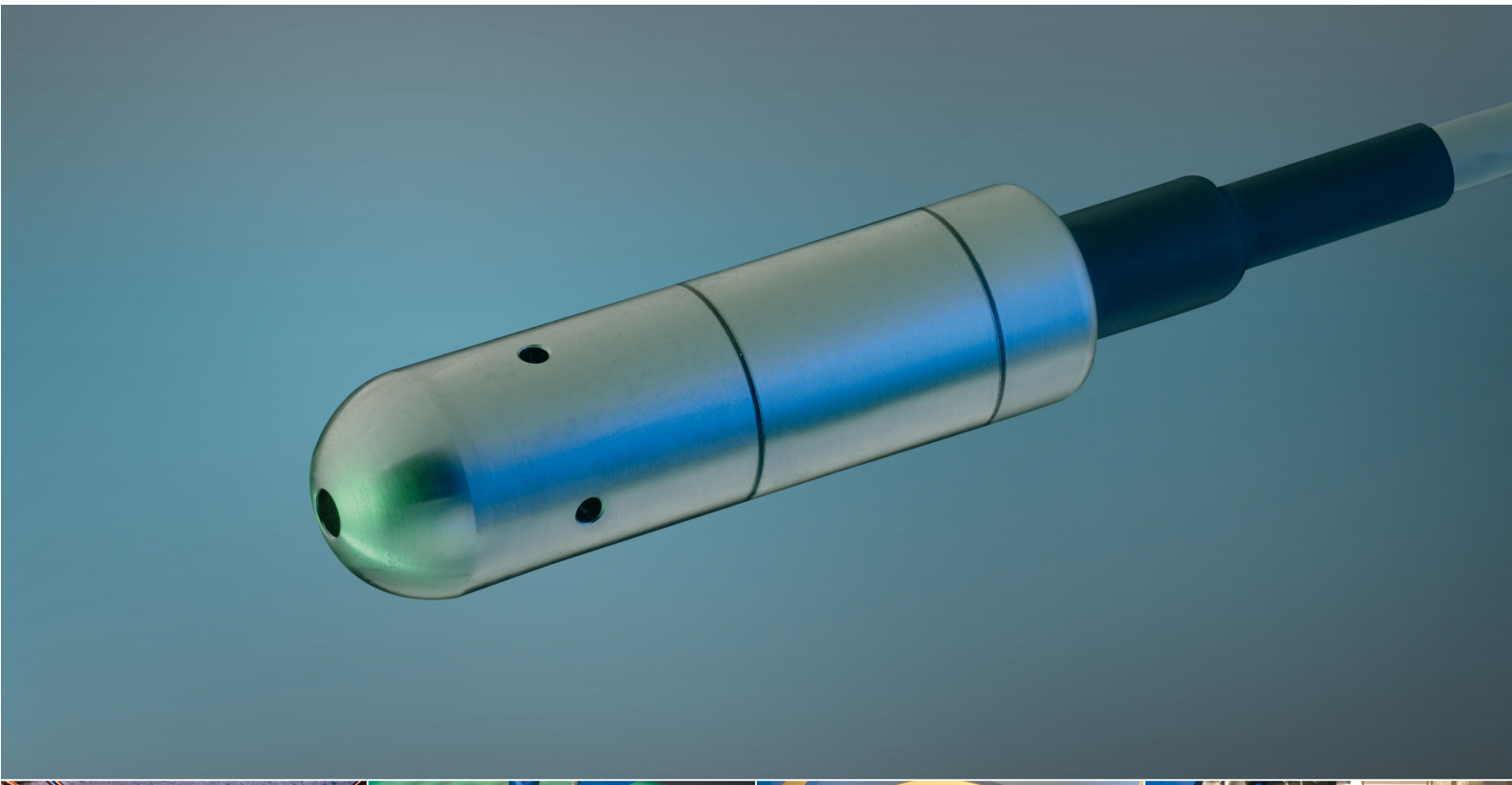
Pioneering new technologies
Pioneering new technologies

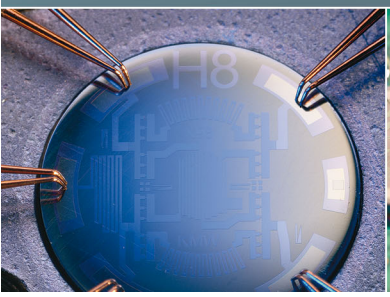
Sensor-Technik Wiedemann GmbH
Mobile Controllers and Measurement Technologies

