

Spence Type J Control Valve



Figure 1. Type J Control Valve

Features

- High Capacity Streamlined Body reduces velocity and pressure loss.
- Compact Design for ease of installation.
- Multiple Port Sizes allows flexibility in sizing.
- Stainless Steel Trim for long life and corrosion resistance.
- Super Polished, Extra Thick Stem provides low friction and precise control.
- Live Loaded V-ring Packing is self adjusting.
- Slip-on Flanges for flexibility in piping.
- NEMUR 4 Mounting Pad for accessories.

Introduction

Type J is a single-seated, top-guided compact pneumatic globe control valve with a streamlined body. The actuator have all Stainless steel hardware with a maximum deadband of 0.3 psig / 0.02 bar. The valve trim are all 316 Stainless steel with replaceable threaded seats for easy maintenance. Standard packing if spring loaded Teflon V-rings. Optional graphite or high temperature packings available. The valve seat leakage conforms to ANSI/ISA 70-2 Class IV for metal seats and Class VI for Teflon soft seats. The valve conforms to NEMUR 4 for mounting of accessories.

Type J

Specifications

The specifications section on this page provides the ratings and other specifications for the Type J control valve.

Control Valve Types

Type J1: Cast Iron

Type J3: Stainless steel

Valve Sizes

NPS 1/2, 3/4, 1, 1 1/2 and 2 /

DN 15, 20, 25, 40 and 50

Pressure and Temperature Chart⁽¹⁾

See Figure 2

End Connection Styles

NPT, CL150, CL300 and CL600

Flow Coefficient, C_v

NPS 1/2 / DN 15: 5.1

NPS 3/4 / DN 20: 10.3

NPS 1 / DN 25: 18.2

NPS 1-1/2 / DN 40: 37

NPS 2 / DN 50: 67

Construction Materials

Body: Stainless steel or Cast iron

Seat Ring: Stainless steel

Packing: Polytetrafluoroethylene (PTFE) V-ring, PTFE/Graphite or Graphite

Plug and Stem Assembly: Stainless steel

Yoke: Ductile iron

Diaphragm: Nitrile (NBR) /Polyester

Piston: Stainless steel

Spring: Steel wire

Actuator Housing: Steel

Options

36 or 60 sq. in. / 0.02 or 0.04 sqm actuators

Soft Seats- 450°F / 232°C

Moore, PMV, Eckardt Positioner Accessories

Approximate Weight

See Table 10

Seat Leakage Classifications

Metal Seats: ANSI/ISA 70-2 Class IV

Teflon Soft Seats: Class VI

1. The pressure/temperature limits in this Bulletin and any applicable standard or code limitation should not be exceeded.

Principle of Operation

The Type J Control Valve is a flow-to-open, globe style, pneumatic diaphragm actuated control valve. It can be arranged to operate with either air-to-close or air-to-open control.

A controller sensing the controlled variable provides an air signal to the actuator of the control valve to obtain the desired control.

Installation

- Locate the valve in a straight run of horizontal pipe as shown in Figure 3. Mount the valve with the actuator in the upright position. Allow room for removal of the actuator.
- Prevent pipeline hammering in compressible fluid service by providing proper drainage before and after the valve.
- Avoid damaging effects of scale and dirt in pipelines by using a strainer.
- A 3-valve by-pass to facilitate inspection and maintenance without interrupting service is recommended.

- To eliminate excessive noise with steam and other compressible fluids, enlarge the delivery pipe size to allow a reasonable flow velocity at the reduced pressure. A concentric transition is recommended.
- If possible, avoid sharp turns close to the valve.
- Install upstream and downstream pressure gauges to indicate performance.
- If the rating of the delivery system or connected equipment is less than the initial pressure, provide a safety relief valve.
- Use Pipe Coupling for ease of maintenance. The spiral wound gasket provides a high performance seal similar to that of a flanged connection, yet retains the convenience of a ground joint union.

Capacity

Capacities shown in Tables 2 to 7 are obtained with factory supplied check valves. For other multiplex capacities, consult factory.

