




































DK-LOK

K Series JIC Tube Fittings
SAE J514 37° Flared

No.00-1
March 2022



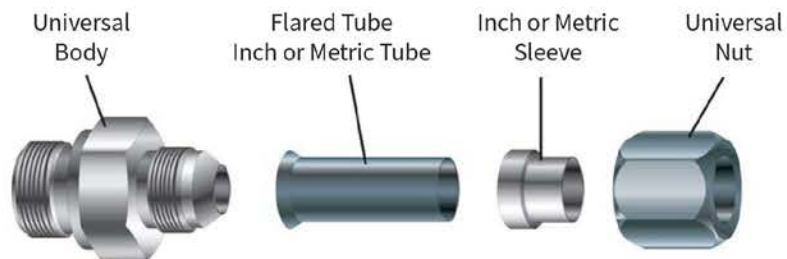
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Design

DK-Lok K Series JIC Tube Fitting consists of body, sleeve and nut and meets the requirements of SAE J514 and ISO 8434-2 standards.

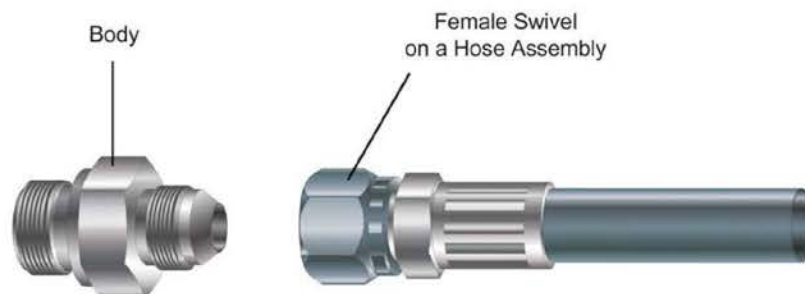


DK-Lok K Series JIC Tube Fitting are capable of connecting to inch and metric tube with no changing the Sleeve and Nut.

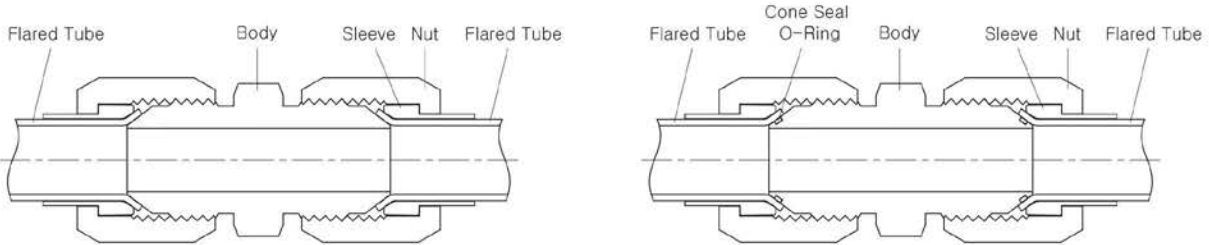


Example : KU-4T-5A fitting capable of connecting to 1/4" OD Stainless steel tubing.

The fitting body without sleeve and nut is widely used as a hose adapter for connection to a female swivel on a hose assembly.



Technical Information



Standard O-Rings: NBR.
Other O-Rings: Consult the manufacturer.

Table 1. Material Standards

Fitting Materials	Body		Nut and Sleeve	Flared Tubing (Not supplied)
	Bar Stock	Forging		
Stainless Steel 316	ASTM A276/A479 Type 316/316L	ASTM A182 F316/F316L	ASTM A276/A479 Type 316/316L Nut supplied with inside Molybdenum coated.	ASTM A269 ASTM A213
Carbon Steel	ASTM A108 JIS G4051 S20C - S48C	ASTM A105 JIS G4051 S20C - S48C	ASTM A108 JIS G4051 S20C - S48C Nut supplied with inside Molybdenum coated.	ASTM A179 ASTM A161
Brass	ASTM B453 UNS C35300 JIS H3250 Alloy C3604	ASTM B283 UNS 37700 JIS G4051 Alloy C3771	ASTM B453 UNS C35300 JIS H3250 Alloy C3604 Nut supplied with inside lubricated.	Copper Tubing ASTM B88 ASTM B75

Table 2. Technical Data

The working pressure is applied to the end of the 37 degree flare, and may be different for the end of the other shape.
The assembly torque is a suggestion and in some cases it may be necessary to over-torque it.

SAE Dash Size	Tube O.D.		Thread UN/UNF	Working Pressure						Assembly Torque (suggested) Nm
				Standard Design				Cone Seal O-Ring		
	inch	metric		SAE J514		ISO 8434-2		SAE J514		
				psig	bar	MPa	bar	psig	bar	
2	1/8	-	5/16-24	5,000	345	35	350	-	-	15
3	3/16	-	3/8-24	5,000	345	35	350	-	-	19
4	1/4	6	7/16-20	5,000	345	35	350	9,000	621	24
5	5/16	8	1/2-20	5,000	345	35	350	9,000	621	31
6	3/8	10	9/16-18	5,000	345	35	350	7,700	531	42
8	1/2	12	3/4-16	4,500	310	31	310	7,700	531	80
10	5/8	14,15,16	7/8-14	3,500	241	24	240	6,000	414	114
12	3/4	18,20	1-1/16-12	3,500	241	24	240	6,000	414	160
14	7/8	22	1-3/16-12	3,000	207	21	210	5,400	372	186
16	1	25	1-5/16-12	3,000	207	21	210	5,400	372	214
20	1-1/4	28,30,32	1-5/8-12	2,500	172	17	170	5,000	345	271
24	1-1/2	35,38	1-7/8-12	2,000	138	14	140	5,000	345	339
32	2	50	2-1/2-12	1,500	103	10.5	105	-	-	497

Table 3. Fittings Surface Finish

Stainless Steel	Carbon Steel	Brass
Passivation	Yellow Zinc plated	Acid Cleaned. On request, chrome plated brass fitting can be supplied.

Ordering Information

To order a fitting with nut and sleeve, select an applicable part number and fitting material designator.
 Example : KU-2T-S

To order a fitting with nut and sleeve factory assembled, select an applicable part number, fitting material designator and suffix **A** to the ordering number.
 Example : KU-2T-SA

Table 4. Fitting Material Designator

Stainless Steel 316	Carbon Steel	Brass
S	C	B

Table 5. Tube OD Designator

OD inch	1/16	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	2
Designator	1T	2T	3T	4T	5T	6T	8T	10T	12T	14T	16T	20T	24T	32T
OD mm	4mm	6mm	8mm	10mm	12mm	16mm	18mm	20mm	22mm	25mm	25mm	32mm	38mm	50mm
Designator	4M	6M	8M	10M	12M	16M	18M	20M	22M	25M	25M	32M	38M	50M

Table 6. Thread Symbol Designator

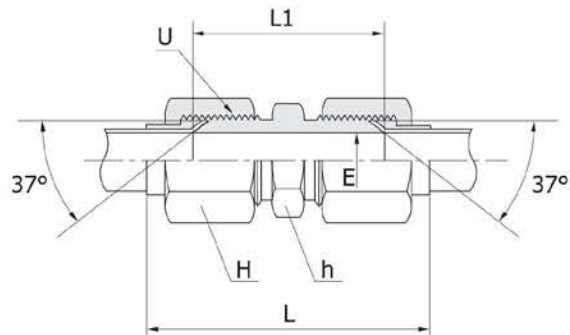
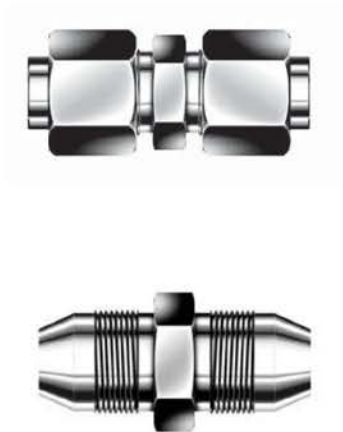
Thread	Symbol	Standards
Taper Thread	N	ASME/ANSI B1.20.1
	R	ISO 7-1, BS 21, JIS B 0203
Parallel Thread	G	ISO 228-1, BS 2779, JIS B0202
	U	ASME B1.1

Table 7. Taper Pipe Thread Designator

Nominal Size	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
N	2N	4N	6N	8N	12N	16N	20N	24N	32N
R	2R	4R	6R	8R	12R	16R	20R	24R	32R

Table 8. ASME B1.1 Unified Thread Designator

Size	5/16	3/8	7/16	1/2	9/16	3/4	7/8	1 1/16	1 3/16	1 5/16	1 5/8	1 7/8	2 1/2
Size Designator	2	3	4	5	6	8	10	12	14	16	20	24	32

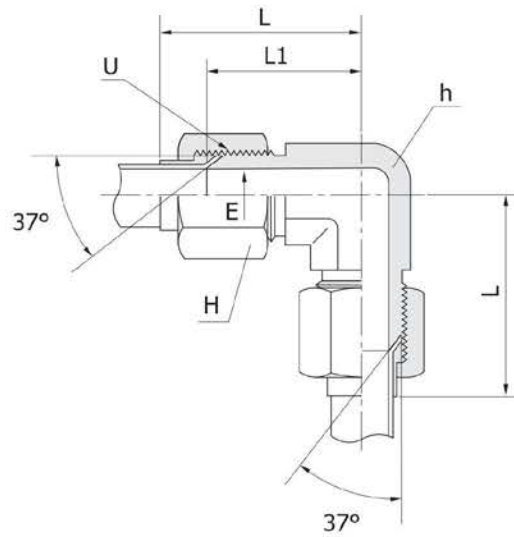


Tube to Tube Union

Part No.	Tube O.D		U (UNF)	E	L	L1	h (HEX)	H (HEX)
	Inch	Metric						
KU-2T	1/8"	3	5/16"-24	1.6	45.3	29.7	11.1	9.5
KU-3T	3/16"	4	3/8"-24	3.2	50.0	31.2	11.1	11.1
KU-4T	1/4"	6	7/16"-20	4.4	53.0	34.8	12.7	14.2
KU-5T	5/16"	8	1/2"-20	6.0	55.6	34.8	14.2	15.8
KU-6T	3/8"	10	9/16"-18	7.5	59.6	35.8	15.8	17.4
KU-8T	1/2"	12	3/4"-16	9.9	66.5	41.1	20.6	22.2
KU-10T	5/8"	16	7/8"-14	12.3	81.0	47.8	23.8	25.4
KU-12T	3/4"	18, 20	1 1/16"-12	15.5	85.9	54.9	28.5	31.7
KU-14T	7/8"	22	1 3/16"-12	18.0	91.3	56.1	31.7	34.9
KU-16T	1"	25	1 5/16"-12	21.5	95.2	57.2	34.9	38.1
KU-20T	1-1/4"	32	1 5/8"-12	27.5	98.7	61.7	46.0	50
KU-24T	1-1/2"	38	1 7/8"-12	33.3	123.2	69.8	50.0	57.2
KU-32T	2"	50	2 1/2"-12	45.0	141.4	86.4	70	75

