



Ver. D, Model 2-6

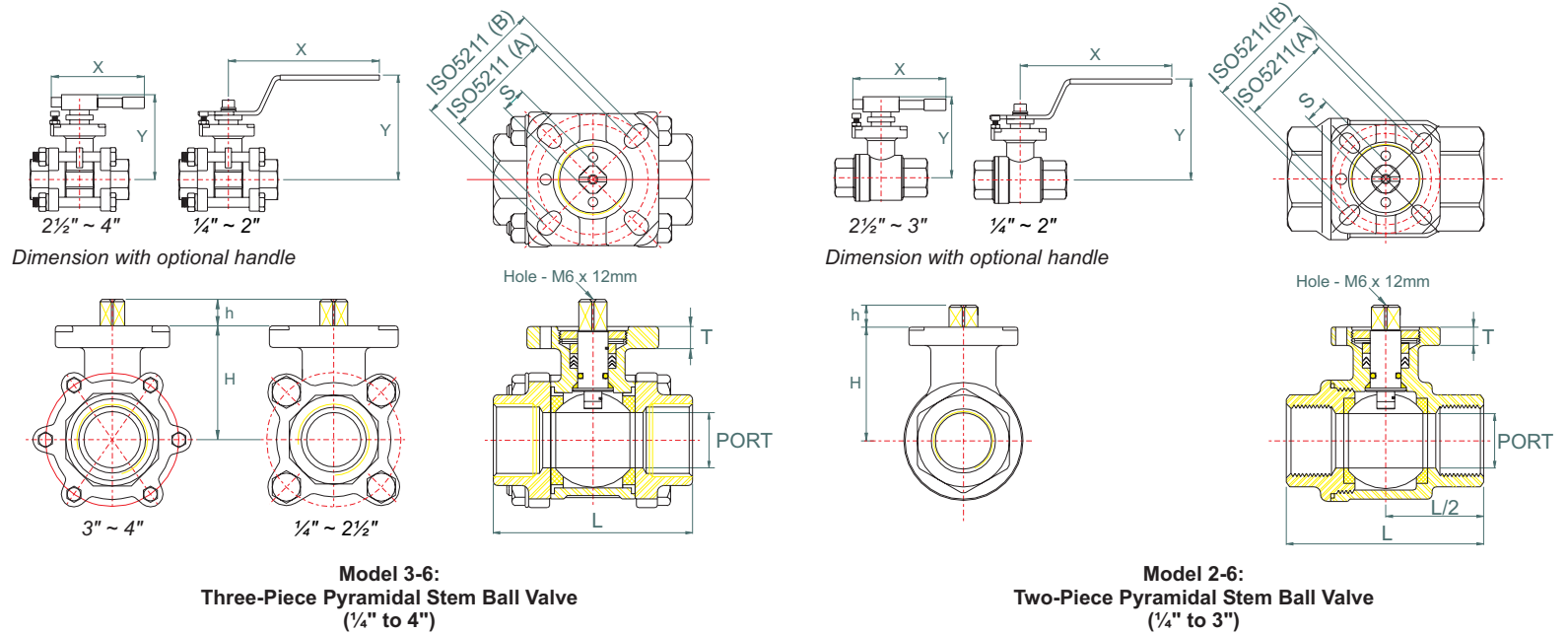
Two-Piece Pyramidal Ball Valve
 Model 2-62: 2000PSI (1/4" to 1")
 1500PSI (1 1/4" to 2")
 Model 2-60: 1000PSI (2 1/2" to 4")

Model 3-6

Three-Piece Pyramidal Ball Valve
 Model 3-6T: Threaded End Ball Valve
 Model 3-6B: Butt Weld End Ball Valve
 Model 3-6S: Socket Weld End Ball Valve
 Pressure Rating: 1000 PSI (1/4" to 4")

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Manual and Bare Stem Ball Valve Dimensions



DIMENSIONS (mm)

