

VEE-LOK[®] Tube Fittings



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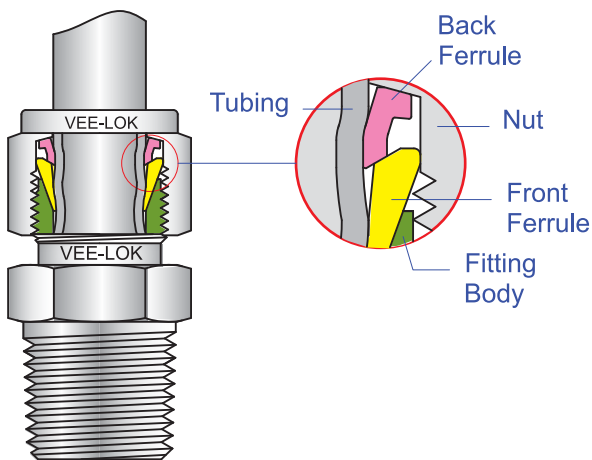


PNEUMOIDRAULICA ENGINEERING

OVERVIEW

Vee-Lok tube fittings are designed to provide a leak-proof connection and applied in chemical, petrochemical, oil refineries, shipbuilding, power generation, pulp and paper industries. The double ferrule design is a mechanism used for sealing and gripping tubing. Through the mechanical advantage and geometry, the tube fitting can overcome the variations in materials, wall thickness and hardness to provide an excellent seal performance.

The tube fitting consists of four parts: body, front, back ferrules and nut with silver-plated to prevent galling.



FEATURES

When the nut is tightened, the back ferrule is driven against the tapered rear of the front ferrule. The front ferrule is driven by force into the tapered mouth of the fitting body and creates a primary tubing seal. The back ferrule consistently grips the tube to hold the fitting and tubing firmly in place while the front ferrule forms a full –faced seal on the tapered surface of the body. In the twin-ferrule tube fitting design, the back and front ferrules move axially instead of a rotary motion. No Torque is transferred to the tubing during installation.

Two ferrules are optimized to provide sealing and tube gripping functions.

The front ferrule creates a seal:

- Against the fitting body
- On the tubing outside diameter.

As the nut is tightened, the back ferrule:

- Axially advances the front ferrule
- Radially provides an effective tube grip.



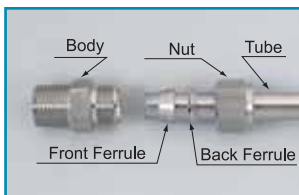
MATERIAL

Vee-Lok twin ferrule tube fittings are made of 316 stainless steel and supplied in metric and fractional sizes from 6mm O.D. to 25mm O.D. and 1/8"O.D. to 1"O.D. Straight fittings are machined from bar stock and shaped bodies from forging. Specifications for fittings materials are listed below.

Fitting Material	Bar Stock	Forging
316 stainless steel	ASTM A276, ASME SA479 ASTM A479	ASME SA182, ASTM A 182,



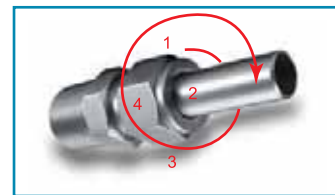
INSTALLATION INSTRUCTIONS



- Make sure all components have been assembled in correct order as shown above.



- Firmly insert the tubing into the fitting assembly until the tubing is fully bottomed on the shoulder inside the fittings.
- Finger-tighten the nut.



- Mark the nut at position no. 1 to facilitate counting the number of turns.
- When holding the body of the fitting with a wrench to prevent body from turning, tighten the nut with another wrench 1.1/4 turns to position no. 2.

PRESSURE RATINGS

The pressure ratings of the Vee-Lok tube fittings are determined by the wall thicknesses of tubings on which they are installed. The maximum working pressure of tubings are listed in **MAWP Table on page 3**.

Note: Material strength and allowable working pressure decrease as the temperature increases.

STAINLESS STEEL TUBING

Fully annealed 304 or 316 stainless steel tubing meeting ASTM A269 or equivalent with hardness Rockwell Rb80 or less. Tubing should be free of scratches and suitable for flaring and bending.



VEE-LOK Tube Fitting

Maximum Allowable Working Pressure Table

1 psi = 0.0689 bar

Stainless Steel Fractional Tubing				
Tube O.D. (Inches)	Tube Wall Thickness in Inches			
	0.035	0.049	0.065	0.083
1/8"	10,900		Working Pressure in psi	
1/4"	5,100	7,500	10,200	
5/16"	4,000	5,800	8,000	
3/8"	3,300	4,800	6,500	
1/2"	2,600	3,700	5,100	6,700
3/4"		2,400	3,300	4,200
7/8"		2,000	2,800	3,600
1"			2,400	3,100

Stainless Steel Metric Tubing							
Tube O.D. (mm)	Tube Wall Thickness in Millimeters (Inches)						
	0.89 (0.035)	1.00	1.24 (0.049)	1.50	1.65	2.0	2.11 (0.083)
6	6,500	7,400	9,400	11,500	12,700	Working Pressure in psi	
8	4,700	5,800	6,800	8,400	9,300		
10	3,700	4,200	5,300	6,500	7,300		
12	3,000	3,400	4,400	5,300	5,900	6,600	7,000
16		2,500	3,200	3,900	4,300	5,300	5,700
18			2,800	3,400	3,800	4,700	5,000
20			2,500	3,000	3,400	4,200	4,400
22			2,300	2,800	3,000	3,800	4,000
25			2,000	2,400	2,700	3,300	3,500

- Allowable stress of 18,750 psi between -30°C to 37°C based on ultimate tensile strength 75,000 psi to provide a safety factory of 4:1.
- Calculations based on minimum wall thickness and maximum O.D. allowable by ASTM A269.

Note: Figures shown are not for design purpose but for reference only and the accuracy of information here is not liability of our company.

Metric VEE-LOK Tube Fitting

Metric tube fittings are machined with the stepped shoulders on the body and nut hex for identification.



VEE-LOK Tube Fitting

ORDERING INFORMATION

DESIGNATOR **M** **MC** **8** — **4** **BSPP**

GROUP 1 2 3 4 5

- 1** “M” is prefixed to designate metric VEE-LOK fittings. For instance, MMC = Metric Male Connector.
- 2** The letter group designates fitting type (MC=Male Connector).
- 3** The group identifies the tube O.D. size.
- 4** The group is used to describe the second tube O.D. size or thread size.
- 5** The group remains blank for NPT thread. Add “BSPT” or “BSPP” to specify BSPT or BSPP threads.

Fitting Type Designator			
Identifier	Description	Identifier	Descriptions
MC	Male Connector	BFC	Bulkhead Female Connector
BMC	Bulkhead Male Connector	FE	Female Elbow
ME	Male Elbow	FRT	Female Run Tee
MRT	Male Run Tee	FBT	Female Branch Tee
MBT	Male Branch Tee	R	Reducer
UT	Union Tee	MA	Male Adapter
U	Union	FA	Female Adapter
RU	Reducing Union	N	Nut
BU	Bulkhead Union	BF	Back Ferrule
UE	Union Elbow	FF	Front Ferrule
UC	Union Cross	P	Plug
FC	Female Connector	CP	Cap

VEE-LOK Tube End Designator									
Fractional Tube	O.D.	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
	Designator	4	5	6	8	10	12	14	16
Metric Tube	O.D.	6	8	10	12	16	20	22	25
	Designator	6	8	10	12	16	20	22	25

Pipe Thread Designator									
Nominal Size	1/8"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
NPT	2	4	5	6	8	10	12	14	16


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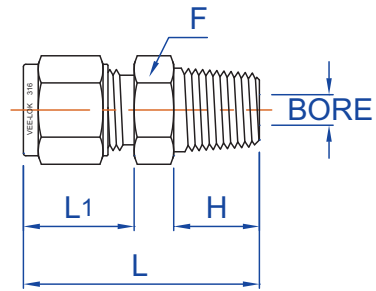
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VEE-LOK Tube Fitting

