

FR/Cu/LSOH

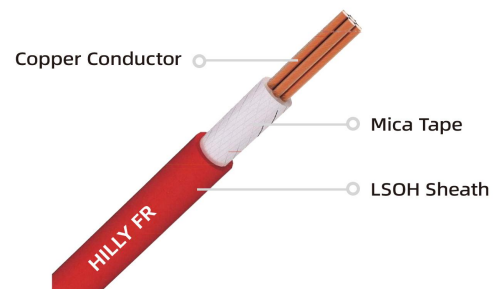
Mica/Glass Tape, LSOH Insulated, Non Sheathed, Fire Resistant, Single Core Cable, 450/750V, BS8592 & BS6387 CWZ

APPLICATION AND DESCRIPTION

BASEC
BRITISH APPROVALS SERVICE FOR CABLES



- © Stranded to BS EN 60228 or IEC 60228 Class 2
- © Mica/Glass Tape
- © LSOH insulation according to EN50363-5 EI5



CORE IDENTIFICATION

- © Green/Yellow, Black, Blue, Brown, Red, White, Grey, other colors upon request

APPLICABLE STANDARDS

- © Design guidelines: BS 8592
- © Circuit Integrity: BS 6387 CWZ
- © Fire Resistant Test: IEC 60331-3
- © Halogen Free: EN 50267-2-1, EN 60684-2
- © Flame retardant: BS EN 60332-1-2
- © Smoke density: BS EN 61034-2

Note: For cable overall size $\leq 20\text{mm}$, BS 6387, EN50200 and BS 8434-2 will be applicable, otherwise BS 8491 will be applicable to cable overall size $> 20\text{mm}$

Wiring cables comply BS6387C, W8Z, EN50200 (PH120), BS8434-2+A2 (PH120) when test conducted in steel conduit or duct

TECHNICAL CHARACTERISTICS

Working voltage	450/750 Volts
Test voltage	2500 Volts
Minimum bending radius	6×Overall diameter
Operating temperature	-15°C to +90°C
Short circuit temperature	+250°C
Insulation resistance	20MΩ·km

1/C FR Cables,BS8592&BS6387CWZ

(AmbientTemperature:30°C,Conductor operating temperature:90°C)

Nominal cross sectional area	Approx. overall diameter	Approx. cable weight	Maximum conductor resistance at 20°C	Short circuit rating 90-250°C (1 sec)	Current rating		Voltage drop		
					Single phase AC or DC enclosed in conduit or trunking	Three phase AC enclosed in conduit or trunking	DC	Single phase AC in conduit or trunking	three phase AC in conduit or trunking
mm ²	mm	kg/km	Ohms/km	kA	Amps	Amps	mV/A/m	mV/A/m	mV/A/m
Stranded conductor									
1.5	3.9	28	12.1	0.22	23	20	31	31	27
2.5	4.5	42	7.41	0.36	31	28	19	19	16
4	5.0	52	4.61	0.60	42	37	12	12	10
6	5.6	72	3.08	0.90	54	48	7.9	7.9	6.8
10	7.2	120	1.83	1.40	75	66	4.7	4.7	4.0
16	8.2	180	1.15	2.30	100	88	2.9	2.9	2.5
25	10.0	275	0.727	3.60	133	117	1.85	1.90	1.65
35	11.2	370	0.524	5.00	164	144	1.35	1.35	1.15
50	12.8	500	0.387	7.20	198	175	0.99	1.05	0.90
70	14.6	700	0.268	10.0	253	222	0.68	0.75	0.65
95	16.9	980	0.193	13.6	306	269	0.49	0.58	0.50
120	18.5	1,207	0.153	17.2	354	312	0.39	0.48	0.42
150	20.4	1,471	0.124	21.5	393	342	0.32	0.43	0.37
185	22.7	1,850	0.0991	26.5	449	384	0.25	0.37	0.32
240	25.7	2,393	0.0754	34.3	528	450	0.190	0.33	0.29
300	28.5	2,988	0.0601	42.9	603	514	0.155	0.31	0.27
400	32.0	3,822	0.0470	57.2	683	584	0.120	0.29	0.25

TEMPERATURE RATING FACTORS

Ambient Temperature°C Rating Factor	25	30	35	40	45	50	55	60	65
Rating Factor	1.02	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65

CORRECTION FACTORS FOR GROUPINGS

Number of Circuits	2	5	3	6	4	7	8	9	10	12	14	16	18	20
Rating Factor	0.80	0.70	0.65	0.60	0.57	0.54	0.52	0.50	0.48	0.45	0.43	0.41	0.39	0.38

※Note: If current rating and buildings is required reference should be made to BS7671 (IEE Wiring Regs)

Complied with the HongKong EMSD COP,and the rating is the average of the conductor cross-sectional area and installation method, and the overall error is within ±5%