SIZE	DN	PORT	h	H	*L	S	T	X	Y	ISO5211 (A)	ISO5211 (B)
1/4"	8	11.5	7.0	42	65	9.0	9.0	130	76	F03 - PCD36 - Ø6 X 4	F04 - PCD42 - Ø6 X 4
3/8"	10	12.7	7.0	42	65	9.0	9.0	130	76	F03 - PCD36 - Ø6 X 4	F04 - PCD42 - Ø6 X 4
1/2"	15	15.0	7.0	42	75	9.0	9.0	130	76	F03 - PCD36 - Ø6 X 4	F04 - PCD42 - Ø6 X 4
3/4"	20	20.0	8.0	45	80	9.0	9.0	130	80	F03 - PCD36 - Ø6 X 4	F04 - PCD42 - Ø6 X 4
1"	25	25.0	11.0	52	90	11.0	10.0	190	95	F04 - PCD42 - Ø6 X 4	F05 - PCD50 - Ø7 X 4
1 1/4"	32	32.0	11.0	57	110	11.0	10.0	190	95	F04 - PCD42 - Ø6 X 4	F05 - PCD50 - Ø7 X 4
1 1/2"	40	38.1	14.0	68	120	14.0	13.0	205	115	F05 - PCD50 - Ø7 X 4	F07 - PCD70 - Ø9 X 4
2"	50	50.0	14.0	77	140	14.0	13.0	205	115	F05 - PCD50 - Ø7 X 4	F07 - PCD70 - Ø9 X 4
2 1/2"	65	63.5	17.0	99	185	17.0	13.0	300	160	F07 - PCD70 - Ø9 X 4	F10 - PCD102 - Ø11 X 4
3"	80	80.0	17.0	111	205	17.0	13.0	300	170	F07 - PCD70 - Ø9 X 4	F10 - PCD102 - Ø11 X 4
4"	100	97.0	22.0	141	240	22.0	16.5	400	200	F10 - PCD102 - Ø11 X 4	F12 - PCD125 - Ø11 X 4

Note: For threaded, socket weld, and butt weld end ball valves, the internal ball diameter for 1/4" (DN8) and 3/8" (DN10) is 15mm. For sizes 1/2" (DN15) and greater the internal ball diameter is the same as the PORT diameter. PORT dimension applies to threaded, socket weld, and butt weld end ball valves. * L value listed is face to face dimension for Threaded End ball valve. For face to face dimension of other types of body end connectors please refer to End Cap dimensions



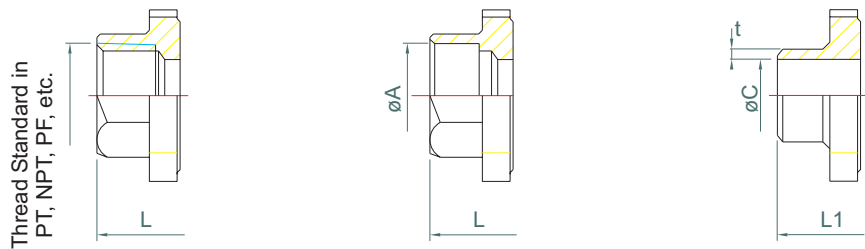
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 Pressure Rating: 1000 PSI (1/4" to 4")

End Cap Dimension for Three-Piece Ball Valve



3-6T
Threaded End

Length According to DIN3202-M3
 (Except 1/4" and 3/8")

3-6S
Socket Weld End

Length According to DIN3202-M3
 (Except 1/4" and 3/8")

3-6B
Butt Weld End

Length According to DIN3202-S13

DIMENSIONS (mm)

SIZE	DN	øA	øC	L	L1	t
1/4"	8	14.2	10.4	65	70	2.2
3/8"	10	17.7	13.7	65	70	2.3
1/2"	15	21.9	15.0	75	75	3.0
3/4"	20	27.3	21.4	80	90	3.0
1"	25	34.1	27.2	90	100	4.0
1 1/4"	32	43.0	35.5	110	110	4.0
1 1/2"	40	49.0	41.2	120	125	4.0
2"	50	61.3	52.7	140	150	5.0
2 1/2"	65	77.0	65.3	185	190	5.2
3"	80	89.9	78.0	205	220	5.5
4"	100	115.3	102.3	240	270	6.0

Torque Values in N•M

SIZE	Break	Running
1/4"	6.1	5.1
3/8"	6.1	5.1
1/2"	6.1	5.1
3/4"	10.8	9.0
1"	17.6	14.7
1 1/4"	21.7	18.1
1 1/2"	27.1	22.6
2"	37.9	31.6
2 1/2"	67.8	56.50
3"	88.1	73.40
4"	149.2	124.3

Note: Torque values provided are based on ambient temperature with less than 5BAR pressure differential across the ends of the valve in clear non-viscous fluid. For torque value at other operation conditions, please refer to our user's manual.

