6	29,4	19,0	16,3	11,2
12MO-FBC-6	12MO-71-6	12	3/8	60,9	41,9	50,8	31,8	24,0	19,5	12,7
12MO-FBC-8	12MO-71-8	12	1/2	66,4	41,9	56,3	31,8	17,0	19,5	12,7

Bulkhead union for fractional tube

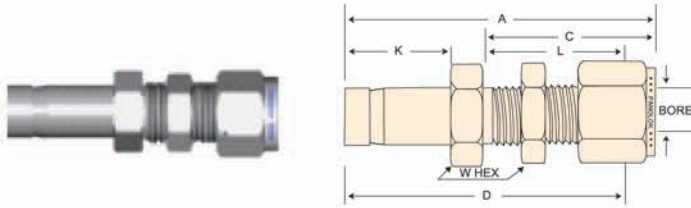


PANOLOK PART NO.	INTER CHANGES WITH	INCHES									
		TUBE O.D.	A	C1	D	C2	L1	L2	W HEX	BULKHEAD HOLE DRILLSIZE	MAX. BULKHEAD THICKNESS
2-BU-2	200-61	1/8	1.02	0.60	1.50	1.23	0.34	0.97	1/2	21/64	1/2
3-BU-3	300-61	3/16	2.11	0.64	1.59	1.26	0.41	1.00	9/16	25/64	1/2
4-BU-2	400-61-2	1/4	2.17	0.70	1.03	1.23	0.41	0.97	5/8	21/64	1/2
4-BU-3	400-61	1/4	2.27	0.70	1.69	1.31	0.41	1.02	5/8	29/64	17/32
5-BU-5	500-61	5/16	2.40	0.73	1.81	1.42	0.44	1.12	11/16	33/64	9/16
6-BU-6	600-61	3/8	2.46	0.76	1.88	1.44	0.47	1.15	3/4	37/64	9/16
3-BU-8	810-61	1/2	2.80	0.87	2.00	1.65	0.47	1.25	15/16	49/64	19/32
4-BU-10	1010-61	5/8	2.86	0.87	2.06	1.68	0.47	1.28	1-1/16	57/64	19/32
4-BU-12	1210-61	3/4	3.11	0.87	2.31	1.87	0.47	1.47	1-3/16	1-1/64	25/32
5-BU-14	1410-61	7/8	3.33	0.87	2.53	2.09	0.47	1.69	1-3/8	1-9/64	15/16
5-BU-16	1610-61	1	3.78	1.05	2.81	1.27	0.56	1.78	1-5/8	1-21/64	15/16

Bulkhead union for metric tube

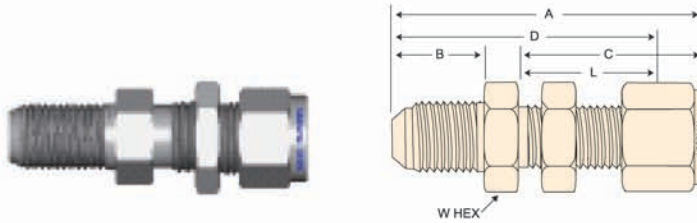
PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS									
		TUBE O.D.	A	C1	C2	D	L	W HEX	B'HEAD HOLE DRILL SIZE	MAX. B'HEAD THICK.	
3MO-BU-2	3MO-61	3	51,3	15,3	31,2	38,2	24,6	14,0	8,3	12,7	
4MO-BU-3	4MO-61	4	53,7	16,1	32,0	40,5	25,4	14,0	9,9	12,7	
6MO-BU-2	6MO-61	6	57,9	17,7	33,7	42,9	26,2	16,0	11,5	10,2	
8MO-BU-3	8MO-61	8	61,0	18,6	36,0	46,0	28,5	18,0	13,1	11,2	
10MO-BU-5	10MO-61	10	63,6	19,5	37,0	48,4	29,4	22,0	16,3	11,2	
12MO-BU-12	12MO-61	12	71,0	22,0	41,9	50,8	31,8	24,0	19,5	12,7	
15MO-BU-15	15MO-61	15	72,5	22,0	42,6	52,3	32,5	27,0	22,5	12,7	
16MO-BU-16	16MO-61	16	72,6	22,0	42,6	52,4	32,5	27,0	22,5	12,7	
18MO-BU-18	18MO-61	18	78,9	22,0	47,4	58,7	37,3	30,0	26,0	16,8	
20MO-BU-20	20MO-61	20	88,2	22,0	51,0	68,0	40,9	35,0	29,0	19,0	
25MO-BU-25	25MO-61	25	95,8	26,5	54,4	71,4	42,2	41,0	33,8	24,0	

Tube end bulkhead adapter for fractional tube



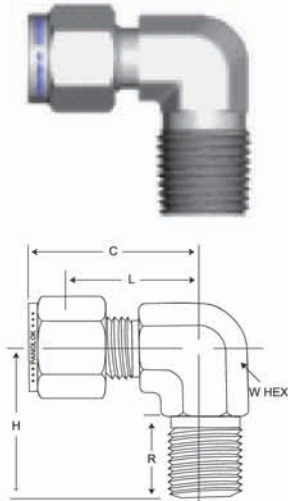
PANOLOK PART NO.	INTER CHANGES WITH	INCHES							
		TUBE O.D.	A	C	L	K	D	BORE	W HEX
2-BAD-2	200-R1-2	1/8	1.95	1.23	.97	0.53	1.69	0.093	1/2
4-BAD-4	400-R1-4	1/4	2.20	1.31	1.02	0.63	1.91	0.187	5/8
6-BAD-6	600-R1-6	3/8	2.42	1.44	1.15	0.69	2.13	0.281	3/4
8-BAD-8	810R1-8	1/2	2.87	1.65	1.25	0.91	2.47	0.406	15/16

37° Flare bulkhead connector for fractional tube



PANOLOK PART NO.	INTER CHANGES WITH	INCHES							
		FLARE END	TUBE O.D.	A	D	C	L	B	W HEX
2-BAN-2	200-61-2 AN	1/8	1/8	1.91	1.65	1.23	0.97	0.45	1/2
2-BAN-4	200-61-4 AN	1/4	1/8	2.04	1.78	1.23	0.97	0.55	5/8
3-BAN-3	300-61-3 AN	3/16	3/16	1.98	1.71	1.26	1.00	0.48	9/16
4-BAN-4	400-61-4 AN	1/4	1/4	2.12	1.83	1.31	1.02	0.55	5/8
5-BAN-5	500-61-5 AN	5/16	5/16	2.21	1.92	1.41	1.12	0.55	11/16
6-BAN-2	600-61-4 AN	1/4	3/8	2.25	1.96	1.44	1.15	0.55	3/4
6-BAN-8	600-61-8 AN	3/8	3/8	2.25	1.96	1.44	.115	0.56	3/4
8-BAN-8	810-61-8 AN	1/2	1/2	2.59	2.19	1.65	1.25	0.66	15/16
10-BAN-10	1010-61-10 AN	5/8	5/8	2.74	2.34	1.68	1.28	0.76	1-1/16
12-BAN-12	1210-61-12 AN	3/4	3/4	3.11	2.71	1.87	1.47	0.86	1-3/16
16-BAN-16	1610-61-16 AN	1	1	3.65	3.16	2.27	1.78	0.91	1-9/16

