

HVAC CATALOGUE

Make fluid control to be adaptive and energy efficient

GALA

20+ years of Valve Manufacturing Excellence

Annual Capacity

1,000,000 units

Global Sales

70+ Countries

Production Facilities

China | Thailand

GALA was established in the United States in 2003. In the same year, the founder, Mr. Mike John Graham, invested in the development of a production facility and a Chinese office Tianjin Galaxy Valve Co., Ltd., which began manufacturing and selling GALA valve products globally. In 2020, GALA opened the Middle East sales Office. In 2023, GALA opened its first overseas production facility and a Southeast Asian sales office in Thailand. And in 2024, GALA opened the sales branch in Russia.

With strong technical support and vertically integrated production provided by the self-owned R&D center and production facilities, GALA has grown into a fluid control valve brand of continuous optimized product line, excellent product performance, and one-stop service commitment in building HVAC, data center, marine, fire protection and waterworks applications around the world.

● China Production Facility



● Thailand Production Facility



● Total Area: 25-acre



Vertical Integration Production

Integrated casting, machining, color Painting, vulcanization, assembling, testing, stocking in one site.

You can be beneficial from vertical integration production as follows:

- Fully-controlled products quality in each chain
- Reduced cost
- Shortened lead time
- Turn-key Solution

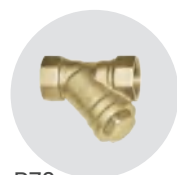
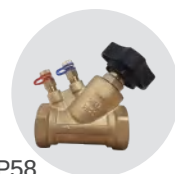
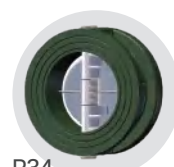
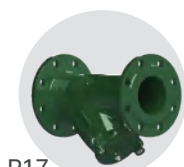


Top-Level R&D Center

5 Test Labs | 6 Test Platforms | 1 Trial Production Center

The R&D center provides strong support for the research and development of new products, the optimization and upgrading of product series, and the sustainable development of GALA valve products.

PRODUCT CATALOG



Concentric Wafer Soft Seated Butterfly Valve

Fig. 2349H

Features

1. Completely sealed in both directions - airtight grade.
2. Valve plate has a precision-machined spherical sealing surface, which has low torque and long service life.
3. Three self-lubricating bushings on the valve stem prevent the valve stem from deflecting.
4. Scientific design with excellent flow characteristics and low-pressure loss.
5. The valve has passed the sulfur dioxide corrosion resistance test and salt spray test.
6. Four flange positioning holes ensure the correct position of the valve during installation.
7. Can be installed in any direction.
8. Maintenance-free.
9. Silicone-free valves can be selected for special industries.
10. More type of valve seat, eg. seat with resin backing, seat with rubber lining are available.



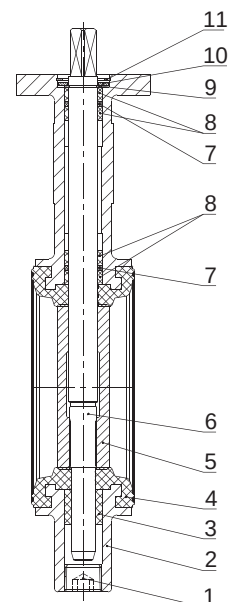
Fig. 2349H-L Lever
Fig. 2349H-G Gear Box
Fig. 2349H-GE Electric

Parameter Standard

1	Design Standard	BS EN 593 / MSS SP-67 / ISO 5752 / BS 5155
2	Face to Face Standard	BS EN 558 20 Series
3	Connection Standard	BS EN1092-2 PN16
4	Top Flange	ISO 5211
5	Size	DN40~DN600
6	Suitable Medium	Hot Water, Cold Water, Ethylene Glycol ($\leq 50\%$)
7	Working Pressure	PN16
8	Working Temperature	-10°C ~120°C
9	Actuator	Manual/Gear/Electric/Hydraulic
10	Performance Testing	Shell: 24bar; Seal: 17.6bar
11	Coating	Epoxy powder coating with 200 μm (Default)
12	Coating Color	Green Ral6005(Default)

Material Specification

No.	Part	Material	Specification
1	Plug	Zinc Plated Steel	BS EN 050A20
2	Body	Ductile Iron	BS EN 420/12(DIN GGG40)
3	Bushing	PTFE	-
4	Seat	EPDM; HT	-
5	Disc	Stainless Steel	BS EN 304C 15
		Ductile Iron Nickel Plate	DIN GGG40
6	Stem	Stainless Steel	BS EN 410S21 (Default) BS EN 431S29
7	O-Ring	EPDM	-
8	Bushing	PTFE	-
9	Circlip	65Mn	BS EN 080A67
10	Flat Washer	Zinc Plated Steel	-
11	Circlip	65Mn	BS EN 080A67

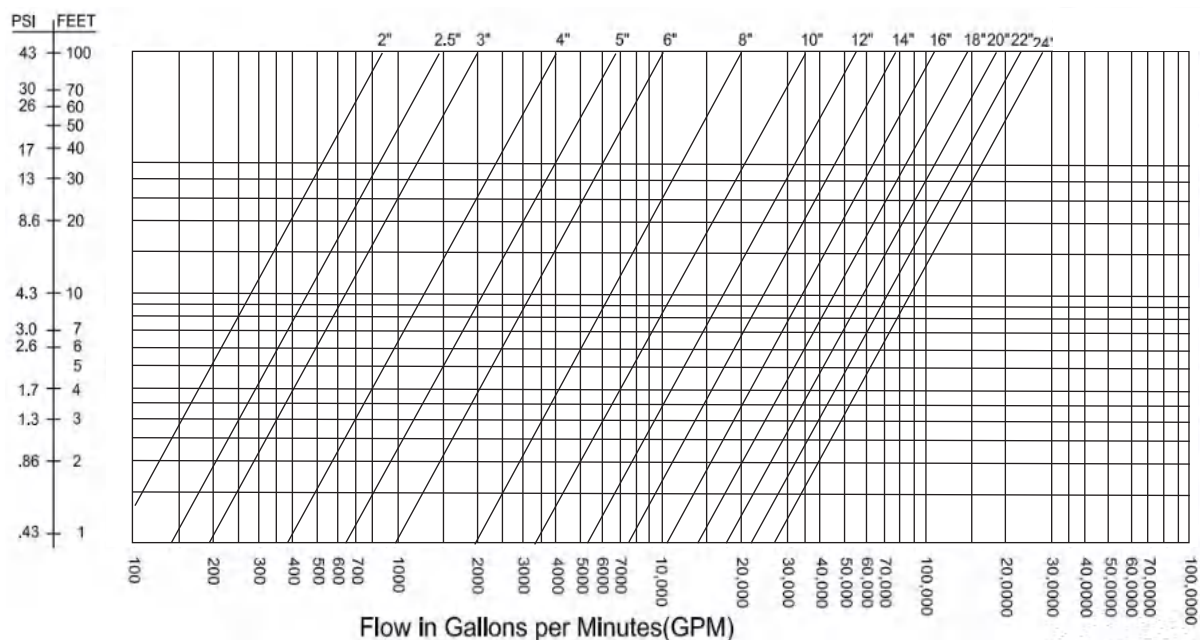


Concentric Wafer Soft Seated Butterfly Valve

Fig. 2349H

KV Value

Size, MM	10°	20°	30°	40°	50°	60°	70°	80°	90° Full Open
40	0.05	2	6	12	22	31	43	60	65
50	0.1	5	12	24	45	64	90	125	135
65	0.2	8	20	37	65	98	144	204	220
80	0.3	12	22	39	70	116	183	275	302
100	0.5	17	36	78	139	230	364	546	600
125	0.8	29	61	133	237	392	620	930	1022
150	2	45	95	205	366	605	958	1437	1579
200	3	89	188	408	727	1202	1903	2854	3136
250	4	151	320	694	1237	2047	3240	4859	5340
300	5	234	495	1072	1911	3162	5005	7507	8250
350	6	338	715	1549	2761	4568	7230	10844	11917
400	8	464	983	2130	3797	6282	9942	14913	16388
450	11	615	1302	2822	5028	8320	13168	19752	21705
500	14	791	1674	3628	6465	10698	16931	25396	27908
600	24	1222	2587	5605	9989	16528	26157	39236	43116



Concentric Wafer Soft Seated Butterfly Valve

Fig. 2349H-L

Dimensions

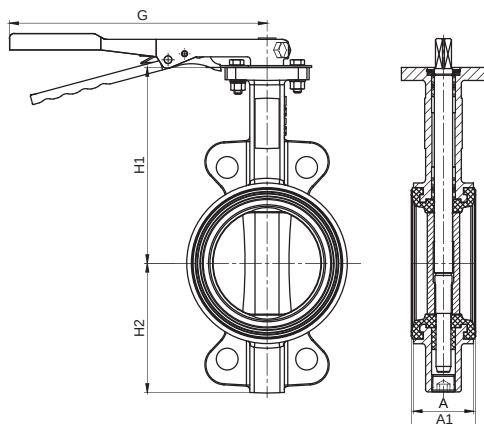


Fig. 2349H-L
DN40-DN150

DN	INCH	H1, MM	H2, MM	A , MM	A1, MM	G, MM	Weight, Kg
40	1½	130	66	33	37	195	1.9
50	2	119.5	69	43	47	195	2.2
65	2½	136	74.5	46	50	195	2.5
80	3	150	95.5	46	50	195	2.9
100	4	170	111.5	52	56	266	4.3
125	5	190	129	56	60	266	5.9
150	6	206	138.5	56	60	328	6.5

Bill of Materials List

Item	Size	Article No.	Flange Connection	Material				Actuator
				Body	Disc	Stem	Seat	
1	DN40	WD2349040LD	PN16	DI	DI Nickel Plate	SS	EPDM HT	Lever
2	DN50	WD2349050LD	PN16	DI	DI Nickel Plate	SS	EPDM HT	Lever
3	DN65	WD2349065LD	PN16	DI	DI Nickel Plate	SS	EPDM HT	Lever
4	DN80	WD2349080LD	PN16	DI	DI Nickel Plate	SS	EPDM HT	Lever
5	DN100	WD2349100LD	PN16	DI	DI Nickel Plate	SS	EPDM HT	Lever
6	DN125	WD2349125LD	PN16	DI	DI Nickel Plate	SS	EPDM HT	Lever
7	DN150	WD2349150LD	PN16	DI	DI Nickel Plate	SS	EPDM HT	Lever

Item	Size	Article No.	Flange Connection	Material				Actuator
				Body	Disc	Stem	Seat	
1	DN40	WD2349040LC	PN16	DI	CF8	SS	EPDM HT	Lever
2	DN50	WD2349050LC	PN16	DI	CF8	SS	EPDM HT	Lever
3	DN65	WD2349065LC	PN16	DI	CF8	SS	EPDM HT	Lever
4	DN80	WD2349080LC	PN16	DI	CF8	SS	EPDM HT	Lever
5	DN100	WD2349100LC	PN16	DI	CF8	SS	EPDM HT	Lever
6	DN125	WD2349125LC	PN16	DI	CF8	SS	EPDM HT	Lever
7	DN150	WD2349150LC	PN16	DI	CF8	SS	EPDM HT	Lever

Concentric Wafer Soft Seated Butterfly Valve

Fig. 2349H-G

Dimensions

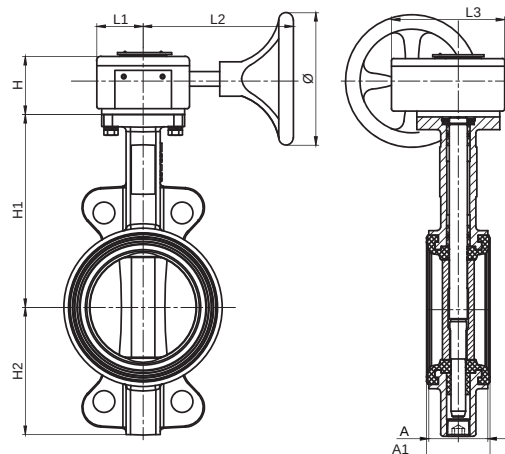


Fig. 2349H-G
DN40-DN150

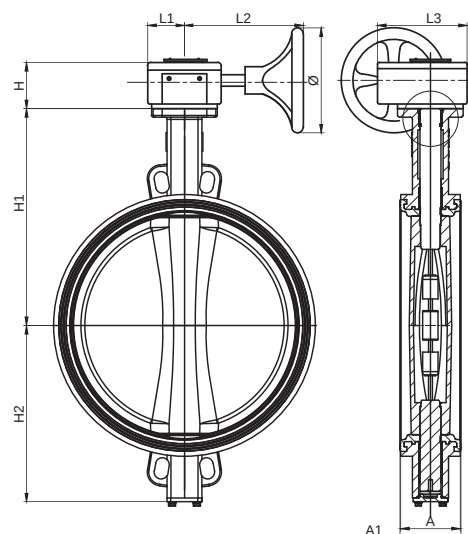


Fig. 2349H-G
DN40-DN150

DN	INCH	H1, MM	H2, MM	A , MM	A1, MM	L1, MM	L2, MM	L3, MM	H, MM	Ø, MM	Weight, Kg
40	1½	130	66	33	37	51	147	115	56	150	1.9
50	2	119.5	69	43	47	51	147	115	56	150	2.2
65	2½	136	75	46	50	51	147	115	56	150	2.5
80	3	150	96	46	50	51	147	115	56	150	2.9
100	4	170	112	52	56	51	147	115	56	150	4.3
125	5	190	129	56	60	51	147	115	56	150	5.9
150	6	206	139	56	60	51	118	125	63	185	6.5
200	8	234	169	60	64	71	191	167	76	285	10.4
250	10	272	210	68	72	71	191	167	76	285	15.9
300	12	327	239	78	82	76	186	188	77	285	31.6
350	14	368	276	78	82	76	186	188	77	285	40.8
400	16	400	315	102	106	124	303	279	108	390	58.2
450	18	422	336	114	118	124	303	279	108	390	85.2
500	20	480	403	127	131	129	376	306	147	390	107.1
600	24	562	547	154	158	129	376	306	147	390	163.3

Concentric Wafer Soft Seated Butterfly Valve

Fig. 2349H-G

Bill of Materials List

Item	Size	Article No.	Flange Connection	Material				Actuator
				Body	Disc	Seat	Stem	
1	DN40	WD2349040GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
2	DN50	WD2349050GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
3	DN65	WD2349065GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
4	DN80	WD2349080GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
5	DN100	WD2349100GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
6	DN125	WD2349125GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
7	DN150	WD2349150GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
8	DN200	WD2349200GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
9	DN250	WD2349250GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
10	DN300	WD2349300GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
11	DN350	WD2349350GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
12	DN400	WD2349400GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
13	DN450	WD2349450GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
14	DN500	WD2349500GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box
15	DN600	WD2349600GD	PN16	DI	DI Nickel Plate	EPDM	SS	Gear Box

Item	Size	Article No.	Flange Connection	Material				Actuator
				Body	Disc	Seat	Stem	
1	DN40	WD2349040GC	PN16	DI	CF8	EPDM	SS	Gear Box
2	DN50	WD2349050GC	PN16	DI	CF8	EPDM	SS	Gear Box
3	DN65	WD2349065GC	PN16	DI	CF8	EPDM	SS	Gear Box
4	DN80	WD2349080GC	PN16	DI	CF8	EPDM	SS	Gear Box
5	DN100	WD2349100GC	PN16	DI	CF8	EPDM	SS	Gear Box
6	DN125	WD2349125GC	PN16	DI	CF8	EPDM	SS	Gear Box
7	DN150	WD2349150GC	PN16	DI	CF8	EPDM	SS	Gear Box
8	DN200	WD2349200GC	PN16	DI	CF8	EPDM	SS	Gear Box
9	DN250	WD2349250GC	PN16	DI	CF8	EPDM	SS	Gear Box
10	DN300	WD2349300GC	PN16	DI	CF8	EPDM	SS	Gear Box
11	DN350	WD2349350GC	PN16	DI	CF8	EPDM	SS	Gear Box
12	DN400	WD2349400GC	PN16	DI	CF8	EPDM	SS	Gear Box
13	DN450	WD2349450GC	PN16	DI	CF8	EPDM	SS	Gear Box
14	DN500	WD2349500GC	PN16	DI	CF8	EPDM	SS	Gear Box
15	DN600	WD2349600GC	PN16	DI	CF8	EPDM	SS	Gear Box

Concentric Wafer Soft Seated Butterfly Valve

Fig. 2349H-GE

Specification

Specification		GE03(S)	GE05(S)	GE10	GE20	GE30
BOM No.		WD2349G003	WD2349G005	WD2349G010	WD2349G020	WD2349G030
Power		10	10	40	25	40
Maximum Output Torque	AC110V AC220V AC/DC24V	35	50	100	200	300
	AC380V Triphase	-	-	100	200	300
Switching Time 50Hz	AC110V AC220V	11	15	19	39	39
	AC380V	-	-	19	39	39
	AC/DC24V	8	10	14	28	28
ISO5211		F03/F04/F05	F03/F04/F05	F05/F07/F10/F12	F05/F07/F10/F12	F05/F07/F10/F12
Stem Connection Size		11*11	11*11	14*14/17*17	14*14/17*17	14*14/17*17
Weight		3	3.2	11	11	11
Stem Height		20	20	20	35	35
Torque Range		35N.m	50N.m	100N.m	200N.m	300N.m
level Of Protection		IP67,IP68(Optional)				
Environment Temperature		-25°C~70°C Optional: -40°C~60°C				
Rating Of Machine		Class F,Overheat Protector,≤135°C Optional:Class H				
Working Time		Switch-Type:S2-15 No more than 600 starts per hour				
Adaptable Voltage		Three-phase: power supply (±10%); Hz (±5%) 50Hz(220,240,380,400,460,500,525and 550Volts) 60Hz(208,220,230,240,380,440,460,480,575 and 600Volts)				

Specification		GE60	GE100	GE130	GE170	GE230	GE350
BOMNo.		WD2349G060	WD2349G100	WD2349G130	WD2349G170	WD2349G230	WD2349G350
Power		90	120	150	120	200	200
Maximum OutputTorque	AC110VAC220V AC/DC24V	600	1000	1300	1700	2300	3500
	AC380VTriphase	600	1000	1300	1700	2300	3500
SwitchingTime 50Hz	AC110VAC220V	39	47	47	34	47	76
	AC380V	39	47	47	34	47	76
	AC/DC24V	28	34	34	25	34	55
ISO5211		F10/F12/F14	F10/F12/F14	F10/F12/F14	F12/F14/F16	F12/F14/F16	F14/F16
StemConnectionSize		22*22/27*27	27*27	27*27	27*27	36*36	40*40
Weight		22	22	22	36	36	76
StemHeight		55	≤30	55	65	65	85
TorqueRange		600N.m	1000N.m	1300N.m	1700N.m	2300N.m	3500N.m
level OfProtection		IP67,IP68(Optional)					
EnvironmentTemperature		-25°C~70°C Optional: -40°C~60°C					
RatingOf Machine		Class F,Overheat Protector,≤135°C Optional:Class H					
WorkingTime		Switch-Type:S2-15 No more than 600 starts per hour					
AdaptableVoltage		Three-phase: power supply (±10%); Hz (±5%) 50Hz(220,240,380,400,460,500,525and 550Volts) 60Hz(208,220,230,240,380,440,460,480,575 and 600Volts) DC:24V(±10%)					

Concentric Wafer Soft Seated Butterfly Valve

Fig. 2349H-GE

Dimensions

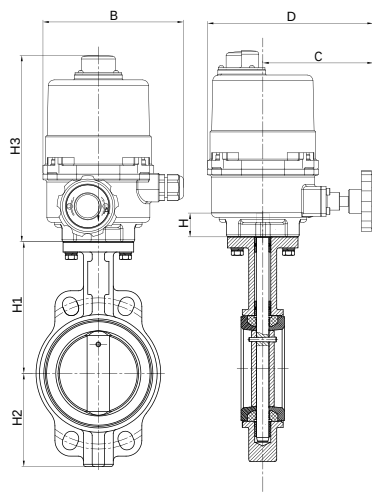


Fig. 2349H-GE
DN40-DN125

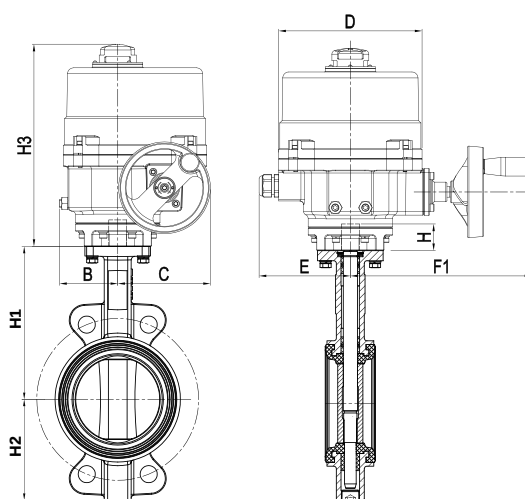


Fig. 2349H-GE
DN150-DN500

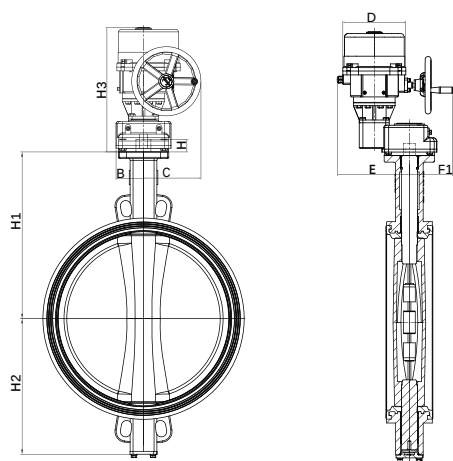


Fig. 2349H-GE
DN600

DN	INCH	H1, MM	H2, MM	H3 , MM	B, MM	C, MM	D, MM	H, MM	Gear box Model	Weight, Kg
40	1½	130	66	192	150	135	170	20	-	-
50	2	119.5	69	192	150	135	170	20	-	-
65	2½	136	74.5	192	150	135	170	20	-	-
80	3	150	95.5	192	150	135	170	20	-	-
100	4	170	111.5	192	150	135	170	20	-	-
125	5	190	129	192	150	135	170	20	-	-
150	6	206	138.5	268	77	123	216	35	GE10	16.7
200	8	234	168.5	268	77	123	216	35	GE20	20.5
250	10	272	210	327	103	187	266	55	GE30	23.5
300	12	327	239	327	103	187	266	55	GE60	50.2
350	14	368	276	327	103	187	266	55	GE100	54.3
400	16	400	315	380	127	242	293	65	GE130	71
450	18	422	336	3880	127	242	293	65	GE170	102
500	20	480	403	380	127	242	293	65	GE230	123.9
600	24	562	547	532	118	242	293	65	GE350	217.3

Concentric Wafer Soft Seated Butterfly Valve

Fig. 2349H-GE

Bill of Materials List

Item	Dimension	BOM No.	Flange		Material			Actuator
			Connection	Body	Disc	Seat	Stem	
1	DN40	WD2349040ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE03(S)
2	DN50	WD2349050ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE03(S)
3	DN65	WD2349065ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE03(S)
4	DN80	WD2349080ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE03(S)
5	DN100	WD2349100ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE05(S)
6	DN125	WD2349125ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE05(S)
7	DN150	WD2349150ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE10
8	DN200	WD2349200ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE20
9	DN250	WD2349250ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE30
10	DN300	WD2349300ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE60
11	DN350	WD2349350ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE100
12	DN400	WD2349400ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE130
13	DN450	WD2349450ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE170
14	DN500	WD2349500ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE230
15	DN600	WD2349600ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE350

Item	Dimension	BOM No.	Flange		Material			Actuator
			Connection	Body	Disc	Seat	Stem	
1	DN40	WD2349040EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE03(S)
2	DN50	WD2349050EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE03(S)
3	DN65	WD2349065EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE03(S)
4	DN80	WD2349080EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE03(S)
5	DN100	WD2349100EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE05(S)
6	DN125	WD2349125EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE05(S)
7	DN150	WD2349150EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE10
8	DN200	WD2349200EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE20
9	DN250	WD2349250EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE30
10	DN300	WD2349300EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE60
11	DN350	WD2349350EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE100
12	DN400	WD2349400EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE130
13	DN450	WD2349450EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE170
14	DN500	WD2349500EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE230
15	DN600	WD2349600EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE350

Concentric Wafer Butterfly Valve

Fig. 2302H

Features

1. Completely sealed in both directions - airtight grade.
2. Valve plate has a precision-machined spherical sealing surface, which has low torque and long service life.
3. Three self-lubricating bushings on the valve stem prevent the valve stem from deflecting.
4. Scientific design with excellent flow characteristics and low-pressure loss.
5. The valve has passed the sulfur dioxide corrosion resistance test and salt spray test.
6. Four flange positioning holes ensure the correct position of the valve during installation.
7. Can be installed in any direction.
8. Maintenance-free.
9. Silicone-free valves can be selected for special industries.



Fig. 2302H-L Lever

Fig. 2302H-G Gear Box

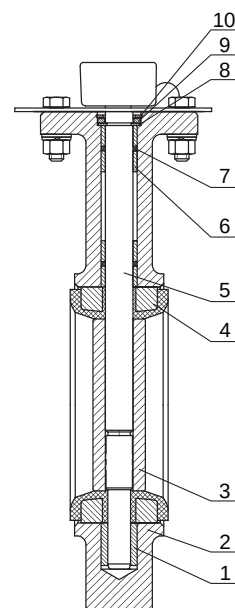
Fig. 2302H-GE Electric

Parameter Standard

1	Design Standard	BS EN593 / MSS SP-67 / ISO 5752 / BS 5155
2	Face to Face Standard	BS EN558 20 Series
3	Connection Standard	BS EN1092-2 PN16
4	Top Flange	ISO 5211
5	Size	DN40~DN600
6	Suitable Medium	Hot Water, Cold Water and Ethylene Glycol (≤50%)
7	Working Pressure	PN16
8	Working Temperature	-10°C~120°C
9	Actuator	Manual/Gear/Electric
10	Performance Testing	Shell: 24bar; Seal: 17.6bar
11	Coating	Epoxy powder coating with 200 μm (Default)
12	Coating Color	Green Ral6005 (Default)

Material Specification

No.	Part	Material	Specification
1	Bushing	Bronze	CW509N
		PTFE	-
2	Body	Ductile Iron	DIN GGG40
3	Disc	Ductile Iron	DIN GGG40
		Stainless Steel	BS EN 304C 15
4	Seat	EPDM HT	-
5	Shaft	Stainless Steel	BS EN 410S21 (Default)
			BS EN 431S29
6	Bushing	Bronze	CW509N
		PTFE	-
7	O-Ring	EPDM HT	-
8	Circlip	65Mn	BS EN 080A67
9	Washer	Carbon Steel	-
10	Circlip	65Mn	BS EN 080A67

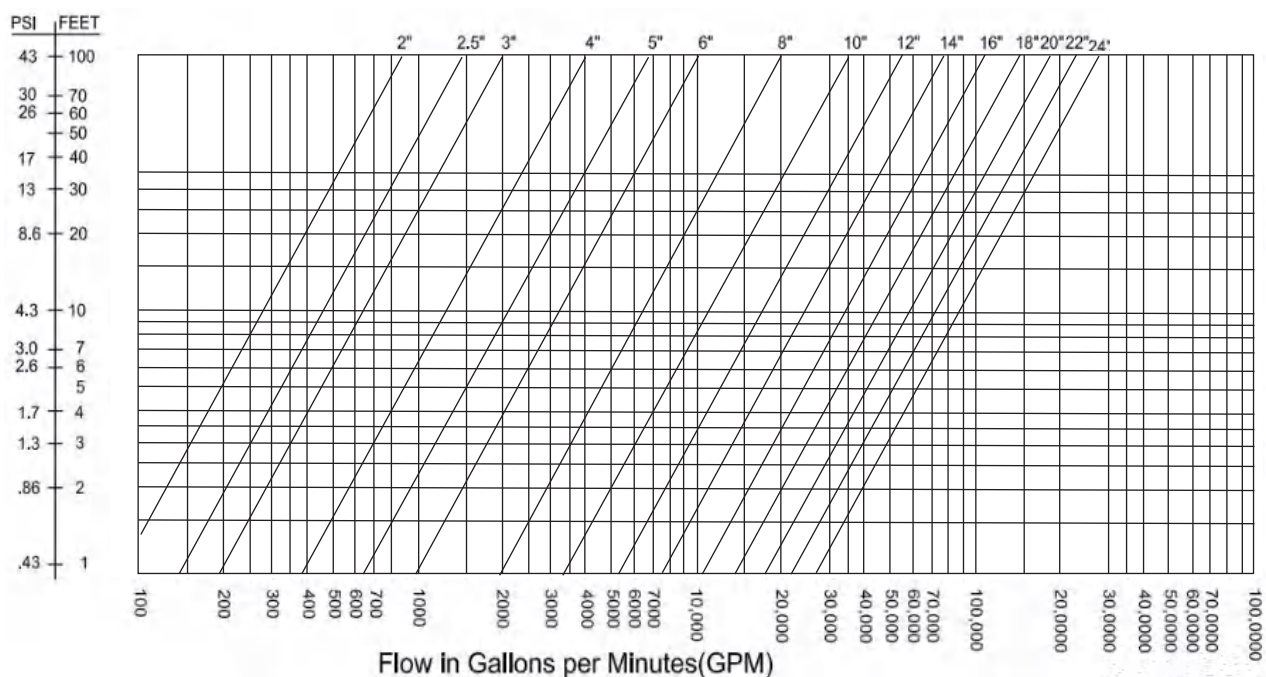


Concentric Wafer Butterfly Valve

Fig. 2302H

KV Value

Size, MM	10°	20°	30°	40°	50°	60°	70°	80°	90° Full Open
40	0.05	2	6	12	22	31	43	60	65
50	0.1	5	12	24	45	64	90	125	135
65	0.2	8	20	37	65	98	144	204	220
80	0.3	12	22	39	70	116	183	275	302
100	0.5	17	36	78	139	230	364	546	600
125	0.8	29	61	133	237	392	620	930	1022
150	2	45	95	205	366	605	958	1437	1579
200	3	89	188	408	727	1202	1903	2854	3136
250	4	151	320	694	1237	2047	3240	4859	5340
300	5	234	495	1072	1911	3162	5005	7507	8250
350	6	338	715	1549	2761	4568	7230	10844	11917
400	8	464	983	2130	3797	6282	9942	14913	16388
450	11	615	1302	2822	5028	8320	13168	19752	21705
500	14	791	1674	3628	6465	10698	16931	25396	27908
600	24	1222	2587	5605	9989	16528	26157	39236	43116



Concentric Wafer Butterfly Valve

Fig. 2302H-L

Dimensions

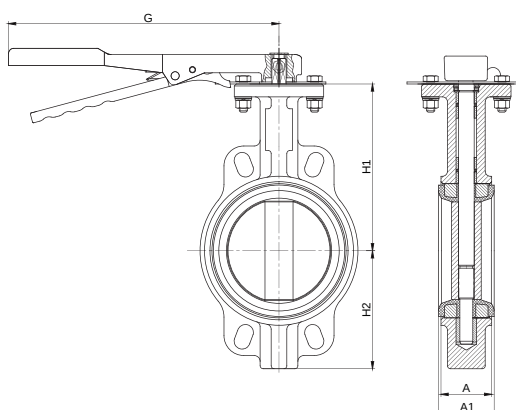


Fig. 2302H-L
DN40-DN300

DN	INCH	H1, MM	H2, MM	A , MM	A1, MM	G, MM	Weight, Kg
40	1½	130	66	33	37	266	1.9
50	2	141	69	42	46	266	2.2
65	2½	150	76	45	50	266	2.5
80	3	156	99	45	50	266	2.9
100	4	168	119	51	56	266	4.3
125	5	187	129	55	59	266	5.9
150	6	206	142	55	59	328	6.5
200	8	231	176	60	64	386	10.4
250	10	270	209	67	72	386	15.9
300	12	328	249	76	80	386	31.6

Bill of Materials List

Item	Size	Article No.	Flange Connection	Material				Actuator
				Body	Disc	Stem	Seat	
1	DN40	WD2302040LD	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM HT	Lever
2	DN50	WD2302050LD	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM HT	Lever
3	DN65	WD2302065LD	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM HT	Lever
4	DN80	WD2302080LD	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM HT	Lever
5	DN100	WD2302100LD	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM HT	Lever
6	DN125	WD2302125LD	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM HT	Lever
7	DN150	WD2302150LD	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM HT	Lever
8	DN200	WD2302200LD	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM HT	Lever
9	DN250	WD2302250LD	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM HT	Lever
10	DN300	WD2302300LD	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM HT	Lever

Item	Size	Article No.	Flange Connection	Material				Actuator
				Body	Disc	Stem	Seat	
1	DN40	WD2302040LC	PN16	Ductile Iron	CF8	Stainless Steel	EPDM HT	Lever
2	DN50	WD2302050LC	PN16	Ductile Iron	CF8	Stainless Steel	EPDM HT	Lever
3	DN65	WD2302065LC	PN16	Ductile Iron	CF8	Stainless Steel	EPDM HT	Lever
4	DN80	WD2302080LC	PN16	Ductile Iron	CF8	Stainless Steel	EPDM HT	Lever
5	DN100	WD2302100LC	PN16	Ductile Iron	CF8	Stainless Steel	EPDM HT	Lever
6	DN125	WD2302125LC	PN16	Ductile Iron	CF8	Stainless Steel	EPDM HT	Lever
7	DN150	WD2302150LC	PN16	Ductile Iron	CF8	Stainless Steel	EPDM HT	Lever
8	DN200	WD2302200LC	PN16	Ductile Iron	CF8	Stainless Steel	EPDM HT	Lever
9	DN250	WD2302250LC	PN16	Ductile Iron	CF8	Stainless Steel	EPDM HT	Lever
10	DN300	WD2302300LC	PN16	Ductile Iron	CF8	Stainless Steel	EPDM HT	Lever

Concentric Wafer Butterfly Valve

Fig. 2302H-G

Dimensions

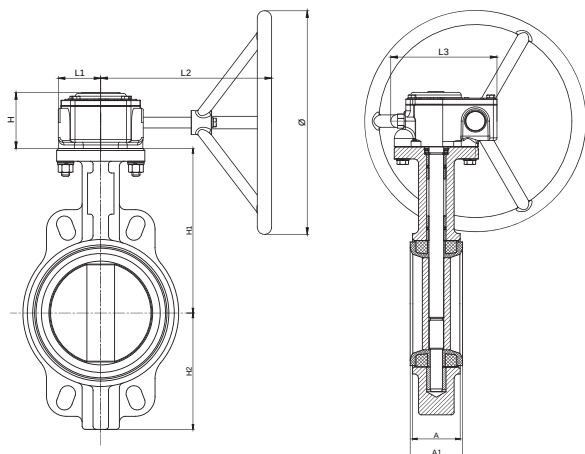


Fig. 2302H-G
DN40-DN300

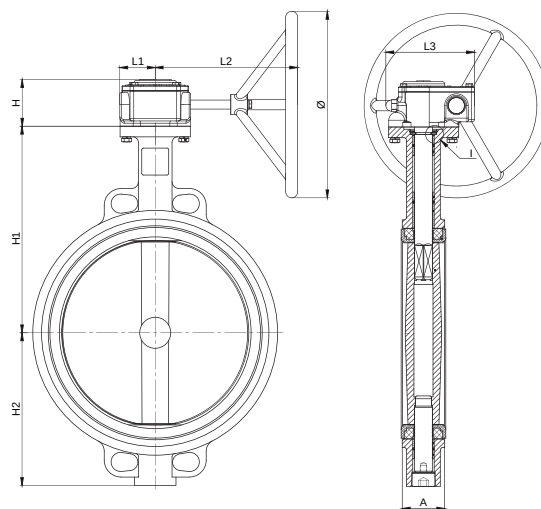


Fig. 2302H-G
DN350-DN500

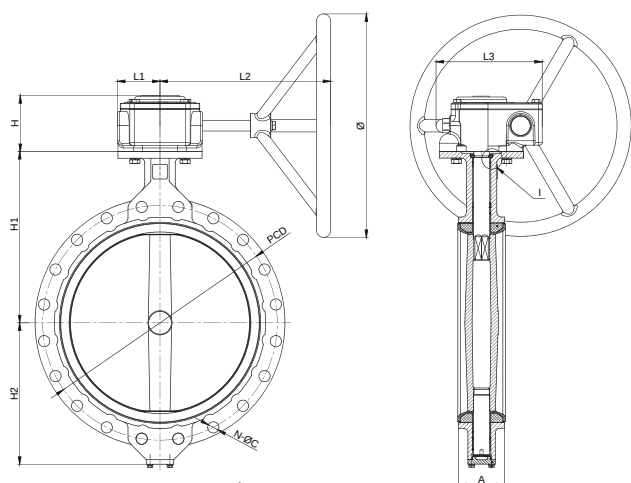


Fig. 2302H-G
DN600

DN	INCH	H1, MM	H2, MM	A , MM	A1, MM	L1, MM	L2, MM	L3, MM	H, MM	Ø, MM	Weight, Kg
40	1½	130	66	33	37	31	160	106	51	150	1.9
50	2	141	69	42	46	31	160	106	51	150	2.2
65	2½	150	76	45	49	31	160	106	51	150	2.5
80	3	156	99	45	49	31	160	106	51	150	2.9
100	4	168	119	51	56	31	190	106	51	150	4.3
125	5	187	129	55	59	31	190	106	51	150	5.9
150	6	206	142	55	59	31	190	106	51	185	6.5
200	8	231	176	60	64	47	220	121	63	200	10.4
250	10	270	209	67	72	48	260	123	63	250	15.9
300	12	328	249	76	80	63	270	154	65	250	31.6
350	14	368	398	76	80	63	270	154	65	250	40.8
400	16	400	342	102	106	70	320	175	90	400	58.2
450	18	422	373	114	118	70	320	175	90	400	85.2
500	20	480	398	127	131	94	370	214	97	400	107.1
600	24	562	464	151	155	94	370	214	97	500	163.3

