

High-Pressure Forged Body Ball Valve - Type FBV



Characteristics

Two-way high-pressure forged body ball valves designed for use as on/off devices for hydraulic applications

Standard Construction

- Forged body design for in-line assembly
- Supplied with off-set lever

Standard Materials

- Body: Carbon Steel, zinc/iron-plated
- Ball: Carbon Steel, hard chrome-plated
- Stem: Carbon Steel
- Lever: Carbon Steel
- Ball seat: Delrin® (POM)
- O-rings: FPM (Viton®)

Standard Connections Styles / Sizes

- 3000 PSI (code 61) SAE mating flange connectors
- 6000 PSI (code 62) SAE mating flange connectors
- Metric ISO and unified coarse (UNC) threads

Pressure Range

- Pressure range: up to 420 bar / 6000 PSI (depending on size and material combination of the ball valve)

Please note: The final maximum working pressure is determined by flange and pipe/tubing rating.

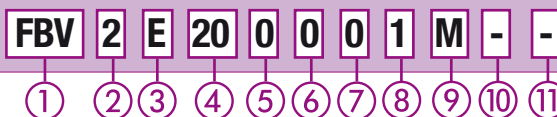
Temperature Range

- Operating temperature range:
-20°C ... +100°C / -4°F ... + 212°F

Options / Accessories

- Flanges and flange kits (see Flanges section)
- Alternative lever designs/materials (see page F98)
- Locking devices (see pages F99-F101)
- Pneumatic actuator packages (see page F102)
- Limit switches (see page F102)
- Stainless Steel body
- Stainless Steel ball and stem
- Special ball seat and O-ring materials available for lower/higher temperatures and more aggressive media
- Additional assembling threads (see page F103)
- Electrical actuators available on request.
Please consult STAUFF for further information.

Order Codes



① Type

High-Pressure Forged Body Ball Valve **FBV**

② Number of Ports

Two Ports (Two-Way Ball Valve) **2**

③ Connection Style

3000 PSI (Code 61) SAE Mating Flange Connectors with Metric ISO Threads	EM
3000 PSI (Code 61) SAE Mating Flange Connectors with Unified Coarse (UNC) Threads	E
6000 PSI (Code 62) SAE Mating Flange Connectors with Metric ISO Threads	SM
6000 PSI (Code 62) SAE Mating Flange Connectors with Unified Coarse (UNC) Threads	S

Please consult STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size (according to dimension table)		
20	24	32

Please consult STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	0
Stainless Steel V4A (AISI 316Ti)	1

Alternative materials / surface finishings are available upon request. Consult STAUFF for further information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated	0
Stem: Carbon Steel	0
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	1

Alternative materials / surface finishings are available upon request. Consult STAUFF for further information.

⑦ Ball Seat Material

Delrin® (POM)	0
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Alternative materials are available upon request. Consult STAUFF for further information.

⑧ O-Ring Material

NBR (Buna-N®)	0
FPM (Viton®)	1

Alternative materials are available upon request. Consult STAUFF for further information.

⑨ Manufacturing Code

Manufacturing code for all connection styles **M**

⑩ Lever Options

Supplied with standard lever (according to table)	-
Supplied without lever	-0

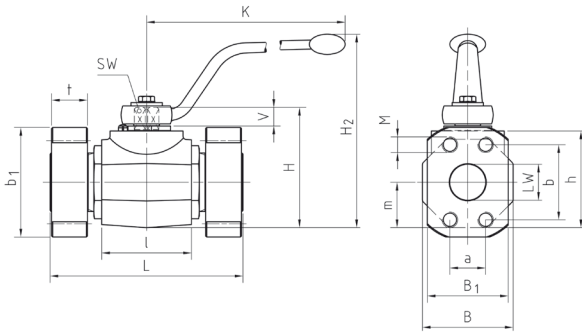
Alternative levers can be ordered separately. Please see page F98 for further information.

