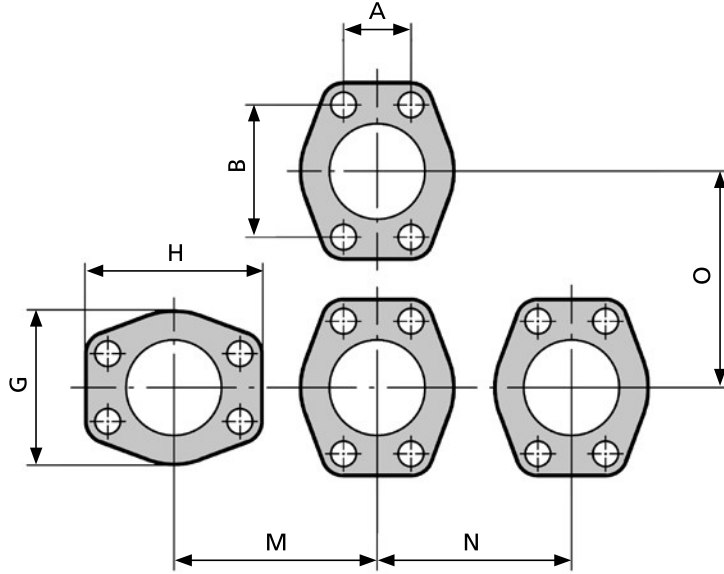


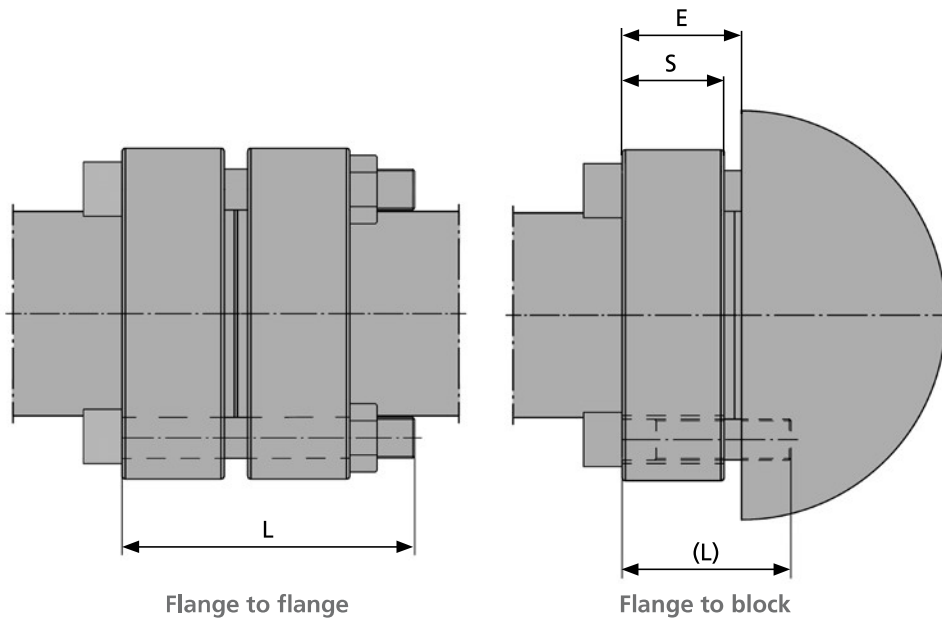
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## Flange dimensions

ISO 6162-2 (SAE J 518 Code 62)



Port dimensions for flange connections according to ISO 6162-2.



Flange to flange

Flange to block

Size	Part No	A	B	G	H	M	N	O	S	E	Bolt L DIN 912, 8.8	W.P. [bar]
1/2"	608	18.2	40.5	48	56	57	53	61	20	24	M8x60(35)	420
3/4"	612	23.8	50.8	60	71	70	65	76	25	29	M10x70(40)	420
1"	616	27.8	57.2	70	81	80	75	86	25	29	M12x70(45)	420
1 1/4"	620*	31.8	66.7	78	95	91	83	100	30	35	M12x90(50)	420
1 1/4"	621**	31.8	66.7	78	95	91	83	100	30	35	M14x90(50)	420
1 1/2"	624	36.5	79.4	95	113	109	100	118	35	40	M16x100(60)	420
2"	632	44.5	96.8	114	133	129	119	139	40	45	M20x110(70)	420
2 1/2"	640	58.7	123.8	150	175	169	156	183	50	55	M24x140(90)	420
3"	648	71.4	152.4	178	215	202	184	218	50	58	M30x160(100)	420

\* = According to the ISO 6162-2 standard (M12 bolts).

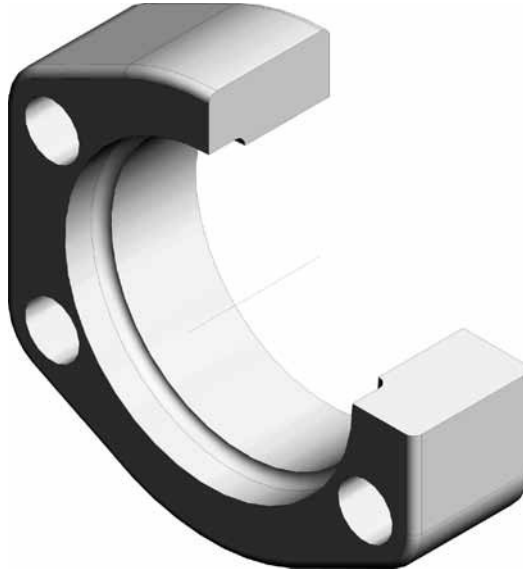
\*\* = According to the previous ISO 6162-2 (2002) standard (M14 bolts). Not to be used for new constructions.

Manufacturing tolerance for flange thickness (S)  $\pm 5\%$ .

L = flange to flange  
(L) = flange to block

## Retain ring flange

ISO 6162-2 (SAE J 518 Code 62)



### Metric pipes

Size	Pipe O.D.	Standard Part No	Standard ID Code	HDG Part No	HDG ID Code	SS Part No	SS ID Code	W.P. [bar]	Weight [kg]
1/2"	26	<b>608</b>	1103000100	<b>608HDG</b>	1113009000	<b>608SS</b>	1203000100	420	0.20
3/4"	36	<b>612</b>	1103030000	<b>612HDG</b>	1113036000	<b>612SS</b>	1203030000	420	0.38
1"	39	<b>616</b>	1103060000	<b>616HDG</b>	1113069000	<b>616SS</b>	1203060000	420	0.50
1 1/4"	46	<b>620*</b>	1103097600	<b>620HDG*</b>	1113099505	<b>620SS*</b>	1203097600	420	0.87
1 1/4"	46	<b>621**</b>	1103090000	<b>621HDG**</b>	1113099000	<b>621SS**</b>	1203090000	420	0.87
1 1/2"	56	<b>624</b>	1103120000	<b>624HDG</b>	1113129000	<b>624SS</b>	1203120000	420	1.40
2"	66	<b>632</b>	1103150000	<b>632HDG</b>	1113159000	<b>632SS</b>	1203150000	420	2.18
2 1/2"	80	<b>640</b>	1103180000	<b>640HDG</b>	1113161000	<b>640SS</b>	1203159000	420	5.69
3"	97	<b>648</b>	1103210000	<b>648HDG</b>	1113210500	<b>648SS</b>	1203210000	420	7.80

### ANSI 36.10/36.19 pipes

Size	Pipe O.D.	Standard Part No	Standard ID Code	HDG Part No	HDG ID Code	SS Part No	SS ID Code	W.P. [bar]	Weight [kg]
1/2"	21.3	<b>608/21.3</b>	1103001500	<b>608/21.3HDG</b>	1113009200	<b>608/21.3SS</b>	1203001500	420	0.28
3/4"	26.7	<b>612/26.7</b>	1103031500	<b>612/26.7HDG</b>	1113039200	<b>612/26.7SS</b>	1203031500	420	0.46
1"	33.4	<b>616/33.4</b>	1103061500	<b>616/33.4HDG</b>	1113069200	<b>616/33.4SS</b>	1203061500	420	0.58
1 1/4"	42.2	<b>620/42.2*</b>	1103097605	<b>620/42.2HDG*</b>	1113099510	<b>620/42.2SS*</b>	1203097605	420	1.00
1 1/4"	42.2	<b>621/42.2**</b>	1103091000	<b>621/42.2HDG**</b>	1113099200	<b>621/42.2SS**</b>	1203092000	420	1.00
1 1/2"	48.3	<b>624/48.3</b>	1103120800	<b>624/48.3HDG</b>	1113129200	<b>624/48.3SS</b>	1203120800	420	1.80
2"	60.3	<b>632/60.3</b>	1103150600	<b>632/60.3HDG</b>	1113150700	<b>632/60.3SS</b>	1203150600	420	2.35
2 1/2"	73.0	<b>640/73</b>	1103181000	<b>640/73HDG</b>	1113161500	<b>640/73SS</b>	1203181000	420	5.95
3"	88.9	<b>648/88.9</b>	1103210800	<b>648/88.9HDG</b>	1113211000	<b>648/88.9SS</b>	1203210800	420	8.10

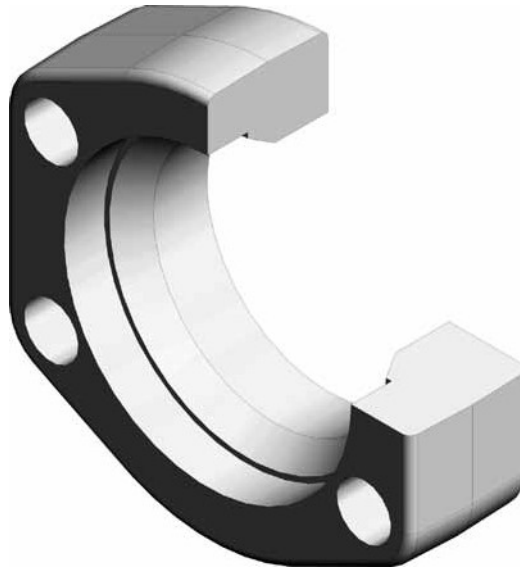
Material possibilities:  
 Standard= carbon steel, zinc plated  
 -HDG= carbon steel, hot dip galvanized  
 -SS= stainless steel  
 Other materials on request.

\* = According to the ISO 6162-2 standard (M12 bolts).

\*\* = According to the previous ISO 6162-2 (2002) standard (M14 bolts). Not to be used for new constructions.

## Flare flange

ISO 6162-2 (SAE J 518 Code 62)



### Metric pipes

Size	Pipe O.D.	Standard Part No	Standard ID Code	HDG Part No	HDG ID Code	SS Part No	SS ID Code	W.P. [bar]	Weight [kg]
1/2"	25	<b>608F</b>	1103003000	<b>608FHDG</b>	1113006000	<b>608FSS</b>	1203003000	420	0.20
3/4"	30	<b>612F</b>	1103033000	<b>612FHDG</b>	1113036000	<b>612FSS</b>	1203033000	420	0.42
1"	38	<b>616F</b>	1103063000	<b>616FHDG</b>	1113066000	<b>616FSS</b>	1203063000	420	0.51
1 1/4"	42	<b>620F*</b>	1103097615	<b>620FHDG*</b>	1113099500	<b>620FSS*</b>	1203097615	420	0.86
1 1/4"	42	<b>621F**</b>	1103093000	<b>621FHDG**</b>	1113096000	<b>621FSS**</b>	1203093000	420	0.86
1 1/2"	50	<b>624F</b>	1103123000	<b>624FHDG</b>	1113126000	<b>624FSS</b>	1203123000	420	1.45
2"	60	<b>632F</b>	1103153000	<b>632FHDG</b>	1113156000	<b>632FSS</b>	1203153000	420	2.31
2 1/2"	73	<b>640F</b>	1103183000	<b>640FHDG</b>	1113160000	<b>640FSS</b>	1203183000	420	5.95
3"	90	<b>648F</b>	1103211000	<b>648FHDG</b>	1113212000	<b>648FSS</b>	1203211000	420	7.95

### ANSI 36.10/36.19 pipes

Size	Pipe O.D.	Standard Part No	Standard ID Code	HDG Part No	HDG ID Code	SS Part No	SS ID Code	W.P. [bar]	Weight [kg]
1/2"	21.3	<b>608F/21.3</b>	1103004500	<b>608F/21.3HDG</b>	1113009300	<b>608F/21.3SS</b>	1203004500	420	0.30
3/4"	26.7	<b>612F/26.7</b>	1103033300	<b>612F/26.7HDG</b>	1113039400	<b>612F/26.7SS</b>	1203033300	420	0.50
1"	33.4	<b>616F/33.4</b>	1103063300	<b>616F/33.4HDG</b>	1113069400	<b>616F/33.4SS</b>	1203063300	420	0.60
1 1/4"	42.2	<b>620F/42.2*</b>	1103097640	<b>620F/42.2HDG*</b>	1113099515	<b>620F/42.2SS*</b>	1203097620	420	1.00
1 1/4"	42.2	<b>621F/42.2**</b>	1103094000	<b>621F/42.2HDG**</b>	1113099400	<b>621F/42.2SS**</b>	1203094000	420	1.00
1 1/2"	48.3	<b>624F/48.3</b>	1103124000	<b>624F/48.3HDG</b>	1113129400	<b>624F/48.3SS</b>	1203124000	420	1.90
2"	60.3	<b>632F/60.3</b>	1103154000	<b>632F/60.3HDG</b>	1113157000	<b>632F/60.3SS</b>	1203154000	420	2.50
2 1/2"	73.0	<b>640F</b>	1103183000	<b>640FHDG</b>	1113160000	<b>640FSS</b>	1203183000	420	5.95
3"	88.9	<b>648F/88.9</b>	1103211100	<b>648F/88.9HDG</b>	1113212500	<b>648F/88.9SS</b>	1203211100	420	8.10

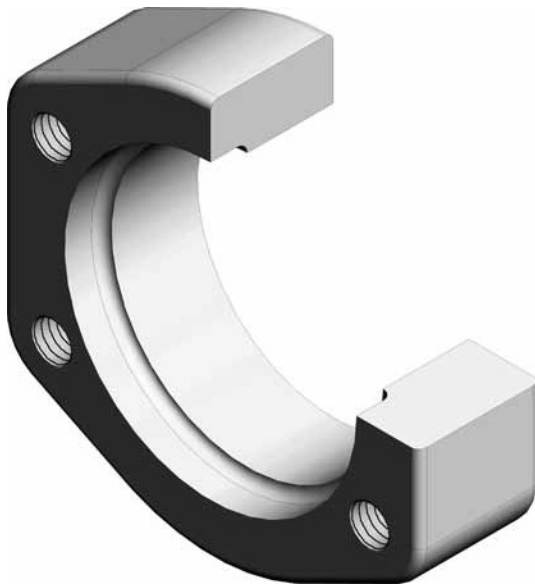
Material possibilities:  
 Standard= carbon steel, zinc plated  
 -HDG= carbon steel, hot dip galvanized  
 -SS= Stainless steel  
 Other materials on request.

\* = According to the ISO 6162-2 standard (M12 bolts).

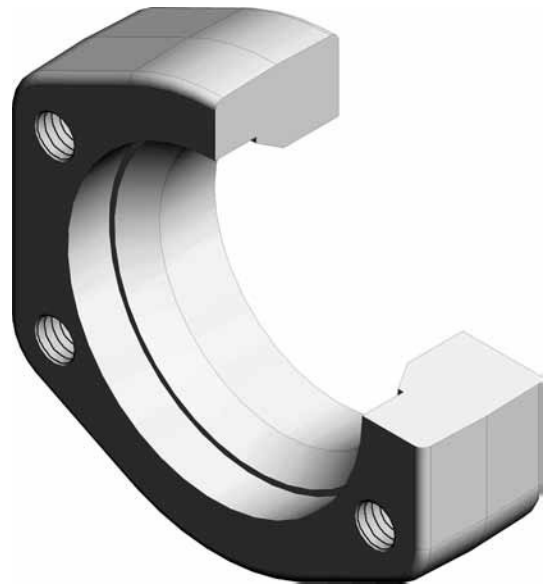
\*\* = According to the previous ISO 6162-2 (2002) standard (M14 bolts). Not to be used for new constructions.

## Counter flange

ISO 6162-2 (SAE J 518 Code 62)



Retain ring flange with threads



Flare flange with threads

### Retain ring flange

Size	Part No	ID Code	Bolt , DIN 912, 8.8	Weight [kg]
1/2"	608/M8	1103002000	M8x45	0.20
3/4"	612/M10	1103032000	M10x60	0.38
1"	616/M12	1103062000	M12x60	0.50
1 1/4"	620/M12*	1103097610	M12x70	0.87
1 1/4"	621/M14**	1103092000	M14x70	0.87
1 1/2"	624/M16	1103122000	M16x80	1.40
2"	632/M20	1103152000	M20x90	2.18

### Flare flange

Size	Part No	ID Code	Bolt , DIN 912, 8.8	Weight [kg]
1/2"	608F/M8	1103003500	M8x45	0.20
3/4"	612F/M10	1103033900	M10x60	0.42
1"	616F/M12	1103064000	M12x60	0.51
1 1/4"	620F/M12*	1103097645	M12x70	0.86
1 1/4"	621F/M14**	1103097500	M14x70	0.86
1 1/2"	624F/M16	1103127500	M16x80	1.45
2"	632F/M20	1103157500	M20x90	2.35

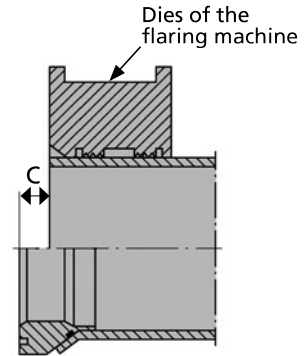
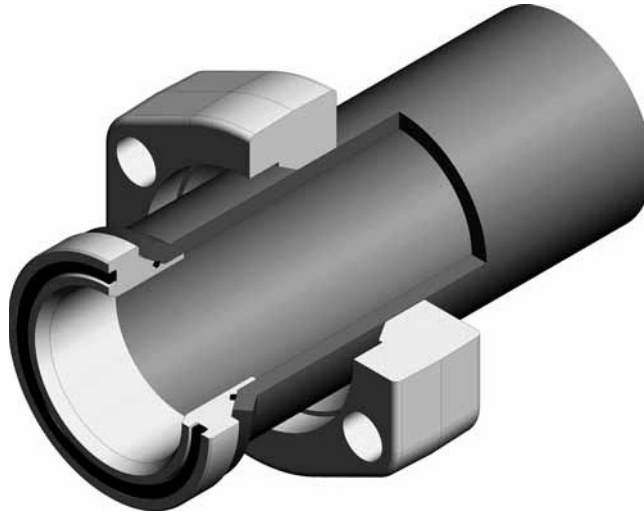
Material possibilities:  
 Standard= carbon steel, zinc plated  
 -SS= Stainless steel  
 Other materials on request.

\* = According to the ISO 6162-2 standard (M12 bolts).

\*\* = According to the previous ISO 6162-2 (2002) standard (M14 bolts). Not to be used for new constructions.

