Product Digest for

pressure and temperature measurement





Mechanical Pressure 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 copper alloy, 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

±3/2/3% of span



Accuracy

Type 212.54	Heavy Duty Service
	Field Liquid Fillable
Sizo	016" 2 4"

Size	21/2" & 4"
Case	stainless steel
Bayonet Ring	stainless steel - twist-on
Wetted Parts	copper alloy
Window	laminated safety glass
Accuracy	±1.5% of span (2½"); ±1.0% of span (4")



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 minimizes pointer oscillation, which reduces wear on the gauge movement. Typical applications include hydraulic and pneumatic equipment.



Type 212.53 213.53	1500	Stainless Steel Case, Brass Internals, Field Liquid Fillable
Size		2", 2½", 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 (2, 2½"); ±1.0% of span (4')

Type 232.53, 233.53	Stainless Steel Case, Stainless Steel Internals, Field Liquid Fillable
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)

±2/1/2% of span (21/2"); ±1.0% of span (4")



Accuracy

Type 132.53, 133.53	General Service Stainless Steel Field Liquid Fillable
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 those requiring high quality, long lasting pressure measurement instrumentation.

Type 232.54

Field Repairable, Field Liquid F

233.54		
Size	WIKA	2½", 4"
Case		stainless steel
Bayonet Ring		stainless steel - twist-on
Wetted Parts		316 stainless steel
Window		laminated safety glass
Liquid Filling		none (232.54); glycerine (233.54)
Accuracy		±2/1/2% of span (21/2"); ±1.0% of span (4")



Туре	232.30,
	233.30*

Solid Front Safety Case

200.00	450	
Size	-////	2½", 4"
Bayonet Ring		stainless steel - twist-on
Wetted Parts		stainless steel
Window		acrylic (21/2"), laminated safety glass (4")
Liquid Filling		none (232.30); glycerine (233.30)
Accuracy		±2/1/2% of span (2½"); ±1.0% of span

*Note: 233.30 is a lower mount connection



Type 23X.54PM	Stainless Steel Construction
Size	3½"
Case	304 stainless steel
Bayonet Ring	electropolished stainless steel - twist-on
Wetted Parts	316 stainless steel
Window	acrylic
Liquid Filling	none (232.54PM); glycerine (233.54PM)
Accuracy	±1.0% of span (dry); ± 1.5 of span (liquid filled)

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



Type 233.55	Panel Builder Gauge
Size	2½"
Case	304 stainless steel
Ring	crimped tamper-proof bezel
Wetted Parts	316 stainless steel
Window	safety glass
Liquid Filling	glycerine
Accuracy	±2/1/2% of span



Type 213.40	Hydraulic Gauge
Size	2½", 4"
Case	cast brass
Cover Ring	brass-plated ABS (2½"); chrome- plated brass (4")
Wetted Parts	copper alloy
Window	acrylic
Liquid Filling	glycerine



Type 212.20, 213.20	Large Diameter Hydraulic Gauge
Size	6"
Case	stainless steel
Ring	stainless steel - twist-on
Wetted Parts	copper alloy
Window	acrylic
Liquid Filling	none (212.20); glycerine (213.20)
Accuracy	±1.0% of span

Type 131.11 1½", 2", 2½" features all stainless steel construction for protection from harsh environments and corrosive process fluids. Additionally the 131.11 is well suited for applications with compact installation spaces. The large 6" diameter of the Type 232.50/233.50 gauge makes it ideal for applications that require dial reading from a distance.



Type 131.11	Small	Diameter Stainless Steel Gauge
Size	1½",	2", 2½"
Case	stainl	ess steel
Bayonet Ring	none	
Wetted Parts	316 s	tainless steel
Window	snap-	-in-acrylic
Accuracy	±2.5%	% of span



Type 232.50, 233.50	Large Diameter Stainless Steel Gauge
Size	2½", 4", 6"
Case	stainless steel
Bayonet Ring	stainless steel - twist-on
Wetted Parts	316 stainless steel
Window	laminated safety glass
Liquid Filling	none (232.50); glycerine (233.50)
Accuracy	(2½") ±2/1/2%; (4") ±1.0%; (6") ±1.0%

WIKA process gauges and hinged ring gauges are specifically designed for the petrochemical, processing, and power generation industries. These durable gauges are engineered to provide reliable service in harsh and rugged environments.