NPT male elbow for fractional tube

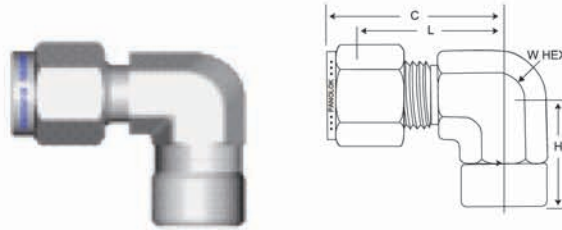


PANOLOK PART NO.	INTER CHANGES WITH	INCHES						
		TUBE O.D	NPT PIPE THREAD	C	H	L	R	W HEX
2-ME-2	200-2-2	1/8	1/8	0.93	0.70	0.67	0.38	7/16
2-ME-4	200-2-4	1/8	1/4	0.98	1.00	0.72	0.56	9/16
3-ME-2	300-2-2	3/16	1/8	1.00	0.74	0.74	0.38	1/2
3-ME-4	300-2-4	3/16	1/4	1.01	0.94	0.75	0.56	9/16
4-ME-2	400-2-2	1/4	1/8	1.08	0.76	0.79	0.38	1/2
4-ME-4	400-2-4	1/4	1/4	1.07	1.00	0.78	0.56	9/16
4-ME-6	400-2-6	1/4	3/8	1.17	1.13	0.88	0.56	3/4
4-ME-8	400-2-8	1/4	1/2	1.26	1.31	0.97	0.75	7/8
5-ME-2	500-2-2	5/16	1/8	1.17	0.82	0.88	0.38	5/8
5-ME-4	500-2-4	5/16	1/4	1.17	1.01	0.88	0.56	5/8
6-ME-2	600-2-2	3/8	1/8	1.20	0.82	0.91	0.38	5/8
6-ME-4	600-2-4	3/8	1/4	1.20	1.01	0.91	0.56	5/8
6-ME-6	600-2-6	3/8	3/8	1.26	1.13	0.97	0.56	3/4
6-ME-8	600-2-8	3/8	1/2	1.32	1.31	1.03	0.75	7/8
6-ME-12	600-2-12	3/8	3/4	1.45	1.50	1.16	0.75	1-1/16
8-ME-4	810-2-4	1/2	1/4	1.42	1.12	1.02	0.56	13/16
8-ME-6	810-2-6	1/2	3/8	1.42	1.12	1.02	0.56	13/16
8-ME-8	810-2-8	1/2	1/2	1.43	1.31	1.03	0.75	7/8
8-ME-12	810-2-12	1/2	3/4	1.53	1.50	1.13	0.75	1-1/16
10-ME-6	1010-2-6	5/8	3/8	1.43	1.25	1.03	0.56	7/8
10-ME-8	1010-2-8	5/8	1/2	1.43	1.31	1.03	0.75	7/8
10-ME-12	1010-2-12	5/8	3/4	1.56	1.50	1.16	0.75	1-1/16
12-ME-8	1210-2-8	3/4	1/2	1.56	1.50	1.16	0.75	1-1/16
12-ME-12	1210-2-12	3/4	3/4	1.56	1.50	1.16	0.75	1-1/16
14-ME-12	1410-2-12	7/8	3/4	1.76	1.66	1.36	0.75	1-3/8
16-ME-12	1610-2-12	1	3/4	1.94	1.65	1.45	0.75	1-3/8
16-ME-16	1610-2-16	1	1	1.94	1.84	1.45	.94	1-3/8

NPT male elbow for mertic tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS						
		TUBE O.D	NPT THREAD	C	H	L	R	W HEX
3MO-ME-4	3MO-2-4	3	1/4	24,6	23,4	18,0	14,2	1/2
4MO-ME-2	4MO-2-2	4	1/8	25,4	18,8	19,2	9,7	1/2
4MO-ME-4	4MO-2-4	4	1/4	26,2	25,4	19,6	14,2	1/2
6MO-ME-2	6MO-2-2	6	1/8	27,0	18,8	19,6	9,7	1/2
6MO-ME-4	6MO-2-4	6	1/4	27,0	23,4	19,6	14,2	1/2
6MO-ME-6	6MO-2-6	6	3/8	19,8	26,2	22,4	14,2	11/16
6MO-ME-8	6MO-2-8	6	1/2	31,8	33,0	24,4	19,0	13/16
8MO-ME-2	8MO-2-2	8	1/8	28,8	19,8	21,3	9,7	9/16
8MO-ME-4	8MO-2-4	8	1/4	28,8	24,4	21,3	14,2	9/16
8MO-ME-6	8MO-2-6	8	3/8	30,6	26,2	23,1	14,2	11/16
8MO-ME-8	8MO-2-8	8	1/2	32,7	33,0	25,2	19,1	13/16
10MO-ME-2	10MO-2-8	10	1/8	31,5	21,6	23,9	9,7	11/16
10MO-ME-4	10MO-2-4	10	1/4	31,5	26,2	23,9	14,2	11/16
10MO-ME-6	10MO-2-6	10	3/8	31,5	26,2	23,9	14,2	11/16
10MO-ME-8	10MO-2-8	10	1/2	33,5	33,0	25,9	19,0	13/16
12MO-ME-4	12MO-2-4	12	1/4	36,0	28,2	25,9	14,2	13/16
12MO-ME-6	12MO-2-6	12	3/8	36,0	28,2	25,9	14,2	13/16
12MO-ME-8	12MO-2-8	12	1/2	36,0	33,0	25,9	19,0	13/16
12MO-ME-12	12MO-2-12	12	3/4	39,8	36,8	29,7	19,0	1-1/16
15MO-ME-8	15MO-2-8	15	1/2	38,0	35,1	27,9	19,0	13/16
16MO-ME-6	16MO-2-6	16	3/8	38,0	30,2	27,9	14,2	13/16
16MO-ME-8	16MO-2-8	16	1/2	38,0	35,1	27,9	14,2	13/16
16MO-ME-12	16MO-2-12	16	3/4	39,8	36,8	29,7	19,0	13/16
18MO-ME-8	18MO-2-8	18	1/2	39,8	36,8	29,7	19,0	1-1/16
18MO-ME-12	18MO-2-12	18	3/4	39,8	36,8	29,7	19,0	1-1/16
20MO-ME-8	20MO-2-8	20	1/2	44,6	41,7	34,5	19,0	1-3/8
20MO-ME-12	20MO-2-12	20	3/4	44,6	41,7	34,5	19,0	1-3/8
22MO-ME-12	22MO-2-12	22	3/4	44,6	41,7	34,5	19,0	1-3/8
25MO-ME-12	25MO-2-12	25	3/4	49,1	41,7	36,8	19,0	1-3/8
25MO-ME-16	25MO-2-16	25	1	49,1	46,5	36,8	23,9	1-3/8

NPT male elbow for fractional tube

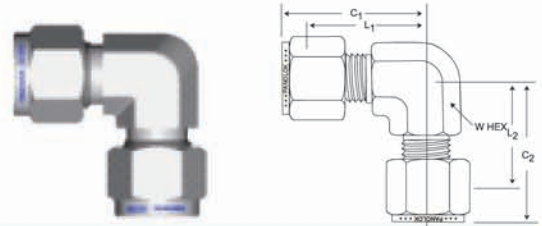


PANOLOK PART NO.	INTER CHANGES WITH	INCHES					
		TUBE O.D.	NPT PIPE THREAD	C	H	L	W HEX
2-FE-2	200-8-2	1/8	1/8	0.98	0.75	0.72	9/16
2-FE-4	200-8-4	1/8	1/4	1.10	0.88	0.84	3/4
3-FE-2	300-8-2	3/16	1/8	1.01	0.75	0.75	9/16
4-FE-2	400-8-2	1/4	1/8	1.07	0.75	0.78	9/16
4-FE-4	400-8-4	1/4	1/4	1.20	0.88	0.91	3/4
4-FE-6	400-8-6	1/4	3/8	1.26	0.88	0.97	7/8
4-FE-8	400-8-8	1/4	1/2	1.35	1.13	1.06	1-1/16
5-FE-2	500-8-2	5/16	1/8	1.17	0.75	0.88	5/8
5-FE-4	500-8-4	5/16	1/4	1.24	0.88	0.94	3/4
6-FE-2	600-8-2	3/8	1/8	1.20	0.75	0.91	5/8
6-FE-4	600-8-4	3/8	1/4	1.26	0.88	0.97	3/4
6-FE-6	600-8-6	3/8	3/8	1.32	0.88	1.03	7/8
8-FE-8	800-8-8	3/8	1/2	1.42	1.13	1.13	1-1/16
8-FE-4	810-8-4	1/2	1/4	1.42	0.88	1.02	13/16
8-FE-6	810-8-6	1/2	3/8	1.43	0.88	1.03	7/8
8-FE-8	810-8-8	1/2	1/2	1.53	1.13	1.13	1-1/16
10-FE-6	1010-8-6	5/8	3/8	1.43	0.88	1.03	7/8
10-FE-8	1010-8-8	5/8	1/2	1.53	1.13	1.13	1-1/16
12-FE-8	1210-8-8	3/4	1/2	1.56	1.13	1.16	1-1/16
12-FE-12	1210-8-12	3/4	3/4	1.65	1.25	1.36	1-3/8
14-FE-12	1410-8-12	7/8	3/4	1.76	1.25	1.36	1-3/8
16-FE-12	1610-8-12	1	3/4	1.94	1.25	1.45	1-3/8
16-FE-16	1610-8-16	1	1	2.02	1.50	1.53	1-5/8

