Brooks® TD100 Series Pressure Transducer Displays
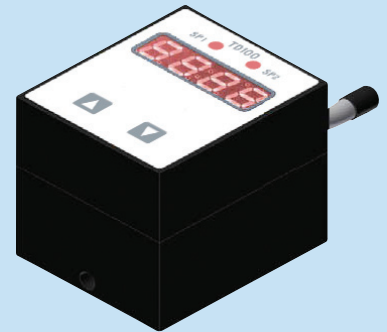
Accurate, miniature displays for point-of-use pressure monitoring

» Local indication of process pressure measurement
» 4 digit display in durable metal enclosure
» Programmable zero and full scale
» Setpoint indication and contact switching options
» CE and RoHS compliant

Product Description

Local display of process pressure improves safety and quality control of the gas delivery systems. The Brooks TD100 series pressure transducer displays allow a 4–20mA sensor to digitally display its pressure and send its signal to a final destination. A sensor, such as the Brooks SolidSense® II pressure transducer, connects to either the back or bottom of the TD100 with a 4-pin, Bendix® connector. The TD100 connects to the loop through either a 6-wire pigtail cable or a 4-pin male Bendix connector. The TD100 offers a real time reading. It is a single channel loop powered display that can swivel around the transducer so the viewing angle can be adjusted. The display has red LED lighting for easy reading in low ambient light. The TD100 has two adjustable alarm setpoints.
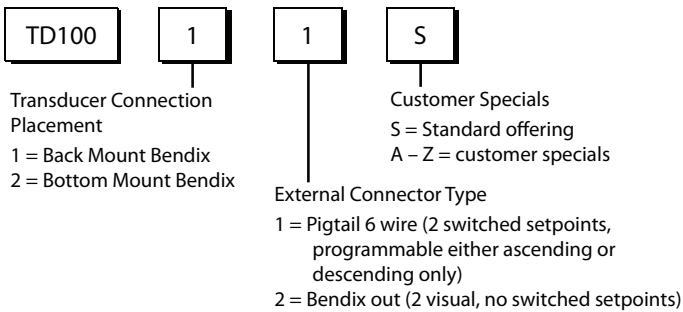
Applications

Gas delivery systems and tools including:

· Gas cabinets

· Gas panels
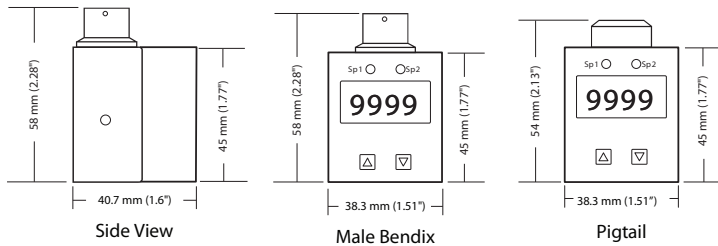
· Gas distribution systems

· Bulk gas

Benefits

· Point-of-use pressure monitoring

· Extremely accurate reading with outstanding noise immunity

· Low power electronics

· Ease of use and installation

BROOKS®
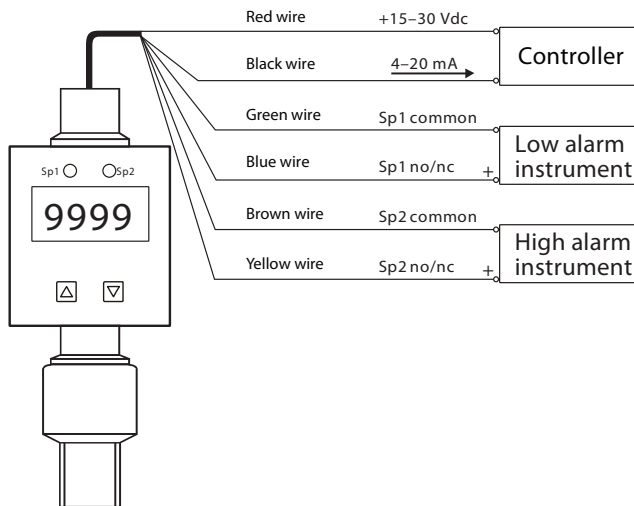**INSTRUMENT**

Product Configurations

TD100	1	1	S

Transducer Connection Placement
1 = Back Mount Bendix
2 = Bottom Mount Bendix

Customer Specials
S = Standard offering
A – Z = customer specials

External Connector Type
1 = Pigtail 6 wire (2 switched setpoints, programmable either ascending or descending only)
2 = Bendix out (2 visual, no switched setpoints)

Product Dimensions
TD100 Series

Side View

Male Bendix

Pigtail

Loop Voltage Simplified
TD100 Series

Red wire	+15–30 Vdc	
Black wire	4–20 mA	Controller
Green wire	Sp1 common	
Blue wire	Sp1 no/nc +	Low alarm instrument
Brown wire	Sp2 common	
Yellow wire	Sp2 no/nc +	High alarm instrument

Brooks TD100 Series Pressure Transducer Display Specifications

Features
· 4–20mA output signal
· Available measuring units include MPa, psi, psig, psia, KPa, Bar, kg/cm and kg
· Programmable zero and FS
· Swivel around transducer for better viewing angle
· Two user programmable/ adjustable alarm setpoints

Display
Accuracy	±0.1% FS
Conversion rate	10 times/second
Decimal point	User adjustable
Digital damping	0.3 to 3 sec (programmable)
Digits and type	4 digit, red LED with 7 segments
Polarity	automatic (–) displayed in vacuum
Range	−1999 to +9999
Temperature coefficient	±0.01 %FS/degree F
Value update	0.1 to 10 sec

Material
Housing	Aluminum, powder coating
Digit height/width	9 mm/5.4 mm
Pigtail length	2 M standard, (optional lengths upon request)
Stability, Vibration	15 Grm 10−2000 Hz (Mil-Std-202M20 Cond. B)
Stability, Shock	50 g, 11 msec (Mil-Std-202, M213 Cond G.)
Approx. shipping weight	200g

Electrical
Power requirements	Voltage drop <4.5; Minimum lit-up current 3 mA.
Input	4−20ma (2 wire, loop powered)
Connections	
Input:	Back mount, 4-pin female Bendix connector, factory wired for 4−20 ma transducer
Input:	Bottom mount, 4 pin female Bendix connector, factory wired for 4−20 ma transducer
Output:	Top mount, pigtail, 6 wire cable
Output:	Top mount, male bendix 4-pin connector
Pressure warnings	2 switched setpoints for pigtail, 2 visual set points for 4-pin Bendix
Setpoint Contact Rating	125 mA (max) and 26 VDC, electrically isolated
Resistive load:	Max 10 K ohm
Inductance:	4.7mH
Switching cycles:	>80K
Protection	
Short:	Permanent short circuit protection
Reverse:	No damage at reverse polarity,but no function
Access:	Password protection
Data Storage:	EPROM, 4 K max.

Environmental
Temperature range	
Operating:	−20 to 85°C
Storage:	−40 to 85°C

Compliance
CE	Compliant to EMC directive EN61326
RoHS	Compliant to EU directive 2002/95/

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