Type 2XX.34	Process Gauge
Size	4½", 6"
Case	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 232.25	Hinged Ring Gauge
Size	4½", 6
Case	black aluminum
Ring	polished stainless steel - removable
Wetted Parts	212.25HR - copper alloy; 232.25HR - 316 stainless steel; 262.25HR - Monel®
Pointer	adjustable
Window	flat glass
Accuracy	±0.5% of span



632.34	Low Pressure Process Gauge	
Size	4½"	
Case	black fiberglass reinforced thermoplas	tic
Wetted Parts	612.34 - brass; 632.34 - 316 stainless s	teel
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 ideal for petrochemical, pulp and paper, wastewater treatment, power plants, and low pressure applications.



Type 452.50	1" ASME 150# RF Flanged Connection
Size	4"
Upper Housing	304 stainless steel
Bayonet Ring	304 stainless steel
Diaphragm	316 stainless steel, PTFE lined
Lower Housing	316 stainless steel, PTFE lined
Window	laminated safety glass
Liquid Filling	none
Accuracy	±1.5% of span



The second second		
Type 432.50, 433.50	All Stainless Steel	
Size	4"	
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	

Extremely sensitive and highly accurate, the Type 611.10 and Type 632.50 capsule gauges are designed to measure very low pressure. They are especially well suited for systems where air or other gases are the measured media, as well as other applications requiring exceptional sensitivity,

precision, and reliability.

1ype 422.12, 432.12	Cast Iron Case
Size	4"
Case	cast iron
Ring	black painted steel
Diaphragm	422.12- <30 PSI 316 stainless steel; >30 PSI carbon steel 432.12- 316 stainless steel
Lower Housing	carbon steel (422.12); 316 stainless steel (432.12)
Window	instrument glass

±1.5% of span



Accuracy

Type 611.10	General Service, Low Pressure
Size	2½"
Case	black painted steel
Wetted Parts	copper alloy
Window	snap-in-acrylic/zero adjustment screw on dial
Accuracy	±1.5% of span



Type 632.50	All Stainless Steel, Low Pressure
Size	4"
Case	stainless steel
Bayonet Ring	stainless steel - twist-on
Wetted Parts	316 stainless steel
Window	laminated safety glass/zero adjustment screw on dial
Accuracy	±1.5% of span



Type 700.04 Dry or Liquid Filled

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	2½", 4½"
Case	reinforced plastic or aluminum
Sensor Housing	316L stainless steel or anodized aluminum
Wetted Parts	aluminum or 316 stainless steel & ceramic magnet
Window	acrylic or shatter-resistant glass
DP Range	0-5 PSID thru 0-100 PSID
Working Pressure	up to 6000 PSIG (400 bar)
Accuracy	±2% of span (increasing)



Type 700.05

Dry or Liquid Filled

This diaphragm-style differential pressure gauge, which eliminates "blow-by", 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.

Size	2½", 4½"	
Case & Bezel	reinforced plastic or aluminum	
Sensor Housing	316L stainless steel or anodized aluminum	
Wetted Parts	aluminum or 316 stainless steel & ceramic magnet Buna N diaphragm	
Window	acrylic or shatter-resistant glass	
DP Range	0-50" H ₂ 0 thru 0-100 PSID	
Working Pressure	up to 3000 PSIG (200 bar)	
Accuracy	$\pm 2\%$ of span (increasing), ranges 15 PSI thru 100 PSI; $\pm 5\%$ of span (increasing), ranges 50" H $_2$ 0 thru 300" H $_2$ 0	



Type 712.25DP/DX	Differential/Duplex Gauge
Size	4½", 6"
Case	black aluminum
Ring	black aluminum, bayonet ring
Wetted Parts	copper alloy
Pointer	one black (differential); one black, one red (duplex)
Window	flat glass
DP Range	0-15 PSID thru 0-1000 PSID
Working Pressure	up to full scale value
Accuracy	±2/1/2% of span (ASME B40.1 Grade A)



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	4½", 6"
Bezel	316L stainless steel
Dial Case	black powder-coated aluminum
Sensor Housing	316L stainless steel
Sensor Element	PTFE; Halocarbon fill; Monel diaphragm
Window	acrylic or shatter-resistant glass
DP Range	0-100" H ₂ 0 thru 0-600 PSID
Working Pressure	0-3000 PSIG (200 bar)
Accuracy	±1% of span



Type 732.26

Dry or Liquid Filled

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	4½", 6"
Bezel	316L stainless steel
Dial Case	black powder-coated aluminum
Sensor Housing	316L stainless steel
Sensor Element	PTFE; Halocarbon fill; 316L stainless steel diaphragm
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.



