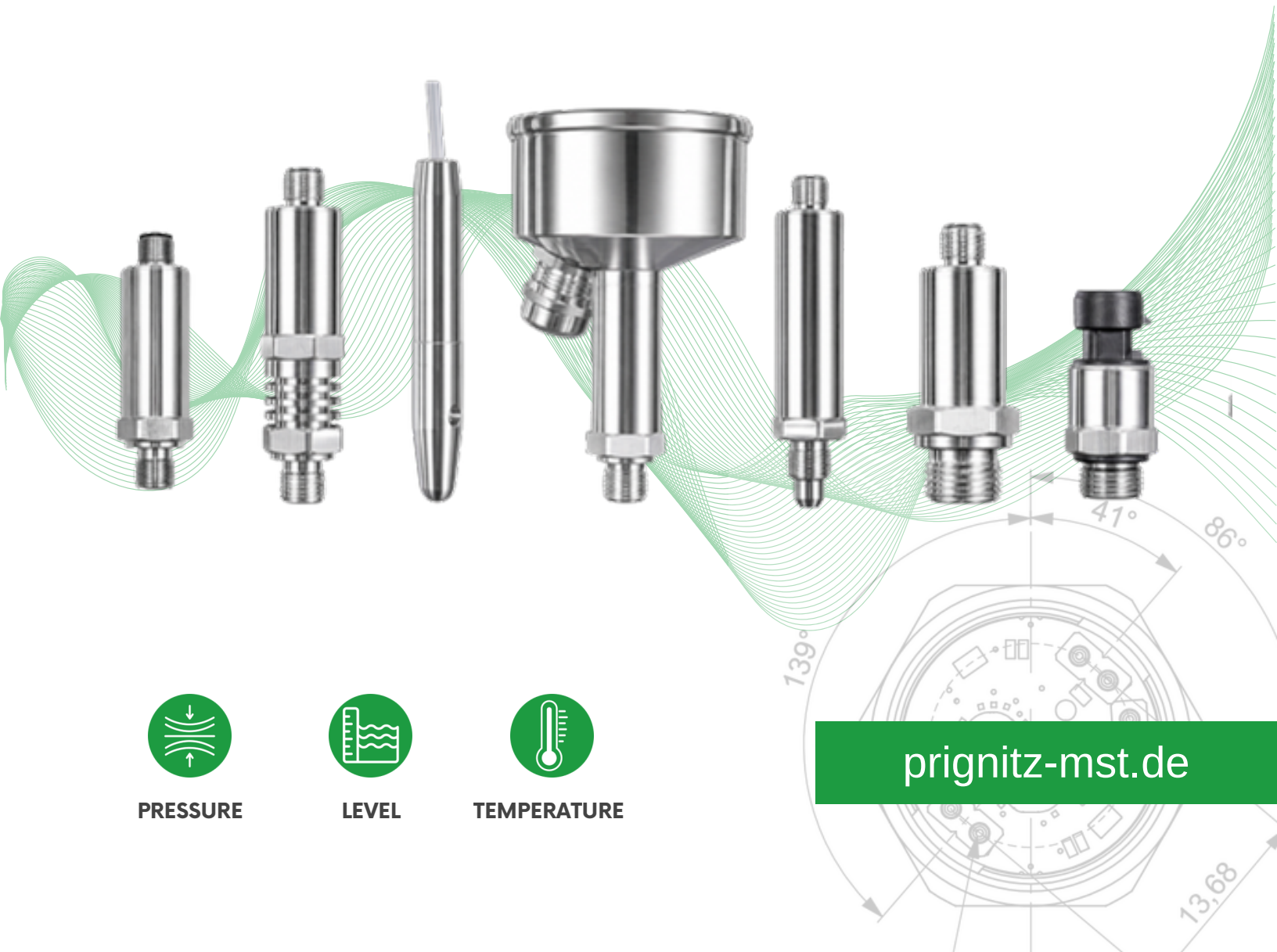


PRODUCT CATALOG

ENGLISH VERSION



PRESSURE



LEVEL



TEMPERATURE

prignitz-mst.de

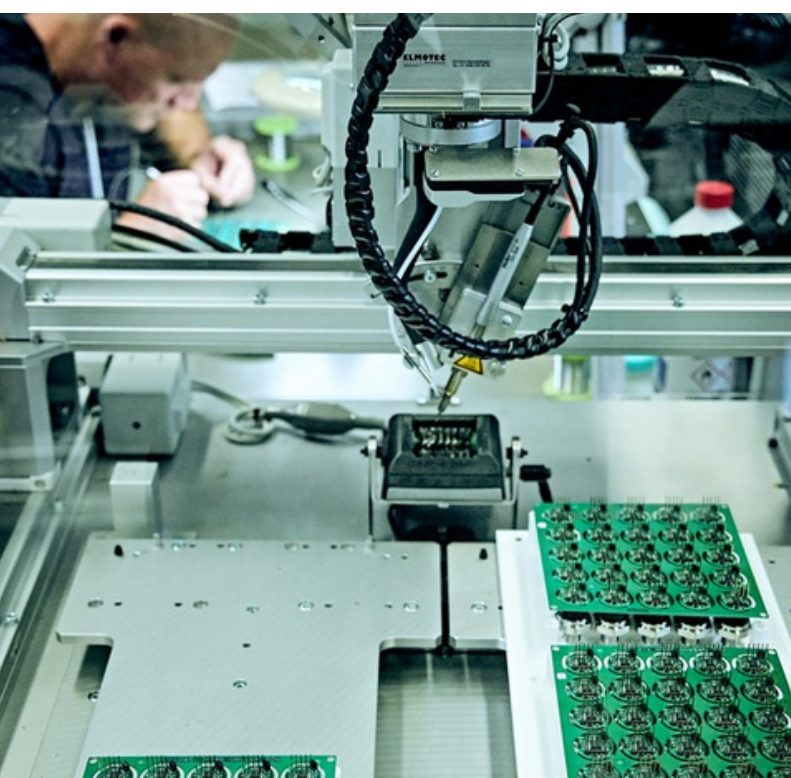
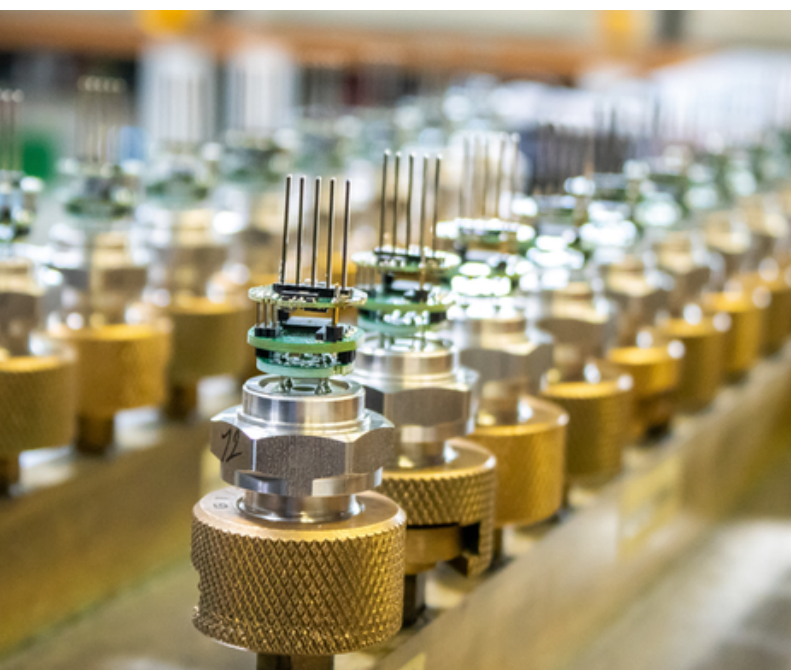


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We offer a wide range of pressure sensor technologies, which are described below. If you are unsure which of our technologies or electronic variants is most effective for your application, simply send us your specifications and details of the application (in particular, which medium is used). We will then suggest the optimal solution for you.

P2P

Piezoresistive technology with a dual measurement bridge

With the P2P technology Prignitz Mikrosystemtechnik has developed a unique, patented Technology that belongs to the strain gauge technologies. The decisive and innovative difference to the competition is the use of two full bridges, which are interconnected in such a way that undesirable external force influences on the sensor signal (e.g. torques during installation) are largely compensated.



A monolithic steel body without any welding is used for this purpose. Only one part made of solid 316L stainless steel comes into contact with the medium. As a result, this technology can also be used for hydrogen applications. For other applications, other materials such as 17-4PH, Hastelloy or others can be used. The high level of internal vertical integration – from packaging to the calibrated sensor system – enables PMST to respond quickly to customer requirements while maintaining a consistently high level of quality.

Advantages of P2P Technology:

- pressure ranges: from 4 bar to 1.000 bar or to >2000 bar for 17-4PH
- accuracy: 0,5% or better
- made entirely of 316L stainless steel, no internal welding, no internal seals
- T-Range: -40°C ... +125°C
- customized solutions
- very high robustness against external forces

Optional possibility of H2 approval, because:

- low permeation
- no chemical reaction
- safety requirements
- high performance
- high reliability



housing and
sensing cell
with thread
(1.4404/316L)



sensing
cell
(Silicone chips
on glass)



half cut
monolith

TFT

Thin-Film Technology

For high pressures and harsh environments, steel diaphragms have proven their worth in pressure sensing. The most reliable measurement principles on steel diaphragms use so-called thin film technologies or alternatively strain gage technologies. While thin film technologies have a relatively low raw signal, piezoresistive elements are characterized by a significantly higher raw signal. Prignitz Mikrosystemtechnik uses both measurement techniques. With Thin-Film technology, we use measurement resistors made of polysilicon, which have about three times the raw signal compared to other thin-film technologies (mostly sputtered metals). The steel 17-4PH (1.4542) used is primarily characterized by high overload values. The technology, which has been used at Prignitz Mikrosystemtechnik for decades, enjoys a very wide range of applications and reliability.



The media, that shall be measured, only comes into contact with stainless steel. The high internal depth of added value enables PMST to respond quickly to customer requirements on the one hand and to maintain a high, consistent level of quality on the other.

PAM

Advanced piezoresistive technology

Silicon membrane-based pressure sensors are an ideal design for non-aggressive gases and to some extent also for non-aggressive liquids.

The technology is mainly used in the lower pressure ranges and can also be manufactured cost-effectively in very high volumes due to the silicon MEMS-based approach.

Prignitz Mikrosystemtechnik has decades of experience with this technology under its own label. Due to the high internal depth of added value, we can offer individual solutions (pressure ranges, electronics, connections, qualifications).



PMI

Piezoresistive technology with media isolation

If pressure sensors are required for “harsh environments” in pressure ranges below 10bar, especially below 1bar, so-called oil-filled sensor modules have proven their worth. Standard piezoresistive MEMS pressure sensor elements used here, are protected from the measurement medium by an additional thin stainless steel diaphragm. An oil serves as the pressure transfer medium from the steel membrane to the silicon chip.

This type of sensors (at Prignitz Mikrosystemtechnik under the brand name PMI) are used very successfully in many fields of application such as oil production, dirty water, chemicals, sea water.

Depending on the application, different designs are available e.g. “inside” protected diaphragm, dead volume free “flush” diaphragm, clamping connection.



PRESSURE SENSORS:

- FOR MEDIUM AND HIGH PRESSURE
- FOR LOW AND VERY LOW PRESSURES
- DIFFERENTIAL PRESSURE TRANSMITTERS
- FOR HAZARDOUS AREAS
- WITH DIGITAL OUTPUT
- ELECTRONIC PRESSURE SWITCHES



OVERVIEW OF AVAILABLE FUNCTIONS AND PARAMETERS

Technologies	P2P, TFT, PAM, PMI (see descriptions on the previous pages)
Measured pressures	• Gauge – referenced to atmospheric pressure • Reference (sealed gauge) – referenced to the averaged atmospheric pressure value • Absolute – measured relative to absolute vacuum
Measured pressure values	from 0 bar abs / –1 bar gauge to 5000 bar
Measurement ranges	from -0,5 ... 0,5 mbar to 0 ... 5000 bar
Accuracy	≤ 0,25% (digital versions) or ≤ 0,5 % (standard) FS @25°C
Output signal	• typically: 4-20 mA, 0-10V, ratio 10-90% Vcc • other options: 0-20 mA, 0-2,5V, 0-5V, 1-5V, 0-10V, etc
Communication protocols	Modbus RTU, CANopen, I ² C, IO-Link
Wetted parts	• typically: stainless steel 316L (1.4404) or 17-4 PH (1.4542) • for highly aggressive media: titanium, Hastelloy
Measuring cell type	• with internal diaphragm – recessed diaphragm, mechanically protected • with flush diaphragm – for low pressures, viscous or contaminated media
Process medium temperature	• typically: –40 ... 125°C • optional: –70 ... 200°C
Pressure and electrical connections	virtually any (on request / depending on specification)
Special versions	• hazardous areas: ATEX, CSA • Hydrogen (H₂) installations: EC79
Additional features	• digital transmitters with online range configuration capability • differential pressure transmitters (e.g., for filters, pumps) • electronic pressure switches

SENSORS FOR MEDIUM AND HIGH PRESSURES

APPLICATION



- INDUSTRIAL AUTOMATION
- MOBILE HYDRAULICS
- RENEWABLE ENERGY
- TRANSPORT
- SHIPBUILDING AND OFFSHORE
- AUTOMOTIVE INDUSTRY
- HYDROGEN INSTALLATIONS
- HVAC

PMP-S122



- with membrane inside
- applicable for Hydrogen

Sensor type	Standard type, P2P technology
Typically application	medium&high pressures, neutral & aggressive media
Pressure range	from -1 ... 4 bar to -1 ... 1000 bar
Type of pressure	gauge, sealed reference
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	G1/4", G1/2", M20x1,5, 1/2"-14 NPT, 1/4"-18 NPT, etc.
Electrical connectors	M12x1, DIN803-A, DT04-3P/4P, PACKARD MP, etc
Benefits	standard pre-configured versions available off the shelf

PMP-C122



- with membrane inside
- applicable for Hydrogen

Sensor type	Digital, P2P technology
Typically application	medium & high pressures, neutral & aggressive media
Pressure range	from -1 ... 4 bar to -1 ... 1000 bar
Type of pressure	gauge, sealed reference
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,25 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	G1/4", G1/2", M20x1,5, 1/2"-14 NPT, 1/4"-18 NPT, etc.
Electrical connectors	EN 175301-803-A;M12x1 (S763);Cable output;Field housing
Benefits	higher accuracy, online configuration capability

