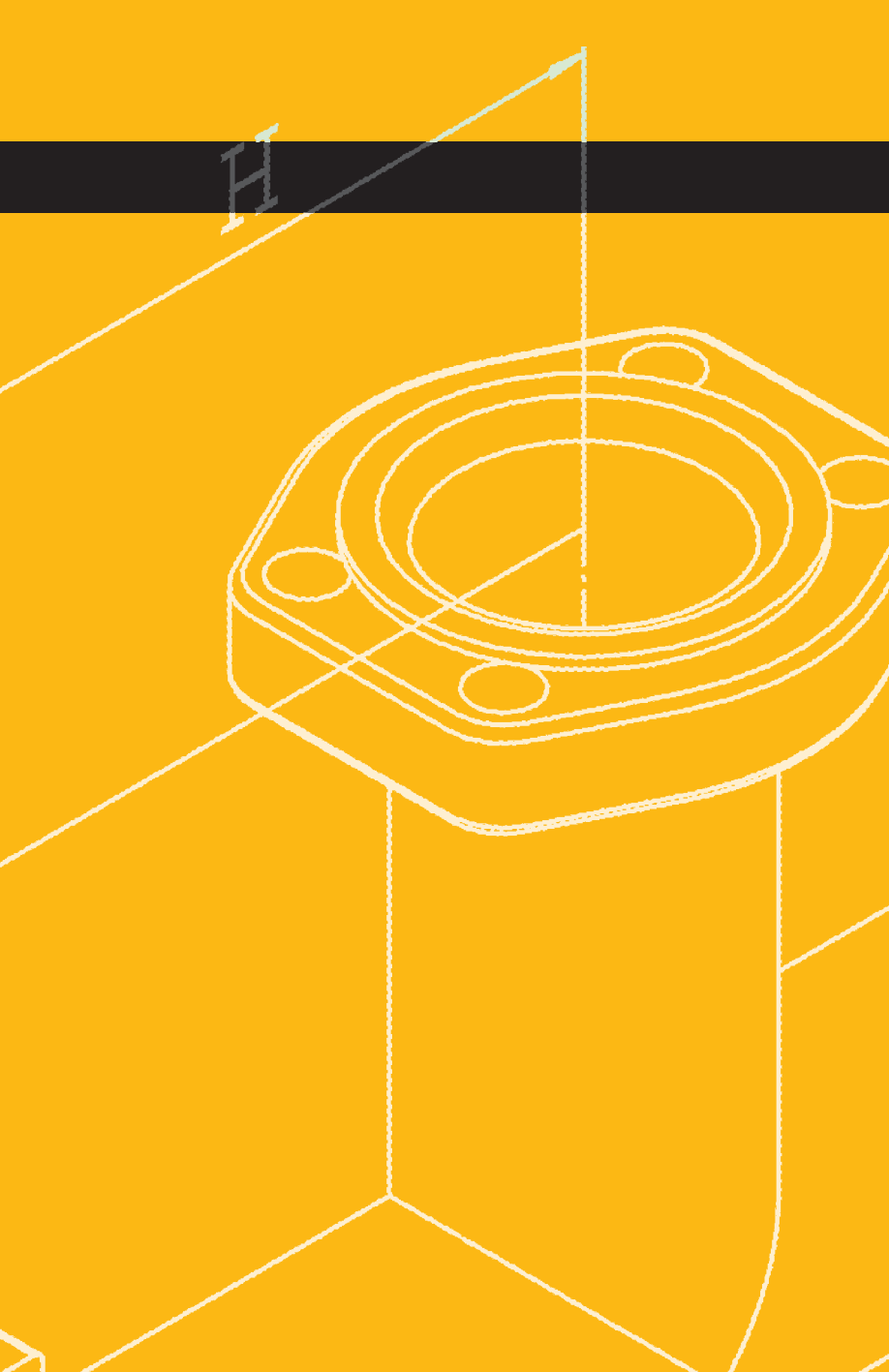


DIN 350-400 BAR



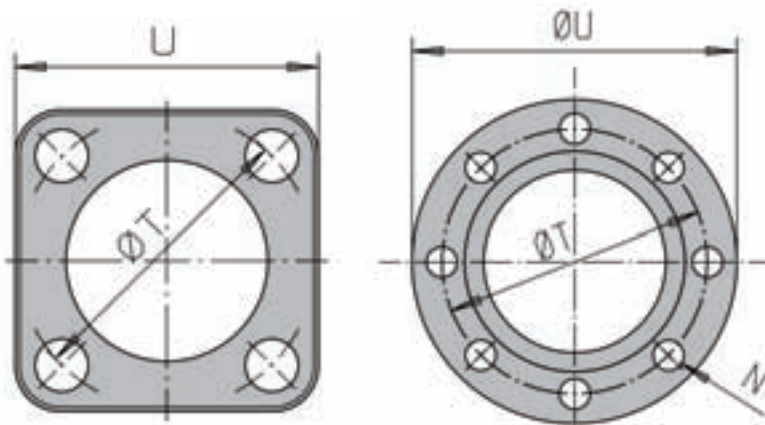
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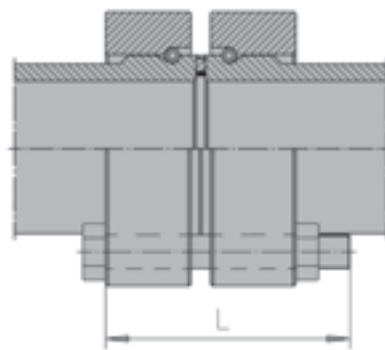


DIN 350-400 BAR

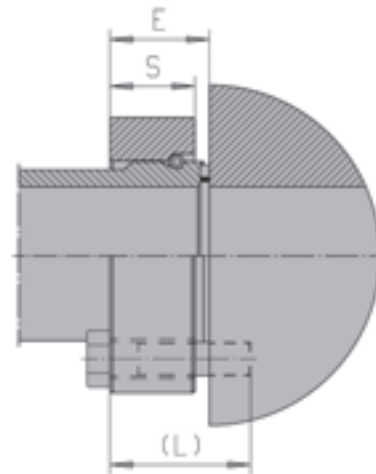


432 – 456

860 + 16192



Flange to flange



Flange to block

Notice! When stainless steel piping system, component or module conforms with Pressure Equipment Directive 97/23/EL, max. allowed working pressure is 69% of the informed value.

Metric

Size	Part No	ID Code	Pipe O.D	T	E	S	U	N	Bolt L DIN 912, 8.8	W.P. bar	Bolt Torque	Weight (kg)
2"	432	11040001	66.0	98	32	30	100	4	M16x90(50)	400	145 Nm	1.30
2 1/2"	440	11040300	80.0	118	47	40	120	4	M20x120(70)	400	275 Nm	2.80
3"	448	11040600	97.0	145	55	45	145	4	M24x140(80)	400	455 Nm	4.55
4"	456	11040900	115.0	175	56	50	180	4	M30x160(100)	400	800 Nm	6.70
4 1/2"	860	11041800	130.0	175	60	50	214	8	M20x140(80)	350	320 Nm	7.70
5"	864	11042100	150.0	205	64	50	245	8	M24x160(90)	350	500 Nm	10.2
6"	880	11042400	190.0	245	78	70	300	8	M30x220(130)	350	840 Nm	22.3
8"	896	11043000	250.0	315	78	70	385	8	M36x210(130)	350	1900 Nm	30.5
12"	12160	11043100	300	370	90	80	440	12	M36x260(160)	350	1950 Nm	48.8
14"	16192	11043200	355.6	440	130	120	520	16	M39x360(220)	350	2060 Nm	83.2

ANSI 36.19

Size	Part No	ID Code	Pipe O.D	T	E	S	U	N	Bolt L DIN 912, 8.8	W.P. bar	Bolt Torque	Weight (kg)
2"	432/60.3	11040110	60.3	98	32	30	100	4	M16x90(50)	400	145 Nm	1.13
2 1/2"	440/73.0	11040307	73.0	118	47	40	120	4	M20x120(70)	400	240 Nm	2.22
3"	448/88.9	11040605	88.9	145	55	45	145	4	M24x140(80)	400	420 Nm	3.66
4"	456/114.3	11032110	114.3	175	56	50	225	4	M24x160(100)	400	800 Nm	6.52
5"	864/141.3	11042110	141.3	205	64	50	245	8	M24x160(100)	350	470 Nm	9.48
5"	864/139.7	11042120	139.7	205	64	50	245	8	M24x160(100)	350	470 Nm	9.48
6"	880/168.3	11042403	168.3	245	83	70	300	8	M30x220(120)	350	840 Nm	15.8
8"	888/219.1	11042720	219.1	290	82	70	350	8	M30x220(120)	350	1340 Nm	28.1
10"	904/273.0	11032600	273.0	375	114	90	450	12	M36x280(180)	250	1400 Nm	58.0

Flange material: forged St 50.2

Other materials by request, for example Stainless Steel, SMO, Duplex, Titanium and Superduplex.

L= Flange to flange

(L)= Flange to block

TUBES & PIPES

CLAMPS

VALVES

BITE TYPE FITTINGS

SAE J514 JIC FLARE FITTINGS

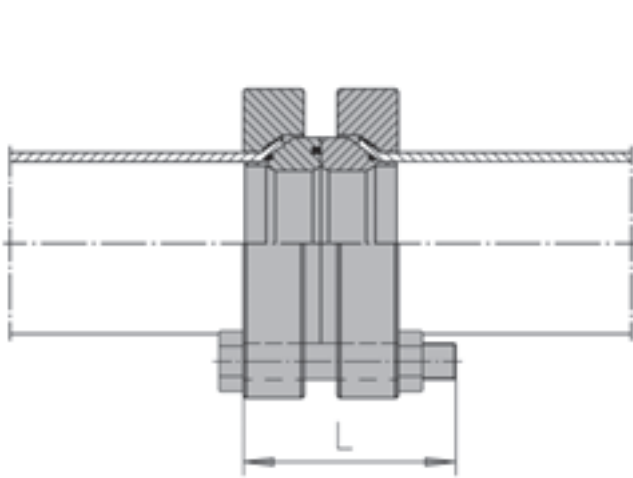
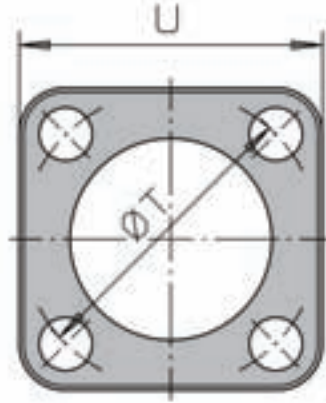
HOSES & HOSE COUPLINGS

