# Heavy Duty pressure gauges with diaphragm system

**to DIN 14 421 for fire-fighting pumps**

**Nominal sizes ND 80**

**Connection position bottom, radial or back, central**

## Description

The Heavy Duty pressure gauges with diaphragm system are used at measuring points with high dynamic alternating loads and strong vibrations and pulses.

They comply with DIN 14 421 -pressure gauges for fire-fighting pumps.

These pressure gauges are used in fire-fighting pumps to DIN 14 420.

The gauges are designed on the basis of a modular construction system and ensure a high level of functional safety and a long service life.

## Features

o High reliability and long service life due to modular construction system

o Insensitive to pressure pulses and mechanical vibrations

o High level shock resistance

o Overload capacity, 1.3 x

o Protection IP 54

o Stainless steel casing

## Measuring ranges
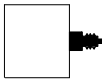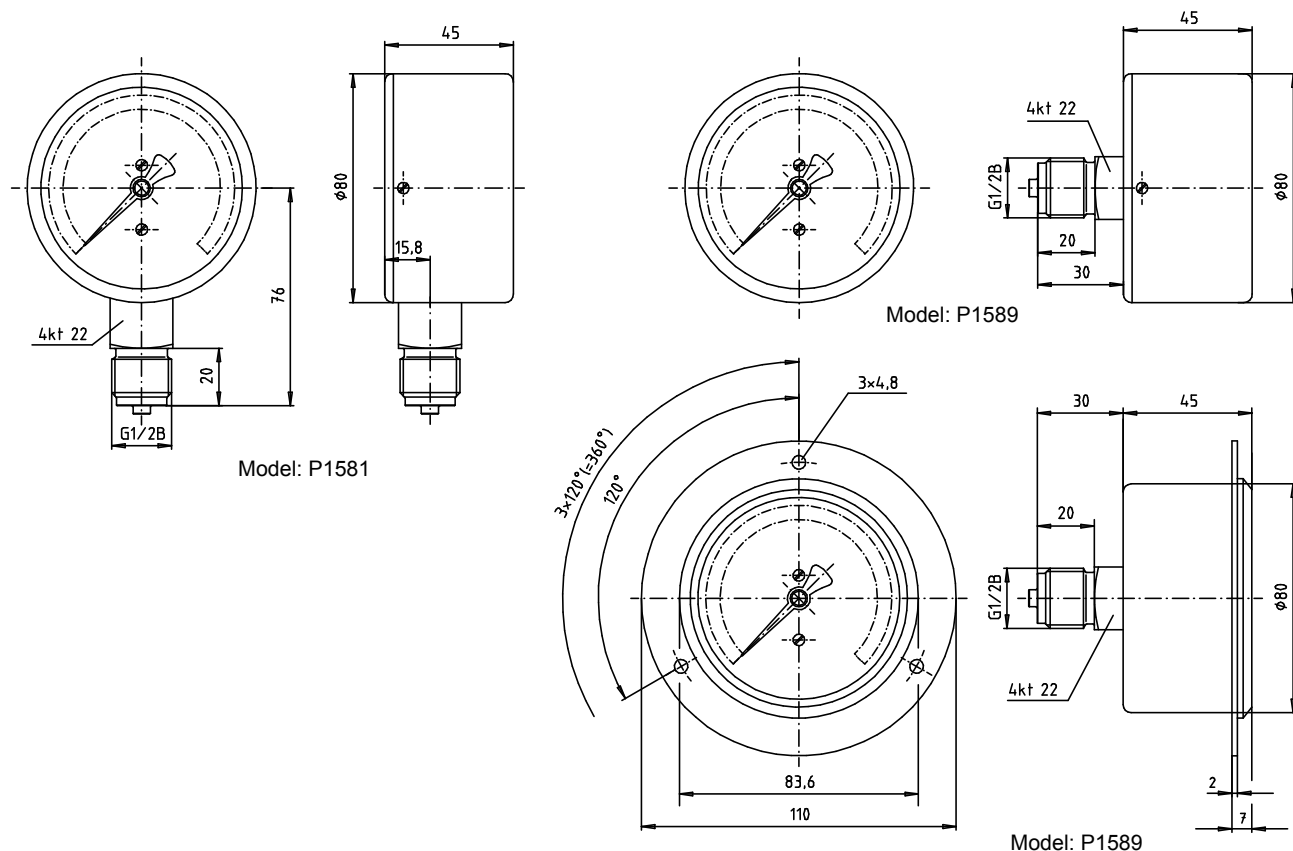
0...25 bar or - 1...0...25 bar

## Applications

Fire-fighting pumps,

plant construction

**Models:  P1581, P1589**

## Technical data

| Models | P1581 | P1589 | Options |
|---|---|---|---|
| Nominal size | 80 | | |
| Symbol | | | |
| Accuracy class to DIN 14 421 | - 1... 0 ...16 bar  ± 2.5%<br>16 ... to ... 25 bar  ± 4% | | |
| Ranges | -1....0....25 bar  or  0....25 bar | | |
| Application | Constant load:      up to full scale value<br>Alternating load:  up to 0.9 x full scale value<br>short-time: overload capacity 1.3 x | | |
| Case | Stainless steel, 1.4301 | | |
| Bezel | retaining front bezel | | Front flange, stainless steel 1.4301 |
| Window | Polyamid | | Trogamid |
| Dial | Aluminium, white, scale and imprint black | | Dual scale |
| Pointer | Aluminium, black | | |
| Movement | CuZn-alloy | | |
| Measuring element | Copper allyo | | |
| Pressure connection<br>  - position<br><br>  - thread | CuZn-alloy, galvanized<br>radial<br>bottom<br>M20 x 1.5 or G 1/2 B | <br>back<br>central | <br><br><br>Other threads on request |
| Temperatures<br>  - Medium<br>  - Ambient | <br>Tmin. -20°C, Tmax.  80°C<br>Tmin. -25°C, Tmax.  60°C | | |
| Temperature drift | 0.5 %/10K if deviation from normal temperature  20°C | | |
| Protection | IP 54 to EN 60 529/IEC 529 | | IP 65 (BR. 1599) |
| Orifice | Copper alloy, M4 x ø 0.8 x 40 lg. | | M4 x ø 0.3; M4 x ø 0.4 |
| Weight approx. | 0.480 kg | 0.560 kg | |

## Dimensions



Model: P1581



Model: P1589



Model: P1589

Modifications reserved