Union Elbow

KL

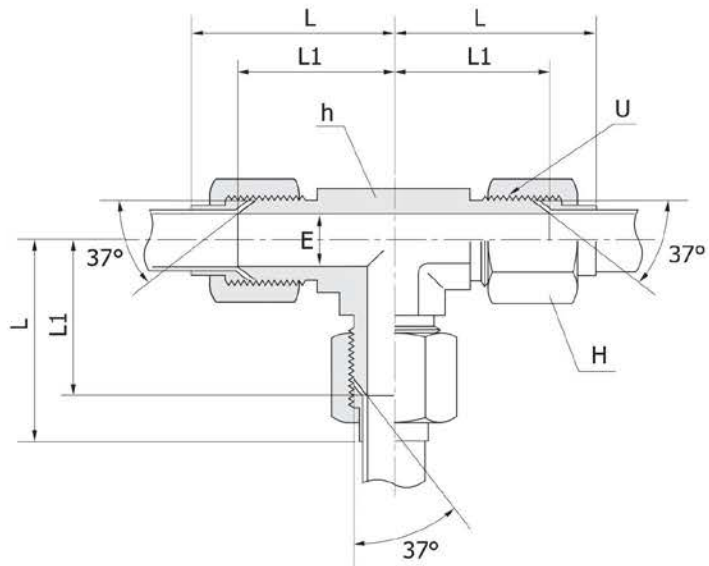


Tube to Tube Union

Part No.	Tube O.D		U (UNF)	E	L	L1	h (HEX)	H (HEX)
	Inch	Metric						
KL-2T	1/8"	3	5/16"-24	1.6	27.4	19.6	11.1	9.5
KL-3T	3/16"	4	3/8"-24	3.2	30.5	21.1	11.1	11.1
KL-4T	1/4"	6	7/16"-20	4.4	31.7	22.6	11.1	14.2
KL-5T	5/16"	8	1/2"-20	6.0	34.5	24.1	14.2	15.8
KL-6T	3/8"	10	9/16"-18	7.5	38.8	26.9	14.2	17.4
KL-8T	1/2"	12	3/4"-16	9.9	44.5	31.8	19.1	22.2
KL-10T	5/8"	16	7/8"-14	12.3	53.4	36.8	22.2	25.4
KL-12T	3/4"	18, 20	1 1/16"-12	15.5	57.7	42.2	27.0	31.7
KL-14T	7/8"	22	1 3/16"-12	18.0	63.3	45.7	33.3	34.9
KL-16T	1"	25	1 5/16"-12	21.5	65.0	46.0	33.3	38.1
KL-20T	1-1/4"	32	1 5/8"-12	27.5	70.8	52.3	41.2	50
KL-24T	1-1/2"	38	1 7/8"-12	33.3	85.9	59.2	47.6	57.2
KL-32T	2"	50	2 1/2"-12	45.0	105.2	77.7	63.5	75

Union Tee

KT

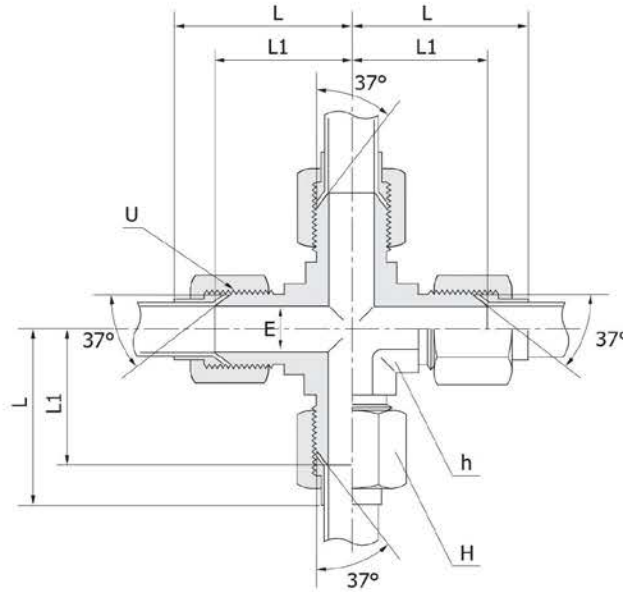


Tube to Tube Union

Part No.	Tube O.D		U (UNF)	E	L	L1	h (HEX)	H (HEX)
	Inch	Metric						
KT-2T	1/8"	3	5/16"-24	1.6	27.4	19.6	11.1	9.5
KT-3T	3/16"	4	3/8"-24	3.2	30.5	21.1	11.1	11.1
KT-4T	1/4"	6	7/16"-20	4.4	31.7	22.6	11.1	14.2
KT-5T	5/16"	8	1/2"-20	6.0	34.5	24.1	14.2	15.8
KT-6T	3/8"	10	9/16"-18	7.5	38.8	26.9	14.2	17.4
KT-8T	1/2"	12	3/4"-16	9.9	44.5	31.8	19.1	22.2
KT-10T	5/8"	16	7/8"-14	12.3	53.4	36.8	22.2	25.4
KT-12T	3/4"	18, 20	1 1/16"-12	15.5	57.7	42.2	27.0	31.7
KT-14T	7/8"	22	1 3/16"-12	18.0	63.3	45.7	33.3	34.9
KT-16T	1"	25	1 5/16"-12	21.5	65.0	46.0	34.9	38.1
KT-20T	1-1/4"	32	1 5/8"-12	27.5	70.8	52.3	41.2	50
KT-24T	1-1/2"	38	1 7/8"-12	33.3	85.9	59.2	47.6	57.2
KT-32T	2"	50	2 1/2"-12	45.0	105.2	77.7	63.5	75

Union Cross

KX

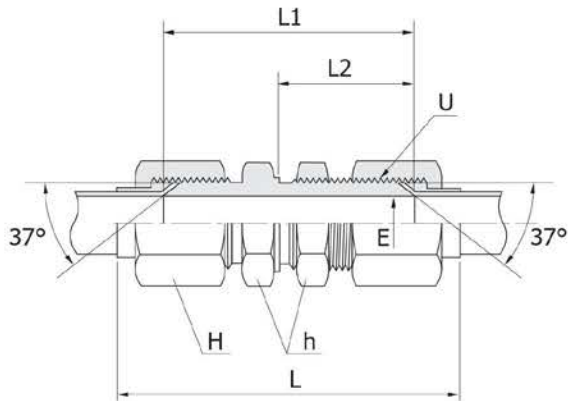


Tube to Tube Union

Part No.	Tube O.D		U (UNF)	E	L	L1	h (HEX)	H (HEX)
	Inch	Metric						
KX-2T	1/8"	3	5/16"-24	1.6	27.4	19.6	11.1	9.5
KX-3T	3/16"	4	3/8"-24	3.2	30.5	21.1	11.1	11.0
KX-4T	1/4"	6	7/16"-20	4.4	31.7	22.6	11.1	14.2
KX-5T	5/16"	8	1/2"-20	6.0	34.5	24.1	14.2	15.8
KX-6T	3/8"	10	9/16"-18	7.5	38.8	26.9	14.2	17.4
KX-8T	1/2"	12	3/4"-16	9.9	44.5	31.8	19.1	22.2
KX-10T	5/8"	16	7/8"-14	12.3	53.4	36.8	22.2	25.4
KX-12T	3/4"	18, 20	1 1/16"-12	15.5	57.7	42.2	27.0	31.7
KX-14T	7/8"	22	1 3/16"-12	18.0	63.3	45.7	33.3	34.9
KX-16T	1"	25	1 5/16"-12	21.5	65.0	46.0	34.9	38.1
KX-20T	1-1/4"	32	1 5/8"-12	27.5	70.8	52.3	41.2	50
KX-24T	1-1/2"	38	1 7/8"-12	33.3	85.9	59.2	47.6	57.2
KX-32T	2"	50	2 1/2"-12	45.0	105.2	77.7	63.5	75

Bulkhead Union

KUB

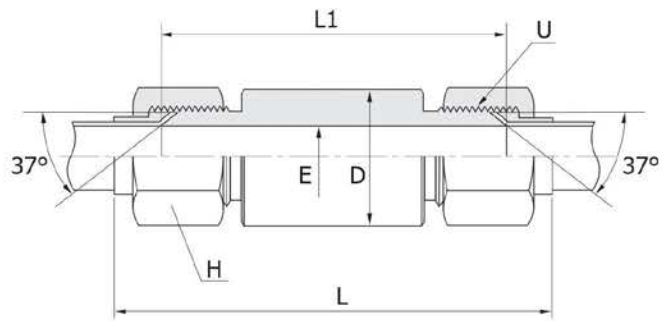
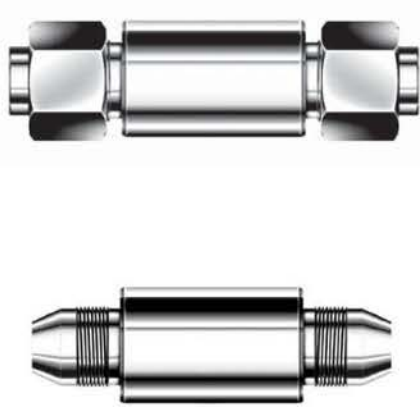


Tube to Tube Union

Part No.	Tube O.D		U (UNF)	E	L	L1	L2	h (HEX)	H (HEX)
	Inch	Metric							
KUB-2T	1/8"	3	5/16"-24	1.6	63.1	47.5	28.2	14.2	9.5
KUB-3T	3/16"	4	3/8"-24	3.2	67.1	48.3	28.2	15.8	11.1
KUB-4T	1/4"	6	7/16"-20	4.4	70.8	52.6	30.5	17.4	14.2
KUB-5T	5/16"	8	1/2"-20	6.0	73.4	52.6	30.5	19.1	15.8
KUB-6T	3/8"	10	9/16"-18	7.5	79.2	55.4	32.5	20.6	17.4
KUB-8T	1/2"	12	3/4"-16	9.9	87.4	62.0	36.6	25.4	22.2
KUB-10T	5/8"	16	7/8"-14	12.3	102.8	69.6	40.1	28.5	25.4
KUB-12T	3/4"	18, 20	1 1/16"-12	15.5	109.5	78.5	44.4	34.9	31.7
KUB-14T	7/8"	22	1 3/16"-12	18.0	114.4	79.2	44.4	38.1	34.9
KUB-16T	1"	25	1 5/16"-12	21.5	117.8	79.8	44.4	41.2	38.1
KUB-20T	1-1/4"	32	1 5/8"-12	27.5	121.1	84.1	45.7	47.6	50
KUB-24T	1-1/2"	38	1 7/8"-12	33.3	142.8	89.4	46.0	53.9	57.2
KUB-32T	2"	50	2 1/2"-12	45.0	161.7	106.7	53.1	69.8	75

Weld Bulkhead Union

KBUW

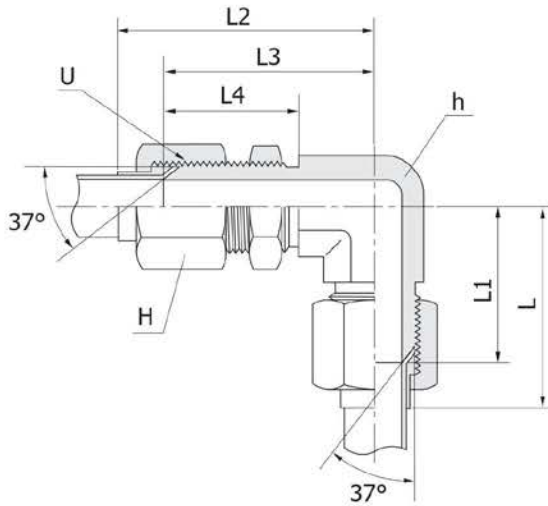


Tube to Tube Union

Part No.	Tube O.D		U (UNF)	E	D	L	L1	H (HEX)
	Inch	Metric						
KBUW-2T	1/8"	3	5/16"-24	1.6	11.0	85.6	70.0	9.5
KBUW-3T	3/16"	4	3/8"-24	3.2	11.0	88.8	70.0	11.1
KBUW-4T	1/4"	6	7/16"-20	4.4	14.0	98.2	80.0	14.2
KBUW-5T	5/16"	8	1/2"-20	6.0	16.0	120.8	100.0	15.8
KBUW-6T	3/8"	10	9/16"-18	7.5	17.0	123.8	100.0	17.4
KBUW-8T	1/2"	12	3/4"-16	9.9	22.0	125.4	100.0	22.2
KBUW-10T	5/8"	16	7/8"-14	12.3	25.0	143.2	110.0	25.4
KBUW-12T	3/4"	18, 20	1 1/16"-12	15.5	30.0	151.0	120.0	31.7
KBUW-14T	7/8"	22	1 3/16"-12	18.0	32.0	165.2	130.0	34.9
KBUW-16T	1"	25	1 5/16"-12	21.5	40.0	168.0	130.0	38.1
KBUW-20T	1-1/4"	32	1 5/8"-12	27.5	46.0	177.0	140.0	50
KBUW-24T	1-1/2"	38	1 7/8"-12	33.3	50.0	193.4	140.0	57.2
KBUW-32T	2"	50	2 1/2"-12	45.0	70.0	205.0	150.0	75

