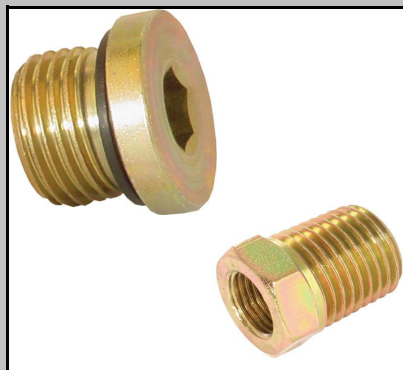


ISO 9001 : 2008 CERTIFIED COMPANY



HOSE ADAPTORS

Catalogue No. VE/005



The World Standard



			
HEX / HOSE ADAPTOR	ADAPTOR - MALE x FEMALE(SW)	ADAPTOR - SW (F) x (F)	MALE ELBOW
			
ELBOW - MALE x FEMALE (SW)	MALE x FEMALE ELBOW	ELBOW - FEMALE x FEMALE	VSTI / ALLEN PLUG WITH ED
			
MALE TEE	FEMALE (SW) TEE	BRANCH (SW) TEE	SWIEVEL FEMALE PLUG
			
RI -REDUCE MALE x FEMALE	SOCKET - FEMALE x FEMALE	FEMALE SWIEVEL ELBOW	HEX MALE PLUG

VE-LOCK has introduced BSP adaptors in the year of 1994 to the address market requirements of OEM and replacement BSP adaptors. Adaptor Fittings are Typically used for Hose Adaptors on equipment desinged and or manufactured for the application of Hydraulic Construction Machineries , Power Packs , SPM , where Hoses are connected with the machine parts with the help of these Hose adaptors.

The metal to metal sealing is achieved by a single line of contact between the conical surface of the 60 degree cone seat and the corresponding surface of the ballnose or cone swivel .

VE-LOCK Hose adaptors are Designed & manufactured in accordance with BS 5200 standards worldwide.

The 60 degree internal seat is desinged for sealing with BSP Hose swivel connections offered by many manufacturers.

Further enhancing the flexibility of Hose adaptors product line is the ability for the male BSP cone end of the straight fittings to also be used as a port adaptor in ISO 1179 -1 / DIN 3852 ports. This is accomplished with the addition of a bonded seal

DESIGN & CONSTRUCTION

VE-LOCK Hose adaptors are anufactured from a Hex Solid bar stock as well as from Hot Forged construction.

The Hose adaptors Threads are designed as per below Standards.

BSPP THREADS	ISO 228 - 1 G
BSPT THREADS	ISO 7/1, JIS B 0203
NPTF THREADS	SAE J476, ANSI B1.20.3, FED-STD-H 28/8

STANDARD MATERIALS FOR HOSE ADAPTORS

HOSE ADAPTORS	STEEL MATERIALS	
	ASTM	TYPE
HEX SOLID BAR STOCK	A108	12L14
FORGED BODY	A576	1214/1215

60° Cone Adaptors : JIS vs. BS 5200

Ve-Lock JIS 60 degree cone adaptors are manufactured in accordance to JIS B 8363 while Ve-Locks BSP adaptors are manufactured in accordance to BS 5200 . The Following are some Pronounced Differences that may help in distinguishing between the JIS & BSP adaptor fittings.

- 1) Thread Length (dimensions - A)
- 2) 60 Degree angle diameter (diamenions - B)
- 3) The undercut Area (area between threads and Hex Body) on the straight K4 fittings incorporates a bonded seal " Locating Pilot " for Bonded seal.
- 4) Ve-Lock JIS fittings are stamped with JIS on the forging body or Hex of the fittings.

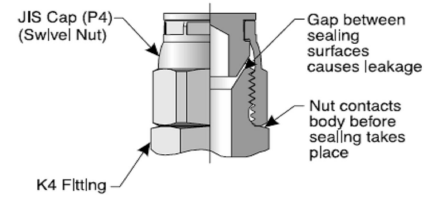


Fig. J5 – Illustration Showing Potential Leakage Problem When Mixing JIS and K4 Components