PMP-S111



with membrane inside

Sensor type	Standard type, TFT technology
Typically application	medium & high pressures, neutral & aggressive media
Pressure range	from -1 ... 3 bar to -1 ... 2000 bar
Type of pressure	gauge, sealed reference
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 17-4 PH (1.4542)
Measuring cell type	with membrane inside
Process connection	G1/4", G1/2", M20x1,5, 1/2"-14 NPT, 1/4"-18 NPT
Electrical connectors	M12x1, DIN 175301-803-A, DT04-4P, PACKARD MP

PMP-C111



- with membrane inside

Sensor type	digital, TFT technology, online configuration capability
Typically application	medium & high pressures, neutral & aggressive media
Pressure range	from -1 ... 3 bar to -1 ... 2000 bar
Type of pressure	gauge, sealed reference
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,25 % FS @25°C
Wetted parts	stainless steel 17-4 PH (1.4542)
Measuring cell type	with membrane inside
Process connection	G1/4", G1/2", M20x1,5, 1/2"-14 NPT, 1/4"-18 NPT
Electrical connectors	EN 175301-803-A; M12x1 (S763); Cable output; Field housing

PMP-S222



- with membrane inside
- applicable for Hydrogen

Sensor type	OEM, compact design, P2P technology, for high quantities MOQ 500
Typically application	high pressures, neutral & aggressive media
Pressure range	from -1 ... 10 bar to -1 ... 900 bar
Type of pressure	gauge, sealed reference
Output signal	4-20 mA, ratio 10-90% Vcc
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	G1/4", 1/4"-18 NPT, 7/16-20 and 9/16-18 UNF SAE J514
Electrical connectors	M12x1, DT04-3P/4P, PACKARD MP, AMP Superseal
Benefits	compact design, resistant to harsh operating conditions

PMP-S221



- with membrane inside

Sensor type	OEM, compact design, P2P technology, for high quantities MOQ 500
Typically application	very high pressures, neutral & aggressive media
Pressure range	from 0 ... 10 bar to 0 ... 5000 bar
Type of pressure	gauge, sealed reference
Output signal	4-20 mA, ratio 10-90% Vcc
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	Stainless steel 17-4 PH (1.4542)
Measuring cell type	with membrane inside
Process connection	G1/4", 1/4"-18 NPT, 7/16-20 and 9/16-18 UNF SAE J514
Electrical connectors	M12x1, DT04-3P/4P, PACKARD MP, AMP Superseal
Benefits	compact, rugged design engineered for demanding industrial environments

SENSORS FOR LOW AND VERY LOW PRESSURE

APPLICATION



- POWER GENERATION
- CHEMICAL INDUSTRY
- HVAC (HEATING, VENTILATION AND AIR CONDITIONING)
- DRINKING WATER SYSTEMS

PMP-S131



- with membrane inside

Sensor type	standard type, PMI technology
Typically application	low pressures, neutral and aggressive media
Pressure range	from 0 ... 60 mbar to -1 ... 10 bar
Type of pressure	gauge, sealed reference, absolute
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	G1/4", G1/2", M20x1,5, 1/2"-14 NPT, 1/4"-18 NPT
Electrical connectors	M12x1, DIN803-A, DT04-4P, PACKARD MP, etc.

PMP-S132



- with flush membrane

Sensor type	standard type, PMI technology
Typically application	low pressures, neutral and aggressive media
Pressure range	from 0 ... 60 mbar to -1 ... 10 bar
Type of pressure	gauge, sealed reference, absolute
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with flush membrane
Process connection	9/16-18UNF 6M; 1/2"-14 NPT; 1/4"-18 NPT; G1/4"B Mano EN 837; G1/2"B Mano EN 837; G1/4"A Form E; 7/16 - 20UNF; G1/2" Form E flush membrane
Electrical connectors	M12x1, DIN803-A, DT04-4P, PACKARD MP, etc.

PMP-S142



- silicon membrane

Sensor type	standard type, PAM technology
Typically application	low pressures, gases, non-aggressive liquids
Pressure range	from 0 ... 60 mbar to -1 ... 10 bar
Type of pressure	gauge, sealed reference, absolute
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 303 housing, Al-carrier, Si-membrane, NBR-O-ring, glue (hard)
Measuring cell type	Silicon cell with different housing
Process connection	G1/4", G1/2", M20x1,5, 1/2"-14 NPT, 1/4"-18 NPT, etc.
Electrical connectors	M12x1, DIN 175301-803-A, DT04-4P, PACKARD MP, etc.

PMP-C131



- with membrane inside

Sensor type	digital, PMI technology, online configuration capability
Typically application	low pressures, neutral and aggressive media
Pressure range	from 0 ... 20 mbar to -1 ... 10 bar
Type of pressure	gauge, sealed reference, absolute
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,25 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	G1/4", G1/2", M20x1,5, 1/2"-14 NPT, 1/4"-18 NPT, etc.
Electrical connectors	EN 175301-803-A; M12x1 (S763); Cable output;Field housing

PMP-C132



- with flush membrane

Sensor type	digital, PMI technology, online configuration capability
Typically application	low pressures, neutral and aggressive media
Pressure range	from 0 ... 20 mbar to -1 ... 10 bar
Type of pressure	gauge, sealed reference, absolute
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,25 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with flush membrane
Process connection	G1/4", G1/2", M20x1,5, 1/2"-14 NPT, 1/4"-18 NPT, etc.
Electrical connectors	EN 175301-803-A; M12x1 (S763); Cable output;Field housing

SENSORS FOR HAZARDOUS AREAS (EXPLOSION PROTECTION)

APPLICATION



- OIL AND GAS
- SHIPBUILDING AND OFFSHORE
- CHEMICAL INDUSTRY
- TEST BENCHES
- INDUSTRIAL AUTOMATION
- AUTOMOTIVE INDUSTRY
- GAS COMPRESSION AND STORAGE

PMP-S111-Exi



- with membrane inside
- Certification: CSA, ATEX

Sensor type	Intrinsically safe pressure transducer
Typically application	High pressure, fast temperature changes, aggressive media
Pressure range	from -1 ... 3 bar to -1 ... 2000 bar
Type of pressure	gauge, sealed reference, Absolute
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 17-4 PH (1.4542)
Measuring cell type	with membrane inside
Process connection	G1/4", 1/4"-18 NPT, 7/16-20 and 9/16-18 UNF SAE J514
Electrical connectors	EN 175 301-803-A /-C; M12 x 1 (Binder S763); TURCK MiniFast 4 pins; cable outlet;

PMP-S111-ExnA



- with membrane inside
- Certification: CSA

Sensor type	Non-sparking pressure transmitter
Typically application	High pressure, fast temperature changes, aggressive media
Pressure range	from -1 ... 3 bar to -1 ... 2000 bar
Type of pressure	gauge, sealed reference, absolute
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 17-4 PH (1.4542)
Measuring cell type	with membrane inside
Process connection	G1/4", 1/4"-18 NPT, 7/16-20 and 9/16-18 UNF SAE J514
Electrical connectors	TURCK MiniFast 4 pins; Conduit fitting ½ MNPT with cable

PMP-S122-ExnA



- with membrane inside
- Certification: CSA

Sensor type	Non-sparking pressure transmitter, P2P technology
Typically application	medium and high pressures, neutral and aggressive media
Pressure range	from -1 ... 4 bar to -1 ... 1000 bar
Type of pressure	gauge, sealed reference
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	G1/4", 1/4"-18 NPT, 7/16-20 and 9/16-18 UNF SAE J514
Electrical connectors	TURCK MiniFast 4 pins; Conduit fitting ½ MNPT with cable

PMP-S122-Exi



- with membrane inside
- Certification: CSA, ATEX, EC79

Sensor type	Intrinsically safe pressure transducer, P2P technology
Typically application	medium and high pressures, neutral and aggressive media
Pressure range	from -1 ... 4 bar to -1 ... 1000 bar
Type of pressure	gauge, sealed reference
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	G1/4", 1/4"-18 NPT, 7/16-20 and 9/16-18 UNF SAE J514
Electrical connectors	EN 175 301-803-A /-C; M12 x 1 (Binder S763); TURCK MiniFast 4 pins; cable outlet;etc

PMP-S122.04-ExD



- with membrane inside
- Certification: CSA

Sensor type	Explosion Proof / Flameproof Enclosure Pressure Transducer
Typically application	medium and high pressures, neutral and aggressive media
Pressure range	from -1 ... 4 bar to -1 ... 1000 bar
Type of pressure	gauge, sealed reference
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	1/2" NPT male, 1/4" NPT male; Coming soon: 7/16"-20 UNF; 9/16"-18 UNF; 1/2"-14 NPT F; 9/16"-18 UNF F Autoclave port; G 1/4" DIN 3852-2; etc.
Electrical connectors	conduit fitting ½ NPT M with cable Standard length: 2/4/10/15 ft. or 0,6/1,2/3/4,5 m

PMP-S131-Exi



- with membrane inside
- Certification: CSA, ATEX

Sensor type	Intrinsically safe pressure transducer
Typically application	low pressure, neutral and aggressive media
Pressure range	from 0 ... 60 mbar to -1 ... 10 bar
Type of pressure	gauge, sealed reference, absolute
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	G1/4", 1/4"-18 NPT, 7/16-20 and 9/16-18 UNF SAE J514
Electrical connectors	EN 175 301-803-A /-C; M12 x 1 (Binder S763); TURCK MiniFast 4 pins; cable outlet; etc.

PMP-C111-Exi



- with membrane inside
- Certification: CSA, ATEX

Sensor type	Intrinsically safe pressure transducer
Typically application	Medium & high pressures, neutral & aggressive media
Pressure range	from -1 ... 3 bar to -1 ... 2000 bar
Type of pressure	gauge, sealed reference
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,25 % FS @25°C
Wetted parts	stainless steel 17-4PH (1.4542)
Measuring cell type	with membrane inside
Process connection	G1/4", 1/4"-18 NPT, 7/16-20 and 9/16-18 UNF SAE J514
Electrical connectors	EN 175 301-803-A /-C; M12 x 1 (Binder S763); TURCK MiniFast 4 pins; cable outlet; etc
Benefits	higher accuracy, online configuration capability

PMP-C122-Exi



- with membrane inside
- Certification: CSA, ATEX, EC79

Sensor type	Intrinsically safe pressure transducer
Typically application	medium & high pressures, neutral & aggressive media
Pressure range	from -1 ... 4 bar to -1 ... 1000 bar
Type of pressure	gauge, sealed reference
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,25 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	G1/4", 1/4"-18 NPT, 7/16-20 and 9/16-18 UNF SAE J514
Electrical connectors	EN 175 301-803-A /-C; M12 x 1 (Binder S763); TURCK MiniFast 4 pins; cable outlet; etc
Benefits	higher accuracy, online configuration capability

PMP-C122.04-ExD



- with membrane inside
- Certification:CSA

Sensor type	Explosion Proof / Flameproof Enclosure Pressure Transducer
Typically application	medium & high pressures, neutral & aggressive media
Pressure range	from -1 ... 4 bar to -1 ... 1000 bar
Type of pressure	gauge, sealed reference
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,25 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	1/2" NPT male, 1/4" NPT male; Coming soon: 7/16"-20 UNF; 9/16"-18 UNF; 1/2"-14 NPT F; 9/16"-18 UNF F Autoclave port; G 1/4" DIN 3852-2; others upon request
Electrical connectors	conduit fitting 1/2 NPT M with cable Standard length 2/4/10/15 ft. or 0,6/1,2/3/4,5 m
Benefits	higher accuracy, online configuration capability

PMP-C131-Exi



- with membrane inside
- Certification:CSA,ATEX

Sensor type	Intrinsically safe pressure transducer
Typically application	Low pressures, neutral and aggressive media
Pressure range	from 0 ... 60 mbar to -1 ... 10 bar
Type of pressure	gauge, sealed reference, absolute
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,25 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	G1/4", 1/4"-18 NPT, 7/16-20 and 9/16-18 UNF SAE J514
Electrical connectors	EN 175 301-803-A I-C; M12 x 1 (Binder S763); TURCK MiniFast 4 pins; cable outlet; etc
Benefits	higher accuracy, online configuration capability

SENSORS WITH DIGITAL OUTPUT

APPLICATION



- INDUSTRIAL AUTOMATION
- CHEMICAL INDUSTRY
- MOBILE HYDRAULICS
- CNC MACHINE TOOLS
- PROCESS LINES
- AUTOMOTIVE INDUSTRY
- POWER ENGINEERING
- HVAC

PMP-S222-SENT

SENT



- with membrane inside

Sensor type	OEM pressure transmitter with SENT Protocol
Typically application	high pressure and aggressive media
Pressure range	from 10 bar to 1000 bar
Type of pressure	gauge, sealed reference
Digital output	Sent (SAE J2716 JAN2010, Rev3)
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside or flush membrane
Process connection	G1/4", G1/2", M20x1,5, 1/2"-14 NPT, 1/4"-18 NPT, etc
Electrical connectors	M12x1 (S763-4) (plastic), Packard Metri-Pack, DEUTSCH DT 04-3P, DEUTSCH DT 04-4P, AMP Superseal
Benefits	high precision, easy integration

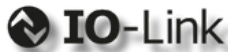
PMP-S100-I2C



- with membrane inside/
flush membrane

Sensor type	sensor with I ² C digital Interface
Typically application	low & high pressures, neutral & aggressive media
Pressure range	from 0 ... 60 mbar to -1 ... 2000 bar
Type of pressure	gauge, sealed reference, absolute
Digital output	I ² C Communication Protocol
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 316L (1.4404) or 17-4PH (1.4542)
Measuring cell type	with membrane inside or flush membrane
Process connection	G1/4", G1/2", M20x1,5, 1/2"-14 NPT, 1/4"-18 NPT, etc
Electrical connectors	EN 175301-803-A; M12x1 (S763);Deutsch DT04-4P; EN 175301-803-C; Cable output
Benefits	compact design for integrated systems and IoT-enabled devices

PMP-S/Sw100-IO-Link



- with membrane inside/
flush membrane

Sensor type	sensors/switch with IO-Link
Typically application	low & high pressures, neutral & aggressive media
Pressure range	from 0 ... 10 bar to 0 ... 5000 bar
Type of pressure	gauge, sealed reference, absolute
Digital output	IO-Link 1.1 (IEC 61131-9) + 2 x switching outputs NPN/PNP
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 17-4PH (1.4542)
Measuring cell type	with membrane inside or flush membrane
Process connection	G1/4", 1/4"-18 NPT, 7/16-20 and 9/16-18 UNF SAE J514
Electrical connectors	M12x1, DT04-3P/4P, Packard Metri-Pack, AMP Superseal
Benefits	transmitter + 2-point pressure switch, integrated diagnostics

