Competitor Cross List
BT1 Temperature Transmitter

Barksdale®
CONTROL PRODUCTS

Manufacturer	 Barksdale	 Wika	 IFM	 Stellar Technology
Series / Model	BT1	TR34-x-TT	TA2613 (TA050FLEN14-A-ZVG/US)	T28XX
Mounting Type	Direct process mount, threaded connection	Direct process mount, threaded connection	Compact threaded temperature transmitter with integrated sensor	Probe Style Temperature Transmitter
Sensor Type	1 × Pt100 Class B	Pt100, Pt1000	Pt1000 RTD (DIN EN 60751 Class A	RTD Based Temperature Transducer
Communication Protocol	None (Analog)	None (Analog)	IO-Link v1.1	RS-232, RS-485, CANbus (optional)
Excitation / Supply Voltage	12-27 VDC (CSA, 4-20 mA), 20-27 VDC (ATEX, 4-20 mA), 10-27 VDC (0/1-5 V, 0/1-6 V), 15-27 VDC (0/1-10 V), 5 VDC ±5% (0.5-4.5 V ratiometric)	10 ... 30 VDC	18...32 VDC	9-36VDC (4-20mA), 8-40VDC Voltage Output, 8-30VDC RS232/RS485, 4-18VDC CANbus
Supply Current	3.6-21.4 mA (4-20 mA), 7 mA typ. (0/1-5 V, 0/1-6 V, 0/1-10 V, 0.5-4.5 V)	Loop Powered	< 50 mA	Not Specified
Output Signal	4-20 mA, 0/1-5 V, 0/1-6 V, 0/1-10 V, 0.5-4.5 V	With direct sensor output (Pt100, Pt1000 in 2-, 3- or 4-wire connection) or integrated transmitter with 4 ... 20 mA output signal	4-20 mA, IO-Link (configurable)	4-20mA, 1-5V, 1-6V, 0-5V, 0-10V, RS232, RS485, CANbus
Accuracy	±1% FS @25°C, ±2% FS overall	±0.25 K transmitter accuracy	±0.3 K + (±0.1% MS)	±1.2°F or 1% whichever greater; Optional ±0.5°F or 0.5%
Process (Media) Temp Range	-40°C to +200°C	Without neck tube: -30°C to +150°C; With neck tube: -30°C to +250°C	-50°C to +150°C (-58°F to +302°F)	-65°F to +300°F (-54°C to +149°C) Standard
Electronics / Ambient Temp Range	-40°C to +85°C	-40°C to +85°C	-25°C to +80°C	Analog: -65°F to +250°F; Digital: -40°F to +185°F
Enclosure Material	Stainless Steel	Stainless Steel	Stainless Steel 316L (1.4404), PEI, FKM	Stainless Steel, Hermetically Sealed
Wetted Material	Stainless Steel	Stainless Steel 1.4571	Stainless Steel 316L (1.4404)	Stainless Steel (Inconel optional)
Ingress Protection	Depends on electrical Connection	IP67 per IEC/EN 60529 IP69 per IEC/EN 60529 IP69K per ISO 20653	IP67, IP68, IP69K	Hermetically Sealed (IP not stated)
Process Connection	G1/4 Form E (washer seal) Male, 7/16”-20 UNF, 1/4”-18 NPT, Custom	G1/4, G3/8, G1/2, 1/4 NPT, 1/2 NPT, M20x1.5	1/4” NPT Male	1/4" NPT Male Std.; 7/16"-20 Optional; Metric Optional
Electrical Connector Options	MIL-C-26482, M12×1 (Binder S763), EN 175 301-803-A (DIN-A), 4P Cable Outlet, Custom	M12 x1 Circular Connector 4-pin, DIN EN 175301-803 form A	M12 A-coded 4-pin(Gold-Plated Contacts;special feature)	PTIH-10-6P Stainless Steel Connector
Weight	Approx. 125 gms	0.2 to 0.7 kg	92 g	8 oz max (227 g)
Shock Rating	EN/IEC 60068-2-32 (1 m free fall)	50 g, 6 ms	50 g, 11 ms (DIN IEC 68-2-27)	Not Specified
Vibration Rating	20 g, 3 axes, EN/IEC 60068-2-6	20 g, 10-2000 Hz	20 g, 10-2000 Hz (DIN IEC 68-2-6)	Not Specified
North America (Class/Div/Zone)	Class I, Div 1, Groups C & D, T3; Class I, Zone 1, AEx ia IIB T3 Gb	CSA: Class I Div 1 Groups A,B,C,D; Class I Zone 0 AEx ia IIC T1-T6 Ga; Class I Zone 1 AEx ia IIC T1-T6 Gb	Not Specified	Area Certifications for Intrinsically Safe and Flameproof Environments Available (details not specified)
IECEx / ATEX (Zone)	II 2G Ex ia IIC T3 Gb	ATEX: II 1G Ex ia IIC T1-T6 Ga; II 1/2G Ex ia IIC T1-T6 Ga/Gb; II 2G Ex ia IIC T1-T6 Gb; IECEx Ex ia IIC T1-T6	Not Specified	Not Specified
Protection Concept	Intrinsically Safe (Ex ia)	Intrinsically Safe Ex ia	General Purpose / Ordinary Location	IS / Flameproof Options Available
Certifying Bodies	CSA, ATEX	ATEX, IECEx, CSA, EAC, DNOP, CCC, CE,PAC	UL, DNV, UKCA,	-
General Compliance	CSA, ATEX	CE, RoHS,EAC	UL Listed, DNV Approved, UKCA	EMC 2014/30/EU, RoHS 2011/65/EU
EMC Standards	EN 61326-1:2013 Section 7, EN 61326-2-3:2013, EN 61326-1:2013 Section 6	EN 61326 (Emission Group 1 Class B, Industrial Immunity)	DIN EN 61000-6-2	EMC Directive 2014/30/EU