

**Product Information**

# Pressure Converter UNICON-P



- Programming via front side keypad
- For dry and non aggressive gases
- Measuring range programmable
- Output 4..20 mA, 2-wire connection

## Characteristics

Pressure converters UNICON-P can be used for measuring low pressure, differential pressure in filter- and clean room technologies. In connection with orifice plates, impact (dynamic) pressure, venturi nozzle it is suitable for measurement of flow rates of dry and non aggressive gases. The model for wet media (condensate-stability device; measuring ranges 30-60) is designed only for relative pressure.

Within the device dependent full scale range, output and display may be adjusted. The device offers additional features like a unidirectional (e.g. 0..1 mbar) or bidirectional (e.g. -1..1 mbar) pressure range. The analog output depends to the programmed analog output.

## Technical data

### Power supply

Supply voltage : 7.5..30 VDC, 2-wire 4..20 mA,  
 16..30 VDC, 3-wire 0..10 VDC

Operating temp. : 0..50 °C or  
 -15..+65 °C condensate-stability device

Storage temperature : -20..+80°C  
 CE-conformity : EN 61326-1:2013

### Input

Process connection  
 Standard device : 2 pressure tubes for 4 mm  
 hose (standard)  
 or 4 and 6 mm Schott glands available

Condensate-stability device : 1 Schott gland, 4 or 6 mm  
 Process medium : see table Measurement / Process media  
 Measuring principle : Piezoelectric  
 Conversion rate : 2 / s  
 Rise time T<sub>90</sub> : parameter → input filter

	low	med	high
Standard	: 300 ms	7000 ms	41000 ms
Condensate-stability device	: 2000 ms	7000 ms	41000 ms

*The accuracy depends to the selected device measuring range, T<sub>k</sub> and zero unbalance*

Standard device : ± 0.25 % ± 1 Digit  
 Condensate-forming : ± 0.5 % ± 1 Digit

### Output

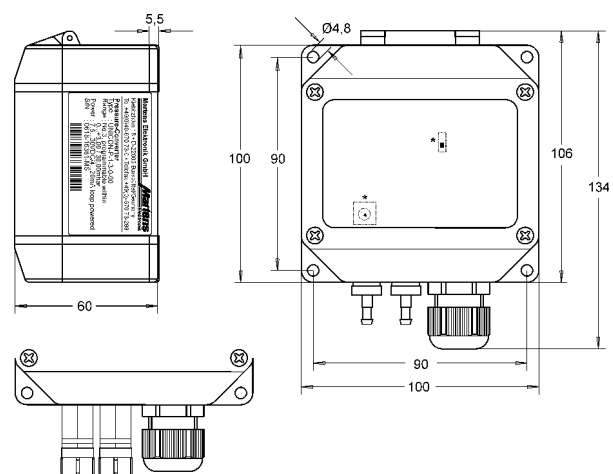
- Current : 4..20 mA, ext. burden;  
 $R_A[\Omega] \leq (U_B - 7,5 \text{ V}) \div 0,02 \text{ A}$
- Voltage : 0..10 V, load < 3 mA, if supply > 16 V;  
 load < 10 mA, if supply > 20 V
- Alarm output**  
 Transistor : 7.5..30 VDC, max. 60 mA,  
 short circuit proof
- Voltage drop : < 3 V (at maximum load)
- Display** : LCD dot-matrix, 2 lines each 16 characters
- Conversion rate : parameter input filter low = 8 / s; med  
 and high = 2 / s;
- Case** : field case
- Material : polyamide with fiber-glass  
 PA6-GF/GK 15/15, front foil polyester
- Dimensions : 100 x 100 x 60 mm (HxWxD)
- Weight : max. 360 g
- Connection : screw terminal with pressure plate,  
 2,5 mm<sup>2</sup> flexible, 4 mm<sup>2</sup> wire
- Protection class : IP65, terminals IP20 acc. to BGV A3

## Pressure

## Measurement / process media

	Standard device	condensate-stability device
<b>Measurement</b>	Pressure relative, absolute, difference pressure ratio / linear	Pressure relative
<b>Process material</b>	Silicon, Nylon, ceramic, Gold	Silicon, Polythermid, Polypropylene, Polyurethane
<b>Median compatibility</b>	Dry, non aggressive gases	Water, alcohol, alkaline cleaning supplies, low acids, and many similar gases
<b>Non median compatibility</b>	All others	Carbon hydride (oil, petrol...), high concentrated acids, depended cleaning supplies

## Dimensions



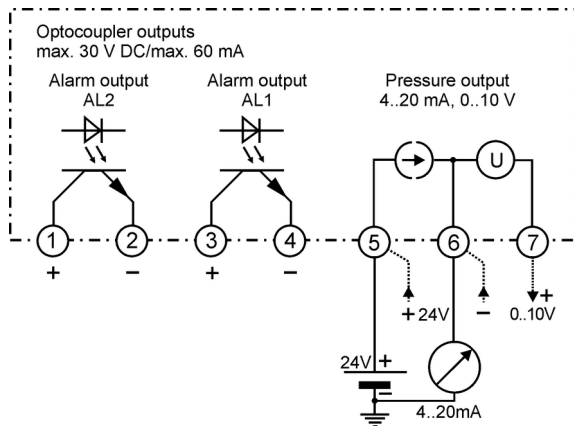
Process port  
6mm Schott glands

Process port  
4 mm tubes

The condensate-stability device provides only 1 process port with 4 or 6 mm Schott glands.

**Product Information**

**Connection diagram**



**Note:**  
 For supplying the converter use terminals 5 and 6 as shown. If the converter is used for monitoring only, terminals 5 and 6 can be connected directly to supply voltage.

**Ordering code**

UNICON-P -  1. -  2. -  3. -  4.

<b>1. Model</b>	
1	output 4..20 mA, 2-wire 7.5..30 V DC
2	as 1, but additional output 0..10 V, 3-wire 16..30 V DC
<b>2. Measuring range [mbar] (max. static over pressure)</b>	
<b>Standard</b>	
1	±3 rel. (200)
2	±10 rel. (200)
3	±30 rel. (300)
4	±100 rel. (600)
5	±300 rel. (1000)
6	±1000 rel. (3000)
9	+2000 abs. (4000)
<b>Device for wet media (condensate-stability)</b>	
30	±50 rel. (1400)
40	±100 rel. (1400)
50	±300 rel. (1400)
60	-700..1000 rel. (3000)
<b>3. Process port</b>	
0	4 mm tube (only standard device)
2	4 mm Schott glands
3	6 mm Schott glands
<b>4. Options</b>	
00	without option
06*	display conversion
11*	extended burst pressure (max. 3 bar) only MR 3

\* not for wet media