

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

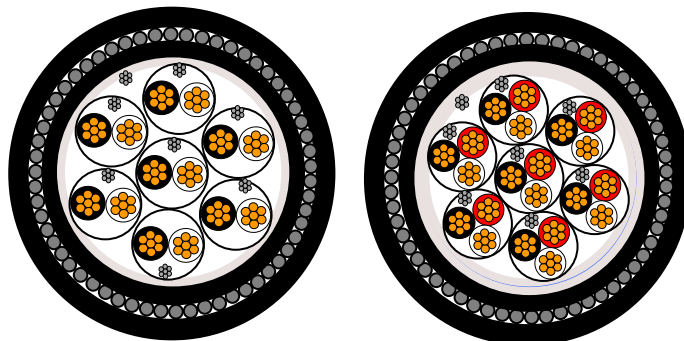
CONDUCTOR	Plain Annealed copper to ASTM B3, Stranded conductor Class 2 of BS EN 60228.
INSULATION	Crosslinked Polyethylene (XLPE) rated 90°C or Polyvinyl Chloride (PVC) rated 90°C.
COLOR CODES	-Pairs: Black/White with successive numbers on each core. -Triads: Black/White/Red with successive numbers on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

ELECTRICAL PROPERTIES

			CONDUCTOR SIZE (mm ²)			
	MATERIAL TYPE	UNIT	0.50	0.75	1.0	1.5
CONDUCTOR (DC) RESISTANCE @ 20°C(Ω/Km)	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 _{ac} (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-02P00050-WBK6D	0.50(7X0.30)	2P	16.30	380
I33X-04P00050-WBK6D		4P	18.30	560
I33X-06P00050-WBK6D		6P	20.30	760
I33X-08P00050-WBK6D		8P	24.10	1020
I33X-10P00050-WBK6D		10P	25.30	1200
I33X-12P00050-WBK6D		12P	29.20	1500
I33X-16P00050-WBK6D		16P	32.00	1860
I33X-24P00050-WBK6D		24P	35.20	2150
I33X-02T00050-WBK6D	0.50(7X0.30)	2T	19.30	510
I33X-04T00050-WBK6D		4T	22.00	730
I33X-06T00050-WBK6D		6T	24.80	1070
I33X-08T00050-WBK6D		8T	27.10	1260
I33X-10T00050-WBK6D		10T	31.50	1720
I33X-12T00050-WBK6D		12T	33.20	1870
I33X-16T00050-WBK6D		16T	35.10	2100
I33X-24T00050-WBK6D		24T	44.00	3470
I33X-02P00750-WBK6D	0.75(7X0.37)	2P	18.50	480
I33X-04P00750-WBK6D		4P	20.50	640
I33X-06P00750-WBK6D		6P	22.50	990
I33X-08P00750-WBK6D		8P	25.80	1080
I33X-10P00750-WBK6D		10P	29.80	1540
I33X-12P00750-WBK6D		12P	30.60	1650
I33X-16P00750-WBK6D		16P	33.20	2060
I33X-24P00750-WBK6D		24P	40.60	2800
I33X-02T00750-WBK6D	0.75(7X0.37)	2T	19.40	650
I33X-04T00750-WBK6D		4T	24.20	980
I33X-06T00750-WBK6D		6T	25.60	1140
I33X-08T00750-WBK6D		8T	28.50	1630
I33X-10T00750-WBK6D		10T	31.80	1725
I33X-12T00750-WBK6D		12T	32.70	1900
I33X-16T00750-WBK6D		16T	38.50	2800
I33X-24T00750-WBK6D		24T	44.70	3550

Dimensions and Weights are subject for manufacturing Tolerance.

ASH INSTRUMENTATION
MULTI PAIR/TRIAD CU/XLPE OR PVC INDIVIDUAL + OVERALL SHIELDED ARMORED 500V
BS EN 50288-7 Sunlight Resistant, Flame Retardant

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-02P00100-WBK6D	1.0(7X0.43)	2P	18.70	570
I33X-04P00100-WBK6D		4P	20.60	710
I33X-06P00100-WBK6D		6P	22.30	980
I33X-08P00100-WBK6D		8P	25.20	1550
I33X-10P00100-WBK6D		10P	27.30	1940
I33X-10P00100-WBK6D		12P	31.20	2000
I33X-16P00100-WBK6D		16P	33.20	2500
I33X-24P00100-WBK6D		24P	41.50	3070
I33X-02T00100-WBK6D	1.0(7X0.43)	2T	20.60	640
I33X-04T00100-WBK6D		4T	22.10	1050
I33X-06T00100-WBK6D		6T	25.30	1535
I33X-08T00100-WBK6D		8T	27.30	1970
I33X-10T00100-WBK6D		10T	30.00	2130
I33X-12P00100-WBK6D		12T	31.60	2850
I33X-16T00100-WBK6D		16T	35.60	3100
I33X-24T00100-WBK6D		24T	40.30	3500
I33X-02P00150-WBK6D	1.5(7X0.525)	2P	20.80	710
I33X-04P00150-WBK6D		4P	22.20	920
I33X-06P00150-WBK6D		6P	24.20	1280
I33X-08P00150-WBK6D		8P	27.10	1600
I33X-10P00150-WBK6D		10P	30.50	1870
I33X-10P00150-WBK6D		12P	32.50	2080
I33X-16P00150-WBK6D		16P	33.20	2760
I33X-24P00150-WBK6D		24P	45.10	3550
I33X-02T00150-WBK6D	1.5(7X0.525)	2T	22.20	920
I33X-04T00150-WBK6D		4T	24.40	1220
I33X-06T00150-WBK6D		6T	26.20	1930
I33X-08T00150-WBK6D		8T	28.60	2250
I33X-10T00150-WBK6D		10T	31.80	3100
I33X-12P00150-WBK6D		12T	36.00	3420
I33X-16T00150-WBK6D		16T	45.20	4070
I33X-24T00150-WBK6D		24T	51.20	4540

Dimensions and Weights are subject for manufacturing Tolerance.