

# SELECTING PRESSURE PILOTS

Any of the Main Valves described in the Main Valve Section can be combined with any of the Pilots listed below to produce the SPENCE Pressure Regulator. This Regulator will reduce and regulate a steady or varying initial pressure, within the range

specified, so as to maintain a constant, adjustable, predetermined delivery pressure. The table below lists the principal Pressure Pilots.

## PRESSURE REGULATOR PILOTS

Type	Service Conditions								Normal Accuracy ±	Diaphragm		Loading	Main Valve		
	Cast Iron		Cast Bronze		Cast Steel		Delivery Pressure			Diameter inches	Material				
	Maximum Initial Pressure psi	Maximum Temperature °F	Maximum Initial Pressure psi	Maximum Temperature °F	Maximum Initial Pressure psi	Maximum Temperature °F	Minimum psi	Maximum psi							
D	250	450	—	—	600	750	3	150	1 psi	3½	St. Stl.	Spring	E or C Series		
D2	250	450	—	—	600	750	100	300	2 psi	3½	St. Stl.	Spring	E or C Series		
D5	250	450	—	—	—	—	1	25	½ psi	5¾	St. Stl.	Spring	E or C Series		
D120	250	450	—	—	600	750	5	150	1 psi	4½	St. Stl.	Spring	E or C Series		
A73	250	450	—	—	600	750	See response curves on A Pilot Product Page 50		½ psi	3½-7¼ <sup>b</sup>	St. Stl.	Air	E or C Series		
A53	250	450	—	—	600	750			½ psi	3½-5¾ <sup>b</sup>	St. Stl.	Air	E or C Series		
A	250	450	—	—	600	750			½ psi	3½	St. Stl.	Air	E or C Series		
A35	250	450	—	—	—	—			⅛ psi	5¾-3½ <sup>b</sup>	St. Stl.	Air	E or C Series		
A54	250	450	—	—	600	750			1 psi	4½-5¾ <sup>b</sup>	St. Stl.	Air	E or C Series		
A70	250	450	—	—	600	750			2 psi	7¼	St. Stl.	Air	E or C Series		
A86	250	450	—	—	600	750			½ psi	4½	St. Stl.	Air	E or C Series		
A87	250	450	—	—	600	750			½ psi	7¼	St. Stl.	Air	E or C Series		
A85	250	450	—	—	600	750			½ psi	3½-5¾ <sup>b</sup>	St. Stl.	Air	E or C Series		
A84	250	450	—	—	600	750			½ psi	3½	St. Stl.	Air	E or C Series		
A83	250	450	—	—	600	750			½ psi	3½	St. Stl.	Air	E or C Series		
A82	250	450	—	—	—	—			⅛ psi	5¾	St. Stl.	Air	E or C Series		
Safety Pilot	—	—	300	500	600	750			5	175	—	3½	St. Stl.	Spring	E or C Series
P125	250	450	—	—	600	750			5	175	1 psi	4½	St. Stl.	Spring	E or C Series

<sup>b</sup>These Pilots have dual diaphragms, the first size being the control diaphragm and the second, the air loading diaphragm.

### NOTES ON SELECTION OF PILOTS

**D SERIES PILOTS** meet the requirements of the majority of all pressure regulator problems. They are spring-loaded. Other Pilots are modifications of the D Series for specific purposes.

**A SERIES PILOTS** are air-loaded. These Pilots are recommended where frequent changes in setting must be made and the Regulator is not easily accessible.

In any one Series of Pilots a larger Diaphragm will produce closer accuracy of control but with less range in delivery pressure.

Water Service Pilot operated Regulators are not uniformly satisfactory as water reducing valves unless the delivery system has the ample cushioning afforded by an elevated tank or air chamber. When the flow is intermittent to an inflexible system, the SPENCE Type D34 Direct Operated Pressure Reducing Valve is recommended.