

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

The calibratable pressure sensors **PREMASGARD® 711x** (series) with eight switchable measuring ranges (eight devices in one), housing made from impact-resistant plastic, optionally with/without display, with cable gland or M12 connector according to DIN EN 61076-2-101 and pressure connection nozzles (quick connect optional) are used to measure positive, negative or differential pressures in air. The piezoresistive measuring element is temperature-compensated and guarantees a high degree of reliability and accuracy.

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 filter monitoring and level measurement or for triggering frequency converters. Media measured with these pressure transducers are 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 for 25 Pa) and an offset potentiometer for final value correction. The sensor is factory-calibrated; an environmental precision adjustment by an expert is possible. The delivery includes the connection set **ASD-06** (2 m connection hose, two pressure port nipples, screws).

**PREMASGARD® 711x**  
with cable gland



**PREMASGARD® 711x-Q**  
with M12 connector



Pressure port  
for pressure hose  
(as standard)



#### TECHNICAL DATA

Power supply:	24 V AC ( $\pm 10\%$ ) for 3-wire I and U variant, 15...36 V DC for 2-wire I variant, depending on working resistance, residual ripple stabilised $\pm 0.3\text{V}$
Working resistance:	$R_a$ (Ohm) = 25...450 Ohm for 3-wire I variant, $R_b$ (Ohm) = $(U_b - 14\text{V}) / 0.02\text{A}$ for 2-wire I variant, see working resistance diagram
Load resistance:	$R_L > 15\text{k}\Omega$ for U variant
Power consumption:	$< 2\text{W} / 24\text{V DC}$ , $< 4.4\text{VA} / 24\text{V AC}$
Measuring ranges:	<b>Multi-range switching with 8 switchable measuring ranges</b> (see table)
Type of pressure:	differential pressure
Pressure connection:	with connection <b>nozzle</b> for pressure hose $\varnothing 6\text{mm}$ , optionally with <b>quick connect</b> made from stainless steel for PVC fabric pressure hose $\varnothing 6\text{mm}$ (external diameter)
Medium:	clean air and non-aggressive, non-combustible gases
Media temperature:	$-20\text{...}+50\text{ }^\circ\text{C}$ (temperature-compensated $0\text{...}+50\text{ }^\circ\text{C}$ )
Accuracy:	<b>Type 7112</b> (25 Pa): typically $\pm 1\text{ Pa}$ <b>Type 7110</b> (100 Pa): typically $\pm 3\text{ Pa}$ <b>Type 7111</b> (1000 Pa): typically $\pm 10\text{ Pa}$ <b>Type 7115</b> (5000 Pa): typically $\pm 35\text{ Pa}$ compared to the calibrated reference device
Sum of linearity+hysteresis:	$< \pm 1\%$ of final value $\pm 2\%$ of final value for pressure ranges $< \pm 250\text{ Pa}$
Temp. drift values:	$\pm 0.1\%$ / $^\circ\text{C}$ $\pm 0.3\%$ / $^\circ\text{C}$ for pressure ranges $< 250\text{ Pa}$
Zero point offset:	$< \pm 0.7\%$ of final value $\pm 1.4\%$ of final value for pressure ranges $< 250\text{ Pa}$
Positive/negative pressure:	$\pm 50\text{ kPa}$
Signal filtering:	<b>switchable 1 s / 10 s</b> (via DIP switches)
Output:	0 -10 V or 4...20 mA
Connection type:	2- or 3-wire connection
Electrical connection:	0.2 - 1.5 mm <sup>2</sup> , via push-in terminals
Cable connection:	<b>Cable gland</b> , plastic (M 16 x 1.5; with strain relief, exchangeable, max. inner diameter 10.4 mm) <b>or</b> <b>M12 connector</b> (male, 5-pin, A-code) according to DIN EN 61076-2-101
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), cover for display is transparent!
Housing dimensions:	126 x 90 x 50 mm (Tyr 2)
Air humidity:	$< 95\%$ RH, non-precipitating air
Protection class:	III (according to EN 60730)
Protection type:	<b>IP 65</b> (according to EN 60529) in the built-in state
Standards:	CE conformity according to EMC Directive 2014/30/EU
Equipment:	<b>Display with illumination</b> , three-line, cutout approx. 70 x 40 mm (W x H), to display the <b>ACTUAL</b> pressure as well as the automatic zero point calibration
<b>ACCESSORIES</b>	see table

