AT-101-616KD
AT-102S- 616KD

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.

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: ±2% f.s. 616KD-A: ±0.25% f.s. 616KD-B: ±1% 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:	2 Psig (0,13 Bar) for ranges up to 5" H2O and 5 Psig for ranges from 10" to 40" H2O PLS see also table 2.
Thermal effect:	616KD-A: ±0.02% FS/°F, 616KD-B: ±0.04% FS/°F, 616KD: ±0.06% FS/°F, includes zero and span.
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 616DK A and B. 16-36 VDC (2 or 3 wire): 20-28 VAC (3 wire) for 616KD.
Output signal:	4 to 20 mA or unit with field selectable 0 to 10 & 0 to 5 volt, 2-10, 1-5 V
Zero and span adjustments:	Accessible opening case only after de-energizing via push button.
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 minumum.
Current consumption:	24 mA max
Electrical connections:	screw-type terminal block
Mounting orientation:	vertical position with pressure connection 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 (IP 65 for versions VS2)
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**	-		-		-		-					
	AT-102 (only for stainless steel material version)																
Enclosure extension	Enclosure without extension	N															
	Enclosure withextension	n/a															
Case material	Aluminum		A														
	Stainless steel (only AT-102 version)		S														
Dwyer model					616KD												
Accuracy	0.25% full-scale accuracy						A										
	1.0 % full-scale accuracy						B										
	2.0 % full-scale accuracy																
Ranges	0 - 1 in w.c.								00								
	0 - 2 in w.c.								01								
	0 - 3 in w.c.								02								
	0 - 5 in w.c.								03								
	0 - 10 in w.c.								04								
	0 - 15 in w.c.								05								
	0 - 20 in w.c.								06								
	0 - 25 in w.c.								07								
	0 - 40 in w.c.								08								
	0 - 250 Pa								10								
	0 - 500 Pa								11								
	0 - 750 Pa								12								
	0 - 1250 Pa								13								
	0 - 2500 Pa								14								
	0 - 5000 Pa								15								
	1 - 0 - 1" w.c.								50								
	2 - 0 - 2" w.c.								51								
	3 - 0 - 3" w.c.								57								
	5 - 0 - 5" w.c.								52								
	10 - 0 - 10" w.c.								53								
	250 - 0 - 250 Pa								54								
	500 - 0 - 500 Pa								55								
	750 - 0 - 750 Pa								56								
	1250 - 0 - 1250 Pa								58								
Output	4 to 20 mA																
	Voltage output 0-5, 1-5, 0-10, 2-10 Vdc (field selectable)										V						
Cover	Blind												B				
	Glass window												N/A				
Pressure port / venting valve material	Brass													1			
	Stainless steel													2			
Pressure port/venting valve (check table 2 based on max static pressure)	STD pressure port / no venting valve														VS0		
	STD pressure port / STD venting valve														VS1		
	STD pressure port / LD venting valve														VS2		
Cable entry	1/2" NPT ANSI/ASME B1.20.1															12	

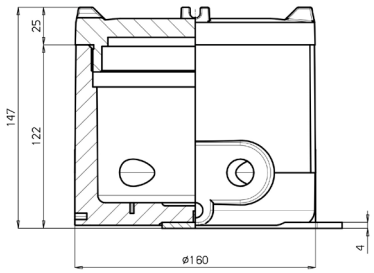
N/A: not available

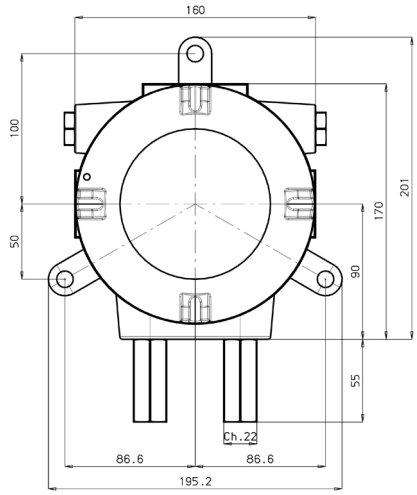
2. Max static pressure admitted - Pressure ports and venting valve configuration

		Simplified scheme of pressure port / breathing device (venting valve)				Maximum pressure value with:	
						only one pressure port connected	both pressure ports connected
Code	VS0	PRESSURE PORTS	STD	Enclosure breathing device (venting valve)	None	10 kPa	10 kPa
	VS1		STD		STD	20 kPa	15 kPa
	VS2		STD		LD	40 kPa	20 kPa

