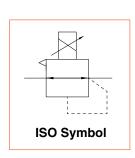
# New Product Introduction

# Electro-Pneumatic Proportional Valves

# **Series RER1**







Proportional Valve with Booster

# **Proportional Valve**

#### STANDARD SPECIFICATIONS

#### Common Specifications:

**Analog Monitor Signal:** 

**Voltage:** 0 – 10 volts DC@20 mA maximum. **Current:** 4 – 20 mA sinking (sourcing optional).

Ambient/Media Temperature: 32° to 158°F (0° to 70°C).

Body and Dome: Zinc.

Command Signal Impedance:

Voltage: 4.7 kΩ. Current: 100Ω.

Command Signal Voltage/Current: 0 – 10 volts DC/4 – 20 mA. Electrical Connector: 6-pin Brad Harrison or 5-pin M12.

Fluid Media: Compressed Air.
Housing: Aluminum; powder coated.

Input Pressure: 29.9 in Hg to 300 psig (760 mm Hg to 20.7 bar).

Manifold: Brass.

Output Pressure: 0 to 200 psi (0 to 13.8 bar).

Seals: Fluorocarbon.

Supply Voltage/Current: 15 – 24 volts DC/250 mA (required).

**Transducer:** Silicon, aluminum. **Valves:** Nickel-plated brass.

## For Proportional Valve with Booster only:

Accuracy:  $< \pm 2.5\%$  F.S.

Linearity/Hysteresis: < ± 2.0% F.S. BFSL.

**Repeatability:**  $< \pm 0.6\%$  F.S. *For Proportional Valve only:* 

**Accuracy:** < ± .25% F.S.

Linearity/Hysteresis: < ± .2% F.S. BFSL.

Repeatability:  $< \pm .2\%$  F.S.

**Note:** High-pressure Proportional valve ≥175 psi (12 bar) - inlet and exhaust ports reversed from picture shown.

#### **GENERAL:**

The Series RER1 Proportional valve is ROSS CONTROLS' latest product using closed loop control technology. It incorporates many important standard features.

Standard flow rate of the valve is typically one scfm maximum. When used with a volume booster a flow rate in excess of 1,000 scfm can be achieved.

Check the items below to see how cost-effective these valves can be in your plant.

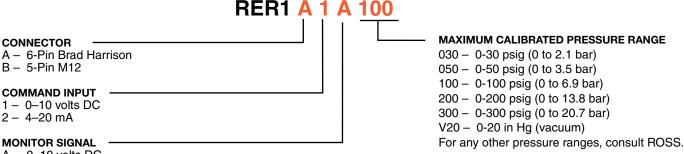
#### **FEATURES:**

- Fits into very small space
- Accurate to < ± 2.5% F.S.
- 0 10 volts DC analog monitor output
- NEMA 4 1P65 rating
- Accepts analog command signal inputs
- Proportional valve with regulator: control pressure ranges from vacuum to 300 psig (20.7 bar)
- Flow rates can exceed 1,000 scfm
- Valve is insensitive to shock, vibration, or mounting position
- Easily repairable in the field



#### ORDERING INFORMATION

For PROPORTIONAL-VALVE ONLY - Change the letters in the sample model number below to specify the proportional valve you want.



A - 0-10 volts DC

B - 4-20 mA - sinking

C - 4-20 mA - sourcing

Brass Inlet Filter (R37-R288) is included when purchasing a proportional-valve.

**NOTE:** Cable must be ordered separately. See choices below.

For PROPORTIONAL-VALVE with VOLUME BOOSTER - Change the letters in the sample model number below to specify the proportional valve you want.

# RB 1 2 ARER1 A 1 A 100

REGULATOR

1 - 1/4 to 3/4 ports Regulator

2 - 3/4 to 1½ ports- High Flow Regulator

3 - 1/4 to 1/2 ports- High Relief Regulator

4 - 3/4 to 11/4 ports- High Flow/High Relief Regulator

#### PRESSURE GAUGE

A - No Gauge

B - 200-BDD Gauge 0 to 200 psig (0 to 14 bar)

C - 600-BDD Gauge 0 to 600 psig (0 to 40 bar)

D - 30-BDD Gauge 0 to 30 psig (0 to 2 bar)

E - 60-BDD Gauge 0 to 60 psig (0 to 4 bar)

For Electronic Gauge, consult ROSS.

#### REGULATOR PRESSURE

Port Size Mode	l Inlet	Outlet	Relief
RB1 - RB2	300 psi (20.7 bar)	200 psi (13.8 bar)	10 scfm
RB3 - RB4	400 psi (27.6 bar)	250 psi (17.3 bar)	200 scfm

**NOTE:** Cable must be ordered separately. See choices below.

#### **INLET/OUTLET PORTS**

2 - 1/4 NPTF B - 1/4 BSPP 3 - 3/8 NPTF C - 3/8 BSPP 4 - 1/2 NPTF D - 1/2 BSPP 6 - 3/4 NPTF E - 3/4 BSPP F - 1 BSPP 8 – 1 NPTF J-11/4 NPTF G - 114 BSPP

#### **ACCESSORIES**

#### MOUNTING BRACKETS

Order mounting brackets separately.

Bracket for proportional valve only: Model Number RER-BRK-1.

Brackets for proportional valve with volume booster: Model Number R-A37-381 (shown on the right).



#### **CABLES**

**Cable Length Part Number** 6 feet (1.8 meters) **RER-CBL-6** 12 feet (3.7 meters) RER-CBL-12 25 feet (7.5 meters) RER-CBL-25

WARRANTY and CAUTIONS Standard ROSS warranty and cautions apply, available upon request or at www.rosscontrols.com.





#### **ROSS** CONTROLS IISA

Customer Svs. 1-800-GET-ROSS Technical Svs. 1-888-TEK-ROSS www.rosscontrols.com

ROSS CONTROLS INDIA Pvt. Ltd. India Fax: 91-44-2625-8730

rossindia@airtelmail.in

#### **ROSS** EUROPA GmbH Germany

Fax: 49-6103-74694 info@rosseuropa.com

#### ROSS SOUTH AMERICA Ltda. Brazil

Fax: 55-11-4335-3888 vendas@ross-sulamerica.com.br

## ROSS ASIA K.K. Japan

Fax: 81-427-78-7256 custsvc@rossasia.co.jp

#### DIMAFLUID s.a.s. France Fax: 33-01-4945-6530

ROSS UK Ltd. United Kingdom Fax: 44-121-559-5309 sales@rossuk.co.uk

ROSS CONTROLS (CHINA) Ltd. China Fax: 86-21-6915-7960 dimafluid@dimafluid.com rosscontrolschina.com