

Direct Operated Pressure Regulator 25MP

Capacity – Pounds of saturated steam per hour at 80% accuracy of regulation

Inlet Steam Pressure	Reduced Steam Pressure															
	2	5	10	15	20	30	40	50	60	75	100	125	150	175	200	
psig	.14	.34	.69	1.03	1.38	2.07	2.76	3.45	4.14	5.17	6.89	8.62	10.3	12.1	13.8	
bar																
15	1.03	8	10	15												
30	2.07	12	18	27	31	33										
50	3.45	15	20	30	37	46	50	57								
75	5.17	17	23	48	59	73	74	78	73	72						
100	6.89	19	39	56	70	85	93	110	92	98	94					
125	8.62			68	85	102	118	122	116	125	128	119				
150	10.3			85	105	124	139	139	139	142	145	143	139			
175	12.1			97	123	140	159	163	150	159	162	164	162	157		
200	13.8			114	137	160	182	188	173	187	191	194	197	190	167	
250	17.2			137	164	192	218	226	224	228	230	233	232	234	222	210
300	20.6				185	210	245	270	260	265	272	275	216	280	280	275

for kg/hr, multiply by .454

Capacity & Accuracy of Regulation

Capacity of the type MP regulator is based upon the accuracy of regulation of the reduced pressure, and chart values are given for an accuracy of regulation of 80%. This means that, for example, at a reduction of 100 psi to 20 psi, the capacity will be 85 lbs/hr when the reduced pressure drops to 80% of the 20 psi initial setting or 16 psi.

The following multipliers can be used to determine the capacity for other percent of accuracy of regulation values.

Accuracy of Regulation	Capacity Chart Multiplier
75%	1.25
80%	1.0
85%	0.75
90%	0.5

Sample Specification

The pressure regulator shall be direct-acting with an external pressure sensing line. The valve trim shall be hardened stainless steel, and the body shall be cast iron.

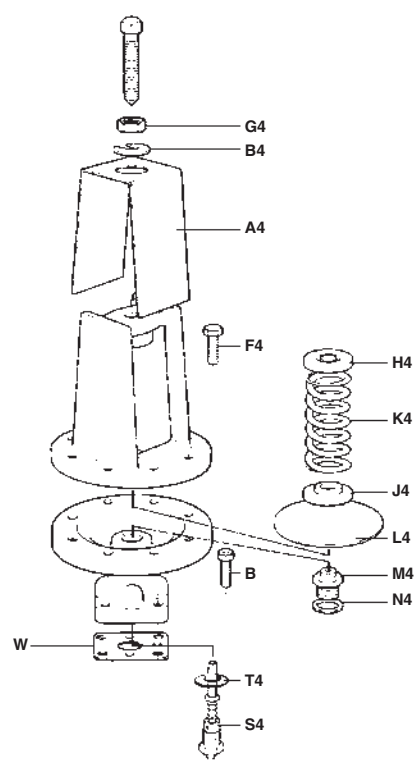
Installation

The regulator should be installed in a horizontal line with suitable bypass and isolating valves. A steam trap should be installed upstream to prevent condensate from reaching the regulator. The trap and regulator should both be protected with a strainer. The pressure sensing line should be located in a straight section of the downstream piping at least 10 pipe diameters from the nearest fitting, or in the steam space.

Maintenance

Complete installation and maintenance instructions are given in IM-3-104-US, a copy of which is supplied with each valve.

Spare Parts



Cover Plate w/ Retaining Ring	A4, B4
Pilot Screws w/ Gasket	B, W
Adjustment Screw w/ Nut, and Upper and Lower Spring Support Disc	G4, H4, J4
Adjustment Spring	K4
Specify controlled pressure and spring color	
Yellow	3 to 30 psi
Blue	20 to 100 psi
Red	80 to 250 psi
Diaphragm Assembly	L4
Stem Guide w/ Gasket	M4, N4
Head & Seat Assembly w/ Gasket	S4, T4
Square Gasket for all Pilots (set of 3)	W

© Spirax Sarco, Inc. 2009

TI-3-104-US 5.09