

AT2-MS2

ATEX/IECEX Exd Magnesense2
low differential pressure transmit



- Ranges from 0-0.1 inch W.C. (0-25 Pa) to 28 inch W.C. (6.975 KPa)
- Zero center ranges
- Monitors pressure, air velocity & air flow
- Display LCD optional
- BACnet/Modbus communications

ATEX	CE 1370 II 2G Ex d IIC T6 Gb II 2D Ex tb IIIC T85°C Db, -60°C ≤ T _{amb} ≤ +60°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)



AT2-MS2 SPECIFICATIONS

MAGNESENSE2®

Service:	Air and compatible clean and dry gases
Temperature limits:	Transmitter: 0 to 150°F (-18 to 66) Case: -60 to 60°C
Pressure limits:	1 psi max operative pressure 10 psi burst.
Accuracy:	± 1%f.s. for ranges: 0.15" w.c (40 Pa), 0.25" w.c (50 Pa), 0.5" w.c. (100 Pa), 2" w.c. (500 Pa), 3" w.c. (750 Pa), 5" (1250 Pa), 10" w.c. (2 kPa), 15" w.c. (3 kPa), 25" w.c. (5 kPa), 28" w.c. (6.975 kPa) ± 2% f.s. for ranges: 0,1" w.c. (25 Pa), 1" w.c. (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 sec. (additional delay in response time due to flame arrestors; from full scale to ∅ 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):	5 digit LCD
Electrical connections:	3 wire removable European style terminal block for 16 to 22 AWG
Mounting orientation:	Diaphragm in vertical position
Supported baud rates:	9600, 19200, 38400, 57600, 76800, 115200
Data size:	8
Parity:	none
Stop bits:	1

HOUSING

Housing material:	Alluminium (stainless steel optional)
Finishing:	Texture epoxy coat RAL7038 suitable for installation in harsh environments.
Process connections:	1/8" female NPT brass (stainless steel optional) in presence of acetylene it is necessary to use stainless steel
Electrical connection:	2 x 1/2" NPT F standard (cable gland non included)
Dimensions:	see drawing below
Weight:	5 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 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.

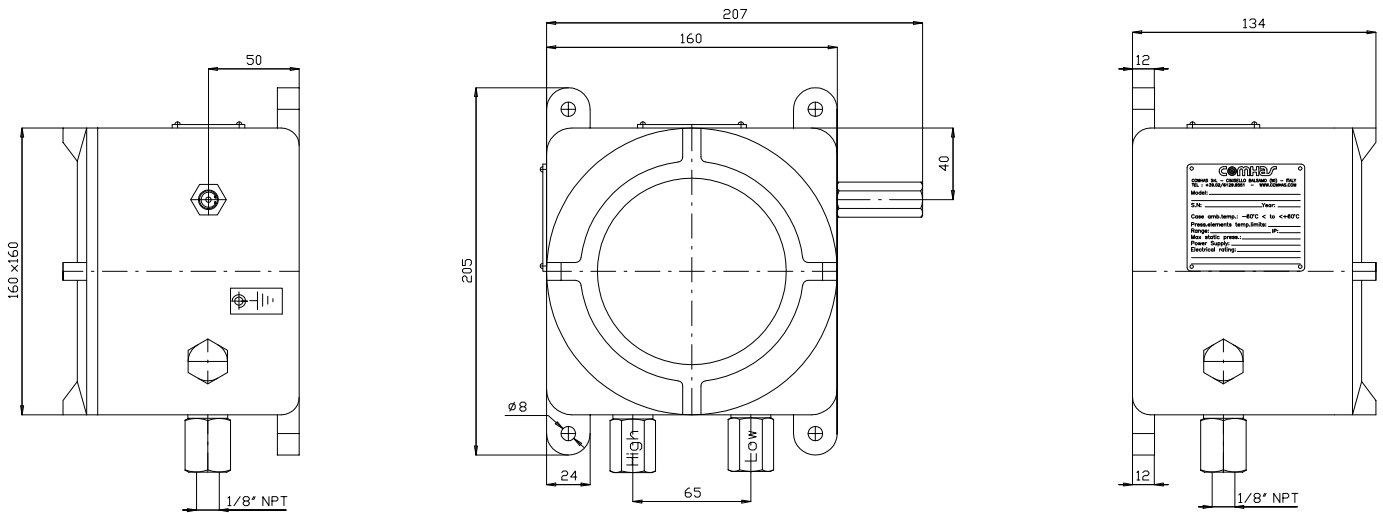
Attention: check local safety rules and warnings on unit and manual for a correct use of the instrument in hazardous area.



STANDARD RANGES (OTHER RANGES AVAILABLE)

MODEL	IN.W.C	Pa	MM W.C.	kPa
MS2-101	0.10 - 0.15 - 0.25 - 0.5	0.1", 0.25", 0.5" W.C. - 25, 50, 100 Pa	2.5 - 4 - 6 - 10	0.025 - 0.04 - 0.05 - 0.125
MS2-102	1 - 2 - 3 - 5	0.1", 0.25", 0.5" W.C. - 25, 50, 100 Pa	25 - 50 - 75 - 125	0.25 - 0.5 - 0.75 - 1.25
MS2-103	10 - 15 - 25 - 28	1", 2", 5" W.C. - 250, 500, 1250 Pa	250 - 350 - 500 - 697,5	2.5 - 3.5 - 5.0 - 6.975
MS2-311	10 - 15 - 25 - 28	1", 2", 5" W.C. - 250, 500, 1250 Pa	±2.5 - 4 - 6 - 10	±0.025 - 0.04 - 0.05 - 0.125
MS2-112	±1 - 2 - 3 - 5	10" W.C. - 2 KPa	±25 - 50 - 75 - 125	±0.25 - 0.5 - 0.75 - 1.25

DIMENSIONS



Consult factory for different holes layout.



MODEL CONFIGURATION AT2-MS2

CODE	AT2	-	MS2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Housing	Magnesense		MS2																	
Output	Range 0.1-0.15-0.25-0.5 Inch W.C./25-40-50-125 Pa																			101
	Range 1-2-3-5" Inch W.C./250-500-750-1250 Pa																			102
	Range 10-15-25-28 Inch W.C./2500-3500-5000-6975 Pa																			103
	Range bidirectional: ±0.1-0.15-0.25-0.5 Inch W.C./25-40-50-125 Pa																			111
	Range bidirectional: 1,2,3,5" Inch W.C./250-500-750-1250 Pa																			112
	Other ranges Non standard not in the above list																			SP
Communication	Modbus																			MC
	Bacnet																			BC
Options	Without display																			
	Display LCD																			LCD
Case material	Alluminium																			A
	Stainless steel (s.s. connection included)																			S
Housing options	Blind top cover																			B
	Glass transparent cover																			0
	1/8" NPT F brass pressure port																			1
	1/8" NPT F stainless steel (only for aluminium housing)																			2
	Standard - without overpressure relief valve																			X
	Overpressure relief valve* (material: same as pressure ports)																			OPV
Other options	Stainless steel tag																			T2
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

XXXXX: Layout code for different holes sizes and layout.

ACCESSORIES

Atex cable gland.

Dimensions may change without any advice.



info@comhas.com - www.comhas.com - T: +39 02 6129.8551