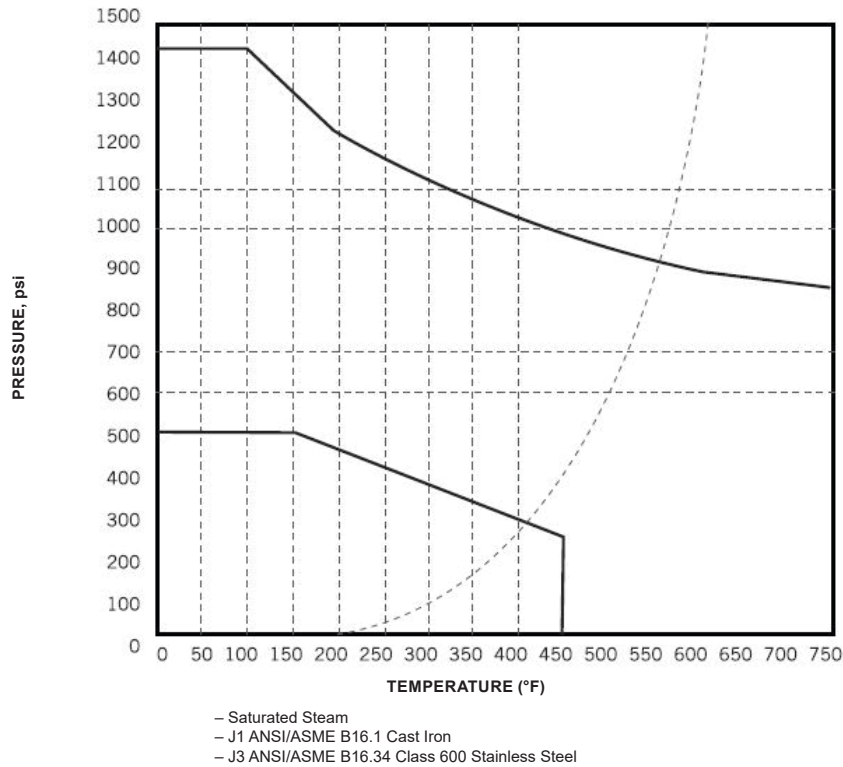


Figure 2. Type J Pressure and Temperature Chart

Table 1. C_v with Percent of Travel

SIZE, NPS / DN	TRAVEL	PORT SIZE	PLUG CONTOUR	PERCENT OF TRAVEL										
				5	10	20	30	40	50	60	70	80	90	100
1/2 / 15	3/4	1/8	EP	0.002	0.003	0.006	0.011	0.021	0.032	0.042	0.052	0.062	0.072	0.08
		3/16	EP	0.004	0.008	0.014	0.021	0.03	0.045	0.063	0.095	0.145	0.25	0.5
		1/4	EP	0.03	0.04	0.07	0.12	0.18	0.25	0.36	0.49	0.7	1.1	1.5
		5/8	MEP	0.05	0.1	0.18	0.31	0.49	0.73	1.1	1.6	2.3	3.4	5.1
3/4 / 20	3/4	1/8	EP	0.002	0.003	0.006	0.011	0.021	0.032	0.042	0.052	0.062	0.072	0.08
		3/16	EP	0.004	0.008	0.014	0.021	0.03	0.045	0.063	0.095	0.145	0.25	0.5
		1/4	EP	0.03	0.04	0.07	0.12	0.18	0.25	0.36	0.49	0.7	1.1	1.5
		5/8	MEP	0.05	0.07	0.18	0.31	0.47	0.73	1.1	1.6	2.4	3.8	6
		7/8	MEP	0.07	0.19	0.58	1	1.3	1.9	2.5	3.8	5.7	8.7	10.3
1 / 25	3/4	5/8	MEP	0.04	0.07	0.16	0.31	0.54	0.79	1.1	1.8	2.2	4	6.2
		7/8	MEP	0.07	0.15	0.42	0.75	1.2	1.9	2.9	4.2	6.7	9.8	12.1
		1-1/4	MEP	0.09	0.27	0.63	1	1.4	3.2	5.3	7.5	11.5	15.6	18.2
1-1/2 / 40	3/4	7/8	MEP	0.11	0.21	0.54	0.89	1.4	1.9	2.7	3.9	6.4	10.1	13.2
		1-1/4	MEP	0.14	0.37	0.99	1.5	2.4	3.6	5.3	7.5	12.3	16.8	22
		1-3/4	MEP	0.41	0.85	2.4	4.3	6.4	9.9	15.7	22.7	29	34.2	37
2 / 50	3/4	1-1/4	MEP	0.14	0.37	0.99	1.5	2.4	3.6	5.3	7.5	12.3	17.3	23
		1-3/4	MEP	0.41	0.85	2.4	4.3	6.5	10	16	23	31	37	43
	1-1/16	2-1/4	MEP	0.75	1.5	3.5	6.5	10.5	15.5	26	39	50	60	67

