

### FEATURES

- The piston cartridge pulse valves are especially designed for dust collector service applications, combining high flow, long life and extremely fast opening and closing to produce reliable and economical operation
- The angle bodies and special piston cartridge result in unique operating features required for dust collector service applications
- The high quality polyacetal (POM) piston cartridge guarantees a long operating life and a large temperature range
- The design with Quick Mount connections eliminates the time consuming thread cutting and sealing resulting in maximum flexibility while the valve will be anchored to the pipes
- Built-in silencers reduce noise and prevent foreign particles from entering the valve
- The integral operators are provided with epoxy moulded F-class coils. Various optional waterproof and explosionproof solenoids for use in potentially explosive atmospheres (gas & dust) according to Directive ATEX 94/9/EC can be mounted on the same basic valve (see pages 49 to 57)
- The components satisfy all relevant EC directives

### GENERAL

**Differential pressure (PS)** 0,3 - 8,5 bar [1 bar = 100kPa]  
**Ambient temperature range** -20 to +85°C

| fluid | temperature range (TS) | piston           |
|-------|------------------------|------------------|
| air   | -20 to +85°C           | POM (polyacetal) |

### CONSTRUCTION

|                         |                                  |
|-------------------------|----------------------------------|
| Body                    | Aluminium                        |
| Bonnet                  | Aluminium                        |
| Quick Mount clamps      | Steel                            |
| Bolts                   | Steel                            |
| Core tube               | Stainless steel                  |
| Core and plugnut        | Stainless steel                  |
| Core spring             | Stainless steel                  |
| Sealings & disc         | NBR (nitrile)                    |
| Piston/cartridge        | POM (polyacetal) / NBR (nitrile) |
| Shading coil            | Copper                           |
| Coil insulation class   | F                                |
| Connector               | Spade plug (cable Ø 6 - 8 mm)    |
| Connector specification | 3 x DIN 46244                    |
| Electrical safety       | IEC 335                          |

### ELECTRICAL CHARACTERISTICS

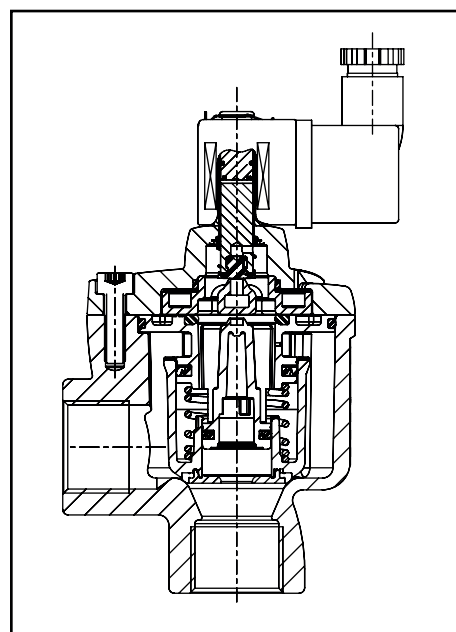
**Standard voltages** DC (-) : 24V  
(Other voltages and 60 Hz on request) AC (-) : 24V - 115V - 230V / 50 Hz

| coil type   | nominal power ratings |           |     | ambient temperature range<br>(°C) | protection |              |
|-------------|-----------------------|-----------|-----|-----------------------------------|------------|--------------|
|             | inrush                | holding   |     |                                   |            | hot/cold     |
|             | ~<br>(VA)             | ~<br>(VA) | (W) |                                   |            | =<br>(W)     |
| CM22-FB     | 14,5                  | 11        | 6,3 | -                                 | -20 to +85 | moulded IP65 |
| CM22-FI (1) | -                     | -         | -   | 15 / 22                           |            |              |

### SPECIFICATIONS

| pipe size                                                 | orifice size | flow coefficient Kv |         | operating pressure differential (bar) |               | coil type |         | catalogue number |               | Quick Mount clamps |
|-----------------------------------------------------------|--------------|---------------------|---------|---------------------------------------|---------------|-----------|---------|------------------|---------------|--------------------|
|                                                           |              |                     |         | min.                                  | max. (PS) air |           |         |                  |               |                    |
|                                                           | (mm)         | (m³/h)              | (l/min) |                                       |               | ~/=       | ~       | = (1)            | standard      |                    |
| <b>(G*) - Threaded pipe connection</b>                    |              |                     |         |                                       |               |           |         |                  |               |                    |
| 3/4                                                       | 20           | 14                  | 233     | 0,3                                   | 8,5           | CM22-FB   | CM22-FI | SC E353A811      | SCDU E353A811 | -                  |
| 1                                                         | 25           | 23                  | 383     | 0,3                                   | 8,5           | CM22-FB   | CM22-FI | SC E353A821      | SCDU E353A821 | -                  |
| 1 1/2                                                     | 40           | 46                  | 768     | 0,3                                   | 8,5           | CM22-FB   | CM22-FI | SC E353A831      | SCDU E353A831 | -                  |
| <b>(Ø) - Quick Mount connection on inlet</b>              |              |                     |         |                                       |               |           |         |                  |               |                    |
| 3/4                                                       | 20           | 14                  | 233     | 0,3                                   | 8,5           | CM22-FB   | CM22-FI | SC S353A811      | SCDU S353A811 | C117-281           |
| 1                                                         | 25           | 23                  | 383     | 0,3                                   | 8,5           | CM22-FB   | CM22-FI | SC S353A821      | SCDU S353A821 | C117-282           |
| 1 1/2                                                     | 40           | 46                  | 768     | 0,3                                   | 8,5           | CM22-FB   | CM22-FI | SC S353A831      | SCDU S353A831 | C117-290           |
| <b>(Ø) - Quick Mount connection on inlet &amp; Outlet</b> |              |                     |         |                                       |               |           |         |                  |               |                    |
| 3/4                                                       | 20           | 14                  | 233     | 0,3                                   | 8,5           | CM22-FB   | CM22-FI | SC S353A711      | SCDU S353A711 | C117-281           |
| 1                                                         | 25           | 23                  | 383     | 0,3                                   | 8,5           | CM22-FB   | CM22-FI | SC S353A721      | SCDU S353A721 | C117-282           |
| 1 1/2                                                     | 40           | 46                  | 768     | 0,3                                   | 8,5           | CM22-FB   | CM22-FI | SC S353A731      | SCDU S353A731 | C117-290           |

(1) Intermittent duty, Relative Duty Time is 10%. Max. on time 1 min.



### OPTIONS

- Waterproof enclosure with embedded screw terminal coil according to protection class IP67, CEE 10.
- Explosionproof solenoids for hazardous locations according to "ATEX" and national standards.
- Explosionproof and watertight solenoids according to "NEMA" standards.
- Plug with visual indication and/or peak voltage suppression.
- Electronic timer.

### INSTALLATION

- The valves can be mounted in any position without affecting operation.
- Pipe connection identifiers are: G\*= combination thread according to ISO 228/1 and ISO 7/1 or Ø for Quick Mount.
- For Quick Mount types tightness is achieved by the O-ring sealing on the pipes (3/4"=Ø26,4 to 27,4 and 1"=Ø33,2 to 34,2 and 1 1/2"=Ø47,8 to 48,8) according to ISO 4200.
- Other pipe threads are available on request.
- Installation/maintenance instructions are included with each valve.
- Spare parts kit and replacement coils are available.

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

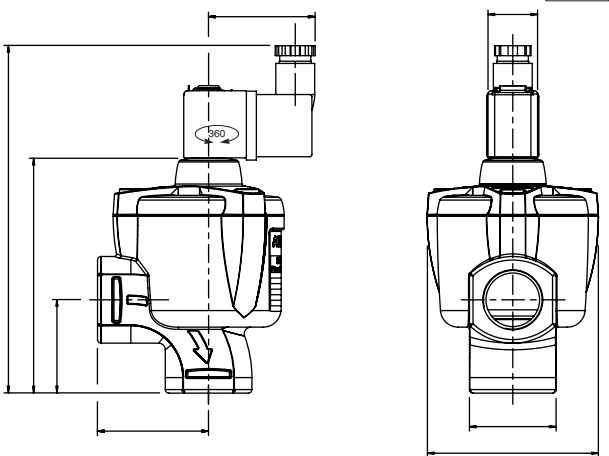


Fig. 1: Threaded type

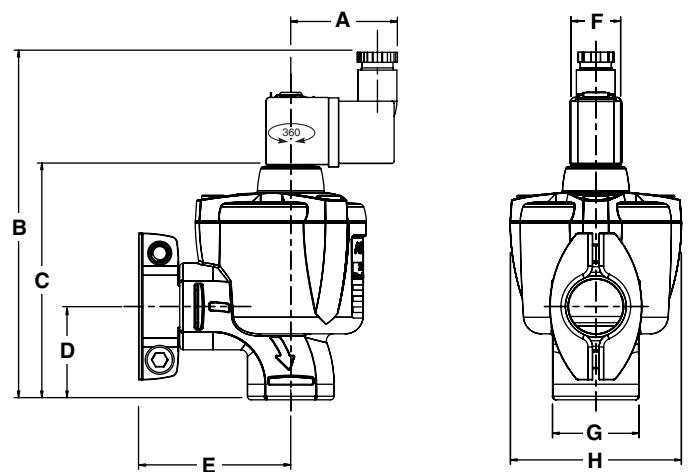


Fig. 2: Quick Mount type (inlet only)

