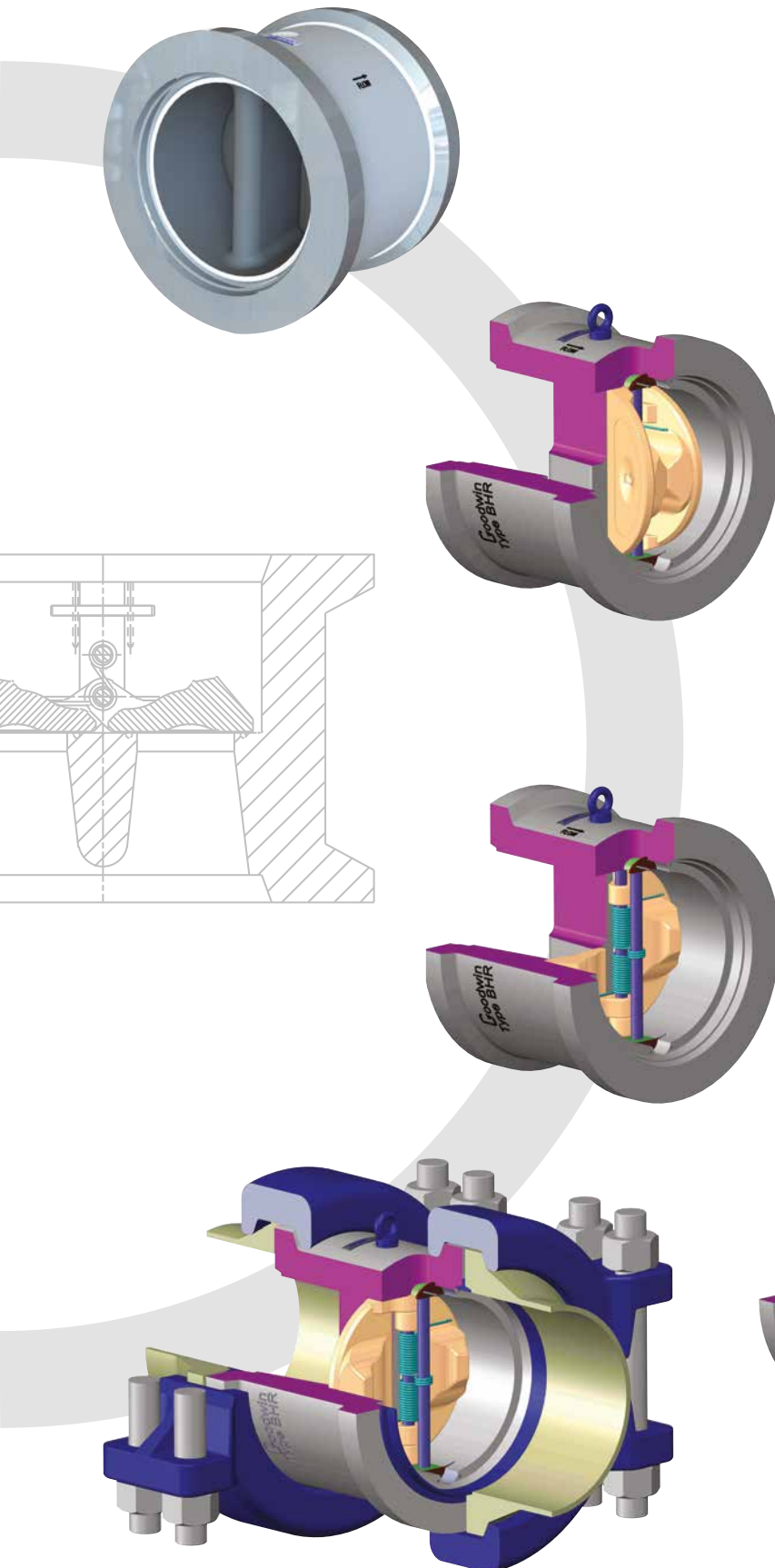


Hub End Type BHR



Hub End design.

Clamped into a piping system using mechanical clamp connectors, eg. Grayloc®, Galperti®, Vector Techlok®.

