



UL SERIES

UL SERIES BACK PRESSURE REGULATOR

SIZES 1/2" – 4"

PRESSURES to 300 PSIG at 500°F

- Steam, Air or Gas Service
- 99% Accuracy of Regulation
- 10:1 Rangeability
- Packless Construction
- One Valve Adjusts to All Ranges
- Pressure Differential 10 psi minimum

APPLICATION DATA

- HVAC Systems
- Process Control Systems for Food, Moulding, Textile, Pulp, etc.
- Packaged OEM Systems for Heat Exchangers, Metal Cleaning, Vaporizers, etc.

VALVE RATINGS

Valve Ends ASME/ANSI	Pressure PSIG (bar)	Temperature °F (°C)
-------------------------	------------------------	------------------------

CAST IRON

B16.1 Class 250 NPT	250 (17.2)	@ 450 (232)
B16.1 Class 125 Flanged	125 (8.6)	@ 450 (232)
B16.1 Class 250 Flanged	250 (17.2)	@ 450 (232)

BRONZE

B16.1 Class 300 NPT	300 (21.0)	@ 500 (260)
B16.1 Class 150 Flanged	150 (10.3)	@ 500 (260)
B16.1 Class 300 Flanged	300 (21.0)	@ 500 (260)

MODELS¹

- UL_KY–Cast Iron
- U_Y– Bronze

OPTIONS¹

- L–Trim for 25-50 psi range
- M–Trim for 25-150 psi range
- H–Trim for 140-300 psi range²

For Sizing Capacity Tables see Pages 38 & 43

RATED FLOW COEFFICIENTS (Cv)

	REGULATOR SIZE									
	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4
STEAM	1.8	3.4	5.6	10	13.7	23	33	51	69	89

ACCUMULATION AND BLOWDOWN DATA

PRESSURE RANGE PSI	SET PRESSURE PSI	ACCUMULATION ³ PSI	BLOWDOWN ⁴ PSI
25-150	25	6.5	3
	50	6	4
	100	5.5	4.5
	150	5	5
150-400	150	7	5
	200	7.5	5.5
	250	8	6
	300	8.5	6.5
25-50	25	4	3
	50	2.5	4

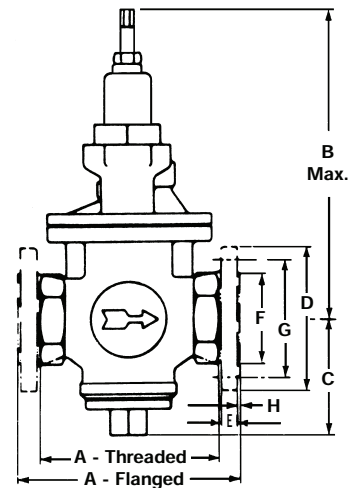
1. Insert letter code for options in model number as required.
2. Cast Iron Models maximum 250 psi
3. ACCUMULATION is the rise in pressure above set pressure to get full flow.
4. BLOWDOWN is pressure below set pressure to get tight shutoff.

UL SERIES BACK PRESSURE REGULATOR SPECIFICATIONS

CAST IRON AND BRONZE REGULATORS shall be of the self-contained, internal pilot, piston operated type. Internal pilot valve and pilot valve seat shall be interchangeable in all sizes and contained wholly within the valve and entirely self draining. The main valve shall be made of stainless steel hardened to at least 500 Brinell. No stuffing boxes or bellows will be permitted. All valve seats shall be renewable. Main valve seat ring to be stainless with STELLITE® seating surface. Pistons in steam pressure regulating service shall be of bronze with a TEFLON® seal. All regulators for over 500°F (260°C) service shall have cylinder liners of stainless steel hardened to 500 Brinell, and bronze pistons with cast iron rings. In air service, piston and liner shall be of bronze with a rubber "O" ring seal. Internal pilot valve to be stainless steel hardened to at least 500 Brinell, with ground finish.

