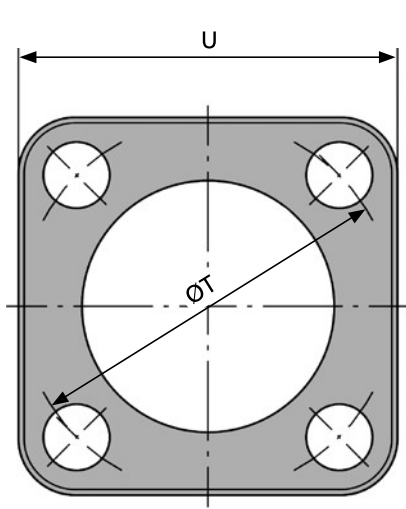


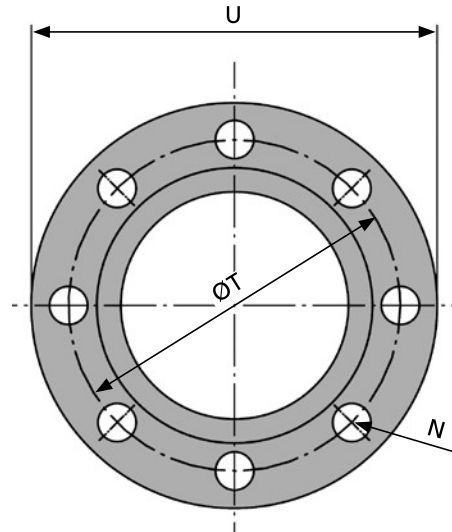
Flange dimensions.....	126
Retain ring flanges.....	127
Flare flanges.....	128
Counter flanges.....	129
Grooving direct on to pipe.....	130
Flare flange connections.....	131
Flange for welding (2"–4").....	132
Flange for welding (4 1/2"–14").....	133
Female thread flange, BSP.....	134
Tee flange.....	135
Tee block.....	136
Tee between, BSP.....	137
Blind flange.....	138
Elbow block.....	139
Elbow flange.....	140
Flange bend.....	141
Reducer flange.....	142
Reducer block.....	143
Bulkhead flange.....	144
Insert cones.....	145
Non return valve.....	146
Adapter.....	147
Retain ring.....	148
Bonded seal.....	149
Seal carrier – Type S and Type D.....	150
Seal carrier.....	151
O-ring for seal carriers.....	152
O-ring for insert cones.....	153
GS-HP Retain Ring™ System	
Grooving direct to pipe/Flange for welding.....	154
Female thread flange, BSP/Flange bend.....	155
Bulkhead flange.....	156

Flange dimensions

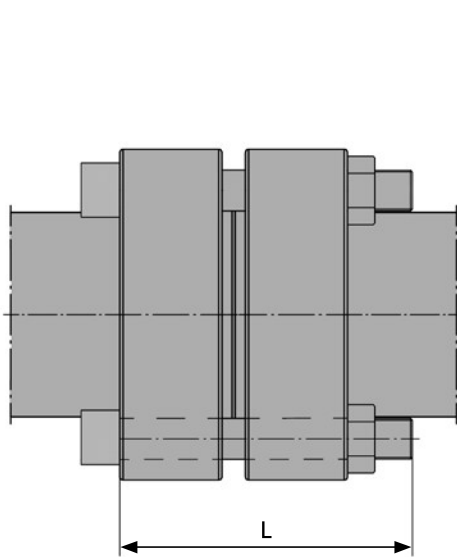
Drilled to ISO 6164 up to 4"



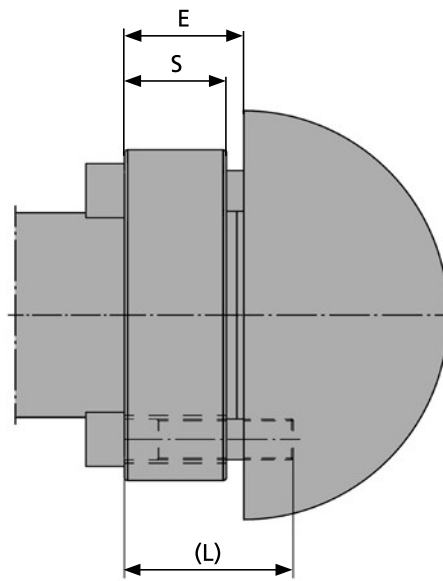
424–456



860–8224



Flange to flange



Flange to block

Pipe size	GS-flange type	T	E	S	U	N	Bolt L DIN 912, 8.8	W.P. [bar]
1 1/2"	424	85	38	35	90	4	M16x100(60)	400
2"	432	98	42	40	100	4	M16x110(60)	400
2 1/2"	440	118	47	40	120	4	M20x120(70)	400
3"	448	145	55	45	145	4	M24x140(80)	400
4"	456	175	56	50	180	4	M30x160(100)	400
4 1/2"	860	175	60	50	214	8	M20x140(80)	350
5"	864	205	69	60	245	8	M24x180(100)	350
6"	880	245	78	70	300	8	M30x220(120)	350
8"	888	290	78	70	350	8	M30x220(130)	350
8"	896	315	78	70	385	8	M36x220(130)	250
10"	8160/273	375	110	100	450	12	M36x300(180)	250
12"	8224/323.9	440	130	120	520	16	M39x360(220)	210
14"	8224/355.6	440	130	120	520	16	M39x360(220)	210

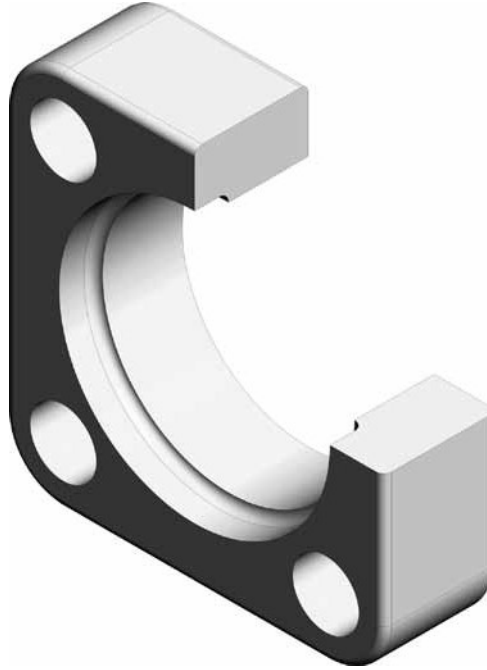
Sizes from 4 1/2" to 14" according to hydraulic equipment supplier.

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

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

Retain ring flange

Drilled to ISO 6164 up to 4"



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]
2"	66	432	1104000100	432HDG	1114009000	432SS	1204000100	400	1.70
2 1/2"	80	440	1104030000	440HDG	1114039000	440SS	1204030000	400	2.80
3"	97	448	1104060000	448HDG	1114069000	448SS	1204060000	400	4.55
4"	115	456	1104090000	456HDG	1114099000	456SS	1204090000	400	6.70
4 1/2"	130	860	1104180000	860HDG	1114240200	860SS	1204180000	350	7.70
5"	150	864	1104210000	864HDG	1114240300	864SS	1204210000	350	11.5
6"	190	880	1104240000	880HDG	1114240500	880SS	1204240000	350	22.3
8"	220	888	1104270000	888HDG	1114240550	888SS	1204270000	350	28.1
8"	250	896	1104300000	896HDG	1114240700	896SS	1204300000	250	30.5

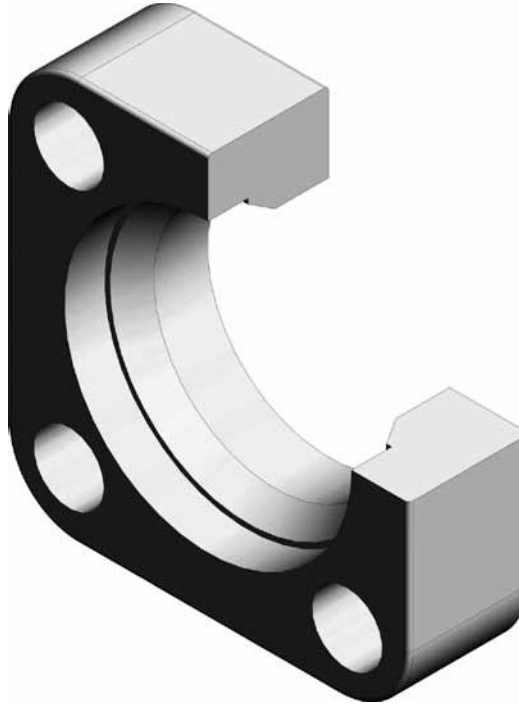
ANSI 36.10/36.19 pipes

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]
2"	60.3	432/60.3	1104009500	432/60.3HDG	1114009400	432/60.3SS	1204009500	400	1.73
2 1/2"	73.0	440/73	1104030700	440/73HDG	1114039100	440/73SS	1204030700	400	2.82
3"	88.9	448/88.9	1104060500	448/88.9HDG	1114069500	448/88.9SS	1204060500	400	4.66
4"	114.3	456/114.3	1104091000	456/114.3HDG	1114099500	456/114.3SS	1204099700	400	6.72
5"	141.3	864/141.3	1104211000	864/141.3HDG	1114240310	864/141.3SS	1204211000	350	12.5
6"	168.3	880/168.3	1104240300	880/168.3HDG	1114240400	880/168.3SS	1204240300	350	23.8
8"	219.1	888/219.1	1104272000	888/219.1HDG	1114240600	888/219.1SS	1204272000	350	28.1
10"	273.0	8160/273	1104306000	8160/273HDG	1114246000	8160/273SS	1204306000	250	66.0
12"	323.9	8224/323.9	1104310000	8224/323.9HDG	1114260100	8224/323.9SS	1204310000	210	48.8
14"	355.6	8224/355.6	1104320000	8224/355.6HDG	1114260300	8224/355.6SS	1204320000	210	83.2

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

Flare flange

Drilled to ISO 6164 up to 4"



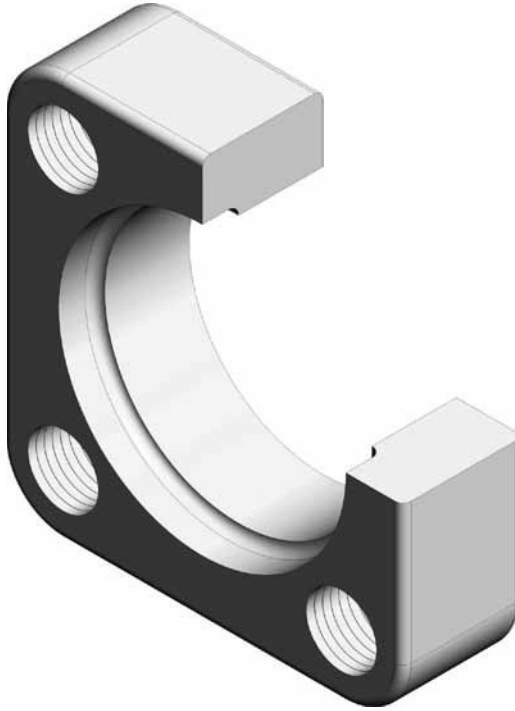
Metric pipes

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 1/2"	50	424F	1104000050	424FHDG	1114008000	424FSS	1204000060	400	1.25
1 1/2"	56	424F/56	1104000060	424F/56HDG	1114008010	424F/56SS	1204000070	400	1.34
2"	60	432F	1104001000	432FHDG	1114009200	432FSS	1204001000	400	1.70
2"	66	432F/66	1104010110	432F/66HDG	1114009210	432F/66SS	1204009510	400	1.55
2 1/2"	73	440F	1104032700	440FHDG	1114039300	440FSS	1204032700	400	2.80
3"	90	448F	1104060100	448FHDG	1114069100	448FSS	1204060100	400	4.40