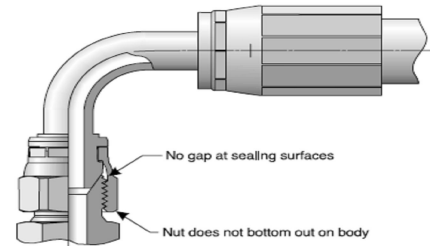
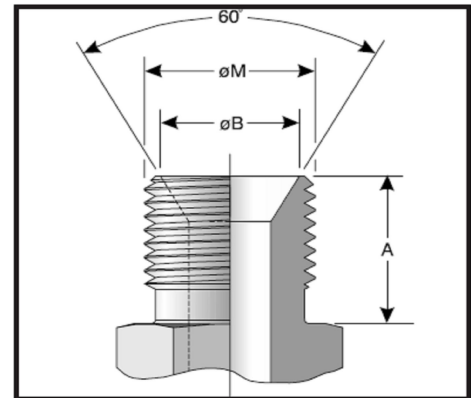


Fig. J6 – An Effective Seal Created with the Proper Combination of Components

For more Details - Please check the Below Dimensions Table - J3 & J 4

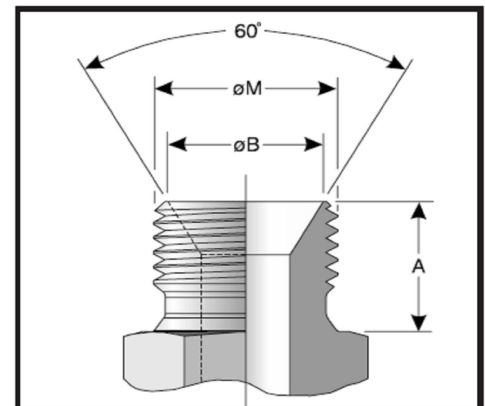
Size	BSPP Thread	M	A	B
2	1/8-28	0.38	0.418	0.276
4	1/4-19	0.51	0.570	0.394
6	3/8-19	0.65	0.609	0.531
8	1/2-14	0.82	0.726	0.650
12	3/4-14	1.04	0.805	0.866
16	1-11	1.30	0.883	1.102
20	1 1/4-11	1.64	0.945	1.417
24	1 1/2-11	1.87	0.962	1.654
32	2-11	2.34	1.102	2.126

Table J3 – Dimensions of JIS B8363 60° Cone Connection

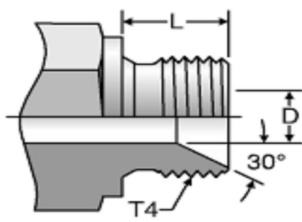


Size	BSPP Thread	M	A	B
2	1/8-28	0.38	0.315	0.295
4	1/4-19	0.51	0.433	0.409
6	3/8-19	0.65	0.472	0.551
8	1/2-14	0.82	0.551	0.689
10	5/8-14	0.90	0.630	0.760
12	3/4-14	1.04	0.630	0.902
16	1-11	1.30	0.748	1.130
20	1 1/4-11	1.64	0.787	1.449
24	1 1/2-11	1.87	0.866	1.681
32	2-11	2.34	0.984	2.150

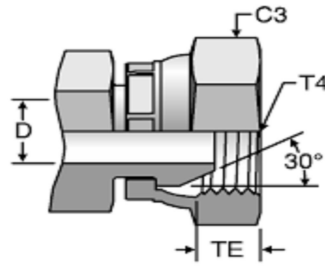
Table J4 – Dimensions of BS B5200 60° Cone Connection



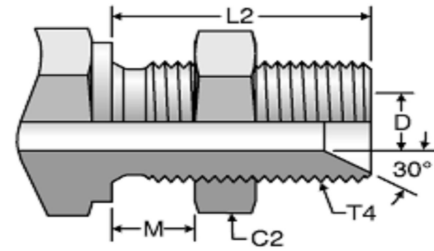
K4 BSP Ends



K4 Male



K4 Swivel



K4 Bulkhead

	BSP Thread	Bulkhead Nut Hex	Swivel Hex	Drill	Male Trun Black	Bulkead Length	Max Bulkhead Thickness	Assembly allowance
Dash size	T4	C2	C3	D	L	L2	M	TE
	BSP -TPI	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
2	1/8-28		14	3.5	8			
4	1/4-19	19	19	4.7	11	28	9.5	7.3
6	3/8-19	22	22	7.9	12	32	12.5	8.4
8	1/2-14	27	27	11.1	14	35	12.3	9.3
10	5/8-14	30	30	14.3	16	35	10.7	
12	3/4-14	36	32	16.7	16	38	13.3	11.3
16	1-11	41	41	22.2	19	41	10	13.6
20	1 1/4-11	50	50	28.6	20	44	12	
24	1 1/2-11	55	60	33.3	22	48	14	
32	2-11			46	25			

