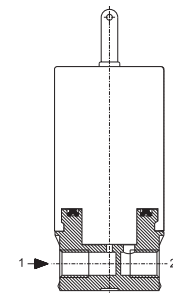
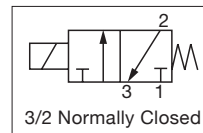
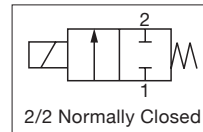


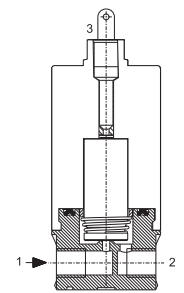
# ASCO™ MINIATURE SOLENOID VALVES

## GENERAL SERVICE VALVES

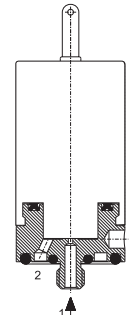
- The S Series solenoid valves are designed for use with air and inert gases
- Compact light-weight architecture and low power consumption make them ideal for portable medical devices
- Larger orifice sizes and vacuum capability make these valves extremely versatile across multiple disciplines
- Available in a variety of different porting configurations for manifold and in-line mounting
- Meets all relevant CE directives, and is RoHS compliant
- Typical applications include:
  - Respiratory Therapy
  - Anesthesia Delivery
  - Dental
  - Industrial Gas Analyzers



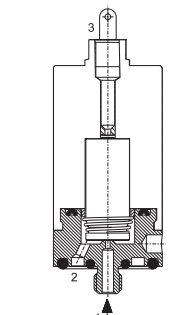
2/2 NC Line Mount



3/2 NC Line Mount



2/2 NC Manifold Mount



3/2 NC Manifold Mount

| Fluids*                         | Temperature Range                  | Seal Materials*                             |
|---------------------------------|------------------------------------|---|
| Air or Inert Gases <sup>1</sup> | -23 °C to 66 °C (-10 °F to 150 °F) | FKM (fluoroelastomer),<br>(EPDM on request) |

<sup>1</sup> Filtered at 10µm

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

| General Valve Information |                    |
|---------------------------|--------------------|
| Body                      | Stainless steel    |
| Others                    | Stainless steel    |
| Response Time             | < 10ms             |
| Vacuum Rating             | -1 bar (-14.5 psi) |

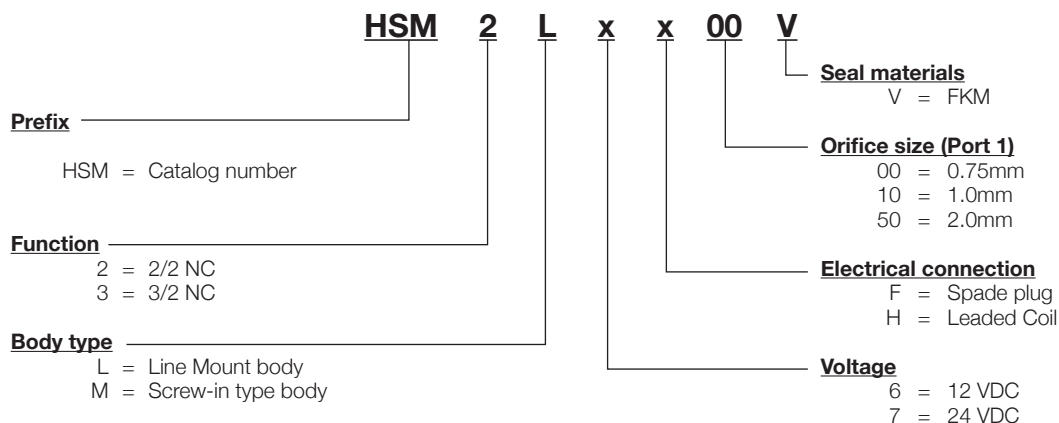
| Electrical Characteristics |                |
|----------------------------|----------------|
| Standard Voltages          | 12 VDC, 24 VDC |
| Power Consumption          | 0.65, 2.0 W    |

