FEATURES

- High flow rate up to 650 l/min
- Spool & Sleeve or rubber packed technology in the same dimension body
- Wide electrical connection selection: G3 or 580 Fieldbus Electronics, 25 or 37 Pin Sub-D connector, 19 Pin Round connector, 26 Pin Round connector or Terminal Strip
- Internal or external pilot pressure supply capability
- Compliance with ISO standard 15407-2 18 mm
- Solenoid air operated valves which can be mounted on manifold bases
- 580 Electronics

GENERAL

Operating pressure
Ambient temperature range (TS)
Rated flow
conforming to ISO 6358
Pneumatic base
Connection
Response time
See «SPECIFICATIONS»
See «SPECIFICATIONS»
See «SPECIFICATIONS»
High flow subbase or ISO 15407-2 18 mm
Joinable subbase
See «SPECIFICATIONS»

<table>
<thead>
<tr>
<th>Fluids (+)</th>
<th>Temperature range (TS)</th>
<th>Technology</th>
<th>Seal materials (+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>air or inert gas ISO 8573</td>
<td>-10°C to +50°C</td>
<td>rubber packed</td>
<td>PUR (polyurethane)</td>
</tr>
<tr>
<td>Level 7.4.4</td>
<td>-10°C to +50°C</td>
<td>spool &amp; sleeve</td>
<td>metal-to-metal sealing</td>
</tr>
</tbody>
</table>

CONSTRUCTION

MATERIALS IN CONTACT WITH FLUID

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

<table>
<thead>
<tr>
<th>Material</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body</td>
<td>Aluminium, E-coating treatment</td>
</tr>
<tr>
<td>Spool</td>
<td>Aluminium or st. steel (spool &amp; sleeve)</td>
</tr>
<tr>
<td>Piston</td>
<td>POM (rubber packed)</td>
</tr>
<tr>
<td>Spring</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>Other seals</td>
<td>NBR</td>
</tr>
<tr>
<td>Other materials</td>
<td>PA (polyamide)</td>
</tr>
<tr>
<td>Subbases</td>
<td>Aluminium, E-coating treatment</td>
</tr>
<tr>
<td>Subbases</td>
<td>GF 50% (glass fiber reinforced)</td>
</tr>
</tbody>
</table>

ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coil insulation class</td>
<td>F</td>
</tr>
<tr>
<td>Electrical safety</td>
<td>IEC-EN 60730-1 / IEC-EN 60730-2-8</td>
</tr>
<tr>
<td>Electrical enclosure protection</td>
<td>IP65 (EN 60529)</td>
</tr>
<tr>
<td>Standard voltages</td>
<td>DC (=) : 24V</td>
</tr>
<tr>
<td>Power ratings (hot/cold) (=)</td>
<td>1,1 W / 1,3 W</td>
</tr>
</tbody>
</table>
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Function</th>
<th>Type</th>
<th>Symbol</th>
<th>Rated Flow</th>
<th>Response Time</th>
<th>Pilot Pressure at 23°C</th>
<th>Operating Pressure Port 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>l/min (ANR)</td>
<td>ms</td>
<td>(bar)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>min.</td>
<td>min.</td>
<td>max.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>max.</td>
<td>max.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### SPOOL VALVE, RUBBER PACKED TECHNOLOGY, WITH IMPULSE MANUAL OPERATOR

<table>
<thead>
<tr>
<th>2 x 3/2</th>
<th>NC</th>
<th>K</th>
<th>650</th>
<th>600</th>
<th>36 / 15</th>
<th>4</th>
<th>8</th>
<th>2 (**)</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>500</td>
<td>440</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(**) Min. pressure with external piloting.

