

Stainless Steel Trim Globe Valves with MP84 Series Pneumatic Actuators

Description

VG7000 Series Stainless Steel Trim Globe Valves with MP84 Series Pneumatic Actuator control hot or chilled water, or 100 psig saturated steam.

Features

- industrial-grade, drawn-steel actuator fits VG7000 valves 1-1/2 and 2 in. with 3/8 in. stem
- corrosion-resistant, electro-painted finish
- effective diaphragm area: 50 sq in.
- controls: hot or chilled water, 100 psig saturated steam
- valve trim: stainless steel
- packing: spring-loaded PTFE and elastomer V-rings

- maximum supply air pressure: 25 psig (172 kPa)
- fluid temperature: 35 to 338°F (2 to 170°C), 100 psig saturated steam
- valve body static pressure rating: ANSI Class 250
- factory or field assembly
- for optional V-9502-95 Positioner, change "00" at the end of the code number to "01"

Repair Information

If the VG7000 Stainless Steel Trim Globe Valve with MP84 Series Pneumatic Actuator fails to operate within its specifications, replace the unit. For a replacement valve or actuator, contact the nearest Johnson Controls® representative.



MP8000 Series Pneumatic Actuator mounted on VG7443 Brass Globe Valve

Selection Chart

VG7000 Stainless Steel Trim Globe Valve with MP84 Series Pneumatic Actuator

Actuator			MP843C001C (1-1/2 and 2 in.)		MP843D001C (1-1/2 and 2 in.)		MP843E001C (1-1/2 and 2 in.)	
Spring Range			3 to 7 psig		4 to 8 psig		9 to 13 psig	
Valve	Size	Cv	Closeoff	Code Number	Closeoff	Code Number	Closeoff	Code Number
Two-Way Normally Open — NPT End Connections (To specify a factory-mounted positioner, change "00" at the end of the code number to "01".)								
VG7243RM	1-1/2"	28.9	165	VG7243RM+843C00	152	VG7243RM+843D00	88	VG7243RM+843E00
VG7243SM	2"	46.2	106	VG7243SM+843C00	97	VG7243SM+843D00	56	VG7243SM+843E00
Two-Way Normally Closed — NPT End Connections (To specify a factory-mounted positioner, change "00" at the end of the code number to "01".)								
VG7443RM	1-1/2"	28.9	39	VG7443RM+843C00	53	VG7443RM+843D00	121	VG7443RM+843E00
VG7443SM	2"	46.2	24	VG7443SM+843C00	33	VG7443SM+843D00	76	VG7443SM+843E00
Three-Way Mixing — NPT End Connections (To specify a factory-mounted positioner, change "00" at the end of the code number to "01".)								
VG7844RM	1-1/2"	28.9	165 / 39	VG7844RM+843C00	152 / 53	VG7844RM+843D00	88 / 121	VG7844RM+843E00
VG7844SM	2"	46.2	106 / 24	VG7844SM+843C00	97 / 33	VG7844SM+843D00	56 / 76	VG7844SM+843E00

VG7000 Series Stainless Steel Trim Globe Valves with MP84 Series Pneumatic Actuators (Continued)

Technical Specifications

VG7000 Stainless Steel Trim Globe Valves with MP84 Series Pneumatic Actuators		
Service¹		Hot Water, Chill Water, 50/50 Glycol Solutions and Steam for HVAC Systems
Fluid Temperature Limits	Water	35 to 338°F (2 to 170°C)
	Steam	100 psig (690 kPa) Saturated Steam
Maximum Allowable Pressure Temperature	Water	400 psig (2,756 kPa) Up to 150°F (66°C) decreasing to 308 psig (2.122 kPa) at 338°F (170°C)
	Steam	100 psig (690 kPa) Saturated Steam
Valve Body Pressure/ Temperature Rating		Meets Requirements of ANSI B16.15, Class 250
Maximum Recommended Operating Pressure Drop	Water	30 psig (207 kPa) for 1-1/2 and 2 in. valves
	Steam	100 psig (690 kPa)
Flow Characteristics	Two-Way Valves	Equal Percentage
	Three-Way Valves	Linear Flow Characteristics
Rangeability²		25:1
Leakage		0.05% of Maximum Flow per ANSI/FCI 70-2, Class 4
Actuator Ambient Operating Temperature Limits		-20 to 150°F (-29 to 66°C)
Maximum Actuator Supply Pressure		25 psig (172 kPa) Maximum
Materials	Body	Cast Bronze
	Bonnet	Brass
	Stem	Stainless Steel
	Plug	Stainless Steel
	Seat	Stainless Steel
	Packing	Self Adjusting Ethylene Propylene Rubber (EPR) Ring Pack U-Cups

1. Refer to VDI 2035 Standard for recommended proper water treatment.

2. Rangeability is defined as the ratio of maximum controllable flow to minimum controllable flow.