PMP-S100-CAN



- with membrane inside/
flush membrane

Sensor type	sensor with CAN digital output
Typically application	low & high pressures, neutral & aggressive media
Pressure range	from 0 ... 60 mbar to -1 ... 2000 bar
Type of pressure	gauge, sealed reference, absolute
Digital output	CANopen 2.0A, CAN J1939
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 316L (1.4404) or 17-4PH (1.4542)
Measuring cell type	with membrane inside or flush membrane
Process connection	G1/4", G1/2", M20x1,5, 1/2"-14 NPT, 1/4"-18 NPT, etc
Electrical connectors	EN 175301-803-A; M12x1 (S763);Deutsch DT04-4P; EN 175301-803-C; Cable output
Benefits	improved error resistance

PMP-S100-PWM



- with membrane inside/
flush membrane

Sensor type	sensor with PWM digital output
Typically application	low & high pressures, neutral & aggressive media
Pressure range	from 0 ... 60 mbar to -1 ... 2000 bar
Type of pressure	gauge, sealed reference, absolute
Digital output	PWM @500 HZ; Duty cycle from 5% until 92%
Accuracy	≤ 0,5 % FS @25°C
Wetted parts	stainless steel 316L (1.4404) or 17-4PH (1.4542)
Measuring cell type	with membrane inside or flush membrane
Process connection	G1/4", G1/2", M20x1,5, 1/2"-14 NPT, 1/4"-18 NPT, etc
Electrical connectors	M12x1 (S763); EN 175301-803-A; Cable output;Packard Metri-Pack; EN 175301-803-C
Benefits	high media resistance, no internal seals

PMP-C200-MOD



- with membrane inside

Sensor type	with MODBUS digital output
Typically application	low & high pressures, neutral & aggressive media
Pressure range	from 0 ... 20 mbar to -1 ... 2000 bar
Type of pressure	gauge, sealed reference, absolute
Digital output	RS485 MODBUS RTU
Accuracy	≤ 0,2 % FS @25°C
Wetted parts	stainless steel 316L (1.4404) or 17-4PH (1.4542)
Measuring cell type	with membrane inside
Process connection	G1/4", G1/2", M20x1,5, 1/2"-14 NPT, 1/4"-18 NPT etc
Electrical connectors	M12x1(S763);Cable output;Deutsch DT04-4P
Benefits	high accuracy, capability for long-distance signal transmission

DIFFERENTIAL PRESSURE SENSORS

APPLICATION



- FILTRATION SYSTEMS
- PUMPING SYSTEMS
- WATER AND WASTEWATER
- FOOD INDUSTRY
- INDUSTRIAL AUTOMATION
- AUTOMOTIVE INDUSTRY
- HVAC

PMP-D111



- with membrane inside

Sensor type	digital, TFT technology
Typically application	high pressure, neutral & aggressive media
Pressure range	from -1 ... 3 bar to -1 ... 1000 bar
Pressure ratio	Δp to line pressure = max. 1:10
Output signal	4–20 mA, 0–10 V, other voltage outputs
Accuracy	$\leq 0,5 \%$ FS @25°C
Wetted parts	stainless steel 17-4PH (1.4542)
Measuring cell type	with membrane inside
Process connection	G1/4", G1/2" 1/4"-18 NPT, 9/16-18 UNF SAE J514, etc
Electrical connectors	EN 175301-803-A;EN 175301-803-C;M12x1 (S763); Cable output
Benefits	configuration on-line

PMP-D131



- with membrane inside

Sensor type	digital, PMI technology
Typically application	low&medium pressure applications, neutral& aggressive media
Pressure range	from 0 ... 70 mbar to -1 ... 100 bar
Pressure ratio	Δp to line pressure = max. 1:10
Output signal	4–20 mA, 0–10 V, other voltage outputs
Accuracy	$\leq 0,5 \%$ FS @25°C
Wetted parts	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	G1/4", G1/2" 1/4"-18 NPT, 9/16-18 UNF SAE J514, etc
Electrical connectors	EN 175301-803-A;EN 175301-803-C;M12x1 (S763); Cable output
Benefits	configuration on-line

PMP-D343.01



- silicon diaphragm
- LCD display

Sensor type	digital, PAM technology
Typically application	low pressure, neutral gases and liquids
Pressure range	from -1 ... 1 mbar to 0 ... 1 bar
Pressure ratio	Δp to line pressure = max. 1:10
Output signal	4-20 mA, 0-10 V, other voltage outputs
Accuracy	$\leq 1,5 \%$ FS @25°C
Wetted parts	silicon diaphragm
Measuring cell type	with membrane inside
Process connection	pressure nipple with 5,6 mm diameter
Electrical connectors	PCB Mount Terminal Block,3-pole
Benefits	measuring range scaling option: $\times 0.5$ or $\times 2$ (set via jumper)

PMP-D343.02



- silicon diaphragm

Sensor type	digital, PAM technology
Typically application	low pressure, neutral gases and liquids
Pressure range	from -1 ... 1 mbar to 0 ... 1 bar
Pressure ratio	Δp to line pressure = max. 1:10
Output signal	4-20 mA, 0-10 V, other voltage outputs
Accuracy	$\leq 1,5 \%$ FS @25°C
Wetted parts	silicon diaphragm
Measuring cell type	with membrane inside
Process connection	pressure nipple with 5,6 mm diameter
Electrical connectors	PCB Mount Terminal Block,3-pole
Benefits	measuring range scaling option: $\times 0.5$ or $\times 2$ (set via jumper)

PMP-D211.01



- with membrane inside
- LCD display

Sensor type	digital, TFT technology
Typically application	medium and high pressure, gases and liquids
Pressure range	from -1 ... 1 bar to 0 ... 1000 bar
Pressure ratio	Δp to line pressure = max. 1:10
Output signal	4-20 mA, 0-10 V, other voltage outputs
Accuracy	$\leq 0,5 \%$ FS @25°C
Wetted parts	stainless steel 17-4 PH
Measuring cell type	with membrane inside
Process connection	G1/4", 1/4"-18 NPT
Electrical connectors	PCB Mount Terminal Block,3-pole
Benefits	range extension option: $\times 2$ (set via jumper)

PMP-D211.02



- with membrane inside

Sensor type	digital, TFT technology
Typically application	medium and high pressure, gases and liquids
Pressure range	from -1 ... 1 bar to 0 ... 1000 bar
Pressure ratio	Δp to line pressure = max. 1:10
Output signal	4–20 mA, 0–10 V, other voltage outputs
Accuracy	$\leq 0,5\%$ FS @25°C
Wetted parts	stainless steel 17-4 PH
Measuring cell type	with membrane inside
Process connection	G1/4", 1/4"-18 NPT
Electrical connectors	PCB Mount Terminal Block, 3-pole
Benefits	range extension option: $\times 2$ (set via jumper)

PRESSURE SWITCHES

APPLICATION



- POWER ENGINEERING
- HYDRAULIC POWER SYSTEMS
- MOBILE HYDRAULICS
- INDUSTRIAL AUTOMATION
- PUMP SYSTEMS
- WATER AND WASTEWATER
- FOOD INDUSTRY
- HVAC

PMP-SW100



- with membrane inside

Sensor type	standard/ TFT, PMI or P2P technologies
Typically application	low and high pressure, gases and liquids
Pressure range	from 0 ... 60 mbar to 0 ... 2000 bar
Type of pressure	gauge, sealed reference, absolute
Output	2 x Switching channels with PNP high side
Max. Switching Current	500 mA / 24V DC
Accuracy	$\leq 0,5\%$ FS@25°C / $p > 1$ bar, $\leq 1\%$ FS @25°C/ $p \leq 1$ bar
Wetted parts	stainless steel 316L (1.4404) or 17-4PH (1.4542)
Measuring cell type	with membrane inside
Process connection	G1/2", G1/4", 1/2" & 1/4" NPT, 7/16-20 & 9/16-18 UNF
Electrical connectors	EN 175301-803-A; M12x1 (S763);Deutsch DT04-4P; EN 175301-803-C; Cable output

PMP-SW200



- with membrane inside

Sensor type	digital/ TFT, PMI or P2P technologies
Typically application	low and high pressure, gases and liquids
Pressure range	from 0 ... 20 mbar to -1 ... 2000 bar
Type of pressure	gauge, sealed reference, absolute
Output	2x Switching channels with different Options: • Option 1: 2 X PNP HIGH SIDE • Option 2: 2 X NPN LOW SIDE • Option 3: 1x PNP HIGH SIDE AND 1 x NPN LOW SIDE
Max. Switching Current	50 mA / 24V DC
Accuracy	$\leq 0,25\%$ FS@25°C/ $p > 1$ bar, $\leq 0,5\%$ FS@25°C/ $p \leq 1$ bar
Wetted parts	stainless steel 316L (1.4404) or 17-4PH (1.4542)
Measuring cell type	with membrane inside
Process connection	G1/2", G1/4", 1/2" & 1/4" NPT, 7/16-20 & 9/16-18 UNF
Electrical connectors	EN 175301-803-A; M12x1 (S763);Deutsch DT04-4P; EN 175301-803-C; Cable output
Benefits	high accuracy and flexible switching output configurations

PMP-SW400



- with membrane inside

Sensor type	digital/ TFT, PMI or P2P technologies
Typically application	medium and high pressure, gases and liquids
Pressure range	from -1 ... 3 bar to -1 ... 2000 bar
Type of pressure	gauge
Outputs	OUTPUT 1 : analog 4..20 mA 3 Wires or 0 .. 10 V OUTPUT 2 : switching outputs: 2 Relay with 1 x Form C
Pressure switch function	1 or 2 relay outputs (NC/NO)
Configuration	Setpoint and hysteresis adjustable via integrated LCD display and push buttons (under removable cover)
Max. switching current	1A / 30V DC, 0,5A / 30V AC
Accuracy	$\leq 0,25\%$ FS@25°C / $p > 1$ bar, $\leq 0,5\%$ FS@25°C/ $p \leq 1$ bar
Wetted parts	stainless steel 316L (1.4404) or 17-4PH (1.4542)
Measuring cell type	with membrane inside
Process connection	G1/2", G1/4", 1/2" & 1/4" NPT, 7/16-20 & 9/16-18 UNF
Electrical connectors	M12x1, DIN803-A, DT04-3P/4P, cable
Benefits	Integrated pressure transmitter with dual setpoint pressure switch and LCD display

LEVEL PROBES:

- STANDARD
- DIGITAL/COMPUTERISED
- FOR HAZARDOUS AREAS (EX)
- DIGITAL WATER LEVEL RECORDERS



OVERVIEW OF AVAILABLE FUNCTIONS AND PARAMETERS

Technologies	P2P, TFT, PAM, PMI (see descriptions on previous pages)
Type of measured pressure	Hydrostatic pressure – pressure generated by the liquid column relative to atmospheric pressure
Level ranges	from -0 ... 1 m H ₂ O to 0 ... 100 m H ₂ O
Accuracy	≤ 0.25% FS @ 25°C (digital versions) or ≤ 0.5% FS @ 25°C (standard versions)
Output signal	• typically: 4–20 mA • other options: 0–10 V, 0–5 V, 1–5 V, ratiometric 10–90% Vcc - others on request
Wetted parts	• probe and diaphragm: stainless steel 316L (1.4404) or 17-4PH (1.4542) • cable: polyurethane (PUR)
Measuring cell type	• with internal diaphragm – recessed diaphragm, mechanically protected; probe end fitted with a weighted tip (nose) made of stainless steel or plastic • with flush diaphragm and removable protective plastic cap – suitable for viscous or contaminated media
Medium temperature	-40 ... +85°C
Cable	• vented polyurethane (PUR) cable, optionally FEP / PTFE • for vertical installations above 30 m, additionally reinforced with stainless steel support cable
Special versions	explosion protection approvals: ATEX, CSA
Additional features	digital probes with online range configuration and higher accuracy



LEVEL

STANDARD LEVEL PROBES

APPLICATION



- TANK LEVEL MONITORING IN INDUSTRIAL FACILITIES
- PROCESS CONTROL IN MANUFACTURING PLANTS
- WATER STORAGE AND MANAGEMENT SYSTEMS
- CHEMICAL STORAGE MONITORING (COMPATIBLE LIQUIDS)
- HYDROSTATIC LEVEL MEASUREMENT IN HVAC SYSTEMS
- INDUSTRIAL AUTOMATION SYSTEMS (GENERAL)
- OEM EQUIPMENT LEVEL FEEDBACK
- MUNICIPAL WATER INFRASTRUCTURE MONITORING

PML-S111



Type of probe	standard, TFT technology
Typical application	Clean liquids, open / vented tanks
Level ranges	from 0 ... 10 m H ₂ O to 0 ... 100 m H ₂ O
Type of pressure	gauge
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,5% FS @25°C
Membrane	stainless steel 17-4PH (1.4542)
Measuring cell type	with membrane inside
Process connection	• plastic protector cap; • plastic/steel sinker
Electrical connection	• 4-core vented PUR cable; optional FEP / PTFE • Stainless steel support cable for vertical lengths > 30 m

PML-S131



Type of probe	standard, PMI technology
Typical application	Various liquids, open / vented tanks
Level ranges	from 0 ... 1 m H ₂ O to 0 ... 30 m H ₂ O
Type of pressure	gauge
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,5% FS @25°C
Membrane	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside or flush membrane
Process connection	• plastic protector cap; • plastic/steel sinker
Electrical connection	• 4-core vented PUR cable; optional FEP / PTFE • Stainless steel support cable for vertical lengths > 30 m

DIGITAL/COMPUTERISED LEVEL PROBES

APPLICATION



- ADVANCED INDUSTRIAL TANK LEVEL MONITORING
- PROCESS AUTOMATION WITH ONLINE CONFIGURATION
- WATER TREATMENT AND DISTRIBUTION SYSTEMS
- CHEMICAL AND FLUID HANDLING PLANTS
- HVAC & BUILDING SERVICES AUTOMATION
- OEM EQUIPMENT
- MARINE & OFFSHORE PLATFORMS
- RENEWABLE ENERGY SYSTEMS (E.G., HYDRO, THERMAL STORAGE)

PML-C111



Type of probe	digital, TFT technology
Typical application	clean liquids, open / vented tanks
Level ranges	from 0 ... 10 m H ₂ O to 0 ... 100 m H ₂ O
Type of pressure	gauge
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,25% FS @25°C
Membrane	stainless steel 17-4PH (1.4542)
Measuring cell type	with membrane inside
Process connection	• plastic protector cap; • plastic/steel sinker
Electrical connection	• 4-core vented PUR cable; optional FEP / PTFE • Stainless steel support cable for vertical lengths > 30 m
Benefits	higher accuracy, online configuration