Properties

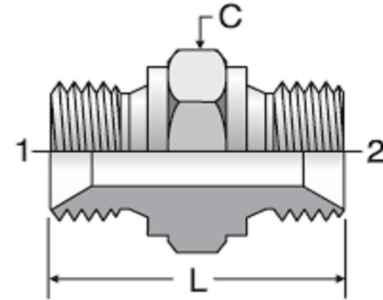
Design - As per BS 5500 standards worldwide

Material - Steel / Stainless Steel / Brass

Surface Protection for Steel - Zinc passivation
or Chrome -VI Free (Trivalent Plated)

Material - Stainless steel -304 / 316 Grade

Surface finish Mat Buff Surface Finish



VE-LOCK ITEM CODE	END SIZE		C = HEX (mm)	L (mm)	W.P. =BAR HEAVY
	1 = BSP	2 = BSP			
HN 1/8 x 1/8	1/8	1/8	14	23.5	400
HN 1/4 x 1/8	1/4	1/8	19	28.0	400
HN 1/4 x 1/4	1/4	1/4	19	31.5	400
HN 3/8 x 1/4	3/8	1/4	22	33.2	400
HN 3/8 x 3/8	3/8	3/8	22	33.2	400
HN 1/2 x 1/4	1/2	1/4	27	36.7	400
HN 1/2 x 3/8	1/2	3/8	27	38.2	400
HN 1/2 x 1/2	1/2	1/2	27	40.7	400
HN 5/8 x 1/2	5/8	1/2	30	43.2	400
HN 5/8 x 5/8	5/8	5/8	30	45.2	400
HN 3/4 x 1/4	3/4	1/4	32	39.2	400
HN 3/4 x 3/8	3/4	3/8	32	40.7	400
HN 3/4 x 1/2	3/4	1/2	32	43.2	400
HN 3/4 x 5/8	3/4	5/8	32	45.2	400
HN 3/4 x 3/4	3/4	3/4	32	45.2	400
HN 1 x 1/2	1	1/2	41	46.9	400
HN 1 x 5/8	1	5/8	41	46.9	400
HN 1 x 3/4	1	3/4	41	48.9	400
HN 1 x 1	1	1	41	51.9	400
HN 1 1/4 x 3/4	1 1/4	3/4	50	57.4	400
HN 1 1/4 x 1	1 1/4	1	50	60.4	400
HN 1 1/4 x 1 1/4	1 1/4	1 1/4	50	61.4	400
HN 1 1/2 x 1	1 1/2	1	55	64.4	400
HN 1 1/2 x 1 1/4	1 1/2	1 1/2	55	65.4	400
HN 1 1/2 x 1 1/2	1 1/2	1 1/2	55	67.4	400
HN 2 x 1 1/2	2	1 1/2	70	72.9	400
HN 2 x 2	2	2	70	76.4	400

Properties

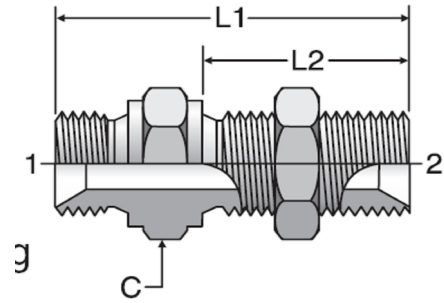
Design - As per BS 5500 standards worldwide

Material - Steel / Stainless Steel / Brass

Surface Protection for Steel - Zinc passivation
or Chrome -VI Free (Trivalent Plated)

