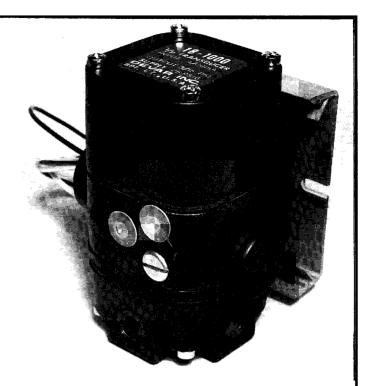
# **DEVAR Inc.**

# **EXTENDED RANGE** 18-1000 ER I/P TRANSDUCER

- \* LOW COST, SMALL SIZE
- \* BUILT-IN VOLUME BOOSTER
- \* FIELD REVERSIBLE
- \* LOW SUPPLY PRESSURE SENSITIVITY
- \* WIDE SPAN ADJUSTMENT RANGE



# **GENERAL DESCRIPTION**

These Extended Range I/P Transducers are based on the proven 18-1000 transducer line — the best selling transducers in the business. 20-830 kPa (3-120 psi) output is available with 4-20mA input.

The large span adjustment range of this line allows recalibration to fit applications with output ranges from approximately 20-245 kPa (3-35 psi) to 20-1015 kPa (3-145 psi). the units accept supply pressures up to 1050 kPa (150 psi) and provide flow capacity to 40.8 m³/hr (24 SCFM).

The 18-1000 I/P Transducers are more cost effective and accurate than typical high output systems using transducers coupled to boosting or multiplying relays.

The new Extended Range 18-100 Transducers have been developed specifically for fluid power applications. They are used to convert analog input signals to a wide range of pneumatic outputs to control:

- \* Web tension
- \* Welding Pressure
- \* Paint spraying pressure
- \* Fluid dispensing
- \*Cylinder positioning and force
- \* Air motor speed and torque
- \* Robotic cylinders and grippers
- \* Pneumatic clutches and brakes

## SPECIFICATIONS MODEL 18-1000 ER I/P

Input Signal Range: See table below Output Range: See table below

Supply Pressure Range:

Min.: 35 kPa (5 psig) above max. output

Max.: 1050 kPa (150 psig)

**Supply Pressure Sensitivity:** 

<+.004% of span per 1.0 kPa

(1.0 psig) change in supply pressure.

Terminal Based Linearity: See table below

Repeatability: <0.5% of span

Hysteresis: <0.5% os span

Flow Rate at Midrange (Typical):

40.8 m<sup>3</sup>/hr ANR (24 SCFM) at 1050 kPa

(150 psig) supply

Air Consumption (Maximum):

0.12 m<sup>3</sup>/hr (.07 SCFM) at midrange

Nominal Impedence: See table below.

Port Sizes: 1/4 NPT (pneumatic);

1/2 NPT (electric)

Size: 54 mm x 54 mm x 102 mm

(2-1/8 in. x 2-1/8 in. x 4 in.) Weight: 0.94 kg (2.1 lb)

#### **ORDERING INFORMATION:**

To order, specify part number from table below.

### **Principal of Operation**

See 18-1000 I/P Transducer brochure #181000

#### Mounting

See 18-1000 I/P Transducer brochure #181000

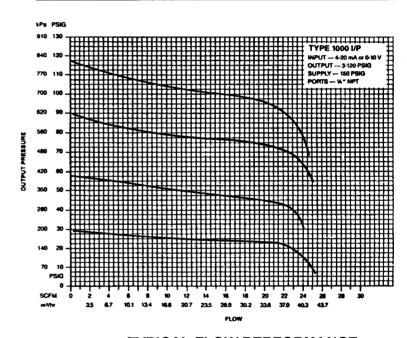
#### Field Reversibility

See 18-1000 I/P Transducer brochure #181000

## **Dimensional Drawing**

See "Dimensional Drawing: General Purpose and Intrinsically Safe Models" in 18-1000 I/P Transducer

Brochure #181000



#### TYPICAL FLOW PERFORMANCE

#### 18-1000 ER Extended Range I/P and E/P Transducers

	Ouput <sup>1</sup>		Terminal Based Linearity (% of Span)	Nominal Impedence (ohms)
Input	psi kPa	Part Number		
4-20mA	3-120 20-830	18-1000ER-120	<+2.0%	260

<sup>1</sup> Output shown is as calibrated at the factory. Large span adjustment allows recalibration for applications with output ranges from approximately 3-35 psi (20-240 kPa) to 3-145 psi (20-1000 kPa).

# DEVAR Inc.

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LOG ON via the internet through the world wide web use: http://www.devarinc.com

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