# CS3790-64-IB

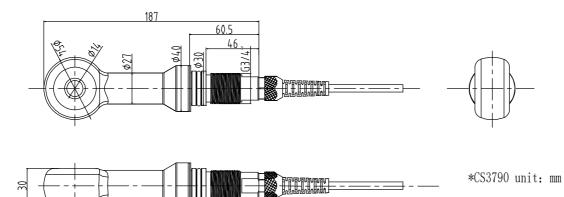
# **Electromagnetic Conductivity Sensor**



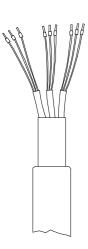
- —— Based on the annular no electrode principle, no polarization phenomenon
- —— PFA material, Resistant to highly corrosive chemicals
- Wide range & high precision measurement
- —— Designed for on-line measurement of conductivity/
  concentration of acids, bases and salts in liquid media, mainly for
  the chemical industry (CPI). Pulp and paper industry and waste
  liquid monitoring.

(Sensor Specifications)	
Model:	CS3790
Cell constant:	2. 7
Measurement range:	0 -2000mS/cm
Temperature compensation:	PT 1000
Operation temperature:	-20°C- +130°C
Response time:	10min
Pressure Range:	≤16 bar
Minimum immersion depth:	54mm
Mounting thread:	G 3/4"
Cable length:	10 meter
(Sensor materials	
Sensor materials:	PFA
Fixed joint material:	SUS316L
Sealing gasket material:	PTFE
O-ring material:	FEP+Viton
Fixed nut material:	SUS316L

## (sensor dimensions)



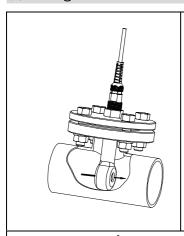
# CS3790 (Wiring illustration)

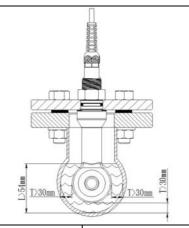


Description	Heat-shrink tube color	Wire color	Wire description
(Drive)	(Red)	(Red)	Drive — H
		(Brown)	Drive — L
		(Clear)	Drive SHIELD
(Receive)	(Black)	(Orange)	Receive— H
		(Black)	Rreceive— L
		(Clear)	Receive SHIELD
(Temp)	(Green)	(Yellow)	PT1K RTD-A
		(Green)	PT1K RTD-B
		(Clear)	PT1K RTD-B

### Mounting of sensor)

### 1.Flange mounted

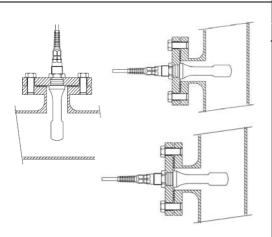






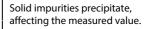
- 1.The center hole of the sensor shall be installed in the pipeline in line with the direction of water flow (as shown in the left picture above).
- 2.The submerged depth of the sensor should be greater than 54mm, and the outer distance from the inner wall of the sensor to the surrounding distance T should be greater than 30mm (the inner diameter of the pipeline should be more than 114mm).
- 3.Installation flange specifications: DN50 or above (customers choose according to the site conditions).

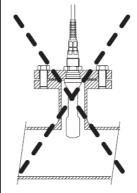
#### Recommended)

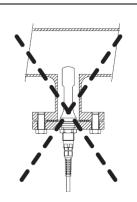


#### (Not recommended)

The sensor is not sufficiently immersed in water.

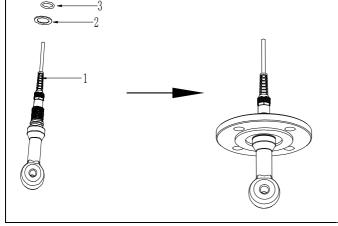




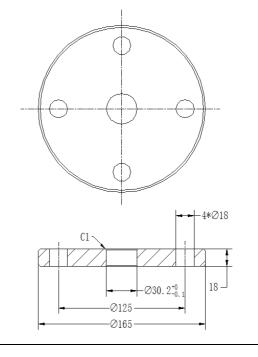


#### Schematic diagram of flange installation steps

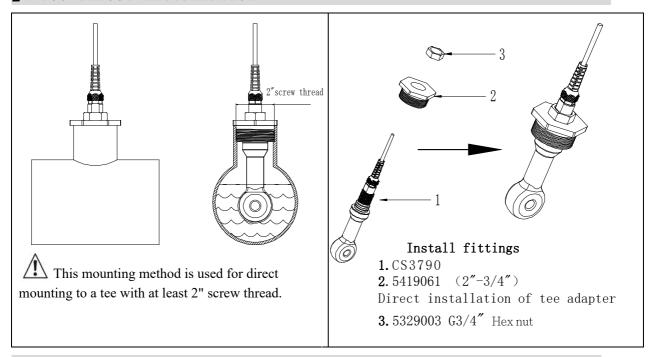
- 6
- 1.CS3790
- 2.5419059 Teflon Gaskets
- 3.5420048 FEP Seal ring
- 4. Flange gasket (Non standard)
- 5. DN50 flange (Non standard)
- 6.5329003 G3/4"Hex nut



#### DN50 PL16 Dimensions



## 2. Tee direct installation



### 3. (Immersion installation)

