



BBF/FSK-V-HS

BALL VALVE WITH FLANGES SHORT PATTERN

DN 32-200 | PN 25

FULL BORE

INFORMATION

Ball valve with Flanges

/// Operating temperature up to +150 °C

/// Flange drilled and dimensioned according to EN 1092 - pressure rating PN 25.
Observe pressure-temperature rating
Flange dimensions: see supplementary sheet

From DN 125:

/// Trunnion mounted ball is standard

From DN 150:

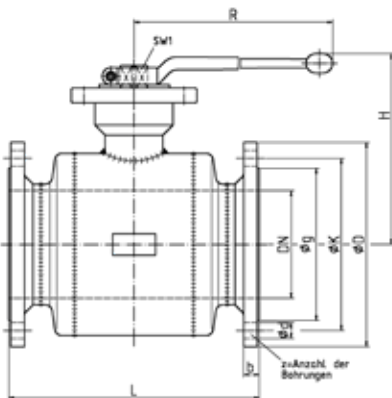
/// From nominal size DN150 we recommend the use of worm gear units.

MATERIALS

Body	Forged Steel / Steel
Flanges	Steel
Ball	Stainless steel
Ball Seals	PTFE
Stem Seals	EPDM

OPTIONS

- /// Suitable for steam
- /// Further options for this ball valve according to the list on the „Options“ supplementary sheet
- /// For deviating operating conditions please send us a written request stating the fluids, as well as the pressure and temperature range.
- /// On request, the ball valves are also available automated with electric or pneumatic actuators.



DN [mm]	PN [bar]	L [mm]	D [mm]	SW1 [mm]	R [mm]	H [mm]	Weight [kg]	Article-No.
32	25	130	140	16	205	120	5.6	056.4686
40	25	140	150	16	205	125	6.9	056.9744
50	25	150	165	16	205	133	9.2	056.9450
65	25	170	185	16	300	137	12.2	056.1092
80	25	180	200	22	350	156	16.2	056.1094
100	25	190	235	22	350	170	21.1	056.2779
125	25	325	270	22	500	189	38.2	056.6910
150	25	350	300	32	600	229	61.5	056.4687
200	25	400	360	32	600	264	93.0	056.0465

Ball valves of nominal size DN450 are made to order in accordance with the customer's requirements. Please refer to the corresponding drawings in case of order.



BBF/FSK-V-HS

BALL VALVE WITH FLANGES SHORT PATTERN

DN 150-1000 | PN 25

FULL BORE

INFORMATION

Ball valve with Flanges

/// Operating temperature up to +150 °C

/// Flange drilled and dimensioned according to EN 1092 - pressure rating PN 25.
Observe pressure-temperature rating
Flange dimensions: see supplementary sheet

/// Trunnion mounted ball is standard

/// The worm gear with handwheel is included in the scope of delivery.

MATERIALS

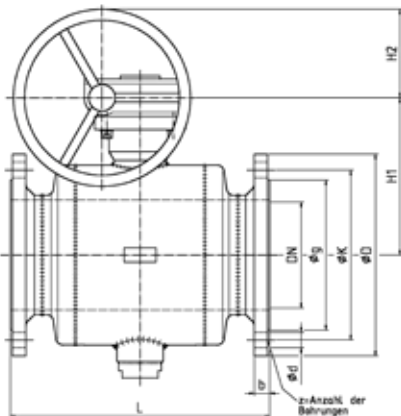
Body	Forged Steel / Steel
Flanges	Steel
Ball	Stainless steel; From DN 450: Steel chemically nickel plated
Ball Seals	PTFE
Stem Seals	EPDM

OPTIONS

- /// Suitable for steam
- /// Further options for this ball valve according to the list on the „Options“ supplementary sheet
- /// For deviating operating conditions please send us a written request stating the fluids, as well as the pressure and temperature range.
- /// On request, the ball valves are also available automated with electric or pneumatic actuators.



On request, we can also supply this ball valve in a version with double blocking, in accordance with DGV 103-002.



DN [mm]	PN [bar]	L [mm]	D [mm]	H1 [mm]	H2 [mm]	Weight [kg]	Article-No.
150	25	350	300	349	150	76	075.0295
200	25	400	360	384	150	115	075.0298
250	25	650	425	355	200	286	075.0301
300	25	750	485	404	200	495	075.0304
350	25	850	555	431	200	660	075.0307
400	25	950	620	531	200	960	075.0310
450	25	on demand	670	567	200	on demand	on demand
500	25	on demand	730	608	250	on demand	on demand
600	25	on demand	845	737	300	on demand	on demand
700	25	on demand	960	870	300	on demand	on demand
800	25	on demand	1085	942	400	on demand	on demand
900	25	on demand	1185	1051	400	on demand	on demand
1000	25	on demand	1320	1180	400	on demand	on demand

Ball valves of nominal size DN450 are made to order in accordance with the customer's requirements. Please refer to the corresponding drawings in case of order.



