

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

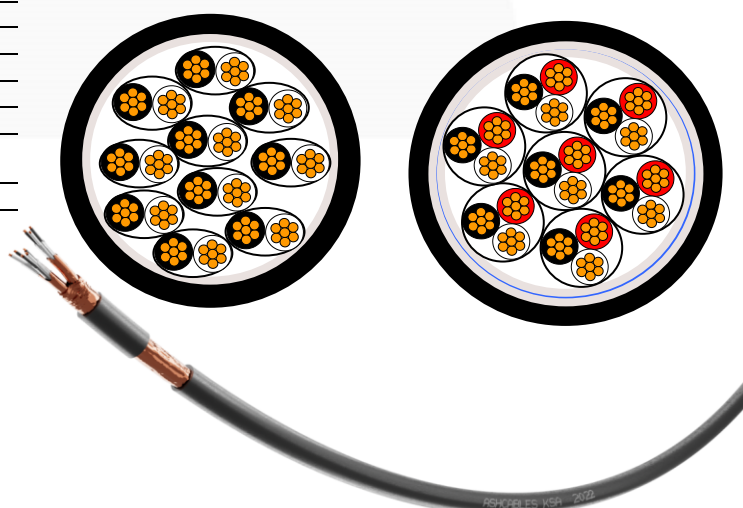
CONDUCTOR	Stranded, circular copper, per ASTM B3, 7 strands minimum: tinned, per ASTM B33
INSULATION	Crosslinked Polyethylene (XLPE) rated 90°C or Polyvinyl Chloride (PVC) rated 90°C.
PAIRS/TRIADS	Two or Three cores are twisted into Pairs/Triads, in suitable lay length.
COLOR CODES	-Pairs: Black/White with successive numbers on each core. -Triads: Black/White/Red with successive numbers on each core.
ASSEMBLY	The required number of pairs/triads are assembled with non-hygroscopic fillers (if required) and wrapped with a polyester binder tape
OUTER JACKET	Poly Vinyl Chloride Flame Retardant Sunlight and Oil Resistant.

ELECTRICAL PROPERTIES

CONDUCTOR (DC) RESISTANCE @ 20°C(Ω/Km)			CONDUCTOR SIZE (AWG)			
	MATERIAL TYPE	UNIT	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



ASH INSTRUMENTATION
SINGLE / MULTI PAIR/TRIAD TCU/XLPE or PVC UNSHIELDED
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)
I8FX-01P18AWG-UXXXX	18(7X0.386)	1P	0.9	5.70	40
I8FX-02P18AWG-UXXXX		2P	1.02	8.5	74
I8FX-04P18AWG-UXXXX		4P	1.27	10.30	130
I8FX-06P18AWG-UXXXX		6P	1.27	12.10	180
I8FX-08P18AWG-UBK6D		8P	1.27	13.50	225
I8FX-10P18AWG-UXXXX		10P	1.52	15.80	290
I8FX-12P18AWG-UXXXX		12P	1.52	16.30	335
I8FX-16P18AWG-UXXXX		16P	1.52	18.00	422
I8FX-24P18AWG-UXXXX		24P	1.78	22.60	630
I8FX-01T18AWG-UXXXX	18(7X0.386)	1T	0.9	6.00	50
I8FX-02T18AWG-UXXXX		2T	1.02	9.50	95
I8FX-04T18AWG-UXXXX		4T	1.27	11.40	175
I8FX-06T18AWG-UXXXX		6T	1.27	13.50	245
I8FX-08T18AWG-UXXXX		8T	1.27	15.00	310
I8FX-10T18AWG-UXXXX		10T	1.52	17.50	400
I8FX-12T18AWG-UXXXX		12T	1.52	18.20	460
I8FX-16T18AWG-UXXXX		16T	1.52	20.20	590
I8FX-24T18AWG-UXXXX		24T	1.78	25.40	880
I8FX-01P16AWG-UXXXX	16 (7X0.488)	1P	0.90	6.30	50
I8FX-02P16AWG-UXXXX		2P	1.02	9.50	100
I8FX-04P16AWG-UXXXX		4P	1.27	11.50	175
I8FX-06P16AWG-UXXXX		6P	1.27	13.50	245
I8FX-08P16AWG-UXXXX		8P	1.27	15.20	315
I8FX-10P16AWG-UXXXX		10P	1.52	17.70	400
I8FX-12P16AWG-UXXXX		12P	1.52	18.30	465
I8FX-16P16AWG-UXXXX		16P	1.52	20.30	595
I8FX-24P16AWG-UXXXX		24P	1.78	25.50	890
I8FX-01T16AWG-UXXXX	16 (7X0.488)	1T	0.90	6.70	68
I8FX-02T16AWG-UXXXX		2T	1.27	11.00	145
I8FX-04T16AWG-UXXXX		4T	1.27	12.80	240
I8FX-06T16AWG-UXXXX		6T	1.27	15.20	345
I8FX-08T16AWG-UXXXX		8T	1.52	17.60	460
I8FX-10T16AWG-UXXXX		10T	1.52	20.00	565
I8FX-12T16AWG-UXXXX		12T	1.52	20.60	650
I8FX-16T16AWG-UXXXX		16T	1.78	23.30	870
I8FX-24T16AWG-UXXXX		24T	1.78	28.80	1255