| Insulation Class | Coil Insulation | Protection         | Power Ratings |         |          |   | Ambient Temperature Range | Electrical Connection  | Type <sup>1</sup> |
|------------------|-----------------|--------------------|---------------|---------|----------|---|---------------------------|--|-------------------|
|                  | °C (°F)         |                    | Inrush        | Holding | Hot/Cold |   |                           |  |                   |
| B                | -               | IP40<br>(EN 60529) | VA            | VA      | W        | W | -23 to 66<br>(-10 to 150) | Spade plug or<br>lead wires 20 AWG, length 300mm<br>(11.8in) | 01                |

<sup>1</sup> Refer to the dimensional drawings on the following page

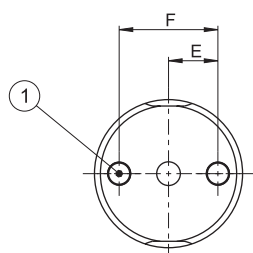
| Specifications           |              |          |                  |       |                               |               |          |              |                 |                    |            |
|--------------------------|--------------|----------|------------------|-------|-------------------------------|---------------|----------|--------------|-----------------|--------------------|------------|
| Connection               | Orifice Size |          | Flow Coefficient |       | Operating Pressure, bar (psi) |               |          | Power Rating |                 | Catalog Number     |            |
|                          | mm (inches)  |          | Kv (m³/h)        | Cv    | min.                          | max.          |          |              |                 |                    |            |
|                          |              |          |                  |       |                               | air and gases |          | W            | Line Mount Body | Screw-in Type Body |            |
| 2/2 NC - Normally Closed |              |          |                  |       |                               |               |          |              |                 |                    |            |
| M5                       | 0.75 (0.03)  |          | 0.025            | 0.016 | -0.9 (-13)                    | -             | 7 (102)  | -            | 1.5             | HSM2Lxx00V         | HSM2Mxx00V |
|                          | 1 (0.04)     |          | 0.041            | 0.027 | -0.9 (-13)                    | -             | 7 (102)  | -            | 1.5             | HSM2Lxx10V         | HSM2Mxx10V |
|                          | 2 (0.08)     |          | 0.085            | 0.057 | -0.9 (-13)                    | -             | 3.5 (51) | -            | 1.5             | HSM2Lxx50V         | HSM2Mxx50V |
| 3/2 NC - Normally Closed |              |          |                  |       |                               |               |          |              |                 |                    |            |
|                          | Port 1       | Port 2   |                  |       |                               |               |          |              |                 |                    |            |
| M5                       | 0.75 (0.03)  | 1 (0.04) | 0.025            | 0.016 | -0.9 (-13)                    | -             | 7 (102)  | -            | 1.5             | HSM3Lxx00V         | HSM3Mxx00V |
|                          | 1 (0.04)     | 1 (0.04) | 0.041            | 0.027 | -0.9 (-13)                    | -             | 7 (102)  | -            | 1.5             | HSM3Lxx10V         | HSM3Mxx10V |
|                          | 2 (0.08)     | 1 (0.04) | 0.085            | 0.057 | -0.9 (-13)                    | -             | 3.5 (51) | -            | 1.5             | HSM3Lxx50V         | HSM3Mxx50V |