Type J

Table 2. Saturated Steam Capacity, lbs/hr (Imperial)

PRESSURE, psi		VALVE SIZE (NPS / DN) AND PORT (in. / mm)																	
		1/2 / 15				3/4 / 20					1 / 25			1-1/2 / 40			2 / 50		
P1	P2	1/8 / 3.2	3/16 / 4.8	1/4 / 6.4	5/8 / 15.9	1/8 / 3.2	3/16 / 4.8	1/4 / 6.4	5/8 / 15.9	7/8 / 22.2	5/8 / 15.9	7/8 / 22.2	1-1/4 / 31.8	7/8 / 22.2	1-1/4 / 31.8	1-3/4 / 44.5	1-1/4 / 31.8	1-3/4 / 44.5	2-1/4 / 57.2
10	5	2	16	47	159	2	16	47	187	322	194	378	569	412	687	1156	719	1344	2094
	3	3	18	53	181	3	18	53	213	366	220	430	646	469	781	1314	817	1527	2380
15	10	3	17	52	177	3	17	52	208	357	215	419	630	457	762	1281	796	1489	2320
	7	3	21	62	212	3	21	62	250	429	258	503	757	549	915	1540	957	1789	2788
	5	4	22	67	229	4	22	67	269	463	278	543	817	593	988	1662	1033	1931	3009
20	15	3	19	56	192	3	19	56	226	387	233	455	685	497	828	1392	865	1617	2520
	10	4	25	74	253	4	25	74	297	510	307	599	902	654	1090	1833	1139	2130	3319
	7	4	27	81	275	4	27	81	324	555	334	652	981	712	1186	1995	1240	2319	3613
30	22	4	26	79	268	4	26	79	315	541	326	636	957	694	1156	1945	1209	2260	3522
	17	5	32	95	323	5	32	95	380	652	393	766	1153	836	1393	2343	1457	2723	4243
	10	6	36	108	369	6	36	108	434	744	448	874	1315	954	1590	2674	1662	3108	4842
40	25	6	38	113	384	6	38	113	452	775	467	911	1370	994	1656	2786	1732	3237	5044
	20	7	41	124	423	7	41	124	497	854	514	1003	1508	1094	1823	3067	1906	3564	5553
	3-0	8	47	141	480	8	47	141	564	969	583	1138	1711	1241	2069	3479	2163	4043	6300
50	35	7	42	125	424	7	42	125	498	855	515	1005	1511	1096	1827	3073	1910	3571	5564
	30	7	46	138	470	7	46	138	553	950	572	1116	1679	1217	2029	3413	2121	3966	6179
	25	8	49	148	505	8	49	148	594	1019	614	1198	1801	1307	2178	3662	2277	4256	6632
	6-0	9	55	166	564	9	55	166	663	1139	686	1338	2013	1460	2433	4091	2543	4755	7409
60	45	7	45	135	460	7	45	135	541	928	559	1090	1640	1189	1982	3334	2072	3874	6037
	40	8	50	151	513	8	50	151	604	1036	624	1217	1831	1328	2213	3722	2313	4325	6739
	35	9	54	163	554	9	54	163	652	1119	674	1315	1977	1434	2390	4020	2499	4672	7279
	9-0	10	64	191	648	10	64	191	763	1309	788	1538	2314	1678	2797	4704	2924	5466	8517
75	55	9	56	168	571	9	56	168	671	1153	694	1354	2036	1477	2462	4140	2574	4811	7497
	50	10	61	182	620	10	61	182	730	1253	754	1472	2214	1606	2677	4501	2798	5231	8151