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

Counter flange

Drilled to ISO 6164 up to 4"



Retain ring flange

Size	Part No	ID Code	Bolt , DIN 912, 8.8	Weight [kg]
2"	432/M16	1104010200	M16X65	1.70
2 1/2"	440/M20	1104033100	M20X90	2.80
3"	448/M24	1104061000	M24X100	4.55
4"	456/M30	1104095000	M30X110	6.70

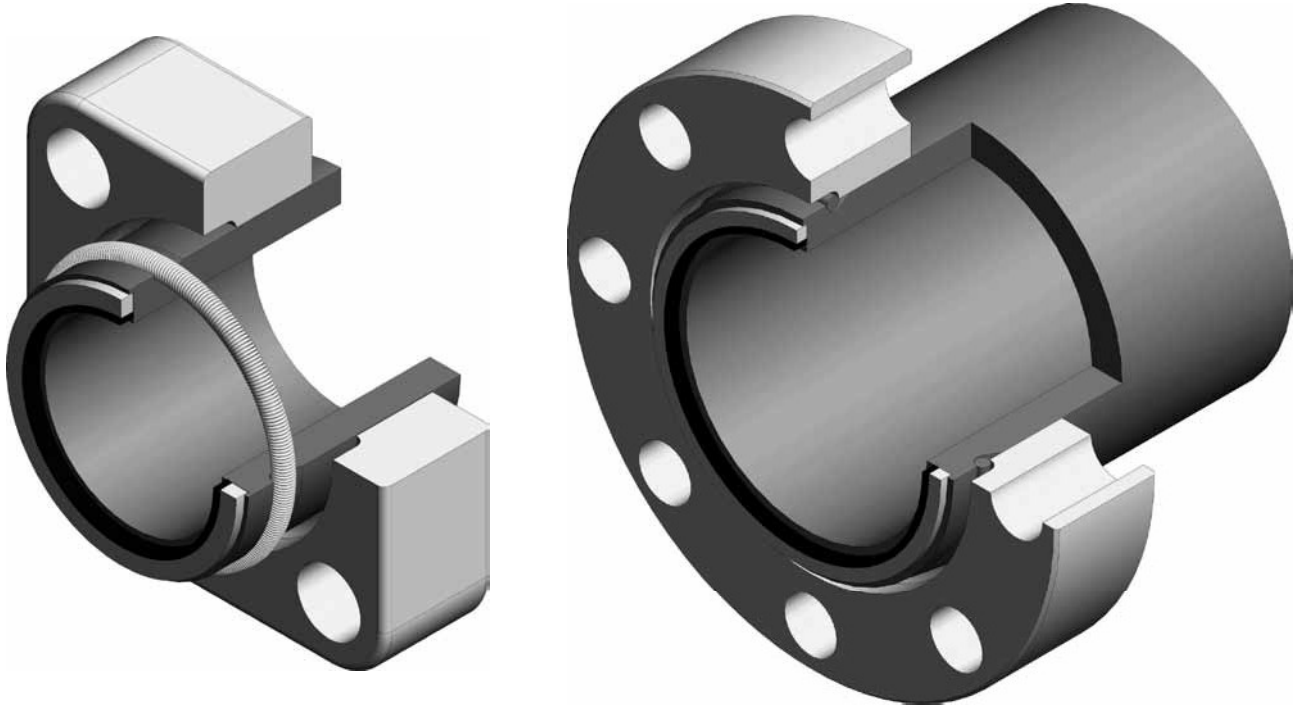
Flare flange

Size	Part No	ID Code	Bolt , DIN 912, 8.8	Weight [kg]
2"	432F/M16	1104010300	M16X65	1.70
2 1/2"	440F/M20	1104033200	M20X80	2.80

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

Grooving direct on to pipe

Drilled to ISO 6164 up to 4"



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
2"	66.0x8.5	432	1104000100	32	1902006050	3219	2701007000
2 1/2"	80.0x10.0	440	1104030000	40	1902007050	4037	2701008000
3"	97.0x12.0	448	1104060000	48	1902008050	4839	2701009000
4"	115.0x15.0	456	1104090000	56	1902010050	5644	2701011000
4 1/4"	130.0x15.0	860	1104180000	60	1902011050	6000	2701012000
5"	150.0x15.0	864	1104210000	64	1902012050	6455	2701013000
6"	190.0x20.0	880	1104240000	80	1902013050	8001	2701014200
8"	220.0x20.0	888	1104270000	88	1902015250	*	-
8"	250.0x25.0	896	1104300000	96	1902015050	9600	2701015000

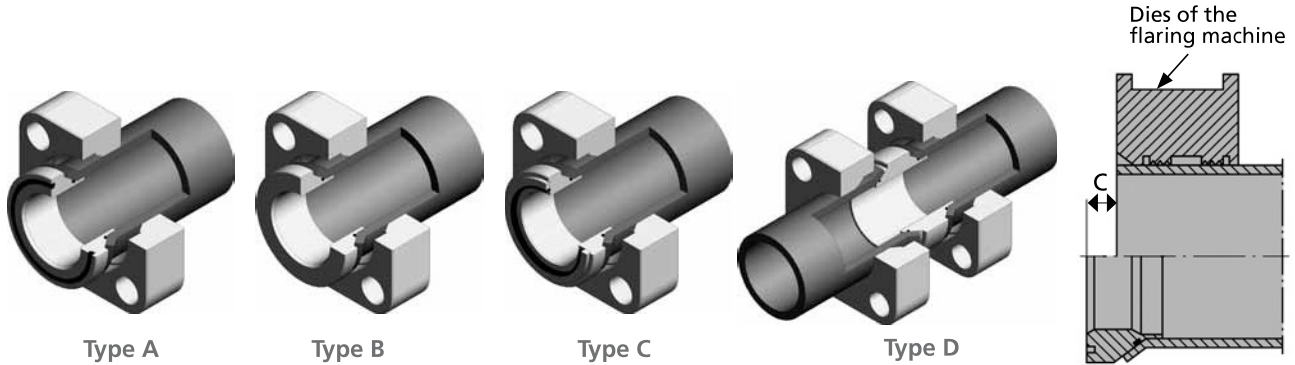
ANSI 36.10/36.19 pipes

Size	Pipe O.D.	Flange Part No	Flange ID Code	Retain Ring Part No	Retain Ring ID Code	Bonded Seal Part No	Bonded Seal ID Code
2"	60.3	432/60.3	1104011000	32/60.3	1902006250	3260	2701007400
2 1/2"	73.0	440/73	1104030700	40/73.0	1902007250	4073	2701008200
3"	88.9	448/88.9	1104060500	48/88.9	1902008250	4888	2701009200
4"	114.3	456/114.3	1104091000	56	1902010050	5644	2701011000
5"	141.3	864/141.3	1104211000	64/141.3	1902012250	*	-
6"	168.3	880/168.3	1104240300	80/168.3	1902013250	*	-
8"	219.1	888/219.1	1104272000	88	1902015250	*	-
10"	273.0	8160/273	1104306000	160/273	1902005050	*	-
12"	323.9	8224/323.9	1104310000	224/323.9	1902016050	*	-
14"	355.6	8224/355.6	1104320000	224/355.6	1902017050	*	-

*) From sizes 5" to 10" use seal carrier instead of bonded seal (flat pipe end).

Flare flange connections

Drilled to ISO 6164 up to 4"



Complete Part No example:
424/50X5FA includes:
 424F 1 pc
 24/50X5FA 1 pc
 OR47.22X3.53 1 pc
 OR41X1.78 1 pc

Type A

Size	Pipe Size	Complete Part No	Complete ID Code	C	Weight [kg]	Insert Part No	O-Ring Part No	O-Ring2 Part No
1 1/2"	50x5	424/50X5FA	1401540000	11	1.10	24/50X5FA	OR47.22X3.53	OR41X1.78
1 1/2"	56x8.5*	424/56X8.5FA	1401540700	12	1.60	24/56X8.5FA	OR47.22X3.53	OR37.82X1.78
2"	60x6	432/60X6FA	1401542000	11	2.00	32/60X6FA	OR56.75X3.53	OR47.35X1.78
2"	66x8.5*	432/66X8.5FA	1401542700	12	2.00	32/66X8.5FA	OR56.75X3.53	OR47.35X1.78
2 1/2"	73x7	440/73X7FA	1401545000	12	2.60	40/73X7FA	OR69.44X3.53	OR56.87X1.78
3"	90x9*	448/90X9FA	1401550000	14	5.10	48/90X9FA	OR85.32X3.53	OR72.75X1.78

Type B

Size	Pipe Size	Complete Part No	Complete ID Code	C	Weight [kg]	Insert Part No	O-Ring2 Part No
1 1/2"	50x5	424/50X5FB	1401540200	11	1.10	24/50X5FB	OR41X1.78
1 1/2"	56x8.5*	424/56X8.5FB	1401540705	12	1.60	24/56X8.5FB	OR37.82X1.78
2"	60x6	432/60X6FB	1401542200	11	2.00	32/60X6FB	OR47.35X1.78
2"	66x8.5*	432/66X8.5FB	1401542705	12	2.00	32/66X8.5FB	OR47.35X1.78
2 1/2"	73x7	440/73X7FB	1401545200	12	2.60	40/73X7FB	OR56.87X1.78
32	90x9*	448/90X9FB	1401550005	14	5.10	48/90X9FB	OR72.75X1.78

Type C

Size	Pipe Size	Complete Part No	Complete ID Code	C	Weight [kg]	Insert Part No	O-Ring2 Part No	Bonded Seal Part No
1 1/2"	50x5	424/50X5FC	1401540400	11	1.10	24/50X5FC	OR41X1.78	2432
1 1/2"	56x8.5*	424/56X8.5FC	1401540710	12	1.60	24/56X8.5FC	OR37.82X1.78	2432
2"	60x6	432/60X6FC	1401542400	11	2.00	32/60X6FC	OR47.35X1.78	3219
2"	66x8.5*	432/66X8.5FC	1401542710	12	2.00	32/66X8.5FC	OR47.35X1.78	3219
2 1/2"	73x7	440/73X7FC	1401545400	12	2.60	40/73X7FC	OR56.87X1.78	4037
3"	90x9*	448/90X9FC	1401550010	14	5.10	48/90X9FC	OR72.75X1.78	4839

Type D

Size	Pipe Size	Complete Part No	Complete ID Code	Weight [kg]	Insert Part No	O-Ring2 Part No
1 1/2"	50x5	424/50X5FD	1401540600	3.30	24/50X5FD	OR41X1.78
1 1/2"	56x8.5*	424/56X8.5FD	1401540715	3.20	24/56X8.5FD	OR37.82X1.78
2"	60x6	432/60X6FD	1401542600	3.80	32/60X6FD	OR47.35X1.78
2"	66x8.5*	432/66X8.5FD	1401542715	3.70	32/66X8.5FD	OR47.35X1.78
2 1/2"	73x7	440/73X7FD	1401545600	5.20	40/73X7FD	OR56.87X1.78
3"	90x9*	448/90X9FD	1401550015	9.00	48/90X9FD	OR72.75X1.78

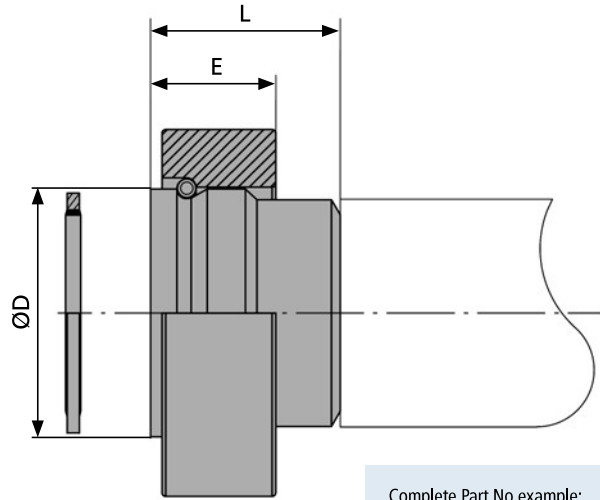
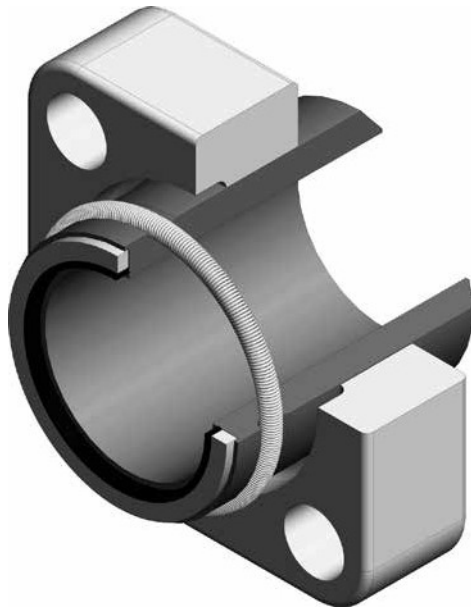
Material possibilities page 168.

