

**Signal
to
the world**



**Fire Alarm System
Solutions
Cable & Assemblies**

Fire Alarm Cable



Our Fire Alarm Cables are manufactured in a wide variety of gauge sizes, shielding configurations and jacketing materials including plenum, riser and general purpose.

Features:

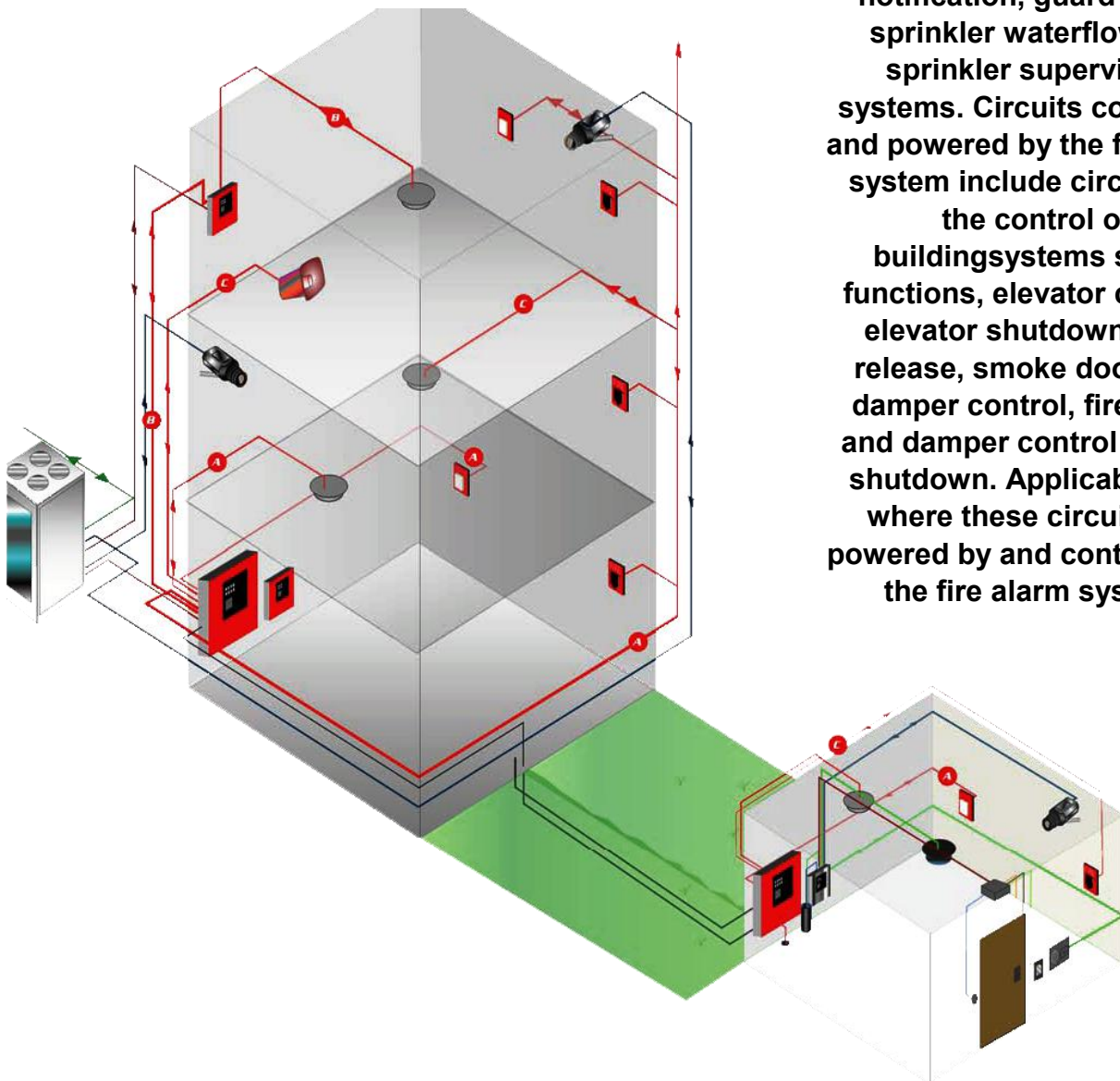
- Countdown or sequential footage markings
- New labeling system on boxes
- Color coded boxes
- Zone and room markings

