



ECO-Tronic Pressure Transmitters Type ECO-1 - 15 PSI to 15,000 PSI

Tronic

- 4-20 mA 2-wire or 0-10 V 3-wire output signal
- Economical alternative for OEM applications
- Stainless steel case and wetted parts
- Available with DIN 43 650 plug or NEMA 4 cable

The WIKAI ECO-Tronic line of pressure transmitters and transducers combine performance, reliability, and value for a wide variety of electronic pressure measurement applications. They are available in ranges from 15 to 15,000 PSI. Both the voltage and current output signals are fully conditioned and provide an output that is both linear and proportional to the applied pressure. Unlike ratiometric transmitters, a costly regulated voltage supply is not required.

All ECO-Tronic transmitters have CE certification and meet stringent RFI protection and emission requirements. Transmitters 300 PSI and above feature a thin film sensing element for improved high pressure performance and resistance to pressure spikes.

The compact design provides a sensor suitable for many general purpose industrial and OEM applications. In OEM quantities the ECO-Tronic can be supplied with custom process connections, output signals, and electrical connections.



With standard
DIN plug

With optional
cable

STANDARD RANGES ¹

RANGE	MAXIMUM*	BURST**	4-20 mA 2-wire Part #	0-10 V 3-wire Part #
0-15 PSI	75 PSI	75 PSI	8392376	8392816
0-25 PSI	145 PSI	145 PSI	8392386	8392826
0-50 PSI	245 PSI	245 PSI	8392396	8392836
0-60 PSI	245 PSI	245 PSI	8392406	8392856
0-100 PSI	500 PSI	500 PSI	8392416	8392866
0-200 PSI	500 PSI	500 PSI	8392426	8392876
0-300 PSI	725 PSI	1800 PSI	8392436	8392596
0-500 PSI	1160 PSI	2900 PSI	8392446	8392606
0-750 PSI	1740 PSI	4350 PSI	8392456	8392616
0-1000 PSI	1740 PSI	4350 PSI	8392466	8392626
0-1500 PSI	2900 PSI	7250 PSI	8392476	8392636
0-2000 PSI	2900 PSI	7250 PSI	8392486	8392646
0-3000 PSI	4640 PSI	11,600 PSI	8392496	8392656
0-5000 PSI	11,600 PSI	18,850 PSI	8392506	8392666
0-7500 PSI	11,600 PSI	18,850 PSI	8392516	8392686
0-10,000 PSI	17,400 PSI	26,100 PSI	8392526	8392696
0-15,000 PSI	21,750 PSI	43,500 PSI	8392586	8392806

¹ Standard part numbers include 1/4 NPT male process connection and DIN 43 650 plug with mating connector.

Notes:

* Pressure applied up to the maximum rating will cause no permanent change in specifications

** Exceeding the burst pressure may result in destruction of the transmitter and loss of media.

Specifications

Input

10-30 VDC (14-30 VDC for 0-10V output signal)

Output & load limitations

4-20 mA 2-wire

0-10 V, 1-5 V, or 1-6 V 3-wire

$$R_{(max)} = (V_s - 10V) / 0.02 A$$

$$R_{(min)} = > 5 k \text{ Ohms}$$

Accuracy

Linearity (B.F.S.L.): $\leq 0.5\%$ of span

Hysteresis: $\leq 0.1\%$ of span

Repeatability: $\leq 0.1\%$ of span

1 yr. stability: $\leq 0.3\%$ of span

Response time: $\leq 5 \text{ ms}$ (10-90% full scale)

Temperature

Effective temperature compensation

+32 °F to 176 °F

Media -40 °F to 212 °F

Ambient -22 °F to 176 °F

Storage -22 °F to 212 °F

Temperature error

On zero (% of span/18 °F) ≤ 0.4

On span (% of span/18 °F) ≤ 0.3

Process connection

1/4" NPT male (G1/4 BSP male)

{other connections available}

Electrical connection

DIN 43650 solderless screw terminal (NEMA 5 / IP 65)

