

### FEATURES

- The normally closed LPG valves are especially designed to meet the particular heavy duty requirements of LPG applications
- Dual flow execution, for use in prepaid systems
- Explosion proof operator, intended for use in potentially explosive areas, according to Directive ATEX 94/9/EC
- Easy electrical installation by means of the moulded-in supply cables, standard length of 2 meter
- ASCO Numatics components satisfy all relevant EC directives

### GENERAL

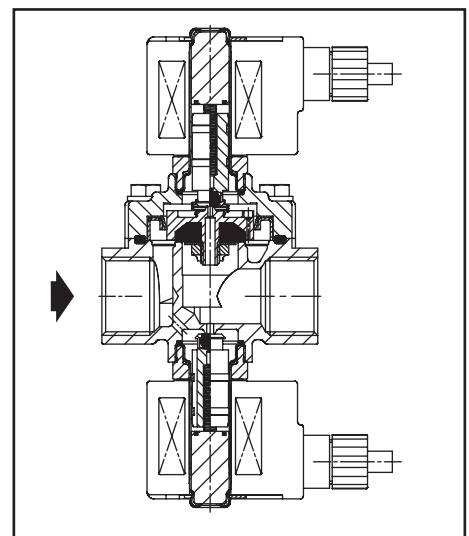
**Differential pressure** 0 - 25 bar [1 bar = 100kPa]  
**Ambient temperature range** -20 to +65°C (FPM execution)  
 -40 to +65°C (PTFE execution)

| fluids (*)   | temperature range (TS) | seal materials (*)    |
|--------------|------------------------|-----------------------|
| LPG / Liquid | -20 to +65°C           | FPM (fluoroelastomer) |
| LPG / Liquid | -40 to +65°C           | PTFE (**)             |

### MATERIALS IN CONTACT WITH FLUID

(\*) Ensure that the compatibility of the fluids in contact with the materials is verified  
 (\*\*) Specify suffix T behind catalogue number for the PTFE execution

|                         |                 |
|-------------------------|-----------------|
| <b>Body</b>             | Brass           |
| <b>Core tube</b>        | Stainless steel |
| <b>Core and plugnut</b> | Stainless steel |
| <b>Core disc</b>        | FPM or PTFE     |
| <b>Rider ring</b>       | PTFE            |
| <b>Springs</b>          | Stainless steel |



### ELECTRICAL CHARACTERISTICS

**Coil insulation class** F  
**Electrical safety** IEC 335  
**Standard voltages** DC (=) 24V - 48V;  
 AC (~): 24V - 48V - 115V - 230V / 50 Hz

| prefix option | power ratings |             | operator ambient temperature range (TS) | safety code          | electrical enclosure protection (EN 60529) | replacement coil |            | type <sup>(1)</sup> |
|---------------|---------------|-------------|---|----------------------|--|------------------|------------|---------------------|
|               | holding ~     | hot/cold =  |   |                      |  | ~                | =          |                     |
|               | (W)           | (W)         |   |                      |  | 230V/50/60 Hz    | 24V/DC     |                     |
| PV            | 10,5          | -           | -40 to +65                              | II 2 G Ex mb II T3   | moulded IP67                               | (2)              | (2)        | 01                  |
| (WS)EM        | -             | 12,0 / 16,8 | -40 to +40                              | II 2 G Ex e mb II T3 | SS / moulded IP65                          | (2)              | (2)        | 02                  |
| SC            | 10,5          | 12,0 / 16,8 | -40 to +65                              | EN 60730             | moulded IP65                               | 400425-117       | 400625-142 | 03 & 04             |

<sup>(1)</sup> Refer to the dimensional drawings on page 22  
<sup>(2)</sup> Multiple coils kits available under ATEX, contact us  
 - Not available

### SPECIFICATIONS

| pipe size                   | orifice size |      | flow coefficient Kv |         | operating pressure differential (bar) |         |   | prefix optional solenoids * |              |    |    |    |      | basic catalogue number |    |          |
|-----------------------------|--------------|------|---------------------|---------|---------------------------------------|---------|---|-----------------------------|--------------|----|----|----|------|------------------------|----|----------|
|                             | Low          | High | Low                 | High    | min                                   | max. PS |   | NEMA 7&9                    | ATEX / IECEx |    |    |    | IP65 |                        |    |          |
|                             |              |      |                     |         |                                       | ~       | = |                             | EF           | NF | EM | PV |      |                        | ZN | SC       |
| G                           | (mm)         | (mm) | (m³/h)              | (l/min) | (m³/h)                                | (l/min) |   |                             |              |    |    |    |      |                        |    |          |
| <b>NC - Normally closed</b> |              |      |                     |         |                                       |         |   |                             |              |    |    |    |      |                        |    |          |
| 3/4                         | 2,4          | 19   | 0,15                | 2,5     | 4,0                                   | 66,7    | 0 | 25                          | 17           | -  | -  | ○  | □    | -                      | ●  | G291A321 |

