

MD42 High Flow Pressure Regulator

MARSH MEDICAL

The **MD42** is a manual, direct-acting, spring-loaded high flow pressure regulator. An ideal fit for medical devices and environments where space is at a premium, the MD42 retains the best elements of its predecessor, the T70, for applications that require substantial flow capacity and accurate pressure controls.

FEATURES

- Balanced pintle design to minimize supply pressure effect and optimize flow capacity
- Rolling diaphragm used to offer durability and responsiveness
- Tapped vent design to capture exhaust air/gas
- Aspirator tube/baffle plate design for the isolation of forward flow
- Notching of the relief seat to improve responsiveness
- Panel, bracket, or pipe mounting

FOCUS MARKETS/APPLICATIONS

- Ventilators
- Anesthesia Systems
- Regulation of air, nitrogen, and inert gases
- Regulation of oxygen in medical applications

COMPETITIVE ADVANTAGES

- 1/4" W.C. sensitivity
- Excellent regulation, stability, and repeatability
- Low droop with good flow capacity
- Responds quickly to changes in downstream pressure
- Rolling diaphragms are designed to sustain millions of cycles
- Honking and buzzing eliminated by action of integral baffle plate and aspirator tube
- Dampening action of aspirator tube maintains downstream pressure
- Compact, space-saving design
- Reduced weight
- Easy integration
- Reliable and accurate pressure regulation
- Innovative, streamlined design
- Exceptional performance
- Engineering collaboration



TECHNICAL DATA

Series	MD42	
Maximum Supply Pressure	250 PSIG	
Output Pressure Range	0 - 3 PSIG	
	0 - 15 PSIG	
	0 - 30 PSIG	
	1 - 60 PSIG	
	2 - 100 PSIG	
Temperature Range	-40 to 180°F	
Sensitivity	1/4" W.C.	
Flow Capacity @ 100 PSIG Supply and 20 PSIG Outlet	25 SCFM / 700 lpm	
Effect of Supply Pressure Variation (100 PSIG) on Outlet Pressure	± 0.2 PSIG	
Air Consumption	< 10.0 SCFH Maximum	
Port Sizes	1/4" NPT, 3/8" NPT, and BSPP	
Dimensions	2.5" x 2.5" x 5.75"	
Weight	1.0 lb.	
Mounting Options	Pipe, Panel, or Bracket	
Materials of Construction	Body & Bonnet	Die cast Aluminum Alloy
	Baffle Plate	Zinc-Plated Steel
	Baffle Guide	Brass
	Aspirator Tube	Brass/Copper
	Baffle Plate	Nitrile
	Gasket	Nitrile
	Elastomers	Nitrile or Neoprene
	Range Springs	Spring Steel
	Valve Springs	Stainless Steel
	Spring Guide	Brass
	Diaphragm	Aluminum
	Piston	Aluminum
	Trim	Brass, Stainless Steel, Celcon, Zinc-Plated Steel, Nylon
	Materials	Zinc-Plated Steel, Nylon
	Relief Seat	Brass
	Supply Seat Assembly	Brass with Nitrile
	Knob Assembly	Phenolic Knob with Zinc-Plated Steel Stud
	Cartridge	Aluminum
	Bottom Plate	Steel