## Flare flange connection – Type A

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:

**608/16X2FA** includes:  
 608F 1 pc  
 08/16X2FA 1 pc  
 08/16F 1 pc  
 OR18.64X3.53 1 pc  
 OR12X1.0 1 pc

### Metric pipes

Size	Pipe Size	Complete Part No	Complete ID Code	C	Weight [kg]	Insert Part No	O-Ring Part No	O-Ring2 Part No	Sleeve Part No
1/2"	16x2,0	608/16X2FA	1401521000	10	0,27	08/16X2FA	OR18.64X3.53	OR12X1.0	08/16F
1/2"	18x2,0	608/18X2FA	1401521500	11	0,27	08/18X2FA	OR18.64X3.53	OR14X1.0	08/18F
1/2"	20x2,0	608/20X2FA	1401522000	9	0,26	08/20X2FA	OR18.64X3.53	OR16X1.0	08/20F
1/2"	25x2,5	608/25X2.5FA	1401522410	9	0,26	08/25X2.5FA	OR18.64X3.53	OR20X1.0	None
1/2"	25x3,0	608/25X3FA	1401522500	9	0,24	08/25X3FA	OR18.64X3.53	OR19X1.0	None
3/4"	20x2,0	612/20X2FA	1401523500	12	0,53	12/20X2FA	OR24.99X3.53	OR16X1.0	12/20F
3/4"	20x2,5	612/20X2.5FA	1401523705	12	0,54	12/20X2.5FA	OR24.99X3.53	OR15X1.0	12/20F
3/4"	25x2,5	612/25X2.5FA	1401524000	9	0,50	12/25X2.5FA	OR24.99X3.53	OR20X1.0	12/25F
3/4"	25x3,0	612/25X3FA	1401524500	10	0,51	12/25X3FA	OR24.99X3.53	OR19X1.0	12/25F
3/4"	30x3,0	612/30X3FA	1401525000	9	0,48	12/30X3FA	OR24.99X3.53	OR23X1.0	None
3/4"	30x4,0	612/30X4FA	1401525600	9	0,50	12/30X4FA	OR24.99X3.53	OR22X1.0	None
1"	25x2,5	616/25X2.5FA	1401526000	9	0,69	16/25X2.5FA	OR32.92X3.53	OR20X1.0	16/25F
1"	25x3,0	616/25X3FA	1401526410	9	0,66	16/25X3FA	OR32.92X3.53	OR19X1.0	16/25F
1"	30x3,0	616/30X3FA	1401526500	7	0,66	16/30X3FA	OR32.92X3.53	OR23X1.0	16/30F
1"	30x4,0	616/30X4FA	1401527000	7	0,66	16/30X4FA	OR32.92X3.53	OR22X1.0	16/30F
1"	38x4,0	616/38X4FA	1401527500	10	0,60	16/38X4FA	OR32.92X3.53	OR30X1.0	None
1 1/4"	30x3,0	620/30X3FA*	1401530328	10	1,08	20/30X3FA	OR37.69X3.53	OR23X1.0	20/30F
1 1/4"	30x4,0	620/30X4FA*	1401530336	10	1,08	20/30X4FA	OR37.69X3.53	OR22X1.0	20/30F
1 1/4"	38x4,0	620/38X4FA*	1401530344	9	1,01	20/38X4FA	OR37.69X3.53	OR30X1.0	20/38F
1 1/4"	38x5,0	620/38X5FA*	1401530352	9	1,00	20/38X5FA	OR37.69X3.53	OR28X1.0	20/38F
1 1/4"	42x4,0	620/42X4FA*	1401530360	11	0,98	20/42X4FA	OR37.69X3.53	OR34X1.0	None
1 1/2"	30x3,0	624/30X3FA	1401530600	14	1,16	24/30X3FA	OR47.22X3.53	OR23X1.0	24/30F
1 1/2"	38x4,0	624/38X4FA	1401531000	13	1,76	24/38X4FA	OR47.22X3.53	OR30X1.0	24/38F
1 1/2"	38x5,0	624/38X5FA	1401531410	13	1,73	24/38X5FA	OR47.22X3.53	OR28X1.0	24/38F
1 1/2"	42x4,0	624/42X4FA	1401531500	13	1,71	24/42X4FA	OR47.22X3.53	OR34X1.0	24/42F
1 1/2"	50x5,0	624/50X5FA	1401532000	11	1,60	24/50X5FA	OR47.22X3.53	OR41X1.78	None
1 1/2"	50x6,0	624/50X6FA	1401532500	11	1,70	24/50X6FA	OR47.22X3.53	OR37,82X1.78	None
1 1/2"	56x8,5**	624/56X8.5FA	1401532550	12	1,60	24/56X8.5FA	OR47.22X3.53	OR37,82X1.78	None
2"	50x5,0	632/50X5FA	1401533000	11	2,70	32/50X5FA	OR56.75X3.53	OR41X1.78	32/50F
2"	60x5,0	632/60X5FA	1401533500	11	2,52	32/60X5FA	OR56.75X3.53	OR50,52X1.78	None
2"	60x6,0	632/60X6FA	1401534000	11	2,56	32/60X6FA	OR56.75X3.53	OR47,35X1.78	None
2"	66x8,5**	632/66X8.5FA	1401534305	12	2,50	32/66X8.5FA	OR56.75X3.53	OR47,35X1.78	None
2 1/2"	60x6,0	640/60X6FA	1401534320	12	7,55	40/60X6FA	OR69,44X3.53	OR47,35X1.78	40/60F
2 1/2"	73x7,0	640/73X7FA	1401534400	12	8,30	40/73X7FA	OR69,44X3.53	OR56,87X1.78	None
3"	90x9,0**	648/90X9FA	1401535000	14	8,55	48/90X9FA	OR85,32X3.53	OR72,75X1.78	None

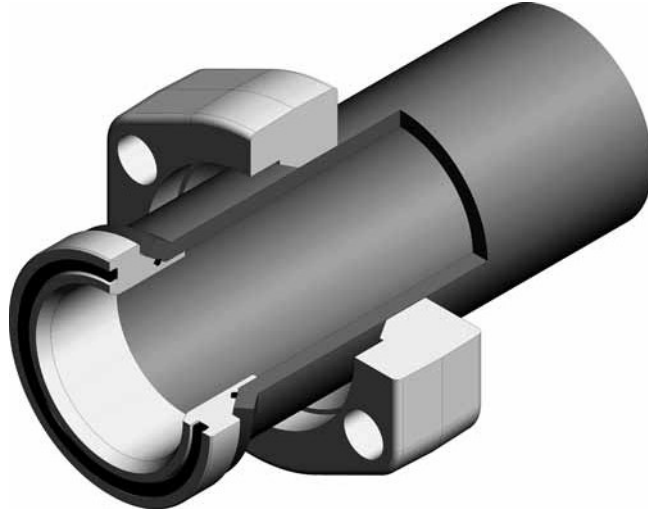
Material possibilities page 168.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.  
 \*\* = Flaring machine requirements GSF 220-HD, GSF 400, FP 170 or FP 275.

Flanges page 80  
 Inserts page 111  
 Sleeves page 113  
 O-rings page 118, 119

## Flare flange connection – Type A

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:  
**608/21.3X3.73FA** includes:  
 608F/21.3 1 pc  
 08/21.3X3.73FA 1 pc  
 OR18.64X3.53 1 pc  
 OR14X1.0 1 pc

### ANSI 36.10/36.19 pipes

Size	Pipe Size	Complete Part No	Complete ID Code	Weight [kg]	Insert Part No	O-Ring Part No	O-Ring2 Part No
1/2"	21.3X3.73	608/21.3X3.73FA	1401761000	0.20	08/21.3X3.73FA	OR18.64X3.53	OR14X1.0
1/2"	21.3X4.78	608/21.3X4.78FA	1401762000	0.20	08/21.3X4.78FA	OR18.64X3.53	OR12X1.0
3/4"	26.7X3.91	612/26.7X3.91FA	1401766000	0.30	12/26.7X3.9F1A	OR25X3.53	OR20X1.0
3/4"	26.7X5.56	612/26.7X5.56FA	1401767000	0.30	12/26.7X5.56FA	OR25X3.53	OR16X1.0
1"	33.4X3.38	616/33.4X3.38FA	1401771000	0.50	16/33.4X3.38FA	OR32.92X3.53	OR25X1.0
1"	33.4X4.55	616/33.4X4.55FA	1401772000	0.50	16/33.4X4.55FA	OR32.92X3.53	OR23X1.0
1 1/4"	42.2X3.56	620/42.2X3.56FA*	1401782650	0.60	20/42.2X3.56FA	OR37.69X3.53	OR34X1.0
1 1/4"	42.2X4.85	620/42.2X4.85FA*	1401782658	0.60	20/42.2X4.85FA	OR37.69X3.53	OR32X1.0
1 1/2"	48.3X3.68	624/48.3X3.68FA	1401785000	0.90	24/48.3X3.68FA	OR47.22X3.53	OR41X1.78
1 1/2"	48.3X5.08	624/48.3X5.08FA	1401786000	0.90	24/48.3X5.08FA	OR47.22X3.53	OR37.82X1.78
2"	60.3X3.91	632/60.3X3.91FA	1401787000	1.40	32/60.3X3.91FA	OR56.75X3.53	OR53.70X1.78
2"	60.3X5.54	632/60.3X5.54FA	1401788000	1.40	32/60.3X5.54FA	OR56.75X3.53	OR47.35X1.78
2 1/2"	73x7.01	640/73X7FA	1401534400	8.30	40/73X7FA	OR69.44X3.53	OR56.87X1.78

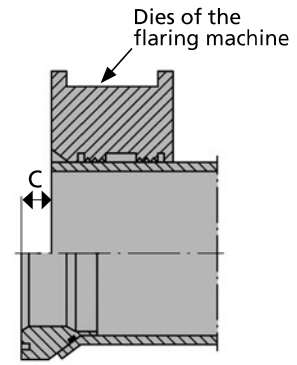
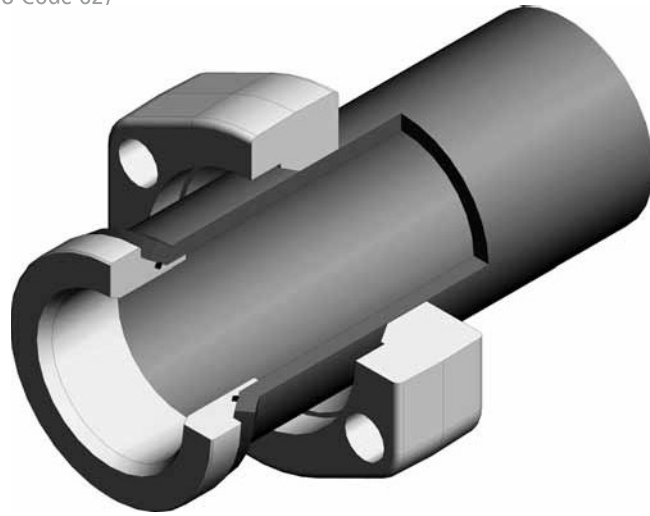
Material possibilities page 168.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

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## Flare flange connection – Type B

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:  
**608/16X2FB** includes:  
 608F 1 pc  
 08/16X2FB 1 pc  
 08/16F 1 pc  
 OR12X1.0 1 pc

### Metric pipes

Size	Pipe Size	Complete Part No	Complete ID Code	C	Weight [kg]	Insert Part No	O-Ring2 Part No	Sleeve Part No
1/2"	16x2.0	608/16X2FB	1401521100	10	0.27	08/16X2FB	OR12X1.0	08/16F
1/2"	18x2.0	608/18X2FB	1401521600	11	0.27	08/18X2FB	OR14X1.0	08/18F
1/2"	20x2.0	608/20X2FB	1401522100	9	0.26	08/20X2FB	OR16X1.0	08/20F
1/2"	25x2.5	608/25X2.5FB	1401522420	9	0.26	08/25X2.5FB	OR20X1.0	None
1/2"	25x3.0	608/25X3FB	1401522600	9	0.24	08/25X3FB	OR19X1.0	None
3/4"	20x2.0	612/20X2FB	1401523600	12	0.53	12/20X2FB	OR16X1.0	12/20F
3/4"	20x2.5	612/20X2.5FB	1401523710	12	0.54	12/20X2.5FB	OR15X1.0	12/20F
3/4"	25x2.5	612/25X2.5FB	1401524100	9	0.50	12/25X2.5FB	OR20X1.0	12/25F
3/4"	25x3.0	612/25X3FB	1401524600	10	0.51	12/25X3FB	OR19X1.0	12/25F
3/4"	30x3.0	612/30X3FB	1401525100	9	0.48	12/30X3FB	OR23X1.0	None
3/4"	30x4.0	612/30X4FB	1401525700	9	0.50	12/30X4FB	OR22X1.0	None
1"	25x2.5	616/25X2.5FB	1401526100	9	0.69	16/25X2.5FB	OR20X1.0	16/25F
1"	25x3.0	616/25X3FB	1401526420	9	0.66	16/25X3FB	OR19X1.0	16/25F
1"	30x3.0	616/30X3FB	1401526600	7	0.66	16/30X3FB	OR23X1.0	16/30F
1"	30x4.0	616/30X4FB	1401527100	7	0.66	16/30X4FB	OR22X1.0	16/30F
1"	38x4.0	616/38X4FB	1401527600	10	0.60	16/38X4FB	OR30X1.0	None
1 1/4"	30x3.0	620/30X3FB*	1401530330	10	1.08	20/30X3FB	OR23X1.0	20/30F
1 1/4"	30x4.0	620/30X4FB*	1401530338	10	1.08	20/30X4FB	OR22X1.0	20/30F
1 1/4"	38x4.0	620/38X4FB*	1401530346	9	1.01	20/38X4FB	OR30X1.0	20/38F
1 1/4"	38x5.0	620/38X5.FB*	1401530354	9	1.00	20/38X5FB	OR28X1.0	20/38F
1 1/4"	42x4.0	620/42X4FB*	1401530362	11	0.98	20/42X4FB	OR34X1.0	None
1 1/2"	30x3.0	624/30X3FB	1401530700	14	1.16	24/30X3FB	OR23X1.0	24/30F
1 1/2"	38x4.0	624/38X4FB	1401531100	13	1.76	24/38X4FB	OR30X1.0	24/38F
1 1/2"	38x5.0	624/38X5FB	1401531412	13	1.73	24/38X5FB	OR28X1.0	24/38F
1 1/2"	42x4.0	624/42X4FB	1401531600	13	1.71	24/42X4FB	OR34X1.0	24/42F
1 1/2"	50x5.0	624/50X5FB	1401532100	11	1.60	24/50X5FB	OR41X1.78	None
1 1/2"	50x6.0	624/50X6FB	1401532510	11	1.70	24/50X6FB	OR37,82X1.78	None
1 1/2"	56x8.5**	624/56X8.5FB	1401532555	12	1.60	24/56X8.5FB	OR37,82X1.78	None
2"	50x5.0	632/50X5FB	1401533100	11	2.70	32/50X5FB	OR41X1.78	32/50F
2"	60x5.0	632/60X5FB	1401533600	11	2.52	32/60X5FB	OR50,52X1.78	None
2"	60x6.0	632/60X6FB	1401534100	11	2.56	32/60X6FB	OR47,35X1.78	None
2"	66x8.5**	632/66X8.5FB	1401534310	12	2.50	32/66X8.5FB	OR47,35X1.78	None
2 1/2"	60x6.0	640/60X6FB	1401534340	12	7.55	40/60X6FB	OR47,35X1.78	40/60F
2 1/2"	73x7.0	640/73X7FB	1401534420	12	8.30	40/73X7FB	OR56,87X1.78	None
3"	90x9.0**	648/90X9FB	1401535005	14	8.55	48/90X9FB	OR72,75X1.78	None

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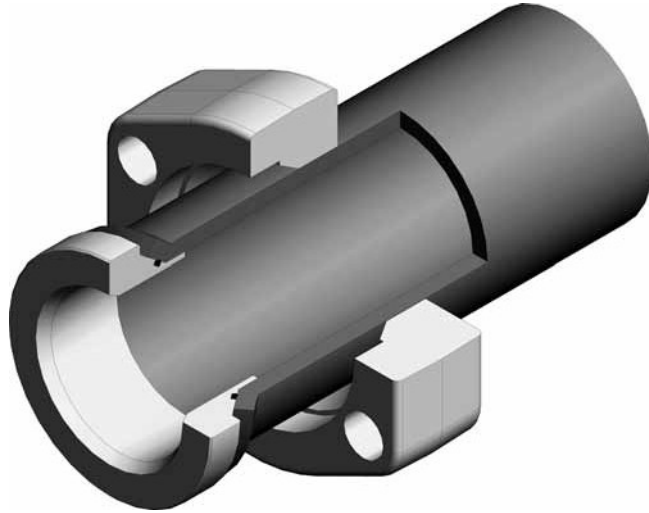
\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.  
 \*\* = Flaring machine requirements GSF 220-HD, GSF 400, FP 170 or FP 275.

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## Flare flange connection – Type B

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:  
**608/21.3X3.73FB** includes:  
 608F/21.3 1 pc  
 08/21.3X3.73FB 1 pc  
 OR14X1.0 1 pc

### ANSI 36.10/36.19 pipes

Size	Pipe Size	Complete Part No	Complete ID Code	Weight [kg]	Insert Part No	O-Ring2 Part No
1/2"	21.3X3.73	<b>608/21.3X3.73FB</b>	1401761200	0.20	08/21.3X3.73FB	OR14X1.0
1/2"	21.3X4.78	<b>608/21.3X4.78FB</b>	1401762200	0.20	08/21.3X4.78FB	OR12X1.0
3/4"	26.7X3.91	<b>612/26.7X3.91FB</b>	1401766200	0.30	12/26.7X3.91FB	OR20X1.0
3/4"	26.7X5.56	<b>612/26.7X5.56FB</b>	1401767200	0.30	12/26.7X5.56FB	OR16X1.0
1"	33.4X3.38	<b>616/33.4X3.38FB</b>	1401771200	0.50	16/33.4X3.38FB	OR25X1.0
1"	33.4X4.55	<b>616/33.4X4.55FB</b>	1401772200	0.50	16/33.4X4.55FB	OR23X1.0
1 1/4"	42.2X3.56	<b>620/42.2X3.56FB*</b>	1401782652	0.60	20/42.2X3.56FB	OR34X1.0
1 1/4"	42.2X4.85	<b>620/42.2X4.85FB*</b>	1401782660	0.60	20/42.2X4.85FB	OR32X1.0
1 1/2"	48.3X3.68	<b>624/48.3X3.68FB</b>	1401785200	0.90	24/48.3X3.68FB	OR41X1.78
1 1/2"	48.3X5.08	<b>624/48.3X5.08FB</b>	1401786200	0.90	24/48.3X5.08FB	OR37.82X1.78
2"	60.3X3.91	<b>632/60.3X3.91FB</b>	1401787200	1.40	32/60.3X3.91FB	OR53.70X1.78
2"	60.3X5.54	<b>632/60.3X5.54FB</b>	1401788200	1.40	32/60.3X5.54FB	OR47.35X1.78
2 1/2"	73x7.01	<b>640/73X7FB</b>	1401534420	8.30	40/73X7FB	OR56.87X1.78

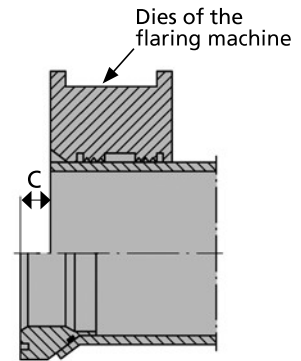
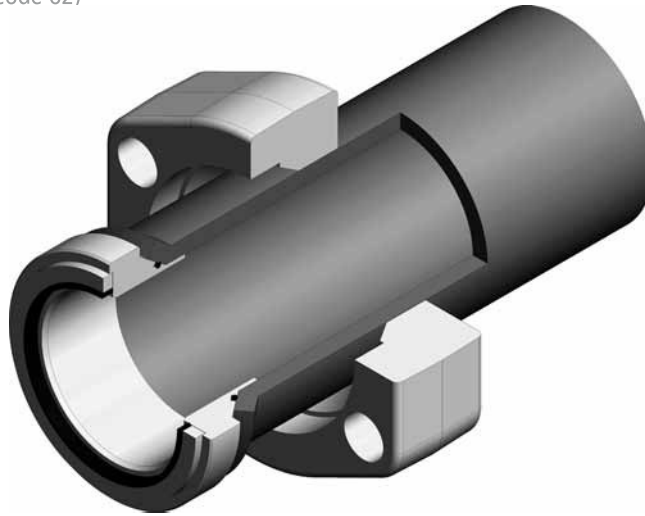
Material possibilities page 168.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

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## Flare flange connection – Type C

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:  
**608/16X2FC** includes:  
 608F 1 pc  
 08/16X2FC 1 pc  
 08/16F 1 pc  
 0823 1 pc  
 OR12X1.0 1 pc

### Metric pipes

Size	Pipe Size	Complete Part No	Complete ID Code	C	Weight [kg]	Insert Part No	O-Ring2 Part No	Bonded Seal Part No	Sleeve Part No
1/2"	16x2.0	608/16X2FC	1401521200	10	0.27	08/16X2FC	OR12X1.0	0823	08/16F
1/2"	18x2.0	608/18X2FC	1401521700	11	0.27	08/18X2FC	OR14X1.0	0823	08/18F
1/2"	20x2.0	608/20X2FC	1401522200	9	0.26	08/20X2FC	OR16X1.0	0823	08/20F
1/2"	25x2.5	608/25X2.5FC	1401522430	9	0.26	08/25X2.5FC	OR20X1.0	0823	None
1/2"	25x3.0	608/25X3FC	1401522700	9	0.24	08/25X3FC	OR19X1.0	0823	None
3/4"	20x2.0	612/20X2FC	1401523700	12	0.53	12/20X2FC	OR16X1.0	1213	12/20F
3/4"	20x2.5	612/20X2.5FC	1401523800	12	0.54	12/20X2.5FC	OR15X1.0	1213	12/20F
3/4"	25x2.5	612/25X2.5FC	1401524200	9	0.50	12/25X2.5FC	OR20X1.0	1213	12/25F
3/4"	25x3.0	612/25X3FC	1401524700	10	0.51	12/25X3FC	OR19X1.0	1213	12/25F
3/4"	30x3.0	612/30X3FC	1401525200	9	0.48	12/30X3FC	OR23X1.0	1213	None
3/4"	30x4.0	612/30X4FC	1401525800	9	0.50	12/30X4FC	OR22X1.0	1213	None
1"	25x2.5	616/25X2.5FC	1401526200	9	0.69	16/25X2.5FC	OR20X1.0	1629	16/25F
1"	25x3.0	616/25X3FC	1401526430	9	0.66	16/25X3FC	OR19X1.0	1629	16/25F
1"	30x3.0	616/30X3FC	1401526700	7	0.66	16/30X3FC	OR23X1.0	1629	16/30F
1"	30x4.0	616/30X4FC	1401527200	7	0.66	16/30X4FC	OR22X1.0	1629	16/30F
1"	38x4.0	616/38X4FC	1401527700	10	0.60	16/38X4FC	OR30X1.0	1629	None
1 1/4"	30x3.0	620/30X3FC*	1401530332	10	1.08	20/30X3FC	OR23X1.0	2030	20/30F
1 1/4"	30x4.0	620/30X4FC*	1401530340	10	1.08	20/30X4FC	OR22X1.0	2030	20/30F
1 1/4"	38x4.0	620/38X4FC*	1401530348	9	1.01	20/38X4FC	OR30X1.0	2030	20/38F
1 1/4"	38x5.0	620/38X5FC*	1401530356	9	1.00	20/38X5FC	OR28X1.0	2030	20/38F
1 1/4"	42x4.0	620/42X4FC*	1401530364	11	0.98	20/42X4FC	OR34X1.0	2030	None
1 1/2"	30x3.0	624/30X3FC	1401530800	14	1.16	24/30X3FC	OR23X1.0	2432	24/30F
1 1/2"	38x4.0	624/38X4FC	1401531200	13	1.76	24/38X4FC	OR30X1.0	2432	24/38F
1 1/2"	38x5.0	624/38X5FC	1401531414	13	1.73	24/38X5FC	OR28X1.0	2432	24/38F
1 1/2"	42x4.0	624/42X4FC	1401531700	13	1.71	24/42X4FC	OR34X1.0	2432	24/42F
1 1/2"	50x5.0	624/50X5FC	1401532200	11	1.60	24/50X5FC	OR41X1.78	2432	None
1 1/2"	50x6.0	624/50X6FC	1401532520	11	1.70	24/50X6FC	OR37,82X1.78	2432	None
1 1/2"	56x8.5**	624/56X8.5FC	1401532560	12	1.60	24/56X8.5FC	OR37,82X1.78	2432	None
2"	50x5.0	632/50X5FC	1401533200	11	2.70	32/50X5FC	OR41X1.78	3219	32/50F
2"	60x5.0	632/60X5FC	1401533700	11	2.52	32/60X5FC	OR50,52X1.78	3219	None
2"	60x6.0	632/60X6FC	1401534200	11	2.60	32/60X6FC	OR47,35X1.78	3219	None
2"	66x8.5**	632/66X8.5FC	1401534315	12	2.50	32/66X8.5FC	OR47,35X1.78	3219	None
2 1/2"	60x6.0	640/60X6FC	1401534360	12	7.55	40/60X6FC	OR47,35X1.78	4037	40/60F
2 1/2"	73x7.0	640/73X7FC	1401534440	12	8.30	40/73X7FC	OR56,87X1.78	4037	None
3"	90x9.0**	648/90X9FC	1401535010	14	8.55	48/90X9FC	OR72,75X1.78	4839	None

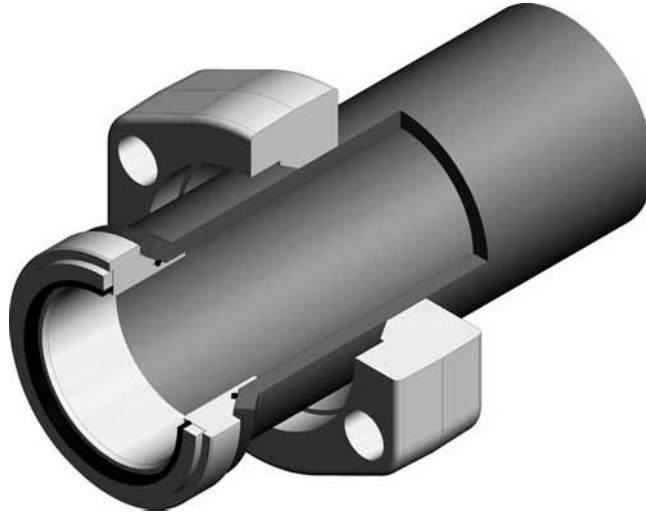
Material possibilities page 168.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.  
 \*\* = Flaring machine requirements GSF 220-HD, GSF 400, FP 170 or FP 275.