ADAPTORS

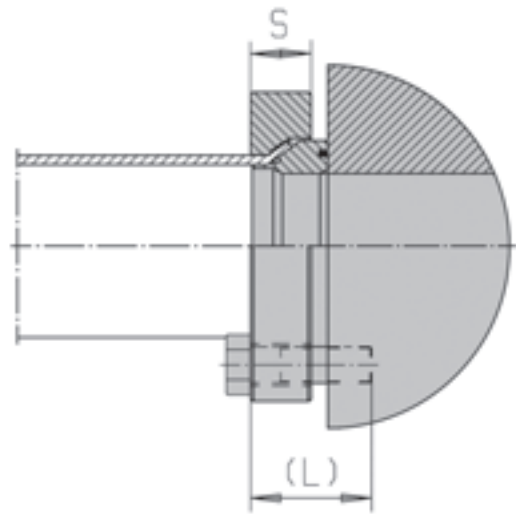
SPECIAL SOLUTIONS

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TECHNICAL INFORMATION



Flange to flange



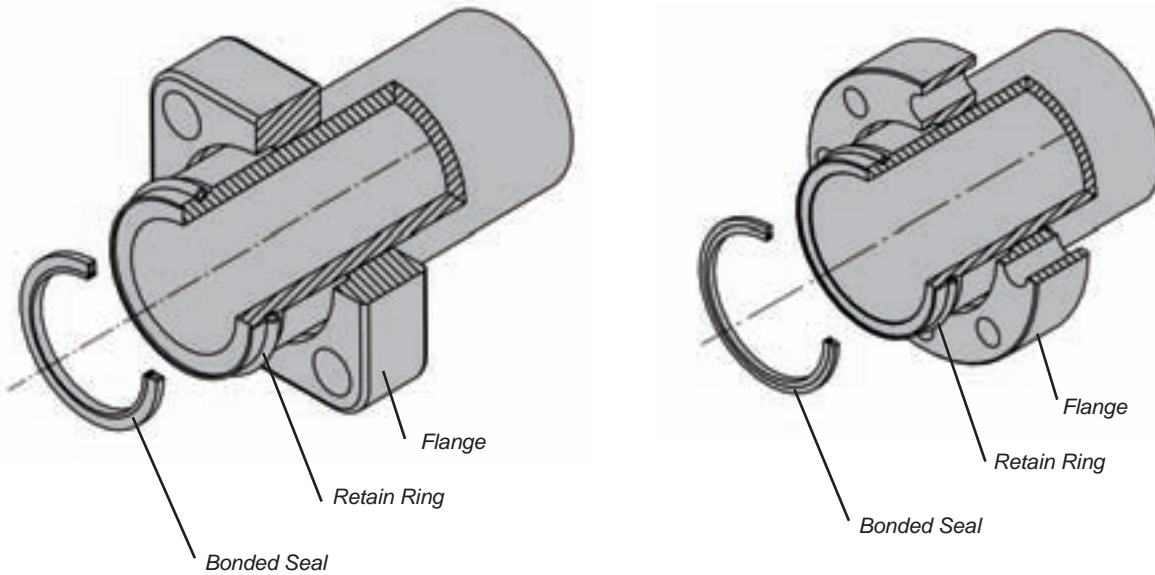
Flange to block

Metric

Size	Part No	ID Code	Pipe O.D	T	S	U	N	Bolt L DIN 912, 8.8	W.P. bar	Bolt Tor- que	Weight (kg)
1 1/2"	424F	110400005	50	80	30	85	4	M16x90(50)	315	158 Nm	1.10
2"	432F	11040010	60	98	30	100	4	M16x90(50)	315	200 Nm	1.30
2 1/2"	440F	11040320	73	118	40	120	4	M20x120(70)	315	275 Nm	2.80

Flange material: forged St 50.2
Other materials by request, for example Stainless Steel,
SMO, Duplex, Titanium and Superduplex.

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



Metric

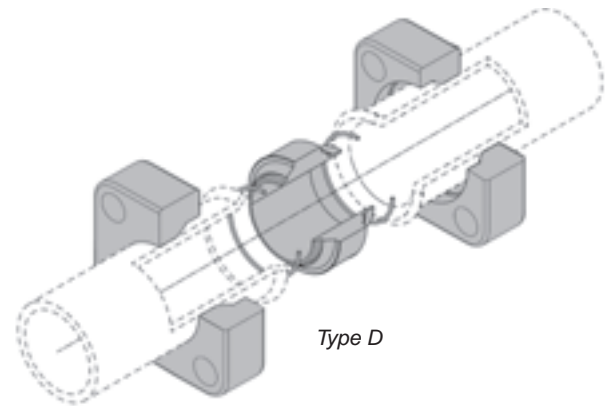
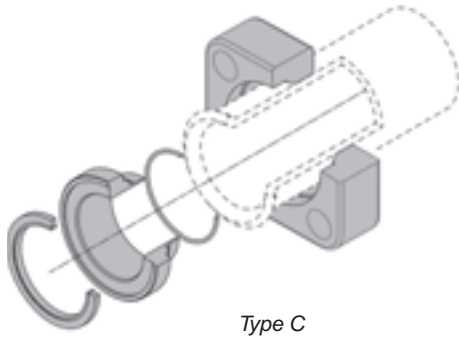
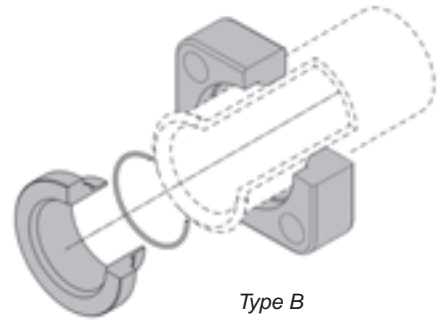
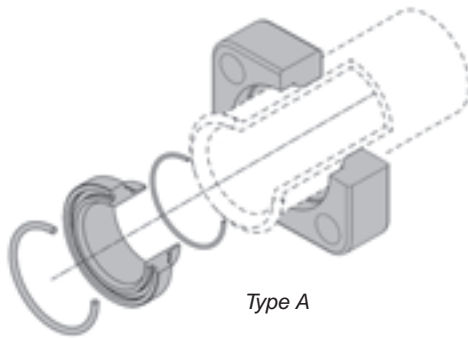
Size	Pipe Size	Flange Part No	Flange ID Code	Retain Ring Part No	Retain Ring ID Code	Bonded Seal Part No	Bonded Seal ID Code
2"	66.0x8.5	432	11040001	32	19020520	3219	19030070
2 1/2"	80.0x10.0	440	11040300	40	19020530	4037	19030080
3"	97.0x12.0	448	11040600	48	19020540	4839	19030090
4"	115.0x15.0	456	11040900	56	19020570	5644	19030110
4 1/4"	130.0x15.0	860	11041800	60	19020110	6000	19030120
5"	150.0x15.0	864	11042100	64	19020120	6455	19030130
6"	190.0x20.0	880	11042400	80	19020130	8001	19030142
8"	250.0x25.0	896	11043000	96	19020150	9600	19030150

ANSI 36.19

Size	Pipe Size	Part No	ID Code	Part No	ID Code	Part No	ID Code
2"	60.3x11.1	432/60.3	11040110	32/60.3	19020062	3260	19030074
2 1/2"	73.0x14.0	440/73.0	11040307	40/73.0	19020072	4073	19030082
3"	88.9x15.2	448/88.9	11040605	48/88.9	19020082	4888	19030092
4"	114.3x17.1	656/114.3	11032110	56	19020100	5644	19030110
5"	141.3x19.1	864/141.3	11042110	64/141.3	19020122	*	
5"	139.7	864/139.7	11042120	64/139.7		*	
6"	168.3x22.0	880/168.3	11042403	80/168.3	19020132	*	
8"	219.1x23.0	888/219.1	11042720	88/219.1	19020152	*	
10"	273.0x25.4	904/273.0	11032600	04/273.0	19020050	*	

Flange material: Forged St50.2, Stainless Steel, SMO, Duplex, Titanium, Superduplex.
Retain ring material: Steel and Perbunan or Stainless Steel and Perbunan.
Bonded seal material: Steel and Perbunan or Stainless Steel and Perbunan

* = From sizes 5" to 10" use seal carrier instead of bonded seal.



Metric - Type A

Size	Pipe Size	Complete Part No	Complete ID Code	Weight	Insert Part No	O-Ring Part No	O-Ring2 Part No
1 1/2"	50x5	424/50X5FA	14015400	1.1	24/50X5FA	OR47.22x3.53	OR41x1.78
2"	60x6	432/60X6FA	14015420	1.5	32/60X6FA	OR56.75x3.53	OR47.37x1.78
2 1/2"	73x7	440/73X7FA	14015440	2.6	40/73X7FA	OR69.44x3.53	OR56.87x1.78

Metric - Type B

Size	Pipe Size	Complete Part No	Complete ID Code	Weight	Insert Part No	O-Ring2 Part No
1 1/2"	50x5	424/50X5FB	14015402	1.1	24/50X5FB	OR41x1.78
2"	60x6	432/60X6FB	14015422	1.5	32/60X6FB	OR47.37x1.78
2 1/2"	73x7	440/73X7FB	14015442	2.6	40/73X7FB	OR56.87x1.78

Metric - Type C

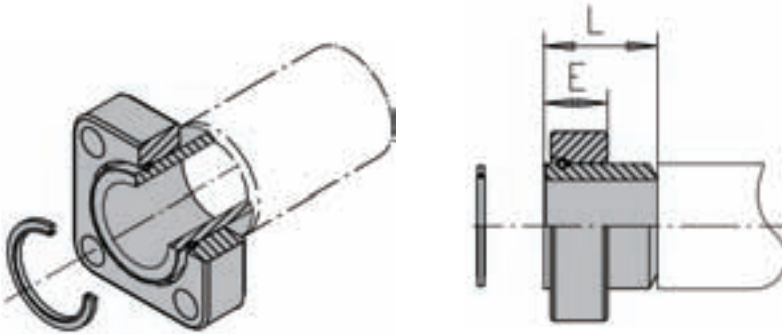
Size	Pipe Size	Complete Part No	Complete ID Code	Weight	Insert Part No	O-Ring2 Part No	Seal part No
1 1/2"	50x5	424/50X5FC	14015404	1.1	24/50X5FC	OR41x1.78	2432
2"	60x6	432/60X6FC	14015424	1.5	32/60X6FC	OR47.37x1.78	3219
2 1/2"	73x7	440/73X7FC	14015444	2.6	40/73X7FC	OR56.87x1.78	4037

