

24 Vdc Series MagnaValve®

Steel Shot Media Valve for Air Blast Machines

Model	Flow Rate Range
576-24	.4 - 2 lb/min (.2 - 1 kg/min)
577-24	2 - 10 lb/min (.9 - 4.5 kg/min)
578-24	6 - 30 lb/min (2.8 - 13.5 kg/min)
579-24	20 - 100 lb/min (9 - 45 kg/min)
580-24	40 - 200 lb/min (18 - 90 kg/min)
590-24	60 - 300 lb/min (27.2 - 136 kg/min)

Flow rates based on S230 cast steel shot. See complete flow rate chart on page three.

Features

- 24 Vdc
- $\pm 5\%$ full-scale accuracy
- Normally closed
- No moving parts for low-maintenance operation
- Meets specification SAE AMS 2430D
- CE compliant
- Includes a 6 ft. (1.83 m) plug and cable

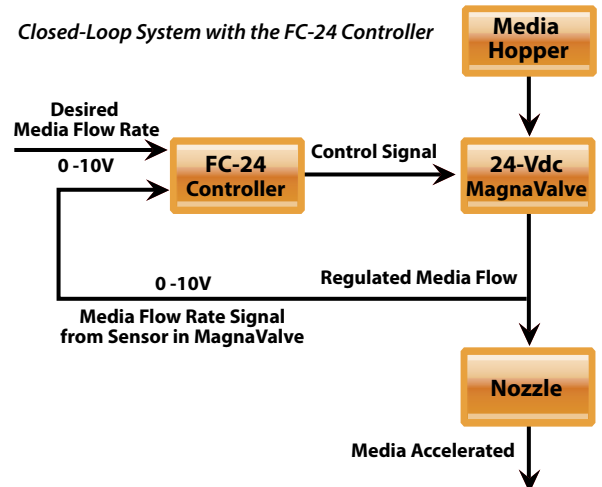
Description

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. It will be calibrated for the media type, size and flow rate specified on the purchase order.

The MagnaValve has 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 2430D 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.



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Specification is subject to change without notice
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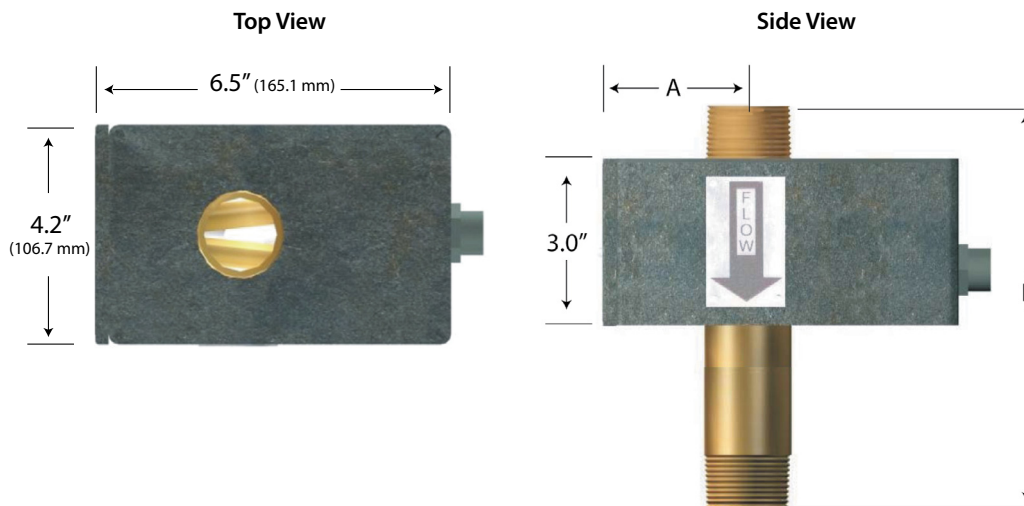
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Specifications

Power	+24 Vdc \pm 2 Vdc @ 2A	Servo Command Input	0 - 10 Vdc
Media	All ferrous media except Cast Stainless Steel	Flow Sensor Output	0 - 10 Vdc, max output 11.5 Vdc
Maximum Pressure	100 PSI	Display LEDs	Valve On Command Input Flow Enable +24V Power
Mode	Normally Closed		
Temperature Range	40°F- 110°F (5°F - 43°C)		
Flow Enable Input	24 Vdc		

Dimensions Inches (Millimeters)



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)

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



24 Vdc MagnaValve Selector Guide Based on Flow Rate

Maximum Flow Rate (pounds per minute/kilograms per minute)												
Shot	576-24		577-24		578-24		579-24		580-24		590-24	
Size	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
S-70	2	1	10	5	30	15	100	45	200	90	300	150
S-110	2	1	10	5	30	15	100	45	200	90	300	150
S-170	2	1	10	5	30	15	100	45	200	90	300	150
S-230	2	1	10	5	30	15	100	45	200	90	300	150
S-280	-	-	10	5	28	13	100	45	200	90	300	135
S-330	-	-	-	-	26	12	100	45	200	90	300	135
S-390	-	-	-	-	25	11	100	45	200	90	250	125
S-460	-	-	-	-	25	11	85	38	200	90	250	125
S-550	-	-	-	-	-	-	70	32	200	90	250	110
S-660	-	-	-	-	-	-	70	32	200	90	240	105
S-930	-	-	-	-	-	-	45	20	200	90	225	100
CCW-14	2	1	10	5	30	15	100	45	200	90	300	150
CCW-23	2	1	10	5	30	15	100	45	200	90	300	150
CCW-28	2	1	10	5	30	15	100	45	200	90	300	150
CCW-32	-	-	10	5	30	13.5	100	45	200	90	300	135
CCW-35	-	-	-	-	26	12	88	40	200	90	300	135



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Shot Peening Control

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