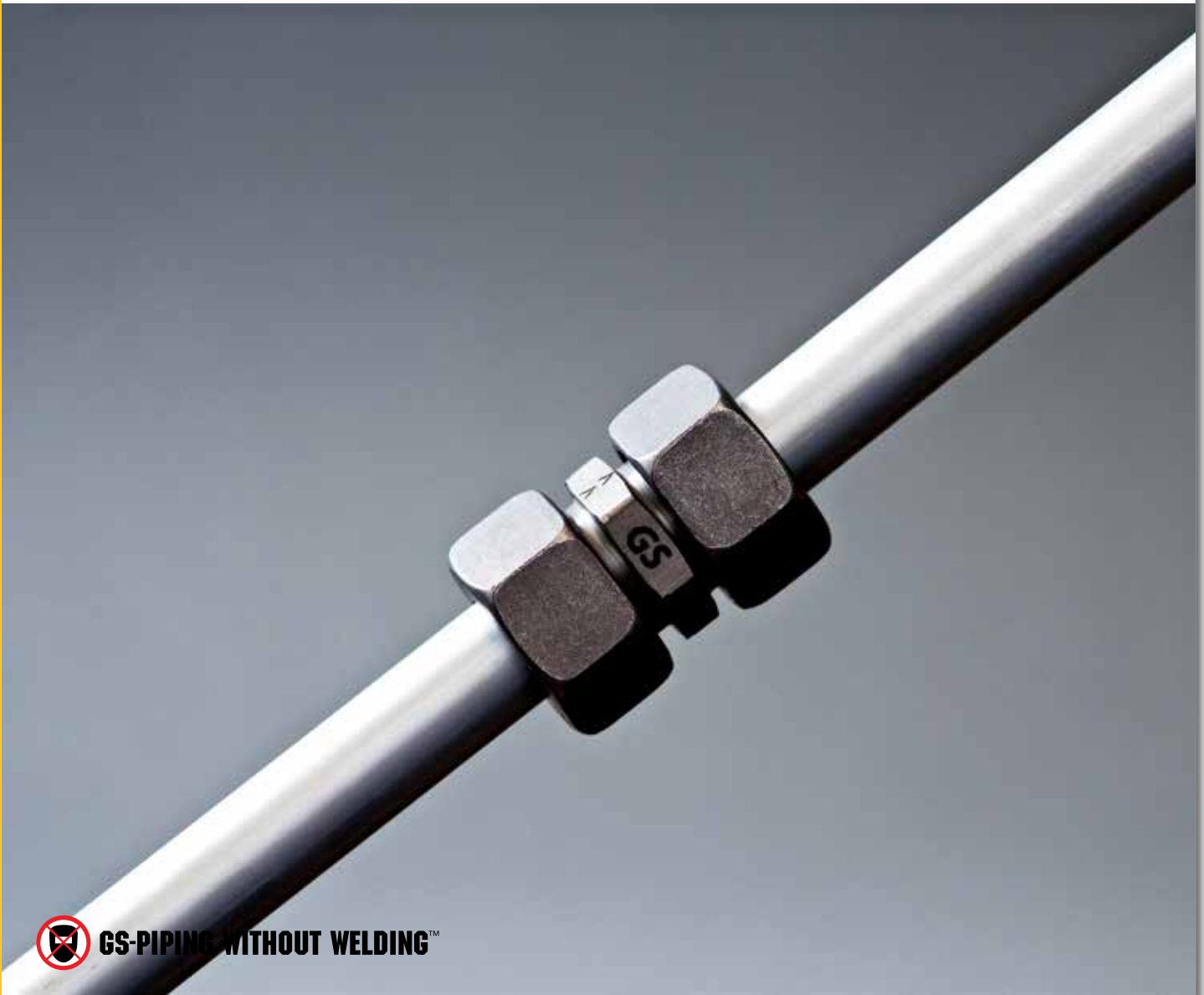


**GS-HYDRO**

# BITE TYPE FITTINGS

REVISION FEBRUARY 2016



**GS-PIPING WITHOUT WELDING™**





## General Information

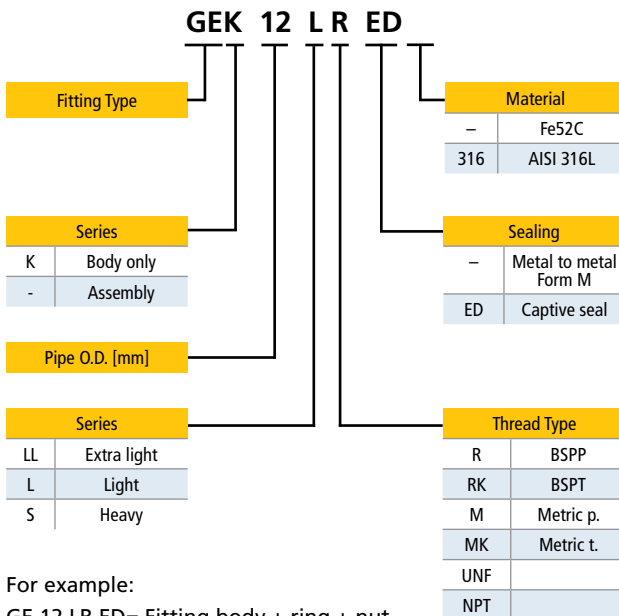
GS-Hydro's bite type (profile ring) fittings comply with DIN 2353/DIN EN ISO 8434-1. These fittings are available in the following ranges: LL (very light), L (light) and S (heavy). Profile ring fittings are available in carbon steel and stainless steel.

## Pressure Rating

GS-Hydro ISO 8434-1 connection offers higher pressure rating than standard.

Series	Tube (O.D.) [mm]	ISO8434-1 [bar]	GS-HYDRO FITTING [bar]
LL	4	100	100
	5	100	100
	6	100	100
	8	100	100
L	6	250	500
	8	250	500
	10	250	500
	12	250	400
	15	250	400
	18	160	400
	22	160	250
	28	100	250
	35	100	250
	42	100	250
S	6	630	800
	8	630	800
	10	630	800
	12	630	630
	14	630	630
	16	400	630
	20	400	420
	25	400	420
	30	250	420
	38	250	420

## Order Example



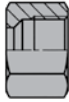



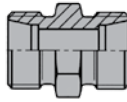


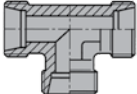
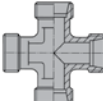
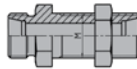

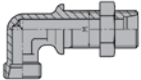


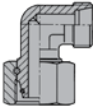
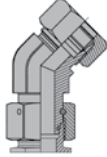
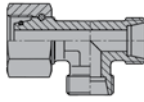
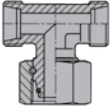
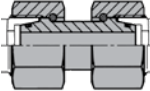
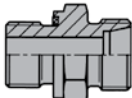
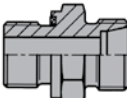
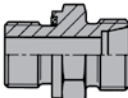
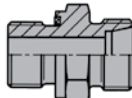
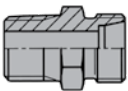
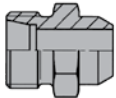
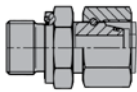
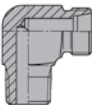
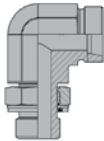
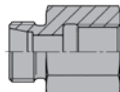
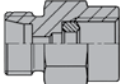
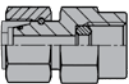
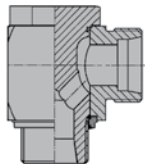
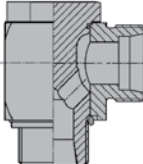
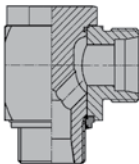
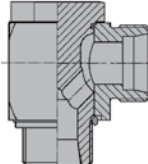


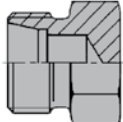
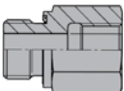
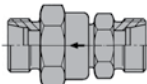
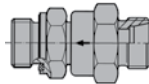
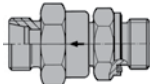
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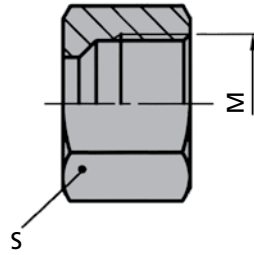
GE 12 LR ED= Fitting body + ring + nut  
 GEK 12 LR ED= Fitting body only

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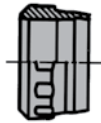
					
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### Metric Nut for 24° Connection

Series	PN	Pipe O.D.	Thread M	Part No	ID Code CS	ID Code SS	S
LL	100	4	M 8x1	<b>M 04 LL</b>	2201420000	2202420000	10
	100	6	M 10x1	<b>M 06 LL</b>	2201420600	2202420600	12
L	100	8	M 12x1	<b>M 08 LL</b>	2201421500	2202421500	14
	500	6	M 12X1,5	<b>M 06 L</b>	2201420300	2202420300	14
	500	8	M 14x1,5	<b>M 08 L</b>	2201421200	2202421200	17
	500	10	M 16x1,5	<b>M 10 L</b>	2201422100	2202422100	19
	400	12	M 18x1,5	<b>M 12 L</b>	2201422700	2202422700	22
	400	15	M 22x1,5	<b>M 15 L</b>	2201423600	2202423600	27
	400	18	M 26x1,5	<b>M 18 L</b>	2201424200	2202424200	32
	250	22	M 30x2	<b>M 22 L</b>	2201424800	2202424800	36
	250	28	M 36x2	<b>M 28 L</b>	2201425400	2202425400	41
	250	35	M 45x2	<b>M 35 L</b>	2201426000	2202426000	50
	250	42	M 52x2	<b>M 42 L</b>	2201426600	2202426600	60
S	800	6	M 14x1,5	<b>M 06 S</b>	2201420900	2202420900	17
	800	8	M 16x1,5	<b>M 08 S</b>	2201421800	2202421800	19
	800	10	M 18x1,5	<b>M 10 S</b>	2201422400	2202422400	22
	630	12	M 20x1,5	<b>M 12 S</b>	2201423000	2202423000	24
	630	14	M 22x1,5	<b>M 14 S</b>	2201423300	2202423300	27
	630	16	M 24x1,5	<b>M 16 S</b>	2201423900	2202423900	30
	400	20	M 30x2	<b>M 20 S</b>	2201424500	2202424500	36
	400	25	M 36x2	<b>M 25 S</b>	2201425100	2202425100	46
	400	30	M 42x2	<b>M 30 S</b>	2201425700	2202425700	50
	400	38	M 52x2	<b>M 38 S</b>	2201426300	2202426300	60

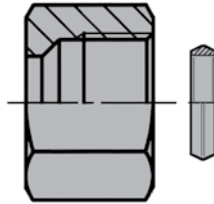
CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No



### Cutting Ring Profile Ring

Series	PN	Pipe O.D.	Part No	ID Code CS	ID Code SS
LL	100	4	<b>DS 04 LL</b>	2201750000	2202750010
	100	6	<b>DS 06 LL</b>	2201750300	2202750310
	100	8	<b>DS 08 LL</b>	2201750600	2202750610
L	500	6	<b>DS 06 LS</b>	2201490000	2202490010
	500	8	<b>DS 08 LS</b>	2201490600	2202490610
	500	10	<b>DS 10 LS</b>	2201491200	2202491210
	400	12	<b>DS 12 LS</b>	2201491800	2202491810
	400	15	<b>DS 15 L</b>	2201492700	2202492710
	400	18	<b>DS 18 L</b>	2201493300	2202493310
	250	22	<b>DS 22 L</b>	2201493900	2202493910
	250	28	<b>DS 28 L</b>	2201494500	2202494510
	250	35	<b>DS 35 L</b>	2201495100	2202495110
	250	42	<b>DS 42 L</b>	2201495700	2202495710
S	800	6	<b>DS 06 LS</b>	2201490000	2202490010
	800	8	<b>DS 08 LS</b>	2201490600	2202490610
	800	10	<b>DS 10 LS</b>	2201491200	2202491210
	630	12	<b>DS 12 LS</b>	2201491800	2202491810
	630	14	<b>DS 14 S</b>	2201492400	2202492410
	630	16	<b>DS 16 S</b>	2201493000	2202493010
	400	20	<b>DS 20 S</b>	2201493600	2202493610
	400	25	<b>DS 25 S</b>	2201494200	2202494210
	400	30	<b>DS 30 S</b>	2201494800	2202494810
	400	38	<b>DS 38 S</b>	2201495400	2202495410

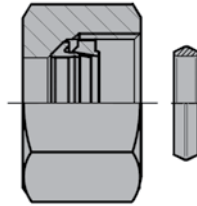
CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No



### Walform System Nut

Series	PN	Pipe O.D.	Part No	ID Code CS	ID Code SS
L	500	6	WF-M 6 L	2201420350	2202420350
	500	8	WF-M 8 L	2201421250	2202421250
	500	10	WF-M 10 L	2201422150	2202422150
	400	12	WF-M 12 L	2201422750	2202422750
	400	15	WF-M 15 L	2201423650	2202423650
	400	18	WF-M 18 L	2201424250	2202424250
	250	22	WF-M 22 L	2201424850	2202424850
	250	28	WF-M 28 L	2201425450	2202425450
	250	35	WF-M 35 L	2201426050	2202426050
	250	42	WF-M 42 L	2201426650	2202426650
S	800	6	WF-M 6 S	2201420950	2202420950
	800	8	WF-M 8 S	2201421850	2202421850
	800	10	WF-M 10 S	2201422450	2202422450
	630	12	WF-M 12 S	2201423050	2202423050
	630	16	WF-M 16 S	2201423950	2202423950
	400	20	WF-M 20 S	2201424550	2202424550
	400	25	WF-M 25 S	2201425150	2202425150
	400	30	WF-M 30 S	2201425750	2202425750
	400	38	WF-M 38 S	2201426350	2202426350

Nut and seal included.  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No

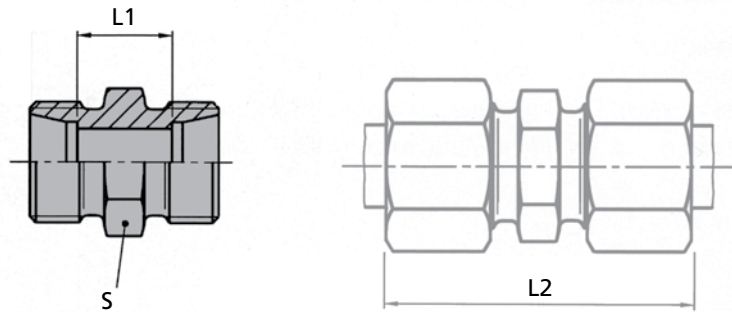


### Walring System Nut

Series	PN	Pipe O.D.	Part No	ID Code CS
L	500	6	WR 06 L	2201141600
	500	8	WR 08 L	2201141620
	500	10	WR 10 L	2201141640
	400	12	WR 12 L	2201141660
	400	15	WR 15 L	2201141680
	400	18	WR 18 L	2201141700
	250	22	WR 22 L	2201141720
	250	28	WR 28 L	2201141740
	250	35	WR 35 L	2201141760
	250	42	WR 42 L	2201141780
S	800	6	WR 06 S	2201141800
	800	8	WR 08 S	2201141820
	800	10	WR 10 S	2201141840
	630	12	WR 12 S	2201141860
	630	16	WR 16 S	2201141880
	400	20	WR 20 S	2201141900
	400	25	WR 25 S	2201141920
	400	30	WR 30 S	2201141940
	400	38	WR 38 S	2201141960

Nut with Walring, sealing ring included  
 CS= carbon steel with zinc plating

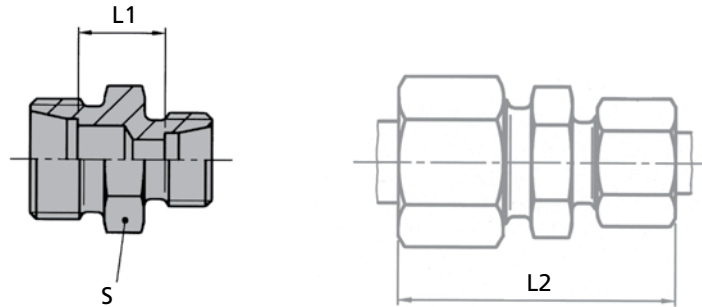




### Straight Union

Series	PN	Pipe O.D.	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	S
				ID Code CS	ID Code SS	ID Code CS	ID Code SS			
LL	100	4	G(K) 04 LL	2201330000	2202330000	2201330010	2202330010	12	31	9
	100	6	G(K) 06 LL	2201330600	2202330600	2201330610	2202330610	9	32	11
	100	8	G(K) 08 LL	2201331500	2202331500	2201331510	2202331510	12	35	12
L	500	6	G(K) 06 L	2201330300	2202330300	2201330310	2202330310	10	39	12
	500	8	G(K) 08 L	2201331200	2202331200	2201331210	2202331210	11	40	14
	500	10	G(K) 10 L	2201332100	2202332100	2201332110	2202332110	13	42	17
	400	12	G(K) 12 L	2201332700	2202332800	2201332810	2202332810	14	43	19
	400	15	G(K) 15 L	2201333600	2202333600	2201333610	2202333610	16	46	24
	400	18	G(K) 18 L	2201334200	2202334200	2201334210	2202334210	16	48	27
	250	22	G(K) 22 L	2201334800	2202334800	2201334810	2202334810	20	52	32
	250	28	G(K) 28 L	2201335400	2202335400	2201335410	2202335410	21	54	41
	250	35	G(K) 35 L	2201336000	2202336000	2201336010	2202336010	20	63	46
	250	42	G(K) 42 L	2201336600	2202336600	2201336610	2202336610	21	66	55
S	800	6	G(K) 06 S	2201330900	2202330900	2201330910	2202330910	16	45	14
	800	8	G(K) 08 S	2201331800	2202331800	2201331810	2202331810	18	47	17
	800	10	G(K) 10 S	2201332400	2202332400	2201332410	2202332410	17	49	19
	630	12	G(K) 12 S	2201333000	2202333000	2201333010	2202333010	19	51	22
	630	14	G(K) 14 S	2201333300	2202333300	2201333310	2202333310	22	57	24
	630	16	G(K) 16 S	2201333900	2202333900	2201333910	2202333910	21	57	27
	420	20	G(K) 20 S	2201334500	2202334500	2201334510	2202334510	23	66	32
	420	25	G(K) 25 S	2201335100	2202335100	2201335110	2202335110	26	74	41
	420	30	G(K) 30 S	2201335700	2202335700	2201335710	2202335710	27	80	46
	400	38	G(K) 38 S	2201336300	2202336300	2201336310	2202336310	29	90	55

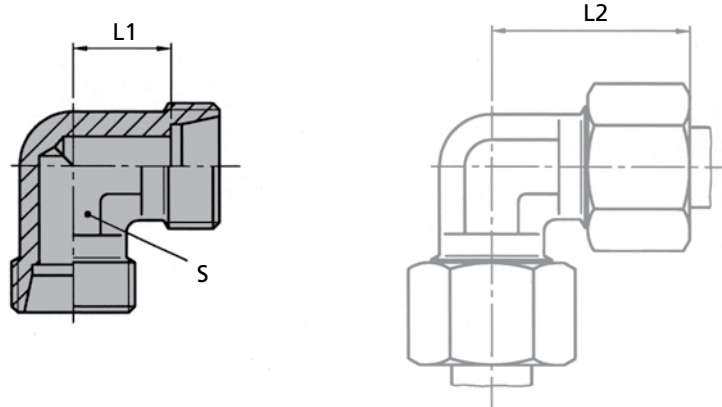
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened



### GR Straight Reducer

Series	PN	Pipe O.D. 1	Pipe O.D. 2	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	S
					ID Code CS	ID Code SS	ID Code CS	ID Code SS			
LL	100	6	4	GR(K) 06/04 LL	2201330200	2202334700	2201330210	2202334701	10,5	32,5	11
	100	8	4	GR(K) 08/04 LL	2201331410	2202334709	2201331411	2202334708	12,5	34	12
L	500	8	6	GR(K) 08/06 L	2201331100	2202334720	2201331110	2202334721	11	40	14
	500	10	6	GR(K) 10/06 L	2201331900	2202334730	2201331910	2202334731	12	41	17
	500	10	8	GR(K) 10/08 L	2201332000	2202334740	2201332010	2202334741	12	41	17
	400	12	6	GR(K) 12/06 L	2201332600	2202334750	2201332610	2202334751	13	42	19
	400	12	8	GR(K) 12/08 L	2201332800	2202334760	2201332710	2202334761	13	42	19
	400	12	10	GR(K) 12/10 L	2201332500	2202334770	2201332510	2202334771	14	42	19
	400	15	10	GR(K) 15/10 L	2201333400	2202334780	2201333410	2202334781	15	44,5	24
	400	15	12	GR(K) 15/12 L	2201333500	2202334790	2201333510	2202334791	15	44,5	24
	400	18	10	GR(K) 18/10 L	2201334000	2202334801	2201334010	2202334802	15,5	46	27
	400	18	12	GR(K) 18/12 L	2201334100	2202334811	2201334110	2202334812	15,5	46	27
	400	18	15	GR(K) 18/15 L	2201334300	2202334820	2201334310	2202334821	16,5	47,5	27
	250	22	15	GR(K) 22/15 L	2201334600	2202334830	2201334610	2202334831	18,5	49,5	32
	250	22	18	GR(K) 22/18 L	2201334700	2202334840	2201334710	2202334841	18	50	32
	250	28	22	GR(K) 28/22 L	2201335200	2202334850	2201335210	2202334851	21	54	41
250	35	22	GR(K) 35/22 L	2201335500	2202334860	2201335510	2202334861	21	59	46	
250	35	28	GR(K) 35/28 L	2201336100	2202334870	2201336110	2202334871	21	59	55	
S	630	16	12	GR(K) 16/12 S	2201333700	2202334880	2201333710	2202334881	20	54	27
	420	20	19	GR(K) 20/16 S	2201334400	2202334890	2201334410	2202334891	23	62,5	32
	420	25	19	GR(K) 25/16 S	2201334900	2202334900	2201334910	2202334910	22,5	68	41
	420	25	20	GR(K) 25/20 S	2201335000	2202335000	2201335010	2202335010	25,5	71	41
	42	30	20	GR(K) 30/20 S	2201335600	2202335600	2201335610	2202335610	26	74	46
	420	30	25	GR(K) 30/25 S	2201335800	2202336200	2201335810	2202336210	26,5	77	46
	400	38	30	GR(K) 38/30 S	2201336200	2202336800	2201336210	2202336810	29,5	87	55

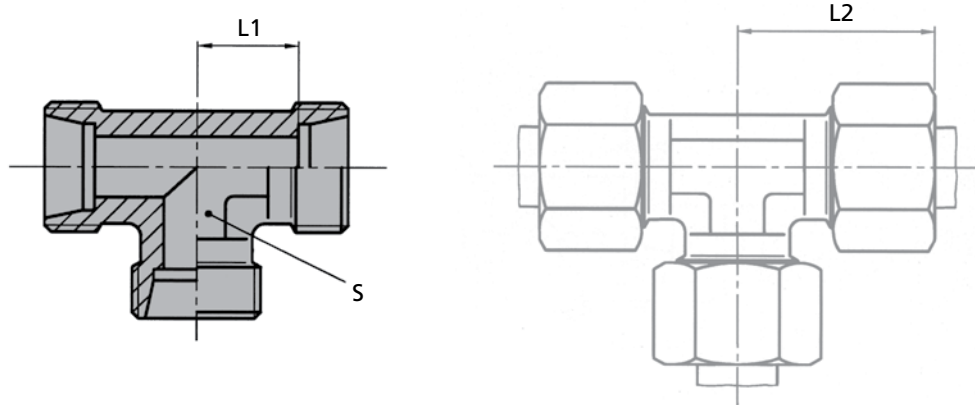
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened



### Equal Elbow

Series	PN	Pipe O.D.	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	S
				ID Code CS	ID Code SS	ID Code CS	ID Code SS			
LL	100	4	W(K) 04 LL	2201930000	2202930000	2201930010	2202930010	11	21	9
	100	6	W(K) 06 LL	2201930600	2202930600	2201930610	2202930610	9,5	21	9
	100	8	W(K) 08 LL	2201931500	2202931500	2201931510	2202931510	11,5	23	12
L	500	6	W(K) 06 L	2201930300	2202930300	2201930310	2202930310	12	27	12
	500	8	W(K) 08 L	2201931200	2202931200	2201931210	2202931210	14	29	12
	500	10	W(K) 10 L	2201932100	2202932100	2201932110	2202932110	15	30	14
	400	12	W(K) 12 L	2201932700	2202932700	2201932710	2202932710	17	32	17
	400	15	W(K) 15 L	2201933600	2202933600	2201933610	2202933610	21	36	19
	400	18	W(K) 18 L	2201934200	2202934200	2201934210	2202934210	23,5	40	24
	250	22	W(K) 22 L	2201934800	2202934800	2201934810	2202934810	27,5	44	27
	250	28	W(K) 28 L	2201935400	2202935400	2201935410	2202935410	30,5	47	36
	250	35	W(K) 35 L	2201936000	2202936000	2201936010	2202936010	34,5	56	41
	250	42	W(K) 42 L	2201936600	2202936600	2201936610	2202936610	40	63	50
S	800	6	W(K) 06 S	2201930900	2202930900	2201930910	2202930910	16	31	12
	800	8	W(K) 08 S	2201931800	2202931800	2201931810	2202931810	17	32	14
	800	10	W(K) 10 S	2201932400	2202932400	2201932410	2202932410	17,5	34	17
	630	12	W(K) 12 S	2201933000	2202933000	2201933010	2202933010	21,5	38	17
	630	14	W(K) 14 S	2201933300	2202933300	2201933310	2202933310	22	40	19
	630	16	W(K) 16 S	2201933900	2202933900	2201933910	2202933910	24,5	43	24
	420	20	W(K) 20 S	2201934500	2202934500	2201934510	2202934510	26,5	48	27
	420	25	W(K) 25 S	2201935100	2202935100	2201935110	2202935110	30	54	36
	420	30	W(K) 30 S	2201935700	2202935700	2201935710	2202935710	35,5	62	41
	400	38	W(K) 38 S	2201936300	2202936300	2201936310	2202936310	41	72	50

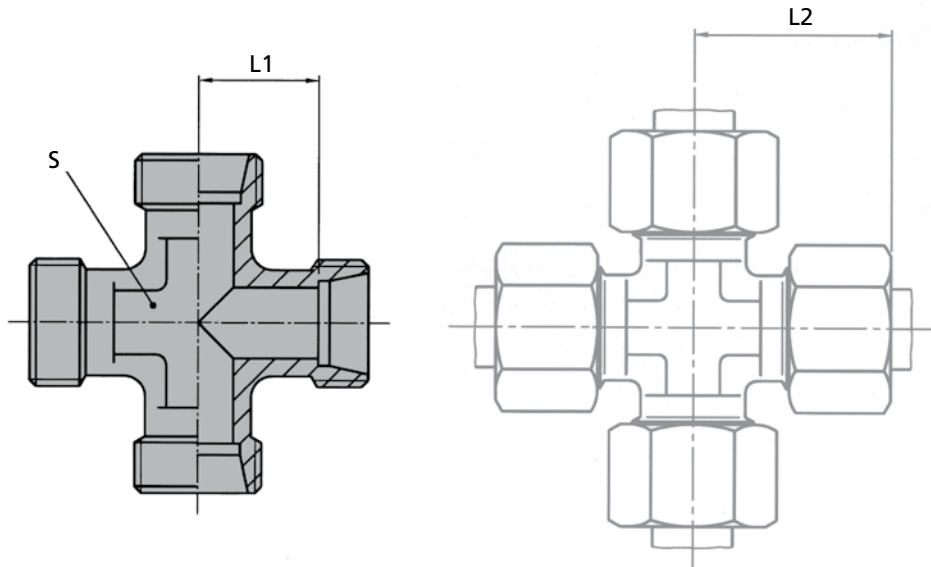
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened



