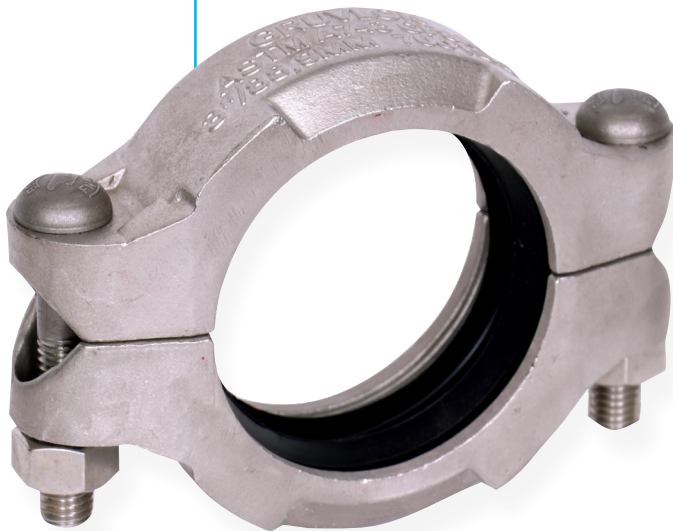


Stainless Steel Flexible Coupling Fig. 7001SS



The Figure 7001SS Flexible Coupling is a Stainless Steel coupling made of ASTM A-743 / A743M cast stainless steel which is the cast equivalent to 316 Stainless Steel. It is designed for installation on Stainless Steel schedule 10 and 40 pipe and fittings. The stainless steel material is suitable for a variety of aggressive corrosive environments. The Figure 7001SS flexible coupling can accommodate some angular, rotational and axial pipe movement. It is capable of pressures up to 750 psi (41.4 bar) depending on pipe size and wall thickness.

Material Specifications

Stainless Steel Bolts

Stainless steel bolts are metric track head bolts conforming to ASTM A 193M Class 2, Type 316 Grade B8M.

Stainless Steel Nuts

Class 2 stainless steel nuts are heavy hex nuts conforming to ASTM A 194M, Type 316, Grade 8M.

Stainless Steel Housing

Type 316L, ASTM A 743/A 743M – Standard specification for castings, iron-chromium, iron-chromium-nickel, corrosion resistant; for general application Grade CR-8M. Tensile strength, minimum 70,000 psi (4826.3 bar). Yield strength, minimum 30,000 psi (2068.4 bar). Elongation in 2" (50mm) minimum 30%.

Material Specifications (Continued)

Gaskets: Materials

Properties as designated in accordance with ASTM D 2000.

Grade "EP" EPDM (Green and Red color code) –40°F to 250°F (Service Temperature Range) (–40°C to 121°C). Recommended for water service, diluted acids, alkaline solutions, oil-free air and many other chemical services.

NOT FOR USE IN PETROLEUM APPLICATIONS. For hot water applications the use of Gruvlok Extreme Temperature lubricant is recommended.

Grade "T" Nitrile (Orange color code) –20°F to 180°F (Service Temperature Range) (–29°C to 82°C). Recommended for petroleum applications, air with oil vapors and vegetable and mineral oils. NOT FOR USE IN HOT WATER OR HOT AIR.

Grade "O" Fluoro-Elastomer (Blue color code)

20°F to 300°F (Service Temperature Range) (–7°C to 149°C). Recommended for high temperature resistance to oxidizing acids, petroleum oils, hydraulic fluids, halo enated hydrocarbons and lubricants.

Gasket Type

Standard C Style (1" – 8")
Flush Gap (1" – 8")

Lubrication

Standard Gruvlok
Gruvlok Xtreme™
(Do Not use with Grade "L")

Stainless Steel Flexible Coupling Fig. 7001SS

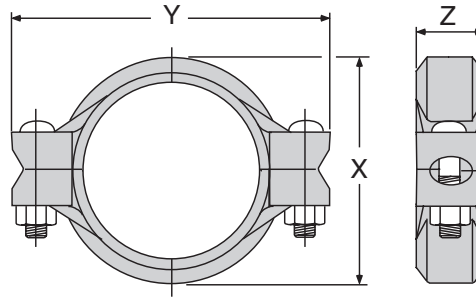


Fig. 7001SS Stainless Steel Flexible Coupling

Nominal Size	O.D.	Max. Working Pressure [†]	Max. End Load [†]	Max. End Gap*‡	Deflection from C		Coupling Dimensions			Coupling Bolts		Approx. Wt. Ea.
					Per Coupling	of Pipe	X	Y	Z	Qty.	Size	
In./DN(mm)	In./mm	PSI/bar	Lbs./kN	In./mm	Degrees (°) - Minutes (')	In./ft-mm/m	In./mm	In./mm	In./mm		In./mm	Lbs./kg
1 25	1.315 33.4	750 51.7	1.019 4.5	0.13 3.3	5° 26'	0.90 95.1	2.70 68.6	3.72 94.5	1.75 44.4	2	$\frac{3}{8} \times 2\frac{1}{4}$ M10 x 57	1.3 0.6
1¼ 32	1.660 42.4	750 51.7	1.623 7.2	0.13 3.3	4° 19'	0.90 75.0	2.92 74.1	4.19 106.4	1.80 45.7	2	$\frac{3}{8} \times 2\frac{1}{4}$ M10 x 57	1.7 0.7
1½ 40	1.900 48.3	750 51.7	2.127 9.5	0.13 3.3	3° 46'	0.79 65.8	3.04 77.2	4.42 112.8	1.80 45.7	2	$\frac{3}{8} \times 2\frac{1}{4}$ M10 x 57	1.8 0.8
2 50	2.375 60.3	500 34.5	2.215 9.9	0.13 3.3	3° 1'	0.63 52.5	3.38 85.8	4.97 126.2	1.76 44.7	2	$\frac{3}{8} \times 2\frac{1}{4}$ M10 x 57	2.1 0.8
2½ 65	2.875 73.0	500 34.5	3.246 14.4	0.13 3.3	2° 29'	0.52 43.3	4.00 101	5.68 144.2	1.76 44.7	2	$\frac{3}{8} \times 2\frac{1}{4}$ M10 x 57	2.7 1.2
3 80	3.500 88.9	500 34.5	4.810 21.4	0.13 3.3	2° 3'	0.43 35.8	4.63 117.6	6.50 165.1	1.85 46.998	2	$\frac{1}{2} \times 3$ M12 x 76	3.8 1.7
4 100	4.500 114.3	500 34.5	7.952 35.3	0.25 6.4	3° 11'	0.67 55.8	5.69 148.1	7.90 200.6	2.00 50.8	2	$\frac{1}{2} \times 3\text{M}12$ x 76	5.2 1.8
5 125	5.563 141.3	450 31.0	10.933 48.7	0.25 6.4	2° 35'	0.54 45.0	6.96 176.8	9.71 246.6	2.04 51.8	2	$\frac{5}{8} \times 3\frac{1}{4}$ M16 x 83	7.4 3.3
139.7 mm 125	5.500 139.7	450 31.0	10.691 47.6	0.25 6.4	2° 36'	0.55 45.5	6.81 173.0	9.75 247.7	2.06 52.3	2	— M16 x 83	7.2 3.3
6 150	6.625 168.3	450 31.0	15.512 69.0	0.25 6.4	2° 10'	0.45 37.5	8.02 203.7	10.75 273.0	2.04 51.8	2	$\frac{5}{8} \times 3\frac{1}{4}$ M16 x 83	8.4 3.8
8 200	8.625 219.1	450 31.0	29.261 117	0.25 6.4	1° 40'	0.35 29.2	10.25 260.3	13.56 344.4	2.31 58.6	2	$\frac{3}{4} \times 4\frac{3}{4}$ M20 x 121	15.2 6.69