Metric - Type D

Size	Pipe Size	Complete Part No	Complete ID Code	Weight	Insert Part No	O-Ring2 Part No
1 1/2"	50x5	424/50X5FD	14015406	1.3	24/50X5FD	OR41x1.78
2"	60x6	432/60X6FD	14015426	1.8	32/60X6FD	OR47.37x1.78
2 1/2"	73x7	440/73X7FD	14015446	2.9	40/73X7FD	OR56.87x1.78

Material possibilities page 17
Part code does not include bolts

Flanges page 144
O-Rings page 171-172
Bonded Seals page 165
Insert Cones page 163



Metric

Size	Pipe Size	Complete Part No	Complete ID Code	L	E	Weight	Body Part No	Body ID Code
2"	50.0x9.0	432001	13015261	50	32	1.84	32001	13010419
2"	60.0x6.0	432002	13015264	50	32	1.66	32002	13010425
2"	60.0x8.0	432003	13015267	50	32	1.75	32003	13010431
2"	48.3x5.6	432008	13015282	50	32	1.77	32008	13010449
2"	60.0x10.0	432009	13015285	50	32	1.83	32009	13010455
2"	56.0x8.5	432010	13015288	50	32	1.80	32010	13010461
2"	66.0x8.5	432011	13015291	75	32	2.01	32011	13010467
2"	60.3x8.7	432085	13015294	75	32	1.90	32085	13010468
2"	60.3x11.1	432086	13015296	75	32	1.95	32086	13010474
2 1/2"	65.0x8.0	440003	13015312	50	43	3.18	40003	13010486
2 1/2"	76.1x6.3	440006	13015321	50	43	2.98	40006	13010498
2 1/2"	76.1x12.5	440007	13015324	50	43	3.22	40007	13010504
2 1/2"	73.0x7.0	440010	13015333	50	43	2.99	40010	13010516
2 1/2"	80.0x10.0	440011	13015335	90	43	3.70	40011	13010522
2 1/2"	73.0x9.5	440085	13015339	90	43	3.00	40085	13010534
2 1/2"	73.0x14.0	440086	13015342	90	43	3.50	40086	13010535
3"	76.1x12.5	448004	13015352	60	51	5.64	48004	13010546
3"	80.0x10.0	448005	13015355	60	51	5.30	48005	13010552
3"	88.9x8.8	448006	13015358	60	51	5.01	48006	13010558
3"	88.9x12.5	448007	13015361	60	51	5.30	48007	13010564
3"	88.9x7.6	448010	13015370	60	51	4.92	48010	13010570
3"	97.0x12.0	448011	13015373	110	51	6.32	48011	13010576
3"	88.9x11.1	448085	13015376	110	51	5.70	48085	13010582
3"	88.9x15.2	448086	13015378	110	51	6.30	48086	13010588
4"	88.9x12.5	456003	13015394	80	56	9.51	56003	13010600
4"	100.0x10.0	456005	13015400	80	56	9.04	56005	13010606
4"	101.6x8.1	456006	13015403	80	56	8.85	56006	13010612
4"	101.6x16.0	456007	13015406	80	56	9.64	56007	13010618
4"	114.3x17.5	456010	13015413	90	56	10.2	56010	13010624
4"	115.0x15.0	456011	13015416	140	56	11.5	56011	13010630
4"	114.3x13.5	456085	13015425	140	56	8.90	56085	13010642
4"	114.3x17.1	456086	13015427	140	56	10.6	56086	13010647

Body material: St 52

Other materials by request, for example Stainless Steel, SMO, Duplex, Titanium and Superduplex.

Part code does not include bolts

Material possibilities page 18

Flanges page 143

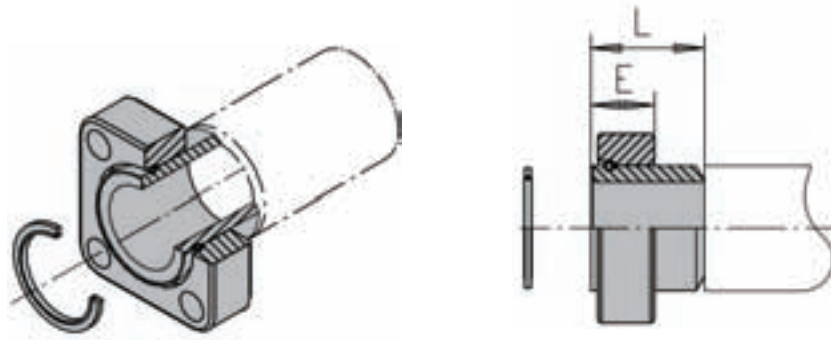
Bonded seals page 165

Retain Rings page 164

DIN 350-400 BAR

Flanges for Welding (4 1/2" – 14")

ISO 6164



Metric

Size	Pipe Size	Complete Part No	Complete ID Code	L	E	Weight	Body Part No	Body ID Code
4 1/2"	88.9x12.5	860002	13015732	100	54	11.4	60002	13010662
4 1/2"	101.6x8.1	860006	13015736	100	54	10.7	60006	13010666
4 1/2"	110.0x12.5	860008	13015738	100	54	11.2	60008	13010668
4 1/2"	130.0x15.0	860011	13015739	125	54	12.4	60011	13010672
5"	114.3x12.5	864001	130157395	80	56	14.5	64001	13010679
5"	139.7x14.2	864002	13015740	100	56	14.3	64002	13010680
5"	141.3x15.9	864003	13015742	100	56	14.7	64003	13010681
5"	150.0x15.0	864011	13015763	155	56	17.0	64011	13010710
5"	141.3x19.1	864086	13015770	150	56	16.5	64086	13010715
6"	139.7x14.2	880001	13015790	150	78	28.5	80001	13010722
6"	168.3x17.5	880003	13015793	150	78	28.1	80003	13010728
6"	190.0x20.0	880011	13015802	175	78	29.9	80011	13010740
6"	168.3x18.3	880085	13015812	175	78	32.0	80085	13010755
6"	168.3x22.0	880086	13015814	175	78	33.1	80086	13010750
8"	168.3x17.5	896001	13015961	150	78	55.1	96001	13010761
8"	193.7x20.0	896002	13015962	150	78	54.0	96002	13010762
8"	219.1x22.2	896003	13015963	200	78	53.0	96003	13010763
8"	250.0x25.0	896011	13015969	200	78	57.4	96011	13010767
12"	300.0x30.0	12160011	13015989	250	116	102	12160011	13010787
14"	350.0x35.0	19162011	13015999	300	142	198	19162011	13010797

Body material: St 52

Other materials by request, for example Stainless Steel, SMO, Duplex, Titanium and Superduplex.

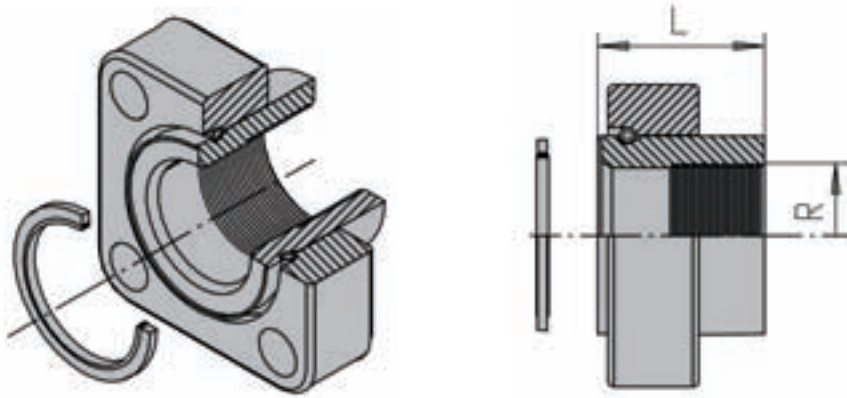
Part code does not include bolts

Material possibilities page 18

Flanges page 143

Bonded seals page 165

Retain Rings page 164

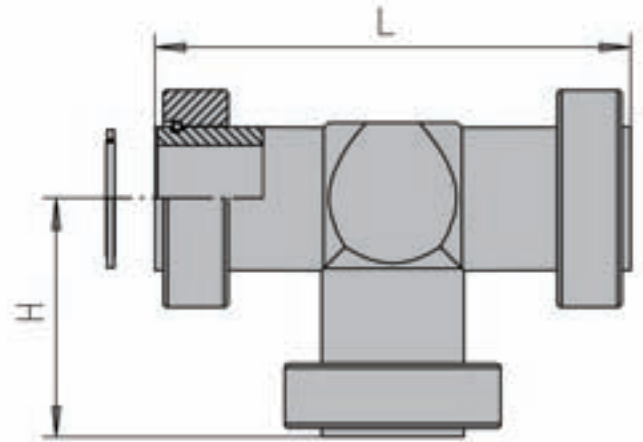
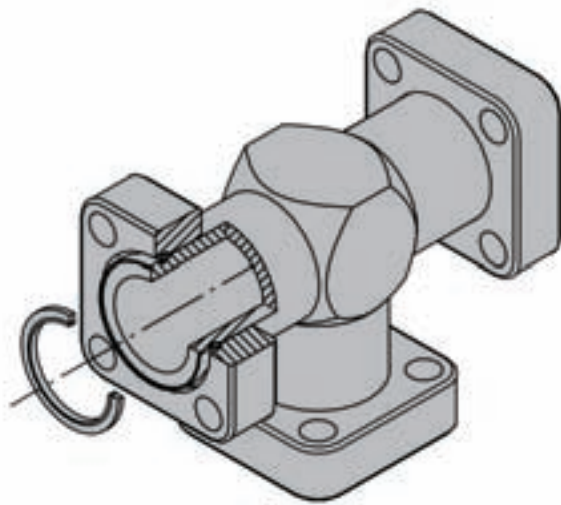


Metric

Size	Complete Part No	Complete ID Code	L	R	Weight (kg)	Body Part No	Body ID Code
2"	432013	13075050	55	1 1/2"	2.7	32013	13070090
2 1/2"	440013	13075060	80	2"	3.6	40013	13070100
3"	448013	13075063	85	2 1/2"	5.8	48013	13070110
4"	456013	13075066	100	3"	10.5	56013	13070140

Body material: St 52
 Other materials by request, for example Stainless Steel, SMO, Duplex, Titanium and Superduplex.
 Part code does not include bolts
 Material possibilities page 184