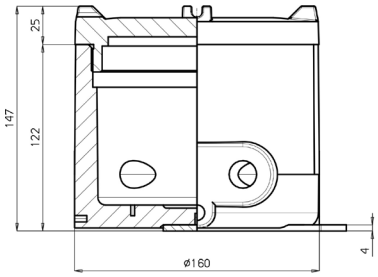
Aluminum case

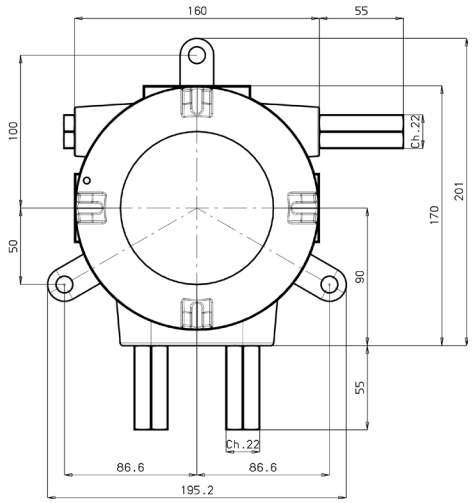
VS0
STD pressure port/no venting valve



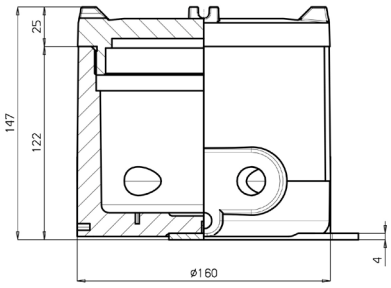


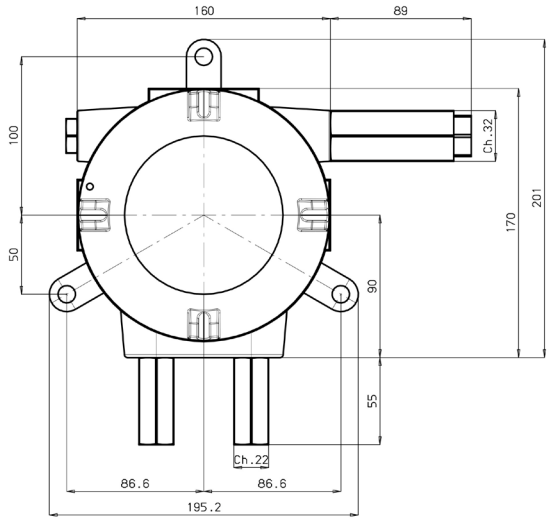
VS1
STD pressure port/STD venting valve





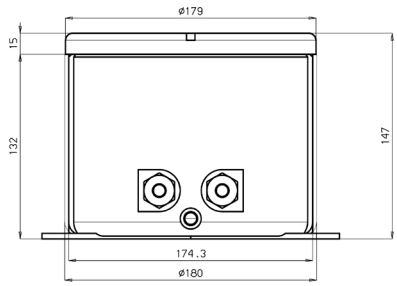
VS2
STD pressure port/LD venting valve

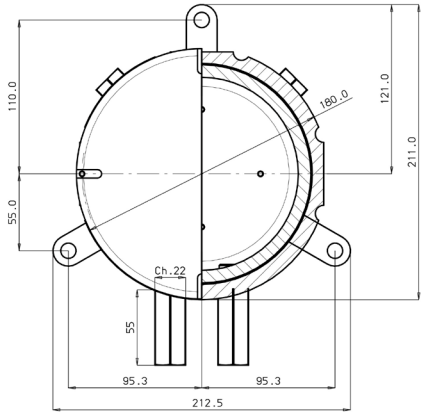




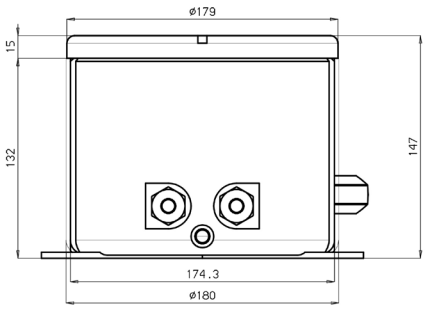
Stainless steel case

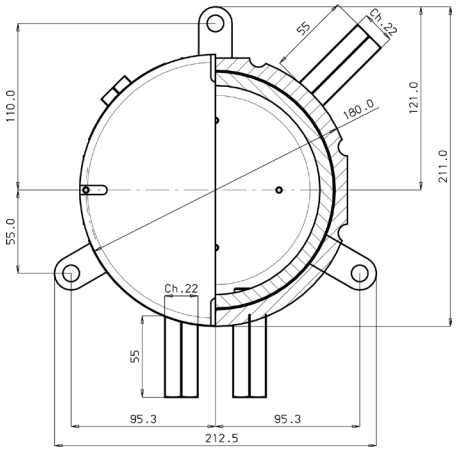
VS0
STD pressure port/no venting valve





VS1
STD pressure port/STD venting valve





VS2
STD pressure port/LD venting valve