

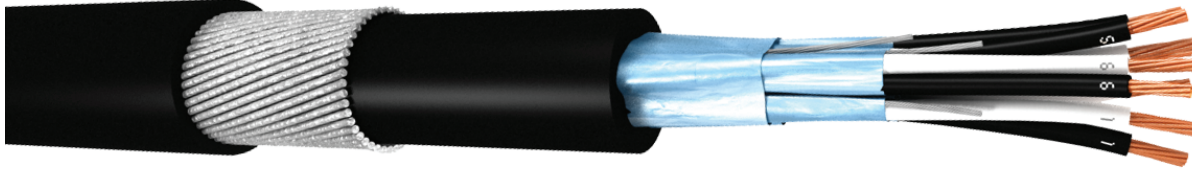
SIGNAL & INSTRUMENTATION CABLE

XLPE / ISCR / OSCR / PVC / SWA / PVC-FR

90°C / 500 V

BS EN 50288-7

Armour, Individual and Overall Screen



Construction

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


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 : 2000V 50Hz 1 min.
core/core : 1000V 50Hz 1 min.
core/screen :

Conductor cross-section		nom.	0.5 mm ²	0.75 mm ²	1.00 mm ²	1.50 mm ²	2.50 mm ²
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 :		115 nF/km				
	2 to 4 pairs :	max.	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	

 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)

SIGNAL & INSTRUMENTATION CABLE

XLPE / ISCR / OSCR / PVC / SWA / PVC-FR

90°C / 500 V

BS EN 50288-7

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
2 X 2 X 0.5	7/0.3	0.6	0.90	1.4	15.4	413
4 X 2 X 0.5	7/0.3	0.6	0.90	1.5	18.2	554
6 X 2 X 0.5	7/0.3	0.6	1.25	1.6	21.2	801
8 X 2 X 0.5	7/0.3	0.6	1.25	1.6	21.9	865
10 X 2 X 0.5	7/0.3	0.6	1.25	1.7	23.9	1005
12 X 2 X 0.5	7/0.3	0.6	1.25	1.7	25.4	1105
16 X 2 X 0.5	7/0.3	0.6	1.25	1.8	28.2	1320
20 X 2 X 0.5	7/0.3	0.6	1.25	1.8	30.5	1508
24 X 2 X 0.5	7/0.3	0.6	1.60	1.9	33.6	1918
2 X 2 X 0.75	7/0.37	0.6	0.90	1.5	15.4	458
4 X 2 X 0.75	7/0.37	0.6	0.90	1.5	18.2	605
6 X 2 X 0.75	7/0.37	0.6	1.25	1.6	21.2	871
8 X 2 X 0.75	7/0.37	0.6	1.25	1.7	21.9	971
10 X 2 X 0.75	7/0.37	0.6	1.25	1.7	23.9	1118
12 X 2 X 0.75	7/0.37	0.6	1.25	1.7	25.4	1240
16 X 2 X 0.75	7/0.37	0.6	1.25	1.8	28.2	1481
20 X 2 X 0.75	7/0.37	0.6	1.60	1.9	30.5	1925
24 X 2 X 0.75	7/0.37	0.6	1.60	2.0	33.6	2206
2 X 2 X 1.0	7/0.43	0.6	0.90	1.5	17.1	494
4 X 2 X 1.0	7/0.43	0.6	0.90	1.6	20.2	673
6 X 2 X 1.0	7/0.43	0.6	1.25	1.7	23.8	986
8 X 2 X 1.0	7/0.43	0.6	1.25	1.7	24.7	1089
10 X 2 X 1.0	7/0.43	0.6	1.25	1.7	26.7	1244
12 X 2 X 1.0	7/0.43	0.6	1.25	1.8	28.6	1393
16 X 2 X 1.0	7/0.43	0.6	1.60	1.9	32.6	1878
20 X 2 X 1.0	7/0.43	0.6	1.60	2.0	35.9	2213
24 X 2 X 1.0	7/0.43	0.6	1.60	2.1	38.5	2495
2 X 2 X 1.5	7/0.53	0.6	0.90	1.5	18.3	563
4 X 2 X 1.5	7/0.53	0.6	1.25	1.6	22.3	890
6 X 2 X 1.5	7/0.53	0.6	1.25	1.7	25.6	1128
8 X 2 X 1.5	7/0.53	0.6	1.25	1.7	26.6	1256
10 X 2 X 1.5	7/0.53	0.6	1.25	1.8	28.9	1456
12 X 2 X 1.5	7/0.53	0.6	1.25	1.9	31.0	1634
16 X 2 X 1.5	7/0.53	0.6	1.60	2.0	35.8	2261
20 X 2 X 1.5	7/0.53	0.6	1.60	2.1	38.9	2595
24 X 2 X 1.5	7/0.53	0.6	1.60	2.1	41.6	2928
2 X 2 X 2.5	7/0.67	0.7	1.25	1.6	21.4	811
4 X 2 X 2.5	7/0.67	0.7	1.25	1.7	25.5	1123
6 X 2 X 2.5	7/0.67	0.7	1.25	1.8	29.2	1407
8 X 2 X 2.5	7/0.67	0.7	1.25	1.8	30.4	1594
10 X 2 X 2.5	7/0.67	0.7	1.60	1.9	33.9	2063
12 X 2 X 2.5	7/0.67	0.7	1.60	2.0	36.8	2389
16 X 2 X 2.5	7/0.67	0.7	1.60	2.1	41.0	2880
20 X 2 X 2.5	7/0.67	0.7	2.00	2.2	45.7	3687
24 X 2 X 2.5	7/0.67	0.7	2.00	2.3	49.6	4254

