

ELECTRO - CHEMICAL DEVICES, INC.

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SPECIFICATION SUMMARY

CS10/17 & RS10/17 CONDUCTIVITY & RESISTIVITY SENSOR for Model T23 Transmitter

MEASUREMENT RANGE

3 basic ranges:

- 1) Low range Conductivity: 1 μ S through 50 μ S.
- 2) High range Conductivity: 100 μ S through 20 mS.
- 3) Resistivity: 2 M Ω through 50 M Ω .

OUTPUT

Signal conditioned output, intrinsically-safe.

SIGNAL CONDITIONER:

Integral to sensor. Three types available:
T23: Models T23, T28, & T21 transmitter
C22: System C22 Controller

POWER SUPPLY

Provided by the transmitter.

OPERATING TEMPERATURE

Standard: +23 $^{\circ}$ F to +212 $^{\circ}$ F (-5 $^{\circ}$ C to +100 $^{\circ}$ C)
Optional:¹ +302 $^{\circ}$ F (+150 $^{\circ}$ C)

OPERATING PRESSURE

Standard CS10 & RS10: 100 psig @ 100 $^{\circ}$ C
Optional CS10 & RS10:² 300 psig @ 150 $^{\circ}$ C
Standard CS17 & RS17: 300 psig @ 100 $^{\circ}$ C
Optional CS17 & RS17:² 300 psig @ 150 $^{\circ}$ C

DIMENSIONS

CS10 & RS10: 0.75" dia x 13.75" lg.
(1.9 cm x 34.9 cm)
CS17 & RS17: 0.75" dia x 19.00" lg.
(1.9 cm x 48.3 cm)

*Dimensions are housing diameter x length of sensor.
Length is measured from front of seal guard to rear of strain relief.*

SHIPPING WEIGHT

CS10 & RS10: 2.50 lbs (1.13 kgs)
CS17 & RS17
without VSS: 2.75 lbs (1.25 kgs)
CS17 & RS17
with VSS: 5.80 lbs (2.63 kgs)

HOUSING & MATERIALS

Standard: 316 stainless steel
Optional: Titanium, grade 2 (T)
Hastelloy C22 (H)

CABLE LENGTH

Standard: 10 feet
Optional: Specify in 10' increments.
Maximum: 50 feet
Type: 6-conductor shielded

O-RING MATERIALS

Standard: Viton (VIT)
Optional: EPR (EPR)
Fluorosilicone (FSIL)
Silicone (SIL)
Kalrez (KLZ)
CV75 (CV)

PROCESS CONNECTIONS (optional)

CS10 & RS10: -75 3/4" 316ss gland fitting with nylon ferrule.
-75HT 3/4" 316ss gland fitting with Teflon ferrule.
-75SF 3/4" 316ss gland fitting with stainless steel ferrule.
-75TFE 3/4" all-Teflon gland fitting.
CS17 & RS17: -VSS 1" 316ss valve-retraction assembly.
-VCS 1" carbon steel valve-retraction assembly.
-VKY 1" Kynar valve-retraction assembly.

All sensors ordered with valve-retraction assemblies are provided with safety lanyards.

TEMPERATURE COMPENSATION

Automatic, 0 $^{\circ}$ C to +100 $^{\circ}$ C.
Accuracy within +/-0.2 $^{\circ}$ C over a +5 $^{\circ}$ C to -95 $^{\circ}$ C span. Uses a 100,000 ohm thermistor, integral to sensor.

¹ Optional temperature ratings are allowed with the use of high temperature polymers such as Ryton, and Teflon.

² Optional pressure ratings are allowed with the use of metallic retaining ferrules. High temperature polymers should also be used where high pressure and temperature are present.