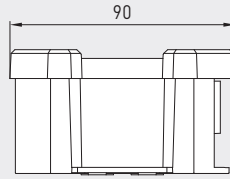
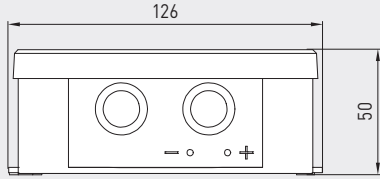


Pressure and differential pressure measuring transducers, including connection set, adjustable, calibratable, with multi-range switching and active output



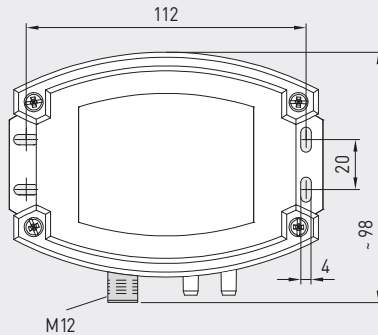
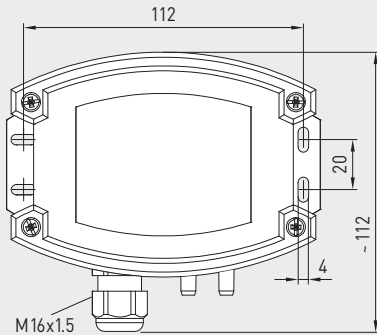
Dimensional drawing [mm]

PREMASGARD® 711x



Housing with cable gland equipped as standard with pressure port nozzles

Housing with M12 connector equipped as standard with pressure port nozzles



Pressure port for pressure hose (as standard)



M12 connector (male)

PREMASGARD® 711x with cable gland and display



PREMASGARD® 711x-Q with M12 connector and display

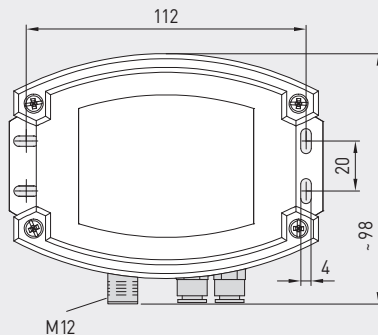
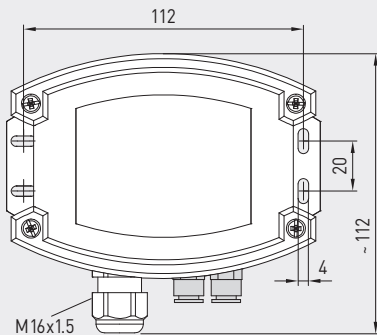


Dimensional drawing [mm]

PREMASGARD® 711x

Housing with cable gland optional on request with quick connect

Housing with M12 connector optional on request with quick connect



Pressure port for PVC/fabric pressure hose (optional)

