

PRESSURE TRANSDUCER (low cost)



Series 3900

INTRODUCTION

ELECTRONIC TRANSDUCER with CONTACTLESS MEASUREMENT of BOURDONTUBE MOVEMENT.

ELECTRONIC AMPLIFIER in separate WATERTIGHT CASE behind STANDARD PRESSURE GAUGE.

OUTPUT SIGNAL
0-20 mA or 4-20 mA
POWER SUPPLY
24 V.D.C. \pm 20%

ZERO and SPAN
ADJUSTMENT.

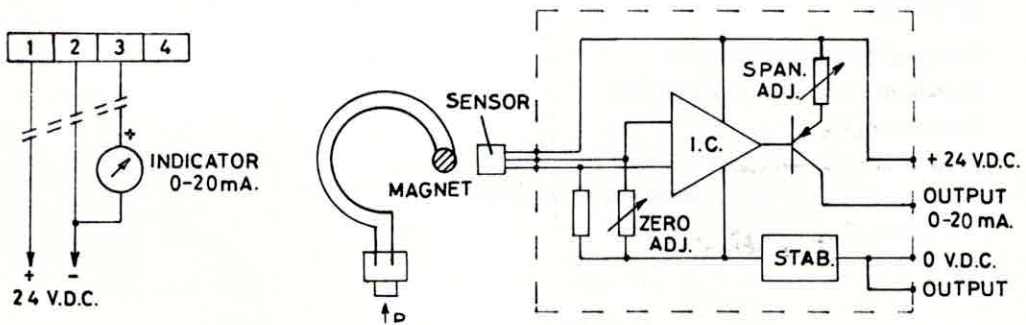
DESCRIPTION:

The gauge consists of a standard bourdon type pressure gauge with an outside diameter of 160 mm.

Behind the gauge an electronic amplifier is mounted in a watertight case with cable glands, power supply and output connections.

A special magnet is mounted on the bourdontube which interferes a magnetic sensor.

Dependent on the position of the bourdontube, signal is obtained by the sensor.



SBE-3900
1973

This sensor forms a bridge with a zero adjustment trim potmeter, which output is connected to a linear amplifier.

The resultant output voltage is transformed into a current by a power transistor and is load independent.

This current can be adjusted by a span potmeter and can be used as a signal for indicators, recorders or other equipment.

The power supply is normally 24 volts DC \pm 20% and is stabilised by a zener referenced regulator inside the pressure gauge.

SPECIFICATIONS

Measuring ranges in Kp/cm².

0-1,6	0-2,5	0-4
0-6	0-10	0-16
0-25	0-40	0-63
0-100		

(other ranges on request).

Supply	: 24 Volts DC \pm 20% 30 mA
Max. ambient temp.	: 70° C
Output signal	: 0-20 mA or 4-20 mA (other ranges on request.)
Total accuracy	: within 1 percent
Linearity error of electronics output	: max. 2%
Load maximum	: 600 ohms

PRESSURE GAUGE:

Pressure connection	: R 1/2"
Housing diameter	: 160 mm
Scale length	: 300 mm
Bourdontube material	: phosphor bronze
Housing material	: cast iron
Bezel material	: brass polished
Other materials on request.	
Accuracy of reading	: 1%

OPTIONS:

Gauge support type PTA 100
Standard cable with junction box
Dampeners
Stop cock with test connection
Supply unit 110 or 220 volts AC to 24 volts DC
Indicators
Alarm units