Mounting accessories

Also available in ATEX version for use in potentially explosive atmospheres in accordance with 94/9/EC Directive

**Mounting equipment**

| 81 533 001 | Hole domino |
| 81 533 001 | Clip domino |
| 000 741 P2 | Bar clips Ø 8 |

**Supply manifold 13 outputs**

| 81 536 801 | Ø 8 |

**Characteristics**

| Weight (g) | 8 |
| For mounting on the end of a zinc-coated mild steel rod Ø 8 mm on an asymmetrical DIN rail |
| 80 |
| For adjustable mounting on a zinc-coated mild steel rod Ø 8 mm on an asymmetrical DIN rail |
| 80 |
| Packet of 100 pieces |
| 80 |

**Dimensions**

81 536 804

Other information

Use Weidmuller plastic labels for marking components part number FW 4734-6.

ATEX version products are available in the following catalogues: Pneumatic products for explosive atmospheres or on our website www.crouzet.com
Miniature solenoid valves for alternating current

- Conform to the Low Voltage Directive
- For mounting on sub-base or footprint in accordance with CNOMO E-06-36-120N
- UL and cUL approval
- Degree of protection with M12 5-pin connector
- Conform to the Low Voltage Directive

Part numbers (and voltages)

<table>
<thead>
<tr>
<th>Function</th>
<th>Version</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>81 519 080</td>
<td>Operating pressure: 1.4 bar, Switching time: 3.8 ms, Flow at 6 bars: 2.5 VA, Operating temperature: 7.5°C</td>
</tr>
<tr>
<td>Output</td>
<td>81 519 210</td>
<td>Compressed air or inert gas - oil-free, Operating pressure: 6 bar, Switching time: 3.8 ms, Flow at 6 bars: 2.5 VA, Operating temperature: 7.5°C</td>
</tr>
<tr>
<td>Exhaust</td>
<td>81 519 600</td>
<td>Compressed air or inert gas - oil-free, Operating pressure: 6 bar, Switching time: 3.8 ms, Flow at 6 bars: 2.5 VA, Operating temperature: 7.5°C</td>
</tr>
</tbody>
</table>

Part numbers (and voltages) for direct current

- Conform to the Low Voltage Directive
- For mounting on sub-base or footprint in accordance with CNOMO E-06-36-120N

Part numbers (and voltages)

<table>
<thead>
<tr>
<th>Function</th>
<th>Version</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>81 519 080</td>
<td>Operating pressure: 1.4 bar, Switching time: 3.8 ms, Flow at 6 bars: 2.5 VA, Operating temperature: 7.5°C</td>
</tr>
<tr>
<td>Output</td>
<td>81 519 210</td>
<td>Compressed air or inert gas - oil-free, Operating pressure: 6 bar, Switching time: 3.8 ms, Flow at 6 bars: 2.5 VA, Operating temperature: 7.5°C</td>
</tr>
<tr>
<td>Exhaust</td>
<td>81 519 600</td>
<td>Compressed air or inert gas - oil-free, Operating pressure: 6 bar, Switching time: 3.8 ms, Flow at 6 bars: 2.5 VA, Operating temperature: 7.5°C</td>
</tr>
</tbody>
</table>

Miniature solenoid valves projecting according to CNOMO E 06-36-120N

- Function
- Version
- UL and cUL approval
- Degree of protection with connector 81 516 082
- Conform to the Low Voltage Directive

Part numbers (and voltages)

<table>
<thead>
<tr>
<th>Function</th>
<th>Version</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>81 519 080</td>
<td>Operating pressure: 1.4 bar, Switching time: 3.8 ms, Flow at 6 bars: 2.5 VA, Operating temperature: 7.5°C</td>
</tr>
<tr>
<td>Output</td>
<td>81 519 210</td>
<td>Compressed air or inert gas - oil-free, Operating pressure: 6 bar, Switching time: 3.8 ms, Flow at 6 bars: 2.5 VA, Operating temperature: 7.5°C</td>
</tr>
<tr>
<td>Exhaust</td>
<td>81 519 600</td>
<td>Compressed air or inert gas - oil-free, Operating pressure: 6 bar, Switching time: 3.8 ms, Flow at 6 bars: 2.5 VA, Operating temperature: 7.5°C</td>
</tr>
</tbody>
</table>
Electro-pneumatic miniature control valves

Mounting

Miniature solenoid valves

Indicators
- LED seals
- LED

Valve modules
- Poppet
  - 3/5 monostable (17.5 mm)
  - 4/2 monostable (17.5 mm)
- Slide valve
  - 4/2 bistable (35 mm)
  - 4/2 monostable spring-return (35 mm)

Sub-bases
For miniature solenoid valves
For valve modules
Doubles
Single

Complete product
Valve modules

- Monostable, bistable
- 3/2, 4/2

Also available in ATEX version for use in potentially explosive atmospheres in accordance with 94/9/EC Directive

