Digital pressure gauge
Model CPG500

Applications
- Calibration service companies and service industry
- Measurement and control laboratories
- Quality assurance
- Easy on-site calibration

Special features
- Measuring ranges from -1 ... +16 bar to 0 ... 1,000 bar
- Accuracy: 0.25 % (incl. calibration certificate)
- Robust case with protective rubber cap
- Simple operation using four buttons
- Complete service cases incl. pressure generation available

Description

General
The model CPG500 digital pressure gauge enables the measurement and display of pressure values in a single instrument. The accuracy of digital measurement technology and the simplicity of an analogue gauge are combined in this instrument.

Accuracy
The CPG500 offers an accuracy of 0.25 % of span in eight pressure ranges. Readings can be displayed in one of five standard units.

Sampling rate
With a measuring rate of 100 measurements per second, the CPG500 features a very high measuring rate. With this, fast pressure peaks and drops in pressure can be detected. The bargraph display and drag pointer function integrated into the display, as well as retrievable MIN/MAX peak values, enable effective analysis of the measuring point.

Properties
In order to prolong the battery life, the CPG500 features an automatic switch-off function. With the ZERO function, the display value can be zeroed with the simple press of a button. An activatable filter function stabilises pressures which fluctuate strongly, and enables the pressure value to be read easily.

Complete test and service cases
For maintenance and service applications, various service case systems are available. Service cases with pneumatic or hydraulic pressure generation are available.

Certified accuracy
For each digital pressure gauge, the accuracy is certified by a factory calibration certificate which accompanies the instrument. On request, we can provide a DKD/DAkkS calibration certificate for this instrument.
## Specifications

**Model CPG500**

### Sensor technology

<table>
<thead>
<tr>
<th>Measuring range</th>
<th>bar</th>
<th>-1 ... +16</th>
<th>-1 ... +20</th>
<th>-1 ... +40</th>
<th>0 ... 60</th>
<th>0 ... 100</th>
<th>0 ... 350</th>
<th>0 ... 700</th>
<th>0 ... 1,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overpressure limit</td>
<td>bar</td>
<td>32</td>
<td>50</td>
<td>80</td>
<td>120</td>
<td>200</td>
<td>800</td>
<td>1,200</td>
<td>1,500</td>
</tr>
<tr>
<td>Burst pressure</td>
<td>bar</td>
<td>160</td>
<td>250</td>
<td>400</td>
<td>550</td>
<td>800</td>
<td>1,700</td>
<td>2,400</td>
<td>3,000</td>
</tr>
<tr>
<td>Resolution</td>
<td>bar</td>
<td>0.001</td>
<td>0.01</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure connection</td>
<td>G ¼</td>
<td>G ½</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td></td>
<td>0.25 % FS ±1 digit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Base instrument

#### Indicator

<table>
<thead>
<tr>
<th>Display</th>
<th>4 ½ digit, bargraph with drag pointer function, illuminated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>50 x 34 mm</td>
</tr>
<tr>
<td>Digit height</td>
<td>15 mm</td>
</tr>
<tr>
<td>Pressure units</td>
<td>bar, psi, MPa, kPa, kg/cm²</td>
</tr>
</tbody>
</table>

#### Function

| Measuring rate        | 10 ms                                                       |
| Memory                | MIN/MAX                                                     |
| Autopower             | Selectable                                                  |
| Zero function         | Zero point adjustment                                       |
| Reset                 | Delete MIN/MAX value                                        |

#### Material

| Wetted parts ¹)       | Stainless steel with sealing NBR                           |
| Case                  | Die-cast zinc with TPE protective rubber cap                |

#### Voltage supply

| Power supply          | 2 x 1.5 V AA batteries                                      |
| Battery life          | approx. 1,500 hrs.                                         |
| Battery status indication | Icon in display                                      |

#### Permissible ambient conditions

| Operating temperature | -10 ... +50 °C                                             |
| Medium temperature    | -20 ... +80 °C                                             |
| Storage temperature   | -20 ... +60 °C                                             |
| Relative humidity     | < 85 % r.H. (non-condensing)                               |

#### Case

| Rotatability         | > 270 °                                                    |
| Dimensions           | 79 x 79 x 33 mm                                           |
| Ingress protection   | IP 67                                                      |
| Weight               | approx. 400 g                                             |

¹) Only for use with safe media per directive 67/548/EEC (article 2, paragraph 2).

### CE conformity, approvals, certificates

#### CE conformity

| EMC directive        | 2004/108/EC, EN 61000-6-3 emissions for commercial and light industrial environments and EN 61000-6-2 interference immunity for industrial environments |

#### Approvals

| GOST-R                | Import certificate, Russia                                  |

#### Certificates

| Calibration          | Standard: 3.1 calibration certificate per DIN EN 10204   |
|                     | Option: DKD/DAkkS calibration certificate                    |

Approvals and certificates, see website
Dimensions in mm

Front view (with protective rubber cap)1)

Front foil

1) Bargraph indicates the current pressure graphically
2) Currently-set unit
3) Display of the measuring range or the MIN/MAX value
4) Clear the MIN/MAX values
   Confirmation function in the menu
5) Hold down to access the menu
   Zero point adjustment carried out by simply pressing
6) Display value changed to MIN/MAX or full scale
7) Switch digital pressure gauge on/off by simply pressing
   Hold down to switch on backlighting
8) Battery status
9) Pressure display

1) Drawing with G ¼ pressure connection
Complete test and service cases

Calibration case with model CPG500 digital pressure gauge and model CPP40 hand test pump, for pressure -0.95 ... +40 bar, consisting of:

- Plastic service case with foam insert
- Model CPG500 digital pressure gauge
- Model CPP40 pneumatic hand test pump; -0.95 ... +40 bar

Available measuring ranges, see specifications

Calibration case with model CPG500 digital pressure gauge and model CPP700-H or CPP1000-H hand test pumps, for pressures 0 ... 700 bar or 0 ... 1,000 bar, consisting of:

- Plastic service case with foam insert
- Model CPG500 digital pressure gauge
- Model CPP700-H or CPP1000-H hydraulic hand test pumps, 0 ... 700 bar or 0 ... 1,000 bar

Available measuring ranges, see specifications

Recommended pressure generation

**Model CPP40 pneumatic hand test pump**

Pressure range: -0.95 ... +40 bar

**Model CPP700-H or model CPP1000-H hydraulic hand test pumps**

Pressure range: 0 ... 700 bar or 0 ... 1,000 bar

For further specifications, see data sheet CT 91.07.
Scope of delivery

- Digital pressure gauge model CPG500
- Operating instructions
- 3.1 calibration certificate per DIN EN 10204
- 2 x AA batteries
- Protective rubber cap for case

Option

- DKD/DAkkS certified accuracy

Accessories

Connection adapters
- Various pressure adapters

Pressure generation
- Pneumatic test pumps
- Hydraulic test pumps

Test cases
- Various calibration cases incl. pressure generation

Ordering information

Model / Unit / Measuring range / Process connection / Test pump / Transport case / Type of certificate / Additional ordering information