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## Flare flange connection – Type C

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:  
**608/21.3X3.73FC** includes:  
 608F/21.3 1 pc  
 08/21.3X3.73FD 1 pc  
 0823 1 pc  
 OR14X1.0 1 pc

### ANSI 36.10/36.19 pipes (with standard GS bonded seal)

Size	Pipe Size	Complete Part No	Complete ID Code	Weight [kg]	Insert Part No	O-Ring <sup>2</sup> Part No	Bonded Seal Part No
1/2"	21.3X3.73	<b>608/21.3X3.73FC</b>	1401761400	0.20	08/21.3X3.73FC	OR14X1.0	0823
1/2"	21.3X4.78	<b>608/21.3X4.78FC</b>	1401762400	0.20	08/21.3X4.78FC	OR12X1.0	0823
3/4"	26.7X3.91	<b>612/26.7X3.91FC</b>	1401766400	0.30	12/26.7X3.91FC	OR20X1.0	1213
3/4"	26.7X5.56	<b>612/26.7X5.56FC</b>	1401767400	0.30	12/26.7X5.56FC	OR16X1.0	1213
1"	33.4X3.38	<b>616/33.4X3.38FC</b>	1401771400	0.50	16/33.4X3.38FC	OR25X1.0	1629
1"	33.4X4.55	<b>616/33.4X4.55FC</b>	1401772400	0.50	16/33.4X4.55FC	OR23X1.0	1629
1 1/4"	42.2X3.56	<b>620/42.2X3.56FC*</b>	1401782654	0.60	20/42.2X3.56FC	OR34X1.0	2030
1 1/4"	42.2X4.85	<b>620/42.2X4.85FC*</b>	1401782662	0.60	20/42.2X4.85FC	OR32X1.0	2030
1 1/2"	48.3X3.68	<b>624/48.3X3.68FC</b>	1401785400	0.90	24/48.3X3.68FC	OR41X1.78	2432
1 1/2"	48.3X5.08	<b>624/48.3X5.08FC</b>	1401786400	0.90	24/48.3X5.08FC	OR37.82X1.78	2432
2"	60.3X3.91	<b>632/60.3X3.91FC</b>	1401787400	1.40	32/60.3X3.91FC	OR53.70X1.78	3219
2"	60.3X5.54	<b>632/60.3X5.54FC</b>	1401788400	1.40	32/60.3X5.54FC	OR47.35X1.78	3219
2 1/2"	73x7.01	<b>640/73X7FC</b>	1401534440	8.30	40/73X7FC	OR56.87X1.78	4037

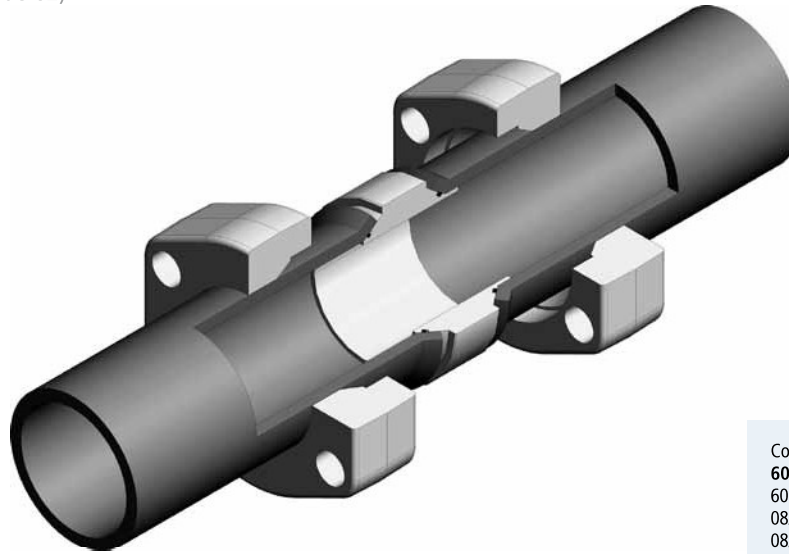
Material possibilities page 168.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

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## Flare flange connection – Type D

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:  
**608/16X2FD** includes:  
 608F 2 pcs  
 08/16X2FD 1 pc  
 08/16F 2 pcs  
 OR12X1.0 2 pcs

### Metric pipes

Size	Pipe Size	Complete Part No	Complete ID Code	Weight [kg]	Insert Part No	O-Ring <sup>2</sup> Part No	Sleeve Part No
1/2"	16x2.0	<b>608/16X2FD</b>	1401521300	0.52	08/16X2FD	OR12X1.0	08/16F
1/2"	18x2.0	<b>608/18X2FD</b>	1401521800	0.53	08/18X2FD	OR14X1.0	08/18F
1/2"	20x2.0	<b>608/20X2FD</b>	1401522300	0.51	08/20X2FD	OR16X1.0	08/20F
1/2"	25x2.5	<b>608/25X2.5FD</b>	1401522440	0.50	08/25X2.5FD	OR20X1.0	None
1/2"	25x3.0	<b>608/25X3FD</b>	1401522800	0.49	08/25X3FD	OR19X1.0	None
3/4"	20x2.0	<b>612/20X2FD</b>	1401523701	1.05	12/20X2FD	OR16X1.0	12/20F
3/4"	20x2.5	<b>612/20X2.5FD</b>	1401523900	1.06	12/20X2.5FD	OR15X1.0	12/20F
3/4"	25x2.5	<b>612/25X2.5FD</b>	1401524300	1.01	12/25X2.5FD	OR20X1.0	12/25F
3/4"	25x3.0	<b>612/25X3FD</b>	1401524800	1.01	12/25X3FD	OR19X1.0	12/25F
3/4"	30x3.0	<b>612/30X3FD</b>	1401525300	1.00	12/30X3FD	OR23X1.0	None
3/4"	30x4.0	<b>612/30X4FD</b>	1401525900	1.00	12/30X4FD	OR22X1.0	None
1"	25x2.5	<b>616/25X2.5FD</b>	1401526300	1.34	16/25X2.5FD	OR20X1.0	16/25F
1"	25x3.0	<b>616/25X3FD</b>	1401526440	1.33	16/25X3FD	OR19X1.0	16/25F
1"	30x3.0	<b>616/30X3FD</b>	1401526800	1.27	16/30X3FD	OR23X1.0	16/30F
1"	30x4.0	<b>616/30X4FD</b>	1401527300	1.28	16/30X4FD	OR22X1.0	16/30F
1"	38x4.0	<b>616/38X4FD</b>	1401527800	1.20	16/38X4FD	OR30X1.0	None
1 1/4"	30x3.0	<b>620/30X3FD*</b>	1401530334	2.12	20/30X3FD	OR23X1.0	20/30F
1 1/4"	30x4.0	<b>620/30X4FD*</b>	1401530342	2.11	20/30X4FD	OR22X1.0	20/30F
1 1/4"	38x4.0	<b>620/38X4FD*</b>	1401530350	2.03	20/38X4FD	OR30X1.0	20/38F
1 1/4"	38x5.0	<b>620/38X5FD*</b>	1401530358	2.02	20/38X5FD	OR28X1.0	20/38F
1 1/4"	42x4.0	<b>620/42X4FD*</b>	1401530366	2.01	20/42X4FD	OR34X1.0	None
1 1/2"	30x3.0	<b>624/30X3FD</b>	1401530900	2.95	24/30X3FD	OR23X1.0	24/30F
1 1/2"	38x4.0	<b>624/38X4FD</b>	1401531300	3.54	24/38X4FD	OR30X1.0	24/38F
1 1/2"	38x5.0	<b>624/38X5FD</b>	1401531416	3.43	24/38X5FD	OR28X1.0	None
1 1/2"	42x4.0	<b>624/42X4FD</b>	1401531800	3.45	24/42X4FD	OR34X1.0	24/42F
1 1/2"	50x5.0	<b>624/50X5FD</b>	1401532300	3.29	24/50X5FD	OR41X1.78	None
1 1/2"	50x6.0	<b>624/50X6FD</b>	1401532530	3.40	24/50X6FD	OR37.82X1.78	None
1 1/2"	56x8.5**	<b>624/56X8.5FD</b>	1401532565	3.30	24/56X8.5FD	OR37.82X1.78	None
2"	50x5.0	<b>632/50X5FD</b>	1401533300	5.27	32/50X5FD	OR41X1.78	32/50F
2"	60x5.0	<b>632/60X5FD</b>	1401533800	5.06	32/60X5FD	OR50.52X1.78	None
2"	60x6.0	<b>632/60X6FD</b>	1401534300	5.06	32/60X6FD	OR47.35X1.78	None
2"	66x8.5**	<b>632/66X8.5FD</b>	1401534317	5.00	32/66X8.5FD	OR47.35X1.78	None
2 1/2"	60x6.0	<b>640/60X6FD</b>	1401534380	11.55	40/60X6FD	OR47.35X1.78	40/60F
2 1/2"	73x7.0	<b>640/73X7FD</b>	1401534460	11.10	40/73X7FD	OR56.87X1.78	None
3"	90x9.0**	<b>648/90X9FD</b>	1401535015	17.00	48/90X9FD	OR72.75X1.78	None

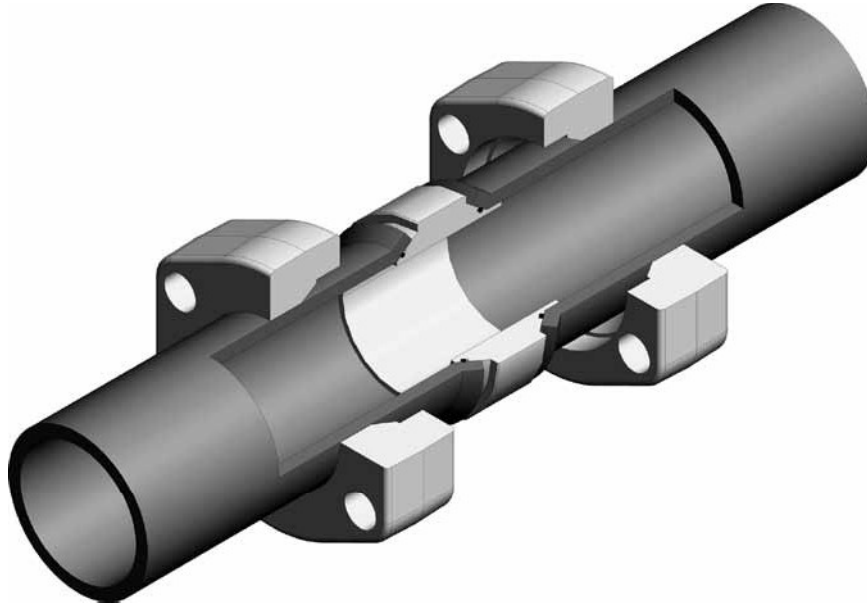
Material possibilities page 168.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.  
 \*\* = Flaring machine requirements GSF 220-HD, GSF 400, FP 170 or FP 275.

Flanges page 80  
 Inserts page 111  
 O-rings page 119

## Flare flange connection – Type D

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:  
**608/21.3X3.73FD** includes:  
 608F/21.3 2 pcs  
 08/21.3X3.73FD 1 pc  
 OR14X1.0 2 pcs

### ANSI 36.10/36.19 pipes

Size	Pipe Size	Complete Part No	Complete ID Code	Weight [kg]	Insert Part No	O-Ring2 Part No
1/2"	21.3X3.73	<b>608/21.3X3.73FD</b>	1401761600	0.52	08/21.3X3.73FD	OR14X1.0
1/2"	21.3X4.78	<b>608/21.3X4.78FD</b>	1401762600	0.53	08/21.3X4.78FD	OR12X1.0
3/4"	26.7X3.91	<b>612/26.7X3.91FD</b>	1401766600	1.05	12/26.7X3.91FD	OR20X1.0
3/4"	26.7X5.56	<b>612/26.7X5.56FD</b>	1401767600	1.06	12/26.7X5.56FD	OR16X1.0
1"	33.4X3.38	<b>616/33.4X3.38FD</b>	1401771600	1.34	16/33.4X3.38FD	OR25X1.0
1"	33.4X4.55	<b>616/33.4X4.55FD</b>	1401772600	1.33	16/33.4X4.55FD	OR23X1.0
1 1/4"	42.2X3.56	<b>620/42.2X3.56FD*</b>	1401782656	2.12	20/42.2X3.56FD	OR34X1.0
1 1/4"	42.2X4.85	<b>620/42.2X4.85FD*</b>	1401782664	2.03	20/42.2X4.85FD	OR32X1.0
1 1/2"	48.3X3.68	<b>624/48.3X3.68FD</b>	1401785600	2.96	24/48.3X3.68FD	OR41X1.78
1 1/2"	48.3X5.08	<b>624/48.3X5.08FD</b>	1401786600	3.43	24/48.3X5.08FD	OR37.82X1.78
2"	60.3X3.91	<b>632/60.3X3.91FD</b>	1401787600	5.27	32/60.3X3.91FD	OR53.70X1.78
2"	60.3X5.54	<b>632/60.3X5.54FD</b>	1401788600	5.08	32/60.3X5.54FD	OR47.35X1.78
2 1/2"	73x7.01	<b>640/73X7FD</b>	1401534460	11.10	40/73X7FD	OR56.87X1.78

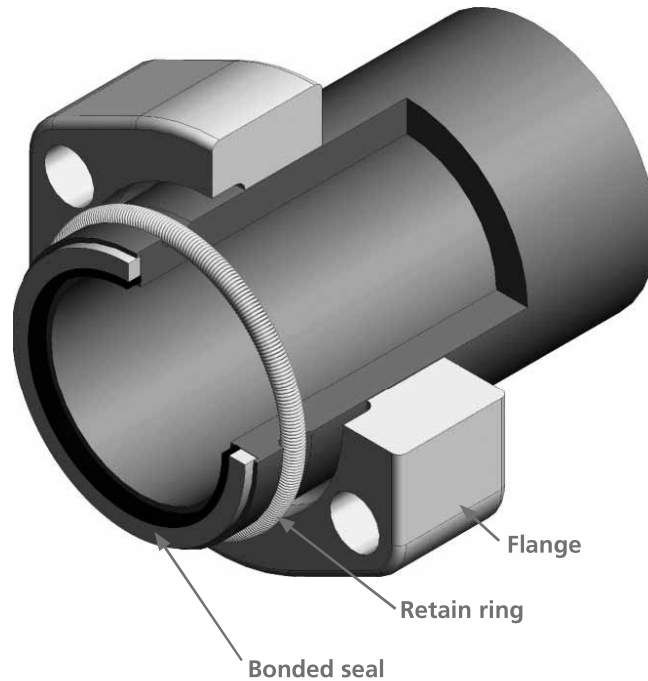
Material possibilities page 168.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

Flanges page 80  
 Inserts page 112  
 O-rings page 119

## Grooving direct on to pipe

ISO 6162-2 (SAE J 518 Code 62)



### Metric pipes

Size	Pipe Size	Flange Part No	Flange ID Code	Retain Ring Part No	Retain Ring ID Code	Bonded Seal Part No	Bonded Seal ID Code
1"	39x7.5	<b>616</b>	1103060000	<b>16</b>	1902002050	<b>1629</b>	2701003000
1 1/4"	46x8	<b>620*</b>	1103097600	<b>20</b>	1902003050	<b>2030</b>	2701004000
1 1/2"	56x8.5	<b>624</b>	1103120000	<b>24</b>	1902004050	<b>2432</b>	2701005000
2"	66x8.5	<b>632</b>	1103150000	<b>32</b>	1902006050	<b>3219</b>	2701007000
2 1/2"	80x10	<b>640</b>	1103180000	<b>40</b>	1902007050	<b>4037</b>	2701008000
3"	97x12	<b>648</b>	1103210000	<b>48</b>	1902008050	<b>4839</b>	2701009000

### ANSI 36.10/36.19 pipes

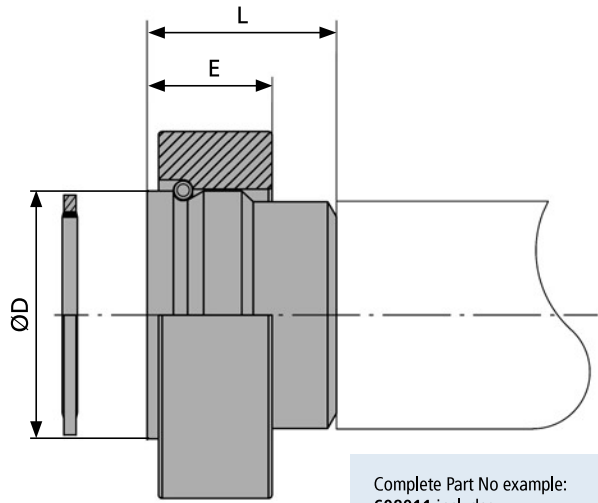
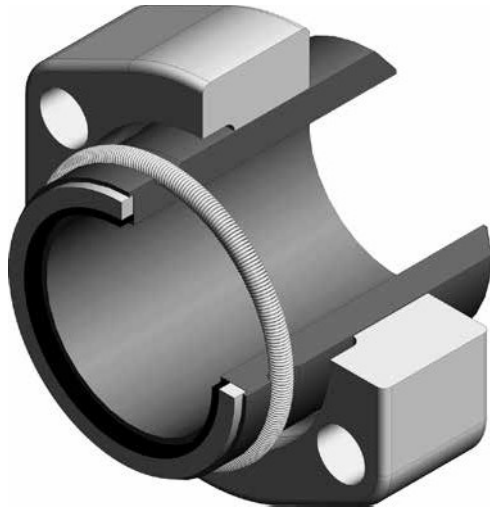
Size	Pipe Size	Flange Part No	Flange ID Code	Retain Ring Part No	Retain Ring ID Code	Bonded Seal Part No	Bonded Seal ID Code
1/2"	21.3x7.5	<b>608/21.3</b>	1103001500	<b>08/21.3</b>	1902000250	<b>0821</b>	2701001000
3/4"	26.7x7.8	<b>612/26.7</b>	1103031500	<b>12/26.7</b>	1902001250	<b>0823</b>	2701001400
1"	33.4x9.1	<b>616/33.4</b>	1103061500	<b>16/33.4</b>	1902002250	<b>1633</b>	2701003400
1 1/4"	42.2x9.7	<b>620/42.2*</b>	1103097605	<b>20/42.2</b>	1902003250	<b>2042</b>	2701004400
1 1/2"	48.3x10.2	<b>624/48.3</b>	1103120800	<b>24/48.3</b>	1902004250	<b>2448</b>	2701005200
2"	60.3x8.7	<b>632/60.3</b>	1103150600	<b>32/60.3</b>	1902006250	<b>3260</b>	2701007400
2 1/2"	73.0x9.53/14.02	<b>640/73</b>	1103181000	<b>40/73</b>	1902007250	<b>4073</b>	2701008200
3"	88.9x11.13/15.24	<b>648/88.9</b>	1103210800	<b>48/88.9</b>	1902008250	<b>4888</b>	2701009200

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

Flanges page 79  
Retain rings page 116  
Bonded seals page 117

## Flange for welding (1/2"–1")

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:  
**608011** includes:  
 608 1 pc  
 08011 1 pc  
 08 1 pc  
 0823 1 pc

Size	Complete Part Code	Complete ID Code	Pipe Size	L	E	ØD	Weight [kg]	Body Part No	Body ID Code
1/2"	608011	1301550300	26x6.0	45	23	26	0.32	08011	1301003700
1/2"	608001	1301547600	12x1.5	40	23	26	0.29	08001	1301000100
1/2"	608002	1301547900	16x2.0	40	23	26	0.27	08002	1301000700
1/2"	608003	1301548200	18x2.0	40	23	26	0.28	08003	1301001300
1/2"	608004	1301548500	20x2.5	40	23	26	0.29	08004	1301001900
1/2"	608005	1301548900	25x2.5	40	23	26	0.29	08005	1301002500
1/2"	608009	1301549700	21.3x3.73	40	23	26	0.29	08009	1301003100
1/2"	608082	1301550500	21.3x2.10	40	23	26	0.27	08082	1301004800
1/2"	608083	1301550600	21.3x2.77	40	23	26	0.27	08083	1301004900
1/2"	608085	1301550900	21.3x4.78	40	23	26	0.27	08085	1301005500
1/2"	608086	1301551100	21.3x7.47	40	23	26	0.30	08086	1301006100
3/4"	612011	1301554500	36x8.0	45	28	36	0.60	12011	1301008800
3/4"	612001	1301551800	20x2.5	40	28	36	0.54	12001	1301006700
3/4"	612002	1301552100	25x3.0	40	28	36	0.53	12002	1301006800
3/4"	612003	1301552400	30x4.0	40	28	36	0.54	12003	1301007900
3/4"	612004	1301552700	30x6.0	40	28	36	0.56	12004	1301009100
3/4"	612005	1301553300	30x3.0	40	28	36	0.53	12005	1301009200
3/4"	612009	1301553900	26.7x3.91	40	28	36	0.54	12009	1301000700
3/4"	612082	1301554800	26.7x2.10	40	28	36	0.48	12082	1301010800
3/4"	612083	1301555000	26.7x2.87	40	28	36	0.48	12083	1301011300
3/4"	612085	1301555200	26.7x5.56	40	28	36	0.51	12085	1301011900
3/4"	612086	1301555400	26.7x7.82	45	28	36	0.55	12086	1301012500
1"	616011	1301558700	39x7.5	50	27	39	0.82	16011	1301019700
1"	616001	1301556000	25x3.0	40	27	39	0.75	16001	1301016100
1"	616002	1301556300	30x4.0	40	27	39	0.74	16002	1301016700
1"	616003	1301556600	38x5.0	40	27	39	0.77	16003	1301017300
1"	616004	1301556900	38x7.0	40	27	39	0.77	16004	1301017900
1"	616005	1301557200	38x4.0	40	27	39	0.76	16005	1301018500
1"	616009	1301558100	33.4x4.55	40	27	39	0.75	16009	1301019100
1"	616082	1301559300	33.4x2.87	40	27	39	0.62	16082	1301021500
1"	616083	1301559400	33.4x3.38	40	27	39	0.65	16083	1301022100
1"	616085	1301559600	33.4x6.35	50	27	39	0.70	16085	1301022700
1"	616086	1301559800	33.4x9.09	50	27	39	0.71	16086	1301023300

Body material:  
 Standard= carbon steel  
 Stainless steel= add SS after Part No  
 Other materials on request.  
 Material possibilities page 168.

