

DK-LOK

Fittings & Valves

DK-Lok UHP Fittings

No.09-01(K)
May 2017





Safe Component Selection

The selection of component for any applications or system design must be considered to ensure safe performance. Component function, material compatibility, component ratings, proper installation, operation and maintenance remain the sole responsibility of the system designer and the user. DK-Lok accepts no liability for any improper selection, installation, operation or maintenance.

Clean Weld Fittings

Micro Elbow
WML 05



Micro Tee
WMT 05



Micro Cross Tee
WMX 05



Micro Tribow
WMTB 06



Micro Half Elbow
WMHL 06



Micro Reducing Elbow
WMRL 06



Micro Reducing Tee
WMRT 07



Micro Reducer
WMR 07



Long Elbow
WL 07



Long Reducing Elbow 90
WRL 08



Long Tee
WT 08



Long Reducing Tee
WRT 08



Long Cross Tee
WX 09



Long Reducer
WR 09



Metal Gasket Face-Seal Fittings

Short Gland
SG 11



Long Gland
LG 11



Auto Butt Weld Short Gland
SGA 12



Auto Butt Weld Long Gland
LGA 12



Male Gland
GM 12



Socket Weld Long Gland
GSL 13



Socket Weld Reducing Long Gland
GSR 13



Socket Weld Short Gland
GSS 13



Tube Adapter Gland
GT 14



Blind Gland
BG 14



Female Nut
FN 14



Male Nut
MN 15



Cap
CP 15



Plug
PG 15



Gasket
GK 16



Gasket Retainer
GKT 16
































Gasket Blind
GKB 16



Double Male Union
MU 17



Double Male Reducing Union MRU		17	Union Cross Tee X		21	High Flow Male Nut HMN		24
Bulkhead Union BHU		17	Male NPT Elbow ML-N		21	Tube Fitting to Auto Butt Weld Connector DATW		24
Tube Fitting Connector DC		18	Coupling C		21	Welded Assembly Fittings		
Tube Fitting Bulkhead Connector DBHC		18	High Flow Fittings					
Male NPT Connector MC-N		18	High Flow Gland HG		22	Swivel Female Union SFU		25
Female NPT Connector FC-N		19	High Flow Reducer HR		22	Swivel Male NPT Connector SMC-N		25
Bulkhead Male NPT Connector BHMC-N		19	Auto Butt Weld High Flow Reducer HRA		22	Swivel Female NPT Connector SFC-N		26
Tube Butt Weld Bulkhead Connector BHTW		19	High Flow Bulkhead Reducer HBR		23	Swivel Tube Fitting Connector SDC-N		26
Straight Thread O-Ring Seal Male Connector MC-UO		20	High Flow Union Elbow HL		23	Swivel Elbow SL		26
Union Elbow L		20	High Flow Union Tee HT		23	Swivel Tee ST		27
Union Tee T		20	High Flow Female Nut HFN		24			

Ordering Information

DK-Lok Weld Fittings and Metal Face Seal Fittings are ordered by product code shown below.



Size	Sleeve Length	Material	Inner Surface Level
4 : 1/4"	635 : 6.35mm	SL : 316L Stainless Steel	B : BA
6 : 3/8"	100 : 10.0mm	DL : 316L Stainless Steel VAR	P : EP
8 : 1/2"	190 : 19.05mm		
12 : 3/4"			
16 : 1"			

Product Type			
Micro Fittings		Face Seal Fittings	
WML	Micro 90° Elbow	FN	Female Nut
WMT	Micro Tee	MN	Male Nut
WMX	Micro Cross Tee	CP	Cap
WMTB	Micro Tribow	PG	Plug
WMHL	Micro 45° Elbow	GK	Gasket
WMRL	Micro Reducing Elbow	GKT	Gasket Retainer
WMRT	Micro Reducing Tee	GKB	Gasket Blind
WMR	Micro Reducer	MU	Double Male Union
Tube Butt Weld Fittings		BHU	Bulkhead Union
WL	Long Elbow	DC	DK-Lok Tube Fitting Connector
WRL	Long Reducing Elbow	DBHC	DK-Lok Bulkhead Tube Fitting Connector
WT	Long Tee	MC-N	Male NPT Connector
WRT	Long Reducing Tee	FC-N	Female NPT Connector
WX	Long Cross Tee	BHMC-N	Bulkhead Male NPT Connector
WR	Long Reducer	BHTW	TBW Bulkhead Connector
Face Seal Fittings		MC-UO	O-ring Seal Male Connector
SG	Female Gland	L	Union Elbow
LG	Male Gland	T	Union Tee
SGA	Automatic Female Gland	X	Union Cross Tee
LGA	Automatic Male Gland	C	Coupling
GM	Male Weld Gland	HG	High Flow Gland
GSL	Socket Weld Long Gland	HR	High Flow Reducer
GSR	Socket Weld Reducing Long Gland	HRA	Automatic High Flow Reducer
GSS	Socket Weld Short Gland	HFN	High Flow Female Nut
GT	Tube Adapter Gland	HMN	High Flow Male Nut
BG	Blind Gland	DATW	Tube Fitting to Auto Butt Weld Connector

Pressure Rating

The pressure ratings provided in this catalogue are obtained by the calculation with the allowable stress of 20,000 psig (1,378 bar) of stainless steel 316 at -20°F (-28°C) to 100°F (37°C) according to ASME B31.3 and B31.1 code.

Pressure derating factors are driven by temperatures greater than 100°F (37°C). They are determined from these pressure code listed in the table 1 and in accordance with ASME B31.3 and B31.1 code. Multiply the applicable pressure rating in this catalogue by the factor in the table 1 to determine the working pressure.

Table 1. Derating Factor

Material	SS 316	SS 316L
Temperature °F (°C)	Derating Factor	
-20 (-28) ~ 100 (37)	1.00	1.00
~ 200 (93)	1.00	0.83
~ 400 (204)	0.96	0.77
~ 600 (315)	0.85	0.67
~ 800 (426)	0.79	0.62
~ 1000 (537)	0.76	0.56

Material

Material	Designation	Specification	
		Bar stock	Forging
316L Stainless Steel	SL	ASME SA479	ASME SA182
316L Stainless Steel VAR	DL	ASTM A479/A276	ASME A182

Cleaning & Packing

Passivation is done in accordance with ASTM A380, Ultra-sonic cleaning in a class 100 clean room environment, implemented with resistivity over 18MΩ D.I water after finishing the passivation for precision cleaning. After cleaning, the product receives double packaging in a clean room environment using anti-static polyethylene bags and high purity nitrogen inclusion.

Surface Roughness

Grade	Designation	Surface Level	
BA	B	R_a : 10 µin	R_y : 3.0 µm
EP	P	R_a : 5 µin	R_y : 0.7 µm

Feature

- Accommodates the miniature tubing system
- Allows close parts spacing
- Flow capacity to be equivalent to the conventional big size welding fitting

Rounded Edge : all edges of the product are rounded for safe handling and to help prevent damage the other products

Material Heat code : marked on the product for easy raw material traceability

Laser Marking : shows the manufacturer, material / grade, heat code and process number on the body for easy identification

10 µin. R_a and 5 µin. R_a are standard surface finish

For automatic tube butt welding, integral filler ring is provided for proper alignment

Sharp and burr-free tube end :

Radiused Junction : pockets and entrapment zones in the junction portion are eliminated for a smooth flow transition

Accurately machined diameter dimension conforms to tube diameter



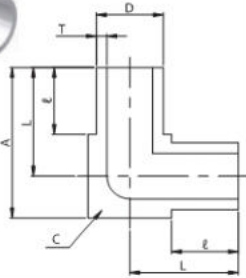
For Tees, the run (① to ②) shall precede the branch(③)

For Crosses, the run (① to ②) shall precede the branch(③ to ④)

Clean Weld Fittings

Micro Elbow

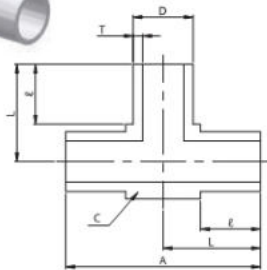
WML



Part No.	Size (D)		Thickness (Tube Wall) T(mm)	L (mm)	ℓ (mm)	A (mm)	C Body Cube (mm)
	in.	mm					
UD-WML-4	1/4	6.35	1.0	10.32	6.35	14.29	7.94
UD-WML-6	3/8	9.53		11.91		17.46	11.11
UD-WML-8	1/2	12.7	1.24	13.5		20.64	14.29
UD-WML-12	3/4	19.05	1.65	16.68		27.0	20.65

Micro Tee

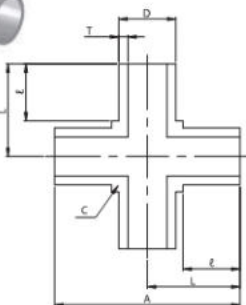
WMT



Part No.	Size (D)		Thickness (Tube Wall) T(mm)	L (mm)	ℓ (mm)	A (mm)	C Body Cube (mm)
	in.	mm					
UD-WMT-4	1/4	6.35	1.0	10.32	6.35	20.64	7.94
UD-WMT-6	3/8	9.53		11.91		23.81	11.11
UD-WMT-8	1/2	12.7	1.24	13.5		26.99	14.29
UD-WMT-12	3/4	19.05	1.65	16.68		33.35	20.65

Micro Cross Tee

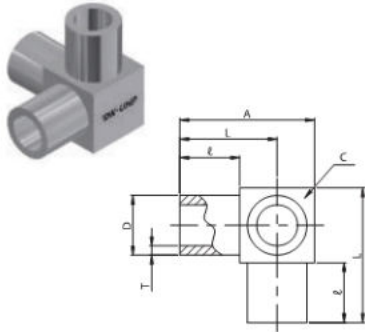
WMX



Part No.	Size (D)		Thickness (Tube Wall) T(mm)	L (mm)	ℓ (mm)	A (mm)	C Body Cube (mm)
	in.	mm					
UD-WMX-4	1/4	6.35	1.0	10.32	6.35	20.64	7.94
UD-WMX-6	3/8	9.53		11.91		23.81	11.11
UD-WMX-8	1/2	12.7	1.24	13.5		26.99	14.29
UD-WMX-12	3/4	19.05	1.65	16.68		33.35	20.65

Micro Tribow

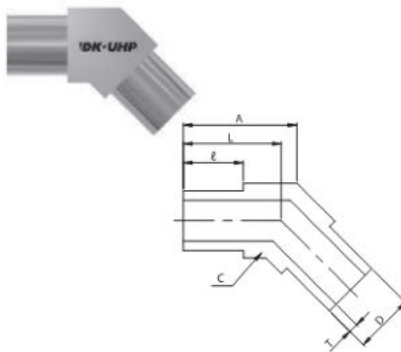
WMTB



Part No.	Size (D)		Thickness (Tube Wall) T(mm)	L (mm)	e (mm)	A (mm)	C Body Cube (mm)
	in.	mm					
UD-WMTB-4	1/4	6.35	1.0	10.32	6.35	14.29	7.94
UD-WMTB-6	3/8	9.53		11.91		17.46	11.11
UD-WMTB-8	1/2	12.7	1.24	13.5		20.64	14.29
UD-WMTB-12	3/4	19.05	1.65	16.68		27	20.65

Micro Half Elbow

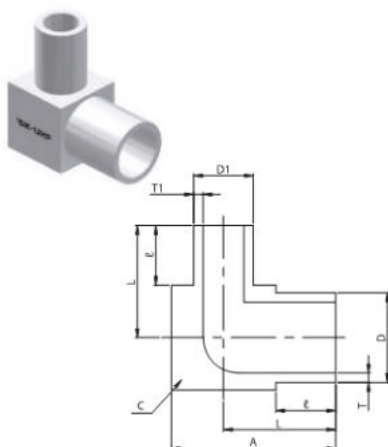
WMHL



Part No.	Size (D)		Thickness (Tube Wall) T(mm)	L (mm)	e (mm)	A (mm)	C Body Cube (mm)
	in.	mm					
UD-WMHL-4	1/4	6.35	1.0	10.4	6.35	12.04	7.94
UD-WMHL-6	3/8	9.53		11.91		14.21	11.11
UD-WMHL-8	1/2	12.7	1.24	13.5		16.46	14.29
UD-WMHL-12	3/4	19.05	1.65	16.68		20.95	20.65

Micro Reducing Elbow

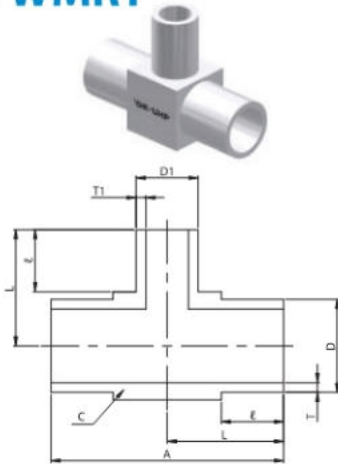
WMRL



Part No.	Size (D)		Size (D1)		Thickness (Tube Wall) T(mm)	Thickness (Tube Wall) T1(mm)	L (mm)	e (mm)	A (mm)	C Body Cube (mm)
	in.	mm	in.	mm						
UD-WMRL-6X4	3/8	9.53	1/4	6.35	1.0	1.0	11.91	6.35	17.46	11.11
UD-WMRL-8X4	1/2	12.7	3/8	9.53			1.24		13.5	20.64
UD-WMRL-8X6					1.0		16.68		27	20.65
UD-WMRL-12X4	3/4	19.05	1/4	6.35	1.65	1.24	16.68		27	20.65
UD-WMRL-12X6			3/8	9.53						
UD-WMRL-12X8			1/2	12.7						

Micro Reducing Tee

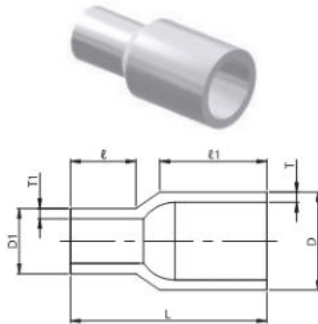
WMRT



Part No.	Size (D)		Size (D1)		Thickness (Tube Wall) T(mm)	Thickness (Tube Wall) T1(mm)	L (mm)	ℓ (mm)	A (mm)	C Body Cube (mm)
	in.	mm	in.	mm						
UD-WMRT-6X4	3/8	9.53	1/4	6.35	1.0	1.0	11.91	6.35	23.81	11.11
UD-WMRT-8X4	1/2	12.7	3/8	9.53	1.24		13.5		26.99	14.29
UD-WMRT-8X6			1/4	6.35	1.65	16.68	33.35	20.65		
UD-WMRT-12X4	3/4	19.05	3/8	9.53						
UD-WMRT-12X6	3/4	19.05	1/2	12.7	1.24					
UD-WMRT-12X8										

Micro Reducer

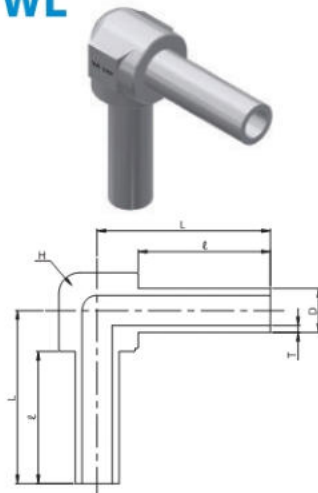
WMR



Part No.	Size (D)		Size (D1)		Thickness (Tube Wall) T(mm)	Thickness (Tube Wall) T1(mm)	L (mm)	ℓ (mm)	ℓ1 (mm)
	in.	mm	in.	mm					
UD-WMR-6X4	3/8	9.53	1/4	6.35	1.0	1.0	19.1	6.35	10.4
UD-WMR-8X4	1/2	12.7	3/8	9.53	1.24				
UD-WMR-8X6			1/4	6.35	1.65	1.24	19.1	6.35	10.4
UD-WMR-12X4	3/4	19.05	3/8	9.53					
UD-WMR-12X6	3/4	19.05	1/2	12.7					
UD-WMR-12X8									

Long Elbow

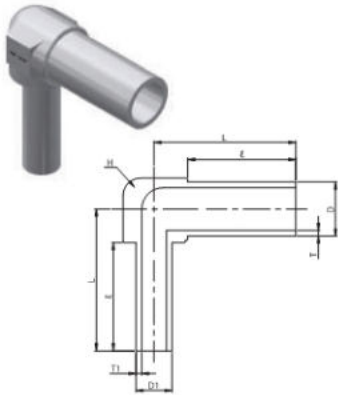
WL



Part No.	Size (D)		Thickness (Tube Wall) T(mm)	L (mm)	ℓ (mm)	H Body Hex (mm)
	in.	mm				
UD-WL-4-100	1/4	6.35	1.0	16.0	10.0	11.1
UD-WL-4-190				25.0	19.05	
UD-WL-6-100	3/8	9.53	1.0	16.0	10.0	11.1
UD-WL-6-190				25.0	19.05	
UD-WL-8-100	1/2	12.7	1.24	20.0	10.0	17.0
UD-WL-8-190				29.0	19.05	
UD-WL-12-100	3/4	19.05	1.65	22.5	10.0	25.0
UD-WL-12-190				31.5	19.05	
UD-WL-16-190	1	25.4		34.0	19.05	30.0

Long Reducing Elbow 90

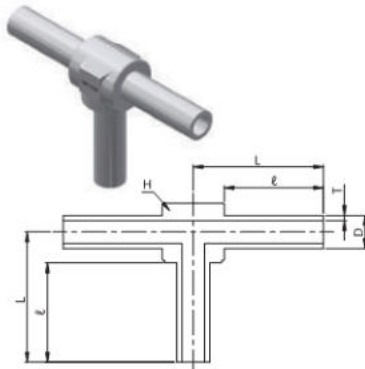
WRL



Part No.	Size (D)		Size (D1)		Thickness (Tube Wall) T(mm)	Thickness (Tube Wall) T1(mm)	L (mm)	ℓ (mm)	H Body Hex (mm)
	in.	mm	in.	mm					
UD-WRL-6X4-190	3/8	9.53	1/4	6.35	1.0	1.0	25.0	19.05	11.1
UD-WRL-8X4-190	1/2	12.7	1/4	6.35	1.24		29.0		17.0
UD-WRL-8X6-190			3/8	9.53		1.0	31.5		25.0
UD-WRL-12X4-190	3/4	19.05	1/4	6.35	1.65				
UD-WRL-12X6-190			3/8	9.53		1.0	25.0		
UD-WRL-12X8-190			1/2	12.7				1.24	30.0
UD-WRL-16X8-190	1	25.4	1/2	12.7	1.65	1.24	34.0		

Long Tee

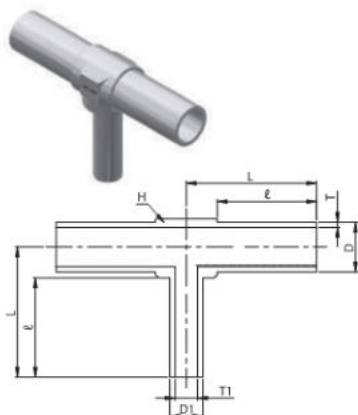
WT



Part No.	Size (D)		Thickness (Tube Wall) T(mm)	L (mm)	ℓ (mm)	H Body Hex (mm)		
	in.	mm						
UD-WT-4-100	1/4	6.35	1.0	16.0	10.0	11.1		
UD-WT-4-190				25.0	19.05			
UD-WT-6-100	3/8	9.53		16.0	10.0			
UD-WT-6-190				25.0	19.05			
UD-WT-8-100	1/2	12.7	1.24	20.0	10.0	17.0		
UD-WT-8-190				29.0	19.05			
UD-WT-12-100	3/4	19.05		1.65	22.5		10.0	25.0
UD-WT-12-190					31.5		19.05	
UD-WT-16-190			1		25.4	34.0	19.05	

Long Reducing Tee

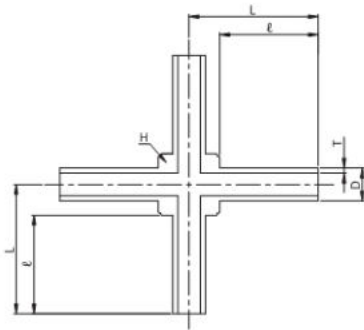
WRT



Part No.	Size (D)		Size (D1)		Thickness (Tube Wall) T(mm)	Thickness (Tube Wall) T1(mm)	L (mm)	ℓ (mm)	H Body Hex (mm)
	in.	mm	in.	mm					
UD-WRT-6X4-190	3/8	9.53	1/4	6.35	1.0	1.0	25.0	19.05	11.1
UD-WRT-8X4-190	1/2	12.7	1/4	6.35	1.24		29.0		17.0
UD-WRT-8X6-190			3/8	9.53		1.0	31.5		25.0
UD-WRT-12X4-190	3/4	19.05	1/4	6.35	1.65				
UD-WRT-12X6-190			3/8	9.53		1.0	25.0		
UD-WRT-12X8-190			1/2	12.7				1.24	30.0
UD-WRT-16X4-190	1	25.4	1/4	6.35	1.65	1.0	34.0		
UD-WRT-16X8-190			1/2	12.7				1.24	

Long Cross Tee

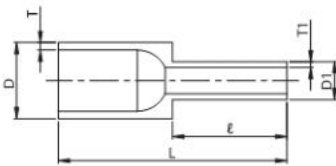
WX



Part No.	Size (D)		Thickness (Tube Wall) T(mm)	L (mm)	l (mm)	H Body Hex (mm)
	in.	mm				
UD-WX-4-100	1/4	6.35	1.0	16.0	10.0	11.1
UD-WX-4-190				25.0	19.05	
UD-WX-6-100	3/8	9.53		16.0	10.0	
UD-WX-6-190				25.0	19.05	
UD-WX-8-100	1/2	12.7	1.24	20.0	10.0	17.0
UD-WX-8-190				29.0	19.05	
UD-WX-12-100	3/4	19.05	1.65	22.5	10.0	25.0
UD-WX-12-190				31.5	19.05	

Long Reducer

WR



Part No.	Size (D)		Size (D1)		Thickness (Tube Wall) T(mm)	Thickness (Tube Wall) T1(mm)	L (mm)	l (mm)
	in.	mm	in.	mm				
UD-WR-6X4-190	3/8	9.53	1/4	6.35	1.0	1.0	38.1	19.05
UD-WR-8X4-190	1/2	12.7			1.24			
UD-WR-8X6-190			3/8	9.53				
UD-WR-12X4-190	3/4	19.05	1/4	6.35	1.65			
UD-WR-12X6-190			3/8	9.53				
UD-WR-12X8-190			1/2	12.7	1.24			

Pressure Rating

All pressure rating follow the calculation as to ASME B31.3 Process Pip-ing code and ASME B31.1 Power Piping code.

The working pressure rating at the room temperature is determined by the material of gasket and the allowable temperature range per the materials is listed in Table 2.

Table 2. Temperature range

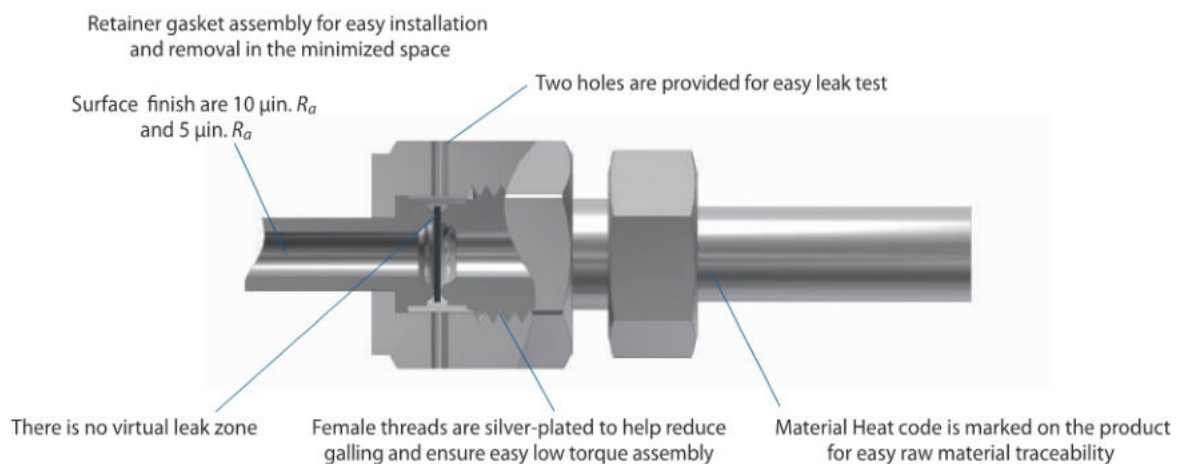
Part	Material	Temperature °F (°C)
Fitting	316L Stainless Steel	1000 (537)
	316L Stainless Steel VAR	
Gasket	316L Stainless Steel	1000 (537)
	Nickel	600 (315)

Material

Material	Designation	Specification	
		Bar stock	Forging
316L Stainless Steel	SL	ASME SA479	ASME SA182
316L Stainless Steel VAR	DL	ASTM A479/A276	ASTM A182
Gasket	316L Stainless Steel	ASTM A167	
	Nickel	ASTM B162	

Feature

- Leak-tight service provided from vacuum to positive pressure application
- Minimized space is needed for installation and or removal



Cleaning & Packing

Passivation is done in accordance with ASTM A380, Ultra-sonic cleaning is performed in a class 100 enviroment with resistivity over 18MΩ D.I water after finishing the passivation for precision cleaning. After cleaning, all product is double packed in the clean room using anti-static polyethylene bags where high purity nitrogen inclusion.

Surface Roughness

Grade	Designation	Surface Level	
BA	B	$R_a : 10\mu\text{in}$	$R_y : 3.0\mu\text{m}$
EP	P	$R_a : 5\mu\text{in}$	$R_y : 0.7\mu\text{m}$

Plating

The internal surface of the female-threaded nut are silver plated to help reduce galling and reduces the pull-up torque.

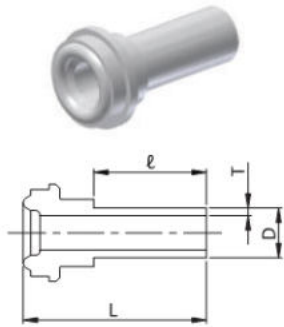
Note : In the event of the damage or removal of the silver plating, thread galling may be occur damaging the fitting components and preventing against proper sealing performance.

Testing

DCR Fittings are rated to a helium leak rate of less than 1×10^{-9} mbar.l/sec and tested in accordance with SEMI F1-96 and SEMA-90120391B-STD.

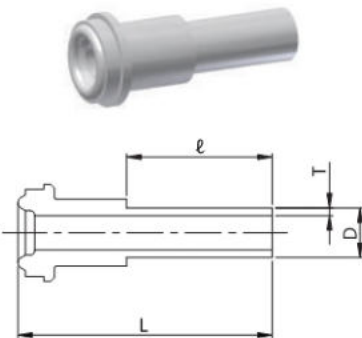
Metal Gasket Face-Seal Fittings

Short Gland

SG


Part No.	Tube Size (D)		Head Size (in.)	Thickness (Tube Wall) T(mm)	L (mm)	ℓ (mm)	
	in.	mm					
UD-SG-4-635	1/4	6.35	1/4	1.0	15.25	6.35	
UD-SG-4-100					18.9	10.0	
UD-SG-4-190					27.95	19.05	
UD-SG-6-635	3/8	9.53	1/2		15.75	6.35	
UD-SG-6-100					19.4	10.0	
UD-SG-6-190					28.45	19.05	
UD-SG-8-635	1/2	12.7		1.24	15.75	6.35	
UD-SG-8-100					19.4	10.0	
UD-SG-8-190					28.45	19.05	
UD-SG-12-190	3/4	19.05	3/4		1.65	34.5	19.05
UD-SG-16-190	1	25.4	1			38.6	19.05
UD-SG-8X4-635	1/4	6.35	1/2		1.0	15.75	6.35
UD-SG-8X4-190				28.45		19.05	

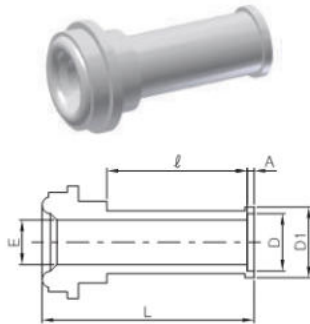
Long Gland

LG


Part No.	Head Size (in.)	Tube Size (D)		Thickness (Tube Wall) T(mm)	L (mm)	ℓ (mm)	
		in.	mm				
UD-LG-4-635	1/4	1/4	6.35	1.0	30.5	6.35	
UD-LG-4-100					34.0	10.0	
UD-LG-4-190					43.2	19.05	
UD-LG-6-635	1/2	3/8	9.53		32.8	6.35	
UD-LG-6-100					36.4	10.0	
UD-LG-6-190					45.5	19.05	
UD-LG-8-635	1/2	1/2	12.7	1.24	32.8	6.35	
UD-LG-8-100					36.4	10.0	
UD-LG-8-190					45.5	19.05	
UD-LG-12-190	3/4	3/4	19.05		1.65	51.6	19.05
UD-LG-16-190	1	1	25.4			58.9	19.05
UD-LG-8X4-635	1/2	1/4	6.35		1.0	32.8	6.35
UD-LG-8X4-190				45.5		19.05	

Auto Butt Weld Short Gland

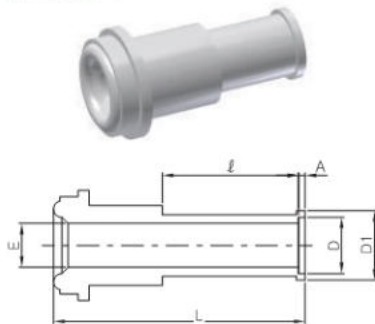
SGA



Part No.	Tube Size (D)		Head Size (in.)	D1 (mm)	E (mm)	A (mm)	L (mm)	ℓ (mm)
	in.	mm						
UD-SGA-4-635	1/4	6.35	1/4	7.4	4.6	0.5	15.7	6.35
UD-SGA-4-190							28.4	19.05
UD-SGA-6-635	3/8	9.53	1/2	10.4	7.9	0.8	16.6	6.35
UD-SGA-6-190							29.2	19.05
UD-SGA-8-635	1/2	12.7	1/2	14.0	10.2	1.0	16.8	6.35
UD-SGA-8-190							29.5	19.05

Auto Butt Weld Long Gland

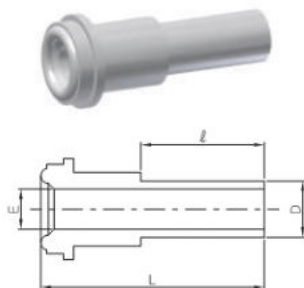
LGA



Part No.	Head Size (in.)	Tube Size (D)		D1 (mm)	E (mm)	A (mm)	L (mm)	ℓ (mm)
		in.	mm					
UD-LGA-4-190	1/4	1/4	6.35	7.4	4.6	0.5	43.7	19.05
UD-LGA-8X4-190							46.2	
UD-LGA-6-190	1/2	3/8	9.53	10.4	7.9	0.8	46.5	
UD-LGA-8-190							1/2	
UD-LGA-12-190	3/4	3/4	19.05	20.3	16.5	1.0	52.6	
UD-LGA-16-244	1	1	25.4	26.9	22.1	1.0	65.3	

Male Gland

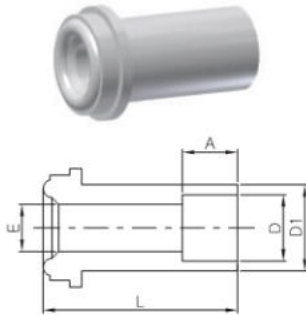
GM



Part No.	Head Size (in.)	Tube Size (D)		E (mm)	L (mm)	ℓ (mm)
		in.	mm			
UD-GM-2	1/8	1/8	3.17	1.5	17.8	7.1
UD-GM-4X2	1/4				33.3	
UD-GM-4		1/4	6.35	3.0		
UD-GM-6	1/2	3/8	9.53	7.1	38.1	12.7
UD-GM-8		1/2	12.7	10.2		
UD-GM-8X4		1/4	6.35	3.0		
UD-GM-12	3/4	3/4	19.05	13.5	50.8	15.7
UD-GM-16	1	1	25.4	19.1	56.4	20.6

Socket Weld Long Gland

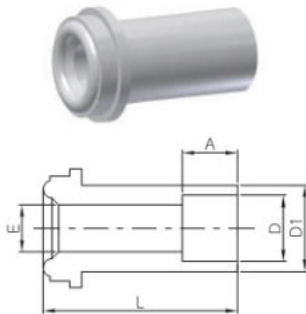
GSL



Part No.	Tube Size (D)		Head Size (in.)	D1 (mm)	E (mm)	L (mm)	A (mm)
	in.	mm					
UD-GSL-2	1/8	3.17	1/8	5.1	2.3	17.8	2.5
UD-GSL-4	1/4	6.35	1/4	8.9	4.6	33.3	7.1
UD-GSL-6	3/8	9.53	1/2	15.2	7.1	38.1	7.9
UD-GSL-8	1/2	12.7			10.2		9.6
UD-GSL-12	3/4	19.05	3/4	22.4	15.7	50.8	11.2
UD-GSL-16	1	25.4	1	30.2	22.1	56.4	15.7

Socket Weld Reducing Long Gland

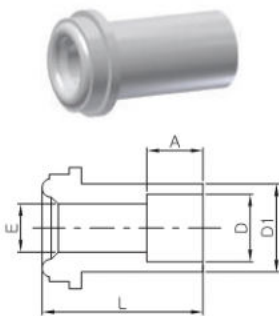
GSR



Part No.	Head Size (in.)	Tube Size (D)		D1 (mm)	E (mm)	L (mm)	A (mm)
		in.	mm				
UD-GSR-4X2	1/4	1/8	3.17	8.9	2.3	33.3	2.5
UD-GSR-8X4	1/2	1/4	6.35	15.2	4.6	38.1	7.1

Socket Weld Short Gland

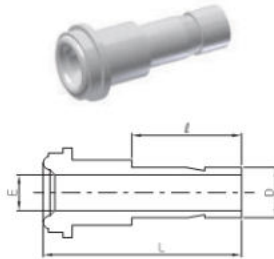
GSS



Part No.	Tube Size (D)		Head Size (in.)	D1 (mm)	E (mm)	L (mm)	A (mm)
	in.	mm					
UD-GSS-4	1/4	6.35	1/4	8.9	4.6	12.7	7.1
UD-GSS-4-191						19.1	

Tube Adapter Gland

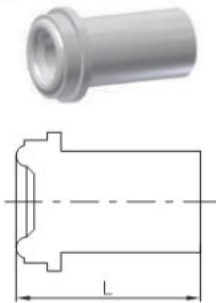
GT



Part No.	Tube Size (D)		Head Size (in.)	E (mm)	L (mm)	l (mm)
	in.	mm				
UD-GT-4	1/4	6.35	1/4	4.3	41.0	16.2
UD-GT-6	3/8	9.53	1/2	6.8	46.0	17.8
UD-GT-8	1/2	12.7		9.4	49.3	24.4

Blind Gland

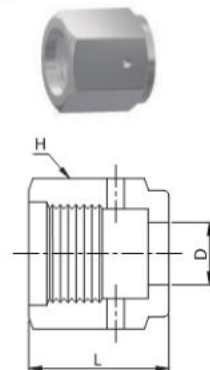
BG



Part No.	Tube Size (D)		Head Size (in.)	L (mm)
	in.	mm		
UD-BG-2	1/8	3.17	1/8	17.8
UD-BG-4	1/4	6.35	1/4	33.3
UD-BG-8	1/2	12.7	1/2	38.1
UD-BG-12	3/4	19.05	3/4	50.8
UD-BG-16	1	25.4	1	56.4

Female Nut

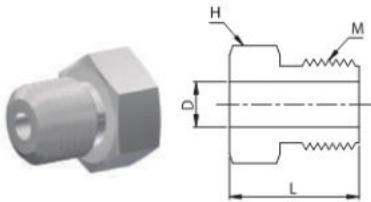
FN



Part No.	Size (in.)	L (mm)	D (mm)	H Hex (mm)
U-FN-2	1/8	13.5	5.3	11.11
U-FN-4	1/4	20.6	9.1	19.05
U-FN-8	1/2	22.4	15.5	26.99
U-FN-12	3/4	28.4	22.6	38.1
U-FN-16	1	34.0	30.5	44.45

Male Nut

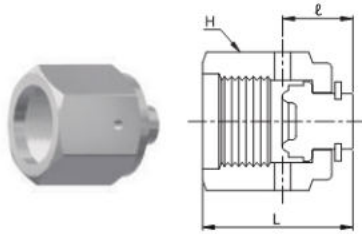
MN



Part No.	Size (in.)	L (mm)	D (mm)	H Hex (mm)	M
U-MN-2	1/8	12.7	5.3	9.52	5/16-24 UNF
U-MN-4	1/4	18.0	9.1	15.88	9/16-18 UNF
U-MN-8	1/2	20.6	15.5	23.81	7/8-14 UNF
U-MN-12	3/4	25.4	22.6	33.34	1 1/4-18 UNEF
U-MN-16	1	30.2	30.5	41.28	1 1/2-20 UN

Cap

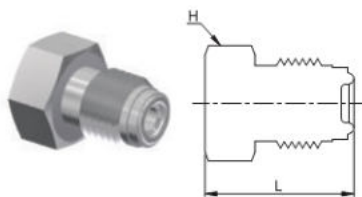
CP



Part No.	Size (in.)	L (mm)	ℓ (mm)	H Hex (mm)
U-CP-2	1/8	16.0	7.6	11.11
U-CP-4	1/4	23.9	11.2	19.05
U-CP-8	1/2	25.6	11.4	26.99
U-CP-12	3/4	32.8	13.7	38.1
U-CP-16	1	39.1	16.0	44.45

Plug

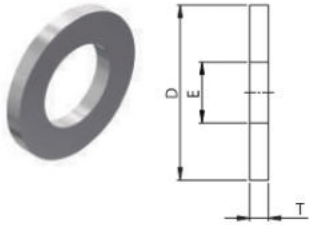
PG



Part No.	Size (in.)	L (mm)	H Hex (mm)
U-PG-2	1/8	17.3	9.52
U-PG-4	1/4	23.4	15.88
U-PG-8	1/2	27.4	23.81
U-PG-12	3/4	36.3	33.34
U-PG-16	1	38.6	41.28

Gasket

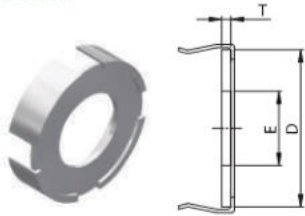
GK



Part No.	Size (in.)	T (mm)	D (mm)	E (mm)
U-GK-2	1/8	0.7	6.6	2.3
U-GK-4	1/4	0.7	12.7	5.6
U-GK-8	1/2	0.7	19.8	11.2
U-GK-12	3/4	0.7	29.0	16.7
U-GK-16	1	0.7	35.8	22.6

Gasket Retainer

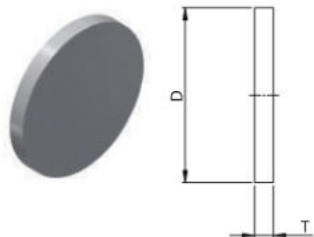
GKT



Part No.	Size (in.)	T (mm)	D (mm)	E (mm)
U-GKT-4	1/4	0.7	11.85	5.6
U-GKT-8	1/2	0.7	19.27	11.2
U-GKT-12	3/4	0.7	27.9	16.7
U-GKT-16	1	0.7	34.2	22.6

Gasket Blind

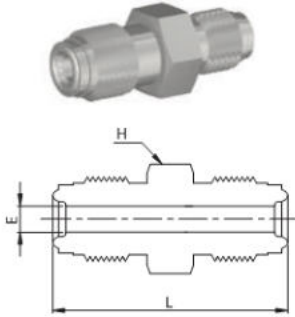
GKB



Part No.	Size (in.)	T (mm)	D (mm)
U-GKB-2	1/8	0.7	6.6
U-GKB-4	1/4	0.7	12.7
U-GKB-8	1/2	0.7	19.8
U-GKB-12	3/4	0.7	29.0
U-GKB-16	1	0.7	35.8

Double Male Union

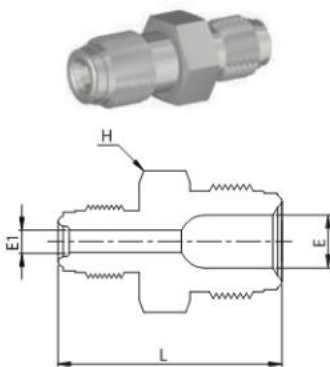
MU



Part No.	Head Size (in.)	L (mm)	E (mm)	H Hex (mm)
UD-MU-2	1/8	28.7	2.3	9.52
UD-MU-4	1/4	39.4	4.35	15.88
UD-MU-8	1/2	46.7	10.2	23.81
UD-MU-12	3/4	62.0	15.7	33.34
UD-MU-16	1	65.8	22.1	41.28

Double Male Reducing Union

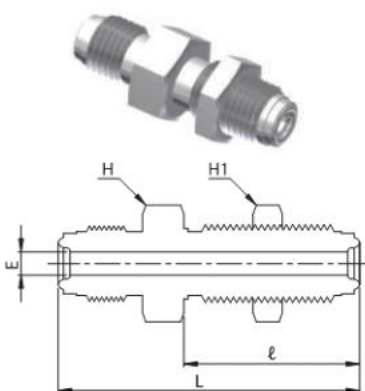
MRU



Part No.	Head Size (in.)	Head Size (in.)	L (mm)	E (mm)	E1 (mm)	H Hex (mm)
UD-MRU-4x2	1/4	1/8	34.8	4.35	2.3	15.88
UD-MRU-8x4	1/2	1/4	43.4	10.2	4.35	23.81

Bulkhead Union

BHU

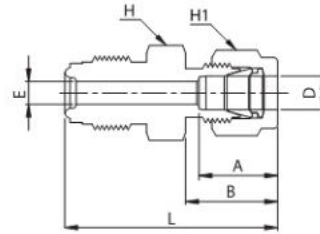


Part No.	Head Size (in.)	L (mm)	ℓ (mm)	E (mm)	H Hex (mm)	H1 Hex (mm)
UD-BHU-4	1/4	56.6	33.0	4.35	19.05	15.88
UD-BHU-8	1/2	65.3	37.6	10.2	26.9	23.81
UD-BHU-12	3/4	79.0	43.4	15.7	38.1	33.34
UD-BHU-16	1	86.0	47.1	22.1	44.4	41.28

Metal Gasket Face-Seal Fittings

Tube Fitting Connector

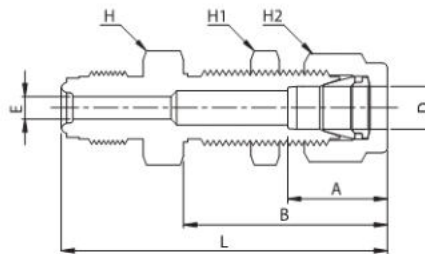
DC



Part No.	Head Size (in.)	Tube Size (D)	L (mm)	B (mm)	A (mm)	E (mm)	H Hex (mm)	H1 Hex (mm)
UD-DC-4X2	1/4	1/8	38.9	15.2	12.7	2.3	15.88	11.11
UD-DC-4	1/4	1/4	41.1	17.8	15.2	4.35	15.88	14.28
UD-DC-8X6	1/2	3/8	46.7	19.3	16.8	7.1	23.81	17.46
UD-DC-8	1/2	1/2	49.5	21.8	22.9	10.2	23.81	22.22

Tube Fitting Bulkhead Connector

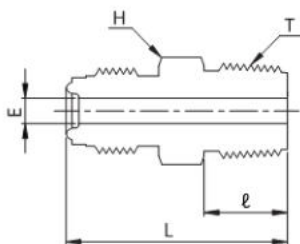
DBHC



Part No.	Head Size (in.)	Tube Size (D)	L (mm)	B (mm)	A (mm)	E (mm)	H Hex (mm)	H1 Hex (mm)	H2 Hex (mm)
UD-DBHC-4	1/4	1/4	57.2	33.5	15.2	4.6	15.88	15.88	14.28
UD-DBHC-8X6	1/2	3/8	64.5	36.8	16.8	7.1	23.81	19.05	17.46
UD-DBHC-8	1/2	1/2	69.6	41.9	22.9	10.2	23.81	23.81	22.22

Male NPT Connector

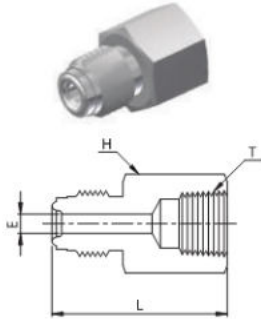
MC-N



Part No.	Head Size (in.)	Size NPT T	L (mm)	ℓ (mm)	E (mm)	H Hex (mm)
UD-MC4-2N	1/4	1/8	33.3	9.6	4.35	15.88
UD-MC4-4N	1/4	1/4	37.8	14.2	4.35	15.88
UD-MC8-4N	1/2	1/4	41.9	14.2	7.1	23.81
UD-MC8-6N	1/2	3/8	41.9	14.2	9.6	23.81
UD-MC8-8N	1/2	1/2	46.7	19.1	10.2	23.81
UD-MC12-12N	3/4	3/4	55.6	19.1	15.7	33.34
UD-MC16-16N	1	1	62.7	23.9	22.1	41.28

Female NPT Connector

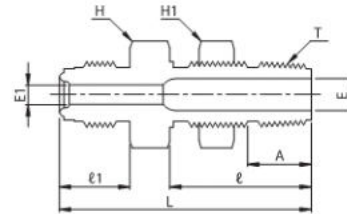
FC-N



Part No.	Head Size (in.)	Size NPT T	L (mm)	E (mm)	H Hex (mm)
UD-FC4-2N	1/4	1/8	35.8	4.35	15.88
UD-FC4-4N	1/4	1/4	39.1	4.35	19.05
UD-FC8-6N	1/2	3/8	44.7	10.2	23.81
UD-FC8-8N	1/2	1/2	50.5	10.2	26.98
UD-FC12-12N	3/4	3/4	59.9	15.7	33.34
UD-FC16-16N	1	1	63.8	22.1	41.28

Bulkhead Male NPT Connector

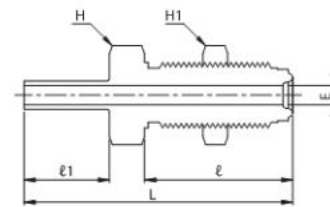
BHMC-N



Part No.	Head Size (in.)	Size NPT T	L (mm)	l1 (mm)	A (mm)	E (mm)	E1 (mm)	l (mm)	H Hex (mm)	H1 Hex (mm)
UD-BHMC4-4N	1/4	1/4	56.1	15.7	14.2	7.1	4.35	31.5	20.63	20.63
UD-BHMC8-4N	1/2	1/4	59.4	19.05	14.2	7.1	10.2	31.5	23.81	20.63

