Product Digest for

pressure and temperature measurement





WIKA Type 111.10/111.12, Type 212.54, and Type 111.25CT gauges are designed for applications where the measured media does not corrode brass, and long and reliable service under rugged conditions is required. Typical applications for these gauges are pumps, hydraulic and pneumatic systems, and compressors.





Type 111.10, 111.12

General Purpose Gauge, Dry

Size	1½", 2", 2½", 3½", 4"
Case	black ABS plastic
Wetted parts	copper alloy
Window	snap-in-acrylic
Accuracy	±3/2/3% of span



Type 212.54

Heavy Duty Service Field Liquid Fillable

Size	2½" & 4"
Case	stainless steel
Bayonet ring	stainless steel - screw-on
Wetted parts	copper alloy
Window	laminated safety glass
Accuracy	±1.0% of span



Type 111.25CT

Contractor's Gauge

Size	4½"
Case	stainless steel
Wetted parts	copper alloy
Window	snap-in-acrylic
Accuracy	±1.0% of span



Type 212.53/213.53, 232.53/233.53, and 132.53/133.53 are ideal choices for OEM and general industrial applications requiring an economical dry or liquid filled pressure gauge. When vibration and/or pulsation are present, the glycerine fill dampens the Bourdon tube and reduces wear on the gauge movement. Typical applications include hydraulic and pneumatic equipment.



Type 212.53, 213.53

Stainless Steel Case, Brass Internals, Field Liquid Fillable

Size	2", 21/2", 4"
Case	stainless steel
Ring	polished stainless steel - crimped-on
Wetted parts	copper alloy
Window	acrylic
Liquid filling	none (212.53); Glycerine (213.53)
Accuracy	±2/1/2% of span



Type 232.53,

Stainless Steel Case, Stainless Steel Internals, Field Liquid Fillable

200.00	intornaio, riora Erquia i mabro
Size	21/2", 4"
Case	stainless steel
Ring	polished stainless steel - crimped-on
Wetted parts	316 stainless steel
Window	acrylic
Liquid filling	none (232.53); Glycerine (233.53)
Accuracy	±1.5% of span (2½"); ±1.0% of span (4")



Type 132.53, 133.53 General Service Stainless Steel, Field Liquid Fillable

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Size	4"
Case	stainless steel
Ring	polished stainless steel - crimped-on
Wetted parts	316 stainless steel
Window	acrylic
Liquid filling	none (132.53); glycerine (133.53)
Accuracy	±3/2/3% of span

With all stainless steel construction, these industrial gauges ensure long service life in the harshest, most demanding environments. Typical applications include process, chemical and petroleum industries, power generation, pollution control equipment, and any other conditions requiring high quality, long lasting pressure measurement instrumentation.



Type 232.54/233.54

Field Repairable,
Field Liquid Fillable

Size	2½", 4"
Case	stainless steel
Bayonet Ring	stainless steel
Ring	polished stainless steel - screw-on
Wetted parts	316 stainless steel
Window	laminated safety glass
Liquid filling	none (232.54); glycerine (233.54)
Accuracy	±1.5% of span (21/2"); ±1.0% of span (4")



Type 232.30, 233.30*

Solid Front Safety Case

Size	2½", 4"
Bayonet ring	stainless steel
Wetted parts	316 stainless steel
Window	acrylic (2½"), laminated safety glass (4")
Liquid filling	none (232.30); glycerine (233.30)
Accuracy	±1.5% of span (2½"); ±1.0% of span (4")

^{*}Note: 233.30 is a lower mount connection



Type 23X.54PM	Stainless Steel	Construction
IVUC CUAJUTI IVI	Stalliess Steel	CONSTRUCTION

Size	3½"
Case	304 stainless steel
Ring	electropolished stainless steel
Wetted parts	316 stainless steel
Window	acrylic
Liquid filling	glycerine (233.54PM)
Accuracy	±1.0% of span (dry); ± 1.5 of span (liquid filled)



WIKA brass and liquid filled gauges are recognized worldwide as the standard of accuracy and durability for gauges in fluid power and hydraulic systems. These liquid filled gauges are ideal for use on compressors, pumps and any hydraulic systems which may produce excessive vibration and pulsation.



Type 213.40	Hydraulic Gauge
Size	2½", 4"
Case	cast brass
Ring	brass-plated ABS (21/2"); chrome-plated steel (4")
Wetted parts	copper alloy
Window	acrylic
Liquid filling	glycerine
Accuracy	±1.5% of span (2½"); ±1.0% of span (4")



Type 212.20, 213.20

Large Diameter Hydraulic Gauge

Size	6"
Case	stainless steel
Ring	stainless steel
Wetted parts	copper alloy
Window	acrylic
Liquid filling	none (212.20); glycerine (213.20)
Accuracy	±1.0% of span

Mechanical Pressure Measurement

The large 6" diameter of Type 232.50/233.50 gauges makes them well-suited for applications that require dial reading from a distance. For applications with compact installation spaces, Type 131.11 1½" or 2" gauges may be ideal. Both models feature all stainless steel construction for protection from harsh environments and corrosive process fluids.

