





The Duratran® transmitter introduces a unique electronic pressure-indicating transmitter with direct mechanical indication, suitable for aggressive environments and process fluids.

The Duratran transmitter combines outstanding, reliable local indication that functions without the need for external power with a stable, self-contained 4-20ma transmitter in a hermetically sealed corrosion proof case (Type 2279).

The wide selection of system materials and corrosion-proof housing meets application requirements in a number of industries. These include chemical processing, petrochemical and refining plants, electric and gas utilities, wastewater, pulp and paper, and other industrial applications.

This electronic pressure-indicating transmitter promises increased service life and long-term stability.

And, users can now integrate pressure gauge installations into safety and data acquisition systems.

## **Principle of Operation**

The pressure gauge function uses Ashcroft Duragauge technology with its easy calibration rotary movement and stable pressure element.

The transmitter portion of this instrument operates with photo-electronics that continually sense the position of a light, rugged vane moving directly with the tip of the bourdon tube that drives the mechanical-indicating mechanism. The opto-electronic system is friction-free and self-regulated through electronic feedback to cancel effects of time and temperature. There are no glues or molecular bonds to creep and degrade accuracy over time. The large measurement motion derived from the basic sensor is inherently linear, simplifying the electronic circuitry and adding reliability.

## PRODUCT SPECIFICATIONS

Model Number: 2279

Service: Liquid, gas or vapor

**Dial Size:** 4½" analog dial indication in engi-

neering units

Case: Solid front, black phenol

hermetically sealed Threaded, glass-filled Polypropylene

Mounting: Stem, surface, flush (with 1278 M ring)

**Bourdon Tube and** 

Ring:

Socket Material: 316 Stainless Steel or Monel Pressure

Connection: ½ NPT

Window: Laminated safety glass
Calibration: Transmitter – Span and zero

adjustment on dial

Gauge – Zero adjustment with

micrometer pointer

Electrical
Connection: 30"#18 wire AWG, ½½ NPT liquid

tight conduit connection at case

Weight: 3 lbs

Ranges: See Table Below
Output: 4-20mA, 2 wire
Power Supply: 12/40 Vdc
Zero Adjustment: ±20% of full scale
Span Adjustment: ±10% of full scale
Temperature Limit: -40°F to 160°F

Over Pressure

**Limits:** 130% of range without

damage to tube

Humidity Limits: Up to 90% relative humidity non-

condensing

Signal Damping: Fixed electronic damping time

constant of 0.2 seconds

Accuracy: ±0.5% including linearity, hystere-

sis and repeatability

Stability: ±0.25% F.S. for 6 months

Temperature Effect: Less than 0.02% of span/°F

**Mounting Position** 

**Effect:** Vertical mounting recommended.

May be re-zeroed to correct error

in other positions

Loop Resistance: See Table C

## STANDARD RANGE TABLE\*

PSI	METRIC		
Vacuum	kg/cm²	bar	kPa
Compound	0/1	0/1	0/100
0/12	0/1.6	0/1.6	0/160
0/15	0/1.5	0/1.0	0/250
0/30 0/60	0/2.3	0/2.3	0/400
0/100	0/4	0/4	0/600
0/160	0/10	0/10	0/1000
0/200	0/16	0/16	0/1600
0/300	0/25	0/25	0/2500
0/400	0/40	0/40	0/4000
0/600	0/60	0/60	0/6000
0/800	0/100	0/100	0/10,000
0/1000 0/1500	0/160	0/160	0/16,000
0/2000	0/250	0/250	0/25,000
0/3000	0/400	0/400	0/40,000
0/5000	0/600	0/600	0/60,000
0/10,000	0/1000	0/1000	0/100,000
0/20,000	0/1600	0/1600	0/160,000

Dual scale and receiver gauge dials available on application



## Type 2279 Duratran<sup>®</sup> Pressure Gauge Available With *PLUS!*™ Performance Option







