

Precision Hand-Held Pressure Indicator Model CPH6400

WIKA Data Sheet CT 14.01

Applications

- Calibration service companies and service industry
- Measurement and control laboratories
- Quality assurance

Special Features

- Digital instrument with easily interchangeable pressure sensors (plug and play)
- Measuring ranges from 0 ... 400 mbar up to 0 ... 6,000 bar (Vacuum and absolute pressure ranges also available)
- Accuracy: 0.025 % (incl. calibration certificate)
- Min-, Max-, pressure rate and data logger function
- PC-Software and complete service sets (incl. pressure generators) available



Model CPH6400 Precision Hand-Held Pressure Indicator

Description

Features

A wide variety of pressure sensors, offering various measuring ranges of up to 6,000 bar, are available to the operator, ensuring a solution suited to the application is always available. The individual sensors can be exchanged quickly and without tools (Plug and Play) and are automatically recognised by the digital indicator. In addition, this instrument impresses with its large, easily-read display (backlighting selectable), its durable housing and its simple, clear operation.

Functionality

In addition to mobile and high-precision pressure measurement, the CPH6400 also opens up other helpful applications e.g. recording of pressure curves (via the logging function), leak testing (via the pressure rate function) and peak value determination (via the Min/Max function). These useful functions can be easily activated or deactivated by pressing the respective keys.

Software

Using WIKA's PrintCal software, the logged data, stored in the CPH6400, can be transferred to a PC via a USB connection, where it can be stored in an EXCEL® file for documentation and further evaluation. In addition to this, PrintCal offers the possibility of PC-supported calibration of pressure measuring instruments using the CPH6400.

Complete test and service sets

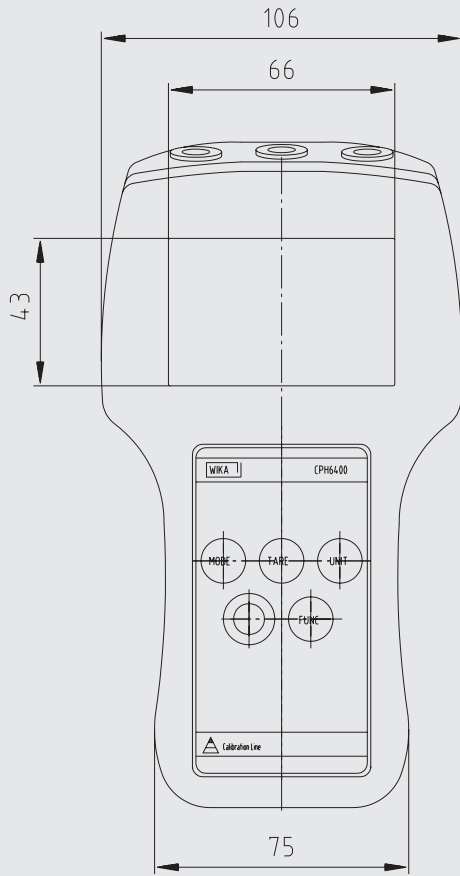
For maintenance and service applications, various service cases are available. These include pressure service sets with or without pressure pump, with charger, adapter, etc.

Certified precision

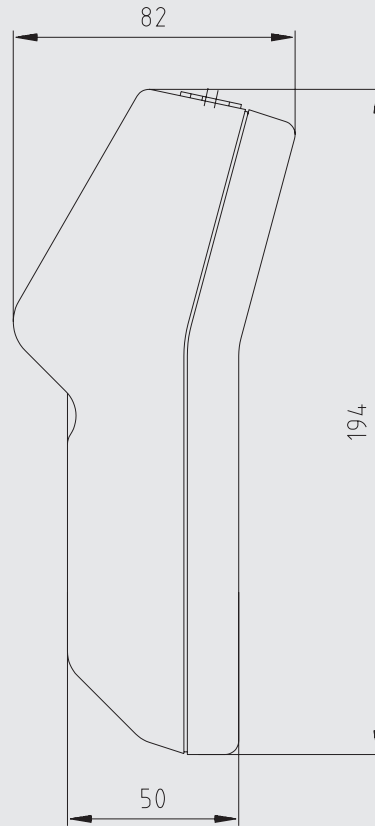
A factory calibration certificate for each pressure transmitter certifies the total uncertainty of the measuring chain. Alternatively, on request, a DKD/DAkkS calibration certificate can be supplied.

