

TEMPERATURE TRANSMITTERS

Selection Guide



HEAD MOUNT TYPE



TxMiniBlock



TxBlock-USB-RTD



TxBlock-USB



TxIsoPack



TxRail-USB



TxIsoRail



TxIsoRail-HRT

Transmitter Type	Pt100 only Programmable Range	Pt100 only Programmable Range	Universal Programmable	Isolated Universal Programmable	Universal Programmable	Isolated Universal Programmable	Isolated Universal Programmable HART
Accuracy	0.2 % of span	0.14 % of span	Pt100 / mV: 0.2 % of span T/C: 0.15 % span $\pm 1^{\circ}\text{C}$ ($\pm 1.8^{\circ}\text{F}$) NTC: 0.7% of span	Pt100 and Voltage: 0.2 % of span Thermocouple: 0.7% of span	Pt100 / mV: 0.2 % of span T/C: 0.15 % span $\pm 1^{\circ}\text{C}$ ($\pm 1.8^{\circ}\text{F}$) NTC: 0.7% of span	Pt100, mV and mA: 0.2 % of span T/C: 0.2% of span $\pm 1^{\circ}\text{C}$ ($\pm 1.8^{\circ}\text{F}$)	Pt100 / mV: 0.15 % of span T/C: 0.15 % span $\pm 1^{\circ}\text{C}$ NTC: 0.2% of span
Input Type	Pt100	Pt100	J, K, T, N, R, S, B, E, Pt100, Pt1000, NTC and 0-50 mV	J, K, T, N, R, S, B, E, Pt100 and 0-50 mV	J, K, T, N, R, S, B, E, Pt100, Pt1000, NTC and 0-50 mV	J, K, T, N, R, S, B, E, Pt100, 0-50 mV, 0-10 V, 0-20 mA and 4-20 mA	J, K, T, N, R, S, B, E, Pt100, Pt1000, NTC and 0-50 mV
Output Type	4-20 mA or 20-4 mA	4-20 mA or 20-4 mA	4-20 mA (or 20-4 mA)	4-20 mA or 20-4 mA	4-20 mA (or 20-4 mA) or 0-10 V (or 10-0 V)	4-20 mA or 20-4 mA	4-20 mA
Output Resolution	4 μA	2 μA	2 μA	4 μA	2 μA	1 μA	0.25 μA
Range	-200 to 650 $^{\circ}\text{C}$ (-328 to 1202 $^{\circ}\text{F}$)	-200 to 650 $^{\circ}\text{C}$ (-328 to 1202 $^{\circ}\text{F}$)	See manual for all types	See manual for all types	See manual for all types	See manual for all types	See manual for all types
Response Time	100 ms	1.6 sec typical	1.6 sec typical	500 ms	1.6 sec típico	500 ms	
Thermal Drift	± 4 ppm of span/ $^{\circ}\text{C}$	0.08% / 25 $^{\circ}\text{C}$ (77 $^{\circ}\text{F}$)	0,16 % / 25 $^{\circ}\text{C}$ (77 $^{\circ}\text{F}$)		0,16 % / 25 $^{\circ}\text{C}$ (77 $^{\circ}\text{F}$)	0.003% of span / $^{\circ}\text{C}$	0.05% / 25 $^{\circ}\text{C}$ (77 $^{\circ}\text{F}$)
Isolation Input-Output				1 kVca		1 kVca	1.5 kVrms
Electric Protection	Reverse Polarity	Reverse Polarity	Reverse Polarity	Reverse Polarity	Reverse Polarity	Reverse Polarity	Reverse Polarity
Programmable Functions	Electric grid filter, Offset, Sensor Failure	Sensor, Unit, Electric grid filter, Offset, Sensor Failure	Input Type, Programmable Range, Electric grid filter, Offset, Sensor Failure	Input Type, Programmable Range, Electric grid filter, Offset, Sensor Failure	Input Type, Programmable Range, Electric grid filter, Offset, Sensor Failure	Input Type, Programmable Range, Electric grid filter, Offset, Sensor Failure	Input Type, Programmable Range, Electric grid filter, Offset, Sensor Failure
Advanced Functions							HART Protocol Version 7
USB Configuration	Through TxConfig adapter	Micro-B type	Micro-B type	Micro-B type	Micro-B type	Through TxConfig adapter	Through TxConfig-HART adapter
Configuration Software	TxConfig	TxConfig II	TxConfig II	TxConfig	TxConfig II	TxConfig	TxConfig
Approvals / Regulations	CE, NAMUR NE43, RoHS, Reach	CE, NAMUR NE43, RoHS, Reach	CE, NAMUR NE43, RoHS, Reach	CE, NAMUR NE43, RoHS, Reach	CE, NAMUR NE43, RoHS, Reach	CE, NAMUR NE43, RoHS, Reach	CE, NAMUR NE43, RoHS, Reach, HART
Electromagnetic Compatibility	EN 50081-2 EN 50082-2	EN 61326-1:2013	EN 61326-1:2006	EN 50081-2 EN 50082-2	EN 61326-1:2006	EN 50081-2 EN 50082-2	CISPR 11 / EN 61000-4-2 EN 61000-4-3 / EN 61000-4-4 EN 61000-4-5 / EN 61000-4-6 EN 61000-4-8
Operating Conditions	-40 to 50 $^{\circ}\text{C}$ (-40 to 122 $^{\circ}\text{F}$) 0 to 90% RH	-40 to 85 $^{\circ}\text{C}$ (-40 to 185 $^{\circ}\text{F}$) 0 to 90% RH	-40 to 85 $^{\circ}\text{C}$ (-40 to 185 $^{\circ}\text{F}$) 0 to 90% RH	-20 to 75 $^{\circ}\text{C}$ (-4 to 167 $^{\circ}\text{F}$) 0 to 90% RH	-40 to 85 $^{\circ}\text{C}$ (-40 to 185 $^{\circ}\text{F}$) 0 to 90% RH	-40 to 85 $^{\circ}\text{C}$ (-40 to 185 $^{\circ}\text{F}$) 0 to 90% RH	-40 to 85 $^{\circ}\text{C}$ (-40 to 185 $^{\circ}\text{F}$) 0 to 90% RH
Power Supply	4-20 mA Loop Powered (12 ~ 35 Vdc)	4-20 mA Loop Powered (10 ~ 35 Vdc)	4-20 mA Loop Powered (12 ~ 35 Vdc)	4-20 mA Loop Powered (12 ~ 35 Vdc)	4-20 mA Loop Powered (10 ~ 35 Vdc)	4-20 mA Loop Powered (12 ~ 35 Vdc)	4-20 mA Loop Powered (10.5 ~ 35 Vdc)
Dimensions	34 mm x 18 mm (1.33 in x 0.71 in)	43.5 mm x 20.5 mm (1.71 in x 0.81 in)	43,5 mm x 2,5 mm (1.71 in x 0.81 in)	44 mm x 24 mm (1.73 in x 0.94 in)	114 mm x 99.5 mm (4.49 in x 3.91 in)	77 mm x 72 mm (3.03 in x 2.83 in)	114 mm x 99.5 mm (4.49 in x 3.91 in)
Enclosure Material	ABS	ABS UL94-HB	ABS UL94-HB	ABS	ABS UL94-HB	ABS	ABS UL94-HB
Format / Mounting	Small Head Mount	Head Mount	Head Mount	Head Mount	35 mm (T535) DIN Rail	35 mm (T535) DIN Rail	35 mm (T535) DIN Rail