

spirax sarco

Electric Pilot Operated On/Off Regulator 1/2" to 4" 25E

The 25E is controlled by an electric pilot valve. The main valve opens wide when the pilot is energized; it closes tight when the pilot is de-energized. The 25E does not modulate or throttle steam at part load.

Note: For pressures below 15 psig, the E pilot is not recommended for use with valves 2-1/2" and larger.

Model	25E			
Sizes	1/2" to 2"	2-1/2", 3", 4"	1/2" to 2"	2", 2-1/2", 3", 4"
Connections	NPT	ANSI 125 flgd.	NPT	ANSI 300 flgd.
Construction	Cast Iron		Cast Steel	
Options		ANSI 250 flgd.		ANSI 150 flgd. (excludes 2")
Electric Pilot Specifications	Enclosure: NEMA 4 & 7 (C&D) 115v/60Hz Holding: 23 VA Inrush: 45 VA Normally closed 200 psig Max. operating pressure			
Electric Pilot Options	140 psig Max. operating pressure (for faster response time) 230 volt coil			

Typical Applications

On/Off control of steam flow in response to remote manual or automatic electrical signals which may originate at safety switches, timers, manual switches, etc.

Sample Specification

The On/Off operation of the main valve shall be controlled by an electrical solenoid pilot which is bolted directly to the main valve and may be removed without disturbing the control tubing connections. The main valve shall be single seated with hardened stainless steel trim. The valve body shall be cast iron (cast steel). The electric pilot shall have a NEMA 4&7 (C&D) enclosure with 115v (230v) 60 Hz coil.

Limiting Operating Conditions

Max. Operating Pressure (PMO)	NPT:	200 psig (14 barg) @ 392°F (200°C)
	ANSI 125:	125 psig (8 barg) @ 392°F (200°C)
	ANSI 250:	200 psig (14 barg) @ 392°F (200°C)
	ANSI 150:	185 psig (12 barg) @ 392°F (200°C)
	ANSI 300:	200 psig (14 barg) @ 392°F (200°C)

Max. Operating Temperature (TMO) 392°F (200°C)

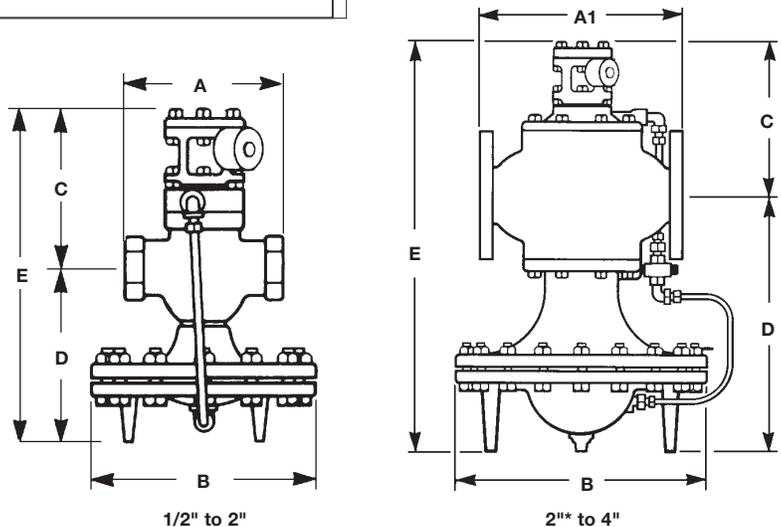
Pressure Shell Design Conditions

PMA Cast Iron: 250 psig/0-450°F 17 barg/0-232°C
Max. allowable pressure Cast Steel: 300 psig/0-450°F 20 barg/0-232°C

TMA Cast Iron: 450°F/0-250 psig 232°C/0-17 barg
Max. allowable temperature Cast Steel: 450°F/0-300 psig 232°C/0- barg

Capacities

For selection and sizing data, see TI-1-1114-US.