Dimensions in mm

CPH6400 Digital instrument
Front view

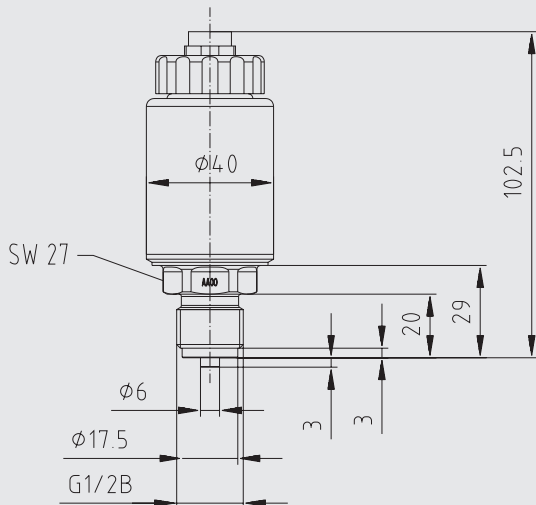


Side view



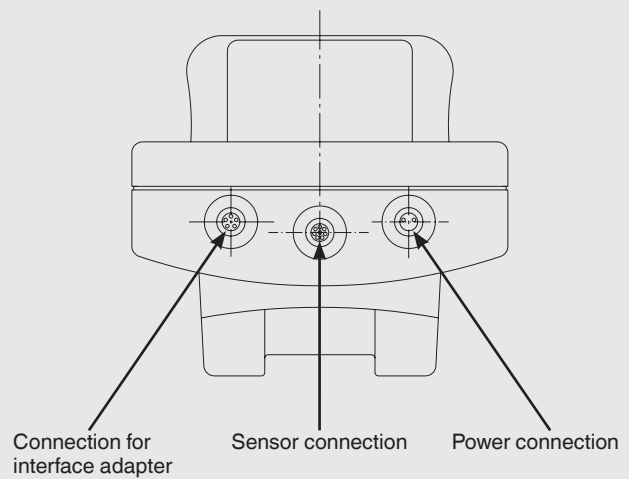
Dimensions in mm

CPT6400 Pressure transmitter



Electrical connections to the digital instrument

Top view



Specifications CPH6400 Precision Hand-Held Pressure Indicator (complete measuring chain)

| | | | | | | | | | | | |
|---------------------------------|-----|--|------|------|-------|-------|-----|------|------|------|--|
| Sensors | | 1 pressure transmitter (interchangeable without tools) ¹ | | | | | | | | | |
| Measuring range (standard) | bar | 0.4 | 1.6 | 6 | 16 | 40 | 100 | 250 | 600 | 1000 | |
| Overpressure safety | bar | 2 | 10 | 35 | 80 | 80 | 200 | 500 | 1200 | 1500 | |
| Burst pressure | bar | 2.4 | 12 | 42 | 96 | 400 | 800 | 1200 | 2400 | 3000 | |
| Accuracy (measuring chain) | | 0.025 % FS* | | | | | | | | | |
| Measuring range (high pressure) | bar | 1600 | 2500 | 4000 | 5000 | 6000 | | | | | |
| Overpressure safety | bar | 2300 | 3500 | 5000 | 6000 | 7000 | | | | | |
| Burst pressure | bar | 4000 | 6000 | 8000 | 10000 | 11000 | | | | | |
| Accuracy (measuring chain) | | 0.1 % FS | | | | | | | | | |
| Type of pressure | | {In addition to the above-specified pressures; vacuum, bi-directional ranges and absolute pressures are available} | | | | | | | | | |
| Units of pressure | | bar, mbar, kPa, mmHg, inHg and psi (depending on the measuring range, selectable) | | | | | | | | | |
| Active temperature compensation | °C | 10 ... 40 | | | | | | | | | |
| Permissible ambient temperature | °C | 0 ... 50 | | | | | | | | | |
| Calibration* | | Factory calibration certificate (optional: DKD/DAkkS calibration certificate) | | | | | | | | | |

