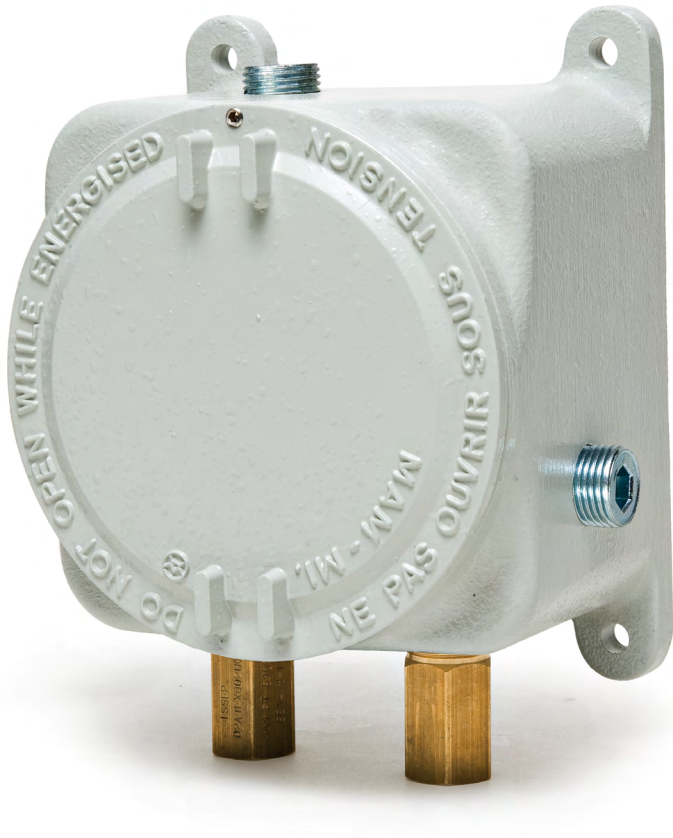


# AT1-616K

Explosion-proof ATEX/IECEX Exd  
Differential pressure transmitter



- Differential pressure transmitters with one-touch® technology are designed for simplicity making them the ideal choice for installers and maintenance professionals.
- With a single digital push button, both zero and span are calibrated properly, nothing else is required.

<b>ATEX</b>	CE 1370 II 2G Ex d IIC T6 Gb II 2D Ex tb IIIC T85°C Db, -60°C ≤ T <sub>amb</sub> ≤ +60°C Certificate: BVI 14 ATEX 0072
<b>IECEX</b>	Ex d IIC T6 Gb Ex tb IIIC T85°C Db Certificate: IECEX EPS 14.0082
<b>ENCLOSURE RATING</b>	IP66 (IP65 with option OPV)



## AT1-616K SPECIFICATIONS

<b>Service:</b>	air and non-combustible, compatible gases.
<b>Wetted materials:</b>	consult factory
<b>Accuracy:</b>	±2% f.s.
<b>Stability:</b>	±1% f.s. year
<b>Temperature limits:</b>	transmitter: 32 to 122°F (0 to 50°C) case: -76 to 140°F (-60 to 60°C)*
<b>Pressure limits:</b>	2 psi (13.8 kPa)
<b>Thermal effect on span:</b>	±0.11% f.s.°F (±0.19% f.s.°C) typ
<b>Thermal effect on zero:</b>	616KD-X0: 0.6% °F (1% °C) 616KD-X1: 0.3% °F (0.5% °C) 616KD-X2: 0.2% °F (0.33% °C) 616KD-X3: 0.12% °F (0.2% °C) 616KD-X4: 0.06% °F (0.1% °C) f.s. max
<b>Power requirements:</b>	16 to 35 VDC (2 or 3 wire) 20 to 28 VAC (3 wire)
<b>Output signal:</b>	4 to 20 mA or unit with field selectable 0 to 10 & 0 to 5 volt
<b>Zero and span adjustments:</b>	push button
<b>Loop resistance:</b>	DC=1000 Ohms max AC=1200 Ohms max
<b>Current consumption:</b>	21 mA max
<b>Electrical connections:</b>	screw-type terminal block
<b>Mounting orientation:</b>	position insensitive
<b>Weight:</b>	1.8 oz (51 g)
<b>Housing material:</b>	aluminium (stainless steel optional)
<b>Finishing:</b>	texture epoxy coated RAL 7038 (only aluminium case)
<b>Pressure connections:</b>	1/8" NPT F brass (stainless steel optional), in presence of acetylene it is necessary to use stainless steel.
<b>Electrical connections:</b>	2 x 1/2" NPT F standard (cable gland not included).
<b>Dimensions:</b>	see drawing below
<b>Weight:</b>	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 with instrument).

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

Open cover only after de-energising instrument.

