

Solumetrix Toroidal Conductivity Sensors with 0-10v Interface

Models:	BKIN50-0-10v, BKIN75-0-10v, BEIN75-0-10v
Conductivity range (compensated):	0-2mS, 0-20mS or 0-200mS
Temperature compensation:	1.7 % per °C (From 25°C)

Feature table:

Model	Maximum Temperature	Fixing Thread	Interface	Electronics
BKIN50-0-10V	50.0°C	1/2" BSP Parallel	0-10V	Internal
BKIN75-0-10V	50.0°C	3/4" BSP Parallel	0-10V	Internal
BEIN75-0-10V	50.0°C	3/4" BSP Parallel	0-10V	Internal

The body of the sensor can be flange mounted and is available in two thread sizes: 1/2" BSP (black) or 3/4" BSP (Beige).

The electronics package is incorporated in the body of the sensor for applications up to 50°C, and for higher temperatures the electronics are housed in an encapsulated module in the lead, situated close to the sensor body.

The sensor has an in-built temperature measurement circuit, and the conductivity signal is output as a digital data stream, comprising uncompensated, compensated conductivity values, together with temperature data. Temperature compensation is carried out within the sensor electronics, the default percentage value is 1.7%/°C.

The electronics package has been developed to be compliant with CE RF industrial fields and does not require any shielded cables for connection.

Mechanical mounting.

The probes can be fitted into tanks using a back nut and sealing washer or into the side of a 'T' piece inline with a pipe using an adaptor.

Note however that there needs to be a minimum clearance around the end of the probe as specified in the drawings below.

The probe should only be held during tightening using the hexagon on the body, on no account should the probe be tightened using the head or a bar through the hole in the head, this will damage the probe.

Connection details.

Analog output interface, 10 Volt output version, with select wires

DAC01-1M-10V **8 wire cable, hard wired to sensor**

Red	Power +15V to +24V DC at 30ma
Clear(screen)	Power 0V
Orange	Conductivity voltage output, 0V = 0mS, 10V = 2.000mS, 20.000mS or 200.00mS depending on probe range.
Black	Conductivity 0V
White	Temperature voltage output, 0V = 0C, 10V = 100C
Green	Temperature 0V
Blue	Range select wire 1
Brown	Range select wire 2

Range table.

Range	Blue Wire	Brown Wire	
20mS	Disconnected	Disconnected	Default
200mS	Connected to 0V	Disconnected	
2mS	Disconnected	Connected to 0V	
Invalid.	Connected to 0V	Connected to 0V	

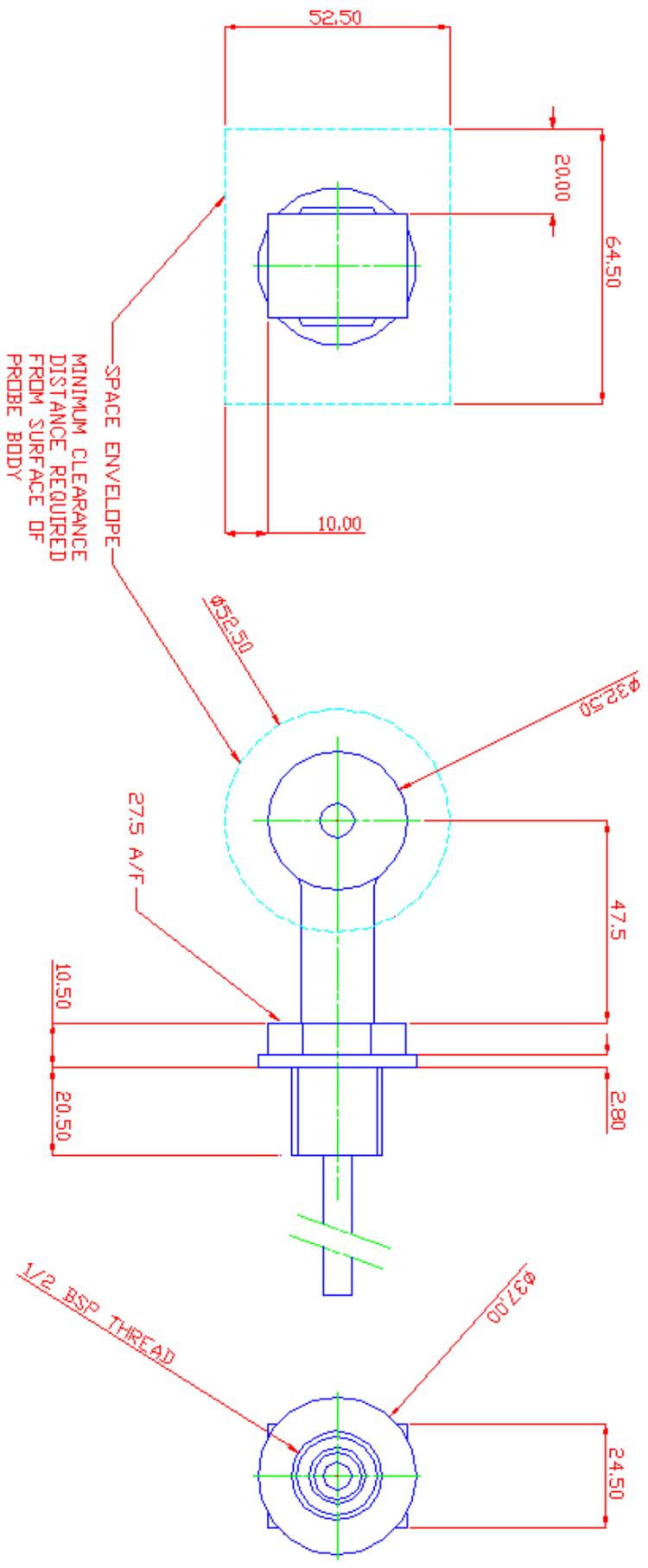
N.B connecting both range wires to 0V is an invalid condition.

Reversal of the supply connections or connecting either of the outputs to the power supply will damage the sensor.

For more information or support please contact **Enquiries@solumetrix.co.uk**

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BKIN50-0-10V
Dimensions



BEIN75-0-10V
Dimensions

