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Dear Customer,

BEFORE INSTALLING OR USING THIS PRODUCT, PLEASE TAKE OUR ADVICE AND READ THE ENTIRE MANUAL THOROUGHLY.

This will enable you to fully profit from all of the advantages offered by this product.

1.1 Unpacking and Control

Please verify that the product is complete and free from any damage.

Compare the specifications on the label to the following list to ensure that you have received the proper unit. If there is any loss or damage, please contact your local Bürkert subsidiary.

1.2 About this Manual

This manual does not contain any warranty statement. Please refer to our general terms of sale and delivery.

Only properly-trained staff should install and/or repair this product. If difficulties should occur at the time of installation, please contact your nearest Bürkert sales office for assistance.

1.3 User's Responsibility for Safety

Bürkert manufactures a broad range of redox potential transmitters (compact, wall-mounted or panel-mounted versions).

While each of these products is designed to operate in a wide variety of applications, it is the user's responsibility to select a transmitter model that is appropriate for the application, install it properly, and maintain all components. Special Attention must be paid to the chemical resistance of the transmitter against the fluids which are directly contacting the product.



This symbol appears in the manual to draw special attention to instructions that affect the safe installation, function and use of the product.

1.4 Electromagnetic compatibility

This transmitter conforms to the EMC-Directive of the Council of European Communities 89/336/EEC. In order to comply with this directive, follow the wiring instructions.

2.1 Ordering table, 8206 compact versions**8206, compact, 4-20 mA output, 12-30 VDC**

Relays	Gasket	Electrode	Electrical connection	Order code
No	FPM ¹⁾	Unitrode ORP	EN 175301-803 plug	418836
No	FPM ¹⁾	Unitrode ORP	2 cable glands	418850
Yes	FPM ¹⁾	Unitrode ORP	2 cable glands	418837

¹⁾ 1 set including 1 cable gland obturator, 1 multiway seal, 1 mounting instruction sheet and 1 black EPDM-gasket is included in the standard delivery.

2.2 Ordering table, 8206 remote versions**8206, panel-mounted versions**

Output	Power supply	Order code
4-20 mA	12-30 VDC	429088
4-20 mA, 2 relays	12-30 VDC	430754

8206, wall-mounted versions

Output	Power supply	Order code
4-20 mA	12-30 VDC	430755
4-20 mA, 2 relays	12-30 VDC	430756
4-20 mA	115/230 VAC	430757
4-20 mA, 2 relays	115/230 VAC	430758

The redox sensor holder 8200 for a remote redox transmitter 8206 must be ordered separately: see corresponding datasheet or instruction manual (order code 428937).

2.3 Design and Measuring Principle**Design****Redox transmitter 8206 compact**

The redox-transmitter compactly combines a redox-sensor and a transmitter 8206 with display.

The sensor component consists of a replaceable combination redox-electrode, screwed into the sensor housing with screw-in threads.

The measured signal is connected to the remote transmitter via a coax cable.

The transmitter component converts the measured signal, displays the instantaneous value and computes the output signals.

The access to the output terminals is provided via an EN 175301-803 plug or two cable glands.

Redox transmitter 8206, remote

The redox transmission system combines a redox sensor 8200, and a separate redox transmitter 8206 with display.

The 8206 remote transmitter is available in panel-mounted version or in a wall-mounted enclosure for connection to the redox sensor 8200.

Redox sensor 8200

A redox sensor is necessary for use with the redox transmitter 8206 separate. The redox sensor 8200 for redox transmitter 8206 separate version can be easily installed into pipes using our specially designed fitting system (S020). Please refer to the redox sensor 8200 instruction manual.

Measuring Principle

When a redox potential electrode is immersed in a solution an electron exchange occurs between the oxidised and the reduced state of the electrolyte. The generated cell voltage is the redox potential.

The transducer without relay functions in a 2-wire circuit and requires a power supply of 12...30 VDC (or 115/230 VAC as an option in Wall-mounted version). A 4...20 mA standard signal is available as output signal, proportional to the redox potential (cf § 4.3.2).

The transducer with two additional relays functions in a 3-wire circuit. Limit values are freely adjustable (cf § 4.3.3).

2.4 Dimensions of the redox transmitter 8206

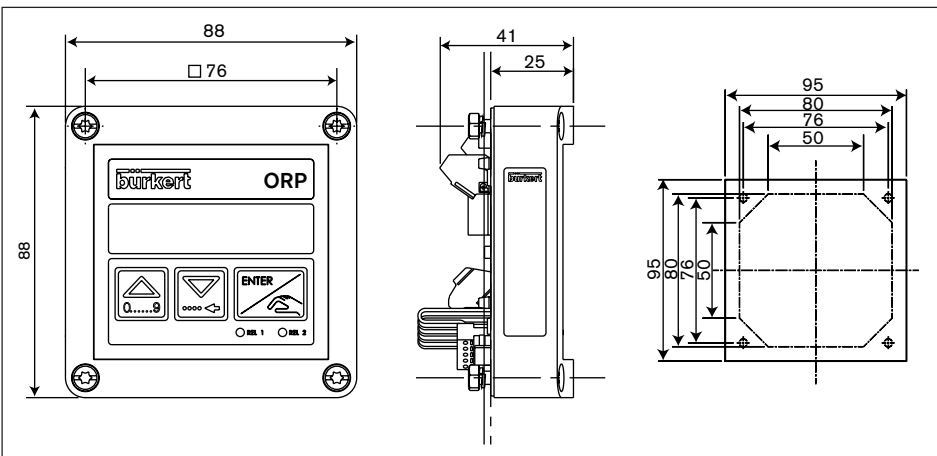


Fig. 2.1 Dimensions redox transmitter 8206 panel-mounted version, and drilling jig

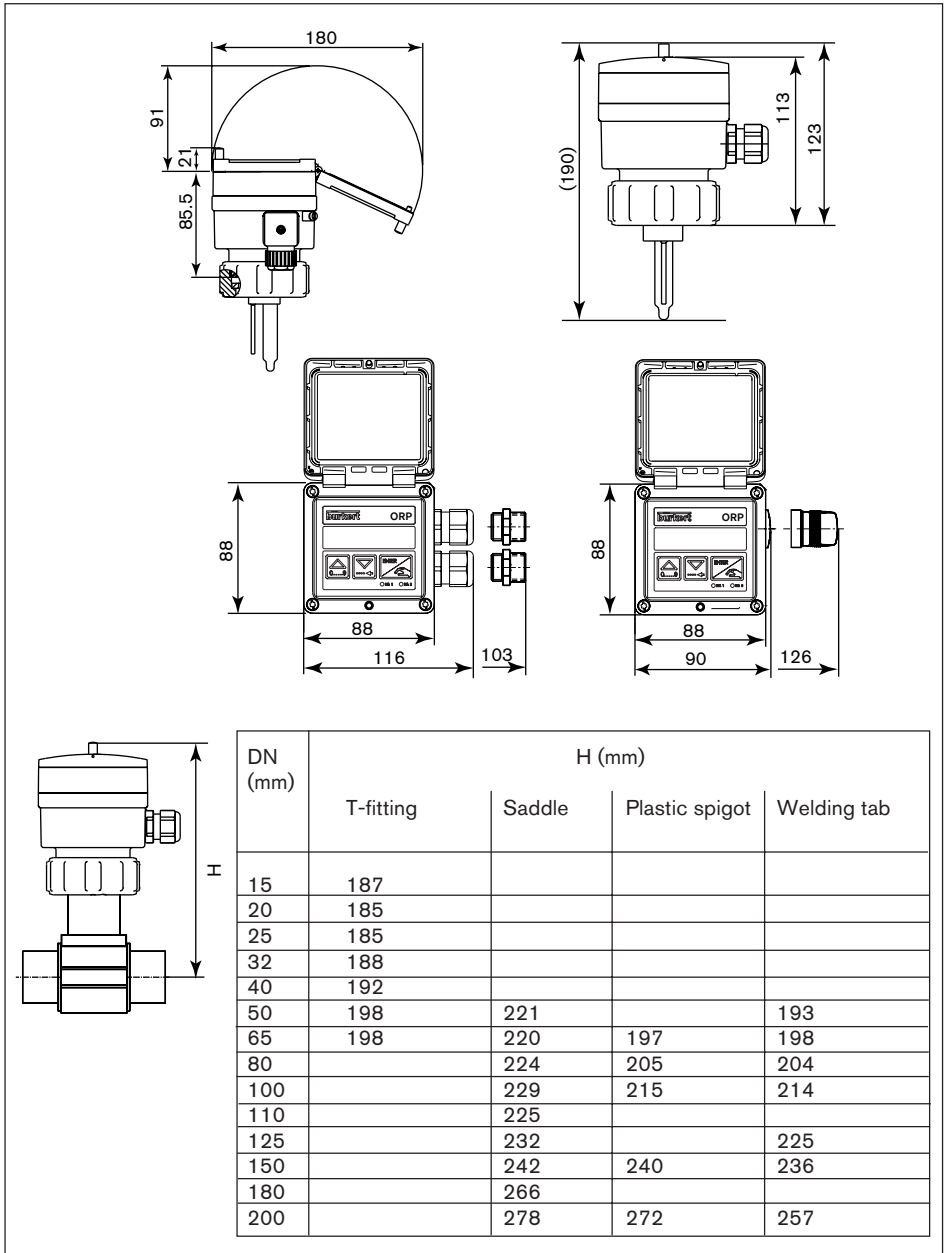


Fig. 2.2 Dimensions redox transmitter 8206 compact version

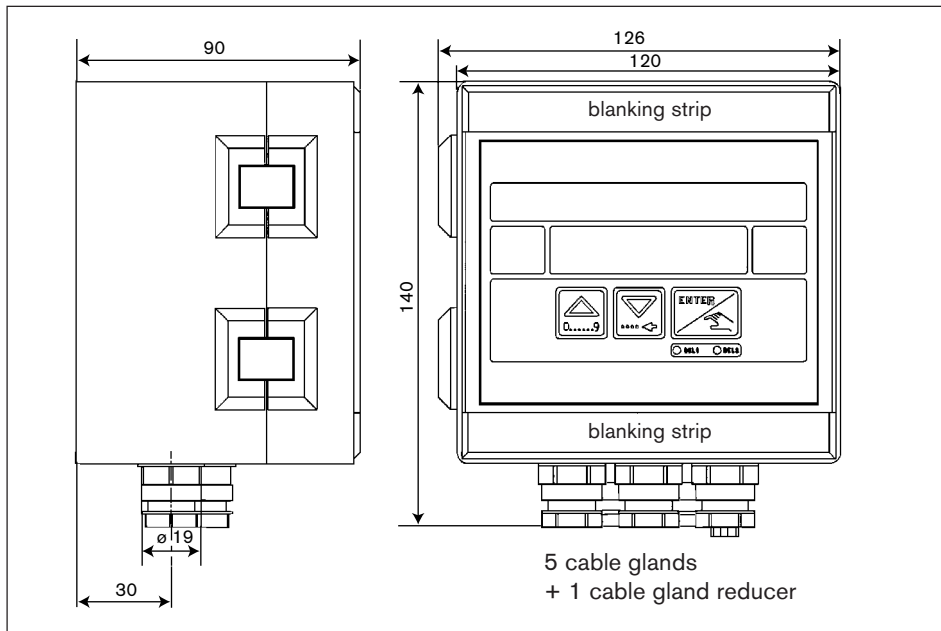


Fig. 2.3 Dimensions redox transmitter 8206 wall-mounted version

2.5 Technical data

Measuring range	-1575 to +1575 mV
Resolution	1 mV
Measuring error	± 3 mV, after electrode calibration

