

ASH RESIST

MULTI CORES CU/SIL/SHIELEDDED/LSZH 300/500 V

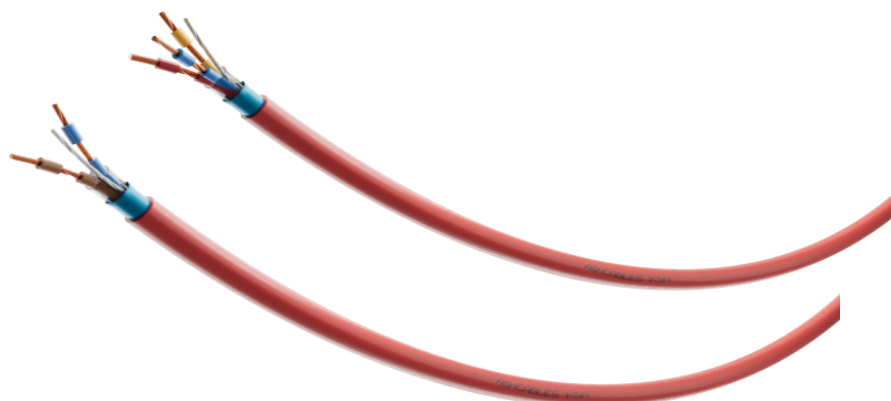
STANDARD FIRE-RESISTANT CABLES

APPLICATION:

- Used in standard Fire Alarm Systems & Emergency Lighting (Circuit Integrity During Fire Conditions)
- Voice alarm systems and emergency voice communication, Emergency and escape lighting and other standard Fire Resistance requirement.
- Emits limited amount of smoke and corrosive gases when burned as measured by a standard test.

CONSTRUCTION DETAILS

Reference Standard	Generally, BS 7629-1, IEC 60331, BS 6387 CAT CWZ, BS EN 50200, IEC 60332-1	
Rated voltage	300 / 500V	
Conductor Material	Plain annealed Copper to ASTM B3, Solid conductor Class (1) of BS EN 60228. Sizes: (1 mm ² , 1.5 mm ² , 2.5 mm ²) Stranded conductor Class (2) of BS EN 60228. Sizes: (1 mm ² , 1.5 mm ² , 2.5 mm ² , 4mm ²)	
Conductor Insulation	Extruded ceramifiable Silicon Rubber (SR)	
Insulation color	No. of cores	Core Identification
	2 Cores	Red, Black
	3 Cores	Red, Yellow, Blue
	4 Cores	Red, Yellow, Blue, Black
Assembly	Insulated conductors are laid up to form a core and non-hygroscopic filler (if required)	
Overall Shield (OS)	Aluminum-backed Mylar tape (Al-Pet Foil) is applied over the assembly (100% coverage) with Tinned copper drain wire. Drain wire size: 0.50 mm ² (Class 1 or Class 2 of BS EN 60228)	
Outer Sheathing	Extruded Low Smoke Zero Halogen (LSZH) compound. The color is Red or White. (or as per customer request)	
Marking (Printing)	Table 1, Table 2	
Cable drawing	Figure 1 and Figure 2	



ELECTRICAL PROPERTY

	1.5 MM2	2.5 MM2	4 MM2	
Conductor DC Resistance @ 20°C	≤12.10	≤7.41	≤4.61	(Ω/km)
Capacitance @ 1 KHz	CORE TO CORE	≤110	≤120	≤150
	CORE TO SHIELD	≤180	≤200	≤250
				pF/m
Inductance to Resistance ratio (L/R)	≤40	≤ 60	≤80	(μH/Ω)
Insulation Resistance	≥ 100 MΩ/km			
Voltage Test	2000 V for 1 minute.			