Type 910.10

Gauge Cocks

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.



Type 910.11, 910.11.100, 910.11.200, 910.11.300

Needle Valves

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).



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).



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.

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 steel
Ring	stainless steel - twist-on
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	
Size	4"	
Case	stainless steel	
Bayonet Ring	stainless steel - twist-on	
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 332.54	ASME B40.100 Grade 3A
Size	4½"
Case	black fiberglass reinforced thermoplastic
Ring	fiberglass reinforced thermoplastic; black
Wetted Parts	316 stainless steel
Window	acrylic
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 II	Digital Pressure Calibrator	
Accuracy	0.02% of reading + 3 digits (including linearity, hysteresis and temperature error)	
Range	-10100 PSI (-0.77 bar)	
Sensor Type	differential pressure (max. 100 PSI static)	
Units	mbar, bar, kPa, mmHg, PSI, in. H20 (20°)	
Voltage Measurement	0+ 32 V DC	
Current Measurement	0+ 32 mA DC	
Transmitter Supply	24 V DC + 5%; max. 30 mA (galv isolated max. 500 VDC)	
Pneumatic	precision pressure regulator (for external pressure supply); pressure hand pump with volume controller for stand alone	

pressure supply



Type DPE 750 Digital Pressure Electronic Calibrator

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.

Range	-14.7 to 300 PSI	
Sensor Type	gauge, differential or absolute	
Units	mbar, bar, mmHg, kPa, PSI, in. H20 (20°), in. Hg)	
Voltage Measurement	0± 32 V DC	
Current Measurement	0± 32 mA DC	
Transmitter Supply	24 V DC + 5%; max. 30 mA (galv isolated max. 500 VDC)	
Pneumatic	precision pressure regulator (for external pressure supply); pressure hand pump with volume controller for stand alone pressure supply	

1	5920	
00		

Type CPC8000

Pressure Controller

Accuracy	.004%, .01%, .025%
Ranges	0 to 6,000 PSI
Keyboard	membrane keyboard
Evaluation Unit	Motorola 50 MHz powerpc-board
Operating System	Windows CE
Digital Interface	RS-232 and IEEE-488.2
Relay Outputs	8 programmable change-over contacts



Type DPR-20C

Pressure Controller

.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Accuracy	0.03% of span
Ranges	from 01.5 PSI -14.7300 PSI from 0100mbar to -120bar
Digital Interface	IEEE.488.2 available in single or dual range



Type Diptron 3 Plus

Digital Pressure Gauge

Accuracy	0.04% of span
Ranges	from 01.5 PSI -14.73000 PSI from 0100mbar



Type 65-2000

Capability

Digital Pneumatic Calibrator

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

Accuracy	0.02% of reading + 3 digits (including linearity, hysteresis and temperature error)
Range	-10100 PSI (-0.77 bar)
Pressure Units	PSI, mbar, bar, kPa, mHg, mH2O (4°C), in. Hg, in. H2O (20°C)
Pressure Overload	to 10 100 DCI (0 times)





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





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









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

DIN Rail Transmitters

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.





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
Isolation	1500 VAC
Dimensions	1.95" dia. (49.5mm), 1.12" ht. (28.5mm)







Type T-42

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.

Inputs	RTD: platinum or nickel, 100 Ohm Thermocouple: 10 types millivolt: -400 to 1200 mV resistance: 5K Ohm
Accuracy	RTD: (per DIN IEC 700, 23°C, ±5°C) ±0.8°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)

Electronic Pressure Measurement









Type N-10, N-11

Non-Incendive

The N-10 is FM approved non-incendive for Class I, Division 2, Groups A, B, C, and D. It features a 1/2" 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 IS-10, IS-11, IF-10

Intrinsically Safe

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







Type E-10, E-11

Explosion Proof

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.



Type LH-10, LS-10, IL-10*

Submersible

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.

