

INDIVIDUAL&OVERALL SCREENED, SWA ARMoured, INSTRUMENTATION CABLE.

(PVC / ISCR / OSCR / PVC / SWA / PVC) RE-Y(St)YSWAY -p/tIMF -fl



Flame Retardant



Fire Retardant



EM Interferences Resistant



UV Resistant



ROHS Compliant

STANDARDS

BS/PAS 5308 Part 2 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:** PVC grade TI51, acc to EN 50590-2-21
- **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:** PVC, acc. to EN 50290-2-22, type TM51. Blue or Black.
- **Armour:** Single layer of Galvanized Steel Wire Armouring (GSWA), applied spirally over the PVC bedding. Wire diameter acc. to BS/PAS5308 app D.
- **Outer Sheath:** PVC, acc. to EN 50290-2-22, type TM51. 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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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 2	100					
Mutual Capacitance (nF/km, 800 Hz). Max. For ISCR cables	180			190		200
Inductance to Resistance Ratio (L/R) (mH/Ω). Max.	25			40		60
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 / +70°C					
Installation Temperature (°C)	-5°C / +50°C					
Bend radius (mm.) (Type 1 / Type 2)	10 x Ø cable / 15 x Ø cable					
PVC IOL. Minimum. (%)	30					
PVC HCL. Maximum. (%)	15					
Flame Propagation	UNE-EN 60332-1-2 / IEC 60332-1-2					
Fire properties	UNE-EN 60332-3-24 / IEC 60332-3-24					

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

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SIZE, DIMENSIONS AND WEIGHTS

0,5 mm ² (16/0,20)		Pair				
Product Part Nr.	Nr. Elem.	Diam. under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB116B050320200N	2	10,5	15,1	374,1	2.000	BA3W000
EB116B050320300N	3	12,3	17,8	564,4	2.000	BA4W000
EB116B050320400N	4	12,7	18,2	600,4	2.000	BA4W000
EB116B050320500N	5	13,6	19,1	651,9	2.000	BA4W000
EB116B050320600N	6	14,1	19,6	698,7	2.000	BA4W000
EB116B050321000N	10	17,8	23,7	951,7	2.000	BA6W000
EB116B050321200N	12	19,1	25,7	1202,6	2.000	BA8W000
EB116B050321500N	15	21,0	27,8	1354,9	2.000	BB0W000
EB116B050321800N	18	23,1	29,9	1531,6	2.000	BB0W000
EB116B050322000N	20	24,2	31,2	1653,1	2.000	BB0W000
EB116B050322400N	24	26,3	33,3	1846,3	2.000	BBBW000
EB116B050323000N	30	29,2	36,4	2130,3	1.600	BBBW000
EB116B050323200N	32	30,0	37,2	2218,7	1.600	BBBW000
EB116B050325000N	50	37,1	45,5	3349,3	1.000	BBBW000

0,5 mm ² (16/0,20)		Triad				
Product Part Nr.	Nr. Elem.	Diam under arm. (mm)	Overall Diam. (mm)	Nominal Weight (kg/km)	Std Delivery (m)	Drum type

EB116B050330200N	2	11,2	15,8	411,5	2.000	BA4W000
EB116B050330300N	3	12,9	18,4	614,4	2.000	BA4W000
EB116B050330400N	4	13,4	18,9	659,5	2.000	BA4W000
EB116B050330500N	5	14,3	19,8	718,9	2.000	BA6W000
EB116B050330600N	6	14,8	20,5	773,4	2.000	BA6W000
EB116B050331000N	10	18,7	25,3	1217,0	2.000	BA8W000
EB116B050331200N	12	20,2	26,8	1343,9	2.000	BB0W000
EB116B050331500N	15	22,4	29,2	1549,6	2.000	BB0W000
EB116B050331800N	18	24,4	31,4	1755,1	2.000	BB0W000
EB116B050332000N	20	25,5	32,5	1862,8	2.000	BBBW000
EB116B050332400N	24	28,0	35,2	2138,0	1.800	BBBW000
EB116B050333000N	30	30,8	39,0	2754,3	1.400	BBBW000
EB116B050333200N	32	31,9	40,1	2870,4	1.300	BBBW000

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

EB116B075320200N	2	11,4	16,2	419,4	2.000	BA4W000
EB116B075320300N	3	13,1	18,6	606,7	2.000	BA4W000
EB116B075320400N	4	13,6	19,1	648,4	2.000	BA4W000
EB116B075320500N	5	14,6	20,3	724,6	2.000	BA6W000
EB116B075320600N	6	15,3	21,0	784,7	2.000	BA6W000
EB116B075321000N	10	19,1	25,7	1204,7	2.000	BA8W000
EB116B075321200N	12	20,6	27,2	1326,0	2.000	BB0W000
EB116B075321500N	15	23,1	29,9	1534,6	2.000	BB0W000
EB116B075321800N	18	24,9	31,9	1718,2	2.000	BB0W000
EB116B075322000N	20	26,3	33,3	1850,4	2.000	BBBW000
EB116B075322400N	24	28,6	35,8	2083,3	1.600	BBBW000
EB116B075323000N	30	31,7	39,9	2706,9	1.400	BBBW000
EB116B075323200N	32	32,6	40,8	2800,1	1.300	BBBW000

