

Differential pressure gauges with bourdon tube, parallel entry measuring system stainless steel Model 732.18/733.18, without/with liquid filling

WIKA data sheet PM 07.03

Applications

- Measurement of differential pressures or of two different pressures applied in refrigeration plants or compressors
- Simultaneous measurement of the vapour pressure and the resulting vapour temperature
- For gaseous and liquid aggressive media that are not highly viscous or crystallising, also in aggressive ambience

Special features

- Differential pressure with moving dial
- Design optionally with duplex scale
- With liquid-filled case for damping in applications with high dynamic pressure pulsations or vibrations and for avoiding condensation water
- Combined pressure and temperature scales as duplex, triplex or quadruplex scales for all common refrigerants

Description

Design

Two independent measuring systems, parallel entries in line

Nominal size in mm

80, 100

Accuracy class

1.6

Scale ranges

0 ... 1 to 0 ... 60 bar

-1 ... 0 ... +12 bar

-1 ... 0 ... +15 bar

-1 ... 0 ... +16 bar

-1 ... 0 ... +25 bar

-1 ... 0 ... +30 bar

-1 ... 0 ... +35 bar

-1 ... 0 ... +40 bar

Other scale ranges on request



Differential pressure gauge model 733.18 with temperature scales and oil pressure display for refrigeration technology

In order to ensure a good readability, the pressure differential to be indicated should be no less than 1/6 of the full scale range.

When ordering please state both pressures:

a) maximum total pressure applied, b) differential pressure

Pressure limitation

Steady: full scale value

Fluctuating: 0.9 x full scale value

Short time: 1.3 x full scale value

Operating temperature

Ambient: -20 ... +60 °C

Medium: +100 °C maximum

Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C):

max. $\pm 0.4\%$ /10 K of full scale value

Standard version

Process connection

Stainless steel,
Lower mount (LM) or back mount (BM)
2 x G 3/8 B, male, 19 mm flats,
plus-connection (HP) and minus-connection (LP) identified
at the gauge

Pressure elements

Stainless steel, welded

Movement

Cu-alloy, wear parts argentan

Dial

Aluminium, white, black lettering

Pointer

1 standard pointer: Aluminium, black
1 scale pointer: Aluminium, white
scaled $\pm 50\%$ of main scale range as
plus and minus differential pressure
indication

Case

Stainless steel

Window

Polycarbonate

Bezel ring

Crimp ring, glossy finish stainless steel

Filling liquid (for model 733.18)

Glycerine 99.7 %

Ingress protection

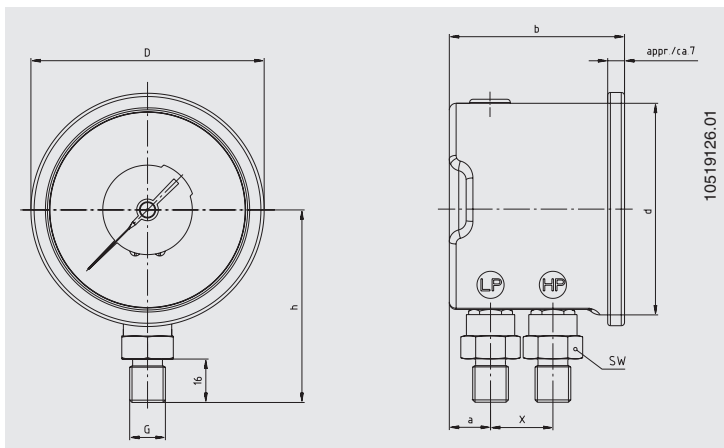
IP 65 per EN 60 529 / IEC 529

Options

- Other process connections: 2 X G 1/4 B, 7/16-20UNF (1/4 Flare), M12 X 1.5 for 6 mm, (others on request)
- Design with duplex scale („duplex pressure gauge“)
- Panel or surface mounting flange
- Panel frame 88 x 88 mm
- Mounting clamp for panel mounting
- Ingress protection IP 66 (only for case filling)

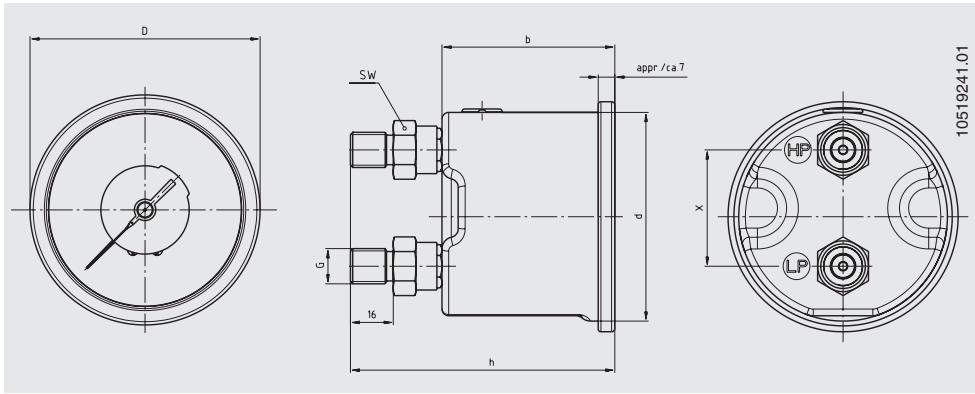
Dimensions in mm

Connection location lower mount (NS 80 and 100)



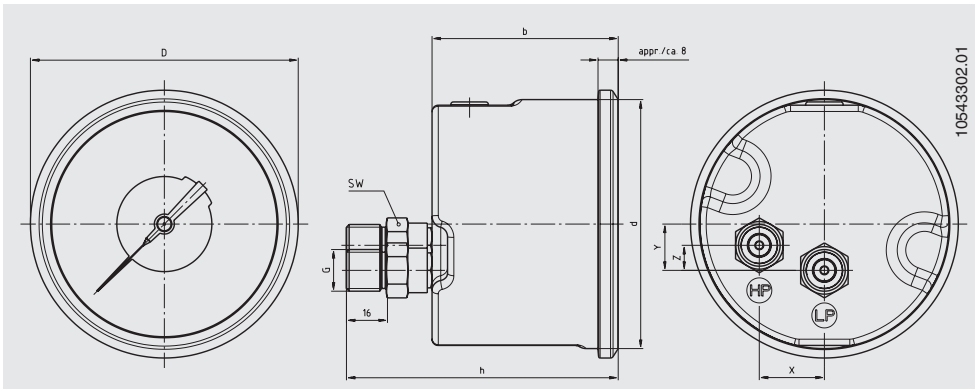
NS	Dimensions in mm								Weight in kg
	a	b	d	D	G	h ± 1	X	SW	
80	15	64.5	78	86	G 3/8 B	71	23	19	0.49
100	16	74	99.5	107	G 3/8 B	83	26.5	19	0.65

Connection location back mount (NS 80)



NS	Dimensions in mm							Weight in kg
	b	d	D	G	$h \pm 1$	X	SW	
80	64.5	78	86	G 3/8 B	99	43.5	19	0.53

Connection location back mount (NS 100)



NS	Dimensions in mm									Weight in kg
	b	d	D	G	$h \pm 1$	X	Y	Z	SW	
100	74	99.5	107	G 3/8 B	109	26	18.5	10	19	0.71

Ordering information

Model / Nominal size / Scale range / Lettering / Differential pressure or duplex scale / Connection size / Connection location /
Max. total pressure applied / Differential pressure span / Options

The specifications given in this document represent the state of engineering at the time of publishing.
We reserve the right to make modifications to the specifications and materials.



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