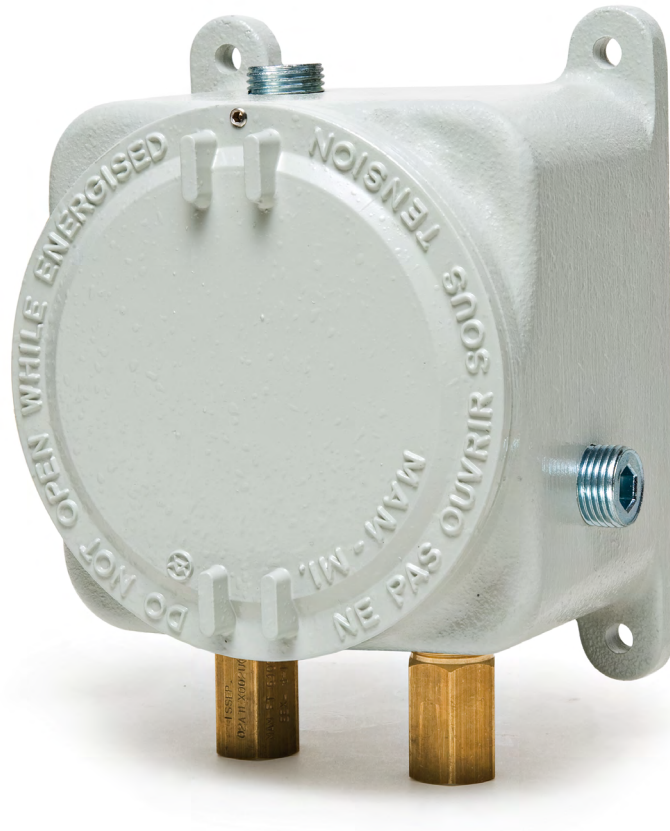


AT1-1900

Explosion-proof ATEX/IECEX Exd differential pressure switch for low ranges



- One of the most popular Dwyer® pressure switch series 1900 it is now available from Comhas as single instrument ATEX/IECEX approved
- 6 models for operating ranges from 0.07 inches W.C. (18 Pascal) to 20 inches W.C. (5000 Pascal)
- Repeatability $\pm 3\%$

ATEX	CE 1370 II 2G Ex d IIC T6 Gb II 2D Ex tb IIIC T85°C Db, $-60^{\circ}\text{C} \leq T_{\text{amb}} \leq +60^{\circ}\text{C}$ Certificate: BVI 14 ATEX 0072
IECEX	Ex d IIC T6 Gb Ex tb IIIC T85°C Db Certificate: IECEX EPS 14.0082
ENCLOSURE RATING	IP66 (IP65 with option OPV)



AT1-1900 SPECIFICATIONS

Service:	air and compatible gases
Wetted parts:	consult factory
Temperature limits:	Pressure switch 1900: -30 to 180°F (-34 to 82.2°C) Case: -76 to 140°F (-60 to 60°C)*
Pressure limits:	45"W.C. (11.2 kPa) continuous; 10 psig (68.95 kPa) surge.
Switch:	type SPDT.
Repeatability:	± 3%.
Electrical rating:	15A @ 120-480 VAC. 60 Hz resistivo; 1/8 HP @ 125 VAC; 1/4 HP @ 250 VAC, 60 Hz. Derate to 10A for operating at high cycle rates.
Electrical wiring:	3 screw type, common, normally open and normally closed.
Set point adjustment:	screw type on pressure switch inside the Exd enclosure accessible by hole with plug on housing. Setpoint regulation must be done with instrument de energised. Follow instructions and safety warning to open cover.
Installation:	in vertical position.
Diaphragm:	silicon rubber standard.
Housing material:	aluminium (stainless steel optional).
Finishing:	texture epoxy coated L7038 (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 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 (IP65 with option OPV, pressure relief valve).

Open cover only after de-energising instrument.