<table>
<thead>
<tr>
<th>Function</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/2 NC monostable</td>
<td>3</td>
</tr>
<tr>
<td>3/2 NO monostable</td>
<td>4</td>
</tr>
<tr>
<td>4/2 monostable</td>
<td>5</td>
</tr>
<tr>
<td>4/2 bistable</td>
<td>6</td>
</tr>
<tr>
<td>4/2 monostable</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (mm)</td>
</tr>
<tr>
<td>Works pressure</td>
</tr>
<tr>
<td>Orifice diameter (mm)</td>
</tr>
<tr>
<td>Flow at 0 bars (l/min)</td>
</tr>
<tr>
<td>Flow Rate (l/min)</td>
</tr>
<tr>
<td>Operating temperature (°C)</td>
</tr>
<tr>
<td>Switching time for the valve only</td>
</tr>
<tr>
<td>Mechanical life (operations)</td>
</tr>
<tr>
<td>Weight (g)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1 513</td>
</tr>
<tr>
<td>V1 516</td>
</tr>
</tbody>
</table>

Sub-bases and end bases for miniature control valves

- Also available in ATEX version for use in potentially explosive atmospheres in accordance with 94/9/EC Directive

<table>
<thead>
<tr>
<th>Part numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbol</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>Sub-bases</td>
</tr>
<tr>
<td>End bases (*</td>
</tr>
<tr>
<td>— intermediate supply module</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torque capacity (Nm)</td>
</tr>
<tr>
<td>UL and cUL approval</td>
</tr>
<tr>
<td>Mounting</td>
</tr>
<tr>
<td>Weight (g)</td>
</tr>
</tbody>
</table>

Connections Pneumatic

- Intermediate base module
- Sub-bases
- End bases

Degree of protection: IP20 when assembled.

Dimensions with miniature control valves (page 62) + miniature solenoid valves (page 58) + indicators (page 65)

ATEX version products are available in the following catalogues: Pneumatic products for explosive atmospheres or on our website www.crouzet.com
Valves and solenoids valves assembled

Contact us for
Other versions

Part numbers

Function
2/2 NC 2/2 NC
4/2 monostable 4/2 bistable

Version
Sub-base with push-in connection for semi-rigid tubing (NFE 49100)
Ø 4 ext.

Common air supply
Pneumatic output

Symbol

Characteristics

Operating pressure bar 4
DIN 35 mm 1
Flow at sub-base 81 513 060 NL/min 3
Pipe at sub-base 81 517 101 NL/min 2

9 V

with sub-base 81 513 060
2.2
with sub-base 81 517 101
2.2

Operating temperature °C 15

Switching time of the assembly ms 20
Mechanical life (operations) at 4 bars 1.5 x 10^7
Valve position will be maintained in the event of pressure loss and/or electrical current loss

Mechanical life (operations)

Weight g 3

Mounting
DIN rail 35 mm

UL and cUL approval
MH10585

Principle of operation
3/2 monostable module (NC)

Anti-return valve to prevent back pressures
Common exhaust
Common air supply
Pneumatic output

4/2 bistable module

Dimensions

Module: 1
Intermediate: 2
End bases: 3

End bases - one pair

LED indicator
LED indicator
Pneumatic output
Pneumatic output

4/2 monostable module

Indicators not supplied (page 65)

End bases not supplied (page 63)

Other versions

Package of 10 pieces
Supplied in multiples of 5
Supplied in multiples of 10

Accessories

Also available in ATEX version for use in potentially explosive atmospheres in accordance with 94/9/EC Directive

Part numbers

Valve
24 V ~ 50-60 Hz +10% -15%
230 V ~ 60 Hz +10% -15%

LED seal
12 to 24 V - DC - AC

LED
25 515 054

Connection

Connection

Consumption W 0.24

Supplied in multiples of 5

Pack of 10 pieces

Weight g 2

Connection

Pilot signal
Earth (4)

ATEX version products are available in the following catalogues: Pneumatic products for explosive atmospheres or on our website www.crouzet.com
Solenoid valves

> Reduced “dimensions”
> Mounted on sub-base

### Part numbers and voltages

<table>
<thead>
<tr>
<th>Function</th>
<th>3/2 NC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solenoid valves</td>
<td>81 519 081</td>
</tr>
<tr>
<td>with 23 V ± 15%</td>
<td>± 15%</td>
</tr>
<tr>
<td>manual</td>
<td>81 519 082</td>
</tr>
<tr>
<td>24 V ± 10%</td>
<td>± 10%</td>
</tr>
<tr>
<td>override</td>
<td>81 519 083</td>
</tr>
<tr>
<td>110 V ± 10%</td>
<td>± 10%</td>
</tr>
<tr>
<td>by impulse</td>
<td>81 519 084</td>
</tr>
<tr>
<td>220 - 230 V ± 10%</td>
<td>± 10%</td>
</tr>
</tbody>
</table>