Flanges page 143
 Bonded seals page 165
 Retain Rings page 164



Metric

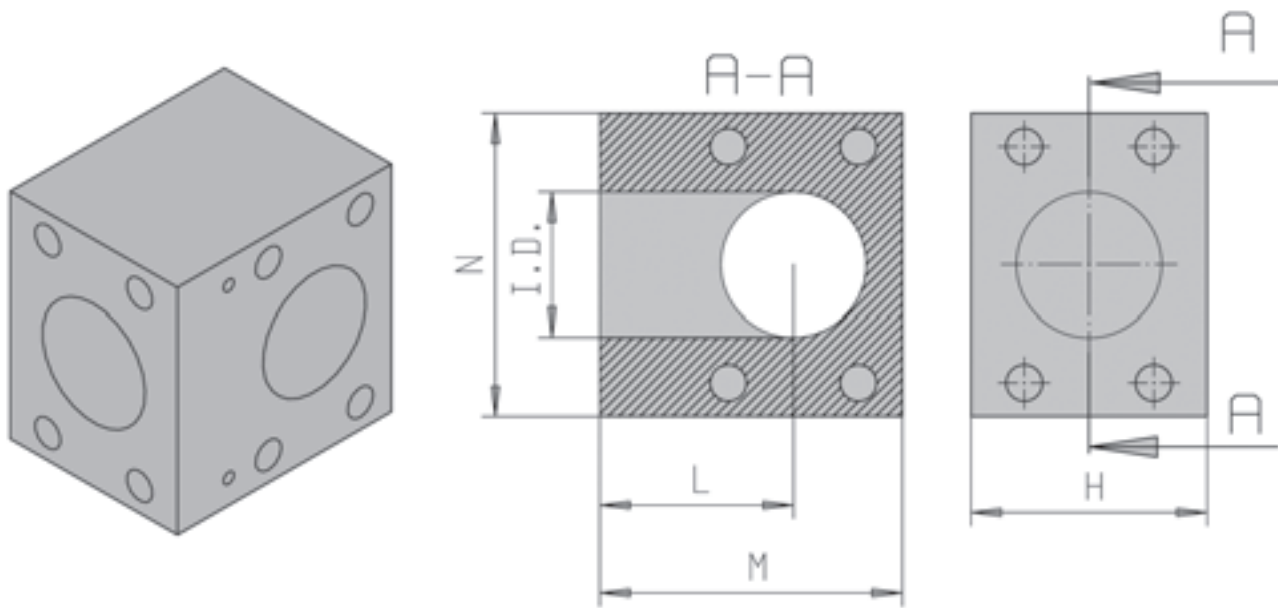
Size	Complete Part No	Complete ID Code	L	H	Weight (kg)	Body Part No	Body ID Code
2"	432016	17012140	220	110	7.77	32016	17010100
2 1/2"	440016	17012160	260	130	13.0	40016	17010120
3"	448016	17012180	320	160	23.1	48016	17010140
4"	456016	17012200	400	200	41.7	56016	17010160
4 1/2"	860016	17012355	390	195	45.3	60016	17010180
5"	864016	17012360	460	230	62.3	64016	17010200
6"	880016	17012365	550	275	112	80016	17010220
8"	896016	17012370	650	325	227	96016	17010240

ANSI 36.19

Size	Complete Part No	Complete ID Code	L	H	Weight (kg)	Body Part No	Body ID Code
2"	432016/60.3	17013832	220	110	6.3	32016/60.3	170105325
2 1/2"	440016/73.0	17013840	260	130	12.9	40016/73.0	17010540
3"	448016/88.9	17013848	320	160	22.0	48016/88.9	17010548
4"	456016/114.3	17013856	400	200	34.5	56016/114.3	17010556

Body material: Forged St 50.2 or St 52
 Other materials by request, for example Stainless Steel,
 SMO, Duplex, Titanium and Superduplex.
 Part code does not include bolts and seals.
 Material possibilities page 18

Flanges page 143
 Bonded seals page 165
 Retain Rings page 164



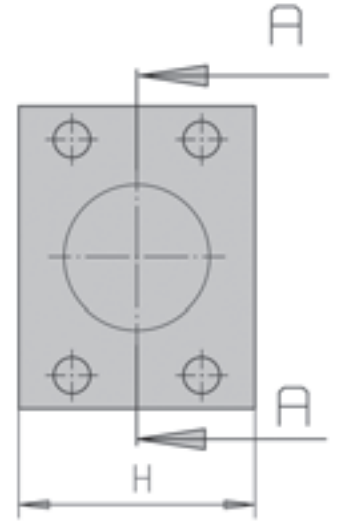
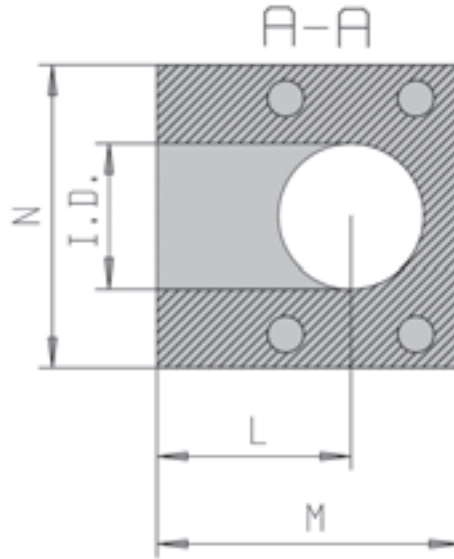
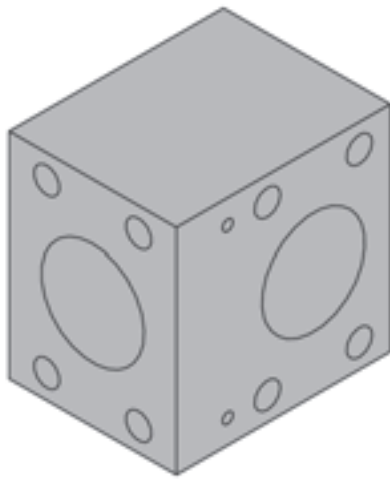
Metric

Size		Part No	ID Code	H	L	M	N	I.D.	Weight (kg)
Body	Outlet								
2"		432116	17020145	100	90	140	100	48	7.39
2"	1 1/2"	432/624/432116	17020149	68	90	140	100		6.55
2"	1 1/4"	432/620/432116	17020148	68	90	140	100		6.81
2"	1"	432/616/432116	17020147	68	90	140	100		6.08
2 1/2"		440116	17020158	120	100	160	120	60	13.1
2 1/2"	2"	440/432/440116	170201645	100	100	160	120		10.6
2 1/2"	1 1/2"	440/624/440116	17020167	80	100	160	120		8.10
2 1/2"	1 1/4"	440/620/440116	170201665	80	90	150	120		8.40
3"		448116	170201705	150	150	225	150	73	27.8
3"	2 1/2"	448/440/448116	170201706	120	130	205	150		20.5
3"	2"	448/432/448116	170201707	100	115	190	150		16.1
3"	1 1/2"	448/624/448116	1702017236	80	115	190	150		13.5
4"		456116	17020179	180	145	235	180	85	40.7
4"	3"	456/448/456116	170201793	150	135	225	180		34.7
4"	2 1/2"	456/440/456116	170201795	120	135	225	180		28.2
4"	2"	456/432/456116	170201797	120	115	205	180		26.0
4 1/2"		860116	17020560	214	160	267	214	105	70.2
4 1/2"	4"	860/456/860116	170205643	190	160	267	214		64.1
4 1/2"	3"	860/448/860116	170205645	180	160	267	214		62.2
4 1/2"	2 1/2"	860/440/860116	170205647	170	160	267	214		59.8
5"		864116	17020570	250	170	295	238	120	102
5"	4 1/2"	864/860/864116	17020572	250	170	295	238		106
5"	4"	864/456/864116	170205773	210	170	295	238		94.1
5"	3"	864/448/864116	170205775	210	170	295	238		96.2
6"		880116	17020580	300	210	360	300	150	174
6"	5"	880/864/880116	17020581	260	200	350	300		160
6"	4 1/2"	880/860/880116	17020582	260	200	350	300		163
6"	4"	880/456/880116	17020585	230	190	340	300		121
8"		896116	17020590	386	270	463	386	200	386
8"	6"	896/880/896116	17020593	330	257	450	386		332
8"	5"	896/864/896116	17020595	300	237	430	386		294
8"	4 1/2"	896/860/896116	17020597	250	237	430	386		297

Component material: St 52

Other materials by request, for example Stainless Steel, SMO, Duplex, Titanium and Superduplex.

Part number does not include bolts



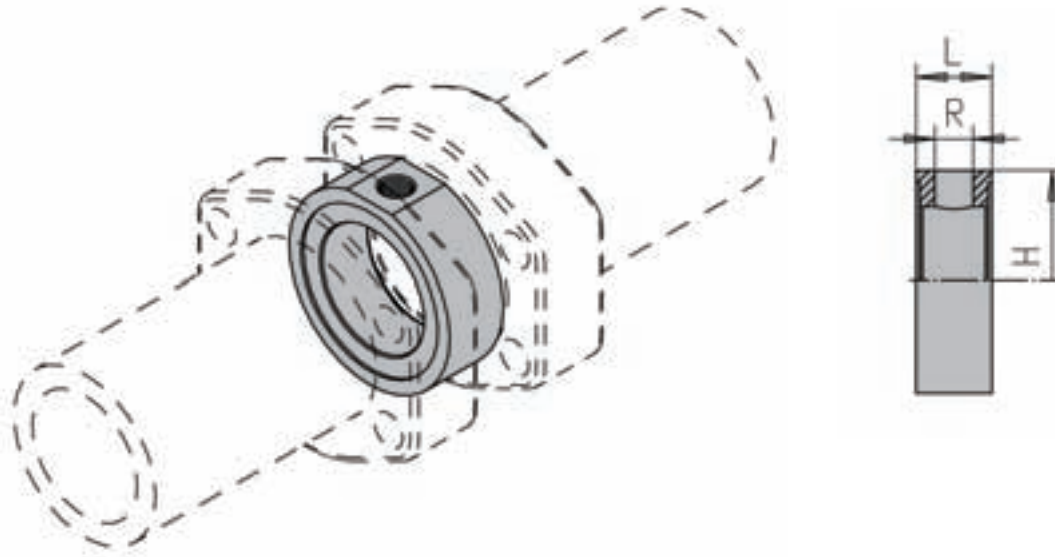
ANSI 36.19

Body Size	Outlet Size	Part No	ID Code	H	L	M	N	I.D.	Weight (kg)
2"		432116/60.3	17020832	100	90	140	100	38.1	7.8
2 1/2"		440116/73.0	17020840	120	100	160	120	45.0	9.1
2 1/2"	2"	440/73.0-432/60.3-440/73.0 116	170208405	100	100	160	120		12.9
3"		448116/88.9	17020848	150	150	225	150	58.4	27.8
4"		456116/114.3	17020856	180	145	235	180	80.1	38.7
4"	3"	456/114.3-448/88.9-456/114.3 116	170208562	150	135	225	180		32.8
4"	2"	456/114.3-432/60.3-456/114.3 116	170208563	120	115	205	180		21.2
5"		864116/139.7	17020864	250	170	295	238	103.2	112.0
6"		880116/168.3	17020880	300	210	360	300	124.4	176.0

Component material: St 52

Other materials by request, for example Stainless Steel, SMO, Duplex, Titanium and Superduplex.