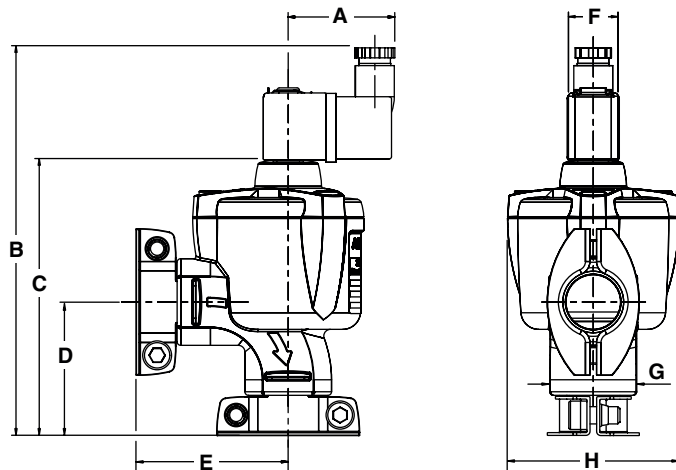


Fig. 3: Quick Mount type (inlet & outlet)

| catalogue number | A  | B   | C   | D  | E  | F  | G  | H   | weight (1) | (C)   |
|------------------|----|-----|-----|----|----|----|----|-----|------------|-------|
| SC(DU) E353A811  | 48 | 156 | 106 | 42 | 50 | 22 | 39 | 77  | 0,52       | Fig.1 |
| SC(DU) E353A821  | 48 | 162 | 112 | 51 | 62 | 22 | 46 | 77  | 0,63       | Fig.1 |
| SC(DU) E353A831  | 48 | 191 | 141 | 60 | 71 | 22 | 62 | 112 | 1,17       | Fig.1 |
| SC(DU) S353A811  | 48 | 156 | 106 | 42 | 70 | 22 | 39 | 77  | 0,60       | Fig.2 |
| SC(DU) S353A821  | 48 | 162 | 112 | 51 | 83 | 22 | 46 | 77  | 0,69       | Fig.2 |
| SC(DU) S353A831  | 48 | 191 | 141 | 60 | 97 | 22 | 62 | 112 | 1,37       | Fig.2 |
| SC(DU) S353A711  | 48 | 176 | 126 | 62 | 70 | 22 | 39 | 77  | 0,68       | Fig.3 |
| SC(DU) S353A721  | 48 | 183 | 133 | 71 | 83 | 22 | 46 | 77  | 0,80       | Fig.3 |
| SC(DU) S353A731  | 48 | 217 | 167 | 80 | 97 | 22 | 62 | 112 | 1,58       | Fig.3 |

(1) incl. coil and connector

(C) construction type

All leaflets are available on: [www.asconumatics.eu](http://www.asconumatics.eu)

## FEATURES

- The diaphragm pulse valves are especially designed for dust collector service applications, combining high flow, long life and extremely fast opening and closing to produce reliable and economical operation
- The high flow, angle type bodies, springless construction, in combination with the special diaphragm assemblies give the unique operating features required for dust collector service applications
- Integral compression fittings for fast, easy, secure installation
- Built-in silencers reduce noise and prevent foreign particles from entering the valve
- The integral operators are provided with epoxy moulded F-class coils. Various optional waterproof and explosionproof solenoids for use in potentially explosive atmospheres (gas & dust) according to Directive ATEX 94/9/EC can be mounted on the same basic valve (see pages 49 to 57)
- The valves satisfy all relevant EC directives

## GENERAL

**Differential pressure (PS)** 0,35 - 8,5 bar [1 bar = 100kPa]  
**Ambient temperature range** -20 to +85°C

| fluids (*) | temperature range (TS) | diaphragm (*) |
|------------|------------------------|---------------|
| air        | -20 to +85 °C          | TPE           |

## MATERIALS IN CONTACT WITH FLUID

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

|                                |                                         |
|--------------------------------|-----------------------------------------|
| <b>Body</b>                    | Aluminium / Stainless steel 316L        |
| <b>Core tube</b>               | Stainless steel                         |
| <b>Core and plugnut</b>        | Stainless steel                         |
| <b>Core spring</b>             | Stainless steel                         |
| <b>Sealings &amp; disc</b>     | NBR (nitrile)                           |
| <b>Diaphragm</b>               | TPE (thermoplastic polyester elastomer) |
| <b>Shading coil</b>            | Copper                                  |
| <b>Coil insulation class</b>   | F                                       |
| <b>Connector</b>               | Spade plug (cable Ø 6 - 10 mm)          |
| <b>Connector specification</b> | ISO 4400                                |
| <b>Electrical safety</b>       | IEC 335                                 |

## ELECTRICAL CHARACTERISTICS

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

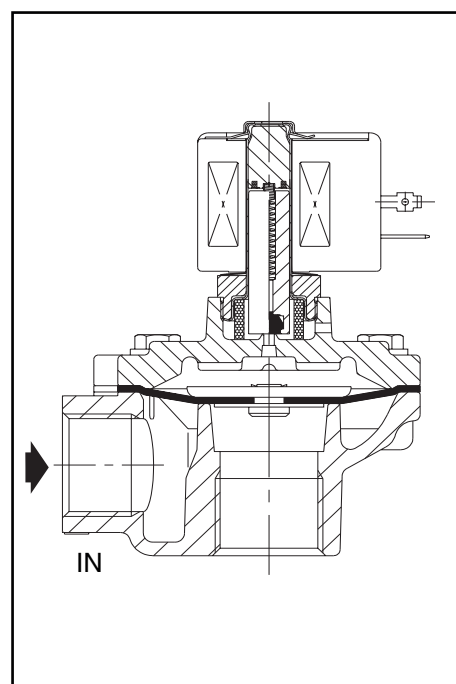
| coil type  | nominal power ratings |               |          | operator temperature range (TS) (°C) | protection |
|------------|-----------------------|---------------|----------|--------------------------------------|------------|
|            | inrush                | holding       | hot/cold |                                      |            |
|            | ~<br>(VA)             | ~<br>(VA) (W) | =<br>(W) |                                      |            |
| CM6-FT     | 34                    | 15,6          | 6        | -                                    | IP65/IP67  |
| CM6-FT (1) | -                     | -             | -        | 14 / 20,8                            | IP65/IP67  |
| CMXX-FT    | 55                    | 23            | 10,5     | -                                    | ATEX-NF    |
| CMXX-FF    | -                     | -             | -        | 14 / 19,7                            | ATEX-NF    |

(1) Intermittent duty, Relative Duty Time is 10%. Max. on time is 1 min.

## SPECIFICATIONS

| pipe size                               | orifice size | flow coefficient Kv |         | operating pressure differential (bar) |           | prefix optional solenoids |    |      |         |    | catalogue number |                      | FPM |  |
|-----------------------------------------|--------------|---------------------|---------|---------------------------------------|-----------|---------------------------|----|------|---------|----|------------------|----------------------|-----|--|
|                                         |              |                     |         | min.                                  | max. (PS) |                           |    |      |         |    |                  |                      |     |  |
|                                         |              |                     |         |                                       | air (★)   |                           |    |      | ATEX    |    |                  |                      |     |  |
| G                                       | (mm)         | (m³/h)              | (l/min) |                                       | ~/=       | SC                        | WP | SCDU | WP(T)DU | NF | aluminium        | stainless steel 316L |     |  |
| G - Threaded pipe connection            |              |                     |         |                                       |           |                           |    |      |         |    |                  |                      |     |  |
| 3/4                                     | 24           | 14                  | 233     | 0,35                                  | 8,5       | ●                         | ●  | ●    | ●       | ●  | G353A043         | G353A132             | V   |  |
| 1                                       | 27           | 17                  | 283     |                                       |           |                           |    |      |         |    | G353A044         | G353A133             | V   |  |
| Ø - Compression fitting pipe connection |              |                     |         |                                       |           |                           |    |      |         |    |                  |                      |     |  |
| 3/4                                     | 24           | 14                  | 233     | 0,35                                  | 8,5       | ●                         | ●  | ●    | ●       | ●  | G353-052         | -                    | V   |  |
| 1                                       | 27           | 17                  | 283     |                                       |           |                           |    |      |         |    | G353-053         | -                    | V   |  |

• : Available feature



### OPTIONS

- Waterproof enclosure with embedded screw terminal coil according to protection class IP67, CEE 10
- Explosionproof solenoids for hazardous locations according to ATEX and national standards
- **IECEX** certification
- Compliance with “UL” standards
- Plug with visual indication and/or peak voltage suppression
- Electronic timer
- Valves can also be supplied with FPM (fluoroelastomer) diaphragms and seals. Use the appropriate optional suffix letter for identification

### INSTALLATION

- The valves can be mounted in any position without affecting operation
- Threaded pipe connection is G (ISO 228/1) or compression fitting
- For compression fitting types tightness is achieved by the compressed gasket on the blow tube
- The use of the rubber gaskets as sealing members will allow a slight misalignment in piping when using compression fittings
- Other pipe threads are available on request
- Installation/maintenance instructions are included with each valve
- Spare parts kits and replacement coils are available