Tube Butt Weld Bulkhead Connector

BHTW

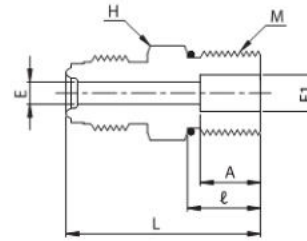


Part No.	Head Size (in.)	Tube Size (D)	L (mm)	l (mm)	l1 (mm)	E (mm)	H Hex (mm)	H1 Hex (mm)
UD-BHTW-4	1/4	6.35	59.85	33.0	19.05	4.35	19.05	15.88
UD-BHTW-8	1/2	12.7	65.25	37.6	19.05	10.2	26.9	23.81
UD-BHTW-12	3/4	19.05	71.30	43.25	19.05	15.7	38.1	33.34

Metal Gasket Face-Seal Fittings

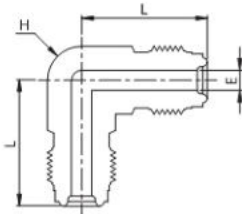
Straight Thread O-Ring Seal Male Connector

MC-UO



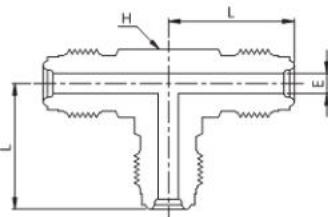
Part No.	Head Size (in.)	L (mm)	ℓ (mm)	A (mm)	E (mm)	E1 (mm)	H Hex (mm)	M
UD-MC4-6U	1/4	33.8	9.9	6.4	4.35	7.1	19.05	9/16-18 UNF
UD-MC8-6U	1/2	37.6	9.9	-	7.1	7.1	23.81	9/16-18 UNF
UD-MC8-10U	1/2	42.2	12.7	10.2	7.1	15	25.4	7/8-14 UNF

Union Elbow



Part No.	Head Size (in.)	L (mm)	E (mm)	H Hex (mm)
UD-L-4	1/4	27.2	4.35	12.7
UD-L-8	1/2	36.8	10.2	20.63
UD-L-12	3/4	48.8	15.7	31.75
UD-L-16	1	50.8	22.1	42.86

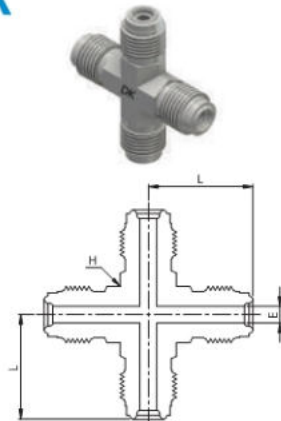
Union Tee



Part No.	Head Size (in.)	L (mm)	E (mm)	H Hex (mm)
UD-T-4	1/4	27.2	4.35	12.7
UD-T-8	1/2	36.8	10.2	20.63
UD-T-12	3/4	48.8	15.7	31.75
UD-T-16	1	50.8	22.1	42.86

Union Cross Tee

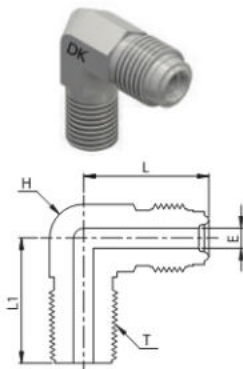
X



Part No.	Head Size (in.)	L (mm)	E (mm)	H Hex (mm)
UD-X-4	1/4	27.2	4.35	12.7
UD-X-8	1/2	36.8	10.2	20.63
UD-X-12	3/4	48.8	15.7	31.75
UD-X-16	1	50.8	22.1	42.86

Male NPT Elbow

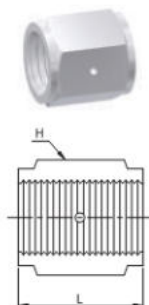
ML-N



Part No.	Head Size (in.)	Size NPT T	L (mm)	L1 (mm)	E (mm)	H Hex (mm)
UD-ML4-2N	1/4	1/8	27.2	22.1	4.35	12.7
UD-ML4-4N	1/4	1/4	27.2	26.7	4.35	12.7
UD-ML8-6N	1/2	3/8	36.8	32.0	10.2	20.63
UD-ML8-8N	1/2	1/2	36.8	36.8	10.2	20.63

Coupling

C

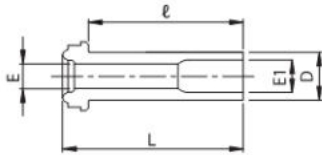


Part No.	Size (in.)	L (mm)	H Hex (mm)
U-C-2	1/8	16.8	11.11
U-C-4	1/4	30.2	19.05
U-C-8	1/2	33.3	26.99
U-C-12	3/4	42.7	38.1
U-C-16	1	51.8	44.45

High Flow Fittings

High Flow Gland

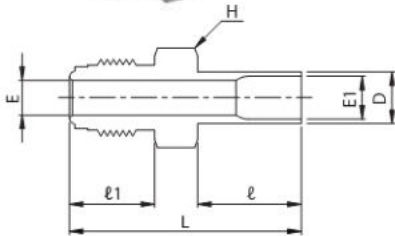
HG



Part No.	Head Size (in.)	Tube Size (D)	E1 (mm)	E (mm)	L (mm)	l (mm)
U-HG-4X6	1/4	3/8	7.9	6.4	33.3	28.4

High Flow Reducer

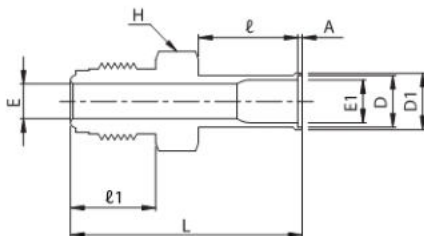
HR



Part No.	Head Size (in.)	Tube Size (D)	L (mm)	l (mm)	l1 (mm)	E (mm)	E1 (mm)	H Hex (mm)
U-HR-4X6	1/4	3/8	42.7	19.1	15.7	6.4	7.9	15.87

Auto Butt Weld High Flow Reducer

HRA



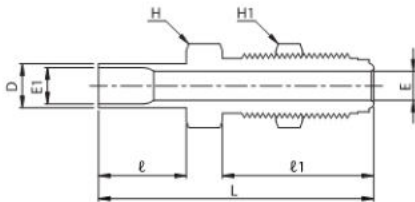
Part No.	Head Size (in.)	Tube Size (D)	L (mm)	l (mm)	l1 (mm)	A (mm)	E (mm)	E1 (mm)	D1 (mm)	H Hex (mm)
U-HRA-4X6	1/4	3/8	43.4	19.1	15.7	0.8	6.4	7.9	10.4	15.87

High Flow Bulkhead Reducer

HBR



Part No.	Head Size (in.)	Tube Size (D)	L (mm)	ℓ (mm)	ℓ1 (mm)	E (mm)	E1 (mm)	H Hex (mm)	H1 Hex (mm)
U-HBR-4X6	1/4	3/8	59.9	19.1	33.0	6.4	7.9	19.05	19.05

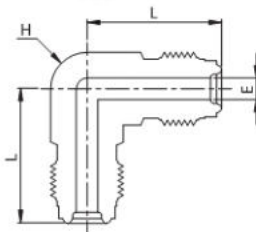


High Flow Union Elbow

HL



Part No.	Head Size (in.)	L (mm)	E (mm)	H Hex (mm)
U-HL-4	1/4	27.2	6.4	12.7

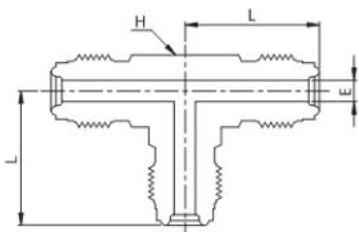


High Flow Union Tee

HT

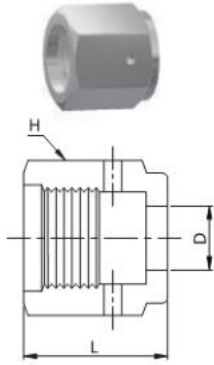


Part No.	Head Size (in.)	L (mm)	E (mm)	H Hex (mm)
U-HT-4	1/4	27.2	6.4	12.7



High Flow Female Nut

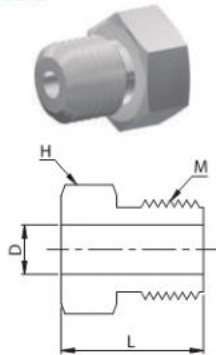
HFN



Part No.	Head Size (in.)	L (mm)	D (mm)	H Hex (mm)
U-HFN-4	1/4	20.6	9.9	19.05

High Flow Male Nut

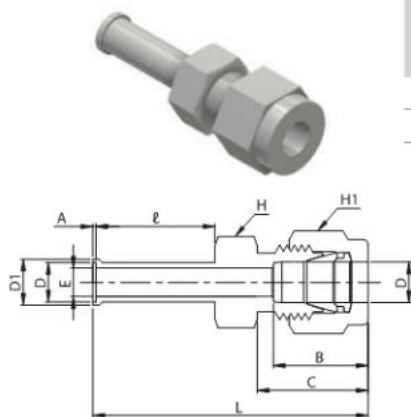
HMN



Part No.	Head Size (in.)	L (mm)	D (mm)	H Hex (mm)	M
U-HMN-4	1/4	18.0	9.9	15.87	9/16-18 UNF

Tube Fitting to Auto Butt Weld Connector

DATW

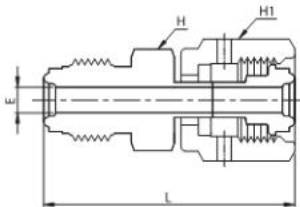


Part No.	Head Size (in.)	Tube Size (D)	D1 (mm)	L (mm)	ℓ (mm)	A (mm)	B (mm)	C (mm)	E (mm)	H Hex (mm)	H1 Hex (mm)
U-DATW-4X4	1/4	1/4	7.4	44.2	19.1	0.5	15.2	17.8	4.6	12.7	14.28
U-DATW-6X6	3/8	3/8	10.4	46.7	19.1	0.5	16.8	19.3	7.9	15.87	17.46

Welded Assembly Fittings

Swivel Female / Male Union

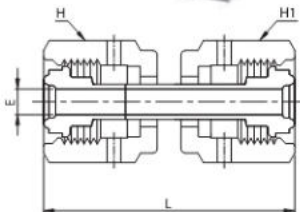
SFMU



Part No.	Head Size (in.)	L (mm)	E (mm)	H Hex (mm)	H1 Hex (mm)
U-SFMU-4	1/4	45.3	4.6	15.87	19.05

Swivel Female Union

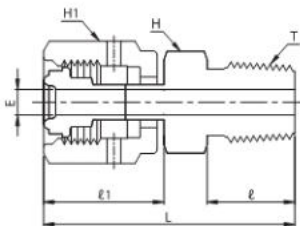
SFU



Part No.	Head Size (in.)	L (mm)	E (mm)	H Hex (mm)	H1 Hex (mm)
U-SFU-4	1/4	43.4	4.6	19.05	19.05
U-SFU-8	1/2	46.7	10.2	26.99	26.99

Swivel Male NPT Connector

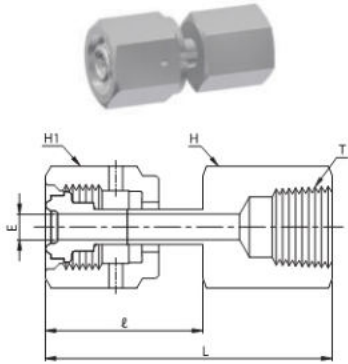
SMC-N



Part No.	Head Size (in.)	Size NPT T	L (mm)	l (mm)	l1 (mm)	E (mm)	H Hex (mm)	H1 Hex (mm)
U-SMC4-2N	1/4	1/8	40.1	9.6	24.1	4.6	11.11	19.05
U-SMC4-4N	1/4	1/4	45.5	14.2	23.4	4.6	14.28	19.05
U-SMC8-6N	1/2	3/8	48.0	14.2	25.4	10.2	17.46	26.99
U-SMC8-8N	1/2	1/2	53.1	19.1	25.6	10.2	22.22	26.99

Swivel Female NPT Connector

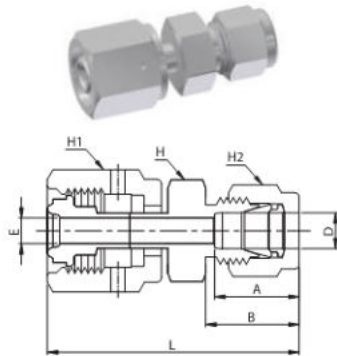
SFC-N



Part No.	Head Size (in.)	Size NPT T	L (mm)	l (mm)	E (mm)	H Hex (mm)	H1 Hex (mm)
U-SFC4-4N	1/4	1/4	45.0	23.4	4.6	19.05	19.05
U-SFC8-6N	1/2	3/8	49.5	26.9	10.2	22.22	26.99
U-SFC8-8N	1/2	1/2	55.4	26.4	10.2	26.99	26.99

Swivel Tube Fitting Connector

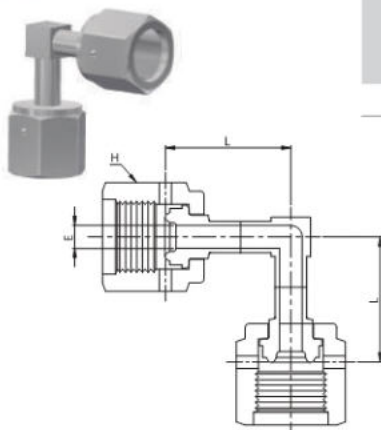
SDC-N



Part No.	Head Size (in.)	Tube Size (D)	L (mm)	A (mm)	B (mm)	E (mm)	H Hex (mm)	H1 Hex (mm)	H2 Hex (mm)
U-SDC-4	1/4	1/4	49.3	15.2	17.8	4.6	12.7	19.05	14.28

Swivel Elbow

SL



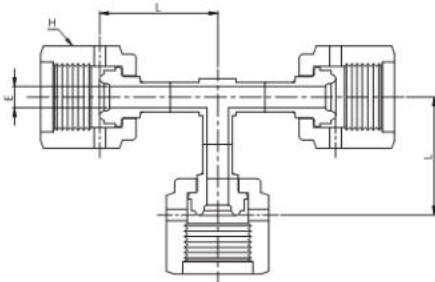
Part No.	Head Size (in.)	L (mm)	E (mm)	H Hex (mm)
U-SL-4	1/4	25.4	4.6	19.05

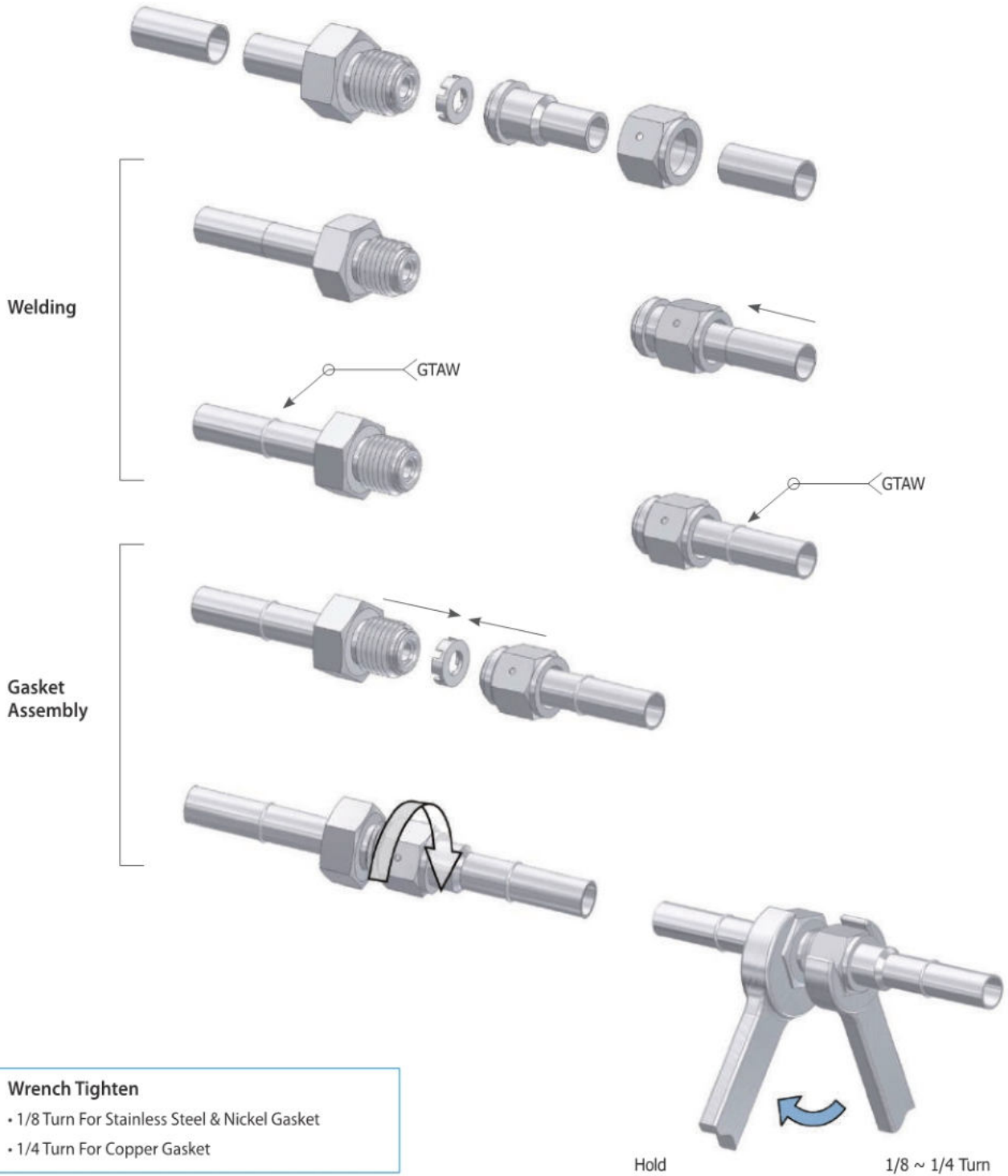
Swivel Tee

ST



Part No.	Head Size (in.)	L (mm)	E (mm)	H Hex (mm)
U-ST-4	1/4	25.4	4.6	19.05





DK-LOK

Fittings & Valves

DK-Lok Tube & Pipe Fittings

No.10-02
February 2019



Tube & Pipe Fittings


90° Elbow(Long / Short)
EB / SEB  **07**

45° Long Elbow
HEB  **07**

Equal Tee(Standard / Short)
ETB / STB  **08**


Cap
CPB  **08**

Reducer(Con / Ecc)
RCB / REB  **09**

Joint Reducer(Male / Female)
JRM / JRF  **09**

Cap Reducer
RCB  **10**

Reducing Tee
RTB  **11**

Joint Tee(Male / Female)
JTM / JTF  **12**

Joint Cap(Male / Female)
JCM / JCF  **12**

Multi-Header Tee
MHT  **13**

Multi-Header Joint Tee
MJT  **13**

Flange Connection

Lap Joint
LAJ  **14**

Pipe Flange
PF  **14**

JIS RF Flange / JIS Blind Flange
RFF / BLF  **15**

Teflon Gasket
TG  **15**

Coaxial Fittings

Coaxial 90° Elbow
CLE  **16**

Coaxial 45° Elbow
CHE  **16**

Coaxial Equal Tee
CET  **16**

Coaxial Reducing Tee
CRT  **17**

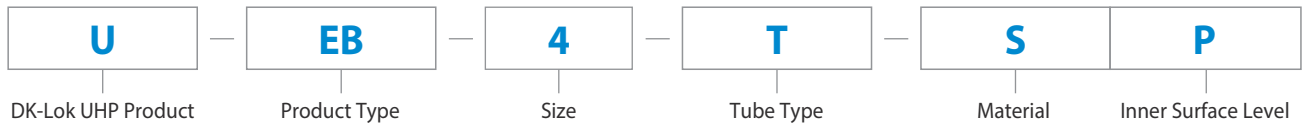
Coaxial Sleeve
CSL  **17**

Coaxial Reducer
CRC  **18**

Coaxial Terminator
CTR  **18**

Ordering Information

DK-Lok Tube & Pipe Fittings are ordered by product code shown bellow.



	U-EB16T-SB	U-RTB50AX8T-SAP	U-SEB50A-SP
Material	SUS316L	SUS316L	SUS316L
Size	1"	50A x 1/2"	50A
Tube Type	Tube	Pipe x Tube	Pipe
Product	90° Long Elbow	Reducing Tee	90° Short Elbow
Inner Surface Level	BA	AP	EP

Material		Size		Tube Type		Product Type		Inner Surface Level	
S	SUS316L	4	1/4"	T	Tube	EB	90° Long Elbow	AP	AP
4S	SUS304	6	3/8"	P	Pipe	SEB	90° Short Elbow	MP	MP
		8	1/2"			HEB	45° Long Elbow	B	BA
		10	5/8"			ETB	Equal Tee	P	EP
		12	3/4"			STB	Equal Short Tee		
		16	1"			RTB	Reducing Tee		
		20	1 1/4"			RCB	Concentric Reducer		
		24	1 1/2"			REB	Eccentric Reducer		
		32	2"			CPB	Cap		
		40	2 1/2"			RCB	Cap Reducer		
		48	3"			JTM	Joint Tee(Male)		
		64	4"			JTF	Joint Tee(Female)		
		80	5"			JRM	Joint Reducer(Male)		
		96	6"			JRF	Joint Reducer(Female)		
		xxxA	PIPE SIZE			JCM	Joint Cap(Male)		
						JCF	Joint Cap(Female)		
						TG	Teflon Gasket		
						PF	Pipe Flange		
						RFF	JIS RF Flange		
						BLF	JIS Blind Flange		
						LAJ	Lap Joint		
						MHT	Multi-Header Tee		
						MJT	Multi-Header Joint Tee		
						CLE	Coaxial 90° Elbow		
						CHE	Coaxial 45° Elbow		
						CET	Coaxial Equal Tee		
						CRT	Coaxial Reducing Tee		
						CSL	Coaxial Sleeve		
						CRC	Coaxial Reducer		
						CTR	Coaxial Terminator		

Tube & Pipe Size

Pipe Size (A Size)

(Unit = mm)

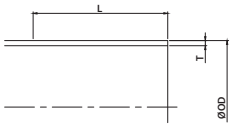
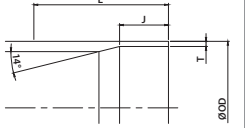
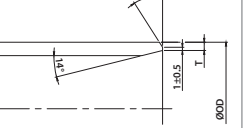
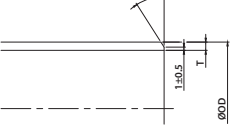
Normal Pipe	Ouside Diameter at End	Wall Thickness at End		Straight End Length	Thinning Length	
	O.D (O.D1, O.D2)	T		L	J	
		5S	10S		5S	10S
8A	13.8	1.2	1.65	29.0	4.0	7.0
10A	17.3	1.2	1.65	36.0	4.0	7.0
15A	21.7	1.65	2.1	36.0	5.0	7.0
20A	27.2	1.65	2.1	36.0	5.0	7.0
25A	34.0	1.65	2.8	36.0	5.0	7.0
32A	42.7	1.65	2.8	46.0	5.0	7.0
40A	48.6	1.65	2.8	46.0	5.0	7.0
50A	60.5	1.65	2.8	46.0	5.0	7.0
65A	76.3	2.1	3.0	51.0	6.0	11.0
80A	89.1	2.1	3.0	51.0	6.0	11.0
100A	114.3	2.1	3.0	51.0	6.0	11.0
125A	139.8	2.8	3.4	-	7.0	-
150A	165.2	2.8	3.4	-	7.0	-
200A	216.3	2.8	4.0	-	7.0	-
250A	267.4	3.4	4.0	-	-	-
300A	318.5	4.0	4.5	-	-	-
350A	355.6	4.0	4.8	-	-	-
400A	406.4	4.2	4.8	-	-	-
450A	457.2	4.2	4.8	-	-	-
500A	508.0	4.8	5.5	-	-	-
550A	558.8	4.8	5.5	-	-	-
600A	609.6	5.5	6.4	-	-	-

Tube Size (Inch Size)

(Unit = mm)

Normal Pipe	Ouside Diameter at End	Wall Thickness at End	Straight End Length	Thinning Length
	O.D (O.D1, O.D2)	T (T1, T2)	L	J
1/8"	3.18	0.7	29.0	7.0
1/4"	6.35	1.0(0.89)	29.0	7.0
3/8"	9.53	1.0(0.89)	29.0	7.0
1/2"	12.7	1.0, 1.24(1.65)	29.0	7.0
5/8"	15.88	1.0(1.24)	36.0	7.0
3/4"	19.05	1.65(1.24)	36.0	7.0
1"	25.4	1.65(1.24)	36.0	7.0
1 1/4"	31.8	1.65	36.0	7.0
1 1/2"	38.1	1.65	46.0	7.0
2"	50.8	1.65	46.0	7.0
2 1/2"	63.5	1.65	51.0	7.0
3"	76.2	1.65	51.0	11.0
4"	101.6	2.11	51.0	11.0
5"	127.0	2.77, 3.05	56.0	11.0
6"	152.4	2.77, 3.05	56.0	11.0

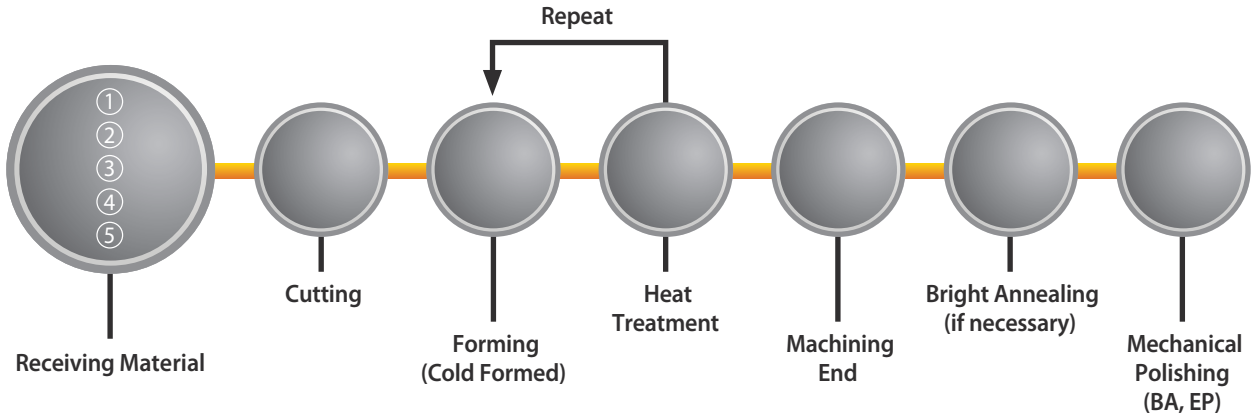
Weld Bevel End Manufacture Form

Type \ Form	Automatic Welding		Manual Welding	
				
Elbow (Long/Short)	8A~100A	-	125A~600A	-
Equal Tee (Long/Short)	8A~65A	80A~100A	125A~600A	-
Reducing Tee	8A~100A	-	-	125A~600A
Cap	-	15A~100A	125A~600A	-
Cap Reducer	15A~32A	40A~100A	125A~600A	-
Concentric Reducer	15A~100A	-	125A~600A	-
Eccentric Reducer	15A~100A	-	125A~600A	-

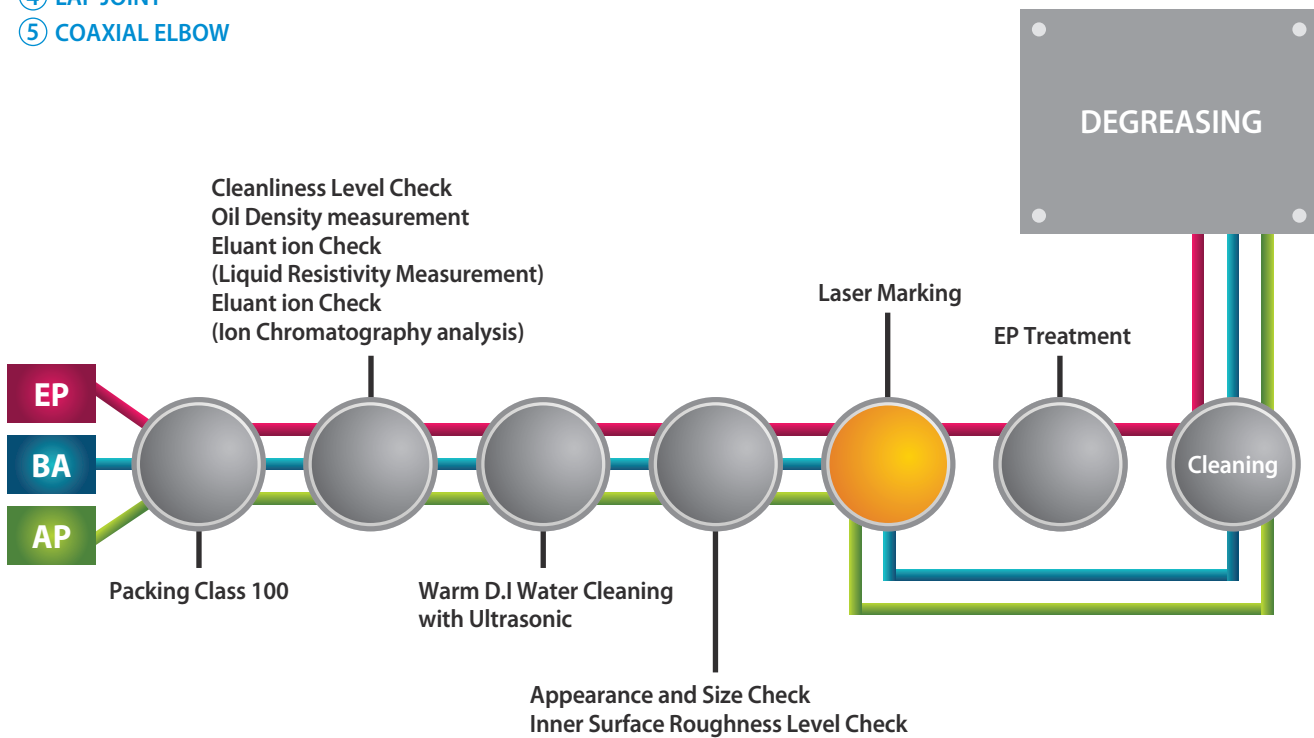
Dimensional Tolerance

Item	Products	Normal Pipe Size				
		1/8"~3/8"	8A~10A 1/2"~3/4"	15A~65A 1"~3"	80A~200A 4"~6"	250A~300A
Pipe Fittings Header Joint-Header Multi-Tee	Outside Diameter at End	± 0.1mm	± 1%			
	Wall Thickness at End	Either Bigger ± 0.2mm or ± 20%				
	Straight End Length	+ Not Specified -0.4mm				
	Thinning Length	+ Not Specified -0				
Elbow, 45° Elbow	Bend Radius	± 0.8mm		± 1.6mm		± 3.2mm
Elbow, 45° Elbow Tee, Joint-Tee Multi-Header Tee Joint-Header, Multi-Tee	Center to End	± 0.8mm		± 1.6mm		± 3.2mm
Lap Joint Pipe Flange	Length	± 0.8mm		± 1.6mm		± 3.2mm
Cap	Back to End	± 0.8mm		± 3.2mm		
Reducer, Cap Reducer Joint Reducer, Joint Cap Outside-Diameter-Changeable Fitting Wall-Thickness-Changeable Fitting	Over All Length	± 0.8mm		± 1.6mm		± 3.2mm
Lap Joint	Thickness of Lap		10A	+ 1.6mm		
				- 0		
Lap Joint	Diameter of Lap		10A	+ 0mm	+ 0mm	
				- 0.8	- 1.6	
Header	Length of End	± 1.6mm				
Joint-Header	Branch Pitch	± 1.6mm			± 3.2mm	
Multi-Tee	Total Length	+ 5mm				
		- 0				

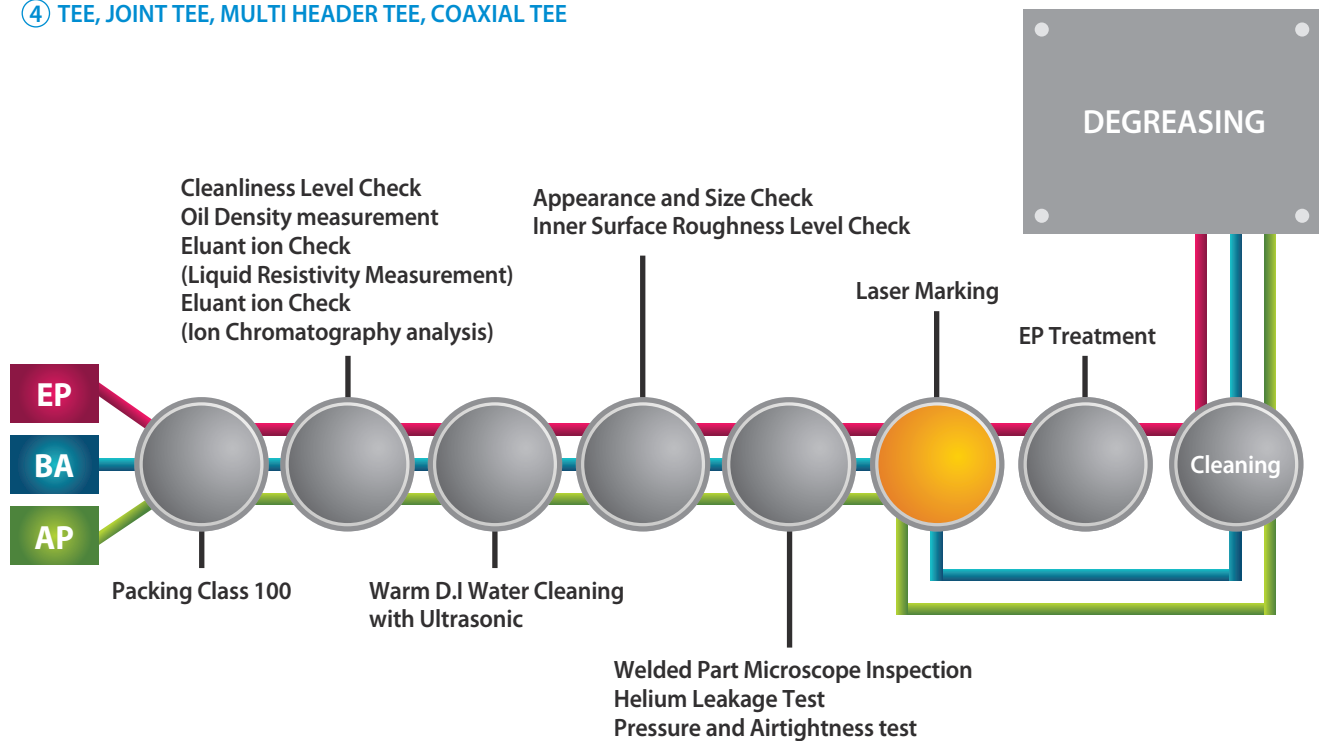
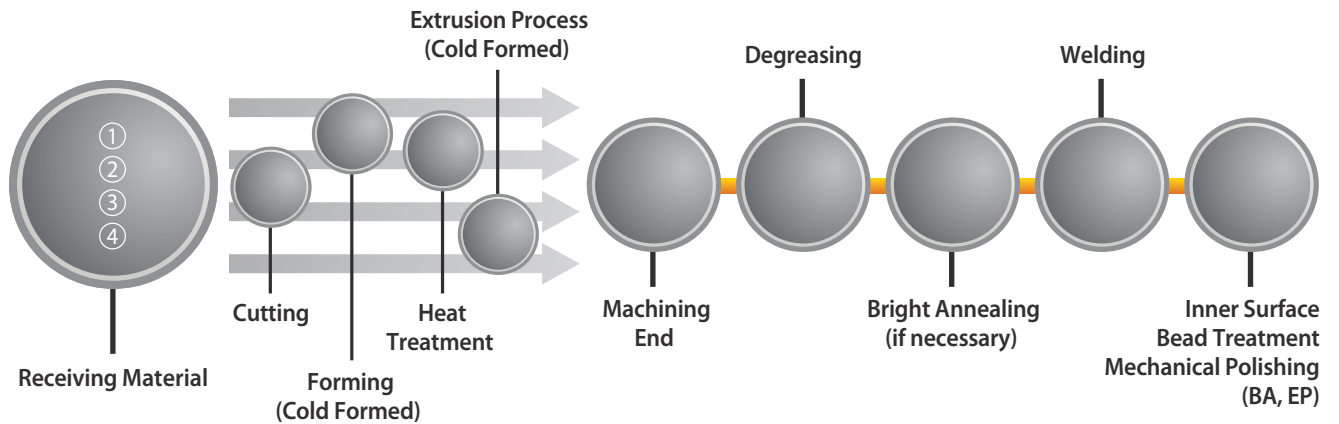
Production Process



- ① ELBOW
- ② CAP
- ③ REDUCER
- ④ LAP JOINT
- ⑤ COAXIAL ELBOW



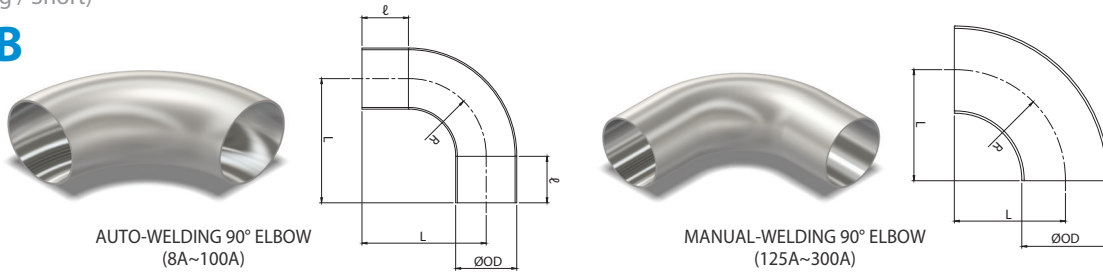
Production Process



Tube & Pipe Fittings

90° Elbow(Long / Short)

EB / SEB



LONG RADIUS

(Unit = mm)

Pipe Size (A Size)														
O.D	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A
R	38.1	38.1	38.1	47.6	57.2	76.2	63.5	76.2	101.6	190.5	228.6	304.8	381.0	457.2
L	75.0	75.0	75.0	94.0	104.0	123.0	147.0	166.0	204.0	-	-	-	-	-
ℓ	36.0	36.0	36.0	46.0	46.0	46.0	51.0	51.0	51.0	-	-	-	-	-

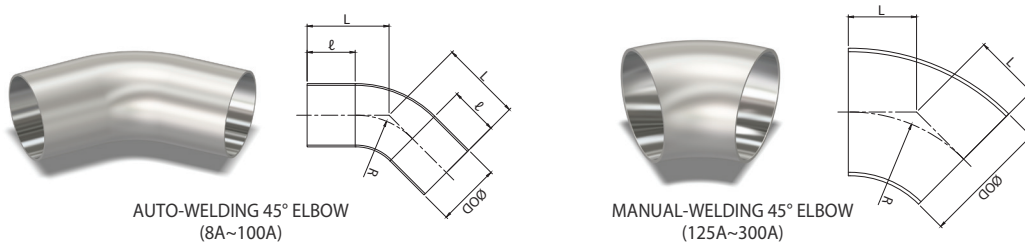
Tube Size (Inch Size)												
O.D	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"
R	25.0	28.0	30.0	33.0	47.6	57.2	76.2	95.3	95.3	133.4	190.5	228.6
L	54.0	64.0	66.0	69.0	84.0	104.0	123.0	147.0	147.0	185.0	250.0	290.0
ℓ	29.0	36.0	36.0	36.0	36.0	46.0	46.0	51.0	51.0	51.0	56.0	56.0

SHORT RADIUS

Pipe Size (A Size)														
O.D	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A
R	12.7	19.1	25.4	31.8	31.8	50.8	63.5	76.2	101.6	127.0	152.4	2030.2	254.0	304.8
L	49.0	756.0	62.0	78.0	85.0	97.0	115.0	128.0	153.0	-	-	-	-	-
ℓ	29.0	36.0	36.0	36.0	36.0	46.0	46.0	51.0	51.0	-	-	-	-	-

45° Long Elbow

HEB



LONG RADIUS

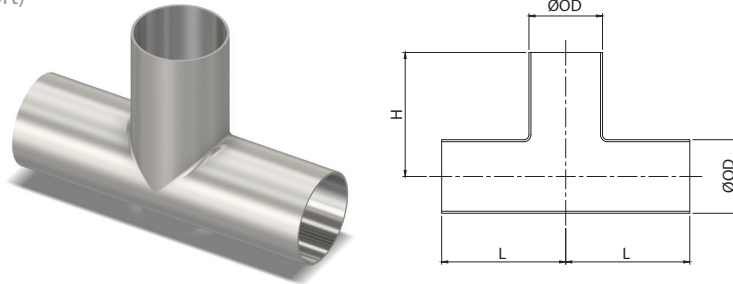
(Unit = mm)

Pipe Size (A Size)														
O.D	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A
R	38.1	38.1	38.1	47.6	57.2	76.2	95.3	114.3	152.4	190.5	228.6	304.8	381.0	457.2
L	52.0	52.0	75.0	66.0	70.0	78.0	91.0	99.0	115.0	78.9	94.7	126.2	157.8	189.4
ℓ	36.0	36.0	36.0	46.0	46.0	46.0	51.0	51.0	51.0	-	-	-	-	-

Tube Size (Inch Size)												
O.D	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"
R	25.0	28.0	30.0	33.0	47.6	57.2	76.2	95.3	95.3	133.4	190.5	228.6
L	40.0	48.0	496.0	50.0	856.0	70.0	78.0	91.0	91.0	107.0	140.0	155.0
ℓ	29.0	36.0	36.0	36.0	36.0	46.0	46.0	51.0	51.0	51.0	56.0	56.0

Equal Tee(Standard / Short)

ETB / STB



STANDARD TEE

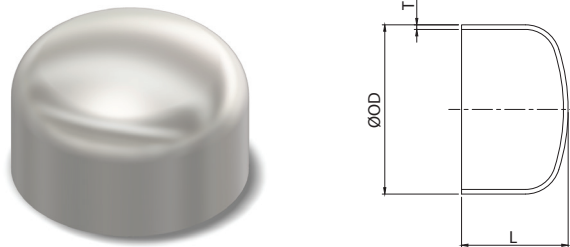
(Unit = mm)

Pipe Size (A Size)														
O.D	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A
L	59.0	65.0	68.0	88.0	95.0	102.0	121.0	130.0	145.0	124.0	143.0	178.0	216.0	254.0
H	59.0	65.0	68.0	88.0	95.0	102.0	121.0	130.0	145.0					
Tube Size (Inch Size)														
O.D	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"		
L	39.0	49.0	52.0	55.0	59.0	74.0	77.0	90.0	121.0	132.0	140.0	160.0		
H	39.0	49.0	52.0	55.0	59.0	74.0	77.0	90.0	121.0	132.0	140.0	160.0		

SHORT TEE

Pipe Size (A Size)									
O.D	15A	20A	25A	32A	40A	50A	65A	80A	100A
L	52.0	55.0	59.0	74.0	77.0	83.0	97.0	103.0	116.0
H	52.0	55.0	59.0	74.0	77.0	83.0	97.0	103.0	116.0

Cap
CPB

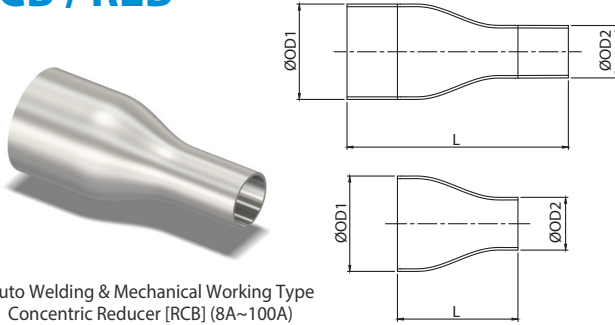


(Unit = mm)

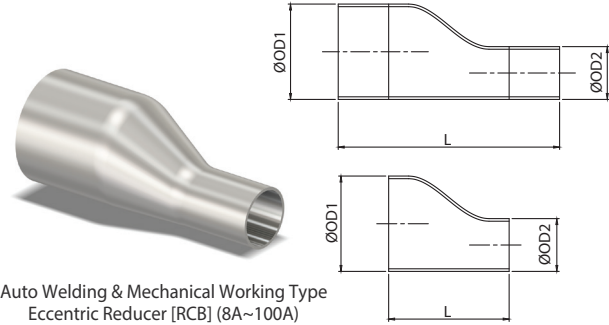
Pipe Size (A Size)														
O.D	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A
L	25.4	25.4	38.1	38.1	38.1	38.1	38.1	50.8	63.5	76.2	88.9	101.6	127.0	152.4
T	1.65	1.65	1.65	1.65	1.65	1.65	2.10	2.10	2.10	3.40	3.40	4.00	4.00	4.50
Tube Size (Inch Size)														
O.D	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"				
L	12.7	12.7	19.1	25.4	38.1	38.1	38.1	38.1	38.1	38.1				
T	1.24	1.24	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65				

Reducer(Con / Ecc)

RCB / REB



Auto Welding & Mechanical Working Type
Concentric Reducer [RCB] (8A~100A)



Auto Welding & Mechanical Working Type
Eccentric Reducer [RCB] (8A~100A)

AUTO WELDING TYPE CONENMTRIC REDUCER / ECCENTRIC REDUCER

(Unit = mm)

Pipe Size (A Size)					
O.D1	O.D2	L	O.D1	O.D2	L
20A	15A	105.0	50A	40A, 32A, 25A	140.0
25A	20A, 15A	120.0	65A	50A, 40A, 32A	165.0
32A	25A, 20A, 15A	125.0	80A	65A, 50A, 40A	170.0
40A	32A, 25A, 20A	130.0	100A	80A, 65A, 50A	180.0

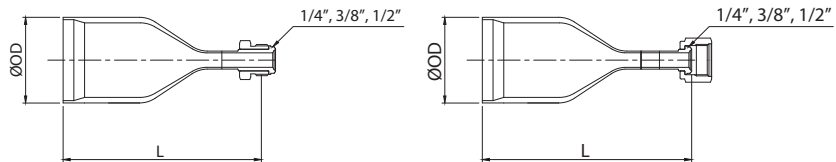
MECHANICAL WORKING TYPE CONCENTRIC REDUCER / ECCENTRIC REDUCER

(Unit = mm)

Tube Size (Inch Size)					
O.D1	O.D2	L	O.D1	O.D2	L
15A	3/4", 1/2"	100.0	32A	1 1/2", 1 1/4", 1"	125.0
20A	1", 3/4", 1/2"	105.0	40A	1 1/2", 1 1/4", 1", 3/4", 1/2", 3/8"	130.0
25A	1", 3/4", 1/2", 3/8", 1/4"	120.0	50A	2", 1 1/2", 1 1/4", 1", 3/4"	140.0

Joint Reducer(Male / Female)

JRM / JRF

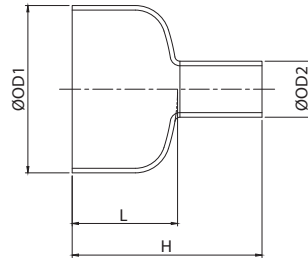


(Unit = mm)

Pipe Size (A Size)					
O.D		15A	20A	25A	
Femal	L	110.0	115.0	130.0	
Male	L	120.0	125.0	140.0	
Tube Size (Inch Size)					
O.D		1/2"	5/8"	3/4"	1"
Femal	L	85.0	100.0	110.0	115.0
Male	L	95.0	110.0	120.0	125.0

Cap Reducer

RCB



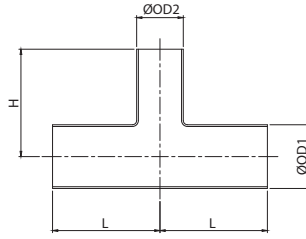
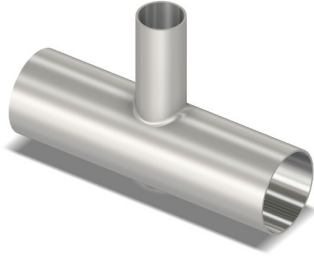
(Unit = mm)

Pipe Size (A Size)									
O.D1	O.D2	L	H	O.D1	O.D2	L	H		
15A	8A, 1/2", 3/8", 1/4"	25.4	60.0	125A	8A, 1/2", 3/8", 1/4"	76.2	120.0		
	10A, 3/4", 5/8"		(67.0)		130.0				
20A	8A, 1/2", 3/8", 1/4"	25.4	60.0		25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"		140.0		
	15A, 10A, 1", 3/4", 5/8"		67.0		(150.0)				
25A	8A, 1/2", 3/8", 1/4"	38.1	73.0		150A		8A, 1/2", 3/8", 1/4"	88.9	130.0
	20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"		(80.0)				140.0		
32A	8A, 1/2", 3/8", 1/4"	38.1	73.0	25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"		150.0			
	25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"		80.0	160.0					
40A	8A, 1/2", 3/8", 1/4"	38.1	73.0	200A	8A, 1/2", 3/8", 1/4"	101.6	140.0		
	25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"		80.0		150.0				
	32A, 1 1/2"		(90.0)		160.0				
50A	8A, 1/2", 3/8", 1/4"	38.1	73.0	250A	100A, 80A, 65A, 4", 3", 2 1/2"	127.0	170.0		
	25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"		80.0		180.0				
	40A, 32A, 2", 1 1/2"		(90.0)		190.0				
65A	8A, 1/2", 3/8", 1/4"	38.1	73.0	300A	50A, 40A, 32A	152.4	200.0		
	25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"		80.0		200.0				
	50A, 40A, 32A, 2", 1 1/2"		(90.0)		210.0				
	2 1/2"		(100.0)		220.0				
80A	8A, 1/2", 3/8", 1/4"	50.8	85.0		8A, 1/2", 3/8", 1/4"		230.0		
	25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"		92.0						
	50A, 40A, 32A, 2", 1 1/2"		102.0						
	65A, 3", 2 1/2"		(110.0)						
100A	8A, 1/2", 3/8", 1/4"	63.5	98.0						
	25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"		105.0						
	50A, 40A, 32A, 2", 1 1/2"		115.0						
	80A, 65A, 4", 3", 2 1/2"		125.0						

*125A(100A, 80A, 65A, 50A) / 150A(125A, 100A, 80A, [65A]) / 200A(150A, 125A, 100A) Bevel end at large dia. Side.