Part number does not include bolts



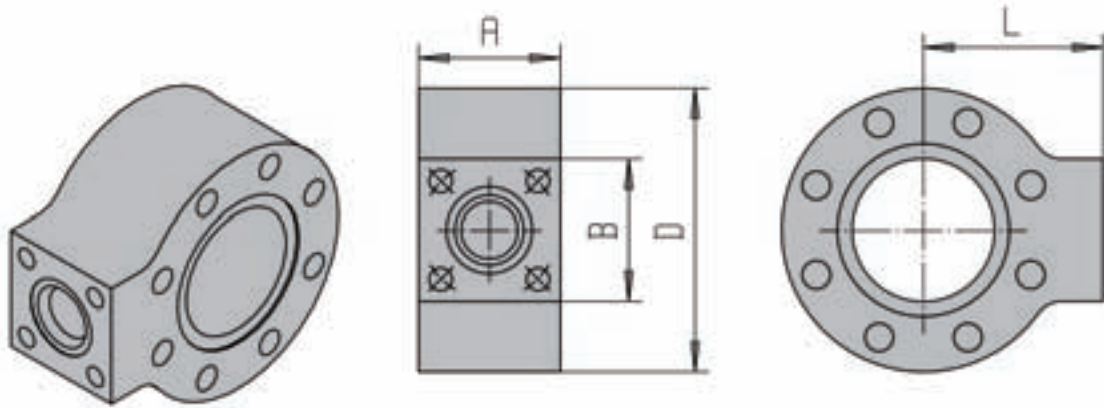
Metric

Size	Part No	ID Code	H	L	BSP	Weight (kg)
2"	32035	18010050	36.0	25	1/4"	0.5
2"	32036	18010051	34.6	35	1/2"	0.6
2 1/2"	40036	18010060	45.0	40	1/2"	1.0
2 1/2"	40037	18010061	43.0	40	3/4"	1.0
3"	48036	18010068	55.0	45	1/2"	1.7
3"	48037	18010069	54.0	50	3/4"	1.9
4"	56036	18010075	66.0	50	1/2"	2.6
4"	56037	18010080	64.0	55	3/4"	2.8
4 1/2"	60036	18010090	70.0	50	1/2"	3.0
4 1/2"	60037	18010093	69.0	55	3/4"	3.3
5"	64036	18010100	81.0	50	1/2"	4.0
5"	64037	18010103	80.0	55	3/4"	4.3
6"	80038	18010113	100.0	75	1"	10.0

Component material: St 52

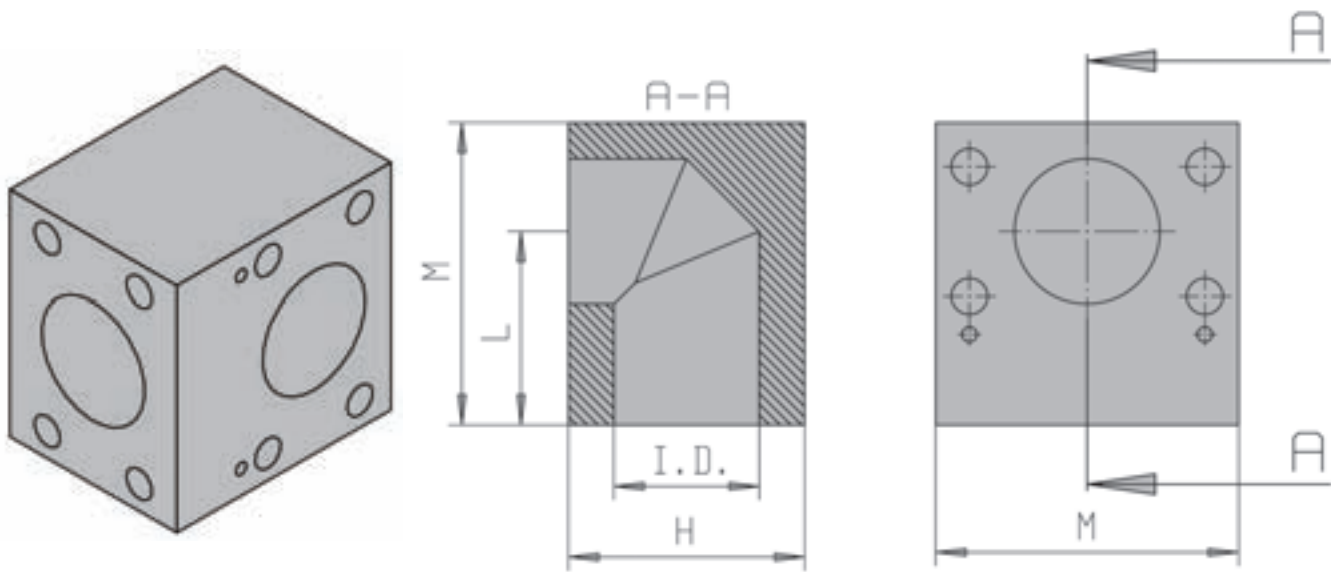
Other materials by request, for example Stainless Steel, SMO, Duplex, Titanium and Superduplex.

Part number does not include bolts

**Metric**

Size		Part No	ID Code	Pipe Size		L	A	B	D	Weight (kg)
Body	Outlet			Body	Outlet					
5"	2"	864/432/864066	18046801	150x15	66x8.5	140	100	100	245	29
6"	2"	880/432/880066	18046811	190x20	66x8.5	180	100	100	300	50
8"	2"	896/432/896066	18046821	250x25	66x8.5	210	100	100	388	102

Component material: St 52
 Other materials by request, for example Stainless Steel,
 SMO, Duplex, Titanium and Superduplex.
 Part number does not include bolts



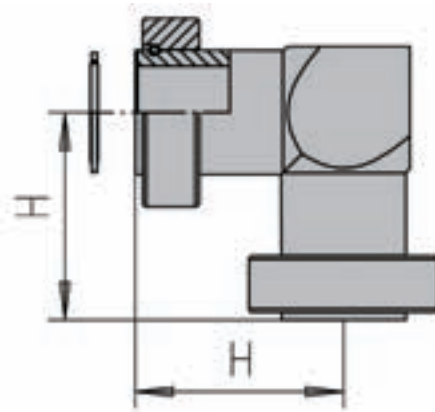
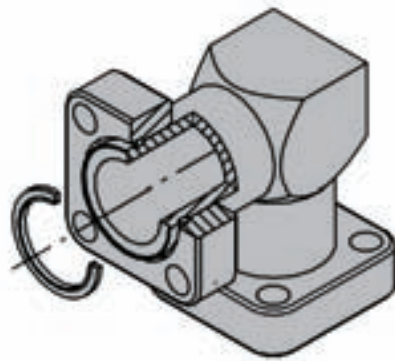
Metric

Size	Part No	ID Code	H	L	M	I.D.	Weight (kg)
2"	432115	16020036	100	90	140	49.0	8.8
2 1/2"	440115	16030037	100	120	160	60.0	14.5
3"	448115	16030038	150	150	227	73.0	31.6
4"	456115	16030039	180	140	210	85.0	48.3
4 1/2"	860115	16030100	214	160	267	100.0	79.6
5"	864115	16030110	260	170	300	120.0	92.9
6"	880115	16030120	300	210	360	150.0	204.0
8"	896115	16030130	386	237	430	200.0	370.0

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Size	Part No	ID Code	H	L	M	I.D.	Weight (kg)
2"	432115/60.3	160302432	100	90	140	38.1	9.7
2 1/2"	440115/73.0	160302440	120	100	160	45.0	15.9
3"	448115/88.9	160302448	154	150	227	58.4	34.4
4"	456115/114.3	160302456	180	140	210	80.1	49.4
5"	864115/139.7	160302464	260	170	300	130.2	140.0
6"	880115/219.1	160302480	300	210	360	124.4	220.0

Component material: St 52
 Other materials by request, for example Stainless Steel,
 SMO, Duplex, Titanium and Superduplex.
 Part number does not include bolts



Metric

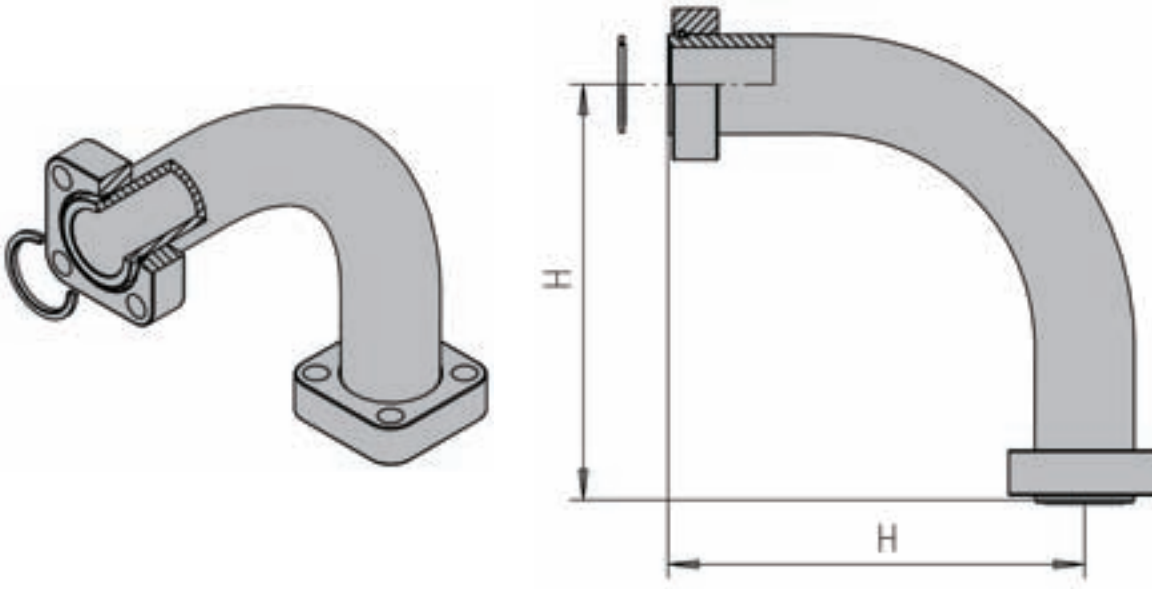
Size	Complete Part No	ID Code	H	Weight (kg)	Body Part No	Body ID Code
2"	432015	16012030	110	5.89	32015	16010025
2 1/2"	440015	16012035	130	9.67	40015	16010030
3"	448015	16012040	160	17.4	48015	16010035
4"	456015	16012045	200	32.3	56015	16010040
4 1/2"	860015	16012083	195	34.5	60015	16010045
5"	864015	16012085	230	47.8	64015	16010050
6"	880015	16012090	275	94.8	80015	16010055
8"	896015	16012100	325	178	96015	16010060