WIKA process gauges and hinged ring gauges are specifically designed for the petrochemical and processing industries. These gauges are engineered to deliver years of reliable service in rugged environments.



Type 2XX.34

Process Gauge

Size 4½", 6 Case black f

black fiberglass reinforced thermoplastic

Wetted parts 21X.34- brass; 22X.34- steel;

23X.34- 316 stainless steel; 26X.34- Monel®

Ring threaded thermoplastic

Window acrylic
Accuracy ±0.5% of span



Type 232.50, 233.50

Large Diameter Stainless Steel Gauge

Size 6" Case sta

Bayonet ring

Wetted parts

Window

stainless steel stainless steel 316 stainless steel laminated safety glass

Liquid filling none (232.50); glycerine (233.50)

Accuracy ±1.0% of span



Type 232.25

Hinged Ring Gauge

Size Case

black aluminum black steel, removable

41/2", 6"

Ring blace Wetted parts 212

212.25HR - copper alloy; 232.25HR - 316 stainless steel; 262.25HR - Monel®

Pointer adjustable

Window flat glass

Accuracy ±0.5% of span (ASME B40.100 Grade 2A)



Type 131.11

Small Diameter Stainless Steel Gauge

Size 1½", 2"
Case stainless steel

Wetted parts 316 stainless steel
Window snap-in-acrylic
Accuracy ±2.5% of span



Type 612.34/632.34

Low Pressure Process Gauge

Size 4½'

Case black fiberglass reinforced thermoplastic
Wetted parts 612.34 - brass; 632.34 - 316 stainless steel

Window acrylic Accuracy ±2/1/2% of span





The WIKA Sealgauge® is a reliable alternative to the conventional system of a diaphragm seal and pressure gauge It uses a mechanical linkage, which eliminates the need for a system fill fluid. The Sealgauge® is built to withstand the corrosive, highly viscous and crystallizing media (gaseous or liquid) typical of the process industry. It is especially well suited for petrochemical, pulp and paper, wastewater treatment, electric power plants, and low pressure applications.



Type 452.50

Accuracy

1" ASME 150# RF **Flanged Connection**

Size Upper housing 304 stainless steel Bayonet ring 304 stainless steel 316 stainless steel, PTFE lined Diaphragm Lower housing 316 stainless steel, PTFE lined

±1.5% of span

laminated safety glass Window Liquid filling none



General Service.

Low Pressure Size

black painted steel

Extremely sensitive and highly accurate, the Type 611.10 and

pressure. They are especially well suited for systems where

applications requiring exceptional sensitivity, precision, and

air or other gases are the measured media, testers, and other

Type 632.50 capsule gauges are designed to measure very low

Wetted parts copper alloy snap-in-acrylic/zero adjustment screw on dial Window

Accuracy ±1.5% of span



All Stainless Steel

Size Case 304 stainless steel Ring 304 stainless steel, polished Diaphragm 316 stainless steel, PTFE lined Lower housing 316 stainless steel Window laminated safety glass

Liquid filling none (432.50); glycerine (433.50)

Accuracy ±1.5% of span



Type 632.50

Window

reliability.

Type 611.10

Case

All Stainless Steel, **Low Pressure**

Size stainless steel Bayonet ring stainless Wetted parts 316 stainless steel

laminated safety glass/zero adjustment screw

on dial

Accuracy ±1.5% of span



Type 422.12, 432.12

Cast Iron Case

Size Case cast iron Ring black painted steel

422.12- ≤30 PSI 316 stainless steel; Diaphragm

>30 PSI carbon steel 432.12- 316 stainless steel

Lower housing carbon steel (422.12); 316 stainless steel (432.12)

instrument glass Window ±1.5% of span Accuracy

Differential Pressure Measurement



This piston-style differential pressure gauge is designed for use with clean liquid or gaseous media where high differential pressure/static process pressures are required. The 700.04 is suitable for measuring pressure drops across a variety of devices, including filters, strainers, separators, and heat exchangers.

Size

Case & bezel reinforced plastic or aluminum Sensor housing 316L stainless steel or anodized aluminum 316 stainless steel & ceramic magnet Wetted parts acrylic or shatter-resistant glass Window DP range 0-5 PSID thru 0-100 PSID

Working pressure up to 6000 PSIG (400 bar) Accuracy ±2% of span (increasing)



This diaphragm-style differential pressure gauge is suited for use in applications requiring low/medium differential and medium/high process pressure media. The 700.05 is intended for measuring pressure drops across filters, strainers, separators, heat exchangers,

and gas recovery systems. 21/2", 41/2" Size

Case & bezel reinforced plastic or aluminum

Sensor housing 316L stainless steel or anodized aluminum Wetted parts 316 stainless steel & ceramic magnet

acrylic or shatter-resistant glass Window 0-50" H₂0 thru 0-100 PSID DP range up to 3000 PSIG (200 bar) Working pressure

±2% of span (increasing), ranges 15 PSI thru Accuracy

100 PSI; ±5% of span (increasing), ranges 50" H₂0

thru 300" H₂0



Type 712.25DP/DX

Differential/Duplex Gauge

Size 4½", 6" Case black aluminum

Ring black aluminum, bayonet ring

Wetted parts copper alloy

one black (differential); one black, one red (duplex) Pointer

Window flat glass

0-15 PSID thru 0-1000 PSID DP range

Working pressure up to full scale value

±2/1/2% of span (ASME B40.1 Grade A) Accuracy



Type 732.25

Dry or Liquid Filled

This opposed membrane/liquid filled sensor element is designed for applications requiring high differential/high process pressures. The 732.25 is used in a variety of industrial uses, including rotating equipment systems and/or corrosive environments in liquid or gaseous media.