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

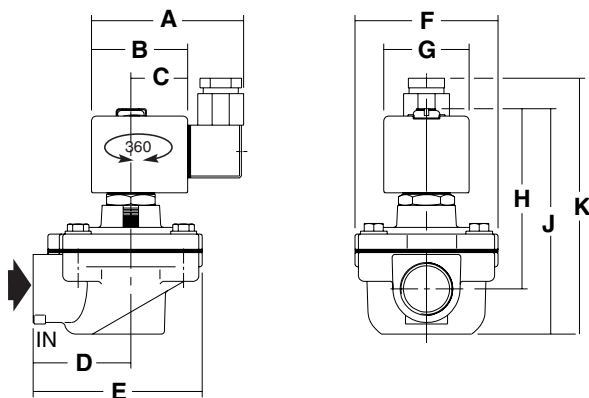


Fig. 1: Threaded pipe connection - aluminium

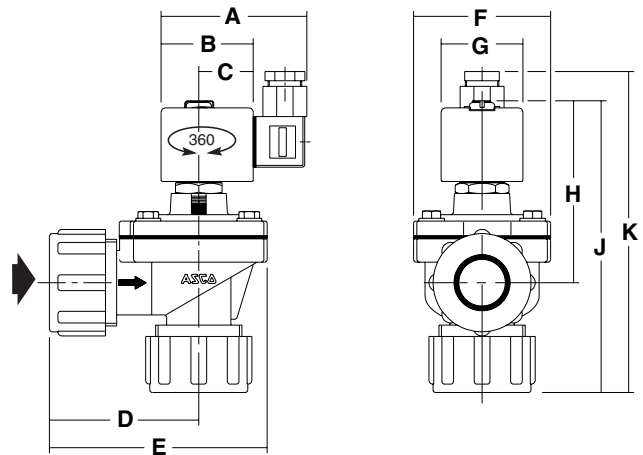


Fig. 2: Compression type fitting - aluminium

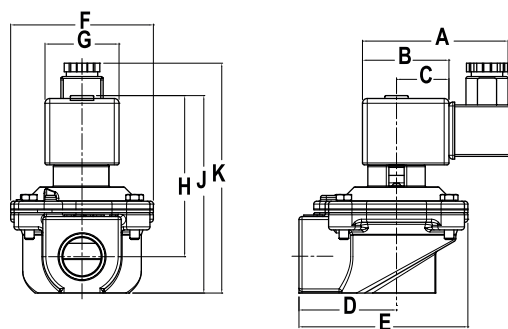


Fig. 3: Threaded pipe connection - stainless steel

| catalogue number | A  | B  | C  | D  | E   | F  | G  | H  | J   | K   | weight (1) | (C)    |
|------------------|----|----|----|----|-----|----|----|----|-----|-----|------------|--------|
| SC(DU)G353A043   | 75 | 45 | 27 | 51 | 89  | 75 | 39 | 92 | 113 | 130 | 0,70       | Fig. 1 |
| SC(DU)G353A044   | 75 | 45 | 27 | 51 | 89  | 75 | 39 | 92 | 113 | 130 | 0,65       | Fig. 1 |
| SC(DU)G353-052   | 75 | 45 | 27 | 81 | 125 | 75 | 39 | 92 | 175 | 195 | 0,85       | Fig. 2 |
| SC(DU)G353-053   | 75 | 45 | 27 | 81 | 125 | 75 | 39 | 92 | 175 | 195 | 0,90       | Fig. 2 |
| SC(DU)G353A132   | 75 | 45 | 27 | 51 | 89  | 75 | 39 | 92 | 113 | 130 | 1,30       | Fig. 3 |
| SC(DU)G353A133   | 75 | 45 | 27 | 51 | 89  | 75 | 39 | 92 | 113 | 130 | 1,20       | Fig. 3 |

(1) Incl. coil and connector (C) Construction type

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### FEATURES

- The diaphragm pulse valves are especially designed for dust collector service applications, combining high flow, long life and extremely fast opening and closing to produce reliable and economical operation
- Integral compression fittings for fast, easy, secure installation
- The high quality diaphragms are reinforced and wear resistant to guarantee a long operating life, even under harsh conditions
- The integral operators are provided with epoxy moulded F-class coils. Various optional waterproof and explosionproof solenoids for use in potentially explosive atmospheres (gas & dust) according to Directive ATEX 94/9/EC can be mounted on the same basic valve (see pages 49 to 57)
- The valves satisfy all relevant EC directives

### GENERAL

**Differential pressure (PS)** 0,35 - 8,5 bar [1 bar = 100kPa]

**Ambient temperature range** -20 to +85°C

| fluids (★) | temperature range (TS) | diaphragm (★) |
|------------|------------------------|---------------|
| Luft       | -20 to +85 °C          | CR            |

### MATERIALS IN CONTACT WITH FLUID

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

|                                |                                  |
|--------------------------------|----------------------------------|
| <b>Body</b>                    | Aluminium / Stainless steel 316L |
| <b>Core tube</b>               | Stainless steel                  |
| <b>Core and plugnut</b>        | Stainless steel                  |
| <b>Core spring</b>             | Stainless steel                  |
| <b>Sealings &amp; disc</b>     | NBR (nitrile)                    |
| <b>Diaphragm</b>               | CR (chloroprene)                 |
| <b>Shading coil</b>            | Copper                           |
| <b>Coil insulation class</b>   | F                                |
| <b>Connector</b>               | Spade plug (cable Ø 6 - 10 mm)   |
| <b>Connector specification</b> | ISO 4400                         |
| <b>Electrical safety</b>       | IEC 335                          |

### ELECTRICAL CHARACTERISTICS

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

| coil type             | nominal power ratings |           |      |           | operator temperature range (TS) (°C) | protection |
|-----------------------|-----------------------|-----------|------|-----------|--------------------------------------|------------|
|                       | inrush                | holding   |      | hot/cold  |                                      |            |
|                       | ~<br>(VA)             | ~<br>(VA) | (W)  | =<br>(W)  |                                      |            |
| CM6-FT                | 34                    | 15,6      | 6    | -         | -20 to +85                           | IP65/IP67  |
| CM6-FT <sup>(1)</sup> | -                     | -         | -    | 14 / 20,8 |                                      | IP65/IP67  |
| CMXX-FT               | 55                    | 23        | 10,5 | -         |                                      | ATEX-NF    |
| CMXX-FF               | -                     | -         | -    | 14 / 19,7 |                                      | ATEX-NF    |

(1) Intermittent duty, Relative Duty Time is 10%. Max. on time is 1 min.

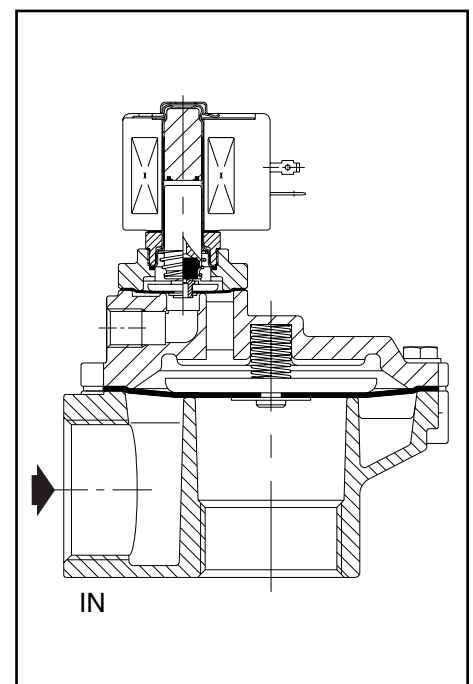
### SPECIFICATIONS

| pipe size                               | orifice size | flow coefficient Kv |         | operating pressure differential (bar) |           | prefix optional solenoids |    |      |         |    | catalogue number        |                         | FPM |  |
|-----------------------------------------|--------------|---------------------|---------|---------------------------------------|-----------|---------------------------|----|------|---------|----|-------------------------|-------------------------|-----|--|
|                                         |              |                     |         | min.                                  | max. (PS) |                           |    |      |         |    |                         |                         |     |  |
|                                         |              |                     |         |                                       |           | air (★)                   |    |      | ATEX    |    |                         |                         |     |  |
| G                                       | (mm)         | (m³/h)              | (l/min) |                                       | ~/=       | SC                        | WP | SCDU | WP(T)DU | NF | aluminium               | stainless steel 316L    |     |  |
| G - Threaded pipe connection            |              |                     |         |                                       |           |                           |    |      |         |    |                         |                         |     |  |
| 1 1/2                                   | 52           | 44                  | 733     | 0,35                                  | 8,5       | ●                         | ●  | ●    | ●       | ●  | G353A047                | G353A134 <sup>(1)</sup> | V   |  |
| 2                                       | 66           | 77                  | 1290    | 0,35                                  | 8,5       | ●                         | ●  | ●    | ●       | ●  | G353A050                | -                       | V   |  |
| 2 1/2                                   | 66           | 92                  | 1540    | 0,35                                  | 8,5       | ●                         | ●  | ●    | ●       | ●  | G353A051                | -                       | V   |  |
| 3                                       | 76           | 170                 | 2833    | 1                                     | 6         | ●                         | ●  | ●    | ●       | ●  | G353.060 <sup>(1)</sup> | -                       | V   |  |
| Ø - Compression fitting pipe connection |              |                     |         |                                       |           |                           |    |      |         |    |                         |                         |     |  |
| 1 1/2                                   | 52           | 44                  | 733     | 0.35                                  | 8.5       | ●                         | ●  | ●    | ●       | ●  | G353A065 <sup>(2)</sup> | -                       | V   |  |

● : Available feature

(1) Contains spring above the main diaphragm

(2) Threaded pipe connection is external (male thread)



### OPTIONS

- Waterproof enclosure with embedded screw terminal coil according to protection class IP67, CEE 10
- Explosionproof solenoids for hazardous locations according to ATEX and national standards
- **IECEX** certification
- Hose connection executions (3" only)
- Compliance with "UL" standards
- Plug with visual indication and/or peak voltage suppression
- Electronic timer
- Valves can also be supplied with FPM (fluoroelastomer) diaphragms and seals. Use the appropriate optional suffix letter for identification

### INSTALLATION

- The valves can be mounted in any position without affecting operation
- Threaded pipe connection is G (ISO 228/1) or compression fitting
- For compression fitting types tightness is achieved by the compressed gasket on the blow tube
- The use of the rubber gaskets as sealing members will allow a slight misalignment in piping when using compression fittings
- Other pipe threads are available on request
- Installation/maintenance instructions are included with each valve
- Spare parts kits and replacement coils are available