	45	10	65	194	660	10	65	194	777	1334	803	1567	2356	1709	2848	4791	2978	5568	8675
	14-0	12	76	227	772	12	76	227	909	1560	939	1833	2757	1999	3332	5604	3484	6513	10148
100	75	11	70	210	715	11	70	210	841	1444	869	1697	2552	1851	3085	5188	3225	6029	9394
	60	13	83	249	847	13	83	249	996	1710	1029	2009	3021	2191	3652	6142	3818	7138	11122
	22-0	15	96	288	978	15	96	288	1151	1975	1189	2321	3491	2532	4219	7096	4411	8247	12850
125	100	13	78	234	797	13	78	234	938	1609	969	1891	2844	2063	3438	5782	3594	6719	10469
	75	16	101	303	1030	16	101	303	1212	2081	1252	2444	3676	2666	4444	7474	4646	8686	13534
	30-0	19	116	348	1182	19	116	348	1391	2388	1437	2805	4220	3060	5101	8578	5332	9969	15534
150	125	14	86	257	875	14	86	257	1029	1766	1063	2075	3121	2264	3773	6346	3945	7375	11491
	100	18	112	336	1142	18	112	336	1343	2306	1388	2709	4074	2955	4925	8283	5149	9626	14998
	38-0	22	136	407	1385	22	136	407	1629	2796	1683	3285	4941	3584	5973	10045	6244	11674	18190
175	150	15	92	275	936	15	92	275	1101	1890	1138	2221	3340	2422	4037	6790	4221	7891	12296
	125	20	122	367	1249	20	122	367	1469	2522	1518	2963	4457	3232	5387	9060	5632	10529	16406
	100	22	139	418	1421	22	139	418	1672	2870	1728	3372	5072	3678	6131	10311	6409	11983	18671
	46-0	25	155	466	1585	25	155	466	1865	3202	1927	3761	5657	4103	6838	11501	7149	13366	20826
200	150	21	131	392	1333	21	131	392	1569	2693	1621	3164	4759	3451	5752	9674	6014	11243	17518
	125	24	152	455	1549	24	152	455	1822	3127	1883	3674	5526	4008	6680	11235	6984	13056	20344
	54-0	28	175	525	1784	28	175	525	2098	3602	2168	4232	6365	4616	7694	12939	8043	15038	23431
225	175	22	139	417	1418	22	139	417	1669	2865	1724	3365	5062	3671	6119	10291	6397	11960	18635
	150	26	162	485	1649	26	162	485	1940	3331	2005	3913	5885	4268	7114	11964	7437	13904	21665
	63-0	31	194	583	1981	31	194	583	2330	4001	2408	4700	7069	5127	8545	14371	8933	16701	26023
250	200	23	147	441	1498	23	147	441	1762	3025	1821	3554	5345	3877	6461	10866	6755	12628	19676
	175	27	172	515	1751	27	172	515	2060	3536	2129	4154	6249	4532	7554	12704	7897	14764	23004
	150	30	189	566	1926	30	189	566	2266	3889	2341	4569	6872	4984	8307	13971	8685	16237	25300
	71-0	34	214	641	2179	34	214	641	2564	4401	2649	5170	7776	5640	9400	15808	9827	18372	28626

