

Conductivity Sensor 4029

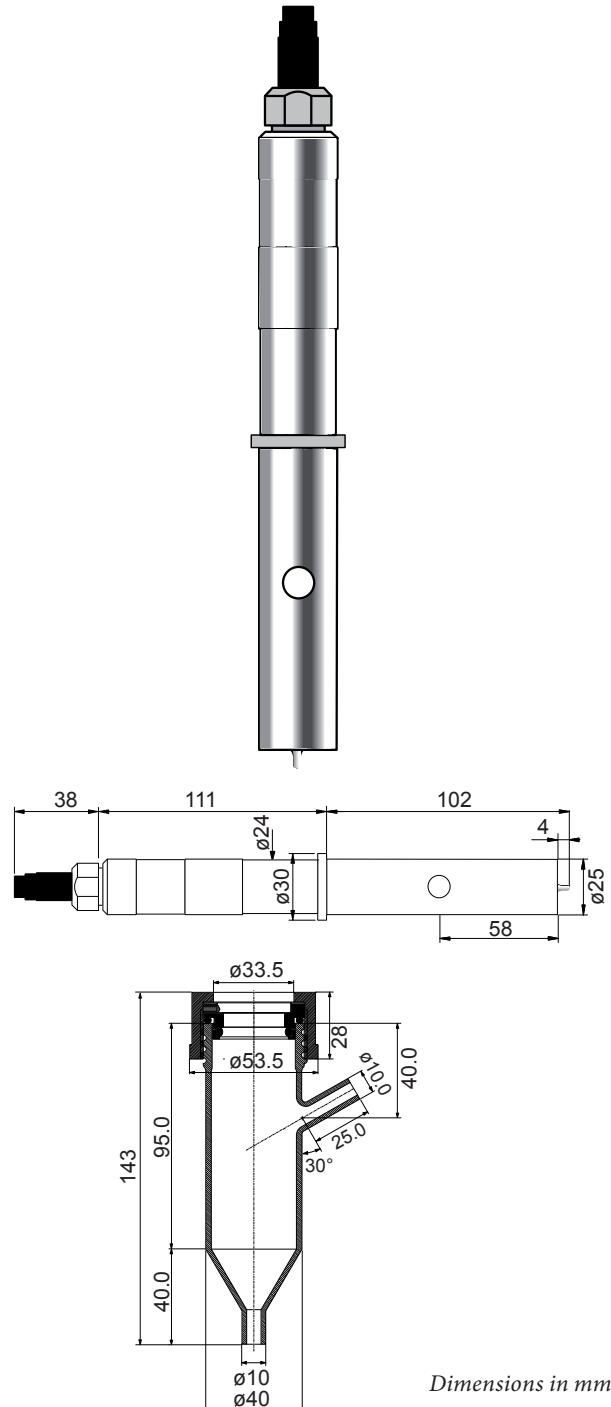
UPW Dip sensor for low conductivities

Used with portable TCU series 3000.

Attention:

- Due to high CO₂ permeability, do not use silicone tubing for ultra low conductivity measurements.
- If a flow chamber is not used, measurements below 0.5 µS/cm will typically give errors of about 10 nS/cm due to CO₂ from the air.
- After measurements above 1 mS/cm, flush the sensor for 10 minutes before doing measurements below 1µS/cm.

Technical data	
Materials	PTFE, EPDM, silicone rubber and steel W 1.4404 (AISI 316L)
Pressure	max. 2 bar at 210 °C
Cell constant	1.0 ± 0.5 % (electrically adjusted)
Accuracy	±1.5 %
Meas. range	2000...0.055 µS/cm
Linearity	± 1 % per decade
Temp. sensor	Pt 1000 (IEC 751 class A) Time delay T ₉₀ , 9 sec.
Protection	IP65 splash-proof (DIN 40 050)
Sensor cable	PVC 12 x 0.25 mm ² max. temp. 70 °C
Cable length	standard length 1 m
Connection	12-pole Binder
Weight	0.7 kg
74 flow chamber (not included)	
For use with dip type sensors; for measurements below 0.5 µS/cm	
Materials	PVDF and DURAN® Borosilicate glass 3.3
Pressure	max. 2 bar at 100 °C



