

Neles™ Neldisc™ high performance metal seated triple eccentric disc valve Series LW, LG, ASME rated

Neldisc wafer type LW and lug type LG series are metal seated, high performance butterfly valves specially designed to fulfill the requirements of chemical, petrochemical, refining and pulp and paper industries. With a nearly equal percentage characteristics and superior tightness Neldisc butterfly valves operate both in control and shut-off applications. As a result of the unique triple offset geometry of Neldisc, the contact between disc and seat is mechanically induced and does not rely on assistance from differential pressure. Due to a number of special constructions developed from the versatile Neldisc design, these valves offer a powerful tool for standardization and are truly high performance valves.

Features

- Metal seated design
- Bidirectional long term tightness
- Low friction
- Excellent wear resistance
- Extended life cycle
- Lower operational torque

Reliability

Approvals

- TA-Luft, chapter 3.1.8.4, Shell SPE 77/312, ISO 15848
- Firesafe tested to BS6755 and API607, 6th edition.

Increased safety and minimized emissions

- Standard live loaded gland packing meets TA-Luft and Clean Air Act requirements.
- PTFE V-ring or graphite packing for a wide range of applications.
- Double packing available with or without leak off connection.
- Anti-blow out shaft construction standard in all valves, see page 2 exploded view.
- ATEX

Performance

Excellent for on-off and control applications

- Bi-directional tight seat ISO 5208 rate A (air), FCI 70.2 Class VI, API 598.
- Unique all-metal seat design assures superior tightness in difficult applications over long time periods.



- Contact between disc and seat is mechanically induced and does not rely on assistance from differential pressure.
- Low cost control valve for low differential pressures.
- Special S-disc option for difficult high noise and cavitation applications.

Abrasion resistant

- Solid metal seat design offered in a variety of materials to suit your application..
- Fully metal seated construction. No resilient parts exposed to the medium.

Materials suitable for a broad range of applications

Standard body materials:

Carbon steel (WCB)

Stainless steel (CF8M)

Other materials are available on application.

Face to face dimensions

API 609, category B

Other face to face dimensions on request.

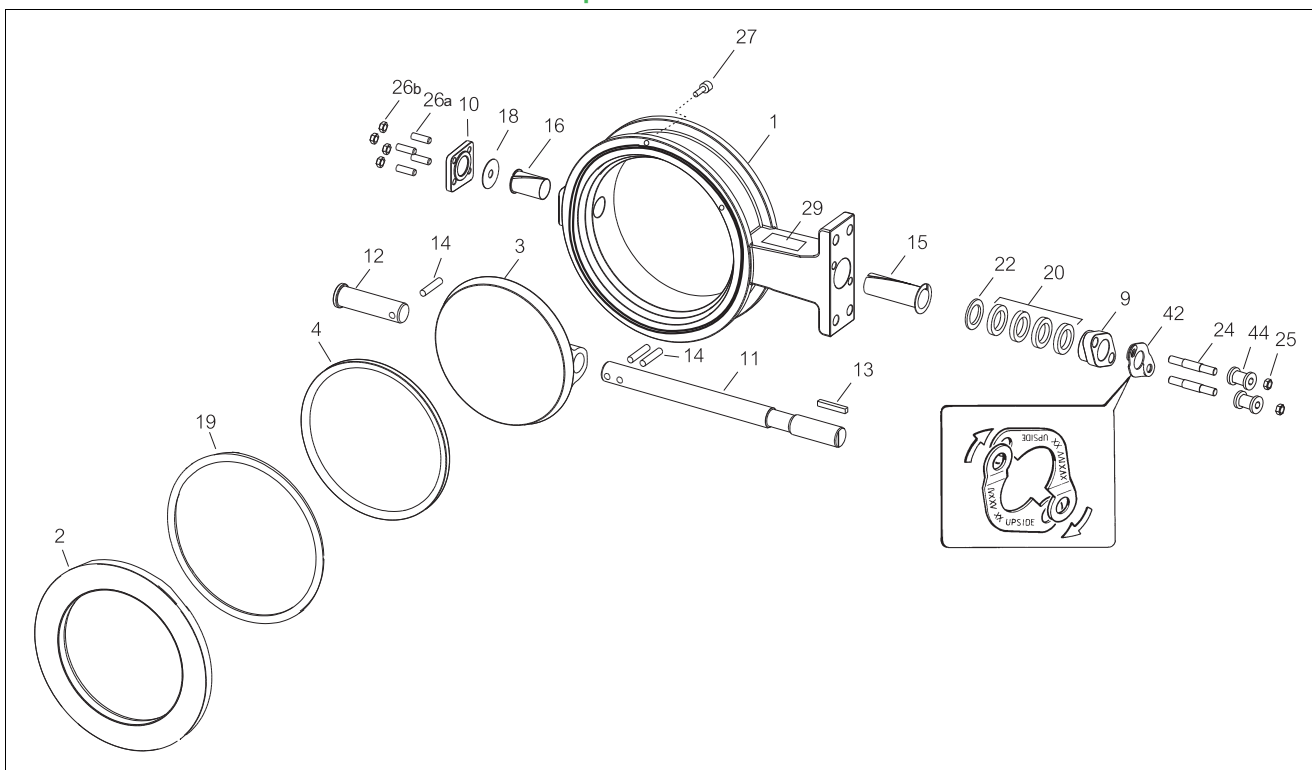
Wide pressure and temperature range

- Differential pressure/temperature ratings in accordance with ASME B16.34.
- Appropriate constructions perform equally well from -200 °C to + 600 °C / -330 °F to +1110 °F.

Extended body neck

- Extended body neck to accommodate easy pipe line insulation.

Exploded view



Parts list

ITEM	PART DESCRIPTION	STANDARD MATERIALS	
1	BODY wafer type	ASTM A216 gr. WCB	ASTM A351 gr. CF8M
2	CLAMP RING		
3	DISC	ASTM A182 gr. F316	
4	SEAT RING (code A)	Hard chrome coated Incoloy 825	
9	GLAND	ASTM A351 gr. CF8M	
10	BLIND FLANGE	ASTM A351 gr. CF8M	
11	DRIVE SHAFT	17-4PH Stainless steel	
12	SHAFT	17-4PH Stainless steel	
13	KEY	329 Stainless steel	
14	PIN	17-4PH Stainless steel	
15	BEARING	AISI 316 + PTFE or cobalt based alloy	
16	BEARING	AISI 316 + PTFE or cobalt based alloy	
18	GASKET	Graphite	
19	BODY SEAL	Graphite	
20	GLAND PACKING	PTFE V-ring or graphite	
22	ANTI-EXTRUSION RING	Graphite + AISI 316	
24	STUD	A4-70 / DIN 267 part 11 Stainless steel	
25	HEXAGON NUT	A4-70 / DIN 267 part 11 Stainless steel	
26a	STUD	Stainless steel	
26b	HEXAGON NUT	Stainless steel	
27	HEX SOC.HEAD CAP SCREW	A4-70 / DIN 267 part 11 Stainless steel	
29	IDENTIFICATION PLATE	AISI 304	
42	RETAINING PLATE	Stainless steel	
44	TA-Luft KIT		

Technical specification

Product type

Fully rated, high performance butterfly valve
Metal seated
LW : Wafer type
LG : Lug type

Pressure ratings

Body & trim: ASME 150: LW5C, LG5C
ASME 300: LW5D, LG5D

Size range

3" - 24"

Temperature range

-200 °C...+ 600 °C / -330 °F...+1110 °F
(over + 600 °C / +1110 °F please consult with factory)

Desing standards

ASME B16.34, API 609 cat B

Approvals

Emission: TA-Luft, chapter 3.1.8.4, Shell
SPE 77/312, ISO 15848
Fire test: BS 6755
API 607, 6th edition.

Valve tightness

Standard seat, code A:

ANSI Class V
ISO 5208, rate D, air
10 x ISO 5208 rate D with RH
hand lever

Optional Leakage

API 598
ANSI Class VI
ISO 5208 rate A, air (4"-24")

Options

S-Disc, flow balancing trim, see bulletin 2 S-L1 20.
High cycle/cycling design
Cryogenic
Oxygen construction
High temperature design
Steam jacket, heat tracing
NACE MR0103/MR0175 with suitable const.
Erosion resistance design

Pressure/Temperature ratings

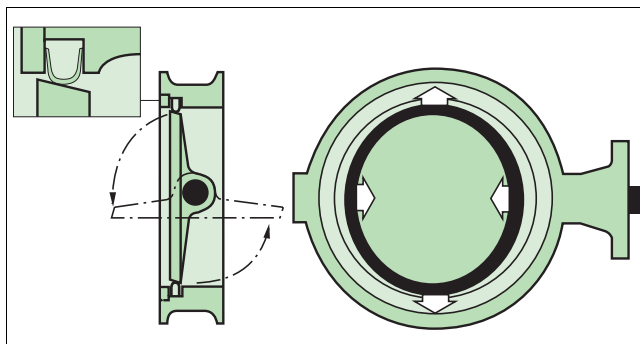
Maximum working pressure ratings of the valve in accordance with ASME B16.34.

Temp. °F	ASME 150		ASME 300	
	Carbon steel* (psi)	AISI 316 Stainless steel (psi)	Carbon steel* (psi)	AISI 316 Stainless steel (psi)
-20 to 100	284.2	275.5	740.9	719.2
122	278.4	266.8	726.4	697.4
212	256.6	234.9	672.8	611.9
300	229.1	214.6	655.4	558.2
392	203.0	198.6	635.1	517.6
482	175.4	175.4	604.6	484.3
572	147.9	147.9	561.1	458.2
662	121.8	121.8	536.5	440.8
707	107.3	107.3	529.2	430.6
752	94.2	94.2	500.2	421.9

* Not recommended for prolonged usage above +425 °C / +800 °F.

Neldisc triple offset seating principle

The disc of the valve is machined to close tolerances to create an elliptical shape similar to an oblique slice taken from a solid metal cone. When the valve is closed, the elliptical disc at the major axis displaces the seat ring outward, causing the seat ring to contact the disc at the minor axis. When the valve is opened, the contact is released and the seat ring returns to its original circular shape.



