

GAS AND OIL SHUTOFF VALVES - FIGURE 1052

The JAMESBURY® Gas and Oil Shutoff Valves are FM (Factory Mutual) approved for providing protection against fire and explosive hazards during light-off and operation of fuel burning equipment. When the electrical signal is interrupted or when there is a loss of air pressure, these fuel line valves will close rapidly to give positive shutoff of fuel flow. This action may be initiated either by safety trip or normal shutdown sequencing.

The units consist of a valve, actuator, limit switch and solenoid pilot valve. Units are approved as an assembly, by FM. Valves are available with either screwed or socket weld ends in sizes 1/2" through 2" (DN 15 – 50), and in ANSI Class 150 flanged design in 1/2" – 6" (DN 15 – 150) full port sizes and 1/2" – 8" (DN 15 – 200) standard port sizes. ANSI Class flanged design are available in 1/2" - 2" (DN 15-40) full port sizes and 1/2" - 3" (DN15-80) standard sizes. Valves are offered in either carbon steel or 316 stainless steel bodies. Ball and stem material is 316 stainless steel as standard.

JAMESBURY gas and oil shut-off valve assemblies are available with a choice of two (2) actuator types. The JAMESBURY QUADRA-POWR® X spring diaphragm actuators rated for 60 psi/4.1 bar minimum air supply (100 psi/6.9 bar maximum), or the VPVL compact piston actuators rated at 60 psi/4.1 bar air supply (100 psi/6.9 bar maximum)

Single pole double throw (SPDT) or double pole double throw (DPDT) limit switches are available with the contact arrangements shown. Specific model numbers are given in the table on page 12.

FEATURES

Tight Shutoff

- Flexible lip seat design is self compensating for wear and eliminates the need for lubricant injection.

Reliable Closing

- Automatic quarter turn rotation is provided by a choice of spring-diaphragm or spring-return piston actuators.

Corrosion Resistant

- 316 stainless steel valves are available for highly corrosive atmospheres. QUADRA-POWR X actuators are constructed of all ferrous materials and are



especially well-suited to industrial environments.

VPVL actuators are aluminum with PTFE coated bodies and polyester coated end caps.

True Position Indication

- Limit switches are actuated directly from the valve/ actuator drive train, reliably giving a true valve position signal.

Approved for Watertight and Hazardous Location

- The limit switch housing assemblies are also FM approved to NEMA 4, 4X, and 6; Class I, Div. 1, Groups B, C, & D; Class II Div. 1, Groups E, F & G for watertight and explosion proof hazardous location service.

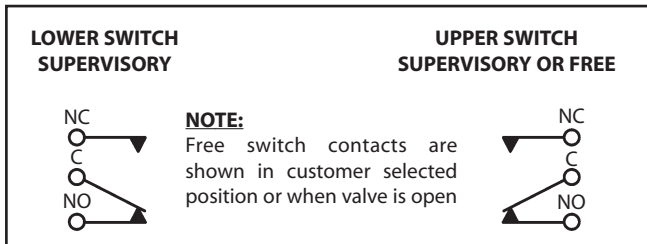
Voltage	Switch Ratings in Amperes		
	QZM2VB1DSS (SPDT)	QZM14B1DSS (DPDT)	QZP2HB1DSS (Hermetically Sealed Proximity Switch SPDT)
125V AC	10	4.5	.30
250V AC	10	4.5	—
125V DC	.50*	—	—

* Not recommended for electrical circuits operating at less than 20mA @ 24 VDC

SWITCH ARRANGEMENTS

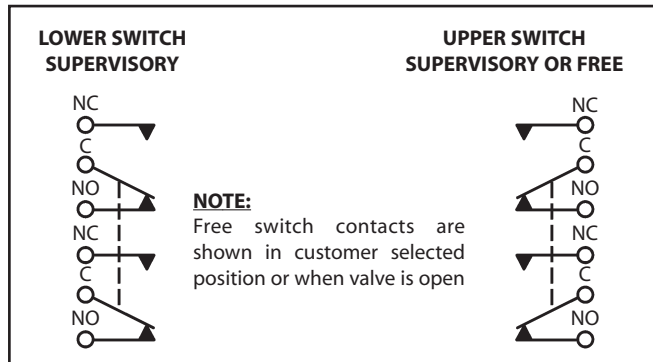
Contacts of each switch are in position shown when valve is closed

SPDT Switch Contact Schematic



The available switch arrangements are shown in the "How to Order" table. Switches designated as "supervisory" are set so that they are actuated only when the valve is in the fully closed position. They are secured to avoid accidental relocation and marked to show any attempts at tampering. Switches indicated as "free" are for indicator lights or other control purposes. These are normally set to close when the valve is fully open, but are not secured and may therefore be adjusted to operate in any position. (DPDT switches can be adjusted only for end of travel, i.e., valve full open or valve full closed.)

DPDT Switch Contact Schematic



A solenoid operated 3-way pilot valve controls valve operation and is of sufficient flow capacity to provide standard valve closing within 5 seconds. Optional fast closing is 1 second or less. Coils are continuous duty molded Class F. Manual reset solenoid operated pilot valves are also available as an FM approved option. Other solenoid pilot valves may be used with FM approval.

Maximum Operating Pressure Ratings

Gas and Oil Safety Shutoff Valves are rated for service based on FM approval tests as shown below. Ambient temperature should not exceed +140°F (60°C).

Valve Size Inches	Valve Size DN	Valve Series or Pressure Class Series	Valve Material	Seats	MAXIMUM OPERATING PRESSURE – psi (bar)							
					Gas WCB / (316)		Unheated #2, #4 Oil WCB / (316)		Heated #5, #6 Oil WCB / (316)		Max. Fluid Temp. Oil Only	
					psi	bar	psi	bar	psi	bar	°F	°C
1/2 – 2	15 – 50	4000	WCB and 316 s/s	XTREME(X) *PTFE (T)	1200/(1200)	83/(83)	1200/(1200)	83/(83)	675/(675)	47/(47)	300	149
1/2 – 8	15 – 200	7150	WCB and 316 s/s		285/(275)	19.6/(19.0)	285/(275)	19.6/(19.0)	230/(215)	15.8/(14.8)	300	149
1/2 – 6	15 – 150	9150	WCB and 316 s/s		285/(275)	19.6/(19.0)	285/(275)	19.6/(19.0)	230/(215)	15.8/(14.8)	300	149
1/2 – 2	15 – 200	7300/730S	WCB and 316 s/s		740/(720)	51.1/(49.6)	740/(720)	51.1/(49.6)	650/(560)	15.8/(14.8)	300	149
3 – 8	80 – 200	7300/730S	WCB and 316 s/s		285/(275)	19.6/(19.0)	285/(275)	19.6/(19.0)	230/(215)	15.8/(14.8)	300	149
1/2 – 1-1/2	15 – 40	9300	WCB and 316 s/s		740/(720)	51.1/(49.6)	740/(720)	51.1/(49.6)	230/(215)	15.8/(14.8)	300	149
2 – 6	50 – 150	9300	WCB and 316 s/s		285/(275)	19.6/(19.0)	285/(275)	19.6/(19.0)	230/(215)	15.8/(14.8)	300	149

*8" 7000 and 6" 9000 Only with QPX Actuator

Flow Data

The tables to the right provide flow coefficients of JAMESBURY Gas and Oil Safety Shutoff Valves covered in this bulletin. The Cv values represent the flow of water at +60°F through the valve in U.S. gallons per minute at a pressure drop of 1 psi. The metric equivalent, Kv, is the flow of water at 16°C through the valve in M³/hr at a pressure drop of 1 kg/cm². To convert Cv to Kv, multiply by 0.8569.