Material - Stainless steel -304 / 316 Grade

Surface finish Mat Buff Surface Finish



CHECK NUT INCLUDE IN THIS PART

VE-LOCK ITEM CODE	END SIZE		C=HEX	L1 = MM	L2 = MM	W.P. =BAR HEAVY
	1	2	IN MM			
SV HN 1/4 x 1/4	1/4	1/4	19	46.8	28	400
SV HN 3/8 x 3/8	3/8	3/8	22	52.5	32	400
SV HN 1/2 x 1/2	1/2	1/2	27	59.0	35	400
SV HN 5/8 x 5/8	5/8	5/8	30	61.5	35	400
SV HN 3/4 x 3/4	3/4	3/4	32	64.5	38	400
SV HN 1 x 1	1	1	41	71.2	41	400
SV HN 1 1/4 x 1 1/4	1 1/4	1 1/4	50	82.7	44	400
SV HN 1 1/2 x 1 1/2	1 1/2	1 1/2	55	90.7	48	400

Properties

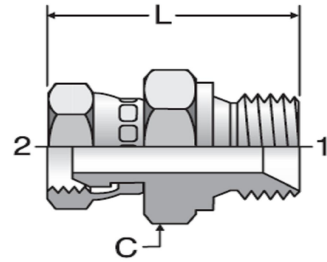
Design - As per BS 5500 standards worldwide

Material - Steel / Stainless Steel / Brass

Surface Protection for Steel - Zinc passivation
or Chrome -VI Free (Trivalent Plated)

Material - Stainless steel -304 / 316 Grade

Surface finish Mat Buff Surface Finish



VE-LOCK ITEM CODE	END SIZE		C = HEX (mm)	L (mm)	W.P. =BAR HEAVY
	1 BSPP	2 BSPP			
VEMF 1/4 x 1/4	1/4	1/4	19	36.6	400
VEMF 1/4 x 3/8	1/4	3/8	22	38.5	400
VEMF 1/4 x 1/2	1/4	1/2	27	42.0	400
VEMF 3/8 x 1/4	3/8	1/4	22	38.3	400
VEMF 3/8 x 3/8	3/8	3/8	22	40.0	400
VEMF 3/8 x 1/2	3/8	1/2	27	43.6	400
VEMF 1/2 x 3/8	1/2	3/8	27	43.5	400
VEMF 1/2 x 1/2	1/2	1/2	27	46.1	400
VEMF 1/2 x 3/4	1/2	3/4	32	48.0	400
VEMF 3/4 x 1/2	3/4	1/2	32	48.6	400
VEMF 3/4 x 3/4	3/4	3/4	32	50.0	400
VEMF 3/4 x 1	3/4	1	41	54.3	400
VEMF 1 x 1	1	1	41	57.3	400

Properties

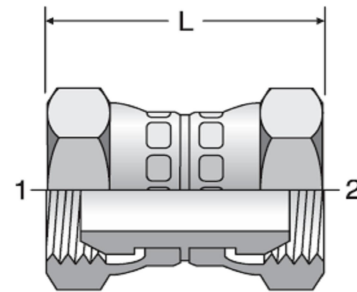
Design - As per BS 5500 standards worldwide

Material - Steel / Stainless Steel /Brass

Surface Protection for Steel - Zinc passivation
or Chrome -VI Free (Trivalent Plated)

Material - Stainless steel -304 / 316 Grade

Surface finish Mat Buff Surface Finish



VE-LOCK ITEM CODE	END SIZE		L (mm)	W.P. =BAR HEAVY
	1= BSPP	2 =BSPP		
VEFF 1/4 x 1/4	1/4	1/4	37.0	5.1
VEFF 3/8 x 1/4	3/8	1/4	38.6	5.1
VEFF 3/8 x 3/8	3/8	3/8	40.5	5.1
VEFF 1/2 x 1/4	1/2	1/4	41.5	2.9
VEFF 1/2 x 3/8	1/2	3/8	42.9	2.9
VEFF 1/2 x 1/2	1/2	1/2	45.8	2.9
VEFF 5/8 x 5/8	5/8	5/8	47.5	2.9
VEFF 3/4 x 1/2	3/4	1/2	48.2	2.9
VEFF 3/4 x 3/4	3/4	3/4	49.5	2.9
VEFF 1 x 1	1	1	57.5	1.7
VEFF 1 1/4 x 1 1/4	1 1/4	1 1/4	66.0	1.5
VEFF 1 1/2 x 1 1/2	1 1/2	1 1/2	70.0	1.5

Properties

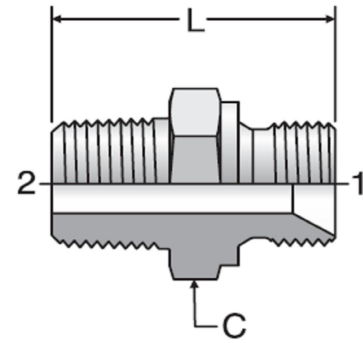
Design - As per BS 5500 standards worldwide