Flow Data

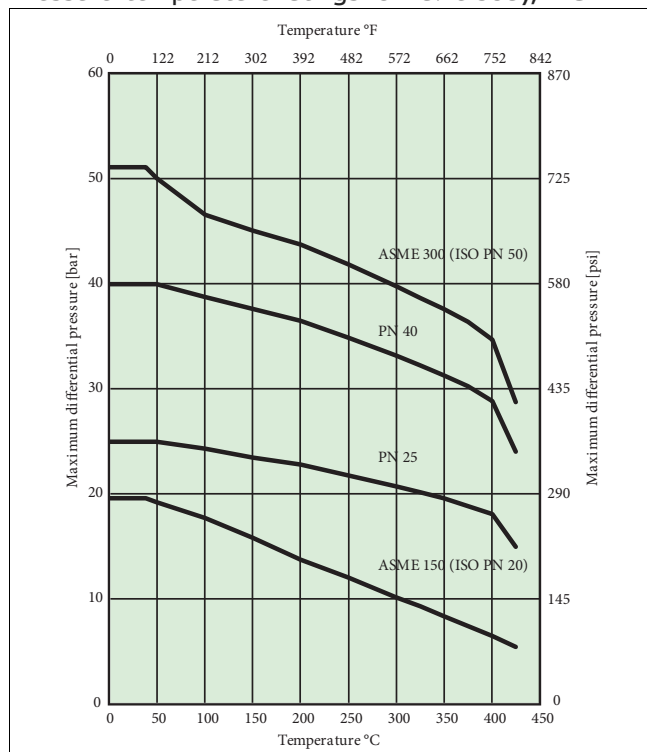
Cv tables of LW and LG valves in pressure classes ASME 150 and 300.

Inch	Cv Values			
	Standard		S-Disc	
	#150	#300	#150	#300
3	245	245	210	210
4	450	450	310	310
6	1500	1300	790	680
8	3050	2300	1470	1160
10	5300	3500	2580	2130
12	7600	5280	3500	3480
14	9400	7470	4500	5200
16	12200	5540	5670	4750
18	17600	6810	7670	5900
20	21900	9110	9180	7840
24	31000	10400	13500	9290
28	25100		12700	
30	35300		17800	
32	46700		20900	
36	53000		23100	
40	69600		30000	

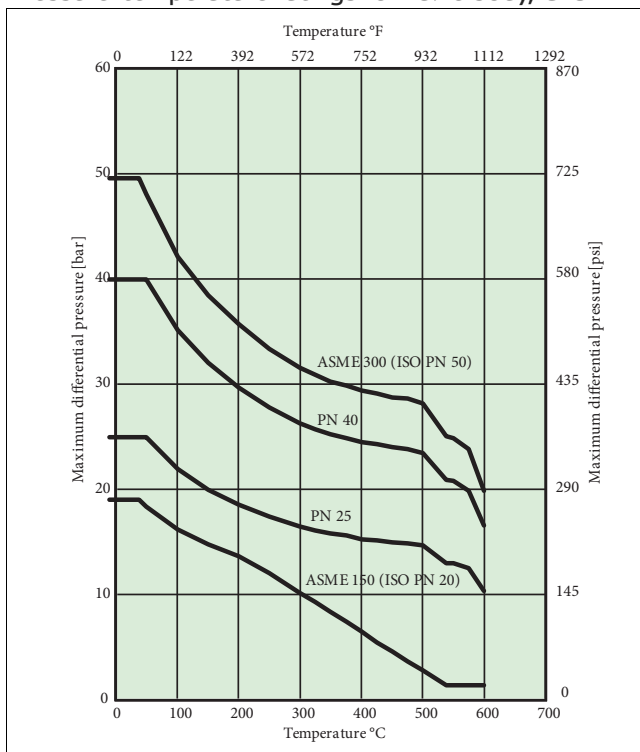
Valve body ratings

Maximum working pressure ratings of the valve body in accordance with different standards.

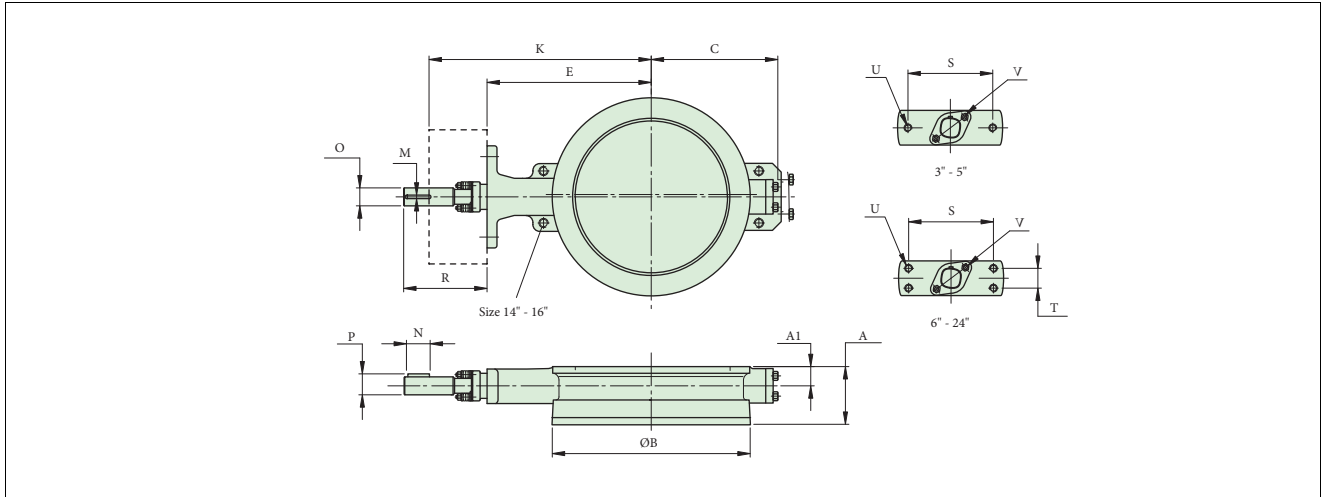
Pressure/temperature ratings for valve body, WCB



Pressure/temperature ratings for valve body, CF8M



LW5C, 3" – 24", ASME 150



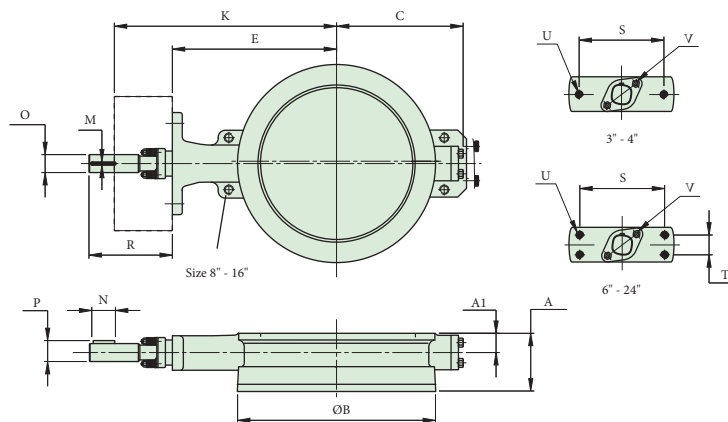
LW5C, dimensions

Size	Dimensions, Inch									U THREAD	V THREAD	Dimensions, Inch					Weight (lbs)
	A1	A	S- LW5C A	ØB	C	E	K	S	T			O	R	M	N	P	
3	0.71	1.89	1.93	5.04	3.15	6.61	9.76	2.76	-	M10	M8	0.59	4.13	0.19	0.98	0.67	9
4	0.79	2.13	2.20	6.22	3.94	7.17	10.71	3.54	-	M12	M8	0.79	4.92	0.19	1.38	0.87	13
6	0.91	2.24	2.76	8.35	5.91	8.94	12.48	4.33	1.26	M12	M8	0.79	4.92	0.19	1.38	0.87	33
8	0.94	2.52	2.80	10.55	6.30	10.12	13.66	4.33	1.26	M12	M10	0.98	5.31	0.25	1.81	1.09	44
10	1.14	2.80	2.99	12.60	8.27	11.42	15.75	5.12	1.26	M12	M10	1.18	6.3	0.25	2.01	1.30	66
12	1.26	3.19	3.27	14.88	10.83	12.60	16.93	5.12	1.26	M12	M10	1.38	6.3	0.37	2.28	1.54	99
14	1.42	3.62	3.62	17.24	11.42	13.98	18.70	6.30	1.57	M16	M10	1.57	7.4	0.37	2.68	1.74	154
16	1.73	4.02	4.02	19.09	12.60	15.94	20.67	6.30	1.57	M16	M14	1.77	7.87	0.50	3.15	1.98	209
18	1.85	4.49	4.49	20.94	14.58	14.96	20.47	6.30	2.17	M20	M14	1.97	9.06	0.50	3.54	2.19	286
20	2.2	5.00	5.00	23.03	16.23	17.32	22.83	6.30	2.17	M20	M14	2.17	9.06	0.50	3.54	2.39	385
24	2.83	6.06	6.06	26.97	18.31	19.88	26.97	9.06	3.54	M20	M14	2.76	11.81	0.75	4.69	3.08	671

LW5C, dimensions

Size	Dimensions, mm									U THREAD	V THREAD	Dimensions, mm					Weight (kg)
	A1	A	S-LW5C A	ØB	C	E	K	S	T			O	R	M	N	P	
3	18	48	49	128	80	168	248	70	-	M10	M8	15	105	4.76	25	17.00	4
4	20	54	56	158	100	182	272	90	-	M12	M8	20	125	4.76	35	22.20	6
6	23	57	70	212	150	227	317	110	32	M12	M8	20	125	4.76	35	22.20	15
8	24	64	71	268	160	257	347	110	32	M12	M10	25	135	6.35	46	27.80	20
10	29	71	76	320	210	290	400	130	32	M12	M10	30	160	6.35	51	32.90	30
12	32	81	83	378	275	320	430	130	32	M12	M10	35	160	9.52	58	39.10	45
14	36	92	92	438	290	355	475	160	40	M16	M10	40	188	9.52	68	44.20	70
16	44	102	102	485	320	405	525	160	40	M16	M14	45	200	12.70	80	50.40	95
18	47	114	114	532	370.3	380	520	160	55	M20	M14	50	230	12.70	90	55.50	130
20	56	127	127	585	412.3	440	580	160	55	M20	M14	55	230	12.70	90	60.60	175
24	72	154	154	685	465	505	685	230	90	M20	M14	70	300	19.05	119	78.15	305

