

**Pressure and differential pressure measuring transducers,
incl. connection set,
with Modbus connection**

S+S REGELTECHNIK

Maintenance-free pressure measuring transducer **PREMASGARD® 232x - Modbus - T3** (Series), with Modbus connection, in an impact-resistant plastic housing with quick-locking screws, optionally with /without display, nozzles for pressure hose (Ø 6 mm), incl. connection set **ASD-06** (2m connecting hose, two pressure port nipples, screws).

The on-wall sensor is used to measure positive, negative or differential pressure in clean air (non-precipitating) or gaseous, non-aggressive, non-combustible media. It is used in the clean room, medical and filter technology, ventilation and air conditioning ducts, spray booths, large-scale catering facilities, for filter monitoring and level measurement or for triggering frequency converters. The piezoresistive measuring element is temperature-compensated and guarantees a high degree of reliability and accuracy.

Innovative Modbus sensor with galvanically separated RS485-Modbus-interface, selectable bus termination resistance, DIP switch for setting the bus parameters and bus address in current-free state, LEDs for telegram status display, two separate push-in terminals and large three-line display (illuminated; with customised programming in the 7-segment and dot-matrix range). The sensor is factory-calibrated; an environmental precision adjustment by an expert is possible.

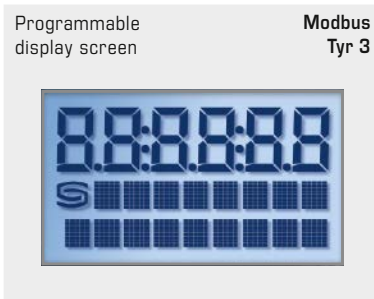
PREMASGARD® 232x - Modbus - T3



TECHNICAL DATA

Power supply:	24 V AC (±20%) and 15...36 V DC
Power consumption:	< 1.2 W / 24 V DC; < 1.8 VA / 24 V AC
Type of pressure:	differential pressure
Pressure connection:	with connection nozzles for pressure hose Ø 6 mm
Measuring ranges:	-500... +500 Pa or -7000...+7000 Pa depending on the type of device, see table
Accuracy:	Type 2328 (500 Pa): typically ± 3 Pa at +25 °C Type 2327 (7000 Pa): typically ±35 Pa at +25 °C compared to the calibrated reference device
Above- / below-pressure:	max. ± 50 kPa
Zero point offset:	± 5 % measuring range
Medium:	clean air and other non-aggressive, non-combustible gases
Media contacting parts:	Brass, Ni, Duroplast, Si, epoxy, RTV, BSG, UV silicone gel
Media temperature:	-20...+50 °C (temperature-compensated 0...+50 °C)
Hysteresis:	0.3% of final value
Linearity:	< ± 1 % of final value
Temperature drift values:	± 0.1 % / °C
Long-term stability:	± 1 % per year
Housing:	plastic, UV-resistant, material polyamide, 30% glass-globe reinforced, with quick-locking screws (slotted / Phillips head combination), colour traffic white (similar to RAL 9016), housing cover for display is transparent!
Housing dimensions:	108 x 78.5 x 43.3 mm (Tyr 3 without display) 108 x 78.5 x 45.8 mm (Tyr 3 with display)
Cable connection:	cable gland , plastic (2x M20 x 1.5; with strain relief, exchangeable, inner diameter 8 - 13 mm) or M12 connector according to DIN EN 61076-2-101 (optional on request)
Electrical connection:	0.2 - 1.5 mm ² , using push-in terminals
Permissible air humidity:	< 95 % r. H., non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP65 (according to EN 60 529)
Standards:	CE conformity, electromagnetic compatibility according to EN 61 326, EMC directive 2014 / 30 / EU
Optional:	Display with illumination , three-line, programmable, cut-out approx. 51 x 29 mm (W x H), for displaying the ACTUAL pressure or an individually programmable display value
ACCESSORIES	see table

