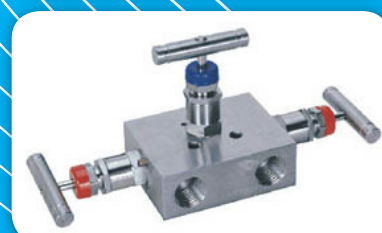


An ISO 9001:2015 Certified Company

AVLOK®



- › Tube Fittings
- › Pipe Fittings
- › Quick Connect Couplings
- › Needle Valves
- › Manifolds
- › Ball Valves
- › Check Valves
- › Pressure Gauges

A V I INTERNATIONAL

315, 3rd Floor, Plot 211, Dalamal Tower
Free Press Journal Marg, Nariman Point

Mumbai- 400021

email: info@avlok.com

website: www.avlok.com

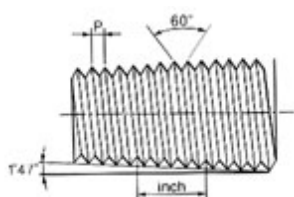
THREAD INFORMATION

Threads of many different kinds are used for different purposes in small piping components.

The Most common are:

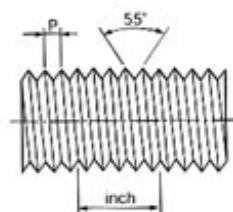
The following are the more common types of pipe used in the small pipe industry.

1. NPT Tapered Pipe Threads



- 60° Thread Angle
- Taper Angle 1°47'
- Truncation of root and crest are flat.
- Pitch measured in inches

2. ISO 228/1 Parallel Pipe Threads

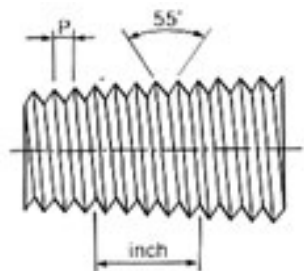


- 55° Thread Angle
- Diameter measured in inches
- Truncation of root and crest are round
- Pitch measured in inches

NPT (National Pipe Tapered) is made to specifications outlined in ANSI B1. 2. This is the pipe thread used on the pipe end

International Organization For Standards (ISO 228/1) parallel (PF ISO Parallel threads are equivalent to DIN ISO 228/1. BSP PL. JIS B0202, R 1/8 AND R 1/4.

2. ISO 7/1 Tapered Pipe Threads



- 60° Thread Angle
- Taper Angle 1°47'
- Truncation of root and crest are flat.
- Pitch measured in inches

International Organization For Standards (ISO 7/1) Tapered. (P.T.) ISO tapered threads are equivalent to DIN 2999. BSP TR, JIS B0203, R 1/8 and R 1/4 keg.

In application ISO threads are used similar to NPT threads. However, care should be used that ISO and NPT threads are not mixed. ISO threads have a 55° angle versus 60° for NPT. Thread pitch is usually measured in millimeters but may be expressed in inch. In many sizes the threads-per-inch are different and the root and crest configurations are different from NPT.

These pipe threads are similar in configuration to 7/1 threads except there is no taper. Therefore do not work by thread interference like the tapered pipe threads of ISO 7/1 of NPT. A gasket or O-Ring is normally used to seal into the parallel female threaded component.

Comparison Chart - Pipe Threads

Nominal Size	Threads Per Inch	Included Thread Angle	Pitch	Pipe O.D.
1/16"	NPT 27	60°	.037"	.312"
	ISO 28	55°	.036"	.312"
1/8"	NPT 27	60°	.037"	.405"
	ISO 28	55°	.036"	.398"
1/4"	NPT 18	60°	.0556"	.540"
	ISO 19	55°	.053"	.535"
3/8"	NPT 18	60°	.0556"	.675"
	ISO 19	55°	.053"	.672"
1/2"	NPT 14	60°	.0714"	.840"
	ISO 14	55°	.071"	.843"
3/4"	NPT 14	60°	.0714"	1.050"
	ISO 14	55°	.071"	1.060"
1"	NPT 11-1/2	60°	.087"	1.315"
	ISO 11	55°	.091"	1.331"
1-1/4"	NPT 11-1/2	60°	.087"	1.660"
	ISO 11	55°	.091"	1.669"
1-1/2"	NPT 11-1/2	60°	.087"	1.900"
	ISO 11	55°	.091"	1.900"
2"	NPT 11-1/2	60°	.087"	2.375"
	ISO 11	55°	.091"	2.375"



All dimensions are for reference only, and are subject to change without prior notice.

Sizes and types other than those featured above are available on request.

ASSEMBLY INSTRUCTIONS



1. AVLOK tube fittings, insert front and back ferrule, are sold completely assembled and ready for directly use. Easily insert the tube in to the center of nut until it bottoms in the fitting body. (if the fitting is disassembled, please note that small tapered end of the ferrule goes into the fitting body)



2. Tighten nut as much as you can by finger this is called "finger tight." Then tight nut with wrench an additional 1-1/4 turn indicated as shown. Hold fitting body with a second to prevent body from turning it is helpful to mark the nut to facilitate counting the number of turns.

SIZE 1/4" thru 1"
SIZE M6 thru M25
(6mm-25mm)



SIZE 1/8" thru 3/16"
SIZE m3 thru M4
(3mm-4mm)

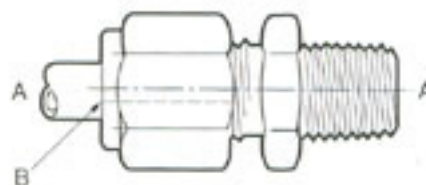


NOTE:

All assembled AVLOK tube fitting in this catalogue are shown on the Finger Tight position.

Remake Instructions

1. When repeated assemblies insert tubing to the preswaged with ferrule and nut into fitting body.
2. Finger tighten the ferrule, nut and further tighten the nut with a wrench to the original position keeping the body steady with a back-up wrench.
3. When a sharp rise in resistance will be felt at the original position. The sung-up slightly with a wrench.



NOTE : All assembled fittings in this catalog are shown in the Finger Tight Position.

Most important, only 1-1/4 turn are required, if over tightening, as this could lead to leakage or tube blow-out under pressure. Additional 3/4 turn for size 3mm O.D. through 4mm O.D.

All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

TUBE INFORMATION

Proper tubing selection is essential to the performance of a tubing system, Consider a system's pressure, flow, temperature, environment and compatibility with the process fluids when choosing the tubing material, size and wall thickness.

Wall Thickness

The wall thickness selection should be based on the operating pressure, temperature and shock conditions. Fully annealed tubing is recommended Stainless Steel Tubing having a hardness of less than Rockwell Rb90 should be used.

Cold Drawn tube A213 and A271

O.D 1-1/2" and under	Over 20%	Under 0%
----------------------	----------	----------

Cold Drawn Tube A269

O.D. Less than 1/2"	Over and Under 15%
1/2" to less than 8"	Over and Under 10%

Cold Drawn Pipe A312 and A376

O.D. All size	Under 12.5%
---------------	-------------

Seamless Stainless Steel Tubes

Grades in regular production to ASTM A269 : TP304, TP304L, TP316, TP316L, TP321, TP347

Grades in regular production to ASTM A213 : As stated for A269 plus TP304H, TP316H, TP321H, TO347H, TP310S.

Other grades available on application.

The weights show in this table theoretical and provided only as a guide.

Cold Drawn

Outside diameter		SWG gauge wall thickness								BWG gauge wall thickness							
		22	20	18	16	14	12	11	10	22	20	18	16	14	12	11	10
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
		inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches
Inches	mm	kg/ft	kg/ft	kg/ft	kg/ft	kg/ft	kg/ft	kg/ft	kg/ft	kg/ft	kg/ft	kg/ft	kg/ft	kg/ft	kg/ft	kg/ft	kg/ft
		kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m
1/4	6.350	0.030	0.038	0.047	0.058	0.067				0.030	0.037	0.048	0.059	0.068			
.250		0.100	0.124	0.156	0.191	0.219				0.100	0.121	0.158	0.193	0.223			
5/16	7.938	0.039	0.049	0.062	0.078	0.091	0.106			0.039	0.048	0.063	0.079	0.094			
.313		0.128	0.160	0.204	0.256	0.300	0.349			0.128	0.156	0.208	0.259	0.307			
3/8	9.525	0.048	0.060	0.077	0.098	0.116	0.138	0.147		0.048	0.058	0.078	0.099	0.119	0.142	0.150	
.375		0.156	0.196	0.252	0.320	0.379	0.453	0.483		0.156	0.191	0.257	0.324	0.389	0.466	0.492	
1/2	12,700	0.065	0.082	0.106	0.137	0.165	0.202	0.218	0.233	0.065	0.080	0.108	0.139	0.170	0.209	0.223	0.240
.500		0.212	0.268	0.349	0.449	0.540	0.662	0.716	0.765	0.212	0.262	0.355	0.454	0.556	0.685	0.733	0.788
5/8	15,875	0.082	0.104	0.136	0.176	0.214	0.265	0.289	0.312	0.082	0.101	0.138	0.178	0.220	0.276	0.297	0.322
.625		0.269	0.341	0.445	0.578	0.701	0.871	0.949	1.02	0.269	0.332	0.454	0.585	0.723	0.904	0.974	1.06
3/4	19,050	0.099	0.126	0.165	0.215	0.263	0.329	0.360	0.390	0.099	0.123	0.168	0.218	0.271	0.342	0.370	0.404
.750		0.325	0.413	0.541	0.706	0.861	1.08	1.18	1.28	0.325	0.402	0.552	0.716	0.890	1.12	1.21	1.33
7/8	22,225	0.116	0.148	0.194	0.254	0.312	0.393	0.431	0.468	0.116	0.144	0.198	0.258	0.322	0.409	0.444	0.486
.875		0.381	0.485	0.638	0.834	1.02	1.29	1.41	1.54	0.381	0.472	0.651	0.846	1.06	0.34	1.46	1.60
1	25,400	0.133	0.170	0.224	0.294	0.361	0.457	0.502	0.547	0.133	0.165	0.228	0.298	0.373	0.476	0.517	0.568
1.000		0.437	0.557	0.734	0.963	1.18	1.50	1.65	1.79	0.437	0.543	0.750	0.977	1.22	1.56	1.70	1.87
1 1/4	31,750	0.168	0.214	0.283	0.372	0.458	0.584	0.644	0.703	0.168	0.208	0.288	0.377	0.474	0.609	0.664	0.733
1.250		0.550	0.702	0.927	1.22	1.50	1.92	2.11	2.31	0.550	0.683	0.946	1.24	1.56	2.00	2.18	2.40
1 1/2	38,100	0.202	0.258	0.341	0.450	0.556	0.711	0.786	0.860	0.202	0.251	0.348	0.457	0.576	0.743	0.811	0.897
1.500		0.662	0.847	1.12	1.48	1.83	2.33	2.58	2.82	0.662	0.824	1.14	1.50	1.89	2.44	2.66	2.94
1 3/4	44,450	0.236	0.302	0.400	0.529	0.654	0.839	0.928	1.02	0.236	0.294	0.408	0.537	0.678	0.876	0.958	1.06
1.750		0.775	0.991	1.31	1.73	2.15	2.75	3.05	3.34	0.775	0.965	1.34	1.76	2.22	2.87	3.14	3.48
2	50,800	0.270	0.346	0.459	0.607	0.752	0.966	1.07	1.17	0.270	0.337	0.468	0.616	0.779	1.01	1.11	1.22
2.000		0.887	1.14	1.51	1.99	2.47	3.17	3.51	3.85	0.887	1.11	1.54	2.02	2.56	3.31	3.63	4.02

All dimensions are for reference only, and are subject to change without prior notice.

Sizes and types other than those featured above are available on request.

MAXIMUM ALLOWABLE WORKING PRESSURE TABLE

Working pressure calculated in accordance with ASME B31.3, Chemical Petrochemical Plant and Refinery Piping Code 1933 Edition. AVLOK Tube Fittings are rated to maximum working pressure of tubing as shown under table.

Stainless Steel Tubing

Fully annealed high quality Stainless Steel seamless Tube ASTM A-269 or equivalent.

Tubing to be free of scratches, simply for bending and flaring.

Hardness : Rb80 or less

Tube O.D. (inch)	TUBE WALL THICKNESS (inches)															
	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
1/16	5500	6800	8000	9300	11500											
1/8						8500	10800									
3/16						5300	7000	10200								
1/4						4000	5100	7500	10100							
5/16							4000	5800	7900							
3/8							3300	4800	6500							
1/2							2300	3500	4700	6100						
5/8								2800	4000	5200	5900					
3/4								2400	3300	4200	4900	5800				
7/8								2000	2800	3500	4200	4700				
1									2400	3100	3600	4200	4600			
1-1/4										2300	2700	3200	3500	4100	4800	
1-1/2											2300	2600	3000	3300	4000	4800
2												2000	2200	2400	2800	3500

4000psi

FACTORS USED TO DETERMINE
TUBING PRESSURE RATING AT
ELEVATED TEMPERATURES.

°C	°F	Copper	316SS	304SS	Monel
90	194	0.80	1.00	1.00	0.88
200	392	0.50	0.96	0.91	0.79
310	590	...	0.85	0.80	0.79
428	600	...	0.79	0.74	0.75
536	660	...	0.76	0.68	...
644	720	...	0.37	0.30	...

Example :

316 Stainless Steel
1/2" O.D. x 0.049WT at 310°C

Allowable Working Pressure :
3500psi x 0.85 = 2975 psi

Tube O.D. (inch)	TUBE WALL THICKNESS (inches)							
	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120
1/8	2600	3500						
3/16	1700	2200	3300					
1/4	1300	1600	2400	3400				
5/16		1200	1900	2600				
3/8		1000	1600	2200				
1/2		800	1100	1600	2000			
5/8			900	1200	1500	1800		
3/4			700	1000	1300	1500	1700	
7/8			600	800	1100	1300	1500	
1			500	700	900	1100	1300	1400

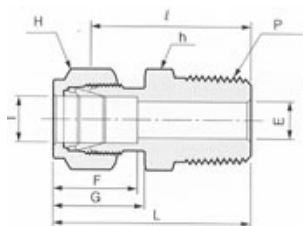
* Allowable Stress of 6,000 psi between -30°C (-22°F) and 40°C (104°F) based on ultimate tensile strength to be 30,000 psi.

All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

INDEX

Item	Part	Page	Item	Part	Page
	Male Connector AVMC			Union AVU	
	Male Pipe Weld Connector AVPWC			Bulkhead Union AVBU	
	Male Elbow AVME			Union Tee AVUT	
	Male Adapter AVMA			Union Cross AVUC	
	Bulkhead Male Connector AVBMC			Reducing Union AVRU	
	Bulkhead Male Connector AVBFC			Union Elbow AVEU	
	Male Run Tee AVMRT			Bulkhead Reducer AVBR	
	Male Branch Tee AVMBT			Reducer AVR	
	Female Adapter AVFA			Tube Cap AVC	
	Female Connector AVFC			Tube Plug AVP	
	Female Elbow AVFE			Nut AVN	
	Female Run Tee AVFRT			Front Ferrule AVFF	
	Female Branch Tee AVFBT			Bank Ferrule AVBF	

All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Male Connector

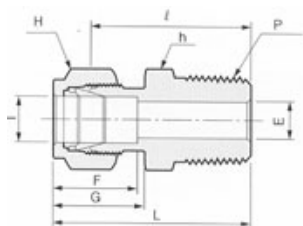
AVMC

Fractional Tube to Female NPT Thread

Part No.	Tube O.D. T		P (NPT)	E Min	h		H		F	G	I	L
	in	mm			in	mm	in	mm				
2AVMC-2N	1/8	3.17	1/8	2.3	7/16	11.11	7/16	11.11	12.7	15.2	23.9	30.5
2AVMC-4N	1/8	3.17	1/4	2.3	9/16	14.28	7/16	11.11	12.7	15.2	29.0	35.6
2AVMC-6N	1/8	3.17	3/8	2.3	11/16	17.46	7/16	11.11	12.7	15.2	29.2	35.8
2AVMC-8N	1/8	3.17	1/2	2.3	7/8	22.22	7/16	11.11	12.7	15.2	35.6	42.2
3AVMC-2N	3/16	4.76	1/8	3.0	7/16	11.11	1/2	12.70	13.7	16.0	24.7	31.2
3AVMC-4N	3/16	4.76	1/4	3.0	9/16	14.28	1/2	12.70	13.7	16.0	29.7	36.3
4AVMC-2N	1/4	6.35	1/8	4.8	1/2	12.70	9/16	14.28	15.2	17.8	25.4	32.8
4AVMC-4N	1/4	6.35	1/4	4.8	9/16	14.28	9/16	14.28	15.2	17.8	30.5	37.8
4AVMC-6N	1/4	6.35	3/8	4.8	11/16	17.46	9/16	14.28	15.2	17.8	31.0	38.4
4AVMC-8N	1/4	6.35	1/2	4.8	7/8	22.22	9/16	14.28	15.2	17.8	37.4	44.7
4AVMC-12N	1/4	6.35	3/4	4.8	1-1/16	26.98	9/16	14.28	15.2	17.8	38.9	46.2
5AVMC-2N	5/16	7.93	1/8	4.8	9/16	14.28	5/8	15.87	16.3	18.5	26.7	34.0
5AVMC-4N	5/16	7.93	1/4	6.4	9/16	14.28	5/8	15.87	16.3	18.5	31.3	38.6
5AVMC-6N	5/16	7.93	3/8	6.4	11/16	17.46	5/8	15.87	16.3	18.5	31.8	39.1
6AVMC-2N	3/8	9.52	1/8	4.8	5/8	15.87	11/16	17.46	16.8	19.3	28.0	35.3
6AVMC-4N	3/8	9.52	1/4	6.5	5/8	15.87	11/16	17.46	16.8	19.3	32.5	39.9
6AVMC-6N	3/8	9.52	3/8	7.0	11/16	17.46	11/16	17.46	16.8	19.3	32.5	39.9
6AVMC-8N	3/8	9.52	1/2	7.0	7/8	22.22	11/16	17.46	16.8	19.3	38.9	46.2
6AVMC-12N	3/8	9.52	3/4	7.0	1-1/16	26.98	11/16	17.46	16.8	19.3	40.4	47.8
8AVMC-2N	1/2	12.70	1/8	4.8	13/16	20.63	7/8	22.22	22.9	21.8	28.7	38.9
8AVMC-4N	1/2	12.70	1/4	6.5	13/16	20.63	7/8	22.22	22.9	21.8	33.3	43.4
8AVMC-6N	1/2	12.70	3/8	10.0	13/16	20.63	7/8	22.22	22.9	21.8	33.3	43.4
8AVMC-8N	1/2	12.70	1/2	10.0	7/8	22.22	7/8	22.22	22.9	21.8	38.9	49.0
8AVMC-12N	1/2	12.70	3/4	10.0	1-1/16	26.98	7/8	22.22	22.9	21.8	40.4	50.5
8AVMC-16N	1/2	12.70	1	10.0	1-3/8	34.92	7/8	22.22	22.9	21.8	47.0	57.2
10AVMC-6N	5/8	15.87	3/8	10.0	15/16	23.81	1	25.40	24.4	21.8	34.0	44.2
10AVMC-8N	5/8	15.87	1/2	12.0	15/16	23.81	1	25.40	24.4	21.8	38.9	49.0
10AVMC-12N	5/8	15.87	3/4	12.0	1-1/16	26.98	1	25.40	24.4	21.8	40.4	50.5
12AVMC-8N	3/4	19.05	1/2	12.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	40.4	50.5
12AVMC-12N	3/4	19.05	3/4	16.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	40.0	50.5
12AVMC-16N	3/4	19.05	1	16.0	1-3/8	34.92	1-1/8	28.57	24.4	21.8	47.0	57.2
14AVMC-12N	7/8	22.22	3/4	16.0	1-3/16	30.16	1-1/4	31.75	25.9	21.8	40.4	50.5
14AVMC-16N	7/8	22.22	1	18.0	1-3/8	34.92	1-1/4	31.75	25.9	21.8	47.0	57.2
16AVMC-8N	1	25.40	1/2	12.0	1-3/8	34.92	1-1/2	38.10	31.2	26.4	45.2	57.4
16AVMC-12N	1	25.40	3/4	16.0	1-3/8	34.92	1-1/2	38.10	31.2	26.4	45.2	57.4
16AVMC-16N	1	25.40	1	22.0	1-3/8	34.92	1-1/2	38.10	31.2	26.4	50.0	62.2



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Male Connector

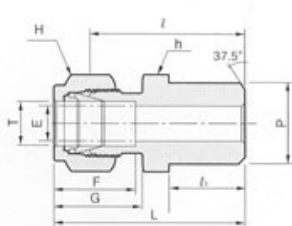
AVMC

Metric Tube to Female ISO Tapered Thread

Part No.	Tube O.D. T (mm)	P (PT)	E Min	h	H	F	G	I	L
M3AVMC-2R	3	1/8	2.3	11.1	11.1	12.9	15.3	23.1	29.7
M3AVMC-4R	3	1/4	2.3	14.3	11.1	12.9	15.3	29.0	35.6
M4AVMC-2R	4	1/8	2.3	11.1	12.7	13.7	16.1	24.6	31.2
M4AVMC-4R	4	1/4	2.3	14.3	12.7	13.7	16.1	29.7	36.3
M6AVMC-2R	6	1/8	4.8	12.7	14.3	15.3	17.7	25.4	32.8
M6AVMC-4R	6	1/4	4.8	14.3	14.3	15.3	17.7	30.2	37.6
M6AVMC-6R	6	3/8	4.8	17.5	14.3	15.3	17.7	31.0	38.4
4M6AVMC-8R	6	1/2	4.8	22.2	14.3	15.3	17.7	36.6	44.0
M8AVMC-2R	8	1/8	4.8	14.3	15.9	16.2	18.6	26.7	34.2
M8AVMC-4R	8	1/4	6.4	14.3	15.9	16.2	18.6	31.2	38.7
M8AVMC-6R	8	3/8	6.4	17.5	15.9	16.2	18.6	31.8	39.2
M8AVMC-8R	8	1/2	6.4	22.2	15.9	16.2	18.6	37.3	44.8
M10AVMC-2R	10	1/8	4.8	17.5	19.1	17.2	19.5	28.7	36.3
M10AVMC-4R	10	1/4	6.4	17.5	19.1	17.2	19.5	33.3	40.9
M10AVMC-6R	10	3/8	8.0	17.5	19.1	17.2	19.5	33.3	40.9
M10AVMC-8R	10	1/2	8.0	22.2	19.1	17.2	19.5	38.1	45.7
M12AVMC-4R	12	1/4	6.4	20.6	22.2	22.8	22.0	33.3	43.4
M12AVMC-6R	12	3/8	10.0	20.6	22.2	22.8	22.0	33.3	43.4
M12AVMC-8R	12	1/2	10.0	22.2	22.2	22.8	22.0	38.1	48.2
M12AVMC-12R	12	3/4	10.0	27.0	22.2	22.8	22.0	38.9	49.0
M15AVMC-8R	15	1/2	12.0	23.8	25.4	24.4	22.0	38.9	49.0
M16AVMC-4R	16	1/4	6.4	23.8	25.4	24.4	22.0	34.0	44.1
M16AVMC-6R	16	3/8	10.0	23.8	25.4	24.4	22.0	34.0	44.1
M16AVMC-8R	16	1/2	12.0	23.8	25.4	24.4	22.0	38.9	49.0
M16AVMC-12R	16	3/4	12.0	27.0	25.4	24.4	15.3	38.9	49.0
M18AVMC-8R	18	1/2	12.0	27.0	30.2	24.4	22.0	40.4	50.5
M18AVMC-12R	18	3/4	15.0	27.0	30.2	24.4	22.0	40.4	50.5
M20AVMC-8R	20	1/2	12.0	30.2	31.8	26.0	22.0	42.2	52.3
M20AVMC-12R	20	3/4	16.0	30.2	31.8	26.0	22.0	42.2	52.3
M22AVMC-12R	22	3/4	16.0	30.2	31.8	26.0	22.0	42.2	52.3
M22AVMC-16R	22	1	18.0	34.9	31.8	26.0	22.0	47.8	57.9
M25AVMC-12R	25	3/4	16.0	34.9	38.1	31.3	26.5	45.2	57.9
M25AVMC-12R	25	1	22.0	34.9	38.1	31.3	26.5	50.0	62.3



