Electronic Pressure Digest
Pressure and Temperature Transmitters
General Purpose Pressure Transmitters

Standard Industrial

**S-10**

These rugged pressure transmitters are designed for use in harsh environments where accuracy, reliability and repeatability are critical. Applications include hydraulics and pneumatics, and numerous other processing operations.

**Ranges**
50 InWC to 15,000 psi, vacuum, compound, absolute

**Output**
4-20 mA, 0-5 V, 0-10 V

**Accuracy**
≤0.25% B.F.S.L.

Flush Diaphragm

**S-11**

The S-11 non-clogging flat diaphragm pressure transmitter is designed for applications with sludge, slurry or high viscosity media.

**Ranges**
50 InWC to 8,000 psi, vacuum, compound, absolute

**Output**
4-20 mA, 0-5 V, 0-10 V

**Accuracy**
≤0.25% B.F.S.L.

Field Case

**F-20, F-21**

The type F-20 and F-21 pressure transmitters feature an integral stainless steel junction box for installation in harsh environments. The F-21 non-clogging flush diaphragm version is designed to measure media containing sludge, slurry or particulates.

**Ranges**
30"-0 HgVac to 15,000 psi

**Output**
4-20 mA, 0-5 V, 0-10 V

**Accuracy**
≤ 0.25% B.F.S.L.

OEM

**A-10**

The WIKA A-10 pressure transmitter is precision engineered and manufactured to fit many industrial and OEM applications. The rugged design provides resistance to vibration, shock, wide temperature variations, RFI and other extreme environmental conditions that are typical of industrial and OEM applications.

**Ranges**
15 psi to 10,000 psi

**Output**
4-20 mA, 0 - 10 V, 0 - 5 V, others

**Accuracy**
≤ (+/-) 0.5% B.F.S.L.

Pressure Transmitter with Integral LED Display and Switch Options

**PSD-30**

The PSD-30 features an integral red LED display that provides three-way adjustability for a wide variety of installation requirements. It is available with PNP or NPN solid state switches for intelligent control applications and meets VDMA standards for ease of programming.

**Ranges**
Vacuum, compound and gauge ranges up to 8,000 psi

**Display**
Red 4 digit LED, .35" high, 14 segments

**Switch points**
Solid state user programmable, NPN or PNP, single or dual

Digital Pressure Gauge

**DG-10**

The DG-10 digital display features a durable stainless steel housing and integral battery power supply. It is suitable for a wide range of applications and industries and is ideal for precise and fast pressure readings.

**Display**
DG-10-S: 4 digit, 7 segment LCD
DG-10-E: 4½ digit, 14 segment LCD (2nd display)

**Power**
2x 1.5 V type AA batteries

**Process connection**
¼" NPT male

For datasheets and additional information, please visit [www.wika.com](http://www.wika.com) or call 1-877-876-6425.
General Purpose Pressure Transmitters, Special Purpose Pressure Transmitters

OEM Mobile Hydraulic Transmitters

MH-2, OT-1
The MH-2 and OT-1 OEM pressure transmitters incorporate WIKA proprietary thin film sensors for exceptional performance, reliability and extended operating life. They offer an excellent price and performance ratio for OEM applications requiring a large production quantity of transmitters. Custom designs are available for specific OEM requirements. Minimum order quantities may apply.

Ranges
100 psi to 8,000 psi

Output
4-20 mA, 1-5 V, 0-10 V, 0.5-4.5 V ratiometric @ 5 V

Accuracy
≤0.5% B.F.S.L.

Mobile Hydraulic

MH-1
The WIKA type MH-1 is engineered to meet the demanding requirements of off-road applications. Extreme shock, vibration and pressure spike resistance are combined with environmental protection up to IP 69K, making the MH-1 ideal for conditions encountered in most mobile hydraulic applications.

Ranges
1,000 psi to 8,000 psi

Output
4-20 mA, 1-5 V

Accuracy
≤0.5% B.F.S.L.

Refrigeration and Air Conditioning

R-1, AC-1
The R-1 and AC-1 pressure transmitters are specifically designed for refrigeration and air conditioning pressure monitoring applications. The R-1 features stainless steel construction and a completely welded measuring cell. The economical AC-1 features a brass case and ceramic sensing element. Both provide condensation proof construction for long service life. Minimum order quantities may apply.