Fire Power Limited Cable:

Type FPL, FPLR, FPLP

Article 760:

The scope of this article covers the installation of wiring and equipment of fire alarm systems including all circuits controlled and powered by the fire alarm system. These include fire detection and alarm notification, guard's tour, sprinkler waterflow and sprinkler supervisory systems. Circuits controlled and powered by the fire alarm system include circuits for the control of buildings systems safety functions, elevator capture, elevator shutdown, door release, smoke doors and damper control, fire doors and damper control and fan shutdown. Applicable only where these circuits are powered by and controlled by the fire alarm system.



Construction:

	Non-Plenum	Plenum	Direct Burial
Conductors	Bare Copper		
Insulation	PP/PE	Low-Smoke PVC	SRPVC
	Conductor Color Code Chart 4		
Jacket	PVC	Low-Smoke PVC	PVC
Colors	Red, White		Black



Features:

Sunlight Resistant (Except Plenum)

Popular Packaging:

Pull Box 500', 1000'

Reel 500', 1000'

Consult factory for other packaging options

22 AWG – UNSHIELDED

#CODE	#COND	STR/ SOL	DC Resistance (OHMS)	NOM. CAP. (PF/FT)	NOM. O.D. (in/mm)	AVG. WT.PER MFT (LBS)
GENERAL PURPOSE – FPL LISTED						
7110001	4	SOL	17.0	15	0.118/3.00	15
7110002	6	SOL	17.0	15	0.144/3.66	19
7110003	8	SOL	17.0	15	0.155/3.94	24
7110004	10	SOL	17.5	15	0.182/4.62	31
7110005	12	SOL	17.0	15	0.188/4.78	37
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110021	4	SOL	17.0	15	0.118/3.00	15
GENERAL PURPOSE – FPL LISTED						
7110201	4	STR			0.137/3.50	
7110202	6	STR			0.163/4.16	
7110203	8	STR			0.171/4.34	
7110204	10	STR			0.197/5.02	
7110205	12	STR			0.204/5.18	
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110221	4	STR			0.134/3.40	

Insulation Color

Number	Description
4	Blk,Red,Ylw,Grn
6	Blk,Red,Ylw,Grn,Brn,Blu
8	Blk,Red,Ylw,Grn,Brn,Blu,Ppl,Pnk
10	Blk,Red,Ylw,Grn,Brn,Blu,Ppl,Pnk,Tan,Org
12	Blk,Red,Ylw,Grn,Brn,Blu,Ppl,Pnk,Tan,Org,Blk\Wht,Red\Wht

18 AWG – UNSHIELDED

#CODE	#COND	STR/ SOL	DC Resistance (OHMS)	NOM. CAP. (PF/FT)	NOM. O.D. (in/mm)	AVG. WT.PER MFT (LBS)
GENERAL PURPOSE – FPL LISTED						
7110006	2	SOL	6.50	20	0.134/3.40	17
7110007	4	SOL	6.50	20	0.170/4.32	29
7110008	6	SOL	6.32	20	0.192/4.87	41
7110009	8	SOL	6.50	20	0.208/5.28	52
7110010	10	SOL	6.50	20	0.244/6.20	68
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110022	2	SOL	6.50	19	0.138/3.50	17
7110023	4	SOL	6.50	19	0.174/4.42	34
7110024	6	SOL	6.50	19	0.187/4.75	44
7110025	10	SOL	6.50	19	0.244/6.20	67
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110041	2	SOL	6.50	24	0.134/3.40	19
7110042	4	SOL	6.50	24	0.156/3.96	32
7110043	6	SOL	6.50	24	0.192/4.87	45
GENERAL PURPOSE – FPL LISTED						
7110206	2	STR	6.50	19	0.260/6.60	37
7110207	4	STR	6.50	19	0.295/4.49	59
7110208	6	STR	6.50	19	0.345/8.76	76
7110209	8	STR	6.50	19	0.375/9.52	95
7110210	10	STR	6.50	19	0.260/6.60	
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110222	2	STR			0.138/3.85	
7110223	4	STR			0.174/4.82	
7110224	6	STR			0.187/4.97	
7110225	10	STR			0.244/6.60	
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110241	2	STR			0.134/3.85	
7110242	4	STR			0.156/4.40	
7110243	6	STR			0.192/5.28	