Tube Size (Inch Size)									
O.D1	O.D2	L	H	O.D1	O.D2	L	H		
3/4"	1/2", 3/8", 1/4", 8A	19.1	54.0	3"	1/2", 3/8", 1/4", 8A	38.1	73.0		
	5/8", 10A		60.0		80.0				
1"	1/2", 3/8", 1/4", 8A	25.4	60.0		1 1/4", 1", 3/4", 5/8", 25A, 20A, 15A, 10A		(90.0)		
	3/4", 5/8", 15A, 10A		67.0		(95.0)				
1 1/4"	1/2", 3/8", 1/4", 8A	38.1	73.0		4"		2 1/2"	63.5	98.0
	1", 3/4", 5/8", 20A, 15A, 10A		80.0				105.0		
1 1/2"	1/2", 3/8", 1/4", 8A	38.1	73.0	2", 1 1/2", 50A, 40A, 32A		115.0			
	1 1/4", 1", 3/4", 5/8", 25A, 20A, 15A, 10A		80.0	(125.0)					
2"	1/2", 3/8", 1/4", 8A	38.1	73.0		3", 2 1/2", 80A, 65A				
	1 1/4", 1", 3/4", 5/8", 25A, 20A, 15A, 10A		80.0						
	1 1/2", 40A, 32A		(90.0)						
2 1/2"	1/2", 3/8", 1/4", 8A	38.1	73.0						
	1 1/4", 1", 3/4", 5/8", 25A, 20A, 15A, 10A		80.0						
	2", 1 1/2", 50A, 40A, 32A		(90.0)						

Reducing Tee
RTB



(Unit = mm)

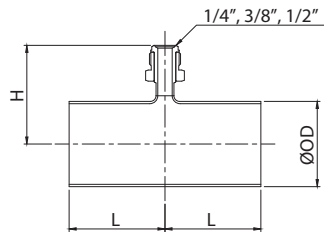
Pipe Size (A Size)							
O.D1	O.D2	L	H	O.D1	O.D2	L	H
15A	8A, 1/2", 3/8", 1/4"	47.0	44.0	125A	8A, 1/2", 3/8", 1/4"	80.0	110.0
	10A, 3/4", 5/8"	52.0	52.0		25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"	100.0	120.0
20A	8A, 1/2", 3/8", 1/4"	47.0	47.0		50A, 40A, 32A, 2", 1 1/2"	120.0	130.0
	15A, 10A, 1", 3/4", 5/8"	55.0	55.0		100A, 80A, 65A, 4", 3", 2 1/2"	140.0	140.0
25A	8A, 1/2", 3/8", 1/4"	47.0	50.0		5"	160.0	160.0
	20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"	59.0	59.0		8A, 1/2", 3/8", 1/4"	90.0	130.0
32A	8A, 1/2", 3/8", 1/4"	57.0	54.0		25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"	110.0	140.0
	25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"	68.0	62.0		50A, 40A, 32A, 2", 1 1/2"	130.0	150.0
40A	8A, 1/2", 3/8", 1/4"	57.0	57.0		100A, 80A, 65A, 4", 3", 2 1/2"	150.0	160.0
	25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"	68.0	65.0		142.9, 136.5, 5"	170.0	170.0
	32A, 1 1/2"	77.0	77.0		8A, 1/2", 3/8", 1/4"	100.0	150.0
50A	8A, 1/2", 3/8", 1/4"	57.0	63.0		25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"	120.0	160.0
	25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"	68.0	71.0	50A, 40A, 32A, 2", 1 1/2"	140.0	170.0	
	40A, 32A, 2", 1 1/2"	83.0	83.0	100A, 80A, 65A, 4", 3", 2 1/2"	160.0	180.0	
65A	8A, 1/2", 3/8", 1/4"	61.0	71.0	177.8, 168.3, 177.8, 161.9, 6", 5"	180.0	190.0	
	25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"	72.0	79.0	8A, 1/2", 3/8", 1/4"	110.0	180.0	
	50A, 40A, 32A, 2", 1 1/2"	88.0	90.0	25A, 20A, 15A, 10A, 1", 3/4"	130.0	190.0	
80A	2 1/2"	97.0	97.0	50A, 40A, 32A	150.0	200.0	
	8A, 1/2", 3/8", 1/4"	61.0	77.0	100A, 80A, 65A	170.0	210.0	
	25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"	72.0	85.0	215.9, 193.7, 215.9, 190.5	190.0	220.0	
	50A, 40A, 32A, 2", 1 1/2"	88.0	96.0	215.9, 203.2	210.0	240.0	
100A	65A, 3", 2 1/2"	103.0	103.0	8A, 1/2", 3/8", 1/4"	120.0	200.0	
	8A, 1/2", 3/8", 1/4"	61.0	90.0	25A, 20A, 15A, 10A, 1", 3/4"	140.0	210.0	
	25A, 20A, 15A, 10A, 1 1/4", 1", 3/4", 5/8"	72.0	98.0	50A, 40A, 32A	160.0	220.0	
125A	50A, 40A, 32A, 2", 1 1/2"	88.0	109.0	100A, 80A, 65A	180.0	230.0	
	80A, 65A, 4", 3", 2 1/2"	116.0	116.0	254.0, 219.1, 254.0, 215.9	200.0	240.0	
				254.0, 228.6	220.0	260.0	

*125A(100A, 80A, 65A, 50A) / 150A(125A, 100A, 80A, [65A]) / 200A(150A, 125A, 100A) Bevel end at large dia. Side.

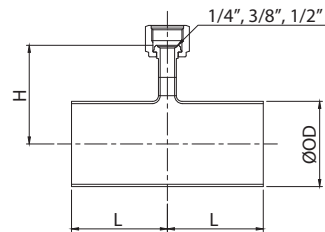
Tube Size (Inch Size)							
O.D1	O.D2	L	H	O.D1	O.D2	L	H
1/2"	3/8", 1/4"	39.0	39.0	3"	1/2", 3/8", 1/4", 8A	61.0	71.0
5/8"	1/2", 3/8", 1/4", 8A	47.0	44.0		1 1/4", 1", 3/4", 5/8", 25A, 20A, 15A, 10A	72.0	79.0
3/4"	1/2", 3/8", 1/4", 8A	47.0	44.0		2", 1 1/2", 50A, 40A, 32A	90.0	90.0
1"	5/8", 10A	52.0	52.0	2 1/2", 65A	97.0	97.0	
	1/2", 3/8", 1/4", 8A	47.0	47.0	1/2", 3/8", 1/4", 8A	61.0	87.0	
1 1/4"	3/4", 5/8", 15A, 10A	55.0	55.0	1 1/4", 1", 3/4", 5/8", 25A, 20A, 15A, 10A	72.0	95.0	
	1/2", 3/8", 1/4", 8A	47.0	50.0	2", 1 1/2", 50A, 40A, 32A	90.0	105.0	
1 1/2"	1", 3/4", 5/8", 20A, 15A, 10A	59.0	59.0	3", 2 1/2", 80A, 65A	110.0	110.0	
	1/2", 3/8", 1/4", 8A	57.0	54.0	1/2", 3/8", 1/4", 8A	70.0	100.0	
2"	1 1/4", 1", 3/4", 5/8", 25A, 20A, 15A, 10A	68.0	62.0	1 1/4", 1", 3/4", 5/8", 25A, 20A, 15A, 10A	90.0	110.0	
	1/2", 3/8", 1/4", 8A	57.0	57.0	2", 1 1/2", 50A, 40A, 32A	110.0	120.0	
	1 1/2", 40A, 32A	77.0	77.0	4", 3", 2 1/2", 100A, 80A, 65A	140.0	140.0	
2 1/2"	1/2", 3/8", 1/4", 8A	61.0	63.0	1/2", 3/8", 1/4", 8A	80.0	115.0	
	1 1/4", 1", 3/4", 5/8", 25A, 20A, 15A, 10A	72.0	71.0	1 1/4", 1", 3/4", 5/8", 25A, 20A, 15A, 10A	100.0	125.0	
	2", 1 1/2", 50A, 40A, 32A	90.0	83.0	2", 1 1/2", 50A, 40A, 32A	120.0	135.0	
				4", 3", 2 1/2", 100A, 80A, 65A	140.0	145.0	
				5", 125A	160.0	160.0	

Joint Tee(Male / Female)

JTM / JTF



MALE TYPE



FEMALE TYPE

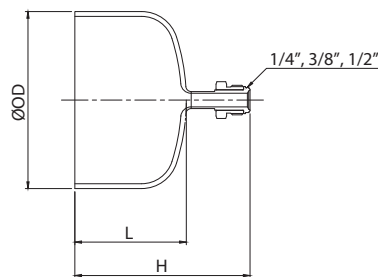
(Unit = mm)

Pipe Size (A Size)													
O.D		15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A
L		52.0	55.0	59.0	68.0	68.0	68.0	72.0	72.0	72.0	100.0	110.0	120.0
Female	H	39.5	42.5	46.5	51.0	54.0	60.0	68.0	74.5	87.0	100.0	113.0	138.5
Male	H	49.5	52.5	56.5	61.0	64.0	70.0	78.0	84.5	97.0	110.0	123.0	148.5

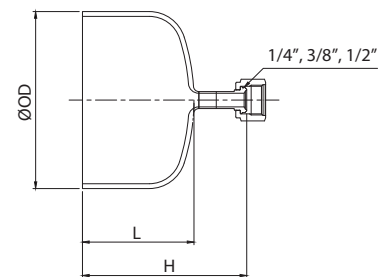
Tube Size (Inch Size)													
O.D		1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"
L		45.0	52.0	52.0	55.0	59.0	68.0	68.0	72.0	72.0	72.0	90.0	100.0
Female	H	35.0	36.5	38.0	42.0	45.5	48.0	55.0	61.5	68.0	81.0	94.0	107.0
Male	H	45.0	46.5	48.0	52.0	55.5	58.0	65.0	72.5	78.0	91.0	104.0	117.0

Joint Cap(Male / Female)

JCM / JCF



MALE TYPE



FEMALE TYPE

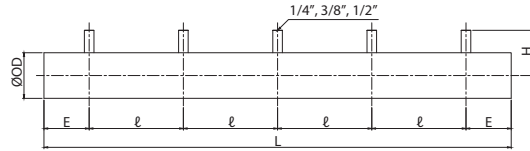
(Unit = mm)

Pipe Size (A Size)														
O.D		10A	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A
Cap Length	L	19.1	25.4	25.4	38.1	38.1	38.1	38.1	38.1	50.8	63.5	76.2	88.9	101.6
Female	H	48.0	55.0	55.0	68.0	68.0	68.0	68.0	68.0	81.0	94.0	107.0	120.0	133.0
Male	H	58.0	65.0	65.0	78.0	78.0	78.0	78.0	78.0	91.0	104.0	117.0	130.0	143.0

Tube Size (Inch Size)										
O.D		3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	
Cap Length	L	19.1	25.4	38.1	38.1	38.1	38.1	38.1	63.5	
Female	H	48.0	55.0	68.0	68.0	68.0	68.0	68.0	94.0	
Male	H	58.0	65.0	78.0	78.0	78.0	78.0	78.0	104.0	

Multi-Header Tee

MHT

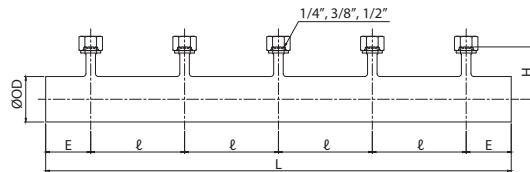


(Unit = mm)

		Pipe Size (A Size)										
O.D		15A	20A	25A	32A	40A	50A	65A	80A	100A		
Length at End	E	60.0								70.0		
	Pitch	125.0								145.0		
Total Length (L)	Number of Branches	2	245.0								285.0	
		3	370.0								430.0	
		4	495.0								575.0	
		5	620.0								720.0	
Branch Tube Height	Tube-End(H)	44.0	47.0	50.0	54.0	57.0	63.0	71.0	77.0	90.0		
	Female(H)	39.5	42.5	46.5	51.0	54.0	60.0	68.0	74.5	87.0		
		Tube Size (Inch Size)										
O.D		1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	
Length at End	E	76.2										
	Pitch	152.4										
Total Length (L)	Number of Branches	2	304.8									
		3	457.2									
		4	609.6									
		5	762.0									
Branch Tube Height	Tube-End(H)	39.0	44.0	44.0	47.0	50.0	54.0	57.0	63.0	71.0	87.0	
	Female(H)	35.0	36.5	38.0	42.0	45.5	48.0	55.0	61.5	68.0	81.0	

Multi-Header Joint Tee

MJT



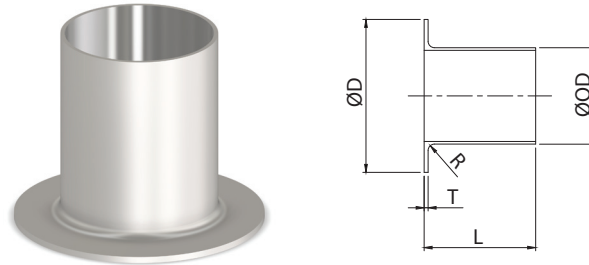
(Unit = mm)

		Pipe Size (A Size)										
O.D		15A	20A	25A	32A	40A	50A	65A	80A	100A		
Length at End	E	31.0	34.0	42.0	46.0	49.0	60.0	68.0	74.5	87.0		
	Pitch	125.0								145.0		
Total Length (L)	Number of Branches	2	245.0								285.0	
		3	370.0								430.0	
		4	495.0								575.0	
		5	620.0								720.0	
Branch Tube Height	Tube-End(H)	44.0	47.0	50.0	54.0	57.0	63.0	71.0	77.0	90.0		
	Female(H)	39.5	42.5	46.5	51.0	54.0	60.0	68.0	74.5	87.0		
		Tube Size (Inch Size)										
O.D		1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	
Length at End	E	21.0	27.0	30.0	33.0	40.0	45.0	50.0	65.0	68.0	86.0	
	Pitch	154.4										
Total Length (L)	Number of Branches	2	304.8									
		3	457.2									
		4	609.6									
		5	762.0									
Branch Tube Height	Tube-End(H)	39.0	44.0	44.0	47.0	50.0	54.0	57.0	63.0	71.0	87.0	
	Female(H)	35.0	36.5	38.0	42.0	45.5	48.0	55.0	61.5	68.0	81.0	

Flange Connection

Lap Joint

LAJ

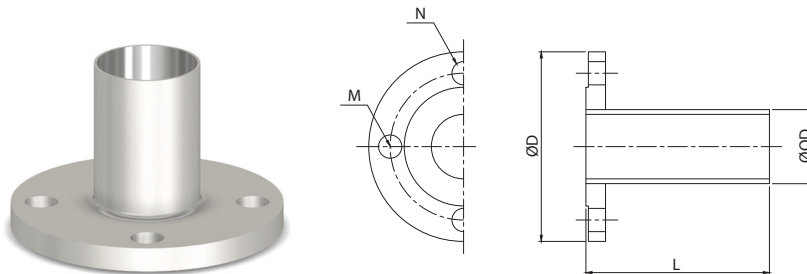


(Unit = mm)

		Pipe Size (A Size)														
O.D		10A	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A
L		55.0	55.0	55.0	55.0	70.0	70.0	70.0	75.0	75.0	75.0	50.0	50.0	65.0	65.0	65.0
D	JIS 10K	46.0	51.0	56.0	67.0	76.0	81.0	96.0	116.0	126.0	151.0	182.0	212.0	262.0	324.0	368.0
	JIS 5K	39.0	44.0	49.0	59.0	70.0	75.0	85.0	110.0	121.0	141.0	182.0	212.0	262.0	324.0	368.0
R		3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
T		2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	5.0	5.0	7.0	7.0	9.0
		Tube Size (Inch Size)														
O.D		3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"					
L		55.0	55.0	55.0	70.0	70.0	70.0	75.0	75.0	85.0	90.0					
D		51.0	56.0	67.0	76.0	81.0	96.0	116.0	136.0	182.0	212.0					
R		3.0	3.0	3.0	3.0	3.0	4.0	4.0	5.0	5.0	5.0					
T		2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0					

Pipe Flange

PF

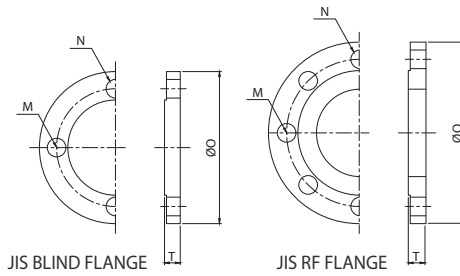
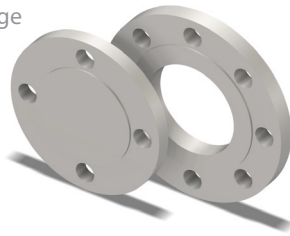


(Unit = mm)

		Pipe Size (A Size)														
O.D		10A	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A
L		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	200.0	200.0	200.0	200.0	200.0
D		90.0	95.0	100.0	125.0	135.0	140.0	155.0	175.0	185.0	210.0	250.0	280.0	330.0	400.0	445.0
N		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	12.0	12.0	16.0
M		M12	M12	M12	M16	M16	M16	M16	M16	M16	M16	M20	M20	M20	M22	M22
		Tube Size (Inch Size)														
O.D		3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"					
L		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	200.0	200.0					
D		95.0	100.0	125.0	135.0	140.0	155.0	175.0	195.0	250.0	280.0					
N		4.0	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0					
M		M12	M12	M16	M16	M16	M16	M16	M16	M20	M20					

JIS RF Flange / JIS Blind Flange

RFF / BLF

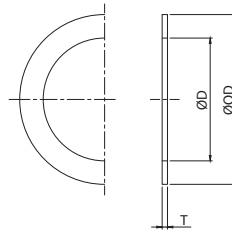


(Unit = mm)

Pipe Size (A Size)															
JIS 10K															
O.D	10A	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A
D	90.0	95.0	100.0	125.0	135.0	140.0	155.0	175.0	185.0	210.0	250.0	280.0	330.0	400.0	445.0
T	12.0	12.0	14.0	14.0	16.0	16.0	16.0	18.0	18.0	18.0	20.0	22.0	22.0	24.0	24.0
N	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	12.0	12.0	16.0
M	M12	M12	M12	M16	M16	M16	M16	M16	M16	M16	M20	M20	M20	M22	M22
JIS 5K															
O.D	10A	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A
D	75.0	80.0	85.0	95.0	115.0	120.0	130.0	155.0	180.0	200.0	235.0	265.0	320.0	385.0	430.0
T	9.0	9.0	10.0	10.0	12.0	12.0	14.0	14.0	14.0	16.0	16.0	18.0	20.0	22.0	22.0
N	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	12.0	12.0
M	M10	M10	M10	M10	M12	M12	M12	M12	M16	M16	M16	M16	M20	M20	M20
Tube Size (Inch Size)															
O.D	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"					
FP / T	95.0	100.0	125.0	135.0	140.0	155.0	175.0	195.0	250.0	280.0					
D	12.0	14.0	14.0	16.0	16.0	16.0	18.0	18.0	20.0	22.0					
N	4.0	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0					
M	M12	M12	M16	M16	M16	M16	M16	M16	M20	M20					

Teflon Gasket

TG



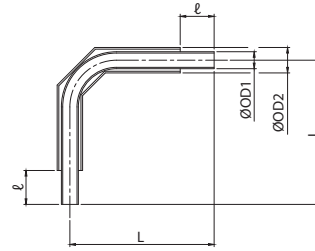
(Thickness T=2mm, Unit = mm)

Pipe Size (A Size)															
JIS 10K															
D	10A	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A
O.D	53.0	58.0	63.0	74.0	84.0	89.0	104.0	124.0	134.0	159.0	190.0	220.0	270.0	333.0	378.0
I.D	18.0	22.0	28.0	35.0	43.0	49.0	61.0	77.0	90.0	115.0	141.0	167.0	218.0	270.0	321.0
JIS 5K															
D	10A	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A
O.D	45.0	50.0	55.0	65.0	78.0	83.0	93.0	118.0	129.0	149.0	184.0	214.0	260.0	325.0	370.0
I.D	18.0	22.0	28.0	35.0	43.0	49.0	61.0	77.0	90.0	115.0	141.0	167.0	218.0	270.0	321.0
Tube Size (Inch Size)															
D	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"					
O.D	58.0	63.0	74.0	84.0	89.0	104.0	124.0	144.0	190.0	220.0					
I.D	19.5	26.0	32.5	38.5	51.5	64.0	77.0	102.5	128.0	153.5					

Coaxial Fittings

Coaxial 90° Elbow

CLE

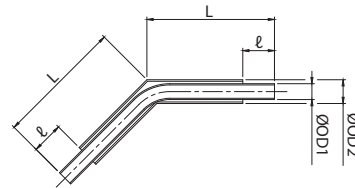


(Unit = mm)

Tube Size	Inner Tube $\varnothing OD1$	$\varnothing OD1$ Wall Thickness	Outer Tube $\varnothing OD2$	$\varnothing OD2$ Wall Thickness	ℓ	L
1/2"	1/2"	1.24t	3/4"	1.65t	25.4	108.0
3/4"	3/4"	1.65t	1"	1.65t	44.5	171.5
1"	1"	1.65t	1 1/4"	1.65t	44.5	180.8
1 1/2"	1 1/2"	1.65t	2"	1.65t	50.8	212.6

Coaxial 45° Elbow

CHE

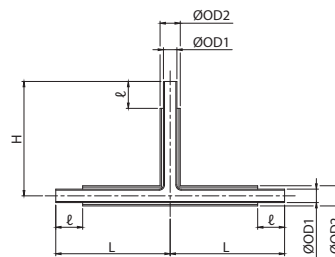
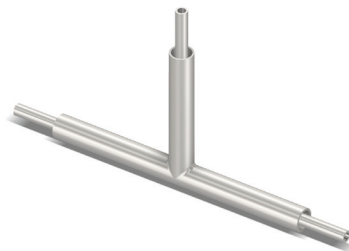


(Unit = mm)

Tube Size	Inner Tube $\varnothing OD1$	$\varnothing OD1$ Wall Thickness	Outer Tube $\varnothing OD2$	$\varnothing OD2$ Wall Thickness	ℓ	L
1/2"	1/2"	1.24t	3/4"	1.65t	25.4	98.3
3/4"	3/4"	1.65t	1"	1.65t	44.5	155.4
1"	1"	1.65t	1 1/4"	1.65t	44.5	158.8
1 1/2"	1 1/2"	1.65t	2"	1.65t	50.8	180.8

Coaxial Equal Tee

CET

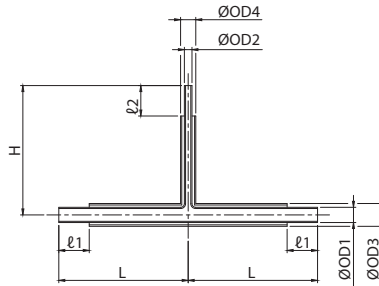
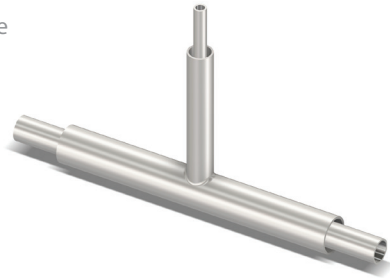


(Unit = mm)

Tube Size	Inner Tube $\varnothing OD1$	$\varnothing OD1$ Wall Thickness	Outer Tube $\varnothing OD2$	$\varnothing OD2$ Wall Thickness	ℓ	L	H
1/2"	1/2"	1.24t	3/4"	1.65t	25.4	101.6	101.6
3/4"	3/4"	1.65t	1"	1.65t	44.5	161.9	161.9
1"	1"	1.65t	1 1/4"	1.65t	44.5	165.1	165.1
1 1/2"	1 1/2"	1.65t	2"	1.65t	50.8	193.7	193.7

Coaxial Reducing Tee

CRT

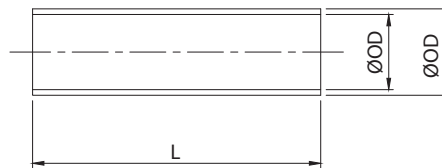
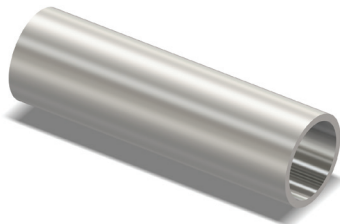


(Unit = mm)

Tube Size	Inner Tube Ø.O.D1	Ø.O.D1 Wall Thickness	Inner Tube Ø.O.D2	Ø.O.D2 Wall Thickness	Outer Tube Ø.O.D3	Ø.O.D3 Wall Thickness	Outer Tube Ø.O.D4	Ø.O.D4 Wall Thickness	ℓ1	L	ℓ2	H
3/8"x1/4"	3/8"	0.89/1t	1/4"	0.89/1t	5/8"	1.24t	1/2"	1.24t	25.4	98.4	25.4	104.6
1/2"x1/4"	1/2"	1.24t	1/4"	0.89/1t	3/4"	1.65t	1/2"	1.24t	25.4	98.4	25.4	104.6
1/2"x3/8"	1/2"	1.65t	3/8"	0.89/1t	3/4"	1.65t	5/8"	1.24t	25.4	101.6	25.4	104.6
3/4"x1/4"	3/4"	1.65t	1/4"	0.89/1t	1"	1.65t	1/2"	1.24t	44.5	155.6	25.4	108.0
3/4"x3/8"	3/4"	1.65t	3/8"	0.89/1t	1"	1.65t	5/8"	1.24t	44.5	158.8	25.4	108.0
3/4"x1/2"	3/4"	1.65t	1/2"	1.24t	1"	1.65t	3/4"	1.65t	44.5	158.8	25.4	108.0
1"x1/4"	1"	1.65t	1/4"	0.89/1t	1 1/4"	1.65t	1/2"	1.24t	44.5	155.6	25.4	111.0
1"x3/8"	1"	1.65t	3/8"	0.89/1t	1 1/4"	1.65t	5/8"	1.24t	44.5	158.8	25.4	111.0
1"x1/2"	1"	1.65t	1/2"	1.24t	1 1/4"	1.65t	3/4"	1.65t	44.5	158.8	25.4	111.0
1"x3/4"	1"	1.65t	3/4"	1.65t	1 1/4"	1.65t	1"	1.65t	44.5	161.9	44.5	168.2
1 1/2"x3/4"	1 1/2"	1.65t	3/4"	1.65t	2"	1.65t	1"	1.65t	50.8	181.0	44.5	177.8
1 1/2"x1"	1 1/2"	1.65t	1"	1.65t	2"	1.65t	1 1/4"	1.65t	50.8	184.2	44.5	177.8

Coaxial Sleeve

CSL

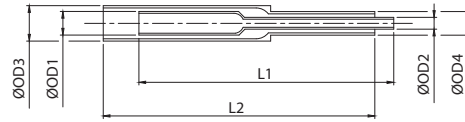
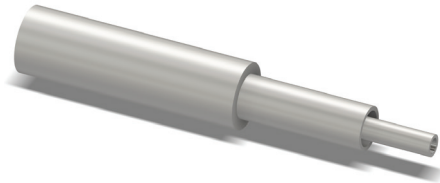


(Unit = mm)

Tube Size	O.D	I.D	L	L(E4*)	L(E5*)	L(E6*)
1/4"	5/8"	Φ12.8 / Φ12.9	63.5	101.6	127.0	152.4
3/8"	3/4"	Φ16.0 / Φ16.1	63.5	101.6	127.0	152.4
1/2"	7/8"	Φ19.2 / Φ19.3	63.5	101.6	127.0	152.4
3/4"	1 1/8"	Φ25.5 / Φ25.6	101.6	-	127.0	152.4
1"	1 3/8"	Φ31.9 / Φ32.0	101.6	-	-	-
1 1/2"	2 1/8"	Φ51.3 / Φ51.4	114.3	-	-	-

Coaxial Reducer

CRC

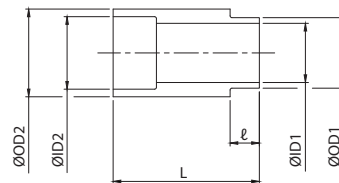
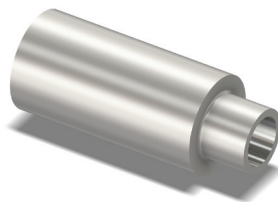


(Unit = mm)

Tube Size	Inner Tube ΦO.D1	ΦO.D1 Wall Thickness	Inner Tube ΦO.D2	ΦO.D2 Wall Thickness	Outer Tube ΦO.D3	ΦO.D3 Wall Thickness	Outer Tube ΦO.D4	ΦO.D4 Wall Thickness	L1	L2
3/8"x1/4"	3/8"	0.89/1t	1/4"	0.89/1t	5/8"	1.24t	1/2"	1.24t	101.6	101.6
1/2"x1/4"	1/2"	1.24t	1/4"	0.89/1t	3/4"	1.65t	1/2"	1.24t	101.6	101.6
1/2"x3/8"	1/2"	1.24t	3/8"	0.89/1t	3/4"	1.65t	5/8"	1.24t	101.6	101.6
3/4"x1/4"	3/4"	1.65t	1/4"	0.89/1t	1"	1.65t	1/2"	1.24t	127.0	146.0
3/4"x3/8"	3/4"	1.65t	3/8"	0.89/1t	1"	1.65t	5/8"	1.24t	127.0	146.0
3/4"x1/2"	3/4"	1.65t	1/2"	1.24t	1"	1.65t	3/4"	1.65t	127.0	146.0
1"x1/4"	1"	1.65t	1/4"	0.89/1t	1 1/4"	1.65t	1/2"	1.24t	127.0	146.0
1"x3/8"	1"	1.65t	3/8"	0.89/1t	1 1/4"	1.65t	5/8"	1.24t	127.0	146.0
1"x1/2"	1"	1.65t	1/2"	1.24t	1 1/4"	1.65t	3/4"	1.65t	127.0	146.0
1"x3/4"	1"	1.65t	3/4"	1.65t	1 1/4"	1.65t	1"	1.65t	165.1	165.1
1 1/2"x1/4"	1 1/2"	1.65t	1/4"	0.89/1t	2"	1.65t	1/2"	1.24t	146.0	171.5
1 1/2"x3/8"	1 1/2"	1.65t	3/8"	0.89/1t	2"	1.65t	5/8"	1.24t	146.0	171.5
1 1/2"x1/2"	1 1/2"	1.65t	1/2"	1.24t	2"	1.65t	3/4"	1.65t	146.0	171.5
1 1/2"x3/4"	1 1/2"	1.65t	3/4"	1.65t	2"	1.65t	1"	1.65t	184.2	190.5
1 1/2"x1"	1 1/2"	1.65t	1"	1.65t	2"	1.65t	1 1/4"	1.65t	184.2	190.5

Coaxial Terminator

CTR



(Unit = mm)

Tube Size	ΦO.D1	ΦI.D1	ΦO.D2	ΦI.D2	ℓ	L
1/4"	Φ8.3	1/4"	1/2"	Φ10.2	6.35	31.8
3/8"	Φ11.4	3/8"	5/8"	Φ13.4	6.35	31.8
1/2"	Φ15.3	1/2"	3/4"	Φ15.7	6.35	31.8
3/4"	Φ22.5	3/4"	1"	Φ22.1	6.35	50.8
1"	Φ28.8	1"	1 1/4"	Φ28.4	6.35	50.8
1 1/2"	Φ41.5	1 1/2"	2"	Φ47.4	6.35	57.2



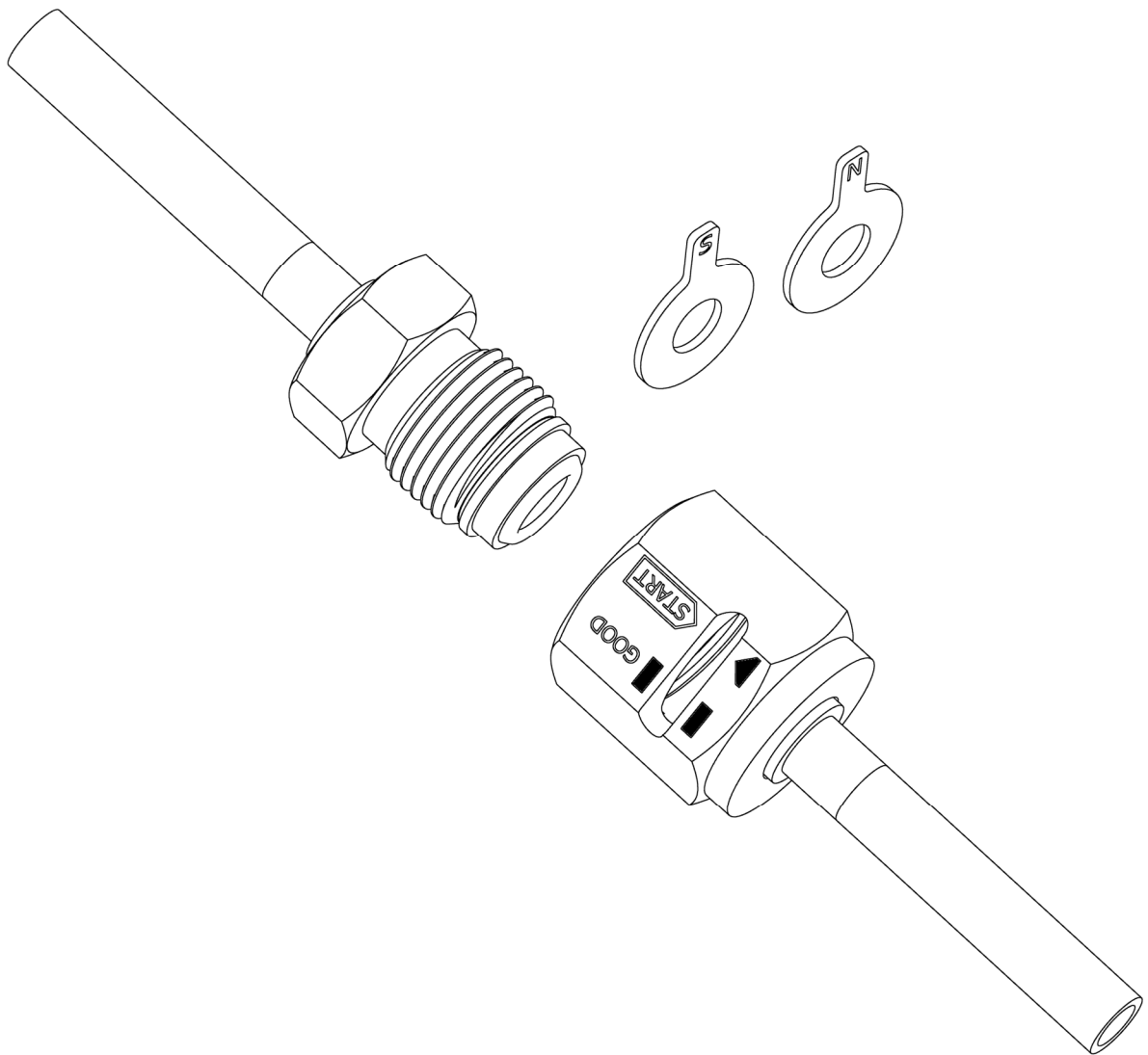
Safe Component Selection

The selection of component for any applications or system design must be considered to ensure safe performance. Component function, material compatibility, component ratings, proper installation, operation and maintenance remain the sole responsibility of the system designer and the user. DK-Lok accepts no liability for any improper selection, installation, operation or maintenance.

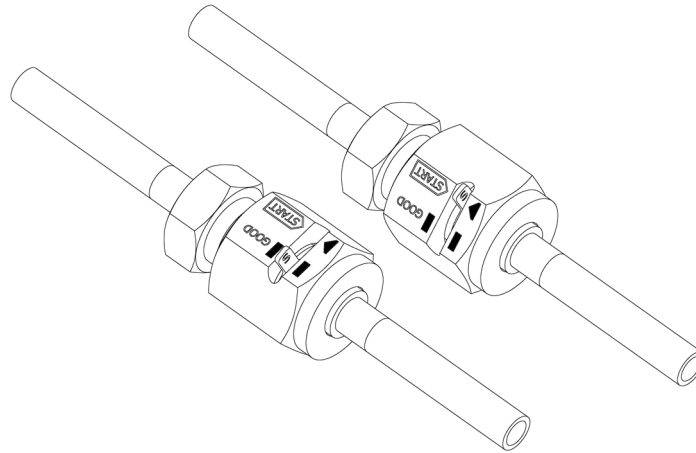
DK-LOK UHP Fitting

VC (Visual Check) DCR Fitting



100% Compatible Designs



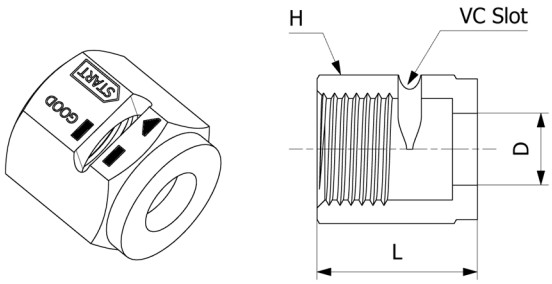
DK-LOK

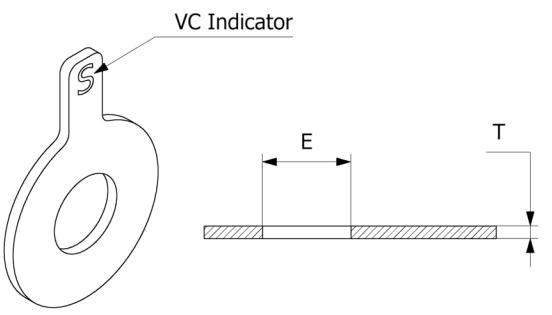


Features

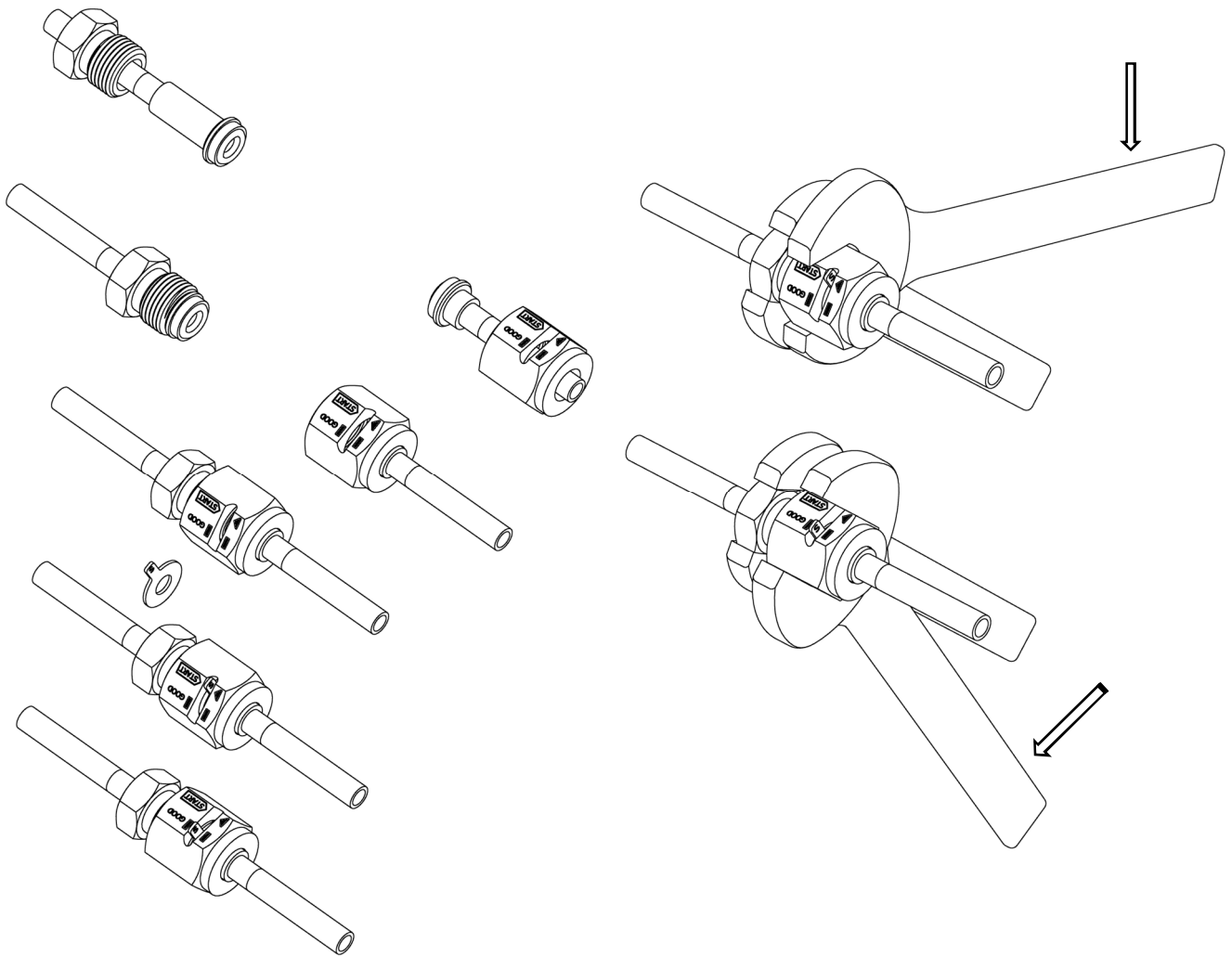
- VC (Visual Check) Indicator shows gasket material, such as "N" for Nickel and "S" for SUS316L.
- VC (Visual Check) Slot of female nut shows a gasket installed or not.
-  and  on female nut surface indicate the correct installation of VC DCR.
- No need for marking on female and male nuts for confirmation of 1/8 turn reduces installation time.
- Nut loosening due to vibration or other causes can be identified.

Dimensions

Female Nut with VC Slot	Part No.	Size (in.)	L (mm)	D (mm)	H Hex (mm)
	U-VCFN4	1/4	20.6	9.1	33.3
	U-VCFN8	1/2	22.4	15.5	38.1
	U-VCFN12	3/4	28.4	22.6	50.8
	U-VCFN16	1	34.0	30.5	56.4

Gasket with VC Indicator	Part No.	Size (in.)	T (mm)	E (mm)
	U-VCGK4-S	1/4	0.8	5.6
	U-VCGK4-N			
	U-VCGK8-S	1/2	0.8	11.2
	U-VCGK8-N			
	U-VCGK12-S	3/4	0.8	16.7
	U-VCGK12-N			
	U-VCGK16-S	1	0.8	35.8
	U-VCGK16-N			

Installation Drawings



Installation Steps

1. Tighten male and female nuts of VC DCR Fitting by fingers until ends of the two glands meet gently together.
2. Loosen the female nut 1 turn by finger.
3. Insert a gasket through VC Slot.
4. While VC Indicator fixed on **START** position, rotate the male nut with finger until finger-tight.
5. Rotate the female nut with wrench until the VC Indicator of gasket aligned with **GOOD**.
6. If under tightened, VC Indicator would not reach **GOOD**. Over-tightening of female nut makes the VC indicator deformed.