Concentric Wafer Butterfly Valve

Fig. 2302H-G

Bill of Materials List

Item	Size	Article No.	Flange Connection	Material				Actuator
				Body	Disc	Seat	Stem	
1	DN40	WD2302040GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
2	DN50	WD2302050GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
3	DN65	WD2302065GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
4	DN80	WD2302080GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
5	DN100	WD2302100GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
6	DN125	WD2302125GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
7	DN150	WD2302150GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
8	DN200	WD2302200GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
9	DN250	WD2302250GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
10	DN300	WD2302300GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
11	DN350	WD2302350GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
12	DN400	WD2302400GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
13	DN450	WD2302450GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
14	DN500	WD2302500GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box
15	DN600	WD2302600GD	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	Gear Box

Item	Size	Article No.	Flange Connection	Material				Actuator
				Body	Disc	Seat	Stem	
1	DN40	WD2302040GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
2	DN50	WD2302050GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
3	DN65	WD2302065GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
4	DN80	WD2302080GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
5	DN100	WD2302100GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
6	DN125	WD2302125GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
7	DN150	WD2302150GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
8	DN200	WD2302200GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
9	DN250	WD2302250GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
10	DN300	WD2302300GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
11	DN350	WD2302350GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
12	DN400	WD2302400GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
13	DN450	WD2302450GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
14	DN500	WD2302500GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box
15	DN600	WD2302600GC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Gear Box

Concentric Wafer Butterfly Valve

Fig. 2302H-GE

Specification

Specification		GE03(S)	GE08	GE10	GE20	GE30	GE60
Article No.		WD2302G003	WD2302G008	WD2302G010	WD2302G020	WD2302G030	WD2302G060
Power		10	10	40	25	40	90
Maximum Output Torque	AC110V AC220V AC / DC24V	35	80	100	200	300	600
	AC380V Triphase	-	-	100	200	300	600
Switching Time 50Hz	AC110V AC220V	11	47	19	39	39	39
	AC380V	-	47	19	39	39	39
	AC / DC24V	8	34	14	28	28	28
ISO5211		F03/F04/F05	F03/F04/F05	F05/F07/F10/F12	F05/F07/F10/F12	F05/F07/F10/F12	F10/F12/F14
Stem Connection Size		11*11	11*11/14*14/17*	14*14/17*17	14*14/17*17	14*14/17*17	22*22/27*27
Weight		3	8	11	11	11	22
Stem Height		20	20	20	35	35	55
Torque Range		35N.m	80N.m	100N.m	200N.m	300N.m	600N.m
Level Of Protection		IP67,IP68(Optional)					
Environment Temperature		-25°C~70°C Optional: -40°C~60°C					
Rating Of Machine		Class F,Overheat Protector,≤135°C Optional:Class H					
Working Time		Switch-Type:S2-15 No more than 600 starts per hour					
Adaptable Voltage		Three-phase: power supply (±10%); Hz (±5%) 50Hz(220,240,380,400,460,500,525and 550Volts) 60Hz(208,220,230,240,380,440,460,480,575 and 600Volts)					

Specification		GE80	GE100	GE130	GE170	GE230	GE350
Article No.		WD2302G080	WD2302G100	WD2302G130	WD2302G170	WD2302G230	WD2302G350
Power		90	120	150	120	200	200
Maximum Output Torque	AC110V AC220V AC / DC24V	800	1000	1300	1700	2300	3500
	AC380V Triphase	800	1000	1300	1700	2300	3500
Switching Time 50Hz	AC110V AC220V	47	47	47	34	47	76
	AC380V	47	47	47	34	47	76
	AC / DC24V	34	34	34	25	34	55
ISO5211		F10/F12/F14	F10/F12/F14	F10/F12/F14	F12/F14/F16	F12/F14/F16	F14/F16
Stem Connection Size		27*27	27*27	27*27	27*27	36*36	40*40
Weight		22	22	22	36	36	76
Stem Height		55	≤30	55	65	65	85
Torque Range		800N.m	1000N.m	1300N.m	1700N.m	2300N.m	3500N.m
Level Of Protection		IP67,IP68(Optional)					
Environment Temperature		-25°C~70°C Optional: -40°C~60°C					
Rating Of Machine		Class F,Overheat Protector,≤135°C Optional:Class H					
Working Time		Switch-Type:S2-15 No more than 600 starts per hour					
Adaptable Voltage		Three-phase: power supply (±10%); Hz (±5%) 50Hz(220,240,380,400,460,500,525and 550Volts) 60Hz(208,220,230,240,380,440,460,480,575 and 600Volts) DC:24V(±10%)					

Concentric Wafer Butterfly Valve

Fig. 2302H-GE

Dimensions

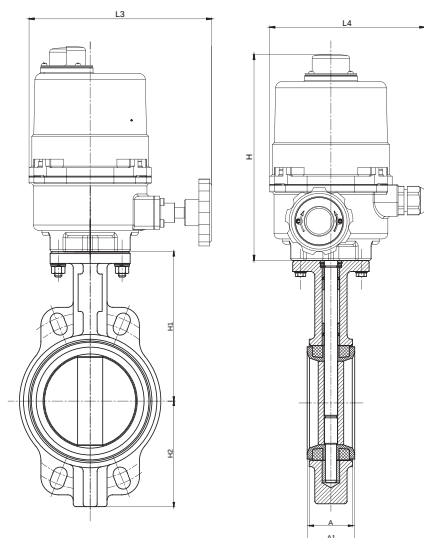


Fig. 2302H-GE
DN40-DN300

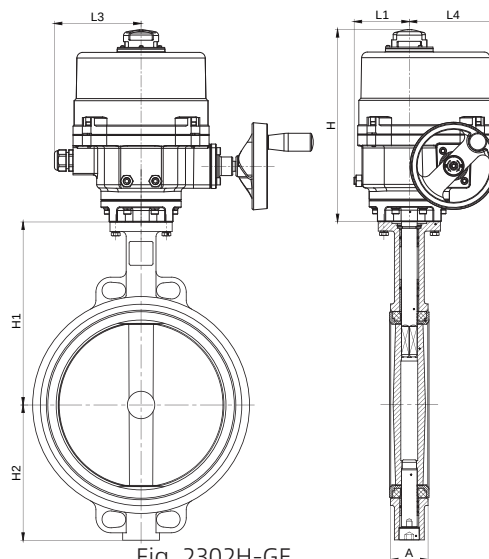


Fig. 2302H-GE
DN350-DN500

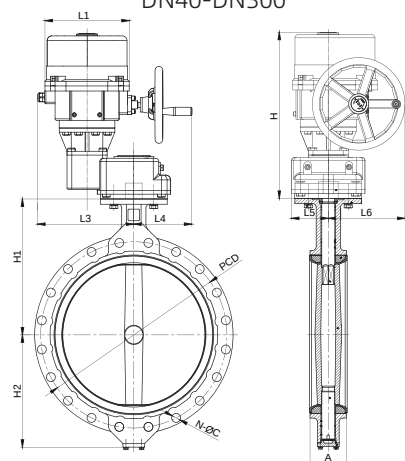


Fig. 2302H-GE
DN600

DN	INCH	H1, MM	H2, MM	A , MM	A1, MM	H, MM	L3, MM	L4, MM	Gear box Model	Weight, Kg
40	1½	130	66	33	37	192	170	150	GE03(S)	-
50	2	141	69	42	46	192	170	150	GE03(S)	4.7
65	2½	150	77	45	49	192	170	150	GE03(S)	5
80	3	156	99	45	49	192	170	150	GE03(S)	5.4
100	4	168	119	51	56	192	170	150	GE08	6.7
125	5	187	129	55	59	268	123	123	GE10	8.3
150	6	206	142	55	59	268	123	123	GE20	16.7
200	8	231	177	60	64	268	123	123	GE30	20.5
250	10	270	209	67	72	327	146	187	GE60	23.5
300	12	328	249	76	80	327	146	187	GE80	50.2
350	14	368	398	76	109	327	146	187	GE100	54.3
400	16	400	342	102	-	327	146	187	GE130	71
450	18	422	373	114	-	378	163	242	GE170	102
500	20	480	398	131	-	378	163	242	GE230S	123.9
600	24	562	464	151	-	532	308	186	GE350	217.3

Concentric Wafer Butterfly Valve

Fig. 2302H-GE

Bill of Materials List

Item	Dimension	BOM No.	Flange		Material			Actuator
			Connection	Body	Disc	Seat	Stem	
1	DN40	WD2302040ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE03(S)
2	DN50	WD2302050ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE03(S)
3	DN65	WD2302065ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE03(S)
4	DN80	WD2302080ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE03(S)
5	DN100	WD2302100ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE08
6	DN125	WD2302125ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE10
7	DN150	WD2302150ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE20
8	DN200	WD2302200ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE30
9	DN250	WD2302250ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE60
10	DN300	WD2302300ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE80
11	DN350	WD2302350ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE100
12	DN400	WD2302400ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE130
13	DN450	WD2302450ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE170
14	DN500	WD2302500ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE230S
15	DN600	WD2302600ED	PN16	Ductile Iron	Ductile Iron	EPDM HT	Stainless Steel	GE350

Item	Dimension	BOM No.	Flange		Material			Actuator
			Connection	Body	Disc	Seat	Stem	
1	DN40	WD2302040EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE03(S)
2	DN50	WD2302050EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE03(S)
3	DN65	WD2302065EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE03(S)
4	DN80	WD2302080EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE03(S)
5	DN100	WD2302100EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE08
6	DN125	WD2302125EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE10
7	DN150	WD2302150EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE20
8	DN200	WD2302200EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE30
9	DN250	WD2302250EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE60
10	DN300	WD2302300EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE80
11	DN350	WD2302350EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE100
12	DN400	WD2302400EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE130
13	DN450	WD2302450EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE170
14	DN500	WD2302500EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE230S
15	DN600	WD2302600EC	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	GE350

Y-Pattern Strainer

Fig. 7309H

Features

1. Can be installed horizontally and vertically.
2. Light weight.
3. Low pressure head loss and valve resistance.
4. Maintenance-free.

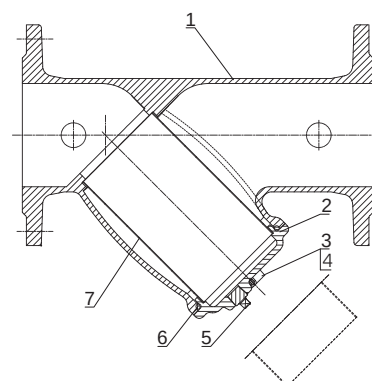


Parameter Standard

1	Design Standard	BS EN 12266
2	Face to Face Standard	BS EN 558-1
3	Connection Standard	EN1092-2 PN16
4	Size	DN50~DN600
5	Suitable Medium	Hot Water, Cold Water, Ethylene Glycol ($\leq 50\%$)
6	Working Pressure	PN16
7	Working Temperature	-10°C~120°C
8	Performance Testing	Shell: 24bar
9	Painting	Internal: 30 μm ; External: 120 μm
10	Painting Color	Green Ral6005 (Default)

Material Specification

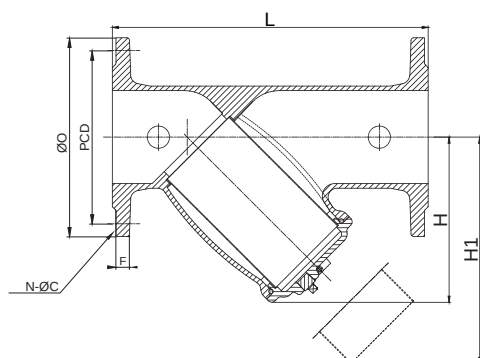
No.	Part	Material	Specification
1	Body	Ductile Iron	BS EN 420/12(DIN GGG40)
2	Bonnet	Ductile Iron	BS EN 420/12(DIN GGG40)
3	Screw	Carbon Steel	SS
4	Hex Nut	Carbon Steel	SS
5	Plug	Stainless Steel	SS
6	O-Ring	EPDM HT	-
7	Screen	Stainless Steel	BS EN 304S15



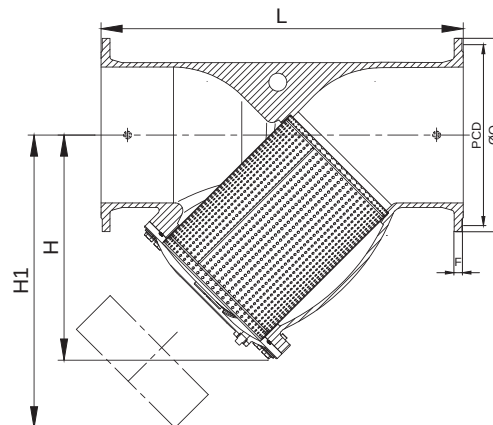
Y-Pattern Strainer

Fig. 7309H

Dimensions



DN50-DN300



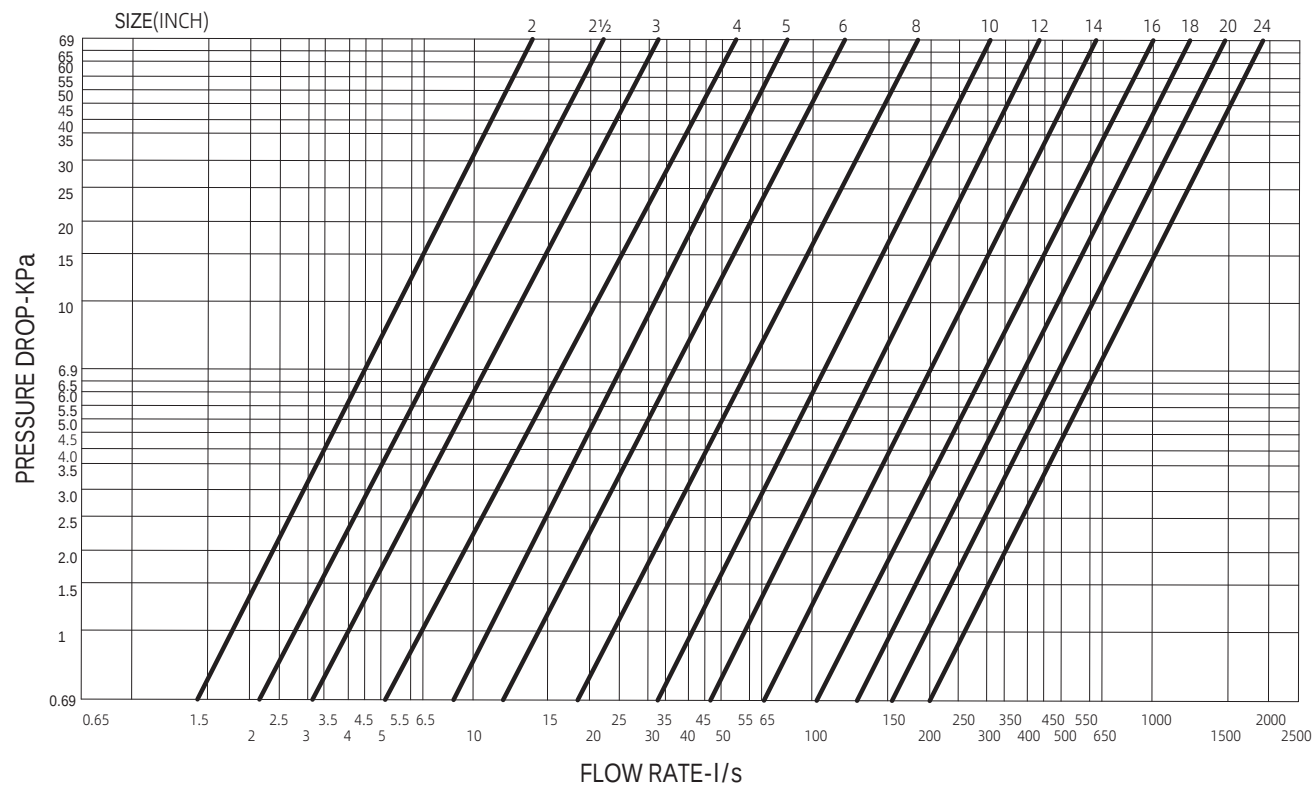
DN350-DN600

DN	INCH	L, MM	H, MM	H1, MM	F, MM	Plug, MM	ØO, MM	PCD, MM	N-ØC, MM	Screen				Weight, Kg
										Hole Diameter, MM	Pitch of Holes, MM	Thickness, MM	Mesh, Qty/inch ²	
50	2	230	110	165	19	3/8"	165	125	4-Ø19	1.5	2.5	0.8	104	5
65	2½	290	135	205	19	3/8"	185	145	4-Ø19	1.5	2.5	0.8	104	7
80	3	310	155	230	19	3/8"	200	160	8-Ø19	1.5	2.5	0.8	104	9
100	4	350	190	295	19	3/8"	220	180	8-Ø19	1.5	2.5	0.8	104	12
125	5	400	255	350	19	3/8"	250	210	8-Ø19	1.5	2.5	0.8	104	18
150	6	480	290	400	19	3/8"	285	240	8-Ø23	1.5	2.5	0.8	104	25
200	8	600	335	510	20	1/2"	340	295	12-Ø23	2.5	5	1.2	26	46
250	10	730	428	665	22	1/2"	405	355	12-Ø28	2.5	5	1.2	26	73
300	12	850	470	745	25	1/2"	460	410	12-Ø28	2.5	5	1.2	26	169
350	14	980	625	940	27	3/4"	520	470	16-Ø28	2.5	5	1.4	26	360
400	16	1100	685	1230	28	3/4"	580	525	16-Ø31	3.5	5.5	1.8	22	485
450	18	1200	746	1110	30	3/4"	640	585	20-Ø31	3.5	5.5	1.8	22	596
500	20	1250	845	1550	32	3/4"	715	650	20-Ø34	3.5	5.5	1.8	22	735
600	24	1450	984	1560	36	1"	840	770	20-Ø37	3.5	5.5	1.8	22	1115

Y-Pattern Strainer

Fig. 7309H

Cv Value



DN	INCH	Cv
50	2	71.3
65	2½	110.9
80	3	174.2
100	4	253.4
125	5	396.0
150	6	570.3
200	8	863.4
250	10	1711.0
300	12	2218.0
350	14	3168.5
400	16	4673.6
450	18	6178.7
500	20	7763.0
600	24	9505.7

Y-Pattern Strainer

Fig. 7309H

Bill of Materials List

Item	Dimension	Article No.	Flange Connection	Material		
				Body	Screen	O-Ring
1	DN50	CG0000869	PN16	Ductile Iron	Stainless Steel	EPDM HT
2	DN65	CG0000870	PN16	Ductile Iron	Stainless Steel	EPDM HT
3	DN80	CG0000871	PN16	Ductile Iron	Stainless Steel	EPDM HT
4	DN100	CG0000872	PN16	Ductile Iron	Stainless Steel	EPDM HT
5	DN125	CG0000873	PN16	Ductile Iron	Stainless Steel	EPDM HT
6	DN150	CG0000874	PN16	Ductile Iron	Stainless Steel	EPDM HT
7	DN200	CG0000875	PN16	Ductile Iron	Stainless Steel	EPDM HT
8	DN250	CG0000876	PN16	Ductile Iron	Stainless Steel	EPDM HT
9	DN300	CG0000877	PN16	Ductile Iron	Stainless Steel	EPDM HT
10	DN350	CG7309350	PN16	Ductile Iron	Stainless Steel	EPDM HT
11	DN400	CG7309400	PN16	Ductile Iron	Stainless Steel	EPDM HT
12	DN450	CG7309450	PN16	Ductile Iron	Stainless Steel	EPDM HT
13	DN500	CG7309500	PN16	Ductile Iron	Stainless Steel	EPDM HT
14	DN600	CG7309600	PN16	Ductile Iron	Stainless Steel	EPDM HT

Variable Orifice Double Regulating Valve

Fig. 1216H

Features

1. Y-shaped globe valve structure, with equal percentage adjustment flow characteristics.
2. The valve opening degree is displayed on the side of valve shaft for easy adjustment.
3. Plug-in pressure test copper valve.
4. The maximum opening can be locked.
5. Can be installed in any direction.
6. Maintenance-free.

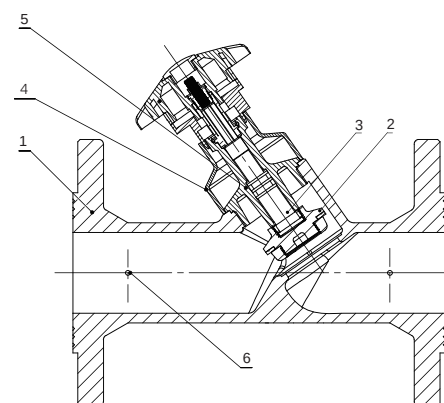


Parameter Standard

1	Design Standard	BS 7350
2	Face to Face Standard	BS EN 558-1
3	Connection Standard	EN1092-2 PN16
4	Size	DN32~DN50
5	Suitable Medium	Hot Water, Cold Water, Ethylene Glycol ($\leq 50\%$)
6	Working Pressure	PN16
7	Working Temperature	-10°C~120°C
8	Performance Testing	Shell: 24bar; Seal: 17.6bar
9	All Open Turns Number	3.8 turns
10	Painting	Internal: 30 μm ; External: 120 μm
11	Painting Color	Green Ral6005 (Default)
12	Leakage Rate	BS 6755-1 rate A

Material Specification

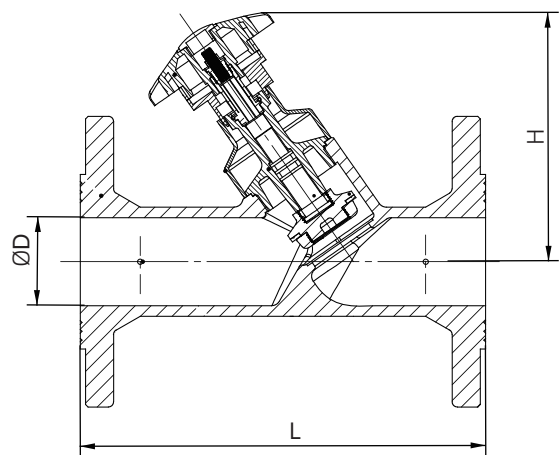
No.	Part	Material	Specification
1	Body	Ductile Iron	DIN GGG50
2	Disc	Copper Alloy	-
3	Stem	Copper Alloy	-
4	Cover	Steel	t14
5	Hex Nut	Copper Alloy	-
6	Plug	Stainless Steel	-



Variable Orifice Double Regulating Valve

Fig. 1216H

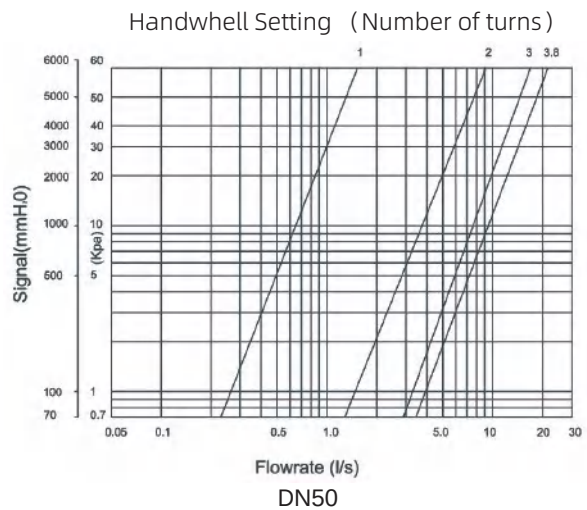
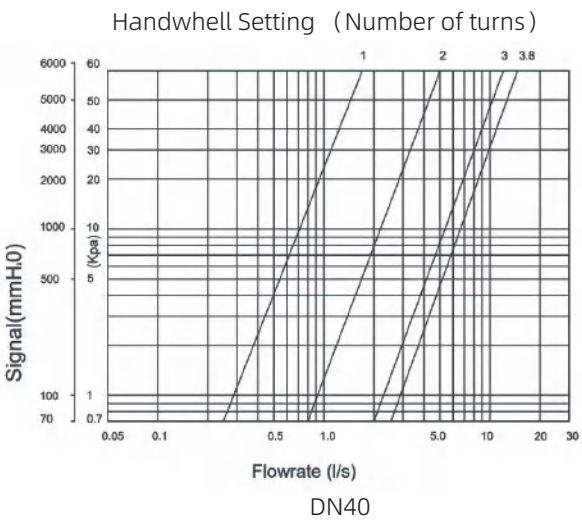
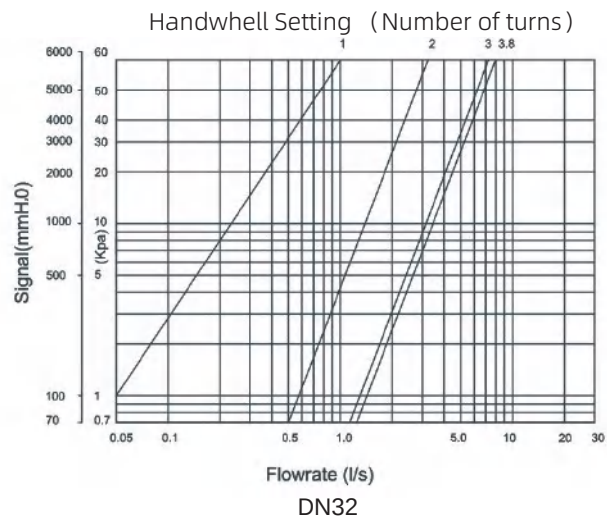
Dimensions



DN	INCH	L, MM	H, MM	ØD, MM	Weight, Kg
32	1¼	180	126	33	4.5
40	1½	200	142	42	5.6
50	2	230	142	50	7.1

Kv Value

Handwheel Position	1	2	3	All Open
DN				
32	1.4	4.2	13.6	14.8
40	3.4	11.4	30.2	34.8
50	2.7	2.7	33.2	42.4



Bill of Materials List

Item	Dimension	Article No.	Flange Connection	Material			
				Body	Disc	Stem	Gasket
1	DN32	CH1216032	PN16	Ductile Iron	Brass	Brass	PTFE
2	DN40	CH1216040	PN16	Ductile Iron	Brass	Brass	PTFE
3	DN50	CH1216050	PN16	Ductile Iron	Brass	Brass	PTFE

Variable Orifice Double Regulating Valve

Fig. 1216H

Features

1. Y-shaped globe valve structure, with equal percentage adjustment flow characteristics.
2. Opening degree shown in double digital, resolution 1/10.
3. The valve opening degree is displayed on the side of valve shaft for easy adjustment.
4. Plug-in pressure test copper valve.
5. The maximum opening can be locked.
6. Can be installed in any direction.
7. Maintenance-free.
8. Saving installation space.

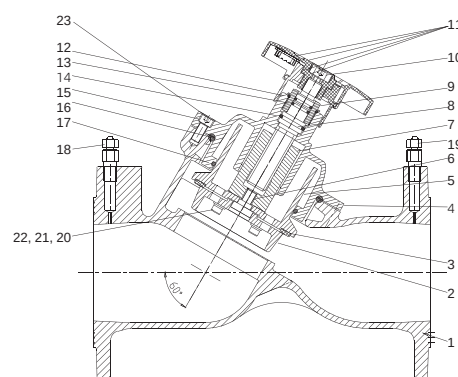


Parameter Standard

1	Design Standard	BS 7350
2	Connection Standard	EN 1092-2 PN16
3	Test Standard	BS 6755
4	Size	DN65~DN600
5	Medium	Hot Water, Cold Water, Ethylene Glycol (≤50%)
6	Working Pressure	PN16
7	Working Temperature	-20°C~120°C
8	Performance Testing	Shell: 24bar; Seal: 17.6bar
9	Painting	Internal: 30 μm; External: 120μm
10	Painting Color	Green Ral6005 (Default)
11	Leakage Rate	BS 6755-1 Rate A

Material Specification

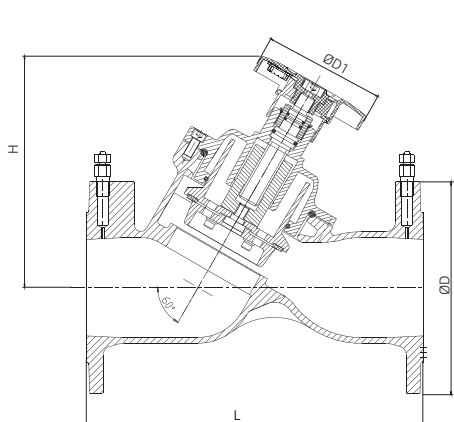
No.	Part	Material	Specification
1	Body	Ductile Iron	EN-JS 1040
2	Disc	Ductile Iron	EN-JS 1040
3	Seal Gasket	EPDM	-
4	Cover	Ductile Iron	EN-JS 1040
5	Bracket	Ductile Iron	EN-JS 1040
6	Screw	Stainless Steel	BS970 304S15
7	Stem Nut	Brass	EN 12165 CW617N
8	Stem	Stainless Steel	BS 970 410S21
9	Gland	Brass	EN 12165 CW617N
10	Hexagon Socket Screws	Stainless Steel	BS970 304S15
11	Handwheel Parts	ABS (DN65~DN150) Ductile Iron (DN200~DN600)	- EN-JS 1040
12~14	O-Ring	EPDM	-
15	Hexagon Socket Screws	Stainless Steel	BS970 304S15
16, 17	O-Ring	EPDM	-
18, 19	Measuring Valve	Brass	EN 12165 CW617N
20	Hexagon Socket Screws	Stainless Steel	BS970 304S15
21	Lock Washer	Stainless Steel	BS970 304S15
22	Plain Washer	Stainless Steel	BS970 304S15
23	Dust Cover	Nylon	-



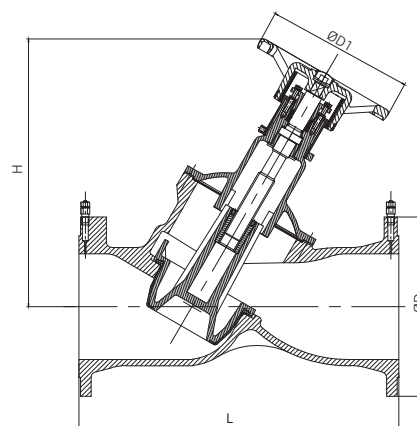
Variable Orifice Double Regulating Valve

Fig. 1216H

Dimensions



DN65-DN150



DN200-DN600

DN	INCH	H, MM	L, MM	ØD1, MM	ØD, MM	Weight, Kg
65	2½	228	290	150	185	17
80	3	235	310	150	200	20
100	4	239	350	150	220	29
125	5	298	400	150	250	40
150	6	311	480	150	285	52
200	8	507	600	280	340	113
250	10	570	730	420	405	185
300	12	686	850	420	460	248
350	14	681	980	420	520	408
400	16	965	1100	640	580	592
450	18	972	1200	640	640	684
500	20	1065	1250	640	715	836
600	24	1180	1450	640	845	1003

Variable Orifice Double Regulating Valve

Fig. 1216H

KV Value

Handwheel Position DN	1	2	3	4	5	6	7	8	All Open
65	26.9	32.4	40.9	44.6	48.6	55.7	66.0	73.2	78.5
80	15.5	20.8	28.9	41.1	56.2	65.0	74.6	87.5	102.9
100	11.7	26.2	63.9	47.8	62.0	93.7	132.7	150.6	153.5
125	45.3	74.1	108.4	151.1	191.0	227.4	247.0	-	255.8
150	34.7	67.5	113.4	210.5	269.9	328.3	375.4	-	400.0

Handwheel Position DN	1	2	3	4	5	6	7	8	9	10	11	12	All Open
200	50.4	70.9	88.6	95.7	148.3	211.6	266.7	327.4	399.0	470.3	547.8	607.2	622.7
250	99	146.8	180.1	241.3	372.1	548.8	692.5	856.1	964.8	1054.1	1174.7	1252.4	1312.0

Handwheel Position DN	1	2	3	4	5	6	7	8	9	10	11	12	13
300	62.0	113.7	175.3	250.8	387.5	604.1	794.9	880.8	1001.8	1111.5	1223.0	1330.9	1383.4
350	64	115	177	250	404	639	807	889	1020	1132	1246	1355	1409
	14	15	16	17	18	All Open							
	1443.9	1505.3	1638.6	1707.4	1730.1	1791.5							
	1470	1533	1669	1739	1762	1824							

Handwheel Position DN	1	2	3	4	5	6	7	8	9	10	11	12	13
400	87	175	262	350	437	525	612	699	787	874	962	1049	1136
450	99	198	296	395	494	593	692	791	889	988	1087	1186	1285
500	110	220	330	440	550	660	770	880	990	1100	1210	1320	1430
600	206	412	617	823	1029	1235	1441	1647	1852	2058	2264	2470	2676

14	15	16	17	18	19	20	21	22	23	24
1224	1311	1399	1486	1574	1661	1748	1836	1923	2011	2098
1384	1482	1581	1680	1779	1878	1977	2075	2174	2273	2372
1540	1650	1760	1870	1980	2090	2200	2310	2420	2530	2640
2882	3087	3293	3499	3705	3911	4117	4322	4528	4734	4940

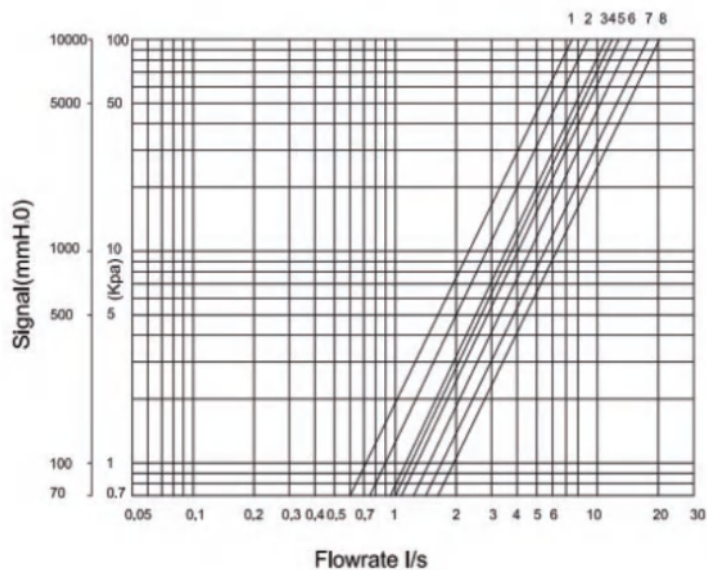
Variable Orifice Double Regulating Valve

Fig. 1216

KV Value

Size 2-1/2" (DN65mm)