Welding hubs for other pipe sizes on request.

Flanges page 79  
 Retain rings page 116  
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SAE 6000 PSI

## Flange for welding (1 1/4"–2")

ISO 6162-2 (SAE J 518 Code 62)

Size	Complete Part Code	Complete ID Code	Pipe Size	L	E	ØD	Weight [kg]	Body Part No	Body ID Code
1 1/4"	620011*	1301564180	46x8,0	55	33	46	1.19	20011	1301028700
1 1/4"	620001*	1301564150	30x4,0	40	33	46	1.10	20001	1301025100
1 1/4"	620002*	1301564155	38x5,0	40	33	46	1.07	20002	1301025700
1 1/4"	620003*	1301564160	42x6,0	40	33	46	1.07	20003	1301026300
1 1/4"	620004*	1301564165	46x7,0	50	33	46	1.07	20004	1301026900
1 1/4"	620005*	1301564170	42x4,0	40	33	46	1.05	20005	1301027500
1 1/4"	620009*	1301564175	42,2x4,85	40	33	46	1.06	20009	1301028100
1 1/4"	620082*	1301564185	42,2x2,77	40	33	46	1.01	20082	1301030500
1 1/4"	620083*	1301564190	42,2x3,56	40	33	46	1.06	20083	1301031100
1 1/4"	620085*	1301564195	42,2x6,35	50	33	46	1.12	20085	1301031700
1 1/4"	620086*	1301564200	42,2x9,70	50	23	46	0.80	20086	1301032900
1 1/2"	624011	1301567400	56x8,5	60	38	56	1.91	24011	1301037100
1 1/2"	624001	1301564400	38x5,0	45	38	56	1.81	24001	1301034100
1 1/2"	624002	1301564700	50x6,0	45	38	56	1.74	24002	1301034700
1 1/2"	624003	1301565000	50x9,0	45	38	56	1.83	24003	1301035300
1 1/2"	624005	1301565600	50x5,0	45	38	56	1.73	24005	1301035900
1 1/2"	624009	1301566800	48,3x5,08	45	38	56	1.72	24009	1301036500
1 1/2"	624082	1301567900	48,3x2,77	45	38	56	1.33	24082	1301038300
1 1/2"	624083	1301568100	48,3x3,68	45	38	56	1.34	24083	1301039500
1 1/2"	624085	1301568300	48,3x7,14	60	38	56	1.45	24085	1301040100
1 1/2"	624086	1301568500	48,3x10,15	60	38	56	1.47	24086	1301040700
2"	632011	1301571900	66x8,5	75	43	66	3.07	32011	1301046700
2"	632001	1301568900	50x9,0	50	43	66	2.91	32001	1301041900
2"	632002	1301569200	60x6,0	50	43	66	2.72	32002	1301042500
2"	632003	1301569500	60x8,0	50	43	66	2.82	32003	1301043100
2"	632005	1301570100	60x5,0	50	43	66	2.71	32005	1301044300
2"	632008	1301571000	48,3x5,6	50	43	66	2.83	32008	1301044900
2"	632009	1301571300	60x10,0	50	43	66	2.89	32009	1301045500
2"	632082	1301572300	60,3x2,77	50	43	66	2.58	32082	1301048800
2"	632083	1301572400	60,3x3,91	50	43	66	2.63	32083	1301045600
2"	632084	1301572500	60,3x5,54	50	43	66	2.63	32084	1301046200
2"	632085	1301572600	60,3x8,74	75	43	66	2.81	32085	1301046800
2"	632086	1301572700	60,3x11,07	75	43	66	2.85	32086	1301047400
2 1/2"	640011	1301572760	80x10,0	85	43	80	6.70	40011	1301052200
2 1/2"	640003	1301572780	65x8,0	50	43	80	6.18	40003	1301048600
2 1/2"	640006	1301572800	76,1x6,3	50	43	80	5.98	40006	1301049800
2 1/2"	640007	1301572820	76,1x12,5	50	43	80	6.22	40007	1301050400
2 1/2"	640010	1301572840	73x7,01	50	43	80	5.99	40010	1301051600
2 1/2"	640085	1301572860	73x9,53	90	43	80	6.00	40085	1301053400
2 1/2"	640086	1301572880	73x14,02	90	43	80	6.50	40086	1301053500
3"	648011	1301572900	97x12,0	110	51	97	9.32	48011	1301057600
3"	648004	1301572920	76,1x12,5	60	51	97	8.64	48004	1301054600
3"	648005	1301572940	80x10,0	60	51	97	8.30	48005	1301055200
3"	648006	1301572960	88,9x8,8	60	51	97	8.01	48006	1301055800
3"	648007	1301572980	88,9x12,5	60	51	97	8.30	48007	1301056400
3"	648010	1301573000	88,9x7,62	60	51	97	7.92	48010	1301057000
3"	648085	1301573020	88,9x11,13	110	51	97	8.70	48085	1301058200
3"	648086	1301573040	88,9x15,24	110	51	97	9.30	48086	1301058800

Body material:  
 Standard= carbon steel  
 Stainless steel= add SS after Part No  
 Other materials on request.  
 Material possibilities page 168.

Welding hubs for other pipe sizes on request.

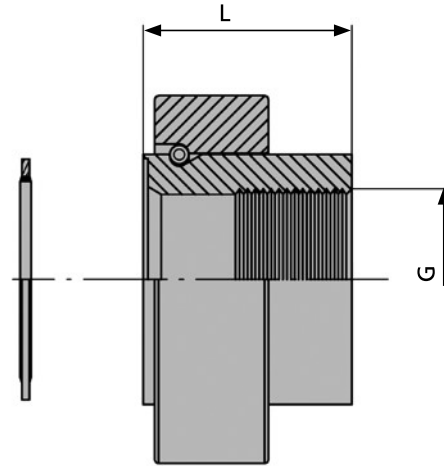
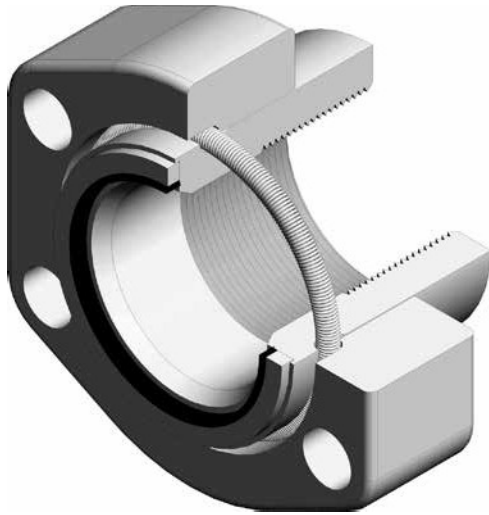
Flanges page 79  
 Retain rings page 116  
 Bonded seals page 117

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.



## Female thread flange, BSPP

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:

**608013** includes:

608	1 pc
08013	1 pc
08	1 pc
0823	1 pc

Size	Complete Part No	Complete ID Code	L	G	Weight [kg]	Body Part No	Body ID Code
1/2"	<b>608013</b>	1307507000	35	1/4"	0.31	08013	1307000100
3/4"	<b>612013</b>	1307508000	40	1/2"	0.60	12013	1307001000
1"	<b>616013</b>	1307509000	40	3/4"	0.68	16013	1307006000
1 1/4"	<b>620013*</b>	1307510050	42	1"	1.16	20013	1307007000
1 1/2"	<b>624013</b>	1307511000	45	1 1/4"	1.84	24013	1307008000
2"	<b>632013</b>	1307512000	55	1 1/2"	2.93	32013	1307009000
2 1/2"	<b>640013</b>	1307512560	80	2"	6.60	40013	1307010000
3"	<b>648013</b>	1307512580	85	2 1/2"	8.80	48013	1307011000

Body material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

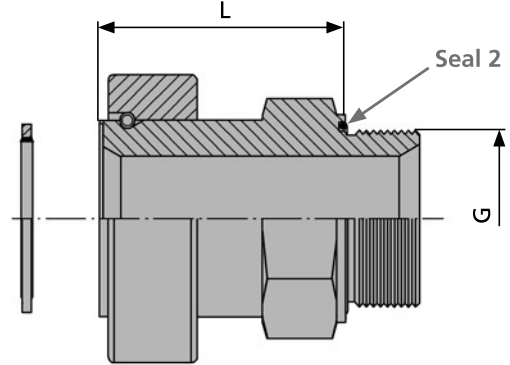
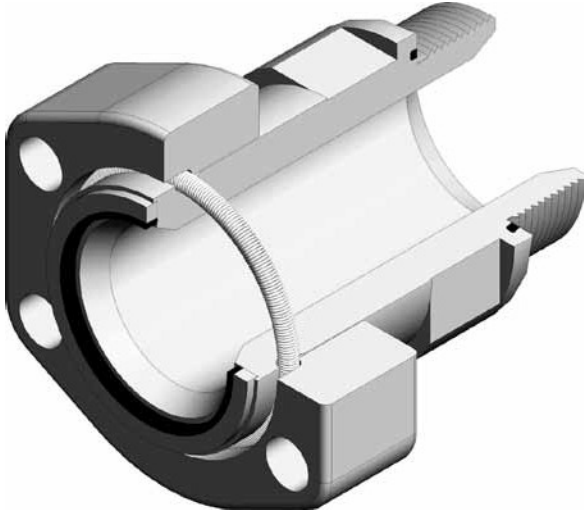
Standard thread BSP,  
 others on request.

Flanges page 79  
 Retain rings page 116  
 Bonded seals page 117

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

## Male thread flange, BSPP

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:

**608014** includes:  
 608 1 pc  
 08014 (Seal 2 included) 1 pc  
 08 1 pc  
 0823 1 pc

Size	Complete Part No	Complete ID Code	L	G	Seal 2	A/F	Weight [kg]	Body Part No	Body ID Code
1/2"	<b>608014</b>	1305520000	50	1/2"	ED R1/2 VI	27	0.35	08014	1305000100
1/2"	<b>608014-G1/4</b>	1305520200	50	1/4"	ED R1/4+M14X1.5 VI	27	0.37	08014-G1/4	1305000400
3/4"	<b>612014</b>	1305520400	61	3/4"	ED R3/4 M26X1.5 27X2 VI	36	0.60	12014	1305002000
3/4"	<b>612014-G1/2</b>	1305520600	61	1/2"	ED R1/2 VI	36	0.62	12014-G1/2	1305002200
1"	<b>616014</b>	1305522000	65	1"	ED R1+M33X2 VI	41	0.78	16014	1305004000
1"	<b>616014-G3/4</b>	1305522200	65	3/4"	ED R3/4 M26X1.5 27X2 VI	41	0.80	16014-G3/4	1305004300
1 1/4"	<b>620014*</b>	1305525050	68	1 1/4"	ED R11/4+M42X2 VI	50	1.08	20014	1305006000
1 1/4"	<b>620014-G1*</b>	1305525055	68	1"	ED R1+M33X2 VI	50	1.16	20014-G1	1305006200
1 1/2"	<b>624014</b>	1305526000	78	1 1/2"	ED R11/2+M82X2 VI	60	1.71	24014	1305010000
1 1/2"	<b>624014-G11/4</b>	1305526200	78	1 1/4"	ED R11/4+M42X2 VI	60	1.80	24014-G11/4	1305010300
2"	<b>632014</b>	1305528000	83	2"	OR59.99X2.62VI	70	2.55	32014	1305014000
2"	<b>632014-G11/2</b>	1305528200	83	1 1/2"	ED R11/2+M82X2 VI	70	2.71	32014-G11/2	1305014200

Body material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

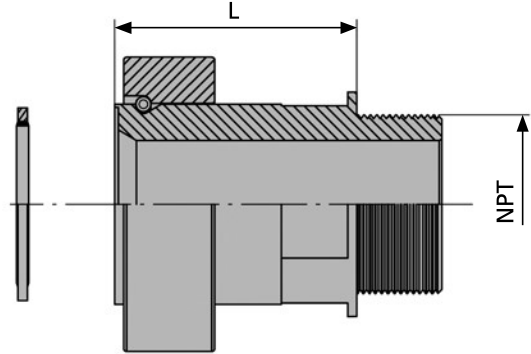
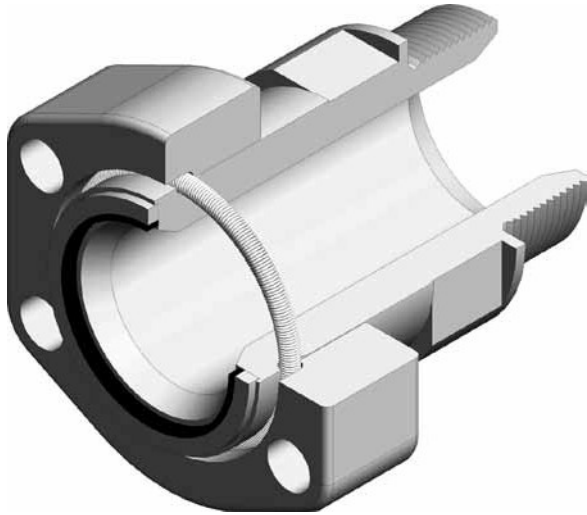
Seal 2 material: FPM (Viton®)

Flanges page 79  
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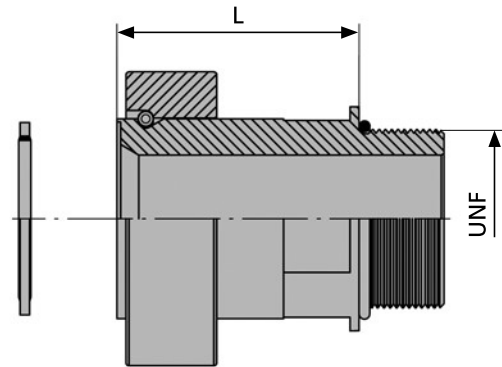
\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

## Male thread flange, NPT & UNF

ISO 6162-2 (SAE J 518 Code 62)



NPT



UNF

Complete Part No example:  
**608114** includes:  
 608 1 pc  
 08114 1 pc  
 08 1 pc  
 0823 1 pc

Complete Part No example:  
**608214** includes:  
 608 1 pc  
 08214 1 pc  
 08 1 pc  
 0823 1 pc  
 OR16.4X2.2 1 pc

### Male thread flange, NPT

Size	Complete Part No	Complete ID Code	L	NPT	Weight [kg]	Body Part No	Body ID Code
1/2"	608114	1305520300	50	1/2"	0.40	08114	1305001000
3/4"	612114	1305520800	63	3/4"	0.50	12114	1305002400
1"	616114	1305522600	63	1"	0.70	16114	1305004600
1 1/4"	620114*	1305525060	67	1 1/4"	1.00	20114	1305008000
1 1/2"	624114	1305526400	75	1 1/2"	1.80	24114	1305012000
2"	632114	1305528600	80	2"	2.50	32114	1305014800

### Male thread flange, UNF

Size	Complete Part No	Complete ID Code	L	UN(F)	Weight [kg]	O-ring Part No	O-ring ID Code	Body Part No	Body ID Code
1/2"	608214	1305520310	48.0	3/4-16	0.40	OR16.4X2.2	2701504500	08214	1305001300
3/4"	612214	1305521000	61.3	1 1/16-12	0.50	OR23X3.0	2701511200	12214	1305002900
1"	616214	1305523000	62.0	1 5/16-12	0.70	OR29.2X3.0	2701516500	16214	1305005500
1 1/4"	620214*	1305525065	65.0	1 5/8-12	1.00	OR37.2X3.0	2701524000	20214	1305009000
1 1/2"	624214	1305527000	78.2	1 7/8-12	1.80	OR43X3.0	2701527000	24214	1305012200
2"	632214	1305529000	83.2	2 1/2-12	2.50	OR59.5X3.0	2701536000	32214	1305015500

Body material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

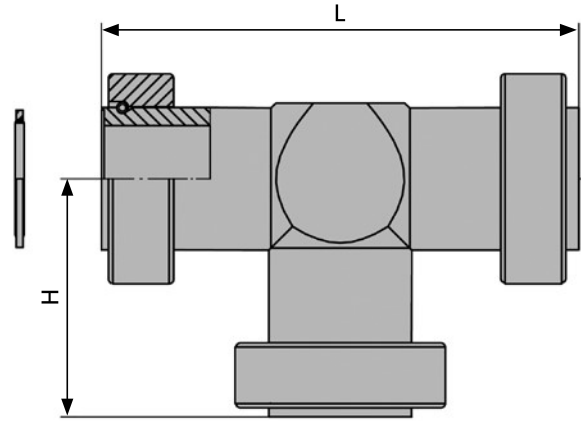
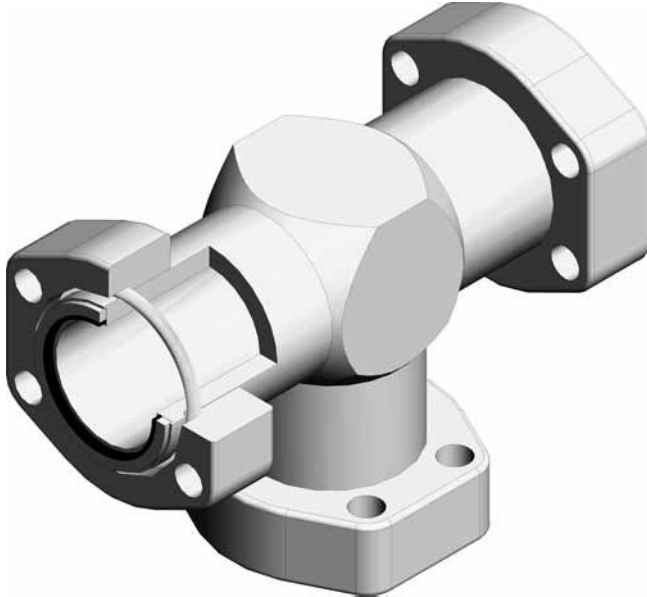
\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

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SAE 6000 PSI

## Tee flange

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:

