
Valves & Fittings

Wato is an innovative engineering and production company that offers products and services for water supply and sewerage systems with distributors in the whole world. With its products and services **Wato** offers to its customers possibilities for optimization and higher efficiency.

The company provides simple and practical solutions that increase the efficiency of water supply systems on all levels, from the water carrier to the final consumer. Wato combines services, products and know-how in a single goal: to maximize reliability and performance of water networks.

Wato Product Range includes:

europevalves®: **Wato** produces the full range of control and isolating valves and fittings needed for a Water Supply Network. All **europevalves®** products are designed with the ultimate goal to bring high quality at an optimized cost level.

TOM Pipes: **Wato** produces a new generation of PVC-O pipes. TOM® PVC-O pipes are the most advanced pipes for the conveyance of high-pressure water currently available on the market, with a number of exceptional features for this kind of application, thanks to the process of molecular orientation.

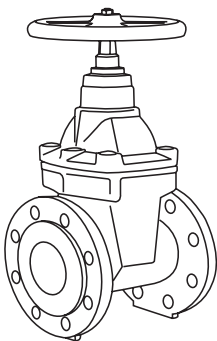
Metering & Control: **Wato** provides equipment to monitor and study the network such as: flow and pressure sensors; data loggers; AMR equipment and remote control systems to optimize the operation of control valves and other units.

Software & Tools: **Wato** customizes its products to the needs of any network operator. The company has developed simple tools to help in monitoring the network on a daily basis and take the right operational decisions on time.

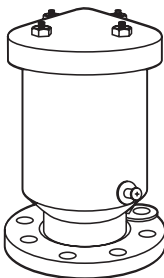
Wato's services include network balancing, meter management, field data capture and asset condition assessment. The company has focused its efforts on two key areas – water loss reduction and sustainable development of water infrastructure. **Wato** provides the following expert solutions in the field of water loss reduction: active pressure management, anti-leakage program and smart metering.

We keep ISO 9001 certification by an accredited certification body. We believe this shows our commitment to quality, customers, and a willingness to work towards improving efficiency. We address the balance between maintaining profitability and reducing environmental impact. We do care about keeping the environment clean. We have put in place an effective Environmental Management System (EMS) and we are ISO 14001 certified.

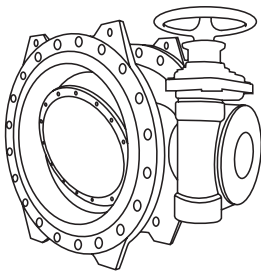
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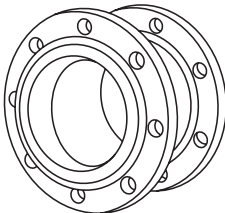
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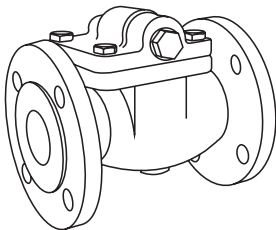
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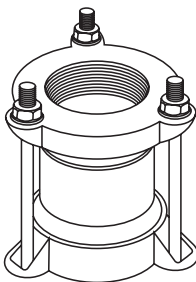
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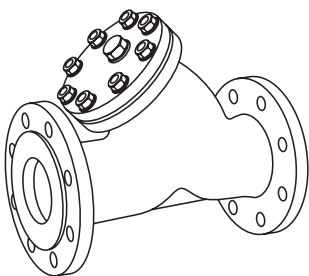
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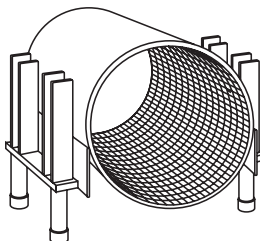
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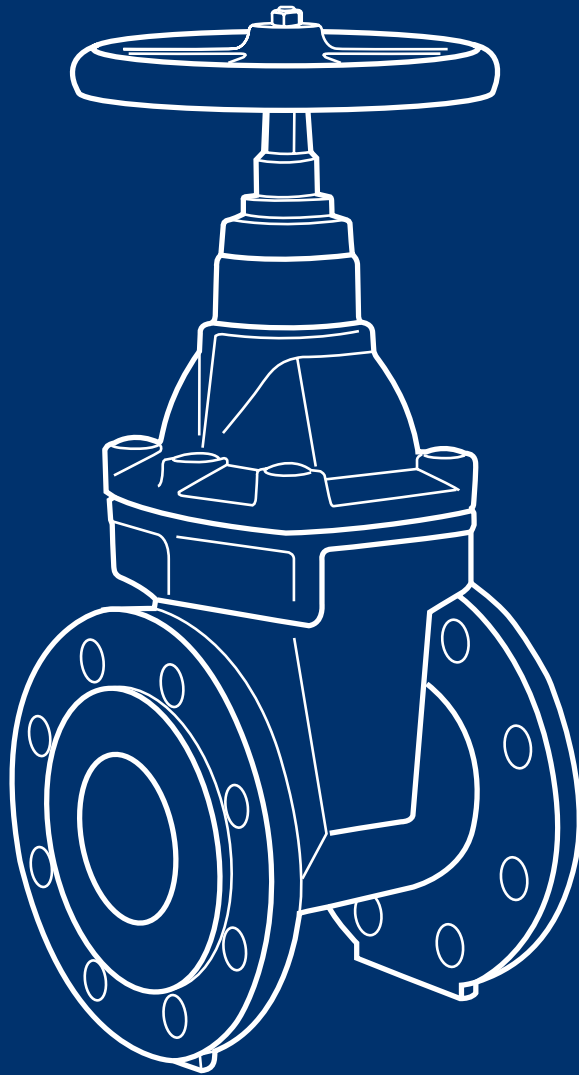
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Gate Valves

Resilient Seated Gate Valve/EN558 Series 14/PN16

Non-Rising Stem

MODEL: GV-RS-S-14-H

Features

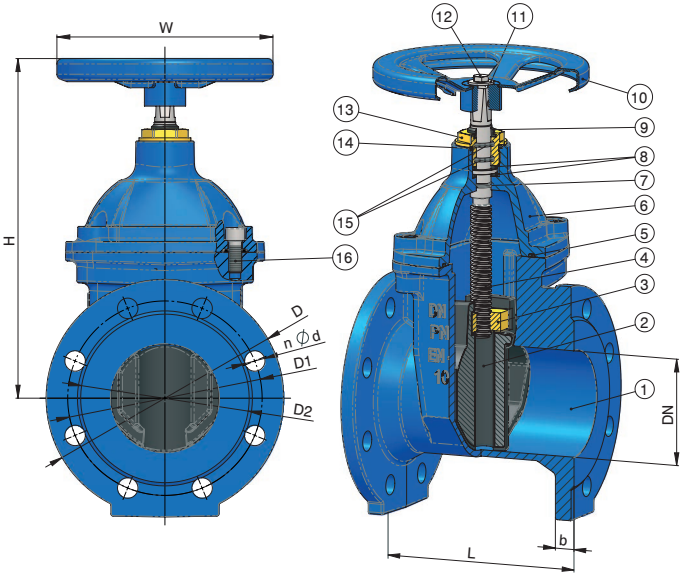
- Replaceable O-ring according ISO 7259
- Low torque operation and abrasion resistance
- Rubber encapsulated wedge
- Clockwise closing direction
- Fusion bonded epoxy coated inside and outside
- Product color: Blue RAL 5005 or RAL 5017
- Maximum temperature 80°C

Technical Specifications

- Design: EN 1074-1 and 2; EN 1171
- Face to Face: EN 558 / ISO 5752 - 14 base series
- Flanges:EN 1092-2 PN10/16
- Hydraulic test to EN12266-1
 - Seat Test Pressure: 17.6 bar
 - Shell Test Pressure: 24 bar
 - Operating torque test
- Nominal pressure designation PN16 bar

Optional Extras

- Stem Cap
- Position Indicator
- Extension Spindle / T Key



Material Specifications

Item	Part Name	Material	Grade	Item	Part Name	Material	Grade
1	Body	Ductile iron	EN-JS-1050(EN-GJS-500-7) EN 1563	9	Dust guard	Rubber	NBR EN 681-1
2	Wedge	DI+Rubber	EN-JS 1050 (EN-GJS-500-7) EN 1563 + EPDM /NBR EN 681-1	10	Handwheel	Steel	S235 JR EN 10025
3	Wedge Nut	Brass	CW602 N (CuZn36Pb2As) EN 12167	11	Washer	Stainless steel	EN ISO 7089
4	Stem	Stainless steel	1.4021 (X20Cr13) EN10088-3	12	Bolt	Stainless steel	EN ISO 4017
5	Bonnet gasket	Rubber	EPDM/NBR EN 681-1	13	Stuffing nut	Brass	CW602 N (CuZn36Pb2As) EN 12167
6	Bonnet	Ductile iron	EN-JS 1050 (EN-GJS-500-7) EN 1563	14	O Ring	EPDM/NBR	EPDM/NBR EN 681-1
7	O Ring	EPDM/NBR	EPDM/NBR EN 681-1	15	O Ring	EPDM/NBR	EPDM/NBR EN 681-1
8	Thrust washer	Plastic	PA(Nylon) EN ISO 1874	16	Bolt	Stainless steel	EN ISO 4762

Dimensions

Size	L	D	D1	D2	b	n-d	H	W	W.T(kg)
DN40	140	150	110	84	19	4-19	240	160 180	9
DN50	150	165	125	99	19	4-19	250	160 180	11
DN65	170	185	145	118	19	4-19	265	180	14
DN80	180	200	160	132	19	8-19	300	200	17
DN100	190	220	180	156	19	8-19	350	200	21
DN125	200	250	210	184	19	8-19	410	220	29
DN150	210	285	240	211	19	8-23	450	250	38
DN200	230	340	295	266	20	12-23	550	280	58
DN250	250	405	355	319	22	12-28	650	320	90
DN300	270	460	410	370	24.5	12-28	710	350	120

Resilient Seated Gate Valve/EN558 Series 15/PN16

Non-Rising Stem

MODEL: GV-RS-S-15-H

Features

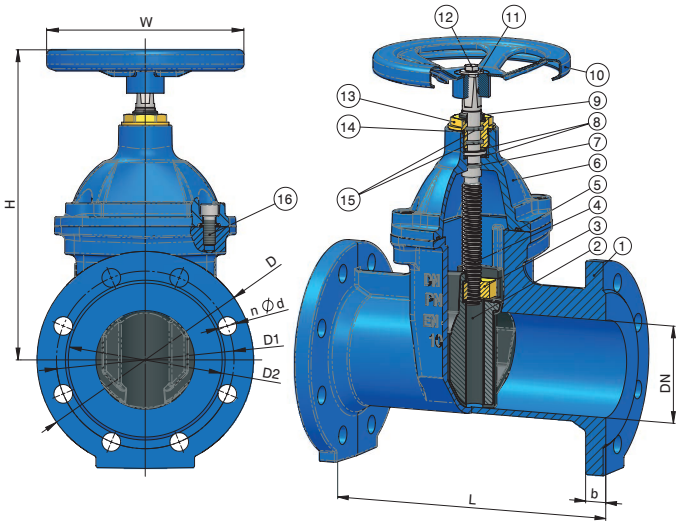
- Replaceable O-ring according ISO 7259
- Low torque operation and abrasion resistance
- Rubber encapsulated wedge
- Clockwise closing direction
- Fusion bonded epoxy coated Inside and outside
- Product color: Blue RAL 5005 or RAL 5017
- Maximum temperature 80°C

Technical Specifications

- Design: EN 1074-1 and 2; EN 1171
- Face to Face: EN 558 / ISO 5752 - 15 base series
- Flanges:EN 1092-2 PN10/16
- Hydraulic test to EN12266-1
 - Seat Test Pressure: 17.6 bar
 - Shell Test Pressure: 24 bar
 - Operating torque test
- Nominal pressure designation PN16 bar

Optional Extras

- Stem Cap
- Position Indicator
- Extension Spindle / T Key



Material Specifications

Item	Part Name	Material	Grade	Item	Part Name	Material	Grade
1	Body	Ductile iron	EN-JS-1050(EN-GJS-500-7) EN 1563	9	Dust guard	Rubber	NBR EN 681-1
2	Wedge	DI+Rubber	EN-JS 1050 (EN-GJS-500-7) EN 1563 + EPDM /NBR EN 681-1	10	Handwheel	Steel	S235 JR EN 10025
3	Wedge Nut	Brass	CW602 N (CuZn36Pb2As) EN 12167	11	Washer	Stainless steel	EN ISO 7089
4	Stem	Stainless steel	1.4021 (X20Cr13) EN10088-3	12	Bolt	Stainless steel	EN ISO 4017
5	Bonnet Gasket	Rubber	EPDM/NBR EN 681-1	13	Stuffing nut	Brass	CW602 N (CuZn36Pb2As) EN 12167
6	Bonnet	Ductile iron	EN-JS 1050 (EN-GJS-500-7) EN 1563	14	O Ring	EPDM/NBR	EPDM/NBR EN 681-1
7	O Ring	EPDM/NBR	EPDM/NBR EN 681-1	15	O Ring	EPDM/NBR	EPDM/NBR EN 681-1
8	Thrust Washer	Plastic	PA(Nylon) EN ISO 1874	16	Bolt	Stainless steel	EN ISO 4762

Dimensions

Size	L	D	D1	D2	b	n-d	H	W	W.T(kg)
DN40	240	150	110	84	19	4-19	240	160	10.5
DN50	250	165	125	99	19	4-19	250	160	12
DN65	270	185	145	118	19	4-19	265	180	15.5
DN80	280	200	160	132	19	8-19	300	200	19.5
DN100	300	220	180	156	19	8-19	350	200	25.5
DN125	325	250	210	184	19	8-19	410	220	34
DN150	350	285	240	211	19	8-23	450	250	45
DN200	400	340	295	266	20	12-23	550	280	69
DN250	450	405	355	319	22	12-28	650	320	106
DN300	500	460	410	370	24.5	12-28	710	350	148

Resilient Seated Gate Valve/EN558 Series 14–15/PN16

Non-Rising Stem

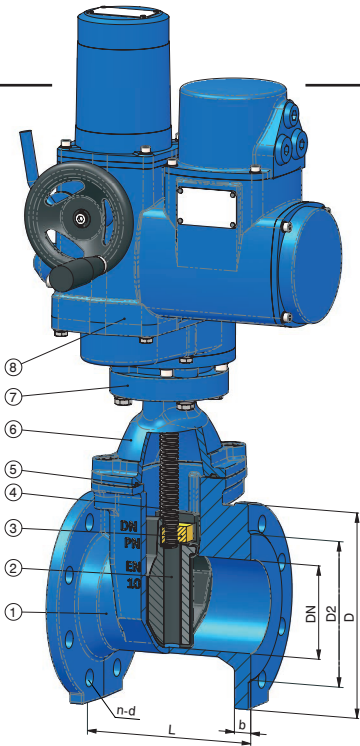
MODEL: GV-RSA-S-14-H / GV-RSA-S-15-H

Features

- Replaceable O-ring according ISO 7259
- Low torque operation and abrasion resistance
- Rubber encapsulated wedge
- Clockwise closing direction
- Fusion bonded epoxy coated inside and outside
- Product color: Blue RAL 5005 or RAL 5017
- Maximum temperature 80°C

Technical Specifications

- Design: EN 1074-1 and 2; EN 1171
- Face to Face: EN 558 / ISO 5752 – 14 and 15 base series
- Flanges:EN 1092-2 PN10/16
- Hydraulic test to EN12266-1
 - Seat Test Pressure: 17.6 bar
 - Shell Test Pressure: 24 bar
 - Operating torque test
- Nominal pressure designation PN16 bar
- Top flange in acc. to ISO 5210 B3



Material Specifications

Item	Part Name	Material	Grade
1	Body	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
2	Wedge	DI+Rubber	EN-JS 1050 (EN-GJS-500-7) EN 1563+ EPDM /NBR EN 681-1
3	Wedge Nut	Brass	CW602 N (CuZn36Pb2As) EN 12167
4	Stem	Stainless steel	1.4021 (X20Cr13) EN10088-3-3
5	Bonnet Gasket	Rubber	EPDM/NBR EN 681-1
6	Bonnet	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
7	Top Flange	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
8	Electrical Actuator		

Dimensions

Size	L	D	D1	D2	b	n-d	W.T(kg)		Top Flange	Torque	
	Series 14	Series 15					F4	F5			
DN40	140	240	150	110	84	19	4-19	9	10.5	F07	45
DN50	150	250	165	125	99	19	4-19	11	12	F07	45
DN65	170	270	185	145	118	19	4-19	14	15.5	F07	50
DN80	180	280	200	160	132	19	8-19	17	19.5	F10	65
DN100	190	300	220	180	156	19	8-19	21	25.5	F10	80
DN125	200	325	250	210	184	19	8-19	29	34	F10	100
DN150	210	350	285	240	211	19	8-23	38	45	F10	110
DN200	230	400	340	295	266	20	12-23	58	69	F14	160
DN250	250	450	405	355	319	22	12-28	90	106	F14	220
DN300	270	500	460	410	370	24.5	12-28	120	148	F14	260

Resilient Seated Gate Valve/EN558 Series 14–15/PN16

Non-Rising Stem

MODEL: GV-RS(A)-XL-14-H / GV-RS(A)-XL-15-H

Features

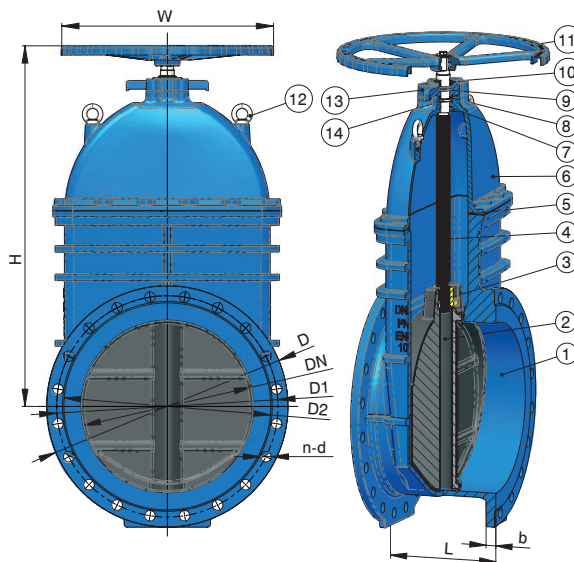
- Replaceable O-ring according ISO 7259
- Low torque operation and abrasion resistance
- Rubber encapsulated wedge
- Clockwise closing direction
- Fusion bonded epoxy coated Inside and outside
- Product color: Blue RAL 5005 or RAL 5017
- Maximum temperature 80°C

Technical Specifications

- Design: EN 1074-1 and 2; EN 1171
- Face to Face : EN 558 / ISO 5752 – 14 and 15 base series
- Flanges: EN 1092-2 PN10/16
- Hydraulic test EN12266-1
- Seat Test Pressure: 17.6 bar
- Shell Test Pressure: 24 bar
- Operating torque test
- Nominal pressure designation PN16 bar