### Equal Tee

Series	PN	Pipe O.D.	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	S
				ID Code CS	ID Code SS	ID Code CS	ID Code SS			
LL	100	4	T(K) 04 LL	2201770000	2202770000	2201770010	2202770010	11	21	9
	100	6	T(K) 06 LL	2201770600	2202770600	2201770610	2202770610	9,5	21	9
	100	8	T(K) 08 LL	2201771500	2202771500	2201771510	2202771510	11,5	23	12
L	500	6	T(K) 06 L	2201770300	2202770300	2201770310	2202770310	12	27	12
	500	8	T(K) 08 L	2201771200	2202771200	2201771210	2202771210	14	29	12
	500	10	T(K) 10 L	2201772100	2202772100	2201772110	2202772110	15	30	14
	400	12	T(K) 12 L	2201772700	2202772700	2201772710	2202772710	17	32	17
	400	15	T(K) 15 L	2201773600	2202773600	2201773610	2202773610	21	36	19
	400	18	T(K) 18 L	2201774200	2202774200	2201774210	2202774210	23,5	40	24
	250	22	T(K) 22 L	2201774800	2202774800	2201774810	2202774810	27,5	44	27
	250	28	T(K) 28 L	2201775400	2202775400	2201775410	2202775410	30,5	47	36
	250	35	T(K) 35 L	2201776000	2202776000	2201776010	2202776010	34,5	56	41
	250	42	T(K) 42 L	2201776600	2202776600	2201776610	2202776610	40	63	50
S	800	6	T(K) 06 S	2201770900	2202770900	2201770910	2202770910	16	31	12
	800	8	T(K) 08 S	2201771800	2202771800	2201771810	2202771810	17	32	14
	800	10	T(K) 10 S	2201772400	2202772400	2201772410	2202772410	17,5	34	17
	630	12	T(K) 12 S	2201773000	2202773000	2201773010	2202773010	21,5	38	17
	630	14	T(K) 14 S	2201773300	2202773300	2201773310	2202773310	22	40	19
	630	16	T(K) 16 S	2201773900	2202773900	2201773910	2202773910	24,5	43	24
	420	20	T(K) 20 S	2201774500	2202774500	2201774510	2202774510	26,5	48	27
	420	25	T(K) 25 S	2201775100	2202775100	2201775110	2202775110	30	54	36
	420	30	T(K) 30 S	2201775700	2202775700	2201775710	2202775710	35,5	62	41
	400	38	T(K) 38 S	2201776300	2202776300	2201776310	2202776310	41	72	50

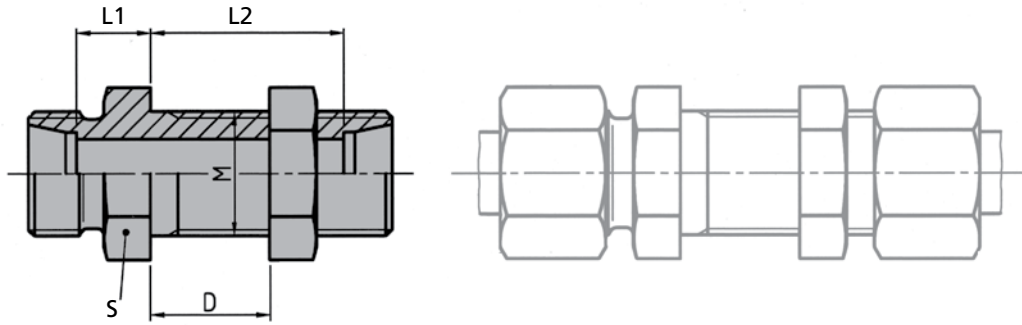
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened



### Equal Cross

Series	PN	Pipe O.D.	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	S
				ID Code CS	ID Code SS	ID Code CS	ID Code SS			
LL	100	4	K(K) 04 LL	2201400400	2202400000	2201400410	2202400010	11	21	9
	100	6	K(K) 06 LL	2201400500	2202400600	2201400510	2202400610	9,5	21	9
	100	8	K(K) 08 LL	2201400600	2202401500	2201400610	2202401510	11,5	23	12
L	500	6	K(K) 06 L	2201400700	2202400300	2201400710	2202400310	12	27	12
	500	8	K(K) 08 L	2201401200	2202401200	2201401210	2202401210	14	29	12
	500	10	K(K) 10 L	2201402100	2202402100	2201402110	2202402110	15	30	14
	400	12	K(K) 12 L	2201402700	2202402700	2201402710	2202402710	17	32	17
	400	15	K(K) 15 L	2201403600	2202403600	2201403610	2202403610	21	36	19
	400	18	K(K) 18 L	2201404200	2202404200	2201404210	2202404210	23,5	40	24
	250	22	K(K) 22 L	2201404800	2202404800	2201404810	2202404810	27,5	44	27
	250	28	K(K) 28 L	2201405400	2202405400	2201405410	2202405410	30,5	47	36
	250	35	K(K) 35 L	2201406000	2202406000	2201406010	2202406010	34,5	56	41
	250	42	K(K) 42 L	2201406600	2202406600	2201406610	2202406610	40	63	50
S	800	6	K(K) 06 S	2201400900	2202400900	2201400910	2202400910	16	31	12
	800	8	K(K) 08 S	2201401800	2202401800	2201401810	2202401810	17	32	14
	800	10	K(K) 10 S	2201402400	2202402400	2201402410	2202402410	17,5	34	17
	630	12	K(K) 12 S	2201403000	2202403000	2201403010	2202403010	21,5	38	17
	630	14	K(K) 14 S	2201403300	2202403300	2201403310	2202403310	22	40	19
	630	16	K(K) 16 S	2201403900	2202403900	2201403910	2202403910	24,5	43	24
	420	20	K(K) 20 S	2201404500	2202404500	2201404510	2202404510	26,5	48	27
	420	25	K(K) 25 S	2201405100	2202405100	2201405110	2202405110	30	54	36
	420	30	K(K) 30 S	2201405700	2202405700	2201405710	2202405710	35,5	62	41
	400	38	K(K) 38 S	2201406300	2202406300	2201406310	2202406310	41	72	50

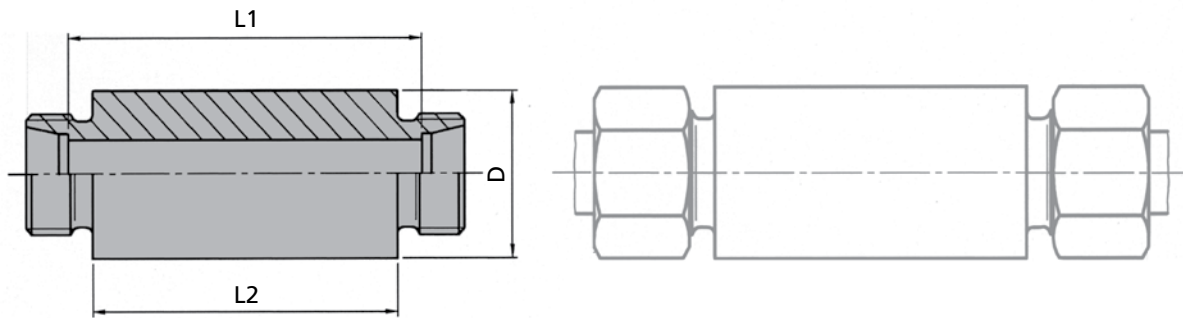
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened



### Bulkhead Coupling

Series	PN	Pipe O.D.	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	D	M	S
				ID Code CS	ID Code SS	ID Code CS	ID Code SS					
L	500	6	SV(K) 06 L	2201340000	2202340000	2201340010	2202340010	7	27	4-16	M 12x1,5	17
	500	8	SV(K) 08 L	2201340600	2202340600	2201340610	2202340610	8	27	4-16	M 14x1,5	19
	500	10	SV(K) 10 L	2201341200	2202341200	2201341210	2202341210	10	28	4-16	M 16x1,5	22
	400	12	SV(K) 12 L	2201341800	2202341800	2201341810	2202341810	10	29	4-16	M 18x1,5	24
	400	15	SV(K) 15 L	2201342700	2202342700	2201342710	2202342710	12	31	4-16	M 22x1,5	27
	400	18	SV(K) 18 L	2201343300	2202343300	2201343310	2202343310	13,5	32,5	4-16	M 26x1,5	32
	250	22	SV(K) 22 L	2201343900	2202343900	2201343910	2202343910	16,5	34,5	5-16	M 30x2	36
	250	28	SV(K) 28 L	2201344500	2202344500	2201344510	2202344510	18,5	35,5	5-16	M 36x2	41
	250	35	SV(K) 35 L	2201345100	2202345100	2201345110	2202345110	18,5	36,5	5-16	M 45x2	50
	250	42	SV(K) 42 L	2201345700	2202345700	2201345710	2202345710	19	36	5-16	M 52x2	60
S	800	6	SV(K) 06 S	2201340300	2202340300	2201340310	2202340310	12	29	4-16	M 14x1,5	19
	800	8	SV(K) 08 S	2201340900	2202340900	2201340910	2202340910	13	29	4-16	M 16x1,5	22
	800	10	SV(K) 10 S	2201341500	2202341500	2201341510	2202341510	14,5	29,5	4-16	M 18x1,5	24
	630	12	SV(K) 12 S	2201342100	2202342100	2201342110	2202342110	14,5	30,5	4-16	M 20x1,5	27
	630	14	SV(K) 14 S	2201342400	2202342400	2201342410	2202342410	17	32	4-16	M 22x1,5	30
	630	16	SV(K) 16 S	2201343000	2202343000	2201343010	2202343010	16,5	31,5	4-16	M 24x1,5	32
	420	20	SV(K) 20 S	2201343600	2202343600	2201343610	2202343610	17,7	33,5	5-16	M 30x2	41
	420	25	SV(K) 25 S	2201344200	2202344200	2201344210	2202344210	20	35	5-16	M 36x2	46
	420	30	SV(K) 30 S	2201344800	2202344800	2201344810	2202344810	21,5	37,5	5-16	M 42x2	50
	400	38	SV(K) 38 S	2201345400	2202345400	2201345410	2202345410	22	37	5-16	M 52x2	65

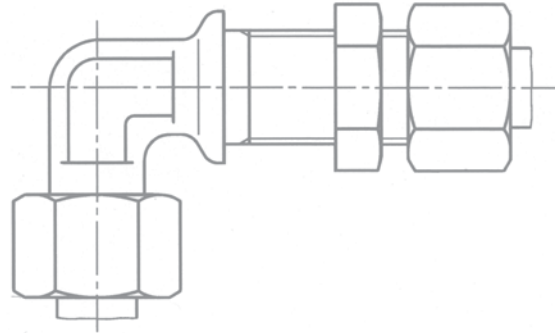
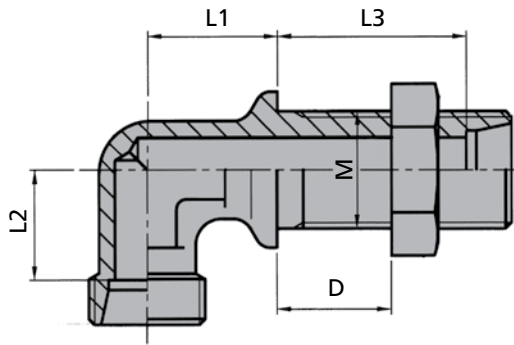
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No



### Weldable Bulkhead Coupling

Series	PN	Pipe O.D.	Part No	Coupling body only (K)		Complete with nuts and rings		L1	D	L2
				ID Code CS	ID Code SS	ID Code CS	ID Code SS			
L	500	6	ESV(K) 06 L	2201130000	2202130000	2201130010	2202130010	56	18	50
	500	8	ESV(K) 08 L	2201130600	2202130600	2201130610	2202130610	56	20	50
	500	10	ESV(K) 10 L	2201131200	2202131200	2201131210	2202131210	58	22	50
	400	12	ESV(K) 12 L	2201131800	2202131800	2201131810	2202131810	58	25	50
	400	15	ESV(K) 15 L	2201132700	2202132700	2201132710	2202132710	70	28	60
	400	18	ESV(K) 18 L	2201133300	2202133300	2201133310	2202133310	69	32	60
	250	22	ESV(K) 22 L	2201133900	2202133900	2201133910	2202133910	73	36	60
	250	28	ESV(K) 28 L	2201134500	2202134500	2201134510	2202134510	73	40	60
	250	35	ESV(K) 35 L	2201135100	2202135100	2201135110	2202135110	71	50	60
	250	42	ESV(K) 42 L	2201135700	2202135700	2201135710	2202135710	70	60	60
S	800	6	ESV(K) 06 S	2201130300	2202130300	2201130310	2202130310	60	20	50
	800	8	ESV(K) 08 S	2201130900	2202130900	2201130910	2202130910	60	22	50
	800	10	ESV(K) 10 S	2201131500	2202131500	2201131510	2202131510	59	25	50
	630	12	ESV(K) 12 S	2201132100	2202132100	2201132110	2202132110	59	28	50
	630	14	ESV(K) 14 S	2201132400	2202132400	2201132410	2202132410	72	30	60
	630	16	ESV(K) 16 S	2201133000	2202133000	2201133010	2202133010	71	35	60
	420	20	ESV(K) 20 S	2201133600	2202133600	2201133610	2202133610	71	38	60
	420	25	ESV(K) 25 S	2201134200	2202134200	2201134210	2202134210	72	45	60
	420	30	ESV(K) 30 S	2201134800	2202134800	2201134810	2202134810	73	50	60
	400	38	ESV(K) 38 S	2201135400	2202135400	2201135410	2202135410	72	60	60

(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= weldable carbon steel  
 SS= stainless steel. Add 316 to end of Part No

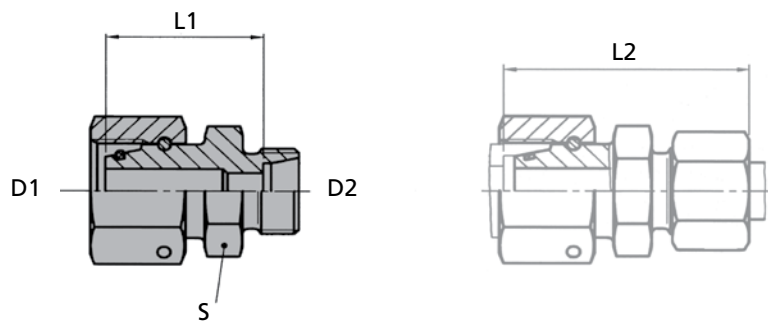


### Bulkhead Elbow

Series	PN	Pipe O.D.	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	L3	D	M
				ID Code CS	ID Code SS	ID Code CS	ID Code SS					
L	500	6	WSV(K) 06 L	2201950000	2202950000	2201950010	2202950010	14	12	27	4-16	M 12x1,5
	500	8	WSV(K) 08 L	2201950600	2202950600	2201950610	2202950610	17	14	27	4-16	M 14x1,5
	500	10	WSV(K) 10 L	2201951200	2202951200	2201951210	2202951210	18	15	28	4-16	M 16x1,5
	400	12	WSV(K) 12 L	2201951800	2202951800	2201951810	2202951810	20	17	29	4-16	M 18x1,5
	400	15	WSV(K) 15 L	2201952700	2202952700	2201952710	2202952710	23	21	31	4-16	M 22x1,5
	400	18	WSV(K) 18 L	2201953300	2202953300	2201953310	2202953310	24	23,5	32,5	4-16	M 26x1,5
	250	22	WSV(K) 22 L	2201953900	2202953900	2201953910	2202953910	30	27,5	34,5	5-16	M 30x2
	250	28	WSV(K) 28 L	2201954500	2202954500	2201954510	2202954510	34	30,5	35,5	5-16	M 36x2
	250	35	WSV(K) 35 L	2201955100	2202955100	2201955110	2202955110	39	34,5	35,5	5-16	M 45x2
	250	42	WSV(K) 42 L	2201955700	2202955700	2201955710	2202955710	43	40	36	5-16	M 52x2
S	800	6	WSV(K) 06 S	2201950300	2202950300	2201950310	2202950310	17	16	29	4-16	M 14x1,5
	800	8	WSV(K) 08 S	2201950900	2202950900	2201950910	2202950910	18	17	29	4-16	M 16x1,5
	800	10	WSV(K) 10 S	2201951500	2202951500	2201951510	2202951510	20	17,5	29,5	4-16	M 18x1,5
	630	12	WSV(K) 12 S	2201952100	2202952100	2201952110	2202952110	212	12,5	30,5	4-16	M 20x1,5
	630	14	WSV(K) 14 S	2201952400	2202952400	2201952410	2202952410	23	22	32	4-16	M 22x1,5
	630	16	WSV(K) 16 S	2201953000	2202953000	2201953010	2202953010	24	24,5	31,5	4-16	M 24x1,5
	420	20	WSV(K) 20 S	2201953600	2202953600	2201953610	2202953610	30	26,5	33,5	5-16	M 30x2
	420	25	WSV(K) 25 S	2201954200	2202954200	2201954210	2202954210	34	30	35	5-16	M 36x2
	420	30	WSV(K) 30 S	2201954800	2202954800	2201954810	2202954810	39	35,5	37,5	5-16	M 42x2
	400	38	WSV(K) 38 S	2201955400	2202955400	2201955410	2202955410	43	41	37	5-16	M 52x2

(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No

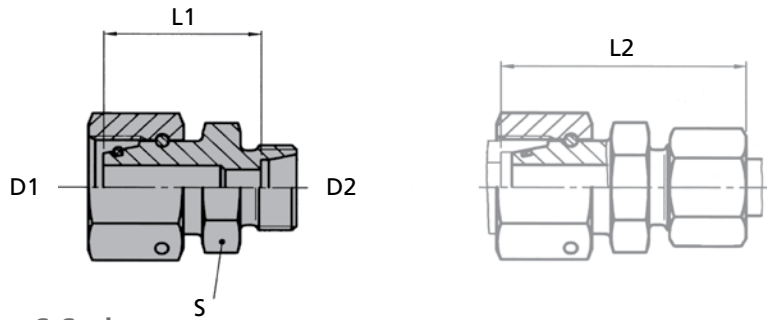




Reducing Fitting – L-series

Series	PN	Pipe O.D. D1	Pipe O.D. D2	Part No	Coupling body only (K)		Complete with nuts and rings		L1	S	L2
					ID Code CS	ID Code SS	ID Code CS	ID Code SS			
L	500	8	6	RED(K) 08/06 L	2201570000	2202570000	2201570010	2202570010	23,5	12	37,5
	500	10	6	RED(K) 10/06 L	2201570600	2202570600	2201570610	2202570610	25	14	39
	500	10	8	RED(K) 10/08 L	2201571200	2202571200	2201571210	2202571210	25	14	39,5
	400	12	6	RED(K) 12/06 L	2201571800	2202571800	2201571810	2202571810	25	17	39
	400	12	8	RED(K) 12/08 L	2201572400	2202572400	2201572410	2202572410	25	17	39,5
	400	12	10	RED(K) 12/10 L	2201573000	2202573000	2201573010	2202573010	26	17	40,5
	400	15	6	RED(K) 15/06 L	2201574800	2202574800	2201574810	2202574810	28,5	22	42,5
	400	15	8	RED(K) 15/08 L	2201575100	2202575100	2201575110	2202575110	28,5	22	43
	400	15	10	RED(K) 15/10 L	2201575400	2202575400	2201575410	2202575410	29,5	22	44
	400	15	12	RED(K) 15/12 L	2201575700	2202575700	2201575710	2202575710	29,5	22	43,5
	400	18	6	RED(K) 18/06 L	2201577500	2202577500	2201577510	2202577510	28	24	42
	400	18	8	RED(K) 18/08 L	2201577800	2202577800	2201577810	2202577810	28	24	42,5
	400	18	10	RED(K) 18/10 L	2201578100	2202578100	2201578110	2202578110	29	24	43,5
	400	18	12	RED(K) 18/12 L	2201578400	2202578400	2201578410	2202578410	29	24	43
	400	18	15	RED(K) 18/15 L	2201578700	2202578700	2201578710	2202578710	30	24	45
	250	22	6	RED(K) 22/06 L	2201580800	2202580800	2201580810	2202580810	32	27	46
	250	22	8	RED(K) 22/08 L	2201581100	2202581100	2201581110	2202581110	32	27	46,5
	250	22	10	RED(K) 22/10 L	2201581400	2202581400	2201581410	2202581410	33	27	47,5
	250	22	12	RED(K) 22/12 L	2201581700	2202581700	2201581710	2202581710	33	27	47
	250	22	15	RED(K) 22/15 L	2201582000	2202582000	2201582010	2202582010	34	27	49
	250	22	18	RED(K) 22/18 L	2201582300	2202582300	2201582310	2202582310	33,5	27	49,5
	250	28	6	RED(K) 28/06 L	2201584700	2202584700	2201584710	2202584710	34	36	48
	250	28	8	RED(K) 28/08 L	2201585000	2202585000	2201585010	2202585010	34	36	48,5
	250	28	10	RED(K) 28/10 L	2201585300	2202585300	2201585310	2202585310	35	36	49,5
	250	28	12	RED(K) 28/12 L	2201585600	2202585600	2201585610	2202585610	35	36	49
	250	28	15	RED(K) 28/15 L	2201585900	2202585900	2201585910	2202585910	36	36	51
	250	28	18	RED(K) 28/18 L	2201586200	2202586200	2201586210	2202586210	35,5	36	51,5
	250	28	22	RED(K) 28/22 L	2201586500	2202586500	2201586510	2202586510	37,5	36	53,5
	250	35	6	RED(K) 35/06 L	2201589200	2202589200	2201589210	2202589210	37	46	51
	250	35	8	RED(K) 35/08 L	2201589500	2202589500	2201589510	2202589510	37	46	51,5
	250	35	10	RED(K) 35/10 L	2201589800	2202589800	2201589810	2202589810	38	46	52,5
	250	35	12	RED(K) 35/12 L	2201590100	2202590100	2201590110	2202590110	38	46	52
	250	35	15	RED(K) 35/15 L	2201590400	2202590400	2201590410	2202590410	39	46	54
	250	35	18	RED(K) 35/18 L	2201590700	2202590700	2201590710	2202590710	38,5	46	54,5
	250	35	22	RED(K) 35/22 L	2201591000	2202591000	2201591010	2202591010	40,5	46	56,5
	250	35	28	RED(K) 35/28 L	2201591300	2202591300	2201591310	2202591310	40,5	46	56,5
	250	42	6	RED(K) 42/06 L	2201594300	2202594300	2201594310	2202594310	40,5	50	54,5
	250	42	8	RED(K) 42/08 L	2201594600	2202594600	2201594610	2202594610	40,5	50	55
	250	42	10	RED(K) 42/10 L	2201594900	2202594900	2201594910	2202594910	41,5	50	56
	250	42	12	RED(K) 42/12 L	2201595200	2202595200	2201595210	2202595210	41,5	50	55,5
	250	42	15	REDK 42/15 L	2201595500	2202595500	2201595510	2202595510	42,5	50	57,5
	250	42	18	REDK 42/18 L	2201595800	2202595800	2201595810	2202595810	42	50	58
250	42	22	REDK 42/22 L	2201596100	2202596100	2201596110	2202596110	44	50	60	
250	42	28	REDK 42/28 L	2201596400	2202596400	2201596410	2202596410	44	50	60	
250	42	35	REDK 42/35 L	2201596700	2202596700	2201596710	2202596710	43	50	63,5	

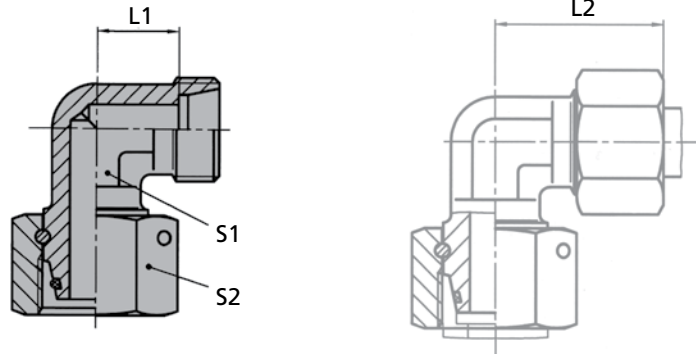
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened



Reducing Fitting – S-Series

Series	PN	Pipe O.D. D1	Pipe O.D. D2	Part No	Coupling body only (K)		Complete with nuts and rings		L1	S	L2
					ID Code CS	ID Code SS	ID Code CS	ID Code SS			
S	800	8	6	RED(K) 08/06 S	2201570300	2202570300	2201570310	2202570310	27	14	41,5
	800	10	6	RED(K) 10/06 S	2201570900	2202570900	2201570910	2202570910	27,5	17	42
	800	10	8	RED(K) 10/08 S	2201571500	2202571500	2201571510	2202571510	27,5	17	42
	630	12	6	RED(K) 12/06 S	2201572100	2202572100	2201572110	2202572110	30	19	44,5
	630	12	8	RED(K) 12/08 S	2201572700	2202572700	2201572710	2202572710	30	19	44,5
	630	12	10	RED(K) 12/10 S	2201573300	2202573300	2201573310	2202573310	29,5	19	55
	630	14	6	RED(K) 14/06 S	2201573600	2202573600	2201573610	2202573610	31,5	22	46
	630	14	8	RED(K) 14/08 S	2201573900	2202573900	2201573910	2202573910	31,5	22	46
	630	14	10	RED(K) 14/10 S	2201574200	2202574200	2201574210	2202574210	31	22	46,5
	630	14	12	RED(K) 14/12 S	2201574500	2202574500	2201574510	2202574510	31	22	46,5
	630	16	6	RED(K) 16/06 S	2201576000	2202576000	2201576010	2202576010	32	22	46,5
	630	16	8	RED(K) 16/08 S	2201576300	2202576300	2201576310	2202576310	32	22	46,5
	630	16	10	RED(K) 16/10 S	2201576600	2202576600	2201576610	2202576610	31,5	22	47
	630	16	12	RED(K) 16/12 S	2201576900	2202576900	2201576910	2202576910	31,5	22	47
	630	16	14	RED(K) 16/14 S	2201577200	2202577200	2201577210	2202577210	33	24	50,5
	420	20	6	RED(K) 20/06 S	2201579000	2202579000	2201579010	2202579010	36	27	50,5
	420	20	8	RED(K) 20/08 S	2201579300	2202579300	2201579310	2202579310	36	27	50,5
	420	20	10	RED(K) 20/10 S	2201579600	2202579600	2201579610	2202579610	35,5	27	51
	420	20	12	RED(K) 20/12 S	2201579900	2202579900	2201579910	2202579910	35,5	27	51
	420	20	14	RED(K) 20/14 S	2201580200	2202580200	2201580210	2202580210	37	27	54,5
	420	20	16	RED(K) 20/16 S	2201580500	2202580500	2201580510	2202580510	36,5	27	54,5
	420	25	6	RED(K) 25/06 S	2201582600	2202582600	2201582610	2202582610	38,5	36	53
	420	25	8	RED(K) 25/08 S	2201582900	2202582900	2201582910	2202582910	38,5	36	53
	420	25	10	RED(K) 25/10 S	2201583200	2202583200	2201583210	2202583210	38	36	53,5
	420	25	12	RED(K) 25/12 S	2201583500	2202583500	2201583510	2202583510	38	36	53,5
	420	25	14	RED(K) 25/14 S	2201583800	2202583800	2201583810	2202583810	39,5	36	57
	420	25	16	RED(K) 25/16 S	2201584100	2202584100	2201584110	2202584110	39	36	57
	420	25	20	RED(K) 25/20 S	2201584400	2202584400	2201584410	2202584410	39	36	60
	400	30	6	RED(K) 30/06 S	2201586800	2202586800	2201586810	2202586810	44	41	58,5
	400	30	8	RED(K) 30/08 S	2201587100	2202587100	2201587110	2202587110	44	41	58,5
	400	30	10	RED(K) 30/10 S	2201587400	2202587400	2201587410	2202587410	43,5	41	59
	400	30	12	RED(K) 30/12 S	2201587700	2202587700	2201587710	2202587710	43,5	41	59
	400	30	14	RED(K) 30/14 S	2201588000	2202588000	2201588010	2202588010	45	41	62,5
	400	30	16	RED(K) 30/16 S	2201588300	2202588300	2201588310	2202588310	44,5	41	62,5
	400	30	20	RED(K) 30/20 S	2201588600	2202588600	2201588610	2202588610	44,5	41	65,5
	400	30	25	RED(K) 30/25 S	2201588900	2202588900	2201588910	2202588910	45	41	68,5
	400	38	6	RED(K) 38/06 S	2201591600	2202591600	2201591610	2202591610	47,5	50	62
	400	38	8	RED(K) 38/08 S	2201591900	2202591900	2201591910	2202591910	47,5	50	62
	400	38	10	RED(K) 38/10 S	2201592200	2202592200	2201592210	2202592210	47	50	62,5
	400	38	12	RED(K) 38/12 S	2201592500	2202592500	2201592510	2202592510	47	50	62,5
400	38	14	RED(K) 38/14 S	2201592800	2202592800	2201592810	2202592810	48,5	50	66	
400	38	16	RED(K) 38/16 S	2201593100	2202593100	2201593110	2202593110	48	50	66	
400	38	20	RED(K) 38/20 S	2201593400	2202593400	2201593410	2202593410	48	50	69	
400	38	25	RED(K) 38/25 S	2201593700	2202593700	2201593710	2202593710	48,5	50	72	
400	38	30	RED(K) 38/30 S	2201594000	2202594000	2201594010	2202594010	49	50	75	

