

# Precision Hand-Held Pressure Indicator Model CPH6400

WIKA Data Sheet CT 14.01

## Applications

- Calibration service companies/service industry
- Service and maintenance companies
- Instrument and control workshops
- Quality assurance

## Special Features

- Digital instrument with easily interchangeable pressure sensors (plug and play)
- Pressure ranges from 0 ... 400 mbar up to 0 ... 4,000 bar (Vacuum & absolute pressure ranges also available)
- Certified accuracy up to 0.025 % FS or 0.1 % of reading
- 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 4,000 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 & Play) and are automatically recognized 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

Apart from 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<sup>®</sup> 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

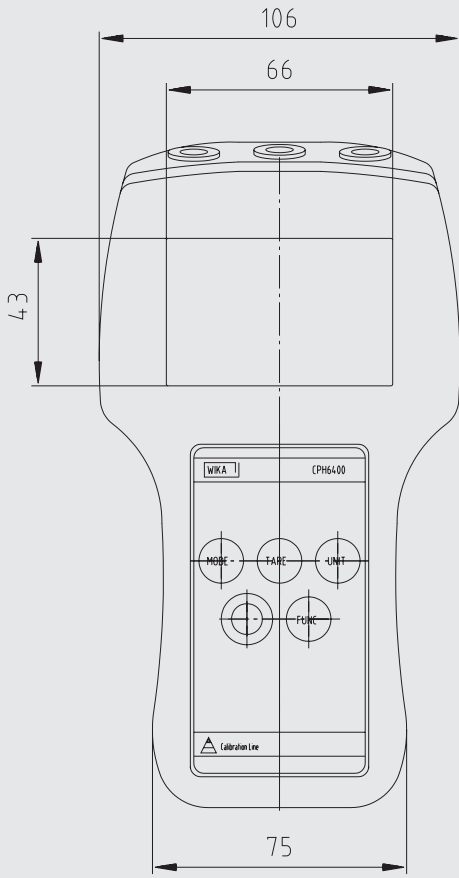
For maintenance and service applications various service cases are available. These include pressure service sets with or without pressure pump, with charger, adapter, etc.

### Certified precision

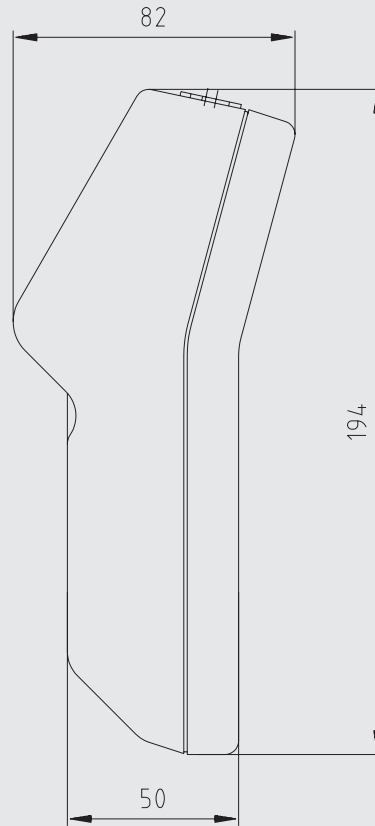
A factory calibration certificate for each pressure transmitter certifies the total uncertainty of the measuring chain. Alternatively, on request, a DKD calibration certificate can be supplied.