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Male Pipe Weld Connector

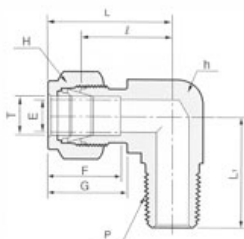
AVPCW

Part No.	Tube O.D. T		Pipe Weld Size (P)		E Min	h		H		F	G	I	I ₁	L
	in	mm	Nom	O.D.		in	mm	in	mm					
2AVPCW-2P	1/8	3.17	1/8	10.30	2.3	7/16	11.11	7/16	11.11	12.7	15.2	23.9	9.7	30.5
3AVPCW-2P	3/16	4.76	1/8	10.30	3.0	7/16	11.11	1/2	12.70	13.7	16.0	24.6	9.7	31.2
4AVPCW-2P	1/4	6.35	1/8	10.30	4.8	1/2	12.70	9/16	14.28	15.2	17.8	25.4	9.7	32.8
4AVPCW-4P	1/4	6.35	1/4	13.70	4.8	9/16	14.28	9/16	14.28	15.2	17.8	30.5	14.2	37.8
5AVPCW-2P	5/16	7.93	1/8	10.30	4.8	9/16	14.28	5/8	15.87	16.3	18.5	26.7	9.7	34.0
5AVPCW-4P	5/16	7.93	1/4	13.70	6.4	9/16	14.28	5/8	15.87	16.3	18.5	31.2	14.2	38.6
6AVPCW-4P	3/8	9.52	1/4	13.70	7.0	5/8	15.87	11/16	17.46	16.8	19.3	32.5	14.2	39.9
6AVPCW-6P	3/8	9.52	3/8	17.10	7.0	11/16	17.46	11/16	17.46	16.8	19.3	32.5	14.2	39.9
6AVPCW-8P	3/8	9.52	1/2	21.30	7.0	7/8	22.22	11/16	17.46	16.8	19.3	38.9	19.1	46.2
8AVPCW-6P	1/2	12.70	3/8	17.10	10.0	13/16	20.63	7/8	22.22	22.9	21.8	33.3	14.2	43.4
8AVPCW-8P	1/2	12.70	1/2	21.30	10.0	7/8	22.22	7/8	22.22	22.9	21.8	38.9	19.1	49.0
8AVPCW-12P	1/2	12.70	3/4	26.67	10.0	1-1/16	26.98	7/8	22.22	22.9	21.8	40.4	19.1	50.5
10AVPCW-8P	5/8	15.87	1/2	21.30	12.0	15/16	23.81	1	25.40	24.4	21.8	38.9	19.1	49.0
12AVPCW-12P	3/4	19.05	3/4	26.67	16.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	40.4	19.1	50.5
16AVPCW-16P	1	25.40	1	33.40	22.0	1-3/8	34.92	1-1/2	38.10	31.2	26.4	50.0	23.9	62.2

Part No.	Tube O.D. T	Pipe Weld Size (P)		E Min	h	H	A	B	I	I ₁	L
		Nom	O.D.								
M3AVPCW-2P	3	1/8	10.3	2.3	11.1	11.1	12.9	15.3	23.1	9.7	29.7
M4AVPCW-2P	4	1/8	10.3	2.3	11.1	12.7	13.7	16.1	24.1	9.7	30.7
M6AVPCW-2P	6	1/8	10.3	4.8	12.7	14.3	15.3	17.7	25.4	9.7	32.8
M6AVPCW-4P	6	1/4	13.7	4.8	14.3	14.3	15.3	17.7	30.2	14.2	37.6
M8AVPCW-2P	8	1/8	10.3	4.8	14.3	15.9	16.2	18.6	26.7	9.7	34.2
M8AVPCW-4P	8	1/4	13.7	6.4	14.3	15.9	16.2	18.6	31.2	14.2	38.7
M8AVPCW-8P	8	1/2	21.3	6.4	22.2	15.9	16.2	18.6	37.3	19.0	44.8
M10AVPCW-4P	10	1/4	13.7	7.0	17.5	19.1	17.2	19.5	33.3	14.2	40.9
M10AVPCW-6P	10	3/8	17.1	8.0	17.5	19.1	17.2	19.5	32.5	14.2	40.1
M10AVPCW-8P	10	1/2	21.3	8.0	22.2	19.1	17.2	19.5	38.1	19.0	45.7
M12AVPCW-4P	12	1/4	13.7	7.0	22.2	22.2	22.8	22.0	33.3	14.2	43.4
M12AVPCW-6P	12	3/8	17.1	10.0	20.6	22.2	22.8	22.0	33.3	14.2	43.4
M12AVPCW-8P	12	1/2	21.3	10.0	22.2	22.2	22.8	22.0	38.1	19.0	48.2
M15AVPCW-8P	15	1/2	21.3	12.0	23.8	25.4	24.4	22.0	38.9	19.0	49.0
M16AVPCW-8P	16	1/2	21.3	12.0	23.8	25.4	24.4	22.0	38.9	19.0	49.0
M18AVPCW-8P	18	1/2	21.3	12.0	27.0	30.2	24.4	22.0	40.4	19.0	50.5



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Male Elbow

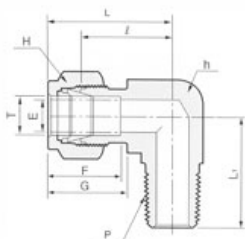
AVME

Fractional Tube to Female NPT

Part No.	Tube O.D. T		P (NPT)	E Min	h		H		F	G	I	L	L ₁
	in	mm			in	mm	in	mm					
2AVME-2N	1/8	3.17	1/8	4.8	7/16	11.11	7/16	11.11	12.7	15.2	17.0	23.6	17.8
2AVME-4N	1/8	3.17	1/4	4.8	1/2	12.70	7/16	11.11	12.7	15.2	18.0	24.6	23.4
3AVME-2N	3/16	4.76	1/8	4.8	7/16	11.11	1/2	12.70	13.7	16.0	18.8	25.4	18.8
3AVME-4N	3/16	4.76	1/4	4.8	1/2	12.70	1/2	12.70	13.7	16.0	18.8	25.4	23.4
4AVME-2N	1/4	6.35	1/8	4.8	1/2	12.70	9/16	14.28	15.2	17.8	19.6	26.9	18.8
4AVME-4N	1/4	6.35	1/4	4.8	1/2	12.70	9/16	14.28	15.2	17.8	19.6	26.9	23.4
4AVME-6N	1/4	6.35	3/8	4.8	11/16	17.46	9/16	14.28	15.2	17.8	22.4	29.7	26.2
4AVME-8N	1/4	6.35	1/2	4.8	13/16	20.63	9/16	14.28	15.2	17.8	24.4	31.8	33.0
5AVME-2N	5/16	7.93	1/8	6.4	9/16	14.28	5/8	15.87	16.3	18.5	21.3	28.7	19.8
5AVME-4N	5/16	7.93	1/4	6.4	9/16	14.28	5/8	15.87	16.3	18.5	21.3	28.7	24.4
5AVME-6N	5/16	7.93	3/8	6.4	11/16	17.46	5/8	15.87	16.3	18.5	23.1	30.5	26.2
6AVME-2N	3/8	9.52	1/8	4.8	5/8	15.87	11/16	17.46	16.8	19.3	23.1	30.5	20.8
6AVME-4N	3/8	9.52	1/4	6.5	5/8	15.87	11/16	17.46	16.8	19.3	23.1	30.5	25.4
6AVME-6N	3/8	9.52	3/8	7.0	11/16	17.46	11/16	17.46	16.8	19.3	23.9	31.2	26.2
6AVME-8N	3/8	9.52	1/2	7.0	13/16	20.63	11/16	17.46	16.8	19.3	25.9	33.5	33.0
6AVME-12N	3/8	9.52	3/4	7.0	1-1/16	26.98	11/16	17.46	16.8	19.3	29.7	37.1	36.8
8AVME-4N	1/2	12.70	1/4	6.5	13/16	20.63	7/8	22.22	22.9	21.8	25.9	36.1	28.2
8AVME-6N	1/2	12.70	3/8	10.0	13/16	20.63	7/8	22.22	22.9	21.8	25.9	36.1	28.2
8AVME-8N	1/2	12.70	1/2	10.0	13/16	20.63	7/8	22.22	22.9	21.8	25.9	36.1	33.0
8AVME-12N	1/2	12.70	3/4	10.0	1-1/16	26.98	7/8	22.22	22.9	21.8	29.7	39.9	36.8
10AVME-6N	5/8	15.87	3/8	10.0	15/16	23.80	1	25.40	24.4	21.8	27.9	38.1	30.2
10AVME-8N	5/8	15.87	1/2	12.0	15/16	23.80	1	25.40	24.4	21.8	27.9	38.1	35.1
10AVME-12N	5/8	15.87	3/4	12.0	1-1/16	26.98	1	25.40	24.4	21.8	29.7	39.9	36.8
12AVME-8N	3/4	19.05	1/2	12.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	29.7	39.9	36.8
12AVME-12N	3/4	19.05	3/4	16.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	29.7	39.9	36.8
14AVME-12N	7/8	22.22	3/4	16.0	1-1/4	31.75	1-1/4	31.75	25.9	21.8	34.5	44.7	41.7
16AVME-12N	1	25.40	3/4	16.0	1-3/8	34.92	1-1/2	38.10	31.2	26.4	36.8	49.0	41.7
16AVME-16N	1	25.40	1	22.0	1-3/8	34.92	1-1/2	38.10	31.2	26.4	36.8	49.0	46.5



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Male Elbow

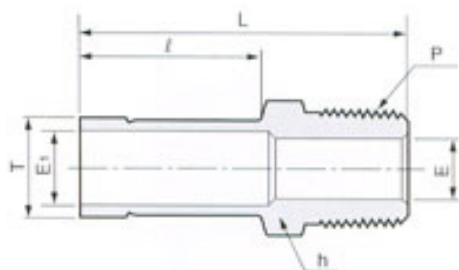
AVME

Metric Tube to Female ISO Tapered Thread

Part No.	O.D. T (mm)	P (PT)	E Min	h	H	F	G	I	L	L ₁
M3AVME-2R	3	1/8	2.3	11.1	11.1	12.9	15.3	17.0	23.6	17.8
M3AVME-4R	3	1/4	2.3	12.7	11.1	12.9	15.3	18.0	24.6	23.4
M4AVME-2R	4	1/8	2.3	11.1	12.7	13.7	16.1	18.8	25.4	18.8
M4AVME-4R	4	1/4	2.3	12.7	12.7	13.7	16.1	18.8	25.4	23.4
M6AVME-2R	6	1/8	4.8	12.7	14.3	15.3	17.7	19.6	27.0	18.8
M6AVME-4R	6	1/4	4.8	12.7	14.3	15.3	17.7	19.6	27.0	23.4
M6AVME-6R	6	3/8	4.8	17.5	14.3	15.3	17.7	22.4	29.8	26.2
M6AVME-8R	6	1/2	4.8	20.6	14.3	15.3	17.7	24.4	31.8	33.0
M8AVME-2R	8	1/8	4.8	14.3	15.9	16.2	18.6	21.3	28.8	19.8
M8AVME-4R	8	1/4	6.4	14.3	15.9	16.2	18.6	21.3	28.8	24.4
M8AVME-6R	8	3/8	6.4	17.5	15.9	16.2	18.6	23.9	31.4	28.5
M8AVME-8R	8	1/2	6.4	20.6	15.9	16.2	18.6	25.1	32.6	33.0
M10AVME-2R	10	1/8	4.8	17.5	19.1	17.2	19.5	23.9	31.5	23.6
M10AVME-4R	10	1/4	6.4	17.5	19.1	17.2	19.5	23.9	31.5	28.2
M10AVME-6R	10	3/8	8.0	17.5	19.1	17.2	19.5	23.9	31.5	28.2
M10AVME-8R	10	2/1	8.0	20.6	19.1	17.2	19.5	23.9	33.5	33.0
M12AVME-2R	12	1/8	4.8	20.6	22.2	22.8	22.0	25.9	36.0	23.6
M12AVME-4R	12	1/4	6.4	20.6	22.2	22.8	22.0	25.9	36.0	28.2
M12AVME-6R	12	3/8	10.0	20.6	22.2	22.8	22.0	25.9	36.0	28.2
M12AVME-8R	12	1/2	10.0	20.6	22.2	22.8	22.0	25.9	36.0	33.0
M12AVME-12R	12	3/4	10.0	27.0	22.2	22.8	22.0	29.7	39.8	36.8
M16AVME-6R	16	3/8	10.0	25.4	25.4	24.4	22.0	27.9	38.0	30.2
M16AVME-8R	16	1/2	12.0	25.4	25.4	24.4	22.0	27.9	38.0	35.1
M16AVME-12R	16	3/4	12.0	27.0	25.4	24.4	22.0	29.7	39.8	36.8
M18AVME-8R	18	1/2	12.0	27.0	30.2	24.4	22.0	29.7	39.8	35.1
M18AVME-12R	18	3/4	15.0	27.0	30.2	24.4	22.0	29.7	39.8	36.8
M20AVME-8R	20	1/2	12.0	31.8	31.8	26.0	22.0	34.5	44.6	41.7
M20AVME-12R	20	3/4	16.0	31.8	31.8	26.0	22.0	34.5	44.6	41.7
M22AVME-12R	22	3/4	16.0	31.8	31.8	26.0	22.0	34.5	44.6	41.7
M22AVME-16R	22	1	18.0	34.9	31.8	26.0	22.0	34.5	44.6	46.5
M25AVME-12R	25	3/4	16.0	34.9	38.1	31.3	26.5	36.8	49.1	41.7
M25AVME-16R	25	1	22.0	34.9	38.1	31.3	26.5	36.8	49.1	46.5



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Male Adapter

AVMA

Fractional AVLOK Port to Female NPT Thread

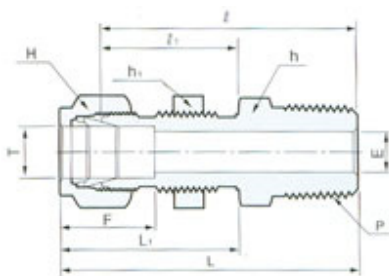
Part No.	Tube O.D. T		P (NPT)	E Min	E _i	h		l	L
	in	mm				in	mm		
2AVMA-2N	1/8	3.17	1/8	4.6	1.8	7/16	11.11	13.5	28.4
3AVMA-2N	3/16	4.76	1/8	4.6	3.0	7/16	11.11	14.2	29.2
4AVMA-2N	1/4	6.35	1/8	4.6	4.6	7/16	11.11	15.7	30.7
4AVMA-4N	1/4	6.35	1/4	4.6	4.6	9/16	14.28	15.7	35.6
5AVMA-2N	5/16	7.93	1/8	4.8	6.4	7/16	11.11	16.5	31.8
5AVMA-4N	5/16	7.93	1/4	6.4	6.4	9/16	14.28	16.5	37.1
6AVMA-4N	3/8	9.52	1/4	7.0	7.0	9/16	14.28	17.3	38.1
6AVMA-6N	3/8	9.52	3/8	7.0	7.0	11/16	17.46	17.3	38.1
6AVMA-8N	3/8	9.52	1/2	7.0	7.0	7/8	22.22	17.3	43.4
8AVMA-4N	1/2	12.70	1/4	6.5	10.0	9/16	14.28	22.9	43.4
8AVMA-6N	1/2	12.70	3/8	10.0	10.0	11/16	17.46	22.9	44.5
8AVMA-8N	1/2	12.70	1/2	10.0	10.0	7/8	22.22	22.9	49.0
10AVMA-8N	5/8	15.87	1/2	12.7	12.7	7/8	22.22	24.4	50.8
12AVMA-12N	3/4	19.05	3/4	15.0	15.0	1-1/16	26.98	24.4	51.6
14AVMA-12N	7/8	22.22	3/4	18.0	18.0	1-1/16	26.98	26.2	53.1
14AVMA-16N	1	25.40	1	22.0	22.0	1-3/8	34.92	30.7	65.0

Metric AVLOK Port to ISO Tapered Thread

Part No.	Tube O.D. T (mm)	P (NPT)	E Min	E _i	h	l	L
M3AVMA-2R	3	1/8	4.0	1.8	11.1	13.5	29.4
M6AVMA-2R	6	1/8	4.8	4.8	11.1	15.9	31.8
M6AVMA-4R	6	1/4	4.8	4.8	14.3	15.9	36.5
M8AVMA-4R	8	1/4	6.4	6.4	14.3	16.7	37.3
M10AVMA-4R	10	1/4	6.4	6.4	14.3	17.5	38.9
M10AVMA-6R	10	3/8	8.0	8.0	17.5	17.5	39.7
M10AVMA-8R	10	1/2	12.0	8.0	22.2	17.5	45.2
M12AVMA-4R	12	1/4	6.4	9.0	14.3	23.0	45.6
M12AVMA-6R	12	3/8	9.0	9.0	17.5	23.0	45.2
M12AVMA-8R	12	1/2	12.0	9.0	22.2	23.0	50.0
M18AVMA-8R	18	1/2	12.0	14.0	22.2	24.6	53.2
M18AVMA-12R	18	3/4	16.0	14.0	27.0	24.6	53.2



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Bulkhead Male Connector

AVBMC

Fractional Tube to Female NPT Thread

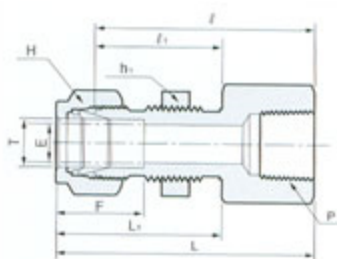
Part No.	Tube O.D. T		P (NPT)	E Min	h		h1		H		F	I	I1	L	L1	Panel Hole Drill Size	Max Panel Thickness
	in	mm			in	mm	in	mm	in	mm							
2AVBMC-2N	1/8	3.17	1/8	2.3	1/2	12.70	1/2	12.70	7/16	11.11	12.70	39.9	24.6	46.5	31.2	8.3	12.7
4AVBMC-2N	1/4	6.35	1/8	4.8	5/8	15.87	5/8	15.87	9/16	14.28	15.24	42.2	26.2	49.5	33.5	11.5	10.2
4AVBMC-4N	1/4	6.35	1/4	4.8	5/8	15.87	5/8	15.87	9/16	14.28	15.24	46.0	26.2	53.3	33.5	11.5	10.2
6AVBMC-4N	3/8	9.52	1/4	6.5	3/4	19.05	3/4	19.05	11/16	17.46	16.76	50.0	29.5	57.4	36.8	14.7	11.2
8AVBMC-6N	1/2	12.70	3/8	10.0	15/16	23.81	15/16	23.81	7/8	22.22	22.86	53.1	31.8	63.2	41.9	19.4	12.7
8AVBMC-8N	1/2	12.70	1/2	10.0	15/16	23.81	15/16	23.81	7/8	22.22	22.86	58.7	31.8	68.8	41.9	19.4	12.7

Metric Tube to Female ISO Tapered Thread

Part No.	Tube O.D. T mm	P (NPT)	E Min	h	h1	H	F	I	I1	L	L1	Panel Hole Drill Size	Max Panel Thickness
M3AVBMC-2R	3	1/8	2.3	12.7	12.7	11.1	12.9	39.9	24.6	46.5	31.2	8.3	12.7
M6AVBMC-2R	6	1/8	4.8	15.9	15.9	14.3	15.3	42.2	26.2	49.5	33.6	11.5	10.2
M6AVBMC-4R	6	1/4	4.8	15.9	15.9	14.3	15.3	46.0	26.2	53.3	33.6	11.5	10.2
M8AVBMC-4R	8	1/4	6.4	17.5	17.5	15.9	16.2	49.0	28.6	57.4	36.1	13.1	11.2
M12AVBMC-6R	12	3/8	10.0	23.8	23.8	22.2	22.8	53.1	31.8	63.2	41.9	19.5	12.7
M12AVBMC-8R	12	1/2	10.0	23.8	23.8	22.2	22.8	58.7	31.8	68.8	41.9	19.5	12.7



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Bulkhead Female Connector

AVBFC

Fractional Tube to Male NPT Thread

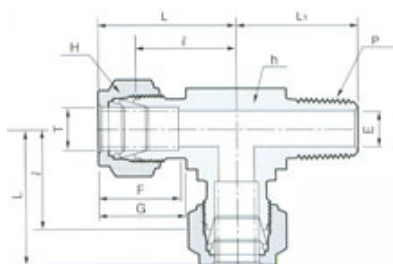
Part No.	Tube O.D. T		P (NPT)	E Min	h		h1		H		F	I	I1	L	L1	Panel Hole Drill Size	Max Panel Thickness
	in	mm			in	mm	in	mm	in	mm							
2AVBFC-2N	1/8	3.17	1/8	2.3	9/16	14.28	1/2	12.70	7/16	11.11	12.7	38.1	24.6	44.7	31.2	8.3	12.7
4AVBFC-2N	1/4	6.35	1/8	4.8	5/8	15.87	5/8	15.87	9/16	14.28	15.2	39.6	26.2	47.0	33.5	11.5	10.2
4AVBFC-4N	1/4	6.35	1/4	4.8	3/4	19.05	5/8	15.87	9/16	14.28	15.2	44.5	26.2	51.8	33.5	11.5	10.2
6AVBFC-4N	3/8	9.52	1/4	7.0	3/4	19.05	3/4	19.05	11/16	17.46	16.8	47.8	29.5	55.1	36.8	14.7	11.2
8AVBFC-6N	1/2	12.70	3/8	10.0	15/16	23.81	15/16	23.81	7/8	22.22	22.9	51.6	31.8	61.7	41.9	19.4	12.7
8AVBFC-8N	1/2	12.70	1/2	10.0	1-1/16	26.98	15/16	23.81	7/8	22.22	22.9	56.4	31.8	66.5	41.9	19.4	12.7

