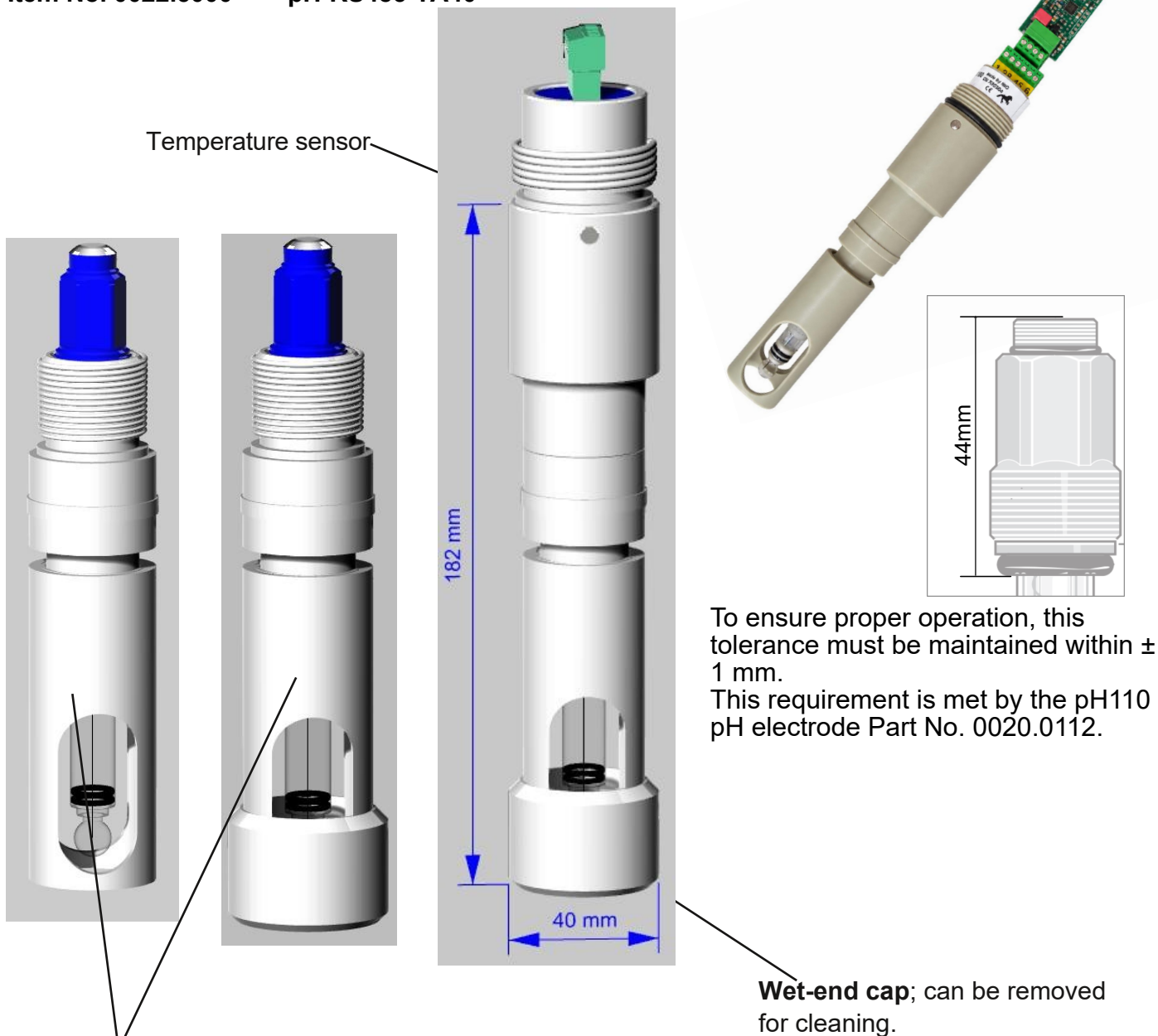


pH Measurement and Temperature Directly from the TA40 Immersion Fitting



Complete pH measurement unit with temperature measurement, automatic temperature compensation, and a digital RS-485 interface. Supports Modbus RTU as well as plug-and-play communication with compatible JUMO digiLine systems.

Item No. 0022.5000 pH-RS485-TA40



Measuring chain; the protective tube is unscrewed for calibration.

