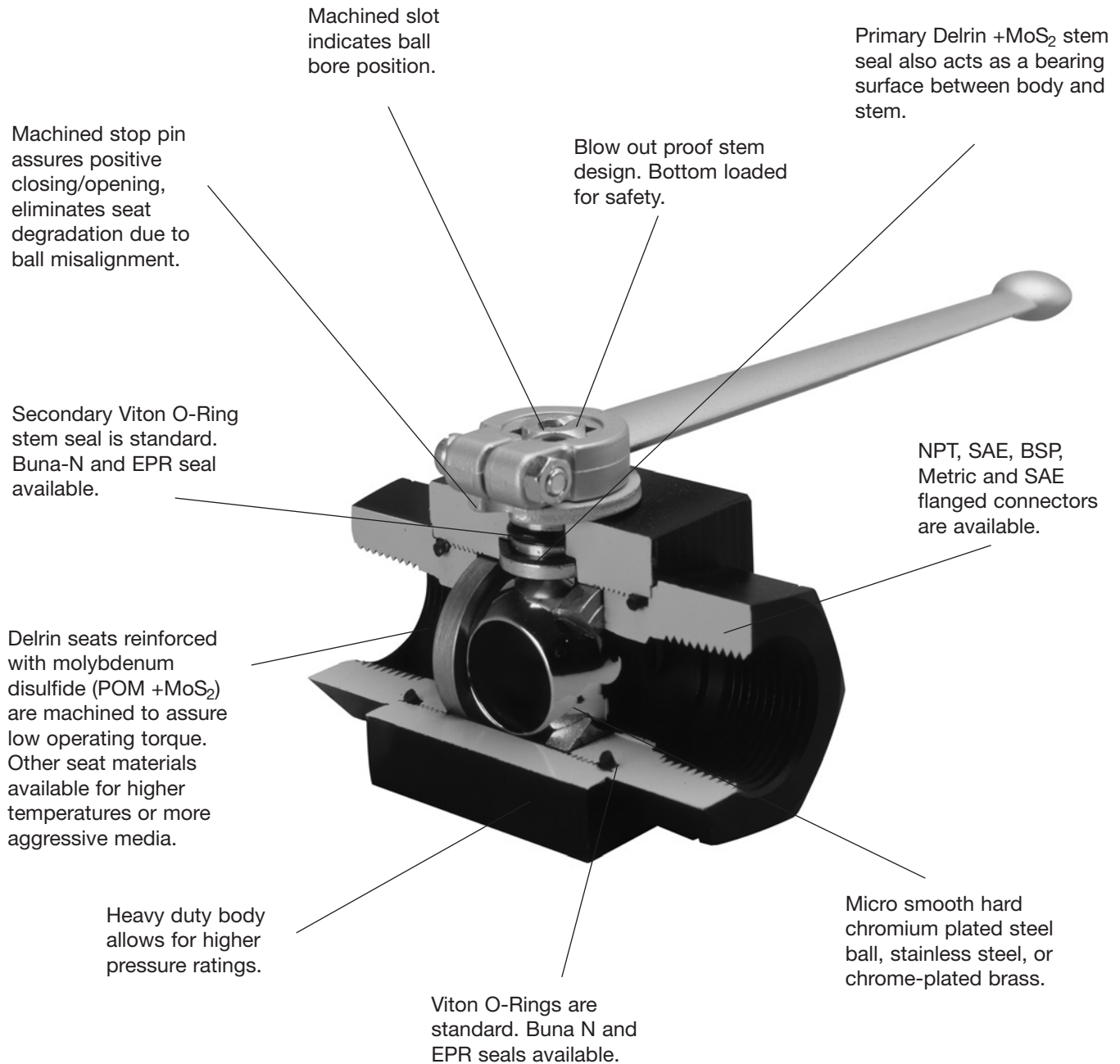


High Pressure Hydraulic Ball Valves

**FULL FLOW AND POSITIVE SHUT-OFF
UP TO 12,000 PSI**



Dimensions are for general information only. Due to constant development and updating of technical details, we ask that all critical dimensions be verified by requesting a certified print.

Features

- Available in carbon, stainless steel or brass.
- 1/4 turn positive operation.
- Depending on size and materials, working pressures up to 12,000 PSI and temperatures up to 930°F can be accommodated.
- No lubrication or maintenance required for the life of the valve.
- All Stauff valves are easily and completely repairable.
- All Stauff valves offer completely bidirectional operation, eliminating any chance of incorrect installation.
- No threads in fluid service to contaminate flow or cause turbulence.
- "Floating Ball" design insures a positive, leak-free seal and automatically compensates for any seat wear or misalignment.
- Hard chromium plated micro-smooth ball greatly reduces friction and seat wear.
- Ball seats are available in a variety of materials to suit your special applications.
- Full size ports on most two-way valves virtually eliminates pressure drop. Cv factor is usually equal to a length of pipe the same length and diameter as the valve.
- All Stauff valves are proof tested to 1.5 times the maximum rated working pressure before shipment from manufacturing facilities.
- Long seal life.

Available Options

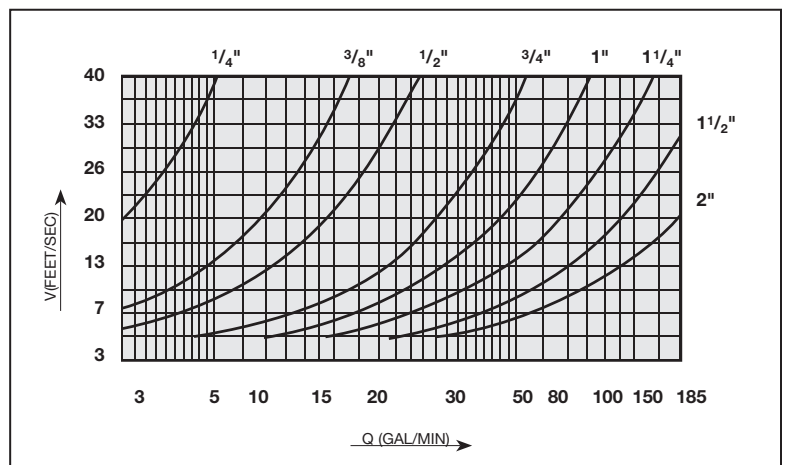
- Locking or detent type handles
- Pneumatic or electric actuator
- Special service seat and seal combinations
- Panel mounted valves
- Tandem mounted valves
- Special threads and connections
- Custom design valves
- Limit/proximity switches

Contact STAUFF for special requirements.

