FEATURES

- Solenoid valve suitable for cutting off the flow of a fluid by pinch
- For sterile, aseptic, physiological and food applications
- No turbulence when cutting off flow by pinch
- Silent operation
- Full bore output flow compared with a traditional solenoid valve
- Manual pulse control for fitting tube
- A single component in contact with the fluid, i.e. the tube
- Bi-directional flow
- The solenoid valves satisfy all relevant EC directives

GENERAL

Differential pressure

See «SPECIFICATIONS» [1 bar = 100 kPa]

MATERIALS IN CONTACT WITH FLUID

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

Recommended flexible tube

VMQ (silicone)
(max. hardness: 50 Shore A)
The silicone tube is not included in our supply

OTHER MATERIALS

Body
Aluminium, anodised
Pinch mechanism
POM (Graphite-reinforced polyacetal)
Internal parts
Stainless steel
Guide tube
Nickel-plated brass

ELECTRICAL CHARACTERISTICS

Coil insulation class
F
Connector
Spade plug (cable Ø 4-6 mm or Ø 6-10 mm)
Connector specification
4 W/8 W/6 W (DMX)
6 W/13 W (AMX/FNX)
DIN 43650, 9.4 mm, industry standard B
ISO 4400 / EN 175301-803, form A
Electrical safety
IEC 335
Electrical enclosure protection
Coil type 01 = IP40 / Coil type 02-03 = IP65

SPECIFICATIONS

<table>
<thead>
<tr>
<th>tube I.D.</th>
<th>tube O.D.</th>
<th>pinch force</th>
<th>operating pressure differential (bar)</th>
<th>power coil (W)</th>
<th>catalogue number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(mm)</td>
<td>(mm)</td>
<td>(daN)</td>
<td>max. (PS) air</td>
<td>inert gas (+)</td>
<td>liquids (+)</td>
</tr>
<tr>
<td>0.76</td>
<td>1.65</td>
<td>0.12</td>
<td>0</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>1.02</td>
<td>2.16</td>
<td>0.18</td>
<td>0</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>1.57</td>
<td>3.18</td>
<td>0.22</td>
<td>0</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>1.98</td>
<td>3.18</td>
<td>0.18</td>
<td>0</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>3.4</td>
<td>4.7</td>
<td>0.4</td>
<td>0</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>4.8</td>
<td>7.9</td>
<td>0.85</td>
<td>0</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>6.4</td>
<td>9.5</td>
<td>1.1</td>
<td>0</td>
<td>0.8</td>
<td>0.8</td>
</tr>
</tbody>
</table>

prefix option

<table>
<thead>
<tr>
<th>(VA)</th>
<th>(VA)</th>
<th>(W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>-</td>
<td>-4</td>
</tr>
<tr>
<td>-</td>
<td>-7</td>
<td>8</td>
</tr>
<tr>
<td>-</td>
<td>-9</td>
<td>13</td>
</tr>
</tbody>
</table>

Replacement coil

<table>
<thead>
<tr>
<th>(PS)</th>
<th>(VA)</th>
<th>(W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 V DC</td>
<td>43005268</td>
<td>43005269</td>
</tr>
<tr>
<td>24 V DC</td>
<td>500701-001</td>
<td>500701-002</td>
</tr>
<tr>
<td>10-60</td>
<td>500701-003</td>
<td>500701-004</td>
</tr>
<tr>
<td>24 V DC</td>
<td>43005143</td>
<td>43005144</td>
</tr>
<tr>
<td>43005316</td>
<td>43005317</td>
<td></td>
</tr>
</tbody>
</table>

- Refer to the dimensional drawings on the following page.
- Observe the minimum of time stated, see graph above.
OPTIONS AND ACCESSORIES

• Flexible tubes having to use an external guiding device for optimum support (see dimensions):
  - with an outside diameter lower than 2.2 mm (catalogue numbers SCH384B001 to .B004)
  - with an outside diameter lower than 3.5 mm (catalogue number SCH384A005)
  - with an outside diameter lower than 6 mm (catalogue numbers SCH384B006 and .007)
• For use on tubes other than those recommended, contact us
• Plug with visual indication and peak voltage suppression or with cable length of 2 m

INSTALLATION

• The solenoid valves can be mounted in any position without affecting operation However, for optimum performance it is recommended that they be fitted with the solenoid operator at the top
• Fixing plate built in between the body and the coil for assembly in a bank on a base plate
• Flexible tubes are not included in our supply
• Do not connect the solenoid valve to the power supply without fitting a flexible tube beforehand
• Installation/maintenance instructions are included with each valve

ORDERING EXAMPLES:

<table>
<thead>
<tr>
<th>Type 01: SCH384B001/002/003/004</th>
<th>Type 02: SCH384A005</th>
<th>Type 03: SCH384B006/B007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefix &quot;SC&quot; Solenoid IEC 335 / DIN 43650</td>
<td>IEC 335 / ISO 4400</td>
<td></td>
</tr>
<tr>
<td>IP40</td>
<td>IP65</td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>H 384 B 001</td>
<td>H 384 B 006</td>
<td>12V / DC</td>
</tr>
<tr>
<td>pipe thread</td>
<td>voltages</td>
<td>24V / DC</td>
</tr>
<tr>
<td>basic number</td>
<td>suffix</td>
<td></td>
</tr>
</tbody>
</table>

DIMENSIONS (mm), WEIGHT (kg)

<table>
<thead>
<tr>
<th>Type</th>
<th>Prefix option</th>
<th>Catalogue number</th>
<th>Ø</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>P</th>
<th>Q</th>
<th>R</th>
<th>S</th>
<th>T</th>
<th>U</th>
<th>V</th>
<th>Weight (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>SC</td>
<td>SCH384B001/002</td>
<td>16</td>
<td>49,5</td>
<td>23,5</td>
<td>16</td>
<td>11</td>
<td>20</td>
<td>1</td>
<td>66</td>
<td>24</td>
<td>17</td>
<td>3,3</td>
<td>M3</td>
<td>16,5</td>
<td>10,7</td>
<td>16</td>
<td>24</td>
<td>2,2</td>
<td>51,2</td>
<td>0,06</td>
<td></td>
</tr>
<tr>
<td>02</td>
<td>SC</td>
<td>SCH384A005</td>
<td>25</td>
<td>78</td>
<td>43</td>
<td>27</td>
<td>17,5</td>
<td>32</td>
<td>1,5</td>
<td>99</td>
<td>39</td>
<td>32</td>
<td>4,5</td>
<td>M4</td>
<td>25,5</td>
<td>14</td>
<td>25</td>
<td>33</td>
<td>3,2</td>
<td>82,5</td>
<td>0,30</td>
<td></td>
</tr>
<tr>
<td>03</td>
<td>SC</td>
<td>SCH384B006/B007</td>
<td>30</td>
<td>84</td>
<td>49</td>
<td>28</td>
<td>24,5</td>
<td>43,5</td>
<td>1,5</td>
<td>99</td>
<td>45,5</td>
<td>42</td>
<td>4,5</td>
<td>M4</td>
<td>30,5</td>
<td>24</td>
<td>30</td>
<td>39</td>
<td>6</td>
<td>99</td>
<td>0,45</td>
<td></td>
</tr>
</tbody>
</table>

(1) Incl. coil(s) and connectors...

All leaflets are available on: www.asconumatics.eu
MICRO SOLENOID VALVES

direct operated

pad-mounting body

for subbase M3/M5

GENERAL

Fluid
Air or inert gas, non-lubricated, filtered at 25 µm

Operating pressure
7 bar max.

Ambient temperature
+5°C to +50°C

Flow (Qv at 6 bar)
See “SPECIFICATIONS”

Manual operator
Impulse-type (without manual operator on request)

Switching time
10 ms (<10 ms on request)

CONSTRUCTION

Body
PA (polyamide) MXD6

Internal parts
Stainless steel, nickel-plated steel, synthetic material, aluminium

Seals
NBR (nitrile), FPM (fluoroelastomer) on request

ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>voltage (other voltages on request)</th>
<th>consumption</th>
<th>insulation class</th>
<th>degree of protection</th>
<th>electrical connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>24V</td>
<td>1W - 1,3W</td>
<td>F</td>
<td>IP 40</td>
<td>connector with two 0.6 mm² lead wires + built-in LED and electrical protection or cable ends, 0.5 m long</td>
</tr>
<tr>
<td>12V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The solenoid valves are designed for continuous operation within the maximum ambient temperature limits.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>symbol</th>
<th>orifice size (mm)</th>
<th>flow at 6 bar l/min (ANR)</th>
<th>coeff. Kv</th>
<th>operating pressure (bar)</th>
<th>consumption (W)</th>
<th>type of electrical connection (♣)</th>
<th>catalogue number</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC</td>
<td>0.5</td>
<td>8</td>
<td>0.12</td>
<td>0</td>
<td>1,3</td>
<td>1</td>
<td>18801003</td>
</tr>
<tr>
<td></td>
<td>0.8</td>
<td>10</td>
<td>0.15</td>
<td>0</td>
<td>1,3</td>
<td>1</td>
<td>18801072</td>
</tr>
<tr>
<td></td>
<td>1.0</td>
<td>12</td>
<td>0.18</td>
<td>0</td>
<td>1,3</td>
<td>1</td>
<td>18801085</td>
</tr>
<tr>
<td></td>
<td>0.5</td>
<td>8</td>
<td>0.12</td>
<td>0</td>
<td>1,3</td>
<td>1</td>
<td>18801090</td>
</tr>
<tr>
<td></td>
<td>0.8</td>
<td>10</td>
<td>0.15</td>
<td>0</td>
<td>1,3</td>
<td>1</td>
<td>18801073</td>
</tr>
<tr>
<td>NO</td>
<td>1.0</td>
<td>12</td>
<td>0.18</td>
<td>0</td>
<td>1,3</td>
<td>1</td>
<td>18801096</td>
</tr>
<tr>
<td></td>
<td>0.5</td>
<td>8</td>
<td>0.12</td>
<td>0</td>
<td>1,3</td>
<td>1</td>
<td>18801099</td>
</tr>
<tr>
<td></td>
<td>0.8</td>
<td>10</td>
<td>0.15</td>
<td>0</td>
<td>1,3</td>
<td>1</td>
<td>18801100</td>
</tr>
</tbody>
</table>

