

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

CONDUCTOR	Stranded, circular copper, per ASTM B3, 7 strands minimum: tinned, per ASTM B33
INSULATION	Crosslinked Polyethylene (XLPE) rated 90°C or Polyvinyl Chloride (PVC) rated 90°C.
COLOR CODES	-Pairs: Black/White with successive numbers on each core. -Triads: Black/White/Red with successive numbers on each core.
PAIRS/TRIADS	Two or Three cores are twisted into Pairs/Triads, in suitable lay length.
INDIVIDUAL SHIELDING	Aluminum-Polyester (AL-PET foil) laminated tape with 100% coverage and suitable overlap, in contact with stranded tinned copper drain wire.
ASSEMBLY	The required number of pairs/triads are assembled with non-hygroscopic fillers (if required) and wrapped with a polyester binder tape
OVERALL SHIELDING	Aluminum-Polyester (AL-PET foil) laminated tape with 100% coverage and suitable overlap, in contact with stranded tinned copper drain wire.
INNER JACKET	Poly Vinyl Chloride (PVC) Flame Retardant
ARMOR	Spirally applied soft Galvanized Round Steel Wires
OUTER JACKET	Poly Vinyl Chloride (PVC) Flame Retardant Sunlight and Oil Resistant.

ELECTRICAL PROPERTIES

			CONDUCTOR SIZE (AWG)			
	MATERIAL TYPE	UNIT	18	16	14	12
CONDUCTOR (DC) RESISTANCE @ 20°C(Ω/Km)	PLAIN Cu	Ω/Km	≤21.80	≤13.70	≤8.62	5.41
	TINNED Cu	Ω/Km	≤22.70	≤14.30	≤8.96	5.61
Insulation Resistance (min.)		MΩ/Km	10	10	10	10
Mutual Capacitance	XLPE	nF/Km	150	150	150	150
	PVC	nF/Km	250	250	250	250
Inductance to Resistance Ratio	L/R	μH/Ω	25	40	60	100
Voltage Test	1.5 Kv AC (2 sec)					
Voltage Rating	300V					

PHYSICAL & ENVIRONMENTAL PROPERTIES

Flame Retardant	Flame Retardance Vertical Tray Test of UL
Oil Resistance	Passes Oil test of UL.
Direct Burial	Passes Crush test of UL.
Sunlight Resistance	Passes UL-1581 test (720 hours)
Minimum Bending Radius	10xCable Outside Diameter
Temperature Range	-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)
IAFX-02P18AWG-WXXXX	18(7X0.386)	2P	0.90	1.27	17.80	445
IAFX-04P18AWG-WXXXX		4P	1.25	1.27	20.30	660
IAFX-06P18AWG-WXXXX		6P	1.25	1.27	23.30	860
IAFX-08P18AWG-WXXXX		8P	1.60	1.27	26.10	1120
IAFX-10P18AWG-WXXXX		10P	1.60	1.27	28.30	1300
IAFX-12P18AWG-WXXXX		12P	1.60	1.27	29.20	1400
IAFX-16P18AWG-WXXXX		16P	2.00	1.27	32.00	1860
IAFX-24P18AWG-WXXXX		24P	2.50	1.27	39.50	2750
IAFX-02T18AWG-WXXXX	18(7X0.386)	2T	1.25	1.27	20.30	610
IAFX-04T18AWG-WXXXX		4T	1.25	1.27	23.00	830
IAFX-06T18AWG-WXXXX		6T	1.60	1.27	26.80	1170
IAFX-08T18AWG-WXXXX		8T	1.60	1.27	29.10	1360
IAFX-10T18AWG-WXXXX		10T	2.00	1.27	33.50	1820
IAFX-12T18AWG-WXXXX		12T	2.00	1.27	34.20	1970
IAFX-16T18AWG-WXXXX		16T	2.00	1.27	37.10	2300
IAFX-24T18AWG-WXXXX		24T	2.50	1.52	46.00	3570
IAFX-02P16AWG-WXXXX	16 (7X0.488)	2P	1.25	1.27	19.50	580
IAFX-04P16AWG-WXXXX		4P	1.25	1.27	21.50	740
IAFX-06P16AWG-WXXXX		6P	1.60	1.27	25.50	1090
IAFX-08P16AWG-WXXXX		8P	1.60	1.27	27.80	1280
IAFX-10P16AWG-WXXXX		10P	1.60	1.27	31.80	1740
IAFX-12P16AWG-WXXXX		12P	2.00	1.27	32.60	1850
IAFX-16P16AWG-WXXXX		16P	2.00	1.27	35.20	2160
IAFX-24P16AWG-WXXXX		24P	2.50	1.52	43.60	3300
IAFX-02T16AWG-WXXXX	16 (7X0.488)	2T	1.25	1.27	21.40	750
IAFX-04T16AWG-WXXXX		4T	1.60	1.27	25.20	1080
IAFX-06T16AWG-WXXXX		6T	1.60	1.27	28.60	1340
IAFX-08T16AWG-WXXXX		8T	2.00	1.27	32.50	1830
IAFX-10T16AWG-WXXXX		10T	2.00	1.27	35.80	2125
IAFX-12T16AWG-WXXXX		12T	2.00	1.27	36.70	2300
IAFX-16T16AWG-WXXXX		16T	2.50	1.27	41.50	3100
IAFX-24T16AWG-WXXXX		24T	2.50	1.52	49.70	4150