Retainerless

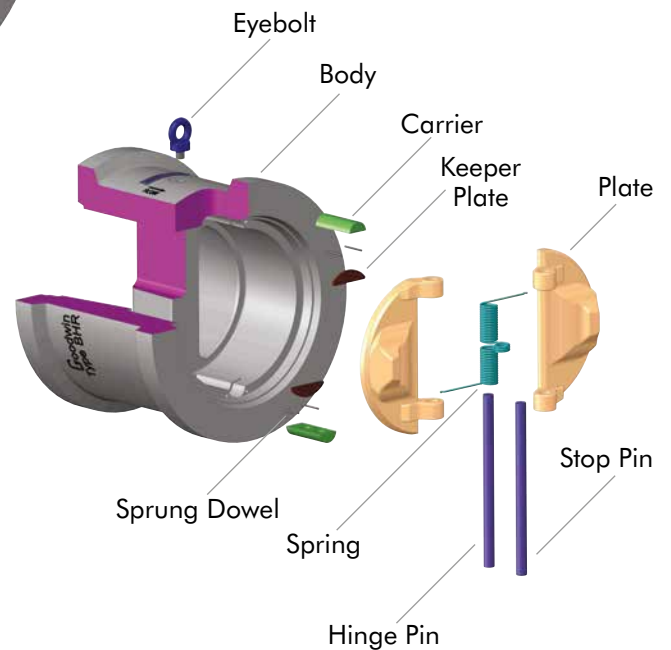
- Retainerless is standard in Goodwin Check Valves

API 594

- Designed in accordance with API 594 / API 6D
- Face-to-face dimensions to Goodwin standard
- 3 design options available
 - BHR(F) (Full bore retainerless)
 - BH(F) (Full bore retaining plugs)
 - BHR(R) (Reduced bore retainerless)

Unique Plate Design

- Pressure sensitive plate
- Improved flow efficiencies
- Total Life Cycle Costs reduced
- Superior metal-to-metal sealing
- High degree of shut-off

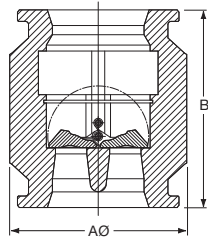


Hub End (Full Bore)

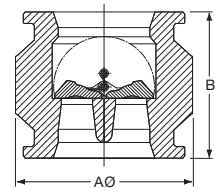
Installation Dimensions



Type BHR(F)



Type BH(F)



Size mm	Pressure Rating ASME	Seal Ring Size	A mm	B mm	† Valve Weight kg
4 (100mm)	900	34-40	229	279	47
	1500		229	279	47
	2500		259	308	71
6 (150mm)	900	46-62	327	358	130
	1500		327	358	130
	2500		349	445	205
8 (200mm)	900	62-82	409	418	245
	1500		409	418	245
	2500		435	451	300
10 (250mm)	900	84-97	464	485	375
	1500		464	485	375
	2500		533	533	520
12 (300mm)	900	97-110	590	602	678
	1500		590	602	678
	2500		638	638	908
14 (350mm)	900	112-130	590	602	932
	1500		590	602	932
	2500		638	689	945

Size mm	Pressure Rating ASME	Seal Ring Size	A mm	B mm	† Valve Weight kg
2 (50mm)	900	13-20	117	136	14
	1500		117	136	14
	2500		117	136	14
3 (80mm)	900	23-27	162	158	29
	1500		162	158	29
	2500		162	158	29
4 (100mm)	900	31-40	191	220	46
	1500		191	220	46
	2500		191	220	46
6 (150mm)	900	40-62	274	279	135
	1500		274	279	135
	2500		274	279	135
8 (200mm)	900	56-82	368	311	243
	1500		368	311	243
	2500		368	311	243
10 (250mm)	900	72-97	409	381	320
	1500		409	381	320
	2500		409	381	320
12 (300mm)	900	92-112	482	431	440
	1500		482	431	440
	2500		482	431	440
14 (350mm)	900	110-120	511	482	646
	1500		511	482	646
16 (400mm)	900	112-120	651	628	770
	1500		651	628	770
16 (400mm)	900	130-137	552	533	770
	1500		552	533	770
18 (450mm)	900	160	660	584	1245
	1500		660	584	1245

† Weights are for valve only and exclude mating clamps and bolting. Weight will vary according to corrosion allowance specification.

