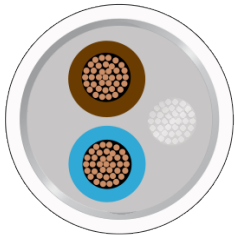


BS8436 SCREENED FIXED WIRING CABLE



APPLICATION

The protected fixed wiring cable is an alternative cable which can be used in place of steel wire armoured cables or singles cables. Intended for installation in air (which includes installation in trunking or other closed systems), and in thin partitions and building voids when connected to a suitably selected protective device. When cables are to be installed in any other environment, reference should be made to the cable manufacturer.

CABLE STANDARDS

1mm² – 4mm², & 10mm² to BS8436
6mm² manufactured to IS273
BS EN 50267-1:1998
Acid gas emissions to BS EN 50267-2-1
Smoke emissions to BS EN 50268-2

CONSTRUCTION

Conductor: Plain Annealed Stranded Copper
Earth: Bare tinned annealed copper earth wire
Insulation: Cross linked Polyethylene (XLPE)
Armouring: Bonded Aluminium Tube
Sheath: Low Smoke Zero Halogen (LSZH)
Sheath Colour: White

Available on Request:

- Solid Cores
- Different sheath and core colours
- 10mm² and 16mm²

CHARACTERISTICS

Voltage Rating:

1mm² – 4mm²: 300/500 Volts
6mm² – 10mm²: 600/1000 Volts

Temperature Limits: Do not install at temperatures below 0°C

Maximum continuous conductor operating -20 to +90°C

Minimum Bending Radius: As per cable manufacturer datasheet

CORE IDENTIFICATION (PLUS EARTH WIRE)

2 Core: ■ Brown ■ Blue
3 Core: ■ Brown ■ Black ■ Grey
4 Core: ■ Brown ■ Black ■ Grey ■ Blue
Earth: ■ Tinned annealed copper earth wire

BS8436 SCREENED FIXED WIRING CABLE- DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM ²)	STRANDING (MM)	NO OF CORES	WEIGHT (KG/KM)	OVERALL DIAMETER (MM)	1 HOLE CLIP REF	GLAND SIZE
CSX2X1WH	1	7/0.44	2	85	8.6	RCHL34	20SA2
CSX3X1WH	1	7/0.44	3	105	9.4	RCHL37	20SA2
CSX4X1WH	1	7/0.44	4	130	10	RCHL37	20A2
CSX2X1/5WH	1.5	7/0.53	2	106	9.8	RCHL37	20A2
CSX3X1/5WH	1.5	7/0.53	3	140	10.4	RCHL40	20A2
CSX4X1/5WH	1.5	7/0.53	4	158	11.3	RCHL43	20A2
CSX2X2/5WH	2.5	7/0.67	2	135	10.8	RCHL43	20A2
CSX3X2/5WH	2.5	7/0.67	3	182	11.1	RCHL43	20A2
CSX4X2/5WH	2.5	7/0.67	4	259	12.6	RCHL47	20A2
CSX2X4WH	4	7/0.85	2	206	11.5	RCHL43	20A2
CSX3X4WH	4	7/0.85	3	265	13.1	RCHL51	25A2
CSX4X4WH	4	7/0.85	4	320	13.9	RCHL54	25A2
CSX2X6WH	6	7/1.04	2	258	13.1	RCHL51	25A2
CSX3X6WH	6	7/1.04	3	328	14.2	RCHL54	25A2
CSX4X6WH	6	7/1.04	4	450	14.9	RCHL59	25A2
CSX2X10WH	10	7/1.35	2	413	16.1	RCHL63	25A2

BS8436 SCREENED FIXED WIRING CABLE - ELECTRICAL CHARACTERISTICS

Conductor cross-sectional area (mm ²)	Reference Method A (enclosed in conduit in thermally insulating wall etc.)		Reference Method B (enclosed in conduit on a wall or in trunking etc.)		Reference Method C (clipped direct)		Reference Method E (free air or on a perforated cable tray etc horizontal or vertical)	
	1 two-core cable*, single-phase a.c. or d.c.	1 three- or four-core cable*, three-phase a.c.	1 two-core cable*, single-phase a.c. or d.c.	1 three- or four-core cable*, three-phase a.c.	1 two-core cable*, single-phase a.c. or d.c.	1 three- or four-core cable*, three-phase a.c.	1 two-core cable*, single-phase a.c. or d.c.	1 three- or four-core cable*, three-phase a.c.
	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
1	14.5	13	17	15	19	14	21	18
1.5	18.5	16.5	22	19.5	24	22	26	23
2.5	25	22	30	26	33	30	36	32
4	33	30	40	35	45	40	49	42
6	42	38	51	44	58	52	63	54
10	57	51	69	60	80	71	86	75

Conductor cross-sectional area mm ²	Two-core cable d.c. mV: Voltage Drop (per ampere per metre)	Two-core cable single phase a.c. mV: Voltage Drop (per ampere per metre)	Three- or four-core cable three phase a.c. mV: Voltage Drop (per ampere per metre)
1	46	46	40
1.5	31	31	27
2.5	19	19	16
4	12	12	10
6	7.9	7.9	6.8
10	4.7	4.7	4

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS TABLE 4E2 FOR CONDUCTOR OPERATING TEMPERATURE: 90°C.

FOR CONDUCTOR OPERATING TEMPERATURE OF 70°C, TABLE 4D2 CAN BE USED

WHERE IT IS INTENDED TO CONNECT THE CABLES IN THIS TABLE TO EQUIPMENT OR ACCESSORIES DESIGNED TO OPERATE AT A TEMPERATURE LOWER THAN THE MAXIMUM OPERATING TEMPERATURE OF THE CABLE, THE CABLES SHOULD BE RATED AT THE MAXIMUM OPERATING TEMPERATURE OF THE EQUIPMENT OR ACCESSORY (SEE REGULATION 512.1.5).

WHERE IT IS INTENDED TO GROUP A CABLE IN THIS TABLE WITH OTHER CABLES, THE CABLE SHOULD BE RATED AT THE LOWEST OF THE MAXIMUM OPERATING TEMPERATURES OF ANY OF THE CABLES IN THE GROUP (SEE REGULATION 512.1.5).

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.