(♣) Type 1, 2, 3, 4 with LED and electrical protection
1 = horizontal, width 5,08 mm
2 = vertical, width 5,08 mm
3 = horizontal, width 2,54 mm
4 = vertical, width 2,54 mm
5 = cable ends 0,5 m long, 0,25 mm²

All leaflets are available on: www.asconumatics.eu
MICRO SOLENOID VALVES
direct operated, with latching coil
pad-mounting body
for subbase M3/M5

GENERAL
Fluid
Air or inert gas, non-lubricated, filtered at 25 µm
Operating pressure
8 bar max.
Ambient temperature
+5°C to +50°C
Flow (Qv at 6 bar)
See “SPECIFICATIONS”
Manual operator
Impulse-type (without manual operator on request)
Switching time
10 ms (<10 ms on request)

CONSTRUCTION
Body
PA (polyamide) MXD6
Internal parts
Stainless steel, nickel-plated steel, synthetic material, aluminium
Seals
NBR (nitrile), FPM (fluoroelastomer) on request

ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>voltage (other voltages on request)</th>
<th>consumption</th>
<th>insulation class</th>
<th>degree of protection</th>
<th>electrical connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>24V = [12 V = +10% -15%] 5 V = 1</td>
<td>1W - 1,3W</td>
<td>F</td>
<td>IP 40</td>
<td>connector with two 0.5 mm² lead wires or cable ends, 0.5 m long</td>
</tr>
</tbody>
</table>

The solenoid valves are designed for continuous operation within the maximum ambient temperature limits.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>symbol</th>
<th>orifice size (mm)</th>
<th>flow at 6 bar l/min (ANR)</th>
<th>coeff. Kv</th>
<th>operating pressure (bar)</th>
<th>consumption (W)</th>
<th>type of electrical connection (✱)</th>
<th>catalogue number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0,5</td>
<td>0,7</td>
<td>8</td>
<td>0.12</td>
<td>1,3</td>
<td>1</td>
<td>18801101</td>
</tr>
<tr>
<td>2</td>
<td>0,5</td>
<td>0,7</td>
<td>8</td>
<td>0.12</td>
<td>1,3</td>
<td>2</td>
<td>18801102</td>
</tr>
<tr>
<td>3</td>
<td>0,5</td>
<td>0,7</td>
<td>8</td>
<td>0.12</td>
<td>1,3</td>
<td>3</td>
<td>18801103</td>
</tr>
<tr>
<td>4</td>
<td>0,5</td>
<td>0,7</td>
<td>8</td>
<td>0.12</td>
<td>1,3</td>
<td>4</td>
<td>18801104</td>
</tr>
<tr>
<td>5</td>
<td>0,8</td>
<td>0,8</td>
<td>10</td>
<td>0.15</td>
<td>1,3</td>
<td>1</td>
<td>18801105</td>
</tr>
<tr>
<td>6</td>
<td>0,8</td>
<td>0,8</td>
<td>10</td>
<td>0.15</td>
<td>1,3</td>
<td>2</td>
<td>18801106</td>
</tr>
<tr>
<td>7</td>
<td>0,8</td>
<td>0,8</td>
<td>10</td>
<td>0.15</td>
<td>1,3</td>
<td>3</td>
<td>18801107</td>
</tr>
<tr>
<td>8</td>
<td>0,8</td>
<td>0,8</td>
<td>10</td>
<td>0.15</td>
<td>1,3</td>
<td>4</td>
<td>18801108</td>
</tr>
<tr>
<td>9</td>
<td>0,8</td>
<td>0,8</td>
<td>10</td>
<td>0.15</td>
<td>1,3</td>
<td>1</td>
<td>18801109</td>
</tr>
<tr>
<td>10</td>
<td>0,8</td>
<td>0,8</td>
<td>10</td>
<td>0.15</td>
<td>1,3</td>
<td>2</td>
<td>18801110</td>
</tr>
<tr>
<td>11</td>
<td>0,8</td>
<td>0,8</td>
<td>10</td>
<td>0.15</td>
<td>1,3</td>
<td>3</td>
<td>18801111</td>
</tr>
<tr>
<td>12</td>
<td>0,8</td>
<td>0,8</td>
<td>10</td>
<td>0.15</td>
<td>1,3</td>
<td>4</td>
<td>18801112</td>
</tr>
<tr>
<td>13</td>
<td>0,8</td>
<td>0,8</td>
<td>10</td>
<td>0.15</td>
<td>1,3</td>
<td>1</td>
<td>18801113</td>
</tr>
<tr>
<td>14</td>
<td>0,8</td>
<td>0,8</td>
<td>10</td>
<td>0.15</td>
<td>1,3</td>
<td>2</td>
<td>18801114</td>
</tr>
<tr>
<td>15</td>
<td>0,8</td>
<td>0,8</td>
<td>10</td>
<td>0.15</td>
<td>1,3</td>
<td>3</td>
<td>18801115</td>
</tr>
</tbody>
</table>

✱ type 1, 2, 3, 4 with LED and electrical protection
1 = horizontal, width 5.08 mm
2 = vertical, width 5.08 mm
3 = horizontal, width 2.54 mm
4 = vertical, width 2.54 mm
5 = cable ends, 0.5 m long, 0.25 mm²

WIRING DIAGRAM

OPEN

24 VDC
0 VDC
coil 1
coil 0
open valve
closed valve

function with latching coil
(no constant current consumption)

Available design and specifications are subject to change without notice. All rights reserved.
### MICRO SOLENOID VALVES - SERIE 188

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Dimension</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>0.0095</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**NO**

- 1 = Pressure
- 2 = Outlet
- 3 = Exhaust

**Use in vacuum (NO)**

- 1 = Vacuum pump
- 2 = Outlet
- 3 = Atmosphere

**NC**

- 1 = Pressure
- 2 = Outlet
- 3 = Exhaust

**Use in vacuum (NC)**

- 1 = Vacuum pump
- 2 = Outlet
- 3 = Atmosphere

---

All leaflets are available on: [www.asconumatics.eu](http://www.asconumatics.eu)
DIMENSIONS (mm), WEIGHT (kg) [ ]

<table>
<thead>
<tr>
<th>number of valves</th>
<th>subbase catalogue number*</th>
<th>weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35300101</td>
<td>0,015</td>
</tr>
</tbody>
</table>

solenoid valve mounted on single subbase

A : Blanking plate, cat. no. 88135305

* The connectors must be ordered separately, please indicate the quantity and one of the following codes:
Connector, 2 wires
Distance between contacts 5,08 mm - Length 0,5 m - cat. no.: 88118801
- Length 1,5 m - cat. no.: 88118802
- Length 3 m - cat. no.: 88118803
Distance between contacts 2,54 mm - Length 0,5 m - cat. no.: 88118806
- Length 1,5 m - cat. no.: 88118807
- Length 3 m - cat. no.: 88118808

All leaflets are available on: www.asconumatics.eu
**GENERAL**

Fluid: Air or inert gas, non-lubricated, filtered at 25 µm

Operating pressure: 10 bar max.

Ambient temperature: +5°C to +50°C

Flow (Qv at 6 bar): See «SPECIFICATIONS»

Switching time: 10 ms

**CONSTRUCTION**

Body: PBT (polybutylene terephthalate)

Internal parts: Stainless steel, synthetic material

Seals: FPM (fluoroelastomer)

---

**ELECTRICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Voltage ± 10 % (other voltages on request)</th>
<th>Power ratings 1)</th>
<th>Insulation class</th>
<th>Degree of protection</th>
<th>Electrical connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>24V =</td>
<td>3.2 W</td>
<td>1.3 W</td>
<td>F</td>
<td>IP40</td>
</tr>
<tr>
<td>12 V =</td>
<td></td>
<td></td>
<td></td>
<td>X1, X2, X3, X4, X5</td>
</tr>
</tbody>
</table>

1) The valves are provided with power save electronics and LED which switch to holding power after 100 msec.

**Electrical Connection Type**

- X1 = type 1, horizontal, distance between contacts 5.08 mm
- X2 = type 2, vertical, distance between contacts 5.08 mm
- X3 = type 3, horizontal, distance between contacts 2.54 mm
- X4 = type 4, vertical, distance between contacts 2.54 mm
- X5 = type 5, two leads 0.5 m long, 0.25 mm²

Type 1,2,3,4,5 with LED, protection and power save electronics.

