Sanitary Conductivity Sensors

4100 for series 3100 Conductivity and 3300 Concentration

Typical applications: food & pharmaceutical industries

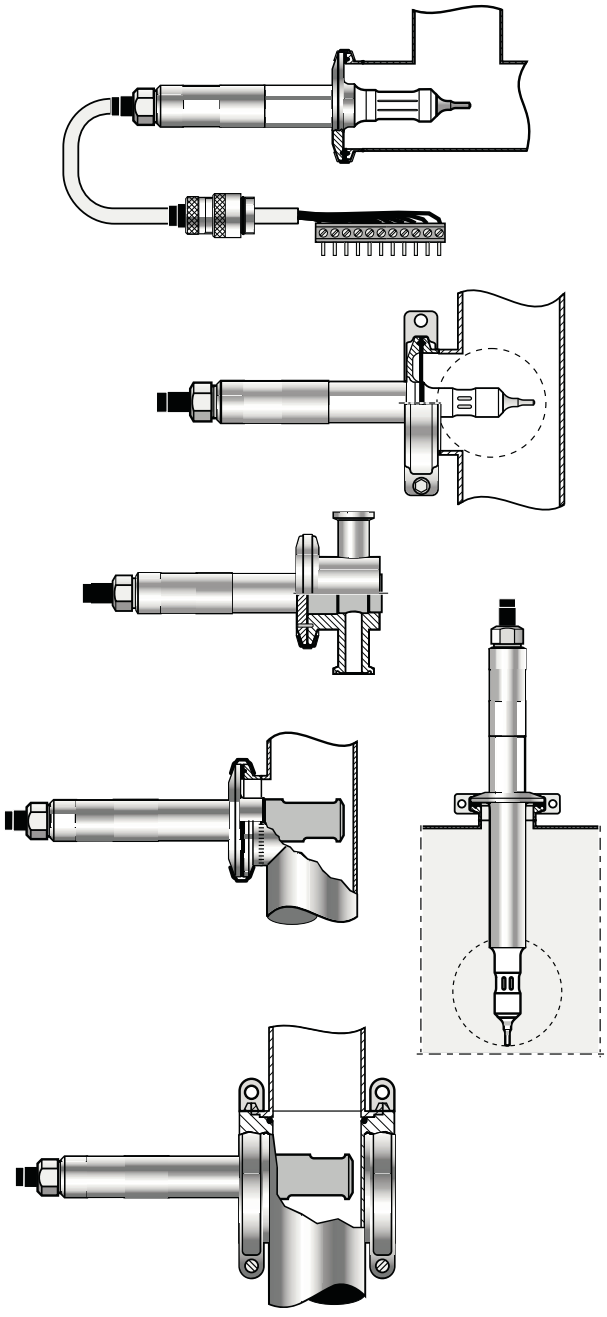
- CIP / SIP cleaning
- Bottling
- Phase separation
- Waste water control
- Boiler control
- Ultrapure water measurements

Features

- Sanitary design
- Selection of EHDEG certified sensors
- Durable quality, resistant to temperature shocks and chemical changes
- Mounting direct into existing pipe work, no heavy fittings required
- Types for small tubes
- Low time constant (T90 = 9 seconds)
- Hydrodynamic design eliminating air bubbles

Technical data

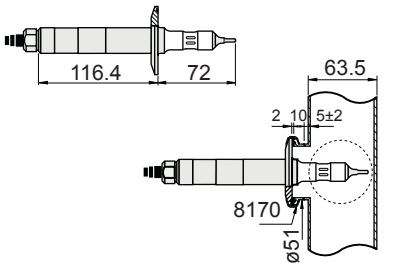
- Maximum: 12 bar at 150 °C PTFE; 10 bar at 130 °C PVDF
- Temperature sensor: Pt 1000 (IEC 751 class A), time delay T90, 9 sec.
- Cell constant: Sensor specific, factory calibrated
- Accuracy: ± 2%.
- Protection: IP65, splash-proof (DIN 40 050).
- Sensor cable: PVC 12 x 0.25 mm^2 screened, max. 70°C. Cable length options: 3, 5 or 15 m.
- Cable connection: 11-pole strip connector with MF20 cable adaptor.
- PTFE sensors: resistant to all normally used chemicals accepted by W 1.4404 (AISI 316L) steel. Water absorption: 0%.
- PVDF sensors: resistant to beverages, cleaning liquids, 3 % NaOH and other bases, 30 % HNO_3, H_3PO_4, weak acids and resistant to 5 % acetone, benzene, toulene, trichlorethylene, and xylene. Water absorption: < 0.04 %.

