

#### 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

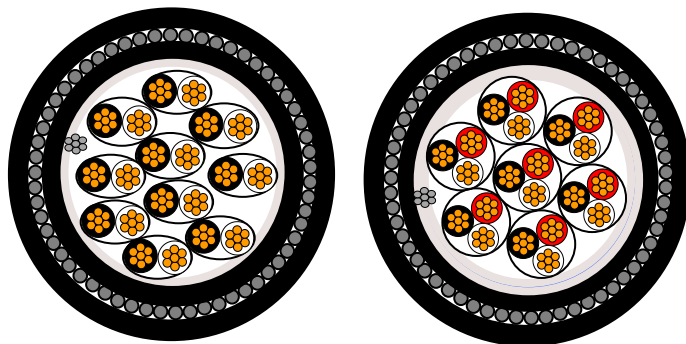
<b>CONDUCTOR</b>	Stranded, circular copper, per ASTM B3, 7 strands minimum; tinned, per ASTM B33
<b>INSULATION</b>	Crosslinked Polyethylene (XLPE) rated 90°C or Polyvinyl Chloride (PVC) rated 90°C.
<b>PAIRS/TRIADS</b>	Two or Three cores are twisted into Pairs/Triads, in suitable lay length.
<b>COLOR 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>INNER JACKET</b>	Poly Vinyl Chloride Flame Retardant
<b>ARMOR</b>	Spirally applied soft Galvanized Round Steel Wires
<b>OUTER JACKET</b>	Poly Vinyl Chloride Flame Retardant Sunlight and Oil Resistant.

#### ELECTRICAL PROPERTIES

CONDUCTOR (DC) RESISTANCE @ 20°C(Ω/Km)	MATERIAL TYPE	UNIT	CONDUCTOR SIZE (AWG)			
			18	16	14	12
	PLAIN Cu	Ω/Km	≤21.80	≤13.70	≤8.60	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>	10x Cable Outside Diameter
<b>Temperature Range</b>	-30°C to 90°C



**DIMENSIONS AND WEIGHTS**

ASH CABLES ITEM CODE	Cross Sectional Area (AWG) (No. of wire X SIZE mm)	NO. OF PAIRS/TRIAD	Dia. Of Armor Wire (mm)	Jacket Thickness (nom.) (mm)	Overall diameter Approx. (mm)	Net Weight Approx. (Kg/km)
I9FX-01P18AWG-UXXXX	<b>18(7X0.386)</b>	1P	0.90	1.02	12.80	245
I9FX-02P18AWG-UXXXX		2P	0.90	1.27	17.00	410
I9FX-04P18AWG-UXXXX		4P	1.25	1.27	19.50	600
I9FX-06P18AWG-UXXXX		6P	1.25	1.27	22.50	755
I9FX-08P18AWG-UXXXX		8P	1.60	1.27	25.00	1010
I9FX-10P18AWG-UXXXX		10P	1.60	1.27	27.20	1160
I9FX-12P18AWG-UXXXX		12P	1.60	1.27	28.00	1245
I9FX-16P18AWG-UXXXX		16P	2.00	1.27	31.20	1670
I9FX-24P18AWG-UXXXX		24P	2.00	1.27	35.50	2180
I9FX-01T18AWG-UXXXX	<b>18(7X0.386)</b>	1T	0.90	1.02	13.20	275
I9FX-02T18AWG-UXXXX		2T	0.90	1.27	18.20	470
I9FX-04T18AWG-UXXXX		4T	1.25	1.27	21.00	700
I9FX-06T18AWG-UXXXX		6T	1.60	1.27	25.00	1010
I9FX-08T18AWG-UXXXX		8T	1.60	1.27	27.00	1200
I9FX-10T18AWG-UXXXX		10T	2.00	1.27	31.00	1450
I9FX-12T18AWG-UXXXX		12T	2.00	1.27	31.90	1750
I9FX-16T18AWG-UXXXX		16T	2.00	1.27	34.20	2030
I9FX-24T18AWG-UXXXX		24T	2.50	1.27	38.50	3050
I9FX-01P16AWG-UXXXX	<b>16 (7X0.488)</b>	1P	0.90	1.02	13.50	275
I9FX-02P16AWG-UXXXX		2P	0.90	1.27	18.10	450
I9FX-04P16AWG-UXXXX		4P	1.25	1.27	20.70	680
I9FX-06P16AWG-UXXXX		6P	1.60	1.27	24.50	720
I9FX-08P16AWG-UXXXX		8P	1.60	1.27	26.60	1010
I9FX-10P16AWG-UXXXX		10P	1.60	1.27	29.20	1300
I9FX-12P16AWG-UXXXX		12P	2.00	1.27	31.20	1670
I9FX-16P16AWG-UXXXX		16P	2.00	1.27	33.80	1970
I9FX-24P16AWG-UXXXX		24P	2.50	1.52	41.20	2900
I9FX-01T16AWG-UXXXX	<b>16 (7X0.488)</b>	1T	0.90	1.02	14.00	300
I9FX-02T16AWG-UXXXX		2T	1.25	1.27	17.00	630
I9FX-04T16AWG-UXXXX		4T	1.25	1.27	23.00	850
I9FX-06T16AWG-UXXXX		6T	1.60	1.27	26.50	1210
I9FX-08T16AWG-UXXXX		8T	2.00	1.27	29.00	1410
I9FX-10T16AWG-UXXXX		10T	2.00	1.27	33.10	1900
I9FX-12T16AWG-UXXXX		12T	2.00	1.27	34.10	2000
I9FX-16T16AWG-UXXXX		16T	2.50	1.27	37.00	2400
I9FX-24T16AWG-UXXXX		24T	2.50	1.52	45.50	3650

