

INDIVIDUAL&OVERALL SCREENED, SWA ARMoured, LSZH INSTRUMENTATION CABLE (XLPE / ISCR / OSCR / LSZH / SWA / LSZH) RE-2X(St)HSAWAH -p/tIMF -fl



Flame Retardant



Fire Retardant



Low smoke emission



Zero halogen



UV Resistant



ROHS Compliant



EM Interferences Resistant

STANDARDS

Gen. to BS/PAS 5308 Part 1 Type 2.

DESCRIPTION AND APPLICATION

Used for transmission of analogue and digital signals in Instrumentation and control systems. Allowed for use in zone 1 and zone 2 group II classified areas (acc. to IEC 60079-14); not allowed for direct connection to low impedance source (i.e. the public mains electricity supply).

Individually screened elements for improved EM protection between pairs/triads.

Recommended for outdoor installation, on racks, trays, in conduits, in dry and wet locations, for direct burial.

CONSTRUCTION

- **Conductors:** Solid (Class 1), stranded (Class 2) or flexible (Class 5) Annealed Copper, acc. to IEC 60228.
- **Insulation:** XLPE Polyethylene, acc to EN 50590-2-29
- **Cabling elements:** Pairs or Triads.
- **Core Identification:** Numbered tapes applied over screened element.
- **Individual screen:** 0,50 sqmm. tinned cooper drain wire under and in contact with aluminium/PETP laminated tape applied metallic side down. Numbered PETP tape applied over each individually screened pair.
- **Core.** Units are assembled together using the reciprocating lay technique.
- **Core wrapping.** PETP tape
- **Collective screen.** 0,50 sqmm. tinned cooper drain wire under and in contact with aluminium/PETP laminated tape applied metallic side down.
- **Inner Sheath:** LSZH compound, acc. to EN 50290-2-29, type LTS3. Blue or Black.
- **Armour:** Single layer of Galvanized Steel Wire Armouring (GSAWA), applied spirally over the LSZH bedding. Wire diameter acc. to BS/PAS5308 app D.
- **Outer Sheath:** LSZH compound, acc. to EN 50290-2-29, type LTS3. Blue or Black.
- **Sheath marking :** The outer sheath shall be marked in white ink, at regular intervals, with the following information:
 - Name of manufacturer/ Year/ Length marks
 - Other type of marks according to the costumer



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INDIVIDUAL&OVERALL SCREENED, SWA ARMoured, LSZH INSTRUMENTATION CABLE

(XLPE / ISCR / OSCR / LSZH / SWA / LSZH) RE-2X(St)HSWAH -p/tIMF -fl

ELECTRICAL CHARACTERISTICS (20°C)	0,5mm ²	0,5mm ²	0,75mm ²	1,0mm ²	1,5mm ²	2,5mm ²
Copper Conductor (Nr. Wires / Wire Diam.)	1/0,8	16/0,20	24/0,20	1/1,13	7/0,52	7/0,67
Conductor Resistance ¹ (Ω/km).	36,8	39,7	26,5	18,4	12,3	7,6
Minimum Insulation Resistance (MΩxkm, 20°C, 500 Vdc). Part 1	5.000					
Mutual Capacitance (nF/km, 800 Hz). Max. For ISCR cables	115			120		
Inductance to Resistance Ratio (L/R) (mH/Ω). Max.	25			40		
Operating voltage (V.)	300 / 500					
Test Voltage (Vac./ Vcc., 1 min)	1.500 / 2.200					

MECHANICAL CHARACTERISTICS	0,5mm ²	0,5mm ²	0,75mm ²	1,0mm ²	1,5mm ²	2,5mm ²
Operating Temperature (°C)	-25°C / +90°C					
Installation Temperature (°C)	-5°C / +50°C					
Bend radius (mm.) (Type 1 / Type 2)	10 x Ø cable / 15 x Ø cable					
Fire properties	UNE-EN 60332-3-24 / IEC 60332-3-24					
Smoke Density	IEC 61034-2					
Halogen Free Test	IEC 60754-1					
Test on corrosiveness of Combustion Gases	IEC 60754-2					

¹ For paired conductors, EN 60228:2005 admits 2% additional conductor resistance.