Bulkhead Union Elbow

KBL

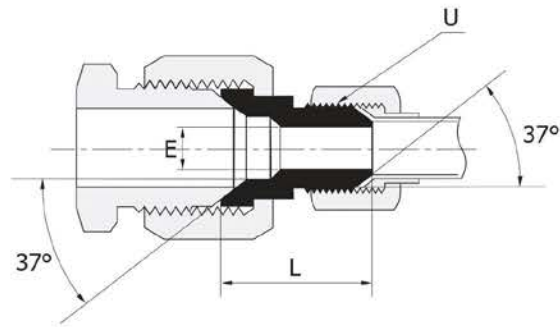


Tube to Tube Union

Part No.	Tube O.D		U (UNF)	L	L1	L2	L3	L4	h (HEX)	H (HEX)
	Inch	Metric								
KBL-2T	1/8"	3	5/16"-24	30.2	22.4	45.9	38.1	23.4	11.1	9.5
KBL-3T	3/16"	4	3/8"-24	33.3	23.9	47.5	38.1	23.4	11.1	11.1
KBL-4T	1/4"	6	7/16"-20	33.7	24.6	49.5	40.4	25.9	11.1	14.2
KBL-5T	5/16"	8	1/2"-20	37.3	26.9	54.1	43.7	25.9	14.2	15.8
KBL-6T	3/8"	10	9/16"-18	39.6	27.7	57.9	46.0	27.7	14.2	17.4
KBL-8T	1/2"	12	3/4"-16	47.2	34.5	66.3	53.6	31.8	19.1	22.2
KBL-10T	5/8"	16	7/8"-14	56.2	39.6	77.3	60.7	35.8	22.2	25.4
KBL-12T	3/4"	18, 20	1 1/16"-12	60.7	45.2	83.1	67.6	39.6	27.0	31.7
KBL-14T	7/8"	22	1 3/16"-12	66.4	48.8	88.7	71.1	39.6	33.3	34.9
KBL-16T	1"	25	1 5/16"-12	68.3	49.3	90.1	71.1	39.6	33.3	38.1
KBL-20T	1-1/4"	32	1 5/8"-12	73.6	55.1	97.7	79.2	40.9	41.2	50.8
KBL-24T	1-1/2"	38	1 7/8"-12	86.1	59.4	113.6	86.9	41.1	47.6	57.1
KBL-32T	2"	50	2 1/2"-12	100.9	73.4	131.9	104.4	48.5	63.5	73.0

Fitting Port Reducer

KPR

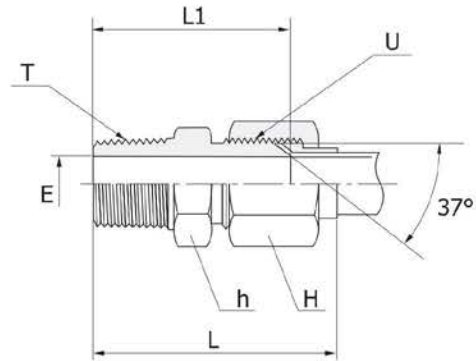


Tube Port to Tube Port

Part No.	Reducing Tube O.D	U (UNF)	E	L
KPR6T-4T	3/8" X 1/4"	7/16"-20	4.4	24.6
KPR8T-4T	1/2" X 1/4"	7/16"-20	4.4	25.4
KPR8T-6T	1/2" X 3/8"	9/16"-18	7.5	25.4
KPR10T-4T	5/8" X 1/4"	7/16"-20	4.4	26.2
KPR10T-6T	5/8" X 3/8"	9/16"-18	7.5	26.2
KPR12T-4T	3/4" X 1/4"	7/16"-20	4.4	27.7
KPR12T-6T	3/4" X 3/8"	9/16"-18	7.5	27.7
KPR12T-8T	3/4" X 1/2"	3/4"-16	10.0	30.2
KPR16T-12T	1" X 3/4"	1-1/16"-12	15.5	37.3
KPR20T-12T	1-1/4" X 3/4"	1-1/16"-12	15.5	38.3
KPR20T-16T	1-1/4" X 1"	1-5/16"-12	21.5	40.3
KPR24T-20T	1-1/2" X 1-1/4"	1 5/8"-12	27.5	42.9

Male Connector

KMC

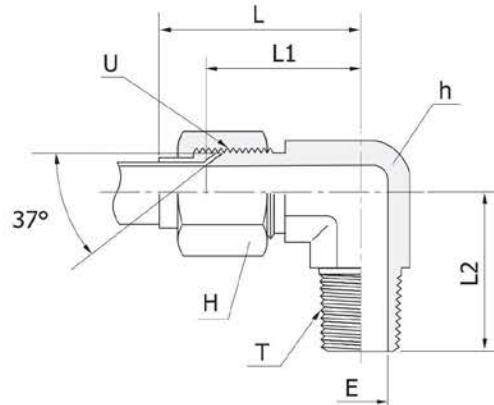


Tube to Male Pipe

Part No.	Tube O.D		T (NPT)	U (UNF)	E	L	L1	h (HEX)	H (HEX)
	Inch	Metric							
KMC2T-2N	1/8"	3	1/8"	5/16"-24	1.6	36.0	28.2	11.1	9.5
KMC3T-2N	3/16"	4	1/8"	3/8"-24	3.2	38.4	29.0	11.1	11.1
KMC4T-2N	1/4"	6	1/8"	7/16"-20	4.4	40.1	31.0	12.7	14.2
KMC5T-2N	5/16"	8	1/8"	1/2"-20	6.0	41.4	31.0	14.2	15.8
KMC6T-4N	3/8"	10	1/4"	9/16"-18	7.5	48.2	36.3	15.8	17.4
KMC8T-6N	1/2"	12	3/8"	3/4"-16	9.9	51.6	38.9	20.6	22.2
KMC10T-8N	5/8"	16	1/2"	7/8"-14	12.3	64.6	48.0	20.6	25.4
KMC12T-12N	3/4"	18, 20	3/4"	1 1/16"-12	15.5	67.8	52.3	28.5	31.7
KMC14T-12N	7/8"	22	3/4"	1 3/16"-12	18.0	70.7	53.1	31.7	34.9
KMC16T-16N	1"	25	1"	1 5/16"-12	21.5	77.4	58.4	34.9	38.1
KMC20T-20N	1-1/4"	32	1-1/4"	1 5/8"-12	27.5	80.7	62.2	42.8	50
KMC24T-24N	1-1/2"	38	1-1/2"	1 7/8"-12	33.3	94.8	68.1	50.8	57.2
KMC32T-32N	2"	50	2"	2 1/2"-12	45.0	106.5	79.0	66.6	75

Male Elbow

KLM

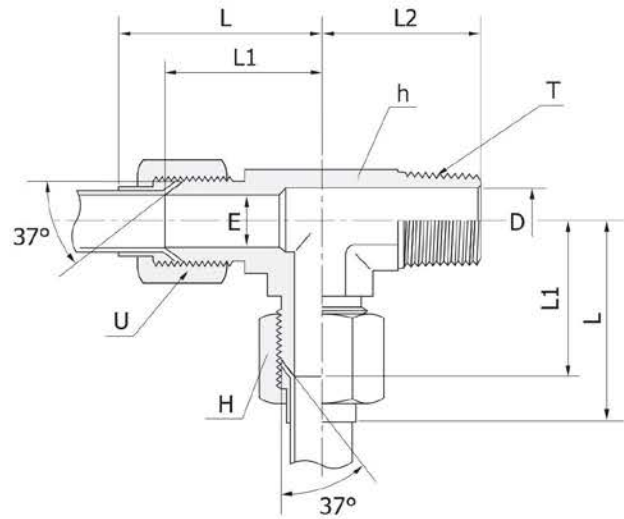


Tube to Male Pipe

Part No.	Tube O.D		T (NPT)	U (UNF)	E	L	L1	L2	h (HEX)	H (HEX)
	Inch	Metric								
KLM2T-2N	1/8"	3	1/8"	5/16"-24	1.6	27.4	19.6	18.3	11.1	9.5
KLM3T-2N	3/16"	4	1/8"	3/8"-24	3.2	30.5	21.1	18.3	11.1	11.1
KLM4T-2N	1/4"	6	1/8"	7/16"-20	4.4	31.7	22.6	19.8	11.1	14.2
KLM5T-2N	5/16"	8	1/8"	1/2"-20	6.0	34.5	24.1	19.8	14.2	15.8
KLM6T-4N	3/8"	10	1/4"	9/16"-18	7.5	38.8	26.9	27.7	14.2	17.4
KLM8T-6N	1/2"	12	3/8"	3/4"-16	9.9	44.5	31.8	31.0	19.1	22.2
KLM10T-8N	5/8"	16	1/2"	7/8"-14	12.3	53.4	36.8	37.3	22.2	25.4
KLM12T-12N	3/4"	18, 20	3/4"	1 1/16"-12	15.5	57.7	42.2	40.4	27.0	31.7
KLM14T-12N	7/8"	22	3/4"	1 3/16"-12	18.0	63.3	45.7	42.9	33.3	34.9
KLM16T-16N	1"	25	1"	1 5/16"-12	21.5	65.0	46.0	50.0	33.3	38.1
KLM20T-20N	1-1/4"	32	1-1/4"	1 5/8"-12	27.5	70.8	52.3	60.5	41.2	50
KLM24T-24N	1-1/2"	38	1-1/2"	1 7/8"-12	33.3	85.9	59.2	67.1	47.6	57.2
KLM32T-32N	2"	50	2"	2 1/2"-12	45.0	105.2	77.7	76.2	63.5	75

Male Run Tee

KTRM

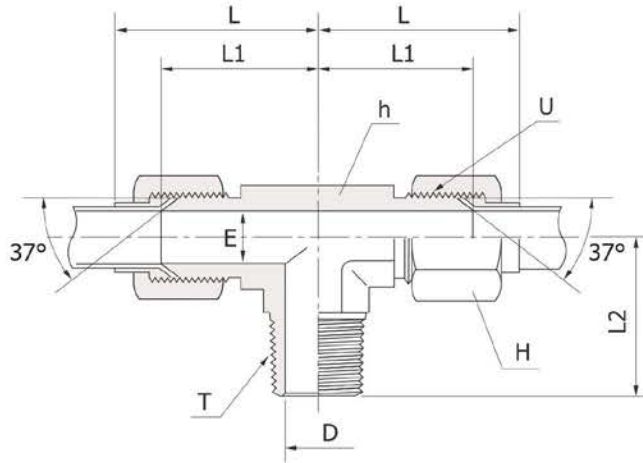


Tube to Male Pipe

Part No.	Tube O.D		T (NPT)	U (UNF)	E	D	L	L1	L2	h (HEX)	H (HEX)
	Inch	Metric									
KTRM2T-2N	1/8"	3	1/8"	5/16"-24	1.6	4.8	27.4	19.6	18.3	11.1	9.5
KTRM3T-2N	3/16"	4	1/8"	3/8"-24	3.2	4.8	30.5	21.1	18.3	11.1	11.1
KTRM4T-2N	1/4"	6	1/8"	7/16"-20	4.4	4.8	31.7	22.6	19.8	11.1	14.2
KTRM5T-2N	5/16"	8	1/8"	1/2"-20	6.0	4.8	34.5	24.1	19.8	14.2	15.8
KTRM6T-4N	3/8"	10	1/4"	9/16"-18	7.5	7.0	38.8	26.9	27.7	14.2	17.4
KTRM8T-6N	1/2"	12	3/8"	3/4"-16	9.9	10.3	44.5	31.8	31.0	19.1	22.2
KTRM10T-8N	5/8"	16	1/2"	7/8"-14	12.3	13.5	53.4	36.8	37.3	22.2	25.4
KTRM12T-12N	3/4"	18, 20	3/4"	1 1/16"-12	15.5	18.0	57.7	42.2	40.4	27.0	31.7
KTRM14T-12N	7/8"	22	3/4"	1 3/16"-12	18.0	18.0	63.3	45.7	42.9	33.3	34.9
KTRM16T-16N	1"	25	1"	1 5/16"-12	21.5	23.8	65.0	46.0	50.0	33.3	38.1
KTRM20T-20N	1-1/4"	32	1-1/4"	1 5/8"-12	27.5	31.7	70.8	52.3	60.5	41.2	50
KTRM24T-24N	1-1/2"	38	1-1/2"	1 7/8"-12	33.3	38.0	85.9	59.2	67.1	47.6	57.2
KTRM32T-32N	2"	50	2"	2 1/2"-12	45.0	49.0	105.2	77.7	76.2	63.5	75