---

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Orifice size (mm)</th>
<th>Flow at 6 bar (l/min ANR)</th>
<th>Coefficient Kv (m³/h)</th>
<th>Operating pressure (bar)</th>
<th>Consumption (W)</th>
<th>Catalogue number</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC</td>
<td>1.0, 1.0</td>
<td>13</td>
<td>0.012</td>
<td>0, 10</td>
<td>1.3</td>
<td>R188B213XXV11XX</td>
</tr>
<tr>
<td></td>
<td>1.3, 1.3</td>
<td>29</td>
<td>0.027</td>
<td>0, 6</td>
<td>1.3</td>
<td>R188B214XXV11XX</td>
</tr>
<tr>
<td></td>
<td>1.6, 1.6</td>
<td>42</td>
<td>0.039</td>
<td>0, 3.5</td>
<td>1.3</td>
<td>R188B215XXV11XX</td>
</tr>
<tr>
<td>NO</td>
<td>1.0, 1.0</td>
<td>13</td>
<td>0.012</td>
<td>0, 8</td>
<td>1.3</td>
<td>R188B223XXV11XX</td>
</tr>
<tr>
<td></td>
<td>1.3, 1.3</td>
<td>29</td>
<td>0.027</td>
<td>0, 4</td>
<td>1.3</td>
<td>R188B224XXV11XX</td>
</tr>
<tr>
<td></td>
<td>1.6, 1.6</td>
<td>42</td>
<td>0.039</td>
<td>0, 1.5</td>
<td>1.3</td>
<td>R188B225XXV11XX</td>
</tr>
</tbody>
</table>

---

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

15-DIGIT PRODUCT CODE

R 188 B 1 1 1 XX 1 0 1 XX

- Fluid Connection Type
  R = Pad Mount

- Product Series
  188 = Series 188 Micro 10

- Revision
  B = Micro 10, Revision B (grey)

- Coil Size & Power-Save
  2 = 10 mm with power-save

- Valve Type
  1 = 3/2 NC
  2 = 3/2 NO

- Valve Orifice
  3 = 1.0 mm
  4 = 1.3 mm
  5 = 1.6 mm

- Voltage
  F1 = 24 VDC
  F3 = 12 VDC

- Manual Override
  1 = without manual override

- Fastening Screws
  0 = without screws
  1 = with metric screws M1.7x12.5
  2 = with self-tapping screws KB18x14

- Sealing Material
  V = FPM

- Electrical Connection Type
  X1 = Type 1, horizontal 5.08 mm
  X2 = Type 2, vertical 5.08 mm
  X3 = Type 3, horizontal 2.54 mm
  X4 = Type 4, vertical 2.54 mm
  X5 = Type 5, 2 leads 0.5 m x 0.25 mm²

ORDERING EXAMPLE: R188B213X1V11F1 = pad mount, series 188, Micro 10 Revision B (grey), with power-save, 3/2 NC, orifice 1.0 mm, Type 1, FPM, M 1.7 x 12.5, without manual override, 24 VDC

All leaflets are available on: www.asconumatics.eu
DIMENSIONS (mm), WEIGHT (kg)

<table>
<thead>
<tr>
<th>number of valves</th>
<th>subbase catalogue number</th>
<th>weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35300207</td>
<td>0.027</td>
</tr>
</tbody>
</table>

The connectors must be ordered separately, please indicate the quantity and one of the following codes:

- Connector, 2 wires
- Distance between contacts 5.08 mm: - length 0.5 m - catalogue number: 88118801
- length 1.5 m - catalogue number: 88118802
- length 3 m - catalogue number: 88118803

- Distance between contacts 2.54 mm: - length 0.5 m - catalogue number: 88118806
- length 1.5 m - catalogue number: 88118807
- length 3 m - catalogue number: 88118808

A: Blanking plate, catalogue number: 513697-001
MINI-SOLENOID VALVES
ISO 15218 (CNOMO, size 15) interface
direct operated, pad mounting body
connector size 15

FEATURES
- Compact, monobloc solenoid pilot valve with spade-plug connector type DIN 43650, form C, with 9.4 mm spacing, or to ISO 15217/DIN 43650 form C, with 8 mm spacing.
- Version with or without integrated LED and electrical protection.
- LED indicator visible from 3 sides.
- The solenoid valves satisfy all relevant EC directives.

GENERAL
Differential pressure
See «SPECIFICATIONS» [1 bar = 100 kPa]
Pneumatic base
ISO 15218 (CNOMO E06.36.120N, size 15)
Connection
Subbase
Response time
8 - 15 ms

<table>
<thead>
<tr>
<th>fluids (+)</th>
<th>temperature range (TS)</th>
<th>seal materials (+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>air or inert gas</td>
<td>-25°C to +60°C (LP2)</td>
<td>NBR (nitrite)</td>
</tr>
<tr>
<td>filtered at 50 µm, lubricated or not</td>
<td>-25°C to +60°C +50°C (LP3)</td>
<td>FPM (fluoroelastomer)</td>
</tr>
</tbody>
</table>

MATERIALS IN CONTACT WITH FLUID
(+ -) Ensure that the compatibility of the fluids in contact with the materials is verified

Body
PARA
Internal parts
POM, PET, stainless steel and brass
Seals
NBR (disc), FPM (others)
Pneumatic interface seal
TPE

OTHER MATERIALS
Coil
Thermoplastic PET

ELECTRICAL CHARACTERISTICS
Coil insulation class
F
Connector
Spade plug (cable Ø 4-6 mm)
Connector specification
DIN 43650, 9.4 mm, form C
or ISO 15217 / DIN 43650, 8 mm, form C
Electrical safety
IEC 335
Electrical enclosure protection
Moulded IP65 (EN 60529)
Standard voltages
DC (=) : 24V
(Other voltages on request)
AC (~) : 24V - 115V - 230V / 50-60 Hz

SPECIFICATIONS

<table>
<thead>
<tr>
<th>orifice size</th>
<th>at 6 bar (ANR)</th>
<th>flow coefficient Kv</th>
<th>operating pressure differential (bar)</th>
<th>power ratings</th>
<th>basic catalogue number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(mm)</td>
<td>1 / 2</td>
<td>2 / 3</td>
<td>1 / 2</td>
<td>2 / 3</td>
<td>min.</td>
</tr>
<tr>
<td>0.6</td>
<td>0.11</td>
<td>0.026</td>
<td>0</td>
<td>1</td>
<td>LP2</td>
</tr>
<tr>
<td>0.8</td>
<td>0.22</td>
<td>0.35</td>
<td>0</td>
<td>5</td>
<td>LP2</td>
</tr>
<tr>
<td>1.1</td>
<td>0.35</td>
<td>0.50</td>
<td>0</td>
<td>7</td>
<td>LP2</td>
</tr>
<tr>
<td>1.5</td>
<td>0.50</td>
<td>0.6</td>
<td>0</td>
<td>5</td>
<td>LP3</td>
</tr>
<tr>
<td>0.6</td>
<td>0.11</td>
<td>0.26</td>
<td>0</td>
<td>10</td>
<td>LP2</td>
</tr>
<tr>
<td>0.8</td>
<td>0.22</td>
<td>0.35</td>
<td>0</td>
<td>5</td>
<td>LP2</td>
</tr>
<tr>
<td>1.1</td>
<td>0.35</td>
<td>0.50</td>
<td>0</td>
<td>7</td>
<td>LP2</td>
</tr>
<tr>
<td>1.5</td>
<td>0.50</td>
<td>0.6</td>
<td>0</td>
<td>5</td>
<td>LP3</td>
</tr>
</tbody>
</table>

NC - Normally closed (Without LED and protection)

NC - Normally closed (With LED and protection)

When ordering, please specify in addition to the basic catalogue number:

- the type of current: voltage / frequency + the version: with or without connector

Examples:
- with connector 24V DC : 30211007 – D 24V DC
- without connector 24V DC : 30211007 – P 24V DC

All leaflets are available on: www.asconumatics.eu
OPTIONS AND ACCESSORIES

- Seals and disc made of FPM (fluoroelastomer)
- Versions without manual operator and NO (Normally Open): contact us
- Version with pneumatic-electric interface
- Version 12 V DC, LP2, connector DIN 43650, 9,4 mm, industry standard B
- Connector ISO 15217 / DIN 43650, 8 mm, form C:
  - standard: catalogue number 88130211
  - with cable 2 m length: catalogue number 88130214
- Connector DIN 43650, 9,4 mm, form C:
  - standard: catalogue number 88143581
  - with cable 2 m length: catalogue number 88143567
- Explosionproof enclosures for use in zones 0/20-1/21-2/22, categories 1-2-3 to ATEX Directive 94/9/EC (see “Explosion proof solenoids” section)

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valve supplied with mounting screws and mounting pad seal(s)
- Installation/maintenance instructions are included with each valve

DIMENSIONS (mm), WEIGHT (kg)

| TYPE 01 |
| IEC 335 / DIN 43650 |
| IP65 |

Subbase mounting surface: ISO 15218
(CNOMO E06.36.120N, size 15)

- Manual operator location
- 2 mounting screw M3 x 20
- Version with LED and electrical protection

weight (1) 0.047

(1) with standard connector.