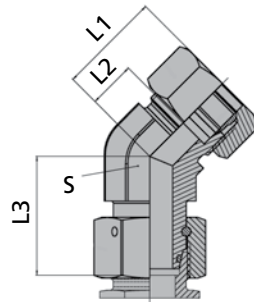
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened



### Adjustable Elbow

Series	PN	Pipe O.D.	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	S1	S2
				ID Code CS	ID Code SS	ID Code CS	ID Code SS				
L	500	6	EW(K) 06 L	2201170000	2202170000	2201170010	2202170010	14	29	12	17
	500	8	EW(K) 08 L	2201170600	2202170600	2201170610	2202170610	14	29	12	17
	500	10	EW(K) 10 L	2201171200	2202171200	2201171210	2202171210	15	30	14	19
	400	12	EW(K) 12 L	2201171800	2202171800	2201171810	2202171810	17	32	17	22
	400	15	EW(K) 15 L	2201172700	2202172700	2201172710	2202172710	21	36	19	27
	400	18	EW(K) 18 L	2201173300	2202173300	2201173310	2202173310	23,5	40	24	32
	250	22	EW(K) 22 L	2201173900	2202173900	2201173910	2202173910	27,5	44	27	36
	250	28	EW(K) 28 L	2201174500	2202174500	2201174510	2202174510	30,5	47	36	46
	250	35	EW(K) 35 L	2201175100	2202175100	2201175110	2202175110	34,5	56	41	50
	250	42	EW(K) 42 L	2201175700	2202175700	2201175710	2202175710	40	63	50	60
S	800	6	EW(K) 06 S	2201170300	2202170300	2201170310	2202170310	16	31	12	17
	800	8	EW(K) 08 S	2201170900	2202170900	2201170910	2202170910	17	32	14	19
	800	10	EW(K) 10 S	2201171500	2202171500	2201171510	2202171510	17,5	34	17	22
	630	12	EW(K) 12 S	2201172100	2202172100	2201172110	2202172110	21,5	38	17	24
	630	14	EW(K) 14 S	2201172400	2202172400	2201172410	2202172410	22	40	19	27
	630	16	EW(K) 16 S	2201173000	2202173000	2201173010	2202173010	24,5	43	24	30
	420	20	EW(K) 20 S	2201173600	2202173600	2201173610	2202173610	26,5	48	27	36
	420	25	EW(K) 25 S	2201174200	2202174200	2201174210	2202174210	30	54	36	46
	420	30	EW(K) 30 S	2201174800	2202174800	2201174810	2202174810	35,5	62	41	50
	400	38	EW(K) 38 S	2201175400	2202175400	2201175410	2202175410	41	72	50	60

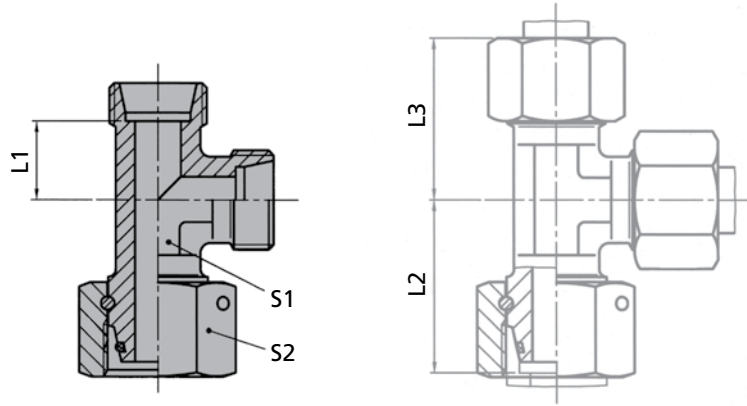
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened



### Adjustable 45° Elbow

Series	PN	Pipe O.D.	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	L3	S
				ID Code CS	ID Code SS	ID Code CS	ID Code SS				
L	500	6	EW(K)45 06 L	2201011000	2202011000	2201011001	2202011001	24	9	26	14
	500	8	EW(K)45 08 L	2201011020	2202011020	2201011021	2202011021	27	12	27,5	14
	500	10	EW(K)45 10 L	2201011040	2202011040	2201011041	2202011041	27	12	29	19
	400	12	EW(K)45 12 L	2201011060	2202011060	2201011061	2202011061	29	14	29,5	19
	400	15	EW(K)45 15 L	2201011080	2202011080	2201011081	2202011081	32	17	32,5	22
	400	18	EW(K)45 18 L	2201011100	2202011100	2201011101	2202011101	33	16,5	35,5	27
	250	22	EW(K)45 22 L	2201011120	2202011120	2201011121	2202011121	35	18,5	38,5	30
	250	28	EW(K)45 28 L	2201011140	2202011140	2201011141	2202011141	40	23	41,5	36
	250	35	EW(K)45 35 L	2201011160	2202011160	2201011161	2202011161	48	26,5	51	50
	250	42	EW(K)45 42 L	2201011180	2202011180	2201011181	2202011181	49	26	56	50
S	800	6	EW(K)45 06 S	2201011200	2202011200	2201011201	2202011201	24	9	27	14
	800	8	EW(K)45 08 S	2201011220	2202011220	2201011221	2202011221	27	12	27,5	19
	800	10	EW(K)45 10 S	2201011240	2202011240	2201011241	2202011241	30	13,5	30	19
	630	12	EW(K)45 12 S	2201011260	2202011260	2201011261	2202011261	33	16,5	31	19
	630	16	EW(K)45 16 S	2201011280	2202011280	2201011281	2202011281	34	15,5	36,5	19
	420	20	EW(K)45 20 S	2201011300	2202011300	2201011301	2202011301	38	16	44,5	27
	420	25	EW(K)45 25 S	2201011320	2202011320	2201011321	2202011321	43	18,5	50	36
	420	30	EW(K)45 30 S	2201011340	2202011340	2201011341	2202011341	50	23,5	55	50
	400	38	EW(K)45 38 S	2201011360	2202011360	2201011361	2202011361	52	21	63	50

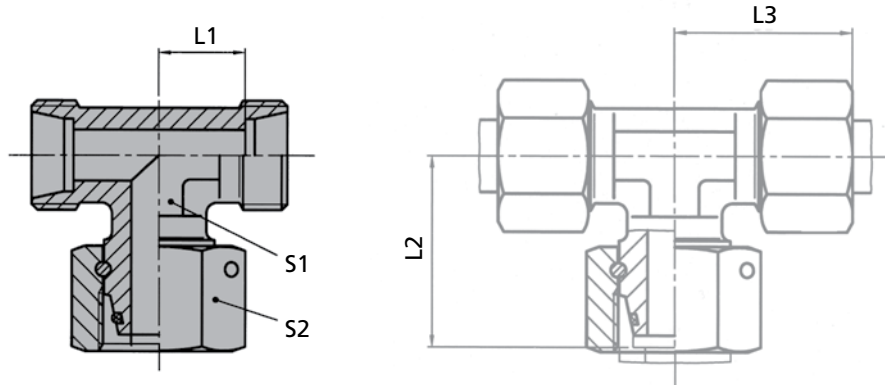
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened



### Adjustable Run Tee

Series	PN	Pipe O.D.	Part No	Coupling body only (K)		Complete with nuts and rings		L1	S1	S2	L2	L3
				ID Code CS	ID Code SS	ID Code CS	ID Code SS					
L	500	6	EL(K) 06 L	2201110000	2202110000	2201110010	2202110010	14	12	17	26	29
	500	8	EL(K) 08 L	2201110600	2202110600	2201110610	2202110610	14	12	17	27,5	29
	500	10	EL(K) 10 L	2201111200	2202111200	2201111210	2202111210	15	14	19	29	30
	400	12	EL(K) 12 L	2201111800	2202111800	2201111810	2202111810	17	17	22	29,5	32
	400	15	EL(K) 15 L	2201112700	2202112700	2201112710	2202112710	21	19	27	32,5	36
	400	18	EL(K) 18 L	2201113300	2202113300	2201113310	2202113310	23,5	24	32	35,5	40
	250	22	EL(K) 22 L	2201113900	2202113900	2201113910	2202113910	27,5	27	36	38,5	44
	250	28	EL(K) 28 L	2201114500	2202114500	2201114510	2202114510	30,5	36	46	41,5	47
	250	34	EL(K) 35 L	2201115100	2202115100	2201115110	2202115110	34,5	41	50	51	56
250	42	EL(K) 42 L	2201115700	2202115700	2201115710	2202115710	40	50	60	56	63	
S	800	6	EL(K) 06 S	2201110300	2202110300	2201110310	2202110310	16	12	17	27	31
	800	8	EL(K) 08 S	2201110900	2202110900	2201110910	2202110910	17	14	19	27,5	32
	800	10	EL(K) 10 S	2201111500	2202111500	2201111510	2202111510	17,5	17	22	30	34
	630	12	EL(K) 12 S	2201112100	2202112100	2201112110	2202112110	21,5	17	24	31	38
	630	14	EL(K) 14 S	2201112400	2202112400	2201112410	2202112410	22	19	27	35	40
	630	16	EL(K) 16 S	2201113000	2202113000	2201113010	2202113010	24,5	24	30	36,5	43
	420	20	EL(K) 20 S	2201113600	2202113600	2201113610	2202113610	26,5	27	36	44,5	48
	420	25	EL(K) 25 S	2201114200	2202114200	2201114210	2202114210	30	36	46	50	54
	420	30	EL(K) 30 S	2201114800	2202114800	2201114810	2202114810	35,5	41	50	55	62
	400	38	EL(K) 38 S	2201115400	2202115400	2201115410	2202115410	41	50	60	63	72

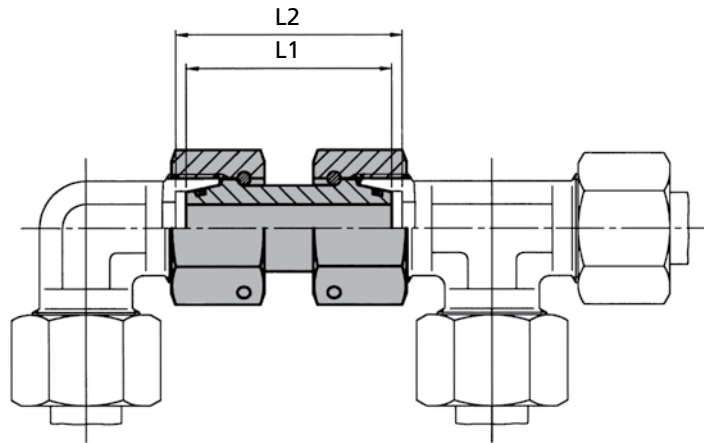
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened



### Adjustable Branch Tee

Series	PN	Pipe O.D.	Part No	Coupling body only (K)		Complete with nuts and rings		L1	S1	S2	L2	L3
				ID Code CS	ID Code SS	ID Code CS	ID Code SS					
L	500	6	ET(K) 06 L	2201150000	2202150000	2201150010	2202150010	14	12	17	26	29
	500	8	ET(K) 08 L	2201150600	2202150600	2201150610	2202150610	14	12	17	27,5	29
	500	10	ET(K) 10 L	2201151200	2202151200	2201151210	2202151210	15	14	19	29	30
	400	12	ET(K) 12 L	2201151800	2202151800	2201151810	2202151810	17	17	22	29,5	32
	400	15	ET(K) 15 L	2201152700	2202152700	2201152710	2202152710	21	19	27	32,5	36
	400	18	ET(K) 18 L	2201153300	2202153300	2201153310	2202153310	23,5	24	32	35,5	40
	250	22	ET(K) 22 L	2201153900	2202153900	2201153910	2202153910	27,5	27	36	38,5	44
	250	28	ET(K) 28 L	2201154500	2202154500	2201154510	2202154510	30,5	36	46	41,5	47
	250	35	ET(K) 35 L	2201155100	2202155100	2201155110	2202155110	34,5	41	50	51	56
	250	42	ET(K) 42 L	2201155700	2202155700	2201155710	2202155710	40	50	60	56	63
S	800	6	ET(K) 06 S	2201150300	2202150300	2201150310	2202150310	16	12	17	27	31
	800	8	ET(K) 08 S	2201150900	2202150900	2201150910	2202150910	17	14	19	27,5	32
	800	10	ET(K) 10 S	2201151500	2202151500	2201151510	2202151510	17,5	17	22	30	34
	630	12	ET(K) 12 S	2201152100	2202152100	2201152110	2202152110	21,5	17	24	31	38
	630	14	ET(K) 14 S	2201152400	2202152400	2201152410	2202152410	22	19	27	35	40
	630	16	ET(K) 16 S	2201153000	2202153000	2201153010	2202153010	24,5	24	30	36,5	43
	420	20	ET(K) 20 S	2201153600	2202153600	2201153610	2202153610	26,5	27	36	44,5	48
	420	25	ET(K) 25 S	2201154200	2202154200	2201154210	2202154210	30	36	46	50	54
	420	30	ET(K) 30 S	2201154800	2202154800	2201154810	2202154810	35,5	41	50	55	62
	400	38	ET(K) 38 S	2201155400	2202155400	2201155410	2202155410	41	50	60	63	72

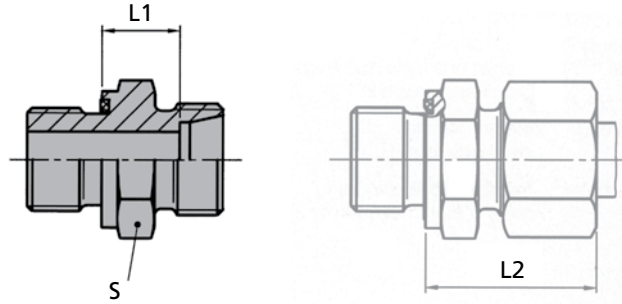
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened



### Swivel Straight Union

Series	PN	Pipe O.D.	DKO Thread	Part No	ID Code CS	ID Code SS	L1 for CS	L2 for CS	L1 for SS	L2 for SS
L	500	6	M 12x1,5	<b>SNV 06 L</b>	2201710000	2202430000	34	36	32	35
	500	8	M 14x1,5	<b>SNV 08 L</b>	2201710900	2202430100	34	36	32	35
	500	10	M 16x1,5	<b>SNV 10 L</b>	2201711800	2202430200	36	37	33	35
	400	12	M 18x1,5	<b>SNV 12 L</b>	2201712700	2202430300	36	37	33	35
	400	15	M 22x1,5	<b>SNV 15 L</b>	2201713900	2202430400	39	40	38	40
	400	18	M 26x1,5	<b>SNV 18 L</b>	2201714800	2202430500	40,5	42,5	38	41
	250	22	M 30x2,0	<b>SNV 22 L</b>	2201716000	2202430600	45	46,5	42	45
	250	28	M 36x2,0	<b>SNV 28 L</b>	2201717200	2202430700	47	48,5	46	49
	250	35	M 45x2,0	<b>SNV 35 L</b>	2201718400	2202430800	53	57,5	48	54
250	42	M 52x2,0	<b>SNV 42 L</b>	2201719600	2202430900	53	58,5	52	59	
S	800	6	M 14x1,5	<b>SNV 06 S</b>	2201710600	2202431000	37	39	32	35
	800	8	M 16x1,5	<b>SNV 08 S</b>	2201711500	2202431100	37	39	33	36
	800	10	M 18x1,5	<b>SNV 10 S</b>	2201712400	2202431200	41	43	33	36
	630	12	M 20x1,5	<b>SNV 12 S</b>	2201713300	2202431300	42	44	36	39
	630	14	M 22x1,5	<b>SNV 14 S</b>	2201713600	2202431400	45	48	39	43
	630	16	M 24x1,5	<b>SNV 16 S</b>	2201714200	2202431500	46	50	38	43
	420	20	M 30x2,0	<b>SNV 20 S</b>	2201715400	2202431600	55	59,5	44	50
	420	25	M 36x2,0	<b>SNV 25 S</b>	2201716600	2202431700	58	65,5	46	54
	420	30	M 42x2,0	<b>SNV 30 S</b>	2201717800	2202431800	62	72,5	52	64
	400	38	M 52x2,0	<b>SNV 38 S</b>	2201719000	2202431900	67	82,5	52	69

CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L1 & L2= approximate lengths



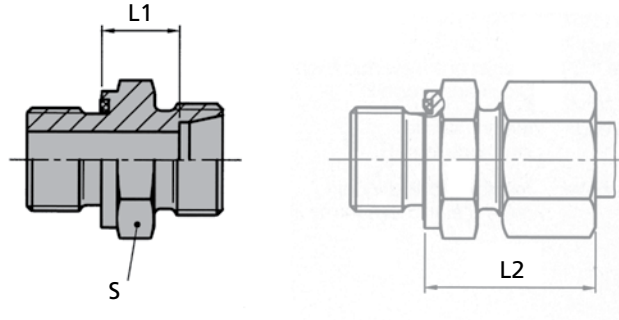
**Male Stud Coupling, BSP With ED-Sealing – LL- and L-Series**

Series	PN	Pipe O.D.	G	Part No	Coupling body only (K)		Complete with nuts and rings		L1	S	L2
					ID Code CS	ID Code SS	ID Code CS	ID Code SS			
LL	100	4	1/8	GE(K) 04 LLR*	2201220000	2202220100	2201220010	2202220110	9,5	14	19
	100	6	1/8	GE(K) 06 LLR*	2201222000	2202222400	2201222010	2202222410	8	14	19,5
	100	8	1/8	GE(K) 08 LLR*	2201228800	2202228800	2201228810	2202228810	9	14	20,5
L	500	6	1/8	GE(K) 06 LR ED	2201224400	2202224400	2201224410	2202224410	8,5	14	23
	500	6	1/4	GE(K) 06 LR 1/4 ED	2201225200	2202225200	2201225210	2202225210	10	19	24,5
	500	8	1/8	GE(K) 08 LR 1/8 ED	2201231200	2202231200	2201231210	2202231210	9,5	14	23
	500	8	1/4	GE(K) 08 LR ED	2201231600	2202231600	2201231610	2202231610	10	19	25
	400	8	3/8	GE(K) 08 LR 3/8 ED	2201232800	2202232800	2201232810	2202232810	11,5	22	26
	500	10	1/8	GE(K) 10 LR 1/8 ED	2201240200	2202242200	2201240210	2202242210	12,5	17	26
	500	10	1/4	GE(K) 10 LR ED	2201240000	2202240000	2201240010	2202240010	11	19	26
	500	10	3/8	GE(K) 10 LR 3/8 ED	2201241200	2202241200	2201241210	2202241210	12,5	22	27
	500	10	1/2	GE(K) 10 LR 1/2 ED	2201242000	2202242000	2201242010	2202242010	13	27	27,5
	400	12	1/4	GE(K) 12 LR 1/4 ED	2201250400	2202250400	2201250410	2202250410	12	19	27
	400	12	3/8	GE(K) 12 LR ED	2201251600	2202251600	2201251610	2202251610	12,5	22	27
	400	12	1/2	GE(K) 12 LR 1/2 ED	2201252800	2202252800	2201252810	2202252810	13	27	28
	400	15	3/8	GE(K) 15 LR 3/8 ED	2201261600	2202261600	2201261610	2202261610	14	27	29
	400	15	1/2	GE(K) 15 LR ED	2201262800	2202262800	2201262810	2202262810	13,5	24	28,5
	400	15	3/4	GE(K) 15 LR 3/4 ED	2201263600	2202263600	2201263610	2202263610	15	32	28,5
	400	18	3/8	GE(K) 18 LR 3/8 ED	2201271800	2202271800	2201271810	2202271810	14	27	31
	400	18	1/2	GE(K) 18 LR ED	2201270800	2202270800	2201270810	2202270810	14,5	27	31
	400	18	3/4	GE(K) 18 LR 3/4 ED	2201271600	2202271600	2201271610	2202271610	14,5	34	31
	250	22	1/2	GE(K) 22 LR 1/2 ED	2201278000	2202278000	2201278010	2202278010	16,5	32	33
	250	22	3/4	GE(K) 22 LR ED	2201278800	2202278800	2201278810	2202278810	16,5	32	33
	250	22	1	GE(K) 22 LR 1 ED	2201279200	2202279200	2201279210	2202279210	17,5	41	31
	250	28	3/4	GE(K) 28 LR 3/4 ED	2201284400	2202284400	2201284410	2202284410	17,5	41	31
	250	28	1	GE(K) 28 LR ED	2201285200	2202285200	2201285210	2202285210	17,5	41	34
250	35	1	GE(K) 35 LR 1 ED	2201290900	2202290900	2201290910	2202290910	17,5	46	39	
250	35	1 1/4	GE(K) 35 LR ED	2201290800	2202290800	2201290810	2202290810	17,5	50	39	
250	42	1 1/4	GE(K) 42 LR 1 1/4 ED	2201294800	2202294800	2201294810	2202294810	17,5	55	42	
250	42	1 1/2	GE(K) 42 LR ED	2201295600	2202295600	2201295610	2202295610	19	55	42	

(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened  
 Other seal types available.

\*= No elastomeric seal

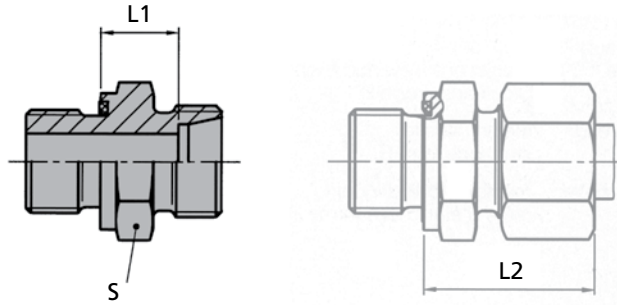




### Male Stud Coupling, BSP With ED-Sealing – S-Series

Series	PN	Pipe O.D.	G	Part No	Coupling body only (K)		Complete with nuts and rings		L1	S	L2
					ID Code CS	ID Code SS	ID Code CS	ID Code SS			
S	800	6	1/4	GE(K) 06 SR ED	2201227200	2202227200	2201227210	2202227210	13	19	28
	800	6	3/8	GE(K) 06 SR 3/8 ED	2201227300	2202227300	2201227310	2202227310	11,5	22	30
	800	6	1/2	GE(K) 06 SR 1/2 ED	2201227400	2202227400	2201227410	2202227410	12	27	30
	800	8	1/4	GE(K) 08 SR ED	2201235200	2202235200	2201235210	2202235210	15	19	30
	800	8	3/8	GE(K) 08 SR 3/8 ED	2201236000	2202236010	2201236010	2202236000	15,5	22	30,5
	800	8	1/2	GE(K) 08 SR 1/2 ED	2201236200	2202236210	2201236210	2202236200	18	27	31
	800	10	3/8	GE(K) 10 SR ED	2201244800	2202244800	2201244810	2202244810	15	22	31
	800	10	1/2	GE(K) 10 SR 1/2 ED	2201245600	2202245600	2201245610	2202245610	17,5	27	33,5
	630	12	3/8	GE(K) 12 SR ED	2201256400	2202256400	2201256410	2202256410	17	22	33
	630	12	1/2	GE(K) 12 SR 1/2 ED	2201257200	2202257200	2201257210	2202257210	17,5	27	34
	630	14	1/2	GE(K) 14 SR ED	2201258800	2202258800	2201258810	2202258810	19	27	37
	630	16	3/8	GE(K) 16 SR 3/8 ED	2201266000	2202266000	2201266010	2202266010	18	27	36,5
	630	16	1/2	GE(K) 16 SR ED	2201266800	2202266800	2201266810	2202266810	18,5	27	37
	630	16	3/4	GE(K) 16 SR 3/4 ED	2201267600	2202267600	2201267610	2202267610	20,5	32	39
	420	20	1/2	GE(K) 20 SR 1/2 ED	2201274400	2202274400	2201274410	2202274410	20,5	32	42
	420	20	3/4	GE(K) 20 SR ED	2201275200	2202275200	2201275210	2202275210	20,5	32	42
	420	20	1	GE(K) 20 SR 1 ED	2201275600	2202275600	2201275610	2202275610	22,5	41	43
	420	25	3/4	GE(K) 25 SR 3/4 ED	2201281200	2202281200	2201281210	2202281210	23	41	47
	420	25	1	GE(K) 25 SR ED	2201282000	2202282000	2201282010	2202282010	23	41	47
	420	25	1 1/4	GE(K) 25 SR 1 1/4 ED	2201282100	2202281400	2201282110	2202281410	23	50	47
400	30	1	GE(K) 30 SR 1 ED	2201287600	2202287600	2201287610	2202287610	23,5	50	50	
400	30	1 1/4	GE(K) 30 SR ED	2201288400	2202288400	2201288410	2202288410	23,5	50	50	
400	38	1 1/4	GE(K) 38 SR 1 1/4 ED	2201292000	2202292000	2201292010	2202292010	26	55	57	
400	38	1 1/2	GE(K) 38 SR ED	2201293200	2202293200	2201293210	2202293210	26	55	57	

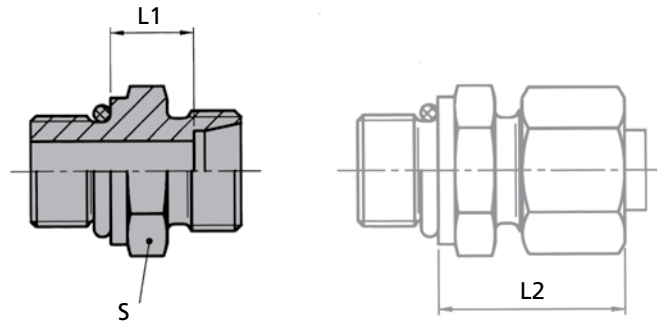
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened  
 Other seal types available.



### Male Stud Coupling – Metric With ED-Sealing

Series	PN	Pipe O.D.	Metric	Part No	Coupling body only (K)		Complete with nuts and rings		L1	S	L2	
					ID Code CS	ID Code SS	ID Code CS	ID Code SS				
L	500	6	M 10x1	GE(K) 06 LM ED	2201222800	2202222800	2201222810	2202222810	8,5	14	23	
	500	8	M 12x1,5	GE(K) 08 LM ED	2201229600	2202229600	2201229610	2202229620	10	17	25	
	500	10	M 14x1,5	GE(K) 10 LM ED	2201238400	2202238400	2201238410	2202238410	11	19	26	
	500	10	M 18x1,5	GE(K) 10 LM 18X1.5 ED	2201238300	2202238300	2201238310	2202238310	12,5	24	27	
	500	10	M 22x1,5	GE(K) 10 LM 22X1.5 ED	2201238800	2202238800	2201238810	2202238810	13	27	27,5	
	400	12	M 16x1,5	GE(K) 12 LM ED	2201248400	2202248400	2201248410	2202248410	12,5	22	27	
	400	12	M 18x1,5	GE(K) 12 LM 18X1.5 ED	2201248800	2202248800	2201248810	2202248810	12,5	24	27	
	400	12	M 22x1,5	GE(K) 12 LM 22X1.5 ED	2201249200	2202249200	2201249210	2202249210	13	27	27,5	
	400	15	M 18x1,5	GE(K) 15 LM ED	2201260400	2202260400	2201260410	2202260410	13,5	24	29	
	400	15	M 22x1,5	GE(K) 15 LM 22X1.5 ED	2201260800	2202260800	2201260810	2202260810	14	27	29	
	400	18	M 18x1,5	GE(K) 18 LM 18X1.5 ED	2201269600	2202269600	2201269610	2202269610	14	27	31	
	400	18	M 22x1,5	GE(K) 18 LM ED	2201270000	2202270000	2201270010	2202270010	14,5	27	30	
	250	22	M 26x1,5	GE(K) 22 LM ED	2201277200	2202277200	2201277210	2202277210	16,5	32	33	
	250	28	M 33x2	GE(K) 28 LM ED	2201283600	2202283600	2201283610	2202283610	17,5	41	34	
	250	35	M 42x2	GE(K) 35 LM ED	2201289600	2202289600	2201289610	2202289610	17,5	50	39	
	250	42	M 48x2	GE(K) 42 LM ED	2201294400	2202294400	2201294410	2202294410	19	55	42	
	S	800	6	M 12x1,5	GE(K) 06 SM ED	2201226400	2202226400	2201226410	2202226410	13	17	28
		800	8	M 14x1,5	GE(K) 08 SM ED	2201234400	2202234400	2201234410	2202234410	15	19	30
800		10	M 16x1,5	GE(K) 10 SM ED	2201243200	2202243200	2201243210	2202243210	15	22	31	
630		12	M 18x1,5	GE(K) 12 SM ED	2201254800	2202254800	2201254810	2202254810	17	24	33	
630		14	M 20x1,5	GE(K) 14 SM ED	2201258000	2202258000	2201258010	2202258010	19	27	37	
630		16	M 22x1,5	GE(K) 16 SM ED	2201265200	2202265200	2201265210	2202265210	18,5	27	37	
400		20	M 27x2	GE(K) 20 SM ED	2201273600	2202273600	2201273610	2202273610	20,5	32	42	
400		25	M 33x2	GE(K) 25 SM ED	2201280400	2202280400	2201280410	2202280410	23	41	47	
250		30	M 42x2	GE(K) 30 SM ED	2201286300	2202286300	2201286310	2202286310	23,5	50	50	
250		38	M 48x2	GE(K) 38 SM ED	2201291600	2202291600	2201291610	2202291610	26	55	57	

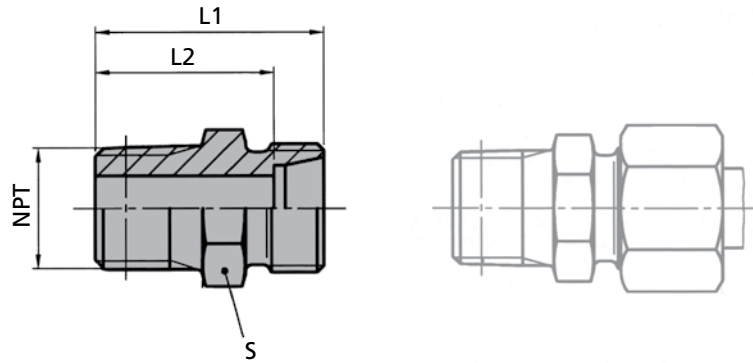
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened  
 Other seal types available.



