

Armatures for analytical probes



Type 8200 can be combined with...



Type 8203
pH- and ORP-probes



Type 8221
Conductivity probes



Type 8232
Chlorine sensor



Type S020
Insertion fitting



Type BBS-11
Safety sockets

- For many different types of installations and applications
- Large range of probe holders
- General purpose and pharmaceutical applications, water treatment, food & beverage industry

•The holder range for 120 mm analytical probes (pH/redox potential/conductivity) covers many types of applications: general purpose, water treatment, food & beverage and pharmaceutical / biotechnology.

A wide range of process connections are available for:

General purpose holders mounted in a pipeline or tank.

Hygienic holders designed for hygienic applications:

- 3-rod holders which ensure good sensor protection and allow easy cleaning. Due to a sanitary design, steam sterilisation, autoclavation, CIP are possible.







- The direct welding holders save space and are designed for installation in fermenters and many other applications with tanks and pipelines. Steam sterilisation, autoclavation, CIP are possible.





- Special holders for the 2" clamp connection or for the DN50 thread process connection satisfy the highest demands, for example, in CIP applications. A Pt1000 temperature probe is available as an option.

- The 15° version with 2" (DN50/40) connection adapted for GEA Tuchenhagen VARINLINE process connection enables positioning of the probe in relation to the flow direction or in vertical pipes.

•A special holder – the 8200 analytical measurement chamber – has been designed to be used with the 8232 chlorine sensor.

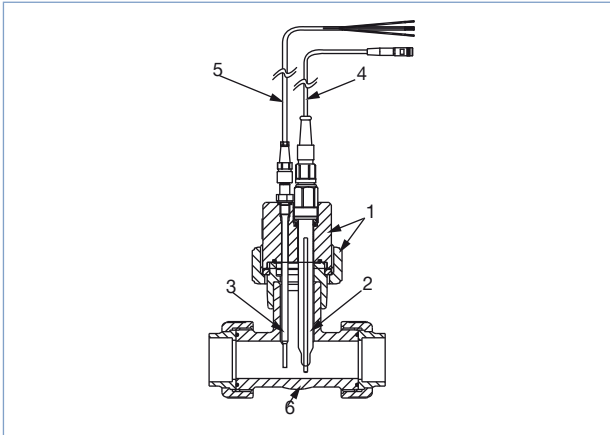
General data	
Process connection	
General purpose	G 2" for use with S020 Insertion fitting G 1" for use with T-Fitting Solvent union for use with T-Fitting d32 x d32 up to d32 x d110 Immersion fitting with fixing kit for use on tanks
Hygienic holder	G 1¼" (28 or 46 mm O-ring position) Clamp 1½" (Ø 50.5 mm) or 2" (Ø 64 mm - acc. to ISO2852) for DN50 thread (acc. to SMS1145) process connection 2" (DN50/40) connection adapted for GEA Tuchenhagen VARINLINE process connections Direct welding on pipe
Measurement chamber	Screw connections (straight for inlet, elbow for outlet) ¼" external thread to 6/8 hose; mounting nut (to fasten the sensor); hose sleeve (to sample)
Fluid temperature	Temperature limits may depend on the inserted probe. Refer to the relevant instruction manual and technical data on next page. If the temperature ranges given for the holder and the inserted probe are different, use the most restrictive range.
Fluid pressure	Pressure limits may depend on the inserted probe. Refer to the relevant instruction manual and technical data on next page. If the pressure ranges given for the holder and the inserted probe are different, use the most restrictive range.
Environment	
Ambient temperature	Temperature limits may depend on the inserted probe. Refer to the relevant instruction manual or datasheet for more details

 General purpose holder G 2" connection	
Materials	
Body	Stainless steel (316L/1.4404), PVC
Seal	FKM (EPDM option)
Fluid temperature	with S020 fitting in PVC: 0...+50 °C (+32...+122 °F), Stainless steel: -20...+130 °C (+5...+266 °F)
Fluid pressure	with S020 fitting in PVC: PN10 (145 PSI), Stainless steel: PN16 (232 PSI)
 General purpose holder G 1" or solvent union connection	
Materials	
Body	PVC
Seal	FKM
Fluid temperature	0...+50 °C (+32...+122 °F)
Fluid pressure	PN10 (145 PSI)
 General purpose holder Immersion fitting with fixing kit	
Materials	
Sensor holder	PVDF
Extension tube	PP
Seal	FKM (EPDM option)
Screws	Stainless steel
Fluid temperature	0...+80 °C (+32...+176 °F)
 Hygienic holder G 1 1/4" connection (28 or 46 mm O-ring position)	
Materials	
Body	Stainless steel (316L/1.4435)
Seal	EPDM (FDA)
Fluid temperature	-10...+135 °C (+14...+275 °F)
Fluid pressure	Max. 6 bar (max. 87 PSI)
 Hygienic holder - short immersion depth 1 1/2" clamp (Ø 50.5 mm) connection	
Materials	
Body	Stainless steel (316L/1.4435)
Seal	EPDM (FDA)
Fluid temperature	-10...+135 °C (+14...+275 °F)
Fluid pressure	Max. 6 bar (max. 87 PSI)
 Hygienic holder - long immersion depth 1 1/2" clamp (Ø 50.5 mm) connection	
Materials	
Body	Stainless steel (316L/1.4404)
Seal	FKM
Fluid temperature	-10...+135 °C (+14...+275 °F)
Fluid pressure	Max. 6 bar (max. 87 PSI)

 Hygienic holder 2" clamp (Ø 64 mm - acc. to ISO2852) connection or for DN50 thread (acc. to SMS1145) process connection	
Materials	
Body	Stainless steel (316L/1.4404)
Seal	EPDM
Fluid temperature	-20...+140 °C (+5...+284 °F)
Fluid pressure	PN16 (232 PSI)
 Hygienic holder 2" (DN50/40) connection adapted for GEA Tuchenhagen VARINLINE process connections	
Materials	
Body	Stainless steel (316L/1.4435)
Seal	EPDM (FDA)
Fluid temperature	-10...+135 °C (+14...+275 °F)
Fluid pressure	Max. 6 bar (max. 87 PSI)
 Hygienic holder Direct welding connection	
Materials	
Body	Stainless steel (316L/1.4435)
Seal	EPDM (FDA)
Fluid temperature	-10...+145 °C (+14...+284 °F)
Fluid pressure	Max. 16 bar (max. 232 PSI)
 Analytical measurement chamber	
Materials	
Body	PMMA polished, beveled edges
Mounting nut	PVC grey
O-ring holder	PVC grey
Slide ring (30 x 25.5 x 4)	PETP black
O-ring (30 x 2.6)	FPM
O-ring (25 x 2.5)	Silicone
Hose connection	PA grey
O-ring (12.42 x 1.78)	NBR
Inlet needle valve with knurling	PVC grey
Float	PEEK nature
M10 sealing plug	PVC grey
Sample needle valve with knurling	PVC grey
Fluid temperature	Max. 45 °C (max. 113 °F) - Permitted operating temperature of the sensor has to be respected
Fluid pressure	Max. 4 bar (max. 58 PSI) - Permitted operating pressure of the sensor has to be respected