MATERIALS OF CONSTRUCTION

Body, Cast Iron	ASTM A126 Cl. B
Body, Cast Bronze	ASTM B61 UNS C92200
Seat Ring	SS w/Stellite®
Main Valve Trim	Hardened SS



STANDARD REGULATOR - L SERIES AND UL SERIES

See Dimensions Chart on page 14

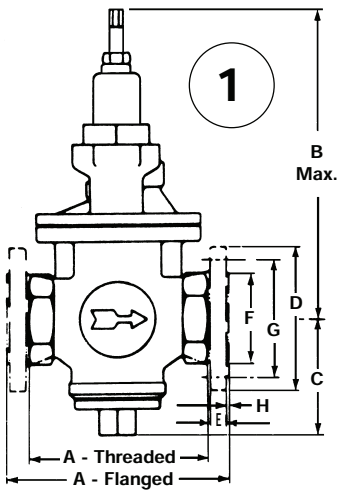
L & UL SERIES

DIMENSIONS inches

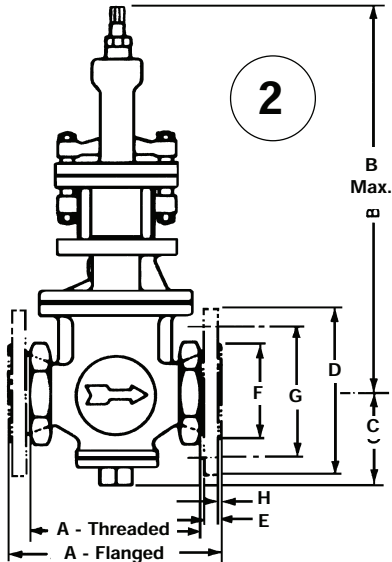
Size	A	1 B	2 B	3 B	C	D	E	F	Bolt Circle G	H	No. of Holes	Bolt Size	Bolt Hole
THREADED, BRONZE & IRON													
1/2	5 3/4	10	13 7/8	11 1/8	2 7/8	—	—	—	—	—	—	—	—
3/4	5 3/4	10	13 7/8	11 1/8	2 7/8	—	—	—	—	—	—	—	—
1	5 3/4	10	13 7/8	11 1/8	2 7/8	—	—	—	—	—	—	—	—
1 1/4	5 3/4	10 1/4	14 1/4	11 3/8	3 1/8	—	—	—	—	—	—	—	—
1 1/2	6 1/4	10 5/8	14 1/2	11 3/4	3 5/8	—	—	—	—	—	—	—	—
2	7 1/2	11 1/8	15	12 1/4	3 1/2	—	—	—	—	—	—	—	—
ANSI CLASS 125 CAST IRON FLANGED													
1 1/2	7 1/2	10 5/8	14 1/2	11 3/4	4 1/8	5	9/16	—	3 7/8	—	4	1/2	5/8
2	8 3/4	11 1/8	15	12 1/4	4 3/8	6	5/8	—	4 3/4	—	4	5/8	3/4
2 1/2	9 3/4	12	15 3/16	13 1/8	5 1/2	7	11/16	—	5 1/2	—	4	5/8	3/4
3	11	12 1/2	16 3/8	13 5/8	6 1/2	7 1/2	3/4	—	6	—	4	5/8	3/4
4	13 1/2	14	15 1/8	18 1/8	7	9	15/16	—	7 1/2	—	8	5/8	3/4
ANSI CLASS 250 CAST IRON FLANGED													
1 1/2	8	10 5/8	14 1/2	11 3/4	4 1/8	6 1/8	3/4	39/16	4 1/2	1/16	4	3/4	7/8
2	9 1/2	11 1/8	15	12 1/4	4 3/8	6 1/2	13/16	4 3/16	5	1/16	8	5/8	3/4
2 1/2	10 3/8	12	15 3/16	13 1/8	5 1/2	7 1/2	15/16	4 15/16	5 7/8	1/16	8	3/4	7/8
3	11 3/4	12 1/2	16 3/8	13 5/8	6 1/2	8 1/4	1 1/16	5 11/16	6 5/8	1/16	8	3/4	7/8
4	14 1/8	14	15 1/8	18 1/8	7 1/2	10	1 3/16	6 15/16	7 7/8	1/16	8	3/4	7/8
ANSI CLASS 150 BRONZE													
1/2	6 3/4	10	13 7/8	11 1/8	2 7/8	3 1/2	9/16	—	2 3/8	—	4	1/2	5/8
3/4	6 3/4	10	13 7/8	11 1/8	2 7/8	3 7/8	9/16	—	2 3/4	—	4	1/2	5/8