Pressure and Temperature Ratings

Dotted lines show the rating for the valve body. Solid color lines show the rating for valve seat. Both ratings need to be considered when determining the limitation of the valve for specific application.

Maxium Body Rating

Model 3-6: Three-Piece Pyramidal Stem Ball Valve
 1/4" to 4" 1000 PSI WOG / PN64

Model 2-6: Two-Piece Pyramidal Stem Ball Valve
 1/4" to 1" 2000 PSI WOG / PN140
 1 1/4" to 2" 1500 PSI WOG / PN100
 2 1/2" to 3" 1000 PSI WOG / PN64

Steam Rating

150 PSI WSP
 PTFE and RPTFE seats are not suitable for steam service

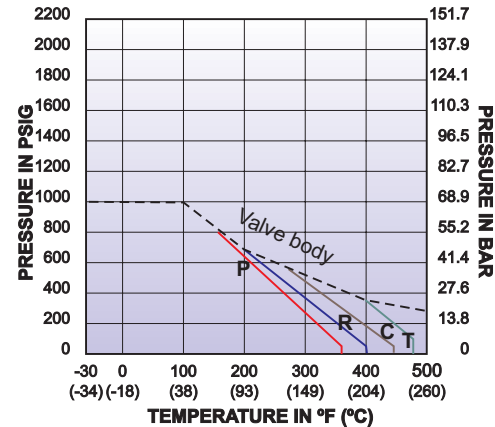
Legend for Body Rating



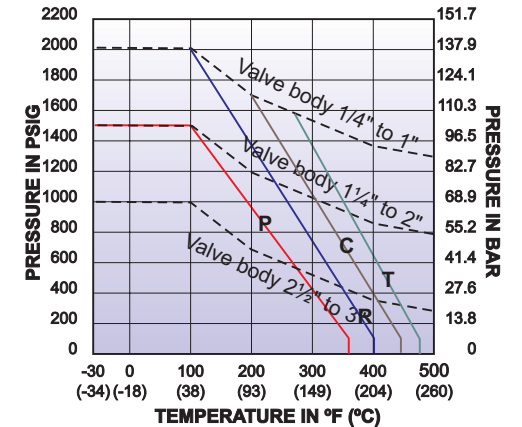
Legend for Seat Rating



Model 3-6: Three-Piece Ball Valve Pressure Vs. Temperature Chart



Model 2-6: Two-Piece Ball Valve Pressure Vs. Temperature Chart





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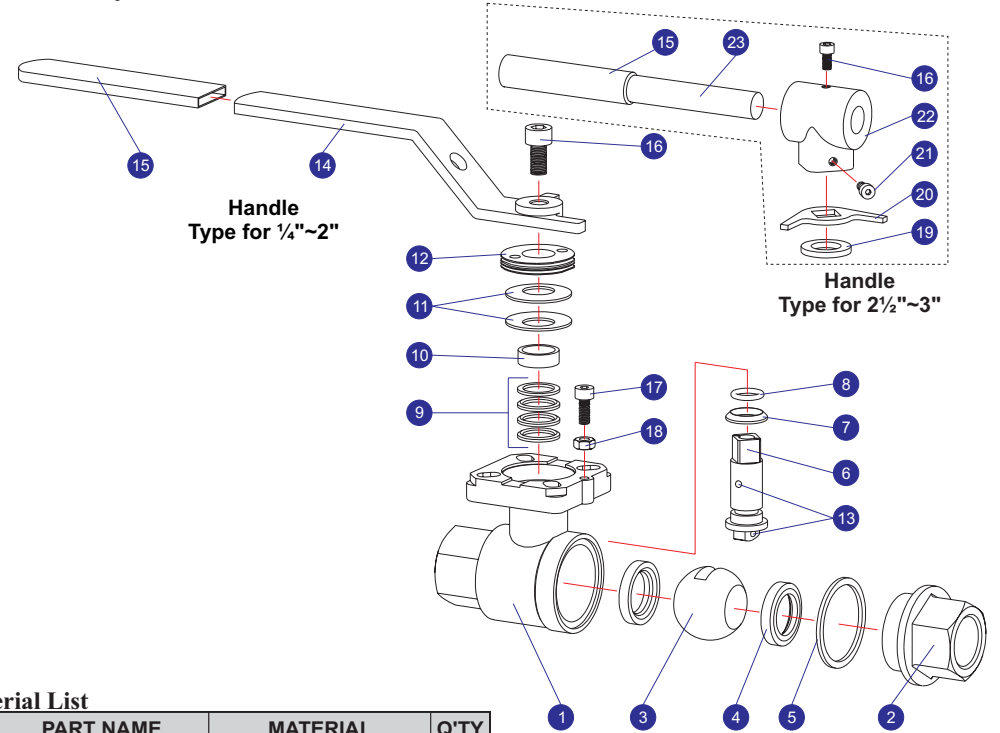
Two-Piece Pyramidal Ball Valve
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Three-Piece Pyramidal Ball Valve
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 Model 3-6B: Butt Weld End Ball Valve
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 Pressure Rating: 1000 PSI (1/4" to 4")