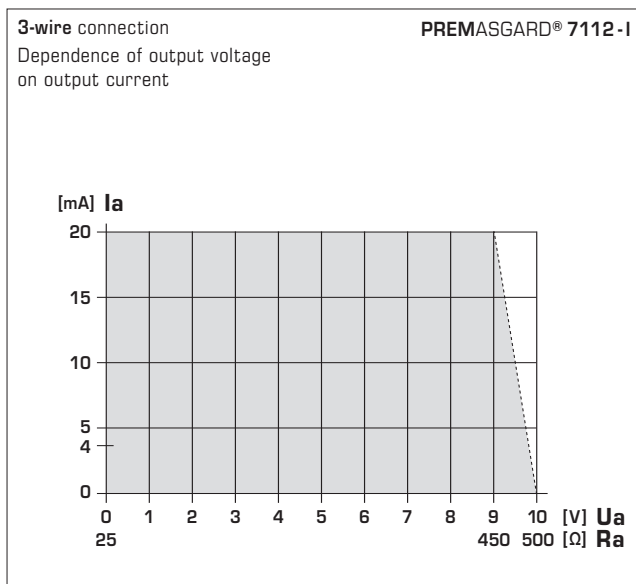
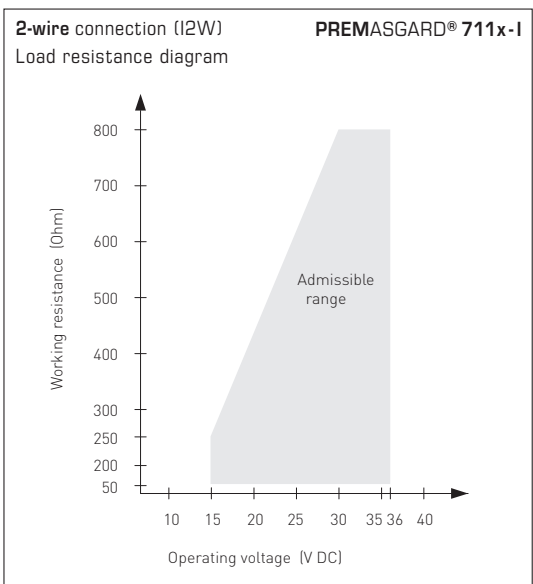
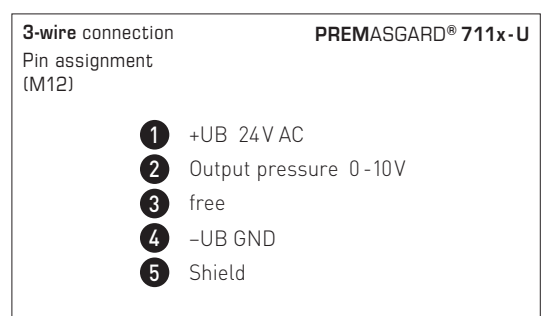
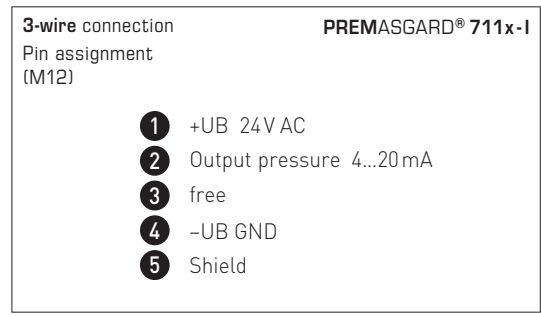
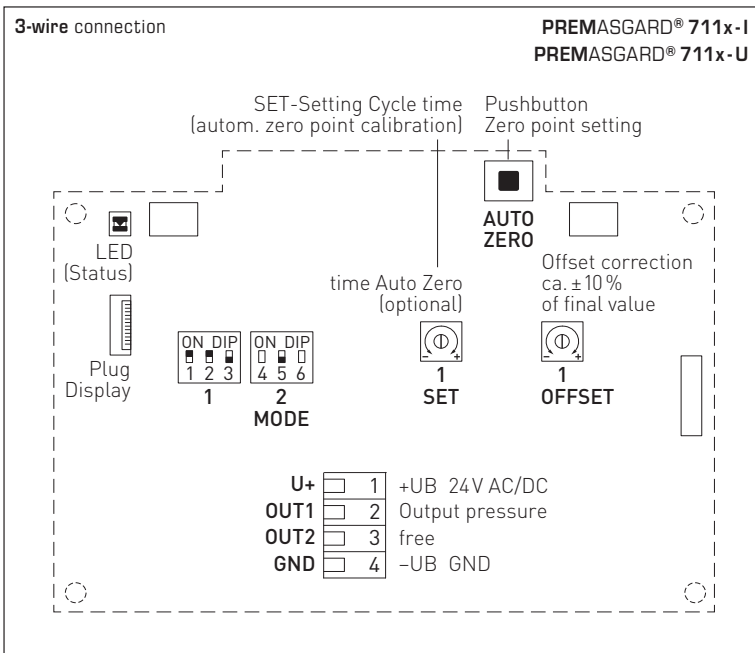
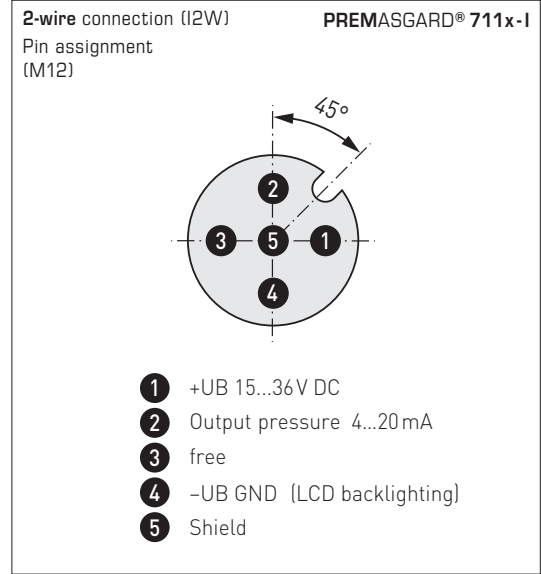
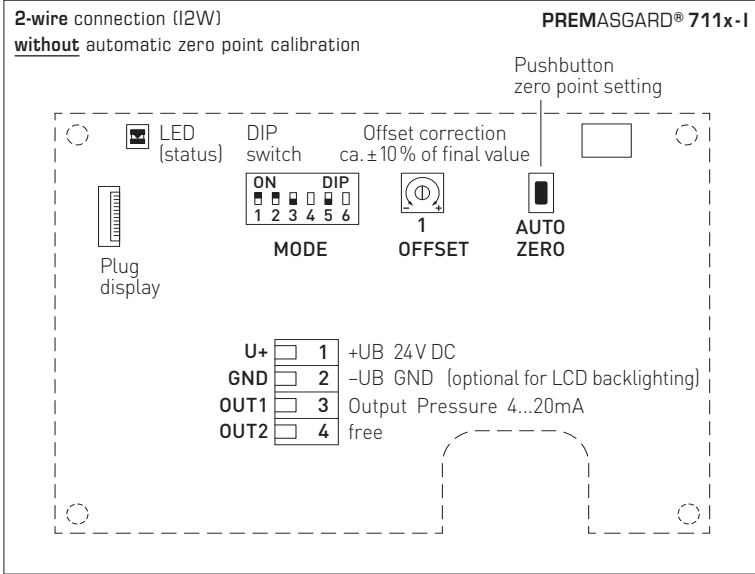


