



PHD
Limited

Valve
Catalogue

2023

PHD LIMITED

Welcome to PHD Limited, specialising in all variations of valves and fittings.
Please give our team a call to discuss your needs.

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Wafer Butterfly Valve (WRAS)

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Fully Lugged



Semi Lugged



Material List		
No.	Part Name	Material
1	Valve Body	EN-GJS-450-10
2	Seat	EPDM
3	Disc	SS316
4	Stem	SS420
5	O-Ring	NBR
6	Lever	Carbon Steel

Specification

Quarter-turn rotational motion valve which can be used to stop, regulate and start flow.

90° rotation of the handle provides a complete closure or opening of the valve.

Performance Rating

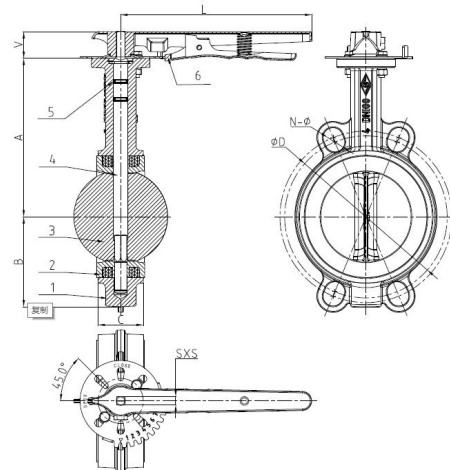
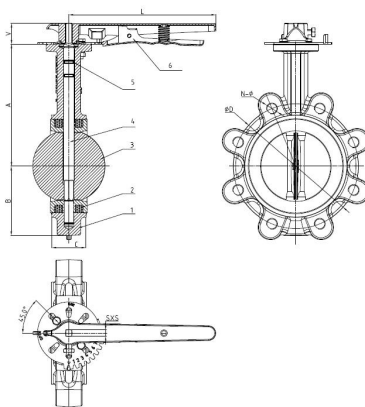
Maximum Working Pressure: 16 bar

Working Temperature Range: 0°C - 85°C (EPDM: -10°C - 120°C)

Size	Torque N/M	
	PN10	PN16
DN50	10	14
DN65	12	18
DN80	17	21
DN100	30	32
DN125	35	45
DN150	61	61
DN200	112	112

Scope of Application

- HVAC Pipelines
- HVAC Plantrooms
- Chamber Installation
- Installation in Plants
- Pipelines
- Water Treatment Plants
- Pumping Stations
- Tanks
- Seawater Applications
- Power Plants (Cooling Water Pipelines)
- Industry



Size	Semi-Lugged		Fully Lugged	
	Nickel Disc	SS Disc	Nickel Disc	SS Disc
50mm	BVSN050	BVSS050	BVFN050	BVFS050
65mm	BVSN065	BVSS065	BVFN065	BVFS065
80mm	BVSN080	BVSS080	BVFN080	BVFS080
100mm	BVSN100	BVSS100	BVFN100	BVFS100
125mm	BVSN125	BVSS125	BVFN125	BVFS125
150mm	BVSN150	BVSS150	BVFN150	BVFS150
200mm	BVSN200	BVSS200	BVFN200	BVFS200



Product Standards	
Design	BS EN593
Connection	EN1092-2

Wafer Butterfly Valve

Fully Lugged



Semi Lugged



Material List		
No.	Part Name	Material
1	Valve Body	EN-GJS-450-10
2	Seat	EPDM
3	Disc	SS316
4	Stem	SS420
5	O-Ring	NBR
6	Lever	Carbon Steel

Specification

Quarter-turn rotational motion valve which can be used to stop, regulate and start flow.

90° rotation of the handle provides a complete closure or opening of the valve.

Performance Rating

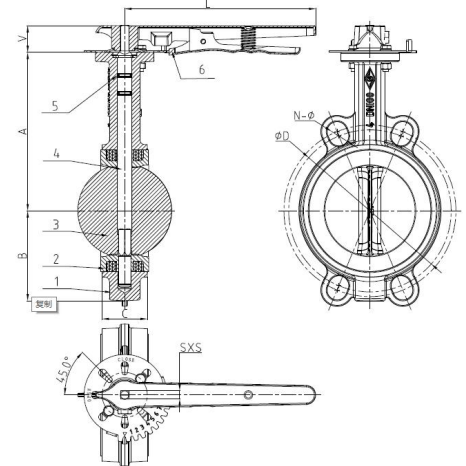
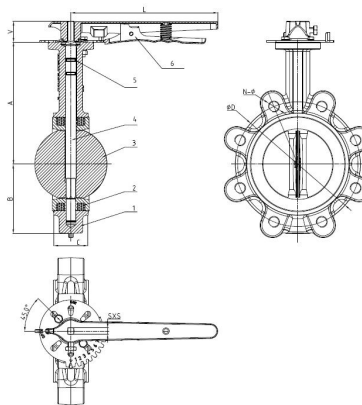
Maximum Working Pressure: 16 bar

Working Temperature Range: 0°C - 85°C (EPDM: -10°C - 120°C)

Size	Torque N/M	
	PN10	PN16
DN50	10	14
DN65	12	18
DN80	17	21
DN100	30	32
DN125	35	45
DN150	61	61
DN200	112	112

Scope of Application

- HVAC Pipelines
- HVAC Plantrooms
- Chamber Installation
- Installation in Plants
- Pipelines
- Water Treatment Plants
- Pumping Stations
- Tanks
- Seawater Applications
- Power Plants (Cooling Water Pipelines)
- Industry



Size	Semi-Lugged		Fully Lugged	
	Nickel Disc	SS Disc	Nickel Disc	SS Disc
50mm	BVSN050	BVSS050	BVFN050	BVFS050
65mm	BVSN065	BVSS065	BVFN065	BVFS065
80mm	BVSN080	BVSS080	BVFN080	BVFS080
100mm	BVSN100	BVSS100	BVFN100	BVFS100
125mm	BVSN125	BVSS125	BVFN125	BVFS125
150mm	BVSN150	BVSS150	BVFN150	BVFS150
200mm	BVSN200	BVSS200	BVFN200	BVFS200

Product Standards	
Design	BS EN593
Connection	EN1092-2

Gear Operated Wafer Butterfly Valve



Specification

The Gear Operated Lugged Wafer Butterfly Valve is simple, with compact and 90° slewing crane structure, it's mainly used for low pressure pipeline.

