



401N7x0A0xxA

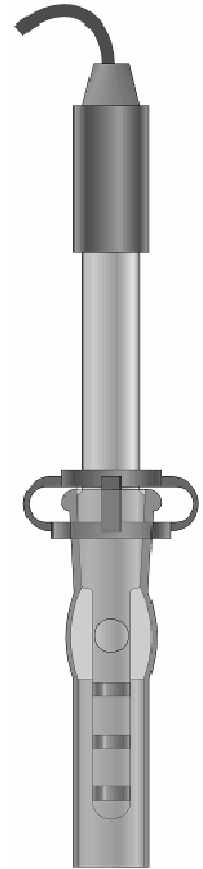
Conductivity cell, glass body, 3 annular platinum electrodes, removable cell protection

Conductivity cell with glass body and 3 annular platinum electrodes. This cell is available with $K = 1$ cm cell constant and, thank to its configuration, covers with good linearity the 0 to 20 mS measuring range.

The glass cell protection can be easily removed for cleaning.

The 401N cell can be supplied c/w integral temperature sensor, for temperature indication and measure thermo compensation.

This cell is designed for specific laboratory applications with dirty or fouling liquids.



Advantages

- Removable cell protection
- NON platinized platinum electrodes can be mechanically cleaned
- Available c/w integral temperature sensor, Pt100, Pt1000, TC100 or other upon request
- Operating temperature $0 \div 90$ °C
- 3 annular platinum electrodes
- Cell constant 1 cm
- Measuring range 0 to 20000 μ S
- Suitable for laboratory use with very dirty or fouling liquids

Operating principle and realization

This cell has glass body, \varnothing 12mm L.120mm and easily removable electrodes protection. Measuring electrodes are made of 3 platinum rings, are therefore unaffected by the polarization phenomenon, so assuring good linearity of the measure within all the measuring range ($0 \div 20000$ μ S).

The Platinum electrodes are not platinized, they can therefore be easily cleaned also with brush or soft paper. Cleaning is very easy.

401N7A0A0xxA cell w/o integral temperature sensor is available with integral cable and with screwed connector. 401N7(B,C,D or Z)0A0xxA cell c/w integral temperature sensor is only available with integral cable. Maximum cable length is always 15 m.

401N cells are available with the options listed in the Order Code Breakdown.

Correspondence between measuring ranges and cell constants for Series 401N7x0A0xxA cells

$K = 1$ cm..... $0 \div 20000$ μ S

Installation, Maintenance and Calibration

The Series 401N cells should be immersed at the minimum depth of 40 mm.

FS values, cell constant and set-point (min and max) of the instrument are factory calibrated. In any case all these values can be modified by the user, as stated in the user manual pertinent to conductivity transmitter.

The cell K correction is the only calibration to be performed at start up.

Insert the cell in a solution with known conductivity and calibrate the slope to obtain the correct reading (the instrument should read the calibration solution conductivity value) or, in the instruments provided with this option, insert the known value of the cell constant (it is indicated on the cell data tag).

Conductivity cells Series 401N can be cleaned with water or with diluted acid or detergent, but also with mechanical cleaning, since electrodes are not platinized. The removable electrodes protection makes cleaning very easy.

401Nx0A0xxA

Technical Specifications

Materials: cell body: glass; measuring electrodes: 3, annular, platinum
Cell constant (cm) and measuring range: K=1 cm; 0÷20000 µS
Operating temperature limits: 0÷90 °C
Dimensions : Ø 12mm, length. 120 mm
Minimum immersion depth: 40 mm
Cable: screw connector (only for cells w/o integral temperature sensor) or sealed, std 1 m, max.15 m

Accessories

401N cells can be supplied c/w many type of cables and connectors on instrument side. Specify at order (or when asking for a quotation) the desired cable and connector.

Allowed choices are listed below; for different options pls contact Your supplier.

Cables for 401N7A0A0xxA cells W/O integral temperature sensor

Integral cable, 1 m length; 3 m length; 5 m length; 10 m length.

