

# Pressure gauge

stainless steel vibration damped movement  
case dim 100 mm

E 02.08.04

Ed.23.02

<b>Application</b>	Pressure gauge in stainless steel version. Suitable for aggressive media and environments With vibration damped movement
<b>Design</b>	EN 837-1
<b>Series</b>	<b>2880</b>
<b>WIKA model</b>	232.50 vibration damped movement
<b>Case size</b>	Nominal size dim 100 or 160 mm
<b>Accuracy</b>	Class 1,0%
<b>Case</b>	Stainless steel 1.4301 with bayonet ring Option with case in stainless steel 316Ti Option with epoxy- or PTFE-coating
<b>Window</b>	Laminated safety glass. Option with polycarbonate
<b>Pressure element</b>	Stainless steel 316L
<b>Movement</b>	Stainless steel, vibration damped
<b>Dial</b>	Aluminium, white with black lettering
<b>Pressure unit</b>	Bar. Option with unit bar/Pa, bar/psi, kPa, MPa, psi
<b>Pressure connection</b>	G3/8", G1/2" or 1/2"NPT male. Option G1/4" or 1/4"NPT Option with mounted restrictor
<b>Mounting</b>	Lower or back mount, also with back flange, front flange or triangular bezel with clamp
<b>Ingress protection</b>	IP 65 acc.to EN 60529/IEC 529
<b>Pressure limitation</b>	Full scale value by steady pressure 90% of full scale value by fluctuating pressure By short time pressure 1,3 x of full scale value Option with overpressure safe 2 x full scale value
<b>Permissible temperature</b>	Medium temperature max -40 till +200°C Ambient temperature max -40 till +60° C
<b>Certificates</b>	Certificate EN 10204 can be delivered as options Test report wetted parts EN 10204-2.2 Inspection certificate wetted parts EN 10204-3.1
<b>Calibration</b>	Option with accredited calibration with calibration certificate according to ISO/IEC 17025:2018 (SWEDAC)
<b>Production options</b>	Explosion protection ATEX Ex h Design acc.to NACE Sour Gas Service Design Degreased for oxygen services Silicone free design Pressure element in monel (type 262.50) Dial with colored sectors or with customer logo



**2880**  
Lower mount



**2881**  
Back mount



**2885**  
Lower mount  
back flange



**2887**  
Back mount  
front flange



**2888**  
Back mount  
bezel and clamp



**2889**  
Lower mount  
front flange

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Pressure range	Interval	Divisions
0-0,6 bar	0,01	60
0-1 bar	0,02	50
0-1,6 bar	0,05	32
0-2,5 bar	0,05	50
0-4 bar	0,1	40
0-6 bar	0,1	60
0-10 bar	0,2	50
0-16 bar	0,5	32
0-25 bar	0,5	50
0-40 bar	1,0	40
0-60 bar	1,0	60
0-100 bar	2,0	50
0-160 bar	5,0	32
0-250 bar	5,0	50
0-400 bar	10,0	40
0-600 bar	10,0	60
0-1000 bar	20,0	50
-1/0 bar	0,02	50
-1/+1,5 bar	0,05	50
-1/+3 bar	0,1	40
-1/+5 bar	0,1	60
-1/+9 bar	0,2	50
-1/+15 bar	0,5	50
-1/+24 bar	0,5	50

## Accuracy

### Max permissible error 1,0%

The accuracy is expressed as a percentage of full scale range. Permissible error 1,0% will cover 0% till 100% of scale range with a reference temperature of +20°C.

Ex. Pressure range 0-10 bar has an error of  $\pm 0,1$  bar

### Temperature effect

Temperature of the measuring system over or under the reference temperature +20°C will effect the accuracy with 0,4 percentage per +10°C. With a medium temperature of +40°C the accuracy will be  $\pm 1,8\%$ .