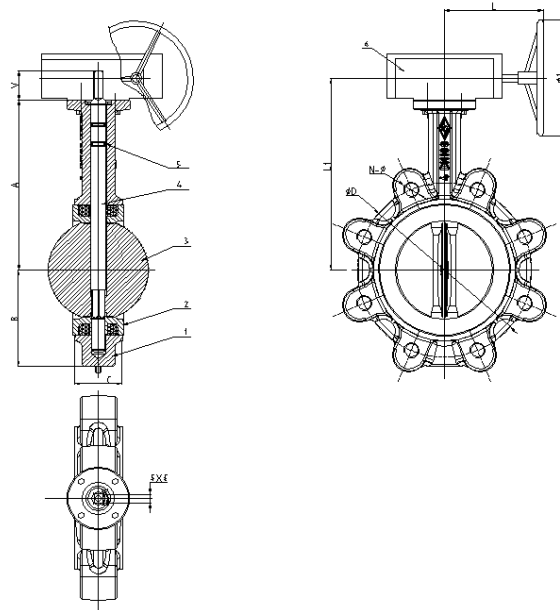
Performance Rating

Maximum Working Pressure: PN16, PN10

Working Temperature Range: 0°C - 85°C (EPDM: -10°C - +120°C)

Material List		
No.	Part Name	Material
1	Body	EN-GJS-450-10
2	Seat	EPDM
3	Disc	SS316
4	Stem	SS420
5	O-Ring	NBR
6	Gear	EN-GJS-450-10

Available Sizes	
Size	Code
50mm	GOWBV050
65mm	GOWBV065
80mm	GOWBV080
100mm	GOWBV100
125mm	GOWBV125
150mm	GOWBV150
200mm	GOWBV200



Product Standards	
Design	BS EN 593
Connection	EN1092-2
Flange	ISO 5211



Specification

Resilient-seated gate valve with bolted cover connection made of premium materials and with special coating designed as both clockwise (default) and anti-clockwise directions (optional).

Performance Rating

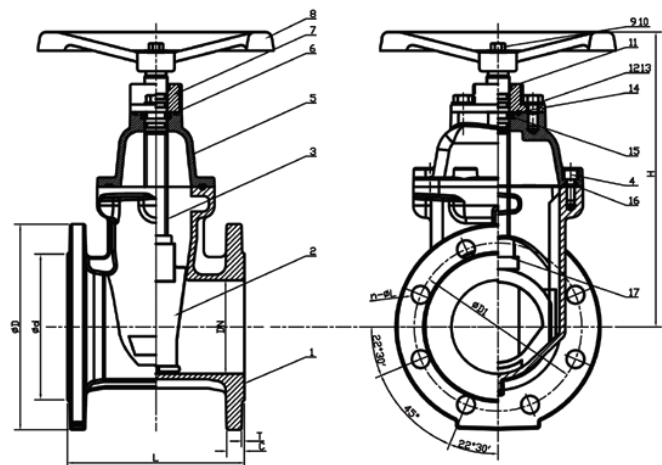
Maximum Working Pressure: 16 bar

Working Temperature Range: 0°C - 85°C (Epoxy),
-10°C - 120°C (Painted)

Scope of Application:

- HVAC Pipework
- HVAC Plantrooms
- Pipelines
- Water Treatment Plants
- Pumping Stations
- Tanks
- Seawater Applications
- Power Plants (Cooling Water Pipelines)
- Industry

Material List		
No.	Part Name	Material
1	Valve Body	EN-GJS-450-10
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM
3	Stem	SS420
4	Bolt	Carbon Steel ZP
5	Bonnet	EN-GJS-450-10
6	O-Ring	NBR
7	Gland	EN-GJS-450-10
8	Handwheel	EN-GJS-450-10
9	Bolt	Carbon Steel ZP
10	Flat Washer	Carbon Steel ZP
11	Ring Wiper	EPDM
12	Bolt	Carbon Steel ZP
13	Flat Washer	Carbon Steel ZP
14	O-Ring	NBR
15	Thrust Washer	Brass HPB59-1
16	Bonnet Gasket	EDPM
17	Wedge Nut	Brass HPB59-1



Available Sizes	
DN	Code
50	GV050
65	GV065
80	GV080
100	GV100
125	GV125
150	GV150
200	GV200

Product Standards	
Design	BS5163-1, BS5163-2, EN558-1 series 3
Connection	EN1092-2
Face to Face	EN558
Testing	EN12266-1



Check Valves - Swing Check



Specification

Our swing check valve is ideal for all basic commercial/ industrial general backflow prevention applications. Durable ductile iron construction resists pipeline stresses and distortion.

Performance Rating

Maximum Working Pressure: 16 bar

Working Temperature Range: 0-85°C (Epoxy, WRAS)

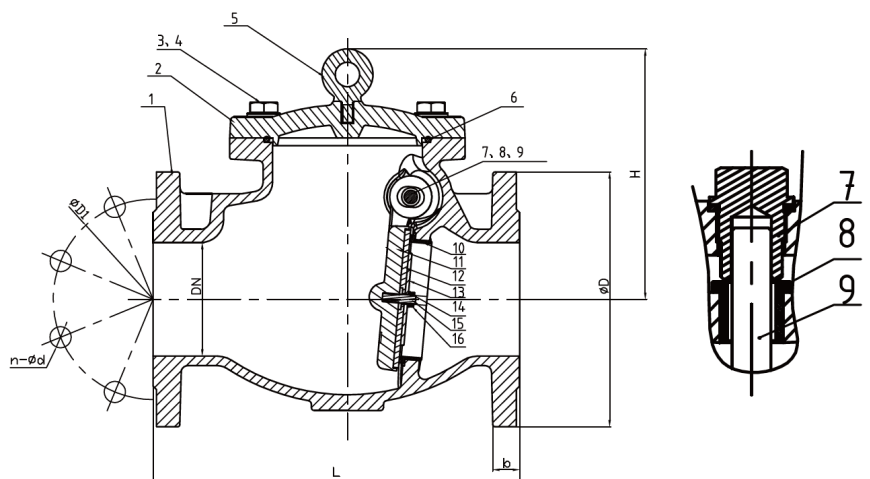
-10 - 120°C (Painted)

