

APT 500 Series
Analogue Pressure Transmitter for Marine and Industrial applications.



- 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 -1.0 to 60 bar
- Vented Gauge and Absolute versions
- Accuracy of +/-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 standard, optional Hastelloy C276 process port
	Diaphragm	316L standard, optional Tantalum with Hastelloy port
	Terminal Head	DIN Plug - ABS : Terminal Head - 316L St. Steel
Standard Measurement Ranges (Bar)	-1.0, -0.35, -0.2, 0.2, 0.35, 1.0, 2.5, 4.0, 6.0, 10, 16, 25, 40, 60.	
Measurement type	Vented Gauge or Absolute – refer for availability of specific range	
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	-20 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 / 10-30V DC	
Maximum load	Supply dependant. $V_s - 10 / 0.02 = \text{Load in Ohms}$	
Weight	0.35Kg (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, and the option of a process port in Hastelloy C276 with a Tantalum diaphragm ensures compatibility with many corrosive fluids

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							
500D	APT 500 - DIN Plug Type 43650 connection						
500H	APT 500 - 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							
A	Absolute						
G	Gauge						
Nominal Range							
Absolute				Gauge			
	TI	SS	HT	A	TI	SS	HT
A	N/A	N/A	N/A	A	0.2 Bar	0.2 Bar	0.2 Bar
B	N/A	N/A	N/A	B	0.5 Bar	0.5 Bar	0.5 Bar
C	N/A	N/A	N/A	C	1.0 Bar	1.0 Bar	1.0 Bar
D	2.5 Bar	2.5 Bar	2.5 Bar	D	2.5 Bar	2.5 Bar	2.5 Bar
E	4.0 Bar	4.0 Bar	4.0 Bar	E	4.0 Bar	4.0 Bar	4.0 Bar
F	10 Bar	10 Bar	10 Bar	F	10 Bar	10 Bar	10 Bar
H	25 Bar	25 Bar	25 Bar	H	25 Bar	25 Bar	25 Bar
I	40 Bar	40 Bar	40 Bar	I	40 Bar	40 Bar	40 Bar
J	60 Bar	60 Bar	60 Bar	J	60 Bar	60 Bar	60 Bar
Process Connections & Fitting Options							
1	1/2" BSP Male (Standard connection). Material is as specified for the main body						
3	G1" Male Adapter in 316 Stainless Steel						
6	G1/2" to DIN EN837 Stainless Steel (Special order, refer for delivery time)						
Cable Length mtrs (only applicable to submersible APT 500 versions)							
0	Not Applicable						
Material							
SS	Stainless Steel (Body & Diaphragm)						
HT	Hastelloy / Tantalum wetted parts (St. Stl. Body)						
Transmitter Orientation							
H	Horizontal						
V	Vertical - Diaphragm facing down						
U	Vertical - Diaphragm facing up						

Example: 500D S A E 1 0 SS H

Dimensions

Written as 500D/S/A/E/1/0/SS/H

Note: Transmitter will be calibrated for 4-20 mA 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.