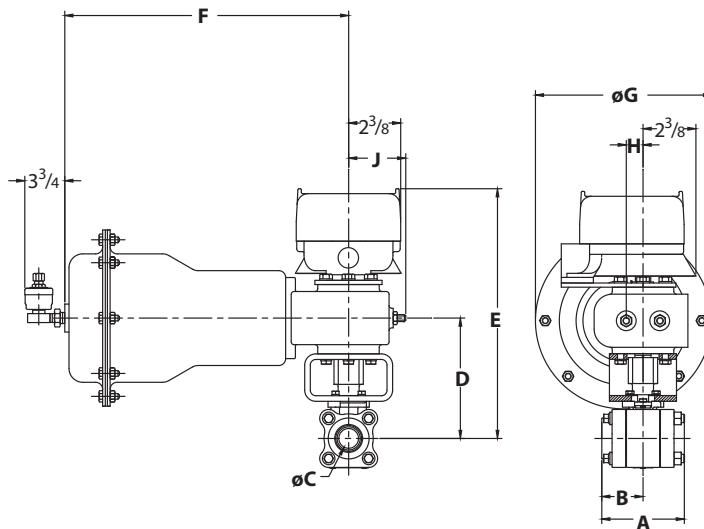
Series 4000					
Valve Size		Standard Port		Full Port	
Inches	DN	Cv	Equivalent length of pipe (ft.)	Cv	Equivalent length of pipe (ft.)
1/2	15	13	1.52	13	1.52
3/4	20	33	1.1	40	.61
1	25	44	2.1	65	1.9
1-1/4	32	46	8.4	90	2.0
1-1/2	40	95	4.5	135	3.2
2	50	111	12.0	—	—

Standard Port Flanged Valves			
Valve Size		Cv	Equivalent length of pipe (ft.)
Inches	DN		
1/2	15	9	3.2
3/4	20	19	3.1
1	25	45	2.0
2	50	165	5.4
3	80	350	9.7
4	100	550	16.2
6	150	765	70
8	200	1890	51

Full Port Flanged Valves			
Valve Size		Cv	Equivalent length of pipe (ft.)
Inches	DN		
1/2	15	9	3.2
3/4	20	50	0.45
1	25	100	0.41
2	50	490	0.6
3	80	1160	0.8
4	100	2200	0.9
6	150	5100	1.6

DIMENSIONS

1/2" – 2" (DN 15 – 50) Series 4000 Screwed End and Socket Weld Valves with QUADRA-POWR Spring-Diaphragm Actuator



Valve Size Inches	*Approximate Dimensions – inches											Approx. Weight lbs.	Actuator
	REDUCED PORT												
	SCREWED		SOCKET WELD		C	D	E	F	G	H	J		
	A	B	A	B	C	D	E	F	G	H	J		
1/2	2.59	1.28	2.59	1.29	0.50	5.07	11.01	11.03	8.38	1.39	2.05	15	QP1C/M
3/4	2.97	1.50	3.01	1.50	0.69	5.23	11.14	11.03	8.38	1.39	2.05	15	QP1C/M
1	3.69	1.84	3.69	1.85	0.88	5.68	11.62	11.03	8.38	1.39	2.05	48	QP1C/M
1-1/4	4.19	2.09	4.22	2.11	1.00	6.28	12.91	11.03	8.38	1.39	2.05	49	QP1C/M
1-1/2	4.53	2.28	4.58	2.29	1.25	7.47	14.01	13.35	8.98	1.65	3.58	56	QP2C/M
2	4.97	2.50	5.11	2.55	1.50	7.64	14.25	13.35	8.98	1.65	3.58	87	QP3C/M

Valve Size DN	*Approximate Dimensions – mm											Approx. Weight kg	Actuator
	REDUCED PORT												
	SCREWED		SOCKET WELD		C	D	E	F	G	H	J		
	A	B	A	B	C	D	E	F	G	H	J		
15	66	33	66	33	13	129	280	280	213	35	52	8	QP1C/M
20	75	38	76	38	18	133	283	280	213	35	52	8	QP1C/M
25	94	47	94	47	22	144	295	280	213	35	52	22	QP1C/M
32	106	53	106	53	25	160	328	280	213	35	52	22	QP1C/M
40	115	58	115	58	32	190	356	339	228	42	91	25	QP2C/M
50	126	64	128	64	38	194	362	339	228	42	91	39	QP3C/M

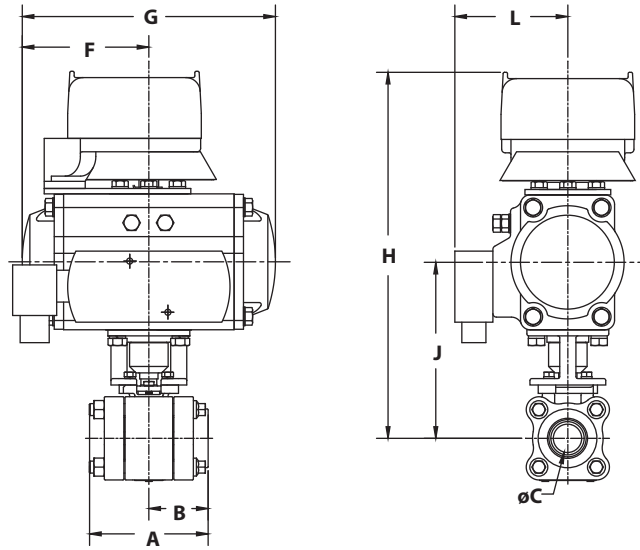
Valve Size Inches	*Approximate Dimensions – inches											Approx. Weight lbs.	Actuator
	FULL PORT												
	SCREWED		SOCKET WELD		C	D	E	F	G	H	J		
	A	B	A	B	C	D	E	F	G	H	J		
1/2	2.59	1.28	2.59	1.29	0.50	5.07	11.01	11.03	8.38	1.39	2.05	15	QP1C/M
3/4	3.41	1.72	3.69	1.85	0.88	5.68	11.62	11.03	8.38	1.39	2.05	48	QP1C/M
1	4.19	2.09	4.22	2.11	1.00	6.28	12.91	11.03	8.38	1.39	2.05	49	QP1C/M
1-1/4	4.59	2.31	4.58	2.29	1.25	7.47	14.01	13.35	8.98	1.65	3.58	57	QP2C/M
1-1/2	5.12	2.56	5.11	2.55	1.50	7.64	14.25	13.35	8.98	1.65	3.58	88	QP3C/M

Valve Size DN	*Approximate Dimensions – mm											Approx. Weight kg	Actuator
	FULL PORT												
	SCREWED		SOCKET WELD		C	D	E	F	G	H	J		
	A	B	A	B	C	D	E	F	G	H	J		
15	66	33	66	33	13	129	280	280	213	35	52	8	QP1C/M
20	87	44	94	47	22	144	295	280	213	35	52	22	QP1C/M
25	106	53	106	53	25	160	328	280	213	35	52	22	QP1C/M
32	117	59	115	58	32	190	356	339	228	42	91	26	QP2C/M
40	130	65	128	64	38	194	362	339	228	42	91	40	QP3C/M

*Dimensions apply to standard actuators sized for 60 psi with standard solenoids.

