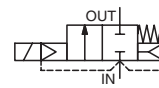




SOLENOID VALVES

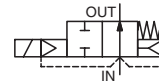
pilot operated, hung diaphragm
for vacuum service
1 to 2

NC



2/2
Series
215

NO



FEATURES

- Special materials and handling procedures are used in the high vacuum valves to avoid molecular contamination
- The medium and high vacuum valves are mass spectrometer tested
- Aluminium bodied valves designed to provide maximum flow
- The valves are for the control of low pressure air and gases, compatible with the seal materials used
- The solenoid valves satisfy all relevant EU Directives

GENERAL

Differential pressure 1 bar absolute [1 bar = 100 kPa]
Response time 25 - 120 ms

| fluids (*) | temperature range (TS) | seal materials (*) |
|----------------|------------------------|-----------------------|
| air, inert gas | - 20°C to + 85°C | NBR (nitrile) |
| | 0°C to + 90°C | FPM (fluoroelastomer) |



MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified

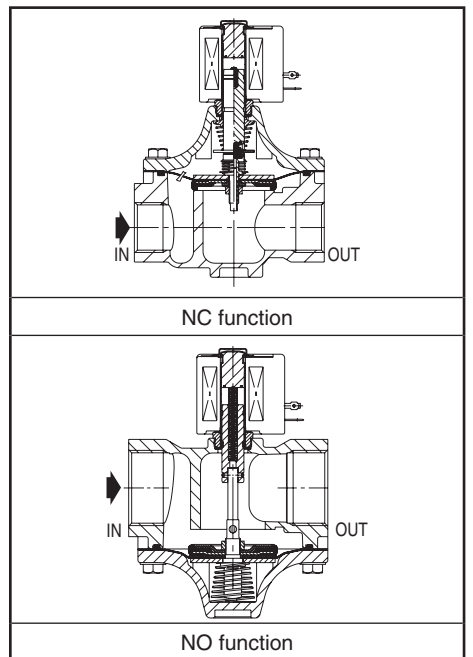
| | |
|------------------------------------|-----------------|
| Body | Aluminium |
| Core tube | Stainless steel |
| Core and plugnut | Stainless steel |
| Springs | Stainless steel |
| Seat | Aluminium |
| Seals, diaphragm & disc | NBR or FPM |
| Disc holder (NO function) | PA |
| Core guide | POM |
| Rider rings | PTFE |
| Shading coil | Copper |

ELECTRICAL CHARACTERISTICS

Coil insulation class F
Connector Spade plug (cable Ø 6-10 mm)
Connector specification ISO 4400 / EN 175301-803, form A
Electrical safety IEC 335
Electrical enclosure protection Moulded IP65 (EN 60529)
Standard voltages DC (=) :-
AC (~) : 24V - 48V - 115V - 230V / 50 Hz

| prefix option | power ratings | | | | operator ambient temperature range (TS) (C°) | replacement coil | | type ⁽¹⁾ |
|---------------|---------------|-----------|------------|-----|--|------------------|---|---------------------|
| | inrush ~ | holding ~ | hot/cold = | | | ~ | = | |
| | (VA) | (VA) | (W) | (W) | | 230 V/50 Hz | | |
| SC | 110 | 33,6 | 15,4 | - | -20 to + 75 | 400525-117 | - | 01 |

⁽¹⁾ Refer to the dimensional drawings on the following page.



SPECIFICATIONS

| pipe size | orifice size | flow coefficient Kv | | minimum absolute vacuum pressure (PS) | power coil (W) | catalogue number | |
|---|--------------|---------------------|---------|---|----------------|--------------------|---------------------------|
| | | | | | | NC Normally closed | NO Normally open |
| Rp | (mm) | (m³/h) | (l/min) | air (*) mbar (Torr) | ~ | - | ~ |
| Low vacuum range to 25 Torr, NBR seals | | | | | | | |
| 1 | 41 | 18 | 300 | 33,3 (25) | 15,4 | - | SCE215B050 SCE215C053 |
| 1 1/4 | 41 | 27 | 450 | 33,3 (25) | 15,4 | - | SCE215B060 SCE215C063 |
| 1 1/2 | 41 | 30 | 500 | 33,3 (25) | 15,4 | - | SCE215B070 SCE215C073 |
| 2 | 53 | 50 | 833 | 33,3 (25) | 15,4 | - | SCE215B080 SCE215C083 |
| Medium vacuum range to 10⁻³ Torr, NBR seals | | | | | | | |
| 1 | 41 | 18 | 300 | 1,33.10 ⁻³ (10 ⁻³) | 15,4 | - | SCE215B050VM SCE215C053VM |
| 1 1/4 | 41 | 27 | 450 | 1,33.10 ⁻³ (10 ⁻³) | 15,4 | - | SCE215B060VM SCE215C063VM |
| 1 1/2 | 41 | 30 | 500 | 1,33.10 ⁻³ (10 ⁻³) | 15,4 | - | SCE215B070VM SCE215C073VM |
| 2 | 53 | 50 | 833 | 1,33.10 ⁻³ (10 ⁻³) | 15,4 | - | SCE215B080VM SCE215C083VM |
| High vacuum range to 10⁻⁶ Torr, FPM seals | | | | | | | |
| 1 | 41 | 18 | 300 | 1,33.10 ⁻⁶ (10 ⁻⁶) | 15,4 | - | SCE215B050VH SCE215C053VH |
| 1 1/4 | 41 | 27 | 450 | 1,33.10 ⁻⁶ (10 ⁻⁶) | 15,4 | - | SCE215B060VH SCE215C063VH |
| 1 1/2 | 41 | 30 | 500 | 1,33.10 ⁻⁶ (10 ⁻⁶) | 15,4 | - | SCE215B070VH SCE215C073VH |
| 2 | 53 | 50 | 833 | 1,33.10 ⁻⁶ (10 ⁻⁶) | 15,4 | - | SCE215B080VH SCE215C083VH |