Scope of Application

- Chamber Installation
- Pipelines
- Water Treatment Plants
- Pumping Stations
- Tanks
- Seawater Applications
- Power Plants
- Industry

Available Sizes	
DN	Code
50	SCV050
65	SCV065
80	SCV080
100	SCV100
125	SCV125
150	SCV150
200	SCV200

Material List		
No.	Part Name	Material
1	Body	EN-GJS-450-10
2	Bonnet	EN-GJS-450-10
3	Bolts	Carbon Steel ZP
4	Washer	Carbon Steel ZP
5	Eye Bolt	Carbon Steel ZP
6	O Ring	NBR
7	Plug	Stainless 304
8	Hinge Bushing	CW617N Brass
9	Hinge Pin	Stainless 420
10	Seat	C83600 Bronze
11	Disc	EN-GJS-450-10
12	Disc Seating Ring	EPDM
13	Retainer Washer	Stainless 420 (DN50-DN100) EN-GJS-450-10 (DN125-DN300)
14	Washer	Stainless 304
15	Stud	Stainless 304
16	Nut	Stainless 304



Product Standards	
Design	EN16767
Connection	BS EN1092-2



Double Door Wafer Check Valve



Material List		
No.	Part Name	Material
1	Valve Body	EN-GJS-450-10
2	Disc	EN-GJS-450-10
3	Stem	SS420
4	Spring	SS304
5	Rubber Seat	EPDM

Specification

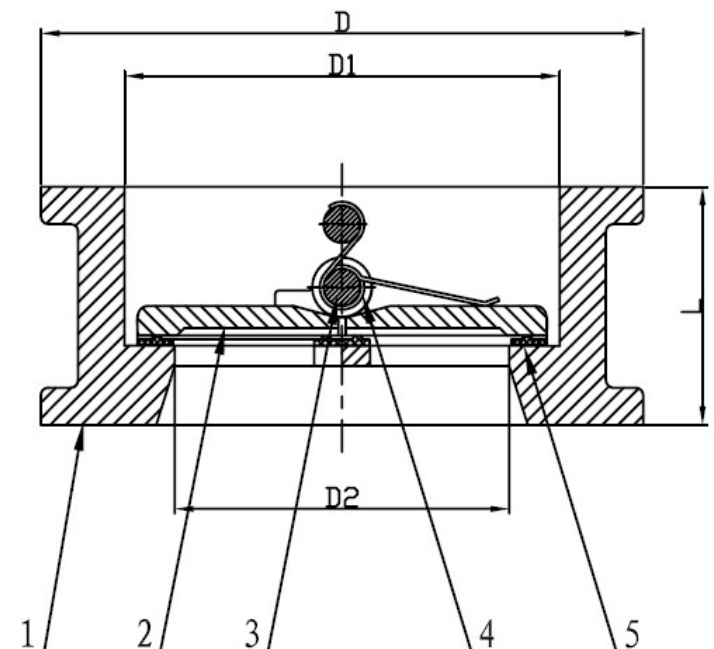
The butterfly check valve is a one-way check valve. When the medium is flowing forward, the valve flap is opened under the pressure of the fluid; when the medium flows in the opposite direction, the valve flap is closed under the spring force and the reverse fluid pressure. Cut the channel to prevent backflow.

Performance Rating

Working Pressure: PN10, PN16, PN25

Working Temperature Range: 0-85°C (Epoxy),
-10 - 120°C (Painted)

Available Sizes	
DN	Code
50	DDW050
65	DDW065
80	DDW080
100	DDW100
125	DDW125
150	DDW150
200	DDW200



Specification

The strainer mainly removes impurities in the medium through the filter to prevent particulate impurities from entering the passage and causing wall plugs to protect the fittings on the equipment pipeline from wear and blockage.

Performance Rating

Maximum Working Pressure: 16 bar

Working Temperature Range: 0°C - 85°C (Epoxy, WRAS),
-10 - 120°C (Painted)



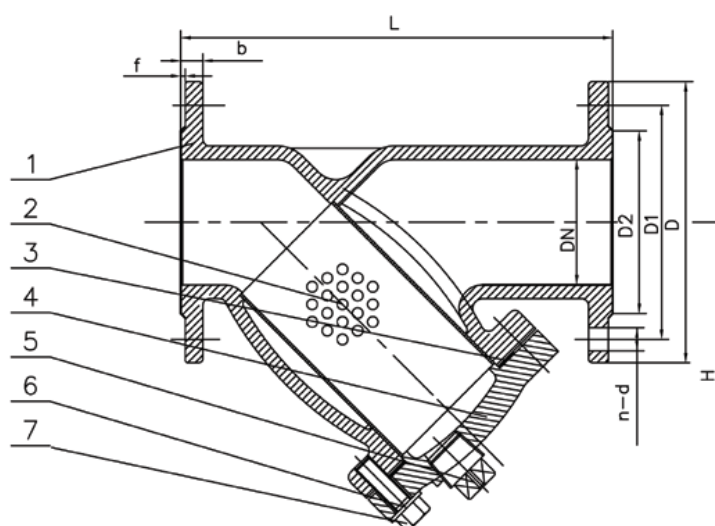
Scope of Application

- Hot & cold water plants
- Steam plants
- Industrial technologies
- Heating
- Refrigerating

Material List		
No.	Part Name	Material
1	Valve Body	EN-GJS-450-10
2	Screen	SS304 (Perforated)
3	Gasket	EPDM
4	Bonnet	EN-GJS-450-10
5	Plug	Mall Iron Galv
6	Bolt	Carbon Steel ZP
7	Flat Washer	Carbon Steel ZP

Available Sizes	
DN	Code
50	YTS050
65	YTS065
80	YTS080
100	YTS100
125	YTS125
150	YTS150

Product Standards	
Design	EN558-1
Connection	EN1092-2



Flanged Metal Seated Globe Valve



Specification

The British standard flanged metal seated globe valve is mainly used in oil and gas, water, HVAC, marine, thermal and other systems, working temperature is from -10 °C to 150 °C.