* = Flaring machine requirements GSF 220-HD, GSF 400, FP 170 or FP 275.

Flanges page 128
 O-rings page 153
 Bonded seals page 149
 Insert cones page 145

Flange for welding (2"–4")

Drilled to ISO 6164 up to 4"



Complete Part No example:
432011 includes:
 432 1 pc
 32011 1 pc
 32 1 pc
 3219 1 pc

Size	Pipe Size	Complete Part No	Complete ID Code	L	E	ØD	Weight [kg]	Body Part No	Body ID Code
2"	66x8,5	432011	1301529100	75	42	66	2.41	32011	1301046700
2"	50x9,0	432001	1301526100	50	42	66	2.24	32001	1301041900
2"	60x6,0	432002	1301526400	50	42	66	2.06	32002	1301042500
2"	60x8,0	432003	1301526700	50	42	66	2.15	32003	1301043100
2"	48,3x5,6	432008	1301528200	50	42	66	2.17	32008	1301044900
2"	60x10,0	432009	1301528500	50	42	66	2.23	32009	1301045500
2"	56x8,5	432010	1301528800	50	42	66	2.20	32010	1301046100
2"	60,3x8,74	432085	1301529400	75	42	66	2.30	32085	1301046800
2"	60,3x11,07	432086	1301529600	75	42	66	2.35	32086	1301047400
2 1/2"	80x10,0	440011	1301533500	85	43	80	3.70	40011	1301052200
2 1/2"	65x8,0	440003	1301531200	50	43	80	3.18	40003	1301048600
2 1/2"	76,1x6,3	440006	1301532100	50	43	80	2.98	40006	1301049800
2 1/2"	76,1x12,5	440007	1301532400	50	43	80	3.22	40007	1301050400
2 1/2"	73x7,01	440010	1301533300	50	43	80	2.99	40010	1301051600
2 1/2"	73x9,53	440085	1301533900	90	43	80	3.00	40085	1301053400
2 1/2"	73x14,02	440086	1301534200	90	43	80	3.50	40086	1301053500
3"	97x12,0	448011	1301537300	110	51	97	6.32	48011	1301057600
3"	76,1x12,5	448004	1301535200	60	51	97	5.64	48004	1301054600
3"	80x10,0	448005	1301535500	60	51	97	5.30	48005	1301055200
3"	88,9x8,8	448006	1301535800	60	51	97	5.01	48006	1301055800
3"	88,9x12,5	448007	1301536100	60	51	97	5.30	48007	1301056400
3"	88,9x7,62	448010	1301537000	60	51	97	4.92	48010	1301057000
3"	88,9x11,13	448085	1301537600	110	51	97	5.70	48085	1301058200
3"	88,9x15,24	448086	1301537800	110	51	97	6.30	48086	1301058800
4"	115x15,0	456011	1301541600	140	56	115	11.5	56011	1301063000
4"	88,9x12,5	456003	1301539400	80	56	115	9.51	56003	1301060000
4"	100x10,0	456005	1301540000	80	56	115	9.04	56005	1301060600
4"	101,6x8,1	456006	1301540300	80	56	115	8.85	56006	1301061200
4"	101,6x16,0	456007	1301540600	80	56	115	9.64	56007	1301061800
4"	114,3x17,5	456010	1301541300	90	56	115	10.2	56010	1301062400
4"	114,3x13,49	456085	1301542500	140	56	115	8.90	56085	1301064200
4"	114,3x17,1 2	456086	1301542700	140	56	115	10.6	56086	1301064700

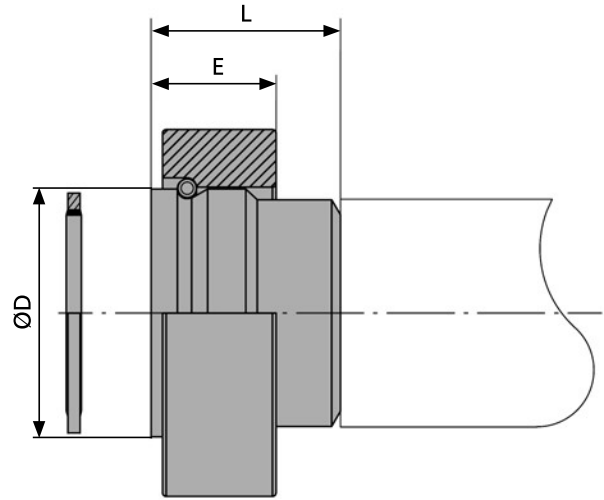
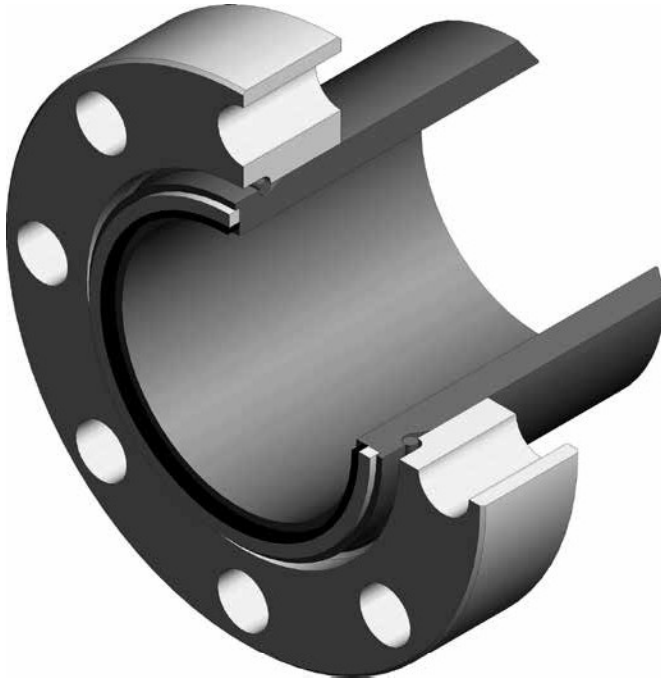
Body material:
 Standard= carbon steel
 Stainless steel= add SS after Part No
 Other materials on request.
 Material possibilities page 168.

Welding hubs for other pipe sizes on request.

Flanges page 127
 Retain rings page 148
 Bonded seals page 149

Flange for welding (4 1/2"–10")

Drilled to ISO 6164 up to 4"



Size	Pipe Size	Complete Part No	Complete ID Code	L	E	ØD	Weight [kg]	Body Part No	Body ID Code
4 1/2"	130x15.0	860011	1301573900	130	54	130	12.4	60011	1301067200
4 1/2"	88.9x12.5	860002	1301573200	100	54	130	11.4	60002	1301066200
4 1/2"	101.6x8.1	860006	1301573600	100	54	130	10.7	60006	1301066600
4 1/2"	110x12.5	860008	1301573800	100	54	130	11.2	60008	1301066800
5"	150x15.0	864011	1301576300	155	56	150	18.3	64011	1301071000
5"	114.3x12.5	864001	1301573950	100	56	150	15.8	64001	1301067900
5"	139.7x14.2	864002	1301574000	100	56	150	15.6	64002	1301068000
5"	141.3x15.88	864085	1301574200	100	56	150	16.0	64085	1301068100
5"	141.3x19.05	864086	1301577000	100	56	150	17.8	64086	1301071500
6"	190x20.0	880011	1301580200	175	78	190	29.9	80011	1301074000
6"	139.7x14.2	880001	1301579000	150	78	190	28.5	80001	1301072200
6"	168.3x17.5	880003	1301579300	150	78	190	28.1	80003	1301072800
6"	168.3x18.26	880085	1301581200	150	78	190	32.0	80085	1301075500
6"	168.3x21.95	880086	1301581400	150	78	190	33.1	80086	1301075000
8"	250x25.0	896011	1301596900	200	78	250	57.4	96011	1301076700
8"	168.3x17.5	896001	1301596100	150	78	250	55.1	96001	1301076100
8"	193.7x20.0	896002	1301596200	150	78	250	54.0	96002	1301076200
8"	219.1x22.23	896086	1301596300	150	78	250	53.0	96086	1301076300
10"	273x28.58	8160085B*	1301596950	250	114	273	107	160085B	1301076955
10"	273x25.40	8160086B*	1301596955	250	114	273	103	160086B	1301076960

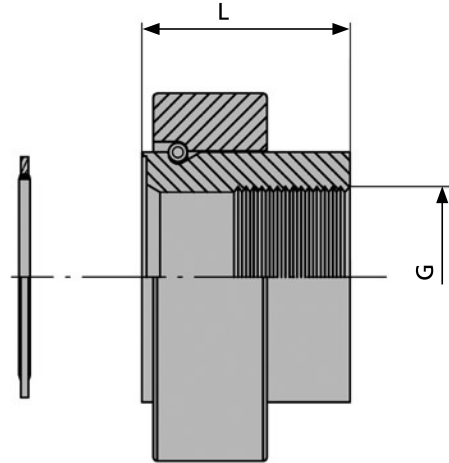
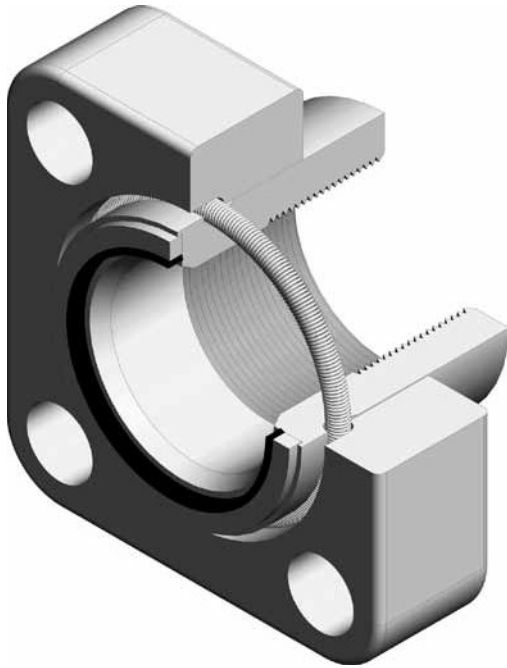
Body material:
 Standard= carbon steel
 Stainless steel= add SS after Part No
 Other materials on request.
 Material possibilities page 168.
 Welding hubs for other pipe sizes on request.

* = Flat pipe end, seal carrier is needed.