LW5D, 3" – 24", ASME 300



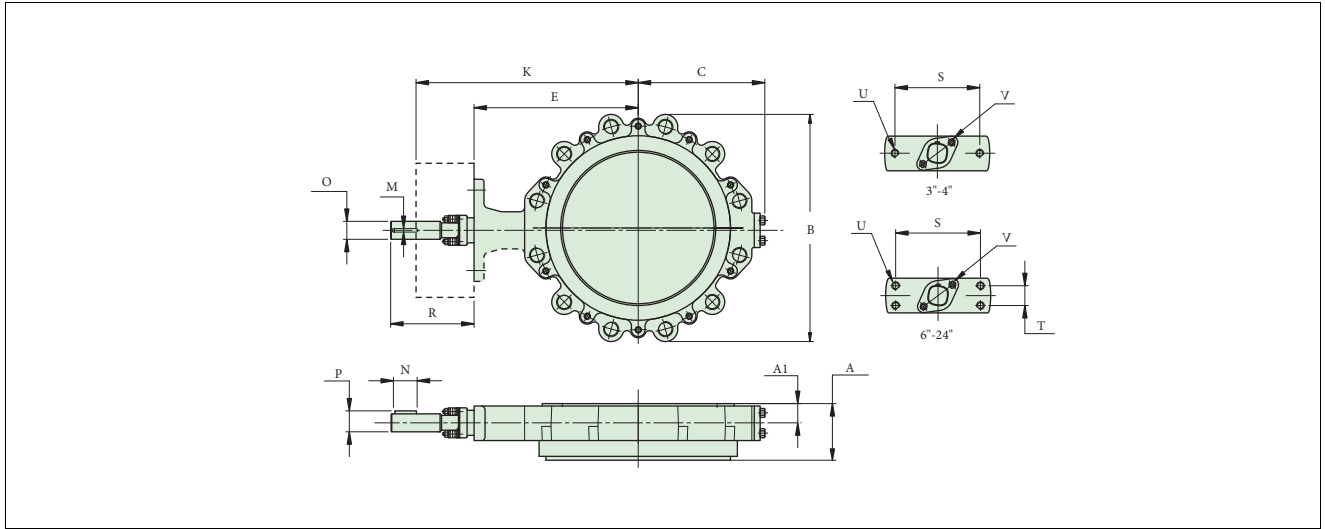
LW5D, dimensions

Size	Dimensions, Inch									U THREAD	V THREAD	Dimensions, Inch					Weight (lbs)
	A1	A	S-LW5D A	ØB	C	E	K	S	T			O	R	M	N	P	
3	0.71	1.89	2.52	5.04	3.15	6.61	9.76	2.76	-	M10	M8	0.59	4.13	0.19	0.98	0.67	9
4	0.79	2.13	2.52	6.22	3.94	7.17	10.71	3.54	-	M12	M8	0.79	4.92	0.19	1.38	0.87	13
6	1.06	2.32	2.99	8.58	5.71	9.13	12.68	4.33	1.26	M12	M8	0.98	5.31	0.25	1.81	1.09	44
8	1.34	2.87	3.50	10.87	8.07	10.79	15.12	5.12	1.26	M12	M10	1.38	6.5	0.37	2.28	1.54	84
10	1.61	3.27	4.49	13.19	10.24	12.60	17.32	6.30	1.57	M12	M10	1.77	7.87	0.50	3.15	1.98	132
12	1.81	3.62	4.49	15.55	11.81	14.17	19.69	6.30	2.17	M12	M10	1.97	9.06	0.50	3.54	2.19	187
14	2.24	4.61	5.00	17.72	12.99	15.75	21.26	6.30	2.17	M16	M10	2.17	9.06	0.50	3.54	2.39	231
16	2.6	5.24	5.51	19.88	14.57	17.32	22.83	6.30	2.17	M16	M14	2.17	9.06	0.50	3.54	2.39	275
18	2.83	5.87	5.98	21.81	16.12	16.34	23.43	9.06	3.54	M20	M14	2.76	11.77	0.75	4.69	3.08	495
20	2.87	6.26	5.98	24.02	17.38	17.32	24.41	9.06	3.54	M20	M14	2.76	11.73	0.75	4.69	3.08	561
24	3.27	7.13	7.01	27.56	20.33	19.69	26.77	9.06	3.54	M20	M14	3.35	12.83	0.88	5.75	3.73	891

LW5D, dimensions

Size	Dimensions, mm									U THREAD	V THREAD	Dimensions, mm					Weight (kg)
	A1	A	S-LW5D A	ØB	C	E	K	S	T			O	R	M	N	P	
3	18	48	64	128	80	168	248	70	-	M10	M8	15	105	4.76	25	17	4
4	20	54	64	158	100	182	272	90	-	M12	M8	20	125	4.76	35	22.2	6
6	27	59	76	218	145	232	322	110	32	M12	M8	25	135	6.35	46	27.8	20
8	34	73	89	276	205	274	384	130	32	M12	M10	35	165	9.52	58	39.1	38
10	41	83	114	335	260	320	440	160	40	M12	M10	45	200	12.70	80	50.4	60
12	46	92	114	395	300	360	500	160	55	M12	M10	50	230	12.70	90	55.5	85
14	57	117	127	450	330	400	540	160	55	M16	M10	55	230	12.70	90	60.6	105
16	66	133	140	505	370	440	580	160	55	M16	M14	55	230	12.70	90	60.6	125
18	72	149	152	554	409.4	415	595	230	90	M20	M14	70	299	19.05	119	78.25	225
20	73	159	152	610	441.4	440	620	230	90	M20	M14	70	298	19.05	119	78.25	255
24	83	181	178	700	516.4	500	680	230	90	M20	M14	85	326	22.225	146	94.625	405

LG5C, 3" – 24", ASME 150



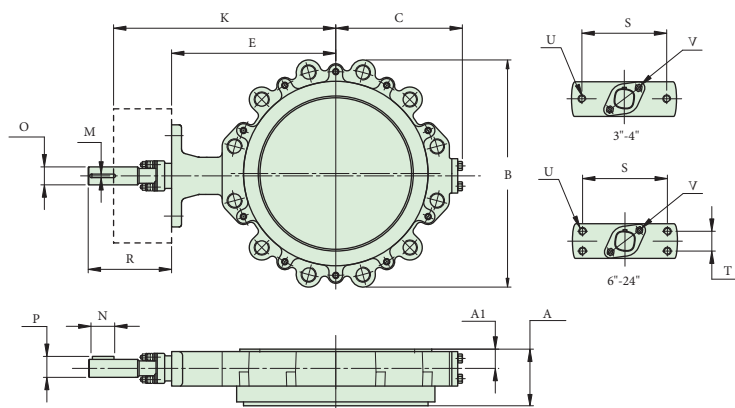
LG5C, dimensions

Size	Dimensions, Inch									U THREAD	V THREAD	Flange Thread		Dimensions, Inch					Weight (lbs)
	A1	A	S-LG5C A	ØB	C	E	K	S	T			Thread	Qty	O	R	M	N	P	
3	0.71	1.89	1.93	8.07	4.72	6.61	9.76	2.76	-	M10	M8	5/8	4	0.59	4.13	0.19	0.98	0.67	20
4	0.83	2.13	2.20	9.25	5.31	7.17	10.71	3.54	-	M12	M8	5/8	8	0.79	4.92	0.19	1.38	0.87	31
6	0.87	2.24	2.76	11.81	6.30	8.94	12.48	4.33	1.26	M12	M8	3/4	8	0.79	4.92	0.19	1.38	0.87	53
8	0.98	2.52	2.80	14.17	7.28	10.12	13.66	4.33	1.26	M12	M10	3/4	8	0.98	5.31	0.25	1.81	1.09	75
10	1.1	2.80	2.99	16.73	8.66	11.42	15.75	5.12	1.26	M12	M10	7/8	12	1.18	6.3	0.25	2.01	1.30	95
12	1.26	3.19	3.27	19.09	10.83	12.60	16.93	5.12	1.26	M12	M10	7/8	12	1.38	6.3	0.37	2.28	1.54	165
14	1.42	3.62	3.62	21.85	12.20	13.98	18.70	6.30	1.57	M16	M10	1	12	1.57	7.4	0.37	2.68	1.74	209
16	1.61	4.02	4.02	24.02	13.39	15.94	20.67	6.30	1.57	M16	M14	1	16	1.77	7.87	0.50	3.15	1.98	330
18	1.93	4.49	4.49	25.20	14.58	14.96	20.47	6.30	2.17	M20	M14	1 1/8	16	1.97	9.06	0.50	3.54	2.19	451
20	2.2	5.00	5.00	28.74	16.23	17.32	22.83	6.30	2.17	M20	M14	1 1/8	20	2.17	9.06	0.50	3.54	2.39	653
24	2.56	6.06	6.06	32.87	18.28	19.88	26.97	9.06	3.54	M20	M14	1 1/4	20	2.76	11.81	0.75	4.69	3.08	981

LG5C, dimensions

Size	Dimensions, mm									U THREA D	V THREA D	Flange Thread		Dimensions, mm					Weight (kg)
	A1	A	S-LG5C A	ØB	C	E	K	S	T			Thread	Qty	O	R	M	N	P	
3	18	48	49	205	120	168	248	70	-	M10	M8	5/8	4	15	105	4.76	25	17	9
4	21	54	56	235	135	182	272	90	-	M12	M8	5/8	8	20	125	4.76	35	22.2	14
6	22	57	70	300	160	227	317	110	32	M12	M8	3/4	8	20	125	4.76	35	22.2	24
8	25	64	71	360	185	257	347	110	32	M12	M10	3/4	8	25	135	6.35	46	27.8	34
10	28	71	76	425	220	290	400	130	32	M12	M10	7/8	12	30	160	6.35	51	32.9	43
12	32	81	83	485	275	320	430	130	32	M12	M10	7/8	12	35	160	9.52	58	39.1	75
14	36	92	92	555	310	355	475	160	40	M16	M10	1	12	40	188	9.52	68	44.2	95
16	41	102	102	610	340	405	525	160	40	M16	M14	1	16	45	200	12.70	80	50.4	150
18	49	114	114	640	370.3	380	520	160	55	M20	M14	1 1/8	16	50	230	12.70	90	55.5	205
20	56	127	127	730	412.3	440	580	160	55	M20	M14	1 1/8	20	55	230	12.70	90	60.6	297
24	65	154	154	835	464.4	505	685	230	90	M20	M14	1 1/4	20	70	300	19.05	119	78.15	446