NPT male elbow for mertic tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS						
		TUBE O.D	NPT THREAD	C	H	L	R	W HEX
3MO-ME-4	3MO-2-4	3	1/4	24,6	23,4	18,0	14,2	1/2
4MO-ME-2	4MO-2-2	4	1/8	25,4	18,8	19,2	9,7	1/2
4MO-ME-4	4MO-2-4	4	1/4	26,2	25,4	19,6	14,2	1/2
6MO-ME-2	6MO-2-2	6	1/8	27,0	18,8	19,6	9,7	1/2
6MO-ME-4	6MO-2-4	6	1/4	27,0	23,4	19,6	14,2	1/2
6MO-ME-6	6MO-2-6	6	3/8	19,8	26,2	22,4	14,2	11/16
6MO-ME-8	6MO-2-8	6	1/2	31,8	33,0	24,4	19,0	13/16
8MO-ME-2	8MO-2-2	8	1/8	28,8	19,8	21,3	9,7	9/16
8MO-ME-4	8MO-2-4	8	1/4	28,8	24,4	21,3	14,2	9/16
8MO-ME-6	8MO-2-6	8	3/8	30,6	26,2	23,1	14,2	11/16
8MO-ME-8	8MO-2-8	8	1/2	32,7	33,0	25,2	19,1	13/16
10MO-ME-2	10MO-2-8	10	1/8	31,5	21,6	23,9	9,7	11/16
10MO-ME-4	10MO-2-4	10	1/4	31,5	26,2	23,9	14,2	11/16
10MO-ME-6	10MO-2-6	10	3/8	31,5	26,2	23,9	14,2	11/16
10MO-ME-8	10MO-2-8	10	1/2	33,5	33,0	25,9	19,0	13/16
12MO-ME-4	12MO-2-4	12	1/4	36,0	28,2	25,9	14,2	13/16
12MO-ME-6	12MO-2-6	12	3/8	36,0	28,2	25,9	14,2	13/16
12MO-ME-8	12MO-2-8	12	1/2	36,0	33,0	25,9	19,0	13/16
12MO-ME-12	12MO-2-12	12	3/4	39,8	36,8	29,7	19,0	1-1/16
15MO-ME-8	15MO-2-8	15	1/2	38,0	35,1	27,9	19,0	13/16
16MO-ME-6	16MO-2-6	16	3/8	38,0	30,2	27,9	14,2	13/16
16MO-ME-8	16MO-2-8	16	1/2	38,0	35,1	27,9	14,2	13/16
16MO-ME-12	16MO-2-12	16	3/4	39,8	36,8	29,7	19,0	13/16
18MO-ME-8	18MO-2-8	18	1/2	39,8	36,8	29,7	19,0	1-1/16
18MO-ME-12	18MO-2-12	18	3/4	39,8	36,8	29,7	19,0	1-1/16
20MO-ME-8	20MO-2-8	20	1/2	44,6	41,7	34,5	19,0	1-3/8
20MO-ME-12	20MO-2-12	20	3/4	44,6	41,7	34,5	19,0	1-3/8
22MO-ME-12	22MO-2-12	22	3/4	44,6	41,7	34,5	19,0	1-3/8
25MO-ME-12	25MO-2-12	25	3/4	49,1	41,7	36,8	19,0	1-3/8
25MO-ME-16	25MO-2-16	25	1	49,1	46,5	36,8	23,9	1-3/8

Union elbow for fractional tube

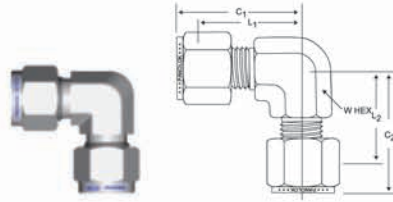


PANOLOK PART NO.	INTER CHANGES WITH	INCHES			
		TUBE O.D.	C	L	W HEX
2-UE	200-9	1/8	0.88	0.62	3/8
3-UE	300-9	3/16	1.00	0.74	1/2
4-UE	400-9	1/4	1.06	0.77	1/2
5-UE	500-9	5/16	1.17	0.88	5/8
6-UE	600-9	3/8	1.20	0.91	5/8
8-UE	810-9	1/2	1.42	1.02	13/16
10-UE	1010-9	5/8	1.43	1.03	7/8
12-UR	1210-9	3/4	1.56	1.16	1-1/16
14-UE	1410-9	7/8	1.76	1.36	1-3/8
16-UE	1610-9	1	1.94	1.45	1-3/8

Union elbow for metric tube

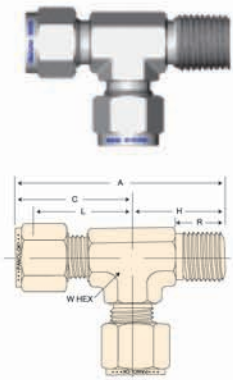
PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS			INCH
		TUBE O.D.	C	L	W HEX
3M O-UE	3MO-9	3	22,3	15,7	3/8
4M O-UE	4MO-9	4	25,4	18,8	1/2
6M O-UE	6MO-9	6	27,0	19,6	1/2
8M O-UE	8MO-9	8	28,8	21,3	9/16
10M O-UE	10MO-9	10	31,5	23,9	11/16
12M O-UE	12MO-9	12	36,0	25,9	13/16
14M O-UE	14MO-9	14	38,1	28,0	15/16
15M O-UE	15MO-9	15	38,0	27,9	15/16
16M O-UE	16MO-9	16	38,0	27,9	15/16
18M O-UE	18MO-9	16	39,8	29,7	1-1/16
20M O-UE	20MO-9	20	44,6	34,5	1-3/8
22M O-UE	22MO-9	22	44,6	34,5	1-3/8
25M O-UE	25MO-9	25	49,1	36,8	1-3/8