Male Stud Coupling – UNF With O-ring

Series	PN	Pipe O.D.	UNF	Part No	Coupling body only (K)		Complete with nuts and rings		L1	S	L2
					ID Code CS	ID Code SS	ID Code CS	ID Code SS			
L	400	6	9/16-18	GE(K) 06 L 9/16-18 UNF	2201221600	2202221600	2201221610	2202221610	10	19	25
	400	8	7/16-20	GE(K) 08 L 7/16-20 UNF	2201228000	2202228000	2201228010	2202228010	10	17	25
	400	8	9/16-18	GE(K) 08 L 9/16-18 UNF	2201228400	2202228400	2201228410	2202228410	10	19	25
	400	10	7/16-20	GE(K) 10 L 7/16- 20 UNF	2201237200	2202237200	2201237210	2202237210	11	17	26
	400	10	9/16-18	GE(K) 10 L 9/16-18 UNF	2201237600	2202237600	2201237610	2202237610	11	19	26
	400	10	3/4-16	GE(K) 10 L 3/4-16 UNF	2201238000	2202238000	2201238010	2202238010	13	24	28
	400	12	7/8-14	GE(K) 12 L 7/8-14 UNF	2201247200	2202247200	2201247210	2202247210	11	19	26
	400	12	9/16-18	GE(K) 12 L 9/16-18 UNF	2201247600	2202247600	2201247610	2202247610	13	24	28
	400	12	3/4-16	GE(K) 12 L 3/4-16 UNF	2201247800	2202247800	2201247810	2202247810	14	27	29
	400	15	7/8-14	GE(K) 15 L 7/8-14 UNF	2201259600	2202259600	2201259610	2202259610	14	24	29
	400	15	3/4-16	GE(K) 15 L 3/4-16 UNF	2201260000	2202260000	2201260010	2202260010	15	27	30
	400	18	3/4-16	GE(K) 18 L 3/4-16 UNF	2201268800	2202268800	2201268810	2202268810	14,5	27	31
	400	18	7/8-14	GE(K) 18 L 7/8-14 UNF	2201269200	2202269200	2201269210	2202269210	14,5	27	31
	250	22	1 11/16-12	GE(K) 22 L 11/16-12 UN	2201276200	2202276200	2201276210	2202276210	16,5	32	33
	250	22	7/8-14	GE(K) 22 L 7/8-14 UNF	2201276400	2202276400	2201276410	2202276410	16,5	32	33
	250	28	7/8-14	GE(K) 28 L 7/8-14 UNF	2201282800	2202282800	2201282810	2202282810	17,5	41	34
	250	28	1 11/16-12	GE(K) 28 L 11/16-12 UN	2201282600	2202282600	2201282610	2202282610	17,5	41	34
	250	35	1 5/8-12	GE(K) 35 L 15/8-12 UNF	2201289000	2202289000	2201289010	2202289010	17,5	50	39
	250	42	1 5/8-12	GE(K) 42 L 7/8-14 UNF	2201294000	2202294000	2201294010	2202294010	19	55	42
	S	630	12	3/4-16	GE(K) 12 S 3/4-16 UNF	2201254400	2202254400	2201254410	2202254410	17,5	24
630		16	3/4-16	GE(K) 16 S 3/4-16 UNF	2201264400	2202264400	2201264410	2202264410	15,5	24	34
630		16	7/8-14	GE(K) 16 S 7/8-14 UNF	2201264800	2202264800	2201264810	2202264810	18,5	27	37
400		20	3/4-16	GE(K) 20 S 3/4-16 UNF	2201272400	2202272400	2201272410	2202272410	20,5	32	42
400		20	7/8-14	GE(K) 20 S 7/8-14 UNF	2201272800	2202272800	2201272810	2202272810	20,5	32	42
400		20	1 11/16-12	GE(K) 20 S 11/16-12 UN	2201273200	2202273200	2201273210	2202273210	20,5	32	42
400		25	1 5/16-12	GE(K) 25 S 15/16-12 UN	2201280000	2202280000	2201280010	2202280010	23	41	47
315		30	1 5/8-12	GE(K) 30 S 15/8-12 UN	2201286200	2202286200	2201286210	2202286210	23,5	50	50

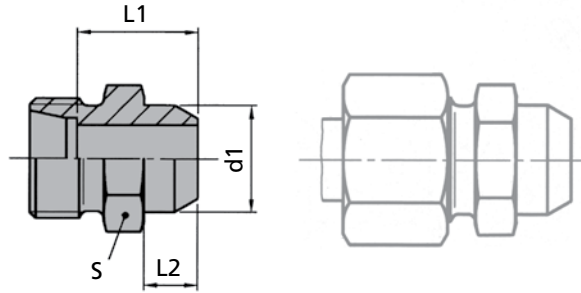
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened



Male Stud Coupling – NPT

Series	PN	Pipe O.D.	NPT	Part No	Coupling body only (K)		Complete with nuts and rings		L1	S	L2
					ID Code CS	ID Code SS	ID Code CS	ID Code SS			
LL	100	4	1/8	GE(K) 04 LL 1/8 NPT	2201219700	2202219700	2201219710	2202219710	22	11	18
	100	6	1/8	GE(K) 06 LL 1/8 NPT	2201221000	2202221000	2201221010	2202221010	22	11	16,5
	100	8	1/8	GE(K) 08 LL 1/8 NPT	2201228600	2202229300	2201228610	2202229310	24	12	18,5
L	315	6	1/8	GE(K) 06 L 1/8 NPT	2201220800	2202220800	2201220810	2202220810	24	12	17
	315	6	1/4	GE(K) 06 L 1/4 NPT	2201221200	2202221200	2201221210	2202221210	30	17	23
	315	8	1/4	GE(K) 08 L 1/4 NPT	2201227600	2202227600	2201227610	2202227610	30	17	23
	315	10	1/4	GE(K) 10 L 1/4 NPT	2201236400	2202236400	2201236410	2202236410	31	17	24
	315	10	3/8	GE(K) 10 L 3/8 NPT	2201236800	2202236800	2201236810	2202236810	32	19	25
	315	12	1/4	GE(K) 12 L 1/4 NPT	2201246000	2202246000	2201246010	2202246010	32	19	25
	315	12	3/8	GE(K) 12 L 3/8 NPT	2201246400	2202246400	2201246410	2202246410	32	19	25
	315	12	1/2	GE(K) 12 L 1/2 NPT	2201246800	2202246800	2201246810	2202246810	37	24	30
	315	15	1/2	GE(K) 15 L 1/2 NPT	2201259200	2202259200	2201259210	2202259210	38	24	31
	315	18	1/2	GE(K) 18 L 1/2 NPT	2201268400	2202268400	2201268410	2202268410	39	27	31,5
	160	22	3/4	GE(K) 22 L 3/4 NPT	2201276000	2202276000	2201276010	2202276010	41	32	33,5
	160	28	1	GE(K) 28 L 1 NPT	2201282400	2202282400	2201282410	2202282410	47	41	39,5
	160	35	1 1/4	GE(K) 35 L 1 1/4 NPT	2201288800	2202288800	2201288810	2202288810	51	46	40,5
	160	42	1 1/2	GE(K) 42 L 1 1/2 NPT	2201293600	2202293600	2201293610	2202293610	53	55	42
S	630	6	1/4	GE(K) 06 S 1/4 NPT	2201226000	2202226000	2201226010	2202226010	35	17	28
	630	8	1/4	GE(K) 08 S 1/4 NPT	2201234000	2202234000	2201234010	2202234010	35	17	28
	630	10	1/4	GE(K) 10 S 1/4 NPT	2201242400	2202242400	2201242410	2202242410	35	19	27,5
	630	10	3/8	GE(K) 10 S 3/8 NPT	2201242800	2202242800	2201242810	2202242810	35	19	27,5
	630	12	1/4	GE(K) 12 S 1/4 NPT	2201253200	2202253200	2201253210	2202253210	37	22	29,5
	630	12	3/8	GE(K) 12 S 3/8 NPT	2201253600	2202253600	2201253610	2202253610	37	22	29,5
	630	12	1/2	GE(K) 12 S 1/2 NPT	2201254000	2202254000	2201254010	2202254010	42	22	34,5
	630	14	1/2	GE(K) 14 S 1/2 NPT	2201257600	2202257600	2201257610	2202257610	44	24	36
	400	16	1/2	GE(K) 16 S 1/2 NPT	2201264000	2202264000	2201264010	2202264010	44	27	35,5
	400	20	3/4	GE(K) 20 S 3/4 NPT	2201272000	2202272000	2201272010	2202272010	48	32	37,5
400	25	1	GE(K) 25 S 1 NPT	2201279600	2202279600	2201279610	2202279610	57	41	45	
400	30	1 1/4	GE(K) 30 S 1 1/4 NPT	2201286000	2202286000	2201286010	2202286010	60	46	46,5	
315	38	1 1/2	GE(K) 38 S 1 1/2 NPT	2201291200	2202291200	2201291210	2202291210	65	55	49	

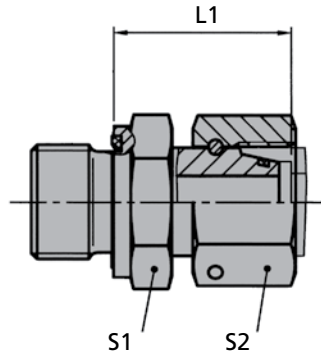
((K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No



### Weldable Stud

Series	PN	Pipe O.D.	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	d1	S
				ID Code CS	ID Code SS	ID Code CS	ID Code SS				
L	500	6	AS(K) 06 L	2201030000	2202030000	2201030010	2202030010	14	7	10	12
	500	8	AS(K) 08 L	2201030600	2202030600	2201030610	2202030610	16	8	12	14
	500	10	AS(K) 10 L	2201031200	2202031200	2201031210	2202031210	18	8	14	17
	400	12	AS(K) 12 L	2201031800	2202031800	2201031810	2202031810	18	8	16	19
	400	15	AS(K) 15 L	2201032700	2202032700	2201032710	2202032710	22	10	19	22
	400	18	AS(K) 18 L	2201033300	2202033300	2201033310	2202033310	23,5	10	22	27
	250	22	AS(K) 22 L	2201033900	2202033900	2201033910	2202033910	28,5	12	27	32
	250	28	AS(K) 28 L	2201034500	2202034500	2201034510	2202034510	30,5	12	32	41
	250	35	AS(K) 35 L	2201035100	2202035100	2201035110	2202035110	32,5	14	40	46
	250	42	AS(K) 42 L	2201035700	2202035700	2201035710	2202035710	35	16	46	55
S	800	6	AS(K) 06 S	2201030300	2202030300	2201030310	2202030310	19	7	11	14
	800	8	AS(K) 08 S	2201030900	2202030900	2201030910	2202030910	21	8	13	17
	800	10	AS(K) 10 S	2201031500	2202031500	2201031510	2202031510	22,5	8	15	19
	630	12	AS(K) 12 S	2201032100	2202032100	2201032110	2202032110	24,5	10	17	22
	630	14	AS(K) 14 S	2201032400	2202032400	2201032410	2202032410	27	10	19	24
	630	16	AS(K) 16 S	2201033000	2202033000	2201033010	2202033010	26,5	10	21	27
	420	20	AS(K) 20 S	2201033600	2202033600	2201033610	2202033610	29,5	12	26	32
	420	25	AS(K) 25 S	2201034200	2202034200	2201034210	2202034210	32	12	31	41
	420	30	AS(K) 30 S	2201034800	2202034800	2201034810	2202034810	35,5	14	36	46
	420	38	AS(K) 38 S	2201035400	2202035400	2201035410	2202035410	38	16	44	55

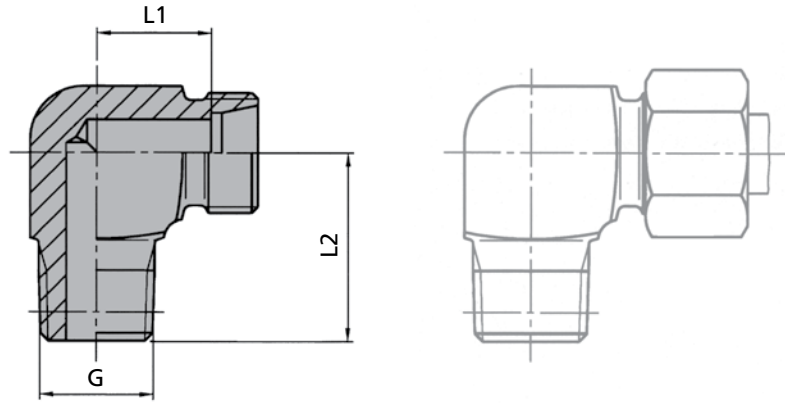
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= weldable carbon steel  
 SS= stainless steel. Add 316 to end of Part No



### Swivel Stud Connector With ED Sealing

Series	PN	Pipe O.D.	G	Part No	ID Code CS	ID Code SS	L1	S1	S2
L	500	6	1/8	EGE 06 LR ED	2201080300	2202080300	24,5	14	17
	500	6	1/4	EGE 06 LR 1/4 ED	2201080600	2202080500	24,5	19	17
	500	8	1/4	EGE 08 LR ED	2201081500	2202081500	29,5	19	17
	500	10	1/4	EGE 10 LR ED	2201082700	2202082700	27,5	19	19
	400	12	1/4	EGE 12 LR 1/4 ED	2201083900	2202083900	27,5	19	22
	400	12	3/8	EGE 12 LR ED	2201084200	2202084200	34	22	22
	400	12	1/2	EGE 12 LR 1/2 ED	2201083400	2202083800	34	27	22
	400	15	3/8	EGE 15 LR 3/8 ED	2201086350	2202085900	32	27	27
	400	15	1/2	EGE 15 LR ED	2201086300	2202086300	32	27	27
	400	18	1/2	EGE 18 LR ED	2201087500	2202087500	31,5	27	32
	250	22	3/4	EGE 22 LR ED	2201088700	2202088700	32,5	32	36
	250	28	1	EGE 28 LR ED	2201089900	2202089900	35	41	46
	250	35	1 1/4	EGE 35 LR ED	2201091100	2202091100	42,5	50	50
	250	42	1 1/2	EGE 42 LR ED	2201092300	2202092300	46,5	55	60
	S	800	6	1/4	EGE 06 SR ED	2201080900	2202080900	27	19
800		8	1/4	EGE 08 SR ED	2201082100	2202082100	29,5	19	19
800		10	3/8	EGE 10 SR ED	2201083300	2202083300	32	22	22
630		12	1/4	EGE 12 SR 1/4 ED	2201085200	—	34	22	24
630		12	3/8	EGE 12 SR ED	2201084800	2202084800	34,5	27	24
630		12	1/2	EGE 12 SR 1/2 ED	2201085100	2202084900	36,5	27	27
630		14	1/2	EGE 14 SR ED	2201085700	2202085700	37	27	30
630		16	1/2	EGE 16 SR ED	2201086900	2202086900	43	32	36
400		20	3/4	EGE 20 SR ED	2201088100	2202088100	48	41	46
400		25	1	EGE 25 SR ED	2201089300	2202089300	51	50	50
400		30	1 1/4	EGE 30 SR ED	2201090500	2202090500	60	55	60
400		38	1 1/2	EGE 38 SR ED	2201091700	2202091700			

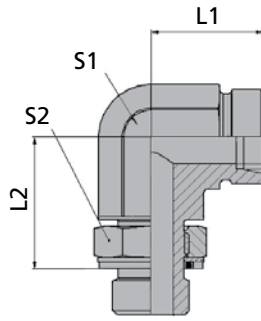
CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No



Male Stud Elbow BSP Taper

Series	PN	Pipe O.D.	G	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2
					ID Code CS	ID Code SS	ID Code CS	ID Code SS		
LL	100	4	1/8	WE(K) 04 LLRK	2201880000	2202880000	2201880010	2202880010	11	17
	100	6	1/8	WE(K) 06 LLRK	2201881000	2202881000	2201881010	2202881010	9,5	17
	100	8	1/8	WE(K) 08 LLRK	2201884000	2202884000	2201884010	2202884010	11,5	20
L	250	6	1/8	WE(K) 06 LRK	2201881500	2202881500	2201881510	2202881510	12	20
	250	6	1/4	WE(K) 06 LR 1/4K	2201882000	2202882000	2201882010	2202882010	14	26
	250	8	1/4	WE(K) 08 LRK	2201884500	2202884500	2201884510	2202884510	14	26
	250	10	1/4	WE(K) 10 LRK	2201887000	2202887000	2201887010	2202887010	15	27
	250	10	3/8	WE(K) 10 LR 3/8K	2201886500	2202886500	2201886510	2202886510	15	27
	250	12	1/4	WE(K) 12 LR 1/4K	2201890000	2202890000	2201890010	2202890010	17	28
	250	12	3/8	WE(K) 12 LRK	2201890500	2202890500	2201890510	2202890510	17	34
	250	12	1/2	WE(K) 12 LR 1/2K	2201889500	2202891000	2201889510	2202891010	17	28
	250	15	3/8	WE(K) 15 LR 3/8K	2201894600	2202894900	2201894610	2202894910	21	34
	250	15	1/2	WE(K) 15 LRK	2201895000	2202895000	2201895010	2202895010	21	34
	160	18	1/2	WE(K) 18 LRK	2201897000	2202897000	2201897010	2202897010	23,5	36
	160	22	3/4	WE(K) 22 LR	2201898400	2202898400	2201898410	2202898410	27,5	42
	160	28	1	WE(K) 28 LR	2201899400	2202899400	2201899410	2202899410	30,5	48
	160	35	1 1/4	WE(K) 35 LR	2201900200	2202900200	2201900210	2202900210	34,5	54
	160	42	1 1/2	WE(K) 42 LR	2201901000	2202901000	2201901010	2202901010	40	61
S	630	6	1/4	WE(K) 06 SRK	2201883000	2202883000	2201883010	2202883010	16	26
	630	8	1/4	WE(K) 08 SRK	2201885500	2202885500	2201885510	2202885510	17	27
	630	10	3/8	WE(K) 10 SRK	2201888000	2202888000	2201888010	2202888010	17,5	28
	630	12	3/8	WE(K) 12 SRK	2201892500	2202892500	2201892510	2202892510	21,5	28
	630	14	1/2	WE(K) 14 SRK	2201894000	2202894000	2201894010	2202894010	22	32
	400	16	1/2	WE(K) 16 SRK	2201896000	2202896000	2201896010	2202896010	24,5	32
	400	20	3/4	WE(K) 20 SR	2201897900	2202897900	2201897910	2202897910	26,5	42
	400	25	1	WE(K) 25 SR	2201898900	2202898900	2201898910	2202898910	30	48
	250	30	1 1/4	WE(K) 30 SR	2201899800	2202899800	2201899810	2202899810	35,5	54
	250	38	1 1/2	WE(K) 38 SR	2201900600	2202900600	2201900610	2202900610	41	61

(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No  
 L2= approximate length with nut tightened

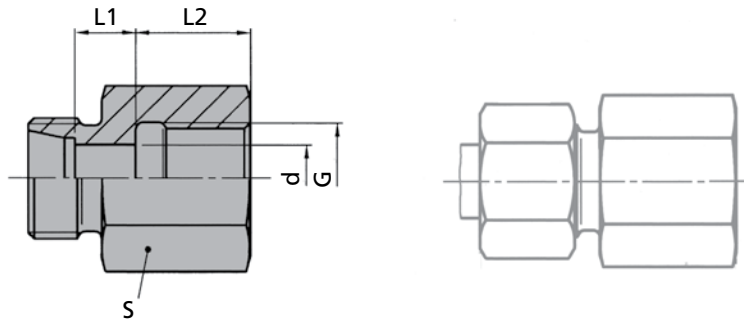


### Adjustable Male Stud Elbow

Series	PN	Pipe O.D.	G	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	S1	S2
					ID Code CS	ID Code SS	ID Code CS	ID Code SS				
L	315	6	1/8	WEA(K) 06 LR	2201010000	2202010000	2201010001	2202010001	19	20	12	14
	315	8	1/4	WEA(K) 08 LR	2201010020	2202010020	2201010021	2202010021	21	21.5	14	19
	315	10	1/4	WEA(K) 10 LR	2201010040	2202010040	2201010041	2202010041	22	21.5	14	19
	250	12	3/8	WEA(K) 12 LR	2201010060	2202010060	2201010061	2202010061	24	26.5	19	22
	250	15	1/2	WEA(K) 15 LR	2201010080	2202010080	2201010081	2202010081	28	30	22	27
	250	18	1/2	WEA(K) 18 LR	2201010100	2202010100	2201010101	2202010101	31	30	22	27
	160	22	3/4	WEA(K) 22 LR	2201010120	2202010120	2201010121	2202010121	35	36.5	27	36
	160	28	1	WEA(K) 28 LR	2201010140	2202010140	2201010141	2202010141	38	36	33	41
	160	35	1 1/4	WEA(K) 35 LR	2201010160	2202010160	2201010161	2202010161	45	41	41	50
160	42	1 1/2	WEA(K) 42 LR	2201010180	2202010180	2201010181	2202010181	51	44.5	48	55	
S	315	6	1/4	WEA(K) 06 SR	2201010200	2202010200	2201010201	2202010201	23	21.5	14	19
	315	8	1/4	WEA(K) 08 SR	2201010220	2202010220	2201010221	2202010221	24	21.5	14	19
	250	10	3/8	WEA(K) 10 SR	2201010240	2202010240	2201010241	2202010241	25	26.5	19	22
	250	12	3/8	WEA(K) 12 SR	2201010260	2202010260	2201010261	2202010261	29	26.5	19	22
	250	16	1/2	WEA(K) 16 SR	2201010280	2202010280	2201010281	2202010281	33	30	22	27
	250	20	3/4	WEA(K) 20 SR	2201010300	2202010300	2201010301	2202010301	37	36.5	27	36
	250	25	1	WEA(K) 25 SR	2201010320	2202010320	2201010321	2202010321	42	36	33	41
	160	30	1 1/4	WEA(K) 30 SR	2201010340	2202010340	2201010341	2202010341	49	41	41	50
	160	38	1 1/2	WEA(K) 38 SR	2201010360	2202010360	2201010361	2202010361	57	44.5	48	55

(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No

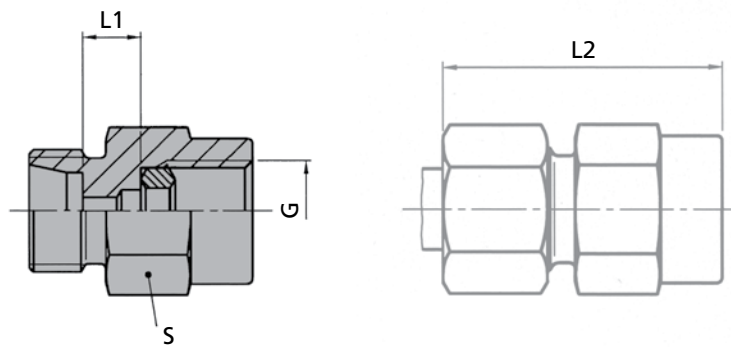




**Parallel Female Connector With BSPP**

Series	PN	Pipe O.D.	G	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	d	S
					ID Code CS	ID Code SS	ID Code CS	ID Code SS				
L	250	6	1/8	GAI(K) 06 LR	2201200000	2202200000	2201200010	2202200010	7	12	4	14
	250	8	1/4	GAI(K) 08 LR	2201200600	2202200600	2201200610	2202200610	7	17	6	19
	250	10	1/4	GAI(K) 10 LR	2201201200	2202201200	2201201210	2202201210	8	17	8	19
	250	12	1/4	GAI(K) 12 LR 1/4	2201201800	2202201800	2201201810	2202201810	8	17	8	19
	250	12	3/8	GAI(K) 12 LR	2201202100	2202202100	2201202110	2202202110	9	17	10	24
	250	15	1/2	GAI(K) 15 LR	2201203000	2202203000	2201203010	2202203010	11	20	12	30
	160	18	1/2	GAI(K) 18 LR	2201203600	2202203600	2201203610	2202203610	10,5	20	15	27
	160	22	3/4	GAI(K) 22 LR	2201204200	2202204200	2201204210	2202204210	13,5	22	19	36
	100	28	1	GAI(K) 28 LR	2201204800	2202204800	2201204810	2202204810	13,5	24,5	24	41
	100	35	1 1/4	GAI(K) 35 LR	2201205400	2202205400	2201205410	2202205410	14,5	26,5	30	55
S	100	42	1 1/2	GAI(K) 42 LR	2201206000	2202206000	2201206010	2202206010	14	28,5	36	60
	400	6	1/4	GAI(K) 06 SR	2201200300	2202200300	2201200310	2202200310	9	17	4	19
	400	8	1/4	GAI(K) 08 SR	2201200900	2202200900	2201200910	2202200910	9	17	5	19
	400	10	3/8	GAI(K) 10 SR	2201201500	2202201500	2201201510	2202201510	9,5	17	7	24
	400	12	3/8	GAI(K) 12 SR	2201202500	2202202400	2201202510	2202202510	9,5	17	8	24
	400	14	1/2	GAI(K) 14 SR	2201202700	2202202700	2201202710	2202202710	12	20	10	27
	400	16	1/2	GAI(K) 16 SR	2201203300	2202203300	2201203310	2202203310	11,5	20	12	30
	400	20	3/4	GAI(K) 20 SR	2201203900	2202203900	2201203910	2202203910	12,5	22	16	36
	400	25	1	GAI(K) 25 SR	2201204500	2202204500	2201204510	2202204510	13	24,5	20	41
	250	30	1 1/4	GAI(K) 30 SR	2201205100	2202205100	2201205110	2202205110	15,5	26,5	25	55
250	38	1 1/2	GAI(K) 38 SR	2201205700	2202205700	2201205710	2202205710	15	28,5	32	60	

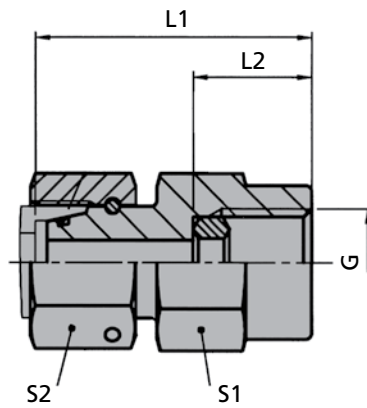
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No



### Gauge Coupling with DKI Sealing Ring

Series	PN	Pipe O.D.	G	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	S
					ID Code CS	ID Code SS	ID Code CS	ID Code SS			
L	500	6	1/4	MAV(K) 06 LR	2201440000	2202440000	2201440010	2202440010	7,5	37	19
	500	8	1/4	MAV(K) 08 LR	2201440600	2202440600	2201440610	2202440610	7,5	37	19
	500	10	1/4	MAV(K) 10 LR	2201441200	2202441800	2201441210	2202441810	8,5	38	19
	400	12	1/4	MAV(K) 12 LR	2201441800	2202441900	2201441810	2202441910	8,5	38	19
S	800	6	1/2	MAV(K) 06 SR	2201440300	2202440300	2201440310	2202440310	11	46	27
	800	8	1/2	MAV(K) 08 SR	2201440900	2202440900	2201440910	2202440910	11	46	27
	800	10	1/2	MAV(K) 10 SR	2201441500	2202441500	2201441510	2202441510	10,5	47	27
	630	12	1/2	MAV(K) 12 SR	2201442100	2202442100	2201442110	2202442110	10,5	47	27