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EB117BC-Ed2

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SIZE, DIMENSIONS AND WEIGHTS

0.5 mm ² (1/0,8)		Pair				
Product Part Nr.	Nr. Elem.	Diam. under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB117BC50120200N	2	9,8	14,4	348,0	2.000	BA3W000
EB117BC50120300N	3	11,2	15,8	410,9	2.000	BA4W000
EB117BC50120400N	4	11,7	16,5	452,7	2.000	BA4W000
EB117BC50120500N	5	12,7	18,2	610,0	2.000	BA4W000
EB117BC50120600N	6	13,1	18,6	643,0	2.000	BA4W000
EB117BC50121000N	10	16,3	22,0	849,8	2.000	BA6W000
EB117BC50121200N	12	17,8	23,7	963,3	2.000	BA6W000
EB117BC50121500N	15	19,5	26,1	1232,6	2.000	BA8W000
EB117BC50121800N	18	21,0	27,8	1370,9	2.000	BB0W000
EB117BC50122000N	20	22,2	29,0	1481,9	2.000	BB0W000
EB117BC50122400N	24	24,2	31,2	1673,8	2.000	BB0W000
EB117BC50123000N	30	26,8	33,8	1916,5	1.900	BBBW000
EB117BC50123200N	32	27,8	34,8	2013,1	1.900	BBBW000
EB117BC50125000N	50	34,1	42,5	3038,2	1.200	BBBW000

0.5 mm ² (1/0,8)		Triad				
Product Part Nr.	Nr. Elem.	Diam under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB117BC50130200N	2	10,3	14,9	376,3	2.000	BA3W000
EB117BC50130300N	3	11,8	16,6	454,6	2.000	BA4W000
EB117BC50130400N	4	12,4	17,9	604,0	2.000	BA4W000
EB117BC50130500N	5	13,3	18,8	668,7	2.000	BA4W000
EB117BC50130600N	6	13,8	19,3	709,4	2.000	BA4W000
EB117BC50131000N	10	17,2	22,9	945,3	2.000	BA6W000
EB117BC50131200N	12	18,7	25,3	1227,5	2.000	BA8W000
EB117BC50131500N	15	20,5	27,1	1376,2	2.000	BB0W000
EB117BC50131800N	18	22,4	29,2	1563,9	2.000	BB0W000
EB117BC50132000N	20	23,6	30,4	1673,2	2.000	BB0W000
EB117BC50132400N	24	25,5	32,5	1880,9	2.000	BBBW000
EB117BC50133000N	30	28,5	35,7	2213,9	1.800	BBBW000
EB117BC50133200N	32	29,3	36,5	2309,3	1.600	BBBW000
EB117BC50135000N	50	36,0	44,4	3471,3	1.100	BBBW000

0,5 mm ² (24/0,20)		Pair				
Product Part Nr.	Nr. Elem.	Diam. under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB117BC50320200N	2	10,5	15,1	371,1	2.000	BA3W000
EB117BC50320300N	3	12,3	17,8	559,4	2.000	BA4W000
EB117BC50320400N	4	12,7	18,2	592,7	2.000	BA4W000
EB117BC50320500N	5	13,6	19,1	641,6	2.000	BA4W000
EB117BC50320600N	6	14,1	19,6	685,8	2.000	BA4W000
EB117BC50321000N	10	17,8	23,7	929,3	2.000	BA6W000
EB117BC50321200N	12	19,1	25,7	1175,0	2.000	BA8W000
EB117BC50321500N	15	21,0	27,8	1319,8	2.000	BB0W000
EB117BC50321800N	18	23,1	29,9	1489,0	2.000	BB0W000
EB117BC50322000N	20	24,2	31,2	1605,7	2.000	BB0W000
EB117BC50322400N	24	26,3	33,3	1788,6	2.000	BBBW000
EB117BC50323000N	30	29,2	36,4	2057,4	1.600	BBBW000
EB117BC50323200N	32	30,0	37,2	2140,5	1.600	BBBW000
EB117BC50325000N	50	37,1	45,5	3225,3	1.000	BBBW000

0,5 mm ² (24/0,20)		Triad				
Product Part Nr.	Nr. Elem.	Diam under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB117BC50330200N	2	11,2	15,8	405,9	2.000	BA4W000
EB117BC50330300N	3	12,9	18,4	605,4	2.000	BA4W000
EB117BC50330400N	4	13,4	18,9	646,4	2.000	BA4W000
EB117BC50330500N	5	14,3	19,8	701,9	2.000	BA6W000
EB117BC50330600N	6	14,8	20,5	752,5	2.000	BA6W000
EB117BC50331000N	10	18,7	25,3	1181,0	2.000	BA8W000
EB117BC50331200N	12	20,2	26,8	1300,0	2.000	BB0W000
EB117BC50331500N	15	22,4	29,2	1494,2	2.000	BB0W000
EB117BC50331800N	18	24,4	31,4	1688,2	2.000	BB0W000
EB117BC50332000N	20	25,5	32,5	1787,9	2.000	BBBW000
EB117BC50332400N	24	28,0	35,2	2047,9	1.800	BBBW000
EB117BC50333000N	30	30,8	39,0	2640,7	1.400	BBBW000
EB117BC50333200N	32	31,9	40,1	2749,0	1.300	BBBW000