MALE CONNECTOR

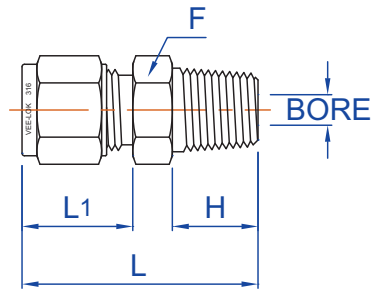


TUBE O.D.	MALE THREAD	PART NO.	L	L1	H	F	BORE
INCHES							
1/8	1/8	MC2-2	1.20	0.60	0.38	7/16	0.09
1/8	1/4	MC2-4	1.40	0.60	0.56	9/16	0.09
1/8	3/8	MC2-6	1.42	0.60	0.56	11/16	0.09
1/8	1/2	MC2-8	1.67	0.60	0.75	7/8	0.09
1/4	1/8	MC4-2	1.29	0.70	0.38	1/2	0.20
1/4	1/4	MC4-4	1.49	0.70	0.56	9/16	0.20
1/4	3/8	MC4-6	1.51	0.70	0.56	11/16	0.20
1/4	1/2	MC4-8	1.76	0.70	0.75	7/8	0.20
1/4	3/4	MC4-12	1.82	0.70	0.75	1-1/16	0.20
5/16	1/8	MC5-2	1.34	0.73	0.38	9/16	0.20
5/16	1/4	MC5-4	1.52	0.73	0.56	9/16	0.25
5/16	3/8	MC5-6	1.55	0.73	0.56	11/16	0.25
3/8	1/8	MC6-2	1.38	0.76	0.38	5/8	0.20
3/8	1/4	MC6-4	1.57	0.76	0.56	5/8	0.28
3/8	3/8	MC6-6	1.57	0.76	0.56	11/16	0.28
3/8	1/2	MC6-8	1.82	0.76	0.75	7/8	0.28
3/8	3/4	MC6-12	1.88	0.76	0.75	1-1/16	0.28
1/2	1/8	MC8-2	1.53	0.87	0.38	13/16	0.20
1/2	1/4	MC8-4	1.71	0.87	0.56	13/16	0.28
1/2	3/8	MC8-6	1.71	0.87	0.56	13/16	0.38
1/2	1/2	MC8-8	1.93	0.87	0.75	7/8	0.41
1/2	3/4	MC8-12	1.99	0.87	0.75	1-1/16	0.41
1/2	1	MC8-16	2.28	0.87	0.94	1-3/8	0.41
5/8	3/8	MC10-6	1.74	0.87	0.56	15/16	0.38
5/8	1/2	MC10-8	1.93	0.87	0.75	15/16	0.47
5/8	3/4	MC10-12	1.99	0.87	0.75	1-1/16	0.50
3/4	1/2	MC12-8	1.99	0.87	0.75	1-1/16	0.47
3/4	3/4	MC12-12	1.99	0.87	0.75	1-1/16	0.61
3/4	1	MC12-16	2.28	0.87	0.94	1-3/8	0.61
1	1/2	MC16-8	2.27	1.05	0.75	1-3/8	0.47
1	3/4	MC16-12	2.27	1.05	0.75	1-3/8	0.61
1	1	MC16-16	2.46	1.05	0.94	1-3/8	0.86

Dimensions for reference only, subject to change without prior notice

VEE-LOK Tube Fitting

MALE CONNECTOR

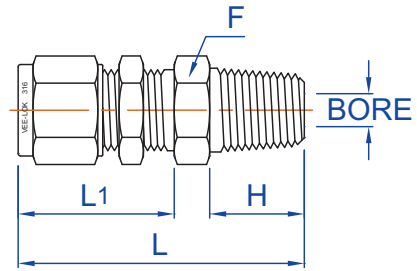


TUBE O.D.	MALE THREAD	PART NO.	L	L1	H	F	BORE
MILLIMETERS							
6	1/8	MMC6-2	32.90	17.70	9.50	14	5.00
6	1/4	MMC6-4	38.10	17.70	14.30	14	5.00
6	3/8	MMC6-6	38.50	17.70	14.30	18	5.00
6	1/2	MMC6-8	44.80	17.70	19.10	22	5.00
8	1/8	MMC8-2	34.20	18.60	9.50	15	5.00
8	1/4	MMC8-4	38.80	18.60	14.30	15	6.50
8	3/8	MMC8-6	39.30	18.60	14.30	18	6.50
8	1/2	MMC8-8	45.60	18.60	19.10	22	6.50
10	1/8	MMC10-2	36.10	19.50	9.50	18	5.00
10	1/4	MMC10-4	40.90	19.50	14.30	18	7.10
10	3/8	MMC10-6	40.90	19.50	14.30	18	7.90
10	1/2	MMC10-8	47.50	19.50	19.10	22	7.90
10	3/4	MMC10-12	46.40	19.50	19.10	27	7.90
12	1/4	MMC12-4	43.40	22.00	14.30	22	7.10
12	3/8	MMC12-6	43.40	22.00	14.30	22	9.50
12	1/2	MMC12-8	49.00	22.00	19.10	22	9.50
12	3/4	MMC12-12	50.50	22.00	19.10	27	9.50
14	1/4	MMC14-4	44.20	22.00	14.30	24	7.10
14	3/8	MMC14-6	44.20	22.00	14.30	24	9.50
14	1/2	MMC14-8	49.00	22.00	19.10	24	11.10
15	1/2	MMC15-8	49.00	22.00	19.10	24	11.90
16	3/8	MMC16-6	44.10	22.00	14.30	24	9.50
16	1/2	MMC16-8	49.00	22.00	19.10	24	11.90
16	3/4	MMC16-12	50.50	22.00	19.10	27	12.70
18	1/2	MMC18-8	50.60	22.00	19.10	27	11.90
18	3/4	MMC18-12	50.60	22.00	19.10	27	15.00
20	1/2	MMC20-8	50.60	22.00	19.10	30	11.90
20	3/4	MMC20-12	52.30	22.00	19.10	30	16.00
22	3/4	MMC22-12	52.30	22.00	19.10	30	16.00
25	1/2	MMC25-8	57.50	26.50	19.10	35	11.90
25	3/4	MMC25-12	57.50	26.50	19.10	35	16.00
25	1	MMC25-16	62.30	26.50	23.80	35	22.00

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VEE-LOK Tube Fitting

BULKHEAD MALE CONNECTOR



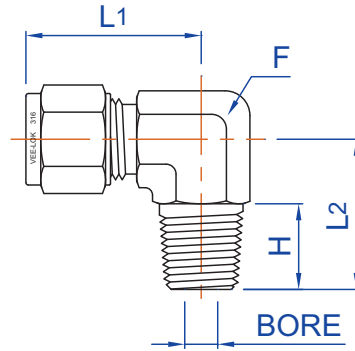
TUBE O.D.	MALE THREAD	PART NO.	L	L1	H	F	Panel Hole Size	Max. Panel Thick.	BORE
INCHES									
1/8	1/8	BMC2-2	1.830	1.23	0.38	1/2	21/64	0.50	0.09
1/4	1/8	BMC4-2	1.950	1.31	0.38	5/8	29/64	0.40	0.20
1/4	1/4	BMC4-4	2.132	1.31	0.56	5/8	29/64	0.40	0.20
3/8	1/4	BMC6-4	2.265	1.44	0.56	3/4	37/64	0.44	0.28
3/8	3/8	BMC6-6	2.265	1.44	0.56	3/4	37/64	0.44	0.28
3/8	1/2	BMC6-8	2.480	1.44	0.75	7/8	37/64	0.44	0.28
1/2	3/8	BMC8-6	2.494	1.65	0.56	15/16	49/64	0.50	0.38
1/2	1/2	BMC8-8	2.712	1.65	0.75	15/16	49/64	0.50	0.41
3/4	3/4	BMC12-12	3.000	1.87	0.75	1-3/16	1-1/64	0.66	0.61
1	1	BMC16-16	3.720	2.27	0.94	1-5/8	1-21/64	0.75	0.86

