AT1-616 & 616C Explosion-proof ATEX/IECEx Exd differential pressure transmitter







• Series 616 transmitter: $\pm 0.25\%$ accuracy in several factory calibrated ranges. Span and Zero controls included for fine tuning and minor re-calibration in the field.

• Series 616C transmitter: 1% accuracy in several factory calibrated ranges. Span and Zero controls included for fine tuning and minor re-calibration in the field.

ATEX	C€ 1370 ● II 2G Ex d IIC T6 Gb II 2D Ex tb IIIC T85°C Db, -60°C <t amb≤+60°c<="" td=""> Certificate: BVI 14 ATEX 0072</t>
IECEx	Ex d IIC T6 Gb Ex tb IIIC T85°C Db Certificate: IECEx EPS 14.0082
ENCLOSURE RATING	IP66 (IP65 with option OPV)



AT1-616 & 616C SPECIFICATIONS

Service:	air and non-combustible, compatible gases
Wetted parts:	consult factory
Accuracy:	616: ±0.25% f.s.
-	616C: ±1.0% f.s.
Stability:	±1% f.s./yr
Temperature limits:	Transmitter: 0 to 140°F (-17.8 to 60°C)
· · · · · · · · · · · · · · · · · · ·	Case: -76 to 140°F (-60 to 60°C)*
Compensated temperature limits:	20 to 120°F (-6.67 to 48.9°C)
Pressure limits:	see ordering page
Thermal effect:	±0.02% f.s./°F (±0.012% f.s./°C)
Power requirements:	10-35 VDC (2-wire)
Output signal:	4 to 20 mA
Zero adjustments:	potentiometers for zero and span
Loop resistance:	DC; 0-1250 ohms maximum
Current consumption:	DC; 38 mA maximum
Electrical Connections:	screw-type terminal block
Housing material:	aluminium (stainless steel optional)
Finishing:	texture epoxy coated RAL 7038 (only aluminium case).
Pressure connections:	1/8" NPT F brass (stainless steel optional).
	In presence of acetylene it is necessary to use stainless steel.
Electrical connections:	2 x 1/2" NPT F standard (cable gland not included).
Dimensions:	see drawing below
Weight:	3.4 Kg ab

* Operating ambient temperature is defined also according to the options and pressure instrument choosed.

CAUTION FOR USE ONLY WITH AIR OR COMPATIBLE GASES! CONTACT FACTORY FOR USE WITH GASES, OTHER THAN AIR AND NITROGEN.

IMPORTANT NOTES FOR INSTALLATION:

Cables must be fitted through M25x1.5 cable gland or Atex/IECEx conduit (not supplied withinstrument).

Make sure after cabling to close tight cover and cable gland, in order to keep IP66 rating

Open cover only after de-energising instrument.

Attention: check local safety rules and warnings on unit and manual for a correct use of the instrument in hazardous area.



STANDARD RANGES 616 AND 616C

MODEL	OPERATING RANGES	USCITA
616-2	0 - 6 in W.C.	5 psig
616-3	0 - 10 in W.C.	5 psig
616-4	0 - 20 in W.C.	11 psig
616-5	0 - 40 in W.C.	11 psig
616-6	0 - 100 in W.C.	29 psig
616-7	0 - 200 in W.C.	29 psig
616-8	0 - 10 PSID	29 psig
616-9	0 - 20 PSID	58 psig
616-10	0 - 30 PSID	58 psig
616-11	0 - 50 PSID	150 psig
616-12	0 - 150 PSID	150 psig
616-6B	3 - 0 - 3 in W.C.	11 psig
616-10B	5 - 0 - 5 in W.C.	5 psig
616-20B	10 - 0 - 10 in W.C.	5 psig

MODEL	OPERATING RANGES	USCITA
616C-1	0 - 3 in W.C.	2 psig
616C-2	0 - 6 in W.C.	5 psig
616C-3	0 - 10 in W.C.	5 psig
616C-4	0 - 20 in W.C.	11 psig
616C-5	0 - 40 in W.C.	11 psig
616C-6	0 - 100 in W.C.	29 psig
616C-7	0 - 200 in W.C.	29 psig
616C-8	0 - 10 PSID	29 psig
616C-9	0 - 20 PSID	58 psig
616C-10	0 - 30 PSID	58 psig
616C-11	0 - 50 PSID	150 psig
616C-12	0 - 100 PSID	150 psig
616C-3B	1,5 - 0 - 1,5 in W.C.	2 psig
616C-6B	3 - 0 - 3 in W.C.	5 psig
616C-10B	5 - 0 - 5 in W.C.	5 psig
616C-20B	10 - 0 - 10 in W.C.	11 psig

MODEL CONFIGURATION 616

CODE	AT1	-	616	-		•		-	В				-	
Housing			616											
	0 - 6 in w.c.				2									
	0 - 10 in w.c.				3									
	0 - 20 in w.c.				4									
	0 - 40 in w.c. 5													
	0 - 100 in w.c.	0 - 100 in w.c. 6												
_	0 - 200 in w.c.				7									
Ranges	0 - 10 PSD				8									
	0 - 20 PSD				9									
	0 - 30 PSD				10									
	0 - 50 PSD				11									
	0 - 150 PSD				12									
	3 - 0 - 3 in w.c.				6B									
	5 - 0 - 5 in w.c.				10B									
	10 - 0 - 10 in w.c.				20B									
Housing material	Alluminium						А							
material	Stainless steel (s.s. connection included)						S							
	Blind								В					
	Glass window						n.a							
	1/8" NPT F brass pressure port									1				
Housing options	1/8" NPT F stainless steel (only for aluminium housing)								2					
	Standard - without overpressure relief valve									Х				
	Overpressure relief valve* (material: same as pressure ports)							OPV						
	Stainless steel tag								T2					
Other options	See "other options" - Possible more than one option .													

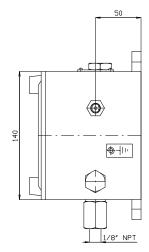


MODEL CONFIGURATION 616C

CODE	AT1	-	616C	-		-		-	В				-	
Housing			616C											
	0 - 3 in w.c.				1									
	0 - 6 in w.c.				2									
	0 - 10 in w.c.				3									
	0 - 20 in w.c.				4									
	0 - 40 in w.c.				5									
_	0 - 100 in w.c.				6									
Ranges	0 - 200 in w.c.				7									
	0 - 10 PSD				8									
	0 - 20 PSD				9									
	0 - 30 PSD				10									
	0 - 50 PSD				11									
	0 - 150 PSD				12									
	3 - 0 - 3 in w.c.				6B									
	5 - 0 - 5 in w.c.				10B									
	10 - 0 - 10 in w.c.				20B									
Housing	Alluminium						А							
material	Stainless steel (s.s. connection included)						S							
	Blind								В					
	Glass window								n.a					
Housing options	1/8" NPT F brass pressure port									1				
	1/8" NPT F stainless steel (only for aluminium housing)									2				
	Standard - without overpressure relief valve X													
	Overpressure relief valve* (material: same as pressure ports) OPV													
	Stainless steel tag											T2		
Other options	See "other options" - Possible more than one option													

* IP65 in case of relief valve installation (OPV). Relief valve is used to keep atmospheric pressure inside the case. Suggested in case of risk of having static pressure ≥19 Bar (static pressure admitted is indicated on tag and it will be anyway always <19 bar). Dimensions may change without any advice.

DIMENSIONS



Consult factory for different holes layout.