Note: Stauff ball valves are designed for use as on/off devices and must not be used to throttle fluid flow. Use in any position other than fully open or fully closed can lead to rapid deterioration of valve components and possible product failure.

When operated from the fully closed position at rated operating pressure, manual operation may prove difficult due to opening torque requirements. Please consult factory prior to field application.

Valve Selection Chart



Specifications

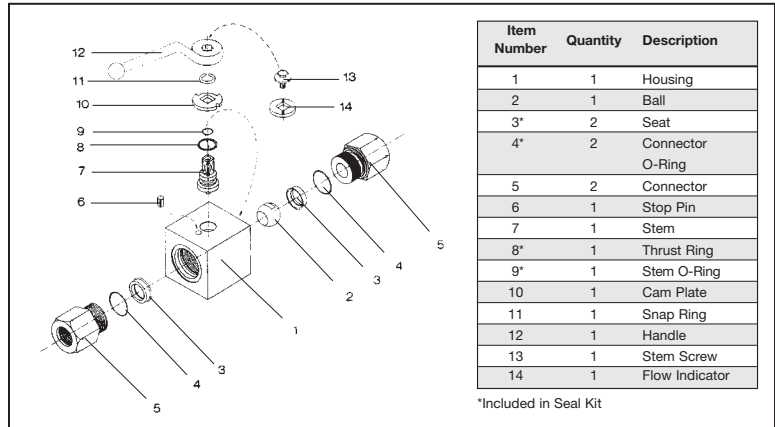
- Block Body, High Pressure Shut-off Valves
- 1/8"-1" Fully Ported-(1 1/4" & 1 1/2" with reduced bore)
- NPT, BSP or SAE O-Ring Connectors
- Delrin +MoS2 Ball Seats
- Viton O-Ring
- Pressure Range: Up to 7250 PSI (500 bar) (depending on material combination and size)
- Standard Carbon Steel Construction
- Standard Temperature Range: -20°F to 212°F (-17°C to 100°C)
- Zinc Plated Body
- Hard Chrome Plated Steel Ball



Options

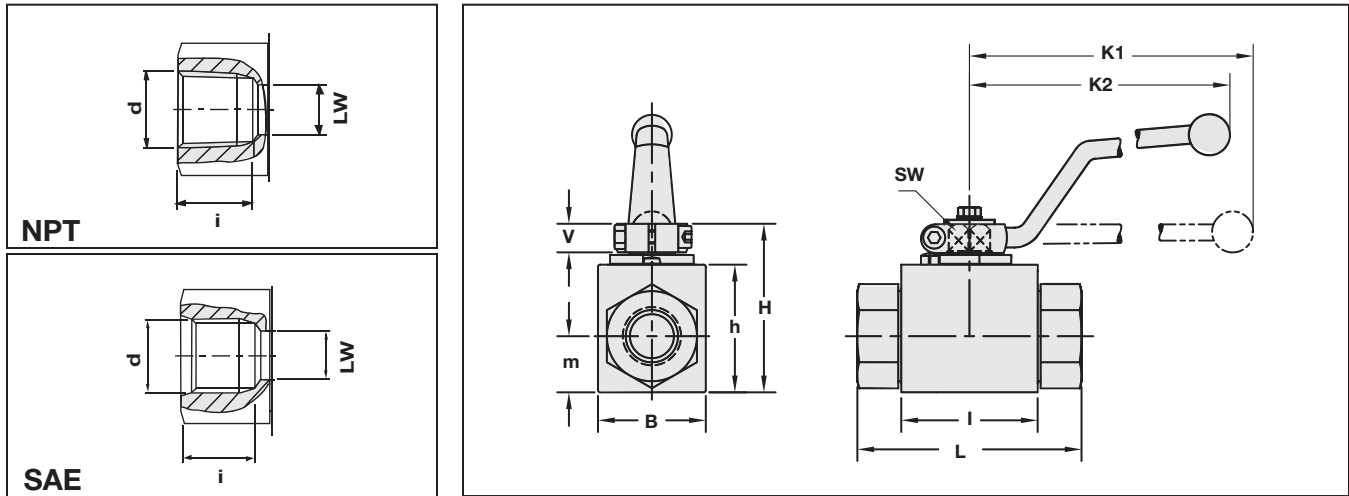
- Locking Kits
- Limit Switch
- Actuator Packages Available
- Straight Handles
- Stainless Steel Body
- Stainless Steel Ball and Stem
- Special seat and "O"-Ring materials available for higher temperatures or more aggressive media.