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Size	Complete Part No	ID Code	H	Weight (kg)	Body Part No	Body ID Code
2"	432015/60.3	16012832	110	5.1	32015/60.3	16011032
2 1/2"	440015/73.0	16012840	130	9.1	40015/73.0	16011040
3"	448015/88.9	16012848	160	17.0	48015/88.9	16011048
4"	456015/114.3	16012856	200	25.5	56015/114.3	16011056
5"	864015/139.7	16012864	230	43.0	64015/139.7	16011064
6"	880015/168.3	16012880	275	95.6	80015/168.3	16011080
8"	888015/219.1	16012888	325	180.0	88015/219.1	16011088

Body material: Forged St 50.2 or St 52
 Other materials by request, for example Stainless Steel,
 SMO, Duplex, Titanium and Superduplex.
 Part code does not include bolts and seals.
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Metric

Size	Complete Part No	Complete ID Code	H	Bending Radius	Weight (kg)	Body Part No	Body ID Code
2"	432018	16022025	275	165	7.9	32018	16020020
2 1/2"	440018	16022030	450	200	18.0	40018	16020025
3"	448018	16022035	540	283	30.8	48018	16020030
4"	456018	16022040	580	284	54.0	56018	16020035
4 1/2"	860018	16022140	610	390	62.0	60018	16020040
5"	864018	16022150	680	450	80.0	64018	16020045
6"	880018	16022170	760	570	153.0	80018	16020050
8"	896018	16022190	1100	750	319.0	96018	16020055

ANSI 36.19

Size	Complete Part No	Complete ID Code	H	Bending Radius	Weight (kg)	Body Part No	Body ID Code
2"	432018/60.3	16012832	275	181	7.2	32018/60.3	16024032
2 1/2"	440018/73.0	16012840	450	219	17.1	40018/73.0	16024040
3"	448018/88.9	16012848	540	267	29.5	48018/88.9	16024048
4"	456018/114.3	16012856	580	343	55.0	56018/114.3	16024056
5"	864018/139.7	16012864	680	424	81.1	64018/139.7	16024064
6"	880018/168.3	16012880	760	505	140.0	80018/168.3	16024080
8"	888018/219.1	16012888	1000	651	282.0	88018/219.1	16024088

Body material: St 52

Other materials by request, for example Stainless Steel, SMO, Duplex, Titanium and Superduplex.

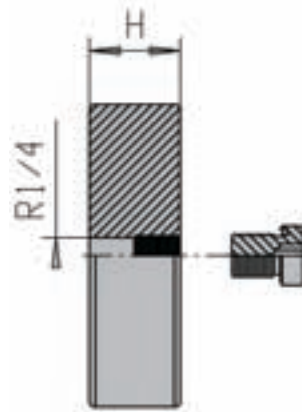
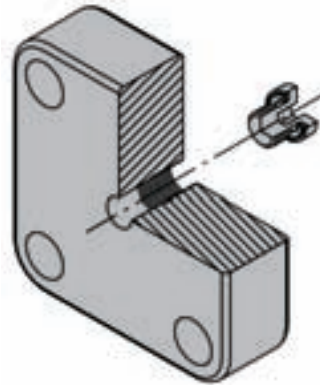
Part code does not include bolts and seals.

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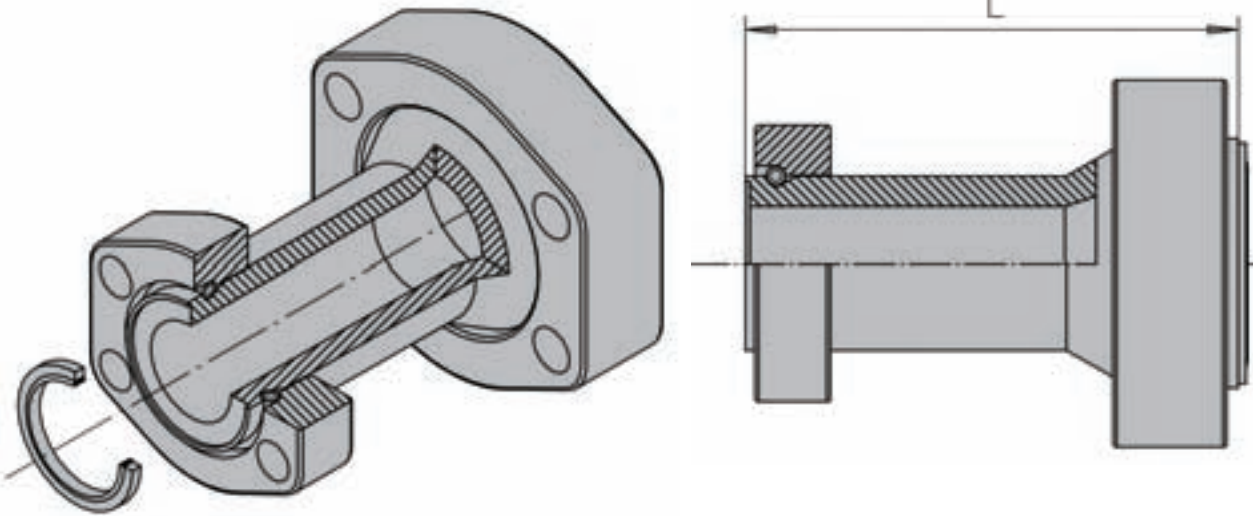
**Metric**

Size	Part No	ID Code	H	BSP	Weight (kg)
2"	432125	19055080	30	1/4"R	2.1
2 1/2"	440125	19055085	40	1/4"R	3.8
3"	448125	19055090	40	1/4"R	6.3
4"	456125	19055095	50	1/4"R	10.8
4 1/2"	860125	19055130	50	1/2"R	15.9
5"	864125	19055135	50	1/2"R	19.4
6"	880125	19055140	60	1/2"R	32.5
8"	896125	19055150	70	1/2"R	42.0

Component material: St 52

Other materials by request, for example Stainless Steel, SMO, Duplex, Titanium and Superduplex.

Part number does not include bolts



Metric

Size	Complete Part No	Complete ID Code	L	Weight (kg)	Body Part No	Body ID Code
2"-1 1/2"	RF432-624	15015125	130	3.91	32-24	15010035
2"-1 1/4"	RF432-620	15015120	130	3.15	32-20	15010030
2 1/2"-2"	RF440-432	15012130	150	5.51	40-32	15010045
2 1/2"-1 1/2"	RF440-624	15012135	150	5.50	40-24	15010040
3"-2 1/2"	RF448-440	15012145	180	9.68	48-40	15010055
3"-2"	RF448-432	15012140	180	8.18	48-32	15010050
4"-3"	RF456-448	15015155	200	16.6	56-48	15010067
4"-2 1/2"	RF456-440	15012150	200	13.7	56-40	15010065
4"-2"	RF456-432	15012148	200	12.1	56-32	15010060
4 1/2"-4"	RF860-456	15015369	250	23.6	60-56	1501006928
4 1/2"-3"	RF860-448	15015366	250	19.6	60-48	1501006925
5"-4 1/2"	RF864-860	15015381	250	28.5	64-60	15010074
5"-4"	RF864-456	15015377	250	27.5	64-56	15010070
5"-3"	RF864-448	15015375	250	24.0	64-48	150100695
6"-5"	RF880-864	15015400	250	41.6	80-64	15010085
6"-4 1/2"	RF880-860	15015398	250	38.1	80-60	15010083
6"-4"	RF880-456	15015396	250	38.0	80-56	15010080
6"-3"	RF880-448	15015394	250	35.0	80-48	15010078
8"-6"	RF896-880	15015415	300	79.7	96-80	15010093
8"-5"	RF896-864	15015410	300	71.5	96-64	15010090

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Size	Complete Part No	Complete ID Code	L	Weight (kg)	Body Part No	Body ID Code
2 1/2"-2"	RF440/73.0-432/60.3	15017840	150	5.0	40/73.0-32/60.3	15017340
3"-2"	RF448/88.9-432/60.3	15017848	180	8.1	48/88.9-32/60.3	15017348
4"-2"	RF456/114.3-432/60.3	15017856	200	11.2	56/114.3-32/60.3	15017356
5"-3"	RF864/139.7-448/88.9	15017864	250	22.0	64/139.7-48/88.9	15017364
6"-3"	RF880/168.3-448/88.9	15017880	250	30.0	80/168.3-48/88.9	15017380
8"-6"	RF888/219.1-880/168.3	15017888	300	80.0	88/219.1-80/168.3	15017388
8"-5"	RF888/219.1-864/139.7	15017882	300	66.0	88/219.1-64/139.7	15017382
8"-4"	RF888/219.1-456/114.3	15017884	300	62.0	88/219.1-56/114.3	15017388

Body material: St 52

Other materials by request, for example Stainless Steel, SMO, Duplex, Titanium and Superduplex.

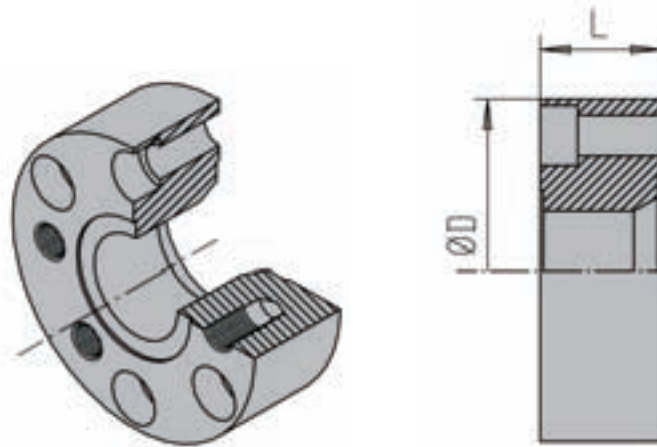
Part code does not include bolts and seals.