**608016** includes:

608	3 pcs
08016	1 pc
08	3 pcs
0823	3 pcs

Size	Complete Part No	Complete ID Code	L	H	Weight [kg]	Body Part No	Body ID Code
1/2"	<b>608016</b>	1701224000	120	60	1.10	08016	1701000100
3/4"	<b>612016</b>	1701226000	130	65	2.41	12016	1701002000
3/4" – 1/2"	<b>612/608/612016</b>	1701226200	130	65	2.20	12/08/12016	1701002200
1"	<b>616016</b>	1701228000	140	70	3.05	16016	1701004000
1" – 3/4"	<b>616/612/616016</b>	1701228400	140	65	2.80	16/12/16016	1701004400
1" – 1/2"	<b>616/608/616016</b>	1701228200	140	65	2.62	16/08/16016	1701004200
1 1/4"	<b>620016*</b>	1701230005	160	80	4.52	20016	1701006000
1 1/4" – 1"	<b>620/616/620016*</b>	1701230610	160	75	4.33	20/16/20016	1701006600
1 1/4" – 3/4"	<b>620/612/620016*</b>	1701230605	160	70	4.10	20/12/20016	1701006400
1 1/2"	<b>624016</b>	1701232000	180	90	7.30	24016	1701008000
1 1/2" – 1 1/4"	<b>624/620/624016*</b>	1701232605	180	85	7.05	24/20/24016	1701008600
1 1/2" – 1"	<b>624/616/624016</b>	1701232400	180	80	6.77	24/16/24016	1701008400
2"	<b>632016</b>	1701234000	220	110	11.0	32016	1701010000
2" – 1 1/2"	<b>632/624/632016</b>	1701234600	220	95	10.2	32/24/32016	1701010800
2" – 1 1/4"	<b>632/620/632016*</b>	1701234405	220	90	9.45	32/20/32016	1701010600
2 1/2"	<b>640016</b>	1701234660	260	130	22.0	40016	1701012000
3"	<b>648016</b>	1701234680	320	160	32.1	48016	1701014000

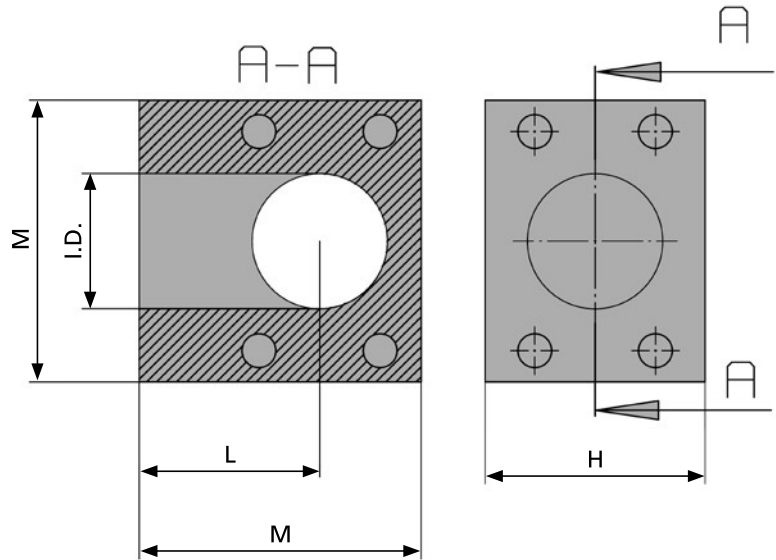
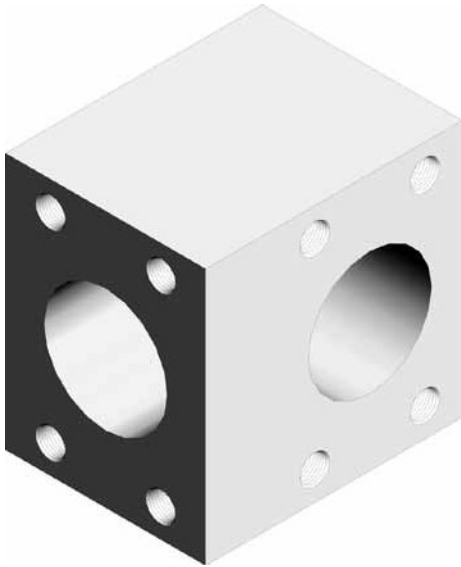
Body material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

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## Tee block

ISO 6162-2 (SAE J 518 Code 62)

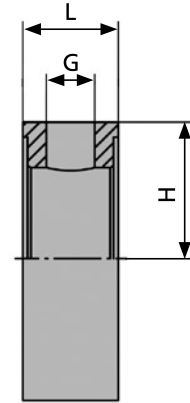


Size	Part No	ID Code	H	L	M	I.D.	Weight [kg]
1/2"	608116	1702020000	40	36	56	13	0.81
3/4"	612116	1702022000	48	49	70	20	1.14
3/4"–1/2"	612/608/612116	1702022200	48	49	70	20/13/20	1.53
1"	616116	1702024000	48	55	80	23	1.81
1"–3/4"	616/612/616116	1702024400	48	55	80	23/20/23	1.91
1"–1/2"	616/608/616116	1702024200	48	55	80	23/13/23	2.06
1 1/4"	620116*	1702026005	58	63	90	30	2.65
1 1/4"–1"	620/616/620116*	1702026815	58	63	90	30/23/30	2.79
1 1/4"–3/4"	620/612/620116*	1702026810	58	63	90	30/20/30	2.92
1 1/2"	624116	1702028000	68	68	100	38	3.62
1 1/2"–1 1/4"	624/620/624116*	1702028605	68	68	100	38/30/38	3.85
1 1/2"–1"	624/616/624116	1702028400	68	68	100	38/23/38	4.01
2"	632116	1702030000	88	90	130	48	8.05
2"–1 1/2"	632/624/632116	1702031000	88	90	130	48/38/48	8.68
2"–1 1/4"	632/620/632116*	1702030805	88	90	130	48/30/48	9.03
2 1/2"	640116	1702034000	100	100	160	60	16.49
2 1/2"–2"	640/632/640116	1702034040	100	100	160	60/48/60	17.02
2 1/2"–1 1/2"	640/624/640116	1702034060	100	100	160	60/38/60	18.20
3"	648116	1702044180	130	140	210	73	33.83
3"–2 1/2"	648/640/648116	1702044220	130	140	210	73/60/73	34.50
3"–2"	648/632/648116	1702044240	130	140	210	73/48/73	35.60

Component material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.  
 \* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

## Tee between, BSPP

ISO 6162-2 (SAE J 518 Code 62)



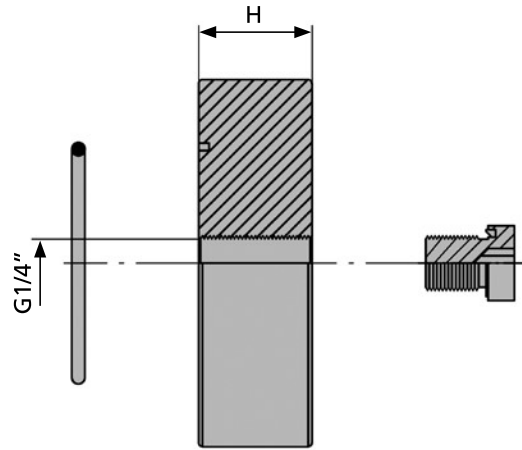
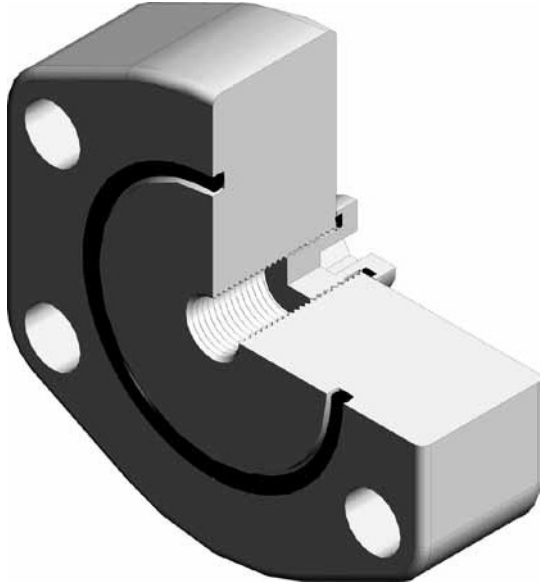
Please add measure L to bolt lengths mentioned on page 78.

Size	Part No	ID Code	L	H	G	Weight [kg]
1/2"	08035	1801000000	25	13.5	1/4"	0.12
3/4"	12035	1801000100	25	17.6	1/4"	0.18
1"	16035	1801002000	25	20.5	1/4"	0.22
1 1/4"	20035	1801003000	25	24.3	1/4"	0.27
1 1/2"	24035	1801004000	25	31.3	1/4"	0.41
2"	32035	1801005000	25	36.0	1/4"	0.47
1 1/4"	20036	1801003100	35	22.5	1/2"	0.35
1 1/2"	24036	1801004300	35	29.6	1/2"	0.56
2"	32036	1801005100	35	34.6	1/2"	0.65
2 1/2"	40036	1801006000	35	42.6	1/2"	0.90
2 1/2"	40037	1801006100	40	41	3/4"	1.30
3"	48038	1801006900	60	48	1"	1.90

Component material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

## Blind flange

ISO 6162-2 (SAE J 518 Code 62)



SAE 6000 PSI

Size	Complete Part No	Complete ID Code	O-ring Part No	O-ring ID Code	H	Weight [kg]
1/2"	608125	1910510000	OR18.64X3.53	2701506000	20	0.27
3/4"	612125	1910510500	OR24.99X3.53	2701512000	25	0.58
1"	616125	1910511000	OR32.92X3.53	2701519400	25	0.69
1 1/4"	620125*	1910511705	OR37.69X3.53	2701524200	30	1.10
1 1/4"	621125**	1910511500	OR37.69X3.53	2701524200	30	1.10
1 1/2"	624125	1910512000	OR47.22X3.53	2701529000	35	1.89
2"	632125	1910512500	OR56.75X3.53	2701535000	40	3.31
2 1/2"	640125	1910512820	OR69.44X3.53	2701540000	50	7.50
3"	648125	1910512840	OR85.32X3.53	2701546000	50	9.19

Component material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

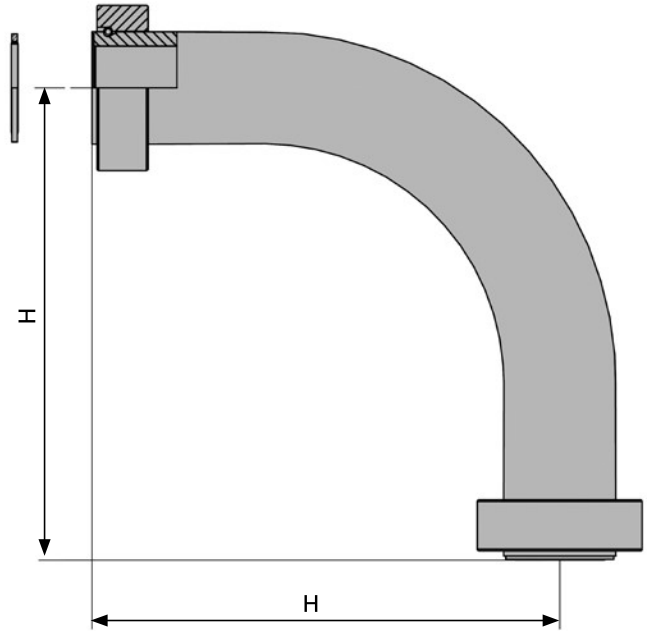
O-ring, ED-seal and plug included in a Part No

Manufacturing tolerance for flange thickness (H) ±5%.

\* = According to the ISO 6162-2 standard (M12 bolts).  
 \*\*= According to the previous ISO 6162-2 (2002) standard (M14 bolts). Not to be used for new constructions.

## Flange bend

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:

**612018** includes:

612	2 pcs
12018	1 pc
12	2 pcs
1213	2 pcs

Size	Complete Part No	Complete ID Code	H	Bending Radius	Weight [kg]	Body Part No	Body ID Code
3/4"	<b>612018</b>	1602205000	180	90	2.48	12018	1602000100
1"	<b>616018</b>	1602205500	180	97.5	2.92	16018	1602000500
1 1/4"	<b>620018*</b>	1602206010	190	96	4.12	20018	1602001000
1 1/2"	<b>624018</b>	1602206500	240	116	6.90	24018	1602001500
2"	<b>632018</b>	1602207000	275	165	10.0	32018	1602002000
2 1/2"	<b>640018**</b>	1602207120	450	200	24.0	40018	1602002500
3"	<b>648018***</b>	1602207140	540	244	36.8	48018	1602003000

Body material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

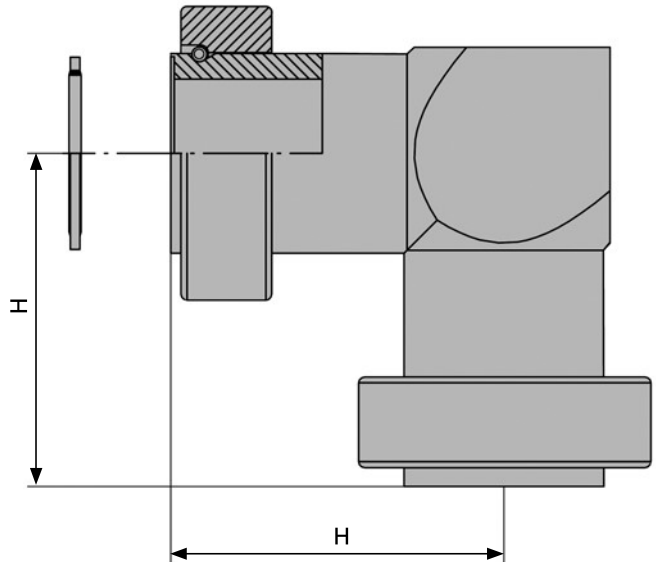
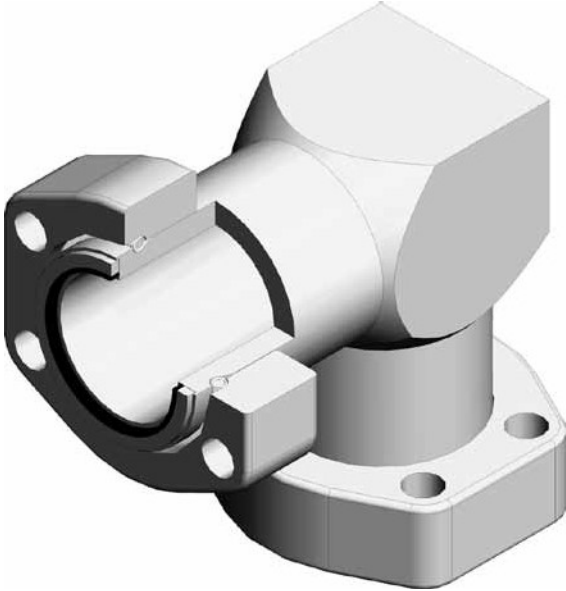
\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.  
 \*\* = Maximum working pressure 418 bar.  
 \*\*\* = Maximum working pressure 416 bar.

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## Elbow flange

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:

**608015** includes:  
 608 2 pcs  
 08015 1 pc  
 08 2 pcs  
 0823 2 pcs

Size	Complete Part No	Complete ID Code	H	Weight [kg]	Body Part No	Body ID Code
1/2"	608015	1601205500	60	0.86	08015	1601000100
3/4"	612015	1601206000	65	1.76	12015	1601000500
1"	616015	1601206500	70	2.23	16015	1601001000
1 1/4"	620015*	1601207010	80	3.30	20015	1601001500
1 1/2"	624015	1601207500	90	5.08	24015	1601002000
2"	632015	1601208000	110	7.99	32015	1601002500
2 1/2"	640015	1601208120	130	15.67	40015	1601003000
3"	648015	1601208140	160	23.4	48015	1601003500

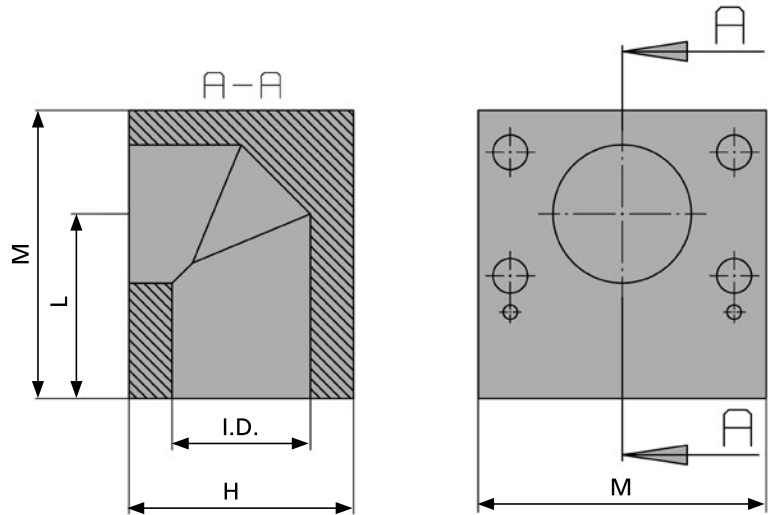
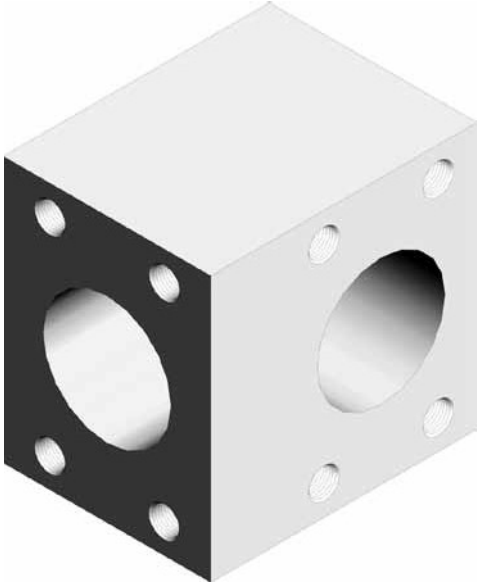
Body material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

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## Elbow block

ISO 6162-2 (SAE J 518 Code 62)



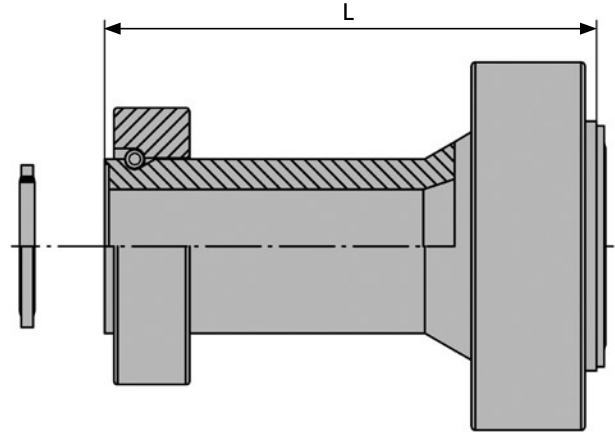
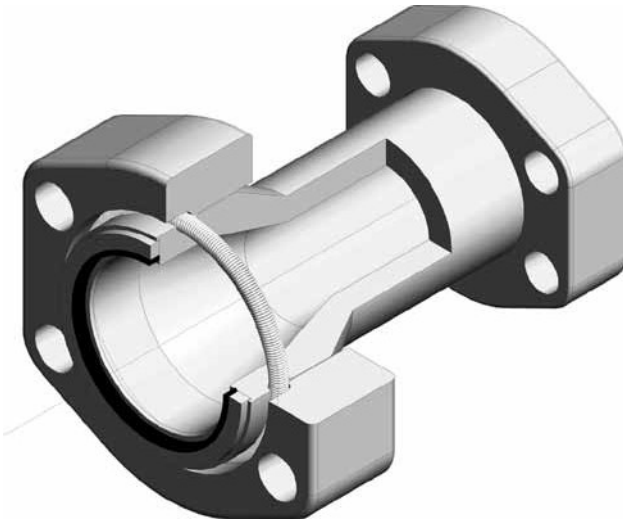
Size	Part No	ID Code	H	L	M	I.D.	Weight [kg]
1/2"	608115	1603004000	40	36	56	13	0.83
3/4"	612115	1603004500	48	49	70	20	1.48
1"	616115	1603005000	48	55	80	23	1.88
1 1/4"	620115*	1603005510	58	63	90	30	2.77
1 1/2"	624115	1603006000	68	68	100	38	3.85
2"	632115	1603006500	88	90	130	48	8.55
2 1/2"	640115	1603006820	100	100	160	60	17.09
3"	648115	1603006840	130	140	210	73	32.62

Component material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

## Reducer flange

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:

**RF612-608** includes:

612	1 pc
608	1 pc
12-08	1 pc
12	1 pc
1213	1 pc
08	1 pc
0823	1 pc

Size	Complete Part No	Complete ID Code	L	Weight [kg]	Body Part No	Body ID Code
3/4" – 1/2"	RF612-608	1501515700	65	0.86	12-08	1501000050
1" – 3/4"	RF616-612	1501516000	110	1.55	16-12	1501000100
1" – 1/2"	RF616-608	1501515800	80	1.12	16-08	1501000090
1 1/4" – 1"	RF620-616*	1501517515	110	2.09	20-16	1501001500
1 1/4" – 3/4"	RF620-612*	1501517510	110	1.87	20-12	1501001000
1 1/2" – 1 1/4"	RF624-620*	1501518510	130	3.25	24-20	1501002500
1 1/2" – 1"	RF624-616	1501518000	110	2.76	24-16	1501002000
2" – 1 1/2"	RF632-624	1501519500	130	4.98	32-24	1501003500
2" – 1 1/4"	RF632-620*	1501519505	130	4.19	32-20	1501003000
2 1/2" – 2"	RF640-632	1501519520	150	8.91	40-32	1501004500
2 1/2" – 1 1/2"	RF640-624	1501519540	150	8.50	40-24	1501004000
3" – 2 1/2"	RF648-640	1501519560	180	15.68	48-40	1501005500
3" – 2"	RF648-632	1501519580	180	11.58	48-32	1501005000