Dimensions and Weights are subject for manufacturing Tolerance.

ASH INSTRUMENTATION
SINGLE / MULTI PAIR/TRIAD TCU/XLPE or PVC UNSHIELDED
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)
I8FX-01P14AWG-UXXXX	14(7X0.615)	1P	1.02	7.90	80
I8FX-02P14AWG-UXXXX		2P	1.27	12.00	160
I8FX-04P14AWG-UXXXX		4P	1.27	14.00	260
I8FX-06P14AWG-UXXXX		6P	1.52	17.20	390
I8FX-08P14AWG-UXXXX		8P	1.52	19.40	495
I8FX-10P14AWG-UXXXX		10P	1.52	21.90	605
I8FX-12P14AWG-UXXXX		12P	1.78	23.20	730
I8FX-16P14AWG-UXXXX		16P	1.78	25.80	935
I8FX-24P14AWG-UXXXX		24P	2.03	32.50	1390
I8FX-01T14AWG-UXXXX	14(7X0.615)	1T	1.02	8.30	105
I8FX-02T14AWG-UXXXX		2T	1.27	13.40	212
I8FX-04T14AWG-UXXXX		4T	1.52	16.20	382
I8FX-06T14AWG-UXXXX		6T	1.52	19.30	540
I8FX-08T14AWG-UXXXX		8T	1.52	21.70	695
I8FX-10T14AWG-UXXXX		10T	1.78	25.20	885
I8FX-12T14AWG-UXXXX		12T	1.78	26.10	1030
I8FX-16T14AWG-UXXXX		16T	1.78	29.00	1330
I8FX-24T14AWG-UXXXX		24T	2.03	36.50	1980
I8FX-01P12AWG-UXXXX	12 (7X0.775)	1P	1.02	8.80	108
I8FX-02P12AWG-UXXXX		2P	1.27	13.50	215
I8FX-04P12AWG-UXXXX		4P	1.52	16.40	385
I8FX-06P12AWG-UXXXX		6P	1.52	19.50	550
I8FX-08P12AWG-UXXXX		8P	1.52	22.00	705
I8FX-10P12AWG-UXXXX		10P	1.78	25.50	895
I8FX-12P12AWG-UXXXX		12P	1.78	26.40	1045
I8FX-16P12AWG-UXXXX		16P	1.78	29.40	1345
I8FX-24P12AWG-UXXXX		24P	2.03	37.00	2010
I8FX-01T12AWG-UXXXX	12 (7X0.775)	1T	1.02	9.30	145
I8FX-02T12AWG-UXXXX		2T	1.27	15.20	295
I8FX-04T12AWG-UXXXX		4T	1.27	18.30	540
I8FX-06T12AWG-UXXXX		6T	1.52	22.00	775
I8FX-08T12AWG-UXXXX		8T	1.78	25.30	1030
I8FX-10T12AWG-UXXXX		10T	1.78	28.70	1272
I8FX-12T12AWG-UXXXX		12T	1.78	29.70	1490
I8FX-16T12AWG-UXXXX		16T	2.03	33.60	1975
I8FX-24T12AWG-UXXXX		24T	2.29	42.30	2940

Dimensions and Weights are subject for manufacturing Tolerance.