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Fields of application:

- Clean room technology
- Medical technology
- Filter technology
- Finnishing pass measurement
- Filling level measurement
(air bubbler method)
- Flow velocity measurement
(pitot tube; orifice disk)
- Heating
- Ventilation
- Air condition

The pressure transducers of the HT02 type series are suitable for detection of excess pressure, low pressure or differential pressure of non-aggressive gasses.
These robust versions can be applied in laboratories and under industrial conditions.
Important criteria such as long-term stability, linearity and good reproducibility are guaranteed through their sturdy mechanical construction. Temperature drift is minimised through targeted compensation of every sensor. The wear-free inductive measure-ment system allows for almost maintenance-free operation.
The integrated electronic system provides a pressure-proportional voltage signal of 0 to 10 V in the output
(option: current signal 0 (4) to 20 mA).
This allows for interference-free transmission of signals even over comparatively large distances. For strongly varying pressures a dampening function is included.

Techncal data:

Measurement ranges	0,1 / 0,2 / 0,3 / 0,4 / 0,5 / 0,6 / 1 / 1,6 / 2,5 / 4 / 5 / 6 / 10 / 16 / 20 / 25 / 50 / 100 / 160 / 200 / 250 / 400 / 500 / 600 / 1000 hPa excess pressure, low pressure, differential pressure, other measurement ranges on request, Absolute pressure version
Option	900 to 1100 hPa, 800 to 1200 hPa, 0 to 1000 hPa, 0 to 500 hPa other measurement ranges on request
Measurement principle	inductive
Overloading capability	Measurement ranges up to 400 hPa 5-fold; measurement over 400 hPa 2-fold For delta p measurements maximum system pressure 1 bar. Higher overload capacities on request
Medium	non- aggressive gasses
Option	On request stainless steel membrane for aggressive gasses
Parts in contact with medium	Ni, Al, CuBe, PU
Linearity	± 1 % of f.v.
Option	± 0.5 % of f.v. only for differential pressure sensors for measurement ranges >= 1 hPa; for absolute pressure sensors for measurement range delta P <= 200 hPa ± 0.2 % of f.v. only for differential pressure sensors for measurement range >= 2,5 hPa for absolute pressure sensors for measurement ranges delta P <= 100 hPa Optional linearity values are not applicable for the square-root extraction versions
Hysteresis	± 0,1 % max. of f.v.
Supply	19 to 31 VDC
Fuse connection	250 mA
Supply influence	< 0,05 %
Option	230 VAC, 115 VAC, 24 VAC, (10 %, 50-60 Hz)
Option	For "contaminated networks" filter elements and interference protection devices are provided.
Output signal	0 bis 10 V (load >= 2 kOhm)
Power consumption	Approx 10 mA (without Load)
Option output signal	± 5 V, ± 10 V (load >= 2 kOhm) 0 – 20 mA, 4 – 20 mA (load <= 500 Ohm) 4 – 20 mA twin-core UB = 12 to 32 V; load (OHM)= UB (V) -12 / Imax (A)
Time constant	T90 approx 0,02 sec.
Response time of the sensor	10 ms
Temperature drift	Zero Point ± 0,3 % of f.v./10 K max. | Span 0,3 % of f.v./10 K max.
Temperature range	Specified range + 10°C to + 50°C
Humidity	Up to 80% relative humidity
Option	Extended temperature range -10°C bis + 60°C
Storage temperature	-10°C to + 70°C
Long- term stability	± 0,5 % per year (typical)
Housing	Material ABS (dimensions see below)
Pressure connections	Ø 6,6 x 11mm (for flexible hoses Ø 6)
Electrical connections	Screwed cable connection M12 x 1.3; screw-type terminals max. 1,5 mm²
Protection class	II
Protection type	IP54
Standards	EN 50081-1; EN 50081-2; EN 50082-1;EN 50082-2; EN 61010
Weight	Approx. 0,3 kg (approx. 0,4 kg with power adaptor)
Impact stability	10 g
Sensor volume	Approx. 3 ml
Volume increase	Approx. 0,2 ml for nominal pressure
Option	LC-Display 3 1 / 2-digits
Option	Automatic zeroing (current input approx. 50 mA)
Option	1 or 2 limit contacts (current input approx. 35/45 mA); relay output transformer: 6 A / 230 VAC
Option	Sensor with evoluted ouput signal 0 to 10 V or 0 (4) to 20 mA Evoluted: UR = √(10 x UL) (UL= linear output 0-10 V) | IR = √(2O x IL) (IL = linear output 0-20 mA)
Option	Overload protection up to 2 bar