TUBE O.D.	MALE THREAD	PART NO.	L	L1	H	F	Panel Hole Size	Max. Panel Thick.	BORE
MILLIMETERS									
6	1/8	MBMC6-2	49.60	33.70	9.50	16	11.50	10.20	5.00
6	1/4	MBMC6-4	53.50	33.70	14.30	16	11.50	10.20	5.00
8	1/8	MBMC8-2	52.30	36.00	9.50	18	13.10	11.20	6.50
8	1/4	MBMC8-4	57.50	36.00	14.30	18	13.10	11.20	7.90
10	1/4	MBMC10-4	58.40	37.00	14.30	22	16.30	11.20	7.90
10	3/8	MBMC10-6	58.40	37.00	14.30	22	16.30	11.20	7.90
10	1/2	MBMC10-8	63.10	37.00	19.00	22	16.30	11.20	7.90
12	1/4	MBMC12-4	63.30	10.10	14.30	24	19.50	12.70	7.10
12	3/8	MBMC12-6	64.50	10.10	14.30	24	19.50	12.70	9.50
12	1/2	MBMC12-8	67.50	10.10	19.00	24	19.50	12.70	9.50

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VEE-LOK Tube Fitting

MALE ELBOW

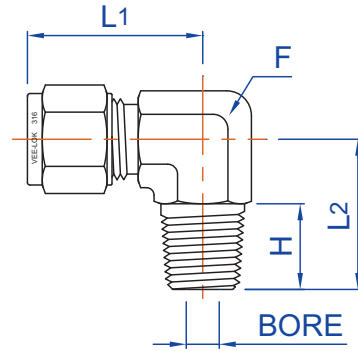


TUBE O.D.	MALE THREAD	PART NO.	L1	L2	H	F	BORE
INCHES							
1/8	1/8	ME2-2	0.93	0.70	0.38	1/2	0.09
1/8	1/4	ME2-4	0.98	1.00	0.56	1/2	0.09
1/4	1/8	ME4-2	1.08	0.76	0.38	1/2	0.20
1/4	1/4	ME4-4	1.07	1.00	0.56	1/2	0.20
1/4	3/8	ME4-6	1.17	1.13	0.56	5/8	0.20
1/4	1/2	ME4-8	1.26	1.31	0.75	13/16	0.20
5/16	1/8	ME5-2	1.17	0.82	0.38	9/16	0.20
5/16	1/4	ME5-4	1.17	1.01	0.56	9/16	0.25
3/8	1/8	ME6-2	1.20	0.82	0.38	5/8	0.20
3/8	1/4	ME6-4	1.20	1.01	0.56	5/8	0.28
3/8	3/8	ME6-6	1.26	1.13	0.56	5/8	0.28
3/8	1/2	ME6-8	1.32	1.31	0.75	13/16	0.28
3/8	3/4	ME6-12	1.45	1.50	0.75	1	0.28
1/2	1/4	ME8-4	1.42	1.12	0.56	13/16	0.28
1/2	3/8	ME8-6	1.42	1.12	0.56	13/16	0.38
1/2	1/2	ME8-8	1.43	1.31	0.75	13/16	0.41
1/2	3/4	ME8-12	1.53	1.50	0.75	1	0.41
5/8	3/8	ME10-6	1.43	1.25	0.56	1	0.38
5/8	1/2	ME10-8	1.43	1.31	0.75	1	0.47
5/8	3/4	ME10-12	1.56	1.50	0.75	1	0.50
3/4	1/2	ME12-8	1.56	1.50	0.75	1	0.47
3/4	3/4	ME12-12	1.56	1.50	0.75	1	0.61
1	3/4	ME16-12	1.94	1.65	0.75	1-3/8	0.61
1	1	ME16-16	1.94	1.84	0.94	1-3/8	0.86

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VEE-LOK Tube Fitting

MALE ELBOW

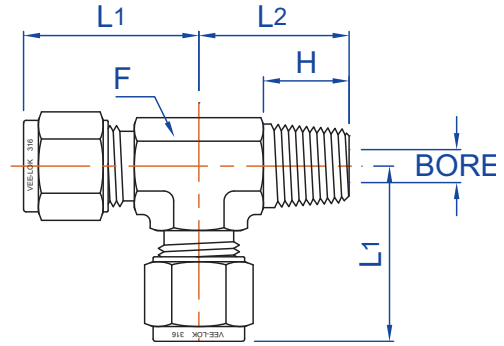


TUBE O.D.	MALE THREAD	PART NO.	L1	L2	H	F	BORE
MILLIMETERS							
6	1/8	MME6-2	27.00	18.80	9.70	1/2	5.00
6	1/4	MME6-4	27.00	23.40	14.20	1/2	5.00
6	3/8	MME6-6	29.80	26.20	14.20	5/8	5.00
6	1/2	MME6-8	31.80	33.00	19.00	13/16	5.00
8	1/8	MME8-2	28.80	19.80	9.70	9/16	5.00
8	1/4	MME8-4	28.80	24.40	14.20	9/16	6.50
8	3/8	MME8-6	30.60	26.20	14.20	5/8	6.50
8	1/2	MME8-8	32.70	33.00	19.10	13/16	6.50
10	1/8	MME10-2	31.50	21.60	9.70	11/16	5.00
10	1/4	MME10-4	31.50	26.20	14.20	11/16	7.10
10	3/8	MME10-6	31.50	26.20	14.20	11/16	7.90
10	1/2	MME10-8	33.50	33.00	19.00	13/16	7.90
12	1/4	MME12-4	36.00	28.20	14.20	13/16	7.10
12	3/8	MME12-6	36.00	28.20	14.20	13/16	9.50
12	1/2	MME12-8	36.00	33.00	19.00	13/16	9.50
12	3/4	MME12-12	39.80	36.80	19.00	1	9.50
15	1/2	MME15-8	38.00	35.10	19.00	1	11.90
16	3/8	MME16-6	38.00	30.20	14.20	1	9.50
16	1/2	MME16-8	38.00	35.10	19.00	1	11.90
16	3/4	MME16-12	39.80	36.80	19.00	1	12.70
18	1/2	MME18-8	39.80	36.80	19.00	1	11.90
18	3/4	MME18-12	39.80	36.80	19.00	1	15.00
20	1/2	MME20-8	44.60	41.70	19.00	1-3/8	11.90
20	3/4	MME20-12	44.60	41.70	19.00	1-3/8	16.00
22	3/4	MME22-12	44.60	41.70	19.00	1-3/8	16.00
25	3/4	MME25-12	49.10	41.70	19.00	1-3/8	16.00
25	1	MME25-16	49.10	46.50	23.90	1-3/8	22.00

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VEE-LOK Tube Fitting

MALE RUN TEE



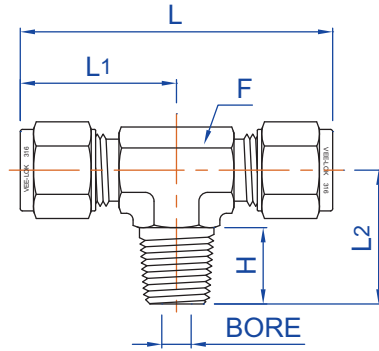
TUBE O.D.	MALE THREAD	PART NO.	L1	L2	H	F	BORE
INCHES							
1/8	1/8	MRT2-2	0.92	0.71	0.38	1/2	0.09
1/8	1/4	MRT2-4	0.98	1.00	0.56	1/2	0.09
1/4	1/8	MRT4-2	1.06	0.74	0.38	1/2	0.20
1/4	1/4	MRT4-4	1.07	1.00	0.56	1/2	0.20
5/16	1/8	MRT5-2	1.17	0.82	0.38	5/8	0.20
3/8	1/4	MRT6-4	1.20	1.01	0.56	5/8	0.28
3/8	3/8	MRT6-6	1.31	1.12	0.56	5/8	0.28
1/2	3/8	MRT8-6	1.42	1.12	0.56	13/16	0.38
1/2	1/2	MRT8-8	1.43	1.31	0.75	7/8	0.41
5/8	1/2	MRT10-8	1.43	1.38	0.75	1	0.47
3/4	3/4	MRT12-12	1.56	1.50	0.75	1	0.61
1	3/4	MRT16-12	1.94	1.66	0.75	1-3/8	0.61
1	1	MRT16-16	1.94	1.84	0.94	1-3/8	0.86

