

AT-101-668B

AT-102S-668B

Explosion-proof ATEX/IECEX Exd
differential pressure transmitter



Measuring low pressures
with a $\pm 0,8$ F.S. accuracy

High accuracy at
low pressure ranges

ATEX

CE 0477

II 2G Ex db IIC T5, T6 Gb $-60^{\circ}\text{C} \leq \text{Ta} \leq +50^{\circ}\text{C}$ (T6)
 $-60^{\circ}\text{C} \leq \text{Ta} \leq +60^{\circ}\text{C}$ (T5)

II 2D Ex tb IIIC T75 $^{\circ}\text{C}$ Db
Certificate: EPT 19 ATEX 3192 X

IECEX

Ex db IIC T5, T6 Gb $-60^{\circ}\text{C} \leq \text{Ta} \leq +50^{\circ}\text{C}$ (T6)
 $-60^{\circ}\text{C} \leq \text{Ta} \leq +60^{\circ}\text{C}$ (T5)

Ex tb IIIC T75 $^{\circ}\text{C}$ Db
Certificate: IECEx EUT 19.0014X

SPECIFICATIONS

Service:	air and non-conductive gases. Not suitable for combustible gases.
Accuracy:	±0,8% of full scale
Temperature limits:	transmitter: 0 to 170°F (-18 to 77°C) case: -76 to 140°F (-60 to 60°C)* T5 (-60 to 50°C) T6
Pressure limits:	see table 2
Compensated temperature range:	40 to 170°F (4,4 to 77°C)
Thermal effects:	0.033% f.s.°F (± 0.054% f.s./°C)
Supply voltage:	12-32 VDC
Output:	4 to 20 mA (2-wire) 0-10 VDC / 0-5 VDC (3 wire)
Zero adjustment:	Accessible opening case only after de-energizing
Response time:	additional delay in response time due to flame arrestors from 0 to full scale up to 5 sec depending on model range.
Electrical connection:	terminal strip
Enclosure rating:	IP66 (IP 65 for versions VS2)
Housing material:	aluminium (optional stainless steel).
Finishing:	Blue - texture epoxy coat RAL7015 (aluminum case) Gray - RAL 5015 (top cover)
Process connections:	1/8" female NPT brass (stainless steel optional)
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.

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			-	668B	-		-		-				
	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					668B									
Ranges	0 - 0.01 in w.c.						01							
	0 - 0.25 in w.c.						21							
	0 - 1 in w.c.						02							
	0 - 2.5 in w.c.						22							
	0 - 5 in w.c.						03							
	0 - 10 in w.c.						04							
	0 - 25 in w.c.						05							
	0 - 50 in w.c.						06							
	0 - 100 in w.c.						07							
	0.1 - 0 - 0.1" in w.c.						08							
	0.25 - 0 - 0.25" in w.c.						09							
	0.5 - 0 - 0.5" in w.c.						12							
	1 - 0 - 1" in w.c.						13							
	2.5 - 0 - 2.5" in w.c.						14							
	5 - 0 - 5" in w.c.						15							
	10 - 0 - 10" w.c.						16							
	25 - 0 - 25" w.c.						17							
	50 - 0 - 50" w.c.						18							
	25 - 0 - 25" w.c.						19							
Output	4 to 20 mA							1						
	0 to 10 Vdc							2						
	0 to 5 Vdc							3						
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

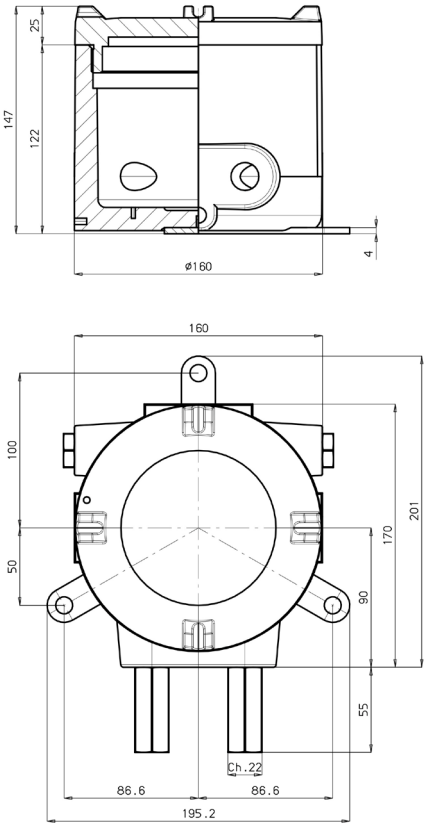
		Simplified scheme of pressure port / breathing device (venting valve)				Maximum pressure value with:	
						only one pressure port connected	both pressure ports connected
Code	VS0	PRESSURE PORTS	STD	Enclosure breathing device (venting valve)	None	10 kPa	10 kPa
	VS1		STD		STD	20 kPa	15 kPa
	VS2		STD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