Material - Steel / Stainless Steel / Brass

Surface Protection for Steel - Zinc passivation
or Chrome -VI Free (Trivalent Plated)

Material - Stainless steel -304 / 316 Grade

Surface finish Mat Buff Surface Finish



VE-LOCK ITEM CODE	END SIZE		C HEX (mm)	L = MM	W.P. =BAR HEAVY
	1= BSPP	2 = NPTF			
HN 1/8 BP x 1/8 NF	1/8	1/8	14	24.4	400
HN 1/8 BP x 1/4 NF	1/8	1/4	14	28.9	400
HN 1/4 BP x 1/8 NF	1/4	1/8	19	28.9	400
HN 1/4 BP x 1/4 NF	1/4	1/4	19	33.4	400
HN 1/4 BP x 3/8 NF	1/4	3/8	19	33.4	400
HN 3/8 BP x 1/4 NF	3/8	1/4	22	35.1	400
HN 3/8 BP x 3/8 NF	3/8	3/8	22	35.1	400
HN 3/8 BP x 1/2 NF	3/8	1/2	22	39.9	400
HN 1/2 BP x 3/8 NF	1/2	3/8	27	38.6	400
HN 1/2 BP x 1/2 NF	1/2	1/2	22	43.4	400
HN 5/8 BP x 1/2 NF	5/8	1/2	27	45.9	400
HN 5/8 BP x 3/4 NF	5/8	3/4	30	45.9	400
HN 3/4 BP x 3/4 NF	3/4	3/4	30	45.9	400
HN 3/4 BP x 1/2 NF	3/4	1/2	32	46.0	400
HN 3/4 BP x 1 NF	3/4	1	36	50.8	400
HN 1 BP x 1 NF	1	1	41	54.5	400
HN 1 BP x 3/4 NF	1	3/4	41	49.6	400
HN 1 1/4 BP x 1 1/4 NF	1 1/4	1 1/4	50	63.7	400
HN 1 1/2 BP x 1 1/2 NF	1 1/2	1 1/2	55	68.5	400

REDUCING THREAD ADAPTOR - MALE x FEMALE

ISO 1179-1 / ISO 228-1G

Properties

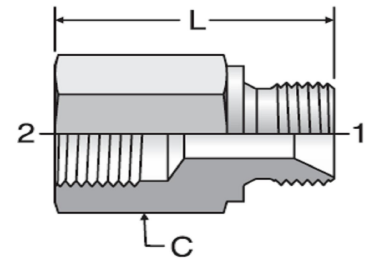
Design - As per BS 5500 standards worldwide

Material - Steel / Stainless Steel /Brass

Surface Protection for Steel - Zinc passivation
or Chrome -VI Free (Trivalent Plated)

Material - Stainless steel -304 / 316 Grade

Surface finish Mat Buff Surface Finish



VE-LOCK ITEM CODE	END SIZE		C = HEX (mm)	L = MM	W.P. =BAR HEAVY
	1 = BSPP - MALE	2 = BSPP - FEMALE			
RI 3/8 M x 1/4 F	3/8	1/4	22	37.1	400
RI 3/8 M x 3/8 F	3/8	3/8	23	36.9	400
RI 1/2 M x 1/4 F	1/2	1/4	27	38.0	400
RI 1/2 M x 3/8 F	1/2	3/8	30	45.3	400
RI 3/4 M x 1/4 F	3/4	1/4	32	40.0	400
RI 3/4 M x 3/8 F	3/4	3/8	32	41.6	400
RI 3/4 M x 1/2 F	3/4	1/2	32	47.3	400
RI 1 M x 1/4 F	1	1/4	41	43.0	400
RI 1 M x 3/8 F	1	3/8	41	44.6	400
RI 1 M x 1/2 F	1	1/2	41	50.3	400
RI 1 M x 3/4 F	1	3/4	41	52.2	400

HEX PLUG - BSP THREADS TYPE

ISO 1179-1 / ISO 228-1G

Properties

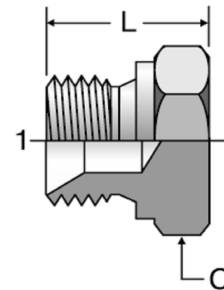
Design - As per BS 5500 standards worldwide