All leaflets are available on: www.asconumatcs.eu
MINI-SOLENOID VALVES
ISO 15218 (CNOMO, size 15) interface
direct operated, pad mounting body
connection M12 or with cable ends

FEATURES
- Compact, monobloc solenoid pilot valve with M12 connector or cable ends
- Version with integrated LED indicator and electrical protection.
- LED indicator visible from 3 sides
- The solenoid valves satisfy all relevant EC directives

GENERAL
Differential pressure
Pneumatic base
Connection
Response time
8 - 15 ms

<table>
<thead>
<tr>
<th>fluids (+)</th>
<th>temperature range (TS)</th>
<th>seal materials (+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>air or inert gas filtered at 50 µm, lubricated or not</td>
<td>- 25°C to + 60°C (LP2) (^{(1)})</td>
<td>NBR (nitrile) FPM (fluoroelastomer)</td>
</tr>
</tbody>
</table>

\(^{(1)}\) LP2: see "electrical characteristics" table

MATERIALS IN CONTACT WITH FLUID
(+) Ensure that the compatibility of the fluids in contact with the materials is verified
Body PAA
Internal parts POM, PET, stainless steel and brass
Pneumatic interface seal TPE

OTHER MATERIALS
Coil Thermoplastic PET

ELECTRICAL CHARACTERISTICS
Coil insulation class F
Connection Connector M12 or cable ends
Electrical safety
- connector M12 CNOMO E03.62.520.N
- cable ends EN 60730
Electrical enclosure protection Moulded IP67 (EN 60529)
Standard voltages DC (=) : 24V

SPECIFICATIONS
<table>
<thead>
<tr>
<th>orifice size (mm)</th>
<th>flow coefficient</th>
<th>coefficient</th>
<th>operating pressure differential (bar)</th>
<th>power ranges</th>
<th>basic catalogue number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>53</td>
<td>0.50</td>
<td>0.56</td>
<td>0</td>
<td>3 LP2 30212022</td>
</tr>
<tr>
<td>1.5</td>
<td>53</td>
<td>0.50</td>
<td>0.56</td>
<td>0</td>
<td>3 LP2 30212023</td>
</tr>
</tbody>
</table>

When ordering:
- with connector --D
- without connector --P
- complete --D

Examples:
- M12 with connector : 30212022--D
- M12 without connector : 30212022--P
- cable ends : 30213022--D
OPTIONS AND ACCESSORIES

- Seals and disc made of FPM (fluoroelastomer)
- Versions without manual operator and NO (Normally Open): contact us
- Version with pneumatic-electric interface
- Straight M12 connector:
  - with 5 m cable length: catalogue number 88130212
- Explosionproof enclosures for use in zones 0/20-1/21-2/22, categories 1-2-3 to ATEX Directive 94/9/EC (see “Explosionproof solenoids” section)

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valve supplied with mounting screws and mounting pad seal(s)
- Installation/maintenance instructions are included with each valve

DIMENSIONS (mm), WEIGHT (kg)

<table>
<thead>
<tr>
<th>TYPE 01</th>
<th>TYPE 02</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEC 335</td>
<td>IEC 335</td>
</tr>
<tr>
<td>Connection M12</td>
<td>Straight M12 connector, 5 m cable length</td>
</tr>
<tr>
<td>IP67</td>
<td>IP67</td>
</tr>
</tbody>
</table>

| Manual operator location. |
| 2 mounting screw M3 x 20 |

<table>
<thead>
<tr>
<th>weight</th>
<th>cable ends</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12 (1)</td>
<td>0.049</td>
</tr>
<tr>
<td>(2)</td>
<td>0.288</td>
</tr>
<tr>
<td>(3)</td>
<td>0.040</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>function</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>NC</td>
</tr>
</tbody>
</table>

P: Pressure  O: Outlet

(1) Without connector  (2) With connector

TYPE 03

IEC 335
Cable ends 0.3 m length
IP67

Subbase mounting surface: ISO 15218
(CNOMO E06.36.120N, size 15)

All leaflets are available on: www.asconumatics.eu
MINI-SOLENOID VALVES SERIES 302

DIMENSIONS (mm), WEIGHT (kg)

**Single subbase**
Aluminium or brass

![Diagram of Single subbase]

**Adapter CNOMO size 30**
(only for NC version)
Aluminium

![Diagram of Adapter CNOMO size 30]

**Joinable subbases**
Aluminium

![Diagram of Joinable subbases]

**Ports 1 and 3: G1/8**
Port 2: coupling for 4mm OD tube

1. Fixing hole Ø 3,2 (2 for 4x ; 1 for 2x)
2. Fixing hole M3, depth 8 (2 for 4x ; 1 for 2x)
3. Mating surface blanking plates (option)
4. TS35 DIN rail (not supplied)
5. Clip for DIN rail mounting (option)

### Specifications

<table>
<thead>
<tr>
<th>Catalogue Number</th>
<th>x</th>
<th>Subbases</th>
<th>L</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35500564</td>
<td>2</td>
<td>2x</td>
<td>-</td>
<td>0.076</td>
</tr>
<tr>
<td>35500565</td>
<td>4</td>
<td>4x</td>
<td>-</td>
<td>0.148</td>
</tr>
<tr>
<td>35500566</td>
<td>6</td>
<td>4x + 2x</td>
<td>114</td>
<td>0.236</td>
</tr>
<tr>
<td>35500567</td>
<td>8</td>
<td>4x + 4x</td>
<td>148</td>
<td>0.313</td>
</tr>
<tr>
<td>35500568</td>
<td>10</td>
<td>4x + 4x + 2x</td>
<td>182</td>
<td>0.389</td>
</tr>
<tr>
<td>35500569</td>
<td>12</td>
<td>4x + 4x + 4x</td>
<td>216</td>
<td>0.466</td>
</tr>
</tbody>
</table>

x = place for mini-solenoid valves.
2 plugs R1/8 supplied.

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

- Additional subbase with 2 places (with seals): catalogue number **35500570**
- 2 tie-rods + nuts for a subbase with:
  - 4 places: catalogue number **88100752**
  - 6 places: catalogue number **88100753**
  - 8 places: catalogue number **88100754**
  - 10 places: catalogue number **88100755**
  - 12 places: catalogue number **88100756**
- Mounting kit for DIN rail (2 clips + screws + washers): catalogue number **88100757**
- Mating surface blanking plate: catalogue number **88130203**

### AMBIENT TEMPERATURE RANGES

<table>
<thead>
<tr>
<th>Current Type</th>
<th>Power Range</th>
<th>Power Coil</th>
<th>Inrush/ Holding (VA)</th>
<th>Holding (W)</th>
<th>Version</th>
<th>Temp Range (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC (≥)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC (≥)</td>
<td>LP2 (1)</td>
<td></td>
<td>1/1,2</td>
<td></td>
<td>standard</td>
<td>-25°C ; +60°C</td>
</tr>
<tr>
<td>DC (≥)</td>
<td>LP3 (2)</td>
<td></td>
<td>1,15/1,35</td>
<td>LED + protection</td>
<td>-25°C ; +40°C</td>
<td></td>
</tr>
<tr>
<td>DC (≥)</td>
<td></td>
<td></td>
<td>2/2,65</td>
<td></td>
<td>standard</td>
<td>-25°C ; +50°C</td>
</tr>
<tr>
<td>DC (≥)</td>
<td></td>
<td></td>
<td>2,15/2,6</td>
<td>LED + protection</td>
<td>-25°C ; +40°C</td>
<td></td>
</tr>
<tr>
<td>AC (~)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC (~)</td>
<td>LP2 (2)</td>
<td></td>
<td>1,4/1,2</td>
<td></td>
<td>standard</td>
<td>-25°C ; +60°C</td>
</tr>
<tr>
<td>AC (~)</td>
<td>LP3 (2)</td>
<td></td>
<td>1,8/1,6</td>
<td>LED + protection</td>
<td>-25°C ; +40°C</td>
<td></td>
</tr>
<tr>
<td>AC (~)</td>
<td></td>
<td></td>
<td>2,1/1,6</td>
<td></td>
<td>standard</td>
<td>-25°C ; +60°C</td>
</tr>
<tr>
<td>AC (~)</td>
<td></td>
<td></td>
<td>2,5/2</td>
<td>LED + protection</td>
<td>-25°C ; +50°C</td>
<td></td>
</tr>
</tbody>
</table>

(1) Voltage: -15% / +20%

(2) Voltage: -15% / +10%
MINI-SOLENOID VALVES
ISO 15218 (CNOMO, size 15) interface
direct operated, pad mounting body
connector size 15

FEATURES
• Compact, monobloc solenoid pilot valve with spade-plug connector type DIN 43650, industry standard form C, with 9.4 mm spacing, or to ISO 15217/DIN 43650 form C, with 8 mm spacing
• Version with or without integrated LED and electrical protection
• The solenoid valves satisfy all relevant EC directives

GENERAL
Differential pressure
Pneumatic base
Connection
Response time
8 - 15 ms

MATERIALS IN CONTACT WITH FLUID
(+) Ensure that the compatibility of the fluids in contact with the materials is verified
Body
Internal parts
Seals
Pneumatic interface seal
OTHER MATERIALS
Coil
ELECTRICAL CHARACTERISTICS
Coil insulation class
Connector
Connector specification
Electrical safety
Electrical enclosure protection
Standard voltages
(Other voltages on request)

SPECIFICATIONS
(9,4 mm / 8 mm)

<table>
<thead>
<tr>
<th>orifice size</th>
<th>flow at 8 bar l/min (ANR)</th>
<th>coefficient Kv</th>
<th>operating pressure differential (bar)</th>
<th>basic catalogue number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>min.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>3</td>
<td>max. (PS)</td>
<td></td>
</tr>
<tr>
<td>1,5</td>
<td>39</td>
<td>53</td>
<td>0,50</td>
<td></td>
</tr>
<tr>
<td>1,1</td>
<td>32</td>
<td>51</td>
<td>0,35</td>
<td></td>
</tr>
<tr>
<td>0,8</td>
<td>17</td>
<td>28</td>
<td>0,22</td>
<td></td>
</tr>
<tr>
<td>0,6</td>
<td>11</td>
<td>20</td>
<td>0,11</td>
<td></td>
</tr>
<tr>
<td>LP1</td>
<td>24</td>
<td>0</td>
<td>0,24</td>
<td>30211109</td>
</tr>
<tr>
<td>LP2</td>
<td>24</td>
<td>14</td>
<td>1,2</td>
<td>30211112</td>
</tr>
<tr>
<td>LP3</td>
<td>24</td>
<td>23</td>
<td>2,1</td>
<td>30211127</td>
</tr>
<tr>
<td>LP2</td>
<td>24-115</td>
<td>24</td>
<td>1,4</td>
<td>30211121</td>
</tr>
<tr>
<td>LP3</td>
<td>230</td>
<td>24</td>
<td>2,1</td>
<td>30211124</td>
</tr>
</tbody>
</table>