Optional Extras

- Stem Cap
- Position Indicator
- Top flange in acc. to ISO 5210 B3
- Extension Spindle / T Key
- Gear Box



Material Specifications

Item	Part Name	Material	Grade
1	Body	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
2	Wedge	DI+Rubber	EN-JS 1050 (EN-GJS-500-7) EN 1563 + EPDM /NBR EN 681-1
3	Wedge Nut	Brass	CW602 N (CuZn36Pb2As) EN 12167
4	Stem	Stainless steel	1.4021 (X20Cr13) EN10088-3-3
5	Bonnet Gasket	Rubber	EPDM/NBR EN 681-1
6	Bonnet	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
7	Back Sealing O Ring	Rubber	EPDM/NBR EN 681-1
8	Thrust Washer	Plastic	PA (Nylon) EN ISO 1874
9	O-Ring	Rubber	EPDM/NBR EN 681-1
10	Dust Guard	Rubber	NBR EN 681-1
11	Hand Wheel	GI	EN-JL 1040 (EN-GJL-250) EN 1561
12	Eye Bolt	Zinc-plated Carbon Steel	DIN 358
13	Gland Flange	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563

Dimensions

Size	L		D	D1	D2	b	n-d	H	H1	W	W.T(kg)		Top Flange	Torque
	F4	F5									F4	F5		
DN350	290	550	520	470	429	26.5	16-28	762	852	450	180	225	F16	350
DN400	310	600	580	525	480	28	16-31	836	926	450	235	294	F16	400
DN450	330	650	640	585	548	30	20-31	957	1047	640	345	431	F16	450
DN500	350	700	715	650	609	31.5	20-34	1036	1126	640	415	519	F25	500
DN600	390	800	840	770	720	36	20-37	1188	1278	640	575	719	F25	600

Service Valve

MODEL: SV-B-H

Features

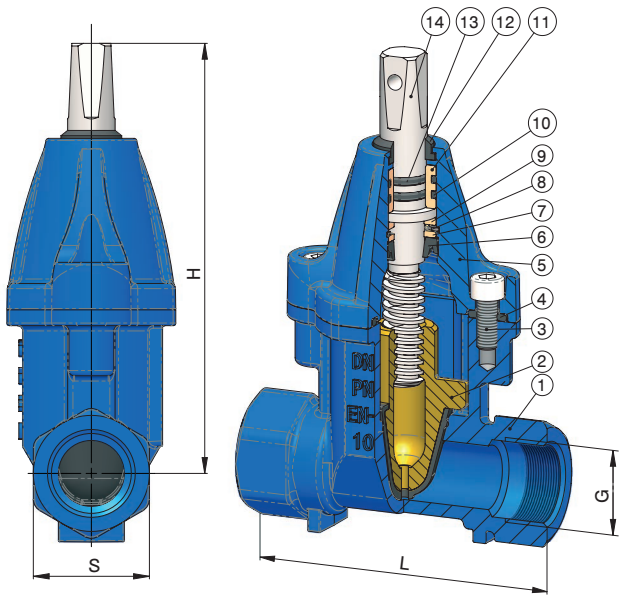
- Bolt Bonnet
- Low torque operation
- Rubber encapsulated wedge
- Clockwise closing direction
- Fusion bonded epoxy coated inside and outside
- Product color: Blue RAL 5005 or RAL 5017
- Maximum temperature 80°C
- Minimum strength torque (mST) equal to three times maximum operation torque (MOT) according EN 1074-1

Technical Specifications

- Design: EN 1074-1 and 2; EN 1171
- Hydraulic test: EN12266-1
Seat Test Pressure: 17.6 bar
Shell Test Pressure: 24 bar
Operating torque test
- Nominal pressure designation PN16 bar

Optional Extras

- Stem Cap
- Extension Spindle / T Key



Material Specifications

Item	Part Name	Material	Grade
1	Body	Ductile iron	EN-JS-1050(EN-GJS-500-7) EN 1563
2	Wedge	Brass+Rubber	CW602 N (CuZn36Pb2As) EN 12167 + EPDM EN 681-1
3	Bolt	Stainless steel	1.4301(X5CrNi18-10) EN 10088-3
4	Gasket	Rubber	EPDM EN 681-1
5	Bonnet	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
6	Seal	Rubber	EPDM EN 681-1
7	Washer	Plastic	PA(Nylon) EN ISO 1874
8	Circlip	Stainless steel	1.4112 (X90CrMoV18) EN 10088-1
9	Thrust washer	Plastic	PA(Nylon) EN ISO 1874
10	O-ring	Rubber	EPDM EN 681-1
11	Seal bushing	Plastic	PA(Nylon) EN ISO 1874
12	Dust guard	Rubber	NBR EN 681-1
13	O-ring	Rubber	EPDM EN 681-1
14	Stem	Stainless steel	1.4021(X20Cr13) EN 10088-3

Dimensions

Size	L	S	G	H
DN20	115	45	3/4"	166
DN25	115	45	1"	166
DN32	130	50	1 1/4"	175
DN40	150	60	1 1/2"	196
DN50	178	70	2"	216

Metal Seated Gate Valve/EN558 Series 14/PN10

Non-Rising Stem

MODEL: GV-MS(A)-S-14-H

Features

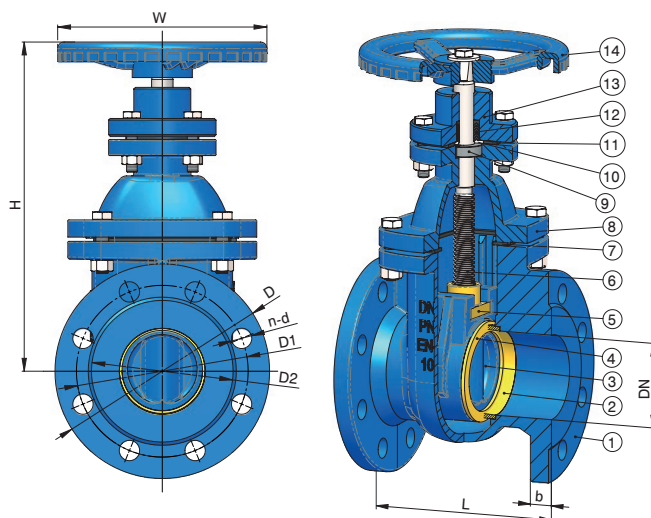
- Bolt Bonnet
- Solid wedge disc
- Replaceable O-ring according ISO 7259
- Clockwise closing direction
- Seat rings are pressed into wedge and body
- Product color: Blue RAL 5005 or RAL 5017
- Maximum temperature 80°C

Technical Specifications

- Design: EN 1074-1 and 2; EN 1171
- Face to Face : EN 558 / ISO 5752 - 14 base series
- Flanges: EN 1092-2 PN10
- Hydraulic test to EN12266-1
Seat Test Pressure: 11 bar
Shell Test Pressure: 15 bar
- Nominal pressure designation PN10 bar

Optional Extras

- Position Indicator
- Extension Spindle / T Key
- Top flange in acc. to ISO 5210 B3



Material Specifications

Item	Part Name	Material	Grade	Item	Part Name	Material	Grade
1	Body	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563	8	Bonnet	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
2	Seat Ring	Brass	CW602 N (CuZn36Pb2As) EN 12164	9	Stem Collar	Carbon Steel	EPDM EN 681-1
3	Wedge	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563	10	Thrust Washer	PTFE	
4	Wedge Ring	Brass	CW602 N (CuZn36Pb2As) EN 1652	11	Gland Flange Gasket	Rubber	NBR 681
5	Wedge Nut	Brass	CW602 N (CuZn36Pb2As) EN 12167	12	Stem Sealing	Rubber	NBR 681
6	Stem	Stainless steel	1.4021 (X20Cr13) EN10088-3-3	13	Gland Flange	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
7	Bonnet Gasket	Rubber	NBR EN 681-1	14	Hand Wheel	GI	EN-JL 1040 (EN-GJL-250) EN 1561

Dimensions

Size	L	D	D1	D2	b	n-d	H	W	W.T (kg)
DN40	140	150	110	84	18	4-19	230	130	11
DN50	150	165	125	99	20	4-19	250	130	12
DN65	170	185	145	118	20	4-19	280	130	16
DN80	180	200	160	132	22	8-19	310	150	19
DN100	190	220	180	156	24	8-19	349	185	26
DN125	200	250	210	184	26	8-19	395	185	36
DN150	210	285	240	211	26	8-23	456	195	51
DN200	230	340	295	266	26	8-23	537	225	62
DN250	250	395	350	319	28	12-23	659	245	127
DN300	270	445	400	370	28	12-23	718	285	165
DN350	290	505	460	429	30	16-23	870	400	225
DN400	310	565	515	480	32	16-28	941	400	369.6

Metal Seated Gate Valve/EN558 Series 15/PN16

Non-Rising Stem

MODEL: GV-MS(A)-S-15-H

Features

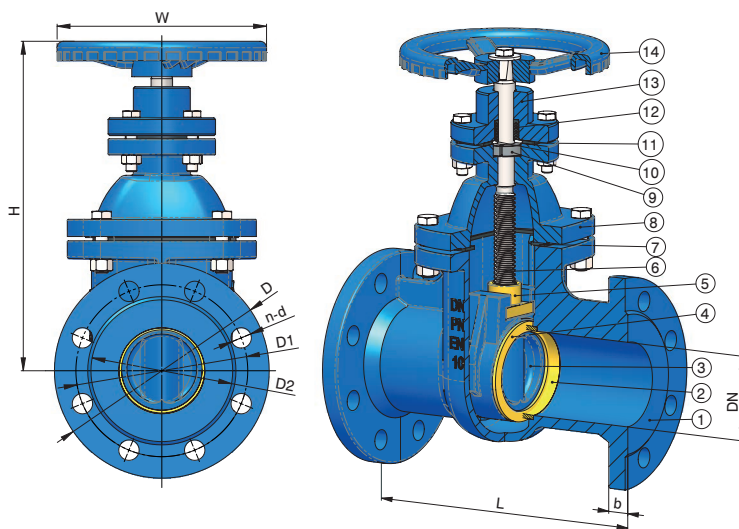
- Bolt Bonnet
- Solid wedge disc
- Replaceable O-ring or Graphite packing
- Clockwise closing direction
- Seat rings are pressed into wedge and body
- Product color: Blue RAL 5005 or RAL 5017
- Maximum temperature 150 °C

Technical Specifications

- Design: EN 1074-1 and 2; EN 1171
- Face to Face: EN 558 / ISO 5752 - 15 base series
- Flanges: EN 1092-2 PN10/16
- Hydraulic test to EN12266-1
- Seat Test Pressure: 17.6 bar
- Shell Test Pressure: 24 bar
- Nominal pressure designation PN16 bar

Optional Extras:

- Position Indicator
- Extension Spindle / T Key
- Top flange in acc. to ISO 5210 B3



Material Specifications

Item	Part Name	Material	Grade	Item	Part Name	Material	Grade
1	Body	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563	8	Bonnet	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
2	Seat Ring	Brass	CW602 N (CuZn36Pb2As) EN 12164	9	Stem Collar	Carbon Steel	EPDM EN 681-1
3	Wedge	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563	10	Thrust Washer	PTFE	
4	Wedge Ring	Brass	CW602 N (CuZn36Pb2As) EN 1652	11	Gland Flange Gasket	Rubber	NBR 681
5	Wedge Nut	Brass	CW602 N (CuZn36Pb2As) EN 12167	12	Stem Sealing	Rubber	NBR 681
6	Stem	Stainless steel	1.4021 (X20Cr13) EN10088-3-3	13	Gland Flange	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
7	Bonnet Gasket	Rubber	NBR EN 681-1	14	Hand Wheel	GI	EN-JL 1040 (EN-GJL-250) EN 1561

Dimensions

Size	L	D	D1	D2	b	n-d	H	W	W.T(kg)
DN40	240	150	110	84	18	4-19	230	150	12.0
DN50	250	165	125	99	20	4-19	250	150	13.9
DN65	270	185	145	118	20	4-19	280	150	17.9
DN80	280	200	160	132	22	8-19	310	180	22.9
DN100	300	220	180	156	24	8-19	349	195	29.2
DN125	325	250	210	184	26	8-19	395	195	47.4
DN150	350	285	240	211	26	8-23	456	225	53.3
DN200	400	340	295	266	30	12-23	537	225	80.6
DN250	450	405	355	319	32	12-28	659	285	123.9
DN300	500	460	410	370	32	12-28	718	400	175.4

Metal Seated Gate Valve/EN558 Series 15/PN16

Non-Rising Stem

MODEL: GV-MS(A)-XL-15-H

Features

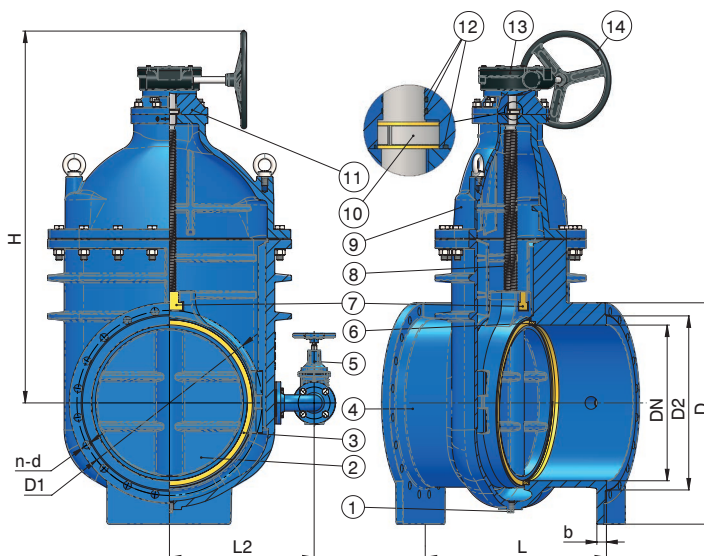
- Bolt Bonnet
- Solid wedge disc
- Replaceable O-ring according ISO 7259
- Clockwise closing direction
- Seat rings are pressed into wedge and body
- Product color: Blue RAL 5017
- Maximum temperature 80 °C

Technical Specifications

- Design: EN 1074-1 and 2; EN 1171
- Face to Face: EN 558 / ISO 5752 - 15 base series
- Flanges: EN 1092-2 PN10/16
- Hydraulic test to EN12266-1
 - Seat Test Pressure: 1,1 x nominal pressure
 - Shell Test Pressure: 1,5 x nominal pressure
- Nominal pressure designation PN10/16 bar

Optional Extras

- Position Indicator
- Top Flange ISO 5210
- Gear box
- By-Pass Valve



Material Specifications

Item	Part Name	Material	Grade	Item	Part Name	Material	Grade
1	Drainage	Zinc Plated Carbon Steel	DIN 358	8	Stem	Stainless steel	1.4021 (X20Cr13) EN10088-3-3
2	Wedge	DI	EN-JS 1050 (EN-GJS-500-7) EN 15631	9	Bonnet	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
3	Wedge Ring	Brass	CW602 N (CuZn36Pb2As) EN 1652	10	Stem Collar	Stainless steel	1.4021 (X20Cr13) EN10088-3-3
4	Body	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563	11	Gland Flange	Carbon Steel	S235JREN10025
5	By-Pass Valve			12	O Rings	Rubber	EPDM/NBR EN 681-1
6	Seat Ring	Brass	CW602 N (CuZn36Pb2As) EN 12164	13	Gearbox		
7	Wedge Nut	Brass	CW602 N (CuZn36Pb2As) EN 12167	14	Hand Wheel	GI	EN-JL 1040 (EN-GJL-250) EN 1561

Dimensions

Size (DN)	L	D	D1	D2	b	n-d	L2	H	W	W.T (kg)
DN350	550	520	470	429	26.5	16-28	600	1082	460	390
DN400	600	580	525	480	28	16-31	600	1123	600	498
DN450	650	640	585	548	30	20-31	620	1204	600	521
DN500	700	715	650	609	31.5	20-34	660	1295	600	699
DN600	800	840	770	720	36	20-37	722	1478	600	1010
DN700	900	910	840	794	39.5	24-37	833	1696	720	2243
DN800	1000	1025	950	901	43	24-41	863	1816	720	2895
DN900	1100	1125	1050	1001	46.5	28-41	972	2323	720	3380
DN1000	1200	1255	1170	1112	50	28-44	1015	2611	720	4683
DN1200	1400	1485	1390	1328	57	32-50	1065	2718	900	6582

Extension spindles for Service and Gate Valves

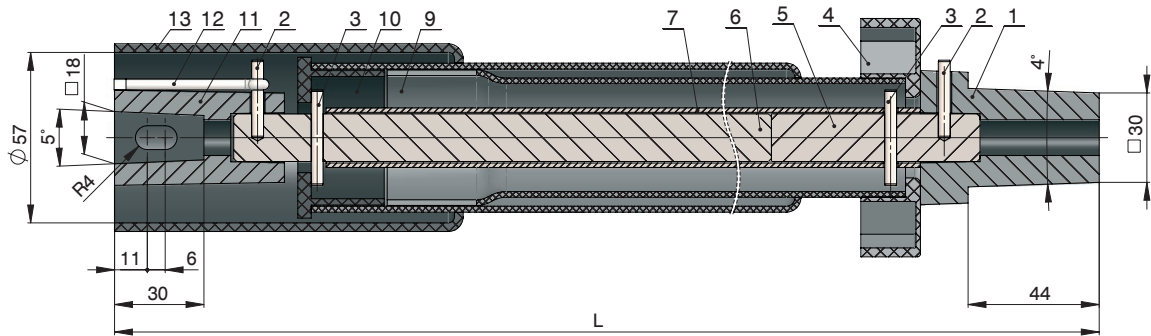
MODEL: GV-ES-W

Features

- Easy access to underground mounted service and gate valves
- Protection against excessive vertical stress
- Fixed and telescopic options available

Optional Extras

- Adaptor for T-key
- Adaptor for stem



Material Specifications

Item	Part Name	Material	Grade
1	Upper stone	DI	EN-GJL-300 EN 1561
4	Collar	Plastic	PVC-U EN ISO 1163-1
5	Short square	Steel	S235JR EN 10025-2
6	Long square	Steel	S235JR EN 10025-2
7	Square tube	Steel	S235JR EN 10025-2
8	Inner tube	Plastic	PVC-U EN 1401-1
9	Outer tube	Plastic	PVC-U EN 1401-1
10	Lower cap	Plastic	PVC-U EN ISO 1163-1
11	Lower stone	Cast iron	EN-GJL-300 EN 1561
13	Bell	Plastic	PE EN 12201-2

Dimensions

Telescopic extension spindle (L=mm)					
DN	550-800	700-1100	800-1200	1000-1650	1400-2200
20 – 150	•	•	•	•	•
150 – 300	•	•	•	•	•
600 – 1000	•	•	•	•	•
1000 – 1500	•	•	•	•	•
1500 – 1800	•	•	•	•	•
Fixed length extension spindle (L=mm)					
DN	800	1000	1250	1500	
20 - 150	•	•	•	•	
150 - 300	•	•	•	•	