Min. difference of the redox measuring range corresponding to the 4-20 mA signal
 50 mV (ex: range 50 to 100 mV corresponds to the 4-20 mA current output)

Protection rating	IP 65 (compact, wall-mounted and front panel of the panel-mounted versions) IP 20 (rear side of the panel-mounted version)
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Electrical data

Power supply	12-30 VDC or 115/230 VAC, depending on the version
Current consumption	20 mA (version without relay) or 80 mA (version with relays)
Current output	4-20 mA programmable, proportional to redox potential
Loop resistance	1000 Ω max. at 30 V; 750 Ω max. at 24 V; 250 Ω max. at 15 V
Relais output	2 relays, 3 A, 230 VAC, adjustable
Electrical connection	through shielded cable with a max. section of 1,5 mm ²

Materials

Sensor armature	PVDF
O rings	FPM (EPDM supplied with the product)
Pt1000	Stainless steel 1.4571 (316 Ti)
Housing	PC (compact and panel-mounted versions) ABS (wall-mounted version)
Cover with lid	PC (compact version)
Screws	Stainless steel
Cable glands	PA
EN 175301-803 plug	PA

Environment

Ambient temperature	0 to 60 °C
Storing temperature	Compact version: 4 to 30 °C (limited through the electrode) Remote versions: 0 to 60 °C
Relative humidity	max 80 %, non condensated

Electrode type UNITRODE

Armature	glas
Medium pressure	0-6 bar
Medium temperature	0-130 °C
Max. pressure at max. temperature	4 bar
Diaphragm	2 clogging free "single pores" TM
Reference electrolyte	polymer

3.1 Installation Guidelines

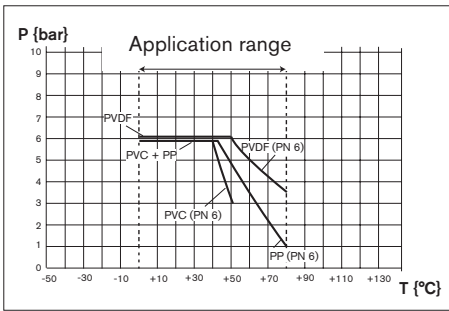
The transmitter must be calibrated with buffer solutions (see § 4.2) prior to installation.



Before first electrode calibration, immerse it for at least 2 hours in a solution of KCl 3M (223,6 g/l) or in drinking water.

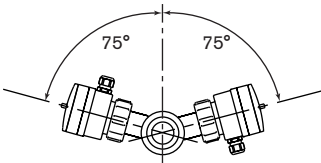
Pressure-Temperature-Diagram

Mind pressure-temperature dependence according to the respective fitting materials.



Installation Guidelines

Mount the compact redox transmitter (or redox sensor) in a vertical position into an horizontal pipe.



The transmitter must be protected from the rain, constant heat radiation and other environmental influences such as magnetic fields or direct exposure to sunlight.

The electrode must continuously be immersed into the measuring fluid in order to protect it from drying out.

3.1.1 installing a compact version

The redox transmitter can be easily installed in pipes using our specially designed fitting system. Remove protective cap of the sensor and keep it for storage.

1. The fitting **4** must be installed into the pipe according to the installation specifications in section 3.1.
2. Insert plastic nut **3** into fitting, and let plastic ring **2** snap into guide bush **5**.
3. Carefully insert the redox transmitter **1** into the fitting. If installed properly, the transmitter cannot be rotated.
4. Tighten transmitter housing to fitting with plastic nut **3**.



Plastic nut must only be tightened by hand!

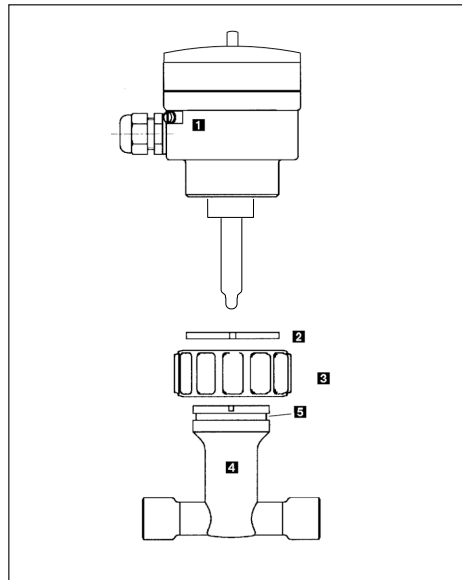


Fig. 3.1 Compact transmitter installation

3.1.2 Installing a panel-mounted version

Follow the instructions below to install the 8206 into a panel:

1. Use the supplied drilling jig to cut away the necessary opening in the panel. Make sure to scrupulously respect the dimensions indicated.
2. Place the gasket on the 4 screws of the cover.
Note: Use the 4 M4x25 screws supplied if the panel door is too thick.
3. Place the cover+gasket set on the cut-away with the electronic board facing the inside of the panel.
4. Insert the 4 washers onto the 4 screws and fit the transmitter to the panel using the 4 nuts.
5. Connect according to instructions described in chapter 3.2.
6. Use the supplied 4 cable clips to fit the cables to the protective plate.

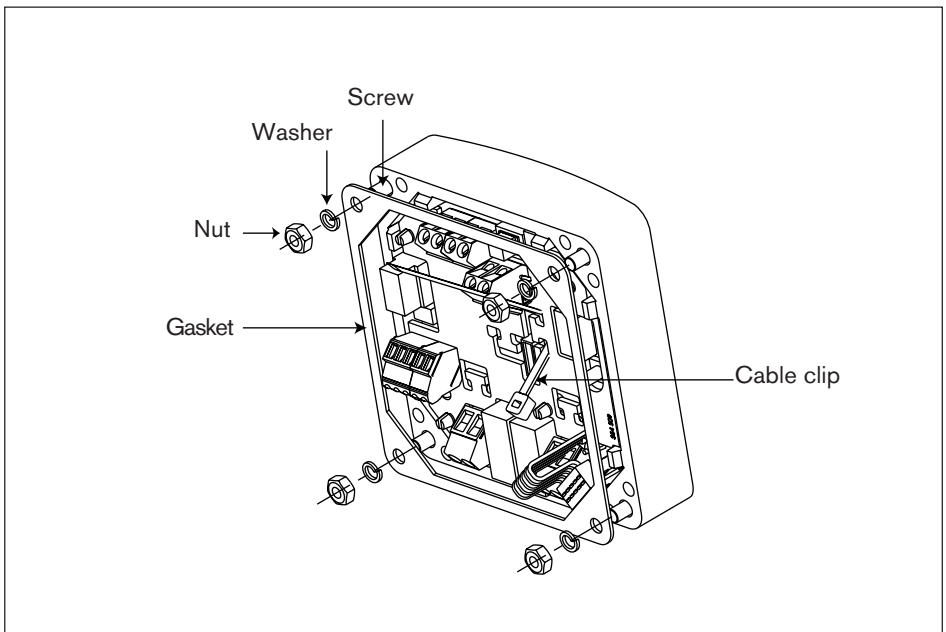


Fig. 3.2 Installation panel-mounted version

3.1.3 Installing a wall-mounted version

The redox transmitter in wall-mounted version has 4 fixing holes in the bottom enclosure. Remove the white blanking strips and the cover to access to fixing holes **1**. Electrical connections are described in § 3.2.