TUBE O.D.	MALE THREAD	PART NO.	L1	L2	H	F	BORE
MILLIMETERS							
6	1/8	MMRT6-2	27.00	18.00	9.70	1/2	5.00
6	1/4	MMRT6-4	27.00	23.40	14.20	1/2	5.00
8	1/8	MMRT8-2	29.90	20.80	9.70	5/8	5.00
8	1/4	MMRT8-4	29.90	25.40	14.20	5/8	6.50
10	1/4	MMRT10-4	33.50	28.20	14.20	11/16	7.10
10	1/2	MMRT10-8	33.50	33.00	19.00	7/8	7.90
12	1/4	MMRT12-4	36.00	28.20	14.20	13/16	7.10
12	3/8	MMRT12-6	36.00	28.20	14.20	13/16	9.50
12	1/2	MMRT12-8	36.00	33.00	19.00	7/8	9.50
16	1	MMRT16-16	46.60	46.50	23.90	1-3/8	12.70

Dimensions for reference only, subject to change without prior notice

VEE-LOK Tube Fitting

MALE BRANCH TEE



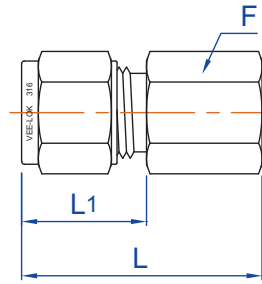
TUBE O.D.	MALE THREAD	PART NO.	L	L1	L2	H	F	BORE
INCHES								
1/8	1/8	MBT2-2	1.84	0.92	0.71	0.38	1/2	0.09
1/8	1/4	MBT2-4	1.96	0.98	1.00	0.56	1/2	0.09
1/4	1/8	MBT4-2	2.12	1.06	0.74	0.38	1/2	0.20
1/4	1/4	MBT4-4	2.14	1.07	1.00	0.56	1/2	0.20
5/16	1/8	MBT5-2	2.34	1.17	0.82	0.38	5/8	0.20
3/8	1/4	MBT6-4	2.40	1.20	1.01	0.56	5/8	0.28
3/8	3/8	MBT6-6	2.62	1.31	1.12	0.56	5/8	0.28
1/2	3/8	MBT8-6	2.84	1.42	1.12	0.56	13/16	0.38
1/2	1/2	MBT8-8	2.86	1.43	1.31	0.75	7/8	0.41
5/8	1/2	MBT10-8	2.86	1.43	1.31	0.75	1	0.47
3/4	3/4	MBT12-12	3.12	1.56	1.50	0.75	1	0.61

TUBE O.D.	MALE THREAD	PART NO.	L	L1	L2	H	F	BORE
MILLIMETERS								
6	1/8	MMBT6-2	53.90	27.00	18.80	9.70	1/2	5.00
6	1/4	MMBT6-4	53.90	27.00	23.40	14.20	1/2	5.00
8	1/8	MMBT8-2	59.70	29.90	20.80	9.70	5/8	5.00
8	1/4	MMBT8-4	59.70	29.90	25.40	14.20	5/8	6.50
10	1/4	MMBT10-4	67.00	33.50	28.20	14.20	11/16	7.10
10	3/8	MMBT10-6	67.00	33.50	28.20	14.20	11/16	7.90
12	1/4	MMBT12-4	72.00	36.00	28.20	14.20	13/16	7.10
12	3/8	MMBT12-6	72.00	36.00	28.20	14.20	13/16	9.50
12	1/2	MMBT12-8	72.00	36.00	33.00	19.00	7/8	9.50
16	1/2	MMBT16-8	77.60	38.80	35.80	19.10	1	11.90

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VEE-LOK Tube Fitting

FEMALE CONNECTOR



TUBE O.D.	FEMALE THREAD	PART NO.	L	L1	F	BORE
INCHES						
1/8	1/8	FC2-2	1.14	0.60	9/16	0.09
1/8	1/4	FC2-4	1.32	0.60	3/4	0.09
1/4	1/8	FC4-2	1.23	0.70	9/16	0.20
1/4	1/4	FC4-4	1.42	0.70	3/4	0.20
1/4	3/8	FC4-6	1.48	0.70	7/8	0.20
1/4	1/2	FC4-8	1.67	0.70	1-1/16	0.20
5/16	1/8	FC5-2	1.27	0.73	9/16	0.25
5/16	1/4	FC5-4	1.46	0.73	3/4	0.25
3/8	1/8	FC6-2	1.29	0.76	5/8	0.28
3/8	1/4	FC6-4	1.48	0.76	3/4	0.28
3/8	3/8	FC6-6	1.54	0.76	7/8	0.28
3/8	1/2	FC6-8	1.73	0.76	1-1/16	0.28
3/8	3/4	FC6-12	1.85	0.76	1-3/8	0.28
1/2	1/4	FC8-4	1.59	0.87	13/16	0.41
1/2	3/8	FC8-6	1.65	0.87	7/8	0.41
1/2	1/2	FC8-8	1.84	0.87	1-1/16	0.41
1/2	3/4	FC8-12	1.96	0.87	1-3/8	0.41
5/8	3/8	FC10-6	1.65	0.87	15/16	0.50
5/8	1/2	FC10-8	1.84	0.87	1-1/16	0.50
5/8	3/4	FC10-12	1.96	0.87	1-3/8	0.50
3/4	1/2	FC12-8	1.84	0.87	1-1/16	0.61
3/4	3/4	FC12-12	1.96	0.87	1-3/8	0.61
1	3/4	FC16-12	2.15	1.05	1-3/8	0.86
1	1	FC16-16	2.46	1.05	1-5/8	0.86

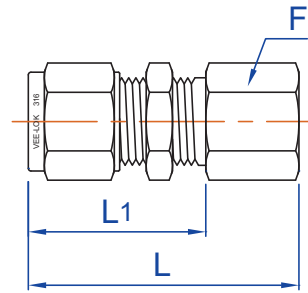
TUBE O.D.	FEMALE THREAD	PART NO.	L	L1	F	BORE
MILLIMETERS						
6	1/8	MFC6-2	31.30	17.70	14	5.00
6	1/4	MFC6-4	36.10	17.70	19	5.00
6	3/8	MFC6-6	37.70	17.70	22	5.00
6	1/2	MFC6-8	42.50	17.70	27	5.00
8	1/8	MFC8-2	32.10	18.60	15	6.50
8	1/4	MFC8-4	36.90	18.60	19	6.50
8	3/8	MFC8-6	38.50	18.60	22	6.50
10	1/4	MFC10-4	37.80	19.50	19	7.90
10	3/8	MFC10-6	39.40	19.50	22	7.90
10	1/2	MFC10-8	44.10	19.50	27	7.90
12	1/4	MFC12-4	41.90	22.00	22	9.50
12	3/8	MFC12-6	41.90	22.00	22	9.50
12	1/2	MFC12-8	46.60	22.00	27	9.50
16	3/8	MFC16-6	41.90	22.00	24	9.50
16	1/2	MFC16-8	46.90	22.00	27	12.70
20	1/2	MFC20-8	47.90	22.00	30	16.00
20	3/4	MFC20-12	49.70	22.00	35	16.00
22	3/4	MFC22-12	49.70	22.00	35	18.00
25	3/4	MFC25-12	53.60	26.50	35	22.00
25	1	MFC25-16	62.30	26.50	41	22.00

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VEE-LOK Tube Fitting

BULKHEAD FEMALE CONNECTOR



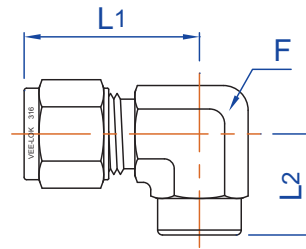
TUBE O.D.	FEMALE THREAD	PART NO.	L	L1	F	Panel Hole Size	Max. Panel Thick.	BORE
INCHES								
1/8	1/8	BFC2-2	1.76	1.23	9/16	21/64	0.50	0.09
1/4	1/8	BFC4-2	1.85	1.31	5/8	29/64	0.40	0.20
1/4	1/4	BFC4-4	2.04	1.31	3/4	29/64	0.40	0.20
3/8	1/4	BFC6-4	2.17	1.44	3/4	37/64	0.44	0.28
1/2	3/8	BFC8-6	2.43	1.65	15/16	49/64	0.50	0.41
1/2	1/2	BFC8-8	2.62	1.65	1-1/16	49/64	0.50	0.41

