Protran® PR3442

SUBMERSIBLE DEPTH PRESSURE TRANSMITTER

- PIEZORESISTIVE SENSOR TECHNOLOGY
- PRESSURE RANGES FROM 0-30mWG
- 4-20mA TWO WIRE OUTPUT
- ACCURACY 0.30% NLHR
- 316L STAINLESS STEEL CONSTRUCTION
- HIGH STRENGTH MOULDED POLYURETHANE CABLE WITH VENT TUBE

DESCRIPTION

The PR3442 submersible transmitter has been designed for the accurate measurement of the depth and level of liquids in borehole applications.

Standard output signal is 4-20mA two wire. Supply range 13-36Vdc, with integral transient voltage protection. Electrical connection is via a high strength moulded polyurethane cable with internal tube for excellent trouble-free venting to the surface atmosphere. The standard depth transmitter is fitted with a stainless steel nose cone with radial inlet holes to prevent sludge build-up. The PR3442 has a slim-line 17.5mm diameter suitable for 19mm boreholes or greater.

Applications include borehole level and reservoir level monitoring, water mains pressure measurement in inspection chambers, power level and outlet pressure measurement on submersible pumps.

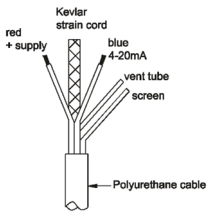
PRESSURE RANGES

0 - 30mWG through to 0 - 500mWG, see table below for list of all standard pressure ranges.

Range (mWG)	Order Code	Range (mWG)	Order Code
0-30	0030	0-150	0150
0-50	0050	0-250	0250
0-80	0080	0-500	0500
0-100	0100		

DIMENSIONS (in mm)

ELECTRICAL CONNECTION	
Red	+ supply
Blue	4-20mA signal
Screen	to case



polyurethane cable termination

ORDERING INFORMATION

PR3442 - xxxx xx xxx

- Model
- Electrical Connector
- Pressure Range - mWG
- Process Connection
- Cable Length

ELECTRICAL CONNECTION/OPTION	Order Code
Cable PU sheathed with internal vent, 4-20mA	-

PROCESS CONNECTION	Order Code
Protective nose cone	AX

EXAMPLE	Order Code
Base Model	PR3442
Cable PU sheathed with internal vent, 4-20mA	-
Pressure range 0-30mWG	0030
Protective nose cone	AX
Cable length 35 metres	035
Correct Part Number	PR3442-0030AX-035

For options not listed contact sales team

DISCLAIMER : ESI Technology Ltd operates a policy of continuous product development. We reserve the right to change specification without prior notice. All products manufactured by ESI Technology Ltd are calibrated using precision calibration equipment with traceability to international standards.

SPECIFICATION

PRESSURE REFERENCE

Vented or sealed gauge

OVERPRESSURE

Pressure can be exceeded by up to 2x full scale range with no damage or change in calibration greater than ±0.5%FS.

OUTPUT SIGNAL

4-20 mA (2 wire configuration).

ZERO OFFSET AND SPAN TOLERNACE

±0.08mA

SUPPLY VOLTAGE

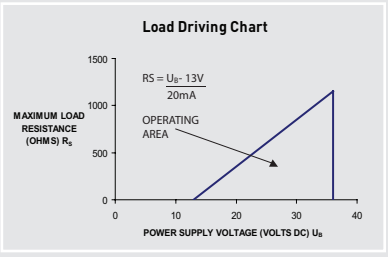
13-36Vdc
Minimum supply to transmitter circuit is 13Vdc. Voltage drop in connecting lead due to cable resistance must be considered. See load driving capability chart below.

PROTECTION OF SUPPLY VOLTAGE

Protected against supply voltage reversal up to 50Vdc

LOAD DRIVING CAPABILITY

For power supply voltages 13-36Vdc



ACCURACY (NON LINEARITY, HYSTERESIS & REPEATABILITY)

±0.30% FS. Typical max. Best fit straight line.

PRESSURE MEDIA

All fluids compatible with 316L stainless steel housing and diaphragm and polyurethane cable.

OPERATING TEMPERATURE RANGE

Operating: -20°C to +60°C
Storage: +5°C to +40°C
Media must not freeze around sensor

TEMPERATURE EFFECTS

±2.0%FS total error band for -20° to +60°C.
Typical thermal zero and span coefficients ±0.03%FS/°C

ELECTROMAGNETIC-COMPATIBILTY

Emissions EN6100-6-4
Immunity EN6100-6-2
Certification CE marked

PRESSURE CONNECTION

Stainless steel nose cone with radial pressure inlets

ELECTRICAL CONNECTION

Submersible black polyurethane cable moulded to housing. With integral screen, Kevlar strain cord and vent tube. Conductor size 7/0.20mm2(24awg), resistance 8.9ohms/100metre (x2).