

EMERSON ASCO SOLENOID VALVE SERIES 210

Pilot Operated, Floating Diaphragm/Piston

E210D022-058
 SCE210D022VMO.24/50...2/2 N.C. Manual Override,
 Rp 1 1/2", 0.35-9 bar, 19.3, FPM, 24/50Hz, IP65,

- 2/2 Normally Closed / Open Rp 3/8", Rp 1/2", Rp 3/4", Rp 1", Rp 1 1/4", Rp 1 1/2", Rp 2"
- FPM, EPDM, NBR, CR
- Suitable To Control Air, Inert Gas, Water, Oil and other Gases/Liquids
- Operating Pressure Differential: Up to 20 Bar
- IP65



PRODUCT DESCRIPTION

The Emerson ASCO™ 210 Series solenoid valve is a robust, pilot-operated 2/2-way valve designed for the **automatic control of air, inert gases, water, light oils, and other compatible fluids**. Featuring a **floating diaphragm or piston construction**, the ASCO 210 Series offers exceptional reliability and durability across demanding industrial and commercial applications.

Built with a **brass body** and **stainless-steel internal components**, the 210 Series ensures long-term corrosion resistance and performance consistency. The valve uses **NBR (nitrile) seals** as standard, with optional seal materials; **FPM (fluoroelastomer)**, **EPDM**, **CR (chloroprene)**, and **PTFE** application and temperature requirements. The valve operates effectively across a temperature range of **-20°C to +85°C** with a maximum viscosity of **65 cSt**.

This Emerson ASCO solenoid valve meets the requirements of the **Pressure Equipment Directive 2014/68/EU** and satisfies all relevant **EU safety directives**, making it suitable for both **Group 1 and Group 2 fluids**. Electrical options include AC (24V, 48V, 115V, 230V/50Hz) and DC (24V, 48V) configurations, with **Class F insulated coils** offering IP65 protection in standard epoxy-moulded housings. Enhanced options include **IP67 waterproof**, **ATEX-certified explosionproof enclosures**, and **NEMA-rated housings** for hazardous or outdoor environments.

Requiring a minimum differential pressure of **0.35 bar**, the 210 Series is ideal for systems with moderate flow demands, with orifice sizes ranging from **16 to 44 mm** and Kv flow coefficients up to **37 m³/h**. Its fast **response time (15–120 ms)** makes it well-suited for **industrial automation, water treatment, heating systems, pneumatic control circuits, and energy applications**.

The Emerson ASCO 210 Series solenoid valve is available in **Normally Closed (NC) or Normally Open (NO)** variations, with **global approvals including WRAS, ATEX, UL, and CSA** (on request).

TECHNICAL DATA

GENERAL DATA

| | |
|---------------------------------|---------------------------------------|
| Function | 2/2, Normally Closed, Manual Override |
| Connection | Rp 1 1/2" |
| Operating Pressure Differential | 0.35 - 9 bar |
| Flow factor / flow coefficient | 19.3 |
| Voltage / Frequency | 24V / 50 Hz |
| IP class | IP65 |

MATERIAL DATA

| | |
|-------------------------------|-----------------|
| Material body | Brass |
| Material of seals | FPM |
| Material seat | Brass |
| Material of core tube | Stainless steel |
| Encapsulation material | thermoplastic |

TEMPERATURE DATA

| | |
|----------------------------------|--------|
| Temperature ambient from | -20 °C |
| Temperature ambient to | 75 °C |
| Temperature of media from | -20 °C |
| Temperature of media to | 85 °C |

ADDITIONAL DATA

| | |
|-------------------------|-----------|
| Response time | 120 ms |
| Viscosity max | 65 cSt |
| Continuous duty | ED 100% |
| Insulation class | F (155°C) |
| Weight | 2.5 kg |