Material - Steel / Stainless Steel /Brass

Surface Protection for Steel - Zinc passivation
or Chrome -VI Free (Trivalent Plated)

Material - Stainless steel -304 / 316 Grade

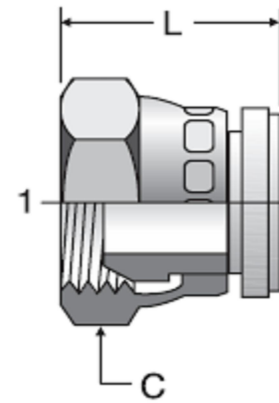
Surface finish Mat Buff Surface Finish



VE-LOCK ITEM CODE	END SIZE	C = HEX (mm)	L = MM	W.P. =BAR HEAVY
	1 =BSPP			
HP 1/8	1/8	14	14.3	400
HP 1/4	1/4	19	18.8	400
HP 3/8	3/8	22	20.5	400
HP 1/2	1/2	27	24.0	400
HP 5/8	5/8	30	24.0	400
HP 3/4	3/4	32	26.5	400
HP 1	1	41	30.2	400
HP 1 1/4	1 1/4	50	38.7	400
HP 1 1/2	1 1/2	55	42.7	400
HP 2	2	70	48.2	400

VE-LOCK®

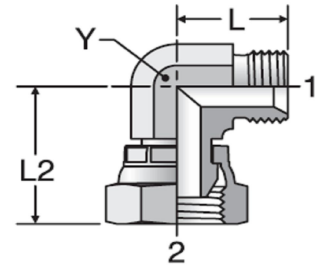
VE-LOCK ITEM CODE	END SIZE	C = HEX (mm)	L = MM	W.P. =BAR
	1 =BSPP			HEAVY
CAP SW 1/8	1/8	14	16	400
CAP SW 1/4	1/4	19	20.6	400
CAP SW 3/8	3/8	22	22.3	400
CAP SW 1/2	1/2	27	22.7	400
CAP SW 5/8	5/8	30	26.6	400
CAP SW 3/4	3/4	32	28.0	400
CAP SW 1	1	41	31.6	400
CAP SW 1 1/4	1 1/4	50	35.9	400
CAP SW 1 1/2	1 1/2	60	37.9	400



ELBOW MALE x FEMALE (SW) -BSPP TYPE

ISO 1179-1 / ISO 228-1G

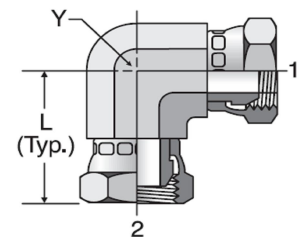
VE-LOCK ITEM CODE	END SIZE		L = MM	L2 = MM	Y = MM	W.P. =BAR HEAVY
	1 = BSPP	2 = BSPP				
WMFSW 1/8 x 1/8	1/8	1/8	16.6	22.0	14	400
WMFSW 1/4 x 1/4	1/4	1/4	27.8	31.2	19	400
WMFSW 3/8 x 3/8	3/8	3/8	31.7	36.2	22	400
WMFSW 1/2 x 1/2	1/2	1/2	37.0	41.0	27	400
WMFSW 5/8 x 5/8	5/8	5/8	39.0	41.6	30	400
WMFSW 3/4 x 3/4	3/4	3/4	41.6	45.3	32	400
WMFSW 1 x 1	1	1	49.7	53.9	41	400
WMFSW 1 1/4 x 1	1 1/4	1 1/4	54.4	60.0	46	400
WMFSW 1 1/2 x 1	1 1/2	1 1/2	53.7	63.3	55	400