Performance Rating

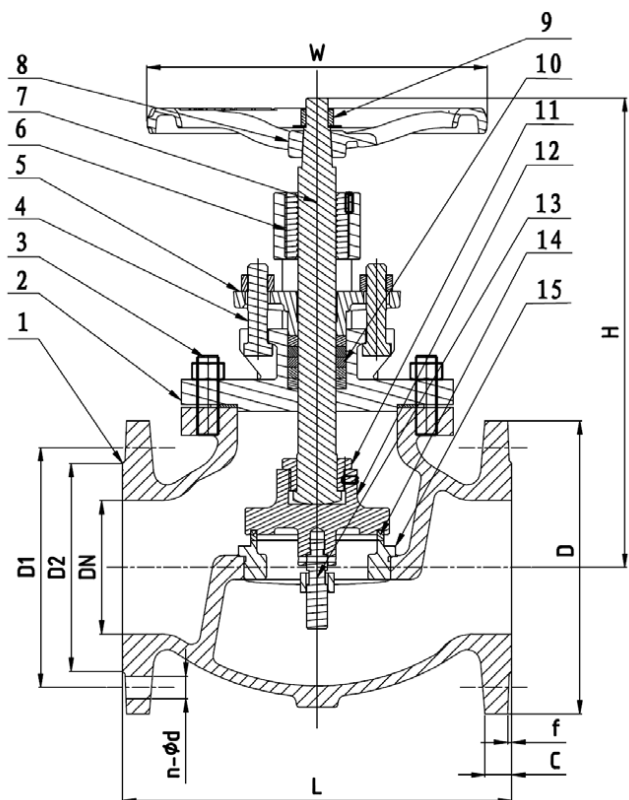
Maximum Working Pressure: PN10/16

Working Temperature Range: -10 °C to 150 °C (Painted)

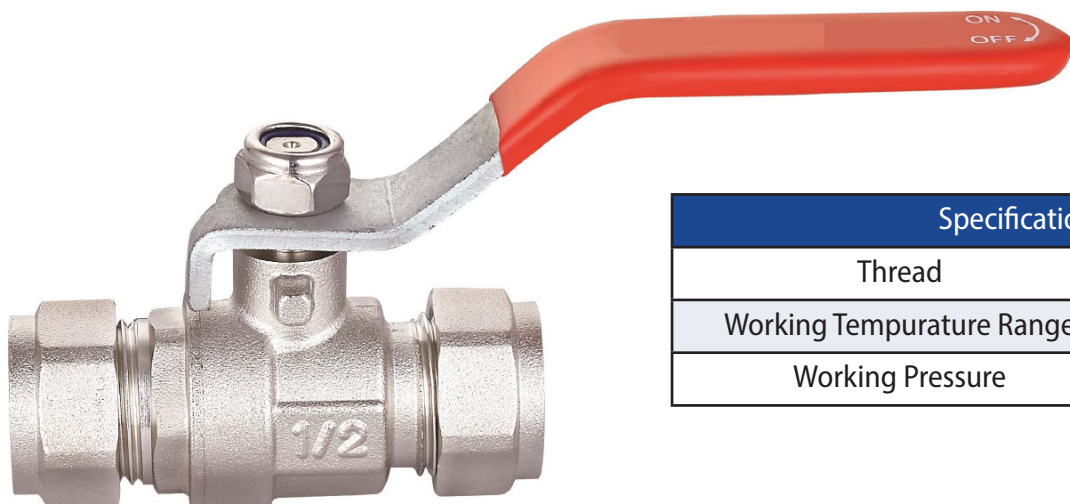
Material List		
No.	Part Name	Material
1	Valve body	EN-GJS-450-10
2	Bonnet	EN-GJS-450-10
3	Stud	Carbon Steel ZP
4	Square head bolt	Carbon Steel ZP
5	Gland follower	EN-GJS-450-10
6	Stem nut	Brass HPb59-1
7	Stem	Stainless Steel
8	Hand wheel	EN-GJS-450-10
9	Nut	Carbon Steel ZP
10	Stem packing	Graphite
11	Disc cover	EN-GJS-450-10
12	Disc	EN-GJS-450-10
13	Guide post	Stainless Steel
14	Disc seal ring	SS304
15	Seat ring	SS304

Product Standards	
Ductile Iron Flange	BS EN1092-2
Cast Iron Flange	BS EN1092-2

Size	Product Code
2"	SGV050
2 1/2"	SGV065
3"	SGV080
4"	SGV100
5"	SGV125
6"	SGV150
8"	SGV200
10"	SGV250
12"	SGV300