SIGNAL & INSTRUMENTATION CABLE

XLPE / ISCR / OSCR / PVC / SWA / PVC-FR

90°C / 500 V

BS EN 50288-7

Data Sheet						
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
2 X 3 X 0.5	7/0.3	0.6	0.90	1.5	16.2	456
4 X 3 X 0.5	7/0.3	0.6	0.90	1.5	19.0	614
8 X 3 X 0.5	7/0.3	0.6	1.25	1.6	22.9	973
12 X 3 X 0.5	7/0.3	0.6	1.25	1.7	26.7	1264
16 X 3 X 0.5	7/0.3	0.6	1.25	1.8	29.7	1516
20 X 3 X 0.5	7/0.3	0.6	1.60	1.9	33.1	1963
24 X 3 X 0.5	7/0.3	0.6	1.60	2.0	35.9	2254
2 X 3 X 0.75	7/0.37	0.6	0.90	1.5	17.0	501
4 X 3 X 0.75	7/0.37	0.6	0.90	1.6	20.2	694
8 X 3 X 0.75	7/0.37	0.6	1.25	1.7	24.6	1126
12 X 3 X 0.75	7/0.37	0.6	1.25	1.8	28.5	1450
16 X 3 X 0.75	7/0.37	0.6	1.60	1.9	32.4	1931
20 X 3 X 0.75	7/0.37	0.6	1.60	2.0	35.8	2310
24 X 3 X 0.75	7/0.37	0.6	1.60	2.0	38.2	2576
2 X 3 X 1.0	7/0.43	0.6	0.90	1.5	17.9	550
4 X 3 X 1.0	7/0.43	0.6	1.25	1.6	21.9	885
8 X 3 X 1.0	7/0.43	0.6	1.25	1.7	26.0	1255
12 X 3 X 1.0	7/0.43	0.6	1.25	1.8	30.0	1609
16 X 3 X 1.0	7/0.43	0.6	1.60	1.9	34.3	2178
20 X 3 X 1.0	7/0.43	0.6	1.60	2.0	37.8	2592
24 X 3 X 1.0	7/0.43	0.6	1.60	2.1	40.6	2935
2 X 3 X 1.5	7/0.53	0.6	0.90	1.5	19.1	624
4 X 3 X 1.5	7/0.53	0.6	1.25	1.7	23.6	1028
8 X 3 X 1.5	7/0.53	0.6	1.25	1.8	28.1	1486
12 X 3 X 1.5	7/0.53	0.6	1.60	1.9	33.4	2145
16 X 3 X 1.5	7/0.53	0.6	1.60	2.0	37.7	2658
20 X 3 X 1.5	7/0.53	0.6	1.60	2.1	41.1	3117
24 X 3 X 1.5	7/0.53	0.6	2.00	2.2	45.0	3861
2 X 3 X 2.5	7/0.67	0.7	1.25	1.6	22.3	903
4 X 3 X 2.5	7/0.67	0.7	1.25	1.7	26.7	1290
8 X 3 X 2.5	7/0.67	0.7	1.60	1.9	33.0	2139
12 X 3 X 2.5	7/0.67	0.7	1.60	2.1	39.0	2876
16 X 3 X 2.5	7/0.67	0.7	2.00	2.2	44.3	3809
20 X 3 X 2.5	7/0.67	0.7	2.00	2.3	48.9	4546
24 X 3 X 2.5	7/0.67	0.7	2.00	2.4	52.6	5169