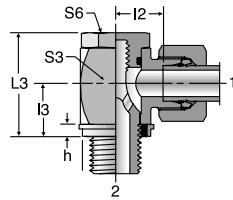


WH-R-KDS

High Pressure Banjo Elbow

24° Flareless / BSPP



TUBE FITTING PART #	END SIZE		h (mm)	I2 (mm)	I3 (mm)	L3 (mm)	S3 (mm)	S6 (mm)	STANDARD Pressure Rating (bar)									
	1 (mm)	2 BSPP							EO		EO-2							
									CF	71	MS	CF						
WH06LRKDS	6	G 1/8 A	2.5	12.0	10.5	24	17	17	315			315						
WH08LRKDS	8	G 1/4 A	3.0	14.5	14.0	30	22	19	315			315						
WH10LRKDS	10	G 1/4 A	3.0	15.5	14.0	30	22	19	315			315						
WH12LRKDS	12	G 3/8 A	3.0	18.0	16.5	36	27	24	315			315						
WH15LRKDS	15	G 1/2 A	4.5	21.5	21.5	45	32	30	315			315						
WH18LRKDS	18	G 1/2 A	4.5	21.0	21.5	45	32	30	315			315						
WH22LRKDS	22	G 3/4 A	3.5	27.5	24.0	53	41	36	160			160						
WH28LRKDS	28	G 1 A	3.5	32.0	30.5	66	50	46	160			160						
WH35LRKDS	35	G 1 1/4 A	3.5	36.0	35.5	76	60	55	160			160						
WH42LRKDS	42	G 1 1/2 A	3.5	40.5	40.5	87	70	60	160			160						
WH06SRKDS	6	G 1/4 A	3.0	16.5	14.0	30	22	19	400	400								
WH08SRKDS	8	G 1/4 A	3.0	16.5	14.0	30	22	19	400			400						
WH10SRKDS	10	G 3/8 A	3.0	18.5	16.5	36	27	24	400			400						
WH12SRKDS	12	G 3/8 A	3.0	18.5	16.5	36	27	24	400			400						
WH14SRKDS	14	G 1/2 A	4.5	22.5	21.5	45	32	30	400									
WH16SRKDS	16	G 1/2 A	4.5	22.0	21.5	45	32	30	315			315						
WH20SRKDS	20	G 3/4 A	3.5	26.5	24.0	53	41	36	315			315						
WH25SRKDS	25	G 1 A	3.5	31.5	30.5	66	50	46	250			250						
WH30SRKDS	30	G 1 1/4 A	3.5	37.0	34.5	76	60	55	160			160						
WH38SRKDS	38	G 1 1/2 A	3.5	41.5	40.5	87	70	60	160			160						

For EO-2 part number, insert "Z" between size and pressure series.

Example WH06ZLRKDSCF

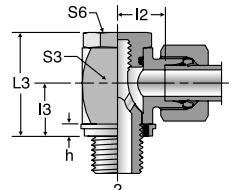
*Stainless Steel (71) part numbers have KD instead of KDS.

Example: WHO6SRKD71

WH-M-KDS

High Pressure Banjo Elbow

Banjo Metric / Flareless



TUBE FITTING PART #	END SIZE		h (mm)	I2 (mm)	I3 (mm)	L3 (mm)	S3 (mm)	S6 (mm)	STANDARD Pressure Rating (bar)									
	1 (mm)	2 BSPP							EO		EO-2							
									CF	71	MS	CF						
WH06LMKDS	6	M10 x 1	2.5	12.0	10.5	24.0	17	17	315			315						
WH08LMKDS	8	M12 x 1.5	3.0	14.5	14.0	30.0	22	19	315									
WH10LMKDS	10	M14 x 1.5	3.0	15.5	14.0	30.0	22	19	315			315						
WH12LMKDS	12	M16 x 1.5	3.0	18.0	16.5	36.0	27	24	315			315						
WH15LMKDS	15	M18 x 1.5	3.0	21.5	18.5	39.5	30	30	315			315						
WH18LMKDS	18	M22 x 1.5	4.5	21.0	21.5	45.0	32	30										
WH22LMKDS	22	M26 x 1.5	3.5	27.5	24.0	53.0	41	36										
WH28LMKDS	28	M33 x 2	3.5	32.0	30.5	66.0	50	46										
WH35LMKDS	35	M42 x 2	3.5	36.0	35.5	76.0	60	55				160						
WH42LMKDS	42	M48 x 2	3.5	40.5	40.5	87.0	70	60										
WH06SMKDS	6	M12 x 1.5	3.0	16.5	14.0	30.0	22	19	400									
WH08SMKDS	8	M14 x 1.5	3.0	16.5	14.0	30.0	22	19	400									
WH10SMKDS	10	M16 x 1.5	3.0	18.5	16.5	36.0	27	24	400			400						
WH12SMKDS	12	M18 x 1.5	3.0	20.0	18.5	39.5	27	27	400			400						
WH14SMKDS	14	M20 x 1.5	3.0	22.5	20.0	43.5	32	30										
WH16SMKDS	16	M22 x 1.5	4.5	22.0	21.5	45.0	32	30	315			315						
WH20SMKDS	20	M27 x 2	3.5	26.5	24.0	53.0	41	36	315									
WH25SMKDS	25	M33 x 2	3.5	31.5	30.5	66.0	50	46	250									
WH30SMKDS	30	M42 x 2	3.5	37.0	35.5	76.0	60	55										
WH38SMKDS	38	M48 x 2	3.5	41.5	40.5	87.0	70	60										

For EO-2 part number, insert "Z" between size and pressure series.

Example: WH06ZLMKDSFC

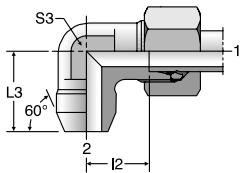
*Stainless Steel (71) part numbers have KD instead of KDS.

Example: WHO6SMKD71

Dimensions and pressures for reference only, subject to change.

WAS

Weld Elbow
24° Flareless / Butt Weld

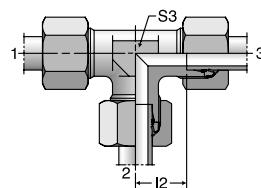


TUBE FITTING PART #	END SIZE		I 2 (mm)	L3 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)				
						EO		EO-2		
	CF	71	MS	CF	71					
WAS06L	6	10	12.0	19	12					
WAS08L	8	12	14.0	23	12					
WAS10L	10	14	15.0	24	14	315				
WAS12L	12	16	17.0	25	17					
WAS15L	15	19	21.0	30	19					
WAS18L	18	22	23.5	33	24					
WAS22L	22	27	27.5	37	27					
WAS28L	28	32	30.5	42	36					
WAS35L	35	40	34.5	49	41					
WAS42L	42	46	40.0	57	50					
WAS06S	6	11	16.0	23	12					
WAS08S	8	13	17.0	24	14					
WAS10S	10	15	17.5	25	17					
WAS12S	12	17	21.5	29	17					
WAS14S	14	19	22.0	30	19					
WAS16S	16	21	24.5	33	24					
WAS20S	20	26	26.5	37	27					
WAS25S	25	31	30.0	42	36					
WAS30S	30	36	35.5	49	41					
WAS38S	38	44	41.0	57	50					

Note: Weld fitting. Omit "CF" in the part number for steel material.
For EO-2 part number, insert "Z" between size and pressure series.
Example: WAS06ZL

T

Union Tee
24° Flareless



TUBE FITTING PART #	END SIZE 1 - 3 (mm)	I 2 (mm)	S3 (mm)	S3 (Only Stainless Steel) (mm)	STANDARD Pressure Rating (bar)				
					EO		EO-2		
					CF	71	MS	CF	71
*T04LL	4	11.0	9	9	100	100	63	100	
*T06LL	6	9.5	11	9	100		63	100	
*T08LL	8	11.5	12	12	100	100	63		
*T10LL	10	12.5	14	12	100		63		
T12LL	12	15.0	14	14	100				
*T06L	6	12.0	12	12	315	315	200	315	315
*T08L	8	14.0	14	12	315	315	200	315	
T10L	10	15.0	14	14	315	315	200	315	
T12L	12	17.0	17	17	315	315	200	315	
T15L	15	21.0	19	19	315	315	200	315	315
T18L	18	23.5	24	24	315	315	200	315	315
T22L	22	27.5	27	27	160	160	100	160	160
T28L	28	30.5	36	36	160	160	100	160	
T35L	35	34.5	41	41	160	160	100	160	
T42L	42	40.0	50	50	160	160	100	160	
*T06S	6	16.0	14	12	630	630	400	630	
T08S	8	17.0	14	14	630	630	400	630	
T10S	10	17.5	17	17	630	630	400	630	
T12S	12	21.5	17	17	630	630	400	630	
T14S	14	22.0	19	19	630	630	400	630	
T16S	16	24.5	24	24	400	400	250	400	400
T20S	20	26.5	27	27	400	400	250	400	
T25S	25	30.0	36	36	400	400	250	400	
T30S	30	35.5	41	41	400	400	250	400	
T38S	38	41.0	50	50	315	315	200	315	

* Extruded body.

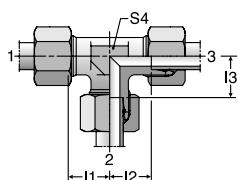
For EO-2 part number, insert "Z" between size and pressure series.

Example: T04ZLLCF

Dimensions and pressures for reference only, subject to change.

TR

Tee-Reducer
24° Flareless



TUBE FITTING PART #	END SIZE			I1 (mm)	I2 (mm)	I3 (mm)	S4 (mm)	STANDARD Pressure Rating (bar)			
	1 (mm)	2 (mm)	3 (mm)					EO		EO-2	
	CF	71	MS	CF	71						
TR04/08/04LL	4	8	4	13.0	13.0	11.5	12	100			
TR06/04/06LL	6	4	6	9.5	9.5	11.0	11	100			
TR06/08/06L	6	8	6	14.0	14.0	14.0	14	315			
TR08/06/08L	8	6	8	14.0	14.0	14.0	14	315			
TR06/10/06L	6	10	6	15.0	15.0	15.0	14	315			
TR08/10/08L	8	10	8	15.0	15.0	15.0	14	315			
TR10/06/10L	10	6	10	15.0	15.0	15.0	14	315			
TR10/08/10L	10	8	10	15.0	15.0	15.0	14	315			
TR10/10/06L	10	10	6	15.0	15.0	15.0	14	315			
TR08/12/08L	8	12	8	17.0	17.0	17.0	17	315			
TR12/06/12L	12	6	12	17.0	17.0	17.0	17				
TR12/08/08L	12	8	8	17.0	17.0	17.0	17	315			
TR12/08/12L	12	8	12	17.0	17.0	17.0	17	315			
TR12/10/10L	12	10	10	17.0	17.0	17.0	17	315			
TR12/12/12L	12	10	12	17.0	17.0	17.0	17	315			
TR12/12/10L	12	12	10	17.0	17.0	17.0	17	315			
TR10/15/10L	10	15	10	21.0	21.0	21.0	19				
TR12/15/12L	12	15	12	21.0	21.0	21.0	19	315			
TR15/06/15L	15	6	15	21.0	21.0	21.0	19	315			
TR15/10/15L	15	10	15	21.0	21.0	21.0	19	315			
TR15/12/12L	15	12	12	21.0	21.0	21.0	19	315			
TR15/12/15L	15	12	15	21.0	21.0	21.0	19	315			
TR15/15/12L	15	15	12	21.0	21.0	21.0	19	315			
TR12/18/12L	12	18	12	24.0	24.0	23.5	24				
TR18/10/10L	18	10	10	23.5	24.0	24.0	24	315			
TR18/10/18L	18	10	18	23.5	23.5	24.0	24	315			
TR18/12/18L	18	12	18	23.5	23.5	24.0	24	315			
TR18/15/18L	18	15	18	23.5	23.5	24.0	24	315			
TR18/18/10L	18	18	10	23.5	24.0	23.5	24	315			
TR22/10/22L	22	10	22	27.5	27.5	28.0	27				
TR22/12/22L	22	12	22	27.5	27.5	28.0	27	160			
TR22/15/15L	22	15	15	27.5	28.0	28.0	27				
TR22/15/22L	22	15	22	27.5	27.5	28.0	27	160			
TR22/18/18L	22	18	18	27.5	27.5	27.5	27	160			
TR22/18/22L	22	18	22	27.5	27.5	27.5	27	160			
TR22/22/18L	22	22	18	27.5	27.5	27.5	27				
TR28/10/28L	28	10	28	30.5	30.5	31.0	36	160			
TR28/12/28L	28	12	28	30.5	30.5	31.0	36	160			
TR28/15/28L	28	15	28	30.5	30.5	31.0	36				
TR28/18/28L	28	18	28	30.5	30.5	30.5	36	160			
TR28/22/22L	28	22	22	30.5	30.5	30.5	36				
TR28/22/28L	28	22	28	30.5	30.5	30.5	36	160			

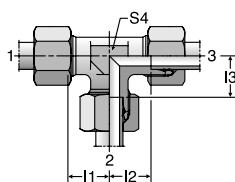
Series S is continued on the next page.

For EO-2 part number, insert "Z" between size and pressure series.
Example: TR06/08/06ZLLCF

Dimensions and pressures for reference only, subject to change.

