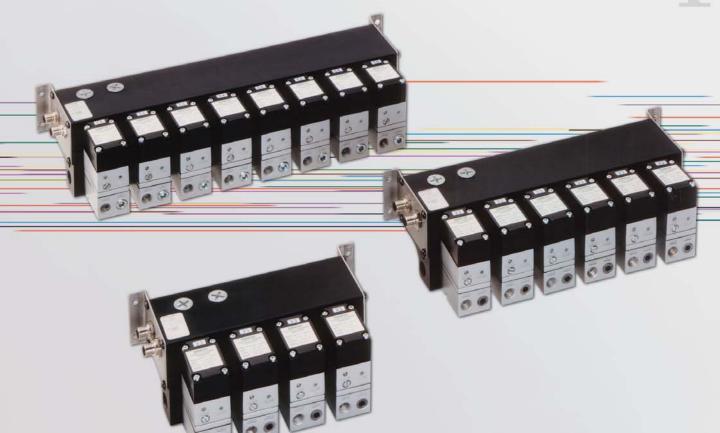


# Air Prep



# MPGR Series

Manifold Proportional Control Regulator

We're everywhere you need us to be!





#### Introducing the MPCR Series Manifold Proportional Control Regulator

Accurate, adaptable, clean, cost effective, user friendly are all words that can be used to describe the MPCR Series.

**Accurate** in that it offers greater than +/-0.10% accuracy of span.

Adaptable in that it has the opportunity for adding, changing, or removing regulators without the need to shutoff the main air supply. (see individual valves in Figure 1)

Clean for the reason that with one power cord and one fieldbus connection the system is up and running. Furthermore, piping away of contaminated exhaust becomes easy with the manifold common exhaust option.

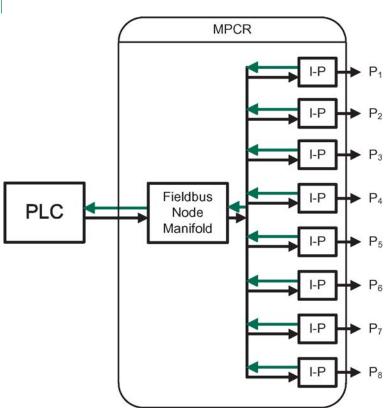
**Cost Effective** because it eliminates the need for multiple fieldbus nodes, power cables, and fittings which in turn cuts labor costs.

**User Friendly** refers to the MPCR's easy interface with DeviceNet and Profibus fieldbus networks.









#### Steps:

- 1. The PLC program sends an 8-bit digital signal across DeviceNet or Profibus to the MPCR node describing the required output pressure for each I/P.
- 2. The node converts the 8-bit digital signal into the appropriate 4-20 mA signal and sends it on to each I/P.
- 3. The I/P receives the 4-20 mA signal and adjusts to the appropriate pressure.
- 4. Each I/P output pressure is monitored by its own pressure transducer.
- The pressure transducer sends an analog signal back to the DeviceNet or Profibus node.
- It is then converted into a digital signal and sent back to the PLC across DeviceNet or Profibus.

—Optional Feedback →

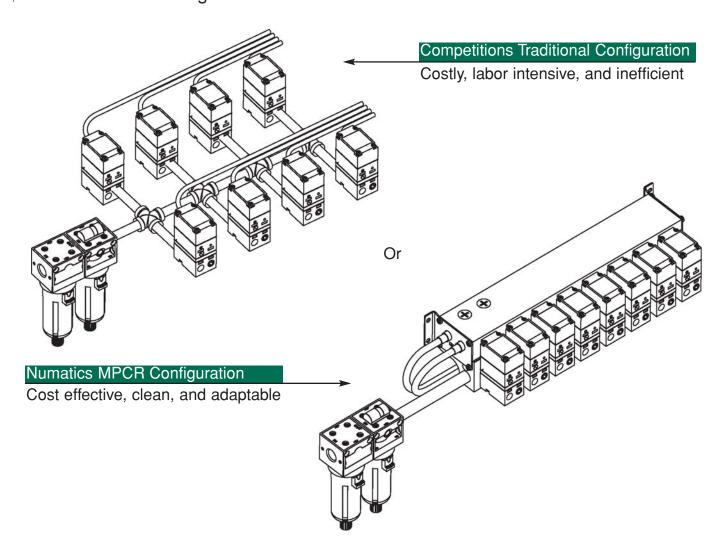




#### Features and Benefits

- 1. Control up to eight miniature electropneumatic regulators with one fieldbus node, which eliminates costly wiring and multiple nodes.
- 2. Optional feedback to the PLC assures the appropriate pressure of each regulator.
- 3. Common supply and optional common exhaust eliminates plumbing.
- 4. Individual shutoffs allows service of individual units while others remain functioning.
- 5. Backplane electronics eliminates the need for re-addressing of the system.
- 6. Designed to meet IP65 requirements.

