

- **HIGH STABILITY and REPEATABILITY**
- **ALL STAINLESS STEEL HOUSING**
- **RESISTANT TO HIGH VOLTAGE SURGES**
- **4-20mA TWO-WIRE OUTPUT**
- **ZERO + SPAN ADJUSTMENT ON-SITE**
- **RANGES 0-2.5mtr to 0-500mtr**
- **PRESSURE TIGHT CABLE SHEATH FOR TROUBLE-FREE VENTING**

DESCRIPTION

The PR3400 submersible range of depth and level transmitters have been designed for the accurate measurement of the depth and level of fluids. An output signal of 4-20mA is standard, along with in-head or remote amplifier with zero/span adjustment. Standard depth transmitters are fitted with nylon nose cones to prevent sludge build-up. For the measurement of depth in sludge/slurry materials, the transmitter is mounted on a platform to lift the diaphragm of the transmitter above the sludge/tar level (PR3420). The new PR3440 bore hole transmitter is designed to measure depth and level in bore holes of 25mm diameter.

Applications include reservoir level, borehole fluid level, water mains pressure inspection chambers, power level, outlet pressure on submersible pumps and slurry/sludge level measurement.

Electrical connection is via a screened cable protected by a tough nylon pressure tight sheath which allows excellent trouble-free venting to the surface.

Ranges available from 0-2.5mtr to 0-500mtr.

SPECIFICATION

INPUT

Pressure ranges..... 0-2.5mtr wg
to 0-500 mtr wg
Pressure reference..... Vented to atmosphere
Over pressure..... 2 x Rated pressure

OUTPUT

Span..... 4-20 mA
Type..... 2 wire

ACCURACY

Zero offset..... <±1% FSO
Span tolerance..... <±1% FSO
Combined non-linearity / hysteresis <±0.3% FSO up to 10mtr
<±0.25%FSO over 10mtr
Repeatability..... <±0.1% FSO
Long term stability..... <±0.2% FSO/6 months

ELECTRICAL

Supply voltage..... 13-36Vdc
Supply voltage effects..... 3µA/V
Reverse polarity..... Protected
Load driving capability..... 1150Ω @ 36Vdc

Output short circuit (to ground) No damage
Insulation resistance..... 100MΩ @ 100Vdc elec conn
to case
Response time (63%)..... 1.5mS
Adjustment..... ±10% FSO Zero and Span

ENVIRONMENTAL

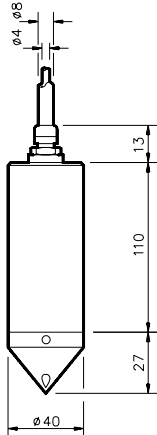
Pressure media..... Compatible with alumina +304 S.S
Operating temperature range... -20 to +85 °C
Storage temperature range..... -40 to +90°C
Thermal effect Zero..... <±0.03% FSO/°C
Thermal sensitivity..... <±0.03% FSO/°C
Vibration tolerance..... 10g's to 50Hz
Mechanical shock tolerance..... 15g@s (11mS)
Operating humidity..... 100% RH

PHYSICAL

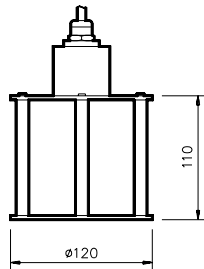
Electrical connection..... Via Screened cable in
vented sheath
Enclosure rating..... IP69
Natural frequency..... 10 KHz (min)
Weight..... PR3400=705g;
PR3420=2000g;
PR3440=250g (without cable)
Materials..... 300 series stain'stl body/connector
alumina diaphragm, nitrile seal

DIMENSIONS / WIRING DETAILS

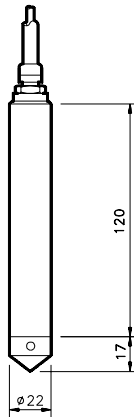
STANDARD PR 3400



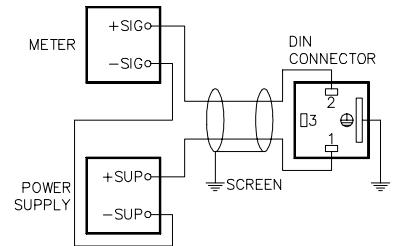
SLUDGE LEVEL PR 3420



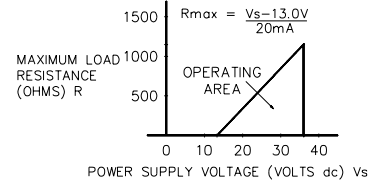
BORE HOLE PR 3440



TRANSMITTER WIRING DIAGRAM



LOAD DRIVING CHART



ORDERING INFORMATION

STATE MODEL NUMBER AND PRESSURE RANGE REQUIRED:-
ie: PR3400 0-10mtr

MODEL NO.	DESCRIPTION
PR3400	Standard Submersible Transmitter. 0-2.5 to 0-500mtr
PR3420	Sludge Submersible Transmitter. 0-2.5 to 0-500mtr
PR3440	Bore Hole Submersible Transmitter. 0-5 to 0-500mtr

PRESSURE RANGES

0 - 2.5 mtr *	0 - 20 mtr
0 - 3 mtr *	0 - 30 mtr
0 - 4 mtr *	0 - 50 mtr
0 - 5 mtr	0 - 100 mtr
0 - 8 mtr	0 - 200 mtr
0 - 10 mtr	0 - 500 mtr
0 - 15 mtr	

* Not available for PR3440