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0,75 mm ² (24/0,20)		Pair				
Product Part Nr.	Nr. Elem.	Diam. under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB117BC75320200N	2	11,4	16,2	416,0	2.000	BA4W000
EB117BC75320300N	3	13,1	18,6	600,6	2.000	BA4W000
EB117BC75320400N	4	13,6	19,1	639,3	2.000	BA4W000
EB117BC75320500N	5	14,6	20,3	712,7	2.000	BA6W000
EB117BC75320600N	6	15,3	21,0	769,9	2.000	BA6W000
EB117BC75321000N	10	19,1	25,7	1178,6	2.000	BA8W000
EB117BC75321200N	12	20,6	27,2	1294,0	2.000	BB0W000
EB117BC75321500N	15	23,1	29,9	1494,3	2.000	BB0W000
EB117BC75321800N	18	24,9	31,9	1669,1	2.000	BB0W000
EB117BC75322000N	20	26,3	33,3	1795,6	2.000	BBB0W000
EB117BC75322400N	24	28,6	35,8	2017,0	1.600	BBB0W000
EB117BC75323000N	30	31,7	39,9	2623,3	1.400	BBB0W000
EB117BC75323200N	32	32,6	40,8	2710,4	1.300	BBB0W000

0,75 mm ² (24/0,20)		Triad				
Product Part Nr.	Nr. Elem.	Diam. under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB117BC75330200N	2	12,2	17,7	564,5	2.000	BA4W000
EB117BC75330300N	3	13,8	19,3	653,8	2.000	BA4W000
EB117BC75330400N	4	14,3	19,8	700,9	2.000	BA6W000
EB117BC75330500N	5	15,6	21,3	793,2	2.000	BA6W000
EB117BC75330600N	6	16,1	21,8	850,5	2.000	BA6W000
EB117BC75331000N	10	20,1	26,7	1308,8	2.000	BB0W000
EB117BC75331200N	12	21,9	28,7	1468,1	2.000	BB0W000
EB117BC75331500N	15	24,3	31,3	1702,1	2.000	BB0W000
EB117BC75331800N	18	26,5	33,5	1905,6	1.900	BBB0W000
EB117BC75332000N	20	27,9	35,1	2066,9	1.900	BBB0W000
EB117BC75332400N	24	30,2	38,4	2599,8	1.400	BBB0W000
EB117BC75333000N	30	33,7	41,9	3002,4	1.200	BBB0W000
EB117BC75333200N	32	34,7	43,1	3153,6	1.200	BBB0W000

1,0 mm ² (1/1,13)		Pair				
Product Part Nr.	Nr. Elem.	Diam. under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB117BCA0120200N	2	11,5	16,3	430,1	2.000	BA4W000
EB117BCA0120300N	3	13,2	18,7	621,3	2.000	BA4W000
EB117BCA0120400N	4	13,7	19,2	676,0	2.000	BA4W000
EB117BCA0120500N	5	14,7	20,4	746,4	2.000	BA6W000
EB117BCA0120600N	6	15,4	21,1	810,1	2.000	BA6W000
EB117BCA0121000N	10	19,2	25,8	1244,7	2.000	BA8W000
EB117BCA0121200N	12	20,7	27,3	1373,2	2.000	BB0W000
EB117BCA0121500N	15	23,2	30,0	1608,8	2.000	BB0W000
EB117BCA0121800N	18	25,1	32,1	1789,0	2.000	BBB0W000
EB117BCA0122000N	20	26,4	33,4	1926,8	1.900	BBB0W000
EB117BCA0122400N	24	28,8	36,0	2191,8	1.600	BBB0W000
EB117BCA0123000N	30	31,9	40,1	2821,3	1.300	BBB0W000
EB117BCA0123200N	32	32,8	41,0	2945,9	1.300	BBB0W000

1,0 mm ² (1/1,13)		Triad				
Product Part Nr.	Nr. Elem.	Diam. under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB117BCA0130200N	2	12,3	17,8	585,3	2.000	BA4W000
EB117BCA0130300N	3	13,9	19,4	684,3	2.000	BA4W000
EB117BCA0130400N	4	14,4	19,9	741,2	2.000	BA6W000
EB117BCA0130500N	5	15,7	21,4	853,1	2.000	BA6W000
EB117BCA0130600N	6	16,2	21,9	910,5	2.000	BA6W000
EB117BCA0131000N	10	20,3	26,9	1410,7	2.000	BB0W000
EB117BCA0131200N	12	22,1	28,9	1604,2	2.000	BB0W000
EB117BCA0131500N	15	24,5	31,5	1851,9	2.000	BB0W000
EB117BCA0131800N	18	26,7	33,7	2100,6	1.900	BBB0W000
EB117BCA0132000N	20	28,2	35,4	2283,4	1.800	BBB0W000
EB117BCA0132400N	24	30,5	38,7	2839,7	1.400	BBB0W000
EB117BCA0133000N	30	34,0	42,2	3325,9	1.200	BBB0W000
EB117BCA0133200N	32	34,9	43,3	3470,3	1.200	BBB0W000