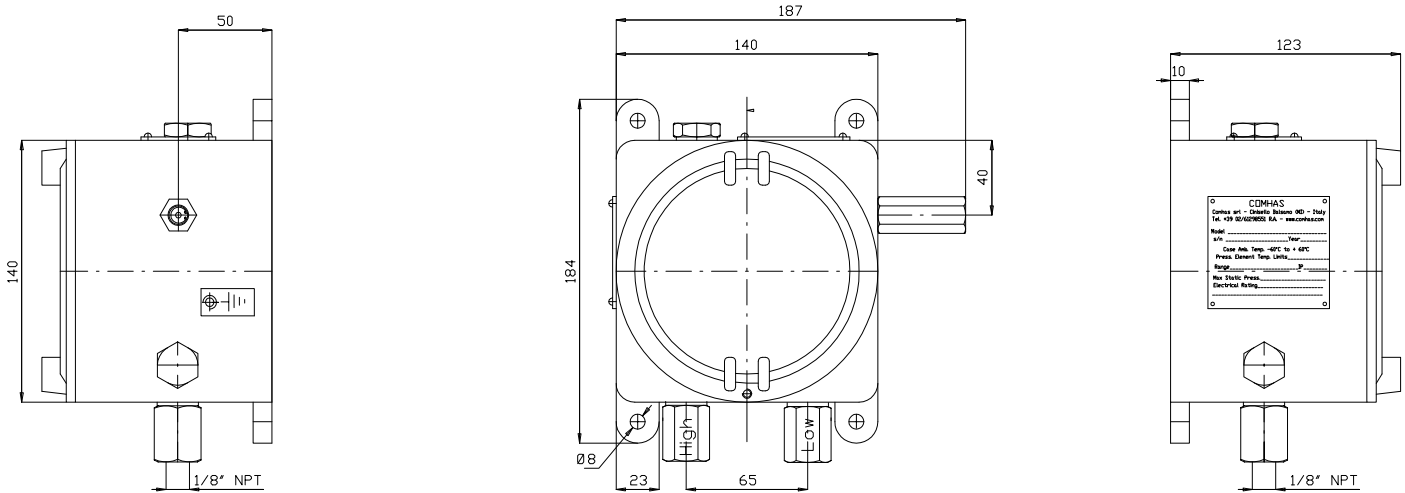
Attention: check local safety rules and warnings on unit and manual for a correct use of the instrument in hazardous area.



## STANDARD RANGES 616K

MODEL	RANGES
616KD-00	0 - 1 in w.c.
616KD-01	0 - 2 in w.c.
616KD-02	0 - 3 in w.c.
616KD-03	0 - 5 in w.c.
616KD-04	0 - 10 in w.c.
616KD-05	0 - 15 in w.c.
616KD-06	0 - 20 in w.c.
616KD-07	0 - 25 in w.c.
616KD-10	0 - 250 Pa
616KD-11	0 - 500 Pa
616KD-12	0 - 750 Pa
616KD-13	0 - 1250 Pa
616KD-14	0 - 2500 Pa
616KD-15	0 - 5000 Pa
616KD-50	1 - 0 - 1 in w.c.
616KD-51	2 - 0 - 2 in w.c.
616KD-52	5 - 0 - 5 in w.c.
616KD-53	10 - 0 - 10 in w.c.
616KD-54	250 - 0 - 250 Pa
616KD-55	500 - 0 - 500 Pa
616KD-56	750 - 0 - 750 Pa

## DIMENSIONS



Consult factory for different holes layout.



**MODEL CONFIGURATION 616K**

CODE	AT1	-	616K	-	-	-	B											
<b>Housing</b>			616K															
<b>Ranges</b>	0 - 1 in w.c.																	
	0 - 2 in w.c.																	
	0 - 3 in w.c.																	
	0 - 5 in w.c.																	
	0 - 10 in w.c.																	
	0 - 15 in w.c.																	
	0 - 20 in w.c.																	
	0 - 25 in w.c.																	
	0 - 250 Pa																	
	0 - 500 Pa																	
	0 - 750 Pa																	
	0 - 1250 Pa																	
	0 - 2500 Pa																	
	0 - 5000 Pa																	
	1 - 0 - 1 in w.c.																	
	2 - 0 - 2 in w.c.																	
	5 - 0 - 5 in w.c.																	
	10 - 0 - 10 in w.c.																	
	250 - 0 - 250 Pa																	
500 - 0 - 500 Pa																		
750 - 0 - 750 Pa																		
<b>Output</b>	Standard 4-20 mA																	
	Field selectable 0-10V/0-5																	
<b>Housing material</b>	Alluminium																	
	Stainless steel (s.s. connection included)																	
<b>Housing options</b>	Blind																	
	Glass window																	
	1/8" NPT F brass pressure port																	
	1/8" NPT F stainless steel (only for aluminium housing)																	
	Standard - without overpressure relief valve																	
	Overpressure relief valve* (material: same as pressure ports)																	
	Stainless steel tag																	
<b>Other options</b>	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).

Accessories: Atex cable gland.

Dimensions may change without any advice.