Note:

* Maximum available gap between pipe ends. Minimum gap = 0.

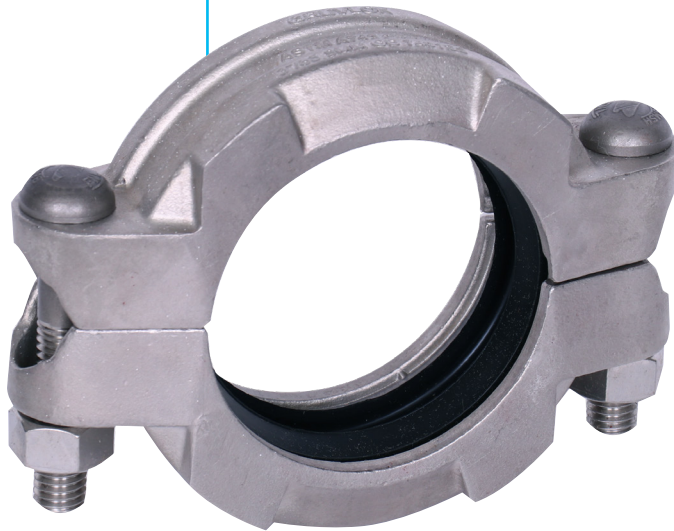
† Maximum Pressure and End Load are total from all loads based on schedule 40 stainless steel pipe.

Pressure ratings and end loads may differ for other pipe materials and/or wall thicknesses.

Contact an ASC Engineered Solutions Sales Representative for details.

‡ Max End Gap and Deflection is for cut grooved standard weight stainless steel pipe. Values for roll grooved pipe will be half that of cut grooved.

Stainless Steel Rigid Coupling Fig. 7401SS



The Figure 7401SS Rigid Coupling is a Stainless Steel coupling made of ASTM A-743 / A743M cast stainless steel which is the cast equivalent to 316 Stainless Steel. It is designed for installation on grooved Stainless Steel Schedules 10 and 40 pipe and grooved fittings. The stainless steel material is suitable for a variety of aggressive corrosive environments. The Figure 7401SS provides a rigid joint connection by firmly gripping along the circumference of the pipe grooves. It is capable of pressures up to 750 psi (41.4 bar) depending on pipe size and wall thickness.

Material Specifications

Stainless Steel Bolts

Stainless steel bolts are metric track head bolts conforming to ASTM A 193M Class 2, Type 316 Grade B8M.

Stainless Steel Nuts

Class 2 stainless steel nuts are heavy hex nuts conforming to ASTM A 194M, Type 316, Grade 8M.

Stainless Steel Housing

Type 316L, ASTM A 743/A 743M – Standard specification for castings, iron-chromium, iron-chromium-nickel, corrosion resistant; for general application Grade CR-8M. Tensile strength, minimum 70,000 psi (4826.3 bar). Yield strength, minimum 30,000 psi (2068.4 bar). Elongation in 2" (50mm) minimum 30%.

Gaskets: Materials

Properties as designated in accordance with ASTM D 2000.

Grade "EP" EPDM (Green and Red color code) –40°F to 250°F (Service Temperature Range) (–40°C to 121°C). Recommended for water service, diluted acids, alkaline solutions, oil-free air and many other chemical services.

NOT FOR USE IN PETROLEUM APPLICATIONS.

For hot water applications the use of Gruvlok Extreme Temperature lubricant is recommended.

Grade "T" Nitrile (Orange color code) –20°F to 180°F (Service Temperature Range) (–29°C to 82°C). Recommended for petroleum applications, air with oil vapors and vegetable and mineral oils. NOT FOR USE IN HOT WATER OR HOT AIR.

Grade "O" Fluoro-Elastomer (Blue color code)

20°F to 300°F (Service Temperature Range) (–7°C to 149°C). Recommended for high temperature resistance to oxidizing acids, petroleum oils, hydraulic fluids, halo enated hydrocarbons and lubricants.

Gasket Type

Standard C Style (1¼" – 12")
Flush Gap (1¼" – 12")

Lubrication

Standard Gruvlok
Gruvlok Xtreme™
(Do Not use with Grade "L")