DIMENSIONS

1/2" – 2" (DN 15 – 50) Series 4000 ANSI Class 600 Screwed End and Socket Weld Valves with Type VPVL Spring-Return Actuator*



* See Page 5 for Series 4000 ANSI Class 150.

Valve Size Inches	*Approximate Dimensions – inches										Approx. Weight lbs.	Actuator
	REDUCED PORT											
	SCREWED		SOCKET WELD		C	F	G	H	J	L		
1/2	2.59	1.28	2.59	1.29	0.50	3.12	6.24	10.14	4.02	3.25	15	VPVL100 SR4/5
3/4	2.97	1.50	3.01	1.50	0.69	4.15	8.29	10.96	4.51	3.43	15	VPVL200 SR4/5
1	3.69	1.84	3.69	1.85	0.88	4.87	9.74	12.34	5.64	3.62	48	VPVL250 SR4/5
1-1/4	4.19	2.09	4.22	2.11	1.00	6.20	12.40	14.04	6.36	4.41	49	VPVL350 SR4/5
1-1/2	4.53	2.28	4.58	2.29	1.25	6.79	13.58	15.07	7.17	4.61	56	VPVL400 SR4/5
2	4.97	2.50	5.11	2.55	1.50	8.04	16.08	16.04	7.75	5.00	87	VPVL450 SR4/5

Valve Size DN	*Approximate Dimensions – mm										Approx. Weight kg	Actuator
	REDUCED PORT											
	SCREWED		SOCKET WELD		C	F	G	H	J	L		
15	66	33	66	33	13	78	156	258	102	81	8	VPVL100 SR4/5
20	75	38	76	38	18	104	207	278	115	86	8	VPVL200 SR4/5
25	94	47	94	47	22	122	244	313	143	91	22	VPVL250 SR4/5
32	106	53	106	53	25	155	310	357	162	110	22	VPVL350 SR4/5
40	115	58	115	58	32	170	340	383	182	115	25	VPVL400 SR4/5
50	126	64	128	64	38	201	402	407	197	125	39	VPVL450 SR4/5

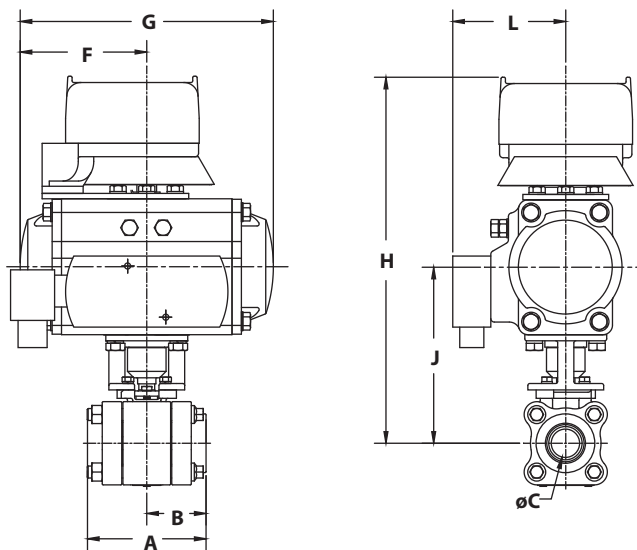
Valve Size Inches	*Approximate Dimensions – inches										Approx. Weight lbs.	Actuator
	FULL PORT											
	SCREWED		SOCKET WELD		C	F	G	H	J	L		
1/2	2.59	1.28	2.59	1.29	0.50	3.12	6.24	10.14	4.02	3.25	15	VPVL100 SR4/5
3/4	3.41	1.72	3.69	1.85	0.88	4.87	9.74	12.34	5.64	3.62	47	VPVL250 SR4/5
1	4.19	2.09	4.22	2.11	1.00	6.20	12.40	14.04	6.36	4.41	51	VPVL350 SR4/5
1-1/4	4.59	2.31	4.58	2.29	1.25	6.79	13.58	15.07	7.17	4.61	54	VPVL400 SR4/5
1-1/2	5.12	2.56	5.11	2.55	1.50	8.04	16.08	16.04	7.75	5.00	89	VPVL450 SR4/5

Valve Size DN	*Approximate Dimensions – mm										Approx. Weight kg	Actuator
	FULL PORT											
	SCREWED		SOCKET WELD		C	F	G	H	J	L		
15	66	33	66	33	13	78	156	258	102	81	8	VPVL100 SR4/5
20	87	44	94	47	22	122	244	313	143	91	21	VPVL250 SR4/5
25	106	53	106	53	25	155	310	357	162	110	23	VPVL350 SR4/5
32	117	59	115	58	32	170	340	383	182	115	24	VPVL400 SR4/5
40	130	65	128	64	38	201	402	407	197	125	40	VPVL450 SR4/5

*Dimensions apply to standard actuators sized for 60 psi with standard solenoids.

DIMENSIONS

1/2" – 2" (DN 15 – 50) Series 4000 ANSI Class 150 Screwed End and Socket Weld Valves with Type VPVL Spring-Return Actuator*



* See Page 4 for Series 4000 ANSI Class 600.

Valve Size Inches	*Approximate Dimensions – inches										Approx. Weight lbs.	Actuator
	REDUCED PORT											
	SCREWED		SOCKET WELD		C	F	G	H	J	L		
1/2	2.59	1.28	2.59	1.29	0.50	2.76	5.53	9.35	3.71	3.03	15	VPVL100 SR4/5
3/4	2.97	1.50	3.01	1.50	0.69	3.12	6.24	10.13	4.18	3.25	15	VPVL100 SR4/5
1	3.69	1.84	3.69	1.85	0.88	4.14	6.29	11.67	5.38	3.43	48	VPVL200 SR4/5
1-1/4	4.19	2.09	4.22	2.11	1.00	4.14	8.29	11.80	5.51	3.43	49	VPVL200 SR4/5
1-1/2	4.53	2.28	4.58	2.29	1.25	4.87	9.74	12.89	6.35	3.62	56	VPVL250 SR4/5
2	4.97	2.50	5.11	2.55	1.50	5.28	10.57	13.54	6.76	4.02	87	VPVL300 SR4/5

Valve Size DN	*Approximate Dimensions – mm										Approx. Weight kg	Actuator
	REDUCED PORT											
	SCREWED		SOCKET WELD		C	F	G	H	J	L		
15	66	33	66	33	13	70	140	237	94	77	8	VPVL100 SR4/5
20	75	38	76	38	18	79	159	257	106	83	8	VPVL100 SR4/5
25	94	47	94	47	22	105	211	296	137	87	22	VPVL200 SR4/5
32	106	53	106	53	25	105	211	300	140	87	22	VPVL200 SR4/5
40	115	58	115	58	32	124	247	327	161	92	25	VPVL250 SR4/5
50	126	64	128	64	38	134	268	344	172	102	39	VPVL300 SR4/5