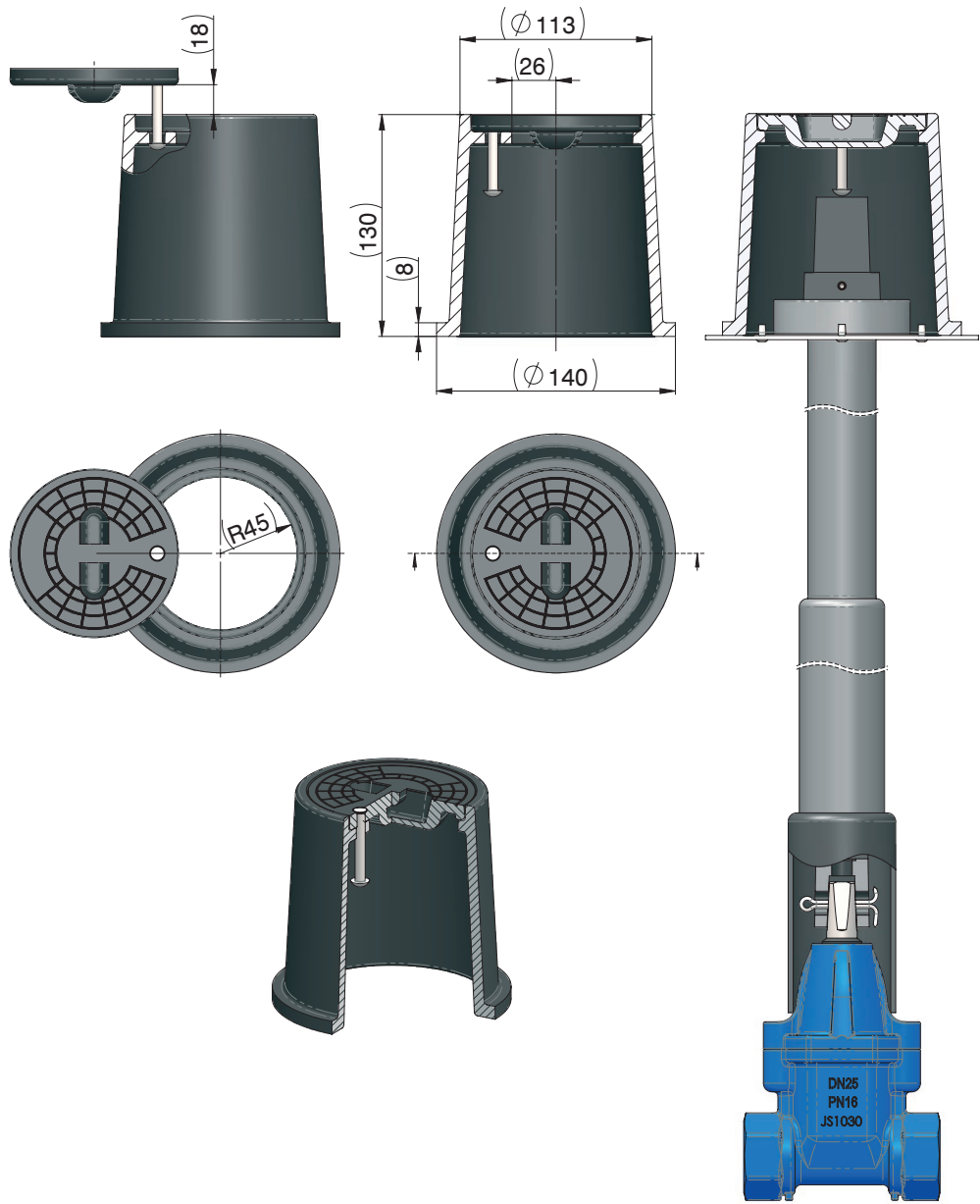
Different length available on request

Surface Box for Service and Gate Valves

MODEL: GV-SB-IP

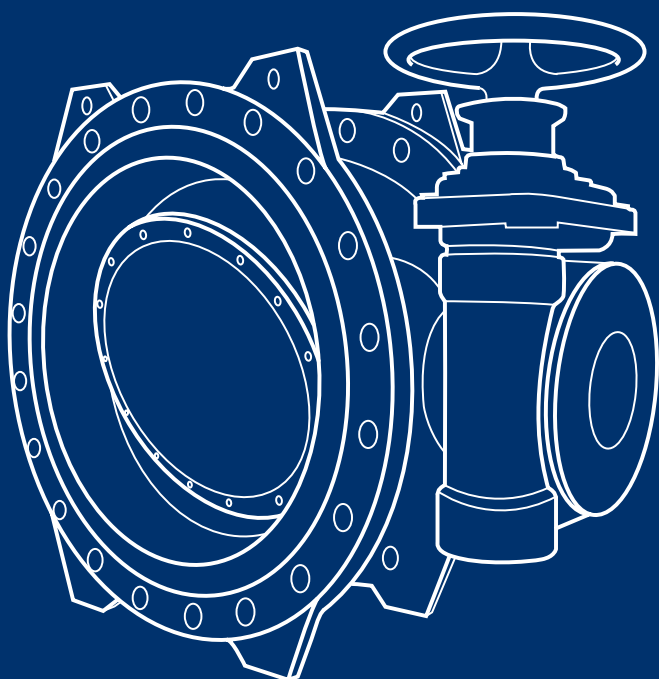
Features

- Corrosion protection



Material Specifications

Item	Part Name	Material	Grade
1	Body	GI	EN-JL 1040 (EN-GJL-250) EN 1561
2	Bonnet	GI	EN-JL 1040 (EN-GJL-250) EN 1561
3	Bonnet Frame	Stainless Steel	
4	Bolts	Stainless Steel	



Butterfly Valves

Wafer Type Butterfly Valves

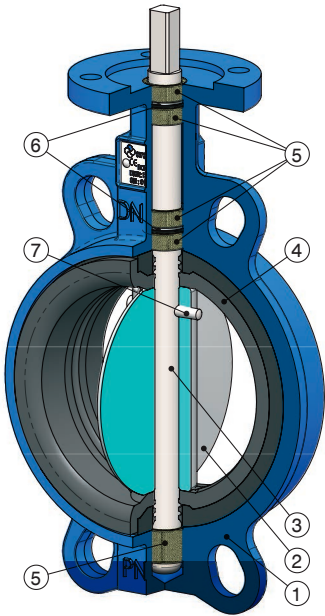
Technical Specifications

Size	DN40-DN1200
General Design	EN 593 *
Mounting Pad	ISO 5210 / ISO5211
Face to Face	EN 558 20 base series*
Flange Drilling	EN 1092 PN10/PN16*
Inspection and Test	EN12266-1
Nominal pressure designation	PN10/16

* All available General Design and Face to Face Standard refer to the Basic Specification of Wato.
* All available Flange drilling kindly refer to the attached Flange Drilling Dimensions.

Product Features

- Wafer, lug or U type flanged body style fit between FF or RF flanges
- PTFE bushing ensure the maximum shaft support and centralized alignment
- 360° polished disc assures positive on-off
- Hard-Backed Cartridge Seat
- One piece shaft, pinned,splined and square connected disc
- Universal ISO 5211 mounting Pad.



Material Specifications

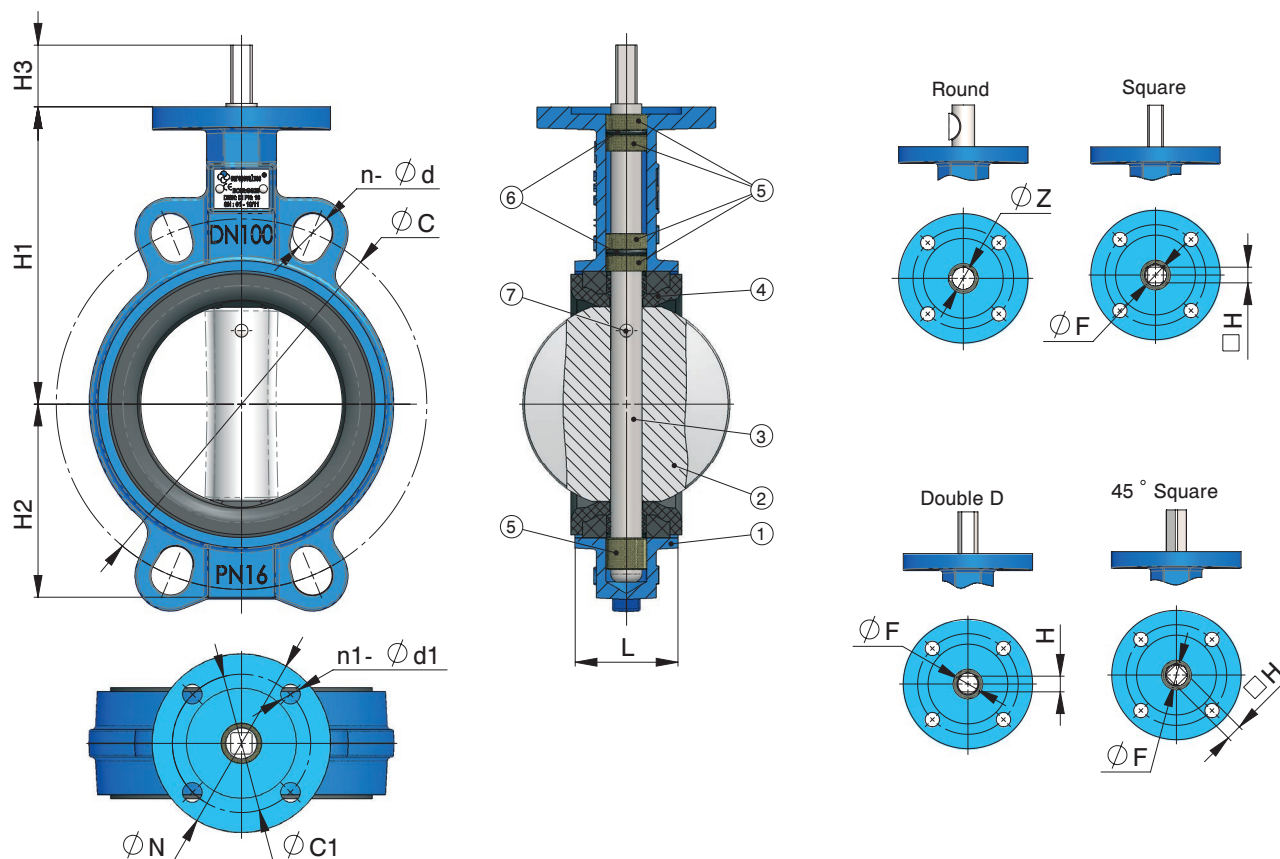
Item	Part name	Material	Grade
1	Body	GI/DI	EN-JL 1040 (EN-GJL-250) EN 1561/EN-JS 1050 (EN-GLS-500-7) EN1563
2	Disc	DI / SS304 / SS316	EN-JS 1050 (EN-GLS-500-7) EN1563 1.4301 (X5CrNi18 9) EN10088-3 1.4401 (X5CrNiMo 17 12 2) EN10088-3
3	Stem	Stainless Steel	1.4406 (X12Cr13) EN10088-3
4	Seat	Rubber	EPDM EN 681-1
5	Bushing	Plastic	PTFE ISO 13000
6	O Ring	Rubber	EPDM EN 681-1
7	Pin	Stainless Steel	1.4408 (GX5CrNiMo 19-11-2) EN10088-3

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Butterfly Valve/EN558 Series 20

Wafer Type

MODEL: BFV-WF-H



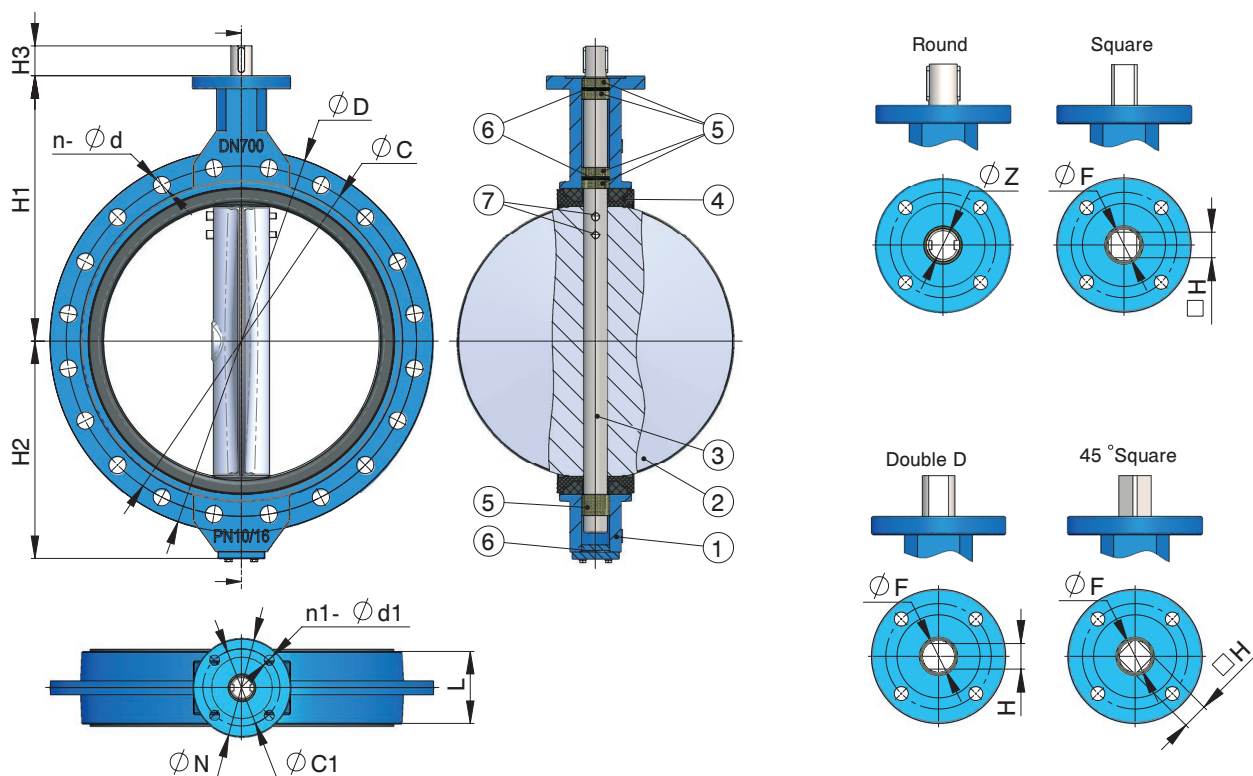
Dimensions

Size		L	H1	H2	H3	ISO5211				EN 1092 PN16		ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-Ød			
40	1.5"	33	139	68	29	F05	65	50	4-Ø8	110	4-Ø18	12.6	12.1	9
50	2"	43	161	80	29	F05	65	50	4-Ø8	125	4-Ø18	12.6	12.1	9
65	2-1/2"	46	175	89	29	F05	65	50	4-Ø8	145	4-Ø18	12.6	12.1	9
80	3"	46	181	95	29	F05	65	50	4-Ø8	160	8-Ø18	12.6	12.1	9
100	4"	52	200	114	29	F07	90	70	4-Ø10	180	8-Ø18	15.77	14.1	11
125	5"	56	213	127	29	F07	90	70	4-Ø10	210	8-Ø18	18.92	18.1	14
150	6"	56	226	139	29	F07	90	70	4-Ø10	240	8-Ø22	18.92	18.1	14
200	8"	60	260	175	35	F10	125	102	4-Ø12	295	12-Ø22	22.1	22.1	17
250	10"	68	292	203	35	F10	125	102	4-Ø12	355	12-Ø26	28.45	28.1	22
300	12"	78	337	242	35	F10	125	102	4-Ø12	410	12-Ø26	31.6	28.1	22
350	14"	78	368	267	45	F10	125	102	4-Ø12	470	16-Ø26	31.6	28.2	22
400	16"	102	400	298.6	51.2	F14	175	140	4-Ø18	525	16-Ø30	33.15	28.2	22
450	18"	114	422	318	51.2	F14	175	140	4-Ø18	585	20-Ø30	38	36.2	27
500	20"	127	480	355	64.2	F14	175	140	4-Ø18	650	20-Ø33	41.15	36.2	27
600	24"	154	562	444	70.2	F16	210	165	4-Ø22	770	20-Ø36	50.65	48.2	36

Butterfly Valve/EN558 Series 20

Wafer Type

MODEL: BFV-WF-H



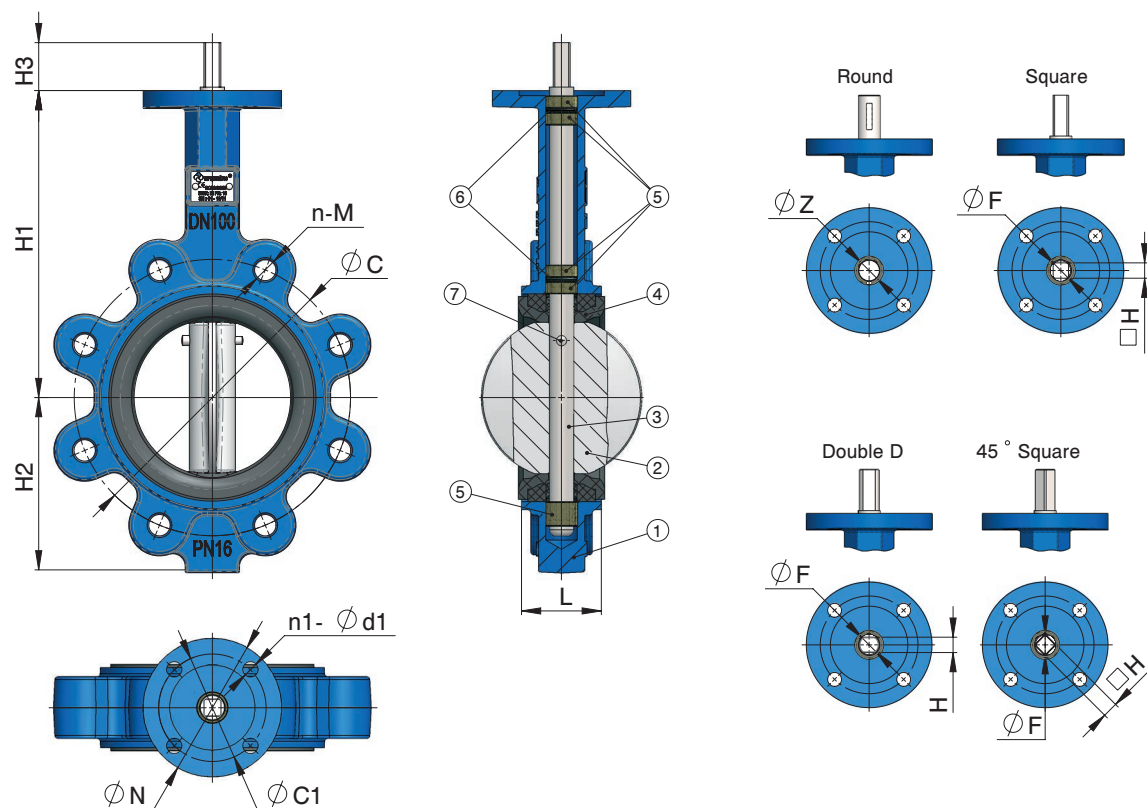
Dimensions

Size		L	H1	H2	H3	ISO5211				EN 1092 PN16			ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØD	ØC	n-Ød			
700	28"	165	623.9	505.1	66	F25	300	254	8-Ø18	895	840	24-Ø30	55	60.2	46
750	30"	165	646	499	66	F25	300	254	8-Ø18	965	900	24-Ø33	55	60.2	46
800	32"	190	672	576	66	F25	300	254	8-Ø18	1015	950	24-Ø33	55	60.2	46
900	36"	203	720	637	118	F25	300	254	8-Ø18	1115	1050	28-Ø33	75	72.2	55
1000	40"	216	800	701	142	F25	300	254	8-Ø18	1230	1160	28-Ø36	85	72.2	55
1200	48"	254	940	844	160	F30	350	298	8-Ø22	1455	1380	32-Ø39	105	98.2	75

