

#### APPLICATION

- For indoor and outdoor installation, on racks and tray, in dry and wet locations, and suitable for direct burial.
- For Transmission of analogue and digital signals in instrument and control systems; allowed for use in hazardous classified locations class I and class II division 2 acc. to NEC 501-4(b) and NEC 502-4(b)
- Not allowed for direct connection to low impedance sources, e.g. Public mains electricity supply.

#### STANDARDS

PLTC TO UL 13	Power-limited tray cable, per NFPA 70, NEC Article 725
ITC TO UL2250	Instrumentation tray cable, per NFPA 70, NEC Article 727.

#### CONSTRUCTION DETAILS

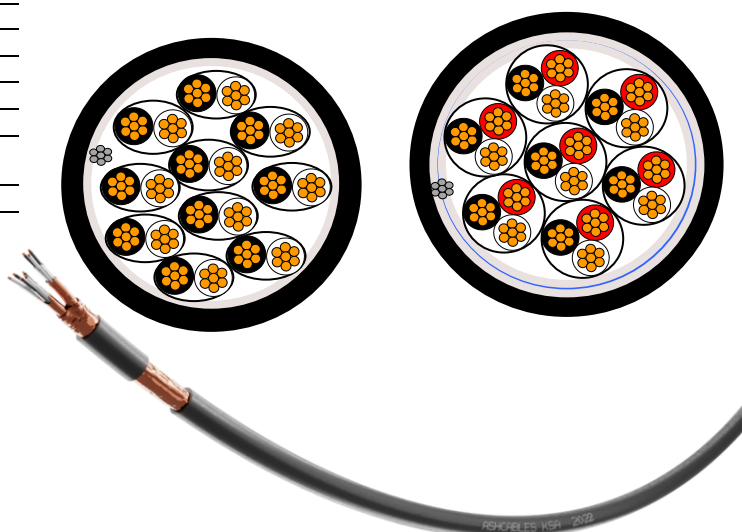
<b>CONDUCTOR</b>	Stranded, circular copper, per ASTM B3, 7 strands minimum; tinned, per ASTM B33
<b>INSULATION</b>	Crosslinked Polyethylene (XLPE) rated 90°C or Polyvinyl Chloride (PVC) rated 90°C.
<b>COLORS IDENTIFICATION</b>	Pair: Black/White, Numeric print on each for Multipairs. Triad: Black/White/Red, Numeric print on each for MultiTriads.
<b>PAIRS/TRIADS</b>	Two or Three cores are twisted into Pairs/Triads, in nominal lay length of 50 to 60 mm.
<b>COLOR CODES</b>	-Pairs : Black/White with successive numbers on each core. -Triads: Black/White/Red with successive numbers on each core.
<b>ASSEMBLY</b>	The required number of pairs/triads are assembled with non-hygroscopic fillers (if required) and wrapped with a polyester binder tape
<b>OVERALL SHIELDING</b>	Aluminum-Polyester (AL-PET foil) laminated tape with 100% coverage and suitable overlap, in contact with stranded tinned copper drain wire.
<b>OUTER JACKET</b>	Poly Vinyl Chloride Flame Retardant Sunlight and Oil Resistant.

#### ELECTRICAL PROPERTIES

		UNIT	CONDUCTOR SIZE (AWG)			
			18	16	14	12
<b>CONDUCTOR (DC) RESISTANCE @ 20°C(Ω/Km)</b>	MATERIAL TYPE					
	PLAIN Cu	Ω/Km	≤21.80	≤13.70	≤8.620	5.41
	TINNED Cu	Ω/Km	≤22.70	≤14.30	≤8.96	5.61
<b>Insulation Resistance (min.)</b>		MΩ/Km	10	10	10	10
<b>Mutual Capacitance</b>	XLPE	nF/Km	150	150	150	150
	PVC	nF/Km	250	250	250	250
<b>Inductance to Resistance Ratio</b>	L/R	μH/Ω	25	40	60	100
<b>Voltage Test</b>	1.5 Kv AC (2 sec)					

#### PHYSICAL & ENVIRONMENTAL PROPERTIES

<b>Flame Retardant</b>	Flame Retardance Vertical Tray Test of UL
<b>Oil Resistance</b>	Passes Oil test of UL.
<b>Direct Burial</b>	Passes Crush test of UL.
<b>Sunlight Resistance</b>	Passes UL-1581 test (720 hours)
<b>Minimum Bending Radius</b>	10xCable Outside Diameter
<b>Temperature Range</b>	-30°C to 90°C



**ASH INSTRUMENTATION**  
**SINGLE / MULTI PAIR/TRIAD TCU/XLPE OR PVC OVERALL SHIELDED**  
**UL 13 / UL 2250, PLTC / ITC, 90°C / 300V, Sunlight & Oil Resistant, Flame Retardant**