Installation example of Type 8200

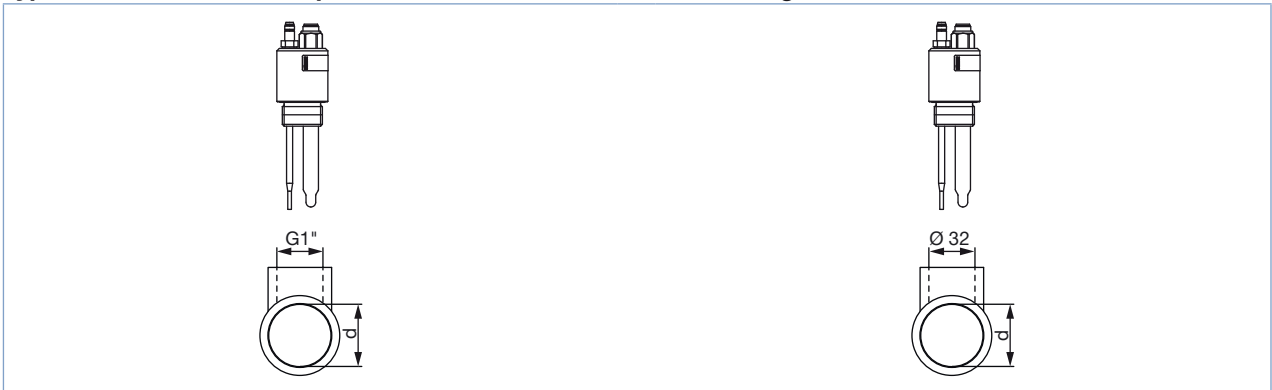
Type 8200 probe holder for installation on S020 Bürkert fitting



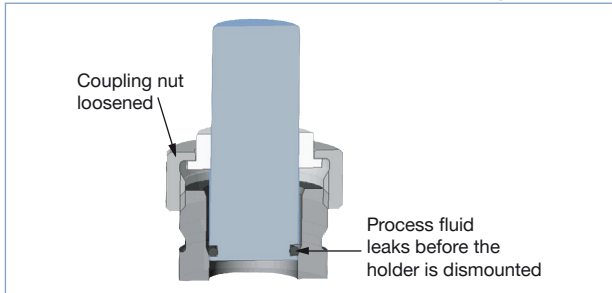
A complete pH/ORP/conductivity sensor consists of

1. Complete Type 8200 probe holder with nut and seals
2. pH/O.R.P probe or conductivity probe with PG 13.5 connection
3. Pt1000 temperature probe/liquid earth rod (option, if needed)
4. Shielded cable for pH/ORP or conductivity cable varioPin (6.0)
5. Shielded cable for Pt1000 temperature probe/liquid earth rod (option, if needed)
6. S020 Bürkert fitting (G 2" connection)

Type 8200 G 1" or solvent probe holder for installation on T-Fitting



Type 8200 G 1 1/4" probe holder with O-ring position of 28 or 46 mm for installation on sockets



The G 1 1/4" probes holder with O-ring position of 28 mm or 46 mm has to be mounted into sockets which are welded on pipes or tanks.

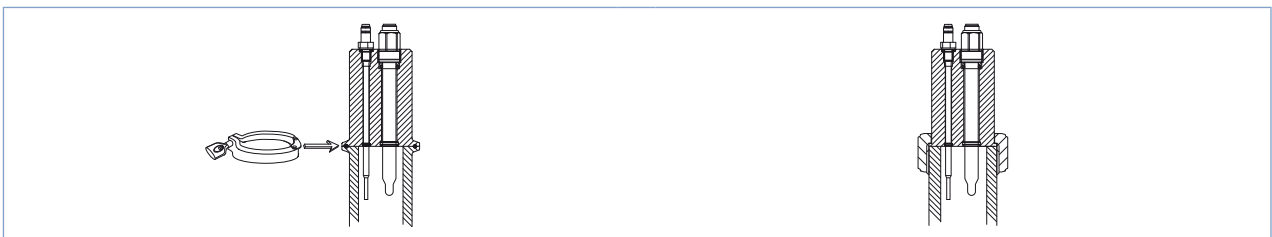
Sockets 15°

Robust weld-in socket with 15° angle to be mounted on tanks.

The sockets have a safety construction. The socket seals only if the O-ring of the holder is exactly in the right position.

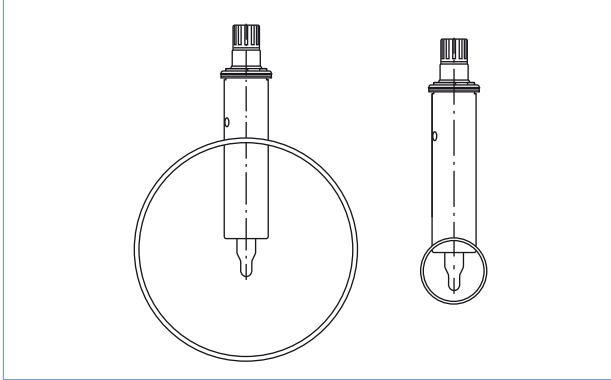
Otherwise the fluid leaks through the G 1 1/4" coupling nut.