Technical Information



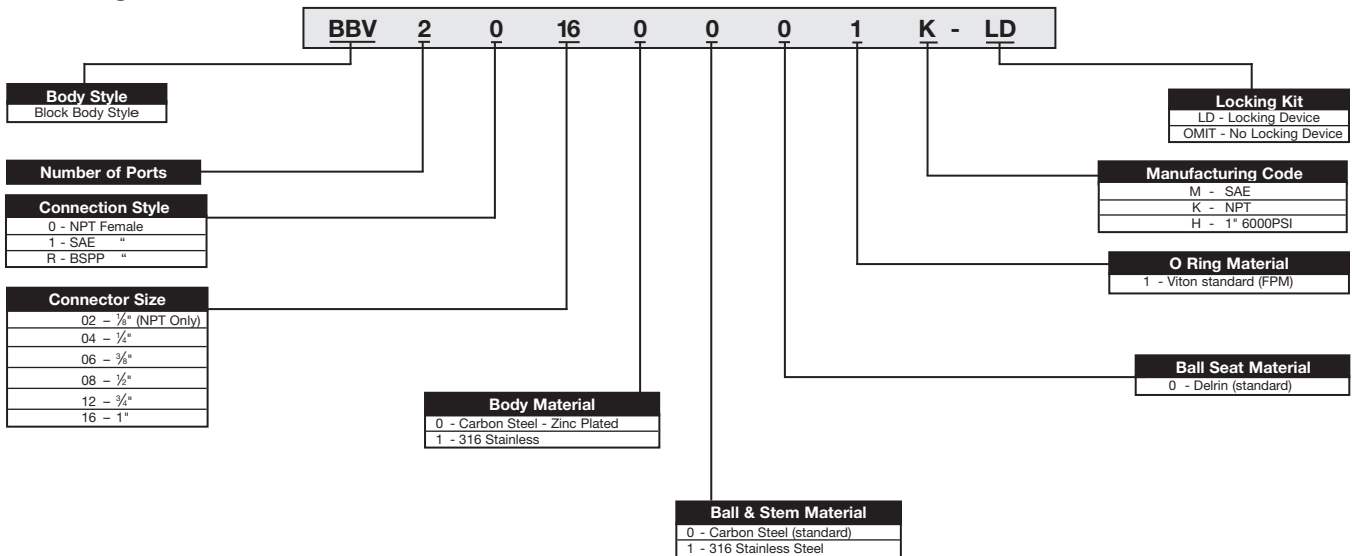
Size	Part Number	Maximum Working Pressure		Size	Part Number	Maximum Working Pressure	
		PSI	Bar			PSI	Bar
1/8"	NPT BBV20020001K	7250 PSI	500	3/4"	NPT BBV20120001K	6000 PSI	410
	SAE BBV21020001M	7250 PSI	500		SAE BBV21120001M	6000 PSI	410
1/4"	NPT BBV20040001K	7250 PSI	500	1"	NPT BBV20160001K	5000 PSI	345
	SAE BBV21040001M	7250 PSI	500		SAE BBV21160001M	5000 PSI	345
3/8"	NPT BBV20060001K	7250 PSI	500	1"	NPT BBV20160001H	6000 PSI	420
	SAE BBV21060001M	7250 PSI	500		SAE BBV21160001H	6000 PSI	420
1/2"	NPT BBV20080001K	7250 PSI	500				
	SAE BBV21080001M	7250 PSI	500				

Dimensional Information



Size	d		i		L NPT / SAE	LW		I	B	H	h	m	V	SW	K1		K2		Weight		
	NPT	SAE	NPT	SAE		NPT	SAE								in	mm	in	mm	in	mm	in
1/8"	1/8-27	3/16-24	0.51				0.24		1.57	1.02	1.85	1.30	0.53	0.43	0.35	5.91	4.53	0.50			
					12.95		6.10		39.88	25.91	46.99	33.02	13.46	10.92	9	150.11	115.06	0.23			
1/4"	1/4-18	5/16-20	0.67	0.55	2.72		0.24	0.2	1.57	1.02	1.85	1.30	0.53	0.43	0.35	5.91	4.53	0.66			
					17.02	13.97	69.00		6.10	5.08	39.88	25.91	46.99	33.02	13.46	10.92	9	150.11	115.06	0.30	
3/8"	3/8-18	7/16-18	0.69	0.61	2.83		0.39	0.39	1.69	1.26	2.05	1.50	0.69	0.43	0.35	5.91	4.53	1.10			
					17.53	15.49	72.00		10.00	10.00	42.93	32.00	52.07	38.10	17.53	10.92	9	150.11	115.06	0.50	
1/2"	1/2-14	5/8-16	0.62	0.69	3.27		0.51	0.51	1.89	1.38	2.13	1.57	0.75	0.43	0.35	5.91	4.53	1.65			
					15.80	17.53	83.06		13.00	13.00	48.01	35.05	54.10	39.88	19.05	10.92	9	150.11	115.06	0.75	
3/4"	3/4-14	1 1/16-12	0.71	0.91	3.74		0.79	0.79	2.44	1.93	2.95	2.24	0.96	0.55	0.55	7.87	6.73	3.65			
					18.00	23.11	95.00		20.00	20.00	61.98	49.02	74.93	56.90	24.38	13.97	14	199.90	171	1.66	
1"	1-11 1/2	1 1/8-12	1.09	0.79	4.45		0.98	0.98	2.60	2.28	3.27	2.56	1.16	0.55	0.55	7.87	6.30	5.06			
					27.69	20.00	113.00		25.00	25.00	66.04	57.91	83.06	65.02	29.46	13.97	14	199.90	160	2.30	
1"H	1 1/2-11 1/2	1 1/2-12	0.79	0.79	4.45		0.98	0.98	2.91	2.75	3.46	2.75	1.36	0.55	0.55	7.90	6.30	5.50			
					20.00	20.00	113.00		25.00	25.00	74.00	70.00	88.00	70.00	34.50	14.00	14	200	160	2.50	

Ordering Information



Specifications

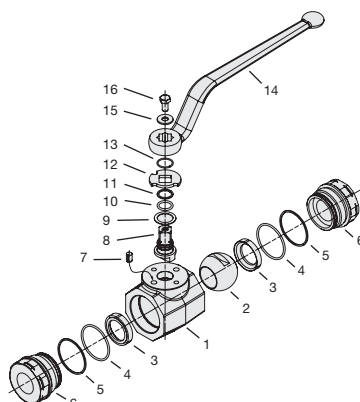
- Forged Body, High Pressure Valves
- 1/4" – 2" Fully Ported
- NPT, BSP or SAE O-Ring Connections
- Delrin +MoS2 Ball Seats
- Viton O-Rings
- Steel Handle
- Pressure Range: Up to 5000 PSI (345 bar)
- Carbon Steel Construction
- Temperature Range: -20°F to 212°F (-28°C to 100°C)
- Zinc Plated Body



Options

- Locking Kits
- Limit Switches
- Stainless Steel Body
- Stainless Steel Ball and Stem
- Straight Handles
- Actuator Packages Available
- Special seat and "O"-Ring materials available for higher temperatures or more aggressive media.