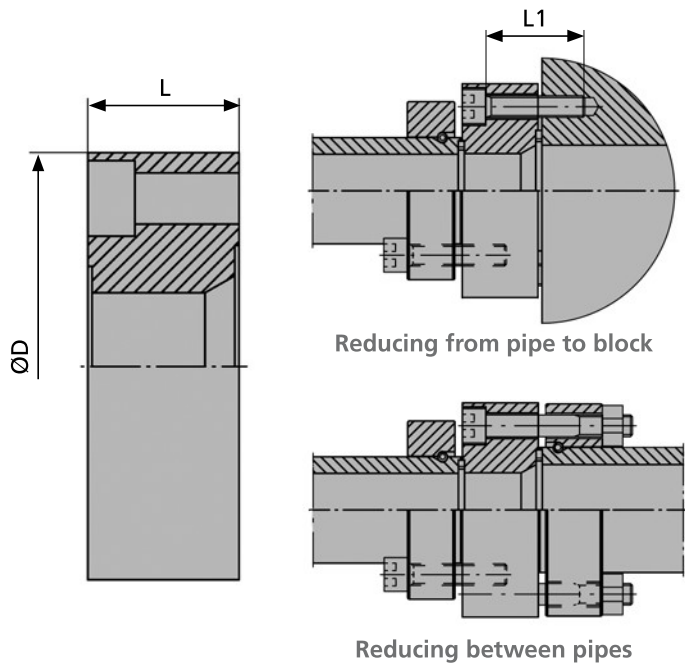
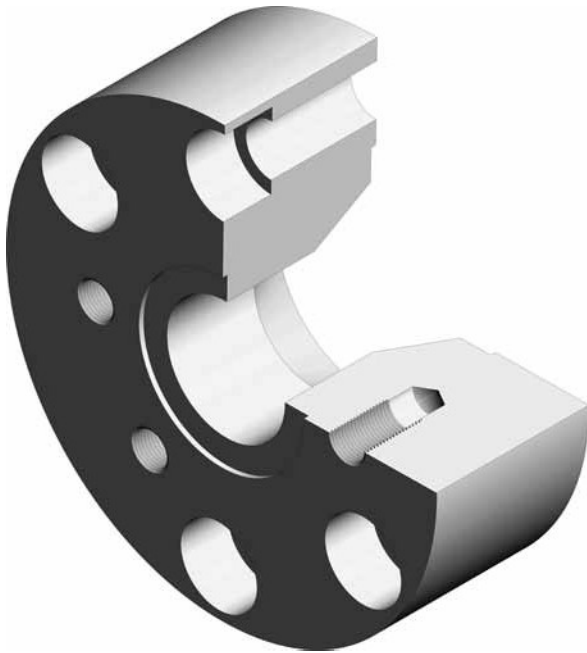
Body material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

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## Reducer block

ISO 6162-2 (SAE J 518 Code 62)



Size	Part No	ID Code	D	L	L1 Bolt size DIN 912, 8.8	Weight [kg]
3/4" – 1/2"	RBE612-608	1502118000	80	25	M10x25	0.82
1" – 3/4"	RBE616-612	1502118400	88	30	M12x35	1.21
1" – 1/2"	RBE616-608	1502118200	88	30	M12x35	1.26
1 1/4" – 1"	RBE620-616*	1502119420	103	35	M14x40	1.88
1 1/4" – 3/4"	RBE620-612*	1502119415	103	35	M14x40	1.97
1 1/4" – 1/2"	RBE620-608*	1502119410	103	35	M14x40	2.02
1 1/2" – 1 1/4"	RBE624-620*	1502120610	120	40	M16x45	2.81
1 1/2" – 1"	RBE624-616	1502120200	120	40	M16x45	2.93
1 1/2" – 3/4"	RBE624-612	1502120000	120	40	M16x45	2.98
2" – 1 1/2"	RBE632-624	1502121400	148	40	M20x45	4.43
2" – 1 1/4"	RBE632-620*	1502121210	148	40	M20x45	4.59
2" – 1"	RBE632-616	1502121000	148	40	M20x45	4.68
2 1/2" – 2"	RBE640-632	1502121500	191	45	M24x55	7.59
2 1/2" – 1 1/2"	RBE640-624	1502121505	191	45	M24x55	7.80
2 1/2" – 1 1/4"	RBE640-620*	1502121512	191	45	M24x55	8.00
3" – 2 1/2"	RBE648-640	1502121520	229	60	M30x70	14.51
3" – 2"	RBE648-632	1502121540	229	60	M30x70	15.00
3" – 1 1/2"	RBE648-624	1502121560	229	60	M30x70	16.00

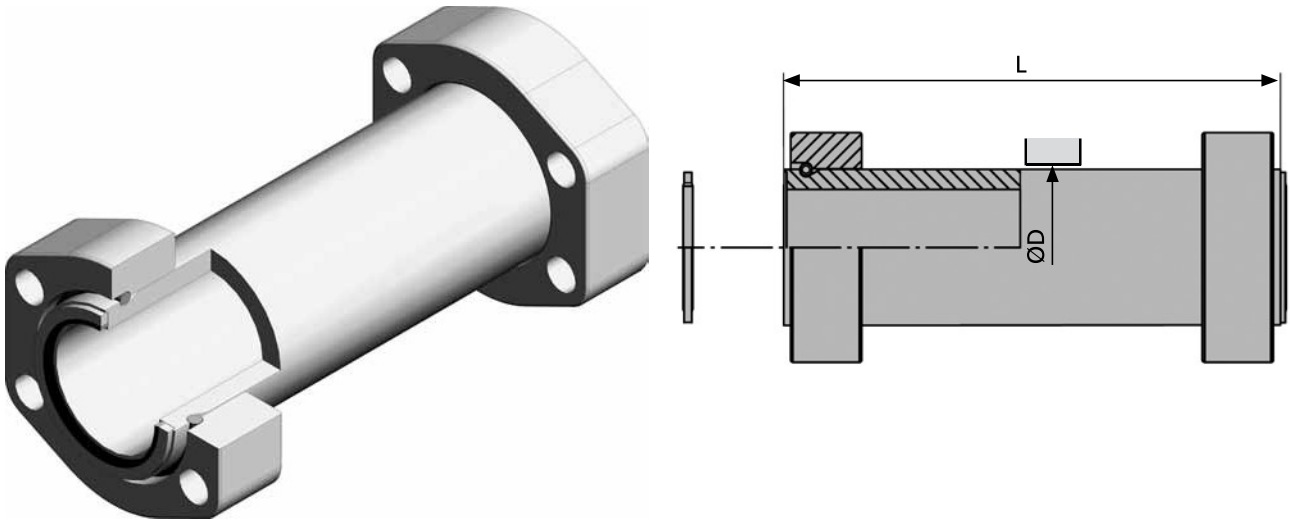
Component material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

L1= reducer block to block

## Bulkhead flange

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:

608019 includes:  
 608 2 pcs  
 08019 1 pc  
 08 2 pcs  
 0823 2 pcs

Size	Complete Part No	Complete ID Code	L	Required bulkhead opening ØD	Weight [kg]	Body Part No	Body ID Code
1/2"	608019	1904059300	170	27	0.53	08019	1904000000
3/4"	612019	1904059500	170	37	1.71	12019	1904000100
1"	616019	1904060000	170	40	2.09	16019	1904000500
1 1/4"	620019*	1904060505	180	47	2.97	20019	1904001000
1 1/2"	624019	1904061000	180	57	4.50	24019	1904001500
2"	632019	1904061500	210	68	6.92	32019	1904002000
2 1/2"	640019	1904061620	220	82	14.20	40019	1904002500
3"	648019	1904061640	240	99	20.0	48019	1904003000

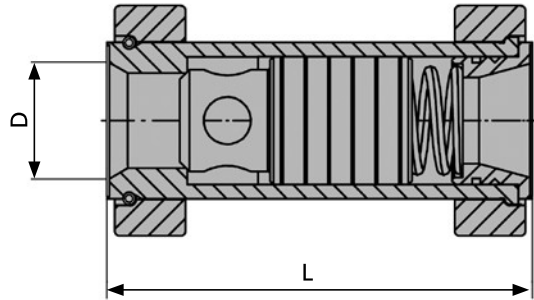
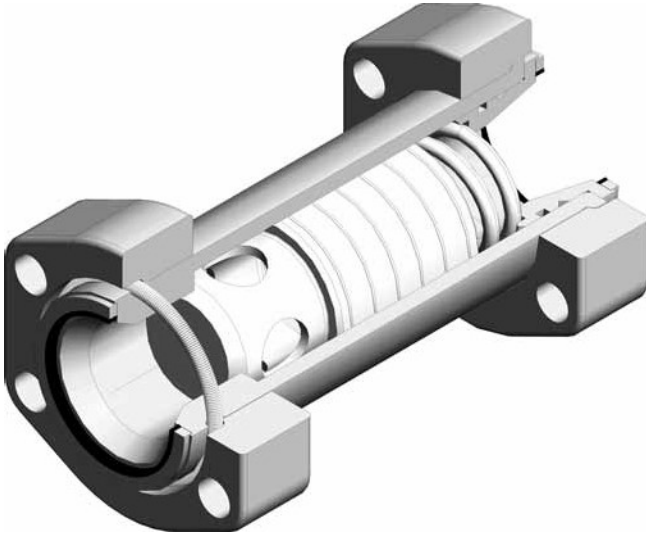
Body material:  
 Standard= carbon steel  
 Stainless steel= add SS after Part No  
 Other materials on request.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

Flanges page 79  
 Retain rings page 116  
 Bonded seals page 117

## Non return valve

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:

**612135** includes:

612	2 pcs
12135	1 pc
12	1 pcs
1213	2 pcs

Size	Complete Part No	ID Code	W.P. [bar]	L	D	Weight [kg]
3/4"	612135	1912016000	420	100	21	1.30
1"	616135	1912017000	420	120	24	1.70
1 1/4"	620135*	1912018005	420	140	31	2.70
1 1/2"	624135	1912019000	420	155	38	4.00
2"	632135	1912020000	420	180	49	6.70
2 1/2"	640135	1912020020	420	190	61	12.6
3"	648135	1912020040	420	200	73	15.6

Body material:

Standard= carbon steel

Stainless steel= add SS after Part No

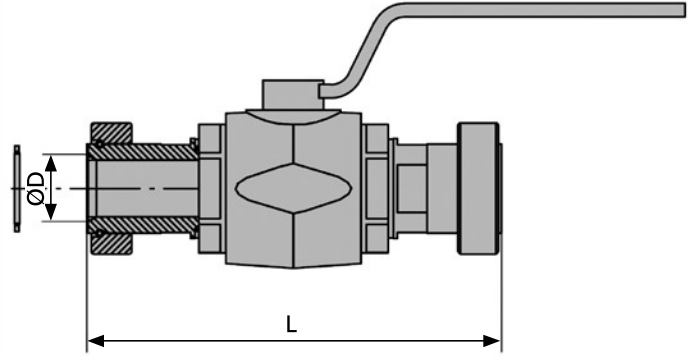
Standard opening pressure= 0.5 bar. On request 1.5 bar to 3 bar.

\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

Flanges page 79  
Retain rings page 116  
Bonded seals page 117

## Ball valve

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:

**608129** includes:

608	2 pcs
08014	2 pc
08	2 pcs
0823	2 pcs
ED R1/2 VI	2 pc
BKH 1/2" R	1 pc

Size	Complete Part No	ID Code	W.P. [bar]	Ball valve Part No	L	D	Weight [kg]
1/2"	<b>608129</b>	2603015000	420	BKH 1/2 R	184	14	1.70
3/4"	<b>612129</b>	2603015400	420	BKH 3/4 R	218	21	3.00
1"	<b>616129</b>	2603015800	420	BKHP 1 R	243*	24	4.10
1 1/4"	<b>620129*</b>	2603016210	420	MKHP 1 1/4 R	247	31	6.30
1 1/2"	<b>624129</b>	2603016600	420	MKHP 1 1/2 R	286	38	10.4
2"	<b>632129</b>	2603017000	420	MKHP 2 R	306	49	15.1

Body material:  
Standard= carbon steel  
Stainless steel= add SS after Part No

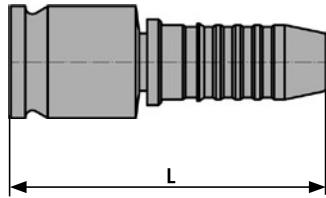
\*) 261 in stainless steel

Flanges page 79  
Retain rings page 116  
Bonded seals page 117

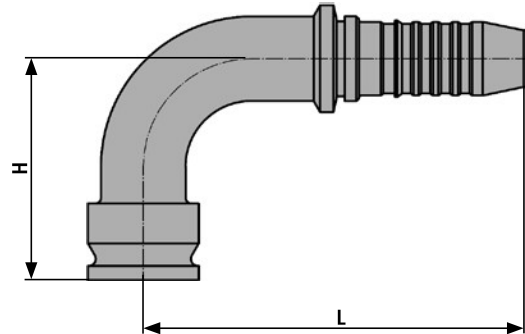
\* = According to the ISO 6162-2 standard (M12 bolts). If flanges with M14 bolt holes are needed, please use 621 (instead of 620) as part number.

## GS-hose couplings

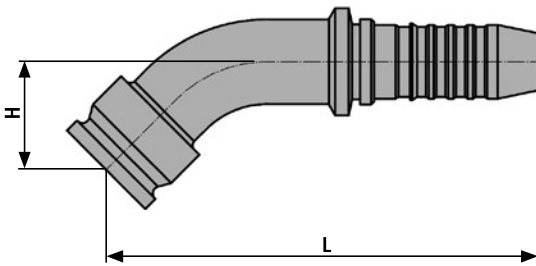
ISO 6162-2 (SAE J 518 Code 62)



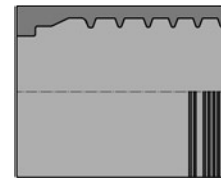
Straight



90°



45°



Ferrule

### GS-hose coupling, straight

Size	Part No	ID Code	L
3/4"	12020G	5301001100	100
1"	16020G	5301001420	111
1 1/4"	20020G	5301001820	128
1 1/2"	24020G	5301002220	134
2"	32020G	5301002620	200

### GS-hose coupling, 90°

Size	Part No	ID Code	L	H
3/4"	12021G	5301042020	115	69
1"	16021G	5301042420	134	78
1 1/4"	20021G	5301042820	137	88
1 1/2"	24021G	5301043620	177	102
2"	32021G	5301044020	254	126

### GS-hose coupling, 45°

Size	Part No	ID Code	L	H
3/4"	12022G	5301040020	132	36
1"	16022G	5301040500	152	38
1 1/4"	20022G	5301040900	186	44
1 1/2"	24022G	5301041220	200	52
2"	32022G	5301041620	274	60

### Ferrule

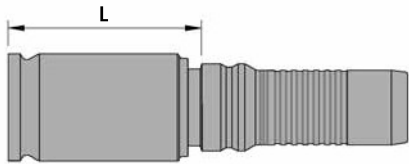
Size	Part No	ID Code	D (after crimping)
3/4"	G599-12	5202001230	37.4–37.8
1"	G599-16	5202001240	44.3–44.7
1 1/4"	G596-20	5202001100	56.2–56.6
1 1/2"	G599-24	5202001260	63.3–63.7
2"	integrated in hose couplings		76.6–78.1

Component material:  
Carbon steel, zinc plated

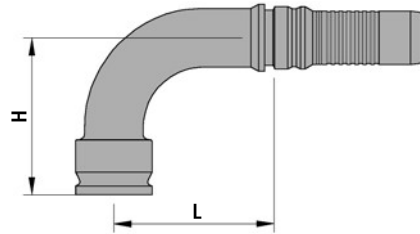


## GS-hose couplings

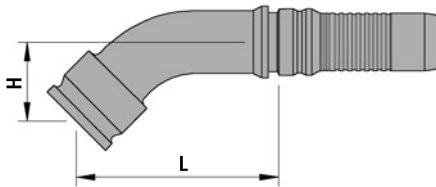
ISO 6162-2 (SAE J 518 Code 62)



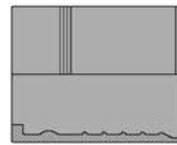
Straight



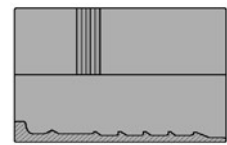
90°



45°



Type 594-



Type 596-

Ferrules

### GS-hose coupling, straight

Size	Part No	ID Code	L
3/4"	12020-IT	5301001105	44.2
1"	16020-IT	5301001425	48.3
1 1/4"	20020-IT	5301001825	82.3
1 1/2"	24020-IT	5301002225	83.4
2"	32020-IT	5301002625	96.9

### GS-hose coupling, 90°

Size	Part No	ID Code	L	H
3/4"	12021-IT	5301042025	59.2	64
1"	16021-IT	5301042425	76.3	75
1 1/4"	20021-IT	5301042825	95.1	93
1 1/2"	24021-IT	5301043625	111.8	110
2"	32021-IT	5301044025	149.5	140

### GS-hose coupling, 45°

Size	Part No	ID Code	L	H
3/4"	12022-IT	5301040025	72.2	32.0
1"	16022-IT	5301040505	88.3	36.1
1 1/4"	20022-IT	5301040905	112.1	43.8
1 1/2"	24022-IT	5301041225	128.8	51.7
2"	32022-IT	5301041625	166.4	65.9

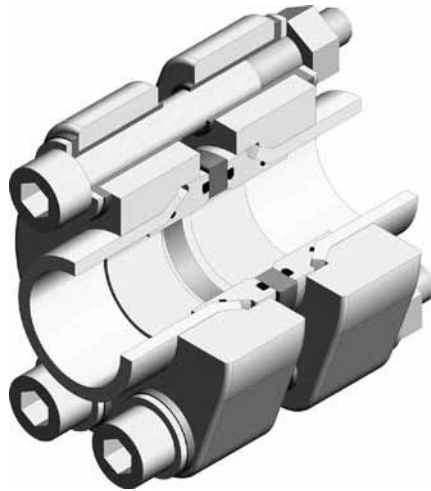
### Ferrules

Size	Gates hoses				Intertraco hoses					
	G5K/EFG5K		G6K/EFG6K		GS4SH		GSR13		GSR15	
	Part No	ID Code	Part No	ID Code	Part No	ID Code	Part No	ID Code	Part No	ID Code
3/4"	594-12	5204006000	594-12	5204006000	594-12	5204006000	594-12	5204006000	594-12	5204006000
1"	594-16	5204006010	594-16	5204006010	594-16	5204006010	594-16	5204006010	594-16	5204006010
1 1/4"	596-20	5204006220	596-20	5204006220	594-20	5204006020	596-20	5204006220	596-20	5204006220
1 1/2"	596-24	5204006230	596-24	5204006230	594-24	5204006030	596-24	5204006230	596-24	5204006230
2"	596-32	5204006240	596-32	5204006240	594-32	5204006040	596-32	5204006240	596-32	5204006240

Component material:  
Carbon steel, zinc plated

## Non-conductive flange connection

ISO 6162-2 (SAE J 518 Code 62)



Complete Part No example:  
**608/16X2FA-NC** includes:  
 608F 2 pcs  
 08/16X2FA 2 pc  
 08/16F 2 pc  
 OR18.64X3.53 2 pc  
 OR12X1.0 2 pc  
 08099B/B-NC 1 pc  
 M6DIN125-308 8 pcs  
 M08-PTFE-308 8 pcs  
 M6X70DIN912-12.9 4 pcs  
 M6DIN934-10 4 pcs

Size	Pipe size	Complete Part No	ID Code	Bolt Torque [Nm]	Weight [kg]
1/2"	16 x 2.0	608/16X2FA-NC	1401901000	15	0.57
1/2"	18 x 2.0	608/18X2FA-NC	1401902000	15	0.57
1/2"	20 x 2.0	608/20X2FA-NC	1401903000	15	0.55
1/2"	25 x 2.5	608/25X2.5FA-NC	1401904000	15	0.55
1/2"	25 x 3.0	608/25X3FA-NC	1401905000	15	0.50
3/4"	20 x 2.0	612/20X2FA-NC	1401906000	27	1.11
3/4"	20 x 2.5	612/20X2.5FA-NC	1401907000	27	1.13
3/4"	25 x 2.5	612/25X2.5FA-NC	1401908000	27	1.05
3/4"	25 x 3.0	612/25X3FA-NC	1401909000	27	1.07
3/4"	30 x 3.0	612/30X3FA-NC	1401910000	27	1.01
3/4"	30 x 4.0	612/30X4FA-NC	1401910500	27	1.05
1"	25 x 2.5	616/25X2.5FA-NC	1401911000	48	1.45
1"	25 x 3.0	616/25X3FA-NC	1401912000	48	1.39
1"	30 x 3.0	616/30X3FA-NC	1401913000	48	1.39
1"	30 x 4.0	616/30X4FA-NC	1401914000	48	1.39
1"	38 x 4.0	616/38X4FA-NC	1401915000	48	1.26
1 1/4"	30 x 3.0	621/30X3FA-NC	1401916000	72	2.27
1 1/4"	30 x 4.0	621/30X4FA-NC	1401917000	72	2.12
1 1/4"	38 x 4.0	621/38X4FA-NC	1401918000	72	2.10
1 1/4"	38 x 5.0	621/38X5FA-NC	1401919000	72	2.10
1 1/4"	42 x 4.0	621/42X4FA-NC	1401920000	72	2.06
1 1/2"	30 x 3.0	624/30X3FA-NC	1401921000	119	2.39
1 1/2"	38 x 4.0	624/38X4FA-NC	1401922000	119	3.70
1 1/2"	38 x 5.0	624/38X5FA-NC	1401922500	119	3.70
1 1/2"	42 x 4.0	624/42X4FA-NC	1401923000	119	3.59
1 1/2"	50 x 5.0	624/50X5FA-NC	1401924000	119	3.36
2"	50 x 5.0	632/50X5FA-NC	1401925000	200	5.67
2"	60 x 5.0	632/60X5FA-NC	1401926000	200	5.29
2"	60 x 6.0	632/60X6FA-NC	1401927000	200	5.29

Material possibilities page 168.