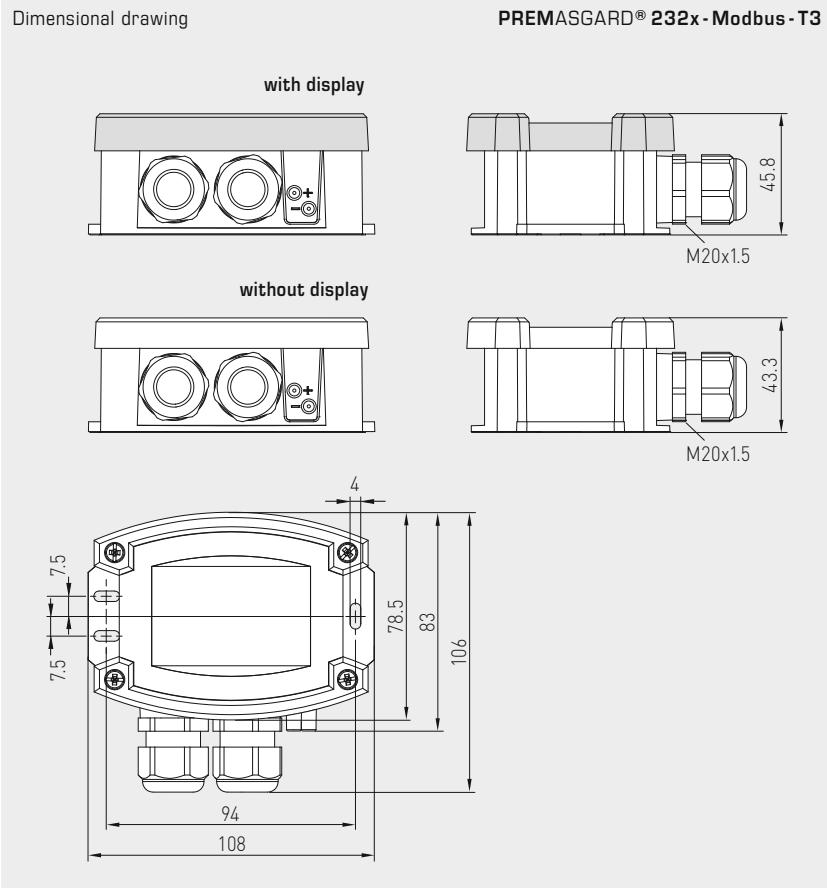
Device version
with **M12 connector**
(optional on request)



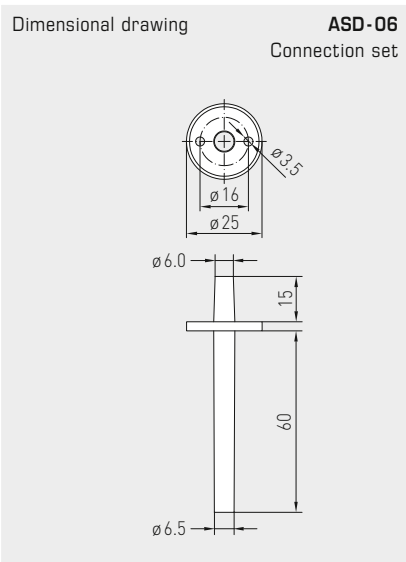


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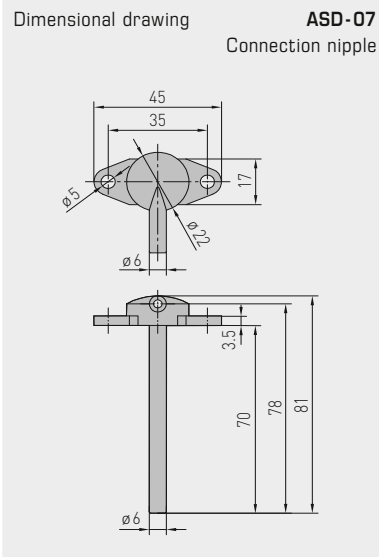
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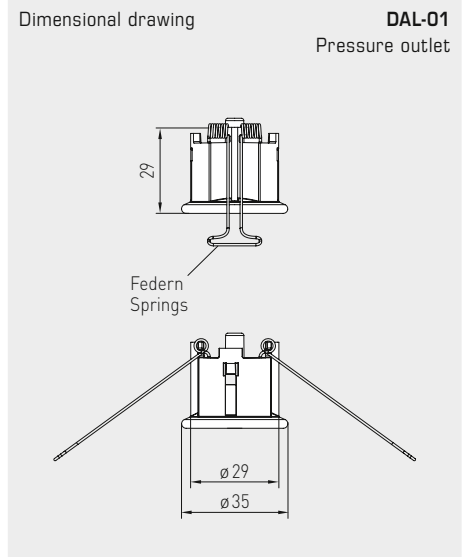
PREMASGARD® 232x - Modbus - T3 with display