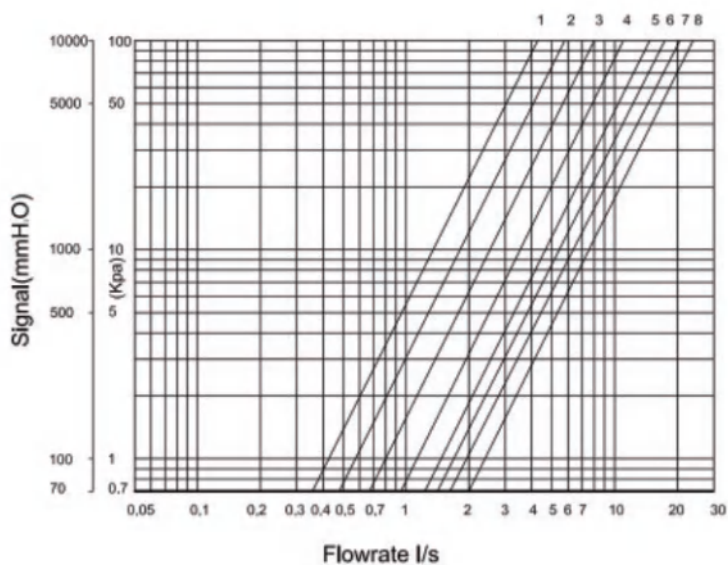
Handwheel Setting (Number of turns)



Handwheel position	1	2	3	4	5	6	7	8	All open
Kv value	26.9	32.4	40.9	44.6	48.6	55.7	66.0	73.2	78.5

Size 3" (DN80mm)

Handwheel Setting (Number of turns)



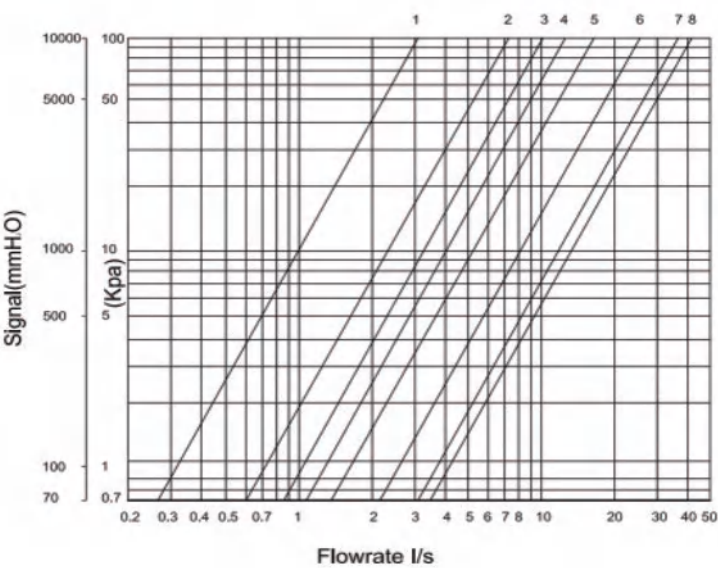
Handwheel position	1	2	3	4	5	6	7	8	All open
Kv value	15.5	20.8	28.9	41.1	56.2	65.0	74.6	87.5	102.9

Variable Orifice Double Regulating Valve

Fig. 1216

Size 4" (DN100mm)

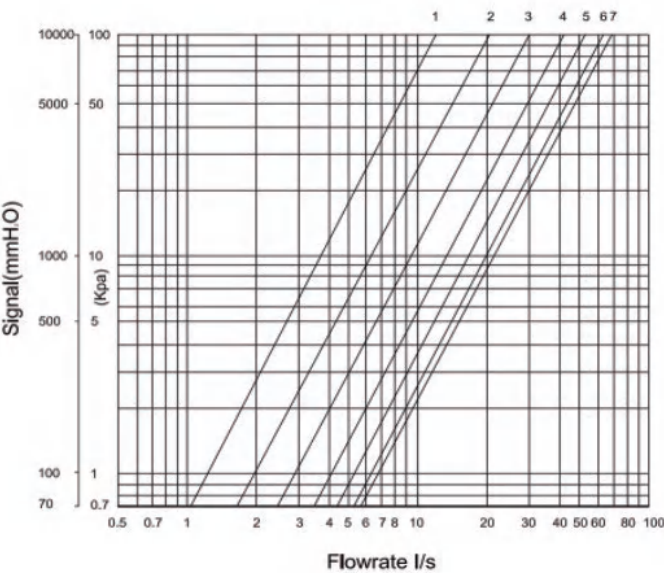
Handwheel Setting (Number of turns)



Handwheel position	1	2	3	4	5	6	7	8	All open
Kv value	11.7	26.2	36.9	47.8	62.0	93.7	132.7	150.6	153.5

Size 5" (DN125mm)

Handwheel Setting (Number of turns)

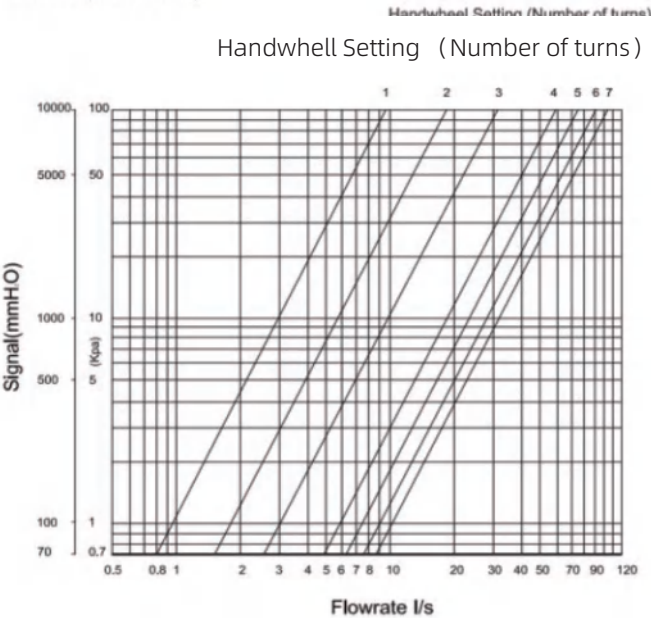


Handwheel position	1	2	3	4	5	6	7	All open
Kv value	45.3	74.1	108.4	151.1	191.0	227.4	247.0	255.8

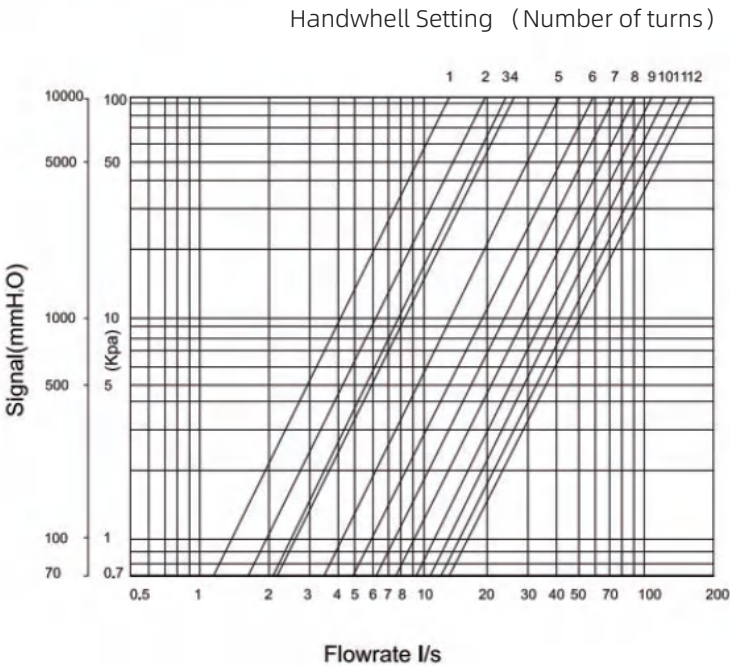
Variable Orifice Double Regulating Valve

Fig. 1216

Size 6" (DN150mm)



Size 8" (DN200mm)

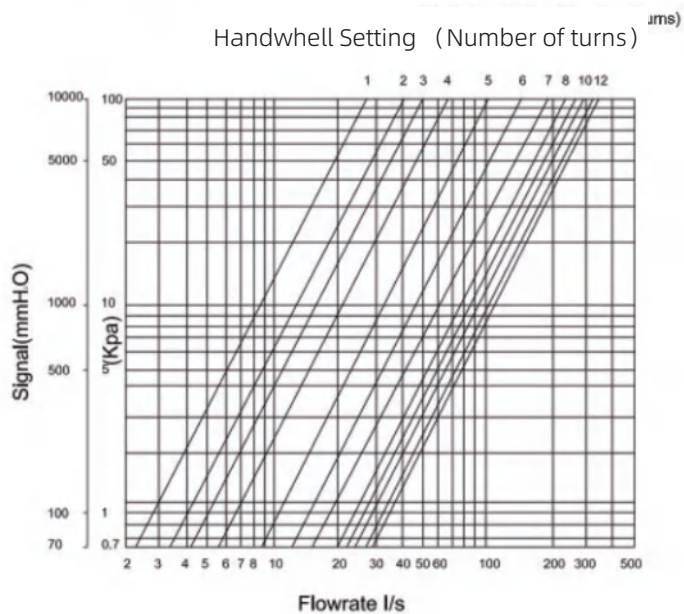


Handwheel position	1	2	3	4	5	6	7	8	9	10	11	12	(All open)
Kv value	50.4	70.9	88.6	95.7	148.3	211.6	266.7	327.4	399.0	470.3	547.8	607.2	622.7

Variable Orifice Double Regulating Valve

Fig. 1216

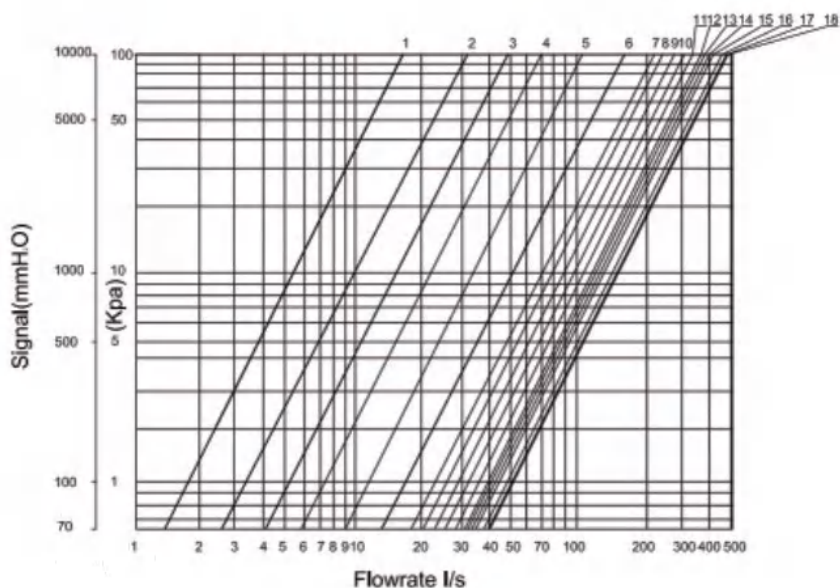
Size 10" (DN250mm)



Handwheel position	1	2	3	4	5	6	7	8	9	10	11	12	All open
Kv value	99	146.8	180.1	241.3	372.1	548.8	692.5	856.1	964.8	1054.1	1174.7	1252.4	1312.0

Size 12" (DN300mm)

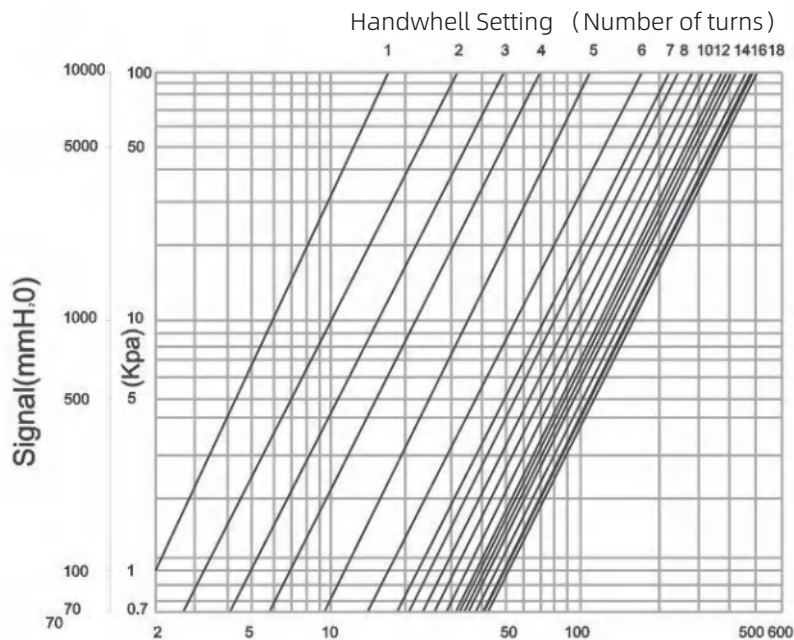
Handwheel Setting (Number of turns)



Handwheel position	1	2	3	4	5	6	7	8	9	10
Kv value	62.0	113.7	175.3	250.8	387.3	604.1	794.9	880.8	1001.8	1111.5
Handwheel position	11	12	13	14	15	16	17	18	All open	
Kv value	1223.0	1330.9	1383.4	1443.9	1505.3	1638.6	1707.4	1730.1	1791.5	

Variable Orifice Double Regulating Valve

Fig. 1216

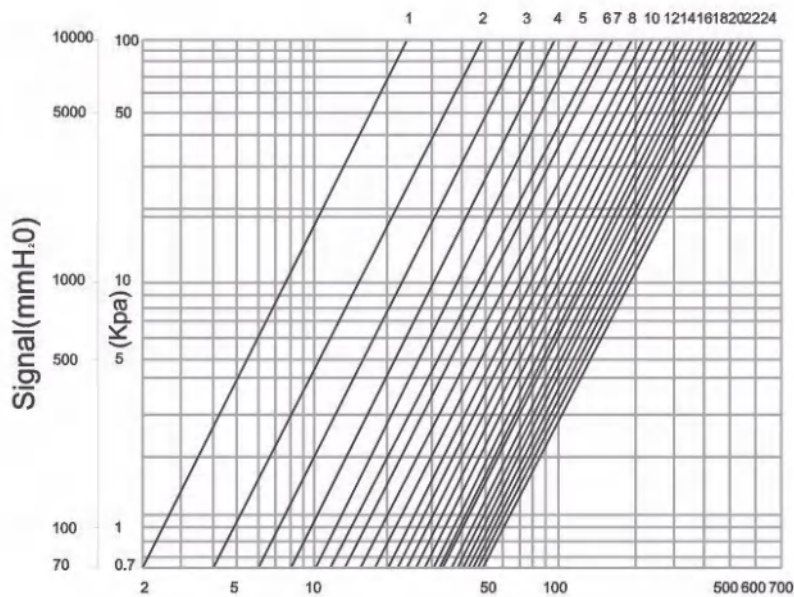


Flowrate l/s

Size 14" (DN350)

Handwheel position	1	2	3	4	5	6	7	8	9	10
Kv Value	64	115	177	250	404	639	807	889	1020	1132
Handwheel position	11	12	13	14	15	16	17	18	All open	
Kv Value	1246	1355	1409	1470	1533	1669	1739	1762	1824	

Handwheel Setting (Number of turns)



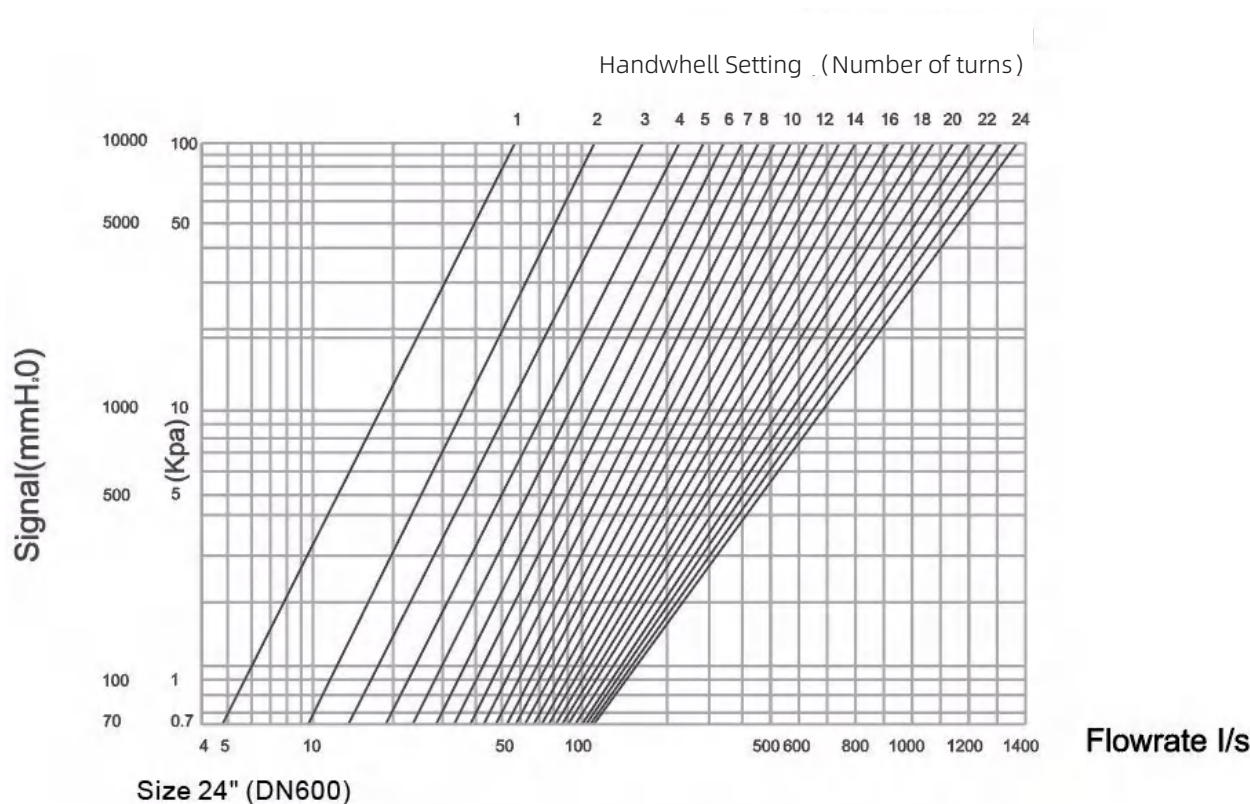
Flowrate l/s

Size 16" (DN400)

Handwheel position	1	2	3	4	5	6	7	8	9	10	11	12
Kv Value	87	175	262	350	437	525	612	699	787	874	962	1049
Handwheel position	13	14	15	16	17	18	19	20	21	22	23	24
Kv Value	1136	1224	1311	1399	1486	1574	1661	1748	1836	1923	2011	2098

Variable Orifice Double Regulating Valve

Fig. 1216



Variable Orifice Double Regulating Valve

Fig. 1216

Bill of Materials List

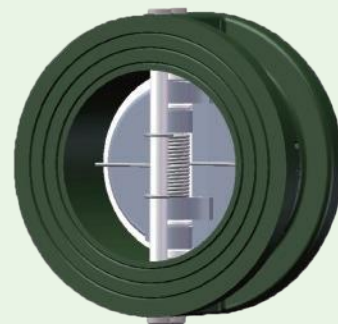
Item	Dimension	Article No.	Flange Connection	Material		
				Body	Disc	Stem
1	DN65	CM0000484	PN16	Ductile Iron	DI+EPDM	Stainless Steel
2	DN80	CM0000475	PN16	Ductile Iron	DI+EPDM	Stainless Steel
3	DN100	CM0000446	PN16	Ductile Iron	DI+EPDM	Stainless Steel
4	DN125	CM0000486	PN16	Ductile Iron	DI+EPDM	Stainless Steel
5	DN150	CM0000487	PN16	Ductile Iron	DI+EPDM	Stainless Steel
6	DN200	CM0000499	PN16	Ductile Iron	DI+EPDM	Stainless Steel
7	DN250	CM0000501	PN16	Ductile Iron	DI+EPDM	Stainless Steel
8	DN300	CM0000503	PN16	Ductile Iron	DI+EPDM	Stainless Steel
9	DN350	CM1216350	PN16	Ductile Iron	DI+EPDM	Stainless Steel
10	DN400	CM1216400	PN16	Ductile Iron	DI+EPDM	Stainless Steel
11	DN450	CM1216450	PN16	Ductile Iron	DI+EPDM	Stainless Steel
12	DN500	CM1216500	PN16	Ductile Iron	DI+EPDM	Stainless Steel
13	DN600	CM1216600	PN16	Ductile Iron	DI+EPDM	Stainless Steel

Wafer Type Dual Plate Check Valve

Fig. 5306H

Features

1. Can be installed horizontally or vertically.
2. Short face-to-face dimension, easy to install.
3. Light weight
4. Low pressure head loss and valve resistance.
5. Maintenance-free.

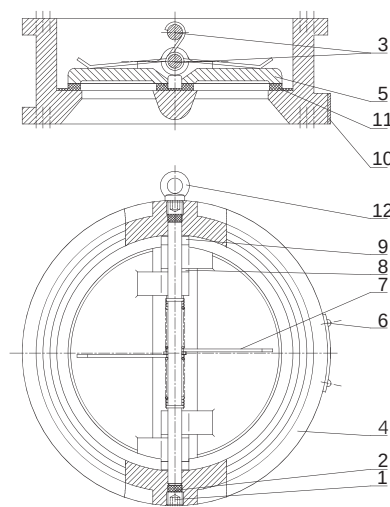


Parameter Standard

1	Design Standard	JB/T 8937
2	Face to Face Standard	DIN 3202
3	Connection Standard	EN1092-2 PN16
4	Size	DN40~DN600
5	Medium	Hot Water, Cold Water, Ethylene Glycol ($\leq 50\%$)
6	Working Pressure	PN16
7	Working Temperature	-10°C~120°C
8	Performance Testing	Shell: 24bar Seal: 17.6bar
9	Painting	Internal: 30 μm ; External: 120 μm
10	Painting Color	Green Ral6005 (Default)

Material Specification

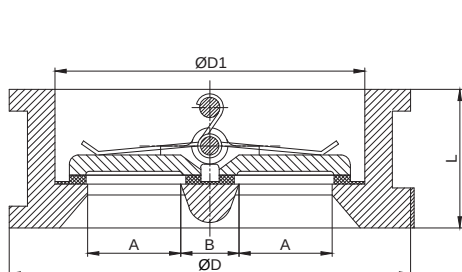
No.	Part	Material	Specification
1	Screw	Carbon Steel	EN-JL 1040
2	Sealing Ring	EPDM HT	-
3	Stem	Stainless Steel	BS EN 316C 15
4	Body	Ductile Iron	EN-GJS-450-10
5	Disc	Ductile Iron Nickel Plate	EN-GJS-450-10
		Stainless Steel	BS EN 304C 15
6	Rivet	Aluminium	-
7	Spring	Stainless Steel	BS EN 316C 15
8	Gasket	PTFE	-
9	Gasket	PTFE	-
10	Name Plate	Steel	-
11	Seat	EPDM HT	-
12	Lifting Ring (for 8 " and above)	Carbon Steel	EN-JL 1040



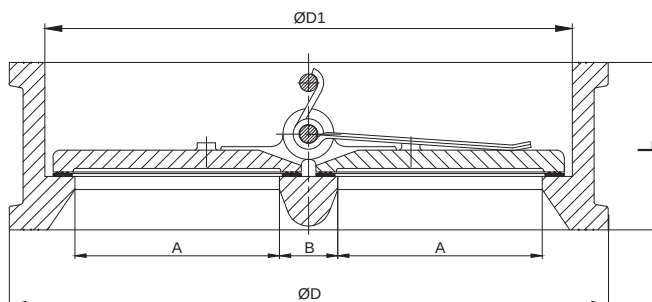
Wafer Type Dual Plate Check Valve

Fig. 5306H

Dimensions



DN50-DN300



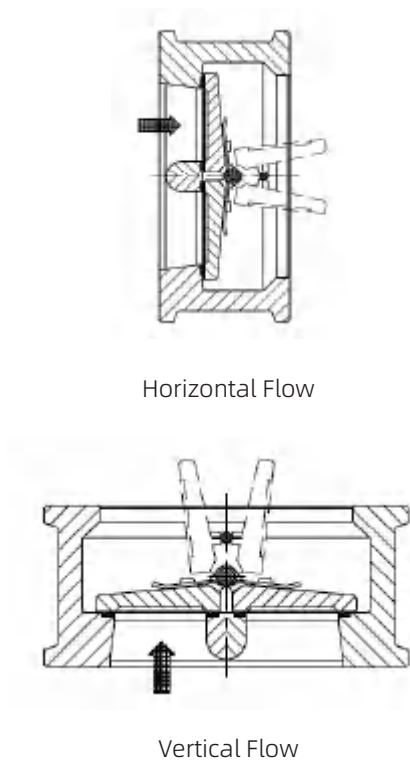
DN350, DN600

DN	INCH	ØD1, MM	ØD, MM	A, MM	B, MM	L, MM	Weight, Kg
40	1½	65	91	12	16	43	1.2
50	2	65	103	12	16	43	1.4
65	2½	80	123	22	17	46	2.7
80	3	94	142	23	25	64	3.7
100	4	117	157	32	24	64	4.2
125	5	145	192	44	28	70	6.3
150	6	170	218	51	32	76	9.3
200	8	224	268	71	41	89	14.8
250	10	265	328	90	40	114	25.5
300	12	310	380	108	44	114	40.7
350	14	360	444	125	48	127	55
400	16	410	495	148	54	140	76.5
450	18	450	554	162	62	152	107
500	20	505	616	188	62	152	114
600	24	624	724	234	70	178	166

Wafer Type Dual Plate Check Valve

Fig. 5306H

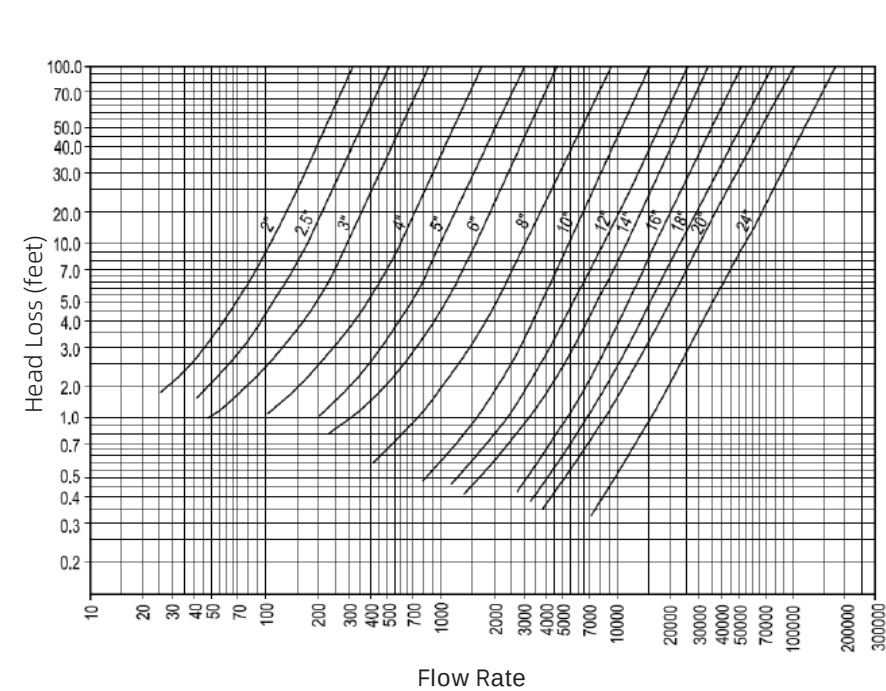
Cracking Pressure



DN	INCH	Cracking Pressure, Kpa	
		Horizontal Flow	Vertical Flow
40	1½	0.2	0.3
50	2	0.2	0.3
65	2½	0.2	0.3
80	3	0.2	0.3
100	4	0.2	0.3
125	5	0.2	0.3
150	6	0.2	0.3
200	8	0.2	0.3
250	10	1	1.2
300	12	1	1.2
350	14	1	1.5
400	16	1	1.7
450	18	1	1.7
500	20	1	1.7
600	24	1	1.7

Cv Value

The Flow rate of water in U.S. gallons per minute of 60°F water, which passes through the valve with 1PSI pressure drop across the valve.



DN	INCH	Cv
40	1½	31
50	2	79
65	2½	120
80	3	226
100	4	404
125	5	695
150	6	1075
200	8	1920
250	10	3360
300	12	5320
350	14	6200
400	16	7650
450	18	9900
500	20	12700
600	24	19200

Wafer Type Dual Plate Check Valve

Fig. 5306H

Bill of Materials List

Item	Dimension	Article No.	Flange Connection	Material				
				Body	Disc	Seat	Stem	Spring
1	DN40	CH5306040	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
2	DN50	CH0100025	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
3	DN65	CH0100026	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
4	DN80	CH0100027	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
5	DN100	CH0100028	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
6	DN125	CH0100029	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
7	DN150	CH0100030	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
8	DN200	CH0100031	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
9	DN250	CH0100032	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
10	DN300	CH0100033	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
11	DN350	CH0100034	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
12	DN400	CH0100035	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
13	DN450	CH0100036	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
14	DN500	CH5306500	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel
15	DN600	CH5306600	PN16	Ductile Iron	DI Nickel Plate	EPDM HT	Stainless Steel	Stainless Steel

Item	Dimension	Article No.	Flange Connection	Material				
				Body	Disc	Seat	Stem	Spring
1	DN40	CH5307040	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
2	DN50	CH5307050	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
3	DN65	CH5307065	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
4	DN80	CH5307080	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
5	DN100	CH5307100	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
6	DN125	CH5307125	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
7	DN150	CH5307150	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
8	DN200	CH5307200	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
9	DN250	CH5307250	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
10	DN300	CH5307300	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
11	DN350	CH5307350	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
12	DN400	CH5307400	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
13	DN450	CH5307450	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
14	DN500	CH5307500	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel
15	DN600	CH5307600	PN16	Ductile Iron	CF8	EPDM HT	Stainless Steel	Stainless Steel

Globe Type Silent Check Valve

Fig. 5104

Features

1. Can be installed horizontally or vertically.
2. Short face-to-face dimension, easy to install.
3. Low pressure head loss and valve resistance.
4. Maintenance-free.

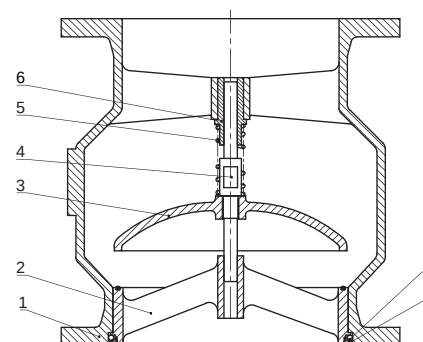


Parameter Standard

1	Design Standard	BS 4504 / Mss SP-125
2	Face to Face Standard	NF EN 14341 / NF E 29-377
3	Connection Standard	EN1092-2 PN16
4	Size	DN50~DN600
5	Medium	Hot Water, Cold Water, Ethylene Glycol (≤50%)
6	Working Pressure	PN16
7	Working Temperature	-10°C~80°C (Tmax. 100°C)
8	Performance Testing	Shell: 24bar Seal: 17.6bar
9	Coating	Epoxy powder coating with 200 µm (Default)
10	Coating Color	Green Ral6005 (Default)

Material Specification

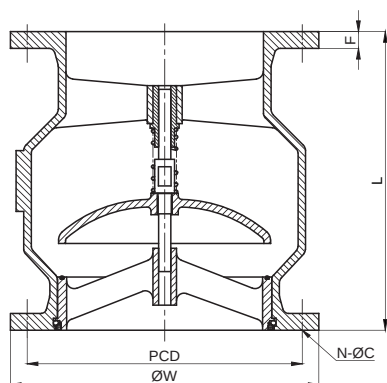
No.	Part	Material	Specification
1	Body	Ductile Iron	EN-GJS-450-10
2	Seat	EPDM	-
3	Disc	Stainless Steel	BS EN 304C 15
		Ductile Iron Nickel Plate	EN-GJS-450-10
4	Stem	Stainless Steel	BS EN 410S21
5	Spring	Stainless Steel	BS EN 304C 15
6	Guiding Bushing	Stainless Steel	BS EN 304C 15
7	Steel Ball	Bearing Steel	-
8	Screw	Stainless Steel	BS EN 304C 15



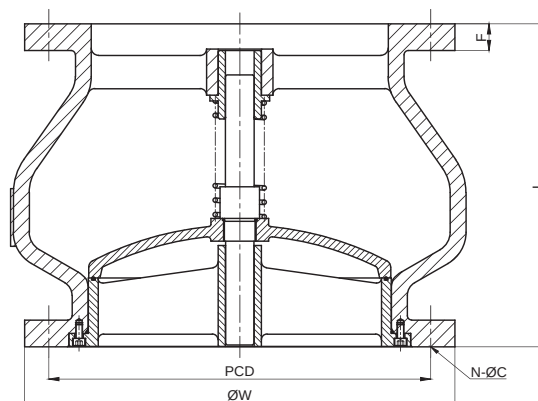
Globe Type Silent Check Valve

Fig. 5104

Dimensions



DN50-DN300



DN350-DN600

DN	INCH	L, MM	ØW, MM	PCD, MM	N-ØC	F, MM	Weight, Kg
50	2	133	165	Ø125	4-Ø19	16	7
65	2½	140	185	Ø145	4-Ø19	18	9
80	3	152	200	Ø160	8-Ø19	19	12
100	4	185	220	Ø180	8-Ø19	19	16
125	5	216	250	Ø210	8-Ø19	19	21
150	6	229	285	Ø240	8-Ø23	19	29
200	8	257	340	Ø295	12-Ø23	20	58
250	10	393	405	Ø355	12-Ø28	22	79
300	12	362	460	Ø410	12-Ø28	25	113
350	14	400	520	Ø470	16-Ø28	35	188
400	16	448	580	Ø525	16-Ø31	37	226
450	18	476	640	Ø585	20-Ø31	40	336
500	20	524	715	Ø650	20-Ø34	42	548
600	24	610	840	Ø710	20-Ø37	49	610

Globe Type Silent Check Valve

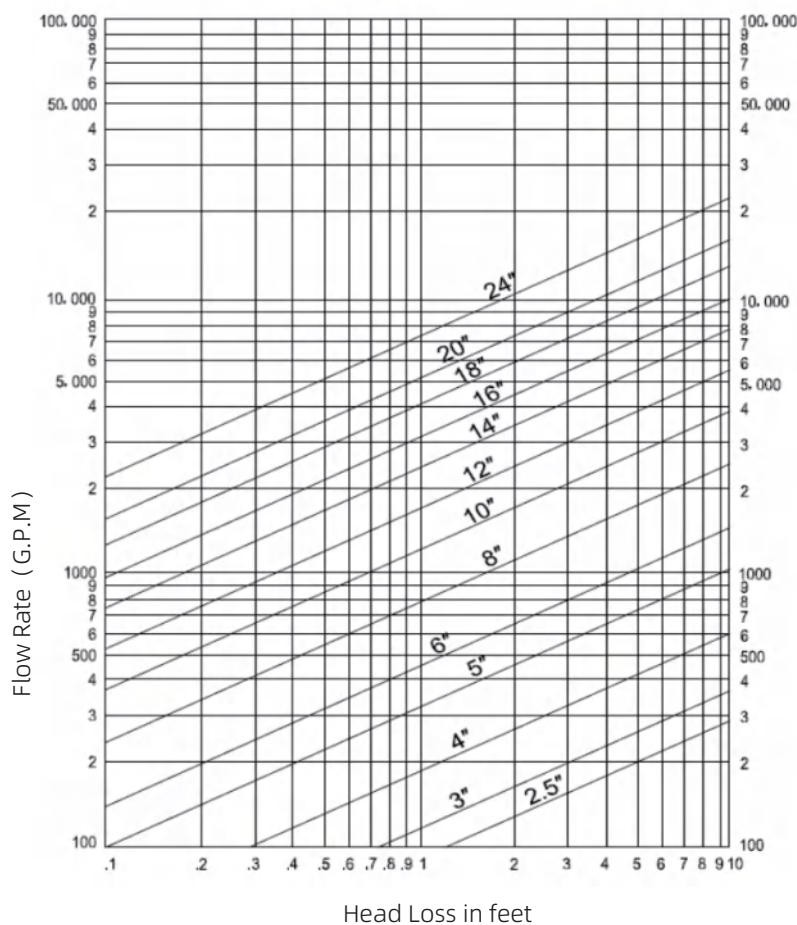
Fig. 5104

Cracking Pressure

Installation Direction	MM	DN50	DN65	DN80	DN100	DN125	DN150	DN200
	INCH	2	2½	3	4	5	6	8
Cracking Pressure, KPa	Vertical Flow	4.67	3.07	2.93	2.92	2.81	4.56	2.96
	Horizontal Flow	3.37	2.01	1.87	1.86	1.88	3.55	1.95

Installation Direction	MM	DN250	DN300	DN350	DN400	DN450	DN500	DN600
	INCH	10	12	14	16	18	20	24
Cracking Pressure, KPa	Vertical Flow	3.54	3.54	4.46	4.71	5.92	4.53	4.32
	Horizontal Flow	2.38	2.23	2.70	2.79	3.51	2.17	1.69

Cv Value



DN	INCH	Cv
50	2	-
65	2½	130
80	3	160
100	4	275
125	5	452
150	6	639
200	8	1110
250	10	1720
300	12	2490
350	14	3450
400	16	4480
450	18	5700
500	20	7000
600	24	10050

Globe Type Silent Check Valve

Fig. 5104

Bill of Materials List

Item	Dimension	Article No.	Flange Connection	Material			
				Body	Disc	Seat	Stem
1	DN50	CH5104050D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel
2	DN65	CH5104065D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel
3	DN80	CH5104080D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel
4	DN100	CH5104100D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel
5	DN125	CH5104125D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel
6	DN150	CH5104150D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel
7	DN200	CH5104200D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel
8	DN250	CH5104250D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel
9	DN300	CH5104300D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel
10	DN350	CH5104350D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel
11	DN400	CH5104400D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel
12	DN450	CH5104450D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel
13	DN500	CH5104500D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel
14	DN600	CH5104600D	PN16	Ductile Iron	DI Nickel Plate	EPDM	Stainless Steel

Item	Dimension	Article No.	Flange Connection	Material			
				Body	Disc	Seat	Stem
1	DN50	CH5104050C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel
2	DN65	CH5104065C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel
3	DN80	CH5104080C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel
4	DN100	CH5104100C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel
5	DN125	CH5104125C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel
6	DN150	CH5104150C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel
7	DN200	CH5104200C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel
8	DN250	CH5104250C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel
9	DN300	CH5104300C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel
10	DN350	CH5104350C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel
11	DN400	CH5104400C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel
12	DN450	CH5104450C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel
13	DN500	CH5104500C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel
14	DN600	CH5104600C	PN16	Ductile Iron	CF8	EPDM	Stainless Steel

Electric Control Valve-2way

Fig. 6151

Application

In boiler, district heating and refrigeration plants, cooling towers, heating groups, in ventilation and air-handling units as control or shutoff valves. For use in closed hydraulic circuits (observe cavitation).