TR

Tee-Reducer
24° Flareless



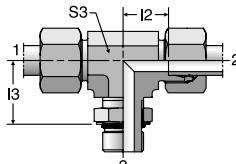
TUBE FITTING PART #	END SIZE			I1 (mm)	I2 (mm)	I3 (mm)	S4 (mm)	STANDARD Pressure Rating (bar)				
	1 (mm)	2 (mm)	3 (mm)					EO		EO-2		
	CF	71	MS					CF	71			
TR10/06/10S	10	6	10	17.5	17.5	18.0	17					
TR12/08/08S	12	8	8	21.5	22.0	22.0	17					
TR12/08/12S	12	8	12	21.5	21.5	22.0	17					
TR12/10/12S	12	10	12	21.5	21.5	21.5	17					
TR12/16/12S	12	16	12	25.5	25.5	24.5	24	400				
TR16/06/16S	16	6	16	24.5	24.5	26.0	24					
TR16/08/16S	16	8	16	24.5	24.5	26.0	24	400				
TR16/10/16S	16	10	16	24.5	24.5	25.5	24					
TR16/12/16S	16	12	16	24.5	24.5	25.5	24	400				
TR16/20/16S	16	20	16	28.5	28.5	26.5	27	400				
TR20/10/20S	20	10	20	26.5	26.5	29.5	27	400				
TR20/12/20S	20	12	20	26.5	26.5	29.5	27	400				
TR20/16/20S	20	16	20	26.5	26.5	28.5	27	400				
TR20/25/20S	20	25	20	31.5	31.5	30.0	36	400				
TR25/16/25S	25	16	25	30.0	30.0	33.5	36	400				
TR25/20/25S	25	20	25	30.0	30.0	31.5	36	400				
TR25/30/25S	25	30	25	37.0	37.0	35.5	41					

Series L is on the previous page.

For EO-2 part number, insert "Z" between size and pressure series.
Example: TR10/06/10ZSCF

TEE-UNF

Adjustable Locknut Branch Tee
24° Flareless / SAE-ORB



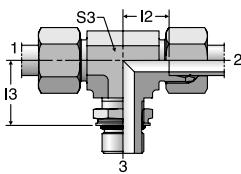
TUBE FITTING PART #	END SIZE			I2 (mm)	I3 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)				
	1 & 2 (mm)	3 UN/UNF-2A (mm)	UN/UNF-2A (mm)				EO		EO-2		
	CF	71	MS				CF	71			
TEE06L7/16UNF	6	7/16-20	14	19	14	315			315		
TEE08L7/16UNF	8	7/16-20	16	19	14	315					
TEE10L9/16UNF	10	9/16-18	17	24	19						
TEE12L9/16UNF	12	9/16-18	19	25	19				315		
TEE12L3/4UNF	12	3/4-16	19	25	19				315		
TEE15L3/4UNF	15	3/4-16	21	28	22	315			315		
TEE15L7/8UNF	15	7/8-14	21	28	22	315			315		
TEE18L7/8UNF	18	7/8-14	24	32	27				315		
TEE18L11/16UN	18	1 1/16-12	24	32	30				315		
TEE22L11/16UN	22	1 1/16-12	28	35	30				160		
TEE28L15/16UN	28	1 5/16-12	31	42	36				160		
TEE35L15/8UN	35	1 5/8-12	38	46	50						
TEE42L17/8UN	42	1 7/8-12	38	47	50						
TEE06S7/16UNF	6	7/16-20	15	20	14						
TEE08S9/16UNF	8	9/16-18	17	25	19						
TEE10S9/16UNF	10	9/16-18	18	26	19	400			400		
TEE12S3/4UNF	12	3/4-16	22	30	22						
TEE16S7/8UNF	16	7/8-14	25	34	27						
TEE20S11/16UN	20	1 1/16-12	28	37	30	400					
TEE25S11/16UN	25	1 1/16-12	30	50	36						
TEE30S15/8UN	30	1 5/8-12	36	50	50						
TEE38S17/8UN	38	1 7/8-12	34	51	50						

For EO-2 part number, insert "Z" between size and pressure series.
Example: TEE06ZL7/16UNFCF

Dimensions and pressures for reference only, subject to change.

TEE-OR

Adjustable Locknut Branch Tee
24° Flareless / Metric ISO 6149



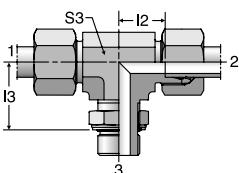
TUBE FITTING PART #	END SIZE		I 2 (mm)	I 3 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)						
						EO		EO-2				
	1 & 2 (mm)	Metric				CF	71	MS	CF			
TEE06LMOR	6	M10x1	14	20	14							
TEE08LMOR	8	M12x1.5	16	22	14	315						
TEE10LMOR	10	M14x1.5	17	25	19	315						
TEE12LMOR	12	M16x1.5	19	26	19	315						
TEE15LMOR	15	M18x1.5	21	30	22							
TEE18LMOR	18	M22x1.5	24	33	27	315						
TEE22LM27X2OR	22	M27x2	28	35	30	160						
TEE28LMOR	28	M33x2	31	38	36	160						
TEE35LMOR	35	M42x2	38	48	50							
TEE42LMOR	42	M48x2	38	49	50	160						
TEE06SMOR	6	M12x1.5	15	22	14							
TEE08SMOR	8	M14x1.5	17	26	19				400			
TEE10SMOR	10	M16x1.5	18	27	19							
TEE12SMOR	12	M18x1.5	22	31	22							
TEE16SMOR	16	M22x1.5	25	35	27							
TEE20SMOR	20	M27x2	28	39	30							
TEE25SMOR	25	M33x2	30	44	36							
TEE30SMOR	30	M42x2	36	51	50							
TEE38SMOR	38	M48x2	34	54	50							

For EO-2 part number, insert "Z" between size and pressure series.

Example: TR06ZLMORCF

TEE-R

Adjustable Locknut Branch Tee
24° Flareless / BSPP ORR



TUBE FITTING PART #	END SIZE		I 2 (mm)	I 3 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)						
						EO		EO-2				
	1 & 2 (mm)	BSPP				CF	71	MS	CF			
TEE06LR	6	G 1/8A	14	19	14	315			315			
TEE08LR	8	G 1/4A	16	23	14	315			315			
TEE10LR	10	G 1/4A	17	25	19	315			315			
TEE12LR	12	G 3/8A	19	28	19	250			250			
TEE15LR	15	G 1/2A	21	30	22	250			250			
TEE18LR	18	G 1/2A	24	36	27	250			250			
TEE22LR	22	G 3/4A	28	36	30	160						
TEE28LR	28	G 1A	31	44	36	160			160			
TEE35LR	35	G 1 1/4A	38	50	50				160			
TEE42LR	42	G 1 1/2A	38	52	50				160			
TEE06SR	6	G 1/4A	15	23	14				315			
TEE08SR	8	G 1/4A	17	27	19				315			
TEE10SR	10	G 3/8A	18	29	19	250						
TEE12SR	12	G 3/8A	22	29	22	250			250			
TEE16SR	16	G 1/2A	25	36	27	250						
TEE20SR	20	G 3/4A	28	39	30	250			250			
TEE25SR	25	G 1A	30	44	36	250			250			
TEE30SR	30	G 1 1/4A	36	49	50	160			160			
TEE38SR	38	G 1 1/2A	34	55	50	160						

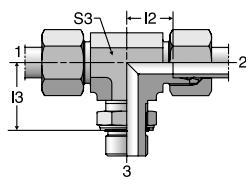
For EO-2 part number, insert "Z" between size and pressure series.

Example: TEE06ZLRCF

Dimensions and pressures for reference only, subject to change.

TEE-M

Adjustable Locknut Branch Tee
24° Flareless / Metric ORR

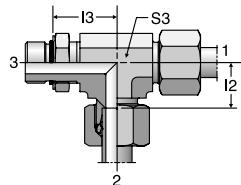


TUBE FITTING PART #	END SIZE		I 2 (mm)	I 3 (mm)	S3 (mm)	STANDARD									
						Pressure Rating (bar)			EO		EO-2				
	1 & 2 (mm)	3 Metric				CF	71	MS	CF	71					
TEE06LM	6	M10x1	14	20	14	315									
TEE08LM	8	M12x1.5	16	22	14	315					315				
TEE10LM	10	M14x1.5	17	25	19	315					315				
TEE12LM	12	M16x1.5	19	26	19	315					315				
TEE15LM	15	M18x1.5	21	30	22						315				
TEE18LM	18	M22x1.5	24	33	27	315					315				
TEE22LM27X2	22	M27x2	28	35	30						160				
TEE28LM	28	M33x2	31	38	36	160									
TEE35LM	35	M42x2	38	48	50										
TEE42LM	42	M48x2	38	49	50										
TEE06SM	6	M12x1.5	15	22	14	400					400				
TEE08SM	8	M14x1.5	17	26	19	400					400				
TEE10SM	10	M16x1.5	18	27	19	400					400				
TEE12SM	12	M18x1.5	22	31	22	400					400				
TEE16SM	16	M22x1.5	25	35	27	400					400				
TEE20SM	20	M27x2	28	39	30	400					400				
TEE25SM	25	M33x2	30	44	36	315					315				
TEE30SM	30	M42x2	36	51	50	250					250				
TEE38SM	38	M48x2	34	54	50	200					200				

For EO-2 part number, insert "Z" between size and pressure series.
Example: TEE06ZLMCF

LEE-UNF

Adjustable Locknut Run Tee
24° Flareless / SAE-ORB



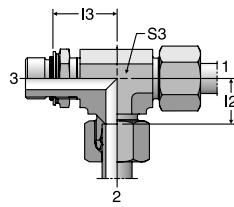
TUBE FITTING PART #	END SIZE		I 2 (mm)	I 3 (mm)	S3 (mm)	STANDARD									
						Pressure Rating (bar)			EO		EO-2				
	1 & 2 (mm)	3 UN/UNF-2A				CF	71	MS	CF	71					
LEE06L7/16UNF	6	7/16-20	14	19	14						315				
LEE08L7/16UNF	8	7/16-20	16	19	14	315					315				
LEE10L9/16UNF	10	9/16-18	17	24	19	315									
LEE12L9/16UNF	12	9/16-18	19	25	19						315				
LEE12L3/4UNF	12	3/4-16	19	25	19	315					315				
LEE15L3/4UNF	15	3/4-16	21	28	22						315				
LEE15L7/8UNF	15	7/8-14	21	28	22						315				
LEE18L7/8UNF	18	7/8-14	24	32	27						315				
LEE18L11/16UN	18	1 1/16-12	24	32	30	315					315				
LEE22L11/16UN	22	1 1/16-12	28	35	30						160				
LEE28L15/16UN	28	1 5/16-12	31	42	36						160				
LEE35L15/8UN	35	1 5/8-12	38	46	50						160				
LEE42L17/8UN	42	1 7/8-12	38	47	50						160				
LEE06S7/16UNF	6	7/16-20	15	20	14										
LEE08S9/16UNF	8	9/16-18	17	25	19										
LEE10S9/16UNF	10	9/16-18	18	26	19	400									
LEE12S3/4UNF	12	3/4-16	22	30	22	400									
LEE16S7/8UNF	16	7/8-14	25	34	27	400									
LEE20S11/16UN	20	1 1/16-12	28	37	30	400									
LEE25S11/16UN	25	1 1/16-12	30	50	36										
LEE30S15/8UN	30	1 5/8-12	36	50	50	250									
LEE38S17/8UN	38	1 7/8-12	34	51	50										

For EO-2 part number, insert "Z" between size and pressure series.
Example: LEE06ZL7/16UNFCF

Dimensions and pressures for reference only, subject to change.

LEE-OR

Adjustable Locknut Run Tee
24° Flareless / Metric ISO 6149



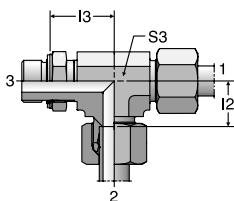
TUBE FITTING PART #	END SIZE		I 2 (mm)	I 3 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)							
						EO			EO-2				
	1 & 2 (mm)	3 Metric				CF	71	MS	CF	71			
LEE06LMOR	6	M10 x 1	14	20	14								
LEE08LMOR	8	M12 x 1.5	16	22	14	315							
LEE10LMOR	10	M14 x 1.5	17	25	19	315							
LEE12LMOR	12	M16 x 1.5	19	26	19	315							
LEE15LMOR	15	M18 x 1.5	21	30	22	315							
LEE18LMOR	18	M22 x 1.5	24	33	27	315							
LEE22LM27x2OR	22	M27 x 2	28	35	30	160							
LEE28LMOR	28	M33 x 2	31	38	36	160							
LEE35LMOR	35	M42 x 2	38	48	50								
LEE42LMOR	42	M48 x 2	38	49	50								
LEE06SMOR	6	M12 x 1.5	15	22	14	400							
LEE08SMOR	8	M14 x 1.5	17	26	19								
LEE10SMOR	10	M16 x 1.5	18	27	19								
LEE12SMOR	12	M18 x 1.5	22	31	22								
LEE16SMOR	16	M22 x 1.5	25	35	27								
LEE20SMOR	20	M27 x 2	28	35	30								
LEE25SMOR	25	M33 x 2	30	44	36	315							
LEE30SMOR	30	M42 x 2	36	51	50								
LEE38SMOR	38	M48 x 2	34	54	50								

For EO-2 part number, insert "Z" between size and pressure series.