Technical Information

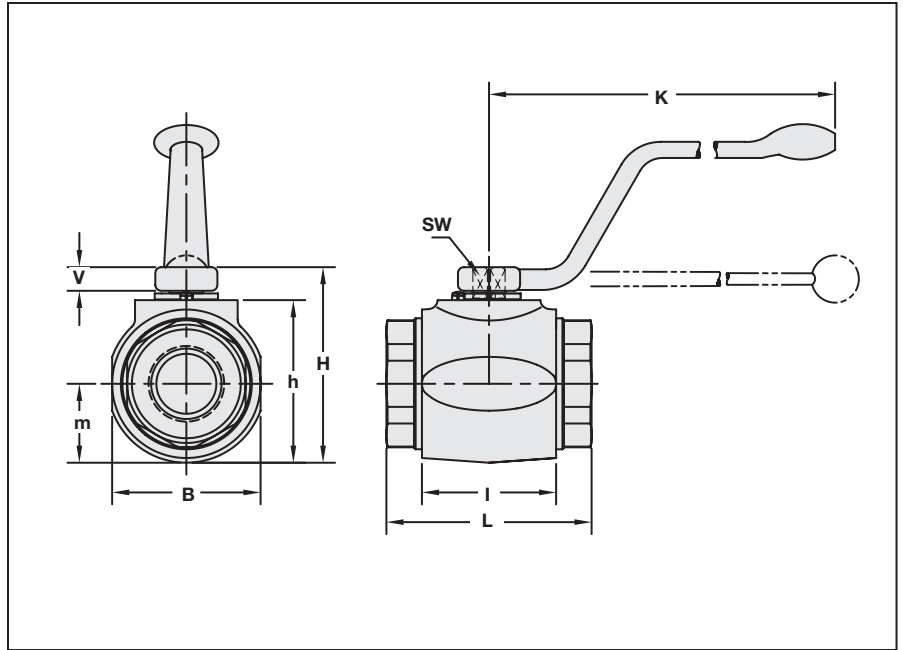
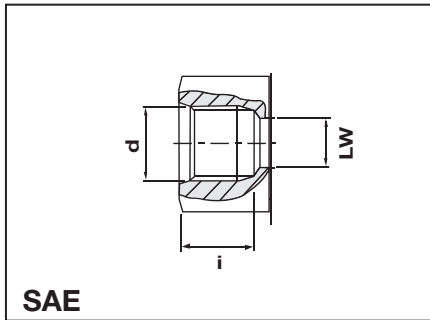
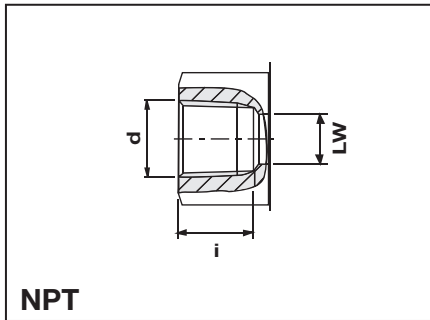


Item Number	Quantity	Description
1	1	Body
2	1	Ball
3*	2	Seat
4*	2	Connector O-Ring
5*	2	Connector Back-Up Ring
6	2	Connector
7	1	Stop Pin
8	1	Stem
9*	1	Thrust Ring
10*	1	Stem O-Ring
11*	1	Stem Back-Up Ring
12	1	Cam Plate
13	1	Snap Ring
14	1	Handle
15	1	Washer
16	1	Stem Bolt

*Included in Seal Kit

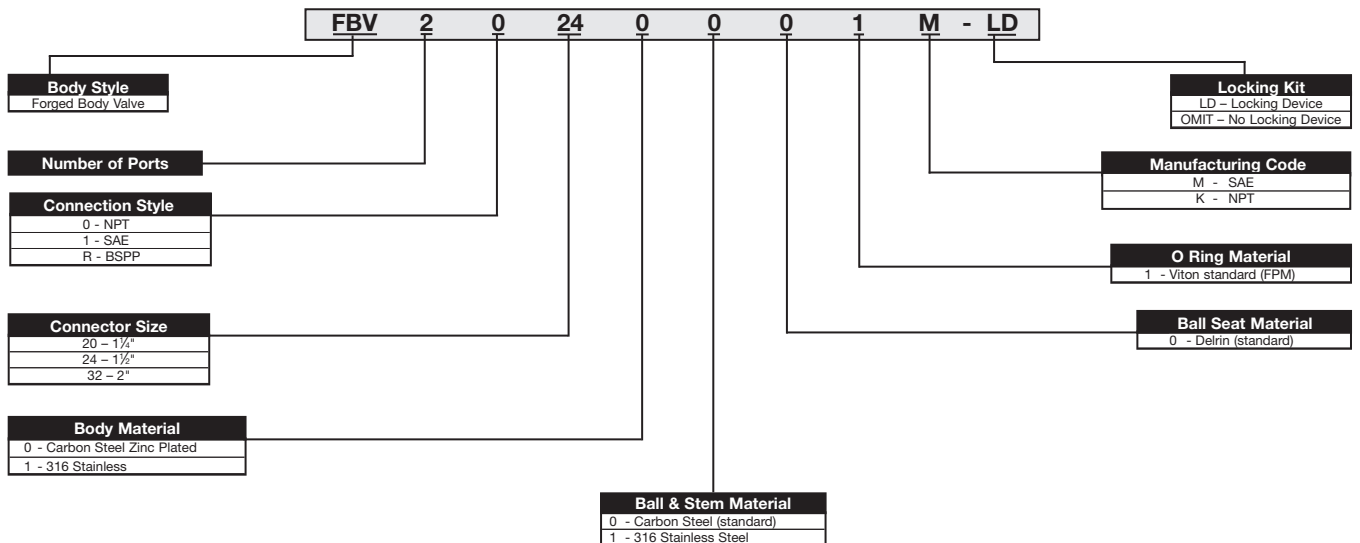
Size	Part Number	Maximum Working Pressure	
		PSI	Bar
1/4"	NPT	6000 PSI	420
	SAE	6000 PSI	420
1/2"	NPT	6000 PSI	420
	SAE	6000 PSI	420
2"	NPT	6000 PSI	420
	SAE	6000 PSI	420