## Alternative design

### Liquid filling

Case with liquid filling

Type 2940 datasheet E02.09.02

### Low pressure

Pressure range < 0-0,6 bar

Pressure range from 2,5 mbar to 400 mbar

Type 2860 datasheet E02.17.01

### High pressure

Pressure range > 0-1000 bar

Pressure range 0-1600 bar or 0-2500 bar

Type 2950 HP1 datasheet E02.11.01

### Test gauge

Pressure gauge for testing and calibration 0,6%

Type 332.50 enligt datablad PM 03.06

### With electrical contact

One or two electrical contact mounted in the case

Max- and/or minfunction

Type PGS23.100 datasheet E02.53.01

### With electrical contact device

One or two electrical contact mounted outside the case

Max- and/or minfunction







Datasheet E02.60.01

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Code number case dim 100 mm scale Bar						
	2880	2880	2880	2885	2885	2885
Mounting	Lower	Lower	Lower	Back flange	Back flange	Back flange
Connection	G3/8"	G1/2"	1/2"NPT	G3/8"	G1/2"	1/2"NPT
0-0,6 bar	28804001	28804401	28805001	28854001	28854401	28855001
0-1 bar	28804002	28804402	28805002	28854002	28854402	28855002
0-1,6 bar	28804003	28804403	28805003	28854003	28854403	28855003
0-2,5 bar	28804004	28804404	28805004	28854004	28854404	28855004
0-4 bar	28804006	28804406	28805006	28854006	28854406	28855006
0-6 bar	28804007	28804407	28805007	28854007	28854407	28855007
0-10 bar	28804008	28804408	28805008	28854008	28854408	28855008
0-16 bar	28804011	28804411	28805011	28854011	28854411	28855011
0-25 bar	28804013	28804413	28805013	28854013	28854413	28855013
0-40 bar	28804015	28804415	28805015	28854015	28854415	28855015
0-60 bar	28804017	28804417	28805017	28854017	28854417	28855017
0-100 bar	28804019	28804419	28805019	28854019	28854419	28855019
0-160 bar	28804020	28804420	28805020	28854020	28854420	28855020
0-250 bar	28804022	28804422	28805022	28854020	28854422	28855022
0-400 bar	28804024	28804424	28405024	28854024	28854424	28855024
0-600 bar	28804025	28804425	28405025	28854025	28854425	28855025
-1/0 bar	28804040	28804440	28805040	28854040	28854440	28855040
-1/+1,5 bar	28804066	28804466	28805066	28854066	28854466	28855066
-1/+3 bar	28804067	28804467	28805067	28854067	28854467	28855067
-1/+5 bar	28804068	28804468	28805068	28854068	28854468	28855068
-1/+9 bar	28804069	28804469	28805069	28854069	28854469	28855069
-1/+15 bar	28804071	28804471	28805071	28854071	28854471	28855071
-1/+24 bar	28804072	28804472	28805072	28854072	28854472	28855072

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Code number case dim 100 mm scale Bar			
	2889	2889	2889
<b>Mounting</b>	Front flange	Front flange	Front flange
<b>Connection</b>	<b>G3/8"</b>	<b>G1/2"</b>	<b>1/2"NPT</b>
0-0,6 bar	28894001	28894401	28895001
0-1 bar	28894002	28894402	28895002
0-1,6 bar	28894003	28894403	28895003
0-2,5 bar	28894004	28894404	28895004
0-4 bar	28894006	28894406	28895006
0-6 bar	28894007	28894407	28895007
0-10 bar	28894008	28894408	28895008
0-16 bar	28894011	28894411	28895011
0-25 bar	28894013	28894413	28895013
0-40 bar	28894015	28894415	28895015
0-60 bar	28894017	28894417	28895017
0-100 bar	28894019	28894419	28895019
0-160 bar	28894020	28894420	28895020
0-250 bar	28894022	28894422	28895022
0-400 bar	28894024	28894424	28895024
0-600 bar	28894025	28894425	28895025
-1/0 bar	28894040	28894440	28895040
-1/+1,5 bar	28894066	28894466	28895066
-1/+3 bar	28894067	28894467	28895067
-1/+5 bar	28894068	28894468	28895068
-1/+9 bar	28894069	28894469	28895069
-1/+15 bar	28894071	28894471	28895071
-1/+24 bar	28894072	28894472	28895072