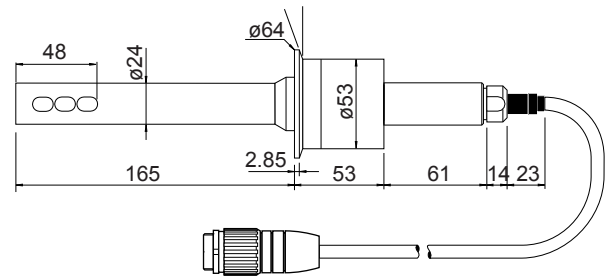
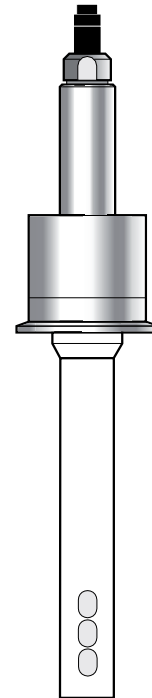
Dimensions in mm

Conductivity Sensor 4038

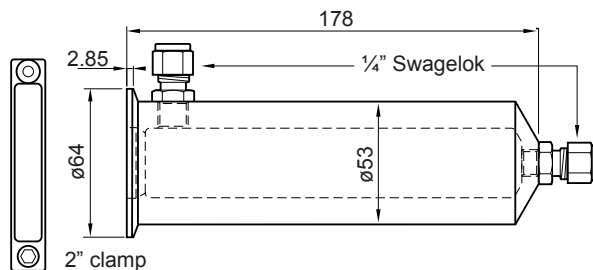
For strong acids

4-electrode conductivity sensor with internal electrodes. Used with portable TCU series 3000.

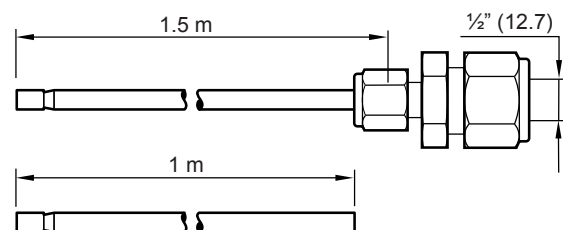
Technical data	
Materials	PTFE and steel W 1.4404 (AISI 316L) Tantalum electrodes
Pressure	max. 12 bar at 120 °C
Cell constant	1.0 ± 0.5 % (electrically adjusted)
Reproduceability	±1 %
Linearity	From 2000 to 0.1 mS/cm ± 1 % per decade
Temp. sensor	Pt 1000 (IEC 751 class A)
Time delay	T ₉₀ , 110 sec.
Protection	IP65 splash-proof (DIN 40 050)
Sensor cable	PVC 12 x 0.25 mm ² screened standard length 1 m max. temp. 70 °C
Connection	12-pole Binder
Weight	2.0 kg
76 flow chamber	
Material	PVDF
Adapters	PFA, Swagelok
Clamp ring	AISI 304
Pressure max.	6.1 bar at 100 °C



76 flow chamber



PFA tubes Ø6



Dimensions in mm

For more information, contact your local Valmet office. www.valmet.com

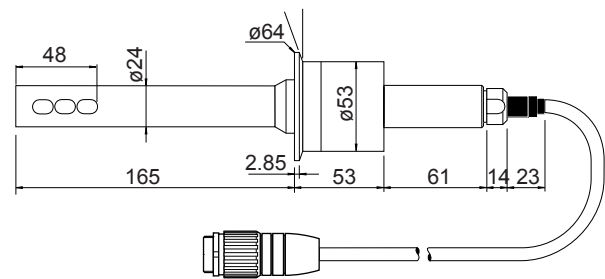
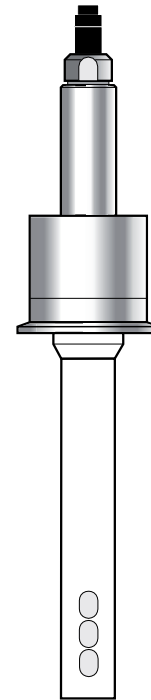
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Conductivity Sensor 4039

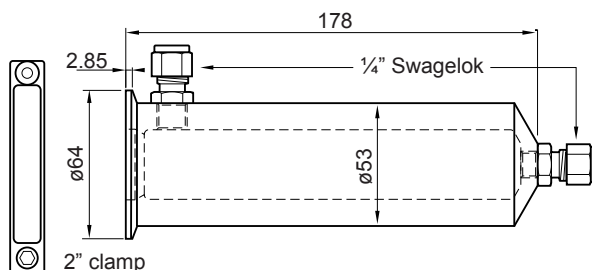
For strong acids

4-electrode conductivity sensor with internal electrodes. Used with portable TCU series 3000.

