

REGULATORS

455 Series

Pressure Regulating Valve

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Model	455 Series
Service	Steam, Water, Air, Other Gases
Sizes	1/2", 3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2", 3", 4"
Connections	NPT, 125# FLG, 250# FLG
Body Material	1/2"– 1-1/2" Bronze 2"– 4" Cast Iron
Seat & Disc	Stainless Steel
Diaphragm	Neoprene/Nylon
Max. Inlet Pressure	250 PSIG
Min. Inlet Pressure	5 PSIG
Max. Diff. Pressure	125 PSI
Min. Diff. Pressure	20% of inlet pressure



PRESSURE TEMPERATURE RATING

NPT	250 PSIG @ 400° F
125# FLG	12.5 PSIG @ 450° F
250# FLG	250 PSIG @ 450° F

PRESSURE-ADJUSTING SPRING RANGES

Size	Outlet Pressure (psig)	Spring No.	Spring Case Dia. (in.)
1/2" through 1-1/2"	1-6	4	6"
	5-20	3	6"
	15-45	2	6"
	40-70	1	6"
	60-125	1	5"
2" through 4"	1-6	4	13"
	5-20	4	9"
	15-45	3	9"
	40-70	3	7"
	60-125	2	7"

FEATURES

- Operates with inlet pressures down to 5 psig
- Stainless steel internals
- Excellent for use in steam systems that contain large amounts of scale and other contamination that would typically cause failure in pilot-operated regulators

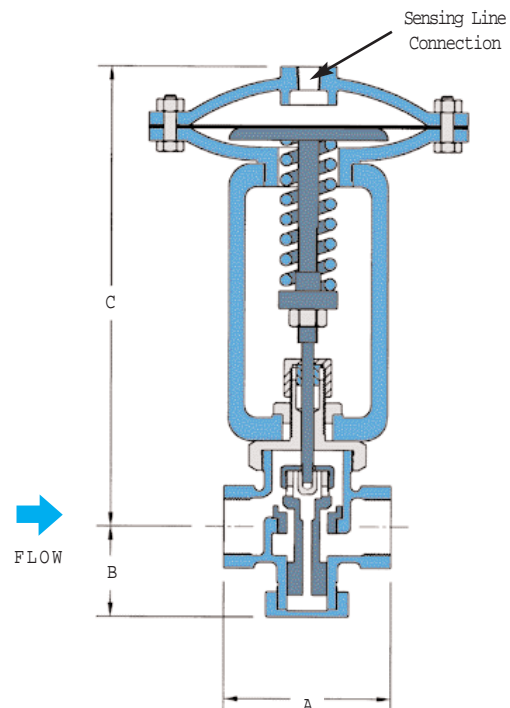
TYPICAL APPLICATIONS

The **455 Series** Externally-Sensed Self-Contained Pressure Regulating Valves are used for reducing pressure in steam, air, and water systems. Commonly used in heating and other process applications. Externally-sensed regulators are often more accurate than internally-sensed regulators when the sensing line is connected close to the process it is intending to control.

HOW TO ORDER

- Specify:
- Regulator **455 Series**
 - Size based on capacity chart
 - Spring range or outlet pressure required
 - Water service - must specify

Example: **1-1/2" 455 Series – 40-70 lbs. Spring Range**



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455 Series Pressure Regulating Valve

DIMENSIONS & WEIGHTS – inches/pounds

Size	Face-to-Face A			B	C	Sensing Line Connection NPT	Weight (lbs)
	Screwed	125# Flanged	250# Flanged				
1/2"	4-1/4			2-3/8	10-1/4	1/4"	15
3/4"	4-1/4			2-3/8	10-1/4	1/4"	15
1"	4-1/8			2-3/8	10-1/4	1/4"	15
1-1/4"	5			3-1/8	10-3/4	1/4"	18
1-1/2"	5-1/4			3-3/8	11	1/4"	20
2"	9-1/2	10-3/8	10-7/8	5-3/4	18-1/2	3/8"	75
2-1/2"		10-5/8	11-1/4	6-1/4	18-3/4	3/8"	95
3"		10-7/8	11-5/8	7-1/8	19-1/4	3/8"	135
4"		12-1/2	13-1/8	8-1/4	20	3/8"	158