EQUAL FEMALE (SW) ELBOW - BSPP THREADS TYPE

ISO 1179-1 / ISO 228-1G

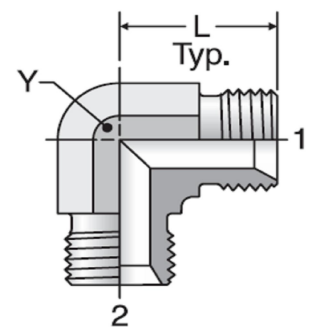
VE-LOCK ITEM CODE	END SIZE		L = MM	Y = MM	W.P. =BAR HEAVY
	1 = BSPP	2 = BSPP			
WFSW 1/8 x 1/8	1/8	1/8	16.6	14	400
WFSW 1/4 x 1/4	1/4	1/4	30.5	19	400
WFSW 3/8 x 3/8	3/8	3/8	33.0	22	400
WFSW 1/2 x 1/2	1/2	1/2	38.8	27	400
WFSW 5/8 x 5/8	5/8	5/8	39.4	30	400
WFSW 3/4 x 3/4	3/4	3/4	42.3	32	400
WFSW 1 x 1	1	1	49.0	41	400
WFSW 1 1/4 x 1 1/4	1 1/4	1 1/4	58.2	46	400
WFSW 1 1/2 x 1 1/2	1 1/2	1 1/2	63.3	55	400



EQUAL UNION ELBOW - BSPP THREADS TYPE

ISO 1179-1 / ISO 228-1G

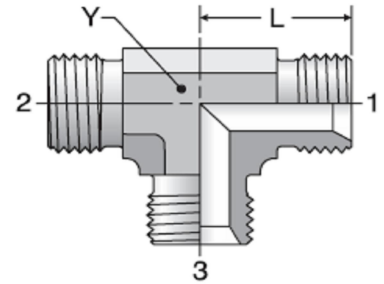
VE-LOCK ITEM CODE	END SIZE		L = MM	Y = MM	W.P. =BAR HEAVY
	1 = BSPP	2 = BSPP			
W 1/8 x 1/8	1/8	1/8	16.6	14	400
W 1/4 x 1/4	1/4	1/4	27.8	19	400
W 3/8 x 3/8	3/8	3/8	31.7	22	400
W 1/2 x 1/2	1/2	1/2	37.0	27	400
W 5/8 x 5/8	5/8	5/8	39.0	30	400
W 3/4 x 3/4	3/4	3/4	41.6	32	400
W 1 x 1	1	1	49.7	41	400
W 1 1/4 x 1 1/4	1 1/4	1 1/4	54.4	46	400
W 1 1/2 x 1 1/2	1 1/2	1 1/2	53.7	55	400



UNION MALE TEE - BSPP THREADS TYPE

ISO 1179-1 / ISO 228-1G

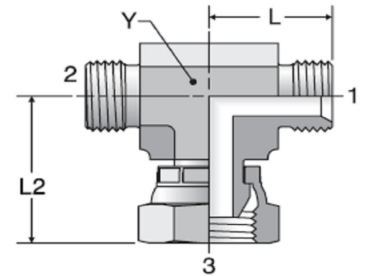
VE-LOCK ITEM CODE	END SIZE	END SIZE	END SIZE	L = MM	Y = MM	W.P. =BAR HEAVY
	1 =BSPP	1 =BSPP	1 =BSPP			
2JMK4	1/8	1/8	1/8	16.6	11	400
4JMK4	1/4	1/4	1/4	27.8	19	400
6JMK4	3/8	3/8	3/8	31.7	22	400
8JMK4	1/2	1/2	1/2	37.0	27	400
10JMK4	5/8	5/8	5/8	39.0	27	400
12JMK4	3/4	3/4	3/4	41.9	33	400
16JMK4	1	1	1	49.7	41	400
20JMK4	1 1/4	1 1/4	1 1/4	54.4	48	400
24JMK4	1 1/2	1 1/2	1 1/2	53.7	48	400



BRANCH TEE - SWEIVEL NUT TYPE

ISO 1179-1 / ISO 228-1G

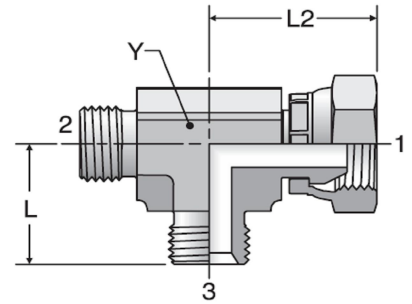
VE-LOCK ITEM CODE	END SIZE	END SIZE	END SIZE	L = MM	L2 = MM	Y = MM	W.P. =BAR HEAVY
	1 =BSPP	1 =BSPP	1 =BSPP				
2S6MK4	1/8	1/8	1/8	16.6	22.0	11	400
4S6MK4	1/4	1/4	1/4	27.8	31.2	19	400
6S6MK4	3/8	3/8	3/8	31.7	36.2	27	400
8S6MK4	1/2	1/2	1/2	37.0	41.0	27	400
10S6MK4	5/8	5/8	5/8	39.0	41.6	27	400
12S6MK4	3/4	3/4	3/4	41.6	45.3	33	400
16S6MK4	1	1	1	49.7	53.9	41	400
20S6MK4	1 1/4	1 1/4	1 1/4	54.4	60.0	48	400