Type 8200 probe holders with 2" clamp (acc. to ISO2852) connection or for DN50 thread (acc. to SMS1145) process connection



Installation example of Type 8200

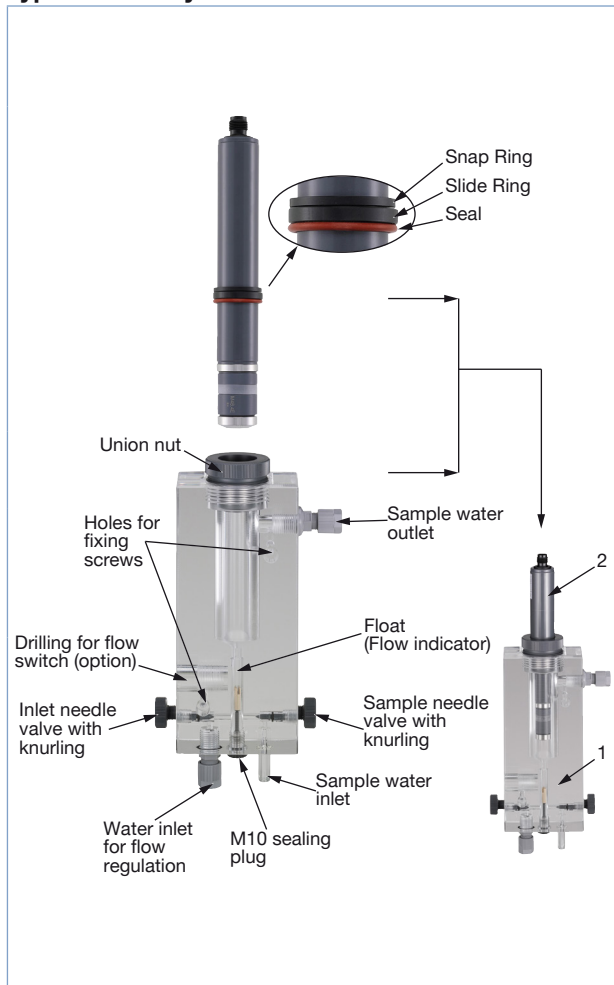
Direct welding Type 8200 probes holder for installation on pipe



The steel mantle can be welded into a hole in the tank wall at virtually any depth. As a result the probe is always immersed to exactly the desired position in the tank.

The O-ring can be easily replaced thanks to the «seal pusher» part. By screwing in an adapter instead of a pH sensor, conductivity sensors can be mounted practically flush with the holder and is then designed in accordance with EHEDG guidelines.

Type 8200 analytical measurement chamber



A complete chlorine sensor consists of

1. Type 8200 analytical measurement chamber with nut and seals
2. Type 8232 chlorine sensor



Do not install the sensor in the main pipe.

Measure only in bypass with use of Type 8200 analytical measurement chamber.

- Respect the sensor pressure and temperature ranges.
- Close the water inlet needle valve of Type 8200 analytical measurement chamber.
- Avoid installations that allow air bubbles to enter the measuring water.
- Stop the circulation of fluid, cut off the pressure and drain the pipe before loosening the process connections. Do not install the sensor in the main pipe.

Installing Type 8200 analytical measurement chamber on the support.



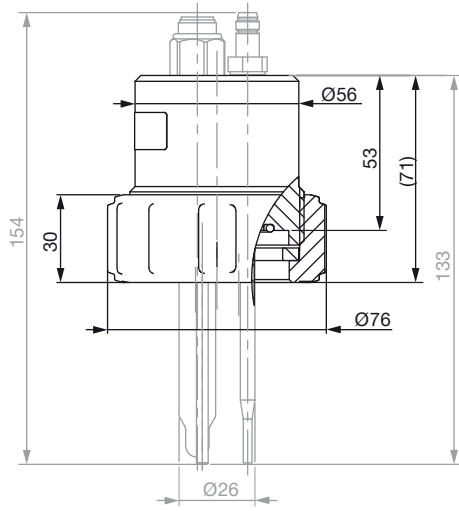
- When choosing of the installation place for Type 8200 analytical measurement chamber, please consider the max. height of the chlorine sensor (approx. 220 mm without cable connected), so it can be set up in this analytical measurement chamber.

- A. Drill holes in the support according to the dimensions indicated on the dimension drawing on page 9.
- B. Mount Type 8200 analytical measurement chamber with two screws (recommendation: M4 x 60 mm pan head screw or hexagon socket head screw. The screws are not provided) onto the support.
- C. Connect the water inlet of the analytical measurement chamber with a 6/8 hose to the sample water source.
- D. Connect the water outlet of the analytical measurement chamber with a 6/8 hose to the drain for example.
- E. Install the chlorine sensor (see operating instruction manual)
- F. Establish the circulation of the fluid.
- G. Open the water inlet needle valve.

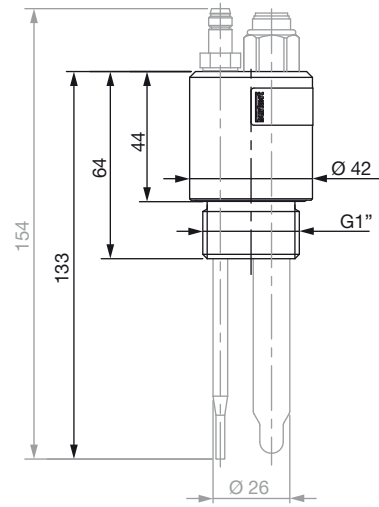
Dimensions [mm]

General purpose holder

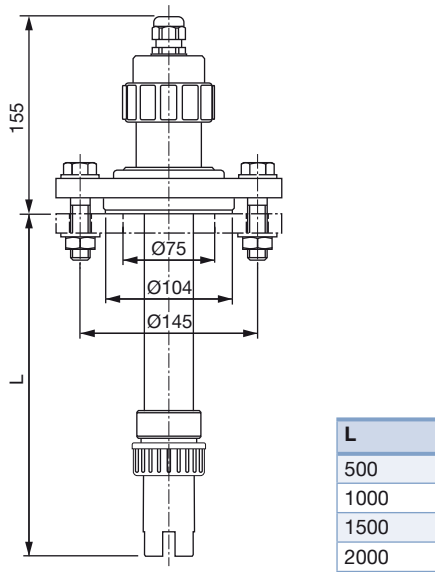
G 2" connection* for installation on Bürkert fitting S020 - PVC, stainless steel



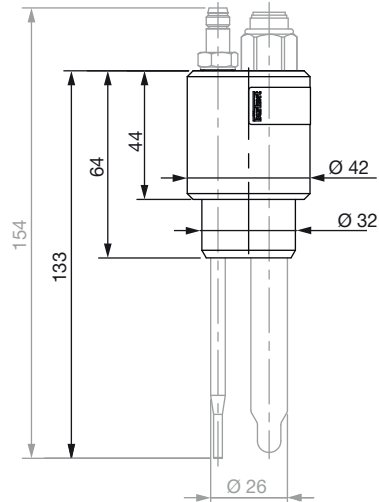
G 1" connection* for installation on T-Fitting - PVC



