

Sanitary Conductivity Sensor Dimensional Details & Mating 3TX-CON Transmitter Selection Guide

Cell Constant	"A"	DIMENSIONS		LOW			STANDARD			HIGH		
		"B"	DIA	NOM CELL	CAL CELL RANGE	FULL RANGE	NOM CELL	CAL CELL RANGE	FULL RANGE	NOM CELL	CAL CELL RANGE	FULL RANGE
0.01	1.97	5.25	0.50	0.01L	0.005-0.015	0-20uS	0.01	0.005-0.015	0-500uS	0.02E	0.006-0.034	0-2,000uS
0.02	1.97	5.25	0.50				0.02E	0.006-0.034	0-2,000uS			
0.05	0.80	2.65	0.50				0.1	0.03-0.17	0-5,000uS			
0.1	0.30	2.65	0.50	0.1L	0.05-0.15	0-200uS	0.1	0.03-0.17	0-5,000uS	0.2	0.06-0.34	0-20,000uS
1	0.30	2.65	0.50	1.0L	0.5-1.50	0-2mS	1.0	0.30-1.70	0-50mS	2.0	0.60-3.40	0-200mS
2.0	0.30	3.00	0.75				2.0	0.60-3.40	0-200mS			
3.0	2.17	4.90	0.50				2.0	0.60-3.40	0-200mS			
5.0	3.00	4.00 to 7.00	0.75				10.0	3.0-17.0	0-500mS	20.0	6.0-34.0	0-1,000mS
10.0	5.20	9.20	0.50				10.0	3.0-17.0	0-500mS	20.0	6.0-34.0	0-1,000mS

NOTES:

"A" is distance from tip of sensor to center of vent hole

"B" is distance from tip of sensor to front of flange

"DIA" is diameter of outer electrode shaft

All dimensions are in inches

"L" series 3TX-CON have a minimum scaling that is 25% of the full range

Standard series 3TX-CON have a minimum scaling that is 10% of full range

X2 series 3TX-CON have full range shown for 0-105C use. For 0-210C use, the full range is half that of 0-105C condition. Min scaling is 10% of full range.

For specification of High-Resolution "E" series please see separate 3TX-CON-E supplement. Not all CON-E options are listed on this guide.

The best choice of cell constant and mating 3TX-CON transmitter is found based upon a combination of meeting the dimensions constraints that may exist for the process installation point together with finding the pairing that is as close to 50% of full range as possible. If the sample conductivity oscillates, consider the condition that is of greatest interest when making the selection. In cases where the conductivity does vary substantially up and down the working range, the CON-E high resolution MODbus is often a very good choice to get the maximum possible precision at any given conductivity value.

Last Revised February 9, 2018