

Miniature Temperature Transmitters

Thermocouple, RTD (Pt100) or Voltage Input

TX93



- ✓ Ultra-Low Profile Design
Only 19 mm (¾") High
(Including Terminal Strip)
- ✓ 4 to 20 mA Output
- ✓ ±0.1% FS Accuracy
- ✓ Non-Isolated
- ✓ Mounts in Protection Head

Models TX93, TX94 and TX95 transmitters can eliminate long runs of costly field wiring in a variety of applications. A stable 4 to 20 mA output signal is provided proportional to the transmitters specific input type and calibrated



TX93-J4, shown actual size.

temperature range (see Range Code table below). Adjustability of ±25% for zero and span is provided to facilitate some rangeability. The transmitted signal eliminates noise pickup, voltage drops, multiple cold junction errors and requires only a twisted pair of copper wire for loop connections. TX93, TX94 and TX95 are ultra-low profile transmitters at an economical price.

NB1TX93-K3 thermocouple RTD. Smaller than actual size.

Transmitter inside!

Specifications

Output Range: 4 to 20 mA dc

Zero and Span Adjustment Range: ±25%

Accuracy: ±0.1% FS (includes effects of linearity, hysteresis and repeatability)

Frequency Response:
3 dB @ 3Hz

Ambient Temperature Range:
-25 to 85°C (-13 to 185°F)

Storage Temperature Range:
-65 to 125°C (-85 to 257°F)

Supply Voltage: 8 to 35 Vdc;
24 Vdc recommended

Maximum Loop Resistance: $V_s - 8V$
0.020

Dimensions: 1.90 H x 4.45 cm D
(0.75 x 1.75") (height includes terminal strip)

Weight: 30 g (1 oz)

Accessories

Model No.	Description
TX90-DIN	DIN rail mounting adaptor
RT	1.2 m (48") mounting track
TX90-BR	Mounting track mounts up to 2 transmitters of the TX90 series
PSR-24S	Regulated power supply, 24 Vdc, 400 mA, screw terminal
PSR-24L	Regulated power supply, 24 Vdc, 400 mA, UL, stripped leads
PSR-24L-230	Regulated power supply, 24 Vdc, 400 mA, stripped leads, 230 Vac input
PSU-93	Unregulated power supply, 16 to 23 Vdc, 300 mA max, screw terminal
TX82B	Process loop indicator (see omega.com)
RAIL-35-2	2 m (6.6') section 35 mm DIN rail

To Order

Model No.	Description
TX93-(*)	Thermocouple transmitter (J, K, T, or E)
TX94-(*)	RTD transmitter (100 Ω Pt, alpha = 0.00385)
TX95-(*)	Voltage input transmitter
NB1TX93-(*)	NB1 thermocouple probe, 305 mm (12") L, 6 mm (¼") OD, ungrounded junction, 304 SS sheath, with TX93 transmitter
PRTX94-(*)	PR-12 RTD probe, 305 mm (12") L, 6 mm (¼") OD, 304 SS sheath, with TX94 transmitter

* Insert range code from chart below.

Range Codes

Model Number						Range °C (°F)
TX93				TX94	TX95	
J	K	T	E	RTD†	Voltage	
J1			E1	1		-40 to 49 (-40 to 120)
J2	K2	T2	E2	2		-18 to 93 (0 to 200)
J3	K3	T3	E3	3		-18 to 149 (0 to 300)
J4	K4	T4	E4	4		-18 to 260 (0 to 500)
J5	K5	T5	E5	5		-18 to 399 (0 to 750)
J6	K6		E6	6		-18 to 538 (0 to 1000)
					V1	0 to 60 mV dc
					V2	0 to 10 Vdc

Comes complete with operator's manual.

† 2-lead RTD configuration

Notes: (1) Thermocouple models output proportional to mV output of thermocouple.

Not linearized to temperature. (2) Non-Isolated unit for use with ungrounded probes.

Ordering Example: TX93-J4, Type J, transmitter with -18 to 260°C (0 to 500°F) range.