ASD-06 Connection set



ASD-07 Connection nipple



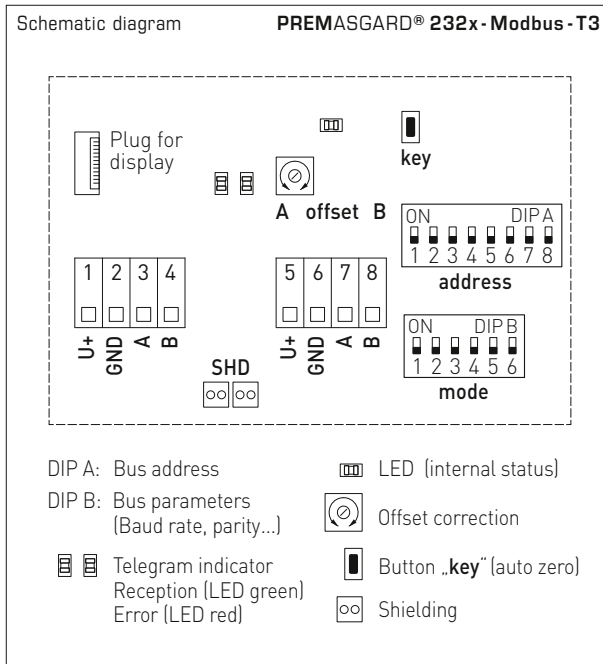
DAL-01 Pressure outlet



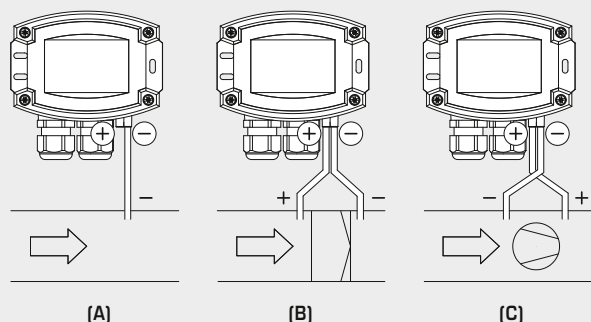
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WS-04

Weather and sun protection hood
(optional)



Mounting diagram **PREMASGARD® 232x - Modbus - T3**



TYPES OF MONITORING:

- (A) Below-atmospheric pressure:**
P1 (+) is not connected but open against atmosphere
P2 (-) connected to inside of duct
- (B) Filter:**
P1 (+) connected upstream of filter
P2 (-) connected downstream of filter
- (C) Ventilator:**
P1 (+) connected downstream of ventilator
P2 (-) connected upstream of ventilator

Pressure connections at the pressure switch are marked with P1 (+) for higher pressure and P2 (-) for lower pressure.

Conversion table for pressure values:

Unit =	bar	mbar	Pa	kPa	mH ₂ O
1 Pa	0.00001 bar	0.01 mbar	1 Pa	0.001 kPa	0.000101971 mH ₂ O
1 kPa	0.01 bar	10 mbar	1000 Pa	1 kPa	0.101971 mH ₂ O
1 bar	1 bar	1000 mbar	100000 Pa	100 kPa	10.1971 mH ₂ O
1 mbar	0.001 bar	1 mbar	100 Pa	0.1 kPa	0.0101971 mH ₂ O
1 mH ₂ O	0.0980665 bar	98.0665 mbar	9806.65 Pa	9.80665 kPa	1 mH ₂ O



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PREMASGARD® 232x - Modbus - T3 Pressure and differential pressure measuring transducers

Type / WG01	Measuring Range Pressure range	Output	Display	Item No.	Price
PREMASGARD® 2328 - Modbus - T3	- 500...+ 500 Pa				
PREMASGARD 2328	-500...+ 500 Pa	Modbus		1301-12C4-0910-200	142,69 €
PREMASGARD 2328 LCD	-500...+ 500 Pa	Modbus	■	1301-12C4-4910-200	188,87 €
PREMASGARD® 2327 - Modbus - T3	- 7000...+ 7000 Pa				
PREMASGARD 2327	-7000...+ 7000 Pa	Modbus		1301-12C4-0950-200	142,69 €
PREMASGARD 2327 LCD	-7000...+ 7000 Pa	Modbus	■	1301-12C4-4950-200	188,87 €
Optional:	Cable connection with M12 connector according to DIN EN 61076-2-101			on request	

ACCESSORIES

KA2-Modbus	Communication adapter (USB/RS485) for system connection			1906-1200-0000-100	188,70 €
LA-Modbus	Line termination device (with terminating resistor) as an active bus termination			1906-1300-0000-100	70,38 €
ASD-06	Connection set (included in the scope of delivery) , consisting of 2 connection nipples (straight) made of ABS, 2 m PVC hose (soft, UV-resistant) and 4 screws			7100-0060-3000-000	6,74 €
ASD-07	2 connection nipples (at 90 degree angle) made of plastic, ABS			7100-0060-7000-000	6,74 €
DAL-01	Pressure outlet for ceiling or in-wall installation (e.g. in clean rooms)			7300-0060-3000-001	31,55 €
WS-04	Weather and sun protection hood , 130 x 180 x 135 mm, stainless steel V2A (1.4301)			7100-0040-7000-000	33,06 €

For further information, see last chapter Accessories!

