

500-24 MagnaValve®

Steel Shot Media Valve for Wheel Blast Machines

Features

- Flow rate range of 120 - 1,200 lb/min (54.4 - 544 kg/min)¹
- $\pm 5\%$ full-scale accuracy²
- Flow control for wheels up to 25 Hp
- Built-in flow sensor
- Variable flow rates
- Normally closed
- No moving parts for low-maintenance operation
- Includes a six ft (1.83 m) plug and cable
- 24 Vdc
- CE compliant

1) Flow rate based on S230 cast steel shot

2) ± 3 full-scale accuracy available with the 500-24B MagnaValve

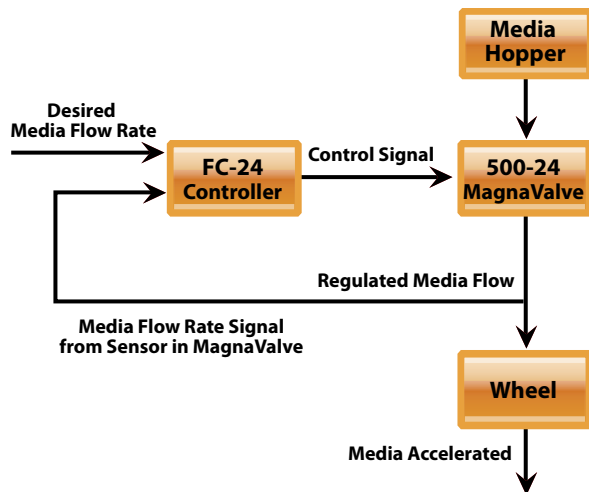
Description

The MagnaValve® is a normally closed magnetic valve that regulates the flow of steel shot and grit in wheel blast machines. The MagnaValve includes a strong and stable rare earth permanent magnet for normally closed operation and an electromagnet for controlling shot flow rates. With power applied to the MagnaValve, the magnetic field is neutralized and shot is allowed to flow through the valve. When no power is applied to the MagnaValve, the permanent magnet stops all flow. If the power is interrupted for any reason, the permanent magnet in the valve securely holds the shot. The MagnaValve can be factory calibrated for various media types and sizes. It will be calibrated for the media type, size and flow rate specified on the purchase order.

The MagnaValve's built-in sensor measures flow rate and when coupled with the EI FC-24 Controller (sold separately), it provides accurate and repeatable flow rates in a closed-loop system, meeting the requirements of AMS 2430, AMS 2432 and other aerospace standards.



FC-24 Controller



Closed Loop System with FC-24 Controller

 **Electronics Inc.**
Shot Peening Control

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Mishawaka, Indiana 46545 USA
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Specification is subject to change without notice
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MagnaValve is a registered trademark of Electronics Inc.

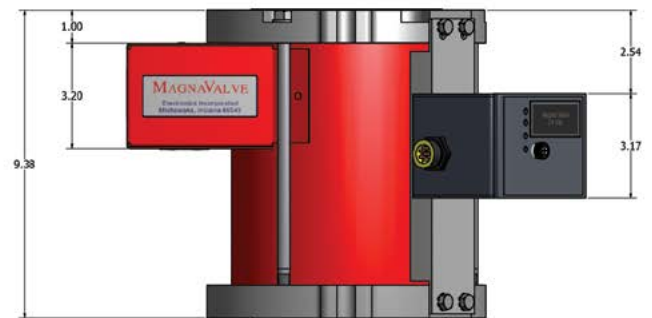
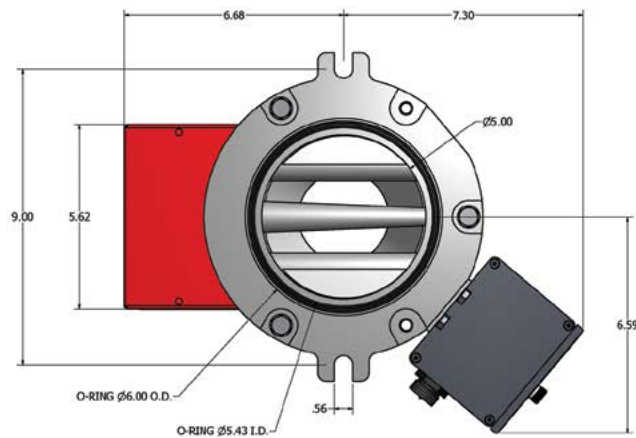
Valve Specifications

Power	+24 Vdc @ 2A (50 VA)
Media	All ferrous media except Cast Stainless Steel
Flow Rate	120 - 1,200 lb/min (544 - 544 kg/min)*
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, max output 11.5 Vdc
Display LEDs	Valve On Command Input Flow Enable +24V Power

* Flow rate based on S230 cast steel shot

Valve Dimensions



FC-24 Controller Specifications (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