*Note: hazardous area approvals only available on Type IL-10



UT-10, UT-11, IUT-10

UniTrans

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
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 transmitters with DIN plug

Electronic Pressure Measurement





Œ

Type S-10

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

Ranges	R50 INWC to 40,000 PSI, vacuum, compound, absolute
Output	4-20 mA 2-wire, 0-5 V 3-wire, 0-10V
Accuracy	±0.25% B.F.S.L.



Œ

Type S-<u>11</u>

Flush Diaphragm
Pressure Transmitters

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

Ranges	50 INWC to 8,000 PSI, vacuum, 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 HP-1

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.



WIKA high precision pressure transmitters provide accuracies as high as <0.05% (0.025% B.F.S.L.) 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.



PROFO.

((

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.

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



3A transmitters for food and pharmaceutical pressure monitoring applications are available in ranges from 50 INWC to 1,000 PSI with 1½" or 2" Tri-Clamp® connections. They meet 3A criteria and are available with cooling extensions for high temperature applications.

Ranges	15 PSI to 1,000 PSI vacuum, compound
Output	4-20 mA, 0-5V
Accuracy	≤ 0.5% B.F.S.L.

Type SA-11	Low Pressure
Ranges	100 INWC to 100 PSI, vacuum, compound
Output	4-20 mA
Accuracy	≤ 0.25% B.F.S.L.





(6

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 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 -10 V 3-wire
Accuracy	±.25% 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
Output	10 to 30 VDC (14 to 30 VDC)
Accuracy	≤ 0.5% B.F.S.L.



CANOpen

Œ

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 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 MH-2/OT-1

OEM Pressure Transmitters

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 / performance ratio for OEM applications requiring a large production quantity of transmitters. Custom designs are available for specific OEM requirements. Minimum order quantities apply.

Ranges	100 PSI to 8000 PSI
Output	4-20 mA,1-5V, 0-10V, 0.5-4.5 ratiometric
Accuracy	≤ 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	Saddle Seal
Instrument Connection	1/4" or 1/2" NPT female, capillary
Process Connection	3" pipe and up
Pressure Rating	1,500 PSI
Suitable Pressure	15 PSI to 1,500 PSI
Wetted Parts	SST, other consult factory



Type M93X.D1	All-Welded System
Size	41/2"
Case	fiberglass reinforced thermoplastic
Wetted Parts	316L stainless steel, Monel, HastelloyC-276
Window	acrylic
Process Connection	½" NPT male
System Fill Fluid	silicone, DC200-10
Accuracy	± 0.5% of span



Type L990.10/12	Standard Version
Instrument Connection	1/4" or 1/2" NPT female, capillary
Process Connection	threaded: 1/4" to 1" NPT female flanged: 1/2" to 2" RF
Pressure Rating	threaded: up to 3675 PSI flanged: 150# to 1500# per ASME B16.5
Suitable Pressure	15 PSI to 3675 PSI
Wetted Parts	CS, SST, Monel®, Hastelloy®, Teflon® lining, Tantalum, other consult factory



Type L990.27	Flange-Type Flush
Instrument Connection	1/4" or 1/2" NPT female, capillary
Process Connection	flanged: 2" to 4" RF
Pressure Rating	flanged: 150# to 2500# per ASME B16.5
Suitable Pressure	10" in H20 to 2500# per ASME B16.5
Wetted Parts	SST, Monel®, Hastelloy®, Teflon® lining, Tantalum, other consult factory



Type L981.10	Wafer INLINE SEAL®
Instrument Connection	1/4" or 1/2" NPT female, capillary
Process Connection	flanged: 1" to 8" RF; wafer
Pressure Rating	flanged: 150# to 2500# per ASME B16.5
Suitable Pressure	10 PSI to 6,000 PSI
Wetted Parts	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	Sanitary
Instrument Connection	1/4" or 1/2" NPT female, capillary
Process Connection	1½" to 4" Tri-Clamp®
Pressure Rating	600 PSI
Suitable Pressure	15 PSI to 600 PSI
Wetted Parts	SST other consult factory





3

Type L981.22	INLINE SEAL™ Sanitary
Instrument Connection	1/4" or 1/2" NPT female, capillary
Process Connection	3/4" to 4" Tri-Clamp®
Pressure Rating	600 PSI
Suitable Pressure	15 PSI to 600 PSI
Wetted Parts	SST, other consult factory