The temperature sensor is located approximately 16 cm above the pH measurement point; this must be taken into account.

The wet-end cap 0006.3010 and the pH electrode 0020.0112 must be ordered separately.

Material: PP / Titanium Grade 2	Max. 70°C ... 80°C
Seals: O-ring	EPDM
Tube diameter	40 mm



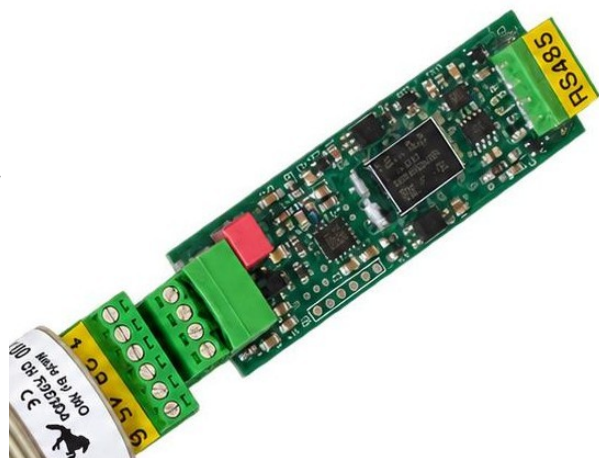
Technical Data:

Measuring Range	0.00...14.00 pH	Power supply	24 V DC $\pm$ 10%
Resolution	0.01 pH	Current consumption	50 mA
Accuracy	$\pm$ 0.02 pH	Interface	RS-485 Plug-and-Play, Modbus RTU
Temperature input	NTC 2 k Ω , B = 3950 K	Communication	9600 baud, 8N1
Temperature-measurement range	0...70 °C	Device Address	1...247, field-configurable
Temperature compensation	NTC / controller reference	Hardware address	is fixed and unique
NTC not connected;	no local temperature value	Calibration data	Stored non-volatily
Measurement value calculation	0.3 s	Modbus connection	SAC-5P-M12MS
Cable length	as needed	Protection class	IP68
Ambient temperature	-20...+50 °C	Compliance	CE, RoHS
Behavior without NTC:	The temperature channel reports "not available" (3.0×10^{37}).		

Pin Assignment for CABLE - SAC-5P-M12MS

Pin	Signal	Wire Color	Function
1	-	brown	Not assigned
2	+24 V DC	white	Power supply
3	GND	blue	Ground
4	RS-485 A	black	Bus Line A
5	RS-485 B	gray	Bus Line B

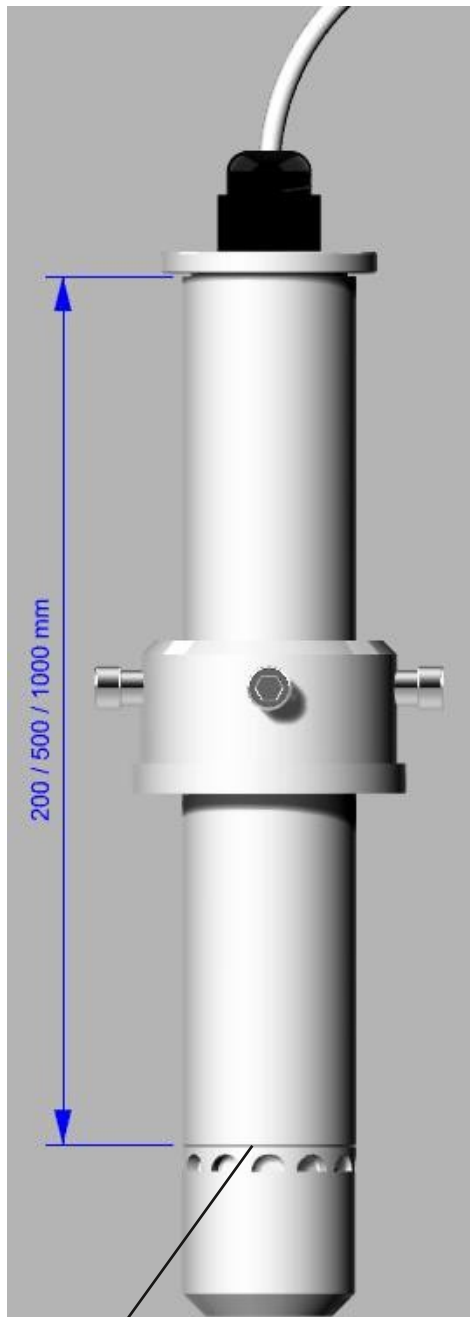
Connector view: Pin side of the M12 connector.