Specifications CPH6400 Digital Instrument

| | | | |
|---------------------------|---------|---|--|
| Display | | Large graphic display, with backlighting On/Off selectable | |
| Display definition | | Up to 6 digits; selectable | |
| Measuring rate (pressure) | Values | 5/sec | |
| Functions | | Min-, Max-memory, pressure rate, tare, offset-correction for gauge pressure ranges, logger function | |
| Data logger | | up to 1000 values; cycle time: adjustable from 1 ... 3600 seconds | |
| Interface | | USB | |
| Power supply | | Internal Lithium-Ion rechargeable battery (charging time: < 6 h; alternative: mains supply via charger) | |
| Battery operation | h | approx. 25 | |
| Permissible | | | |
| ■ Air humidity | % r. h. | 0 ... 85 (relative humidity without moisture condensation; at 50 °C) | |
| ■ Storage temperature | °C | -20 ... +60 | |
| Housing | | Polyamide 12, membrane keyboard, transparent panels | |
| Ingress protection | | IP65 | |
| Weight | g | approx. 480 | |
| CE-conformity | | | |
| ■ EMC directive | | 2004/108/EC, EN 61326 Emission (Group 1, Class B) and Immunity (industrial locations) | |

Specifications CPT6400 Reference Pressure Sensor

| | | | |
|--------------------------------|----|--|--|
| Pressure connection | | ≤ 1000 bar: G ½ B; {various connection adapters on request} > 1000 bar: M16 x 1.5 female, with sealing cone | |
| Material wetted parts | | Stainless steel (measuring range > 25 bar additional Elgiloy®) | |
| Internal transmission fluid | | Synthetic oil (only for measuring ranges up to 25 bar) | |
| Permissible temperature ranges | | | |
| ■ Medium | °C | -20 ... +80 | |
| ■ Storage | °C | -40 ... +85 | |
| Housing | | Stainless steel | |
| Electrical connection | | round plug, 8-pin | |
| Ingress protection | | IP65 (with cable connected) | |
| Weight | g | approx. 220 | |
| CE-conformity | | | |
| ■ Pressure equipment directive | | 97/23/EC, PS > 200 bar; Module A, pressure accessory | |
| ■ EMC directive | | 2004/108/EC, EN 61326 Emission (Group 1, Class B) and Immunity (industrial locations) | |

1) Calibration data sets for up to 10 transmitters can be stored in each CPH6400

*) Calibrated at 23 °C and in vertical mounting position with pressure connection facing downwards.

{ } Items in curved brackets are optional extras for an additional price.

Scope of Supply

- CPH6400
- Battery charger
- 3.1 calibration certificate per DIN EN 10204
- Choice of sensors

Options

- DKD/DAkkS certified accuracy

Accessories

Pressure adapters

- Various pressure adapters
- "Minimes" Quick-Connect process connection system

Power supply

- Battery charger

Connection cable

- USB Interface cable

Pressure generation

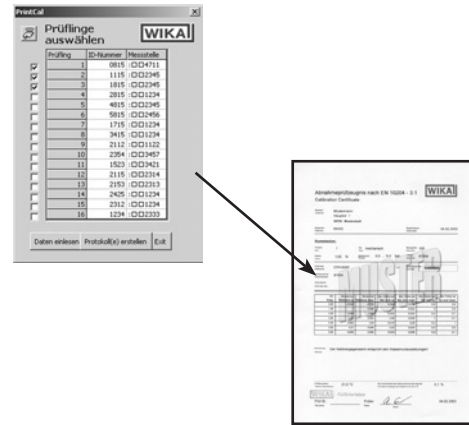
- Pneumatic test pumps
- Hydraulic test pumps

Service case

- Test and measuring cases
- Various test and calibration cases incl. test pump

Software

- PrintCal calibration certificate print tool



Software PrintCal



CPH6400 Service case with CPP30 test pump

Products and Services within our Calibration Technology Program

- DKD/DAkkS calibration services for pressure
- Repair of calibration units of all makes
- Portable pressure measuring devices for test and calibration tasks
- Precision pressure measuring units and pressure controllers
- Primary standards for pressure
- Testing technology system solutions
- DKD/DAkkS calibration services for temperature
- Dry well temperature calibrators
- Calibration baths and furnaces
- Temperature measuring instruments for test and calibration tasks
- Precision thermometers
- Primary standards for temperature
- Consulting and seminars

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.