● Available feature ○ Available feature in DC only □ Available feature in AC only  
 - Not available  
 \* For description of solenoids see pages 31-40

### ADDITIONAL OPTIONS

- Other explosionproof enclosures for use in zone 1/21-2/22, categories 2-3 to ATEX Directive 94/9/EC
- Explosionproof and watertight solenoids according to "NEMA" standards

### INSTALLATION

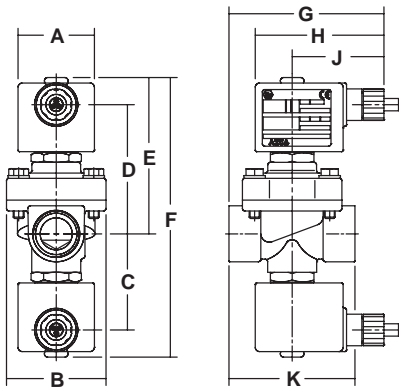
- The valves can be mounted in any position without affecting operation
- Pipe connection identifiers: G = pipe thread according to ISO 228/1
- Installation/maintenance instructions are included with each valve
- PV solenoids have a standard cable length of 2 meters. Other lengths in full meters are available on request

### DIMENSIONS (mm), WEIGHT (kg)



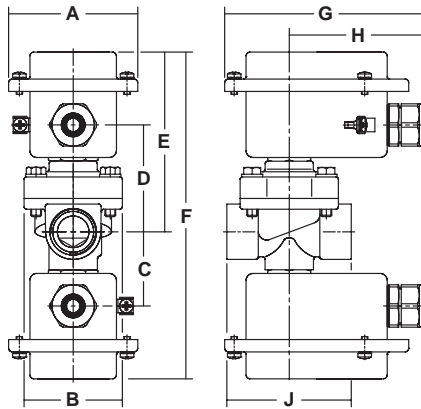
**TYPE 01**  
Prefix "PV" Solenoid  
Epoxy encapsulated  
EN-IEC 60079-0, 60079-18, 61241-0, 61241-18  
II 2 G/D Ex mb II / Ex mD  
IP67

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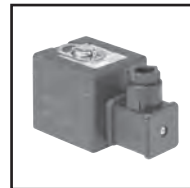
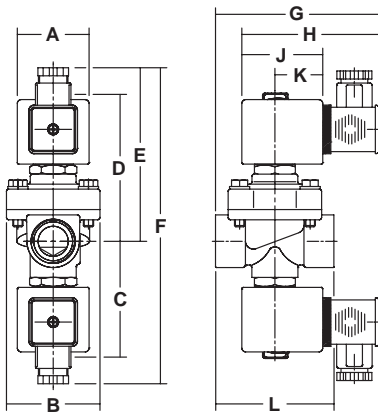
**TYPE 02**  
Prefix "EM" and "WSEM" Solenoid  
Zinc plated steel, epoxy coated (EM)  
Stainless steel, AISI 316 (WSEM)  
EN-IEC 60079-0, 60079-7, 60079-18, 61241-0, 61241-18  
II 2 G/D Ex e mb II / Ex tD  
IP67

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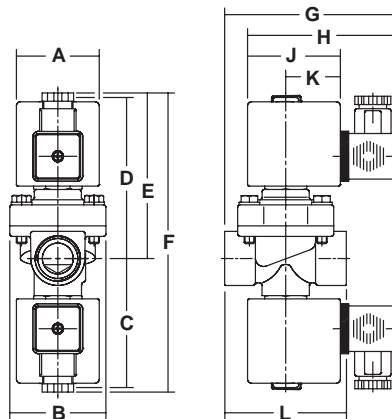
**TYPE 03**  
Prefix "SC" Solenoid  
Epoxy moulded  
IEC 335 / ISO 4400  
IP65

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**TYPE 04**  
Prefix "SC" Solenoid  
Epoxy moulded  
IEC 335 / ISO 4400  
IP65

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| type | AC/DC | prefix option | catalogue number | spare parts kits | A  | B  | C  | D  | E   | F   | G   | H  | J  | K  | L  | weight |
|------|-------|---------------|------------------|------------------|----|----|----|----|-----|-----|-----|----|----|----|----|--------|
| 01   | ~     | PV            | G291A321         | PVC139678        | 45 | 58 | 56 | 75 | 91  | 163 | 90  | 75 | 54 | 73 | -  | 1,7 Kg |
| 02   | =     | (WS)EM        | G291A321         | EMC139679        | 76 | 58 | 44 | 63 | 106 | 193 | 120 | 82 | 73 | -  | -  | 2,1 Kg |
| 03   | ~     | SC            | G291A321         | C139678          | 45 | 58 | 72 | 91 | 108 | 196 | 102 | 85 | 50 | 30 | 73 | 1,5 Kg |
| 04   | =     | SC            | G291A321         | C139679          | 50 | 58 | 78 | 97 | 100 | 181 | 105 | 91 | 56 | 33 | 73 | 1,9 Kg |

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