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

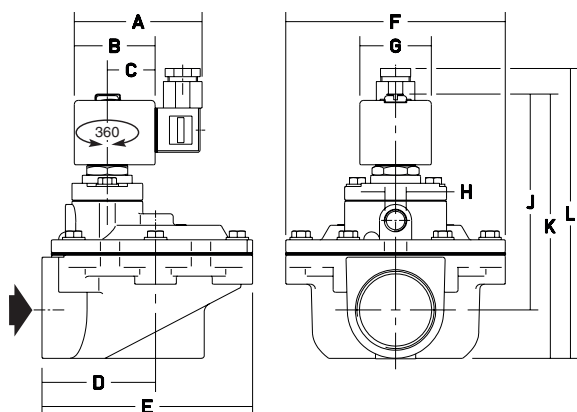


Fig. 1: Threaded pipe connection - aluminium

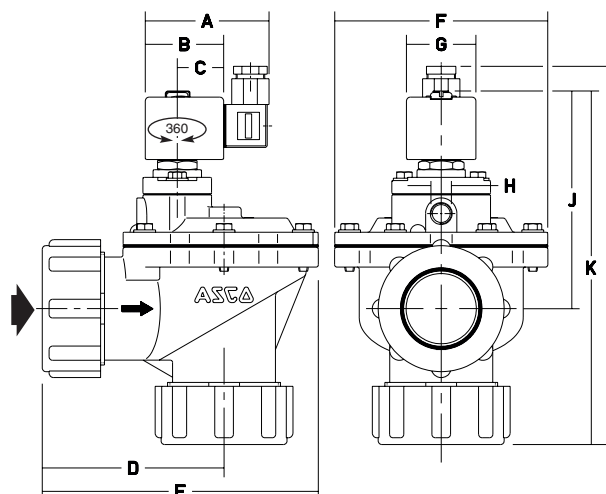


Fig. 2 Compression type fitting - aluminium

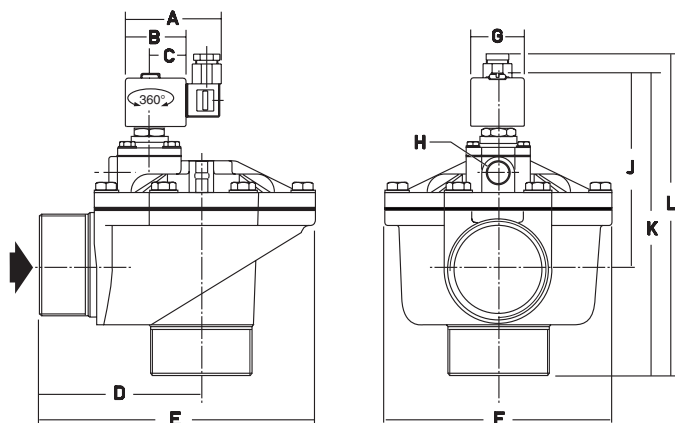


Fig. 3: External threaded type - aluminium

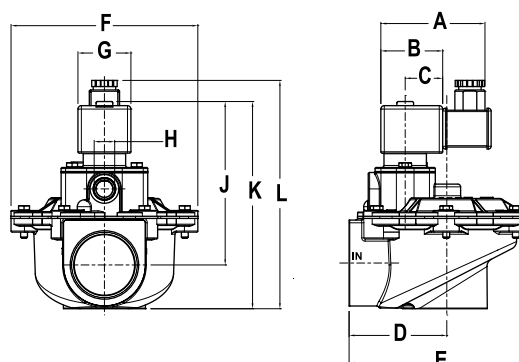


Fig. 4: Threaded pipe connection - stainless steel

| catalogue number | A  | B  | C  | D   | E   | F   | G  | H     | J   | K   | L   | weight (1) | (C)    |
|------------------|----|----|----|-----|-----|-----|----|-------|-----|-----|-----|------------|--------|
| SC(DU)G353A047   | 80 | 50 | 30 | 71  | 130 | 136 | 45 | G 3/8 | 131 | 161 | 178 | 1,4        | Fig. 1 |
| SC(DU)G353A050   | 80 | 50 | 30 | 95  | 168 | 165 | 45 | G 3/4 | 165 | 210 | 227 | 2,9        | Fig. 1 |
| SC(DU) G353-051  | 80 | 50 | 30 | 95  | 168 | 165 | 45 | G 3/4 | 165 | 210 | 227 | 2,6        | Fig. 1 |
| SC(DU) G353-060  | 80 | 50 | 30 | 143 | 240 | 192 | 45 | G 1/2 | 165 | 258 | 275 | 4,1        | Fig. 2 |
| SC(DU)G353A065   | 80 | 50 | 30 | 117 | 177 | 136 | 45 | G 3/8 | 131 | 225 | 242 | 1,75       | Fig. 3 |
| SC(DU)G353A134   | 80 | 50 | 30 | 71  | 130 | 136 | 45 | G 3/8 | 131 | 161 | 178 | 2,5        | Fig. 4 |

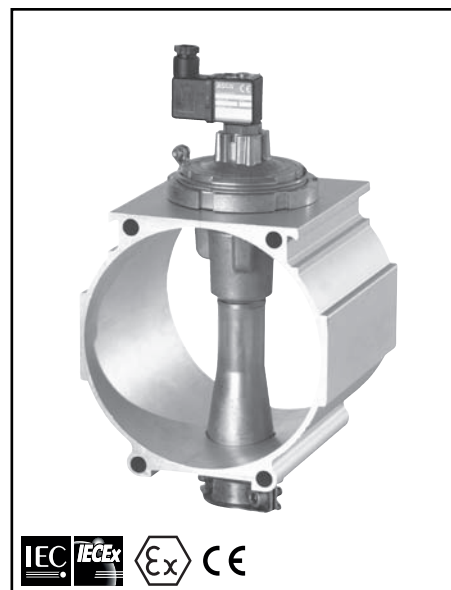
(1) Incl. coil and connector

(C) Construction type

All leaflets are available on: [www.asconumatics.eu](http://www.asconumatics.eu)

### FEATURES

- Power Pulse Tank System using aluminium profile and end covers with CE approval according to Directive 97/23/EC for Pressure Equipment
- Full immersed valve system with special springless piston/diaphragm design offers highest peak pressure and best flow performance operating features required for dust collector applications
- The high quality TPE piston/diaphragm guarantees a long operating life and a large temperature range
- Possibility to apply different combinations of pitch distances and upto 24 valves
- Easy to connect to other tank systems. Service connections for different accessories such as: filter regulator, pressure gauge, safety valve and automatic/manual drain valve
- Several blow pipe connections available, such as: Quick Mount, push-in, hose or threaded
- Built-in silencers reduce the noise and prevent foreign particles from entering the valve
- The integral operators are provided with epoxy moulded F-class coils. Various optional waterproof and explosionproof solenoids for use in potentially explosive atmospheres (gas & dust) according to Directive ATEX 94/9/EC can be mounted on the same basic valve (see pages 49 to 57)



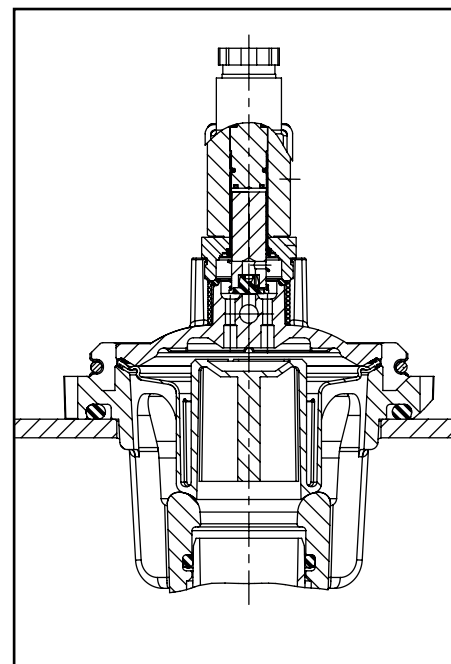
### GENERAL

**Differential pressure (PS)** 0,3 to 8,5 bar [1 bar = 100 kPa]  
**Ambient temperature range** -20°C to +85°C

### Tank System

**volume** 0,20 dm<sup>3</sup> per cm tank  
**recommended min. tank volume** 10 dm<sup>3</sup> (equals to 500 mm tank length)  
**min. pitch distance** 120 mm  
**maximum length** 3000 mm  
**min. pulse time** 50 ms

| fluid | temperature range (TS) | piston/diaphragm                        |
|-------|------------------------|-----------------------------------------|
| air   | -20 to +100 °C         | TPE (thermoplastic polyester elastomer) |



### CONSTRUCTION

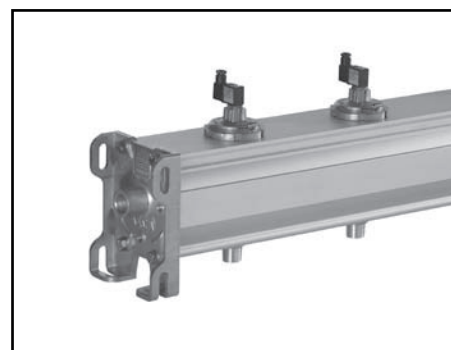
**Tank** Anodized aluminium  
**Adapter/body** Aluminium  
**Clipping** Stainless steel  
**Clamps** Stainless steel  
**Bolts (clamps)** Stainless steel  
**Core tube** Stainless steel  
**Core and plugnut** Stainless steel  
**Core spring** Stainless steel  
**Sealings & disc** NBR (nitrile)  
**Piston/diaphragm** TPE (thermoplastic polyester elastomer)  
**Shading coil** Copper  
**Coil insulation class** F  
**Connector** Spade plug (cable Ø 6 - 8 mm)  
**Connector specification** 3 x DIN 46244  
**Electrical safety** IEC 335