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Assembly Diagram for Model 2-6: Two-Piece Pyramidal Ball Valve



Material List

NO.	PART NAME	MATERIAL	Q'TY
1	Body	1.4408 or 1.0619	1
2	End Cap	1.4408 or 1.0619	2
3	Ball	SUS316	1
4	Seat	PTFE	2
5	Body Gasket	PTFE	2
6	Stem	SUS316	1
7	Pyramidal Stem Seal	PTFE	1
8	O-Ring	Viton	1
9	V-Ring Stem Packing	PTFE	†
10	Gland	SUS304	1
11	Belleville Washer	SUS301	2
12	Disc Plate	SUS304	1
13	Anti-Static Device	SUS316	2

† 1/4" to 3/4" a set = 2pcs; 1" to 3" a set = 4pcs

Material List for Optional Handle Kit

NO.	PART NAME	MATERIAL	Q'TY
14	Handle	SUS304	1
15	Handle Sleeve	Vinyl	1
16	Handle Bolt	SUS304	1
17	Stop Bolt	SUS304	1
18	Stop Nut	SUS304	1
19	Handle Spacer	PTFE	1
20	Stop Plate	SUS304	1
21	Adapter Bolt	SUS304	1
22	Handle Adapter	SUS304	1
23	Round Handle	SUS304	1

Items 14 to 16 are for 1/4" to 2" valves. Items 15 to 23 are for 2 1/2" to 3" valves



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Two-Piece Pyramidal Ball Valve

Model 2-62: 2000PSI (1/4" to 1")

1500PSI (1 1/4" to 2")

Model 2-60: 1000PSI (2 1/2" to 4")

