

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.



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.



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

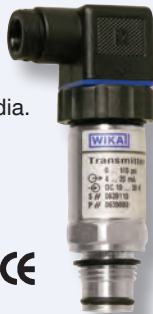
50 InWC to 8,000 psi, vacuum, compound, absolute

Output

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

Accuracy

≤0.25% B.F.S.L.



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



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.



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



OEM

C-10

Featuring a highly stable, temperature compensated and conditioned output signal, the WIKA C-10 is specifically designed to meet OEM requirements. Applications include hydraulics, pneumatics, compressor control, off-road equipment and industrial engine control.

Ranges

100 InWC to 15,000 psi

Output

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

Accuracy

≤0.5% B.F.S.L.



General Purpose Pressure Transmitters, Special Purpose Pressure Transmitters

OEM Mobile Hydraulic Transmitters

MH-2, OT-1, MCH-1

The mobile hydraulic OEM pressure transmitters incorporate WIKA proprietary thin film sensors for exceptional performance, reliability and extended operating life. Custom designs are available for specific OEM requirements. Minimum order quantities may apply.

Ranges

100 psi to 8,000 psi
MCH-1: 1,000 to 10,000 psi

Output

4-20 mA, 1-5 V, 0-10 V, 0.5-4.5 ratiometric @ 5 V
MCH-1: CANopen or J1939

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

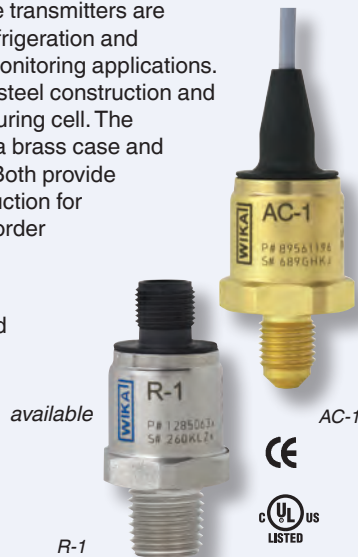
100psi - 850 psi, compound

Output

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

Accuracy

<1% B.F.S.L.



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.



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 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

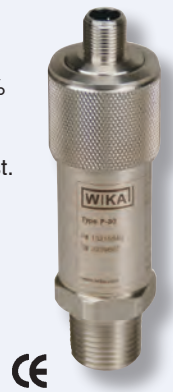
30"-0 HgVac to 15,000 psi

Output

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

Accuracy

Up to ≤ +/- 0.05% (terminal based)



Special Purpose Pressure Transmitters, Meters & Displays, UHP

Panel Mount Digital Indicator

DI-15

The DI-15 features a .40" red 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.



Attachable Loop Powered Local Indicator

A-10 transmitter not included

Low Pressure Differential

DP-10

The WIKA DP-10 pressure transmitter is designed for the measurement of extremely low gauge and differential pressures of clean, dry, inert gaseous media. This transmitter uses a linear variable differential transformer (LVDT sensor) for exceptional sensitivity and performance at extremely low pressures.

Ranges

0.2 InWC- 200 InWC

Output

4-20 mA, 0-5 V

Accuracy

≤1.0% of span



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)



IUT-10 intrinsically safe version available

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.



WU-15

WU-16

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, LH-20

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. The LH-20 is sub 1" diameter and available in titanium.

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.
0.1% (LH-20)



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.



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.



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.



D-10-7

D-11-7



3A Sanitary

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.



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.



3A Sanitary

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.



CANopen

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 15,000 psi

Output

CAN (DIN / ISO 11898)

Accuracy

≤ 0.25% B.F.S.L.



Analog

T19

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 T19 has user selectable ranges and potentiometers for adjustment.

Inputs

RTD: 100 Ohm platinum, alpha 0.00385

Accuracy

±0.1% of measurement range



Analog

T24

With the configurable flexibility of a Windows PC, the T24 is suited for applications in the machine industry and plant construction.

Inputs

RTD: 100 Ohm platinum

Basic configuration

3 wire 0 ... 150°C



DIN Rail

T12.30, T19.30, T32.3S

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.



T19.30



T32.3S

Digital

T12, T32.1S

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 T32 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)



T12



T32



Fieldbus and PROFIBUS PA

T53

T53 has PROFIBUS PA and foundation capabilities and is compatible with RTDs, thermocouples, resistance sensors and millivolt sensors. The T53 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)



T12.30





With almost 70 years of experience, WIKA Instrument, LP is the leading global manufacturer of pressure and temperature measurement instrumentation, producing more than 43 million pressure gauges, diaphragm seals, pressure transmitters, thermometers and other instruments annually. WIKA's extensive product line, including mechanical and electronic instruments, provides measurement solutions for any application in a large variety of industries. A global leader in lean manufacturing and instrumentation experience, WIKA also offers a broad selection of stock and custom instrumentation as well as dedicated services to provide customers with the right solutions, at the right time, wherever they need us.



**Liquid Level Transmitter
with Anti-clog Attachment**
LS-10 with LevelGuard



OEM Pressure Transmitter
A-10

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

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