

# Hydraulic service kit

## Model CPG-KITH

WIKA data sheet CT 93.02

### Applications

- Oil and gas industry
- Maintenance and service facilities
- Calibration service companies and service industry
- Simple calibrations directly on site

### Special features

- Testing and adjustment of pressure gauges, pressure sensors, pressure switches or safety valves
- Reference instrument model CPG1500 with 0.05 % FS
- Hydraulic version up to 700 bar (10,000 psi)
- Clear and simple operation



Hydraulic service kit, model CPG-KITH

## Description

### Application range

The CPG-KITH hydraulic service kit is the ideal tool for the hydraulic testing, adjustment and calibration of mechanical and electronic pressure measuring instruments through comparative measurements or for the setting of pressure switches. These and other tests can take place quickly and reliably in the laboratory or workshop, or on site at the measuring point. With the service kit, service and maintenance are more complete, safer and more flexible. The kit is high-quality finish, handy and robust and is also suitable for service use.

### Components

The service kit consists of a hydraulic hand test pump for the generation of a defined test pressure and also a highly accurate model CPG1500 precision digital pressure gauge as a reference instrument. Air is used as the pressure medium. Various connection adapters are also available in the test case. All components are carefully stowed in the case and protected for in-house transport.

### Simple function

If one connects the test item and the model CPG1500 precision digital pressure gauge to the test pump, on actuating the pump, the same pressure will act on both instruments. Using the fine adjustment valve, the test pressure is set exactly. By comparison of the two measured values at any given pressure value, a check of the accuracy and/or adjustment of the pressure measuring instrument under test can be carried out.

### WIKA-Cal software

The collected data from the data logger of the digital pressure gauge can be transmitted wirelessly to the WIKA-Cal calibration software for further evaluation. WIKA-Cal also offers, over and above PC-supported calibration, the management of the calibration and instrument data in an SQL database. A WIKA-Wireless interface is available for the data transfer.

## Specifications

Specifications	Metric version CPG-KITH-EUxx-Z	Imperial version CPG-KITH-USxx-Z
<b>CPG1500</b>		
Pressure range	See ordering information	
Pressure connection	G ½ male thread	¼ NPT male thread
Wetted parts	Stainless steel	
<b>CPP700-H</b>		
Pressure range	0 ... 700 bar	0 ... 10,000 psi
Pressure transmission medium	Hydraulic fluid based on mineral oil or single distilled water 1) 2)	
Pressure connection	G ½ female thread for reference instrument, freely rotating, hose with G ¼ female thread for test item	¼ NPT female thread via adapter for reference instrument, hose with ¼ NPT via adapter for test item
Fine adjustment	Fine adjustment valve/volume adjustment	
Fluid reservoir	200 cm <sup>3</sup> (12.2 in <sup>3</sup> )	
Material	anodised aluminium, brass, stainless steel, ABS	
Sealings	FKM and NBR (standard)	
Dimensions (L x W x H)	280 x 170 x 120 mm (11.02 x 6.69 x 4.72 in)	
Weight	1.9 kg (4.19 lbs.)	
Standard accessories	Minimess® test item connection hose; length 1 m (3.3 ft)	

1) Other pressure transmission media on request.

2) Liquids are not included in the scope of delivery.

## Certificates

Certificate	
<b>Calibration</b>	Standard: 3.1 calibration certificate per EN 10204 Option: DKD/DaKkS calibration certificate
<b>Recommended recalibration interval</b>	1 year (dependent on conditions of use)

Approvals and certificates, see website

Ordering information	Metric version	
	Measuring range	Accuracy
CPG-KITH-EU52-5-ZZ	0 ... 60 bar	0,05 % FS <sup>3)</sup>
CPG-KITH-EU53-5-ZZ	0 ... 100 bar	0,05 % FS <sup>3)</sup>
CPG-KITH-EU54-5-ZZ	0 ... 160 bar	0,05 % FS <sup>3)</sup>
CPG-KITH-EU55-5-ZZ	0 ... 250 bar	0,05 % FS <sup>3)</sup>
CPG-KITH-EU51-5-ZZ	0 ... 400 bar	0,05 % FS <sup>3)</sup>
CPG-KITH-EU50-5-ZZ	0 ... 700 bar	0,05 % FS <sup>3)</sup>
CPG-KITH-EU52-1-ZZ	0 ... 60 bar	0.1 % FS <sup>3)</sup>
CPG-KITH-EU53-1-ZZ	0 ... 100 bar	0.1 % FS <sup>3)</sup>
CPG-KITH-EU54-1-ZZ	0 ... 160 bar	0.1 % FS <sup>3)</sup>
CPG-KITH-EU55-1-ZZ	0 ... 250 bar	0.1 % FS <sup>3)</sup>
CPG-KITH-EU51-1-ZZ	0 ... 400 bar	0.1 % FS <sup>3)</sup>
CPG-KITH-EU50-1-ZZ	0 ... 700 bar	0.1 % FS <sup>3)</sup>