Metric Tube to Male ISO Tapered Thread

Part No.	Tube O.D. T mm	P (NPT)	E Min	h	h1	H	F	I	I1	L	L1	Panel Hole Drill Size	Max Panel Thickness
M3AVBFC-2R	3	1/8	2.3	14.3	12.7	11.1	12.9	38.1	24.6	44.7	31.2	8.3	12.7
M6AVBFC-2R	6	1/8	4.8	15.9	15.9	14.3	15.3	39.6	26.2	47.0	33.6	11.5	10.2
M6AVBFC-4R	6	1/4	4.8	19.1	15.9	14.3	15.3	44.5	26.2	51.8	33.6	11.5	10.2
M8AVBFC-4R	8	1/4	7.0	19.1	17.5	15.9	16.2	49.0	28.4	54.2	36.1	13.1	11.2
M12AVBFC-6R	12	3/8	10.0	23.8	23.8	22.2	22.8	51.6	31.8	61.7	41.9	19.5	12.7
M12AVBFC-8R	12	1/2	10.0	27.0	23.8	22.2	22.8	56.4	31.8	66.5	41.9	19.5	12.7



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Male Run Tee

AVMRT

Fractional Tube to Female NPT Thread

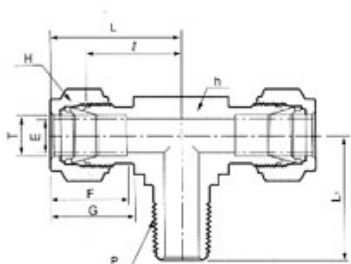
Part No.	Tube O.D. T		P (NPT)	E Min	h		H		F	G	I	L	L ₁
	in	mm			in	mm	in	mm					
2AVMRT-2N	1/8	3.17	1/8	2.3	7/16	11.11	7/16	11.11	12.70	15.2	17.0	23.6	17.8
2AVMRT-2N	1/8	3.17	1/4	2.3	1/2	12.70	7/16	11.11	12.70	15.2	18.0	24.6	23.4
3AVMRT-2N	3/16	4.76	1/8	3.0	7/16	11.11	1/2	12.70	13.71	16.0	17.8	24.4	17.8
4AVMRT-2N	1/4	6.35	1/8	4.8	1/2	12.70	9/16	14.28	15.24	17.8	19.6	26.9	18.8
4AVMRT-4N	1/4	6.35	1/4	4.8	1/2	12.70	9/16	14.28	15.24	17.8	19.6	26.9	23.4
5AVMRT-2N	5/16	7.93	1/8	4.8	9/16	14.28	5/8	15.87	16.25	18.5	22.4	29.7	20.8
6AVMRT-4N	3/8	9.52	1/4	6.5	5/8	15.87	11/16	17.46	16.76	19.3	23.1	30.5	25.4
6AVMRT-6N	3/8	9.52	3/8	7.0	11/16	17.46	11/16	17.46	16.76	19.3	25.9	33.3	28.2
8AVMRT-6N	1/2	12.70	3/8	10.0	13/16	20.63	7/8	22.22	22.86	21.8	25.9	36.1	28.2
8AVMRT-8N	1/2	12.70	1/2	10.0	13/16	20.63	7/8	22.22	22.86	21.8	25.9	36.1	33.0
10AVMRT-8N	5/8	15.87	1/2	12.0	15/16	23.80	1	25.40	24.38	21.8	27.9	38.1	35.1
12AVMRT-12N	3/4	19.05	3/4	16.0	1-1/16	26.98	1-1/8	28.57	24.38	21.8	28.2	38.4	35.3

Metric Tube to Female ISO Tapered Thread

Part No.	Tube O.D. Tmm	P (NPT)	E Min	h	H	F	G	I	L	L ₁
M3AVMRT-2R	3	1/8	2.3	11.1	11.1	12.9	15.3	17.0	23.6	17.8
M3AVMRT-4R	3	1/4	2.3	12.7	11.1	12.9	15.3	18.0	24.6	23.4
M4AVMRT-2R	4	1/8	2.3	11.1	12.7	13.7	16.1	18.8	25.4	18.8
M6AVMRT-2R	6	1/8	4.8	12.7	14.3	15.3	17.7	19.6	27.0	18.8
M6AVMRT-4R	6	1/4	4.8	12.7	14.3	15.3	17.7	19.6	27.0	23.4
M8AVMRT-2R	8	1/8	4.8	14.3	15.9	16.2	18.6	21.3	28.8	19.8
M8AVMRT-4R	8	1/4	6.4	14.3	15.9	16.2	18.6	21.3	28.8	24.4
M10AVMRT-4R	10	1/4	6.4	17.5	19.1	17.2	19.5	23.9	31.5	28.2
M10AVMRT-6R	10	3/8	8.0	17.5	19.1	17.2	19.5	23.9	31.5	28.2
M12AVMRT-4R	12	1/4	6.4	20.6	22.2	22.8	22.0	25.9	36.0	28.2
M12AVMRT-6R	12	3/8	10.0	20.6	22.2	22.8	22.0	25.9	36.0	28.2
M12AVMRT-8R	12	1/2	10.0	20.6	22.2	22.8	22.0	25.9	36.0	33.0
M16AVMRT-6R	16	3/8	10.0	25.4	25.4	24.4	22.0	27.9	38.0	30.2
M16AVMRT-8R	16	1/2	12.0	25.4	25.4	24.4	22.0	27.9	38.0	35.1
M20AVMRT-12R	20	3/4	16.0	31.8	31.8	26.0	22.0	34.5	44.6	41.7



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Male Branch Tee

AVMBT

Fractional Tube to Female NPT Thread

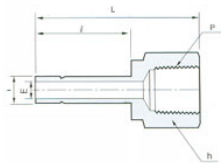
Part No.	Tube O.D. T		P (NPT)	E Min	h		H		F	G	I	L	L ₁
	in	mm			in	mm	in	mm					
2AVMBT-2N	1/8	3.17	1/8	2.3	7/16	11.11	7/16	11.11	12.7	15.2	17.0	23.6	17.8
2AVMBT-2N	1/8	3.17	1/4	2.3	1/2	12.70	7/16	11.11	12.7	15.2	18.0	24.6	23.4
3AVMBT-2N	3/16	4.76	1/8	3.0	7/16	11.11	1/2	12.70	13.7	16.0	17.8	24.4	17.8
4AVMBT-2N	1/4	6.35	1/8	4.8	1/2	12.70	9/16	14.28	15.2	17.8	19.6	26.9	18.8
4AVMBT-4N	1/4	6.35	1/4	4.8	1/2	12.70	9/16	14.28	15.2	17.8	19.6	26.9	23.4
5AVMBT-2N	5/16	7.93	1/8	4.8	9/16	14.28	5/8	15.87	16.3	18.5	22.4	29.7	20.8
6AVMBT-4N	3/8	9.52	1/4	7.0	5/8	15.87	11/16	17.46	16.8	19.3	23.1	30.5	25.4
6AVMBT-6N	3/8	9.52	3/8	7.0	11/16	17.46	11/16	17.46	16.8	19.3	25.9	33.3	28.2
8AVMBT-6N	1/2	12.70	3/8	10.0	13/16	20.63	7/8	22.22	22.9	21.8	25.9	36.1	28.2
8AVMBT-8N	1/2	12.70	1/2	10.0	13/16	20.63	7/8	22.22	22.9	21.8	25.9	36.1	33.0
10AVMBT-8N	5/8	15.87	1/2	12.0	15/16	23.8	1	25.40	24.4	21.8	27.9	38.1	35.1
12AVMBT-12N	3/4	19.05	3/4	16.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	28.2	38.4	35.3

Metric Tube to Female ISO Tapered Thread

Part No.	Tube O.D. Tmm	P (NPT)	E Min	h	H	F	G	I	L	L ₁
M3AVMBT-2R	3	1/8	2.3	11.1	11.1	12.9	15.3	17.0	23.6	17.8
M3AVMBT-4R	3	1/4	2.3	12.7	11.1	12.9	15.3	18.0	24.6	23.4
M4AVMBT-2R	4	1/8	2.3	11.1	12.7	13.7	16.1	18.8	25.4	18.8
M6AVMBT-2R	6	1/8	4.8	12.7	14.3	15.3	17.7	19.6	27.0	18.8
M6AVMBT-4R	6	1/4	4.8	12.7	14.3	15.3	17.7	19.6	27.0	23.4
M8AVMBT-2R	8	1/8	4.8	14.3	15.9	16.2	18.6	21.3	28.8	19.8
M8AVMBT-4R	8	1/4	6.4	14.3	15.9	16.2	18.6	21.3	28.8	24.4
M10AVMBT-4R	10	1/4	6.4	17.5	19.1	17.2	19.5	23.9	31.5	28.2
M10AVMBT-6R	10	3/8	8.0	17.5	19.1	17.2	19.5	23.9	31.5	28.2
M12AVMBT-4R	12	1/4	6.4	20.6	22.2	22.8	22.0	25.9	36.0	28.2
M12AVMBT-6R	12	3/8	10.0	20.6	22.2	22.8	22.0	25.9	36.0	28.2
M12AVMBT-8R	12	1/2	10.0	20.6	22.2	22.8	22.0	25.9	36.0	33.0
M16AVMBT-6R	16	3/8	10.0	25.4	25.4	24.4	22.0	27.9	38.0	30.2
M16AVMBT-8R	16	1/2	12.0	25.4	25.4	24.4	22.0	27.9	38.0	35.1
M20AVMBT-12R	20	3/4	16.0	31.8	31.8	26.0	22.0	34.5	44.6	41.7



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Female Adapter AVFA

Fractional Tube to Male NPT Thread

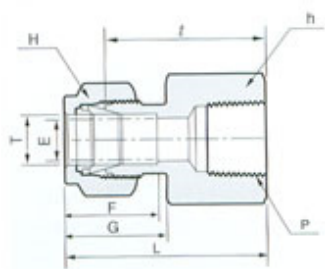
Part No.	Tube O.D.		P (NPT)	E Min	h		l	L
	in	mm			in	mm		
2 AV FA-2N	1/8	3.17	1/8	1.8	9/16	14.28	13.5	31.2
2 AV FA-4N	1/8	3.17	1/4	1.8	3/4	19.06	13.5	34.0
3 AV FA-2N	3/16	4.76	1/8	3.0	9/16	14.28	14.2	32.0
3 AV FA-4N	3/16	4.76	1/4	3.0	3/4	19.05	14.2	34.8
4 AV FA-2N	1/4	6.35	1/8	4.6	9/16	14.28	15.7	33.5
4 AV FA-4N	1/4	6.35	1/4	4.6	3/4	19.05	15.7	36.3
4 AV FA-6N	1/4	6.35	3/8	4.6	7/8	22.22	15.7	39.6
4 AV FA-8N	1/4	6.35	1/2	4.6	1-1/16	26.98	15.7	45.2
5 AV FA-2N	5/16	7.93	1/8	6.4	9/16	14.28	16.5	34.3
5 AV FA-2N	5/16	7.93	1/4	6.4	3/4	19.05	16.5	37.1
6 AV FA-2N	3/8	9.52	1/8	7.0	9/16	14.28	17.3	35.3
6 AV FA-4N	3/8	9.52	1/4	7.0	3/4	19.05	17.3	38.1
6 AV FA-6N	3/8	9.52	3/8	7.0	7/8	22.22	17.3	41.1
6 AV FA-8N	3/8	9.52	1/2	7.0	1-1/16	26.98	17.3	46.7
8 AV FA-4N	1/2	12.70	1/4	10.0	3/4	19.05	22.9	43.4
8 AV FA-6N	1/2	12.70	3/8	10.0	7/8	22.22	22.9	46.7
8 AV FA-8N	1/2	12.70	1/2	10.0	1-1/16	26.98	24.4	52.3
10 AV FA-6N	5/8	15.87	3/8	12.7	7/8	22.22	24.4	48.3
10 AV FA-8N	5/8	15.87	1/2	12.7	1-1/16	26.98	24.4	53.8
10 AV FA-12N	5/8	15.87	3/4	12.7	1-1/4	31.75	24.4	55.4
12 AV FA-8N	3/4	19.05	1/2	15.0	1-1/16	26.98	24.4	53.8
12 AV FA-12N	3/4	19.05	3/4	15.0	1-1/4	31.75	24.4	55.4
12 AV FA-16N	3/4	19.05	1	15.0	1-5/8	41.27	24.4	62.5
14 AV FA-12N	7/8	22.22	3/4	17.0	1-1/4	31.75	26.2	57.2
16 AV FA-12N	1	25.40	3/4	20.0	1-1/4	31.75	30.7	61.7
16 AV FA-16N	1	25.40	1	20.0	1-5/8	41.27	30.7	68.8

Metric Tube to Female ISO Tapered Thread

Part No.	Tube O.D. Tm m	P (NPT)	E Min	h	l	L
M3AV FA-2R	3	1/8	1.8	14.3	13.5	35.7
M6AV FA-2R	6	1/8	4.8	14.3	15.9	34.1
M6AV FA-4R	6	1/4	4.8	19.1	15.9	38.9
M8AV FA-4R	8	1/4	6.4	19.1	16.7	38.1
M10AV FA-4R	10	1/4	6.4	19.1	17.5	39.7
M10AV FA-6R	10	3/8	8.0	22.2	17.5	41.3
M10AV FA-8R	10	1/2	8.0	27.0	17.5	47.0
M12AV FA-4R	12	1/4	9.0	19.1	23.0	45.2
M12AV FA-6R	12	3/8	9.0	22.2	23.0	46.0
M12AV FA-8R	12	1/2	9.0	27.0	23.0	52.0
M18AV FA-12R	18	3/4	14.0	31.8	24.6	54.8



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Female Connector

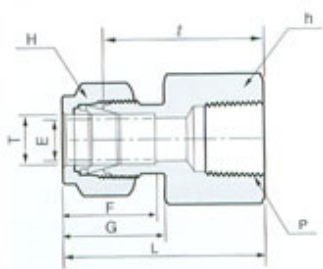
AVFC

Fractional Tube to Male NPT Thread

Part No.	Tube O.D. T		P (NPT)	E Min	h		H		F	G	I	L
	in	mm			in	mm	in	mm				
2AVFC-2N	1/8	3.17	1/8	2.3	9/16	14.28	7/16	11.11	12.7	15.2	22.1	28.7
2AVFC-4N	1/8	3.17	1/4	2.3	3/4	19.05	7/16	11.11	12.7	15.2	26.9	33.5
3AVFC-2N	3/16	4.76	1/8	3.0	9/16	14.28	1/2	12.70	13.7	16.0	23.1	29.7
4AVFC-2N	1/4	6.35	1/8	4.8	9/16	14.28	9/16	14.28	15.2	17.8	23.8	31.2
4AVFC-4N	1/4	6.35	1/4	4.8	3/4	19.05	9/16	14.28	15.2	17.8	28.4	35.8
4AVFC-6N	1/4	6.35	3/8	4.8	7/8	22.22	9/16	14.28	15.2	17.8	30.2	37.6
4AVFC-8N	1/4	6.35	1/2	4.8	1-1/16	26.98	9/16	14.28	15.2	17.8	35.1	42.4
5AVFC-2N	5/16	7.93	1/8	6.4	9/16	14.28	5/8	15.87	16.3	18.5	24.6	32.0
5AVFC-4N	5/16	7.93	1/4	6.4	3/4	19.05	5/8	15.87	16.3	18.5	29.5	36.8
6AVFC-2N	3/8	9.52	1/8	7.0	5/8	15.87	11/16	17.46	16.8	19.3	25.4	32.8
6AVFC-4N	3/8	9.52	1/4	7.0	3/4	19.05	11/16	17.46	16.8	19.3	30.2	37.6
6AVFC-6N	3/8	9.52	3/8	7.0	7/8	22.22	11/16	17.46	16.8	19.3	31.8	39.1
6AVFC-8N	3/8	9.52	1/2	7.0	1-1/16	26.98	11/16	17.46	16.8	19.3	36.6	43.9
6AVFC-12N	3/8	9.52	3/4	7.0	1-5/16	33.33	11/16	17.46	16.8	19.3	40.4	47.8
8AVFC-4N	1/2	12.70	1/4	10.0	13/16	20.63	7/8	22.22	22.9	21.8	30.2	40.4
8AVFC-6N	1/2	12.70	3/8	10.0	7/8	22.22	7/8	22.22	22.9	21.8	31.8	41.9
8AVFC-8N	1/2	12.70	1/2	10.0	1-1/16	26.98	7/8	22.22	22.9	21.8	36.6	46.7
8AVFC-12N	1/2	12.70	3/4	10.0	1-5/16	33.33	7/8	22.22	22.9	21.8	38.1	48.3
10AVFC-6N	5/8	15.87	3/8	12.0	15/16	33.33	1	25.40	24.4	21.8	31.8	41.9
10AVFC-8N	5/8	15.87	1/2	12.0	1-1/16	26.98	1	25.40	24.4	21.8	36.6	46.7
12AVFC-8N	3/4	19.05	1/2	16.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	36.6	46.7
12AVFC-12N	3/4	19.05	3/4	16.0	1-5/16	33.33	1-1/8	28.57	24.4	21.8	38.1	48.3
14AVFC-12N	7/8	22.22	3/4	18.0	1-5/16	33.33	1-1/4	31.75	25.9	21.8	39.6	49.8
16AVFC-12N	1	25.40	3/4	22.0	1-3/8	34.92	1-1/2	38.10	31.2	26.4	41.1	53.3
16AVFC-16N	1	25.40	1	22.0	1-5/8	41.27	1-1/2	38.10	31.2	26.4	50.0	62.2



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Female Connector

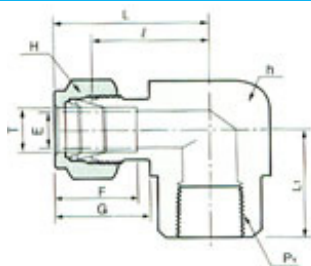
AVFC

Metric Tube to Female ISO Tapered Thread

Part No.	Tube O.D. Tmm	P (NPT)	E Min	h	H	F	G	I	I ₁	L
M3AVFC-2R	3	1/8	2.3	14.3	11.1	12.9	15.3	22.1	9.9	28.7
M3AVFC-4R	3	1/4	2.3	19.1	11.1	12.9	15.3	26.9	15.0	33.5
M4AVFC-2R	4	1/8	2.3	14.3	12.7	13.7	16.1	23.1	9.9	29.7
M6AVFC-2R	6	1/8	4.8	14.3	14.3	15.3	17.7	23.9	9.9	31.3
M6AVFC-4R	6	1/4	4.8	19.1	14.3	15.3	17.7	28.4	15.0	35.8
M6AVFC-6R	6	3/8	4.8	22.2	14.3	15.3	17.7	29.5	15.0	36.9
M6AVFC-8R	6	1/2	4.8	27.0	14.3	15.3	17.7	35.1	19.8	42.5
M8AVFC-2R	8	1/8	6.4	14.3	15.9	16.2	18.6	24.6	9.9	32.1
M8AVFC-4R	8	1/4	6.4	19.1	15.9	16.2	18.6	29.5	15.0	37.0
M8AVFC-6R	8	3/8	6.4	22.2	15.9	16.2	18.6	30.2	15.0	37.0
M8AVFC-8R	8	1/2	6.4	27.0	15.9	16.2	18.6	35.8	19.8	43.3
M10AVFC-2R	10	1/8	8.0	17.5	19.1	17.2	19.5	25.4	9.9	33.0
M10AVFC-4R	10	1/4	8.0	19.1	19.1	17.2	19.5	30.2	15.0	37.8
M10AVFC-6R	10	3/8	8.0	22.2	19.1	17.2	19.5	31.0	15.0	38.6
M10AVFC-8R	10	1/2	8.0	27.0	19.1	17.2	19.5	36.6	19.8	44.2
M12AVFC-2R	12	1/8	8.3	22.2	22.2	22.8	22.0	28.4	9.9	38.5
M12AVFC-4R	12	1/4	10.0	22.2	22.2	22.8	22.0	30.2	15.0	40.3
M12AVFC-6R	12	3/8	10.0	22.2	22.2	22.8	22.0	31.0	15.0	41.1
M12AVFC-8R	12	1/2	10.0	27.0	22.2	22.8	22.0	36.6	19.8	46.7
M12AVFC-12R	12	3/4	10.0	31.8	22.2	22.8	22.0	38.9	20.6	49.0
M15AVFC-8R	15	1/2	12.0	27.0	25.4	24.4	22.0	36.6	19.8	46.7
M16AVFC-8R	16	1/2	12.0	27.0	25.4	24.4	22.0	36.8	19.8	46.9
M20AVFC-8R	20	1/2	16.0	30.2	31.8	26.0	22.0	37.8	19.8	47.9
M20AVFC-12R	20	3/4	16.0	31.8	31.8	26.0	22.0	39.6	20.6	49.7
M22AVFC-12R	22	3/4	18.0	31.8	31.8	26.0	22.0	39.6	20.6	49.7
M22AVFC-16R	22	1	18.0	39.7	31.8	26.0	22.0	47.8	25.4	57.9
M25AVFC-12R	25	3/4	22.0	36.5	38.1	31.3	26.5	41.1	20.6	53.4
M25AVFC-16R	25	1	22.0	39.7	38.1	31.3	26.5	50.0	25.4	62.3



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Female Elbow

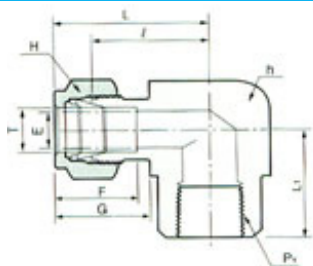
AVFE

Fractional Tube to Male NPT Thread

Part No.	Tube O.D. T		P (NPT)	E Min	h		H		F	G	I	L	L ₁
	in	mm			in	mm	in	mm					
2AVFE-2N	1/8	3.17	1/8	2.3	1/2	12.70	7/16	11.11	12.7	15.2	18.0	24.6	19.1
2AVFE-4N	1/8	3.17	1/4	2.3	11/16	17.46	7/16	11.11	12.7	15.2	20.8	27.4	22.4
3AVFE-2N	3/16	4.76	1/8	3.0	1/2	12.70	1/2	12.70	13.7	16.0	18.8	25.4	19.1
4AVFE-2N	1/4	6.35	1/8	4.8	1/2	12.70	9/16	14.28	15.2	17.8	19.6	26.9	19.1
4AVFE-4N	1/4	6.35	1/4	4.8	11/16	17.46	9/16	14.28	15.2	17.8	22.4	29.7	22.4
4AVFE-6N	1/4	6.35	3/8	4.8	13/16	20.63	9/16	14.28	15.2	17.8	24.4	31.8	22.4
4AVFE-8N	1/4	6.35	1/2	4.8	1	25.40	9/16	14.28	15.2	17.8	27.2	34.5	28.4
5AVFE-2N	5/16	7.93	1/8	6.4	9/16	14.28	5/8	15.87	16.3	18.5	21.3	28.7	19.1
5AVFE-4N	5/16	7.93	1/4	6.4	11/16	17.46	5/8	15.87	16.3	18.5	23.1	30.5	22.4
6AVFE-2N	3/8	9.52	1/8	7.0	5/8	15.87	11/16	17.46	16.8	19.3	23.1	30.5	19.1
6AVFE-4N	3/8	9.52	1/4	7.0	11/16	17.46	11/16	17.46	16.8	19.3	23.9	31.2	22.4
6AVFE-6N	3/8	9.52	3/8	7.0	13/16	20.63	11/16	17.46	16.8	19.3	25.9	33.3	22.4
6AVFE-8N	3/8	9.52	1/2	7.0	1	25.40	11/16	17.46	16.8	19.3	28.7	36.1	28.4
8AVFE-4N	1/2	12.70	1/4	10.0	13/16	20.63	7/8	22.22	22.9	21.8	25.9	36.1	22.4
8AVFE-6N	1/2	12.70	3/8	10.0	13/16	20.63	7/8	22.22	22.9	21.8	25.9	36.1	22.4
8AVFE-8N	1/2	12.70	1/2	10.0	1	25.40	7/8	22.22	22.9	21.8	28.7	38.9	28.4
10AVFE-6N	5/8	15.87	3/8	12.0	1	25.40	1	25.40	24.4	21.8	27.9	38.1	22.4
10AVFE-8N	5/8	15.87	1/2	12.0	1	25.40	1	25.40	24.4	21.8	29.7	39.9	28.4
12AVFE-8N	3/4	19.05	1/2	16.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	29.7	39.9	28.4
12AVFE-12N	3/4	19.05	3/4	16.0	1-1/4	31.75	1-1/8	28.57	24.4	21.8	34.5	44.7	31.8
14AVFE-12N	7/8	22.22	3/4	18.0	1-1/4	31.75	1-1/4	31.75	25.9	21.8	34.5	44.7	31.8
16AVFE-12N	1	25.40	3/4	22.0	1-3/8	34.92	1-1/2	38.10	31.2	26.4	36.8	49.0	31.8
16AVFE-16N	1	25.40	1	22.0	1-11/16	42.86	1-1/2	38.10	31.2	26.4	38.1	50.3	38.1