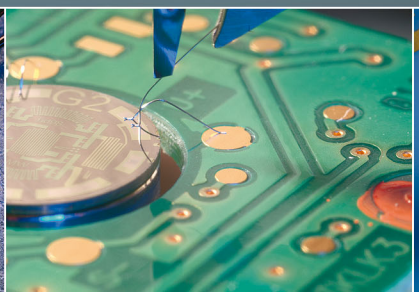
Tect Electronics
The authorized distributor in the Greater China Region

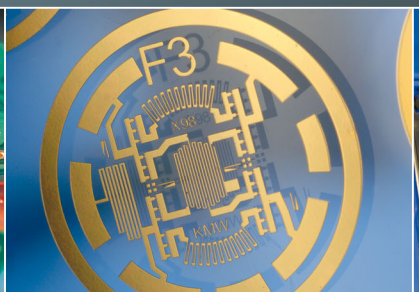
Pressure transmitter model TS02

Pressure transmitter model TS02









Pressure transmitter - Tauchsonde TS02 – for gauge pressure measurement

Characteristics

- Piezoresistive measuring element
- Parts in contact with the medium consist of stainless steel
- Compact construction
- With atmospheric pressure compensation
- High accuracy and long term stability

Applications

- Water level/depth measurements in wells
- Drill holes
- Stagnant waters
- Tanks

Technical specifications

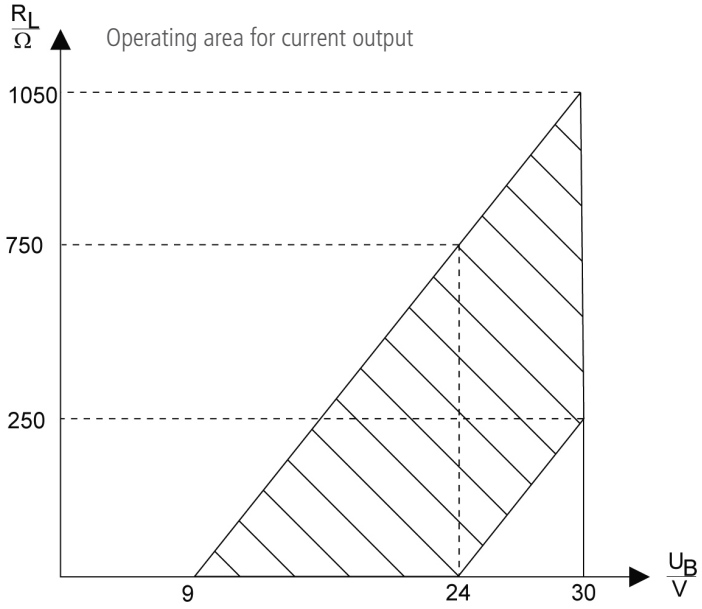
Gauge pressure range		0 ... 0.25 bar to 0 ... 10 bar, other ranges on requests					
		1 m water column = 98.1 mbar					
Standard pressure range	bar	0.25	0.6	1.6	2.0	5.0	10
Overpressure	bar	0.5	1.2	3.2	4	7	15
Linearity	% FS (typ.)	0.5					
Pressure hysteresis and repeatability	% FS	0.1					
Thermal effect on zero	% FS/10K	0.6	0.3	0.2			
Thermal effect on span	% FS/10K	0.6	0.3	0.1			
Media temperature	°C	-10 ... +85 for liquid media					
Storage temperature	°C	-25 ... +125					
Excitation voltage		9 ... 30 VDC 14 ... 30 VDC (voltage output) permissible ripple @ 50 Hz: 10%					
Output signal		4-20 mA (2-wire-technique), 0-20 mA, 0-10 V					
Electrical connection		5 m cable with cover consisting of polyamide 12 (DIN 47100) reverse polarity and short circuit protection					
Protection classification		IP 68					
EMC		EN 61000-6-2 EN 61000-6-3					
Material housing		1.4571					
Material diaphragm		1.4435					

Pressure transmitter - Tauchsonde TS02 – for gauge pressure measurement

The depth sensing is based on the measurement of the hydrostatic pressure of a liquid level. The piezoresistive measuring element of the pressure transmitter transforms the mechanical pressure into a proportional current or voltage signal.