Dimensional Information



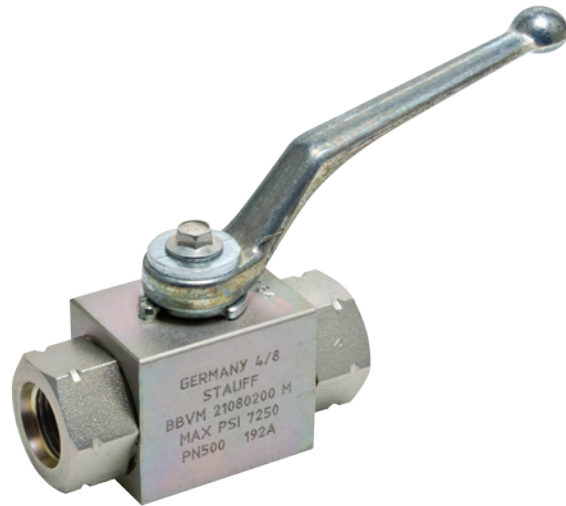
Size	d NPT	d SAE	i NPT	i SAE	L NPT	L SAE	LW NPT	LW SAE	I	B	H	h	m	V	SW	K	Weight
			in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs kg
1¼"	1¼-1½	1¾-12	1.11 28.19	0.91 23.11	4.72 119.89	4.37 111.00	1.26 32.00	1.18 29.97	3.15 80.01	3.19 81.03	4.21 106.93	3.39 86.11	1.59 40.39	0.65 16.51	.66 17	11.81 320	8.04 3.65
1½"	1½-1½	1¾-12	1.1 27.94	0.91 23.11	5.12 130.05	5.12 130.05	1.50 38.10	1.50 38.10	3.35 85.09	3.94 100.08	4.88 123.95	4.06 103.12	1.97 50.04	0.65 16.51	.66 17	11.81 320	13.00 5.91
2"	2-1½	2¾-12	1.19 30.23	0.91 23.11	5.51 139.95	5.51 139.95	1.89 48.01	1.77 44.96	3.94 100.08	4.65 118.11	5.43 137.92	4.61 117.09	2.32 58.93	0.65 16.51	.66 17	11.81 320	19.00 8.64

Ordering Information



Specifications

- Block Body, Medium Duty High Pressure Shut-off Valves
- 1/8"-1" Fully Ported-(1 1/4" & 1 1/2" with reduced bore)
- NPT SAE O-Ring Connectors
- Delrin +MoS2 Ball Seats
- Buna O-Ring
- Pressure Range: Up to 7250 PSI (500 bar) (depending on material combination and size)
- Standard Carbon Steel Construction
- Standard Temperature Range: -20°F to 212°F (-17°C to 100°C)
- Zinc Plated Body
- Brass Ball



Options

- Locking Kits
- Limit Switch
- Straight Handles

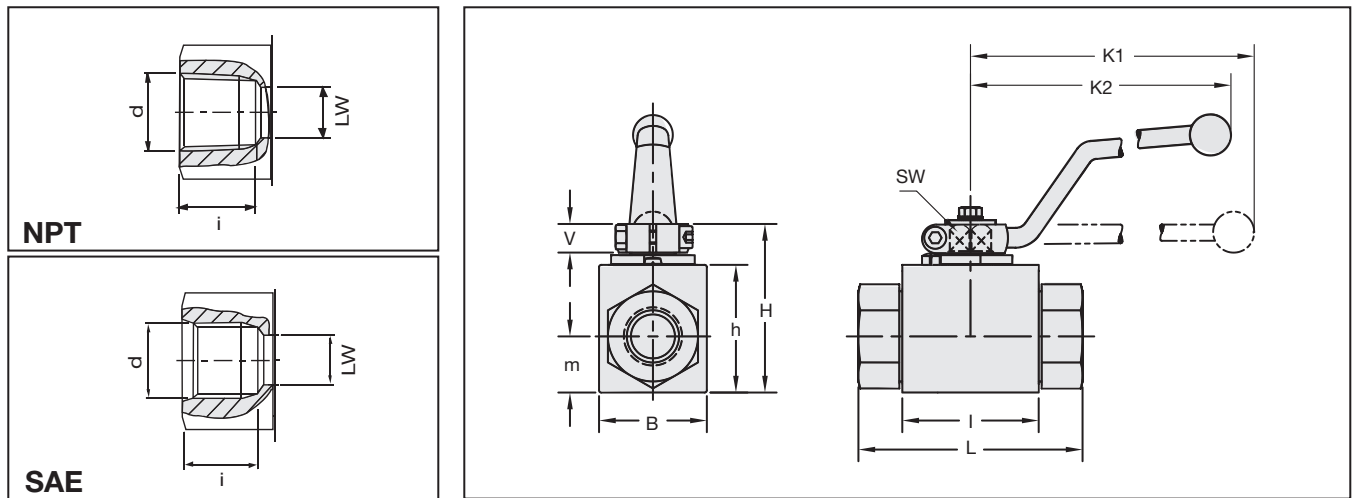
Technical Information

Item Number	Quantity	Description
1	1	Housing
2	1	Brass Ball
3*	2	Seat
4*	2	Connector O-Ring
5	2	Connector
6	1	Stop Pin
7	1	Stem
8*	1	Thrust Ring
9*	1	Stem O-Ring
10	1	Cam Plate
11	1	Snap Ring
12	1	Handle
13	1	Stem Screw
14	1	Flow Indicator