Model 3-6

Three-Piece Pyramidal Ball Valve

Model 3-6T: Threaded End Ball Valve

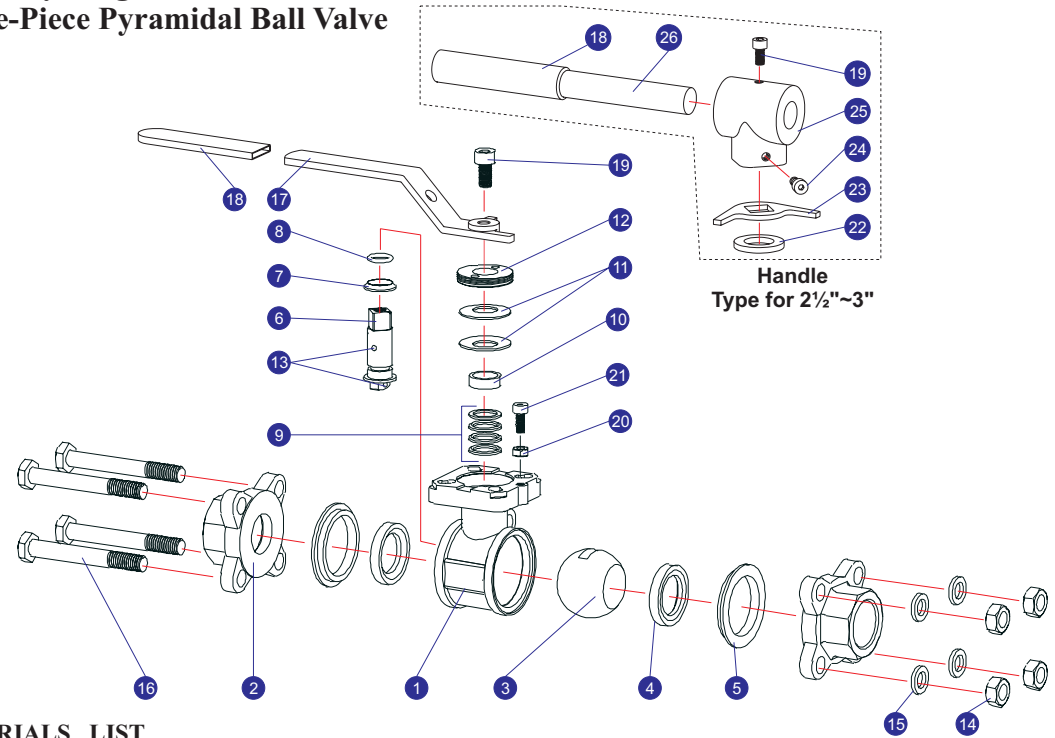
Model 3-6B: Butt Weld End Ball Valve

Model 3-6S: Socket Weld End Ball Valve

Pressure Rating: 1000 PSI (1/4" to 4")

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Assembly Diagram for Model 3-6: Three-Piece Pyramidal Ball Valve



MATERIALS LIST

NO.	PART NAME	MATERIAL	Q'TY
1	Body	1.4408 or 1.0619	1
2	End Cap	1.4408 or 1.0619	2
3	Ball	SUS316	1
4	Seat	PTFE	2
5	Body Gasket	PTFE	2
6	Stem	SUS316	1
7	Pyramidal Stem Seal	PTFE	1
8	O-Ring	Viton	1
9	V-Ring Stem Packing	PTFE	†
10	Gland	SUS304	1
11	Belleville Washer	SUS301	2
12	Disc Plate	SUS304	1
13	Anti-Static Device	SUS316	2
14	Body Nut	ISO-3506 (A2-70)	§
15	Body Washer	ISO-3506 (A2-70)	§
16	Body Bolt	ISO-3506 (A2-70)	‡

Material List for Optional Handle Kit

NO.	PART NAME	MATERIAL	Q'TY
17	Handle	SUS304	1
18	Handle Sleeve	Vinyl	1
19	Handle Bolt	SUS304	1
20	Stop Bolt	SUS304	1
21	Stop Nut	SUS304	1
22	Handle Spacer	PTFE	1
23	Stop Plate	SUS304	1
24	Adapter Bolt	SUS304	1
25	Handle Adapter	SUS304	1
26	Round Handle	SUS304	1

§ 1/4" to 2" = 4pcs; 2 1/2" = 8pcs; 3" & 4" = 12pcs

‡ 1/4" to 2" = 4pcs; 2 1/2" = 4pcs studs; 3" & 4" = 6pcs studs

† 1/4" to 3/4" a set = 2pcs; 1" to 4" a set = 4pcs

Items 17 to 19 are for 1/4" to 2" valves. Items 18 to 26 are for 2 1/2" to 4" valves