Drop size elbows for fractional tube



PANOLOK PART NO.	INTER CHANGES WITH	INCHES					
		TUBE O.D.	L1	C1	L2	C2	W HEX
3-UE-2	300-9-2	3/16-1/8	0.69	0.96	0.66	0.92	7/16
4-UE-2	400-9-2	1/4-1/8	0.77	1.06	0.70	0.96	1/2
5-UE-2	500-9-2	5/16-1/8	0.88	1.17	0.78	1.04	5/8
5-UE-4	500-9-4	5/16-1/4	0.88	1.17	0.85	1.14	5/8
6-UE-2	600-9-2	3/8-1/8	0.91	1.20	0.78	1.04	5/8
6-UE-4	600-9-4	3/8-1/4	.91	1.20	.85	1.09	5/8
6-UE-5	600-9-5	3/8-5/16	.91	1.20	.88	1.17	5/8
8-UE-4	810-9-4	1/2-1/4	1.02	1.42	.96	1.25	13/16
8-UE-5	810-9-5	1/2-5/16	1.02	1.42	.99	1.28	13/16
8-UE-6	810-9-6	1/2-3/8	1.02	1.42	1.02	1.31	13/16
10-UE-6	1010-9-6	5/8-3/8	1.03	1.43	1.03	1.32	7/8
10-UE-8	1010-9-8	5/8-1/2	1.03	1.43	1.03	1.43	7/8
12-UE-4	1210-9-4	3/4-1/4	1.16	1.56	1.09	1.38	1-1/16
12-UE-6	1210-9-6	3/4-3/8	1.16	1.56	1.16	1.45	1-1/16
12-UE-8	1210-9-8	3/4-1/2	1.16	1.56	1.16	1.56	1-1/16
14-UE-4	1410-9-4	7/8-1/4	1.36	1.76	1.22	1.51	1-3/8
16-UE-8	1610-9-8	1-1/2	1.45	1.94	1.22	1.62	1-5/16
16-UE-12	1610-9-12	1-3/4	1.45	1.94	1.36	1.76	1-3/8

Union elbow for fractional tube

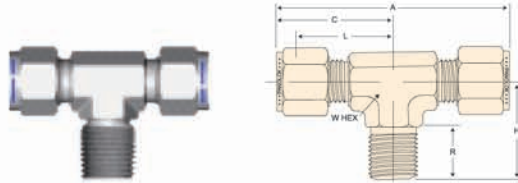


PANOLOK PART NO.	INTER CHANGES WITH	INCHES							
		TUBE O.D	NPT PIPE THREAD	A	C	H	L	R	W HEX
2-MRT-2TMT	200-3-2TMT	1/8	1/8	1.67	0.92	0.71	0.66	0.38	5/16
2-MRT-4TMT	200-3-4TMT	1/8	1/4	1.98	0.98	1.00	0.72	0.56	1/2
3-MRT-2TMT	300-3-2TMT	3/16	1/8	1.74	1.00	0.74	0.74	0.38	1/2
4-MRT-2TMT	400-3-2TMT	1/4	1/8	1.80	1.06	0.74	0.77	0.38	1/2
4-MRT-4TMT	400-3-4TMT	1/4	1/4	2.07	1.07	1.00	0.78	0.56	9/16
5-MRT-2TMT	500-3-2TMT	5/16	1/8	2.00	1.17	.82	0.88	0.38	5/8
5-MRT-4TMT	500-3-4TMT	5/16	1/4	2.18	1.17	1.01	0.88	0.56	5/8
6-MRT-4TMT	600-3-4TMT	3/8	1/4	2.21	1.20	1.01	0.98	0.56	5/8
6-MRT-6TMT	600-3-6TMT	3/8	3/8	2.43	1.31	1.12	1.02	0.56	13/16
8-MRT-6TMT	810-3-6TMT	1/2	3/8	2.82	1.42	1.12	1.02	0.56	13/16
8-MRT-8TMT	810-3-8TMT	1/2	1/2	2.74	1.43	1.31	1.03	0.75	7/8
10-MRT-8TMT	1010-3-8TMT	5/8	1/2	2.81	1.43	1.38	1.03	0.75	7/8
12-MRT-12TMT	1210-3-12TMT	3/4	3/4	3.06	1.56	1.50	1.16	0.75	1-1/16
14-MRT-12TMT	1410-3-12TMT	7/8	3/4	3.26	1.76	1.50	1.36	0.75	1-5/16
16-MRT-12TMT	1610-3-12TMT	1	3/4	3.60	1.94	1.66	1.45	0.75	1-5/16
16-MRT-16TMT	1610-3-16TMT	1	1	3.78	1.94	1.84	1.45	0.94	1-3/8

NPT male run tee for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS							INCH
		TUBE O.D	NPT PIPE THREAD	A	C	H	L	R	W HEX
6M O-MRT-2TMT	6MO-3-2TMT	6	1/8	45.8	27.0	18.0	19.6	9.7	1/2
6M O-MRT-4TMT	6MO-3-4TMT	6	1/4	50.3	27.0	23.4	19.6	14.2	1/2
8MO-MRT-2TMT	8MO-3-2TMT	8	1/8	50.7	29.9	20.8	22.4	9.7	5/8
8MO-MRT-4TMT	8MO-3-4TMT	8	1/4	55.3	29.9	25.4	22.4	14.2	5/8
10 MO-MRT-4TMT	10MO-3-4TMT	10	1/4	61.7	33.5	28.2	25.9	14.2	13/16
10 MO-MRT-8TMT	10MO-3-8TMT	10	3/8	67.0	33.5	28.2	25.9	14.2	13/16
12 MO-MRT-4TMT	12MO-3-4TMT	12	1/4	72.0	36.0	28.2	25.9	14.2	13/16
12 MO-MRT-6TMT	12MO-3-6TMT	12	3/8	72.0	36.0	28.2	25.9	14.2	13/16
12 MO-MRT-8TMT	12MO-3-8TMT	12	1/2	72.0	36.0	33.0	25.9	19.0	13/16
16 MO-MRT-16TMT	16MO-3-16TMT	16	1/2	77.6	38.8	35.8	28.7	19.1	1

NPT male branch tee for fractional tube

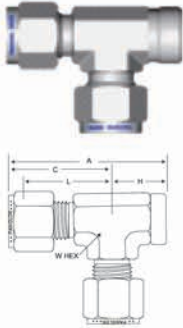


PANOLOK PART NO.	INTER CHANGES WITH	INCHES							
		TUBE O.D.	NPT PIPE THREAD	A	C	H	L	R	W HEX
2-MBT-2TTM	200-3-2TTM	1/8	1/8	1.84	0.92	0.71	0.66	0.38	7/16
2-MBT-4TTM	200-3-4TTM	1/8	1/4	1.96	0.98	1.00	0.72	0.56	9/16
3-MBT- 2TTM	300-3-2TTM	3/16	1/8	2.00	1.00	0.74	0.74	0.38	1/2
4-MBT-2TTM	400-3-2TTM	1/4	1/8	2.12	1.06	0.74	0.77	0.38	1/2
4-MBT-4TTM	400-3-4TTM	1/4	1/4	2.14	1.07	1.00	0.78	0.56	9/16
5-MBT-2TTM	500-3-2TTM	5/16	1/8	2.34	1.17	0.82	0.88	0.38	5/8
5-MBT-4TTM	500-3-4TTM	5/16	1/4	2.34	1.17	1.01	0.88	0.56	5/8
6-MBT-4TTM	600-3-4TTM	3/8	1/4	2.40	1.20	1.01	0.91	0.56	5/8
6-MBT-6TTM	600-3-6TTM	3/8	3/8	2.62	1.31	1.12	1.02	0.56	13/16
8-MBT-6TTM	810-3-6TTM	1/2	3/8	2.84	1.42	1.12	1.02	0.56	13/16
8-MBT-8TTM	810-3-8TTM	1/2	1/2	2.86	1.43	1.31	1.03	.75	7/8
10-MBT-8TTM	1010-3-8TTM	5/8	1/2	2.86	1.43	1.31	1.03	0.75	7/8
12-MBT-12TTM	1210-3-12TTM	3/4	3/4	3.12	1.56	1.50	1.16	0.75	1-1/16
14-MBT-12TTM	1410-3-12TTM	7/8	3/4	3.52	1.76	1.50	1.36	0.75	1-3/8
16-MBT-12TTM	1610-3-12TTM	1	3/4	3.88	1.94	1.66	1.45	0.75	1-3/8
16-MBT-16TTM	1610-3-16TTM	1	1	3.88	1.94	1.84	1.45	0.94	1-3/8