Male Branch Tee

KTBM

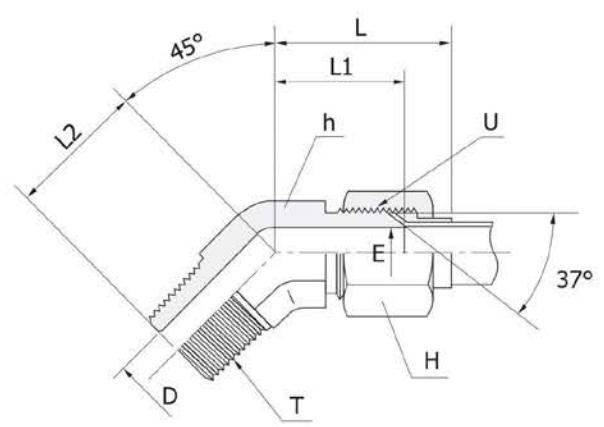


Tube to Male Pipe

Part No.	Tube O.D		T (NPT)	U (UNF)	E	D	L	L1	L2	h (HEX)	H (HEX)
	Inch	Metric									
KTBM2T-2N	1/8"	3	1/8"	5/16"-24	1.6	4.8	27.4	19.6	18.3	11.1	9.5
KTBM3T-2N	3/16"	4	1/8"	3/8"-24	3.2	4.8	30.5	21.1	18.3	11.1	11.1
KTBM4T-2N	1/4"	6	1/8"	7/16"-20	4.4	4.8	31.7	22.6	19.8	11.1	14.2
KTBM5T-2N	5/16"	8	1/8"	1/2"-20	6.0	4.8	34.5	24.1	19.8	14.2	15.8
KTBM6T-4N	3/8"	10	1/4"	9/16"-18	7.5	7.0	38.8	26.9	27.7	14.2	17.4
KTBM8T-6N	1/2"	12	3/8"	3/4"-16	9.9	10.3	44.5	31.8	31.0	19.1	22.2
KTBM10T-8N	5/8"	16	1/2"	7/8"-14	12.3	13.5	53.4	36.8	37.3	22.2	25.4
KTBM12T-12N	3/4"	18, 20	3/4"	1 1/16"-12	15.5	18.0	57.7	42.2	40.4	27.0	31.7
KTBM14T-12N	7/8"	22	3/4"	1 3/16"-12	18.0	18.0	63.3	45.7	42.9	33.3	34.9
KTBM16T-16N	1"	25	1"	1 5/16"-12	21.5	23.8	65.0	46.0	50.0	33.3	38.1
KTBM20T-20N	1-1/4"	32	1-1/4"	1 5/8"-12	27.5	31.7	70.8	52.3	60.5	41.2	50
KTBM24T-24N	1-1/2"	38	1-1/2"	1 7/8"-12	33.3	38.0	85.9	59.2	67.1	47.6	57.2
KTBM32T-32N	2"	50	2"	2 1/2"-12	45.0	49.0	105.2	77.7	76.2	63.5	75

45° Male Elbow

KLBM

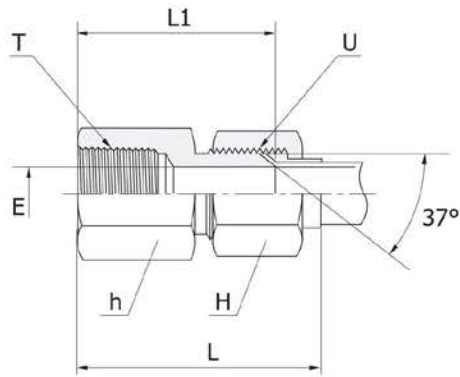


Tube to Male Pipe

Part No.	Tube O.D		T (NPT)	U (UNF)	E	D	L	L1	L2	h (HEX)	H (HEX)
	Inch	Metric									
KLBM2T-2N	1/8"	3	1/8"	5/16"-24	1.6	1.6	25.3	17.5	13.2	11.1	9.5
KLBM3T-2N	3/16"	4	1/8"	3/8"-24	3.2	3.2	26.9	17.5	13.2	11.1	11.1
KLBM4T-2N	1/4"	6	1/8"	7/16"-20	4.4	4.4	27.4	18.3	16.3	11.1	14.2
KLBM5T-2N	5/16"	8	1/8"	1/2"-20	6.0	6.0	30.0	19.6	16.3	14.2	15.8
KLBM6T-4N	3/8"	10	1/4"	9/16"-18	7.5	7.5	33.0	21.1	21.8	14.2	17.4
KLBM8T-6N	1/2"	12	3/8"	3/4"-16	9.9	9.9	37.6	24.9	24.1	19.1	22.2
KLBM10T-8N	5/8"	16	1/2"	7/8"-14	12.3	12.3	44.8	28.2	29.7	22.2	25.4
KLBM12T-12N	3/4"	18, 20	3/4"	1 1/16"-12	15.5	15.5	48.0	32.5	30.5	27.0	31.7
KLBM14T-12N	7/8"	22	3/4"	1 3/16"-12	18.0	18.0	54.4	36.8	33.3	33.3	34.9
KLBM16T-16N	1"	25	1"	1 5/16"-12	21.5	21.5	56.3	37.3	37.6	35.0	38.1
KLBM20T-20N	1-1/4"	32	1-1/4"	1 5/8"-12	27.5	27.5	58.9	40.4	42.4	41.2	50
KLBM24T-24N	1-1/2"	38	1-1/2"	1 7/8"-12	33.3	33.3	71.9	45.2	45.0	47.6	57.2
KLBM32T-32N	2"	50	2"	2 1/2"-12	45.0	45.0	83.9	56.4	53.6	63.5	75

Female Connector

KCF

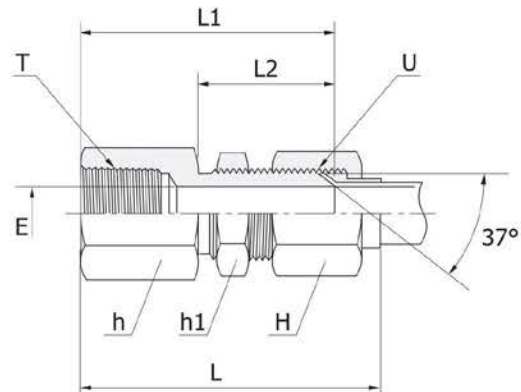
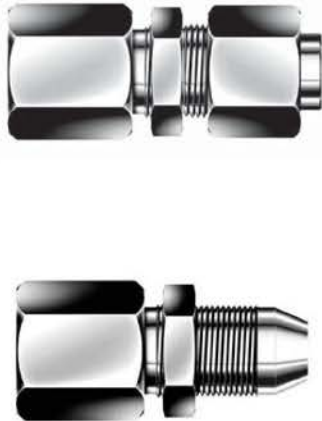


Tube to Female Pipe

Part No.	Tube O.D		T (NPT)	U (UNF)	E	L	L1	h (HEX)	H (HEX)
	Inch	Metric							
KCF2T-2N	1/8"	3	1/8"	5/16"-24	1.6	36.2	28.4	14.2	9.5
KCF3T-2N	3/16"	4	1/8"	3/8"-24	3.2	38.1	28.7	14.2	11.1
KCF4T-2N	1/4"	6	1/8"	7/16"-20	4.4	39.3	30.2	14.2	14.2
KCF5T-2N	5/16"	8	1/8"	1/2"-20	6.0	40.1	29.7	14.2	15.8
KCF6T-4N	3/8"	10	1/4"	9/16"-18	7.5	47.5	35.6	19.1	17.4
KCF8T-6N	1/2"	12	3/8"	3/4"-16	9.9	52.3	39.6	22.2	22.2
KCF10T-8N	5/8"	16	1/2"	7/8"-14	12.3	64.6	48.0	28.5	25.4
KCF12T-12N	3/4"	18, 20	3/4"	1 1/16"-12	15.5	67.8	52.3	34.9	31.7
KCF14T-12N	7/8"	22	3/4"	1 3/16"-12	18.0	69.9	52.3	34.9	34.9
KCF16T-16N	1"	25	1"	1 5/16"-12	21.5	78.7	59.7	41.2	38.1
KCF20T-20N	1-1/4"	32	1-1/4"	1 5/8"-12	27.5	81.7	63.2	50.8	50
KCF24T-24N	1-1/2"	38	1-1/2"	1 7/8"-12	33.3	93.2	66.5	60.3	57.2
KCF32T-32N	2"	50	2"	2 1/2"-12	45.0	102.9	75.4	73.0	75

Bulkhead Female Connector

KCBF

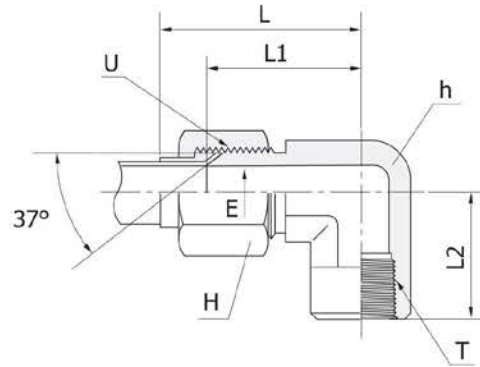


Tube to Female Pipe

Part No.	Tube O.D		T (NPT)	U (UNF)	E	L	L1	L2	h (HEX)	h1 (HEX)	H (HEX)
	Inch	Metric									
KCBF2T-2N	1/8"	3	1/8"	5/16"-24	1.6	49.0	41.2	28.2	14.2	14.2	9.5
KCBF3T-2N	3/16"	4	1/8"	3/8"-24	3.2	50.6	41.2	28.2	14.2	15.8	11.1
KCBF4T-2N	1/4"	6	1/8"	7/16"-20	4.4	52.6	46.7	30.5	17.4	17.4	14.2
KCBF5T-2N	5/16"	8	1/8"	1/2"-20	6.0	53.9	43.5	30.5	19.1	19.1	15.8
KCBF6T-4N	3/8"	10	1/4"	9/16"-18	7.5	62.5	52.3	32.5	20.6	20.6	17.4
KCBF8T-6N	1/2"	12	3/8"	3/4"-16	9.9	69.3	54.4	36.6	25.4	25.4	22.2
KCBF10T-8N	5/8"	16	1/2"	7/8"-14	12.3	82.7	67.5	40.1	28.5	28.5	25.4
KCBF12T-12N	3/4"	18, 20	3/4"	1 1/16"-12	15.5	86.0	73.9	44.4	34.9	34.9	31.7
KCBF14T-12N	7/8"	22	3/4"	1 3/16"-12	18.0	89.0	73.4	44.4	38.1	38.1	34.9
KCBF16T-16N	1"	25	1"	1 5/16"-12	21.5	94.4	78.5	44.4	41.2	41.2	38.1
KCBF20T-20N	1-1/4"	32	1-1/4"	1 5/8"-12	27.5	99.2	80.7	45.7	50.8	47.6	50
KCBF24T-24N	1-1/2"	38	1-1/2"	1 7/8"-12	33.3	107.7	85.1	46.0	53.9	53.9	57.2
KCBF32T-32N	2"	50	2"	2 1/2"-12	45.0	120.6	93.1	53.1	75	69.8	75