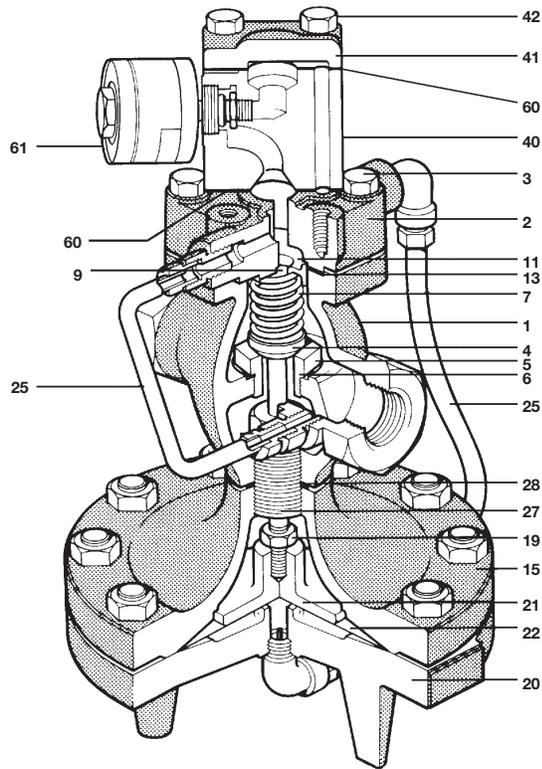


Size	Dimensions (nominal) in inches and millimeters						Weight		
	ANSI 125 ANSI 150	ANSI 250 ANSI 300	ANSI 250 ANSI 300	B	C	D	E	Cast Iron	Cast Steel
1/2", 3/4"	5.5 140	- -	- -	7.6 194	6.1 154	6.2 157	12.25 311	28 lb 12.7 kg	31 lb 14.1 kg
1"	6.0 152	- -	- -	8.6 219	6.0 152	6.75 171	12.75 324	35 lb 15.9 kg	38 lb 17.2 kg
1-1/4", 1-1/2"	7.25 184	- -	- -	8.6 219	6.6 167	7.1 179	13.6 346	40.5 lb 18.4 kg	44 lb 20 kg
2"	8.5 216	- -	9.0 228	10.6 270	7.2 183	8.2 208	15.4 391	65 lb 29.5 kg	71 lb 32.2 kg
2-1/2"	- -	10.9 276	11.5 292	13.6 346	7.9 200	13.9 354	21.8 554	153.5 lb 69.6 kg	167 lb 75.8 kg
3"	- -	11.75 298	12.5 318	13.6 346	7.9 198	14.4 367	22.25 565	184 lb 83.7 kg	201 lb 91.2 kg
4"	- -	13.9 352	14.5 368	15.6 397	9.1 232	16.1 410	25.25 641	280.5 lb 127 kg	305 lb 138 kg

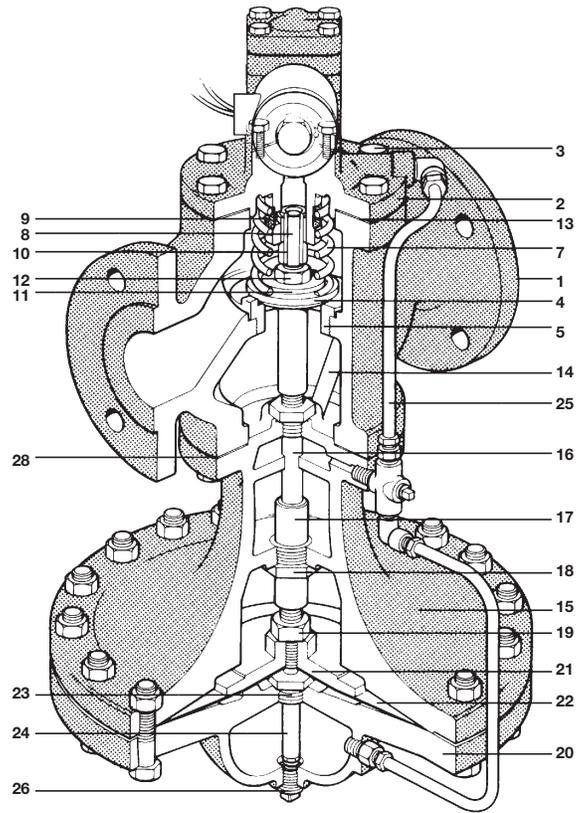
Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.
 In the interests of development and improvement of the product, we reserve the right to change the specification.

Electric Pilot Operated On/Off Regulator

1/2" to 4" 25E



1/2" to 2"



2" to 4" *ANSI 300 ONLY

Construction Materials

No.	Part	Material
1	Valve Body	Cast Iron ASTM A 126 CL B
		Cast Steel ASTM A216 Gr WCB
2	Cover	Cast Iron ASTM A 126 CL B
		Cast Steel ASTM A216 Gr WCB
3	Cover Bolts	Steel ASTM A449
4	Main Valve Head	Stainless Steel
5	Main Valve Seat	Stainless Steel
6	Main Valve Seat Gasket	Copper
7	Valve Return Spring	Stainless Steel
8	Valve Stem	Stainless Steel
9	Strainer Screen	Stainless Steel
10	Valve Stem Sleeve	Stainless Steel
11	Spring Guide	Cast Iron 1/2"-2" CRS 2" - 4"
12	Nut	Steel
13	Cover Gasket	Graphite
14	Pressure Equalizer Pipe	Stainless Steel
15	Upper Diaphragm Case	Cast Iron ASTM A 126 CL B
		Cast Steel ASTM A216 Gr WCB
16	Stem Bushing (2-1/2" - 4" Cast Steel only)	Stainless Steel
17	Diaphragm Plate Stem	Stainless Steel
18	Diaphragm Stem Guide	Stainless Steel
19	Nut	Brass 1/2" - 2"
		Steel 2" - 4"
20	Lower Diaphragm Case	Cast Iron ASTM A 126 CL B
		Cast Steel ASTM A216 Gr WCB
21	Diaphragm Plate	Brass 1/2" - 2" C.I. 2" - 4"
22	Main Diaphragm (2 ply)	Stainless Steel
23	Bushing	CRS
24	Tube & Orifice	Stainless Steel

25	Tubing Assembly	Copper
		Brass
26	Plug (Cast Iron) (Cast Steel)	Brass
		Steel
27	Connector Stud	Stainless Steel
28	Body Gasket	1/2" - 2" Copper Clad
		2" - 4" Graphite
40	Electric Pilot Body	Cast Iron ASTM A 126 CL B
		Cast Bronze ASTM B62
41	Electric Pilot Cover	Cast Iron ASTM A 126 CL B
42	Cap Screws	Steel ASTM A449
60	Pilot Gasket	Stainless Steel
61	Electric Solenoid Valve	

Installation

The valve should be installed in a horizontal pipe with suitable bypass and isolating valves. A steam trap should be installed upstream to prevent condensate from reaching the valve. The trap and valve should both be protected with a strainer.

Maintenance

Complete installation and maintenance instructions are given in IM-3-000-US, a copy of which is supplied with each valve. Available spare parts are shown on TI-1-1120-US and TI-3-0271-US.