Stainless Steel Rigid Coupling Fig. 7401SS

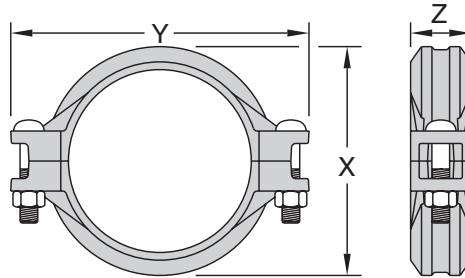


Fig. 7401SS Stainless Steel Rigid Coupling

Nominal Size	O.D.	Max. Working Pressure [†]	Max. End Load [†]	Max. End Gap*‡	Coupling Dimensions			Coupling Bolts		Approx. Wt. Ea.
					X	Y	Z	Qty.	Size	
In./DN(mm)	In./mm	PSI/bar	Lbs./kN	In./mm	In./mm	In./mm	In./mm		In./mm	Lbs./kg
1¼ 32	1.660 42.4	750 51.7	1.623 7.22	0.06 1.5	3.02 76.7	4.38 111.3	1.81 46.0	2	¾ x 2¼ M10 x 57	2.0 0.9
1½ 40	1.900 48.3	750 51.7	2.127 9.46	0.08 2.0	3.14 79.7	4.62 117.3	1.81 46.0	2	¾ x 2¼ M10 x 57	2.1 0.9
2 50	2.375 60.3	750 51.7	3.323 14.78	0.13 3.3	3.63 92.2	5.12 130.0	1.88 47.8	2	¾ x 2¼ M10 x 57	2.5 1.1
2½ 65	2.875 73.0	600 41.4	3.895 17.3	0.13 3.3	4.28 108.7	5.70 144.8	1.88 47.8	2	¾ x 2¼ M10 x 57	3.2 1.5
3 80	3.500 88.9	600 41.4	5.772 25.7	0.13 3.3	4.90 111.7	6.50 165.1	1.88 47.8	2	½ x 3 M12 x 76	4.3 1.9
4 100	4.500 114.3	600 41.4	9.542 42.4	0.19 4.8	6.08 154.4	7.82 198.6	1.97 44.9	2	½ x 3 M12 x 76	5.7 2.6
5 125	5.563 141.3	600 41.4	14.583 64.9	0.19 4.8	7.20 182.8	9.71 246.6	2.04 51.8	2	⅝ x 3¼ M16 x 83	8.2 3.7
6 150	6.625 168.3	600 41.4	20.682 92.0	0.19 4.8	8.27 210.1	10.88 276.3	2.13 54.1	2	⅝ x 3¼ M16 x 83	9.2 4.2
8 200	8.625 219.1	600 41.4	35.054 156	0.19 4.8	10.51 266.9	13.56 344.4	2.62 66.5	2	¾ x 4¾ M20 x 121	19.4 8.8
10 250	10.750 273.0	600 41.4	54.455 242	0.13 3.3	12.97 329.4	16.40 416.6	2.62 66.5	2	1 x 6½ M24 x 165	32.2 14.6
12 300	12.750 323.9	600 41.4	76.603 340	0.13 3.3	15.42 391.7	18.84 478.5	2.62 66.5	2	1 x 6½ M24 x 165	42.2 19.1

Note:

* Maximum available gap between pipe ends. Minimum gap = 0.

† Maximum Pressure and End Load are total from all loads based on schedule 40 stainless steel pipe. Pressure ratings and end loads may differ for other pipe materials and/or wall thicknesses. Contact an ASC Engineered Solutions Sales Representative for details.

‡ Max End Gap and Deflection is for cut grooved standard weight stainless steel pipe. Values for roll grooved pipe will be half that of cut grooved.

Stainless Steel Method Fittings Figs. 7050SS, 7051SS, 7060SS, 7061SS, 7072SS, 7073SS, 7074SS, 7084SS, 7788SS



Material Specifications

Fabricated Fittings

304/316L stainless steel conforming to ASTM A 312, Schedule 10 and Schedule 40

Full Flow Fittings

304/316L stainless steel conforming to ASTM A 403 WPW or A 403 CR

Maximum Working Pressure

Maximum working pressure is determined by the lowest rated component in a connected system. Please refer to individual component sheets to determine the appropriate value.

For Listings/Approval Details and Limitations, visit our website at www.asc-es.com or contact an ASC Engineered Solutions™ Sales Representative.

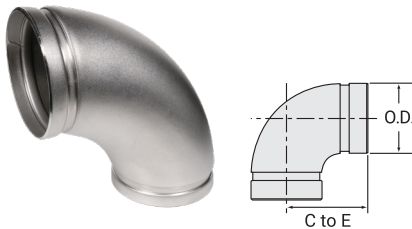
Gruvlok Stainless Steel, Full-Flow Grooved fittings are made of lightweight, corrosion-resistant Type 304 and 316 stainless steel. The assortment of available fittings provides economical and efficient methods to change direction in, add outlets to, reduce, or cap piping systems.

Fittings are available in full-flow and fabricated versions in 304 and 316L S.S. Fabricated fittings are available with Schedule 10 or Schedule 40 wall thickness.

Stainless Steel Method Fittings (Ordering Information)

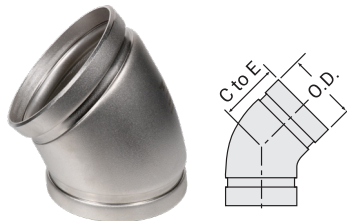
Sample Part Number	2"	7050SS -	40	04
Origin	Size	Item	Schedule	SST
2" 7050SS-4004 A - Global No Letter - Domestic	1 1/4" - 12"	7050SS - 90° Elbow	10 - Sch. 10	04 - Type 304
		7051SS - 45° Elbow	40 - Sch. 40	16 - Type 316
		7060SS - Straight Tee		
		7061SS - Reducing Tee		
		7072SS - Concentric Reducer		
		7073SS - Eccentric Reducer		
		7074SS - Steel Cap		
		7084SS - Flange Adapter		
		7788SS - Flange Adapter		

Fig. 7050SS
90° Stainless Steel Elbow



Nominal Size	O.D.	Center to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	Lbs./kg
1 25	1.315 33.4	2.88 73.2	1 0.45
1¼ 32	1.660 42.2	3.13 79.5	1 0.45
1½ 40	1.900 48.3	3.50 88.9	1 0.45
2 50	2.375 60.3	4.50 114.3	1.1 0.5
2½ 65	2.875 73.0	5.00 127.0	1.7 0.77
3 80	3.500 88.9	4.50 114.3	2.6 1.18
4 100	4.500 114.3	6.00 152.4	4.7 2.13
5 125	5.563 141.3	7.50 190.5	8.4 3.81
6 150	6.625 168.3	9.00 228.6	10.3 4.67
8 200	8.625 219.1	12.00 304.8	17.6 7.98
10 250	10.750 273.0	15.00 381.0	49.2 22.32
12 300	12.750 323.9	18.00 457.2	78.4 35.56