PML-C131



Type of probe	digital, PMI technology
Typical application	clean liquids, open / vented tanks
Level ranges	from 0 ... 1 m H ₂ O to 0 ... 30 m H ₂ O
Type of pressure	gauge
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	≤ 0,25% FS @25°C
Membrane	stainless steel 316L (1.4404)
Measuring cell type	with membrane inside
Process connection	• plastic protector cap; • plastic/steel sinker
Electrical connection	• 4-core vented PUR cable; optional FEP / PTFE • Stainless steel support cable for vertical lengths > 30 m
Benefits	higher accuracy, online configuration

LEVEL PROBES FOR HAZARDOUS AREAS (EX)

APPLICATION



- OIL & GAS STORAGE TANKS IN HAZARDOUS ZONES
- CHEMICAL STORAGE & PROCESSING PLANTS
- PETROCHEMICAL REFINERIES
- FUEL DISPENSING & TRANSFER STATIONS
- INDUSTRIAL PROCESS CONTROL IN ZONE-CLASSIFIED AREAS
- OFFSHORE PLATFORMS & MARINE FUEL TANKS
- HAZARDOUS WASTE STORAGE FACILITIES
- ENERGY & POWER GENERATION SYSTEMS IN CLASSIFIED ZONES

PML-S111-Exi PML-C111-Exi



Type of probes	S - standard / C - digital, TFT technology
Typical application	various liquids, open / vented tanks
Level ranges	from 0 ... 10 m H ₂ O to 0 ... 100 m H ₂ O
Type of pressure	gauge
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	S111: ≤ 0,5% FS @25°C, C111: ≤ 0,25% FS @25°C
Membrane	stainless steel 316L (1.4404) or 17-4PH (1.4542)
Measuring cell type	with membrane inside
Process connection	• plastic protector cap; • plastic/steel sinker
Electrical connection	• 4-core vented PUR cable; optional FEP / PTFE • Stainless steel support cable for vertical lengths > 30 m
Certification	CSA, ATEX II 1G Ex ia IIB T4 Ga or II 2G Ex ia IIC T4 Gb

PML-S131-Exi PML-C131-Exi



Type of probes	S - standard / C - digital, PMI technology
Typical application	various liquids, open / vented tanks
Level ranges	from 0 ... 1 m H ₂ O to 0 ... 30 m H ₂ O
Type of pressure	gauge
Output signal	4-20 mA, 0-10V, ratio 10-90% Vcc
Accuracy	S131: ≤ 0,5% FS @25°C, C131: ≤ 0,25% FS @25°C
Membrane	stainless steel 316L (1.4404) or 17-4PH (1.4542)
Measuring cell type	with membrane inside
Process connection	• plastic protector cap; • plastic/steel sinker
Electrical connection	• 4-core vented PUR cable; optional FEP / PTFE • Stainless steel support cable for vertical lengths > 30 m
Certification	CSA, ATEX II 1G Ex ia IIB T4 Ga or II 2G Ex ia IIC T4 Gb

DIGITAL WATER LEVEL RECORDER

APPLICATION



- GROUNDWATER MONITORING AND HYDROGEOLOGY
- RIVER AND SURFACE WATER LEVEL MEASUREMENT
- FLOOD WARNING AND FLOODPLAIN MANAGEMENT
- RESERVOIR AND DAM LEVEL CONTROL
- ENVIRONMENTAL & WATER QUALITY MONITORING
- INDUSTRIAL WATER SUPPLY & PROCESS CONTROL
- IRRIGATION & AGRICULTURAL WATER MANAGEMENT
- HYDROPOWER & RENEWABLE ENERGY SYSTEMS

PML-DWLR	
	Type of probes
	Digital Water Level Recorder
	Typical application
	Long-term groundwater level monitoring
	Level ranges
	from 0 ...1 m H2O to 0...30 m H2O
	Type of pressure
	gauge, absolute
	Output signal
	digital output via RS485
	Accuracy
	≤ 0.2 % FS after limit-point calibration
	Membrane
	stainless steel 316L (1.4404)
	Process connection
	• plastic protector cap; • plastic/steel sinker
	Electrical connection
	S709-4 connector
	Connection Cable
	RS485 to USB Adapter cable
	Benefits
	DWL recorder for high and very high accuracy environmental measuring solutions. Can be connected to a PC or tablet to read the stored values and make analysis.



TEMPERATURE SENSORS:

- STANDARD WITH SIGNAL TRANSMITTER
- COMPACT (WITHOUT TRANSMITTER)
- FOR HAZARDOUS AREAS

OVERVIEW OF AVAILABLE FUNCTIONS AND PARAMETERS

Measuring element:	Pt100, class B; options: Pt1000, others on request
Measuring ranges:	from -40 to 200 °C
Output signal:	Current output: 4–20 mA (2-wire) Voltage output: 0–5 V / 1–5 V; 0–6 V / 1–6 V; 0–10 V / 1–10 V Ratiometric output: 0.5–4.5 V Resistance output: PT100, Class B (PMT-C111 series)
Sensor length:	5...500 mm (standard versions); 5...30 mm (Hydrogen versions)
Housing material:	stainless steel
Max. static pressure:	160 bar
Process connection:	G1/2" (on request), G1/4", 1/4"-18 NPT, 9/16-18 UNF SAE J514
Supply voltage:	10...32 V (4–20 mA); 8...32 V (0–5 V); 14...32 V (0–10 V); 5 V ±5% (ratiometric); 12...27 V (Exi CSA); 20...27 V (Exi ATEX)
Electrical connection:	EN 175 301-803-A (3-pin, IP65–IP67); EN 175 301-803-C (3-pin, IP65); M12x1 (Binder S763, 4-pin, IP67); Deutsch DT04-3P (3-pin, IP67); Packard Metri-Pack (3-pin, IP67); MIL-C-26482 (Exi versions); Cable outlet (3/4-pin, IP67–IP68); 2-pin connector (-pin interface available upon request, implementation depends on customer specification)
Duct / channel versions:	Duct insertion probes with extended probe lengths and customer-specific mounting options are available on request.
OEM & cable assemblies:	Pre-assembled sensor solutions with customized cable lengths, connectors and pinouts for OEM and system integration applications.
Protection class:	IP65–IP68 (depending on connector)
Certifications:	ATEX, IECEx, CSA (Exi versions)/ applicable for Hydrogen
Additional functions:	customized outputs, connectors, cable assemblies, special materials and certifications (on request)

STANDARD WITH SIGNAL TRANSMITTER

APPLICATION



- OIL & GAS INDUSTRY
- POWER & ENERGY GENERATION
- CHEMICAL & PROCESS INDUSTRY
- WATER & ENVIRONMENTAL TECHNOLOGY
- INDUSTRIAL AUTOMATION & PROCESS CONTROL
- MACHINERY & OEM EQUIPMENT MANUFACTURING
- GENERAL INDUSTRIAL MANUFACTURING
- HVAC

PMT-S111
PMT-S111-H



EC79

Sensor type:	PT100 temperature transmitter, Class B Hydrogen-compatible version (PMT-S111-H)
Typical applications:	Neutral and aggressive media. Industrial process control, Hydrogen applications (fuel cells, gas technology)
Measurement range:	-40 ... +200 °C (media) -40 ... +125 °C (ambient) Hydrogen version: same temperature range
Output signal:	4–20 mA (2-wire); 0–5 V / 1–5 V; 0–6 V / 1–6 V; 0–10 V / 1–10 V; 0.5–4.5 V (ratiometric)
Sensor length:	5 ... 500 mm (standard versions) 5 ... 30 mm (Hydrogen versions)
Measurement error:	≤ 1% FS at 25°C, ≤ 2% FS over the full measuring range
Sensor material:	Stainless steel Wetted parts: 316L (Hydrogen-compatible)
Max. static pressure:	160 bar
Process connection:	G1/4 Form E; 1/4"-18 NPT; 7/16"-20 UNF; 9/16"-18 UNF; (custom threads on request)
Electrical connection:	EN 175 301-803-A (3-pin, IP65–IP67); EN 175 301-803-C (3-pin, IP65); M12x1 Binder S763 (4-pin, IP67); Deutsch DT04-3P (3-pin, IP67); Packard Metri-Pack (3-pin, IP67); Cable outlet (3/4-pin, IP67–IP68); 2-pin connector (custom, on request)

COMPACT TEMPERATURE SENSORS

APPLICATION



- GENERAL INDUSTRIAL TEMPERATURE MEASUREMENT
- MACHINERY OEM & MANUFACTURING INTEGRATION
- WATER & ENVIRONMENTAL TECHNOLOGY
- POWER GENERATION & THERMAL ENERGY SYSTEMS
- CHEMICAL AND PETROCHEMICAL INDUSTRY
- INDUSTRIAL PROCESS CONTROL & AUTOMATION
- OIL & GAS PROCESSING AND FLOW MONITORING
- HYDROGEN TECHNOLOGY & FUEL CELLS

PMT-C111 PMT-C111-H	
	Sensor type:
	PT100 temperature sensor, Class B Hydrogen-compatible version available (PMT-C111-H)
	Typical applications:
	Wide range of liquids and gases Hydrogen applications (fuel cells, gas technology)
	Measurement range:
	-50 ... +150 °C (PMT-C111) -40 ... +200 °C (PMT-C111-H) Ambient: -40 ... +125 °C
	Output signal:
	• Resistance output: PT100, Class B (2-wire).
	Sensor length:
	10 ... 500 mm (standard versions) 5 ... 30 mm (Hydrogen versions)
Measurement error: ≤ 1% FS at 25°C, ≤ 2% FS over the full measuring range	
Sensor material: Stainless steel Wetted parts: 316L (Hydrogen-compatible)	
Max. static pressure: 160 bar	
Process connection: G1/4 Form E; 1/4"-18 NPT; 7/16"-20 UNF; 9/16"-18 UNF; (custom threads on request)	
Electrical connection: EN 175 301-803-A (3-pin, IP65-IP67) EN 175 301-803-C (3-pin, IP65) M12x1 Binder S763 (4-pin, IP67) Deutsch DT04-3P (3-pin, IP67) Packard Metri-Pack (3-pin, IP67) Cable outlet (3-pin, IP67)	

TEMPERATURE SENSORS FOR HAZARD AREAS

APPLICATION



- OIL & GAS PROCESSING AND EXTRACTION
- POWER GENERATION & UTILITY SYSTEMS
- CHEMICAL & PETROCHEMICAL INDUSTRY
- HAZARDOUS STORAGE & HANDLING FACILITIES
- INDUSTRIAL PROCESS CONTROL & AUTOMATION
- REMOTE MONITORING IN HAZARDOUS ZONES
- FLUID AND GAS DISTRIBUTION NETWORKS
- HARSH ENVIRONMENT MACHINERY AND EQUIPMENT

PMT-S111-Exi
PMT-S111-Exi-H



Sensor type:	PT100 temperature transmitter, Class B Intrinsically safe version (Exi) Hydrogen-compatible version available (PMT-S111-Exi-H)
Typical applications:	Hazardous areas (ATEX / IECEx / CSA) Wide range of liquids and gases Hydrogen applications (fuel cells, gas technology)
Measurement range:	-40 ... +200 °C (media) -40 ... +85 °C (ambient, Exi limitation) Hydrogen version: same temperature range
Output signal:	4-20 mA (2-wire); 0-5 V / 1-5 V; 0-6 V / 1-6 V; 0-10 V / 1-10 V; 0.5-4.5 V (ratiometric)
Sensor length:	5 ... 500 mm (standard versions) 5 ... 30 mm (Hydrogen versions)
Measurement error:	≤ 1% FS at 25°C, ≤ 2% FS over the full measuring range
Sensor material:	Stainless steel Wetted parts: 316L (Hydrogen-compatible)
Max. static pressure:	160 bar
Process connection:	G1/4 Form E; 1/4"-18 NPT; 7/16"-20 UNF; 9/16"-18 UNF; (custom threads on request)
Electrical connection:	EN 175 301-803-A (3-pin, IP65-IP67); M12x1 Binder S763 (4-pin, IP67); MIL-C-26482 (3-pin, IP67, Exi versions); Cable outlet (3-pin, IP68); 2-pin connector (custom, on request)
Certification:	CSA, ATEX II 2G Ex ia IIC T3 Gb -40°C ≤ Ta ≤ 85°C



PRIGNITZ Mikrosystemtechnik combines strong engineering expertise, extensive development and manufacturing experience, and a broad range of measurement technologies to deliver application-specific sensor solutions.

On the following pages, you will find a structured overview of the product families, ordering logic and configuration schemes used in this catalogue. The sequence is designed to guide you step by step - from understanding the product family structure and designation system to selecting standard versions and building a complete ordering code.

• PRODUCT SERIES STRUCTURE

This is a description of the product series structure of PRIGNITZ Mikrosystemtechnik across pressure (PMP), temperature (PMT), and level (PML), where the product code defines the measurement type and the series index specifies the electronics concept and functional level. The text clarifies the differences between standard (S-Series) and configurable/digital (C-Series) solutions and demonstrates the systematic logic behind structuring the portfolio according to accuracy, application scope, and technology platform.

• KEY APPLICATION AREAS

This short guide provides an overview of typical applications for pressure sensors, temperature sensors and hydrostatic level probes across different industries.

• PRODUCT ORDERING CODES

To simplify the selection process, in the following section we present product codes for selected configurations — including those commonly used in general industrial applications, as well as additional examples illustrating various design and specification options.

• CONFIGURATION SCHEMES

Dedicated configuration schemes for each product line allow the complete ordering code to be generated by selecting the required parameters for your specific application.

Please note that the configuration scheme presented is for reference purposes only. Not all theoretically possible combinations may be available for ordering at any given time; at the same time, additional options or versions not shown in this scheme may be available. Prior to incorporating any selected configuration into a project or placing an order, it is strongly recommended to verify with the manufacturer or authorized distributor the actual availability and current technical specifications of the requested configuration.

Our product portfolio is not limited to the models shown in this catalogue. Customized versions and special solutions are available upon request. If you do not find the required configuration in the datasheet, please contact our engineering team — we will be pleased to support you in selecting the most suitable technical solution for your application.

order@prignitz-mst.de
+49 (0) 38 77 5 67 46-0
or visit: prignitz-mst.de

PRODUCT SERIES STRUCTURE

PRIGNITZ Mikrosystemtechnik structures its product portfolio into clearly defined sensor series. The product code (PMP / PML / PMT) identifies the measurement type, while the letter within the code (S, C) defines the electronics concept and functional scope.



