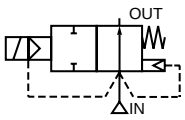
# SOLENOID VALVES

normally open
pilot operated, hung diaphragm
3/8 to 1 1/2

**NO**




**2/2**
Series
**210**



3

## FEATURES

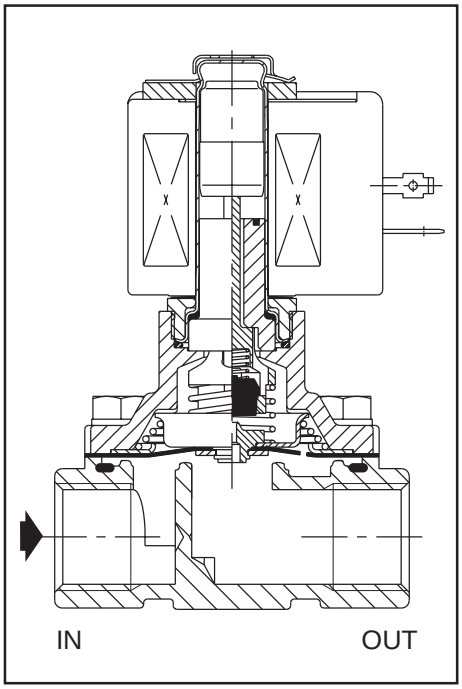
- *Two way shut-off valves for automatic control of air, inert gas, water, light oil and other gases/liquids compatible with the sealing materials used*
- *Valves do not require a minimum operating pressure*

## GENERAL

| | |
|---|---|
| **Differential pressure** | 0 - 9 bar [1 bar =100 kPa] |
| **Maximum allowable pressure** | 18 bar |
| **Maximum viscosity** | 65 cSt ($mm^2/s$) |
| **Response times** | 15 - 120 ms |

| fluids | temperature range | sealings |
|---|---|---|
| water, air, neutral gas, light oil | -20 to +85°C | NBR (nitrile / buna-n) |

| **CONSTRUCTION** | **Brass body** | **Stainless steel body** |
|---|---|---|
| **Body** | Brass | AISI 303 SS |
| **Core tube** | Stainless steel | Stainless steel |
| **Core and plugnut** | Stainless steel | Stainless steel |
| **Springs** | Stainless steel | Stainless steel |
| **Seat** | Brass | Stainless steel |
| **Sealing, diaphragm & disc** | NBR | NBR |
| **Disc holder** | PA (nylon) | PA (nylon) |
| **Shading coil** | Copper | Silver |
| **Coil insulation class** | F | F |
| **Connector** | Spade plug (Pg 11P) | Spade plug (Pg 11P) |
| **Connector specification** | ISO 4400 | ISO 4400 |
| **Electrical safety** | IEC 335 | IEC 335 |




## ELECTRICAL CHARACTERISTICS

**Standard voltages** DC (=) : 24V
(Other voltages and 60 Hz on request) AC (~) : 24V - 115V - 230V / 50 Hz

| coil type | power ratings inrush ~ (VA) | holding ~ (VA) | holding ~ (W) | hot/cold = (W) | ambient temperature ranges (°C) | protection |
|---|---|---|---|---|---|---|
| CMXX-FT | 55 | 23,0 | 10,5 | 9 / 11,2 | -20 to +75 | moulded IP65 |
| CM12-FB | 240 | 43,0 | 20,0 | - | -20 to +50 | moulded IP65 |

## SPECIFICATIONS

| pipe size | orifice size | flow coefficient Kv | | operating pressure differential (bar) min. | maximum air/gas ~ | maximum air/gas = | maximum water ~ | maximum water = | maximum oil < 65cSt ~ | maximum oil < 65cSt = | coil type ~ | coil type = | catalogue number | OPTIONAL FPM | OPTIONAL EPDM | OPTIONAL CR | OPTIONAL PTFE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (mm) | ($m^3/h$) | (l/min) | | | | | | | | | | | | | | |
| **Rp** | **Brass body, NBR sealings and discs** | | | | | | | | | | | | | | | | |
| 3/8 | 16 | 2,6 | 43 | 0 | 9 | 9 | 9 | 9 | 9 | 5 | CMXX-FT | CMXX-FT | **SC E210C033** | **V** | **E** | **J** | |
| 1/2 | 16 | 3,4 | 57 | 0 | 9 | 9 | 9 | 9 | 9 | 5 | CMXX-FT | CMXX-FT | **SC E210C034** | **V** | **E** | **J** | |
| 3/4 | 19 | 4,7 | 79 | 0 | 9 | 9 | 9 | 9 | 9 | 5 | CMXX-FT | CMXX-FT | **SC E210C035** | **V** | **E** | **J** | |
| 1 | 25 | 11,1 | 185 | 0 | 9 | - | 9 | - | 9 | - | CM12-FB | - | **SC E210B057** (1) | **V** | **E** | **J** | |
| 1 1/4 | 28 | 12,8 | 213 | 0 | 9 | - | 9 | - | 9 | - | CM12-FB | - | **SC E210B058** (1) | **V** | **E** | **J** | |
| 1 1/2 | 32 | 19,3 | 322 | 0 | 9 | - | 9 | - | 9 | - | CM12-FB | - | **SC E210B059** (1) | **V** | **E** | **J** | |
| **NPT** | **Stainless steel body, NBR sealings and discs** | | | | | | | | | | | | | | | | |
| 1/2 | 16 | 2,6 | 43 | 0 | 9 | 9 | 9 | 9 | 7 | 5 | CMXX-FT | CMXX-FT | **SC B210B030** | **V** | **E** | **J** | |
| 3/4 | 16 | 2,6 | 43 | 0 | 9 | 9 | 9 | 9 | 5 | 5 | CMXX-FT | CMXX-FT | **SC B210B038** | **V** | **E** | **J** | |