Immersion fitting with fixing kit for installation on Tanks



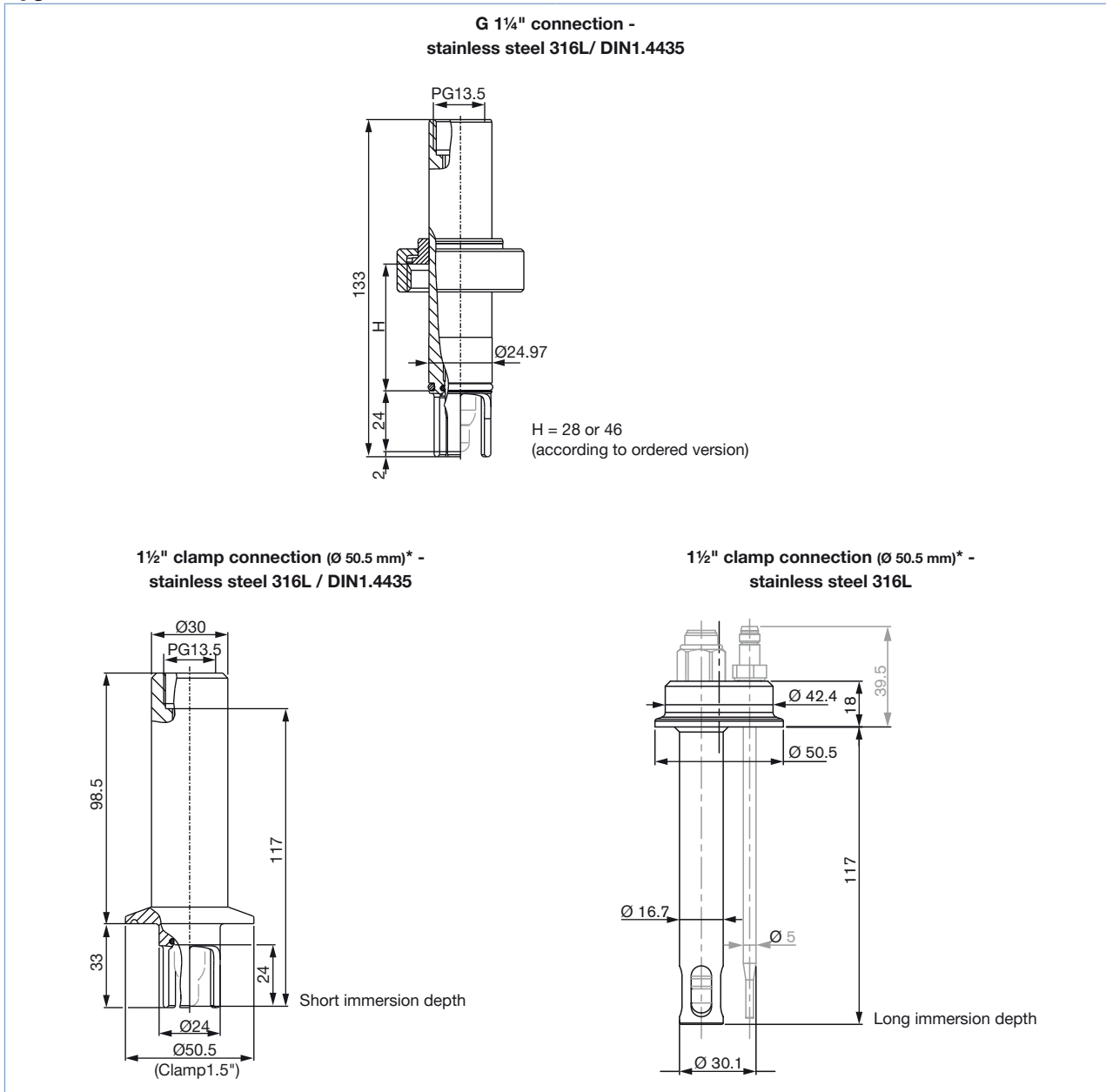
Stick connection* for installation on T-Fitting - PVC



* with analytical probe and Pt1000 temperature probe/liquid earth rod - have to be ordered separately

Dimensions [mm]