### ELECTRICAL CHARACTERISTICS

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

| coil type   | nominal power ratings |           |     |            | ambient temperature range (°C) | protection   |
|-------------|-----------------------|-----------|-----|------------|--------------------------------|--------------|
|             | inrush ~              | holding ~ |     | hot/cold = |                                |              |
|             | (VA)                  | (VA)      | (W) | (W)        |                                |              |
| CM22-FT     | 14,5                  | 11        | 6,3 | -          | -20 to +85                     | moulded IP65 |
| CM22-FI (1) | -                     | -         | -   | 15/22      | -20 to +85                     | moulded IP65 |

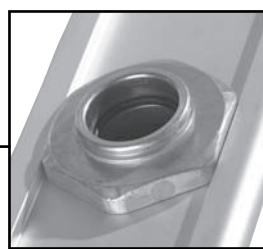
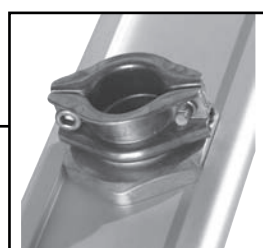
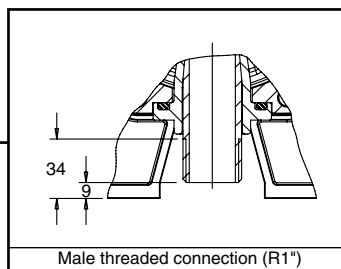
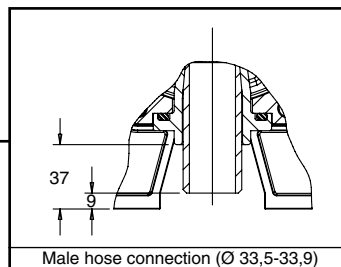
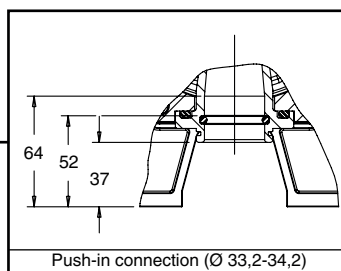
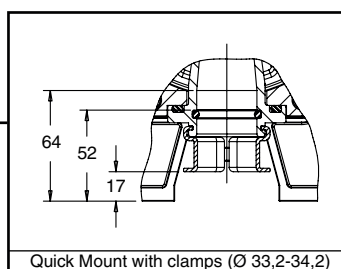
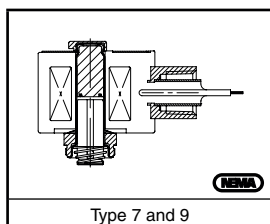
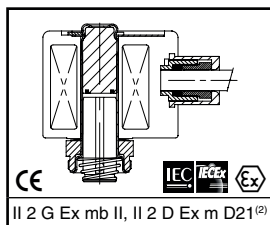
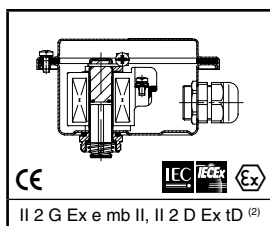
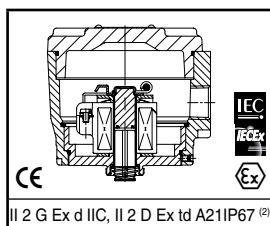
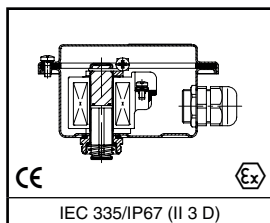
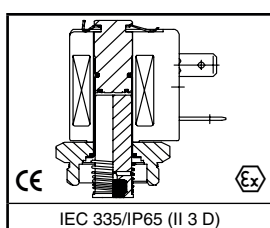
(1) Intermittent duty, Relative Duty Time is 10%. Max. on time 1 min.



### SPECIFICATIONS

| pipe<br>size | orifice<br>size | flow<br>coefficient<br>Kv |     | operating pressure differential<br>(bar) |              |     | coil type |         | catalogue<br>number |
|--------------|-----------------|---------------------------|-----|------------------------------------------|--------------|-----|-----------|---------|---------------------|
|              |                 |                           |     | min.                                     | maximum (PS) |     |           |         |                     |
|              |                 |                           |     |                                          | air          |     |           |         |                     |
|              | ~               | =                         | ~   |                                          | =            |     |           |         |                     |
| 1"           | 25              | 23                        | 384 | 0,30                                     | 8,5          | 8,5 | CM22-FT   | CM22-FI | .. E355A ...        |

**ORDERING INFORMATION - for example: SC E355A J 06** (Specify Voltage/Hz) + **Dimension code (specified on next page)**



<sup>(1)</sup> Specify required number of valves between 01 and 24

<sup>(2)</sup> Exact temperature class depends on wattage and max. ambient temperature (see also page 48 to 56)

### ORDERING INFORMATION DIMENSION CODE

|                 |       |               |
|-----------------|-------|---------------|
| Start distance  | A     | (min. 110 mm) |
| Standard pitch  | B/C/D | (min. 120 mm) |
| Deviating pitch | B/C/D | (min. 120 mm) |
| End distance    | A     | (min. 110 mm) |

#### Example I: Dimension code for a 4 valves tank system:

|                        |                                                          |
|------------------------|----------------------------------------------------------|
| Operator               | SC, 24V/DC                                               |
| Connection             | Quick Mount                                              |
| Number of valves       | 4 pcs                                                    |
| Start and End distance | 110 mm                                                   |
| Standard pitch         | 120 mm                                                   |
| Deviating pitch        | Between valve 2 and 3 is position C (see fig. 2); 150 mm |
| Catalogue number       | SC E355AJ04 24V/DC                                       |
| Dimension code         | 110120C150                                               |
| Complete order number  | SC E355AJ04 24V/DC + 110120C150                          |

#### Example II: Dimension code for a 8 valves tank system:

|                        |                                                                        |
|------------------------|------------------------------------------------------------------------|
| Operator               | SC, 230/50                                                             |
| Connection             | Thread                                                                 |
| Number of valves       | 8 pcs                                                                  |
| Start and End distance | 150 mm                                                                 |
| Standard pitch         | 160 mm                                                                 |
| Deviating pitch        | Between valve 2 and 3, 4 and 5, 6 and 7 is position C, E and G; 200 mm |
| Catalogue number       | SC E355AM08 230/50                                                     |
| Dimension code         | 150160CEG200                                                           |
| Complete order number  | SC E355AM08 230/50 + 150160CEG200                                      |

For assistance please consult our website: [www.asconumatics.eu](http://www.asconumatics.eu)

**DIMENSIONS (mm), WEIGHT (kg)**



Fig. 1 (front view)

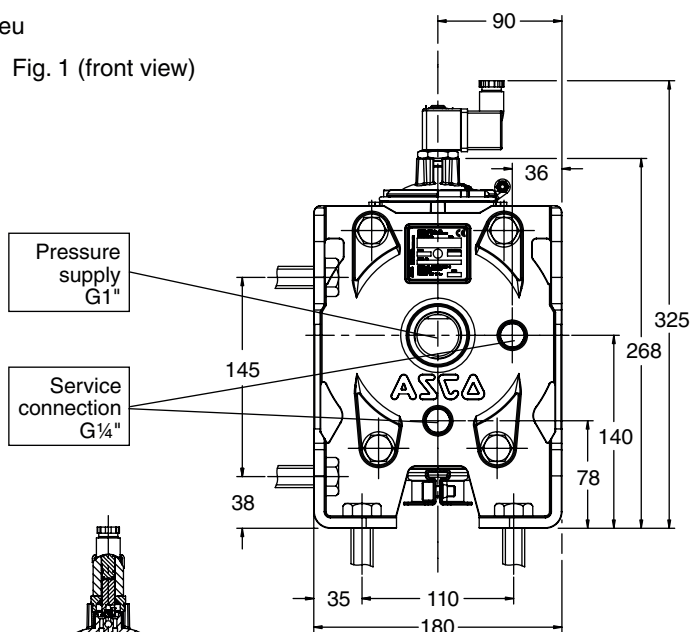
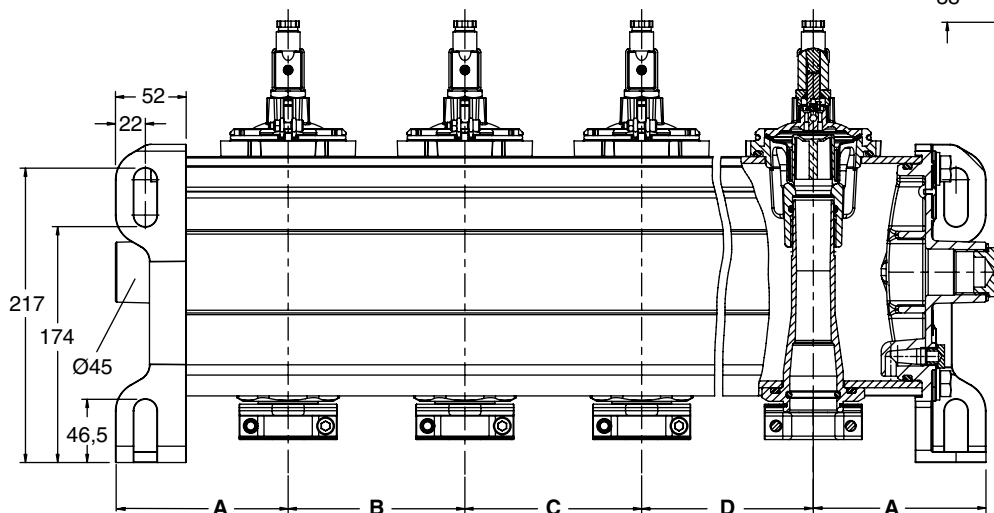


Fig. 2 (side view)