Dimension

Aluminum case

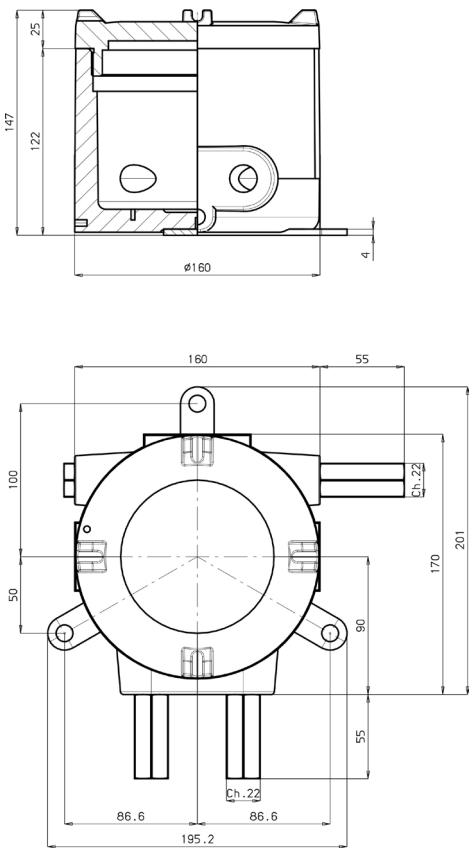
VS0

STD pressure port/no venting valve



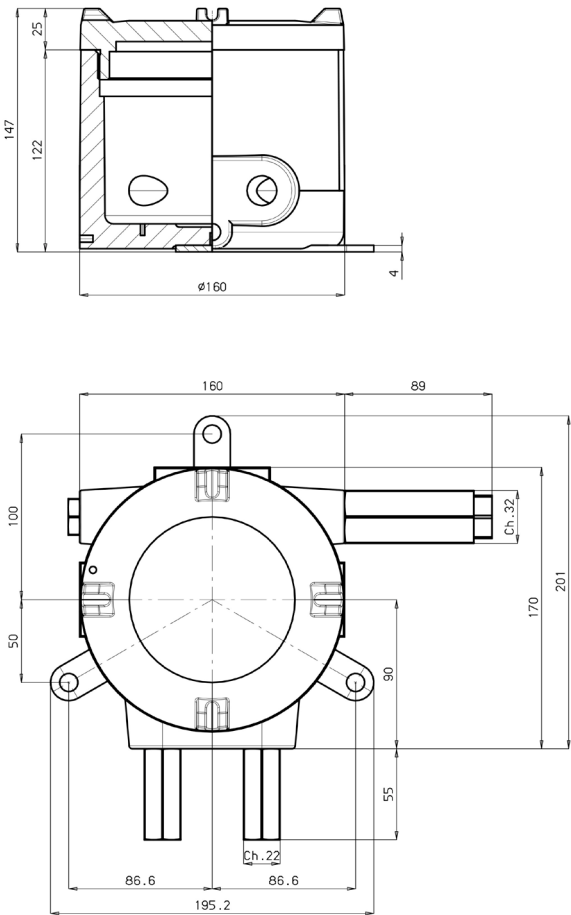
VS1

STD pressure port/STD venting valve



VS2

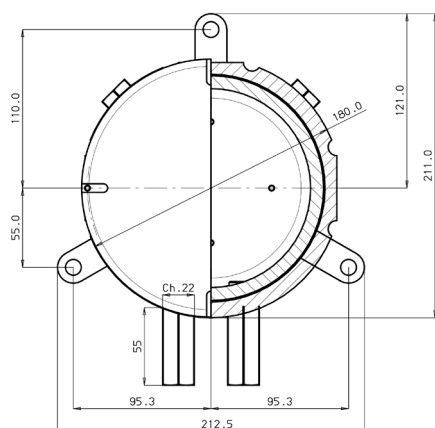
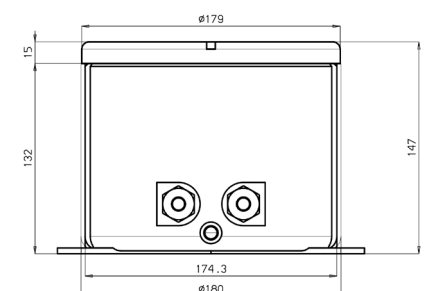
STD pressure port/LD venting valve



Stainless steel case

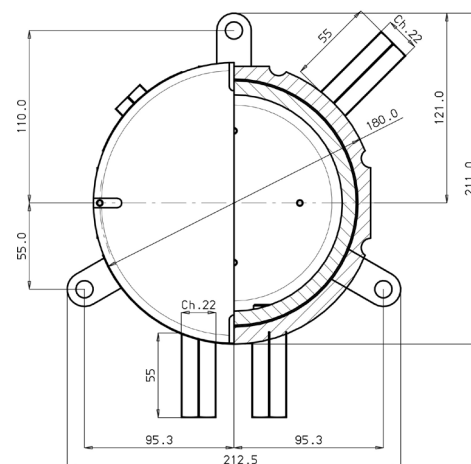
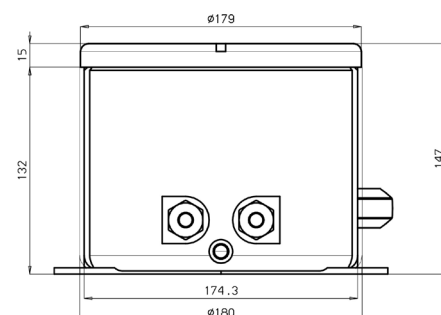
VS0

STD pressure port/no venting valve



VS1

STD pressure port/STD venting valve



VS2

STD pressure port/LD venting valve