Butterfly Valve/EN558 Series 20

Lug Type

MODEL: BFV-LG-H



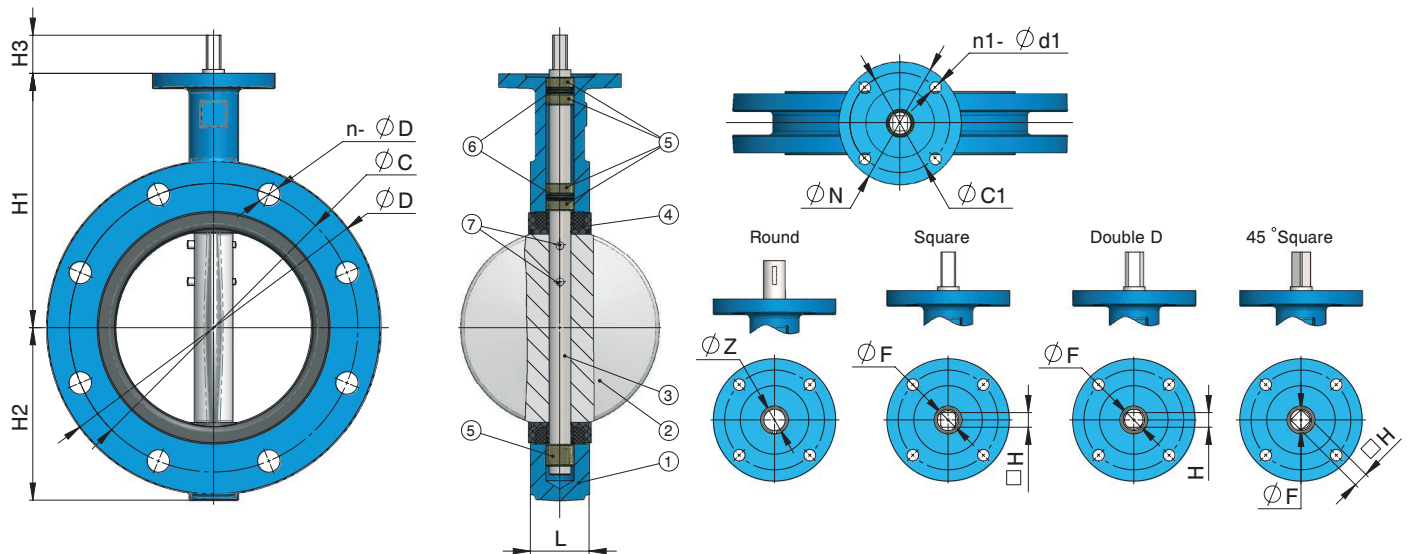
Dimensions

Size		L	H1	H2	H3	ISO5211				EN 1092 PN16		ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-Ød			
40	1.5"	33	139	68	29	F05	65	50	4-Ø8	110	4-M16	13	12.1	9
50	2"	43	161	80	29	F05	65	50	4-Ø8	125	4-M16	13	12.1	9
65	2-1/2"	46	175	89	29	F05	65	50	4-Ø8	145	4-M16	13	12.1	9
80	3"	46	181	95	29	F05	65	50	4-Ø8	160	8-M16	13	12.1	9
100	4"	52	200	114	29	F07	90	70	4-Ø10	180	8-M16	16	14.1	11
125	5"	56	213	127	29	F07	90	70	4-Ø10	210	8-M16	19	18.1	14
150	6"	56	226	139	29	F07	90	70	4-Ø10	240	8-M20	19	18.1	14
200	8"	60	260	175	35	F10	125	102	4-Ø12	295	12-M20	22	22.2	17
250	10"	68	292	203	35	F10	125	102	4-Ø12	355	12-M24	28	28.2	22
300	12"	78	337	242	35	F10	125	102	4-Ø12	410	12-M24	32	28.2	22
350	14"	78	368	267	45	F10	125	102	4-Ø12	470	16-M24	32	28.2	22
400	16"	102	400	299	51.2	F14	175	140	4-Ø18	525	16-M27	33	28.2	22
450	18"	114	422	318	51.2	F14	175	140	4-Ø18	585	20-M27	38	36.2	27
500	20"	127	480	355	64.2	F14	175	140	4-Ø18	650	20-M30	41	36.2	27
600	24"	154	562	444	70.2	F16	210	165	4-Ø22	770	20-M33	51	48.2	36
700	28"	165	624	505	66	F25	300	254	8-Ø18	840	24-M33	55	60.2	46
750	30"	165	646	499	66	F25	300	254	8-Ø18	900	24-M33	55	60.2	46
800	32"	190	672	576	66	F25	300	254	8-Ø18	950	24-M36	55	60.2	46

Butterfly Valve/EN558 Series 20

U Type

MODEL: BFV-U-H



Dimensions

Size		L	H1	H2	H3	ISO5211				EN 1092 PN16			ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØD	ØC	n-Ød			
40	1.5"	33	139	75	29	F05	65	50	4-Ø8	150	110	4-Ø18	13	12.1	9
50	2"	43	161	83	29	F05	65	50	4-Ø8	165	125	4-Ø18	13	12.1	9
65	2-1/2"	46	175	93	29	F05	65	50	4-Ø8	185	145	4-Ø18	13	12.1	9
80	3"	46	181	100	29	F05	65	50	4-Ø8	200	160	8-Ø18	13	12.1	9
100	4"	52	200	110	29	F07	90	70	4-Ø10	220	180	8-Ø18	16	14.1	11
125	5"	56	213	125	29	F07	90	70	4-Ø10	250	210	8-Ø18	19	18.1	14
150	6"	56	226	143	29	F07	90	70	4-Ø10	285	240	8-Ø22	19	18.1	14
200	8"	60	260	170	35	F10	125	102	4-Ø12	340	295	12-Ø22	22	22.2	17
250	10"	68	292	202	35	F10	125	102	4-Ø12	405	355	12-Ø26	28	28.2	22
300	12"	78	337	230	35	F10	125	102	4-Ø12	460	410	12-Ø26	31	28.2	22
350	14"	78	368	260	45	F10	125	102	4-Ø12	520	470	16-Ø26	31	28.2	22
400	16"	102	400	290	51	F14	175	140	4-Ø18	580	525	16-Ø30	33	28.2	22
450	18"	114	422	324	51	F14	175	140	4-Ø18	640	585	20-Ø30	38	36.2	27
500	20"	127	480	358	64	F14	175	140	4-Ø18	715	650	20-Ø33	41	36.2	27
600	24"	154	562	420	70	F16	210	165	4-Ø22	840	770	20-Ø36	51	48.2	36
Size		L	H1	H2	H3	ISO5211				EN 1092 PN10			ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØD	ØC	n-Ød			
700	28"	165	624	455	85	F25	300	254	8-Ø18	895	840	24-Ø30	55	60.2	46
750	30"	167	646	499	86	F25	300	254	8-Ø18	965	900	24-Ø30	55	60.2	46
800	32"	190	672	513	85	F25	300	254	8-Ø18	1015	950	24-Ø33	55	60.2	46
900	36"	203	720	563	118	F25	300	254	8-Ø18	1115	1050	28-Ø33	75	72.2	55
1000	40"	218	800	628	130	F25	300	254	8-Ø18	1230	1160	28-Ø36	85	72.2	55
1050	42"	251	825	740	150	F25	300	254	8-Ø18	/	/	/	85	72.2	55
1100	44"	254	825	740	150	F25	300	254	8-Ø18	1340	1270	32-Ø36	95	72.2	55
1200	48"	254	940	844	150	F30	350	298	8-Ø22	1455	1380	32-Ø39	105	98.2	75

Butterfly Valve/EN558 Series 13

Concentric, Double Flanged

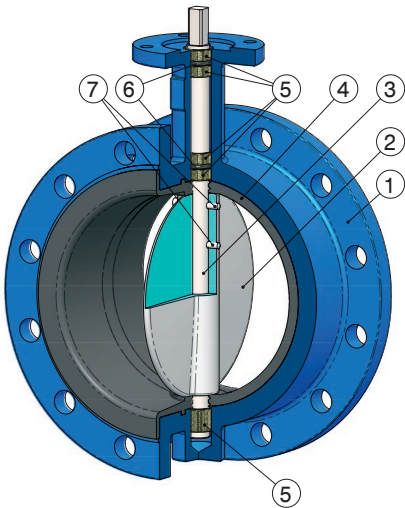
MODEL: BFV-DFC-H

Technical Specifications

Size	DN50-DN1200
General Design	EN593
Flange Drilling	EN 1092 PN10/16
Mounting Pad	ISO 5211
Face to Face	BS 5155; EN 558 13 series etc.
Inspection and Test	EN12266-1
Nominal pressure designation	PN10/16

Product Features

- Double flanged style fit between FF or RF flanges
- High strength body and large safety factor ensure the body can resist high pipe pressure.
- Overall Vulcanization liner with good performance of resisting tearing apartment and deformation
- Universal ISO 5211 mounting Pad

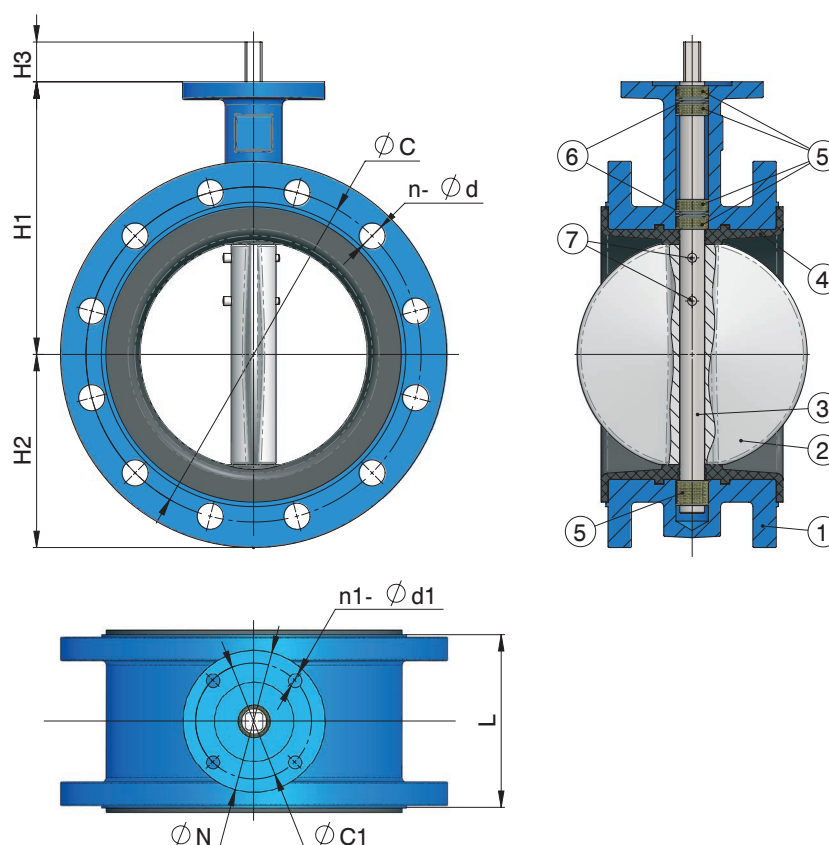


Material Specifications

Item	Part Name	Material	Grade
1	Body	DI	EN-JS 1050 (EN-GLS-500-7) EN1563
2	Disc	DI	EN-JS 1050 (EN-GLS-500-7) EN1563
3	Stem	Stainless Steel	1.4006 (X12Cr13) EN10088-3
4	Seat	Rubber	EPDM EN 681-1
5	Bushing	Plastic	PTFE ISO 13000
6	O Ring	Rubber	EPDM EN 681-1
7	Pin	Stainless Steel	1.4408 (GX5CrNiMo19-11-2) EN10088-3

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MODEL: BFV-DFC-H



Dimensions

Size		L	H1	H2	H3	ISO5211				EN 1092 PN10		ØZ	ØF	H
DN	NPS					No.	ØN	ØC1	n1-Ød1	ØC	n-Ød			
50	2"	108	120	80	29	F05	65	50	4-Ø8	125	4-Ø18	13	12.1	9
65	2-1/2"	112	145	75	29	F05	65	50	4-Ø8	145	4-Ø18	13	12.1	9
80	3"	114	130	90	29	F05	65	50	4-Ø8	160	8-Ø18	13	12.1	9
100	4"	127	165	115	29	F07	90	70	4-Ø10	180	8-Ø18	16	14.1	11
125	5"	140	180	110	29	F07	90	70	4-Ø10	210	8-Ø18	19	18.1	14
150	6"	140	190	150	29	F07	90	70	4-Ø10	240	8-Ø22	19	18.1	14
200	8"	152	240	160	35	F10	125	102	4-Ø12	295	8-Ø22	22	22.2	17
250	10"	165	260	195	35	F10	125	102	4-Ø12	350	12-Ø22	29	28.2	22
300	12"	178	300	220	35	F10	125	102	4-Ø12	400	12-Ø22	32	28.2	22
350	14"	190	330	245	45	F14	175	140	4-Ø18	460	16-Ø22	32	28.2	22
400	16"	216	370	267	51	F14	175	140	4-Ø18	515	16-Ø26	33	28.2	22
450	18"	222	400	300	51	F14	175	140	4-Ø18	565	20-Ø26	38	36.2	27
500	20"	229	500	390	64	F14	175	140	4-Ø18	620	20-Ø26	41	36.2	27
600	24"	267	525	425	70	F16	210	165	4-Ø22	725	20-Ø30	51	48.2	36
700	28"	292	570	480	66	F25	300	254	8-Ø18	840	24-Ø30	55	60.2	46
800	32"	318	630	575	66	F25	300	254	8-Ø18	950	24-Ø33	55	60.2	46
900	36"	330	690	560	118	F25	300	254	8-Ø18	1050	28-Ø33	75	72.2	55
1000	40"	410	745	637	142	F25	300	254	8-Ø18	1160	28-Ø36	85	72.2	55
1200	48"	470	925	775	160	F30	350	298	8-Ø22	1380	32-Ø39	105	98.2	75

Butterfly Valve/EN558 Series 14

Double Eccentric

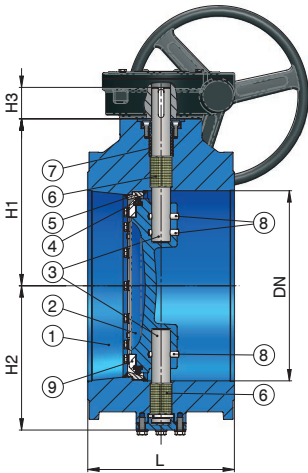
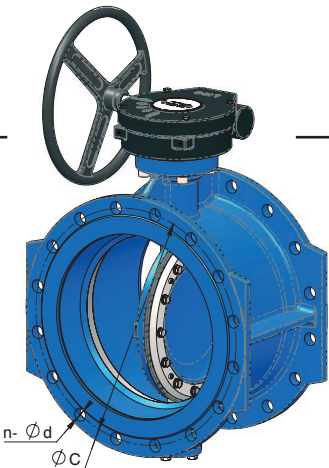
MODEL: BFV-DFDE-H

Technical Specifications

Size	DN100-DN2000
General Design	EN593
Mounting Pad	ISO5211
Face to Face	EN558-1 14 Series
Flange Drilling	EN1092-2PN10/PN16/PN25*
Nominal pressure designation	PN10/16

Material of Construction

Item	Part Name	Material	Grade
1	Body	DI	EN-GJS-400-15 (EN-JS 1030) EN 1563
2	Disc	DI	EN-GJS-400-15 (EN-JS 1030) EN 1563
3	Stem	Stainless Steel	1.4006 (X12Cr13) EN10088-3
4	Disc Sealing	Rubber	EPDM EN 681-1
5	Body Sealing	Stainless Steel	1.4301 (X5CrNi18-9) EN10088-3
6	Bushing	PTFE+Non-ferrous metal	PTFE ISO 13000+non ferrous metal
7	Packing	Rubber	EPDM EN 681-1
8	Pin	Stainless Steel	1.4021 (X20Cr13) EN10088-3
9	Retaining Ring	Stainless Steel	1.4301 (X5CrNi18-9) EN10088-3