Features

1. Face to face standard: EN558-1 series.
2. Balanced disc structure, closing pressure difference up to 1.6MPa.
3. Commonality: Can be matched with various brands of actuators.



Parameter Standard

1	Flange Standard	EN1092-1 PN16
2	Face to Face Standard	EN558-1 Series
3	Working Pressure	PN16
4	Working Temperature	-10°C~120°C (Tmax. 150°C)
5	Size	DN25~DN150
6	Suitable Medium	Hot Water, Cold Water, Ethylene Glycol (≤50%)
7	Leakage Range	0~0.02% of Kvs
8	Leakage Standard	EN 60534-4
9	Optional Model	Modulaty type(4-20mA) / On-off (0-10V)
10	Painting	Internal: 30 μm; External: 120μm
11	Painting Color	Black Ral9005 (Default)

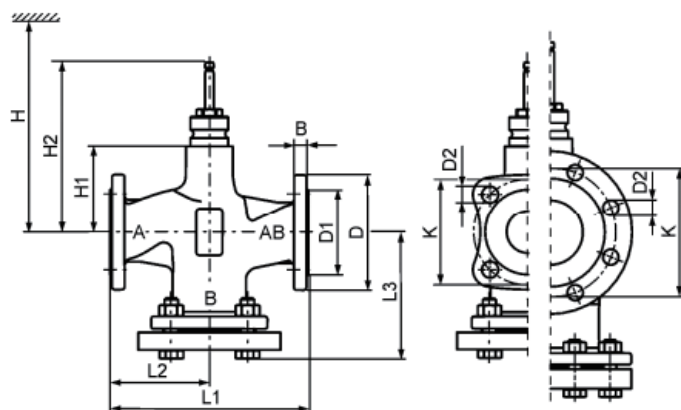
Material Specification

No.	Part	Material	Specification
1	Body	Gray Iron(DN25~DN100)	EN-GJL-250
		Ductile Iron(DN125~DN150)	EN-GJL-450-10
2	Blank Flange	Gray Iron(DN25~DN100)	EN-GJL-250
		Ductile Iron(DN125~DN150)	EN-GJL-450-10
3	Stem	Stainless Steel	1.4006
4	Seat	Machined Surface	-
5	Spool Plug	DN25: Brass	-
		DN32~DN150: Stainless Steel	SS
6	Stem Sealing Gland	Brass+PTFE	-
7	O-Ring	EPDM	-

Electric Control Valve-2way

Fig. 6151

Dimensions

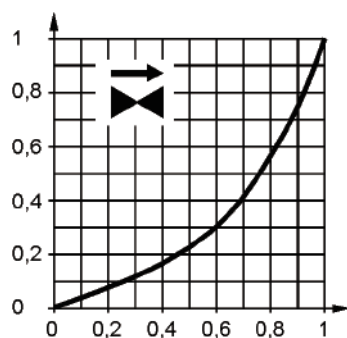


DN	INCH	B, MM	ΦD, MM	ΦD1, MM	ΦD2, MM	L1, MM	L2, MM	L3, MM	ΦK, MM	H1, MM	H2, MM	H, MM	Weight, Kg
25	1	13	115	65	14(4x)	160	80	102	85	37	134	479	5
32	1¼	15	140	76	19(4x)	180	90	116	100	38	134	479	7.4
40	1½	15	150	84	19(4x)	200	100	126	110	38	134	479	9
50	2	16	165	99	19(4x)	230	115	144	125	52	147	492	11.9
65	2½	17	185	118	19(4x)	290	145	174	145	75	172	517	16.7
80	3	19	200	132	19(8x)	310	160	186	160	75	172	517	26.6
100	4	20	220	156	19(8x)	350	180	205	180	110	227	575	36.5
125	5	20	250	184	19(8x)	400	210	228	210	123	240	588	45.7
150	6	20	284	211	23(8x)	480	240	273	240	151	267	616	63.6

Valve Characteristics

About the numbers in this section: X-axis: Travel (H/H100);

Y-axis: Flow coefficient (Kv/Kvs)

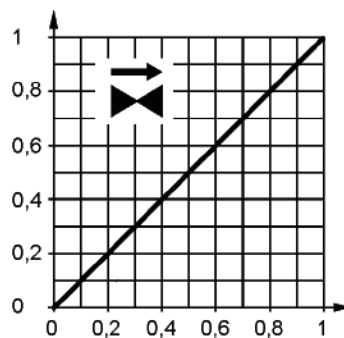


DN25~DN100

0... 30% : Linear

30... 100% : Equal percentage ($n_{gl}=3$ match VDI/VDE 2173)

Feature design for LGBR(SBT)



DN125, DN150

0... 100% : Linear

Model	DN	Kvs
Fig.6151.25-6.3	25	6.3
Fig.6151.25-10	25	10
Fig.6151.32-16	32	16
Fig.6151.40-16	40	16
Fig.6151.40-25	40	25
Fig.6151.50-31.5	50	31.5
Fig.6151.50-40	50	40
Fig.6151.65-50	65	50
Fig.6151.65-63	65	63
Fig.6151.80-80	80	80
Fig.6151.80-100	80	100
Fig.6151.100-125	100	125
Fig.6151.100-160	100	160
Fig.6151.125-200	125	200
Fig.6151.125-250	125	250
Fig.6151.150-315	150	315
Fig.6151.150-400	150	400

Electric Control Valve-2way

Fig. 6151

Bill of Materials List

Item	Size	Article No.	Flange Connection	Body	Actuator
1	DN25	WT6151025R	PN16	Gray Iron	GSX 16: Control Signal 0~10V
2	DN32	WT6151032R	PN16	Gray Iron	GSX 16: Control Signal 0~10V
3	DN40	WT6151040R	PN16	Gray Iron	GSX 16: Control Signal 0~10V
4	DN50	WT6151050R	PN16	Gray Iron	GSX 16: Control Signal 0~10V
5	DN65	WT6151065R	PN16	Gray Iron	GSX 16: Control Signal 0~10V
6	DN80	WT6151080R	PN16	Gray Iron	GSX 16: Control Signal 0~10V
7	DN100	WT6151100R	PN16	Gray Iron	GSV 16: Control Signal 0~10V
8	DN125	WT6151125R	PN16	Ductile Iron	GSV 16: Control Signal 0~10V
9	DN150	WT6151150R	PN16	Ductile Iron	GSV 16: Control Signal 0~10V

Item	Size	Article No.	Flange Connection	Body	Actuator
1	DN25	WT6151025T	PN16	Gray Iron	GSX 16: Control Signal 4~20mA
2	DN32	WT6151032T	PN16	Gray Iron	GSX 16: Control Signal 4~20mA
3	DN40	WT6151040T	PN16	Gray Iron	GSX 16: Control Signal 4~20mA
4	DN50	WT6151050T	PN16	Gray Iron	GSX 16: Control Signal 4~20mA
5	DN65	WT6151065T	PN16	Gray Iron	GSX 16: Control Signal 4~20mA
6	DN80	WT6151080T	PN16	Gray Iron	GSX 16: Control Signal 4~20mA
7	DN100	WT6151100T	PN16	Gray Iron	GSV 16: Control Signal 4~20mA
8	DN125	WT6151125T	PN16	Ductile Iron	GSV 16: Control Signal 4~20mA
9	DN150	WT6151150T	PN16	Ductile Iron	GSV 16: Control Signal 4~20mA

Item	Size	Article No.	Flange Connection	Body	Actuator
1	DN25	WT6151025O	PN16	Gray Iron	GSX 31
2	DN32	WT6151032O	PN16	Gray Iron	GSX 31
3	DN40	WT6151040O	PN16	Gray Iron	GSX 31
4	DN50	WT6151050O	PN16	Gray Iron	GSX 31
5	DN65	WT6151065O	PN16	Gray Iron	GSX 31
6	DN80	WT6151080O	PN16	Gray Iron	GSX 31
7	DN100	WT6151100O	PN16	Gray Iron	GSV 31
8	DN125	WT6151125O	PN16	Ductile Iron	GSV 31
9	DN150	WT6151150O	PN16	Ductile Iron	GSV 31

Item	Size	Article No.	Flange Connection	Body	Actuator
1	DN25	WT6151025	PN16	Gray Iron	GSX 11
2	DN32	WT6151030	PN16	Gray Iron	GSX 11
3	DN40	WT6151040	PN16	Gray Iron	GSX 11
4	DN50	WT6151050	PN16	Gray Iron	GSX 11
5	DN65	WT6151065	PN16	Gray Iron	GSX 11
6	DN80	WT6151080	PN16	Gray Iron	GSX 11
7	DN100	WT6151100	PN16	Gray Iron	GSV 11
8	DN125	WT6151125	PN16	Ductile Iron	GSV 11
9	DN150	WT6151150	PN16	Ductile Iron	GSV 11

Electric Control Valve-3way

Fig. 6171

Application

In boiler, district heating and refrigeration plants, cooling towers, heating groups, in ventilation and air-handling units as control or shutoff valves. For use in closed hydraulic circuits (observe cavitation).

Features

1. Balanced disc structure, closing pressure difference up to 1.6MPa.
2. Commonality: Can be matched with various brands of actuators.



Parameter Standard

1	Flange Standard	EN1092-1 PN16
2	Face to Face Standard	EN558-1 Series
3	Working Pressure	PN16
4	Working Temperture	-10°C~120°C (Tmax. 150°C)
5	Size	DN25~DN150
6	Suitable Medium	Hot Water, Cold Water, Ethylene Glycol (≤50%)
7	Leakage Range	Straight-through type 0~0.02% of kvs
		By-pass type 0.5~2% of kvs
8	Leakage Standard	EN 60534-4
9	Opertional Model	Modulatly type (4-20mA) / On-off (0~10V)
10	Painting	Internal: 30 μm; External: 120μm
11	Painting Color	Black Ral9005 (Default)

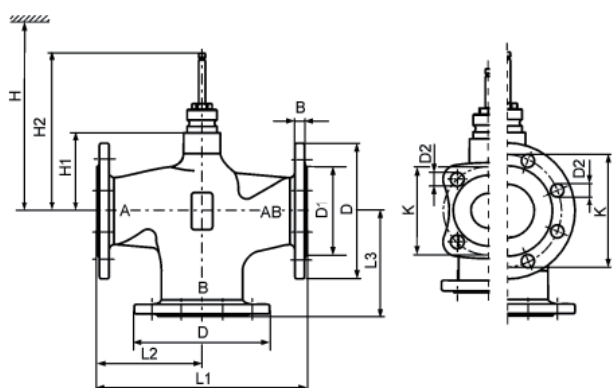
Material Specification

No.	Part	Material	Specification
1	Body	Gray Iron(DN25~DN100)	EN-GJL-250
		Ductile Iron(DN125~DN150)	EN-GJL-450-10
2	Blank Flange	Gray Iron(DN25~DN100)	EN-GJL-250
		Ductile Iron(DN125~DN150)	EN-GJL-450-10
3	Stem	Stainless Steel	1.4006
4	Seat	Machined Surface	-
5	Spool Plug	DN25: Brass	-
		DN32~DN150: Stainless Steel	SS
6	Stem Sealing Gland	Brass+PTFE	-
7	O-Ring	EPDM	-

Electric Control Valve-3way

Fig. 6171

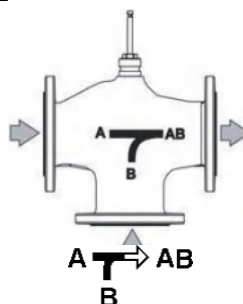
Dimensions



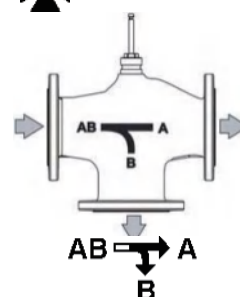
Technological Structure



Mixing valve (preferred)



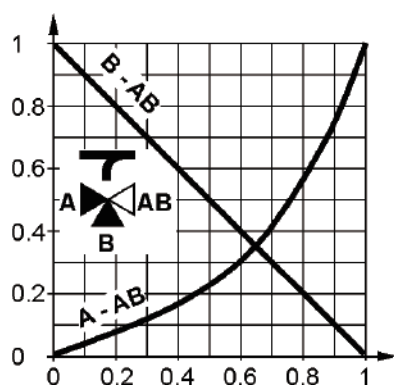
Split-flow valve



DN	INCH	B, MM	ΦD, MM	ΦD1, MM	ΦD2, MM	L1, MM	L2, MM	L3, MM	ΦK, MM	H1, MM	H2, MM	H, MM	Weight, Kg
25	1	13	115	65	14(4x)	160	80	80	85	37	134	479	4.1
32	1¼	15	140	76	19(4x)	180	90	90	100	38	134	479	6.1
40	1½	15	150	84	19(4x)	200	100	100	110	38	134	479	7.1
50	2	16	165	99	19(4x)	230	115	115	125	52	147	492	9.5
65	2½	17	185	118	19(4x)	290	145	145	145	75	172	517	13.9
80	3	19	200	132	19(8x)	310	155	155	160	75	172	517	21.5
100	4	20	220	156	19(8x)	350	175	175	180	110	227	575	31.1
125	5	15	250	184	19(8x)	400	200	200	210	123	240	588	38.4
150	6	15	284	211	23(8x)	480	240	240	240	151	267	616	53.6

Valve Characteristics

About the numbers in this section: X-axis: Travel (H/H100); Y-axis: Flow coefficient (Kv/Kvs) Confluence: Flows from ports A and B to AB; Traffic diversion: Flows from ports AB to A and B



DN25~DN100

Straight-through(A-AB):

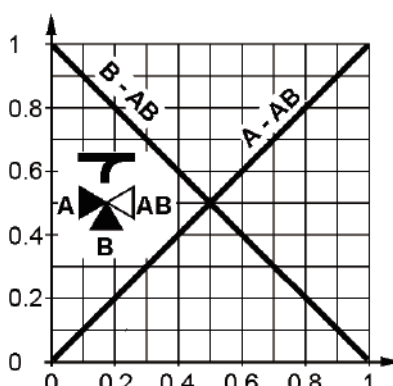
0-30% :Linear

30-100% :Equal percentage

(ngl= 3 according with VDI/VDE 2173)

Feature design for LGBR(SBT)

Bypass(B-AB): 0~100% Linear



DN125, DN150

Straight-through(A-AB): 0~100% Linear

Bypass(B-AB): 0... 100% : Linear

Model	DN	Kvs
Fig.6171.25-6.3	25	6.3
Fig.6171.25-10	25	10
Fig.6171.32-16	32	16
Fig.6171.40-16	40	16
Fig.6171.40-25	40	25
Fig.6171.50-31.5	50	31.5
Fig.6171.50-40	50	40
Fig.6171.65-50	65	50
Fig.6171.65-63	65	63
Fig.6171.80-80	80	80
Fig.6171.80-100	80	100
Fig.6171.100-125	100	125
Fig.6171.100-160	100	160
Fig.6171.125-200	125	200
Fig.6171.125-250	125	250
Fig.6171.150-315	150	315
Fig.6171.150-400	150	400

Electric Control Valve-3way

Fig. 6171

Bill of Materials List

Item	Size	Article No.	Flange Connection	Body	Actuator
1	DN25	WT6171025R	PN16	Gray Iron	GSX 16: Control Signal 0~10V
2	DN32	WT6171032R	PN16	Gray Iron	GSX 16: Control Signal 0~10V
3	DN40	WT6171040R	PN16	Gray Iron	GSX 16: Control Signal 0~10V
4	DN50	WT6171050R	PN16	Gray Iron	GSX 16: Control Signal 0~10V
5	DN65	WT6171065R	PN16	Gray Iron	GSX 16: Control Signal 0~10V
6	DN80	WT6171080R	PN16	Gray Iron	GSX 16: Control Signal 0~10V
7	DN100	WT6171100R	PN16	Gray Iron	GSV 16: Control Signal 0~10V
8	DN125	WT6171125R	PN16	Ductile Iron	GSV 16: Control Signal 0~10V
9	DN150	WT6171150R	PN16	Ductile Iron	GSV 16: Control Signal 0~10V

Item	Size	Article No.	Flange Connection	Body	Actuator
1	DN25	WT6171025T	PN16	Gray Iron	GSX 16: Control Signal 4~20mA
2	DN32	WT6171032T	PN16	Gray Iron	GSX 16: Control Signal 4~20mA
3	DN40	WT6171040T	PN16	Gray Iron	GSX 16: Control Signal 4~20mA
4	DN50	WT6171050T	PN16	Gray Iron	GSX 16: Control Signal 4~20mA
5	DN65	WT6171065T	PN16	Gray Iron	GSX 16: Control Signal 4~20mA
6	DN80	WT6171080T	PN16	Gray Iron	GSX 16: Control Signal 4~20mA
7	DN100	WT6171100T	PN16	Gray Iron	GSV 16: Control Signal 4~20mA
8	DN125	WT6171125T	PN16	Ductile Iron	GSV 16: Control Signal 4~20mA
9	DN150	WT6171150T	PN16	Ductile Iron	GSV 16: Control Signal 4~20mA

Item	Size	Article No.	Flange Connection	Body	Actuator
1	DN25	WT6171025O	PN16	Gray Iron	GSX 31
2	DN32	WT6171032O	PN16	Gray Iron	GSX 31
3	DN40	WT6171040O	PN16	Gray Iron	GSX 31
4	DN50	WT6171050O	PN16	Gray Iron	GSX 31
5	DN65	WT6171065O	PN16	Gray Iron	GSX 31
6	DN80	WT6171080O	PN16	Gray Iron	GSX 31
7	DN100	WT6171100O	PN16	Gray Iron	GSV 31
8	DN125	WT6171125O	PN16	Ductile Iron	GSV 31
9	DN150	WT6171150O	PN16	Ductile Iron	GSV 31

Item	Size	Bom No.	Flange Connection	Body	Actuator
1	DN25	WT6171025	PN16	Gray Iron	GSX 11
2	DN32	WT6171030	PN16	Gray Iron	GSX 11
3	DN40	WT6171040	PN16	Gray Iron	GSX 11
4	DN50	WT6171050	PN16	Gray Iron	GSX 11
5	DN65	WT6171065	PN16	Gray Iron	GSX 11
6	DN80	WT6171080	PN16	Gray Iron	GSX 11
7	DN100	WT6171100	PN16	Gray Iron	GSV 11
8	DN125	WT6171125	PN16	Ductile Iron	GSV 11
9	DN150	WT6171150	PN16	Ductile Iron	GSV 11

Actuator Specification

Fig. GSX

Features

1. The actuator adopts die-cast aluminum bracket and alloy steel transmission gear;
2. Flexible combination of valve body and actuator, can adapt to the needs of different pressure differences;
3. Low power consumption, low noise, large output torque;
4. The actuator uses synchronous motor, limited bit power off protection function. Can produce stable in the case of pause. The torque allows the valve to stop in any position;
5. Positive and negative rotation control; Reversible rotation can be set as required to match different valve bodies;
6. Automatic calibration of valve position: long press and hold K1 key for 4 seconds, wait for the red light LED1 to blink quickly for 3 times, release the button, and then press K1 button once, LED1 long light. Enter automatic calibration. Automatically walk back and forth to identify and remember the valve body position.



Technical Data

No.	Type	GSX 11	GSX 16	GSX 31
1	Action/Control	Incremental Control	Proportionally Regulated	Incremental Control Switch
2	Power	24VAC 50/60Hz	24VAC 50/60Hz	220VAC 50/60Hz
3	Acting Force	1000N	1000N	1000N
4	Control Signal	Incremental Signal	0~10V or 4~20mA	Incremental Signal
5	Feedback Signal	-	0~10V or 4~20mA	-
6	Power Consumption	7.5VA	7.5VA	5.5VA
7	Operating Speed	0.33mm/s		
8	Maximum Stroke	25mm		
9	Maximum Relative Humidity	10%~95%RH Non-condensation		
10	Working Temperature	-10°C~55°C		
11	Weight	1.5Kg		

Install Caution

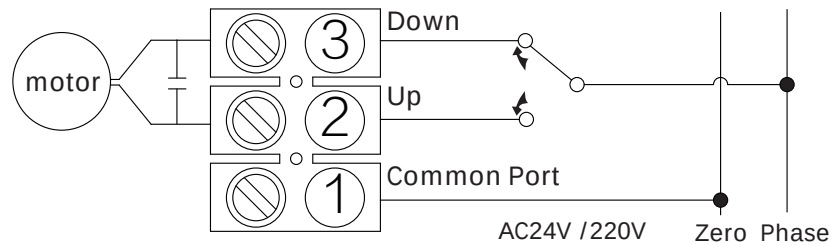
1. Install according to the flow direction shown by the valve body;
2. Before installing the valve, ensure that the pipeline is clean and there is no oxide left during welding;
3. When the pipe is connected with the valve body, it must be completely consistent and not subject to vibration;
4. Factories operating with high-temperature fluids (such as steam, superheated, diathermy liquids) should use expansion joints when installing to avoid pipe expansion and squeezing liquids;
5. When the driver is vertically installed on the valve body, avoid the driver under the valve body;
6. Leave enough space for routine maintenance and remove the driver from the valve body;
7. The valve body shall not be installed in an explosive and ambient temperature above 65 °C or below 2 °C environment, nor shall it be placed in steam, hydraulic injection or drip;
8. When the actuator is manual, the speed should not be too fast or exceed the display of the head line of the actuator, otherwise it will cause damage to the execution section.

Actuator Specification

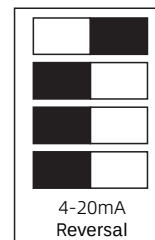
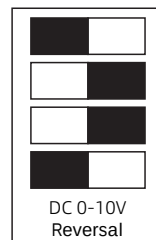
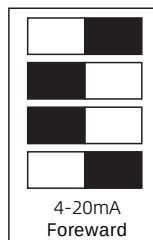
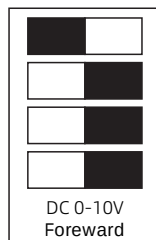
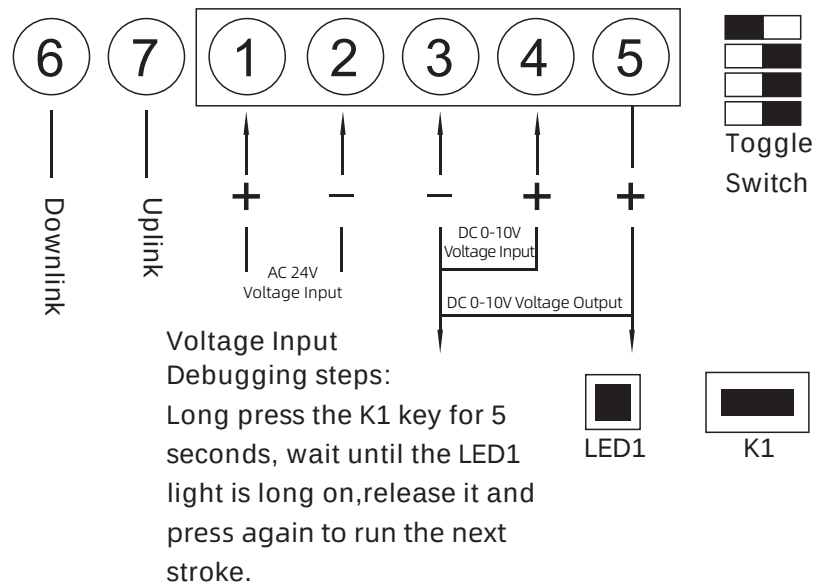
Fig. GSX

Wiring Diagram

◆ On-off Type



◆ Regulatory Type



Bill of Materials List

Item	Model	Article No.	Power	Control Signal	Power Consumption
1	GSX 11	WT1128001	24VAC 50/60Hz	Incremental Signal	7.5VA
2	GSX 16	WT1628001	24VAC 50/60Hz	4~20mA	7.5VA
3	GSX 16	WT1628002	24VAC 50/60Hz	0~10V	7.5VA
4	GSX 31	WT3128001	220VAC 50/60Hz	Incremental Signal	5.5VA

Actuator Specification

Fig. GSV

Features

1. The actuator adopts die-cast aluminum bracket and alloy steel transmission gear;
2. Flexible combination of valve body and actuator, can adapt to the needs of different pressure differences;
3. Low power consumption, low noise, large output torque;
4. The actuator uses synchronous motor, limited bit power off protection function. It can produce stable torque in the case of standstill so that the valve can be banned in any position;
5. Positive and negative rotation control; Reversible rotation can be set as required to match different valve bodies;
7. Provide feedback signals for valve position: resistance feedback, voltage signal DC 0(2) ~ 10V or current signal DC 0(4) ~ 20mA;
8. With valve stroke adaptive function and manual device, easy to install and debug on site;
9. The actuator control signal output is accurate, and the perfect equal percentage control curve can be achieved when used with the linear adjustment valve.



Technical Data

No.	Type	GSV 11	GSV 16	GSV 31
1	Action/Control	Incremental Control	Proportionally Regulated	Incremental Control Switch
2	Power	24VAC 50/60Hz	24VAC 50/60Hz	220VAC 50/60Hz
3	Acting Force	1800N	1800N	1800N
4	Control Signal	Incremental Signal	0~10V or 4~20mA	Incremental Signal
5	Feedback Signal	-	0~10V or 4~20mA	-
6	Power Consumption	10VA	12VA	10VA
7	Operating Speed	0.23mm/s		
8	Maximum Stroke	42mm		
9	Maximum Relative Humidity	10%~95%RH Non-condensation		
10	Working Temperature	-10°C~55°C		
11	Weight	1.5Kg		

Install Caution

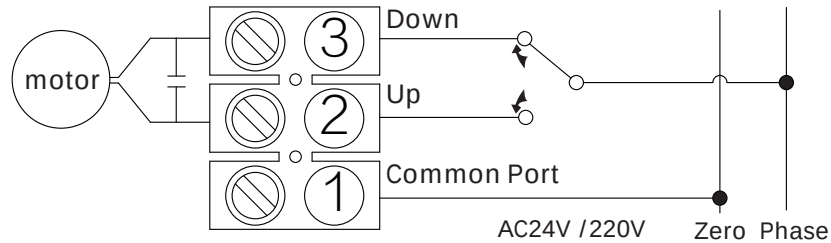
1. Hold the drive, tilt the drive bracket over the valve; Then put the valve stem connection clip on the valve stem and tighten it with a hex wrench; Then use a Hex key to lock the nut of the bracket valve body buckle to the valve body and fasten the driver.
2. The installation of the driver should be as vertical as possible to the ground, and the tilt should not exceed 30°. Adequate space should be left during installation for maintenance.
3. Open the actuator cover and connect the power supply according to the wiring diagram.
4. Power check, the valve stem up to the valve top dead center (fully closed state) and the valve stem down to the valve bottom dead center (fully open state), the motor can be powered off and stop working, if the valve stem end to the top dead center or bottom dead center, the motor has been stuck (motor spindle keeps shaking), then adjust the actuator travel limit switch until appropriate. (The driver has been set at the appropriate stroke calibration before delivery, and no adjustment is required if there are no special circumstances.)

Actuator Specification

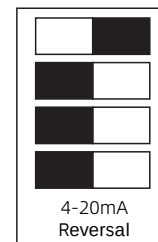
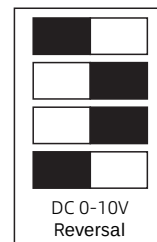
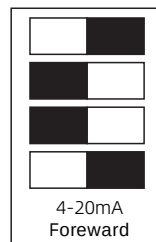
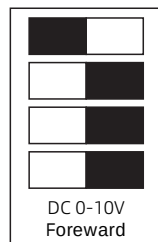
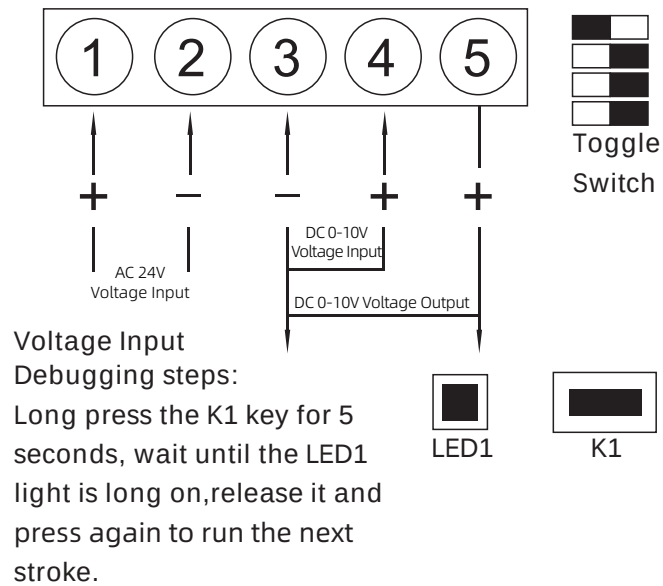
Fig. GSV

Wiring Diagram

◆ On-off Type



◆ Proportional Integration Type



Bill of Materials List

Item	Model	Article No.	Power	Control Signal	Power Consumption
1	GSV 11	WT1130001	24VAC 50/60Hz	Incremental Signal	7.5VA
2	GSV 16	WT1630001	24VAC 50/60Hz	4~20mA	7.5VA
3	GSV 16	WT1630002	24VAC 50/60Hz	0~10V	7.5VA
4	GSV 31	WT3130001	220VAC 50/60Hz	Incremental Signal	5.5VA

Actuator Specification

Fig. GSX/GSV

Standard Definitions

- DN = Nominal Aperture
- Sv = Adjustable Ratio
- ΔP_s = Electric valve under the action of pressure to ensure the maximum allowable pressure difference when closed.
- ΔP_{max} = Through the electric valve through the entire range of maximum allowable pressure difference.

***Remark: Please contact sales manager if require higher force actuators.**

Device Combination

Fig.6151	Actuators			GSX...*		GSV...*	
PN16	Stroke			20mm		40mm	
	Driving Force			1000N		1800N	
-10~150°C	PN	DN	Sv	ΔP_s	ΔP_{max}	ΔP_s	ΔP_{max}
Fig.6151.25-6.3	16	25	> 50	1600	400	-	-
Fig.6151.25-10		25					
Fig.6151.32-16		32	> 50	1200	400	-	-
Fig.6151.40-16		40		750			
Fig.6151.40-25		40					
Fig.6151.50-31.5		50	> 100	450	400	-	-
Fig.6151.50-40		50					
Fig.6151.65-50		65	> 100	250	200	-	-
Fig.6151.65-63		65					
Fig.6151.80-80		80	> 100	175	125	-	-
Fig.6151.80-100		80					
Fig.6151.100-125		100	> 100	-	-	300	250
Fig.6151.100-160		100					
Fig.6151.125-200		125	> 100	-	-	190	160
Fig.6151.125-250		125					
Fig.6151.150-315		150	> 100	-	-	125	100
Fig.6151.150-400		150					

Actuator Specification

Fig. GSX/GSV

Fig.6171	Actuators			GSX...*		GSV...*		
PN16	Stroke			20mm		40mm		
	Driving Force			1000N		1600N		
-10~150℃	PN	DN	Sv	 AB	 AB	 AB	 AB	
Fig.6171.25-6.3	16	25	> 50	400	100	-	-	
Fig.6171.25-10		25						
Fig.6171.32-16		32						
Fig.6171.40-16		40						
Fig.6171.40-25		40						
Fig.6171.50-31.5		50	> 100	200	80	400	100	
Fig.6171.50-40		50						
Fig.6171.65-50		65						
Fig.6171.65-63		65						
Fig.6171.80-80		80	> 100	125	50	225	50	
Fig.6171.80-100		80						
Fig.6171.100-125		100	> 100	-	-	125	50	
Fig.6171.100-160		100						
Fig.6171.125-200		125	> 100	-	-	90		
Fig.6171.125-250		125						
Fig.6171.150-315		150	> 100	-	-	60		
Fig.6171.150-400		150						

Flange Type Differential Pressure Control Valve

Fig. 1250-DF

Features

1. Self-controlled differential pressure control, no external power source, constant controlled differential pressure.
2. The pressure difference can be set on site.
3. Wide range of controllable pressure difference.
4. Hand wheel with differential pressure setting instructions.
5. With pressure measuring port.
6. Equipped with tee measuring joint.