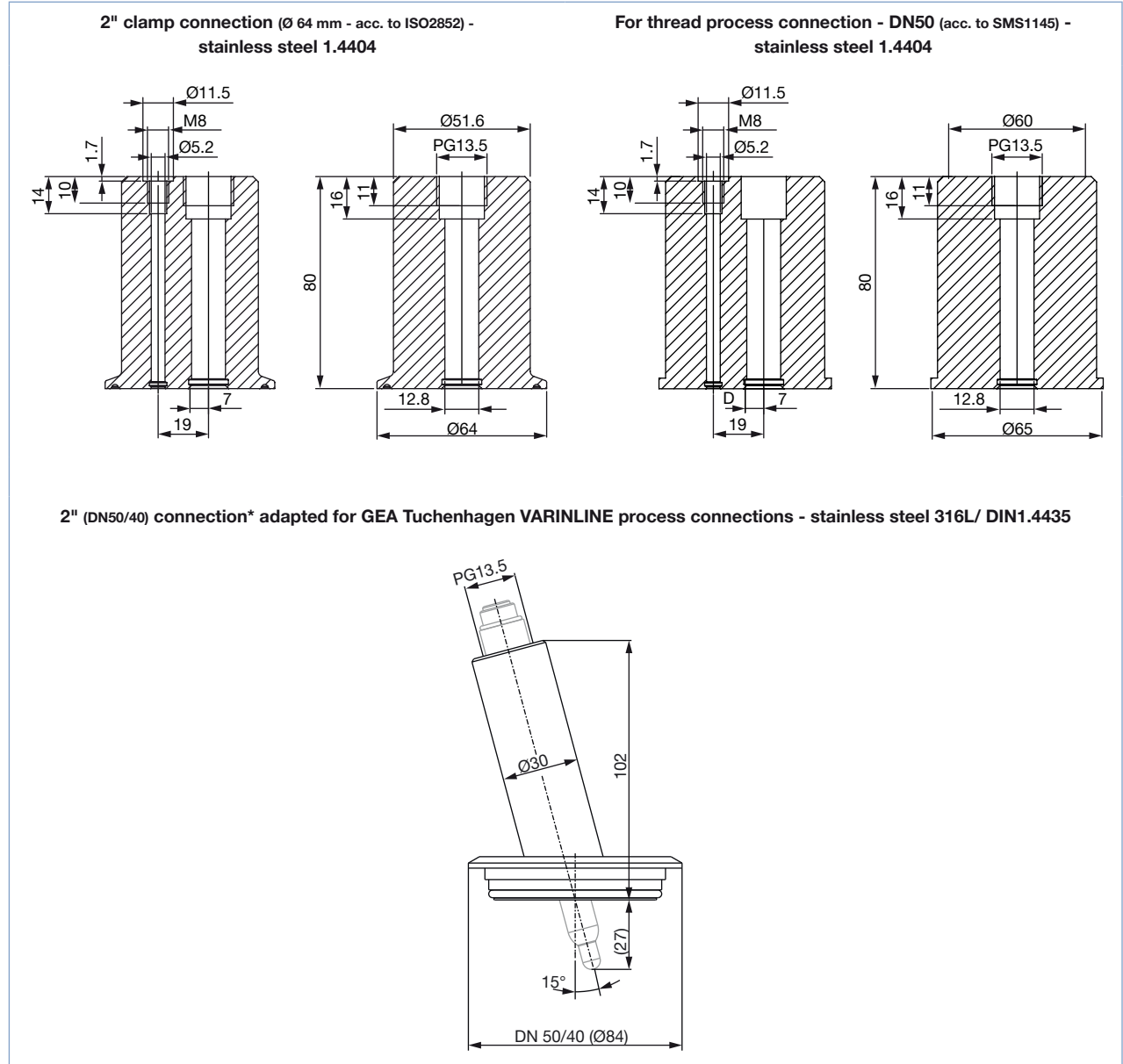
Hygienic holder



* with analytical probe and Pt1000 temperature probe/liquid earth rod - have to be ordered separately

Dimensions [mm]

Hygienic holder



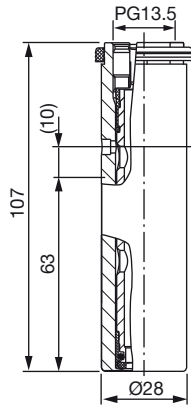
* with analytical probe - have to be ordered separately

Dimensions [mm]