RUN TEE -SWEIVEL NUT TYPE

ISO 1179-1 / ISO 228-1G

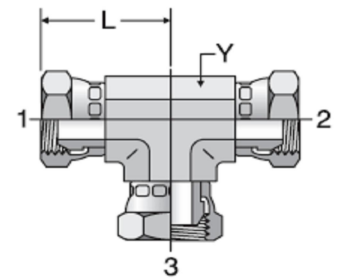
VE-LOCK ITEM CODE	END SIZE	END SIZE	L = MM	L2 = MM	Y = MM	W.P. =BAR
	1 =BSPP	1 =BSPP				HEAVY
						S
2R6MK4	1/8	1/8	1/8	16.6	22.0	5.1
4R6MK4	1/4	1/4	1/4	27.8	31.2	5.1
6R6MK4	3/8	3/8	3/8	31.7	36.2	5.1
8R6MK4	1/2	1/2	1/2	37.0	41.0	5.1
10R6MK4	5/8	5/8	5/8	39.0	41.6	5.1
12R6MK4	3/4	3/4	3/4	41.6	45.3	5.1
16R6MK4	1	1	1	49.7	53.9	5.1
20R6MK4	1 1/4	1 1/4	1 1/4	54.4	60.0	5.1



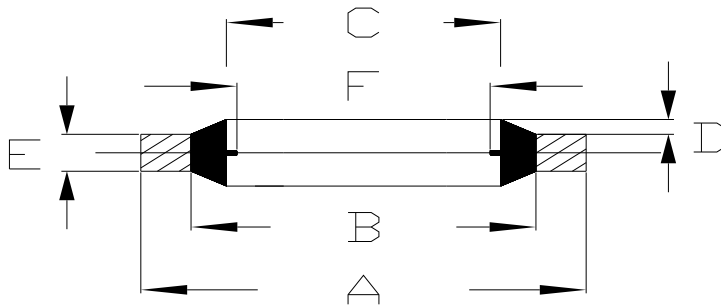
TEE -FEMALE SWIEVEL NUT ALL SIDES

ISO 1179-1 / ISO 228-1G

VE-LOCK ITEM CODE	END SIZE	END SIZE	END SIZE	L = MM	Y = MM	W.P. =BAR
	1 =BSPP	1 =BSPP	1 =BSPP			HEAVY
4J6MK4	1/4	1/4	1/4	30.5	14	400
6J6MK4	3/8	3/8	3/8	33.0	19	400
8J6MK4	1/2	1/2	1/2	38.8	22	400
10J6MK4	5/8	5/8	5/8	39.4	22	400
12J6MK4	3/4	3/4	3/4	42.3	27	400
16J6MK4	1	1	1	49.0	33	400
20J6MK4	1 1/4	1 1/4	1 1/4	58.2	41	400



BONDED WASHER



SIZE BSP	PART NO	A	B	C	D	E	F	Kg/100
1/8	VEDW 02	15.88	11.84	10.37	0.25/0.51	2.03	8.56	0.15
1/4	VEDW04	20.57	15.21	13.74	0.25/0.51	2.03	11.45	0.25
3/8	VEDW06	23.8	18.75	17.28	0.25/0.51	2.03	14.96	0.29
1/2	VEDW08	28.58	23.01	21.54	0.25/0.51	2.49	18.64	0.46
3/4	VEDW12	34.93	28.53	27.05	0.25/0.51	2.49	24.13	0.62
1	VEDW16	42.8	36.88	33.89	0.25/0.51	3.38	30.3	0.79
1.25	VEDW20	52.38	45.93	42.93	0.25/0.51	3.38	38.96	1.04
1.5	VEDW24	58.6	51.39	48.44	0.25/0.51	3.38	44.86	1.3
2	VEDW32	73.03	63.63	60.58	0.25/0.51	3.38	56.67	2.14