Dimensions and Weights are subject for manufacturing Tolerance.

### DIMENSIONS AND WEIGHTS

ASH CABLES ITEM CODE	Cross Sectional Area (AWG) (No. of wire X SIZE mm)	NO. OF PAIRS/TRIAD	Dia. Of Armor Wire (mm)	Jacket Thickness (nom.) (mm)	Overall diameter Approx. (mm)	Net Weight Approx. (Kg/km)
I9FX-01P14AWG-UXXXX	14(7X0.615)	1P	0.90	1.02	14.20	315
I9FX-02P14AWG-UXXXX		2P	1.25	1.27	20.10	610
I9FX-04P14AWG-UXXXX		4P	1.25	1.27	22.80	820
I9FX-06P14AWG-UXXXX		6P	1.60	1.27	26.50	1150
I9FX-08P14AWG-UXXXX		8P	1.60	1.27	28.80	1400
I9FX-10P14AWG-UXXXX		10P	2.00	1.27	33.10	1870
I9FX-12P14AWG-UXXXX		12P	2.00	1.27	34.00	2020
I9FX-16P14AWG-UXXXX		16P	2.00	1.27	36.70	2400
I9FX-24P14AWG-UXXXX		24P	2.50	1.52	45.50	3650
I9FX-01T14AWG-UXXXX	14(7X0.615)	1T	0.90	1.27	15.20	350
I9FX-02T14AWG-UXXXX		2T	1.25	1.27	21.50	730
I9FX-04T14AWG-UXXXX		4T	1.60	1.27	25.20	1120
I9FX-06T14AWG-UXXXX		6T	1.60	1.27	28.80	1450
I9FX-08T14AWG-UXXXX		8T	2.00	1.27	32.70	1950
I9FX-10T14AWG-UXXXX		10T	2.00	1.27	36.10	2310
I9FX-12T14AWG-UXXXX		12T	2.00	1.27	37.00	2500
I9FX-16T14AWG-UXXXX		16T	2.50	1.27	41.60	3350
I9FX-24T14AWG-UXXXX		24T	2.50	1.52	50.30	4550
I9FX-01P12AWG-UXXXX	12 (7X0.775)	1P	0.90	1.27	16.20	400
I9FX-02P12AWG-UXXXX		2P	1.25	1.27	21.60	720
I9FX-04P12AWG-UXXXX		4P	1.60	1.27	25.20	1100
I9FX-06P12AWG-UXXXX		6P	1.60	1.27	28.80	1420
I9FX-08P12AWG-UXXXX		8P	2.00	1.27	31.70	1950
I9FX-10P12AWG-UXXXX		10P	2.00	1.27	33.00	2310
I9FX-12P12AWG-UXXXX		12P	2.00	1.27	37.10	2500
I9FX-16P12AWG-UXXXX		16P	2.50	1.27	41.80	3370
I9FX-24P12AWG-UXXXX		24P	2.50	1.52	46.40	4550
I9FX-01T12AWG-UXXXX	12 (7X0.775)	1T	0.90	1.27	17.00	450
I9FX-02T12AWG-UXXXX		2T	1.60	1.27	24.50	1020
I9FX-04T12AWG-UXXXX		4T	1.60	1.27	27.40	1350
I9FX-06T12AWG-UXXXX		6T	2.00	1.27	32.80	2000
I9FX-08T12AWG-UXXXX		8T	2.00	1.27	35.70	2440
I9FX-10T12AWG-UXXXX		10T	2.50	1.27	40.50	3100
I9FX-12T12AWG-UXXXX		12T	2.50	1.52	42.80	3500
I9FX-16T12AWG-UXXXX		16T	2.50	1.52	46.50	4300
I9FX-24T12AWG-UXXXX		24T	2.50	1.52	56.00	5900

Dimensions and Weights are subject for manufacturing Tolerance.