

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.
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
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 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 (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 KVac (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)
I23X-01P00050-WBK6D	0.50(7X0.30)	1P	11.80	235
I23X-02P00050-WBK6D		2P	13.00	310
I23X-04P00050-WBK6D		4P	15.50	500
I23X-06P00050-WBK6D		6P	18.50	655
I23X-08P00050-WBK6D		8P	20.00	910
I23X-10P00050-WBK6D		10P	23.20	1060
I23X-12P00050-WBK6D		12P	25.00	1145
I23X-16P00050-WBK6D		16P	28.20	1370
I23X-24P00050-WBK6D		24P	32.50	2180
I23X-01T00050-WBK6D	0.50(7X0.30)	1T	12.20	255
I23X-02T00050-WBK6D		2T	14.20	370
I23X-04T00050-WBK6D		4T	16.00	600
I23X-06T00050-WBK6D		6T	20.00	910
I23X-08T00050-WBK6D		8T	22.00	1100
I23X-10T00050-WBK6D		10T	26.00	1250
I23X-12T00050-WBK6D		12T	28.90	1550
I23X-16T00050-WBK6D		16T	30.20	1930
I23X-24T00050-WBK6D		24T	33.50	2250
I23X-01P00750-WBK6D	0.75(7X0.37)	1P	12.50	265
I23X-02P00750-WBK6D		2P	14.10	350
I23X-04P00750-WBK6D		4P	16.70	580
I23X-06P00750-WBK6D		6P	19.50	620
I23X-08P00750-WBK6D		8P	21.60	910
I23X-10P00750-WBK6D		10P	25.20	1100
I23X-12P00750-WBK6D		12P	28.20	1470
I23X-16P00750-WBK6D		16P	31.80	1770
I23X-24P00750-WBK6D		24P	35.20	2100
I23X-01T00750-WBK6D	0.75(7X0.37)	1T	13.00	285
I23X-02T00750-WBK6D		2T	14.00	530
I23X-04T00750-WBK6D		4T	18.00	750
I23X-06T00750-WBK6D		6T	21.50	1010
I23X-08T00750-WBK6D		8T	23.00	1210
I23X-10T00750-WBK6D		10T	28.10	1500
I23X-12T00750-WBK6D		12T	30.10	1900
I23X-16T00750-WBK6D		16T	34.00	2100
I23X-24T00750-WBK6D		24T	41.50	3150

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)
I23X-02P00100-WBK6D	1.0(7X0.43)	1P	13.20	300
I23X-02P00100-WBK6D		2P	14.10	610
I23X-04P00100-WBK6D		4P	16.80	720
I23X-06P00100-WBK6D		6P	19.50	1050
I23X-08P00100-WBK6D		8P	23.80	1300
I23X-10P00100-WBK6D		10P	28.10	1770
I23X-10P00100-WBK6D		12P	30.00	1920
I23X-16P00100-WBK6D		16P	32.70	2100
I23X-24P00100-WBK6D		24P	40.50	2650
I23X-02T00100-WBK6D	1.0(7X0.43)	1T	13.20	300
I23X-02T00100-WBK6D		2T	15.50	730
I23X-04T00100-WBK6D		4T	18.20	1020
I23X-06T00100-WBK6D		6T	21.80	1150
I23X-08T00100-WBK6D		8T	24.70	1850
I23X-10T00100-WBK6D		10T	28.10	2110
I23X-12T00100-WBK6D		12T	31.00	2400
I23X-16T00100-WBK6D		16T	34.60	3050
I23X-24T00100-WBK6D		24T	45.30	3550
I23X-02P00150-WBK6D	1.5(7X0.525)	1P	14.20	300
I23X-02P00150-WBK6D		2P	15.60	720
I23X-04P00150-WBK6D		4P	18.20	990
I23X-06P00150-WBK6D		6P	20.80	1120
I23X-08P00150-WBK6D		8P	22.70	1750
I23X-10P00150-WBK6D		10P	25.00	2110
I23X-10P00150-WBK6D		12P	28.10	2300
I23X-16P00150-WBK6D		16P	35.80	2870
I23X-24P00150-WBK6D		24P	42.40	3150
I23X-02T00150-WBK6D	1.5(7X0.525)	1T	15.00	380
I23X-02T00150-WBK6D		2T	18.50	1020
I23X-04T00150-WBK6D		4T	22.40	1150
I23X-06T00150-WBK6D		6T	25.80	2000
I23X-08T00150-WBK6D		8T	29.70	2440
I23X-10T00150-WBK6D		10T	32.50	2940
I23X-12P00150-WBK6D		12T	37.80	3100
I23X-16T00150-WBK6D		16T	40.50	3300
I23X-24T00150-WBK6D		24T	46.00	3900

Dimensions and Weights are subject for manufacturing Tolerance.