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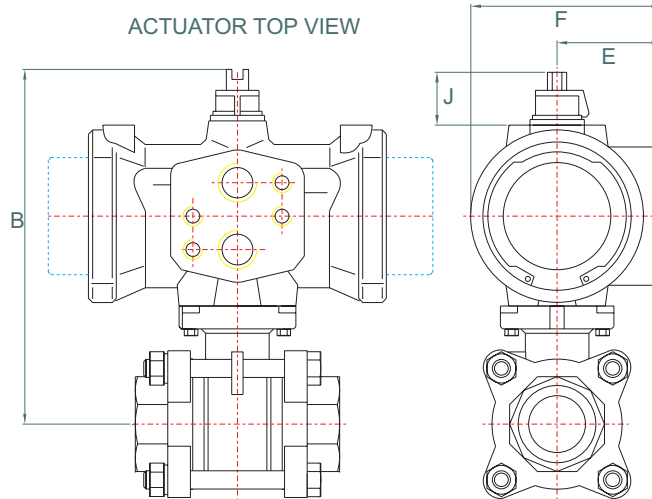
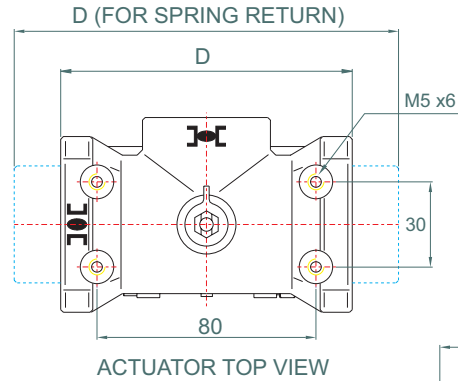
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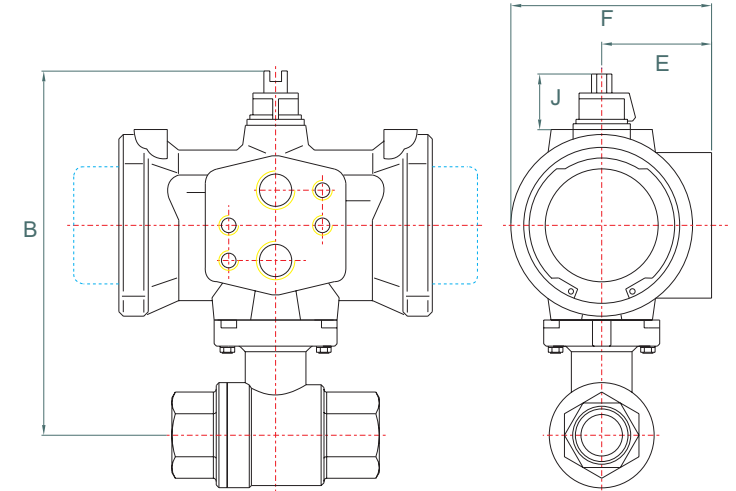
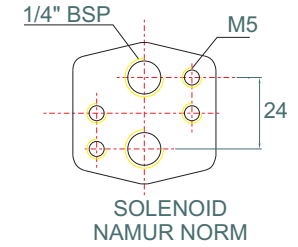
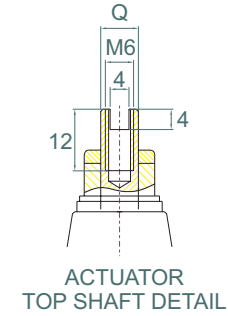
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Actuated Ball Valve Dimensions



Model 3-6: Three-Piece Ball Valve



Model 2-6: Two-Piece Ball Valve

Dimensions for Valve with Double Acting Actuator (mm)

SIZE	DN	Actuator Type	B	D	E	F	J	Q
1/4"	8	PW	127	107	37.5	68.5	20	8
3/8"	10	PW	127	107	37.5	68.5	20	8
1/2"	15	PW	127	107	37.5	68.5	20	8
3/4"	20	PW	130	107	37.5	68.5	20	8
1"	25	PW	137	107	37.5	68.5	20	8
1 1/4"	32	P00	167	125	44	80	30	10
1 1/2"	40	P05	190	146	53	98	30	10
2"	50	P05	199	146	53	98	30	10
2 1/2"	65	P15	247	204	60	115	30	10
3"	80	P15	259	204	60	115	30	10
4"	100	P25	332	276	78	152	30	16

Dimensions for Valve with Single Acting Actuator (mm)

SIZE	DN	Actuator Type	B	D	E	F	J	Q
1/4"	8	PWS	127	107	37.5	68.5	20	8
3/8"	10	PWS	127	107	37.5	68.5	20	8
1/2"	15	PWS	127	107	37.5	68.5	20	8
3/4"	20	P00S	155	125	44	80	30	10
1"	25	P05S	174	146	53	98	30	10
1 1/4"	32	P05S	179	146	53	98	30	10
1 1/2"	40	P10S	195	178	55	102	30	10
2"	50	P15S	225	204	60	115	30	10
2 1/2"	65	P20S	260	234	67	127	30	16
3"	80	P25S	302	276	78	152	30	16
4"	100	P30S	351	308	90	180	30	16

Note: Actuator is sized for 6 BAR air pressure operation with less than 5BAR pressure differential across the outlet of the valves in clear non-viscous fluid. For other operation conditions please re-select actuator according to differential torque values find in our user's manual.