LG5D, 3" – 24" ASME 300



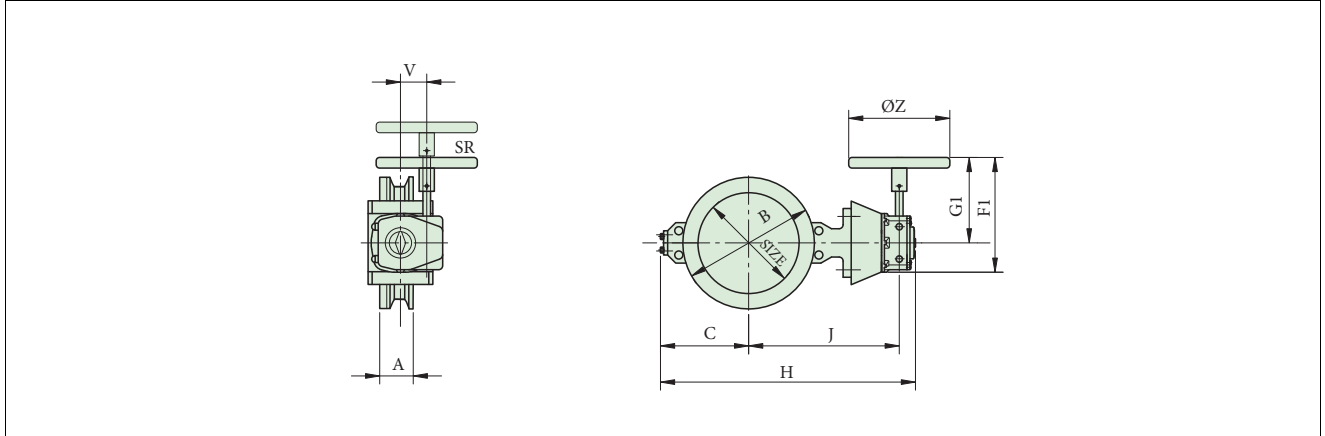
LG5D, dimensions

Size	Dimensions, Inch									U THREAD	V THREAD	Flange Thread		Dimensions, Inch					Weight (lbs)
	A1	A	S-LG5D A	ØB	C	E	K	S	T			Thread	Qty	O	R	M	N	P	
3	0.67	1.89	2.52	8.07	4.72	6.61	9.76	2.76	-	M10	M8	3/4	8	0.59	4.13	0.19	0.98	0.67	20
4	0.83	2.13	2.52	9.25	5.31	7.17	10.71	3.54	-	M12	M8	3/4	8	0.79	4.92	0.19	1.38	0.87	31
6	0.94	2.32	2.99	11.42	6.30	9.13	12.68	4.33	1.26	M12	M10	3/4	12	0.98	5.31	0.25	1.81	1.09	55
8	1.34	2.87	3.50	14.37	8.07	10.79	15.12	5.12	1.26	M12	M10	7/8	12	1.38	6.5	0.37	2.28	1.54	106
10	1.61	3.27	4.49	17.13	10.24	12.60	17.32	6.30	1.57	M16	M14	1	16	1.77	7.87	0.50	3.15	1.98	198
12	1.81	3.62	4.49	19.69	11.81	14.17	19.69	6.30	2.17	M20	M14	1 1/8	16	1.97	9.06	0.50	3.54	2.19	330
14	2.24	4.61	5.00	22.24	12.99	15.75	21.26	6.30	2.17	M20	M14	1 1/8	20	2.17	9.06	0.50	3.54	2.39	440
16	2.44	5.24	5.51	25.55	14.57	17.32	22.83	6.30	2.17	M20	M33	1 1/4	20	2.17	9.06	0.50	3.54	2.39	638
18	2.85	5.87	5.98	27.95	16.12	16.34	23.43	9.06	3.54	M24	M16	1 1/4	24	2.76	11.77	0.75	4.69	3.08	840
20	2.95	6.26	5.98	30.31	17.38	17.32	24.41	9.06	3.54	M24	M16	1 1/4	24	2.76	11.73	0.75	4.69	3.08	979
24	3.15	7.13	7.01	36.02	20.33	19.69	26.77	9.06	3.54	M24	M16	1 1/2	24	3.35	12.83	0.88	5.75	3.73	1595

LG5D, dimensions

Size	Dimensions, mm										U THREAD	V THREAD	Flange Thread		Dimensions, mm					Weight (kg)
	A1	A	S-LG5D A	ØB	C	E	K	S	T	Thread			Qty	O	R	M	N	P		
3	17	48	64	205	120	168	248	70	-	M10	M8	3/4	8	15	105	4.76	25	17	9	
4	21	54	64	235	135	182	272	90	-	M12	M8	3/4	8	20	125	4.76	35	22.2	14	
6	24	59	76	290	160	232	322	110	32	M12	M10	3/4	12	25	135	6.35	46	27.8	25	
8	34	73	89	365	205	274	384	130	32	M12	M10	7/8	12	35	165	9.52	58	39.1	48	
10	41	83	114	435	260	320	440	160	40	M16	M14	1	16	45	200	12.70	80	50.4	90	
12	46	92	114	500	300	360	500	160	55	M20	M14	1 1/8	16	50	230	12.70	90	55.5	150	
14	57	117	127	565	330	400	540	160	55	M20	M14	1 1/8	20	55	230	12.70	90	60.6	200	
16	62	133	140	649	370	440	580	160	55	M20	M33	1 1/4	20	55	230	12.70	90	60.6	290	
18	72	149	152	710	409.4	415	595	230	90	M24	M16	1 1/4	24	70	299	19.05	119	78.25	382	
20	75	159	152	770	441.4	440	620	230	90	M24	M16	1 1/4	24	70	298	19.05	119	78.25	445	
24	80	181	178	915	516.4	500	680	230	90	M24	M16	1 1/2	24	85	326	22.225	146	94.625	725	

Valve+ manual gear operator, M-series



L₅C+M-series, dimensions

Size	OPERATOR ISO 5211	Dimensions, Inch													Weight	
		L ₅ C	S-L ₅ C	LW5C			LG5C			F1	G1	J	V	Z	LW5C-M lbs	LG5C-M lbs
		A	A	ØB	C	H	B	C	H							
3	M7/Q	1.89	1.93	5.04	3.15	15.35	8.07	4.72	16.93	6.93	5.2	10.79	1.54	5.98	18	28
4	M7/Q	2.13	2.20	6.22	3.94	17.13	9.25	5.31	18.50	6.93	5.2	11.73	1.54	5.98	22	40
6	M7/Q	2.25	2.76	8.35	5.91	20.87	11.81	6.30	21.26	6.93	5.2	13.50	1.54	5.98	42	62
8	M10/Q	2.52	2.80	10.55	6.30	22.83	14.17	7.28	23.82	9.8	7.52	15.04	2.05	12.01	57	88
10	M12/Q	2.80	2.99	12.60	8.27	27.36	16.73	8.66	27.76	12.56	9.61	17.40	2.64	17.99	92	120
12	M14/Q	3.19	3.27	14.88	10.83	31.70	19.09	10.83	31.69	16.69	12.8	18.90	3.50	24.02	143	210
14	M14/Q	3.62	3.62	17.24	11.42	34.05	21.85	12.20	34.84	16.69	12.8	20.67	3.50	25.02	210	265
16	M16/Q	4.02	4.02	19.09	12.60	38.19	24.02	13.39	38.98	23.66	17.44	22.64	6.06	35.98	310	430
18	M15/Q	4.49	4.49	20.94	14.76	39.17	25.20	14.76	39.17	17.95	13.62	20.94	15.98	22.36	6.15	9.10
20	M15/Q	5.00	5.00	23.03	16.34	43.11	28.74	16.34	43.11	17.95	13.62	20.94	15.98	22.36	7.92	12.72
20	M16/Q	5.00	5.00	23.03	16.34	44.09	28.74	16.34	44.09	17.95	13.62	25.28	15.98	25.00	8.34	13.14
24	M25/Q	6.06	6.06	26.97	18.31	51.57	32.87	18.31	51.57	17.95	16.22	-	-	29.29	14.40	19.95

L₅D+M-series, dimensions

Size	OPERATOR ISO 5211	Dimensions, Inch													Weight	
		L ₅ D	S-L ₅ D	LW5D			LG5D			F1	G1	J	V	Z	LW5D-M lbs	LG5D-M lbs
		A	A	ØB	C	H	B	C	H							
3	M7/Q	1.89	2.52	5.04	3.15	15.35	8.07	4.72	16.93	6.93	5.2	10.79	1.54	5.98	18	28
4	M7/Q	2.13	2.52	6.22	3.94	17.13	9.25	5.31	18.50	6.93	5.2	11.73	1.54	5.98	22	40
6	M10/Q	2.32	2.99	8.58	5.71	21.26	11.42	6.30	21.85	9.8	7.52	14.06	2.05	12.01	57	66
8	M14/Q	2.87	3.50	10.87	8.07	26.38	14.37	8.07	26.38	16.69	12.8	17.09	3.50	24.02	123	145
10	M14/Q	3.27	4.49	13.19	10.24	31.50	17.13	10.24	31.50	16.69	12.8	19.29	3.50	24.02	165	230
12	M16/Q	3.62	4.49	15.55	11.81	35.83	19.69	11.81	35.83	23.66	17.44	21.65	6.06	35.98	255	395
14	M16/Q	4.61	5.00	17.72	12.99	38.58	22.24	12.99	38.58	23.66	17.44	23.23	6.06	35.98	300	495
16	M16/Q	5.24	5.51	19.88	14.57	41.73	25.55	14.57	41.73	23.66	17.44	24.80	6.06	35.98	340	680
18	M16/Q	5.87	5.98	21.81	16.12	44.49	27.95	16.12	44.49	17.95	13.62	25.59	6.06	35.98	576	922
18	M20/K85	5.87	5.98	21.81	16.12	45.87	27.95	16.12	45.87	23.50	16.22	25.75	7.17	30.00	629	975
20	M20/K85	6.26	5.98	24.02	17.38	48.23	30.31	17.38	48.23	23.50	16.22	26.73	7.17	30.00	695	1113
24	M20/K85	7.13	7.01	27.56	20.33	53.54	36.02	20.33	53.54	23.50	16.22	29.09	7.17	30.00	1025	1729

