

**Pressure and differential pressure measuring transducers,
including connection set, calibratable,
with multi-range switching and active output**

The calibratable **PREMASGARD® 711x** pressure sensors (series) are equipped with eight switchable measuring ranges and equipped with optional display (eight devices in one) and are used to measure above-atmospheric, below-atmospheric, or differential pressures in air. The piezoresistive measuring element is temperature-compensated and guarantees a high degree of reliability and precision.

Applications of these pressure sensors are in clean room, medical and filter technology, in ventilation and air conditioning ducts, in spray booths, in large-scale catering facilities, for monitoring filters, for level measurement or for triggering frequency converters. Media measured with these pressure transducers are clean air (non-precipitating), or other gaseous non-aggressive, non-combustible media.

The pressure sensor has a button for manual zero point calibration (automatic zero point calibration optional / standard at 25 Pa) and one offset potentiometer for final value correction. Fine adjustment by the user is possible at any time. The delivery includes the connection set **ASD-06** (2 m connection hose, two pressure connection nipples, screws).

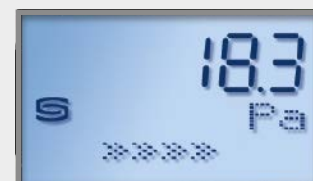
PREMASGARD® 711x**TECHNICAL DATA**

Power supply:	24 V AC (±20%); 15...36 V DC for U variant 15...36 V DC for I variant, depending on working resistance, residual ripple stabilised ±0.3 V
Working resistance:	$R_a(\text{ohm}) = (U_b - 14 \text{ V}) / 0.02 \text{ A}$ for I variant
Load resistance:	$R_L > 5 \text{ kOhm}$ for U variant
Power consumption:	< 2 VA / 24 V DC, < 3.5 VA / 24 V AC
Measuring ranges:	multi-range switching with 8 switchable measuring ranges (see table)
Output signal:	0 -10 V or 4...20 mA
Connection type:	2- or 3-wire connection
Media temperature:	-20...+50 °C
Pressure connection:	4 / 6 x 11 mm (hoses Ø = 4 / 6 mm), metal pressure connection nozzles
Type of pressure:	differential pressure
Medium:	clean air and non-aggressive, non-combustible gases
Accuracy:	Type 7112 (25 Pa): typically ±1 Pa Type 7110 (100 Pa): typically ±2 Pa Type 7111 (1000 Pa): typically ±5 Pa Type 7115 (5000 Pa): typically ±25 Pa compared to the calibrated reference device
Sum of Linearity+hysteresis:	< ±1 % of final value ±2 % of final value for pressure ranges < ±250 Pa
Temperature drift values:	±0.1 % / °C ±0.3 % / °C for pressure ranges < 250 Pa
Zero point offset:	< ±0.7 % of final value ±1.4 % of final value for pressure ranges < 250 Pa
Above- / below-atmospheric pressure:	max. ±100 hPa
Signal filtering:	switchable 1 s / 10 s
Housing:	plastic, UV-stabilised, 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!
Dimensions:	126 x 90 x 50 mm (Tyr 2)
Electrical connection:	0.14 -1.5 mm², via plug-in screw terminal
Cable gland:	M 16 x 1.5; including strain relief
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 according to EMC Directive 2014 / 30 / EU, according to EN 61326-1, according to EN 61326-2-3
Equipment:	three-line display with illumination , cutout approx. 70 x 40 mm (W x H), for displaying ACTUAL pressure as well as automatic zero point calibration

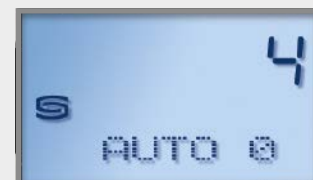
ACCESSORIES

ASD-06	Connection set (nipple straight) – (included in the scope of delivery)
ASD-07	Connection nipple (at 90° angle)
DAL-01	Pressure outlet for ceiling or in-wall installation (e.g. in clean rooms)
WS-03	Weather and sun protection hood, 200 x 180 x 150 mm, stainless steel V2A (1.4301)

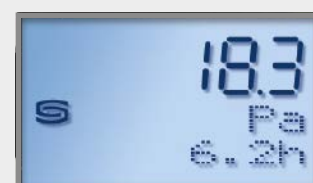
Display with option
automatic zero point calibration

**Standard**

Actual pressure (in Pa)
Calibration interval (arrows)