M12 connector (male)

Pressure port for PVC/fabric pressure hose (optional)



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





PREMASGARD® 711x-Q  
with display,  
hinged



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
<b>0...25 Pa</b>	<b>0...100 Pa</b>	<b>0...1000 Pa</b>	<b>0...5000 Pa</b>	<b>-25...+25 Pa</b>	<b>-100...+100 Pa</b>	<b>-1000...+1000 Pa</b>	<b>-5000...+5000 Pa</b>	<b>ON</b>	<b>ON</b>

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

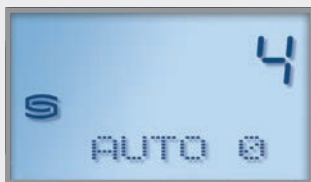
Measurement signal filtering (Time interval selectable)	DIP 5
1 s	ON
10 s (default)	OFF

DIP switches 4 and 6 are not assigned!

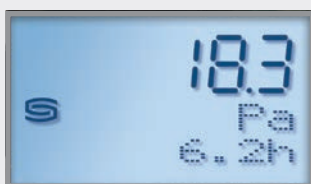
Display with option  
automatic zero point calibration



**Standard**  
Actual pressure (in Pa)  
Calibration interval (arrows)



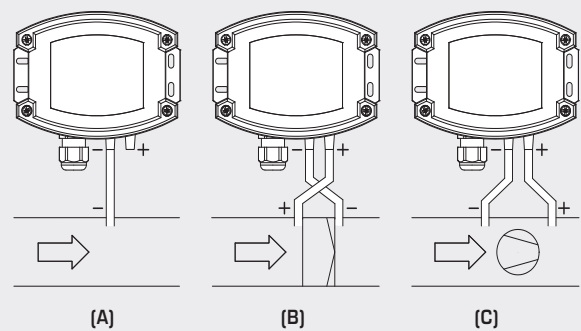
**Zero point calibration active**  
Remaining calibration time  
(in seconds)