Independent product of IMO GmbH.

No affiliation with or endorsement by JUMO. The names JUMO and digiLine are used solely to describe compatibility.

Shielded cable should be used for cable lengths of 6 m or longer. The shield should be connected to the ground wire inside the control cabinet.



TA40 Fitting for pH electrodes and conductivity cells.

TA40 Head
0022.4300

TA40 Tube
Length 200 mm 0022.4020
Length 500 mm 0022.4050
Length 1000 mm 0022.4100



The 0022.4400 **collar sleeve** is sealed to the dip tube with an O-ring and can slide along its entire length. It fits a 2 1/4" threaded connection. With the adapter ring 0022.4500, a 2 3/4" threaded connection can be used.

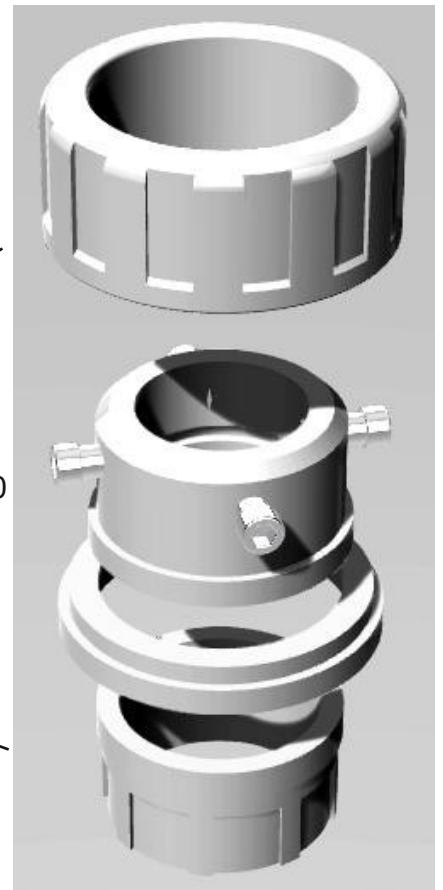
This version is designed for pressures up to 4 bar. The 4 hex socket screws must be tightened.

The pH measuring unit or a 4-electrode conductivity cell is screwed into this fitting.

2 3/4" threaded connection

Flange Sleeve 0022.4400

Adapter ring 0022.4500





The **pH measuring unit** or a **4-electrode conductivity cell** is screwed into this fitting.

TA40 connector 0022.0476
Used to connect
2 **TA40 tubes**.

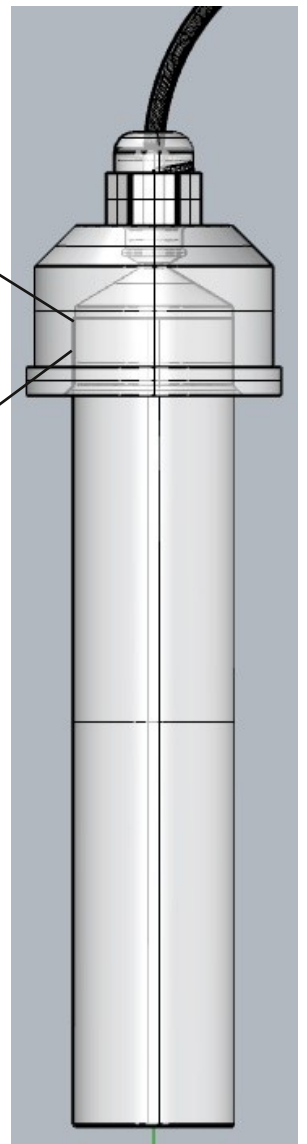


Insert head 0022.4450

Screw connection 2 1/4"

The **TA40 pipe** is cut to the desired length.

The weld can be performed by IMO or by the customer.



For pressures greater than 3–4 bar, we recommend using **insertion head** 0022.4450.

To do this, the **TA40 tube** is cut to the desired length and welded to the **insertion head**. This ensures that pressures > 4 bar are not a problem.

With **adapter ring** 0022.4500, the 2 3/4" threaded connection can also be used.