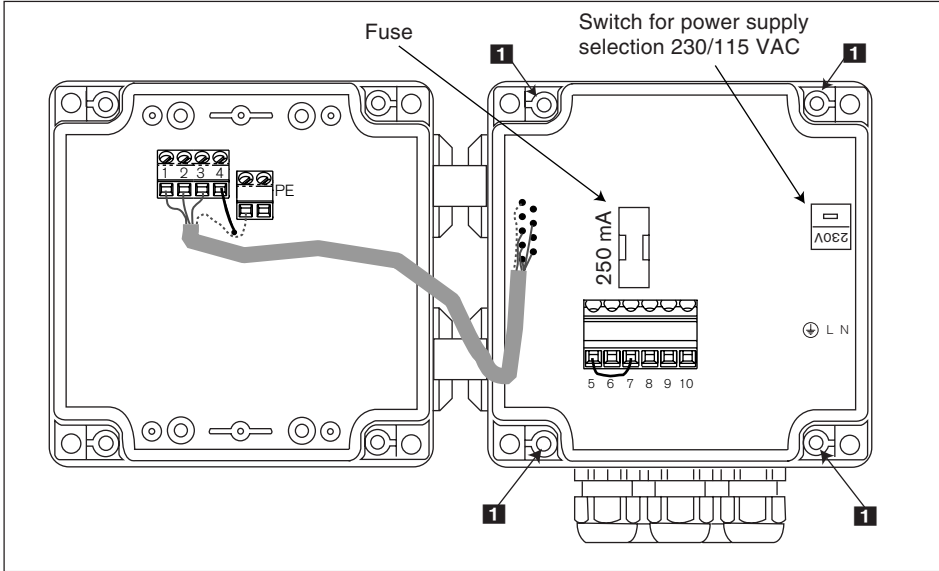


Fig. 3.3 Installation wall-mounted version

3.2 Electrical connection

3.2.1 General electrical requirements

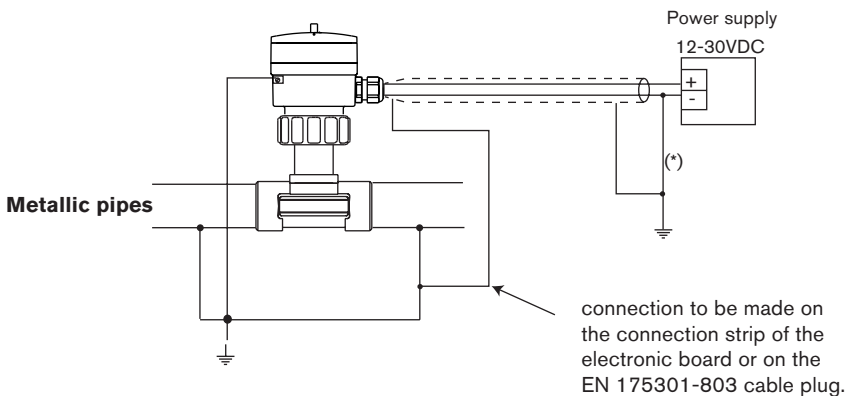
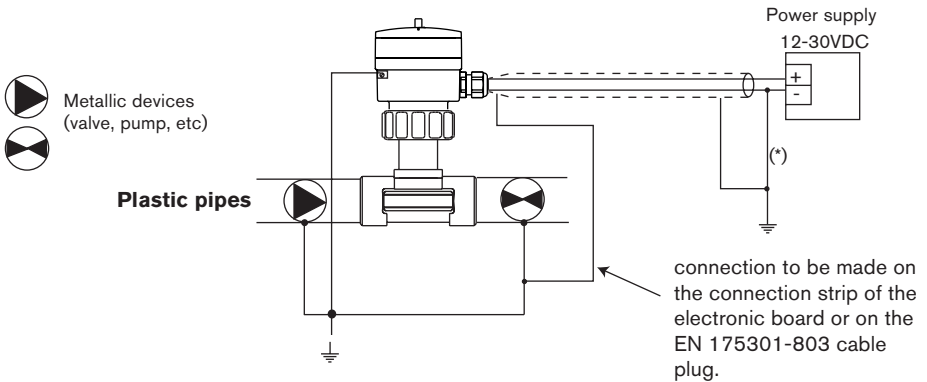
- Do not open and wire the transmitter with the power supply connected.
- It is advisable to put security devices on:
 - Power supply: Fuse (250 mA) and an interrupter**
 - Relay: 3A max. fuse and circuit breaker (depending on application).**
- Use cables with a temperature limit of 80°C minimum.
- For normal operating conditions the measuring signal can be transmitted by a shielded cable of 0.75 mm² cross section.
- The line must not be installed in combination with carrying lines with a higher voltage or frequency.
- If a combined installation cannot be avoided, a minimum space of 30 cm should be respected.
- The cable diameter must be between 6 and 12 mm;
 - If 2 cables are needed, use the supplied multiway seal and 4-mm diameter cables.
- The 12-30 VDC power supply must be filtered and regulated.

- Ensure the equipotentiality of the installation (power supply - transmitter - fluid):
 - The various earth spots in the installation have to be connected together to eliminate the potential differences that may occur between different earthes.
 - Observe faultless grounding of the shield at both ends of the cable.
 - Earth the negative terminal of the power supply to suppress the common mode currents. If direct earthing is not possible insert a 100 nF / 50 V-condensator between the negative terminal and the earth.

Special attention has to be paid if the transmitter is installed on plastic pipes because there is no direct earthing possible.

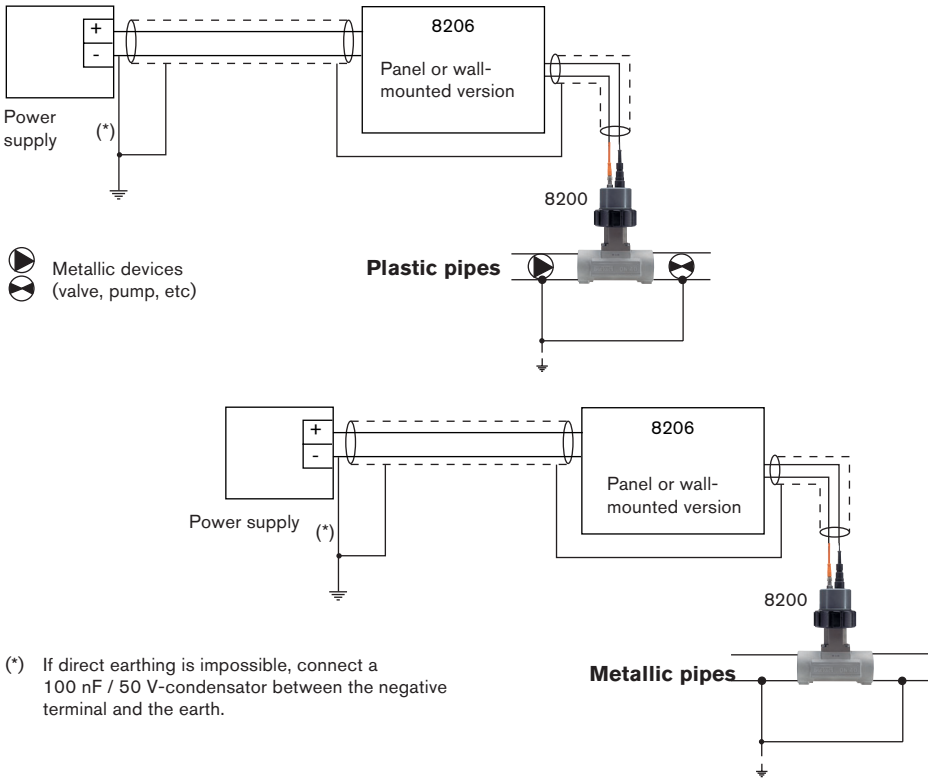
Proper earthing is performed by earthing together the metallic devices such as pumps or valves, that are as close as possible to the transmitter.

Realizing (principle) the equipotentiality of a compact version:



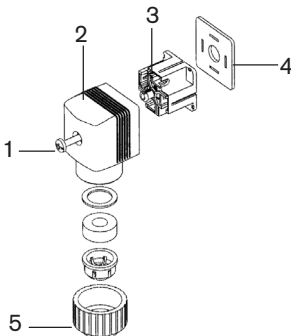
(*) If direct earthing is impossible, connect a 100 nF / 50 V-condensator between the negative terminal and the earth.

Realizing (principle) the equipotentiality of a compact version:



3.2.2 Electrical connection, compact version without relay, with EN 175301-803 cable plug

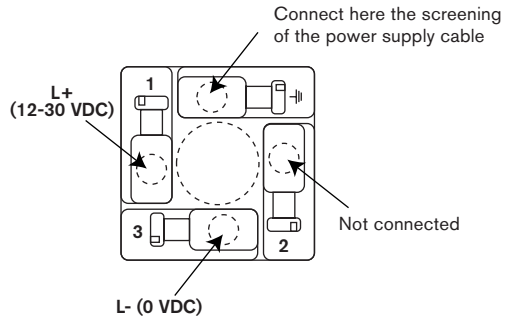
Assembly of the EN 175301-803 cable plug



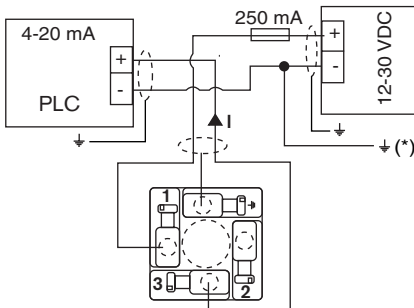
- Extract part [3] from part [2].
- Unscrew cable gland [5].
- Insert cable into part [2] via cable gland [5].
- Connect part [3] (see hereafter).
- Replace part [3].
- Tighten cable gland [5].
- Place gasket [4] between connector and fixed connector.
- Plug the connector onto the transmitter.
- Tighten screw [1].

Fig. 3.4 Assembly of EN 175301-803 cable plug

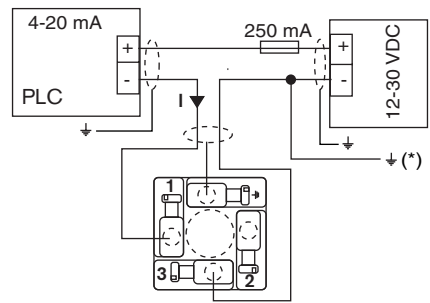
Wiring EN 175301-803 cable plug



Connection of transmitter 8206 with EN 175301-803 cable plug to a PLC:



Connection in sourcing mode



Connection in sinking mode

(*) If direct earthing is impossible, connect a 100 nF / 50 V-condensator between the negative terminal and the earth.

3.2.3 How to use the cable clips (versions without EN 175301-803 plug)

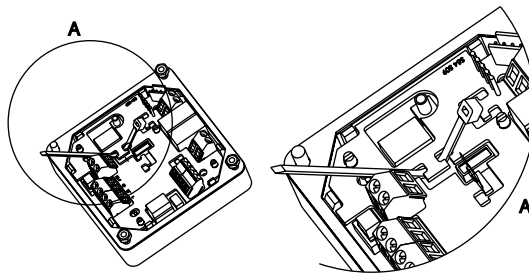


Fig. 3.5 Using the cable clips on versions without EN 175301-803 plug

3.2.4 Wiring of a compact version without relay, with cable glands

Lift the transparent lid after having unfastened the screw. Remove the cover of the device by unscrewing the 4 screws, pass the cables through the cable glands and connect according to the pin assignment below.



Always seal the unused cable gland using the supplied obstructor to ensure the tightness of the device. Unscrew the cable gland nut, insert the obstructor and screw the nut back onto the cable gland.