PRESSURE TRANSMITTERS (PMP)

Pressure products cover applications from very low pressure to high-pressure ranges up to 5000 bar, including hydrogen and hazardous area installations.

Depending on the application, different measurement technologies are used (P2P, TFT, PAM, PMI), allowing optimized solutions for media compatibility, overload resistance, accuracy and long-term stability.

Family differentiation:

- **S-Series – Standard Pressure Transmitters**

Fixed electronics configuration, industrial standard outputs (e.g. 4–20 mA, 0–10 V), robust design for general industrial applications.

- **C-Series – Computerised / Configurable Pressure Transmitters**

Digital signal processing, higher accuracy, programmable parameters (e.g. scaling, zero adjustment), optional online configuration capability.



TEMPERATURE SENSORS (PMT)

Temperature products are based on platinum resistance sensors (Pt100 / Pt1000) and are divided into two product families depending on signal conditioning and output type:

- **S-Series – Standard Temperature Transmitters**

Integrated temperature transmitters with signal conditioning and analog output (e.g. 4–20 mA, 0/1–10 V).

Designed for direct connection to control systems and process controllers.

- **C-Series – Compact Temperature Sensors**

Compact Pt100 / Pt1000 sensors with resistance output only (no integrated signal transmitter).

Intended for direct integration into system electronics or external transmitter modules.

Both families cover a wide temperature range and are available in multiple process connection types and housing configurations.



LEVEL PROBES (PML)

Hydrostatic level probes are available for clean and contaminated media, with internal or flush diaphragm designs and extended cable solutions for deep installations.

Family differentiation:

- **S-Series – Standard Level Probes**

Analog output versions for stable and cost-efficient level measurement in industrial and environmental applications.

- **C-Series – Computerised/Digital Level Probes**

Enhanced accuracy, configurable measurement ranges and extended functionality for advanced monitoring applications.

KEY APPLICATION AREAS

This short guide provides an overview of typical applications for pressure sensors, temperature sensors and hydrostatic level probes across different industries. It outlines the main technical considerations and highlights suitable product series without replacing detailed specification and configuration information in the following sections.



INDUSTRIAL AUTOMATION

Application Requirements:

- stationary installations
- PLC-controlled systems
- standard process connections
- analog 4–20 mA signal integration
- pressure ranges from vacuum to approx. 1000 bar

General-purpose industrial pressure measurement

Recommended: **PMP-S122 (P2P Technology, 316L)**

Suitable for machine building, plant automation and general process monitoring.

Why:

- Wide pressure range up to 1000 bar
- 316L wetted parts suitable for neutral and moderately aggressive media
- Analog outputs (4–20 mA, 0–10 V) for direct PLC integration
- Pre-configured versions for fast deployment

Plant-wide digital communication

Recommended: **PMP-C200-MOD (RS485 Modbus RTU)**

Used in larger industrial installations where analog signal transmission is not preferred.

Why:

- Multi-drop digital communication via RS485
- Suitable for long cable runs and centralized control systems
- ≤0.2% FS accuracy class
- Pressure range from very low pressure up to 2000 bar

Higher accuracy and configurable systems

Recommended: **PMP-C122**

Selected when calibration, parameter adjustment or higher repeatability is required.

Why:

- ≤0.25% FS accuracy for tighter process control
- Digital signal processing with online configuration capability
- Same mechanical platform as S122 but enhanced electronics

Embedded integration (system-level electronics)

Recommended: **PMP-S100-I²C**

Not intended for field wiring, but for integration into electronic control boards.

Why:

- I²C digital interface for PCB-level integration
- Compact design for OEM modules and smart devices
- Pressure range 0.60 mbar...2000 bar



OIL & GAS / OFFSHORE / CHEMICAL INDUSTRY

Application Requirements:

- high static pressures and pressure peaks
- aggressive or corrosive media
- hazardous area certification (ATEX / CSA)
- temperature fluctuations
- marine/offshore environmental exposure

High pressure applications (up to 2000 bar)

Recommended: **PMP-S111** (TFT Technology, 17-4PH). Or **PMP-S121** and **PMP-S221** / (P2P Technology, 17-4PH).
Selected when mechanical robustness and pressure resistance are primary requirements.

Why:

- 17-4PH wetted parts provide high mechanical strength
- 17-4PH material
- Pressure range up to 2000 bar
- Suitable for rapid temperature changes and harsh environments
- Listed for shipbuilding/offshore and chemical industry

Hazardous areas (Zone 0/1/2)

Recommended :

- **PMP-S111-Exi**
- **PMP-S122-Exi**
- **PMP-S122-ExD**
- **PMP-S122-ExnA**

Selection depends on required protection concept and installation environment.

Why:

- Available with intrinsic safety (Exi), flameproof enclosure (ExD), and non-sparking (ExnA) options
- Maintain core mechanical platform while meeting regulatory requirements



HYDROGEN INSTALLATIONS

Hydrogen applications require materials resistant to hydrogen embrittlement, minimized internal sealing interfaces and certified solutions (e.g. EC79) for pressurized systems. Selection must consider pressure range, mechanical strength, and hazardous area requirements.

Medium & High Pressure (up to 1000 bar)

Recommended: **PMP-S122-H** / **PMP-C122-H/PMP-S222-H** (P2P Technology, 316L)

Why:

- Monolithic P2P Technology measuring body without internal welding reduces potential diffusion paths
- 316L wetted parts compatible with hydrogen environments in medium pressure systems
- Pressure range up to 1000 bar covers storage and distribution
- Media temperature -40...+125°C
- Analog outputs (4–20 mA / 0–10 V) for industrial control systems

When to choose C122 instead of S122:

- Higher precision requirement ($\leq 0.25\%$ FS)
- Test benches or calibration systems
- Parameterization and digital configuration required

PMP-S222-H is compact OEM-oriented version appropriate for series production and hydrogen systems.

Medium/high pressure with corrosive media (up to 1000 bar)

Recommended: **PMP-S122** / **PMP-C122** (P2P Technology, 316L)

Selected when media compatibility and corrosion resistance are more critical than extreme pressure resistance.

Why:

- 316L stainless steel provides strong corrosion resistance
- Suitable for neutral and aggressive media
- Wide pressure range up to 1000 bar
- C-version provides higher accuracy and configuration capability

Differential pressure monitoring (filters, pumps, process lines)

Selection depends on required differential range and material compatibility.

Recommended: **PMP-D111** (17-4PH) for High differential pressure

Why:

- Δp up to 1000 bar
- Suitable for high-pressure pipeline monitoring
- Digital configuration capability

PMP-D131 (316L) for medium differential pressure

Why:

- Δp up to 100 bar
- Suitable for chemically aggressive media
- Digital configuration capability

Very High Pressure (up to 5000 bar)

Recommended: **PMP-S221** (17-4PH)

Selected when mechanical strength is the dominant factor.

Why:

- 17-4PH provides higher mechanical strength than 316L
- Pressure range up to 5000 bar suitable for hydrogen compression systems
- Compact OEM design for integration into high-pressure modules

Hazardous Areas (H₂ + ATEX / CSA / EC79)

Recommended: **PMP-S122-Exi.1H/PMP-S122-Exi.1H**

Why:

- Based on proven P2P platform
- Intrinsic safety (Exi)
- EC79 certification for hydrogen pressure systems

Temperature Monitoring in Hydrogen Systems

Recommended: **PMT-S111-H**, **PMT-C111-H**, **PMT-S111-Exi-xH**

Why:

- Pt100 sensing element for stable temperature measurement
- H₂-compatible versions available
- -40...+200°C typical range
- S111-H: 4–20 mA transmitter
- C111-H: resistance output for system integration
- Exi-H versions available for hazardous areas

Low Pressure Hydrogen (0.60 mbar...10 bar)

Recommended: **PMP-S131** / **PMP-S132** (PMI Technology, 316L)

Selected when measurement sensitivity at low pressure is more critical than extreme pressure resistance.

Why:

- Designed for low and very low pressure sensitivity
- 316L wetted parts compatible with hydrogen
- Membrane inside (S131) or flush membrane (S132) depending on media cleanliness



CONSTRUCTION MACHINERY / MOBILE HYDRAULICS

Application Requirements:

- *High dynamic pressure peaks*
- *Strong mechanical vibration and shock*
- *Compact installation space*
- *Ambient temperature range typically -40...+125°C*
- *Integration into vehicle control systems (e.g. CAN J1939)*

Very High Pressure Hydraulics (up to 5000 bar)

Recommended: **PMP-S221** (17-4PH)

Selected for high-pressure hydraulic blocks and heavy-duty machinery.

Why:

- 17-4PH wetted parts provide high mechanical strength
- Pressure range up to 5000 bar
- Compact OEM design
- Suitable for extreme hydraulic pressure spikes

Medium / High Pressure (up to 2000 bar)

Recommended: **PMP-S111** (TFT Technology, 17-4PH)

Why:

- Thin-film technology offers strong overload resistance
- 17-4PH suitable for mechanical stress
- Pressure range up to 2000 bar

Medium Pressure OEM Series (up to 1000 bar)

Recommended: **PMP-S222** (P2P, 316L)

Selected for hydraulic systems in medium pressure ranges.

Why:

- Compact P2P Technology design
- Suitable for series production
- Pressure range up to 1000 bar
- Cost-efficient OEM integration

Vehicle Bus Integration

Recommended: **PMP-S100-CAN**

Why:

- CANopen 2.0A / J1939
- Standard interface in heavy-duty mobile machinery
- Improved noise immunity
- Reduced wiring complexity



HVAC / BUILDING TECHNOLOGY

Application Requirements:

- *Very low and low pressure measurement in air ducts*
- *Stable signal in small differential pressure ranges*
- *Non-aggressive gases (air)*
- *Integration into building management systems*
- *Compact and easy installation*

Static Low Pressure Monitoring (air ducts, ventilation)

Recommended: **PMP-S131 / PMP-S132** (PMI Technology, 316L)

Used for static pressure measurement in air channels.

Why:

- Designed for low and very low pressure applications
- Pressure range starting from 0.60 mbar
- Suitable for HVAC ventilation systems
- S131: membrane inside
- S132: flush diaphragm for condensation or contamination risk

Temperature Monitoring in HVAC Systems

Recommended: **PMT-S111**

Why:

- Pt100 sensing element
- 4–20 mA output for BMS integration
- Suitable for air and water temperature measurement
- Compact transmitter design

Optional (OEM / system integration): **PMT-C111**

Why:

- Resistance output (Pt100)
- Suitable for direct controller integration



WATER & WASTEWATER / ENVIRONMENTAL MONITORING

Application Requirements:

- Hydrostatic level measurement in open or vented tanks
- Contaminated or aggressive liquids (wastewater, sludge)
- Long cable installations (10...100 m)
- Outdoor temperature variations
- Optional hazardous area requirements

High accuracy environmental monitoring (rivers, groundwater, long-term logging)

Recommended level probes:

- **PML-C111** (TFT, 17-4PH)
- **PML-C131** (PMI, 316L)

Why these C-series models:

- Accuracy class: $\leq 0.25\%$ FS - better data quality for reporting and trend analysis
- Function: online configuration capability - simplifies setup and calibration workflow

How to choose between C111 vs C131:

- Choose C111 when high range / deeper installations (10...100 m H₂O) dominate
- Choose C131 when lower ranges (0.1...30 m H₂O) and media variability/contamination dominate

Differential Pressure Monitoring (filters, cleanrooms)

Recommended: **PMP-D343.01 / PMP-D343.02**

Used for filter clogging and airflow monitoring.

Why:

- Silicon diaphragm optimized for non-aggressive air
- Accuracy $\leq 1.5\%$ FS suitable for filter monitoring
- Medium temperature $-10...+50^{\circ}\text{C}$
- D343.01 with LCD, D343.02 without display

Hazardous areas (e.g., sewage facilities, biogas-related zones)

Recommended level probes:

- **PML-S111-Exi**
- **PML-C111-Exi**
- (if low-range wastewater is required in Ex areas: use the corresponding PML-S131-Exi / PML-C131-Exi where available in the catalogue)

Why Exi variants fit:

- Intrinsic safety (Exi) - intended for hazardous area installations
- Retains the same proven hydrostatic platform while meeting safety requirements

Various liquids / wastewater – lower ranges (0.1...30 m H₂O)

Recommended level probes: **PML-S131** (PMI, 316L)

PML-C131 (PMI, 316L)

Why PML-S131 fits:

- Range: 0.1...30 m H₂O - higher sensitivity in lower level ranges
- Wetted parts: 316L - suitable for various and more aggressive liquids
- Technology: PMI (media-isolated) - suited for harsh/dirty environments
- Design options: membrane inside / flush diaphragm

Why PML-C131 is chosen instead of S131 (when needed):

- Accuracy: ≤0.25% FS - better long-term monitoring quality
- Function: online configuration capability → setup and adjustment during commissioning
- Same sensing platform as S131, but digital/configurable electronics

Clean liquids – deep tanks / wells (10...100 m H₂O)

Recommended level probes:

- **PML-S111** (TFT, 17-4PH)
- **PML-C111** (TFT, 17-4PH)

Why PML-S111 fits:

- Range: 10...100 m H₂O - designed for higher level ranges
- Technology: TFT - robust measuring cell for deep installations
- Typical application: clean liquids, open/vented tanks
- Accuracy: ≤0.5% FS - sufficient for general water level monitoring

Why PML-C111 is chosen instead of S111 (when needed):

- Accuracy: ≤0.25% FS - higher precision for monitoring/compliance
- Function: online configuration capability - parameter setting for system integration
- Same mechanical platform as S111, but higher-performance electronics

Long cable installations / deep deployment (installation rule)

Applies to: **all PML series (S111/C111/S131/C131)**

Why this matters:

- Vented PUR cable enables atmospheric compensation in open/vented systems
- Reinforced support cable is recommended for installations >30 m to reduce mechanical load on the sensor cable and improve long-term reliability

PRODUCT ORDERING CODES

Pressure transmitters - standard

PMP-S122

Common parameters for the standard products listed below:

Electrical connection: DIN EN 175301-803-A plug, IP65

Wetted parts: Stainless steel 316L (AISI 316L)

