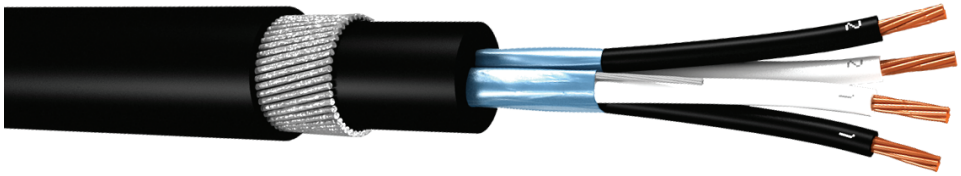
INSTRUMENTATION CABLE

XLPE / OSCR / PVC / SWA / PVC-FR-UV IEC-60332-3A, IEC-60228

BS EN 50288-7

RE-2X(St)YSWAY-FL 300/500V

Collective Screen Cable Armoured



Construction

1. Stranded plain copper conductor
2. Cross-Linked Polyethylene insulation (XLPE)
3. Core twisted in pairs, pairs twisted in concentric layers
4. Colour coding for pair : black/white, continuously numbered
   triad : black/white/red, continuously numbered
5. Polyester tape wrapping
6. Overall Screen of plastic bonded aluminium mylar tape with tinned copper drain wire, approx. 25% overlapped
7. Bedding of polyvinyl chloride (PVC)
8. Galvanized steel wire armour
9. PVC outer sheath, flame retardant to IEC 60332-3A, black or blue colour (Intrinsically Safe)

Available on request :Tinned conductors, PVC, PE or EPR insulations, sheathing of LSOH, oil & hydrocarbon resistant, anti termite, anti rodent, and other special sheath performance

Application

For the transmission of signals and measuring data in power stations and industrial plants.

This cable is suitable for fixed indoor, outdoor and underground installations.

Electrical and technical data

Working voltage : max. 500 V

Test voltage core/core : 2000V 50Hz 1 min.

core/screen : 1000V 50Hz 1 min.

Conductor cross-section		nom.	0.5 mm²	0.75 mm²	1.00 mm²	1.50 mm²	2.50 mm²
Conductor resistance		max.	36.8 Ω/km	24.9 Ω/km	18.6 Ω/km	12.3 Ω/km	7.6 Ω/km
Mutual capacitance at 1 kHz	single pair :	max.	115 nF/km				
	2 to 4 pairs :		90 nF/km			102 nF/km	
	above 4 pairs :		75 nF/km			85 nF/km	
L/R ratio		max.	25 µH/Ω			40 µH/Ω	60 µH/Ω

Capacitance unbalance : max. 500 pF/500 m

Insulation resistance : min 5000 MΩ/km

Inductance : max. 1 mH/km

Temperature range, fixed : -30°C to +90°C

Minimum bending radius : 10 x cable diameter

Flame retardancy : IEC-60332-1

Flame propagation : IEC-60332-3-22 (cat A)

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Data Sheet

No. of pairs x cross section (mm^2)	Conductor no / mm	Thickness of insulation mm	Steel wire diameter mm	Thickness of outer sheath mm	Overall diameter (approx.) mm	Cable weight (approx.) kg/km
1 X 2 X 0.5	7/0.3	0.6	0.90	1.3	11.3	258
2 X 2 X 0.5	7/0.3	0.6	0.90	1.4	14.6	373
4 X 2 X 0.5	7/0.3	0.6	0.90	1.5	17.1	488
6 X 2 X 0.5	7/0.3	0.6	0.90	1.5	19.1	583
8 X 2 X 0.5	7/0.3	0.6	0.90	1.6	20.0	651
10 X 2 X 0.5	7/0.3	0.6	1.25	1.6	22.2	861
12 X 2 X 0.5	7/0.3	0.6	1.25	1.7	23.9	974
16 X 2 X 0.5	7/0.3	0.6	1.25	1.7	26.3	1137
20 X 2 X 0.5	7/0.3	0.6	1.25	1.8	28.6	1300
24 X 2 X 0.5	7/0.3	0.6	1.25	1.8	30.5	1446
1 X 2 X 0.75	7/0.37	0.6	0.90	1.3	11.7	274
2 X 2 X 0.75	7/0.37	0.6	0.90	1.4	15.4	413
4 X 2 X 0.75	7/0.37	0.6	0.90	1.5	18.1	549
6 X 2 X 0.75	7/0.37	0.6	1.25	1.6	21.1	785
8 X 2 X 0.75	7/0.37	0.6	1.25	1.6	21.9	862
10 X 2 X 0.75	7/0.37	0.6	1.25	1.7	23.8	996
12 X 2 X 0.75	7/0.37	0.6	1.25	1.7	25.4	1102
16 X 2 X 0.75	7/0.37	0.6	1.25	1.8	28.1	1308
20 X 2 X 0.75	7/0.37	0.6	1.25	1.8	30.4	1485
24 X 2 X 0.75	7/0.37	0.6	1.60	1.9	33.4	1880
1 X 2 X 1.0	7/0.43	0.6	0.90	1.4	12.3	296
2 X 2 X 1.0	7/0.43	0.6	0.90	1.5	16.3	459
4 X 2 X 1.0	7/0.43	0.6	0.90	1.5	19.0	602
6 X 2 X 1.0	7/0.43	0.6	1.25	1.6	22.2	868
8 X 2 X 1.0	7/0.43	0.6	1.25	1.6	23.0	955
10 X 2 X 1.0	7/0.43	0.6	1.25	1.7	25.1	1107
12 X 2 X 1.0	7/0.43	0.6	1.25	1.7	26.7	1229
16 X 2 X 1.0	7/0.43	0.6	1.25	1.8	29.7	1469
20 X 2 X 1.0	7/0.43	0.6	1.60	1.9	33.2	1912
24 X 2 X 1.0	7/0.43	0.6	1.60	2.0	36.0	2192
1 X 2 X 1.5	7/0.53	0.6	0.90	1.4	12.9	326
2 X 2 X 1.5	7/0.53	0.6	0.90	1.5	17.4	515
4 X 2 X 1.5	7/0.53	0.6	1.25	1.6	21.2	827
6 X 2 X 1.5	7/0.53	0.6	1.25	1.7	24.1	1016
8 X 2 X 1.5	7/0.53	0.6	1.25	1.7	25.0	1139
10 X 2 X 1.5	7/0.53	0.6	1.25	1.8	27.3	1321
12 X 2 X 1.5	7/0.53	0.6	1.25	1.8	29.0	1464
16 X 2 X 1.5	7/0.53	0.6	1.60	1.9	33.1	1979
20 X 2 X 1.5	7/0.53	0.6	1.60	2.0	36.5	2337
24 X 2 X 1.5	7/0.53	0.6	1.60	2.1	39.1	2634
1 X 2 X 2.5	7/0.67	0.7	0.90	1.4	14.1	389
2 X 2 X 2.5	7/0.67	0.7	0.90	1.6	19.7	641
4 X 2 X 2.5	7/0.67	0.7	1.25	1.7	24.1	1026
6 X 2 X 2.5	7/0.67	0.7	1.25	1.8	27.6	1294
8 X 2 X 2.5	7/0.67	0.7	1.25	1.8	28.7	1464
10 X 2 X 2.5	7/0.67	0.7	1.25	1.9	31.3	1703
12 X 2 X 2.5	7/0.67	0.7	1.60	1.9	34.2	2133
16 X 2 X 2.5	7/0.67	0.7	1.60	2.1	38.7	2639
20 X 2 X 2.5	7/0.67	0.7	1.60	2.2	42.2	3064
24 X 2 X 2.5	7/0.67	0.7	2.00	2.3	46.3	3839