Table 7. Water Capacity, m³/hr (Metric)

PRESSURE, bar		VALVE SIZE (NPS / DN) AND PORT (in. / mm)																	
		1/2 / 15				3/4 / 20					1 / 25				1-1/2 / 40			2 / 50	
P1	P2	1/8 / 3.2	3/16 / 4.8	1/4 / 6.4	5/8 / 15.9	1/8 / 3.2	3/16 / 4.8	1/4 / 6.4	5/8 / 15.9	7/8 / 22.2	5/8 / 15.9	7/8 / 22.2	1-1/4 / 31.8	7/8 / 22.2	1-1/4 / 31.8	1-3/4 / 44.5	1-1/4 / 31.8	1-3/4 / 44.5	2-1/4 / 57.2
0.7	0.5 0.3	0.03 0.04	0.2 0.3	0.6 0.8	2.0 2.8	0.03 0.04	0.2 0.3	0.6 0.8	2.3 3.3	4.0 5.6	2.4 3.4	4.7 6.6	7.0 10.0	5.1 7.2	8.5 12.0	14.3 20.2	8.9 12.6	16.6 23.5	25.9 36.6
1	0.7 0.5 0.4	0.04 0.05 0.05	0.2 0.3 0.3	0.7 0.9 1.0	2.4 3.1 3.4	0.04 0.05 0.05	0.2 0.3 0.3	0.7 0.9 1.0	2.8 3.7 4.0	4.9 6.3 6.9	2.9 3.8 4.2	5.7 7.4 8.1	8.6 11.1 12.2	6.3 8.1 8.8	10.4 13.5 14.7	17.5 22.6 24.8	10.9 14.1 15.4	20.4 26.3 28.8	31.7 41.0 44.9
1.5	1 0.7 0.6	0.05 0.06 0.07	0.3 0.4 0.4	0.9 1.2 1.2	3.1 3.9 4.2	0.05 0.06 0.07	0.3 0.4 0.4	0.9 1.2 1.2	3.7 4.6 4.9	6.3 8.0 8.5	3.8 4.8 5.1	7.4 9.4 9.9	11.1 14.1 14.9	8.1 10.2 10.8	13.5 17.0 18.0	22.6 28.6 30.4	14.1 17.8 18.9	26.3 33.3 35.3	41.0 51.8 55.0
2	1.5 1 0.8	0.05 0.07 0.08	0.3 0.4 0.5	0.9 1.3 1.4	3.1 4.4 4.8	0.05 0.07 0.08	0.3 0.4 0.5	0.9 1.3 1.4	3.7 5.2 5.7	6.3 8.9 9.8	3.8 5.4 5.9	7.4 10.5 11.5	11.1 15.7 17.2	8.1 11.4 12.5	13.5 19.0 20.8	22.6 32.0 35.1	14.1 19.9 21.8	26.3 37.2 40.7	41.0 57.9 63.5
3	2 1.5 1.0	0.07 0.08 0.10	0.4 0.5 0.6	1.3 1.6 1.8	4.4 5.4 6.2	0.07 0.08 0.10	0.4 0.5 0.6	1.3 1.6 1.8	5.2 6.4 7.3	8.9 10.9 12.6	5.4 6.6 7.6	7.4 10.5 14.8	15.7 19.3 22.3	11.4 14.0 16.1	19.0 23.3 26.9	32.0 39.2 45.2	19.9 24.4 28.1	37.2 45.5 52.6	57.9 71.0 81.9
3.5	3 2 1.5 1	0.05 0.08 0.10 0.11	0.3 0.5 0.6 0.7	0.9 1.6 2.1	3.1 5.4 7.0	0.05 0.08 0.10 0.11	0.3 0.5 0.6 0.7	0.9 1.6 2.1	3.7 6.4 8.2	6.3 10.9 14.1	3.8 6.6 8.5	7.4 12.8 16.5	11.1 19.3 24.9	8.1 14.0 18.0	13.5 23.3 30.1	22.6 39.2 50.6	14.1 24.4 31.4	26.3 45.5 58.8	41.0 71.0 91.6
4	3.5 3 2 1.7	0.05 0.07 0.10 0.10	0.3 0.4 0.6 0.7	0.9 1.3 1.8 2.0	3.1 4.4 6.2 6.7	0.05 0.07 0.10 0.10	0.3 0.4 0.6 0.7	0.9 1.3 1.8 2.0	3.7 5.2 7.3 7.9	6.3 8.9 12.6 13.5	3.8 5.4 7.6 8.1	7.4 10.5 14.8 15.9	11.1 15.7 22.3 23.9	8.1 11.4 16.1 17.3	13.5 19.0 26.9 28.9	22.6 32.0 45.2 48.5	14.1 19.9 28.1 30.2	26.3 37.2 52.6 56.4	41.0 57.9 81.9 87.9
5	4 3 2.5 2.2	0.07 0.10 0.11 0.12	0.4 0.6 0.7 0.7	1.3 1.8 2.1 2.2	4.4 6.2 7.0 7.4	0.07 0.10 0.11 0.12	0.4 0.6 0.7 0.7	1.3 1.8 2.1 2.2	5.2 7.3 8.2 8.7	8.9 12.6 14.1 14.9	5.4 7.6 8.5 9.0	10.5 14.8 16.5 17.5	15.7 22.3 24.9 26.3	11.4 16.1 18.0 19.1	19.0 26.9 30.1 31.8	32.0 45.2 50.6 53.5	19.9 28.1 31.4 33.3	37.2 52.6 58.8 62.2	57.9 81.9 91.6 97.0