Example: LEE06ZLMORCF

LEE-R

Adjustable Locknut Run Tee
24° Flareless / BSPP ORR



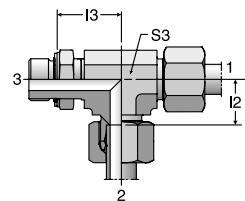
TUBE FITTING PART #	END SIZE		I 2 (mm)	I 3 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)							
						EO			EO-2				
	1 & 2 (mm)	3 BSPP				CF	71	MS	CF	71			
LEE06LR	6	G 1/8A	14	19	14	315							
LEE08LR	8	G 1/4A	16	23	14	315							
LEE10LR	10	G 1/4A	17	25	19	315							
LEE12LR	12	G 3/8A	19	28	19	250							
LEE15LR	15	G 1/2A	21	30	22	250							
LEE18LR	18	G 1/2A	24	36	27	250							
LEE22LR	22	G 3/4A	28	36	30	160							
LEE28LR	28	G 1A	31	44	36	160							
LEE35LR	35	G 1 1/4A	38	50	50								
LEE42LR	42	G 1 1/2A	38	52	50	160							
LEE06SR	6	G 1/4A	15	23	14	315							
LEE08SR	8	G 1/4A	17	27	19								
LEE10SR	10	G 3/8A	18	29	19								
LEE12SR	12	G 3/8A	22	29	22	250							
LEE16SR	16	G 1/2A	25	36	27								
LEE20SR	20	G 3/4A	28	39	30	250							
LEE25SR	25	G 1A	30	44	36								
LEE30SR	30	G 1 1/4A	36	49	50								
LEE38SR	38	G 1 1/2A	34	55	50								

For EO-2 part number, insert "Z" between size and pressure series.
Example: LEE06ZLRCF

Dimensions and pressures for reference only, subject to change.

LEE-M

Adjustable Locknut Run Tee
24° Flareless / Metric ORR

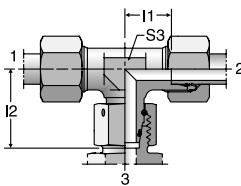


TUBE FITTING PART #	END SIZE		I 2 (mm)	I 3 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)							
						EO			EO-2				
	1 & 2 (mm)	3 Metric				CF	71	MS	CF	71			
LEE06LM	6	M10 x 1	14	20	14								
LEE08LM	8	M12 x 1.5	16	22	14					315			
LEE10LM	10	M14 x 1.5	17	25	19								
LEE12LM	12	M16 x 1.5	19	26	19	315				315			
LEE15LM	15	M18 x 1.5	21	30	22					315			
LEE18LM	18	M22 x 1.5	24	33	27					250			
LEE22LM27X2	22	M27 x 2	28	35	30								
LEE28LM	28	M33 x 2	31	38	36					160			
LEE35LM	35	M42 x 2	38	48	50								
LEE42LM	42	M48 x 2	38	49	50								
LEE06SM	6	M12 x 1.5	15	22	14								
LEE08SM	8	M14 x 1.5	17	26	19	315							
LEE10SM	10	M16 x 1.5	18	27	19								
LEE12SM	12	M18 x 1.5	22	31	22								
LEE16SM	16	M22 x 1.5	25	35	27								
LEE20SM	20	M27 x 2	28	39	30								
LEE25SM	25	M33 x 2	30	44	36								
LEE30SM	30	M42 x 2	36	51	50								
LEE38SM	38	M48 x 2	34	54	50					160			

For EO-2 part number, insert "Z" between size and pressure series.
Example: LEE06ZLMCF

ET

Swivel Nut Branch Tee

24° Flareless / 24° Flareless /
Flareless Swivel

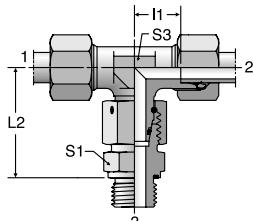
TUBE FITTING PART #	END SIZE		I 1 (mm)	I 2 (mm)	S3 (mm)	STANDARD						
						Pressure Rating (bar)		EO				
	1 & 2 (mm)	3 Metric				CF	71	MS	CF			
ET06L	6	M12 x 1.5	12.0	26.0	12	315			315			
ET08L	8	M14 x 1.5	14.0	27.5	12	315			315			
ET10L	10	M16 x 1.5	15.0	29.0	14	315	315		315			
ET12L	12	M18 x 1.5	17.0	29.5	17	315	315		315			
ET15L	15	M22 x 1.5	21.0	32.5	19	315			315			
ET18L	18	M26 x 1.5	23.5	35.5	24	315			315			
ET22L	22	M30 x 2	27.5	38.5	27	160			160			
ET28L	28	M36 x 2	30.5	41.5	36	160			160			
ET35L	35	M45 x 2	34.5	51.0	41	160			160			
ET42L	42	M52 x 2	40.0	56.0	50	160			160			
ET06S	6	M14 x 1.5	16.0	27.0	12	630			630			
ET08S	8	M16 x 1.5	17.0	27.5	14	630			630			
ET10S	10	M18 x 1.5	17.5	30.0	17	630			630			
ET12S	12	M20 x 1.5	21.5	31.0	17	630			630			
ET14S	14	M22 x 1.5	22.0	35.0	19	630						
ET16S	16	M24 x 1.5	24.5	36.5	24	400	400		400			
ET20S	20	M30 x 2	26.5	44.5	27	400			400			
ET25S	25	M36 x 2	30.0	50.0	36	400			400			
ET30S	30	M42 x 2	35.5	55.0	41	400			400			
ET38S	38	M52 x 2	41.0	63.0	50	315			315			

For EO-2 part number, insert "Z" between size and pressure series.

Example: ET06ZLCF

ET-R-ED

Assembled Adjustable Swivel Branch Tee

24° Flareless / 24° Flareless /
BSPP with EOlastic Seal

TUBE FITTING PART #	END SIZE		I 1 (mm)	L2 (mm)	S1 (mm)	S3 (mm)	STANDARD							
							Pressure Rating (bar)		EO					
	1 & 2 (mm)	3 BSPP					CF	71	MS	CF				
ET06LRED	6	G 1/8 A	12.0	34.5	14	12	315			315				
ET08LRED	8	G 1/4 A	14.0	37.5	19	12	315			315				
ET10LRED	10	G 1/4 A	15.0	40.0	19	14	315			315				
ET12LRED	12	G 3/8 A	17.0	42.0	22	17	315			315				
ET15LRED	15	G 1/2 A	21.0	46.5	27	19	315			315				
ET18LRED	18	G 1/2 A	23.5	50.0	27	24	315			315				
ET22LRED	22	G 3/4 A	27.5	55.0	32	27	160			160				
ET28LRED	28	G 1 A	30.5	59.0	41	36	160							
ET35LRED	35	G 1 1/4 A	34.5	68.5	50	41								
ET42LRED	42	G 1 1/2 A	40.0	75.0	55	50								
ET06SRED	6	G 1/4 A	16.0	40.0	19	12	630			630				
ET08SRED	8	G 1/4 A	17.0	42.5	19	14	630			630				
ET10SRED	10	G 3/8 A	17.5	45.0	22	17	630			630				
ET12SRED	12	G 3/8 A	21.5	48.0	22	17	630			630				
ET14SRED	14	G 1/2 A	22.0	54.0	27	19								
ET16SRED	16	G 1/2 A	24.5	55.0	27	24	400			400				
ET20SRED	20	G 3/4 A	26.5	65.0	32	27	400			400				
ET25SRED	25	G 1 A	30.0	73.0	41	36	400							
ET30SRED	30	G 1 1/4 A	35.5	78.5	50	41								
ET38SRED	38	G 1 1/2 A	41.0	89.0	55	50								

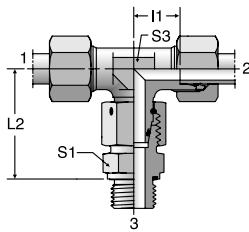
For EO-2 part number, insert "Z" between size and pressure series.

Example: ET06ZLREDCF

Dimensions and pressures for reference only, subject to change.

ET-M-ED

Assembled Adjustable Swivel Branch Tee
24° Flareless / 24° Flareless /
Metric Parallel with EOlastic Seal



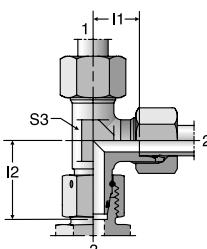
TUBE FITTING PART #	END SIZE		I 1 (mm)	L2 (mm)	S1 (mm)	S3 (mm)	STANDARD							
							Pressure Rating (bar)		EO					
	1 & 2 (mm)	3 Metric					CF	71	MS	CF	71			
ET06LMED	6	M10 x 1	12.0	34.5	14	12								
ET08LMED	8	M12 x 1.5	14.0	37.5	17	12	315							
ET10LMED	10	M14 x 1.5	15.0	40.0	19	14	315			315				
ET12LMED	12	M16 x 1.5	17.0	42.0	22	17	315							
ET15LMED	15	M18 x 1.5	21.0	46.0	24	19	315							
ET18LMED	18	M22 x 1.5	23.5	50.0	27	24	315							
ET22LMED	22	M26 x 1.5	27.5	55.0	32	27	160							
ET28LMED	28	M33 x 2	30.5	59.0	41	36	160							
ET35LMED	35	M42 x 2	34.5	68.5	50	41								
ET42LMED	42	M48 x 2	40.0	75.0	55	50	160							
ET06SMED	6	M12 x 1.5	16.0	40.0	17	12								
ET08SMED	8	M14 x 1.5	17.0	42.5	19	14								
ET10SMED	10	M16 x 1.5	17.5	45.0	22	17	630							
ET12SMED	12	M18 x 1.5	21.5	48.0	24	17	630							
ET14SMED	14	M20 x 1.5	22.0	54.0	27	19								
ET16SMED	16	M22 x 1.5	24.5	55.0	27	24	400							
ET20SMED	20	M27 x 2	26.5	65.0	32	27								
ET25SMED	25	M33 x 2	30.0	73.0	41	36	400							
ET30SMED	30	M42 x 2	35.5	78.5	50	41								
ET38SMED	38	M48 x 2	41.0	89.0	55	50								

For EO-2 part number, insert "Z" between size and pressure series.

Example: ET06ZLMEDCF

EL

Swivel Nut Run Tee
24° Flareless / Flareless Swivel



TUBE FITTING PART #	END SIZE		I 1 (mm)	I 2 (mm)	S3 (mm)	STANDARD						
						Pressure Rating (bar)		EO				
	1 & 2 (mm)	3 Metric				CF	71	MS	CF	71		
EL06L	6	M12 x 1.5	12.0	26.0	12	315			315			
EL08L	8	M14 x 1.5	14.0	27.5	12	315			315			
EL10L	10	M16 x 1.5	15.0	29.0	14	315			315			
EL12L	12	M18 x 1.5	17.0	29.5	17	315	315		315			
EL15L	15	M22 x 1.5	21.0	32.5	19	315			315			
EL18L	18	M26 x 1.5	23.5	35.5	24	315			315			
EL22L	22	M30 x 2	27.5	38.5	27	160			160			
EL28L	28	M36 x 2	30.5	41.5	36	160			160			
EL35L	35	M45 x 2	34.5	51.0	41	160			160			
EL42L	42	M52 x 2	40.0	56.0	50	160			160			
EL06S	6	M14 x 1.5	16.0	27.0	12	630			630			
EL08S	8	M16 x 1.5	17.0	27.5	14	630			630			
EL10S	10	M18 x 1.5	17.5	30.0	17	630			630			
EL12S	12	M20 x 1.5	21.5	31.0	17	630	630		630			
EL14S	14	M22 x 1.5	22.0	35.0	19	630			630			
EL16S	16	M24 x 1.5	24.5	36.5	24	400			400			
EL20S	20	M30 x 2	26.5	44.5	27	400			400			
EL25S	25	M36 x 2	30.0	50.0	36	400			400			
EL30S	30	M42 x 2	35.5	55.0	41	400			400			
EL38S	38	M52 x 2	41.0	63.0	50	315			315			

For EO-2 part number, insert "Z" between size and pressure series.

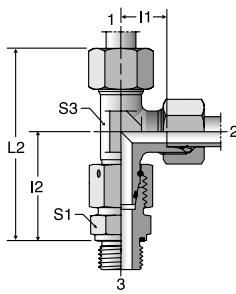
Example: EL06ZLCF

Dimensions and pressures for reference only, subject to change.