#### The Manifold Advantage

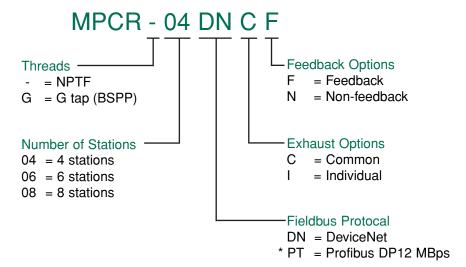




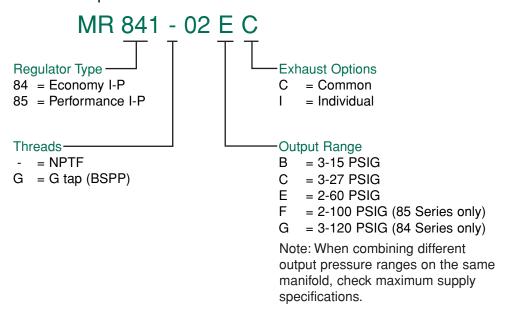


#### How to Order

#### Step 1: Choose size and type of manifold



Step 2: Choose type of Miniature Electropneumatic Transducer to be assembled to the manifold.



#### Step 3: Specify how the manifold will be assembled

Example Order:

List stations in order, left to right facing the ports

Manifold	MPCR-04DNCF
Station 1	MR851-02EC
Station 2	MR851-02EC
Station 3	MR851-02FC
Station 4	MR851-02FC
	ASSEMBLED

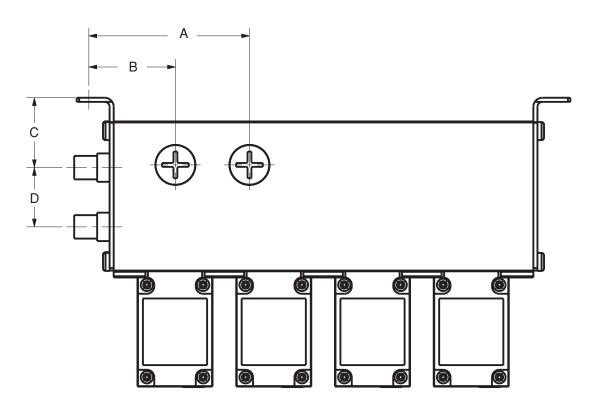
<sup>\*</sup> Available 3rd quarter 2004

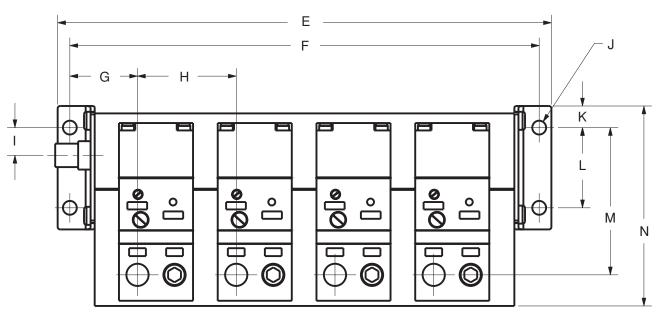






#### **Dimensional Drawings**





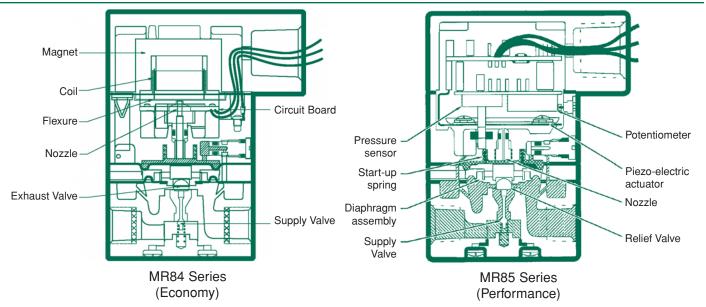
1/4 ports on Regulators

3/8 supply, 1/4 exhaust on manifolds

	А	В	С	D	E	F	G	Н	I	J	K	L	М	Ν
4 Station	3.25	1.75	1.42	1.20	10.00	9.51	1.37	2.00	.56	.28	.44	1.63	2.98	4.05
6 Station	3.25	1.75	1.42	1.20	14.00	13.51	1.37	2.00	.56	.28	.44	1.63	2.98	4.05
8 Station	3.25	1.75	1.42	1.20	18.00	17.51	1.37	2.00	.56	.28	.44	1.63	2.98	4.05