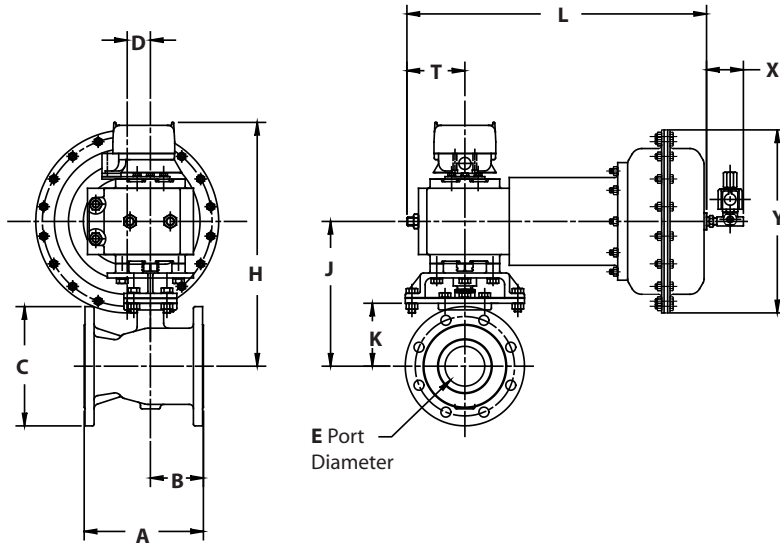
Valve Size Inches	*Approximate Dimensions – inches										Approx. Weight lbs.	Actuator
	FULL PORT											
	SCREWED		SOCKET WELD		C	F	G	H	J	L		
1/2	2.59	1.28	2.59	1.29	0.50	2.76	5.53	9.35	3.71	3.03	15	VPVL100 SR4/5
3/4	3.41	1.72	3.69	1.85	0.88	4.14	8.29	11.67	5.38	3.43	47	VPVL200 SR4/5
1	4.19	2.09	4.22	2.11	1.00	4.14	8.29	11.80	5.51	3.43	51	VPVL200 SR4/5
1-1/4	4.59	2.31	4.58	2.29	1.25	4.87	9.74	12.89	6.35	3.62	54	VPVL250 SR4/5
1-1/2	5.12	2.56	5.11	2.55	1.50	5.28	10.57	13.54	6.76	4.02	89	VPVL300 SR4/5

Valve Size DN	*Approximate Dimensions – mm										Approx. Weight kg	Actuator
	FULL PORT											
	SCREWED		SOCKET WELD		C	F	G	H	J	L		
15	66	33	66	33	13	70	140	237	94	77	8	VPVL100 SR4/5
20	87	44	94	47	22	105	211	296	137	87	21	VPVL200 SR4/5
25	106	53	106	53	25	105	211	300	140	87	23	VPVL200 SR4/5
32	117	59	115	58	32	124	247	327	161	92	24	VPVL250 SR4/5
40	130	65	128	64	38	134	268	344	172	102	40	VPVL300 SR4/5

*Dimensions apply to standard actuators sized for 60 psi with standard solenoids.

DIMENSIONS

**1/2" – 8" (DN 15 – 200) ANSI Class 150 Type 7000 Standard Port Valves and
ANSI Class 300 1/2" – 3" (DN 15 – 80) with QUADRA-POWR Spring Diaphragm Actuator**



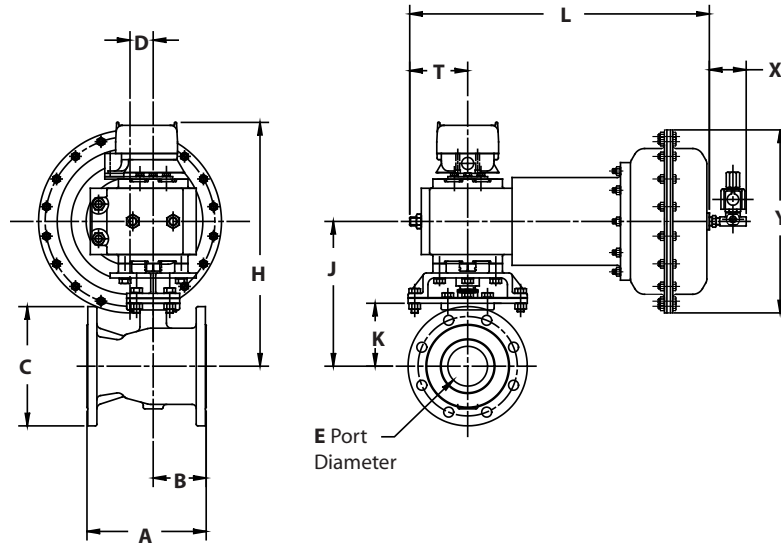
NOTE: 8" (DN 200) valves have a two-piece body

Valve Series	Valve Size Inches	*Approximate Dimensions – inches												Approx. Weight lbs.	Actuator
		A	B	C	D	E	H	J	K	L	T	X	Y		
7150	1/2	4.25	1.94	3.50	1.37	0.50	10.75	4.93	1.06	14.06	2.05	3.80	7.75	35	QP1C/M
	3/4	4.63	2.00	3.88	1.37	0.69	10.91	5.09	1.22	14.06	2.05	3.80	7.75	35	QP1C/M
	1	5.00	2.19	4.25	1.37	0.88	11.39	5.57	1.65	14.06	2.05	3.80	7.75	38	QP1C/M
	1-1/2	6.50	2.65	5.00	1.72	1.25	11.97	6.15	2.08	16.75	3.58	3.80	8.98	53	QP2C/M
	2	7.00	2.43	6.00	1.72	1.50	14.91	8.12	2.37	16.75	4.69	3.80	8.98	57	QP2C/M
	3	8.00	3.75	7.50	2.09	2.31	16.32	9.53	3.44	20.28	4.69	3.80	10.79	116	QP3C/M
	4	9.00	4.00	9.00	2.68	3.03	17.82	10.61	3.93	23.03	5.51	4.50	12.60	144	QP4C/M
	6	10.50	4.25	11.00	2.68	4.00	20.28	13.07	5.51	23.03	5.51	4.50	12.60	250	QP4C/M
730S	8	11.50	6.41	13.50	3.44	6.00	24.34	12.16	7.28	28.27	6.30	4.50	15.04	527	QP5C/M
	1/2	4.25	1.94	3.75	1.37	0.50	10.75	4.93	1.06	14.06	2.05	3.80	7.75	35	QP1C/M
	3/4	4.63	2.00	4.62	1.37	0.69	10.91	5.09	1.22	14.06	2.05	3.80	7.75	38	QP1C/M
	1	5.00	2.19	4.88	1.37	0.88	11.39	5.57	1.65	14.06	2.05	3.80	7.75	40	QP1C/M
	1-1/2	6.50	2.65	6.12	1.72	1.25	11.97	6.15	2.08	16.75	3.58	3.80	8.98	48	QP2CM
	2	7.00	2.43	6.00	2.09	1.50	14.91	8.12	2.37	16.75	4.69	3.80	10.79	53	QP2C/M
7300	3	8.00	3.75	7.50	2.09	2.31	16.32	9.53	3.44	20.28	4.69	3.80	10.79	133	QP3C/M
	1/2	5.50	1.94	3.75	1.37	0.50	10.75	4.93	1.06	14.06	2.05	3.80	7.75	36	QP1C/M
	3/4	6.00	2.00	4.62	1.37	0.69	10.91	5.09	1.22	14.06	2.05	3.80	7.75	38	QP1C/M
	1	6.50	2.19	4.88	1.37	0.88	11.39	5.57	1.65	14.06	2.05	3.80	7.75	41	QP1C/M
	1-1/2	7.50	2.65	6.12	1.72	1.25	11.97	6.15	2.08	16.75	3.58	3.80	8.98	60	QP2C/M
	2	7.00	2.43	6.00	2.09	1.50	14.91	8.12	2.37	16.75	4.69	3.80	10.79	54	QP2C/M
	3	11.12	3.75	7.50	2.09	2.31	16.32	9.53	3.44	20.28	4.69	3.80	10.79	138	QP3C/M

