Technical Information TI 224C/07/en No. 51502656

# Plug-in System for the Connection of pH Electrodes *TOP 68*





















#### Features and benefits

- Corrosion-proof PPS housing with highest ingress protection IP 68
- Temperature stability up to 135 °C
- Pressure stability up to 16 bar (triple safety)
- Allows autoclaving and sterilization
- Fitting for all marketable assemblies
- Gilded plug-in contacts
- Hydrophobic PFA for plug-in contact embedding
- Easy plug-in procedure
  - Blindly pluggable
  - Seals already during plugging of the coupling
- For electrodes filled with gel or liquid KCl
- With 2, 4 or 6 contacts

#### Area of application

Plug-in connection for pH/redox electrodes enabling reliable high-impedance transmission of measured values



### Advantages in detail

1.



The orientation of plug and coupling is exclusively done at the PPS housings. This rules out any mechanical stress of the contacts.

2.



The contact carrier is made of PFA, an extremely hydrophobic material. Moisture can simply be dried up.

3.



The contacts are manufactured and welded precisely. The short spring excursions rule out any bending of the contacts.

4.



The plug-in system is made of glass-fibre reinforced PPS. This synthetic is a heavy-duty material distinguished by chemical (corrosion) resistivity and temperature stability.

5.



In the area of cable leadthrough, this feature is achieved by a torsion-proof cable bushing with double sealing lip and axial pressing.

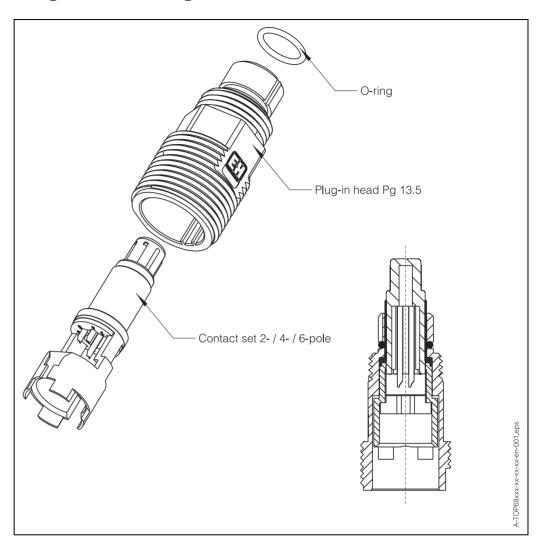
6.



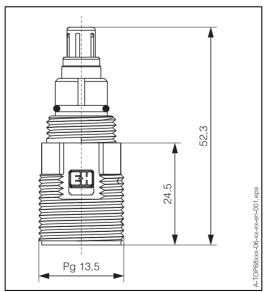
The screening of the cable is led across the total length of the plug-in system (proven in 150,000 TSA plug-in heads).