Safe Valve Selection

The selection of a valve for any application or system design must be considered to ensure safe performance. Valve function, valve rating, material compatibility, proper installation, operation and maintenance remain the sole responsibility of the system designer and the user. DK-Lok accepts no liability for any improper selection, installation, operation or maintenance.

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DK-LOK



Fittings & Valves

DK-Lok VR Series Tube Fittings










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The Premium Quality

DK-Lok VR Series Tube Fittings

DK-Lok VR Series Tube Fitting is designed using industrial codes and Specification with additional Cutting-Edge Engineering on swaging action and sealing integrity. DK-Lok VR Series provides excellent leak-free sealing on high pressure gas, vacuum, impulse, thermal shock, heavy vibration, and many other stringent applications.

DK-Lok brings you truly excellent quality, outstanding customer service, and availability.

Enjoy DK-Lok VR Series Tube fitting working on your application!

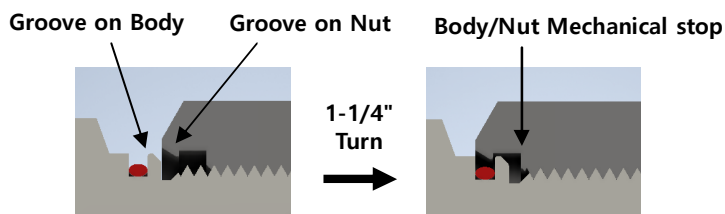
Construction of DK-Lok VR Series Tube Fittings

DK-Lok VR Series Tube Fitting consists of body, front ferrule, back ferrule and nut. The features include.

- Excellent product range up to 1 in. and 25 mm OD.
- Additional engineering on sealing integrity and swaging action.
- Re-usable and predictable quality.
- Gaugable.
- Excellent leak-free sealing integrity on heavy vibration, vacuum and impulse.
- Heat-Code Traceability.
- No torque transferring to connective tubing during installation.

DK-Lok VR Series Tube Fittings "HOOK" Design

The Patented Groove constructed both on Stainless DK-Lok Tube Fitting Nut and Body locks the Nut up on the Body mechanically at 1-1/4 turns beyond the finger tight.



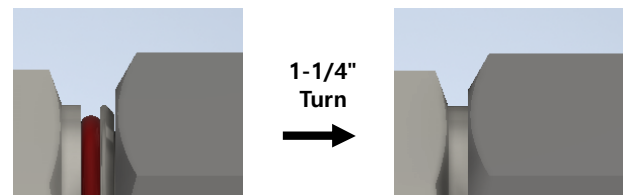
The Hooked (made-up) DK-Lok tube fitting provides LIFETIME Leak-Tight sealing unless the fitting manually un-tightened by spanner.

The patented GROOVE constructed both on Nut and Body allows no over-tightening beyond 1-1/4 turns is install & re-tightening installation. Over-tightening is not feasible in the DK-Lok VR Series Tube Fitting mechanically that is designed to provide precise 1-1/4 make-up keeping the four components of front, back ferrule, nut and body fatigue-free for extended lifetime service.

Product Identification / Visual inspection

The red color on body identifies DK-Lok VR Series Tube Fittings. It is disappeared by the nut when the fittings make-up is completed with 1-1/4 turns beyond finger tight position.

The identification helps fitters eliminate the make-up inspection with a gap gauge it further facilitates operator's visual inspection on the running system.



Product Cleaning

Every DK-Lok VR Series tube fitting is cleaned to remove surface contamination, iron particles from cutting tools, oil form cutting fluid, and loose particles. For further information refer to DK cleaning standard DC-01.

Specialcleaning for oxygen service application is available on request.

Refer to specialcleaning standard DC-11.

Table 1. Material Standard

DK-Lok VR Series tube fitting are supplied in various materials to satisfy the needs of various applications including on shore oil& gas, refinery, offshore oil& gas, chemical, petrochemical, analytical instrumentation, steel mill, power plant, shipbuilding, pharmaceutical, and alternative fuel.

Material	Bar stock	Forging
Stainless Steel 316	ASTM A 276	ASTM A 182
	ASTM A 479	ASME SA 182
	ASME SA 479	JIS G3214
	JIS G4303	

O-ring

DK-Lok fitting pipe end with O-ring is supplied, 90 durometer FKM O-ring on Stainless steel fitting.

Other O-ring is available on request.

DK-Lok Port Dimension

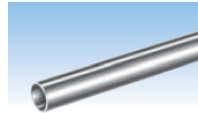
Dimensions on DK-Lok VR Series Port in the catalog are approximate figures and shown in finger-tight position.

Alternative Fuels

Stainless steel 316 DK-Lok VR Series Tube fitting are tested to the requirements of ECE E110, EIHP Draft, ECE R67 and certified by TUV.

Tubing

For safe, reliable and leak-free DK-Lok VR Series fitting system, tubing should be considered as one of fitting components.



- Tubing is assembled by simple wrench make-up on DK-Lok fitting. This results in less assembly and maintenance costs.
- Tubing assembly on DK-Lok fitting is re-usable.
- Tubing is bendable. It allows lower pressure drop with fewer connections. This in turn reduces system costs because of less fabricating manpower.
- Pipe threading or welding is difficult to disassemble and re-assemble
- Piping requires skilled worker for welding & threading

Tubing Selection

Hardness

- Tubing must be softer than fitting material. The metal tubing must be fully annealed and suitable for bending and flaring.
- Tubing hardness must be selected according to the information in the table 2 to 3.

Surface

- Tubing must have a surface free from scratches, draw mark, dirt, dust and flat spots.

Ovality

- Tubing in oval or out-of-roundness way not fit into the fitting. Do not force the tubing into the fitting, it may damage the fitting sealing system on nut, ferrules, and body.

Wallthickness

- The table 2 to 3 list tubing working pressure ratings in a wide range of wall thickness. A too thin wall may collapse and a too thick wall may not properly be deformed by the ferrule action.
- Do not use tubing wall thickness not listed in the table 2 to 3.

Weld tubing

- Welded tubing should have a not measurable bead on it's outside diameter.

Tubing Handling

Careful handling and storage practices will protect tubing from unnecessary scratches, nicks, or degrading the good tubing surface

- Tubing ends should be capped so any foreign materials will not fall inside during transportation and storage.
- Do not drag across tubing rack, cement, gravel or any rough surface.
- Do use correct tube cutter for tube material. The wrong cutter may result in excessive deformation of the tube end.
- Do not cut deep with each turn of cutting.
- Tube cutters and hacksaws should be sharp enough.
- Hacksaw blades should have at least 32 teeth per inch.
- Do deburr tube ends before inserting in fittings.

DK-Lok Tube Fitting Pressure Rating

- The pressure rating of DK-Lok VR Series is rated to the working pressure of connective tubing.
- The allowable working pressure of tubing in various materials is listed in the table 2 to 3.

Material

Using like tubing and fitting material is essential for leak-free sealing system.

Unlike material may have different mechanical properties that may adversely affect the fitting seal on tubing.

Application



The outstanding feature of HOOK design never allows DK-Lok VR Series Tube Fitting on service to loose nut resulting in system failure & leakage. The application includes where thermal shock, extreme impulse such as power generation, equipment, where leak-tight service must be in place such as hazardous gas and offshore industries.

Gas Application

DK-Lok tube fitting is designed for wide range of leak-free application including gas leak proof and vacuum tight service. Gases (helium, hydrogen, nitrogen, air, etc.) can escape even the most minute leak-path due to their very small molecules. Tube therefore must be handled not to have scratches, draw mark, nicks, flat spots, dirt, and dust. Use NOT thin wall tubing for gas applications. Heavier wall tubing resists the ferrule action whereas thin wall tubing may collapse with little resistance to ferrule action. For Gas service, use the tubing wall listed on un-shadowed section in table 2 to 3.

Vacuum Application

DK-Lok VR Series Tube fittings has been proved to be excellent vacuum tight seal in many applications including analytical industry. DK-Lok Tube Fittings comply with the leakage requirements of TA-LUFT 2002.

Cryogenic Application

DK-Lok VR Series Fittings in SS316 Stainless Steel provide highly reliable performance on cryogenic application. Cryogenic temperature is considered to be temperatures below -100°F (-73°C).

High Pressure Application

Pressure 500 psig (34.5 bar) or higher is considered generally high pressure. In the high pressure system scratches, draw mark, nicks, flat spots, and dirt on tubing may cause leakage.

- For gas application, select the gas applicable tubing wall thickness from Table 2 to 13.
- Follow the suggestion on tubing selection, handling, and installation.

Stainless Steel Tubing

Table 2. Fractional Seamless Stainless Steel Tubing

Fully annealed austenitic Type 316 seamless tubing ASTM A 269 or ASTM A 213, or equivalent. Tubing to free from scratches, draw mark, dirt, dust, flat spots, and suitable for bending and flaring. recommended hardness : 80 HRB or less.

OD In.	Wall Thickness (in.)							
	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.12
1/4	4000	5100	7500	10200				
5/16		4000	5800	8000				
3/8		3300	4800	6500	7500			
1/2		2400	3500	4700	6200			
5/8			2900	4000	5200	6000		
3/4			2400	3300	4200	4900	5800	
7/8			2000	2800	3600	4200	4800	
1				2400	3100	3600	4200	4700

Table 3. Metric Seamless Stainless Steel Tubing

OD mm	Wall Thickness (in.)									
	0.8	1.0	1.2	1.5	1.8	2.0	2.2	2.5	2.8	3.0
6	330	420	520	670						
8		310	380	490						
10		240	300	380						
12		200	240	310	380	430				
14		180	220	280	340	390	430			
15		170	200	260	320	360	400			
16			190	240	300	330	370			
18			170	210	260	290	320	370		
20			150	190	230	260	290	330	380	
22			130	170	210	230	260	300	340	
25					180	200	230	260	300	320

- According to the requirements of ASME B31.3 Process Piping Code and ASME B31.1 Power Piping Code, allowable working pressure calculated at -20 to 100°F (-28 to 37°C) using S value of 20,000 psi.
- Pressure calculations are based on **maximum O.D. and minimum wall thickness** and no allowance is made for corrosion and erosion. i.e., ASTM A269 1/2 in. OD x 0.035 in.WT: OD tolerance ± 0.005 in., WT tolerance $\pm 15\%$. Calculations are based on 0.505 in.OD x 0.0298 in. WT.
- Safety Factor is 3.75 to 1, considering ultimate tensile strength of 75,000 psi.

Weld Stainless Steel Tubing Allowable Working Pressure

To determine the working pressure of weld tubing to the requirements of ASME B31.3 Code, de-rating factors below must be applied.

For single weld tubing multiply by 0.80, and for double weld tubing multiply by 0.85.

Example : SS316 seamless 1/2 in. O.D. x 0.065 in. WT allowable working pressure: 4700 psi.

To determine the work pressure of the single weld tubing, multiply 4700 psi by 0.80.

4700 psig x 0.80 = 3760 psig at -20 to 100°F (-28 to 37°C).

Temperature De-rating Factors

The pressure rating of DK-Lok port is governed by the connective tubing pressure rating.

To determine allowable working pressure at elevated temperature, multiply working pressure by applicable factor shown in table 4.

Example : SS316 seamless tubing 1/2 in. O.D. x 0.065 in.WT at 700 °F. 4700 psig x 0.82 = 3854 psi.

Allowable working pressure of SS316 seamless 1/2 in. O.D. x 0.065 in. WT is 3854 psi at 700 °F.

Table 4.

Temp.		Stainless steel 316
°F	°C	
100	38	1
200	93	1
300	149	1
400	204	0.97
500	260	0.9
600	316	0.85
700	371	0.82
800	427	0.8
900	482	0.78
1000	538	0.77
1200	649	0.37

DK-Lok Pipe End Pressure Rating

DK-Lok Tube Fitting is designed using industrial codes and Specification with additional Cutting-Edge Engineering on swaging action and sealing integrity. DK-Lok provides excellent leak-free sealing on high pressure gas, vacuum, impulse, thermal shock, heavy vibration, and many other stringent applications.

Table 5. DK-Lok Pipe Thread Designator

Legends • DK : DK-Lok pipe thread designator. • E : Equivalent.

	D K	Reference Specification	Tread Configuration	E
Tapered Pipe Thread	N	ASME B1.20.1 (NPT) SAE AS71051		
	R	ISO 7-1 BS EN 10226-1 (BSPT) DIN 2999 (male thread only) JIS B0203 (PT)		RT
Parallel Pipe Thread	G	ISO 228-1 BS 2779 (BSPP) JIS B0202 (PF) DIN 3852 FORM A		RS
	G B	ISO 228-1 BS 2779 (BSPP) JIS B0202 (PF) DIN 3852 FORM B		RP
	G P	ISO 228-1 BS 2779 (BSPP) JIS B0202 (PF) SAE J475 SAE J1926		PR
	G G	ISO 228-1 BS 2779 (BSPP) JIS B0202 (PF) EN 837-1& EN 837-3		RG

Parallel Pipe Thread	G R	ISO 228-1 BS 2779 (BSPP) JIS B0202 (PF) DIN 3852 FORM Z		RP
	G Y	ISO 228-1 BS 2779 (BSPP) JIS B0202 (PF) DIN 3852 FORM Y		RJ
SAE Straight Thread	U	ASME B1.1 ISO R725 SAE J475 SAE J514		SR
	U O	ASME B1.1 ISO R725 SAE J475 SAE J514		OR
	U P	ASME B1.1 ISO R725 SAE J475 SAE J514		ST
	N O	ASME B1.20.1 SAE AS71051 SAE J514		OR

Pipe Thread Sealants

to ensure leak-free thread sealing. Sealant usually contains a lubricant.

Thread sealant fills the voids between the threads and prevents thread galling.

Wrap PTFE tape clockwise from first thread. Do not overhang the first thread the tape may get into the fluid system.

Pressure Equivalents:

1 bar = 100 kPa = 14.503 psi 1 kPa = 0.01 bar = 0.145 psi

1 psi = 0.069 bar = 6.89 kPa 1 kg/cm² = 0.98 bar = 14.22 psi

Table 5. Tapered Pipe Thread Pressure Ratings

Applicable to DK-Lok thread designator: N and R

ISO / NPT Pipe Size	SS316			
	Male		Female	
S value	psig	bar	psig	bar
1/16	14000	965	6600	455
1/8	10000	689	6400	441
1/4	8300	572	6500	448
3/8	8000	551	5200	358
1/2	7800	537	4800	331
3/4	7500	517	4600	317
1	5300	365	4400	303

Allowable Working Pressure**DK-Lok ISO Parallel Male Pipe Thread End**

Applicable to DK-Lok thread designator: G, GB, and GP.
SS316 and carbon steel fitting thread ends up to 1 in. are rated to 5900 psi (406 bar)

DK-Lok SAE Straight Thread End

Applicable to DK-Lok thread designator: U, UO, and UP.
SS316 and carbon steel fitting thread ends up to 16U (1 5/16-12) are rated to 6000 psi (413 bar)

DK-Lok Tube Socket Weld End

Applicable to DK-Lok tube fitting part number: DCSW and DLSW.
SS316 and carbon steel fitting tube socket ends up to 1/2 in. (-8) are rated to 7,000 psi (482 bar)

DK-Lok Pipe Butt Weld End

Applicable to DK-Lok tube fitting part number: DCW and DLW.
SS316 and carbon steel fitting pipe butt weld ends up to 3/4 in. (-12P) are rated to 6,000 psi (413 bar)

- Pressure ratings are based on ASME B31.3 Process Piping Code, at ambient temperature.
- For further information about each size end rating, contact the authorized DK-Lok distributor in your region.

Table 6. Elastomer seal temperature ratings

Elastomer O-ring	Rating
NBR	-40 to 110°C (-40 to 230°F)
FKM	-28 to 204°C(-18 to 400°F)
FFKM (Kalrez®)	-30 to 275°C(-22 to 527°F)

Care must be taken as fitting with elastomer O-ring seal may have lower temperature rating.

Kalrez®: Dupont™

Ordering Information

Suffix the material designator to the part number.

Example: DU-8-VR-S

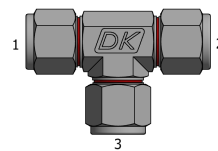
Table 7. Tapered Pipe Thread Pressure Ratings

Table 7. Material Designator

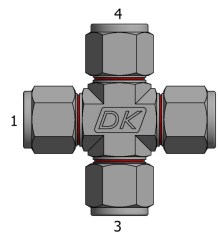
Material	Designator
Stainless Steel 316	S
Dual Grade	

Tee and Cross Fittings

Tee and Cross Fittings



Tee fitting part number is described by first the run (1 and 2) and next branch (3).



Cross fitting part number is described by first the run (1 and 2) and next the branch (3 and 4)

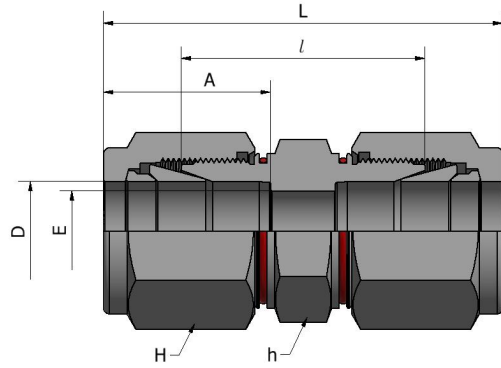
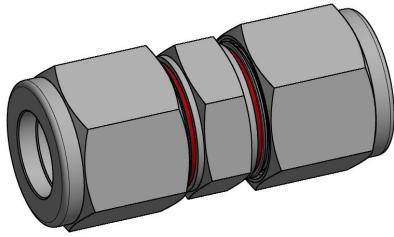
Table 8. Pipe Thread Size Designator

Nom. Size in.	1/16	1/8	1/4	3/8	1/2	3/4	1
Designator	1	2	4	6	8	12	16

Table 9. Tube O.D Designator

O.D in.	1/4	5/16	3/8	1/2	5/8	3/4	7/8	1
Designator	4	5	6	8	10	12	14	16
O.D mm	6mm	8mm	10mm	12mm	16mm	20mm	22mm	25mm
Designator	6M	8M	10M	12M	16M	20M	22M	25M

Union
DU-VR



Fractional

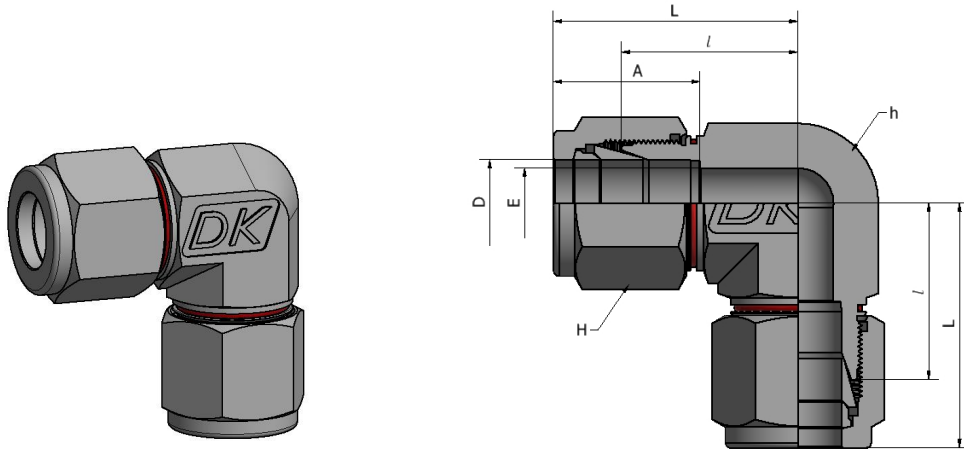
Part No.	Tube O.D D		E Min.	Width across flat				A	l	L
	In.	mm		h		H				
				In.	mm	In.	mm			
DU-4-VR	1/4	6.35	4.82	9/16	14.28	5/8	15.87	15.24	26.16	40.89
DU-5-VR	5/16	7.93	6.35	5/8	15.87	11/16	17.46	16.25	28.19	42.92
DU-6-VR	3/8	9.52	7.11	11/16	17.46	13/16	20.64	16.76	30.22	44.95
DU-8-VR	1/2	12.7	10.41	13/16	20.64	7/8	22.22	22.86	30.98	51.3
DU-10-VR	5/8	15.87	12.7	15/16	23.81	1	25.4	24.38	31.75	52.07
DU-12-VR	3/4	19.05	15.74	1-1/16	26.98	1-1/8	28.58	24.38	33.27	53.59
DU-14-VR	7/8	22.22	18.28	1-3/16	30.16	1-1/4	31.75	25.9	35.05	55.37
DU-16-VR	1	25.4	22.35	1-3/8	34.92	1-1/2	38.1	31.24	40.38	64.77

Metric

Part No.	Tube O.D D	E Min.	Width across flat		A	l	L
			h	H			
DU-6M-VR	6	4.8	14	16	15.3	26.2	41
DU-8M-VR	8	6.4	16	17.46	16.2	28.2	43.2
DU-10M-VR	10	7.9	18	20.64	17.2	31	46.2
DU-12M-VR	12	9.5	20.64	22.22	22.8	31	51.2
DU-14M-VR	14	11.1	24	25	24.4	31.8	52
DU-15M-VR	15	11.9	24	25	24.4	31.8	52
DU-16M-VR	16	12.7	24	25	24.4	31.8	52
DU-18M-VR	18	15.1	27	30	24.4	33.3	53.5
DU-20M-VR	20	15.9	30	32	26	34.8	55
DU-22M-VR	22	18.3	30	32	26	34.8	55
DU-25M-VR	25	21.8	35	38	31.3	40.4	65

Union Elbow

DL-VR



Fractional

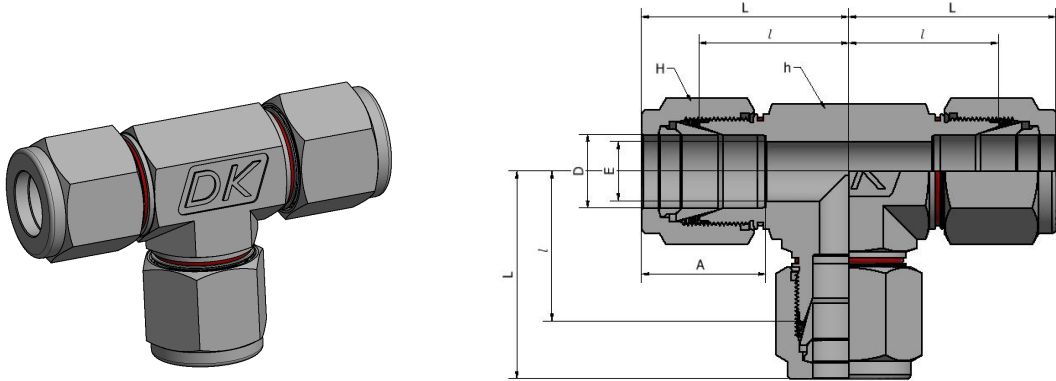
Part No.	Tube O.D D		E Min.	Width across flat				A	l	L
	In.	mm		h		H				
				In.	mm	In.	mm			
DL-4-VR	1/4	6.35	4.82	9/16	14.28	5/8	15.87	15.24	26	33.37
DL-5-VR	5/16	7.93	6.35	5/8	15.87	11/16	17.46	16.25	23.9	28.7
DL-6-VR	3/8	9.52	7.11	11/16	17.46	13/16	20.64	16.76	26	33.37
DL-8-VR	1/2	12.7	10.41	13/16	20.64	7/8	22.22	22.86	28	38.16
DL-10-VR	5/8	15.87	12.7	15/16	23.81	1	25.4	24.38	28.70	38.8
DL-12-VR	3/4	19.05	15.74	1-1/16	26.98	1-1/8	28.58	24.38	34	44.16
DL-14-VR	7/8	22.22	18.28	1-3/8	34.92	1-1/2	38.1	25.9	36.83	49.02
DL-16-VR	1	25.4	22.35	1-3/8	34.92	1-1/2	38.1	31.24	39.5	51.7

Metric

Part No.	Tube O.D D	E Min.	Width across flat		A	l	L
			h	H			
DL-6M-VR	6	4.8	14.28	16	15.3	26	33.4
DL-8M-VR	8	6.4	15.87	17.46	16.2	23.9	31.4
DL-10M-VR	10	7.9	17.46	20.64	17.2	26	33.6
DL-12M-VR	12	9.5	20.64	22.22	22.8	28	38.1
DL-15M-VR	15	11.9	25.4	25	24.4	28.7	38.8
DL-16M-VR	16	12.7	25.4	25	24.4	28.7	38.8
DL-18M-VR	18	15.1	27	30	24.4	29.7	39.8
DL-20M-VR	20	15.9	34.92	32	26	32.5	42.6
DL-22M-VR	22	18.3	34.92	32	26	32.5	42.6
DL-25M-VR	25	21.8	34.92	38	31.3	36.8	49.1

Union Tee

DT-VR



Fractional

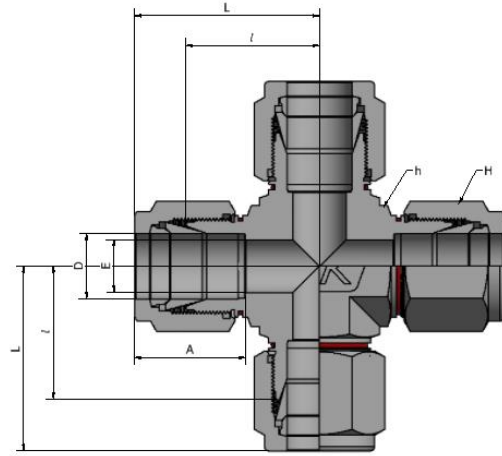
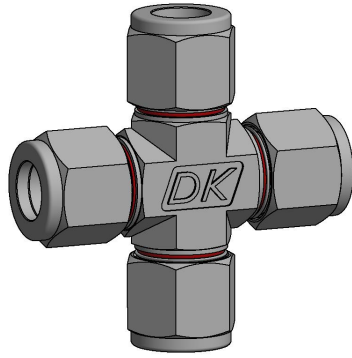
Part No.	Tube O.D D		E Min.	Width across flat				A	l	L
	In.	mm		h		H				
				In.	mm	In.	mm			
DT-4-VR	1/4	6.35	4.82	9/16	14.28	5/8	15.87	15.24	26	33.37
DT-5-VR	5/16	7.93	6.35	5/8	15.87	11/16	17.46	16.25	21.33	28.7
DT-6-VR	3/8	9.52	7.11	11/16	17.46	13/16	20.64	16.76	26	33.37
DT-8-VR	1/2	12.7	10.41	13/16	20.64	7/8	22.22	22.86	28	38.16
DT-10-VR	5/8	15.87	12.7	15/16	23.81	1	25.4	24.38	28.7	38.8
DT-12-VR	3/4	19.05	15.74	1-1/16	26.98	1-1/8	28.58	24.38	34	44.16
DT-14-VR	7/8	22.22	18.28	1-3/8	34.92	1-1/4	31.75	25.9	34.54	44.7
DT-16-VR	1	25.4	22.35	1-3/8	34.92	1-1/2	38.1	31.24	39.5	51.7

Metric

Part No.	Tube O.D D	E Min.	Width across flat		A	l	L
			h	H			
			DT-6M-VR	6			
DT-8M-VR	8	6.4	15.87	17.46	16.2	23.9	31.4
DT-10M-VR	10	7.9	17.46	20.64	17.2	26	33.6
DT-12M-VR	12	9.5	20.64	22.22	22.8	28	38.1
DT-15M-VR	15	11.9	25.4	25	24.4	28.7	38.8
DT-16M-VR	16	12.7	25.4	25	24.4	28.7	38.8
DT-18M-VR	18	15.1	27	30	24.4	29.7	39.8
DT-20M-VR	20	15.9	34.92	32	26	32.5	42.6
DT-22M-VR	22	18.3	34.92	32	26	32.5	42.6
DT-25M-VR	25	21.8	34.92	38	31.3	36.8	49.1

Union Cross

DX-VR



Fractional

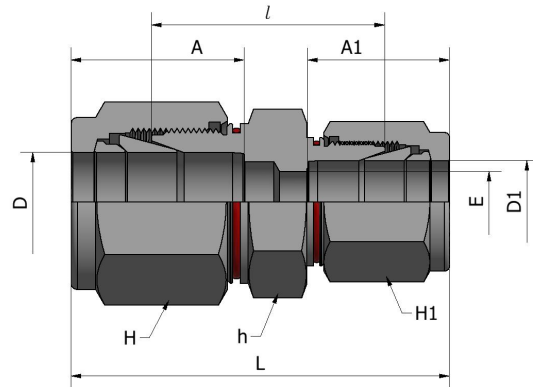
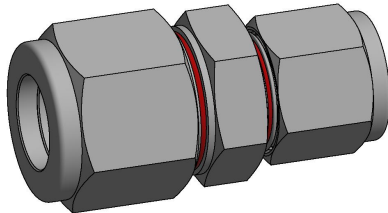
Part No.	Tube O.D D		E Min.	Width across flat				A	l	L
	In.	mm		h		H				
				In.	mm	In.	mm			
DX-4-VR	1/4	6.35	4.82	9/16	14.28	5/8	15.87	15.24	26	33.37
DX-5-VR	5/16	7.93	6.35	5/8	15.87	11/16	17.46	16.25	21.33	28.7
DX-6-VR	3/8	9.52	7.11	11/16	17.46	13/16	20.64	16.76	26	33.37
DX-8-VR	1/2	12.7	10.41	13/16	20.64	7/8	22.22	22.86	28	38.16
DX-10-VR	5/8	15.87	12.7	15/16	23.81	1	25.4	24.38	28.7	38.8
DX-12-VR	3/4	19.05	15.74	1-1/16	26.98	1-1/8	28.58	24.38	34	44.16
DX-14-VR	7/8	22.22	18.28	1-3/8	34.92	1-1/4	31.75	25.9	34.54	44.7
DX-16-VR	1	25.4	22.35	1-3/8	34.92	1-1/2	38.1	31.24	39.5	51.7

Metric

Part No.	Tube O.D D	E Min.	Width across flat		A	l	L
			h	H			
DX-6M-VR	6	4.8	14.28	16	15.3	26	33.4
DX-8M-VR	8	6.4	15.87	17.46	16.2	23.9	31.4
DX-10M-VR	10	7.9	17.46	20.64	17.2	26	33.6
DX-12M-VR	12	9.5	20.64	22.22	22.8	28	38.1
DX-15M-VR	15	11.9	25.4	25	24.4	28.7	38.8
DX-16M-VR	16	12.7	25.4	25	24.4	28.7	38.8
DX-18M-VR	18	15.1	27	30	24.4	29.7	39.8
DX-20M-VR	20	15.9	34.92	32	26	32.5	42.6
DX-22M-VR	22	18.3	34.92	32	26	32.5	42.6
DX-25M-VR	25	21.8	34.92	38	31.3	36.8	49.1

Reducing Union

DUR-VR



Fractional

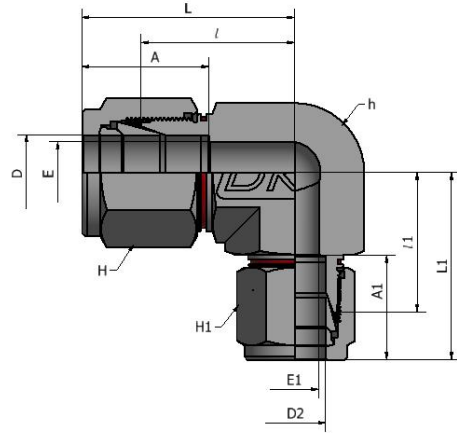
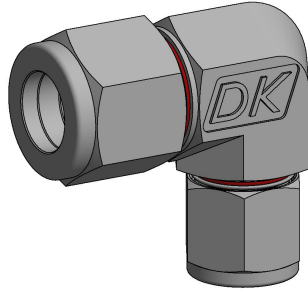
Part No.	Tube O.D				E Min.	Width across flat						A	A1	L	
	D		D2			h		H		H1					
	In.	mm	In.	mm		In.	mm	In.	mm	In.	mm				
DUR5-4-VR	5/16	7.93	1/4	6.35	4.82	5/8	15.87	11/16	17.46	5/8	15.87	16.25	15.24	27.43	42.16
DUR6-4-VR	3/8	9.52	1/4	6.35	4.82	11/16	17.46	13/16	20.64	5/8	15.87	16.76	15.24	28.44	43.18
DUR6-5-VR	3/8	9.52	5/16	7.93	6.35	11/16	17.46	13/16	20.64	11/16	17.46	16.76	16.25	29.46	44.19
DUR8-4-VR	1/2	12.7	1/4	6.35	4.82	13/16	20.64	7/8	22.22	5/8	15.87	22.86	15.24	29.46	46.99
DUR8-6-VR	1/2	12.7	3/8	9.52	7.11	13/16	20.64	7/8	22.22	13/16	20.64	22.86	16.76	30.98	48.51
DUR10-6-VR	5/8	15.87	3/8	9.52	7.11	15/16	23.81	1	25.4	13/16	20.64	24.38	16.76	31.75	49.27
DUR10-8-VR	5/8	15.87	1/2	12.7	10.41	15/16	23.81	1	25.4	7/8	22.22	24.38	22.86	31.75	52.07
DUR12-4-VR	3/4	19.05	1/4	6.35	4.82	1-1/16	26.98	1-1/8	28.58	5/8	15.87	24.38	15.24	31.75	49.27
DUR12-6-VR	3/4	19.05	3/8	9.52	7.11	1-1/16	26.98	1-1/8	28.58	13/16	20.64	24.38	16.76	33.27	50.8
DUR12-8-VR	3/4	19.05	1/2	12.7	10.41	1-1/16	26.98	1-1/8	28.58	7/8	22.22	24.38	22.86	33.27	53.59
DUR12-10-VR	3/4	19.05	5/8	15.87	12.7	1-1/16	26.98	1-1/8	28.58	1	25.4	24.38	24.38	33.27	53.59
DUR16-8-VR	1	25.4	1/2	12.7	10.41	1-3/8	34.92	1-1/2	38.1	7/8	22.22	31.24	22.86	40.89	63.24
DUR16-12-VR	1	25.4	3/4	19.05	15.74	1-3/8	34.92	1-1/2	38.1	1-1/8	28.58	31.24	24.38	40.38	62.73

Metric

Part No.	Tube O.D		E Min.	Width across flat			A	A1	l	L
	D	D1		h	H	H1				
DUR8M-6M-VR	8	6	4.8	16	17.46	16	16.2	15.3	27.4	42.3
DUR10M-6M-VR	10	6	4.8	18	20.64	16	17.2	15.3	29.5	44.5
DUR10M-8M-VR	10	8	6.4	18	20.64	17.46	17.2	16.2	30	45.1
DUR12M-6M-VR	12	6	4.8	20.64	22.22	16	22.8	15.3	29.5	47
DUR12M-8M-VR	12	8	6.4	20.64	22.22	17.46	22.8	16.2	30.2	47.8
DUR12M-10M-VR	12	10	7.9	20.64	22.22	20.64	22.8	17.2	31	48.7
DUR15M-12M-VR	15	12	9.8	24	25	22.22	24.4	17.2	31.8	52.5
DUR16M-10M-VR	16	10	7.9	24	25	20.64	24.4	17.2	31.8	49.5
DUR16M-12M-VR	16	12	9.5	24	25	22.22	24.4	22.8	31.8	52
DUR18M-10M-VR	18	10	7.9	27	30	20.64	24.4	17.2	33	51
DUR18M-12M-VR	18	12	9.5	27	30	22.22	24.4	22.8	33.3	53.5
DUR25M-18M-VR	25	18	15.1	35	38	30	31.3	24.4	38.6	61
DUR25M-20M-VR	25	20	15.9	35	38	32	31.3	26	39.9	62.3

Reducing Union Elbow

DLR-VR



Fractional

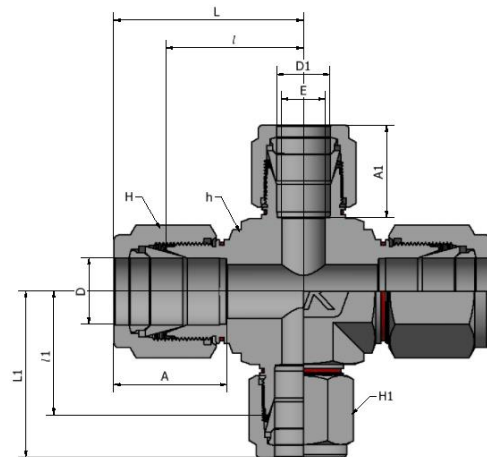
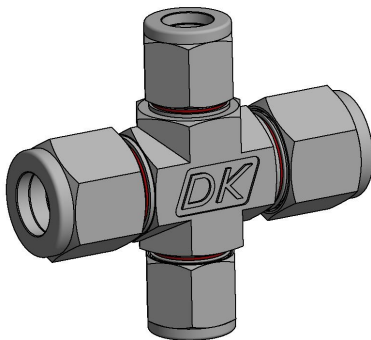
Part No.	Tube O.D				E Min.	E1 Min	Width across flat						A	A1	l	l1	L	L1
	D		D1				h		H		H1							
	In.	mm	In.	mm			In.	mm	In.	mm	In.	mm						
DLR6-4-VR	3/8	9.52	1/4	6.35	7.11	4.82	11/16	17.46	13/16	20.64	5/8	15.87	16.76	15.24	23.1	21.92	30.47	29.29
DLR8-4-VR	1/2	12.7	1/4	6.35	10.41	4.82	13/16	20.64	7/8	22.22	5/8	15.87	22.86	15.24	25.9	24.4	36.06	31.77
DLR8-6-VR	1/2	12.7	3/8	9.52	10.41	7.11	13/16	20.64	7/8	22.22	11/16	17.46	22.86	16.76	25.9	25.9	36.06	33.27

Metric

Part No.	Tube O.D			E Min.	Width across flat			A	A1	l	l1	L	L1
	D	D1			h	H	H1						
		In.	mm										
DUR8M-4-VR	8	1/4		4.8	16	17.46	16	16.2	15.3	27.4	20.6	28.7	42.3

Reducing Union Cross

DXR-VR



Fractional

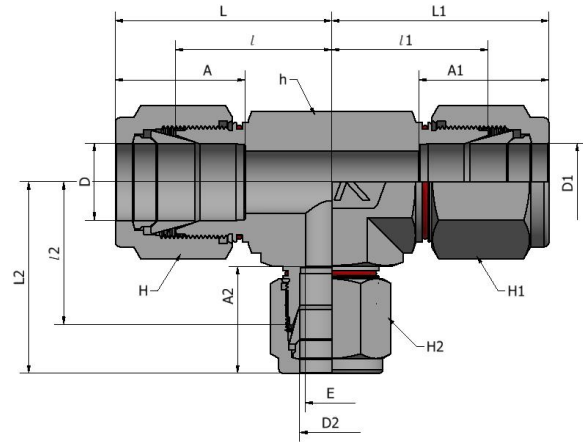
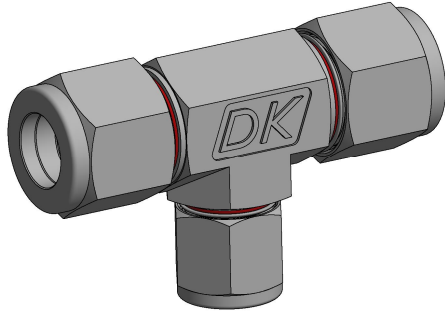
Part No.	Port1	Port2	Port3	Port4	E Min.	Width across flat						A	A1	l	l1	L
	D		D1			h		H		H1						
	In.	mm	In.	mm		In.	mm	In.	mm	In.	mm					
DXR12-12-6-6-VR	3/4	19.05	3/8	9.52	7.11	1-1/16	26.98	1-1/8	28.58	13/16	20.64	24.38	16.76	29.71	39.87	37.07

Metric

Part No.	Tube O.D		E Min.	Width across flat			A	A1	l	L
	D	D1		h	H	H1				
DXR16M6M6M6M-VR	8	6	4.8	16	17.46	16	16.2	15.3	28.7	38.8

Reducing Union

DTR-VR



Fractional

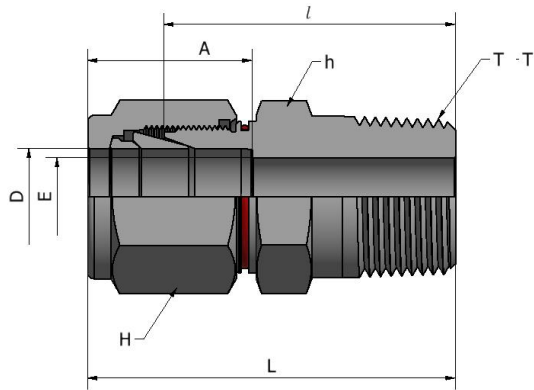
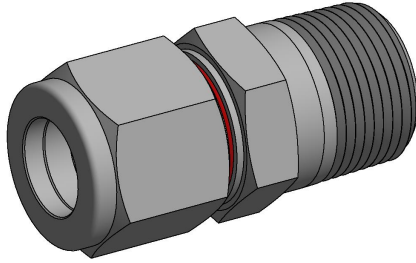
Part No.	Tube O.D						E Min.	Width across flat								A	A1	A2	l	l1	l2	L	L1	L2	L3
	Port1 D		Port2 D1		Port3 D2			h		H		H1		H2											
	In.	mm	In.	Mm	In.	Mm		In.	mm	In.	mm	In.	mm	In.	mm										
DTR4-4-6-VR	1/4	6.35	1/4	6.35	3/8	9.52	4.8	11/16	17.46	5/8	15.87	5/8	15.87	13/16	20.64	15.24	15.24	16.76	21.92	21.92	26	29.28	29.28	33.37	
DTR4-8-8-VR	1/4	6.35	1/2	12.7	1/2	12.7	4.8	13/16	20.64	5/8	15.87	7/8	22.22	7/8	22.22	15.24	22.86	22.86	24.4	28	28	31.76	38.16	38.16	
DTR6-4-6-VR	3/8	9.52	1/4	6.35	3/8	9.52	4.8	11/16	17.46	13/16	20.64	5/8	15.87	13/16	20.64	16.76	15.24	16.76	26	23.1	26	33.37	30.46	33.37	
DTR6-6-4-VR	3/8	9.52	3/8	9.52	1/4	6.35	4.8	11/16	17.46	13/16	20.64	13/16	20.64	5/8	15.87	16.76	16.76	15.24	26	26	21.92	33.37	33.37	29.28	
DTR6-6-8-VR	3/8	9.52	3/8	9.52	1/2	12.7	7.1	13/16	20.64	13/16	20.64	13/16	20.64	7/8	22.22	16.76	16.76	22.86	25.9	25.9	28	33.26	33.26	38.16	
DTR8-4-6-VR	1/2	12.7	1/4	6.35	3/8	9.52	4.8	13/16	20.64	7/8	22.22	5/8	15.87	13/16	20.64	22.86	15.24	16.76	28	25.9	25.9	38.16	33.26	33.26	
DTR8-4-8-VR	1/2	12.7	1/4	6.35	1/2	12.7	4.8	13/16	20.64	7/8	22.22	5/8	15.87	7/8	22.22	22.86	15.24	22.86	28	24.4	28	38.16	31.76	38.16	
DTR8-6-6-VR	1/2	12.7	3/8	9.52	3/8	9.52	7.1	13/16	20.64	7/8	22.22	13/16	20.64	13/16	20.64	22.86	16.76	16.76	28	25.9	25.9	38.16	33.26	33.26	
DTR8-8-4-VR	1/2	12.7	1/2	12.7	1/4	6.35	4.8	13/16	20.64	7/8	22.22	7/8	22.22	5/8	15.87	22.86	22.86	15.24	28	28	24.4	38.16	38.16	31.76	
DTR8-8-6-VR	1/2	12.7	1/2	12.7	3/8	9.52	7.1	13/16	20.64	7/8	22.22	7/8	22.22	13/16	20.64	22.86	22.86	16.76	28	28	25.9	38.16	38.16	33.26	
DTR10-10-6-VR	5/8	15.87	5/8	15.87	3/8	9.52	7.1	15/16	23.81	1	25.4	1	25.4	13/16	20.64	24.38	24.38	16.76	28.7	28.7	28.7	38.86	38.86	36.06	
DTR12-8-12-VR	3/4	19.05	1/2	12.7	3/4	19.05	10.41	1-1/16	28.58	1-1/8	28.58	7/8	22.22	1-1/8	28.58	24.38	24.38	24.38	34	29.71	34	44.16	39.87	44.16	
DTR12-12-4-VR	3/4	19.05	3/4	19.05	1/4	6.35	4.8	1-1/16	28.58	1-1/8	28.58	1-1/8	28.58	5/8	15.87	24.38	24.38	15.24	34	34	28.21	44.16	44.16	35.57	
DTR12-12-6-VR	3/4	19.05	3/4	19.05	3/8	9.52	7.1	1-1/16	28.58	1-1/8	28.58	1-1/8	28.58	13/16	20.64	24.38	24.38	16.76	34	34	29.71	44.16	44.16	35.57	
DTR12-12-8-VR	3/4	19.05	3/4	19.05	1/2	12.7	10.41	1-1/16	28.58	1-1/8	28.58	1-1/8	28.58	7/8	22.22	24.38	24.38	22.86	34	34	29.71	44.16	44.16	38.37	
DTR12-12-16-VR	3/4	19.05	3/4	19.05	1	25.4	16	1-3/8	34.92	1-1/8	28.58	1-1/8	28.58	1-1/2	38.1	24.38	24.38	31.24	34.43	34.43	39.5	49.02	49.02	51.7	
DTR14-14-8-VR	7/8	22.22	7/8	22.22	1/2	12.7	10.41	1-1/4	31.75	1-1/4	31.75	1-1/4	31.75	7/8	22.22	25.9	25.9	22.86	34.54	34.54	34.54	44.7	44.7	44.7	
DTR16-12-12-VR	1	25.4	3/4	19.05	3/4	19.05	16	1-3/8	34.92	1-1/2	38.1	1-1/8	28.58	1-1/8	28.58	31.24	24.38	24.38	39.5	36.83	35.54	51.7	45.7	45.7	
DTR16-16-4-VR	1	25.4	1	25.4	1/4	6.35	4.8	1-3/8	34.92	1-1/2	38.1	1-1/2	38.1	5/8	15.87	31.24	31.24	15.24	39.5	39.5	33.04	51.7	51.7	40.4	
DTR16-16-6-VR	1	25.4	1	25.4	3/8	9.52	7.1	1-3/8	34.92	1-1/2	38.1	1-1/2	38.1	13/16	20.64	31.24	31.24	16.76	39.5	39.5	34.54	51.7	51.7	41.9	
DTR16-16-8-VR	1	25.4	1	25.4	1/2	12.7	10.41	1-3/8	34.92	1-1/2	38.1	1-1/2	38.1	7/8	22.22	31.24	31.24	22.86	39.5	39.5	34.54	51.7	51.7	44.7	
DTR16-16-12-VR	1	25.4	1	25.4	3/4	19.05	16	1-3/8	34.92	1-1/2	38.1	1-1/2	38.1	1-1/8	28.58	31.24	31.24	24.38	39.5	39.5	35.54	51.7	51.7	45.7	