Accuracy @ 25°C: ≤ 0.5% FS

Media temperature: -40 ... +125 °C

Other parameters: see product data sheet at prignitz-mst.de

Pressure range (bar, gauge)	Process connection DIN 1179-2, type E	Pulsation damper	Product code	
			Output signal 4 - 20 mA	Output signal 0 - 10 V
0 ... 4	G 1/4"	-	94011731	94051318
	G 1/2"	-	94011733	94051320
0 ... 6	G 1/4"	-	94011735	94051322
	G 1/2"	-	94011737	94051324
0 ... 10	G 1/4"	-	94011738	94051325
	G 1/2"	-	94011739	94051326
0 ... 16	G 1/4"	-	94011740	94051327
	G 1/2"	-	94011741	94051328
0 ... 25	G 1/4"	-	94011742	94051329
	G 1/2"	-	94011743	94051330
0 ... 60	G 1/4"	-	94011746	94051305
		✓	94011747	94051306
0 - 100	G 1/4"	-	94011748	94051307
		✓	94011749	94051308
0 - 160	G 1/4"	-	94011750	94051309
		✓	94011751	94051310
0 ... 250	G 1/4"	-	94011752	94051311
		✓	94011753	94051312
0 ... 400	G 1/4"	-	94011754	94051313
		✓	94011755	94051314

PMP-S131

Common parameters for the standard products listed below:

Electrical connection: DIN EN 175301-803-A plug, IP65

Wetted parts: Stainless steel 316L (AISI 316L / 1.4404)

Accuracy at 25°C: ≤ 0.5% FS

Media temperature: -40 ... +125 °C

Other parameters: see product data sheet at prignitz-mst.de

Pressure range (bar, gauge)	Process connection DIN 1179-2, type E	Output signal	Product code
-20 ... 20	G1/4"	4 - 20 mA	94011762
-30 ... 30	G1/4"	4 - 20 mA	94011763
-70 ... 70	G1/4"	4 - 20 mA	94011764
-100 ... 100	G1/4"	4 - 20 mA	94011765
0 ... 60	G1/4"	4 - 20 mA	94011756
0 ... 100	G1/4"	4 - 20 mA	94011757
0 ... 150	G1/4"	4 - 20 mA	94011758
0 ... 250	G1/4"	4 - 20 mA	94011759
0 ... 400	G1/4"	4 - 20 mA	94011760
0 ... 600	G1/4"	4 - 20 mA	94011761

PMP-S111

Common parameters for the standard products listed below:

Electrical connection: DIN EN 175301-803-A plug, IP65

Wetted parts: Stainless steel 17-4PH (1.4542)

Accuracy at 25°C: ≤ 0.5% FS

Media temperature: -40 ... +125 °C

Other parameters: see product data sheet at prignitz-mst.de

Pressure range (bar, gauge)	Process connection DIN 1179-2, type E	Product code	
		Output signal 4 - 20 mA	Output signal 0 - 10 V
0 ... 2,5	G1/4"	94011728	94051315
	G 1/2"	94011729	94051316
0 ... 4	G1/4"	94011730	94051317
	G 1/2"	94011732	94051319
0 ... 6	G1/4"	94011734	94051321
	G 1/2"	94011736	94051323

PMP-S132

Common parameters for the standard products listed below:

Diaphragm: Flush

Electrical connection: DIN EN 175301-803-A plug, IP65

Wetted parts: Stainless steel 316L (AISI 316L / 1.4404)

Accuracy at 25°C: ≤ 0.5% FS

Media temperature: -40 ... +125 °C

Other parameters: see product data sheet at prignitz-mst.de

Pressure ranges	Pressure type	Process connection DIN 1179-2, type E	Output signal	Product code
0 ... 600 mbar abs	absolute	G1"	4 - 20 mA	94811009
0 ... 40 mbar	gauge	G1"	4 - 20 mA	94811014
0 ... 100 mbar	gauge	G1/2"	4 - 20 mA	94811013
0 ... 160 mbar	gauge	G1"	4 - 20 mA	94811024
0 ... 200 mbar	gauge	G1/2"	4 - 20 mA	94811008
0 ... 300 mbar	gauge	G1/2"	4 - 20 mA	94811017
0 ... 400 mbar	gauge	G1/2"	4 - 20 mA	94811032
0 ... 4 bar abs	absolute	G3/4"	4 - 20 mA	94811005
-1 ... 5 bar	gauge	G1/2"	4 - 20 mA	94811001
0 ... 4 bar	gauge	G1"	4 - 20 mA	94811010
0 ... 6 bar	gauge	G1"	4 - 20 mA	94811011
0 ... 10 bar abs	absolute	G1/2"	4 - 20 mA	94811002
0 ... 10 bar	gauge	G1/2"	4 - 20 mA	94811031
0 ... 10 bar	gauge	G1"	4 - 20 mA	94811012

Pressure transmitters for hazardous areas

PMP-S111-Exi PMP-S131-Exi

Common parameters for the products listed below

Electrical connection: DIN EN 175301-803-A plug, IP65

Wetted parts: stainless steel 316L (1.4404) or 17-4PH (1.4542)

Accuracy @25°C: ≤ 0.5% FS

Medium temperature: -40 ... +85 °C

Other parameters: see product datasheet at prignitz-mst.de

The following table presents only exemplary product configurations.

Pressure range (bar, gauge)	Process connection	Output signal	Series PMP-	Materia	Product code
0 ... 1 bar abs.	G1/2"	4 - 20 mA	S131-Exi	316L	90011051
0 ... 1	G1/4"	4 - 20 mA	S131-Exi	316L	90011087
0 ... 1,6	G1/2"	4 - 20 mA	S131-Exi	316L	90011024
0 ... 1,6	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011056
-1 ... 3	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011042
0 ... 4	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011055
0 ... 6	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011046
0 ... 10	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011068
0 ... 16	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011086
0 ... 25	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011071
0 ... 40	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011061
0 ... 60	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011007
0 ... 100	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011034
0 ... 160	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011069
0 ... 250	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011070
0 ... 400	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011005
0 ... 600	G1/2" mano	4 - 20 mA	S111-Exi	17-4PH	90011049

Differential pressure sensors

PMP-D111 PMP-D131

Common parameters for the products listed below

Diaphragm: stainless steel 316L (1.4404) or 17-4PH (1.4542)

Media types: neutral and aggressive media

Accuracy @25°C: typ. ≤ 0.5% FS

Medium temperature: -40 ... +125 °C

Other parameters: see the product datasheet at prignitz-mst.de

The following table presents only exemplary product configurations.

Pressure range (bar, gauge)	Process connections	Output signal	Electrical connection	Seria PMP-	Material	Product cod
0 ... 70 mbar	GW G1/8"	4 - 20 mA	M12	D131	316L	91512005
0 ... 100 mbar	G1/4"	4 - 20 mA	M12	D131	316L	91512008
0 ... 160 mbar	G1/2"	4 - 20 mA	M12	D131	316L	91512007
0 ... 200 mbar	G1/4"	4 - 20 mA	M12	D131	316L	91512003
-1 ... 1 bar	G1/4"	4 - 20 mA	Cable 10 m	D131	316L	91515003
0 ... 2 bar	G1/2" mano	4 - 20 mA	M12	D131	316L	91512002
0 ... 2,5 bar	GW G1/4"	4 - 20 mA	DIN connector	D111	17-4PH	91511001
0 ... 10 bar	G 1/2" mano	4 - 20 mA	M12	D111	17-4PH	91512006
0 ... 250 bar	1/4"-18 NPT	4 - 20 mA	Cable 10 m	D111	17-4PH	91519002

PMP-D343.01
PMP-D343.02

Common parameters for the product listed below
D343.01 with display/D343.02 without display
Diaphragm: silicon
Suitable media: non-aggressive media
Display: LCD (D343.01 version)
Accuracy @25°C: typ. ≤ 1.5% FS
Medium temperature: -10 ... +50 °C
Electrical connection: internal terminal block, cable outlet via cable gland
Protection rating: IP65
Other parameters: see the product datasheet at prignitz-mst.de

The following table presents only exemplary product configurations.

Ranges		Pressure connections	LCD display	Output signal	Product code
kPa	mbar				
-1 ... 1	-10 ... 10	4 mm	✓	4 - 20 mA	91212029
-1 ... 1	-10 ... 10	6 mm	-	0 - 10 V	91250013
-1 ... 2	-10 ... 20	6 mm	-	4 - 20 mA	91210033
-2 ... 2	-20 ... 20	4 mm	✓	0 - 10 V	91250009
-3 ... 3	-30 ... 30	6 mm	-	0 - 10 V	91250019
-5 ... 5	-50 ... 50	4 mm	✓	4 - 20 mA	91212009
-5 ... 5	-50 ... 50	6 mm	-	0 - 10 V	91250005
-10 ... 10	-100 ... 100	4 mm	-	4 - 20 mA	91210030
-20 ... 20	-200 ... 200	4 mm	✓	4 - 20 mA	91212002
-25 ... 25	-250 ... 250	6 mm	✓	4 - 20 mA	91212051
-25 ... 25	-250 ... 250	4 mm	✓	0 - 10 V	91250008

Pressure Switches

PMP-SW400

Common parameters for the product listed below
Electrical connection: 2 × M16 cable glands
Protection rating: IP65
Wetted parts: stainless steel 17-4PH (1.4542)
Housing: aluminium, 100 × 66 × 45 mm
Display: LCD
Accuracy @25°C: ≤ 0.5% FS
Medium temperature: -25 ... +120 °C

Pressure range (bar, gauge)	Process connection DIN 1179-2, type E	Number of relay outputs (NC/NO)	Output signal	Product codes
-1 ... 0	G 1/4"	2	4 - 20 mA	92412019
-1 ... 1	G 1/4"	1	4 - 20 mA	92412006
-1 ... 3	G 1/4"	2	4 - 20 mA	92412030
0 ... 1	G 1/4"	2	4 - 20 mA	92412027
0 ... 4	G 1/4"	2	4 - 20 mA	92412014
0 ... 5	G 1/4"	2	4 - 20 mA	92412024
0 ... 6	G 1/4"	2	4 - 20 mA	92412011
0 ... 10	G 1/4"	2	4 - 20 mA	92412023
0 ... 10	G 1/4"	1	4 - 20 mA	92412031
0 ... 10	G 1/4"	2	0 - 10 V	92412010
0 ... 20	G 1/4"	1	4 - 20 mA	92412015
0 ... 60	G 1/4"	2	4 - 20 mA	92412029
0 ... 60	G 1/4"	2	0 - 10 V	92412003
0 ... 160	G 1/4"	2	4 - 20 mA	92412005
0 ... 250	G 1/4"	2	4 - 20 mA	92412020
0 ... 1000	G 1/4"	2	4 - 20 mA	92412028

Standard level probes

PML-S111

Common parameters for the standard products listed below

Measuring head: with internal diaphragm, G1/2" and removable weight

Cable: vented 4-core PUR cable

Probe material: stainless steel 316L (1.4404)

Accuracy @25°C: ≤ 0.5% FS

Medium temperature: -40 ... +85 °C

Other parameters: see the product datasheet at prignitz-mst.de

Measuring range m H ₂ O	Cable length: m	Stainless steel suspension cable	Output signal	Product code
0 ... 4	20	-	4 - 20 mA	95010171
0 ... 10	10	-	4 - 20 mA	95010175
0 ... 20	30	-	4 - 20 mA	95010173
0 ... 20	50	✓	4 - 20 mA	95010174
0 ... 30	40	✓	4 - 20 mA	95010176

PML-S131

Common parameters for the standard products listed below

Measuring head: with front-flush diaphragm G1/2" and removable plastic protective cap

Cable: vented 4-core PUR cable

Probe material: stainless steel 316L (1.4404)

Accuracy @25°C: ≤ 0.5% FS

Medium temperature: -40 ... +85 °C

Other parameters: see the product datasheet at prignitz-mst.de

Measuring range m H ₂ O	Cable length: m	Stainless steel suspensi on cable	Output signal	Product code
0 ... 2,5	10	-	4 - 20 mA	95010169
0 ... 4	10	-	4 - 20 mA	95010168
0 ... 6	10	-	4 - 20 mA	95010170
0 ... 10	10	-	4 - 20 mA	95010177

Digital level probes

PML-C132

Common parameters for the standard products listed below

Measuring head: with front-flush diaphragm G1/2" and removable plastic protective cap

Cable: vented 4-core PUR cable

Probe material: stainless steel 316L (1.4404)

Accuracy @25°C: ≤ 0.25% FS

Medium temperature: -40 ... +85 °C

Other parameters: see the product datasheet at prignitz-mst.de

Measuring range m H ₂ O	Cable length: m	Stainless steel suspension cable	Output signal	Product code
0 ... 1,6	10	-	4 - 20 mA	95310003
0 ... 2	5	-	4 - 20 mA	95310011
0 ... 2,5	35	-	4 - 20 mA	95310025
0 ... 3	3	-	4 - 20 mA	95310026
0 ... 4	10	-	4 - 20 mA	95310004
0 ... 4	15	-	4 - 20 mA	95310005
0 ... 5	10	-	4 - 20 mA	95310010
0 ... 10	10	-	4 - 20 mA	95310008

PML-C131

Common parameters for the standard products listed below

Measuring head: with internal diaphragm and stainless steel or plastic weight

Cable: vented 4-core PUR cable

Probe material: stainless steel 316L (1.4404)

Accuracy @25°C: ≤ 0.25% FS

Medium temperature: -40 ... +85 °C

Other parameters: see the product datasheet at prignitz-mst.de

Measuring range m H ₂ O	Cable length: m	Stainless steel suspensio n cable	Output signal	Weight material	Product code
0 ... 0,5	2	-	4 - 20 mA	steel	95110005
0 ... 1	2	-	4 - 20 mA	steel	95110002
0 ... 2	5	-	4 - 20 mA	steel	95110019
0 ... 2,5	3	-	4 - 20 mA	steel	95110006
0 ... 3	5	-	4 - 20 mA	plastic	95110012
0 ... 4	25	-	4 - 20 mA	plastic	95110014
0 ... 5	25	-	4 - 20 mA	plastic	95110022

Standard with signal transmitter

PMT-S111

Common parameters for the product listed below
Sensor material: stainless steel 316L (1.4404)
Accuracy @25°C: ≤ 1% FS; ≤ 2% FS over the full range
Sensor outer diameter: 6 mm
Electrical connection: DIN EN 175301-803-A
Option: additional thermowell made of AISI 316 stainless steel
Other parameters: see the product datasheet at prignitz-mst.de

- **Electrical connection:** M12 × 1

Sensor length: mm	Thread mm	Measuring range °C	Output signal	Product code
10	G ¼"	0 ... 150	4 - 20 mA	96211146
25	¼-18 NPT	0 ... 100	4 - 20 mA	96211150
50	G ¼"	-20 ... 80	4 - 20 mA	96211020
75	R ½"	0 ... 100	4 - 20 mA	96211147
100	G ¼"	-20 ... 80	4 - 20 mA	96211021
150	G ¼"	0 ... 100	4 - 20 mA	96211130
250	G ¼"	-50 ... 100	4 - 20 mA	96211032
400	G ¼"	-20 ... 80	4 - 20 mA	96211022