00170GB-2018/R01 Availability, design and specifications are subject to change without notice. All rights reserved.

OPTIONS

- Waterproof enclosure with embedded screw terminal coil according to protection class IP67, CEE-10
- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU (www.asco.com)
- Electrical enclosures according to "NEMA" standards are available
- Compliance with "UL", "CSA" and other local approvals available on request
- Other pipe connections are available on request
- Connector with visual indication and peak voltage suppression or with cable length of 2 m (www.asco.com)

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- Pipe connection identifier is E = Rp (ISO 7/1)
- Installation/maintenance instructions are included with each valve

SPARE PARTS KITS & ACCESSORIES

| catalogue number | spare parts kit no. | |
|----------------------|---------------------|---|
| | ~ | - |
| SCE215B050/B060/B070 | C302352 | - |
| SCE215B080 | C302353 | - |
| SCE215C053/C063/C073 | C304691 | - |
| SCE215C083 | C304692 | - |

⁽¹⁾ Standard suffixes are also applicable to kits.

ORDERING EXAMPLES:

| | | | | | |
|-----------|---|-----|----------|-----|------------------------|
| SC | E | 215 | B | 060 | 230V / 50 Hz |
| SC | E | 215 | B | 070 | VM 115V / 50 Hz |
| SC | E | 215 | C | 053 | VM 24V / 50 Hz |
| SC | E | 215 | C | 073 | VH 230V / 50 Hz |

prefix — pipe thread — basic number — voltage — suffix

ORDERING EXAMPLES KITS:

| | |
|------------------------|-----------|
| C302352 ⁽¹⁾ | |
| C302352 | VM |
| C302352 | VH |

basic number — suffix

DIMENSIONS (mm), WEIGHT (kg)

TYPE 01

Prefix "SC" Solenoid
Epoxy moulded
IEC 335 / ISO 4400
IP65

SCE215B050/B060/B070/B080

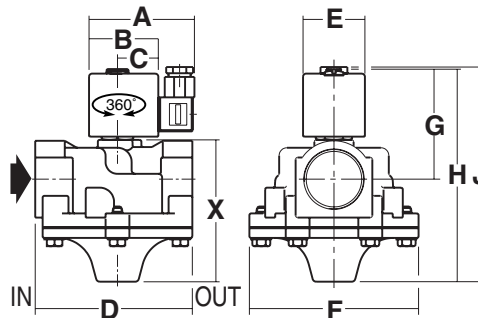
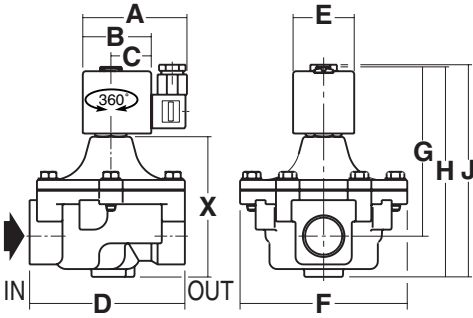
SCE215B050VM/B060VM/B070VM/B080VM

SCE215B050VH/B060VH/B070VH/B080VMH

SCE215C053/C063/C073/C083

SCE215C053VM/C063VM/C073VM/C083VM

SCE215C053VH/C063VH/C073VH/C083VH



| type | prefix option | catalogue number | A | B | C | D | E | F | G | H | J | X | weight ⁽²⁾ |
|------|---------------|--|----|----|----|-----|----|-----|-----|-----|-----|-----|-----------------------|
| 01 | SC | SCE215B050/B060/B070 B050VM/B060VM/B070VM/ B050VH/B060VH/B070VH | 86 | 56 | 33 | 127 | 50 | 137 | 140 | 171 | 172 | 221 | 1,8 |
| | | SCE215B080/B080VM/B080VH | 86 | 56 | 33 | 155 | 50 | 160 | 149 | 188 | 188 | 139 | 2,1 |
| | | SCE215C053/C063/C073/ C053VM/C063VM/C073VM/ C053VH/C063VH/C073VH | 86 | 56 | 33 | 127 | 50 | 137 | 90 | 172 | 172 | 123 | 1,5 |
| | | SCE215C083/C083VM/C083VH | 86 | 56 | 33 | 155 | 50 | 160 | 95 | 187 | 187 | 132 | 2,3 |

⁽²⁾ including coil and connector.

All leaflets are available on: www.asco.com

10 - Vacuum Service (2/2)



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ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

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www.scatts.co.uk