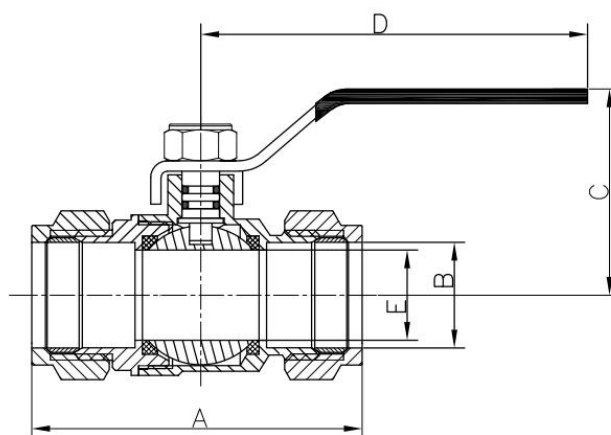


Brass Ball Valve PHD1031



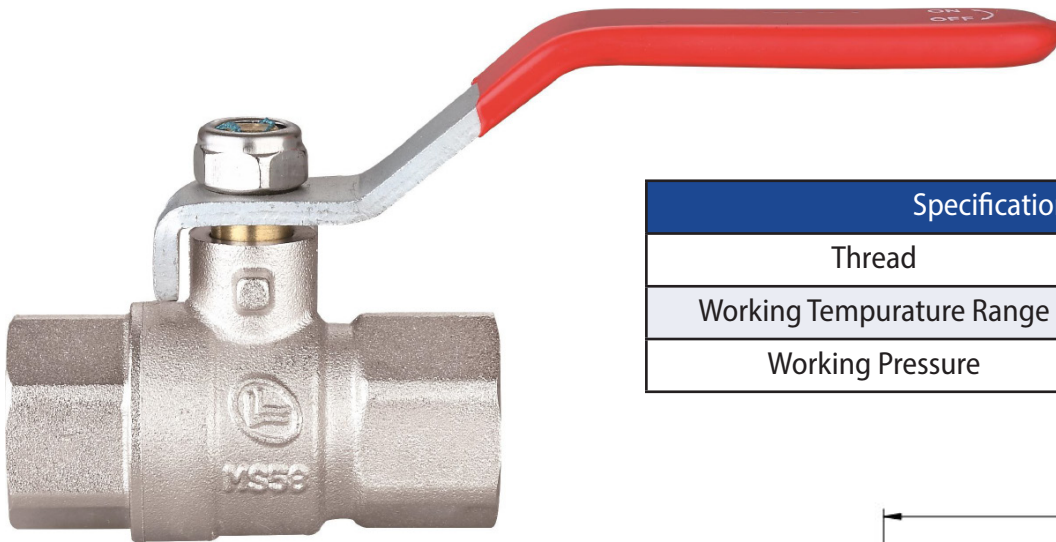
Specifications	
Thread	ISO 228
Working Temperature Range	-10°C to 120°C
Working Pressure	25 Bar

Material List		
No.	Part Name	Material
1	Body	Brass
2	Bonnet	Brass
3	Ball	Brass/Stainless Steel
4	Seal	PTFE
5	Stem	Brass
6	O-Ring	EPDM
7	Handle	Steel
8	Nut	Stainless Steel



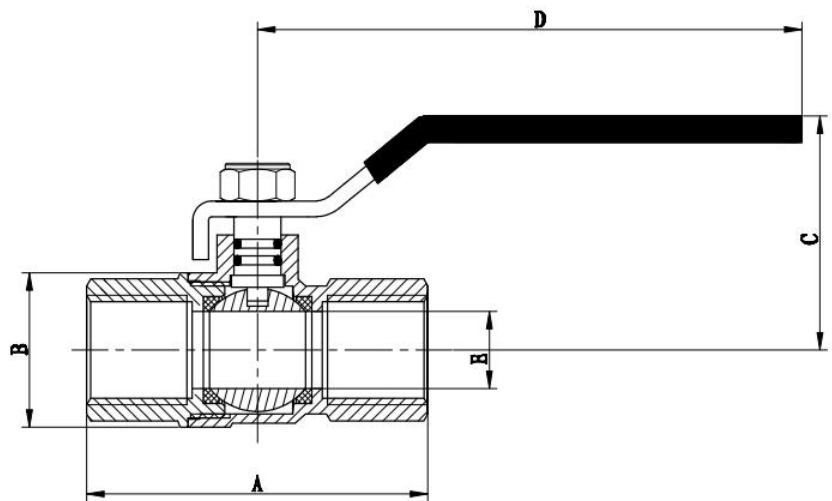
Size (mm)	A	B	C	D	E	Approx. KG/Pc
15mm	64	15	51	95	13.5	0.21
22mm	68	22	55	95	17	0.29
28mm	83	28	59	126	24	0.5

Brass Ball Valve PHD1063



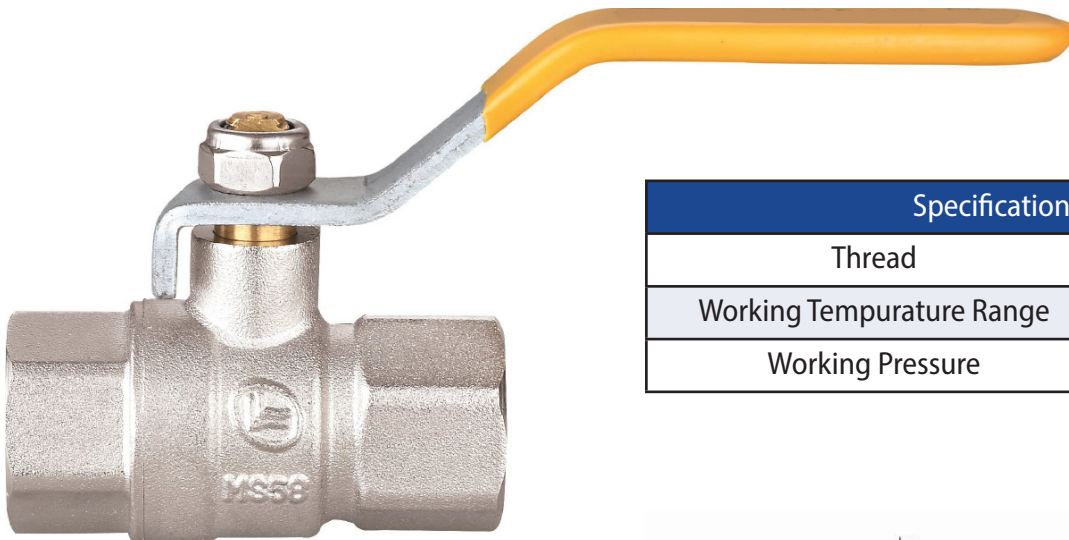
Specifications	
Thread	ISO 228
Working Temperature Range	-10°C to 120°C
Working Pressure	25 Bar