*Dimensions apply to standard actuators sized for 60 psi with standard solenoids.

DIMENSIONS

**1/2" – 8" (DN 15 – 200) ANSI Class 150 Type 7000 Standard Port Valves and
ANSI Class 300 1/2" – 3" (DN 15 – 80) with QUADRA-POWR Spring Diaphragm Actuator**



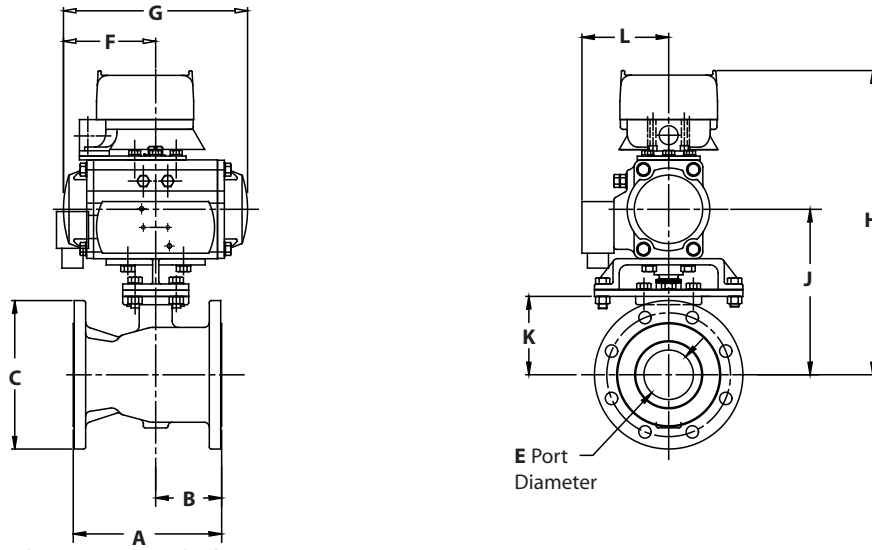
NOTE: 8" (DN 200) valves have a two-piece body

Valve Series	Valve Size DN	*Approximate Dimensions – mm												Approx. Weight kg	Actuator
		A	B	C	D	E	H	J	K	L	T	X	Y		
7150	15	106	49	89	35	13	273	125	27	357	52	97	197	16	QP1C/M
	20	117	51	98	35	17	277	129	31	357	52	97	197	16	QP1C/M
	25	127	56	108	35	22	289	141	42	357	52	97	197	17	QP1C/M
	40	165	67	127	44	32	304	156	53	425	91	97	226	24	QP2C/M
	50	178	62	152	53	38	373	274	59	425	119	95	226	26	QP2C/M
	80	203	95	191	53	59	408	274	86	515	119	95	270	53	QP3C/M
	100	229	102	229	68	76	446	320	98	585	140	114	315	65	QP4C/M
	150	267	108	279	68	102	507	320	138	585	140	114	315	113	QP4C/M
200	292	163	343	86	152	609	304	182	707	158	114	376	239	QP5C/M	
7305	15	106	49	95	35	13	273	125	27	357	52	97	197	16	QP1C/M
	20	117	51	117	35	17	277	129	31	357	52	97	197	17	QP1C/M
	25	127	56	124	35	22	289	141	42	357	52	97	197	18	QP1C/M
	40	165	67	155	44	32	304	156	53	425	91	97	226	22	QP2C/M
	50	178	62	152	53	38	373	274	59	425	119	95	226	24	QP2C/M
	80	203	95	191	53	59	408	274	86	515	117	95	270	60	QP3C/M
7300	15	140	49	95	35	13	273	125	27	357	52	97	197	16	QP1C/M
	20	152	51	117	35	17	277	129	31	357	52	97	197	17	QP1C/M
	25	165	56	124	35	22	289	141	42	357	52	97	197	18	QP1C/M
	40	191	67	155	44	32	304	156	53	425	91	97	226	27	QP2C/M
	50	178	62	152	53	38	373	274	59	425	119	95	226	25	QP2C/M
	80	282	95	191	53	59	408	274	86	515	117	95	270	63	QP3C/M

*Dimensions apply to standard actuators sized for 60 psi with standard solenoids.

DIMENSIONS

**1/2" – 8" (DN 15 – 200) ANSI Class 150 Type 7000 Standard Port Valves
and 1/2" – 3" (DN 15 – 80) ANSI Class 300 with Type VPVL Spring-Return Actuator**



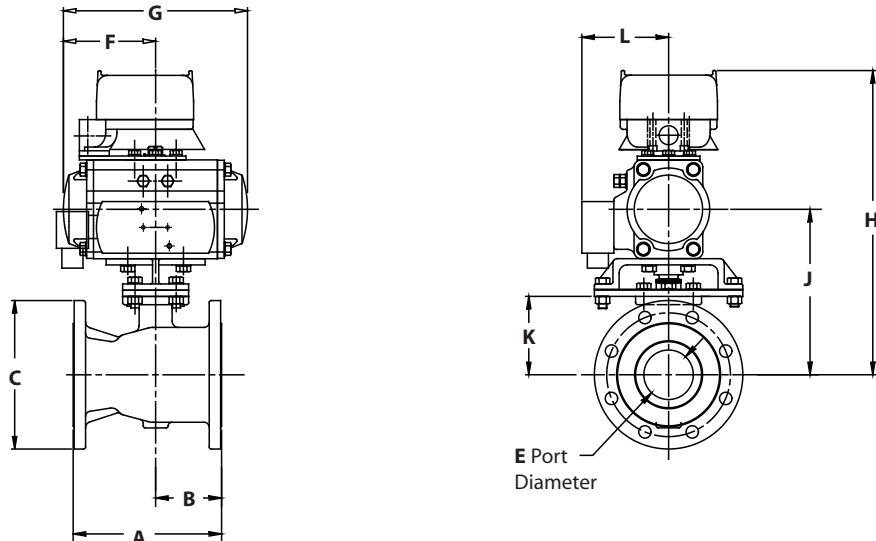
NOTE: 8" (DN 200) valves have a two-piece body