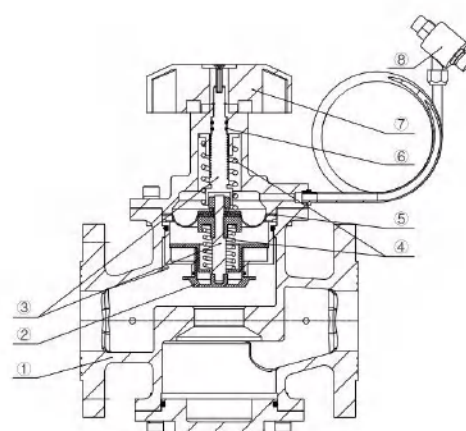


Parameter Standard

1	Design Standard	ISO 7005C
2	Connection Standard	EN1092-2 PN16
3	Size	DN40~DN250
4	Medium	Hot Water, Cold Water, Ethylene Glycol ($\leq 50\%$)
5	Working Pressure	PN16
6	Maximum Operating Pressure Differential	$\leq 400\text{KPa}$
7	Working Temperature	$10^{\circ}\text{C} \sim 80^{\circ}\text{C}$ (Tmax. 100°C)
8	Performance Testing	Shell: 24bar Seal: 17.6bar
9	Painting	Internal: $30\text{ }\mu\text{m}$; External: $120\text{ }\mu\text{m}$
10	Painting Color	Black Ral9005 (Default)

Material Specification

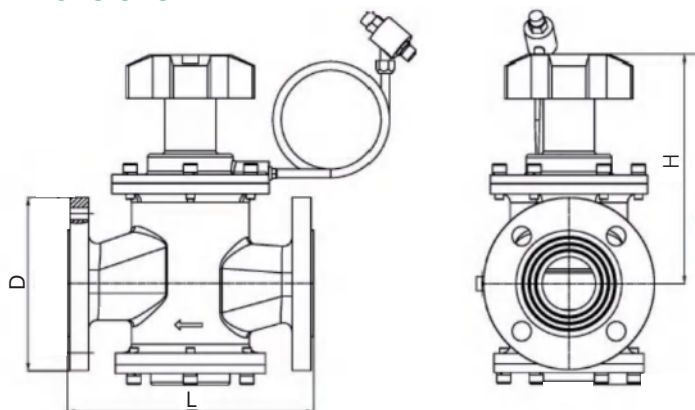
No.	Part	Material	Specification
1	Body	Ductile Iron	EN-JS 1040
2	Disc	Stainless Steel	BS970 304S15
3	Stem	Stainless Steel	BS970 410S21
4	Spring	Stainless Steel	BS970 304S15
5	Diaphragm	EPDM	-
6	O-Ring	NBR	-
7	Hand wheel	PA	-
8	Measuring Valve	Brass	EN 12165 CW617N



Flange Type Differential Pressure Control Valve

Fig. 1250-DF

Dimensions



DN	INCH	D, MM	L, MM	H, MM	N-Ød	Weight, Kg
40	1½	150	200	193	4-Ø19	13
50	2	165	230	213	4-Ø19	16
65	2½	185	290	266	4-Ø19	26
80	3	200	310	272	8-Ø19	33
100	4	235	350	282	8-Ø19	40
125	5	270	400	304	8-Ø19	74
150	6	300	480	335	8-Ø23	97
200	8	340	600	385	12-Ø23	165
250	10	405	730	420	12-Ø28	238

Specification Options

ΔPL(mbar)	Q(m³/h)	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250
200	Q(min)	0.42	0.51	0.65	0.85	2.04	2.95	3.8	9.51	10.8
	Q(nom)	7.14	9.84	11.2	14.5	35	52	66.5	83.2	94.6
	Q(max)	9.84	12.4	16.8	21.8	50	74.2	95.2	118.8	135.2
300	Q(min)	0.51	0.71	0.87	1.45	2.6	3.55	4.8	10.7	12.6
	Q(nom)	8.24	11.2	14.5	24.8	44.7	61.8	84.5	93.5	108.6
	Q(max)	12.2	18.4	21.8	33.8	64	89	120.6	133.8	154.8
400	Q(min)	0.52	0.81	1.05	1.58	2.75	4.21	5.24	12.4	14.5
	Q(nom)	10.5	14.5	18.6	28.4	48.5	72.8	93.5	107.8	125.4
	Q(max)	12.4	19.8	26.8	38.6	69.5	103.5	135.2	154.2	178.6
500	Q(min)	0.68	1.01	1.45	1.95	3.15	4.52	6.5	13.5	15.9
	Q(nom)	12.5	16.8	21.8	38.4	54.5	51.2	112	118.2	142.3
	Q(max)	19.8	21.5	30.5	51.2	77.8	116.5	160.5	168.5	201
600	Q(min)	0.98	1.22	1.65	2.41	3.4	5.21	6.75	14.8	16.8
	Q(nom)	16.2	19.8	24.8	40.5	59.8	89.5	117.2	130.5	154.2
	Q(max)	21.5	28.4	32.8	55.8	85.2	127.5	167.5	185.4	220.4
700	Q(min)	1.12	1.45	1.84	2.78	3.5	5.45	7.18	15.8	18.6
	Q(nom)	18.5	21.4	26.8	41.9	64.2	96.5	126.8	138.2	160.2
	Q(max)	24.5	3.04	34.5	60.5	92.2	138.5	181.2	198.2	231
800	Q(min)	1.25	1.78	2.15	3.05	4.15	6.24	7.5	18	18.5
	Q(nom)	20.3	28.5	32.4	54.2	70.1	105.2	132.2	150.2	167.1
	Q(max)	32.1	41.2	52.4	75.8	100	148.9	185.4	210.5	235.5

Flange Type Differential Pressure Control Valve

Fig. 1250-DF

$\Delta PL(mbar)$	$Q(m^3/h)$	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250
400	Q(min)	0.62	0.88	1.05	1.41	2.71	4.35	5.05	12.1	13.5
	Q(nom)	9.85	12.8	17.2	24.2	50.4	75.5	87.5	105.8	118.2
	Q(max)	12.4	18.5	24.3	34.5	72.1	107.4	124.5	150.2	168.2
500	Q(min)	0.65	0.98	1.22	1.65	3.15	4.78	6.21	14.2	15
	Q(nom)	10.4	14.6	20.1	27.4	55.4	82	108.9	125	130.2
	Q(max)	14.8	21.2	28.3	38.5	78.2	117.5	157.4	177.8	184.9
600	Q(min)	0.85	1.01	1.45	1.85	3.55	5.22	6.41	14.8	16.4
	Q(nom)	12.5	17.5	21.6	32.5	61	92.2	112.5	132.2	142.8
	Q(max)	18.4	25.4	30.5	46.1	86.5	131.5	160.5	189.2	204.5
700	Q(min)	0.92	1.22	1.35	2.01	3.81	5.68	7.11	16.8	18.2
	Q(nom)	14.2	19.4	23.1	33.6	66.8	96.5	120.4	148.5	160.8
	Q(max)	20.5	27.6	33.5	50.8	95.5	140.5	174.2	211.6	231.2
800	Q(min)	1.04	1.31	1.52	2.17	4.12	5.98	7.45	18.4	18.9
	Q(nom)	17.2	21.4	25.2	36.5	70.5	104.8	128.6	164.2	168.2
	Q(max)	22.5	29.4	35.6	52.1	100.5	150.8	185.4	233.6	240.1
900	Q(min)	1.24	1.54	1.62	2.24	4.22	6.5	8.21	19.5	21.2
	Q(nom)	18.5	22.4	26.4	38.5	73.5	112	142.5	172.2	185.5
	Q(max)	24.8	31.2	37.8	55.1	104.5	160.2	204.1	245.6	265.3
1000	Q(min)	1.42	1.58	1.7	2.38	4.42	7.08	8.45	19.8	22.4
	Q(nom)	19.5	24.5	27.8	40.2	75.8	120.5	147.2	177.5	195.6
	Q(max)	26.7	34.2	39.5	57.9	110.5	174.2	211.2	255.4	278.5
1100	Q(min)	1.38	1.55	1.66	2.41	4.56	7.11	8.45	21.2	22.8
	Q(nom)	20.4	24.8	28.4	42.5	80.9	124.2	152.1	185.4	206.5
	Q(max)	28.5	35.8	41.2	60.6	115.8	175.4	218.5	265.3	298.4
1200	Q(min)	1.42	1.61	1.75	2.65	4.88	7.22	9.12	22.8	24.3
	Q(nom)	22.4	26.2	31	41.5	85.2	127.4	158	204.1	213.2
	Q(max)	30.4	36.8	42.6	64.2	120.5	180.6	224.5	288.5	305.4
1300	Q(min)	1.51	1.68	1.81	2.71	5.12	7.44	9.45	24.1	24.8
	Q(nom)	24.2	26.9	31.2	45.2	87.6	130.5	160.4	210.5	222.1
	Q(max)	32.1	37.5	44.5	65.2	125.4	182.4	233.5	300.5	318.5
1400	Q(min)	1.62	1.74	1.88	2.7	5.22	7.56	9.55	24.2	26.5
	Q(nom)	25.8	27.4	31.6	45.8	91.4	132.8	168.2	215.6	233.2
	Q(max)	34.1	38.4	44.6	65.8	130.5	189.8	241.5	304.2	330.4
1500	Q(min)	1.68	1.84	2.05	2.88	5.41	8.05	9.54	24.2	27.5
	Q(nom)	26.5	28.4	32.6	47.5	94.2	140.5	170.4	222.5	244.1
	Q(max)	35.4	40.5	46.5	68	135.2	200.4	246.3	320.4	349.8
1600	Q(min)	1.82	1.92	2.21	2.95	5.58	8.28	9.88	26.8	28.5
	Q(nom)	27.6	29.4	33.4	50.2	98.8	144.5	172.4	238.5	255.4
	Q(max)	37.5	42.2	48.5	71.4	140.5	205.1	248.5	340.8	358.6

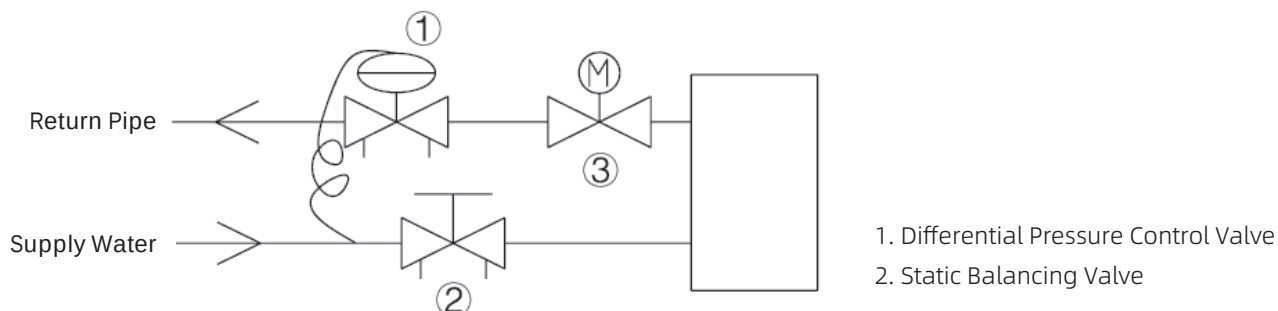
Kv Value

DN	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250
KVs(m^3/h)	15	34	52	75	110	160	280	320	400
Flow Deviation	+/-5%								

Flange Type Differential Pressure Control Valve

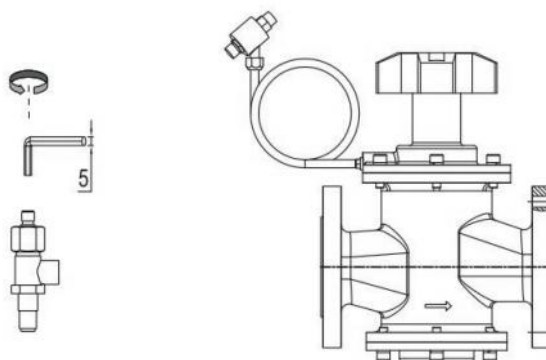
Fig. 1250-DF

Installation Information



Attention:

Differential pressure control valve is usually installed in return pipes, and installed base on the true water flow direction.



Setting:

1. Open the three way brass test valve.
2. Open the air release plug, and close it after release all the air.

Bill of Materials List

Item	Dimension	Article No.	Flange Connection	Material				Differential Pressure Range(KPa)
				Body	Disc	O-Ring	Stem	
1	DN40	CH1250040	PN16	Ductile Iron	Stainless Steel	NBR	Stainless Steel	30~100
2	DN50	CH1250050	PN16	Ductile Iron	Stainless Steel	NBR	Stainless Steel	
3	DN65	CH1250065	PN16	Ductile Iron	Stainless Steel	NBR	Stainless Steel	
4	DN80	CH1250080	PN16	Ductile Iron	Stainless Steel	NBR	Stainless Steel	40~180
5	DN100	CH1250100	PN16	Ductile Iron	Stainless Steel	NBR	Stainless Steel	
6	DN125	CH1250125	PN16	Ductile Iron	Stainless Steel	NBR	Stainless Steel	
7	DN150	CH1250150	PN16	Ductile Iron	Stainless Steel	NBR	Stainless Steel	
8	DN200	CH1250200	PN16	Ductile Iron	Stainless Steel	NBR	Stainless Steel	
9	DN250	CH1250250	PN16	Ductile Iron	Stainless Steel	NBR	Stainless Steel	

Brass Fixed Orifice Double Regulating Valve

Fig. 1206

Application

This single unit-commissioning valve is designed for installation in circuits where combined functions of regulation and flow measurement are required. Accuracy of flow measurement is +5% across all hand wheel settings.

Features

1. Compact Design
2. Independent adjustment and shutdown functions without affecting each other
3. With opening locking device
4. Easy for assembly and disassembly



Parameter Standard

1	Connection Standard	Threaded to ISO7-1
2	Test Standard	ISO 5208
3	Size	DN15~DN50
4	Medium	Hot Water, Cold Water and Ethylene Glycol ($\leq 50\%$)
5	Working Pressure	PN25
6	Working Temperature	-10°C~100°C
7	Flow Adjustment Accuracy	+/- 10%

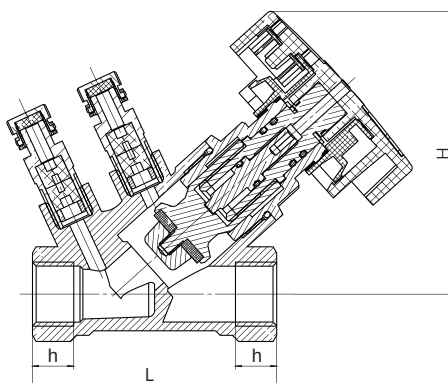
Material Specification

No.	Part	Material	Specification
1	Body	Brass	HPb59-1
2	Disc	Brass	HPb59-1
3	Plug	NBR	-
4	Stem	Brass	HPb59-1
5	Sealing Ring	NBR	-
6	Bonnet	Brass	HPb59-1
7	O-Ring	FPM	-
8	Coined Gasket Seal	NBR	-
9	Handwheel	PA 66+30%GF	-
10	Bush	Brass	HPb59-1

Brass Fixed Orifice Double Regulating Valve

Fig. 1206

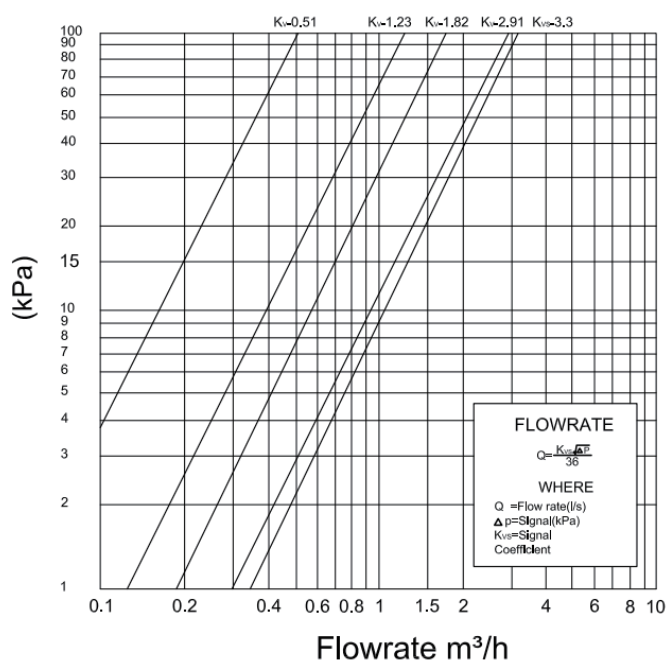
Dimensions



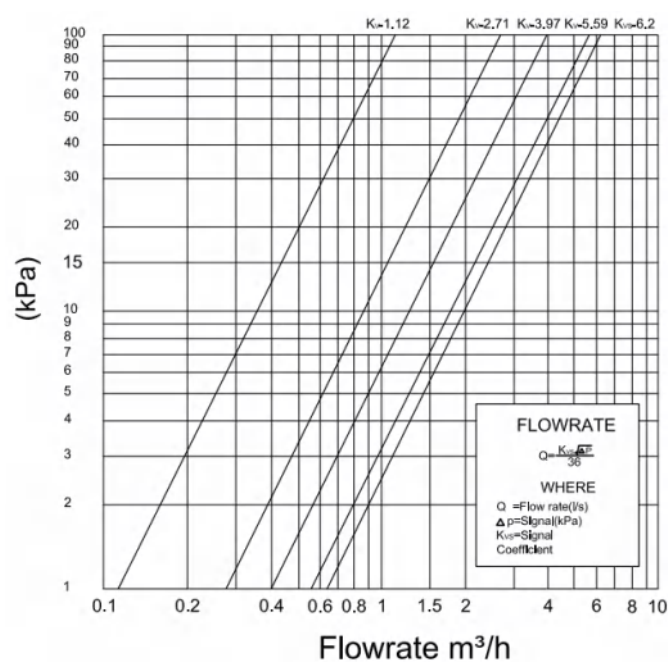
DN	INCH	D, MM	L, MM	h, MM	H, MM	Weight, Kg
15	½	BSPT ½	80	14	93	0.6
20	¾	BSPT ¾	79	13	92	0.6
25	1	BSPT 1	89	16	95	0.7
32	1¼	BSPT 1¼	105	16	105	1.1
40	1½	BSPT 1½	120	18	111	1.5
50	2	BSPT 2	140	20	121	2.1

KV Value

DN	Handwheel Position							
	0.5 turn	1 turn	1.5 turn	2 turn	2.5 turn	3 turn	3.5 turn	All Open 4 turn
15	0.51	0.87	1.23	1.52	1.82	2.49	2.91	3.3
20	1.12	1.98	2.71	3.39	3.97	4.79	5.59	6.2
25	1.44	2.76	3.73	4.36	5.85	7.48	8.62	9.7
32	1.89	3.58	4.57	6.91	9.56	11.69	13.21	15.2
40	2.11	3.54	5.25	9.99	13.46	15.76	18.31	20.6
50	2.94	5.11	7.38	14.31	20.05	24.33	29.11	33

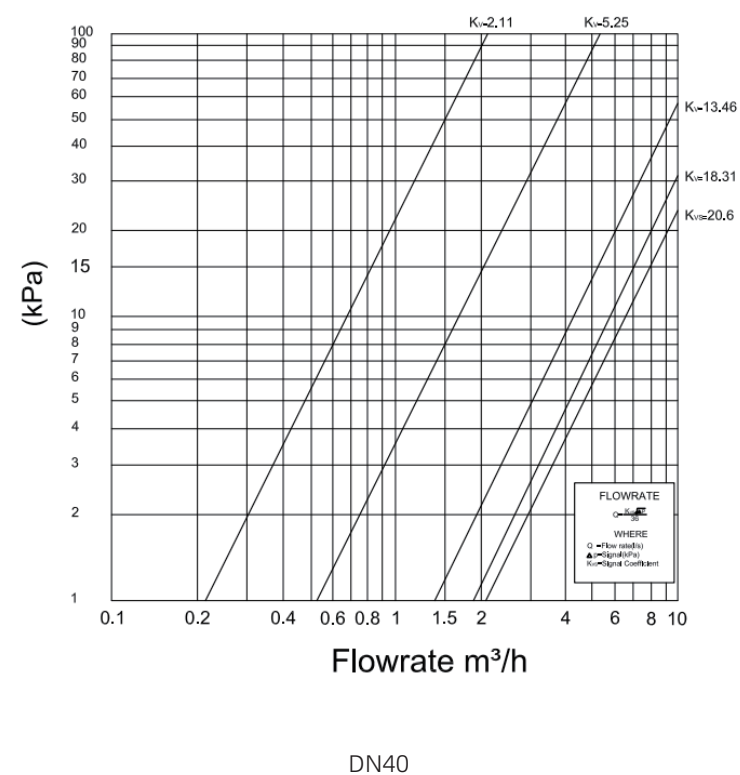
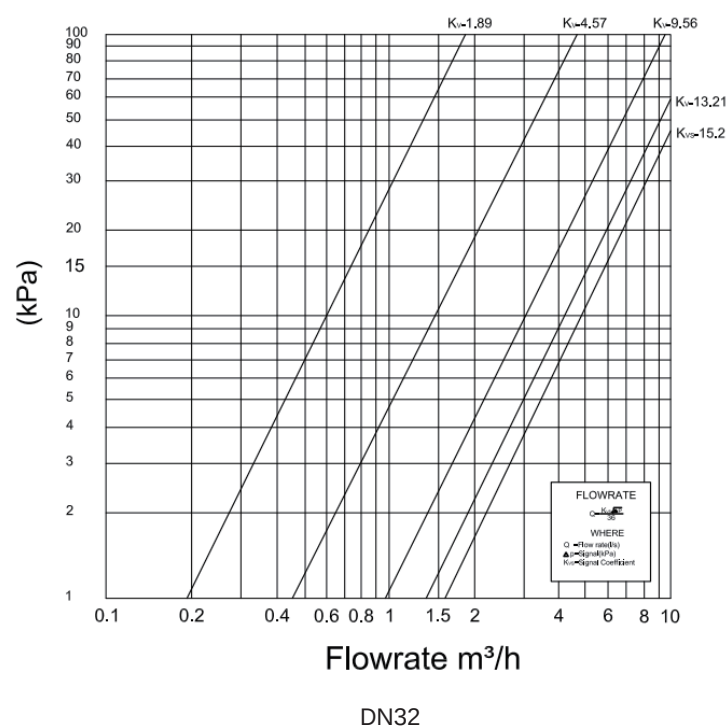
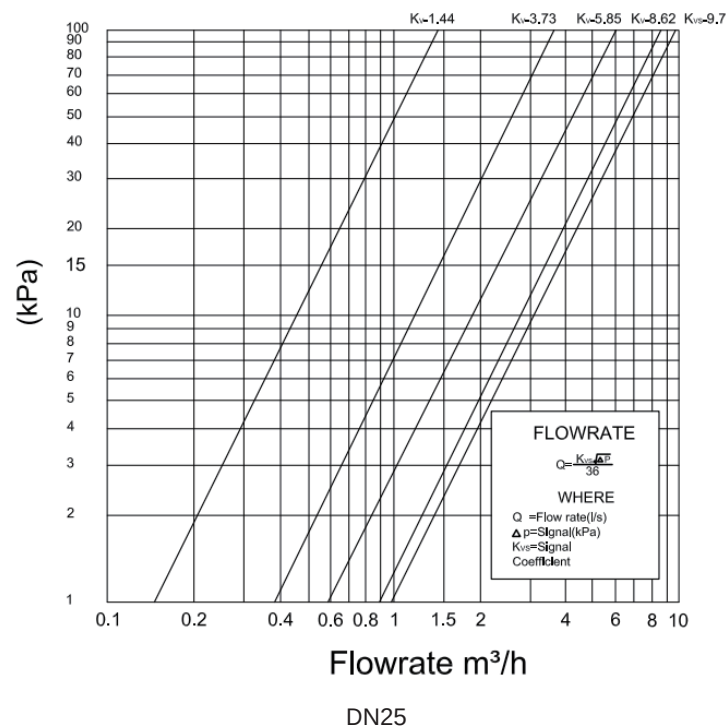


DN15



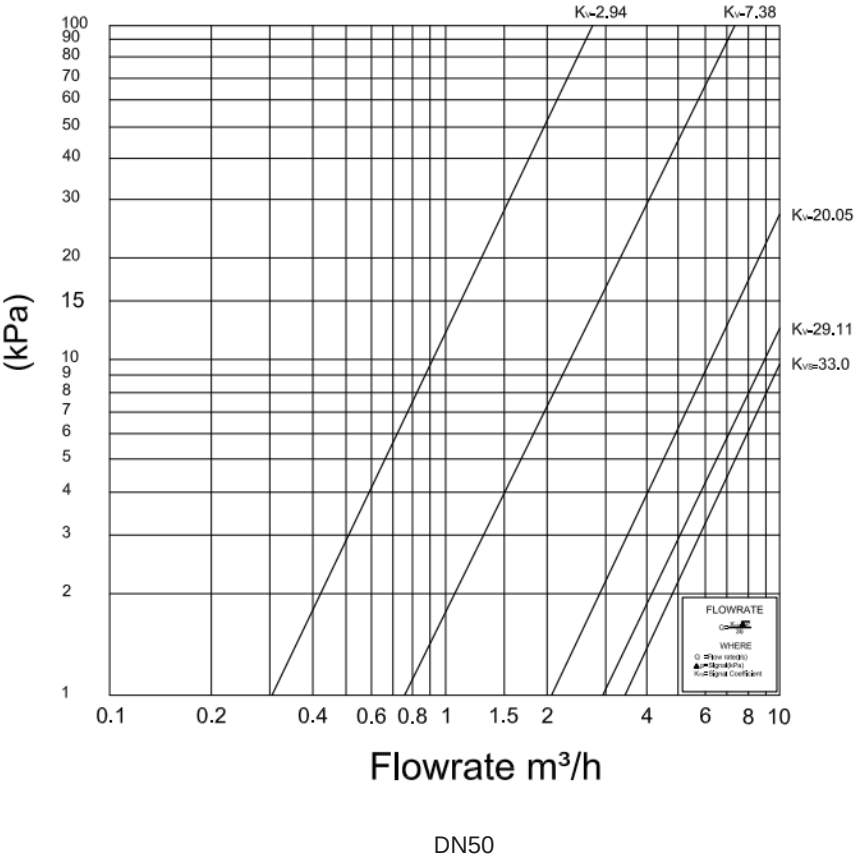
DN20

Brass Fixed Orifice Double Regulating Valve Fig. 1206



Brass Fixed Orifice Double Regulating Valve

Fig. 1206



Bill of Materials List

Item	Dimension	Article No.	Thread	Material				Actuator
				Body	Disc	Stem	Bonnet	
1	DN15	WM0100143	BSPT	Brass	Brass	Brass	Brass	Handwheel
2	DN20	WM0100132	BSPT	Brass	Brass	Brass	Brass	Handwheel
3	DN25	WM0100133	BSPT	Brass	Brass	Brass	Brass	Handwheel
4	DN32	WM0100134	BSPT	Brass	Brass	Brass	Brass	Handwheel
5	DN40	WM0100135	BSPT	Brass	Brass	Brass	Brass	Handwheel
6	DN50	WM0100136	BSPT	Brass	Brass	Brass	Brass	Handwheel

Threaded Pressure Independent Control Valve

Fig. 1230-BT

Application

1. In ventilation and air conditioning plants for control on the water side and automatic hydraulic balancing of terminal units, such as fan coils, induction units, and in heat exchangers for heating or cooling.
2. In heating zones like self-contained heating systems, apartments, individual rooms, etc.
3. For closed circuits.

Features

1. With integrated differential pressure controller
2. DN15~DN32: Valve body is made of dezincification resistant hot-pressed brass (DZR)
3. DN40~DN50: Valve body is made of Ductile Iron
4. Volumetric flow range: 30~11000 L/h
5. Differential pressure range: 15~600 kPa
6. Internal thread Rp conforming to ISO 7-1
7. Accessories for external thread G conforming to ISO 228-1 (optional)
8. Version with pressure test points for Δp measurement (optional)
9. Can be equipped with multiples famous brand electric actuators



DN15~DN32



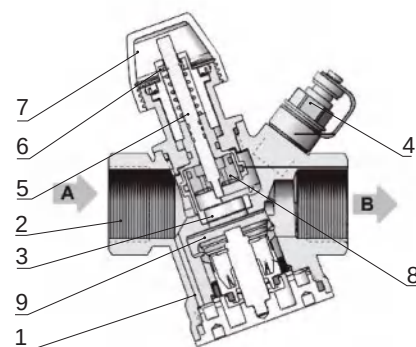
DN40~DN50

Parameter Standard

1	Connection Standard	G to ISO 228-1 (externally threaded) additional accessories
		Rp to ISO 7-1 (internally threaded)
2	Size	DN15~ DN50
3	Medium	Water, Oil, Gas and Ethylene Glycol ($\leq 50\%$)
4	Working Pressure	PN25
5	Working Temperature	-10°C ~ 100°C
6	Actuator Connection	DN15~DN32 M30 x 1.5mm
		DN40~DN50 Ø40 Standard Connector Interface
7	Pressure Test Points	G $\frac{1}{4}$ " (Connection Valve Body)

Material Specification

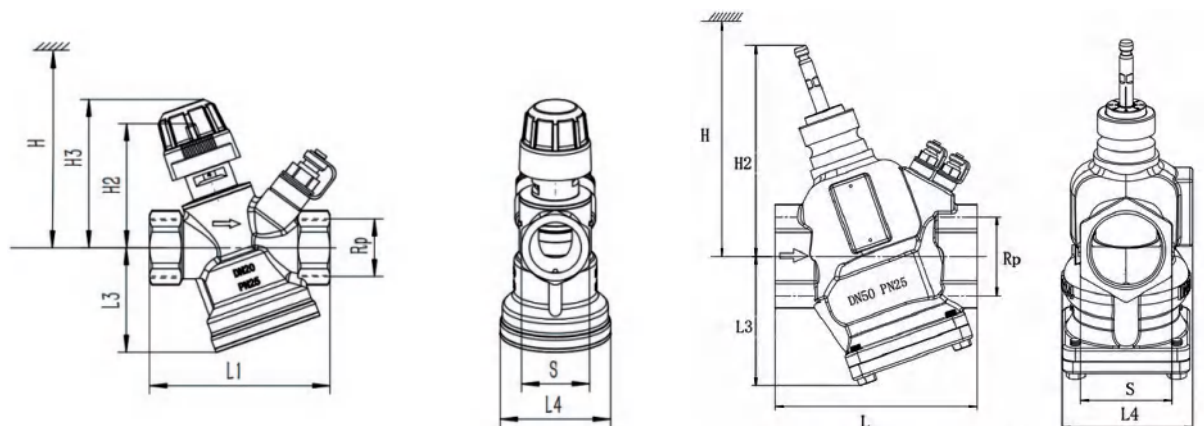
No.	Part	Material	Specification
1	Body	DN15~DN32: DZR Brass	CW 602N
		DN40~DN50: Nodular Cast Iron	-
2	Port	DZR Bass	CW 602N
3	Seat	DZR Bass	CW 602N
4	Test Points	DZR Bass	-
5	Stem	Stainless Steel	X29CrS13
6	Spring	Stainless Steel	x5CrNiMo17
7	Presetting Element	ABS or PA	-
8	Regulator	PPS+Brass(DZR)	CW 602N
9	O-Ring	EPDM	-



Threaded Pressure Independent Control Valve

Fig. 1230-BT

Dimensions-Valve



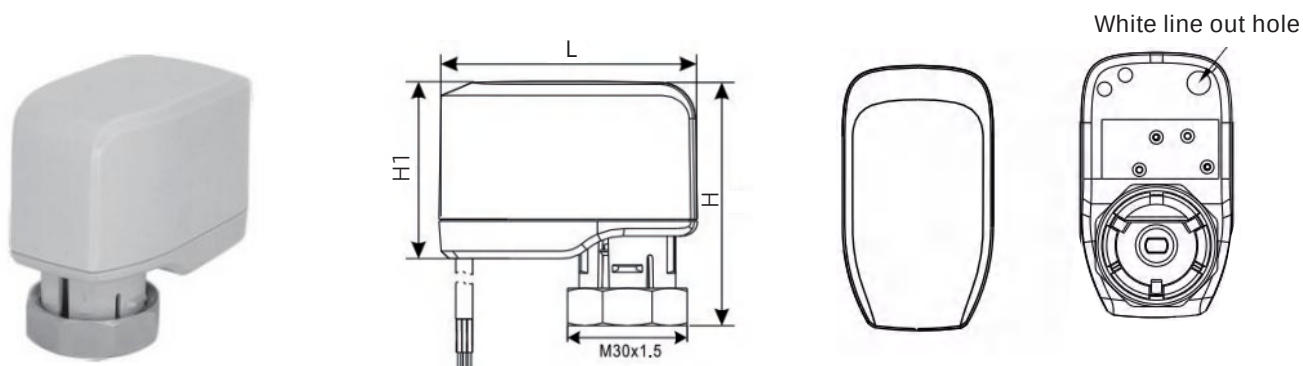
DN15~DN32

DN40~DN50

DN	INCH	S, MM	L1, MM	L3, MM	L4, MM	H2, MM	H3, MM	Weight, Kg
15	½	25	75	501	52	60	72	0.7
20	¾	32	85	51	52	60	72	0.7
25	1	39	94	51	52	60	72	0.9
32	1¼	46	120	71	70	68	80	1.6
40	1½	70	155	99	100	162	/	5.4
50	2	70	155	99	100	162	/	5.7

Dimensions-Actuator

Type: ZEB24A,ZEB230K ZEB24K



Rp, INCH	L, MM	H1, MM	H, MM
Rp ¾	69	47	65
Rp 1	69	47	65

Threaded Pressure Independent Control Valve

Fig. 1230-BT

Type Summary

Model	H ₁₀₀₀ , MM	Connections, INCH	Test Points	V _{min} , l/h	V ₁₀₀ , l/h	ΔP _{min} , KPa
1230BT·15L0.8	2.5	G ¾	-	125	830	22
1230BT·20F1.0	5.0	G ¾		150	1000	19
1230BT·20F1.4	5.0	G ¾		210	1400	29
1230BT·25F1.7	5.0	G 1		255	1700	39
1230BT·32F4.5	5.0	G 1½		675	4500	28
1230BT·15L0.8	2.5	G ¾		125	830	22
1230BT·20F1.0Q	5.0	G ¾	With pressure test points P/T	150	1000	19
1230BT·20F1.4Q	5.0	G ¾		210	1400	29
1230BT·25F1.7Q	5.0	G 1		255	1700	39
1230BT·32F4.5Q	5.0	G 1½		675	4500	28
1230BT·40F9.5Q	15	Rp 1½		1425	9500	35
1230BT·50F11Q	15	Rp 2		1650	11000	35

DN = nominal size

H₁₀₀ = nominal stroke

V₁₀₀ = volumetric flow through fully open valve

V_{min} = smallest pre-settable volumetric flow through fully open valve

ΔP_{min} = minimum differential pressure required across the valve's control path, so that the difference pressure regulator works reliably

Actuator Model	Article No.	Function Description	Operating Voltage	Running Power	Start-up Current	Force	Stroke	Class of Protection	Cable	Valve Dimension
ZEB24A	WM1052024A	0~10VDC Modulated	AC/DC 24V	2W	1A	120N	6mm	IP54	3×0.5mm ²	DN15~DN32
	WM1053024A									DN40~DN50
ZEB230K	WM1052230K	Three wire single control	230V AC	2W	0.1A	120N	6mm	IP54	3×0.5mm ²	DN15~DN32
	WM1053230K									DN40~DN50
ZEB24K	WH1052024K	Three wire dual control	AC/DC 24V	2W	1A	120N	6mm	IP54	3×0.5mm ²	DN15~DN32
	WH1053024K									DN40~DN50

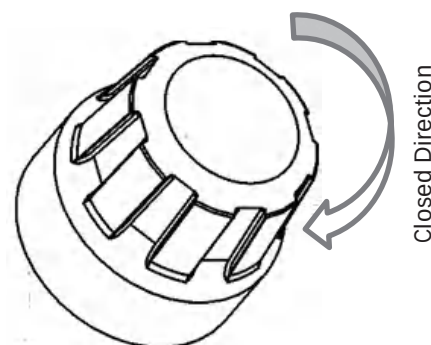
Manual Control(DN15~DN32)

The manual control knob (1) is ready fitted to protect valve stem and pre-set mechanism and facilitates manual control of the PICV valve during commissioning.

Factory setting:

The valve is open. To close the valve, turn the manual knob clockwise.

The valve must be open to purge the system.



Threaded Pressure Independent Control Valve

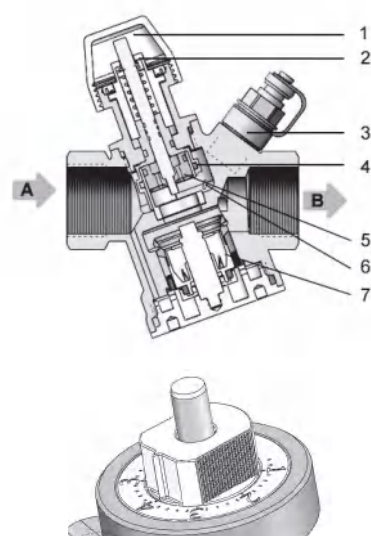
Fig. 1230-BT

Fittings

DN	Description	Application
G 3/8"	Connector	Set of 2 fittings with threaded connections for 2-port valves, Convert valve from internal thread to entenal thread
G 1/2"	Connector	
G 3/4"	Connector	
G 1	Connector	
G 1 1/2"	Connector	

Functional Principle

No.	Part
1	Manual Control Knob
2	Dial for Presetting
3	Pressure Test Point (Blue Ribbon) Pressure Test Point (Red Ribbon)
4	Plug for Presetting Opening
5	Flow Control Vlave
6	Aperture for Differential Pressure Controller is linked with outlet Port B
7	Differential Pressure Controller
A	Inlet Port
B	Outlet Port

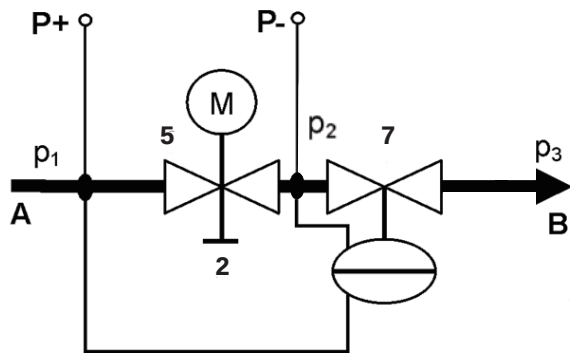


Dial for presetting(2)

The medium entering the valve (inlet port A) passes through the variable presetting opening (4) which is connected to the dial (2) for presetting the desired maximum volumetric flow. Then, the medium flows through the flow control valve (5) with a linear characteristic and a stroke of 2.5 mm (DN 10...15) respectively 5 mm (DN 20/DN25/DN32) and 15mm(DN40/DN50). The actuator (not shown here) opens and accurately positions the control valve (5). Before leaving the PICV valve, the medium passes through a built-in mechanical differential pressure controller (7). This differential pressure controller is the heart of the PICV valve and ensures that the selected volumetric flow is maintained across the whole working range and independent of the inlet pressure p_1 . The PICV valves 1230-BT are additionally equipped with two pressure test points (P+, P-), which allow measurement of the differential pressure across the. For that purpose, the electronic manometer ALE10 can be used.