Sensor length: mm	Thread mm	Measuring range °C	Output signal	Product code
20	G ½"	-40 ... 120	4 - 20 mA	96212011
20	G ¼"	-20 ... 80	4 - 20 mA	96212019
50	G ¼"	-40 ... 120	4 - 20 mA	96212008
50	G ½"	-40 ... 120	4 - 20 mA	96212012
100	G ¼"	-40 ... 120	4 - 20 mA	96212009
100	G ½"	-40 ... 120	4 - 20 mA	96212013
100	G ¼"	-20 ... 80	4 - 20 mA	96212021
150	G ¼"	-50 ... 50	4 - 20 mA	96212076
250	G ¼"	-20 ... 80	4 - 20 mA	96212083
400	G ¼"	-40 ... 120	4 - 20 mA	96212010
400	G ½"	-40 ... 120	4 - 20 mA	96212014

Compact temperature sensors

PMT-C111

Common parameters for the product listed below
Sensor material: stainless steel 316L (1.4404)
Accuracy @25°C: ≤ 1% FS; ≤ 2% FS over the full range
Sensor outer diameter: 6 mm
Electrical connection: DIN EN 175301-803-A
Option: additional thermowell made of AISI 316 stainless steel
Other parameters: see the product datasheet at prignitz-mst.de

- **Electrical connection:** M12 × 1

Sensor length: mm	Thread mm	Measuring range °C	Output signal	Product code
40	G ¼"	-50 ... 200	3	96301007
50	G ¼"	-50 ... 200	2	96301003
60	G ¼"	-50 ... 200	3	96301008
100	G ¼"	-50 ... 200	2	96301004
100	G ½"	-50 ... 200	2	96301005
100	G ¼"	-50 ... 200	3	96301006

Sensor length: mm	Thread mm	Measuring range °C	Output signal	Product code
25	G ½"	-50 ... 200	2	96302008
30	G ½"	-50 ... 200	2	96302005
50	G ¼"	-50 ... 200	2	96302008
50	G ½"	-50 ... 200	2	96302003
70	G ½"	-50 ... 200	2	96302001
100	G ½"	-50 ... 200	2	96302004

CONFIGURATION SCHEMES FOR PRESSURE SENSORS

NOTICE: The configuration scheme presented below illustrates the general configuration possibilities of pressure transmitters, hydrostatic probes, and temperature sensors. The information provided is for reference purposes only.

Not all theoretically possible configurations may be available for ordering at any given time. At the same time, additional options or versions not shown in this scheme may be available.

Prior to incorporating any selected configuration into a project or placing an order, it is strongly recommended to verify with the manufacturer or authorized distributor the actual availability and current technical specifications of the requested configuration.

PMP-XXXX-XX-XX-(X...X)-XX-X-XX-X-XX

Measured variable

P= Pressure

Series

S=SPT
C=CIT

Family

1=S100 Family / C100 Family
2=S200 Family / C200 Family

Technology

1=TFT Technology
2=P2P Technology
3=PMI Technology
4=PAM Technology

Wetted parts

TFT Technology

1=17-4PH

P2P Technology

1=17-4PH
2=316L
3=Hastelloy

PMI Technology

1=Membrane inside
2=Flush membrane
3=Clamp Version

PAM Technology

1=Silicon Kernel
2=Silicon
3=Moulded

Certificate

- = without
Exi.10=Exi CSA
Exi.20=Exi ATEX
Exi.1H=CSA+EC79
Exi.2H =ATEX+EC79
ExD = ExD CSA
Exna.10= Exna CSA
Exna.1H=Exna CSA+EC79
H=EC79

Output

I2=4-20mA 2L
I3=4-20mA 3L
I30=0-20mA 3L
UR= ratiometric
OU5= 0-5V
1U5 =1-5V
OU10=0-10V
xUy=X V Y
I2C=I2C
PWM=PWM
MOD=RS485 MODBUS RTU
IOL =IO-Link
RS= RS485 Bus
CAN=CAN on request
USB=USB on request

Pressure ranges

(min.-max.)

Electrical connection

00=Customized
01=Packard
02=MVS/A
03=MVS/C
04=M12X1 (plastic) S763-4
05=M12X1 (steel) S763-4
06=M12X1 (steel) S763-5
07=M16X0,75 S763-5
08=DT04-2P
09=DT04-3P
10=DT04-4P
11=AMP Superseal
14=Turck mini fast 4p
15=Molex Ultra-Lock M12
16=MIL-C-26482
17=clamp connection
19=S709-4
C0=Cable Customized
C1=Cable 3P (shielded, not ventilated)
C2=Cable 4P (shielded, not ventilated)
C3=PUR Cable 4P ventilated
90=Field Housing 74mm

Snubber

N=No
S=Standard Snubber
C=Customized Snubber

Mech.Connector

00=customized
01=G1/4
02=G1/4
03=G1/2 Form E
04=G1/2 Form A
05=G1/2 B Mano
06=G3/8
07=1/2 - 14 NPT ExD
08=1/4 -18 NPT
09=1/4 -18 NPT ExD
10=9/16-18 UNF
11=3/8-24 UNF
12=M10X1
13=M12X1
14=M12X1,25
15=M12X1,5
16=M12X1,5
17=M18X1,5
18=M20X1,5
19=G1/4
20=G1/4 female
21=9/16-18UNF female
22=M16X1,5
23=G3/8
24=1/8-27 NPT
25=G1/8
26=M20X1,5
27=M14X1,5
28=M14X1,5
29=M16X1,5 female
32=1/4" - 18 NPT,fem.
33=7/16-20 UNF SAE J514

Type

0=customized
g=gage
a=absolute
s=Sealed
reference

Unit

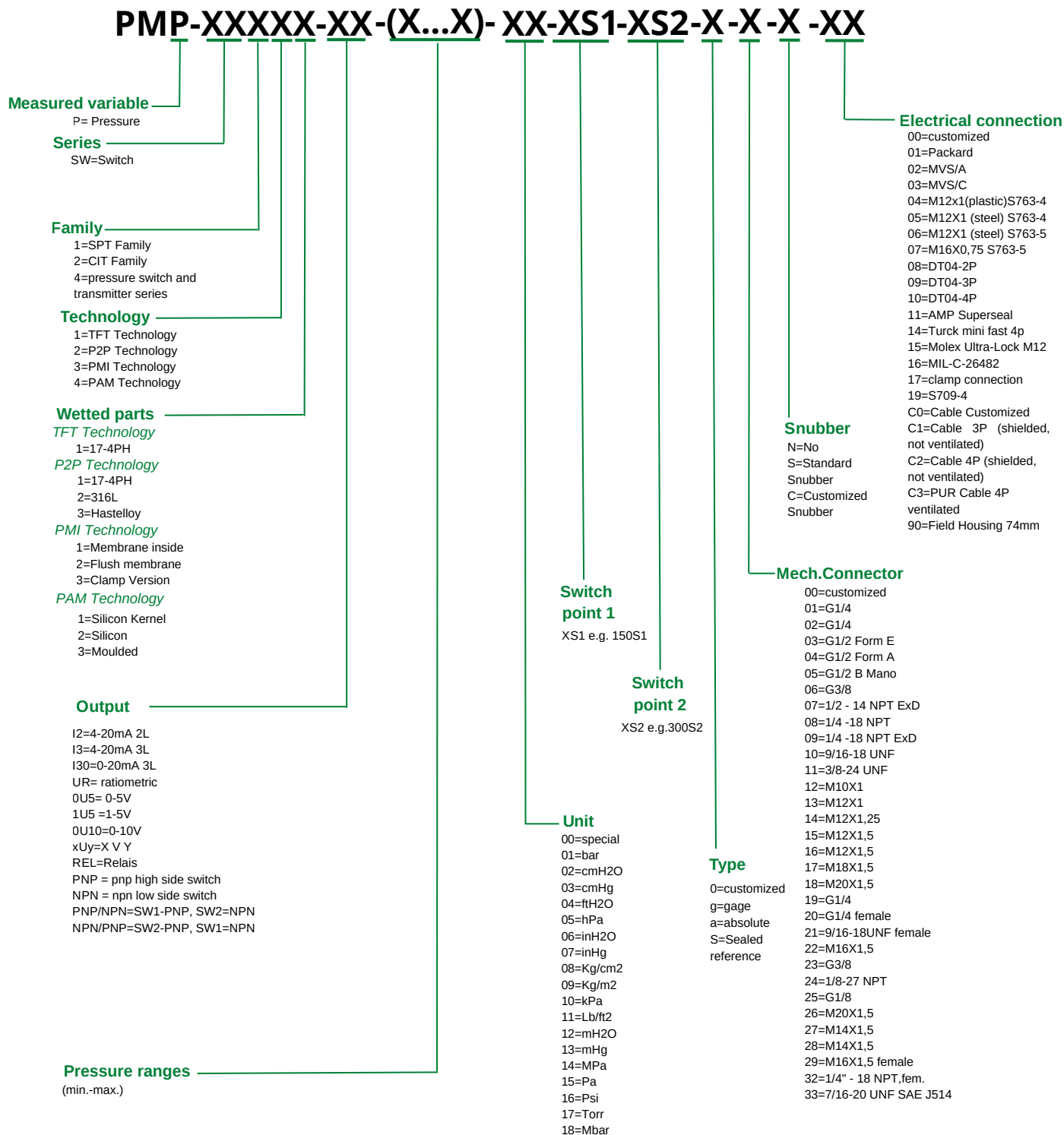
00=special
01=bar
02=cmH2O
03=cmHg
04=ftH2O
05=hPa
06=inH2O
07=inHg
08=Kg/cm2
09=Kg/m2
10=kPa
11=Lb/ft2
12=mH2O
13=mHg
14=MPa
15=Pa
16=Psi
17=Torr
18=Mbar

CONFIGURATION SCHEMES FOR PRESSURE SWITCHES

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Prior to incorporating any selected configuration into a project or placing an order, it is strongly recommended to verify with the manufacturer or authorized distributor the actual availability and current technical specifications of the requested configuration.

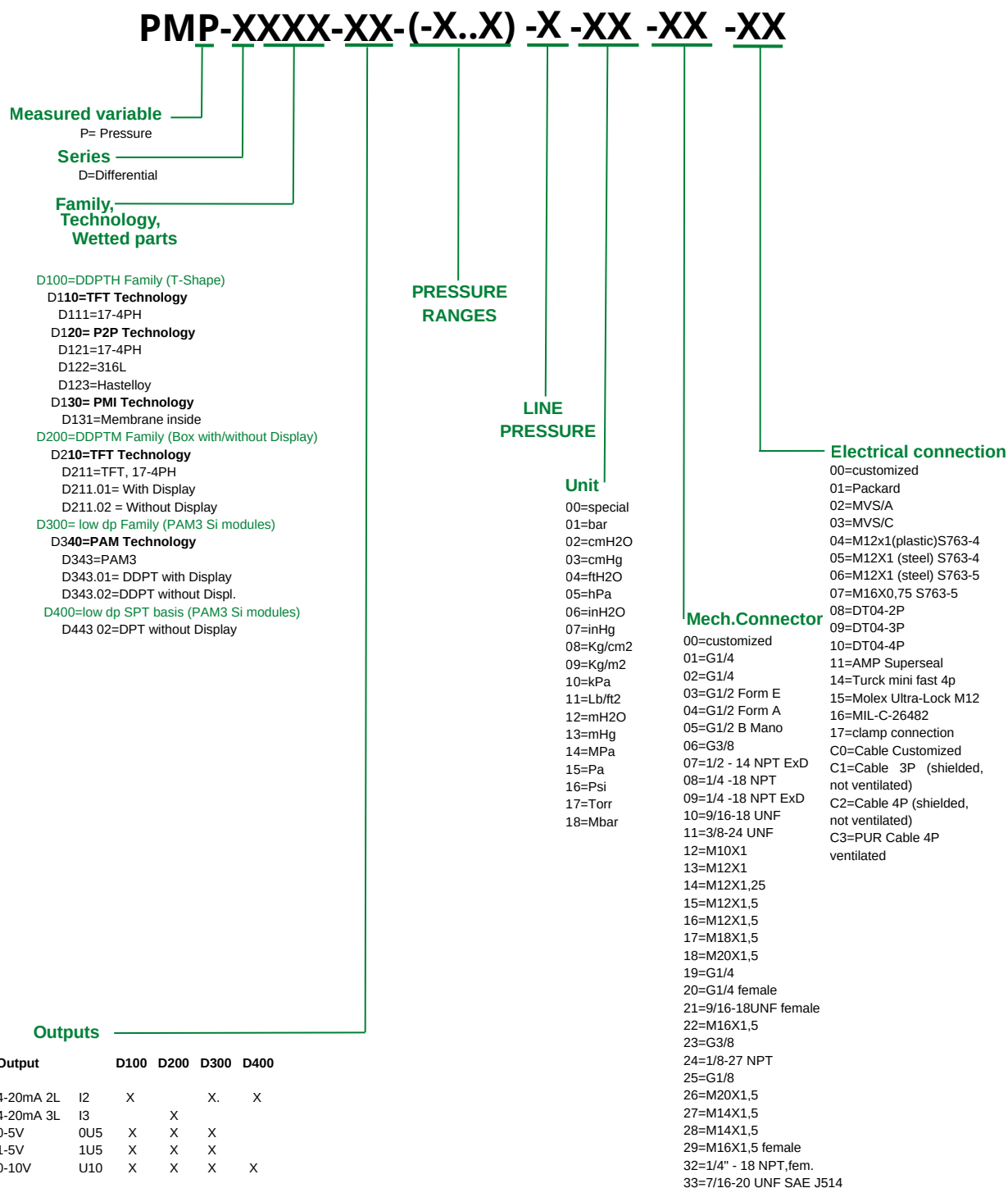


CONFIGURATION SCHEMES FOR DIFFERENTIAL PRESSURE SENSORS

NOTICE: The configuration scheme presented below illustrates the general configuration possibilities of pressure transmitters, hydrostatic probes, and temperature sensors. The information provided is for reference purposes only.

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Prior to incorporating any selected configuration into a project or placing an order, it is strongly recommended to verify with the manufacturer or authorized distributor the actual availability and current technical specifications of the requested configuration.

