

PVS 803

Pilot-Operated Safety
Relief Valves

Classification and application fields

The **PVS 803** is a servo actuated safety valve in which the opening and closing of the valve are controlled by a control device sensitive to pressure variations.

The **PVS 803** is a piloted-operated safety relief valves valve to be used in all applications where rapid opening and reliable repositioning after closure are essential.

It is Truly a **TOP ENTRY** design, which confers to the regulator management advantages, for example the ability to performs full maintenance without uninstalling it from the connection pipe.

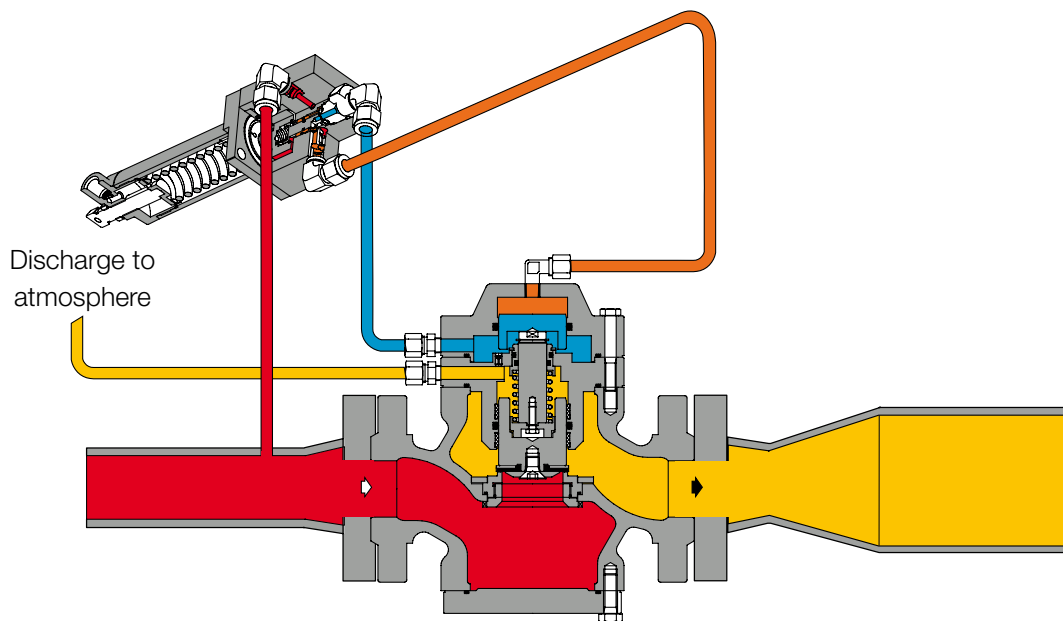


Fig.1

PVS 803 - pilot-operated safety relief valves



Inlet pressure



Atmospheric pressure



Motorisation pressure



Control pressure

Features

Operating Features:*

- **Maximum inlet pressure:** up to 1450 Psig (100 bar)
- **Opening start pressure:** 10% max
- **Minimum environmental temperature:** Up to - 4°F (-20°C)
- **Maximum environmental temperature:** Up to 140°F (+60°C)
- **Inlet gas temperature:** Up to - 4°F + 140°F (-20°C +60°C)

Construction Features:

- **DN Nominal dimensions:** 1" (25); 2" (50); 3" (80); 4" (100); 6" (150);
- **Flanged connections:** Class 150, 300, 600 according to EN1759-1 PN16, PN 50, PN 100 according to ISO 7005

Materials: **

- **Body:** Steel ASTM A216WCB / ASTM A352LCC
- **Valve seat:** Stainless steel
- **Plug:** Steel ASTM A350LF2
- **Sealing ring:** Nitrile rubber / Fluorocarbon
- **Connection fittings:** In zinc-plated carbon steel according to DIN 2353; Stainless steel on request

Pilots:

The **PVS 803** pilot-operated safety relief valves are, alternatively, equipped with the following pilots:

- **P16/M:** Action range 1.5-40 barg
- **P17/M:** Action range 40-74 barg

NOTE: * Different operating features available on request.

** The above materials refer to standard operations.

Different materials can be provided for specific needs.

Sizing of the pilot-operated safety relief valves

In general, the sizing of the safety valve involves determining the pressure drop under given operating conditions through the valve itself, verifying that such pressure drop is compatible with the plant parameters specified in the request.

Sizing	
	
For the sizing of the involved valves, kindly refer to our website: www.fiorentini.com/sizing	
	Tab. 1

Typical connection diagrams

The following examples are provided as a recommendation to get the best performances from the pilot-operated pilot-operated safety relief valves **PVS 803**.