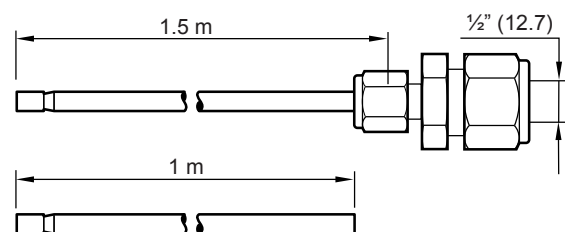
Technical data	
Materials	PTFE and steel W 1.4404 (AISI 316L) Platinum electrodes
Pressure	max. 12 bar at 120 °C
Cell constant	1.0 ± 0.5 % (electrically adjusted)
Reproduceability	±1 %
Linearity	From 2000 to 0.1 mS/cm ± 1 % per decade
Temp. sensor	Pt 1000 (IEC 751 class A)
Time delay	T ₉₀ , 110 sec.
Protection	IP65 splash-proof (DIN 40 050)
Sensor cable	PVC 12 x 0.25 mm ² screened standard length 1 m max. temp. 70 °C
Connection	12-pole Binder
Weight	2.0 kg
76 flow chamber	
Material	PVDF
Adapters	PFA, Swagelok
Clamp ring	AISI 304
Pressure max.	6.1 bar at 100 °C



76 flow chamber



PFA tubes Ø6



Dimensions in mm

For more information, contact your local Valmet office. www.valmet.com

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Conductivity Sensor 4041

For high conductivities

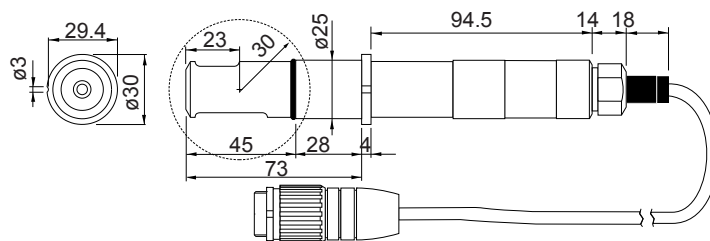
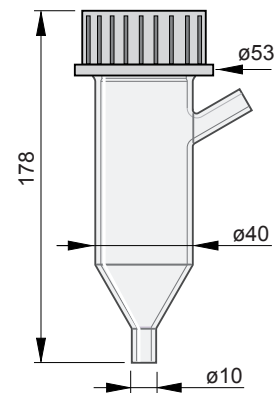
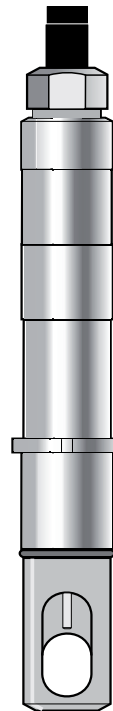
4-electrode conductivity sensor with internal electrodes. Used with portable TCU series 3000.

Technical data

Materials	PVDF, EPDM and steel W 1.4404 (AISI 316L)
Pressure	max. 10 bar at 130 °C
Cell constant	1.0 ± 0.5 % (electrically adjusted) Calibrated in a > 80 mm beaker. When used with flow chamber type 74 gives an error of approx. +0.82 %
Reproduceability	±1.5 %
Linearity	From 200 000 to 50 µS/cm ± 1 % per decade
Temp. sensor	Pt 1000 (IEC 751 class A)
Time delay	T ₉₀ , 9 sec.
Protection	IP65 splash-proof (DIN 40 050)
Sensor cable	PVC 12 x 0.25 mm ² screened standard length 1 m max. temp. 70 °C
Connection	12-pole Binder
Weight	1.4 kg