Material List		
No.	Part Name	Material
1	Body	Brass
2	Bonnet	Brass
3	Ball	Brass/Stainless Steel
4	Seal	PTFE
5	Stem	Brass
6	O-Ring	EPDM
7	Handle	Steel
8	Nut	Stainless Steel



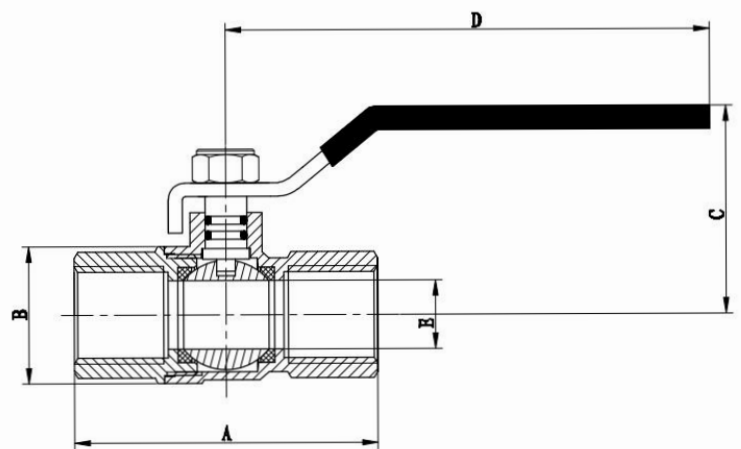
Size (mm)	A	B	C	D	E	Approx. KG/Pc
1/4"	45	23	39.2	87	9	0.13
3/8"	45.8	23	39.8	87	10	0.13
1/2"	59.4	29.5	54.2	95	14.8	0.21
3/4"	67	35.5	57.6	95	19	0.30
1"	77	42.7	60.6	126	24	0.48
1 - 1/4"	93	53	75.8	140	30.2	0.72
1 - 1/2"	99	63	81.3	140	37	0.93
2"	117	79	88.5	165	47	1.48
2-1/2"	143	102.5	121.5	224	62	3.00
3"	165	120.5	129.5	224	74	4.34
4"	190	144.5	141	283.5	90	6.43

Brass Ball Valve PHD1071



Specifications	
Thread	ISO 228
Working Temperature Range	-10°C to 80°C
Working Pressure	25 Bar

Material List		
No.	Part Name	Material
1	Body	Brass
2	Bonnet	Brass
3	Ball	Brass/Stainless Steel
4	Seal	PTFE
5	Stem	Brass
6	O-Ring	EPDM
7	Handle	Steel
8	Nut	Stainless Steel



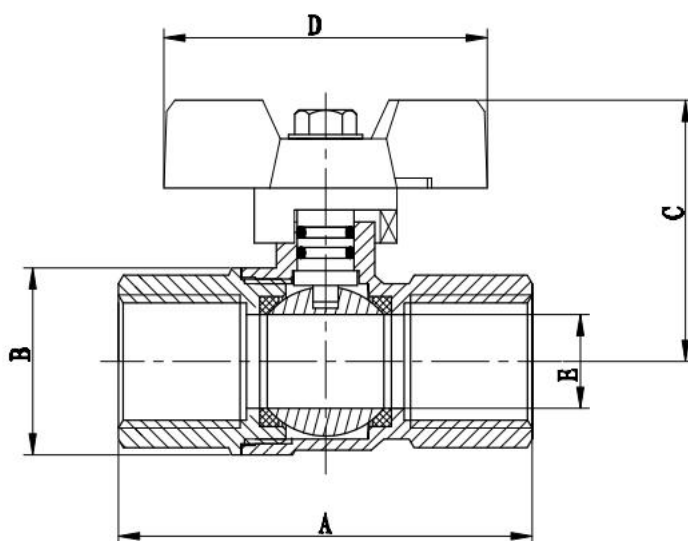
Size (mm)	A	B	C	D	E	Approx. KG/Pc
1/4"	45	23	39.2	87	9	0.13
3/8"	45.8	23	39.8	87	10	0.13
1/2"	59.4	29.5	54.2	95	14.8	0.21
3/4"	67	35	57.6	95	19	0.30
1"	77	42.7	60.6	126	24	0.48
1 - 1/4"	93	53	75.8	140	30.2	0.72
1 - 1/2"	99	63	81.3	140	37	0.93
2"	117	79	88.5	165	47	1.48
2-1/2"	143	102.5	121.5	224	62	3.00
3"	165	120.5	129.5	224	74	4.34
4"	190	144.5	141	283.5	90	6.43

Brass Ball Valve PHD1072



Specifications	
Thread	ISO 228
Working Temperature Range	-10°C to 80°C
Working Pressure	5 Bar

Material List		
No.	Part Name	Material
1	Body	Brass
2	Bonnet	Brass
3	Ball	Brass/Stainless Steel
4	Seal	PTFE
5	Stem	Brass
6	O-Ring	EPDM
7	Handle	Aluminium
8	Nut	Stainless Steel



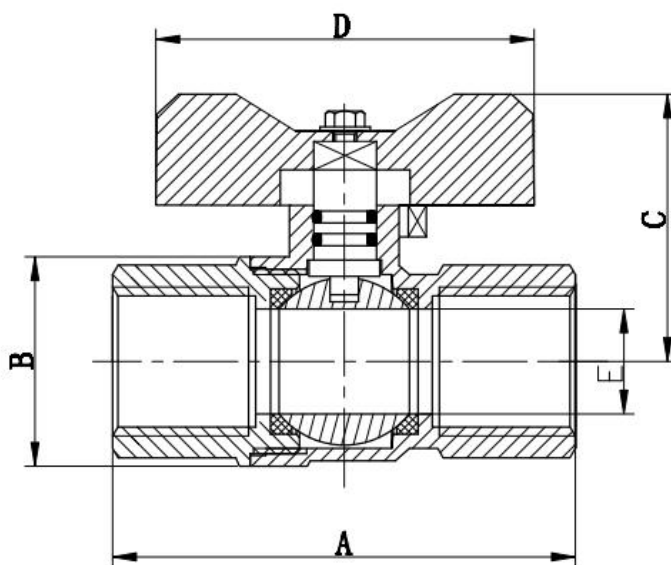
Size (mm)	A	B	C	D	E	Approx. KG/Pc
1/2"	59.4	29.5	43.5	60	14.8	0.19
3/4"	67	35.5	48.5	60	19	0.27
1"	77	42.7	52.5	60	24	0.42