Flanges page 127
 Retain rings page 148
 Bonded seals page 149
 Seal carriers page 150–151

Female thread flange, BSPP

Drilled to ISO 6164 up to 4"



Complete Part No example:

432013 includes:

432	1 pc
32013	1 pc
32	1 pc
3219	1 pc

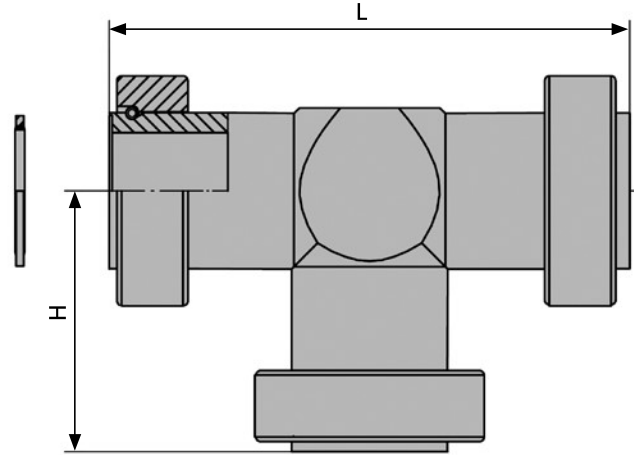
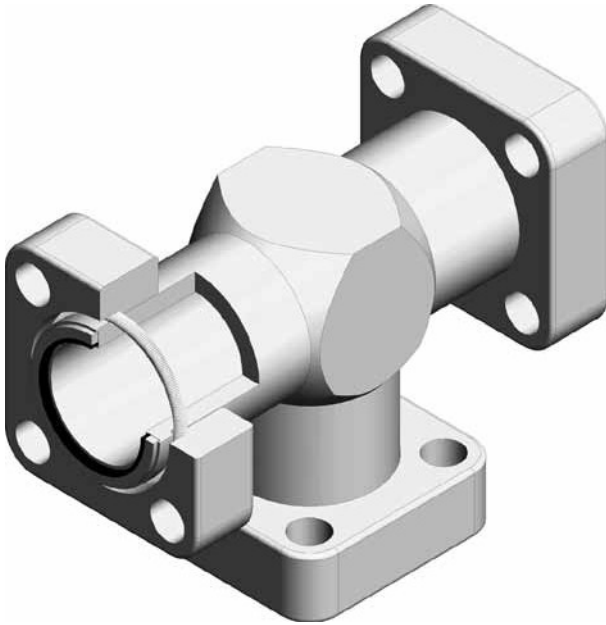
Size	Complete Part No	Complete ID Code	L	G	Weight [kg]	Body Part No	Body ID Code
2"	432013	1307505000	55	1 1/2"	3.10	32013	13070090
2 1/2"	440013	1307506000	80	2"	3.60	40013	13070100
3"	448013	1307506300	85	2 1/2"	5.80	48013	13070110
4"	456013	1307506600	100	3"	10.5	56013	13070140

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

Flanges page 127
 Retain rings page 148
 Bonded seals page 149

Tee flange

Drilled to ISO 6164 up to 4"



Complete Part No example:

432016 includes:
 432 3 pcs
 32016 1 pc
 32 3 pcs
 3219 3 pcs

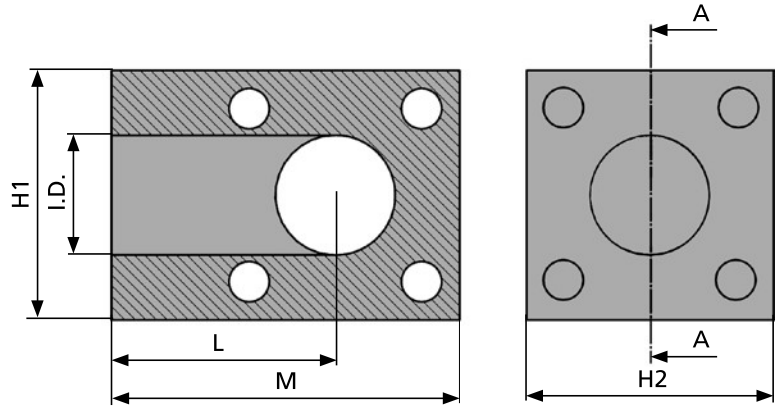
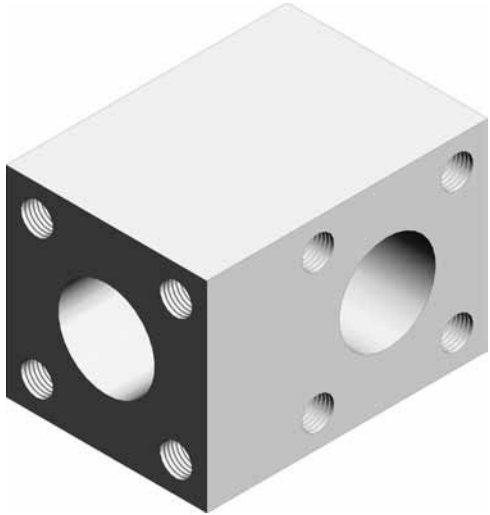
Size	Complete Part No	Complete ID Code	L	H	Weight [kg]	Body Part No	Body ID Code
2"	432016	1701214000	220	110	8.97	32016	1701010000
2 1/2"	440016	1701216000	260	130	13.0	40016	1701012000
3"	448016	1701218000	320	160	23.1	48016	1701014000
4"	456016	1701220000	400	200	41.7	56016	1701016000
4 1/2"	860016	1701235500	390	195	45.3	60016	1701018000
5"	864016	1701236000	460	230	66.2	64016	1701020000
6"	880016	1701236500	550	275	112	80016	1701022000
8"	896016	1701237000	650	325	227	96016	1701024000

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

Flanges page 127
 Retain rings page 148
 Bonded seals page 149

Tee block

Drilled to ISO 6164 up to 4"



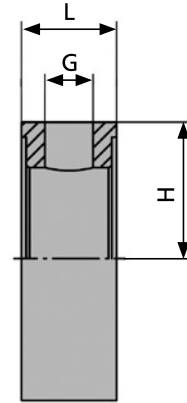
Size		Part No	ID Code	L	H1	H2	M	I.D.	Weight [kg]
Body	Outlet								
2"		432116	1702014500	90	100	100	140	48	7.39
2"	1 1/2"	432/624/432116	1702014900	90	100	70	140	48/38/48	6.55
2"	1 1/4"	432/620/432116*	1702014800	90	100	70	140	48/30/48	6.81
2"	1"	432/616/432116	1702014700	90	100	70	140	48/23/48	6.08
2 1/2"		440116	1702015800	100	120	120	160	60	13.1
2 1/2"	2"	440/432/440116	1702016450	100	120	100	160	60/48/60	10.6
2 1/2"	1 1/2"	440/624/440116	1702016700	100	120	80	160	60/38/60	8.10
2 1/2"	1 1/4"	440/620/440116*	1702016650	90	120	80	150	60/30/60	8.40
3"		448116	1702017050	150	150	150	225	73	27.8
3"	2 1/2"	448/440/448116	1702017060	130	150	120	205	73/60/73	20.5
3"	2"	448/432/448116	1702017070	115	150	100	190	73/48/73	16.1
3"	1 1/2"	448/624/448116	1702017236	115	150	80	190	73/38/73	13.5
4"		456116	1702017900	145	180	180	235	85	40.7
4"	3"	456/448/456116	1702017930	135	180	150	225	85/73/85	34.7
4"	2 1/2"	456/440/456116	1702017950	135	180	120	225	85/60/85	28.2
4"	2"	456/432/456116	1702017970	115	180	120	205	85/48/85	26.0
4 1/2"		860116	1702056000	160	214	214	267	105	70.2
4 1/2"	4"	860/456/860116	1702056430	160	214	190	267	105/85/105	64.1
4 1/2"	3"	860/448/860116	1702056450	160	214	180	267	105/73/105	62.2
4 1/2"	2 1/2"	860/440/860116	1702056470	160	214	170	267	105/60/105	59.8
5"		864116	1702057000	170	238	250	295	120	102
5"	4 1/2"	864/860/864116	1702057200	170	238	250	295	120/105/120	106
5"	4"	864/456/864116	1702057730	170	238	210	295	120/85/120	94.1
5"	3"	864/448/864116	1702057750	170	238	210	295	120/73/120	96.2
6"		880116	1702058000	210	300	300	360	150	174
6"	5"	880/864/880116	1702058100	200	300	260	350	150/120/150	160
6"	4 1/2"	880/860/880116	1702058200	200	300	260	350	150/105/150	163
6"	4"	880/456/880116	1702058500	190	300	230	340	150/85/150	121
8"		896116	1702059000	270	386	386	463	200	386
8"	6"	896/880/896116	1702059300	257	386	330	450	200/150/200	332
8"	5"	896/864/896116	1702059500	237	386	300	430	200/120/200	294
8"	4 1/2"	896/860/896116	1702059700	237	386	250	430	200/105/200	297

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

Drilled to ISO 6164 up to 4"



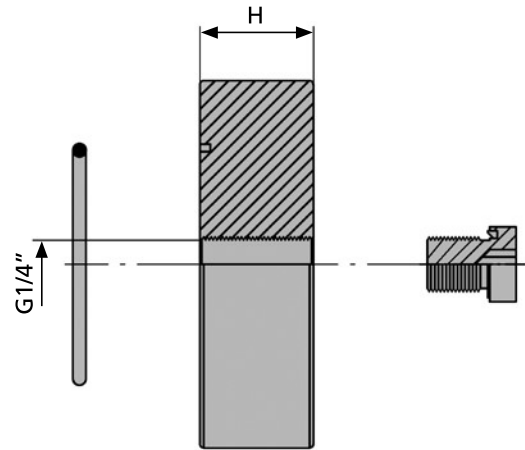
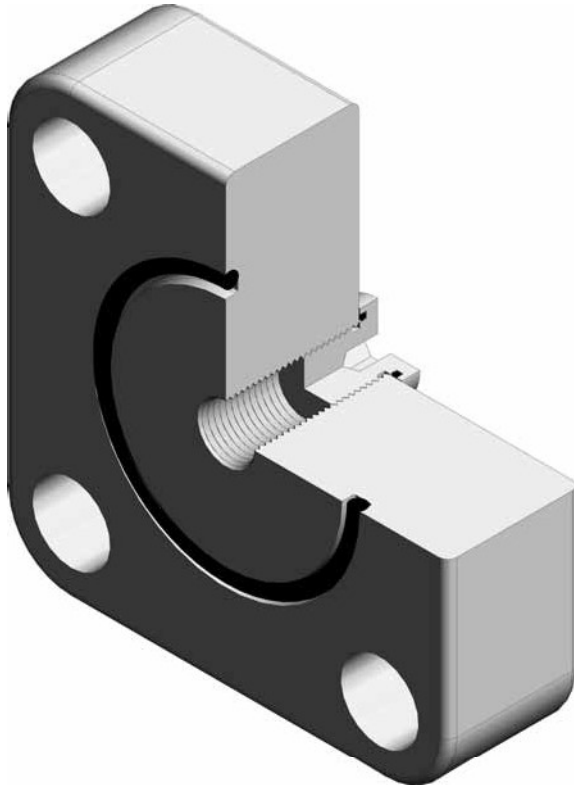
Please add measure L to bolt lengths mentioned on page 126.