All leaflets are available on: www.asconumatics.eu
MINI-SOLENOID VALVES SERIES 302

SPECIFICATIONS: NO, U

<table>
<thead>
<tr>
<th>orifice size (mm)</th>
<th>flow at 6 bar l/min (ANR)</th>
<th>coefficient Kv</th>
<th>operating pressure differential (bar)</th>
<th>power ranges</th>
<th>basic catalogue number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>impulse</td>
<td>manual operator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>~</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>~</td>
</tr>
</tbody>
</table>

NO - Normally open (Without LED and protection)

| 0.8              | 20                        | 17             | 0.26                                 | 0.20         | 0                     | 8          | LP2          | 30211130 | 30210130 | 30211131 | 30210131 |
| 1                | 28                        | 32             | 0.35                                 | 0.35         | 0                     | 5          | LP2          | 30211133 | 30210133 | 30211134 | 30210134 |
| 1.5              | 53                        | 39             | 0.56                                 | 0.50         | 0                     | 2          | LP2          | 30211142 | 30210142 | 30211143 | 30210143 |

NO - Normally open (With LED and protection)

| 0.8              | 20                        | 17             | 0.26                                 | 0.20         | 0                     | 8          | LP2          | 30215130 | 30214130 | 30215131 | 30214131 |
| 1                | 28                        | 32             | 0.35                                 | 0.35         | 0                     | 5          | LP2          | 30215133 | 30214133 | 30215134 | 30214134 |
| 1.5              | 53                        | 39             | 0.56                                 | 0.50         | 0                     | 2          | LP2          | 30215142 | 30214142 | 30215143 | 30214143 |

U - Universal (Without LED and protection)

| 0.8              | 17                        | 20             | 0.20                                 | 0.26         | 0                     | 6          | LP2          | 30211148 | 30210148 | 30211149 | 30210149 |

U - Universal (With LED and protection)

| 0.8              | 17                        | 20             | 0.20                                 | 0.26         | 0                     | 6          | LP2          | 30215148 | 30214148 | 30215149 | 30214149 |

OPTIONS AND ACCESSORIES

- Seals and disc made of FPM (fluoroelastomer)
- Versions without manual operator and Uv (Universal vacuum): contact us
- Version with pneumatic-electric interface
- Version 12 V DC, LP2, connector DIN 43650, 9,4 mm, industry standard B
- Connector ISO 15217 / DIN 43650, 8 mm, form C:
  - standard: catalogue number 88130211
  - with cable 2 m length: catalogue number 88130214
- Connector EN 175301-803 industry standard form C (9,4 mm):
  - standard: catalogue number 88143581
  - with cable 2 m length: catalogue number 88143567
- Explosionproof enclosures for use in zones 0/20-1/21-2/22, categories 1-2-3 to ATEX Directive 94/9/EC (see “Explosionproof solenoids” section)

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valve supplied with mounting screws and mounting pad seal(s)
- Installation/maintenance instructions are included with each valve

DIMENSIONS (mm), WEIGHT (kg)

<table>
<thead>
<tr>
<th>TYPE 01</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEC 335 / DIN 43650</td>
</tr>
<tr>
<td>IP65</td>
</tr>
</tbody>
</table>

Subbase mounting surface: ISO 15218 (CNO MO E06.36.120N, size 15)

All leaflets are available on: www.asconumatics.eu

92
MINI-SOLENOID VALVES
ISO 15218 (CNOMO, size 15) interface direct operated, pad mounting body connection M12 or with cable ends

FEATURES
- Compact, monobloc solenoid pilot valve with M12 connector or cable ends
- Version with integrated LED indicator and electrical protection
  LED indicator visible from 3 sides
- The solenoid valves satisfy all relevant EC directives

GENERAL
Differential pressure
See «SPECIFICATIONS» [1 bar = 100 kPa]  
Pneumatic base
ISO 15218 (CNOMO E06.36.120N, size 15)  
Connection
Subbase
Response time
8 - 15 ms

MATERIALS IN CONTACT WITH FLUID
(+)* Ensure that the compatibility of the fluids in contact with the materials is verified
Body
PAA
Internal parts
POM, PET, stainless steel and brass
Pneumatic interface seal
TPE
OTHER MATERIALS
Coil
Thermoplastic PET

ELECTRICAL CHARACTERISTICS
Coil insulation class
F
Connection
Connector M12 or cable ends
Electrical safety
connector M12: CNOMO E03.62.520.N  
cable ends: EN 60730
Electrical enclosure protection
Moulded IP67 (EN 60529)
Standard voltages
DC (=) : 24V

SPECIFICATIONS
<table>
<thead>
<tr>
<th>orifice size (mm)</th>
<th>flow at 6 bar (l/min (ANR))</th>
<th>coefficient Kv</th>
<th>operating pressure differential (bar)</th>
<th>power ranges (VA)</th>
<th>basic catalogue number</th>
<th>manual operator (W)</th>
<th>maintained (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC - Normally closed, connection M12 + LED and protection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.6</td>
<td>11</td>
<td>20</td>
<td>0.11</td>
<td>0.26</td>
<td>0</td>
<td>10</td>
<td>30212109</td>
</tr>
<tr>
<td>0.8</td>
<td>17</td>
<td>28</td>
<td>0.22</td>
<td>0.35</td>
<td>0</td>
<td>5</td>
<td>30212112</td>
</tr>
<tr>
<td>1.1</td>
<td>32</td>
<td>51</td>
<td>0.35</td>
<td>0.50</td>
<td>0</td>
<td>5</td>
<td>30212118</td>
</tr>
<tr>
<td>1.5</td>
<td>39</td>
<td>53</td>
<td>0.50</td>
<td>0.6</td>
<td>0</td>
<td>3</td>
<td>30212124</td>
</tr>
<tr>
<td>NC - Normally closed, cable ends + LED and protection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.6</td>
<td>11</td>
<td>20</td>
<td>0.11</td>
<td>0.26</td>
<td>0</td>
<td>10</td>
<td>30213109</td>
</tr>
<tr>
<td>0.8</td>
<td>17</td>
<td>28</td>
<td>0.22</td>
<td>0.35</td>
<td>0</td>
<td>5</td>
<td>30213112</td>
</tr>
<tr>
<td>1.1</td>
<td>32</td>
<td>51</td>
<td>0.35</td>
<td>0.50</td>
<td>0</td>
<td>5</td>
<td>30213118</td>
</tr>
<tr>
<td>1.5</td>
<td>39</td>
<td>53</td>
<td>0.50</td>
<td>0.6</td>
<td>0</td>
<td>3</td>
<td>30213124</td>
</tr>
</tbody>
</table>

When ordering:
- M12 with connector: 30212109--D
- M12 without connector: 30212109--P
- cable ends: 30212109--D

All leaflets are available on: www.asconumatics.eu
OPTIONS AND ACCESSORIES

- Seals and disc made of FPM (fluoroelastomer)
- Versions without manual operator, NO (Normally Open), U (Universal) and Uv (Universal vacuum): contact us
- Version with pneumatic-electric interface
- Straight M12 connector:
  - with 5 m cable length: catalogue number 88130212
- Explosionproof enclosures for use in zones 0/20-1/21-2/22, categories 1-2-3 to ATEX Directive 94/9/EC (see "Explosionproof solenoids" section)

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valve supplied with mounting screws and mounting pad seal(s)
- Installation/maintenance instructions are included with each valve

DIMENSIONS (mm), WEIGHT (kg)

**TYPE 01**
IEC 335
Connection M12
IP67

<table>
<thead>
<tr>
<th>M12</th>
<th>weight</th>
<th>cable ends</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M12 (1)</td>
<td>Without connector</td>
</tr>
<tr>
<td></td>
<td>(2) With connector</td>
<td>0.288</td>
</tr>
<tr>
<td></td>
<td>(3) With connector</td>
<td>0.040</td>
</tr>
</tbody>
</table>

**TYPE 02**
IEC 335 / Straight M12 connector, 5 m cable length
IP67

**TYPE 03**
IEC 335
Cable ends 0.3 m length
IP67

Subbase mounting surface: ISO 15218
(CNOMO E06.36.120N, size 15)
MINI-SOLENOID VALVES SERIES 302

DIMENSIONS (mm), WEIGHT (kg)

Single subbase
Aluminium or brass

Adapter CNOMO size 30
(only for NC version)
Aluminium

Joinable subbases
Aluminium

Mounting: 2 holes M3, depth 4,5
Orifice (2) can be connected on the left
or on the right of the subbase.