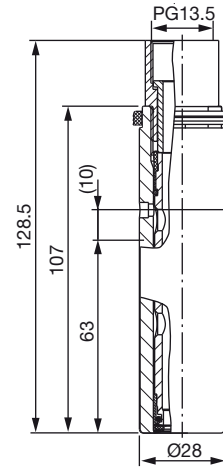
Hygienic holder

Direct welding connection - stainless steel 316L/ DIN1.4435

without adapter



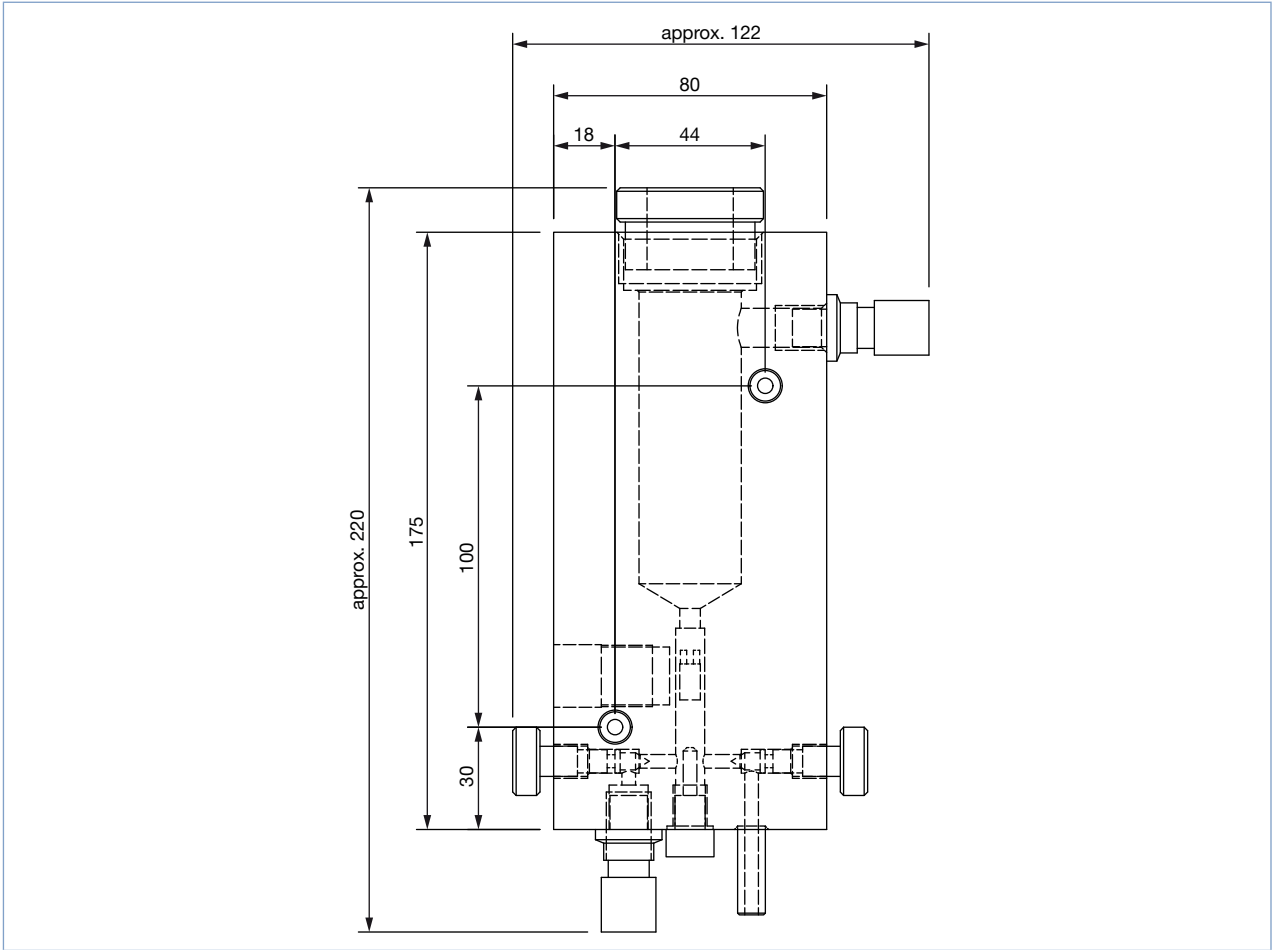
with adapter



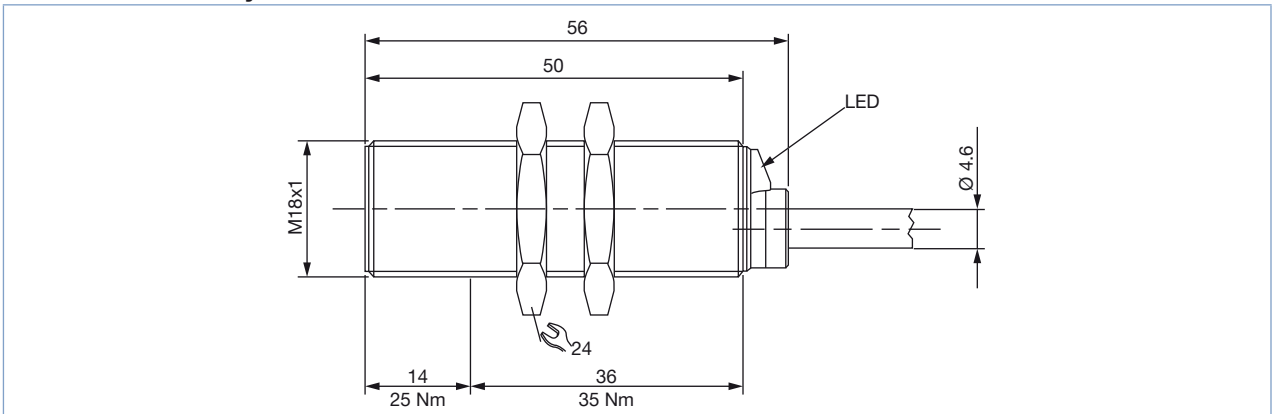
Standard EHEDG approved design: with adapter and conductivity probe Type 8221

Dimensions [mm]

Analytical measurement chamber






Flow switch for analytical measurement chamber (option)



Ordering information for complete pH/ORP sensor using Type 8200

■ Combining Type 8200 probe holder with Type S020 fitting

Available fitting DN	DN15	DN200	DN50	DN65	DN100	DN200
T-Fitting 	[Available]			[Available]		
Weld-in socket 	[Available]			[Available]		
Fusion spigot 	[Available]			[Available]		
Analytical measurement using probe holder G 2" connection for S020	Note A			[Available]		

Note A: Only use plastic fitting in analytical version with true union acc. to DIN8063 (PVC), to DIN16962 (PP) or to ISO10931 (PVDF), see datasheet, Type S020.

■ pH/O.R.P sensor for tank or pipe installation

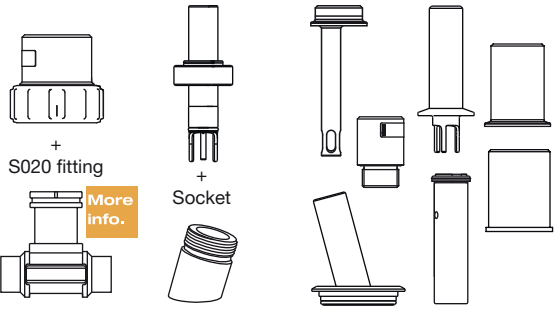
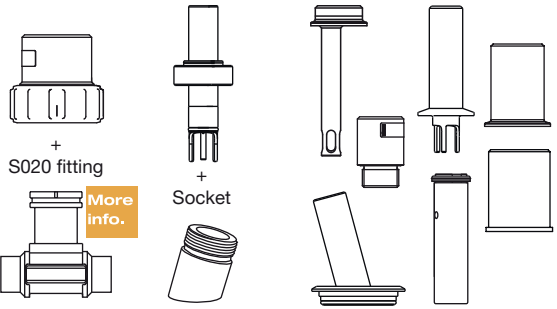


A complete pH/ORP sensor consists of Type 8200 probe holder with seals, Type 8203 pH/O.R.P probe, a Pt1000 temperature probe/liquid earth rod (option) and a fitting according to the selected holder.

The following information is necessary for the selection of a complete device:

- Article no. of the desired **Type 8200** probe holder (see ordering chart, p. 13)
- Article no. of the selected **Type 8203** pH or O.R.P probe (see separate datasheet)
- Article no. of the Pt1000 temperature probe/liquid earth rod if needed (see separate datasheet Type 8203)
- Article no. of the selected **Type S020** fitting (DN15...DN200) **only** if probe holder has a G 2" connection (see separate datasheet) or of the selected socket **only** if probes holder has a G 1¼" connection with O-ring position of 28 or 46 mm (see ordering chart, p. 14)

→ You have to order the components separately.

When you click on the orange box "More info.", you will come to our website for the resp. product where you can download the datasheet.

Type 8200 probe holder		Type 8203 probe	
 <p>S020 fitting + Socket</p> <p>More info.</p>	 <p>More info.</p>	<p>pH or ORP probes</p>  <p>More info.</p>	<p>Pt1000/liquid earth rod</p> 

Ordering information for complete pH/ORP sensor using Type 8200 (continued)

■ pH/O.R.P sensor for tank installation with the immersion fitting.

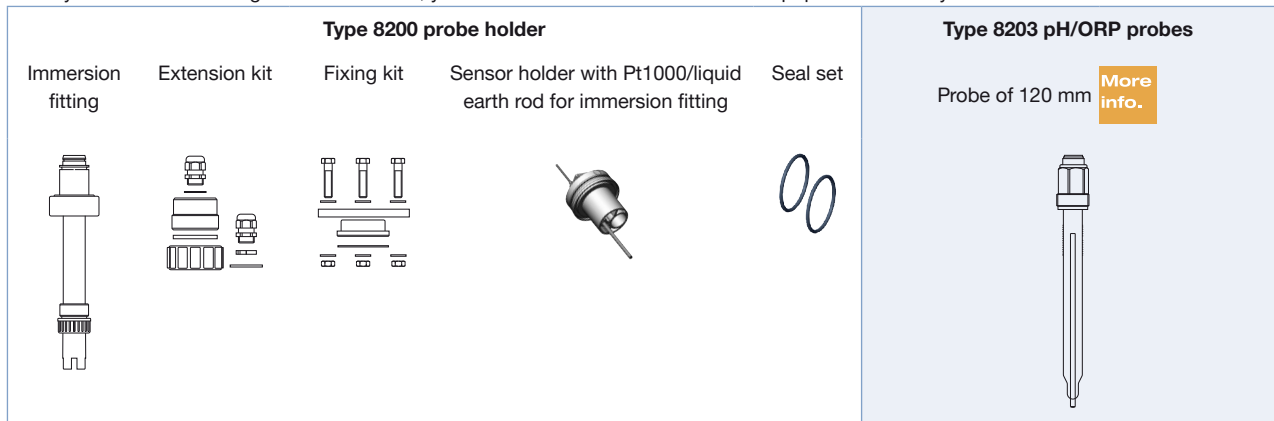
A complete pH/ORP sensor for tank installation consists of an immersion fitting, an extension kit for immersion fitting, a fixing kit (flange DN65 with stainless steel screws), a probe holder with Pt1000 temperature probe/liquid earth rod, Type 8203 pH/ORP probe and a seal.