NPT male branch tee for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS								INCH W HEX
		TUBE O.D.	NPT THREAD	A	C	H	L	R		
6MO-MBT-2TTM	6MO-3TTM	6	1/8	53,9	27,0	18,8	19,6	9,7	1/2	
6MO-MBT-4TTM	6MO-3-4TTM	6	1/4	53,9	27,0	23,4	19,6	14,2	1/2	
8MO-MBT-2TTM	8MO-3TTM	8	1/8	59,7	29,9	20,8	22,4	9,7	5/8	
8MO-MBT-4TTM	8MO-3-4TTM	8	1/4	59,7	29,9	25,4	22,4	14,2	5/8	
10MO-MBT-4TTM	10MO-3-4TTM	10	1/4	67,0	33,5	28,2	25,9	14,2	13/16	
10MO-MBT-6TTM	10MO-3-6TTM	10	3/8	67,0	33,5	28,2	25,9	14,2	13/16	
12MO-MBT-4TTM	12MO-3-4TTM	12	1/4	72,0	36,0	28,2	25,9	14,2	13/16	
12MO-MBT-6TTM	12MO-3-6TTM	12	3/8	72,0	36,0	28,2	25,9	14,2	13/16	
12MO-MBT-8TTM	12MO-3-8TTM	12	1/2	72,0	36,0	33,0	25,9	19,0	13/16	
16MO-MBT-8TTM	16MO-3-8TTM	16	1/2	77,6	38,8	35,8	28,7	19,1	1	

NPT female run tee for fractional tube

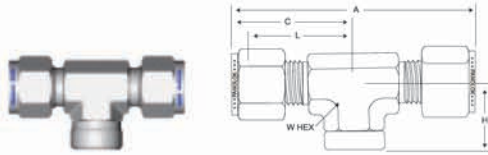


PANOLOK PART NO.	INTER CHANGES WITH	INCHES						
		TUBE O.D.	NPT PIPE THREAD	A	C	H	L	W HEX
2-FRT-2TFT	200-3-2TFT	1/8	1/8	1.76	1.01	0.75	0.75	9/16
3-FRT-2TFT	300-3-2TFT	3/16	1/8	1.76	1.01	0.75	0.75	9/16
4-FRT-2TFT	400-3-2TFT	1/4	1/8	1.82	1.07	0.75	0.78	9/16
4-FRT-4TFT	400-3-4TFT	1/4	1/4	2.08	1.20	0.88	0.91	3/4
5-FRT-2TFT	500-3-2TFT	5/16	1/8	1.92	1.17	0.75	0.88	5/8
6-FRT-4TFT	600-3-4TFT	3/8	1/4	2.14	1.26	0.88	0.97	3/4
8-FRT-4TFT	810-3-4TFT	1/2	1/2	2.56	1.43	1.13	1.13	13/16
8-FRT-6TFT	810-3-6TFT	1/2	3/8	2.34	1.43	0.91	1.03	7/8
8-FRT-8TFT	810-3-8TFT	1/2	1/2	2.66	1.53	1.13	1.13	1-1/16
10-FRT-8TFT	1010-3-8TFT	5/8	1/2	2.66	1.53	1.13	1.13	1-1/16
12-FRT-12TFT	1210-3-12TFT	3/4	3/4	2.90	1.65	1.25	1.36	1-3/8
14-FRT-8TFT	1410-3-8TFT	7/8	1/2	3.01	1.76	1.25	1.36	1-3/8
14-FRT-12TFT	1410-3-12TFT	7/8	3/4	3.01	1.76	1.25	1.36	1-3/8
16-FRT-12TFT	1610-3-12TFT	1	3/4	3.19	1.94	1.25	1.45	1-3/8
16-FRT-16TFT	1610-3-16TFT	1	1	3.52	2.02	1.50	1.53	1-3/8

NPT female run tee for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS						INCH
		TUBE O.D.	NPT PIPE THREAD	A	C	H	L	W HEX
6MO-FRT-2TFT	6MO-3TFT	6	1/8	46,0	27,0	19,6	19,6	1/2
6MO-FRT-4TFT	6MO-3-4TFT	6	1/4	52,1	22,4	22,4	22,4	11/16
8MO-FRT-2TFT	8MO-3TFT	8	1/8	48,9	19,0	19,0	22,4	5/8
10MO-FRT-2TFT	10MO-3TFT	10	1/4	55,9	19,0	22,4	25,9	13/16
10MO-FRT-4TFT	12MO-3-4TFT	12	1/4	58,4	22,4	22,4	25,9	13/16
12MO-FRT-6TFT	12MO-3TFT	12	3/8	58,4	36,0	22,4	25,9	13/16
12MO-FRT-8TFT	12MO-3-8TFT	12	1/2	67,3	38,8	28,5	28,7	1
16MO-FRT-12TFT	16MO-3TFT	16	1/2	68,2	39,8	28,4	29,7	1-1/16

NPT female branch tee for fractional tube

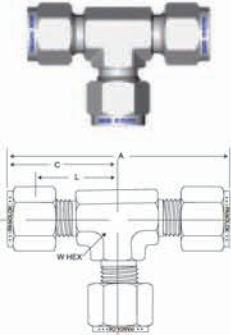


PANOLOK PART NO.	INTER CHANGES WITH	INCHES						
		TUBE O.D.	NPT PIPE THREAD	A	C	H	L	W HEX
2-FBT-2 TTF	200-3-2TTF	1/8	1/8	2.02	1.01	0.75	0.75	9/16
3-FBT-2 TTF	300-3-2TTF	3/16	1/8	2.02	1.01	0.75	0.75	9/16
4-FBT-2 TTF	400-3-2TTF	1/4	1/8	2.14	1.07	0.75	0.78	9/16
4-FBT-4T TF	400-3-4TTF	1/4	1/4	2.40	1.20	0.88	0.91	3/4
5-FBT-2TTF	500-3-2TTF	5/16	1/8	2.34	1.17	0.75	0.88	5/8
6-FBT-4TTF	600-3-4TTF	3/8	1/4	2.52	1.26	0.88	0.97	3/4
8-FBT-4TTF	810-3-4TTF	1/2	1/4	2.86	1.43	0.88	1.02	13/16
8-FBT-6TTF	810-3-6TTF	1/2	3/8	2.86	1.43	0.91	1.03	7/8
8-FBT-8TTF	810-3-8TTF	1/2	1/2	3.06	1.53	1.13	1.13	1-1/16
10-FBT-8TTF	1010-3-8TTF	5/8	1/2	3.06	1.53	1.13	1.13	1-1/16
12-FBT-12TTF	1210-3-12TTF	3/4	3/4	3.30	1.65	1.25	1.36	1-3/8
14-FBT-12TTF	1410-3-12TTF	7/8	3/4	3.52	1.76	1.25	1.36	1-3/8
16-FBT-12TTF	1610-3-12TTF	1	3/4	3.88	1.94	1.25	1.45	1-3/8
16-FBT-16TTF	1610-3-16TTF	1	1	4.04	2.02	1.50	1.53	1-3/8

NPT male branch tee for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS							INCH
		TUBE O.D.	NPT THREAD	A	C	H	L	W HEX	
6M-FBT-2TTF	6MO-3-2TTF	6	1/8	53,9	27,0	19,0	19,6	1/2	
6M-FBT-4TTF	6MO3-4TTF	6	1/4	59,5	29,8	22,4	22,4	11/16	
8M-FBT-3TTF	8MO-3TTF	8	1/8	19,7	29,9	19,0	22,4	5/8	
10M-FBT-3TTF	10MO-3TTF	10	1/4	67,0	33,5	22,4	25,9	13/16	
12M-FBT-3TTF	12MO-3TTF	12	1/8	72,0	36,0	22,3	25,9	13/16	
12M-FBT-4TTF	12MO-3-4TTF	12	1/4	72,0	36,0	22,3	25,9	13/16	
12M-FBT-3TTF	12MO-3TTF	12	3/8	72,0	36,0	22,4	25,9	13/16	
12M-FBT-8TTF	12MO-3-8TTF	12	1/2	77,6	38,8	28,5	28,7	1	
16M-FBT-TTF	16MO-3T TF	16	1/2	77,6	38,8	28,4	28,7	1	