Material | Catalogue number | Weight (g)
---|---|---
Aluminium | 88263002 | 0.011
Brass | 30300001 | 0.034

Mounting: 2 screws M4 x 10 (supplied)

Catalogue number | Weight (g)
---|---
88263001 | 0.018

Ports 1 and 3: G1/8
Port 2: coupling for 4mm OD tube

1. Fixing hole Ø 3.2 (2 for 4x ; 1 for 2x)
2. Fixing hole M3, depth 8 (2 for 4x ; 1 for 2x)
3. Mating surface blanking plates (option)
4. TS35 DIN rail (not supplied)
5. Clip for DIN rail mounting (option)

Catalogue number | X | Subbases | L | Weight (g)
---|---|---|---|---
35500564 | 2 | 2x | - | 0.076
35500565 | 4 | 4x | - | 0.148
35500566 | 6 | 4x + 2x | 114 | 0.236
35500567 | 8 | 4x + 4x | 148 | 0.313
35500568 | 10 | 4x + 4x + 2x | 182 | 0.389
35500569 | 12 | 4x + 4x + 4x | 216 | 0.466

Subbases alone
X = place for mini-solenoid valves.
2 plugs R1/8 supplied.

All leaflets are available on: www.asconumatics.eu
OPTIONS AND ACCESSORIES

- Additional subbase with 2 places (with seals): catalogue number 35500570
- 2 tie-rods + nuts for a subbase with:
  4 places: catalogue number 88100752
  6 places: catalogue number 88100753
  8 places: catalogue number 88100754
  10 places: catalogue number 88100755
  12 places: catalogue number 88100756
- Mounting kit for DIN rail (2 clips + screws + washers): catalogue number 88100757
- Mating surface blanking plate: catalogue number 88130203

AMBIENT TEMPERATURE RANGES

<table>
<thead>
<tr>
<th>current type</th>
<th>power range</th>
<th>power coil</th>
<th>inrush/holding (VA)</th>
<th>version</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC (=)</td>
<td>- 0.5/0.55</td>
<td>standard</td>
<td>-10°C ; +50°C</td>
<td>-10°C ; +50°C</td>
</tr>
<tr>
<td></td>
<td>- 1/1.2</td>
<td>standard</td>
<td>-25°C ; +60°C</td>
<td>-25°C ; +60°C</td>
</tr>
<tr>
<td></td>
<td>- 1.5/1.35</td>
<td>LED + protection</td>
<td>-25°C ; +60°C</td>
<td>-25°C ; +60°C</td>
</tr>
<tr>
<td></td>
<td>- 2/2.65</td>
<td>standard</td>
<td>-25°C ; +60°C</td>
<td>-25°C ; +60°C</td>
</tr>
<tr>
<td></td>
<td>- 2.5/2.8</td>
<td>LED + protection</td>
<td>-25°C ; +60°C</td>
<td>-25°C ; +60°C</td>
</tr>
<tr>
<td>AC (~)</td>
<td>- 1.4/1.2</td>
<td>standard</td>
<td>-25°C ; +60°C</td>
<td>-25°C ; +60°C</td>
</tr>
<tr>
<td></td>
<td>- 1.8/1.6</td>
<td>LED + protection</td>
<td>-25°C ; +60°C</td>
<td>-25°C ; +60°C</td>
</tr>
<tr>
<td></td>
<td>- 2/1.6</td>
<td>standard</td>
<td>-25°C ; +60°C</td>
<td>-25°C ; +60°C</td>
</tr>
<tr>
<td></td>
<td>- 2.5/2</td>
<td>LED + protection</td>
<td>-25°C ; +60°C</td>
<td>-25°C ; +60°C</td>
</tr>
</tbody>
</table>

(1) Voltage: -15% / +20%
(2) Voltage: -15% / +10%
MINI PIEZO-VALVES PIEZOTRONIC
direct operated
ISO 15218 (CNOMO, size 15) interface
pad mounting body, M5, G1/8 or instant fittings subbase

SPECIFICATIONS
FLUIDS: air or inert gas, filtered at 25 µm, condensate free
dow point -10°C
PRESSURE: 0 to 4 or 8 bar
MAX. ALLOWABLE PRESSURE (MAP): 8 bar
FLUID TEMPERATURE: 0°C to +60°C
AMBIENT TEMPERATURE: 0°C to +60°C
STORAGE TEMPERATURE: -40°C to +60°C
BASE:
ISO 15218 (CNOMO E06.36.120N, size 15)
or ISO 15218 (CNOMO E06.05.80, size 30) with adapter
MOUNTING: on subbases ØM5, G1/8 or instant fittings
SERVICE LIFE: > 10 cycles at 6 bar
MOUNTING POSITION: all

CONSTRUCTION
Body: synthetic material (PPS)
Internal parts: piezo ceramics
Sealings: nitrile (NBR)
Manual override: without or impulse type
Subbase: brass, polyamide, zinc diecast

ELECTRICAL CHARACTERISTICS
<table>
<thead>
<tr>
<th>Voltage (Maximum ripple: ±10%)</th>
<th>Power consumption at 24 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 to 70 V AC/DC ±10%</td>
<td>0.6 W</td>
</tr>
<tr>
<td></td>
<td>0.007 W</td>
</tr>
<tr>
<td>Response time: 50 ms (DC) 70 ms (AC)</td>
<td></td>
</tr>
<tr>
<td>Protection degree: IP 65</td>
<td></td>
</tr>
</tbody>
</table>

Electrical connection: Spade plug size 15 connector, DIN 43650, 9.4 mm, industry standard B, rotatable by 90°. Option: with wires, length 1 m

Switching current = 25 mA/30ms

SPECIFICATIONS
| Symbols | Functions | Flow at 6 bar l/min (ANR) | Coefficient Kv | Allowable differential pressure (Δp in bar) min. max. | (M) | catalogue number |
|---------|-----------|---------------------------|----------------|-------------------------------------------------|-----|----------------|---------------|
| 2/2 NC  |           | 6, 0.086                  |                | 0 8                                             | X   | 63000065, 63000071, 63000015, 63000021 |
| 2/2 NO  |           | 6, 0.12                   |                | 0 4                                             | X   | 63000067, 63000073, 63000017, 63000023 |
| 3/2 NC  |           | 7, 0.10                   |                | 2 8                                             | X   | 63000069, 630000063, 63000013, 63000019 |
| 3/2 NO  |           | 6, 0.086                  |                | 2 8                                             | X   | 63000064, 630000069, 63000014, 63000020 |

(1) Flow at 4 bar in l/min (ANR)

SUBBASES: Single subbase with lateral connection Ø M5 - cat no.: 88263002
Single subbase - connection G1/8 - cat no.: 35300047
Joinable subbase - connection G1/8 - cat no.: 35300048

OPTION: Minivalve operated, intrinsically safe EEx ia, 12V - 24V DC

ACCESSORIES
<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>catalogue number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual indicator LED (Caution, consumption 0.25W and voltage 24V max.)</td>
<td>88130401</td>
</tr>
<tr>
<td>Plug size 15 with 2 m cable</td>
<td>88134367</td>
</tr>
<tr>
<td>Plug size 15 with built-in visual indicator (LED), with 2 m cable</td>
<td>881343580</td>
</tr>
<tr>
<td>Adapter for mounting PIEZOTRONIC on base ISO 15218 (CNOMO E06.05.80, size 30)</td>
<td>88263001</td>
</tr>
</tbody>
</table>

All leaflets are available on: www.asconumatics.eu

97
MINI PIEZO-VALVES PIEZOTRONIC - SERIES 630

DIMENSIONS AND WEIGHTS

MINI PIEZO-VALVE WITH STANDARD CONNECTOR
Weight: 24 g without connector
34 g with connector

MINI PIEZO-VALVE ON SINGLE SUBBASE 88263002
Weight: 45 g

ASSEMBLY WITH LED INDICATOR
(accessory, rotatable x180°)

MOUNTING FACE
Subbase for mini piezo-valve ISO 15218 (CNOMO E06.36.120N, size15)

Single subbase connection:
Outlet (2) can be connected on the left or on the right of subbase; closed unused port with a Ø M5 plug (supplied).

Connector size 15 rotatable by 90°
Manual operator by impulse
(+*) + 10 mm for clearance

MINI VALVE + Intermediate subbase (Adapter CNOMO size 30 : cat no.: 88263001)
Total weight: 53 g

Connector rotatable x 90°
CM6 (Pg 7p)

Mounting 2 screws CM4x10

Exhaust (3) (not-collectable)
Outlet (2)
Pressure (1)

(*) + 10 mm for clearance

All leaflets are available on: www.asconumatics.eu
FEATURES
• Miniature solenoid valves for medical and gas analysers and leak detectors
• Suitable for the control of gases
• The valves have a service life of more than 100 million cycles when used with inert gas
• Short response times
• Easy to integrate thanks to the valve’s small size
• Available in a variety of versions for a wide range of applications: threaded connections or pad-mount for installation on multiple manifolds
• Vacuum application up to -0.1 bar
• Low power consumption and light weight offers extended battery life for portable devices
• Multiple body configurations to suit all application needs

GENERAL
Differential pressure See "SPECIFICATIONS" [1 bar = 100 kPa]
Response time < 10 ms

<table>
<thead>
<tr>
<th>fluids (*)</th>
<th>temperature range (TS)</th>
<th>seal materials (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>air, inert gases (filtered 10 µm)</td>
<td>0 °C to +60 °C</td>
<td>FPM (fluoroelastomer) NBR (nitrile)</td>
</tr>
</tbody>
</table>

MATERIALS IN CONTACT WITH FLUID
(*) Ensure that the compatibility of the fluids in contact with the materials is verified
Body PBT, brass
Internal parts Stainless steel
Seat PBT, brass
Seals FPM, NBR

ELECTRICAL CHARACTERISTICS
Coil insulation class B (130°C)
Connection Cable ends 26 AWG or circuit board mount
Electrical safety IEC 335
Electrical enclosure protection IP30 (EN 60529)
Standard voltages DC (=) : 5V - 12V - 24V