Insulation Color

Number	Description
2	Blk,Red
4	Blk,Red,Ylw,Grn
6	Blk,Red,Ylw,Grn,Brn,Blu
8	Blk,Red,Ylw,Grn,Brn,Blu,Ppl,Pnk
10	Blk,Red,Ylw,Grn,Brn,Blu,Ppl,Pnk,Tan,Org

Construction:

	Non-Plenum	Plenum	Direct Burial
Conductors	Bare Copper		
Insulation	PP/PVC	Low-Smoke PVC	SRPVC
	Conductor Color Code Chart 4		
Jacket	PVC	Low-Smoke PVC	PVC
Colors	Red, White		Black



Features:

Sunlight Resistant (Except Plenum)

Popular Packaging:

Pull Box 500', 1000'

Reel 500', 1000'

Consult factory for other packaging options

16 AWG – UNSHIELDED

#CODE	#COND	STR/ SOL	DC Resistance (OHMS)	NOM. CAP. (PF/FT)	NOM. O.D. (in/mm)	AVG. WT.PER MFT (LBS)
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GENERAL PURPOSE – FPL LISTED

7110011	2	SOL	4.15	20	0.157/4.01	24
7110012	4	SOL	4.15	20	0.180/4.57	43

RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED

7110026	2	SOL	4.919	20	0.155/3.94	24
7110027	4	SOL	4.15	20	0.184/4.67	43

PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED

7110044	2	SOL	4.19	27	0.154/3.91	26
7110045	4	SOL	4.05	27	0.180/4.57	47

GENERAL PURPOSE – FPL LISTED

7110211	2	STR			0.173/4.41	
7110212	4	STR			0.195/4.97	

RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED

7110226	2	STR			0.171/4.34	
7110227	4	STR			0.200/5.07	

PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED

7110244	2	STR			0.170/4.31	
7110245	4	STR			0.195/4.97	

Insulation Color

Number	Description
2	Blk,Red
4	Blk,Red,Ylw,Grn

14 AWG – UNSHIELDED

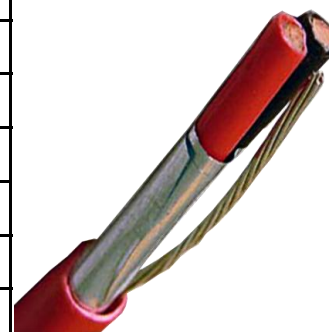
#CODE	#COND	STR/ SOL	DC Resistance (OHMS)	NOM. CAP. (PF/FT)	NOM. O.D. (in/mm)	AVG. WT.PER MFT (LBS)
GENERAL PURPOSE – FPL LISTED						
7110013	2	SOL	2.60	22	0.200/5.08	35
7110014	4	SOL	2.60	22	0.214/5.44	64
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110028	2	SOL	2.54	22	0.202/5.13	37
7110029	4	SOL	2.54	22	0.236/5.99	65
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110046	2	SOL	2.50	27	0.180/4.57	38
7110047	4	SOL	2.50	27	0.246/6.25	68
GENERAL PURPOSE – FPL LISTED						
7110213	2	STR			0.216/5.48	
7110214	4	STR			0.230/5.84	
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110228	2	STR			0.218/5.53	
7110229	4	STR			0.251/6.39	
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110246	2	STR			0.195/4.97	
7110247	4	STR			0.262/6.65	