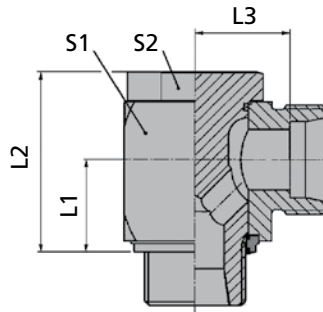
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No



### Gauge Coupling Swivel Nut with DKI Sealing Ring

Series	PN	Pipe O.D.	Part No	ID Code CS	ID Code SS	G	L1	L2	S1	S2
L	500	6	<b>MAVE 06 LR</b>	2201120000	2202120000	1/4	38	14,5	19	14
	500	8	<b>MAVE 08 LR</b>	2201120600	2202120600	1/4	38	14,5	19	17
	500	10	<b>MAVE 10 LR</b>	2201121200	2202121200	1/4	39,5	14,5	19	19
	400	12	<b>MAVE 12 LR</b>	2201121800	2202121800	1/4	40,5	14,5	19	22
S	630	6	<b>MAVE 06 SR</b>	2201120300	2202120300	1/2	45	20	27	17
	630	8	<b>MAVE 08 SR</b>	2201120900	2202120900	1/2	45	20	27	19
	630	10	<b>MAVE 10 SR</b>	2201121500	2202121500	1/2	47	20	27	22
	630	12	<b>MAVE 12 SR</b>	2201122100	2202122100	1/2	47,5	20	27	24

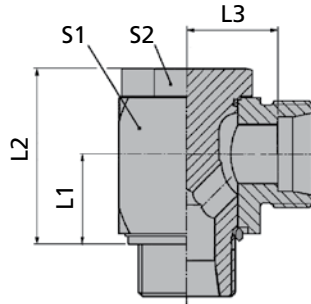
CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No



### Banjo Coupling With Elastomer Soft Sealing

Series	PN	Pipe O.D.	Banjo thread G	Part No	Coupling body only (K)		Complete with nuts and rings		L1	L2	L3	S1	S2	
					ID Code CS	ID Code SS	ID Code CS	ID Code SS						
L	500	6	1/8	DSWV(K) 06 LR ED	2201651200	2202650600	2201651210	2202650610	10	21	13	14	14	
	500	6	1/4	DSWV(K) 06 LR 1/4 ED	2201651500	2202651500	2201651510	2202651510	13,5	27	15	19	19	
	500	8	1/4	DSWV(K) 08 LR ED	2201653000	2202652700	2201653010	2202652710	13,5	27	14	19	19	
	500	10	1/4	DSWV(K) 10 LR ED	2201654200	2202653900	2201654210	2202653910	13,5	27	15	19	19	
	400	12	1/4	DSWV(K) 12 LR 1/4 ED	2201655200	-	2201655210	-	15,5	30	15	22	19	
	400	12	3/8	DSWV(K) 12 LR ED	2201656000	2202655400	2201656010	2202655410	16	32,5	17,5	24	22	
	400	15	1/2	DSWV(K) 15 LR ED	2201657800	2202657500	2201657810	2202657510	19,5	43	21	30	27	
	400	18	1/2	DSWV(K) 18 LR ED	2201659000	2202658700	2201659010	2202658710	21,5	43	20,5	30	27	
	250	22	3/4	DSWV(K) 22 LR ED	2201660200	2202659900	2201660210	2202659910	24	48	27	36	32	
	250	28	1	DSWV(K) 28 LR ED	2201661400	2202661100	2201661410	2202661110	30,5	59	31,5	46	41	
	250	35	1 1/4	DSWV(K) 35 LR ED	2201662600	2202662300	2201662610	2202662310	35,5	70	35,5	55	50	
	250	42	1 1/2	DSWV(K) 42 LR ED	2201663800	2202663500	2201663810	2202663510	40,5	80	40	65	55	
	S	500	6	1/4	DSWV(K) 06 SR ED	2201652100	2202651800	2201652110	2202651810	13,5	27	16	19	19
		500	8	1/4	DSWV(K) 08 SR ED	2201653600	2202653300	2201653610	2202653310	13,5	27	16	19	19
500		10	3/8	DSWV(K) 10 SR ED	2201654800	2202654500	2201654810	2202654510	16	32,5	18	24	22	
400		12	3/8	DSWV(K) 12 SR ED	2201656600	2202656300	2201656610	2202656310	16	32,5	18	24	22	
400		14	1/2	DSWV(K) 14 SR ED	2201657200	2202656900	2201657210	2202656910	19,5	41	22	30	27	
400		16	1/2	DSWV(K) 16 SR ED	2201658400	2202658100	2201658410	2202658110	21,5	43	21,5	30	27	
315		20	3/4	DSWV(K) 20 SR ED	2201659600	2202659300	2201659610	2202659310	24	48	26	36	32	
250		25	1	DSWV(K) 25 SR ED	2201660800	2202660500	2201660810	2202660510	30,5	59	31	46	41	
250		30	1 1/4	DSWV(K) 30 SR ED	2201662000	2202661700	2201662010	2202661710	35,5	70	36,5	55	50	
250		38	1 1/2	DSWV(K) 38 SR ED	2201663200	2202662900	2201663210	2202662910	40,5	80	41	65	55	

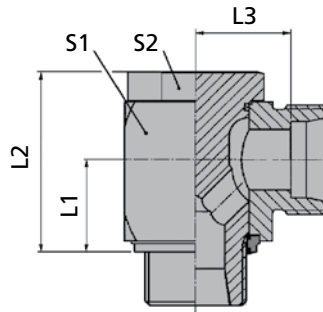
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No



### Banjo Coupling With Metallic Sealing

Series	PN	Pipe O.D.	Banjo thread G	Part No	Coupling body only (K) ID Code CS	Complete with nuts and rings ID Code CS	L1	L2	L3	S1	S2
LL	100	4	1/8	DSWV(K) 04 LLR	2201650000	2201650010	10	21	16	14	14
	100	6	1/8	DSWV(K) 06 LLR	2201650300	2201650310	10	21	14,5	14	14
	100	8	1/8	DSWV(K) 08 LLR	2201652400	2201652410	10	21	16	14	14
L	500	6	1/8	DSWV(K) 06 LR	2201650600	2201650610	10	21	13	14	14
	500	6	1/4	DSWV(K) 06 LR 1/4	2201650900	2201650910	13,5	27	15	19	19
	500	8	1/4	DSWV(K) 08 LR	2201652700	2201652710	13,5	27	14	19	19
	500	10	1/4	DSWV(K) 10 LR	2201653900	2201653910	13,5	27	15	19	19
	400	12	1/4	DSWV(K) 12 LR 1/4	2201655100	2201655110	15,5	30	15	22	19
	400	12	3/8	DSWV(K) 12 LR	2201655400	2201655410	16	32,5	17,5	24	22
	400	15	1/2	DSWV(K) 15 LR	2201657500	2201657510	19,5	43	21	30	27
	400	18	1/2	DSWV(K) 18 LR	2201658700	2201658710	21,5	43	20,5	30	27
	250	22	3/4	DSWV(K) 22 LR	2201659900	2201659910	24	48	27	36	32
	250	28	1	DSWV(K) 28 LR	2201661100	2201661110	30,5	59	31,5	46	41
	250	35	1 1/4	DSWV(K) 35 LR	2201662300	2201662310	35,5	70	35,5	55	50
	250	42	1 1/2	DSWV(K) 42 LR	2201663500	2201663510	40,5	80	40	65	55
	S	500	6	1/4	DSWV(K) 06 SR	2201651800	2201651810	13,5	27	16	19
500		8	1/4	DSWV(K) 08 SR	2201653300	2201653310	13,5	27	16	19	19
500		10	3/8	DSWV(K) 10 SR	2201654500	2201654510	16	32,5	18	24	22
400		12	3/8	DSWV(K) 12 SR	2201656300	2201656310	16	32,5	18	24	22
400		14	1/2	DSWV(K) 14 SR	2201656900	2201656910	19,5	41	22	30	27
400		16	1/2	DSWV(K) 16 SR	2201658100	2201658110	21,5	43	21,5	30	27
315		20	3/4	DSWV(K) 20 SR	2201659300	2201659310	24	48	26	36	32
250		25	1	DSWV(K) 25 SR	2201660500	2201660510	30,5	59	31	46	41
250		30	1 1/4	DSWV(K) 30 SR	2201661700	2201661710	35,5	70	36,5	55	50
250		38	1 1/2	DSWV(K) 38 SR	2201662900	2201662910	40,5	80	41	65	55

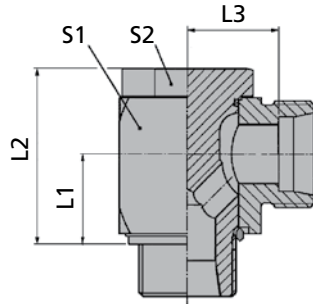
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
CS= carbon steel with zinc plating



### Metric Banjo Coupling With Elastomer Soft Sealing

Series	PN	Pipe O.D.	Banjo thread M	Part No	Coupling body only (K) ID Code CS	Complete with nuts and rings ID Code CS	L1	L2	L3	S1	S2
L	500	6	M 10x1	DSWV(K) 06 LM ED	2201650500	2201650510	10	21	13	14	14
	500	8	M 12x1,5	DSWV(K) 08 LM ED	2201652600	2201652610	13,5	27	14	19	19
	500	10	M 14x1,5	DSWV(K) 10 LM ED	2201653800	2201653810	13,5	27	15	19	19
	400	12	M 18x1,5	DSWV(K) 12 LM 18X1.5 ED	2201655000	2201655010	18,5	36	17,5	24	22
	400	12	M 16x1,5	DSWV(K) 12 LM ED	2201655500	2201655510	16	30	20	24	22
	400	15	M 18x1,5	DSWV(K) 15 LM ED	2201657400	2201657410	18,5	37	20	27	24
	400	18	M 22x1,5	DSWV(K) 18 LM ED	2201658600	2201658610	21,5	43	20,5	30	27
	250	22	M 26x1,5	DSWV(K) 22 LM ED	2201659800	2201659810	24	43	27	36	32
	250	28	M 33x2	DSWV(K) 28 LM ED	2201661000	2201661010	30,5	59	31,5	46	41
	250	35	M 42x2	DSWV(K) 35 LM ED	2201662200	2201662210	35,5	70	35,5	55	50
250	42	M 48x2	DSWV(K) 42 LM ED	2201663400	2201663410	40,5	80	40	65	55	
S	500	6	M 12x1,5	DSWV(K) 06 SM ED	2201651400	2201651410	13,5	27	16	19	19
	500	8	M 14x1,5	DSWV(K) 08 SM ED	2201653200	2201653210	13,5	27	16	19	19
	500	10	M 16x1,5	DSWV(K) 10 SM ED	2201654400	2201654410	16	32,5	18	24	22
	400	12	M 18x1,5	DSWV(K) 12 SM ED	2201656200	2201656210	18,5	37	19	27	24
	400	16	M 22x1,5	DSWV(K) 16 SM ED	2201658000	2201658010	16	43	21,5	30	27
	315	20	M 27x2	DSWV(K) 20 SM ED	2201659200	2201659210	21,5	48	26	36	32
	250	25	M 33x2	DSWV(K) 25 SM ED	2201660400	2201660410	30,5	59	31	46	41
	250	30	M 42x2	DSWV(K) 30 SM ED	2201661600	2201661610	35,5	70	36,5	55	50
250	38	M 48x2	DSWV(K) 38 SM ED	2201662800	2201662810	40,5	80	41	65	55	

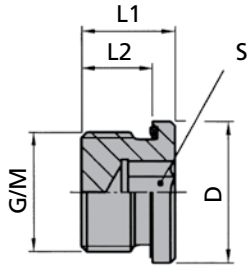
(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No



### Metric Banjo Coupling With Metallic Sealing

Series	PN	Pipe O.D.	Banjo thread M	Part No	Coupling body only (K) ID Code CS	Complete with nuts and rings ID Code CS	L1	L2	L3	S1	S2	
LL	100	4	M 8x1	DSWV(K) 04 LLM	2201650100	2201650110	10	21	16	14	14	
	100	6	M 10x1	DSWV(K) 06 LLM	2201650200	2201650210	10	21	14,5	14	14	
	100	8	M 10x1	DSWV(K) 08 LLM	2201652200	2201652210	10	21	16	14	14	
L	500	6	M 10x1	DSWV(K) 06 LM	2201650400	2201650410	10	21	13	14	14	
	500	8	M 12x1,5	DSWV(K) 08 LM	2201652500	2201652510	13,5	27	14	19	19	
	500	10	M 14x1,5	DSWV(K) 10 LM	2201653700	2201653710	13,5	27	15	19	19	
	500	12	M 18x1,5	DSWV(K) 12 LM 18X1.5	2201654900	2201654910	18,5	36	17,5	24	22	
	400	12	M 16x1,5	DSWV(K) 12 LM	2201655300	2201655310	16	30	20	24	22	
	400	15	M 18x1,5	DSWV(K) 15 LM	2201657300	2201657310	18,5	37	20	27	24	
	400	18	M 22x1,5	DSWV(K) 18 LM	2201658500	2201658510	21,5	43	20,5	30	27	
	250	22	M 26x1,5	DSWV(K) 22 LM	2201659700	2201659710	24	43	27	36	32	
	250	28	M 33x2	DSWV(K) 28 LM	2201660900	2201660910	30,5	59	31,5	46	41	
	250	35	M 42x2	DSWV(K) 35 LM	2201662100	2201662110	35,5	70	35,5	55	50	
	250	42	M 48x2	DSWV(K) 42 LM	2201663300	2201663310	40,5	80	40	65	55	
	S	500	6	M 12x1,5	DSWV(K) 06 SM	2201651300	2201651310	13,5	27	16	19	19
		500	8	M 14x1,5	DSWV(K) 08 SM	2201653100	2201653110	13,5	27	16	19	19
500		10	M 16x1,5	DSWV(K) 10 SM	2201654300	2201654310	16	32,5	18	24	22	
400		12	M 18x1,5	DSWV(K) 12 SM	2201656100	2201656110	18,5	37	19	27	24	
400		14	M 20x1,5	DSWV(K) 14 SM	2201656700	2201656710	16	43	21,5	30	27	
400		16	M 22x1,5	DSWV(K) 16 SM	2201657900	2201657910	21,5	48	26	36	32	
315		20	M 27x2	DSWV(K) 20 SM	2201659100	2201659110	30,5	59	31	46	41	
250		25	M 33x2	DSWV(K) 25 SM	2201660300	2201660310	35,5	70	36,5	55	50	
250		30	M 42x2	DSWV(K) 30 SM	2201661500	2201661510	40,5	80	41	65	55	
250		38	M 48x2	DSWV(K) 38 SM	2201662700	2201662710	40,5	80	41	65	55	

(K)= Part No with K means fitting body only. Part No without K means complete fitting with nut and ring  
CS= carbon steel with zinc plating

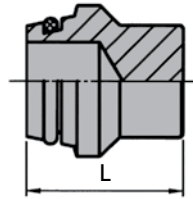


### Blanking End

PN	G BSP	Part No	ID Code CS	ID Code SS	D	L1	L2	S
400	1/8	VSTI 1/8 R ED	2201810000	2202810000	14	12	8	5
400	1/4	VSTI 1/4 R ED	2201810300	2202810300	18,9	17	12	6
400	3/8	VSTI 3/8 R ED	2201810600	2202810600	22	17	12	8
400	1/2	VSTI 1/2 R ED	2201810900	2202810900	26,9	19	14	10
400	3/4	VSTI 3/4 R ED	2201811200	2202811200	32	21	16	12
400	1	VSTI 1 R ED	2201811500	2202811500	39,9	22,5	16	17
250	1 1/4	VSTI 1 1/4 R ED	2201811800	2202811800	49,9	22,5	16	22
250	1 1/2	VSTI 1 1/2 R ED	2201812400	2202812400	55	22,5	16	24
250	2	VSTI 2 R ED	2201813000	2202813000	72	34	20	32
	M				D	L1	L2	S
400	M 10x1	VSTIM 1010	2201800000	2202800000	14	12	8	5
400	M 12x1,5	VSTIM 1215	2201800300	2202800300	17	17	12	6
400	M 14x1,5	VSTIM 1415	2201800600	2202800600	19	17	12	6
400	M 16x1,5	VSTIM 1615	2201800900	2202800900	21,9	17	12	8
400	M 18x1,5	VSTIM 1815	2201801200	2202801200	23,9	17	12	8
400	M 20x1,5	VSTIM 2015	2201801500	2202801500	25,9	19	14	10
400	M 22x1,5	VSTIM 2215	2201801800	2202801800	27	19	14	10
400	M 26x1,5	VSTIM 2615	2201802100	2202802100	31,9	21	16	12
400	M 27x2	VSTIM 2725	2201802400	2202802400	32	21	16	12
400	M 33x2	VSTIM 3320	2201802700	2202802700	39,9	22,5	16	17
250	M 42x2	VSTIM 4220	2201803000	2202803000	49,9	22,5	16	22
250	M 48x2	VSTIM 4820	2201803300	2202803300	55	22,5	16	24

CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No

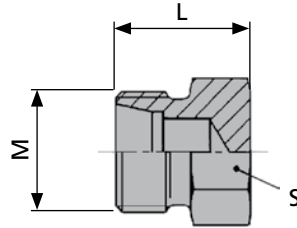




### Blanking Plug for 24° Cone

Series	PN	Pipe O.D.	Part No	ID Code CS	ID Code SS	L	O-Ring
LL	100	4	<b>BUZ 04 LL</b>	2201830000	2202813300	13,5	3,0x1,0
	100	6	<b>BUZ 06 LL</b>	2201830600	2202813500	15	5,0x1,0
	100	8	<b>BUZ 08 LL</b>	2201831200	2202814200	15	7,0x1,0
L	500	6	<b>BUZ 06 LS</b>	2201830300	2202813600	17	4,5x1,5
	500	8	<b>BUZ 08 LS</b>	2201830900	2202813900	17	6,0x1,5
	500	10	<b>BUZ 10 LS</b>	2201831500	2202814300	20	8,5x1,5
	400	12	<b>BUZ 12 LS</b>	2201831800	2202814400	21	10,0x1,5
	400	15	<b>BUZ 15 L</b>	2201832400	2202815200	20	12,0x2,0
	400	19	<b>BUZ 18 L</b>	2201833000	2202815400	21	15,0x2,0
	250	22	<b>BUZ 22 L</b>	2201833600	2202815800	23	20,0x2,0
	250	28	<b>BUZ 28 L</b>	2201834200	2202816400	23	26,0x2,0
	250	35	<b>BUZ 35 L</b>	2201834800	2202816700	29	32,0x2,5
	250	42	<b>BUZ 42 L</b>	2201835400	2202814600	30	38,0x2,5
S	800	6	<b>BUZ 06 LS</b>	2201830300	2202813600	17	4,5x1,5
	800	8	<b>BUZ 08 LS</b>	2201830900	2202813900	17	6,0x1,5
	800	10	<b>BUZ 10 LS</b>	2201831500	2202814300	20	8,5x1,5
	630	12	<b>BUZ 12 LS</b>	2201831800	2202814400	21	10,0x1,5
	630	14	<b>BUZ 14 S</b>	2201832100	2202815300	23	12,0x2,0
	630	16	<b>BUZ 16 S</b>	2201832700	2202815500	24	14,0x2,0
	420	20	<b>BUZ 20 S</b>	2201833300	2202816100	28	17,3x2,4
	420	22	<b>BUZ 25 S</b>	2201833900	2202816500	31	22,3x2,4
	420	30	<b>BUZ 30 S</b>	2201834500	2202834500	34	27,3x2,4
	420	38	<b>BUZ 38 S</b>	2201835100	2202835100	38	35,0x2,5

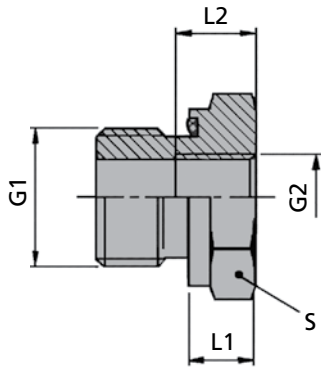
CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No



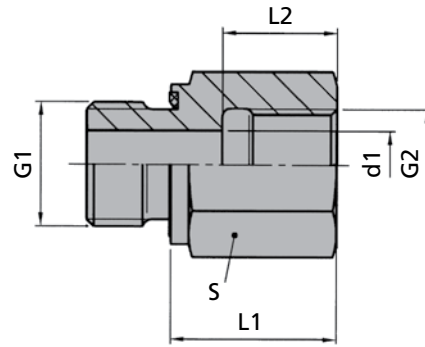
### Blind/Plug Body

Series	PN	Pipe O.D.	M	Part No	ID Code CS	ID Code SS	L	S
L	500	6	M 12x1,5	ROVK 06 L	2201840000	2202840000	17	14
	500	8	M 14x1,5	ROVK 08 L	2201840600	2202840600	17	17
	500	10	M 16x1,5	ROVK 10 L	2201841200	2202841200	20	17
	400	12	M 18x1,5	ROVK 12 L	2201841800	2202841800	21	19
	400	15	M 22x1,5	ROVK 15 L	2201842700	2202842700	20	24
	400	18	M 26x1,5	ROVK 18 L	2201843300	2202843300	21	27
	250	22	M 30x2	ROVK 22 L	2201843900	2202843900	23	32
	250	28	M 36x2	ROVK 28 L	2201844500	2202844500	23	41
	250	35	M 45x2	ROVK 35 L	2201845100	2202845100	29	46
	250	42	M 52x2	ROVK 42 L	2201845700	2202845700	30	55
S	800	6	M 14x1,5	ROVK 06 S	2201840300	2202840300	17	17
	800	8	M 16x1,5	ROVK 08 S	2201840900	2202840900	17	17
	800	10	M 18x1,5	ROVK 10 S	2201841500	2202841500	20	19
	630	12	M 20x1,5	ROVK 12 S	2201842100	2202842100	21	22
	630	14	M 22x1,5	ROVK 14 S	2201842400	2202842400	23	24
	630	16	M 24x1,5	ROVK 16 S	2201843000	2202843000	24	27
	420	20	M 30x2	ROVK 20 S	2201843600	2202843600	28	32
	420	25	M 36x2	ROVK 25 S	2201844200	2202844200	31	41
	420	30	M 42x2	ROVK 30 S	2201844800	2202844800	34	46
	420	38	M 52x2	ROVK 38 S	2201845400	2202845400	38	55

CS= carbon steel with zinc plating  
SS= stainless steel. Add 316 to end of Part No



Form A

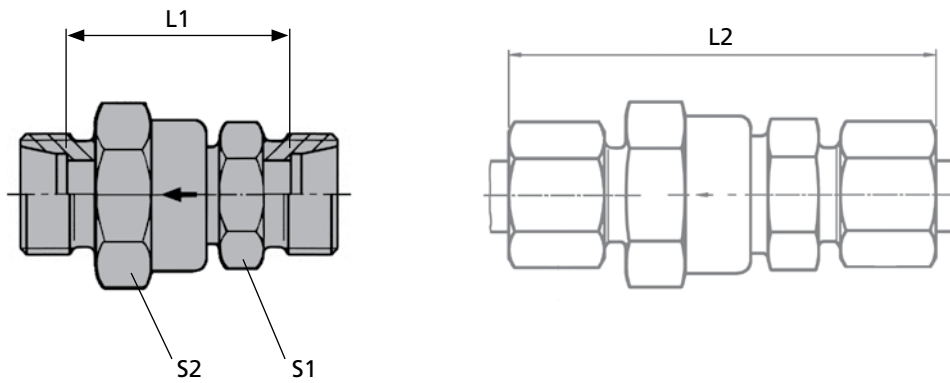


Form B

Reducing Adaptor with e.d. Seal

Pressure [bar]	G1 BSP ED	G2 BSP	Form	Part No	ID Code CS	ID Code SS	Body only			
							L1	d1	L2	S
400	1/8	1/4	B	RI 1/8-1/4	2201520000	2202520000	23	4	17	19
400		3/8	B	RI 1/8-3/8	2201520500	2202520500	24	4	17	24
400	1/4	1/8	B	RI 1/4-1/8	2201521000	2202521000	17	5	12	19
400		3/8	B	RI 1/4-3/8	2201521500	2202521500	24	5	17	24
400		1/2	B	RI 1/4-1/2	2201522000	2202522000	28	5	20	30
400		3/4	B	RI 1/4-3/4	2201522500	2202522500	31	5	22	36
630	3/8	1/8	A	RI 3/8-1/8	2201523000	2202523000	10,5	-	8	22
400		1/4	B	RI 3/8-1/4	2201523500	2202523500	24	8	17	22
400		1/2	B	RI 3/8-1/2	2201524000	2202524000	29	8	20	30
400		3/4	B	RI 3/8-3/4	2201524500	2202524500	32	8	22	36
630	1/2	1/8	A	RI 1/2-1/8	2201525000	2202525000	10	-	8	27
630		1/4	A	RI 1/2-1/4	2201525500	2202525500	10	-	12	27
400		3/8	B	RI 1/2-3/8	2201526000	2202526000	23	12	17	27
400		3/4	B	RI 1/2-3/4	2201526500	2202526500	32	12	22	36
400		1	B	RI 1/2-1	2201527000	2202527000	35	12	24,5	41
250	3/4	1 1/4	B	RI 1/2-1 1/4	2201527500	2202527500	39	12	26,5	55
400		1/4	A	RI 3/4-1/4	2201528000	2202528000	10	-	12	32
400		3/8	A	RI 3/4-3/8	2201528500	2202528500	10	-	12	32
400		1/2	B	RI 3/4-1/2	2201529000	2202529000	27	16	20	32
400		1	B	RI 3/4-1	2201529500	2202529500	35	16	24,5	41
250		1 1/4	B	RI 3/4-1 1/4	2201530000	2202530000	39	16	26,5	55
250		1 1/2	B	RI 3/4-1 1/2	2201530500	2202530500	41	16	28,5	60
400	1	1/4	A	RI 1-1/4	2201531000	2202531000	11	-	12	41
400		3/8	A	RI 1-3/8	2201531500	2202531500	11	-	12	41
400		1/2	A	RI 1-1/2	2201532000	2202532000	11	-	14	41
400		3/4	B	RI 1-3/4	2201532500	2202532500	31	20	22	41
250		1 1/4	B	RI 1-1 1/4	2201533000	2202533000	39	20	26,5	55
250		1 1/2	B	RI 1-1 1/2	2201533500	2202533500	41	20	28,5	60
250		1 1/2	B	RI 1 1/4-1 1/2	2201535500	2202535500	40	25	28,5	60
400	1 1/4	1/2	A	RI 1 1/4-1/2	2201534000	2202534000	12	-	14	50
400		3/4	A	RI 1 1/4-3/4	2201534500	2202534500	12	-	16	50
400		1	B	RI 1 1/4-1	2201535000	2202535000	33	25	24,5	50
400		1 1/2	A	RI 1 1/2-1/2	2201536000	2202536000	14	-	14	55
400	1 1/2	3/4	A	RI 1 1/2-3/4	2201536500	2202536500	14	-	16	55
400		1	A	RI 1 1/2-1	2201537000	2202537000	14	-	18	55
250		1 1/4	B	RI 1 1/2-1 1/4	2201537500	2202537500	36	32	26,5	55
400		2	A	RI 2-1/2	2201538000	2202538000	18	-	14	70
400	2	3/4	A	RI 2-3/4	2201538500	2202538500	18	-	16	70
400		1	A	RI 2-1	2201539000	2202539000	18	-	20	70
400		1 1/4	A	RI 2-1 1/4	2201539500	2202539500	18	-	21	70
400		1 1/2	A	RI 2-1 1/2	2201540000	2202539900	19	-	24	70