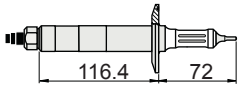


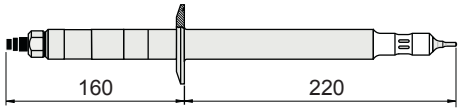
Valmet

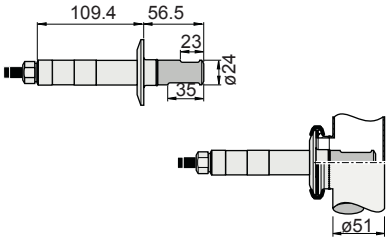
Type	Length	Sensor body	Weight	Notes
Sensors with 2" ISO clamp 2852				
4113	72 mm	PTFE	1.1 kg	High conductivity model EHEDG certified
4113s	72 mm	PTFE	0.6 kg	Low conductivity model EHEDG certified
4115	220 mm	PTFE	1.1 kg	
4141	56.5 mm	PVDF	1.0 kg	Resistant to acetone.
4147	44 mm	PVDF	1.0 kg	Flow chamber installation
3A sensors with 2 ½" ISO clamp				
4124	69 mm	PTFE	1.1 kg	3-A sanitary type High conductivity model EHEDG certified
4124s	69 mm	PTFE	1.1 kg	Low conductivity model EHEDG certified