Valve Series	Valve Size Inches	*Approximate Dimensions – inches										Approx. Weight lbs.	Actuator
		A	B	C	E	F	G	H	J	K	L		
7150	1/2	4.25	1.94	3.50	0.50	3.12	6.24	10.00	4.01	1.06	4.47	13	VPVL100SR4/5
	3/4	4.63	2.00	3.88	0.69	3.12	6.24	10.16	4.17	1.22	4.47	13	VPVL100SR4/5
	1	5.00	2.19	4.25	0.88	4.15	8.29	11.70	5.88	1.65	4.67	21	VPVL200SR4/5
	1-1/2	6.50	2.65	5.00	1.25	4.87	9.74	12.90	6.34	2.07	4.86	30	VPVL250SR4/5
	2	7.00	2.43	6.00	1.50	5.29	10.57	14.31	7.37	2.37	4.00	97	VPVL300SR4/5
	3	8.00	3.75	7.50	2.31	6.20	12.40	17.50	9.84	3.44	4.41	116	VPVL400SR4/5
	4	9.00	4.00	9.00	3.03	8.04	16.08	19.25	11.00	3.93	4.98	144	VPVL450SR4/5
	6	10.50	4.25	11.00	4.00	10.69	21.38	25.09	14.67	5.51	5.79	250	VPVL600SR4/5
730S	1/2	4.25	1.94	3.75	0.50	3.12	6.24	10.00	4.01	1.06	4.47	15	VPVL100SR4/5
	3/4	4.63	2.00	4.62	0.69	3.12	6.24	10.16	4.17	1.22	4.47	18	VPVL100SR4/5
	1	5.00	2.19	4.88	0.88	4.15	8.29	11.70	5.38	1.65	4.67	23	VPVL200SR4/5
	1-1/2	6.50	2.65	6.12	1.25	5.29	10.57	12.90	6.34	2.07	5.26	33	VPVL300SR4/5
	2	7.00	2.43	6.00	1.50	6.79	13.58	15.61	7.71	2.37	4.61	102	VPVL350SR4/5
	3	8.00	3.75	7.50	2.31	8.61	17.22	19.50	10.84	3.44	5.28	133	VPVL400SR4/5
7300	1/2	5.50	1.94	3.75	0.50	3.12	6.24	10.00	4.01	1.06	4.47	16	VPVL100SR4/5
	3/4	6.00	2.00	4.62	0.69	3.12	6.24	10.16	4.17	1.22	4.47	16	VPVL100SR4/5
	1	6.50	2.19	4.88	0.88	4.15	8.29	11.70	5.38	1.65	4.67	24	VPVL200SR4/5
	1-1/2	7.50	2.65	6.12	1.25	5.29	10.57	12.90	6.34	2.07	5.26	35	VPVL300SR4/5
	2	8.50	2.43	6.00	1.50	6.79	13.58	15.61	7.71	2.37	4.61	103	VPVL350SR4/5
	3	11.12	3.75	7.50	2.31	8.61	17.22	19.50	10.84	3.44	5.28	138	VPVL400SR4/5

*Dimensions apply to standard actuators sized for 60 psi with standard solenoids.

DIMENSIONS

**1/2" – 8" (DN 15 – 200) ANSI Class 150 Type 7000 Standard Port Valves
and 1/2" – 3" (DN 15 – 80) ANSI Class 300 with Type VPVL Spring-Return Actuator**



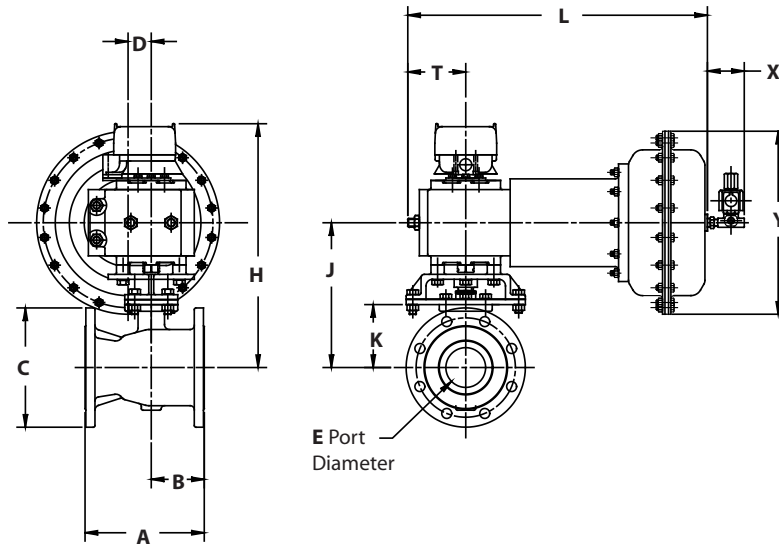
NOTE: 8" (DN 200) valves have a two-piece body

Valve Series	Valve Size DN	*Approximate Dimensions – mm										Approx. Weight kg	Actuator
		A	B	C	E	F	G	H	J	K	L		
7150	15	106	49	89	13	79	158	254	102	27	114	6	VPVL100SR4/5
	20	117	51	98	17	79	158	258	105	31	114	7	VPVL100SR4/5
	25	127	56	108	22	105	211	297	137	42	119	10	VPVL200SR4/5
	40	165	67	127	32	124	247	328	161	53	123	13	VPVL250SR4/5
	50	178	62	152	38	132	264	358	184	59	100	44	VPVL300SR4/5
	80	203	95	191	59	155	310	438	246	86	110	53	VPVL350SR4/5
	100	229	102	229	76	201	402	481	275	98	125	65	VPVL450SR4/5
	150	267	108	279	102	267	535	627	367	138	145	113	VPVL600SR4/5
730S	15	106	49	95	13	79	158	254	102	27	114	7	VPVL100SR4/5
	20	117	51	117	17	79	158	258	105	31	114	8	VPVL100SR4/5
	25	127	56	124	22	105	211	297	137	42	119	11	VPVL200SR4/5
	40	165	67	155	32	134	268	328	161	53	134	15	VPVL300SR4/5
	50	178	62	150	38	170	340	390	193	59	115	46	VPVL350SR4/5
	80	203	95	191	59	215	431	488	271	86	132	60	VPVL400SR4/5
7300	15	140	49	95	13	79	158	254	102	27	114	7	VPVL100SR4/5
	20	152	51	117	17	79	158	258	105	31	114	8	VPVL100SR4/5
	25	165	56	124	22	105	211	297	137	42	119	11	VPVL200SR4/5
	40	191	67	155	32	134	268	328	161	53	134	16	VPVL300SR4/5
	50	216	62	150	38	170	340	390	193	59	115	47	VPVL350SR4/5
	80	282	95	191	59	215	431	488	271	86	132	63	VPVL400SR4/5

*Dimensions apply to standard actuators sized for 60 psi with standard solenoids.

