

**ASH FIRE ALARM  
 TWO CORES CU/PVC/PVC 105°C (SHIELDED OR UNSHIELDED)  
 E506797 (UL) LISTED CABLE**

**APPLICATION:**

- Fire Alarms, Burglar Alarms & Smoke Detectors.
- Voice Communication & Control Circuits.
- Audio, Notification & Initiating Circuits.

**CONSTRUCTION DETAILS**

<b>Reference Standard</b>	<b>UL 1424(FPLR, FPL), UL 1666</b>	
<b>Rated voltage</b>	300 / 500V	
<b>Conductor Material</b>	Plain annealed solid copper conductor as per ASTM B3.	
<b>Conductor Insulation</b>	Extruded PVC- (Polyvinyl Chloride) rated 105°C.	
<b>Insulation color</b>	<b>No. of cores</b>	<b>Core Identification</b>
	2 Cores	Red, Black
<b>Assembly</b>	Insulated conductors are laid up to form a core and non-hygroscopic filler (if required)	
<b>Overall Shield (OS)</b> (For Shielding type)	Aluminum-backed Mylar tape (Al-Pet Foil) is applied over the assembly with 100% coverage with metal side in contact with a tinned solid copper drain wire. Drain wire size (22 AWG solid Tinned Copper to ASTM B33).	
<b>Outer Sheathing</b>	Extruded PVC- (Polyvinyl Chloride) rated 105°C. The color is Red or White. (or as per customer request)	
<b>Marking (Printing)</b>	<b>For Unshielded Type:</b> ASHFIRE (F117) TYPE FPLR (UL)E506797 (No. of cores) X size (AWG) CU/PVC/PVC UNSHIELDED 105°C 300V ASHCABLES KSA (YEAR OF MANUFACTURE) (METER MARKING)	
	<b>For Shielded Type:</b> ASHFIRE (F317) TYPE FPLR (UL)E506797 (No. of cores) X size (AWG) CU/PVC/OS/PVC SHIELDED 105°C ASHCABLES KSA (YEAR OF MANUFACTURE) (METER MARKING)	
<b>Cable Cross sectional drawing</b>	Figure 1	

**ELECTRICAL PROPERTY**

	<b>18 AWG</b>	<b>16 AWG</b>	<b>14 AWG</b>	<b>12 AWG</b>	
<b>Conductor DC Resistance @ 20°C</b>	≤21.40	≤13.50	≤8.45	≤5.31	(Ω/km)
<b>Voltage Drop</b>	50	30	16	12	mV/Amp/m
<b>Insulation Resistance</b>	≥ 10 MΩ/km				
<b>Voltage Rating</b>	300V				

**FLAME BEHAVIOUR, MECHANICAL & ENVIRONMENTAL PROPERTY**

<b>Operating Temperature</b>	-20°C to +105°C
<b>Bending Radius</b>	8 X Cable Outer Diameter
<b>Flame Retardance</b>	UL 1666
<b>Oxygen Index</b>	30% to ASTM D 2863

**PACKAGING AND JACKET COLORS**

<b>PACKING</b>	1000 FT / 305 Meters (Spools) In cable Wooden Drum for special cutting requirement.
<b>Jacket color</b>	Any standard color is available upon request.



UL Report Ref.  
 E506797-20190626



**ASH FIRE ALARM  
 TWO CORES CU/PVC/PVC 105°C (SHIELDED OR UNSHIELDED)  
 E506797 (UL) LISTED CABLE**

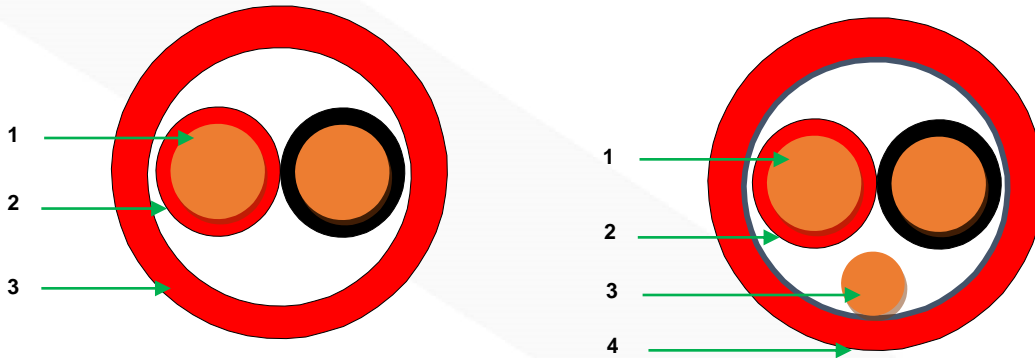
**DIMENSIONAL DATA SHEET  
 TWO CORES CU/PVC/UNSHIELDED/PVC 105°C 300 V**

ITEM	ASH CABLES ITEM CODES	No. of cores	Size (AWG) (Wire Dia.)	NOM. INS. THICKNESS (mm)	NOM. OUTER SHEATH THICKNESS (mm)	APPRX. CABLE DIA. (mm)	Approx. Cable Weight (kg/km)	Standard Length (FT/m)
1	F117-02C18AWGUX4I	2	18 (1x1.02)	0.45	0.60	5.50	45	1000 / 305
2	F117-02C16AWGUX4I	2	16 (1x1.29)	0.45	0.60	6.20	55	1000 / 305
3	F117-02C14AWGUX4I	2	14 (1x1.63)	0.45	0.60	7.80	85	1000 / 305
4	F117-02C12AWGUX4I	2	12 (1x2.05)	0.45	0.60	8.60	115	1000 / 305

**TWO CORES CU/PVC/SHIELDED/PVC 105°C 300 V**

ITEM	ASH CABLES ITEM CODES	No. of cores	Size (AWG) (Wire Dia.)	NOM. INS. THICKNESS (mm)	NOM. OUTER SHEATH THICKNESS (mm)	APPRX. CABLE DIA. (mm)	Approx. Cable Weight (kg/km)	Standard Length (FT/m)
1	F317-02C18AWGUX4I	2	18 (1x1.02)	0.45	0.60	5.90	50	1000 / 305
2	F317-02C16AWGUX4I	2	16 (1x1.29)	0.45	0.60	6.50	60	1000 / 305
3	F317-02C14AWGUX4I	2	14 (1x1.63)	0.45	0.60	8.00	100	1000 / 305
4	F317-02C12AWGUX4I	2	12 (1x2.05)	0.45	0.60	9.00	130	1000 / 305

Figure 1  
2 Cores



- 1. PLAIN ANNEALED SOLID COPPER CONDUCTOR
- 2. PVC 105°C INSULATION
- 3. PVC 105°C FINAL JACKET (RED OR WHITE- AS PER REQUEST)

- 1. PLAIN ANNEALED SOLID COPPER CONDUCTOR
- 2. PVC 105°C INSULATION
- 3. SHIELDING (DRAIN WIRE + AL-PET FOIL)
- 4. PVC 105°C FINAL JACKET (RED OR WHITE- AS PER REQUEST)



UL Report Ref.  
E506797-20190626