⑪ Accessories / Options

Supplied without accessories	-
Supplied with Locking Device LD1	-LD1
Supplied with Locking Device LD6 (standard)	-LD6
Supplied with Double-Acting Pneumatic Actuator (Please add size **)	-EDA**
Supplied with Single-Acting Pneumatic Actuator (Please add size **)	-ESA**
Supplied with Limit Switch in open position	-LS-0
Supplied with Limit Switch in closed position	-LS-C
Supplied with Limit Switch in open and closed position	-LS-OC

Please see page F99 for further information.

High-Pressure Forged Body Ball Valve - Type FBV 3000 PSI SAE Flange Connection (ISO 6162-1)



When ordering the standard option as indicated in the table below, the following materials will be supplied:

- Body, ball and stem: Carbon Steel
- Lever: Carbon Steel
- Ball seat: Delrin® (POM)
- O-rings: FPM (Viton®)

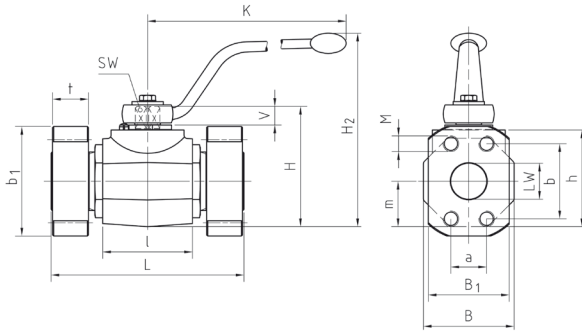
3000 PSI Series (Code 61) - Metric ISO Threads

STAUFF Size	SAE Flange Size	Nominal Size DN	Dimensions (mm/in)																Nom. Pressure (bar/PSI)	Weight (kg/lbs)	Order Codes (Standard Option)	
			LW	L	I	B	H	h	m	V	SW	K	B1	b1	t	a	b	M				H2
20	1-1/4	32	32	172	80	81	107	86	40.5	16.5	17	306	68	79	16	30.2	58.7	M10	171	210	7,52	FBV2EM200001M
			1.26	6.77	3.15	3.19	4.21	3.39	1.59	.65	.67	12.05	2.68	3.11	.63	1.19	2.31	6.73	3000	16.54		
24	1-1/2	40	38	177	85	100	124	103	50	16.5	17	306	78	93	16	35.7	69.8	M12	188	210	11,09	FBV2EM240001M
			1.50	6.97	3.35	3.94	4.88	4.06	1.97	.65	.67	12.05	3.07	3.66	.63	1.41	2.75	7.40	3000	24.40		
32	2	50	48	196	100	118	138	117	59	16.5	17	306	90	102	16	42.9	77.8	M12	202	210	19,29	FBV2EM320001M
			1.89	7.72	3.94	4.65	5.43	4.61	2.32	.65	.67	12.05	3.54	4.02	.63	1.69	3.06	7.95	3000	42.44		
40	2-1/2	50/65	48	196	100	118	138	117	59	16.5	17	306	105	114	19	50.8	88.9	M12	202	210	19,29	FBV2EM400001M
			1.89	7.72	3.94	4.65	5.43	4.61	2.32	.65	.67	12.05	4.13	4.49	.75	2.00	3.50	7.95	3000	42.44		

3000 PSI Series (Code 61) - Unified Coarse (UNC) Threads

STAUFF Size	SAE Flange Size	Nominal Size DN	Dimensions (mm/in)																Nom. Pressure (bar/PSI)	Weight (kg/lbs)	Order Codes (Standard Option)	
			LW	L	I	B	H	h	m	V	SW	K	B1	b1	t	a	b	M				H2
20	1-1/4	32	32	172	80	81	107	86	40.5	16.5	17	306	68	79	16	30.2	58.7	7/16-14	171	210	7,52	FBV2E200001M
			1.26	6.77	3.15	3.19	4.21	3.39	1.59	.65	.67	12.05	2.68	3.11	.63	1.19	2.31	UNC	6.73	3000	16.54	
24	1-1/2	40	38	177	85	100	124	103	50	16.5	17	306	78	93	16	35.7	69.8	1/2-13	188	210	11,09	FBV2E240001M
			1.50	6.97	3.35	3.94	4.88	4.06	1.97	.65	.67	12.05	3.07	3.66	.63	1.41	2.75	UNC	7.40	3000	24.40	
32	2	50	48	196	100	118	138	117	59	16.5	17	306	90	102	16	42.9	77.8	1/2-13	202	210	19,29	FBV2E320001M
			1.89	7.72	3.94	4.65	5.43	4.61	2.32	.65	.67	12.05	3.54	4.02	.63	1.69	3.06	UNC	7.95	3000	42.44	
40	2-1/2	50/65	48	196	100	118	138	117	59	16.5	17	306	105	114	19	50.8	88.9	1/2-13	202	210	19,29	FBV2E400001M
			1.89	7.72	3.94	4.65	5.43	4.61	2.32	.65	.67	12.05	4.13	4.49	.75	2.00	3.50	UNC	7.95	3000	42.44	