Female Elbow

KLF

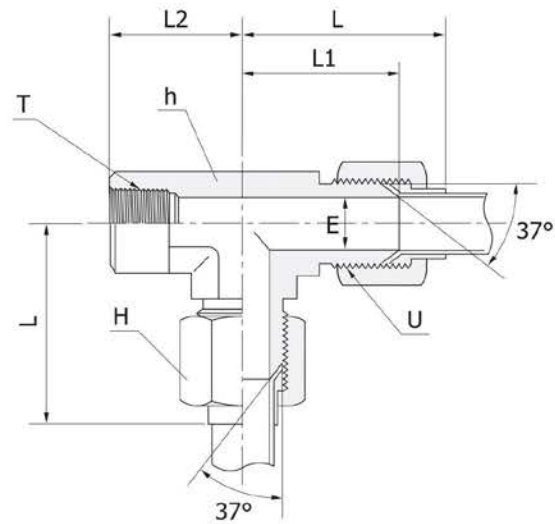


Tube to Female Pipe

Part No.	Tube O.D		T (NPT)	U (UNF)	E	L	L1	L2	h (HEX)	H (HEX)
	Inch	Metric								
KLF2T-2N	1/8"	3	1/8"	5/16"-24	1.6	33.2	25.4	16.8	14.2	9.5
KLF3T-2N	3/16"	4	1/8"	3/8"-24	3.2	35.6	26.2	16.8	14.2	11.1
KLF4T-2N	1/4"	6	1/8"	7/16"-20	4.4	36.5	27.4	16.8	14.2	14.2
KLF5T-2N	5/16"	8	1/8"	1/2"-20	6.0	37.8	27.4	16.8	14.2	15.8
KLF6T-4N	3/8"	10	1/4"	9/16"-18	7.5	43.1	31.2	22.4	19.1	17.4
KLF8T-6N	1/2"	12	3/8"	3/4"-16	9.9	48.8	36.1	25.9	22.2	22.2
KLF10T-8N	5/8"	16	1/2"	7/8"-14	12.3	58.3	41.7	31.2	27.0	25.4
KLF12T-12N	3/4"	18, 20	3/4"	1 1/16"-12	15.5	63.5	48.0	34.5	33.3	31.7
KLF14T-12N	7/8"	22	3/4"	1 3/16"-12	18.0	64.8	47.2	36.1	33.3	34.9
KLF16T-16N	1"	25	1"	1 5/16"-12	21.5	74.1	55.1	41.1	41.2	38.1
KLF20T-20N	1-1/4"	32	1-1/4"	1 5/8"-12	27.5	77.7	59.2	43.2	47.6	50
KLF24T-24N	1-1/2"	38	1-1/2"	1 7/8"-12	33.3	100.1	73.4	52.8	65.1	57.2
KLF32T-32N	2"	50	2"	2 1/2"-12	45.0	111.3	83.8	60.7	71.4	75

Female Run Tee

KTRF

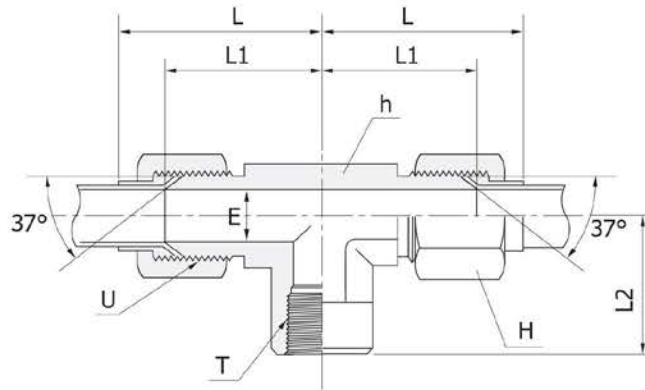


Tube to Female Pipe

Part No.	Tube O.D		T (NPT)	U (UNF)	E	L	L1	L2	h (HEX)	H (HEX)
	Inch	Metric								
KTRF2T-2N	1/8"	3	1/8"	5/16"-24	1.6	33.2	25.4	16.8	14.2	9.5
KTRF3T-2N	3/16"	4	1/8"	3/8"-24	3.2	35.6	26.2	16.8	14.2	11.1
KTRF4T-2N	1/4"	6	1/8"	7/16"-20	4.4	36.5	27.4	16.8	14.2	14.2
KTRF5T-2N	5/16"	8	1/8"	1/2"-20	6.0	37.8	27.4	16.8	14.2	15.8
KTRF6T-4N	3/8"	10	1/4"	9/16"-18	7.5	43.1	31.2	22.4	19.1	17.4
KTRF8T-6N	1/2"	12	3/8"	3/4"-16	9.9	48.8	36.1	25.9	22.2	22.2
KTRF10T-8N	5/8"	16	1/2"	7/8"-14	12.3	58.3	41.7	31.2	27.0	25.4
KTRF12T-12N	3/4"	18, 20	3/4"	1 1/16"-12	15.5	63.5	48.0	34.5	33.3	31.7
KTRF14T-12N	7/8"	22	3/4"	1 3/16"-12	18.0	64.8	47.2	36.1	33.3	34.9
KTRF16T-16N	1"	25	1"	1 5/16"-12	21.5	74.1	55.1	41.1	41.2	38.1
KTRF20T-20N	1-1/4"	32	1-1/4"	1 5/8"-12	27.5	77.7	59.2	43.2	47.6	50
KTRF24T-24N	1-1/2"	38	1-1/2"	1 7/8"-12	33.3	100.1	73.4	52.8	65.1	57.2
KTRF32T-32N	2"	50	2"	2 1/2"-12	45.0	111.3	83.8	60.7	71.4	75

Female Branch Tee

KTBF

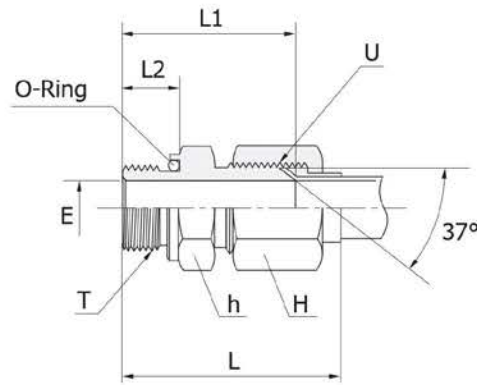


Tube to Female Pipe

Part No.	Tube O.D		T (NPT)	U (UNF)	E	L	L1	L2	h (HEX)	H (HEX)
	Inch	Metric								
KTBF2T-2N	1/8"	3	1/8"	5/16"-24	1.6	33.2	25.4	16.8	14.2	9.5
KTBF3T-2N	3/16"	4	1/8"	3/8"-24	3.2	35.6	26.2	16.8	14.2	11.1
KTBF4T-2N	1/4"	6	1/8"	7/16"-20	4.4	36.5	27.4	16.8	14.2	14.2
KTBF5T-2N	5/16"	8	1/8"	1/2"-20	6.0	37.8	27.4	16.8	14.2	15.8
KTBF6T-4N	3/8"	10	1/4"	9/16"-18	7.5	43.1	31.2	22.4	19.1	17.4
KTBF8T-6N	1/2"	12	3/8"	3/4"-16	9.9	48.8	36.1	25.9	22.2	22.2
KTBF10T-8N	5/8"	16	1/2"	7/8"-14	12.3	58.3	41.7	31.2	27.0	25.4
KTBF12T-12N	3/4"	18, 20	3/4"	1 1/16"-12	15.5	63.5	48.0	34.5	33.3	31.7
KTBF14T-12N	7/8"	22	3/4"	1 3/16"-12	18.0	64.8	47.2	36.1	33.3	34.9
KTBF16T-16N	1"	25	1"	1 5/16"-12	21.5	74.1	55.1	41.1	41.2	38.1
KTBF20T-20N	1-1/4"	32	1-1/4"	1 5/8"-12	27.5	77.7	59.2	43.2	47.6	50
KTBF24T-24N	1-1/2"	38	1-1/2"	1 7/8"-12	33.3	100.1	73.4	52.8	65.1	57.2
KTBF32T-32N	2"	50	2"	2 1/2"-12	45.0	111.3	83.8	60.7	71.4	75

O-Seal G Male Connector

KMC-GO



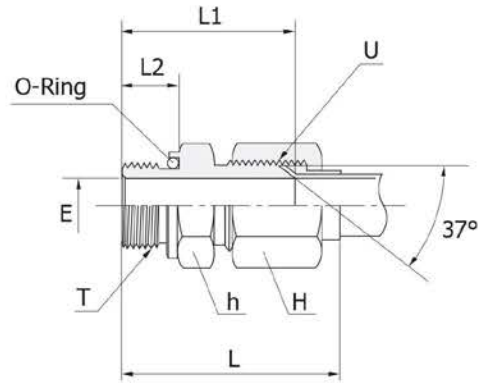
O-Ring Type: Viton.

Tube to Straight Thread

Part No.	Tube O.D		T (PF)	U (UNF)	E	L	L1	L2	h (HEX)	H (HEX)
	Inch	Metric								
KMC2T-2GO	1/8"	3	1/8"	5/16"-24	1.6	35.3	27.5	8.0	11.1	9.5
KMC3T-2GO	3/16"	4	1/8"	3/8"-24	3.2	37.9	28.5	8.0	12.7	11.0
KMC4T-2GO	1/4"	6	1/8"	7/16"-20	4.4	39.3	30.2	8.0	14.2	14.2
KMC5T-2GO	5/16"	8	1/8"	1/2"-20	6.0	40.6	30.2	8.0	15.8	16.0
KMC6T-4GO	3/8"	10	1/4"	9/16"-18	7.5	46.9	35.0	12.0	17.4	17.4
KMC8T-6GO	1/2"	12	3/8"	3/4"-16	9.9	51.4	38.7	12.0	22.2	22.2
KMC10T-8GO	5/8"	16	1/2"	7/8"-14	12.3	61.1	44.5	14.0	25.4	25.4
KMC12T-12GO	3/4"	18, 20	3/4"	1 1/16"-12	15.5	66.4	50.9	16.0	31.7	32.0
KMC14T-12GO	7/8"	22	3/4"	1 3/16"-12	18.0	69.0	51.4	16.0	34.9	35.0
KMC16T-16GO	1"	25	1"	1 5/16"-12	21.5	71.7	52.7	18.0	38.0	38.0
KMC20T-20GO	1-1/4"	32	1-1/4"	1 5/8"-12	37.5	78.5	60.0	20.0	42.8	50.8
KMC24T-24GO	1-1/2"	38	1-1/2"	1 7/8"-12	33.0	92.8	66.1	21.0	55.0	57.0
KMC32T-32GO	2"	50	2"	2 1/2"-12	45.0	108.0	80.5	25.0	70.0	73.0

O-Seal UNF Male Connector

KMCS-U



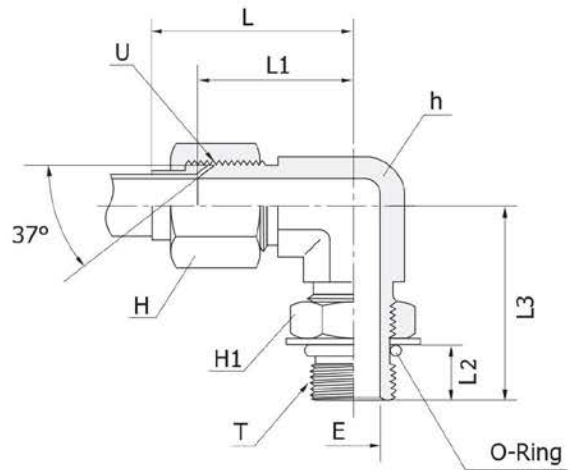
O-Ring Type: Viton.

Tube to Straight Thread

Part No.	Tube O.D		T (UNF)	U (UNF)	E	L	L1	L2	h (HEX)	H (HEX)
	Inch	Metric								
KMCS2T-2U	1/8"	3	5/16"-24	5/16"-24	1.6	34.7	26.9	7.5	11.1	9.5
KMCS3T-3U	3/16"	4	3/8"-24	3/8"-24	3.2	37.3	27.9	7.5	12.7	11.1
KMCS4T-4U	1/4"	6	7/16"-20	7/16"-20	4.4	40.3	31.2	9.1	14.2	14.2
KMCS5T-5U	5/16"	8	1/2"-20	1/2"-20	6.0	41.6	31.2	9.1	15.8	15.8
KMCS6T-6U	3/8"	10	9/16"-18	9/16"-18	7.5	44.9	33.0	9.9	17.4	17.4
KMCS8T-8U	1/2"	12	3/4"-16	3/4"-16	9.9	50.3	37.6	11.1	22.2	22.2
KMCS10T-10U	5/8"	16	7/8"-14	7/8"-14	12.3	59.8	43.2	12.7	25.4	25.4
KMCS12T-12U	3/4"	18, 20	1 1/16"-12	1 1/16"-12	15.5	65.5	50.0	15.1	31.7	31.7
KMCS14T-14U	7/8"	22	1 3/16"-12	1 3/16"-12	18.0	68.1	50.5	15.1	34.9	34.9
KMCS16T-16U	1"	25	1 5/16"-12	1 5/16"-12	21.5	70.8	51.8	15.1	38.1	38.1
KMCS20T-20U	1-1/4"	32	1 5/8"-12	1 5/8"-12	27.5	73.6	55.1	15.1	47.6	50
KMCS24T-24U	1-1/2"	38	1 7/8"-12	1 7/8"-12	33.3	86.9	60.2	15.1	53.9	57.2
KMCS32T-32U	2"	50	2 1/2"-12	2 1/2"-12	45.0	98.1	70.6	15.1	69.8	75

O-Seal UNF Male Elbow

KLS-UP



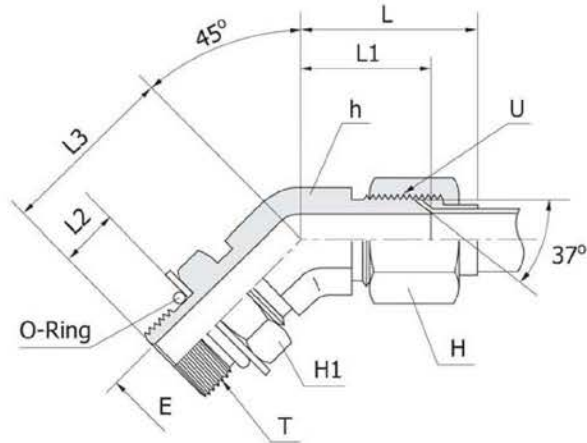
O-Ring Type: Viton.