TUBE O.D.	FEMALE THREAD	PART NO.	L	L1	F	Panel Hole Size	Max. Panel Thick.	BORE
MILLIMETERS								
6	1/8	MBFC6-2	47.20	33.70	16	11.50	10.20	5.00
6	1/4	MBFC6-4	52.00	33.70	19	11.50	10.20	5.00
8	1/8	MBFC8-2	49.60	36.10	18	13.10	11.20	5.00
10	1/4	MBFC10-4	55.20	37.00	22	16.30	11.20	7.10
12	3/8	MBFC12-6	60.90	41.90	24	19.50	12.70	9.50
12	1/2	MBFC12-8	66.40	41.90	27	19.50	12.70	9.50

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VEE-LOK Tube Fitting

FEMALE ELBOW



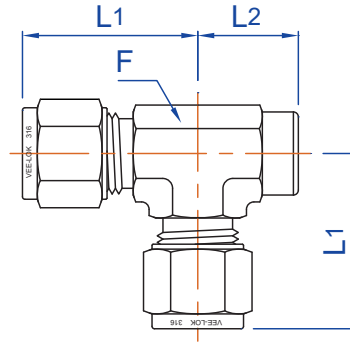
TUBE O.D.	FEMALE THREAD	PART NO.	L1	L2	F	BORE
INCHES						
1/8	1/8	FE2-2	0.98	0.96	1/2	0.09
1/8	1/4	FE2-4	1.10	1.12	11/16	0.09
1/4	1/8	FE4-2	1.07	0.96	1/2	0.20
1/4	1/4	FE4-4	1.20	1.12	11/16	0.20
1/4	3/8	FE4-6	1.26	1.10	13/16	0.20
1/4	1/2	FE4-8	1.35	1.50	1	0.20
5/16	1/8	FE5-2	1.17	1.14	5/8	0.25
5/16	1/4	FE5-4	1.24	1.12	11/16	0.25
3/8	1/8	FE6-2	1.20	1.08	5/8	0.28
3/8	1/4	FE6-4	1.26	1.12	11/16	0.28
3/8	3/8	FE6-6	1.32	1.10	13/16	0.28
3/8	1/2	FE6-8	1.42	1.50	1	0.28
1/2	1/4	FE8-4	1.42	1.12	13/16	0.41
1/2	3/8	FE8-6	1.43	1.10	13/16	0.41
1/2	1/2	FE8-8	1.53	1.50	1	0.41
5/8	3/8	FE10-6	1.43	1.50	1	0.50
5/8	1/2	FE10-8	1.53	1.50	1	0.50
3/4	1/2	FE12-8	1.56	1.50	1	0.61
3/4	3/4	FE12-12	1.65	1.59	1-3/8	0.61
1	3/4	FE16-12	1.94	1.59	1-3/8	0.86

TUBE O.D.	FEMALE THREAD	PART NO.	L1	L2	F	BORE
MILLIMETERS						
6	1/8	MFE6-2	27.00	24.50	1/2	5.00
6	1/4	MFE6-4	29.80	28.50	11/16	5.00
8	1/4	MFE8-4	30.60	29.00	11/16	6.50
10	1/4	MFE10-4	33.50	28.50	11/16	7.90
10	3/8	MFE10-6	33.50	28.00	13/16	7.90
10	1/2	MFE10-8	36.30	38.00	1	7.90
12	1/4	MFE12-4	36.00	28.50	13/16	9.50
12	3/8	MFE12-6	36.00	28.00	13/16	9.50
12	1/2	MFE12-8	38.80	38.00	1	9.50
16	1/2	MFE16-8	39.50	38.00	1	12.70

Dimensions for reference only, subject to change without prior notice

VEE-LOK Tube Fitting

FEMALE RUN TEE



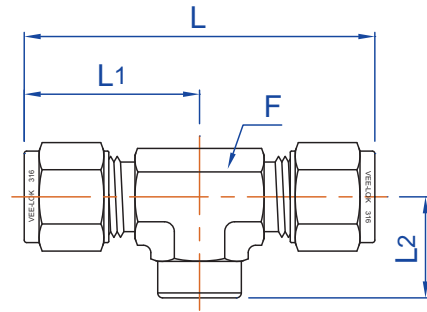
TUBE O.D.	FEMALE THREAD	PART NO.	L1	L2	F	BORE
INCHES						
1/8	1/8	FRT2-2	1.01	0.96	1/2	0.09
1/4	1/8	FRT4-2	1.07	0.96	1/2	0.20
1/4	1/4	FRT4-4	1.20	1.12	11/16	0.20
3/8	1/4	FRT6-4	1.26	1.12	11/16	0.28
1/2	3/8	FRT8-6	1.43	1.10	7/8"	0.38
1/2	1/2	FRT8-8	1.53	1.50	1	0.41
3/4	3/4	FRT12-12	1.65	1.59	1-3/8	0.61
1	3/4	FRT16-12	1.94	1.59	1-3/8	0.86

TUBE O.D.	FEMALE THREAD	PART NO.	L1	L2	F	BORE
MILLIMETERS						
6	1/8	MFRT6-2	27.00	24.50	1/2	5.00
6	1/4	MFRT6-4	29.80	28.50	11/16	5.00
8	1/8	MFRT8-2	29.90	29.00	5/8	6.50
10	1/4	MFRT10-4	33.50	28.50	11/16	7.90
12	1/4	MFRT12-4	36.00	28.50	13/16	9.50
12	3/8	MFRT12-6	36.00	28.00	7/8"	9.50
12	1/2	MFRT12-8	38.80	38.00	1	9.50
16	1/2	MFRT16-8	39.80	40.50	1	12.70

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VEE-LOK Tube Fitting

FEMALE BRANCH TEE



TUBE O.D.	FEMALE THREAD	PART NO.	L	L1	L2	F	BORE
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INCHES

1/8	1/8	FBT2-2	2.02	1.01	0.96	1/2	0.09
1/4	1/8	FBT4-2	2.14	1.07	0.96	1/2	0.20
1/4	1/4	FBT4-4	2.40	1.20	1.12	11/16	0.20
3/8	1/4	FBT6-4	2.52	1.26	1.12	11/16	0.28
1/2	1/4	FBT8-4	2.86	1.43	1.12	13/16	0.41
1/2	3/8	FBT8-6	2.86	1.43	1.10	7/8"	0.41
1/2	1/2	FBT8-8	3.06	1.53	1.50	1	0.41
5/8	1/2	FBT10-8	3.06	1.53	1.50	1	0.50
3/4	3/4	FBT12-12	3.30	1.65	1.50	1-3/8	0.61
1	3/4	FBT16-12	3.88	1.94	1.59	1-3/8	0.86

TUBE O.D.	FEMALE THREAD	PART NO.	L	L1	L2	F	BORE
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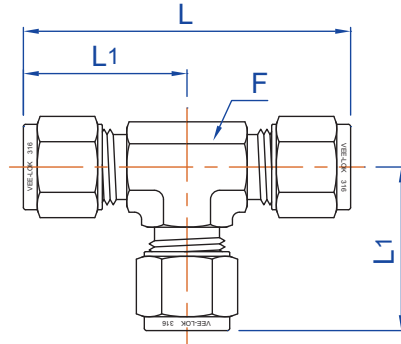
MILLIMETERS

6	1/8	MFBT6-2	53.90	27.00	24.50	1/2	5.00
6	1/4	MFBT6-4	59.50	29.80	28.50	11/16	5.00
8	1/8	MFBT8-2	59.70	29.90	29.00	5/8	6.50
10	1/4	MFBT10-4	67.00	33.50	28.50	11/16	7.90
12	1/4	MFBT12-4	72.00	36.00	28.50	13/16	9.50
12	3/8	MFBT12-6	72.00	36.00	28.00	7/8"	9.50
12	1/2	MFBT12-8	77.60	38.80	38.00	1	9.50
16	1/2	MFBT16-8	77.60	38.80	38.00	1	12.70

Dimensions for reference only, subject to change without prior notice

VEE-LOK Tube Fitting

UNION TEE



TUBE O.D.	PART NO.	L	L1	F	BORE
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INCHES

1/8	UT2	1.76	0.88	1/2	0.09
1/4	UT4	2.12	1.06	1/2	0.20
5/16	UT5	2.34	1.17	5/8	0.25
3/8	UT6	2.40	1.20	5/8	0.28
1/2	UT8	2.84	1.42	13/16	0.41
5/8	UT10	2.86	1.43	1	0.50
3/4	UT12	3.12	1.56	1	0.61
1	UT16	3.88	1.94	1-3/8	0.70