Union tee for fractional tube

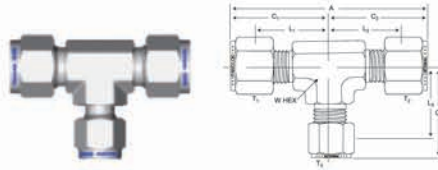


PANOLOK PART NO.	INTER CHANGES WITH	INCHES				
		TUBE O.D.	A	C	L	W HEX
2-UT	200-3	1/8	1.76	.88	.62	3/8
3-UT	300-3	3/16	2.00	1.00	.74	1/2
4-UT	400-3	1/4	1.12	1.06	.77	1/2
5-UT	500-3	5/16	2.34	1.17	.88	5/8
6-UT	600-3	3/8	2.40	1.20	.91	5/8
8-UT	810-3	1/2	2.84	1.42	1.02	13/16
10-UT	1010-3	5/8	2.86	1.43	1.03	7/8
12-UT	1210-3	3/4	3.12	1.56	1.16	1-1/16
14-UT	1410-3	7/8	3.52	1.76	1.36	1-3/8
16-UT	1610-3	1	3.88	1.94	1.45	1-3/8

Union tee for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS				
		TUBE O.D.	A	C	L	W HEX
3MO-UT	3MO-3	3	44,7	22,3	15,7	3/8
4MO-UT	4MO-3	4	50,8	25,4	18,8	1/2
6MO-UT	6MO-3	6	53,9	27,0	19,6	1/2
8MO-UT	8MO-3	8	59,7	29,9	22,4	5/8
10M O-UT	10MO-3	10	63,0	31,5	23,9	11/16
12M O-UT	12MO-3	12	72,0	36,0	25,9	13/16
14M O-UT	14MO-3	14	77,6	38,8	28,7	1
15M O-UT	15MO-3	15	77,6	38,8	28,7	1
16M O-UT	16MO-3	16	77,6	38,8	28,7	1
18M O-UT	18MO-3	18	79,5	38,8	29,7	1-1/16
20M O-UT	20MO-3	20	89,3	44,6	34,5	1-3/8
22M O-UT	22MO-3	22	89,3	44,6	34,5	1-3/8
25M O-UT	25MO-3	25	89,3	49,1	36,8	1-3/8

Drop size tee for fractional tube

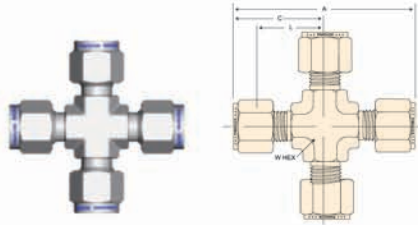


PANOLOK PART NO.	INTER CHANGES WITH	INCHES										
		T1	T2	T3	A	L1	C1	L2	C2	L3	C3	W
		TUBE O.D.	TUBE O.D.	TUBE O.D.								HEX
4-UT-4-2	400-3-4-2	1/4	1/4	1/8	2.10	.76	1.05	.76	1.05	.70	.96	1/2
6-UT-2-4	600-3-6-4	3/8	3/8	1/4	2.40	.91	1.20	.91	1.20	.85	1.14	5/8
6-UT-4-6	600-3-4-6	3/8	1/4	3/8	2.34	.91	1.20	.85	1.14	.91	1.20	5/8
6-UT-4-4	600-3-4-4	3/8	1/4	1/4	2.34	.91	1.20	.85	1.14	.85	1.14	5/8
8-UT-4-6	810-3-8-6	1/2	1/4	3/8	2.84	1.02	1.42	1.02	1.42	1.02	1.31	13/16
8-UT-8-4	810-3-8-4	1/2	1/2	1/4	2.84	1.02	1.42	1.02	1.42	.96	1.25	13/16
8-UT-6-8	810-3-6-8	1/2	3/8	1/2	2.73	1.02	1.42	1.02	1.31	1.02	1.42	13/16
8-UT-4-8	810-3-4-8	1/2	1/4	1/2	2.67	1.02	1.42	.96	1.25	1.02	1.42	13/16
8-UT-6-6	810-3-6-8	1/2	3/8	3/8	2.73	1.02	1.42	1.02	1.31	1.02	1.31	13/16
8-UT-4-6	810-3-4-4	1/2	1/4	1/4	2.67	1.02	1.42	.96	1.25	.96	1.25	13/16
10-UT-10-8	1010-3-10-8	5/8	5/8	1/2	2.86	1.03	1.43	1.03	1.43	1.03	1.43	7/8
10-UT-10-6	1010-3-10-6	5/8	5/8	3/8	2.86	1.03	1.43	1.03	1.43	1.03	1.32	7/8
10-UT-8-8	1010-3-8-8	5/8	1/2	1/2	2.86	1.03	1.43	1.03	1.43	1.03	1.43	7/8
10-UT-8-6	1010-3-8-6	5/8	1/2	3/8	2.86	1.03	1.43	1.03	1.43	1.03	1.32	7/8
10-UT-6-6	1010-3-6-6	5/8	3/8	3/8	2.75	1.03	1.43	.103	1.32	1.03	1.32	7/8
10-UT-6-8	1010-3-6-8	5/8	3/8	1/2	2.75	1.03	1.43	1.03	1.32	1.03	1.43	7/8
12-UT-12-10	1210-3-12-10	3/4	3/4	5/8	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-UT-12-8	1210-3-12-8	3/4	3/4	1/2	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-UT-12-6	1210-3-12-6	3/4	3/4	3/8	3.12	1.16	1.56	1.16	1.56	1.16	1.45	1-1/16
12-UT-12-4	1210-3-12-4	3/4	3/4	1/4	3.12	1.16	1.56	1.16	1.56	1.09	1.38	1-1/16
12-UT-10-10	1210-3-10-10	3/4	5/8	5/8	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-UT-8-8	1210-3-8-8	3/4	1/2	1/2	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-UT-6-6	1210-3-6-6	3/4	3/8	3/8	3.01	1.16	1.56	1.16	1.45	1.16	1.45	1-1/16
12-UT-10-8	1210-3-10-8	3/4	5/8	1/2	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-UT-10-6	1210-3-10-6	3/4	5/8	3/8	3.12	1.16	1.56	1.16	1.56	1.16	1.45	1-1/16
12-UT-8-6	1210-3-8-6	3-4	1/2	3/8	3.12	1.16	1.56	1.16	1.56	1.16	1.45	1-1/16
14-UT-14-6	1410-3-14-6	7/8	7/8	3/8	3.52	1.36	1.76	1.36	1.76	1.36	1.65	1-3/8
14-UT-14-4	1410-3-14-4	7/8	7/8	1/4	3.52	1.36	1.76	1.36	1.76	1.30	1.59	1-3/8
14-UT-12-12	1410-3-12-12	7/8	3/4	3/4	3.52	1.36	1.76	1.36	1.76	1.36	1.76	1-3/8
14-UT-12-10	1410-3-12-8	7/8	3/4	1/2	3.52	1.36	1.76	1.36	1.76	1.36	1.76	1-3/8
14-UT-12-6	1410-3-12-6	7/8	3/4	3/8	3.52	1.36	1.76	1.36	1.76	1.36	1.65	1-3/8
14-UT-10-6	1410-3-10-6	7/8	5/8	3/8	3.52	1.36	1.76	1.36	1.76	1.36	1.65	1-3/8
14-UT-8-12	1410-3-8-12	7/8	1/2	3/4	3.52	1.36	1.76	1.36	1.76	1.36	1.76	1-3/8