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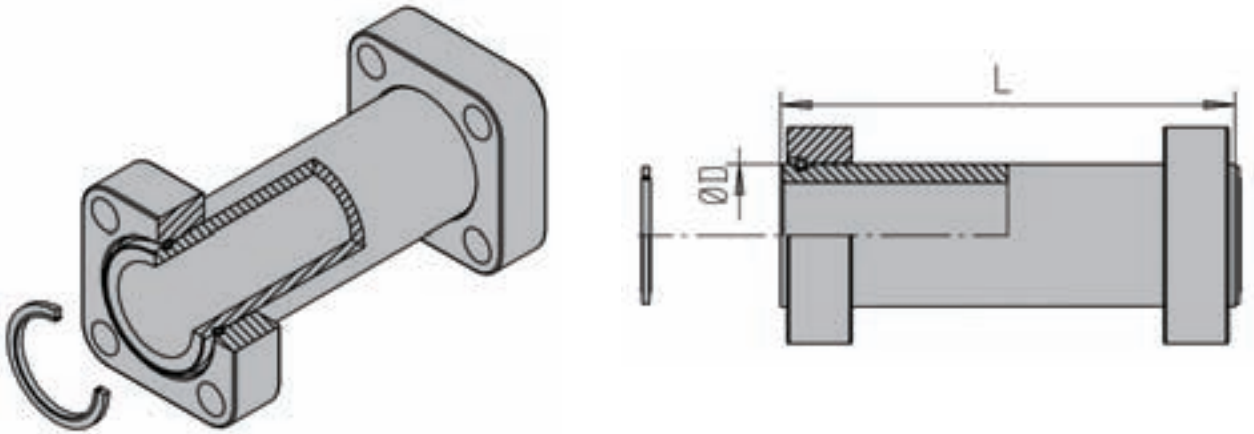
**Metric**

Size	Part No	ID Code	D	L	Weight (kg)
2 1/2"-2"	RBE440-432	15021150	155	45	5.47
2 1/2"-1 1/2"	RBE440-624	15021154	155	45	5.49
2 1/2"-1 1/4"	RBE440-620	15021152	155	45	5.78
3"-2 1/2"	RBE448-440	15021160	185	50	8.29
3"-2"	RBE448-632	15021164	185	50	8.60
3"-1 1/2"	RBE448-624	15021162	185	50	8.86
4"-3"	RBE456-448	15021172	220	60	13.9
4"-2 1/2"	RBE456-440	15021170	220	60	14.6
4"-2"	RBE456-632	15021174	220	60	15.2
4 1/2"-4"	RBE860-456	15021224	220	85	18.4
4 1/2"-3"	RBE860-448	15021222	214	85	19.7
4 1/2"-2 1/2"	RBE860-440	15021220	214	85	20.5
5"-4 1/2"	RBE864-860	15021238	245	80	21.3
5"-4"	RBE864-456	15021236	245	80	21.6
5"-3"	RBE864-448	15021234	245	80	23.2
6"-5"	RBE880-864	15021250	300	80	31.1
6"-4 1/2"	RBE880-860	15021248	300	80	33.7
6"-4"	RBE880-456	15021245	300	80	33.8
8"-6"	RBE896-880	15021264	385	100	67.5
8"-5"	RBE896-864	15021262	385	100	70.8
8"-4 1/2"	RBE896-860	15021260	385	100	71.9

Body material: St 52

Other materials by request, for example Stainless Steel, SMO, Duplex, Titanium and Superduplex.

Part code does not include bolts



Metric

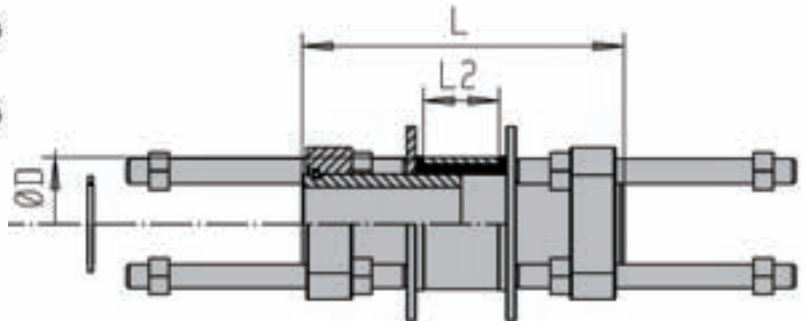
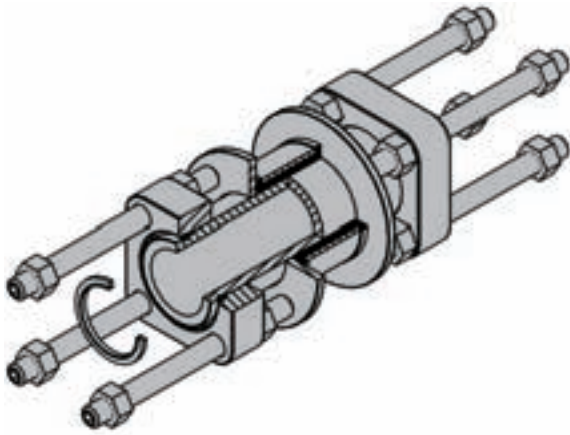
Size	Complete Part No	Complete ID Code	L	D	Weight (kg)	Body Part No	Body ID Code
2"	432019	19040570	210	68	5.0	32019	19040020
2 1/2"	440019	19040575	220	82	8.2	40019	19040025
3"	448019	19040580	240	92	14.0	48019	19040030
4"	456019	19040585	260	117	23.3	56019	19040035
4 1/2"	860019	19040618	260	133	27.0	60019	19040038
5"	864019	19040620	260	152	34.0	64019	19040040
6"	880019	19040625	290	192	60.0	80019	19040045
8"	896019	19040630	320	252	105.4	96019	19040050

ANSI 36.19

Size	Complete Part No	Complete ID Code	L	D	Weight (kg)	Body Part No	Body ID Code
2"	432019/60.3	19041832	210	62	4.5	32019/60.3	19041032
2 1/2"	440019/73.0	19041840	220	75	7.4	40019/73.0	19041040
3"	448019/88.9	19041848	240	100	15.0	48019/88.9	19041048
4"	456019/114.3	19041856	260	116	23.0	56019/114.3	19041056
5"	864019/139.7	19041864	260	143	33.0	64019/139.7	19041064
6"	880019/168.3	19041880	290	170	58.8	80019/168.3	19041080
8"	888019/219.1	19041888	320	221	91.8	88019/219.1	19041088

Body material: St 52
 Other materials by request, for example Stainless Steel, SMO, Duplex, Titanium and Superduplex.
 Part code does not include bolts and seals.
 Material possibilities page 18

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**Metric**

Size	Complete Part No	Complete ID Code	D	L	L2	Weight (kg)
2"	432024	19042070	88	210	50	7.4
2 1/2"	440024	19042075	104	220	50	10.2
3"	448024	19042080	124	240	50	17.0
4"	456024	19042085	150	260	50	28.5
4 1/2"	860024	19042118	165	260	50	38.0
5"	864024	19042120	185	260	50	46.0
6"	880024	19042124	225	290	50	78.0

ANSI 36.19

Size	Complete Part No	Complete ID Code	D	L	L2	Weight (kg)
2"	432024/60.3	19042832	88	210	50	7.0
2 1/2"	440024/73.0	19042840	104	220	50	8.5
3"	448024/88.9	19042848	124	240	50	16.0
4"	456024/114.3	19042856	150	260	50	28.0
5"	864024/139.7	19042864	185	260	50	43.5
6"	880024/136.3	19042880	225	290	50	74.0
8"	888024/219.1	19042888	225	320	50	135.0

Body material: St 52
 Other materials by request, for e.g. Stainless Steel,
 SMO, Duplex, Titanium and Superduplex.
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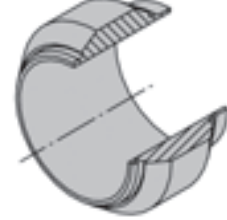
Type A



Type B



Type C



Type D

TUBES & PIPES

CLAMPS

VALVES

BITE TYPE FITTINGS

SAE J514 JIC FLARE FITTINGS

HOSES & HOSE COUPLINGS

ADAPTORS

SPECIAL SOLUTIONS

MACHINES

TECHNICAL INFORMATION

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	14010397	24/50X5FB	14010398	24/50X5FC	14010399	24/50X5FD	14010400	50x5
2"	32/60X6FA	14010426	32/60X6FB	14010427	32/60X6FC	14010428	32/60X6FD	14010429	60x6
2 1/2"	40/72X7FA	1401045355	40/72X7FB	140105365	40/72X7FC	14010454	40/72X7FD	1401045401	72x7

Body material: St 52

Other materials by request, for example Stainless Steel, SMO, Duplex, Titanium and Superduplex.

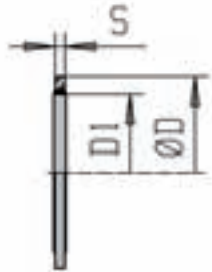
**Metric**

Size	Part No	ID Code	DxS
2"	32	19020060	71x5
2 1/2"	40	19020070	85x5
3"	48	19020080	103x6
4"	56	19020100	123x8
4 1/2"	60	19020110	138x8
5"	64	19020120	158x8
6"	80	19020130	200x10
8"	96	19020150	262x12

ANSI 36.19

Size	Part No	ID Code	Pipe Size
2"	32/60.3	19020062	60.3x11.1
2 1/2"	40/73.0	19020072	73.0x14.0
3"	48/88.9	19020082	88.9x15.2
4"	56	19020100	114.3x17.1
5"	64/141.3	19020122	141.3x19.1
5"	64/139.7		139.7x
6"	80/168.3	19020132	168.3x22.0
8"	88x	19020152	219.1x23.0
10"	04/273.0	19020050	273.0x25.4

Material: AISI 302, special treated.