# Pressure gauge




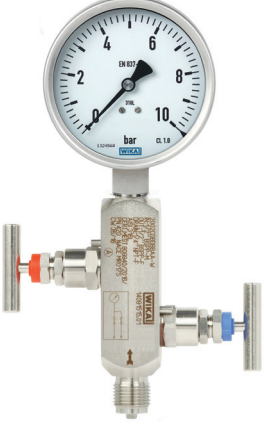
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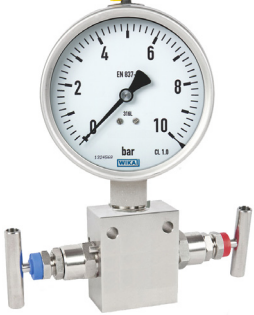



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## Pressure gauge with Instrument Needle valve and Block-and-bleed valve

Material body stainless steel 316L  
With or without mounting bracket hole  
Material packing PTFE or Graphite  
Nominal pressure 6000 psi / 420 bar

With or without vent connection  
NACE Sour Gas Service  
Inspection certificate 3.1 EN 10204  
all wetted parts material

IV10	IV11	IV201	IV202
Needle valve	Needle valve	Block-and-bleed valve	Block-and-bleed valve
Standard	Multiport	Square form angled	Square form in-line
Female x female/male	Female x female/male	Female x female/male	Female x female/male
			

