

Measuring transducers for atmospheric pressure calibrateable, with active output, series Thor I

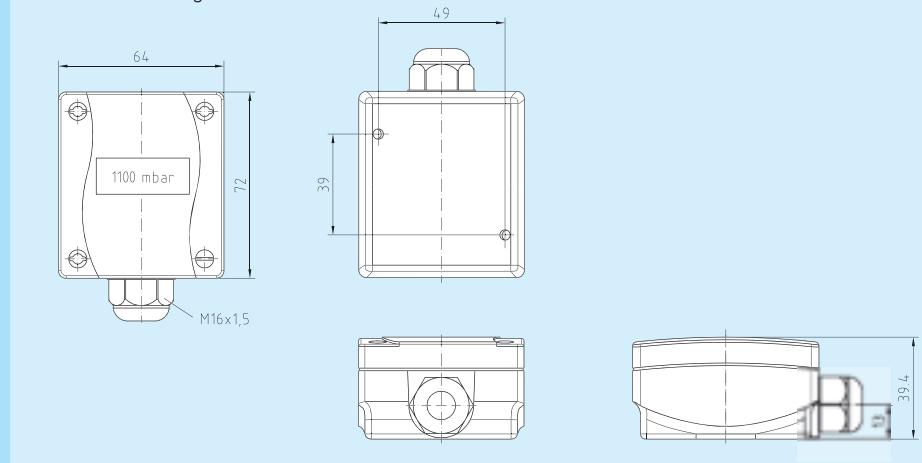
PREMASGARD® ALD measures the atmospheric pressure within a range of 850 - 1150 mbar and converts it into a standard signal of 0-10V. The sensor system is designed for measurements in clean air and other non-aggressive, non-condensing gaseous media. Applications of this pressure sensor are for example in ventilation and air conditioning technology, air pressure dependent control systems, meteorological measurement stations and climate observation units. The pressure sensor excels by its high accuracy, long-term stability and reliability.

A device variant with additional display for pressure reading is available.

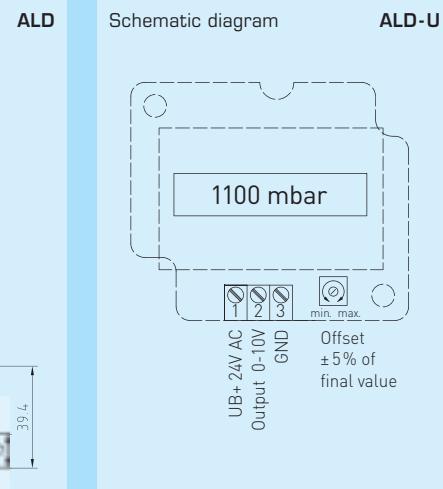
TECHNICAL DATA:

Power supply:..... 15 ... 36V DC or
24V AC (half-wave rectification)
Output signal:..... 0 -10V
Current consumption:..... max. 20mA [at 24V DC]
Electrical connection:..... 3-wire connection
Medium:..... clean air and other
non-aggressive, non-combustible gases
Type of pressure:..... atmospheric pressure /absolute pressure
Measuring range:..... 850 - 1150 mbar (750 - 1250 mbar optional)
Max. pressure:..... 2000 mbar
Accuracy:..... $\pm 3.0\%$ of final value [at 20°C]
Long-term stability:..... $\pm 0.5\%$ of final value per year
Linearity:..... $\pm 0.5\%$ of final value
Temperature drift values:..... $\pm 0.5\%$ of final value per 10K
Hysteresis:..... $\pm 0.1\%$ of final value
Ambient temperature:..... 0 ... +50°C
Operating range:..... 10 ... 95% r.H.
Storage temperature:..... -20 ... +50°C
Turn-on time: < 10 min
 t_{90} : < 1 s
Enclosure:..... plastic, material polyamide, 30% glass-globe-reinforced,
with quick-locking screws,
colour pure white [similar RAL9010]
Dimensions:..... 72 x 64 x 39.4 mm (Thor I)
Electrical connection:..... 0.14 - 1.5 mm², via terminal screws
Cable gland:..... M 16, including strain relief
Humidity:..... < 95% r.H., non-precipitating air
Protection class:..... III (according to EN 60730)
Protection type:..... IP 65 (according to EN 60529)
Standards:..... CE conformity, electromagnetic compatibility
according to EN 61 326 + A1 + A2, EMC directive 2004 / 108 / EC
Features:..... display, [optional]

Dimensional drawing



Schematic diagram



PREMASGARD® ALD

Type/WG2	Pressure Range	Output
ALD-U	850...1150 mbar	0-10 V
ALD-U-Display	850...1150 mbar	0-10 V