Size	Part No	ID Code	H	L	G	Weight [kg]
2"	32035	1801005000	36.0	25	1/4"	0.5
2"	32036	1801005100	34.6	35	1/2"	0.6
2 1/2"	40036	1801006000	42.6	35	1/2"	1.0
2 1/2"	40037	1801006100	41.0	40	3/4"	1.0
3"	48036	1801006800	49.0	45	1/2"	1.7
3"	48037	1801006900	54.0	55	3/4"	1.9
4"	56036	1801007500	67.0	35	1/2"	2.6
4"	56037	1801008000	64.0	40	3/4"	2.8
4 1/2"	60036	1801009000	70.0	35	1/2"	3.0
4 1/2"	60037	1801009300	69.0	40	3/4"	3.3
5"	64036	1801010000	83.0	35	1/2"	4.0
5"	64037	1801010300	80.0	40	3/4"	4.3
6"	80038	1801011300	100	45	1"	10.0

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

Blind flange

Drilled to ISO 6164 up to 4"



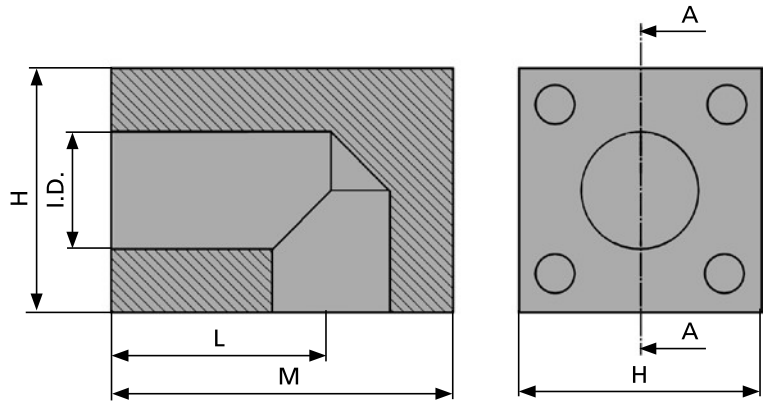
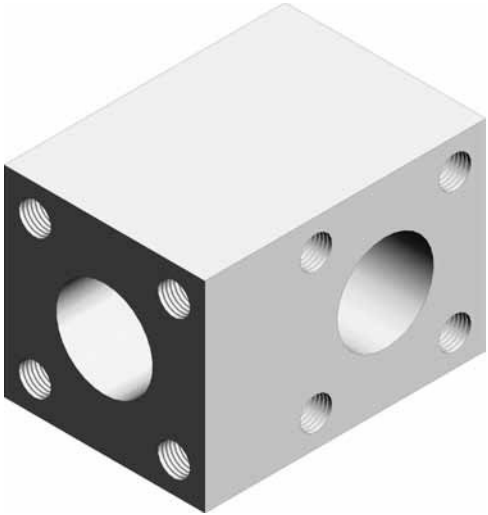
Size	Part No	ID Code	O-ring Part No	O-ring ID Code	H	Weight [kg]
2"	432125	1910508000	OR53.57X3.53	2701532100	40	2.7
2 1/2"	440125	1910508500	OR66.27X3.53	2701537900	40	3.8
3"	448125	1910509000	OR82.14X3.53	2701544000	45	6.3
4"	456125	1910509500	OR98.02X3.53	2701549000	50	10.8
4 1/2"	860125	1910513000	OR110.72X3.53	2701552000	50	15.9
5"	864125	1910513500	OR136.12X3.53	2701557000	50	20.0
6"	880125	1910514000	OR158.34X3.53	2701560000	70	32.5
8"	896125	1910515000	OR209.14X3.53	2701562900	70	42.0

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%.

Elbow block

Drilled to ISO 6164 up to 4"

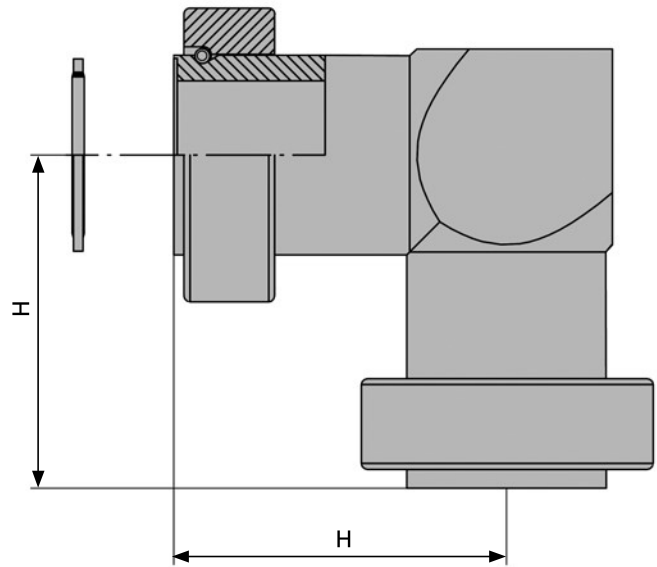
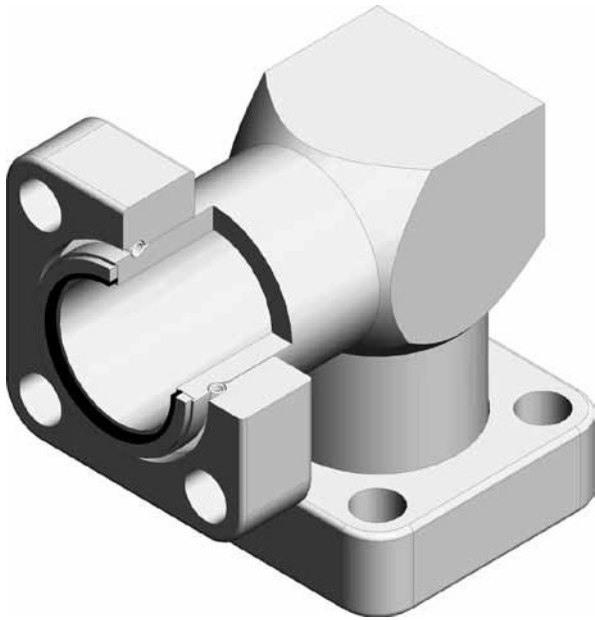


Size	Part No	ID Code	H	L	M	I.D.	Weight [kg]
2"	432115	1602003600	100	90	140	48	8.80
2 1/2"	440115	1603003700	120	100	160	60	14.5
3"	448115	1603003800	150	150	225	72	31.6
4"	456115	1603003900	180	145	235	85	48.3
4 1/2"	860115	1603010000	214	160	267	105	79.6
5"	864115	1603011000	250	170	295	120	92.9
6"	880115	1603012000	300	210	360	150	204
8"	896115	1603013000	386	270	463	200	370

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

Elbow flange

Drilled to ISO 6164 up to 4"



Complete Part No example:

432015 includes:

432	2 pcs
32015	1 pc
32	2 pcs
3219	2 pcs

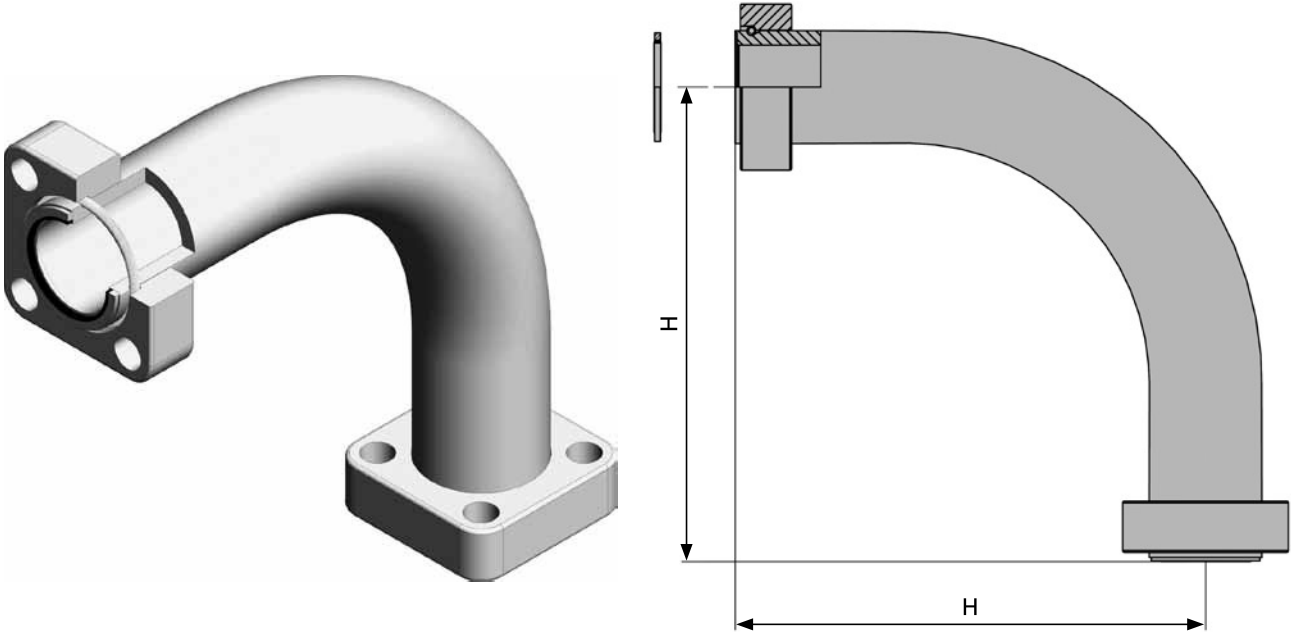
Size	Part No	ID Code	H	Weight [kg]	Body Part No	Body ID Code
2"	432015	1601203000	110	6.69	32015	1601002500
2 1/2"	440015	1601203500	130	9.67	40015	1601003000
3"	448015	1601204000	160	17.4	48015	1601003500
4"	456015	1601204500	200	32.3	56015	1601004000
4 1/2"	860015	1601208300	195	34.5	60015	1601004500
5"	864015	1601208500	230	50.4	64015	1601005000
6"	880015	1601209000	275	94.8	80015	1601005500
8"	896015	1601210000	325	178	96015	1601006000

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

Flanges page 127
 Retain rings page 148
 Bonded seals page 149

Flange bend

Drilled to ISO 6164 up to 4"



Complete Part No example:

432018 includes:

432	2 pcs
32018	1 pc
32	2 pcs
3219	2 pcs

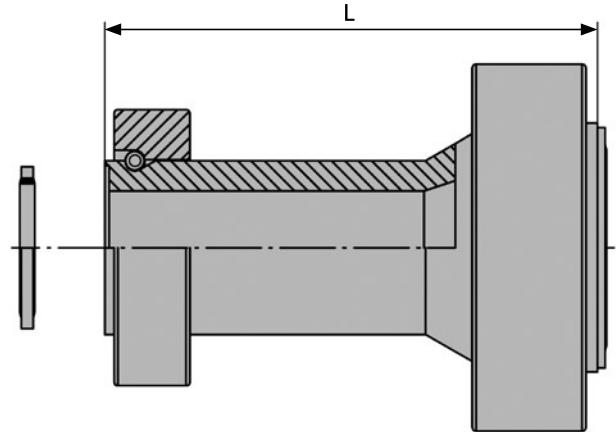
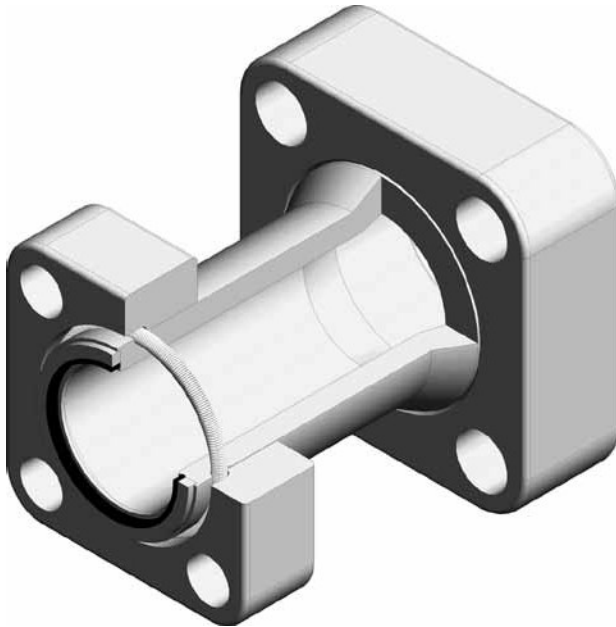
Size	Complete Part No	Complete ID Code	H	Bending Radius	Weight [kg]	Body Part No	Body ID Code
2"	432018	1602202500	275	165	8.70	32018	1602002000
2 1/2"	440018	1602203000	450	200	18.0	40018	1602002500
3"	448018	1602203500	540	244	30.8	48018	1602003000
4"	456018	1602204000	580	289	54.0	56018	1602003500
4 1/2"	860018	1602214000	610	326	62.0	60018	1602004000
5"	864018	1602215000	690	376	82.6	64018	1602004500
6"	880018	1602217000	760	380	153	80018	1602005000
8"	896018	1602219000	1000	500	319	96018	1602005500

