



bar APR3400 Protran®
Submersible Depth Pressure Transmitter

- Ceramic Thick Film Sensor Technology
- Pressure Ranges 0-5m_{wg} To 0-500m_{wg}
- 4-20ma Two Wire Output As Standard (0-5vdc, 0-10vdc Optional)
- Optional ATEX Approved Version
- All Stainless Steel Housing
- Nylon Over Tube For Trouble Free Venting



DESCRIPTION

The APR3400 submersible depth and level transmitter has been designed for the accurate measurement of the depth and level of fluids. Standard version has output signal of 4-20mA, two wire. Options include; outputs of 0-5Vdc and 0-10Vdc, remote amplifier for surface adjustment of zero and span.

For submersion in aggressive or corrosive liquids the APR3400 is available in specialist materials such as Inconel 625, Hastalloy C, titanium and plastic. The standard depth transmitter is fitted with a Delrin® nose cone to reduce sludge build-up. The nose cone connection may be replaced by a variety of threaded process connections common in sub-sea requirements. We has many options available for high pressure and hydraulic sub-sea applications.

Standard applications include reservoir and borehole level monitoring, water mains pressure metering, power level and outlet pressure on submersible pumps. Electrical connection is via a screened cable protected by a tough nylon pressure tight sheath, which allows excellent trouble-free venting to the surface.

An optional ATEX certified version of this product is available approved for explosion protection for flammable gases (zone 0), dusts (zone 20) and mining areas (group I M1).





PRESSURE RANGES

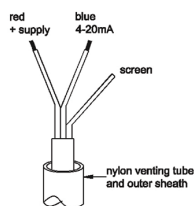
0 to 5mWG through to 0 to 500mWG, see table below for list of all standard pressure ranges.

Range (mWG)	Order Code	Range (mWG)	Order Code
0-5	0005	0-80	0080
0-10	0010	0-100	0100
0-20	0020	0-150	0150
0-30	0030	0-200	0200
0-50	0050	0-500	0500

DIMENSIONS (in mm)



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



cable termination

ORDERING INFORMATION

Model: APR3400 - xxxx - xx - xxx

Electrical Connector: _____

Pressure Range - mWG: _____

Process Connection: _____

Cable Length: _____

ELECTRICAL CONNECTION / OPTION

- Nylon sheathed vented cable, 4-20mA 2 wire
- Nylon sheathed vented cable, 0-5Vdc 4 wire
- Nylon sheathed vented cable, 0-10Vdc 4 wire
- Nylon sheathed vented cable, 4-20mA 2 wire ATEX

Order Code

-
- A
- B
- EX

PROCESS CONNECTION

- Protective nose cone

Order Code

- AX

EXAMPLE

- Base Model
- Nylon sheathed vented cable, 4-20mA 2 wire
- Pressure range 0-10mWG
- Protective nose cone
- Cable length 10 metres

Order Code

- APR3400
-
- 0010
- AX
- 010

Correct Part Number: APR3400-0010AX-010
 For options not listed contact sales team

SPECIFICATION

PRESSURE REFERENCE

Vented gauge

OVERPRESSURE

Pressure can be exceeded by up to 1.6x full scale range with no damage or change in calibration greater than ±0.5%FS.

OUTPUT SIGNAL

4-20mA (2 wire configuration).

ZERO OFFSET AND SPAN TOLERANCE

±0.16mA

SUPPLY VOLTAGE

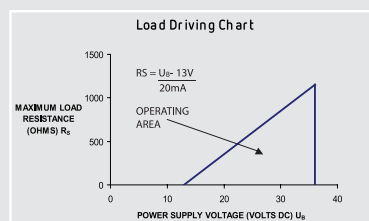
13-36Vdc
 Minimum supply to transmitter circuit is 13Vdc. Voltage drop in connecting lead due to cable resistance must be considered. See load driving capability chart below.

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 303 or 316L stainless steel housing, alumina diaphragm, nylon over tube and Nitrile o-ring seal.

OPERATING TEMPERATURE RANGE

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

TEMPERATURE EFFECTS

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

ATEX APPROVAL

Ex II 1 G Ex ia IIC T4 Ga (zone 0)
 Ex II 1 D Ex ia IIC T135°C Da (zone 20)
 EX I M 1 Ex ia I Ma (group I M1)

ATEX SAFETY VALUES

U_i = 28V
 I_i = 119mA
 P_i = 0.65W
 L_i = 0.1
 C_i = 62NF
 Temperature range = -20°C to +70°C
 Max. cable length = 105m

PRESSURE CONNECTION

Delrin® nose cone with radial pressure inlets.

ELECTRICAL CONNECTION

Screened cable in pressure tight, flexible nylon sheath. Cable conductor size 7/0.20mm²(24awg), resistance 8.9ohms/100metre (x2).

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