FLAME BEHAVIOUR, MECHANICAL & ENVIRONMENTAL PROPERTY

Operating Temperature	-20°C to +90°C
Bending Radius	10 X Cable Outer Diameter
Flame Retardance	Pass Flammability Test Requirement of IEC 60332-1, IEC 60332-3 CAT C
Fire Resistant	IEC 60331, BS 6387 Cat. CWZ (for time of 3 hours up to 950°C)
BS EN 50200	PH30, PH60, PH120
Halogen Acid Gases	≤0.5% to IEC 60754-1
Light Transmit	60% to IEC61034
Oxygen Index	30% to ASTM D 2863

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DIMENSIONAL DATA SHEET

Table 1

Solid conductor Class (1) of BS EN 60228. Sizes: (1 mm², 1.5 mm², 2.5 mm²)

S/N	ASH CABLES ITEM CODE	No. of cores X Size (mm ²)	NOM. INSULATION THICKNESS (mm)	NOM. OUTER SHEATH THICKNESS (mm)	APPRX. CABLE DIAMETER (mm)	Approx. Cable Weight (kg/km)	Standard Length (m) ± 5%
1	F41L-02C00100-URD6G	2C X 1.0 (1x1.13 mm)	0.60	0.90	7.30	70	500 / 1000
2	F41L-02C00150-URD6G	2C X 1.50 (1x1.38mm)	0.70	0.90	8.20	95	500 / 1000
3	F41L-02C00250-URD6G	2C X 2.50 (1x1.78mm)	0.80	1.00	9.50	140	500 / 1000
4	F41L-03C00150-URD6G	3C X 1.50 (1x1.38mm)	0.70	0.90	8.50	120	500 / 1000
5	F41L-03C00250-URD6G	3C X 2.50(1x1.78mm)	0.80	1.00	10.20	175	500 / 1000
6	F41L-04C00150-URD6G	4C X 1.50(1x1.38mm)	0.70	1.00	9.50	145	500 / 1000
7	F41L-04C00250-URD6G	4C X 2.50 (1x1.78mm)	0.80	1.00	11.00	215	500 / 1000
Cable Marking		ASHRESIST (F41L) (no. of cores) X (size) MM2 CU/SR/OS/LSZH 300/500V BS 7629-1 BS 6387 CWZ IEC 60331 EN50200 PH120 LPCB 711e-(cl-4)/01 ASHCABLES KSA (YEAR OF MANUFACTURE) (METER MARKING)					

Table 2

Stranded conductor Class (2) of BS EN 60228. Sizes: (1 mm², 1.5 mm², 2.5 mm², 4 mm²)

S/N	ASH CABLES ITEM CODE	No. of cores X Size (mm ²)	NOM. INSULATION THICKNESS (mm)	NOM. OUTER SHEATH THICKNESS (mm)	APPRX. CABLE DIAMETER (mm)	Approx. Cable Weight (kg/km)	Standard Length (m) ± 5%
1	F43L-02C00100-URD6G	2C X 1.0 (7x0.44 mm)	0.60	0.90	7.50	72	500 / 1000
2	F43L-02C00150-URD6G	2C X 1.50 (7x0.525 mm)	0.70	0.90	8.50	100	500 / 1000
3	F43L-02C00250-URD6G	2C X 2.50 (7x0.67 mm)	0.80	1.00	10.00	145	500 / 1000
4	F43L-02C00400-URD6G	2C X 4.0 (7x0.84 mm)	0.80	1.10	11.00	200	500 / 1000
5	F43L-03C00150-URD6G	3C X 1.50 (7x0.525 mm)	0.70	0.90	9.00	125	500 / 1000
6	F43L-03C00250-URD6G	3C X 2.50 (7x0.67 mm)	0.80	1.00	10.50	180	500 / 1000
7	F43L-03C00400-URD6G	3C X 4.0 (7x0.84 mm)	0.80	1.10	12.20	260	500 / 1000
8	F43L-04C00150-URD6G	4C X 1.50 (7x0.525 mm)	0.70	1.00	10.00	155	500 / 1000
9	F43L-04C00250-URD6G	4C X 2.50 (7x0.67 mm)	0.80	1.00	11.50	220	500 / 1000
10	F43L-04C00400-URD6G	4C X 4.0 (7x0.84 mm)	0.80	1.20	13.50	330	500 / 1000
Cable Marking		ASHRESIST (F43L) (no. of cores) X (size) MM2 CU/SR/OS/LSZH 300/500V BS 7629-1 BS 6387 CWZ IEC 60331 EN50200 PH120 LPCB 711e-(cl-4)/01 ASHCABLES KSA (YEAR OF MANUFACTURE) (METER MARKING)					

PACKING	500/1000 mts in cable Wooden Drum or any other customer requirement
	Each reels/drum shall be marked with ASH cables standard practice.