TUBE O.D.	PART NO.	L	L1	F	BORE
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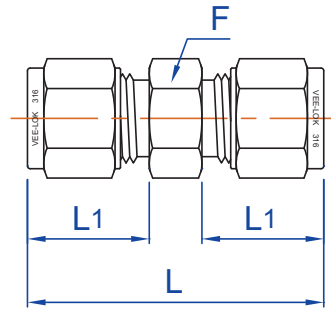
MILLIMETERS

6	MUT6	53.90	27.00	1/2	5.00
8	MUT8	59.70	29.90	5/8	6.50
10	MUT10	63.00	31.50	11/16	7.90
12	MUT12	72.00	36.00	13/16	9.50
14	MUT14	77.60	38.80	1	11.10
15	MUT15	77.60	38.80	1	11.90
16	MUT16	77.60	38.80	1	12.70
18	MUT18	79.50	38.80	1	15.00
20	MUT20	89.30	44.60	1-3/8	16.00
22	MUT22	89.30	44.60	1-3/8	18.00
25	MUT25	98.30	49.10	1-3/8	22.00

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VEE-LOK Tube Fitting

UNION

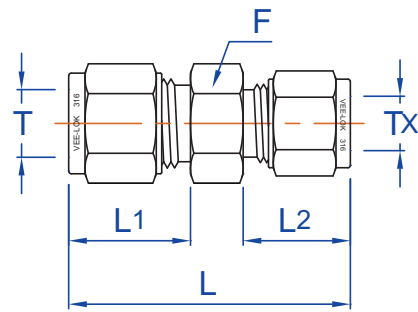


TUBE O.D.	PART NO.	L	L1	F	BORE
INCHES					
1/8	U2	1.39	0.60	7/16	0.09
1/4	U4	1.62	0.70	1/2	0.20
5/16	U5	1.70	0.73	9/16	0.25
3/8	U6	1.77	0.76	5/8	0.28
1/2	U8	2.02	0.87	13/16	0.41
5/8	U10	2.05	0.87	15/16	0.50
3/4	U12	2.11	0.87	1-1/16	0.61
1	U16	2.57	1.05	1-3/8	0.86
TUBE O.D.	PART NO.	L	L1	F	BORE
MILLIMETERS					
6	MU6	41.20	17.70	14	5.00
8	MU8	43.20	18.60	15	6.50
10	MU10	46.20	19.50	18	7.90
12	MU12	51.20	22.00	22	9.50
14	MU14	52.00	22.00	24	11.10
15	MU15	52.00	22.00	24	11.90
16	MU16	52.00	22.00	24	12.70
18	MU18	53.50	22.00	27	15.00
20	MU20	55.00	22.00	30	16.00
22	MU22	55.00	22.00	30	18.00
25	MU25	65.10	26.50	35	22.00

Dimensions for reference only, subject to change without prior notice

VEE-LOK Tube Fitting

REDUCING UNION



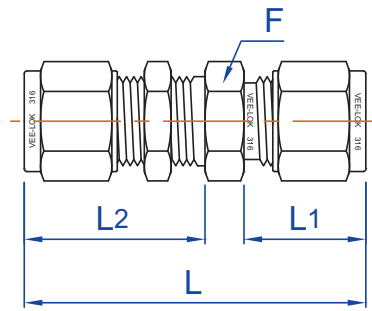
T TUBE O.D.	TX TUBE O.D.	PART NO.	L	L1	L2	F	BORE
INCHES							
1/4	1/8	RU4-2	1.52	0.97	0.70	1/2	0.09
5/16	1/8	RU5-2	1.58	1.03	0.73	9/16	0.09
5/16	1/4	RU5-4	1.67	1.08	0.73	9/16	0.20
3/8	1/8	RU6-2	1.61	1.06	0.76	5/8	0.09
3/8	1/4	RU6-4	1.71	1.13	0.76	5/8	0.20
3/8	5/16	RU6-5	1.75	1.16	0.76	5/8	0.25
1/2	1/8	RU8-2	1.75	1.09	0.87	13/16	0.09
1/2	1/4	RU8-4	1.85	1.16	0.87	13/16	0.20
1/2	3/8	RU8-6	1.91	1.22	0.87	13/16	0.28
5/8	3/8	RU10-6	1.94	1.25	0.87	15/16	0.28
5/8	1/2	RU10-8	2.05	1.25	0.87	15/16	0.41
3/4	1/4	RU12-4	1.95	1.25	0.87	1-1/16	0.20
3/4	3/8	RU12-6	2.00	1.31	0.87	1-1/16	0.28
3/4	1/2	RU12-8	2.11	1.31	0.87	1-1/16	0.41
3/4	5/8	RU12-10	2.11	1.31	0.87	1-1/16	0.50
1	1/2	RU16-8	2.39	1.50	1.05	1-3/8	0.41
1	3/4	RU16-12	2.39	1.50	1.05	1-3/8	0.61

T TUBE O.D.	TX TUBE O.D.	PART NO.	L	L1	L2	F	BORE
MILLIMETERS							
8	6	MMRU8-6	42.40	18.60	17.70	15	5.00
10	6	MMRU10-6	44.50	19.50	17.70	18	5.00
10	8	MMRU10-8	44.50	19.50	18.60	18	6.50
12	6	MMRU12-6	47.00	22.00	17.70	22	5.00
12	8	MMRU12-8	47.80	22.00	18.60	22	6.50
12	10	MMRU12-10	48.70	22.00	19.50	22	7.90
16	10	MMRU16-10	49.50	22.00	19.50	24	7.90
16	12	MMRU16-12	52.00	22.00	22.00	24	9.50
18	12	MMRU18-12	53.50	22.00	22.00	27	9.50
25	18	MMRU25-18	60.50	26.50	22.00	35	15.00
25	20	MMRU25-20	62.30	26.50	22.00	35	16.00

Dimensions for reference only, subject to change without prior notice

VEE-LOK Tube Fitting

BULKHEAD UNION



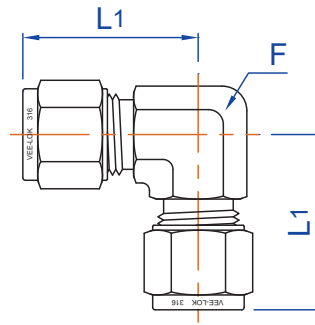
TUBE O.D.	PART NO.	L	L1	L2	F	Panel Hole Size	Max. Panel Thick.	BORE
INCHES								
1/8	BU2	2.02	0.60	1.23	1/2	21/64	1/2	0.09
1/4	BU4	2.27	0.70	1.31	5/8	29/64	17/32	0.20
5/16	BU5	2.40	0.73	1.42	11/16	33/64	9/16	0.25
3/8	BU6	2.46	0.76	1.44	3/4	37/64	9/16	0.28
1/2	BU8	2.80	0.87	1.65	15/16	49/64	19/32	0.41
5/8	BU10	2.86	0.87	1.68	1-1/16	57/64	19/32	0.50
3/4	BU12	3.11	0.87	1.87	1-3/16	1-1/64	25/32	0.61
1	BU16	3.78	1.05	2.27	1-5/8	1-21/64	15/16	0.86

TUBE O.D.	PART NO.	L	L1	L2	F	Panel Hole Size	Max. Panel Thick.	BORE
MILLIMETERS								
6	MBU6	57.90	17.70	33.70	16	11.50	10.20	5.00
8	MBU8	61.00	18.60	36.00	18	13.10	11.20	6.50
10	MBU10	63.60	19.50	37.00	22	16.30	11.20	7.90
12	MBU12	71.00	22.00	41.90	24	19.50	12.70	9.50
15	MBU15	72.50	22.00	42.60	27	22.50	12.70	11.90
16	MBU16	72.60	22.00	42.60	27	22.50	12.70	12.70
18	MBU18	78.90	22.00	47.40	30	26.00	16.80	15.00
20	MBU20	88.20	22.00	51.00	35	29.00	19.00	16.00
25	MBU25	95.80	26.50	54.40	41	33.80	24.00	22.00