Threaded Pressure Independent Control Valve

Fig. 1230-BT



- A Inlet medium (inlet port)
- B Outlet medium (outlet port)
- 2 Ring with dial for presetting
- 7 Differential pressure controller maintains the pressure $p_1 - p_2$ constant across the flow control valve (5) and the presetting (2)
- 5 Control valve with mounted actuator

P- = P/T port, pressure test point with blue ribbon (3A)

P+ = P/T port, pressure test point with red ribbon (3B)

P1 = pressure at inlet of Combi valve

P2 = pressure at outlet of flow control valve

P3 = pressure at outlet of PICV valve

Sizing

Engineering Example

Basis of calculation

1. Determine energy demand Q [kW]
2. Determine temperature differential ΔT [K]
3. Calculate volumetric flow Hint: you can also determine the volumetric flow using the valve slide rule.
4. Select suitable PICV
 - Pipe connections (internally or externally threaded)
 - With or without P/T ports
 - Ideally, PICVs should be selected such that they operate at about 80 % of their maximum flow, enabling them to deliver spare capacity, if required.
5. Determine dial setting using volumetric flow/dial presetting table, cf. Volumetric flow/dial presetting.

Example

1. Given is a heat exchanger with $Q = 3.8$ kW
2. Temperature differential (supply - return) $\Delta T = 6$ K
3. Volumetric flow

$$\dot{v} = \frac{3,8 \text{ kW} \cdot 1000}{1,163 \cdot 6 \text{ K}} = 544,56 \text{ l/h}$$

Hint: You can also determine the volumetric flow using the valve slide rule.

4. The valve shall have connections with external threads to ISO 228-1 and size DN15.
5. PICV valve selection:

Ideally, PICV valves should be selected such that they operate at about 80% of their maximum flow, enabling them to deliver spare capacity, if required.

(internally threaded connections, with pressure test points P/T, nominal volumetric flow 830 l/h)

6. Determine dial setting using volumetric flow/dial presetting table below:

Volumetric flow 545 l/h

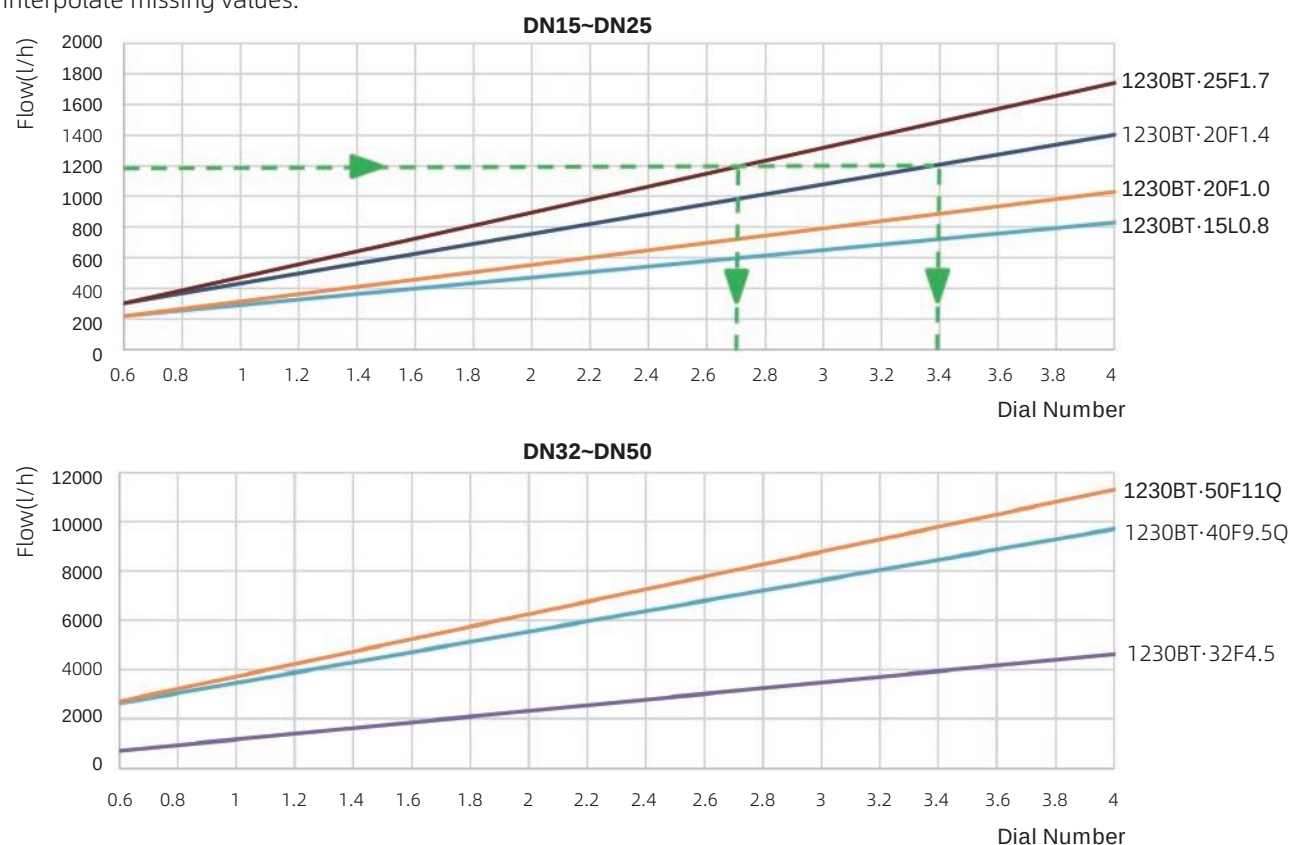
Dial setting 2.4 (from diagram)

Threaded Pressure Independent Control Valve

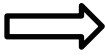
Fig. 1230-BT

Volumetric Flow/Dial Presetting

Tables to determine the dial setting for a desired volumetric flow. $D_p \text{ min [kPa]}$ based on volumetric flow; interpolate missing values.

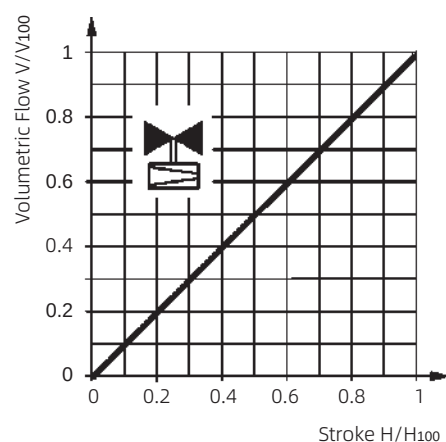


Engineering Notes

Symbols / Direction of flow		Flow in control mode	Valve Stem	
Common	with pressure test points P/T		Retracts	Extends
		variable 	closes	opens

⚠ The direction of flow indicated (arrow on the valve body) is mandatory!

Valve Characteristic



Threaded Pressure Independent Control Valve

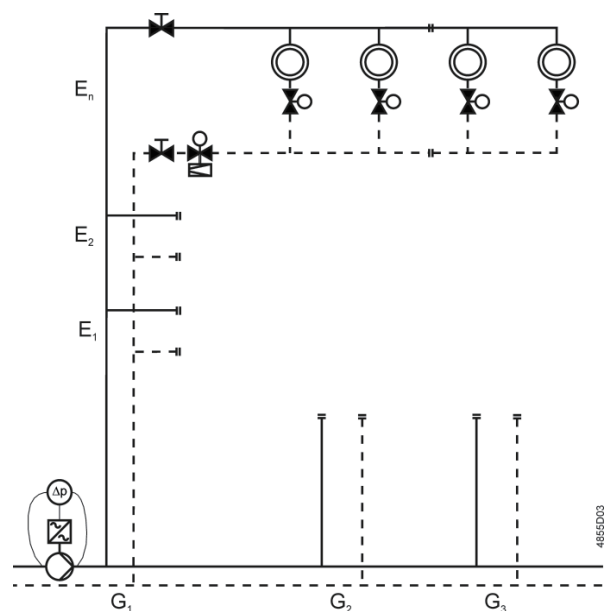
Fig. 1230-BT

Application Examples

PICV valves in HVAC systems combined with variable speed pumps provide even higher energy efficiency. When sizing the pump, it must be made certain that the most critical branch or consumer in the system – usually the remotest from the pump – gets enough pressure (pump head). Thus, it is recommended to use a variable speed pump in constant-pressure mode with end-point feedback, to maintain a minimum differential pressure across the critical valve.

Residential buildings

Residential buildings with for example self-contained flat heating systems:

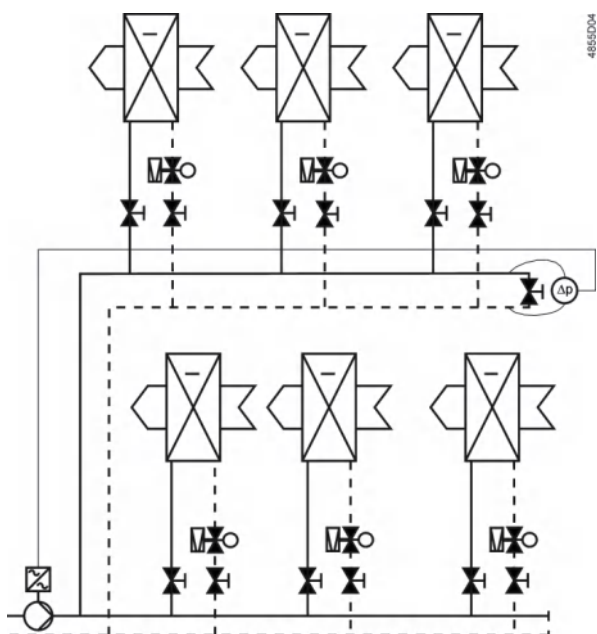


E = Floor

G = Group or zone

Non-residential buildings

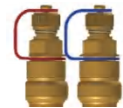
Commercial buildings with for example Fan Coil Units or heat exchangers for heating or cooling:



Threaded Pressure Independent Control Valve

Fig. 1230-BT

Accessories

Product no.	Stock no.	Product	Description
Electronic manometer	0-200 kPa		Electronic manometer excluding measuring lines and measuring tips. Measuring range 0-700 kPa. A differential pressure of more than 200 kPa will destroy the pressure sensor. For measuring the differential pressure between P+ and P- of the Combi valves (refer to diagram under "Functional principle" on page 3). Functions of the manometer: · Start/stop · Automatic zero position · Backlit display · Display: Out outside the measuring range Holding function
Measuring lines	2 x 40 mm		Measuring lines and straight measuring tips for use with Siemens PICV valves. Equipped with G 1/8" connection with 2 x 40 mm needles.
P/T port	G 1/4 P/T port		Spare nipples P/T port (set of 2) Set contains 1 piece each with a red and blue ribbon. Connection to valve body: G 1/4 " to ISO 228, inclusive O-ring
Plug	G1/4		Blanking plug for P/T ports Connection to valve body: G 1/4 " to ISO 228, inclusive O-ring
Knob	manual knob		Spare black valve protection cap

Bill of Materials List

Item	Dimension	Article No.	Thread	Material		
				Body	Seat	Stem
1	DN15	WM1230015	BSPT	Brass	Brass	SS420
2	DN20	WM0300003	BSPT	Brass	Brass	SS420
3	DN25	WM0300013	BSPT	Brass	Brass	SS420
4	DN32	WM1230032	BSPT	Brass	Brass	SS420
5	DN40	WM0300006	BSPT	Brass	Brass	SS420
6	DN50	WM1230050	BSPT	Brass	Brass	SS420

Brass Y-type Strainer

Fig. 7691

Features

1. Small size, light weight and compact structure.
2. Installation and disassembly are quick and easy.

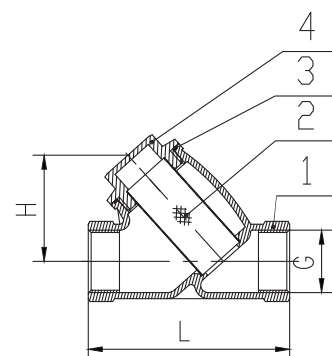


Parameter Standard

1	Thread Standard	ISO228-1
2	Size	DN15~DN50
3	Medium	Hot Water, Cold Water and Ethylene Glycol (≤50%)
4	Working Pressure	PN16
5	Performance Testing	Shell: 24bar
6	Working Temperature	-10°C~170°C

Material Specification

No.	Part	Material	Specification
1	Body	Brass	BS EN12164 CW614N
2	Screen	Stainless Steel 304	-
3	Gasket	PTFE	-
4	Cap	Brass	BS EN12164 CW614N



Dimensions and Kv Value

DN, MM	DN, INCH	L, MM	H, MM	Screen Mesh, Qty/cm ²	Weight, Kg	Kvs
15	½	55	64	55~60	0.17	4.0
20	¾	64	38		0.24	6.8
25	1	73	42		0.34	13.5
32	1¼	90	51		0.51	14.4
40	1½	94	53		0.76	20.8
50	2	114	68		1.34	30.3

Bill of Materials List

Item	Dimension	Artical No.	Thread	Material		
				Body	Cap	Screen
1	DN15	WG0200001	BSPT	Brass	Brass	SS304
2	DN20	WG0200002	BSPT	Brass	Brass	SS304
3	DN25	WG0200003	BSPT	Brass	Brass	SS304
4	DN32	WG0200004	BSPT	Brass	Brass	SS304
5	DN40	WG0200005	BSPT	Brass	Brass	SS304
6	DN50	WG0200006	BSPT	Brass	Brass	SS304

Threaded Brass Ball Valve

Fig. 1207

Features

- 1.Available for HVAC system.
- 2.Suitable for frequent operations, opening and closing quickly and easily.
- 3.Small fluid resistance.
- 4.Simple structure, small volume size, light weight and easy to maintain.
- 5.Good sealing performance.
- 6.It is not restricted by the installation direction, fluid direction can be bidirectional.

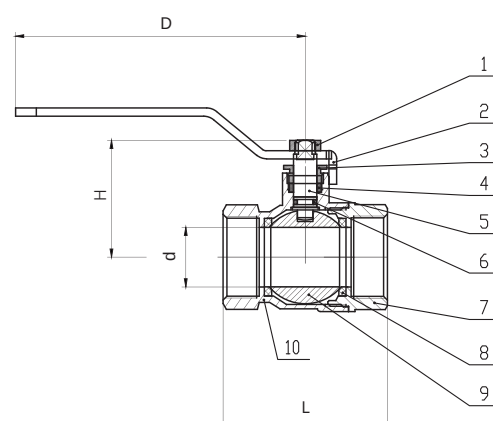


Parameter Standard

1	Thread Standard	ISO228-1
2	Size	DN15~DN50
3	Medium	Hot Water, Cold Water and Ethylene Glycol (≤50%)
4	Working Pressure	PN25
5	Working Temperature	-10°C~100°C
6	Performance Testing	Shell: 37.5bar; Seal: 27.5bar

Material Specification

No.	Part	Material	Specification
1	Lever Nut	Mild Steel	-
2	Lever	Mild Steel	-
3	Gland Nut	Brass	BS EN 12164 Cw614N
4	Packing	PTFE	-
5	stem	Brass	BS EN 12164 Cw614N
6	O Ring	NBR/PTFE	
7	Seat Retainer	Brass	BS EN 12164 Cw614N
8	Seat	PTFE	-
9	Ball	Brass	BS EN 12164 Cw614N
10	Body	Brass	BS EN 12164 Cw614N



Dimensions and Kv Value

DN	INCH	L, MM	H, MM	D, MM	d, MM	Weight, Kg	Kvs
15	½	47	46	82	14	0.17	8.0
20	¾	53	49	82	19	0.23	24.0
25	1	65	56	102	23	0.38	49.5
32	1¼	73	67	121	30	0.59	74.8
40	1½	81	71	121	37	0.77	169.6
50	2	98	93	144	45	1.29	242.0

Bill of Materials List

Item	Dimension	Article No.	Thread	Material			
				Body	Ball	Stem	Seat
1	DN15	WQ0200003	BSPT	Brass	Brass	Brass	PTFE
2	DN20	WQ0200004	BSPT	Brass	Brass	Brass	PTFE
3	DN25	WQ0200005	BSPT	Brass	Brass	Brass	PTFE
4	DN32	WQ0200006	BSPT	Brass	Brass	Brass	PTFE
5	DN40	WQ0200007	BSPT	Brass	Brass	Brass	PTFE
6	DN50	WQ0200008	BSPT	Brass	Brass	Brass	PTFE

Threaded Brass Gate Valve

Fig. 3101

Features

1. Wide range of application, including HVAC systems, etc.
2. Simple structure, convenient to manufacture and maintain.
3. Small working stroke and short opening/closing time.
4. Good sealing performance, small friction between sealing surfaces, long service life.

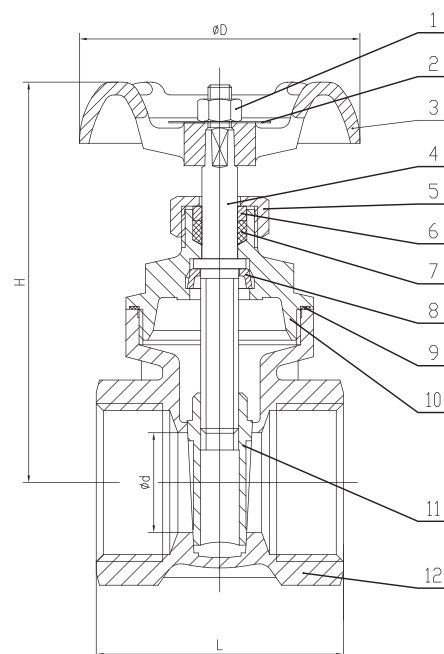


Parameter Standard

1	Thread Standard	ISO228-1
2	Size	DN15~DN50
3	Medium	Hot Water, Cold Water and Ethylene Glycol (≤50%)
4	Working Pressure	PN16
5	Working Temperature	-10°C~100°C
6	Performance Testing	Shell: 24bar; Seal: 17.6bar

Material Specification

No.	Part	Material	Specification
1	Nut	A2-70	-
2	Plate	Aluminum	-
3	Handwheel	Cast-Iron	-
4	Stem	Brass	BS EN 12164 Cw614N
5	packing Nut	Brass	BS EN 12164 Cw614N
6	Ring	Brass	BS EN 12164 Cw614N
7	Packing	PTFE	-
8	Stem Bush	Brass	BS EN 12164 Cw614N
9	Gasket	PTFE	-
10	Bonnet	Brass	BS EN 12164 Cw614N
11	Disc	Brass	BS EN 12164 Cw614N
12	Body	Brass	BS EN 12164 Cw614N



Dimensions

DN	INCH	L, MM	H, MM	ΦD, MM	Φd, MM	Weight, Kg
15	½	45	70	53	13	0.25
20	¾	48	77	53	19	0.3
25	1	54	85	53	22	0.38
32	1¼	59	103	59	19	0.64
40	1½	61	117	71	36	0.78
50	2	70	138	78	47	1.16

Threaded Brass Gate Valve

Fig. 3101

Bill of Materials List

Item	Dimension	Article No.	Thread	Material			
				Body	Bonnet	Disc	Stem
1	DN15	WZ0300002	BSPT	Brass	Brass	Brass	Brass
2	DN20	WZ0300003	BSPT	Brass	Brass	Brass	Brass
3	DN25	WZ0300004	BSPT	Brass	Brass	Brass	Brass
4	DN32	WZ0300005	BSPT	Brass	Brass	Brass	Brass
5	DN40	WZ0300006	BSPT	Brass	Brass	Brass	Brass
6	DN50	WZ0300007	BSPT	Brass	Brass	Brass	Brass

Brass Lift Check Valve

Fig. 5407

Features

1. Small size, light weight and compact structure.
2. Vertical lifting structure.
3. Metal valve core, NBR seal.
4. Installation and disassembly are quick and easy.

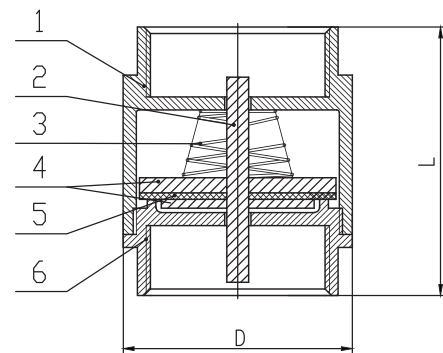


Parameter Standard

1	Thread Standard	ISO228-1
2	Size	DN15~DN50
3	Medium	Hot Water, Cold Water and Ethylene Glycol (≤50%)
4	Working Pressure	PN16
5	Working Temperature	-10°C~100°C
6	Performance Testing	Shell: 24bar; Seal: 17.6bar

Material Specification

No.	Part	Material	Specification
1	Body	Brass	BS EN 12164 CW614N
2	Stem	Brass	BS EN 12164 CW614N
3	Spring	Stainless Steel 304	BS EN 304C 15
4	Disc	Brass	BS EN 12164 CW614N
5	Gasket	EPDM	-
6	Bonnet	Brass	BS EN 12164 CW614N



Dimensions

DN	INCH	L, MM	D, MM	Weight, Kg	Kvs
15	½	47	33	0.14	3.4
20	¾	57	42	0.20	7.0
25	1	61	46	0.27	10.3
32	1¼	62	59	0.39	17.2
40	1½	67	66	0.59	21.3
50	2	85	80	0.85	39.2

Bill of Materials List

Item	Dimension	Article No.	Thread	Material		
				Body	Disc	Stem
1	DN15	WH0300025	BSPT	Brass	Brass	Brass
2	DN20	WH0300026	BSPT	Brass	Brass	Brass
3	DN25	WH0300027	BSPT	Brass	Brass	Brass
4	DN32	WH0300028	BSPT	Brass	Brass	Brass
5	DN40	WH0300029	BSPT	Brass	Brass	Brass
6	DN50	WH0300030	BSPT	Brass	Brass	Brass

Threaded Brass Air Release Valve

Fig. 9801

Features

- 1.Excellent sealing performance.
- 2.Large exhaust volume.
- 3.Reliable performance.
- 4.Easy to maintain.
- 5.Only exhaust, not drain.
- 6.Valve will continuously exhaust air, as long as there is pressure in the system.

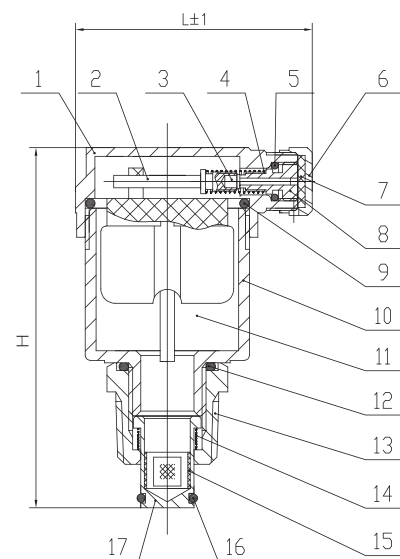


Parameter Standard

1	Thread Standard	BSPT
2	Size	DN15, DN20, DN25
3	Medium	Hot Water, Cold Water and Ethylene Glycol (≤50%)
4	Working Pressure	PN16
5	Working Temperature	-10°C~100°C
6	Performance Testing	Shell: 24bar; Seal: 17.5bar

Material Specification

No.	Part	Material	Specification
1	Cap	Brass	BS EN12164 CW614N
2	Stem	Brass	BS EN12164 CW614N
3	Gasket	EPDM	-
4	Spring	Stainless Steel 304	BS EN 304C 15
5	O Ring	EPDM	-
6	Air Cap	Brass	BS EN12164 CW614N
7	O Ring	EPDM	-
8	Core	Brass	BS EN12164 CW614N
9	O Ring	EPDM	-
10	Body	Brass	BS EN12164 CW614N
11	Floater	Polytene	-
12	O Ring	EPDM	-
13	Connector	Brass	BS EN12164 CW614N
14	Spring	Stainless Steel 304	BS EN 304C 15
15	Screen	Stainless Steel 304	BS EN 304C 15
16	O Ring	EPDM	-
17	Disc	Brass	BS EN12164 CW614N



Dimensions

DN	INCH	L, MM	H, MM	Weight, Kg
15	½	50	68	0.15
20	¾	50	68	0.17
25	1	50	69	0.19

Threaded Brass Air Release Valve

Fig. 9801

Bill of Materials List

Item	Dimension	Article No.	Thread	Material		
				Body	Disc	Stem
1	DN15	WP0100004	BSPT	Brass	Brass	Brass
2	DN20	WP0100005	BSPT	Brass	Brass	Brass
3	DN25	WP0100006	BSPT	Brass	Brass	Brass

Brass Pressure Reducing Valve

Fig. 1530

Features

- 1.Small size, light weight and compact structure.
2. Installation and disassembly are quick and easy.

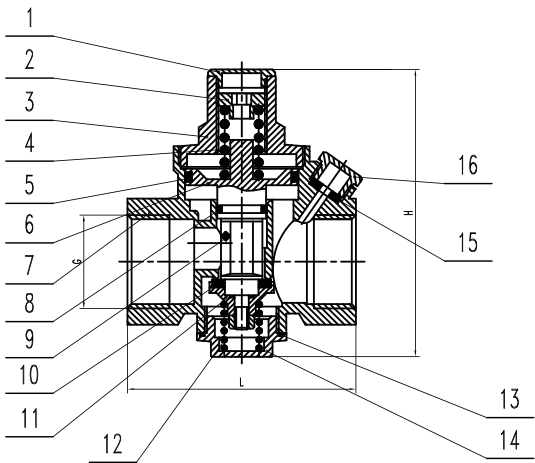


Parameter Standard

1	Thread Standard	ISO 228
2	Size	DN15~DN50
3	Medium	Hot Water, Cold Water and Ethylene Glycol (≤50%)
4	Working Pressure	PN16
5	Working Temperature	0°C~70°C
6	Performance Testing	Shell: 24bar; Seal: 17.5bar

Material Specification

No.	Part	Material	Specification
1	Cap	Brass	BS EN12164 CW614N
2	Pressing Cap	Brass	BS EN12164 CW614N
3	Bonnet	Brass	BS EN12164 CW614N
4	Spring	Stainless Steel	-
5	O Ring	NBR	-
6	Body	Brass	BS EN12164 CW614N
7	Stem	Brass	BS EN12164 CW614N
8	O Ring	NBR	-
9	Screen	Stainless Steel	-
10	Gasket	NBR	-
11	Silicone Cap	Brass	BS EN12164 CW614N
12	Spring	Stainless Steel	-
13	Flat mat	NBR	-
14	Cover	Brass	BS EN12164 CW614N
15	O Ring	NBR	-
16	Cap	Brass	BS EN12164 CW614N



Dimensions

DN	INCH	L, MM	H, MM	Weight, Kg
15	½	65	85	0.3
20	¾	71	85	0.38
25	1	73	92	0.49
32	1¼	80.8	111	0.75
40	1½	90	131	1.11
50	2	92.7	131	1.13

Brass Pressure Reducing Valve

Fig. 1530

Bill of Materials List

Item	Dimension	Article No.	Thread	Material			
				Body	Bonnet	Stem	Gasket
1	DN15	WF0100027	BSPT	Brass	Brass	Brass	NBR
2	DN20	WF0100028	BSPT	Brass	Brass	Brass	NBR
3	DN25	WF0100017	BSPT	Brass	Brass	Brass	NBR
4	DN32	WF0100018	BSPT	Brass	Brass	Brass	NBR
5	DN40	WF0100019	BSPT	Brass	Brass	Brass	NBR
6	DN50	WF0100020	BSPT	Brass	Brass	Brass	NBR

Single-Sphere Flexible Rubber Joint with Floating Flanges

Fig. GFLEX-F1

Features

1. Can reduce vibration and noise, and can compensate for thermal expansion and contraction caused by temperature changes.
2. Adapt to a variety of media and environments.
3. Good sealing performance, light weight, easy installation and maintenance, and long service life.

Applications

This product is mainly applicable for piping systems in commercial and industrial buildings and plants. Applicable fluids are exclusively water including cold water, warm water, cooled water, sea water, etc. This product can not be used for drinking water, pool water, oil, or boiled water.

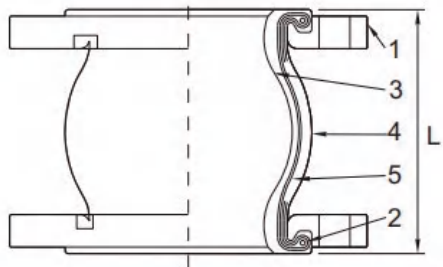


Parameter Standard

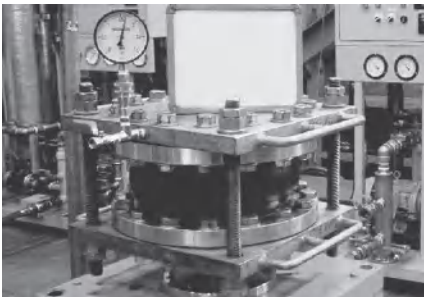
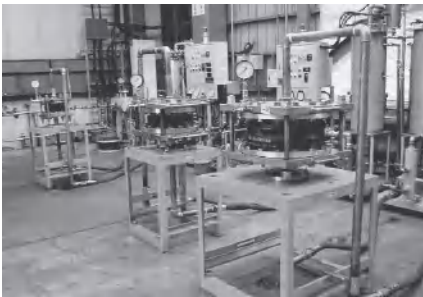
1	Design Standard	BS 5163
2	Size	DN32~DN600
3	Medium	Hot Water, Cold Water and Ethylene Glycol ($\leq 50\%$)
4	Working Pressure	PN16
5	Working Temperature	-15°C~115°C
6	Performance Testing	Shell: 24bar

Material Specification

No.	Part	Material	ASTM
1	Flange	Galvanized Carbon Steel	S275JR
2	Reinforcing Ring	Carbon Steel	S275JR
3	Inner Rubber	EPDM	-
4	Outer Rubber	EPDM	-
5	Reinforcing Cord	Nylon	-



Flanges on ANSI, BS, etc. available. The flange material can be changed to Mild Steel, SUS304 and SUS316. Please consult us. JIS16K/JIS20K Flanges are all Mild steel (32~600)

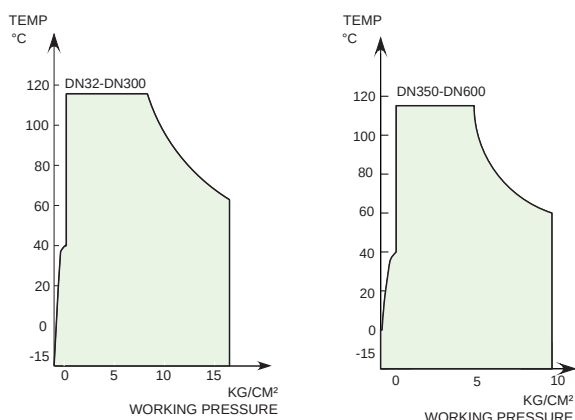


Single-Sphere Flexible Rubber Joint with Floating Flanges

Fig. GFLEX-F1

Operating Conditions and Performance

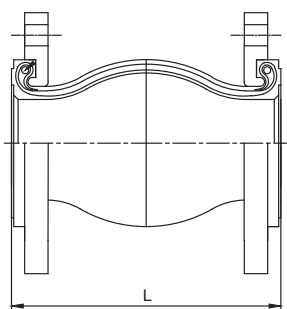
Working Temperature vs. Working Pressure



Technical Parameters

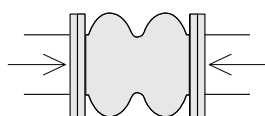
Size	DN32~DN300	DN350~DN600
Operating Pressure, Psig(kg/Sqcm)	225(16)	125(8.6)
Bursting Pressure, Psig(kg/Sqcm)	682(48)	435(30)
Vacuum Rating, mmHg	750	500
Temperature, °C	-15~115	-15~115

Dimensions and Displacement Valve

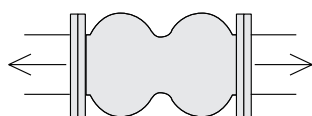


DN	INCH	Dimensions	Axial Displacement		Lateral Displacement, MM	Angle of Deflection (Bilateral), MM	Weight, Kg
		L, MM	Stretch, MM	Compression, MM			
32	1¼	95	6	10	9	15°	3.1
40	1½	95	6	10	9	15°	3.5
50	2	105	7	10	10	15°	4.4
65	2.5	115	8	13	12	15°	5.4
80	3	130	8	15	12	15°	6.5
100	4	135	8	15	12	15°	7.5
125	5	170	12	19	15	15°	7
150	6	180	12	20	15	10°	10
200	8	205	12	20	22	10°	12
250	10	230	16	28	22	10°	15.8
300	12	245	16	28	25	10°	23.8
350	14	200	13	19	19	10°	31
400	16	200	13	19	19	10°	44
450	18	200	13	19	19	10°	53
500	20	200	13	19	19	10°	64.6
600	24	265	16	28	25	10°	106

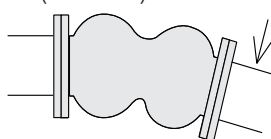
Compression



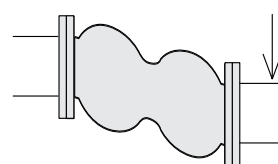
Stretch



Angle of Deflection (Bilateral)



Lateral Displacement



Single-Sphere Flexible Rubber Joint with Floating Flanges

Fig. GFLEX-F1

Bill of Materials List

Item	Dimension	Article No.	Flange Connection	Material		
				Flange-A	Flange-B	Rubber
1	DN32	WX0100036	PN16	WCB	WCB	EPDM
2	DN40	WX0100037	PN16	WCB	WCB	EPDM
3	DN50	WX0100038	PN16	WCB	WCB	EPDM
4	DN65	WX0100039	PN16	WCB	WCB	EPDM
5	DN80	WX0100040	PN16	WCB	WCB	EPDM
6	DN100	WX0100041	PN16	WCB	WCB	EPDM
1	DN125	WX0100042	PN16	WCB	WCB	EPDM
2	DN150	WX0100043	PN16	WCB	WCB	EPDM
3	DN200	WX0100044	PN16	WCB	WCB	EPDM
4	DN250	WX0100045	PN16	WCB	WCB	EPDM
5	DN300	WX0100046	PN16	WCB	WCB	EPDM
6	DN350	WX0100047	PN16	WCB	WCB	EPDM
3	DN400	WX0100048	PN16	WCB	WCB	EPDM
4	DN450	WX0100049	PN16	WCB	WCB	EPDM
5	DN500	WX0100050	PN16	WCB	WCB	EPDM
6	DN600	WX0100051	PN16	WCB	WCB	EPDM

Screwed Type Flexible Rubber Joint

Fig. GFLEX-GS

Features

1. Strong vibration absorption ability.
2. High reliability.
3. Installation and disassembly are quick and easy.
4. Wide range of applications.

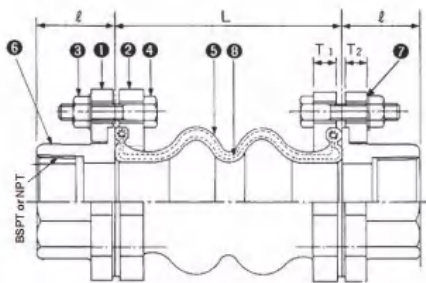


Applications

Vibration isolation for small pumps and circular pumps. Sewage disposal purifier line. Vibration isolation for air-conditioners and pipes.