# Plug-in head for gel-filled electrodes

### Design

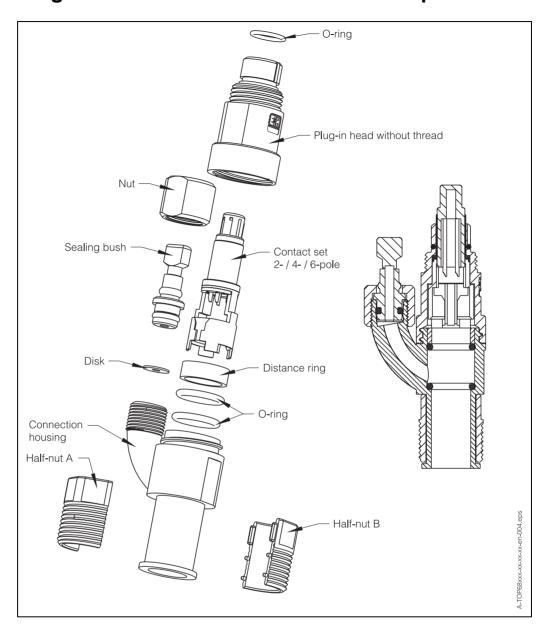


### **Dimensions**

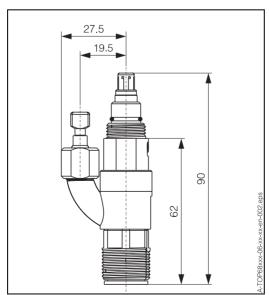


### Plug-in head for electrodes filled with liquid KCI

### Design

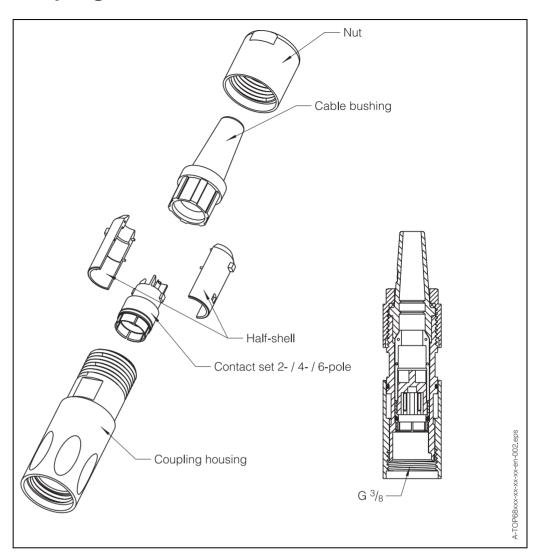


#### **Dimensions**

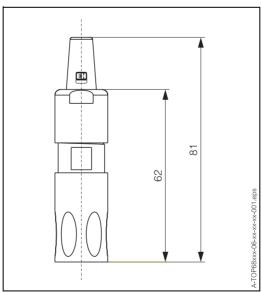


# Coupling

### Design

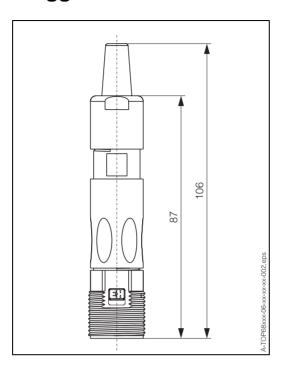


### Dimensions

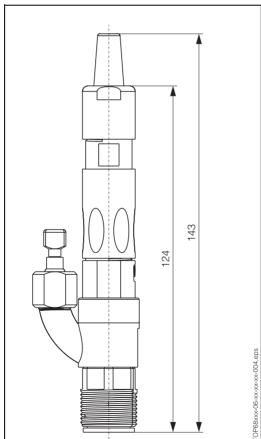


# Plugged-in state

Dimensions with plug-in head for gel-filled electrodes



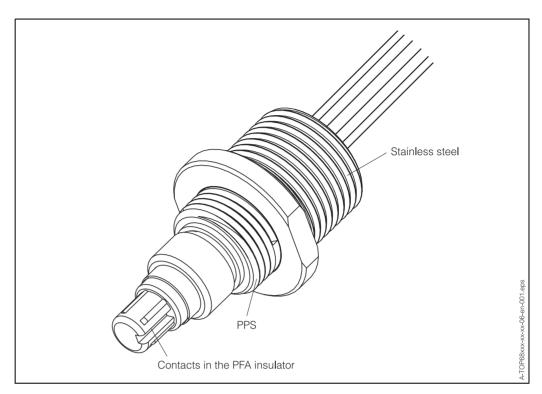
Dimensions with plug-in head for electrodes filled with liquid KCl



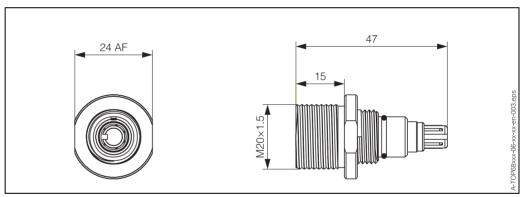
### **Instrument connector**

Order no.: 51503255

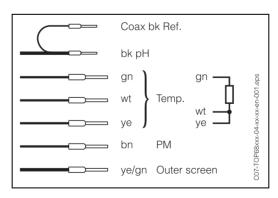
### Design



#### **Dimensions**



### Pin connection



### **General data**

Ingress protection	IP 68 (1 m water column, 50 °C, 168 h)
Temperature range	−15 +135 °C
Contact surface	nickeled and gilded
Coating of screening	Ag on half-shell, Au on screening sleeve
Cable diameter	7.2 mm
Resistance to pressure of plug-in head	16 bar against process pressure (triple safety)
Number of pins	2- / 4- / 6-pole

Endress + Hauser Gmbh + Co. Instruments International P.O. Box 2222 D-79574 Weil am Rhein Germany

Tel. (07621) 975-02 Fax (07621) 975-345 http://www.endress.com info@ii.endress.com