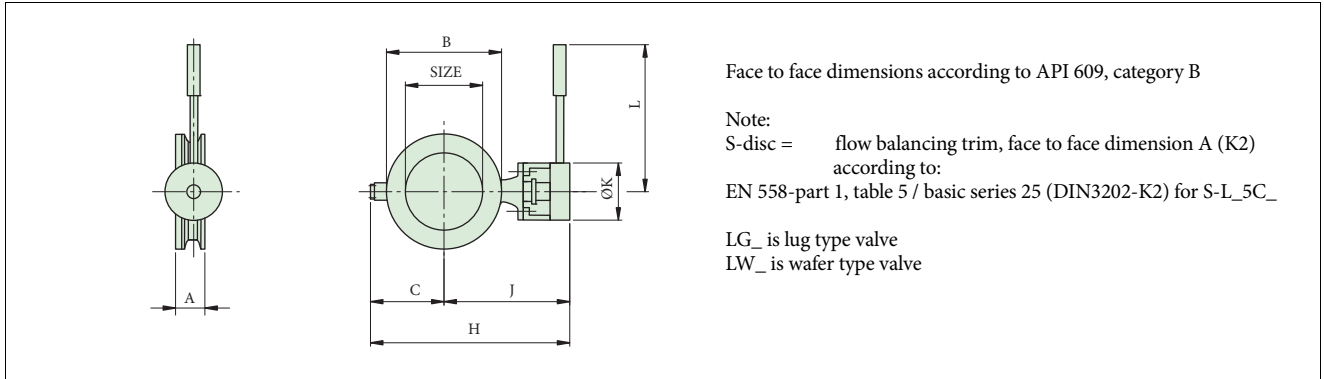
L_5C+M-series, dimensions

Size	OPERATOR ISO 5211	Dimensions, mm													Weight	
		L_5C	S-L_5C	LW5C			LG5C			F1	G1	J	V	Z	LW5C-M kg	LG5C-M kg
		A	A	ØB	C	H	B	C	H							
3	M7/Q	48	49	128	80	390	205	120	430	176	132	274	39	152	8	13
4	M7/Q	54	56	158	100	435	235	135	470	176	132	298	39	152	10	18
6	M7/Q	57	70	212	150	530	300	160	540	176	132	343	39	152	19	28
8	M10/Q	64	71	268	160	580	360	185	605	249	191	382	52	305	26	40
10	M12/Q	71	76	320	210	695	425	220	705	319	244	442	67	457	42	55
12	M14/Q	81	83	378	275	805	485	275	805	424	325	480	89	610	65	95
14	M14/Q	92	92	438	290	865	555	310	885	424	325	525	89	636	95	120
16	M16/Q	102	102	485	320	970	610	340	990	601	443	575	154	914	141	195
18	M15/Q	114	114	532	375	995	640	375	995	456	346	532	406	568	156.2	231.2
20	M15/Q	127	127	585	415	1095	730	415	1095	456	346	532	406	568	201.2	323.2
20	M16/Q	127	127	585	415	1120	730	415	1120	456	346	642	406	635	211.8	333.8
24	M25/Q	154	154	685	465	1310	835	465	1310	456	412	-	-	744	365.8	506.8

L_5C+M-series, dimensions

Size	OPERATOR ISO 5211	Dimensions, mm													Weight	
		L_5D	S-L_5D	LW5D			LG5D			F1	G1	J	V	Z	LW5D-M kg	LG5D-M kg
		A	A	ØB	C	H	B	C	H							
3	M7/Q	48	64	128	80	390	205	120	430	176	132	274	39	152	8	13
4	M7/Q	54	64	158	100	435	235	135	470	176	132	298	39	152	10	18
6	M10/Q	59	76	218	145	540	290	160	555	249	191	357	52	305	26	30
8	M14/Q	73	89	276	205	670	365	205	670	424	325	434	89	610	56	66
10	M14/Q	83	114	335	260	800	435	260	800	424	325	490	89	610	75	105
12	M16/Q	92	114	395	300	910	500	300	910	601	443	550	154	914	116	180
14	M16/Q	117	127	450	330	980	565	330	980	601	443	590	154	914	136	225
16	M16/Q	133	140	505	370	1060	649	370	1060	601	443	630	154	914	155	309
18	M16/Q	149	152	554	409	1130	710	409	1130	456	346	650	154	914	262	419
18	M20/K85	149	152	554	409	1165	710	409	1165	597	412	654	182	762	286	443
20	M20/K85	159	152	610	441	1225	770	441	1225	597	412	679	182	762	316	506
24	M20/K85	181	178	700	516	1360	915	516	1360	597	412	739	182	762	466	786

Valve + hand lever, RH



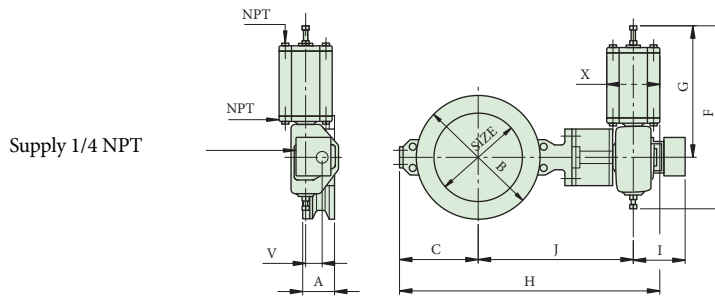
LW5C + RH, dimensions

SIZE	HAND LEVER	Dimensions, inch											LW5C-RH lbs	LG5C-RH lbs
		L_5C	S-L_5C	LW5C			LG5C			J	ØK	L		
		A	A	B	C	H	B	C	H					
3	RH 415 MM	1.89	1.93	5.04	3.15	13.98	8.07	4.72	15.55	10.83	3.94	15.75	11	22
4	RH 420 MM	2.13	2.20	6.22	3.94	16.14	9.25	5.31	17.52	12.20	3.94	15.75	15	33
6	RH 520 MM	2.24	2.76	8.35	5.91	20.87	11.81	6.30	21.26	14.57	5.12	19.69	37	57

LW5C + RH, dimensions

SIZE	HAND LEVER	Dimensions, mm											LW5C-RH kg	LG5C-RH kg
		L_5C	S-L_5C	LW5C			LG5C			J	ØK	L		
		A	A	B	C	H	B	C	H					
3	RH 415 MM	49	49	128	80	355	205	120	395	275	100	400	5	10
4	RH 420 MM	52	56	158	100	410	235	135	445	310	100	400	7	15
6	RH 520 MM	56	70	212	150	530	300	160	540	370	130	500	17	26

Valve + pneumatic actuator, B1C



L_5C+B1C, dimensions

Size	ACTUATOR	Dimensions, Inch														NPT	Weight	
		L_5C	S-L_5C	LW5C			LG5C			F	G	I	J	V	X		LW5C-B1C	LG5C-B1C
		A	A	OB	C	H	B	C	H								lbs	lbs
3	B1C9	1.89	1.93	5.04	3.15	17.52	8.07	4.72	19.09	17.72	12.4	8.66	12.09	1.69	4.33	1/4	44	55
4	B1C9	2.13	2.20	6.22	3.94	19.29	9.25	5.31	20.67	17.72	12.4	8.66	13.03	1.69	4.33	1/4	48	66
4	B1C11	2.13	2.20	6.22	3.94	20.08	9.25	5.31	21.46	21.06	14.76	8.86	13.27	2.01	5.31	3/8	62	79
6	B1C9	2.25	2.76	8.35	5.91	23.03	11.81	6.30	23.43	17.72	12.4	8.66	14.80	1.69	4.33	1/4	75	95
6	B1C11	2.25	2.76	8.35	5.91	23.82	11.81	6.30	24.02	21.06	14.76	8.86	15.04	2.01	5.31	3/8	88	108
6	B1C13	2.25	2.76	8.35	5.91	25.20	11.81	6.30	24.21	25.59	25.5	9.45	9.45	2.56	6.89	3/8	121	141
8	B1C11	2.52	2.80	10.55	6.30	25.39	14.17	7.28	17.52	21.06	14.76	8.86	16.22	2.01	5.31	3/8	99	130
8	B1C13	2.52	2.80	10.55	6.30	26.77	14.17	7.28	27.76	25.59	17.52	9.45	16.85	2.56	6.89	3/8	132	163
8	B1C17	2.52	2.80	10.55	6.30	28.15	14.17	7.28	29.13	30.91	21.85	10.04	17.44	3.07	8.46	1/2	183	213
10	B1C13	2.80	2.99	12.60	8.27	30.91	16.73	8.66	31.30	25.59	17.52	9.45	18.94	2.56	6.89	3/8	156	185
10	B1C17	2.80	2.99	12.60	8.27	32.28	16.73	8.66	32.68	30.91	21.85	10.04	19.53	3.07	8.46	1/2	207	235
12	B1C13	3.19	3.27	14.88	10.83	34.65	19.09	10.83	34.65	25.59	17.52	9.45	20.12	2.56	6.89	3/8	189	255
12	B1C17	3.19	3.27	14.88	10.83	36.02	19.09	10.83	36.02	36.02	21.85	10.04	20.71	3.07	8.46	1/2	242	308
12	B1C20	3.19	3.27	14.88	10.83	36.81	19.09	10.83	36.81	34.65	23.23	10.63	21.46	3.82	8.46	1/2	282	348
14	B1C17	3.62	3.62	17.24	11.42	39.39	21.85	12.20	39.17	30.91	21.85	10.04	22.48	3.07	8.46	1/2	297	352
14	B1C20	3.62	3.62	17.24	11.42	39.17	21.85	12.20	39.96	34.65	23.23	10.63	23.23	3.82	8.46	1/2	319	396
14	B1C25	3.62	3.62	17.24	11.42	40.94	21.85	12.20	41.73	42.32	28.54	12.2	24.13	4.76	10.43	1/2	473	528
16	B1C20	4.02	4.02	19.09	12.60	42.32	24.02	13.39	43.11	34.65	23.23	10.63	25.20	3.82	8.46	1/2	396	517
16	B1C25	4.02	4.02	19.09	12.60	44.09	24.02	13.39	44.88	42.32	28.54	12.2	26.10	4.76	10.43	1/2	528	649
18	B1C25	4.49	4.49	20.94	14.76	45.70	25.20	14.76	45.70	42.32	28.54	12.20	25.91	4.76	10.43	1/2	574	739
18	B1C32	4.49	4.49	20.94	14.76	49.72	25.20	14.76	49.72	53.94	36.22	13.78	27.36	6.02	15.55	3/4	849	1014
20	B1C25	5.00	5.00	23.03	16.34	49.72	28.74	16.34	49.72	42.32	28.54	12.20	28.27	4.76	10.43	1/2	673	942
20	B1C32	5.00	5.00	23.03	16.34	53.73	28.74	16.34	53.73	53.94	36.22	13.78	29.72	6.02	15.55	3/4	948	1217
24	B1C32	6.06	6.06	26.97	18.31	59.92	32.87	18.31	59.92	53.94	36.22	13.78	33.86	6.02	15.55	3/4	1234	1544
24	B1C40	6.06	6.06	26.97	18.31	64.05	32.87	18.31	64.05	65.75	45.28	14.57	35.83	7.64	19.88	3/4	1652	1962

