SORTING

High Speed Solenoid Valves
Manifolds for Sorting Applications
Electronic Driver Boards
MANIFOLDS FOR SORTING APPLICATIONS

In the Sorting industry, Matrix offers the most advanced and developed solutions. Among these is featured a wide range of assembled Manifolds, with an ample scope of customisations specifically tailored for the solenoid valves belonging to 720, 820 and 840 series.

Matrix Manifolds, made in aluminium alloy UNI 9006, are fit to perform with extremely reduced pitches between the orifices maintaining top-notch performances. In the standard configuration the minimum distance between orifices is of 6,35 mm (1/4\(^*\)). In the TWIN configuration the minimum distance between orifices is of 3,175 mm (1/8\(^*\)). First-rate manufacturing is combined with excellent dynamic performances of the solenoid valves. The result is a manifold group assembled and tested with highest quality standards, suitable to meet requirements for the most demanding applications.

They are available in a number of exterior protection coatings, such as anodised oxidation for food, metal coat plating, nickel plating and special custom finishing.

HIGH SPEED SOLENOID VALVES FOR SORTING APPLICATIONS

A wide variety of products, distinguished by exceptional dynamic performances and enhanced reliability, intended for the most complex applications, with high endurance standards. Featuring ideal characteristics for Sorting applications, an industry field in which Matrix offers the most of its outstanding potentials.

- 580 Series, 2/2 solenoid multi-valves, flowrate up to 180 Nl/min @ 6 bar, response time inferior to 0,5 ms.
- 720 Series, 3/2, 2/2 solenoid valves, width 12 mm, flowrate up to 120 Nl/min @ 6 bar, response time inferior to 2 ms.
- 820 Series, 2/2 solenoid valves, width 12 mm, flowrate up to 180 Nl/min @ 6 bar, response time inferior to 0,5 ms.
- 840 Series, 2/2 solenoid valves, width 12 mm, flowrate up to 320 Nl/min @ 6 bar, response time inferior to 0,5 ms.
- 840D Series, same characteristics of the 840 Series but with speed-up control driver integrated in the valves body.
- 850 Series, 2/2 solenoid multi-valves, flowrate ranging from 80 to 1500 Nl/min @ 6 bar (depending on configuration), response time inferior to 0,5 ms.
- 850 UHS Series, same characteristics of the 850 Series but with a maximum operating frequency of 2000 Hz, response time inferior to 0,2 ms.
HIGH SPEED SOLENOID VALVES FOR SORTING APPLICATIONS

840 series

850 series

820 series

720 series

580 series

840 D series with driver integrated

850 UHS SERIES (Ultra High Speed) 2000 Hz Solenoid Multi-Valves

In the pneumatic industry worldwide Matrix is synonym of products featuring advanced technology and state of the art performances characteristics. Resulting from constant research and innovation, 850 UHS Series represents a remarkable example of such technology. Capable of ensuring an operative frequency of 2000 Hz, the integrated multi-outlet solenoid valves applied in UHS Series pave the way to new horizons in the Sorting domain.

Pressure wave and Current wave at 2000 Hz

Pressure wave

Current wave

850 series Ultra High Speed
ELECTRONIC DRIVER BOARDS

Dynamic performances of pneumatic solenoid valves depend largely on the characteristics featured on the electronic driver control units. In order to ensure the utmost degree of integration and warrant highest performance levels, Matrix has developed a new series of ELECTRONIC DRIVER BOARDS which represent the ideal complement to the solenoid valves belonging to 580, 720, 820, 840 and 850 series.

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<th>Number of channels</th>
<th>Max frequency</th>
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BIBUS GmbH
89231 Neu-Ulm
Tel. 0731 20769-0
Fax 0731 20769-620
info@bibus.de
www.bibus.de