Dimensions

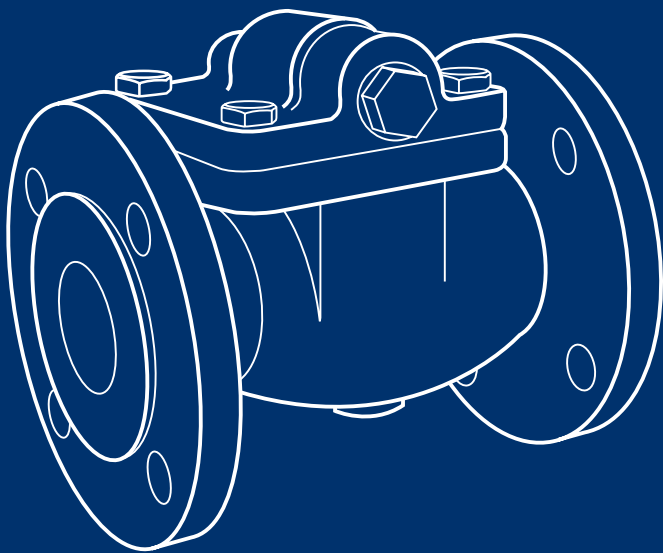
SIZE		L	H1	H2	H3	EN1092-2 PN10			EN1092-2 PN16			EN1092-2 PN25		
DN	NPS					ØD	ØC	n-Ød	ØD	ØC	n-Ød	ØD	ØC	n-Ød
100	4"	190	140	115	38	220	180	8-19	220	180	8-19	235	190	8-23
125	5"	200	150	130	38	250	210	8-19	250	210	8-19	270	220	8-28
150	6"	210	160	150	38	285	240	8-23	285	240	8-23	300	250	8-28
200	8"	230	200	187	42	340	295	8-23	340	295	12-23	360	310	12-28
250	10"	250	235	215	42	395	350	12-23	405	355	12-28	425	370	12-31
300	12"	270	264	237	42	445	400	12-23	460	410	12-28	485	430	16-31
350	14"	290	300	270	51	505	460	16-23	520	470	16-28	555	490	16-34
400	16"	310	335	305	51	565	515	16-28	580	525	16-31	620	550	16-37
450	18"	330	360	335	51	615	565	20-28	640	585	20-31	670	600	20-37
500	20"	350	395	370	136	670	620	20-28	715	650	20-34	730	660	20-37
600	24"	390	460	425	136	780	725	20-31	840	770	20-37	845	770	20-41
700	28"	430	535	505	149	895	840	24-31	910	840	24-37	960	875	24-44
800	32"	470	590	560	149	1015	950	24-34	1025	950	24-41	1085	990	24-50
900	36"	510	660	630	185	1115	1050	28-34	1125	1050	28-41	1185	1090	28-50
1000	40"	550	735	705	216	1230	1160	28-37	1255	1170	28-44	1320	1210	28-57
1200	48"	630	840	815	216	1455	1380	32-41	1485	1390	32-50	1530	1420	32-57
1400	56"	710	1010	985	267	1675	1590	36-44	1685	1590	36-50	/	/	/
1600	64"	790	1130	1120	312	1915	1820	40-50	1930	1820	40-57	/	/	/
1800	72"	870	1280	1270	312	2115	2020	44-50	/	/	/	/	/	/
2000	80"	950	1405	1380	326	2325	2230	48-50	/	/	/	/	/	/

ISO5211 Mounting Pad

Dimensions

DN	Size	ØD	ØD2	ØD1	Ø d	N	h	a
F05	DN40	65	35.5	50	8	4	3.5	45
F05	DN50	65	35.5	50	8	4	3.5	45
F05	DN65	65	35.5	50	8	4	3.5	45
F05	DN80	65	35.5	50	8	4	3.5	45
F07	DN100	90	55.5	70	10	4	3.5	45
F07	DN125	90	55.5	70	10	4	3.5	45
F07	DN150	90	55.5	70	10	4	3.5	45
F10	DN200	125	70.5	102	12	4	3.5	45
F10	DN250	125	70.5	102	12	4	3.5	45
F10	DN300	125	70.5	102	12	4	3.5	45
F10	DN350	125	70.5	102	12	4	3.5	45
F14	DN400	175	100.5	140	18	4	4.5	45
F14	DN450	175	100.5	140	18	4	4.5	45
F14	DN500	175	100.5	140	18	4	4.5	45
F16	DN550	210	130.5	165	22	4	5.5	45
F16	DN600	210	130.5	165	22	4	5.5	45
F25	DN700	300	200.5	254	18	8	5.5	22.5
F25	DN750	300	200.5	254	18	8	5.5	22.5
F25	DN800	300	200.5	254	18	8	5.5	22.5
F25	DN900	300	200.5	254	18	8	5.5	22.5
F25	DN1000	300	200.5	254	18	8	5.5	22.5
F30	DN1200	350	230.5	298	22	8	5.5	22.5

Notes



Check Valves

Counterweight Check Valve

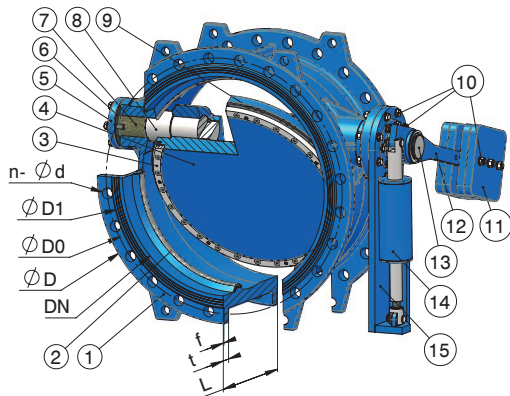
MODEL: CHV-CW(HD)-D

Technical Specifications

- Size: DN100-DN2000
- Nominal pressure designation PN10/16
- Face to face: EN558 Series 14
- Flanges: PN10/16
- Inspection test: EN12266-1
- Product color: Blue RAL 5005 or RAL 5017
- Double eccentric design

Optional Extras

- Hydraulic damper



Material Specifications

Item	Part Name	Material	Grade
1	Body	DI	EN-JS 1050 (EN-GJS-500-7) EN
2	Body Seat	SS	1.4301 (X5CrNi18 9) EN10088-3
3	Retaining Ring	Rubber	EPDM EN 681-1
4	Disc	DI	EN-JS 1050 (EN-GJS-500-7) EN
5	Shaft Cover	DI	EN-JS 1050 (EN-GJS-500-7) EN
6	Gasket	Rubber	EPDM EN 681-1
7	Bushing	PTFE	1.4021 (X20Cr13) EN10088-3
8	Shaft	SS	1.4301 (X5CrNi18 9) EN10088-3
9	Disc Seat Ring	Rubber	EPDM EN 681-1
10	Bolt	SS+PTFE	
11	Ballance Weight	GI	EN-JL 1040 (EN-GJL-250) EN 1561
12	Arm	DI	EN-JS 1050 (EN-GJS-500-7) EN
13	Up Shaft	DI	EN-JS 1050 (EN-GJS-500-7) EN
14	Cylinder	WCB	1.0619 (GS-C 25)/
15	Yoke	DI	EN-JS 1050 (EN-GJS-500-7) EN

Dimensions

PN10								PN16							
DN	L (F4)	øD	øD ₀	øD ₁	n-ød	t	f	DN	L (F4)	øD	øD ₀	øD ₁	n-ød	t	f
DN100	190	220	180	156	8-19	19	3	100	190	220	180	156	8-19	19	3
DN150	210	285	240	211	8-23	19	3	150	210	285	240	211	8-23	19	3
DN200	230	340	295	266	12-23	20	3	200	230	340	295	266	12-23	20	3
DN250	250	395	350	319	12-23	22	3	250	250	405	355	319	12-28	22	3
DN300	270	445	400	370	12-23	24.5	4	DN300	270	460	410	370	12-28	24.5	4
DN350	290	505	460	429	16-23	24.5	4	DN350	290	520	470	429	16-28	26.5	4
DN400	310	565	515	480	16-28	24.5	4	DN400	310	580	525	480	16-31	28	4
DN500	350	670	620	582	20-28	26.5	4	DN500	350	715	650	609	20-34	31.5	4
DN600	390	780	725	682	20-31	30	5	DN600	390	840	770	720	20-37	36	5
DN700	430	895	840	794	24-31	32.5	5	DN700	430	910	840	794	24-37	39.5	5
DN800	470	1015	950	901	24-34	35	5	DN800	470	1025	950	901	24-40	43	5
DN900	510	1115	1050	1001	28-34	37.5	5	DN900	510	1125	1050	1001	28-40	46.5	5
DN1000	550	1230	1160	1112	28-37	40	5	DN1000	550	1255	1170	1112	28-43	50	5
DN1200	630	1455	1380	1328	32-41	45	5	DN1200	630	1485	1390	1328	32-49	57	5
DN1400	710	1675	1590	1530	36-44	46	5	DN1400	710	1685	1590	1530	36-49	60	5
DN1600	790	1915	1820	1750	40-50	49	5	DN1600	790	1930	1820	1750	40-56	65	5
DN1800	870	2115	2020	1950	44-50	52	5	DN1800	870	2130	2020	1950	44-56	70	5
DN2000	950	2325	2230	2150	48-50	55	5	DN2000	950	2345	2230	2150	48-62	75	5

Silent Check Valve

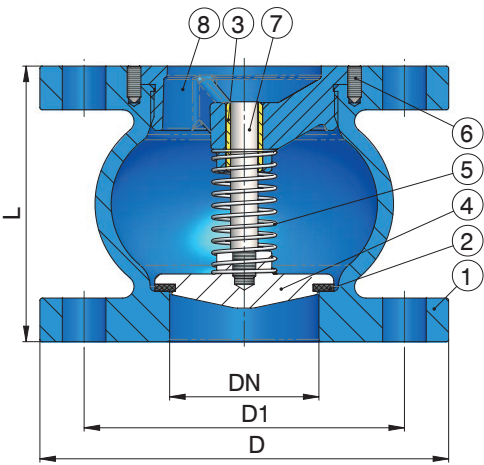
MODEL: CHV-S-H

Technical Specifications

- Size: DN50-DN300
- Nominal pressure designation: PN10/PN16
- Flanges: EN1092-2 PN10/PN16
- Inspection test: EN12266-1
- Product color: Blue RAL 5005 or RAL 5017

Features

- Globe design to provide semi-straight flow
- Non-slam closure against water hammer
- Expanded flow area to reduce head losses
- Resilients seat to provide zero leakages



Material Specifications

Item	Part Name	Material	Grade
1	Body	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
2	Seat	EPDM/NBR	EN 681-1
3	Bushing	Aluminium-bronze	C954 EN12164
4	Disc	DI/Stainless Steel	EN-JS 1050 (EN-GJS-500-7) EN 1563/1.4301 (X5CrNi 18 9) EN10088-3
5	Spring	Stainless Steel	1.4301 (X5CrNi 18 9) EN10088-3
6	Bolts	Stainless Steel	1.4301 (X5CrNi 18 9) EN10088-3
7	Stem	Stainless Steel	1.4005 (X12CrS13) EN10088-3
8	Frame	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563

Dimensions

Size	L	D	D1	n-ød
DN50	100	152	120.5	4-19
DN65	120	178	139.5	4-19
DN80	140	191	152.5	4-19
DN100	170	229	190.5	8-19
DN125	200	254	216	8-22
DN150	230	279	241.5	8-22
DN200	288	343	298.5	8-22
DN250	354	406	362	12-25
DN300	410	483	432	12-25

Check Valve/EN558 Series 48/PN16 Swing Type

MODEL: CHV-SW-H

Features

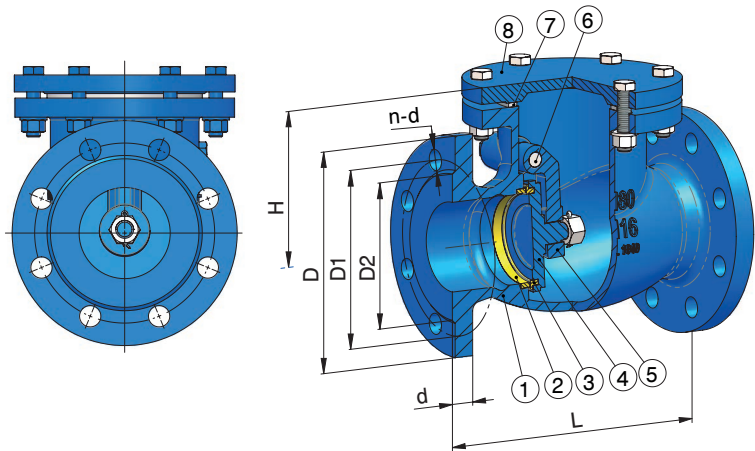
- Full port
- Bolted cover
- Suitable for both horizontal and vertical installation
- Product color: Blue RAL 5005 or RAL 5017
- Wet spray or FBE coated

Options

- External lever arm and weight

Technical Specifications

- Face to Face: EN 558 / ISO 5752 - 48 base series
- Flanges: EN 1092-2 PN10/16
- Hydraulic test to EN12266-1
 - Seat Test Pressure: 17.6 bar
 - Shell Test Pressure: 24 bar
- Nominal pressure designation PN16 bar



Material Specifications

Item	Part Name	Material	Grade	Item	Part Name	Material	Grade
1	Body	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563	4	Disc	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
2	Seat Ring	Brass	CW602 N (CuZn36Pb2As) EN 12164	5	Hanger	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
		Bronze	CC491K (CuZn40Pb2) EN 1982	6	Hanger Stem	Stainless Steel	1.4408 (GX5CrNiMo 19-11-2) EN10088-3-3
		Stainless steel	1.4408 (GX5CrNiMo 19-11-2) EN10088				
3	Disc Ring	Brass/Bronze	CW602 N (CuZn36Pb2As) EN 12164 / CC491K (CuZn40Pb2) EN 1982	7	Cover Gasket	Graphite With Soft Steel	
		Rubber	EPDM/NBR EN 681-1	8	Cover	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
		Stainless steel	1.4408 (GX5CrNiMo 19-11-2) EN10088				

Dimensions

Size	L	D	D1	D2	B	n-d	H	W.T (kg)
DN40	180	150	110	84	18	4-19	110	9
DN50	200	165	125	99	20	4-19	130	13.4
DN65	240	185	145	118	20	4-19	140	17.7
DN80	260	200	160	132	22	8-19	150	20.83
DN100	300	220	180	156	24	8-19	160	29.25
DN125	350	250	210	184	26	8-19	190	47
DN150	400	285	240	211	26	8-23	210	67
DN200	500	340	295	266	30	12-23	250	118.7
DN250	600	405	355	319	32	12-28	310	171.9
DN300	700	460	410	370	32	12-28	340	232.5
DN350	800	520	470	429	36	16-28	450	330
DN400	900	580	525	480	38	16-31	520	460
DN450	1000	640	585	548	40	20-31	550	580
DN500	1100	715	650	609	42	20-34	590	700
DN600	1300	840	770	720	48	20-37	680	780

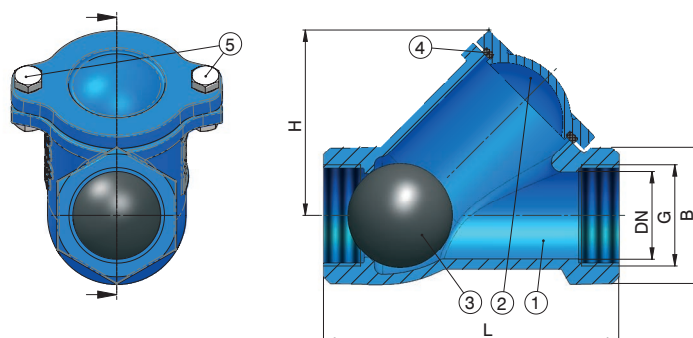
Ball Check Valves

MODEL: CHV-BL-H

Material Specifications

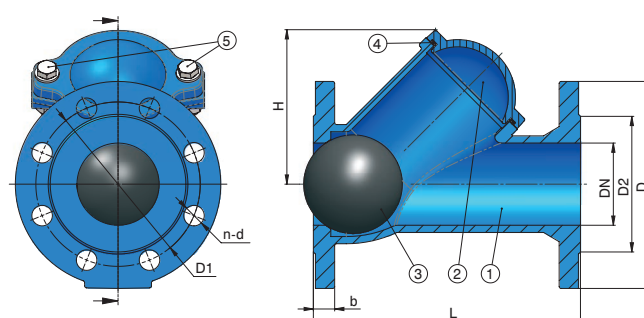
Item	Part Name	Material	Grade	Item	Part Name	Material	Grade
1	Body	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563	4	Bonnet Gasket	Rubber	NBR/EPDM EN 681-1
2	Bonnet	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563	5	Bolts	Stainless Steel	1.4301 (X5CrNi18-10) EN10088-3-3
3	Ball	Steel+Rubber	Steel + EPDM EN 681-1 Steel + NBR EN 681-1				

Check Valve/BSP threaded connection Ball Type Dimensions Threaded



Size	L	B	H	Weight
DN32	135	50	72	2
DN40	145	60	85	2
DN50	175	70	100	3
DN65	200	90	125	5

Check Valve/EN558 Series 48 Ball Type Dimensions Flanged



Size	EN 1092-2 PN16					b	H	Weight
	L	D	D1	D2	n-d			
DN50	200	165	125	102	4-18	20	100	6.5
DN65	240	185	145	122	4-18	20	125	11
DN80	260	200	160	138	8-18	22	136	14.35
DN100	300	220	180	158	8-18	24	185	19.98
DN125	350	250	210	188	8-18	26	196	30.4
DN150	400	285	240	212	8-22	26	265	42.3
DN200	500	340	295	268	12-22	30	340	73.5
DN250	600	405	355	320	12-26	32	420	128
DN300	700	460	410	378	12-26	32	480	180

Check Valve/EN558 Series 16

Dual Plate

MODEL: CHV-DP-H

Technical Specifications

Size	DN40-DN800
Nominal pressure designation	PN10/PN16
Face to Face	EN 558 - 16 base series / ISO 5752 - 16 series
Flange Drilling	EN1092-PN10/PN16 *
Inspection and Test	EN12266-1

Product Features

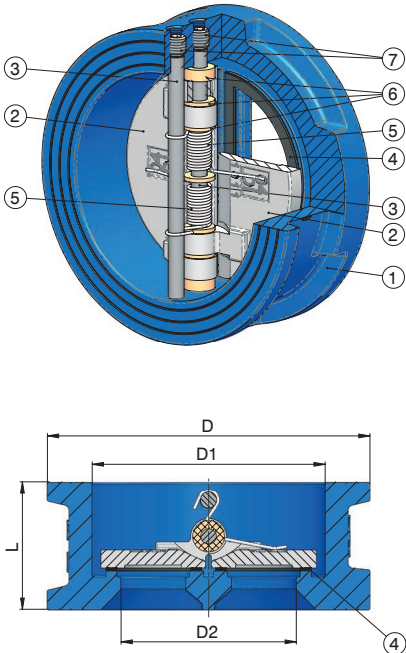
- Wafer body style fits between flanges type A (flat face) or B (raised face).
- Upper and lower PTFE thrust washers
- Resilient NBR/EPDM seat..
- Dual Plate Valves give maximum strength with minimum opening time.
- Torsion springs assist valve closure, preventing flow reversal .
- Thrust washers reduce friction and wear of valve plate hinges.

