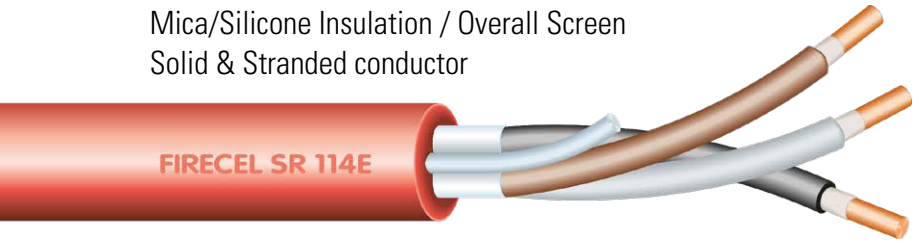
FIRECEL SR 114E

Mica/Silicone Insulation / Overall Screen
Solid & Stranded conductor



Enhanced Cable 300/500 V

BS 5839-1:2017 Clause 26.2e

BS EN 50200:2015 (PH 120)
830°C fire and mechanical shocks

BS 8434-2:2003 +A2:2009 930°C - 120 min. (60 min. fire and mechanical shocks + 60 min. fire mechanical shocks and water spray)

BS 6387:2013
Cat. C fire @ 950°C - 180 min
Cat. W fire 15 min. + fire and water spray 15 min.
Cat. Z fire and mechanical shocks @ 950°C - 15 min.fire

LPCB ref. 217g
(cables up to 4 cores)
For the scope of the LPCB Approval see www.redbooklive.com

For the scope of the BASEC Approval see www.basec.org.uk

APPLICATIONS

FIRECEL SR 114E are primarily intended for use in fire detection and fire alarm systems, emergency lighting circuits or if cables need to properly operate when **fire resistance improvement is required.**
Typical applications are:

BS 5839-1 for **enhanced** fire resistant cables in fire detection and fire alarm systems for building

BS 5839-8 for voice alarm systems

BS 5839-9 for emergency voice communication systems.

BS 5266-1 for emergency lighting of premises

BS 8519 for fire-resistant control cable systems for life safety and fire-fighting application - Category 2

OPERATING TEMPERATURE

-40°C to +90°C

MINIMUM BENDING RADIUS

6 times the outer diameter.

CABLE CONSTRUCTION

Conductors
Plain annealed copper wire, solid class 1 or stranded class 2 according to EN 60228.

Insulation
Mica/Glass fire resistant tape covered by high performance fire resistant silicone rubber type EI2 to BS EN 50363-1.

Cabling
Insulated cores are cabled together.

Overall screen
Aluminium/polyester tape.

Circuit protective conductor or drain wire
Uninsulated tinned copper conductor of the same section and class as the insulated conductors in the 2-, 3- and 4-core cables. Drain wire of 0.5 mm2 tinned copper conductor is provided in cables with more than 4 conductors.

Outer sheath
LSZH thermoplastic material type LTS3 to BS 7655-6.1.
Colour red or white (other colours on request).

COLOUR CODE UP TO 4 CORES TO HD 308

2 cores: ● ●
3 cores: ● ● ●
4 cores: ● ● ● ●
7 cores: centre ●
1st layer ● ● - 4 cores ○
12 cores: centre ● ● ○
1st layer ● ● - 7 cores ○
19 cores: centre ●
1st layer ● ● - 4 cores ○
2nd layer ● ● - 10 cores ○

(on request the cores can be one colour only, identified by printed numbers)

APPLICABLE STANDARDS

Basic design
BS 7629-1
Fire resistant
BS 6387 (cat. C-W-Z)
BS EN 50200 (PH120)
BS EN 50200 annex E (fire, mechanical shock and water spray)
BS 8434-2 (120 min)
IEC 60331
Flame retardant
BS EN 60332-1-2
Fire retardant
BS EN 60332-3-24 (cat. C)
Acid gas emission
BS EN 60754-1
Smoke density
BS EN 61034-2

N° of cond. x cross section (mm²)	Outer diameter (mm)	Weight (kg/km)
1 mm² solid		
2x1.0	7.9	85
3x1.0*	8.4	105
4x1.0*	9.3	125
7x1.0	10.9	175
12x1.0	14.5	300
19x1.0	17.0	470
1.5 mm² solid		
2x1.5	8.8	105
3x1.5	9.3	130
4x1.5	10.3	165
7x1.5	12.1	230
12x1.5	16.0	380
19x1.5	19.0	590
1.5 mm² stranded		
2x1.5	9.2	110
3x1.5	9.7	135
4x1.5	10.5	170
2.5 mm² solid		
2x2.5	10.2	150
3x2.5	10.8	190
4x2.5	12.0	240
2.5 mm² stranded		
2x2.5	10.6	155
3x2.5	11.3	190
4x2.5	12.5	250
4 mm² stranded		
2x4	12.2	220
3x4	13.0	280
4x4	14.4	350

approximate values
* not included in BS 7629-1:2015 and in LPCB/BASEC approval.