## Dimensions in mm

**CPH6400 Digital instrument**  
Front view

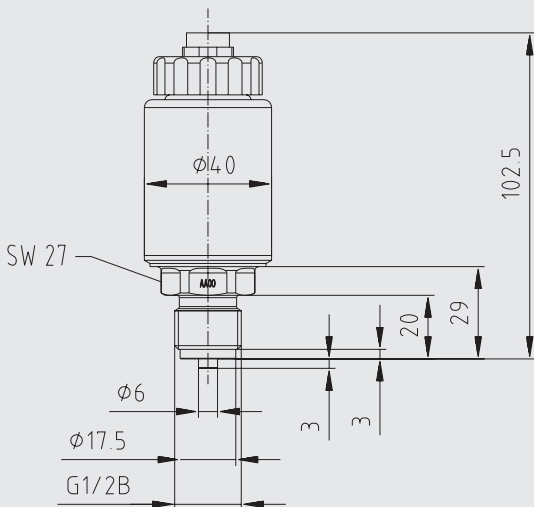


**Side view**



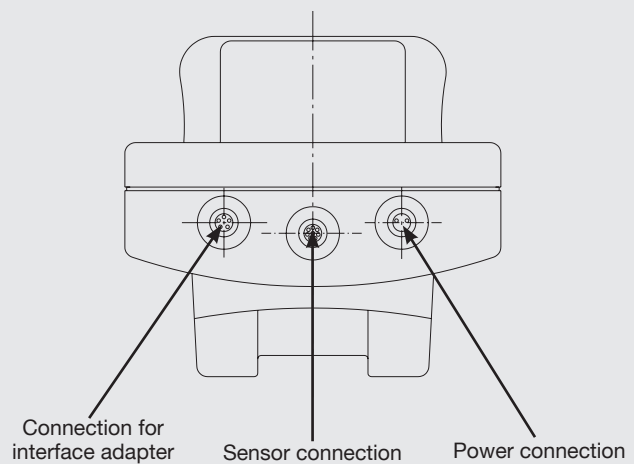
## Dimensions in mm

**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) <sup>1</sup>								
Pressure ranges (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 (measurement chain)		0.025 % FS* or 0.1 % of measured value (whichever is the greater)								
Pressure ranges (high pressure)	bar	1600	2500	4000						
Overpressure safety	bar	2000	3000	4400						
Burst pressure	bar	4000	5000	7000						
Accuracy (measurement chain)		0.15 % 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 (dependent of the measurement range, selectable)								
Active temperature compensation	°C	+10 ... +40								
Permissible ambient temperature	°C	0 ... +50								
Calibration*		Factory calibration certificate (optional: DKD 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, tare, pressure rate, filter (rolling average), offset-correction
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)
Permissible storage temperature	°C	-20 ... +60
Housing		Polyamide 12, membrane keyboard, transparent panels
Ingress protection		IP65
Mass	g	approx. 480
CE-conformity		Interference emission and immunity to EN 61 326, declaration of conformity on request

## Specifications

## CPT6400 Reference Pressure Sensor

Pressure connection		up to 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 (pressure range > 16 bar additional Elgiloy®)
Internal transmission fluid		Synthetic oil (only for pressure range up to 25 bar)
Permissible temperature ranges		
- Medium	°C	-30 ... +105
- Storage	°C	-40 ... +85
Housing		Stainless steel
Electrical connection		round plug, 8-pole
Ingress protection		IP65 (with cable connected)
Mass	g	approx. 220
CE-conformity		89/336/EWG Interference emission and immunity to EN 61 326; 97/23/EG Pressure equipment directive (Module H)

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 in accordance with DIN EN 10 204
- Choice of sensors

## Options

- DKD certified accuracy

## Accessories

### Pressure adapters

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

### Power supply

- Battery charger

### Connection cable

- USB Interface cable

### Pressure generation

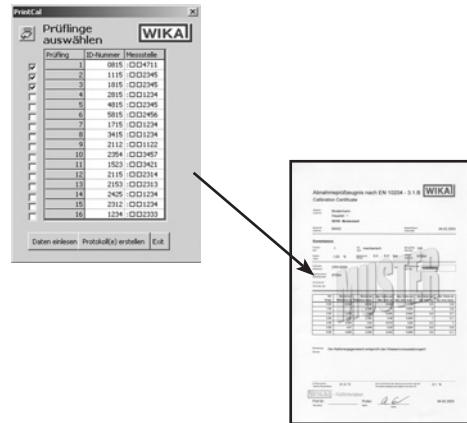
- Pneumatic test pumps
- Hydraulic test pumps

### 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 test pump

## Products and Services within our Testing and Calibration Technology Program

- DKD 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 calibration services for temperature
- Temperature dry well calibrators
- Calibration baths and furnaces
- Temperature measuring instruments for test and calibration tasks
- Precision thermometers
- Primary standards for temperature
- Consulting and seminars

Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.



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