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VEE-LOK Tube Fitting

UNION ELBOW

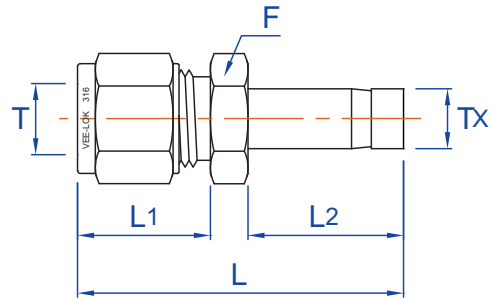


TUBE O.D.	PART NO.	L1	F	BORE
INCHES				
1/8	UE2	0.88	1/2	0.09
1/4	UE4	1.06	1/2	0.20
5/16	UE5	1.17	9/16	0.25
3/8	UE6	1.20	5/8	0.28
1/2	UE8	1.42	13/16	0.41
5/8	UE10	1.43	1	0.50
3/4	UE12	1.56	1	0.61
1	UE16	1.94	1-3/8	0.86
TUBE O.D.	PART NO.	L1	F	BORE
MILLIMETERS				
6	MUE6	27.00	1/2	5.00
8	MUE8	28.80	9/16	6.50
10	MUE10	31.50	11/16	7.90
12	MUE12	36.00	13/16	9.50
14	MUE14	38.10	1	11.10
15	MUE15	38.00	1	11.90
16	MUE16	38.00	1	12.70
18	MUE18	39.80	1	15.00
20	MUE20	44.60	1-3/8	16.00
22	MUE22	44.60	1-3/8	18.00
25	MUE25	49.10	1-3/8	22.00

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VEE-LOK Tube Fitting

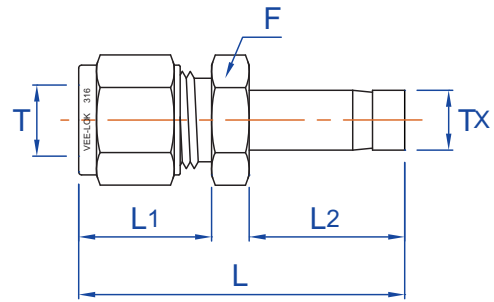
REDUCER



T TUBE O.D.	TX TUBE O.D.	PART NO.	L	L1	L2	F	BORE
INCHES							
1/8	1/8	R2-2	1.34	0.43	0.54	7/16	0.08
1/8	1/4	R2-4	1.45	0.70	0.53	7/16	0.09
1/4	1/8	R4-2	1.42	0.60	0.63	1/2	0.08
1/4	1/4	R4-4	1.54	0.70	0.63	1/2	0.17
1/4	3/8	R4-6	1.63	0.76	0.63	1/2	0.19
1/4	1/2	R4-8	1.77	0.87	0.63	9/16	0.19
3/8	1/4	R6-4	1.60	0.70	0.69	5/8	0.17
3/8	3/8	R6-6	1.70	0.76	0.69	5/8	0.27
3/8	1/2	R6-8	1.84	0.87	0.69	5/8	0.28
1/2	1/4	R8-4	1.82	0.70	0.91	13/16	0.17
1/2	3/8	R8-6	1.91	0.76	0.91	13/16	0.27
1/2	3/4	R8-12	2.15	0.87	0.91	13/16	0.41
3/4	1/2	R12-8	2.12	0.87	0.97	1-1/16	0.37

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REDUCER

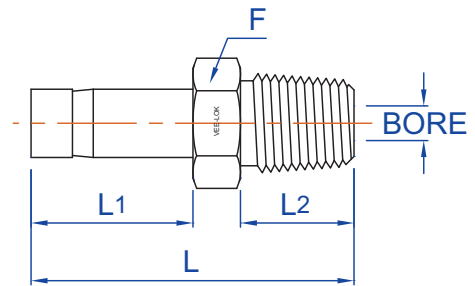


T TUBE O.D.	TX TUBE O.D.	PART NO.	L	L1	L2	F	BORE
MILLIMETERS							
6	8	MR6-8	40.00	18.60	15.90	14	5.00
6	10	MR6-10	41.70	19.50	15.90	14	5.00
6	12	MR6-12	44.90	22.00	15.90	14	5.00
8	6	MR8-6	40.00	17.70	16.70	15	4.10
8	10	MR8-10	43.40	19.50	15.30	15	6.50
10	6	MR10-6	40.80	17.70	17.50	18	4.10
10	8	MR10-8	42.00	18.60	17.50	18	5.60
10	12	MR10-12	46.60	22.00	17.50	18	7.90
12	6	MR12-6	46.40	17.70	23.00	22	4.10
12	8	MR12-8	47.60	18.60	23.00	22	5.60
12	10	MR12-10	49.70	19.50	23.00	22	7.10
12	16	MR12-16	53.00	22.00	23.00	22	9.50
12	18	MR12-18	54.60	22.00	23.00	22	9.50
16	12	MR16-12	53.80	22.00	24.60	24	8.80
18	12	MR18-12	53.80	22.00	24.60	27	8.80
18	16	MR18-16	54.70	22.00	24.80	27	12.00
18	20	MR18-20	57.90	22.00	24.60	27	15.00
18	25	MR18-25	63.10	26.50	24.60	27	15.00
20	16	MR20-16	55.30	22.00	25.60	30	12.00
20	18	MR20-18	57.60	22.00	25.40	30	13.90
20	25	MR20-25	64.50	26.50	25.40	30	16.00
22	18	MR22-18	56.10	22.00	26.20	30	13.90
22	20	MR22-20	57.70	22.00	26.20	30	15.50
25	12	MR25-12	60.90	22.00	31.80	35	18.00
25	18	MR25-18	62.50	22.00	31.80	35	13.90
25	20	MR25-20	64.20	22.00	31.80	35	15.50

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VEE-LOK Tube Fitting

MALE ADAPTER

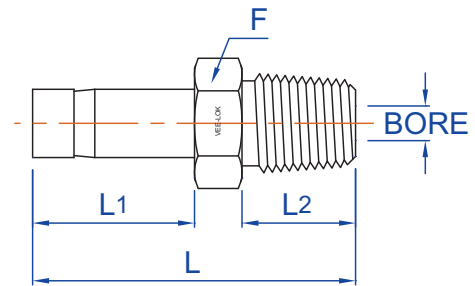


TUBE O.D.	MALE THREAD	PART NO.	L	L1	L2	F	A	BORE
INCHES								
1/8	1/8	MA2-2	1.16	0.54	0.38	7/16	0.078	0.08
1/8	1/4	MA2-4	1.38	0.54	0.56	9/16	0.078	0.08
1/4	1/8	MA4-2	1.25	0.63	0.38	7/16	0.156	0.17
1/4	1/4	MA4-4	1.46	0.63	0.56	9/16	0.156	0.17
1/4	3/8	MA4-6	1.49	0.63	0.56	11/16	0.156	0.17
1/4	1/2	MA4-8	1.71	0.63	0.75	7/8	0.156	0.17
5/16	1/8	MA5-2	1.29	0.66	0.38	7/16	0.219	0.20
5/16	1/4	MA5-4	1.50	0.66	0.56	9/16	0.219	0.22
3/8	1/8	MA6-2	1.32	0.69	0.38	7/16	0.281	0.20
3/8	1/4	MA6-4	1.53	0.69	0.56	9/16	0.281	0.27
3/8	3/8	MA6-6	1.56	0.69	0.56	11/16	0.281	0.27
3/8	1/2	MA6-8	1.78	0.69	0.75	7/8	0.281	0.27
1/2	1/4	MA8-4	1.75	0.91	0.56	9/16	0.281	0.28
1/2	3/8	MA8-6	1.78	0.91	0.56	11/16	0.375	0.37
1/2	1/2	MA8-8	2.00	0.91	0.75	7/8	0.375	0.37
5/8	1/2	MA10-8	2.06	0.97	0.75	7/8	0.469	0.47
3/4	1/2	MA12-8	2.06	0.97	0.75	7/8	0.469	0.47
3/4	3/4	MA12-12	2.06	0.97	0.75	1-1/16	0.578	0.58
1	3/4	MA16-12	2.31	1.22	0.75	1-1/16	0.813	0.61
1	1	MA16-16	2.68	1.22	0.94	1-3/8	0.813	0.80

