

# Digital pressure gauge NS 80

Nominal pressure 0...100 mbar up to 0...600 bar

Accuracy 0.25% or 0.5%

With battery



## Description

The battery powered digital pressure gauge has been specially designed for applications in hydraulics and pneumatics. It could be installed easily and quickly in situ. The display module is continuously rotatable so that a clear readability is guaranteed even in unusual installation positions.

## Operation

The device can be operated menu driven via three pushbuttons in the touchpad. Besides showing information about the nominal pressure range as well as minimal and maximal pressure of the process, several pressure units (bar, mbar, PSI, mW, inHg, cmHg, mmHg, kPa, MPa) and the position of decimal point can be set. Upper and lower range of the measured range can be recalibrated by the customer. Defaults can be loaded again via menu.

## Characteristics

- Rugged, rotatable plastic housing
- 4,5-digit LC display for showing the measured value
- 6-digit additional display for the unit (digit height 7.5 mm)
- Easy configuration via three push buttons
- Accuracy 0.125 / 0.250 % FS BFSL (IEC 60770: 0,25 / 0,5 % FS)
- Ingress protection IP 65
- Mechanical connection:
  - G 1/2 EN 837
  - G 1/4 EN 837
  - 1/2" NPT
  - 1/4" NPT

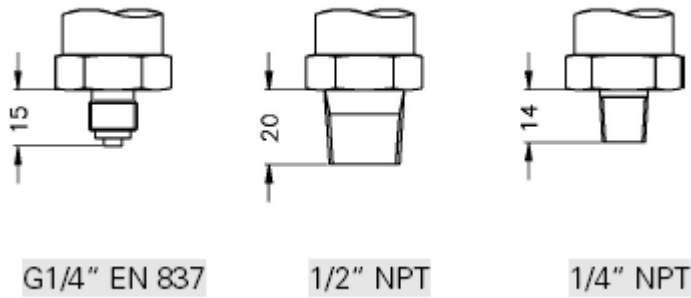
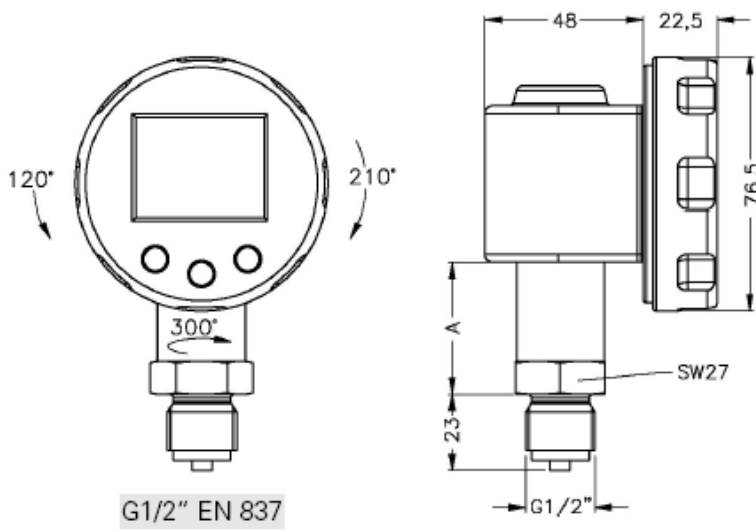
## Applications