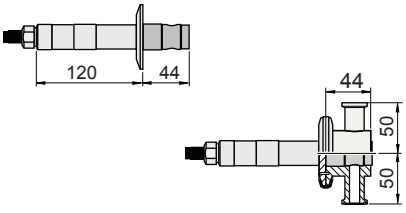
Dimensions & Typical installation

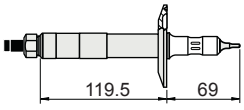


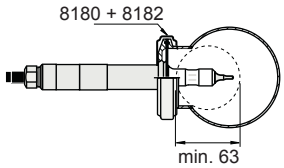












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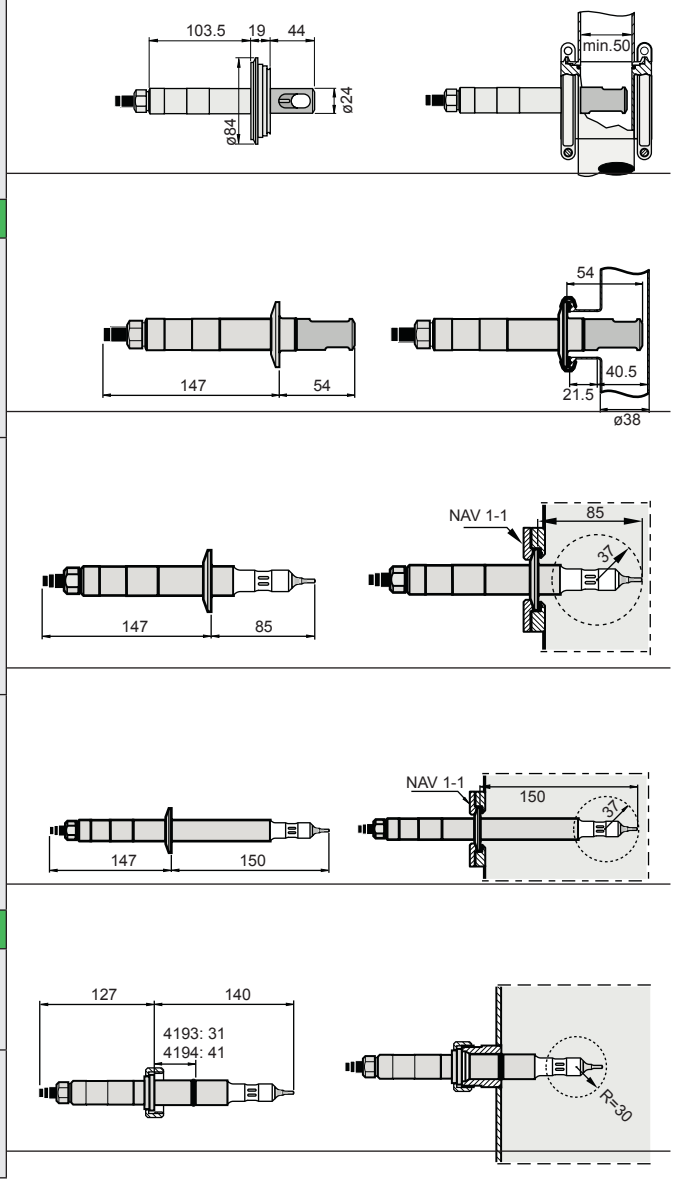
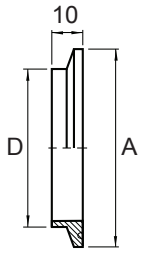
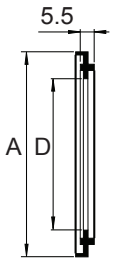
Type	Length	Sensor body	Weight	Notes
Sensor with Varivent flange				
4154	44 mm	PVDF	1.6 kg	
Sensors with 1 ½" ISO clamp				
4181	54 mm	PVDF	1.0 kg	
4183	85 mm	PTFE	1.0 kg	EHEDG certified
4185	150 mm	PTFE	1.2 kg	
Sensors for Ingold nipples				
4193	31 / 140 mm	PTFE	1.5 kg	
4194	41 / 140 mm	PTFE	1.5 kg	

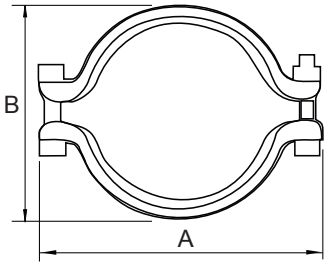
Dimensions & Typical installation



Accessories for 4100 sensors







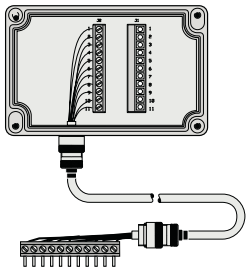
Short nipple with gasket, AISI 316L			
Type	A	D	ISO 2852
8170	63.9	51	2″
8180	77.5	63.5	2.5″

Extra gasket, EPDM			
Type	A	D	ISO 2852
8171	66.2	48.8	2″
8181	79.7	60.5	2.5″

Clamp ring, AISI 304			
Type	A	B	ISO 2852
8172	99	72	2″
8182	112.5	85.5	2.5″

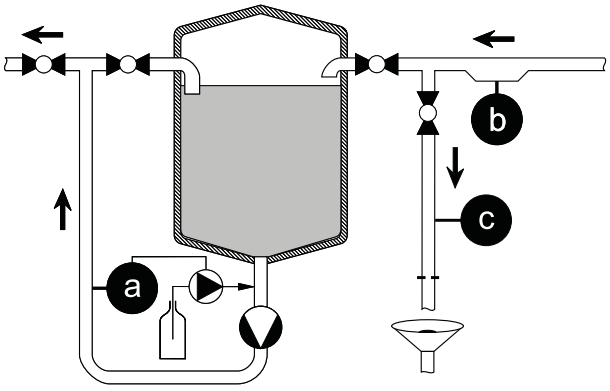
Sensor cable extension kit 4901

Painted cast aluminum housing, IP65. Dimensions 80 x 130 x 68 mm, weight 600 g. Note: cannot be used at low conductivities!



Mounting

- Preferably upstream mounting (a)
- Dosing inlet close to the controlling sensor (a)
- Mounting where no air pockets of sedimentation occurs (b)
- Use a flow damper (c) for downstream mounting



Hygienic mounting of EHEDG sensors

- Mounting in an EHEDG approved process connection.
- Inside diameter of pipes at installation position must be 3” or more.

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