



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 out-standing, 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.

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, waste-water, 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.

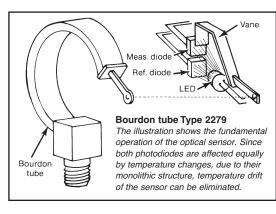
Principle of Operation

80

ASHCROFT

The pressure gauge function uses technology from our Duragauge® pressure gauge 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

Liquid, gas or vapor Service: Dial Size: 4½" analog dial indication in engineering units

Solid front, black phenol Case: hermetically sealed

Ring: Threaded, glass-filled

Polypropylene

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

Bourdon Tube and

Socket Material: 316 Stainless Steel or Monel Pressure

½ NPT Connection:

Window: Laminated safety glass Transmitter - Span and zero **Calibration:**

adjustment on dial

Gauge - Zero adjustment with

micrometer pointer

Electrical Connection: 30" #18 wire AWG, 1/2 NPT liquid

tight conduit connection at case

3 lbs Weight:

See Table Below Ranges: 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

Fixed electronic damping time Signal Damping:

constant of 0.2 seconds ±0.5% including linearity, Accuracy:

hysteresis and repeatability

Stability: ±0.25% F.S. for 6 months Temperature Effect: Less than 0.02% of span/°F

Mounting Position

Vertical mounting recommended. May be re-zeroed to correct error Effect:

in other positions

Loop Resistance: See loop resistance chart on back.

STANDARD RANGE TABLE*

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PSI	METRIC		
Vacuum	kg/cm ²	bar	kPa
Compound	0/1	0/1	0/100
0/12 0/15	0/1.6	0/1.6	0/160
0/30	0/2.5	0/2.5	0/250
0/60	0/4	0/4	0/400
0/100	0/6	0/6	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 0/800	0/60	0/60	0/6000
0/1000	0/100	0/100	0/10,000
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® Transmitter Available With *PLUS!*™ Performance Option