Tube to Straight Thread

Part No.	Tube O.D		T (UNF)	U (UNF)	E	L	L1	L2	L3	h (HEX)	H (HEX)	H1 (HEX)
	Inch	Metric										
KLS2T-2UP	1/8"	3	5/16"-24	5/16"-24	1.6	27.4	19.6	8.4	23.9	11.1	9.5	11.1
KLS3T-3UP	3/16"	4	3/8"-24	3/8"-24	3.2	30.5	21.1	8.4	23.9	11.1	11.1	12.7
KLS4T-4UP	1/4"	6	7/16"-20	7/16"-20	4.4	31.7	22.6	9.8	26.2	11.1	14.2	14.2
KLS5T-5UP	5/16"	8	1/2"-20	1/2"-20	6.0	34.5	24.1	9.8	28.7	14.2	15.8	15.8
KLS6T-6UP	3/8"	10	9/16"-18	9/16"-18	7.5	38.8	26.9	11	31.8	14.2	17.4	17.4
KLS8T-8UP	1/2"	12	3/4"-16	3/4"-16	9.9	44.5	31.8	12.5	36.8	19.1	22.2	22.2
KLS10T-10UP	5/8"	16	7/8"-14	7/8"-14	12.3	53.4	36.8	14.3	43.2	22.2	25.4	25.4
KLS12T-12UP	3/4"	18, 20	1 1/16"-12	1 1/16"-12	15.5	57.7	42.2	16.5	49.3	27.0	31.7	31.7
KLS14T-14UP	7/8"	22	1 3/16"-12	1 3/16"-12	18.0	63.3	45.7	16.5	50.8	33.3	34.9	34.9
KLS16T-16UP	1"	25	1 5/16"-12	1 5/16"-12	21.5	65.0	46.0	16.5	52.1	33.3	38.1	38.1
KLS20T-20UP	1-1/4"	32	1 5/8"-12	1 5/8"-12	27.5	70.8	52.3	16.5	57.2	41.2	50	47.6
KLS24T-24UP	1-1/2"	38	1 7/8"-12	1 7/8"-12	33.3	85.9	59.2	16.5	60.7	47.6	57.2	53.9
KLS32T-32UP	2"	50	2 1/2"-12	2 1/2"-12	45.0	105.2	77.7	16.5	73.4	63.5	75	69.8

O-Seal 45° UNF Male Elbow

KLBS-UP



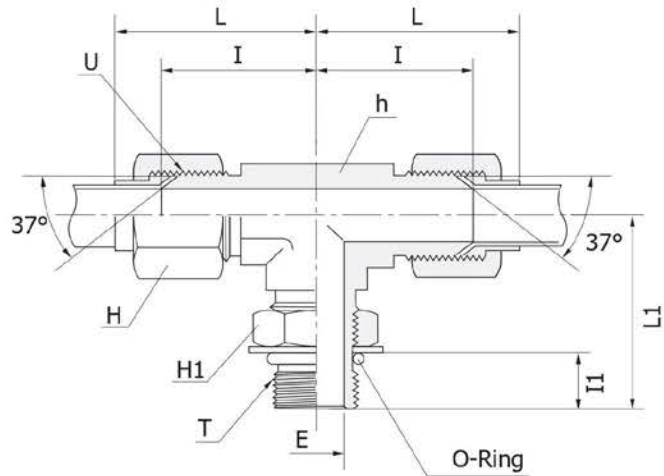
O-Ring Type: Viton.

Tube to Straight Thread

Part No.	Tube O.D		T (UNF)	U (UNF)	E	L	L1	L2	L3	h (HEX)	H (HEX)	H1 (HEX)
	Inch	Metric										
KLBS2T-2UP	1/8"	3	5/16"-24	5/16"-24	1.6	25.3	17.5	8.4	22.4	11.1	9.5	11.1
KLBS3T-3UP	3/16"	4	3/8"-24	3/8"-24	3.2	26.9	17.5	8.4	22.4	11.1	11.1	12.7
KLBS4T-4UP	1/4"	6	7/16"-20	7/16"-20	4.4	27.4	18.3	9.8	26.7	11.1	14.2	14.2
KLBS5T-5UP	5/16"	8	1/2"-20	1/2"-20	6.0	30.0	19.6	9.8	26.7	14.2	15.8	15.8
KLBS6T-6UP	3/8"	10	9/16"-18	9/16"-18	7.5	33.0	21.1	11	29	14.2	17.4	17.4
KLBS8T-8UP	1/2"	12	3/4"-16	3/4"-16	9.9	37.6	24.9	12.5	33	19.1	22.2	22.2
KLBS10T-10UP	5/8"	16	7/8"-14	7/8"-14	12.3	44.8	28.2	14.3	38.6	22.2	25.4	25.4
KLBS12T-12UP	3/4"	18, 20	1 1/16"-12	1 1/16"-12	15.5	48.0	32.5	16.5	43.9	27.0	31.7	31.7
KLBS14T-14UP	7/8"	22	1 3/16"-12	1 3/16"-12	18.0	54.4	36.8	16.5	47.2	33.3	34.9	34.9
KLBS16T-16UP	1"	25	1 5/16"-12	1 5/16"-12	21.5	56.3	37.3	16.5	47.2	33.3	38.1	38.1
KLBS20T-20UP	1-1/4"	32	1 5/8"-12	1 5/8"-12	27.5	58.9	40.4	16.5	48.5	41.2	50	47.6
KLBS24T-24UP	1-1/2"	38	1 7/8"-12	1 7/8"-12	33.3	71.9	45.2	16.5	48.5	47.6	57.0	53.9
KLBS32T-32UP	2"	50	2 1/2"-12	2 1/2"-12	45.0	83.9	56.4	16.5	47.2	63.5	73.0	69.8

O-Seal UNF Branch Tee

KTBS-UP



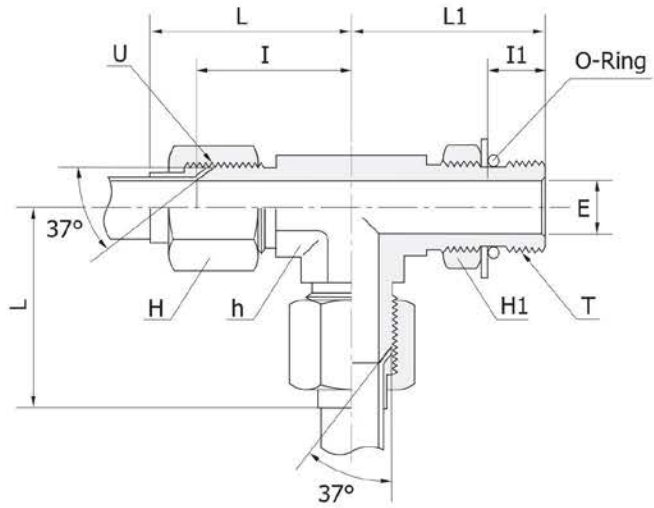
O-Ring Type: Viton.

Tube to Straight Thread

Part No.	Tube O.D		T (UNF)	U (UNF)	E	L	L1	I	I1	h (HEX)	H (HEX)	H1 (HEX)
	Inch	Metric										
KTBS2T-2UP	1/8"	3	5/16"-24	5/16"-24	1.6	27.4	23.9	19.6	8.4	11.1	9.5	11.1
KTBS3T-3UP	3/16"	4	3/8"-24	3/8"-24	3.2	30.5	23.9	21.1	8.4	11.1	11.1	12.7
KTBS4T-4UP	1/4"	6	7/16"-20	7/16"-20	4.4	31.7	26.2	22.6	9.8	11.1	14.2	14.2
KTBS5T-5UP	5/16"	8	1/2"-20	1/2"-20	6.0	34.5	28.7	24.1	9.8	14.2	15.8	15.8
KTBS6T-6UP	3/8"	10	9/16"-18	9/16"-18	7.5	38.8	31.8	26.9	11	14.2	17.4	17.4
KTBS8T-8UP	1/2"	12	3/4"-16	3/4"-16	9.9	44.5	36.8	31.8	12.5	19.1	22.2	22.2
KTBS10T-10UP	5/8"	16	7/8"-14	7/8"-14	12.3	53.4	43.2	36.8	14.3	22.2	25.4	25.4
KTBS12T-12UP	3/4"	18, 20	1 1/16"-12	1 1/16"-12	15.5	57.7	49.3	42.2	16.5	27.0	31.7	31.7
KTBS14T-14UP	7/8"	22	1 3/16"-12	1 3/16"-12	18.0	63.3	50.8	45.7	16.5	33.3	34.9	34.9
KTBS16T-16UP	1"	25	1 5/16"-12	1 5/16"-12	21.5	65.0	52.1	46.0	16.5	33.3	38.1	38.1
KTBS20T-20UP	1-1/4"	32	1 5/8"-12	1 5/8"-12	27.5	70.8	57.2	52.3	16.5	41.2	50	47.6
KTBS24T-24UP	1-1/2"	38	1 7/8"-12	1 7/8"-12	33.3	85.9	60.7	59.2	16.5	47.6	57.2	53.9
KTBS32T-32UP	2"	50	2 1/2"-12	2 1/2"-12	45.0	105.2	73.4	77.7	16.5	63.5	75	69.8

O-Seal UNF Run Tee

KTRS-UP



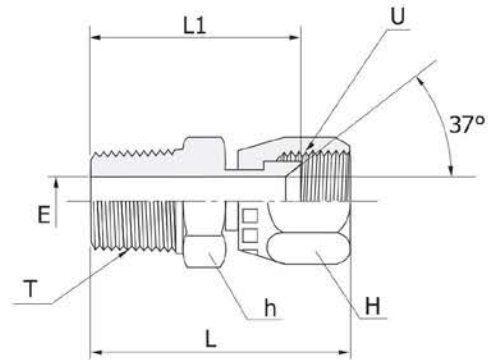
O-Ring Type: Viton.