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VEE-LOK Tube Fitting

MALE ADAPTER

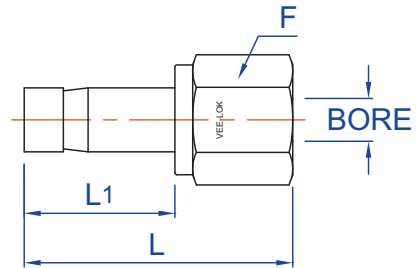


TUBE O.D.	MALE THREAD	PART NO.	L	L1	L2	F	A	BORE
MILLIMETERS								
6	1/8	MMA6-2	31.00	15.90	9.70	11	4.00	4.10
6	1/4	MMA6-4	35.70	15.90	14.20	14	4.00	4.10
8	1/4	MMA8-4	37.30	16.70	14.20	14	6.40	5.60
8	3/8	MMA8-6	38.10	16.70	14.20	18	6.40	5.60
10	1/4	MMA10-4	38.10	17.50	14.20	14	7.10	7.10
10	3/8	MMA10-6	43.70	17.50	14.20	18	7.50	7.10
10	1/2	MMA10-8	44.50	17.50	19.10	22	7.50	7.10
12	1/4	MMA12-4	43.70	23.00	14.20	14	7.10	7.10
12	1/2	MMA12-8	49.20	23.00	19.10	22	9.10	8.80
16	1/2	MMA16-8	50.80	24.60	19.10	22	12.70	12.70
18	1/2	MMA18-8	50.80	24.60	19.10	22	12.70	11.90
18	3/4	MMA18-12	51.60	24.60	19.10	27	14.00	15.90
20	3/4	MMA20-12	52.40	25.40	19.10	27	15.10	15.10
25	1	MMA25-16	65.90	31.80	23.90	35	19.80	19.80

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VEE-LOK Tube Fitting

FEMALE ADAPTER



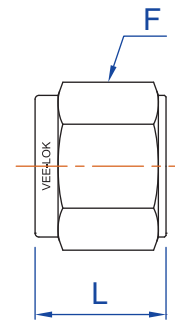
TUBE O.D.	FEMALE THREAD	PART NO.	L	L1	F	A	BORE
INCHES							
1/8	1/8	FA2-2	1.23	0.53	9/16	0.093	0.08
1/8	1/4	FA2-4	1.38	0.53	3/4	0.093	0.08
1/4	1/8	FA4-2	1.31	0.63	9/16	0.188	0.17
1/4	1/4	FA4-4	1.47	0.63	3/4	0.188	0.17
1/4	3/8	FA4-6	1.56	0.63	7/8	0.188	0.17
1/4	1/2	FA4-8	1.80	0.63	1-1/16	0.188	0.17
5/16	1/4	FA5-4	1.50	0.66	3/4	0.219	0.22
3/8	1/8	FA6-2	1.36	0.69	9/16	0.281	0.27
3/8	1/4	FA6-4	1.55	0.69	3/4	0.281	0.27
3/8	3/8	FA6-6	1.59	0.69	7/8	0.281	0.27
3/8	1/2	FA6-8	1.84	0.69	1-1/16	0.281	0.27
1/2	1/4	FA8-4	1.72	0.91	3/4	0.391	0.37
1/2	3/8	FA8-6	1.80	0.91	7/8	0.391	0.37
1/2	1/2	FA8-8	2.10	0.91	1-1/16	0.390	0.37
5/8	1/2	FA10-8	2.09	0.97	1-1/16	0.469	0.47
3/4	1/2	FA12-8	2.10	0.97	1-1/16	0.578	0.58
3/4	3/4	FA12-12	2.16	0.97	1-3/8	0.578	0.58
3/4	1	FA12-16	2.30	0.97	1-5/8	0.578	0.58
1	3/4	FA16-12	2.41	1.22	1-3/8	0.813	0.80
1	1	FA16-16	2.54	1.22	1-5/8	0.813	0.80

TUBE O.D.	FEMALE THREAD	PART NO.	L	L1	F	A	BORE
MILLIMETERS							
6	1/8	MFA6-2	29.40	15.90	14	4.00	4.10
6	1/4	MFA6-4	34.10	15.90	19	4.00	4.10
8	1/4	MFA8-4	35.10	16.70	19	6.40	5.60
10	1/4	MFA10-4	37.30	17.50	19	7.50	7.10
10	3/8	MFA10-6	37.30	17.50	22	7.50	7.10
10	1/2	MFA10-8	42.10	17.50	27	7.50	7.10
12	1/4	MFA12-4	41.30	23.00	19	9.10	8.80
12	3/8	MFA12-6	42.90	23.00	22	9.10	8.80
12	1/2	MFA12-8	47.60	23.00	27	9.10	8.80
16	1/2	MFA16-8	49.20	24.60	27	12.70	12.00
18	3/4	MFA18-12	52.40	24.60	35	14.00	13.90
20	1/2	MFA20-8	50.00	25.60	27	15.00	15.50
20	3/4	MFA20-12	53.20	25.40	35	15.10	15.50
25	1	MFA25-16	66.70	31.80	41	19.80	19.90

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VEE-LOK Tube Fitting

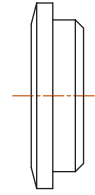
NUT



TUBE O.D.	PART NO.	L	F
INCHES			
1/8	N2	0.47	7/16
1/4	N4	0.50	9/16
5/16	N5	0.53	5/8
3/8	N6	0.56	11/16
1/2	N8	0.69	7/8
5/8	N10	0.69	1
3/4	N12	0.69	1-3/16
1	N16	0.81	1-1/2
TUBE O.D.	PART NO.	L	F
MILLIMETERS			
6	MN6	12.70	14
8	MN8	13.50	16
10	MN10	15.10	19
12	MN12	17.50	22
14	MN14	17.50	25
15	MN15	17.50	25
16	MN16	17.50	25
18	MN18	17.50	30
20	MN20	17.50	32
22	MN22	17.50	32
25	MN25	20.60	38

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BACK FERRULE



TUBE O.D.	PART NO.
INCHES	
1/8	BF2
1/4	BF4
5/16	BF5
3/8	BF6
1/2	BF8
5/8	BF10
3/4	BF12
1	BF16
TUBE O.D.	PART NO.
MILLIMETERS	
6	MBF6
8	MBF8
10	MBF10
12	MBF12
14	MBF14
15	MBF15
16	MBF16
18	MBF18
20	MBF20
22	MBF22
25	MBF25

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FRONT FERRULE

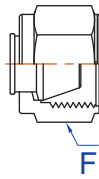


TUBE O.D.	PART NO.
INCHES	
1/8	FF2
1/4	FF4
5/16	FF5
3/8	FF6
1/2	FF8
5/8	FF10
3/4	FF12
1	FF16
TUBE O.D.	PART NO.
MILLIMETERS	
6	MFF6
8	MFF8
10	MFF10
12	MFF12
14	MFF14
15	MFF15
16	MFF16
18	MFF18
20	MFF20
22	MFF22
25	MFF25

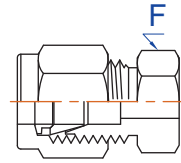
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VEE-LOK Tube Fitting

PLUG



CAP



TUBE O.D.	PART NO.	F
INCHES		
1/8	P2	7/16
1/4	P4	9/16
5/16	P5	5/8
3/8	P6	11/16
1/2	P8	7/8
5/8	P10	1
3/4	P12	1-3/16
1	P16	1-1/2

TUBE O.D.	PART NO.	F
INCHES		
1/8	CP2	7/16
1/4	CP4	1/2
5/16	CP5	9/16
3/8	CP6	5/8
1/2	CP8	13/16
5/8	CP10	15/16
3/4	CP12	1-1/16
1	CP16	1-3/8

TUBE O.D.	PART NO.	F
MILLIMETERS		
6	MP6	14
8	MP8	16
10	MP10	19
12	MP12	22
14	MP14	25
15	MP15	25
16	MP16	25
18	MP18	30
20	MP20	32
22	MP22	32
25	MP25	38

TUBE O.D.	PART NO.	F
MILLIMETERS		
6	MCP6	14
8	MCP8	15
10	MCP10	18
12	MCP12	22
14	MCP14	24
15	MCP15	24
16	MCP16	24
18	MCP18	27
20	MCP20	30
22	MCP22	30
25	MCP25	35

Dimensions for reference only, subject to change without prior notice

MEMO

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