6	5 4 3.5	0.07 0.10 0.11	0.4 0.6 0.7	1.3 1.8 2.1	4.4 6.2 7.0	0.07 0.10 0.11	0.4 0.6 0.7	1.3 1.8 2.1	5.2 7.3 8.2	8.9 12.6 14.1	5.4 7.6 8.5	10.5 14.8 16.5	15.7 22.3 24.9	11.4 16.1 18.0	19.0 26.9 30.1	32.0 45.2 50.6	19.9 28.1 31.4	37.2 52.6 58.8	57.9 81.9 91.6
8	10	0.10 0.12 0.14	0.6 0.7 0.9	1.8 2.2 2.6	6.2 7.6 8.8	0.10 0.12 0.14	0.6 0.7 0.9	1.8 2.2 2.6	7.3 9.0 10.4	12.6 15.4 17.8	7.6 9.3 10.7	14.8 18.1 20.9	22.3 27.3 31.5	16.1 19.8 22.8	26.9 33.0 38.0	45.2 55.4 64.0	28.1 34.5 39.8	52.6 64.4 74.4	81.9 100 116
10	CO CD 10	0.10 0.14 0.15	0.6 0.9 1.0	1.8 2.6 2.9	6.2 8.8 9.9	0.10 0.14 0.15	0.6 0.9 1.0	1.8 2.6 2.9	7.3 10.4 11.6	12.6 17.8 19.9	7.6 10.7 12.0	14.8 20.9 23.4	22.3 31.5 35.2	16.1 22.8 25.5	26.9 38.0 42.5	45.2 64.0 71.5	28.1 39.8 44.5	52.6 74.4 83.1	81.9 116 130
12	10 8 6 5	0.10 0.14 0.17 0.18	0.6 0.9 1.1 1.1	1.8 2.6 3.2 3.4	6.2 8.8 10.8 11.7	0.10 0.14 0.17 0.18	0.6 0.9 1.1 1.1	1.8 2.6 3.2 3.4	7.3 10.4 12.7 13.7	12.6 17.8 21.8 23.6	7.6 10.7 13.1 14.2	14.8 20.9 25.6 27.7	22.3 31.5 38.6 41.6	16.1 22.8 28.0 30.2	26.9 38.0 46.6 50.3	45.2 64.0 78.4 84.7	28.1 39.8 48.7 52.6	52.6 74.4 91.1 98.4	81.9 116 142 153
14	10 8 6	0.14 0.17 0.20	0.9 1.1 1.2	2.6 3.2 3.7	8.8 10.8 12.5	0.14 0.17 0.20	0.9 1.1 1.2	2.6 3.2 3.7	10.4 12.7 14.7	17.8 21.8 25.2	10.7 13.1 15.2	20.9 25.6 29.6	31.5 38.6 44.5	22.8 28.0 32.3	38.0 46.6 53.8	64.0 78.4 90.5	39.8 48.7 56.3	74.4 91.1 105	116 142 164
15	12 10 7	0.12 0.15 0.20	0.7 1.0 1.2	2.2 2.9 3.7	7.6 9.9 12.5	0.12 0.15 0.20	0.7 1.0 1.2	2.2 2.9 3.7	9.0 11.6 14.7	15.4 19.9 25.2	9.3 12.0 15.2	18.1 23.4 29.6	27.3 35.2 44.5	19.8 25.5 32.3	33.0 42.5 53.8	55.4 71.5 90.5	34.5 44.5 56.3	64.4 83.1 105	100 130 164
17	14 12 10 9	0.12 0.15 0.18 0.20	0.7 1.0 1.1 1.2	2.2 2.9 3.4 3.7	7.6 9.9 11.7 12.5	0.12 0.15 0.18 0.20	0.7 1.0 1.1 1.2	2.2 2.9 3.4 3.7	9.0 11.6 13.7 14.7	15.4 19.9 23.6 25.2	9.3 12.0 14.2 15.2	18.1 23.4 27.7 29.6	27.3 35.2 41.6 44.5	19.8 25.5 30.2 32.3	33.0 42.5 50.3 53.8	55.4 71.5 84.7 90.5	34.5 44.5 52.6 56.3	64.4 83.1 98.4 105	100 130 153 164
20	17 15 9	0.12 0.15 0.23	0.7 1.0 1.4	2.2 2.9 4.3	7.6 9.9 14.6	0.12 0.15 0.23	0.7 1.0 1.4	2.2 2.9 4.3	9.0 11.6 17.2	15.4 19.9 29.5	9.3 12.0 17.8	18.1 23.4 34.7	27.3 35.2 52.2	19.8 25.5 37.9	33.0 42.5 63.1	55.4 71.5 106	34.5 44.5 66.0	64.4 83.1 123	100 130 192
27	20 15 12	0.18 0.24 0.27	1.1 1.5 1.7	3.4 4.5 5.0	11.7 15.3 17.1	0.18 0.24 0.27	1.1 1.5 1.7	3.4 4.5 5.0	13.7 18.0 20.1	23.6 30.9 34.5	14.2 18.6 20.8	27.7 36.2 40.5	41.6 54.5 61.0	30.2 39.5 44.2	50.3 65.9 73.7	84.7 111 124	52.6 68.9 77.0	98.4 129 144	153 201 224