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Female Elbow

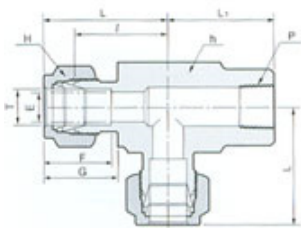
AVFE

Metric Tube to Male NPT Thread

Part No.	Tube O.D. Tm m	P (NPT)	E Min	h	H	F	G	I	L	L ₁
M3AVFE-2N	3	1/8	2.3	12.7	11.1	12.9	15.3	18.0	24.6	19.1
M3AVFE-4N	3	1/4	2.3	17.5	11.1	12.9	15.3	20.8	27.4	22.4
M4AVFE-2N	4	1/8	3.0	12.7	12.7	13.7	16.1	18.8	25.4	19.1
M6AVFE-2N	6	1/8	4.8	12.7	14.3	15.3	17.7	19.6	26.9	19.1
M6AVFE-4N	6	1/4	4.8	17.5	14.3	15.3	17.7	22.4	29.7	22.4
M6AVFE-6N	6	3/8	4.8	20.6	14.3	15.3	17.7	24.4	31.8	22.4
M6AVFE-8N	6	1/2	4.8	25.4	14.3	15.3	17.7	27.2	34.5	28.4
M8AVFE-2N	8	1/8	6.4	14.3	15.9	16.2	18.6	21.3	28.7	19.1
M8AVFE-4N	8	1/4	6.4	17.5	15.9	16.2	18.6	23.1	30.5	22.4
M12AVFE-4N	12	1/4	10.0	20.6	22.2	22.8	22.0	25.9	36.1	22.4
M12AVFE-6N	12	3/8	10.0	20.6	22.2	22.8	22.0	25.9	36.1	22.4
M12AVFE-8N	12	1/2	10.0	25.4	22.2	22.8	22.0	28.7	38.9	28.4
M15AVFE-6N	15	3/8	12.0	25.4	25.4	24.4	22.0	27.9	38.1	22.4
M15AVFE-8N	15	1/2	12.0	25.4	25.4	24.4	22.0	29.7	39.9	28.4
M18AVFE-8N	18	1/2	16.0	27.0	30.2	24.4	22.0	29.7	39.9	28.4
M18AVFE-12N	18	3/4	16.0	31.8	30.2	24.4	22.0	34.5	44.7	31.8
M22AVFE-12N	22	3/4	18.0	31.8	31.8	26.0	22.0	34.5	44.7	31.8
M25AVFE-12N	25	3/4	22.0	34.9	38.1	31.3	26.5	36.8	49.0	31.8
M25AVFE-16N	25	1	22.0	42.9	38.1	31.3	26.5	38.1	50.3	38.1



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Female Run Tee

AVFRT

Fractional Tube to Male NPT Thread

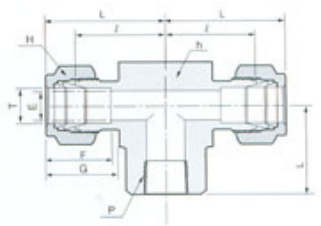
Part No.	Tube O.D. T		P (NPT)	E Min	h		H		F	G	I	L	L ₁
	in	mm			in	mm	in	mm					
2AVFRT-2N	1/8	3.17	1/8	2.3	1/2	12.70	7/16	11.11	12.7	15.2	18.0	24.6	19.1
4AVFRT-2N	1/4	6.35	1/8	4.8	1/2	12.70	9/16	14.28	15.2	17.8	19.6	26.9	19.1
4AVFRT-4N	1/4	6.35	1/4	4.8	11/16	17.46	9/16	14.28	15.2	17.8	22.9	29.7	22.4
6AVFRT-4N	3/8	9.52	1/4	7.0	11/16	17.46	11/16	17.46	16.8	19.3	23.9	31.2	22.4
8AVFRT-6N	1/2	12.70	3/8	10.0	13/16	20.63	7/8	22.22	22.9	21.8	25.9	36.1	22.4
8AVFRT-8N	1/2	12.70	1/2	10.0	1	25.40	7/8	22.22	22.9	21.8	29.7	39.9	28.4
12AVFRT-12N	3/4	19.05	3/4	16.0	1-1/4	31.75	1-1/8	28.57	24.4	21.8	34.5	44.7	31.8

Metric Tube to Male NPT Thread

Part No.	Tube O.D. Tmm	P (NPT)	E Min	h	H	F	G	I	L	L ₁
M3AVFRT-2N	3	1/8	2.3	12.7	11.1	12.9	15.3	18.0	24.4	19.1
M6AVFRT-2N	6	1/8	4.8	12.7	14.3	15.3	17.7	19.6	26.9	19.1
M6AVFRT-4N	6	1/4	4.8	17.5	14.3	15.3	17.7	22.4	29.7	22.4
M12AVFRT-4N	12	1/4	10.0	20.6	22.2	22.8	22.0	25.9	36.1	22.4
M12AVFRT-6N	12	3/8	10.0	20.6	22.2	22.8	22.0	25.9	36.1	22.4
M12AVFRT-8N	12	1/2	10.0	25.4	22.2	22.8	22.0	28.7	38.9	28.4
M15AVFRT-8N	15	1/2	12.0	25.4	25.4	24.4	22.0	28.7	38.9	28.4
M18AVFRT-12N	18	3/4	16.0	31.8	30.2	24.4	22.0	34.5	44.7	31.8
M25AVFRT-12N	25	3/4	22.0	34.9	38.1	31.3	26.5	36.8	49.0	31.8
M25AVFRT-16N	25	1	22.0	42.9	38.1	31.3	26.5	38.1	50.3	38.1



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Female Branch Tee

AVFBT

Fractional Tube to Male NPT Thread

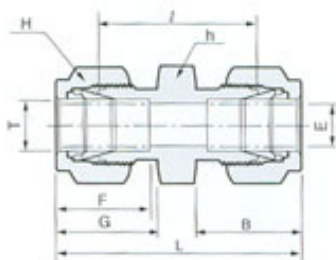
Part No.	Tube O.D. T		P (NPT)	E Min	h		H		F	G	I	L	L ₁
	in	mm			in	mm	in	mm					
2AVFBT-2N	1/8	3.17	1/8	2.3	1/2	12.70	7/16	11.11	12.7	15.2	18.0	24.4	19.1
4AVFBT-2N	1/4	6.35	1/8	4.8	1/2	12.70	9/16	14.28	15.2	17.8	19.6	26.9	19.1
4AVFBT-4N	1/4	6.35	1/4	4.8	11/16	17.46	9/16	14.28	15.2	17.8	22.4	29.7	22.4
6AVFBT-4N	3/8	9.52	1/4	7.0	11/16	17.46	11/16	17.46	16.8	19.3	23.9	31.2	22.4
8AVFBT-4N	1/2	12.70	1/4	10.0	13/16	20.63	7/8	22.22	22.9	21.8	25.9	36.1	22.4
8AVFBT-6N	1/2	12.70	3/8	10.0	13/16	20.63	7/8	22.22	22.9	21.8	25.9	36.1	22.4
8AVFBT-8N	1/2	12.70	1/2	10.0	1	25.40	7/8	22.22	22.9	21.8	28.7	38.9	28.4
10AVFBT-8N	5/8	15.87	1/2	12.0	1	25.40	1	25.40	24.4	21.8	28.7	38.9	28.4
12AVFBT-12N	3/4	19.05	3/4	16.0	1-1/4	31.75	1-1/8	28.57	24.4	21.8	34.5	44.7	31.8
16AVFBT-12N	1	25.40	3/4	22.0	1-3/8	34.92	1-1/2	38.10	31.2	26.4	36.8	49.0	31.8
16AVFBT-16N	1	25.40	1	22.0	1-11/16	42.86	1-1/2	38.10	31.2	26.4	38.1	50.3	38.1

Metric Tube to Male NPT Thread

Part No.	Tube O.D. Tmm	P (NPT)	E Min	h	H	F	G	I	L	L ₁
M3AVFBT-2N	3	1/8	2.3	12.7	11.1	12.9	15.3	18.0	24.4	19.1
M6AVFBT-2N	6	1/8	4.8	12.7	14.3	15.3	17.7	19.6	26.9	19.1
M6AVFBT-4N	6	1/4	4.8	17.5	14.3	15.3	17.7	22.4	29.7	22.4
M12AVFBT-4N	12	1/4	10.0	20.6	22.2	22.8	22.0	25.9	36.1	22.4
M12AVFBT-6N	12	3/8	10.0	20.6	22.2	22.8	22.0	25.9	36.1	22.4
M12AVFBT-8N	12	1/2	10.0	25.4	22.2	22.8	22.0	28.7	38.9	28.4
M15AVFBT-8N	15	1/2	12.0	25.4	25.4	24.4	22.0	28.7	38.9	28.4
M18AVFBT-12N	18	3/4	16.0	31.8	30.2	24.4	22.0	34.5	44.7	31.8
M25AVFBT-12N	25	3/4	22.0	34.9	38.1	31.3	26.5	36.8	49.0	31.8
M25AVFBT-16N	25	1	22.0	42.9	38.1	31.3	26.5	38.1	50.3	38.1



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Union

AVU

Fractional Tubes

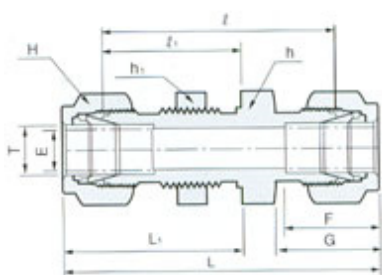
Part No.	Tube O.D. T		E Min	h		H		F	G	I	L
	in	mm		in	mm	in	mm				
2AV U	1/8	3.17	2.3	7/16	11.11	7/16	11.11	12.7	15.2	22.4	35.6
3AV U	3/16	4.76	3.0	7/16	11.11	1/2	12.70	13.7	16.0	24.1	37.3
4AV U	1/4	6.35	4.8	1/2	12.70	9/16	14.28	15.2	17.8	26.2	40.9
5AV U	5/16	7.93	6.4	9/16	14.28	5/8	15.87	16.3	18.5	28.2	42.9
6AV U	3/8	9.52	7.0	5/8	15.87	11/16	17.46	16.8	19.3	30.2	45.0
8AV U	1/2	12.70	10.0	13/16	20.63	7/8	22.22	22.9	21.8	31.0	51.3
10AV U	5/8	15.87	12.0	15/16	23.81	1	25.40	24.4	21.8	31.8	52.1
12AV U	3/4	19.05	16.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	33.3	53.6
14AV U	7/8	22.22	18.0	1-3/16	30.16	1-1/4	31.75	25.9	21.8	35.1	55.4
16AV U	1	25.40	22.0	1-3/8	34.92	1-1/2	38.10	31.2	26.4	40.4	64.8

Metric Tubes

Part No.	Tube O.D. Tmm	E Min	h	H	F	G	I	L
M3AV U	3	2.3	11.1	11.1	12.9	15.3	22.1	31.3
M4AV U	4	2.3	11.1	12.7	13.7	16.1	24.1	37.3
M6AV U	6	4.8	12.7	14.3	15.3	17.7	26.2	41.0
M8AV U	8	6.4	14.3	15.9	16.2	18.6	28.2	43.2
M10AV U	10	8.0	17.5	19.1	15.3	19.5	31.0	46.2
M12AV U	12	10.0	20.6	22.2	22.8	22.0	31.0	51.2
M15AV U	15	12.0	23.8	25.4	24.4	22.0	31.8	52.0
M16AV U	16	12.0	23.8	25.4	24.4	22.0	31.8	52.0
M18AV U	18	15.0	27.0	30.2	24.4	22.0	33.3	53.5
M20AV U	20	16.0	30.2	31.8	26.0	22.0	34.8	55.0
M22AV U	22	18.0	30.2	31.8	26.0	22.0	34.8	55.0
M25AV U	25	22.0	34.9	38.1	31.3	26.5	40.4	65.0



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Bulkhead Union

AVBU

Fractional Tubes

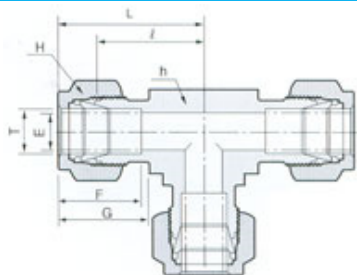
Part No.	Tube O.D.		E Min	h		H		F	G	I	I ₁	L	L ₁	Panel Hole Drill Size	Max Panel Thickness
	in	mm		in	mm	in	mm								
2AVBU	1/8	3.17	2.3	1/2	12.70	7/16	11.11	12.7	15.2	38.1	24.6	51.3	31.2	8.3	12.7
3AVBU	3/16	4.76	3.0	9/16	14.28	1/2	12.70	13.7	16.0	40.4	25.4	53.6	32.0	9.9	12.7
4AVBU	1/4	6.35	4.8	5/8	15.87	9/16	14.28	15.2	17.8	42.9	26.2	57.7	33.5	11.5	10.2
5AVBU	5/16	7.93	6.4	11/16	17.46	5/8	15.87	16.3	18.5	46.0	28.4	60.7	35.8	13.1	11.2
6AVBU	3/8	9.52	7.0	3/4	19.05	11/16	17.46	16.8	19.3	47.5	29.5	62.2	36.8	14.7	11.2
8AVBU	1/2	12.70	10.0	15/16	23.81	7/8	22.22	22.9	21.8	50.8	31.8	71.1	41.9	19.4	12.7
10AVBU	5/8	15.87	12.0	1-1/16	26.81	1	25.40	24.4	21.8	52.3	32.5	72.6	42.7	22.6	12.7
12AVBU	3/4	19.05	16.0	1-3/16	30.16	1-1/8	28.57	24.4	21.8	58.7	37.3	79.0	47.5	25.8	16.8
14AVBU	7/8	22.22	18.0	1-3/8	34.92	1-1/4	31.75	25.9	21.8	64.3	42.9	84.6	53.1	29.0	19.1
16AVBU	1	25.40	22.0	1-5/8	41.27	1-1/2	38.10	31.2	26.4	71.4	45.2	95.8	57.4	33.7	19.1

Metric Tubes

Part No.	Tube O.D. Tmm	E Min	h	h ₁	H	A	B	I	I ₁	L	L ₁	Panel Hole Drill Size	Max Panel Thickness
M3AVBU	3	2.3	12.7	12.7	12.7	12.9	15.3	38.1	24.6	51.3	31.2	8.3	12.7
M4AVBU	4	2.3	14.3	14.3	12.7	13.7	16.1	40.4	25.4	53.6	32.0	9.9	12.7
M6AVBU	6	4.8	15.9	15.9	14.3	15.3	17.7	42.9	26.2	57.7	33.6	11.5	10.2
M8AVBU	8	6.4	17.5	17.5	15.9	16.2	18.6	46.0	28.6	61.0	36.1	13.1	11.2
M10AVBU	10	8.0	22.2	22.0	19.1	17.2	19.5	48.5	29.4	63.7	37.0	16.2	11.2
M12AVBU	12	10.0	23.8	23.8	22.2	22.8	22.0	50.8	31.8	71.0	41.9	19.5	12.7
M15AVBU	15	12.0	27.0	27.0	25.4	24.4	22.0	52.3	32.5	72.5	42.6	22.8	12.7
M16AVBU	16	12.0	27.0	27.0	25.4	24.4	22.0	52.3	32.5	72.5	42.6	22.8	12.7
M18AVBU	18	15.0	30.2	30.2	30.2	24.4	22.0	58.7	37.3	78.9	47.4	26.0	16.8



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Union Tee AVUT

Fractional Tubes

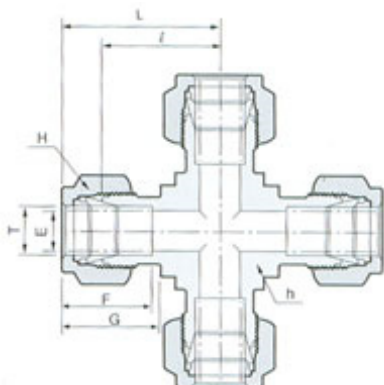
Part No.	Tube O.D. T		E Min	h		H		F	G	I	L
	in	mm		in	mm	in	mm				
2AVUT	1/8	3.17	2.3	7/16	11.11	7/16	11.11	12.7	15.2	15.7	22.4
3AVUT	3/16	4.76	3.0	7/16	11.11	1/2	12.70	13.7	16.0	17.8	24.4
4AVUT	1/4	6.35	4.8	1/2	12.70	9/16	14.28	15.2	17.8	19.6	26.9
5AVUT	5/16	7.93	6.4	9/16	14.28	5/8	15.87	16.3	18.5	21.3	28.7
6AVUT	3/8	9.52	7.0	5/8	15.87	11/16	17.46	16.8	19.3	23.1	30.5
8AVUT	1/2	12.70	10.0	13/16	20.63	7/8	22.22	22.9	21.8	25.9	36.1
10AVUT	5/8	15.87	12.0	1	25.40	1	25.40	24.4	21.8	28.7	38.9
12AVUT	3/4	19.05	16.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	29.7	39.9
14AVUT	7/8	22.22	18.0	1-1/4	31.75	1-1/4	31.75	25.9	21.8	34.5	44.7
16AVUT	1	25.40	22.0	1-3/8	34.92	1-1/2	38.10	31.2	26.4	36.8	49.0

Metric Tubes

Part No.	Tube O.D. Tmm	E Min	h	H	F	G	I	L
M3AVUT	3	2.3	11.1	11.1	12.9	15.3	17.0	23.6
M4AVUT	4	2.3	11.1	12.7	13.7	16.1	18.8	25.4
M6AVUT	6	4.8	12.7	14.3	15.3	17.7	19.6	27.0
M8AVUT	8	6.4	14.3	15.9	16.2	18.6	21.3	28.8
M10AVUT	10	8.0	17.5	19.1	17.2	19.5	23.9	31.5
M12AVUT	12	10.0	20.6	22.2	22.8	22.0	25.9	36.0
M15AVUT	15	12.0	25.4	25.4	24.4	22.0	28.7	38.8
M16AVUT	16	12.0	25.4	25.4	24.4	22.0	28.7	38.8
M18AVUT	18	15.0	27.0	30.2	24.4	22.0	29.7	39.8
M20AVUT	20	16.0	31.8	31.8	26.0	22.0	32.5	42.6
M22AVUT	22	18.0	31.8	31.8	26.0	22.0	32.5	42.6
M25AVUT	25	22.0	34.9	38.1	31.3	26.5	36.8	49.1



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Union Cross
AVUC

Fractional Tubes

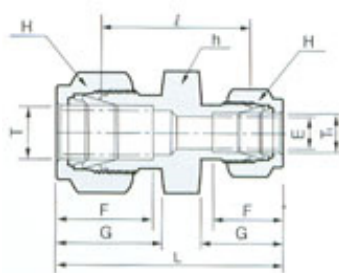
Part No.	Tube O.D. T		E Min	h		H		F	G	I	L
	in	mm		in	mm	in	mm				
2AVUC	1/8	3.17	2.3	7/16	11.11	7/16	11.11	12.7	15.2	15.7	22.4
3AVUC	3/16	4.76	3.0	7/16	11.11	1/2	12.70	13.7	16.0	17.8	24.4
4AVUC	1/4	6.35	4.8	1/2	12.70	9/16	14.28	15.2	17.8	19.6	26.9
5AVUC	5/16	7.93	6.4	9/16	14.28	5/8	15.87	16.3	18.5	21.3	28.7
6AVUC	3/8	9.52	7.0	5/8	15.87	11/16	17.46	16.8	19.3	23.1	30.5
8AVUC	1/2	12.70	10.0	13/16	20.63	7/8	22.22	22.9	21.8	25.9	36.1
10AVUC	5/8	15.87	12.0	1	25.40	1	25.40	24.4	21.8	28.7	38.9
12AVUC	3/4	19.05	16.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	29.7	39.9
14AVUC	7/8	22.22	18.0	1-1/4	31.75	1-1/4	31.75	25.9	21.8	34.5	44.7
16AVUC	1	25.40	22.0	1-3/8	34.92	1-1/2	38.10	31.2	26.4	36.8	49.0

Metric Tubes

Part No.	Tube O.D. Tmm	E Min	h	H	F	G	I	L
M3AVUC	3	2.3	11.1	11.1	12.9	15.3	17.0	23.6
M4AVUC	4	2.3	11.1	12.7	13.7	16.1	18.8	25.4
M6AVUC	6	4.8	12.7	14.3	15.3	17.7	19.6	27.0
M8AVUC	8	6.4	14.3	15.9	16.2	18.6	21.3	28.8
M10AVUC	10	8.0	17.5	19.1	17.2	19.5	23.9	31.5
M12AVUC	12	10.0	20.6	22.2	22.8	22.0	25.9	36.0



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.



