

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.

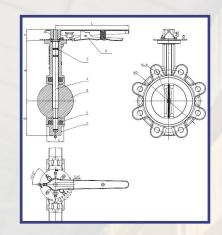
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Wafer Butterfly Valve Fully Lugged (WRAS)







	Material List		
	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	

Size	Fully Lugged
	SS Disc
50mm	BVFS050
65mm	BVFS065
80mm	BVFS080
100mm	BVFS100
125mm	BVFS125
150mm	BVFS150

Size	Torque N/M
	PN16
DN50	14
DN65	18
DN80	21
DN100	32
DN125	45
DN150	61
DN200	112

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 to +85°C

(EPDM: -10°C to +120°C)

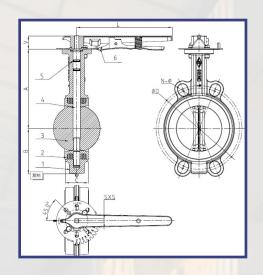
Product Standards	
Design	BS EN593
Connection	EN1092-2



Wafer Butterfly Valve Semi Lugged (WRAS)







	Material List		
	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	

Size	Semi- Lugged
	SS Disc
50mm	BVSS050
65mm	BVSS065
80mm	BVSS080
100mm	BVSS100
125mm	BVSS125
150mm	BVSS150
200mm	BVSS200

Size	Torque N/M
	PN16
DN50	14
DN65	18
DN80	21
DN100	32
DN125	45
DN150	61
DN200	112

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 to +85°C

(EPDM: -10°C to +120°C)

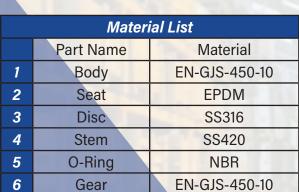
Product Standards	
Design	BS EN593
Connection	EN1092-2

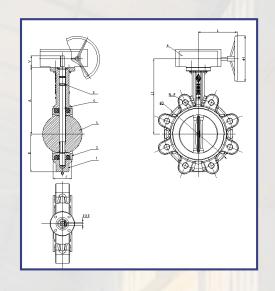


Gear Operated Wafer Butterfly Valve









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

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

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

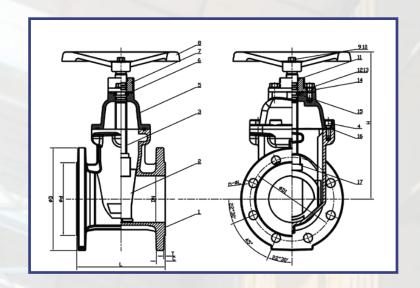
Maximum Working Pressure: PN16, PN10 Working Temperature Range: 0°C to +85°C

(EPDM: -10°C to +120°C)

Gate Valves







Material List		
	Part Name	Material
1	Valve Body	EN-GJS-450-10
2	Resilient	EN-GJS-450-
	Wedge Disc	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 Wash-	Brass HPB59-1
	er	
16	Bonnet Gas-	EDPM
	ket	
17	Wedge Nut	Brass HPB59-1

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

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

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 to +85°C (Epoxy)

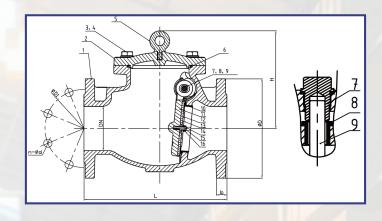
-10°C to +120°C (Painted)



Check Valves - Swing Check







	Material List		
	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	EPDM	
	Ring		
13	Retainer Wash-	Stainless 420	
	er	(DN50-DN100)	
		EN-GJS-450-10	
		(DN125-DN300)	
14	Washer	Stainless 304	
15	Stud	Stainless 304	
16	Nut	Stainless 304	

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

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°C to +85°C (Epoxy, WRAS) -10°C to +120°C (Painted)

Product Standards	
Design	EN16767
Connection	BS EN1092-2



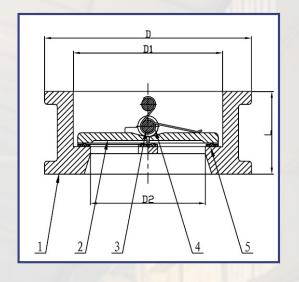
Double Door Wafer Check Valve





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

Product Standards		
Connection	BS EN 1092 PN16	



Material List		
	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.