12 AWG – UNSHIELDED

#CODE	#COND	STR/ SOL	DC Resistance (OHMS)	NOM. CAP. (PF/FT)	NOM. O.D. (in/mm)	AVG. WT.PER MFT (LBS)
GENERAL PURPOSE – FPL LISTED						
7110015	2	SOL	1.60	22	0.242/6.15	52
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110030	2	SOL	2.54	22	0.232/5.89	55
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110048	2	SOL	1.60	30	0.246/6.25	55
GENERAL PURPOSE – FPL LISTED						
7110215	2	STR			0.258/6.55	
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110230	2	STR			0.247/6.29	
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110248	2	STR			0.262/6.65	

Construction:

	Non-Plenum	Plenum
Conductors	Bare Copper	
Shielded	Al/Mylar with Drain Wire	
Insulation	PP/PVC	Low-Smoke PVC
	Conductor Color Code Chart 4	
Jacket	PVC	Low-Smoke PVC
Colors	Red, White	



Features:

Sunlight Resistant (Except Plenum)

Popular Packaging:

Pull Box 500', 1000'

Reel 500', 1000'

Consult factory for other packaging options

22 AWG – SHIELDED

#CODE	#COND	STR/ SOL	DC Resistance (OHMS)	NOM. CAP. (PF/FT)	NOM. O.D. (in/mm)	AVG. WT.PER MFT (LBS)
GENERAL PURPOSE – FPL LISTED						
7110101	4	SOL	17.0	31	0.124/3.15	17
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110121	4	SOL	17.5	31	0.126/3.20	16
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110141	4	SOL	17.0	53	0.126/3.20	18
GENERAL PURPOSE – FPL LISTED						
7110301	4	STR			0.136/3.45	
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110321	4	STR			0.142/3.60	
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110341	4	STR			0.142/3.60	

Insulation Color

Number	Description
4	Blk,Red,Ylw,Grn

18 AWG – SHIELDED

#CODE	#COND	STR/ SOL	DC Resistance (OHMS)	NOM. CAP. (PF/FT)	NOM. O.D. (in/mm)	AVG. WT.PER MFT (LBS)
GENERAL PURPOSE – FPL LISTED						
7110102	2	SOL	6.50	42	0.138/3.51	20
7110103	4	SOL	6.50	42	0.160/4.06	31
7110104	6	SOL	6.50	42	0.196/4.99	50
7110105	8	SOL	6.50	42	0.212/5.38	57
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110122	2	SOL	6.50	42	0.138/3.51	21
7110123	4	SOL	6.50	42	0.163/4.14	32
7110124	6	SOL	6.50	42	0.196/4.99	46
7110125	8	SOL	6.50	42	0.212/5.38	56
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110142	2	SOL	6.50	68	0.140/3.57	22
7110143	4	SOL	6.50	68	0.168/4.27	35
7110144	6	SOL	6.50	68	0.196/4.99	50
GENERAL PURPOSE – FPL LISTED						
7110302	2	STR			0.154/3.91	
7110303	4	STR			0.175/4.46	
7110304	6	STR			0.212/5.39	
7110305	8	STR			0.227/5.78	
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110322	2	STR			0.154/3.91	
7110323	4	STR			0.179/4.54	
7110324	6	STR			0.212/5.39	
7110325	8	STR			0.227/5.78	
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110342	2	STR			0.156/3.97	
7110343	4	STR			0.184/4.67	
7110344	6	STR			0.212/5.39	

Insulation Color

Number	Description
2	Blk,Red
4	Blk,Red,Ylw,Grn
6	Blk,Red,Ylw,Grn,Brn,Blu
8	Blk,Red,Ylw,Grn,Brn,Blu,Ppl,Pnk