Metric

Part No.	Tube O.D			E Min.	Width across flat				A	A1	A2	l	l1	l2	L	L1	L2
	Port1 D	Port D1	Port D2		h	H	H1	H2									
DTR8M-8M-6M-VR	8	8	6	4.8	15.87	17.46	17.46	16	16.2	16.2	15.3	23.9	23.9	20.5	31.4	31.4	28
DTR10M-10M-6M-VR	10	10	6	4.8	17.46	20.64	20.64	16	17.2	17.2	15.3	26	26	22.4	33.6	33.6	29.8
DTR10M-10M-12M-VR	10	10	12	7.9	20.64	20.64	20.64	22.22	17.2	17.2	22.8	25.9	25.9	28	33.5	33.5	38.1
DTR12M-6M-10M-VR	12	6	10	4.8	20.64	22.22	16	20.64	22.8	15.3	17.2	28	24.4	25.9	38.1	31.8	33.5
DTR12M-6M-12M-VR	12	6	12	7.9	20.64	22.22	16	22.22	22.8	15.3	22.8	28	24.4	28	38.1	31.8	38.1
DTR12M-10M-10M-VR	12	10	10	7.9	20.64	22.22	20.64	20.64	22.8	17.2	17.2	28	25.9	25.9	38.1	33.5	33.5
DTR12M-12M-10M-VR	12	12	10	7.9	20.64	22.22	22.22	20.64	22.8	22.8	17.2	28	28	25.9	38.1	38.1	33.5
DTR12M-12M-6M-VR	12	12	6	4.8	20.64	22.22	22.22	16	22.8	22.8	15.3	28	28	24.4	38.1	38.1	31.8
DTR15M-15M-12M-VR	15	15	12	9.8	25.4	25	25.22	22.22	24.4	24.4	22.8	28.7	28.7	28.7	38.8	38.8	38.8
DTR16M-16M-12M-VR	16	16	12	9.8	25.4	25	25	22.22	24.4	24.4	22.8	28.7	28.7	28.7	38.8	38.8	38.8
DTR18M-18M-12M-VR	18	18	12	9.8	27	30	30	22.22	24.4	24.4	22.8	29.7	29.7	28.2	39.8	39.8	38.3
DTR20M-12M-20M-VR	20	12	20	9.8	34.9	32	22.22	32	26	22.8	26	32.5	32.5	32.5	42.6	42.6	42.6
DTR20M-20M-6M-VR	20	20	6	4.8	34.9	32	32	16	26	26	15.3	32.5	32.5	31	42.6	42.6	38.4
DTR20M-20M-10M-VR	20	20	10	7.9	34.9	32	32	20.64	26	26	17.2	32.5	32.5	32.5	42.6	42.6	40.1
DTR20M-20M-12M-VR	20	20	12	9.8	34.9	32	32	22.22	26	26	22.8	32.5	32.5	32.5	42.6	42.6	42.6
DTR20M-20M-25M-VR	20	20	25	15.9	34.9	32	32	38	26	26	31.3	34.3	34.3	36.8	44.4	44.4	49.1
DTR22M-22M-12M-VR	22	22	12	9.8	34.9	32	32	22.22	26	26	22.8	32.5	32.5	32.5	42.6	42.6	42.6
DTR25M-20M-20M-VR	25	20	20	15.9	34.9	38	32	32	31.3	26	26	36.8	34.3	34.3	49.1	44.4	44.4
DTR25M-25M-10M-VR	25	25	10	7.9	34.9	38	38	20.64	31.3	31.3	17.2	36.8	36.8	34.3	49.1	49.1	38.9
DTR25M-25M-12M-VR	25	25	12	9.8	34.9	38	38	22.22	31.3	31.3	22.8	36.8	36.8	34.3	49.1	49.1	44.4
DTR25M-25M-20M-VR	25	25	20	15.9	34.9	38	38	32	31.3	31.3	26	36.8	36.8	34.3	49.1	49.1	44.4

Male Connector

DMC-N-VR

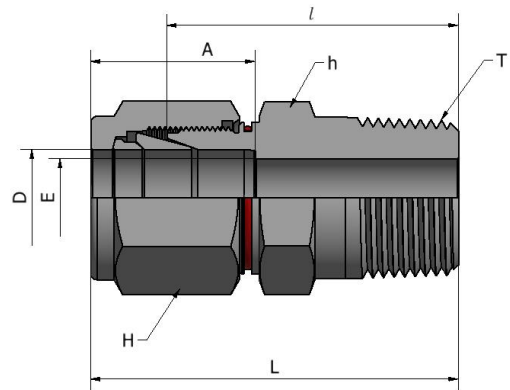
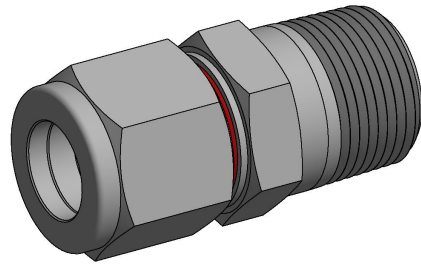


Fractional

Part No.	Tube O.D		T NPT	E Min.	Width across flat				A	L	L
	D				h		H				
	In.	mm			In.	mm	In.	mm			
DMC4-1N-VR	1/4	6.35	1/16	4.82	9/16	14.28	5/8	15.87	15.24	25.4	32.76
DMC4-2N-VR	1/4	6.35	1/8	4.82	9/16	14.28	5/8	15.87	15.24	25.4	32.76
DMC4-4N-VR	1/4	6.35	1/4	4.82	9/16	14.28	5/8	15.87	15.24	30.48	37.84
DMC4-6N-VR	1/4	6.35	3/8	4.82	11/16	17.46	5/8	15.87	15.24	30.98	38.35
DMC4-8N-VR	1/4	6.35	1/2	4.82	7/8	22.22	5/8	15.87	15.24	37.33	44.7
DMC4-12N-VR	1/4	6.35	3/4	4.82	1-1/16	26.98	5/8	15.87	15.24	38.86	46.22
DMC5-2N-VR	5/16	7.93	1/8	4.82	5/8	15.87	11/16	17.46	16.25	26.67	34.03
DMC5-4N-VR	5/16	7.93	1/4	6.35	5/8	15.87	11/16	17.46	16.25	31.24	38.6
DMC5-6N-VR	5/16	7.93	3/8	6.35	11/16	17.46	11/16	17.46	16.25	31.75	39.11
DMC5-8N-VR	5/16	7.93	1/2	6.35	7/8	22.22	11/16	17.46	16.25	38.11	45.6
DMC6-2N-VR	3/8	9.52	1/8	4.82	5/8	15.87	13/16	20.64	16.76	27.94	35.3
DMC6-4N-VR	3/8	9.52	1/4	7.11	5/8	15.87	13/16	20.64	16.76	32.51	39.87
DMC6-6N-VR	3/8	9.52	3/8	7.11	11/16	17.46	13/16	20.64	16.76	32.51	39.87
DMC6-8N-VR	3/8	9.52	1/2	7.11	7/8	22.22	13/16	20.64	16.76	38.86	46.22
DMC6-12N-VR	3/8	9.52	3/4	7.11	1-1/16	26.98	13/16	20.64	16.76	40.38	47.75
DMC6-16N-VR	3/8	9.52	1	7.11	1-3/8	34.92	13/16	20.64	16.76	47	54.37
DMC8-2N-VR	1/2	12.7	1/8	4.82	13/16	20.64	7/8	22.22	22.86	28.7	38.86
DMC8-4N-VR	1/2	12.7	1/4	7.11	13/16	20.64	7/8	22.22	22.86	33.27	43.43
DMC8-6N-VR	1/2	12.7	3/8	9.65	13/16	20.64	7/8	22.22	22.86	33.27	43.43
DMC8-8N-VR	1/2	12.7	1/2	10.41	7/8	22.22	7/8	22.22	22.86	38.86	49.02
DMC8-12N-VR	1/2	12.7	3/4	10.41	1-1/16	26.98	7/8	22.22	22.86	40.38	50.24
DMC8-16N-VR	1/2	12.7	1	10.41	1-3/8	34.92	7/8	22.22	22.86	46.99	57.15
DMC10-4N-VR	5/8	15.87	1/4	6.35	15/16	23.81	1	25.4	24.38	33.8	43.96
DMC10-6N-VR	5/8	15.87	3/8	9.65	15/16	23.81	1	25.4	24.38	34.03	44.19
DMC10-8N-VR	5/8	15.87	1/2	11.93	15/16	23.81	1	25.4	24.38	38.86	49.02
DMC10-12N-VR	5/8	15.87	3/4	12.7	1-1/16	26.98	1	25.4	24.38	40.38	50.54
DMC12-6N-VR	3/4	19.05	3/8	9.65	1-1/16	26.98	1-1/8	28.58	24.38	34.03	44.19
DMC12-8N-VR	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.58	24.38	40.38	50.54
DMC12-12N-VR	3/4	19.05	3/4	15.74	1-1/16	26.98	1-1/8	28.58	24.38	40.38	50.54
DMC12-16N-VR	3/4	19.05	1	15.74	1-3/8	34.92	1-1/8	28.58	24.38	46.99	57.15
DMC14-8N-VR	7/8	22.22	1/2	11.9	1-3/16	30.16	1-1/4	31.75	25.9	40.38	50.54
DMC14-12N-VR	7/8	22.22	3/4	15.74	1-3/16	30.16	1-1/4	31.75	25.9	40.38	50.54
DMC14-16N-VR	7/8	22.22	1	18.28	1-3/8	34.92	1-1/4	31.75	25.9	46.99	57.15
DMC16-6N-VR	1	25.4	3/8	9.65	1-3/8	34.92	1-1/2	38.1	31.24	40.3	52.49
DMC16-8N-VR	1	25.4	1/2	11.93	1-3/8	34.92	1-1/2	38.1	31.24	45.21	57.4
DMC16-12N-VR	1	25.4	3/4	15.74	1-3/8	34.92	1-1/2	38.1	31.24	45.21	57.4
DMC16-16N-VR	1	25.4	1	22.35	1-3/8	34.92	1-1/2	38.1	31.24	50.03	62.23

Male Connector

DMC-N-VR

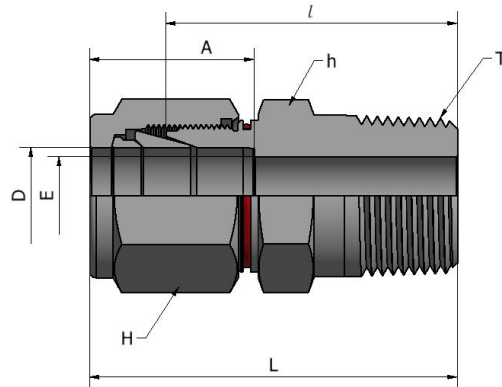
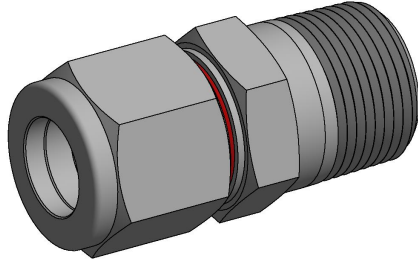


Metric

Part No.	Tube O.D. D	T NPT	E Min.	Width across flat		A	l	L
				h	H			
DMC6M-2N-VR	6	1/8	4.8	14	16	15.3	25.4	32.8
DMC6M-4N-VR	6	1/4	4.8	14	16	15.3	30.2	37.6
DMC6M-6N-VR	6	3/8	4.8	18	16	15.3	31	38.4
DMC6M-8N-VR	6	1/2	4.8	22	16	15.3	37.3	44
DMC8M-2N-VR	8	1/8	4.8	16	17.46	16.2	26.7	34.2
DMC8M-4N-VR	8	1/4	6.4	16	17.46	16.2	31.2	38.7
DMC8M-6N-VR	8	3/8	6.4	18	17.46	16.2	31.8	39.2
DMC8M-8N-VR	8	1/2	6.4	22	17.46	16.2	37.3	44.8
DMC10M-2N-VR	10	1/8	4.8	18	20.64	17.2	28.7	36.3
DMC10M-4N-VR	10	1/4	7.1	18	20.64	17.2	33.3	40.9
DMC10M-6N-VR	10	3/8	7.9	18	20.64	17.2	33.3	40.9
DMC10M-8N-VR	10	1/2	7.9	22	20.64	17.2	38.1	45.7
DMC10M-12N-VR	10	3/4	7.9	27	20.64	17.2	38.9	46.5
DMC12M-2N-VR	12	1/8	4.8	22	22.22	22.8	28.7	38.8
DMC12M-4N-VR	12	1/4	7.1	22	22.22	22.8	33.3	43.4
DMC12M-6N-VR	12	3/8	9.5	22	22.22	22.8	33.3	43.4
DMC12M-8N-VR	12	1/2	9.5	22	22.22	22.8	38.1	48.2
DMC12M-12N-VR	12	3/4	9.5	27	22.22	22.8	38.9	49
DMC14M-4N-VR	14	1/4	6.4	24	25	24.4	34	44.1
DMC14M-6N-VR	14	3/8	9.5	24	25	24.4	34	44.1
DMC14M-8N-VR	14	1/2	11.1	24	25	24.4	34	44.1
DMC15M-8N-VR	15	1/2	11.9	24	25	24.4	38.9	49
DMC16M-4N-VR	16	1/4	7.1	24	25	24.4	34	44.1
DMC16M-6N-VR	16	3/8	9.5	24	25	24.4	34	44.1
DMC16M-8N-VR	16	1/2	11.9	24	25	24.4	38.9	49
DMC16M-12N-VR	16	3/4	12.7	27	25	24.4	38.9	49
DMC18M-8N-VR	18	1/2	11.9	27	30	24.4	40.4	50.5
DMC18M-12N-VR	18	3/4	15.1	27	30	24.4	40.4	50.5
DMC20M-8N-VR	20	1/2	11.9	30	32	26	42.2	52.3
DMC20M-12N-VR	20	3/4	15.9	30	32	26	42.2	52.3
DMC22M-12N-VR	22	3/4	15.9	30	32	26	42.2	52.3
DMC22M-16N-VR	22	1	18.3	35	32	26	47.8	57.9
DMC25M-8N-VR	25	1/2	11.9	35	38	31.3	45.2	57.5
DMC25M-12N-VR	25	3/4	15.9	35	38	31.3	45.2	57.5
DMC25M-16N-VR	25	1	21.8	35	38	31.3	50	62.3

Male Connector

DMC-R-VR

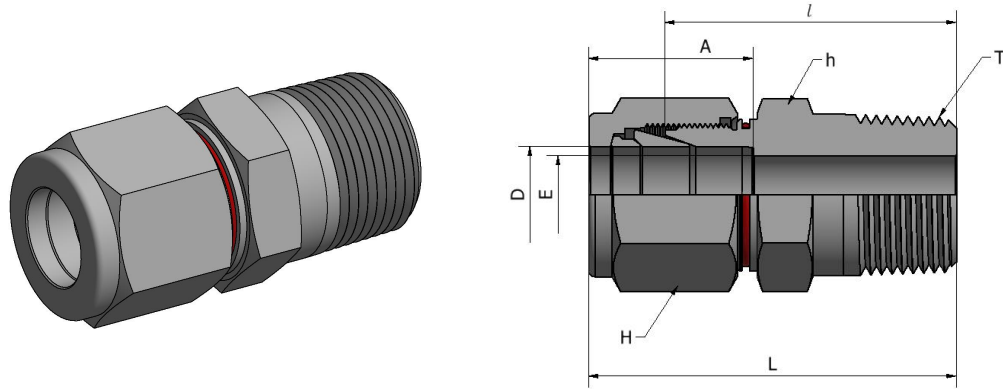


Fractional

Part No.	Tube O.D D		T PT	E Min.	Width across flat				A	l	L
	In.	mm			h		H				
					In.	mm	In.	mm			
DMC4-2R-VR	1/4	6.35	1/8	4.82	9/16	14.28	5/8	15.87	15.24	25.4	32.76
DMC4-4R-VR	1/4	6.35	1/4	4.82	9/16	14.28	5/8	15.87	15.24	30.48	37.84
DMC4-6R-VR	1/4	6.35	3/8	4.82	11/16	17.46	5/8	15.87	15.24	30.98	38.35
DMC4-8R-VR	1/4	6.35	1/2	4.82	7/8	22.22	5/8	15.87	15.24	37.33	44.7
DMC5-2R-VR	5/16	7.93	1/8	4.82	5/8	15.87	11/16	17.46	16.25	26.67	34.03
DMC5-4R-VR	5/16	7.93	1/4	6.35	5/8	15.87	11/16	17.46	16.25	31.24	38.6
DMC5-16R-VR	5/16	7.93	1	6.35	1-3/8	34.92	11/16	17.46	16.25	46.2	50
DMC6-2R-VR	3/8	9.52	1/8	4.82	5/8	15.87	13/16	20.64	16.76	27.94	35.3
DMC6-4R-VR	3/8	9.52	1/4	7.11	5/8	15.87	13/16	20.64	16.76	32.51	39.87
DMC6-6R-VR	3/8	9.52	3/8	7.11	11/16	17.46	13/16	20.64	16.76	32.51	39.87
DMC6-8R-VR	3/8	9.52	1/2	7.11	7/8	22.22	13/16	20.64	16.76	38.86	46.22
DMC6-12R-VR	3/8	9.52	3/4	7.11	1-1/16	26.98	13/16	20.64	16.76	40.38	47.75
DMC8-2R-VR	1/2	12.7	1/8	4.82	13/16	20.64	7/8	22.22	22.86	28.7	38.86
DMC8-4R-VR	1/2	12.7	1/4	7.11	13/16	20.64	7/8	22.22	22.86	33.27	43.43
DMC8-6R-VR	1/2	12.7	3/8	9.65	13/16	20.64	7/8	22.22	22.86	33.27	43.43
DMC8-8R-VR	1/2	12.7	1/2	10.41	7/8	22.22	7/8	22.22	22.86	38.86	49.02
DMC8-12R-VR	1/2	12.7	3/4	10.41	1-1/16	26.98	7/8	22.22	22.86	40.38	50.24
DMC8-16R-VR	1/2	12.7	1	10.41	1-3/8	34.92	7/8	22.22	22.86	46.99	57.15
DMC10-6R-VR	5/8	15.87	3/8	9.65	15/16	23.81	1	25.4	24.38	34.03	44.19
DMC10-8R-VR	5/8	15.87	1/2	11.93	15/16	23.81	1	25.4	24.38	38.86	49.02
DMC10-12R-VR	5/8	15.87	3/4	12.7	1-1/16	26.98	1	25.4	24.38	40.38	50.54
DMC12-8R-VR	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.58	24.38	40.38	50.54
DMC12-12R-VR	3/4	19.05	3/4	15.74	1-1/16	26.98	1-1/8	28.58	24.38	40.38	50.54
DMC12-16R-VR	3/4	19.05	1	15.74	1-3/8	34.92	1-1/8	28.58	24.38	46.99	57.15
DMC16-12R-VR	1	25.4	3/4	15.74	1-3/8	34.92	1-1/2	38.1	31.24	45.21	57.4
DMC16-16R-VR	1	25.4	1	22.35	1-3/8	34.92	1-1/2	38.1	31.24	50.03	62.23

Male Connector

DMC-R-VR

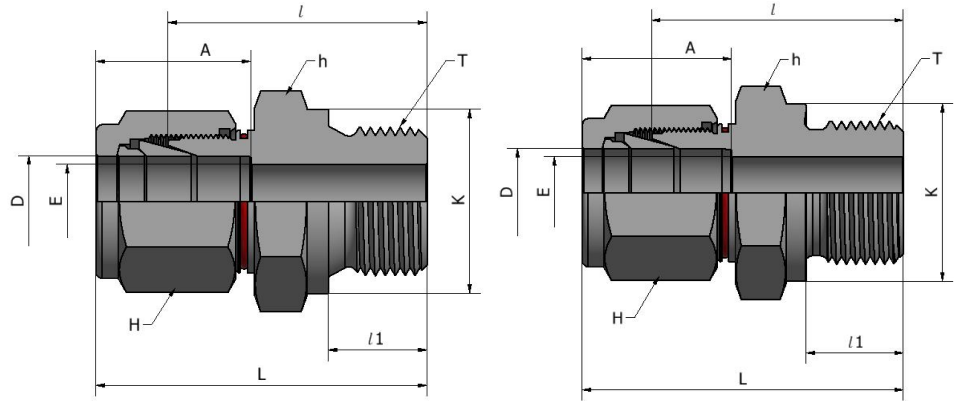
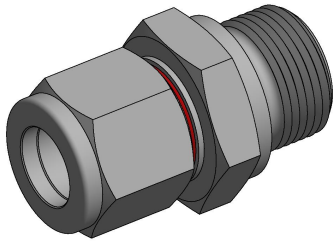


Metric

Part No.	Tube O.D D	T PT	E Min.	Width across flat		A	l	L
				h	H			
DMC6M-2R-VR	6	1/8	4.8	14	16	15.3	25.4	32.8
DMC6M-4R-VR	6	1/4	4.8	14	16	15.3	30.2	37.6
DMC6M-6R-VR	6	3/8	4.8	18	16	15.3	31	38.4
DMC6M-8R-VR	6	1/2	4.8	22	16	15.3	37.3	44
DMC8M-2R-VR	8	1/8	4.8	16	17.46	16.2	26.7	34.2
DMC8M-4R-VR	8	1/4	6.4	16	17.46	16.2	31.2	38.7
DMC8M-6R-VR	8	3/8	6.4	18	17.46	16.2	31.8	39.2
DMC8M-8R-VR	8	1/2	6.4	22	17.46	16.2	37.3	44.8
DMC10M-2R-VR	10	1/8	4.8	18	20.64	17.2	28.7	36.3
DMC10M-4R-VR	10	1/4	7.1	18	20.64	17.2	33.3	40.9
DMC10M-6R-VR	10	3/8	7.9	18	20.64	17.2	33.3	40.9
DMC10M-8R-VR	10	1/2	7.9	22	20.64	17.2	38.1	45.7
DMC10M-12R-VR	10	3/4	7.9	27	20.64	17.2	38.9	46.5
DMC12M-4R-VR	12	1/4	7.1	22	22.22	22.8	33.3	43.4
DMC12M-6R-VR	12	3/8	9.5	22	22.22	22.8	33.3	43.4
DMC12M-8R-VR	12	1/2	9.5	22	22.22	22.8	38.1	48.2
DMC12M-12R-VR	12	3/4	9.5	27	22.22	22.8	38.9	49
DMC14M-6R-VR	14	3/8	9.5	24	25	24.4	34	44.1
DMC14M-8R-VR	14	1/2	11.1	24	25	24.4	34	44.1
DMC15M-6R-VR	15	3/8	9.5	24	25	24.4	34	44.1
DMC15M-8R-VR	15	1/2	11.9	24	25	24.4	38.9	49
DMC16M-4R-VR	16	1/4	7.1	24	25	24.4	34	44.1
DMC16M-6R-VR	16	3/8	9.5	24	25	24.4	34	44.1
DMC16M-8R-VR	16	1/2	11.9	24	25	24.4	38.9	49
DMC16M-12R-VR	16	3/4	12.7	27	25	24.4	38.9	49
DMC18M-8R-VR	18	1/2	11.9	27	30	24.4	40.4	50.5
DMC18M-12R-VR	18	3/4	15.1	27	30	24.4	40.4	50.5
DMC20M-8R-VR	20	1/2	11.9	30	32	26	42.2	52.3
DMC20M-12R-VR	20	3/4	15.9	30	32	26	42.2	52.3
DMC22M-8R-VR	22	1/2	11.9	30	32	26	42.2	52.3
DMC22M-12R-VR	22	3/4	15.9	30	32	26	42.2	52.3
DMC22M-16R-VR	22	1	18.3	35	32	26	47.8	57.9
DMC25M-8R-VR	25	1/2	11.9	35	38	31.3	45.2	57.5
DMC25M-12R-VR	25	3/4	15.9	35	38	31.3	45.2	57.5
DMC25M-16R-VR	25	1	21.8	35	38	31.3	50	62.3

Male Connector for
Bonded Gasket Seal(G), Metal Gasket(GB)

DMC-G, GB-VR



Fractional

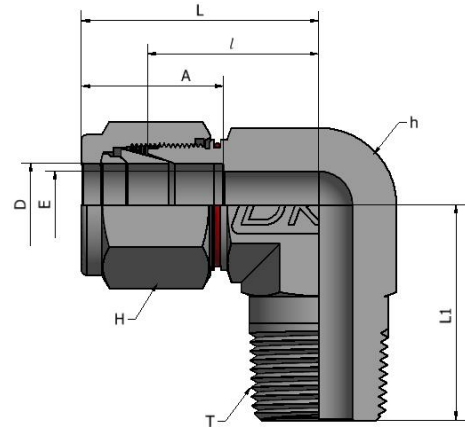
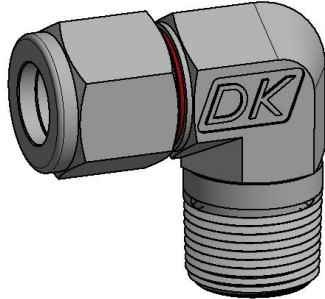
Part No.	Tube O.D D		T PF	E Min.	Width across flat				A	l	l1	L	K
	In.	mm			h		H						
					In.	mm	In.	mm					
DMC4-2G-VR (-GB)	1/4	6.35	1/8	2.28	9/16	14.28	5/8	15.87	15.24	24.89	7.11	32.26	13.8
DMC4-4G-VR (-GB)	1/4	6.35	1/4	4.8	3/4	19.05	5/8	15.87	15.24	30.23	11.18	37.59	18
DMC4-6G-VR (-GB)	1/4	6.35	3/8	4.8	7/8	22.22	5/8	15.87	15.24	31.5	11.18	38.86	21.8
DMC4-8G-VR (-GB)	1/4	6.35	1/2	4.8	1-1/16	26.98	5/8	15.87	15.24	37.34	14.22	44.7	26
DMC6-2G-VR (-GB)	3/8	9.52	1/8	4.8	5/8	15.87	13/16	20.64	16.76	26.4	7.11	33.77	13.8
DMC6-4G-VR (-GB)	3/8	9.52	1/4	4.8	3/4	19.05	13/16	20.64	16.76	31.75	11.18	39.12	18
DMC6-6G-VR (-GB)	3/8	9.52	3/8	7.11	7/8	22.22	13/16	20.64	16.76	33.02	11.18	40.39	21.8
DMC6-8G-VR (-GB)	3/8	9.52	1/2	7.11	1-1/16	26.98	13/16	20.64	16.76	38.86	14.22	46.23	26
DMC8-4G-VR (-GB)	1/2	12.7	1/4	7.11	13/16	20.64	7/8	22.22	22.86	32.51	11.18	42.67	18
DMC8-6G-VR (-GB)	1/2	12.7	3/8	7.9	7/8	22.22	7/8	22.22	22.86	33.02	11.18	43.18	21.8
DMC8-8G-VR (-GB)	1/2	12.7	1/2	10.41	1-1/16	26.98	7/8	22.22	22.86	38.86	14.22	49.02	26
DMC12-8G-VR (-GB)	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.58	24.38	38.86	14.22	49.02	26
DMC12-12G-VR (-GB)	3/4	19.05	3/4	15.74	1-5/16	33.33	1-1/8	28.58	24.38	42.67	15.75	52.83	32
DMC16-8G-VR (-GB)	1	25.4	1/2	11.93	1-3/8	34.92	1-1/2	38.1	31.24	43.69	14.22	55.88	26
DMC16-12G-VR (-GB)	1	25.4	3/4	15.74	1-3/8	34.92	1-1/2	38.1	31.24	43.69	15.75	55.88	32
DMC16-16G-VR (-GB)	1	25.4	1	22.35	1-5/8	41.27	1-1/2	38.1	31.24	47.75	18.29	59.94	39

Metric

Part No.	Tube O.D D		T PF	E Min.	Width across flat		A	l	l1	L	K
	In.	mm			h						
					In.	mm					
DMC6M-2G-VR (-GB)	6	1/8	4	14	14	15.3	24.9	7.1	32.3	13.8	
DMC6M-4G-VR (-GB)	6	1/4	4.8	19	14	15.3	30.2	11.2	37.6	18	
DMC6M-6G-VR (-GB)	6	3/8	4.8	22	14	15.3	31.5	11.2	38.9	21.8	
DMC6M-8G-VR (-GB)	6	1/2	4.8	27	14	15.3	37.3	14.2	44.7	26	
DMC8M-2G-VR (-GB)	8	1/8	4	15	16	16.2	25.7	7.1	33.2	13.8	
DMC8M-4G-VR (-GB)	8	1/4	6.4	19	16	16.2	31	11.2	38.5	18	
DMC8M-6G-VR (-GB)	8	3/8	6.4	22	16	16.2	32.3	11.2	39.8	21.8	
DMC8M-8G-VR (-GB)	8	1/2	6.4	27	16	16.2	38.1	14.2	45.6	26	
DMC10M-4G-VR (-GB)	10	1/4	5.9	19	19	17.2	31.8	11.2	39.4	18	
DMC10M-6G-VR (-GB)	10	3/8	7.9	22	19	17.2	33	11.2	40.6	21.8	
DMC10M-8G-VR (-GB)	10	1/2	7.9	27	19	17.2	38.9	14.2	46.5	26	
DMC12M-4G-VR (-GB)	12	1/4	5.9	22	22	22.8	32.5	11.2	42.6	18	
DMC12M-6G-VR (-GB)	12	3/8	7.9	22	22	22.8	33	11.2	43.1	21.8	
DMC12M-8G-VR (-GB)	12	1/2	9.5	27	22	22.8	38.9	14.2	49	26	
DMC12M-12G-VR (-GB)	12	3/4	9.5	35	22	22.8	42.7	15.7	52.8	32	
DMC15M-8G-VR (-GB)	15	1/2	11.9	27	25	24.4	33.9	14.2	49	26	
DMC16M-6G-VR (-GB)	16	3/8	7.9	24	25	24.4	33.8	11.2	43.9	21.8	
DMC16M-8G-VR (-GB)	16	1/2	11.9	27	25	24.4	38.9	14.2	49	26	
DMC18M-8G-VR (-GB)	18	1/2	11.9	27	30	24.4	38.9	14.2	49	26	
DMC18M-12G-VR (-GB)	18	3/4	15.1	35	30	24.4	42.7	15.7	52.8	32	
DMC20M-8G-VR (-GB)	20	1/2	11.9	30	32	26	40.4	14.2	50.5	26	
DMC20M-12G-VR (-GB)	20	3/4	15.9	35	32	26	42.7	15.7	52.8	32	
DMC22M-12G-VR (-GB)	22	3/4	15.9	35	32	26	42.7	15.7	52.8	32	
DMC22M-16G-VR (-GB)	22	1	18.3	41	32	26	45.2	18.3	55.3	39	
DMC25M-12G-VR (-GB)	25	3/4	15.9	35	38	31.3	45.2	15.7	57.5	32	
DMC25M-16G-VR (-GB)	25	1	19.8	41	38	31.3	47.8	18.3	60.1	39	

Male Elbow

DLM-N-VR

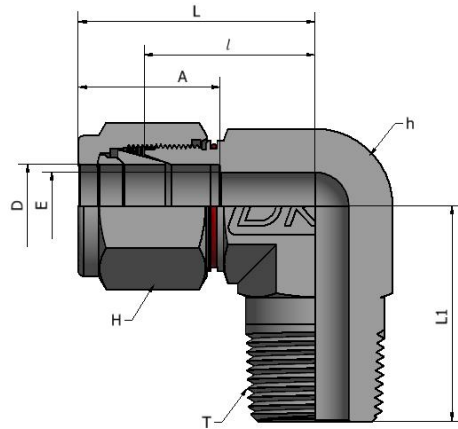
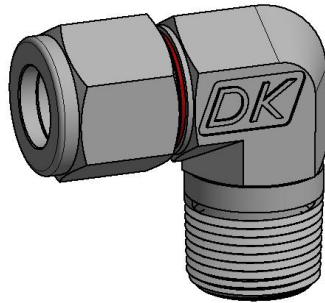


Fractional

Part No.	Tube O.D		T NPT	E Min.	Width across flat				A	l	L	L1
	D				h		H					
	In.	mm			In.	mm	In.	mm				
DLM4-1N-VR	1/4	6.35	1/16	3.04	9/16	14.28	5/8	15.87	15.24	19.55	26.9	18.79
DLM4-2N-VR	1/4	6.35	1/8	4.82	9/16	14.28	5/8	15.87	15.24	19.55	26.47	18.79
DLM4-4N-VR	1/4	6.35	1/4	4.82	9/16	14.28	5/8	15.87	15.24	19.81	27.18	23.87
DLM4-6N-VR	1/4	6.35	3/8	4.82	11/16	17.46	5/8	15.87	15.24	22.35	29.71	26.2
DLM4-8N-VR	1/4	6.35	1/2	4.82	13/16	20.64	5/8	15.87	15.24	24.6	31.97	33.02
DLM5-2N-VR	5/16	7.93	1/8	4.82	5/8	15.87	11/16	17.46	16.25	21.33	28.7	19.81
DLM5-4N-VR	5/16	7.93	1/4	6.35	5/8	15.87	11/16	17.46	16.25	21.33	29.77	24.5
DLM5-6N-VR	5/16	7.93	3/8	6.35	11/16	17.46	11/16	17.46	16.25	23.11	30.48	26.2
DLM6-2N-VR	3/8	9.52	1/8	4.82	5/8	15.87	13/16	20.64	16.76	23.11	30.48	20.6
DLM6-4N-VR	3/8	9.52	1/4	7.11	5/8	15.87	13/16	20.64	16.76	23.11	30.48	25.4
DLM6-6N-VR	3/8	9.52	3/8	7.11	11/16	17.46	13/16	20.64	16.76	23.87	31.24	26.2
DLM6-8N-VR	3/8	9.52	1/2	7.11	13/16	20.64	13/16	20.64	16.76	25.9	31.42	26.2
DLM6-12N-VR	3/8	9.52	3/4	7.11	1-1/16	26.98	13/16	20.64	16.76	29.71	37.08	36.83
DLM8-4N-VR	1/2	12.7	1/4	6.35	13/16	20.64	7/8	22.22	22.86	25.9	36.06	28.3
DLM8-6N-VR	1/2	12.7	3/8	9.65	13/16	20.64	7/8	22.22	22.86	25.9	36.06	28.3
DLM8-8N-VR	1/2	12.7	1/2	10.41	13/16	20.64	7/8	22.22	22.86	25.9	36.06	33.02
DLM8-12N-VR	1/2	12.7	3/4	10.41	1-1/16	26.98	7/8	22.22	22.86	29.71	39.87	36.83
DLM10-6N-VR	5/8	15.87	3/8	9.65	15/16	23.81	1	25.4	24.38	28	37.06	30.22
DLM10-8N-VR	5/8	15.87	1/2	11.93	15/16	23.81	1	25.4	24.38	28	37.06	35.1
DLM10-12N-VR	5/8	15.87	3/4	12.7	1-1/16	26.98	1	25.4	24.38	29.71	39.87	36.83
DLM12-8N-VR	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.58	24.38	29.71	39.87	37
DLM12-12N-VR	3/4	19.05	3/4	15.74	1-1/16	26.98	1-1/8	28.58	24.38	29.71	39.87	36.83
DLM14-12N-VR	7/8	22.22	3/4	15.74	1-3/8	34.92	1-1/4	31.75	25.9	34.54	44.7	41.65
DLM16-12N-VR	1	25.4	3/4	15.74	1-3/8	34.92	1-1/2	38.1	31.24	36.83	49.02	42.2
DLM16-16N-VR	1	25.4	1	22.35	1-3/8	34.92	1-1/2	38.1	31.24	36.83	49.02	46.7

Male Elbow

DLM-N-VR

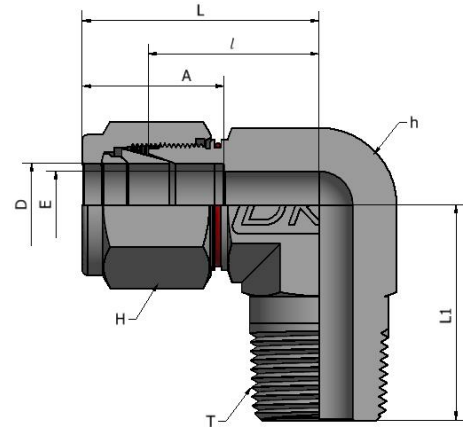
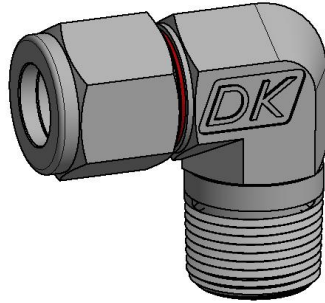


Metric

Part No.	Tube O.D D	T NPT	E Min.	Width across flat		A	l	L	L1
				h	H				
DLM6M-2N-VR	6M	1/8	4.8	14.28	16	15.3	19.6	27	18.8
DLM6M-4N-VR	6M	1/4	4.8	14.28	16	15.3	19.6	27	23.4
DLM6M-6N-VR	6M	3/8	4.8	17.5	16	15.3	22.4	29.8	26.2
DLM6M-8N-VR	6M	1/2	4.8	20.6	16	15.3	24.4	31.8	33
DLM8M-2N-VR	8M	1/8	4.8	15.87	17.46	16.2	21.3	28.8	19.8
DLM8M-4N-VR	8M	1/4	6.4	15.87	17.46	16.2	21.3	28.8	24.4
DLM8M-6N-VR	8M	3/8	6.4	17.5	17.46	16.2	23.1	30.6	26.2
DLM8M-8N-VR	8M	1/2	6.4	20.6	17.46	16.2	25.1	32.6	33
DLM10M-2N-VR	10M	1/8	4.8	17.5	20.64	17.2	23.9	31.5	23.6
DLM10M-4N-VR	10M	1/4	7.1	17.5	20.64	17.2	23.9	31.5	26.2
DLM10M-6N-VR	10M	3/8	7.9	17.5	20.64	17.2	23.9	31.5	26.2
DLM10M-8N-VR	10M	1/2	7.9	20.6	20.64	17.2	25.9	33.5	33
DLM12M-4N-VR	12M	1/4	7.1	20.6	22.22	22.8	25.9	36	28.2
DLM12M-6N-VR	12M	3/8	9.5	20.6	22.22	22.8	25.9	36	28.2
DLM12M-8N-VR	12M	1/2	9.5	20.6	22.22	22.8	25.9	36	33
DLM12M-12N-VR	12M	3/4	9.5	27	22.22	22.8	29.7	39.8	36.8
DLM15M-6N-VR	15M	3/8	9.5	23.81	25	24.4	27.9	38	30.2
DLM15M-8N-VR	15M	1/2	11.9	23.81	25	24.4	27.9	38	35.1
DLM16M-6N-VR	16M	3/8	9.5	25.4	25	24.4	27.9	38	30.2
DLM16M-8N-VR	16M	1/2	11.9	23.81	25	24.4	27.9	38	35.1
DLM16M-12N-VR	16M	3/4	12.7	23.81	25	24.4	29.7	39.8	36.8
DLM18M-8N-VR	18M	1/2	11.9	27	30	24.4	29.7	39.8	36.8
DLM18M-12N-VR	18M	3/4	15.1	27	30	24.4	29.7	39.8	36.8
DLM20M-8N-VR	20M	1/2	11.9	34.9	32	26	34.5	44.6	41.7
DLM20M-12N-VR	20M	3/4	15.9	34.9	32	26	34.5	44.6	41.7
DLM22M-8N-VR	22M	1/2	11.9	34.9	32	26	32.5	42.6	39.6
DLM22M-12N-VR	22M	3/4	15.9	34.9	32	26	34.5	44.6	41.7
DLM22M-16N-VR	22M	1	18.3	34.9	32	26	34.5	44.6	46.5
DLM25M-12N-VR	25M	3/4	15.9	34.9	38	31.3	36.8	49.1	41.7
DLM25M-16N-VR	25M	1	21.8	34.9	38	31.3	36.8	49.1	46.5

Male Elbow

DLM-R-VR

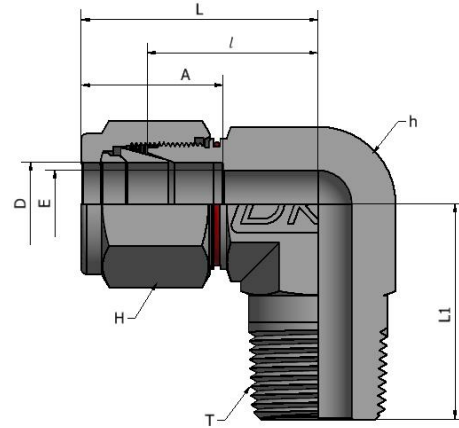
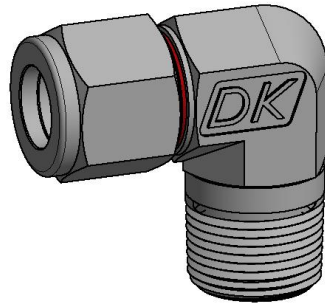


Fractional

Part No.	Tube O.D		T PT	E Min.	Width across flat				A	l	L	L1
	D				h		H					
	In.	mm			In.	mm	In.	mm				
DLM4-2R-VR	1/4	6.35	1/8	4.82	9/16	14.28	5/8	15.87	15.24	19.55	26.47	18.79
DLM4-4R-VR	1/4	6.35	1/4	4.82	9/16	14.28	5/8	15.87	15.24	19.81	27.18	23.87
DLM4-6R-VR	1/4	6.35	3/8	4.82	9/16	14.28	5/8	15.87	15.24	22.35	29.71	26.2
DLM4-8R-VR	1/4	6.35	1/2	4.82	13/16	20.64	5/8	15.87	15.24	24.6	31.97	33.02
DLM5-4R-VR	5/16	7.93	1/4	6.35	5/8	15.87	11/16	17.46	16.25	21.33	29.77	24.5
DLM5-6R-VR	5/16	7.93	3/8	6.35	11/16	17.46	11/16	17.46	16.25	23.11	30.48	26.2
DLM6-2R-VR	3/8	9.52	1/8	4.82	5/8	15.87	13/16	20.64	16.76	23.11	30.48	20.6
DLM6-4R-VR	3/8	9.52	1/4	7.11	5/8	15.87	13/16	20.64	16.76	23.11	30.48	25.4
DLM6-6R-VR	3/8	9.52	3/8	7.11	11/16	17.46	13/16	20.64	16.76	23.87	31.24	26.2
DLM6-8R-VR	3/8	9.52	1/2	7.11	13/16	20.64	13/16	20.64	16.76	25.9	31.42	33.02
DLM6-12R-VR	3/8	9.52	3/4	7.11	1-1/16	26.98	13/16	20.64	16.76	29.71	37.08	36.83
DLM8-4R-VR	1/2	12.7	1/4	6.35	13/16	20.64	7/8	22.22	22.86	25.9	36.06	28.3
DLM8-6R-VR	1/2	12.7	3/8	9.65	13/16	20.64	7/8	22.22	22.86	25.9	36.06	28.3
DLM8-8R-VR	1/2	12.7	1/2	10.41	13/16	20.64	7/8	22.22	22.86	25.9	36.06	33.02
DLM8-12R-VR	1/2	12.7	3/4	10.41	1-1/16	26.98	7/8	22.22	22.86	29.71	39.87	36.83
DLM10-6R-VR	5/8	15.87	3/8	9.65	15/16	23.81	1	25.4	24.38	28	37.06	30.22
DLM10-8R-VR	5/8	15.87	1/2	11.93	15/16	23.81	1	25.4	24.38	28	37.06	35.1
DLM10-12R-VR	5/8	15.87	3/4	12.7	1-1/16	26.98	1	25.4	24.38	29.71	39.87	36.83
DLM12-8R-VR	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.58	24.38	29.71	39.87	37
DLM12-12R-VR	3/4	19.05	3/4	15.74	1-1/16	26.98	1-1/8	28.58	24.38	29.71	39.87	36.83
DLM16-12R-VR	1	25.4	3/4	15.74	1-3/8	34.92	1-1/2	38.1	31.24	36.83	49.02	42.2
DLM16-16R-VR	1	25.4	1	22.35	1-3/8	34.2	1-1/2	38.1	31.24	36.83	49.02	46.7