Reducing Union

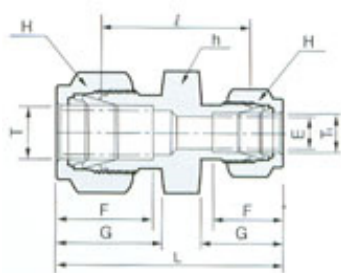
AVRU

Fractional Tube to Fractional Tube

Part No.	Tube O.D.				E Min	h		H		H1		F	F1	G	G1	I	L1
	T in	mm	T1 in	mm		in	mm	in	mm	in	mm						
3AVRU-2	3/16	4.76	1/8	3.17	2.3	7/16	11.11	1/2	12.70	7/16	11.11	13.7	12.7	16.0	15.2	23.4	36.6
4AVRU-2	1/4	6.35	1/8	3.17	2.3	1/2	12.70	9/16	14.28	7/16	11.11	15.2	12.7	17.8	15.2	24.6	38.6
4AVRU-3	1/4	6.35	3/16	4.76	3.0	1/2	12.70	9/16	14.28	1/2	12.70	15.2	13.7	17.8	16.0	25.4	39.4
5AVRU-2	5/16	7.93	1/8	3.17	2.3	9/16	14.28	5/8	15.87	7/16	11.11	16.3	12.7	18.5	15.2	25.9	39.9
5AVRU-4	5/16	7.93	1/4	6.35	4.8	9/16	14.28	5/8	15.87	9/16	14.28	16.3	15.2	18.5	17.8	27.4	42.2
6AVRU-2	3/8	9.52	1/8	3.17	2.3	5/8	15.87	11/16	17.46	7/16	11.11	16.8	12.7	19.3	15.2	26.9	40.9
6AVRU-4	3/8	9.52	1/4	6.35	4.8	5/8	15.87	11/16	17.46	9/16	14.28	16.8	15.2	19.3	17.8	28.4	43.2
6AVRU-5	3/8	9.52	5/16	7.93	6.4	5/8	15.87	11/16	17.46	5/8	15.87	16.8	16.3	19.3	18.5	29.5	44.2
8AVRU-2	1/2	12.70	1/8	3.17	2.3	13/16	20.63	7/8	22.22	7/16	11.11	22.9	12.7	21.8	15.2	28.4	45.2
8AVRU-4	1/2	12.70	1/4	6.35	4.8	13/16	20.63	7/8	22.22	9/16	14.28	22.9	15.2	21.8	17.8	29.5	47.0
8AVRU-6	1/2	12.70	3/8	9.52	7.0	13/16	20.63	7/8	22.22	11/16	17.46	22.9	16.8	17.8	19.3	31.0	48.5
10AVRU-6	5/8	15.87	3/8	9.52	7.0	15/16	23.81	1	25.40	11/16	17.46	24.4	16.8	21.8	19.3	31.8	49.3
10AVRU-8	5/8	15.87	1/2	12.70	10.0	15/16	23.81	1	25.40	7/8	22.22	24.4	22.9	21.8	21.8	31.8	52.1
12AVRU-4	3/4	19.05	1/4	6.35	4.8	1-1/16	26.98	1-1/8	28.57	9/16	14.28	24.4	15.2	21.8	17.8	31.8	49.3
12AVRU-6	3/4	19.05	3/8	9.52	7.0	1-1/16	26.98	1-1/8	28.57	11/16	17.46	24.4	16.8	21.8	19.3	33.3	50.8
12AVRU-8	3/4	19.05	1/2	12.70	10.0	1-1/16	26.98	1-1/8	28.57	7/8	22.22	24.4	22.9	21.8	21.8	33.3	53.6
12AVRU-10	3/4	19.05	5/8	15.87	12.0	1-1/16	26.98	1-1/8	28.57	1	25.40	24.4	24.4	21.8	21.8	33.3	53.6
16AVRU-8	1	25.40	1/2	12.70	10.0	1-3/8	34.92	1-1/2	38.10	7/8	22.22	31.2	22.9	26.4	21.8	40.9	63.2
16AVRU-12	1	25.40	3/4	19.05	16.0	1-3/8	34.92	1-1/2	38.10	1-1/8	28.57	31.2	24.4	26.4	21.8	40.9	62.7



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Reducing Union

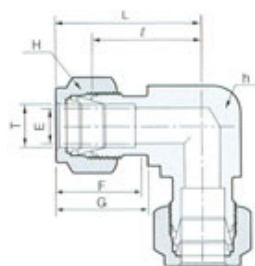
AVRU

Part No.	Tube O.D.		E min	Width across flat			F	F ₁	G	G ₁	I	L
	T (mm)	T ₁ (mm)		h	H	H ₁						
M6AVRU-M3	6	3	2.3	12.7	14.3	11.1	15.3	12.9	17.7	15.3	24.6	38.6
M6AVRU-M3	6	4	2.3	12.7	14.3	12.7	15.3	13.7	17.7	16.1	25.4	39.4
M8AVRU-M6	8	6	4.8	14.3	15.9	14.3	16.2	15.3	18.6	17.7	27.4	42.3
M10AVRU-M6	10	6	4.8	17.5	19.1	14.3	17.2	15.3	19.5	17.7	29.5	44.5
M10AVRU-M8	10	8	6.4	17.5	22.2	15.9	17.2	16.2	19.5	18.6	30.0	45.1
M12AVRU-M6	12	6	4.8	20.6	22.2	14.3	22.8	15.3	22.0	17.7	29.5	47.0
M12AVRU-M8	12	8	6.4	20.6	22.2	15.9	22.8	16.2	22.0	18.6	30.2	47.8
M12AVRU-M10	12	10	8.0	20.6	22.2	19.1	22.8	17.2	22.0	19.5	31.0	48.7
M16AVRU-M12	16	12	10.0	23.8	25.4	22.2	24.4	22.8	22.0	22.0	31.8	52.0
M25AVRU-M18	25	18	15.0	34.9	38.1	30.2	31.3	24.4	26.5	22.0	38.6	61.0
M25AVRU-M20	25	20	16.0	34.9	38.1	31.8	31.3	26.0	26.5	22.0	39.9	62.3

Part No.	Tube O.D.			E Min	Width across flat			F	F ₁	G	G ₁	I	L
	D (mm)	D ₁			h	H	H ₁						
		in	mm										
M3AVRU-2	3	1/8	3.17	2.3	11.1	11.1	11.1	12.9	12.8	15.3	15.2	22.1	35.2
M4AVRU-2	4	1/8	3.17	2.3	11.1	12.7	11.1	13.7	12.8	16.1	15.2	23.4	36.5
M4AVRU-4	4	1/4	6.35	2.3	14.3	12.7	14.3	13.7	15.3	16.1	17.7	25.4	39.4
M6AVRU-2	6	1/8	3.17	2.3	12.7	14.3	11.1	15.3	12.8	17.7	15.2	24.6	38.5
M6AVRU-4	6	1/4	6.35	4.8	12.7	14.3	14.3	15.3	15.8	17.7	17.7	26.2	41.0
M6AVRU-5	6	5/16	7.93	4.8	14.3	14.3	15.9	15.3	16.2	17.7	18.6	27.4	42.3
M8AVRU-4	8	1/4	6.35	4.8	14.3	15.9	14.3	16.2	15.3	18.6	17.7	27.4	42.3
M10AVRU-2	10	1/8	3.17	2.3	17.5	19.1	11.1	17.2	16.2	19.5	15.2	27.7	41.8
M10AVRU-4	10	1/4	6.35	4.8	17.5	19.1	14.3	17.2	15.3	19.5	17.7	29.5	44.5
M10AVRU-5	10	5/16	7.93	6.4	17.5	19.1	15.9	17.2	12.8	19.5	18.6	30.0	45.1
M10AVRU-6	10	3/8	9.52	7.0	17.5	19.1	17.5	17.2	15.3	19.5	19.2	31.0	45.9
M12AVRU-5	12	5/16	7.93	6.4	20.6	22.2	15.9	22.8	16.2	22.0	18.6	30.2	47.8
M12AVRU-6	12	3/8	9.52	7.0	20.6	22.2	17.5	22.8	16.9	22.0	19.2	31.0	48.4
M12AVRU-8	12	1/2	12.70	10.0	20.6	22.2	22.2	22.8	22.8	22.0	22.0	31.0	51.2
M15AVRU-8	15	1/2	12.70	10.0	23.8	25.4	22.2	24.4	22.8	22.0	22.0	31.8	52.0
M16AVRU-10	16	5/8	15.87	12.0	23.8	25.4	25.4	24.4	24.4	22.0	22.0	31.8	52.0
M18AVRU-12	18	3/4	19.05	15.0	27.0	30.2	28.6	24.4	24.4	22.0	22.0	33.3	53.5



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Union Elbow

AVEU

Fractional Tube to Fractional AVLOK port

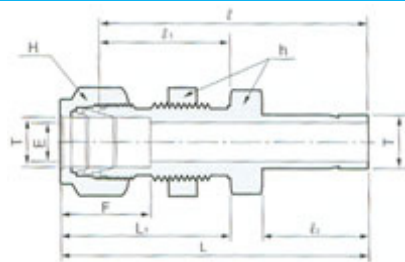
Part No.	Tube O.D. T		E Min	h		H		F	G	I	L
	in	mm		in	mm	in	mm				
2AVEU	1/8	3.17	2.3	7/16	11.11	7/16	11.11	12.7	15.2	15.7	22.4
3AVEU	3/16	4.76	3.0	7/16	11.11	1/2	12.70	13.7	16.0	17.8	24.4
4AVEU	1/4	6.35	4.8	1/2	12.70	9/16	14.28	15.2	17.8	19.6	26.9
5AVEU	5/16	7.93	6.4	9/16	14.28	5/8	15.87	16.3	18.5	21.3	28.7
6AVEU	3/8	9.52	7.0	5/8	15.87	11/16	17.46	16.8	19.3	23.1	30.5
8AVEU	1/2	12.70	10.0	13/16	20.63	7/8	22.22	22.9	21.8	25.9	36.1
10AVEU	5/8	15.87	12.0	1	25.40	1	25.40	24.4	21.8	28.7	38.9
12AVEU	3/4	19.05	16.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	29.7	39.9
14AVEU	7/8	22.22	18.0	1-1/4	31.75	1-1/4	31.75	25.9	21.8	34.5	44.7
16AVEU	1	25.40	22.0	1-3/8	34.92	1-1/2	38.10	31.2	26.4	36.8	49.0

Metric Tube to Metric AVLOK port

Part No.	Tube O.D. Tmm	E Min	h	H	F	G	I	L
M3AVEU	3	2.3	11.1	11.1	12.9	15.3	17.0	23.6
M4AVEU	4	2.3	11.1	12.7	13.7	16.1	18.8	25.4
M6AVEU	6	4.8	12.7	14.3	15.3	17.7	19.6	27.0
M8AVEU	8	6.4	14.3	15.9	16.2	18.6	21.3	28.8
M10AVEU	10	8.0	17.5	19.1	17.2	19.5	23.9	31.5
M12AVEU	12	10.0	20.6	22.2	22.8	22.0	25.9	36.0
M15AVEU	15	12.0	25.4	25.4	24.4	22.0	28.7	38.8
M16AVEU	16	12.0	25.4	25.4	24.4	22.0	28.7	38.8
M18AVEU	18	15.0	27.0	30.2	24.4	22.0	29.7	39.8
M20AVEU	20	16.0	31.8	31.8	26.0	22.0	32.5	42.6
M22AVEU	22	18.0	31.8	31.8	26.0	22.0	32.5	42.6
M25AVEU	25	22.0	34.9	38.1	31.3	26.5	36.8	49.1



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Bulk Head Reducer

AVBR

Fractional Tube to Fractional AVLOK port

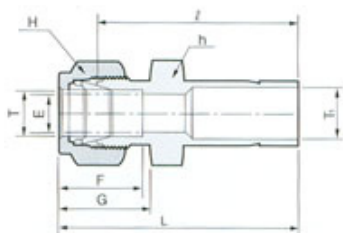
Part No.	Tube O.D. T		E Min	h		H		F	G	I	I ₁	L	L ₁	Panel Hole Drill Size	Max Panel Thickness
	in	mm		in	mm	in	mm								
2AV B R	1/8	3.17	2.0	1/2	12.70	7/16	11.11	12.7	42.9	24.6	13.5	49.5	31.2	8.3	12.7
4AV B R	1/4	6.35	4.8	5/8	15.87	9/16	14.28	15.2	48.5	26.2	15.7	55.9	33.5	11.5	10.2
6AV B R	3/8	9.52	7.0	3/4	19.05	11/16	17.46	16.8	53.8	29.5	17.5	61.2	36.8	14.7	11.2
8AV B R	1/2	12.70	10.0	15/16	23.81	7/8	22.22	22.9	62.7	31.8	23.1	72.9	41.9	19.4	12.7

Metric Tube to Metric AVLOK port

Part No.	Tube O.D. T(mm)	E Min	h	H	A	B	I	I ₁	L	L ₁	Panel Hole Drill Size	Max Panel Thickness
M3AV B R	3	2.0	12.7	11.1	12.9	43.0	24.6	13.5	49.7	31.2	8.3	12.7
M6AV B R	6	4.8	15.9	14.3	15.3	48.5	26.2	15.9	55.9	33.6	11.5	10.2
M8AV B R	8	6.4	17.5	15.9	16.2	53.1	28.6	16.7	59.1	36.1	13.1	11.2
M12AV B R	12	10.0	23.8	22.2	22.8	62.7	31.8	23.0	72.9	41.9	19.4	12.7



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



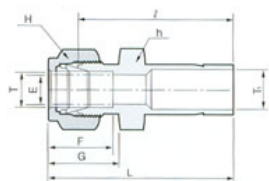
Reducer AVR

Fractional Tube to Fractional AVLOK port

Part No.	Tube O.D.				E Min	h		H		F	G	I	L
	T in	T mm	T1 in	T1 mm		in	mm	in	mm				
2AVR-2	1/8	3.17	1/8	3.17	2.0	7/16	11.11	7/16	11.11	12.7	15.2	26.9	33.5
2AVR-3	1/8	3.17	3/16	4.76	2.3	7/16	11.11	7/16	11.11	12.7	15.2	27.7	34.3
2AVR-4	1/8	3.17	1/4	6.35	2.3	7/16	11.11	7/16	11.11	12.7	15.2	29.5	36.1
2AVR-6	1/8	3.17	3/8	9.52	2.3	7/16	11.11	7/16	11.11	12.7	15.2	31.0	37.6
2AVR-8	1/8	3.17	1/2	12.70	2.3	9/16	14.28	7/16	11.11	12.7	15.2	37.6	44.2
3AVR-2	3/16	4.76	1/8	3.17	2.0	7/16	11.11	7/16	12.70	13.7	16.0	28.2	34.8
3AVR-4	3/16	4.76	1/4	6.35	3.0	7/16	11.11	7/16	12.70	13.7	16.0	30.5	37.8
4AVR-2	1/4	6.35	1/8	3.17	2.0	1/2	12.70	9/16	14.28	15.2	17.8	29.5	36.8
4AVR-3	1/4	6.35	3/16	4.76	3.0	1/2	12.70	9/16	14.28	15.2	17.8	30.2	37.6
4AVR-4	1/4	6.35	1/4	6.35	4.8	1/2	12.70	9/16	14.28	15.2	17.8	31.8	39.1
4AVR-5	1/4	6.35	5/16	7.93	4.8	1/2	12.70	9/16	14.28	15.2	17.8	32.5	39.9
4AVR-6	1/4	6.35	3/8	9.52	4.8	1/2	12.70	9/16	14.28	15.2	17.8	33.3	40.6
4AVR-8	1/4	6.35	1/2	12.70	4.8	9/16	14.28	9/16	14.28	15.2	17.8	38.9	46.2
4AVR-10	1/4	6.35	5/8	15.87	4.8	11/16	17.46	9/16	14.28	15.2	17.8	40.6	48.0
4AVR-12	1/4	6.35	3/4	19.05	4.8	13/16	20.63	9/16	14.28	15.2	17.8	40.4	47.8
5AVR-6	5/16	7.93	3/8	9.52	6.4	9/16	14.28	5/8	15.87	16.3	18.5	34.5	41.9
5AVR-8	5/16	7.93	1/2	12.70	6.4	9/16	14.28	5/8	15.87	16.3	18.5	40.1	47.5
6AVR-4	3/8	9.52	1/4	6.35	4.8	5/8	15.87	11/16	17.46	16.8	19.3	34.0	41.4
6AVR-6	3/8	9.52	3/8	9.52	7.0	5/8	15.87	11/16	17.46	16.8	19.3	35.8	43.2
6AVR-8	3/8	9.52	1/2	12.70	7.0	5/8	15.87	11/16	17.46	16.8	19.3	41.1	48.5
6AVR-10	3/8	9.52	5/8	15.87	7.0	11/16	17.46	11/16	17.46	16.8	19.3	42.9	50.3
6AVR-12	3/8	9.52	3/4	19.05	7.0	13/16	20.63	11/16	17.46	16.8	19.3	42.9	50.3
8AVR-4	1/2	12.70	1/4	6.35	4.8	13/16	20.63	7/8	22.22	22.9	21.8	34.8	45.0
8AVR-6	1/2	12.70	3/8	9.52	7.0	13/16	20.63	7/8	22.22	22.9	21.8	36.6	46.7
8AVR-8	1/2	12.70	1/2	12.70	10.0	13/16	20.63	7/8	22.22	22.9	21.8	42.2	52.3
8AVR-10	1/2	12.70	5/8	15.87	10.0	13/16	20.63	7/8	22.22	22.9	21.8	43.7	53.8
8AVR-12	1/2	12.70	3/4	19.05	10.0	13/16	20.63	7/8	22.22	22.9	21.8	43.7	53.8
8AVR-16	1/2	12.70	1	25.40	10.0	1-1/16	26.98	7/8	22.22	22.9	21.8	50.0	60.2
10AVR-12	5/8	15.87	3/4	19.05	12.0	15/16	23.81	1	25.40	24.4	21.8	44.5	54.6
10AVR-14	5/8	15.87	7/8	22.22	12.0	15/16	23.81	1	25.40	24.4	21.8	46.0	56.1
10AVR-16	5/8	15.87	1	25.40	12.0	1-1/16	23.81	1	25.40	24.4	21.8	50.8	61.0
12AVR-8	3/4	19.05	1/2	12.70	10.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	44.5	54.6
12AVR-16	3/4	19.05	1	25.40	16.0	1-1/16	26.98	1-1/8	28.57	24.4	21.8	52.3	62.5



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Reducer AVR

Metric Tube to Metric AVLOK port

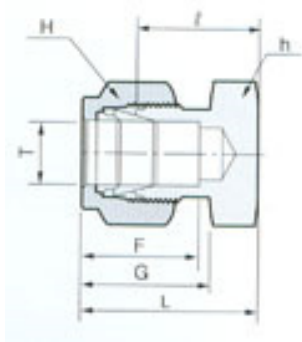
Part No.	Tube O.D.		E Min	h	H	F	G	I	L
	T (mm)	T1 (mm)							
M3AVR-M4	3	4	2.3	11.1	11.1	12.9	15.3	28.4	35.0
M3AVR-M6	3	6	2.3	11.1	11.1	12.9	15.3	29.5	36.1
M6AVR-M8	6	8	4.8	12.7	14.3	15.3	17.7	32.5	39.9
M6AVR-M10	6	10	4.8	12.7	14.3	15.3	17.7	33.3	40.7
M6AVR-M12	6	12	4.8	14.3	14.3	15.3	17.7	38.9	46.3
M8AVR-M6	8	6	4.8	14.3	15.9	16.2	18.6	32.8	40.3
M8AVR-M10	8	10	6.4	14.3	15.9	16.2	18.6	34.5	42.0
M8AVR-M12	8	12	6.4	14.3	15.9	16.2	18.6	40.1	47.6
M10AVR-M6	10	6	4.8	17.5	17.5	17.2	19.5	34.8	42.4
M10AVR-M12	10	12	8.0	17.5	17.5	17.2	19.5	42.2	49.8
M12AVR-M6	12	6	4.8	20.6	22.2	22.8	22.0	34.8	44.9
M12AVR-M10	12	10	8.0	20.6	22.2	22.8	22.0	36.6	46.7
M12AVR-M16	12	16	10.0	20.6	22.2	22.8	22.0	43.7	53.8
M12AVR-M18	12	18	10.0	20.6	22.2	22.8	22.0	43.7	53.8
M16AVR-M12	16	12	9.0	23.8	25.4	24.4	22.0	42.9	53.0
M18AVR-M12	18	12	9.0	27.0	30.2	24.4	22.0	44.5	54.8
M18AVR-M16	18	16	12.0	27.0	30.2	24.4	22.0	46.0	56.1
M20AVR-M16	20	16	12.0	30.2	31.8	26.0	22.0	47.8	57.9
M20AVR-M18	20	18	14.0	30.2	31.8	26.0	22.0	47.8	57.9
M22AVR-M20	22	20	15.0	30.2	31.8	26.0	22.0	49.3	59.4
M22AVR-M25	22	25	18.0	30.2	31.8	26.0	22.0	54.1	64.2
M25AVR-M25	25	18	14.0	34.9	38.1	31.3	26.5	50.8	63.1
M25AVR-M20	25	25	15.0	34.9	38.1	31.3	26.5	52.3	64.6

Metric Tube to Fractional AVLOK port

Part No.	T (mm)	Tube O.D.		E Min	h	H	F	G	I	L
		T1								
		in	mm							
M3AVR-2	3	1/8	3.17	2.0	11.1	11.1	12.9	15.3	26.9	33.5
M3AVR-6	3	1/4	6.35	2.3	11.1	11.1	12.9	15.3	29.5	36.1
M6AVR-4	6	1/4	6.35	4.8	12.7	14.3	15.3	17.7	31.8	39.2
M6AVR-5	6	5/16	7.93	4.8	12.7	14.3	15.3	17.7	32.5	39.9
M6AVR-6	6	3/8	9.52	4.8	12.7	14.3	15.3	17.7	33.3	40.7
M6AVR-8	6	1/2	12.70	4.8	14.3	14.3	15.3	17.7	38.9	46.3
M8AVR-6	8	3/8	9.52	6.4	14.3	15.9	16.2	18.6	34.5	42.0
M8AVR-8	8	1/2	12.70	6.4	14.3	15.9	16.2	18.6	40.1	47.6
M10AVR-6	10	3/8	9.52	7.0	17.5	19.1	17.2	19.5	36.6	44.2
M10AVR-8	10	1/2	12.70	8.0	17.5	19.1	17.2	19.5	42.2	49.8
M12AVR-8	12	1/2	12.70	10.0	20.6	22.2	22.8	22.0	42.2	52.3
M12AVR-12	12	3/4	19.05	10.0	20.6	22.2	22.8	22.0	43.7	53.8
M18AVR-12	18	3/4	19.05	15.0	27.0	30.2	24.4	22.0	46.0	56.1
M18AVR-16	18	1	25.40	15.0	27.0	30.2	24.4	22.0	52.3	62.4



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Tube Cap AVC

Fractional Tubes

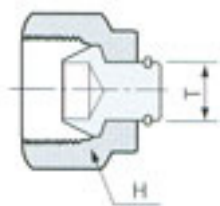
Part No.	Tube O.D. T		h		H		F	G	I	L
	in	mm	in	mm	in	mm				
2AV C	1/8	3.17	7/16	11.11	7/16	11.11	12.7	15.2	13.5	20.1
3AV C	3/16	4.76	7/16	11.11	1/2	12.70	13.7	16.0	14.7	21.3
4AV C	1/4	6.35	1/2	12.70	9/16	14.28	15.2	17.8	16.0	23.4
5AV C	5/16	7.93	9/16	14.28	5/8	15.87	16.3	18.5	17.0	24.4
6AV C	3/8	9.52	5/8	15.87	11/16	17.46	16.8	19.3	18.3	25.7
8AV C	1/2	12.70	13/16	20.63	7/8	22.22	22.9	21.8	19.1	29.2
10AV C	5/8	15.87	15/16	23.81	1	25.40	24.4	21.8	19.8	30.0
12AV C	3/4	19.05	1-1/16	26.98	1-1/8	28.57	24.4	21.8	21.3	31.5
14AV C	7/8	22.22	1-3/16	30.16	1-1/4	31.75	25.9	21.8	23.9	34.0
16AV C	1	25.40	1-3/8	34.92	1-1/2	38.10	31.2	26.4	26.2	38.4

