750 Series - 5/2

Compact solenoid multi-valve | 5/2 x 4
PNEUMATIC DIVISION

MATRIX
mechatronics

www.matrix.to.it
sales@matrix.to.it
5/2 750 Series encloses 8 shutters in a single body, four in NC configuration and four in NO configuration. Shutters are placed in NC - NO couples and every couple is combined to a single control, providing the change of function. The 8 outlets of the solenoid valve are also placed in an alternated NC - NO sequence and every couple is prearranged to control a double-acting cylinder. The models present all the innovations offered by Matrix technology, combining dynamic high-performance with the simplicity and reliability of the manufacture. Response times are of milliseconds while operating life lasts over 500 million cycles. Due to the control of speed-up type, dynamic characteristics are even more improved. Standard solenoid valves have a response time lower than 5 ms in opening and in closing, with a maximum operating frequency of 100 Hz.

For 5/2 750 series, a lot of accessories are available, such as IP 52 or IP 56 connectors, manifolds with different positions and speed-up driver boards.

**Advantages**

- Compact dimension.
- Short response times.
- Insensitivity to frequency work and to vibrations.
- Low absorbed power.
- Precision, repetitiveness and flexibility.
- Long operating life.

**Applications**

- Process and precision instrumentation.
- Industrial automation.
- Robotics.
- Positioning systems.
- Piloting.

**Materials**

- Body in PPS.
- Flanges in Al.
- Seals in NBR (shutters in HNBR if required).
**GENERAL CHARACTERISTICS**

- FLUID: Non-lubricated dry air, neutral gases (−10 to 50°C)
- FILTRATION RATING: Min 40 micron
- TEMPERATURE: −10 to 50°C (Standard version)
- RESPONSE TIME IN OPENING: KK < 5 ms
- RESPONSE TIME IN CLOSING: KK < 5 ms
- MAXIMUM FREQUENCY: 100 Hz
- WEIGHT: 380 g
- PRODUCT LIFE EXPECTANCY: ≥ 500 M/s cycles
- IP RATING: IP 52 - IP 65

**IDENTIFICATION CODE**

- **FLOW RATE** (at 6 bar):
  - H 50 Nl / min

- **VERSION**:
  - Standard
  - H HNBR Shutters

- **OUTLETS**:
  - 8 8 Outlets

- **FUNCTIONS**:
  - E N.4 Outlets NO
  - N.4 Outlets NC

- **TYPE**:
  - 5 5/2

- **CONTROL TENSION**:
  - KK Speed-up in tension
  - ED 100% *(1)*
  - *(1)* Only with Electronic Driver Boards PRB or UDB

- **PORT CONNECTION**:
  - E Presetting for Easy connection
  - IP 52 - IP 65

- **OPERATING PRESSURE**:

<table>
<thead>
<tr>
<th>RANGE</th>
<th>MODELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>All</td>
</tr>
</tbody>
</table>
NC-NO

758 • 5/2

OUTLETS M5
Normally Open 1 - 3 - 5 - 7
Normally Closed 2 - 4 - 6 - 8

ACCESSORIES

<table>
<thead>
<tr>
<th>Reference</th>
<th>Quantity</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>PUSH-IN FITTING Ø 10</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>PUSH-IN FITTING Ø 4/6</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>SILENCER</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>SILENCER</td>
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</table>

NOTE: Inch size available

CHARACTERISTICS OF THE ELECTRICAL CONTROL - MODELS KK

V1 = 24 VDC  t1 = 6 ms  V2 = 5 VDC

N.B. KK MODELS ARE CONTROLLED IN TENSION

FLOW RATE H

Q (Nl/min)

60
50
40
30
20
10
0

P (bar)

Qn = 34 Nl/min
C = 7.14 Nl/min bar
b = 0.456

ELECTRICAL PORT CONNECTION

<table>
<thead>
<tr>
<th>COLOUR</th>
<th>4 CONTROLS</th>
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<tbody>
<tr>
<td>BLACK</td>
<td>COMMON</td>
</tr>
<tr>
<td>BROWN</td>
<td>1 – 2</td>
</tr>
<tr>
<td>RED</td>
<td>3 – 4</td>
</tr>
<tr>
<td>ORANGE</td>
<td>5 – 6</td>
</tr>
<tr>
<td>YELLOW</td>
<td>7 – 8</td>
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