## How to Order

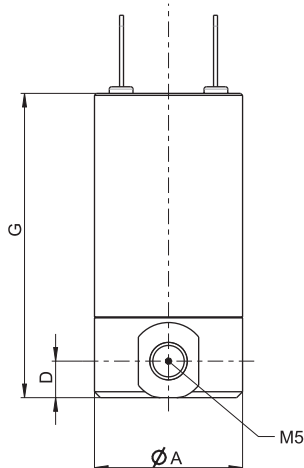


## Dimensions: mm (inches)

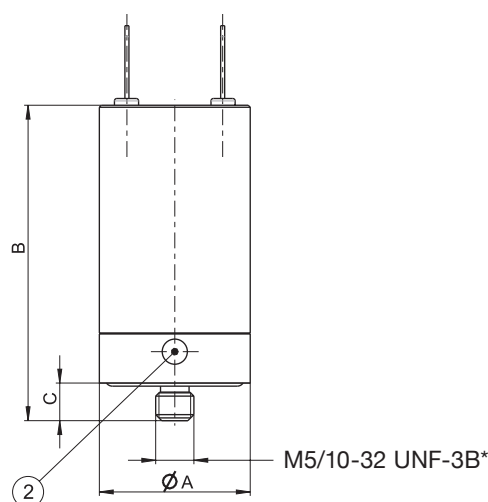
### HSM2Lxx00V/HSM2Lxx10V/HSM2Lxx50V HSM2Mxx00V/HSM2Mxx10V/HSM2Mxx50V



- ① 2 mounting holes  
ØM3x0.5
- ② Mounting with hook  
spanner wrench DIN 1810B

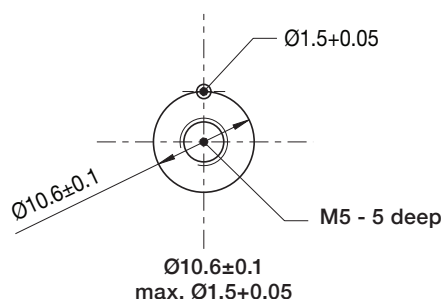


- ① 2 mounting holes ØM3x0.5
- ② Mounting with hook spanner wrench DIN 1810B



\* Supplied with 10-32 UNF-3B male thread compatible with M5 female counter-thread