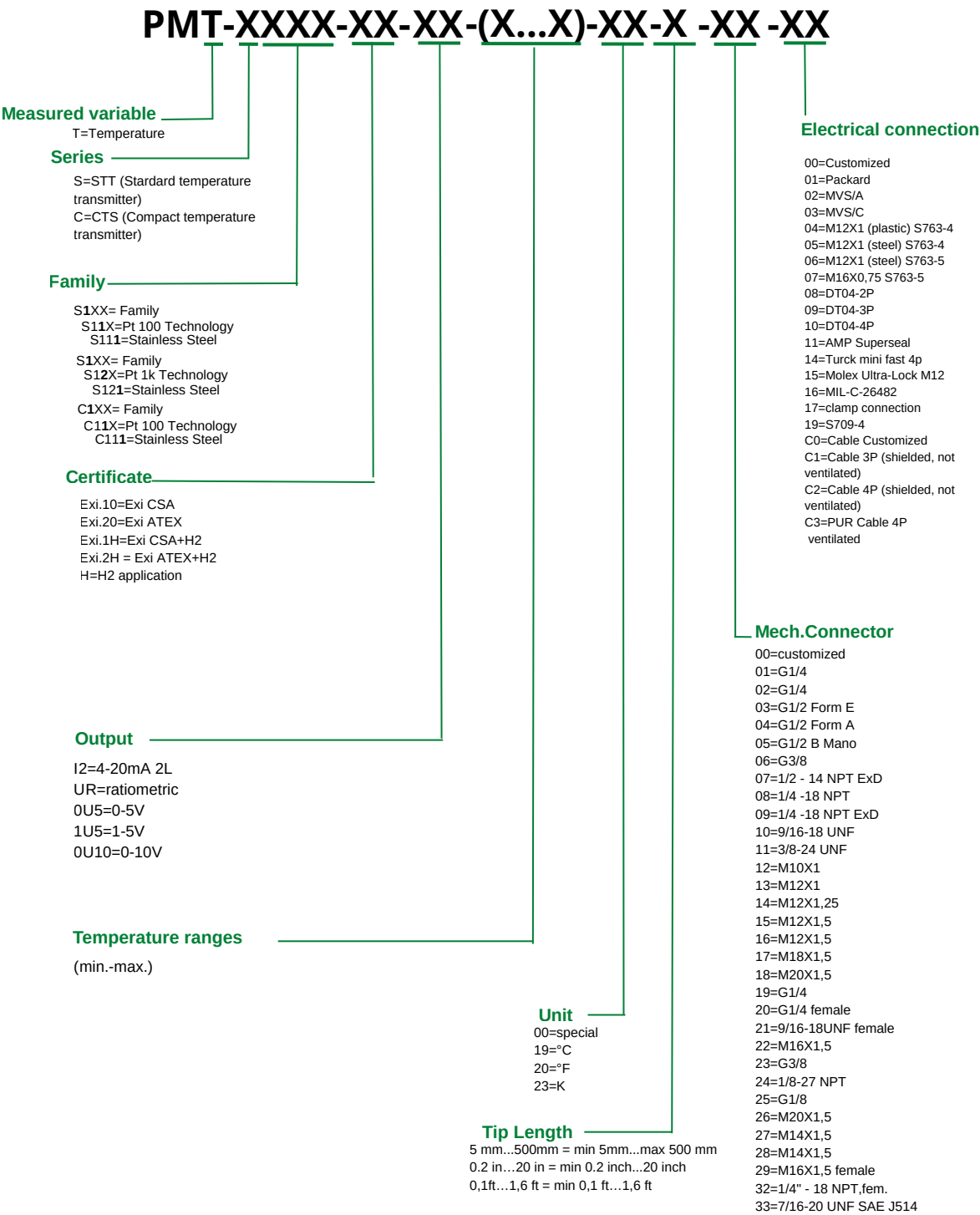


CONFIGURATION SCHEMES FOR TEMPERATURE SENSORS

NOTICE: The configuration scheme presented below illustrates the general configuration possibilities of pressure transmitters, hydrostatic probes, and temperature sensors. The information provided is for reference purposes only.

Not all theoretically possible configurations may be available for ordering at any given time. At the same time, additional options or versions not shown in this scheme may be available.

Prior to incorporating any selected configuration into a project or placing an order, it is strongly recommended to verify with the manufacturer or authorized distributor the actual availability and current technical specifications of the requested configuration.

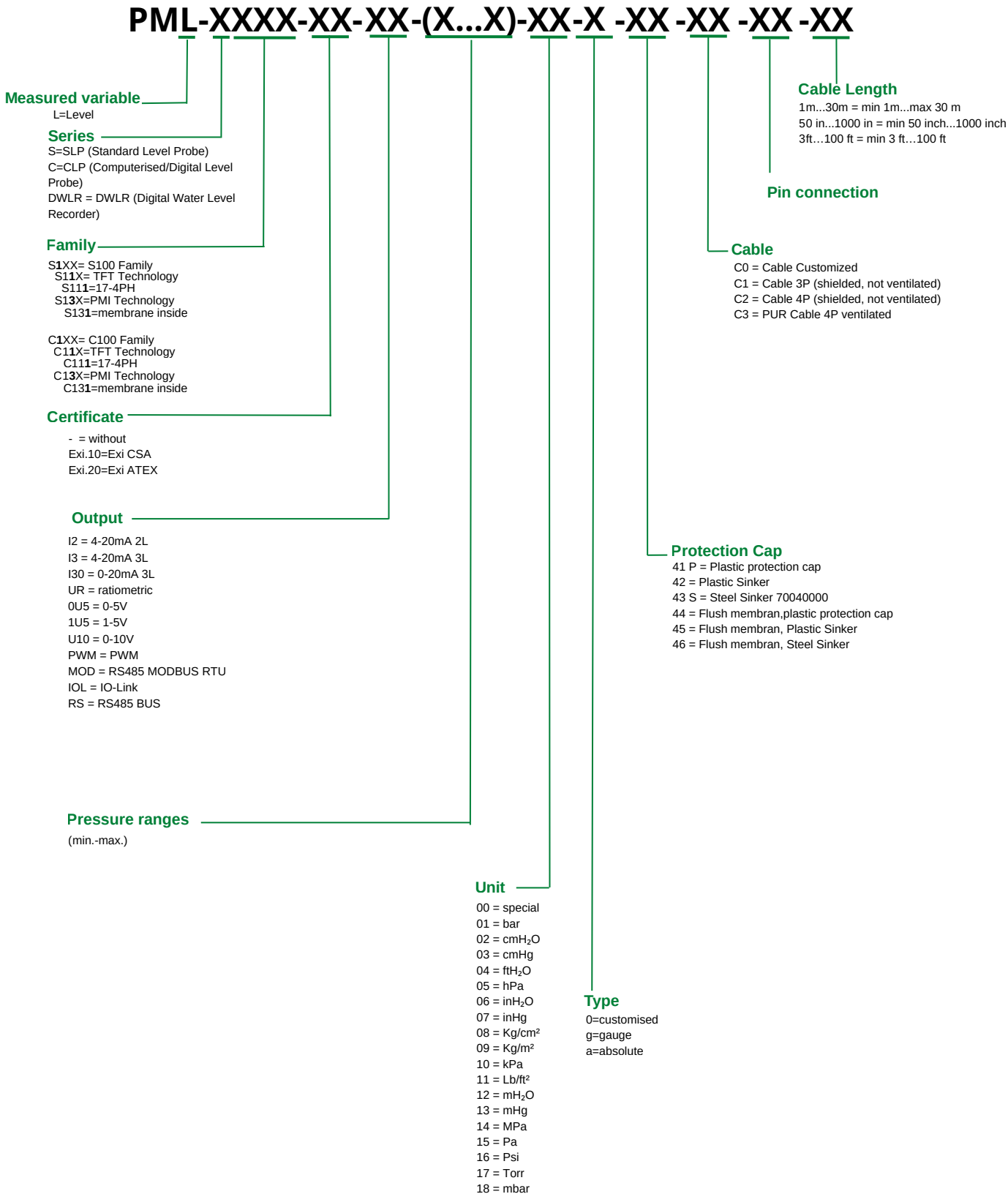


CONFIGURATION SCHEMES FOR LEVEL PROBES

NOTICE: The configuration scheme presented below illustrates the general configuration possibilities of pressure transmitters, hydrostatic probes, and temperature sensors. The information provided is for reference purposes only.

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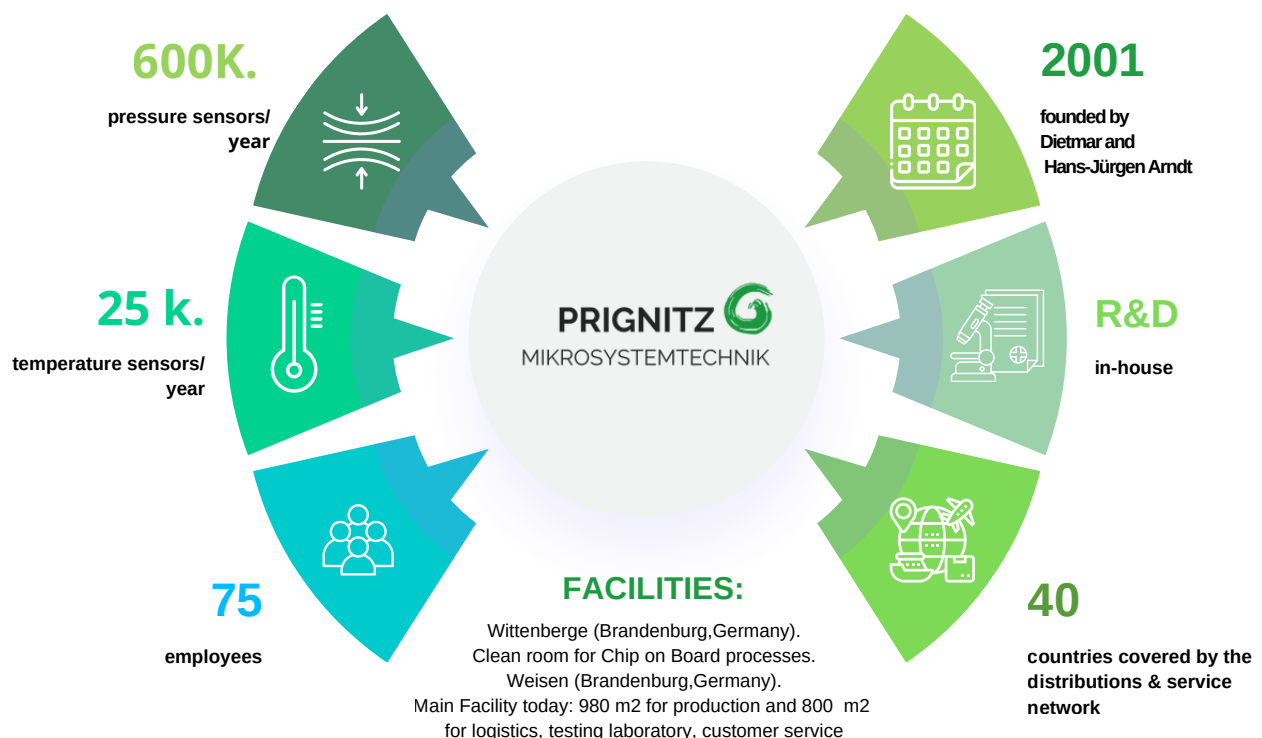
ABOUT PRIGNITZ MIKROSYSTEMTECHNIK

We are a globally operating, socially responsible sensor manufacturer - driven by innovation and powered by in-house R&D that keeps us at the forefront of measurement technology.

PRIGNITZ Mikrosystemtechnik designs, manufactures, and delivers high-value pressure sensors, temperature transmitters, and level probes — covering the entire value chain from chip to fully calibrated transmitter. Our solutions reach customers in more than 40 countries through a dedicated global sales and service network.

We don't just supply sensors — we deliver answers. Backed by deep R&D expertise, we develop precisely tailored solutions for customers across a wide range of industries, ensuring every product fully meets their specific requirements.

OEM customers choose PRIGNITZ as a trusted long-term partner: decades of experience as a professional supplier mean reliability, consistency, and technical excellence at every stage of cooperation. We also offer Private Label solutions for manufacturers and distributors who want to bring their own branded products to market — with the quality and precision PRIGNITZ is known for.



Due to our high level of added value (from the chip to calibration), we can guarantee a high level of delivery security even in the current turbulent times.

- Our high quality management standards have been certified according to DIN EN ISO 9001.
- Our sensors have certification with highest protection classes ATEX, IECEx, CSA.
- The approval according to the European Directive EC79/2009 officially seals the suitability of our sensors for measuring hydrogen pressure with nominal pressures between vacuum and 600 bar.
- We have received the BSFZ-Seal. The BSFZ certificate (Bescheinigungsstelle Forschungszulage) in Germany indicates companies that achieve special technological results due to their R&D activities. The BSFZ works on behalf of the Federal Ministry of Education and Research of Germany.

Find out more about our quality standards and product certification: prignitz-mst.de/quality



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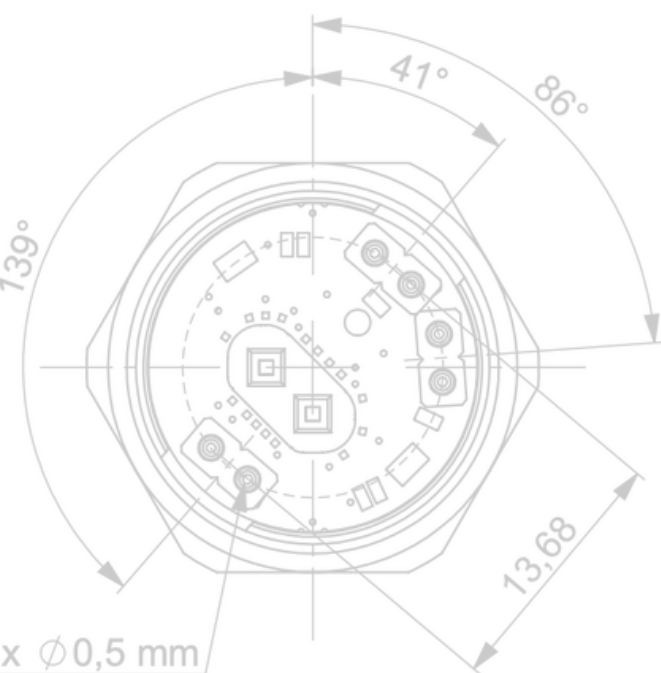
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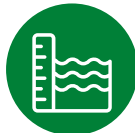


PRIGNITZ

MIKROSYSTEMTECHNIK



PRESSURE



LEVEL



TEMPERATURE

PRIGNITZ Mikrosystemtechnik GmbH

Margarethenstraße 61, 19322 Wittenberge / Elbe, Germany

Tel.: +49 3877 567 460 , info@prignitz-mst.de

prignitz-mst.de