Type J

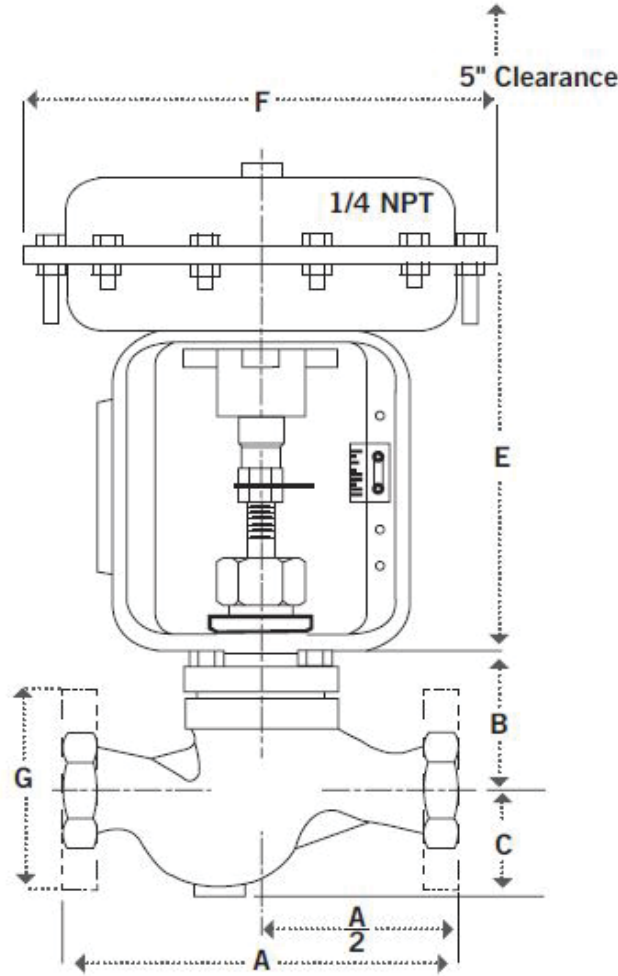


Figure 3. Type J Control Valve Dimension Drawing

Table 8. Type J Control Valve Dimension, in. (Imperial)

SIZE, NPS	A		B	C	E		F		G (FLANGED DIAMETER)	
	SCREWED	FLANGED			36 in. sq	60 in. sq	36 in. sq	60 in. sq	CL150	CL300/ CL600
1/2	7-5/8	8	2-11/16	1-7/8	9-7/8	11-7/8	9-1/4	11-1/4	3-1/2	3-3/4
3/4	7-5/8	8-1/8	2-11/16	1-7/8	9-7/8	11-7/8	9-1/4	11-1/4	3-7/8	4-5/8
1	7-3/4	8-1/4	2-3/4	2-1/8	9-7/8	11-7/8	9-1/4	11-1/4	4-1/4	4-7/8
1-1/2	9-1/4	9-7/8	3-3/8	2-11/16	9-7/8	11-7/8	9-1/4	11-1/4	5	6-1/8
2	10-1/2	11-1/4	3-9/32	3-5/16	9-7/8	11-7/8	9-1/4	11-1/4	6	6-1/2