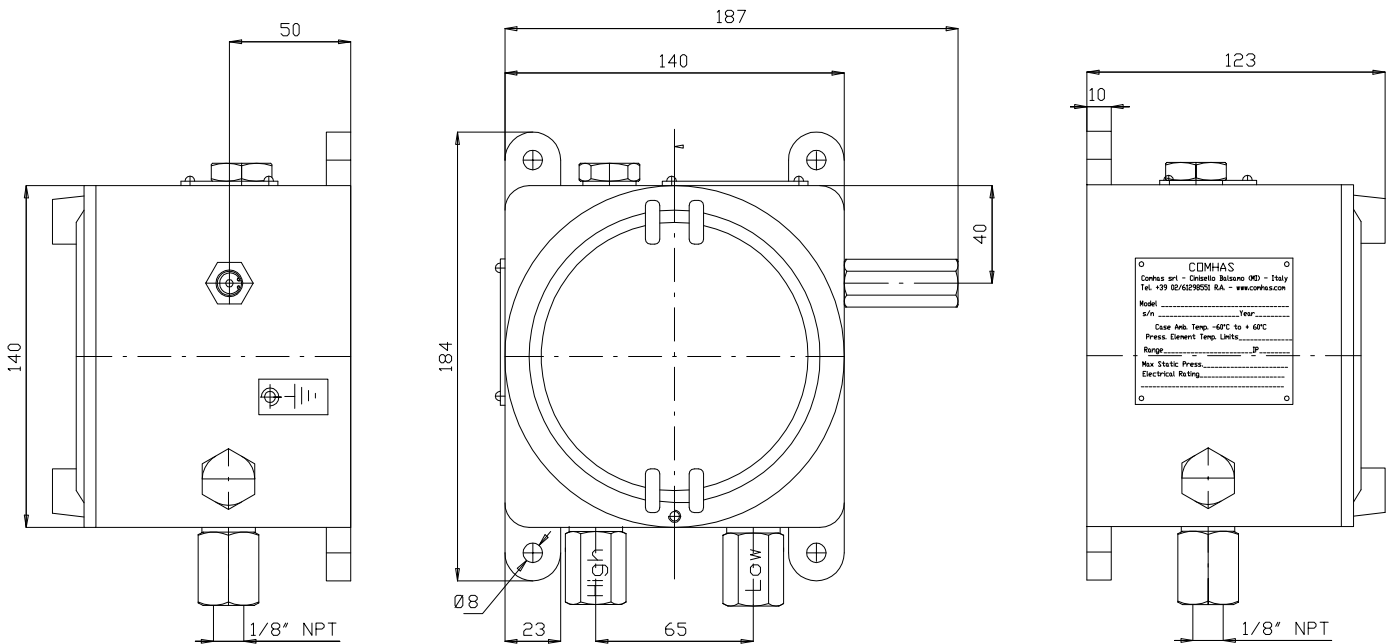
Attention: check local safety rules and warnings on unit and manual for a correct use of the instrument in hazardous area.



STANDARD RANGES AT1-1900

MODEL	OPERATING RANGES	APPROXIMATE DEADBAND	
		AT MIN SET PO	AT MAX SET POINT
1910-00	0.07-0.15 Inch W.C. (17.5-37 Pa)	0.04 Inch W.C. (10 Pa)	0.04 Inch W.C. (10 Pa)
1910-0	0.15-0.55 Inch W.C. (37.5-137 Pa)	0.1 Inch W.C. (25 Pa)	0.1 Inch W.C. (25 Pa)
1910-1	0.40-1.6 Inch W.C. (100-398 Pa)	0.15 Inch W.C. (38 Pa)	0.16 Inch W.C. (40 Pa)
1910-5	1.4-5.5 Inch W.C. (348.5-1368 Pa)	0.3 Inch W.C. (75 Pa)	0.3 Inch W.C. (75 Pa)
1910-10	3.0-11.75 Inch W.C. (747-2924 Pa)	0.4 Inch W.C. (100 Pa)	0.4 Inch W.C. (100 Pa)
1910-20	4.0-20.0 Inch W.C. (996-4977 Pa)	0.4 Inch W.C. (100 Pa)	0.4 Inch W.C. (100 Pa)

DIMENSIONS



Consult factory for different holes layout.



MODEL CONFIGURATION AT1-1900

CODE	AT1	-	1900	-	-	-	B													
Housing			1900																	
Ranges	0.07-0.15 Inch W.C. (17.5-37 Pa)																			
	0.15-0.55 Inch W.C. (37.5-137 Pa)																			
	0.40-1.6 Inch W.C. (100-398 Pa)																			
	1.4-5.5 Inch W.C. (348.5-1368 Pa)																			
	3.0-11.75 Inch W.C. (747-2924 Pa).																			
	4.0-20.0 Inch W.C. (996-4977 Pa)																			
Housing material	Alluminium																			
	Stainless steel (s.s. connection included)																			
Housing options	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																			
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).

OTHER OPTIONS

- B: buna-N diaphragm.
- G: gold contacts.
- VIT: fluoroelastomer o-ring and diaphragm.
- XXXXX: layout code for different holes sizes and layout.

ACCESSORIES

Atex cable gland.

Dimensions may change without any advice.

