

24 Vdc Series MagnaValve

Magnetic Media Valve for Air Blast Machines

Model	Flow Rate Range
576-24	.2 - 2 lb/min (.1 - 1 kg/min)
577-24	1 - 10 lb/min (.5 - 5 kg/min)
578-24	3 - 30 lb/min (1.5 - 15 kg/min)
579-24	10 - 100 lb/min (5 - 50 kg/min)
580-24	20 - 200 lb/min (10 - 100 kg/min)
590-24	30 - 300 lb/min (15 - 150 kg/min)

Features

- 24 Vdc
- $\pm 5\%$ full-scale accuracy*
- Normally closed
- No moving parts
- Meets SAE AMS 2430 and 2432 specifications

Description

The MagnaValve® is a normally closed magnetic valve that regulates the flow of steel shot and cut wire media in air blast machines. The MagnaValve's built-in sensor measures flow rate and, together with the FC-24 Controller (sold separately), provides accurate and repeatable flow rates. The MagnaValve can be factory calibrated for various media types and sizes.

The MagnaValve's maintenance-free construction includes a strong and stable rare earth permanent magnet for normally closed operation and an electromagnet for controlling shot flow rates. When no power is applied to the MagnaValve, the permanent magnet stops all flow. With power applied, the magnetic field is neutralized and shot is allowed to flow through the valve. If the power is interrupted for any reason, the permanent magnet in the valve securely holds the shot. The valve is factory calibrated and results are supplied upon request.

The MagnaValve provides reliable, repetitive, and consistent media flow rates for shot peening and blast cleaning applications. The MagnaValve makes it easy to document flow rates and establish or repeat a good set-up. The valve meets the requirements of SAE AMS 2430, AMS 2432 and other aerospace and commercial specifications.

Clear and comprehensive installation manuals simplify installation for the 24 Vdc Series MagnaValves and the FC-24 Controller. In addition, the products are supported by the Electronics Inc. application engineering staff.

*Higher accuracy available upon request

FC-24 Controller datasheet in PDF is available for download at www.electronics-inc.com

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The FC-24 Controller (left) and MagnaValve (right) work together to provide accurate and repeatable ferrous media flow rates for air blast machines.

Valve Specifications

Power	+24 Vdc @ 2A (50 VA)
Media	All ferrous media except Cast Stainless Steel
Maximum Pressure	100 PSI
Mode	Normally Closed
Temperature Range	40 - 110° F (5 - 43° C)
Servo Command Input	0 - 10 Vdc
Flow Enable Input	24 Vdc
Flow Sensor Output	0 - 10 Vdc
Display LEDs	Valve On Command Input Flow Enable +24V Power

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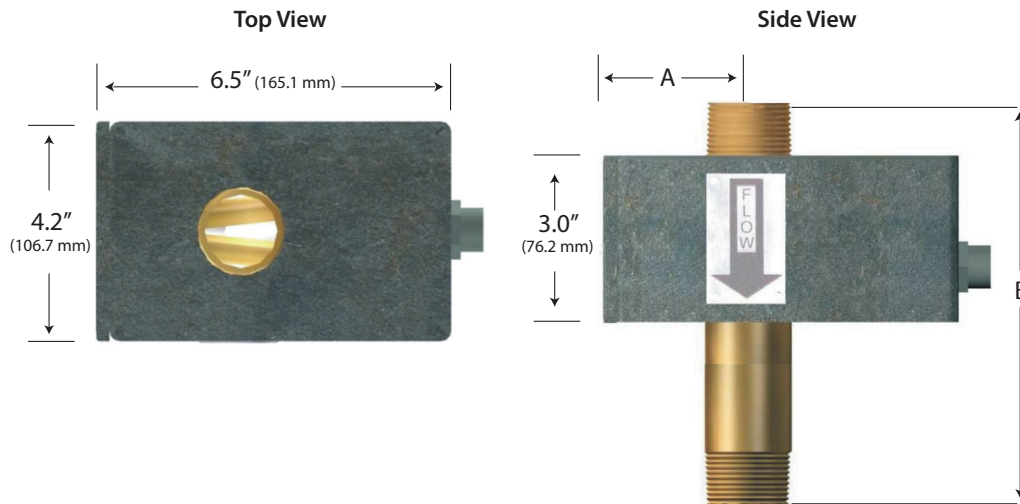
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24 Vdc Series MagnaValves come with 6 ft. (1.83 m) cable

Control - FC-24 Controller (sold separately)

Flow Sensor Input from MagnaValve	0 - 10 Vdc into 100K
Flow Enable Input from PLC	24 Vdc @ 10 mA
Flow Enable Output to MagnaValve	24 Vdc @ 10 mA
Servo Command Output to MagnaValve	0 - 10 Vdc
Remote Setpoint Input from PLC	0 - 10 Vdc



Model Number	Pipe Size	"A"	"B"
576-24	1" NPT	2.5" (63.5 mm)	6.0" (152.4 mm)
577-24	1" NPT	2.5" (63.5 mm)	6.0" (152.4 mm)
578-24	1.25" NPT	2.5" (63.5 mm)	6.0" (152.4 mm)
579-24	1.25" NPT	2.5" (63.5 mm)	8.0" (203.2 mm)
580-24	2" NPT	3.0" (76.2 mm)	8.0" (203.2 mm)
590-24	2" NPT	3.0" (76.2 mm)	8.0" (203.2 mm)