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

Flanges page 127
 Retain rings page 148
 Bonded seals page 149

Reducer flange

Drilled to ISO 6164 up to 4"



Complete Part No example:

RF432-624 includes:

432	1 pc
624	1 pc
32-24	1 pc
32	1 pc
3219	1 pc
24	1 pc
2432	1 pc

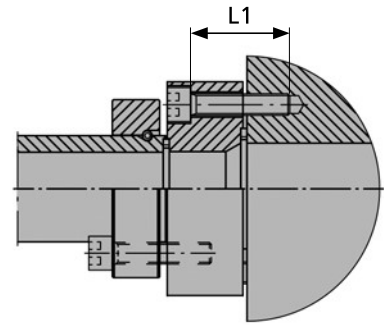
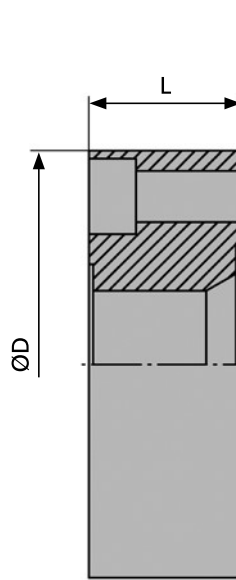
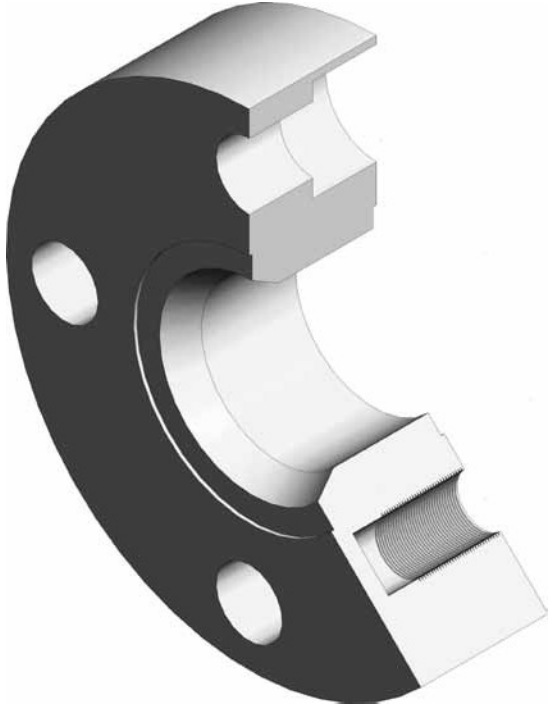
Size	Complete Part No	Complete ID Code	L	Weight [kg]	Body Part No	Body ID Code
2"–1 1/2"	RF432-624	1501212500	130	4.31	32-24	1501003500
2"–1 1/4"	RF432-620	1501212000	130	3.55	32-20	1501003000
2 1/2"–2"	RF440-432	1501213000	150	5.91	40-32	1501004500
2 1/2"–1 1/2"	RF440-624	1501213500	150	5.50	40-24	1501004000
3"–2 1/2"	RF448-440	1501214500	180	9.68	48-40	1501005500
3"–2"	RF448-432	1501214000	180	8.58	48-32	1501005000
4"–3"	RF456-448	1501515500	200	16.6	56-48	1501006700
4"–2 1/2"	RF456-440	1501215000	200	13.7	56-40	1501006500
4"–2"	RF456-432	1501214800	200	12.5	56-32	1501006000
4 1/2"–4"	RF860-456	1501536900	250	23.6	60-56	1501006928
4 1/2"–3"	RF860-448	1501536600	250	19.6	60-48	1501006925
5"–4 1/2"	RF864-860	1501538100	250	29.8	64-60	1501007400
5"–4"	RF864-456	1501537700	250	28.8	64-56	1501007000
5"–3"	RF864-448	1501537500	250	25.3	64-48	1501006950
6"–5"	RF880-864	1501540000	250	42.9	80-64	1501008500
6"–4 1/2"	RF880-860	1501539800	250	38.1	80-60	1501008300
6"–4"	RF880-456	1501539600	250	38.0	80-56	1501008000
6"–3"	RF880-448	1501539400	250	35.0	80-48	1501007800
8"–6"	RF896-880	1501541500	300	79.7	96-80	1501009300
8"–5"	RF896-864	1501541000	300	72.8	96-64	1501009000

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

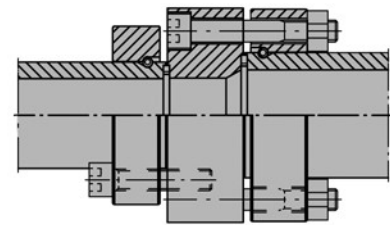
Flanges page 127
 Retain rings page 148
 Bonded seals page 149

Reducer block

Drilled to ISO 6164 up to 4"



Reducing from pipe to block



Reducing between pipes

Size	Part No	ID Code	D	L	L1 Bolt size DIN 912, 8.8	Weight [kg]
2 1/2"–2"	RBE440-432	1502115000	157	45	M20x50	5.47
2 1/2"–1 1/2"	RBE440-624	1502115400	157	45	M20x50	5.49
2 1/2"–1 1/4"	RBE440-620*	1502115200	157	45	M20x50	5.78
3"–2 1/2"	RBE448-440	1502116000	191	50	M24x55	8.29
3"–2"	RBE448-632	1502116400	191	50	M24x55	8.60
3"–1 1/2"	RBE448-624	1502116200	191	50	M24x55	8.86
4"–3"	RBE456-448	1502117200	230	60	M30x65	13.9
4"–2 1/2"	RBE456-440	1502117000	230	60	M30x65	14.6
4"–2"	RBE456-632	1502117400	230	60	M30x65	15.2
4 1/2"–4"	RBE860-456	1502122400	220	85	M20x90	18.4
4 1/2"–3"	RBE860-448	1502122200	220	85	M20x90	19.7
4 1/2"–2 1/2"	RBE860-440	1502122000	220	85	M20x90	20.5
5"–4 1/2"	RBE864-860	1502123800	250	80	M24x85	21.3
5"–4"	RBE864-456	1502123600	250	80	M24x85	21.6
5"–3"	RBE864-448	1502123400	250	80	M24x85	23.2
6"–5"	RBE880-864	1502125000	300	80	M30x90	31.1
6"–4 1/2"	RBE880-860	1502124800	300	80	M30x90	33.7
6"–4"	RBE880-456	1502124500	300	80	M30x90	33.8
8"–6"	RBE896-880	1502126400	385	100	M36x120	67.5
8"–5"	RBE896-864	1502126200	385	100	M36x120	70.8
8"–4 1/2"	RBE896-860	1502126000	385	100	M36x120	71.9

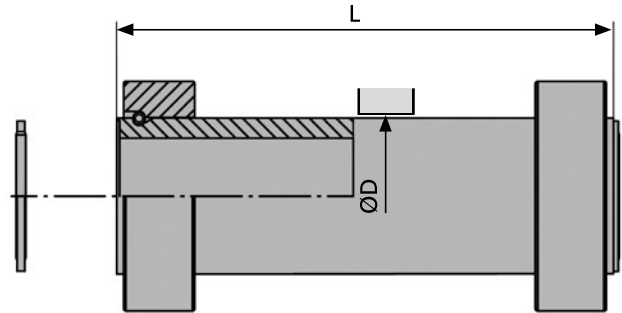
Component material:
Standard= carbon steel, zinc plated
Stainless steel= add SS after Part No
Other materials on request.

* = 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

Drilled to ISO 6164 up to 4"



Complete Part No example:

432019 includes:

432	2 pcs
32019	1 pc
32	2 pcs
3219	2 pcs

Size	Complete Part No	Complete ID Code	L	Required bulkhead opening ØD	Weight [kg]	Body Part No	Body ID Code
2"	432019	1904057000	210	68	5.80	32019	1904002000
2 1/2"	440019	1904057500	220	82	8.20	40019	1904002500
3"	448019	1904058000	240	99	14.0	48019	1904003000
4"	456019	1904058500	260	117	23.3	56019	1904003500
4 1/2"	860019	1904061800	260	132	27.0	60019	1904003800
5"	864019	1904062000	260	152	32.6	64019	1904004000
6"	880019	1904062500	290	192	60.0	80019	1904004500
8"	896019	1904063000	320	252	105	96019	1904005000

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

Flanges page 127
 Retain rings page 148
 Bonded seals page 149

Insert cones for flare flange connections

Drilled to ISO 6164 up to 4"



Type A



Type B



Type C



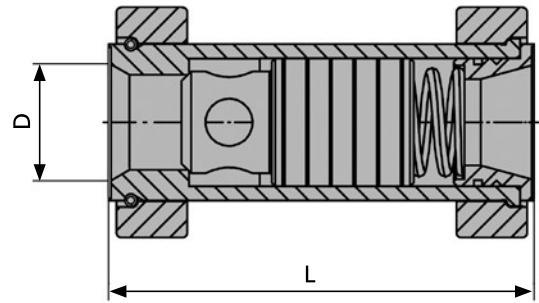
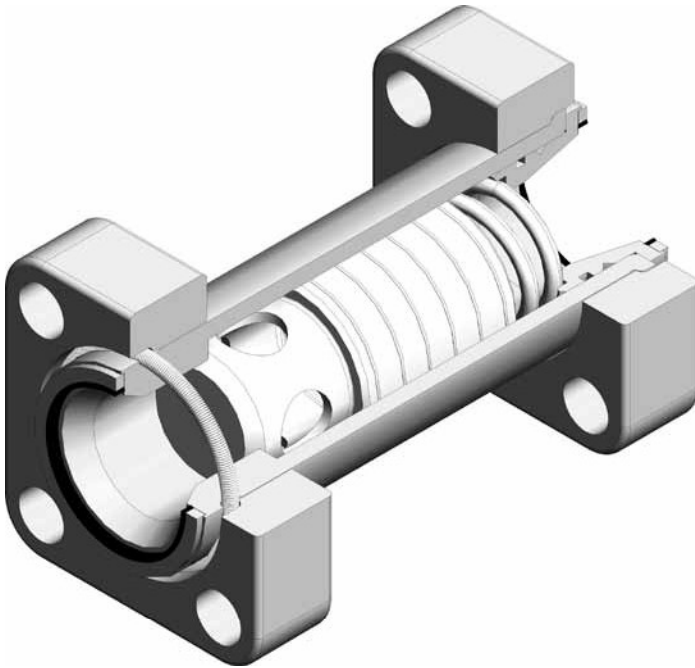
Type D

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 1/2"	24/50X5FA	1401039700	24/50X5FB	1401039800	24/50X5FC	1401039900	24/50X5FD	1401040000	50x5
2"	32/60X6FA	1401042600	32/60X6FB	1401042700	32/60X6FC	1401042800	32/60X6FD	1401042900	60x6
2 1/2"	40/73X7FA	1401045480	40/73X7FB	1401045482	40/73X7FC	1401045484	40/73X7FD	1401045486	73x7

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.