Size 41/2", 6" Bezel

316L stainless steel

Dial case black powder-coated aluminum

Sensor housing 316L stainless steel

Sensor element PTFE; Halocarbon fill; Monel Window acrylic or shatter-resistant glass DP range 0-100" H₂0 thru 0-600 PSID 0-3000 PSIG (200 bar) Working pressure

Accuracy ±1% of span

NACE MR-01-75 compliant NACE



This opposed membrane/liquid filled sensor element differential pressure gauge is for applications requiring medium differential/high process pressures. The 732.26 is typically used for a variety of industrial uses, including cryogenic gases and/or corrosive environments in liquid or gaseous media.

Size 41/2", 6" Bezel

316L stainless steel

Dial case black powder-coated aluminum

Sensor housing 316L stainless steel

Sensor element PTFE; Halocarbon fill; 316L stainless steel

Window acrylic or shatter-resistant glass

DP range 0-100" H₂0 thru 0-400 PSID

Working pressure 600 PSIG (40 bar) Accuracy

±1% of span



Type 910.12.100, 910.12.200, 910.12.300

Pressure Snubbers

Pressure snubbers dampen pressure oscillations allowing easy reading of the "average" pressure. They also protect the gauge from damaging pulsations and spikes. Available in brass and 316 stainless steel in porous, piston, and throttling types. WIKA gauge cocks provide an economical method for isolating the instrument from the process. They also provide an adjustable flow orifice and are rated at 200 PSI.



Needle valves isolate the pressure gauge from the pressure medium and act as a throttling device. They can also effectively dampen pulsation.

WIKA's needle valves are available in standard, mini, block & bleed, and multi-port designs.



Type 910.14.100 Pressure & Temperature Plugs

Pressure & temperature plugs allow multiple process sampling ports. Equipped with a self-sealing pierceable rubber diaphragm and rated at 1,000 PSI and 200°F (350°F available).



Type 910.13 Adjustable Overpressure Protectors

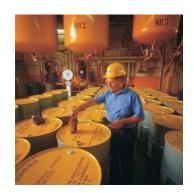
Overpressure protectors prevent the pressure gauges from sudden spikes in pressure. The shut-off pressure point is adjustable from 50 PSI to 5,000 PSI. Available in aluminum, brass, and 316 stainless steel.



Type 910.15.100, 910.15.200

Gauge Siphons

Gauge siphons protect gauges from high temperature mediums such as saturated steam. The high temperature steam condenses in the siphon preventing it from damaging the gauge internals. Available in brass, steel or 316 stainless steel. For horizontal (coil) or vertical installations (pigtail).



High Precision & Calibration

WIKA high precision and test gauges are extremely sensitive and highly accurate. They are ideal for instrument shops, gauge repair and calibration shops, testing laboratories and other applications demanding high precision and consistent results. These gauges feature a mirrored band on the dial to eliminate parallax reading errors.



Type 312.20, 332.30

ASME B40.100 Grade 3A

Size 6"

Case stainless stee

Wetted parts 312.20 - copper alloy; 332.30 - 316 stainless steel

Window laminated safety glass Accuracy ±0.25% of span



Type 332.54

ASME B40.100 Grade 3A

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Case	stainless steel
Bayonet ring	polished stainless steel
Wetted parts	316 stainless steel
Window	laminated safety glass
Accuracy	+0.25% of span



Type 342.11 ASME B40.100 Grade 4A

Size	10"
Case	cast aluminum, dark grey
Ring	cast aluminum, dark grey
Connection	316 stainless steel
Bourdon tube	Ni-span®

Window green tinted acrylic, non-reflecting Accuracy ±0.1% of span



Type 332.34 ASME B40.100 Grade 3A

Size	4½"
Case	black fiberglass reinforced thermoplastic
Ring	fiberglass reinforced thermoplastic; black
Wetted parts	316 stainless steel
Window	laminated safety glass
Accuracy	±0.25% of span





High Precision & Calibration

WIKA has calibration equipment available for temperature or pressure, mechanical or electronic, field use, or use in metrology labs. With EN and N.I.S.T. traceable products, WIKA can provide the required equipment to maintain metrology and calibration laboratories.