*Included in Seal Kit

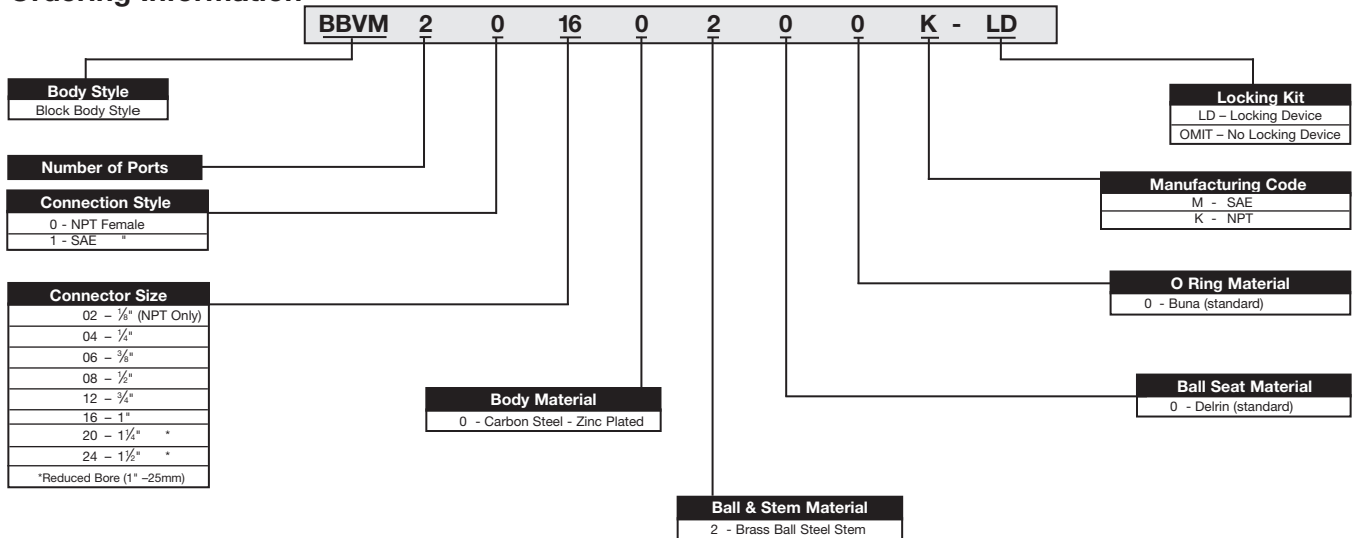
Size	Part Number	Maximum Working Pressure		Size	Part Number	Maximum Working Pressure			
		PSI	Bar			PSI	Bar		
1/8"	NPT	BBVM20020200K	7250 PSI	500	3/4"	NPT	BBVM20120200K	6000 PSI	420
	SAE	BBVM21020200M	7250 PSI	500		SAE	BBVM21120200M	6000 PSI	420
1/4"	NPT	BBVM20040200K	7250 PSI	500	1"	NPT	BBVM20160200K	5000 PSI	345
	SAE	BBVM21040200M	7250 PSI	500		SAE	BBVM21160200M	5000 PSI	345
3/8"	NPT	BBVM20060200K	7250 PSI	500	1 1/4"	NPT	BBVM20200200K	5000 PSI	345
	SAE	BBVM21060200M	7250 PSI	500		SAE	BBVM21200200M	5000 PSI	345
1/2"	NPT	BBVM20080200K	7250 PSI	500	1 1/2"	NPT	BBVM20240200K	3600 PSI	250
	SAE	BBVM21080001M	7250 PSI	500		SAE	BBVM21240001M	3600 PSI	250