Male Elbow

DLM-R-VR

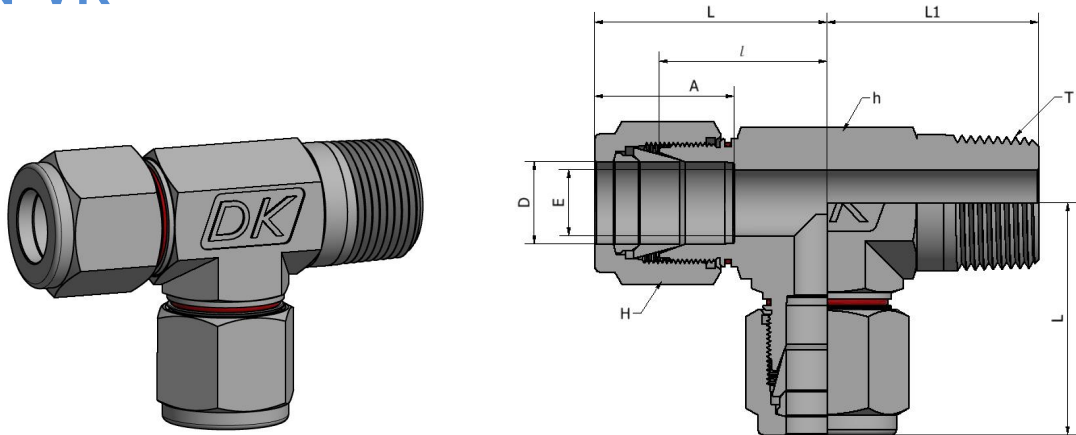


Metric

Part No.	Tube O.D D	T PT	E Min.	Width across flat		A	l	L	L1
				h	H				
DLM6M-2R-VR	6M	1/8	4.8	14.28	16	15.3	19.6	27	18.8
DLM6M-4R-VR	6M	1/4	4.8	14.28	16	15.3	19.6	27	23.4
DLM6M-6R-VR	6M	3/8	4.8	17.5	16	15.3	22.4	29.8	26.2
DLM6M-8R-VR	6M	1/2	4.8	20.6	16	15.3	24.4	31.8	33
DLM8M-2R-VR	8M	1/8	4.8	15.87	17.46	16.2	21.3	28.8	19.8
DLM8M-4R-VR	8M	1/4	6.4	15.87	17.46	16.2	21.3	28.8	24.4
DLM8M-6R-VR	8M	3/8	6.4	17.5	17.46	16.2	23.1	30.6	26.2
DLM8M-8R-VR	8M	1/2	6.4	20.6	17.46	16.2	25.1	32.6	33
DLM10M-2R-VR	10M	1/8	4.8	17.5	20.64	17.2	23.9	31.5	26.2
DLM10M-4R-VR	10M	1/4	7.1	17.5	20.64	17.2	23.9	31.5	26.2
DLM10M-6R-VR	10M	3/8	7.9	17.5	20.64	17.2	25.9	33.5	33
DLM10M-8R-VR	10M	1/2	7.9	20.6	20.64	17.2	25.9	36	23.6
DLM12M-2R-VR	12M	1/8	4.8	20.6	22.22	22.8	25.9	36	28.2
DLM12M-4R-VR	12M	1/4	7.1	20.6	22.22	22.8	25.9	36	28.2
DLM12M-6R-VR	12M	3/8	9.5	20.6	22.22	22.8	25.9	36	28.2
DLM12M-8R-VR	12M	1/2	9.5	20.6	22.22	22.8	25.9	36	33
DLM12M-12R-VR	12M	3/4	9.5	27	22.22	22.8	29.7	39.8	36.8
DLM14M-8R-VR	14M	1/2	11.1	23.81	25	24.4	27.9	38	30
DLM15M-6R-VR	15M	3/8	9.5	23.81	25	24.4	27.9	38	30
DLM15M-8R-VR	15M	1/2	11.9	23.81	25	24.4	27.9	38	35.1
DLM16M-6R-VR	16M	3/8	9.5	25.4	25	24.4	27.9	38	30.2
DLM16M-8R-VR	16M	1/2	11.9	23.81	25	24.4	27.9	38	35.1
DLM18M-8R-VR	18M	1/2	11.9	27	30	24.4	29.7	39.8	36.8
DLM18M-12R-VR	18M	3/4	15.1	27	30	24.4	29.7	39.8	36.8
DLM20M-8R-VR	20M	1/2	11.9	34.92	32	26	34.5	44.6	41.7
DLM20M-12R-VR	20M	3/4	15.9	34.92	32	26	34.5	44.6	41.7
DLM22M-8R-VR	22M	1/2	11.9	34.92	32	26	32.5	42.6	39.6
DLM22M-12R-VR	22M	3/4	15.9	34.92	32	26	34.5	44.6	41.7
DLM22M-16R-VR	22M	1	18.3	34.92	32	26	34.5	44.6	46.5
DLM25M-8R-VR	25M	1/2	11.9	34.92	38	31.3	36.8	49.1	41.7
DLM25M-12R-VR	25M	3/4	15.9	34.92	38	31.3	36.8	49.1	41.7
DLM25M-16R-VR	25M	1	21.8	34.92	38	31.3	36.8	49.1	46.5

Male Run Tee

DTRM-N-VR

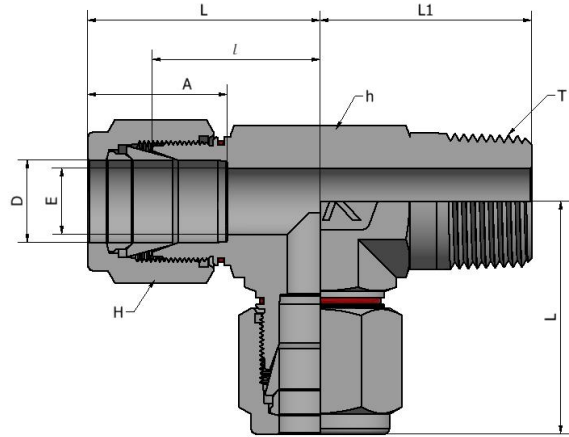
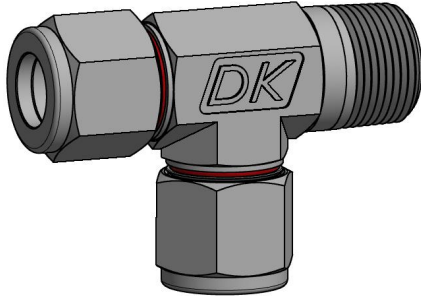


Fractional

Part No.	Tube O.D		T NPT	E Min.	Width across flat				A	l	L	L1
	D				h		H					
	In.	mm			In.	mm	In.	mm				
DTRM4-1N-VR	1/4	6.35	1/16	3.04	9/16	14.28	5/8	15.87	15.24	19.55	26.9	18.79
DTRM4-2N-VR	1/4	6.35	1/8	4.82	9/16	14.28	5/8	15.87	15.24	19.55	26.92	18.79
DTRM4-4N-VR	1/4	6.35	1/4	4.82	9/16	14.28	5/8	15.87	15.24	19.55	27.08	23.87
DTRM4-6N-VR	1/4	6.35	3/8	4.82	11/16	17.46	5/8	15.87	15.24	22.35	29.71	28.4
DTRM4-8N-VR	1/4	6.35	1/2	4.82	13/16	20.64	5/8	15.87	15.24	24.6	31.97	35.1
DTRM5-2N-VR	5/16	7.93	1/8	4.82	5/8	15.87	11/16	17.46	16.25	22.35	29.71	19.81
DTRM5-4N-VR	5/16	7.93	1/4	6.35	5/8	15.87	11/16	17.46	16.25	22.35	29.77	24.5
DTRM5-6N-VR	5/16	7.93	3/8	6.35	11/16	17.46	11/16	17.46	16.25	23.11	30.48	28.4
DTRM6-4N-VR	3/8	9.52	1/4	7.11	5/8	15.87	13/16	20.64	16.76	23.11	30.48	25.4
DTRM6-6N-VR	3/8	9.52	3/8	7.11	11/16	17.46	13/16	20.64	16.76	23.87	31.24	28.44
DTRM6-8N-VR	3/8	9.52	1/2	7.11	13/16	20.64	13/16	20.64	16.76	25.9	33.27	33.02
DTRM6-12N-VR	3/8	9.52	3/4	7.11	1-1/16	26.98	13/16	20.64	16.76	29.71	37.08	36.83
DTRM8-4N-VR	1/2	12.7	1/4	7.11	13/16	20.64	7/8	22.22	22.86	25.9	36.06	28.3
DTRM8-6N-VR	1/2	12.7	3/8	9.65	13/16	20.64	7/8	22.22	22.86	25.9	36.06	28.3
DTRM8-8N-VR	1/2	12.7	1/2	10.41	13/16	20.64	7/8	22.22	22.86	25.9	36.06	33.02
DTRM8-12N-VR	1/2	12.7	3/4	10.41	1-1/16	26.98	7/8	22.22	22.86	29.71	39.84	36.83
DTRM10-6N-VR	5/8	15.87	3/8	9.65	15/16	23.81	1	25.4	24.38	27.9	38.1	29.4
DTRM10-8N-VR	5/8	15.87	1/2	11.93	15/16	23.81	1	25.4	24.38	27.9	38.1	34
DTRM10-12N-VR	5/8	15.87	3/4	12.7	1-1/16	26.98	1	25.4	24.38	29.71	39.87	36.83
DTRM12-8N-VR	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.58	24.38	29.71	39.87	37
DTRM12-12N-VR	3/4	19.05	3/4	15.74	1-1/16	26.98	1-1/8	28.58	24.38	29.71	39.81	36.83
DTRM14-12N-VR	7/8	22.22	3/4	15.74	1-3/8	34.92	1-1/4	31.75	25.9	34.54	44.7	41.65
DTRM16-12N-VR	1	25.4	3/4	15.74	1-3/8	34.92	1-1/2	38.1	31.24	36.83	49.02	42.2
DTRM16-16N-VR	1	25.4	1	22.35	1-3/8	34.92	1-1/2	38.1	31.24	36.83	49.02	46.7

Male Run Tee

DTRM-N-VR

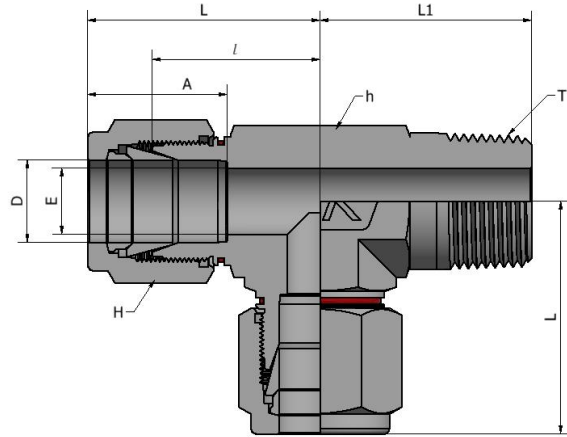
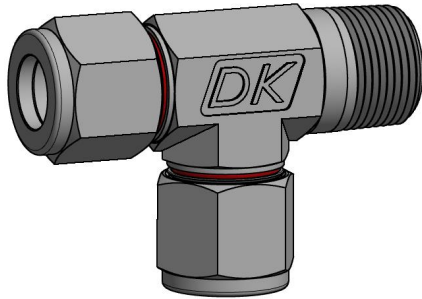


Metric

Part No.	Tube O.D D	T PT	E Min.	Width across flat		A	l	L	L1
				h	H				
DTRM6M-2N-VR	6M	1/8	4.8	14.28	16	15.3	19.6	27	18.8
DTRM6M-4N-VR	6M	1/4	4.8	14.28	16	15.3	19.6	27	23.4
DTRM6M-6N-VR	6M	3/8	4.8	17.5	16	15.3	22.4	29.8	26.2
DTRM6M-8N-VR	6M	1/2	4.8	20.6	16	15.3	24.4	31.8	33
DTRM8M-2N-VR	8M	1/8	4.8	15.87	17.46	16.2	21.3	28.8	19.8
DTRM8M-4N-VR	8M	1/4	6.4	15.87	17.46	16.2	21.3	28.8	24.4
DTRM8M-6N-VR	8M	3/8	6.4	17.5	17.46	16.2	23.1	30.6	26.2
DTRM8M-8N-VR	8M	1/2	6.4	20.6	17.46	16.2	25.1	32.6	33
DTRM10M-2N-VR	10M	1/8	4.8	17.5	20.64	17.2	23.9	31.5	23.6
DTRM10M-4N-VR	10M	1/4	7.1	17.5	20.64	17.2	23.9	31.5	26.2
DTRM10M-6N-VR	10M	3/8	7.9	17.5	20.64	17.2	23.9	31.5	26.2
DTRM10M-8N-VR	10M	1/2	7.9	20.6	20.64	17.2	25.9	33.5	33
DTRM12M-2N-VR	12M	1/8	4.8	20.6	22.22	22.8	25.9	36	23.6
DTRM12M-4N-VR	12M	1/4	7.1	20.6	22.22	22.8	25.9	36	28.2
DTRM12M-6N-VR	12M	3/8	9.5	20.6	22.22	22.8	25.9	36	28.2
DTRM12M-8N-VR	12M	1/2	9.5	20.6	22.22	22.8	25.9	36	33
DTRM12M-12N-VR	12M	3/4	9.5	27	22.22	22.8	29.7	39.8	36.8
DTRM16M-6N-VR	16M	3/8	9.5	25.4	25	24.4	27.9	38	30.2
DTRM16M-8N-VR	16M	1/2	11.9	25.4	25	24.4	27.9	38	35.1
DTRM16M-12N-VR	16M	3/4	12.7	27	25	24.4	29.7	39.8	36.8
DTRM18M-8N-VR	18M	1/2	11.9	27	30	24.4	29.7	39.8	36.8
DTRM18M-12N-VR	18M	3/4	15.1	27	30	24.4	29.7	39.8	36.8
DTRM20M-8N-VR	20M	1/2	11.9	34.92	32	26	34.5	44.6	41.7
DTRM20M-12N-VR	20M	3/4	15.9	34.92	32	26	34.5	44.6	41.7
DTRM22M-12N-VR	22M	3/4	15.9	34.92	32	26	34.5	44.6	41.7
DTRM22M-16N-VR	22M	1	18.3	34.92	32	26	34.5	44.6	46.5
DTRM25M-12N-VR	25M	3/4	15.9	34.92	38	31.3	36.8	49.1	41.7
DTRM25M-16N-VR	25M	1	21.8	34.92	38	31.3	36.8	49.1	46.5

Male Run Tee

DTRM-R-VR

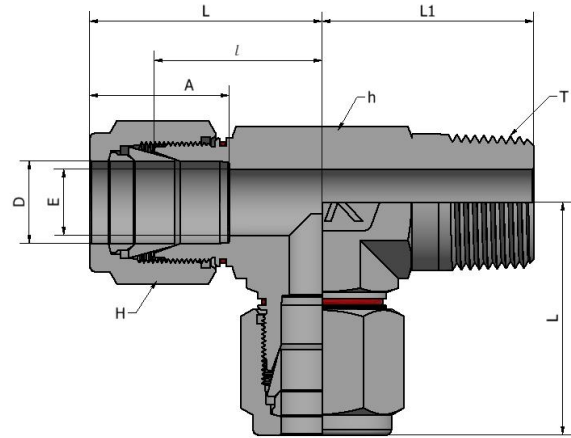
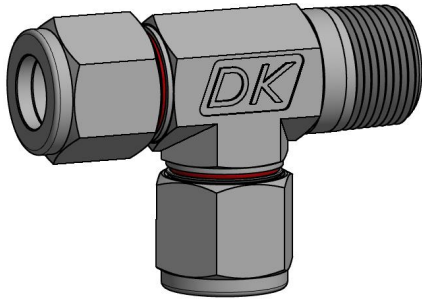


Fractional

Part No.	Tube O.D		T PT	E Min.	Width across flat				A	l	L	L1
	D				h		H					
	In.	mm			In.	mm	In.	mm				
DTRM4-1R-VR	1/4	6.35	1/16	3.04	9/16	14.28	5/8	15.87	15.24	19.55	26.9	18.79
DTRM4-2R-VR	1/4	6.35	1/8	4.82	9/16	14.28	5/8	15.87	15.24	19.55	26.92	18.78
DTRM4-4R-VR	1/4	6.35	1/4	4.82	9/16	14.28	5/8	15.87	15.24	19.55	27.08	23.87
DTRM4-6R-VR	1/4	6.35	3/8	4.82	11/16	17.46	5/8	15.87	15.24	22.35	29.71	28.4
DTRM4-8R-VR	1/4	6.35	1/2	4.82	13/16	20.64	5/8	15.87	15.24	24.6	31.97	35.1
DTRM5-2R-VR	5/16	7.93	1/8	4.82	5/8	15.87	11/16	17.46	16.25	22.35	29.71	19.81
DTRM5-4R-VR	5/16	7.93	1/4	6.35	5/8	15.87	11/16	17.46	16.25	22.35	29.77	24.5
DTRM5-6R-VR	5/16	7.93	3/8	6.35	11/16	17.46	11/16	17.46	16.25	23.11	30.48	28.4
DTRM6-4R-VR	3/8	9.52	1/4	7.11	5/8	15.87	13/16	20.64	16.76	23.11	30.48	25.4
DTRM6-6R-VR	3/8	9.52	3/8	7.11	11/16	17.46	13/16	20.64	16.76	23.87	31.24	28.44
DTRM6-8R-VR	3/8	9.52	1/2	7.11	13/16	20.64	13/16	20.64	16.76	25.9	33.27	33.02
DTRM6-12R-VR	3/8	9.52	3/4	7.11	1-1/16	26.98	13/16	20.64	16.76	29.71	37.08	36.83
DTRM8-4R-VR	1/2	12.7	1/4	7.11	13/16	20.64	7/8	22.22	22.86	25.9	36.06	28.3
DTRM8-6R-VR	1/2	12.7	3/8	9.65	13/16	20.64	7/8	22.22	22.86	25.9	36.06	28.3
DTRM8-8R-VR	1/2	12.7	1/2	10.41	13/16	20.64	7/8	22.22	22.86	25.9	36.06	33.02
DTRM8-12R-VR	1/2	12.7	3/4	10.41	1-1/16	26.98	7/8	22.22	22.86	29.71	39.84	36.83
DTRM10-6R-VR	5/8	15.87	3/8	9.65	15/16	23.81	1	25.4	24.38	27.9	38.1	29.4
DTRM10-8R-VR	5/8	15.87	1/2	11.93	15/16	23.81	1	25.4	24.38	27.9	38.1	34
DTRM10-12R-VR	5/8	15.87	3/4	12.7	1-1/16	26.98	1	25.4	24.38	29.71	39.87	36.83
DTRM12-8R-VR	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.58	24.38	29.71	39.87	37
DTRM12-12R-VR	3/4	19.05	3/4	15.74	1-1/16	26.98	1-1/8	28.58	24.38	29.71	39.81	36.83
DTRM14-12R-VR	7/8	22.22	3/4	15.74	1-3/8	34.92	1-1/4	31.75	25.9	34.54	44.7	41.65
DTRM16-12R-VR	1	25.4	3/4	15.74	1-3/8	34.92	1-1/2	38.1	31.24	36.83	49.02	42.2
DTRM16-16R-VR	1	25.4	1	22.35	1-3/8	34.92	1-1/2	38.1	31.24	36.83	49.02	46.7

Male Run Tee

DTRM-R-VR

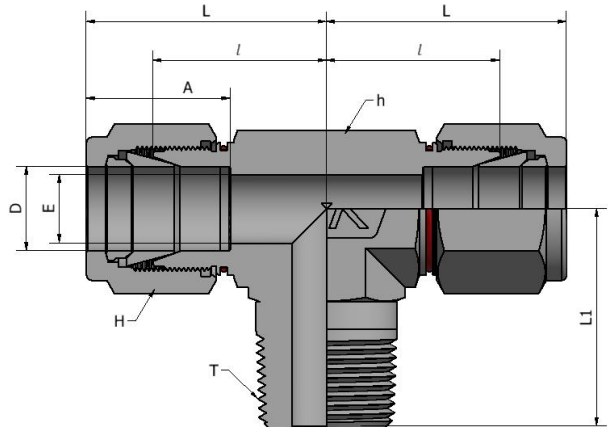
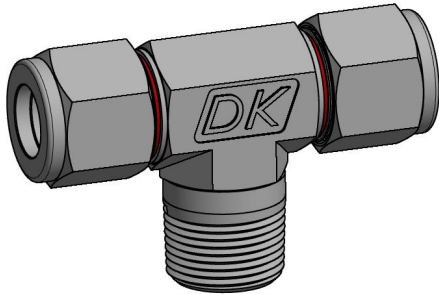


Metric

Part No.	Tube O.D D	T PT	E Min.	Width across flat		A	l	L	L1
				h	H				
DTRM6M-2R-VR	6M	1/8	4.8	14.28	16	15.3	19.6	27	18.8
DTRM6M-4R-VR	6M	1/4	4.8	14.28	16	15.3	19.6	27	23.4
DTRM6M-6R-VR	6M	3/8	4.8	17.5	16	15.3	22.4	29.8	26.2
DTRM6M-8R-VR	6M	1/2	4.8	20.6	16	15.3	24.4	31.8	33
DTRM8M-2R-VR	8M	1/8	4.8	15.87	17.46	16.2	21.3	28.8	19.8
DTRM8M-4R-VR	8M	1/4	6.4	15.87	17.46	16.2	21.3	28.8	24.4
DTRM8M-6R-VR	8M	3/8	6.4	17.5	17.46	16.2	23.1	30.6	26.2
DTRM8M-8R-VR	8M	1/2	6.4	20.6	17.46	16.2	25.1	32.6	33
DTRM10M-2R-VR	10M	1/8	4.8	17.5	20.64	17.2	23.9	31.5	23.6
DTRM10M-4R-VR	10M	1/4	7.1	17.5	20.64	17.2	23.9	31.5	26.2
DTRM10M-6R-VR	10M	3/8	7.9	17.5	20.64	17.2	23.9	31.5	26.2
DTRM10M-8R-VR	10M	1/2	7.9	20.6	20.64	17.2	25.9	33.5	33
DTRM12M-2R-VR	12M	1/8	4.8	20.6	22.22	22.8	25.9	36	23.6
DTRM12M-4R-VR	12M	1/4	7.1	20.6	22.22	22.8	25.9	36	28.2
DTRM12M-6R-VR	12M	3/8	9.5	20.6	22.22	22.8	25.9	36	28.2
DTRM12M-8R-VR	12M	1/2	9.5	20.6	22.22	22.8	25.9	36	33
DTRM12M-12R-VR	12M	3/4	9.5	27	22.22	22.8	29.7	39.8	36.8
DTRM16M-6R-VR	16M	3/8	9.5	25.4	25	24.4	27.9	38	30.2
DTRM16M-8R-VR	16M	1/2	11.9	25.4	25	24.4	27.9	38	35.1
DTRM16M-12R-VR	16M	3/4	12.7	27	25	24.4	29.7	39.8	36.8
DTRM18M-8R-VR	18M	1/2	11.9	27	30	24.4	29.7	39.8	36.8
DTRM18M-12R-VR	18M	3/4	15.1	27	30	24.4	29.7	39.8	36.8
DTRM20M-8R-VR	20M	1/2	11.9	34.92	32	26	34.5	44.6	41.7
DTRM20M-12R-VR	20M	3/4	15.9	34.92	32	26	34.5	44.6	41.7
DTRM22M-12R-VR	22M	3/4	15.9	34.92	32	26	34.5	44.6	41.7
DTRM22M-16R-VR	22M	1	18.3	34.92	32	26	34.5	44.6	46.5
DTRM25M-12R-VR	25M	3/4	15.9	34.92	38	31.3	36.8	49.1	41.7
DTRM25M-16R-VR	25M	1	21.8	34.92	38	31.3	36.8	49.1	46.5

Male Run Tee

DTBM-N-VR

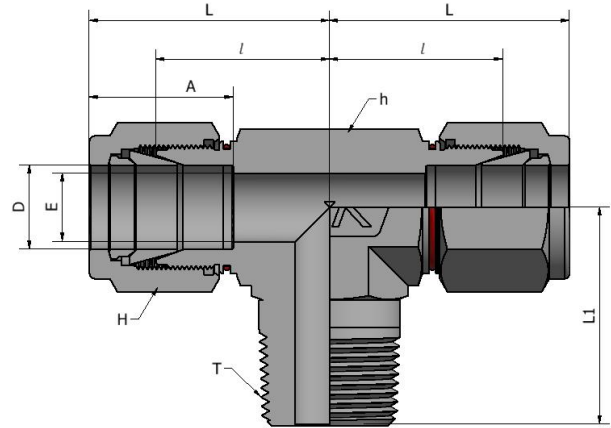
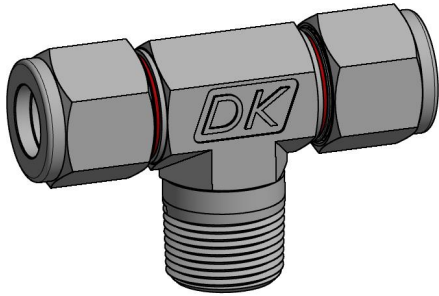


Fractional

Part No.	Tube O.D		T NPT	E Min.	Width across flat				A	l	L	L1
	D				h		H					
	In.	mm			In.	mm	In.	mm				
DTBM4-1N-VR	1/4	6.35	1/16	3.04	9/16	14.28	5/8	15.87	15.24	19.55	26.9	18.79
DTBM4-2N-VR	1/4	6.35	1/8	4.82	9/16	14.28	5/8	15.87	15.24	19.55	26.92	19.1
DTBM4-4N-VR	1/4	6.35	1/4	4.82	9/16	14.28	5/8	15.87	15.24	19.55	27.08	23.87
DTBM4-6N-VR	1/4	6.35	3/8	4.82	11/16	17.46	5/8	15.87	15.24	22.35	29.71	28.4
DTBM4-8N-VR	1/4	6.35	1/2	4.82	13/16	20.64	5/8	15.87	15.24	24.6	31.97	35.1
DTBM5-2N-VR	5/16	7.93	1/8	4.82	5/8	15.87	11/16	17.46	16.25	22.35	29.71	19.81
DTBM5-4N-VR	5/16	7.93	1/4	6.35	5/8	15.87	11/16	17.46	16.25	22.35	29.77	24.5
DTBM5-6N-VR	5/16	7.93	3/8	6.35	11/16	17.46	11/16	17.46	16.25	23.11	30.48	28.4
DTBM6-4N-VR	3/8	9.52	1/4	7.11	5/8	15.87	13/16	20.64	16.76	23.11	30.48	25.4
DTBM6-6N-VR	3/8	9.52	3/8	7.11	11/16	17.46	13/16	20.64	16.76	23.87	31.24	28.44
DTBM6-8N-VR	3/8	9.52	1/2	7.11	13/16	20.64	13/16	20.64	16.76	25.9	33.27	33.02
DTBM6-12N-VR	3/8	9.52	3/4	7.11	1-1/16	26.98	13/16	20.64	16.76	29.71	37.08	36.83
DTBM8-4N-VR	1/2	12.7	1/4	7.11	13/16	20.64	7/8	22.22	22.86	25.9	36.06	28.3
DTBM8-6N-VR	1/2	12.7	3/8	9.65	13/16	20.64	7/8	22.22	22.86	25.9	36.06	28.3
DTBM8-8N-VR	1/2	12.7	1/2	10.41	13/16	20.64	7/8	22.22	22.86	25.9	36.06	33.02
DTBM8-12N-VR	1/2	12.7	3/4	10.41	1-1/16	26.98	7/8	22.22	22.86	29.71	39.87	36.83
DTBM10-6N-VR	5/8	15.87	3/8	9.65	15/16	23.81	1	25.4	24.38	27.9	38.1	29.4
DTBM10-8N-VR	5/8	15.87	1/2	11.93	15/16	23.81	1	25.4	24.38	27.9	38.1	34
DTBM10-12N-VR	5/8	15.87	3/4	12.7	1-1/16	26.98	1	25.4	24.38	29.71	39.87	36.83
DTBM12-8N-VR	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.58	24.38	29.71	39.87	37
DTBM12-12N-VR	3/4	19.05	3/4	15.74	1-1/16	26.98	1-1/8	28.58	24.38	29.71	39.87	36.83
DTBM14-12N-VR	7/8	22.22	3/4	15.74	1-3/8	34.92	31.75	25.9	25.9	34.54	44.7	41.65
DTBM16-12N-VR	1	25.4	3/4	15.74	1-3/8	34.92	1-1/2	38.1	31.24	36.83	49.02	42.2
DTBM16-16N-VR	1	25.4	1	22.35	1-3/8	34.92	1-1/2	38.1	31.24	36.83	49.02	46.7

Male Run Tee

DTBM-N-VR

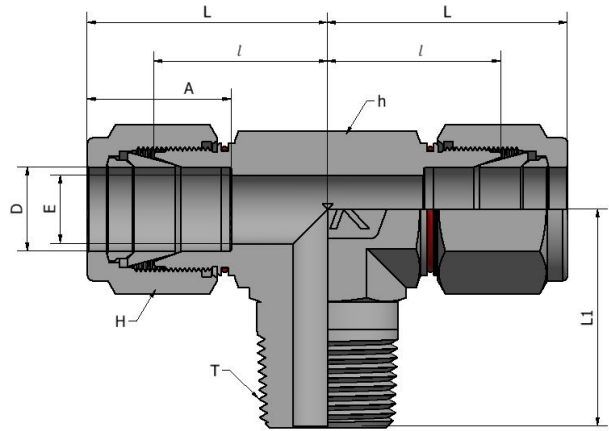
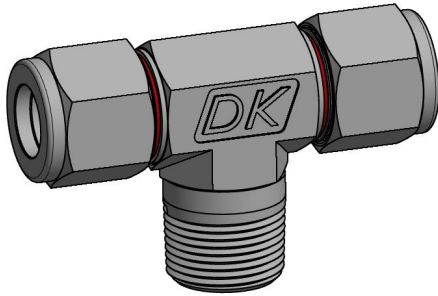


Metric

Part No.	Tube O.D D	T NPT	E Min.	Width across flat		A	l	L	L1
				h	H				
DTBM6M-2R-VR	6M	1/8	4.8	14.28	16	15.3	19.6	27	18.8
DTBM6M-4R-VR	6M	1/4	4.8	14.28	16	15.3	19.6	27	23.4
DTBM6M-6R-VR	6M	3/8	4.8	17.5	16	15.3	22.4	29.8	26.2
DTBM6M-8R-VR	6M	1/2	4.8	20.6	16	15.3	24.4	31.8	33
DTBM8M-2R-VR	8M	1/8	4.8	15.87	17.46	16.2	21.3	28.8	19.8
DTBM8M-4R-VR	8M	1/4	6.4	15.87	17.46	16.2	21.3	28.8	24.4
DTBM8M-6R-VR	8M	3/8	6.4	17.5	17.46	16.2	23.1	30.6	26.2
DTBM8M-8R-VR	8M	1/2	6.4	20.6	17.46	16.2	25.1	32.6	33
DTBM10M-2R-VR	10M	1/8	4.8	17.5	20.64	17.2	23.9	31.5	23.6
DTBM10M-4R-VR	10M	1/4	7.1	17.5	20.64	17.2	23.9	31.5	26.2
DTBM10M-6R-VR	10M	3/8	7.9	17.5	20.64	17.2	23.9	31.5	26.2
DTBM10M-8R-VR	10M	1/2	7.9	20.6	20.64	17.2	25.9	33.5	33
DTBM12M-2R-VR	12M	1/8	4.8	20.6	22.22	22.8	25.9	36	23.6
DTBM12M-4R-VR	12M	1/4	7.1	20.6	22.22	22.8	25.9	36	28.2
DTBM12M-6R-VR	12M	3/8	9.5	20.6	22.22	22.8	25.9	36	28.2
DTBM12M-8R-VR	12M	1/2	9.5	20.6	22.22	22.8	25.9	36	33
DTBM12M-12R-VR	12M	3/4	9.5	27	22.22	22.8	29.7	39.8	36.8
DTBM16M-6R-VR	16M	3/8	9.5	25.4	25	24.4	27.9	38	30.2
DTBM16M-8R-VR	16M	1/2	11.9	25.4	25	24.4	27.9	38	35.1
DTBM16M-12R-VR	16M	3/4	12.7	27	25	24.4	29.7	39.8	36.8
DTBM18M-8R-VR	18M	1/2	11.9	27	30	24.4	29.7	39.8	36.8
DTBM18M-12R-VR	18M	3/4	15.1	27	30	24.4	29.7	39.8	36.8
DTBM20M-8R-VR	20M	1/2	11.9	34.92	32	26	34.5	44.6	41.7
DTBM20M-12R-VR	20M	3/4	15.9	34.92	32	26	34.5	44.6	41.7
DTBM22M-12R-VR	22M	3/4	15.9	34.92	32	26	34.5	44.6	41.7
DTBM22M-16R-VR	22M	1	18.3	34.92	32	26	34.5	44.6	46.5
DTBM25M-12R-VR	25M	3/4	15.9	34.92	32	31.3	34.5	44.6	41.7
DTBM25M-16R-VR	25M	1	21.8	34.92	32	31.3	34.5	44.6	46.5

Male Run Tee

DTBM-R-VR

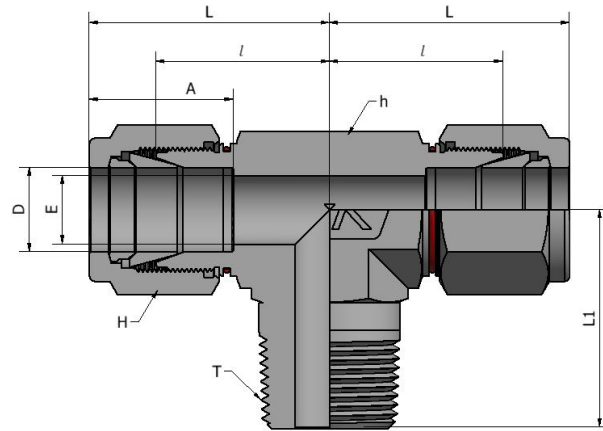
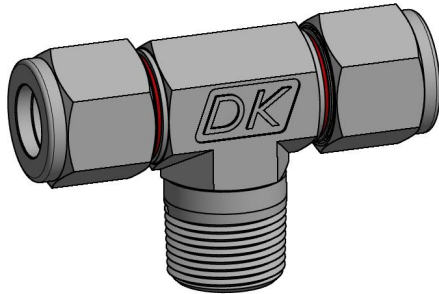


Fractional

Part No.	Tube O.D D		T PT	E Min.	Width across flat				A	l	L	L1
	In.	mm			h		H					
					In.	mm	In.	mm				
DTBM4-1N-VR	1/4	6.35	1/16	3.04	9/16	14.28	5/8	15.87	15.24	19.55	26.9	18.79
DTBM4-2N-VR	1/4	6.35	1/8	4.82	9/16	14.28	5/8	15.87	15.24	19.55	26.92	19.1
DTBM4-4N-VR	1/4	6.35	1/4	4.82	9/16	14.28	5/8	15.87	15.24	19.55	27.08	23.87
DTBM4-6N-VR	1/4	6.35	3/8	4.82	11/16	17.46	5/8	15.87	15.24	22.35	29.71	28.4
DTBM4-8N-VR	1/4	6.35	1/2	4.82	13/16	20.64	5/8	15.87	15.24	24.60	31.97	35.1
DTBM5-2N-VR	5/16	7.93	1/8	4.82	5/8	15.87	11/16	17.46	16.25	22.35	29.71	19.81
DTBM5-4N-VR	5/16	7.93	1/4	6.35	5/8	15.87	11/16	17.46	16.25	22.35	29.77	24.5
DTBM5-6N-VR	5/16	7.93	3/8	6.35	11/16	17.46	11/16	17.46	16.25	23.11	30.48	28.4
DTBM6-4N-VR	3/8	9.52	1/4	7.11	5/8	15.87	13/16	20.64	16.76	23.11	30.48	25.4
DTBM6-6N-VR	3/8	9.52	3/8	7.11	11/16	17.46	13/16	20.64	16.76	23.87	31.24	28.44
DTBM6-8N-VR	3/8	9.52	1/2	7.11	13/16	20.64	13/16	20.64	16.76	25.9	33.27	33.02
DTBM6-12N-VR	3/8	9.52	3/4	7.11	1-1/16	26.98	13/16	20.64	16.76	29.71	37.08	36.83
DTBM8-4N-VR	1/2	12.7	1/4	7.11	13/16	20.64	7/8	22.22	22.86	25.9	36.06	28.3
DTBM8-6N-VR	1/2	12.7	3/8	9.65	13/16	20.64	7/8	22.22	22.86	25.9	36.06	28.3
DTBM8-8N-VR	1/2	12.7	1/2	10.41	13/16	20.64	7/8	22.22	22.86	25.9	36.06	28.3
DTBM8-12N-VR	1/2	12.7	3/4	10.41	1-1/16	26.98	7/8	22.22	22.86	29.71	39.87	36.83
DTBM10-6N-VR	5/8	15.87	3/8	9.65	15/16	23.81	1	25.4	24.38	27.9	38.1	29.4
DTBM10-8N-VR	5/8	15.87	1/2	11.93	15/16	23.81	1	25.4	24.38	27.9	38.1	34
DTBM10-12N-VR	5/8	15.87	3/4	12.7	1-1/16	26.98	1	25.4	24.38	29.71	39.87	36.83
DTBM12-8N-VR	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	28.58	24.38	29.71	39.87	37
DTBM12-12N-VR	3/4	19.05	3/4	15.74	1-1/16	26.98	1-1/8	28.58	24.38	29.71	39.87	36.83
DTBM14-12N-VR	7/8	22.22	3/4	15.74	1-3/8	34.92	1-1/4	31.75	25.9	29.71	39.87	36.83
DTBM16-12N-VR	1	25.4	3/4	15.74	1-3/8	34.92	1-1/2	38.1	31.24	36.83	49.02	42.2
DTBM16-16N-VR	1	25.4	1	22.35	1-3/8	34.92	1-1/2	38.1	31.24	36.83	19.02	46.7

Male Run Tee

DTBM-R-VR

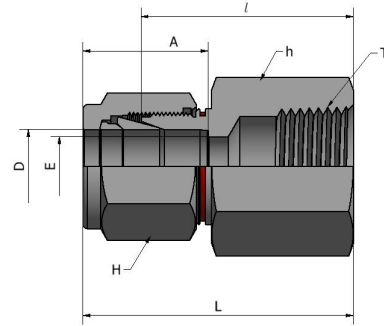
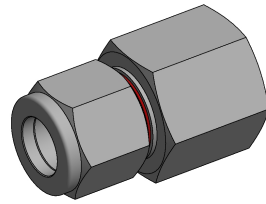


Metric

Part No.	Tube O.D D	T PT	E Min.	Width across flat		A	l	L	L1
				h	H				
DTBM6M-2R-VR	6M	1/8	4.8	14.28	16	15.3	19.6	27	18.8
DTBM6M-4R-VR	6M	1/4	4.8	14.28	16	15.3	19.6	27	23.4
DTBM6M-6R-VR	6M	3/8	4.8	17.5	16	15.3	22.4	29.8	26.2
DTBM6M-8R-VR	6M	1/2	4.8	20.6	16	15.3	24.4	31.8	33
DTBM8M-2R-VR	8M	1/8	4.8	15.87	17.46	16.2	21.3	28.8	19.8
DTBM8M-4R-VR	8M	1/4	6.4	15.87	17.46	16.2	21.3	1707	24.4
DTBM8M-6R-VR	8M	3/8	6.4	17.5	17.46	16.2	23.1	30.6	26.2
DTBM8M-8R-VR	8M	1/2	6.4	20.6	17.46	16.2	25.1	32.6	33
DTBM10M-2R-VR	10M	1/8	4.8	17.5	20.64	17.2	23.9	31.5	23.6
DTBM10M-4R-VR	10M	1/4	7.1	17.5	20.64	17.2	23.9	31.5	26.2
DTBM10M-6R-VR	10M	3/8	7.9	17.5	20.64	17.2	23.9	315.	26.2
DTBM10M-8R-VR	10M	1/2	7.9	20.6	20.64	17.2	25.9	33.5	33
DTBM12M-2R-VR	12M	1/8	4.8	20.6	22.22	22.8	25.9	36	23.6
DTBM12M-4R-VR	12M	1/4	7.1	20.6	22.22	22.8	25.9	36	28.2
DTBM12M-6R-VR	12M	3/8	9.5	20.6	22.22	22.8	25.9	36	28.2
DTBM12M-8R-VR	12M	1/2	9.5	20.6	22.22	22.8	25.9	36	33
DTBM12M-12R-VR	12M	3/4	9.5	27	22.22	22.8	29.7	39.8	36.8
DTBM16M-6R-VR	16M	3/8	9.5	25.4	25	24.4	27.9	38	30.2
DTBM16M-8R-VR	16M	1/2	11.9	25.4	25	24.4	27.9	38	35.1
DTBM16M-12R-VR	16M	3/4	12.7	27	25	24.4	29.7	39.8	36.8
DTBM18M-8R-VR	18M	1/2	11.9	27	30	24.4	29.7	39.8	36.8
DTBM18M-12R-VR	18M	3/4	15.1	27	30	24.4	29.7	39.8	36.8
DTBM20M-8R-VR	20M	1/2	11.9	34.92	32	26	34.5	44.6	41.7
DTBM20M-12R-VR	20M	3/4	15.9	34.92	32	26	34.5	44.6	41.7
DTBM22M-12R-VR	22M	3/4	15.9	34.92	32	26	34.5	44.6	41.7
DTBM22M-16R-VR	22M	1	18.3	34.92	32	26	34.5	44.6	46.5
DTBM25M-12R-VR	25M	3/4	15.9	34.92	32	31.3	36.8	49.1	41.7
DTBM25M-16R-VR	25M	1	21.8	34.92	32	31.3	36.8	49.1	46.5

Female Connector

DCF-N-VR



Fractional

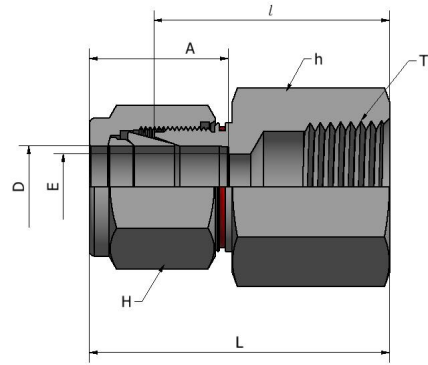
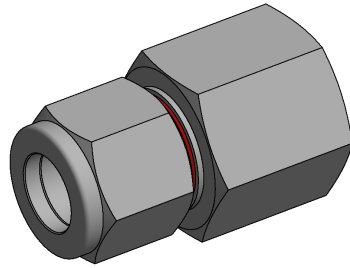
Part No.	Tube O.D		T NPT	E Min.	Width across flat				A	l	L
	D				h		H				
	In.	mm			In.	mm	In.	mm			
DCF4-2N-VR	1/4	6.35	1/8	4.82	9/16	14.28	5/8	15.87	15.24	23.87	31.24
DCF4-4N-VR	1/4	6.35	1/4	4.82	3/4	19.05	5/8	15.87	15.24	28.44	35.81
DCF4-6N-VR	1/4	6.35	3/8	4.82	7/8	22.22	5/8	15.87	15.24	30.22	37.59
DCF4-8N-VR	1/4	6.35	1/2	4.82	1-1/16	26.98	5/8	15.87	15.24	35.05	42.41
DCF5-2N-VR	5/16	7.93	1/8	6.35	5/8	15.87	11/16	17.46	16.25	24.63	32
DCF5-4N-VR	5/16	7.93	1/4	6.35	3/4	19.05	11/16	17.46	16.25	29.46	36.83
DCF6-2N-VR	3/8	9.52	1/8	7.11	5/8	15.87	13/16	20.64	16.76	25.4	32.76
DCF6-4N-VR	3/8	9.52	1/4	7.11	3/4	19.05	13/16	20.64	16.76	30.22	37.59
DCF6-6N-VR	3/8	9.52	3/8	7.11	7/8	22.22	13/16	20.64	16.76	31.75	39.11
DCF6-8N-VR	3/8	9.52	1/2	7.11	1-1/16	26.98	13/16	20.64	16.76	36.57	43.94
DCF6-12N-VR	3/8	9.52	3/4	7.11	1-5/16	33.33	13/16	20.64	16.76	40.38	47.75
DCF8-4N-VR	1/2	12.7	1/4	10.41	1-3/16	20.64	7/8	22.22	22.86	30.22	40.38
DCF8-6N-VR	1/2	12.7	3/8	10.41	47/8	22.22	7/8	22.22	22.86	31.75	41.91
DCF8-8N-VR	1/2	12.7	1/2	10.41	1-1/16	26.98	7/8	22.22	22.86	36.57	46.73
DCF8-12N-VR	1/2	12.7	3/4	10.41	1-5/16	33.33	7/8	22.22	22.86	38.1	48.26
DCF10-6N-VR	5/8	15.87	3/8	12.7	15/16	23.81	1	25.4	24.38	31.75	41.91
DCF10-8N-VR	5/8	15.87	1/2	12.7	1-1/16	26.98	1	25.4	24.38	36.57	46.73
DCF10-12N-VR	5/8	15.87	3/4	12.7	1-5/16	33.33	1	25.4	24.38	38.1	48.26
DCF12-8N-VR	3/4	19.05	1/2	15.74	1-1/16	26.98	1-1/8	28.58	24.38	36.57	46.73
DCF12-12N-VR	3/4	19.05	3/4	15.74	1-5/16	33.33	1-1/8	28.58	24.38	38.1	48.26
DCF14-12N-VR	7/8	22.22	3/4	18.28	1-5/16	33.33	1-1/4	31.75	25.9	39.62	49.78
DCF16-12N-VR	1	25.4	3/4	22.35	1-3/8	34.92	1-1/2	38.1	31.24	41.14	53.34
DCF16-16N-VR	1	25.4	1	22.35	1-5/8	41.27	1-1/2	38.1	31.24	50.03	62.23

Metric

Part No.	Tube O.D D	T NPT	E Min.	Width across flat		A	l	L
				h	H			
DCF6M-2N-VR	6	1/8	4.8	14	16	15.3	23.9	31.3
DCF6M-4N-VR	6	1/4	4.8	19	16	15.3	28.4	35.8
DCF6M-6N-VR	6	3/8	4.8	22	16	15.3	29.5	36.9
DCF6M-8N-VR	6	1/2	4.8	27	16	15.3	35.1	42.5
DCF8M-2N-VR	8	1/8	4.8	16	17.46	16.2	24.6	32.1
DCF8M-4N-VR	8	1/4	6.4	19	17.46	16.2	29.5	37
DCF8M-6N-VR	8	3/8	6.4	22	17.46	16.2	30.2	37.7
DCF8M-8N-VR	8	1/2	6.4	27	17.46	16.2	35.8	43.3
DCF10M-2N-VR	10	1/8	4.8	18	20.64	17.2	25.4	33
DCF10M-4N-VR	10	1/4	7.1	19	20.64	17.2	30.2	37.8
DCF10M-6N-VR	10	3/8	7.9	22	20.64	17.2	31	38.6
DCF10M-8N-VR	10	1/2	7.9	27	20.64	17.2	36.6	44.2
DCF12M-2N-VR	12	1/8	4.8	22	22.22	22.8	28.4	38.5
DCF12M-4N-VR	12	1/4	7.1	22	22.22	22.8	30.2	40.3
DCF12M-6N-VR	12	3/8	9.5	22	22.22	22.8	31	41.1
DCF12M-8N-VR	12	1/2	9.5	27	22.22	22.8	36.6	46.7
DCF12M-12N-VR	12	3/4	9.5	35	22.22	22.8	38.9	49
DCF15M-8N-VR	15	1/2	11.9	27	25	24.4	36.6	46.7
DCF16M-8N-VR	16	1/2	11.9	27	25	24.4	36.8	46.9
DCF20M-8N-VR	20	1/2	11.9	30	32	26	37.8	47.9
DCF20M-12N-VR	20	3/4	15.9	35	32	26	39.6	49.7
DCF22M-12N-VR	22	3/4	15.9	35	32	26	39.6	49.7
DCF22M-16N-VR	22	1	18.3	41	32	26	47.8	57.9
DCF25M-12N-VR	25	3/4	15.9	35	38	31.3	41.1	53.4
DCF25M-16N-VR	25	1	21.8	41	38	31.3	50	62.3