Type 65-2000

Accuracy

Range Pressure units

Pressure overload capability

Digital Pneumatic Calibrator

0.02% of reading ± 3 digits (including linearity, hysteresis and temperature error)

-10...100 PSI (-0.7...7 bar)

PSI, mbar, bar, kPa, mHg, mH₂O (4°C),

"Hg, "H₂O (20°C)

up to -10...100 PSI (2 times)



Type 65-2000 II

Range Sensor type Units Voltage measurement

Current measurement Transmitter supply

Pneumatic

Digital Pressure Calibrator

-10..0..100 PSI~ (-0.7...7 bar)

differential pressure (max. 100 PSI static) mbar, bar, kPa, mmHg, PSI, in. H₂0 (20°)

0... ± 32 V DC 0... + 32 mA DC

24 V DC + 5%; max. 30 mA (galv. isolated

max. 500 VDC)

precision pressure regulator (for external pressure supply); pressure hand pump with volume controller for stand alone pressure supply



Type DPE 750

Digital Pressure Electronic Controller

The DPE 750 is a universal test and calibration unit for the maintenance and calibration of pressure gauges and transmitters. It is designed for workshop and laboratory calibration, as well as field operation. The DPM 200 Digital Panel Manometer is panel-mounted into the DPE 750.



Type CPG8000

Modular Sensor System

<0.01% FS and IP 41 Accuracy Ranges 4 to 40,000 PSI

Sensors

Keyboard membrane keyboard **Evaluation unit** Motorola 50 MHz powerpc-board

Windows CE Operating System

RS-232 and IEEE-488.2 Digital Interface

Relay Outputs 8 programmable change-over contacts



Type DPR-20C

Accuracy 0.03% of span Ranges from 0...1.5 PSI

-14.7...300 PSI from 0...100mbar to -1...20bar



Type Diptron 3 Plus

Accuracy 0.04% of span Ranges from 0...1.5 PSI

-14.7...3000 PSI from 0...100mbar to -1...200bar



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Type T-19

Analog Transmitter

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: Platinum 100 Ohm, alpha 0.00385 thermocouple: J, K, N, T, E, R, S, B
Accuracy ±0.1% of measurement range



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Type T-24

Analog Transmitter

The T-24 combines the timely response of an analog transmitter with the configurable flexibility of a Windows PC. The T-24 is suited for applications in the machine industry and plant construction.

Inputs measuring range configurable with Windows PC Basic configuration 3 wire 0 ... 150°C

basic configuration 3 wife 0 ... 130 C







Type TE-19.30, T-32.30, T-12.30

These transmitters have all the features of the complete head mounted transmitter, except for 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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Type T-23

Digital Transmitters

The T-23 digital temperature transmitter converts thermocouple inputs to a linearized 4-20 mA signal. It features a full galvanic isolation and thermocouple break protection. This transmitter withstands shock and vibration in harsh industrial environments.

Inputs thermocouple: J, K, N, T, E, L, U, R, S, B, W3, W5

Accuracy thermocouple: (per DIN IEC 770, 23°C or

0.05% FS or ±010% µV







Type T-12, T-32

Digital Transmitters

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: Platinum 100 Ohm, 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

1500 VAC

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







Type T-42

Isolation

Isolation

Profibus DP Compatible

T-42 has Profibus protocol capability for Profibus-PA bus systems and is compatible with RTDs, thermocouples, resistance sensors, and millivolt sensors. The T-42 is also intrinsically safe and CE approved.

nputs RTD: platinum or nickel, 100 Ohm

thermocouple: 10 types millivolt: -400 to 1200mV resistance: 5K 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

1500 VAC

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



The N-10 is FM approved non-incendive for Class I, Division 2, Groups A, B, C, and D. It features a ½" male conduit electrical connection, NACE listed wetted parts, NEMA 4 / IP 67 weather protection, and excellent vibration resistance.

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.

Type N-10, N-11



Intrinsically safe transmitters are for applications requiring Class I, Division 1 protection in hazardous environments. IS-10 are industrial grade FM approved transmitters. IS-11 transmitters feature a non-clogging flat sensor for use with media containing particulates for pressure to 8,000 PSI. IF-10 transmitters have a NEMA 4X integral junction box for use in wet, corrosive environments.

Ranges 50 INWC to 60,000 PSI, vacuum,

compound, absolute

Output 4-20mA 2-wire Accuracy 0.25% B.F.S.L.



The E series transmitters are FM Approved explosion proof for Class I, Division I locations.

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.



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

Ranges 50 INWC to 400 PSI

Output 4-20 mA

Accuracy 0.25% - 0.125% B.F.S.L.



The UniTrans has a turndown capability of 20:1, 0.15% accuracy, an integral temperature sensor, and is available with a HART communications interface.

Ranges 0-5 PSI to 0-15,000 PSI

Output 4-20 MA 2-wire

UT-10

Accuracy 0.15% B.F.S.L. (before turndown)



Attachable Loop Powered Local Indicator

Display -1999 to +9999 user-programmable

Power loop powered with 3 VDC drop

Application for use with WIKA industrial and Eco-Tronic pressure

transmitters with DIN plug



Standard Industrial **Pressure Transmitters**

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.