**Adjustment of zero point calibration**  
Cycle time  
(15 min to 24 hours)  
adjustable by potentiometer.

Mounting diagram

PREMASGARD® 711x



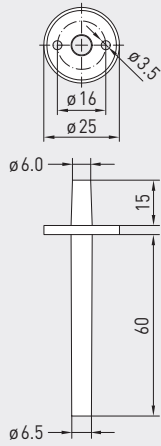
**TYPES OF MONITORING:**

- (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.

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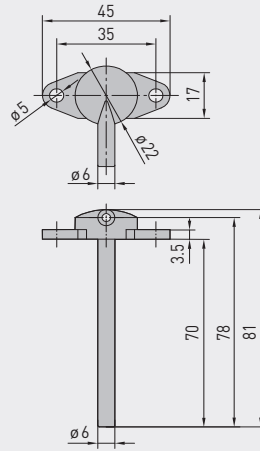
Dimensional drawing [mm] ASD-06



ASD-06 Connection set



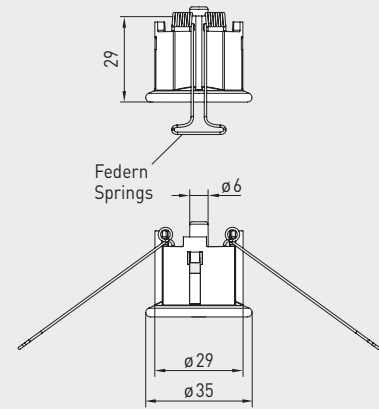
Dimensional drawing [mm] ASD-07



ASD-07 Connection nipple



Dimensional drawing [mm] DAL-01



DAL-01 Pressure outlet



WS-03 Weather and sun protection hood (optional)

Pressure port for pressure hose (as standard)



Pressure port for PVC/fabric pressure hose (optional)



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, UV-resistant) and 4 screws	7100-0060-3000-000	8,43 €
ASD-07	2 connection nipples (at 90 degree angle) made of plastic, ABS	7100-0060-7000-000	8,43 €
DAL-01	Pressure outlet for ceiling or in-wall installation (e.g. in clean rooms)	7300-0060-3000-001	39,46 €
WS-03	Weather and sun protection hood, 200 x 180 x 150 mm, stainless steel V2A (1.4301)	7100-0040-6000-000	49,36 €

For further information, see chapter Accessories!