Ranges
100 psi - 850 psi, compound

Output
4-20 mA, 0-10 V, 0.5 - 4.5 V ratiometric

Accuracy
<1% B.F.S.L

OEM Sensor

TTF-1
The WIKA OEM-designed pressure sensor incorporates the most recent advances in thin film technology. This sensor is designed for engineers who want to provide their own power supply and signal conditioning circuitry.

Ranges
10 bar to 1,000 bar

Output
2 mV per V

Accuracy
up to +0.06% of span

High Pressure

HP-2
The HP-2 is designed for ultra-high pressure monitoring and control applications up to 225,000 psi. It provides accurate, reliable and safe performance when exposed to rapid pressure changes.

Ranges
40,000 psi to 225,000 psi

Output
4-20 mA, 0-5 V, 0-10 V

Accuracy
≤0.25% B.F.S.L

High Precision Digital

P-30, P-31
The P-30 provides non-linearity of up to 0.04% of span (B.F.S.L.) for precise measurement in critical applications. Each instrument is provided with a test report at no additional cost. Other test certificates are available.

The P-31 features a flat, non-clogging flush diaphragm for use with slurries or crystallizing media that may clog the orifice of the P-30.

Ranges
30”-0 HgVac to 15,000 psi

Output
4-20 mA

Accuracy
Up to 0.025% B.F.S.L.

For datasheets and additional information, please visit www.wika.com or call 1-877-876-6425.
Special Purpose Pressure Transmitters, Meters & Displays, UHP

Panel Mount Digital Indicator

**DI-15**

The DI-15 features a .40" LED display and is a compact size for installation in tight spaces. User-adjustable digital filtering improves readability during rapid pressure changes.

- **Display**
  - 4 digit, .40" red LED
- **Power**
  - 9-28 VDC
- **Accuracy**
  - ±0.5% of span ± 1 digit

Attachable Loop Powered Indicator

**A-AI-1**

The A-AI-1 is designed for use with the 4-pin DIN 43650 "L" plug supplied with electronic pressure industrial and A-10 4-20mA output pressure transmitters. User-adjustable digital filtering stabilizes the display during rapid pressure changes.

- **Display**
  - -1999 to +9999 user-programmable
- **Output**
  - 4-20 mA
- **Power**
  - Loop powered with 3 VDC drop
- **Application**
  - For use with electronic pressure industrial S-10, S-11 and A-10 pressure transmitters with DIN plug.

UniTrans®

**UT-10**

The UniTrans® has a turndown capability of up to 20:1, a 0.15% accuracy and an integral temperature sensor. An intrinsically safe version is also available with a HART® communications interface.

- **Ranges**
  - 5 psi to 15,000 psi
- **Output**
  - 4-20 mA
- **Accuracy**
  - ≤0.15% B.F.S.L. (pre-turndown)

CAN Interface

**CAN Interface**

This very compact CAN Interface series is based on the thin film and piezo sensors. Due to their specially adapted specifications in combination with CAN Interface, these pressure transmitters are the perfect instruments for applications in the mobile hydraulics sector, machine construction and automation systems industry. Contact factory for details.

Ultra High Purity

**WU-10, WU-15, WU-16**

Ultra High Purity (UHP) transmitters are specifically designed for ultra pure media applications in semiconductor, flat panel display and micro-electronic industries. They feature electropolished Elgiloy sensor assemblies and replaceable circuit boards and have long-term stability.

Please consult factory for technical specifications, ranges and available configurations.

For datasheets and additional information, please visit [www.wika.com](http://www.wika.com) or call 1-877-876-6425.
Hazardous Area Pressure Transmitters, Submersible Liquid Level Transmitters

Explosion-proof

**E-10, E-11**

The E series transmitters are CSA, FM-approved explosion-proof for Class I, Division I hazardous environments.

**Ranges**
5 psi to 15,000 psi, vacuum, compound, absolute

**Output**
4-20 mA or 1-5V low power

**Accuracy**
≤0.25% B.F.S.L.

Submersible Level

**LS-10, LH-10**

Submersible level transmitters have a watertight construction suitable for applications in tank level measurement, water/wastewater treatment, and reservoir or well depth measurement. They are submersible up to 1,000 feet.

