

AT-101-616KD-LR

AT-102S-616KD-LR

Explosion-proof ATEX/IECEX Exd differential pressure transmitter



Differential pressure transmitters with one-touch® technology.

With a single digital push button, both zero and span are calibrated properly, nothing else is required.

ATEX

CE 0477

II 2G Ex db IIC T5, T6 Gb -60°C ≤ Ta ≤ +50°C (T6)
-60°C ≤ Ta ≤ +60°C (T5)

II 2D Ex tb IIIC T75 °C Db
Certificate: EPT 19 ATEX 3192 X

IECEX

Ex db IIC T5, T6 Gb -60°C ≤ Ta ≤ +50°C (T6)
-60°C ≤ Ta ≤ +60°C (T5)

Ex tb IIIC T75°C Db
Certificate: IECEX EUT 19.0014X

SPECIFICATIONS

Service:	air and non-combustible, compatible gases.
Wetted materials:	consult factory
Accuracy:	616KD-LR-A: 0,25% f.s. 616KD-LR-B: 1,00% f.s. 616KD-LR-D: 0,5% f.s.
Stability:	± 1% f.s. year
Temperature limits:	transmitter: 0 to 140°F (-17.8 to 60°C) case: -76 to 140°F (-60 to 60°C)* T5 (-60 to 50°C) T6
Pressure limits:	1 Psi max
Power requirements:	4-20 mA output: 10-35 VDC (2wire) or 12-26 VAC (4 wire); 5V output: 10-35 VDC (3wire) or 12-26 VAC (4 wire); 10 V output :13-35 VDC (3 wire) or 12-26 VAC (4wire) for 616KD A and B. 16-36 VDC (2 or 3 wire); 20-28 VAC (3 wire) for 616KD.
Output signal:	4 to 20 mA 0 to 10 & 0 to 5 volt
Zero and span adjustments:	Accessible opening case only after de-energizing via push buttons
Loop resistance:	4-20 mA output (DC): 0 to 1250 Ω max. Rmax = 50 (VpsDC-10) Ω; 4-20 mA output (AC): 0 to 1200 Ω max. Rmax = 50 (1.4 VpsAC - 12) Ω; Voltage output: 5K minimum.
Current consumption:	40 mA max
Electrical connections:	screw-type terminal block
Mounting orientation:	vertical with pressure connections pointing down
Housing material:	aluminium (stainless steel optional)
Finishing:	Blue - texture epoxy coat RAL7015 (aluminum case) Grey - RAL 5015 (top cover)
Process connections:	1/8" female NPT brass (stainless steel optional)
Electrical connections:	2 x 1/2" NPT F standard (cable gland not included).
Enclosure rating:	IP66
Dimensions:	see drawing below
Weight:	from 4,7 to 15,5 kg

* 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 1/2" NPT 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 (only without venting valve).

Open cover only after de-energizing instrument.

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

1. Model configuration

CODE	AT-101				-	616KD-LR	-												
	AT-102 (only for stainless steel material version)																		
Enclosure extension	Enclosure without extension	N																	
	Enclosure with extension	n/a																	
Case material	Aluminum		A																
	Stainless steel (only AT-102 version)		S																
Dwyer model						616KD-LR													
Accuracy	0.25% full-scale accuracy						A												
	1.0% full-scale accuracy						B												
	0.5% full-scale accuracy						D												
Ranges	0 - 0.1 in w.c. (1)																		
	0 - 0.25 in w.c. (2)																		
	0 - 0.4 in w.c.																		
	0 - 0.5 in w.c.																		
	0.1 - 0 - 0.1 in w.c. (1)																		
	0.25 - 0 - 0.25 in w.c. (2)																		
	0.4 - 0 - 0.4 in w.c.																		
	0.5 - 0 - 0.5 in w.c.																		
	0 - 25 Pa (1)																		
	0 - 60 Pa (2)																		
	0 - 100 Pa																		
	0 - 125 Pa																		
	25 - 0 - 25 Pa (1)																		
	60 - 0 - 60 Pa (2)																		
	100 - 0 - 100 Pa																		
125 - 0 - 125 Pa																			
Output	4 to 20 mA and 0-10 V																		
	4-20 mA and 0-5 V																		
	4-20 mA and 2-10 V																		
	4-20 mA and 1-5 V																		
Cover	Blind																		
	Glass window																		
Pressure port / venting valve material	Brass																		
	Stainless steel																		
Pressure port/venting valve (check table 2 based on max static pressure)	STD pressure port / no venting valve																		
	LD pressure port / no venting valve																		
Cable entry	1/2" NPT ANSI/ASME B1.20.1																		