The following information is necessary for the selection of a complete device:

- **Article no.** of the immersion fitting (see ordering chart of probe holders, p. 13)
- **Article no.** of the extension kit for the immersion fitting (see ordering chart of accessories, p. 14)
- **Article no.** of the fixing kit (flange DN65 with stainless steel screws - see ordering chart of accessories, p. 14)
- **Article no.** of the probe holder for immersion fitting with Pt1000 temperature probe/liquid earth rod (see ordering chart of probe holder, p. 13)
- **Article no.** of **Type 8203** 120 mm pH/ORP probe (see separate datasheet)
- **Article no.** of the seal set if EPDM desired (see ordering chart of accessories, p. 14)

→ You have to order the components separately.

When you click on the orange box "More info.", you will come to our website for the resp. product where you can download the datasheet.



Ordering information for complete conductivity sensor using Type 8200

■ Conductivity sensor for tank or pipe installation

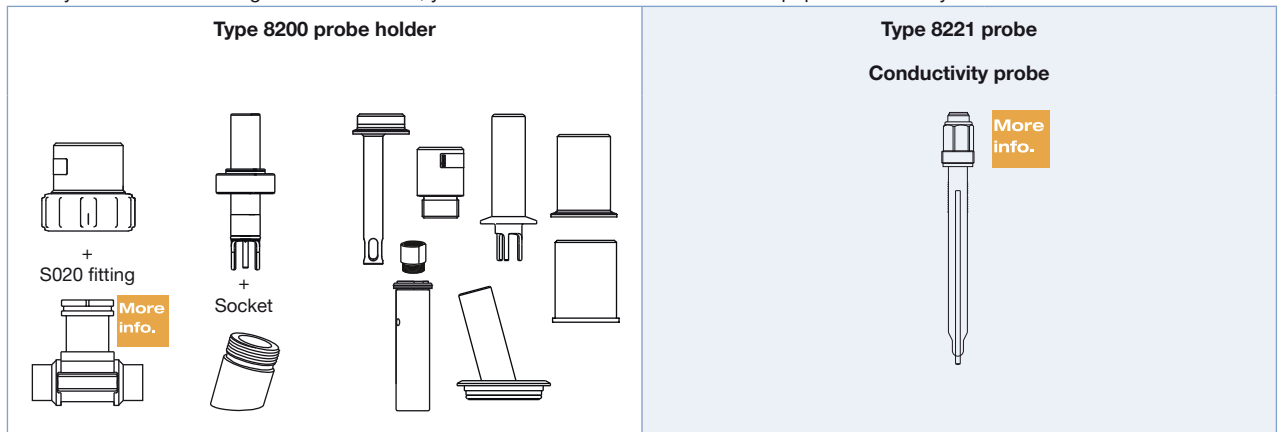
A complete conductivity sensor consists of a probes holder Type 8200 and a conductivity probe.

The following information is necessary for the selection of a complete device:

- **Article no. of Type 8200** probes holder (see ordering chart of probes holder, p. 13)
- **Article no. of the selected conductivity probe** (see separate datasheet Type 8221)
- **Article no. of the selected Type S020 fitting** (DN15...DN200) **only** if probe holder has a G 2" connection (see separate datasheet)

→ You have to order the components separately.

When you click on the orange box "More info.", you will come to our website for the resp. product where you can download the datasheet.



Ordering information for complete chlorine sensor using Type 8200

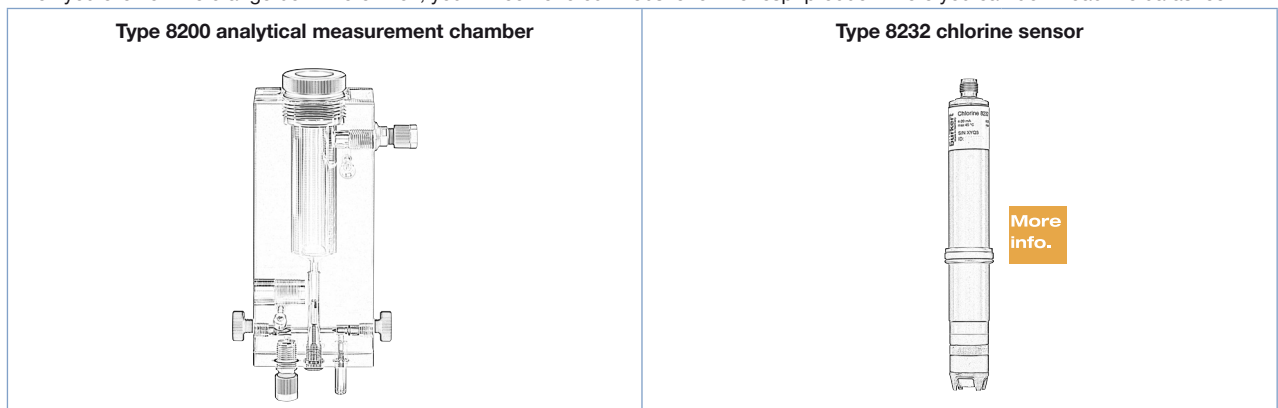
A complete chlorine sensor consists of Type 8200 analytical measurement chamber and a chlorine sensor.

The following information is necessary for the selection of a complete device:

- **Article no. of Type 8200** analytical measurement chamber (see ordering chart of analytical measurement chamber, p. 13)
- **Article no. of the selected chlorine sensor** (see separate datasheet, Type 8232)
- **Article no. of the flow switch for continuous monitoring of the flow** (optional) (see ordering chart of analytical measurement chamber, p. 13)

→ You have to order the components separately.

When you click on the orange box "More info.", you will come to our website for the resp. product where you can download the datasheet.