**Ranges**
50 inWC to 400 psi

**Output**
4-20 mA, 2-wire

**Accuracy**
≤0.25% (LS-10) - 0.125% (LH-10) B.F.S.L.

Non-incendive

**N-10, N-11**

Type N-10/N-11 pressure transmitters are specifically designed for gas compressor systems. These transmitters are engineered to meet Class I, Division 2 non-incendive protection in hazardous environments.

**Ranges**
50 inWC to 15,000 psi, vacuum, compound, absolute

**Output**
4-20 mA or 1-5V low power

**Accuracy**
≤0.25% B.F.S.L.

Anti-clog Attachment for Liquid Level Transmitters

**LevelGuard**

The LevelGuard is compatible with the LS-10, LH-10 and IL-10 submersible liquid level transmitters. It is designed for use in wet wells, lift stations and other applications where sludge, slurry or turbulence may be present.

Intrinsically Safe

**IS-20, IS-21, IS-20F**

WIKA's intrinsically safe transmitters are FM, ATEX and CSA-approved. They are designed for installation in Class I, Division 1 hazardous locations.

The IS-21 features a flat, non-clogging diaphragm designed to measure media containing sludge, slurry or particulates. The IS-20-F has an all stainless steel integral junction box for installation in harsh environments.

**Ranges**
50 inWC to 15,000 psi, vacuum, compound, absolute

**Output**
4-20 mA

**Accuracy**
≤0.25% B.F.S.L.

**Intrinsically Safe**

**IL-10**

WIKA IL-10 intrinsically safe submersible liquid level transmitters are engineered for a wide variety of industrial and municipal liquid level measurement applications installed in hazardous areas. Each transmitter undergoes extensive quality control testing and calibration to achieve high accuracy and reliability.

**Ranges**
50 inWC to 400 psi

**Output**
4-20 mA, 2-wire

**Accuracy**
≤0.125% B.F.S.L.

For datasheets and additional information, please visit [www.wika.com](http://www.wika.com) or call 1-877-876-6425.
3A Sanitary Transmitters, Digital Transmitters

3A Sanitary

**S-10-3A**

S-10-3A pressure transmitters meet 3A sanitary criteria for pressure and level measurement in the food, pharmaceutical, cosmetic and beverage industries. They feature 0.25% accuracy, rugged stainless steel construction and a wide operating temperature range.

**Ranges**

15 psi to 1,000 psi vacuum, compound

**Output**

4-20 mA, 0-5 V, 0-10 V

**Accuracy**

≤ 0.50% B.F.S.L.

**SA-11**

WIKA SA-11 pressure transmitters meet 3A and EHEDG sanitary criteria for pressure and level measurement in the food, pharmaceutical, cosmetic and beverage industries. They feature 0.25% accuracy, rugged stainless steel construction and a wide operating temperature range to 300°F.

**Ranges**

40 InWC to 100 psi, vacuum, compound, absolute

**Output**

4-20 mA, 0-5 V

**Accuracy**

≤ 0.25% B.F.S.L.

**F-20-3A**

WIKA F-20-3A pressure transmitters are in compliance with 3A third party criteria for pressure and level measurement in all sanitary applications. The process wetted surfaces of 316L SS are electropolished to reduce cleaning time. This transmitter features 0.25% output linearity (B.F.S.L.) over a wide operating temperature range.

**Ranges**

100 inWC to 200 psi vacuum, compound, absolute

**Output**

4-20 mA, 2-wire

**Accuracy**

0.25% B.F.S.L.

PROFIBUS DP-Interface

**D-10-7, D-11-7**

The D-10-7 and D-11-7 transmitters with accuracies of 0.1% (or 0.05%) have been designed to enable direct communication to a PC, which is required in the field of test, calibration and service technology.

**Ranges**

5 psi to 15,000 psi

**Output**

Profibus DP (EN 50170)

**Accuracy**

≤ 0.1% B.F.S.L.