Tube to Straight Thread

Part No.	Tube O.D		T (UNF)	U (UNF)	E	L	L1	I	I1	h (HEX)	H (HEX)	H1 (HEX)
	Inch	Metric										
KTRS2T-2UP	1/8"	3	5/16"-24	5/16"-24	1.6	27.4	23.9	19.6	8.4	11.1	9.5	11.1
KTRS3T-3UP	3/16"	4	3/8"-24	3/8"-24	3.2	30.5	23.9	21.1	8.4	11.1	11.1	12.7
KTRS4T-4UP	1/4"	6	7/16"-20	7/16"-20	4.4	31.7	26.2	22.6	9.8	11.1	14.2	14.2
KTRS5T-5UP	5/16"	8	1/2"-20	1/2"-20	6.0	34.5	28.7	24.1	9.8	14.2	15.8	15.8
KTRS6T-6UP	3/8"	10	9/16"-18	9/16"-18	7.5	38.8	31.8	26.9	11	14.2	17.4	17.4
KTRS8T-8UP	1/2"	12	3/4"-16	3/4"-16	9.9	44.5	36.8	31.8	12.5	19.1	22.2	22.2
KTRS10T-10UP	5/8"	16	7/8"-14	7/8"-14	12.3	53.4	43.2	36.8	14.3	22.2	25.4	25.4
KTRS12T-12UP	3/4"	18, 20	1 1/16"-12	1 1/16"-12	15.5	57.7	49.3	42.2	16.5	27.0	31.7	31.7
KTRS14T-14UP	7/8"	22	1 3/16"-12	1 3/16"-12	18.0	63.3	50.8	45.7	16.5	33.3	34.9	34.9
KTRS16T-16UP	1"	25	1 5/16"-12	1 5/16"-12	21.5	65.0	52.1	46.0	16.5	33.3	38.1	38.1
KTRS20T-20UP	1-1/4"	32	1 5/8"-12	1 5/8"-12	27.5	70.8	57.2	52.3	16.5	41.2	50	47.6
KTRS24T-24UP	1-1/2"	38	1 7/8"-12	1 7/8"-12	33.3	85.9	60.7	59.2	16.5	47.6	57.2	53.9
KTRS32T-32UP	2"	50	2 1/2"-12	2 1/2"-12	45.0	105.2	73.4	77.7	16.5	63.5	75	69.8

Swivel Male Connector

KSMC

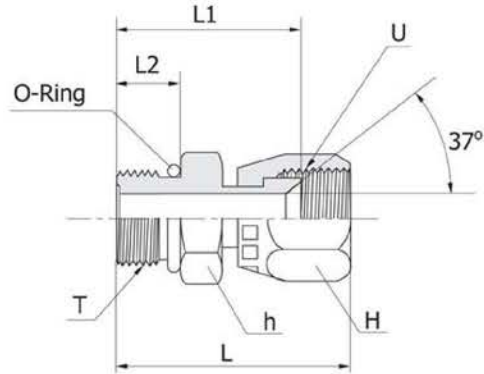
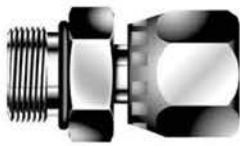


Swivel Fittings

Part No.	Tube O.D		T (NPT)	U (UNF)	E	L	L1	h (HEX)	H (HEX)
	Inch	Metric							
KSMC2T-2N	1/8"	3	1/8"	5/16"-24	1.6	30.0	22.0	11.1	11.1
KSMC3T-2N	3/16"	4	1/8"	3/8"-24	3.2	32.0	23.5	11.1	12.7
KSMC4T-2N	1/4"	6	1/8"	7/16"-20	4.4	34.2	25.5	12.7	14.2
KSMC5T-2N	5/16"	8	1/8"	1/2"-20	6.0	35.0	25.5	14.2	16.0
KSMC6T-4N	3/8"	10	1/4"	9/16"-18	7.5	40.2	30.7	16	17.4
KSMC8T-6N	1/2"	12	3/8"	3/4"-16	9.9	42.7	32	21	22.2
KSMC10T-8N	5/8"	16	1/2"	7/8"-14	12.3	51.3	38.6	23.8	25.4
KSMC12T-12N	3/4"	18, 20	3/4"	1 1/16"-12	15.5	54.5	40.2	29	32
KSMC14T-12N	7/8"	22	3/4"	1 3/16"-12	18.0	56.0	41.2	32.0	35.0
KSMC16T-16N	1"	25	1"	1 5/16"-12	21.5	63.7	48.6	36	38
KSMC20T-20N	1-1/4"	32	1-1/4"	1 5/8"-12	27.5	68.9	53	46	50.8
KSMC24T-24N	1-1/2"	38	1-1/2"	1 7/8"-12	33.3	77.6	59	50	57
KSMC32T-32N	2"	50	2"	2 1/2"-12	45.0	92.9	69.1	66.7	73

Swivel UNF Male Connector

KSMCS-U



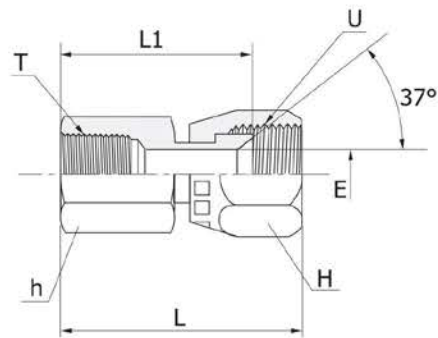
O-Ring Type: Viton.

Swivel Fittings

Part No.	Tube O.D		T (UNF)	U (UNF)	L	L1	L2	h (HEX)	H (HEX)
	Inch	Metric							
KSMCS2T-02U	1/8"	3	5/16"-24	5/16"-24	30.4	22.5	7.5	11.1	11.1
KSMCS3T-02U	3/16"	4	3/8"-24	3/8"-24	31.0	22.7	7.5	12.7	12.7
KSMCS4T-04U	1/4"	6	7/16"-20	7/16"-20	33.9	25.2	9.1	14.2	14.2
KSMCS5T-05U	5/16"	8	1/2"-20	1/2"-20	35.7	26.2	9.1	15.8	15.8
KSMCS6T-06U	3/8"	10	9/16"-18	9/16"-18	37.4	27.9	9.9	17.4	19
KSMCS8T-08U	1/2"	12	3/4"-16	3/4"-16	41.6	30.7	11.1	22.2	22.2
KSMCS10T-10U	5/8"	16	7/8"-14	7/8"-14	47.6	34.9	12.7	25.4	27
KSMCS12T-12U	3/4"	18, 20	1 1/16"-12	1 1/16"-12	54.4	40.1	15.1	31.8	32
KSMCS14T-14U	7/8"	22	1 3/16"-12	1 3/16"-12	55.6	40.9	15.1	34.9	34.9
KSMCS16T-16U	1"	25	1 5/16"-12	1 5/16"-12	56.8	41.7	15.1	38.1	38.1
KSMCS20T-20U	1-1/4"	32	1 5/8"-12	1 5/8"-12	63.2	47.3	15.1	46.7	50.8
KSMCS24T-24U	1-1/2"	38	1 7/8"-12	1 7/8"-12	71.3	52.7	15.1	54.0	60.0
KSMCS32T-32U	2"	50	2 1/2"-12	2 1/2"-12	72.5	58.7	15.1	70.0	73.0

Swivel Female Connector

KSCF

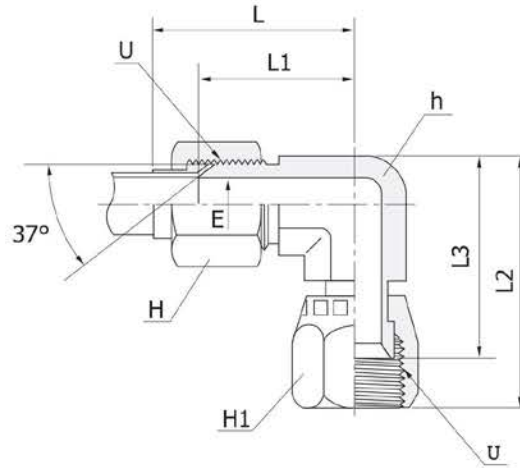


Swivel Fittings

Part No.	Tube O.D		T (NPT)	U (UNF)	E	L	L1	h (HEX)	H (HEX)
	Inch	Metric							
KSCF2T-2N	1/8"	3	1/8"	5/16"-24	1.6	36.1	28.2	14.2	11.1
KSCF3T-2N	3/16"	4	1/8"	3/8"-24	3.2	37.3	29.0	14.2	12.7
KSCF4T-2N	1/4"	6	1/8"	7/16"-20	4.4	39.7	31	14.2	14.2
KSCF5T-2N	5/16"	8	1/8"	1/2"-20	6.0	40.5	31.0	14.2	16.0
KSCF6T-4N	3/8"	10	1/4"	9/16"-18	7.5	45.8	36.3	19	17.4
KSCF8T-6N	1/2"	12	3/8"	3/4"-16	9.9	47	38.9	22.2	22.2
KSCF10T-8N	5/8"	16	1/2"	7/8"-14	12.3	51.6	48	29	25.4
KSCF12T-12N	3/4"	18, 20	3/4"	1 1/16"-12	15.5	66.6	52.3	35	32
KSCF14T-12N	7/8"	22	3/4"	1 3/16"-12	18.0	67.8	53.1	35.0	35.0
KSCF16T-16N	1"	25	1"	1 5/16"-12	21.5	73.5	58.4	41	38
KSCF20T-20N	1-1/4"	32	1-1/4"	1 5/8"-12	27.5	78.1	62.2	50.8	50.8
KSCF24T-24N	1-1/2"	38	1-1/2"	1 7/8"-12	33.3	86.7	68.1	60.0	57
KSCF32T-32N	2"	50	2"	2 1/2"-12	45.0	89.3	65.2	73	73

Swivel Elbow

KSL

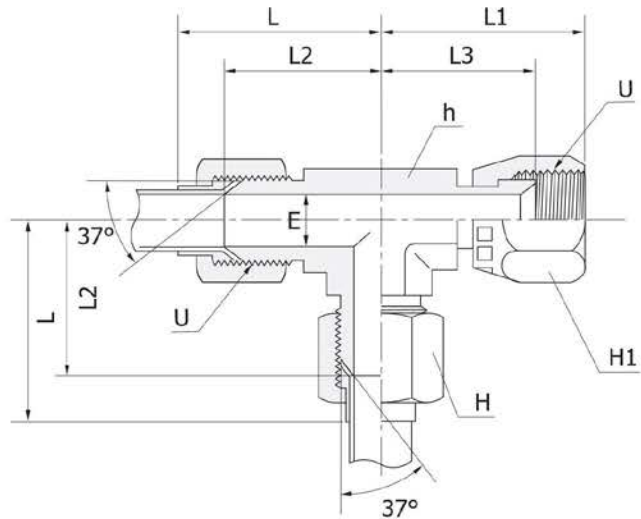


Swivel Fittings

Part No.	Tube O.D		U (UNF)	E	L	L1	L2	L3	h (HEX)	H (HEX)	H1 (HEX)
	Inch	Metric									
KSL-2T	1/8"	3	5/16"-24	1.6	27.4	19.6	24.6	16.7	11.1	9.5	11.1
KSL-3T	3/16"	4	3/8"-24	3.2	30.5	21.1	25.4	17.1	11.1	11.1	12.7
KSL-4T	1/4"	6	7/16"-20	4.4	31.7	22.6	25.4	16.7	11.1	14.2	14.2
KSL-5T	5/16"	8	1/2"-20	6.0	34.5	24.1	26.9	17.4	14.2	15.8	15.8
KSL-6T	3/8"	10	9/16"-18	7.5	38.8	26.9	31.8	22.3	14.2	17.4	17.4
KSL-8T	1/2"	12	3/4"-16	9.9	44.5	31.8	35.1	24.4	19.1	22.2	22.2
KSL-10T	5/8"	16	7/8"-14	12.3	53.4	36.8	41.1	28.4	22.2	25.4	25.4
KSL-12T	3/4"	18, 20	1 1/16"-12	15.5	57.7	42.2	44.4	30.1	27.0	31.7	31.7
KSL-14T	7/8"	22	1 3/16"-12	18.0	63.3	45.7	45.2	30.5	33.3	34.9	34.9
KSL-16T	1"	25	1 5/16"-12	21.5	65.0	46.0	50.8	35.7	33.3	38.1	38.1
KSL-20T	1-1/4"	32	1 5/8"-12	27.5	70.8	52.3	58.7	42.8	41.2	50	50
KSL-24T	1-1/2"	38	1 7/8"-12	33.3	85.9	59.2	65.8	47.2	47.6	57.2	57.2
KSL-32T	2"	50	2 1/2"-12	45.0	105.2	77.7	85.9	62.1	63.5	75	75