EL-R-ED

Adjustable Assembled Swivel Run Tee
24° Flareless / BSPP with EOlastic Seal

TUBE FITTING PART #	END SIZE		I 1 (mm)	I 2 (mm)	L2 (mm)	S1 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)								
								EO		EO-2						
	1 & 2 (mm)	3 BSPP						CF	71	MS	CF					
EL06LRED	6	G 1/8 A	12.0	34.5	61	14	12	315			315					
EL08LRED	8	G 1/4 A	14.0	37.5	66	19	12	315			315					
EL10LRED	10	G 1/4 A	15.0	40.0	70	19	14	315			315					
EL12LRED	12	G 3/8 A	17.0	42.0	74	22	17	315			315					
EL15LRED	15	G 1/2 A	21.0	46.5	83	27	19	315			315					
EL18LRED	18	G 1/2 A	23.5	50.0	90	27	24	315			315					
EL22LRED	22	G 3/4 A	27.5	55.0	99	32	27	160			160					
EL28LRED	28	G 1 A	30.5	59.0	106	41	36	160			160					
EL35LRED	35	G 1 1/4 A	34.5	68.5	125	50	41				160					
EL42LRED	42	G 1 1/2 A	40.0	75.0	138	55	50				160					
EL06SRED	6	G 1/4 A	16.0	40.0	71	19	12	630			630					
EL08SRED	8	G 1/4 A	17.0	42.5	74	19	14	630			630					
EL10SRED	10	G 3/8 A	17.5	45.0	79	22	17	630			630					
EL12SRED	12	G 3/8 A	21.5	48.0	86	22	17	630			630					
EL14SRED	14	G 1/2 A	22.0	54.0	94	27	19	630								
EL16SRED	16	G 1/2 A	24.5	55.0	98	27	24	400			400					
EL20SRED	20	G 3/4 A	26.5	65.0	113	32	27	400			400					
EL25SRED	25	G 1 A	30.0	73.0	127	41	36	400			400					
EL30SRED	30	G 1 1/4 A	35.5	78.5	141	50	41				400					
EL38SRED	38	G 1 1/2 A	41.0	89.0	161	55	50				315					

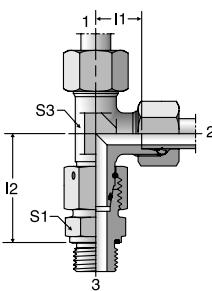


For EO-2 part number, insert "Z" between size and pressure series.
Example: EL06ZLREDCF

EL-M-ED

Adjustable Assembled Swivel Run Tee
24° Flareless / Metric Parallel with EOlastic Seal

TUBE FITTING PART #	END SIZE		I 1 (mm)	I 2 (mm)	S1 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)							
							EO		EO-2					
	1 & 2 (mm)	Metric					CF	71	MS	CF				
EL06LMED	6	M10 x 1	12.0	34.5	14	12	315							
EL08LMED	8	M12 x 1.5	14.0	37.5	17	12	315							
EL10LMED	10	M14 x 1.5	15.0	40.0	19	14	315							
EL12LMED	12	M16 x 1.5	17.0	42.0	22	17	315							
EL15LMED	15	M18 x 1.5	21.0	46.5	24	19								
EL18LMED	18	M22 x 1.5	23.5	50.0	27	24	315							
EL22LMED	22	M26 x 1.5	27.5	55.0	32	27	160							
EL28LMED	28	M33 x 2	30.5	59.0	41	36	160							
EL35LMED	35	M42 x 2	34.5	68.5	50	41								
EL42LMED	42	M48 x 2	40.0	75.0	55	50								
EL06SMED	6	M12 x 1.5	16.0	40.0	17	12	630							
EL08SMED	8	M14 x 1.5	17.0	42.5	19	14								
EL10SMED	10	M16 x 1.5	17.5	45.0	22	17								
EL12SMED	12	M18 x 1.5	21.5	48.0	24	17	630							
EL14SMED	14	M20 x 1.5	22.0	54.0	27	19								
EL16SMED	16	M22 x 1.5	24.5	55.0	27	24	400							
EL20SMED	20	M27 x 2	26.5	65.0	32	27	400							
EL25SMED	25	M33 x 2	30.0	73.0	41	36	400							
EL30SMED	30	M42 x 2	35.5	78.5	50	41								
EL38SMED	38	M48 x 2	41.0	89.0	55	50	315							

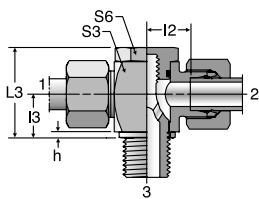


For EO-2 part number, insert "Z" between size and pressure series.
Example: EL06ZLMEDCF

Dimensions and pressures for reference only, subject to change.

TH-R

High Pressure Banjo Tee
24° Flareless / 24° Flareless / BSPP

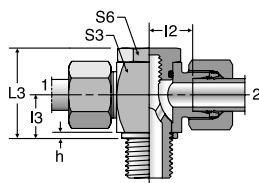


TUBE FITTING PART #	END SIZE		h (mm)	I 2 (mm)	I 3 (mm)	L 3 (mm)	S 3 (mm)	S 6 (mm)	STANDARD Pressure Rating (bar)									
									EO		EO-2							
	1 & 2 (mm)	3 BSPP							CF	71	MS	CF						
TH06LR	6	G 1/8 A	2.5	12.0	10.5	24	17	17	250			250						
TH08LR	8	G 1/4 A	3.0	14.5	14.0	30	22	19	250			250						
TH10LR	10	G 1/4 A	3.0	15.5	14.0	30	22	19	250			250						
TH12LR	12	G 3/8 A	3.0	18.0	16.5	36	27	24	250	250		250						
TH15LR	15	G 1/2 A	4.5	21.5	21.5	45	32	30	250			250						
TH18LR	18	G 1/2 A	4.5	21.0	21.5	45	32	30	250			250						
TH22LR	22	G 3/4 A	3.5	27.5	24.0	53	41	36	160			160						
TH28LR	28	G 1 A	3.5	32.0	30.5	66	50	46	160			160						
TH35LR	35	G 1 1/4 A	3.5	36.0	35.5	76	60	55	160			160						
TH42LR	42	G 1 1/2 A	3.5	40.5	40.5	87	70	60	160			160						
TH06SR	6	G 1/4 A	3.0	16.5	14.0	30	22	19	315			315						
TH08SR	8	G 1/4 A	3.0	16.5	14.0	30	22	19	315			315						
TH10SR	10	G 3/8 A	3.0	18.5	16.5	36	27	24	315			315						
TH12SR	12	G 3/8 A	3.0	18.5	16.5	36	27	24	315			315						
TH14SR	14	G 1/2 A	4.5	22.5	21.5	45	32	30	315			315						
TH16SR	16	G 1/2 A	4.5	22.0	21.5	45	32	30	315			315						
TH20SR	20	G 3/4 A	3.5	26.5	24.0	53	41	36	160			160						
TH25SR	25	G 1 A	3.5	31.5	30.5	66	50	46	160			160						
TH30SR	30	G 1 1/4 A	3.5	37.0	35.5	76	60	55	160			160						
TH38SR	38	G 1 1/2 A	3.5	41.5	40.5	87	70	60	160			160						

For EO-2 part number, insert "Z" between size and pressure series.
Example: TH06ZLRCF

TH-M

High Pressure Banjo Tee
24° Flareless / 24° Flareless / Metric Parallel



TUBE FITTING PART #	END SIZE		h (mm)	I 2 (mm)	I 3 (mm)	L 3 (mm)	S 3 (mm)	S 6 (mm)	STANDARD Pressure Rating (bar)									
									EO		EO-2							
	1 & 2 (mm)	3 Metric							CF	71	MS	CF						
TH06LM	6	M10 x 1	2.5	12.0	10.5	24.0	17	17	250			250						
TH08LM	8	M12 x 1.5	3.0	14.5	14.0	30.0	22	19	250			250						
TH10LM	10	M14 x 1.5	3.0	15.5	14.0	30.0	22	19	250			250						
TH12LM	12	M16 x 1.5	3.0	18.0	16.5	36.0	27	24	250			250						
TH15LM	15	M18 x 1.5	3.0	21.5	18.5	39.5	30	30	250			250						
TH18LM	18	M22 x 1.5	4.5	21.0	21.5	45.0	32	30	250			250						
TH22LM	22	M26 x 1.5	3.5	27.5	24.0	53.0	41	36	160			160						
TH28LM	28	M33 x 2	3.5	32.0	30.5	66.0	50	46	160			160						
TH35LM	35	M42 x 2	3.5	36.0	35.5	76.0	60	55	160			160						
TH42LM	42	M48 x 2	3.5	40.5	40.5	87.0	70	60	160			160						
TH06SM	6	M12 x 1.5	3.0	16.5	14.0	30.0	22	19	315	315		315						
TH08SM	8	M14 x 1.5	3.0	16.5	14.0	30.0	22	19	315	315		315						
TH10SM	10	M16 x 1.5	3.0	18.5	16.5	36.0	27	24	315	315		315						
TH12SM	12	M18 x 1.5	3.0	20.0	18.5	39.5	27	27	315	315		315						
TH14SM	14	M20 x 1.5	3.0	22.5	20.0	43.5	32	30	315	315		315						
TH16SM	16	M22 x 1.5	4.5	22.0	21.5	45.0	32	30	315	315		315						
TH20SM	20	M27 x 2	3.5	26.5	24.0	53.0	41	36	160	160		160						
TH25SM	25	M33 x 2	3.5	31.5	30.5	66.0	50	46	160			160						
TH30SM	30	M42 x 2	3.5	37.0	35.5	76.0	60	55	160			160						
TH38SM	38	M48 x 2	3.5	41.5	40.5	87.0	70	60	160			160						

For EO-2 part number, insert "Z" between size and pressure series.
Example: TH06ZLMCF

Dimensions and pressures for reference only, subject to change.

TH-R-KDS

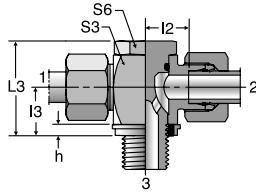
High Pressure Banjo Tee

24° Flareless / 24° Flareless / BSPP

TUBE FITTING PART #	END SIZE		h (mm)	I 2 (mm)	I 3 (mm)	L3 (mm)	S3 (mm)	S6 (mm)	STANDARD Pressure Rating (bar)									
	1 & 2 (mm)	3 BSPP							EO		EO-2							
									CF	71	MS	CF						
TH06LRKDS	6	G 1/8 A	2.5	12.0	10.5	24	17	17	315									
TH08LRKDS	8	G 1/4 A	3.0	14.5	14.0	30	22	19	315			315						
TH10LRKDS	10	G 1/4 A	3.0	15.5	14.0	30	22	19				315						
TH12LRKDS	12	G 3/8 A	3.0	18.0	16.5	36	27	24	315									
TH15LRKDS	15	G 1/2 A	4.5	21.5	21.5	45	32	30										
TH18LRKDS	18	G 1/2 A	4.5	21.0	21.5	45	32	30				315						
TH22LRKDS	22	G 3/4 A	3.5	27.5	24.0	53	41	36										
TH28LRKDS	28	G 1 A	3.5	32.0	30.5	66	50	46										
TH35LRKDS	35	G 1 1/4 A	3.5	36.0	35.5	76	60	55										
TH42LRKDS	42	G 1 1/2 A	3.5	40.5	40.5	87	70	60										
TH06SRKDS	6	G 1/4 A	3.0	16.5	14.0	30	22	19										
TH08SRKDS	8	G 1/4 A	3.0	16.5	14.0	30	22	19	400									
TH10SRKDS	10	G 3/8 A	3.0	18.5	16.5	36	27	24										
TH12SRKDS	12	G 3/8 A	3.0	18.5	16.5	36	27	24	400									
TH14SRKDS	14	G 1/2 A	4.5	22.5	21.5	45	32	30										
TH16SRKDS	16	G 1/2 A	4.5	22.0	21.5	45	32	30										
TH20SRKDS	20	G 3/4 A	3.5	26.5	24.0	53	41	36	315									
TH25SRKDS	25	G 1 A	3.5	31.5	30.5	66	50	46										
TH30SRKDS	30	G 1 1/4 A	3.5	37.0	35.5	76	60	55	160									
TH38SRKDS	38	G 1 1/2 A	3.5	41.5	40.5	87	70	60	160									

For EO-2 part number, insert "Z" between size and pressure series.

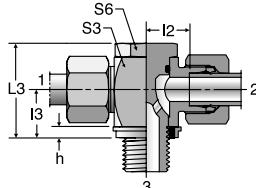
Example: TH06ZLRKDSCF

**TH-M-KDS**

High Pressure Banjo Tee

24° Flareless / 24° Flareless / Metric Parallel

TUBE FITTING PART #	END SIZE		h (mm)	I 2 (mm)	I 3 (mm)	L3 (mm)	S3 (mm)	S6 (mm)	STANDARD Pressure Rating (bar)									
	1 & 2 (mm)	3 Metric							EO		EO-2							
									CF	71	MS	CF						
TH06LMKDS	6	M10 x 1	2.5	12.0	10.5	24	17	17										
TH08LMKDS	8	M12 x 1.5	3.0	14.5	14.0	30	22	19	315									
TH10LMKDS	10	M14 x 1.5	3.0	15.5	14.0	30	22	19										
TH12LMKDS	12	M16 x 1.5	3.0	18.0	16.5	36	27	24										
TH15LMKDS	15	M18 x 1.5	3.0	21.5	18.5	39.5	30	30	315									
TH18LMKDS	18	M22 x 1.5	4.5	21.0	21.5	45	32	30										
TH22LMKDS	22	M26 x 1.5	3.5	27.5	24.0	53	41	36										
TH28LMKDS	28	M33 x 2	3.5	32.0	30.5	66	50	46										
TH35LMKDS	35	M42 x 2	3.5	36.0	35.5	76	60	55										
TH42LMKDS	42	M48 x 2	3.5	40.5	40.5	87	70	60										
TH06SMKDS	6	M12 x 1.5	3.0	16.5	14.0	30	22	19										
TH08SMKDS	8	M14 x 1.5	3.0	16.5	14.0	30	22	19										
TH10SMKDS	10	M16 x 1.5	3.0	18.5	16.5	36	27	24										
TH12SMKDS	12	M18 x 1.5	3.0	20.0	18.5	39.5	27	27										
TH14SMKDS	14	M20 x 1.5	3.0	22.5	20.0	43.5	32	30										
TH16SMKDS	16	M22 x 1.5	4.5	22.0	21.5	45	32	30	315									
TH20SMKDS	20	M27 x 2	3.5	26.5	24.0	53	41	36										
TH25SMKDS	25	M33 x 2	3.5	31.5	30.5	66	50	46										
TH30SMKDS	30	M42 x 2	3.5	37.0	35.5	76	60	55										
TH38SMKDS	38	M48 x 2	3.5	41.5	40.5	87	70	60										



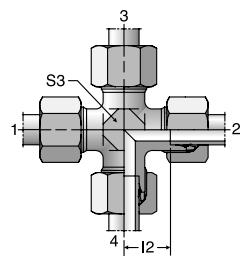
For EO-2 part number, insert "Z" between size and pressure series.