1. Type BH(F) is supplied with external threaded retainers
2. Reduced Bore Retainerless, Type BHR(R), i.e. no external threaded components.
3. Clamps, seal rings and companion hubs are not included with the valve
4. Particular make of Hub Ends, Seal Ring Size and Clamp Style must be specified by customer. Relevant technical information should be obtained from the chosen clamp supplier, e.g. Grayloc®, Techlok®, Galperti®.
5. Dimension B: These are typical only. Due to the large variety of Hub End sizes and Clamp Styles available the face-to-face dimensions for a given size and rating may vary to maintain ASME and API design specifications. Please contact Goodwin for details prior to using above data as design criteria.
6. Valve sizes not listed above are available on application, together with customer specified end sizes and types. All valves are rated in accordance with ASME B 16.34, API 594 and API 598 design and application specifications.
7. Internals designed to suit customer's specified hub-ended bore details.

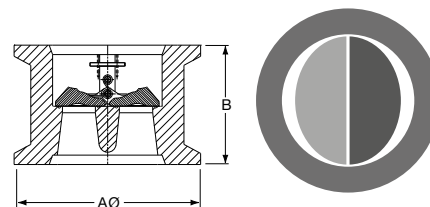
HEAVY DUTY HUB DIMENSIONS ARE AVAILABLE ON APPLICATION TO GOODWIN INTERNATIONAL

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Type BHR(R)

Hub End (Reduced Bore)

Installation Dimensions



Size mm	Pressure Rating ASME	Seal Ring Size	A mm	B mm	† Valve Weight kg
3 (80mm)	900	23-27	127	114	15
	1500		127	114	15
	2500		127	114	15
4 (100mm)	900	31-40	152	127	17
	1500		152	127	17
	2500		152	127	17
6 (150mm)	900	46-62	235	159	54
	1500		235	159	54
	2500		235	159	54
8 (200mm)	900	52	292	159	95
	1500		292	159	95
	2500		292	159	95
8 (200mm)	900	64-82	292	206	95
	1500		292	206	95
	2500		292	206	95
10 (250mm)	900	67-97	346	248	120
	1500		346	248	120
	2500		346	248	120
12 (300mm)	900	91-112	406	317	321
	1500		406	317	321
	2500		406	317	321
14 (350mm)	900	97-120	470	356	490
	1500		470	356	490
	2500		470	356	490

Size mm	Pressure Rating ASME	Seal Ring Size	A mm	B mm	† Valve Weight kg
16 (400mm)	900	114-120	533	406	642
	1500		533	406	642
16 (400mm)	900	130-140	533	381	642
	1500		533	381	642
18 (450mm)	900	134-144	559	394	335
	1500		559	394	339
18 (450mm)	900	S162	533	314	301
	1500		533	314	304
20 (500mm)	900	160	660	463	994
	1500		660	463	994
20 (500mm)	900	180	660	381	994
	1500		660	381	994
24 (600mm)	900	180	749	578	1750
	1500		749	578	1750
24 (600mm)	900	200-220	749	533	1300
	1500		749	533	1300
30 (750mm)	900	251	992	584	2950
	1500		992	584	2950

† Weights are for valve only and exclude mating clamps and bolting. Weight will vary according to corrosion allowance specification.

1. Clamps, seal rings and companion hubs are not included with the valve
2. Particular make of Hub Ends, Seal Ring Size and Clamp Style must be specified by customer. Relevant technical information should be obtained from the chosen clamp supplier, e.g. Grayloc®, Techlok®, Galperti®.
3. Dimension B: These are typical only. Due to the large variety of Hub End sizes and Clamp Styles available the face-to-face dimensions for a given size and rating may vary to maintain ASME and API design specifications. Please contact Goodwin for details prior to using above data as design criteria.
4. Valve sizes not listed above are available on application, together with customer specified end sizes and types. All valves are rated in accordance with ASME B 16.34, API 594 and API 598 design and application specifications.
5. Internals designed to suit customer's specified hub-ended bore details.
6. BHR(R) valves have reduced bore internals. C_v values available on request.

HEAVY DUTY HUB DIMENSIONS ARE AVAILABLE ON APPLICATION TO GOODWIN INTERNATIONAL