TUBES & PIPES

CLAMPS

VALVES

BITE TYPE FITTINGS

SAE J514 JIC FLARE FITTINGS

HOSES & HOSE COUPLINGS

ADAPTORS

SPECIAL SOLUTIONS

MACHINES

TECHNICAL INFORMATION

Metric

Size	Part No	ID Code	S	D	d1
2"	3219	19030070	3.25	63.50	51.69
2 1/2"	4037	19030080	3.25	75.00	64.39
3"	4839	19030090	3.25	90.17	76.08
4"	5644	19030110	4.00	110.00	95.0
4 1/2"	6000	19030120	4.00	126.00	108.0
5"	6455	19030130	5.00	143.67	127.0
6"	8001	19030142	8.00	181.00	155.0
8"	9600	19030150	9.00	240.00	205.0

ANSI 36.19

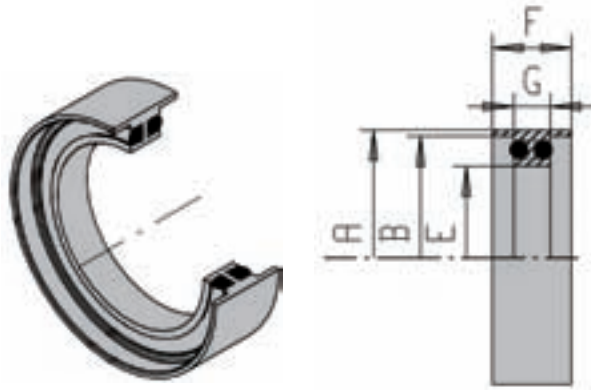
Size	Part No	ID Code	S	D	D1
2"	3260	19030074	3.25	55.50	46.50
2 1/2"	4073	19030082	3.25	69.85	54.89
3"	4888	19030092	4.00	83.80	70
4"	5644	19030110	4.00	109.80	95

Material: Steel and Perbunan or Stainless Steel and Perbunan.

DIN 350-400 BAR

Seal Carrier with O-ring between Flanges

ISO 6164



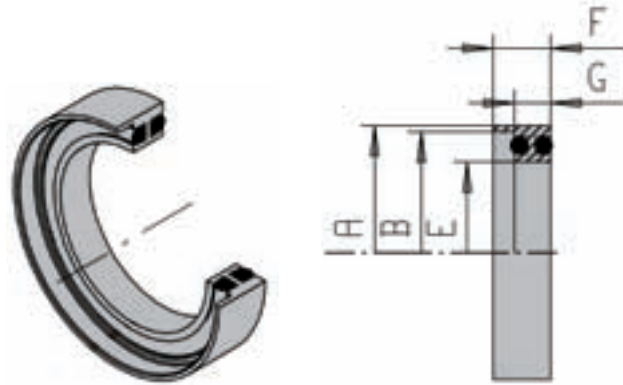
Metric

Size	Part No	ID Code	O-Ring Size	A	B	G	E	F	Pipe Size
2 1/2"	4020-D	18990100	OR64.3x5.7	84	80.2	12	60	26	80x10
3"	4820-D	18990104	OR79.3x5.7	102	97.2	12	73	32	97x12
4"	5620-D	18990108	OR94.3x5.7	121	115.2	12	80	36	115x15
4 1/2"	6020-D	18990112	OR109.3x5.7	135	130.2	12	100	36	130x15
5"	6420-D	18990116	OR129.3x5.7	158	150.2	12	120	36	150x15
6"	8020-D	18990120	OR159.3x5.7	200	190.2	12	150	42	190x20

ANSI 36.19

Size	Part No	ID Code	O-Ring Size	A	B	G	E	F	Pipe Size
3"	4820/88.9x7.7D	18999448	OR78.97x3.53	93	89.4	10	77.7	20	88.9x7.7
4"	5620/114.3x8.7D	18999456	OR101.2x3.53	119.3	114.8	12	97.0	18	114.3x8.7

Seal Carrier material: same as pipe



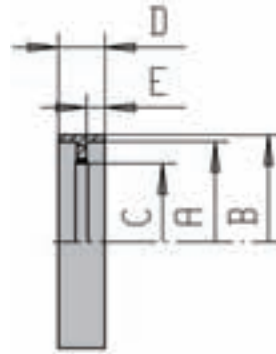
Metric

Size	Part No	ID Code	O-Ring Size	A	B	G	E	F	Pipe Size
2 1/2"	4020-S	18990102	OR64.3x5.7	84	80.2	12	60	19	80x10
3"	4820-S	18990106	OR79.3x5.7	102	97.2	12	73	22	97x12
4"	5620-S	18990110	OR94.3x5.7	121	115.2	12	80	24	115x15
4 1/2"	6020-S	18990114	OR109.3x5.7	135	130.2	12	100	24	130x15
5"	6420-S	18990118	OR129.3x5.7	158	150.2	12	120	24	150x15
6"	8020-S	18990122	OR159.3x5.7	200	190.2	12	150	27	190x20

ANSI 36.19

Size	Part No	ID Code	O-Ring Size	A	B	G	E	F	Pipe Size
3"	4820/88.9x7.7S	18999548	OR78.97x3.53	93	89.4	10	77.7	15	88.9x7.7
4"	5620/114.3x8.7S	18999556	OR101.2x3.53	119.3	114.8	12	97.0	15	114.3x8.7

Seal Carrier material: same as pipe

**Metric**

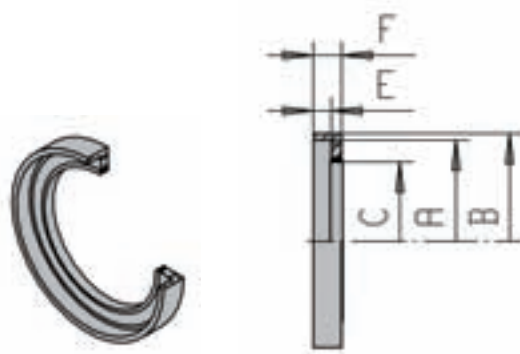
Size	Complete Part No	Complete ID Code	Dowty Seal Part No	A	B	C	E	D	Pipe O.D.
2"	D3250	18998132	3219	66.2	70.5	51.7	6	15.3	66
2 1/2"	D4050	18998140	4037	80.2	84.5	64.3	7	17.3	80
3"	D4850	18998148	4839	97.3	102.5	76.0	9	21.3	97
4"	D5650	18998156	5644	115.3	122.0	95.0	11	26.0	115
4 1/2"	D6050	18998164	6000	130.3	137.0	117.0	11	26.0	130
5"	D6450	18998172	6455	150.3	157.0	127.0	11	26.5	150

ANSI 36.19

Size	Complete Part No	Complete ID Code	Dowty Seal Part No	A	B	C	E	D	Pipe O.D.
2"	D3250/60.3xW.T	18999232	3260	60.5	65	46.5	6	15.3	60.3
2 1/2"	D4050/73.0xW.T	18999240	4073	73.4	78	54.9	7	10.3	73.0
3"	D4850/88.9xW.T	18999248	4888	89.2	95	70	9	22	88.9
4"	D5650/114.3xW.T	18999256	5644	114.6	122	95.0	11	15.0	114.3

Seal Carrier material: same as pipe

Bonded Seals page 139



Metric

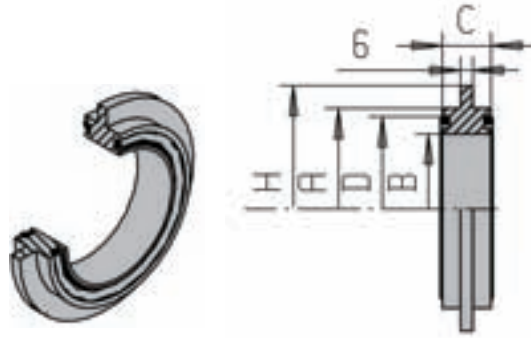
Size	Complete Part No	Complete ID Code	Dowty Seal Part No	A	B	C	E	F	Pipe O.D.
2"	S3250	18998032	3219	66.2	70.5	51.7	6	9.3	66
2 1/2"	S4050	18998040	4037	80.2	84.5	64.3	7	10.3	80
3"	S4850	18998048	4839	97.3	102.5	76.0	9	12.3	97
4"	S5650	18998056	5644	115.3	122.0	95.0	11	15.0	115
4 1/2"	S6050	18998064	6000	130.3	137.0	117.0	11	15.0	130
5"	S6450	18998072	6455	150.3	157.0	127.0	11	15.0	150

ANSI 36.19

Size	Complete Part No	Complete ID Code	Dowty Seal Part No	A	B	C	E	F	Pipe O.D.
2"	S3250/60.3xW.T	18999332	3260	60.5	65	46.5	6	9.3	60.3
2 1/2"	S4050/73.0xW.T	18999340	4073	73.4	78	54.9	7	10.3	73.0
3"	S4850/88.9xW.T	18999348	4888	89.2	95	70	9	13.0	88.9
4"	S5650/114.3xW.T	18999356	5644	114.6	122	95.0	11	15.0	114.3

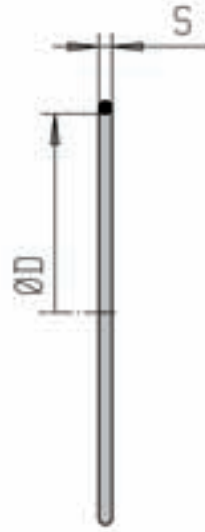
Seal Carrier material: same as pipe

Bonded Seals page 165

DIN 350-400 BAR**Seal Carrier between Flanges****ISO 6164****ANSI 36.19**

Size	Part No	A	B	C	H	D
2"	3210/60.3xW.T.	60.3	To be specified	16	83	56.0
2 1/2"	4010/73.0xW.T.	73.0	To be specified	16	99	68.0
3"	4810/88.9xW.T.	88.9	To be specified	16	121	85.6
4"	5610/114.3xW.T.	114.3	To be specified	16	145	105.7
5"	6410/141.3xW.T.	141.3	To be specified	16	181	130.7
5"	6410/139.7xW.T.	139.7	To be specified	16	181	130.7
6"	8010/168.3xW.T.	168.3	To be specified	16	214	150.7
8"	8810/219.1xW.T.	219.1	To be specified	16	259	200.7
10"	90410/273.0xW.T.	273.0	To be specified	16	338	240.7

Material: Same as pipe



Metric

Pipe Size	Part No	ID Code
50x5	OR47.22x3.53	19035290
60x6	OR56.75x3.53	19035350
72x7	OR69.44x3.53	19035400

TUBES & PIPES

CLAMPS

VALVES

BITE TYPE FITTINGS

SAE J514 JIC FLARE FITTINGS

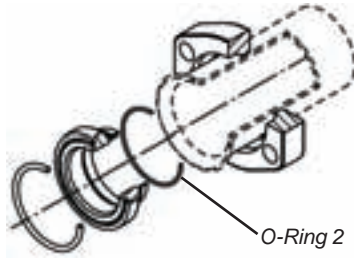
HOSES & HOSE COUPLINGS

ADAPTORS

SPECIAL SOLUTIONS

MACHINES

TECHNICAL INFORMATION



TUBES & PIPES

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BITE TYPE
FITTINGSSAE J514 JIC
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TECHNICAL
INFORMATION**Metric**

Pipe Size	Part No	ID Code
50x5	OR41x1.78	19035250
60x6	OR47.35x1.78	19035292
72x7	OR56.87x1.78	19035352