Material Specifications

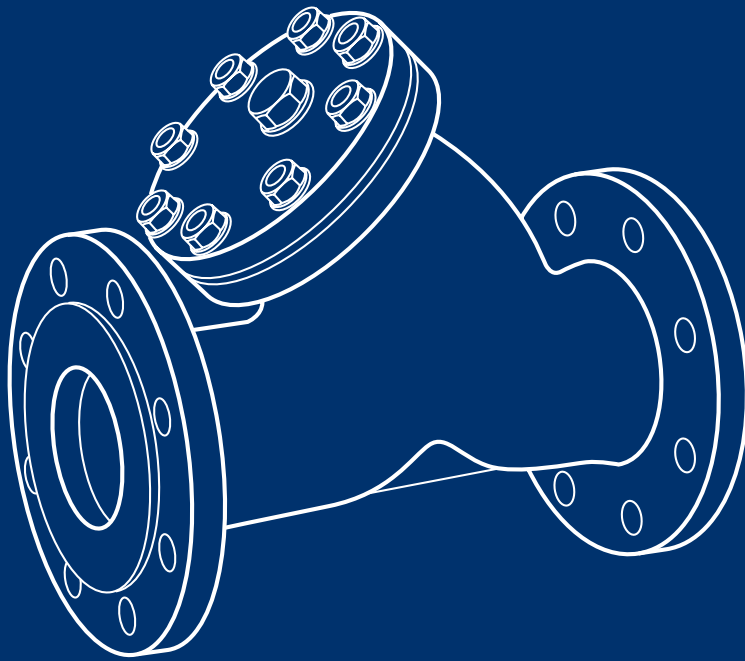
Parts	Description	Material	Grade
1	Body	GI	EN-JL 1040 (EN-GJL-250) EN 1561
2	Disc	DI/Stainless Steel	EN-JS 1050 (EN-GJS-500-7) EN 1563/1.4308 (GX5CrNi19-10) EN10088-3
3	Stem	Stainless Steel	1.4005 (X12CrS13) EN10088-3
4	Seat	EPDM	
5	Spring	Stainless Steel	AISI 316
6	Washer	Plastic	Nylon
7	Hex Nut	Carbon Steel	1.7225 (42CrMo4) EN 10083-3

Dimensions

SIZE		L	D		D1	D2
DN	NPS		PN10	PN16		
40	1.5"	43	78	78	57	38
50	2"	43	107	107	65	46
65	2.5"	46	127	127	80	60
80	3"	64	142	142	94	70
100	4"	64	162	162	117	88
125	5"	70	192	192	145	115
150	6"	76	218	218	170	134
200	8"	89	273	273	224	184
250	10"	114	328	328	265	220
300	12"	114	378	378	310	260
350	14"	127	438	444	360	298
400	16"	140	489	489	410	350
450	18"	152	539	555	450	385
500	20"	152	594	617	505	438
600	24"	178	695	734	624	538
700	28"	229	810	804	720	640
800	32"	241	917	911	825	734



Notes



Strainers

Strainer Y type

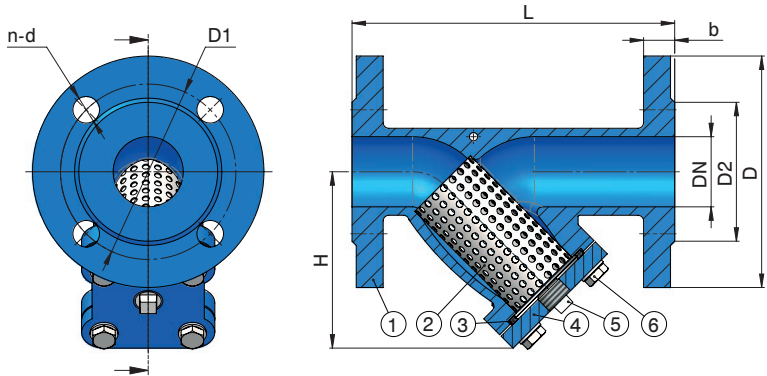
MODEL: S-Y-H

Features

- Y-Pattern
- Stainless Steel Screen
- Bolted Cover
- Flanged Ends
- FBE Coated

Technical Specifications

- Face to Face: EN 558 / ISO 5752 - 1 base series
- Flanges: EN 1092-2 PN10/16
- Hydraulic test to EN12266-1
Seat Test Pressure: 17.6 bar
Shell Test Pressure: 24 bar
- Nominal pressure designation PN10/16 bar



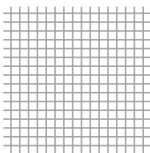
Material Specifications

Item	Part Name	Material	Grade
1	Body	GI/ DI	EN-JL 1040 (EN-GJL-250) EN 1561 / EN-JS 1050(EN-GJS-500-7) EN 1563
2	Screen	SS Perforated Mesh	
3	Cover Gasket	Graphite With Soft Steel Rubber	EPDM/NBR EN 681-1
4	Cover	DI	EN-JS 1050 (EN-GJS-500-7) EN 1563
5	Plug	Zine Steel BSPT	
6	Bolt & Nut	Galvanized flat head bolt Galvanized stud bolt Stainless Steel	

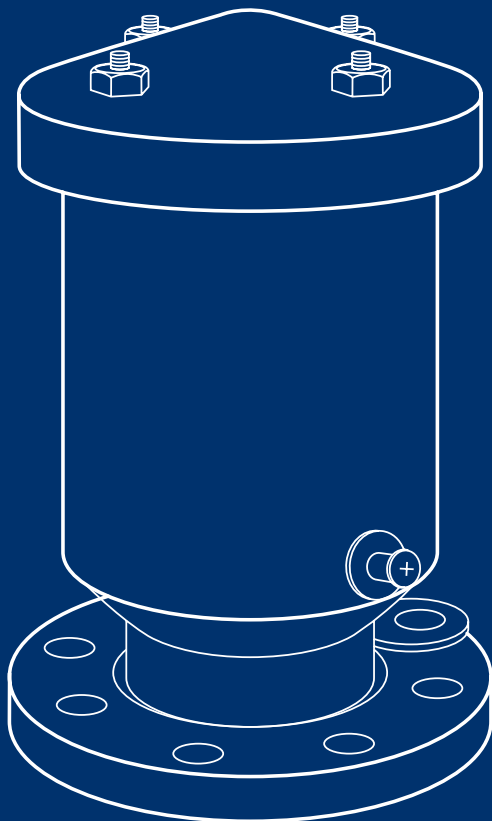
Dimensions

Size	L	D	D1	D2	b	n-d	H	Plug	W.T (kg)
DN15	130	95	65	46	14	4-14	65	1/4"	1.7
DN20	150	105	75	56	16	4-14	70	1/4"	2.25
DN25	160	115	85	65	16	4-14	80	1/4"	3.15
DN32	180	140	100	76	18	4-19	90	1/4"	5
DN40	200	150	110	84	18	4-19	135	1/2"	6.45
DN50	230	165	125	99	20	4-19	150	1/2"	8.7
DN65	290	185	145	118	20	4-19	160	1/2"	12
DN80	310	200	160	132	22	8-19	200	1/2"	19
DN100	350	220	180	156	24	8-19	240	1/2"	27
DN125	400	250	210	184	26	8-19	290	3/4"	40
DN150	480	285	240	211	26	8-23	330	3/4"	58
DN200	600	340	295	266	30	12-23	380	3/4"	86
DN250	730	405	355	319	32	12-28	480	1"	127
DN300	850	460	410	370	32	12-28	550	1"	200
DN350	980	520	470	429	36	16-28	680	2"	320
DN400	1100	580	525	480	38	16-31	780	2"	420
DN450	1200	640	585	548	40	20-31	830	2"	620
DN500	1250	715	650	609	42	20-34	910	2"	780

Mesh



Mesh	Dia.of Wire	Width of Opening	Opening
	mm	mm	%
21	0.4	0.8	46
12	0.87	1.2	42
10	1	1.6	40



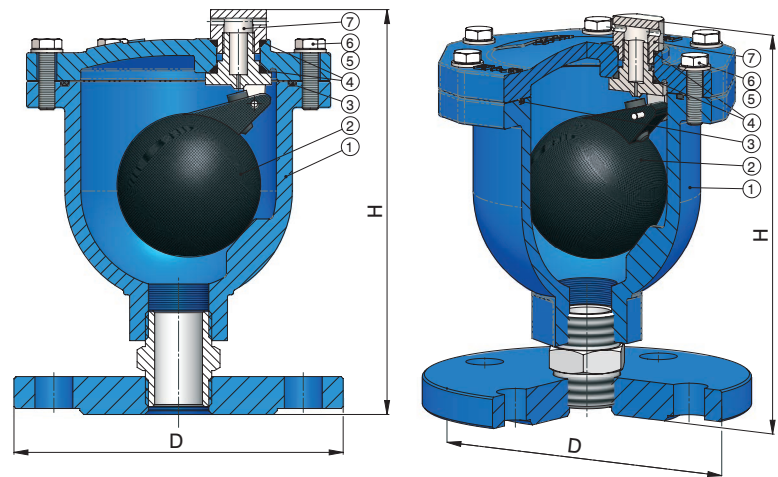
Air Valves

Single Chambre/Single Function Air Valve

MODEL: AV-1C-1F-DG

Technical Specifications

- Size: 1" (Optional flange sizes DN40-DN150)
- Nominal pressure designation: PN10/16/25
- Flanges: EN1092-2 PN10/16/25/40
- Operating temperature: -10°C...+80°C
- Product color: Blue RAL 5005 or RAL 5017



Material Specifications

Part name	Material	Grade
Body	DI	EN-GJS-400-15 (EN-JS 1030) EN1563
Cover	DI	EN-GJS-400-15 (EN-JS 1030) EN1563
Ball	Foam polypropylene	
Orifice body	Brass	CW602 N (CuZn36Pb2As) EN 12164
Orifice cover	Brass	CW602 N (CuZn36Pb2As) EN 12164
O-ring	EPDM/NBR	EN 681-1
Screw	Galvanized steel	
Pin	Stainless steel	1.4301 (X5CrNi18 9) EN10088-3
Sealing	EPDM/NBR	EN 681-1

Dimensions

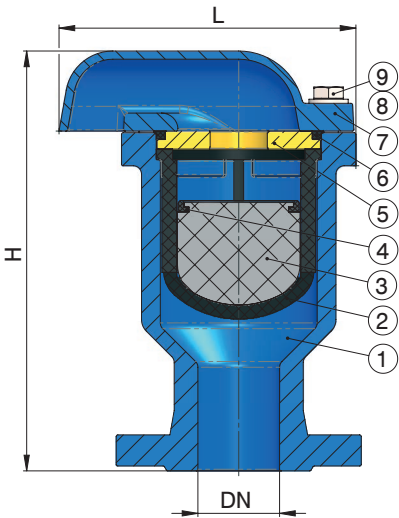
Size	H	D		Weight (kg) with flanges
		PN 10/16	PN 25/40	
DN40	195	150	150	7
DN50	195	165	165	7,5
DN65	195	185	185	8
DN80	195	200	200	9
DN100	195	220	235	10
DN150	195	285	300	13

Single Chambre/Double Function Air Valve

MODEL: AV-1C-2F-DG

Technical Specifications

- Size: DN40-DN500
- Nominal pressure designation: PN10/16/25
- Flanges: EN1092-2 PN10/16/25
- Operating temperature: -10°C...+80°C
- Product color: Blue RAL 5005 or RAL 5017



Material Specifications

Item	Part name	Material	Grade
1	Body	DI	EN-GJS-400-15 (EN-JS 1030) EN1563
2	Mesh	PVC and Nylon (Polyamide 6)	
3	Float	Foam polypropylene (DN40-DN150) Polyethylene (DN200-DN500)	
4	Float Sealing	Rubber	EPDM EN681-1
5	Disc	Brass	CW602 N (CuZn36Pb2As) EN 12164
6	Cover Gasket	Rubber	EPDM EN681-1
7	Cover	DI	EN-GJS-400-15 (EN-JS 1030) EN1563
8	Bolt	Galvanized steel	

Dimensions

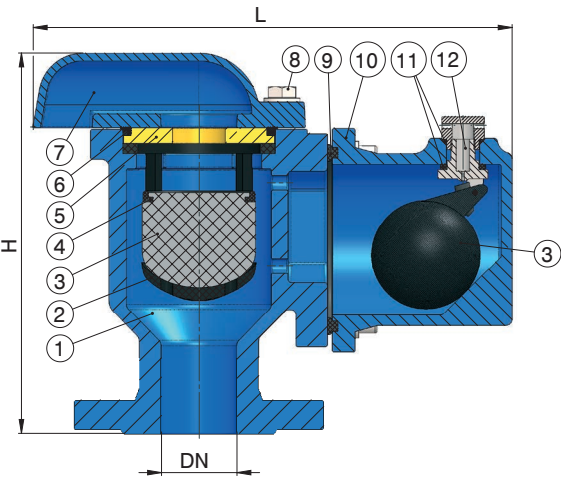
Size	H	D	Weight (kg)			
			PN10	PN16	PN25	PN40
DN40	255	180	10,5	10,5	11	11
DN50	260	180	10,5	10,5	11	11
DN65	260	180	12	12	12	12
DN80	260	180	12	12	14,5	14,5
DN100	320	265	24	24	24,2	24,2
DN125	320	265	26	26	27	27
DN150	320	265	30	30	31,5	31,5
DN200	450	345	54	54	56	57
DN250	810	440	175	175	180	185
DN300	975	525	190	195	200	205
DN350	1065	615	415	420	427	435
DN400	1220	700	830	840	-	-
DN500	1525	880	1030	1040	-	-

Double Chambre/Triple Function Air Valve

MODEL: AV-2C-3F-DG

Technical Specifications

- Size: DN40-DN500
- Nominal pressure designation: PN10/16/25
- Flanges: EN1092-2 PN10/16/25
- Operating temperature: -10°C...+80°C
- Product color:
Blue RAL 5005 or RAL 5017



Material Specifications

Item	Part name	Material	Grade
1	Body	DI	EN-GJS-400-15 (EN-JS 1030) EN1563
2	Mesh	PVC and Naylon (Polyamide 6)	
3	Float	Foam polypropylene (DN40-DN150) Polyethylene (DN200-DN500)	
4	Float Sealing	Rubber	EPDM EN681-1
5	Disc	Brass	CW602 N (CuZn36Pb2As) EN 12164
6	Cover Gasket	Rubber	EPDM EN681-1
7	Cover	DI	EN-GJS-400-15 (EN-JS 1030) EN1563
8	Bolt	Galvanized steel	
9	Gasket	Rubber	EPDM EN681-1
10	Automatic Air Valve		
11	O-Rings	Rubber	EPDM EN681-1
12	Orifice	Stainless Steel	1.4301 (X5CrNi18 9) EN10088-3

Dimensions

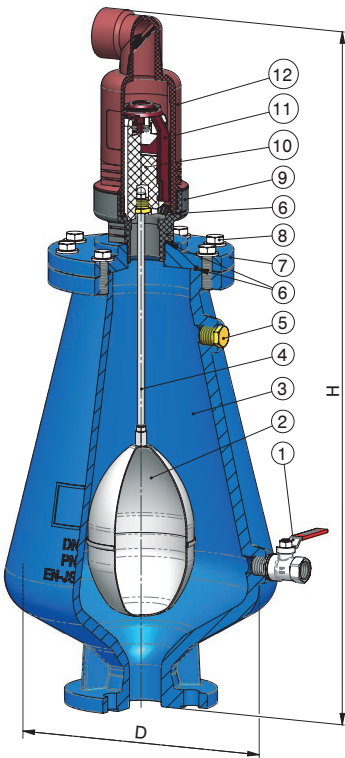
Size	H	W				L	Weight (kg)			
		PN10	PN16	PN25	PN40		PN10	PN16	PN25	PN40
DN40	255	150	150	150	150	325	17	17	17	17
DN50	260	165	165	165	165	325	17	17	17	17
DN65	260	185	185	185	185	325	20,1	20,1	21	21
DN80	260	200	200	200	200	325	20,4	20,4	22	22
DN100	320	220	220	235	235	370	31,2	31,2	34	34
DN125	320	250	250	270	270	370	32	32	34,5	34,5
DN150	320	285	285	300	300	370	34	34	36,5	36,5
DN200	450	340	340	360	375	370	64	64	67	71
DN250	810	395	405	425	450	580	181	181	185	190
DN300	975	525	525	525	525	700	195	200	205	210
DN350	1065	615	615	615	615	880	420	425	432	440
DN400	1220	700	700	700	700	910	835	845	-	-
DN500	1525	880	880	880	880	1135	1035	1050	-	-

Air Valve for Sewage

MODEL: SAV-1C-3F-DG

Technical Specifications

- Size: DN40-DN500
- Nominal pressure designation: PN10/16
- Flanges: EN1092-2 PN10/16
- Operating temperature: -10°C...+80°C
- Product color: Blue RAL 5005 or RAL 5017

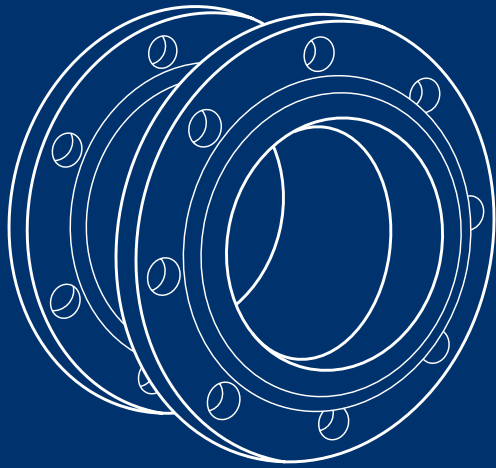


Material Specifications

Item	Part name	Material	Grade
1	Drainage ball valve 1"	Brass	CW602 N (CuZn36Pb2As) EN 12164
2	Float	Stainless steel	1.4401 (X5CrNiMo 17 12 2) EN10088-3
3	Body	DI	EN-GJS-400-15 (EN-JS 1030) EN1563
4	Stem	Stainless steel	1.4401 (X5CrNiMo 17 12 2) EN10088-3
5	Probe	Brass	
6	Cover Gasket	Rubber	NBR EN681-1
7	Cover	DI	EN-GJS-400-15 (EN-JS 1030) EN1563
8	Bolt	Stainless steel	1.4401 (X5CrNiMo 17 12 2) EN10088-3
9	Plastic Base	Plastic	
10	Float	Foamed Polypropilene	
11	Seal plug assembly	Plastic	
12	Cover	Plastic	

Dimensions

Size	H	L	Weight (kg)
DN50	605	365	17
DN80	605	365	18,5
DN100	605	365	19,5
DN150	610	365	21
DN200	610	365	24



Rubber Expansion

Rubber Expansion Joint Single Sphere

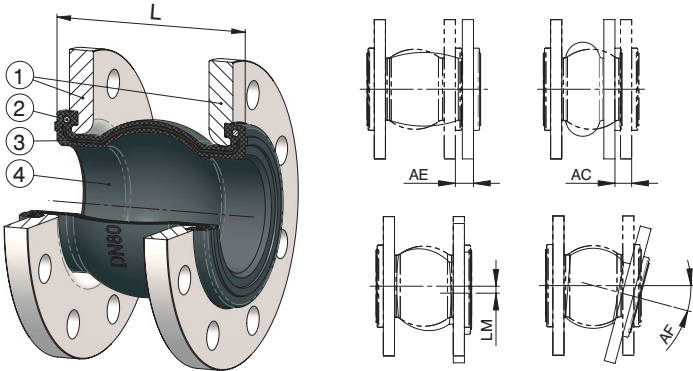
MODEL: RJ-SS-H

Technical Specifications

- Size: DN32-DN1000
- Nominal pressure designation: PN10/16
- Flanges: EN1092-2 PN10/16

Features

Applicable for suction and delivery (discharge). Provides sound and vibration isolation. Gaskets and packing are not required. Floating flanges allow for easy installation. Prevents piping system and equipment breakdown by absorbing and contraction caused by temperature variances. Absorbs water pulsation and minimizes water hammering.