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(XLPE / ISCR / OSCR / LSZH / SWA / LSZH) RE-2X(St)HSWAH -p/tIMF -fl

1,5 mm ² (7/0,52)		Pair				
Product Part Nr.	Nr. Elem.	Diam. under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB117BCA5220200N	2	13,3	18,8	625,7	2.000	BA4W000
EB117BCA5220300N	3	15,0	20,7	735,5	2.000	BA6W000
EB117BCA5220400N	4	15,8	21,5	812,2	2.000	BA6W000
EB117BCA5220500N	5	17,0	22,7	897,8	2.000	BA6W000
EB117BCA5220600N	6	17,8	23,7	986,8	2.000	BA6W000
EB117BCA5221000N	10	22,3	29,1	1522,5	2.000	BB0W000
EB117BCA5221200N	12	24,3	31,3	1722,3	2.000	BB0W000
EB117BCA5221500N	15	26,9	33,9	1976,9	1.900	BBBW000
EB117BCA5221800N	18	29,3	36,5	2247,5	1.600	BBBW000
EB117BCA5222000N	20	30,7	38,9	2673,9	1.400	BBBW000
EB117BCA5222400N	24	33,4	41,6	3023,3	1.300	BBBW000
EB117BCA5223000N	30	37,2	45,6	3539,6	1.000	BBBW000

1,5 mm ² (7/0,52)		Triad				
Product Part Nr.	Nr. Elem.	Diam. under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB117BCA5230200N	2	14,0	19,5	678,4	2.000	BA4W000
EB117BCA5230300N	3	16,1	21,8	836,5	2.000	BA6W000
EB117BCA5230400N	4	16,7	22,4	912,3	2.000	BA6W000
EB117BCA5230500N	5	18,2	24,8	1196,1	2.000	BA8W000
EB117BCA5230600N	6	18,8	25,4	1278,6	2.000	BA8W000
EB117BCA5231000N	10	23,8	30,6	1774,8	2.000	BB0W000
EB117BCA5231200N	12	25,7	32,7	1999,2	2.000	BBBW000
EB117BCA5231500N	15	28,7	35,9	2341,6	1.600	BBBW000
EB117BCA5231800N	18	31,0	39,2	2932,7	1.400	BBBW000
EB117BCA5232000N	20	32,7	40,9	3167,2	1.300	BBBW000
EB117BCA5232400N	24	35,6	44,0	3587,7	1.100	BBBW000

2,5 mm ² (7/0,67)		Pair				
Product Part Nr.	Nr. Elem.	Diam. under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB117BCB5220200N	2	14,8	20,5	721,9	2.000	BA6W000
EB117BCB5220300N	3	17,1	22,8	876,3	2.000	BA6W000
EB117BCB5220400N	4	18,0	24,6	1129,2	2.000	BA8W000
EB117BCB5220500N	5	19,3	25,9	1255,4	2.000	BA8W000
EB117BCB5220600N	6	20,0	26,6	1341,8	2.000	BA8W000
EB117BCB5221000N	10	25,3	32,3	1885,4	2.000	BBBW000
EB117BCB5221200N	12	27,8	34,8	2148,8	1.900	BBBW000
EB117BCB5221500N	15	30,6	38,8	2763,4	1.400	BBBW000
EB117BCB5221800N	18	33,3	41,5	3106,4	1.300	BBBW000
EB117BCB5222000N	20	35,1	43,5	3370,0	1.200	BBBW000
EB117BCB5222400N	24	38,2	46,8	3834,0	1.000	BBBW000

2,5 mm ² (7/0,67)		Triad				
Product Part Nr.	Nr. Elem.	Diam. under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB117BCB5230200N	2	15,9	21,6	825,0	2.000	BA6W000
EB117BCB5230300N	3	18,3	24,9	1169,5	2.000	BA8W000
EB117BCB5230400N	4	19,0	25,6	1282,8	2.000	BA8W000
EB117BCB5230500N	5	20,5	27,1	1440,1	2.000	BB0W000
EB117BCB5230600N	6	21,2	28,0	1582,4	2.000	BB0W000
EB117BCB5231000N	10	27,0	34,0	2241,2	1.900	BBBW000
EB117BCB5231200N	12	29,4	36,6	2564,5	1.600	BBBW000
EB117BCB5231500N	15	32,6	40,8	3292,1	1.300	BBBW000
EB117BCB5231800N	18	35,6	44,0	3769,1	1.100	BBBW000

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