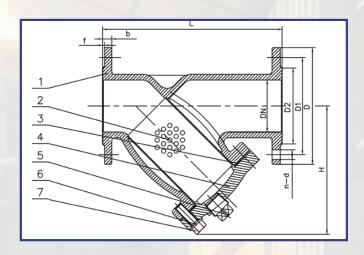
Performance Rating

Working Pressure: PN10, PN16, PN25
Working Temperature Range: 0°C to +85°C (Epoxy),
-10°C to +120°C (Painted)

Y Strainer







Available Sizes		
DN	Code	
50	YS050	
65	YS065	
80	YS080	
100	YS100	
125	YS125	
150	YS150	
200	YS200	

	Material List		
	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	

Product Standards Design EN558-1 Connection EN1092-2

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 to +85°C (Epoxy,

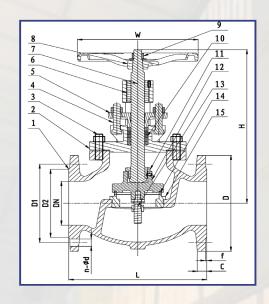
WRAS), -10°C to +120°C (Painted)



Flanged Metal Seated Globe Valve







Material List		
	Part Name	Material
1	Valve body	EN-GJS-450-10
2	Bonnet	EN-GJS-450-10
3	Stud	Carbon Steel ZP
4	Square head	Carbon Steel ZP
	bolt	
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

	Part Name	Material
1	Valve body	EN-GJS-450-10
2	Bonnet	EN-GJS-450-10
3	Stud	Carbon Steel ZP
4	Square head	Carbon Steel ZP
	bolt	
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

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

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.

Product Standards Ductile Iron BS EN1092-2 Flange

Cast Iron Flange

Performance Rating

Maximum Working Pressure: PN10/16

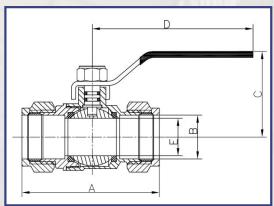
Working Temperature Range: -10 °C to +150 °C

(Painted)

BS EN1092-2







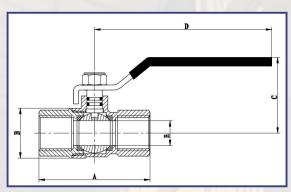
Material List						
	Part Name	Material				
1	Body	Brass				
2	Bonnet	Brass				
3	Ball	Brass/Stainless				
		Steel				
4	Seal	PTFE				
5	Stem	Brass				
6	O-Ring	EPDM				
7	Handle	Steel				

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

Size (mm)	A	В	С	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







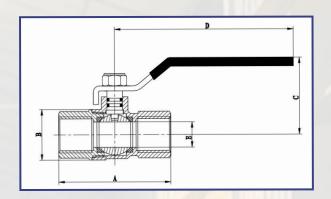
	Material List					
	Part Name	Material				
1	Body	Brass				
2	Bonnet	Brass				
3	Ball	Brass/Stainless Steel				
4	Seal	PTFE				
5	Stem	Brass				
6	O-Ring	EPDM				
7	Handle	Steel				

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

Size (mm)	А	В	С	D	Ε	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







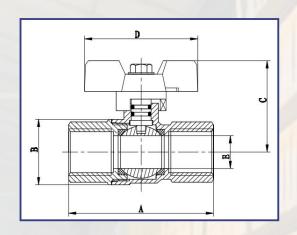
	Material List						
	Part Name	Material					
1	Body	Brass					
2	Bonnet	Brass					
3	Ball	Brass/Stainless					
		Steel					
4	Seal	PTFE					
5	Stem	Brass					
6	O-Ring	EPDM					
7	Handle	Steel					