Zero point calibration active
remaining calibration time
(in seconds)



**Adjustment of
zero point calibration**

Cycle time (15 min to 24 hours)
adjustable by potentiometer



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PREMASGARD® 711x

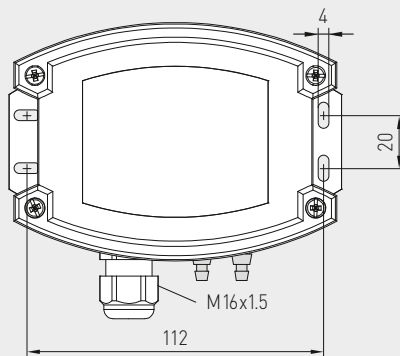
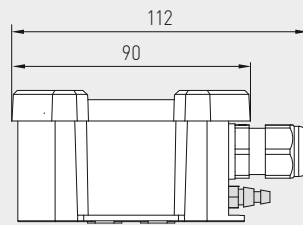
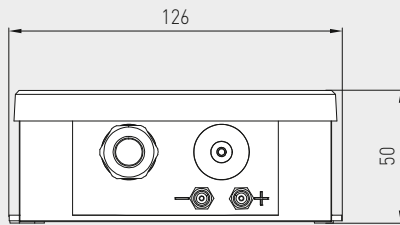
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Dimensional drawing

PREMASGARD® 711x

PREMASGARD® 711x
with display



Dimensional drawing

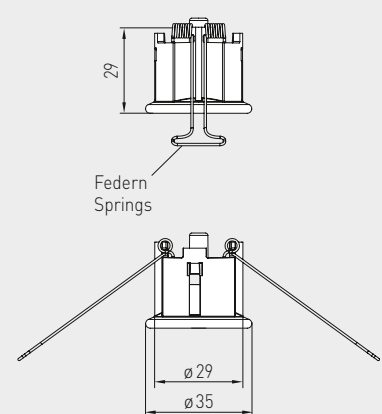
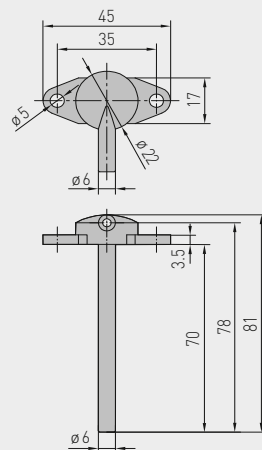
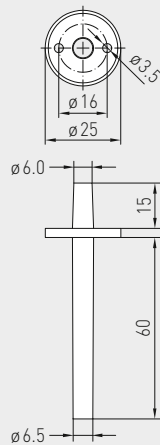
ASD-06
Connection set

Dimensional drawing

ASD-07
Connection nipple

Dimensional drawing

DAL-01
Pressure outlet



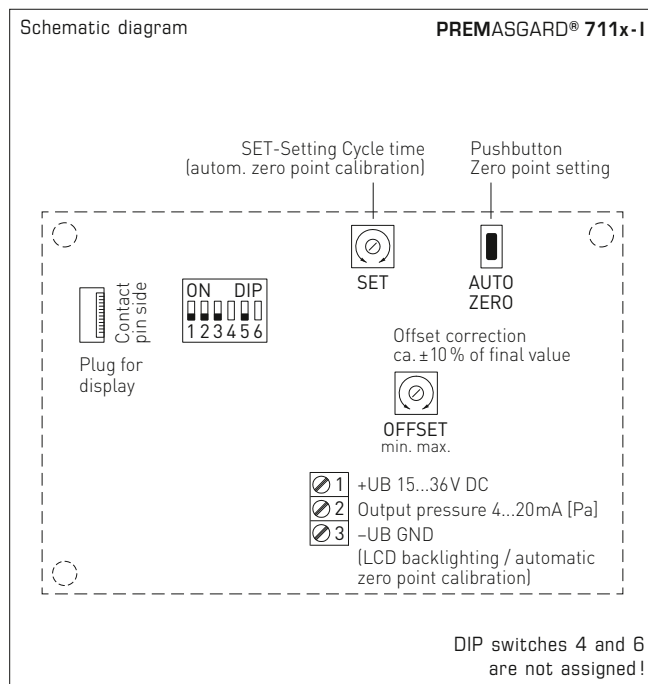
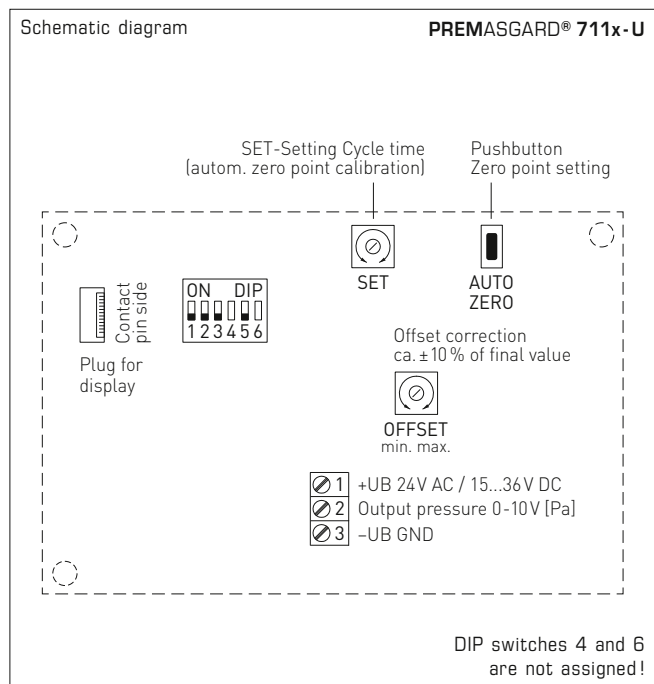
ASD-06
Connection set