(1) Mounting position: piping horizontal, solenoid upright

The codes in the grey shaded areas correspond to commonly used products which can be supplied rapidly

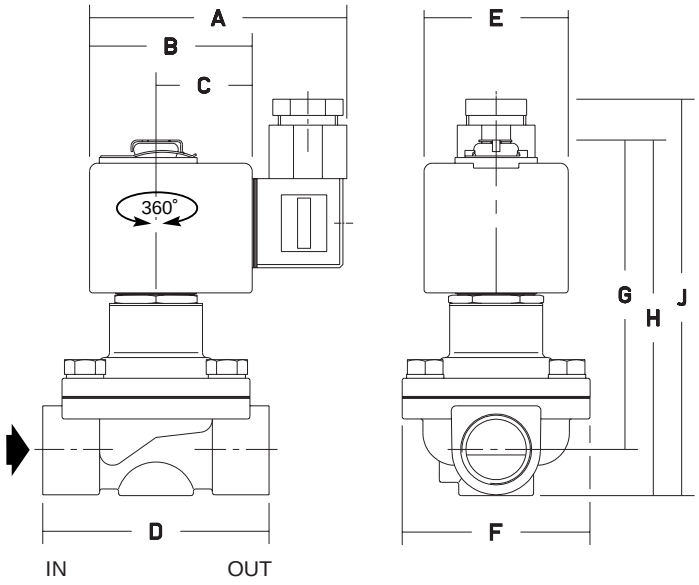
## OPTIONS

- Valves can also be supplied with FPM (fluorelastomer / viton), EPDM (ethylene-propylene) and CR (chloroprene / neoprene) diaphragms, sealings and discs. Use the appropriate suffix letter for identification
- Waterproof enclosure with embedded screw terminal coiland Pg 13,5 cable gland to meet CEE 10 (IP67)
- Explosionproof enclosures for hazardous locations according to "**CENELEC**" and national standards (see section 10)
- Explosionproof and watertight enclosures according to "**NEMA**" standards (see section 10)
- Compliance with "**UL**" and "**CSA**" standards
- Mounting brackets except for SC E210B057/B058/B059
- Plug with visual indication and with peak voltage suppression or with cable length of 2m (see section 11)

## INSTALLATION

- The valves can be mounted in any position without affecting operation, unless indicated otherwise in the specifications table
- Pipe connection identifiers are: B = NPT (ANSI 1.20.3); E = Rp (ISO 7/1)
- The third digit in the catalogue number indicates the standard pipe connection
- Other pipe connections are available on request
- Installation/maintenance instructions are included with each valve
- Spare Parts Kit and replacement coils are available (see section 11)

## DIMENSIONS (mm), WEIGHT (kg)




| catalogue number SC E210 | A | B | C | D | E | F | G | H | J | weight (1) |
|---|---|---|---|---|---|---|---|---|---|---|
| C033 - C034 | 80 | 50 | 30 | 70 | 45 | 58 | 98 | 112 | 127 | 0,9 |
| C035 | 80 | 50 | 30 | 70 | 45 | 58 | 102 | 117 | 132 | 1,0 |
| B057 | 86 | 56 | 33 | 95 | 50 | 83 | 155 | 175 | 175 | 2,0 |
| B058 | 86 | 56 | 33 | 95 | 50 | 83 | 161 | 187 | 187 | 2,0 |
| B059 | 86 | 56 | 33 | 111 | 50 | 99 | 167 | 194 | 194 | 2,5 |
| B030 - B038 | 80 | 50 | 30 | 70 | 45 | 61 | 100 | 118 | 133 | 1,0 |

(1) incl. coil and connector

**ASCO/JOUCOMATIC** reserves the right to alter the availability, design and specifications without notice.