3) FS = Full Span

Ordering information	Imperial version	
	Measuring range	Accuracy
CPG-KITH-US52-5-ZZ	0 ... 700 psi	0,05 % FS <sup>3)</sup>
CPG-KITH-US53-5-ZZ	0 ... 1,500 psi	0,05 % FS <sup>3)</sup>
CPG-KITH-US54-5-ZZ	0 ... 2,000 psi	0,05 % FS <sup>3)</sup>
CPG-KITH-US55-5-ZZ	0 ... 3,000 psi	0,05 % FS <sup>3)</sup>
CPG-KITH-US51-5-ZZ	0 ... 5,000 psi	0,05 % FS <sup>3)</sup>
CPG-KITH-US50-5-ZZ	0 ... 10,000 psi	0,05 % FS <sup>3)</sup>
CPG-KITH-US52-1-ZZ	0 ... 700 psi	0.1 % FS <sup>3)</sup>
CPG-KITH-US53-1-ZZ	0 ... 1,500 psi	0.1 % FS <sup>3)</sup>
CPG-KITH-US54-1-ZZ	0 ... 2,000 psi	0.1 % FS <sup>3)</sup>
CPG-KITH-US55-1-ZZ	0 ... 3,000 psi	0.1 % FS <sup>3)</sup>
CPG-KITH-US51-1-ZZ	0 ... 5,000 psi	0.1 % FS <sup>3)</sup>
CPG-KITH-US50-1-ZZ	0 ... 10,000 psi	0.1 % FS <sup>3)</sup>

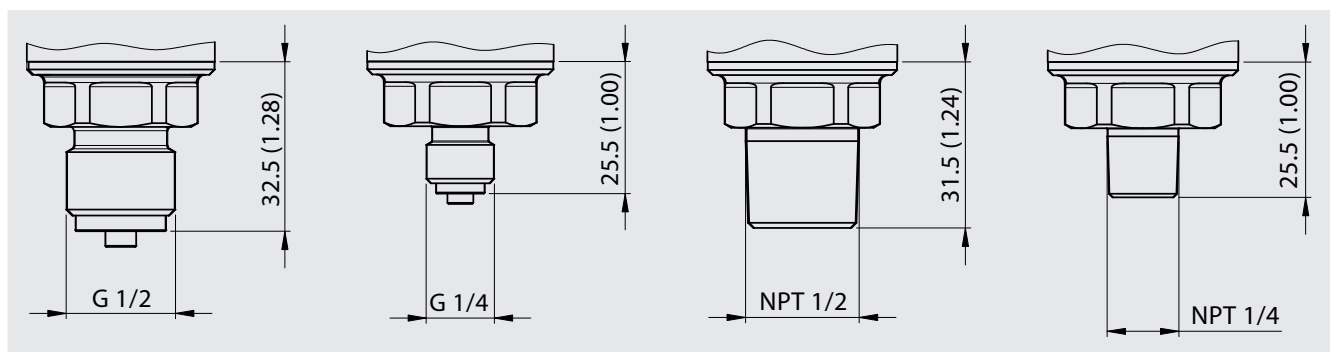
3) FS = Full Span

Ordering information	
CPG-A-15-ZZ2-Z	WIKA-Wireless USB stick for wireless data transfer
WIKA-Cal	WIKA-Cal
CPG-A-15-ZZB-Z	BSP adapter set
CPH-A-15-ZZF-Z	NPT adapter set
CPG-A-15-ZZD-Z	Sealing set, consisting of 4 x G 1/2 USIT seals and 2 x G 1/4 USIT seals
CPG-A-15-ZZC-Z	3 x AA alkaline batteries

Adapter set for test item connection		
Pressure range	BSP	NPT
Adapter	G 1/4 male to: G 1/8 female G 3/8 female G 1/2 female	G 1/4 male to: 1/8 NPT female 1/4 NPT female 3/8 NPT female 1/2 NPT female