ASD-07
Connection nipple

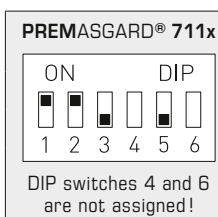
DAL-01
Pressure outlet



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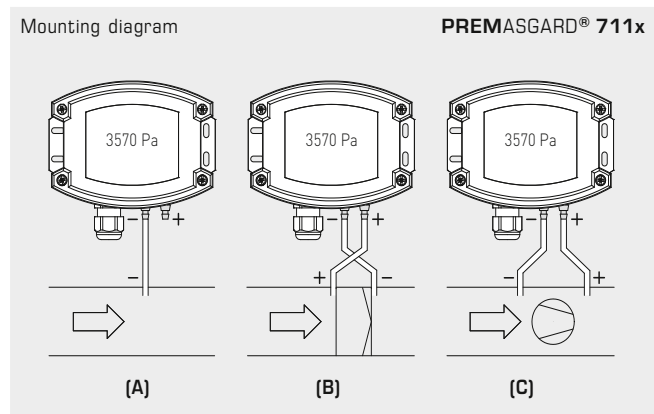


Pressure range (selectable) – max. measuring range (default) is depending to the type of device								DIP 1	DIP 2
0...25 Pa	0...50 Pa	0...100 Pa	0...1000 Pa	-25...+25 Pa	-50...+50 Pa	-100...+100 Pa	-1000...+1000 Pa	OFF	OFF
–	–	0...300 Pa	0...2000 Pa	–	–	-300...+300 Pa	-2000...+2000 Pa	ON	OFF
–	–	0...500 Pa	0...3000 Pa	–	–	-500...+500 Pa	-3000...+3000 Pa	OFF	ON
0...25 Pa	0...100 Pa	0...1000 Pa	0...5000 Pa	-25...+25 Pa	-100...+100 Pa	-1000...+1000 Pa	-5000...+5000 Pa	ON	ON



Measuring range mode (Mode selectable)	DIP 3
Unidirectional (0...+MR) (default)	OFF
Bidirectional (-MR...+MR)	ON

Measurement signal filtering (Time interval selectable)	DIP 5
10 s (default)	OFF
1 s	ON



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:

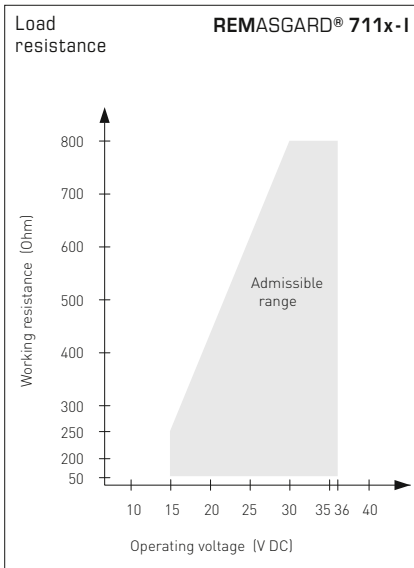
Unit =	bar	mbar	Pa	kPa	mH ₂ O
1 Pa	0.00001 bar	0.01 mbar	1 Pa	0.001 kPa	0.000101971 mH ₂ O
1 kPa	0.01 bar	10 mbar	1000 Pa	1 kPa	0.101971 mH ₂ O
1 bar	1 bar	1000 mbar	100000 Pa	100 kPa	10.1971 mH ₂ O
1 mbar	0.001 bar	1 mbar	100 Pa	0.1 kPa	0.0101971 mH ₂ O
1 mH ₂ O	0.0980665 bar	98.0665 mbar	9806.65 Pa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



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PREMASGARD® 711x
with display



PREMASGARD® 711x		Pressure and differential pressure measuring transducers, <i>Deluxe</i>			
Pressure range (adjustable)	Type / WG02	Output	Display	Item No.	Price
max. - 1000...+ 1000 Pa		PREMASGARD® 7111			
0... 100 Pa / - 100... + 100 Pa	PREMASGARD 7111-U	0-10V		1301-7111-0010-200	141,78 €
0... 300 Pa / - 300... + 300 Pa	PREMASGARD 7111-U LCD	0-10V	■	1301-7111-4010-200	198,90 €
0... 500 Pa / - 500... + 500 Pa	PREMASGARD 7111-I	4...20mA		1301-7112-0010-100	141,78 €
0... 1000 Pa / -1000... + 1000 Pa	PREMASGARD 7111-I LCD	4...20mA	■	1301-7112-4010-100	198,90 €
max. - 5000...+ 5000 Pa		PREMASGARD® 7115			
0...1000 Pa / - 1000 ... + 1000 Pa	PREMASGARD 7115-U	0-10V		1301-7111-0050-200	141,78 €
0...2000 Pa / -2000 ... + 2000 Pa	PREMASGARD 7115-U LCD	0-10V	■	1301-7111-4050-200	198,90 €
0...3000 Pa / -3000 ... + 3000 Pa	PREMASGARD 7115-I	4...20mA		1301-7112-0050-100	141,78 €
0...5000 Pa / -5000 ... + 5000 Pa	PREMASGARD 7115-I LCD	4...20mA	■	1301-7112-4050-100	198,90 €
max. -100...+100 Pa		PREMASGARD® 7110			
0... +50 Pa / -50... +50 Pa	PREMASGARD 7110-U	0-10V		1301-7111-0110-200	178,50 €
0...+100 Pa / -100...+100 Pa	PREMASGARD 7110-U LCD	0-10V	■	1301-7111-4110-200	229,50 €
	PREMASGARD 7110-I	4...20mA		1301-7112-0110-100	178,50 €
	PREMASGARD 7110-I LCD	4...20mA	■	1301-7112-4110-100	229,50 €
max. -25...+25 Pa		PREMASGARD® 7112			
0... +25 Pa / -25... +25 Pa	PREMASGARD 7112-U	0-10V		1301-7111-0370-200	228,48 €
	PREMASGARD 7112-U LCD	0-10V	■	1301-7111-4370-200	270,51 €
	PREMASGARD 7112-I	4...20mA		1301-7112-0370-200	228,48 €
	PREMASGARD 7112-I LCD	4...20mA	■	1301-7112-4370-200	270,51 €
Equipped as standard with automatic zero point calibration (3-wire connection)					
Multi-range switching:	The pressure ranges depend on the device type and can be set via DIP switches.				
Extra charge:	Other special measuring ranges up to max. 5000 Pa with optional automatic zero point calibration (please specify in your order)				42,02 € 61,20 €
Accessories					
ASD-06	Connection set (included in the scope of delivery), consisting of 2 connection nipples (straight) made of ABS, 2 m PVC hose, soft, and 4 tapping screws			7100-0060-3000-000	6,45 €
ASD-07	2 connection nipples (at 90 degree angle) made of plastic, ABS			7100-0060-7000-000	6,45 €
DAL-01	Pressure outlet for ceiling or in-wall installation (e.g. in clean rooms)			7300-0060-3000-001	30,18 €
WS-03	Weather and sun protection hood, 200x 180x 150 mm, stainless steel V2A (1.4301)			7100-0040-6000-000	37,74 €
For further information, see last chapter Accessories!					