DIMENSIONS

1/2" – 6" (DN 15 – 150) ANSI Class 150 and 1/2" – 1-1/2" (DN 15 – 40) Class 300 Type 9000 Full Port Valves with QUADRA-POWR Spring-Diaphragm Actuator



NOTE: 2" – 6" (DN 50 – 150) valves have a two-piece body

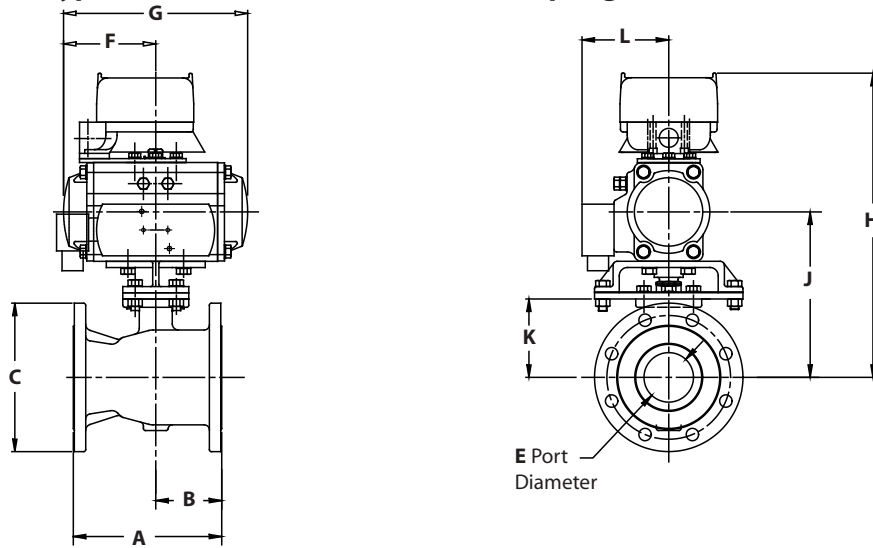
Valve Series	Valve Size Inches	*Approximate Dimensions – inches												Approx. Weight lbs.	Actuator
		A	B	C	D	E	H	J	K	L	T	X	Y		
9150	1/2	4.25	1.94	3.50	1.37	0.50	10.75	4.93	1.06	13.07	2.05	3.80	8.39	33.3	QP1C/M
	3/4	4.62	2.06	3.87	1.37	0.75	11.17	6.82	1.37	13.07	2.05	3.80	8.39	36	QP1C/M
	1	5.00	2.18	4.25	1.37	1.00	11.42	6.94	1.50	13.07	2.05	3.80	8.39	39	QP1C/M
	1-1/2	6.50	2.43	5.00	1.65	1.50	13.02	8.18	2.37	16.93	3.58	3.80	8.98	64	QP2C/M
	2	7.04	3.93	6.00	2.09	2.00	15.98	9.18	3.09	20.28	4.69	3.80	10.79	99	QP3C/M
	3	8.04	4.13	7.50	2.09	3.00	17.91	10.42	3.90	20.28	4.69	3.80	10.79	135	QP4C/M
	4	9.04	4.52	9.00	2.68	4.00	20.28	13.07	5.51	23.03	5.51	4.50	12.60	220	QP4C/M
	6	15.50	8.25	11.00	3.44	6.00	24.34	12.16	7.28	28.27	6.30	4.50	15.04	487	QP5C/M
9300	1/2	5.50	1.94	3.75	1.37	0.50	10.75	4.93	1.65	13.07	2.05	3.80	8.39	35	QP1C/M
	3/4	6.00	2.06	4.63	1.37	0.75	11.17	6.82	1.37	13.07	2.05	3.80	8.39	36	QP1C/M
	1	6.50	2.18	4.88	1.37	1.00	11.42	6.94	1.50	13.07	2.05	3.80	8.39	39	QP1C/M
	1-1/2	7.50	2.43	6.13	1.65	1.50	13.02	8.18	2.37	16.93	3.58	3.80	8.39	64	QP2C/M

Valve Series	Valve Size DN	*Approximate Dimensions – mm												Approx. Weight kg	Actuator
		A	B	C	D	E	H	J	K	L	T	X	Y		
9150	15	108	49	89	35	13	273	125	27	332	52	97	213	15	QP1C/M
	20	117	52	98	35	19	279	173	35	332	52	97	213	16	QP1C/M
	25	127	55	108	35	25	286	176	38	332	52	97	213	18	QP1C/M
	40	165	62	127	42	38	326	208	60	430	91	97	228	29	QP2C/M
	50	178	100	152	53	51	400	233	78	515	119	97	274	45	QP3C/M
	80	204	105	190	53	76	448	265	99	515	119	97	274	61	QP4C/M
	100	230	115	229	68	102	507	332	140	585	140	114	320	100	QP4C/M
	150	394	210	279	87	152	609	309	185	718	160	114	382	221	QP5C/M
9300	15	140	49	89	35	13	273	125	27	323	52	97	213	16	QP1C/M
	20	152	52	118	35	19	279	173	35	332	52	97	213	16	QP1C/M
	25	165	55	124	35	25	286	176	38	332	52	97	213	18	QP1C/M
	40	191	62	156	42	38	326	208	60	430	91	97	213	29	QP2C/M

*Dimensions apply to standard actuators sized for 60 psi with standard solenoids.

DIMENSIONS

**1/2" – 6" (DN 15 – 150) ANSI Class 150 and 1/2" – 1-1/2" (DN 15 – 40) Class 300
Type 9000 Full Port Valves with VPVL Spring-Return Actuator**



NOTE: 2" – 6" (DN 50 – 150) valves have a two-piece body

Valve Series	Valve Size Inches	*Approximate Dimensions – inches										Approx. Weight lbs.	Actuator
		A	B	C	E	F	G	H	J	K	L		
9150	1/2	4.25	1.94	3.50	0.50	2.76	5.53	10.15	5.25	1.06	3.08	27	VPVL051SR4/5
	3/4	4.62	2.06	3.87	0.75	4.15	8.29	12.33	5.88	1.37	3.43	36	VPVL200SR4/5
	1	5.00	2.18	4.25	1.00	4.15	8.29	12.46	6.00	1.50	3.43	39	VPVL200SR4/5
	1-1/2	6.50	2.43	5.00	1.50	5.29	10.57	14.31	7.37	2.37	4.00	64	VPVL300SR4/5
	2	7.04	3.93	6.00	2.00	5.29	10.57	16.07	9.13	3.09	4.00	99	VPVL350SR4/5
	3	8.04	4.13	7.50	3.00	8.04	16.08	19.22	10.93	3.90	5.00	135	VPVL450SR4/5
	4	9.04	4.52	9.00	4.00	10.69	21.38	25.09	14.67	5.51	5.79	220	VPVL600SR4/5
9300	6	15.50	8.25	11.00	6.00	12.23	24.45	29.36	17.94	7.28	8.91	487	VPVL650SR4/5
	1/2	5.50	1.94	3.75	0.50	2.76	5.53	10.15	5.25	1.06	3.08	29	VPVL051SR4/5
	3/4	6.00	2.06	4.63	0.75	4.15	8.29	12.33	6.00	1.37	3.43	36	VPVL200SR4/5
	1	6.50	2.18	4.88	1.00	5.29	10.57	13.44	7.37	1.50	4.00	39	VPVL250SR4/5
	1-1/2	7.50	2.43	6.13	1.50	6.79	13.58	15.61	7.71	2.37	4.61	64	VPVL350SR4/5