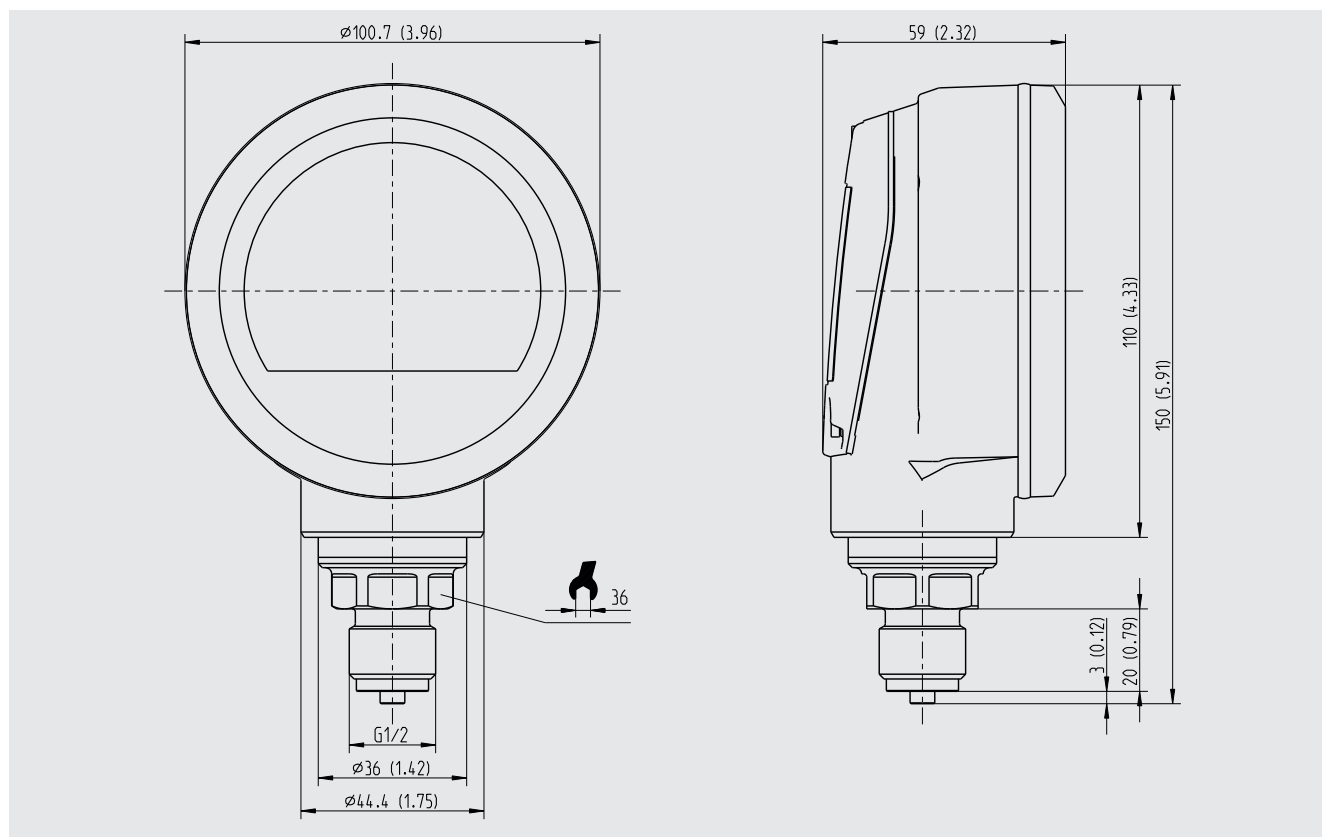
## Dimensions in mm (in)