Please note: The final maximum working pressure is determined by flange and pipe/tubing rating.



High-Pressure Forged Body Ball Valve - Type FBV 6000 PSI SAE Flange Connection (ISO 6162-2)

When ordering the standard option as indicated in the table below, the following materials will be supplied:

- Body, ball and stem: Carbon Steel
- Lever: Carbon Steel
- Ball seat: Delrin® (POM)
- O-rings: FPM (Viton®)

6000 PSI Series (Code 62) - Metric ISO Threads

STAUFF Size	SAE Flange Size	Nominal Size DN	Dimensions (mm/in)																Nom. Pressure (bar/PSI)	Weight (kg/lbs)	Order Codes (Standard Option)	
			LW	L	I	B	H	h	m	V	SW	K	B1	b1	t	a	b	M				H2
20	1-1/4	32	32	172	80	81	107	86	40.5	16.5	17	306	78	95	27	31.8	66.6	M12	171	420	7,52	FBV2SM200001M
			1.26	6.77	3.15	3.19	4.21	3.39	1.59	.65	.67	12.05	3.07	3.74	1.06	1.25	2.63	6.73	6000	16.54		
24	1-1/2	40	38	177	85	100	124	103	50	16.5	17	306	94	112	30	36.5	79.4	M16	188	420	11,09	FBV2SM240001M
			1.50	6.97	3.35	3.94	4.88	4.06	1.97	.65	.67	12.05	3.70	4.41	1.18	1.44	3.13	7.40	6000	24.40		
32	2	50	48	196	100	118	138	117	59	16.5	17	306	114	134	35	44.5	96.8	M20	202	420	19,29	FBV2SM320001M
			1.89	7.72	3.94	4.65	5.43	4.61	2.32	.65	.67	12.05	4.49	5.28	1.38	1.75	3.81	7.95	6000	42.44		

6000 PSI Series (Code 62) - Unified Coarse (UNC) Threads

STAUFF Size	SAE Flange Size	Nominal Size DN	Dimensions (mm/in)																Nom. Pressure (bar/PSI)	Weight (kg/lbs)	Order Codes (Standard Option)	
			LW	L	I	B	H	h	m	V	SW	K	B1	b1	t	a	b	M				H2
20	1-1/4	32	32	172	80	81	107	86	40.5	16.5	17	306	78	95	27	31.8	66.7	1/2-13	171	420	7,52	FBV2S200001M
			1.26	6.77	3.15	3.19	4.21	3.39	1.59	.65	.67	12.05	3.07	3.74	1.06	1.25	2.63	UNC	6.73	6000	16.54	
24	1-1/2	40	38	177	85	100	124	103	50	16.5	17	306	94	112	30	36.5	79.4	5/8-11	188	420	11,09	FBV2S240001M
			1.50	6.97	3.35	3.94	4.88	4.06	1.97	.65	.67	12.05	3.70	4.41	1.18	1.44	3.13	UNC	7.40	6000	24.40	
32	2	50	48	196	100	118	138	117	59	16.5	17	306	114	134	35	44.5	96.8	3/4-10	202	420	19,29	FBV2S320001M
			1.89	7.72	3.94	4.65	5.43	4.61	2.32	.65	.67	12.05	4.49	5.28	1.38	1.75	3.81	UNC	7.95	6000	42.44	

Please note: The final maximum working pressure is determined by flange and pipe/tubing rating.