### Characteristics

<table>
<thead>
<tr>
<th>Operating pressure</th>
<th>2 - 8 b ar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orifice diameter</td>
<td>2.7 mm</td>
</tr>
<tr>
<td>Flow at 6 bars</td>
<td>1.5 x 10⁷ Nl/min</td>
</tr>
<tr>
<td>Rotatable coil</td>
<td>4 positions in 90° steps</td>
</tr>
</tbody>
</table>

### Degree of protection (IP 65)

<table>
<thead>
<tr>
<th>Protection (with connector 81 516 082 not supplied) (see page 65)</th>
<th>IEC 529</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP 65</td>
<td></td>
</tr>
</tbody>
</table>

### Mechanical life

<table>
<thead>
<tr>
<th>Operations</th>
<th>1.5 x 10⁷</th>
</tr>
</thead>
</table>

### Consumption

<table>
<thead>
<tr>
<th>Power supply</th>
<th>1 W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature</td>
<td>-5 ➞ +50 °C</td>
</tr>
<tr>
<td>Weight</td>
<td>3.7 g</td>
</tr>
</tbody>
</table>

### Principle of operation

#### Connections

- **Pneumatic**
  - 1 - Supply
  - 2 - Output

- **Electrical**
  - 1 - Pilot signal
  - Earth

#### Dimensions

<table>
<thead>
<tr>
<th>81 519</th>
</tr>
</thead>
</table>

#### Electrical connection by connector 81 516 062 (see page 65)

### Miniature control valves, 17.5 mm

**Electro-pneumatic interface block**

Complete block, ready to install, consisting of:
- Preconfigured 8-position sub-base
- 6/4/2 monostable valve modules with 24 V c pilot holes
- 2 blanking plates (for extension if necessary)
- 1 connection cable

#### Part numbers

<table>
<thead>
<tr>
<th>16 outputs</th>
<th>16 outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part numbers</td>
<td>81513241</td>
</tr>
<tr>
<td>81513238</td>
<td></td>
</tr>
</tbody>
</table>

#### Electric characteristics

- **Supply voltage**
  - 24 V ± 10% ± 10% 24 V ± 10% ± 10%
- **Current max. absorbed by 24 V de SUBD (mA)**
  - 500 500
- **Maximum working current**
  - 60 60
- **Response time (ms)**
  - 15 15
- **LED display**
  - Yes (integrated in the sub-base) Yes (integrated in the sub-base)
- **Protection against voltage surges**
  - Yes Yes
- **Electrical characteristics**
  - Type of cable Sub D9 AWG 24 wires Sub D9 AWG 24 wires
  - **Cable length**
    - 2 m 2 m
  - **Electro-pneumatic characteristics**
    - **Function**
      - 6/4/2 monostable valve modules (81513200) + 2 free positions
    - **Without**
      - Operating pressure bars 3 ➞ 8 b ar 3 ➞ 8 b ar
      - Flow at 6 bars Nl/min 300 300
      - Mechanical life (operations) 1.5 x 10⁷ 1.5 x 10⁷
      - Working medium Compressed air or inert gas, 50 µm filtered non-lubricated air Compressed air or inert gas, 50 µm filtered non-lubricated air
    - **Pneumatic connections**
      - Power supply connection Push-in connection Ø 8 mm Push-in connection Ø 8 mm
      - Output connections Push-in connection Ø 6 mm Push-in connection Ø 6 mm
      - Connection of common exhaust Push-in connection Ø 8 mm Push-in connection Ø 8 mm

#### General characteristics

- **Operating temperature**
  - Range IEC 68-2-14 (°C) -5 ➞ +50 -5 ➞ +50
- **Storage temperature**
  - IEC 68-2-14 (°C) -15 ➞ +50 -15 ➞ +50
- **Protection (IEC/EN 60529)**
  - IP 20 IP20
- **Mounting**
  - On DIN rail or via two M5 screws (according to mounting plan) On DIN rail or via two M5 screws (according to mounting plan)
- **Weight (g)**
  - 1350 1350

#### Comments

- Other configurations on request

### Dimensions (mm)

<table>
<thead>
<tr>
<th>81513241</th>
</tr>
</thead>
</table>

#### Connections

- **Common 0 V**
- **Clips female Cl**
Specific islands “for integrators” (supplied in packs of 20)

Versions with interfaces 300 NL / mm

Configuration
1 - Specify the number and type of interfaces (3 / 2 mono - 4 / 2 mono - 4 / 2 bistable) see page 62.
2 - Specify the voltage, the type and method of the control valve connections, see page 58-59 (Example: 24 V DC with manual switch maintained, exit leads).
3 - Please send us your application specifying your requirements and quantities per year, and we will respond as soon as possible.

Versions with interfaces 30 NL / mm

Configuration
1 - Specify the voltage, the type and method of the control valve connections, see page 58-59 (Example: 24 V DC with manual switch maintained, exit leads).
2 - Please send us your application specifying your requirements and quantities per year, and we will respond as soon as possible.

Develop customised versions to specifications

Crouzet analyses your needs and offers a customised solution.

MULTI-FLUID
SOLENOID VALVES