BBF/FSK-R-HS

BALL VALVE WITH FLANGES
SHORT PATTERN

DN 65-250 | PN 25

REDUCED BORE

INFORMATION

Ball valve with Flanges beidseitig

/// Operating temperature up to +150 °C

/// Flange drilled and dimensioned according to EN 1092 - pressure rating PN 25.
Observe pressure-temperature rating
Flange dimensions: see supplementary sheet

From DN 150:

/// Trunnion mounted ball is standard

From DN 200:

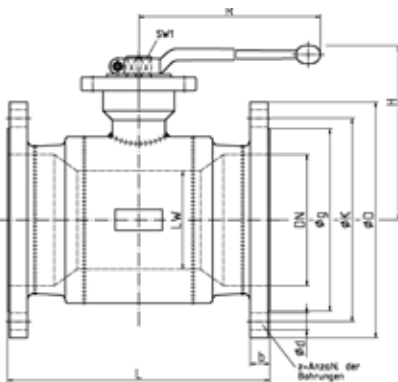
/// From nominal size DN200 we recommend the use of worm gear units.

MATERIALS

Body	Forged Steel / Steel
Flanges	Steel
Ball	Stainless steel
Ball Seals	PTFE
Stem Seals	EPDM

OPTIONS

- /// Suitable for steam
- /// Further options for this ball valve according to the list on the „Options“ supplementary sheet
- /// For deviating operating conditions please send us a written request stating the fluids, as well as the pressure and temperature range.
- /// On request, the ball valves are also available automated with electric or pneumatic actuators.



DN/LW [mm]	PN [bar]	L [mm]	D [mm]	SW1 [mm]	R [mm]	H [mm]	Weight [kg]	Article-No.
65/50	25	170	185	16	205	133	11.1	056.7018
80/65	25	180	200	16	300	137	14.5	056.7017
100/80	25	190	235	22	350	156	19.7	056.7016
125/100	25	325	270	22	350	170	31.5	056.7015
150/125	25	350	300	22	500	189	45.0	056.7014
200/150	25	400	360	32	600	229	74.5	056.7013
250/200	25	450	425	32	600	264	117.0	056.7012



BBF/FSK-R-HS

BALL VALVE WITH FLANGES.
SHORT PATTERN

DN 200-1000 | PN 25

REDUCED BORE

INFORMATION

Ball valve with Flanges beidseitig

/// Operating temperature up to +150 °C

/// Flange drilled and dimensioned according to EN 1092 - pressure rating PN 25.
Observe pressure-temperature rating
Flange dimensions: see supplementary sheet

/// Trunnion mounted ball is standard

/// The worm gear with handwheel is included in the scope of delivery.

MATERIALS

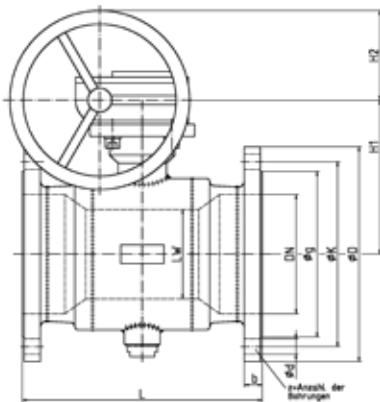
Body	Forged Steel / Steel
Flanges	Steel
Ball	Stainless steel; From DN 600: Steel chemically nickel plated
Ball Seals	PTFE
Stem Seals	EPDM

OPTIONS

- /// Suitable for steam
- /// Further options for this ball valve according to the list on the „Options“ supplementary sheet
- /// For deviating operating conditions please send us a written request stating the fluids, as well as the pressure and temperature range.
- /// On request, the ball valves are also available automated with electric or pneumatic actuators.



On request, we can also supply this ball valve in a version with double blocking, in accordance with DGVU 103-002.



DN/LW [mm]	PN [bar]	L [mm]	D [mm]	H1 [mm]	H2 [mm]	Weight [kg]	Article-No.
200/150	25	400	360	349	100	95	075.0274
250/200	25	450	425	384	150	148	075.0277
300/250	25	750	485	355	200	380	075.0280
350/300	25	850	555	404	200	610	075.0283
400/300	25	950	620	404	200	665	075.0286
450/400	25	1050	670	531	200	1010	075.0289
500/400	25	1150	730	531	200	1065	075.0292
600/500	25	on demand	845	608	250	on demand	on demand
700/600	25	on demand	960	737	300	on demand	on demand
800/700	25	on demand	1085	870	300	on demand	on demand
900/800	25	on demand	1185	946	400	on demand	on demand
1000/900	25	on demand	1320	1051	400	on demand	on demand

Ball valves of nominal size DN600 are made to order in accordance with the customer's requirements. Please refer to the corresponding drawings in case of order.