Fig. 7051SS
45° Stainless Steel Elbow



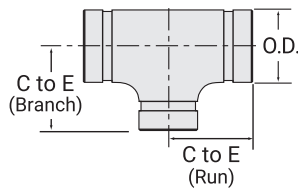
Nominal Size	O.D.	Center to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	Lbs./kg
1 25	1.315 33.4	2.00 50.8	0.6 0.27
1¼ 32	1.660 42.2	2.00 50.8	0.8 0.36
1½ 40	1.900 48.3	2.13 54.1	1 0.45
2 50	2.375 60.3	2.75 69.9	1.2 0.54
2½ 65	2.875 73.0	2.88 73.2	1.3 0.59
3 80	3.500 88.9	2.00 50.8	1.3 0.59
4 100	4.500 114.3	2.50 63.5	2.3 1.04
5 125	5.563 141.3	3.13 79.5	4.2 1.91
6 150	6.625 168.3	3.75 95.3	5.1 2.31
8 200	8.625 219.1	5.00 127	13.8 6.26
10 250	10.750 273.0	6.25 158.8	24.6 11.16
12 300	12.750 323.9	7.50 190.5	39.2 17.78

Fig. 7060SS
Stainless Steel Tee



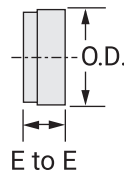
Nominal Size	O.D.	Center to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	Lbs./kg
1 25	1.315 33.4	2.25 57.2	0.7 0.32
1¼ 32	1.66 42.2	3.13 79.5	1.3 0.59
1½ 40	1.9 48.3	3.38 85.9	1.6 0.73
2 50	2.375 60.3	2.75 69.9	2.3 1.04
2½ 65	2.875 73.0	3.13 79.5	2.8 1.27
3 80	3.5 88.9	3.75 95.3	3.1 1.41
4 100	4.5 114.3	4.50 114.3	4.9 2.22
5 125	5.563 141.3	5.89 149.6	7.1 3.22
6 150	6.625 168.3	5.89 149.6	11.7 5.31
8 200	8.625 219.1	7.76 197.1	20.0 9.07
10 250	10.75 273.0	8.88 225.6	34.4 15.60
12 300	12.75 323.9	10.38 263.7	52.5 23.81

Fig. 7061SS
Stainless Steel Reducing Tee



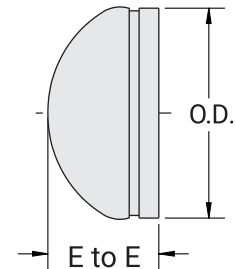
Nominal Size	O.D. 1	O.D. 2	C to E	C to B	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	In./mm	In./mm	Lbs./kg
1½ x 1½ x 1 40 x 40 x 25	1.900 48.3	1.315 33.4	2.75 69.9	2.75 69.9	1.5 0.68
1½ x 1½ x 1¼ 40 x 40 x 32	1.900 48.3	1.660 42.4	2.75 69.9	2.75 69.9	1.7 0.77
2 x 2 x 1 50 x 50 x 25	2.375 60.3	1.315 33.4	3.25 82.6	3.25 82.6	2.2 1.00
2 x 2 x 1¼ 50 x 50 x 32	2.375 60.3	1.660 42.2	3.25 82.6	3.25 82.6	2.4 1.09
2 x 2 x 1½ 50 x 50 x 40	2.375 60.3	1.900 48.3	2.75 69.9	2.75 69.9	2.4 1.09
2½ x 2½ x 1 50 x 50 x 40	2.875 73.0	1.315 33.4	3.75 95.3	3.75 95.3	3.1 1.41
2½ x 2½ x 1½ 50 x 50 x 40	2.875 73.0	1.900 48.3	3.75 95.3	3.75 95.3	3.4 1.54
2½ x 2½ x 2 50 x 50 x 40	2.875 73.0	2.375 60.3	3.07 78.0	3.07 78.0	3.6 1.63
3 x 3 x 1 80 x 80 x 25	3.500 88.9	1.315 33.4	4.25 108.0	4.25 108.0	4.3 1.95
3 x 3 x 1¼ 80 x 80 x 32	3.500 88.9	1.660 42.2	4.25 108.0	4.25 108.0	4.3 1.95
3 x 3 x 1½ 80 x 80 x 40	3.500 88.9	1.900 48.3	4.25 108.0	4.25 108.0	4.4 2.00
3 x 3 x 2 80 x 80 x 50	3.500 88.9	2.375 60.3	3.77 95.8	3.23 82.0	4.4 2.00
3 x 3 x 2½ 80 x 80 x 65	3.500 88.9	2.875 73.0	3.77 95.8	3.23 82.0	4.4 2.00
4 x 4 x 2 100 x 100 x 50	4.500 114.3	2.375 60.3	4.47 113.5	3.82 97.0	4.4 2.00
4 x 4 x 2½ 100 x 100 x 65	4.500 114.3	2.875 73.0	4.47 113.5	3.82 97.0	4.6 2.09
4 x 4 x 3 100 x 100 x 80	4.500 114.3	3.500 88.9	4.47 113.5	3.88 98.6	4.9 2.22
6 x 6 x 1½ 150 x 150 x 40	6.625 168.3	1.900 48.3	5.91 150.1	5.91 150.1	9.3 4.22
6 x 6 x 2 150 x 150 x 50	6.625 168.3	2.375 60.3	5.91 150.1	5.91 150.1	9.3 4.22
6 x 6 x 3 150 x 150 x 80	6.625 168.3	3.5 88.9	5.91 150.1	4.88 124.0	9.3 4.22
6 x 6 x 4 150 x 150 x 100	6.625 168.3	4.500 114.3	5.91 150.1	5.12 130.0	9.3 4.22
8 x 8 x 4 200 x 200 x 100	8.625 219.1	4.500 114.3	7.79 197.9	6.31 160.3	18.1 8.21
8 x 8 x 6 200 x 200 x 150	8.625 219.1	6.625 168.3	7.79 197.9	6.62 168.1	18.1 8.21
10 x 10 x 6 250 x 250 x 150	10.750 273.0	6.625 168.3	8.89 225.8	7.70 195.6	29.3 13.29
10 x 10 x 8 250 x 250 x 200	10.750 273.0	8.625 219.1	8.89 225.8	8.59 218.2	31.7 14.38
12 x 12 x 8 300 x 300 x 200	12.750 323.9	8.625 219.1	10.39 263.9	9.51 242	44.0 19.96
12 x 12 x 10 300 x 300 x 250	12.750 323.9	10.750 273.0	10.39 263.9	9.89 251.2	44.0 19.96