n/a: not available
 (1): B accuracy only
 (2): B and D accuracies only

2. Max static pressure admitted - Pressure ports and venting valve configuration

		Simplified scheme of pressure port / breathing device (venting valve)				Maximum pressure value with: *	
						only one pressure port connected	both pressure ports connected
Code	VSO	PRESSURE PORTS	STD	Enclosure breathing device (venting valve)	None	10 kPa	10 kPa
	VL0		LD		None	10 kPa	10 kPa

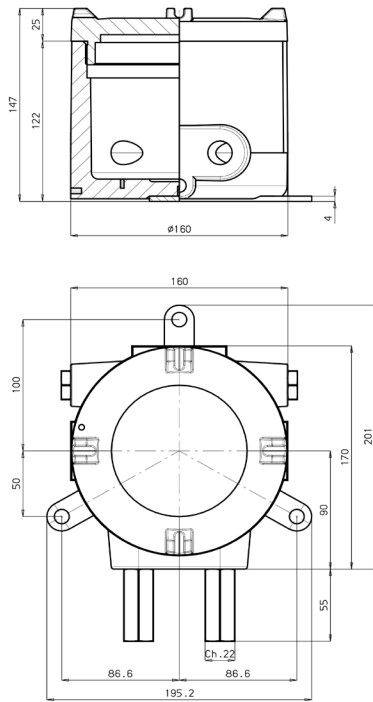
* Max static pressure is 1Psi as max P for 616KD is 1 Psi

Dimension

Aluminum case

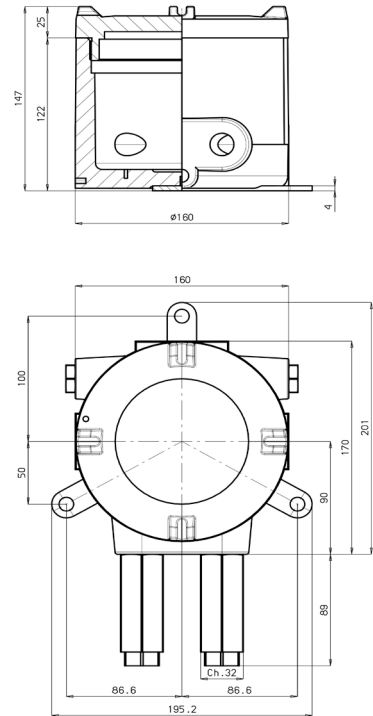
VSO

STD pressure port/no venting valve



VLO

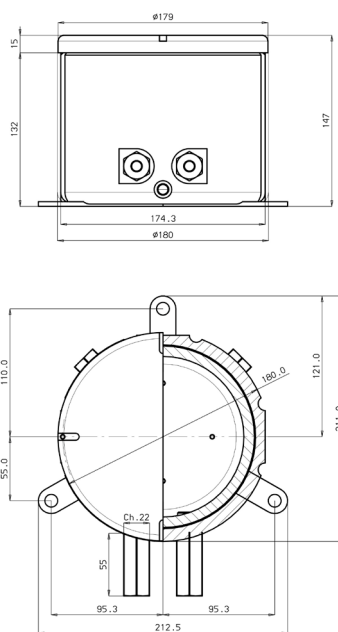
LD pressure port/no venting valve



Stainless steel case

VSO

STD pressure port/no venting valve



VLO

LD pressure port/no venting valve

