



Technical Data

SD 3001C

SPENCE ENGINEERING COMPANY, INC. 150 GOLDENHAM ROAD, WALDEN, NY 12586-2035

TYPE E Main Valve Sizes 3/8" through 12"

The Spence Type E Main Valve is of normally closed, single seat design featuring packless construction, balanced metal diaphragms and protected main spring.

When controlled by one or more of the various types of Spence Pilots, this valve will accomplish most functions required of a regulator.

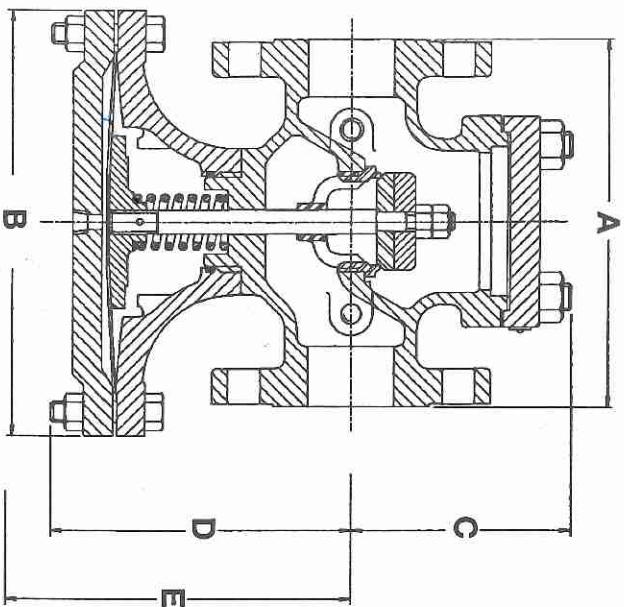
CAST IRON RATINGS (Maximum Inlet Conditions)

- Valve Ends Pressure (Temperature)
- ANSI NPT Screwed 250 PSIG (450°F)
- ANSI 125 Flanged 125 PSIG (450°F)
- ANSI 250 Flanged 250 PSIG (450°F)

CAST STEEL RATINGS (Maximum Inlet Conditions)

- Valve Ends Pressure (Temperature)
- ANSI NPT Screwed 300 PSIG (600°F)[†]
- ANSI 150 Flanged 150 PSIG (600°F)
- ANSI 300 Flanged 300 PSIG (600°F)[†]
- ANSI 600 Flanged 600 PSIG (600°F)[†]

[†]750°F construction available on request.



TYPE E MAIN VALVE

DIMENSIONS (inches) AND WEIGHTS (pounds)

SIZE	FACE TO FACE DIMENSIONS					OTHER DIMENSIONS					APPROX. WT.											
	ANSI NPT	ANSI 125,150	ANSI 250	ANSI 300	ANSI 600	B	C	D	E	ANSI NPT	ANSI 125	ANSI 150	ANSI 250	ANSI 300	ANSI 600							
3/8	43/8	—	—	—	—	57/8	23/4	5 1/4	7 3/8	14	—	—	—	—	—							
1/2	43/8	—	—	—	6	57/8	2 3/4	5 1/4	7 3/8	14	—	—	—	—	20							
3/4	43/8	—	—	—	6 3/8	6 1/2	37/8	5 1/2	77/8	18	—	—	—	—	28							
1	53/8	5 1/2	6	6 1/2	6 1/2	7	3 5/8	6 1/4	87/8	23	24	26	27	31	32							
1 1/4	63/4	6 3/4	7 1/4	77/8	77/8	7 7/8	4 1/8	6 1/2	9 1/8	33	36	37	40	41	45							
1 1/2	71/4	67/8	7 3/8	8	8	8 3/4	4 3/8	5 1/8	9 1/4	43	45	47	51	55	58							
2	71/2	8 1/2	9	10 1/4	10 1/4	9 7/8	5 1/4	5 3/4	7 5/8	62	67	73	72	78	83							
2 1/2	—	9 3/8	10	11 1/4	11 1/4	107/8	5 3/4	77/8	8 3/8	82	82	95	100	100	130							
3	—	10	10 3/4	12 1/4	12 1/4	11 3/4	6 5/8	9 1/4	9 1/4	110	110	125	130	140	175							
4	—	117/8	12 1/2	12 1/2	14 1/2	14 3/4	7 5/8	10 5/8	117/8	181/4	200	210	235	230	310							
5	—	13 3/8	14 1/2	14 1/2	16 1/2	167/8	8 1/2	12 1/2	12 1/2	280	295	295	315	310	490							
6	—	15 1/8	16	16	17 3/8	19 3/4	10	13 3/4	14 1/8	385	420	420	455	470	655							
8	—	19	20	20	21 5/8	22 1/2	11 1/2	15 3/8	17 1/4	657	700	700	735	710	1070							
10	—	23 3/8	25	25	—	28	13 3/4	—	23 3/8	1260	1240	1430	1300	—	—							
12	—	26 1/2	28	28	—	33	15 7/8	—	25 1/4	2070	2060	2145	2140	—	—							

RATED FLOW COEFFICIENTS (CV)

SEAT FACTOR	REGULATOR SIZE														
	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12
Full	1.5	2.8	5.4	8.8	14.1	19.8	31	44	74	109	169	248	444	706	1113
Full 75 %	—	—	2.1	4.0	6.6	10.6	23.3	33	56	82	127	186	333	530	835
Full 50 %	—	—	1.4	2.7	4.4	7.0	15.5	22	37	55	85	124	222	353	557
Normal	.65	1.5	4.8	7.5	10.4	14.6	17.6	24	43	78	115	151	249	377	631
Normal 75 %	—	—	—	—	—	—	—	18	33	59	87	114	187	283	474
Normal 50 %	—	—	—	—	—	—	—	12	22	39	58	76	125	189	316