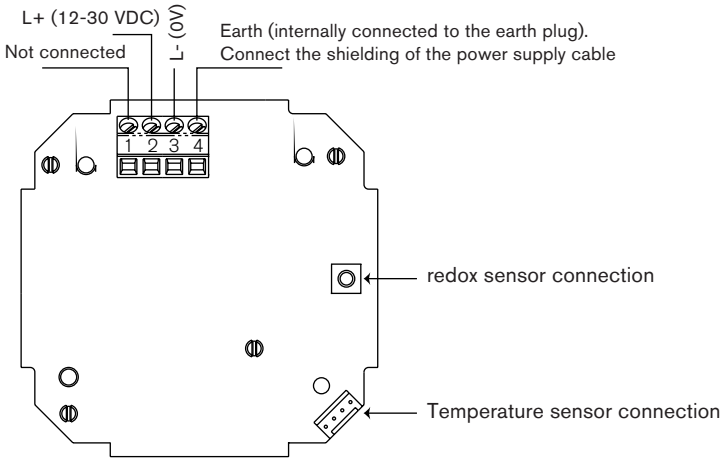
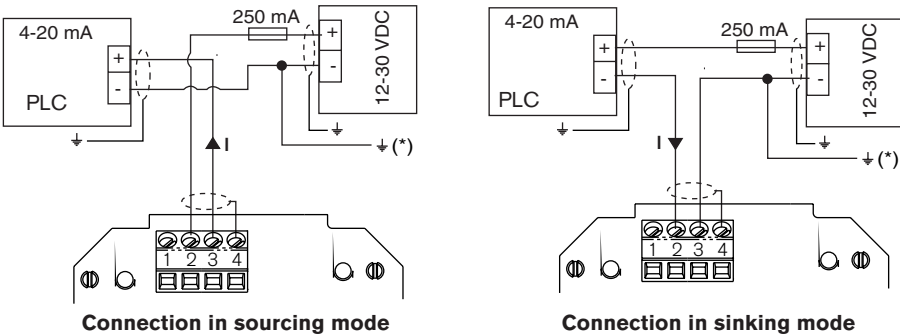


Fig. 3.6 Wiring of the 8206, compact version, without relay, with cable glands

Connecting the 8206 to a PLC:



(*) If direct earthing is impossible, connect a 100 nF / 50 V-condensator between the negative terminal and the earth.

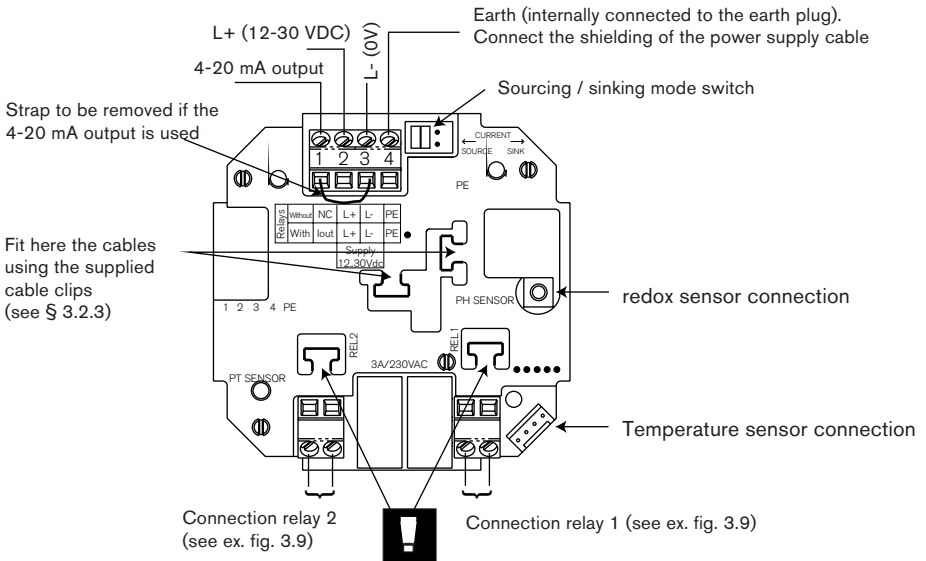
Fig. 3.7 Connection to a PLC, 8206 compact, without relay

3.2.5 Wiring of a compact version with relays, with cable glands

Lift the transparent lid after having unfastened the screw. Remove the cover of the device by unscrewing the 4 screws, pass the cables through the cable glands and connect according to the pin assignment below.



Always seal the unused cable gland using the supplied obstructor to ensure the tightness of the device. Unscrew the cable gland nut, insert the obstructor and screw the nut back onto the cable gland.



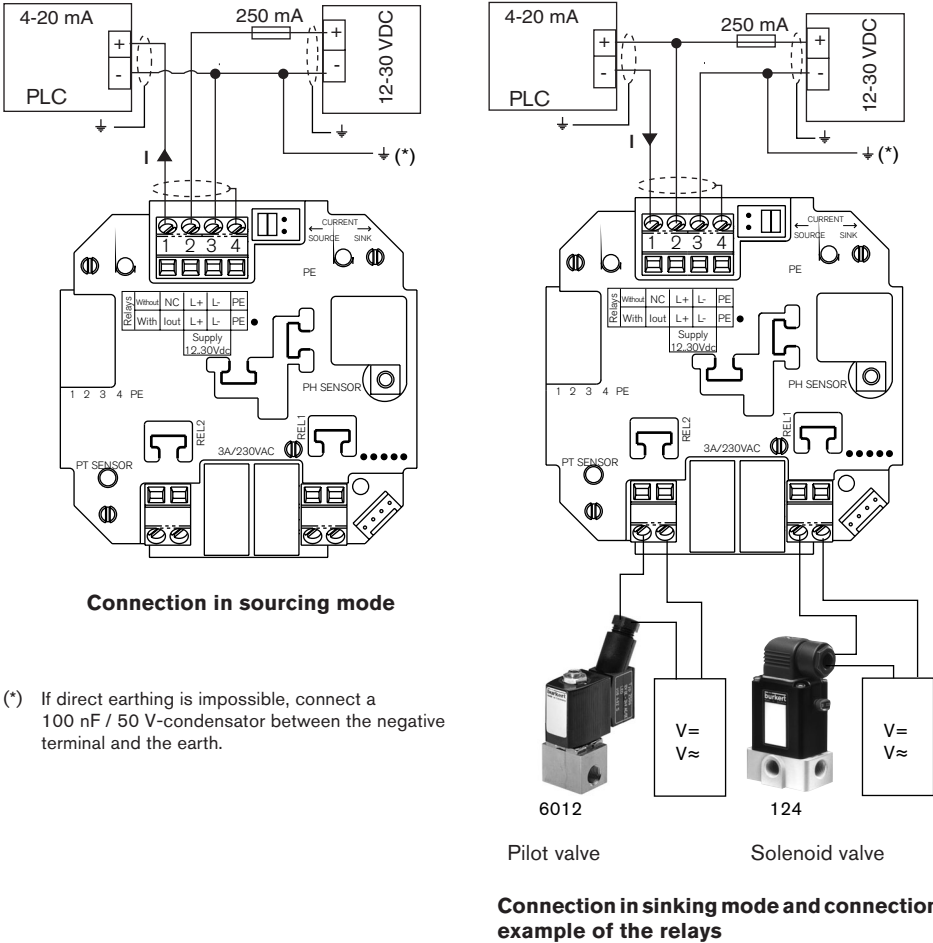
Relay cables must be fitted here to the board using the supplied cable clips (see § 3.2.3)

Fig. 3.8 Wiring of the 8206, compact version, with relays, with cable glands

Connecting the 4-20 mA output of transmitter 8206 to a PLC and connection example for the relays, see fig. 3.9.

Connecting the 4-20 mA output of transmitter 8206 to a PLC. Depending on the PLC type, position the "sourcing / sinking mode" switch properly (see fig. 3.8).

! Only manipulate the switch when the device is not powered.



Connection in sourcing mode

(*) If direct earthing is impossible, connect a 100 nF / 50 V-condensator between the negative terminal and the earth.

Fig. 3.9 Connection to a PLC, 8206 compact version, with relays

3.2.6 Wiring of a panel-mounted version without relay

Install the transmitter as described in § 3.1.2. Connect the terminals according to the pin assignment described below.

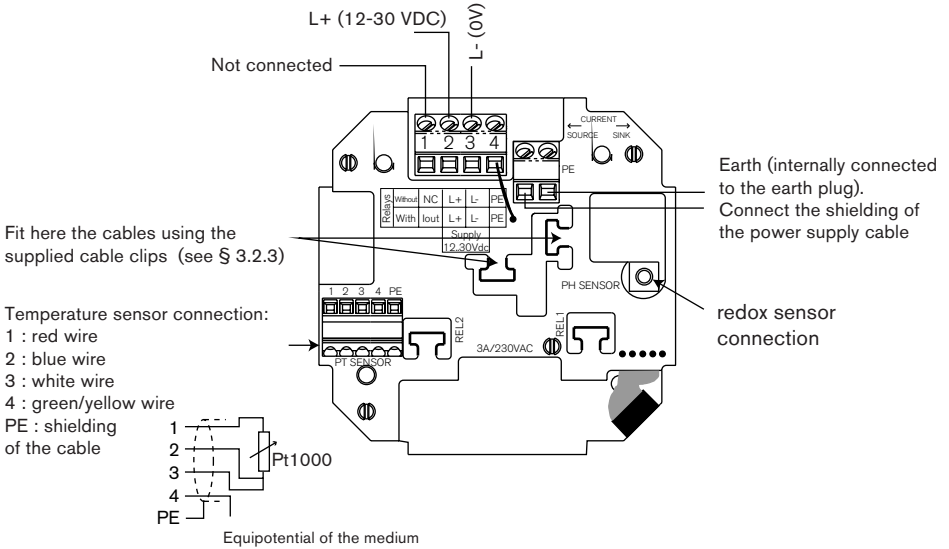
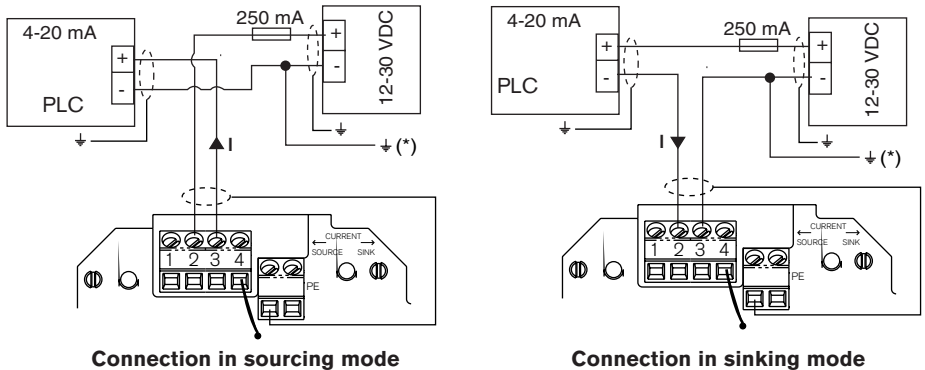


Fig. 3.10 Wiring of the transmitter, panel-mounted version, without relay

Connecting the 8206 to a PLC:



(*) If direct earthing is impossible, connect a 100 nF / 50 V-condensator between the negative terminal and the earth.

