

# Bourdon Tube Pressure Gauges

## Dry or Liquid Filled Gauge with SAE Connection

### Type 212.53S - Dry Case

### Type 213.53S - Liquid-filled Case

WIKA Datasheet 21X.53S

#### Applications

- Intended for adverse service conditions where pulsating or vibration exists (with liquid filling)
- Hydraulics & compressors
- Suitable for gaseous or liquid media that will not obstruct the pressure system

#### Product features

- Vibration and shock resistant (with liquid filling)
- 7/16" -20 SAE connection
- Pressure ranges up to 15,000 psi

#### Specifications

##### Design

ASME B40.100 & EN 837-1

##### Sizes

2½" (63 mm)

##### Accuracy class

± 2/1/2% of span (ASME B40.100 Grade A)

##### Ranges

Vacuum / Compound to 200 psi (16 bar)  
Pressure from 15 psi (1 bar) to 15,000 psi (1000 bar)  
or other equivalent units of pressure or vacuum

##### Working pressure

Steady: 3/4 scale value  
Fluctuating: 2/3 full scale value  
Short time: full scale value

##### Operating temperature

Ambient: -40°F to +140°F (-40°C to +60°C) - dry  
-4°F to +140°F (-20°C to +60°C) - glycerine filled  
-40°F to +140°F (-40°C to +60°C) - silicone filled  
Medium: +140°F (+60°C) maximum



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##### Temperature error

Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.4% of span for every 18°F (10°K) rising or falling.

##### Weather protection

Weather tight (NEMA 4X / IP 66)

##### Pressure connection

Material: copper alloy  
Lower mount (LM)  
7/16" - 20 SAE with o-ring, washer and lock nut

##### Bourdon tube

Material: copper alloy  
≤ 870 psi (60 bar): C-shape  
> 870 psi (60 bar): Helical type

##### Movement

Copper alloy

##### Dial

White ABS with stop pin and with black lettering

##### Pointer

Black aluminum

**Case**

304 stainless steel with vent plug and stainless steel crimp ring. Suitable for liquid filling. Case connection sealed with EPDM o-ring (glycerine filled) or Viton o-ring (dry or silicone filled).

**Window**

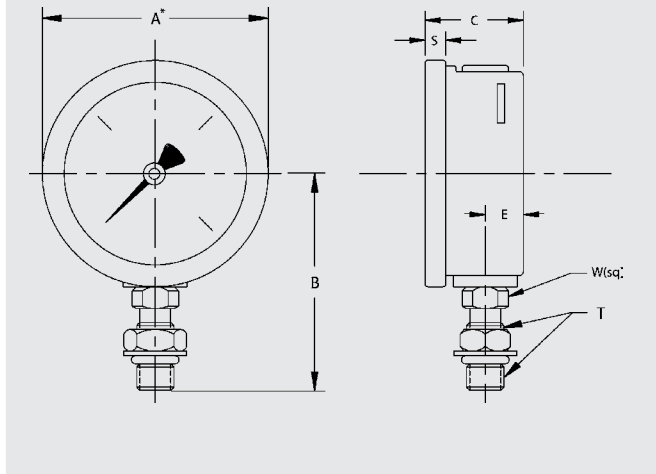
Polycarbonate with Buna-N gasket

**Case fill**

Glycerine 99.7% - Type 213.53S

**Optional extras**

- Brass restrictor
- External zero adjustment (2½" only)
- Red drag pointer or mark pointer
- Silicone or Halocarbon Oil case filling
- Custom dial layout
- Other pressure scales available  
bar, kPa, MPa, kg/cm<sup>2</sup> and dual scales

**Dimensions**

Size		A	B	C	E	S	T	W	Weight
2.5"	mm	69	61.2	31	13	6		14	0.38 lb. dry
	in	2.69	2.41	1.23	0.51	0.24	7/16-20	0.55	0.46 lb. filled

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