50 INWC to 40,000 PSI, vacuum, Ranges

compound, absolute

Output 4-20 mA 2-wire, 0-5 V 3-wire, 0-10V

3-wire, 0-100 mV 4-wire

Accuracy





Profibus DP-Interface

The Profibus DP (EN 50170) interface compatible pressure transmitter enables rapid data transmission rate of up to 12 Mbit for automation and test bench applications. Accuracy of 0.1% is standard. The transmitter features built-in diagnostic routines as well as no temperature error between 0° and 122°F.

0-5 PSI to 0-15,000 PSI Ranges Profibus DP (EN 50170) Output ±0.1% B.F.S.L. Accuracy



Type S-11

Type HP-1

Type P-10

Flush Diaphragm **Pressure Transmitters**

The S-11 flat diaphragm pressure transmitters are designed for use with sludge, slurry, or high viscosity media.

50 INWC to 8,000 PSI, vacuum, Ranges

compound, absolute

Output 4-20 mA 2-wire, 0-5 V 3-wire, 0-10V

3-wire, 0-100 mV 4-wire

Accuracy ±0.25% B.F.S.L



Type SA-11

Ranges

Output

Accuracy

3A transmitters for food and pharmaceutical pressure monitoring applications are available in ranges from 50 INWC to 1,000 PSI with 11/2" or 2" Tri-Clamp® connections. They meet 3A criteria and are available with cooling extensions for high temperature applications.

100 INWC to 100 PSI, vacuum, compound

15 PSI to 1,000 PSI vacuum, compound Ranges

> 4-20mA ≤ 0.25% B.F.S.L.

4-20mA, 0-5V Output ≤ 0.5% B.F.S.L Accuracy



High Pressure Transmitter

The new HP-1 is designed for ultra-high pressure monitoring and control applications up to 120,000 PSI. It provides accurate, reliable and safe performance when exposed to rapid pressure changes.



High Precision Digital

WIKA high precision pressure transmitters provide accuracies as high as ≤0.05% of span and have no temperature error between 0 and 122°F. They are suitable for applications in the laboratory as well as harsh industrial environments.





Low Pressure 3A Sanitary



Type C-10

OEM Pressure Transmitter

WIKA OEM pressure transmitters are specifically designed to meet price and performance requirements of Original Equipment Manufacturers. They feature a highly stable, temperature compensated, conditioned output signal, and are designed for long service life. OEM applications include hydraulics, pneumatics, compressor control, off-road equipment and industrial engine control.

Ranges 100 INWC to 15,000 PSI, gauge or absolute Output 4-20 mA 2-wire, 0-5 V 3-wire, 0-10 V 3-wire

Accuracy ≤0.5% B.F.S.L.





Type CAN-Interface

OEM & Open Transmitter

The CAN-interface transmitter is available with CAN OEM protocol compatibility. With a baud rate of 1 megabit, a 5 msec capture rate is possible for rapid acquisition of measurement cycles. High shock and vibration capability allow for tough applications such as mobile hydraulic, machine tools and test equipment.

Ranges 0-5 PSI to 0-22,000 PSI

Output CAN (DIN / ISO 11898)

Accuracy ±0.25% B.F.S.L.





Type M-10

Micro-Tronic

With a case length (including hex) of just 1.7" and a diameter of .75", the Micro-Tronic is one of the world's smallest industrial pressure transmitters for embedded OEM sensor applications. The Micro-Tronic is CE approved.

Ranges 0-500 PSI to 0 -15,000 PSI

Output 4-20 mA 2-wire, 0-5 V 3-wire, 0.1 -10V3-wire

Accuracy ±.25% B.F.S.L.



Type MH-1

Mobile Hydraulic Transmitter

The MH-1 is a rugged transmitter designed for the most demanding applications in the mobile hydraulic industry. Outputs include 4-20 mA or 1-5 V 3-wire signals. Shock resistance of 1,000g and vibration to 50g assures continued performance in the toughest applications. Available with IP-69K environmental protection for high pressure steam washdown. Sensor is countersunk into the process connection to prevent media leaks in the event of a damaged transmitter or shear of the transmitter body.

Ranges 0-1,000 PSI to 0-10,000 PSI Output 4-20 mA 2-wire, 1-5 V 3-wire

Accuracy ±0.5% B.F.S.L.



Type Eco-Tronic

Eco-Tronic transmitters provide a conditioned high level 4-20 mA or 0-10 V output. All have CE certification and meet stringent RFI protection requirements. They are suitable for many general purpose and OEM pressure measurement applications.

Ranges 15 PSI to 15,000 PSI Supply Voltage 10 to 30 VDC (14 to 30 VDC)

Output 4-20mA (0-10VDC) Accuracy \leq 0.5% B.F.S.L.

Diaphragm Seals

WIKA diaphragm seal systems enable pressure gauges, transmitters, transducers, and switches to be adapted for installation into adverse applications. Diaphragm seals are excellent for applications involving high temperature, corrosive, toxic, abrasive and highly viscous media and offer a wide variety of exotic materials to ensure complete compatibility with most processes.