Fig. 3.11 Connection to a PLC, 8206 panel-mounted version, without relay

3.2.7 Wiring of a panel-mounted version with relays

Install the transmitter as described in § 3.1.2. Connect the terminals according to the pin assignment described below.

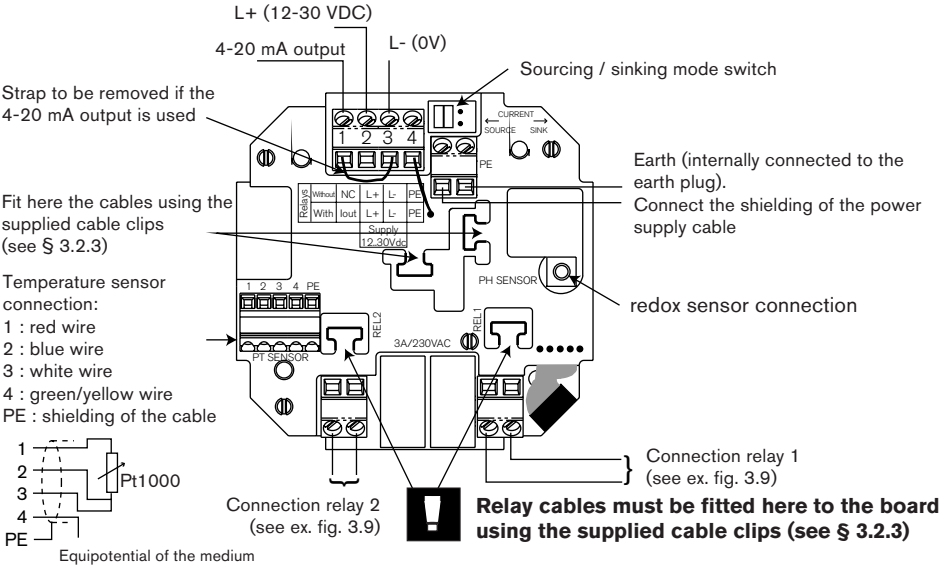
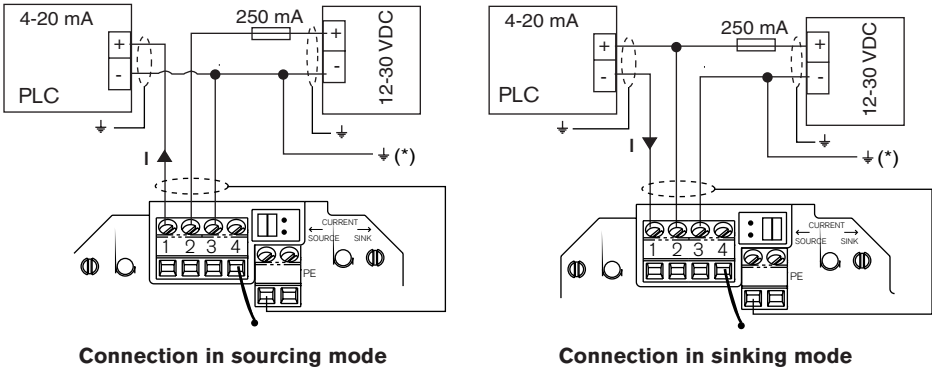


Fig. 3.12 Wiring of the transmitter, panel-mounted version, with relays

Connecting the 4-20 mA output of transmitter 8206 to a PLC. Depending on the PLC type, position the "sourcing / sinking mode" switch properly (see fig. 3.12).

! Only manipulate the switch when the device is not powered.



(*) If direct earthing is impossible, connect a 100 nF / 50 V-condensator between the negative terminal and the earth.

Fig. 3.13 Connection to a PLC, 8206 panel-mounted version, with relays

3.2.8 Wiring of a wall-mounted version, 12-30 VDC, without relay

Install the transmitter as described in § 3.1.3. Unscrew the 4 screws of the cover and unscrew the cable glands. Pass the cables through the cable glands by preferably respecting the following allocation in order to ease the wiring:

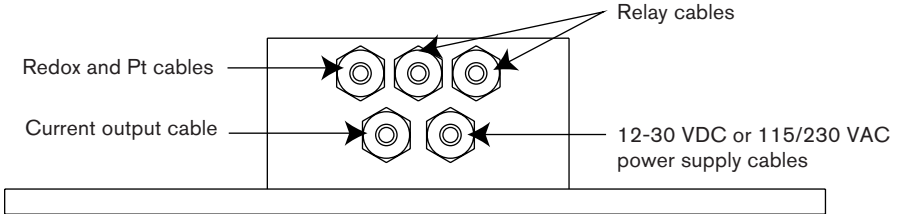


Fig. 3.14 Allocation of the cable glands, wall-mounted versions

Connect the terminals according to the pin assignment below.

Connection of transmitter 8206 in a wall-mounted version without relay to a PLC is similar to the connection of a panel-mounted version without relay (see Fig. 3.11).

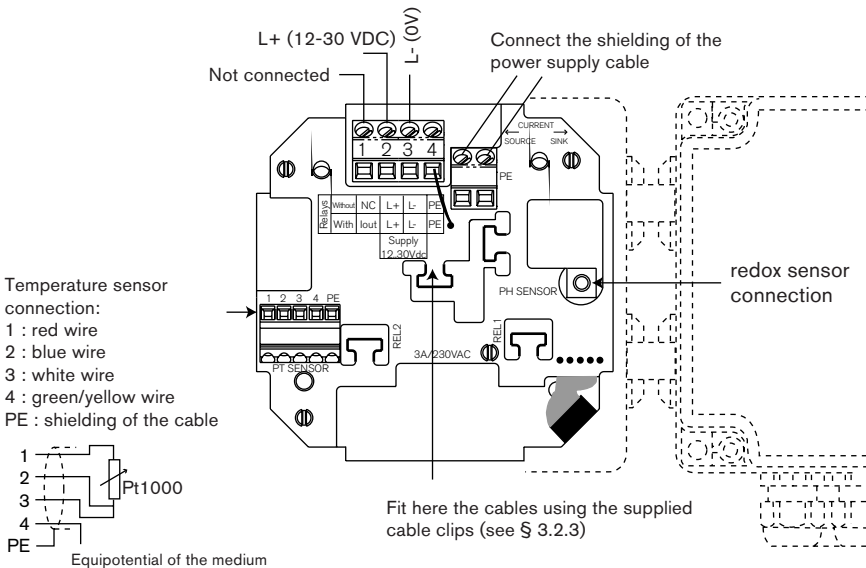


Fig. 3.15 Wiring of the transmitter, wall-mounted version, 12-30 VDC, without relay

3.2.9 Wiring of a wall-mounted version, 12-30 VDC, with relays

Install the transmitter as described in § 3.1.3. Unscrew the 4 screws of the cover and unscrew the cable glands. Pass the cables through the cable glands by preferably respecting the allocation indicated in fig. 3.14. Connect according to pin assignment below.

Connection of transmitter 8206 in a wall-mounted version with relays to a PLC is similar to the connection of a panel-mounted version with relays (see Fig. 3.13).



Only manipulate the switch when the device is not powered.

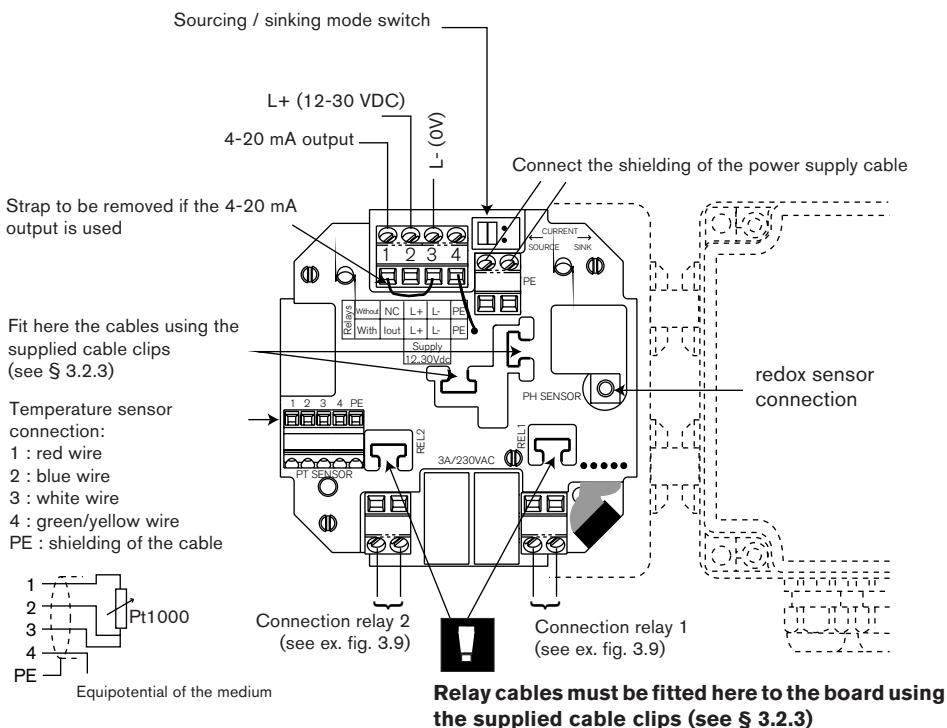


Fig. 3.16 Wiring of the transmitter, wall-mounted version, 12-30 VDC, with relays

3.2.10 Wiring of a wall-mounted version, 115/230 VAC, without relay

Install the transmitter as described in § 3.1.3. Unscrew the 4 screws of the cover and unscrew the cable glands. Pass the cables through the cable glands by preferably respecting the allocation indicated in fig. 3.14. Connect according to pin assignment below.



Only manipulate the switch when the device is not powered.