CAPACITIES – Steam (lbs/hr) Air (scfm)

Inlet Press.	Outlet Press.	1/2"		3/4"		1"		1-1/4"		1-1/2"		2"		2-1/2"		3"		4"	
		Steam	Air	Steam	Air	Steam	Air	Steam	Air	Steam	Air	Steam	Air	Steam	Air	Steam	Air	Steam	Air
5	2	53	15	95	97	191	54	276	78	403	114	572	162	890	252	1166	330	1484	420
	5	73	25	131	45	263	90	380	130	555	190	788	270	1226	420	1606	550	2044	700
20	0-5	157	48	283	86	565	173	816	250	1193	365	1696	518	2638	806	3454	1056	4396	1344
	10	125	42	225	76	450	151	650	218	950	319	1350	454	2100	706	2750	924	3500	1176
30	0-10	200	63	360	113	720	227	1040	328	1520	479	2160	680	3360	1058	4400	1386	5600	1764
	20	145	48	261	86	522	173	754	250	1102	365	1566	518	2436	806	3190	1056	4060	1344
	25	107	35	193	63	385	126	556	182	813	266	1156	378	1798	588	2354	770	2996	980
50	0-20	295	97	531	175	1062	349	1534	504	2242	737	3186	1048	4956	1630	6490	2134	8260	2716
	30	245	82	441	148	882	295	1274	426	1862	623	2646	886	4116	1378	5390	1804	6860	2296
	40	185	62	333	112	666	223	962	322	1406	471	1998	670	3108	1042	4070	1364	5180	1736
75	0-30	402	133	724	239	1447	479	2090	692	3055	1011	4342	1436	6754	2234	8844	2926	11256	3724
	50	327	108	589	194	1177	389	1700	562	2485	821	3532	1166	5494	1814	7194	2376	9156	3024
	60	255	85	459	153	918	306	1326	442	1938	646	2754	918	4284	1428	5610	1870	7140	2380
100	0-50	522	175	940	315	1879	630	2714	910	3967	1330	5638	1890	8770	2940	11484	3850	14616	4900
	60	455	152	819	274	1638	547	2366	790	3458	1155	4914	1642	7644	2554	10010	3344	12740	4256
	80	325	107	585	193	1170	385	1690	556	2470	813	3510	1156	5460	1798	7150	2354	9100	2996
125	0-60	635	205	1143	369	2286	738	3302	1066	4826	1558	6858	2214	10668	3444	13970	4510	17780	5740
	70	575	192	1035	346	2070	691	2990	998	4370	1459	6210	2074	9660	3226	12650	4224	16100	5376
	100	420	140	756	252	1512	504	2184	728	3192	1064	4536	1512	7056	2352	9240	3080	11760	3920
150	0-70	750	250	1350	450	2700	900	3900	1300	5700	1900	8100	2700	12600	4200	16500	5500	21000	7000
	100	612	205	1102	369	2203	738	3182	1066	4651	1558	6610	2214	10282	3444	13464	4510	17136	5740
	125	435	152	783	274	1566	547	2262	790	3306	1155	4698	1642	7308	2554	9570	3344	12180	4256
200	0-100	977	325	1759	585	3517	1170	5080	1690	7425	2470	10552	3510	16414	5460	21494	7150	27356	9100
	125	850	282	1530	508	3060	1015	4420	1466	6460	2143	9180	3046	14280	4738	18700	6204	23800	7896
250	0-125	1180	402	2124	724	4248	1447	6136	2090	8968	3055	12744	4342	19824	6754	25960	8844	33040	11256

For capacities of other gases multiply the air capacities by the following factors: **Argon-0.85** **Co₂-0.81** **Helium-2.69** **Nitrogen-1.0**
For water service capacity consult factory.