Fig. 7074SS
Stainless Steel Cap



Nominal Size	O.D.	End to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	Lbs./kg
1 25	1.315 33.4	1.08 27.4	0.2 0.09
1¼ 32	1.660 42.2	1.08 27.4	0.4 0.18
1½ 40	1.900 48.3	1.08 27.4	0.5 0.23
2 50	2.375 60.3	1.08 27.4	0.7 0.32
2½ 65	2.875 73.0	1.08 27.4	1.0 0.45
76.1mm 65	3.000 76.2	2.36 60.0	3.1 1.41
3 80	3.500 88.9	1.08 27.4	2.0 0.91
4 100	4.500 114.3	1.13 28.7	3.1 1.41
5 125	5.563 141.3	3.00 76.2	1.7 0.77
6 150	6.625 168.3	3.50 88.9	1.9 0.86
8 200	8.625 219.1	4.00 101.6	3.1 1.41
10 250	10.750 273.0	5.00 127.0	6.0 2.72
12 300	12.750 323.9	6.00 152.4	7.8 3.54

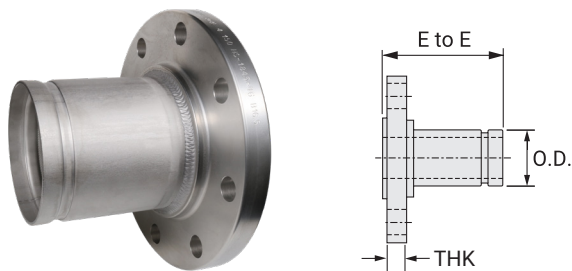
Fig. 7074SS
Stainless Steel Cap (Large)



Nominal Size	O.D.	End to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	Lbs./kg
4 100	4.500 114.3	1.13 28.7	3.1 1.41
5 125	5.563 141.3	3.00 76.2	1.7 0.77
6 150	6.625 168.3	3.50 88.9	1.9 0.86
8 200	8.625 219.1	4.00 101.6	3.1 1.41
10 250	10.750 273.0	5.00 127.0	6.0 2.72
12 300	12.750 323.9	6.00 152.4	7.8 3.54

Fig. 7084SS

Groove x Class 150 Stainless Steel Flange Adapter



Nominal Size	O.D.	End to End	THK	Mating Flange Bolt	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	In./mm	In./mm	Lbs./kg
--	--	--	--	--	--
--	--	--	--	--	--
--	--	--	--	--	--
2 50	2.380 60.5	2.490 63.2	0.500 12.7	4	2.7 1.22
2 ½ 65	2.880 73.2	2.400 61.0	0.440 11.2	8	3.0 1.36
3 80	3.500 88.9	2.680 68.1	0.560 14.2	8	6.0 2.72
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4 100	4.500 114.3	2.620 66.5	0.640 16.3	8	7.0 3.18
5 125	5.560 141.2	2.610 66.3	0.670 17.0	8	10.0 4.54
6 150	6.630 168.4	2.630 66.8	0.690 17.5	8	12.0 5.44
8 200	8.630 219.2	3.120 79.2	0.810 20.6	8	21.0 9.53
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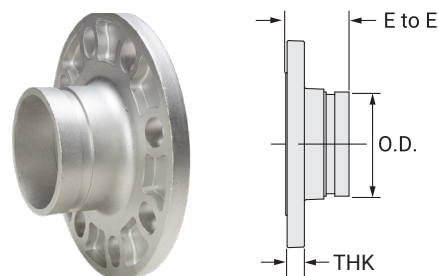
Fig. 7788SS

Groove Cast 316 Stainless Steel Flange Adapter

Notes

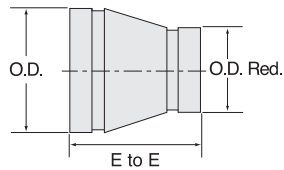
Maximum Allowable Working Pressure: 300 psi.

Material: Cast stainless steel equivalent to 316 alloy.



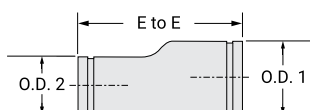
Nominal Size	O.D.	End to End	THK	Mating Flange Bolt	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	In./mm	In./mm	Lbs./kg
1 25	1.315 33.4	3.000 76.2	0.500 12.7	4	2.5 1.13
1 ¼ 32	1.660 42.2	4.000 101.6	0.560 14.2	4	3.8 1.72
1 ½ 40	1.900 48.3	4.000 101.6	0.620 15.7	4	4.1 1.86
2 50	2.375 60.3	4.000 101.6	0.690 17.5	4	6.0 2.72
2 ½ 65	2.875 73.0	4.000 101.6	0.810 20.6	4	9.2 4.17
3 80	3.500 88.9	4.000 101.6	0.880 22.4	4	10.4 4.72
3 ½ 90	4.000 101.6	4.000 101.6	0.880 22.4	4	14.0 6.35
4 100	4.500 114.3	6.000 152.4	0.880 22.4	8	19.1 8.66
5 125	5.563 141.3	6.000 152.4	0.880 22.4	8	23.0 10.43
6 150	6.625 168.3	6.000 152.4	0.940 23.9	8	28.1 12.75
8 200	8.625 219.1	6.000 152.4	1.060 26.9	8	43.7 19.82
10 250	10.750 273.0	8.000 203.2	1.12 28.4	12	68.2 30.94
12 300	12.750 323.9	8.000 203.2	1.19 30.2	12	96.1 43.59