{5 foot vented cable with free ends} (NEMA 4 / IP 67)

Material

Wetted parts 316 stainless steel below 300 PSI

316 stainless steel and PH17-4 ss

Body material 304 stainless steel

Transmitting liquid

Synthetic oil < 300 PSI {Fluorocarbon oil for oxygen service}
none used in ranges $\geq 300 \text{ PSI}$

Electrical protection

Protected against reverse polarity, short circuit, and overvoltage

Shock and Vibration

(per DIN IEC 68-2)

Shock: 500g, 1 ms

Vibration: 10g, 60-2000 Hz

CE Conformity

Interference emissions per EN 50 081-1 and -2

Interference immunity per EN 50 082-2

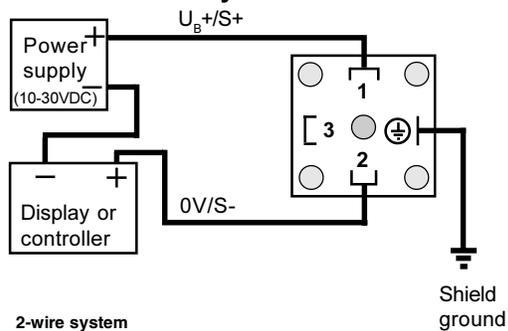
Notes: Items in curved brackets { } are available on special order.



Loop powered attachable LCD display for 4-20 mA only - Part # 4210069

Wiring

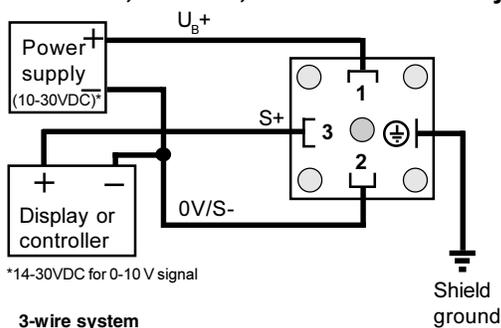
4-20 mA 2 wire system



2-wire system

Wire	Coding	DIN Plug	Wire Color
Supply +	$U_B+ / S+$	pin 1	brown
Signal -	$0V / S-$	pin 2	green

0-10 VDC, 0-5 VDC, or 1-6 VDC 3 wire system

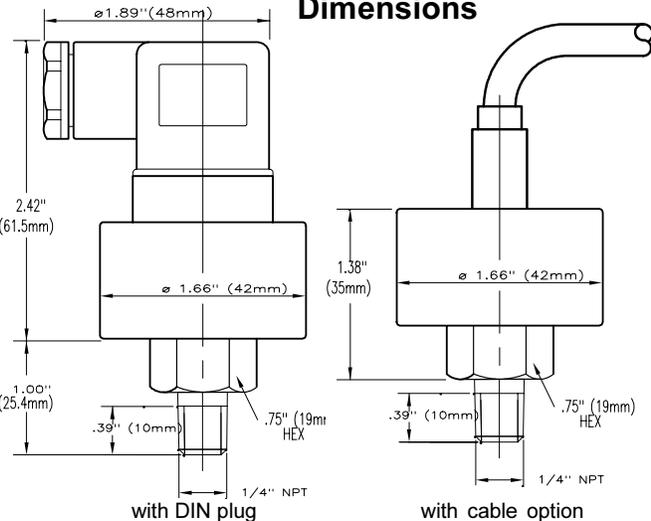


*14-30VDC for 0-10 V signal

3-wire system

Wire	Coding	DIN Plug	Wire Color
Supply +	U_B+	pin 1	brown
Supply - Signal -	$0V / S-$	pin 2	green
Signal +	$S+$	pin 3	white

Dimensions



Ordering Information:

State computer part number (if available) / type number / range / output / process connection / electrical connection / other required options.

Specifications given in this data sheet represent the state of engineering at the time of printing. Modifications may take place and the specified materials may change without prior notice



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