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No. of triads x cross section (mm^2)	Conductor no / mm	Thickness of insulation mm	Steel wire diameter mm	Thickness of outer sheath mm	Overall diameter (approx.) mm	Cable weight (approx.) kg/km
1 X 3 X 0.5	7/0.3	0.6	0.90	1.3	11.6	274
4 X 3 X 0.5	7/0.3	0.6	0.90	1.5	18.0	557
8 X 3 X 0.5	7/0.3	0.6	1.25	1.6	21.7	876
12 X 3 X 0.5	7/0.3	0.6	1.25	1.7	25.0	1113
16 X 3 X 0.5	7/0.3	0.6	1.25	1.8	27.9	1332
20 X 3 X 0.5	7/0.3	0.6	1.25	1.8	30.1	1522
24 X 3 X 0.5	7/0.3	0.6	1.60	1.9	33.2	1935
1 X 3 X 0.75	7/0.37	0.6	0.90	1.4	12.2	299
4 X 3 X 0.75	7/0.37	0.6	0.90	1.5	18.9	619
8 X 3 X 0.75	7/0.37	0.6	1.25	1.6	22.9	991
12 X 3 X 0.75	7/0.37	0.6	1.25	1.7	26.6	1276
16 X 3 X 0.75	7/0.37	0.6	1.25	1.8	29.6	1536
20 X 3 X 0.75	7/0.37	0.6	1.60	1.9	33.1	2009
24 X 3 X 0.75	7/0.37	0.6	1.60	2.0	35.9	2309
1 X 3 X 1.0	7/0.43	0.6	0.90	1.4	12.7	326
4 X 3 X 1.0	7/0.43	0.6	0.90	1.6	20.1	696
8 X 3 X 1.0	7/0.43	0.6	1.25	1.7	24.5	1133
12 X 3 X 1.0	7/0.43	0.6	1.25	1.8	28.3	1461
16 X 3 X 1.0	7/0.43	0.6	1.25	1.9	31.5	1771
20 X 3 X 1.0	7/0.43	0.6	1.60	2.0	35.6	2335
24 X 3 X 1.0	7/0.43	0.6	1.60	2.0	38.0	2627
1 X 3 X 1.5	7/0.53	0.6	0.90	1.4	13.3	360
4 X 3 X 1.5	7/0.53	0.6	1.25	1.6	22.2	939
8 X 3 X 1.5	7/0.53	0.6	1.25	1.7	26.4	1352
12 X 3 X 1.5	7/0.53	0.6	1.25	1.8	30.6	1765
16 X 3 X 1.5	7/0.53	0.6	1.60	2.0	35.5	2435
20 X 3 X 1.5	7/0.53	0.6	1.60	2.1	38.7	2848
24 X 3 X 1.5	7/0.53	0.6	1.60	2.1	41.3	3207
1 X 3 X 2.5	7/0.67	0.7	0.90	1.4	14.6	430
4 X 3 X 2.5	7/0.67	0.7	1.25	1.7	25.4	1202
8 X 3 X 2.5	7/0.67	0.7	1.25	1.8	30.3	1774
12 X 3 X 2.5	7/0.67	0.7	1.60	2.0	36.7	2646
16 X 3 X 2.5	7/0.67	0.7	1.60	2.1	40.9	3230
20 X 3 X 2.5	7/0.67	0.7	2.00	2.2	45.6	4147
24 X 3 X 2.5	7/0.67	0.7	2.00	2.3	49.4	4795