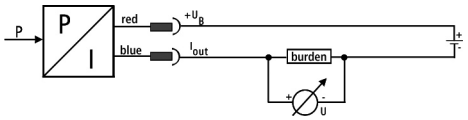
The measuring element is positioned in an oil filled chamber which is made of stainless steel. A stainless steel protection cap prevents damage to the diaphragm. The measuring element is separated from the medium by a stainless steel diaphragm.
The sensor on the inside is connected with the atmosphere through a capillary cable Tube. This fluctuations of the atmospheric pressure are compensated for.

The connection cable is connected firmly and leaktight with the housing.

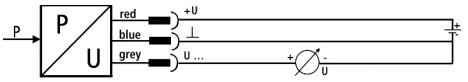


Operating area for current output

Electrical connection for 2-wire-technique



Electrical connection for 3-wire-technique

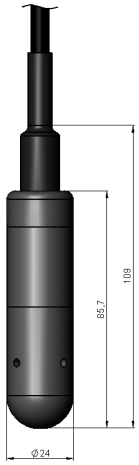


Connection STW-Pressure transducer

	2-wire-technique	3-wire-technique
$+U_B$	red	red
GND	–	blue
Output	blue	grey

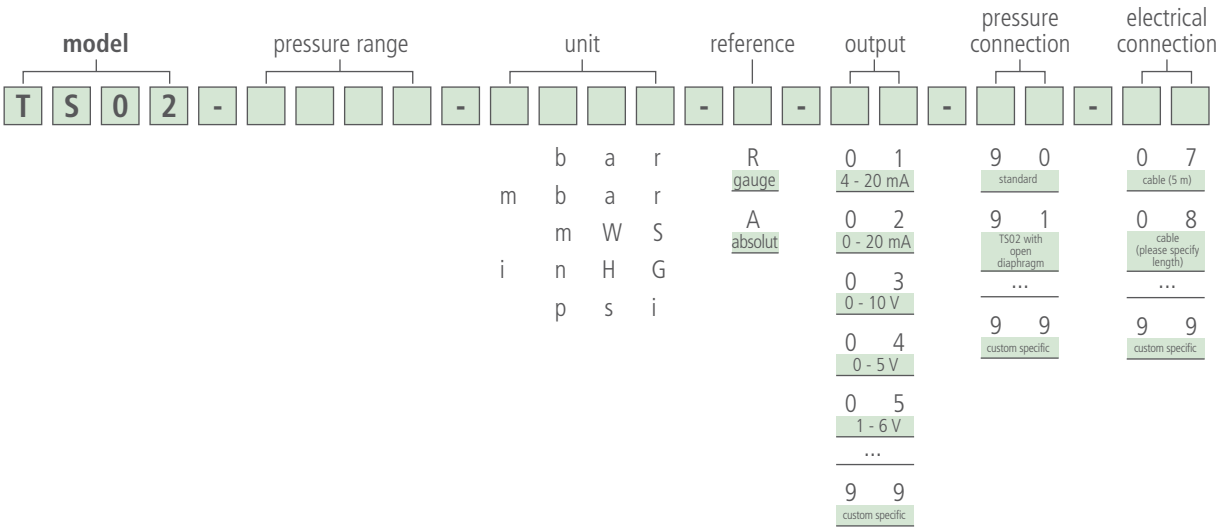
Current output: load $R_L = \frac{U_B - 9\ V}{0{,}02\ A}$

Voltage output: load $R_L > 10k\Omega$



Order codes overleaf!

Order codes



Sensor-Technik Wiedemann GmbH
Steuer- und Regelelektronik
Am Bärenwald 6
87600 Kaufbeuren
Germany
Telephone +49 (0) 8341 9505-0
Telefax +49 (0) 8341 9505-55
E-Mail info@sensor-technik.de
Internet www.sensor-technik.de

STW-Technic, LP
Mobile Controllers and
Measurement Technologies
3000 Northwoods Parkway, Suite 260
Norcross, GA 30071, USA
Telephone +1 (770) 242-1002
Telefax +1 (770) 242-1006
E-Mail sales@stw-technic.com
Internet www.stw-technic.com

Sensor-Technik UK Ltd.
Unit 1, Stoke Mills
Mill Road
Sharnbrook, Bedfordshire
MK44 1NN England
Telephone +44 (0) 1234 7820-49
Telefax +44 (0) 1234 7820-56
E-Mail info@sensor-technik.co.uk
Internet www.sensor-technik.co.uk

20090109 GB – Subject to change without notice –