### OPTIONS

- Special customized executions
- Waterproof enclosures with embedded screw terminal coil according to protection class IP67, CEE 10
- Explosionproof solenoids for hazardous locations according to "ATEX" and national standards
- Explosionproof and watertight solenoids according to "NEMA" standards
- Separate Quick Mount clamps for outlet connection; kit number: **C132-679**

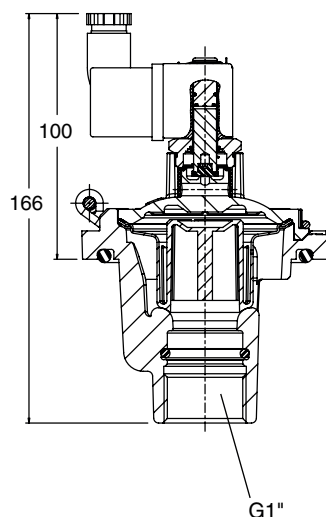
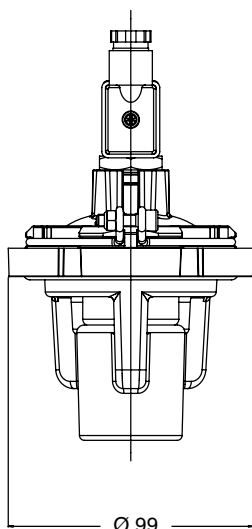
### INSTALLATION

- Tank system can be mounted in any position using the standard brackets integrated in the end cap (M12 bolts recommended) without affecting operation
- Pipe connection identifier is: R = according to ISO 7/1, G = according to ISO 228/1 or Ø for other outlet connections
- For Quick Mount types tightness is achieved by the O-ring sealing on the pipe (1" = Ø33,2 to 34,2) according to ISO 4200
- Installation/maintenance instructions and declaration of conformity are included with each tank system
- Spare valves, spare parts kits and coils are available

### SEPARATE / SPARE POWER PULSE VALVES

**FEATURES** - (same as for the tank system)

**DIMENSIONS** (mm), **WEIGHT** (kg)



### SPECIFICATIONS

| pipe size                                  | standard catalogue catalogue number | ATEX dust II3D catalogue number | weight (1) |
|--------------------------------------------|-------------------------------------|---------------------------------|------------|
| (G) Female threaded connection (ISO 228/1) |                                     |                                 |            |
| 1"                                         | SC E353A237                         | SCDU E353A237                   | 0,558      |

(1) = incl. coil and connector

### FEATURES

- Tank system using aluminium profile and end covers with CE approval according to Pressure Equipment Directive 97/23/EC, modules B1+D
- For use in dust collector applications requiring high flow capacity and accurate process control
- Full immersed valve system with polychloroprene (CR) diaphragm design offers highest peak pressure and best flow performance
- The high quality polychloroprene (CR) diaphragm guarantees a long operating life and a large temperature range
- Possibility to apply different combinations of pitch distances and up to 18 valves
- Easy to connect to other tank systems. Service connections for different accessories such as: filter regulator, pressure gauge, safety valve and automatic/manual drain valve
- Several blow pipe connections available, such as: Quick Mount, push-in, hose or male or female threaded
- Tanks are available in a direct control valve version with a selection of coil systems and voltages or as a remote control, single or double diaphragm version for external pilot valves or pilot boxes
- The integral operators are provided with epoxy moulded F-class coils. Various optional explosionproof solenoids for use in potentially explosive atmospheres according to Directive ATEX 94/9/EC, Zones 21+22 can be mounted



### GENERAL

|                           |                            |
|---------------------------|----------------------------|
| Pressure inlet connection | ISO 228/1, G 1 1/2" female |
| Air operating pressure    | min. 1,0 max. 8,0 bar      |
| Safety pressure           | 12,2 bar                   |
| Flow rate                 | Kv 43,3 = 724 l/min        |
| Ambient temperature range | -20°C to +85°C             |

### Tank System

|                              |                                                            |
|------------------------------|------------------------------------------------------------|
| volume                       | 0,314 dm <sup>3</sup> / cm                                 |
| recommended min. tank volume | 15 dm <sup>3</sup>                                         |
| min. pitch distance          | end cap 110 mm for bracket 120 mm;<br>between valve 160 mm |
| maximum length               | 3000 mm                                                    |

The tank system can be mounted in any position without affecting operation

| fluids | temperature range (TS) | diaphragm            |
|--------|------------------------|----------------------|
| air    | -20 to +100 °C         | CR (polychloroprene) |

### CONSTRUCTION

|                       |                                           |
|-----------------------|-------------------------------------------|
| Tank                  | Anodised aluminium profile EN AW-6060 T66 |
| Valve, outlet adapter | Die-cast aluminium GD-ALSi12 to EN 1706   |
| End caps              | Die-cast aluminium GD-ALSi12 to EN 1706   |
| Spring                | Stainless steel                           |
| Plugs                 | PA (polyamide)                            |
| Sealings & disc       | NBR (nitrile)                             |
| Screws                | Steel 8.8                                 |
| Diaphragm             | CR (optionally FPM or TPE)                |
| Mounting brackets     | stainless steel AISI 304 (1.4301)         |
| Shading coil          | Copper                                    |

### ELECTRICAL CHARACTERISTICS

|                                       |                                    |
|---------------------------------------|------------------------------------|
| Coil insulation class                 | F                                  |
| Connector                             | Spade plug (cable Ø 6-10 mm)       |
| Connector specification               | 3 x DIN 46244                      |
| Electrical safety                     | IEC 335                            |
| Standard voltages                     | DC (=) : 24V                       |
| (Other voltages and 60 Hz on request) | AC (~) : 24V - 120V - 230V / 50 Hz |

| coil type | nominal power ratings |           |      |           | operator temperature range (TS) (°C) | protection   |
|-----------|-----------------------|-----------|------|-----------|--------------------------------------|--------------|
|           | inrush                | holding   |      | hot/cold  |                                      |              |
|           | ~<br>(VA)             | ~<br>(VA) | (W)  | =<br>(W)  |                                      |              |
| CMXX-FT   | 55                    | 23        | 10,5 | -         | -20 to +85                           | moulded IP65 |
| CMXX-FF   | -                     | -         | -    | 14 / 19,7 |                                      |              |

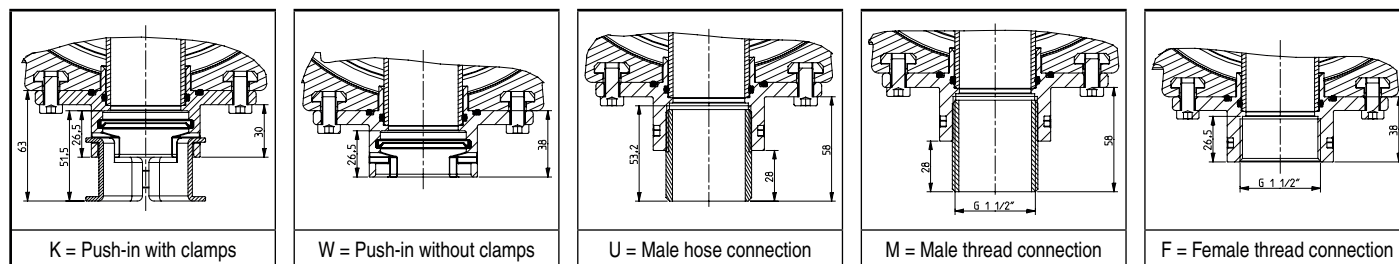
## ALUMINIUM TANK SYSTEM

### HOW TO ORDER

#### 15-DIGIT PRODUCT CODE

|                                                                                                                                                                                                                               |          |            |          |          |          |          |          |             |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------|----------|----------|----------|----------|----------|-------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Thread connection</b><br>G = ISO 228/1                                                                                                                                                                                     | <b>G</b> | <b>355</b> | <b>B</b> | <b>8</b> | <b>M</b> | <b>B</b> | <b>S</b> | <b>0000</b> | <b>F1</b> | <b>Voltage - class</b><br><b>F1</b> = 24 DC - Class F<br><b>FL</b> = 24/50 - Class F<br><b>FH</b> = 230/50-60 - Class F<br><b>F2</b> = 120/60 - Class F<br><b>00</b> = All remote valves no voltage required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Product series</b><br>355                                                                                                                                                                                                  |          |            |          |          |          |          |          |             |           | <b>Dimensions and option code</b><br>Consult our Dynamic Product Modeling Tool on: <a href="http://www.asconumatics.eu">www.asconumatics.eu</a><br>Mounting brackets (2 or 3) depending on total weight<br>Silencer for double stage valves                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Revision letter</b><br>B                                                                                                                                                                                                   |          |            |          |          |          |          |          |             |           | <b>Pitch/dimensions</b><br>Dimension code for distance between valves, end caps and mounting brackets is determined by ASCO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Diameter code / diaphragm material</b><br><b>8</b> = 8" / Polychloroprene (CR)<br><b>F</b> = 8" / Fluoroelastomer (FPM)<br><b>C</b> = 8" / Thermoplastic polyester elastomer (TPE)<br>Only for single stage remote version |          |            |          |          |          |          |          |             |           | <b>Actuation</b><br><b>1</b> = Remote single stage prepared for pilot box, incl. brackets; push in fittings; plastic tube<br><b>2</b> = Remote double stage prepared for pilot box, incl. brackets; push in fittings; plastic tube<br><b>3</b> = Remote control single stage<br><b>4</b> = Remote control double stage<br><b>5</b> = Remote single stage prepared for pilot box ATEX II G/D<br><b>6</b> = Remote double stage prepared for pilot box ATEX II G/D<br><b>7</b> = Remote control single stage ATEX II G/D<br><b>8</b> = Remote control double stage ATEX II G/D<br><b>S</b> = Solenoid operators SC IP65 ISO 4400<br><b>D</b> = Solenoid operators SG ATEX 3D<br><b>N</b> = Solenoid operators NF ATEX 2G/D<br><b>E</b> = Solenoid operators EM ATEX 2G/D<br><b>P</b> = Solenoid operators PV ATEX 2G/D<br><b>F</b> = Solenoid operators EF NEMA 7+9 ICS-6 ANSI<br>For more technical information see catalogue page "OPERATORS" |
| <b>Outlet connection type</b><br><b>K</b> = Push-in with clamps<br><b>W</b> = Push-in without clamps<br><b>U</b> = Male hose connection<br><b>M</b> = Male thread connection<br><b>F</b> = Female thread connection           |          |            |          |          |          |          |          |             |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Number of valve stations</b><br><b>1</b> = 1<br>...<br><b>A</b> = 10<br><b>B</b> = 11<br><b>C</b> = 12<br><b>D</b> = 13<br><b>E</b> = 14<br><b>F</b> = 15<br><b>G</b> = 16<br><b>H</b> = 17<br><b>J</b> = 18               |          |            |          |          |          |          |          |             |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

