

TYPE 700 WATER PRESSURE REGULATOR

Spring Diaphragm Type
Adjustable Spring Range 8-30; 28-50; 45-75; 70-100

Service: The Type 700 is an improved design of the best type of water pressure reducing valve in small sizes for silent, dead end operation, especially for supplying low or medium water pressure to buildings from high pressure city water mains. Because they are dependable, tight closing, compact, and rarely require attention they are in use for fresh and salt water systems on many naval and merchant ships. No. 700 valves are made for initial pressures up to 300 psi. The delivery pressures are sufficiently high for ordinary service water uses but limited only to insure long diaphragm life, good regulation and to avoid damage to plumbing fixtures.

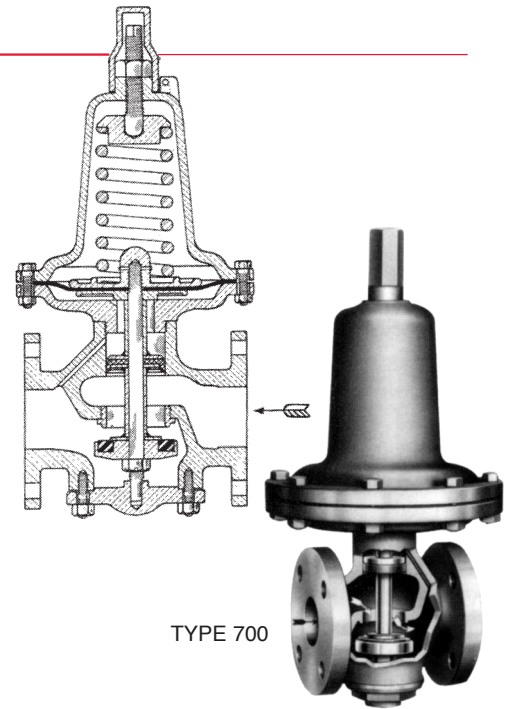
Construction: In the design of these valves special attention has been given to provide large flow passages; rugged construction for durability and to assure perfect alignment and free operation under pipe strains; accessibility for replacement of the rubber disc, diaphragm, or leather cup without removing from the line; and a better spring design for constant pressure over a wide range of capacity.

Standard valves have bronze bodies and cast iron spring chambers in size 1½ inches and smaller, cast iron bodies and spring chambers in the larger sizes, with bronze trim in all sizes. **For marine service, the bodies and spring chambers are usually furnished in all bronze material at extra cost.**

Operation: The inlet water pressure acts upward on the piston (sealed by a leather cup) and downward on the disc holder carrying a rubber ring disc. The inner valve is consequently balanced and unaffected by changes in inlet pressure.

The valve is held open by the spring until the delivery pressure, transmitted through the diagonal drilled hole to the space under the diaphragm, is sufficient to lift the diaphragm and pull the valve closed.

Water capacity table page 15.



TYPE 700

INITIAL PRESSURE AND TEMPERATURE LIMITS

Body: Bronze or Cast Iron, Scrd.
Air-Water: 300 psi 150°F.
Not used for steam

Body: Cast Iron, 125 lb. Flanges
Air-Water: 200 psi 150°F.
Not used for steam

Body: Cast Iron, 250 lb. Flanges
Air-Water: 300 psi 150°F.
Not used for steam

Higher Temperatures-Consult Factory

Reduced Pressures

Different springs required to cover this range each adjustable over part of range. Spring ranges -8 to 30; 28 to 50; 45 to 75; 70 to 100.

DIMENSIONS—WEIGHTS (approximate)

	DIMENSION—INCHES						SHIPPING WEIGHTS			
	Face to Face			Center Line to Top	Center Line to Bottom	Diameter Diaphragm Chamber	Screwed	Flanged		
	Screwed	125#	250#					125#	250#	
½-¾	3%	—	—	9%	1%	5	16	—	—	
1	4%	—	—	10 ³ / ₁₆	2%	6	20	—	—	
1¼	4%	—	—	13 ³ / ₁₆	2 ¹ / ₁₆	8	30	—	—	
1½	5%	—	—	14%	2%	8	40	—	—	
2	8%	7%	8	14%	3½	8	55	60	65	
2½	9%	9%	10%	18%	4%	9%	140	150	155	
3	11½	10%	11%	24	6	12	210	225	240	
4	—	11%	11%	24 ¹ / ₁₆	6½	12	—	270	290	