#### SPOOL VALVE, SPOOL AND SLEEVE TECHNOLOGY, WITH IMPULSE MANUAL OPERATOR

<table>
<thead>
<tr>
<th>S</th>
<th>5/2</th>
<th>470</th>
<th>530</th>
<th>16 / 49</th>
<th>2</th>
<th>8</th>
<th>-0,95</th>
<th>8</th>
<th>R502A1B10MA00F1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>410</td>
<td>390</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td></td>
<td>470</td>
<td>530</td>
<td>11 / 26</td>
<td>1,5</td>
<td>8</td>
<td>-0,95</td>
<td>8</td>
<td>R502A1B0NA00F1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>410</td>
<td>390</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J</td>
<td></td>
<td>470</td>
<td>530</td>
<td>16 / 16</td>
<td>2</td>
<td>8</td>
<td>-0,95</td>
<td>8</td>
<td>R502A1B40MA00F1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>410</td>
<td>390</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>5/3</td>
<td>420</td>
<td>440</td>
<td>12 / 12</td>
<td>1,5</td>
<td>8</td>
<td>-0,95</td>
<td>8</td>
<td>R502A1B60MA00F1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>360</td>
<td>350</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>420</td>
<td>430</td>
<td>13 / 23</td>
<td>1,5</td>
<td>8</td>
<td>-0,95</td>
<td>8</td>
<td>R502A1B70MA00F1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>370</td>
<td>350</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
<td>380</td>
<td>500</td>
<td>23 / 13</td>
<td>1,5</td>
<td>8</td>
<td>-0,95</td>
<td>8</td>
<td>R502A1B50MA00F1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>340</td>
<td>350</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(*) Vérifier la compatibilité du fluide avec les matériaux en contact.
(c) Contact us.

All leaflets are available on: www.asco.com
### Plug in Valve

#### Dimensions (mm)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>69</td>
</tr>
<tr>
<td>3</td>
<td>49.8</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>5</td>
<td>120</td>
</tr>
</tbody>
</table>

| weight (kg) | 0.169 |

Configurator - CAD Files

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

All leaflets are available on: [www.asco.com](http://www.asco.com)
Assembly kits

25 or 37 Pin Sub-D

1-32 Terminal Strip

19 Pin Round Connector

26 Pin Round Connector

Manifold assembly with G3 Electronics & Discrete I/O

All leaflets are available on: www.asco.com
Maximum number of valve stations is determined by:

- The electrical connection type
- The valve type: single and/or double solenoid valves
**How to Order**

**Subbases**

**15-DIGIT PRODUCT CODE**

<table>
<thead>
<tr>
<th>G</th>
<th>502</th>
<th>A</th>
<th>M</th>
<th>S2</th>
<th>2</th>
<th>M</th>
<th>A00</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
</table>

**Interface**
1 = Pneumatic high flow
2 = ISO 15407-2 (18 mm)

**Options**
A00 = Standard (internal pilot)
14X = External pilot supply from port 14
83H = Pilot Separation from Station 1
83J = Pilot Separation from Station 2

**Wiring option**
M = Plug-in
T = 32+ Solenoid Auxiliary Power (used with M4 and F)
V = +24 V DC Separation at First Station
W = +24 V DC Separation at Second Station

**Port connection**

*Used with the digit «G» or «8»:
1 = 1/8 (female thread only)
3 = 3/8 (Used for Dual Flow only)
4 = 1/2 (Used for Dual Flow only)

*Used with the digit «K»:
F = 4 x 6 mm [push-in connector only]
H = 6 x 8 mm [push-in connector only]

**Thread connection**
G = ISO 228/1
8 = NPT (contact us)
K = Push-in connectors

**Product series**
502 (18 mm valve)

**Revision letter**
A = Initial release

**Product type**
M = Manifold base
Z = Mid station supply
F = 32+ Solenoid Manifold Subbase

**Mounting**
S2 = Manifold base, 2 stations, side port, single Z-Board™
M2 = Manifold base, 2 stations, side port, double Z-Board™
V2 = Manifold base, 2 stations, side port
M4 = 32+ Manifold Sub Base, 4 Stations, Side Ports, Double Z-Board™

---

**Dimensions (mm)**

**Plug in Valve Mounted**

**Configurator - CAD Files**

All leaflets are available on: www.asco.com

16 - Fielbus Electronics
**How to Order Valves**

<table>
<thead>
<tr>
<th>15-DIGIT PRODUCT CODE</th>
<th>R</th>
<th>502</th>
<th>A</th>
<th>2</th>
<th>B</th>
<th>1</th>
<th>0</th>
<th>M</th>
<th>A00</th>
<th>F1</th>
</tr>
</thead>
</table>