Female Connector

DCF-R-VR



Fractional

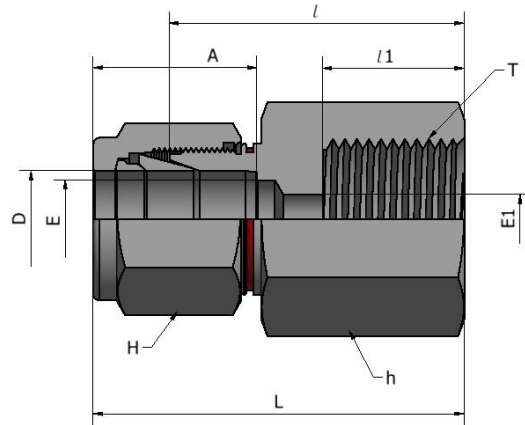
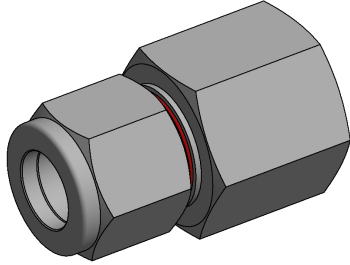
Part No.	Tube O.D D		T PT	E Min.	Width across flat				A	l	L
	In.	mm			h		H				
					In.	mm	In.	mm			
DCF4-2R-VR	1/4	6.35	1/8	4.82	9/16	14.28	5/8	15.87	15.24	23.87	31.24
DCF4-4R-VR	1/4	6.35	1/4	4.82	3/4	19.05	5/8	15.87	15.24	28.44	35.81
DCF4-6R-VR	1/4	6.35	3/8	4.82	7/8	22.22	5/8	15.87	15.24	30.22	37.59
DCF4-8R-VR	1/4	6.35	1/2	4.82	1-1/16	26.98	5/8	15.87	15.24	35.05	42.41
DCF6-4R-VR	3/8	9.52	1/4	7.11	3/4	19.05	13/16	20.64	16.76	30.22	37.59
DCF6-6R-VR	3/8	9.52	3/8	7.11	7/8	22.22	13/16	20.64	16.76	31.75	39.11
DCF6-8R-VR	3/8	9.52	1/2	7.11	1-1/16	26.98	13/16	20.64	16.76	36.57	43.94
DCF8-2R-VR	1/2	12.7	1/8	10.41	13/16	20.64	7/8	22.22	22.86	25.4	35.56
DCF8-4R-VR	1/2	12.7	1/4	10.41	1-3/16	20.64	7/8	22.22	22.86	30.22	40.38
DCF8-6R-VR	1/2	12.7	3/8	10.41	7/8	22.22	7/8	22.22	22.86	31.75	41.91
DCF8-8R-VR	1/2	12.7	1/2	10.41	1-1/16	26.98	7/8	22.22	22.86	36.57	46.73
DCF8-12R-VR	1/2	12.7	3/4	10.41	1-5/16	33.33	7/8	22.22	22.86	38.1	48.26
DCF10-6R-VR	5/8	15.87	3/8	12.7	15/16	23.81	1	25.4	24.38	31.75	41.91
DCF10-8R-VR	5/8	15.87	1/2	12.7	1-1/16	26.98	1	25.4	24.38	36.57	46.73
DCF10-12R-VR	5/8	15.87	3/4	12.7	1-5/16	33.33	1	25.4	24.38	38.1	48.26
DCF12-8R-VR	3/4	19.05	1/2	15.74	1-1/16	26.98	1-1/8	28.58	24.38	36.57	46.73
DCF12-12R-VR	3/4	19.05	3/4	15.74	1-5/16	33.33	1-1/8	28.58	24.38	38.1	48.26
DCF16-12R-VR	1	25.4	3/4	22.35	1-3/8	34.92	1-1/2	38.1	31.24	41.14	53.34
DCF16-16R-VR	1	25.4	1	22.35	1-5/8	41.27	1-1/2	38.1	31.24	50.03	62.23

Metric

Part No.	Tube O.D D	T PT	E Min.	Width across flat		A	l	L
				h	H			
DCF6M-2R-VR	6	1/8	4.8	14	16	15.3	23.9	31.3
DCF6M-4R-VR	6	1/4	4.8	19	16	15.3	28.4	35.8
DCF6M-6R-VR	6	3/8	4.8	22	16	15.3	29.5	36.9
DCF6M-8R-VR	6	1/2	4.8	27	16	15.3	35.1	42.5
DCF8M-2R-VR	8	1/8	4.8	16	17.46	16.2	24.6	32.1
DCF8M-4R-VR	8	1/4	6.4	19	17.46	16.2	29.5	37
DCF8M-6R-VR	8	3/8	6.4	22	17.46	16.2	30.2	37.7
DCF8M-8R-VR	8	1/2	6.4	27	17.46	16.2	35.8	43.3
DCF10M-2R-VR	10	1/8	4.8	18	20.64	17.2	25.4	33
DCF10M-4R-VR	10	1/4	7.1	19	20.64	17.2	30.2	37.8
DCF10M-6R-VR	10	3/8	7.9	22	20.64	17.2	31	38.6
DCF10M-8R-VR	10	1/2	7.9	27	20.64	17.2	36.6	44.2
DCF12M-2R-VR	12	1/8	4.8	22	22.22	22.8	28.4	38.5
DCF12M-4R-VR	12	1/4	7.1	22	22.22	22.8	30.2	40.3
DCF12M-6R-VR	12	3/8	9.5	22	22.22	22.8	31	41.1
DCF12M-8R-VR	12	1/2	9.5	27	22.22	22.8	36.6	46.7
DCF12M-12R-VR	12	3/4	9.5	35	22.22	22.8	38.9	49
DCF15M-8R-VR	15	1/2	11.9	27	25	24.4	36.6	46.7
DCF16M-8R-VR	16	1/2	11.9	27	25	24.4	36.8	46.9
DCF20M-8R-VR	20	1/2	11.9	30	32	26	37.8	47.9
DCF20M-12R-VR	20	3/4	15.9	35	32	26	39.6	49.7
DCF22M-12R-VR	22	3/4	15.9	35	32	26	39.6	49.7
DCF22M-16R-VR	22	1	18.3	41	32	26	47.8	57.9
DCF25M-12R-VR	25	3/4	15.9	35	38	31.3	41.1	53.4
DCF25M-16R-VR	25	1	21.8	41	38	31.3	50	62.3

Female Connector (Gauge Connector)

DCF-GG-VR



Fractional

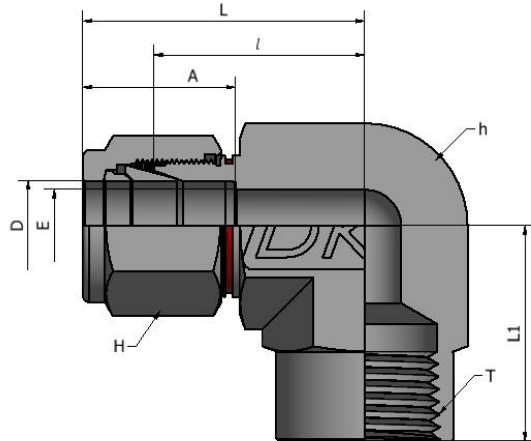
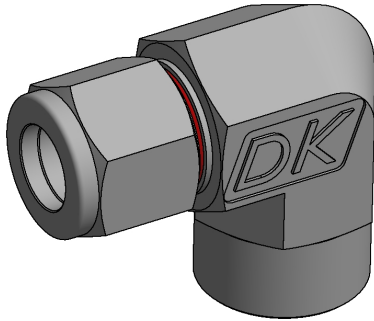
Part No.	Tube O.D D		T PF	E Min.	E1	Width across flat				A	l	l1	L
	In.	mm				h		H					
						In.	mm	In.	mm				
DCF4-2GG-VR	1/4	6.35	1/8	4.82	-	9/16	14.28	5/8	15.87	15.24	26.3	12	33.55
DCF4-4GG-VR	1/4	6.35	1/4	4.82	5.5	3/4	19.05	5/8	15.87	15.24	30.22	13	37.59
DCF4-6GG-VR	1/4	6.35	3/8	4.82	6.5	15/16	23.81	5/8	15.87	15.24	30.22	14.22	37.59
DCF4-8GG-VR	1/4	6.35	1/2	4.82	7	1-1/16	26.98	5/8	15.87	15.24	30.07	18.8	43.43
DCF5-4GG-VR	5/16	7.93	1/4	5.58	5.5	3/4	19.05	11/16	17.46	16.25	30.98	13	38.35
DCF5-8GG-VR	5/16	7.93	1/2	7.11	7	1-1/16	26.98	11/16	17.46	16.25	33.02	18.8	40.38
DCF6-4GG-VR	3/8	9.52	1/4	5.58	5.5	3/4	19.05	13/16	20.64	16.76	31.75	13	39.12
DCF6-6GG-VR	3/8	9.52	3/8	6.6	6.5	15/16	23.81	13/16	20.64	16.76	31.24	14.22	38.61
DCF6-8GG-VR	3/8	9.52	1/2	7.11	7	1-1/16	26.98	13/16	20.64	16.76	34.54	18.8	41.91
DCF8-4GG-VR	1/2	12.7	1/4	5.5	5.5	7/8	22.22	7/8	22.22	22.86	31.8	13	41.95
DCF8-6GG-VR	1/2	12.7	3/8	6.6	6.5	15/16	23.81	7/8	22.22	22.86	34.29	14.22	44.45
DCF8-8GG-VR	1/2	12.7	1/2	7.11	7	1-1/16	26.98	7/8	22.22	22.86	38.1	18.8	48.26

Metric

Part No.	Tube O.D D	T PT	E Min.	E1	Width across flat		A	l	l1	L
					h	H				
DCF6M-4GG-VR	6	1/4	4.8	5.5	19	16	15.3	30.2	13	37.6
DCF6M-6GG-VR	6	3/8	4.8	6.5	24	16	15.3	30.2	14	37.6
DCF6M-8GG-VR	6	1/2	4.8	7	27	16	15.3	36.3	19	43
DCF8M-4GG-VR	8	1/4	5.5	5.5	19	17.46	16.2	31	13	38.5
DCF8M-6GG-VR	8	3/8	6.5	6.5	24	17.46	16.2	28.7	14	36.2
DCF8M-8GG-VR	8	1/2	7	7	27	17.46	16.2	33	19	40.5
DCF10M-4GG-VR	10	1/4	5.5	5.5	19	20.64	17.2	31.8	13	39.4
DCF10M-6GG-VR	10	3/8	6.5	6.5	24	20.64	17.2	31.2	14	38.8
DCF10M-8GG-VR	10	1/2	7	7	27	20.64	17.2	33.8	19	41.4
DCF12M-4GG-VR	12	1/4	5.5	5.5	22	22.22	22.8	31.8	13	41.9
DCF12M-6GG-VR	12	3/8	6.5	6.5	24	22.22	22.8	34.3	14	44.4
DCF12M-8GG-VR	12	1/2	7	7	27	22.22	22.8	38.1	19	48.2
DCF20M-8GG-VR	20	1/2	7	7	30	32	26	44.2	19	54.3
DCF22M-8GG-VR	22	1/2	7	7	30	32	26	44.2	19	54.3

Female Elbow

DLF-N-VR



Fractional

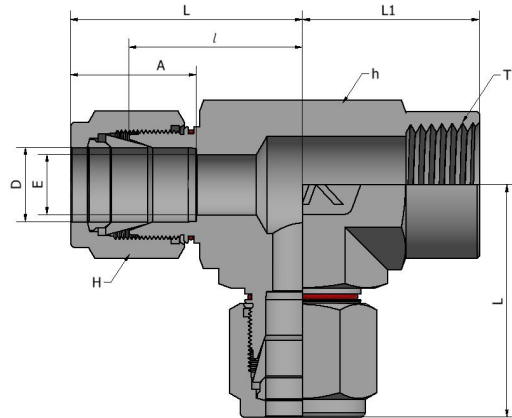
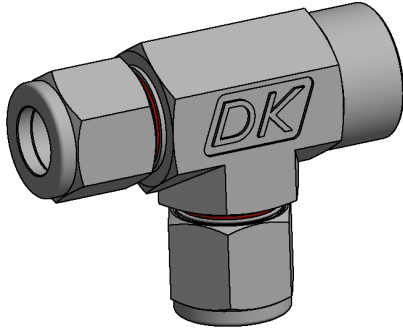
Part No.	Tube O.D		T NPT	E Min.	Width across flat				A	l	L	L1
	D				h		H					
	In.	mm			In.	mm	In.	mm				
DLF4-2N-VR	1/4	6.35	1/8	4.82	9/16	14.28	5/8	15.87	15.24	19.55	26.92	19.05
DLF4-4N-VR	1/4	6.35	1/4	4.82	11/16	17.46	5/8	15.87	15.24	22.35	29.71	22.35
DLF4-6N-VR	1/4	6.35	3/8	4.82	13/16	20.64	5/8	15.87	15.24	24.38	31.75	22.35
DLF4-8N-VR	1/4	6.35	1/2	4.82	1	25.4	5/8	15.87	15.24	27.17	34.54	28.44
DLF5-2N-VR	5/16	7.93	1/8	6.35	5/8	15.87	11/16	17.46	16.25	21.33	28.7	19.05
DLF5-4N-VR	5/16	7.93	1/4	6.35	11/16	17.46	11/16	17.46	16.25	23.11	30.48	22.35
DLF6-2N-VR	3/8	9.52	1/8	7.11	5/8	15.87	13/16	20.64	16.76	23.11	30.48	19.05
DLF6-4N-VR	3/8	9.52	1/4	7.11	11/16	17.46	13/16	20.64	16.76	23.87	31.24	22.35
DLF6-6N-VR	3/8	9.52	3/8	7.11	13/16	20.64	13/16	20.64	16.76	25.9	33.27	22.35
DLF6-8N-VR	3/8	9.52	1/2	7.11	1	25.4	13/16	20.64	16.76	28.7	36.06	28.44
DLF8-4N-VR	1/2	12.7	1/4	10.41	13/16	20.64	7/8	22.22	22.86	25.9	36.06	22.35
DLF8-6N-VR	1/2	12.7	3/8	10.41	13/16	20.64	7/8	22.22	22.86	25.9	36.06	22.35
DLF8-8N-VR	1/2	12.7	1/2	10.41	1	25.4	7/8	22.22	22.86	28.7	38.86	28.44
DLF10-6N-VR	5/8	15.87	3/8	12.7	15/16	23.81	1	25.4	24.38	27.94	38.1	22.35
DLF10-8N-VR	5/8	15.87	1/2	12.7	1	25.4	1	25.4	24.38	29.71	39.87	28.44
DLF12-8N-VR	3/4	19.05	1/2	15.74	1-1/16	26.98	1-1/8	28.58	24.38	29.71	39.87	28.44
DLF12-12N-VR	3/4	19.05	3/4	15.74	1-3/8	34.92	1-1/8	28.58	24.38	34.54	44.7	31.75
DLF14-12N-VR	7/8	22.22	3/4	18.28	1-3/8	34.92	1-1/4	31.75	25.9	34.54	44.7	31.75
DLF16-12N-VR	1	25.4	3/4	22.35	1-3/8	34.92	1-1/2	38.1	31.24	36.83	49.02	31.75
DLF16-16N-VR	1	25.4	1	22.35	1-11/16	42.86	1-1/2	38.1	31.24	41.4	50.29	38.1

Metric

Part No.	Tube O.D D	T NPT	E Min.	Width across flat		A	l	L	L1
				h	H				
DLF6M-2N-VR	6	1/8	4.8	14.28	16	15.3	19.6	27	19
DLF6M-4N-VR	6	1/4	4.8	17.46	16	15.3	22.4	29.8	22.4
DLF6M-6N-VR	6	3/8	4.8	20.64	16	15.3	24.4	31.7	22.4
DLF6M-8N-VR	6	1/2	4.8	25.4	16	15.3	27.2	34.6	28.4
DLF8M-2N-VR	8	1/8	6.4	15.87	17.46	16.2	23.1	29.9	19
DLF8M-4N-VR	8	1/4	6.4	17.46	17.46	16.2	23.1	30.6	22.4
DLF8M-8N-VR	8	1/2	6.4	25.4	17.46	16.2	28	35.2	28.4
DLF10M-2N-VR	10	1/8	7.9	17.46	20.64	17.2	23.9	31.5	19
DLF10M-4N-VR	10	1/4	7.9	17.46	20.64	17.2	25.9	33.5	22.35
DLF10M-6N-VR	10	3/8	7.9	20.64	20.64	17.2	25.9	33.5	22.4
DLF10M-8N-VR	10	1/2	7.9	25.4	20.64	17.2	28.7	36.1	28.4
DLF12M-4N-VR	12	1/4	9.5	20.64	22.22	22.8	25.9	36	22.4
DLF12M-6N-VR	12	3/8	9.5	20.64	22.22	22.8	25.9	36.2	22.35
DLF12M-8N-VR	12	1/2	9.5	25.4	22.22	22.8	28.7	38.8	28.4
DLF16M-8N-VR	16	1/2	12.7	26.98	25	24.4	29.7	39.5	28.4

Female Run Tee

DTRF-N-VR



Fractional

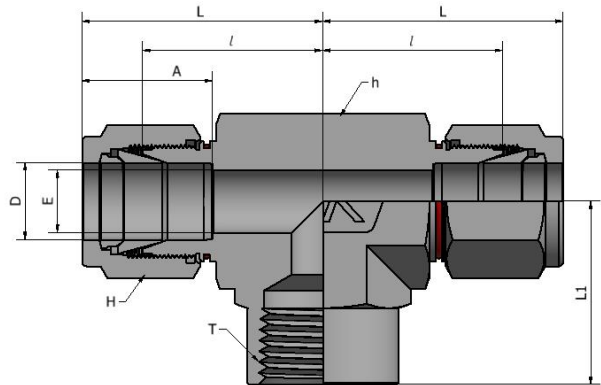
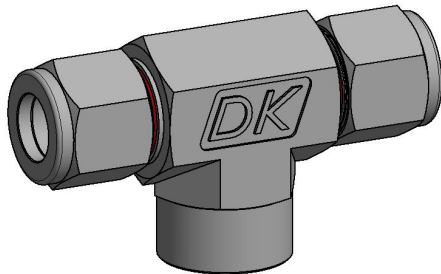
Part No.	Tube O.D D		T NPT	E Min.	Width across flat				A	l	L	L1
	In.	mm			h		H					
					In.	mm	In.	mm				
DTRF4-2N-VR	1/4	6.35	1/8	4.82	9/16	14.28	5/8	15.87	15.24	19.55	26.92	19.05
DTRF4-4N-VR	1/4	6.35	1/4	4.82	11/16	17.46	5/8	15.87	15.24	22.86	29.71	22.35
DTRF4-6N-VR	1/4	6.35	3/8	4.82	13/16	20.64	5/8	15.87	15.24	24.38	31.75	22.35
DTRF4-8N-VR	1/4	6.35	1/2	4.82	1	25.4	5/8	15.87	15.24	27.17	34.54	28.44
DTRF5-2N-VR	5/16	7.94	1/8	6.35	5/8	15.87	11/16	17.46	16.25	21.33	28.7	19.05
DTRF5-4N-VR	5/16	7.94	1/4	6.35	11/16	17.46	11/16	17.46	16.25	23.11	30.48	22.35
DTRF6-2N-VR	3/8	9.52	1/8	7.11	5/8	15.87	13/16	20.64	16.76	23.11	30.48	19.05
DTRF6-4N-VR	3/8	9.52	1/4	7.11	11/16	17.46	13/16	20.64	16.76	23.87	31.24	22.35
DTRF6-6N-VR	3/8	9.52	3/8	6.35	13/16	20.64	13/16	20.64	16.76	25.9	33.27	22.35
DTRF6-8N-VR	3/8	9.52	1/2	7.11	1	25.4	13/16	20.64	16.76	28.7	36.06	28.44
DTRF8-4N-VR	1/2	12.7	1/4	10.41	13/16	20.64	7/8	22.22	22.86	25.9	36.06	22.35
DTRF8-6N-VR	1/2	12.7	3/8	10.41	13/16	20.64	7/8	22.22	22.86	25.9	36.06	22.35
DTRF8-8N-VR	1/2	12.7	1/2	10.41	1	25.4	7/8	22.22	22.86	29.71	39.87	28.44
DTRF10-6N-VR	5/8	15.87	3/8	12.7	15/16	23.81	1	25.4	24.38	27.94	38.1	22.35
DTRF10-8N-VR	5/8	15.87	1/2	12.7	1	25.4	1	25.4	24.38	28.7	38.86	28.44
DTRF12-8N-VR	3/4	19.05	1/2	15.74	1-1/16	26.98	1-1/8	28/58	33.27	29.71	39.87	28.44
DTRF12-12N-VR	3/4	19.05	3/4	15.74	1-3/8	34.92	1-1/8	28/58	33.27	34.54	44.7	31.75
DTRF14-12N-VR	7/8	22.22	3/4	18.28	1-3/8	34.92	1-1/4	31.75	25.9	34.54	44.7	31.75
DTRF16-12N-VR	1	25.4	3/4	22.35	1-3/8	34.92	1-1/2	38.1	31.24	36.83	49.02	31.75
DTRF16-16N-VR	1	25.4	1	22.35	1-1/16	42.86	1-1/2	38.1	31.24	41.4	50.29	38.1

Metric

Part No.	Tube O.D D	T NPT	E Min.	Width across flat		A	l	L	L1
				h	H				
DTRF6M-2N-VR	6	1/8	4.8	14.28	16	15.3	19.6	27	19
DTRF6M-4N-VR	6	1/4	4.8	17.46	16	15.3	22.4	29.8	24
DTRF6M-6N-VR	6	3/8	4.8	20.64	16	15.3	24.4	31.7	22.4
DTRF6M-8N-VR	6	1/2	4.8	25.4	16	15.3	27.2	34.5	28.4
DTRF8M-2N-VR	8	1/8	6.4	15.87	17.46	16.2	23.1	29.9	19
DTRF8M-4N-VR	8	1/4	6.4	17.46	17.46	16.2	23.1	30.6	22.4
DTRF8M-6N-VR	8	3/8	6.4	20.64	17.46	16.2	25.2	32.4	22.4
DTRF8M-8N-VR	8	1/2	6.4	25.4	17.46	16.2	28	35.2	28.4
DTRF10M-2N-VR	10	1/8	7.9	20.64	20.64	17.2	23.9	31.5	19
DTRF10M-4N-VR	10	1/4	7.9	20.64	20.64	17.2	25.9	33.6	22.4
DTRF10M-6N-VR	10	3/8	7.9	20.64	20.64	17.2	25.9	33.6	22.4
DTRF10M-8N-VR	10	1/2	7.9	25.4	20.64	17.2	26.2	33.6	28.4
DTRF12M-4N-VR	12	1/4	9.5	20.64	22.22	22.8	25.9	36	22.4
DTRF12M-6N-VR	12	3/8	9.5	20.64	22.22	22.8	25.9	36	22.4
DTRF12M-8N-VR	12	1/2	9.5	25.4	22.22	22.8	29.7	40	28.4
DTRF16M-8N-VR	16	1/2	12.7	25.4	25	24.4	29.7	40	28.4

Female Branch Tee

DTBF-N-VR



Fractional

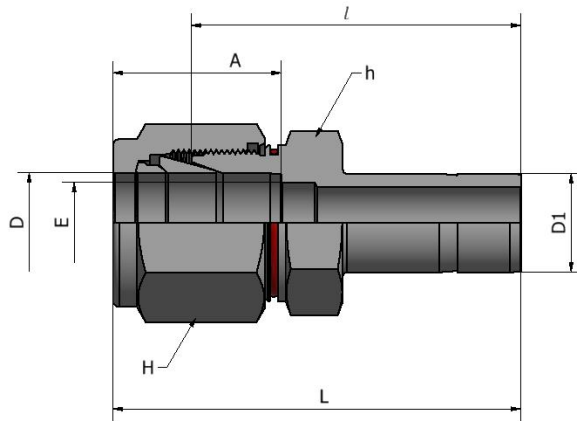
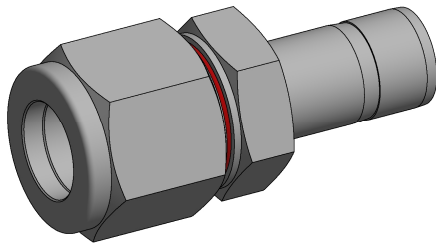
Part No.	Tube O.D D		T NPT	E Min.	Width across flat				A	l	L	L1
	In.	mm			h		H					
					In.	mm	In.	mm				
DTBF4-2N-VR	1/4	6.35	1/8	4.82	9/16	14.28	5/8	15.87	15.24	19.55	26.92	19.05
DTBF4-4N-VR	1/4	6.35	1/4	4.82	11/16	17.46	5/8	15.87	15.24	22.35	29.71	22.35
DTBF4-6N-VR	1/4	6.35	3/8	4.82	13/16	20.64	5/8	15.87	15.24	24.38	31.75	22.35
DTBF4-8N-VR	1/4	6.35	1/2	4.82	1	25.4	5/8	15.87	15.24	27.17	34.54	28.44
DTBF5-2N-VR	5/16	7.94	1/8	6.35	5/8	15.87	11/16	17.46	16.25	21.33	28.7	19.05
DTBF5-4N-VR	5/16	7.94	1/4	6.35	11/16	17.46	11/16	17.46	16.25	23.11	30.48	22.35
DTBF6-2N-VR	3/8	9.52	1/8	7.11	11/16	17.46	13/16	20.64	16.76	23.11	30.48	19.05
DTBF6-4N-VR	3/8	9.52	1/4	7.11	11/16	17.46	13/16	20.64	16.76	23.87	31.24	22.35
DTBF6-6N-VR	3/8	9.52	3/8	6.35	13/16	20.64	13/16	20.64	16.76	25.9	33.27	22.35
DTBF6-8N-VR	3/8	9.52	1/2	7.11	1	25.4	13/16	20.64	16.76	28.7	36.06	28.44
DTBF8-4N-VR	1/2	12.7	1/4	10.41	13/16	20.64	7/8	22.22	22.86	25.9	36.06	22.35
DTBF8-6N-VR	1/2	12.7	3/8	10.41	13/16	20.64	7/8	22.22	22.86	25.9	36.06	22.35
DTBF8-8N-VR	1/2	12.7	1/2	10.41	1	25.4	7/8	22.22	22.86	29.71	39.87	28.44
DTBF10-6N-VR	5/8	15.87	3/8	12.7	15/16	23.81	1	25.4	24.38	27.94	38.1	22.35
DTBF10-8N-VR	5/8	15.87	1/2	12.7	1	25.4	1	25.4	24.38	28.7	38.86	28.44
DTBF12-8N-VR	3/4	19.05	1/2	15.74	1-1/16	26.98	1-1/8	28/58	33.27	29.71	39.87	28.44
DTBF12-12N-VR	3/4	19.05	3/4	15.74	1-3/8	34.92	1-1/8	28/58	33.27	34.54	44.7	31.75
DTBF14-12N-VR	7/8	22.22	3/4	18.28	1-3/8	34.92	1-1/4	31.75	25.9	24.54	44.7	31.75
DTBF16-12N-VR	1	25.4	3/4	22.35	1-3/8	34.92	1-1/2	38.1	31.24	36.83	49.02	31.75
DTBF16-16N-VR	1	25.4	1	22.35	1-11/16	42.86	1-1/2	38.1	31.24	41.4	53.59	38.1

Metric

Part No.	Tube O.D D	T NPT	E Min.	Width across flat		A	l	L	L1
				h	H				
DTBF6M-2N-VR	6	1/8	4.8	14.28	16	15.3	19.6	27	19
DTBF6M-4N-VR	6	1/4	4.8	14.28	16	15.3	22.4	29.8	22.4
DTBF6M-6N-VR	6	3/8	4.8	20.64	16	15.3	24.4	31.7	22.4
DTBF6M-8N-VR	6	1/2	4.8	25.4	16	15.3	27.2	34.5	28.4
DTBF8M-2N-VR	8	1/8	6.4	15.87	17.46	16.2	23.1	29.9	19
DTBF8M-4N-VR	8	1/4	6.4	17.46	17.46	16.2	23.1	30.6	22.4
DTBF8M-6N-VR	8	3/8	6.4	20.64	17.46	16.2	25.2	32.4	22.4
DTBF8M-8N-VR	8	1/2	6.4	25.4	17.46	16.2	28	35.2	28.4
DTBF10M-2N-VR	10	1/8	7.9	17.46	20.64	17.2	23.9	31.5	19
DTBF10M-4N-VR	10	1/4	7.9	20.64	20.64	17.2	25.9	33.5	22.4
DTBF10M-6N-VR	10	3/8	7.9	20.64	20.64	17.2	25.9	33.5	22.4
DTBF10M-8N-VR	10	1/2	7.9	25.4	20.64	17.2	26.2	33.6	22.4
DTBF12M-4N-VR	12	1/4	9.5	20.64	22.22	22.8	25.9	36	22.4
DTBF12M-6N-VR	12	3/8	9.5	20.64	22.22	22.8	25.9	36	22.4
DTBF12M-8N-VR	12	1/2	9.5	25.4	22.22	22.8	29.7	40	28.7
DTBF16M-8N-VR	16	1/2	12.7	25.4	25	24.4	29.7	40	28.7

Reducer

DR-VR



Fractional

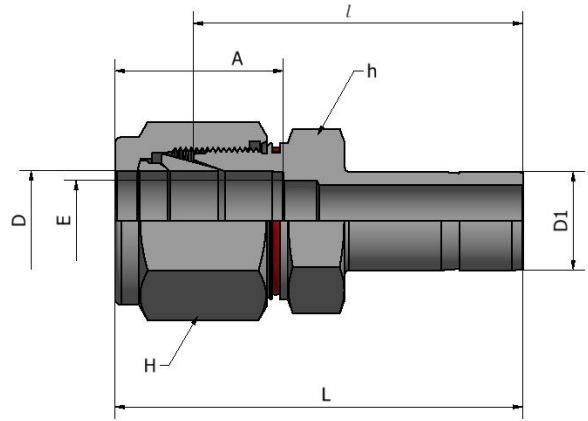
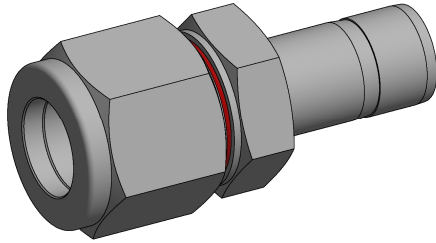
Part No.	Tube O.D				E Min.	Width across flat				A	l	L
	D		D1			h		H				
	In.	mm	In.	mm		In.	mm	In.	mm			
DR4-2-VR	1/4	6.35	1/8	3.17	2.03	9/16	14.28	5/8	15.87	15.24	29.46	36.83
DR4-3-VR	1/4	6.35	3/16	4.76	3.04	9/16	14.28	5/8	15.87	15.24	30.22	37.59
DR4-4-VR	1/4	6.35	1/4	6.35	4.82	9/16	14.28	5/8	15.87	15.24	31.75	39.11
DR4-5-VR	1/4	6.35	5/16	7.93	4.82	9/16	14.28	5/8	15.87	15.24	32.51	39.87
DR4-6-VR	1/4	6.35	3/8	9.52	4.82	9/16	14.28	5/8	15.87	15.24	33.27	40.64
DR4-8-VR	1/4	6.35	1/2	12.7	4.82	9/16	14.28	5/8	15.87	15.24	38.86	46.22
DR4-10-VR	1/4	6.35	5/8	15.87	4.82	11/16	17.46	5/8	15.87	15.24	40.64	48
DR4-12-VR	1/4	6.35	3/4	19.05	4.82	13/16	20.64	5/8	15.87	15.24	40.38	47.75
DR5-6-VR	5/16	7.93	3/8	9.52	6.35	5/8	15.87	11/16	17.46	16.25	34.54	41.91
DR5-8-VR	5/16	7.93	1/2	12.7	6.35	5/8	15.87	11/16	17.46	16.25	40.13	47.49
DR6-4-VR	3/8	9.52	1/4	6.35	4.82	11/16	17.46	13/16	20.64	16.76	34.03	41.4
DR6-6-VR	3/8	9.52	3/8	9.52	7.11	11/16	17.46	13/16	20.64	16.76	35.81	43.18
DR6-8-VR	3/8	9.52	1/2	12.7	7.11	11/16	17.46	13/16	20.64	16.76	41.14	45.81
DR6-10-VR	3/8	9.52	5/8	15.87	7.11	11/16	17.46	13/16	20.64	16.76	42.92	50.29
DR6-12-VR	3/8	9.52	3/4	19.05	7.11	13/16	20.64	13/16	20.64	16.76	42.92	50.29
DR8-4-VR	1/2	12.7	1/4	6.35	4.82	13/16	20.64	7/8	22.22	22.86	34.79	44.95
DR8-6-VR	1/2	12.7	3/8	9.52	7.11	13/16	20.64	7/8	22.22	22.86	36.57	46.73
DR8-8-VR	1/2	12.7	1/2	12.7	9.9	13/16	20.64	7/8	22.22	22.86	42.16	52.32
DR8-10-VR	1/2	12.7	5/8	15.87	10.41	13/16	20.64	7/8	22.22	22.86	43.68	53.84
DR8-12-VR	1/2	12.7	3/4	19.05	10.41	13/16	20.64	7/8	22.22	22.86	43.84	53.84
DR8-16-VR	1/2	12.7	1	25.4	10.41	1-1/16	26.98	7/8	22.22	22.86	50.03	60.19
DR10-12-VR	5/8	15.87	3/4	19.05	12.7	15/16	23.81	1	25.4	24.38	44.45	54.61
DR10-14-VR	5/8	15.87	7/8	22.22	12.7	15/16	23.81	1	25.4	24.38	45.97	56.13
DR10-16-VR	5/8	15.87	1	25.4	12.7	1-1/16	26.98	1	25.4	24.38	50.8	60.96
DR12-8-VR	3/4	19.05	1/2	12.7	9.9	1-1/16	26.98	1-1/8	28.58	24.38	44.45	54.61
DR12-16-VR	3/4	19.05	1	25.4	15.74	1-1/16	26.98	1-1/8	28.58	24.38	52.32	62.48

Metric Tube Metric DK-Lok Port

Part No.	Tube O.D			E Min.	Width across flat		A	l	L
	D	D1			h	H			
		In.	mm						
DR6M-2-VR	6	1/8	3.17	2	14	16	15.3	29.5	36.9
DR6M-4-VR	6	1/4	6.35	4.8	14	16	15.3	31.8	39.2
DR6M-5-VR	6	5/16	7.93	4.8	14	16	15.3	32.5	39.9
DR6M-6-VR	6	3/8	9.52	4.8	14	16	15.3	33.3	40.7
DR6M-8-VR	6	1/2	12.7	4.8	14	16	15.3	38.9	46.3
DR8M-6-VR	8	3/8	9.52	6.4	16	17.46	16.2	34.5	42
DR8M-8-VR	8	1/2	12.7	6.4	16	17.46	16.2	40.1	47.6
DR10M-6-VR	10	3/8	9.52	7.1	18	20.64	17.2	36.6	44.2
DR10M-8-VR	10	1/2	12.7	7.9	18	20.64	17.2	42.2	49.8
DR12M-8-VR	12	1/2	12.7	9.5	22	22.22	22.8	42.2	52.3
DR12M-12-VR	12	3/4	19.05	9.5	22	22.22	22.8	43.7	53.8
DR18M-12-VR	18	3/4	19.05	15.1	27	30	24.4	46	56.1
DR18M-16-VR	18	1	25.4	15.1	27	30	24.4	52.3	62.4
DR25M-16-VR	25	1	25.4	20.2	35	38	31.3	57.2	69.5

Reducer

DR-VR

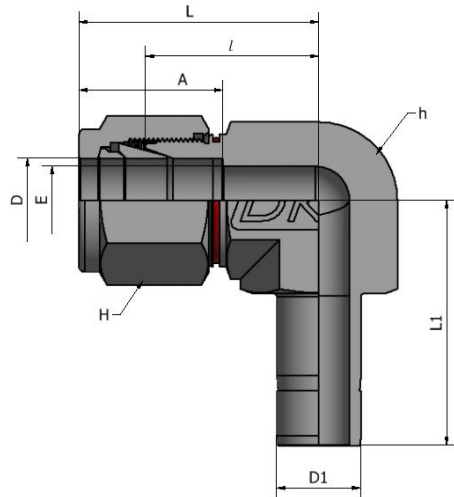
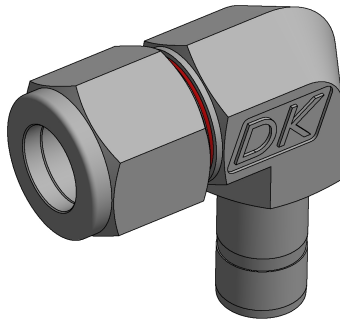


Metric

Part No.	Tube O.D		E Min.	Width across flat		A	l	L
	D	D1		H	H			
DR6M-3M-VR	6	3	1.8	14	16	15.3	29.5	36.9
DR6M-8M-VR	6	8	4.8	14	16	15.3	32.5	39.9
DR6M-10M-VR	6	10	4.8	14	16	15.3	33.3	40.7
DR6M-12M-VR	6	12	4.8	14	16	15.3	38.9	46.3
DR8M-6M-VR	8	6	4.6	16	17.46	16.2	32.8	40.3
DR8M-10M-VR	8	10	6.4	16	17.46	16.2	34.5	42
DR8M-12M-VR	8	12	6.4	16	17.46	16.2	40.1	47.6
DR10M-6M-VR	10	6	4.6	18	20.64	17.2	34.8	42.4
DR10M-12M-VR	10	12	7.9	18	20.64	17.1	42.2	49.8
DR10M-15M-VR	10	15	7.9	18	20.64	17.2	43.7	51.3
DR10M-18M-VR	10	18	7.9	19	20.64	17.2	43.7	51.3
DR12M-6M-VR	12	6	4.6	22	22.22	22.8	34.8	44.9
DR12M-10M-VR	12	10	7.7	22	22.22	22.8	36.6	46.7
DR12M-16M-VR	12	16	9.5	22	22.22	22.8	43.7	53.8
DR12M-18M-VR	12	18	9.5	22	22.22	22.8	43.7	53.8
DR12M-20M-VR	12	20	9.5	22	22.22	22.8	46	56.1
DR12M-22M-VR	12	22	9.5	24	22.22	22.8	46	56.1
DR12M-25M-VR	12	25	9.5	27	22.22	22.8	52.3	62.4
DR16M-12M-VR	16	12	9.1	24	25	24.4	42.9	53
DR18M-12M-VR	18	12	9.1	27	30	24.4	44.5	54.6
DR18M-16M-VR	18	16	12.7	27	30	24.4	46	56.1
DR18M-20M-VR	18	20	15.1	27	30	24.4	47.5	57.6
DR18M-22M-VR	18	22	15.1	27	30	24.4	47.5	57.6
DR18M-25M-VR	18	25	15.1	27	30	24.4	52.3	62.4
DR20M-16M-VR	20	16	12.7	30	32	26	47.8	57.9
DR20M-18M-VR	20	18	13.9	30	32	26	27.8	57.9
DR20M-22M-VR	20	22	15.8	30	32	26	49.3	59.4
DR20M-25M-VR	20	25	15.8	30	32	26	54.1	64.2
DR22M-18M-VR	22	18	13.9	30	32	26	47.8	57.9
DR22M-20M-VR	22	20	15.1	30	32	26	49.3	59.4
DR22M-25M-VR	22	25	18.3	30	32	26	54.1	64.2
DR25M-18M-VR	25	18	13.9	35	38	31.3	50.8	63.1
DR25M-20M-VR	25	20	15.1	35	38	31.3	52.3	64.6

Elbow Adapter

DLA-VR

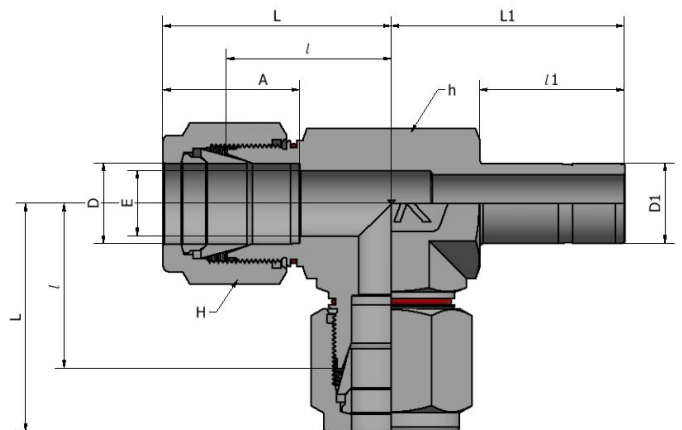
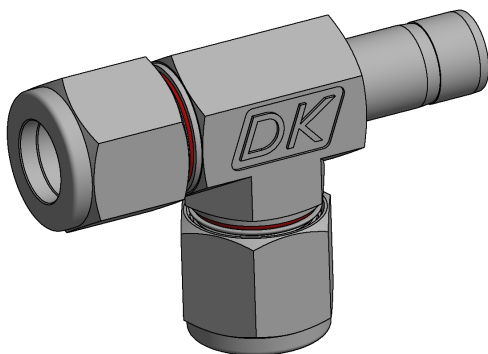


Metric

Part No.	Tube O.D		E Min.	Width across flat		A	l	l1	L	L1
	D	D1		h	H					
DLA-6M-VR	6	6	4.6	14.28	16	15.3	19.6	15.7	27	25
DLA-8M-VR	8	8	6.4	15.87	17.46	16.2	21.3	16.8	28.8	27.05
DLA-10M-VR	10	10	7.7	17.6	20.64	17.2	23.9	17.5	31.5	30
DLA-12M-VR	12	12	9.1	20.64	22.22	22.8	25.9	23.1	36	37.3
DLA-14M-VR	14	14	11.1	25.4	25	24.4	28.7	24.6	38.8	41.5
DLA-15M-VR	15	15	11.9	25.4	25	24.4	28.7	24.65	38.8	41.55
DLA-16M-VR	16	16	12.7	25.4	25	24.4	28.7	24.6	38.8	41.5
DLA-18M-VR	18	18	13.9	26.9	30	24.4	29.7	24.6	39.8	42
DLA-20M-VR	20	20	15.1	31.8	32	26	32.5	26.2	42.6	47
DLA-22M-VR	22	22	18.3	31.8	32	26	32.5	26.6	42.6	47.15
DLA-25M-VR	25	25	19.8	34.9	38	31.3	36.8	31.7	49.1	55.2

Run Tee Adapter

DTRA-VR

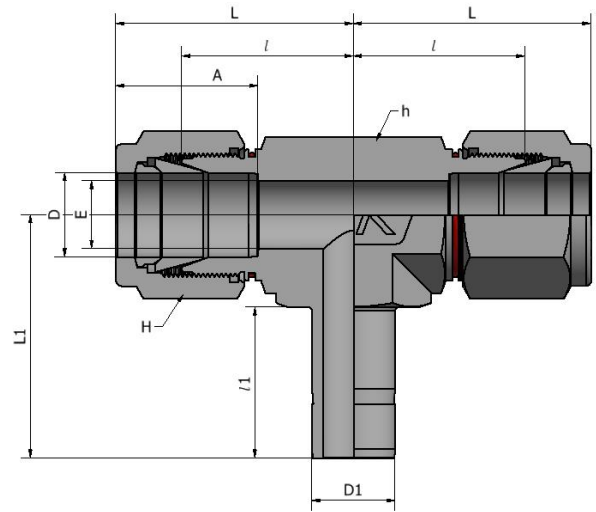
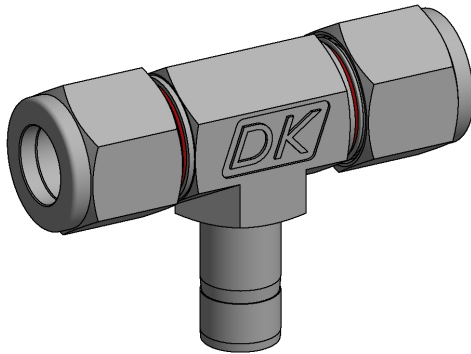


Metric

Part No.	Tube O.D		E Min.	Width across flat		A	l	l1	L	L1
	D	D1		h	H					
DLA-8M-VR	8	8	6.4	15.87	17.46	16.2	21.3	16.8	28.8	27.5
DLA-10M-VR	10	10	7.9	17.46	20.64	17.2	23.9	17.5	31.5	30

Branch Tee Adapter

DTBA-VR

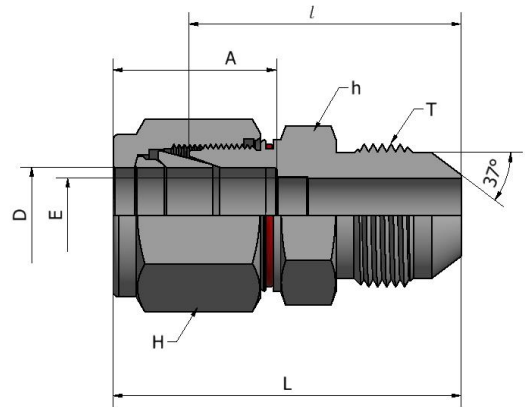
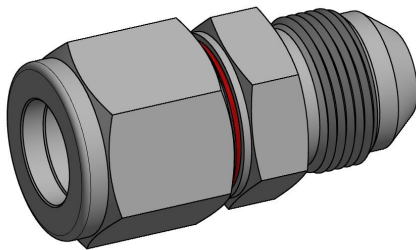


Metric

Part No.	Tube O.D		E Min.	Width across flat		A	l	l1	L	L1
	D	D1		h	H					
DTBA-8M-VR	8	8	6.4	15.87	17.46	16.2	21.3	16.8	28.8	27.5

AN Union

DUA-VR

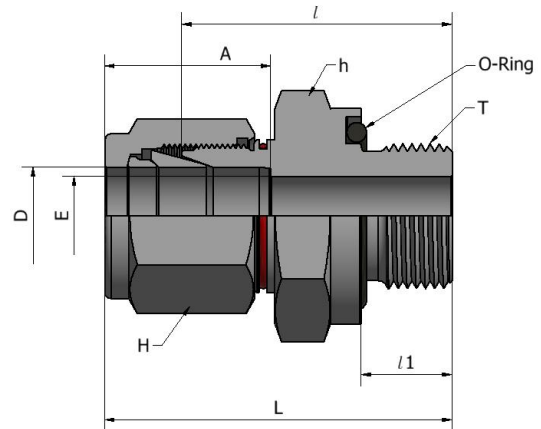
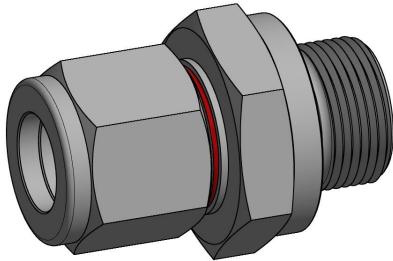