Example: TH06ZLMKDSCF

Dimensions and pressures for reference only, subject to change.

K

Union Cross
24° Flareless

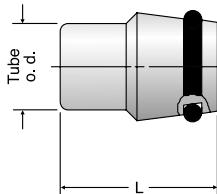


TUBE FITTING PART #	END SIZE 1 - 4 (mm)	I 2 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)					
				EO			EO-2		
				CF	71	MS	CF	71	
K04LL	4	11.0	9	100					
K06LL	6	9.5	9	100					
K08LL	8	11.5	12	100					
K06L	6	12.0	12	315			315		
K08L	8	14.0	12	315			315		
K10L	10	15.0	14	315			315		
K12L	12	17.0	17	315			315		
K15L	15	21.0	19	315			315		
K18L	18	23.5	24	315			315		
K22L	22	27.5	27	160			160		
K28L	28	30.5	36	160			160		
K35L	35	34.5	41	160			160		
K42L	42	40.0	50				160		
K06S	6	16.0	12	630	630				
K08S	8	17.0	14	630			630		
K10S	10	17.5	17	630					
K12S	12	21.5	17	630					
K14S	14	22.0	19	400			400		
K16S	16	24.5	24	400					
K20S	20	26.5	27	315			315		
K25S	25	30.0	36	315			315		
K30S	30	35.5	41	315			315		
K38S	38	41.0	50	315					

For EO-2 part number, insert "Z" between size and pressure series.
Example: K06ZLCF

VKA

Cap

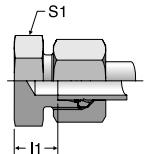


TUBE FITTING PART #	END SIZE 1 (mm)	END SIZE L (mm)	STANDARD Pressure Rating (bar)		
			EO		
			CF	71	MS
VKA06	6	18.5	315		200
VKA08	8	18.5	315	315	200
VKA10	10	20.0	315	315	200
VKA12	12	20.5	315	315	200
VKA15	15	20.5	315	315	200
VKA18	18	22.5	315		200
VKA22	22	25.0	160	160	100
VKA28	28	25.5	160		100
VKA35	35	30.0	160	160	
VKA42	42	30.0	160		
VKA06	6	18.5	630		400
VKA08	8	18.5	630	630	400
VKA10	10	20.0	630	630	400
VKA12	12	20.5	630	630	400
VKA14	14	22.5	630	630	400
VKA16	16	23.5	400		250
VKA20	20	28.5	400	400	250
VKA25	25	29.0	400	400	250
VKA30	30	30.5	400	400	
VKA38	38	33.0	315	315	

Note: Part does not include tube nut.
Sizes 6,8,10 & 12 work with L and S Series.

ROV

Plug
24° Flareless



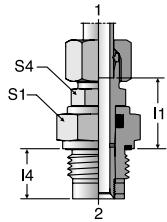
TUBE FITTING PART #	END SIZE 1 (mm)	END SIZE I 1 (mm)	END SIZE S1 (mm)	STANDARD Pressure Rating (bar)				
				EO				
				CF	71	MS	CF	71
ROV06L	6	7	12	315			315	
ROV08L	8	8	14	315			315	
ROV10L	10	9	17	315			315	
ROV12L	12	10.0	19	315	315		315	
ROV15L	15	11.0	24	315			315	
ROV18L	18	11.5	27	315			315	
ROV22L	22	13.5	32	160	160		160	
ROV28L	28	14.5	41	160			160	
ROV35L	35	14.5	46	160			160	
ROV42L	42	16.0	55	160			160	
ROV06S	6	11.0	14	630	630		630	
ROV08S	8	13.0	17	630			630	
ROV10S	10	12.5	19	630			630	
ROV12S	12	14.5	22	630	630		630	
ROV14S	14	16.0	24	630				
ROV16S	16	15.5	27	400			400	
ROV20S	20	17.5	32	400			400	
ROV25S	25	20.0	41	400			400	
ROV30S	30	20.5	46	400			400	
ROV38S	38	23.0	55	315			315	

For EO-2 part number, insert "Z" between size and pressure series.
Example: ROV06ZLCF

Dimensions and pressures for reference only, subject to change.

DVGE-R

Plain Bearing Rotary Straight
24° Flareless / BSPP with EOlastic Seal*

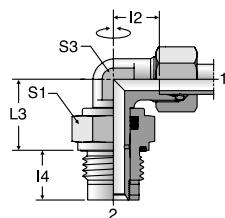


TUBE FITTING PART #	END SIZE		I 1 (mm)	I 4 (mm)	S 1 (mm)	S 4 (mm)	STANDARD Pressure Rating (bar)						
							EO						
	1 (mm)	2 BSPP					CF	71	MS				
DVGE06LR	6	G 1/4 A	21.0	18.0	19	12	40						
DVGE08LR	8	G 1/4 A	21.0	18.0	19	14	40						
DVGE10LR	10	G 3/8 A	25.0	18.0	24	17	40						
DVGE12LR	12	G 1/2 A	27.0	21.0	27	19	40						
DVGE15LR	15	G 3/4 A	32.0	24.0	32	24	40						
DVGE18LR	18	G 1 A	35.0	27.5	41	27	40						
DVGE22LR	22	G 1 A	39.0	27.5	41	32	40						
DVGE28LR	28	G 1 1/4 A	40.5	31.0	50	41	40						
DVGE35LR	35	G 1/2 A	44.5	35.0	55	46							
DVGE06SR	6	G 1/4 A	23.0	18.0	19	14							
DVGE08SR	8	G 1/4 A	24.0	18.0	19	17	100						
DVGE10SR	10	G 3/8 A	26.5	18.0	24	19	100						
DVGE12SR	12	G 1/2 A	28.5	21.0	27	22							
DVGE16SR	16	G 3/4 A	33.5	24.0	32	27							
DVGE20SR	20	G 1 A	38.0	27.5	41	32	100						
DVGE25SR	25	G 1 A	40.5	27.5	41	41	100						
DVGE30SR	30	G 1 1/4 A	41.5	31.0	50	46	100						
DVGE38SR	38	G 1 1/2 A	47.0	35.0	55	55							

*Note: Port depth must be deeper than standard DIN 3852-2.

DVWE-R

Plain Bearing Rotary Elbow
24° Flareless / BSPP with EOlastic Seal*



TUBE FITTING PART #	END SIZE		I 2 (mm)	I 4 (mm)	L 3 (mm)	S 1 (mm)	S 3 (mm)	STANDARD Pressure Rating (bar)							
								EO							
	1 (mm)	2 BSPP						CF	71	MS					
DVWE06LR	6	G 1/4 A	12.0	18.0	20.0	19	12	40							
DVWE08LR	8	G 1/4 A	14.0	18.0	21.0	19	12	40							
DVWE10LR	10	G 3/8 A	15.0	18.0	26.0	24	14	40							
DVWE12LR	12	G 1/2 A	17.0	21.0	27.0	27	17	40							
DVWE15LR	15	G 3/4 A	21.0	24.0	33.0	32	19	40							
DVWE18LR	18	G 1 A	23.5	27.5	37.5	41	27	40							
DVWE22LR	22	G 1 A	27.5	27.5	39.5	41	27	40							
DVWE28LR	28	G 1 1/4 A	30.5	31.0	44.0	50	36								
DVWE35LR	35	G 1/2 A	34.5	35.0	54.0	55	41								
DVWE06SR	6	G 1/4 A	16.0	18.0	21.0	19	12								
DVWE08SR	8	G 1/4 A	17.0	18.0	22.0	19	14	100							
DVWE10SR	10	G 3/8 A	17.5	18.0	27.0	24	17	100							
DVWE12SR	12	G 1/2 A	21.5	21.0	28.0	27	17	100							
DVWE16SR	16	G 3/4 A	24.5	24.0	34.0	32	24								
DVWE20SR	20	G 1 A	26.5	27.5	39.5	41	27								
DVWE25SR	25	G 1 A	30.0	27.5	42.5	41	36	100							
DVWE30SR	30	G 1 1/4 A	35.5	31.0	48.0	50	41	100							
DVWE38SR	38	G 1 1/2 A	41.0	35.0	55.0	55	50								

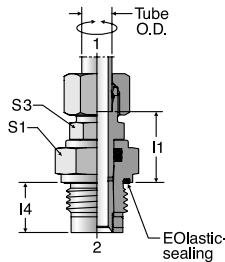
*Note: Port depth must be deeper than standard DIN 3852-2.

Dimensions and pressures for reference only, subject to change.

DVGE-M

Plain Bearing Rotary Straight
24° Flareless / Metric Parallel with EOlastic Seal*

TUBE FITTING PART #	END SIZE		I 1 (mm)	I 4 (mm)	S1 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)						
							EO						
	1 (mm)	2 Metric					CF	71	MS				
DVGE06LM	6	M 14 x 1.5	20.0	18.0	19	12							
DVGE08LM	8	M 14 x 1.5	21.0	18.0	19	12							
DVGE10LM	10	M 18 x 1.5	26.0	18.0	24	14	40						
DVGE12LM	12	M 22 x 1.5	27.0	21.0	27	17							
DVGE15LM	15	M 27 x 2	33.0	24.0	32	19							
DVGE18LM	18	M 33 x 2	37.5	27.5	41	27							
DVGE22LM	22	M 33 x 2	39.5	27.5	41	27							
DVGE28LM	28	M 42 x 2	44.0	31.0	50	36	40						
DVGE35LM	35	M 48 x 2	54.0	35.0	55	41							
DVGE06SM	6	M 14 x 1.5	21.0	18.0	19	12							
DVGE08SM	8	M 14 x 1.5	22.0	18.0	19	14							
DVGE10SM	10	M 18 x 1.5	27.0	18.0	24	17							
DVGE12SM	12	M 22 x 1.5	28.0	21.0	27	17							
DVGE16SM	16	M 27 x 2	34.0	24.0	32	24							
DVGE20SM	20	M 33 x 2	39.5	27.5	41	27							
DVGE25SM	25	M 33 x 2	42.5	27.5	41	36							
DVGE30SM	30	M 42 x 2	48.0	31.0	50	41	100						
DVGE38SM	38	M 48 x 2	55.0	35.0	55	50							

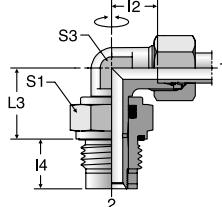


*Note: Port depth must be deeper than standard DIN 3852-1.

DVWE-M

Plain Bearing Rotary Elbow
24° Flareless / Metric Parallel with EOlastic Seal*

TUBE FITTING PART #	END SIZE		I 2 (mm)	I 4 (mm)	L3 (mm)	S1 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)							
								EO							
	1 (mm)	2 Metric						CF	71	MS					
DVWE06LM	6	M 14 x 1.5	12.0	18.0	20.0	19	12	40							
DVWE08LM	8	M 14 x 1.5	14.0	18.0	21.0	19	12	40							
DVWE10LM	10	M 18 x 1.5	15.0	18.0	26.0	24	14								
DVWE12LM	12	M 22 x 1.5	17.0	21.0	27.0	27	17								
DVWE15LM	15	M 27 x 2	21.0	24.0	33.0	32	19								
DVWE18LM	18	M 33 x 2	23.5	27.5	37.5	41	27								
DVWE22LM	22	M 33 x 2	27.5	27.5	39.5	41	27								
DVWE28LM	28	M 42 x 2	30.5	31.0	44.0	50	36								
DVWE35LM	35	M 48 x 2	34.5	35.0	54.0	55	41								
DVWE06SM	6	M 14 x 1.5	16.0	18.0	21.0	19	12	100							
DVWE08SM	8	M 14 x 1.5	17.0	18.0	22.0	19	14	100							
DVWE10SM	10	M 18 x 1.5	17.5	18.0	27.0	24	17								
DVWE12SM	12	M 22 x 1.5	21.5	21.0	28.0	27	17								
DVWE16SM	16	M 27 x 2	24.5	24.0	34.0	32	24								
DVWE20SM	20	M 33 x 2	26.5	27.5	39.5	41	27								
DVWE25SM	25	M 33 x 2	30.0	27.5	42.5	41	36								
DVWE30SM	30	M 42 x 2	35.5	31.0	48.0	50	41								
DVWE38SM	38	M 48 x 2	41.0	35.0	55.0	55	50								

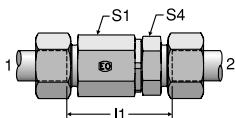


*Note: Port depth must be deeper than standard DIN 3852-1.

Dimensions and pressures for reference only, subject to change.