Parameter Standard

1	Thread Standard	BSPT
2	Size	DN15~DN50
3	Medium	Hot Water, Cold Water and Ethylene Glycol (≤50%)
4	Working Pressure	PN16
5	Working Temperature	-15°C~115°C
6	Performance Testing	Shell: 24bar



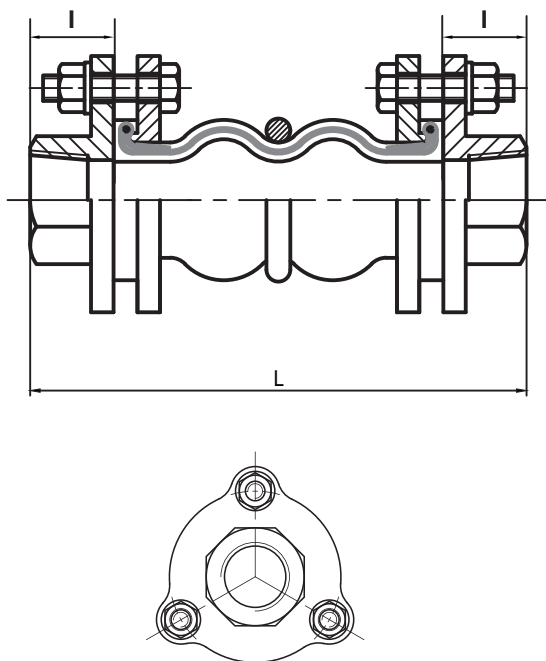
Material Specification

No.	Part	Material	Specification
1	Flange-A	Ductile Iron	EN-GJS-450-10
2	Flange-B	Ductile Iron	EN-GJS-450-10
3	Nut	Carbon Steel	-
4	Bolt	Carbon Steel	-
5	Rubber	EPDM	-
6	Union Edge	Ductile Iron	EN-GJS-450-10
7	Washer	Carbon Steel	-
8	Reinforcing Cord	Nylon	-

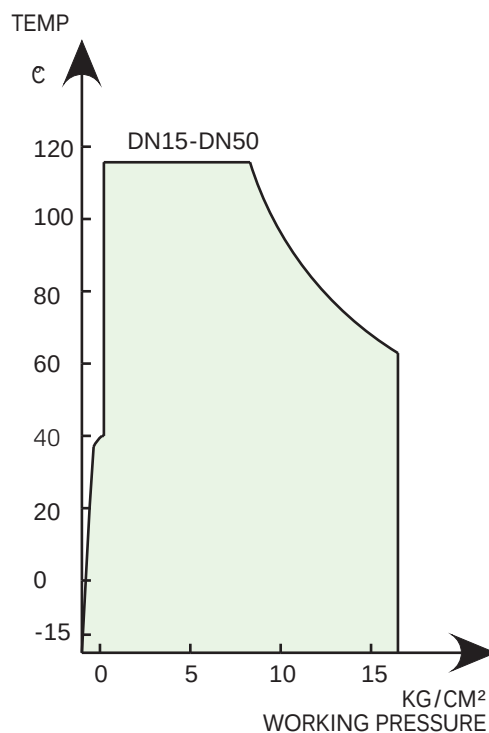
Screwed Type Flexible Rubber Joint

Fig. GFLEX-GS

Dimensions



Operating Condition



Size		Dimensions		Axial Displacement		Lateral Displacement, MM	Angle of Deflection (Bilateral), MM	Weight, Kg
DN	INCH	L, MM	I, MM	Stretch, MM	Compression, MM			
15	½	180	30	10	15	15	30°	0.6
20	¾	180	30	10	15	15	30°	0.7
25	1	180	26	10	15	15	30°	1
32	1¼	245	30	10	15	15	20°	1.3
40	1½	245	32	10	15	15	20°	1.9
50	2	255	32	10	15	15	20°	2.6

Bill of Materials List

Item	Dimension	Article No.	Thread	Material		
				Flange-A	Flange-B	Rubber
1	DN15	WX0200071	PN16	DI	DI	EPDM
2	DN20	WX0200072	PN16	DI	DI	EPDM
3	DN25	WX0200073	PN16	DI	DI	EPDM
4	DN32	WX0200074	PN16	DI	DI	EPDM
5	DN40	WX0200075	PN16	DI	DI	EPDM
6	DN50	WX0200076	PN16	DI	DI	EPDM

Dismantle-Type Double-flange Transmission Joint

Fig. GF700

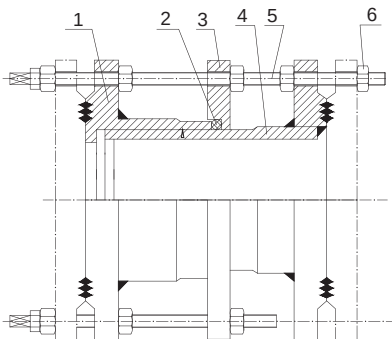
Features

1. Corrosion resistant construction
2. Studs are located on every flange hole
3. The rods are required from the upstream to downstream sides of the pipe equipment installation
4. Provides easy installation and disassembly of flanged equipment



Parameter Standard

1	Flange Standard	EN 1092-2
2	Test Standard	EN12266-1
3	Size	DN50~DN2200
4	Medium	Normal Temperature Water, Ethylene Glycol (≤50%)
5	Working Pressure	PN16
6	Working Temperature	-10°C~70°C
7	CoatingColor	Green Ral 6005/Blue Ral 5015



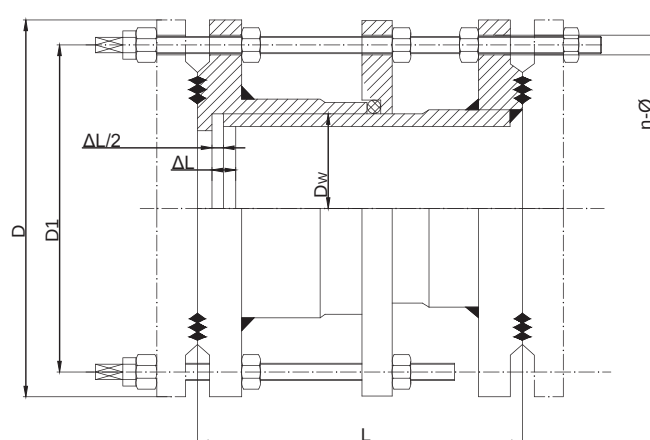
Material Specification

No.	Part	Material	Specification
1	Body	Carbon Steel	S235JR
2	O-Ring	NBR	-
3	Gland	Carbon Steel	S235JR
4	Flange	Carbon Steel	S235JR
5	Bolt	Galvanized Carbon Steel	S235JR
6	Nut	Galvanized Carbon Steel	S235JR

Dismantle-Type Double-flange Transmission Joint

Fig. GF700

Dimensions



DN, MM	DN, INCH	DW, MM	L, MM	ΔL , MM	D, MM	D1, MM	n- $\emptyset$	Keight, Kg
50	2	59	200	40	165	125	4-19	15
65	2½	76	200	40	185	145	4-19	16
80	3	89	200	40	200	160	8-19	20
100	4	108	200	40	220	180	8-19	22
125	5	133	200	40	250	210	8-19	24
150	6	159	200	40	285	240	8-23	28
200	8	219	200	40	340	295	12-23	32
250	10	273	200	40	405	355	12-28	50
300	12	325	220	50	460	410	12-28	60
350	14	377	220	50	520	470	16-28	78
400	16	426	220	50	580	525	16-31	90
450	18	480	220	50	640	585	20-31	100
500	20	530	220	50	715	650	20-34	120
600	24	630	240	50	840	770	20-37	150
700	28	720	240	50	910	840	24-37	200
800	32	820	350	60	1025	950	24-40	290
900	36	920	350	60	1125	1050	28-40	305
1000	40	1020	350	60	1255	1170	28-43	410
1200	48	1220	370	60	1485	1390	32-49	580
1400	56	1420	370	60	1685	1590	36-49	860
1600	64	1620	380	60	1930	1820	40-56	1100
1800	72	1820	380	60	2130	2020	44-56	1400
2000	80	2020	400	60	2345	2230	48-62	1900
2200	88	2220	400	60	2555	2440	52-62	2300

Dismantle-Type Double-flange Transmission Joint

Fig. GF700

Bill of Materials List

Item	Dimension	Artical No.	Flange Connection	Material		
				Body	O-Ring	Flange
1	DN50	WXGF7000050	PN16	WCB	NBR	WCB
2	DN65	WXGF7000065	PN16	WCB	NBR	WCB
3	DN80	WXGF7000080	PN16	WCB	NBR	WCB
4	DN100	WXGF7000100	PN16	WCB	NBR	WCB
5	DN125	WXGF7000125	PN16	WCB	NBR	WCB
6	DN150	WXGF7000150	PN16	WCB	NBR	WCB
7	DN200	WXGF7000200	PN16	WCB	NBR	WCB
8	DN250	WXGF7000250	PN16	WCB	NBR	WCB
9	DN300	WXGF7000300	PN16	WCB	NBR	WCB
10	DN350	WXGF7000350	PN16	WCB	NBR	WCB
11	DN400	WXGF7000400	PN16	WCB	NBR	WCB
12	DN450	WXGF7000450	PN16	WCB	NBR	WCB
13	DN500	WXGF7000500	PN16	WCB	NBR	WCB
14	DN600	WXGF7000600	PN16	WCB	NBR	WCB
15	DN700	WXGF7000700	PN16	WCB	NBR	WCB
16	DN800	WXGF7000800	PN16	WCB	NBR	WCB
17	DN900	WXGF7000900	PN16	WCB	NBR	WCB
18	DN1000	WXGF7001000	PN16	WCB	NBR	WCB
19	DN1200	WXGF7001200	PN16	WCB	NBR	WCB
20	DN1400	WXGF7001400	PN16	WCB	NBR	WCB
21	DN1600	WXGF7001600	PN16	WCB	NBR	WCB
22	DN1800	WXGF7001800	PN16	WCB	NBR	WCB
23	DN2000	WXGF7002000	PN16	WCB	NBR	WCB
24	DN2200	WXGF7002200	PN16	WCB	NBR	WCB

Double Eccentric Butterfly Valve

Fig. 2688

Features

1. Compact structure and small size.

Ease of installation and maintenance while reducing space requirements.

2. Good sealing performance.

Achieve zero leakage, ensuring that the fluid is not leaked.

3. Easy operation and long service life.

Control elements such as handles, gears and motors are easy to operate, and the integrated construction increases service life.

4. Wide range of industry applications.

Suitable for water plant, power plant, steel smelting, chemical industry and other industries, to meet the flow regulation and truncation requirements of various media.

5. Low pressure loss and good regulating performance.

With large adjustment range and accuracy, it can accurately control the flow rate and reduce the system energy consumption.

6. Quickly shut down and start.

It is designed so that it can complete full on or full off operation in a short time.

7. Good corrosion resistance.

Made of corrosion-resistant material, suitable for various media working environment.

8. Low opening and closing torque.

Ensures a more complete separation of the valve plate from the seat during opening and closing, improving the ease of operation.

9. Large flow and wear resistance.

The structural design and the optimization of the size of the valve channel make the flow of the valve larger, suitable for the occasions where the medium contains strong corrosion and wear substances.

10. High execution accuracy and reliability.

High control precision, good reliability, can maintain long-term stable operation.



Parameter Standard

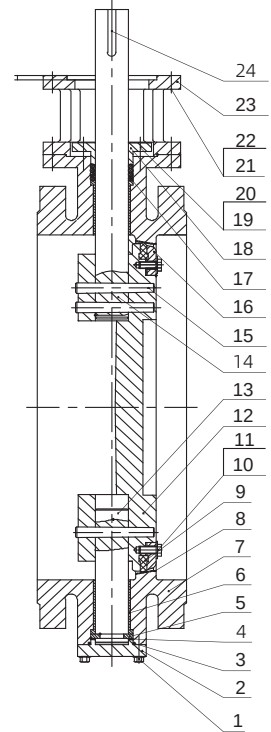
1	Design Standard	BS 5155 / EN 593 / MSS SP-67
2	Face to Face Standard	EN 558-12/EN558-14
3	Connection Standard	BS EN1092-2 PN16/PN25
4	Size	DN100~DN1200
5	Medium	Ethylene Glycol (≤50%), Normal Temperature Water
6	Working Pressure	PN16/PN25
7	Working Temperature	-10°C~80°C
8	Performance Testing	Shell: 24bar/37.5bar
		Seal: 17.6bar/27.bar
9	Coating	Epoxy powder coating with 200 μm (Default)
10	Coating Color	Green Ral6005 / Blue Ral5015

Double Eccentric Butterfly Valve

Fig. 2688

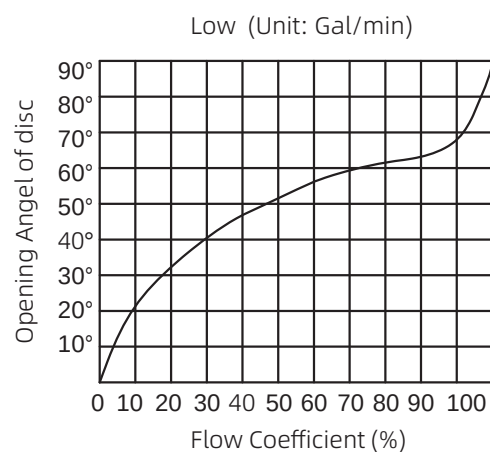
Material Specification

No.	Part	Material	Specification
1	Bolt	Stainless Steel	SS
2	Cover	Cast Iron	EN-GJL-200
3	O-Ring	EPDM	-
4	Adjust Gasket	Stainless Steel	SS
5	Circle Ring	Stainless Steel	SS
6	Bushing	PTFE	-
7	Body	Ductile Iron	EN-GJS-450-10
8	Body Sealing Seat	Stainless Steel	SS
9	Disc Sealing Seat	EPDM	-
10	Bolt	Stainless Steel	SS
11	Gasket	Stainless Steel	SS
12	Disc	Ductile Iron	EN-GJS-450-10
13	Down Shaft	Stainless Steel	SS
14	Up Shaft	Stainless Steel	SS
15	Pin	Stainless Steel	SS
16	Press Ring	Carbon Structural Steel	S235JR
17	O-Ring	EPDM	-
18	Packing Cover	Cast Iron	EN-GJL-200
19	Bolt	Stainless Steel	SS
20	Nut	Stainless Steel	SS
21	Bolt	Stainless Steel	SS
22	Spring Gasket	Stainless Steel	SS
23	Connecting Base	Cast Iron	EN-GJL-200
24	Key	Steel	C45(1.0503)



Cv Value

DN	INCH	Cv
100	4	471
150	6	1091
200	8	1895
250	10	3735
300	12	5593
350	14	7685
400	16	10030
450	18	13377
500	20	15788
600	24	23162
700	28	31870
800	32	41911
900	36	58169
1000	40	71175
1200	48	102845



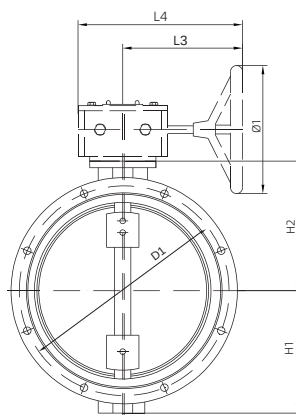
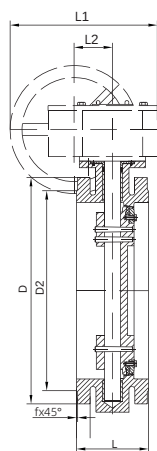
Note:

Performance curve of flow volume means the relationship between opening degree of valve suitable to use in control flow. When valve's opening degree is under 30°, not recommend to use in flow volume control.

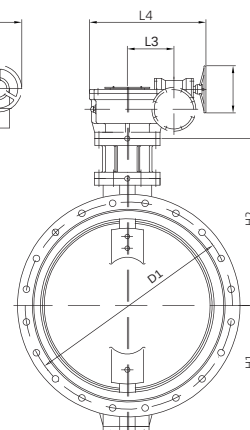
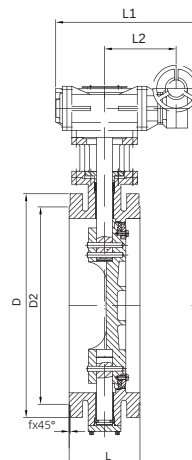
Double Eccentric Butterfly Valve

Fig. 2688

Dimensions-PN16

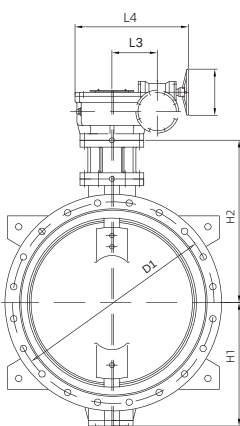
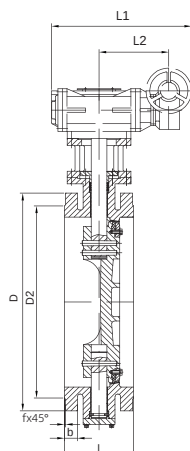


DN100-DN250

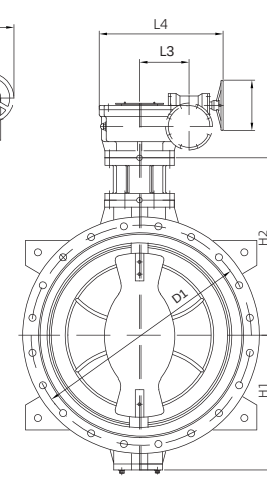
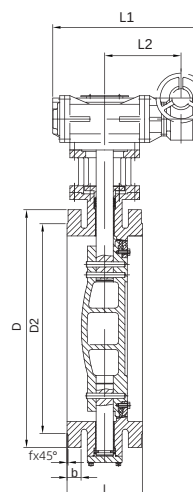


DN300-DN350

DN	INCH	L, MM	H1, MM	H2, MM	D, MM	D1, MM	D2, MM	L1, MM	L2, MM	L3, MM	L4, MM	Ø1, MM	Torque, Nm	Weight, Kg
100	4	127	114	171	220	180	158	172	45	173	226	150	208	35
150	6	140	148	210	285	240	212	288	63	238	313	300	234	43
200	8	152	175	250	340	295	268	288	63	238	313	300	338	55
250	10	165	213	270	405	355	320	310	78	225	307	300	390	100
300	12	178	246	306	460	410	370	340	93	183	280	300	1040	125
350	14	190	286	337	520	470	430	340	93	183	280	300	1560	172



DN400-DN500



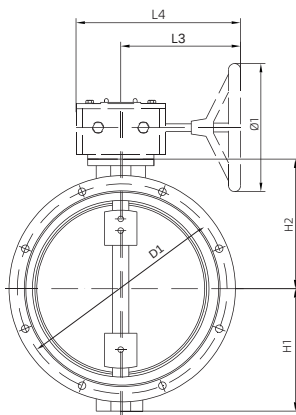
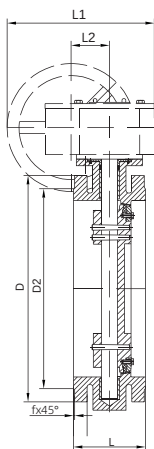
DN600-DN1200

DN	INCH	L, MM	H1, MM	H2, MM	D, MM	D1, MM	D2, MM	L1, MM	L2, MM	L3, MM	L4, MM	Ø1, MM	Torque, Nm	Weight, Kg
400	16	216	335	378	580	525	482	434	181	94	357	300	2340	200
450	18	222	350	390	640	585	548	434	181	94	357	300	2730	235
500	20	229	385	430	715	650	609	531	200	125	432	400	3640	330
600	24	267	448	508	840	770	720	531	200	125	432	400	4550	491
700	28	292	495	557	910	840	794	574	228	140	501	400	6240	631
800	32	318	570	613	1025	950	901	574	228	140	501	400	7800	821
900	36	330	602	667	1125	1050	1001	638	243	162	547	450	9750	1020
1000	40	410	685	722	1255	1170	1112	777	302	236	656	450	15600	1314
1200	48	470	796	845	1485	1390	1328	777	302	236	656	450	23400	2468

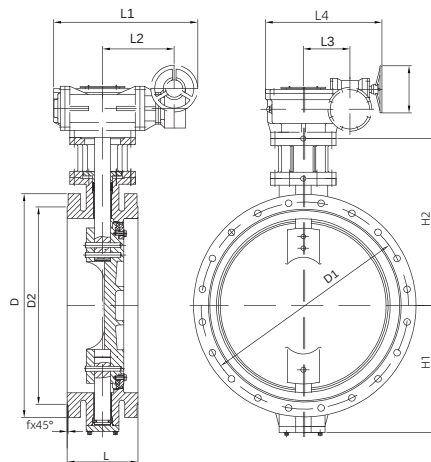
Double Eccentric Butterfly Valve

Fig. 2688

Dimensions-PN25

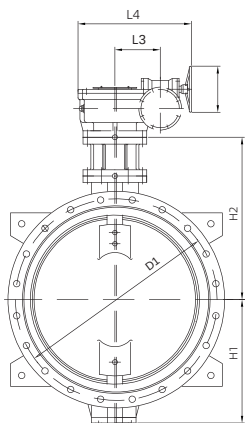
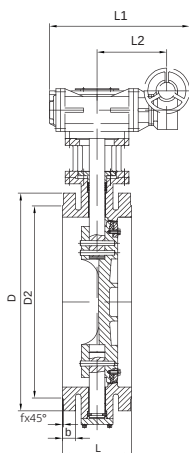


DN100-DN250

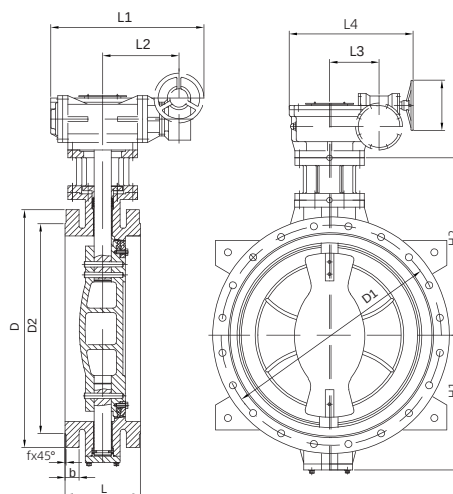


DN300-DN350

DN	INCH	L, MM	H1, MM	H2, MM	D, MM	D1, MM	D2, MM	L1, MM	L2, MM	L3, MM	L4, MM	Ø1, MM	Torque, Nm	Weight, Kg
100	4	190	123	178	235	190	162	172	45	173	226	150	208	-
150	6	210	162	213	300	250	218	288	63	238	323	300	234	-
200	8	230	186	260	360	310	278	288	63	238	323	300	338	-
250	10	250	216	293	425	370	335	310	78	225	307	300	390	-
300	12	270	301	458	485	430	395	434	181	94	357	300	1040	-
350	14	290	310	481	555	490	450	434	181	94	357	300	1560	-



DN400-DN500



DN600-DN1200

DN	INCH	L, MM	H1, MM	H2, MM	D, MM	D1, MM	D2, MM	L1, MM	L2, MM	L3, MM	L4, MM	Ø1, MM	Torque, Nm	Weight, Kg
400	16	310	360	530	620	550	505	434	181	94	357	300	2340	-
450	18	330	355	545	670	600	555	434	181	94	357	300	2730	-
500	20	350	400	632	730	660	615	531	200	125	432	400	3640	-
600	24	390	476	686	845	770	720	531	200	125	432	400	4550	-
700	28	430	490	736	960	875	820	574	228	140	501	400	6240	-
800	32	470	570	750	1085	990	930	574	228	140	501	400	7800	-
900	36	510	607	862	1185	1090	1030	638	243	162	547	450	9750	-
1000	40	550	675	910	1320	1210	1140	777	302	236	656	450	15600	-
1200	48	630	797	1032	1530	1420	1350	777	302	236	656	450	23400	-

Double Eccentric Butterfly Valve

Fig. 2688

Bill of Materials List

Item	Dimension	Article No.	Flange Connection	Material				Actuator
				Body	Disc	Seat	Stem	
1	100	WD0100169	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
2	150	WD0100171	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
3	200	WD0100172	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
4	250	WD0100173	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
5	300	WD0100174	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
6	350	WD0100175	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
7	400	WD0100176	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
8	450	WD0100177	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
9	500	WD0100178	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
10	600	WD0100179	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
11	700	WD0100180	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
12	800	WD0100181	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
13	900	WD0100182	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
14	1000	WD0100183	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
15	1200	WD0100184	PN16	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box

Item	Dimension	Article No.	Flange Connection	Material				Actuator
				Body	Disc	Seat	Stem	
1	100	WD0100185	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
2	150	WD0100186	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
3	200	WD0100187	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
4	250	WD0100188	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
5	300	WD0100189	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
6	350	WD0100190	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
7	400	WD0100191	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
8	450	WD0100192	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
9	500	WD0100193	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
10	600	WD0100194	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
11	700	WD0100195	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
12	800	WD0100196	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
13	900	WD0100197	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
14	1000	WD0100198	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box
15	1200	WD0100199	PN25	Ductile Iron	Ductile Iron	EPDM	Stainless Steel	Gear Box

Double Flanged Butterfly Valve

Fig. 2123

Features

1. Compact structure and small size.

Ease of installation and maintenance while reducing space requirements.

2. Good sealing performance.

Achieve zero leakage, ensuring that the fluid is not leaked.

3. Wide range of industry applications.

Suitable for water plant, power plant, steel smelting, chemical industry and other industries, to meet the flow regulation and truncation requirements of various media.

4. Low pressure loss and good regulating performance.

With large adjustment range and accuracy, it can accurately control the flow rate and reduce the system energy consumption.

5. Quickly shut down and start.

It is designed so that it can complete full on or full off operation in a short time.

6. Maintenance-free.



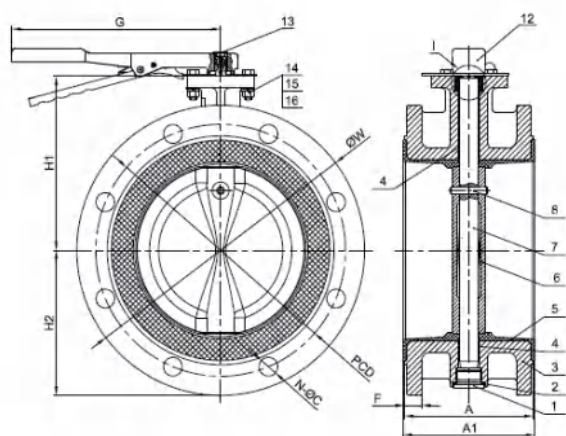
Parameter Standard

1	Design Standard	ISO 5752/BS 5155/BS EN 593
2	Connection Standard	BS EN1092-2 PN16
3	Size	DN50~DN1200
4	Medium	Ethylene Glycol ($\leq 50\%$), Normal Temperature Water
5	Working Pressure	PN16
6	Working Temperature	-10°C~80°C
7	Performance Testing	Shell: 24bar
		Seal: 17.6bar
8	Coating	Epoxy powder coating with 200 μm (Default)
9	Coating Color	Green Ral6005 / Blue Ral5015

Double Flanged Butterfly Valve

Fig. 2123

Material Specification



DN50-DN200

No.	Part	Material	Specification
1	Plug	Carbon Steel	EN-JL 1040
2	Sealing Washer	PTFE	-
3	Body	Ductile Iron	EN-GJS-450-10
4	Bushing	PAP	-
5	Rubber	EPDM	-
6	Disc	Ductile Iron	EN-GJS-450-10
7	Stem	Stainless Steel	-
8	Pin	Stainless Steel	-
9	Saling Bushing	PA66	-
10	O-Ring	EPDM	-
11	O-Ring	EPDM	-
12	Lever/Gear Box	-	-
13	Plastic Cover	ABS	-
14	Bolt	Carbon Steel	EN-JL 1040
15	Spring Washer	Spring Steel	-
16	Plain Washer	Carbon Steel	EN-JL 1040

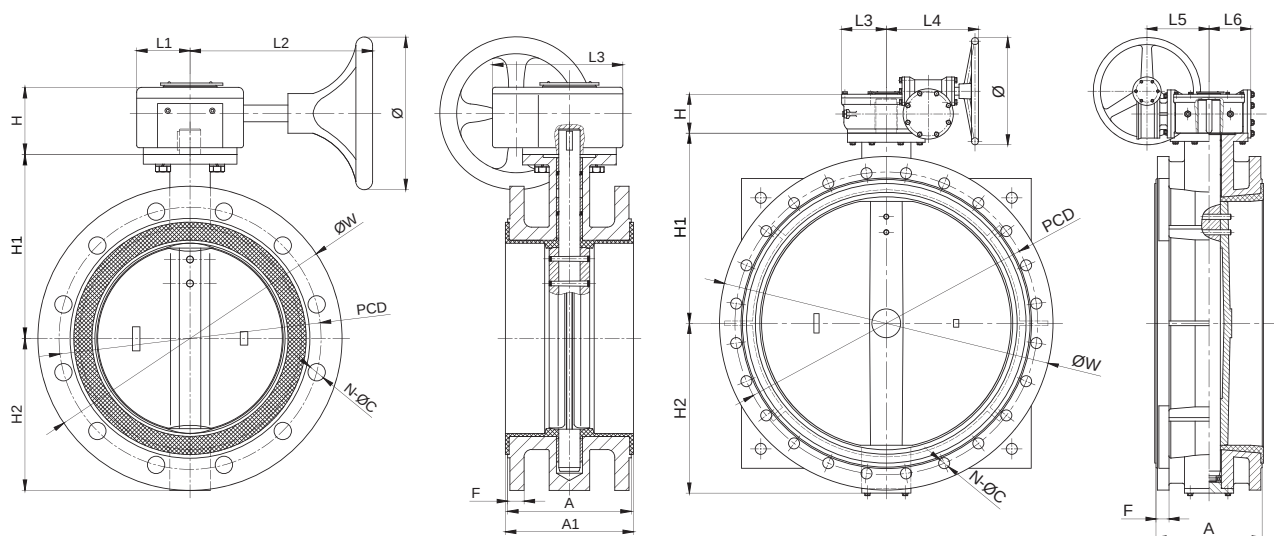
Dimensions

DN	INCH	H1, MM	H2, MM	G, MM	F, MM	A, MM	A1, MM	ØW, MM	PCD, MM	N-ØC	Weight, Kg
50	2	118	82.5	195/266	19	108	112	165	125	4-19	8.4
65	2½	126	92.5	195/266	19	112	116	185	145	4-19	9
80	3	133	100	195/266	19	114	118	200	160	8-19	10
100	4	147	110	266	19	127	131	220	180	8-19	13.8
125	5	160	125	266	19	140	144	250	210	8-19	18
150	6	180	142.5	328	19	140	144	285	240	8-23	22

Double Flanged Butterfly Valve

Fig. 2123

Dimensions



DN50-DN600

DN700-DN1200

DN	INCH	H1, MM	H2, MM	A, MM	A1, MM	F, MM	L1, MM	L2, MM	H, MM	ØW, MM	PCD, MM	N-ØC	Ø	Weight, Kg
50	2	110	80	108	112	19	52	118	70	165	125	4-19	150	12
65	2½	134	80	112	116	19	52	118	70	185	145	4-19	150	13
80	3	131	95	114	118	19	52	118	70	200	160	8-19	150	15
100	4	150	114	127	132	19	52	118	70	229	180	8-19	150	18
125	5	170	113	140	145	19	52	118	70	254	210	8-19	150	22
150	6	180	139	140	145	19	52	118	70	285	240	8-23	150	27
200	8	210	175	152	158	20	75	191	80	343	295	12-23	280	38
250	10	345.5	203	165	171	22	75	191	80	406	355	12-28	280	55
300	12	376	242	178	184	24.5	80	186	80	483	410	12-28	280	78
350	14	328	250	190	196	26.5	80	186	80	533	470	16-28	280	110
400	16	376	312	216	223	28	125	303	99	597	525	16-31	400	140
450	18	406.6	345	222	230	30	125	350	99	640	585	20-31	400	150
500	20	433	380	229	237	31.5	130	376	150	715	650	20-34	400	260
600	24	507.5	445	267	275	36	130	376	150	840	770	20-37	400	350

DN	INCH	H1, MM	H2, MM	A, MM	F, MM	L1, MM	L2, MM	L3, MM	L4, MM	H, MM	ØW, MM	PCD, MM	N-ØC	Ø	Weight, Kg
700	28	560	478	292	39.5	173	359	245	173	158	927	840	24-37	425	500
750	30	610	508	305	43	173	359	245	173	158	1025	900	24-36	425	546
800	32	620	530	318	43	173	359	245	173	158	1060	950	24-40	425	615
900	36	692	602	330	46.5	201	399	279	201	185	1168	1050	28-40	425	820
1000	40	735	656	410	50	201	399	279	201	185	1289	1170	28-43	425	1095
1100	44	813	735	450	53.5	201	399	279	201	185	1380	1270	32-43	425	1350
1200	48	917	781	470	57	185	443	311	255	216	1511	1390	32-49	425	1810

Double Flanged Butterfly Valve

Fig. 2123

Bill of Materials List

Item	Dimension	Article No.	Flange Connection	Material				Actuator
				Body	Disc	Stem	Seat	
1	DN50	WH2123050L	PN16	DI	DI	SS	EPDM	Lever
2	DN65	WH2123065L	PN16	DI	DI	SS	EPDM	Lever
3	DN80	WH2123080L	PN16	DI	DI	SS	EPDM	Lever
4	DN100	WH2123100L	PN16	DI	DI	SS	EPDM	Lever
5	DN125	WH2123125L	PN16	DI	DI	SS	EPDM	Lever
6	DN150	WH2123150L	PN16	DI	DI	SS	EPDM	Lever

Item	Dimension	Article No.	Flange Connection	Material				Actuator
				Body	Disc	Stem	Seat	
1	DN50	WH2123050G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
2	DN65	WH2123065G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
3	DN80	WH2123080G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
4	DN100	WH2123100G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
5	DN125	WH2123125G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
6	DN150	WH2123150G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
7	DN200	WH2123200G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
8	DN250	WH2123250G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
9	DN300	WH2123300G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
10	DN350	WH2123350G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
11	DN400	WH2123400G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
12	DN450	WH2123450G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
13	DN500	WH2123500G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
14	DN600	WH2123600G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
15	DN700	WH2123700G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
16	DN800	WH2123800G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
17	DN900	WH2123900G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
18	DN1000	WH21231000G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
19	DN1100	WH21231100G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box
20	DN1200	WH21231200G	PN16	Ductile Iron	Ductile Iron	Stainless Steel	EPDM	Gear Box

NRS Metal Seated Gate Valve

Fig. 3125

Features

1. Low leakage rate

The metal seat gate valve is made of hard material, which is tightly fitted by a tight device to achieve the purpose of the seal. Compared with the soft seal valve, the leakage rate of the metal sealing valve is lower, and it can withstand higher pressure and temperature.

2. Long life

Strong abrasion resistance and long life. In a harsh working environment, the life of the hard sealing valve far exceeds the soft seal valve.

3. Good abrasion resistance

The sealing surface uses a full -seal structure, which can effectively prevent the leakage and wear of the medium, thereby ensuring the life of the valve.

4. Excellent sealing performance

The sealing performance is more stable and reliable, and the sealing performance of the valve is more reliable. Compared with the soft sealing valve, the hard seal valve can withstand higher pressure and temperature, and it is not easy to leak.

5. Convenient operation

The operation of the hard sealing valve is light and simple, and can easily switch the valve if don't need too much force. At the same time, the hard sealing valve is not easy to get stuck, and it is more convenient to operate.