Dimensional Information

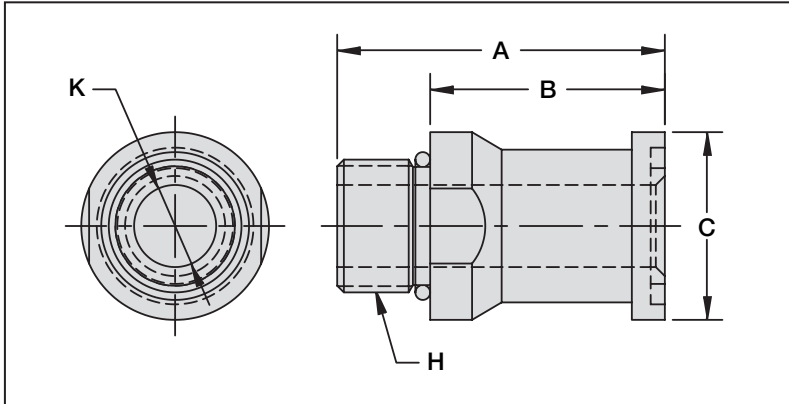


Size	d		i		L	LW		I	B	H	h	m	V	SW	K		Weight		
	NPT	SAE	NPT	SAE		NPT	SAE								NPT	SAE	K ₁	K ₂	lbs
1/8"	1/8-27	0.51 12.95	0.55 13.97	2.72 69.09	0.24 6.10	0.2 5.08	1.57 39.88	1.02 25.91	1.85 46.99	1.30 33.02	0.53 13.46	0.43 10.92	0.35 9	5.91 150.11	4.53 115.06	0.50 0.23	0.66 0.30		
1/4"	1/4-18	0.67 17.02	0.61 15.49	2.72 69.09	0.24 6.10	0.2 5.08	1.57 39.88	1.02 25.91	1.85 46.99	1.30 33.02	0.53 13.46	0.43 10.92	0.35 9	5.91 150.11	4.53 115.06	0.66 0.50	0.30		
3/8"	3/8-18	0.69 17.53	0.61 15.49	3.07 77.98	2.83 71.88	0.39 10	1.69 42.93	1.26 32.00	2.05 52.07	1.50 38.10	0.69 17.53	0.43 10.92	0.35 9	5.91 150.11	4.53 115.06	1.10 0.50			
1/2"	1/2-14	0.98 24.89	0.69 17.53	4.09 103.89	3.27 83.06	0.51 13	1.89 48.01	1.38 35.05	2.13 54.10	1.57 39.88	0.75 19.05	0.43 10.92	0.35 9	5.91 150.11	4.53 115.06	1.65 0.75			
3/4"	3/4-14	1.01 25.65	0.91 23.11	4.02 102.11	3.74 95.00	0.79 20	2.44 61.98	1.93 49.02	2.95 74.93	2.24 56.90	0.96 24.38	0.55 13.97	0.55 14	7.87 199.90	6.30 160.02	3.65 1.66			
1"	1-11 1/2	1.09 27.69	0.91 23.11	4.69 119.13	4.45 113.03	0.98 25	2.60 66.04	2.28 57.91	3.27 83.06	2.56 65.02	1.16 29.46	0.55 13.97	0.55 14	7.87 199.90	6.30 160.02	5.06 2.30			
1 1/4"	1 1/4-11 1/2	1.10 27.94	0.91 23.11	5.10 129.54	5.10 129.54	0.98 25	2.60 66.04	2.28 57.91	3.27 83.06	2.56 65.02	1.16 29.46	0.55 13.97	0.55 14	7.87 199.90	6.30 160.02	5.50 2.50			
1 1/2"	1 1/2-11 1/2	1.19 30.28	0.91 23.11	5.20 132.08	5.20 132.08	0.98 25	2.60 66.04	2.28 57.91	3.27 83.06	2.56 65.02	1.16 29.46	0.55 13.97	0.55 14	7.87 199.90	6.30 160.02	5.75 2.61			

Ordering Information



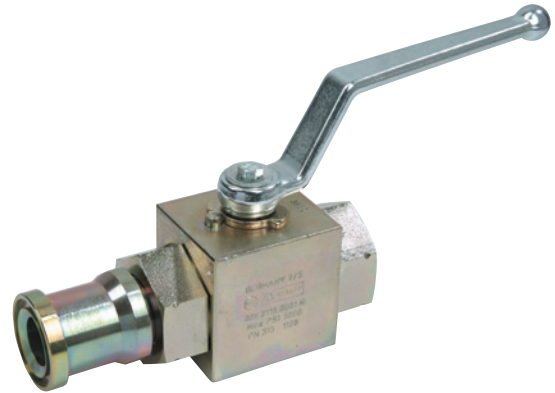
Split Flange End Connection Adaptor



Use these Carbon Steel (Zinc Plated) adaptors to extend the application range of Stauff SAE Threaded Valves by using High Pressure Adaptors on one or both ports. Maximum pressure to 7250 PSI (500 bar).

Part Number	Tube O.D.	Flange Size		A	B	C	H Thread	K
		Code 61	Code 62					
				in mm	in mm	in mm		in mm
302-12-12	3/4"	3/4"		2.48 62.99	1.88 47.75	1.50 38.10	1/16-12	0.66 16.76
302-16-16	1"	1"		2.48 62.99	1.88 47.75	1.75 44.45	1/16-12	0.88 22.35
302-20-20	1 1/4"	1 1/4"		3.00 76.20	2.4 60.96	2.00 50.80	1/8-12	1.1 27.94
302-24-24	1 1/2"	1 1/2"		3.01 76.45	2.41 61.21	2.38 60.45	1/8-12	1.3 33.02
302-32-32	2"	2"		3.50 88.90	2.4 60.96	2.81 71.37	2 1/2-12	1.8 45.72
602-12-12	3/4"		3/4"	2.48 62.99	1.88 47.75	1.62 41.15	1/16-12	0.66 16.76
602-16-16	1"		1"	2.48 62.99	1.88 47.75	1.87 47.50	1/16-12	0.88 22.35
602-20-20	1 1/4"		1 1/4"	2.82 71.62	2.23 56.64	2.12 53.85	1/8-12	1.1 27.94
602-24-24	1 1/2"		1 1/2"	3.19 81.03	2.41 61.21	2.50 63.50	1/8-12	1.3 33.02
602-32-32	2"		2"	3.60 91.44	3.00 76.20	3.12 79.25	2 1/2-12	1.8 45.72

*Note: Pressure rating of valve determines assembly pressure rating.



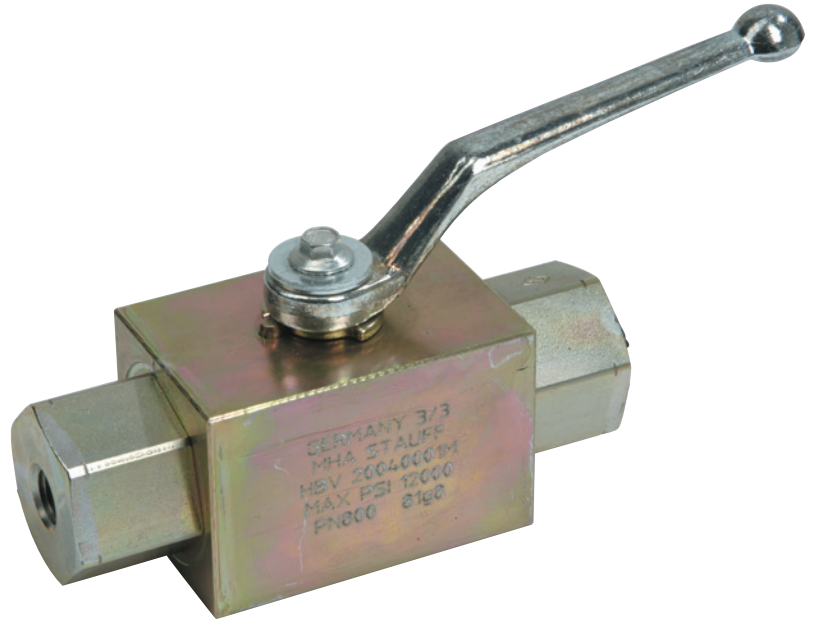
Step sizes are available.
Consult factory for information.

