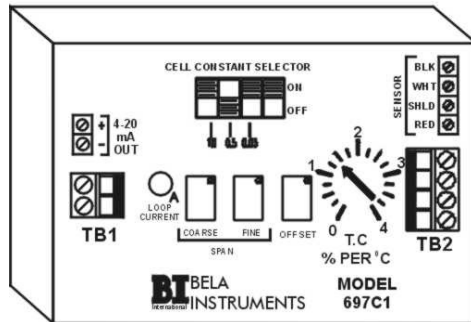
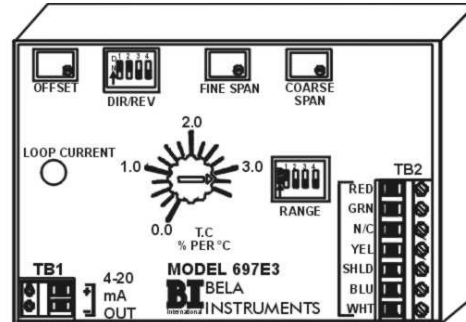


Models 697 Non-Indicating Two-wire Contacting & Electrodeless Conductivity Transmitters



Contacting
Conductivity
Transmitter



Electrodeless
Conductivity
Transmitter

- **Simplified Two-wire Hookup.**
- **Automatic or None Temperature Compensation.**
- **Two point Calibration.**
- **4-20 mA Output.**
- **Field-changeable Measuring Range.**
- **NEMA 4X Enclosure.**
- **Adjustable slope control compensates for Solution Temp coefficients.**

Specifications

Operational:

Measuring Range	697C.....0-5 to 0-20,000 μ Siemens/cm
	697E.....From 0-500 to 0-1,000,000 microSiemens/cm
Ambient Conditions.....	-20 to + 158°F (-30 to +70°C), 0 to 100% R.H.
Sensor-to-Transmitter Distance	697C.....100ft. (30m) maximum.
	697E.....200ft. (60m) Maximum.
Output Transmission Distance.....	Limited only by wire resistance/power supply voltage
Power Requirements.....	16-40 VDC, connections via terminal strip
Temperature Compensation.....	Automatic 32-212°F (0-100°C), Slope adjustable (0-4.0% per °C)
Temperature Input.....	697 C: accepts 3K Ω Thermistor
	697 E: accepts Pt 1000 ohm RTD

Performance (Electrical, 4-20 mA out, Isolated/Non-Isolated):

Sensitivity.....	0.1% of span	Insertion loss at 20 mA....	5.7 VDC (785 Ω max.
Stability.....	0.2% of span per 24 hours, Non-cumulative	Insertion loss in	4-20 mA loop)
Non-Linearity.....	0.4% of span	Enclosure (optional).....	NEMA 4X, Polycarbonate, surface mount
Repeatability.....	0.2% of span or better	Net Weight (less opt. enclosure).....	0.6 lbs. (0.27 kg) approx.
Temperature Drift.....	Zero and Span: 0.08% of span per °C		
Response Time.....	2 seconds to 90% of value upon step change		

Ordering Information

MODEL NUMBER 697 Fully encapsulated, non-indicating two-wire transmitter with 4-20mA output	
MEASUREMENT PARAMETER (specify measuring scale) C1 Conductivity (from 0-5 to 0-20,000 microSiemens/cm) E3 Electrodeless Conductivity (from 0-500 to 0-1,000,000 microSiemens/cm)	
MOUNTING OPTIONS K Special R Module mounted on metal plate for use with polycarbonate enclosure (NEMA 4X)	
OUTPUT ISOLATION 0 Non-isolated output 1 Isolated output (Model 697C1 only)	NOTE: Isolated output option is not necessary for Model 697E3 because the process is electrically isolated from the transmitter, thereby making the output effectively isolated.
N STANDARD K SPECIAL	

697 Product Number

Choose one from each category.

Accessories (ordered separately)

• Interconnect Cables

- 99X1W0979 5-wire cable (4 cond. plus shield) for contacting conductivity sensors
- 99X1W1103 7-wire cable (6 cond. plus shield) for electrodeless conductivity sensors

Contacting Conductivity Sensor Selection

For the following measuring range categories, use a contacting conductivity sensor with the correspondingly listed cell constants.

Measuring Range (microSiemens/cm)	Sensor Cell Constant
0-5 through 0-500	0.05
0-100 through 0-5000	0.5
0-2000 through 0-20,000	10.0

- **Sensors** – Model 697C1 and 697E3 transmitters can only be used with sensors described on data sheets 30000 and 4700 respectively.

Dimensions

Inches (mm)