1	6 3/4	10	13 7/8	11 1/8	2 7/8	4 1/4	9/16	—	3 1/8	—	4	1/2	5/8
1 1/4	7	10 1/4	14 1/4	11 3/8	3 1/8	4 5/8	9/16	—	3 1/2	—	4	1/2	5/8
1 1/2	7 1/2	10 5/8	14 1/2	11 3/4	3 7/16	5	9/16	—	3 7/8	—	4	1/2	5/8
2	8 3/4	11 1/8	14 3/4	12 1/4	3 1/2	6	5/8	—	4 3/4	—	4	5/8	3/4
2 1/2	9 3/4	12	15 7/8	13 1/8	4 3/8	7	11/16	—	5 1/2	—	4	5/8	3/4
3	11	12 1/2	16 1/8	13 5/8	5 1/4	7 1/2	3/4	—	6	—	4	5/8	3/4
4	13	14	15 1/8	18 1/8	7	9	11/16	—	7 1/2	—	8	3/4	5/8
ANSI CLASS 300 BRONZE FLANGED													
1/2	6 3/4	10	13 7/8	11 1/8	2 7/8	3 3/4	9/16	—	2 5/8	—	4	1/2	5/8
3/4	6 3/4	10	13 7/8	11 1/8	2 7/8	4 5/8	9/16	—	3 1/4	—	4	5/8	3/4
1	6 3/4	10	13 7/8	11 1/8	2 7/8	4 7/8	9/16	—	3 1/2	—	4	5/8	3/4
1 1/4	7	10 1/4	14 1/4	11 3/8	3 1/8	5 1/4	9/16	—	3 7/8	—	4	5/8	3/4
1 1/2	7 1/2	10 5/8	14 1/2	11 3/4	3 7/16	6 1/8	9/16	—	4 1/2	—	4	3/4	7/8
2	8 3/4	11 1/8	14 3/4	12 1/4	3 1/2	6 1/2	5/8	—	5	—	8	5/8	3/4
2 1/2	9 3/4	12	15 3/16	13 1/8	4 3/8	7 1/2	11/16	—	5 7/8	—	8	3/4	7/8
3	11	12 1/2	16 1/8	13 5/8	5 1/4	8 1/4	3/4	—	6 5/8	—	8	3/4	7/8
4	13	14	15 1/8	18 1/8	7	10	11/16	—	7 7/8	—	8	3/4	7/8
ANSI CLASS 150 CAST STEEL FLANGED													
1/2	7 5/8	11 11/16	15 11/16	12 13/16	3 7/16	3 1/2	5/16	1 3/8	2 3/8	1/16	4	1/2	5/8
3/4	7 5/8	11 11/16	15 11/16	12 13/16	3 7/16	3 7/8	3/8	1 11/16	2 3/4	1/16	4	1/2	5/8
1	7 1/2	11 11/16	15 11/16	12 13/16	3 7/16	4 1/4	3/8	2	3 1/8	1/16	4	1/2	5/8
1 1/4	7 7/8	11 15/16	15 13/16	13 1/16	3 13/16	4 5/8	7/16	2 1/2	3 1/2	1/16	4	1/2	5/8
1 1/2	8 3/4	12 5/16	16 3/16	13 7/16	4 1/8	5	1/2	2 7/8	3 7/8	1/16	4	1/2	5/8
2	10 1/4	11 7/8	15 3/4	13	4 1/2	6	9/16	3 3/8	4 3/4	1/16	4	5/8	3/4
2 1/2	11 5/8	12 7/8	16 1/16	14	6	7	5/8	4 1/8	5 1/2	1/16	4	5/8	3/4
3	12 1/2	13 13/16	17 1/16	14 15/16	6 13/16	7 1/2	11/16	5	6	1/16	4	5/8	3/4