<table>
<thead>
<tr>
<th>prefix option</th>
<th>power ratings</th>
<th>operator ambient temperature range (TS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>inrush (VA)</td>
<td>holding (VA)</td>
<td>hot/cold (W)</td>
</tr>
<tr>
<td>(W)</td>
<td>(C°)</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>0.5/1.0/2.0</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>0 to +60</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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

All leaflets are available on: www.asconumatics.eu
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>pipe size (mm)</th>
<th>orifice size (mm)</th>
<th>flow coefficient Kv</th>
<th>operating pressure differential (bar)</th>
<th>power coil (W)</th>
<th>catalogue number</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-32 UNF Stud Manifold Mount, Brass (M)</td>
<td>0.8</td>
<td>0.021</td>
<td>0.35</td>
<td>-0.9</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>0.047</td>
<td>0.78</td>
<td>-0.9</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>0.047</td>
<td>0.78</td>
<td>-0.9</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>2.0</td>
<td>0.07</td>
<td>1.16</td>
<td>-0.9</td>
<td>6.9</td>
</tr>
<tr>
<td>10-32 UNF Female In-Line, Brass (L)</td>
<td>0.8</td>
<td>0.021</td>
<td>0.35</td>
<td>-0.9</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>0.047</td>
<td>0.78</td>
<td>-0.9</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>3.17 mm Push-in Hose Connection PBT (B)</td>
<td>0.8</td>
<td>0.021</td>
<td>0.35</td>
<td>-0.9</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>0.047</td>
<td>0.78</td>
<td>-0.9</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>2.0</td>
<td>0.07</td>
<td>1.16</td>
<td>-0.9</td>
<td>6.9</td>
</tr>
<tr>
<td>Pad Mount, PBT (F)</td>
<td>0.8</td>
<td>0.021</td>
<td>0.35</td>
<td>-0.9</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>0.047</td>
<td>0.78</td>
<td>-0.9</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>2.0</td>
<td>0.07</td>
<td>1.16</td>
<td>-0.9</td>
<td>4.8</td>
</tr>
</tbody>
</table>

**2/2 NC - Normally closed**

**Ordering example:** RLM20H30B = 2-way (normally closed), 5 VDC, manifold mount with 0.8 mm orifice, 0.5 watt, cable ends, NBR seals

### HOW TO ORDER

**10-DIGIT PRODUCT CODE**

<table>
<thead>
<tr>
<th>catalogue no.</th>
<th>10-DIGIT PRODUCT CODE</th>
<th>seal materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLM20</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>voltages</td>
<td>seal materials</td>
<td></td>
</tr>
<tr>
<td>4 = 5 VDC</td>
<td>B = NBR</td>
<td></td>
</tr>
<tr>
<td>6 = 12 VDC</td>
<td>V = FPM</td>
<td></td>
</tr>
<tr>
<td>7 = 24 VDC</td>
<td>O = Oxygen service (FPM)</td>
<td></td>
</tr>
<tr>
<td>electrical connection</td>
<td>catalogue no.</td>
<td></td>
</tr>
<tr>
<td>H = cable ends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P = PCB pins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(circuit board)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All leaflets are available on: www.asconumatics.eu
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>pipe size</th>
<th>orifice size (mm)</th>
<th>flow coefficient Kv</th>
<th>operating pressure differential (bar)</th>
<th>power coil (W)</th>
<th>catalogue number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 = 2</td>
<td>2 = 3</td>
<td>min, max, PS</td>
<td>air, inert gas (+)</td>
<td></td>
</tr>
<tr>
<td>3/2 NC - Normally closed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-32 UNF Stud Manifold Mount, Brass (M)</td>
<td>0.8</td>
<td>1.0</td>
<td>0.021</td>
<td>0.35</td>
<td>-0.9</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>1.3</td>
<td>0.047</td>
<td>0.78</td>
<td>-0.9</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>1.3</td>
<td>0.047</td>
<td>0.78</td>
<td>-0.9</td>
</tr>
<tr>
<td>10-32 UNF Female In-Line, Brass (L)</td>
<td>0.8</td>
<td>1.0</td>
<td>0.021</td>
<td>0.35</td>
<td>-0.9</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>1.3</td>
<td>0.047</td>
<td>0.78</td>
<td>-0.9</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>1.3</td>
<td>0.047</td>
<td>0.78</td>
<td>-0.9</td>
</tr>
<tr>
<td>3,17 mm push-in hose PBT (B)</td>
<td>0.8</td>
<td>1.0</td>
<td>0.021</td>
<td>0.35</td>
<td>-0.9</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>1.3</td>
<td>0.047</td>
<td>0.78</td>
<td>-0.9</td>
</tr>
<tr>
<td></td>
<td>2.0</td>
<td>1.3</td>
<td>0.07 / 0.047</td>
<td>1.16 / 0.78</td>
<td>-0.9</td>
</tr>
<tr>
<td>Pad Mount, PBT (F)</td>
<td>0.8</td>
<td>1.0</td>
<td>0.021</td>
<td>0.35</td>
<td>-0.9</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>1.3</td>
<td>0.047</td>
<td>0.78</td>
<td>-0.9</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>1.3</td>
<td>0.047</td>
<td>0.78</td>
<td>-0.9</td>
</tr>
<tr>
<td></td>
<td>2.0</td>
<td>1.3</td>
<td>0.07 / 0.047</td>
<td>1.16 / 0.78</td>
<td>-0.9</td>
</tr>
</tbody>
</table>

### HOW TO ORDER

**10-DIGIT PRODUCT CODE**

<table>
<thead>
<tr>
<th>catalogue no.</th>
<th>RLM3</th>
<th>x</th>
<th>x</th>
<th>x</th>
<th>30</th>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td>port 3 style</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B = 3,17 mm push-in hose connection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F = 10-32 UNF female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>voltages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = 5 VDC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 = 12 VDC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 = 24 VDC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>electrical connection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H = cable ends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P = PCB pins (circuit board)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordering example: RLM3B7P34V = 3-way (normally closed), 24 VDC, port 3 with push-in hose connection, manifold mount with 0.8 mm orifice, 0.5 watt, PCB pins, FPM seals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### OPTIONS
- Other voltages
- Other seal materials
- Other electrical connectors
- Oxygen service
- Other pipe connections

### INSTALLATION
- The solenoid valves can be mounted in any position without affecting operation
- Threaded solenoid valves have 2 mounting holes in body
- Pad-mount valves and o-ring seals for multiple manifolds

All leaflets are available on: www.asconumatics.eu
DIMENSIONS (mm), WEIGHT (kg)

2- and 3-way pad mount solenoid valve

2 x Ø 3,2 mm mounting holes (for screws M3x20)

26 AWG PTFE coated lead wires 304,8 mm long

Hose I.D. 3,2 mm

Port 1

Port 2

Port 3 (if applicable)

2- and 3-way solenoid valve with push-in hose connection

2 x Ø 3,2 mm mounting holes (for screws M3x20)

Port 1

Port 2

Port 3 (if applicable)

Square pins 0,6 mm x 0,6 mm

2 front pins for mounting only

2 rear pins for mounting and electrical connection

Hose I.D. 3,2 mm

All leaflets are available on: www.asconumatics.eu
DIMENSIONS (mm), WEIGHT (kg)

2- and 3-way line mount solenoid valve

**Mounting holes**
- 2 x 6-32 UNC 4.8 mm deep

26 AWG PTFE coated lead wire 304.8 mm long

Port 1 & port 2

2 x 10-32 UNF

2- and 3-way manifold mount solenoid valve

**Screw-in mounting pattern**
- Ø 1.5+0.05
- Ø 10.6±0.1
- Max. Ø 1.5+0.05
- M5 - 5 deep

Port 1

3 x Ø 3.2 mm for hook spanner wrench

10-32 UNF mounting stud

Port 3 (if applicable)
FEATURES
- Miniature solenoid valves for medical and gas analysers and leak detectors
- Suitable for the control of gases
- Short response times
- Compact size for easy integration into systems
- Available in a variety of versions for a wide range of applications: threaded or screw-in type valve bodies for installation on multiple manifolds
- Approved to UL standards
- Vacuum application up to -0.9 bar

GENERAL
Differential pressure
Response time
< 10 ms

<table>
<thead>
<tr>
<th>fluids (+)</th>
<th>temperature range (TS)</th>
<th>seal materials (+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>air, inert gases (filtered 10 µm)</td>
<td>0 ºC to +60 ºC</td>
<td>FPM (fluoroelastomer)</td>
</tr>
</tbody>
</table>

MATERIALS IN CONTACT WITH FLUID
(+ *) Ensure that the compatibility of the fluids in contact with the materials is verified
- Body: Stainless steel
- Internal parts: Stainless steel
- Seals: FPM (fluoroelastomer) [EPDM (ethylene-propylene), contact us]

ELECTRICAL CHARACTERISTICS
- Coil insulation class: B
- Connection: Spade plug or cable ends AWG 20, length 300 mm
- Electrical safety: IEC 335
- Electrical enclosure protection: IP40 (EN 60529)
- Standard voltages: DC (=): 12V - 24V

<table>
<thead>
<tr>
<th>prefix option</th>
<th>power ratings</th>
<th>replacement coil</th>
<th>Typ (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>power intake ~</td>
<td>holding ~</td>
<td>hot/cold ~</td>
<td>ambient temperature range (TS)</td>
</tr>
<tr>
<td>inrush (VA)</td>
<td>holding (VA)</td>
<td>power (W)</td>
<td>max. (°C)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.5/1.5</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>01</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