DG101

Ball Bearing Rotary Union
24° Flareless / 24° Flareless

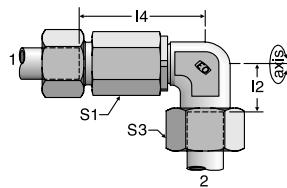


TUBE FITTING PART #	END SIZE 1 & 2 (mm)	STANDARD Pressure Rating (bar)					
		EO			CF	71	MS
		I 1 (mm)	S 1 (mm)	S 4 (mm)			
DG101/06S	6	47	22	17			
DG101/08S	8	47	22	17	•		
DG101/12S	12	57	30	24	•		
DG101/16S	16	57	30	27	•		
DG101/20S	20	71	41	36	•		
DG101/25S	25	72	41	41	•		
DG101/30S	30	82	60	46			
DG101/38S	38	82	60	55			

Note: See Table F1 on page F7 for RPM/working pressure data.

DG103

Ball Bearing Rotary Elbow
24° Flareless / 24° Flareless

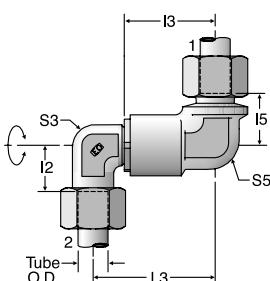


TUBE FITTING PART #	END SIZE 1 & 2 (mm)	STANDARD Pressure Rating (bar)					
		EO			CF	71	MS
		I 2 (mm)	I 4 (mm)	S 1 (mm)			
DG103/06S	6	16.0	44.5	22	17		
DG103/08S	8	17.0	44.5	22	19	•	
DG103/12S	12	21.5	55.5	30	24	•	
DG103/16S	16	24.5	54.5	30	30	•	
DG103/20S	20	26.5	72.5	41	36	•	
DG103/25S	25	30.0	71.0	41	46		
DG103/30S	30	35.5	89.0	60	50	•	
DG103/38S	38	41.0	86.5	60	60		

Note: See Table F1 on page F7 for RPM/working pressure data.

DG105

Ball Bearing Rotary Union
24° Flareless / 24° Flareless

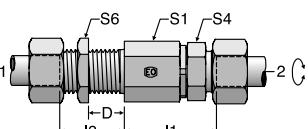


TUBE FITTING PART #	END SIZE 1 & 2 (mm)	STANDARD Pressure Rating (bar)					
		EO			CF	71	MS
		I 2 (mm)	I 3 (mm)	I 5 (mm)			
DG105/12S	12	21.5	39.5	26.5	81	22	24
DG105/16S	16	24.5	39.5	25.5	87	22	24
DG105/20S	20	26.5	56.5	39.5	109	36	32
DG105/25S	25	30.0	56.5	38.0	116	36	32
DG105/30S	30	35.5	65.0	44.5	133	50	50
DG105/38S	38	41.0	65.0	42.0	145	50	50

Note: See Table F1 on page F7 for RPM/working pressure data.

DG107

Ball Bearing Rotary Bulkhead Union
24° Flareless / 24° Flareless



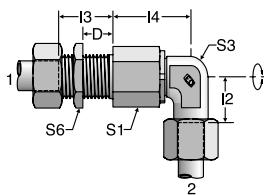
TUBE FITTING PART #	END SIZE 1 & 2 (mm)	STANDARD Pressure Rating (bar)					
		EO			CF	71	MS
		D (mm)	I 1 (mm)	I 3 (mm)			
DG107/06S	6	5	42.0	16.0	22	17	19
DG107/08S	8	5	42.0	16.0	22	17	22
DG107/12S	12	5	52.5	15.5	30	24	27
DG107/16S	16	5	51.5	17.5	30	27	32
DG107/20S	20	15	65.5	28.5	41	36	41
DG107/25S	25	15	66.0	30.0	41	41	46
DG107/30S	30	15	75.5	30.5	60	46	50
DG107/38S	38	15	76.0	31.0	60	55	65

Note: See Table F1 on page F7 for RPM/working pressure data.

Dimensions and pressures for reference only, subject to change.

DG108

Ball Bearing Rotary Bulkhead Elbow
24° Flareless / 24° Flareless

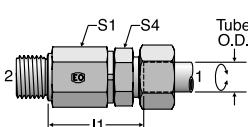


TUBE FITTING PART #	END SIZE 1 & 2 (mm)	STANDARD Pressure Rating (bar)						
		EO			CF	71	MS	
		D	I2 (mm)	I3 (mm)	I4 (mm)	S1 (mm)	S3 (mm)	S6 (mm)
DG108/06S	6	5	16.0	16.0	39.5	22	17	19
DG108/08S	8	5	17.0	16.0	39.5	22	17	22
DG108/12S	12	5	21.5	15.5	51.0	30	22	27
DG108/16S	16	5	24.5	17.5	49.0	30	22	32
DG108/20S	20	15	26.5	28.5	67.0	41	36	41
DG108/25S	25	15	30.0	30.0	65.0	41	36	46
DG108/30S	30	15	35.5	30.5	82.5	60	50	50
DG108/38S	38	15	41.0	31.0	80.5	60	50	65

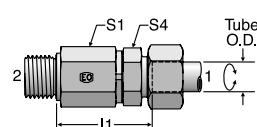
Note: See Table F1 on page F7 for RPM/working pressure data.

DG102-R

Ball Bearing Rotary Straight
24° Flareless / BSPP

**DG102-M**

Ball Bearing Rotary Straight
24° Flareless / Metric Parallel



TUBE FITTING PART #	END SIZE		I1 (mm)	S1 (mm)	S4 (mm)	STANDARD Pressure Rating (bar)					
	EO					CF	71	MS			
	1 (mm)	2 BSPP									
DG102/06SR	6	G 1/4 A	42.0	22	17	•					
DG102/08SR	8	G 1/4 A	42.0	22	17	•					
DG102/12SR	12	G 3/8 A	52.5	30	24	•					
DG102/16SR	16	G 1/2 A	51.5	30	27	•					
DG102/20SR	20	G 3/4 A	65.5	41	36						
DG102/25SR	25	G 1 A	66.0	41	41						
DG102/30SR	30	G 1 1/4 A	75.5	60	46	•					
DG102/38SR	38	G 1 1/2 A	76.0	60	55	•					

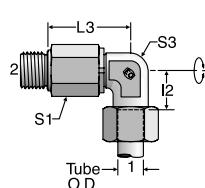
Note: See Table F1 on page F7 for RPM/working pressure data.

TUBE FITTING PART #	END SIZE		I1 (mm)	S1 (mm)	S4 (mm)	STANDARD Pressure Rating (bar)					
	EO					CF	71	MS			
	1 (mm)	2 Metric									
DG102/06SM	6	M14 x 1.5	42.0	22	17	•					
DG102/08SM	8	M14 x 1.5	42.0	22	17						
DG102/12SM	12	M18 x 1.5	52.5	30	24	•					
DG102/16SM	16	M22 x 1.5	51.5	30	27	•					
DG102/20SM	20	M27 x 2	65.5	41	36						
DG102/25SM	25	M33 x 2	66.0	41	41						
DG102/30SM	30	M42 x 2	75.5	60	46						
DG102/38SM	38	M48 x 2	76.0	60	55						

Note: See Table F1 on page F7 for RPM/working pressure data.

DG104-R

Ball Bearing Rotary Elbow
24° Flareless / BSPP with
EOlastic Seal



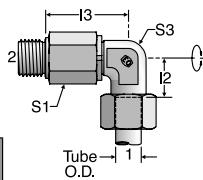
TUBE FITTING PART #	END SIZE		I2 (mm)	L3 (mm)	S1 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)						
	EO						CF	71	MS				
	1 (mm)	2 BSPP											
DG104/06SR	6	G 1/4 A	16.0	39.5	22	17	•						
DG104/08SR	8	G 1/4 A	17.0	39.5	22	17	•						
DG104/12SR	12	G 3/8 A	21.5	51.0	30	22	•						
DG104/16SR	16	G 1/2 A	24.5	49.0	30	22	•						
DG104/20SR	20	G 3/4 A	26.5	67.0	41	36	•						
DG104/25SR	25	G 1 A	30.0	65.0	41	36	•						
DG104/30SR	30	G 1 1/4 A	35.5	82.5	60	50	•						
DG104/38SR	38	G 1 1/2 A	41.0	80.5	60	50							

Note: See Table F1 on page F7 for RPM/working pressure data.

Dimensions and pressures for reference only, subject to change.

DG104-M

Ball Bearing Rotary Elbow
24° Flareless / Metric Parallel

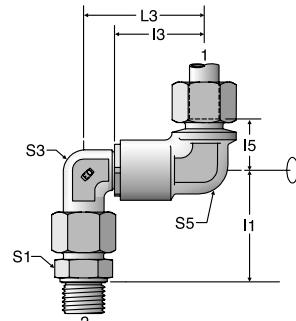


TUBE FITTING PART #	END SIZE		L2 (mm)	L3 (mm)	S1 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)						
							EO						
	1 (mm)	2 Metric					CF	71	MS				
DG104/06SM	6	M14 x 1.5	16.0	39.5	22	17							
DG104/08SM	8	M14 x 1.5	17.0	39.5	22	17	•						
DG104/12SM	12	M18 x 1.5	21.5	51.0	30	22	•						
DG104/16SM	16	M22 x 1.5	24.5	49.0	30	22	•						
DG104/20SM	20	M27 x 2	26.5	67.0	41	36							
DG104/25SM	25	M33 x 2	30.0	65.0	41	36	•						
DG104/30SM	30	M42 x 2	35.5	82.5	60	50							
DG104/38SM	38	M48 x 2	41.0	80.5	60	50							

Note: See Table F1 on page F7 for RPM/working pressure data.

DG106-R

Ball Bearing Rotary Double Elbow
24° Flareless / BSPP with EOlastic Seal

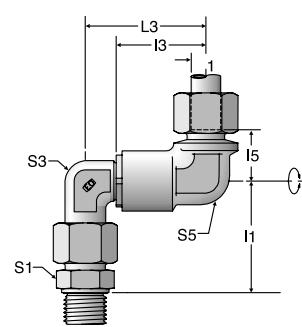


TUBE FITTING PART #	END SIZE		L1 (mm)	L3 (mm)	L5 (mm)	L3 (mm)	S1 (mm)	S3 (mm)	S5 (mm)	STANDARD Pressure Rating (bar)									
										EO									
	1 (mm)	2 BSPP								CF	71	MS							
DG106/12SR	12	G 3/8 A	55.5	39.5	26.5	53.0	22	24	22	•									
DG106/16SR	16	G 1/2 A	61.5	39.5	25.5	53.0	27	24	24										
DG106/20SR	20	G 3/4 A	69.5	56.5	39.5	76.0	32	36	32										
DG106/25SR	25	G 1 A	78	56.5	38.0	76.0	41	36	32										
DG106/30SR	30	G 1 1/4 A	86.5	65.0	44.5	92.5	50	50	50										
DG106/38SR	38	G 1 1/2 A	101.0	65.0	42.0	92.5	55	50	50										

Note: See Table F1 on page F7 for RPM/working pressure data.

DG106-M

Ball Bearing Rotary Double Elbow
24° Flareless / Metric Parallel



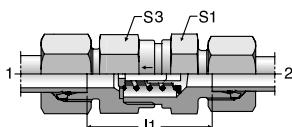
TUBE FITTING PART #	END SIZE		L1 (mm)	L3 (mm)	L5 (mm)	L3 (mm)	S1 (mm)	S3 (mm)	S5 (mm)	STANDARD Pressure Rating (bar)									
										EO									
	1 (mm)	2 Metric								CF	71	MS							
DG106/12SM	12	M18 x 1.5	55.5	39.5	26.5	53	24	24	22	•									
DG106/16SM	16	M22 x 1.5	61.5	39.5	25.5	53	27	24	24										
DG106/20SM	20	M27 x 2	69.5	56.5	39.5	76	32	36	32										
DG106/25SM	25	M33 x 2	78.0	56.5	38.0	76	41	36	32										
DG106/30SM	30	M42 x 2	86.5	65.0	44.5	92.5	50	50	50										
DG106/38SM	38	M48 x 2	101.0	65.0	42.0	92.5	55	50	50										

Note: See Table F1 on page F7 for RPM/working pressure data.

Dimensions and pressures for reference only, subject to change.

RHD

Non-Return Valve
24° Flareless / 24° Flareless



TUBE FITTING PART #	END SIZE 1 & 2 (mm)	DN SIZE (mm)	I 1 (mm)	S1 (mm)	S3 (mm)	STANDARD					
						Pressure Rating (bar)			EO-2		
						CF	71	MS	CF	71	
RHD06L	6	4	29.0	17	17	250			250		
RHD08L	8	6	30.0	19	19	250			250		
RHD10L	10	8	40.5	22	24	250	250		250		
RHD12L	12	10	43.5	27	30	250	250		250		
RHD15L	15	12	47.5	27	32	250			250		
RHD18L	18	16	51.5	36	36	160			160		
RHD22L	22	20	61.5	41	46	160			160		
RHD28L	28	25	69.5	50	55	100			100		
RHD35L	35	32	74.5	60	60	100			100		
RHD42L	42	32	74.0	65	70	100			100		
RHD06S	6	3	34.5	19	19	400					
RHD08S	8	4	34.5	19	19	400					
RHD10S	10	6	40.5	22	24	400					
RHD12S	12	8	42.5	24	27	400			400		
RHD14S	14	10	47.5	27	32						
RHD16S	16	12	50.5	32	36	315	315				
RHD20S	20	16	54.5	41	46	250	250		250		
RHD25S	25	20	58.5	46	50	250	250				
RHD30S	30	25	69.5	60	60	250					
RHD38S	38	32	75.5	65	70	250					

Note: These valves are not compatible with steam, oxygen and explosive gases.