Specifications

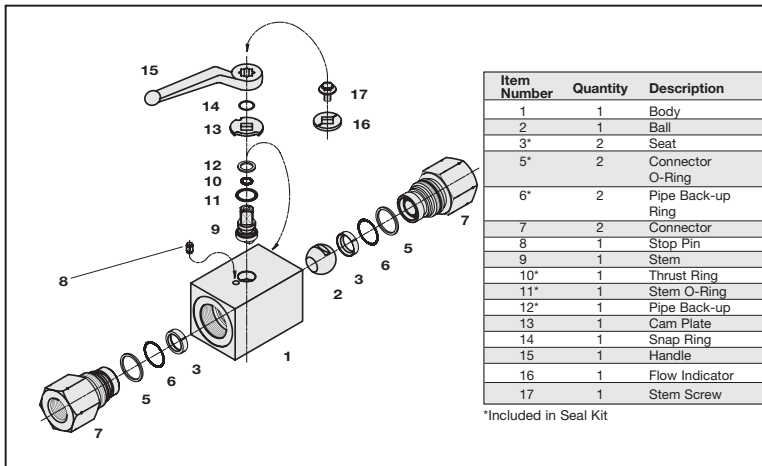
- 12,000 PSI (825 bar) Working Pressure
- Two-Way Valves
- 1/4" – 1" Fully Ported
- NPT and SAE Threaded Connections
- Temperature Range: -30°F to 212°F (-34°C to 100°C)
- Peek Seat Material
- Carbon Steel
- Zinc Plated Body

Options

- Stainless Steel Construction
- Limit Switches
- Actuator Packages Available

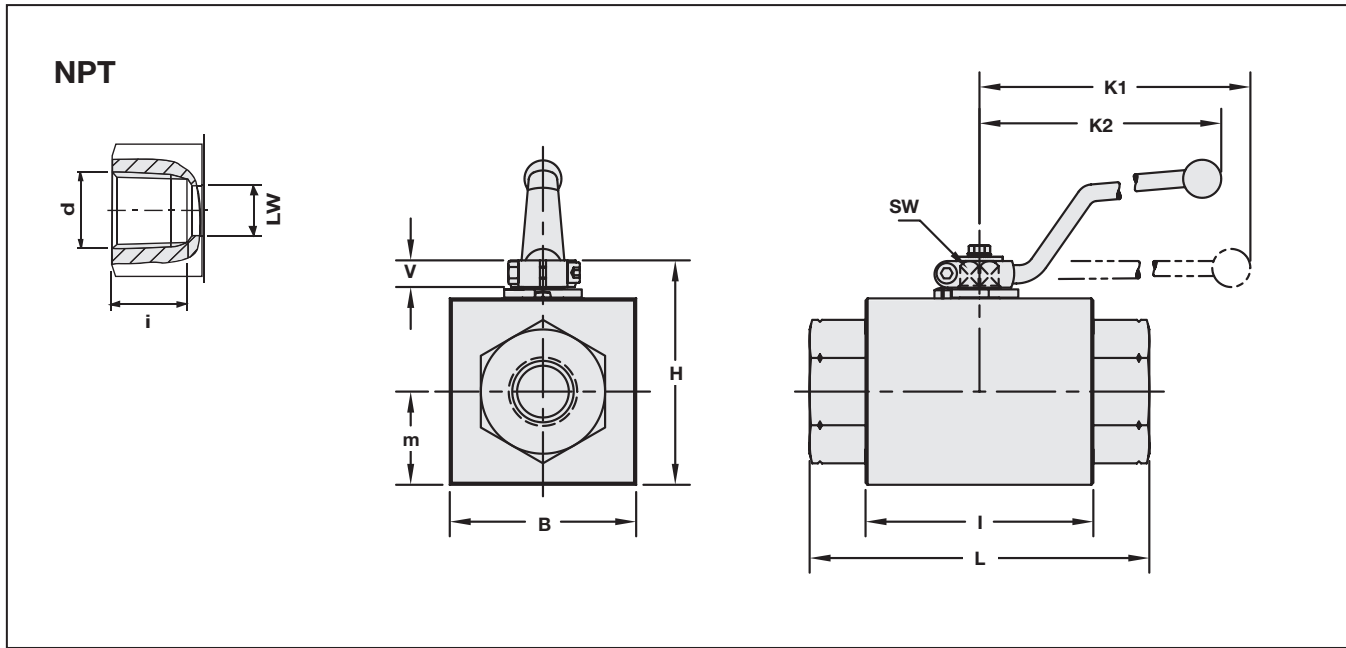


Technical Information



Size		Part Number	Maximum Working Pressure	
			PSI	Bar
1/4"	NPT	HBV20040001M	12,000 PSI	825
3/8"	NPT	HBV20060001M	12,000 PSI	825
1/2"	NPT	HBV20080001M	12,000 PSI	825
3/4"	NPT	HBV20120001M	12,000 PSI	825
1"	NPT	HBV20160001M	12,000 PSI	825

Dimensional Information



Size	d NPT	i NPT	LW		L		I		B		H		m		V		SW		K ₁		K ₂		Weight	
			mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
1/4"	1/4-18	0.67	6	0.24	130	5.12	76	2.99	50	1.97	64	2.52	25	0.98	11	0.43	9	0.35	150	5.91	115	4.53	1.3	2.86
3/8"	3/8-18	0.69	10	0.39	130	5.12	76	2.99	50	1.97	64	2.52	25	0.98	11	0.43	9	0.35	150	5.91	115	4.53	1.3	2.86
1/2"	1/2-14	0.98	13	0.51	130	5.12	76	2.99	50	1.97	64	2.52	25	0.98	11	0.43	9	0.35	150	5.91	115	4.53	1.3	2.86
3/4"	3/4-14	0.91	20	0.79	161	6.34	111	4.37	90	3.54	108	4.25	45	1.77	14	0.55	14	0.55	200	7.87	160	6.30	5.6	12.32
1"	1-11 1/4	1.09	25	0.98	164	6.46	111	4.37	90	3.54	108	4.25	45	1.77	14	0.55	14	0.55	1200	7.87	160	6.30	5.6	12.32

Ordering Information