IN-LINE INSTALLATION

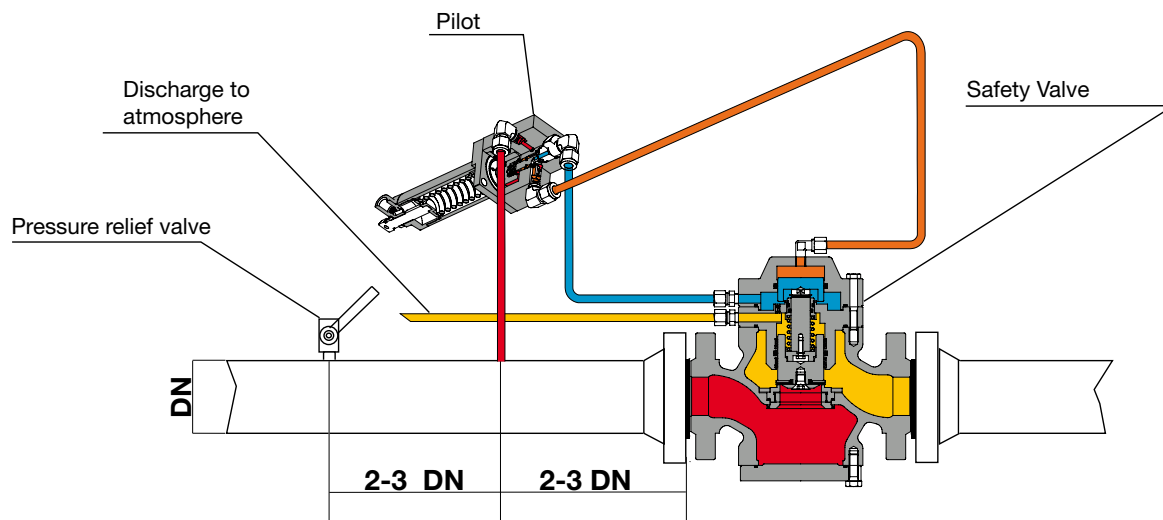


Fig.2

Recommended installations

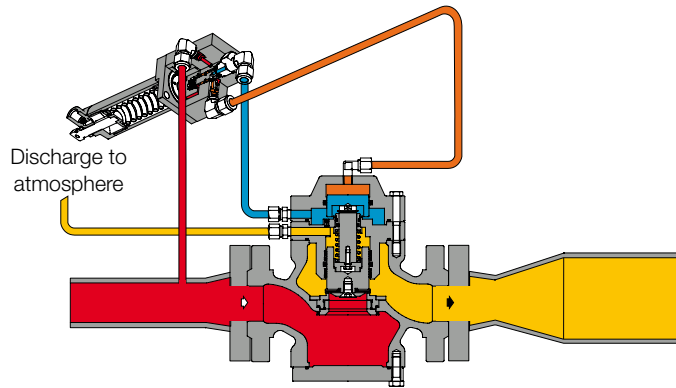


Fig.3 PVS 803 - Horizontal installation

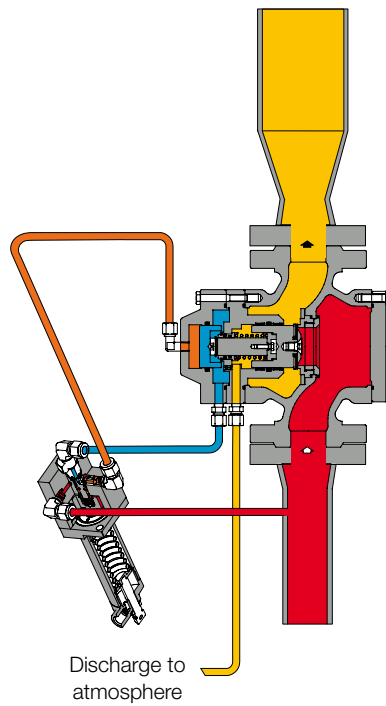


Fig.4 PVS 803 - Vertical installation

 Inlet pressure

 Atmospheric pressure

 Motorisation pressure

 Control pressure

Dimensions

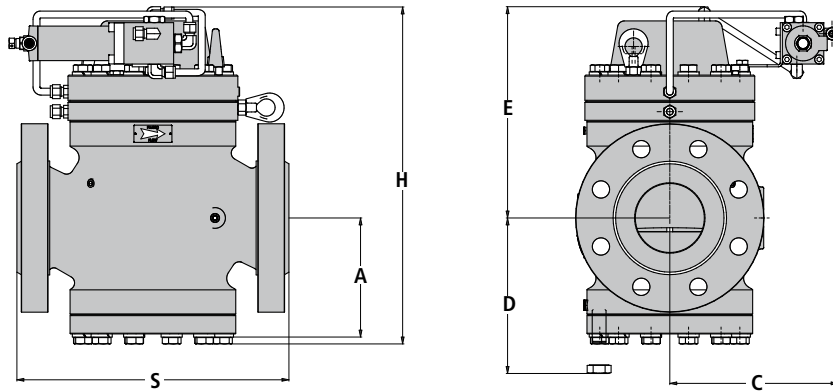


Fig.5

Diameter [Inches]						
Millimetres	25	50	80	100	150	
Inches	1"	2"	3"	4"	6"	
S - Ansi 150/Pn16	7.2	10.0	11.7	13.9	17.8	
S - Ansi 300	7.8	10.5	12.5	14.5	18.6	
S - Ansi 600	8.3	11.3	13.2	15.5	20.0	
A	3.1	4.3	5.2	6.6	8.7	
C	7.7	8.3	9.0	9.8	11.3	
D	4.5	6.2	7.6	8.9	12.2	
E	9.8	10.4	11.6	11.9	18.0	
H	13.2	15.2	17.3	18.9	27.4	
						Tab.4

Dimension S according to EN 334 and IEC 534-3

Weights [lbs]						
Ansi 150/Pn16	40	75	139	243	282	
Ansi 300	42	80	148	254	305	
Ansi 600	44	84	157	278	353	
						Tab.5

www.florentini.com

The data are not binding. We reserve the right to make changes without prior notice.