Hydraulics  
Pneumatics  
Mechanical engineering

## Technical specification

<b>Model</b>	<b>3319</b>	<b>3320</b>																																																																						
<b>Accuracy</b>	0,5%	0,25%																																																																						
<b>Display</b>	LC display, visible range 40x30 mm 4,5-digit, 7-Segment-main display, digit height 11 mm 6-digit 14-Segment-additional display, digit height 7.5 mm																																																																							
<b>Sensor</b>	Ceramic	Stainless steel																																																																						
<b>Power supply</b>	2x 3,6 V Lithium batteries, Type ½ AA Standby-Mode: approx. 5 years																																																																							
<b>Nominal pressure</b> rel./ abs.	<table border="1"> <thead> <tr> <th>Pressure</th> <th>permiss. overpressure</th> </tr> </thead> <tbody> <tr><td>1,6 bar</td><td>4 bar</td></tr> <tr><td>2,5 bar</td><td>4 bar</td></tr> <tr><td>4 bar</td><td>10 bar</td></tr> <tr><td>6 bar</td><td>10 bar</td></tr> <tr><td>10 bar</td><td>20 bar</td></tr> <tr><td>16 bar</td><td>40 bar</td></tr> <tr><td>25 bar</td><td>40 bar</td></tr> <tr><td>40 bar</td><td>100 bar</td></tr> <tr><td>60 bar</td><td>100 bar</td></tr> <tr><td>100 bar</td><td>200 bar</td></tr> <tr><td>160 bar</td><td>400 bar</td></tr> <tr><td>250 bar</td><td>400 bar</td></tr> <tr><td>400 bar</td><td>600 bar</td></tr> </tbody> </table>	Pressure	permiss. overpressure	1,6 bar	4 bar	2,5 bar	4 bar	4 bar	10 bar	6 bar	10 bar	10 bar	20 bar	16 bar	40 bar	25 bar	40 bar	40 bar	100 bar	60 bar	100 bar	100 bar	200 bar	160 bar	400 bar	250 bar	400 bar	400 bar	600 bar	<table border="1"> <thead> <tr> <th>Pressure</th> <th>permiss. overpressure</th> </tr> </thead> <tbody> <tr><td>0,10 bar</td><td>0,5 bar</td></tr> <tr><td>0,16 bar</td><td>0,5 bar</td></tr> <tr><td>0,25 bar</td><td>1 bar</td></tr> <tr><td>0,4 bar</td><td>1 bar</td></tr> <tr><td>0,6 bar</td><td>1 bar</td></tr> <tr><td>1 bar</td><td>3 bar</td></tr> <tr><td>1,6 bar</td><td>6 bar</td></tr> <tr><td>2,5 bar</td><td>6 bar</td></tr> <tr><td>4 bar</td><td>20 bar</td></tr> <tr><td>6 bar</td><td>20 bar</td></tr> <tr><td>10 bar</td><td>20 bar</td></tr> <tr><td>16 bar</td><td>60 bar</td></tr> <tr><td>25 bar</td><td>60 bar</td></tr> <tr><td>40 bar</td><td>100 bar</td></tr> <tr><td>60 bar</td><td>140 bar</td></tr> <tr><td>100 bar</td><td>340 bar</td></tr> <tr><td>160 bar</td><td>340 bar</td></tr> <tr><td>250 bar</td><td>600 bar</td></tr> <tr><td>400 bar</td><td>600 bar</td></tr> <tr><td>600 bar</td><td>1000 bar</td></tr> </tbody> </table>	Pressure	permiss. overpressure	0,10 bar	0,5 bar	0,16 bar	0,5 bar	0,25 bar	1 bar	0,4 bar	1 bar	0,6 bar	1 bar	1 bar	3 bar	1,6 bar	6 bar	2,5 bar	6 bar	4 bar	20 bar	6 bar	20 bar	10 bar	20 bar	16 bar	60 bar	25 bar	60 bar	40 bar	100 bar	60 bar	140 bar	100 bar	340 bar	160 bar	340 bar	250 bar	600 bar	400 bar	600 bar	600 bar	1000 bar
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<b>Material</b> - Housing - Seals (media wetted) - Pressure port/diaphragm  - Media wetted parts	PA 6.6, Polycarbonate < 100 bar: FKM; ≥ 100 bar: NBR Stainless steel 1.4571; 1.4435 or ceramic Al <sub>2</sub> O <sub>3</sub> 96%  Pressure port, seals, diaphragm	PA 6.6, Polycarbonate ≤ 40 bar: FKM, EPDM; > 40 bar: NBR																																																																						
<b>Data memory</b>	EEPROM (non-volatile)																																																																							
<b>Ingress protection</b>	IP 65																																																																							
<b>Installation position</b>	any (The digital pressure gauge is calibrated in a vertical position with the pressure connection down. If this position is changed on installation there can be slight deviations in the zero point for devices with stainless steel sensor and pressure range $P_n \leq 1$ bar)																																																																							
<b>Weight</b>	Approx. 300 g																																																																							

## Dimensions



Size	with stainless steel sensor	with ceramic sensor
A	35	41,5