L_5D+B1C, dimensions

Size	ACTUATOR	Dimensions, Inch														NPT	Weight	
		L_5D	S-L_5D	LW5D			LG5D			F	G	I	J	V	X		LW5D-B1C	LG5D-B1C
		A	A	OB	C	H	B	C	H								lbs	lbs
3	B1C9	1.89	2.52	5.04	3.15	17.52	8.07	4.72	19.09	17.72	12.4	8.66	12.09	1.69	4.33	1/4	46	57
4	B1C9	2.13	2.52	6.22	3.94	19.29	9.25	5.31	20.67	17.72	12.4	8.66	13.03	1.69	4.33	1/4	51	68
4	B1C11	2.13	2.52	6.22	3.94	20.08	9.25	5.31	21.46	21.06	14.76	8.86	13.27	2.01	5.31	3/8	64	81
6	B1C9	2.25	2.99	8.58	5.71	23.82	11.42	6.30	25.79	17.72	12.4	8.66	15.24	1.69	4.33	1/4	79	90
6	B1C11	2.25	2.99	8.58	5.71	25.20	11.42	6.30	27.00	21.06	14.76	8.86	15.87	2.01	5.31	3/8	92	103
6	B1C13	2.25	2.99	8.58	5.71	26.57	11.42	6.30	17.00	25.2	17.52	9.45	16.46	2.56	6.89	3/8	128	139
8	B1C11	2.87	3.50	10.87	8.07	29.33	14.37	8.07	29.33	21.06	14.76	8.86	17.52	2.01	5.31	3/8	132	154
8	B1C13	2.87	3.50	10.87	8.07	30.71	14.37	8.07	30.71	25.2	17.52	9.45	18.11	2.56	6.89	3/8	167	189
8	B1C17	2.87	3.50	10.87	8.07	31.30	14.37	8.07	31.30	30.91	21.85	10.04	18.86	3.07	8.46	1/2	220	242
10	B1C17	3.27	4.49	13.19	10.24	35.83	17.13	10.24	35.83	30.91	21.85	10.04	21.10	3.07	8.46	1/2	264	330
10	B1C20	3.27	4.49	13.19	10.24	36.61	17.13	10.24	36.61	34.65	23.23	10.63	21.85	3.82	8.46	1/2	308	374
10	B1C25	3.27	4.49	13.19	10.24	38.39	17.13	10.24	38.39	42.32	28.54	12.2	22.76	4.76	10.43	1/2	440	506
12	B1C20	3.62	4.49	15.55	11.81	40.55	19.69	11.81	40.55	34.65	23.23	10.63	24.21	3.82	8.46	1/2	506	566
12	B1C25	3.62	4.49	15.55	11.81	42.32	19.69	11.81	42.32	42.32	28.54	12.2	25.12	4.76	10.43	1/2	495	638
14	B1C20	4.61	5.00	17.72	12.99	43.31	22.24	12.99	43.31	34.65	23.23	10.63	25.12	3.82	8.46	1/2	407	616
14	B1C25	4.61	5.00	17.72	12.99	45.08	22.24	12.99	45.08	42.32	28.54	12.2	26.69	4.76	10.43	1/2	539	748
16	B1C20	5.24	5.51	19.88	14.57	46.46	25.55	14.57	46.46	34.65	23.23	10.63	27.36	3.82	8.46	1/2	451	814
18	B1C32	5.87	5.98	21.81	16.12	54.21	27.95	16.12	54.21	53.94	36.22	13.78	30.31	6.02	15.55	3/4	1058	1404
18	B1C40	5.87	5.98	21.81	16.12	58.34	27.95	16.12	58.34	65.75	45.28	14.57	32.28	7.64	19.88	3/4	1476	1822
20	B1C32	6.26	5.98	24.02	17.38	56.45	30.31	17.38	56.45	53.94	36.22	13.78	31.30	6.02	15.55	3/4	1124	1542
20	B1C40	6.26	5.98	24.02	17.38	60.59	30.31	17.38	60.59	65.75	45.28	14.57	33.27	7.64	19.88	3/4	1542	1960
24	B1C32	7.13	7.01	27.56	20.33	61.77	36.02	20.33	61.77	53.94	36.22	13.78	33.66	6.02	15.55	3/4	1454	2158
24	B1C40	7.13	7.01	27.56	20.33	65.90	36.02	20.33	65.90	65.75	45.28	14.57	35.63	7.64	19.88	3/4	1872	2576
24	B1C50	7.13	7.01	27.56	20.33	69.64	36.02	20.33	69.64	81.10	54.72	16.34	37.60	9.53	24.02	1	2717	3421

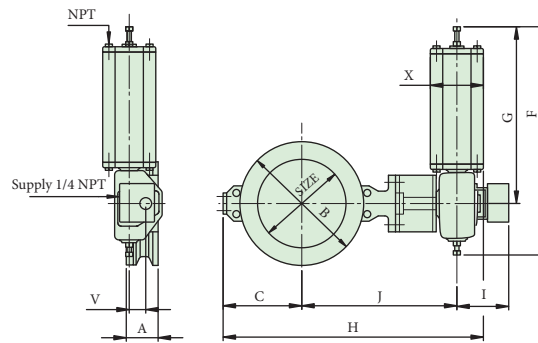
L_5C+B1C, dimensions

Size	ACTUATOR	Dimensions, mm														NPT	Weight	
		L_5C	S-L_5C	LW5C			LG5C			F	G	I	J	V	X		LW5C-B1C kg	LG5C-B1C kg
		A	A	ØB	C	H	B	C	H									
3	B1C9	48	49	128	80	445	205	120	485	450	315	220	307	43	110	1/4	20	25
4	B1C9	54	56	158	100	490	235	135	525	450	315	220	331	43	110	1/4	22	30
4	B1C11	54	56	158	100	510	235	135	545	535	375	225	337	51	135	3/8	28	36
6	B1C9	57	70	212	150	585	300	160	595	450	315	220	376	43	110	1/4	34	43
6	B1C11	57	70	212	150	605	300	160	610	535	375	225	382	51	135	3/8	40	49
6	B1C13	57	70	212	150	640	300	160	615	650	648	240	240	65	175	3/8	55	64
8	B1C11	64	71	268	160	645	360	185	445	535	375	225	412	51	135	3/8	45	59
8	B1C13	64	71	268	160	680	360	185	705	650	445	240	428	65	175	3/8	60	74
8	B1C17	64	71	268	160	715	360	185	740	785	555	255	443	78	215	1/2	83	97
10	B1C13	71	76	320	210	785	425	220	795	650	445	240	481	65	175	3/8	71	84
10	B1C17	71	76	320	210	820	425	220	830	785	555	255	496	78	215	1/2	94	107
12	B1C13	81	83	378	275	880	485	275	880	650	445	240	511	65	175	3/8	86	116
12	B1C17	81	83	378	275	915	485	275	915	915	555	255	526	78	215	1/2	110	140
12	B1C20	81	83	378	275	935	485	275	935	880	590	270	545	97	215	1/2	128	158
14	B1C17	92	92	438	290	1001	555	310	995	785	555	255	571	78	215	1/2	135	160
14	B1C20	92	92	438	290	995	555	310	1015	880	590	270	590	97	215	1/2	145	180
14	B1C25	92	92	438	290	1040	555	310	1060	1075	725	310	613	121	265	1/2	215	240
16	B1C20	102	102	485	320	1075	610	340	1095	880	590	270	640	97	215	1/2	180	235
16	B1C25	102	102	485	320	1120	610	340	1140	1075	725	310	663	121	265	1/2	240	295
18	B1C25	114	114	532	375	1161	640	375	1161	1075	725	310	658	121	265	1/2	261	336
18	B1C32	114	114	532	375	1263	640	375	1263	1370	920	350	695	153	395	3/4	386	461
20	B1C25	127	127	585	415	1263	730	415	1263	1075	725	310	718	121	265	1/2	306	428
20	B1C32	127	127	585	415	1365	730	415	1365	1370	920	350	755	153	395	3/4	431	553
24	B1C32	154	154	685	465	1522	835	465	1522	1370	920	350	860	153	395	3/4	561	702
24	B1C40	154	154	685	465	1627	835	465	1627	1670	1150	370	910	194	505	3/4	751	892