Digital

**D-10**

The D-10 transmitters with accuracies of 0.1% (or 0.05%) have been designed to enable direct communication to a PC, which is required in the field of test, calibration and service technology. The pressure transmitter’s power supply is taken directly from the RS 232-interface of the PC.

**Ranges**

30”-0 HgVac to 15,000 psi

**Output**

4-20 mA

**Accuracy**

≤ 0.25% B.F.S.L.

Digital

**D-20-9, D-21-9**

The D-20-9 is a precision transmitter with CANopen interface. Due to shock and vibration resistance values which comply with the industrial standards, it is ideal for fieldbus applications in mechanical engineering, automation and test benches.

**Ranges**

5 psi to 22,000 psi

**Output**

CAN (DIN / ISO 11898)

**Accuracy**

≤ 0.25% B.F.S.L.

For datasheets and additional information, please visit www.wika.com or call 1-877-876-6425.
Electronic Temperature Transmitters

**Analog T-19**

Analog transmitters offer an economical solution to most transmitter applications. A choice of inputs are available for 100 Ohm platinum RTD or any one of eight thermocouple types. The T-19 has user selectable ranges and potentiometers for adjustment.

**Inputs**
RTD: 100 Ohm platinum, alpha 0.00385

**Accuracy**
±0.1% of measurement range

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**DIN Rail T-12.30, TE-19.30, T-32.35**

These transmitters have all the features of the complete head mounted transmitter in a convenient DIN rail package. Typically mounted in electrical enclosures, the DIN rail transmitters provide signal conditioning for PLC and data acquisition applications.

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**Digital T-12, T-32.15**

Digital transmitters feature the flexibility of input and range programming combined with high accuracy. The input is programmable for 100 Ohm platinum RTD or any one of 11 thermocouple types. The 4-20 mA output is isolated and linearized to the temperature input. The T-32 has HART® protocol for programming and communications.

**Inputs**
RTD: 100 Ohm platinum, alpha 0.00385
Thermocouple: 11 types
Millivolt: 800 mVdc
Resistance: 5K Ohm

**Accuracy**
RTD: (per DIN IEC 770, 23°C, ±5°C) ±0.2°C
Thermocouple: (per DIN IEC 770, 23°C, ±5°C)
Types J, K, T, E, N, L, U: ±1.0°C
Types R, S, B, W5: ±2.0°C

**Isolation**
1500 VAC

**Dimensions**
1.95" dia. (49.5mm), 1.12" ht. (28.5mm)

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**Fieldbus and PROFIBUS PA T-53**

T-53 has PROFIBUS PA and foundation capabilities and is compatible with RTDs, thermocouples, resistance sensors and millivolt sensors. The T-53 is also intrinsically safe and CE approved.

**Inputs**
RTD: platinum or nickel, 100 Ohm
Thermocouple: 10 types
Millivolt: -800 to 800mV
Resistance: 0 to 10K Ohm

**Accuracy**
RTD: (per DIN IEC 700, 23°C, ±5°C) ±0.8°C
Thermocouple: (per DIN IEC 700, 23°C, ±5°C)
Types J, K, T, E, N, L, U: ±1.0°C
Types R, S, B: 2.0°C

**Isolation**
1500 VAC

**Dimensions**
1.95" dia. (49.5mm), 1.12" ht. (28.5mm)

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For over 60 years, WIKA Instrument Corporation has continuously advanced pressure gauge, transmitter and temperature measurement instrumentation. As the global leader in lean manufacturing, WIKA offers a broad selection of stock and custom instrumentation solutions, which are often available for distribution within days. Producing over 43 million gauges, diaphragm seals, transmitters and thermometers worldwide annually, WIKA’s extensive product line provides measurement solutions for any application. The WIKA sales team, along with its customer service and technical staff members, are ready to share their extensive product and industry knowledge to make your business experience with WIKA productive and progressive.

WIKA provides distinctive service and support to our channel partners and customers:

- Award winning U.S.-based manufacturing, sales and ordering customer service and technical support
- Certified technical specialists who conduct Best Practice Instrument Reviews with performance improvement reports
- An in-house engineering team for product customization and innovation
- Proven capabilities to connect with customer business processes for ordering and inventory management
- Web-based customer service features, including RFQs, literature request and competitor product cross reference