PANOLOK PART NO.	INTER CHANGES WITH	INCHES										
		T1 TUBE	T2 TUBE	T3 TUBE	A	L1	C1	L2	C2	L3	C3	W HEX
16-UT-16-12	1610-3-16-12	1	1	3/4	3.88	1.45	1.94	1.45	1.94	1.36	1.76	1-5/16
16-UT-16-10	1610-3-16-10	1	1	5/8	3.88	1.45	1.94	1.45	1.94	1.36	1.76	1-5/16
16-UT-16-8	1610-3-16-8	1	1	1/2	3.88	1.45	1.94	1.45	1.94	1.36	1.76	1-5/16
16-UT-16-10	1610-3-16-6	1	1	3/8	3.88	1.45	1.94	1.45	1.94	1.36	1.65	1-5/16
16-UT-16-4	1610-3-16-4	1	1	1/4	3.88	1.45	1.94	1.45	1.94	1.30	1.59	1-5/16
16-UT-12-16	1610-3-12-16	1	3/4	1	3.70	1.45	1.94	1.36	1.76	1.45	1.94	1-5/16
16-UT-14-14	1610-3-14-14	1	7/8	7/8	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-5/16
16-UT-14-12	1610-3-14-12	1	7/8	3/4	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-5/16
16-UT-14-8	1610-3-14-8	1	7/8	1/2	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-5/16
16-UT-14-6	1610-3-14-6	1	7/8	3/8	3.70	1.45	1.94	1.36	1.76	1.36	1.65	1-5/16
16-UT-14-4	1610-3-14-4	1	7/8	1/4	3.70	1.45	1.94	1.36	1.76	1.30	1.59	1-5/16
16-UT-16-14	1610-3-16-14	1	1	7/8	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-5/16
16-UT-12-10	1610-3-12-10	1	3/4	5/8	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-5/16
16-UT-12-8	1610-3-12-8	1	3/4	1/2	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-5/16
16-UT-10-6	1610-3-10-6	1	5/8	3/8	3.70	1.45	1.94	1.36	1.76	1.36	1.65	1-5/16
16-UT-8-16	1610-3-8-16	1	1/2	1	3.70	1.45	1.94	1.36	1.76	1.45	1.94	1-5/16
16-UT-8-8	1610-3-8-8	1	1/2	1/2	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-5/16
16-UT-8-6	1610-3-8-6	1	1/2	3/8	3.70	1.45	1.94	1.36	1.76	1.36	1.65	1-5/16
16-UT-8-4	1610-3-8-4	1	1/2	1/4	3.70	1.45	1.94	1.36	1.76	1.30	1.59	1-5/16
16-UT-6-6	1610-3-6-6	1	3/8	3/8	3.59	1.45	1.94	1.36	1.65	1.36	1.65	1-5/16

Union cross for fractional tube

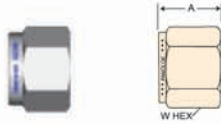


PANOLOK PART NO.	INTER CHANGES WITH	INCHES				
		TUBE O.D.	A	C	L	W HEX
2-UC	200-4	1/8	1.84	0.92	0.66	7/16
3-UC	300-4	3/16	1.92	0.95	0.69	7/16
4-UC	400-4	1/4	2.02	1.01	0.72	7/16
5-UC	500-4	5/16	2.28	1.14	0.84	9/16
6-UC	600-4	3/8	2.26	1.13	0.84	9/16
8-UC	810-4	1/2	2.74	1.37	0.97	3/4
10-UC	1010-4	5/8	2.86	1.43	1.03	1-1/16
12-UC	1210-4	3/4	3.12	1.56	1.16	1-1/16
14-UC	1410-4	7/8	3.52	1.76	1.36	1-5/16
16-UC	1610-4	1	3.86	1.93	1.45	1-5/16

Union cross fro metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS				INCH
		TUBE O.D.	A	C	L	W HEX
3MO-UC	3MO-4	3	44,7	22,3	15,7	7/16
4MO-UC	4MO-4	4	50,8	25,4	18,8	1/2
6MO-UC	6MO-6	6	53,9	27,0	19,6	1/2
8MO-UC	8MO-8	8	59,7	29,9	22,4	5/8
10MO-UC	10MO-10	10	67,0	33,5	25,9	13/16
12MO-UC	12MO-12	12	72,0	36,0	25,9	13/16
16MO-UC	16MO-16	16	74,0	37,0	26,9	15/16
18MO-UC	18MO-18	18	16,6	38,3	28,2	1-1/16

Tube nut for fractional tube

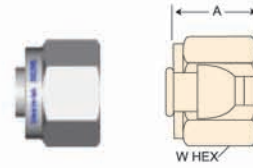


PANOLOK PART NO.	INTER CHANGES WITH	INCHES		
		TUBE O.D.	A	W HEX
1-NU	102-1	1/16	0.31	5/16
2-NU	202-1	1/8	0.47	7/16
3-NU	302-1	3/16	0.47	1/2
4-NU	402-1	1/4	0.50	9/16
5-NU	502-1	5/16	0.53	5/8
6-NU	602-1	3/8	0.56	11/16
8-NU	812-1	1/2	0.69	7/8
10-NU	1012-1	5/8	0.69	1
12-NU	1212-1	3/4	0.69	1-1/8
14-NU	1412-1	7/8	0.69	1-1/4
16-NU	1612-1	1	0.81	1-1/2

Tube nut for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	UN THREAD	MILLIMETERS		
			TUBE O.D.	A	W HEX
2MO- NU	2M2-1	2	5/16-20	11,9	12,0
3MO- NU	3M2-1	3	5/16-20	11,9	12,0
4MO-NU	4M2-1	4	3/8-20	11,9	12,0
6MO- NU	6M2-1	6	7/16-20	12,7	14,0
8MO- NU	8M2-1	8	1/2-20	13,5	16,0
10MO- NU	10M2-1	10	5/8-20	15,1	19,0
12MO- NU	12M2-1	12	3/4-20	17,5	22,0
14MO- NU	14M2-1	14	7/8-20	17,5	25,0
15MO-NU	15M2-1	15	7/8-20	17,5	25,0
16MO- NU	16M2-1	16	7/8-20	17,5	25,0
18MO-NU	18M2-1	18	1-20	17,5	30,0
20MO- NU	20M2-1	20	1.1/8-20	17,5	32,0
22MO- NU	22M2-1	22	1.1/8-20	17,5	32,0
25MO- NU	25M2-1	25	1.5/16-20	20,6	38,0

Plug for fractional tube

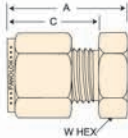


PANOLOK PART NO.	INTER CHANGES WITH	INCHES			
		TUBE O.D.	THREAD	A	W HEX
1-P G	100-P	1/16	10-32	0.31	5/16
2-PG	200-P	1/8	5/16-20	0.47	7/16
3-P G	300-P	3/16	3/8-20	0.47	1/2
4-PG	400-P	1/4	7/16-20	0.50	9/16
5-PG	500-P	5/16	1/2-20	0.53	5/8
6-PG	600-P	3/8	9/16-20	0.56	11-16
8-PG	810-P	1/2	3/4-20	0.69	7/8
10- PG	1010-P	5/8	7/8-20	0.69	1
12-PG	1210-P	3/4	1-20	0.69	1-1/8
14-PG	1410-P	7/8	1-1/8-20	0.69	1-1/4
16-PG	1610-P	1	1-5/16-20	0.81	1-1/2

Plug for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS			
		TUBE O.D.	THREAD	A	W HEX
2MO-PG	2MO-P	2	5/16-20	11,9	12,0
3MO-PG	3MO-P	3	5/16-20	11,9	12,0
4MO-PG	4MO-P	4	3/8-20	11,9	12,0
6MO-PG	6MO-P	6	7/16-20	12,7	14,0
8MO-PG	8MO-P	8	1/2-20	13,5	16,0
10MO-PG	10MO-P	10	5/8-20	15,1	19,0
12MO-PG	12MO-P	12	3/4-20	17,5	22,0
14MO-PG	14MO-P	14	7/8-20	17,5	25,0
15MO-PG	15MO-P	15	7/8-20	17,5	25,0
16MO-PG	16MO-P	16	7/8-20	17,5	25,0
18MO-PG	18MO-P	18	1-20	17,5	30,0
20MO-PG	20MO-P	20	1-1/8-20	17,5	32,0
22MO-PG	22MO-P	22	1-1/8-20	17,5	32,0
25MO-PG	25MO-P	25	1-5/16-20	20,6	38,0