L_5D+B1C, dimensions

Size	ACTUATOR	Dimensions, mm														NPT	Weight	
		L_5D	S-L_5D	LW5D			LG5D			F	G	I	J	V	X		LW5D-B1 kg	LG5D-B1C kg
		A	A	ØB	C	H	B	C	H									
3	B1C9	48	64	128	80	445	205	120	485	450	315	220	307	43	110	1/4	21	26
4	B1C9	54	64	158	100	490	235	135	525	450	315	220	331	43	110	1/4	23	31
4	B1C11	54	64	158	100	510	235	135	545	535	375	225	337	51	135	3/8	29	37
6	B1C9	57	76	218	145	605	290	160	655	450	315	220	387	43	110	1/4	36	41
6	B1C11	57	76	218	145	640	290	160	686	535	375	225	403	51	135	3/8	42	47
6	B1C13	57	76	218	145	675	290	160	432	640	445	240	418	65	175	3/8	58	63
8	B1C11	73	89	276	205	745	365	205	745	535	375	225	445	51	135	3/8	60	70
8	B1C13	73	89	276	205	780	365	205	780	640	445	240	460	65	175	3/8	76	86
8	B1C17	73	89	276	205	795	365	205	795	785	555	255	479	78	215	1/2	100	110
10	B1C17	83	114	335	260	910	435	260	910	785	555	255	536	78	215	1/2	120	150
10	B1C20	83	114	335	260	930	435	260	930	880	590	270	555	97	215	1/2	140	170
10	B1C25	83	114	335	260	975	435	260	975	1075	725	310	578	121	265	1/2	200	230
12	B1C20	92	114	395	300	1030	500	300	1030	880	590	270	615	97	215	1/2	230	165
12	B1C25	92	114	395	300	1075	500	300	1075	1075	725	310	638	121	265	1/2	225	290
14	B1C20	117	127	450	330	1100	565	330	1100	880	590	270	638	97	215	1/2	185	280
14	B1C25	117	127	450	330	1145	565	330	1145	1075	725	310	678	121	265	1/2	245	340
16	B1C20	133	140	505	370	1180	649	370	1180	880	590	270	695	97	215	1/2	205	370
18	B1C32	149	152	554	409	1377	710	409	1377	1370	920	350	770	153	395	3/4	481	638
18	B1C40	149	152	554	409	1482	710	409	1482	1670	1150	370	820	194	505	3/4	671	828
20	B1C32	159	152	610	441	1434	770	441	1434	1370	920	350	795	153	395	3/4	511	701
20	B1C40	159	152	610	441	1539	770	441	1539	1670	1150	370	845	194	505	3/4	701	891
24	B1C32	181	178	700	516	1569	915	516	1569	1370	920	350	855	153	395	3/4	661	981
24	B1C40	181	178	700	516	1674	915	516	1674	1670	1150	370	905	194	505	3/4	851	1171
24	B1C50	181	178	700	516	1769	915	516	1776	2060	1390	415	955	242	610	1	1235	1555

Valve + pneumatic spring return actuator, B1J



L_5C + B1J, dimensions

Size	ACTUATOR	Dimensions, Inch														NPT	Weight	
		L_5C	S-L_5C	LW5C			LG5C			F	G	I	J	V	X		LW5C-B1J lbs	LG5C-B1J lbs
		A	A	ØB	C	H	B	C	H									
3	B1J8	1.89	1.93	5.04	3.15	18.11	8.07	4.72	19.69	21.85	16.54	8.66	12.09	1.69	5.31	3/8	59	70
4	B1J8	2.13	2.20	6.22	3.94	19.88	9.25	5.31	21.26	21.85	16.54	8.66	13.03	1.69	5.31	3/8	64	81
4	B1J10	2.13	2.20	6.22	3.94	20.87	9.25	5.31	22.24	25.2	18.9	8.86	13.27	2.01	6.89	3/8	92	110
6	B1J8	2.25	2.76	8.35	5.91	23.62	11.81	6.30	24.02	21.85	16.54	8.66	14.80	1.69	5.31	3/8	90	110
6	B1J10	2.25	2.76	8.35	5.91	24.61	11.81	6.30	25.00	25.2	18.9	8.86	15.04	2.01	6.89	3/8	119	139
6	B1J12	2.25	2.76	8.35	5.91	25.98	11.81	6.30	26.38	32.09	24.41	9.45	15.67	2.56	8.46	1/2	178	198
8	B1J10	2.52	2.80	10.55	6.30	26.18	14.17	7.28	27.17	25.2	18.9	8.86	16.22	2.01	6.89	3/8	130	161
8	B1J12	2.52	2.80	10.55	6.30	27.56	14.17	7.28	28.54	32.09	24.41	9.45	16.85	2.56	8.46	1/2	189	220
8	B1J16	2.52	2.80	10.55	6.30	29.13	14.17	7.28	30.12	38.98	29.92	10.04	17.44	3.07	10.43	1/2	315	284
10	B1J12	2.80	2.99	12.60	8.27	31.69	16.73	8.66	32.09	32.09	24.41	9.45	18.94	2.56	8.46	1/2	213	242
10	B1J16	2.80	2.99	12.60	8.27	33.26	16.73	8.66	33.66	38.98	29.92	10.04	19.53	3.07	10.43	1/2	308	337
12	B1J12	3.19	3.27	14.88	10.83	35.43	19.09	10.83	35.43	32.09	24.41	9.45	20.12	2.56	8.46	1/2	246	312
12	B1J16	3.19	3.27	14.88	10.83	37.01	19.09	10.83	37.01	38.98	29.92	10.04	20.71	3.07	10.43	1/2	343	409
12	B1J20	3.19	3.27	14.88	10.83	40.35	19.09	10.83	40.35	48.43	37.01	10.63	21.46	3.82	15.55	3/4	506	572
14	B1J16	3.62	3.62	17.24	11.42	39.37	21.85	12.20	40.16	38.98	29.92	10.04	22.48	3.07	10.43	1/2	396	451
14	B1J20	3.62	3.62	17.24	11.42	42.72	21.85	12.20	43.50	48.43	37.01	10.63	23.23	3.82	15.55	3/4	539	616
14	B1J25	3.62	3.62	17.24	11.42	45.67	21.85	12.20	46.46	58.66	44.88	12.2	24.13	4.76	19.88	3/4	957	1012
16	B1J20	4.02	4.02	19.09	12.60	45.87	24.02	13.39	46.65	48.43	37.01	10.63	25.20	3.82	15.55	3/4	616	737
16	B1J25	4.02	4.02	19.09	12.60	48.82	24.02	13.39	49.61	58.66	44.88	12.2	26.10	4.76	19.88	3/4	1012	1133
18	B1J25	4.49	4.49	20.94	14.76	50.43	25.20	14.76	50.43	58.66	44.88	12.20	25.91	4.76	19.88	3/4	1056	1221
20	B1J32	5.00	5.00	23.03	16.34	56.59	28.74	16.34	56.59	74.21	56.50	13.78	29.72	6.02	21.26	3/4	1861	2130
24	B1J32	6.06	6.06	26.97	18.31	52.14	32.87	18.31	52.14	74.21	56.50	13.78	33.86	6.02	21.26	1	2147	2457
24	B1J40	6.06	6.06	26.97	18.31	68.35	32.87	18.31	68.35	82.48	62.13	14.37	35.83	7.64	28.50	1	3091	3401

L_5D + B1J, dimensions

Size	ACTUATOR	Dimensions, Inch														NPT	Weight	
		L_5D	S-L_5D	LW5D			LG5D			F	G	I	J	V	X		LW5D-B1J lbs	LG5D-B1J lbs
		A	A	ØB	C	H	B	C	H									
3	B1J8	1.89	2.52	5.04	3.15	18.11	8.07	4.72	19.69	21.85	16.54	8.66	12.09	1.69	5.31	3/8	62	73
4	B1J8	2.13	2.52	6.22	3.94	19.88	9.25	5.31	21.26	21.85	16.54	8.66	13.03	1.69	5.31	3/8	66	84
4	B1J10	2.13	2.52	6.22	3.94	20.87	9.25	5.31	22.24	25.2	18.9	8.86	13.27	2.01	6.89	3/8	95	90
6	B1J10	2.25	2.99	8.58	5.71	24.61	11.42	6.30	25.20	25.2	18.9	8.86	15.24	2.01	6.89	3/8	123	134
6	B1J12	2.25	2.99	8.58	5.71	25.98	11.42	6.30	38.39	32.09	24.41	9.45	15.87	2.56	8.46	1/2	183	194
6	B1J16	2.25	2.99	8.58	5.71	27.56	11.42	6.30	28.15	38.98	29.92	10.01	16.46	3.07	10.43	1/2	282	293
8	B1J12	2.52	2.99	10.87	8.07	30.12	14.37	8.07	30.12	32.09	24.41	9.45	17.52	2.56	8.46	1/2	220	242
8	B1J16	2.87	3.50	10.87	8.07	31.69	14.37	8.07	31.69	38.98	29.92	10.04	18.11	3.07	10.43	1/2	319	341
8	B1J20	2.87	3.50	10.87	8.07	35.04	14.37	8.07	35.04	48.43	37.01	10.63	18.86	3.82	15.55	3/4	484	506
10	B1J16	3.27	4.49	13.19	10.24	36.81	17.13	10.24	36.81	38.98	29.92	10.04	21.10	3.07	10.43	1/2	363	429
10	B1J20	3.27	4.49	13.19	10.24	40.16	17.13	10.24	40.16	48.43	37.01	10.63	21.85	3.82	15.55	3/4	528	594
10	B1J25	3.27	4.49	13.19	10.24	43.11	17.13	10.24	43.11	58.66	44.88	12.2	22.76	4.76	19.88	3/4	968	1034
12	B1J20	3.62	4.49	15.55	11.81	44.09	19.69	11.81	44.09	48.43	37.01	10.63	24.21	3.82	15.55	3/4	660	726
12	B1J25	3.62	4.49	15.55	11.81	47.05	19.69	11.81	47.05	58.66	44.88	12.2	25.12	4.76	19.88	3/4	979	1122
14	B1J20	4.61	5.00	17.72	12.99	46.85	22.24	12.99	46.85	48.43	37.01	10.63	25.79	3.82	15.55	3/4	627	836
14	B1J25	4.61	5.00	17.72	12.99	49.80	22.24	12.99	49.80	58.66	44.88	12.2	26.69	4.76	19.88	3/4	1023	1232
16	B1J20	5.24	5.51	19.88	14.57	49.80	25.55	14.57	49.80	48.43	37.01	10.63	27.36	3.82	15.55	3/4	671	1034
16	B1J25	5.24	5.51	19.88	14.57	52.76	25.55	14.57	52.76	58.66	44.88	12.2	28.27	4.76	19.88	3/4	1067	1430
18	B1J32	5.87	5.98	21.81	16.12	57.06	27.95	16.12	57.06	74.21	56.50	13.78	30.31	6.02	21.26	3/4	1971	2317
18	B1J40	5.87	5.98	21.81	16.12	62.44	27.95	16.12	62.44	82.48	62.13	14.37	32.05	7.64	28.50	3/4	2915	3260
20	B1J32	6.26	5.98	24.02	17.38	59.31	30.31	17.38	59.31	74.21	56.50	13.78	31.30	6.02	21.26	3/4	2037	2455
20	B1J40	6.26	5.98	24.02	17.38	64.96	30.31	17.38	64.96	82.48	62.13	14.37	33.31	7.64	28.50	1	2981	3399
24	B1J40	7.13	7.01	27.56	20.33	70.87	36.02	20.33	70.87	82.48	62.13	14.37	36.26	7.64	28.50	1	4235	4939
24	B1J322	7.13	7.01	27.56	20.33	66.59	36.02	20.33	66.59	112.99	56.5	-	34.25	6.02	24.02	1	4521	5225