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)
IAFX-02P14AWG-WXXXX	14(7X0.615)	2P	1.25	1.27	20.70	670
IAFX-04P14AWG-WXXXX		4P	1.25	1.27	23.60	910
IAFX-06P14AWG-WXXXX		6P	1.60	1.27	24.30	1280
IAFX-08P14AWG-WXXXX		8P	2.00	1.27	31.20	1750
IAFX-10P14AWG-WXXXX		10P	2.00	1.27	34.30	2040
IAFX-12P14AWG-WXXXX		12P	2.00	1.27	35.20	2200
IAFX-16P14AWG-WXXXX		16P	2.00	1.27	38.20	2600
IAFX-24P14AWG-WXXXX		24P	2.50	1.52	47.50	3970
IAFX-02T14AWG-WXXXX	14(7X0.615)	2T	1.25	1.27	23.60	840
IAFX-04T14AWG-WXXXX		4T	1.60	1.27	27.10	1250
IAFX-06T14AWG-WXXXX		6T	2.00	1.27	32.30	1835
IAFX-08T14AWG-WXXXX		8T	2.00	1.27	35.30	2170
IAFX-10T14AWG-WXXXX		10T	2.50	1.27	40.00	2830
IAFX-12T14AWG-WXXXX		12T	2.50	1.27	41.60	3150
IAFX-16T14AWG-WXXXX		16T	2.50	1.52	45.60	3800
IAFX-24T14AWG-WXXXX		24T	2.50	1.52	46.30	5130
IAFX-02P12AWG-WXXXX	12 (7X0.775)	2P	1.25	1.27	22.80	810
IAFX-04P12AWG-WXXXX		4P	1.60	1.27	26.20	1220
IAFX-06P12AWG-WXXXX		6P	2.00	1.27	31.20	1780
IAFX-08P12AWG-WXXXX		8P	2.00	1.27	34.10	2100
IAFX-10P12AWG-WXXXX		10P	2.00	1.27	37.50	2470
IAFX-12P12AWG-WXXXX		12P	2.00	1.27	38.50	2680
IAFX-16P12AWG-WXXXX		16P	2.50	1.52	40.20	3660
IAFX-24P12AWG-WXXXX		24P	2.50	1.52	49.10	4990
IAFX-02T12AWG-WXXXX	12 (7X0.775)	2T	1.60	1.27	26.20	1120
IAFX-04T12AWG-WXXXX		4T	1.60	1.27	29.40	1520
IAFX-06T12AWG-WXXXX		6T	2.00	1.27	35.20	2230
IAFX-08T12AWG-WXXXX		8T	2.00	1.27	38.60	2650
IAFX-10T12AWG-WXXXX		10T	2.50	1.52	44.80	3600
IAFX-12T12AWG-WXXXX		12T	2.50	1.52	46.00	3920
IAFX-16T12AWG-WXXXX		16T	2.50	1.52	50.20	4670
IAFX-24T12AWG-WXXXX		24T	2.50	1.52	61.20	6540

Dimensions and Weights are subject for manufacturing Tolerance.