Fig. 7072SS
Stainless Steel Concentric Reducer



Nominal Size	O.D. 1	O.D. 2	End to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	In./mm	Lbs./kg
1½ x 1 40 x 25	1.900 48.3	1.315 33.4	3.75 95.3	1.4 0.64
1½ x 1¼ 40 x 32	1.900 48.3	1.660 42.2	3.75 95.3	1.4 0.64
2 x 1 50 x 25	2.375 60.3	1.315 33.4	3.75 95.3	1.5 0.68
2 x 1¼ 50 x 32	2.375 60.3	1.660 42.2	3.75 95.3	2.5 1.13
2 x 1½ 50 x 40	2.375 60.3	1.900 48.3	5.00 127.0	2.5 1.13
2½ x 1½ 65 x 40	2.875 73.0	1.900 48.3	5.00 127.0	3.5 1.59
2½ x 2 65 x 50	2.875 73.0	2.375 60.3	5.00 127.0	3.5 1.59
3 x 1 80 x 25	3.500 88.9	1.315 33.4	5.00 127.0	3.5 1.59
3 x 1¼ 80 x 32	3.500 88.9	1.660 42.2	5.00 127.0	4.3 1.95
3 x 1½ 80 x 40	3.500 88.9	1.900 48.3	5.00 127.0	4.4 2.00
3 x 2 80 x 50	3.500 88.9	2.375 60.3	5.00 127.0	4.8 2.18
3 x 2½ 80 x 65	3.500 88.9	2.875 73.0	5.00 127.0	4.8 2.18
4 x 2 100 x 50	4.500 114.3	2.375 60.3	5.00 127.0	4.8 2.18
4 x 2½ 100 x 65	4.500 114.3	2.875 73.0	5.00 127.0	4.8 2.18
4 x 3 100 x 80	4.500 114.3	3.500 88.9	5.00 127.0	5.0 2.27
5 x 3 125 x 80	5.563 141.3	3.500 88.9	9.00 228.6	7.0 3.18
5 x 4 125 x 100	5.563 141.3	4.500 114.3	9.00 228.6	7.0 3.18
6 x 2 150 x 50	6.625 168.3	2.375 60.3	5.50 139.7	4.2 1.91
6 x 2½ 150 x 65	6.625 168.3	2.875 73.0	5.50 139.7	4.2 1.91
6 x 3 150 x 80	6.625 168.3	3.500 88.9	5.50 139.7	4.0 1.81
6 x 4 150 x 100	6.625 168.3	4.500 114.3	5.50 139.7	4.2 1.91
8 x 4 200 x 100	8.625 219.1	4.500 114.3	6.00 152.4	9.6 4.35
8 x 6 200 x 150	8.625 219.1	6.625 168.3	6.00 152.4	9.6 4.35
10 x 4 250 x 100	10.750 273.0	4.500 114.3	7.00 177.8	8.8 3.99
10 x 6 250 x 150	10.750 273.0	6.625 168.3	7.00 177.8	11.5 5.22
10 x 8 250 x 200	10.750 273.0	8.625 219.1	7.00 177.8	11.5 5.22
12 x 6 300 x 150	12.750 323.9	6.625 168.3	8.00 203.2	13.0 5.90
12 x 8 300 x 200	12.750 323.9	8.625 219.1	8.00 203.2	13.0 5.90
12 x 10 300 x 250	12.750 323.9	10.750 273.0	8.00 203.2	17.0 7.71

Fig. 7073SS
Stainless Steel Eccentric Reducer



Nominal Size	O.D. 1	O.D. 2	End to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	In./mm	Lbs./kg
1½ x 1 40 x 25	1.900 48.3	1.315 33.4	3.75 95.3	1.4 0.64
1½ x 1¼ 40 x 32	1.900 48.3	1.660 42.2	3.75 95.3	1.4 0.64
2 x 1 50 x 25	2.375 60.3	1.315 33.4	3.75 95.3	1.5 0.68
2 x 1¼ 50 x 32	2.375 60.3	1.660 42.2	3.75 95.3	2.5 1.13
2 x 1½ 50 x 40	2.375 60.3	1.900 48.3	3.75 95.3	2.5 1.13
2½ x 2 65 x 50	2.875 73.0	2.375 60.3	5.00 127.0	3.5 1.59
3 x 1 80 x 25	3.500 88.9	1.315 33.4	5.00 127.0	4.3 1.95
3 x 2 80 x 50	3.500 88.9	2.375 60.3	5.00 127.0	4.3 1.95
3 x 2½ 80 x 65	3.500 88.9	2.875 73.0	5.00 127.0	4.5 2.04
4 x 2 100 x 50	4.500 114.3	2.375 60.3	5.00 127.0	4.8 2.18
4 x 2½ 100 x 65	4.500 114.3	2.875 73.0	5.00 127.0	5.8 2.63
4 x 3 100 x 80	4.500 114.3	3.5 88.9	5.00 127.0	5.9 2.68
5 x 3 125 x 80	5.563 141.3	3.5 88.9	9.00 228.6	6.7 3.04
5 x 4 125 x 100	5.563 141.3	4.5 114.3	9.00 228.6	7.0 3.18
6 x 2 150 x 50	6.625 168.3	2.375 60.3	9.00 228.6	7.0 3.17
6 x 2½ 150 x 65	6.625 168.3	2.875 73.0	9.00 228.6	7.0 3.17
6 x 3 150 x 80	6.625 168.3	3.5 88.9	9.00 228.6	7.0 3.18
6 x 4 150 x 100	6.625 168.3	4.5 114.3	9.00 228.6	7.0 3.18
8 x 3 200 x 80	8.625 219.1	3.5 88.9	10.00 254.0	9.3 4.22
8 x 4 200 x 100	8.625 219.1	4.5 114.3	10.00 254.0	11.6 5.26
8 x 6 200 x 150	8.625 219.1	6.625 168.3	10.00 254.0	11.8 5.35
10 x 6 250 x 150	10.75 273.0	6.625 168.3	13.00 330.2	12.5 5.67
10 x 8 250 x 200	10.750 273.0	8.625 219.1	13.00 330.2	11.5 5.22
12 x 6 300 x 150	12.750 323.9	6.625 168.3	14.00 355.6	21.1 9.57
12 x 8 300 x 200	12.750 323.9	8.625 219.1	14.00 355.6	21.1 9.57
12 x 10 300 x 250	12.750 323.9	10.75 273.0	14.00 355.6	21.1 9.57

Grooved End Stainless Steel Butterfly Valve with Lever Handle Model B480



For additional listings or approvals, visit our website at www.asc-es.com

The Model B480 Grooved End Stainless Steel Butterfly Valve with Lever Handle is a grooved-end stainless steel butterfly valve designed for 300 psi service, supplied with a 10-position locking lever handle. The end-to-end dimensions conform to MSS SP-67. The body is investment cast in grade CF8M (Type 316) to ASTM A743 with integral neck and ISO mounting top flange. The neck height allows for pipe insulation up to two inches thick. The disc is a dual-seal type, encapsulated either with Grade “EN” EPDM for cold water services or with Grade “T” Nitrile for oil services. The Model B480 Stainless Steel Butterfly Valves with standard disc and Grade “EN” EPDM seat are UL classified to ANSI/NSF 61 and ANSI/NSF 372.