74 flow chamber

Material	PVDF, EPDM and Duran® Borosilicate glass 3.3
Pressure	2 bar at 100 °C



Dimensions in mm

Conductivity Sensor 4043

For high conductivities

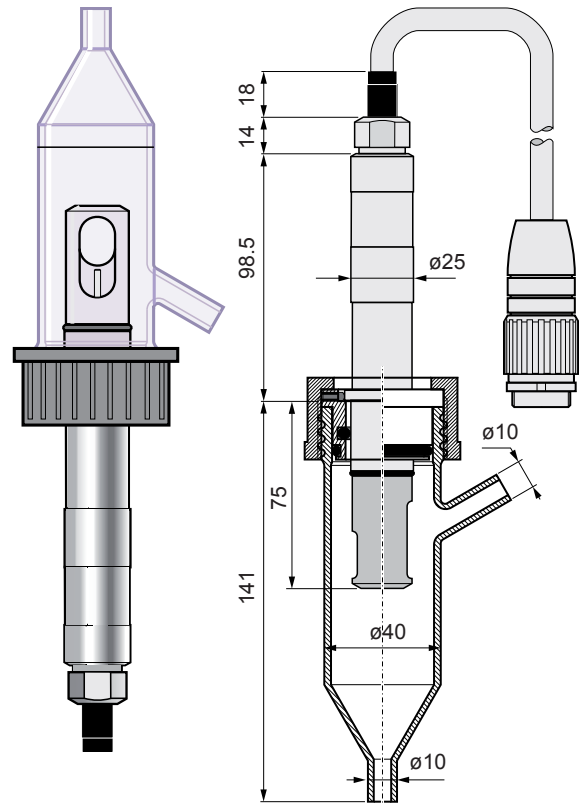
4-electrode conductivity sensor with type 74 flow chamber. Used with portable TCU series 3000.

Warning:

- Due to high CO₂ permeability, do not use silicone tubing for ultra low conductivity measurements.
- After measurements above 10 mS/cm it is necessary to flush the sensor for 2 hours before doing measurements below 5 µS/cm.

Technical data

Materials	PVDF, EPDM, silicone rubber and steel W 1.4404 (AISI 316L)
Flow chamber	PVDF and DURAN® Borosilicate glass 3.3
Pressure	max. 2 bar at 100 °C
Cell constant	1.0 ± 0.5 % (electrically adjusted) Calibrated in a flow chamber. If used without flow chamber, cell constant correction is required. Error -0.82 %
Reproduceability	±1.5 %
Linearity	From 200 000 to 0.5 µS/cm ± 1 % per decade Cable error: 8 ± 4 nS/cm per meter of cable
Temp. sensor	Pt 1000 (IEC 751 class A)
Time delay	T ₉₀ , 9 sec.
Protection	IP65 splash-proof (DIN 40 050)
Sensor cable	PVC 12 x 0.25 mm ² screened standard length 1 m max. temp. 70 °C
Connection	12-pole Binder
Weight	0.5 kg



Dimensions in mm

Conductivity Sensor 4049

UPW flow sensor for low conductivities

Conductivity sensor with type 73 flow chamber. Used with portable TCU series 3000.

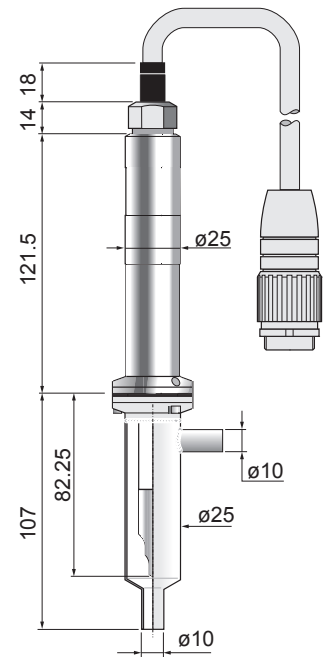
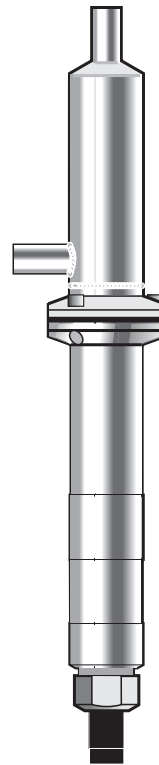
Accessories included:

- 1.9 m of transparent smooth C-flex Tubing (type 70753) with low gas permeability and excellent chemical resistance. Dimensions: id 9.6 mm, od 12.8 mm.

Warning:

- Due to high CO₂ permeability, do not use silicone tubing for ultra low conductivity measurements.

Technical data	
Materials	PTFE, EPDM, silicone rubber and steel W 1.4404 (AISI 316L)
Flow chamber	Steel W 1.4404 (AISI 316L)
Pressure	max. 2 bar at 100 °C
Cell constant	1.0 ± 0.5 % (electrically adjusted) Calibrated in a flow chamber; cannot be used without the flow chamber.
Reproduceability	± 1.5 %
Linearity	From 2000 to 0.055 µS/cm ± 1 % per decade Cable error: ± 1 nS/cm for cable lengths 1 to 20 meters
Temp. sensor	Pt 1000 (IEC 751 class A)
Time delay	T ₉₀ , 9 sec.
Protection	IP65 splash-proof (DIN 40 050)
Sensor cable	PVC
	standard length 1 m
	max. temp. 70 °C
Connection	12-pole Binder
Weight	0.7 kg



Dimensions in mm