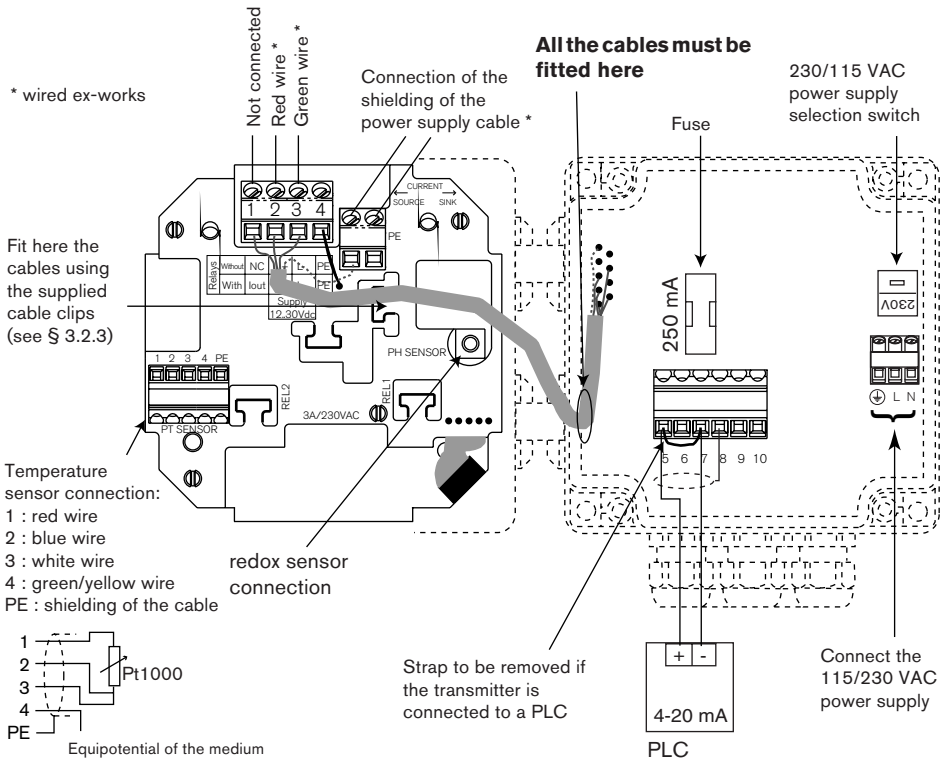


Fig. 3.17 Wiring of the transmitter, wall-mounted version, 115/230 VAC, without relay

3.2.11 Wiring of a wall-mounted version, 115/230 VAC, with relays

Install the transmitter as described in § 3.1.3. Unscrew the 4 screws of the cover and unscrew the cable glands. Pass the cables through the cable glands by preferably respecting the allocation indicated in fig. 3.14. Connect according to pin assignment below.

! Only manipulate the switches when the device is not powered.

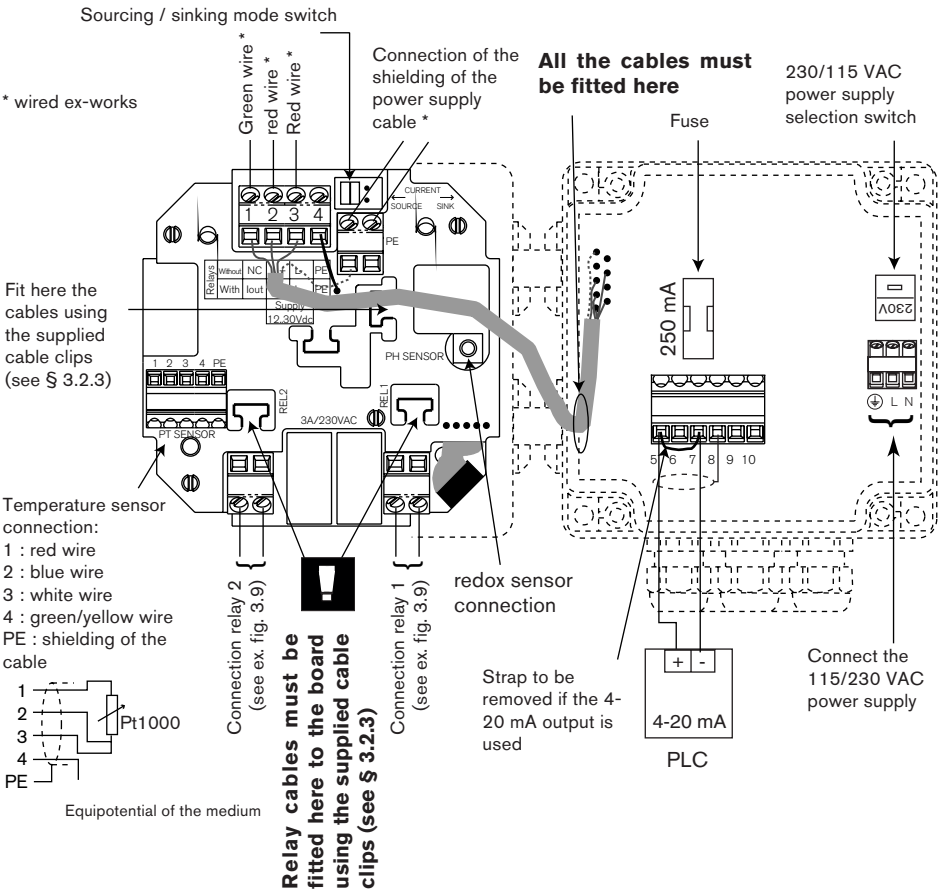


Fig. 3.18 Wiring of the transmitter, wall-mounted version, 115/230 VAC, with relays

The operation of the redox transmitter is classified according to 3 levels.

Main Menu

Redox and output current are displayed in the normal function mode.

The "HOLD" function and electrode calibration ("ORP CAL.") can be accessed . (§ 4.2)

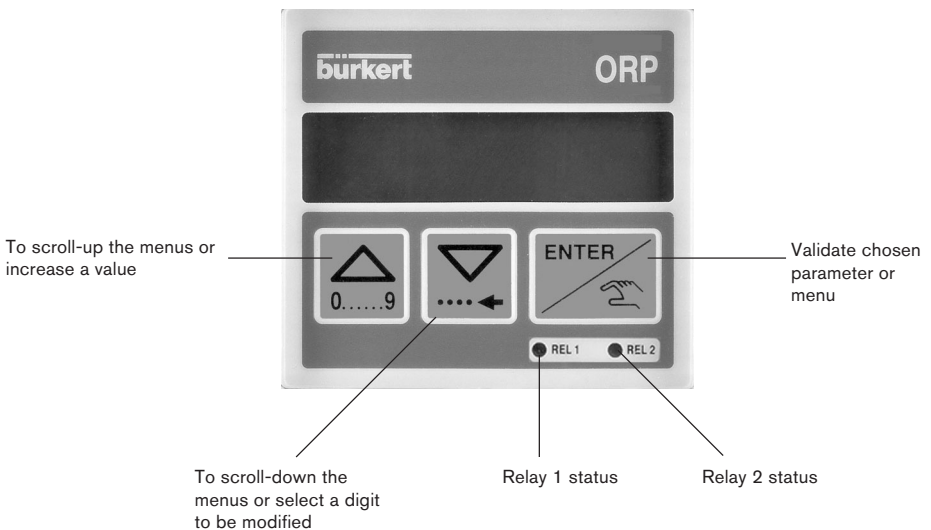
Calibration Menu

The calibration mode allows adjustments of all redox measurement parameters: language, 4...20 mA output, relay thresholds (option), and filter selection (§ 4.3).

Test Menu

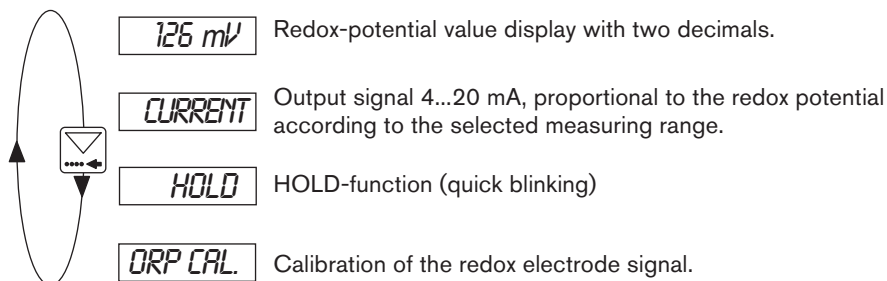
The test menu allows the basic setting of the transmitter: Offset (4 mA), Span (20 mA). A redox value can be simulated via this menu, allowing the process to be tested in the "dry condition" (§ 4.4)

4.1 Transmitter Operating and Control Elements



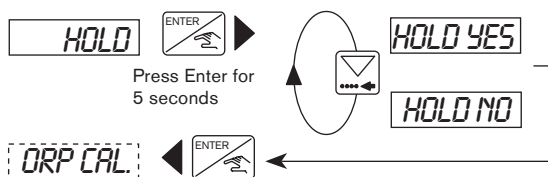
4.2 Operation Mode Display

The following process values are displayed in the display operation mode.



4.2.1 HOLD function

A continuous 4-20 mA output corresponding to the last value measured before this option was entered is generated. The relays are locked in their last state. This allows the electrode to be cleaned without interruption of the process. The display in the operation mode is flashing and there is no access to the parameter definition or the test menu, as long as the HOLD-function is activated. To deactivate HOLD function, enter again "HOLD" option and confirm "HOLD NO".



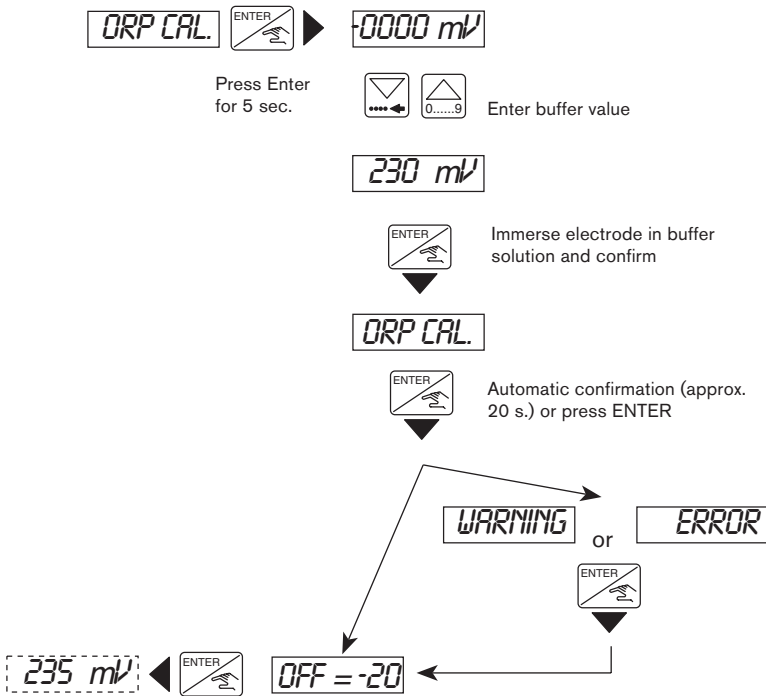
4.2.2 Calibration of redox electrode

In order to obtain reliable measurements, it is necessary to perform regular calibrations of the redox electrode.

