

APT 500 Series

Analogue Pressure Transmitter for Marine
and Industrial applications



Key features

- Industry standard DIN Plug or Stainless Steel Terminal Head connection
- Choice of construction materials depending on application
- Robust construction with high overload tolerance
- Nominal measurement ranges from 0.5 to 40 Bar Gauge
- Accuracy of $\pm 0.2\%$ of full range
- Temperature compensated output over 0 to 70°C
- IECEx and ATEX certified for use in hazardous areas (Zone 0)
- Marine Type Approved for Shipboard application

Specifications

Materials	Sensor body	316L Stainless Steel or Titanium
	Diaphragm	As above
	Terminal Head	DIN Plug - ABS : Terminal Head - 316L St. Steel
Standard Measurement Ranges (Bar)	0.5, 1.0, 2.5, 4.0, 10, 25, 40.	
Measurement type	Vented Gauge	
Overload	2 x Nominal range with no effect	
Span accuracy	0.2% within compensated range	
Zero accuracy	0.2% within compensated range	
Total Error Band	+/- 0.2% of Nominal range at reference conditions of 25°C	
Thermal compensation	Max +/- 0.0075% of Nominal range for Zero & Span /°C from reference	
Long term stability	Error not exceeding 0.1% Per Annum	
Max / Min process temperature	-30 to +85°C	
IP Rating	IP65 DIN Plug - IP67 Terminal Head	
IECEX certification	IECEX ITS180012X.0 Ex ia IIC T4 Ga -30°C ≤ Ta ≤ +85°C	
ATEX certification	ITS18ATEX203153X Issue 0 Ex ia IIC T4 Ga -30°C ≤ Ta ≤ +85°C	
Signal Output / Power supply	4-20mA / 18-30V DC	
Reverse Polarity Protection	Yes	
Maximum load	Supply dependant. Vs-18/0.02 = Load in Ohms	
Weight	0.35 - 0.5Kg (typical)	

With a choice of measurement ranges and materials, robust construction and excellent accuracy the APT500 series is equally suitable for both marine and land based industrial applications.

Signal output is industry standard 4-20mA 2 wire, which can be supplied to a standard range or calibrated during production to specific needs.

The all welded body uses 316L Stainless Steel as standard. For seawater or other corrosive duties an all Titanium construction can be specified.

Connection is by industry standard DIN plug or optional Stainless Steel Terminal Head.

Integral thermal compensation for actual temperature ensures accuracy is maintained over a wide operating temperature and the solid-state measurement element employs the latest technology to ensure excellent long term stability.

APT500 Pressure Transmitter	
550D	APT 550 - DIN Plug Type 43650 connection
550H	APT 550 - Terminal Head
Certification	
S	Hazardous Area Approval NOT APPLICABLE
I	Certified Intrinsically Safe to ATEX - Hazardous Area Approved
X	Certified Intrinsically Safe to IECEx - Hazardous Area Approved
IX	Dual Certification ATEX / IECEx - Hazardous Area Approved
Measurement Type	
G	Gauge
Nominal Range	
B	0.5 Bar
C	1.0 Bar
D	2.5 Bar
E	4.0 Bar
F	10 Bar
H	25 Bar
I	40 Bar
Process Connections & Fitting Options	
1	1/2" BSP Male (Standard connection). Material is as specified for the main body
Transmitter Body Material	
SS	Stainless Steel (Body & Diaphragm)
Ti	Titanium (Body & Diaphragm)
Transmitter Orientation (0.5 & 1.0 Bar ranges only)	
H	Horizontal
V	Vertical - Diaphragm facing down
U	Vertical - Diaphragm facing up
4-20mA Calibrated Range	
N	Calibrated to Nominal Range
Y	Calibrated Range Specified

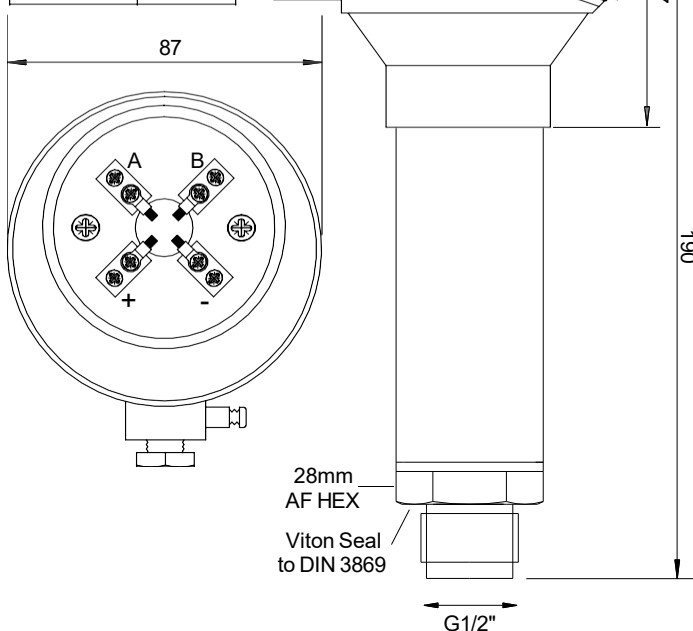
Example: 550D / S / G / E / 1 / SS / H / 3.0Bar

Note: Transmitter will be calibrated for 4-20mA over Nominal range as standard.
Where a specific calibration range is required this must be advised separately.
Actual calibration can be a maximum of 2:1 turndown from Nominal range.

Part No.	Optional Pressure Snubber
100934	Pressure Snubber / Spike Suppressor G 1/2 Female to G 1/2 Male

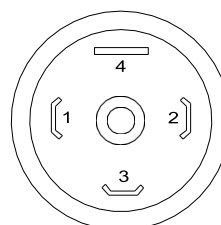


CONNECTIONS	
+ Positive	Supply
- Negative	4-20mA
A & B	Not used



GDM 3009 Plug

GSP-3 connector



APT500 DIN PLUG IDENTS		
Terminal 1	+ Positive	Supply
Terminal 2	- Negative	4-20mA
Terminal 3	Not Used	
Terminal 4	Not Used	

28mm AF HEX

Viton Seal to DIN 3869

G1/2"