Diaphragm seals can be assembled to the pressure measuring instrument directly or remotely through the use of a capillary. Seals are used extensively in industries such as petrochemical, chemical, and gas facilities, oil refineries, pulp and paper mills, food and dairy processing, water and sewage treatment, and pharmaceutical facilities.



Type L910.ZA

1/4" or 1/2" NPT female, capillary Instrument connection 3" pipe and up Process connection Pressure rating 1,500 PSI 15 PSI to 1,500 PSI Suitable pressure Wetted parts SST, other consult factory



Type M93X.D1

All-Welded System

Size 41/2" fiberglass reinforced thermoplastic Case Wetted parts 316L stainless steel, Monel, HastelloyC-276

Window acrylic 1/2" NPT male Process connection System fill fluid silicone, DC200-10 Accuracy +0.5% of span



Type L990.10/12

Instrument connection Process connection

Pressure rating

Suitable pressure Wetted parts

Standard Version

1/4" or 1/2" NPT female, capillary threaded: 1/4" to 1" NPT female flanged:

1/2" to 2" RF

threaded: up to 3675 PSI flanged: 150# to 1500# per ASME B16.5

15 PSI to 3675 PSI

CS, SST, Monel®, Hastelloy®, Teflon® lining, Tantalum, other consult factory



Type L990.27

Instrument connection Process connection Pressure rating Suitable pressure Wetted parts

Flange-Type Flush

1/4" or 1/2" NPT female, capillary flanged: 2" to 4" RF flanged: 150# to 2500# per ASME B16.5 10" in H₂0 to 2500# per ASME B16.5 SST, Monel®, Hastelloy®, Teflon® lining, Tantalum, other consult factory



Type L981.10

Instrument connection Process connection Pressure rating Suitable pressure Wetted parts

INLINE SEAL®

flanged: 1" to 8" RF; wafer flanged: 150# to 2500# per ASME B16.5

1/4" or 1/2" NPT female, capillary

10 PSI to 6,000 PSI

SST, Monel®, Hastelloy®, Teflon® coated, Tantalum, other consult factory

Sanitary seals are designed to facilitate ease of assembly and disassembly from its mating fitting. The most common sanitary seal and mating fitting are held together via a clamp to minimize impurities entering the process during the removal and reinstallation of the seal. The sanitary seal Tri-Clamp® construction meets the criteria set by "3A". Sanitary seals are designed for applications in the pharmaceutical, and food & beverage industries.







Type L990.22

Wetted parts

Instrument connection
Process connection
Pressure rating
Suitable pressure

1/4" or 1/2" NPT female, capillary 11/2" to 4" Tri-Clamp® 600 PSI

15 PSI to 600 PSI SST, other consult factory Type M93X.25 Field Fillable

Size 2½"

Case polished stainless steel

Ring polished stainless steel, crimped

Wetted parts
316L stainless steel
Window
Process connection
316L stainless steel
polycarbonate
%" Tri-Clamp®

Process connection %" Tri-Clamp® Accuracy ±2/1/2% of span





Field Fillable

Type L981.22

Instrument connection
Process connection
Pressure rating
Suitable pressure

INLINE SEAL™ Sanitary
¼" or ½" NPT female, capillary
¾" to 4" Tri-Clamp®

600 PSI 15 PSI to 600 PSI

Wetted parts SST, other consult factory

Type M93X.2A

Accuracy

Size 2½", 4"

Case stainless steel

Ring stainless steel

Wetted parts 316L stainless steel

Window polycarbonate

Process connection 1½", 2" Tri-Clamp®;

1½", 2" Tri-Clamp®; lower or back mount ±1.5% of span (2½"), ±1.0% of span (4")







Type M932.2C

Size 1½", 2"
Case stainless steel
Ring polished stainless steel, press-fit

Wetted parts 316L stainless steel

Window glass

Process connection 3/4" Tri-clamp®, lower or center back mount Accuracy ±3/2/3% of span

Mechanical Temperature Measurement



Type 30, 31, 32, 50, 51, 52

Process Grade Bimetal Thermometers

WIKA bimetal process grade thermometers are suitable for nearly every direct-reading thermometer application. Their durable construction and finish ensure reliable readings and long-lasting service. The superior quality of the WIKA Type 30, 31, 32, 50, 51, 52 is reflected in the 7-year warranty.

Size Case & stem 304 stainless steel Stem lengths 21/2" to 72"

Case configuration back-connected, bottom-connected,

adjustable angle

Connection 1/2" NPT on 3" and 5" dials (std.) Window

flat instrument glass Dial white aluminum; anti-parallax

Pointer black aluminum Accuracy ±1.0% of span ASME B40.3 Grade A

Scale dual °F/'°C; single °F or °C

-100°F(-70°C) to 1000°F(500°C), in dual scale F&C, Ranges

Fahrenheit only or Celsius only

External reset a slotted hex adjustment head offers screwdriver

or wrench use to field calibrate the thermometer

WIKA does not recommend use of filled instruments' Fill policy

continual use at operating temperatures above

400°F(204°C) or below -100°F(-70°C) pressure rating on WIKA standard 1/4" stem

Pressure thermometers (1/4" O.D.x.020 wall tubing) is

> 1450 PSI working external pressure hermetically sealed per ASME B40.3. Guaranteed

Immersion for accurate temperature readings, immerse stem a

minimum of 2" in agitated liquid or 4" in moving air

Options silicone fill; min-max pointer; 3/8" stem; 316

stainless steel wetted parts



Industrial Grade Bimetal Thermometers

WIKA's industrial grade bimetal thermometers are ideal for a weather resistant application or where a tamper-proof thermometer is recommended. The WIKA Type 20, 33, 34, 53, 54 are warranted for one year.