Swivel Run Tee

KSRT

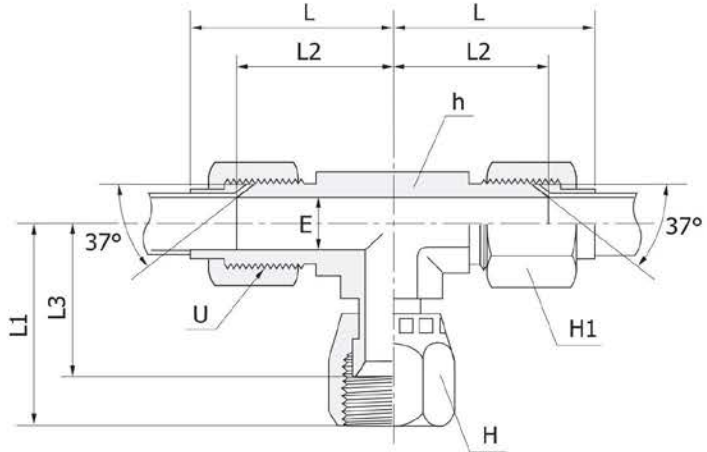
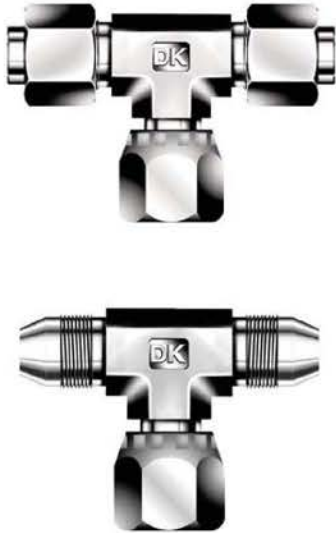


Swivel Fittings

Part No.	Tube O.D		U (UNF)	E	L	L1	L2	L3	h (HEX)	H (HEX)	H1 (HEX)
	Inch	Metric									
KSRT-2T	1/8"	3	5/16"-24	1.6	27.4	24.6	19.6	16.7	11.1	9.5	11.1
KSRT-3T	3/16"	4	3/8"-24	3.2	30.5	25.4	21.1	17.1	11.1	11.1	12.7
KSRT-4T	1/4"	6	7/16"-20	4.4	31.7	25.4	22.6	16.7	11.1	14.2	14.2
KSRT-5T	5/16"	8	1/2"-20	6.0	34.5	26.9	24.1	17.4	14.2	15.8	15.8
KSRT-6T	3/8"	10	9/16"-18	7.5	38.8	31.8	26.9	22.3	14.2	17.4	17.4
KSRT-8T	1/2"	12	3/4"-16	9.9	44.5	35.1	31.8	24.4	19.1	22.2	22.2
KSRT-10T	5/8"	16	7/8"-14	12.3	53.4	41.1	36.8	28.4	22.2	25.4	25.4
KSRT-12T	3/4"	18, 20	1 1/16"-12	15.5	57.7	44.4	42.2	30.1	27.0	31.7	31.7
KSRT-14T	7/8"	22	1 3/16"-12	18.0	63.3	45.2	45.7	30.5	33.3	34.9	34.9
KSRT-16T	1"	25	1 5/16"-12	21.5	65.0	50.8	46.0	35.7	33.3	38.1	38.1
KSRT-20T	1-1/4"	32	1 5/8"-12	27.5	70.8	58.7	52.3	42.8	41.2	50	50
KSRT-24T	1-1/2"	38	1 7/8"-12	33.3	85.9	65.8	59.2	47.2	47.6	57.2	57.2
KSRT-32T	2"	50	2 1/2"-12	45.0	105.2	85.9	77.7	62.1	63.5	75	75

Swivel Branch Tee

KSBT

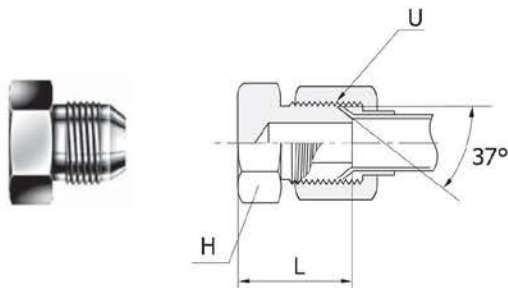


Swivel Fittings

Part No.	Tube O.D		U (UNF)	E	L	L1	L2	L3	h (HEX)	H (HEX)	H1 (HEX)
	Inch	Metric									
KSBT-2T	1/8"	3	5/16"-24	1.6	27.4	24.6	19.6	16.7	11.1	9.5	11.1
KSBT-3T	3/16"	4	3/8"-24	3.2	30.5	25.4	21.1	17.1	11.1	11.1	12.7
KSBT-4T	1/4"	6	7/16"-20	4.4	31.7	25.4	22.6	16.7	11.1	14.2	14.2
KSBT-5T	5/16"	8	1/2"-20	6.0	34.5	26.9	24.1	17.4	14.2	15.8	15.8
KSBT-6T	3/8"	10	9/16"-18	7.5	38.8	31.8	26.9	22.3	14.2	17.4	17.4
KSBT-8T	1/2"	12	3/4"-16	9.9	44.5	35.1	31.8	24.4	19.1	22.2	22.2
KSBT-10T	5/8"	16	7/8"-14	12.3	53.4	41.1	36.8	28.4	22.2	25.4	25.4
KSBT-12T	3/4"	18, 20	1 1/16"-12	15.5	57.7	44.4	42.2	30.1	27.0	31.7	31.7
KSBT-14T	7/8"	22	1 3/16"-12	18.0	63.3	45.2	45.7	30.5	33.3	34.9	34.9
KSBT-16T	1"	25	1 5/16"-12	21.5	65.0	50.8	46.0	35.7	33.3	38.1	38.1
KSBT-20T	1-1/4"	32	1 5/8"-12	27.5	70.8	58.7	52.3	42.8	41.2	50	50
KSBT-24T	1-1/2"	38	1 7/8"-12	33.3	85.9	65.8	59.2	47.2	47.6	57.2	57.2
KSBT-32T	2"	50	2 1/2"-12	45.0	105.2	85.9	77.7	62.1	63.5	75	75

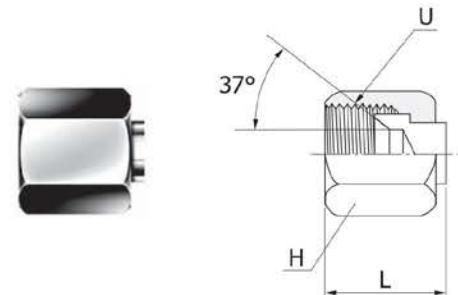
Cap for Tube End

KC



Plug for Fitting Port

KP



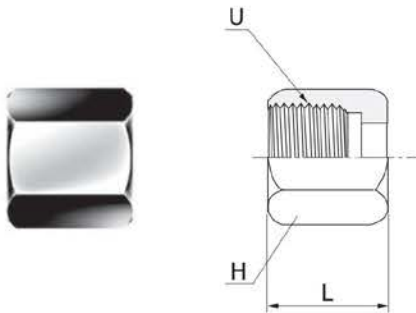
Cap and Plug

Part No.	Tube O.D		U (UNF)	H (HEX)	L
	Inch	Metric			
KC-2T	1/8"	3	5/16"-24	11.1	17.8
KC-3T	3/16"	4	3/8"-24	11.1	18.5
KC-4T	1/4"	6	7/16"-20	12.7	20.3
KC-5T	5/16"	8	1/2"-20	14.2	20.3
KC-6T	3/8"	10	9/16"-18	15.8	21.3
KC-8T	1/2"	12	3/4"-16	20.6	23.9
KC-10T	5/8"	16	7/8"-14	23.8	27.9
KC-12T	3/4"	18, 20	1 1/16"-12	28.5	32.5
KC-14T	7/8"	22	1 3/16"-12	31.7	33.3
KC-16T	1"	25	1 5/16"-12	34.9	33.8
KC-20T	1-1/4"	32	1 5/8"-12	42.8	36.8
KC-24T	1-1/2"	38	1 7/8"-12	50	41.9
KC-32T	2"	50	2 1/2"-12	70	52.1

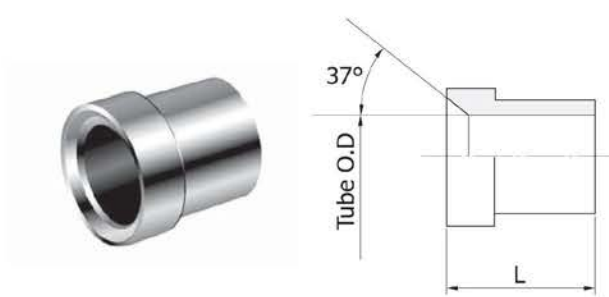
Cap and Plug

Part No.	Tube O.D		U (UNF)	H (HEX)	L
	Inch	Metric			
KP-2T	1/8"	3	5/16"-24	9.5	13.7
KP-3T	3/16"	4	3/8"-24	11.1	15.2
KP-4T	1/4"	6	7/16"-20	14.2	15.5
KP-5T	5/16"	8	1/2"-20	15.8	17.0
KP-6T	3/8"	10	9/16"-18	17.4	18.3
KP-8T	1/2"	12	3/4"-16	22.2	21.3
KP-10T	5/8"	16	7/8"-14	25.4	24.6
KP-12T	3/4"	18, 20	1 1/16"-12	31.7	25.9
KP-14T	7/8"	22	1 3/16"-12	34.9	27.4
KP-16T	1"	25	1 5/16"-12	38.1	28.4
KP-20T	1-1/4"	32	1 5/8"-12	50.8	31.0
KP-24T	1-1/2"	38	1 7/8"-12	57.1	35.8
KP-32T	2"	50	2 1/2"-12	73.0	44.2

Nut
KN



Sleeve
KS



Spare Parts

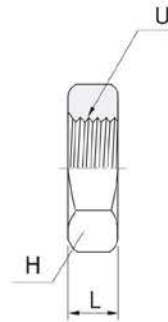
Part No.	Tube O.D		U (UNF)	H (HEX)	L
	Inch	Metric			
KN-2T	1/8"	3	5/16"-24	9.5	14.0
KN-3T	3/16"	4	3/8"-24	11.1	15.5
KN-4T	1/4"	6	7/16"-20	14.2	15.8
KN-5T	5/16"	8	1/2"-20	15.8	17.3
KN-6T	3/8"	10	9/16"-18	17.4	18.5
KN-8T	1/2"	12	3/4"-16	22.2	21.6
KN-10T	5/8"	16	7/8"-14	25.4	24.9
KN-12T	3/4"	18, 20	1 1/16"-12	31.7	26.2
KN-14T	7/8"	22	1 3/16"-12	34.9	27.7
KN-16T	1"	25	1 5/16"-12	38.1	28.7
KN-20T	1-1/4"	32	1 5/8"-12	50	31.2
KN-24T	1-1/2"	38	1 7/8"-12	57.2	36.1
KN-32T	2"	50	2 1/2"-12	75	44.5

Spare Parts

Part No.	Tube O.D		Part No.	Tube O.D	
	Inch	L		Metric	L
KS-2T	1/8"	8.6	KS-3M	3	8.6
KS-3T	3/16"	8.6	KS-4M	4	8.6
KS-4T	1/4"	10.4	KS-6M	6	10.4
KS-5T	5/16"	11.2	KS-8M	8	11.2
KS-6T	3/8"	12.7	KS-10M	10	12.7
KS-8T	1/2"	14.2	KS-12M	12	14.2
KS-10T	5/8"	16.8	KS-16M	16	16.8
KS-12T	3/4"	17.3	KS-18M	18	17.3
KS-14T	7/8"	19.3	KS-20M	20	17.3
KS-16T	1"	19.8	KS-22M	22	19.3
KS-20T	1-1/4"	23.1	KS-25M	25	19.8
KS-24T	1-1/2"	28.4	KS-32M	32	23.1
KS-32T	2"	30.2	KS-38M	38	28.4
			KS-50M	50	30.2

Bulkhead Lok Nut

KBN



Spare Parts

Part No.	Tube O.D		U (UNF)	L	H (HEX)
	Inch	Metric			
KBN-2T	1/8"	3	5/16"-24	5.6	14.2
KBN-3T	3/16"	4	3/8"-24	5.6	15.8
KBN-4T	1/4"	6	7/16"-20	6.4	17.4
KBN-5T	5/16"	8	1/2"-20	6.4	19.1
KBN-6T	3/8"	10	9/16"-18	6.9	20.6
KBN-8T	1/2"	12	3/4"-16	7.9	25.4
KBN-10T	5/8"	16	7/8"-14	9.1	28.5
KBN-12T	3/4"	18, 20	1 1/16"-12	10.4	34.9
KBN-14T	7/8"	22	1 3/16"-12	10.4	38.1
KBN-16T	1"	25	1 5/16"-12	10.4	41
KBN-20T	1-1/4"	32	1 5/8"-12	10.4	47.6
KBN-24T	1-1/2"	38	1 7/8"-12	10.4	53.9
KBN-32T	2"	50	2 1/2"-12	10.4	70

