

# TCS3000 and 3020 Series Toroidal Conductivity Sensors




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**Resists coating, corrosion and fouling**

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**Durable Noryl construction**

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**Easy installation**

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**Custom tee for in-line mounting**

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**Connects to Sensorex TCSMA, TCSTX, Rosemount or Foxboro Instrumentation**

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The Sensorex TCS series toroidal inductive conductivity sensors features a wide measurement range and dependable toroidal technology over the range 0-2000. Resistant to corrosion, coatings and fouling common to contacting conductivity sensors, the TCS series is designed for a trouble free and long service life.

Noryl is the standard material of construction and has a wide solvent tolerance and temperature stability to 105 degrees C\*\*\*. Optional PEEK models will be available in the future. All models can be submersed by utilizing the 3/4" MNPT threads on the sensor or installed in 2" NPT tees for in-line deployment. ATC element is user specified and built into the TCS sensor. All TCS sensor models are supplied with 20ft long 9-conductor cable. Custom lengths are available. Please contact Sensorex for pricing.

Choose the TCS3020 for use with a Sensorex TCSMA or TCSTX toroidal transmitter. TCS3000 sensors can be connected to many toroidal controllers and transmitter manufactured by Rosemount, Foxboro or others.

## Specifications

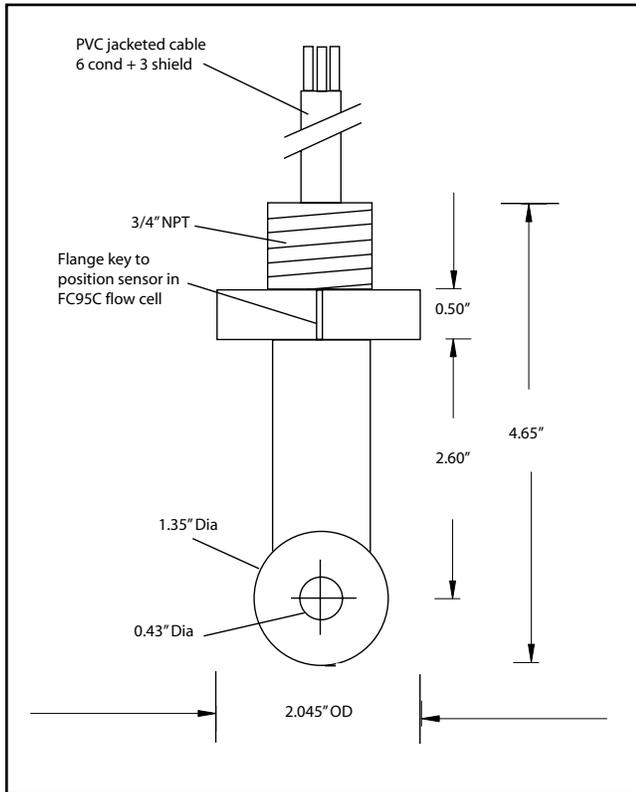
<b>Measuring Range</b>	TCS3020 and TCS3000 - 0-2,000,000 uS/cm
<b>Body Material</b>	Noryl (Optional PEEK will be available in the future)
<b>Max Temperature</b>	105 Degrees C***
<b>Max Pressure</b>	150 psig
<b>Temp Comp</b>	User specified temperature elements or -P1k for TCSMA and TCSTX transmitters.
<b>Cable Length</b>	20 feet, 6 conductor plus shields
<b>Process Connection</b>	3/4" MNPT for submersion, 2" standard tee with A1001/A1002 adapter.

**Parts covered by this product data sheet include:**  
TCS3000, TCS3020, FC95C

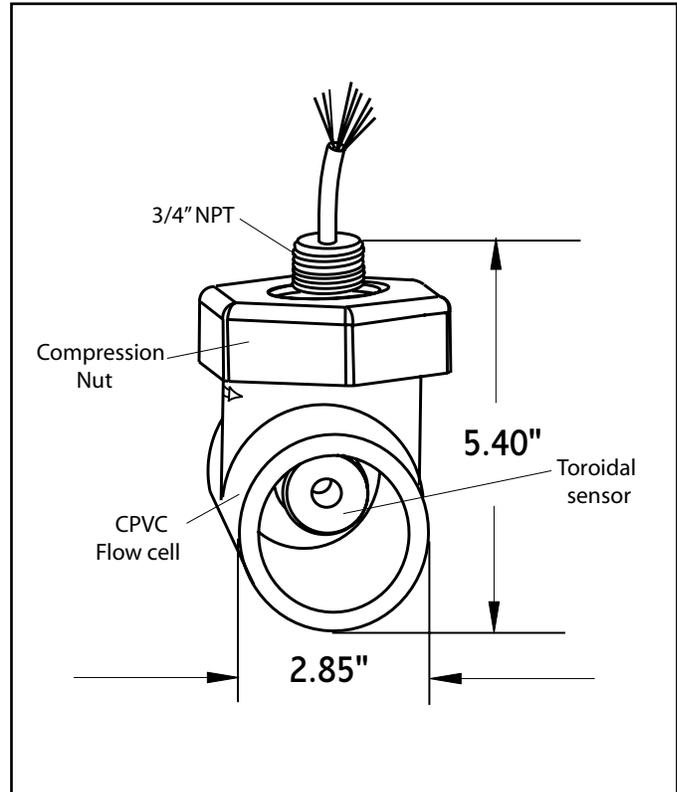
**\*\*\*Note: 105 degrees C spec is for sensor only. If used with FC95C flow cell, maximum temperature is 80 degrees C**

# Outline and Dimensions

**TCS3020**



**TCS3020 MOUNTED IN FC95C FLOW CELL**



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## Ordering Information

The TCS toroidal sensors are submersion ready by utilizing the 3/4" MNPT threads on the top of the sensor. In-line installations are accomplished by ordering flow cell listed below.

### Sensors

TCS3000	Noryl Toroidal Sensor (Version 3) - After 05-31-2008
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TCS3020	Noryl Toroidal Sensor with 20-30 windings
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### Toroidal 2-Wire Transmitter

TCSMA	2-Wire blind Toroidal Transmitter, 4-20mA (use with TCS3020 ONLY)
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TCSTX	2-Wire Autoranging Toroidal Transmitter with display, 4-20mA (use with TCS3020 ONLY)
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### In-Line Flow Cell

FC95C	2" Keyed slip fit flow cell (For use with Version 3 TCS3000 and TCS3020 Noryl toroidal sensors.)
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### Calibration Solutions-Quarts

TDS3000	3000ppm/3900uS
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TDS15000	15000ppm/16630uS
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TDS30000	30000ppm/30100uS
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