Flanges page 80  
 Inserts page 111  
 Sleeves page 113  
 O-rings page 118, 119

## Insert cone for flare flange connection

ISO 6162-2 (SAE J 518 Code 62)



Type A



Type B



Type C



Type D

### Metric pipes

Size	Part No Type A	ID Code Type A	Part No Type B	ID Code Type B	Part No Type C	ID Code Type C	Part No Type D	ID Code Type D	Pipe Size
1/2"	08/16X2FA	1401000300	08/16X2FB	1401000400	08/16X2FC	1401000500	08/16X2FD	1401000600	16x2.0
1/2"	08/18X2FA	1401002100	08/18X2FB	1401002200	08/18X2FC	1401002300	08/18X2FD	1401002400	18x2.0
1/2"	08/20X2FA	1401004100	08/20X2FB	1401004200	08/20X2FC	1401004300	08/20X2FD	1401004400	20x2.0
1/2"	08/25X2.5FA	1401006000	08/25X2.5FB	1401006100	08/25X2.5FC	1401006300	08/25X2.5FD	1401006400	25x2.5
1/2"	08/25X3FA	1401006600	08/25X3FB	1401006700	08/25X3FC	1401006800	08/25X3FD	1401006900	25x3.0
3/4"	12/20X2FA	1401010100	12/20X2FB	1401010200	12/20X2FC	1401010300	12/20X2FD	1401010400	20x2.0
3/4"	12/20X2.5FA	1401010600	12/20X2.5FB	1401010700	12/20X2.5FC	1401010800	12/20X2.5FD	1401010900	20x2.5
3/4"	12/25X2.5FA	1401012100	12/25X2.5FB	1401012200	12/25X2.5FC	1401012300	12/25X2.5FD	1401012400	25x2.5
3/4"	12/25X3FA	1401012600	12/25X3FB	1401012700	12/25X3FC	1401012800	12/25X3FD	1401012900	25x3.0
3/4"	12/30X3FA	1401014100	12/30X3FB	1401014200	12/30X3FC	1401014300	12/30X3FD	1401014400	30x3.0
1"	16/25X2.5FA	1401016100	16/25X2.5FB	1401016200	16/25X2.5FC	1401016300	16/25X2.5FD	1401016400	25x2.5
1"	16/25X3FA	1401016600	16/25X3FB	1401016700	16/25X3FC	1401016800	16/25X3FD	1401016900	25x3.0
1"	16/30X3FA	1401018100	16/30X3FB	1401018200	16/30X3FC	1401018300	16/30X3FD	1401018400	30x3.0
1"	16/30X4FA	1401018600	16/30X4FB	1401018700	16/30X4FC	1401018800	16/30X4FD	1401018900	30x4.0
1"	16/38X4FA	1401022700	16/38X4FB	1401022800	16/38X4FC	1401022900	16/38X4FD	1401023000	38x4.0
1 1/4"	20/30X3FA	1401024100	20/30X3FB	1401024200	20/30X3FC	1401024300	20/30X3FD	1401024400	30x3.0
1 1/4"	20/30X4FA	1401024420	20/30X4FB	1401024440	20/30X4FC	1401024500	20/30X4FD	1401024510	30x4.0
1 1/4"	20/38X4FA	1401028500	20/38X4FB	1401028600	20/38X4FC	1401028700	20/38X4FD	1401028800	38x4.0
1 1/4"	20/38X5FA	1401029000	20/38X5FB	1041029200	20/38X5FC	1041029300	20/38X5FD	1041029400	38x5.0
1 1/4"	20/42X4FA	1401030600	20/42X4FB	1401030700	20/42X4FC	1401030800	20/42X4FD	1401030900	42x4.0
1 1/2"	24/30X3FA	1401032700	24/30X3FB	1401032800	24/30X3FC	1401032900	24/30X3FD	1401033000	30x3.0
1 1/2"	24/38X4FA	1401034100	24/38X4FB	1401034200	24/38X4FC	1401034300	24/38X4FD	1401034400	38x4.0
1 1/2"	24/42X4FA	1401036600	24/42X4FB	1401036700	24/42X4FC	1401036800	24/42X4FD	1401036900	42x4.0
1 1/2"	24/50X5FA	1401039700	24/50X5FB	1401039800	24/50X5FC	1401039900	24/50X5FD	1401040000	50x5.0
1 1/2"	24/50X6FA	1401040100	24/50X6FB	1401040200	24/50X6FC	1401040300	24/50X6FD	1401040400	50x6.0
2"	32/50X5FA	1401041100	32/50X5FB	1401041200	32/50X5FC	1401041300	32/50X5FD	1401041400	50x5.0
2"	32/60X5FA	1401042100	32/60X5FB	1401042200	32/60X5FC	1401042300	32/60X5FD	1401042400	60x5.0
2"	32/60X6FA	1401042600	32/60X6FB	1401042700	32/60X6FC	1401042800	32/60X6FD	1401042900	60x6.0
2 1/2"	40/60X6FA	1401045312	40/60X6FB	1401045314	40/60X6FC	1401045316	40/60X6FD	1401045318	60x6.0
2 1/2"	40/73X7FA	1401045480	40/73X7FB	1401045482	40/73X7FC	1401045484	40/73X7FD	1401045486	73x7.0

Component material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.  
 Bonded seals and O-rings not included.

SAE 6000 PSI

## Insert cone for flare flange connection

ISO 6162-2 (SAE J 518 Code 62)



Type A



Type B



Type C



Type D

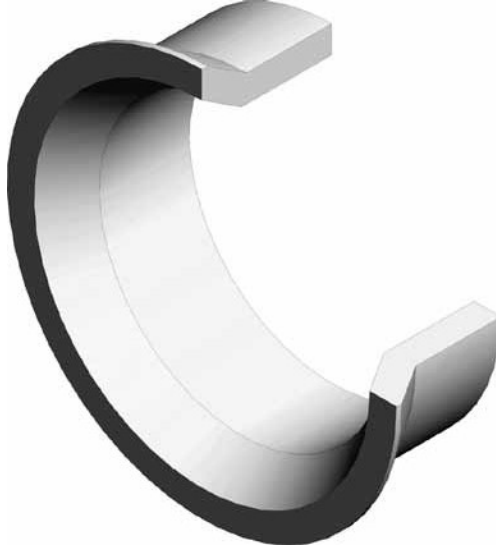
### ANSI 36.10/36.19 pipes

Size	Part No Type A	ID Code Type A	Part No Type B	ID Code Type B	Part No Type C	ID Code Type C	Part No Type D	ID Code Type D	Pipe Size
1/2"	08/21.3X3.73FA	1401004921	08/21.3X3.73FB	1401004925	08/21.3X3.73FC	1401004930	08/21.3X3.73FD	1401004935	21.3X3.73
1/2"	08/21.3X4.78FA	1401004950	08/21.3X4.78FB	1401004955	08/21.3X4.78FC	1401004960	08/21.3X4.78FD	1401004965	21.3X4.78
3/4"	12/26.7X3.91FA	1401003130	12/26.7X3.91FB	1401013132	12/26.7X3.91FC	1401013134	12/26.7X3.91FD	1401013136	26.7X3.91
3/4"	12/26.7X5.56FA	1401013140	12/26.7X5.56FB	1401013145	12/26.7X5.56FC	1401013150	12/26.7X5.56FD	1401013155	26.7X5.56
1"	16/33.4X3.38FA	1401019720	16/33.4X3.38FB	1401019722	16/33.4X3.38FC	1401019724	16/33.4X3.38FD	1401019726	33.4X3.38
1"	16/33.4X4.55FA	1401019746	16/33.4X4.55FB	1401019748	16/33.4X4.55FC	1401019750	16/33.4X4.55FD	1401019752	33.4X4.55
1 1/4"	20/42.2X3.56FA	1401031020	20/42.2X3.56FB	1401031022	20/42.2X3.56FC	1401031024	20/42.2X3.56FD	1401031026	42.2X3.56
1 1/4"	20/42.2X4.85FA	1401031040	20/42.2X4.85FB	1401031042	20/42.2X4.85FC	1401031044	20/42.2X4.85FD	1401031046	42.2X4.85
1 1/2"	24/48.3X3.68FA	1401038220	24/48.3X3.68FB	1401038222	24/48.3X3.68FC	1401038224	24/48.3X3.68FD	1401038226	48.3X3.68
1 1/2"	24/48.3X5.08FA	1401038240	24/48.3X5.08FB	1401038242	24/48.3X5.08FC	1401038244	24/48.3X5.08FD	1401038246	48.3X5.08
2"	32/60.3X3.91FA	1401043720	32/60.3X3.91FB	1401043722	32/60.3X3.91FC	1401043724	32/60.3X3.91FD	1401043726	60.3X3.91
2"	32/60.3X5.54FA	1401043800	32/60.3X5.54FB	1401043820	32/60.3X5.54FC	1401043830	32/60.3X5.54FD	1401043840	60.3X5.54
2 1/2"	40/73X7FA	1401045480	40/73X7FA	1401045482	40/73X7FA	1401045484	40/73X7FA	1401045486	73x7.01

Component material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.  
 Bonded seals and O-rings not included.

## Sleeve

ISO 6162-2 (SAE J 518 Code 62)

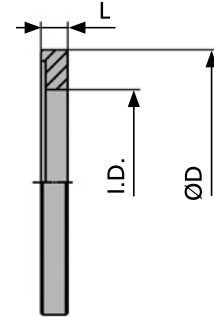


Size	Part No	ID Code	Pipe O.D. [mm]
1/2"	08/16F	1401000100	16
1/2"	08/18F	1401002000	18
1/2"	08/20F	1401004000	20
3/4"	12/20F	1401010000	20
3/4"	12/25F	1401012000	25
1"	16/25F	1401016000	25
1"	16/30F	1401018000	30
1 1/4"	20/30F	1401024000	30
1 1/4"	20/38F	1401028000	38
1 1/2"	24/38F	1401034000	38
1 1/2"	24/42F	1401036000	42
2"	32/50F	1401041000	50
2 1/2"	40/60F	1401045000	60

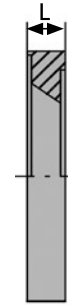
Component material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

# Adapter

ISO 6162-2 (SAE J 518 Code 62)



Adapter between O-ring and bonded seal



Adapter between metric and ANSI 36.10/36.19

Please add 10 mm to bolt lengths mentioned on page 78.

## Adapter between O-ring and standard GSbonded seal, metric pipes

Size	Part No	ID Code	L	D	ID	Weight [kg]
1/2"	08099	1803000100	7	30	14	0.02
3/4"	12099	1803001000	7	40	20	0.05
1"	16099	1803002000	7	45	24	0.06
1 1/4"	20099	1803003000	7	50	30	0.07
1 1/2"	24099	1803004000	7	60	39	0.09
2"	32099	1803005000	7	70	49	0.12
2 1/2"	40099	1803006000	7	84	60	0.16
3"	48099	1803007000	7	102	72	0.22

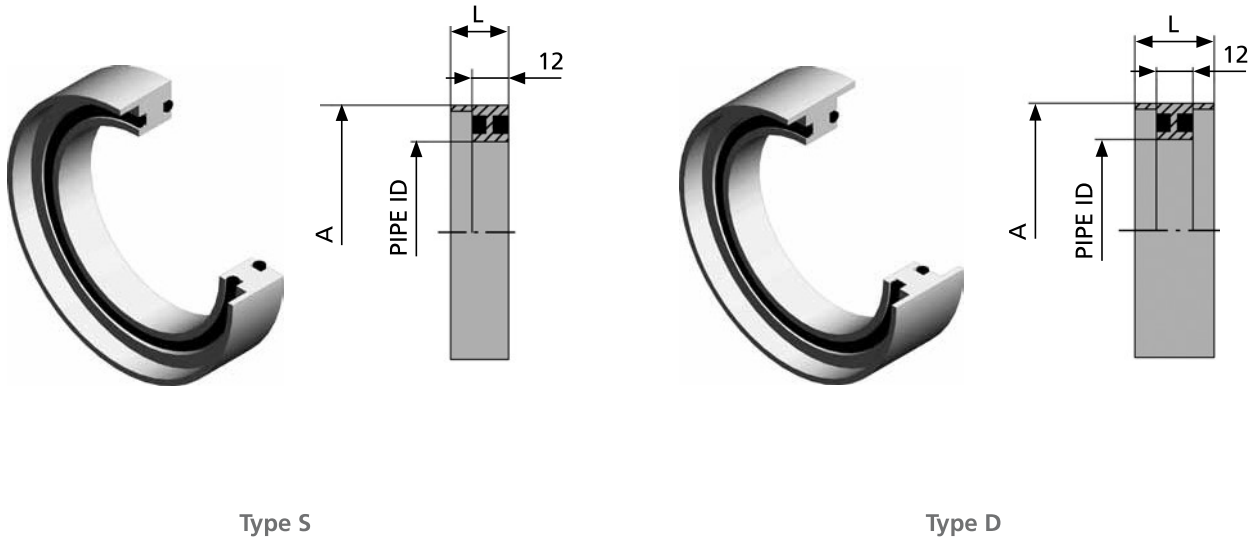
## Adapter between metric and ANSI 36.10/36.19 pipes

Size	Part No	ID Code	A-Pipe	B-Pipe	Bonded Seal		L	Weight [kg]
					1	2		
1/2"	08087	1803201000	26x6.0	21.3x7.5	0823	0821	10	0.03
3/4"	12087	1803202000	36x8.0	26.7x7.8	1213	0823	10	0.06
1"	16087	1803203000	39x7.5	33.4x6.4	1629	1633	10	0.06
1"	16088	1803203500	39x7.5	33.4x9.1	1629	1633	10	0.07
1 1/4"	20087	1803204000	46x8.5	42.2x6.4	2030	2042	10	0.07
1 1/4"	20088	1803204500	46x8.5	42.2x9.7	2030	2042	10	0.08
1 1/2"	24087	1803205000	56x8.5	48.3x7.1	2432	2448	10	0.10
1 1/2"	24088	1803205500	56x8.5	48.3x10.2	2432	2448	10	0.11
2"	32087	1803206000	66x8.5	60.3x8.7	3219	3260	10	0.13
2"	32088	1803206500	66x8.5	60.3x11.1	3219	3260	10	0.14

Component material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

## Seal carrier

ISO 6162-2 (SAE J 518 Code 62)



Type S

Type D

Please add at least 10 mm to bolt lengths mentioned on page 78.

### Type S with O-rings between flange and block – metric pipes

Size	Part No	ID Code	O-Ring	A	L	Pipe Size
2"	3220S	1809010000	OR53.57X3.53	70	15	66x8.5
2 1/2"	4020S	1809011000	OR66.27X3.53	84	15	80x10
3"	4820S	1809012000	OR82.14X3.53	102	15	97x12

### Type S with O-rings between flange and block – ANSI 36.10/36.19 pipes

Size	Part No	ID Code	O-Ring	A	L	Pipe Size
2"	3220/60.3X8.74S	1809010200	OR47.22X3.53	65	15	60.3x8.74
2 1/2"	4020/73X9.53S	1809011300	OR58.74X3.53	79	15	73.0x9.53
3"	4820/88.9X11.13S	1809012200	OR77.62X3.53	93	15	88.9x11.13

### Type D with O-rings between flanges – metric pipes

Size	Part No	ID Code	O-Ring	A	L	Pipe Size
2"	3220D	1809010100	OR53.57X3.53	70	18	66x8.5
2 1/2"	4020D	1809011100	OR66.27X3.53	84	18	80x10
3"	4820D	1809012100	OR82.14X3.53	102	18	97x12

### Type D with O-rings between flanges – ANSI 36.10/36.19 pipes

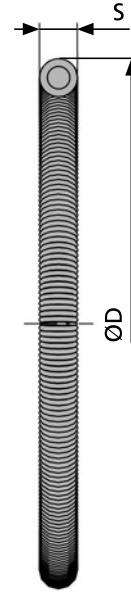
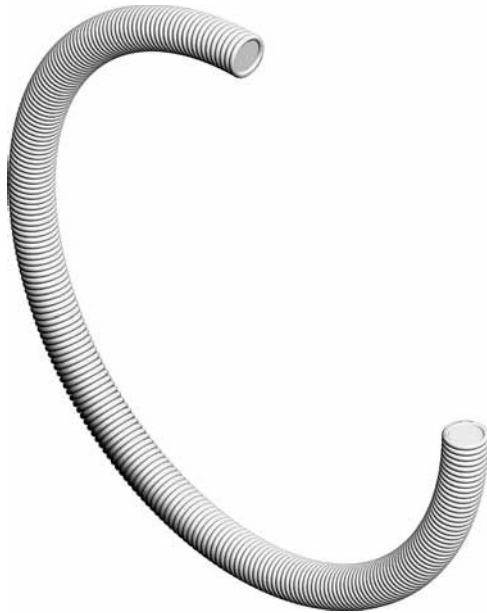
Size	Part No	ID Code	O-Ring	A	L	Pipe Size
2"	3220/60.3X8.74D	1809010300	OR47.22X3.53	65	18	60.3x8.74
2 1/2"	4020/73X9.53D	1809011400	OR58.74X3.53	79	18	73.0x9.53
3"	4820/88.9X11.13D	1809012300	OR77.62X3.53	93	18	88.9x11.13

Component material:  
Standard= carbon steel, zinc plated  
Stainless steel= add SS after Part No  
Other materials on request.

O-ring not included in a Part No,  
please order separately.

## Retain ring

ISO 6162-2 (SAE J 518 Code 62)



### Metric pipes

Size	Part No	ID Code	Pipe Size	D	S
1/2"	08	1902000150	26x6	30	4
3/4"	12	1902001050	36x8	40	4
1"	16	1902002050	39x7.5	44	5
1 1/4"	20	1902003050	46x8	51	5
1 1/2"	24	1902004050	56x8.5	61	5
2"	32	1902006050	66x8.5	71	5
2 1/2"	40	1902007050	80x10	85	5
3"	48	1902008050	97x12	103	6

### ANSI 36.10/36.19 pipes

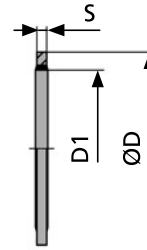
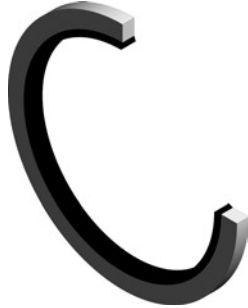
Size	Part No	ID Code	Pipe Size	D	S
1/2"	08/21.3	1902000250	21.3x7.5	25.3	4
3/4"	12/26.7	1902001250	26.7x7.8	30.7	4
1"	16/33.4	1902002250	33.4x9.1	38.4	5
1 1/4"	20/42.2	1902003250	42.2x9.7	47.2	5
1 1/2"	24/48.3	1902004250	48.3x10.2	53.3	5
2"	32/60.3	1902006250	60.3x11.1	65.3	5
2 1/2"	40/73	1902007250	73.0x14.02	78.0	5
3"	48/88.9	1902008250	88.9x15.2	94.9	6

Component material:  
AISI 316, special treated



## Bonded seal

ISO 6162-2 (SAE J 518 Code 62)



### Bonded seal for metric GS-pipe ends

Size	Standard Part No	Standard ID Code	SS Part No	SS ID Code	S	D	D1
1/2"	0823	2701001400	0823SS	2701100200	2.03	23.80	17.28
3/4"	1213	2701002000	1213SS	2701101000	2.34	33.27	24.26
1"	1629	2701003000	1629SS	2701102000	2.34	34.93	27.05
1 1/4"	2030	2701004000	2030SS	2701103000	3.25	42.80	33.89
1 1/2"	2432	2701005000	2432SS	2701104000	3.25	52.38	42.93
2"	3219	2701007000	3219SS	2701105000	3.25	63.50	51.69
2 1/2"	4037	2701008000	4037SS	2701107000	3.25	75.00	64.39
3"	4839	2701009000	4839SS	2701108000	3.25	90.17	76.08

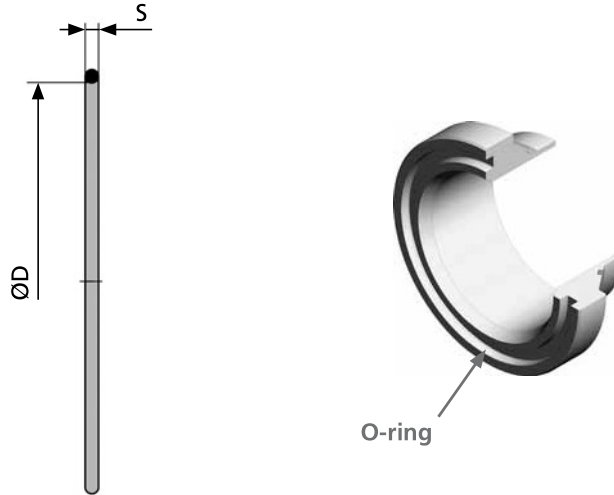
### Bonded seal for ANSI 36.10/36.19 GS-pipe ends

Size	Standard Part No	Standard ID Code	SS Part No	SS ID Code	S	D	D1
1/2"	0821	2701001000	0821SS	2701100000	2.00	15.88	10.37
3/4"	0823	2701001400	0823SS	2701100200	2.03	23.80	17.28
1"	1633	2701003400	1633SS	2701102100	2.34	28.58	21.54
1 1/4"	2042	2701004400	2042SS	2701103400	2.34	39.00	31.00
1 1/2"	2448	2701005200	2448SS	2701104500	3.25	44.45	35.94
2"	3260	2701007400	3260SS	2701105400	3.25	55.50	46.50
2 1/2"	4073	2701008200	4073SS	2701107500	3.25	69.85	54.89
3"	4888	2701009200	4888SS	2701108300	4.00	83.80	70.00

Material possibilities:  
 Standard= carbon steel, zinc plated with NBR  
 SS= stainless steel with NBR  
 Other materials and combinations on request.

