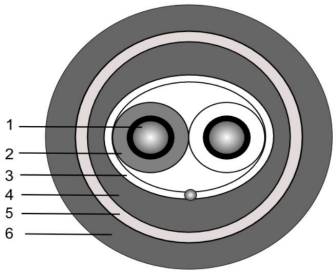
CONTROL CABLE

Doc code	Variant	Revision	Date
ST/2010/040	-	01	23/08/2022

FIRECEL 114E + SWA/LSZH - 300/500 V - FR

Cable type : Overall screened - Armoured
Customized features : LSZH - Fire resistant - Fire retardant - Flame retardant - UV resistant

Picture for illustrative purpose only.



GENERAL CONSTRUCTION

1 -	**Conductor**	Solid plain annealed copper class 1 (U) Stranded plain annealed copper class 2 (R)
2 -	**Insulation**	Mica tape + Silicone rubber
	Colours	2 cores Blue, brown 3 cores Brown, black, grey 4 cores Blue, brown, black, grey 7-12-19 cores Black numbered
	Cabling	The elements are cabled together + PET wrapping
3 -	**Overall screen components**	PET/Al + DW (+ PET wrapping where needed)
	Drain wire	Uninsulated circuit protective conductor (up to 4 cores) Tinned copper drain wire (above 4 cores)
4 -	**Inner sheath**	LSZH thermoplastic compound
5 -	**Armour**	Steel wire armour
6 -	**Outer sheath**	LSZH thermoplastic compound
	Colour	Red (or on request)

Printed marking (D ≤ 20 mm)
-Durability as per BS EN 50396-5.1

- Solid conductors for size 1,1.5,2.5 mm2	FIRECEL SR 114E + SWA - ELECTRIC CABLE - 300/500 V - ENHANCED 120 - Formation - H - BS 6387 C-W-Z - BATCH *****/year of manufacture - MADE IN ITALY + meter marking
- Stranded conductors for size 1.5,2.5,4 mm2	FIRECEL SR 114E + SWA - STRANDED - ELECTRIC CABLE - 300/500 V - ENHANCED 120 - Formation - H - BS 6387 C-W-Z - BATCH *****/year of manufacture - MADE IN ITALY + meter marking

Printed marking (D > 20 mm)
-Durability as per BS EN 50396-5.1

- Solid conductors for size 1,1.5,2.5 mm2	FIRECEL SR 114E + SWA - ELECTRIC CABLE - 300/500 V - ENHANCED 120 - Formation - H - IEC 60331-21 - BATCH *****/year of manufacture - MADE IN ITALY + meter marking

TECHNICAL DATA

Electric Data

Voltage rating	300/500 V	
Dielectric test core/core	2000 Va.c. for 1 min	
Dielectric test core/screen	2000 Va.c. for 1 min	
Max. Conductor resistance (20°C)	18.1 Ω/km	for 1 mm2
	12.1 Ω/km	for 1.5 mm2
	7.41 Ω/km	for 2.5 mm2
	4.61 Ω/km	for 4 mm2
Min. Insulation resistance	300 MΩxkm	

Physical data

Min. bending radius	12xD
Flex/installation temperature	-5/+75 °C
Static/working temperature	-40/+90 °C

Norms

Conductors	IEC 60228
Construction (as far as applicable)	BS 7629-1

Fire Behaviour

Fire resistant (for D ≤ 20 mm)	EN 50200 PH 120
	EN 50200 + Annex E
	BS 8434-2 + A2
	BS 6387 Cat. C-W-Z
Fire resistant (for D ≥ 20 mm)	IEC 60331-21 PH 120
Fire retardant	IEC 60332-3-24 Cat. C
Flame retardant	IEC 60332-1-2
Acid gas emission	IEC 60754-1 (HCl ≤ 0.5%)
	IEC 60754-2 (pH ≥ 4.3, Conductivity ≤ 10 µS/mm)
Smoke density	IEC 61034-2 (Light transmittance ≥ 60%)
Outer sheath oxygen index (≥ 30%)	ISO 4589-2

U-mSR/OS/LSZH/SWA/LSZH - 300/500 V				
Cavicel code (N)	Formation *mm2*	Under armour diameter (±10%) *mm*	Outer diameter (±10%) *mm*	Net Weight (±10%) *kg/km*
160296	2 x 1 + E	8.0	12.6	310
160301	3 x 1 + E	8.4	13.0	340
160302	4 x 1 + E	9.0	13.6	360
160303	7 x 1	11.1	15.9	480
160304	12 x 1	14.6	19.6	700
160305	19 x 1	17.3	22.3	910
160309	2 x 1.5 + E	8.8	13.4	350
160310	3 x 1.5 + E	9.3	13.9	380
160311	4 x 1.5 + E	10.5	15.1	450
160312	7 x 1.5	12.5	17.3	580
160313	12 x 1.5	16.5	21.5	840
160314	19 x 1.5	19.5	24.7	1120
160316	2 x 2.5 + E	10.0	14.6	420
160318	3 x 2.5 + E	10.8	15.6	480
160319	4 x 2.5 + E	12.0	16.8	560

R-mSR/OS/LSZH/SWA/LSZH - 300/500 V				
Cavicel code (N)	Formation *mm2*	Under armour diameter (±10%) *mm*	Outer diameter (±10%) *mm*	Net Weight (±10%) *kg/km*
160320	2 x 1.5 + E	9.3	13.9	370
160321	3 x 1.5 + E	9.6	14.2	400
160322	4 x 1.5 + E	10.7	15.5	460
160323	2 x 2.5 + E	15.5	15.1	440
160324	3 x 2.5 + E	11.3	16.1	510
160326	4 x 2.5 + E	12.5	17.3	590
160327	2 x 4 + E	12.2	17.0	570
160328	3 x 4 + E	12.9	17.7	640
160329	4 x 4 + E	13.9	18.7	720