Ordering chart - Type 8200 probe holders

Specifications	Version	Material	Boring for Pt1000 temperature probe/liquid earth rod	Protection tube	Article no.
G 2" connection for installation on Bürkert fitting S020	standard	PVC	No	Yes	429224
			Yes	Yes	429228
		Stainless steel 316L/1.4404	No	Yes	429227
			Yes	Yes	429231
G 1" connection	short	PVC	No	No	429220
			Yes	No	429221
Stick connection	short	PVC	No	No	564236
			Yes	No	563475
For immersion fitting	Pt1000 temperature probe/liquid earth rod in stainless steel	PVDF	Yes	Yes	418889
	Pt1000 temperature probe/liquid earth rod in titanium	PVDF	Yes	Yes	418890
Immersion fitting	L = 0.5 m	PP	No	Yes	419567
	L = 1.0 m	PP	No	Yes	419568
	L = 1.5 m	PP	No	Yes	419569
	L = 2.0 m	PP	No	Yes	419570
Hygienic G 1 1/4" connection	High = 28	Stainless steel 316L/1.4435	No	Yes	562431
	High = 46	Stainless steel 316L/1.4435	No	Yes	562432
1 1/2" clamp connection - (Ø 50.5 mm)	Short immersion depth	Stainless steel 316L/1.4435	No	Yes	558885
	Long immersion depth	Stainless steel 316L/1.4404	Yes	Yes	429235
2" clamp connection (Ø 64 mm - ISO2852)	standard	Stainless steel 316L/1.4404	No	No	567197
	standard	Stainless steel 316L/1.4404	Yes	No	567198
For DN50 thread (acc. to SMS1145) process connection	standard	Stainless steel 316L/1.4404	Yes	No	566501
	standard	Stainless steel 316L/1.4404	No	No	566502
2" (DN50/40) connection adapted for GEA Tuohenhagen VARINLINE process connections	15°	Stainless steel 316L/1.4435	No	Yes	562433
Hygienic direct welding connection	Standard	Stainless steel 316L/1.4435	No	No	561728








Ordering chart - Type 8200 analytical measurement chamber

Description	Article no.
Analytical measurement chamber	569221
Flow switch for analytical measurement chamber, PNP, 2 m cable (optional)	772858

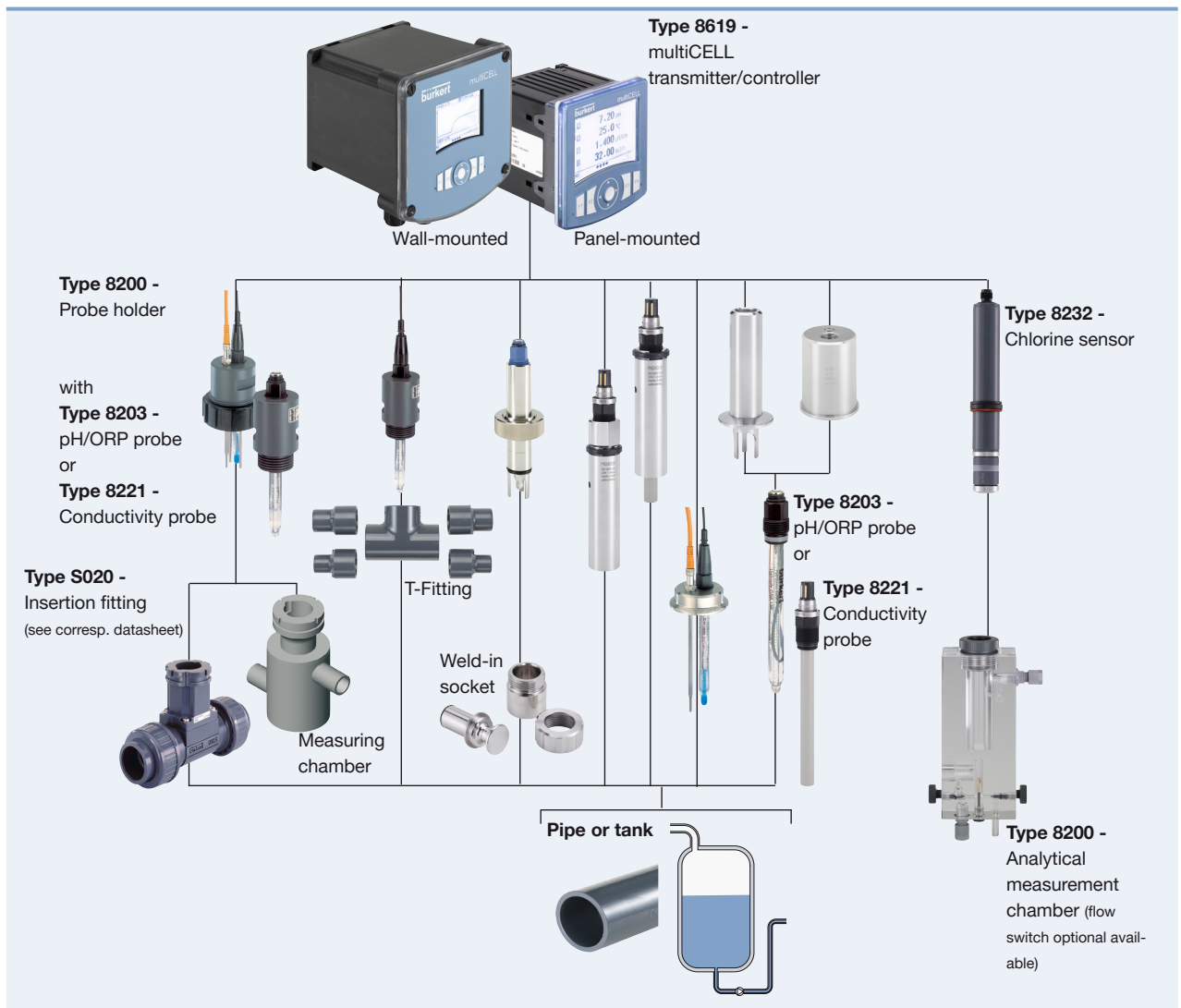
Ordering chart for accessories

Description	Article no.
Pt1000 temperature probe/liquid earth rod - in stainless steel 1.4571	427023
Pt1000 temperature probe/liquid earth rod - in titanium	560317

Ordering chart for accessories

Description	Article no.
Set with FKM seal for the general purpose holder G 2" connection	429264 
Set with 1 green FKM + 1 black EPDM seal for the general purpose holder G 2" connection	552111 
Extension kit for the immersion fitting L = X m	562573 
Fixing kit - flange DN65 with stainless steel screws for the immersion fitting L = X m	413615 
Weld-in socket 15° L=28 for holder G 1 1/4"	737241 
Weld-in socket 15° L=46 for holder G 1 1/4"	737260 
Adapter for hygienic direct welding connection and conductivity probe	563477 

Interconnection possibilities with other Bürkert devices



To find your nearest Bürkert facility, click on the orange box →

www.burkert.comIn case of special application conditions,
please consult for advice.Subject to alteration.
© Christian Bürkert GmbH & Co. KG

1806/13_EU-en_00895158