**DIMENSIONS AND WEIGHTS**

ASH CABLES ITEM CODE	Cross Sectional Area (AWG) (No. of wire X SIZE mm)	NO. OF PAIRS/ TRIAD	Jacket Thickness (nom.) (mm)	Overall diameter Approx. (mm)	Net Weight Approx. (Kg/km)
I9FX-01P18AWG-UXXXX	<b>18(7X0.386)</b>	1P	0.9	6.00	47
I9FX-02P18AWG-UXXXX		2P	1.02	8.70	82
I9FX-04P18AWG-UXXXX		4P	1.27	10.50	140
I9FX-06P18AWG-UXXXX		6P	1.27	12.40	188
I9FX-08P18AWG-UXXXX		8P	1.27	13.80	235
I9FX-10P18AWG-UXXXX		10P	1.52	16.00	300
I9FX-12P18AWG-UXXXX		12P	1.52	16.50	344
I9FX-16P18AWG-UXXXX		16P	1.52	18.30	432
I9FX-24P18AWG-UXXXX		24P	1.78	23.00	645
I9FX-01T16AWG-UXXXX	<b>18(7X0.386)</b>	1T	0.9	6.30	57
I9FX-02T18AWG-UXXXX		2T	1.02	9.70	105
I9FX-04T18AWG-UXXXX		4T	1.27	11.70	185
I9FX-06T18AWG-UXXXX		6T	1.27	13.90	253
I9FX-08T18AWG-UXXXX		8T	1.27	15.50	320
I9FX-10T18AWG-UXXXX		10T	1.52	17.90	410
I9FX-12T18AWG-UXXXX		12T	1.52	18.50	472
I9FX-16T18AWG-UXXXX		16T	1.52	20.50	600
I9FX-24T18AWG-UXXXX		24T	1.78	25.90	895
I9FX-01P16AWG-UXXXX	<b>16 (7X0.488)</b>	1P	0.90	6.60	60
I9FX-02P16AWG-UXXXX		2P	1.02	9.70	106
I9FX-04P16AWG-UXXXX		4P	1.27	11.70	185
I9FX-06P16AWG-UXXXX		6P	1.27	13.80	255
I9FX-08P16AWG-UXXXX		8P	1.27	15.50	323
I9FX-10P16AWG-UXXXX		10P	1.52	18.00	415
I9FX-12P16AWG-UXXXX		12P	1.52	18.60	475
I9FX-16P16AWG-UXXXX		16P	1.52	20.60	605
I9FX-24P16AWG-UXXXX		24P	1.78	25.80	900
I9FX-01T16AWG-UXXXX	<b>16 (7X0.488)</b>	1T	0.90	7.00	75
I9FX-02T16AWG-UXXXX		2T	1.27	11.30	155
I9FX-04T16AWG-UXXXX		4T	1.27	13.00	250
I9FX-06T16AWG-UXXXX		6T	1.27	15.50	355
I9FX-08T16AWG-UXXXX		8T	1.52	17.80	470
I9FX-10T16AWG-UXXXX		10T	1.52	20.20	575
I9FX-12T16AWG-UXXXX		12T	1.52	20.80	665
I9FX-16T16AWG-UXXXX		16T	1.78	23.60	880
I9FX-24T16AWG-UXXXX		24T	1.78	29.20	1270

Dimensions and Weights are subject for manufacturing Tolerance.

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**DIMENSIONS AND WEIGHTS**

ASH CABLES ITEM CODE	Cross Sectional Area (AWG) (No. of wire X SIZE mm)	NO. OF PAIRS/ TRIAD	Jacket Thickness (nom.) (mm)	Overall diameter Approx. (mm)	Net Weight Approx. (Kg/km)
I9FX-01P14AWG-UXXXX	<b>14(7X0.615)</b>	1P	1.02	8.00	91
I9FX-02P14AWG-UXXXX		2P	1.27	12.40	178
I9FX-04P14AWG-UXXXX		4P	1.27	14.40	286
I9FX-06P14AWG-UXXXX		6P	1.52	17.60	422
I9FX-08P14AWG-UXXXX		8P	1.52	19.80	532
I9FX-10P14AWG-UXXXX		10P	1.52	22.90	675
I9FX-12P14AWG-UXXXX		12P	1.78	23.70	775
I9FX-16P14AWG-UXXXX		16P	1.78	26.30	990
I9FX-24P14AWG-UXXXX		24P	2.03	33.20	1470
I9FX-01T14AWG-UXXXX	<b>14(7X0.615)</b>	1T	1.02	8.50	115
I9FX-02T14AWG-UXXXX		2T	1.27	13.70	235
I9FX-04T14AWG-UXXXX		4T	1.52	16.50	410
I9FX-06T14AWG-UXXXX		6T	1.52	19.60	580
I9FX-08T14AWG-UXXXX		8T	1.52	22.00	740
I9FX-10T14AWG-UXXXX		10T	1.78	25.50	935
I9FX-12T14AWG-UXXXX		12T	1.78	26.40	1080
I9FX-16T14AWG-UXXXX		16T	1.78	29.40	1395
I9FX-24T14AWG-UXXXX		24T	2.03	37.50	2080
I9FX-01P12AWG-UXXXX	<b>12 (7X0.775)</b>	1P	1.02	9.10	115
I9FX-02P12AWG-UXXXX		2P	1.27	13.80	225
I9FX-04P12AWG-UXXXX		4P	1.52	16.60	400
I9FX-06P12AWG-UXXXX		6P	1.52	19.80	560
I9FX-08P12AWG-UXXXX		8P	1.52	22.30	720
I9FX-10P12AWG-UXXXX		10P	1.78	25.80	910
I9FX-12P12AWG-UXXXX		12P	1.78	26.80	1060
I9FX-16P12AWG-UXXXX		16P	1.78	29.80	1365
I9FX-24P12AWG-UXXXX		24P	2.03	37.40	2030
I9FX-01T12AWG-UXXXX	<b>12 (7X0.775)</b>	1T	1.02	9.60	155
I9FX-02T12AWG-UXXXX		2T	1.27	15.50	305
I9FX-04T12AWG-UXXXX		4T	1.27	18.70	555
I9FX-06T12AWG-UXXXX		6T	1.52	22.30	790
I9FX-08T12AWG-UXXXX		8T	1.78	25.60	1050
I9FX-10T12AWG-UXXXX		10T	1.78	29.10	1290
I9FX-12T12AWG-UXXXX		12T	1.78	30.10	1505
I9FX-16T12AWG-UXXXX		16T	2.03	34.00	1990
I9FX-24T12AWG-UXXXX		24T	2.29	42.80	2960

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