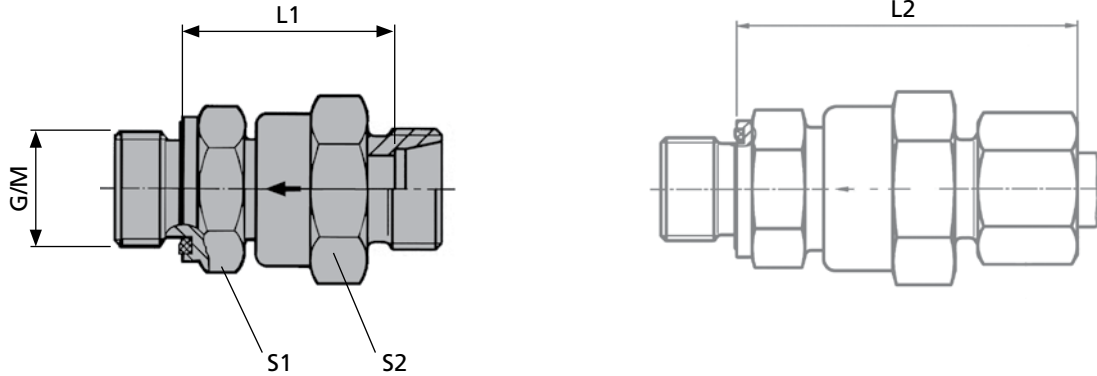
CS= carbon steel with zinc plating  
SS= stainless steel. Add 316 to end of Part No



**Non Return Valve With Tube Connections**

Series	PN	Pipe O.D.	Part No	ID Code CS	ID Code SS	L1	L2	S1	S2
L	400	6	RHDK 06 L	2201600000	2202600000	38	67	22	27
	400	8	RHDK 08 L	2201601000	2202601000	38	67	22	27
	400	10	RHDK 10 L	2201602000	2202602000	38	67	22	27
	400	12	RHDK 12 L	2201603000	2202603000	39	68	22	27
	400	15	RHDK 15 L	2201604500	2202604500	44	74	27	32
	400	18	RHDK 18 L	2201605500	2202605500	48	80	27	32
	250	22	RHDK 22 L	2201606500	2202606500	60	92	41	46
	250	28	RHDK 28 L	2201607500	2202607500	66	99	41	46
	250	35	RHDK 35 L	2201608500	2202608500	71	114	60	70
	250	42	RHDK 42 L	2201619500	2202619500	65	101	60	70
S	400	6	RHDK 06 S	2201600500	2202600500	42	71	22	27
	400	8	RHDK 08 S	2201601500	2202601500	38	67	22	27
	400	10	RHDK 10 S	2201602500	2202602500	39	71	22	27
	400	12	RHDK 12 S	2201603500	2202603500	40	72	22	27
	400	14	RHDK 14 S	2201604000	2202604000	46	81	27	32
	400	16	RHDK 16 S	2201605000	2202605000	48	84	27	32
	400	20	RHDK 20 S	2201606000	2202606000	57	100	41	46
	250	25	RHDK 25 S	2201607000	2202607000	57	105	41	46
	250	30	RHDK 30 S	2201608000	2202608000	64	117	50	55
	250	38	RHDK 38 S	2201609000	2202609000	67	128	60	70

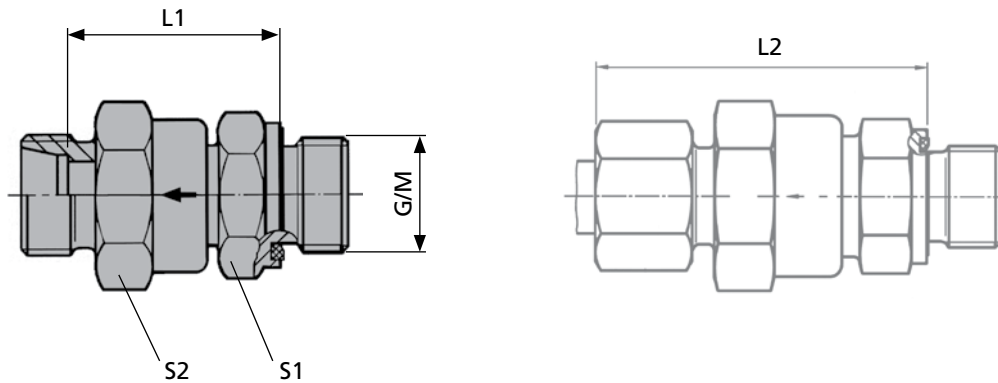
Openin pressure 1,0 bar (opening 0,5–3 bar available on request).  
 CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No



**Non Return Valve With Male Stud With ED-sealing and Tube Connection**

Series	Pipe O.D.	G thread with ED	PN	Part No	ID Code CS	L1	L2	S1	S2
L	6	1/8	400	RHZK 06 LR ED	2201670000	36	50,5	22	27
	8	1/4	400	RHZK 08 LR ED	2201672000	36	50,5	22	27
	10	1/4	400	RHZK 10 LR ED	2201674000	34	48,5	22	27
	12	3/8	400	RHZK 12 LR ED	2201676000	39	53,5	22	27
	15	1/2	400	RHZK 15 LR ED	2201679000	41	56	27	32
	18	1/2	400	RHZK 18 LR ED	2201684500	45,5	61,5	27	32
	22	3/4	250	RHZK 22 LR ED	2201682500	53,5	69,5	41	46
	28	1	250	RHZK 28 LR ED	2201685000	60,5	77	41	46
	35	1 1/4	250	RHZK 35 LR ED	2201687000	67	88,5	60	70
	42	1 1/2	250	RHZK 42 LR ED	2201689000	64,5	87,5	60	70
S	6	1/4	400	RHZK 06 SR ED	2201671000	38	52,5	22	27
	8	1/4	400	RHZK 08 SR ED	2201673000	36	50,5	22	27
	10	3/8	400	RHZK 10 SR ED	2201675000	37,5	53,5	22	27
	12	3/8	400	RHZK 12 SR ED	2201677000	39,5	55,5	22	27
	14	1/2	400	RHZK 14 SR ED	2201677700	42	59,5	27	32
	16	1/2	400	RHZK 16 SR ED	2201680000	44,5	62,5	27	32
	20	3/4	400	RHZK 20 SR ED	2201682000	52,5	74	41	46
	25	1	250	RHZK 25 SR ED	2201684000	53	77	41	46
	30	1 1/4	250	RHZK 30 SR ED	2201686000	60,5	87	50	55
	38	1 1/2	250	RHZK 38 SR ED	2201687500	65,5	96	60	70
<b>M thread with ED</b>						<b>L1</b>	<b>L2</b>	<b>S1</b>	<b>S2</b>
L	8	M 12x1,5	400	RHZK 08 LM ED	2201671500	36	50,5	22	27
	10	M 14x1,5	400	RHZK 10 LM ED	2201673500	34	48,5	22	27
	12	M 16x1,5	400	RHZK 12 LM ED	2201677600	39	53,5	22	27
	15	M 18x1,5	400	RHZK 15 LM ED	2201678500	41	56	27	32
	18	M 22x1,5	400	RHZK 18 LM ED	2201680500	45,5	61,5	27	32
	22	M 26x1,5	250	RHZK 22 LM ED	2201683000	53,5	69,5	41	46
	28	M 33x2	250	RHZK 28 LM ED	2201684520	60,5	77	41	46
	35	M 42x2	250	RHZK 35 LM ED	2201686500	67	88,5	60	70
S	8	M 14x1,5	400	RHZK 08 SM ED	2201672500	36	50,5	22	27
	10	M 16x1,5	400	RHZK 10 SM ED	2201674500	37,5	53,5	22	27
	12	M 18x1,5	400	RHZK 12 SM ED	2201676500	39,5	55,5	22	27
	16	M 22x1,5	400	RHZK 16 SM ED	2201679500	44,5	62,5	27	32
	20	M 27x2	400	RHZK 20 SM ED	2201681500	52,5	74	41	46
	25	M 33x2	250	RHZK 25 SM ED	2201683500	53	77	41	46
	38	M 48x2	250	RHZK 38 SM ED	2201687300	65,5	96	60	70

CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No

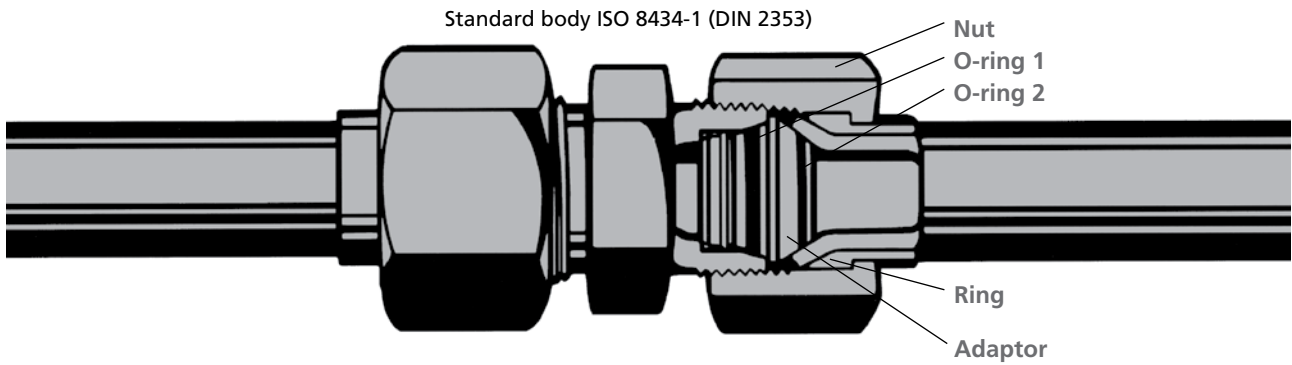


**Non Return Valve With Male Stud With ED-sealing and Tube Connection**

Series	Pipe O.D.	G thread with ED	PN	Part No	ID Code CS	L1	L2	S1	S2
L	6	1/8	400	RHVK 06 LR ED	2201960000	36	50,5	22	27
	8	1/4	400	RHVK 08 LR ED	2201632500	36	50,5	22	27
	10	1/4	400	RHVK 10 LR ED	2201634500	34	48,5	22	27
	12	3/8	400	RHVK 12 LR ED	2201636500	39	53,5	22	27
	15	1/2	400	RHVK 15 LR ED	2201639500	41	56	27	32
	18	1/2	400	RHVK 18 LR ED	2201641500	45,5	61,5	27	32
	22	3/4	250	RHVK 22 LR ED	2201643500	53,5	69,5	41	46
	28	1	250	RHVK 28 LR ED	2201645500	60,5	77	41	46
	35	1 1/4	250	RHVK 35 LR ED	2201647500	67	88,5	60	70
	42	1 1/2	250	RHVK 42 LR ED	2201649500	64,5	87,5	60	70
S	6	1/4	400	RHVK 06 SR ED	2201631000	38	52,5	22	27
	8	1/4	400	RHVK 08 SR ED	2201962800	36	50,5	22	27
	10	3/8	400	RHVK 10 SR ED	2201635500	37,5	53,5	22	27
	12	3/8	400	RHVK 12 SR ED	2201637500	39,5	55,5	22	27
	14	1/2	400	RHVK 14 SR ED	2201638100	42	59,5	27	32
	16	1/2	400	RHVK 16 SR ED	2201640500	44,5	62,5	27	32
	20	3/4	400	RHVK 20 SR ED	2201642500	52,5	74	41	46
	25	1	250	RHVK 25 SR ED	2201644500	53	77	41	46
	30	1 1/4	250	RHVK 30 SR ED	2201646500	60,5	87	50	55
	38	1 1/2	250	RHVK 38 SR ED	2201648500	65,5	96	60	70
		M thread with ED				L1	L2	S1	S2
L	8	M 12x1,5	400	RHVK 08 LM ED	2201961400	36	50,5	22	27
	10	M 14x1,5	400	RHVK 10 LM ED	2201634000	34	48,5	22	27
	12	M 16x1,5	400	RHVK 12 LM ED	2201636000	39	53,5	22	27
	15	M 18x1,5	400	RHVK 15 LM ED	2201639000	41	56	27	32
	18	M 22x1,5	400	RHVK 18 LM ED	2201641000	45,5	61,5	27	32
	22	M 26x1,5	250	RHVK 22 LM ED	2201643000	53,5	69,5	41	46
	28	M 33x2	250	RHVK 28 LM ED	2201645000	60,5	77	41	46
S	10	M 16x1,5	400	RHVK 10 SM ED	2201635000	67	88,5	60	70
	12	M 18x1,5	400	RHVK 12 SM ED	2201637000	36	50,5	22	27
	14	M 20x1,4	400	RHVK 14 SM ED	2201638000	37,5	53,5	22	27
	16	M 22x1,5	400	RHVK 16 SM ED	2201640000	39,5	55,5	22	27
	20	M 27x2	400	RHVK 20 SM ED	2201642000	44,5	62,5	27	32
	25	M 33x2	250	RHVK 25 SM ED	2201644000	52,5	74	41	46
	30	M 42x2	250	RHVK 30 SM ED	2201646000	53	77	41	46
	38	M 48x2	250	RHVK 38 SM ED	2201648000	65,5	96	60	70

CS= carbon steel with zinc plating  
 SS= stainless steel. Add 316 to end of Part No

## Bördel Flare Fittings



BÖRDEL (flare fittings) can be used together with standard bite type fittings type ISO 8434-1 (DIN 2353).

- Standard bite type bodies to be used
- Tightening force reduced due to the O-ring seal
- Delivered as standard with NBR O-rings.  
Can be supplied with Viton O-rings on request.

Series	PN [bar]	Pipe O.D. [mm]	Complete Part No CS	Complete ID Code CS	Complete ID Code SS	Adaptor			Ring Part No CS	Nut Part No CS
						Part No CS	O-ring 1	O-ring 2		
L	500	6	BOA 06 L	2201040001	2202040001	BAO 06 LS	4.5x1.5	4.4x0.8	SRO 06 LS	BMO 06 L
L	500	8	BOA 08 L	2201040600	2202040600	BAO 08 LS	6x1.5	6x0.8	SRO 08 LS	BMO 08 L
L	500	10	BOA 10 L	2201041200	2202041200	BAO 10 LS	8.5x1.5	7.5x0.8	SRO 10 LS	BMO 10 L
L	400	12	BOA 12 L	2201041800	2202041800	BAO 12 LS	10x1.5	9.5x0.8	SRO 12 LS	BMO 12 L
L	400	15	BOA 15 L	2201042700	2202042700	BAO 15 L	12x2	12.5x0.8	SRO 15 L	BMO 14 S/15 L
L	400	18	BOA 18 L	2201043300	2202043300	BAO 18 L	15x2	15x1	SRO 18 L	BMO 18 L
L	250	22	BOA 22 L	2201043900	2202043900	BAO 22 L	20x2	18x1	SRO 22 L	BMO 20 S/22 L
L	250	28	BOA 28 L	2201044500	2202044500	BAO 28 L	26x2	23x1	SRO 28 L	BMO 28 L
L	250	35	BOA 35 L	2201045100	2202045100	BAO 35 L	32x2	30x1	SRO 35 L	BMO 35 L
L	250	42	BOA 42 L	2201045700	2202045700	BAO 42 L	38x2.5	37x1	SRO 42 L	BMO 42 L

Series	PN [bar]	Pipe O.D. [mm]	Complete Part No CS	Complete ID Code CS	Complete ID Code SS	Adaptor			Ring Part No CS	Nut Part No CS
						Part No CS	O-ring 1	O-ring 2		
S	630	6	BOA 06 S	2201040301	2202040301	BAO 06 LS	4.5x1.5	4.4x0.8	SRO 06 LS	BMO 06 S
S	630	8	BOA 08 S	2201040900	2202040900	BAO 08 LS	6x1.5	6x0.8	SRO 08 LS	BMO 08 S
S	630	10	BOA 10 S	2201041500	2202041500	BAO 10 LS	8.5x1.5	7.5x0.8	SRO 10 LS	BMO 10 S
S	630	12	BOA 12 S	2201042100	2202042100	BAO 12 LS	10x1.5	9.5x0.8	SRO 12 LS	BMO 12 S
S	630	14	BOA 14 S	2201042400	2202042400	BAO 14 S	12x2	11x1	SRO 14 S	BMO 14 S/15 L
S	630	16	BOA 16 S	2201043000	2202043000	BAO 16 S	14x2	12.5x1	SRO 16 S	BMO 16 S
S	400	20	BOA 20 S	2201043600	2202043600	BAO 20 S	17.3x2.4	16x1	SRO 20 S	BMO 20 S/22 L
S	400	25	BOA 25 S	2201044200	2202044200	BAO 25 S	22.3x2.4	20x1	SRO 25 S	BMO 25 S
S	400	30	BOA 30 S	2201044800	2202044800	BAO 30 S	27.3x2.4	25x1	SRO 30 S	BMO 30 S
S	315	38	BOA 38 S	2201045400	2202045400	BAO 38 S	35x2.5	32x1.78	SRO 38 S	BMO 38 S

CS= carbon steel with zinc plating  
SS= stainless steel. Add 316 to end of Part No

## Technical Information

### Temperature ranges

Fitting and seal materials have to be chosen according to the working temperature.

Material	Permissible working temperature TB °C												
	-60	-40	-35	-25	+20	+50	+80	+100	+120	+175	+200	+250	+400
Steel fittings *													
Stainless steel fittings 1.4571													
Seal material NBR (e.g. Perbunan®)													
Seal material FPM (e.g. Viton®)													
Seal material POM (e.g. Delrin®)													

Permissible working temperature

If different fitting and seal materials are used, the lowest temperature indicated for each material is applicable. Special materials on request.

\*= The manufacturers of material 9SMnPb28K or comparable steel grades do not currently confirm low-temperature resistance down to -40°C. The practical experience of hose and tube fitting manufacturers has revealed nothing negative to date.

### Safety

The nominal pressure ratings (PN) and working pressures (PB) of the fittings represent the maximum permissible working pressures inclusive of pressure peaks. In this context the information provided in the chapters “Temperatures” and “Reduction in pressure” should be taken into account. The safety factor for static load conditions (up to 120°C) is 4 for fittings with indication PN, and 2.5 or 1.5 if PB is indicated. For ball valves, banjo fittings and swivel banjos, the separately specified safety factors must be taken into account. Allowances must be made for working conditions

involving heavy impact pressure and mechanical strain, such as vibrations.

The pressure ratings and safety factors as specified are only applicable on condition that the Eaton’s Walterscheid assembly instructions are strictly adhered to. Another prerequisite consists in the stress-free installation of the pipework (use a sufficient number of pipe clamps).

Note:

At temperatures below -20°C, the use of tube fittings made of free-cutting steel is at the user’s discretion.

### Reduction in pressure

Material 1.4571 allows for a reduction in pressure as a function of temperature. (DIN 17440, DIN 17458)

Temperature	Reduction in pressure
-60° bis +20°C	-
+50°C	4.5%
+100°C	11%
+200°C	20%
+300°C	29%
+400°C	33%

#### Caution!

If different fitting and sealing materials are used, the lowest temperature as indicated for each material is applicable!

### Calculated pressures and tolerances of seamless precision steel tubes

Parallel sleeves are recommended where thin-walled tubes are subject to severe strains.

	Steel St 37.4	Stainless steel 1.4571
Calculation to DIN 2413 (1993-10), scope of application I, for primarily static load conditions at temperatures up to 120°C		
Yield point/Rp1.0	235 N/mm <sup>2</sup> (DIN 1630)	245 N/mm <sup>2</sup> (DIN 17458)
Design factor	1.5	1.5
Allowance factor c1	10% of wall thickness	10% of wall thickness
Allowance factor c2	0 (no allowance to corrosion)	0 (no allowance to corrosion)
Calculation to DIN 2413 (1993-10), scope of application III, for pulsating load conditions at temperatures up to 120°C		
Pulsating fatigue limit	225 N/mm <sup>2</sup> see DIN 2413 (1993-10), 4.2.3	190 N/mm <sup>2</sup> (assumed value)
Allowance factor c1	10% of wall thickness	10% of wall thickness

**Caution!** In the case of temperatures over 20°C the pressure reductions should be noted for tube material 1.4571.



## Technical Information

### Pressure strength, ISO 8343-1

PB – Working pressure

The permissible excess working pressure for a component is identical with the max. internal excess pressure admissible for this component owing to the material and the bases of calculation at the permissible operating temperature TB during trouble-free operation.

PN – Nominal pressure

Nominal pressure is a common rounded characteristic value relating to pressure.

### Pressure ranges

Range	Steel cutting ring tube fittings		Stainless steel cutting ring tube fittings	
	Tube OD [mm]	Nominal pressure [bar]	Tube OD [mm]	Nominal pressure [bar]
LL	04–08	100	04–08	100 bar
L	06–10	500	06–12	400
	12–18	400	15–18	315
	22–42	250	22–42	160
S	06–10	800	06–16	630
	12–16	630	20–30	400
	20–38	420	38	315
Range	Steel flare fittings		Stainless steel flare fittings	
L	06–10	500	06–12	400
	12–18	400	15–18	315
	22–42	250	22–42	160
S	06–16	630	06–16	630
	20–38	400	20–30	400
			38	315

Caution! For certain types of fittings the nominal pressure differs from the values shown above, in which case the ratings indicated for the individual types should be observed. Nominal pressures also available on request.

### Standard thread sizes

Series	Pipe OD	T1		T2 Port thread	
		DIN 24 thread	BSPP	Metric	BSPT
LL	04	M 08x1,0	G 1/8	M 08x1,0	R 1/8
	05	M 10x1,0	G 1/8	M 08x1,0	
	06	M 10x1,0	G 1/8	M 10x1,0	R 1/8
	08	M 12x1,0	G 1/8	M 10x1,0	R 1/8
	10	M 14x1,0	G 1/4	-	R 1/4
	12	M 16x1,0	G 1/4	-	R 1/4
L	06	M 12x1,5	G 1/8	M 10x1,0	
	08	M 14x1,5	G 1/4	M 12x1,5	
	10	M 16x1,5	G 1/4	M 14x1,5	
	12	M 18x1,5	G 3/8	M 16x1,5	
	15	M 22x1,5	G 1/2	M 18x1,5	
	18	M 26x1,5	G 1/2	M 22x1,5	
	22	M 30x2,0	G 3/4	M 26x1,5	
	28	M 36x2,0	G 1	M 33x2,0	
	35	M 45x2,0	G 1 1/4	M 42x2,0	
	42	M 52x2,0	G 1 1/2	M 48x2,0	
S	06	M 14x1,5	G 1/4	M 12x1,5	
	08	M 16x1,5	G 1/4	M 14x1,5	
	10	M 18x1,5	G 3/8	M 16x1,5	
	12	M 20x1,5	G 3/8	M 18x1,5	
	14	M 22x1,5	G 1/2	M 20x1,5	
	16	M 24x1,5	G 1/2	M 22x1,5	
	20	M 30x2,0	G 3/4	M 27x2,0	
	25	M 36x2,0	G 1	M 33x2,0	
	30	M 42x2,0	G 1 1/4	M 42x2,0	
	38	M 52x2,0	G 1 1/2	M 48x2,0	

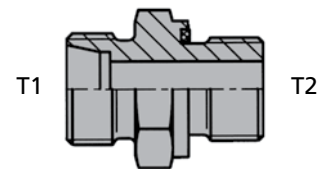
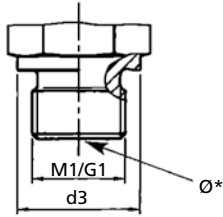


Table shows standard thread combinations.  
Only non-standard port thread is mentioned in partnumber.

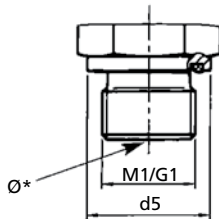
## Technical Information

Metric ISO thread (parallel) DIN 13  
BSP thread (parallel) DIN-ISO 228 (up to now DIN 259)

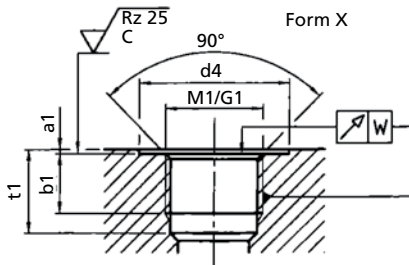
**Stud form B**  
DIN 3852-1 / ISO 9974-3 (metric)  
DIN 3852-2 / ISO/DIS 1179-4 (BSP)  
metal-to-metal seal



**Stud form E**  
DIN 3852-11 / ISO 9974-2 (metric)  
DIN 3852-11 / ISO/DIS 1179-2 (BSP)  
with captive seal (WD)

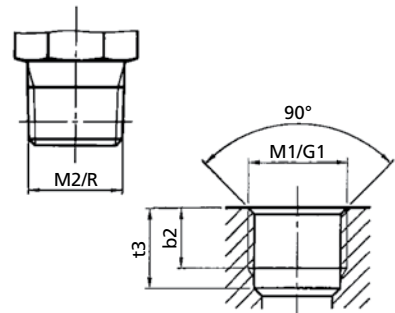


**Stud form X,Y**  
DIN 3852-1 / ISO 9974-1 (metric)  
DIN 3852-2 / ISO/DIS 1179-1 (BSP)  
(for parallel stud threads)



Metric taper thread to DIN 158  
BSP thread (taper) DIN 3858

**Stud form C**  
DIN 3852-1 (metric)  
DIN 3852-2 (BSP thread)  
taper thread



**Stud form Z**  
DIN 3852-1 (metric)  
DIN 3852-2 (BSP thread)  
(for taper stud threads only)\*\*\*

M <sub>1</sub>	d <sub>3</sub>	d <sub>4</sub> +0.4	d <sub>5</sub>	a <sub>1 max</sub>	b <sub>1 min</sub>	t <sub>1 min</sub>	Ø* LL	Ø* L	Ø* S	W
M 8x1	12	13	12	1	8	13.5	3.5	-	-	0.1
M 10x1	14	15	13.9	1	8	13.5	5	4	-	0.1
M 12x1.5	17	18	16.9	1.5	12	18.5	-	6	4	0.1
M 14x1.5	19	20	18.9	1.5	12	18.5	-	7	5	0.1
M 16x1.5	21	22	21.9	1.5	12	18.5	-	9	7	0.1
M 18x1.5	23	24	23.9	2	12	18.5	-	11	8	0.1
M 20x1.5	25	26	25.9	2	14	20.5	-	-	10	0.1
M 22x1.5	27	28	26.9	2.5	14	20.5	-	14	12	0.1
M 26x1.5	31	32	31.9	2.5	16	22.5	-	18	-	0.2
M 27x2	32	33	31.9	2.5	16	24	-	-	16	0.2
M 33x2	39	40	29.9	2.5	18	26	-	23	20	0.2
M 42x2	49	50	49.9	2.5	20	28	-	30	25	0.2
M 48x2	55	56	54.9	2.5	22	30	-	36	32	0.2
G <sub>1</sub>										
G 1/8A**	14	15	13.9	1	8	13	5	4	-	0.1
G 1/4A**	18	19	18.9	1.5	12	18.5	-	7	5	0.1
G 3/8A**	22	23	21.9	2	12	18.5	-	9	8	0.1
G 1/2A**	26	27	26.9	2.5	14	22	-	14	12	0.1
G 3/4A**	32	33	31.9	2.5	16	24	-	18	16	0.2
G 1A**	39	40	39.9	2.5	18	27	-	23	20	0.2
G 1 1/4A**	49	50	49.9	2.5	20	29	-	30	25	0.2
G 1 1/2A**	55	56	54.9	2.5	22	31	-	36	32	0.2

\*= Stud hole. For special types, deviating holes may be required.  
\*\*= For female threads, A does not apply.

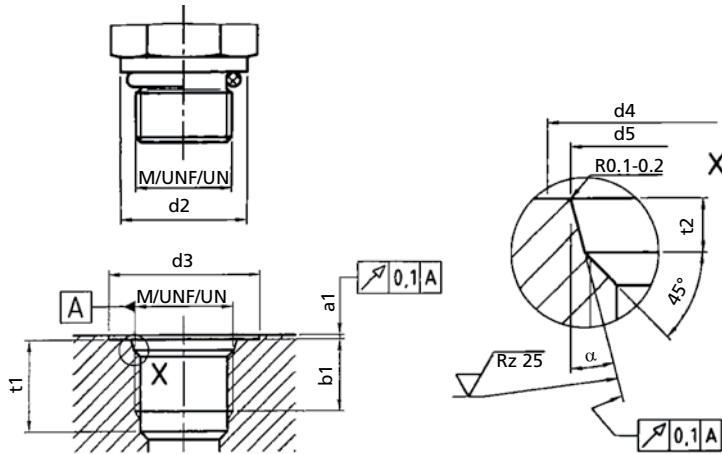
M <sub>2</sub>	d <sub>2 min</sub>	t <sub>3 min</sub>
M 8x1 keg	5.5	10
M 10x1 keg	5.5	10
M 12x1.5 keg	8.5	13.5
M 14x1.5 keg	8.5	13.5
M 16x1.5 keg	8.5	13.5
M 18x1.5 keg	8.5	13.5
M 20x1.5 keg	10.5	15.5
M 22x1.5 keg	10.5	15.5
R		
R 1/8 keg	5.5	9.5
R 1/4 keg	8.5	13.5
R 3/8 keg	8.5	13.5
R 1/2 keg	10.5	16.5

\*\*\*= Attention: Additional sealing material required!