A buffer solution is necessary to calibrate the reference value, we recommend the choice of a buffer value as close as possible to the required final redox potential value. Before each calibration, clean the electrode (see §5.2).


This maintenance procedure is very important to ensure a reliable control operation.

The frequency of calibration depends upon the degree of contamination of the measuring fluid, in normal operations conditions, calibration should be repeated once a week.



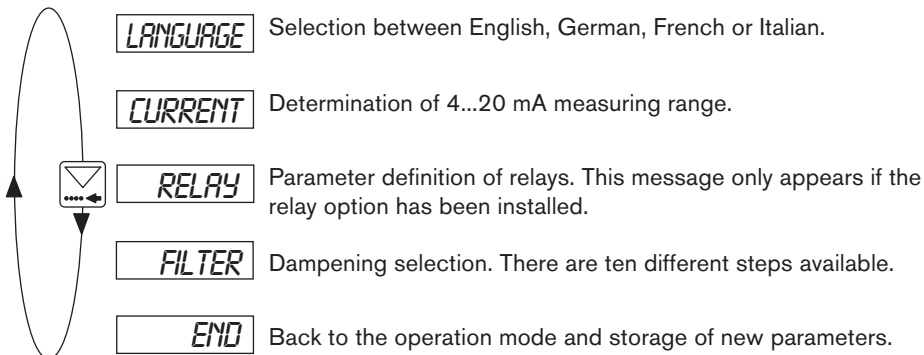
The message "WARNING" at the end of calibration indicates a buffer solution error or advanced ageing of the electrode. In the latest case, a replacement of electrode must be anticipated. In normal conditions, the message "WARNING" appears then the electrode has reached the half of its lifetime (i.e. an Offset value between -60 mV and -35 mV or between 35 mV and 60 mV).

The message "ERROR" at the end of calibration indicates a buffer solution error or that the electrode is out of tolerance. The message is displayed when the Offset value is < -60 mV or > 60 mV. In this case, values of previous calibration are kept. The electrode must be changed, otherwise the measured values would be erroneous.

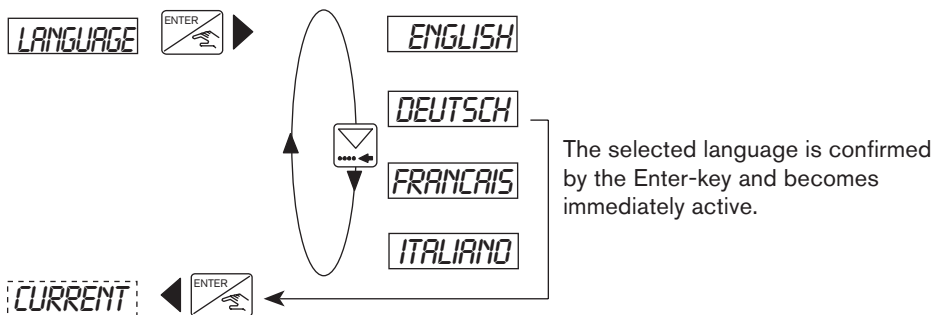
To escape electrode calibration, press  for 2s. Previous calibration values are kept. The sign can be changed as numbers.

4.3 Calibration Mode: Press simultaneously for 5 seconds

The following adjustments are set in the calibration mode display:



4.3.1 Language



4.3.2 Output Current

Enter the measuring range corresponding to the 4...20 mA output. E.g. -200 to 500 mV corresponding to 4...20 mA. The beginning of the measuring range might be larger than the end of it, e.g. -200 to 500 mV corresponds to 20...4 mA (inverted output signal).



Entering the beginning of the measuring range



Entering the end of the measuring range



The sign can be changed like numbers.

The minimum measuring range is 0,5 redox. If the beginning of the measuring range equals the end of it, there will be no display of the current value in the operation mode display (§4.2)

4.3.3 Relay

Definition of the relay functions. Two limit thresholds are set for each relay: 1- and 1+ or 2- and 2+. Inversion of the relays and delay are available. A delay (0 to 180 seconds) prevents the relays from being activated too fast, e.g. when time for homogenization is required (e.g. measurements in tanks with agitator). If the redox potential exceeds a limit value, the transmitter activates the relay at the end of the delay. Nothing happens, if the redox potential passes again under the threshold before the delay is elapsed. Units and decimal points as selected in the submenu "CURRENT" are active.







The following condition must be maintained $1- \leq 1+$ and $\Delta \text{ mV} > 2$.

RELAY  1- = 0000



1- = 0150  1+ = 0000



 INV NO  1+ = 0250
 INV YES  DEL1 = 000







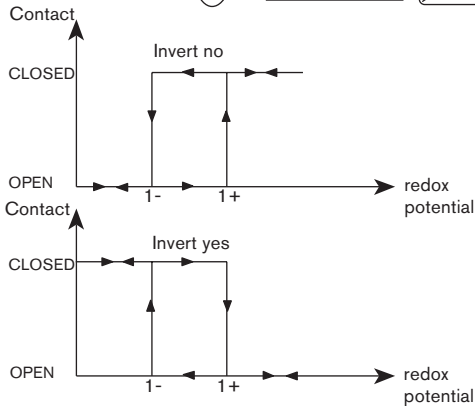
DEL1 = 030  2- = 0000



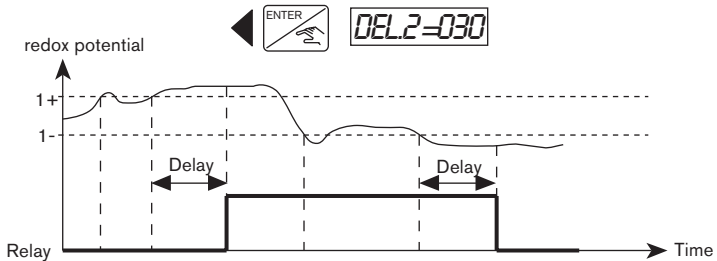
2+ = 0000  2- = 0400



 INV NO  2+ = 0450
 INV YES  DEL2 = 000

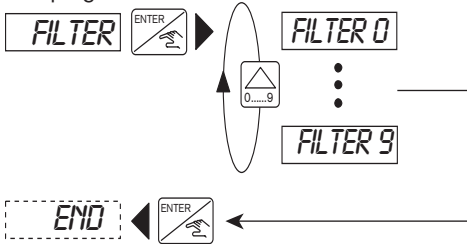


FILTER



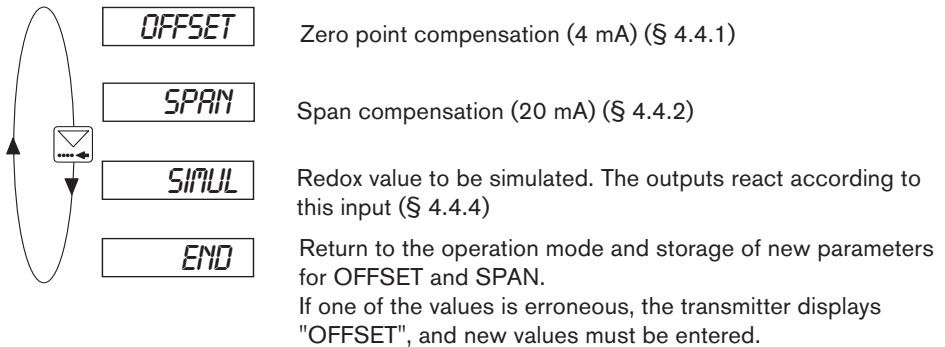
4.3.4 Filter Function

The damping is set in this sub-menu, which prevents display and output current fluctuations. There are 10 steps available. However, the first step ("FILTER 0") has no damping function.



4.4 Test Menu: Press simultaneously for 5 seconds

The following compensations and controls are carried out in the Test menu:



4.4.1 Offset-Compensation

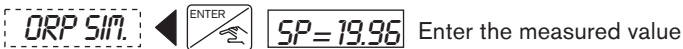
In order to check and modify the basic setting of 4 mA, connect an ammeter in the output circuit. Press ENTER when "OFFSET" is displayed, the transmitter generates 4 mA. If the measured value is different from 4 mA, enter the measured value as the new offset.



Enter the measured value

4.4.2 Span-Compensation

Check and modify the basic setting of 20 mA. The procedure is identical to the Offset-compensation. The transmitter generates 20 mA, if the ENTER key is pressed when "OFFSET" is displayed. Correct the span value by entering the measured value if necessary.



4.4.3 Redox potential-Simulation

A redox potential value can be simulated in this menu, allowing the user to test his system without the presence of any liquid being required. The simulated value influences the current output and the relays.



Enter the redox potential value



¹⁾ The simulation remains active until the user enters another sub-menu of the test menu.

5.1 Replacement of the redox electrode (compact version)



Redox-electrodes have a limited service life, depending upon many parameters, such as the chemical composition of the handled fluid, temperature, pressure, etc.

The manufacturer's warranty does not cover the redox electrodes.

The electrode must be replaced if it shows visible damage (broken glass, fractures, etc.) or if the message *ERROR* is displayed at the end of calibration.

For replacement, proceed as follows:



1. Disconnect supply voltage and make sure that there is no pressure on pipe or tank.

2. Remove the transmitter from the pipe or submersion assembly.
3. Unscrew the cover and open it slightly.
4. Pull out electrode connector from the electronic board.
5. Pull sensor assembly out of the enclosure.
6. Unscrew the electrode out of assembly with SW17 wrench.
7. Screw new electrode into assembly and tighten with SW17 wrench.
Reassemble in reverse order.

5.2 Storage and cleaning of the electrode

When not in operation, the electrode should be stored in a 3 molar potassium chloride solution (223,6 g/l), providing a regenerative effect. Is there no such solution available, normal tap water will also do for short measuring interruptions of max. 2 - 3 days.

The electrode must not be stored in distilled or deionized water, which may be used for rinsing purposes only!

Measuring inaccuracies may occur, if the platine band electrode is covered by solid matter deposits or organic substances. Since the contamination depends on the application, there is no general detergent available. The following detergents however can be recommended for most application cases.

- Greasy or oily deposits must be removed with a tenside-containing agent.
- Chalky deposits and metal hydroxide layers require diluted hydrochloric acid (10 %).
- Sulphide-containing deposits (purification systems) are removed with a detergent mixture of diluted hydrochloric acid (10 %) and saturated pepsin.