### Screw-in Mounting Pattern

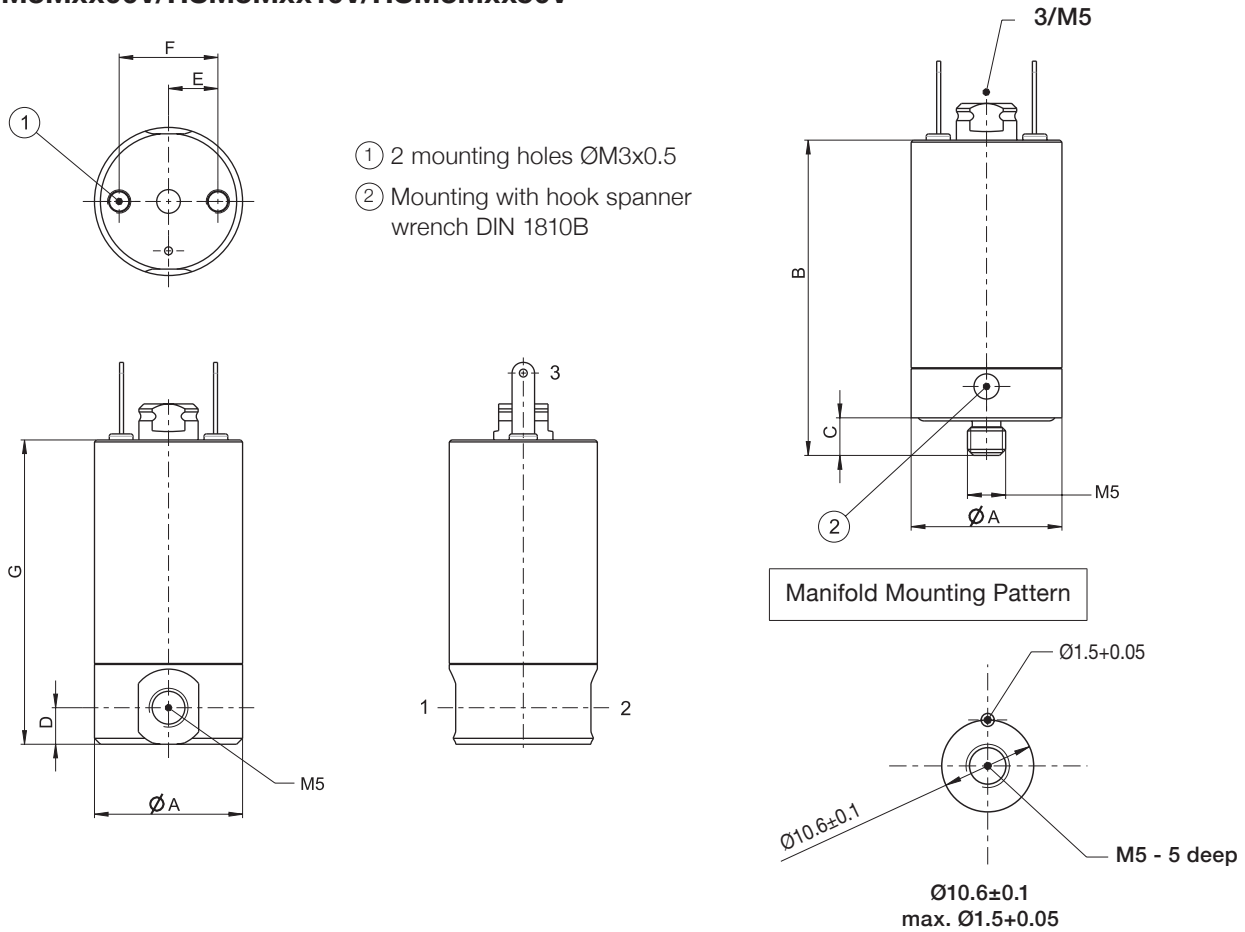


| Connection Type    | Catalog Number                   | A               | B               | C             | D             | E              | F              | G               |
|--------------------|----------------------------------|-----------------|-----------------|---------------|---------------|----------------|----------------|-----------------|
| Line Mount body    | HSM2Lxx00V/HSM2Lxx10V/HSM2Lxx50V | 19.05<br>(0.75) | -               | -             | 4.7<br>(0.18) | 6.35<br>(0.25) | 12.7<br>(0.50) | 39.11<br>(1.54) |
| Screw-in type body | HSM2Mxx00V/HSM2Mxx10V/HSM2Mxx50V | 19.05<br>(0.75) | 39.62<br>(1.56) | 4.8<br>(0.19) | -             | -              | -              | -               |

# **ASCO™ MINIATURE SOLENOID VALVES** GENERAL SERVICE VALVES

**Dimensions: mm (inches)**

**HSM3Lxx00V/HSM3Lxx10V/HSM3Lxx50V**  
**HSM3Mxx00V/HSM3Mxx10V/HSM3Mxx50V**



| Connection Type    | Catalog Number                   | A               | B               | C             | D             | E              | F              | G               |
|--------------------|----------------------------------|-----------------|-----------------|---------------|---------------|----------------|----------------|-----------------|
| Line Mount body    | HSM3Lxx00V/HSM3Lxx10V/HSM3Lxx50V | 19.05<br>(0.75) | -               | -             | 4.7<br>(0.18) | 6.35<br>(0.25) | 12.7<br>(0.50) | 39.11<br>(1.54) |
| Screw-in type body | HSM3Mxx00V/HSM3Mxx10V/HSM3Mxx50V | 19.05<br>(0.75) | 39.62<br>(1.56) | 4.8<br>(0.19) | -             | -              | -              | -               |

## Options

- EPDM seals available on request
- Oxygen service
- Other pipe connections available on request (10-32 UNF-3B)

## Installation

- The solenoid valves can be mounted in any position without affecting operation
- Line Mount solenoid valves have 2 mounting holes in body

