

TWS

TestMate® Water Sensor for BioDiesel



The TWS-C-E is a water and temperature sensor for the continuous monitoring of ester based fuels (like biodiesel) - accurately, continuously and on line. It measures the water content relative to the saturation concentration (saturation point) and outputs the degree of saturation (saturation level) in the range of 0 to 100% as a 4-20 mA signal. A reading of 0% would indicate the absence of water, while a reading of 100% would indicate that a fluid is saturated with water.

Specifications

Measuring Range (Saturation level):	0 to 100%
Operating pressure:	Max. 725 psi, / max. 50 bar
Overload pressure:	Max. 9135 psi / max. 630 bar
Parts in contact with media:	stainless steel, seal viton or EPDM, ceramic with evaporated metal
Output signal:	4 to 20 mA
Calibrated accuracy:	± 2 % FS max.
Accuracy in media measurements:	± 3% FS typ.
Pressure-dependent:	+ 0.02% FS/bar
Output signal:	4 to 20 mA
Accuracy:	* ± 2% FS max.
Nominal temperature range:	32° to 194° F (0° to 90°C)
Ambient Temperature:	-40° to 212° F (-40° to 100°C)
Fluid temperature range:	-40° to 257° F (-40° to 100° C)
Viscosity range:	32 to 23175 SUS
Flow velocity:	< 16 ft/s
Media tolerance:	mineral oil based fluids, natural and synthetic esters
CE mark:	EN 50081-1, EN 50081-2, EN 50082-1, EN 61000-6-2
Type of Protection acc. DIN 40050:	IP 67
Supply voltage:	12 to 32 V DC
Residual ripple supply voltage:	≤ 5%
Mechanical connection:	G3/8A DIN 3852
Torque rating:	18.5 ft-lbs.
Electrical connection:	M12x1, 5 pole (DIN VDE 0627)
	Pin 1: +Ub Pin 2: Signal saturation level Pin 3: OV / GND Pin 4: Signal temperature Pin 5: not connected

Model Code

How to Build a Valid Model Number for a Schroeder TWS:

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5
TWS				

Example: NOTE: One option per box

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	
TWS	C	E	0	0	= TWSCE00

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5
Model	Serial	Medium	Signal Technology	Signal Technology
TWS	C series C	M Mineral oil E Esters	Analog output 1 0 saturation level signal 4 to 20 mA	Analog output 1 0 temperature signal 4 to 20 mA