

AT2-MS

ATEX/IECEX Exd Magnesense®
low differential pressure transmitter



- AT2-MS differential pressure transmitters in Exd ATEX/IECEX enclosures
- Ranges from 0-0.1 inch W.C. (0-25 Pa) to 25 inch W.C. (5 KPa)
- Zero center ranges
- Monitors pressure & air velocity
- Display LCD optional

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



AT2-MS SPECIFICATIONS

Service:	air and compatible gases and dry gases.
Wetted parts:	consult factory.
Temperature limits:	Magnesense®: from 0 to 150°F (-18 to 66°C). Case: from -60 to 60°C*.
Pressure limits:	1 psi max. operative pressure. 10 psi burst.
Accuracy:	± 1% f.s. for ranges: 0.25", 0.5", 2", 5", 10", 15", 25", 50 Pa, 100 Pa, 500 Pa, 1250 Pa, 2 KPa, 3 KPa, 5 KPa. ± 2% for ranges: 0.1"-1", 25 Pa, 250 Pa and all bi-directional ranges
Stability:	± 1% f.s. / year.
Power requirements:	10 to 35 VDC (2-wire); 17 to 36 VDC or isolated 21.6 to 33 VAC (3-wire).
Output signals:	4 to 20 mA (2-wire); 0 to 5 V, 0 to 10 V (3-wire).
Response time:	field adjustable 0.5 to 15 sec. time constant. Provides a 95% response time of 1.5 to 45 seconds (additional delay in response time due to flame arrestors; from full scale to 0 up to 90 sec depending on model range).
Zero & span adjustments:	Digital push button (to be made in safe area).
Loop resistance:	Current output: 0-1250 Ohm max. Voltage Output: min. load resistance 1 kOhm.
Current consumption:	40 mA max..
Display (optional):	4 digit LCD.
Electrical connections:	4-20 mA, 2-wire: European Style terminal block for 16 to 26 AWG. 0-10 V, 3-wire: European Style terminal block 16 to 22 AWG.
Housing material:	aluminium (stainless steel optional).
Finishing:	texture epoxy coat RAL7038 (only aluminium enclosure).
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:	5 Kg ab. (blind)

* 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 closed 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.

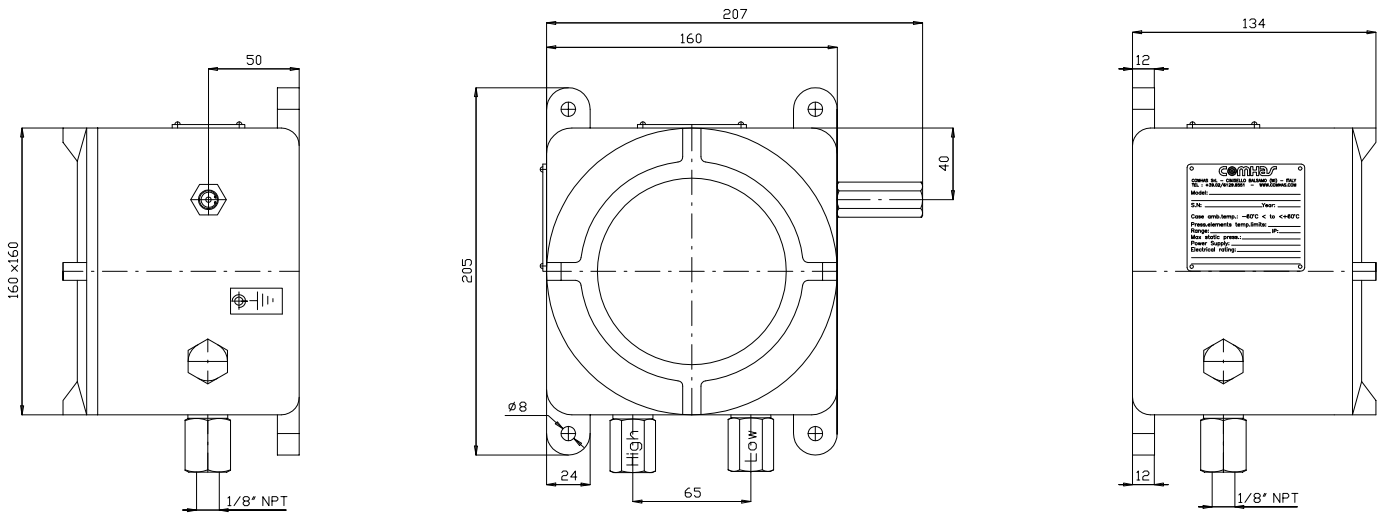
Attention: check local safety rules and warnings on unit and manual for a correct use of the instrument in hazardous area.



STANDARD RANGES (OTHER RANGES AVAILABLE)

MODEL	OUTPUT	RANGES
MS-121	4-20 mA	0.1", 0.25", 0.5" W.C. - 25, 50, 100 Pa
MS-321	0-10 V	0.1", 0.25", 0.5" W.C. - 25, 50, 100 Pa
MS-111	4-20 mA	1", 2", 5" W.C. - 250, 500, 1250 Pa
MS-311	0-10 V	1", 2", 5" W.C. - 250, 500, 1250 Pa
MS-131	4-20 mA	10" W.C. - 2 KPa
MS-331	0-10 V	10" W.C. - 2 KPa
MS-141	4-20 mA	15" W.C. - 3 KPa
MS-341	0-10 V	15" W.C. - 3 KPa
MS-151	4-20 mA	25" W.C. - 5 KPa
MS-351	0-10 V	25" W.C. - 5 KPa
MS-021	4-20 mA	±0.1", 0.25", 0.5" W.C. - ±25, 50, 100 Pa
MS-221	0-10 V	±0.1", 0.25", 0.5" W.C. - ±25, 50, 100 Pa

DIMENSIONS



Consult factory for different holes layout.



MODEL CONFIGURATION AT2-MS

CODE	AT2	-	MS	-		-														
Housing	Magnesense		MS																	
Output	Bidirectional 4-20 mA																			
	Positive range 4-20 mA																			
	Bidirectional 0-10 VDC																			
	Positive range 0-10 VDC																			
	Bidirectional 0-5 Vcc																			
	Positive range 0-5 Vcc																			
	Bidirectional 0-5 Vcc alim 0-12 V (not all ranges)																			
	Positive range 0-5 Vcc alim 0-12 V (not all ranges)																			
Range	1, 2, 5 Inch W.C. e 250, 500, 1250 Pa																			
	0.1, 0.25, 0.5 Inch W.C. e 25.50, 100 Pa**																			
	Piezo 10 Inch W.C. e 2 KPa																			
	Piezo 15 Inch W.C. e 3 KPa																			
	Piezo 25 Inch W.C. e 5 KPa																			
	Different other ranges no above indicated																			
Mounting	Wall mounting																			
Options	Without display																			
	Display LCD																			
Case material	Alluminium																			
	Stainless steel (s.s. connection included)																			
Housing options	Blind top cover																			
	Glass transparent cover																			
	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).
 ** Currently "2" range is the only one available with ø center ranges.

OTHER OPTIONS
 XXXXX: Layout code for different holes sizes and layout.

Dimensions may change without any advice.