Observe safety regulations, when handling acid-containing solutions. Always rinse electrode with deionized water and leave for approx. 10 minutes in a 3 molar potassium chloride solution or in tap water.

5.3 Error messages

"**ERROR**" on the display (except during the electrode calibration) points on that calibration data are lost. By pressing ENTER, the user can access the main menu, but the transmitter works with the factory settings (see §5.4). The transmitter needs re-calibration. If this message recurs, please return the transmitter to your supplier.

Electrode voltage: $>+1575$ mV or <-1575 mV. "---- mV" is displayed. For the outputs (current and relays) $+1575$ mV, respectively -1575 mV, are fixed.

5.4 Factory-setting of redox transmitter 8206 at delivery

Language:	English	Relay 2:		
Current Output:		2-:		-1575
4 mA:	0000	2+:		-1575
20 mA:	0000	DEL2:		000
Relay 1:		INV:		Yes
1-:	-1575			
1+:	-1575	Filter:		Filter 2
DEL1:	000			
INV:	Yes			

User-setting of redox transmitter 8206

Language:		Relay 2:		
Current Output:		2-:		
4 mA:		2+:		
20 mA:		DEL2:		
Relay 1:		INV:		
1-:				
1+:		Filter:		Filter
DEL1:				
INV:				

5.5 Spare Parts List ORP Transmitter 8206

5.5.1 Spare Part List Transmitter 8206 compact

Position	Specification	Order code
1	Cover with lid, window and screws	553189
2	Electronic board with relays	555719
3	Electronic board without relay	555718
4	Cable plug EN 175301-803 with cable gland (type 2508)	438811
5	Cable plug EN 175301-803 with reduction NPT1/2", without cable gland (type 2509)	162673
6+8+9+11	Set incl. 2 cable glands M20x1,5 + 2 neoprene flat gaskets for cable gland or screwed plug + 2 screwed plugs M20x1,5 + 2 multiway seals 2x6 mm	449755
7+8+9	Set incl. 2 reductions M20x1,5 / NPT1/2" (mounted gasket) + 2 neoprene flat gaskets for screwed plug + 2 screwed plugs M20x1,5	551782
10+11+16	Set incl. 1 obturator for cable gland M20x1,5 + 1 multiway seal 2x6 mm for cable gland + 1 black EPDM gasket for the sensor + 1 mounting instruction sheet	551775
12	Complete sensor housing with EN 175301-803 plug (type 2508), ring and union nut	425524
13	Complete sensor housing for 2 cable glands M20x1.5 with ring and union nut	425526
14	Ring	619205
15	Union nut	619204
16	Set with 1 green FPM gasket + 1 black EPDM gasket (for the sensor)	552111
17	Electrode holder with stainless steel Pt1000	418889 ¹⁾
	Electrode holder with Ti Pt1000	418890 ¹⁾
18	Redox potential electrode 0...130 °C, 0...6 bar	634507
	Buffer solution, 475 mV, 500 ml	418555

¹⁾ Fitted depending on the version.

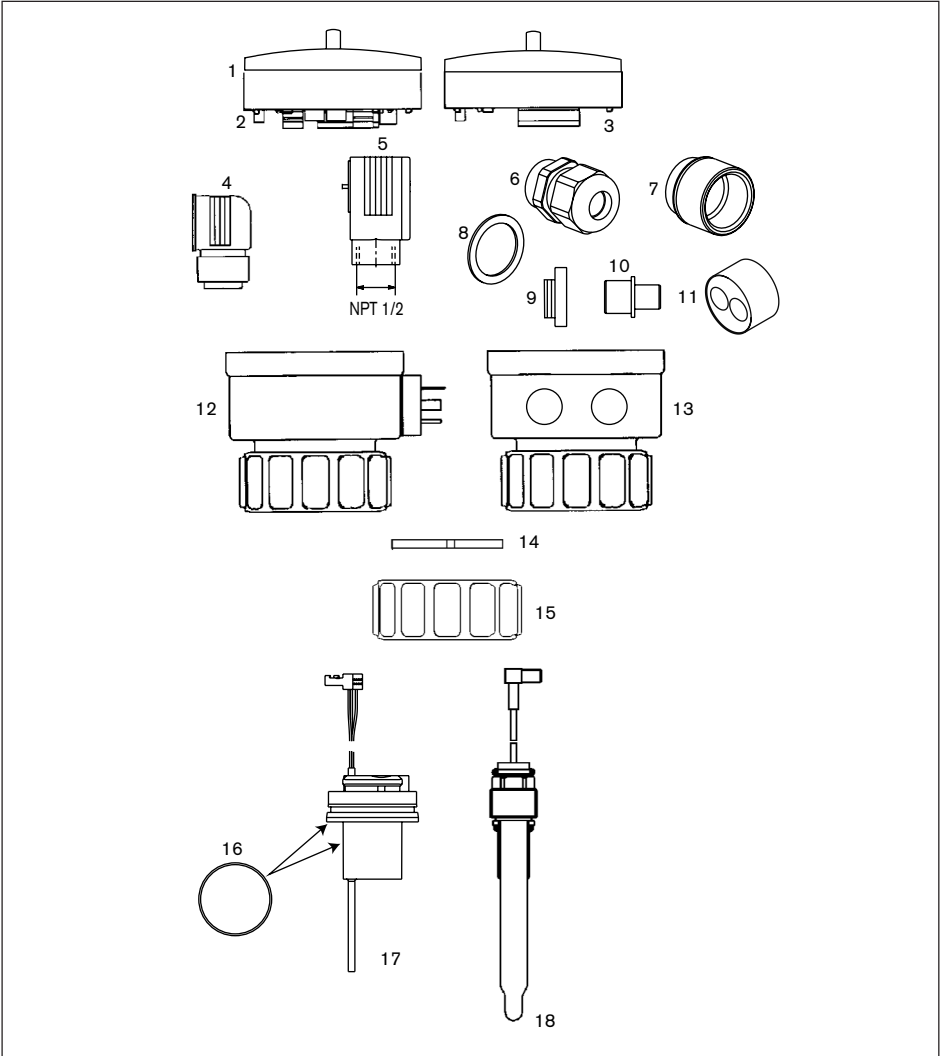


Fig 5.1 Spare parts compact version

5.5.2 Spare parts redox-transmitter 8206 panel version

Position	Designation	Order code
1	Electronic board without relay + protective plates + mounting instructions	555720
	Electronic board with relays + protective plates + mounting instructions	555721
2	Mounting set (screws, washers, nuts, cable clips)	554807
3	Gasket	419350

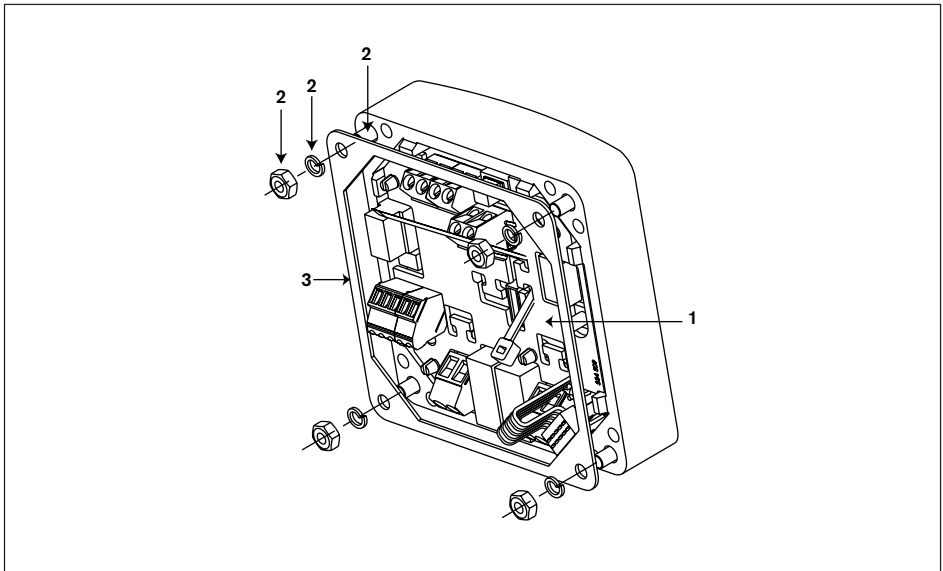


Fig 5.2 Spare parts panel version

5.5.3 Spare parts redox-transmitter 8206 wall-mounted version

Position	Designation	Order code
1	IP65 housing	427096
2	Electronic board without relay + protective plates + mounting instructions	555720
	Electronic board with relays + protective plates + mounting instructions	555721
3	115/230 VAC power supply board	555722

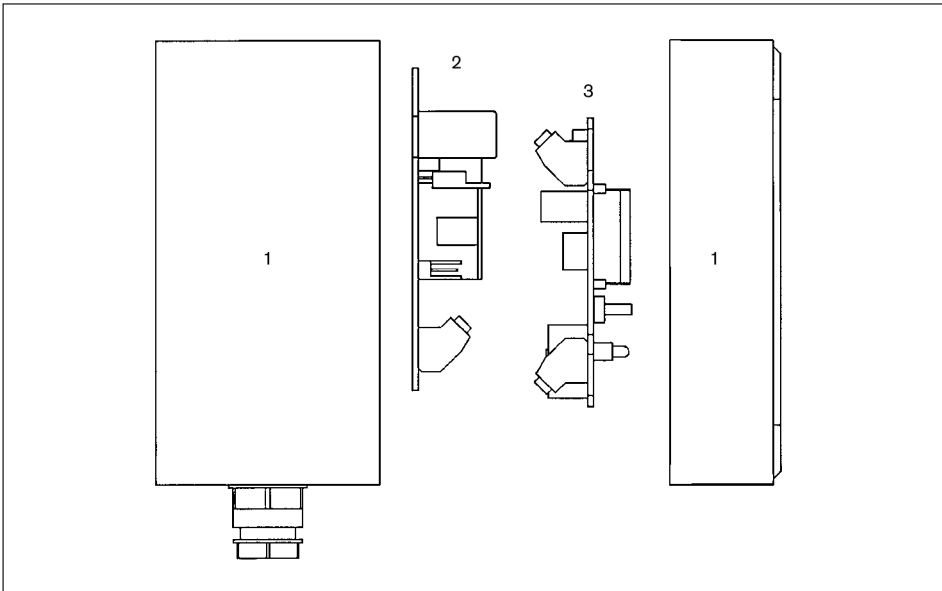


Fig 5.3 Spare parts wall-mounted version