Metric Tubes

Part No.	Tube O.D. T	h	H	F	G	I	L
M3AV C	3	11.1	11.1	12.9	15.3	13.5	20.1
M4AV C	4	11.1	12.7	13.7	16.1	14.7	21.3
M6AV C	6	14.3	14.3	15.3	17.7	15.7	23.1
M8AV C	8	14.3	15.9	16.2	18.6	17.0	24.5
M10AV C	10	17.5	19.1	17.2	19.5	19.0	26.6
M12AV C	12	20.6	22.2	22.8	22.0	19.0	29.1
M15AV C	15	23.8	25.4	24.4	22.0	19.8	29.9
M16AV C	16	23.8	25.4	24.4	22.0	19.8	31.9
M18AV C	18	27.0	30.2	24.4	22.0	21.3	31.4
M20AV C	20	30.2	31.8	26.0	22.0	23.9	34.0
M22AV C	22	30.2	31.8	26.0	22.0	23.9	34.0
M25AV C	25	34.9	38.1	31.3	26.5	26.2	38.5



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Tube Plug

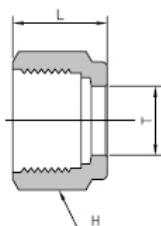
AVP

Fractional Tubes

Part No.	Tube O.D. T		H	
	in	mm	in	mm
2AV P	1/8	3.17	7/16	11.11
3AV P	3/16	4.76	1/2	12.70
4AV P	1/4	6.35	9/16	14.28
5AV P	5/16	7.93	5/8	15.87
6AV P	3/8	9.52	11/16	17.46
8AV P	1/2	12.70	7/8	22.22
10AV P	5/8	15.87	1	25.40
12AV P	3/4	19.05	1-1/8	28.57
14AV P	7/8	22.22	1-1/4	31.75
16AV P	1	25.40	1-1/2	38.10

Metric Tubes

Part No.	Tube O.D. T (mm)	H
M3AV P	3	11.1
M4AV P	4	12.7
M6AV P	6	14.3
M8AV P	8	15.9
M10AV P	10	19.1
M12AV P	12	22.2
M15AV P	15	25.4
M16AV P	16	25.4
M18AV P	18	30.2
M20AV P	20	31.8
M22AV P	22	31.8
M25AV P	25	38.1



Nut

AVN

Fractional Tubes

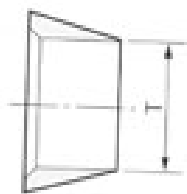
Part No.	Tube O.D. T		H		L
	in	mm	in	mm	
2AV N	1/8	3.17	7/16	11.11	11.9
3AV N	3/16	4.76	1/2	12.70	11.9
4AV N	1/4	6.35	9/16	14.28	12.7
5AV N	5/16	7.93	5/8	15.87	13.4
6AV N	3/8	9.52	11/16	17.46	14.2
8AV N	1/2	12.70	7/8	22.22	17.5
10AV N	5/8	15.87	1	25.40	17.5
12AV N	3/4	19.05	1-1/8	28.57	17.5
14AV N	7/8	22.22	1-1/4	31.75	17.5
16AV N	1	25.40	1-1/2	38.10	20.6

Metric Tubes

Part No.	Tube O.D. T (mm)	H	L
M3AV N	3	11.1	11.9
M4AV N	4	11.1	11.9
M6AV N	6	14.3	12.7
M8AV N	8	15.9	13.4
M10AV N	10	19.1	15.1
M12AV N	12	22.2	17.5
M15AV N	15	25.4	17.5
M16AV N	16	25.4	17.5
M18AV N	18	30.2	17.5
M20AV N	20	31.9	17.5
M22AV N	22	31.9	17.5
M25AV N	25	38.1	20.6



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.



Front Ferrule

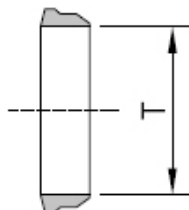
AVFF

Fractional Tubes

Part No.	Tube O.D.	
	in	mm
2AVFF	1/8	3.17
3AVFF	3/16	4.76
4AVFF	1/4	6.35
5AVFF	5/16	7.93
6AVFF	3/8	9.52
8AVFF	1/2	12.70
10AVFF	5/8	15.87
12AVFF	3/4	19.05
14AVFF	7/8	22.22
16AVFF	1	25.40

Metric Tubes

Part No.	Tube O.D. T (mm)
M3AVFF	3
M4AVFF	4
M6AVFF	6
M8AVFF	8
M10AVFF	10
M12AVFF	12
M15AVFF	15
M16AVFF	16
M18AVFF	18
M20AVFF	20
M22AVFF	22
M25AVFF	25



Back Ferrule

AVBF

Fractional Tubes

Part No.	Tube O.D.	
	in	mm
2AVBF	1/8	3.17
3AVBF	3/16	4.76
4AVBF	1/4	6.35
5AVBF	5/16	7.93
6AVBF	3/8	9.52
8AVBF	1/2	12.70
10AVBF	5/8	15.87
12AVBF	3/4	19.05
14AVBF	7/8	22.22
16AVBF	1	25.40

Metric Tubes

Part No.	Tube O.D. T (mm)
M3AVBF	3
M4AVBF	4
M6AVBF	6
M8AVBF	8
M10AVBF	10
M12AVBF	12
M15AVBF	15
M16AVBF	16
M18AVBF	18
M20AVBF	20
M22AVBF	22
M25AVBF	25



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.

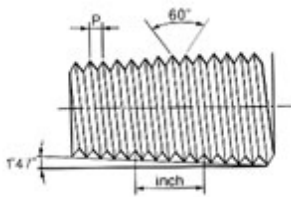
THREAD INFORMATION

Threads of many different kinds are used for different purposes in small piping components.

The Most common are:

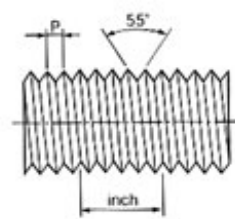
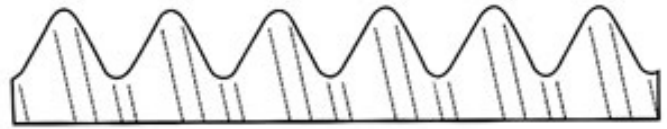
The following are the more common types of pipe used in the small pipe industry.

1. NPT Tapered Pipe Threads



- 60° Thread Angle
- Taper Angle 1° 47'
- Truncation of root and crest are flat.
- Pitch measured in inches

2. ISO 228/1 Parallel Pipe Threads

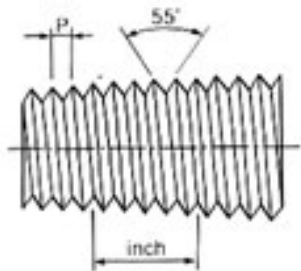


- 55° Thread Angle
- Diameter measured in inches
- Truncation of root and crest are round
- Pitch measured in inches

NPT (National Pipe Tapered) is made to specifications outlined in ANSI B1. 2. This is the pipe thread used on the pipe end

International Organization For Standards (ISO 228/1) parallel (PF ISO Parallel threads are equivalent to DIN ISO 228/1. BSP PL. JIS B0202, R 1/8 AND R 1/4.

2. ISO/ 7/1 Tapered Pipe Threads



- 60° Thread Angle
- Taper Angle 1° 47'
- Truncation of root and crest are flat.
- Pitch measured in inches

International Organization For Standards (ISO 7/1) Tapered. (P.T.) ISO tapered threads are equivalent to DIN 2999. BSP TR, JIS B0203, R 1/8 and R 1/4 keg.

In application ISO threads are used similar to NPT threads. However, care should be used that ISO and NPT threads are not mixed. ISO threads have a 55° angle versus 60° for NPT. Thread pitch is usually measured in millimeters but may be expressed in inch. In many sizes the threads-per-inch are different and the root and crest configurations are different from NPT.

These pipe threads are similar in configuration to 7/1 threads except there is no taper. Therefore do not work by thread interference like the tapered pipe threads of ISO 7/1 of NPT. A gasket or O-Ring is normally used to seal into the parallel female threaded component.

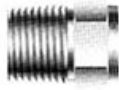
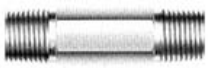
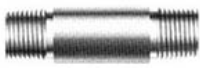
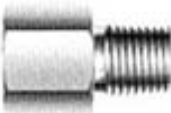
Comparison Chart - Pipe Threads

Nominal Size	Threads Per Inch	Included Thread Angle	Pitch	Pipe O.D.
1/16"	NPT 27	60°	.037"	.312"
	ISO 28	55°	.036"	.312"
1/8"	NPT 27	60°	.037"	.405"
	ISO 28	55°	.036"	.398"
1/4"	NPT 18	60°	.0556"	.540"
	ISO 19	55°	.053"	.535"
3/8"	NPT 18	60°	.0556"	.675"
	ISO 19	55°	.053"	.672"
1/2"	NPT 14	60°	.0714"	.840"
	ISO 14	55°	.071"	.843"
3/4"	NPT 14	60°	.0714"	1.050"
	ISO 14	55°	.071"	1.060"
1"	NPT 11-1/2	60°	.087"	1.315"
	ISO 11	55°	.091"	1.331"
1-1/4"	NPT 11-1/2	60°	.087"	1.660"
	ISO 11	55°	.091"	1.669"
1-1/2"	NPT 11-1/2	60°	.087"	1.900"
	ISO 11	55°	.091"	1.900"
2"	NPT 11-1/2	60°	.087"	2.375"
	ISO 11	55°	.091"	2.375"



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

INDEX

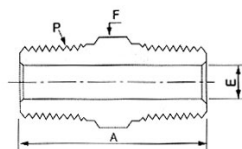
Item	Part	Page	Item	Part	Page
	Hex Nipple AVPHN	3		Pipe Plug AVPPG	5
	Hex Long Nipple AVPHLN	3		Pipe Cap AVPCP	5
	Long Nipple AVPLN	3		Coupling S. W. Type AVPCW	6
	Hex Reducing Nipple AVPHRN	3		Reducing Coupling S. W. Type AVPRCW	6
	Adapter AVPA	4		Female Elbow AVPFE	6
	Reducing Adapter AVPRA	4		Male Elbow AVPME	6
	Reducing Coupling AVPRC	4		Street Elbow AVPSE	7
	Coupling AVPC	4		Female Tee AVPFT	7
	Reducing Bushing AVPRB	5		Male Tee AVPMT	7



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

Hex Nipple

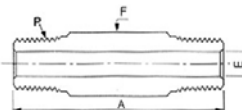
AVPHN



ORDER BY PART NO.	PIPE P-PT NPT	DIMENSIONS		
		A	E	F
AVPHN-2	1/8	25	4.8	7/16
AVPHN-4	1/4	35	7.0	9/16
AVPHN-6	3/8	36	10.0	11/16
AVPHN-8	1/2	47	12.0	7/8
AVPHN-12	3/4	47	16.0	1-1/16
AVPHN-16	1	59	22.0	1-3/8

Hex Long Nipple

AVPHLN



ORDER BY PART NO.	PIPE P-PT NPT	DIMENSIONS		
		A	E	F
AVPHLN-2	1/8	100	4.8	7/16
AVPHLN-4	1/4	100	7.0	9/16
AVPHLN-6	3/8	100	10.0	11/16
AVPHLN-8	1/2	100	12.0	7/8
AVPHLN-12	3/4	100	16.0	1-1/16
AVPHLN-16	1	100	22.0	1-3/8

Long Nipple

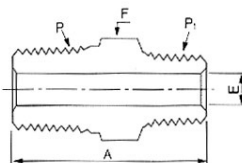
AVPLN



ORDER BY PART NO.	PIPE P-PT NPT	DIMENSIONS		
		A	E	F
AVPLN-2	1/8	100	5.7	10.5Ø
AVPLN-4	1/4	100	7.8	13.8Ø
AVPLN-6	3/8	100	10.9	17.3Ø
AVPLN-8	1/2	100	14.3	21.7Ø
AVPLN-12	3/4	100	19.4	27.2Ø
AVPLN-16	1	100	25.0	34.0Ø

Hex Reducing Nipple

AVPHRN



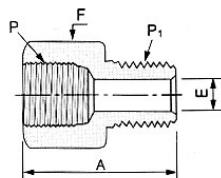
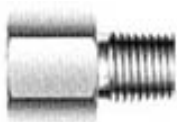
ORDER BY PART NO.	PIPE SIZE		DIMENSION		
	P-PT.NPT	P-PT.NPT	A	E	F
4AVPHRN-2	1/4	1/8	31	4.8	9/16
6AVPHRN-4	3/8	1/4	36	7.0	11/16
8AVPHRN-4	1/2	1/4	42	7.0	7/8
8AVPHRN-6	1/2	3/8	42	10.0	7/8
12AVPHRN-6	3/4	3/8	44	10.0	1-1/16
12AVPHRN-8	3/4	1/2	49	12.0	1-1/16
16AVPHRN-8	1	1/2	54	12.0	1-3/8
16AVPHRN-12	1	3/4	54	16.0	1-3/8



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

Adapter

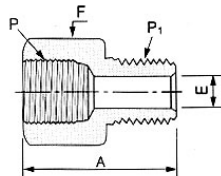
AVPA



ORDER BY PA RT NO.	PIPE P-PT NPT	DIMENSIONS		
		A	E	F
AVPA-2	1/8	28	4.8	9/16
AVPA-4	1/4	33	6.5	3/4
AVPA-6	3/8	36	10.0	7/8
AVPA-8	1/2	45	12.0	1-1/16
AVPA-12	3/4	50	16.0	1-1/4
AVPA-26	1	58	22.0	1-5/8

Reducing Adapter

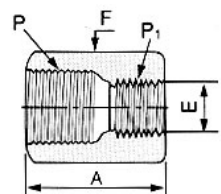
AVPRA



ORDER BY PA RT NO.	PIPE SIZE		DIMENSION		
	P-PT.NPT	P-PT.NPT	A	E	F
4AVPRA-2	1/4	1/8	30	4.8	3/4
6AVPRA-4	3/8	1/4	35	6.5	7/8
8AVPRA-4	1/2	1/4	39	6.5	1-1/16
8AVPRA-6	1/2	3/8	41	10.0	1-1/16
12AVPRA-6	3/4	3/8	44	10.0	1-1/4
12AVPRA-8	3/4	1/2	48	12.0	1-1/4
16AVPRA-8	1	1/2	52	12.0	1-5/8
16AVPRA-12	1	3/4	55	16.0	1-5/8

Reducing Coupling

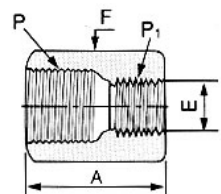
AVPRC



ORDER BY PA RT NO.	PIPE SIZE		DIMENSION		
	P-PT.NPT	P-PT.NPT	A	E	F
4AVPRC-2	1/4	1/8	30	8.0	3/4
6AVPRC-4	3/8	1/4	30	11.0	7/8
8AVPRC-4	1/2	1/4	40	11.0	1-1/16
8AVPRC-6	1/2	3/8	40	15.0	1-1/16
12AVPRC-6	3/4	3/8	42	15.0	1-1/4
12AVPRC-8	3/4	1/2	42	18.0	1-1/4
16AVPRC-8	1	1/2	51	18.0	1-5/8
16AVPRC-12	1	3/4	51	22.0	1-5/8

Coupling

AVPC



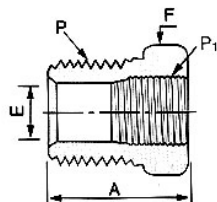
ORDER BY PA RT NO.	PIPE P-PT NPT	DIMENSIONS		
		A	E	F
AVPC-2	1/8	21	8.0	9/16
AVPC-4	1/4	30	11.0	3/4
AVPC-6	3/8	30	15.0	7/8
AVPC-8	1/2	40	18.0	1-1/16
AVPC-12	3/4	42	22.0	1-1/4
AVPC-26	1	51	25.0	1-5/8



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

Reducing Bushing

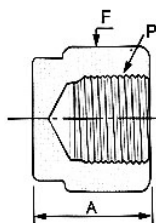
AVPRB



ORDER BY PART NO.	PIPE SIZE		DIMENSION		
	P-PT.NPT	P-PT.NPT	A	E	F
4AVPRB-2	1/4	1/8	22	8.0	9/16
6AVPRB-4	3/8	1/4	23	11.0	11/16
8AVPRB-4	1/2	1/4	28	11.0	7/8
8AVPRB-6	1/2	3/8	28	15.0	7/8
12AVPRB-4	3/4	1/4	31	11.0	1-1/16
12AVPRB-6	3/4	3/8	31	15.0	1-1/16
12AVPRB-8	3/4	1/2	31	18.0	1-1/16
16AVPRA-8	1	1/2	35	18.0	1-3/8
16AVPRA-12	1	3/4	35	22.0	1-3/8

Pipe Cap

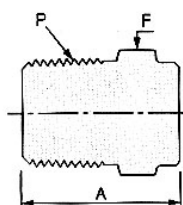
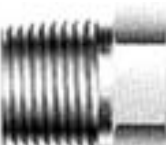
AVPCP



ORDER BY PART NO.	PIPE P-PT NPT	DIMENSIONS	
		A	F
AVPCP-2	1/8	19	9/16
AVPCP-4	1/4	23	3/4
AVPCP-6	3/8	23	7/8
AVPCP-8	1/2	34	1-1/16
AVPCP-12	3/4	34	1-1/4
AVPCP-16	1	41	1-5/8

Pipe Plug

AVPPG



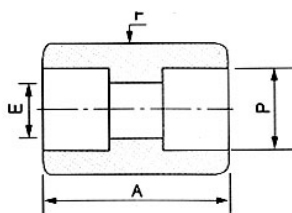
ORDER BY PART NO.	PIPE P-PT NPT	DIMENSIONS	
		A	F
AVPCP-2	1/8	19	7/16
AVPCP-4	1/4	24	9/16
AVPCP-6	3/8	25	11/16
AVPCP-8	1/2	31	7/8
AVPCP-12	3/4	31	1-1/16
AVPCP-16	1	38	1-3/8



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

Coupling S. W. Type

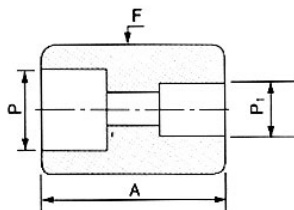
AVPCW



ORDER BY PA RT NO.	PIPE SIZE		DIMENSION		
	NOM SIZE	P-SW	A	E	F
8AVPCW-8	1/2	22.2	29.5	14.0	32Ø
12AVPCW-12	3/4	27.7	35.5	19.0	38Ø
16AVPCW-16	1	34.5	38.7	25.0	46Ø

Reducing Coupling S. W.
Type

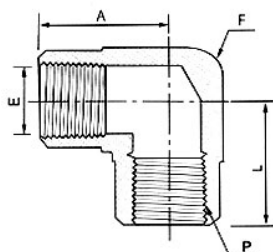
AVPRCW



ORDER BY PA RT NO.	PIPE SIZE			DIMENSION		
	MON SIZE	PI-SW	P-SW	A	E	F
12AVPRCW-8	3/4 x 1/2	27.7	22.2	32.5	14.0	38Ø
16AVPRCW-8	1 x 1/2	34.5	22.2	35.7	14.0	46Ø
16AVPRCW-12	1 x 3/4	34.5	27.7	38.7	19.0	46Ø

Female Elbow

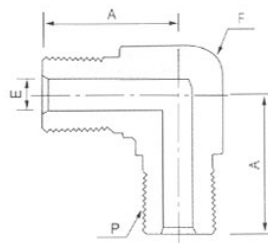
AVPFE



ORDER BY PA RT NO.	PIPE P-PT NPT	DIMENSIONS		
		A	E	F
AVPFE-2	1/8	26.4	8.6	1/2
AVPFE-4	1/4	29.7	11.4	11/16
AVPFE-6	3/8	36.0	14.9	13/16
AVPFE-8	1/2	39.6	18.5	1

Male Elbow

AVPME



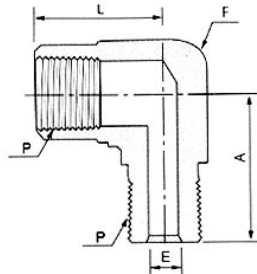
ORDER BY PA RT NO.	PIPE P-PT NPT	DIMENSIONS		
		A	E	F
AVPME-2	1/8	19.5	4.8	7/16
AVPME-4	1/4	23.4	7.0	1/2
AVPME-6	3/8	28.0	10.0	13/16
AVPME-8	1/2	36.8	12.0	13/16



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

Street Elbow

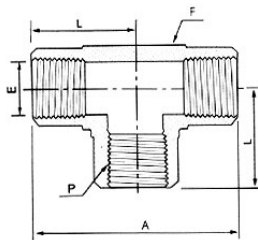
AVPSE



ORDER BY PART NO.	PIPE P-PT NPT	DIMENSIONS			
		A	E	L	F
AVPSE-2	1/8	26.4	26.4	4.8	7/16
AVPSE-4	1/4	29.7	29.7	7.0	1/2
AVPSE-6	3/8	36.0	36.0	10.0	11/16
AVPSE-8	1/2	39.6	39.6	12.0	13/16

Female Tee

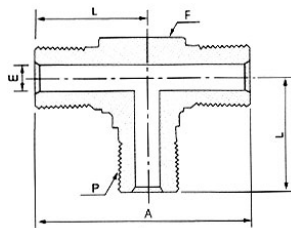
AVPFT



ORDER BY PART NO.	PIPE P-PT NPT	DIMENSIONS			
		A	E	L	F
AVPFT-2	1/8	46	8.6	23	1/2
AVPFT-4	1/4	46	11.4	23	11/16
AVPFT-6	3/8	52	14.9	26	13/16
AVPFT-8	1/2	60	18.5	30	1

Male Tee

AVPMT



ORDER BY PART NO.	PIPE P-PT NPT	DIMENSIONS			
		A	E	L	F
AVPMT-2	1/8	39.0	4.8	19.5	7/16
AVPMT-4	1/4	53.3	7.0	21.5	9/16
AVPMT-6	3/8	56.0	10.0	28.0	11/16
AVPMT-8	1/2	73.6	12.0	36.8	13/16

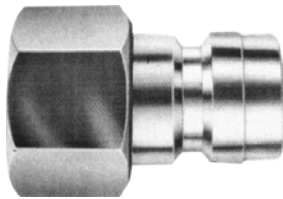


All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

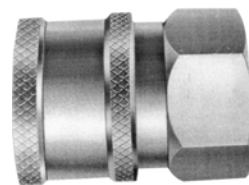
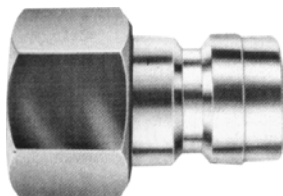
Type AVDV 'DV' : (Double Valve) Two way shut-off valves incorporated into both the Coupler & Adapter



Type AVSV : (Single Valve) One way shut-off valve in Coupler half only



Type AVST : (Through Type) Straight through, valve less both the halves, Coupler & Adapter



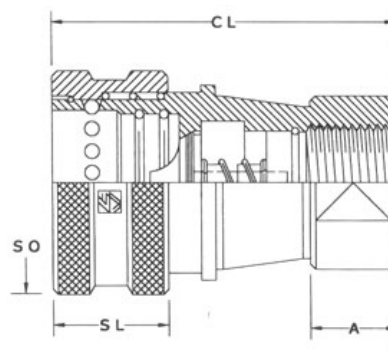
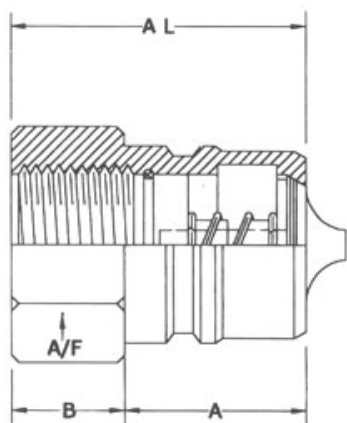
All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.