2½" to 24" Size Case & stem 304 stainless steel 21/2" to 72" Stem lengths

Case configuration back-connected, bottom-connected,

adjustable angle

Connection 1/2" NPT on 3" and 5" dials; 1/4" NPT on 2" dials

standard; others available Window flat instrument glass

white aluminum; anti -parallax Dial

Pointer black aluminum

Accuracy ±1.0% of span ASME B40.3 Grade A

dual °F/'°C; single °F or °C Scale

Ranges -100°F(-70°C) to 1000°F(500°C), in dual scale F&C,

Fahrenheit only or Celsius only

pressure rating on WIKA standard 1/4" stem Pressure

thermometers (1/4" O.D.x.020 wall tubing) is

1450 PSI working external pressure

Hermetic seal hermetically sealed per ASME B40.3. Guaranteed

not to fog

Immersion for accurate temperature readings, immerse stem a minimum of 2" in agitated liquid or 4" in moving air



TI.T17, TI.T20

Hermetic seal

Laboratory Thin Stem Thermometers

WIKA laboratory/thin stem thermometers deliver fast, extremely accurate readings. They are high-quality, economical thermometers designed for laboratory and OEM applications.

13/4", 2" Case & stem 304 stainless steel

Stem lengths 5", 8", 12", 18" Connection plain, 7/16" hex hub with no threads

Window flat instrument glass Dial white aluminum Pointer black aluminum Accuracy 1.0% full scale value Scale dual °F/°C; single °F or °C

-100°F (-70°C) to 1000°F(500°C), in dual scale F&C, Ranges

Fahrenheit only or Celsius only

External reset externally adjustable on plain connection Options

stem lengths, threaded connections, scales and dial markings, Lexan® window, beaker clip, stem tip



Mechanical Temperature Measurement





Industrial Glass Thermometers

WIKA's industrial glass thermometers offer easy-to-read temperature measurement in tough applications. Their molded housings offer excellent rigidity and impact resistance, and the glass tube is mounted to resist shock.

Features guaranteed accuracy to within 1% of scale: spring

mounted glass window to reduce rattles

completely adjustable locking case & stem; Ranges 7" & 9" to 550°F (288°C) in Fahrenheit, Celsius, and Dual

Scale; blue (non-mercury) liquid standard. Available

with or without thermowell

available with brass dual-threaded thermowell socket that fits both 1/2" and 3/4" NPT; Ranges 40°F

(-40°C) to 400°F(200°C) in Fahrenheit, Celsius, and Dual Scale. 300°F (150°) max with red mercury fill; spirit fill available.



Gas Actuated Thermometers

WIKA gas actuated dial thermometers are easy-to-read and provide excellent performance throughout their ranges. They are excellent when extremely accurate temperature readings are needed from remote locations or mercury-sensitive environments.

41/2" and 6"

Case connection front flange, back flange, u-clamp, phenolic turret, direct reading adjustable angle

Connection variety of connection systems

Capillary lengths to 99

Ranges -320°F(-200°C) to 1200°F(650°)

bendable extensions up to 18" with sliding union; Options copper bulb, capillary & braided armor; stainless steel

bulb; capillary & spring armor; stainless steel interlocking armor; acrylic or shatterproof glass

window; min-max pointer; red set hand



Solar Powered Digital Thermometer

WIKA's solar powered digital thermometer is the ideal instrument where exact readings are required, such as a pilot plant or a Research & Development application.

TI.80 - back connected; TI.82- adjustable angle Type

Case & stem 304 stainless steel

Lens glass ½" NPT Connection

Sensor ceramic thermister requiring 35 lux to operate the

3-volt solar cell



Solar Industrial Thermometer

Lux Rating

WIKA' solar industrial thermometer is an excellent alternative to mercuryin-glass. It eliminates toxic mercury and offers fast, accurate, easy-toread temperature indications. Retro-fit design is a drop-in replacement for glass

10 Lux (one foot candle)

Range -50/300°F (-50/150°C) 1% of reading 1° Accuracy Sensor glass passivated thermistor



Vapor Actuated Thermometers

Where critical measurement is within a limited range, a WIKA vapor actuated thermometer is ideal. Rugged and reliable, these instruments are well-suited for refrigeration, drying ovens, and plating applications.