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

EB116B075330200N	2	12,2	17,7	570,7	2.000	BA4W000
EB116B075330300N	3	13,8	19,3	664,4	2.000	BA4W000
EB116B075330400N	4	14,3	19,8	716,3	2.000	BA6W000
EB116B075330500N	5	15,6	21,3	812,7	2.000	BA6W000
EB116B075330600N	6	16,1	21,8	874,6	2.000	BA6W000
EB116B075331000N	10	20,1	26,7	1350,7	2.000	BB0W000
EB116B075331200N	12	21,9	28,7	1518,6	2.000	BB0W000
EB116B075331500N	15	24,3	31,3	1765,8	2.000	BB0W000
EB116B075331800N	18	26,5	33,5	1982,8	1.900	BBBW000
EB116B075332000N	20	27,9	35,1	2152,6	1.900	BBBW000
EB116B075332400N	24	30,2	38,4	2703,4	1.400	BBBW000
EB116B075333000N	30	33,7	41,9	3133,0	1.200	BBBW000
EB116B075333200N	32	34,7	43,1	3293,0	1.200	BBBW000

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EB116B0-Ed2

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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

EB116B0A5220200N	2	13,3	18,8	630,5	2.000	BA4W000
EB116B0A5220300N	3	15,0	20,7	743,8	2.000	BA6W000
EB116B0A5220400N	4	15,8	21,5	824,3	2.000	BA6W000
EB116B0A5220500N	5	17,0	22,7	913,7	2.000	BA6W000
EB116B0A5220600N	6	17,8	23,7	1006,4	2.000	BA6W000
EB116B0A5221000N	10	22,3	29,1	1556,9	2.000	BB0W000
EB116B0A5221200N	12	24,3	31,3	1764,0	2.000	BB0W000
EB116B0A5221500N	15	26,9	33,9	2030,0	1.900	BBBW000
EB116B0A5221800N	18	29,3	36,5	2311,7	1.600	BBBW000
EB116B0A5222000N	20	30,7	38,9	2745,4	1.400	BBBW000
EB116B0A5222400N	24	33,4	41,6	3110,2	1.300	BBBW000
EB116B0A5223000N	30	37,2	45,6	3649,1	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

EB116B0A5230200N	2	14,0	19,5	687,1	2.000	BA4W000
EB116B0A5230300N	3	16,1	21,8	850,6	2.000	BA6W000
EB116B0A5230400N	4	16,7	22,4	932,5	2.000	BA6W000
EB116B0A5230500N	5	18,2	24,1	1073,0	2.000	BA6W000
EB116B0A5230600N	6	18,8	25,4	1310,2	2.000	BA8W000
EB116B0A5231000N	10	23,8	30,6	1829,4	2.000	BB0W000
EB116B0A5231200N	12	25,7	32,7	2065,4	2.000	BBBW000
EB116B0A5231500N	15	28,7	35,9	2424,8	1.600	BBBW000
EB116B0A5231800N	18	31,0	39,2	3033,3	1.400	BBBW000
EB116B0A5232000N	20	32,7	40,9	3279,4	1.300	BBBW000
EB116B0A5232400N	24	35,6	44,0	3723,0	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

EB116B0B5220200N	2	14,8	20,5	727,8	2.000	BA6W000
EB116B0B5220300N	3	17,1	22,8	886,6	2.000	BA6W000
EB116B0B5220400N	4	18,0	23,9	1001,4	2.000	BA6W000
EB116B0B5220500N	5	19,3	25,9	1274,7	2.000	BA8W000
EB116B0B5220600N	6	20,0	26,6	1365,9	2.000	BA8W000
EB116B0B5221000N	10	25,3	32,3	1927,3	2.000	BBBW000
EB116B0B5221200N	12	27,8	34,8	2199,5	1.900	BBBW000
EB116B0B5221500N	15	30,6	38,8	2827,6	1.400	BBBW000
EB116B0B5221800N	18	33,3	41,5	3184,4	1.300	BBBW000
EB116B0B5222000N	20	35,1	43,5	3456,8	1.200	BBBW000
EB116B0B5222400N	24	38,2	46,8	3939,1	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

EB116B0B5230200N	2	15,9	21,6	835,7	2.000	BA6W000
EB116B0B5230300N	3	18,3	24,2	1037,9	2.000	BA6W000
EB116B0B5230400N	4	19,0	25,6	1307,3	2.000	BA8W000
EB116B0B5230500N	5	20,5	27,1	1471,7	2.000	BB0W000
EB116B0B5230600N	6	21,2	28,0	1621,2	2.000	BB0W000
EB116B0B5231000N	10	27,0	34,0	2307,7	1.900	BBBW000
EB116B0B5231200N	12	29,4	36,6	2644,8	1.600	BBBW000
EB116B0B5231500N	15	32,6	40,8	3393,1	1.300	BBBW000
EB116B0B5231800N	18	35,6	44,0	3891,2	1.100	BBBW000

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