- **Thread connection**
  - R = Pad mount

- **Product series**
  - 502 (18 mm valve)

- **Revision letter**
  - A = Initial release

- **Actuation**
  - 1 = Spool and sleeve
  - 2 = Rubber packed (2x3/2 NC, only)

- **Valve type**
  - B = Solenoid pilot
    - (With impulse manual operator)

- **Function**
  - D = 2x3/2 NC, dual 3-way (Rubber packed)
  - N = 5/2, Differential air return
  - 1 = 5/2, spring return
  - 4 = 5/2, solenoid air return
  - 5 = 5/3, W3, open center to exhaust
  - 6 = 5/3, W1, center closed
  - 7 = 5/3, W2, open center to pressure

- **Voltage - class**
  - F1 = 24 V DC - class F

- **Options**
  - A00 = Standard (No option)
  - 11B = With impulse manual operator
  - 11M = Without manual operator

- **Electrical interface**
  - M = Plug-in (with LED indicator / DC)

(1) Used external spool valves (internal/external supply configured in the end plate kits).
## How to Order

### Regulators

<table>
<thead>
<tr>
<th>15-DIGIT PRODUCT CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
</tr>
</tbody>
</table>

### Thread connection
- **R** = Pad mount

### Product series
- **502** (18 mm valve)

### Revision letter
- **A** = Initial release

### Product type
- **R** = Pressure regulator

### Type régulateur
- **S** = Single regulator - Pressure to port 1
- **D** = Regulator - Pressure to ports 5 & 3
- **E** = Regulator - Pressure to ports 4 & 2, without valve
- **T** = Regulator - Pressure to ports 1 & 3, 2 pressure selector

### Interface
- **1** = Pneumatic high flow
- **2** = ISO 15407-2

### Options
- **A00** = Standard (no options)
- **16N** = Jumper on 14 end
- **16P** = Jumper on 12 end
- **61Y** = Regulator with Gauge Extension Fitting
- **63L** = 16P + 61Y
- **63M** = 16N + 61Y

### Wiring option
- **J** = Plug-in

### Gauge type
- **2** = Gauge scale (bar)

### Plage de pression
- **1** = 0.7 to 9 bar
- **3** = 0.2 to 2 bar
- **4** = 0.3 to 4 bar

---

Configurator - CAD Files

All leaflets are available on: [www.asco.com](http://www.asco.com)

18 - Fielbus Electronics
Adaptor Plate Kits

The kits include the adapter plate, transfer board, gasket, screws. Individual end plates for the 502 and 503 are not included. This adaptor allows the transition from the 503 to the 502 series.

EXAMPLE ORDERS:

Adapter plate kit:
G503AVJD332VA00
R503A2B40MA00F1
R503A2B40MA00F1
G503AMM22MA0010
R502A1B40MA00F1
R502A1B40MA00F1
G502AMM21MA0010
ASSEMBLED

Valves:
R503A2B40MA00F1
R503A2B40MA00F1
G503AMM22MA0010
R502A1B40MA00F1
R502A1B40MA00F1
G502AMM21MA0010

and mounting:

Adaptor Plate Kit with Standard End Plates
(ISO 15407-2 + High Flow)

<table>
<thead>
<tr>
<th>Description</th>
<th>15-DIGIT PRODUCT CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>503 with 3/8 G-tap to 502</td>
<td>G503AT429964003</td>
</tr>
</tbody>
</table>

Adaptor Plate Kit with Standard End Plates
(ISO 15407-1)

<table>
<thead>
<tr>
<th>Description</th>
<th>15-DIGIT PRODUCT CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>503 with 3/8 G-tap to 502</td>
<td>G503AT429964004</td>
</tr>
</tbody>
</table>

Dimensions (mm)

503 to 502

All leaflets are available on: www.asco.com

Fielbus Electronics - 19