Maximum Working Pressure: 300 psi (20 bar)

Materials of Construction

Valve Body

CF8M (Type 316) Stainless Steel conforming to ASTM A743 or A351, or A744 which is UL Classified in accordance with ANSI/ NSF 61 and ANSI/NSF 372 for potable water use up to 180°F (82°C)

Stems

Stainless Steel Type 410 conforming to ASTM A582

Disc

CF8M (Type 316) Stainless Steel conforming to ASTM A743 or A351, or A744 which is UL Classified in accordance with ANSI/NSF 61 and Annex G for potable water use up to 180°F (82°C)

Disc Encapsulation

Grade “EN” EPDM Rubber Classified in accordance with ANSI/NSF 61 and ANSI/NSF 372 for potable water use up to 180°F (82°C), or Grade “T” Nitrile

O-Rings

EPDM

Seat Material

- Grade “EN” EPDM – For service temperatures from -30°F to 230°F (-34°C to 110°C). For general service. Recommended for water service, dilute acids, alkalies, oil-free air and many chemical services.

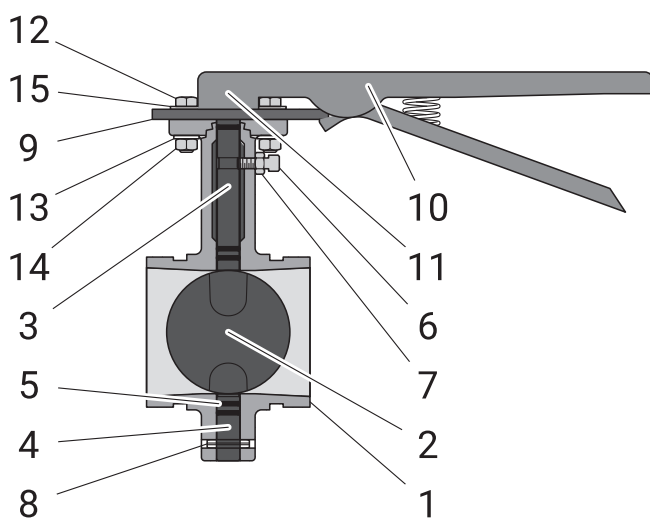
Note: Not recommended for use in petroleum services.

- Grade “T” Nitrile – For service temperatures from -20°F to 180°F (-29°C to 82°C). Recommended for petroleum products, air with oil vapors, vegetable oils, and mineral oils.

Note: Not recommended for use in hot water services.

Contact an ASC Engineered Solutions Sales Representative for specific recommendations on seat material.

Grooved End Stainless Steel Butterfly Valve with Lever Handle Model B480



B480 Shaft Size

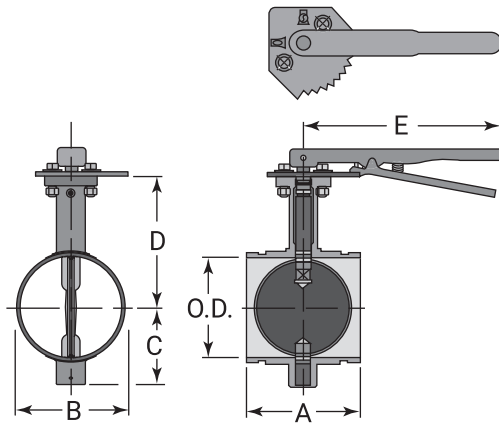
Size	Shaft Size SJ-400 (B480)
2"	φ12.7
2½"	φ12.7
3"	φ12.7
4"	φ19.0
5"	φ19.0
6"	φ19.0
8"	φ19.0

Round shaft with pin.

Material Specifications

- 1. Body**
Stainless Steel
- 2. Disc**
Stainless Steel
- 3. Upper Shaft**
Stainless Steel
- 4. Lower Shaft**
Stainless Steel
- 5. O-Ring**
EPDM
- 6. Hex Socket Set Screw**
Stainless Steel
- 7. Hex Nut**
Stainless Steel
- 8. Roll Pin**
Spring Steel
- 9. Throttle Plate**
Stainless Steel
- 10. Lever-Lock Handle Assembly**
Stainless Steel
- 11. Roll Pin**
Spring Steel
- 12. Hex Bolt**
Stainless Steel
- 13. Lock Washer**
Stainless Steel
- 14. Hex Nut**
Stainless Steel
- 15. Flat Washer**
Stainless Steel

Grooved End Stainless Steel Butterfly Valve with Lever Handle Model B480



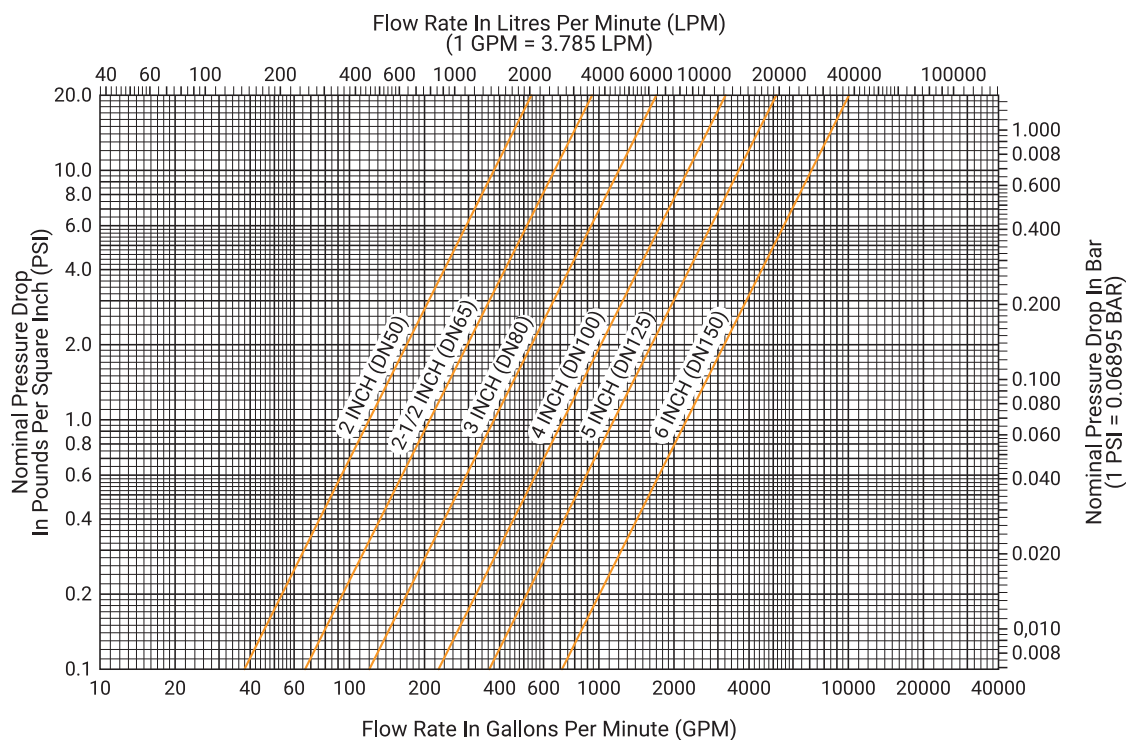
Valve Size	O.D.	Operating Torque	Dimensions					Approx. Wt. Ea.
In./mm	In./mm	In.-lb./Nm	A	B	C	D	E	Lbs./Kg
2	2.375	78	3.19	2.756	2.480	4.17	10.0	5.0
50	60.3	8.80	81	70	63	106	254	2,3
2½	2.875	84	3.81	3.386	2.677	4.28	10.0	7.0
65	73.0	9.50	97	86	68	111	254	3,2
76.1mm	3.000	84	3.81	3.386	2.677	4.28	10.0	7.0
65	76.1	9.50	97	86	68	111	254	3,2
3	3.500	95	3.81	3.858	2.992	4.97	10.0	6.6
80	88.9	10.7	97	98	76	126	254	3,5
4	4.500	200	4.56	4.882	3.504	5.33	10.0	11.0
100	114.3	22.6	116	124	89	135	254	5,0
165.1mm	6.500	310	5.81	7.008	4.488	6.62	10.0	20.2
150	165.1	34.9	148	178	114	168	254	9,2
6	6.625	310	5.81	7.008	4.488	7.25	10.0	20.2
150	168.3	34.9	148	178	114	184	254	9,2

