

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

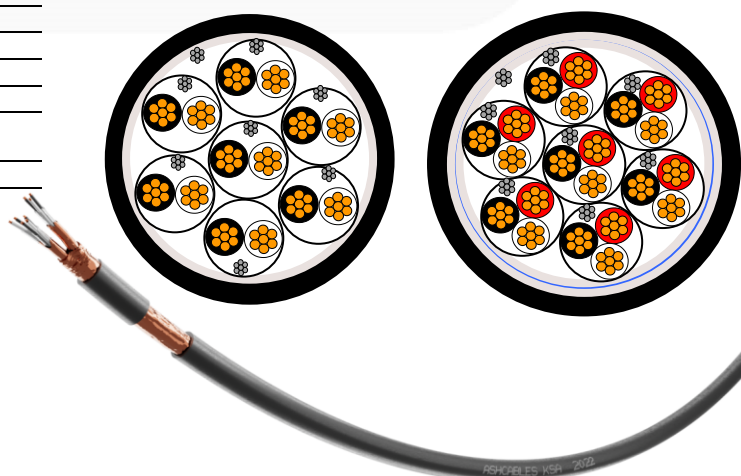
CONDUCTOR	Stranded, circular copper, per ASTM B3, 7 strands minimum; tinned, per ASTM B33
INSULATION	Crosslinked Polyethylene (XLPE) rated 90°C or Polyvinyl Chloride (PVC) rated 90°C.
COLOR CODES	-Pairs : Black/White with successive numbers on each core. -Triads: Black/White/Red with successive numbers 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.
OUTER JACKET	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	≤8.620	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)					

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	Jacket Thickness (nom.) (mm)	Overall diameter Approx. (mm)	Net Weight Approx. (Kg/km)
IAFX-02P18AWG-UXXXX	18(7X0.386)	2P	1.02	9.30	100
IAFX-04P18AWG-UXXXX		4P	1.27	11.30	170
IAFX-06P18AWG-UXXXX		6P	1.27	13.50	235
IAFX-08P18AWG-UXXXX		8P	1.27	14.80	300
IAFX-10P18AWG-UXXXX		10P	1.52	17.20	380
IAFX-12P18AWG-UXXXX		12P	1.52	18.50	445
IAFX-16P18AWG-UXXXX		16P	1.52	20.50	565
IAFX-24P18AWG-UXXXX		24P	1.78	24.60	825
IAFX-02T18AWG-UXXXX	18(7X0.386)	2T	1.02	10.70	140
IAFX-04T18AWG-UXXXX		4T	1.27	12.70	220
IAFX-06T18AWG-UXXXX		6T	1.27	15.00	310
IAFX-08T18AWG-UXXXX		8T	1.27	17.50	415
IAFX-10T18AWG-UXXXX		10T	1.52	19.60	500
IAFX-12T18AWG-UXXXX		12T	1.52	20.50	575
IAFX-16T18AWG-UXXXX		16T	1.52	23.20	765
IAFX-24T18AWG-UXXXX		24T	1.78	28.50	1100
IAFX-02P16AWG-UXXXX	16 (7X0.488)	2P	1.27	11.00	135
IAFX-04P16AWG-UXXXX		4P	1.27	12.50	220
IAFX-06P16AWG-UXXXX		6P	1.27	14.80	305
IAFX-08P16AWG-UXXXX		8P	1.52	17.10	410
IAFX-10P16AWG-UXXXX		10P	1.52	19.50	500
IAFX-12P16AWG-UXXXX		12P	1.52	20.00	580
IAFX-16P16AWG-UXXXX		16P	1.52	22.20	740
IAFX-24P16AWG-UXXXX		24P	1.78	27.80	1100
IAFX-02T16AWG-UXXXX	16 (7X0.488)	2T	1.27	12.60	180
IAFX-04T16AWG-UXXXX		4T	1.27	14.60	295
IAFX-06T16AWG-UXXXX		6T	1.52	17.90	430
IAFX-08T16AWG-UXXXX		8T	1.52	20.00	550
IAFX-10T16AWG-UXXXX		10T	1.78	23.20	705
IAFX-12T16AWG-UXXXX		12T	1.78	23.80	805
IAFX-16T16AWG-UXXXX		16T	1.78	26.50	1030
IAFX-24T16AWG-UXXXX		24T	2.03	33.50	1530

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	Jacket Thickness (nom.) (mm)	Overall diameter Approx. (mm)	Net Weight Approx. (Kg/km)
IAFX-02P14AWG-UXXXX	14(7X0.615)	2P	1.27	13.20	190
IAFX-04P14AWG-UXXXX		4P	1.27	16.10	365
IAFX-06P14AWG-UXXXX		6P	1.52	19.10	515
IAFX-08P14AWG-UXXXX		8P	1.52	21.50	655
IAFX-10P14AWG-UXXXX		10P	1.78	25.00	835
IAFX-12P14AWG-UXXXX		12P	1.78	25.80	960
IAFX-16P14AWG-UXXXX		16P	1.78	28.70	1230
IAFX-24P14AWG-UXXXX		24P	2.03	36.50	1835
IAFX-02T14AWG-UXXXX	14(7X0.615)	2T	1.27	14.80	270
IAFX-04T14AWG-UXXXX		4T	1.52	17.80	475
IAFX-06T14AWG-UXXXX		6T	1.52	21.50	675
IAFX-08T14AWG-UXXXX		8T	1.78	24.60	895
IAFX-10T14AWG-UXXXX		10T	1.78	28.00	1095
IAFX-12T14AWG-UXXXX		12T	1.78	28.80	1275
IAFX-16T14AWG-UXXXX		16T	2.03	32.50	1685
IAFX-24T14AWG-UXXXX		24T	2.03	40.70	2455
IAFX-02P12AWG-UXXXX	12 (7X0.775)	2P	1.27	14.60	245
IAFX-04P12AWG-UXXXX		4P	1.52	17.50	435
IAFX-06P12AWG-UXXXX		6P	1.52	21.00	620
IAFX-08P12AWG-UXXXX		8P	1.78	24.20	820
IAFX-10P12AWG-UXXXX		10P	1.78	27.50	1010
IAFX-12P12AWG-UXXXX		12P	1.78	28.50	1170
IAFX-16P12AWG-UXXXX		16P	1.78	31.50	1515
IAFX-24P12AWG-UXXXX		24P	2.03	40.00	2245
IAFX-02T12AWG-UXXXX	12 (7X0.775)	2T	1.52	17.70	355
IAFX-04T12AWG-UXXXX		4T	1.52	20.80	600
IAFX-06T12AWG-UXXXX		6T	1.78	25.20	885
IAFX-08T12AWG-UXXXX		8T	1.78	28.50	1140
IAFX-10T12AWG-UXXXX		10T	2.03	32.70	1430
IAFX-12T12AWG-UXXXX		12T	2.03	33.80	1670
IAFX-16T12AWG-UXXXX		16T	2.03	37.70	2160
IAFX-24T12AWG-UXXXX		24T	2.29	47.50	3210

Dimensions and Weights are subject for manufacturing Tolerance.