### Technical Information

Metric ISO thread (parallel) DIN 13  
UNF/UN thread ISO 725 / ANSI B1-1-1974

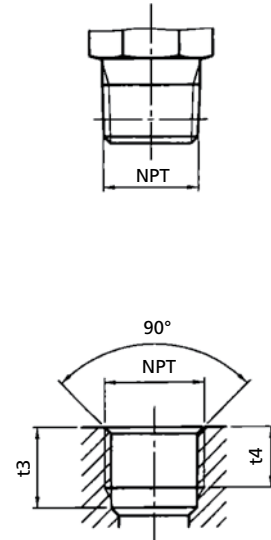
Stud (metric)  
with O-ring  
DIN ISO 6149-2 and -3  
Stud UTS  
with O-ring  
ISO 11926-2 and -3



Port from (metric)  
for O-ring  
DIN ISO 6149-1  
ISO 11926-1 (UST)

NPT thread  
ANIS/ASME B1.20.1 - 1983

Stud  
NPT  
ANSI&ASME  
B1.20.1/1983



Port form  
NPT  
ANSI/ASME  
B1.20.1-1983

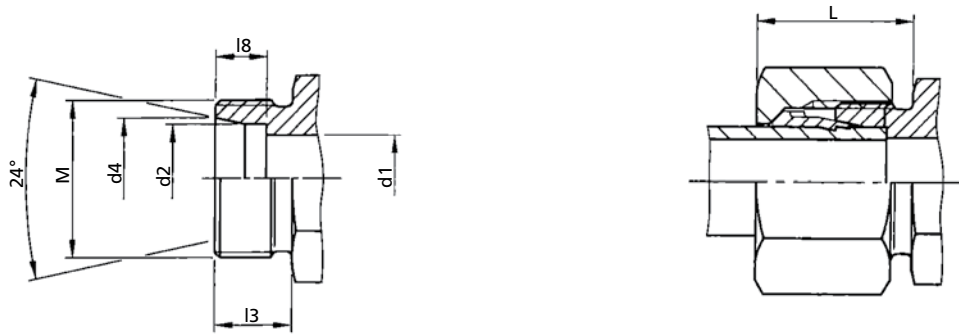
M	d <sub>2</sub>	d <sub>3 min.</sub>	d <sub>4</sub>	d <sub>5 ± 0,1</sub>	a <sub>1 max.</sub>	t <sub>2</sub>	t <sub>1 min.</sub>	b <sub>1 min.</sub>	α
M 8x1	10.9	17	11	9.1	1	1.6	11.5	10	12
M 10x1	12.9	20	13	11.1	1	1.6	11.5	10	12
M 12x1.5	16.9	22	16	13.8	1.5	2.4	14	11.5	15
M 14x1.5	18.9	25	18	15.8	1.5	2.4	14	11.5	15
M 16x1.5	20.9	27	20	17.8	1.5	2.4	15.5	13	15
M 18x1.5	22.9	29	22	19.8	2	2.4	16.5	14.5	15
M 20x1.5	24.9	32	24	21.8	2	2.4	16.5	14	15
M 22x1.5	26.9	34	26	23.8	2	2.4	18	15.5	15
M 26x1.5	30.9	37	31	29.05	2	3.1	18.5	16	15
M 27x2	31.9	40	32	29.4	2	3.1	22	19	15
M 33x2	37.9	46	36	35.4	2.5	3.1	22	19	15
M 42x2	47.9	56	47	44.4	2.5	3.1	22.5	19.5	15
M 48x2	54.9	64	53	50.4	2.5	3.1	25	22	15
UNF/UN									
7/16 - 20 UNF	14.4	21	15	12.4	1.6	2.4	14	11.5	12
9/16 - 18 UNF	17.6	25	18	15.6	1.6	2.5	15.5	12.7	12
3/4 - 16 UNF	22.3	30	23	20.6	2.4	2.5	17.5	14.3	15
7/8 - 14 UNF	25.5	34	26	23.9	2.4	2.5	20	16.7	15
1 1/16 - 12 UN	31.9	41	32	29.2	2.4	3.3	23	19	15
1 5/16 - 12 UN	38.2	49	39	35.5	3.2	3.3	23	19	15
1 5/8 - 12 UN	47.7	58	48	43.5	3.2	3.3	23	19	15

d <sub>1 NPT</sub>	t <sub>3 min</sub>	t <sub>4 min</sub>
1/8 - 27 NPT	11.6	6.9
1/4 - 18 NPT	16.4	10.0
3/8 - 18 NPT	17.4	10.3
1/2 - 14 NPT	22.6	13.6
3/4 - 14 NPT	23.1	14.1
1 - 11.5 NPT	27.8	16.8
1 1/4 - 11.5 NPT	28.3	17.3
1 1/2 - 18 NPT	28.3	17.3

## Technical Information

Stud form to DIN 3853/ISO 8434

Port form W to DIN 3861



Series	PN	Pipe O.D.	M	d <sub>1</sub>	d <sub>2</sub> <sup>B11</sup>	d <sub>4</sub> <sup>+0.1</sup>	l <sub>3</sub>	L	l <sub>8</sub> <sup>+0.3</sup>
LL	100	4	M 8x1	3	4	5	8	14	4
		6	M 10x1	4.5	6	7.5	8	14	5.5
		8	M 12x1	6	8	9.5	9	15	5.5
L	500	6	M 12x1.5	4	6	8.1	10	18	7
		8	M 14x1.5	6	8	10.1	10	18	7
		10	M 16x1.5	8	10	12.3	11	19	7
	400	12	M 18x1.5	10	12	14.3	11	19	7
		15	M 22x1.5	12	15	17.3	12	20	7
		18	M 26x1.5	15	18	20.3	12	21	7.5
	250	22	M 30x2	19	22	24.3	14	23	7.5
		28	M 36x2	24	28	30.3	14	23	7.5
		35	M 45x2	30	35.25 <sup>+0.15</sup>	38	16	27	10.5
		42	M 52x2	36	42.25 <sup>+0.15</sup>	45	16	28	11
S	800	6	M 14x1.5	4	6	8.1	12	20	7
		8	M 16x1.5	5	8	10.1	12	20	7
		10	M 18x1.5	7	10	12.3	12	21	7.5
	630	12	M 20x1.5	8	12	14.3	12	21	7.5
		14	M 22x1.5	10	14	16.3	14	24	8
		16	M 24x1.5	12	16	18.3	14	24	8.5
	400	20	M 30x2	16	20	22.9	16	27	10.5
		25	M 36x2	20	25	27.9	18	30	12
		30	M 42x2	25	30	33	20	33	13.5
		38	M 52x2	32	38.25 <sup>+0.15</sup>	41	22	37	16

## Technical Information

For all parts, dimension L2 corresponds to the approximate length with tightened nut. In the catalogue this dimension always refers to an assembled profile ring or Walform fitting.

### Lengths of BO fitting assemblies

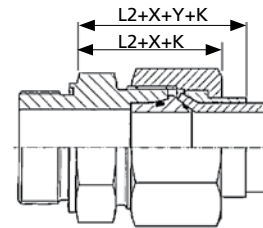
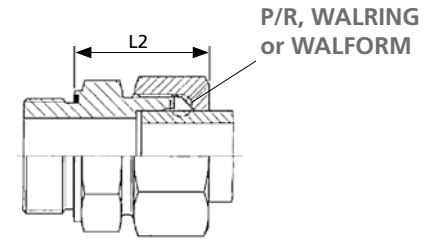
For the flare fitting, dimension L2 must be calculated for each size by adding the value of X (see Table 1: X/Y value) and the corrective dimension K (see Table 2: Corrective dimension), depending on the wall thickness used. Dimension Y must also be added in order to determine the length up to

Example: GEK 15 LM-ED with tube 15x2

Corrective dimension = +1

$L2 + X + K = 29 + 6,5 + 1 = 36,5$

$L2 + X + Y + K = 29 + 6,5 + 4 + 1 = 40,5$



Series	X-Dimension	Y-Dimension	Series	X-Dimension	Y-Dimension
6L	3	3	6S	2.5	3
8L	3.5	3	8S	3.5	3
10L	5	4.5	10S	4	5.5
12L	5.5	4.5	12S	4.5	5.5
15L	6.5	4	14S	5	4.5
18L	7	3.5	16S	6.5	6
22L	8	6.5	20S	6	5.5
28L	9.5	5.5	25S	7	7.5
35L	8.5	6	30S	6.5	8.5
42L	11.5	6	38S	6.5	10.5

The dimensions marked • in the following table represent the tube wall thicknesses on which the lengths in the lists of dimensions are based. For other tube wall thicknesses, the lengths have to be modified by the corrected dimension taken from the table.

Series	Pipe O.D. [mm]	Pipe wall thickness [mm]								
		1	1.5	2	2.5	3	3.5	4	5	6
L	6	•	+1							
	8	•	+1	+1.5						
	10	-1	•	+1						
	12	-1	•	+1						
	15		•	+1	+2					
	18		-1	•	+1					
	22		-1	•	+1	+1.5				
	28			-1.5	-0.5	•				
	35			-1.5	-1	•		+1.5		
	42			-1.5		•				
S	6	•	+1							
	8	•	+1	+1.5						
	10	-1	•	+1						
	12	-1	•	+1						
	14		-0.5	•	+1	+2				
	16		-2	•	+0.5	+1.5				
	20			•	+1	+2	+3			
	25			-1.5	-1	•		+1.5		
	30			-2	-1	•		+2	+3.5	
	38				-0.5	•		+1.5	+3.5	+5

## Technical Information

### Tube End Forming Technology

WALFORM*plus* consists of a fitting body, reshaped tube, viton soft seal and nut.

#### Walform options

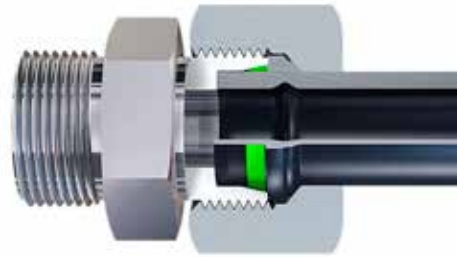
1. WALFORM*plus* with elastomer sealing
2. WALFORM*plus*-M with metallic sealing

#### Features

- Meets & exceeds DIN 2353 / ISO 8431-1 requirements
- Reshaped tube – one piece
- Fewer components
- Low torque
- Stainless steel & carbon steel

#### Benefits

- Connections meeting industry specifications
- Redundant sealing for improved performance
- Eliminates leak path and does not allow tube pull out
- Saves money
- Provides safe and easy assembly



WALFORM*plus*



WALFORM*plus*-M

### WALFORM Reshaping Machines

The tube is reshaped by a machine in such a way that it fits into a DIN 2353 fitting body and nut. Retaining function and sealing function are isolated from each other in all respects. Mechanical reshaping guarantees consistent quality of the geometry and is easily controlled.

Air driven machine available to fulfill ATEX specification Ex II 2G II B T4X.



M-WF385Xplus

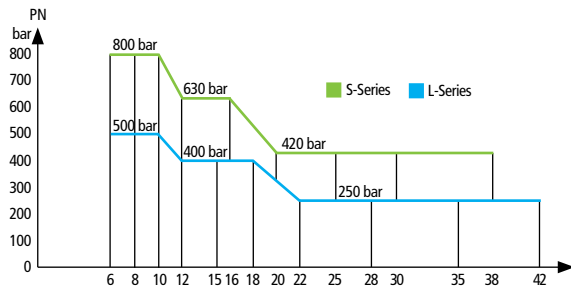
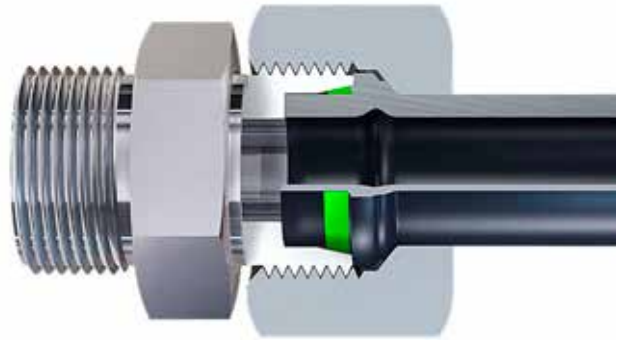


M-WF385-EX1

## Technical Information

### WALFORMplus

- Extremely reliable sealing achieved by specially shaped FKM soft seal (H-NBR, NBR and EPDM on request)
- Secondary sealing by metal to metal contact between pipe and fitting body
- Reliable protection against excessive tightening
- Unlimited repeated assembly by just replacing the seal



Nominal pressure levels with safety factory of 4.  
(Always check the working pressure of pipe in use.)

### Suitable pipe sizes for WALFORMplus

Pipe OD [mm]	Carbon steel									
	Wall thickness [mm]									
	1	1.5	2	2.5	3	3.5	4	5	6	
6	+									
8	+									
10	+									
12	+	•								
15	+	•	•	•						
16		+	•	•						
18		+	•	•						
20			•	•						
22		+	•	•						
25			•	•						
28				•	•					
30			+	•	•					
35			+	•	•					
38					•					
42			+		•	•	•			

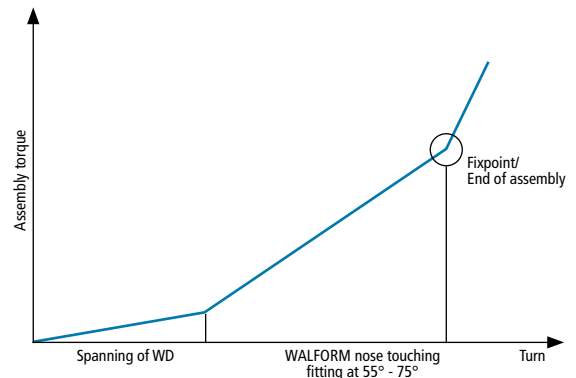
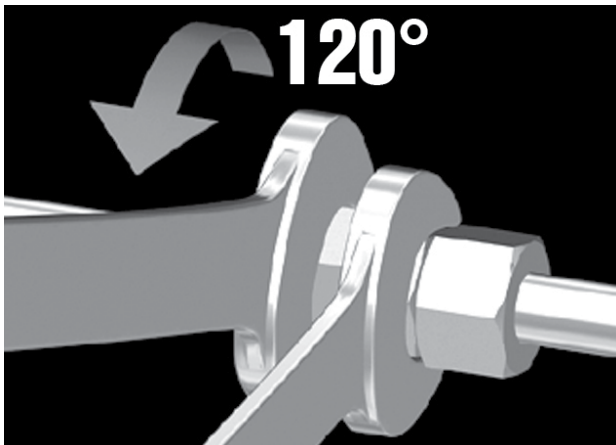
Pipe specification in pages 60-63

  Reshaping without internal support  
 • Reshaping with internal support  
 + With adapter ring

Pipe OD [mm]	Stainless steel									
	Wall thickness [mm]									
	1	1.5	2	2.5	3	3.5	4	5	6	
6	+									
8	+									
10	+									
12	+									
15		•	•							
16			•	•						
18			•	•						
20			•	•						
22			•	•						
25			•	•	•					
28			•	•	•					
30				•	•					
35					•					
38					•					
42					•					

Pipe specification in page 64

### Assembly of WALFORMplus

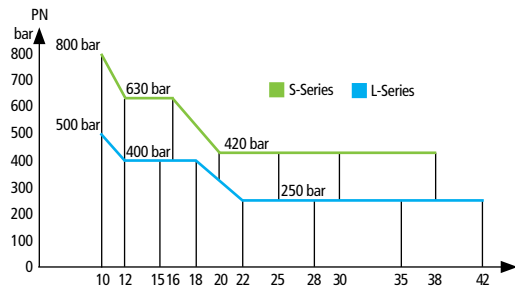


## Technical Information

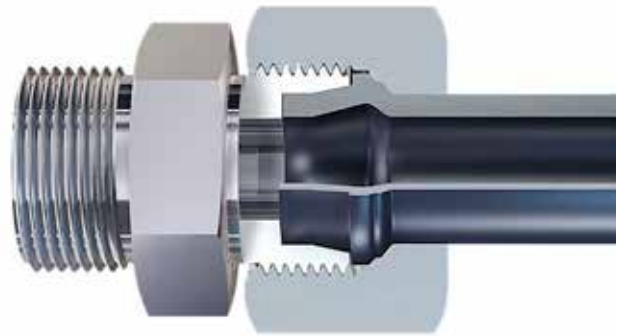
### WALFORMplus-M

High-level safety to positive fit and metallic seal

- Sturdy, metallic seal
- Absolutely leak-proof
- No effects of an elastomeric seal
- Minimal pressure drop and noise generation comparable to other fitting systems



Nominal pressure levels with safety factory of 4.  
(Always check the working pressure of pipe in use.)



### Suitable pipe sizes for WALFORMplus-M

Pipe OD [mm]	Carbon steel									
	Wall thickness [mm]									
	1	1.5	2	2.5	3	3.5	4	5	6	
8										
10										
12										
15										
16										
18										
20										
22										
25										
28										
30										
35										
38										
42										

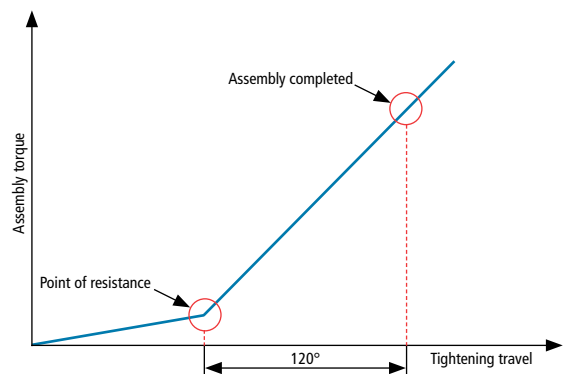
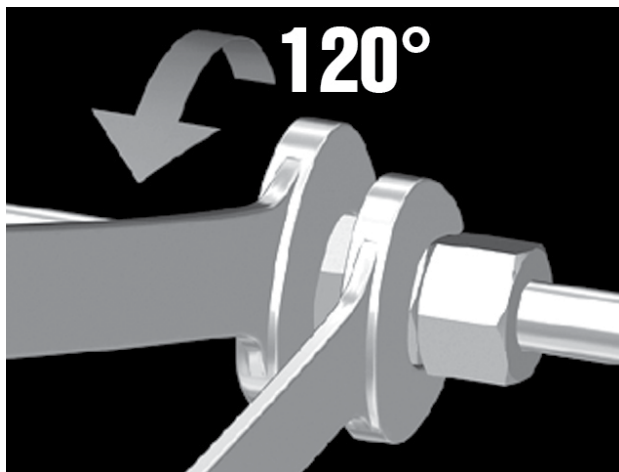
Pipe specification in pages 60-63

Pipe OD [mm]	Stainless steel									
	Wall thickness [mm]									
	1	1.5	2	2.5	3	3.5	4	5	6	
8										
10										
12										
15										
16										
18										
20										
22										
25										
28										
30										
35										
38										

Pipe specification in page 64

• Reshaping with internal support

### Assembly of WALFORMplus-M



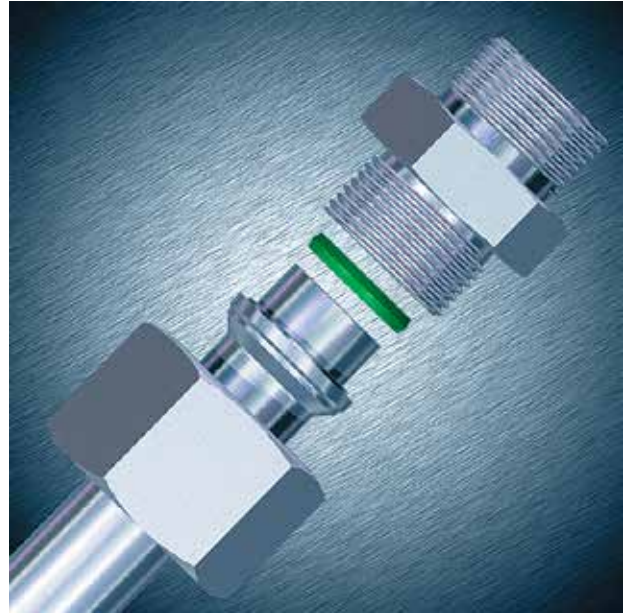


## Technical Information

### Captive Seal – Type WF – Viton

The new WALFORM tube fitting dispenses with the previously customary sealing ring and comprises just three components:

- Fitting Body
- Nut
- Captive Seal (Viton)

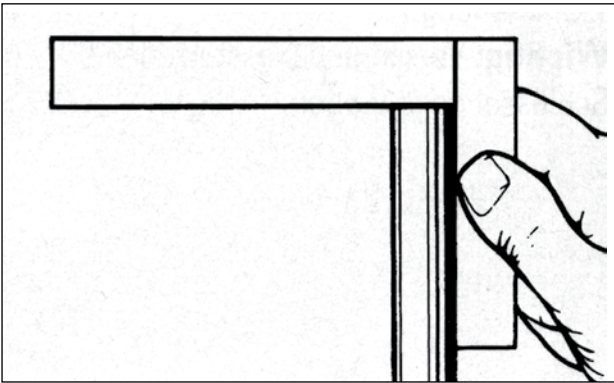


Series	Part No	Complete ID Code	Pipe O.D. [mm]
L	WF-ED 06 VI	2201910000	6
	WF-ED 08 VI	2201910600	8
	WF-ED 10 VI	2201911200	10
	WF-ED 12 VI	2201911800	12
	WF-ED 15 VI	2201912700	15
	WF-ED 18 VI	2201913300	18
	WF-ED 22 VI	2201913900	22
	WF-ED 28 VI	2201914500	28
	WF-ED 35 VI	2201915100	35
S	WF-ED 42 VI	2201915700	42
	WF-ED 06 VI	2201910000	6
	WF-ED 08 VI	2201910600	8
	WF-ED 10 VI	2201911200	10
	WF-ED 12 VI	2201911800	12
	WF-ED 16 VI	2201913000	16
	WF-ED 20 VI	2201913600	20
	WF-ED 25 VI	2201914200	25
	WF-ED 30 VI	2201914800	30
WF-ED 38 VI	2201915400	38	

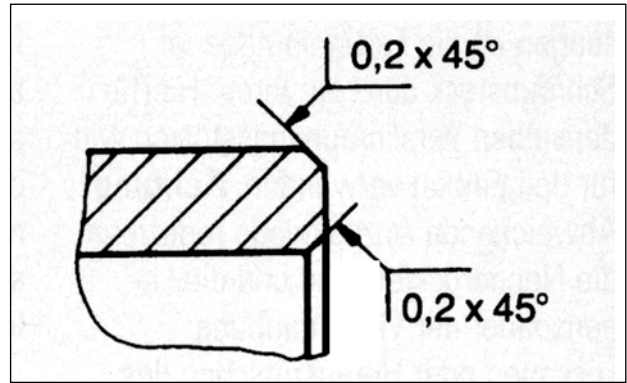
## Technical Information

### Installation and Assembly

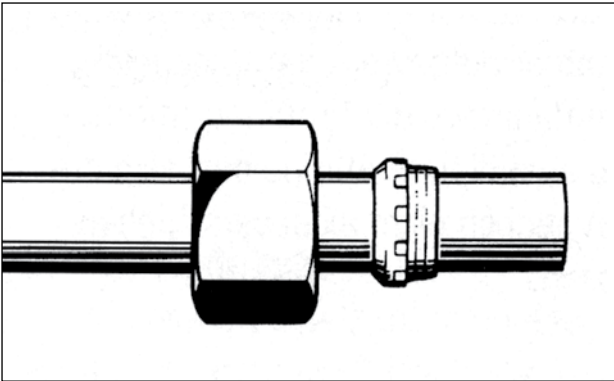
The following presents the general principles of the assembly and installation of bite type fittings and are thus not to be construed as detailed and complete instruction. Note! The detailed assembly and installation instructions are available from GS-Hydro upon request.



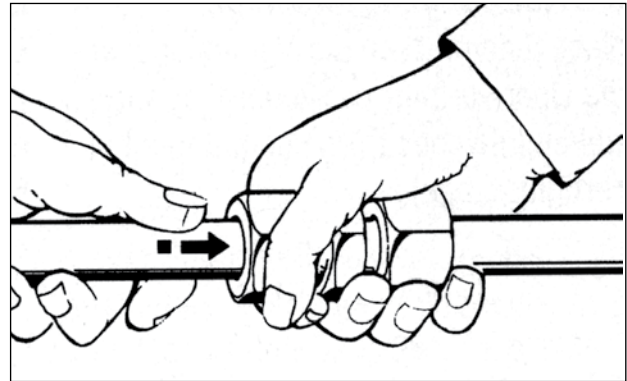
Saw the tube off at rightangles, an angular deviation of 0.5° relative to the tube axis is permissible. Do not use pipe cutter or cutting-off wheels. Use a sawing machine / sawing device.



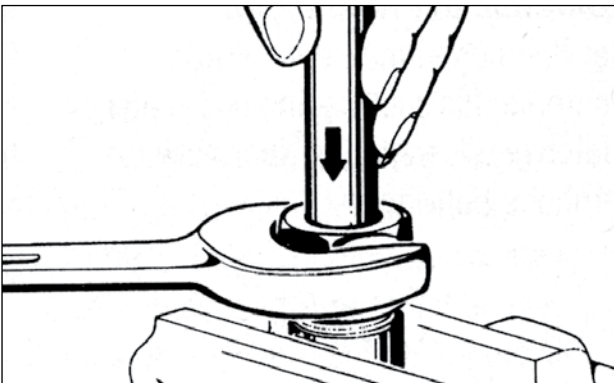
Lightly deburr the tube ends and clean the tube.



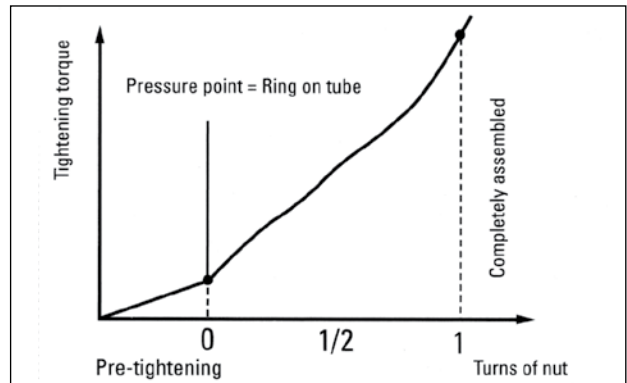
Place nut and profile ring on tube as shown.



Press tube into fitting body up to tube abutment. Tighten nut by hand.



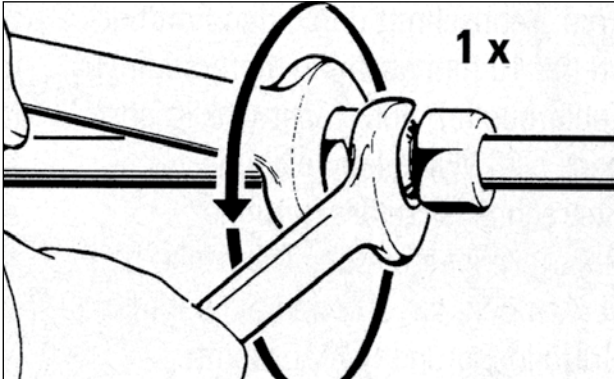
With unfavourable mounting conditions and great tube dimensions, the appropriate fitting body must be fixed in a vice.



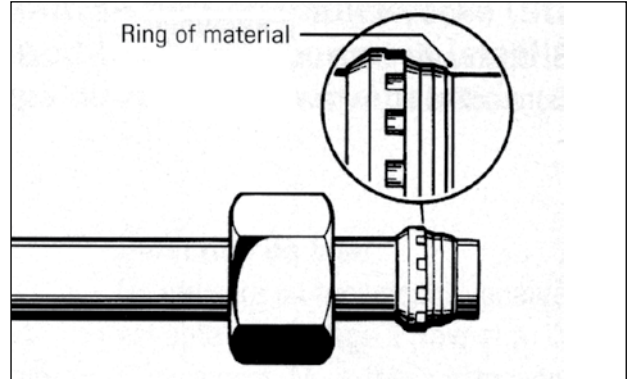
Tighten nut until the profile ring grips the tube which is felt by a noticeable increase in torque.