OPTIONS

	Underground Ball valves HE					Standard Ball valves HS						
	KSF V KSF R	ELF/ESF V	EMG/ESF V	KSF V KSF R Tie-in ball valve	KSF V (Hot tapping ball valve)	KSF V KSF R	FSK V FSK R	FSL V	FSL/KSF V + FSK/KSF V FSL/KSF R + FSK/KSF R	KSG/KSF V	KSG V	KSF V (Hot tapping ball valve)
Variable lengths for underground installation ¹	✓											
Special lengths		✓	✓			✓		✓	✓	✓		
Variable stem extensions for underground installation ²	✓											
Stem extension 60 mm /100 mm						✓	✓	✓	✓	✓	✓	✓
Spigot for drain and vent ball valve	✓											
Test connection from DN150 (with plug or ball valve)						✓	✓	✓				
greater wall thicknesses for extreme axial loads or corrosion surcharges	✓											
With Flange/Weld end from DN125					✓							
Suitable for steam	✓			✓	✓	✓	✓	✓			✓	

¹Variable overall lengths for installation in the ground:

The overall lengths specified in the catalog correspond to the standard dimensions. Other overall lengths are available on request as special production.

²Variable spindle extensions for buried installation:

The dome height of 350 mm shown in the catalog corresponds to the standard. In addition, dome heights of 500 mm, 750 mm and 1000 mm can be manufactured on request.

Tender specification texts are available for download on our website.

TECHNICAL INFORMATION

Wall thicknesses for ball valves for underground installation

The pipe ends used for BÖHMER inground district heating ball valves comply with the requirements of AD-Merkblatt B9 for the necking of pipes. Necking for drain and vent lines can be carried out on these pipes without falling below the minimum

wall thickness requirements of EN488. The following wall thicknesses refer to the pipe material used. These are machined at the weld preparation by wall thickness adjustment.

DN	20	25	32	40	50
Pipe dimensions	26,9 x 3,2	33,7 x 3,2	42,4 x 3,2	48,3 x 3,6	60,3 x 3,6
DN	65	80	100	125	150
Pipe dimensions	76,1 x 4,0	88,9 x 4,5	114,3 x 4,5	139,7 x 4,5	168,3 x 5,0
DN	200	250	300	350	400
Pipe dimensions	219,1 x 6,3	273,0 x 7,1	323,9 x 8,0	355,6 x 8,0	406,4 x 8,8

Flange dimensions

For all ball valves the standard for flange connections EN1092 is complied with. Below you will find an overview of the flange connection dimensions for pressure ratings PN10 - PN40, which

were not listed in the data sheets for reasons of clarity. The flange sheet thicknesses may deviate upwards from the dimensions required in the standard for manufacturing reasons.

DN	PN10	PN16	PN25	PN40	D	g	K	b	z	d
10	X	X	X	X	90	40	60	16	4	14
15	X	X	X	X	95	45	65	16	4	14
20	X	X	X	X	105	58	75	18	4	14
25	X	X	X	X	115	68	85	18	4	14
32	X	X	X	X	140	78	100	18	4	18
40	X	X	X	X	150	88	110	18	4	18
50	X	X	X	X	165	102	125	20	4	18
65	X	X			185	122	145	22	4	18
65			X	X	185	122	145	22	8	18
80	X	X	X	X	200	138	160	24	8	18
100	X	X			220	158	180	20	8	18
100			X	X	235	162	190	24	8	22
125	X	X			250	188	210	22	8	18
125			X	X	270	188	220	26	8	26
150	X	X			285	212	240	22	8	22
150			X	X	300	218	250	28	8	26
200	X				340	268	295	24	8	22
200		X			340	268	295	24	12	22
200			X		360	278	310	30	12	26
200				X	375	285	320	34	12	30
250	X				395	320	350	26	12	22
250		X			405	320	355	26	12	26
250			X		425	335	370	32	12	30
250				X	450	345	385	38	12	33
300	X				445	370	400	26	12	22
300		X			460	378	410	28	12	26
300			X		485	395	430	34	16	30
300				X	515	410	450	42	16	33
350	X				505	430	460	26	16	22
350		X			520	438	470	30	16	26
350			X		555	450	490	38	16	33
350				X	580	465	510	46	16	36
400	X				565	482	515	26	16	26
400		X			580	490	525	32	16	30
400			X		620	505	550	40	16	36
400				X	660	535	585	50	16	39