### Various test connections

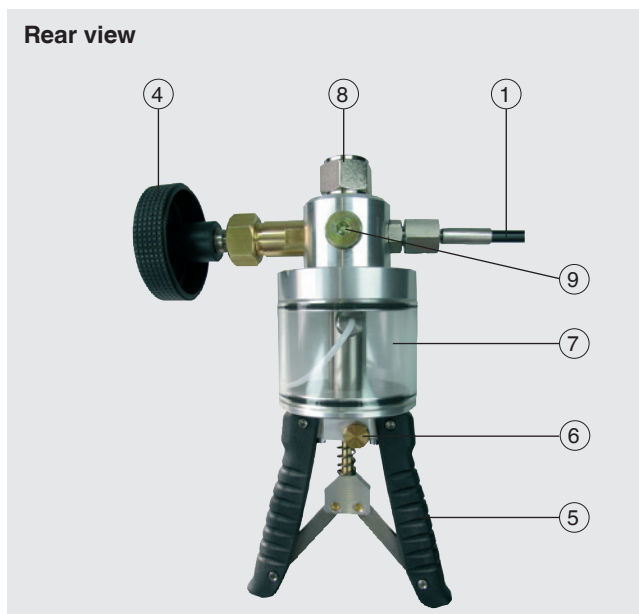
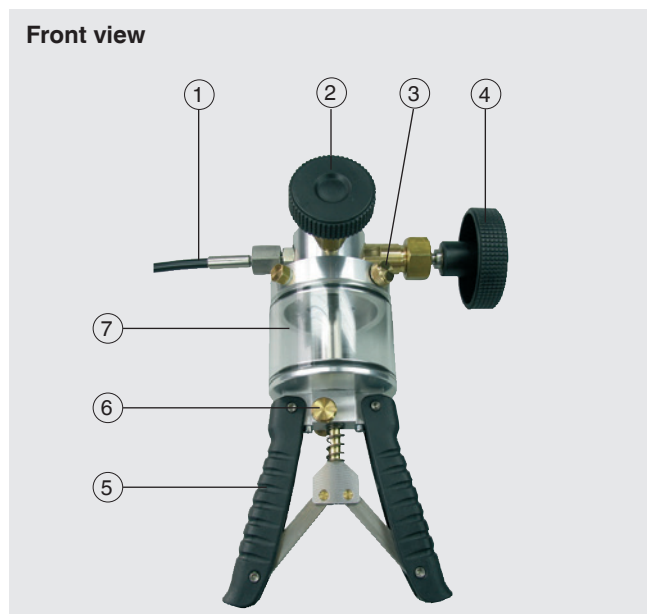


## Dimensions in mm (in)

### CPG1500 without protective rubber cap



### Hydraulic hand test pump model CPP700-H



- ① Test item connection hose; Minimesse® system with a G ¼ female pressure gauge bulkhead connector
- ② Pressure relief valve
- ③ Plug screw for fluid reservoir
- ④ Fine adjustment valve (volume adjustment)
- ⑤ Pump handles

- ⑥ Toggle control, system and high-pressure generation
- ⑦ Fluid reservoir
- ⑧ Connection G ½ female, freely rotating for reference instruments
- ⑨ Blind plug, do not open!

## WIKA-Cal calibration software

### Easy and fast creation of a high-quality calibration certificate

The WIKA-Cal calibration software is used for generating calibration certificates or logger protocols for pressure measuring instruments and is available as a demo version for a cost-free download.

A template helps the user and guides him through the creation process of a document.

In order to switch from the demo version to a full version of the respective template, a USB stick with the template has to be purchased.

The pre-installed demo version automatically changes to the selected full version when the USB stick is inserted and is available as long as the USB stick is connected to the computer.



- Creation of calibration certificates for mechanical and electronic pressure measuring instruments
- A calibration assistant guides you through the calibration
- Automatic generation of the calibration steps
- Generation of 3.1 certificates per DIN EN 10204
- Creation of logger protocols
- User-friendly interface
- Languages: German, English, Italian and more due with software updates

For further information see data sheet CT 95.10

Calibration certificates can be created with the Cal-Template and logger protocols can be created with the Log-Template.



#### Cal Demo

Generation of calibration certificates limited to 2 measuring points, with automatic initiation of pressures via a pressure controller.



#### Cal Light

Generation of calibration certificates with no limitations on measuring points, without automatic initiation of pressures via a pressure controller.



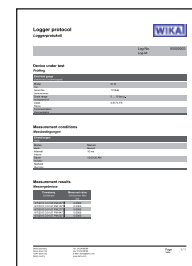
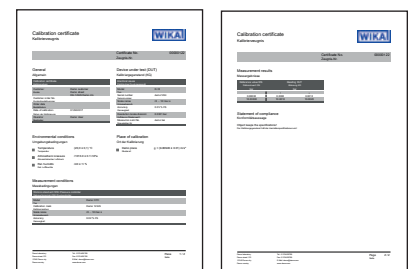
#### Log Demo

Creation of data logger test reports, limited to 5 measured values.



#### Log

Creation of data logger test reports without limiting the measured values.



## Scope of delivery

- Precision digital pressure gauge model CPG1500
- Hydraulic hand test pump model CPP700-H
- Adapter set
- Protective rubber cap for model CPG1500
- Case with matching foam insert for CPG1500, CPP700-H and adapter set
- Operating instructions CPG1500 and CPP700-H

## Options

- DKD/DAkkS calibration

## Accessories

- WIKA-Cal calibration software
- WIKA-Wireless USB stick

