PETROL®

PD Flowmeters since 1970

Control Valve

Description

- The PETROL INSTRUMENTS Control Valve is used when a high precision flowrate and batch control is needed. The valve is usually installed in conjunction with an electronic preset counter for start and stop and flowrate control function. The valve permit to maintain a constant flowrate during batching function varying line pressure necessary for a maximum flowmeter accuracy. The external control is mainly composed by a normally closed solenoid valve and a normally open solenoid valve.



Operating Principle

- The valve operates on a balanced piston principle, normally closed through a spring. When the differential pressure overcome the spring forces, the valve is opened. Fluctuation of valve opening and closing is used to maintain a constant flowrate.

Specifications

- **Maximum Viscosity**: up to 37 cSt, for viscosity above 37 cSt, consult factory
- **Max Pressure**: up to 40 bar
- **Temperature Range**: - 10°C ÷ 140°C
- **Voltage** (**Solenoids**): 12 VDC, 24 VAC/DC, 110 VAC/DC, 220-230 VAC, for different voltage consult the factory
- **Electrical Classification**: EX d IIC T6
- **Protection Degree**: IP67

Please consult factory for special applications.

Main Features / Benefits

- **Excellent Performance:** High Precision Flowrate and Batch control
- **Materials of Construction:** A broad range of materials are available to meet customer application requirements
- **Easy Maintenance:** Internals can be removed without dismounting the valve form pipeline
- **Flow Limiting Capability:** When used with an electronic preset counter capable of digital control
- **Check Valve Function:** The design of valve permits the valve to automatically operate as a check valve
- **Production Line:**
  Flange size 2", 3", 4", 6"

  For different size please consult the factory

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Identification Code

V A 4 - F 8

- **V** Control Valve
- **A** Max operating pressure
- **4** Valve model
- **F** Body/Cover material
- **8** Cylinder/Piston material

Max Pressure

Code	MPa
A	1
L	2
M	4

Max Flowrate

Model	m3/h
2	50 ÷ 60
3	90 ÷ 110
4	160 ÷ 180
6	300 ÷ 320

Body/Cover Materials

Code	Body/Cover
C	Carbon steel
F	Aisi 316
G	Aisi 316L

Main Application Fields

- ✓ Petroleum Industry
- ✓ Petrochemical Industry
- ✓ Chemical Industry
- ✓ Pharmaceutical Industry
- ✓ Crude Oil Extraction
- ✓ Power Plants Industry
- ✓ Ships and Steel Making Industry

Please consult factory for special applications.

Cylinder/Piston Materials

Code	Cylinder/Piston
4	St.st. / Brass
8	St. St. / St. St.

Note 1: Above valve can be supplied in one of the following versions:

- Digital Solenoid Control Valve - Flow Rate and Batch Control

- Two Stage Electric Shut-Off Valve

- Solenoid Operated On-Off Valve

- Rate of Flow Control

- Two Stage Hydraulic Control Valve

For Different versions please consult the factory







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