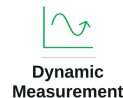


DIGITAL PRESSURE AND TEMPERATURE TRANSMITTER, USB



- USB · SOFTWARE INCLUDED
- 1 TO 3000 bar
- 2 000 000 DIVISIONS



NOMINAL PRESSURE (FS)

Pressure type	Nominal pressure (FS)	Zero at	Code
Gauge (R)	1 · 2.5 · 5 · 10 · 20 bar	atmospheric pressure	R
Absolute (A)	50 · 100 · 250 · 350 · 500 · 700 bar	absolute vacuum	A
Absolute (A)	1000 · 1500 · 2000 · 3000 bar	absolute vacuum	A

No analogue output and no separate supply: the transmitter is powered from the USB port and read by the software that comes with it. It reports pressure and temperature, resolves 2 000 000 divisions internally and delivers between 5 and 4800 readings per second. The four highest ranges carry the G 1/2" process coupling.



TECHNICAL DATA

PRECISION

Linearity and hysteresis	$\leq \pm 0.10\%$, better on request
Internal resolution	2 000 000 divisions
Readings per second	5 · 20 · 120 · 600 · 1200 · 2400 · 4800
Temperature indication, resolution	0.1 °C
Temperature indication, class	$\pm 2\text{ °C}$
Temperature effect on zero (1 °C)	$\leq \pm 0.015\%$
Temperature effect on sensitivity (1 °C)	$\leq \pm 0.015\%$
Reference temperature	+23 °C

MECHANICAL PROPERTIES

Sensor material	Stainless steel 17-4 PH, monolithic
Sealing	Entirely laser welded, resin encapsulated
Protection class	IP65 · EN 60529
Process coupling	G 1/4" male · G 1/2" male · BSP male
Tightening	Wrench 27 mm · 28 N·m
Body · length	Ø 25 mm · 110 mm · thread 15 mm
Working temperature range	-10...+70 °C
Storage temperature range	-20...+80 °C

FIELD OF USE — Test benches, calibration rigs, service and commissioning work — a laptop, one cable and a reading, without an amplifier or an indicator.

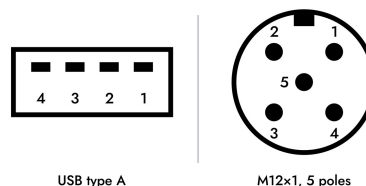
MECHANICAL LIMITS

Service pressure	100 %	May be applied continuously without leaving the specification.
Max. permissible pressure	150 %	May be applied without permanent change of the characteristics.
Breaking pressure	> 300 %	Pressure at which mechanical failure may occur.
Highly dynamic pressure	75 %	Amplitude permitted for rapidly alternating pressure.

ELECTRICAL PROPERTIES

Interface	USB, type A
Power supply	5 Vdc from the USB port
Electrical connection	M12×1 male connector, 4 poles
Cable	M12 to USB, 2 m, supplied
Zero function	50 % of the range
Digital filter	Moving average over 1, 2, 4, 8, 16 or 32 points
Programmable resolution	1 · 2 · 5 · 10 · 20 · 50 · 100
Units of measurement	mbar · bar · MPa · kPa · psi · kg/cm ² · mHg · mmH ₂ O
Peak function	Positive and negative

ELECTRICAL CONNECTION



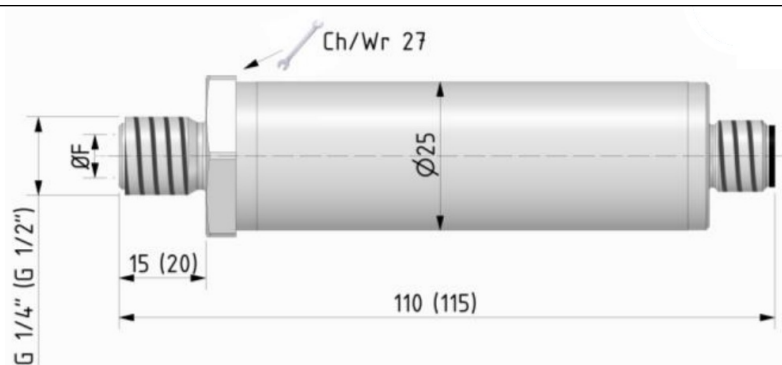
USB	Pin	Cable
VBUS, 5 Vdc	1	RED
D-	2	WHITE
D+	3	GREEN
GND	4	BLACK

The M12×1 connector on the transmitter carries the same four signals under the same pin numbers and has a fifth, central contact connected to earth; the supplied cable makes the transition to USB type A.

All four values refer to the nominal pressure of the version ordered.



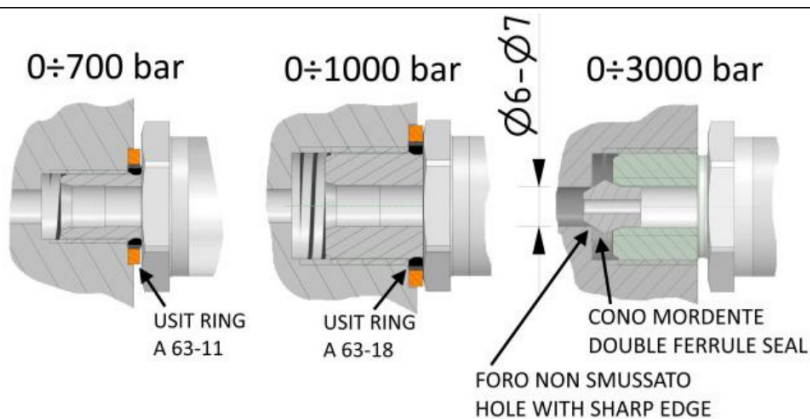
DIMENSIONS (mm)



Nominal Pressure ≤ 10 bar $\varnothing F = 6$ mm

Nominal Pressure ≥ 20 bar $\varnothing F = 7$ mm

Dimensions in mm. Values in brackets apply to the G 1/2" process coupling; seat diameter $\varnothing F$ 6 mm up to 10 bar, 7 mm from 20 bar.



Typical installation. Up to 700 bar with a USIT ring A 63-11, up to 1000 bar with a USIT ring A 63-18, up to 3000 bar with a double ferrule seal in a hole with a sharp edge, $\varnothing 6$ to $\varnothing 7$.



COMPLIANCE AND CERTIFICATION

Protection rating	IP65 according to EN 60529 · entirely laser welded and resin encapsulated
Compliance	CE, RoHS, REACH
Applied standards	EN 61326-1 (2013) · EN 61010-1 (2013)
Directives and regulations	2014/30/EU · 2014/35/EU · 2011/65/EU (RoHS) · 2012/19/EU (WEEE) · 1907/2006 (REACH)
Quality system	Certified according to EN ISO 9001 · Dasa-Rägiſter IQ-1100-01
Declaration of conformity	Issued by the manufacturer on 01/04/2016, covering all options listed in the sales catalogue
Food contact	Declaration of conformity for materials in contact with food to (CE) 1935/2004 and (CE) 2023/2006 (GMP) — for versions from 20 bar upwards, material 17-4 PH (WN 1.4542)
On request	Calibration report

OPTIONS AND ACCESSORIES

Item	Availability	Data
Better accuracy class	On request	The standard class is $\leq \pm 0.10 \%$
Food contact (MOCA)	Option	For versions from 20 bar upwards
Calibration report	On request	Factory calibration