## O-ring between 37° insert cones

ISO 6162-2 (SAE J 518 Code 62)

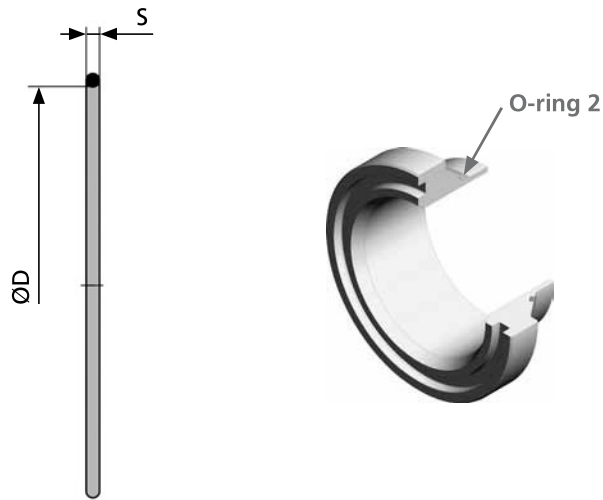


Size	Part No	ID Code	GS Size
1/2"	OR18.64X3.53	2701506000	08
3/4"	OR24.99X3.53	2701512000	12
1"	OR32.92X3.53	2701519400	16
1 1/4"	OR37.69X3.53	2701524200	20
1 1/2"	OR47.22X3.53	2701529000	24
2"	OR56.75X3.53	2701535000	32
2 1/2"	OR69.44X3.53	2701540000	40

Material possibilities:  
 Standard= NBR, Shore 90 A  
 FPM (Viton®), Shore 90 A= add VI after Part No  
 Other materials on request.

## O-ring 2 for insert cones

ISO 6162-2 (SAE J 518 Code 62)



### Metric pipes

Pipe Size	Part No	ID Code
16x2.0	OR12X1.0	2701500000
18x2.0	OR14X1.0	2701502000
20x2.0	OR16X1.0	2701504000
20x2.5	OR15X1.0	2701503000
25x2.5	OR20X1.0	2701508000
25x3.0	OR19X1.0	2701507200
30x3.0	OR23X1.0	2701511000
30x4.0	OR22X1.0	2701510000
38x4.0	OR30X1.0	2701517200
38x5.0	OR28X1.0	2701516000
42x4.0	OR34X1.0	2701521200
50x5.0	OR41X1.78	2701525000
50x6.0	OR37.82X1.78	2701524600
60x5.0	OR50.52X1.78	2701531000
60x6.0	OR47.35X1.78	2701529200
73x7.0	OR56.87X1.78	2701535200

### ANSI 36.10/36.19 pipes

Pipe Size	Part No	ID Code
21.3x3.73	OR14X1.0	2701502000
21.3x4.78	OR12X1.0	2701500000
26.7x3.91	OR20X1.0	2701508000
26.7x5.56	OR16X1.0	2701504000
33.4x3.38	OR25X1.0	2701513200
33.4x4.55	OR23X1.0	2701511000
42.2x3.56	OR34X1.0	2701521200
42.2x4.85	OR32X1.0	2701519600
48.3x3.68	OR41X1.78	2701525000
48.3x5.08	OR37.82X1.78	2701524600
60.3x3.91	OR53.70X1.78	2701533000
60.3x5.54	OR47.35X1.78	2701529200
73x7.01	OR56.87X1.78	2701535200

Material possibilities:  
 Standard= NBR, Shore 90 A  
 FPM (Viton®), Shore 90 A= add VI after Part No  
 Other materials on request.

## ED-Seal for male thread nipple

ISO 6162-2 (SAE J 518 Code 62)



Part No	ID Code
ED R1/2 VI	2201861910
ED R3/4 M26X1.5 27X2 VI	2201862410
ED R1+M33X2 VI	2201863010
ED R11/4+M42X2 VI	2201863310
ED R11/2+M48X2 VI	2201863610

Material: FPM (Viton®)

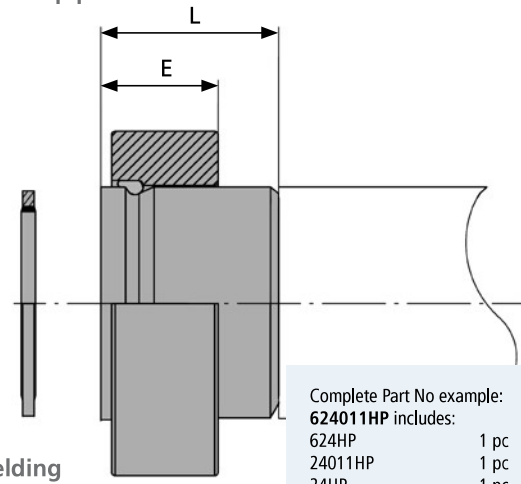
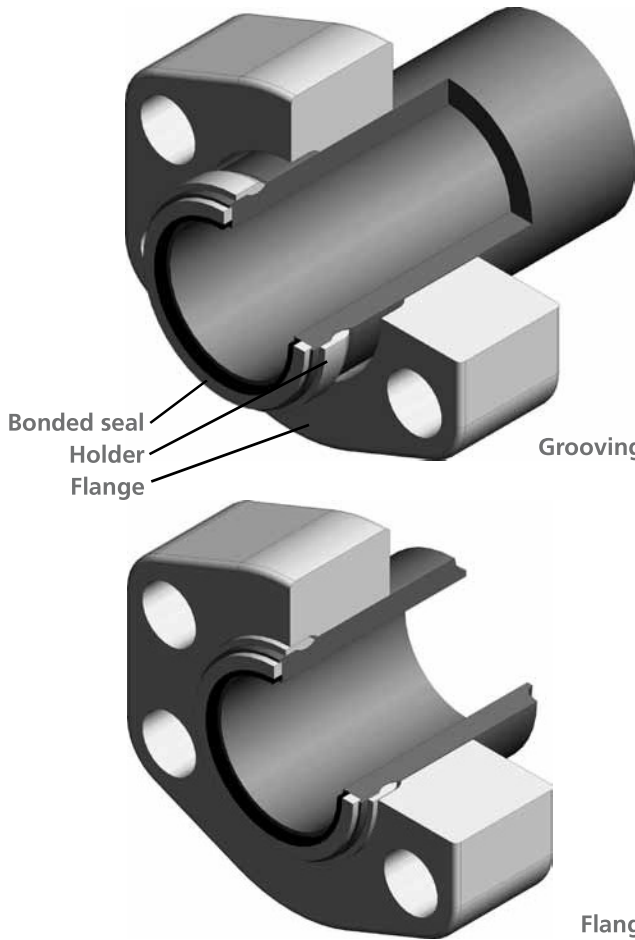
# GS-HP Retain Ring™ System

ISO 6162-2 (SAE J 518 Code 62)

## Connection Technology

The GS-HP Retain Ring™ system provides compact, high pressure joint, in which the flanges are held to the pipe by solid retain ring halves which are sitting in a machined groove on the pipe end. The bonded seal between pipe faces ensures tight sealing when tightening the screws. This new system has been subjected to rigorous burst and impulse testing. The HP-retain rings, flanges and screws absorb the axial forces and shocks. The combination of retain rings and flanges strengthens the pipe (at the location of the groove) in such a manner that connection is stronger than the pipe itself!

The GS-HP Retain Ring™ system provides a proven, reliable and leak-free piping solution. New design and improved characteristics lead to a minimised need for maintenance, repair or replacement of piping components. The excellent sealing performance and very high mechanical strength of new HP-invention has been proven by external testing laboratories. New type of connection technology allows much higher external loads and has unique resistance against external loads.



### Grooving direct on to pipe

Size	Pipe Size	Flange Part No	Flange ID Code	Holder Part No	Holder ID Code	Bonded Seal Part No	Bonded Seal ID Code
1 1/2"	56x8.5	<b>624HP</b>	1103120500	<b>24HP</b>	1902004500	<b>2432</b>	1903005000
2"	66x8.5	<b>632HP</b>	1103150300	<b>32HP</b>	1902006500	<b>3219</b>	1903007000

### Flange for welding

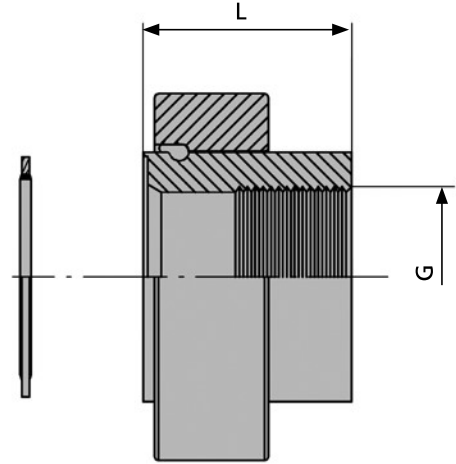
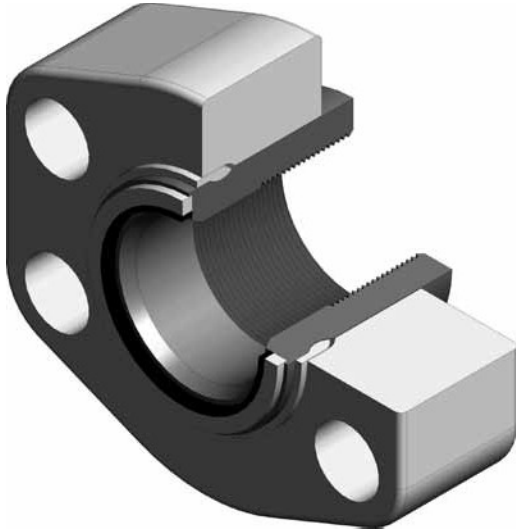
Size	Pipe Size	Complete Part Code	Complete ID Code	L	E	Weight [kg]	Body Part No	Body ID Code
1 1/2"	56x8.5	<b>624011HP</b>	1301567500	60	38	1.91	24011HP	1301037400
2"	66x8.5	<b>632011HP</b>	1301572000	75	43	3.07	32011HP	1301046795

Body material:  
 Standard= carbon steel  
 Stainless steel= add SS after Part No  
 Other materials on request.  
 Holder material= duplex

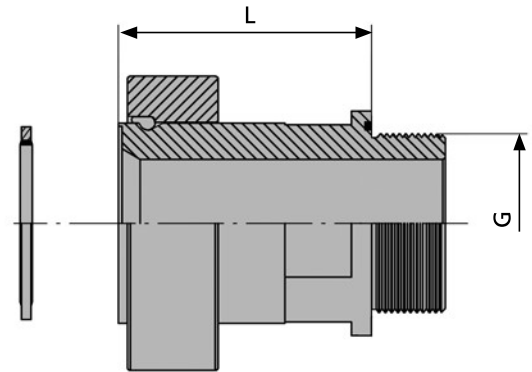
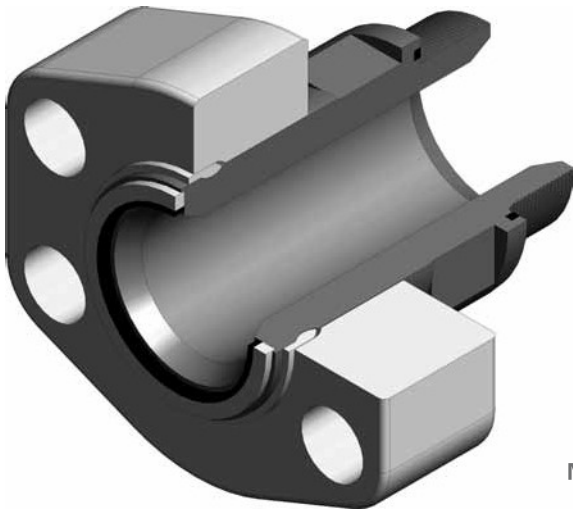
Flange dimensions page 79  
 Bonded seals page 117

## GS-HP Retain Ring™ System

ISO 6162-2 (SAE J 518 Code 62)



Female thread flange



Male thread flange

Complete Part No example:  
**624013HP** includes:  
 624HP 1 pc  
 24013HP 1 pc  
 24HP 1 pc  
 2432 1 pc

Complete Part No example:  
**624014HP** includes:  
 624HP 1 pc  
 24014HP 1 pc  
 24HP 1 pc  
 2432 1 pc  
 EDR112M48X2 1 pc

### Female thread flange, BSPP

Size	Complete Part No	Complete ID Code	L	G	Weight [kg]	Body Part No	Body ID Code
1 1/2"	<b>624013HP</b>	1307511500	45	1 1/4"	1.84	24013HP	1307008600
2"	<b>632013HP</b>	1307512500	55	1 1/2"	2.93	32013HP	1307009300

### Male thread flange, BSPP

Size	Complete Part No	Complete ID Code	L	G	Seal 2	A/F	Weight [kg]	Body Part No	Body ID Code
1 1/2"	<b>624014HP</b>	1305527100	78.2	1 1/2"	EDR112M48X2	50	1.71	24014HP	1305010400
2"	<b>632014HP</b>	1305528100	83.2	2"	OR59.9X2.62	65	2.55	32014HP	1305014350

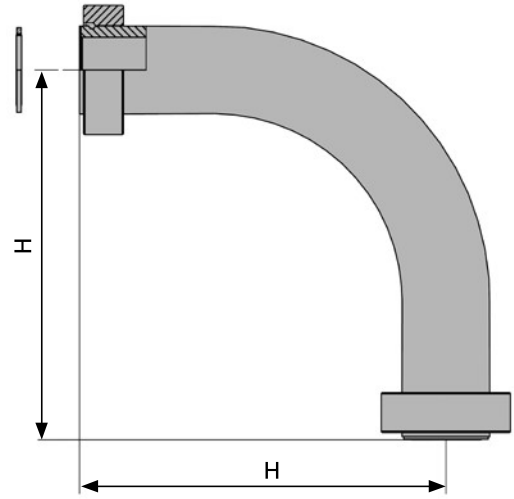
Body material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.  
 Standard thread BSP, others on request.

Seal 2 material: FPM (Viton®)

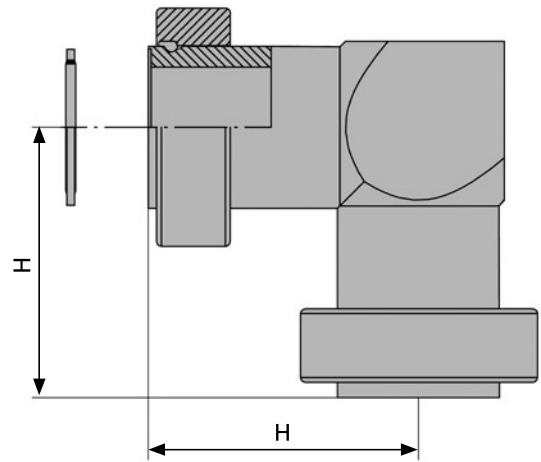
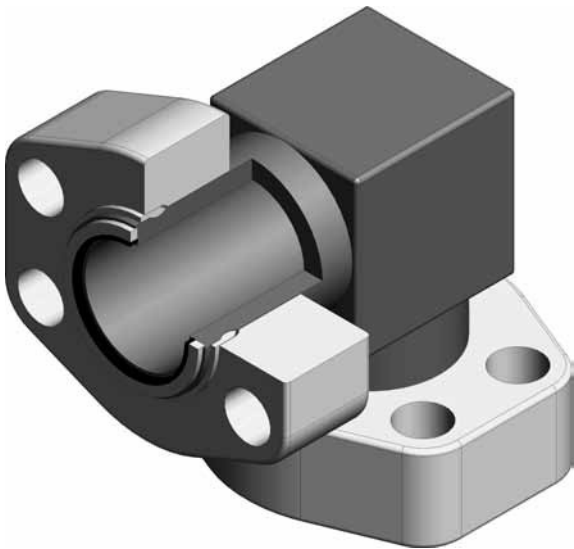
Flange dimensions page 79  
 Bonded seals page 117

## GS-HP Retain Ring™ System

ISO 6162-2 (SAE J 518 Code 62)



Flange bend



Elbow flange

SAE 6000 PSI

Complete Part No example:  
**624018HP** includes:  
 624HP 2 pcs  
 24018HP 1 pc  
 24HP 2 pcs  
 2432 2 pcs

Complete Part No example:  
**624015HP** includes:  
 624HP 2 pcs  
 24015HP 1 pc  
 24HP 2 pcs  
 2432 2 pcs

### Flange bend

Size	Complete Part No	Complete ID Code	H	Bending Radius	Weight [kg]	Body Part No	Body ID Code
1 1/2"	<b>624018HP*</b>	1602206600	240	116	6.90	24018HP	1602001550
2"	<b>632018HP*</b>	1602207100	275	173	10.0	32018HP	1602002050

### Elbow flange

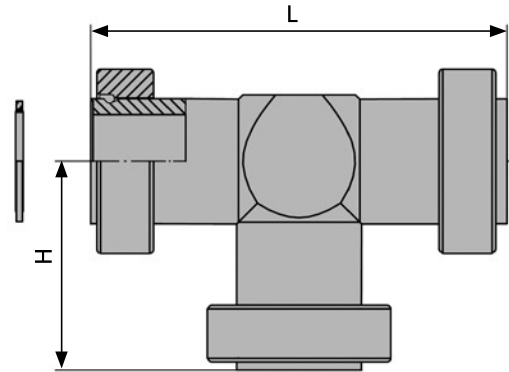
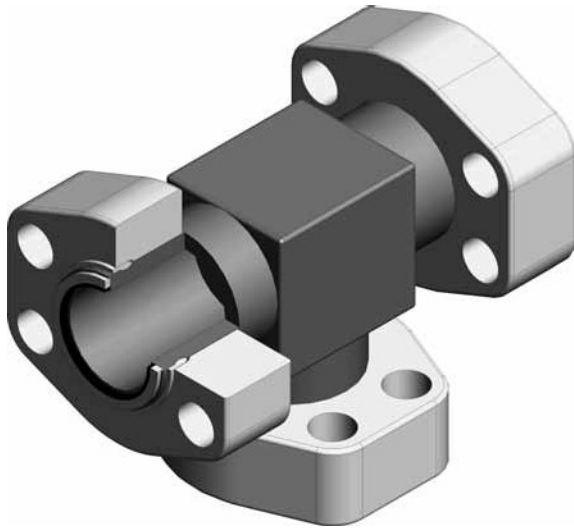
Size	Complete Part No	Complete ID Code	H	Weight [kg]	Body Part No	Body ID Code
1 1/2"	<b>624015HP</b>	1601207600	90	5.08	24015HP	1601002050
2"	<b>632015HP</b>	1601208100	110	7.99	32015HP	1601002550

Body material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 \*) Not available in stainless steel  
 Other materials on request.

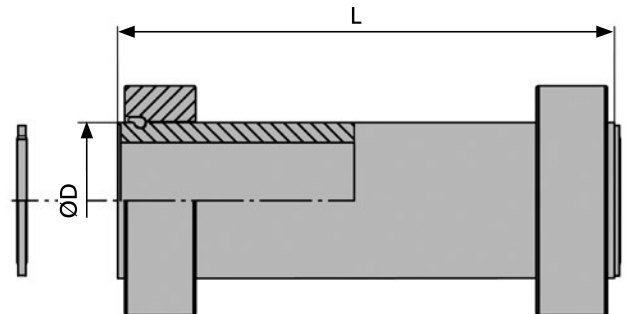
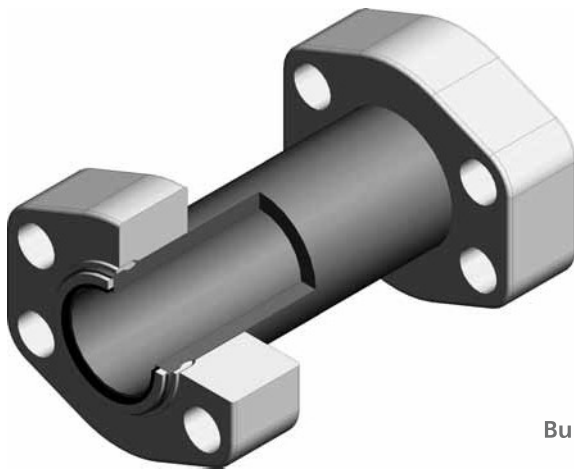
Flange dimensions page 79  
 Bonded seals page 117

## GS-HP Retain Ring™ System

ISO 6162-2 (SAE J 518 Code 62)



Tee flange



Bulkhead flange

Complete Part No example:  
**624016HP** includes:  
 624HP 3 pcs  
 24016HP 1 pc  
 24HP 3 pcs  
 2432 3 pcs

Complete Part No example:  
**624019HP** includes:  
 624HP 2 pcs  
 24019HP 1 pc  
 24HP 2 pcs  
 2432 2 pcs

### Tee flange

Size	Complete Part No	Complete ID Code	L	H	Weight [kg]	Body Part No	Body ID Code
1 1/2"	<b>624016HP</b>	1701232100	180	90	4.75	24016HP	1701008100
2"	<b>632016HP</b>	1701234100	220	110	7.05	32016HP	1701010100

### Bulkhead flange

Size	Complete Part No	Complete ID Code	L	D	Weight [kg]	Body Part No	Body ID Code
1 1/2"	<b>624019HP</b>	1904061100	180	57	4.50	24019HP	1904001700
2"	<b>632019HP</b>	1904061600	210	68	6.92	32019HP	1904002200

Body material:  
 Standard= carbon steel, zinc plated  
 Stainless steel= add SS after Part No  
 Other materials on request.

Flange dimensions page 79  
 Bonded seals page 117