Brass Ball Valve PHD1193



Specifications	
Thread	ISO 228
Working Temperature Range	-10°C to 120°C
Working Pressure	25 Bar

Material List		
No.	Part Name	Material
1	Body	Brass
2	Bonnet	Brass
3	Ball	Brass/Stainless Steel
4	Seal	PTFE
5	Stem	Brass
6	O-Ring	EPDM
7	Handle	Aluminium
8	Nut	Stainless Steel



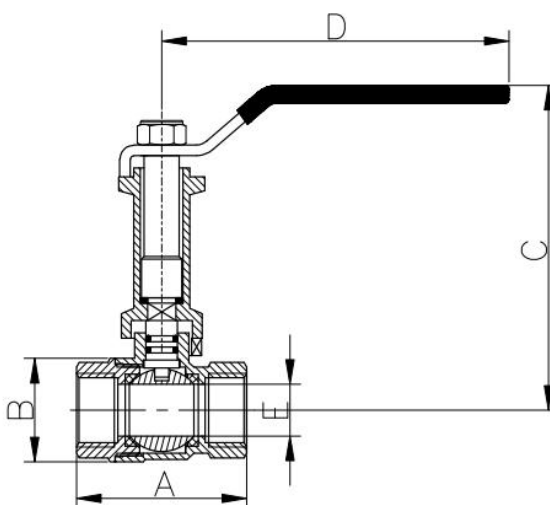
Size (mm)	A	B	C	D	E	Approx. KG/Pc
1/4"	45	23	34	46	9	0.1
3/8"	45.8	23	35	46	10	0.1
1/2"	59.4	29.5	38.8	54	14.8	0.17
3/4"	67	35	44	60	19	0.26
1"	77	42.7	52.5	67	24	0.42
1 - 1/4"	93	53	59	67	30.2	0.64

Brass Ball Valve PHD1529



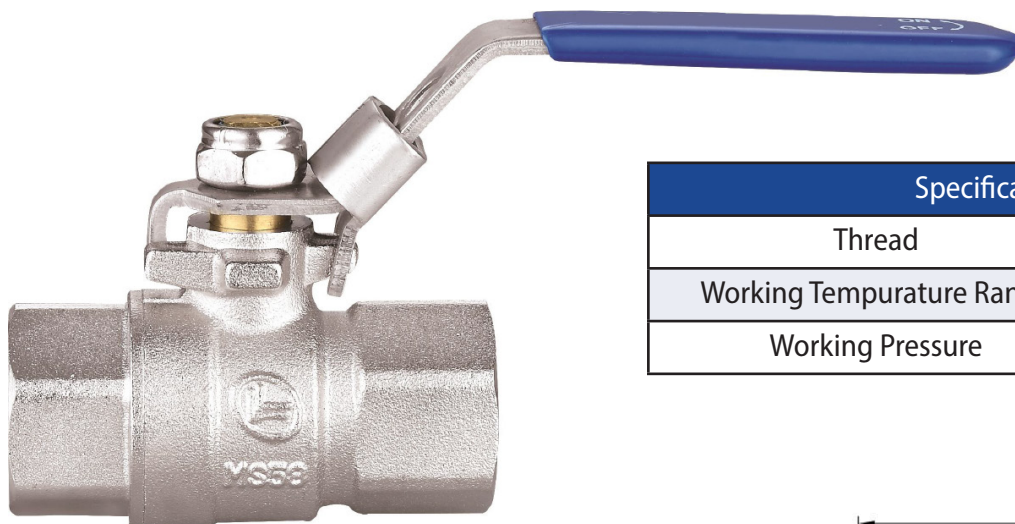
Specifications	
Thread	ISO 228
Working Temperature Range	-10°C to 120°C
Working Pressure	25 Bar

Material List		
No.	Part Name	Material
1	Body	Brass
2	Bonnet	Brass
3	Ball	Brass/Stainless Steel
4	Seal	PTFE
5	Stem	Brass
6	O-Ring	EPDM
7	Handle	Aluminium
8	Nut	Stainless Steel



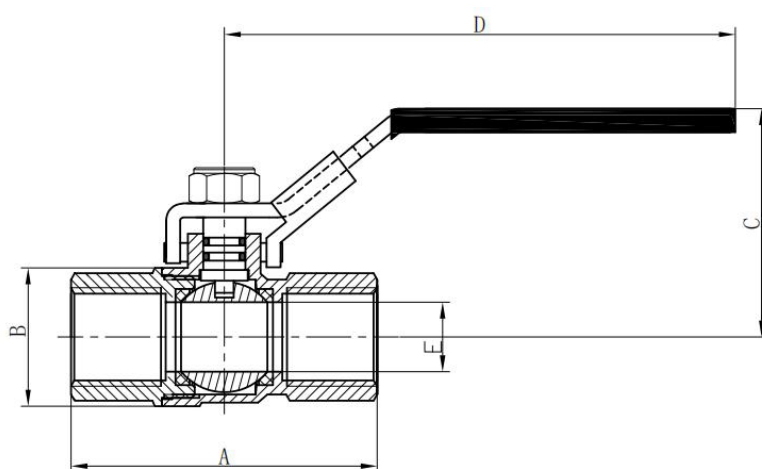
Size (mm)	A	B	C	D	E	Approx. KG/Pc
1/2"	48.4	29.5	101	95	14.8	0.24
3/4"	56	35.5	104.6	95	19	0.32
1"	65	42.7	107.6	126	24	0.5

