

CASH VALVE E-55 SERIES PRESSURE REGULATORS

Pressure regulators for water and air services designed for high capacity, variable flow rates and accurate regulation



FEATURES

- Handles high and variable flow rates well beyond the limitations of ordinary regulators.
- Aspirated design for close pressure control.
- Balanced piston design provides sensitive operation, close regulation over wide fluctuations in inlet pressure and assures quiet performance.
- Simple design for easy maintenance and repair.
- Inbuilt strainer screen protects working parts and is easily cleaned.
- Optional construction for cryogenic service.

GENERAL APPLICATION

Suitable for service on air, water, oil, gases (except steam) and fluids not corrosive to brass. It is particularly suitable for all types of water systems and various hydraulic and pneumatic systems that require exceptional accuracy.

TECHNICAL DATA

Materials:	Bronze
Sizes:	½" through 2" (15 mm to 50 mm)
Connections:	Threaded NPTF
Max. inlet pressure:	400 psig (27.6 barg)
Reduced pressure range:	25 to 300 psig (1.7 to 20.7 barg)
Max. temperature:	180°F (82°C)

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MATERIALS OF CONSTRUCTION

Part description	Materials
Body	Bronze
Spring chamber	Bronze
Adjusting spring	Steel plated
Pressure plate	Brass
Diaphragm	NBR nylon reinforced
Body seat	Stainless steel
Seat disc	NBR
Piston	Brass
O-ring	NBR
Strainer screen	Monel®
Bottom plug	Bronze

SPECIFICATIONS

Size NPS	Spring range adjustment (psi)				
1/2, 3/4, 1	15 - 50	25 - 80	50 - 110	75 - 195	100 - 250
1 1/4, 1 1/2, 2	15 - 25	20 - 50	40 - 100	75 - 150	*150 - 300

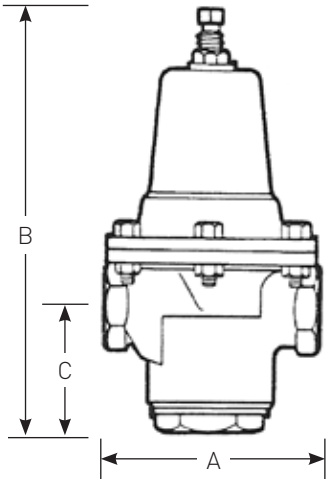
NOTES

* 150 - 300 range for 1 1/4", 1 1/2" and 2" sizes available.
Adjustable range varies with use of closing cap; consult factory.

DIMENSIONS

Size NPS	Dimensions inch			Shipping weight (lbs)
	A	B	C	
1/2	4	7 1/4	2 1/4	6
3/4	4	7 1/4	2 1/4	6
1	4	7 1/4	2 1/4	6
1 1/4	5 5/8	11 1/4	3 1/4	17
1 1/2	5 5/8	11 1/4	3 1/4	17
2	5 5/8	11 1/4	2 7/8	17

The amount of air or fluid any regulator will pass is governed by two factors: (1) pressure differential (difference between the inlet and outlet set pressure), and (2) fall-off (or droop). Outlet pressure fall-off drops slightly with increased flow (initially slight, increasing with higher flow). The rates of flow stated on the following charts are based on assumed conditions, which may be considered average for a given installation.



Type	Size NPS	Valve connections	Maximum inlet pressure	Adjustment range	Maximum operating temp. (°F)
E-55	1/2, 3/4, 1, 1 1/4, 1 1/2, 2	Threaded	400	25-300	180

CASH VALVE E-55 SERIES PRESSURE REGULATORS

TYPE E-55 PRESSURE REGULATOR - WATER CAPACITY IN GPM BY SIZE

Inlet (psig)	Outlet (psig)	½"	¾"	1"	1¼"	1½"	2"
25	15	4	5	6	18	20	25
50	40	4	5	6	18	20	25
	25	9	10	11	38	40	50
75	50	12	14	15	56	62	74
	25	13	17	19	60	70	80
100	75	12	14	15	56	62	74
	50	16	20	22	73	82	94
	25	16	22	24	80	90	100
125	75	16	20	22	73	82	94
	50	17	25	28	85	95	109
	25	18	28	38	95	107	120
150	100	16	20	32	73	82	94
	75	17	25	28	85	95	109
	50	18	28	32	95	107	120
	25	18	30	35	102	115	130
200	150	16	20	22	73	82	94
	100	18	28	32	95	107	120
	75	18	30	35	102	115	130
	50	18	33	38	109	124	140
250	150	18	28	32	95	107	120
	100	18	33	38	109	124	140
	50	18	35	43	120	140	140
300/400	200	18	28	32	95	107	120
	100	18	35	43	120	140	140
	50	18	35	43	120	140	140

NOTE

Capacities are based on a 20% fall-off.

TYPE E-55 PRESSURE REGULATOR - AIR CAPACITY IN SCFM BY SIZE

Inlet (psig)	Outlet (psig)	½"	¾"	1"	1¼"	1½"	2"
25	15	22	27	32	97	107	134
50	40	22	27	32	97	107	13
	25	61	68	74	257	271	338
75	50	81	95	101	379	420	500
	25	88	115	129	406	474	542
100	75	81	95	101	379	420	500
	50	108	135	149	494	555	636
	25	133	183	200	667	751	834
125	75	108	135	149	494	555	636
	50	142	208	233	709	792	909
	25	150	234	267	792	892	1000
150	100	108	135	149	494	555	636
	75	142	208	233	709	792	909
	50	150	234	267	792	892	1000
	25	150	234	267	792	892	1000
200	150	108	135	149	494	555	636
	100	150	234	267	792	892	1000
	75	168	290	335	959	1087	1223
	50	186	341	393	1126	1281	1446
250	150	150	234	267	792	892	1000
	100	186	341	393	1126	1281	1446
	50	206	400	492	1373	1602	1830
300/400	200	150	234	267	792	892	1000
	100	206	400	492	1373	1602	1830
	50	206	400	492	1373	1602	1830

NOTE

Capacities are based on a 20% fall-off.

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SELECTION GUIDE

Example:	E55	C	W	S	B	B	01	-	D	0025
Model										
E55	E55 valve w/bronze body and spring chamber									
Valve size										
C	1/2"									
D	3/4"									
E	1"									
F	1 1/4"									
G	1 1/2"									
H	2"									
Service										
W	Water/air									
Body style/connection style										
S	Side inlet/side outlet - straight thru w/NPT connections									
B	Side inlet/side outlet - straight thru w/BSPT connections									
Diaphragm material										
B	NBR (water/air)									
Seat material										
B	NBR (water/air)									
Variation										
01	Standard									
02	Without strainer screen									
Design revision										
(-)	Indicates original design									
Spring material										
D	Steel									
E	SST									
Set pressure										
0005	5 psig									
0025	25 psig									
0150	150 psig									



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