### OUTLET CONNECTION TYPES



### SPARE PARTS KITS

| designation                                     | spare parts kit no. |
|-------------------------------------------------|---------------------|
| Double remote operated valve                    | C113826             |
| Solenoid operated valve                         | C113827             |
| Spare parts for valve sealings                  | M200336A00          |
| Spare parts kit for pilot box mounting brackets | M200337A00          |

### ORDERING INFORMATION

**DIMENSIONS (mm), WEIGHT (kg), VOLUME (l)** 

#### Solenoid operated valve system

including spade plug connector ISO 4400, IP65, IEC 335

Fig. 1 (front view)

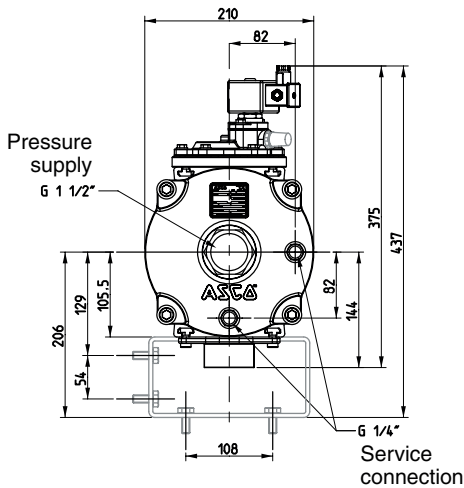
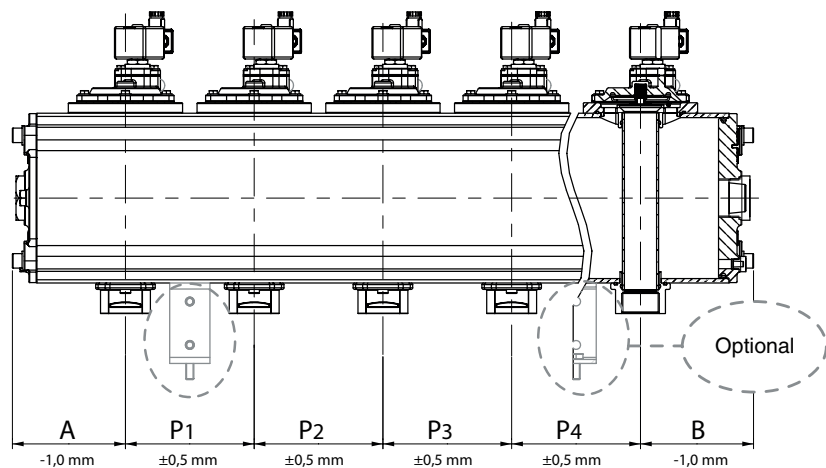


Fig. 2 (side view)



**Example I: Dimension code for a 5 solenoid operated valve 24 DC tank system with push-in outlet:**

|                 |                      |
|-----------------|----------------------|
| Start distance  | A = 125 mm           |
| Standard pitch  | P = 1+2+3+4 = 175 mm |
| End distance    | B = 125 mm           |
| Total dimension | 950 mm               |
| Weight          | 27 kg                |
| Volume          | 26 l                 |
| Order number    | G355B8W5S0015F1      |

For assistance please consult our website: [www.asconumatics.eu](http://www.asconumatics.eu)

## ORDERING INFORMATION

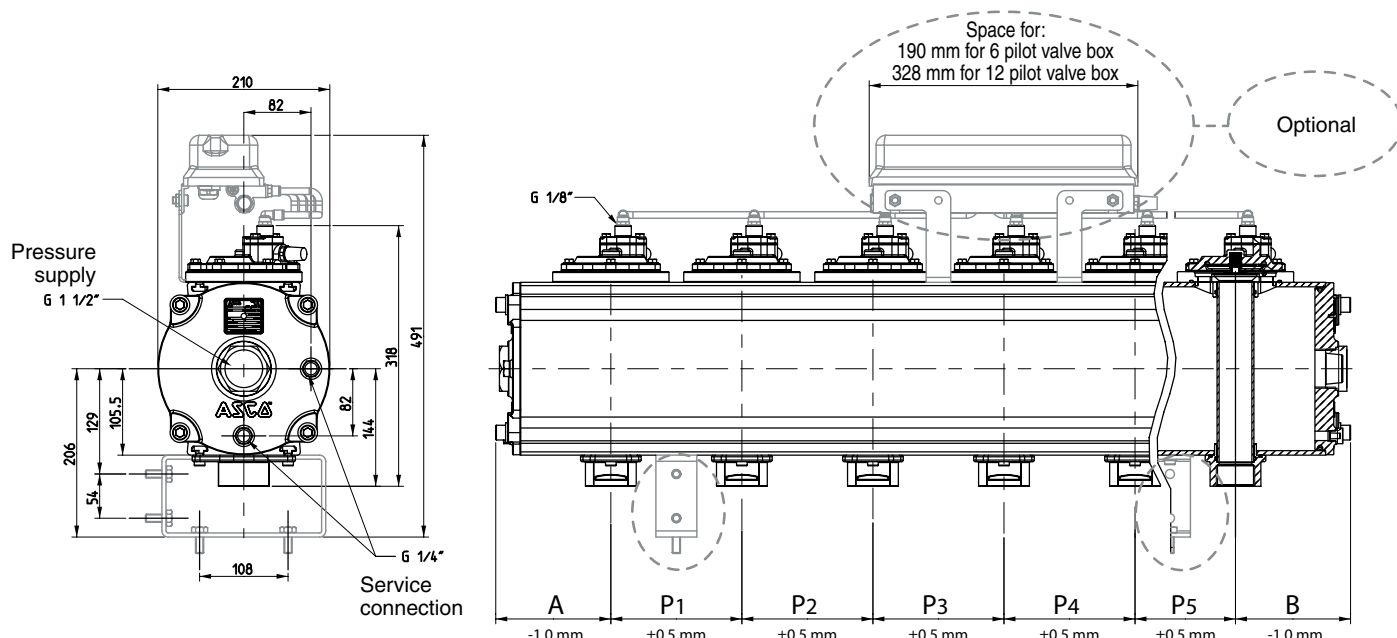
## DIMENSIONS (mm), WEIGHT (kg), VOLUME (l)

### Remote double staged operated valve system prepared for pilot box

including pilot box mounting brackets, push-in fittings and tubes for G 1/8" pilot box series 110

Fig. 1 (front view)

Fig. 2 (side view)



**Example II: Dimension code for a 6 double remote operated valve tank system prepared for pilot box with clamp outlet:**

|                 |                                        |
|-----------------|----------------------------------------|
| Start distance  | A = 137 mm                             |
| Standard pitch  | P = 1+2+4+5 = 190 mm                   |
| Deviating pitch | P = 3 = between valve 3 and 4 = 260 mm |
| End distance    | B = 137 mm                             |
| Total dimension | 1294 mm                                |
| Weight          | 34 kg                                  |
| Volume          | 37 l                                   |
| Order number    | <b>G355B8K62001600</b>                 |

For technical information on ASCO pilot boxes see catalogue series 110

For assistance please consult our website: [www.asconumatics.eu](http://www.asconumatics.eu)

## OPTIONS

- Special customised executions
- Valve can be supplied with FPM (fluoroelastomer) and TPE (thermoplastic polyester elastomer) diaphragms.
- Waterproof enclosures with embedded screw terminal coil according to protection class IP67, CEE 10
- Explosionproof solenoids for hazardous locations according to "ATEX" and national standards
- Explosionproof and watertight solenoids according to "NEMA" standards
- Separate Quick Mount clamps for outlet connection; kit number: **C117-290**

## INSTALLATION

- The tank system can be mounted in any position using the standard brackets (M8 bolts recommended) without affecting operation.
- Pipe connection identifier is: G = according to ISO 228/1 and ISO 7/1, or Ø for other outlet connections
- For Quick Mount types tightness is achieved by the O-ring sealing on the pipe (1 1/2" = Ø47,8 to 48,8) according to ISO 4200.
- When connecting piping or tubing to the G 1/8" or G 1/4" connection in the valve bonnet, the remote ASCO pilot valve should be mounted as close as possible to the main pulse valve. Connection tubing lengths of 3 meters or less have little effect on the pulse response. Installations with over 3 meters of tubing must be tested under actual operating conditions. Tubing with Ø6 or Ø8 mm O.D. is recommended for all installations.
- Installation/maintenance instructions and declaration of conformity are included with each tank system.
- Spare parts kits and coils are available.