#### **Specifications:**

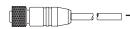
pecifications:		
	MR84 Series	MR85 Series
Linearity	<± 0.5% of span	<± 0.10% of span
Hysteresis & Repeatability	<± 0.5% of span	<± 0.10% of span
Weight	1.3 lbs	0.8 lbs
Air Consumption at mid range	1.8 SCFH (0.05 m3/ hr)	1.5 SCFH (0.11 m3/hr)
Output	3-15 PSIG 0.20-1.00 BAR 3-27 PSIG 0.20-1.80 BAR 2-60 PSIG 0.14-4.00 BAR 3-120 PSIG 0.20-8.00 BAR	3-15 PSIG 0.20-1.00 BAR 3-27 PSIG 0.20-1.80 BAR 2-60 PSIG 0.14-4.00 BAR 2-100 PSIG 0.20-8.00 BAR
Supply Pressure	100 PSIG (6.90 BAR) max. (3-15, 3-27 PSIG)	100 PSIG (6.90 BAR) max. (3-15, 3-27 PSIG)
	150 PSIG (10.00 BAR) max. (2-60, 3-120 PSIG)	130 PSIG (9.00 BAR) max. (2-60, 2-100 PSIG)
Flow Capacity	4.5 SCFM (7.7 m3/hr) at 25 PSIG (1.70 BAR) supply (3-15, 3-27 PSIG)	4.5 SCFM (7.7 m3/hr) at 25 PSIG (1.70 BAR) supply (3-15, 3-27 PSIG)
	12.0 SCFM (20.0 m3/hr) at 100 PSIG (6.90 BAR) supply (3-15, 3-27, 2-60 PSIG)	12.0 SCFM (20.0 m3/hr) at 100 PSIG (6.90 BAR) supply (3-15, 3-27, 2-60 PSIG)
	20.0 SCFM (34.0 m3/hr) at 150 PSIG (10.00 BAR) supply (2-60, 3-120 PSIG)	20.0 SCFM (34.0 m3/hr) at 130 PSIG (9.00 BAR) supply (2-60, 2-100 PSIG)
Relief Capacity	2 SCFM (3.4 m3/hr) at 5 PSIG (35kPa) above set point	2 SCFM (3.4 m3/hr) at 5 PSIG (35kPa) above set point
Temperature Range	-20° to +150° F (-30° to +65° C)	-20° to +150° F (-30° to +65° C)







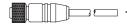
#### Accessories



#### 4 Pole Micro Power Cord

2 Meter - TC0402MAE0000000

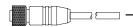
5 Meter - TC0405MAE0000000



#### DeviceNet Female Micro-Thin Cable

6 Foot - TC0506FGD0000000

12 Foot - TC0512FGD0000000



#### Profibus Female 12mm Reverse Key Single Ended Cable

2 Meter - RC0502MHP0000000

5 Meter - RC0505MHP0000000



#### Blank Station Plug

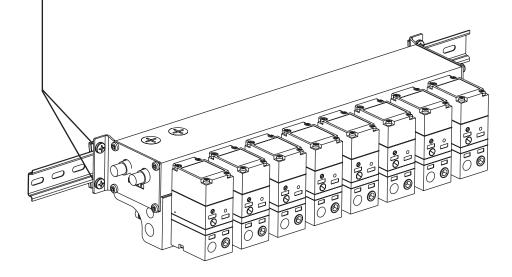
Model #: MPCR-08

### DIN-Rail Mounting Kit (comes standard with MPCR manifold)

For additional kits please reference: Model #:

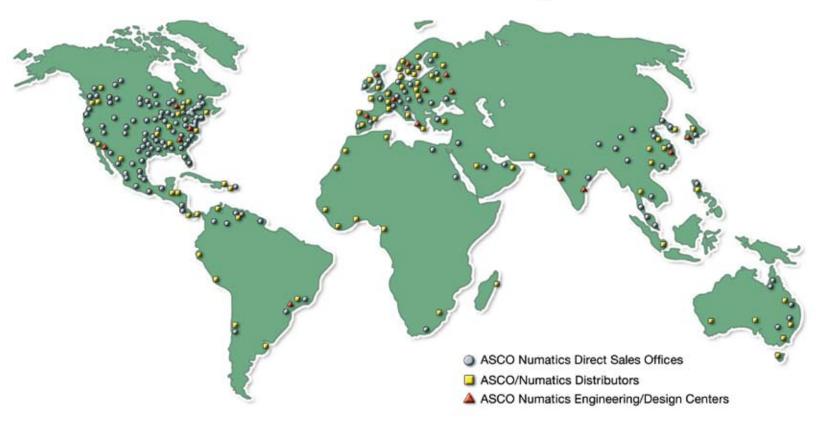
MPCR-DRC

(Included 4 screws and clips)



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