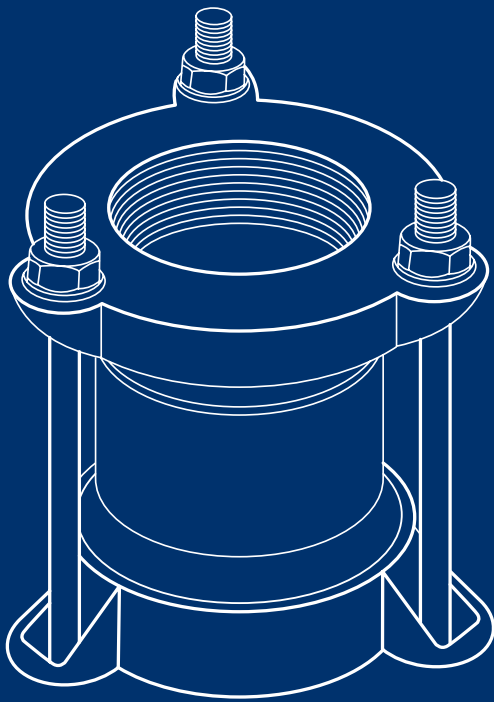
Material Specifications

Item	Part Name	Material
1	Flanges	Carbon Steel
2	Reinforcing Cord	Carbon Steel
3	Tube	Synthetic Fiber
4	Body	Synthetic Rubber

Dimensions

Size	L	Axial Elongation	Axial Compression	Lateral Movement	Angular Flexion
DN32	95	6	9	9	15°
DN40	95	6	10	9	15°
DN50	105	7	10	10	15°
DN65	115	7	13	11	15°
DN80	135	8	15	12	15°
DN100	150	10	19	13	15°
DN125	165	12	19	14	15°
DN150	180	12	20	22	15°
DN200	210	16	25	22	15°
DN250	230	16	25	22	15°
DN300	245	16	25	22	15°
DN350	255	16	25	22	15°
DN400	255	16	25	22	15°
DN450	255	16	25	22	15°
DN500	255	16	25	22	15°
DN600	260	16	25	22	15°
DN700	260	16	25	22	15°
DN800	260	16	25	22	15°
DN900	260	16	25	22	15°
DN1000	260	16	25	22	15°

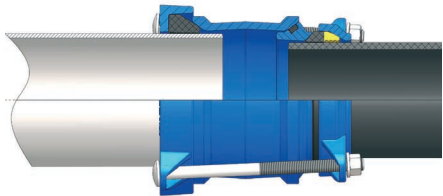
Notes



Couplings & Fittings

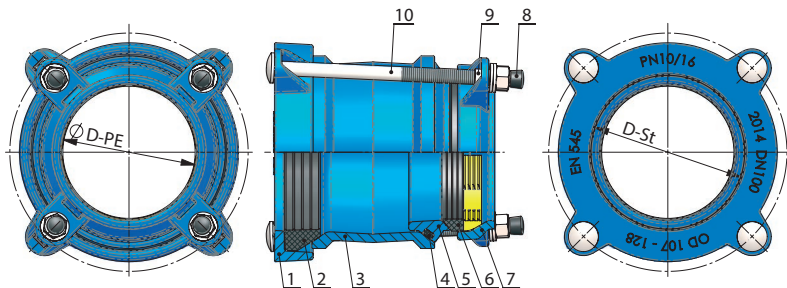
Combined Coupling

MODEL: W-C-C



Features

- Designed to provide transition from rigid pipes to soft pipes
- Adjustable ranges of rigid side to cover all existing outside diameters of asbestos, steel and iron pipes
- Fixed restrained end for tight grip
- Option for reduction of restrained end with one or two sizes



Material Specifications

Item	Part Name	Material	Specification
1	Adaptor	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
2	Sealing Ring	Rubber	EPDM EN 681-1
3	Body	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
4	Reduction Ring Sealing	Rubber	EPDM EN 681-1
5	Reduction Ring	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
6	Sealing Ring	Rubber	EPDM EN 681-1
7	Adaptor	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
8	Cap	Plastic	
9	Supporting Bushing	Zinc-plated Steel	
10	Bolts	Zinc-plated Steel	

Dimensions

Rigid Side	Rigid Side Range	Soft Side
DN50	59-72	PE63
DN65	72-85	PE75
DN65	72-85	PE63
DN80	88-103	PE90
DN80	88-103	PE75
DN100	109-128	PE110
DN100	109-128	PE90
DN125	132-153	PE125
DN125	132-153	PE110
DN150	159-182	PE160
DN150	159-182	PE125
DN200	218-235	PE200
DN200	218-235	PE160
DN200	218-235	PE225
DN200	218-235	PE200
DN200	242-267	PE225
DN200	242-267	PE200
DN250	272-289	PE250
DN250	272-289	PE225
DN250	272-289	PE280
DN300	315-332	PE315
DN300	315-332	PE280

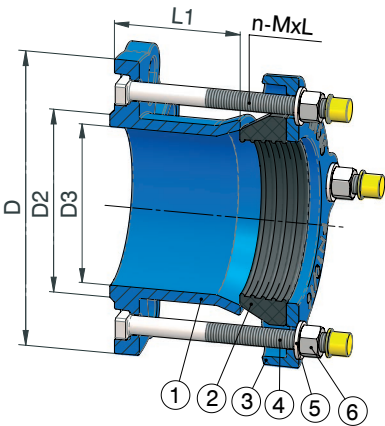
* Different ranges for the rigid side and reductions for the soft side available on request

Universal Flange Adaptor

MODEL: FA-U-H

Features

- Nominal pressure designation: PN16
- Equipped with galvanized steel bolts, nuts
- EPDM or NBR rubber seals
- High Tolerance Mechanical Pipe Fittings
- Angular deflection +/- 6°
- FBE coated
- Flanges EN1092-2 PN10/16



Material Specifications

Item	Part Name	Material	Specification
1	Body	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
2	Rubber Seal	Rubber	NBR/EPDM/EN 681-1
3	End Ring	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
4	Bolt	Zinc-plated Steel	
5	Washer	Zinc-plated Steel	
6	Nut	Zinc-plated Steel	

Dimensions

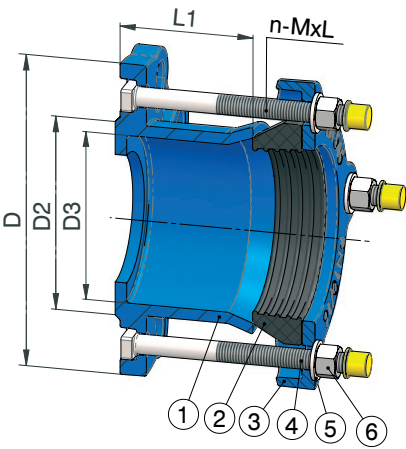
Size	Pipe O.D. (mm)	D	D2	D3	L1	M x L	Bolts Qty	Weight	Flange Designation PN10/PN16
DN40	48-60	150	84	64	82	M12*130	2	4.2	•
DN50	59-72	165	99	77	82	M12*130	2	5.4	•
DN65	72-85	185	108	90	82	M12*130	2	6.4	•
DN80	88-103	200	132	108	82	M12*140	4	6.9	•
DN100	109-128	220	156	133	82	M12*140	4	7.9	•
DN125	132-153	250	184	158	82	M12*140	4	12.5	•
DN200	192-210	340	266	215	82	M12*140	4	12.8	•
DN200	218-235	340	266	241	82	M12*140	4	15.7	•
DN250	242-267	405	319	265	82	M12*150	4	17.5	•
DN250	272-289	405	319	295	90	M12*150	6	21.8	•
DN300	315-332	460	370	338	90	M12*150	6	27.6	•
DN300	322-339	460	370	345	90	M12*150	6	30.0	•
DN350	351-378	520	425	380	115	M12*180	8	35.0	•
DN350	374-391	520	425	393	115	M12*180	8	34.4	•
DN400	425-442	580	477	444	115	M12*180	8	38.5	•
DN450	476-493	620	510	475	115	M12*180	10	57.2	•
DN500	526-546	715	548	518	130	M12*180	10	92.4	•
DN600	630-647	840	682	650	115	M12*180	10	76.8	•

Universal Flange Adaptor – Wide Range

MODEL: FA-U-WR-H

Features

- Nominal pressure designation: PN16
- Equipped with galvanized steel bolts, nuts
- EPDM or NBR rubber seals
- High Tolerance Mechanical Pipe Fittings
- Angular deflection +/- 6°
- FBE coated
- Flanges EN1092-2 PN10/16



Material Specifications

Item	Part Name	Material	Specification
1	Body	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
2	Rubber Seal	Rubber	NBR/EPDM/EN 681-1
3	End Ring	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
4	Bolt	Zinc-plated Steel	
5	Washer	Zinc-plated Steel	
6	Nut	Zinc-plated Steel	

Dimensions

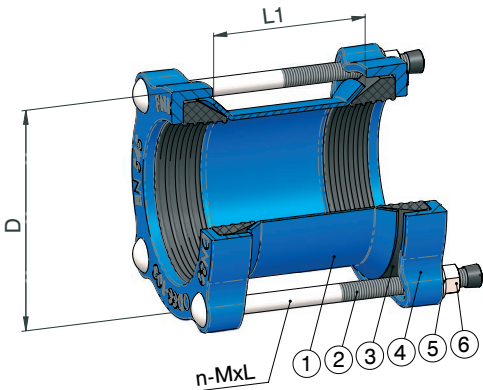
Size	PipeO.D. (mm)	D	D2	D3	L ₁	M × L	Bolts Qty	Flange Designation PN10/PN16	Weight
DN50	58-74	166	110	50	100	M12 × 150	4	•	4.2
DN60	68-84	187	125	65	100	M12 × 150	4	•	5.0
DN80	84-105	200	140	80	100	M12 × 150	4	•	6.3
DN100	99-118	235	155	100	100	M12 × 150	4	•	6.8
DN100	109-133	235	155	100	105	M12 × 150	4	•	7.8
DN125	133-157	285	185	133	110	M12 × 170	4	•	11.0
DN150	157-182	285	215	150	110	M12 × 170	4	•	12.5
DN150	177-201	285	215	150	110	M12 × 170	4	•	12.5
DN200	194-215	345	265	200	120	M12 × 170	4	•	15.5
DN200	218-242	245	265	200	120	M12 × 170	4	•	17.5
DN250	242-268	410	320	245	120	M12 × 170	6	•	20.5
DN250	266-291	410	320	250	120	M12 × 170	6	•	21.0
DN250	280-305	410	320	250	120	M12 × 170	6	•	25.5
DN300	302-327	490	370	300	120	M12 × 170	6	•	27.0
DN300	324-350	455	410	310	140	M12 × 190	6	•	24.0
DN350	352-378	520	470	350	120	M14 × 170	8	•	25.4
DN350	386-410	520	470	360	140	M14 × 190	8	•	29.2
DN400	410-436	580	525	400	160	M14 × 210	8	•	34.5
DN400	436-462	580	525	410	160	M14 × 210	8	•	36.8

Universal Coupling

MODEL: C-U-H

Features

- Nominal pressure designation: PN16
- Equipped with galvanized steel bolts, nuts
- EPDM or NBR rubber seals
- High Tolerance Mechanical Pipe Fittings
- Angular deflection +/- 6°
- FBE coated



Material Specifications

Item	Part Name	Material	Specification
1	Body	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
2	Bolt	Dacromet Coated Steel	IS0898-1:1999
3	Rubber Seal	Rubber	NBR/EPDM/EN 681-1
4	End Ring	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
5	Washer	Dacromet Coated Steel	
6	Nut	Dacromet Coated Steel	IS0898-2:1992
7	Cap	Plastic	

Dimensions

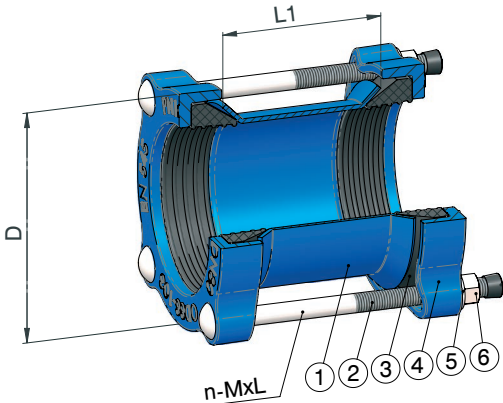
Size	Pipe O.D. (mm)	D	L1	M x L	Weight (kg)
DN40	48-60	155	95	2-M12*170	2-5
DN50	59-72	165	95	2-M12-170	2.5
DN65	72-85	180	95	2-M 12*170	2.7
DN80	88-103	185	95	4-M 12*190	4-2
DN100	109-128	225	95	4-M 12*190	4.8
DN125	132-153	250	95	4-M12M90	6.4
DN150	159-182	275	110	4-M12*190	7.2
DN175	192-210	305	130	4-M 12*220	12
DN200	218-235	315	130	4-M12*220	13.5
DN225	242-267	350	130	4-M 12*220	15
DN250	272-289	395	130	6-M 12*220	15
DN300	315-332	450	130	6-M 12*220	19
DN300	322-339	460	130	6-M 12*220	19
DN350	351-378	510	130	8-M14*250	28
DN350	374-391	520	130	8-M 14*250	30
DN400	425-442	570	130	8-M 14*250	32
DN450	476-493	690	130	10-M 14*250	40
DN500	526-546	720	130	10-M 14*250	48
DN600	630-647	790	130	10-M 14*250	60

Universal Coupling – Wide Range

MODEL: C-U-WR-H

Features

- Nominal pressure designation: PN16
- Equipped with galvanized steel bolts, nuts
- EPDM or NBR rubber seals
- High Tolerance Mechanical Pipe Fittings
- Angular deflection +/- 6°
- FBE coated



Material Specifications

Item	Part Name	Material	Specification
1	Body	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
2	Bolt	Zinc-plated Steel	
3	Rubber Seal	Rubber	NBR/EPDM/EN 681-1
4	End Ring	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
5	Washer	Zinc-plated Steel	
6	Nut	Zinc-plated Steel	

Dimensions

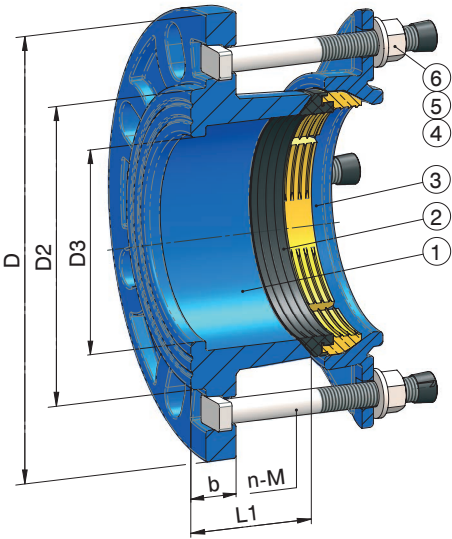
Size	Pipe O.D. (mm)	D	D2	D3	L	M x L ₁	Bolts No.	Weight (kg)
DN50	58-74	166	110	50	100	M12 x 150	4	4.2
DN60	68-84	187	125	65	100	M12 x 150	4	5.0
DN80	84-105	200	140	80	100	M12 x 150	4	6.3
DN100	99-118	235	155	100	100	M12 x 150	4	6.8
DN100	109-133	235	155	100	105	M12 x 150	4	7.8
DN125	133-157	285	185	133	110	M12 x 170	4	11.0
DN150	157-182	285	215	150	110	M12 x 170	4	12.5
DN150	177-201	285	215	150	110	M12 x 170	4	12.5
DN200	194-215	345	265	200	120	M12 x 170	4	15.5
DN200	218-242	245	265	200	120	M12 x 170	4	17.5
DN250	242-268	410	320	245	120	M12 x 170	6	20.5
DN250	266-291	410	320	250	120	M12 x 170	6	21.0
DN250	280-305	410	320	250	120	M12 x 170	6	25.5
DN300	302-327	490	370	300	120	M12 x 170	6	27.0
DN300	324-350	455	410	310	140	M12 x 190	6	24.0
DN350	352-378	520	470	350	120	M14 x 170	8	25.4
DN350	386-410	520	470	360	140	M14 x 190	8	29.2
DN400	410-436	580	525	400	160	M14 x 210	8	34.5
DN400	436-462	580	525	410	160	M14 x 210	8	36.8

Restrained Flange Adaptor for PE/PVC Pipe

MODEL: FA-PE-H

Features

- Nominal pressure designation: PN16
- Equipped with galvanized steel bolts, nuts
- EPDM or NBR rubber seals
- High Tolerance Mechanical Pipe Fittings
- Angular deflection +/- 6°
- FBE coated
- Flanges EN1092-2 PN10/16



Material Specifications

Item	Part Name	Material	Specification
1	Body	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
2	Sealing Ring	Rubber+Brass	NBR/EPDM+Brass
3	End Ring	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
4	Bolt	Zinc-plated steel	
5	Washer	Zinc-plated steel	
6	Nuts	Zinc-plated steel	

Dimensions

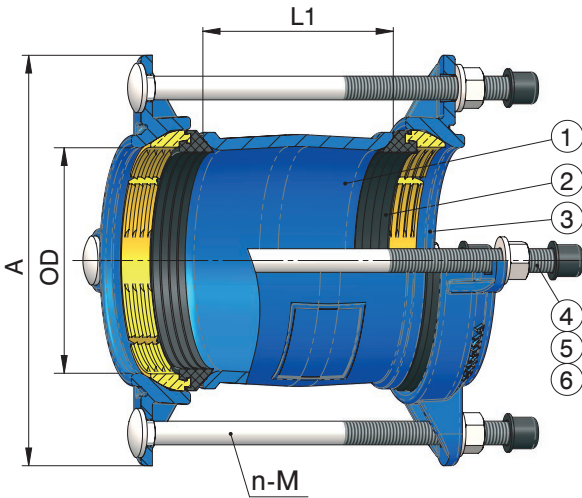
Size	Pipe O.D.	D3	D	b	L1	M × L	Flange Designation PN10/PN16	Bolts Qty
DN50	63	55	180	18	63	M12 × 125	•	2
DN65	75	66	180	18	63	M12 × 125	•	2
DN80	90	84	180	18	63	M12 × 125	•	4
DN100	110	105	200	18	63	M12 × 125	•	4
DN125	125	125	220	18	63	M12 × 125	•	4
DN150	160	154	285	18	63	M12 × 125	•	4
DN200	200	200	340	18	63	M12 × 125	•	4
DN200	225	210	340	23	82	M12 × 175	•	4
DN250	250	250	400	26	82	M12 × 175	•	6
DN300	280	275	400	26	88	M12 × 175	•	6
DN300	315	302	455	26	88	M12 × 175	•	6

Restrained Coupling for PE/PVC Pipe

MODEL: C-PE-H

Features

- Designed for PE/PVC pipes
- Nominal pressure designation: PN16
- Fusion bonded, epoxy coated RAL5005/RAL5017
- Angular deflection +/- 3°.