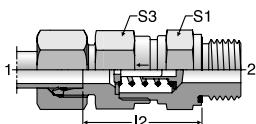
For EO-2 part number, insert "Z" between size and pressure series.

Example: RHD06ZLCF

For Optional Opening Pressures see page F8.

RHV-R-ED

Non-Return Valve
24° Flareless / BSPP
with EOlastic Seal



TUBE FITTING PART #	END SIZE		DN SIZE (mm)	I 2 (mm)	S1 (mm)	S3 (mm)	STANDARD					
	Pressure Rating (bar)						EO			EO-2		
	CF	71	MS	CF	71							
RHV06LRED	6	G 1/8 A	4	28.0	17	17	250					
RHV08LRED	8	G 1/4 A	6	30.0	19	19	250			250		
RHV10LRED	10	G 1/4 A	8	38.5	22	24	250					
RHV12LRED	12	G 3/8 A	10	42.5	27	30	250			250		
RHV15LRED	15	G 1/2 A	12	45.5	27	32	250					
RHV18LRED	18	G 1/2 A	16	50.0	36	36	160			160	160	
RHV22LRED	22	G 3/4 A	20	55.0	41	46	160			160	160	
RHV28LRED	28	G 1 A	25	63.0	50	55	100			100		
RHV35LRED	35	G 1 1/4 A	32	69.0	60	60	100			100		
RHV42LRED	42	G 1 1/2 A	32	68.5	65	70	100			100		
RHV06SRED	6	G 1/4 A	3	31.5	19	19	400					
RHV08SRED	8	G 1/4 A	4	31.5	19	19	400	400				
RHV10SRED	10	G 3/8 A	6	38.0	22	24	400					
RHV12SRED	12	G 3/8 A	8	41.0	24	27	400					
RHV14SRED	14	G 1/2 A	10	44.5	27	32						
RHV16SRED	16	G 1/2 A	12	48.0	32	36	315			315		
RHV20SRED	20	G 3/4 A	16	52.0	41	46	250					
RHV25SRED	25	G 1 A	20	54.5	46	50	250					
RHV30SRED	30	G 1 1/4 A	25	64.0	60	60	250					
RHV38SRED	38	G 1 1/2 A	32	69.5	65	70	250					

Note: These valves are not compatible with steam, oxygen and explosive gases.

For EO-2 part number, insert "Z" between size and pressure series.

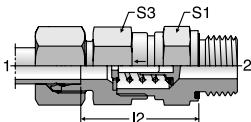
Example: RHV06ZLREDF

For Optional Opening Pressures see page F8.

Dimensions and pressures for reference only, subject to change.

RHV-M-ED

Non-Return Valve
24° Flareless / Metric Parallel
with EOlastic Seal



TUBE FITTING PART #	END SIZE		DN SIZE (mm)	I 2 (mm)	S1 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)			
	1 (mm)	2 Metric					EO		EO-2	
	CF	71	MS	CF	71					
RHV06LMED	6	M10 x 1	4	28.0	17	17	250			
RHV08LMED	8	M12 x 1.5	6	29.0	19	19	250			
RHV10LMED	10	M14 x 1.5	8	38.5	22	24				
RHV12LMED	12	M16 x 1.5	10	42.5	27	30	250			
RHV15LMED	15	M18 x 1.5	12	45.5	27	32				
RHV18LMED	18	M22 x 1.5	16	50.0	36	36				
RHV22LMED	22	M26 x 1.5	20	55.0	41	46				
RHV28LMED	28	M33 x 2	25	63.0	50	55				
RHV35LMED	35	M42 x 2	32	69.0	60	60				
RHV42LMED	42	M48 x 2	32	68.5	65	70				
RHV06SMED	6	M12 x 1.5	3	31.5	19	19				
RHV08SMED	8	M14 x 1.5	4	31.5	19	19				
RHV10SMED	10	M16 x 1.5	6	38.0	22	24				
RHV12SMED	12	M18 x 1.5	8	41.0	24	27				
RHV14SMED	14	M20 x 1.5	10	44.5	27	32				
RHV16SMED	16	M22 x 1.5	12	48.0	32	36				
RHV20SMED	20	M27 x 2	16	52.0	41	46				
RHV25SMED	25	M33 x 2	20	54.5	46	50				
RHV30SMED	30	M42 x 2	25	64.0	60	60				
RHV38SMED	38	M48 x 2	32	69.5	65	70				

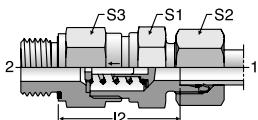
For EO-2 part number, insert "Z" between size and pressure series.

Example: RHV06ZLMEDCF

For Optional Opening Pressures see [page F8](#).

RHZ-R-ED

Non-Return Valve
24° Flareless / BSPP



TUBE FITTING PART #	END SIZE		DN SIZE (mm)	I 2 (mm)	S1 (mm)	S2 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)			
	1 (mm)	2 BSPP						EO		EO-2	
	CF	71	MS	CF	71						
RHZ06LRED	6	G 1/8 A	4	26.5	17	14	17	250			
RHZ08LRED	8	G 1/4 A	6	28.5	19	17	19	250			
RHZ10LRED	10	G 1/4 A	8	38.5	22	19	24	250			
RHZ12LRED	12	G 3/8 A	10	40.5	27	22	30	250		250	
RHZ15LRED	15	G 1/2 A	12	42.5	27	27	32	250		250	
RHZ18LRED	18	G 1/2 A	16	48.0	36	32	36	160		160	
RHZ22LRED	22	G 3/4 A	20	56.0	41	36	46	160		160	
RHZ28LRED	28	G 1 A	25	64.0	50	41	55	100		100	
RHZ35LRED	35	G 1 1/4 A	32	70.0	60	50	60	100			
RHZ42LRED	42	G 1 1/2 A	32	70.5	65	60	70				
RHZ06SRED	6	G 1/4 A	3	31.5	19	17	19	400			
RHZ08SRED	8	G 1/4 A	4	31.5	19	19	19	400			
RHZ10SRED	10	G 3/8 A	6	38.0	22	22	24		400		
RHZ12SRED	12	G 3/8 A	8	41.0	24	24	27				
RHZ14SRED	14	G 1/2 A	10	43.5	27	27	32				
RHZ16SRED	16	G 1/2 A	12	46.0	32	30	36	315			
RHZ20SRED	20	G 3/4 A	16	50.0	41	36	46	250			
RHZ25SRED	25	G 1 A	20	54.5	46	46	50	250			
RHZ30SRED	30	G 1 1/4 A	25	64.0	60	50	60				
RHZ38SRED	38	G 1 1/2 A	32	71.5	65	60	70				

For EO-2 part number, insert "Z" between size and pressure series.

Example: RHZ06ZLREDCF

For Optional Opening Pressures see [page F8](#).

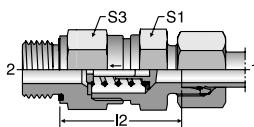
Dimensions and pressures for reference only, subject to change.



Note: These valves are not compatible with steam, oxygen and explosive gases.

RHZ-M-ED

Non-Return Valve
24° Flareless / Metric Parallel with
EOlastic Seal



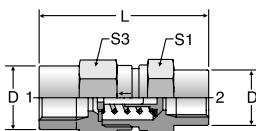
TUBE FITTING PART #	END SIZE		DN SIZE (mm)	I 2 (mm)	S1 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)			
	1 (mm)	2 Metric					EO	CF	71	MS
										EO-2
RHZ06LMED	6	M10 x 1	4	26.5	17	17	250			
RHZ08LMED	8	M12 x 1.5	6	28.5	19	19				
RHZ10LMED	10	M14 x 1.5	8	38.5	22	24	250			
RHZ12LMED	12	M16 x 1.5	10	40.5	27	30	250			
RHZ15LMED	15	M18 x 1.5	12	42.5	27	32				250
RHZ18LMED	18	M22 x 1.5	16	48.0	36	36				
RHZ22LMED	22	M26 x 1.5	20	56.0	41	46				
RHZ28LMED	28	M33 x 2	25	64.0	50	55				
RHZ35LMED	35	M42 x 2	32	70.0	60	60				
RHZ42LMED	42	M48 x 2	32	70.5	65	70				
RHZ06SMED	6	M12 x 1.5	3	31.5	19	19	400			
RHZ08SMED	8	M14 x 1.5	4	31.5	19	19				
RHZ10SMED	10	M16 x 1.5	6	38.0	22	24				
RHZ12SMED	12	M18 x 1.5	8	41.0	24	27				
RHZ14SMED	14	M20 x 1.5	10	43.5	27	32				
RHZ16SMED	16	M22 x 1.5	12	46.0	32	36				
RHZ20SMED	20	M27 x 2	16	50.0	41	46				
RHZ25SMED	25	M33 x 2	20	54.5	46	50				
RHZ30SMED	30	M42 x 2	25	64.0	60	60				
RHZ38SMED	38	M48 x 2	32	71.5	65	70				

For EO-2 part number, insert "Z" between size and pressure series.
Example: RHZ06ZLMEDCF

For Optional Opening Pressures see page F8.

RHDI

Non-Return Valve
BSPP Female / BSPP Female



TUBE FITTING PART #	END SIZE 1 & 2 BSPP	DN SIZE (mm)	D (mm)	L (mm)	S1 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)		
							EO	CF	71
							MS		
RHD11/8	G 1/8	3	19	42.5	19	19	400		
RHD11/4	G 1/4	4	19	51	19	19	400		
RHD13/8	G 3/8	8	24	60	24	27	400		
RHD11/2	G 1/2	12	32	72	32	36	315	315	
RHD13/4	G 3/4	16	41	84	41	46	250		
RHD11	G 1	20	46	95	46	50	250		
RHD111/4	G 1 1/4	25	60	110	60	60	250	250	
RHD111/2	G 1 1/2	32	65	114	65	70	250	250	

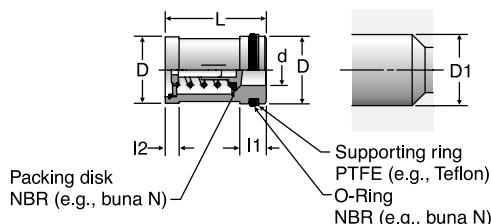
For Optional Opening Pressures see page F8.

Note: These valves are not compatible with steam, oxygen and explosive gases.

Dimensions and pressures for reference only, subject to change.

RVP

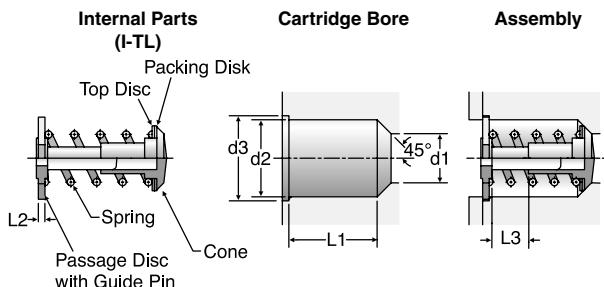
Non-Return Valve
Cartridge



TUBE FITTING PART #	d (mm)	D (mm)	D1 (mm)	I 1 (mm)	I 2 (mm)	L (mm)	STANDARD Pressure Rating (bar)		
							EO		
							CF	71	MS
RVP13	3.5	13	13	9.5	6.0	23.0		400	
RVP16	5.5	16	16	9.5	6.5	26.5	400	400	
RVP20	7.5	20	20	9.5	6.5	30.0	400	400	
RVP24	9.5	24	24	12.0	7.5	35.0	315	315	
RVP27	11.5	27	27	12.0	7.5	38.0		315	
RVP35	15.0	35	35	12.0	9.5	44.5	250	250	
RVP40	19.0	40	40	12.0	11.0	50.5		250	
RVP47	24.0	47	47	13.0	13.0	60.0		250	
RVP55	29.0	55	55	16.0	13.0	70.0		250	

I-TL

Non-Return Valve
Internal Parts



TUBE FITTING PART #	For Use With	STANDARD FROM STOCK								
		d1 (mm)	d2 (mm)	d3 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	CF	71	MS
ITL06L	6L, 8S	3.5	7.5	8.55	8.2	2.0	1.0	•		
ITL08L	8L, 10S	5.5	10.2	11.55	11.0	2.0	1.7	•		
ITL10L	10L, 12S	7.5	13.0	14.05	14.0	2.0	2.3	•		
ITL12L	12L, 14S	9.5	16.7	18.05	16.5	2.5	2.9	•		
ITL15L	15L, 16S	11.5	19.5	20.55	19.0	2.5	3.5	•		
ITL18L	18L, 20S	15	25.2	27.10	22.5	3.0	4.4	•		
ITL22L	22L, 25S	19	30.8	32.60	27.0	3.0	5.5	•		
ITL28L	28L, 30S	24	38.6	40.60	32.5	3.5	7.3			
ITL35L	35L, 42L, 38S	29	45.7	48.10	37.5	3.5	8.9			

Note: Omit "CF" in the part number for steel material.