## Technical Information

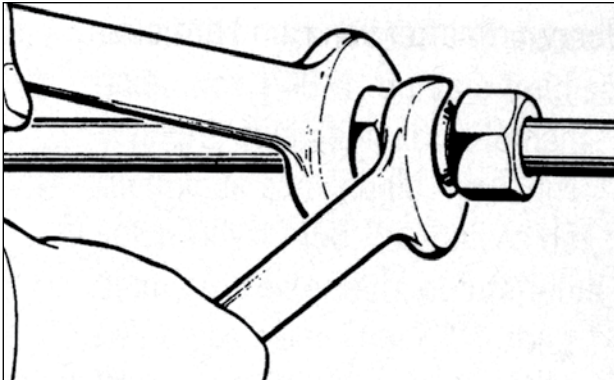
### Installation and Assembly



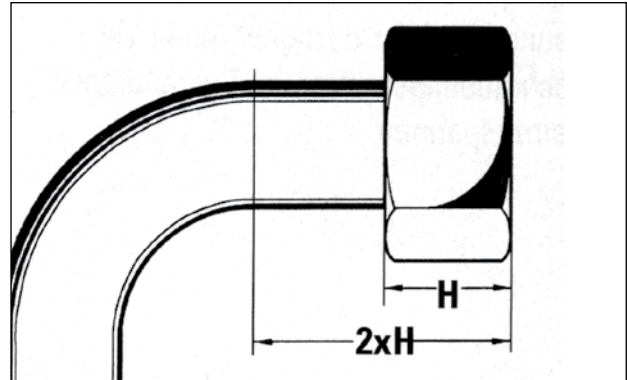
Final assembly by one turn. Important: Hold fitting body firmly by means of a spanner.



Check penetration of cutting edge. A visible ring of material should fill the space in front of the profile ring end face.



Each time the fitting is disassembled, the nut must be re-tightened firmly using the same torque as required for final assembly.



For tube bends, the length of the straight tube end up to start of the bending radius must be at least twice the nut length.

### Pipe Dimensions and Final Assembly Torques

Series	Pipe O.D. [mm]	Min. Pipe Wall Thickness [mm]	Final Assembly Torque [Nm]
L (light duty)	6	1.0	25
	8	1.0	40
	10	1.0	50
	12	1.5	70
	15	1.5	90
	18	1.5	115
	22	2.0	210
	28	2.0	310
	35	3.0	500
S (heavy duty)	42	3.0	600
	6	2.0	35
	8	1.5	55
	10	1.5	70
	12	1.5	85
	16	1.5	120
	20	2.0	200
	25	2.5	340
	30	3.0	480
	38	4.0	850

## Pipes and Tubes

### Hydraulic Pipe E235N (St 37.4) to EN 10305-4, phosphated and oiled

Part No	Size	ID Code	Working Pressure			Burst Pressure	Weight [kg/m]
			1. DNV [bar]	2. DNV [bar]	3. DIN [bar]	4. DNV [bar]	
4X1ST37.4NBK*	4 x 1.0	3201041000	397	459	555	2600	0.07
<b>6X1ST37.4NBK</b>	<b>6 x 1.0</b>	<b>3201061000</b>	<b>252</b>	<b>289</b>	<b>394</b>	<b>1560</b>	<b>0.12</b>
<b>6X1.5ST37.4NBK</b>	<b>6 x 1.5</b>	<b>3201061500</b>	<b>475</b>	<b>552</b>	<b>555</b>	<b>2600</b>	<b>0.17</b>
6X2ST37.4NBK*	6 x 2.0	3201062000	736	867	697	3900	0.19
<b>8X1ST37.4NBK</b>	<b>8 x 1.0</b>	<b>3201081000</b>	<b>184</b>	<b>211</b>	<b>305</b>	<b>1114</b>	<b>0.17</b>
<b>8X1.5ST37.4NBK</b>	<b>8 x 1.5</b>	<b>3201081500</b>	<b>341</b>	<b>393</b>	<b>436</b>	<b>1800</b>	<b>0.24</b>
8X2ST37.4NBK*	8 x 2.0	3201082000	515	600	555	2600	0.30
8X2.5ST37.4NBK*	8 x 2.5	3201082500	712	838	663	3545	0.34
<b>10X1ST37.4NBK</b>	<b>10 x 1.0</b>	<b>3201101000</b>	<b>145</b>	<b>166</b>	<b>249</b>	<b>867</b>	<b>0.22</b>
<b>10X1.5ST37.4NBK</b>	<b>10 x 1.5</b>	<b>3201101500</b>	<b>265</b>	<b>305</b>	<b>359</b>	<b>1376</b>	<b>0.31</b>
10X2ST37.4NBK*	10 x 2.0	3201102000	397	459	461	1950	0.40
10X2.5ST37.4NBK*	10 x 2.5	3201102500	540	630	555	2600	0.46
<b>12X1.5ST37.4NBK</b>	<b>12 x 1.5</b>	<b>3201121500</b>	<b>218</b>	<b>249</b>	<b>305</b>	<b>1114</b>	<b>0.39</b>
<b>12X2ST37.4NBK</b>	<b>12 x 2.0</b>	<b>3201122000</b>	<b>322</b>	<b>371</b>	<b>394</b>	<b>1560</b>	<b>0.49</b>
12X2.5ST37.4NBK*	12 x 2.5	3201122500	435	504	477	2053	0.59
14X1.5ST37.4NBK*	14 x 1.5	3201141500	184	211	266	936	0.46
14X2ST37.4NBK*	14 x 2.0	3201142000	271	312	344	1300	0.59
15X1.5ST37.4NBK*	15 x 1.5	3201151500	171	196	249	867	0.50
15X2ST37.4NBK*	15 x 2.0	3201152000	252	289	324	1200	0.64
16X1.5ST37.4NBK*	16 x 1.5	3201161500	160	183	235	807	0.54
16X2ST37.4NBK*	16 x 2.0	3201162000	234	269	305	1114	0.69
16X2.5ST37.4NBK*	16 x 2.5	3201162500	313	361	372	1444	0.83
16X3ST37.4NBK*	16 x 3.0	3201163000	397	459	436	1800	0.96
18X1.5ST37.4NBK*	18 x 1.5	3201181500	141	161	211	709	0.61
18X2ST37.4NBK*	18 x 2.0	3201182000	206	236	275	975	0.79
20X2ST37.4NBK*	20 x 2.0	3201202000	184	211	249	867	0.89
20X2.5ST37.4NBK*	20 x 2.5	3201202500	245	281	305	1114	1.08
20X3ST37.4NBK*	20 x 3.0	3201203000	308	355	359	1376	1.26
20X4ST37.4NBK*	20 x 4.0	3201204000	443	514	461	1950	1.58
22X1.5ST37.4NBK*	22 x 1.5	3201221500	114	130	175	571	0.76
22X2ST37.4NBK*	22 x 2.0	3201222000	166	190	228	780	0.99
22X2.5ST37.4NBK*	22 x 2.5	3201222500	221	253	280	1000	1.09
25X2ST37.4NBK*	25 x 2.0	3201252000	145	166	203	678	1.13
25X2.5ST37.4NBK*	25 x 2.5	3201252500	192	220	249	867	1.39
25X3ST37.4NBK*	25 x 3.0	3201253000	241	276	294	1064	1.63
25X4ST37.4NBK*	25 x 4.0	3201254000	343	395	380	1486	2.07
28X2ST37.4NBK*	28 x 2.0	3201282000	129	147	182	600	1.28
28X2.5ST37.4NBK*	28 x 2.5	3201282500	170	195	225	765	1.57
28X3ST37.4NBK*	28 x 3.0	3201283000	213	244	266	936	1.85
30X2ST37.4NBK*	30 x 2.0	3201302000	120	137	171	557	1.38
30X3ST37.4NBK*	30 x 3.0	3201303000	197	226	249	867	2.00
30X4ST37.4NBK*	30 x 4.0	3201304000	279	321	324	1200	2.56
35X2ST37.4NBK*	35 x 2.0	3201352000	102	116	148	473	1.63
35X3ST37.4NBK*	35 x 3.0	3201353000	167	191	216	731	2.37
38X2.5ST37.4NBK*	38 x 2.5	3201382500	123	141	169	549	2.19
38X3ST37.4NBK*	38 x 3.0	3201383000	153	175	200	669	2.59
38X4ST37.4NBK*	38 x 4.0	3201384000	216	247	261	918	3.35
38X5ST37.4NBK*	38 x 5.0	3201385000	281	323	320	1182	4.07
38X6ST37.4NBK*	38 x 6.0	3201386000	349	403	376	1463	4.74
42X2ST37.4NBK*	42 x 2.0	3201422000	85	96	124	390	1.97
42X3ST37.4NBK*	42 x 3.0	3201423000	138	158	182	600	2.89
42X4ST37.4NBK*	42 x 4.0	3201424000	194	222	238	821	3.75

Items with black letters: Recommended sizes. Normally stock items.  
 \*= Items with grey letters: Non-standard sizes. Limited availability.

1. Bended pipe including manufacturing and corrosion tolerances.  
 2. Straight pipe including manufacturing and corrosion tolerances.  
 3. DIN 2413 III: Dynamic straight pipe including manufacturing tolerance.  
 4. Based on Tensile value, wall thickness tolerance not included.

## Pipes and Tubes

### Hydraulic Pipe E235N (St 37.4) to EN 10305-4, Cr-VI-free plated

Part No	Size	ID Code	Working Pressure			Burst Pressure	Weight [kg/m]
			1. DNV [bar]	2. DNV [bar]	3. DIN [bar]	4. DNV [bar]	
6X1ST37.4NBK/ZN	6 x 1.0	3202061000	252	289	394	1560	0.07
6X1.5ST37.4NBK/ZN	6 x 1.5	3202061500	475	552	555	2600	0.17
6X2ST37.4NBK/ZN*	6 x 2.0	3202062000	736	867	697	3900	0.19
8X1ST37.4NBK/ZN	8 x 1.0	3202081000	184	211	305	1115	0.17
8X1.5ST37.4NBK/ZN	8 x 1.5	3202081500	341	393	436	1800	0.24
8X2ST37.4NBK/ZN*	8 x 2.0	3202082000	515	600	555	2600	0.30
8X2.5ST37.4NBK/ZN*	8 x 2.5	3202082500	712	838	663	3545	0.34
10X1ST37.4NBK/ZN	10 x 1.0	3202101000	145	166	249	867	0.22
10X1.5ST37.4NBK/ZN	10 x 1.5	3202101500	265	305	359	1376	0.31
10X2ST37.4NBK/ZN*	10 x 2.0	3202102000	397	459	461	1950	0.40
10X2.5ST37.4NBK/ZN*	10 x 2.5	3202102500	540	630	555	2600	0.45
12X1.5ST37.4NBK/ZN	12 x 1.5	3202121500	218	249	305	1114	0.39
12X2ST37.4NBK/ZN	12 x 2.0	3202122000	322	371	394	1560	0.49
12X2.5ST37.4NBK/ZN*	12 x 2.5	3202122500	435	504	477	2053	0.59
15X1.5ST37.4NBK/ZN	15 x 1.5	3202151500	171	196	249	867	0.50
15X2ST37.4NBK/ZN*	15 x 2.0	3202152000	252	289	324	1200	0.64
16X1.5ST37.4NBK/ZN*	16 x 1.5	3202161500	160	183	235	807	0.54
16X2ST37.4NBK/ZN	16 x 2.0	3202162000	234	269	305	1114	0.69
16X2.5ST37.4NBK/ZN*	16 x 2.5	3202162500	313	361	372	1444	0.83
16X3ST37.4NBK/ZN*	16 x 3.0	3202163000	397	459	436	1800	0.96
18X1.5ST37.4NBK/ZN	18 x 1.5	3202181500	141	161	211	709	0.61
18X2ST37.4NBK/ZN*	18 x 2.0	3202182000	206	236	275	975	0.79
20X2ST37.4NBK/ZN	20 x 2.0	3202202000	184	211	249	867	0.89
20X2.5ST37.4NBK/ZN	20 x 2.5	3202202500	245	281	305	1114	1.08
20X3ST37.4NBK/ZN*	20 x 3.0	3202203000	308	355	359	1376	1.25
22X1.5ST37.4NBK/ZN*	22 x 1.5	3202221500	114	130	175	571	0.76
22X2ST37.4NBK/ZN	22 x 2.0	3202222000	166	190	228	780	0.99
22X2.5ST37.4NBK/ZN*	22 x 2.5	3202222500	221	253	280	1000	1.09
25X2ST37.4NBK/ZN*	25 x 2.0	3202252000	145	166	203	678	1.13
25X2.5ST37.4NBK/ZN*	25 x 2.5	3202252500	192	220	249	867	1.39
25X4ST37.4NBK/ZN	25 x 4.0	3202254000	343	395	380	1486	2.07
28X2ST37.4NBK/ZN	28 x 2.0	3202282000	129	147	182	600	1.28
28X2.5ST37.4NBK/ZN*	28 x 2.5	3202282500	170	195	225	765	1.57
28X3ST37.4NBK/ZN*	28 x 3.0	3202283000	213	244	266	936	1.85
30X2ST37.4NBK/ZN*	30 x 2.0	3202302000	120	137	171	557	1.38
30X3ST37.4NBK/ZN	30 x 3.0	3202303000	197	226	249	867	2.00
30X4ST37.4NBK/ZN*	30 x 4.0	3202304000	279	321	324	1200	2.51
35X2ST37.4NBK/ZN	35 x 2.0	3202352000	102	116	148	473	1.63
35X3ST37.4NBK/ZN*	35 x 3.0	3202353000	167	191	216	731	2.37
38X2.5ST37.4NBK/ZN*	38 x 2.5	3202382500	123	141	169	549	2.19
38X3ST37.4NBK/ZN*	38 x 3.0	3202383000	153	175	200	669	2.59
38X4ST37.4NBK/ZN	38 x 4.0	3202384000	216	247	261	918	3.95
38X6ST37.4NBK/ZN*	38 x 6.0	3202386000	349	403	376	1463	4.74
42X2ST37.4NBK/ZN*	42 x 2.0	3202422000	85	96	124	390	1.97
42X3ST37.4NBK/ZN	42 x 3.0	3202423000	138	158	182	600	2.89
42X4ST37.4NBK/ZN*	42 x 4.0	3202424000	194	222	238	821	3.75

Items with black letters: Recommended sizes. Normally stock items.  
 \*= Items with grey letters: Non-standard sizes. Limited availability.

1. Bended pipe including manufacturing and corrosion tolerances.  
 2. Straight pipe including manufacturing and corrosion tolerances.  
 3. DIN 2413 III: Dynamic straight pipe including manufacturing tolerance.  
 4. Based on Tensile value, wall thickness tolerance not included.

## Pipes and Tubes

### Hydraulic Pipe E355N (St 52.4) to EN 10305-4, phosphated and oiled

Part No	Size	ID Code	Working Pressure			Burst Pressure	Weight [kg/m]
			1. DNV [bar]	2. DNV [bar]	3. DIN [bar]	4. DNV [bar]	
14X2ST52.4NBK*	14 x 2.0	3101142000	411	473	456	1777	0.59
15X1.5ST52.4NBK	15 x 1.5	3101151500	259	297	330	1184	0.50
15X2ST52.4NBK*	15 x 2.0	3101152000	381	438	429	1640	0.61
16X1.5ST52.4NBK*	16 x 1.5	3101161500	242	277	311	1103	0.54
16X2ST52.4NBK	16 x 2.0	3101162000	355	408	404	1523	0.69
16X2.5ST52.4NBK	16 x 2.5	3101162500	475	547	493	1974	0.83
18X1.5ST52.4NBK	18 x 1.5	3101181500	214	244	279	969	0.61
18X2ST52.4NBK	18 x 2.0	3101182000	313	358	364	1333	0.79
20X2ST52.4NBK	20 x 2.0	3101202000	279	319	330	1184	0.89
20X2.5ST52.4NBK	20 x 2.5	3101202500	371	426	404	1523	1.08
20X3ST52.4NBK	20 x 3.0	3101203000	467	537	476	1881	1.25
22X1.5ST52.4NBK*	22 x 1.5	3101221500	173	197	231	780	0.76
22X2ST52.4NBK	22 x 2.0	3101222000	252	288	303	1066	0.99
25X2ST52.4NBK*	25 x 2.0	3101252000	220	251	269	927	1.13
25X2.5ST52.4NBK	25 x 2.5	3101252500	291	333	330	1184	1.39
25X3ST52.4NBK	25 x 3.0	3101253000	365	418	390	1454	1.63
28X2ST52.4NBK	28 x 2.0	3101282000	195	223	242	820	1.28
28X3ST52.4NBK*	28 x 3.0	3101283000	322	369	352	1279	1.85
30X2ST52.4NBK*	30 x 2.0	3101302000	182	207	226	761	1.38
30X3ST52.4NBK	30 x 3.0	3101303000	299	343	330	1184	2.00
30X4ST52.4NBK	30 x 4.0	3101304000	424	487	429	1640	2.56
35X2ST52.4NBK*	35 x 2.0	3101352000	155	176	196	646	1.63
35X3ST52.4NBK	35 x 3.0	3101353000	254	290	286	999	2.37
38X3ST52.4NBK*	38 x 3.0	3101383000	233	266	265	914	2.59
38X4ST52.4NBK	38 x 4.0	3101384000	327	375	346	1254	3.35
38X5ST52.4NBK	38 x 5.0	3101385000	426	490	424	1615	4.10
39X7.5ST52.4NBK*	39 x 7.5	3101397500	673	781	590	2538	5.86
42X2ST52.4NBK*	42 x 2.0	3101422000	128	146	164	533	1.97
42X3ST52.4NBK	42 x 3.0	3101423000	209	239	242	820	2.89
42X4ST52.4NBK	42 x 4.0	3101424000	293	336	316	1122	3.75

Items with black letters: Recommended sizes. Normally stock items.  
 \*= Items with grey letters: Non-standard sizes. Limited availability.

1. Bended pipe including manufacturing and corrosion tolerances.  
 2. Straight pipe including manufacturing and corrosion tolerances.  
 3. DIN 2413 III: Dynamic straight pipe including manufacturing tolerance.  
 4. Based on Tensile value, wall thickness tolerance not included.

## Pipes and Tubes

### Hydraulic Pipe E355N (St 52.4) to EN 10305-4, Cr-VI-free plated

Part No	Size	ID Code	Working Pressure			Burst Pressure	Weight [kg/m]
			1. DNV [bar]	2. DNV [bar]	3. DIN [bar]	4. DNV [bar]	
15X1.5ST52.4NBK/ZN	15 x 1.5	3102151500	259	297	330	1184	0.50
15X2ST52.4NBK/ZN*	15 x 2.0	3102152000	381	438	429	1640	0.64
16X1.5ST52.4NBK/ZN*	16 x 1.5	3102161500	242	277	311	1103	0.54
16X2ST52.4NBK/ZN	16 x 2.0	3102162000	355	408	404	1523	0.69
16X2.5ST52.4NBK/ZN	16 x 2.5	3102162500	475	547	493	1974	0.83
18X1.5ST52.4NBK/ZN	18 x 1.5	3102181500	214	244	279	969	0.61
18X2ST52.4NBK/ZN	18 x 2.0	3102182000	313	358	364	1333	0.79
20X2ST52.4NBK/ZN	20 x 2.0	3102202000	279	319	330	1184	0.89
20X2.5ST52.4NBK/ZN	20 x 2.5	3102202500	371	426	404	1523	1.08
20X3ST52.4NBK/ZN	20 x 3.0	3102203000	467	537	476	1881	1.26
22X1.5ST52.4NBK/ZN*	22 x 1.5	3102221500	173	197	231	780	0.76
22X2ST52.4NBK/ZN	22 x 2.0	3102222000	252	288	303	1066	0.99
25X2ST52.4NBK/ZN*	25 x 2.0	3102252000	220	251	269	927	1.13
25X2.5ST52.4NBK/ZN	25 x 2.5	3102252500	291	333	330	1184	1.39
25X3ST52.4NBK/ZN	25 x 3.0	3102253000	365	418	390	1454	1.63
28X2ST52.4NBK/ZN	28 x 2.0	3102282000	195	223	242	820	1.28
28X3ST52.4NBK/ZN*	28 x 3.0	3102283000	322	369	352	1279	1.85
30X2ST52.4NBK/ZN*	30 x 2.0	3102302000	182	207	226	761	1.38
30X3ST52.4NBK/ZN	30 x 3.0	3102303000	299	343	330	1184	2.00
30X4ST52.4NBK/ZN	30 x 4.0	3102304000	424	487	429	1649	2.56
35X2ST52.4NBK/ZN	35 x 2.0	3102352000	155	176	196	646	1.63
35X3ST52.4NBK/ZN	35 x 3.0	3102353000	254	290	286	999	2.37
38X3ST52.4NBK/ZN	38 x 3.0	3102383000	233	266	265	914	2.59
38X4ST52.4NBK/ZN	38 x 4.0	3102384000	327	375	346	1254	3.35
38X5ST52.4NBK/ZN	38 x 5.0	3102385000	426	490	424	1615	4.07
42X3ST52.4NBK/ZN	42 x 3.0	3102423000	209	239	242	820	2.89
42X4ST52.4NBK/ZN	42 x 4.0	3102424000	293	336	316	1122	3.75

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 2. Straight pipe including manufacturing and corrosion tolerances.  
 3. DIN 2413 III: Dynamic straight pipe including manufacturing tolerance.  
 4. Based on Tensile value, wall thickness tolerance not included.

## Pipes and Tubes

### Seamless Coldrawn Stainless Steel Pipe to ASTM A269/A213 – AISI 316 L

Part No	Size	ID Code	Working Pressure			Burst Pressure	Weight [kg/m]
			1. DNV [bar]	2. DNV [bar]	3. DIN [bar]	4. DNV [bar]	
6X1AISI316L	6 x 1.0	3301061000	525	607	365	2120	0.07
8X1AISI316L	8 x 1.0	3301081000	379	436	283	1514	0.17
8X1.5AISI316L	8 x 1.5	3301081500	602	698	404	2446	0.24
10X1AISI316L	10 x 1.0	3301101000	297	340	231	1178	0.22
10X1.5AISI316L	10 x 1.5	3301101500	465	537	333	1871	0.31
10X2AISI316L*	10 x 2.0	3301102000	650	755	427	2650	0.40
12X1AISI316L	12 x 1.0	3301121000	244	279	195	964	0.27
12X1.5AISI316L	12 x 1.5	3301121500	379	436	283	1514	0.39
12X2AISI316L	12 x 2.0	3301122000	525	607	365	2120	0.49
12X2.5AISI316L*	12 x 2.5	3301122500	682	794	442	2789	0.59
15X1.5AISI316L	15 x 1.5	3301151500	297	340	231	1178	0.50
16X1.5AISI316L*	16 x 1.5	3301161500	277	317	218	1097	0.54
16X2AISI316L	16 x 2.0	3301162000	379	436	283	1514	0.69
16X2.5AISI316L	16 x 2.5	3301162500	487	563	345	1963	0.83
16X3AISI316L*	16 x 3.0	3301163000	602	698	404	2446	0.96
18X1.5AISI316L	18 x 1.5	3301181500	244	279	195	964	0.61
18X2AISI316L	18 x 2.0	3301182000	333	382	255	1325	0.79
20X2AISI316L	20 x 2.0	3301202000	297	340	231	1178	0.89
20X2.5AISI316L	20 x 2.5	3301202500	379	436	283	1514	1.08
20X3AISI316L	20 x 3.0	3301203000	465	537	333	1871	1.26
22X1.5AISI316L*	22 x 1.5	3301221500	197	225	162	776	0.76
22X2AISI316L	22 x 2.0	3301222000	268	307	212	1060	0.99
25X1.5AISI316L*	25 x 1.5	3301251500	172	196	143	677	0.87
25X2AISI316L	25 x 2.0	3301252000	233	267	188	922	1.13
25X2.5AISI316L	25 x 2.5	3301252500	297	340	231	1178	1.39
25X3AISI316L	25 x 3.0	3301253000	362	417	273	1445	1.63
25X4AISI316L	25 x 4.0	3301254000	501	579	352	2019	2.07
28X2AISI316L	28 x 2.0	3301282000	207	236	169	815	1.28
28X2.5AISI316L	28 x 2.5	3301282500	263	301	208	1039	1.57
28X3AISI316L*	28 x 3.0	3301283000	320	367	246	1272	1.85
30X2AISI316L*	30 x 2.0	3301302000	192	220	158	757	1.38
30X2.5AISI316L*	30 x 2.5	3301302500	244	279	195	964	1.70
30X3AISI316L	30 x 3.0	3301303000	297	340	231	1178	2.00
30X4AISI316L	30 x 4.0	3301304000	408	469	300	1631	2.56
35X2AISI316L	35 x 2.0	3301352000	164	187	137	642	1.63
35X2.5AISI316L	35 x 2.5	3301352500	201	236	169	815	2.00
35X3AISI316L	35 x 3.0	3301353000	251	288	201	994	2.37
38X2.5AISI316L*	38 x 2.5	3301382500	190	217	157	746	2.19
38X3AISI316L	38 x 3.0	3301383000	230	263	186	909	2.59
38X4AISI316L	38 x 4.0	3301384000	314	360	242	1247	3.35
38X5AISI316L	38 x 5.0	3301385000	402	462	296	1606	4.07
42X2AISI316L	42 x 2.0	3301422000	135	154	115	530	1.97
42X2.5AISI316L	42 x 2.5	3301422500	171	195	142	671	2.43
42X3AISI316L	42 x 3.0	3301423000	207	236	169	815	2.89
42X4AISI316L	42 x 4.0	3301424000	282	323	221	1116	3.75

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 \*= Items with grey letters: Non-standard sizes. Limited availability.

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 2. Straight pipe including manufacturing and corrosion tolerances.  
 3. DIN 2413 III: Dynamic straight pipe including manufacturing tolerance.  
 4. Based on Tensile value, wall thickness tolerance not included.





**Notes**

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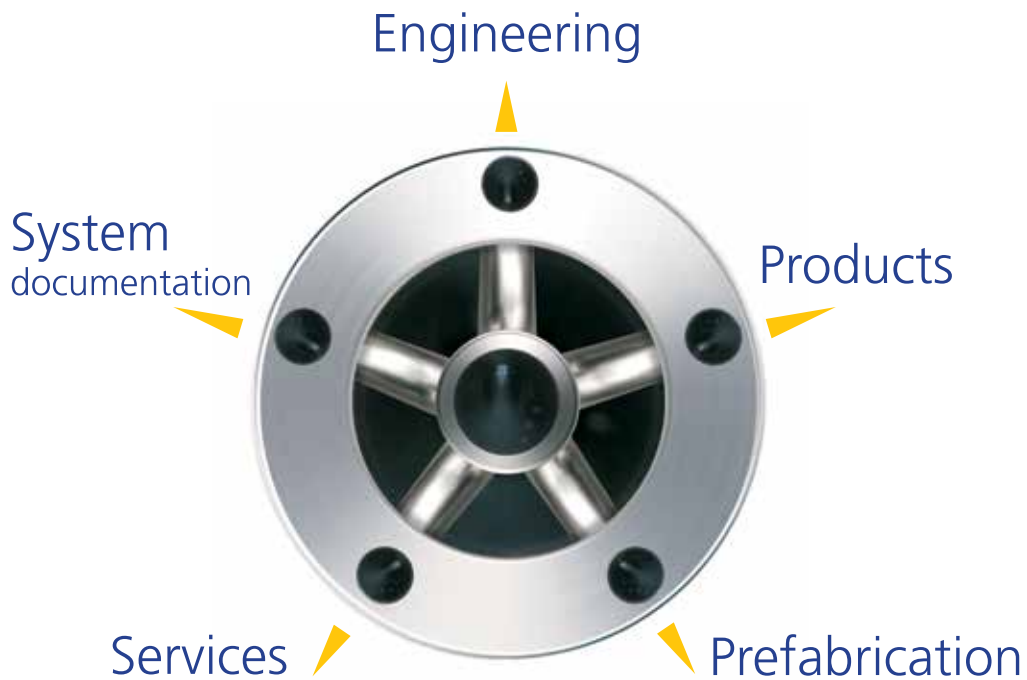
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**GS-Hydro** is the original provider of non-welded piping solutions with numerous benefits for a wide variety of demanding applications. We create value together with our customers by providing innovative fluid transfer solutions which enable safe operation, reduced environmental impact and lower total cost of ownership. We deliver our piping and hose solutions globally in more than twenty-five countries through own companies and partners.

## GS-Hydro system offering



8990306607 Product Offering Bite Type Fittings, February 2016



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