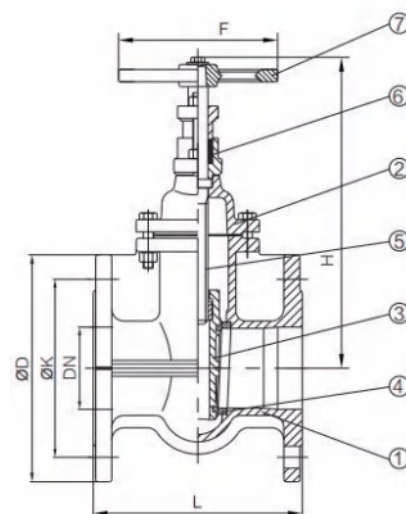


Parameter Standard

1	Design Standard	DIN3352 F4
2	Connection Standard	BS EN 1092-2 PN16
3	Size	DN40~DN300
4	Medium	Ethylene Glycol (≤50%), Normal Temperature Water
5	Working Pressure	PN16
6	Working Temperature	-10°C~80°C
7	Performance Testing	Shell: 24bar Seal: 17.6bar
8	Coating	Epoxy powder coating with 200 μm (Default)
9	Coating Color	Green Ral6005 / Blue Ral5015

Material Specification

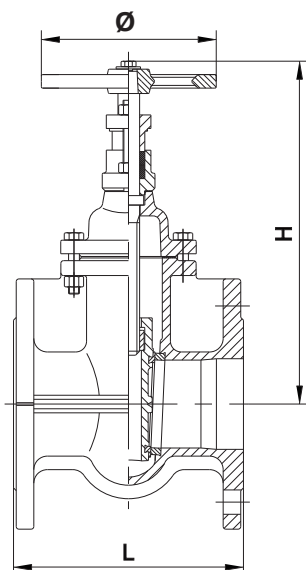
No.	Part	Material	Specification
1	Body	Ductile Iron	EN-JS 1050
2	Bonnet	Ductile Iron	EN-JS 1050
3	Disc	Ductile Iron	EN-JS 1050
4	Seat Ring	Brass	EN 12165 W603N
5	Stem	Brass	EN 12165 W603N
		Stainless Steel (Default)	BS970 420S37
6	Packing	Graphite	Non-Asbestos
7	Handwheel	Cast Iron	EN-JL 1040



NRS Metal Seated Gate Valve

Fig. 3125

Dimensions



DN	INCH	H, MM	L, MM	Ø, MM	Weight, Kg
40	1½	245	140	130	9
50	2	255	150	130	11.6
65	2½	277	170	130	13.6
80	3	303	180	150	18.5
100	4	340	190	185	25
125	5	387	200	185	34.5
150	6	454	210	195	47.5
200	8	538	230	225	73.4
250	10	629	250	245	101
300	12	730	270	285	147.2

Bill of Materials List

Item	Dimension	Article No.	Flange Connection	Material	
				Body	Stem
1	DN40	WZ0400001	PN16	Ductile Iron	Stainless Steel
2	DN50	WZ0400002	PN16	Ductile Iron	Stainless Steel
3	DN65	WZ0400003	PN16	Ductile Iron	Stainless Steel
4	DN80	WZ0400004	PN16	Ductile Iron	Stainless Steel
5	DN100	WZ0400005	PN16	Ductile Iron	Stainless Steel
6	DN125	WZ0400006	PN16	Ductile Iron	Stainless Steel
7	DN150	WZ0400007	PN16	Ductile Iron	Stainless Steel
8	DN200	WZ0400008	PN16	Ductile Iron	Stainless Steel
9	DN250	WZ0400009	PN16	Ductile Iron	Stainless Steel
10	DN300	WZ0400010	PN16	Ductile Iron	Stainless Steel

NRS Metal Seated Gate Valve

Fig. 3127

Features

1. Low leakage rate

The metal seat gate valve is made of hard material, which is tightly fitted by a tight device to achieve the purpose of the seal. Compared with the soft seal valve, the leakage rate of the metal sealing valve is lower, and it can withstand higher pressure and temperature.

2. Long life

Strong abrasion resistance and long life. In a harsh working environment, the life of the hard sealing valve far exceeds the soft seal valve.

3. Good abrasion resistance

The sealing surface uses a full -seal structure, which can effectively prevent the leakage and wear of the medium, thereby ensuring the life of the valve.

4. Excellent sealing performance

The sealing performance is more stable and reliable, and the sealing performance of the valve is more reliable. Compared with the soft sealing valve, the hard seal valve can withstand higher pressure and temperature, and it is not easy to leak.

5. Convenient operation

The operation of the hard sealing valve is light and simple, and can easily switch the valve if don't need too much force. At the same time, the hard sealing valve is not easy to get stuck, and it is more convenient to operate.

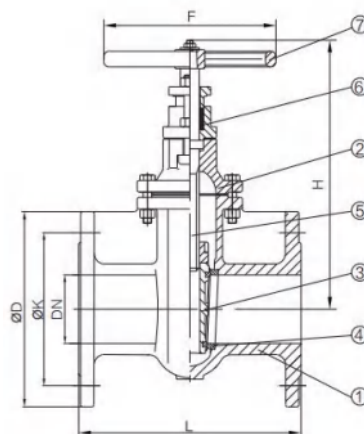


Parameter Standard

1	Design Standard	DIN3352 F4
2	Connection Standard	BS EN 1092-2 PN16
3	Size	DN40~DN400
4	Medium	Ethylene Glycol ($\leq 50\%$), Normal Temperature Water
5	Working Pressure	PN16
6	Working Temperature	-10°C~80°C
7	Performance Testing	Shell: 24bar
		Seal: 17.6bar
8	Coating	Epoxy powder coating with 200 μm (Default)
9	Coating Color	Green Ral6005 / Blue Ral5015

Material Specification

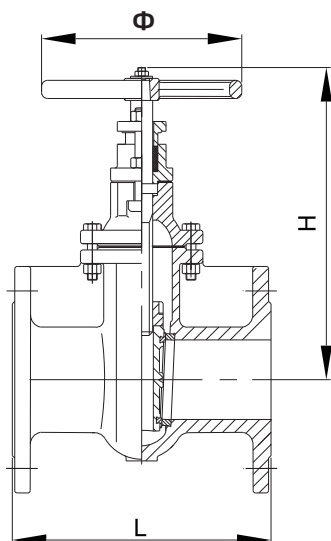
No.	Part	Material	Specification
1	Body	Ductile Iron	EN-JS 1050
2	Bonnet	Ductile Iron	EN-JS 1050
3	Disc	Ductile Iron	EN-JS 1050
4	Seat Ring	Brass	EN 12165 W603N
5	Stem	Stainless Steel	17440X20Cr13 BS970 420S37 (Default)
6	Packing	Graphite	Non-Asbestos
7	Handwheel	Cast Iron	EN-JL 1040



NRS Metal Seated Gate Valve

Fig. 3127

Dimensions



DN	INCH	H, MM	L, MM	ϕ , MM	Weight, Kg
40	1½	271	240	160	15
50	2	291	250	160	16
65	2½	321	270	160	17
80	3	360	280	160	20
100	4	378	300	200	25
125	5	451	325	250	35
150	6	489	350	250	42
200	8	573	400	250	60
250	10	708	450	320	95
300	12	764	500	320	138
350	14	870	550	400	202
400	16	940	600	400	298

Bill of Materials List

Item	Dimension	Article No.	Flange Connection	Material	
				Body	Stem
1	DN40	WZ3127040	PN16	Ductile Iron	Stainless Steel
2	DN50	WZ3127050	PN16	Ductile Iron	Stainless Steel
3	DN65	WZ3127065	PN16	Ductile Iron	Stainless Steel
4	DN80	WZ3127080	PN16	Ductile Iron	Stainless Steel
5	DN100	WZ3127100	PN16	Ductile Iron	Stainless Steel
6	DN125	WZ3127125	PN16	Ductile Iron	Stainless Steel
7	DN150	WZ3127150	PN16	Ductile Iron	Stainless Steel
8	DN200	WZ3127200	PN16	Ductile Iron	Stainless Steel
9	DN250	WZ3127250	PN16	Ductile Iron	Stainless Steel
10	DN300	WZ3127300	PN16	Ductile Iron	Stainless Steel
11	DN350	WZ3127350	PN16	Ductile Iron	Stainless Steel
12	DN400	WZ3127400	PN16	Ductile Iron	Stainless Steel

NRS Resilient Seated Gate Valve

Fig. 3269

Features

1. Excellent sealing performance

The soft seal gate valve uses soft sealing materials such as rubber, which can effectively provide excellent sealing performance. It can reduce the risk of leakage and ensure the safety and reliability of the system.

2. Lower operating torque

The soft seal gate valve uses soft sealing material and its friction coefficient is low, so it requires less torque to open and close the valve. This makes the soft seal gate valve easier and more convenient to operate manually or electrically.

3. Small fluid resistance

The internal structure of the soft seal gate valve is reasonably designed and the valve channel is unimpeded, which can reduce the resistance when fluid passes and reduce energy consumption.

4. Long service life

The soft seal gate valve is made of wear-resistant materials, which has good durability and anti-wear properties. It can maintain good working condition during long-term use and reduce the frequency of maintenance and replacement.

5. Flat bottom design

There is usually a groove at the bottom of the valve seat of a traditional gate valve. When the medium in the pipeline flows through the valve, impurities and particles contained in the medium will precipitate and accumulate in the bottom groove, making the valve unable to close tightly and causing leakage. The bottom of the seat of the soft-sealing gate valve adopts a flat-bottom design without grooves. After the medium flows through the pipeline, there will be no accumulation of impurity particles. The sealing performance of the valve is guaranteed and leakage is avoided.

6. Precision casting

The valve body of the soft-sealing gate valve is precision cast, and the dimensions are accurate. There is no need for any finishing work inside the valve body, and the sealing performance of the valve body is guaranteed.

7. Light weight

The soft-sealing gate valve uses ductile iron as the valve body material. The overall weight of the valve is 20%-30% lighter than the traditional gate valve. The lighter weight makes the soft-sealing gate valve easier to install and maintain.

8. Anti-corrosion

The interior of the soft-sealed gate valve body is coated with non-toxic epoxy resin, and the gate is completely wrapped by rubber, which can effectively prevent the interior of the valve body from being corroded by the media in the pipeline.

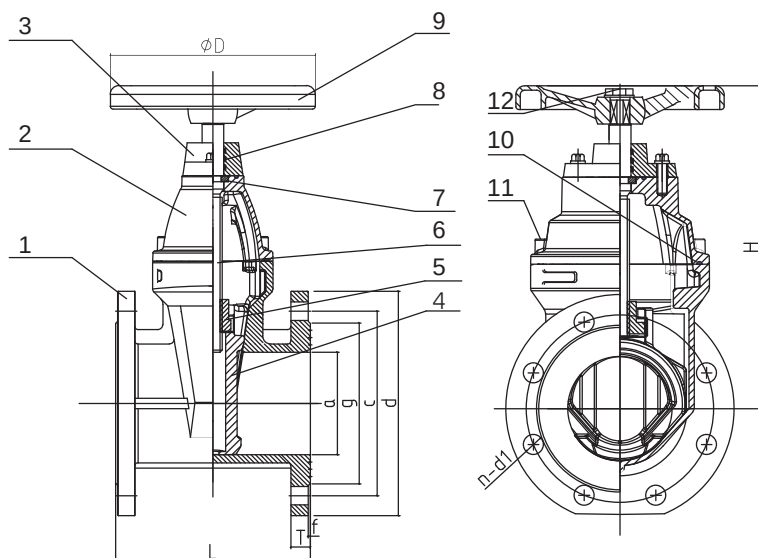


Parameter Standard

1	Design Standard	DIN 3252 F4
2	Connection Standard	BS EN 1092-2 PN16
3	Size	DN50~DN600
4	Medium	Ethylene Glycol ($\leq 50\%$), Normal temperature Water
5	Working Pressure	PN16
6	Working Temperature	-10°C~80°C
7	Performance Testing	Shell: 24bar Seal: 17.6bar
8	Coating	Epoxy powder coating with 200 μm (Default)
9	Coating Color	Green Ral6005 / Blue Ral5015

NRS Resilient Seated Gate Valve

Fig. 3269



Material Specification

No.	Part	Material	Specification
1	Body	Ductile Iron	EN-GJS-450-10
2	Cover	Ductile Iron	EN-GJS-450-10
3	Gland	Ductile Iron	EN-GJS-450-10
4	Disc	DI+EPDM	EN-GJS-450-10
5	Stem Nut	Cast Brass	DIN Cu-Zn39Pb2
6	Stem	Stainless Steel	SS
7	Fixture Block	Brass/Carbon Steel	B453 C35330/EN-JL 1040
8	O-ring	NBR	-
9	Handwheel	Ductile Iron	EN-GJS-450-10
10	Sealing Gasket	EPDM	-
11	Nut	Carbon Steel	EN-JL 1040
12	Nut	Carbon Steel	EN-JL 1040

Dimensions

DN	INCH	H, MM	L, MM	ØD, MM	a, MM	d, MM	c, MM	T, MM	f, MM	g, MM	D, MM	n-d1	Weight, Kg
50	2	227	150	160	50	165	125	18	2	99	160	4-Ø19	9
65	2½	230	170	160	65	185	145	18	2	118	160	4-Ø19	10.5
80	3	270	180	180	80	200	160	18	2	132	180	8-Ø19	13
100	4	310	190	200	100	220	180	19	2	156	200	8-Ø19	19
125	5	365	200	250	125	250	210	19	2	184	250	8-Ø19	29
150	6	406	210	250	150	285	240	20	2	211	250	8-Ø23	34.5
200	8	512	230	300	200	340	295	21	2.5	266	300	8-Ø23	58
250	10	580	250	350	250	407	355	26	3	319	350	12-Ø23	86
300	12	657	270	400	300	461	410	27	3	370	400	12-Ø23	116
350	14	783	290	500	350	515	470	26	3	430	500	16-Ø23	156
400	16	900	310	500	400	572	525	26	3	480	500	16-Ø28	213
450	18	995	330	500	450	640	585	26	3	548	500	20-Ø28	250
500	20	1078	350	600	500	715	650	30	3.5	609	600	20-Ø25	340
600	24	1242	390	600	600	840	770	34	4	720	600	20-Ø31	510

NRS Resilient Seated Gate Valve

Fig. 3269

Bill of Materials List

Item	Dimension	BOM No.	Flange Connection	Material		
				Body	Disc	Stem
1	DN50	WH3269050	PN16	Ductile Iron	DI+EPDM	Stainless Steel
2	DN65	WH3269065	PN16	Ductile Iron	DI+EPDM	Stainless Steel
3	DN80	WH3269080	PN16	Ductile Iron	DI+EPDM	Stainless Steel
4	DN100	WH3269100	PN16	Ductile Iron	DI+EPDM	Stainless Steel
5	DN125	WH3269125	PN16	Ductile Iron	DI+EPDM	Stainless Steel
6	DN150	WH3269150	PN16	Ductile Iron	DI+EPDM	Stainless Steel
7	DN200	WH3269200	PN16	Ductile Iron	DI+EPDM	Stainless Steel
8	DN250	WH3269250	PN16	Ductile Iron	DI+EPDM	Stainless Steel
9	DN300	WH3269300	PN16	Ductile Iron	DI+EPDM	Stainless Steel
10	DN350	WH3269350	PN16	Ductile Iron	DI+EPDM	Stainless Steel
11	DN400	WH3269400	PN16	Ductile Iron	DI+EPDM	Stainless Steel
12	DN450	WH3269450	PN16	Ductile Iron	DI+EPDM	Stainless Steel
13	DN500	WH3269500	PN16	Ductile Iron	DI+EPDM	Stainless Steel
14	DN600	WH3269600	PN16	Ductile Iron	DI+EPDM	Stainless Steel

NRS Resilient Seated Gate Valve

Fig. 3249

Features

1. Excellent sealing performance

The soft seal gate valve uses soft sealing materials such as rubber, which can effectively provide excellent sealing performance. It can reduce the risk of leakage and ensure the safety and reliability of the system.

2. Lower operating torque

The soft seal gate valve uses soft sealing material and its friction coefficient is low, so it requires less torque to open and close the valve. This makes the soft seal gate valve easier and more convenient to operate manually or electrically.

3. Small fluid resistance

The internal structure of the soft seal gate valve is reasonably designed and the valve channel is unimpeded, which can reduce the resistance when fluid passes and reduce energy consumption.

4. Long service life

The soft seal gate valve is made of wear-resistant materials, which has good durability and anti-wear properties. It can maintain good working condition during long-term use and reduce the frequency of maintenance and replacement.

5. Flat bottom design

There is usually a groove at the bottom of the valve seat of a traditional gate valve. When the medium in the pipeline flows through the valve, impurities and particles contained in the medium will precipitate and accumulate in the bottom groove, making the valve unable to close tightly and causing leakage. The bottom of the seat of the soft-sealing gate valve adopts a flat-bottom design without grooves. After the medium flows through the pipeline, there will be no accumulation of impurity particles. The sealing performance of the valve is guaranteed and leakage is avoided.

6. Precision casting

The valve body of the soft-sealing gate valve is precision cast, and the dimensions are accurate. There is no need for any finishing work inside the valve body, and the sealing performance of the valve body is guaranteed.

7. Light weight

The soft-sealing gate valve uses ductile iron as the valve body material. The overall weight of the valve is 20%-30% lighter than the traditional gate valve. The lighter weight makes the soft-sealing gate valve easier to install and maintain.

8. Anti-corrosion

The interior of the soft-sealed gate valve body is coated with non-toxic epoxy resin, and the gate is completely wrapped by rubber, which can effectively prevent the interior of the valve body from being corroded by the media in the pipeline.

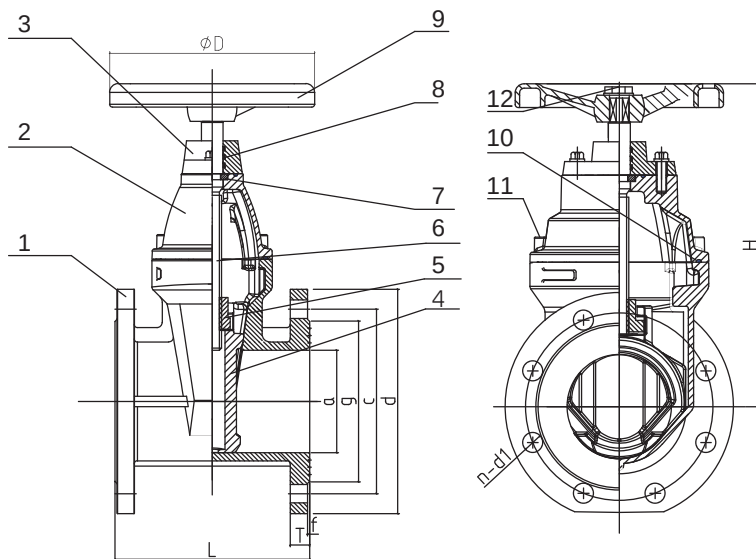


Parameter Standard

1	Design Standard	BS 5163
2	Connection Standard	BS EN 1092-2 PN16
3	Size	DN50~DN600
4	Medium	Ethylene Glycol ($\leq 50\%$), Normal temperature Water
5	Working Pressure	PN16
6	Working Temperature	-10°C~80°C
7	Performance Testing	Shell: 24bar Seal: 17.6bar
8	Coating	Epoxy powder coating with 200 μm (Default)
9	Coating Color	Green Ral6005 / Blue Ral5015

NRS Resilient Seated Gate Valve

Fig. 3249



Material Specification

No.	Part	Material	Specification
1	Body	Ductile Iron	EN-GJS-450-10
2	Cover	Ductile Iron	EN-GJS-450-10
3	Gland	Ductile Iron	EN-GJS-450-10
4	Disc	DI+EPDM	EN-GJS-450-10
5	Stem Nut	Cast Brass	DIN Cu-Zn39Pb2
6	Stem	Stainless Steel	SS
7	Fixture Block	Brass/Carbon Steel	B453 C35330/EN-JL 1040
8	O-ring	NBR	-
9	Handwheel	Ductile Iron	EN-GJS-450-10
10	Sealing Gasket	EPDM	-
11	Nut	Carbon Steel	EN-JL 1040
12	Nut	Carbon Steel	EN-JL 1040

Dimensions

DN	INCH	H, MM	L, MM	ØD, MM	a, MM	d, MM	c, MM	T, MM	f, MM	g, MM	D, MM	n-d1	Weight, Kg
50	2	227	178	160	50	165	125	18	2	99	160	4-Ø19	18
65	2½	230	190	160	65	185	145	18	2	118	160	4-Ø19	19
80	3	270	203	180	80	200	160	18	2	132	180	8-Ø19	22
100	4	310	229	200	100	220	180	19	2	156	200	8-Ø19	27
125	5	365	254	250	125	250	210	19	2	184	250	8-Ø19	40
150	6	406	267	250	150	285	240	20	2	211	250	8-Ø23	47
200	8	512	292	300	200	340	295	21	2.5	266	300	8-Ø23	72
250	10	580	330	350	250	407	355	26	3	319	350	12-Ø23	111
300	12	657	356	400	300	461	410	27	3	370	400	12-Ø28	167
350	14	783	381	500	350	515	470	26	3	430	500	16-Ø28	232
400	16	900	406	500	400	572	525	26	3	480	500	16-Ø31	308
450	18	995	432	500	450	640	585	26	3	548	500	20-Ø31	446
500	20	1078	457	600	500	715	650	30	3.5	609	600	20-Ø34	636
600	24	1242	512	600	600	840	770	34	4	720	600	20-Ø37	748

NRS Resilient Seated Gate Valve

Fig. 3249

Bill of Materials List

Item	Dimension	Article No.	Flange Connection	Material		
				Body	Disc	Stem
1	DN50	WZ0600593	PN16	Ductile Iron	DI+EPDM	Stainless Steel
2	DN65	WZ0600594	PN16	Ductile Iron	DI+EPDM	Stainless Steel
3	DN80	WZ0600595	PN16	Ductile Iron	DI+EPDM	Stainless Steel
4	DN100	WZ0600596	PN16	Ductile Iron	DI+EPDM	Stainless Steel
5	DN125	WZ0600597	PN16	Ductile Iron	DI+EPDM	Stainless Steel
6	DN150	WZ0600598	PN16	Ductile Iron	DI+EPDM	Stainless Steel
7	DN200	WZ0600599	PN16	Ductile Iron	DI+EPDM	Stainless Steel
8	DN250	WZ0600600	PN16	Ductile Iron	DI+EPDM	Stainless Steel
9	DN300	WZ0600601	PN16	Ductile Iron	DI+EPDM	Stainless Steel
10	DN350	WZ0600602	PN16	Ductile Iron	DI+EPDM	Stainless Steel
11	DN400	WZ0600603	PN16	Ductile Iron	DI+EPDM	Stainless Steel
12	DN450	WZ0600604	PN16	Ductile Iron	DI+EPDM	Stainless Steel
13	DN500	WZ0600605	PN16	Ductile Iron	DI+EPDM	Stainless Steel
14	DN600	WZ0600606	PN16	Ductile Iron	DI+EPDM	Stainless Steel

OSY Resilient Seated Gate Valve

Fig. 3239

Features

1. Excellent sealing performance

The soft seal gate valve uses soft sealing materials such as rubber, which can effectively provide excellent sealing performance. It can reduce the risk of leakage and ensure the safety and reliability of the system.

2. Lower operating torque

The soft seal gate valve uses soft sealing material and its friction coefficient is low, so it requires less torque to open and close the valve. This makes the soft seal gate valve easier and more convenient to operate manually or electrically.

3. Small fluid resistance

The internal structure of the soft seal gate valve is reasonably designed and the valve channel is unimpeded, which can reduce the resistance when fluid passes and reduce energy consumption.

4. Long service life

The soft seal gate valve is made of wear-resistant materials, which has good durability and anti-wear properties. It can maintain good working condition during long-term use and reduce the frequency of maintenance and replacement.

5. Flat bottom design

There is usually a groove at the bottom of the valve seat of a traditional gate valve. When the medium in the pipeline flows through the valve, impurities and particles contained in the medium will precipitate and accumulate in the bottom groove, making the valve unable to close tightly and causing leakage. The bottom of the seat of the soft-sealing gate valve adopts a flat-bottom design without grooves. After the medium flows through the pipeline, there will be no accumulation of impurity particles. The sealing performance of the valve is guaranteed and leakage is avoided.

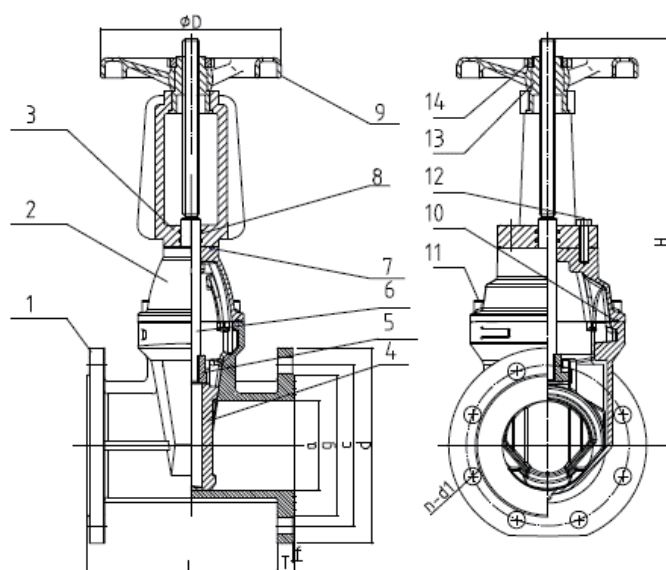


Parameter Standard

1	Design Standard	BS 5163
2	Size	DN50~DN400
3	Medium	Ethylene Glycol ($\leq 50\%$), Normal temperature Water
4	Working Pressure	PN16
5	Working Temperature	-10°C~80°C
6	Performance Testing	Shell: 24bar
		Seal: 17.6bar
7	Coating	Epoxy powder coating with 200 μm (Default)
8	Coating Color	Green Ral6005 / Blue Ral5015

OSY Resilient Seated Gate Valve

Fig. 3239



Material Specification

No.	Part	Material	Specification
1	Body	Ductile Iron	EN-GJS-450-10
2	Cover	Ductile Iron	EN-GJS-450-10
3	Gland	Ductile Iron	EN-GJS-450-10
4	Disc	DI+EPDM	EN-GJS-450-10
5	Stem Nut	DI	EN-GJS-450-10
6	Stem	Stainless Steel	-
7	Gasket	NBR	-
8	O-ring	NBR	-
9	Handwheel	Ductile Iron	EN-GJS-450-10
10	Gasket	EPDM	-
11	Bolt	Carbon Steel	N-JL 1040
12	Bolt	Carbon Steel	EN-JL 1040
13	Stem Nut	Brass	-
14	Nut	Carbon Steel	EN-JL 1040

Dimensions

DN	INCH	H, MM	L, MM	ØD, MM	a, MM	d, MM	c, MM	T, MM	f, MM	g, MM	D, MM	n-d1	Weight, Kg
50	2	303	178	160	50	165	125	18	2	99	160	4-Ø19	18
65	2½	318	190	160	65	185	145	18	2	118	160	4-Ø19	19
80	3	375	203	180	80	200	160	18	2	132	180	8-Ø19	22
100	4	426	229	200	100	220	180	19	2	156	200	8-Ø19	27
125	5	547	254	250	125	250	210	19	2	184	250	8-Ø19	40
150	6	563	267	250	150	285	240	20	2	211	250	8-Ø23	47
200	8	735	292	300	200	340	295	21	2.5	266	300	8-Ø23	72
250	10	888	330	350	250	407	355	26	3	319	350	12-Ø23	111
300	12	937	356	400	300	461	410	27	3	370	400	12-Ø28	167
350	14	1155	381	500	350	515	470	26	3	430	500	16-Ø28	232
400	16	1310	406	500	400	572	525	26	3	480	500	16-Ø31	308

OSY Resilient Seated Gate Valve

Fig. 3239

Bill of Materials List

Item	Dimension	Article No.	Flange Connection	Material		
				Body	Disc	Stem
1	DN50	WH3239050	PN16	Ductile Iron	DI+EPDM	Stainless Steel
2	DN65	WH3239065	PN16	Ductile Iron	DI+EPDM	Stainless Steel
3	DN80	WH3239080	PN16	Ductile Iron	DI+EPDM	Stainless Steel
4	DN100	WH3239100	PN16	Ductile Iron	DI+EPDM	Stainless Steel
5	DN125	WH3239125	PN16	Ductile Iron	DI+EPDM	Stainless Steel
6	DN150	WH3239150	PN16	Ductile Iron	DI+EPDM	Stainless Steel
7	DN200	WH3239200	PN16	Ductile Iron	DI+EPDM	Stainless Steel
8	DN250	WH3239250	PN16	Ductile Iron	DI+EPDM	Stainless Steel
9	DN300	WH3239300	PN16	Ductile Iron	DI+EPDM	Stainless Steel
10	DN350	WH3239350	PN16	Ductile Iron	DI+EPDM	Stainless Steel
11	DN400	WH3239400	PN16	Ductile Iron	DI+EPDM	Stainless Steel

Flanged Orifice Air Valve

Fig. 9101

Features

1. Reliable sealing, special sealing design.
2. Automatic exhaust and automatic replenishment, no need to operate.
3. It has three functions:
 - (1) discharge a large amount of air in the pipeline.
 - (2) Small amount of exhaust gas in system operation.
 - (3) High speed into the outside air
4. There will be no pressure water scouring the float, causing the float to be closed by mistake.

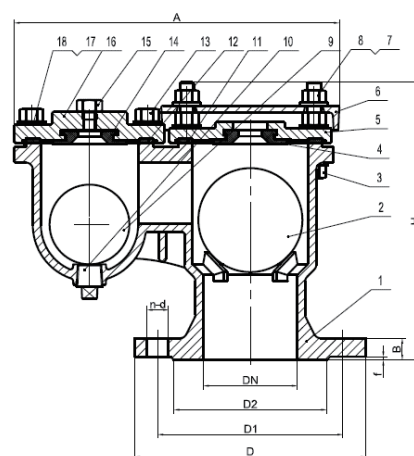


Parameter Standard

1	Design Standard	BS 21
2	Size	DN40~DN250
3	Medium	Normal Temperature Water, Ethylene Glycol ($\leq 50\%$)
4	Working Pressure	PN16
5	Working Temperature	-10°C~80°C
6	Performance Testing	Shell: 24bar Seal: 17.6bar
7	Coating	Epoxy powder coating with 200 μm (Default)
8	Coating Color	Green Ral6005 / Blue Ral 5015

Material Specification

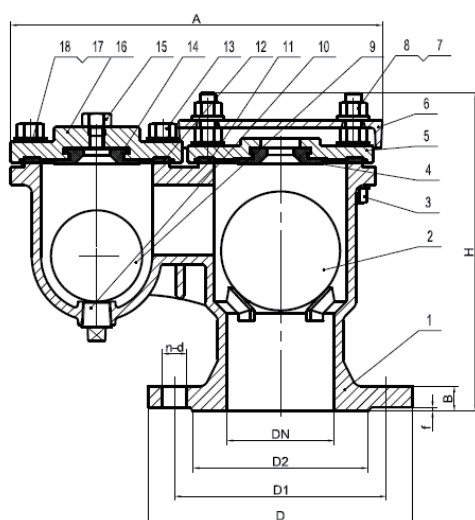
No.	Part	Material	Specification
1	Body	Ductile Iron	BS2789 Gr500-7
2	Float Ball	ABS	-
3	Bolt	Steel	BS970 43A
4	Ball Seat Large Orifice	EPDM	-
5	Large Orifice Cover	Ductile Iron	BS2789 Gr500-7
6	Dust Cap	Ductile Iron	BS2789 Gr500-7
7	Nut	Steel	BS970 43A
8	Washer	Steel	BS970 43A
9	Screw Plug	ABS	-
10	Float Ball	Brass	-
11	Ball Seat Large Orifice	EPDM	-
12	Gasket	EPDM	-
13	Bolt	Steel	BS970 43A
14	Sealed Orifice	EPDM	-
15	Screw Plug	Brass	-
16	Small Orifice Cover	Ductile Iron	BS2789 Gr500-7
17	Nut	Steel	BS970 43A
18	Washer	Steel	BS970 43A



Flanged Orifice Air Valve

Fig. 9101

Dimensions



DN	INCH	A, MM	H, MM	B, MM	D, MM	D1, MM	D2, MM	n-d	f	Weight, Kg
40	1½	244	187	19	150	110	84	4-19	3	8.7
50	2	273	214	19	165	125	99	4-19	3	13
65	2½	273	214	19	185	145	118	4-19	3	13.7
80	3	283	244	19	200	160	132	8-19	3	16.2
100	4	302	270	19	220	180	156	8-19	3	20
125	5	353	323	19	250	210	184	8-19	3	32
150	6	353	323	19	285	240	211	8-23	3	32.7
200	8	433	401	20	340	295	266	12-23	3	53.5
250	10	491	450	22	405	355	319	12-28	3	77

Bill of Materials List

Item	Dimension	Article No.	Flange Connection	Material		
				Body	Float Ball	Gasket
1	DN40	WH9101040	PN16	Ductile Iron	ABS	EPDM
2	DN50	WH9101050	PN16	Ductile Iron	ABS	EPDM
3	DN65	WH9101065	PN16	Ductile Iron	ABS	EPDM
4	DN80	WH9101080	PN16	Ductile Iron	ABS	EPDM
5	DN100	WH9101100	PN16	Ductile Iron	ABS	EPDM
6	DN125	WH9101125	PN16	Ductile Iron	ABS	EPDM
7	DN150	WH9101150	PN16	Ductile Iron	ABS	EPDM
8	DN200	WH9101200	PN16	Ductile Iron	ABS	EPDM
9	DN250	WH9101250	PN16	Ductile Iron	ABS	EPDM

Flanged Ball Check Valve

Fig. 5109

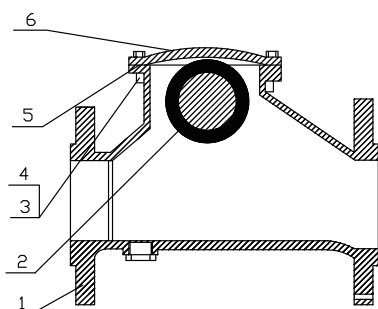
Features

1. Epoxy power coating process is adopted to extend the service life.
2. Switch life up to one million times.
3. Short ball closing stroke.
4. Full flow area design, small head loss, will not cause debris accumulation.



Parameter Standard

1	Design Standard	EN1074.3
2	Test Standard	EN12266
3	Connection Standard	EN 1092-2 PN16
4	Size	DN40~DN300
5	Medium	Normal Temperature Water, Ethylene Glycol (≤50%)
6	Working Pressure	PN16
7	Working Temperature	-10°C~80°C
8	Performance Testing	Shell: 24bar; Seal: 17.6bar
9	Coating	Epoxy powder coating with 200 μm (Default)
10	Coating Color	Green Ral6005 / Blue Ral 5015



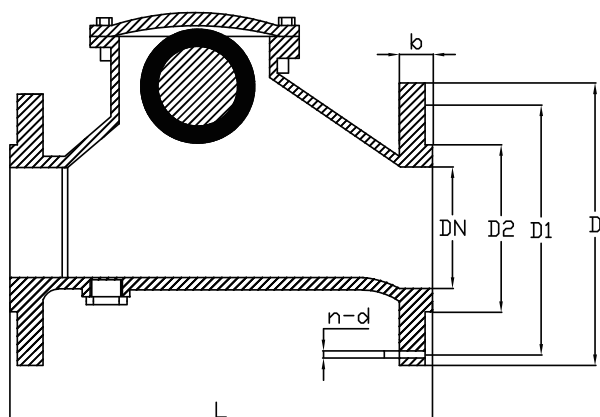
Material Specification

No.	Part	Material	Specification
1	Body	Ductile Iron	GGG40
2	Ball	WCB+EPDM	-
3	Bolt	Steel	C45E/1045
4	Nut	Steel	C45E/1045
5	Bonnet Gasket	NBR	-
6	Bonnet	Ductile Iron	GGG40

Flanged Ball Check Valve

Fig. 5109

Dimensions



DN, MM	DN, INCH	L, MM	D, MM	D1, MM	D2, MM	b, MM	n-Ø d	Keight, Kg
40	1½	180	150	110	84	19	4-Ø 19	9
50	2	200	165	125	102	19	4-Ø 19	10.8
65	2½	240	185	145	122	19	4-Ø 19	12.5
80	3	260	200	160	138	19	8-Ø 19	16.8
100	4	300	220	180	158	19	8-Ø 19	20.5
125	5	350	250	210	188	19	8-Ø 19	33
150	6	400	285	240	212	19	8-Ø 23	42
200	8	500	340	295	268	24	12-Ø 23	49
250	10	600	405	355	320	24	12-Ø 27	87
300	12	700	460	410	378	26	12-Ø 27	120

Bill of Materials List

Item	Dimension	Artical No.	Flange Connection	Material		
				Body	Ball	Gasket
1	DN40	CH5109040	PN16	DI	WCB+EPDM	NBR
2	DN50	CH5109050	PN16	DI	WCB+EPDM	NBR
3	DN65	CH5109065	PN16	DI	WCB+EPDM	NBR
4	DN80	CH5109080	PN16	DI	WCB+EPDM	NBR
5	DN100	CH5109100	PN16	DI	WCB+EPDM	NBR
6	DN125	CH5109125	PN16	DI	WCB+EPDM	NBR
7	DN150	CH5109150	PN16	DI	WCB+EPDM	NBR
8	DN200	CH5109200	PN16	DI	WCB+EPDM	NBR
9	DN250	CH5109250	PN16	DI	WCB+EPDM	NBR
10	DN300	CH5109300	PN16	DI	WCB+EPDM	NBR



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