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

Size (mm)	Α	В	С	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







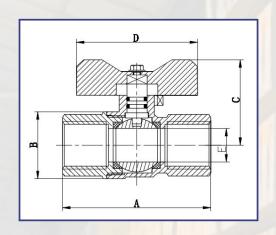
	Material List					
	Part Name	Material				
1	Body	Brass				
2	Bonnet	Brass				
3	Ball	Brass/Stainless				
		Steel				
4	Seal	PTFE				
5	Stem	Brass				
6	O-Ring	EPDM				
7	Handle	Aluminium				

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

Size (mm)	Α	В	С	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







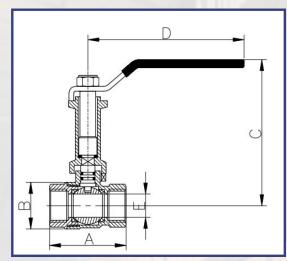
	Material List					
	Part Name	Material				
1	Body	Brass				
2	Bonnet	Brass				
3	Ball	Brass/Stainless				
		Steel				
4	Seal	PTFE				
5	Stem	Brass				
6	O-Ring	EPDM				
7	Handle	Aluminium				

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

Size (mm)	Α	В	С	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







	Material List						
	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					

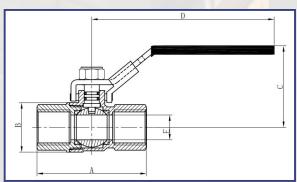
Specifications					
Thread	ISO 228				
Working Tempurature Range	-10°C to 120°C				
Working Pressure	25 Bar				

Size (mm)	A	В	С	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







	Material List						
	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					

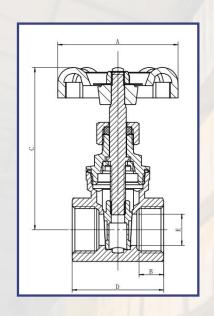
Specifications					
Thread	ISO 228				
Working Tempurature Range	-10°C to 120°C				
Working Pressure	25 Bar				

Size (mm)	A	В	С	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						
	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					

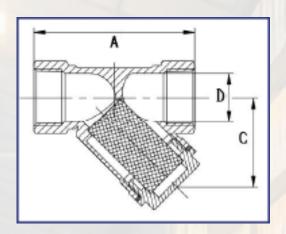
Specifications					
Thread	ISO 228				
Working Tempurature Range	-10°C to 120°C				
Working Pressure	25 Bar				

Size (mm)	Α	В	С	D	Ε	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







Material List				
	Part Name Material			
1	Body	Brass		
2	Bonnet	Brass		
3	Filter	Stainless Steel		
4	Gasket	PTFE		

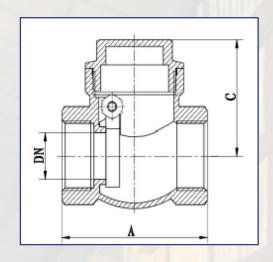
Specifications				
Thread	ISO 228			
Working Tempurature Range	-10°C to 120°C			
Working Pressure	16 Bar			

Size (mm)	Ā	В	С	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

Brass Swing Check Valve LL5007







Material List				
	Part Name Material			
1	End Cap Plastic			
2	Screw	Brass		
3	Bonnet	Brass		
4	Body	Brass		

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

Size (mm)	Α	С	Approx. KG/Pc
1/2"	47.5	34.5	0.16
3/4"	56	39	0.22
1"	63	46.5	0.33
1-1/4"	71	51	0.52
1-1/2"	80.5	59.5	0.73
2"	93	67	1.09
2-1/2"	105	77	1.84
3"	123	81	2.54
4"	162	101	4.56