Type M93X.25	Case Field Fillable
Size	2½"
Case	polished stainless steel
Ring	polished stainless steel, crimped
Wetted Parts	316L stainless steel
Window	polycarbonate
Process Connection	¾" Tri-Clamp®
Accuracy	<u>+</u> 2/1/2% of span





Type M93X.2A	Case Field Fillable
Size	2½", 4"
Case	stainless steel
Ring	stainless steel
Wetted Parts	316L stainless steel
Window	polycarbonate
Process Connection	1½", 2" Tri-Clamp®; lower or back mount
Accuracy	<u>+</u> 1.5% of span (2½"), <u>+</u> 1.0% of span (4")





Type M932.2C	445	
Size	11/2", 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	<u>+</u> 3/2/3% of span	

Type 30, 31, 32, 50, Process Grade 51, 52 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 seven-year warranty.

seven-year warranty.	51, 32, 30, 31, 32 is reflected in the
Size	3", 5"
Case & Stem	304 stainless steel
Stem Lengths	2½" to 72" (call factory for lengths over 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
Ranges	-100°F(-70°C) to 1000°F(500°C), in dual scale F&C, Fahrenheit only or Celsius only
External Reset	a slotted hex adjustment head offers screwdriver or wrench use to field calibrate the thermometer
Fill Policy	WIKA does not recommend use of filled instruments' continual use at operating temperatures above 400°F(204°C) or below -100°F(-70°C)
Pressure	pressure rating on WIKA standard ¼" stem thermometers (¼" 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 or gas
Options Options	dampened movement (shown below); min-max pointer; 3/8" stem; 316 stainless steel wetted parts; safety glass; Lexan® and acrylic windows
20 240	Application of the second of t

Type 20, 33, 34, 53, 54 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.

Size	2½" to 24"
Case & Stem	304 stainless steel
Stem Lengths	2½" to 72"
Case Configuration	back-connected, bottom-connected, adjustable angle
Connection	½" NPT on 3" and 5" dials; ¼" NPT on 2" dials standard; others available
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
Ranges	-100°F(-70°C) to 1000°F(500°C), in dual scale F&C, Fahrenheit only or Celsius only
Pressure	pressure rating on WIKA standard ¼" stem thermometers (¼" 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 or gas







TI.T17, TI.T20

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.

Size	1¾", 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
Ranges	-100°F (-70°C) to 1000°F(500°C), in dual scale F&C, 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

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.

guaranteed accuracy to within 1% of scale; spring mounted glass window to reduce rattles

completely adjustable locking case & stem; Ranges 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 ½" and ¾" NPT; Ranges 40°F (-40°C) to 400°F(200°C) in Fahrenheit, Celsius, and Dual Scale.

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.

Dial	4½" 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°)
Options	bendable extensions up to 18" with sliding union; 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

Note: Thermometer pictured with optional thermowell installed.

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.

77.1

Туре	Tl.80 - back connected; Tl.82- adjustable angle
Case & Stem	304 stainless steel
Lens	glass
Connection	½" NPT
Sensor	ceramic thermister requiring 35 lux to operate the 3-volt solar cell

Solar Industrial Thermometer

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

Range -50/300°F (-50/150°C)

Accuracy 1% of reading 1°

Sensor glass passivated thermistor

Lux Rating 10 Lux (one foot candle)



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", 2½", 3½", 4½"
Case Connection	front flange, back flange, u-clamp
Connection	plain, threaded union, thermowell
Capillary Lengths	to 99'
Ranges	-40°F(-40°C) to 350°F(176°C)
Options	copper bulb, capillary & braided armor; or stainless steel bulb, capillary stainless steel interlocking armor available



WIKA's unique Twin-Temp thermometer combines the accuracy, reliability and easy-to-read dial of a bimetal or solar digital 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	1⁄4" O.D.
Length	T/C 2½" to 48"; RTD 4" to 48"
Connection	½" NPT
Range	-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.

Note: The Twin-Temp is available in explosion proof and digital configurations.

111111 Section Fields

Type TI.1006DW

Digital Pocket Test

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"
Range	-40/300°F (-40/150°C) switchable
Power	battery



Type TI.1005

Pocket Test

Type Tl.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



Thermowells

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