Table 9. Type J Control Valve Dimension, mm (metric)

SIZE, DN	A		B	C	E		F		G (FLANGED DIAMETER)	
	SCREWED	FLANGED			0.02 sqm	0.04 sqm	0.02 sqm	0.04 sqm	CL150	CL300/ CL600
15	194	203	68.3	47.6	251	302	235	286	88.9	95.3
20	194	206	68.3	47.6	251	302	235	286	98.4	117
25	197	210	69.9	54.0	251	302	235	286	108	124
40	235	251	85.7	68.3	251	302	235	286	127	156
50	267	286	83.3	84.1	251	302	235	286	152	165

Table 10. Approximate Weight

VALVE SIZE		SCREWED				FLANGED			
		36 in. sq / 0.02 sqm		60 in. sq / 0.04 sqm		36 in. sq / 0.02 sqm		60 in. sq / 0.04 sqm	
NPS	DN	Lbs	kg	Lbs	kg	Lbs	kg	Lbs	kg
1/2	15	20.5	9.3	36.5	16.6	23.5	10.7	39.5	17.9
3/4	20	20.5	9.3	36.5	16.6	25.75	11.7	41.75	18.9
1	25	22.5	10.2	38.75	17.6	29.0	13.2	45.25	20.5
1-1/2	40	29.25	13.3	45.5	20.6	40.25	18.3	57.5	26.1
2	50	38.25	17.3	54.25	24.6	50.25	22.8	68.25	31.0

Ordering Information

When ordering, complete the ordering guide on this page. Refer to the Specifications section. Review the description to the right of each specification and the information in each referenced table or figure. Specify your choice whenever a selection is offered.

Ordering Guide

Available Configuration (Select One)

- J1 - Cast iron
- J3 - Stainless steel

Orifice (Select One)

- 1/8 in. / 3.18 mm
- 1/4 in. / 6.35 mm
- 3/6 in. / 12.7 mm
- 5/8 in. / 15.9 mm
- 7/8 in. / 22.2 mm
- 1-1/4 in. / 31.8 mm
- 1-3/4 in. / 44.5 mm
- 2-1/4 in. / 57.2 mm

Size (Select One)

- NPS 1/2 / DN 15
- NPS 3/4 / DN 20
- NPS 1 / DN 25
- NPS 1-1/2 / DN 40
- NPS 2 / DN 50

Connections (Select One)

- CL150
- CL300
- CL600
- NPT

Trim (Select One)

- Metal
- Soft

Packing (Select One)

- V-ring
- Graphite
- High Temperature

Actuator (Select One)

- None
- 36 in. sq / 0.02 sqm
- 60 in. sq / 0.04 sqm

Spring (Select One)

- 3 to 13 Dir 36
- 3 to 10 Dir 36
- 3 to 5 Dir 36
- 3 to 10 Dir 60*
- 3 to 11 Dir 60
- 3 to 8 Dir 60
- 5 to 15 Rev 36
- 8 to 15 Rev 36
- 10 to 15 Rev 36
- 8 to 15 Rev 60
- 10 to 15 Rev 60
- 20 to 60 Rev 60
- 20 to 60 Rev 60*
- 12 to 15 Rev 60

Positioner (Select One)

- None
- Eckardt I/P
- Eckardt P
- Moore I/P
- Moore P
- PMV P4 P
- PMV P5 I/P
- PMV P5
- Smart HART
- Smart Profibus

Positioner Set (Select One)

- None
- 3 to 15 / 4 to 20 mA
- 3 to 9 / 4 to 12 mA
- 9 to 15 / 12 to 20 mA

Accessories

- None
- Limit Switch, Mechanical
- Limit Switch
- Proximity Switch
- Feedback Potentiometer 1K
- Feedback 4 to 20 mA Positioner Trans

Type J

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