Material Specifications

Item	Part Name	Material	Specification
1	Body	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
2	Sealing Ring	Rubber+Brass	NBR/EPDM+Brass
3	End Ring	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
4	Bolt	Zinc-plated steel	
5	Washer	Zinc-plated steel	
6	Nuts	Zinc-plated steel	

Dimensions

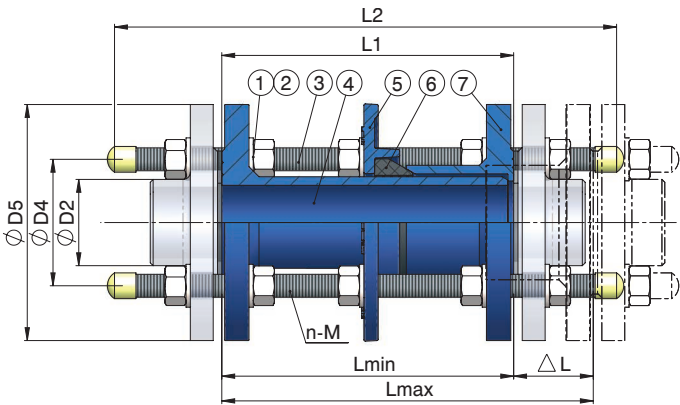
Size	Pipe OD	A	M × L	Bolts Qty
DN50	55	140	M12 × 90	2
DN63	67	150	M12 × 90	2
DN75	80	150	M12 × 90	2
DN90	95	180	M12 × 90	4
DN110	115	200	M12 × 90	4
DN125	130	240	M12 × 90	4
DN160	165	270	M12 × 90	4
DN200	205	325	M12 × 110	4
DN225	230	325	M12 × 110	4
DN250	255	380	M12 × 110	6
DN280	285	380	M12 × 110	6
DN315	320	420	M12 × 170	6

Dismantling Joint

MODEL: DJ-U-H

Features

- Fusion bonded epoxy coating RAL5005/RAL5017
- Nominal pressure designation: PN10/16
- Sizes DN80-DN2200
- Free Movement: DN 80-2200 H = +/-25mm



Material Specifications

Item	Part Name	Material	Specification
1	Washer	Zinc-plated steel	
2	Nut	Zinc-plated steel	
3	Stud	Zinc-plated steel	
4	Pipe	Ductile Iron	EN-JS 1050 (EN-GJS-500-7) EN1563
5	Middle Flange	Ductile Iron	EN-JS 1050 (EN-GJS-500-7) EN1563
6	Sealing Ring	Rubber	EPDM/EN 681-1
7	Outer Flange	Ductile Iron	EN-JS 1050 (EN-GJS-500-7) EN1563

Dimensions

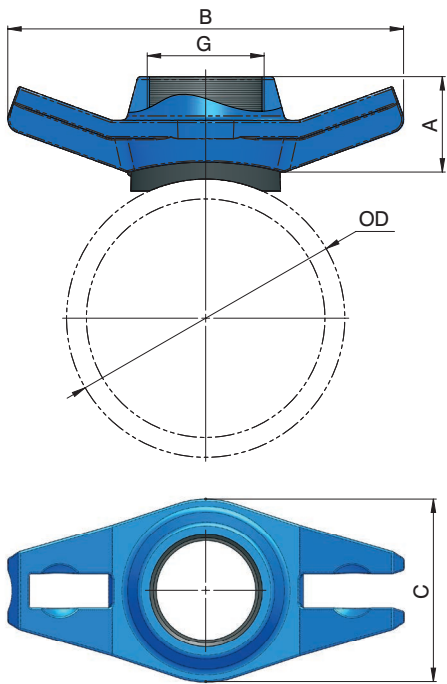
DN	Pipe OD	Length		PN16 Flange Drilling			Weight
	D2	I1	I2	d4	d5	n – M	
80	98	200	310	160	200	8-M16	19
100	118	200	310	180	220	8-M16	22
125	144	200	310	210	250	8-M16	24
150	170	200	320	240	285	8-M20	30
200	222	220	340	295	340	12-M20	42
250	274	230	370	355	400	12-M24	52
300	326	250	410	410	455	12-M24	72
350	378	260	410	470	520	16-M24	84
400	429	270	430	525	580	16-M27	129
450	480	270	430	585	640	20-M27	172
500	532	280	440	650	715	20-M30	215
600	635	300	480	770	840	20-M33	274
700	738	300	480	840	910	24-M33	367
800	842	320	520	950	1025	24-M36	409
900	945	320	520	1050	1125	28-M36	472
1000	1048	340	560	1170	1255	28-M39	580
1100	1152	340	560	1270	1355	32-M39	668
1200	1255	360	600	1390	1475	32-M45	987
1400	1462	36:	630	1590	1685	36-M45	1186
1500	1565	400	665	1710	1820	36-M52	1466
1600	1668	400	700	1820	1930	40-M52	1710
1800	1875	420	730	2020	2130	44-M52	2011
2000	2082	440	730	2230	2345	44-M52	2633
2200	2288	450	750	2440	2555	52-M56	3200

Tapping Saddle

MODEL: TS-U-TR

Features

- Designed for: iron, asbesthos cement or steel pipes
- Nominal pressure designation: PN16
- Fusion bonded, epoxy coated RAL5005/RAL5017



Material Specifications

Part Name	Material	Specification
Body	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
Rubber Seal	Rubber	EPDM EN 681-1

Dimensions

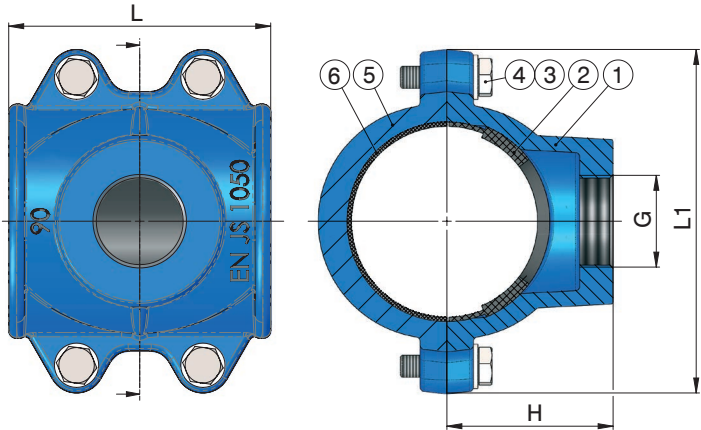
Pipe O.D.	G	A	B	C
50-200	3/4"	45	150	70
50-200	1"	45	150	70
50-200	1 1/4"	45	150	70
50-200	1 1/2"	45	150	70
100-300	1"	45	195	92
100-300	1 1/4"	45	195	92
100-300	1 1/2"	45	195	92
100-300	2"	45	195	92
150-400*	2"	65	216	157
150-400*	2 1/2"	65	216	157
150-400*	3"	65	216	157

Tapping Saddle for PE/PVC Pipes

MODEL: TS-PE-DG-R

Features

- Designed for: PE/PVC Pipes
- Dual grip
- Nominal pressure designation: PN10/16
- Fusion bonded, epoxy coated RAL5005/RAL5017



Material Specifications

Item	Part Name	Material	Specification
1	Upper Body	Ductile Iron	EN-JS-1050(EN-GJS-500-7) EN 1563
2	Rubber Seal	Rubber	EPDM EN 681-1
3	Bolt	Zinc-plated steel	
4	Washer	Zinc-plated steel	
5	Lower Body		
6	Rubber Plate	Rubber	EPDM EN 681-1

Dimensions

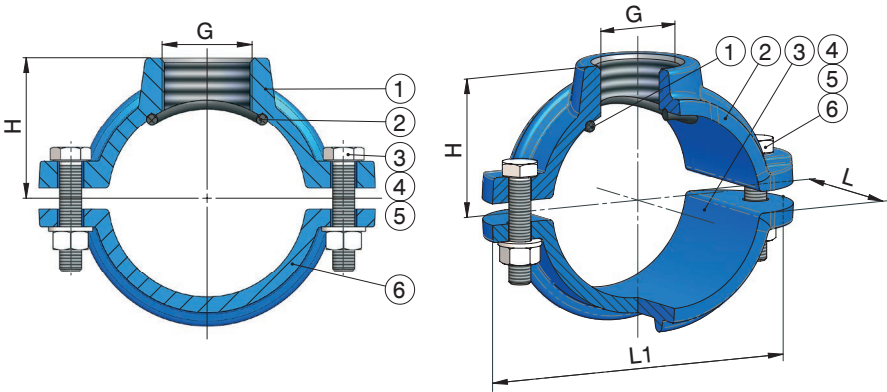
DN	G						L	L1	H	Weight
50	3/4" 1"						100	122	50	1.4
63	3/4"	1"	1 1/4"	1 1/2"	2"		100	136	58	1.6
75	3/4"	1"	1 1/4"	1 1/2"	2"		120	145	75	2.1
90	3/4"	1"	1 1/4"	1 1/2"	2"		120	156	77	2.5
110	3/4"	1"	1 1/4"	1 1/2"	2"		140	185	88	3.4
125	3/4"	1"	1 1/4"	1 1/2"	2"		140	200	96	3.5
140	3/4"	1"	1 1/4"	1 1/2"	2"		140	225	105	5.2
160	3/4"	1"	1 1/4"	1 1/2"	2"		170	240	113	5.7
200	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	200	310	133	10
250	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	200	360	158	14
315	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	200	440	191	17

Tapping Saddle for PE/PVC Pipes

MODEL: TS-PE-SG-R

Features

- Designed for: PE/PVC Pipes
- Single grip
- PN10/PN16 working pressure
- Fusion bonded, epoxy coated RAL5005/RAL5017



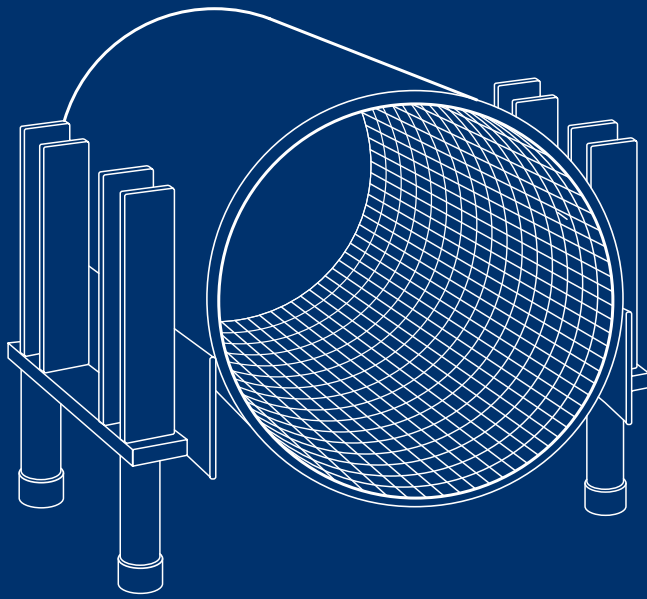
Material Specifications

Item	Part Name	Material	Specification
1	Body	Cast Iron	EN-JL 1040 (EN-GJL-250)
2	Rubber Seal	Rubber	Rubber EN681-1
3	Bolt	Zinc-plated steel	
4	Washer	Zinc-plated steel	
5	Nut		
6	Lower Body		

Dimensions

DN	G					L	L1	H	Weight
32	1/2' 3/4"					44	90	32	0.425
40	3/4" 1"					48	95	35 42	0.5 0.62
50	3/4" 1"					62	120	42	0.94
63	3/4" 1"					62 68	132	47.5	1.1
75	3/4" 1" 1 1/4" 1 1/2"					62 68	145	55 56	1.25 1.32
90	3/4" 1" 1 1/4" 1 1/2"					68	158	62 64	1.5 1.7
110	3/4"	1"	1 1/4"	1 1/2"	2" 2 1/2" 3"	70	180 195	80	2 3
125	3/4"	1"	1 1/4"	1 1/2"	2" 2 1/2" 3"	70	194	86 88	2.4 3
140	3/4"	1"	1 1/4"	1 1/2"	2" 2 1/2" 3"	70	215	98 100	2.7 3
160	3/4"	1"	1 1/4"	1 1/2"	2" 2 1/2" 3"	70	235	106 110	3 4
180	1"	1 1/4"	1 1/2"	2"	2 1/2" 3"	70	255	115	3.5 4
200	1"	1 1/4"	1 1/2"	2"	2 1/2" 3"	70	275	123 125	4 5
250	1"	1 1/4"	1 1/2"	2" 2 1/2" 3"		70 80	340	150	6 7.5
315	2" 2 1/2" 3"					75	415	195	10.5

Notes

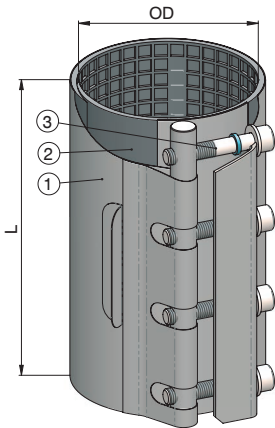


Repair Clamps

Repair Clamps Single Band

Features

- Special leak proof design
- Certified for contact with drinking water rubber gasket
- High corrosion resistance



Material Specifications

Item	Part Name	Material	Grade
1	Body	SS304	1.4301 (X5CrNi 18 9)
2	Screen	EPDM	EN 681-1
3	Washer	Corrosion protected	
4	Bolt	Corrosion protected	

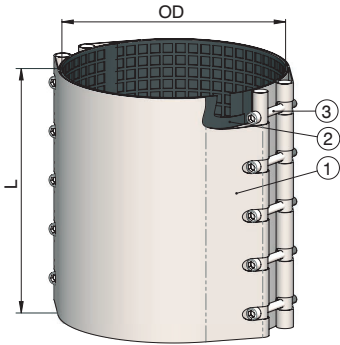
Dimensions

WP	Working range	clamp length, mm									
bar	mm	80	130	140	200	210	250	300	350	400	500
16	20-25	•									
16	25-30	•									
16	30-35	•									
16	40-45		•								
16	45-50		•								
16	60-65		•								
16	73-80		•	•	•		•				
16	76-83			•	•		•				
16	87-94			•	•		•				
16	95-102			•	•		•				
16	102-112			•	•		•				
16	113-123			•	•		•				
16	118-128			•	•		•				
16	125-135			•	•		•				
16	135-145			•	•		•				
16	145-155			•	•		•				
16	151-161			•	•		•	•	•	•	•
16	165-175				•		•	•	•	•	•
16	176-186				•		•	•	•	•	•
16	187-198				•		•	•	•	•	•
16	199-214				•		•	•	•	•	•
16	215-222				•		•	•	•	•	•
16	223-229				•		•	•	•	•	•
16	230-240				•		•	•	•	•	•
16	237-247				•		•	•	•	•	•
16	248-255					•		•	•	•	•
16	270-280					•	•	•	•	•	•
16	281-291					•	•	•	•	•	•
16	308-314					•		•	•	•	•
16	314-320					•		•	•	•	•
16	320-330					•		•	•	•	•
16	330-340					•		•	•	•	•
16	340-350					•		•	•	•	•
16	350-360					•		•	•	•	•
16	365-385					•		•	•	•	•
16	386-396					•		•	•	•	•

Repair Clamps Dual Band

Features

- Special leak proof design
- Certified for contact with drinking water rubber gasket
- High corrosion resistance



Item	Part Name	Material	Grade
1	Body	SS304	1.4301 (X5CrNi 18 9)
2	Rubber	EPDM	EN 681-1
3	Washer	Corrosion protected	
4	Bolt	Corrosion protected	

Dimensions

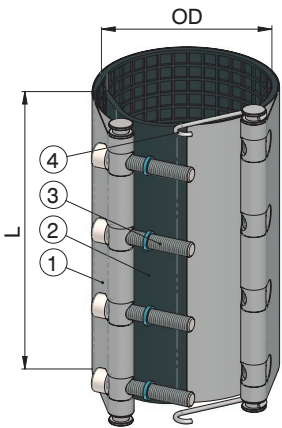
WP	Working range	clamp length, mm									
bar	mm	80	130	140	200	210	250	300	350	400	500
16	396-420					•		•	•	•	•
16	420-440					•		•	•	•	•
16	440-450					•		•	•	•	•
16	450-470					•		•	•	•	•
10	495-505					•		•	•	•	•
10	520-540					•		•	•	•	•
10	545-555					•		•	•	•	•
10	555-565					•		•	•	•	•
10	630-650					•		•	•	•	•

Repair Clamp

special fastening system for easy installation

Features

- Special leak proof design
- Certified for contact with drinking water rubber gasket
- High corrosion resistance
- Double band model available for sizes over 350 mm



Material Specifications

Item	Part Name	Material	Grade
1	Body	SS304	1.4301 (X5CrNi 18 9)
2	Rubber	EPDM	EN 681-1
3	Washer	Corrosion protected	
4	Bolt	Corrosion protected	

Dimensions

WP	Working range	clamp length, mm									
		80	130	140	200	210	250	300	350	400	500
16	20-25	•									
16	25-30	•									
16	30-35	•									
16	40-45		•								
16	45-50		•								
16	60-65		•								
16	73-80		•	•	•		•				
16	76-83			•	•		•				
16	87-94			•	•		•				
16	95-102			•	•		•				
16	102-112			•	•		•				
16	113-123			•	•		•				
16	118-128			•	•		•				
16	125-135			•	•		•				
16	135-145			•	•		•				
16	145-155			•	•		•				
16	151-161			•	•		•	•	•	•	•
16	165-175				•		•	•	•	•	•
16	176-186				•		•	•	•	•	•
16	187-198				•		•	•	•	•	•
16	199-214				•		•	•	•	•	•
16	215-222				•		•	•	•	•	•
16	223-229				•		•	•	•	•	•
16	230-240				•		•	•	•	•	•
16	237-247				•		•	•	•	•	•
16	248-255					•		•	•	•	•
16	270-280					•	•	•	•	•	•
16	281-291					•	•	•	•	•	•
16	308-314					•		•	•	•	•
16	314-320					•		•	•	•	•
16	320-330					•		•	•	•	•
16	330-340					•		•	•	•	•
16	340-350					•		•	•	•	•
16	350-360					•		•	•	•	•
16	365-385					•		•	•	•	•
16	386-396					•		•	•	•	•
16	396-420					•		•	•	•	•
16	420-440					•		•	•	•	•
16	440-450					•		•	•	•	•
16	450-470					•		•	•	•	•
10	495-505					•		•	•	•	•
10	520-540					•		•	•	•	•
10	545-555					•		•	•	•	•
10	555-565					•		•	•	•	•
10	630-650					•		•	•	•	•





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