Non return valve

Drilled to ISO 6164 up to 4"



Complete Part No example:

432135 includes:

432	2 pcs
32135	1 pc
32	1 pcs
3219	2 pcs

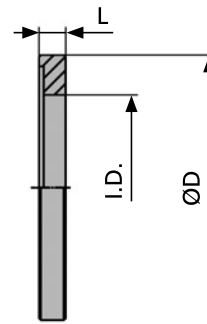
Size	Complete Part No	ID Code	W.P. [bar]	L	D	Weight [kg]
2"	432135	1912030000	400	180	49	5.2
2 1/2"	440135	1912031000	400	190	60	6.6
3"	448135	1912032000	400	200	73	9.6

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.

Flanges page 127
 Retain rings page 148
 Bonded seals page 149

Adapter between O-ring and bonded seal, metric

Drilled to ISO 6164 up to 4"



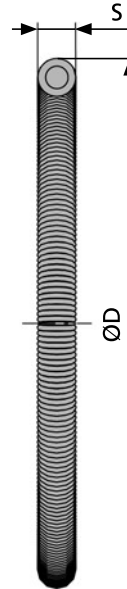
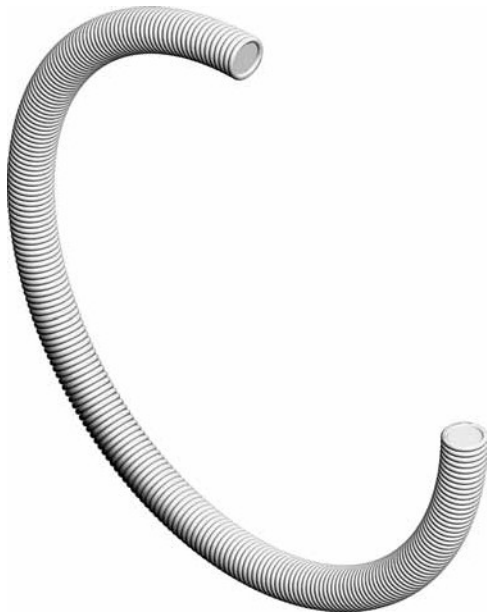
Please add 10 mm to bolt lengths mentioned on page 126.

Size	Part No	ID Code	L	D	ID	Weight [kg]
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

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

Retain ring

Drilled to ISO 6164 up to 4"



Metric pipes

Size	Part No	ID Code	Pipe Size	D	S
2"	32	1902006050	66x8.5	71	5
2 1/2"	40	1902007050	80x10	85	5
3"	48	1902008050	97x12	103	6
4"	56	1902010050	115x15	123	8
4 1/2"	60	1902011050	130x15	138	8
5"	64	1902012050	150x15	158	8
6"	80	1902013050	190x20	200	10
8"	88	1902015250	220x20	232	12
8"	96	1902015050	250x25	262	12

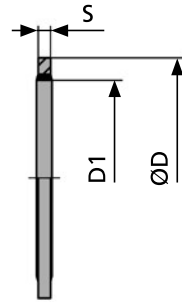
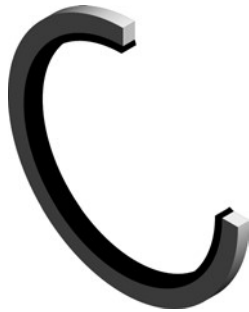
ANSI 36.10/36.19 pipes

Size	Part No	ID Code	Pipe O.D.	D	S
2"	32/60.3	1902006250	60.3	65.3	5
2 1/2"	40/73	1902007250	73.0	78.0	5
3"	48/88.9	1902008250	88.9	94.9	6
4"	56	1902010050	114.3	123	8
5"	64/141.3*	1902012250	141.3	149.3	8
6"	80/168.3	1902013250	168.3	178.3	10
8"	88	1902015250	219.1	232	12
10"	160/273	1902005050	273.0	285	12
12"	224/323.9	1902016050	323.9		
14"	224/355.6	1902017050	355.6		

Component material:
 AISI 316, special treated
 * = Could use also for pipe O.D. 139.7

Bonded seal

Drilled to ISO 6164 up to 4"



Bonded seal for metric GS-pipe ends

Size	Standard Part No	Standard ID Code	SS Part No	SS ID Code	S	D	D1
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
4"	5644	2701011000	5644SS	2701109000	4.0	110.0	95.00
4 1/2"	6000	2701012000	6000SS	2701109500	4.0	126.0	108.0
5"	6455	2701013000	6455SS	2701110000	5.0	143.7	127.0
6"	8001	2701014200	8001SS	2701110500	8.0	181.0	155.0
8"	9600	2701015000	9600SS	2701111000	9.0	240.0	205.0

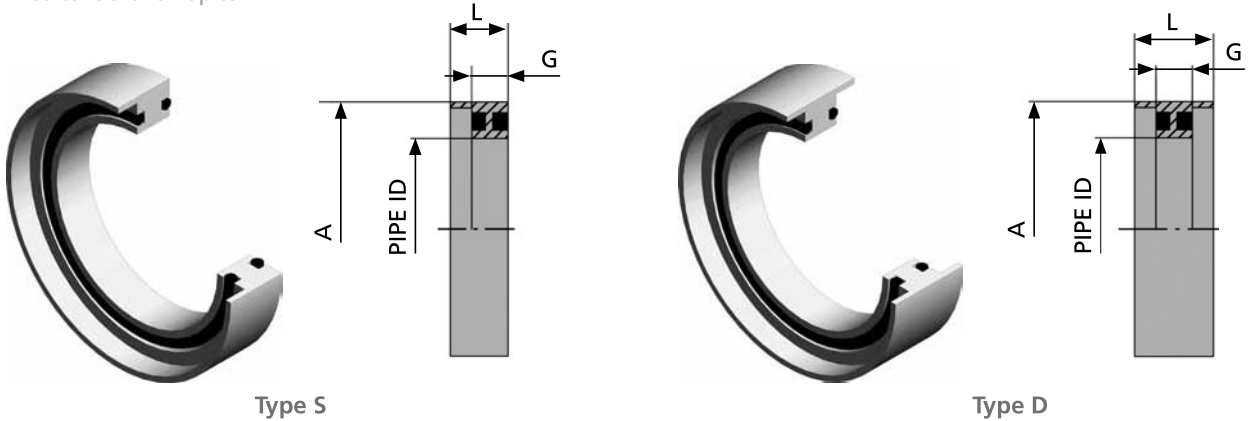
Bonded seal for ANSI 36.10/36.19 GS-pipe ends

Size	Standard Part No	Standard ID Code	SS Part No	SS ID Code	S	D	D1
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	4.0	83.80	70.00
4"	5644	2701011000	5644SS	2701109000	4.0	110.0	95.00

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

Seal carrier – Type S & Type D

Drilled to ISO 6164 up to 4"



Type S

Type D

Please add 10 mm to bolt lengths mentioned on page 126.

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

Size	Part No	ID Code	O-Ring Size	A	G	L	Pipe Size
2 1/2"	4020S	1809011000	OR66.27X3.53	84	12	15	80x10
3"	4820S	1809012000	OR82.14X3.53	102	12	15	97x12
4"	5620S	1809013000	OR98.02X3.53	120	12	15	115x15
4 1/2"	6020S	1809014000	OR110.72X3.53	135	12	15	130x15
5"	6420S	1809015000	OR136.12X3.53	155	16	19	150x15
6"	8020S	1809016000	OR158.34X3.53	195	16	19	190x20
8"	8820S	1809017000	OR194.3X5.7	225	16	19	220x20
8"	9620S	1809018000	OR209.14X3.53	257	16	19	250x25

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

Size	Part No	ID Code	O-Ring Size	A	G	L	Pipe Size
3"	4820/88.9X11.13S	1809012200	OR72.62X3.53	93	12	15	88.9x11.13
4"	5620/114.3X13.49S	1809013200	OR98.02X3.53	119.3	12	15	114.3x13.49
5"	6420/141.3X15.88S	1809015200	OR120.24X3.53	149	16	19	141.3x15.88
6"	8020/168.3X18.26S	1809016200	OR152X3.53	174	16	19	168.3x18.26
8"	8820/219.1X23.01S	1809017200	OR194.3X5.7	225	16	19	219.1x23.01
10"	16020/273X25.40S	1809019000	OR239.3X5.7	279	16	19	273x25.40
10"	16020/273X28.58S	1809019200	OR239.3X5.7	279	16	19	273x28.58

Type D with O-rings between flange and block, metric pipes

Size	Part No	ID Code	O-Ring Size	A	G	L	Pipe Size
2 1/2"	4020D	1809011100	OR66.27X3.53	84	12	18	80x10
3"	4820D	1809012100	OR82.14X3.53	102	12	18	97x12
4"	5620D	1809013100	OR98.02X3.53	120	12	18	115x15
4 1/2"	6020D	1809014100	OR110.72X3.53	135	12	18	130x15
5"	6420D	1809015100	OR136.12X3.53	155	16	22	150x15
6"	8020D	1809016100	OR158.34X3.53	195	16	22	190x20
8"	8820D	1809017100	OR194.3X5.7	225	16	22	220x20
8"	9620D	1809018100	OR209.14X3.53	257	16	22	250x25

Type D with O-rings between flange and block, ANSI 36.10/36.19 pipes

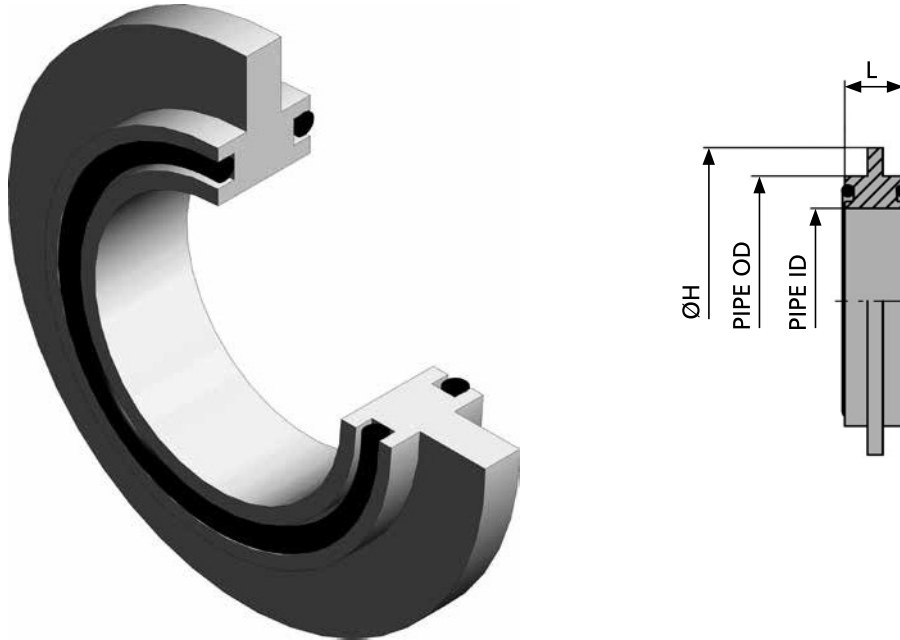
Size	Part No	ID Code	O-Ring Size	A	G	L	Pipe Size
3"	4820/88.9X11.13D	1809012300	OR72.62X3.53	93	12	18	88.9x11.13
4"	5620/114.3X13.49D	1809013300	OR98.02X3.53	119.3	12	18	114.3x13.49
5"	6420/141.3X15.88D	1809015300	OR120.24X3.53	149	16	22	141.3x15.88
6"	8020/168.3X18.26D	1809016300	OR152X3.53	174	16	22	168.3x18.26
8"	8820/219.1X23.01D	1809017300	OR194.3X5.7	225	16	22	219.1x23.01
10"	16020/273X25.40D	1809019100	OR239.3X5.7	279	16	22	273x25.40
10"	16020/273X28.58D	1809019300	OR239.3X5.7	279	16	22	273x28.58

Material possibilities:
Standard= carbon steel, zinc plated with NBR O-rings
Stainless steel with NBR O-rings= add SS after Part No
Other materials and combinations on request.

