

## TECHNICAL DATA SHEET INSTRUMENTATION CABLES

Cable Description:

TCU / XLPE / IS / OS / PVC 300 V 12P 18 AWG  
UL 2250 / UL 13 TYPE ITC/PLTC 90°C

Design and Construction Data:		
Reference Manufacturing Standards		UL 13, UL 2250
Max. Permissible Continuous Conductor Temp	°C	90
Rated Voltage	V	300
Size	N x AWG	12 Pairs x 18
Conductor Material & Shape		Tinned Cu & circular stranded 7 wires as per ASTM B33
Insulation Material		XLPE
Conductor Nominal Insulation Thickness	mm	0.38
Insulation Color		Black - White & Numbers on White conductor
Assembly of insulated conductors		Two insulated conductors uniformly twisted into a pair
Lay of twist of element		As per UL 1277
Individual Shield/Screen Material		24 µm Aluminum foil bonded to non-hygroscopic polyester (Mylar) tape, Minimum 25% overlap
Individual Shield/Screen Drain Wire		20 AWG, Circular tinned copper, per ASTM B33, 7 strands minimum
Overall Shield/Screen Material		24 µm Aluminum foil bonded to non-hygroscopic polyester (Mylar) tape, Minimum 25% overlap
Overall Shield/Screen Drain Wire		20 AWG, Circular tinned copper, per ASTM B33, 7 strands minimum
Outer Sheath Material		PVC
Colour of Outer Sheath		BLACK
Approximate Cable Overall Diameter	mm	18.4
Electrical Data:		
Max. Conductor DC resistance @ 20 °C	ohms/km	23.60
Max. Mutual Capacitance	nf/km	150
Max. Inductance to Resistance Ratio	µH/ohms	25
Additional Data:		
Maximum pulling Tension	kN	0.983
Minimum Bending Radius	mm	148
The Cable generally meets the requirements of:	UL 13, UL 2250, Flame retardant Vertical Tray Test of 20.5 kW (70,000 Btu/h) per IEEE 383	
Packing Data:		
Drum Type		Non-Returnable
Length of Cable per drum (± 5%)	m	1000
Drum Dimensions "Height x Width" (Approx.)	m	1.2 x 1.01
Gross Weight (Approximate without Lagging)	kg	538
Cable Marking:		
BAHRA CABLES CO. KSA 12P 18 AWG (0.823 mm2) TCU / XLPE / IS / OS / PVC 90°C TYPE ITC/PLTC (UL) DIR BUR SUN RES OIL RES I Manufacturing Year - Meter marked		