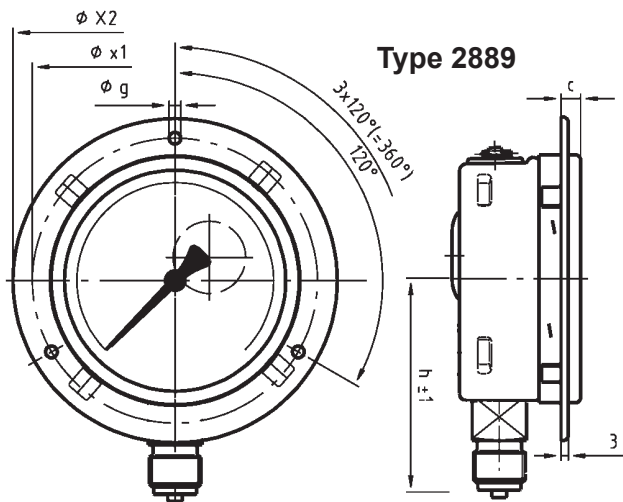
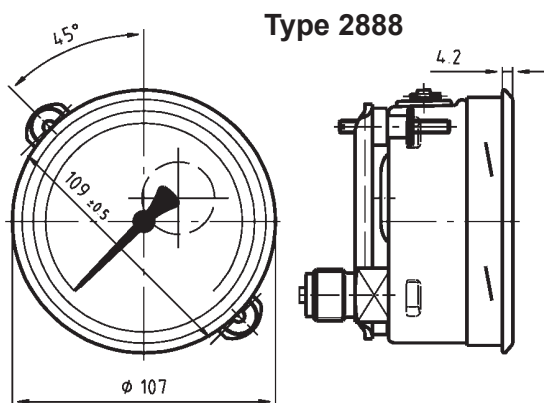
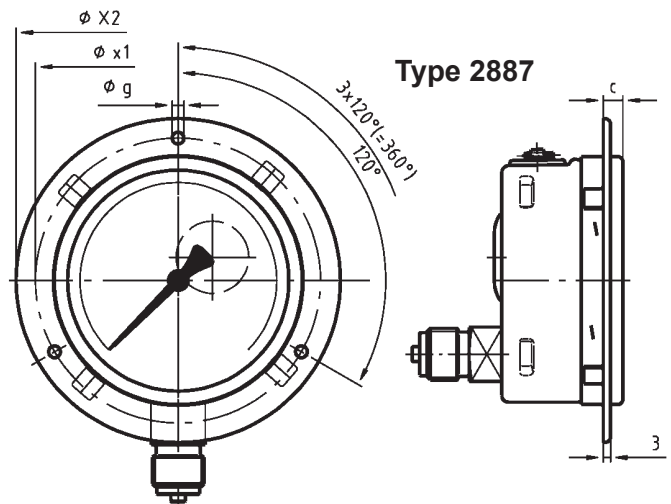
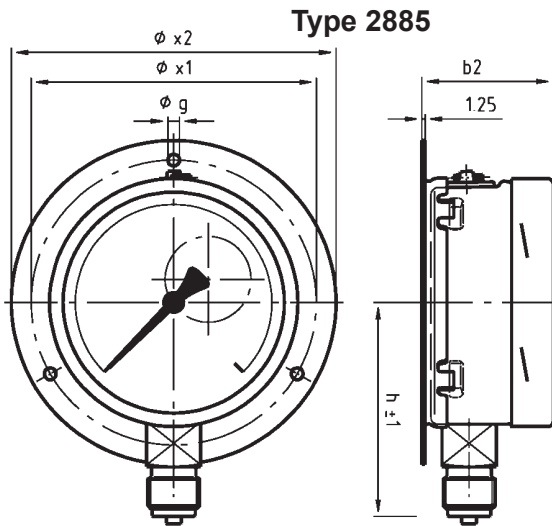
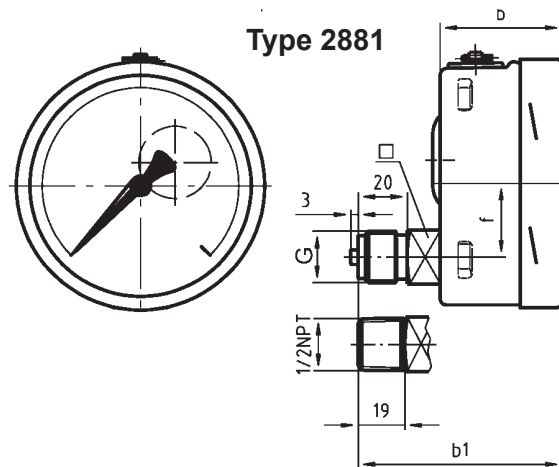
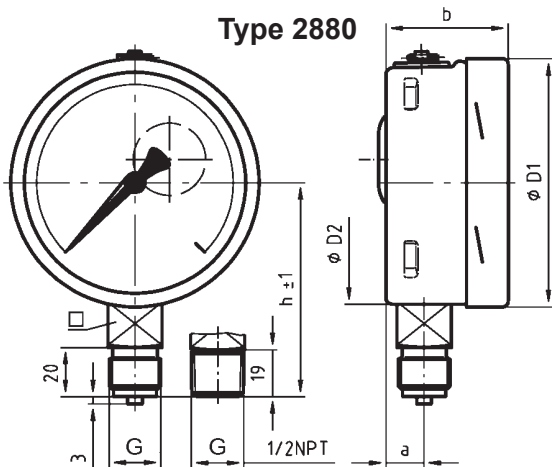
IV212	IV211	IVM2	IBF1
Block-and-bleed valve	Block-and-bleed valve	Monoflange	Monoblock
Flat form in-line	Flat form angled	Flange connection	Flange connection
Female x female	Female x female	Different versions	Different versions
			

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Dim Ø	a	b	b <sub>1</sub>	b <sub>2</sub>	D <sub>1</sub>	D <sub>2</sub>	x1	x2	g	h±1	f	c	kg	G
100	15,5	49,5	83	53,5	101	99	116	132	4,8	87	30	8	0,6	G3/8-G1/2-1/2NPT
160	15,5	49,5 <sup>1)</sup>	83 <sup>1)</sup>	53,5	161	159	178	196	5,8	118	50	10	1,1	G3/8-G1/2-1/2NPT

<sup>1)</sup> From 100 bar b = 65,5 mm and b<sub>1</sub> = 99 mm