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

Seal carrier

Drilled to ISO 6164 up to 4"



Please add 10 or 20 mm to bolt lengths mentioned on page 126.

ANSI 36.10/36.19 pipes

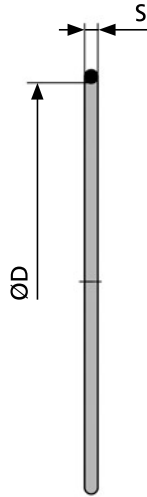
Size	Component Part No	Component ID Code	SCH	H	L	O-ring Part No
2"	3210/60.3X8.74	1809010120	160	82	12	OR47.22X3.53
2"	3210/60.3X11.07	1809010140	XXS	82	12	OR47.22X3.53
2 1/2"	4010/73X9.53	1809011120	160	99	12	OR58.74X3.53
2 1/2"	4010/73X14.02	1809011140	XXS	99	12	OR58.74X3.53
3"	4810/88.9X11.13	1809012120	160	121	12	OR72.62X3.53
3"	4810/88.9X15.24	1809012140	XXS	121	12	OR72.62X3.53
4"	5610/114.3X13.49	1809013120	160	145	12	OR98.02X3.53
4"	5610/114.3X17.12	1809013140	XXS	145	12	OR98.02X3.53
5"	6410/141.3X15.88	1809015120	160	181	12	OR120.24X3.53
5"	6410/141.3X19.05	1809015140	XXS	181	12	OR120.24X3.53
6"	8010/168.3X18.26	1809016120	160	214	16	OR152X3.53
6"	8010/168.3X21.95	1809016140	XXS	214	16	OR152X3.53
8"	8810/219.1X23.01	1809017120	160	260	16	OR194.3X5.7
8"	8810/219.1X22.23	1809017140	XXS	260	16	OR194.3X5.7
10"	16010/273X28.58	1809019120	160	338	16	OR239.3X5.7
10"	16010/273X25.40	1809019140	XXS	338	16	OR239.3X5.7
12"	22410/323.9X33.32	1809019500	160	400	20	OR289.3X5.7
12"	22410/323.9X25.40	1809019520	XXS	400	20	OR289.3X5.7
14"	22410/355.6X35.71	1809019540	160	400	20	OR299.3X5.7

Material possibilities:
 Standard= carbon steel, zinc plated with NBR O-rings
 Stainless steel with NBR O-rings= add SS after Part No
 Other pipe sizes, materials and combinations on request.

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

O-rings for seal carriers

Drilled to ISO 6164 up to 4"



For metric pipes

Pipe Size	Part No	ID Code
80x10	OR66.27X3.53	2701537900
97x12	OR82.14X3.53	2701544000
115x15	OR98.02X3.53	2701549000
130x15	OR110.72X3.53	2701552000
150x15	OR136.12X3.53	2701557000
190x20	OR158.34X3.53	2701560000
220x20	OR194.3X5.7	2701562000
250x25	OR209.14X3.53	2701562900
273x25	OR239.3X5.7	2701564500

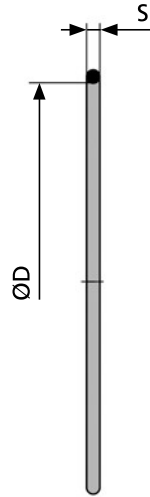
For ANSI 36.10/36.19 pipes

Pipe O.D.	Part No	ID Code
60.3	OR47.22X3.53	2701529000
73.0	OR58.74X3.53	2701535500
88.9	OR72.62X3.53	2701540500
114.3	OR98.02X3.53	2701549000
141.3	OR120.24X3.53	2701554500
139.7	OR120.24X3.53	2701554500
168.3	OR152X3.53	2701557950
219.1	OR194.3X5.7	2701562000
273.0	OR239.3X5.7	2701564500
323.9	OR289.3X5.7	2701568000

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

O-rings for insert cones

Drilled to ISO 6164 up to 4"



O-ring between insert cones

Pipe Size	Part No	ID Code
50x5	OR47.22X3.53	2701529000
60x6	OR56.75X3.53	2701535000
73x7	OR69.44X3.53	2701540000

O-ring 2 for insert cones

Pipe Size	Part No	ID Code
50x5	OR41X1.78	2701525000
60x6	OR47.35X1.78	2701529200
73x7	OR56.87X1.78	2701535200

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

GS-HP Retain Ring™ System

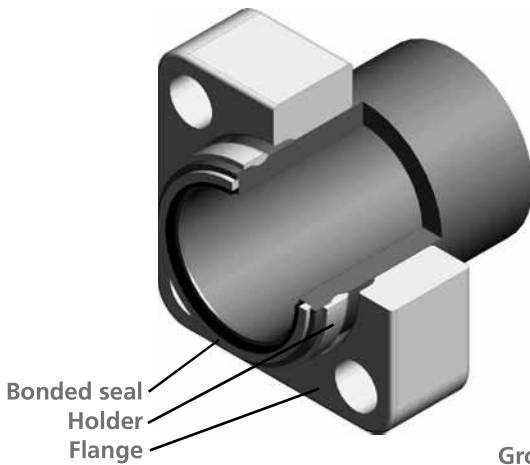
Drilled to ISO 6164 up to 4"

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.

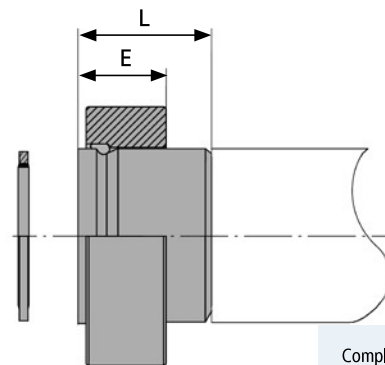
The excellent sealing performance and very high mechanical strength of new HP-invention has been proven by external testing laboratories. New type of connection technology allows much higher external loads and has unique resistance against external loads.



Grooving direct on to pipe



Flange for welding



Complete Part No example:
440011HP includes:
 440HP 1 pc
 40011HP 1 pc
 40HP 1 pc
 4037 1 pc

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
2 1/2"	80x10	440HP	1104030300	40HP	1902007500	4037	2701008000
3"	97x12	448HP	1104060300	48HP	1902008500	4839	2701009000

Flange for welding

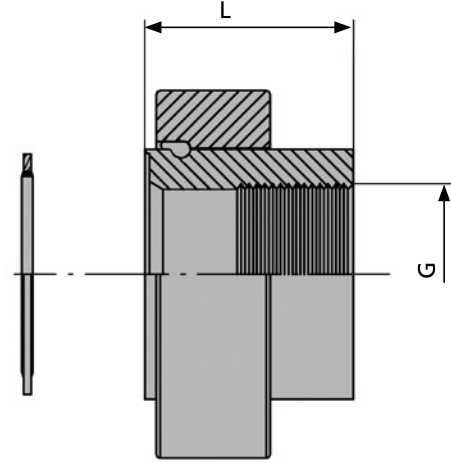
Size	Pipe Size	Complete Part Code	Complete ID Code	L	E	Weight [kg]	Body Part No	Body ID Code
2 1/2"	80x10	440011HP	1301533600	85	43	2.01	40011HP	1301052250
3"	97x12	448011HP	1301537400	110	51	3.70	48011HP	1301057650

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

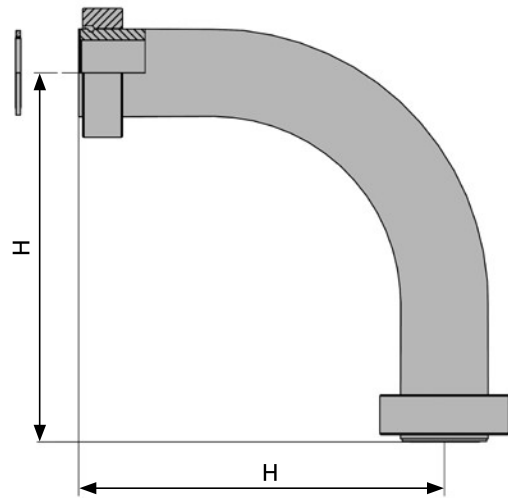
Flange dimensions page 126
 Bonded seals page 149

GS-HP Retain Ring™ System

Drilled to ISO 6164 up to 4"



Female thread flange



Flange bend

Complete Part No example:

440013HP includes:

440HP	1 pc
40013HP	1 pc
40HP	1 pc
4037	1 pc

Complete Part No example:

440018HP includes:

440HP	2 pcs
40018HP	1 pc
40HP	2 pcs
4037	2 pcs

Female thread flange, BSPP

Size	Complete Part No	Complete ID Code	L	G*	Weight [kg]	Body Part No	Body ID Code
2 1/2"	440013HP	1307506100	80	2"	3,60	40013HP	1307010100
3"	448013HP	1307506400	85	2 1/2"	5,80	48013HP	1307011400

Flange bend

Size	Complete Part No	Complete ID Code	H	Bending Radius	Weight [kg]	Body Part No	Body ID Code
2 1/2"	440018HP**	1602203100	450	220	18,0	40018HP	1602002550
3"	448018HP**	1602203600	540	270	30,8	48018HP	1602003050

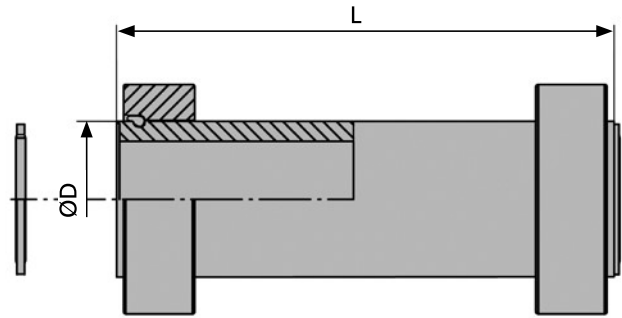
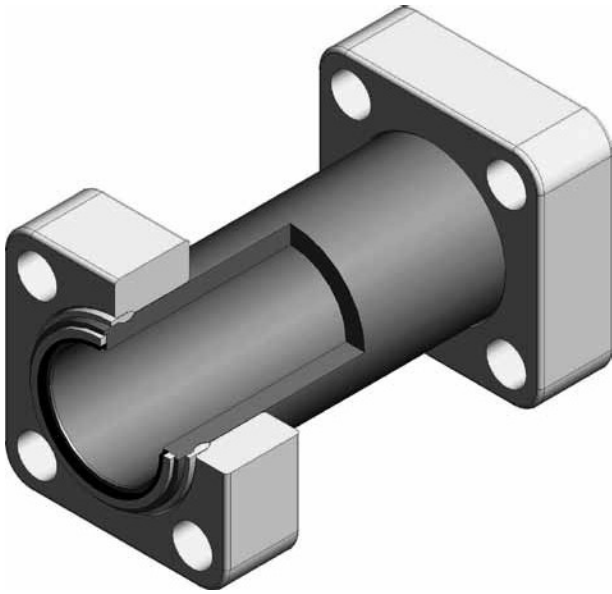
Body material:
Standard= carbon steel, zinc plated
Stainless steel= add SS after Part No
**) Not available in stainless steel
Other materials on request.

*) Standard thread BSP,
others on request.

Flange dimensions page 126
Bonded seals page 149

GS-HP Retain Ring™ System

Drilled to ISO 6164 up to 4"



Complete Part No example:

440019HP includes:

440HP	2 pcs
40019HP	1 pc
40HP	2 pcs
4037	2 pcs

Bulkhead flange

Size	Complete Part No	Complete ID Code	L	D	Weight [kg]	Body Part No	Body ID Code
2 1/2"	440019HP	1904057600	220	82	8.20	40019HP	1904002700
3"	448019HP	1904058100	240	92	14.0	48019HP	1904003200

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

Flange dimensions page 126
 Bonded seals page 149