Dial 2", 21/2", 31/2", 41/2'

Case connection front flange, back flange, u-clamp plain, threaded union, thermowell Connection

Capillary lengths to 99

Options

-40°F(-40°C) to 350°F(176°C) Ranges

> copper bulb, capillary & braided armor; or stainless steel bulb, capillary stainless steel

interlocking armor available



Twin-Temp

Range

WIKA's unique Twin-Temp thermometer combines the accuracy, reliability and easy-to-read dial of a bimetal thermometer with the precision readout and data acquisition capability of a thermocouple or RTD sensor. Every thermowell in your process can have two sensors.

Size	3" and 5"
Case	adjustable angle case or back-connected case
Stem	¼" O.D.
Length	T/C 2½" to 48"; RTD 4" to 48"
Connection	½" NPT

-100°F(-70°) to 550°F(260°C) in Fahrenheit, Celsius, and dual scale. Type K thermocouple or 100 Ohm RTD is standard. Types J, E, and T are

optional.







Type TI.1005

Pocket Test

Type TI.1005 is a bimetal dial thermometer requiring no power to deliver its quick, accurate readings. The 1" dial is easy-to-read. Stem length is 5". Thermometer includes pocket case which can be used to hold the stem.

Accuracy	±1% of full scale
Case	stainless steel
Stem	.142" diameter
Length	5"
Range	-40/160°F; 0/220°F; 50/550°F
Pointer	aluminum with matte red finish



Type TI.1006DW is a water-resistant, impact-resistant digital pocket thermometer offering both Fahrenheit and Celsius readings, with a unique "data hold" feature that "remembers" the last reading. Range is from -40° to 300°F and -40° to 150°C. Battery is included.

Accuracy	±1% of full scale
Case	plastic
Stem	.157" diameter
Length	3" 250
Range	-40/300°F (-40/150°C) switchable
Power	battery



Thermowells

Working range

Thermowells for temperature instruments are recommended for all processes where measurement is of a corrosive medium. WIKA thermowells are available from a complete selection of base materials, as well as shields and coatings, and in threaded, flanged, welded, and sanitary connections. WIKA thermowells are offered in .260" and .385" bores. WIKA sanitary thermowells meet the criteria for USDA and 3A sanitary standard 09-09 requirements. WIKA also manufactures thermowell conversion kits to adapt different thermowells to new types of thermometers.

Process connections	threaded, flanged, welded, sanitary
Instrument connection	½" NPSM standard
Shank configurations	stepped, straight, tapered
Bore diameter	.260", .385"
Materials	brass, AISI 304, AISI 316 (other materials available)
Surface finish	brass: 60-100Ra; AISI 304 & AISI 316:
	16-32Ra; sanitary (AISI 304 & 316):
	16-32Ra



Steady: ¾ X full-scale value; Fluctuating: 2/3 X

full-scale value; Short Time: full-scale value

The thermogauge is a combination of both a pressure gauge and bimetal thermometer into one, compact instrument. Popular for pressure and temperature measurement in hot water and commercial boilers, this product consists of a Bourdon Tube and a bimetal helix for pressure and temperature measurement.

Size 2½" (CBM only), 3¼" (CBM & LM)
Case & stem
Stem lengths 7/8" thru 2"
Accuracy ±3% FS
Ranges 0/55 & 0/60 PSI/ftH2O (feet of water) pressure (model specific)70/250°F Temperature



TI.TSG60 Temperature Switch Gauge

WIKA's temperature switch gauge offers a combination of industrial strength performance with unmatched precision. The TI.TSG60 has a rugged stainless steel case which holds up to four single pole, double throw 10 amp switches for a variety of switching actions.

Size	6¼"
Case	304 stainless steel; bottom connected back flange
Window	Lexan®
Switch rating	10 amp@125/250 VAC, non-inductive; 5 amp@120
	VAC, inductive; ½" amp @125 VDC, noninductive;
	1/4" amp @ 250 VDC, non-inductive
Switch connection	terminal block for 1 and 2 switch models; Amphenol
	connector for 3 and 4 switch models
Switch differential	equal to 2-3% of span
Connection	3/8" x 3" 316 stainless steel bulb with 12" or 18"
	bendable extension, and ½" NPT one-time
	compression fitting
Range	50% up to 500°F, except 10% on 0-120°C and
	0-250°F





As the world's leading manufacturer of pressure and temperature instrumentation, WIKA Instrument Corporation combines U.S. manufacturing with a global network of subsidiaries to deliver the most extensive product line in the industry. Located just outside of Atlanta in Lawrenceville, Georgia, WIKA's 210,000 square foot facility features state-of-the-art manufacturing technology and highly automated proprietary production equipment. Additionally, WIKA has manufacturing facilities in Germany, Brazil, South Africa, China, India, Switzerland, and Canada.

Since 1946, WIKA has been recognized for being innovative and supplying quality products. Annually, WIKA produces over 30 million gauges, diaphragm seals, transmitters, and thermometers worldwide. WIKA maintains a nationwide network of over 110 full capability distributors who offer product application expertise and an extensive inventory of pressure and temperature products.

WIKA's dedication to improving products and services is seen in continuous product engineering and development. The result is the highest quality, longest lasting instruments available designed to meet or exceed customers' requirements.

To find your nearest WIKA distributor, call toll-free 1-888-WIKA-USA

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