AVDV

Type AVDV : Double valve series couplings, both halves female threaded having valves which operate on the opposed poppet valve principle, valve consists of a spring loaded seat seal with attached valve. A quick pull on the sleeve and the assembly is disconnected, pull again, push the adaptor in coupler half and the unit is connected.

Double valve self sealing couplings seal off at both ends when disconnected is not completely dry, a few CCS of fluid being spilled.

PRECAUTION : Can not be connected / disconnected under pressure.



A D A P T O R					< + >	C O U P L E R					
Size Thrds.	AL	A	B	A.A/F.	Coupled Length	CL	A	SO	SL	C.A.F	Wrk. Prss. P S I
1/8"	32	20	12	14.Hex	70	52	13	24	19	18Ø-14.A/F	4000
1/4"	38	25	13	17.Hex	77	60	14	30	20	23Ø-19.A/F	4000
3/8"	40	27	13	22.Hex	80	66	16	38	24	28Ø-24.A/F	3500
1/2"	45	30	15	28.Hex	90	74	18	44	27	35Ø-30.A/F	3500
3/4"	55	35	20	35.Hex	110	88	23	54	30	40Ø-35.A/F	3000
1"	60	37	23	41.Hex	120	95	25	62	32	48Ø-41.A/F	3000
1 1/4"	68	42	26	60Ø-54.A/F	135	110	28	75	36	60Ø-54.A/F	2000
1 1/2"	75	46	29	65Ø-60.A/F	150	120	30	87	40	70Ø-63.A/F	1500
2"	80	51	29	75Ø-70.A/F	160	130	32	100	44	80Ø-72.A/F	1000
2 1/2"	90	56	34	88Ø-82A/F	180	145	38	110	45	92Ø-85.A/F	500
3"	100	57	43	105Ø-97.A/F	200	157	40	125	51	110Ø-103.A/F	500

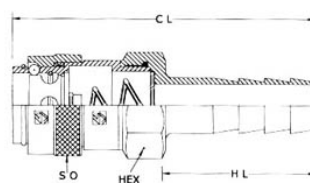
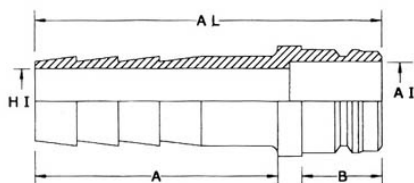
All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

AVSV

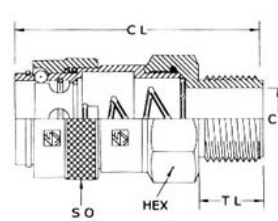
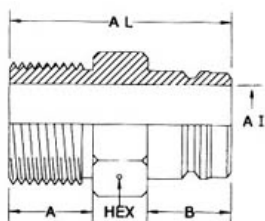
Type AVSV : Single valve series couplings, Coupler consists of a spring loaded seat seal with attached valve and adaptor without valve. A quick pull on the sleeve and the assembly is disconnected to connect again push the adaptor without touching coupler sleeve and the unit is connected. It is also ideal for pneumatic tools, air and water piping.

PRECAUTION :

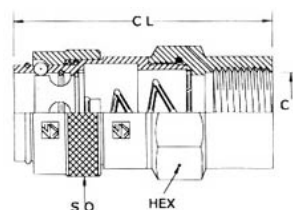
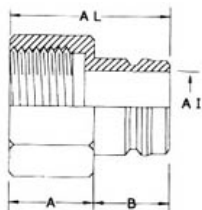
- Fluid flow direction is from coupler to adaptor and not the vice-versa.
- Can not be connected / disconnected under pressure.



NMnl. Size	AL	AI	HI	A	B	Coupled Length	CL	SO	HL	Hex.	Wrk. Prss. P S I
1/4"	50	06	04	28	18	112	79	25	30	22	1500
3/8"	60	09	07	34	18	133	94	30	48	25	1500
1/2"	74	11	09	45	20	158	108	33	59	28	750
3/4"	89	17	16	55	22	185	123	41	70	35	750
1"	107	23	22	70	23	220	143	48	87	42	500



Thrds. Size	A	B	AL	AI	Hex.	Coupled Length	CL	CI	SO	Hex.	TL	Wrk. Prss. P S I
1/4"	12	18	37	06	15	077	64	07	25	22	12	1500
3/8"	14	18	40	09	17	086	73	09	30	25	13	1500
1/2"	16	20	52	11	22	094	79	14	33	28	16	750
3/4"	18	22	58	17	28	101	85	18	41	35	18	750
1"	23	23	65	23	35	118	98	23	48	41	23	500

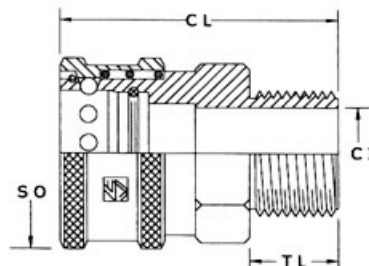
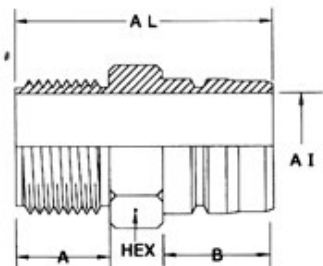


Thrds. Size	AL	AI	A	B	Coupled Length	CL	SO	Hex.	A	Wrk. Prss. P S I
1/4"	32	06	14	18	075	60	25	22	20	1500
3/8"	35	09	15	18	085	71	30	25	25	1500
1/2"	40	11	18	20	094	77	33	28	28	750
3/4"	45	17	20	22	101	83	41	35	30	750
1"	55	23	28	23	114	88	48	41	32	500

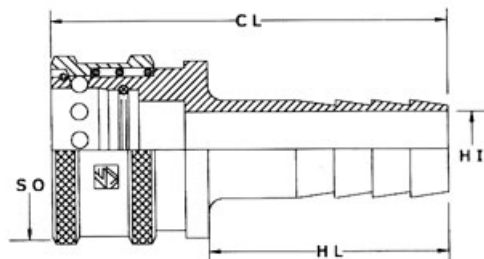
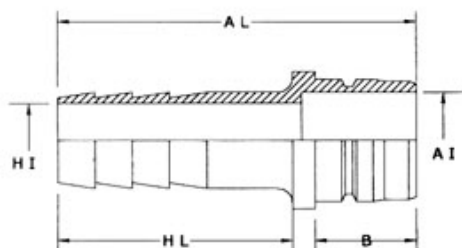
All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.

AVST

Type AVST : Through type series couplings, Coupler & Adaptor both halves does not have valve mechanism. This one has a full flow straight through capacity because it is without valves. To disconnect pull the sleeve as well as the adaptor and to connect again pull the sleeve and push the adaptor.



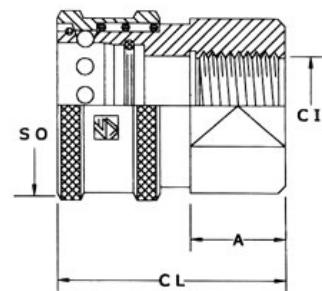
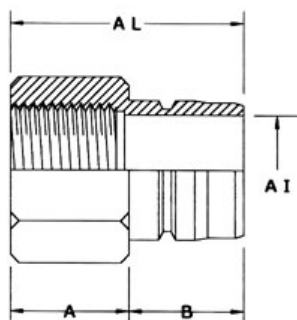
NMnl. Size	A	B	AL	AI	Hex.	Coupled Length	CL	CI	SO	TL	Wrk. Prss. P S I
1/4"	12	18	38	06	16	065	45	06	23	12	1500
3/8"	14	21	43	10	19	070	48	10	28	14	1500
1/2"	18	22	50	13	22	090	62	13	35	18	1000
3/4"	19	25	57	19	28	100	68	19	44	19	1000
1"	23	26	63	25	35	113	76	25	50	23	750
1 1/4"	25	38	80	32	41	127	85	32	68	25	750
1 1/2"	26	42	85	38	50	138	95	38	75	26	750
2"	27	42	88	50	61	146	100	50	83	27	500
2 1/2"	28	45	92	63	75	157	110	63	99	28	500
3"	30	50	100	76	98	185	135	76	119	30	500



NMnl. Size	HL	B	AL	AI	HI	Coupled Length	HL	SO	CL	HI	Wrk. Prss. P S I
1/4"	30	18	52	06	04	095	30	23	60	04	1500
3/8"	38	21	63	10	07	111	38	28	68	07	1500
1/2"	45	22	72	13	09	131	45	35	80	09	1000
3/4"	50	25	80	19	16	146	50	44	90	16	1000
1"	63	26	95	25	22	174	63	50	105	22	750
1 1/4"	70	38	115	32	28	207	70	68	130	28	750
1 1/2"	75	42	124	38	32	220	75	75	138	32	750
2"	80	42	130	50	45	233	80	83	145	45	500
2 1/2"	85	45	140	63	55	252	85	99	157	55	500
3"	100	50	160	76	68	280	100	119	170	68	500

All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.

AVST



Thrds. Size	A	B	AL	AI	Coupled Length	CL	CI	SO	A	Wrk. Prss. P S I
1/4"	16	18	34	06	054	38	06	23	16	1500
3/8"	17	21	38	10	059	42	10	28	17	1500
1/2"	18	22	40	13	066	48	13	35	18	1000
3/4"	22	25	47	19	078	56	19	44	22	1000
1"	28	26	54	25	090	62	25	50	24	750
1 1/4"	30	38	68	32	102	72	32	68	25	750
1 1/2"	31	42	73	38	109	78	38	75	26	750
2"	32	42	74	50	112	80	50	83	28	500
2 1/2"	40	45	85	63	132	92	63	99	35	500
3"	42	50	92	76	145	103	76	119	38	500

FEATURES :

Operation : The sliding sleeve on the coupler is pulled back, the adaptor is inserted, then the sleeve is pushed forward to make the connection. The seal is made by poppet valves in each component, which close during the disconnection cycle.

Specification : All our Quick Release couplings are in accordance with our manufacturing standard and generally not interchangeable with other couplings manufacturer's.

Thread of Couplings: All the quick Release couplings are available in BSP/NPT standards (Male or Female). Other threadings can be manufactured if required as per your standard.

AT A GLANCE:

AVI has been the confident supplier of Camlock and Quick disconnect couplings to various industries. AVI Quick disconnect couplings are standard for on various Hose application which needed frequent takedown and service. This advantage plus proven reliability make AVLOK Quick disconnect couplings **THE MARKET LEADER.**

R & D has always been and continues to be an important activity of AVLOK. Many other developments and product variations result in the most complete line of Hose connections for the largest variety of fluids and applications offered by any other manufacturer.

All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.

PROPERTIES & PHYSICAL FEATURES

These couplings are manufactured in various metals, with different end connections like, Female / Male Threaded, Hose Shank, Flange End, Socket / Butt Weld End.

METALS OF ASSEMBLY

BODY	BALLS	SPRINGS	VALVES
Brass	SS.304	SS.304	Brass
SS.304	SS.304	SS.304	SS.304
SS.316	SS.316	SS.316	SS.316
Carbon Steel	Carbon Steel	SS.	Carbon Steel

SEAL MATERIAL

Selecting the right seal material depends on which fluid type and temperature range is used listed below. This will greatly influence the life of the couplings. The standard seal material is nitrile rubber.

RUBBER	OPERATING TEMPERATURE	RECOMMENDED APPLICATION
NITRILE	-20°C TO +90°C	OIL RESISTANT
NEOPRENE	-20°C TO +100°C	FREON / OZONE RESISTANT
EPDM	-20°C TO +120°C	STEAM RESISTANT
SILICON	-20°C TO +180°C	DRY HEAT
VITON	-20°C TO +220°C	HEAT AND /OR CHEMICAL
TEFLON	-40°C TO +260°C	HIGHTEMPERATURE

QUALITY CONTROL

Each AVLOK Coupling manufactured goes through stringent quality control, right from the procurement of raw material upto final stage.

PRECAUTION

- Avoid connecting or disconnecting a coupling under pressure.
- Residual pressure in a coupling may make it difficult to connect. In such a case, do not strike the valve end to depressurize it.
- Improper selection of seal rubber may cause leakage.
- Dust or flaws in the seal may cause leakage.
- Improper selection or improper use of the products can cause personal injury and property damage.

All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

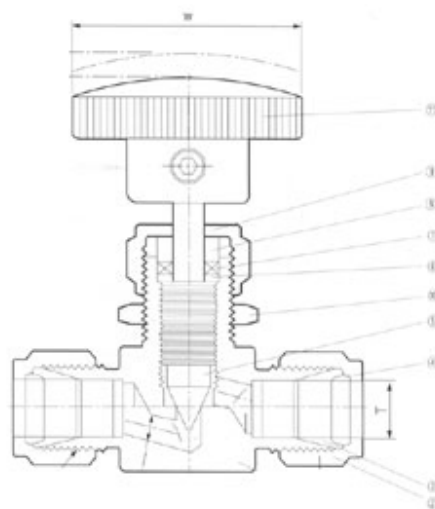
FORGED INTEGRAL BONNET NEEDLE VALVES



SPECIFICATION

1. CONNECTION : AVLOK TUBE FITTING
2. MAX OPERATION TEMPERATURE : -50°c ~ +232°
3. MAX OPERATION PRESSURE
ASTM A182 F316 : 5000PSIG
BRASS : 3000PSIG
4. AVAILABLE WITH PLASTIC OR SS/ALUMINIUM BAR HANDLES.
5. SIZE RANGE 1/8" UPTO 1"

No.	Description	SS316Valves	Brass Valves
1.	Body	316SS	Brass
2.	Nut	316SS	Brass
3.	Front Ferrule	316SS	Brass
4.	Back Ferrule	316SS	Brass
5.	Stem	316SS	316SS
6.	Packing Ring	316SS	Brass
7.	Packing	TFE	TFE
8.	Packing Gland	316SS	Brass
9.	Packing Nut	316SS	Brass
10.	Lock Nut	316SS	Brass
11.	Handle	Standard	P.C.
		Alternative	316SS (BAR) Brass (Bar)



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

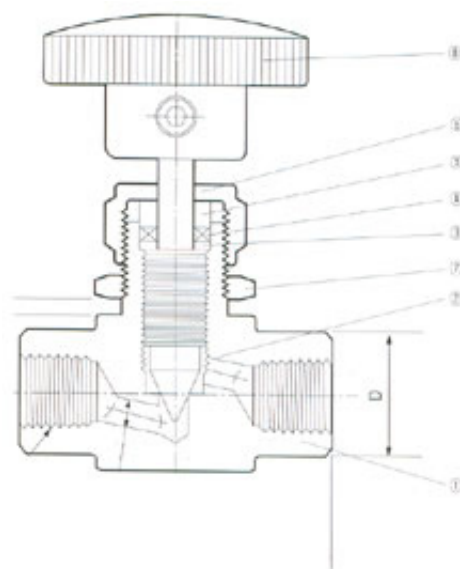
FORGED INTEGRAL BONNET NEEDLE VALVES



SPECIFICATION

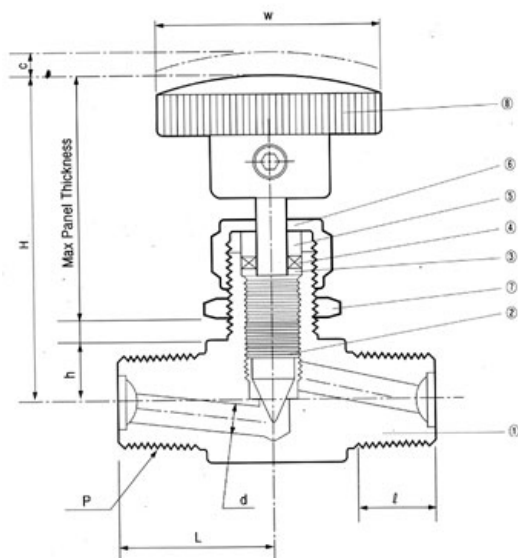
1. CONNECTION : FEMALE THREAD (BSP/NPT)
2. MAX OPERATION TEMPERATURE : -50°c ~ +232°
3. MAX OPERATION PRESSURE
ASTM A182 F316 : 5000PSIG
BRASS : 3000PSIG
4. AVAILABLE WITH PLASTIC/SS BAR HANDLES
5. SIZE RANGE 1/8" UPTO 1"

No.	Description		SS316Valves	Brass Valves
1.	Body		316SS	Brass
2.	Stem		316SS	316SS
3.	Packing Ring		316SS	Brass
4.	Packing		TFE	TFE
5.	Packing Gland		316SS	Brass
6.	Packing Nut		316SS	Brass
7.	Lock Nut		316SS	Brass
8.	Handle	Standard	P.C.	P.C.
		Alternative	316SS (BAR)	Brass (Bar)



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

FORGED INTEGRAL BONNET NEEDLE VALVES



SPECIFICATION

1. CONNECTION : MALE THREAD (BSP/NPT)
2. MAX OPERATION TEMPERATURE : -50°c ~ +232°
3. MAX OPERATION PRESSURE
ASTM A182 F316 : 5000PSIG
4. AVAILABLE WITH PLASTIC/SS BAR HANDLES
5. SIZE RANGE 1/8" UPTO 1"

No.	Description	SS316Valves	Brass Valves
1.	Body	316SS	Brass
2.	Stem	316SS	316SS
3.	Packing Ring	316SS	Brass
4.	Packing	TFE	TFE
5.	Packing Gland	316SS	Brass
6.	Packing Nut	316SS	Brass
7.	Lock Nut	316SS	Brass
8.	Handle	Standard	P.C.
		Alternative	316SS (BAR) Brass (Bar)



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

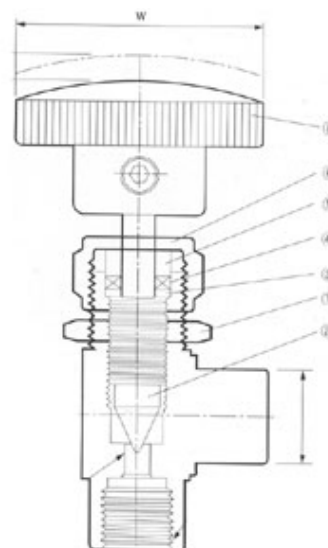
FORGED INTEGRAL BONNET ANGLE TYPE VALVES



SPECIFICATION

1. CONNECTION : FEMALE THREAD (BSP/NPT)
2. MAX OPERATION TEMPERATURE : $-50^{\circ}\text{C} \sim +232^{\circ}$
3. MAX OPERATION PRESSURE
 - ASTM A182 F316 : 5000PSIG
 - BRASS : 3000PSIG
4. AVAILABLE WITH PLASTIC OR SS/ALUMINIUM BAR HANDLES.
5. SIZE RANGE $1/8''$ UPTO $1''$

No.	Description	SS316Valves	Brass Valves
1.	Body	316SS	Brass
2.	Stem	316SS	316SS
3.	Packing Ring	316SS	Brass
4.	Packing	TFE	TFE
5.	Packing Gland	316SS	Brass
6.	Packing Nut	316SS	Brass
7.	Lock Nut	316SS	Brass
8.	Handle	Standard	P.C.
		Alternative	316SS (BAR) Brass (Bar)



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.

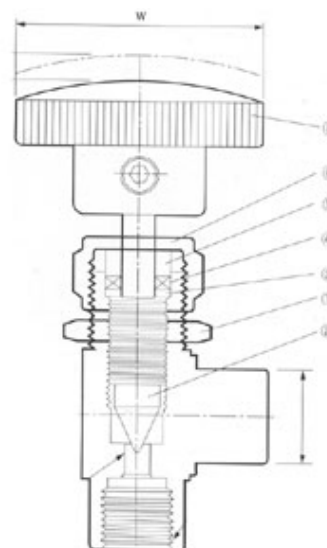
FORGED INTEGRAL BONNET ANGLE TYPE VALVES



SPECIFICATION

1. CONNECTION : FEMALE THREAD (BSP/NPT)
2. MAX OPERATION TEMPERATURE : $-50^{\circ}\text{C} \sim +232^{\circ}$
3. MAX OPERATION PRESSURE
 - ASTM A182 F316 : 5000PSIG
 - BRASS : 3000PSIG
4. AVAILABLE WITH PLASTIC OR SS/ALUMINIUM BAR HANDLES.
5. SIZE RANGE 1/8" UPTO 1"

No.	Description	SS316Valves	Brass Valves
1.	Body	316SS	Brass
2.	Stem	316SS	316SS
3.	Packing Ring	316SS	Brass
4.	Packing	TFE	TFE
5.	Packing Gland	316SS	Brass
6.	Packing Nut	316SS	Brass
7.	Lock Nut	316SS	Brass
8.	Handle	Standard	P.C.
		Alternative	316SS (BAR) Brass (Bar)



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.

2-VALVE MANIFOLD

2-Valve Manifold

AVLOK 2 -Valve Manifolds offer safety and reliability in a general purpose design. The simple 2- Valve Configuration allows for easy block, bleed and calibration of a static pressure transmitter or gauge. Valves are available with either metal seats or replaceable soft seat inserts. Connections are 1/2 female NPT on all three ports.

Specifications

- Connection : 1/2" Female NPT to 1/2" Female NPT
- One-piece, high strength body construction for safety no welding used.
- Stems feature an non-rotating top with an easily replaceable soft insert.
- Bonnet lock pin prevents accidental valve disassembly.
- 316 stainless steel construction for superior corrosion resistance
- Bonnet-to-body seals are metal-to-metal-no O-Rings used.
- Mounting holes provided for self supporting applications
- 100% pressure tested for shut-off and at all seals
- Manifolds feature at 4:1 safety factor

Materials of Construction

No.	Component	Material Specification
1.	Handle	Stainless Steel
2.	Handle Pin	Stainless Steel
3.	Set Screw	
4.	Packing Nut	Stainless Steel
5.	Upper Gland	
6.	Packing	TFE /Grafoil
7.	Lower Gland	316SS
8.	Bonnet	
9a.	Steam (Needle Tip)	
9b.	Steam (Vee Tip)	Delrin
10.	Soft Seat (Vee Tip)	
11.	Cap Screw	Stainless Steel
12.	Lock Plate	
13.	Manifold	316SS



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.