Fractional

Part No.	Tube O.D		AN Tube Flare Size		Straight Thread T(U)	E Min.	Width across flat				A	l	L
	In.	mm	In.	mm			h		H				
							In.	mm	In.	mm			
DUA4-4-VR	1/4	6.35	1/4	6.35	7/16-20	4.31	9/16	14.28	5/8	15.87	15.24	30.22	37.59
DUA5-5-VR	5/16	7.93	5/16	7.93	1/2-20	5.84	5/8	15.87	11/16	17.46	16.25	30.98	38.35
DUA6-4-VR	3/8	9.52	1/4	6.35	7/16-20	4.31	11/16	17.46	13/16	20.64	16.76	32.25	39.62
DUA6-6-VR	3/8	9.52	3/8	9.52	9/16-18	7.11	11/16	17.46	13/16	20.64	16.76	32.25	39.62
DUA8-8-VR	1/2	12.7	1/2	12.7	3/4-16	9.9	13/16	20.64	7/8	22.22	22.86	35.81	45.97
DUA12-12-VR	3/4	19.05	3/4	19.05	1-1/16-12	15.49	1-1/8	28.58	1-1/8	28.58	24.38	43.18	53.34
DUA16-16-VR	1	25.4	1	25.4	1-5/16-12	21.33	1-3/8	34.92	1-1/2	38.1	31.24	49.27	61.46

O-Seal Straight Thread Connector

DMC-UO-VR

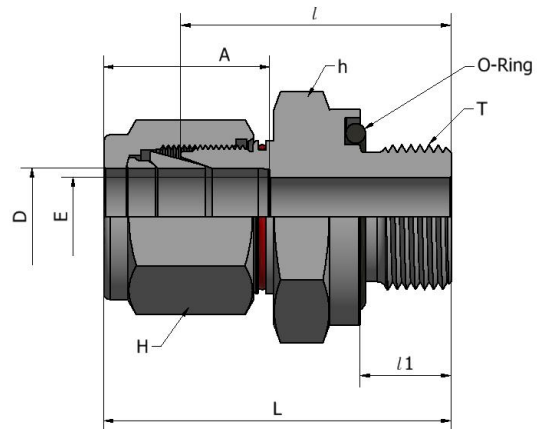
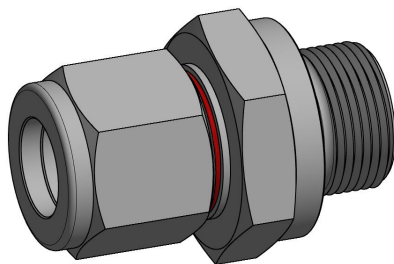


Fractional

Part No.	Tube O.D D		Straight Thread T(U)	E Min.	Width across flat				A	l	l1	L	O-Ring Uniform Size Number
	In.	mm			h		H						
					In.	mm	In.	mm					
DMC4-4UO-VR	1/4	6.35	7/16-20	4.82	3/4	19.05	5/8	15.87	15.24	30.98	10.41	38.35	-013
DMC5-5UO-VR	5/16	7.93	1/2-20	6.35	7/8	22.22	11/16	17.46	16.25	33.27	11.17	40.64	-112
DMC6-6UO-VR	3/8	9.52	9/16-18	7.11	15/16	23.81	13/16	20.64	16.76	35.05	11.93	42.41	-113
DMC8-8UO-VR	1/2	12.7	3/4-16	10.41	1-1/8	28.57	7/8	22.22	22.86	35.81	11.93	45.97	-116
DMC12-12UO-VR	3/4	19.05	1-1/16-12	15.74	1-1/2	38.1	1-1/8	28.58	24.38	42.16	14.22	52.32	-121
DMC16-16UO-VR	1	25.4	1-5/16-12	22.35	1-3/4	44.45	1-1/2	38.1	31.24	45.97	14.22	58.16	-125

O-Seal Pipe Thread Connector

DMC-NO-VR

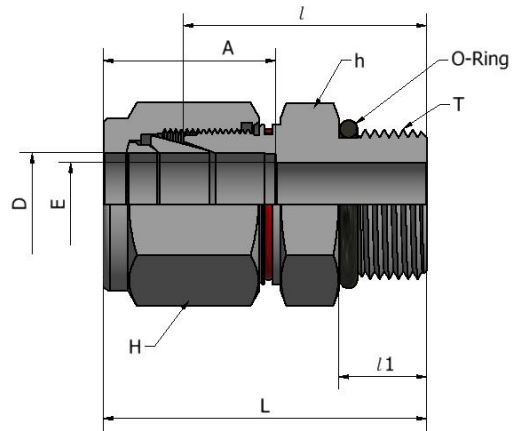
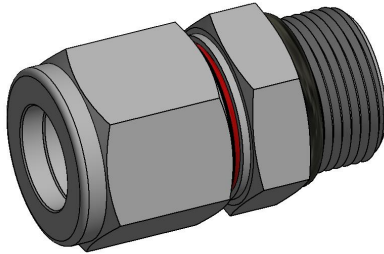


Fractional

Part No.	Tube O.D D		T NPT	E Min.	Width across flat				A	l	l1	L	O-Ring Uniform Size Number
	In.	mm			h		H						
					In.	mm	In.	mm					
DMC4-2NO-VR	1/4	6.35	1/8	4.82	3/4	19.05	5/8	15.87	15.24	27.68	7.11	35.05	-013
DMC4-4NO-VR	1/4	6.35	1/4	4.82	15/16	23.81	5/8	15.87	15.24	30.98	9.65	38.35	-113
DMC6-4NO-VR	3/8	9.52	1/4	7.11	15/16	23.81	13/16	20.64	16.76	32.51	9.65	37.87	-113
DMC6-6NO-VR	3/8	9.52	3/8	7.11	1-1/8	28.58	13/16	20.64	16.76	34.03	10.41	41.4	-116
DMC6-8NO-VR	3/8	9.52	1/2	7.11	1-5/16	33.33	13/16	20.64	16.76	39.62	13.46	46.99	-118
DMC8-8NO-VR	1/2	12.7	1/2	10.41	1-5/16	33.33	7/8	22.22	22.86	39.62	13.46	49.78	-118

Non-Positionable SAE Male Connector

DMCS-U-VR



Fractional

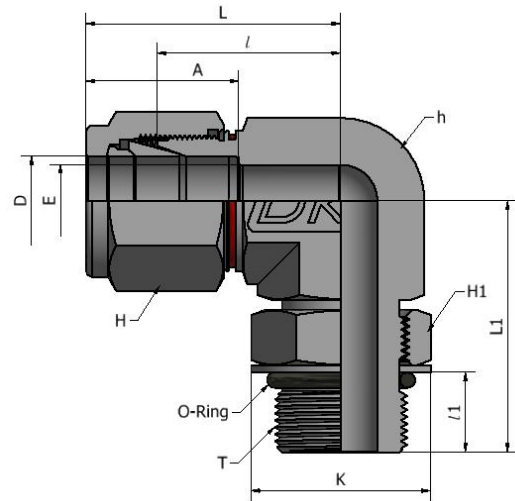
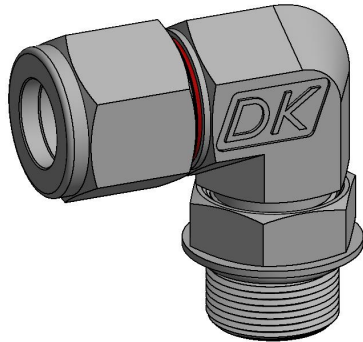
Part No.	Tube O.D D		Straight Thread T(U)	E Min.	Width across flat				A	l	l1	L	O-Ring Uniform Size Number
	In.	mm			h		H						
					In.	mm	In.	mm					
DMCS4-4U-VR	1/4	6.35	7/16-20	4.82	9/16	14.28	5/8	15.87	15.24	26.67	9.14	34.03	-904
DMCS4-6U-VR	1/4	6.35	9/16-18	4.82	11/16	17.46	5/8	15.87	15.24	28.19	9.9	35.56	-906
DMCS4-8U-VR	1/4	6.35	3/4-16	4.82	7/8	22.22	5/8	15.87	15.24	30.22	11.17	37.59	-908
DMCS4-10U-VR	1/4	6.35	7/8-14	4.82	1	25.4	5/8	15.87	15.24	33.27	12.7	40.64	-910
DMCS5-5U-VR	5/16	9.73	1/2-20	5.84	5/8	15.87	11/16	17.46	16.25	27.43	9.14	34.79	-905
DMCS6-4U-VR	3/8	9.52	7/16-20	5.08	11/16	17.46	13/16	20.64	16.76	28.19	9.14	35.56	-904
DMCS6-6U-VR	3/8	9.52	9/16-18	7.11	11/16	17.46	13/16	20.64	16.76	29.71	9.9	37.08	-906
DMCS6-8U-VR	3/8	9.52	3/4-16	7.11	7/8	22.22	13/16	20.64	16.76	31.75	11.17	39.11	-908
DMCS6-10U-VR	3/8	9.52	7/8-14	7.11	1	25.4	13/16	20.64	16.76	34.79	12.7	42.16	-910
DMCS8-6U-VR	1/2	12.7	9/16-18	7.11	13/16	20.64	7/8	22.22	22.86	28.95	9.9	39.11	-906
DMCS8-8U-VR	1/2	12.7	3/4-16	10.41	7/8	22.22	7/8	22.22	22.86	31.75	11.17	41.91	-908
DMCS8-10U-VR	1/2	12.7	7/8-14	10.41	1	25.4	7/8	22.22	22.86	34.79	12.7	44.95	-910
DMCS8-12U-VR	1/2	12.7	1-1/16-12	10.41	1-1/4	31.75	7/8	22.22	22.86	38.86	14.98	49.02	-912
DMCS10-8U-VR	5/8	15.87	3/4-16	10.66	15/16	23.81	1	25.4	24.38	31.75	31.75	41.91	-908
DMCS10-10U-VR	5/8	15.87	7/8-14	12.7	1	25.4	1	25.4	24.38	35.05	12.7	45.21	-910
DMCS12-8U-VR	3/4	19.05	3/4-16	10.66	1-1/16	26.98	1-1/8	28.58	24.38	35.81	11.17	45.97	-908
DMCS12-12U-VR	3/4	19.05	1-1/16-12	15.74	1-1/4	31.75	1-1/8	28.58	24.38	38.86	14.98	49.02	-912
DMCS14-14U-VR	7/8	22.22	1-3/16-12	18.28	1-3/8	34.92	1-1/4	31.75	25.9	38.86	14.98	49.02	-914
DMCS16-12U-VR	1	25.4	1-1/16-12	16.76	1-3/8	34.92	1-1/2	38.1	31.24	41.14	14.98	53.34	-912
DMCS16-16U-VR	1	25.4	1-5/16-12	22.35	1-1/2	38.1	1-1/2	38.1	31.24	42.16	14.98	54.35	-916

Metric

Part No.	Tube O.D D	Straight Thread T(U)	E Min.	Width across flat		A	l	l1	L	O-Ring Uniform Size Number
				h	H					
DMCS6M-6U-VR	6	9/16-18	4.8	18	16	15.3	28.2	9.9	36.5	-906
DMCS10M-6U-VR	10	9/16-18	7.9	18	20.64	17.2	29.7	9.9	37.3	-906
DMCS10M-8U-VR	10	3/4-16	7.9	22	20.64	17.2	31.8	11.17	39.4	-908
DMCS12M-4U-VR	12	7/16-20	5.2	22	22.22	22.8	28.2	9.14	38.3	-904
DMCS12M-6U-VR	12	9/16-18	7.5	22	22.22	22.8	29	9.9	39.1	-906

Positionable SAE Male Elbow

DLS-UP-VR

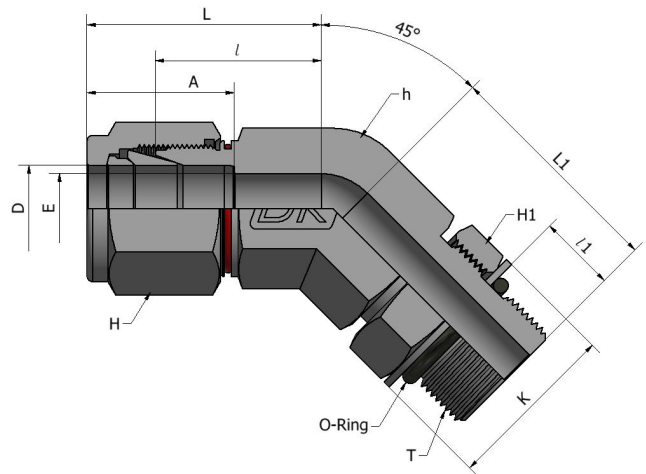
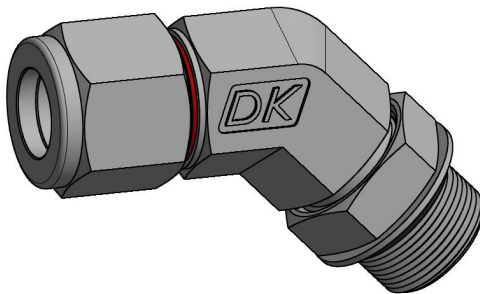


Fractional

Part No.	Tube O.D D		Straight Thread T(U)	E Min.	Width across flat						A	l	l1	L	L1	K	O-Ring Uniform Size Number
	In.	mm			h		H		H1								
					In.	mm	In.	mm	In.	mm							
DLS4-4UP-VR	1/4	6.35	7/16-20	4.82	9/16	14.28	5/8	15.87	9/16	14.28	15.24	21.08	9.9	28.44	28.44	16.51	-904
DLS5-5UP-VR	5/16	7.93	1/2-20	5.84	5/8	15.87	11/16	17.46	5/8	15.87	16.25	22.86	9.9	30.22	29.46	18.28	-905
DLS6-6UP-VR	3/8	9.52	9/16-18	7.11	11/16	17.46	13/16	20.64	11/16	17.46	16.76	24.63	11.17	32	32.25	20.06	-906
DLS6-8UP-VR	3/8	9.52	3/4-16	7.11	13/16	20.64	13/16	20.64	7/8	22.22	16.76	27.43	12.7	34.79	37.84	25.65	-908
DLS8-8UP-VR	1/2	12.7	3/4-16	10.41	13/16	20.64	7/8	22.22	7/8	22.22	22.86	27.43	12.7	37.59	37.84	25.65	-908
DLS10-10UP-VR	5/8	15.87	7/8-14	12.7	1	25.4	1	25.4	1	25.4	24.38	29.46	14.22	39.62	43.43	29.46	-910
DLS12-12UP-VR	3/4	19.05	1-1/16-12	15.74	1-1/16	26.98	1-1/8	28.58	1-1/4	31.75	24.38	31.24	16.76	41.4	48.76	36.57	-912
DLS14-14UP-VR	7/8	22.22	1-3/16-12	18.28	1-1/4	31.75	1-1/4	31.75	1-3/8	34.92	25.9	33.02	16.76	43.18	50.54	40.38	-914
DLS16-16UP-VR	1	25.4	1-5/16-12	22.35	1-3/8	34.92	1-1/2	38.1	1-1/2	38.1	31.24	38.35	16.76	50.54	53.59	43.94	-916

Positionable 45° SAE Male Elbow

DLBS-UP-VR

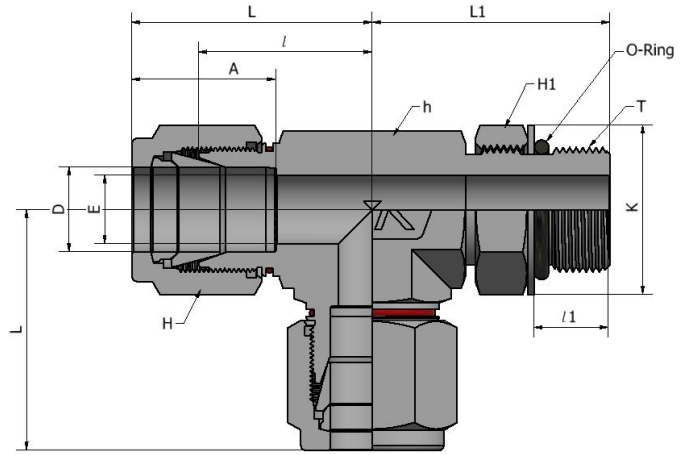
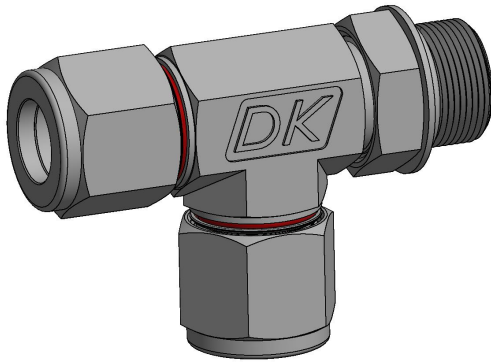


Fractional

Part No.	Tube O.D D		Straight Thread T(U)	E Min.	Width across flat						A	l	l1	L	L1	K	O-Ring Uniform Size Number
	In.	mm			h		H		H1								
					In.	mm	In.	mm	In.	mm							
DLBS4-4UP-VR	1/4	6.35	7/16-20	4.82	9/16	14.28	5/8	15.87	9/16	14.28	15.24	18.28	9.9	25.65	25.65	16.51	-904
DLBS6-6UP-VR	3/8	9.52	9/16-18	7.11	11/16	17.46	13/16	20.64	11/16	17.46	16.76	20.57	11.17	27.94	28.19	20.06	-906
DLBS8-8UP-VR	1/2	12.7	3/4-16	10.41	13/16	20.64	7/8	22.22	7/8	22.22	22.86	21.84	12.7	32	32.25	25.65	-908
DLBS12-12UP-VR	3/4	19.05	1-1/16-12	15.74	1-1/8	28.58	1-1/8	28.58	1-1/4	31.75	24.38	29.71	16.76	39.87	47.24	36.57	-912
DLBS16-16UP-VR	1	25.4	1-5/16-12	22.35	1-3/8	34.92	1-1/2	38.1	1-1/2	38.1	31.24	35.3	16.76	47.49	50.54	43.94	-916

Positionable SAE Male Run Tee

DTRS-UP-VR

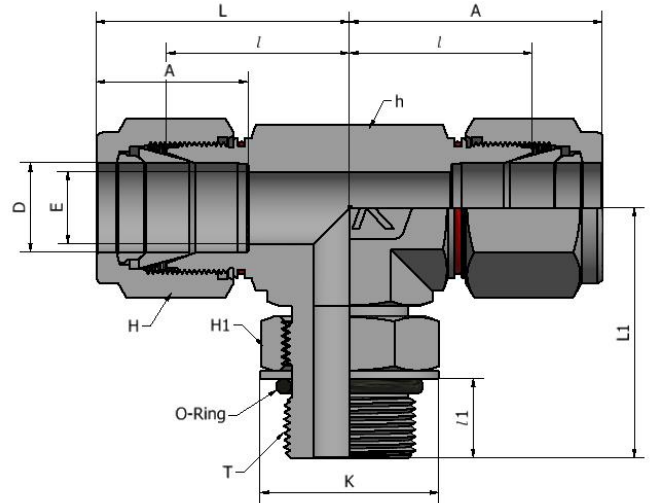
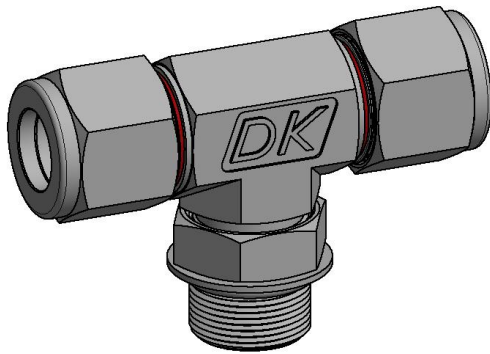


Fractional

Part No.	Tube O.D D		Straight Thread T(U)	E Min.	Width across flat						A	l	l1	L	L1	K	O-Ring Uniform Size Number
	In.	mm			h		H		H1								
					In.	mm	In.	mm	In.	mm							
DTRS4-4UP-VR	1/4	6.35	7/16-20	4.82	9/16	14.28	5/8	15.87	9/16	14.28	15.24	21.08	9.9	28.44	28.44	16.51	-904
DTRS6-6UP-VR	3/8	9.52	9/16-18	7.11	11/16	17.46	13/16	20.64	11/16	17.46	16.76	24.63	11.17	32	32.25	20.06	-906
DTRS8-8UP-VR	1/2	12.7	3/4-16	10.41	13/16	20.64	7/8	22.22	7/8	22.22	22.86	27.43	12.7	37.59	37.84	25.65	-908
DTRS12-12UP-VR	3/4	19.05	1-1/16-12	15.74	1-1/8	26.98	1-1/8	28.58	1-1/4	31.75	24.38	31.24	16.76	41.4	48.76	36.57	-912
DTRS16-16UP-VR	1	25.4	1-5/16-12	22.35	1-3/8	34.92	1-1/2	38.1	1-1/2	38.1	31.24	38.35	16.76	50.54	50.54	43.94	-916

Positionable SAE Male Branch Tee

DTBS-UP-VR

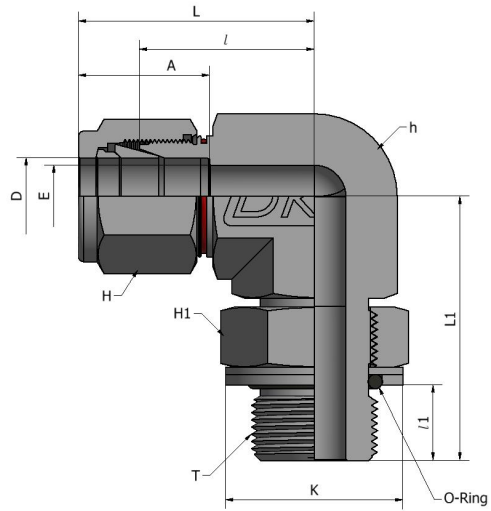
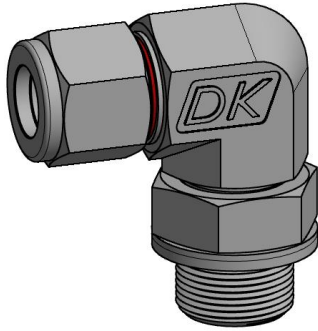


Fractional

Part No.	Tube O.D D		Straight Thread T(U)	E Min.	Width across flat						A	l	l1	L	L1	K	O-Ring Uniform Size Number
	In.	mm			h		H		H1								
					In.	mm	In.	mm	In.	mm							
DTBS4-4UP-VR	1/4	6.35	7/16-20	4.82	9/16	14.28	5/8	15.87	9/16	14.28	15.24	21.08	9.9	28.44	28.44	16.51	-904
DTBS6-6UP-VR	3/8	9.52	9/16-18	7.11	11/16	17.46	13/16	20.64	11/16	17.46	16.76	24.63	11.17	32	32.25	20.06	-906
DTBS8-8UP-VR	1/2	12.7	3/4-16	10.41	13/16	20.64	7/8	22.22	7/8	22.22	22.86	27.43	12.7	37.59	37.84	25.65	-908
DTBS12-12UP-VR	3/4	19.05	1-1/16-12	15.74	1-1/8	26.98	1-1/8	28.58	1-1/4	31.75	24.38	31.24	16.76	41.4	48.76	36.57	-912
DTBS16-16UP-VR	1	25.4	1-5/16-12	22.35	1-3/8	34.92	1-1/2	38.1	1-1/2	38.1	31.24	38.35	16.76	50.54	50.54	43.94	-916

Positionable Male Elbow

DLM-GP-VR



Fractional

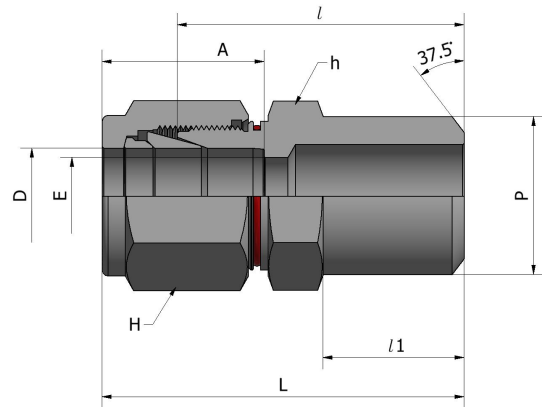
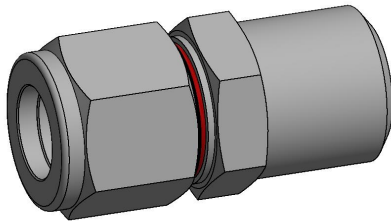
Part No.	Tube O.D D		T G(PF)	E Min.	Width across flat						A	l	l1	L	L1	K	O-Ring Uniform Size Number
	In.	mm			h		H		H1								
					In.	mm	In.	mm	In.	mm							
DLM4-2GP-VR	1/4	6.35	1/8	4.06	9/16	14.28	5/8	15.87	9/16	14.28	15.24	19.6	8.12	26.92	26.42	15.2	P8
DLM4-4GP-VR	1/4	6.35	1/4	4.82	5/8	15.87	5/8	15.87	3/4	19.05	15.24	21.6	9.14	28.95	32.3	20.3	-111
DLM6-4GP-VR	3/8	9.52	1/4	5.84	11/16	17.46	13/16	20.64	3/4	19.05	16.76	23.1	9.14	30.48	32.3	20.3	-111
DLM6-6GP-VR	3/8	9.52	3/8	7.11	13/16	20.64	13/16	20.64	3/4	19.05	16.76	25.9	9.39	33.27	37.1	24.4	-113
DLM8-4GP-VR	1/2	12.7	1/4	5.84	13/16	20.64	7/8	22.22	7/8	22.22	22.86	25.9	9.14	36.06	35.1	20.3	-111
DLM8-6GP-VR	1/2	12.7	3/8	7.87	13/16	20.64	7/8	22.22	7/8	22.22	22.86	25.9	9.39	36.06	37.1	24.4	-113
DLM8-8GP-VR	1/2	12.7	1/2	10.41	15/16	23.81	7/8	22.22	1-1/16	26.98	22.86	27.9	12.95	38.1	43.4	29.5	P18
DLM12-8GP-VR	3/4	19.05	1/2	11.93	1-1/16	26.98	1-1/8	26.98	1-1/16	26.98	24.38	29.7	12.95	39.87	45.21	29.5	P18
DLM12-12GP-VR	3/4	19.05	3/4	15.74	1-1/16	26.98	1-1/8	26.98	1-3/8	34.92	24.38	29.7	12.95	39.87	48.77	36.3	-119
DLM16-16GP-VR	1	25.4	1	19.81	1-3/8	34.92	1-1/2	38.1	1-5/8	41.28	31.24	36.8	13.97	49.02	53.6	46.2	-217

Metric

Part No.	Tube O.D D	T G(PF)	E Min.	Width across flat			A	l	l1	L	L1	K	O-Ring Uniform Size Number
				h	H	H1							
				DLM6M-2GP-VR	6	1/8							
DLM6M-4GP-VR	6	1/4	4.8	15.8	16	19.05	15.3	21.6	9.1	29	32.3	20.3	-111
DLM6M-6GP-VR	6	3/8	4.8	20.6	16	22.22	15.3	24.4	9.4	31.8	37.1	24.4	-113
DLM8M-2GP-VR	8	1/8	4	15.87	17.46	14.28	16.2	21.3	8.1	28.8	27.4	15.2	P8
DLM8M-4GP-VR	8	1/4	5.9	15.87	17.46	19.05	16.2	22.4	9.1	29.9	32.2	20.3	-111
DLM10M-4GP-VR	10	1/4	5.9	20.6	20.64	19.05	17.2	25.9	9.1	33.5	35	20.3	-113
DLM10M-6GP-VR	10	3/8	7.9	20.6	20.64	22.22	17.2	25.9	9.4	33.5	37.1	24.4	-111
DLM12M-4GP-VR	12	1/4	5.9	20.6	22.22	19.05	22.8	25.9	9.1	36	35	20.3	-113
DLM12M-6GP-VR	12	3/8	7.9	20.6	22.22	22.22	22.8	25.9	9.4	36	37.1	24.4	-113
DLM12M-8GP-VR	12	1/2	9.5	20.6	22.22	26.98	22.8	27.9	13	38	43.4	29.5	P18

Male Pipe Weld Connector

DCW-VR



Fractional

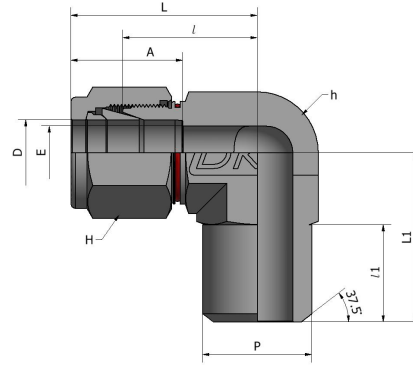
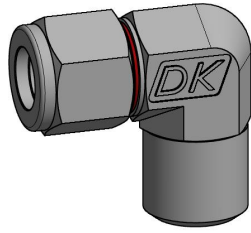
Part No.	Tube O.D D		Male PIPE Size P		E Min.	Width across flat				A	l	l1	L
	In.	mm	Nom.	O.D.		h		H					
						In.	mm	In.	mm				
DCW4-2P-VR	1/4	6.35	1/8	10.29	4.82	9/19	14.28	5/8	15.87	15.24	25.4	9.65	32.76
DCW4-4P-VR	1/4	6.35	1/4	13.72	4.82	9/16	14.28	5/8	15.87	15.24	30.48	14.22	37.84
DCW5-2P-VR	5/16	7.93	1/8	10.29	5.08	5/8	15.87	11/16	17.46	16.25	26.67	9.65	34.03
DCW5-4P-VR	5/16	7.93	1/4	13.72	6.35	5/8	15.87	11/16	17.46	16.25	31.24	14.22	38.6
DCW6-4P-VR	3/8	9.52	1/4	13.72	7.11	11/16	17.46	13/16	20.64	16.76	32.51	14.22	39.87
DCW6-6P-VR	3/8	9.52	3/8	17.15	7.11	11/16	17.46	13/16	20.64	16.76	32.51	14.22	39.87
DCW6-8P-VR	3/8	9.52	1/2	21.34	7.11	7/8	22.22	13/16	20.64	16.76	38.86	11.05	43.23
DCW8-6P-VR	1/2	12.7	3/8	17.15	10.41	13/16	20.64	7/8	22.22	22.86	33.27	14.22	43.43
DCW8-8P-VR	1/2	12.7	1/2	21.34	10.41	7/8	22.22	7/8	22.22	22.86	38.86	19.05	49.02
DCW8-12P-VR	1/2	12.7	3/4	26.67	10.41	1-1/16	26.98	7/8	22.22	22.86	40.38	19.05	50.54
DCW10-8P-VR	5/8	15.87	1/2	21.34	12.7	15/16	23.81			24.38	38.86	19.05	49.02
DCW12-12P-VR	3/4	19.05	3/4	26.67	15.74	1-1/16	26.98	1-1/8	28.58	24.38	40.38	19.05	50.54
DCW16-16P-VR	1	25.4	1	33.4	22.35	1-3/8	34.92	1-1/2	38.1	31.24	50.03	23.87	62.23

Metric

Part No.	Tube O.D D	Male Pipe Size P		E Min.	Width across flat		A	l	l1	L
		Nom.	O.D.		h	H				
DCW6M-2P-VR	6	1/8	10.29	4.8	14	16	15.3	25.4	9.7	32.8
DCW6M-4P-VR	6	1/4	13.72	4.8	14	16	15.3	30.2	14.2	37.6
DCW8M-2P-VR	8	1/8	10.29	5.1	16	17.46	16.2	26.7	9.7	34.2
DCW8M-4P-VR	8	1/4	13.72	6.4	16	17.46	16.2	31.2	14.2	38.7
DCW8M-8P-VR	8	1/2	21.34	6.4	22	17.46	16.2	37.3	19	44.8
DCW10M-4P-VR	10	1/4	13.72	7.1	18	20.64	17.2	33.3	14.2	40.9
DCW10M-6P-VR	10	3/8	17.15	7.9	18	20.64	17.2	32.5	14.2	40.1
DCW10M-8P-VR	10	1/2	21.34	7.9	22	20.64	17.2	38.1	19	45.7
DCW12M-4P-VR	12	1/4	13.72	7.1	22	22.22	22.8	33.3	14.2	43.4
DCW12M-6P-VR	12	3/8	17.15	9.5	22	22.22	22.8	33.3	14.2	43.4
DCW12M-8P-VR	12	1/2	21.34	9.5	22	22.22	22.8	38.1	19	48.2
DCW14M-6P-VR	14	3/8	17.15	10.3	24	25	24.4	34	14.2	44.1
DCW15M-8P-VR	15	1/2	21.34	11.9	24	25	24.4	38.9	19	49
DCW16M-8P-VR	16	1/2	21.34	12.7	24	25	24.4	38.9	19	49
DCW18M-8P-VR	18	1/2	21.34	13.5	27	20	24.4	40.4	19	50.5

Male Pipe Weld Elbow

DLW-VR

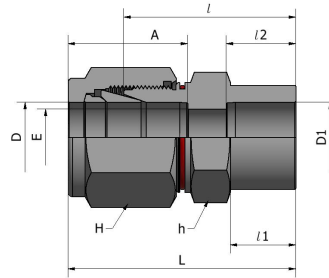
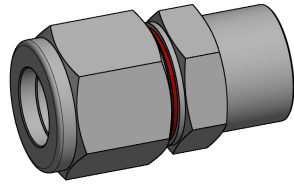


Fractional

Part No.	Tube O.D D		Male PIPE Size P		E Min.	Width across flat				A	l	l1	L	L1
	In.	mm	Nom.	O.D.		h		H						
						In.	mm	In.	mm					
DLW4-4P-VR	1/4	6.35	1/4	13.72	4.82	9/16	14.28	5/8	15.87	15.24	26	14.22	33.37	23.36
DLW6-4P-VR	3/8	9.52	1/4	13.72	7.11	11/16	17.46	13/16	20.64	16.76	26	14.22	33.37	25.4
DLW8-8P-VR	1/2	12.7	1/2	21.34	10.41	13/16	20.64	7/8	22.22	22.86	28	19.05	38.16	33.02
DLW12-12P-VR	3/4	19.05	3/4	26.67	15.74	1-1/16	26.98	1-1/8	28.58	24.38	34	19.05	44.16	36.83

Tube Socket Weld Connector

DCSW-VR

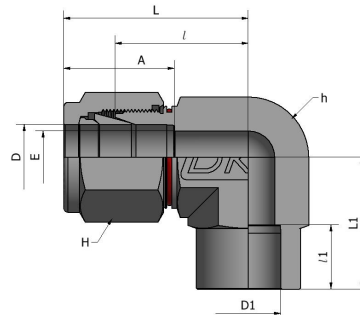
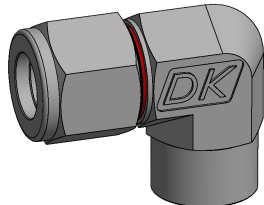


Fractional

Part No.	Tube O.D				E Min.	Width across flat				A	l	l1	l2	L
	D		D1			h		H						
	In.	mm	In.	mm		In.	mm	In.	mm					
DCSW4-4-VR	1/4	6.35	1/4	6.35	4.82	9/16	14.28	5/8	15.87	15.24	26.16	10.41	7.87	33.52
DCSW6-6-VR	3/8	9.52	3/8	9.52	7.11	11/16	17.46	13/16	20.64	16.76	30.22	11.93	9.65	37.59
DCSW8-8-VR	1/2	12.7	1/2	12.7	10.41	13/16	20.64	7/8	22.22	22.86	30.98	11.93	12.7	41.14
DCSW12-12-VR	3/4	19.05	3/4	19.05	15.74	1-1/16	26.98	1-1/8	28.58	24.38	33.27	11.93	14.22	43.43
DCSW16-16-VR	1	25.4	1	25.4	22.35	1-3/8	34.92	1-1/2	38.1	31.24	40.38	14.22	19.05	52.57

Tube Socket Weld Elbow

DLSW-VR

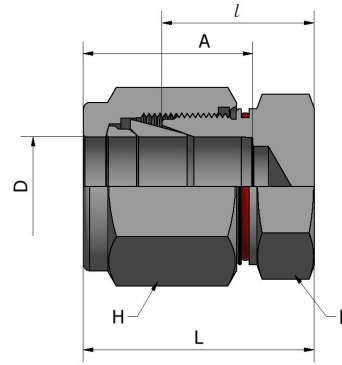
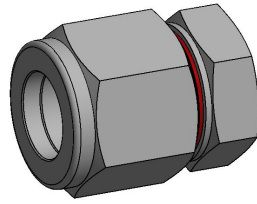


Fractional

Part No.	Tube O.D				E Min.	Width across flat				A	l	l1	L	L1
	D		D1			h		H						
	In.	mm	In.	mm		In.	mm	In.	mm					
DLSW4-4-VR	1/4	6.35	1/4	6.35	4.82	9/16	14.28	5/8	15.87	15.24	26	7.87	33.37	19.55
DLSW6-6-VR	3/8	9.52	3/8	9.52	7.11	11/16	17.46	13/16	20.64	16.76	26	9.65	33.37	23.11
DLSW8-8-VR	1/2	12.7	1/2	12.7	10.41	13/16	20.64	7/8	22.22	22.86	28	12.7	38.16	25.9
DLSW12-12-VR	3/4	19.05	3/4	19.05	15.74	1-1/16	26.98	1-1/8	28.58	24.38	34	14.22	44.16	29.71
DLSW16-16-VR	1	25.4	1	25.4	22.35	1-3/8	34.93	1-1/2	38.1	31.24	39.5	19.05	51.7	36.83

Cap

DC-VR



Fractional

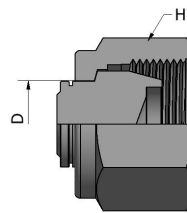
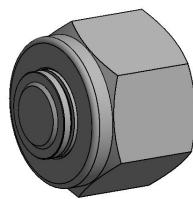
Part No.	Tube O.D D		E Min.	Width across flat				A	l	L
	In.	mm		h		H				
				In.	mm	In.	mm			
DC-4-VR	1/4	6.35	4.82	9/16	14.28	5/8	15.87	15.24	16	23.26
DC-5-VR	5/16	7.93	6.35	5/8	15.87	11/16	17.46	16.25	17.01	24.38
DC-6-VR	3/8	9.52	7.11	11/16	17.46	13/16	20.64	16.76	18.28	25.65
DC-8-VR	1/2	12.7	10.41	13/16	20.64	7/8	22.22	22.86	19.05	29.21
DC-10-VR	5/8	15.87	12.7	15/16	23.81	1	25.4	24.38	19.81	29.97
DC-12-VR	3/4	19.05	15.74	1-1/16	26.98	1-1/8	28.58	24.38	21.33	31.49
DC-14-VR	7/8	22.22	18.28	1-3/16	30.16	1-1/4	31.75	25.9	23.87	34.03
DC-16-VR	1	25.4	22.35	1-3/8	34.92	1-1/2	38.1	31.24	26.16	38.35

Metric

Part No.	Tube O.D D	E Min.	Width across flat		A	l	L
			h	H			
DC-6M-VR	6	4.8	14	16	15.3	15.7	23.1
DC-8M-VR	8	6.4	16	17.46	16.2	17	24.5
DC-10M-VR	10	7.9	18	20.64	17.2	19	26.6
DC-12M-VR	12	9.5	20.64	22.22	22.8	19	29.1
DC-15M-VR	15	11.9	24	25	24.4	19.8	29.9
DC-16M-VR	16	12.7	24	25	24.4	19.8	29.9
DC-18M-VR	18	15.1	27	30	24.4	21.3	31.4
DC-20M-VR	20	15.9	30	32	26	23.9	34
DC-22M-VR	22	18.3	30	32	26	23.9	34
DC-25M-VR	25	21.8	35	38	31.3	26.2	38.5

Plug

DP / DP-VR



Fractional

Part No.	Tube O.D D		Width across flat	
	In.	mm	H	
			In.	mm
DP-4-VR	1/4	6.35	5/8	15.87
DP-5-VR	5/16	7.93	11/16	17.46
DP-6-VR	3/8	9.52	13/16	20.64
* DP-8	1/2	12.7	7/8	22.22
* DP-10	5/8	15.87	1	25.4
* DP-12	3/4	19.05	1-1/8	25.58
* DP-14	7/8	22.22	1-1/4	31.75
* DP-16	1	25.4	1-1/2	38.1

Metric

Part No.	Tube O.D D	Width across flat
DP-6M-VR	6	16
DP-8M-VR	8	17.46
DP-10M-VR	10	20.64
* DP-12M	12	22.22
* DP-15M	15	25
* DP-16M	16	25
* DP-18M	18	30
* DP-20M	20	32
* DP-22M	22	32
* DP-25M	25	38

Installation Instructions

Plug is for plugging un-used DK-Lok VR Series port.

1. Remove the nut and ferrule from the DK-Lok VR Series fitting body.
2. Finger-tighten the plug.
3. Tighten the plug 1/4 turn beyond the finger-tight position, keeping the fitting body steady with a backup wrench.

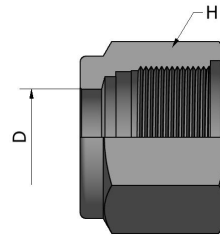
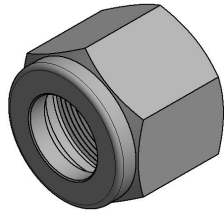
Caution

- The Plug is not assembled by Page 3. (Product Identification / Visual Inspection)
- Do not tighten 1-1/4 turns as this has machined ferrule not the standard ferrule.

* * * Products are same as DK-Lok Tube Fitting.

NUT

DN-VR



Fractional

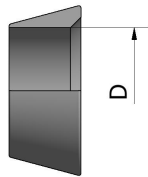
Part No.	Tube O.D D		Width across flat H	
	In.	mm	In.	mm
	DN-4-VR	1/4	6.35	5/8
DN-5-VR	5/16	7.93	11/16	17.46
DN-6-VR	3/8	9.52	13/16	20.64
DN-8-VR	1/2	12.7	7/8	22.22
DN-10-VR	5/8	15.87	1	25.4
DN-12-VR	3/4	19.05	1-1/8	28.58
DN-14-VR	7/8	22.22	1-1/4	31.75
DN-16-VR	1	25.4	1-1/2	38.1

Metric

Part No.	Tube O.D D	Width across flat
		H
DN-6M-VR	6	16
DN-8M-VR	8	17.46
DN-10M-VR	10	20.64
DN-12M-VR	12	22.22
DN-15M-VR	15	25
DN-16M-VR	16	25
DN-18M-VR	18	30
DN-20M-VR	20	32
DN-22M-VR	22	32
DN-25M-VR	25	38

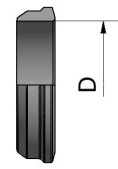
Front Ferrule

DFF



Back Ferrule

DFB



Fractional

Part No.	Tube O.D D	
	In.	mm
DFF-4	1/4	6.35
DFF-5	5/16	7.93
DFF-6	3/8	9.52
DFF-8	1/2	12.7
DFF-10	5/8	15.87
DFF-12	3/4	19.05
DFF-14	7/8	22.22
DFF-16	1	25.4

Metric

Part No.	Tube O.D D
DFF-6M	6
DFF-8M	8
DFF-10M	10
DFF-12M	12
DFF-15M	15
DFF-16M	16
DFF-18M	18
DFF-20M	20
DFF-22M	22
DFF-25M	25

Fractional

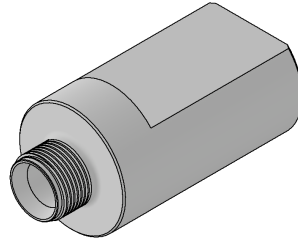
Part No.	Tube O.D D	
	In.	mm
DFB-4	1/4	6.35
DFB-5	5/16	7.93
DFB-6	3/8	9.52
DFB-8	1/2	12.7
DFB-10	5/8	15.87
DFB-12	3/4	19.05
DFB-14	7/8	22.22
DFB-16	1	25.4

Metric

Part No.	Tube O.D D
DFB-6M	6
DFB-8M	8
DFB-10M	10
DFB-12M	12
DFB-15M	15
DFB-16M	16
DFB-18M	18
DFB-20M	20
DFB-22M	22
DFB-25M	25

Pre-swaging Tool(DPS)

DPS / DPS-VR



Fractional

Part No.	Tube O.D
DPS-4-VR-C	1/4
DPS-5-VR-C	5/16
DPS-6-VR-C	3/8
* DPS-8-C	1/2
* DPS-12-C	3/4
* DPS-16-C	1

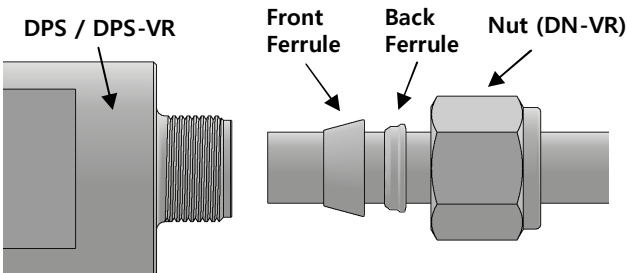
" * " Products are same as DK-Lok Tube Fitting.

Metric

Part No.	Tube O.D D
DPS-6M-VR	6
DPS-8M-VR	8
* DPS-10M	10
* DPS-12M	12
* DPS-16M	16
* DPS-18M	18
* DPS-20M	20
* DPS-22M	22
* DPS-25M	25

Operating Instructions

Operation on Pre-Swaging Tool



1. Clamp the DPS / DPS-VR on the VISE steadily.
2. Install the DK-Lok VR Series nut, ferrules onto the tubing.
3. Insert the loose ferrules and loose nut installed tubing end into the DPS / DPS-VR until it is bottomed on the shoulder of the DPS / DPS-VR.
4. Finger-tighten the nut(DN-VR).
5. Scribe the nut at the 6 o'clock position.
6. Wrench-tighten the nut 1-1/4 turns to the 9 o'clock position.
7. Un-thread the nut(DN-VR).
8. Remove the tubing pre-swaged ferrules from the DPS / DPS-VR.
 - In case the tubing is difficult to remove from DPS / DPS-VR, gently rock the tubing back and forth. Do not rotate the tubing.

Assembly on Fitting



1. Insert the ferrule Pre-Swaged tubing into the fitting body Untill the front ferrule seats.
2. Assemble by tightening the nut on the body.
3. Assemble by tightening the nut with a wench. (At this point, s sharp increase in Torque is felt.)
4. Tighten the nut with a wrench and assemble until the product identification(Red) part of the body is covered.