Brass Lockable Ball Valve PHD1064



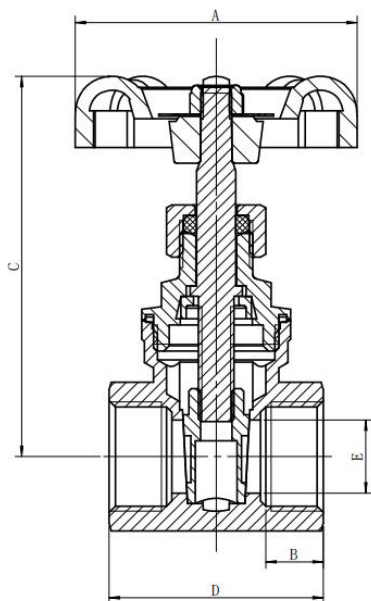
Specifications	
Thread	ISO 228
Working Temperature Range	-10°C to 120°C
Working Pressure	25 Bar

Material List		
No.	Part Name	Material
1	Body	Brass
2	Bonnet	Brass
3	Ball	Brass/Stainless Steel
4	Seal	PTFE
5	Stem	Brass
6	O-Ring	EPDM
7	Handle	Stainless Steel
8	Nut	Stainless Steel



Size (mm)	A	B	C	D	E	Approx. KG/Pc
1/4"	45	23	45	96	9	0.14
3/8"	45.8	23	45	96	10	0.14
1/2"	59.4	29.5	52	96	14.8	0.21
3/4"	67	35	53	96	19	0.30
1"	77	42.7	61	123	24	0.48
1 - 1/4"	93	53	81	146	30.2	0.71
1 - 1/2"	99	63	86	146	37	0.92
2"	117	79	93	170	47	1.56
2-1/2"	143	102.5	115.5	210	62	2.91
3"	165	120.5	124	210	74	4.19
4"	190	144.5	135.5	230	90	6.21

Brass Gate Valve PHD4030

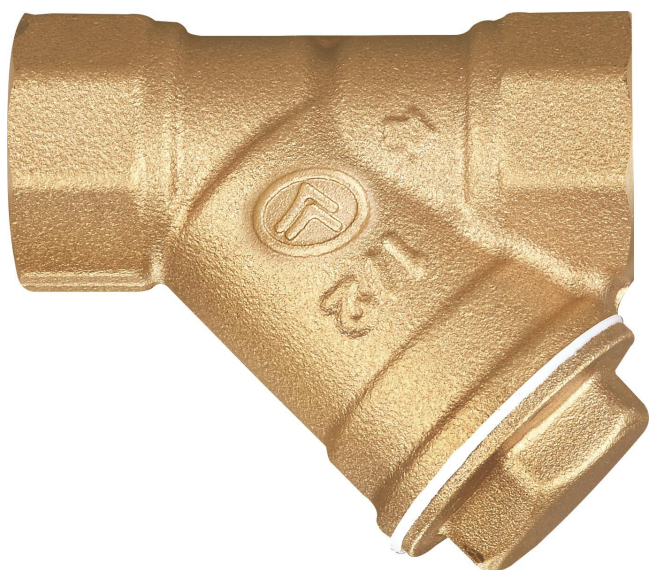


Material List		
No.	Part Name	Material
1	Body	Brass
2	Gate	Brass
3	Filler	PTFE
4	Bonnet	Brass
5	Lock Cap	Brass
6	Stem	Brass
7	Handwheel	Cast-Iron
8	Nut	Stainless Steel

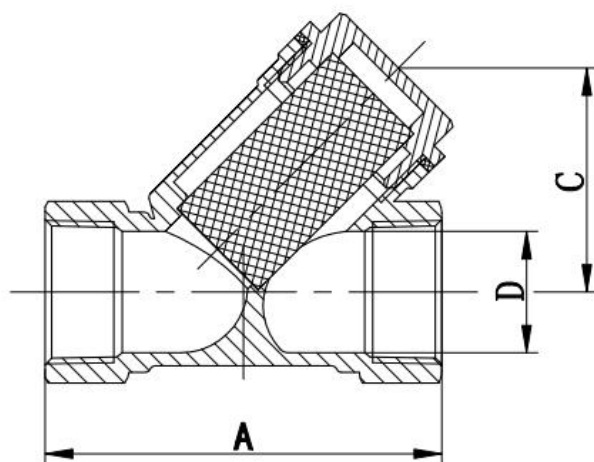
Specifications	
Thread	ISO 228
Working Temperature Range	-10°C to 120°C
Working Pressure	25 Bar

Size (mm)	A	B	C	D	E	Approx. KG/Pc
1/2"	55	12	73	41	14	0.26
3/4"	55	13	75	43	15	0.29
1"	60	14	83	48	19	0.42
1-1/4"	70	15	100	53	25	0.62
1-1/2"	70	15	110	54	31	0.80
2"	80	16	130	61	40	1.15
2-1/2"	100	22	165	78	54	2.35
3"	110	23.5	180	83	60	2.93
4"	140	27	245	100	90	5.05

Brass Y Strainer PHD5005



Specifications	
Thread	ISO 228
Working Temperature Range	-10°C to 120°C
Working Pressure	16 Bar



Material List		
No.	Part Name	Material
1	Body	Brass
2	Bonnet	Brass
3	Filter	Stainless Steel
4	Gasket	PTFE

Size (mm)	A	B	C	D	Mesh	Approx. KG/Pc
1/2"	56.5	32.5	32.5	18	40	0.14
3/4"	69	36	36	22.5	40	0.2
1"	80	42	42	28.5	40	0.33
1-1/4"	96	52.5	52.5	36	40	0.59
1-1/2"	105	61.5	61.5	42.5	40	0.75
2"	125	75	75	54	20	1.29
2-1/2"	134.5	85	85	65	20	1.90
3"	156	101	101	76	10	2.68
4"	181.5	123	123	97	10	4.52