

APPLICATION

--For transmission of signals in instrument and control systems (Interconnection of electrical equipment and instruments.) used within industrial process manufacturing plants for communication, data and voice transmission signals and services. 500V rated voltage.

STANDARDS

BS EN 50288-7	Multi-element metallic cables used in analogue and digital communication and control. Part 7: Sectional specification for instrumentation and control cables.
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CONSTRUCTION DETAILS

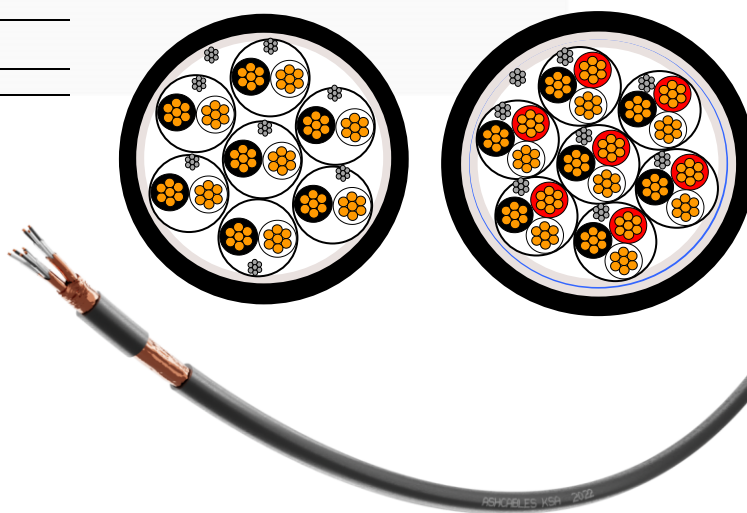
CONDUCTOR	Plain Annealed copper to ASTM B3, Stranded conductor Class 2 of BS EN 60228.
INSULATION	Crosslinked Polyethylene (XLPE) rated 90°C or Polyvinyl Chloride (PVC) rated 90°C.
COLOR CODES	-Pairs : Black/White with successive numbers on each core. -Triads: Black/White/Red with successive numbers 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. (0.50 mm ²)
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. (0.50 mm ²)
OUTER JACKET	Poly Vinyl Chloride Flame Retardant Sunlight or Low Smoke Zero Halogen Free (LSZH) type.

ELECTRICAL PROPERTIES

CONDUCTOR (DC) RESISTANCE @ 20°C (Ω/Km)	MATERIAL TYPE	UNIT	CONDUCTOR SIZE (mm ²)			
			0.50	0.75	1.0	1.5
	PLAIN Cu	Ω/Km	≤21.80	≤13.70	≤8.620	5.41
	TINNED Cu	Ω/Km	≤22.70	≤14.30	≤8.96	5.61
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	2 KV (60 sec)					

PHYSICAL & ENVIRONMENTAL PROPERTIES

Flame Retardant	IEC 60332-1-2, IEC 60332-3-24
Minimum Bending Radius	10xCable Outside Diameter
Temperature Range	-30°C to 70°C and 90°C



DIMENSIONS AND WEIGHTS

ASH CABLES ITEM CODE	Cross Sectional Area (mm ²) (No. of wire X SIZE mm)	NO. OF PAIRS/ TRIAD	Overall diameter Approx. (mm)	Net Weight Approx. (Kg/km)
I33X-01P00050-UBK6D	0.50(7X0.30)	2P	9.30	100
I33X-02P00050-UBK6D		4P	11.20	166
I33X-04P00050-UBK6D		6P	13.40	230
I33X-06P00050-UBK6D		8P	14.70	295
I33X-08P00050-UBK6D		10P	17.10	375
I33X-10P00050-UBK6D		12P	18.30	440
I33X-12P00050-UBK6D		16P	20.30	560
I33X-16P00050-UBK6D		24P	24.40	800
I33X-24P00050-UBK6D	0.50(7X0.30)	2T	10.70	140
I33X-01T00050-UBK6D		4T	12.60	215
I33X-02T00050-UBK6D		6T	14.90	305
I33X-04T00050-UBK6D		8T	17.40	410
I33X-06T00050-UBK6D		10T	19.50	495
I33X-08T00050-UBK6D		12T	20.40	570
I33X-10T00050-UBK6D		16T	23.10	760
I33X-12T00050-UBK6D		24T	28.40	1095
I33X-01P00075-UBK6D	0.75(7X0.37)	2P	11.00	135
I33X-02P00075-UBK6D		4P	12.30	218
I33X-04P00075-UBK6D		6P	14.70	305
I33X-06P00075-UBK6D		8P	17.00	405
I33X-08P00075-UBK6D		10P	19.40	515
I33X-10P00075-UBK6D		12P	20.20	570
I33X-12P00075-UBK6D		16P	22.20	735
I33X-16P00075-UBK6D		24P	29.00	1095
I3X-24P00075-UBK6D	0.75(7X0.37)	2T	12.60	180
I33X-01T00075-UBK6D		4T	14.60	295
I33X-02T00075-UBK6D		6T	17.90	430
I33X-04T00075-UBK6D		8T	20.00	550
I33X-06T00075-UBK6D		10T	23.20	705
I33X-08T00075-UBK6D		12T	23.80	805
I33X-10T00075-UBK6D		16T	27.50	10.25
I33X-12T00075-UBK6D		24T	34.50	1350

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	Overall diameter Approx. (mm)	Net Weight Approx. (Kg/km)
I33X-01P00100-UBK6D	1.0(7X0.43)	2P	13.00	185
I33X-02P00100-UBK6D		4P	16.00	360
I33X-04P00100-UBK6D		6P	19.00	510
I33X-06P00100-UBK6D		8P	21.40	650
I33X-08P00100-UBK6D		10P	24.90	820
I33X-10P00100-UBK6D		12P	25.70	950
I33X-12P00100-UBK6D		16P	28.50	1210
I33X-16P00100-UBK6D		24P	35.90	1830
I33X-24P00100-UBK6D	1.0(7X0.43)	2T	14.70	265
I33X-01T00100-UBK6D		4T	17.70	470
I33X-02T00100-UBK6D		6T	21.40	670
I33X-04T00100-UBK6D		8T	24.50	90
I33X-06T00100-UBK6D		10T	27.90	1090
I33X-08T00100-UBK6D		12T	28.70	1265
I33X-10T00100-UBK6D		16T	32.40	1680
I33X-12T00100-UBK6D		24T	38.70	1905
I33X-01P00150-UBK6D	1.5(7X0.525)	2P	14.50	240
I33X-02P00150-UBK6D		4P	17.40	430
I33X-04P00150-UBK6D		6P	20.90	615
I33X-06P00150-UBK6D		8P	24.10	815
I33X-08P00150-UBK6D		10P	27.40	1005
I33X-10P00150-UBK6D		12P	28.30	1165
I33X-12P00150-UBK6D		16P	30.50	1510
I33X-16P00150-UBK6D		24P	36.50	1930
I33X-24P00150-UBK6D	1.5(7X0.525)	2T	17.50	350
I33X-01T00150-UBK6D		4T	20.70	595
I33X-02T00150-UBK6D		6T	25.10	880
I33X-04T00150-UBK6D		8T	28.40	1130
I33X-06T00150-UBK6D		10T	32.60	1410
I33X-08T00150-UBK6D		12T	33.70	1650
I33X-10T00150-UBK6D		16T	37.50	2150
I33X-12T00150-UBK6D		24T	45.50	2210

Dimensions and Weights are subject for manufacturing Tolerance.