L_5C + B1J, dimensions

Size	ACTUATOR	Dimensions, mm														NPT	Weight	
		L_5C	S-L_5C	LW5C			LG5C			F	G	I	J	V	X		LW5C-B1J kg	LG5C-B1J kg
		A	A	ØB	C	H	B	C	H									
3	B1J8	48	49	128	80	460	205	120	500	555	420	220	307	43	135	3/8	27	32
4	B1J8	54	56	158	100	505	235	135	540	555	420	220	331	43	135	3/8	29	37
4	B1J10	54	56	158	100	530	235	135	565	640	480	225	337	51	175	3/8	42	50
6	B1J8	57	70	212	150	600	300	160	610	555	420	220	376	43	135	3/8	41	50
6	B1J10	57	70	212	150	625	300	160	635	640	480	225	382	51	175	3/8	54	63
6	B1J12	57	70	212	150	660	300	160	670	815	620	240	398	65	215	1/2	81	90
8	B1J10	64	71	268	160	665	360	185	690	640	480	225	412	51	175	3/8	59	73
8	B1J12	64	71	268	160	700	360	185	725	815	620	240	428	65	215	1/2	86	100
8	B1J16	64	71	268	160	740	360	185	765	990	760	255	443	78	265	1/2	143	129
10	B1J12	71	76	320	210	805	425	220	815	815	620	240	481	65	215	1/2	97	110
10	B1J16	71	76	320	210	845	425	220	855	990	760	255	496	78	265	1/2	140	153
12	B1J12	81	83	378	275	900	485	275	900	815	620	240	511	65	215	1/2	112	142
12	B1J16	81	83	378	275	940	485	275	940	990	760	255	526	78	265	1/2	156	186
12	B1J20	81	83	378	275	1025	485	275	1025	1230	940	270	545	97	395	3/4	230	260
14	B1J16	92	92	438	290	1000	555	310	1020	990	760	255	571	78	265	1/2	180	205
14	B1J20	92	92	438	290	1085	555	310	1105	1230	940	270	590	97	395	3/4	245	280
14	B1J25	92	92	438	290	1160	555	310	1180	1490	1140	310	613	121	505	3/4	435	460
16	B1J20	102	102	485	320	1165	610	340	1185	1230	940	270	640	97	395	3/4	280	335
16	B1J25	102	102	485	320	1240	610	340	1260	1490	1140	310	663	121	505	3/4	460	515
18	B1J25	114	114	532	375	1281	640	375	1281	1490	1140	310	658	121	505	3/4	480	555
20	B1J32	127	127	585	415	1437	730	415	1437	1885	1435	350	755	153	540	3/4	846	968
24	B1J32	154	154	685	465	1324	835	465	1324	1885	1435	350	860	153	540	1	976	1117
24	B1J40	154	154	685	465	1736	835	465	1736	2095	1578	365	910	194	724	1	1405	1546

L_5D + B1J, dimensions

Size	ACTUATOR	Dimensions, mm														NPT	Weight	
		L_5D	S-L_5D	LW5D			LG5D			F	G	I	J	V	X		LW5D-B1J kg	LG5D-B1J kg
		A	A	ØB	C	H	B	C	H									
3	B1J8	48	64	128	80	460	205	120	500	555	420	220	307	43	135	3/8	28	33
4	B1J8	54	64	158	100	505	235	135	540	555	420	220	331	43	135	3/8	30	38
4	B1J10	54	64	158	100	530	235	135	565	640	480	225	337	51	175	3/8	43	41
6	B1J10	57	76	218	145	625	290	160	640	640	480	225	387	51	175	3/8	56	61
6	B1J12	57	76	218	145	660	290	160	975	815	620	240	403	65	215	1/2	83	88
6	B1J16	57	76	218	145	700	290	160	715	990	760	254	418	78	265	1/2	128	133
8	B1J12	64	76	276	205	765	365	205	765	815	620	240	445	65	215	1/2	100	110
8	B1J16	73	89	276	205	805	365	205	805	990	760	255	460	78	265	1/2	145	155
8	B1J20	73	89	276	205	890	365	205	890	1230	940	270	479	97	395	3/4	220	230
10	B1J16	83	114	335	260	935	435	260	935	990	760	255	536	78	265	1/2	165	195
10	B1J20	83	114	335	260	1020	435	260	1020	1230	940	270	555	97	395	3/4	240	270
10	B1J25	83	114	335	260	1095	435	260	1095	1490	1140	310	578	121	505	3/4	440	470
12	B1J20	92	114	395	300	1120	500	300	1120	1230	940	270	615	97	395	3/4	300	330
12	B1J25	92	114	395	300	1195	500	300	1195	1490	1140	310	638	121	505	3/4	445	510
14	B1J20	117	127	450	330	1190	565	330	1190	1230	940	270	655	97	395	3/4	285	380
14	B1J25	117	127	450	330	1265	565	330	1265	1490	1140	310	678	121	505	3/4	465	560
16	B1J20	133	140	505	370	1265	649	370	1265	1230	940	270	695	97	395	3/4	305	470
16	B1J25	133	140	505	370	1340	649	370	1340	1490	1140	310	718	121	505	3/4	485	650
18	B1J32	149	152	554	409	1449	710	409	1449	1885	1435	350	770	153	540	3/4	896	1053
18	B1J40	149	152	554	409	1586	710	409	1586	2095	1578	365	814	194	724	3/4	1325	1482
20	B1J32	159	152	610	441	1506	770	441	1506	1885	1435	350	795	153	540	3/4	926	1116
20	B1J40	159	152	610	441	1650	770	441	1650	2095	1578	365	846	194	724	1	1355	1545
24	B1J40	181	178	700	516	1800	915	516	1800	2095	1578	365	921	194	724	1	1925	2245
24	B1J322	181	178	700	516	1691	915	516	1691	2870	1435	-	870	153	610	1	2055	2375

WARNING:

As the use of the valve is application specific, a number of factors should be taken into account when selecting a valve for a given application. Therefore, some of the situations in which the valves are used are outside the scope of this manual. If you have any questions concerning the use, application or compatibility of the valve with the intended service, contact Valmet for more information.

How to order

Neldisc butterfly valve, Series LW, LG, ASME rated.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
	LW	5	C	B	A	08	P	A	C	A	G	/

1. sign	S-DISC CONSTRUCTION
S-	Flow balancing trim on down stream side of body flow port. Face to face acc. to EN 558 -part 1, table 5

2. sign	PRODUCT SERIES / DESIGN
LW	Wafer type, metal seated butterfly valve.
LG	Lug type, metal seated butterfly valve.

3. sign	FACE TO FACE
5	API 609, category B.

4. sign	PRESSURE RATING
C	ASME 150 fully rated.
D	ASME 300 fully rated.

5. sign	VALVE- ACTUATOR CONNECTION
B	Drive shaft with key way.

6. sign	CONSTRUCTION
A	STANDARD (-80 °C...+260 °C/-110 °F...+500 °F) - bearings AISI 316 + PTFE - body and blind flange gaskets graphite - live loaded TA-Luft packing
C	CRYOGENIC (min. -200 °C/-330 °F) - extended bonnet and drive shaft - otherwise as construction A
N	EXTENDED SERVICE (max.+425 °C/+800 °F) - shaft bearings surfaces Nitrited - bearings cobalt based alloy - body and blind flange gaskets graphite - live loaded TA-Luft packing
H	HIGH TEMP (max.+600 °C / +1110 °F) - shaft bearings surfaces Celsit coated - bearings cobalt based alloy - body and blind flange gaskets graphite - live loaded TA-Luft packing
B	BEARING PROTECTION - O-ring bearing protection on upper and lower shaft - O-ring behind seat to prevent the accumulation of process fluid behind the seat

7. sign	SIZE
	03, 04, 06, 08, 10, 12, 14, 16, 18, 20, 24, 28, 30, 32, 36, 40

MATERIALS					
8. sign	BODY	9. sign	DISC	10. sign	SHAFTS & PINS
A	CF8M	A	F316 or CF8M	C	gr. 630 (17-4PH)
P	WCB	B	CF8M / F316+ cobalt based alloy on disc edge	H	Nimonic 80A (Not used with N-construction, can not be nitrated)
				N	XM-19 (Not used with N-construction, can not be nitrated)

11. sign	SEAT
A	Incoloy 825, hard chrome plated.
H	Nimonic 80A, hard chrome plated. (Used with "H" construction)
K	2.4681, UNS R31233 (ULTIMET®).

12. sign	DESIGN OPTIONS
T	TA-Luft PTFE V-ring packing.
G	TA-Luft graphite packing, Fire safe construction.

13. sign	FLANGE FACING
-	ASME B16.5 (Ra 3.2-6.3/RMS 125 - 250), standard, without sign.
Y	Special, to be specified.

Example model codes:

LW5CBA_AACAT - Standard valve (Tmax = 500 °F)

S-LW5CBA_AACAT - Standard valve with flow balancing trim (Face to face according to EN558-part 1, table 5)

LW5CBN_AACAG - Extended service valve (Tmax = 800 °F)

LW5CBH_AANHG (Tmax = 1100 °F)

Subject to change without prior notice.

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