3-VALVE MANIFOLD

3-Valve Manifold

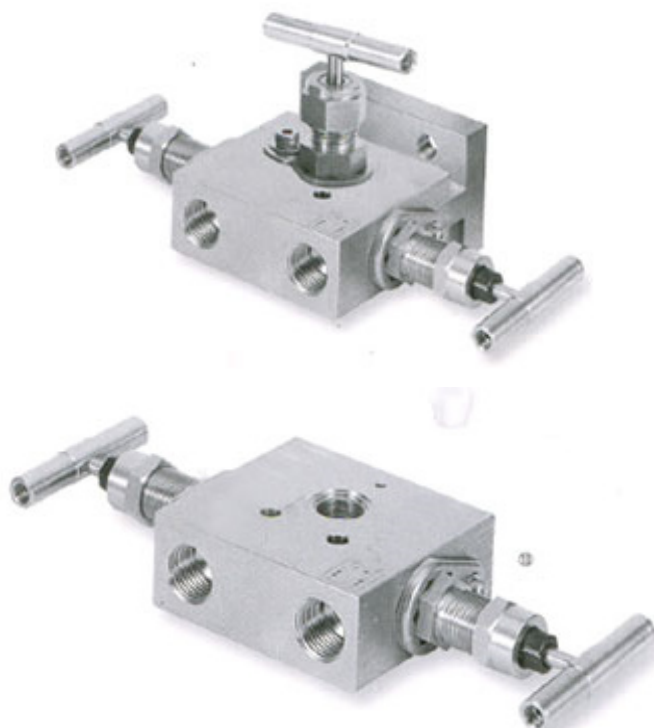
The AVLOK Pipe to Pipe 3-Valve Manifold is a general purpose design for connection system impulse lines and transmitters . This manifold consists of two block Valves and an equalizer valve. Connection are 1/2" Female NPT on 2-1/8" (54mm_ centres for safety, an bonnet lock pin is standard.

Specifications

- Connection : 1/2" Female NPT to 1/2" Female NPT
- One-piece, high strength body construction for safety no welding used.
- 316 stainless steel construction for superior corrosion resistance
- Bonnet lock pin prevents accidental valve disassembly.
- 2-1/8" (54mm) Port centerline dimension for proper alignment.
- 100% pressure tested for shut-off and at all seals
- Manifolds feature at 4:1 safety factor

Materials of Construction

No.	Component	Material Specification
1.	Handle	Stainless Steel
2.	Handle Pin	Stainless Steel
3.	Set Screw	
4.	Lock Nut	Stainless Steel
5.	Packing Bolt	316SS
6.	Packing Support	Reinforced TFE
7.	Packing	TFE /Grafol
8.	Bonnet	316SS
9a.	Steam (Needle Tip)	
9b.	Steam (Plug Tip)	
10.	Seat (Plug Tip)	Delrin
11.	Lock Plate	Stainless Steel
12.	Cap Screw	
13.	Manifold Body	316SS



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.

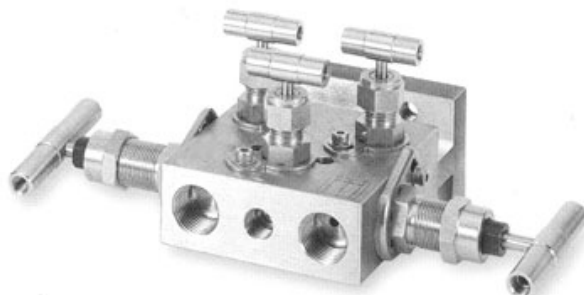
5-VALVE MANIFOLD

5-Valve Manifold

5-Valve Manifold offer two mainline block valves and a double block and bleed valve for the equalizer line. The manifold is primarily intended for gas service and is used to connect differential pressure transmitters to system flow meters. Connections are 1/2" Female NPT on 2-1/8" (54mm) centres Standard feature include two 1/4" NPT static pressure connections on the instrument side and one 1/4" NPT vent connection from the bleed valve.

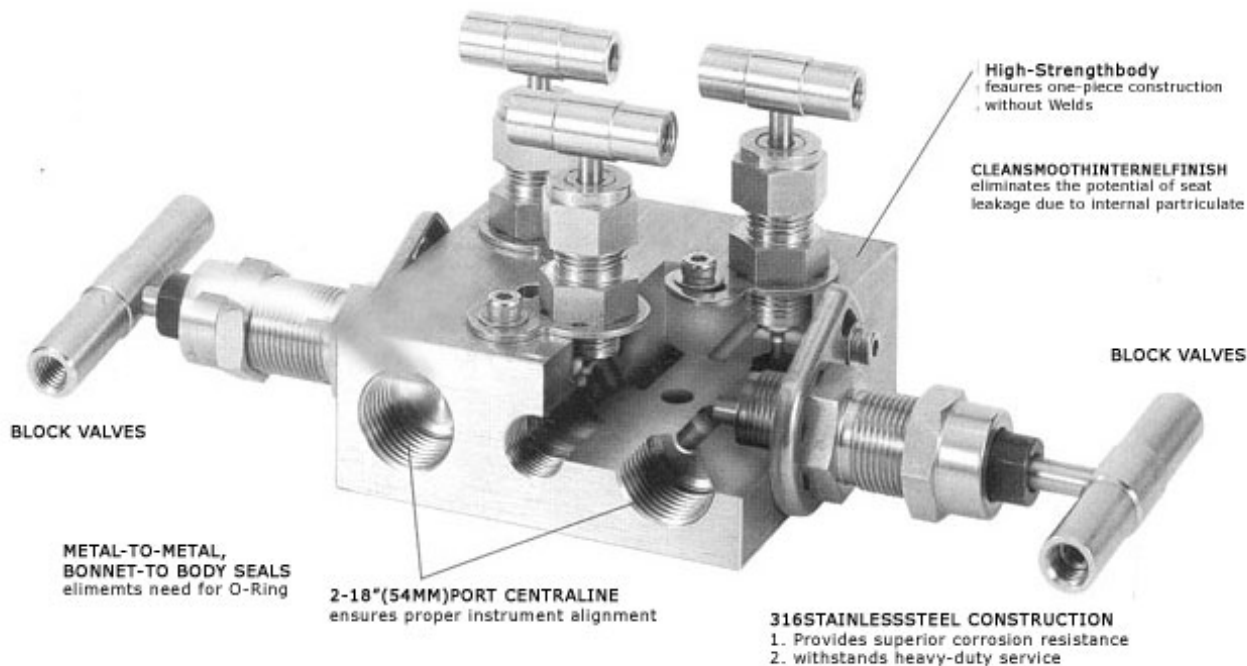
Specifications

- Connection : 1/2" Female NPT to 1/2" Female NPT
- One-piece, high strength body construction for safety no welding used.
- Bonnet lock pin prevents accidental valve disassembly.
- 2-1/8" (54mm) Port centerline dimension for proper alignment.
- 100% pressure tested for shut-off and at all seals
- 316 stainless steel construction for superior corrosion resistance
- Bonnet-to-body seals are metal-to-metal. No O-Rings are used.
- Manifolds feature a 4:1 safety factor.



Manifold Bodies

Equalizer & Bleed Valves



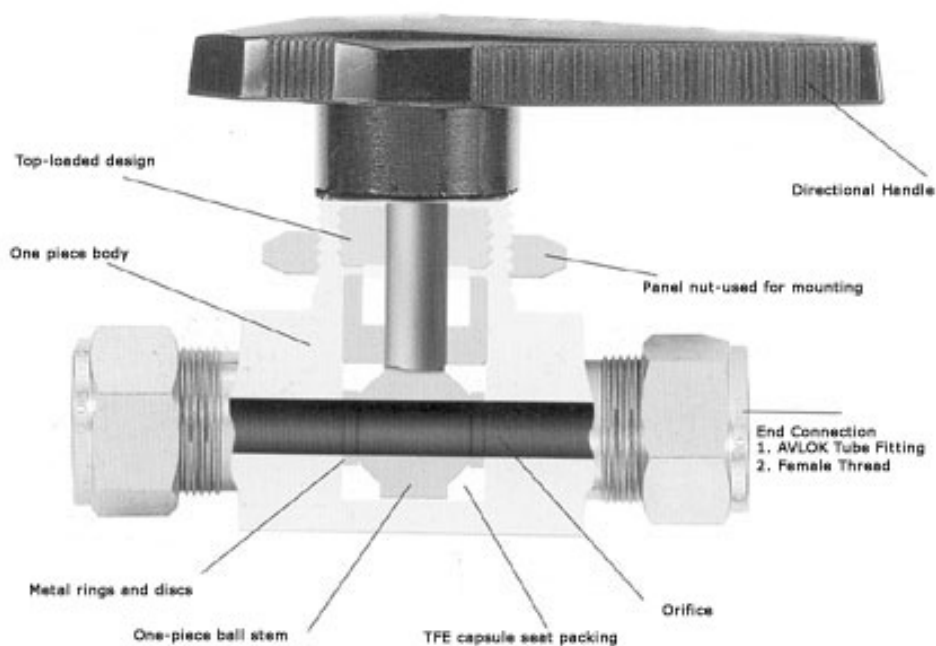
All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.

BALL VALVES

SPECIFICATION



1. CONNECTION : AVLOK TUBE FITTING FEMALE THREAD
2. OPERATION TEMPERATURE : -10°C ~ +65°C (50°F ~ 150°F)
3. MAX OPERATION PRESSURE : ASTM A182 F316 : 3000 PSIG 2(206BAR)
4. SIZE RANGE 1/8" UPTO 1"
5. AVAILABLE IN S.S. AND BRASS



No.	Description	SS316
1.	Handle	Nylon
2.	Set Screw	Steel
3.	Packing Bolt	316SS
4.	Upper Gland	316SS
5.	Bushing	TFE
6.	Lower Gland	316SS
7.	Upper Packing	TFE
8.	Ball Stem	316SS
9.	Side Disk	316SS
10.	Lower Packing	TFE
11.	Panel Nut	304SS
12.	Body	316SS

Lubrication: Silicon base lubricant



All dimensions are for reference only, and are subject to change without prior notice.
 Sizes and types other than those featured above are available on request.

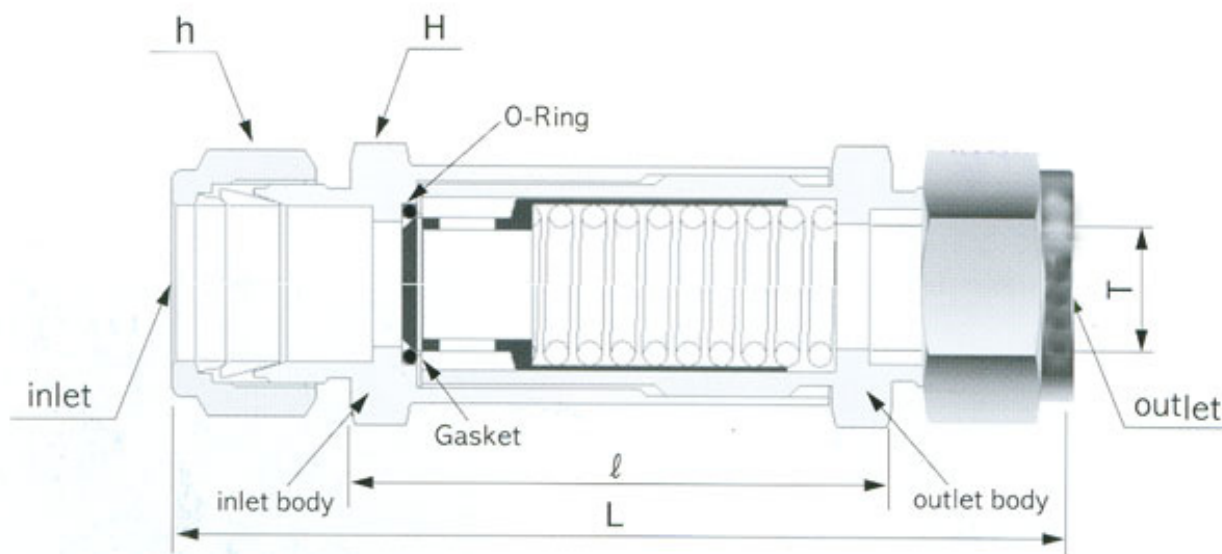
CHECK VALVES

AVLOK CHECK / NON-RETURN VALVES



FEATURES:

- Available in SS316 and Brass
- Working pressure upto 3000 PSIG.
- Temperature rating -20°C to 190°C with viton seal.
- Cracking pressure 1, 10, 25 PSIG available.
- Available in AVLOK, male/female (BSP/NPT Threads)
- Sizes range 1/8" upto 1".



Material of Construction:

Body	-	SS316/Brass
O-Ring	-	Viton
Gasket	-	SS316
Popet	-	SS316
Spring	-	SS316



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

PRESSURE GAUGES

We are reputed names for manufacturing wide variety of pressure gauge such as glycerin-filled pressure gauge, diaphragm sealed pressure gauge and electric contact gauges. The entire range of pressure gauge is designed to withstand the hazardous effects of aggressive, abrasive, heterogeneous, corrosive, highly viscous and crystallizing gas & liquid. Our seamlessly constructed gauges make or break an electronic control cycle as per the position of the instrument's pointer.

Glycerin Filled Pressure Gauge:

We are the renowned manufacturer and exporter of qualitative range of glycerin-filled pressure gauge. Widely demanded, these pressure gauge are ideal for dampening the effect of pulsation and vibration. The gauge has a stainless steel case which is filled with glycerin to offer protection against harsh environments. It also enhances the integrity as well as reliability of measuring system for long periods under extreme operating condition. The gauge find application in :

- * Marine engines
- * Pumps
- * Air Compressor
- * Hydraulic Presses
- * Industrial Power Plants
- * Pipelines and Transmission Stations

Standard features of the product are as follows:

- * Ranges: Pressure up to 1400kg/cm, Vacuum Compound Ranges
- * Size: 63mm, 100mm & 150mm
- * Accuracy: +2% / + 1% of full scale
- * Case & Bazel(IP-65): S.S. 304 Crimp type, Snap Action Bayonet Type
- * Wetted Parts: Stainless steel
- * Mounting: Direct with bottom entry, direct with back entry Flush panel with back entry (Three Panel, Bracket) Surface with bottom entry.



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

PRESSURE GAUGES

Stainless Steel Pressure Gauges:

Catering to the varied requirements of allied and power industry, we present wide gamut of stainless steel pressure gauges. Renowned for offering resistance in corrosive environments and modes, our weatherproof pressure gauge are used in diverse industrial application such as in power generation, pollution control equipment, chemical & pet-rochemicals and oil exploration. These gauges are available in 63mm, 100mm & 150mm sizes and can be custom made as per requirement.

Salient features of the product are as follows:

- * Size: 63mm, 100mm & 150mm
- * Case & Bazel(IP-65): S.S. 304 crimp type / Snap Action Bayonet Type
- * Accuracy: $\pm 1\%$ of fsd
- * Ranges: Pressure up to 1400kg /cm, vacuum & compound ranges
- * Mounting: Direct with bottom entry, direct with back entry or flush panel with back entry (Three hole panel or bracket type), surface with bottom entry
- * Wetted Parts: Stainless steel



Diaphragm Sealed Pressure Gauge:

Best utilizing our resources & facilities, we are offering diaphragm-sealed pressure gauge that is widely appreciated as they comply with international standards of quality. Diaphragm sealed pressure gauge is precisely designed by experts to withstand the hazardous effects of aggressive, abrasive, heterogeneous, corrosive, highly viscous and crystallizing media (gaseous & liquid) These are available in 63 (compact sealed), 100mm, 150mm sizes.

Salient features of the product include:

- * Accuracy: $\pm 1\%$ of fsd
- * Wetted Parts: Stainless steel
- * Case & Bazel (IP-65): S.S.-304 Crimp type, Snap Action Bayonet Type
- * Ranges: Vacuum, 0.6 to 250 Kg/Cm²
- * Size: 63 (compact sealed), 100mm, 150mm
- * Mounting: Stem, panel & surface



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

PRESSURE GAUGES

Renowned for functional competence, this gauge finds wide applications in

- * Electric power plants
- * Petrochemical
- * Water & sewage treatment plants
- * Chemical
- * Pulp & Paper
- * Food Processing

Construction Features includes:

- * Pointer: Al, Brass, Zero adjustment, Micro Zero Adjustment pointer
- * Dial: Aluminum white painted with 270 degree black scale marking.
- * Dial Size: 63mm, 100mm, 150mm
- * Scale Range: Vacuum, Compound & Pressure up to 420 kg/cm²
- * Blow Out Protection: On Top, On back side at 0.6 Kg/cm²
- * Mounting: Stem (Bottom), Surface, Panel Mounting, Surface with capillary extension
- * Over Load Protection: 125% of f.s.d for < 150 Kg/cm² 115% of f.s.d. for > 150 Kg/cm²
- * Window: Acrylic, Toughened, Safely glass
- * Joints: Argon arc welded

Sealed Unit

- * Diaphragm Material: SS 316L/ MOME /HASTALLOY - C /TANTALUM or any other material.
Teflon Coating can be provided if required
- * Upper Chamber Material: SS 304
- * Lower Chamber: SS 304 / SS 316 / MONEL or any Other material
- * Filling Fluid: Silicon Oil or suitable liquid as desired by the user



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

PRESSURE GAUGES

Diaphragm Pressure Gauges

Leveraging on our advanced infrastructure, we manufacture and supply an extensive range of diaphragm pressure gauges. Widely acclaimed for durability, efficiency and accuracy, our diaphragm pressure gauge is suitable for low-pressure measurement of commercial heating, filtration system level measurement, gas distribution. Available in dial Size of 100mm & 150mm, that are aluminum white painted with 270 degree black scale marking.

Our range finds wide application in:

- * Environment & heating engineering
- * Filter monitoring
- * Medical & vacuum technology
- * Level indication

Construction Features are as follows

- * Case & Bezel (IP-65): SS 304 Snap Action Bayonet type
- * Accuracy: $\pm 1\%$ of full scale
- * Window: Toughened / Safety glass
- * Pointer: Al. / Brass, Zero adjustment/ Micro Zero Adjustment pointer
- * Pressure Element: SS 316 Diaphragm, Compact capsule
- * Dial Size: 100mm & 150mm
- * Dial: Aluminum white painted with 270 degree black scale marking
- * Scale range: For Schaffer Diaphragm: 760mmHg Vacuum, Compound, 0.6 to 21 Kg/cm²
- * Movement: Brass/SS 304
- * Mounting Scale Range: Direct Bottom entry
- * Over Load Protection: 125% of f.s.d. for $< 150 \text{ Kg/cm}^2$ and 115% of f.s.d for $> 150 \text{ Kg/cm}^2$
- * For Low Pressure Diaphragm: 250mmWc to 6000 mm WC.
- * For Compact Capsule: 250mmWc to 6000mrnWc.

Upper Chamber

- * Material, Diaphragm Material, Lower Chamber: SS 304, Carbon Steel Powder Coated. Brass / SS 316
- * Teflon Coating can provided if required. SS 304 / SS 316, PTFE Lining provide if required (Threaded/Flange type)



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

PRESSURE GAUGES

Differential Pressure Gauges

With the assistance of our advanced technology and experienced workforce, we manufacture and export differential pressure gauges that have gained wide appreciation in the international market. Fabricated using supreme quality material our high on durability gauges are ideal for gaseous media and corrosive environment. These pressure gauges are available in dial size of 100mm and 150mm. Our entire range is consistent in performance and accurate in construction.

Our range finds wide application in:

- * Accuracy: $\pm 1.6\%$ of full seals
- * Dial Size: 100mm & 150mm
- * Case & Bezel (IP-65): SS 304 Snap Action Bayonet type
- * HP / LP Chamber: SS304/SS316
- * Movement: SS304 Pressure Element: SS 316L Single diaphragm
- * Dial Pointer: Aluminum white painted with 270 degree black scale marking Al. / Brass, Micro Zero Adjustment pointer
- * Ring Static: Viton Pressure: 10 times of scale range
- * Mounting Scale Range: Directs Surface 250 rnm Wc to 6000 rnm Wc up to 10 Kg/cm²
- * Window Sealing: Toughened / Safety glass



Electrical Contact Gauges

Engaged in manufacturing and exporting electric contact gauges that find application in several industries. Highly efficient and durable, these contact gauges are widely used for monitoring, measuring and controlling of the line pressure by switching on & off electrical equipment. Complying to set industrial norms, these gauges make or break an electronic control cycle as per the position of the instrument's pointer and there is no need for a separate switch on these electric contract gauges.

Applications of the product includes following

- * Motor, Turbine
- * Control & Regulation of industrial process
- * Monitoring of plants and switching of electric circuit
- * Chemical & petrochemical industries
- * Pump
- * Power plants



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

PRESSURE GAUGES

Precision Test Pressure Gauges

Judicial mix of men and machinery enables us to provide an extensive range of precision test pressure gauges. Designed in line with various industrial standards, these gauges are widely used for gaseous and liquid media, particularly for testing and calibration. Extremely accurate, these gauges are provided with adjustable knife-edge pointer and mirror bands on the dial which ensure precise readings and eliminate parallax error. Available in 63mm, 100mm & 150mm sizes.

The precision test pressure gauge has the following features:

- * Ranges: Pressure up to 1400 kg/cm, Vacuum & Compound Ranges
- * Case & Bazel(IP-65): S.S. 304 Crimp type, Snap Action Bayonet
- * Accuracy: $\pm 1\%$ of fsd.
- * Mounting: Direct with bottom entry, Direct with back entry, Flush Panel with back entry (Three hole panel or bracket type), Surface with bottom entry
- * Wetted parts: Stainless steel



Utility Pressure Gauges

Capitalizing on our advanced technology, we are engaged in the manufacturing and supplying utility pressure gauges. These utility pressure gauges are precisely designed for long and reliable service under tugged condition as well. Our top quality industrial utility pressure gauges are suitable where gaseous and liquid are not highly viscous and does not attack copper alloys or crystallize. Highly efficient, these gauges enable easy recalibration.



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

PRESSURE GAUGES

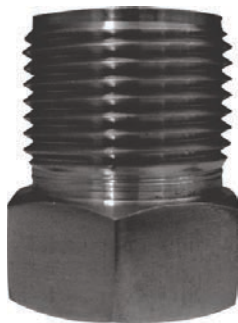
Special Pressure Gauges

We use latest technology and comprehensive quality control systems in designing and manufacturing an extensive range of special pressure gauge. Pressure Gauges come with autoclave ends 9/16" API Type III (collar and gland). Pressure Gauges are also available in Monel, Inconel or Hastelloy C working parts. Catering to the demands of various industries, we offer our products in standard as well as customized specifications.



ACCESSORIES

COLLAR AND GLANDS FOR HIGH PRESSURE GAUGES



All dimensions are for reference only, and are subject to change without prior notice.
Sizes and types other than those featured above are available on request.

We Export:



AVLOK®

A V I INTERNATIONAL

315, 3rd Floor, Plot 211, Dalamal Tower
Free Press Journal Marg, Nariman Point
Mumbai- 400021

email: info@avlok.com
website: www.avlok.com