4	14 3/8	14 3/4	18 1/2	15 7/8	7 9/16	9	7/8	6 3/16	7 1/2	1/16	4	5/8	3/4
ANSI CLASS 300 CAST STEEL FLANGED													
1/2	8	11 11/16	15 11/16	12 13/16	3 7/16	3 3/4	1/2	1 3/8	2 5/8	1/16	4	1/2	5/8
3/4	8	11 11/16	15 11/16	12 13/16	3 7/16	4 5/8	9/16	1 11/16	3 1/4	1/16	4	5/8	3/4
1	8	11 11/16	15 11/16	12 13/16	3 7/16	4 7/8	5/8	2	3 1/2	1/16	4	5/8	3/4
1 1/4	8 3/8	11 15/16	15 13/16	13 1/16	3 13/16	5 1/4	11/16	2 1/2	3 7/8	1/16	4	5/8	3/4
1 1/2	8 7/8	12 5/16	16 3/16	13 7/16	4 1/8	6 1/8	3/4	2 7/8	4 1/2	1/16	4	3/4	7/8
2	10 3/4	11 7/8	15 3/4	13	4 1/2	6 1/2	13/16	3 5/8	5	1/16	8	5/8	3/4
2 1/2	12 1/4	12 7/8	16 1/16	14	6	7 1/2	15/16	4 1/8	5 7/8	1/16	8	3/4	7/8
3	13 1/4	13 13/16	17 1/16	14 15/16	6 13/16	8 1/4	1 1/16	5	6 5/8	1/16	8	3/4	7/8
4	15	14 3/4	18 1/2	15 7/8	7 9/16	10	1 3/16	6 3/16	7 7/8	1/16	8	3/4	7/8
ANSI CLASS 400 & 600 CAST STEEL FLANGED													
1/2	8 1/2	11 11/16	15 11/16	12 13/16	3 7/16	3 3/4	9/16	1 3/8	2 5/8	1/4	4	1/2	5/8
3/4	8 1/2	11 11/16	15 11/16	12 13/16	3 7/16	4 5/8	5/8	1 11/16	3 1/4	1/4	4	5/8	3/4
1	8 1/2	11 11/16	15 11/16	12 13/16	3 7/16	4 7/8	11/16	2	3 1/2	1/4	4	5/8	3/4
1 1/4	9	11 15/16	15 13/16	13 1/16	3 13/16	5 1/4	13/16	2 1/2	3 7/8	1/4	4	5/8	3/4
1 1/2	9 1/2	12 5/16	16 3/16	13 7/16	4 1/8	6 1/8	7/8	2 7/8	4 1/2	1/4	4	3/4	7/8
2	11 1/2	11 7/8	15 3/4	13	4 1/2	6 1/2	1	3 5/8	5	1/4	8	5/8	3/4
2 1/2	13	12 7/8	16 1/16	14	6	7 1/2	1 1/8	4 1/8	5 7/8	1/4	8	3/4	7/8
3	14	13 13/16	17 1/16	14 15/16	6 13/16	8 1/4	1 1/4	5	6 5/8	1/4	8	3/4	7/8
4	16	14 3/4	18 1/2	15 7/8	7 9/16	10 3/4	1 1/2	6 3/16	8 1/2	1/4	8	7/8	1

L & UL SERIES

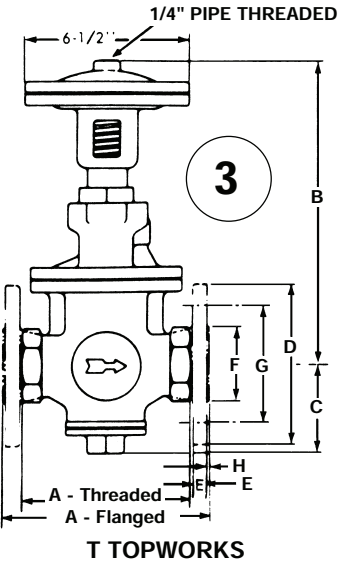
DIMENSIONS DIAGRAMS



STANDARD REGULATOR - L SERIES AND UL SERIES



DIFFERENTIAL REGULATOR - LX SERIES



T TOPWORKS