Cell with S7 screwed connector, cables to be used are:

Mod.CV/S7-1 Shielded cable, Ø 5mm, length 1 m, c/w S7 connector (CN/10)

Mod.CV/S7-3 Shielded cable, Ø 5mm, length 3 m, c/w S7 connector (CN/10)

Mod.CV/S7-5 Shielded cable, Ø 5mm, length 5 m, c/w S7 connector (CN/10)

Mod.CV/S7-10 Shielded cable, Ø 5mm, length 10 m, c/w S7 connector (CN/10)

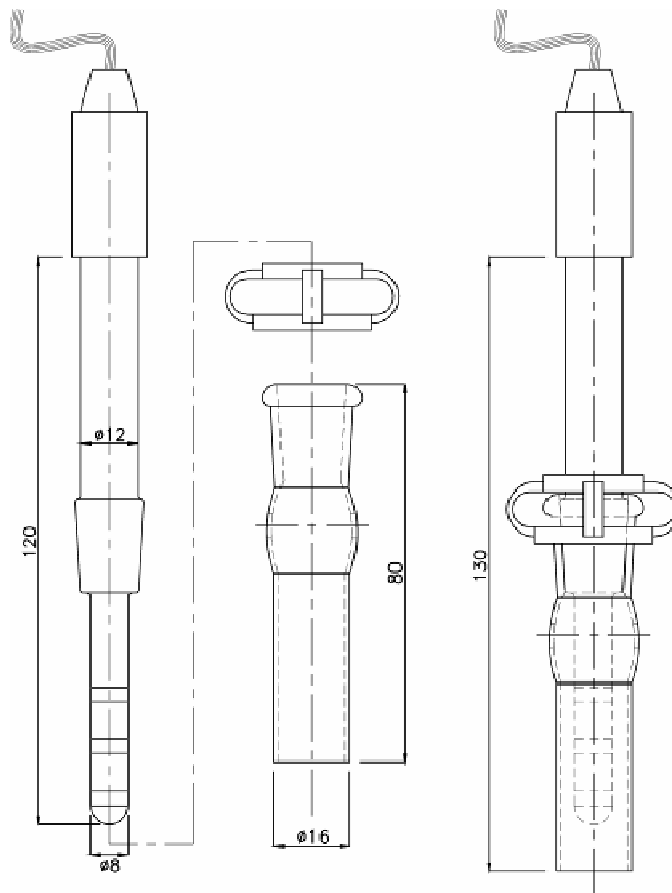
Cables for 401N7(B,C,D or Z)0A0xxA cells, C/W integral temperature sensor

Integral cable, 7 wires, shielded, length 1 m

Integral cable, 7 wires, shielded, length 3 m

Integral cable, 7 wires, shielded, length 5 m

Integral cable, 7 wires, shielded, length 10 m



Cable connectors, instrument side, ONLY for 401N7A0A0xxA cells, W/O integral temperature sensor:

Mod.CN/1 coaxial, BNC

Mod.CN/7 Banana Ø 4 mm

Mod.CN/8 Banana Ø 2 mm

Cable connectors, instrument side, for 401N7(B,C,D or Z)0A0xxA cells, WITH integral temperature sensor:

Mod.CN/40 connector with linearizing circuit (for the connection to Mod.HD2306 portable conductivity meter) - cell 401N7(B,C,D or Z)0A0x4A

Mod.CN/12 8 poles connector - cell 401N7(B,C,D or Z)0A0x5A

Optional accessories

Known conductivity standard solution, 250 ml bottle..... T/401-A

Specify desired conductivity value at order; typical values are: 1,278 mS, 11,67 mS e 102,09 mS, however solution with other conductivity values are available upon request.

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Order code breakdown

Conductivity cells	401	x	x	x	x	x	x	x	x	x
Type of cell Removable protection 401/SC	N									
Cell constant k = 1 cm (three annular electrodes, platinum)	7									
Temperature sensing element Not included Pt100 sensor Pt1000 sensor TC100 sensor Special execution			A B C D Z							
Cell construction material Glass body, NON platinized platinum electrodes				0						
Fixed code					A					
Fixed code						0				
Cable and connector Integral cable, 1 m Integral cable, 5 m Integral cable, 10 m Integral cable, 15 m S7 screw connector (Note 1) Special execution								A B C D E Z		
Connector on instrument side None BNC coaxial (Note 1) Banana 2 mm (Note 1) Banana 4 mm (Note 1) CN/40 connector for HD2306 8 poles connector (CN/12) Special execution									0 1 2 3 4 5 9	
Fixed code										A

Note 1: not available for cells with integral temperature sensor