Standard: Material steel zinc plated (A3K), springs phosphated and oiled. Packing disc of NBR (e.g., buna N), opening pressure 1 bar.

On request:

- Packing disc of FKM (e.g., fluorocarbon)
- Stainless steel 1.4571, packing disc of NBR (e.g., buna N) or FKM (e.g., fluorocarbon) (on request).

Temperature rating, without pressure reductions of steel non-return valves with NBR seals (e.g., buna N standard) is -35°C to +100°C and with FKM seals (e.g., fluorocarbon) (on request) is -25°C to +120°C.

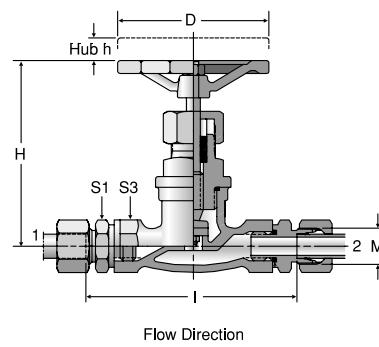
Dimensions and pressures for reference only, subject to change.

DV

Shut-Off Valve, PN 10

24° Flareless / 24° Flareless

TUBE FITTING PART #	END SIZE 1 & 2 (mm)	M Metric	DN SIZE (mm)	D (mm)	h (mm)	H (mm)	I (mm)	S1 (mm)	S3 (mm)	STANDARD Pressure Rating (bar)		
										EO		
										CF	71	MS
DV06L	6	12 x 1.5	5	50	7	63	88	22	21			10
DV08L	8	14 x 1.5	6	50	7	63	88	22	21			10
DV10L	10	16 x 1.5	8	50	7	63	90	22	21			10
DV12L	12	18 x 1.5	10	50	7	63	90	22	21			10
DV15L	15	22 x 1.5	12	50	8	65	93	27	25			10
DV18L	18	26 x 1.5	16	50	8	67	94	27	25			10
DV22L	22	30 x 2	20	60	8	67	108	32	32			10
DV28L	28	36 x 2	25	60	10	95	125	41	38			10
DV35L	35	45 x 2	32	70	10	102	145	50	47			10



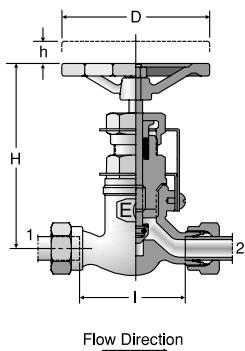
Note: The pressure specification PN for hand operated shut-off valves applies to the design factor 1.5 (according to DIN 3230 T5 and ISO 5208). Omit "MS" in the part number for brass material.

LD

Shut-Off Valve, PN 40

24° Flareless / 24° Flareless

TUBE FITTING PART #	END SIZE 1 & 2 (mm)	DN SIZE (mm)	D (mm)	h LIFT (mm)	H (mm)	I (mm)	STANDARD Pressure Rating (bar)		
							EO		
							CF	71	MS
LD10S	10	6	63	7	98	45			40
LD12S	12	8	63	7	98	49			40
LD14S	14	10	63	7	98	54			40
LD16S	16	12	80	9	110	67			40
LD20S	20	16	80	9	110	69			40
LD25S	25	20	100	12	129	86			40
LD30S	30	25	100	12	129	93			40
LD38S	38	32	100	12	158	108			40



Note: The pressure specification PN for hand operated shut-off valves applies to the design factor 1.5 (according to DIN 3230 T5 and ISO 5208). Omit "MS" in the part number for brass material.

Dimensions and pressures for reference only, subject to change.

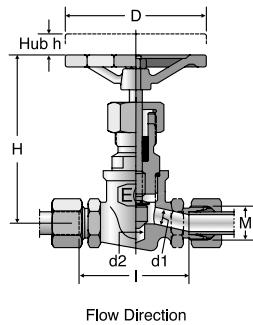
VDHA

High Pressure Valve
24° Flareless / 24° Flareless

TUBE FITTING PART #	END SIZE (mm)	DN SIZE (mm)	d1 (mm)	d2 (mm)	D (mm)	h (mm)	H (mm)	I (mm)	STANDARD Pressure Rating (bar)			
									EO	EO-2	CF	71
VDHA06S	6	3	4	9.5	100	6	120	66				
VDHA08S	8	4	5	9.5	100	6	120	66				
VDHA10S	10	6	7	9.5	100	6	120	65				
VDHA12S	12	8	8	9.5	100	6	120	65	250			
VDHA14S	14	10	10	9.5	100	6	120	84				
VDHA16S	16	12	11	9.5	100	6	120	83	160			
VDHA20S	20	16	13	11.0	100	6	120	79				
VDHA25S	25	20	17	12.0	125	9	143	106	160			
VDHA30S	30	25	19	22.5	125	12	164	103	100			
VDHA38S	38	32	25	26.5	180	12	198	118	100			

For EO-2 part number, insert "Z" between size and pressure series.

Example: VDHA06ZS



Internal threaded spindle
and body of low grade
forged stainless steel

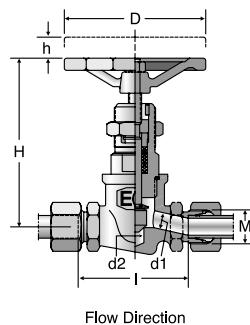
VDHB

High Pressure Valve – Panel Mount
24° Flareless / 24° Flareless

TUBE FITTING PART #	END SIZE (mm)	DN SIZE (mm)	M Metric	d1 (mm)	d2 (mm)	D (mm)	h (mm)	H (mm)	I (mm)	STANDARD Pressure Rating (bar)			
										EO	EO-2	CF	71
VDHB06S	6	4	14 x 1.5	4	9.5	100	6	124	66	160			160
VDHB08S	8	4	16 x 1.5	5	9.5	100	6	124	66	160			160
VDHB10S	10	6	18 x 1.5	7	9.5	100	6	124	65	160	160		160
VDHB12S	12	8	20 x 1.5	8	9.5	100	6	124	65	160	160		160
VDHB14S	14	10	22 x 1.5	10	9.5	100	6	124	84	160			160
VDHB16S	16	12	24 x 1.5	11	9.5	100	6	124	83	160			160
VDHB20S	20	16	30 x 2	13	11.0	100	6	124	79	160			160
VDHB25S	25	20	36 x 2	17	12.0	125	9	153	106	160			160

For EO-2 part number, insert "Z" between size and pressure series.

Example: VDHB06ZS

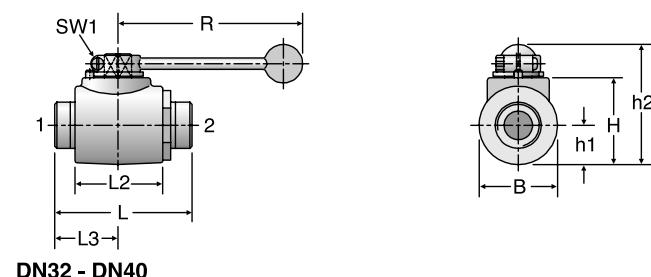
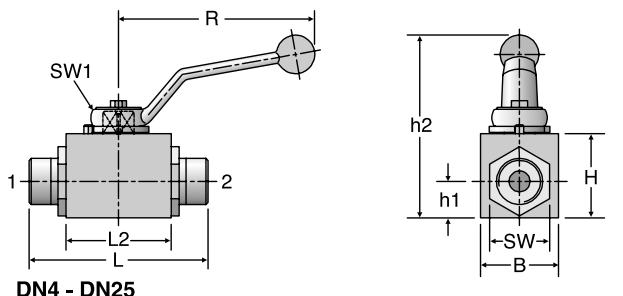


External threaded spindle
and body of low grade
forged stainless steel

Dimensions and pressures for reference only, subject to change.

KH

Two-Way Ball Valve
24° Flareless / 24° Flareless



TUBE FITTING PART #	END SIZE (mm)	DN SIZE (mm)	B (mm)	h1 (mm)	h2 (mm)	H (mm)	L (mm)	L2 (mm)	L3 (mm)	R (mm)	SW1 (mm)	EO			EO-2	
												CF	71	MS	CF	71
KH06L	6	4	20	10.0	55.0	25	67	36	—	76	7	125				
KH08L	8	6	20	10.0	55.0	25	67	36	—	76	7	125				
KH10L	10	8	30	14.5	68.0	35	75	45	—	100	8	125			125	
KH12L	12	10	30	14.5	68.0	35	75	45	—	100	8	125	125		125	
KH15L	15	12	35	17.0	92.0	40	83	51	—	112	10	125	125		125	
KH18L	18	16	45	20.0	105.0	45	82	50	—	166	11	125			125	
KH22L	22	20	45	24.0	113.0	55	99	60	—	187	14				63	
KH28L	28	25	55	26.0	118.0	60	108	70	—	187	14	63			63	
KH35L	35	32	73	36.5	180.5	80	121	79	58.5	240	17					
KH42L	42	40	85	42.5	190.5	90	118	76	52.5	250	17	63				
KH08S	8	4	20	10.0	55.0	25	73	36	—	76	7	200				
KH10S	10	6	20	10.0	55.0	25	73	36	—	76	7	200				
KH12S	12	8	30	14.5	68.0	35	77	45	—	100	8	200				
KH14S	14	10	30	14.5	68.0	35	81	45	—	100	8	200				
KH16S	16	12	35	17.0	92.0	40	87	51	—	112	10	160				
KH20S	20	16	40	20.0	105.0	45	90	50	—	166	11	160	160		160	
KH25S	25	20	45	24.0	113.0	55	107	60	—	187	14	125				
KH30S	30	25	55	36.0	118.0	60	120	70	—	187	14	125				
KH38S	38	32	73	36.5	180.5	80	127	73	58.5	320	17	63				

For EO-2 part number, insert "Z" between size and pressure series.

Example: KH08ZSCF. Omit "CF" in the part number for steel material.

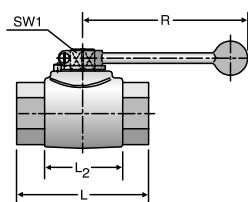
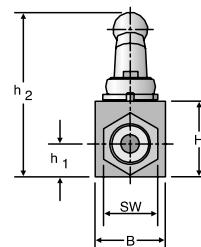
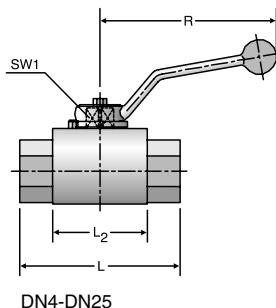
Dimensions and pressures for reference only, subject to change.

KH-R/NPT

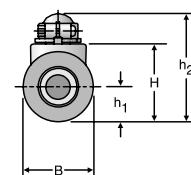
Two-Way Ball Valve

Female BSPP / Female BSPP

Female NPT / Female NPT



DN32-DN40



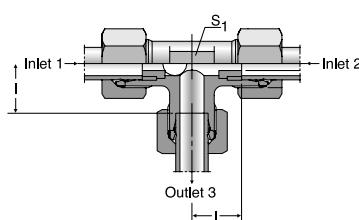
TUBE FITTING PART #	END SIZE NPT / BSPT	DN SIZE (mm)	B (mm)	h1 (mm)	h2 (mm)	H (mm)	L (mm)	L2 (mm)	R (mm)	SW1 (mm)	STANDARD Pressure Rating (bar)		
											CF	71	MS
KH1/8X	1/8-28	4	20	10.0	55.0	25	69	36	76	7	200		
KH1/4X	1/4-19	6	20	10.0	55.0	25	69	36	76	7	200		
KH3/8X	3/8-19	10	30	14.5	68.0	35	73	45	100	8	200		
KH1/2X	1/2-14	12	35	17.0	92.0	40	82	51	112	10	200		
KH5/8X	5/8-14	16	40	20.0	105.0	45	88	50	166	11			
KH3/4X	3/4-14	20	45	24.0	113.0	55	93	60	187	14	125		
KH1X	1-11	25	55	26.0	118.0	60	113	70	187	14	125		
KH11/4X	1 1/4-11	32	73	36.5	104.5	80	110	70	240	17	195		
KH11/2X	1 1/2-11	40	85	42.5	114.5	90	114	75	240	17	195		
KH1/8NPTX	1/8-27	4	20	10.0	55.0	25	69	36	76	7			
KH1/4NPTX	1/4-18	6	20	10.0	55.0	25	69	36	76	7	200		
KH3/8NPTX	3/8-18	10	30	14.5	68.0	35	73	45	100	8	200		
KH1/2NPTX	1/2-14	12	35	17.0	92.0	40	82	51	112	10	200		
KH3/4NPTX	3/4-14	20	45	24.0	113.0	55	93	60	187	14	125		
KH1NPTX	1-11 1/2	25	55	26.0	118.0	60	113	70	187	14	125		
KH11/4NPTX	1 1/4-11 1/2	32	73	36.5	104.5	80	110	70	240	17	125		
KH11/2NPTX	1 1/2-11 1/2	40	85	42.5	114.5	90	114	75	240	17			

Note: Omit "CF" in the part number for steel material.

WV

Alternating Valve

24° Flareless



TUBE FITTING PART #	END SIZE 1 - 3 (mm)	I (mm)	S1 (mm)	STANDARD Pressure Rating (bar)			
				EO	CF	71	MS
WV08L	8	14	14	160			
WV10L	10	15	17	160			
WV12L	12	17	19	160			
WV15L	15	21	19				

Dimensions and pressures for reference only, subject to change.