These torque values were derived from test data with non-lubricated valves in water, non-pressurized at ambient temperatures
For information on alternative sizes, contact an ASC Engineered Solutions Sales Representative.

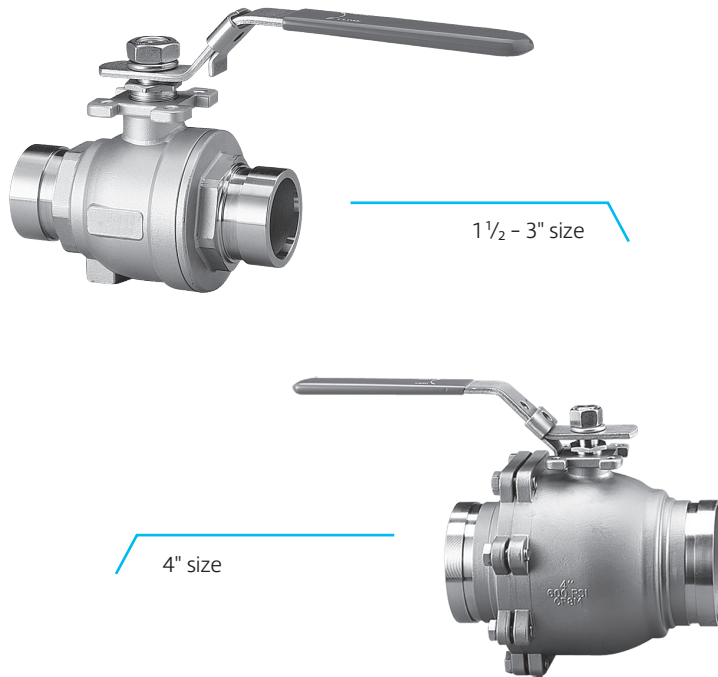
Note: The torque values are based on liquid applications. For dry or non-lubricating applications add a 25% service factor to the above values.

Grooved End Stainless Steel Butterfly Valve with Lever Handle Model B480

Model B480 Grooved End Stainless Steel Butterfly Valve Nominal Pressure Loss Vs Flow



Grooved End Stainless Steel Ball Valve with Lever Handle Model BV435



Material Specifications

Body

Cast Stainless Steel per ASTM A351-CF8M

Ball

Cast Stainless Steel per ASTM A351-CF8M

Upper Stems

Stainless steel per ASTM A276, Type 316

Operator

Stainless Steel Lever per ASTM A-276, Type 304

Seats

1 1/2 to 3 Inches: Virgin PTFE,
4 Inches: Glass Filled PTFE

Seals

PTFE

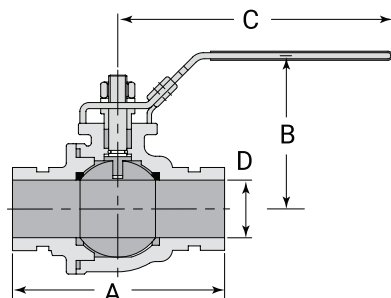
O-Rings

EPDM

The Model BV435 Grooved End Stainless Steel Ball Valves with Lever Handle provide for efficient control of fluid in piping systems. Flow may be from either direction, and the valves may be positioned in any orientation. The valves are furnished with grooved ends for use with Gruvlok grooved couplings. The handle is provided with a device for padlocking in either the open or closed position.

Maximum Working Pressure: 600 psi (41.4 bar)

Grooved End Stainless Steel Ball Valve with Lever Handle Model BV435



Size	O.D.	Dimensions				Operating Torque	Approx. Wt. Ea.
		A	B	C	D		
In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In.-Lbs./Nm	Lbs./Kg
1½	1.900	5.50	3.70	7.60	1.50	62	6.6
40	48.3	140	94	193	38	7	3.0
2	2.375	6.15	4.13	7.60	1.97	150	8.8
50	60.3	156	105	193	50	17	4.0
2½	2.875	7.09	4.33	9.84	2.36	186	15.4
65	73.0	180	110	250	60	21	7.0
3	3.500	8.42	6.00	9.84	2.99	248	20.7
80	88.9	214	152	250	76	28	9.4
4	4.500	9.45	6.57	11.42	3.94	398	55
100	114.3	240	167	290	100	45	25.0

Weight includes the lever handle.

Model BV435 Grooved End Stainless Steel Ball Valve Nominal Pressure Loss vs Flow

Flow Rate In Litres Per Minute (LPM)
(1 GPM = 3.785 LPM)