SPECIFICATIONS
- Pipe size: M5
- Orifice size: 0.016 - 0.058
- Flow coefficient kv: 0.26 - 0.97
- Operating pressure differential: 0 - 6 bar
- Power coil (W): 0.016 - 0.058
- Catalogue no.:
  - Threading body: HSM2Lxx00V
  - Screw-in body: HSM2Mxx00V

HOW TO ORDER
- 10-DIGIT PRODUCT CODE:
  - HSM2L
  - x
  - x
  - 00
  - V
  - Seal materials: V = FPM

All leaflets are available on: www.asconumatics.eu

OPTIONS

• Seals made from EPDM (ethylene-propylene) (contact us)
• Oxygen service

INSTALLATION

• The solenoid valves can be mounted in any position without affecting operation
• Threaded solenoid valves have 2 mounting holes in body
• Screw-in type valves and o-ring seals for multiple manifolds

DIMENSIONS (mm), WEIGHT (kg)

<table>
<thead>
<tr>
<th>connection type</th>
<th>catalogue no.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>threaded body</td>
<td>HSM2Lxx00V/HSM2Lxx10V/HSM2Lxx50V</td>
<td>19.05</td>
<td>-</td>
<td>4.7</td>
<td>6.35</td>
<td>12.7</td>
<td>39.11</td>
<td>0.059</td>
<td></td>
</tr>
<tr>
<td>screw-in type body</td>
<td>HSM2Mxx00V/HSM2Mxx10V/HSM2Mxx50V</td>
<td>19.05</td>
<td>39.62</td>
<td>4.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.053</td>
</tr>
</tbody>
</table>

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

All leaflets are available on: www.asconumatics.eu
SOLENOID VALVE

direct operated, quick switching
threaded or screw-in type body
M5

FEATURES

• Miniature solenoid valves for medical and gas analysers and leak detectors
• Suitable for the control of gases
• Short response times
• Compact size for easy integration into systems
• Available in a variety of versions for a wide range of applications: threaded or screw-in type valve bodies for installation on multiple manifolds
• Approved to UL standards
• Vacuum application up to -0.9 bar

GENERAL

Differential pressure
See “SPECIFICATIONS” [1 bar = 100 kPa]
Response time
< 10 ms

<table>
<thead>
<tr>
<th>fluids (†)</th>
<th>temperature range (TS)</th>
<th>seal materials (†)</th>
</tr>
</thead>
<tbody>
<tr>
<td>air, inert gases (filtered 10 µm)</td>
<td>0 °C to +60 °C</td>
<td>FPM (fluoroelastomer)</td>
</tr>
</tbody>
</table>

MATERIALS IN CONTACT WITH FLUID

(†) Ensure that the compatibility of the fluids in contact with the materials is verified
Body
Stainless steel
Internal parts
Stainless steel
Seals
FPM (fluoroelastomer) [EPDM (ethylene-propylene), contact us]

ELECTRICAL CHARACTERISTICS

Coil insulation class
B
Connection
Spade plug or cable ends AWG 20, length 300 mm
Electrical safety
IEC 335
Electrical enclosure protection
IP40 (EN 60529)
Standard voltages
DC (=): 12V - 24V

<table>
<thead>
<tr>
<th>prefix option</th>
<th>power ratings</th>
<th>replacement coil</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>inrush ~ holding ~ hot/cold =</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>(VA)</td>
<td>(VA)</td>
</tr>
<tr>
<td>F</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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

SPECIFICATIONS

<table>
<thead>
<tr>
<th>pipe size</th>
<th>orifice size</th>
<th>flow coefficient Kv</th>
<th>operating pressure differential (bar)</th>
<th>power coil (W)</th>
<th>catalogue no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(mm)</td>
<td>(m³/h)</td>
<td>(l/min)</td>
<td>min.</td>
<td>max. (PS)</td>
</tr>
<tr>
<td>M5 1</td>
<td>0.75</td>
<td>1</td>
<td>0.016</td>
<td>0.26</td>
<td>-0.9</td>
</tr>
<tr>
<td>1</td>
<td>0.025</td>
<td>0.42</td>
<td>-0.9</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>0.058</td>
<td>0.97</td>
<td>-0.9</td>
<td>-</td>
<td>3.5</td>
</tr>
</tbody>
</table>

HOW TO ORDER

10-DIGIT PRODUCT CODE

<table>
<thead>
<tr>
<th>HSM3L</th>
<th>x</th>
<th>x</th>
<th>00</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>seal materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>V = FPM</td>
</tr>
</tbody>
</table>

catalogue no.
catalogue no.

voltages
6 = 12 VDC
7 = 24 VDC

electrical connection
F = Spade plug
H = cable ends

All leaflets are available on: www.asconumatics.eu
OPTIONS
- Seals made from EPDM (ethylene-propylene) (contact us)
- Oxygen service
- Other pipe connections (10-32 UNF-3B)

INSTALLATION
- The solenoid valves can be mounted in any position without affecting operation
- Threaded solenoid valves have 2 mounting holes in body
- Screw-in type valves and O-ring seals for multiple manifolds

DIMENSIONS (mm), WEIGHT (kg)

![Diagram of solenoid valves](image)

<table>
<thead>
<tr>
<th>connection type</th>
<th>catalogue no.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>threaded body</td>
<td>HSM3Lxx00V / HSM3Lxx10V / HSM3Lxx50V</td>
<td>19.05</td>
<td>-</td>
<td>-</td>
<td>4.7</td>
<td>6.35</td>
<td>12.7</td>
<td>39.11</td>
<td>0.059</td>
</tr>
<tr>
<td></td>
<td>HSM3Lxx00V / HSM3Lxx10V / HSM3Lxx50V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>screw-in type body</td>
<td>HSM3Mxx00V / HSM3Mxx10V / HSM3Mxx50V</td>
<td>19.05</td>
<td>39.62</td>
<td>4.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.053</td>
</tr>
<tr>
<td></td>
<td>HSM3Mxx00V / HSM3Mxx10V / HSM3Mxx50V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Availability, design and specifications are subject to change without notice. All rights reserved.

All leaflets are available on: www.asconumatics.eu
**FEATURES**

- Miniature solenoid valve for respirators, medical analyzers, gas analyzers and control units, as well as for use as a pilot valve.
- RoHS compliant.
- New flat-spring technology enables
  - short response times and their precise adjustment
  - very low switching noise
  - exceptional long service life
- Suitable for oxygen service
- Easy to integrate thanks to the valves' small size.
- Pad-mount for installation on multiple manifolds.
- Vacuum application up to 0.1 bar abs.
- All 3 connections of the 3/2 way valve are contactable via the flange.

**GENERAL**

<table>
<thead>
<tr>
<th>Differential pressure</th>
<th>See “SPECIFICATIONS” [1 bar = 100 kPa]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum viscosity</td>
<td>20 cSt (mm²/s)</td>
</tr>
<tr>
<td>Response time</td>
<td>&lt; 10 ms</td>
</tr>
<tr>
<td>Internal volume</td>
<td>≤ 150 µl (couplings not included)</td>
</tr>
</tbody>
</table>

**MATERIALS IN CONTACT WITH FLUID**

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

- Body: Stainless steel
- Plugnut: Stainless steel
- Flat-spring: Stainless steel
- Seat and housing base: PPS
- Seals: FPM (other materials: contact us)

**ELECTRICAL CHARACTERISTICS**

- Coil insulation class: F
- Connection: Cable leads AWG 26/7, 80mm length
- Electrical safety: IEC 335
- Electrical enclosure protection: IP40 (EN 60529)
- Standard voltages: DC (=): 12V, 24V
- Power: 2W at 20°C
- Duty cycle: 100% at ambient temperature 0°C to 60°C

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>function</th>
<th>orifice size</th>
<th>flow coefficient kv</th>
<th>operating pressure differential (bar)</th>
<th>power coil</th>
<th>catalogue number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/2 NC</td>
<td>0.6</td>
<td>0.010</td>
<td>0.010</td>
<td>0</td>
<td>R065A131L0V00xx</td>
</tr>
<tr>
<td></td>
<td>1.2</td>
<td>0.025</td>
<td>0.050</td>
<td>3</td>
<td>R065A134L0V00xx</td>
</tr>
<tr>
<td>3/2 NC</td>
<td>0.6</td>
<td>0.010</td>
<td>0.010</td>
<td>0</td>
<td>R065A141L0V00xx</td>
</tr>
<tr>
<td></td>
<td>1.2</td>
<td>0.024</td>
<td>0.040</td>
<td>1.3</td>
<td>R065A144L0V00xx</td>
</tr>
</tbody>
</table>

**ORDERING**

According to table “SPECIFICATIONS”

- Voltage
  - F1 = 24 VDC
  - F3 = 12 VDC

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

- Other seal materials
- Specific response times
- Optimised operating noise level

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation.
- Seals and mounting screws (M2, hexagon socket, DIN912) for flange connection are standard supplied.

DIMENSIONS (mm), WEIGHT (kg)

<table>
<thead>
<tr>
<th>Option</th>
<th>Dimensions</th>
<th>Weight*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/2 way</td>
<td>24.8 x 19.8</td>
<td>0.020kg</td>
</tr>
<tr>
<td>3/2 way</td>
<td>24.8 x 19.8</td>
<td>0.021kg</td>
</tr>
</tbody>
</table>

* Incl. mounting screws

Outlet

Inlet

Length not to scale

Subbase mounting surface

- Optional orientation pin Ø=1.0mm (m6), DIN EN ISO 2338 (not supplied).
- Must project not more than 3mm.