## FEATURES

- Immersion tank system using steel profile and welded end covers with CE approval according to Directive 87/404/EC
- Immersed valve system with special diaphragm design offers highest peak pressure and best flow performance operating features required for dust collector applications
- The high quality diaphragms are reinforced and wear resistant to guarantee a long operating life, even under harsh conditions
- Possibility to apply different combinations of pitch distances
- Service connections for different accessories such as: filter regulator, pressure gauge, safety valve and automatic/manual drain valve
- Available with hose and threaded blow pipe connections
- The integral operators are provided with epoxy moulded F-class coils

## GENERAL

**Differential pressure (PS)** 0,35 to 8 bar [1 bar = 100kPa]

**Ambient temperature range** -10 to +80°C

| fluid | temperature range (TS) | seal materials   |
|-------|------------------------|------------------|
| air   | -10 to +80°C           | CR (chloroprene) |

## CONSTRUCTION

|                                |                             |
|--------------------------------|-----------------------------|
| <b>Tank</b>                    | Steel, grey                 |
| <b>Bonnet</b>                  | Aluminium                   |
| <b>Bolts</b>                   | Stainless steel             |
| <b>Core tube</b>               | Stainless steel             |
| <b>Core and plugnut</b>        | Stainless steel             |
| <b>Spring</b>                  | Stainless steel             |
| <b>Sealing &amp; discs</b>     | NBR (nitrile)               |
| <b>Diaphragm</b>               | CR (chloroprene)            |
| <b>Shading coil</b>            | Copper                      |
| <b>Coil insulation class</b>   | F                           |
| <b>Connector</b>               | Spade plug (cable Ø 6-10mm) |
| <b>Connector specification</b> | ISO 4400                    |
| <b>Electrical safety</b>       | IEC 335                     |

## ELECTRICAL CHARACTERISTICS

**Standard voltages** DC (=) : 24V - 48V;  
(Other voltages and 60 Hz on request) AC (~) : 24V - 48V - 115V - 230V / 50Hz

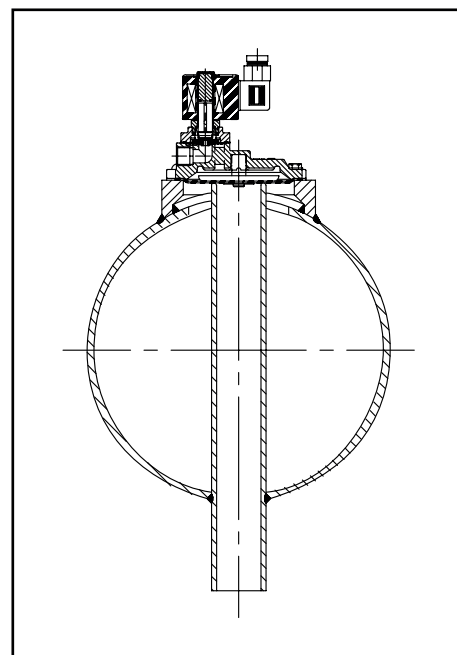
| coil type | nominal power ratings |           |          |           | protection   |
|-----------|-----------------------|-----------|----------|-----------|--------------|
|           | inrush                | holding   |          | hot/cold  |              |
|           | ~<br>(VA)             | ~<br>(VA) | ~<br>(W) | =<br>(W)  |              |
| CMXX-FT   | 55                    | 23        | 10,5     | -         | moulded IP65 |
| CMXX-FT   | -                     | -         | -        | 14 / 19,7 |              |

## SPECIFICATIONS

| pipe size      | orifice size | flow coefficient<br>Kv |          | operating pressure differential (bar) |           | catalogue number              |                               |
|----------------|--------------|------------------------|----------|---------------------------------------|-----------|-------------------------------|-------------------------------|
|                |              |                        |          | min                                   | max. (PS) |                               |                               |
|                |              |                        |          |                                       | air       |                               |                               |
|                | ~ / =        | hose                   | threaded |                                       |           |                               |                               |
| 8" Tank System |              |                        |          |                                       |           |                               |                               |
| 1 1/2"         | 40           | 46                     | 768      | 0.35                                  | 8         | SCG357ANxx <sup>(1) (2)</sup> | SCG357AOxx <sup>(1) (2)</sup> |

<sup>(1)</sup> Standard tank has round ends. For flat ends use suffix FE

<sup>(2)</sup> xx indicates the number of valves



### ORDERING

Example: Dimension code for a 4 valves tank system:

|                        |                                                                    |
|------------------------|--------------------------------------------------------------------|
| Tank diameter          | 8"                                                                 |
| Operator               | SC, 24V/DC                                                         |
| Pipe size              | 1 1/2"                                                             |
| Connection             | Hose (see fig. 1: Connection Type)                                 |
| Number of valves       | 4 pcs                                                              |
| Start and End distance | 170 mm                                                             |
| Standard pitch         | 180 mm                                                             |
| Deviating pitch        | Between valve no. 3 and no. 4<br>is position D (see fig. 1) 200 mm |
| Catalogue number       | SCG357AN04 24V/DC                                                  |
| Dimension code         | 170180D200                                                         |

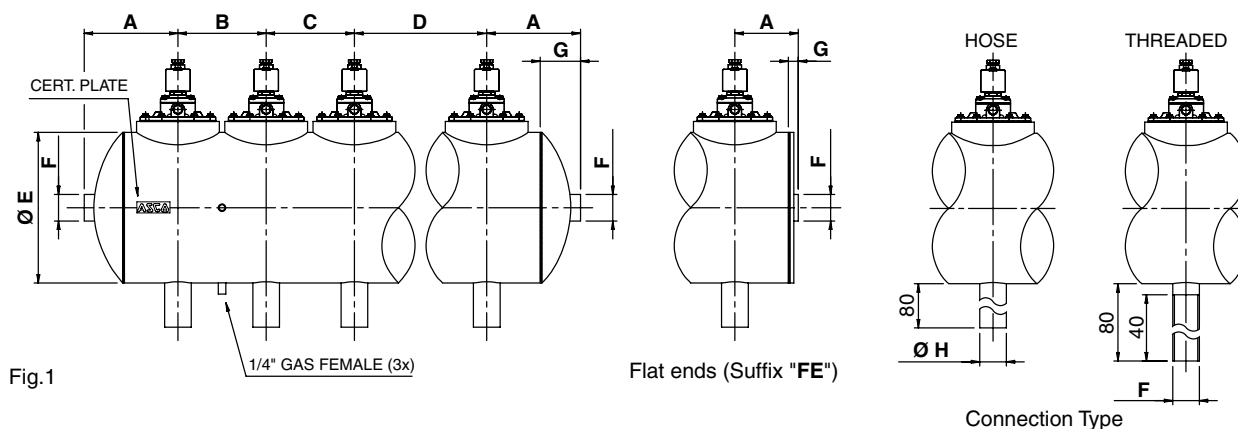
### ORDERING EXAMPLE TANK SYSTEM:

|          |    |     |         |   |     |     |      |                   |
|----------|----|-----|---------|---|-----|-----|------|-------------------|
| SCG357AN | 04 | (*) | 24 V/DC | + | 170 | 180 | D200 |                   |
|          |    |     |         |   |     |     |      | deviating pitch   |
|          |    |     |         |   |     |     |      | standard pitch    |
|          |    |     |         |   |     |     |      | start & end dist. |
|          |    |     |         |   |     |     |      | voltage           |
|          |    |     |         |   |     |     |      | tank end type     |
|          |    |     |         |   |     |     |      | no. of valves     |
|          |    |     |         |   |     |     |      | catalogue no.     |

### SPARE PARTS KITS

| catalogue number | spare parts kit no. |
|------------------|---------------------|
|                  | ~/=                 |
| SCG357ANxx       |                     |
| SCG357AOxx       | C113827             |

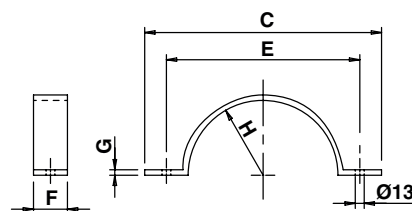
### DIMENSIONS (mm)



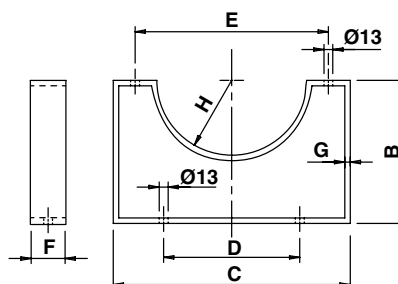
| tank diameter | fig. | A                              |        | B / C / D                |        | A                            |        | Ø E   | F        | G  |    | Ø H  |
|---------------|------|--------------------------------|--------|--------------------------|--------|------------------------------|--------|-------|----------|----|----|------|
|               |      | min. start distance<br>(round) | (flat) | minimum pitch<br>(round) | (flat) | min. end distance<br>(round) | (flat) |       |          |    |    |      |
| 8"            | 1    | 170                            | 118    | 160                      | 160    | 170                          | 118    | 218,1 | G 1 1/2" | 70 | 18 | 48,3 |

(\*) For standard tank (round ends) use no suffix, for flat ends use suffix FE

### MOUNTING BRACKETS



| tank diameter | fig. | C   | Ø E | F  | G | H   |
|---------------|------|-----|-----|----|---|-----|
| 8"            | 2    | 348 | 284 | 50 | 8 | 110 |



| tank diameter | fig. | B   | C   | D   | Ø E | F  | G | H   |
|---------------|------|-----|-----|-----|-----|----|---|-----|
| 8"            | 3    | 210 | 348 | 200 | 284 | 50 | 8 | 110 |

### INSTALLATION

- Tank System can be mounted in any position. We can supply standard mounting brackets with each tank by specifying suffix MB behind the catalogue number (see figure 2 and 3)
- Installation / maintenance instructions and declaration of conformity are included with each tank system
- Spare part kits and coils are available