Valve Series	Valve Size DN	*Approximate Dimensions – mm										Approx. Weight kg	Actuator
		A	B	C	E	F	G	H	J	K	L		
9150	15	108	50	89	13	70	140	258	133	27	78	12	VPVL051SR4/5
	20	117	52	98	19	104	207	308	147	35	86	16	VPVL200SR4/5
	25	127	55	108	25	104	207	312	150	38	86	18	VPVL200SR4/5
	40	165	62	127	38	132	264	358	184	60	100	29	VPVL300SR4/5
	50	178	100	152	51	132	264	402	228	78	100	45	VPVL350SR4/5
	80	204	105	190	76	201	402	481	273	99	125	61	VPVL450SR4/5
	100	230	115	229	102	267	535	627	367	140	145	100	VPVL600SR4/5
9300	150	394	210	279	152	306	611	734	449	185	223	221	VPVL650SR4/5
	15	140	49	95	13	70	140	258	133	27	78	13	VPVL051SR4/5
	20	152	52	118	19	104	207	308	150	35	86	16	VPVL200SR4/5
	25	165	55	124	25	132	264	336	184	38	100	18	VPVL250SR4/5
	40	191	62	156	38	170	340	390	193	60	115	29	VPVL350SR4/5

*Dimensions apply to standard actuators sized for 60 psi with standard solenoids.

HOW TO ORDER JAMESBURY GAS AND OIL SAFETY SHUTOFF VALVES

The Gas and Oil Safety Shutoff Valve designation is made up of numbers and letters that describe all features of the available variations of these units.

Example: 1052 – 7LX3VSA1 A 3" (DN 80) Gas and Oil Safety Shutoff Class 150 flanged design with carbon steel body and stainless steel trim and XTREME material seats with two supervisory double pole double throw mechanical limit switches and Type VPVL actuator standard solenoid with 120 VAC power.

1	2	3	4	5	6	7	8
7	L	X	3	V	B	A	1

1	Size									
Code	1	2	3	4	5	6	7	8	9	0
inches	1/2	3/4	1	1-1/4	1-1/2	2	3	4	6	8
DN	15	20	25	32	40	50	80	100	150	200

2	Valve Body Style		
Code†	Series	Body Style	Body Material
C	4000	Screwed End, Reduced Bore (1/2" - 2")	Carbon
D	4000	Screwed End, Reduced Bore (1/2" - 2")	Stainless
E	4000	Socket Weld, Reduced Bore (1/2" - 2")	Carbon
F	4000	Socket Weld, Reduced Bore (1/2" - 2")	Stainless
G	4000	Screwed End, Full Bore (1/2" - 1-1/2")	Carbon
H	4000	Screwed End, Full Bore (1/2" - 1-1/2")	Stainless
J	4000	Socket Weld, Full Bore (1/2" - 1-1/2")	Carbon
K	4000	Socket Weld, Full Bore (1/2" - 1-1/2")	Stainless
L	7150	Flanged, Reduced Bore, Class 150, (1/2" - 8")	Carbon
M	7150	Flanged, Reduced Bore, Class 150, (1/2" - 8")	Stainless
N	9150	Flanged, Full Bore, Class 150, (1/2" - 6")	Carbon
P	9150	Flanged, Full Bore, Class 150, (1/2" - 6")	Stainless
Q	9300	Flanged, Full Bore, Class 300, (1/2" - 2")*	Carbon
S	730S	Flanged, Reduced Bore, Class 300, Short, (1/2" - 3")**	Carbon
T	9300	Flanged, Full Bore, Class 300, (1/2" - 2")*	Stainless
V	730S	Flanged, Reduced Bore, Class 300, Short, (1/2" - 3")**	Stainless
Y	7300	Flanged, Reduced Bore, Class 300, (1/2" - 3")**	Carbon
Z	7300	Flanged, Reduced Bore, Class 300, (1/2" - 3")**	Stainless

3	Valve Seat Material	
Code	Seat Material	
X	XTREME	up to 6" 7000 Series and 4" 9000 Series
T	PTFE	8" 7000 Series and 6" 9000 Series Only

† Standard ball and stem material is 316 stainless steel

*2" and larger Rated to Class 150.

**3" and larger Rated to Class 150

4	Switch Description	
Code	Description	Switch Code
0	No Switch	
1	2 SPDT switches, both fixed	QX2VB02SDM (Mechanical switches)
2	2 SPDT switches, 1 fixed, 1 adjustable	
3	2 DPDT switches, both fixed	QX14B02SDM (Mechanical switches)
4	2 DPDT switches, 1 fixed, 1 adjustable	
6	2 SPDT switches, 1 fixed, 1 adjustable	QX2HB02SDM (Longer Life Proximity switches)
7	2 SPDT switches, both fixed	

5	Actuator (See Pages 3-11 for Actuator details)	
Code	Actuator Type	
Q	QUADRA-POWR, diaphragm, spring return *	
V	VPVL, rack and pinion, spring return **	

*Ambient temperature from -20°F to 140°F.

**Ambient temperature from -40°F to 140°F.

6	Options	
Code	Option	
S	Standard	
B	4000 Series ANSI B31 valve per ANSI B16.34 with Class 600 rating	
M	Valve with Monel ball and stem	
R	4000 Series ANSI B31 valve per ANSI B16.34 with Class 150 rating	

7	Solenoid	
Code	Solenoid	
A	Standard (up to 125°F, 51°C)	
B	High Temperature (up to 140°F, 60°C)	
C	Manual reset	
D	Stainless steel	
E	Faster closing	
F	High temperature & faster closing	

8	Solenoid Voltage	
Code	Voltage	
1	120 VAC, 60 Hz	
2	240 VAC, 60 Hz	
3	12 VDC	
4	24 VDC	

Subject to change without prior notice.

Metso Automation Inc.

Europe, Levytie 6, P.O. Box 310, 00811 Helsinki, Finland.
Tel. +358 20 483 150. Fax +358 20 483 151

North America, 44 Bowditch Drive, P.O. Box 8044, Shrewsbury, MA 01545, USA.
Tel. +1 508 852 0200. Fax +1 508 852 8172

Europe, 6-8 rue du Maine, 68271 Wittenheim Cedex, France.
Tel. +33 (0)3 89 50 64 00. Fax +33 (0)3 89 50 64 40

South America, Av. Independência, 2500- Iporanga, 18087-101, Sorocaba-São Paulo
Brazil. Tel. +55 15 2102 9700. Fax +55 15 2102 9748/49

Asia Pacific, 238A Thomson Road, #25-09 Novena Square Tower A, 307684 Singapore.
Tel. +65 6511 1011. Fax +65 6250 0830

China, 19/F, the Exchange Beijing, No. 118, Jianguo Lu Yi, Chaoyang Dist, 100022 Beijing, China.
Tel. +86-10-6566-6600. Fax +86-10-6566-2575

Middle East, Roundabout 8, Unit AB-07, P.O. Box 17175, Jebel Ali Freezone, Dubai,
United Arab Emirates. Tel. +971 4 883 6974. Fax +971 4 883 6836

www.metso.com/automation