Cap for fractional tube



PANOLOK PART NO.	INTER CHANGES WITH	INCHES			
		TUBE O.D.	A	C	W HEX
2-CP	200-C	1/8	0.79	0.60	7/16
3-CP	300-C	3/16	0.84	0.64	7/16
4-CP	400-C	1/4	0.92	0.70	1/2
5-CP	500-C	5/16	0.96	0.73	9/16
6-CP	600-C	3/8	1.01	0.76	5/8
8-CP	810-C	1/2	1.15	0.87	13/16
10-CP	1010-C	5/8	1.18	0.87	15/16
12-CP	1210-C	3/4	1.25	0.87	1-1/16
14-CP	1410-C	7/8	1.31	0.87	1-3/16
16-CP	1610-C	1	1.52	1.05	1-3/8

Cap for metric tube

PANOLOK PART NO.	INTER CHANGES WITH	MILLIMETERS			
		TUBE O.D.	A	C	W HEX
3MO-CP	3MO-C	3	13,5	15,3	12,0
4MO-CP	4MO-C	4	14,3	16,1	12,0
6MO-CP	6MO-C	6	15,9	17,7	14,0
8MO-CP	8MO-C	8	17,1	18,6	15,0
10MO-CP	10MO-C	10	19,1	19,5	18,0
12MO-CP	12MO-C	12	19,1	22,0	22,0
14MO-CP	14MO-C	14	19,8	22,0	24,0
15MO-CP	15MO-C	15	19,8	22,0	24,0
16MO-CP	16MO-C	16	19,8	22,0	24,0
18MO-CP	18MO-C	18	21,3	22,0	27,0
20MO-CP	20MO-C	20	23,9	22,0	30,0
22MO-CP	22MO-C	22	23,9	22,0	30,0
25MO-CP	25MO-C	25	26,2	26,5	35,0

Front ferrule for fractional tube



PANOLOK PART NO.	INTER CHANGES WITH	INCHES TUBE O.D.
1-FF	103-1	1/16
2-FF	203-1	1/8
3-FF	303-1	3/16
4-FF	403-1	1/4
5-FF	503-1	5/16
6-FF	603-1	3/8
8-FF	813-1	1/2
10-FF	1013-1	5/8
12-FF	1213-1	3/4
14-FF	1413-1	7/8
16-FF	1613-1	1

Front ferrule for fractional tube

PANOLOK PART NO.	INTER CHANGES WITH	INCHES TUBE O.D.
2MO-FF	2M3-1	2
3MO-FF	3M3-1	3
4MO-FF	4M3-1	4
6MO-FF	6M3-1	6
8MO-FF	8M3-1	8
10MO-FF	10M3-1	10
12MO-FF	12M3-1	12
14MO-FF	14M3-1	14
15MO-FF	15M3-1	15
16MO-FF	16M3-1	16
18MO-FF	18M3-1	18
20MO-FF	20M3-1	20
22MO-FF	22M3-1	22
25MO-FF	25M3-1	25

Back ferrule for metric tube



PANOLOK PART NO.	INTER CHANGES WITH	INCHES TUBE O.D.
1-BF	104-1	1/16
2-BF	204-1	1/8
3-BF	304-1	3/16
4-BF	404-1	1/4
5-BF	504-1	5/16
6-BF	604-1	3/8
8-BF	814-1	1/2
10 -BF	1014-1	5/8
12 -BF	1214-1	3/4
14 -BF	1414-1	7/8
16 -BF	1614-1	1

Back ferrule for metric tube

MASTERLOK PART NO.	INTER CHANGES WITH	INCHES TUBE O.D.
2MO-B F	2M4-1	2
3MO-B F	3M4-1	3
4MO-B F	4M4-1	4
6MO-B F	6M4-1	6
8MO-B F	8M4-1	8
10MO-BF	10M4-1	10
12MO-BF	12M4-1	12
14MO-BF	14M4-1	14
15MO-BF	15M4-1	15
16MO-BF	16M4-1	16
18MO-BF	18M4-1	18
20MO-BF	20M4-1	20
22MO-BF	22M4-1	22
25MO-BF	25M4-1	25

Ferrule set



PANOLOK PART NO.	T TUBE O.D. (INCHES)
2-SET	1/8
4-SET	1/4
6-SET	3/8
8-SET	1/2
12-SET	3/4
16-SET	1

PANOLOK PART NO.	T TUBE O.D. (mm)
3MO-SET	3
4MO-SET	4
6MO-SET	6
8MO-SET	8
10MO-SET	10
12MO-SET	12
14MO-SET	14
15MO-SET	15
16MO-SET	16
18MO-SET	18
20MO-SET	20
22MO-SET	22
25MO-SET	25

Instrument Valves



3 PIECE BALL VALVE

The Panolok Ball Valve is 100% pressure tested, cleaned, and assembled in a class 1,000 cleanroom





PRESSURE REGULATOR



NEEDLE VALVES

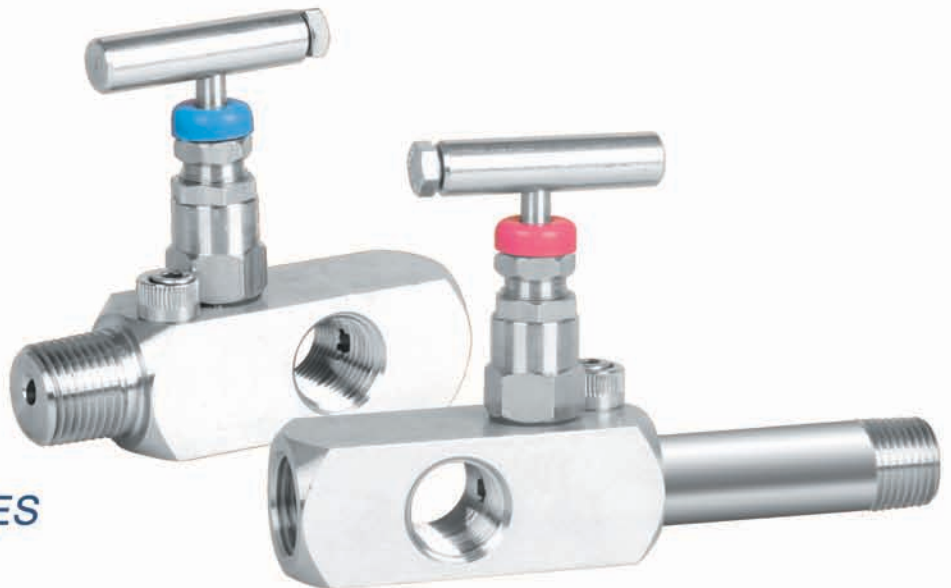


PRSSURE REDUCING REGULATOR

HIGH PRESSURE BALL VALVES



BALL VALVES



GAUGE VALVES



FACTORY ADDRESS: 598 ZHENBEI ROAD,JIAXING,
ZHEJIANG PROVINCE, CHINA (ZIP CODE,314031)

OFFICE ADDRESS: 1202 JINGRUN PLAZA, 2017 WEST ZHONGSHAN ROAD,JIAXING,
ZHEJIANG PROVINCE, CHINA (ZIP CODE,314031)

TEL: +86 - 573 - 8279 - 6081

FAX: +86 - 573 - 8359 - 1020

EMAIL: eric@panolok.com

EMAIL: www.panolok.com