S+S REGELTECHNIK

PREMASGARD® 711x

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

PREMASGARD® 711x-Q  
with M12 connector



PREMASGARD® 711x  
with cable gland



PREMASGARD® 711x		Pressure and differential pressure measuring transducers, <i>Deluxe</i>					
Pressure range (adjustable)	Type / WG02	Connection 2- or 3-wire	Output	Display ● = Q	Item No.	Price	
<b>max. - 1000...+ 1000 Pa</b>		<b>Type 7111</b>					
0... 100 Pa / - 100... + 100 Pa	PREMASGARD 7111-U	3	0-10V		1301-7111-0010-200	185,46 €	
0... 300 Pa / - 300... + 300 Pa	PREMASGARD 7111-U LCD	3	0-10V	■	1301-7111-4010-200	260,19 €	
0... 500 Pa / - 500... + 500 Pa	PREMASGARD 7111-I	2	4...20 mA		1301-7112-0010-10L	185,46 €	
0... 1000 Pa / -1000... + 1000 Pa	PREMASGARD 7111-I LCD	2(3)	4...20 mA	■	1301-7112-4010-10L	260,19 €	
	PREMASGARD 7111-U Q	3	0-10V	●	2004-6131-1100-001	231,72 €	
	PREMASGARD 7111-U Q LCD	3	0-10V	● ■	2004-6132-1100-001	306,44 €	
	PREMASGARD 7111-I Q	2	4...20 mA	●	2004-6131-2100-002	231,72 €	
	PREMASGARD 7111-I Q LCD	2(3)	4...20 mA	● ■	2004-6132-2100-002	306,44 €	
<b>max. - 5000...+ 5000 Pa</b>		<b>Type 7115</b>					
0... 1000 Pa / - 1000 ... + 1000 Pa	PREMASGARD 7115-U	3	0-10V		1301-7111-0050-200	185,46 €	
0... 2000 Pa / - 2000 ... + 2000 Pa	PREMASGARD 7115-U LCD	3	0-10V	■	1301-7111-4050-200	260,19 €	
0... 3000 Pa / - 3000 ... + 3000 Pa	PREMASGARD 7115-I	2	4...20 mA		1301-7112-0050-10L	185,46 €	
0... 5000 Pa / - 5000 ... + 5000 Pa	PREMASGARD 7115-I LCD	2(3)	4...20 mA	■	1301-7112-4050-10L	260,19 €	
	PREMASGARD 7115-U Q	3	0-10V	●	2004-6131-1100-011	231,72 €	
	PREMASGARD 7115-U Q LCD	3	0-10V	● ■	2004-6132-1100-021	306,44 €	
	PREMASGARD 7115-I Q	2	4...20 mA	●	2004-6131-2100-012	231,72 €	
	PREMASGARD 7115-I Q LCD	2(3)	4...20 mA	● ■	2004-6132-2100-012	306,44 €	
<b>max. - 100...+ 100 Pa</b>		<b>Type 7110</b>					
0... +50 Pa / -50... +50 Pa	PREMASGARD 7110-U	3	0-10V		1301-7111-0110-200	233,50 €	
0...+100 Pa / -100...+100 Pa	PREMASGARD 7110-U LCD	3	0-10V	■	1301-7111-4110-200	300,21 €	
	PREMASGARD 7110-I	2	4...20 mA		1301-7112-0110-10L	233,50 €	
	PREMASGARD 7110-I LCD	2(3)	4...20 mA	■	1301-7112-4110-10L	300,21 €	
	PREMASGARD 7110-U Q	3	0-10V	●	2004-6131-1100-021	279,76 €	
	PREMASGARD 7110-U Q LCD	3	0-10V	● ■	2004-6132-1100-031	346,46 €	
	PREMASGARD 7110-I Q	2	4...20 mA	●	2004-6131-2100-022	279,76 €	
	PREMASGARD 7110-I Q LCD	2(3)	4...20 mA	● ■	2004-6132-2100-022	346,46 €	
<b>max. - 25...+ 25 Pa</b>		<b>Type 7112</b>					
0... +25 Pa / -25... +25 Pa	PREMASGARD 7112-U	3	0-10V		1301-7111-0370-200	298,88 €	
	PREMASGARD 7112-U LCD	3	0-10V	■	1301-7111-4370-200	353,86 €	
	PREMASGARD 7112-I	3	4...20 mA		1301-7112-0370-200	298,88 €	
	PREMASGARD 7112-I LCD	3	4...20 mA	■	1301-7112-4370-200	353,86 €	
	PREMASGARD 7112-U Q	3	0-10V	●	2004-6131-1100-031	345,14 €	
	PREMASGARD 7112-U Q LCD	3	0-10V	● ■	2004-6132-1100-011	400,11 €	
	PREMASGARD 7112-I Q	3	4...20 mA	●	2004-6131-3100-001	345,14 €	
	PREMASGARD 7112-I Q LCD	3	4...20 mA	● ■	2004-6132-3100-011	400,11 €	
<b>2-wire connection:</b>		LCD backlight inactive – activation via PIN 'GND' (I2W)					
<b>Housing variant "Q":</b>		Cable connection with <b>M12 connector</b> (male, <b>5-pin</b> , A-code)					
<b>Multi-range switching:</b>		The <b>pressure ranges</b> depend on the device type and can be set via DIP switches.					
<b>Extra charge:</b>		other special measuring ranges up to max. 5000 Pa with optional automatic zero point calibration (3-wire connection) with optional quick connect for PVC fabric pressure hose Ø 6 mm				54,97 € 80,06 € 46,28 €	