

MD42X Cartridge Style Pressure Regulator

MARSH MEDICAL

The **MD42X Cartridge Style Pressure Regulator** embodies a significant advancement in medical gas management, crafted to enhance operational efficiency and reliability within healthcare environments. Key to its design is the innovative quick-change cartridge system, which facilitates rapid swaps to significantly minimize downtime—a crucial feature in the fast-paced medical sector.

FEATURES

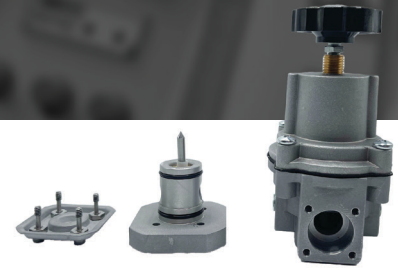
- Cartridge design to allow body disassembly without removing from the service line
- Captive screw design to enable easy disassembly of the cartridge from the unit
- Balanced pintle design to minimize supply pressure effect and optimize flow capacity
- Rolling diaphragm used to offer durability and 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
- Pulmonary Function Testing
- Regulation of air, nitrogen, and inert gases
- Regulation of oxygen in medical applications

COMPETITIVE ADVANTAGES

- Units can be disassembled and serviced without removal from airline
- 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
- Superior performance



TECHNICAL DATA

Series	MD42X
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 Gasket Nitrile Elastomers Nitrile or Neoprene Range Springs Spring Steel Valve Springs Stainless Steel Spring Guide Brass Diaphragm Piston Aluminum Trim Materials Brass, Stainless Steel, Celcon, 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