16 AWG – SHIELDED

#CODE	#COND	STR/ SOL	DC Resistance (OHMS)	NOM. CAP. (PF/FT)	NOM. O.D. (in/mm)	AVG. WT.PER MFT (LBS)
GENERAL PURPOSE – FPL LISTED						
7110106	2	SOL	4.10	46	0.158/4.01	29
7110107	4	SOL	4.10	46	0.186/4.72	49
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110126	2	SOL	4.10	46	0.166/4.22	31
7110127	4	SOL	4.10	46	0.195/4.95	49
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110145	2	SOL	4.05	77	0.175/4.45	35
7110146	4	SOL	4.05	77	0.202/5.13	52
GENERAL PURPOSE – FPL LISTED						
7110306	2	STR			0.174/4.41	
7110307	4	STR			0.201/5.12	
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110326	2	STR			0.182/4.62	
7110327	4	STR			0.211/5.35	
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110345	2	STR			0.191/4.85	
7110346	4	STR			0.211/5.37	

Insulation Color

Number	Description
2	Blk,Red
4	Blk,Red,Ylw,Grn

Quality



Professional



Safety



14 AWG – SHIELDED

#CODE	#COND	STR/ SOL	DC Resistance (OHMS)	NOM. CAP. (PF/FT)	NOM. O.D. (in/mm)	AVG. WT.PER MFT (LBS)
GENERAL PURPOSE – FPL LISTED						
7110108	2	SOL	2.54	52	0.200/5.33	40
7110109	4	SOL	2.54	52	0.214/5.59	67
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110128	2	SOL	2.54	52	0.202/5.21	42
7110129	4	SOL	2.54	52	0.236/6.10	72
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110147	2	SOL	2.50	86	0.180/5.28	44
7110148	4	SOL	2.50	86	0.246/6.86	75
GENERAL PURPOSE – FPL LISTED						
7110308	2	STR			0.216/5.73	
7110309	4	STR			0.230/5.99	
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110328	2	STR			0.218/5.61	
7110329	4	STR			0.251/6.50	
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110347	2	STR			0.195/5.68	
7110348	4	STR			0.262/7.26	

12 AWG – UNSHIELDED

#CODE	#COND	STR/ SOL	DC Resistance (OHMS)	NOM. CAP. (PF/FT)	NOM. O.D. (in/mm)	AVG. WT.PER MFT (LBS)
GENERAL PURPOSE – FPL LISTED						
7110110	2	SOL	1.60	56	0.242/6.10	59
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110130	2	SOL	1.65	56	0.232/5.54	60
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110149	2	SOL	1.60	96	0.246/6.22	63
GENERAL PURPOSE – FPL LISTED						
7110310	2	STR			0.258/6.50	
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110330	2	STR			0.247/5.94	
PLENUM RATED – FPLP, CL2P, C(UL), FT6 LISTED						
7110349	2	STR			0.262/6.62	

Construction:

Solid Bare Copper Conductors
PVC Insulation
Parallel Zip Construction
Jacket Colors: Red, White

Features:

Sunlight Resistant
One Conductor Ribbed for Polarity

Popular Packaging:

Pull Box 500', 1000'
Reel 500', 1000'
Consult factory for other packaging options



#CODE	#COND	STR/ SOL	DC Resistance (OHMS)	NOM. CAP. (PF/FT)	NOM. O.D. (mm)	AVG. WT.PER MFT (LBS)
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110031	18AWG 2C	SOL	6.50	17	2.24 × 4.99	18
7110032	16AWG 2C	SOL	4.05	17	2.39 × 5.08	26
7110033	14AWG 2C	SOL	2.54	17	2.72 × 5.59	37
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110231	18AWG 2C	STR			2.44 × 5.39	
7110232	16AWG 2C	STR			2.59 × 5.48	
7110233	14AWG 2C	STR			2.92 × 5.99	



Fire Alarm Cables – Unshielded Mid. Capacitance

P10

Construction:

Solid Bare Copper Conductors
Polypropylene Insulation
PVC Jacket
Conductor Color Code Chart 4
Jacket Colors: Red

Features:

Sunlight Resistant

Popular Packaging:

Pull Box 500', 1000'
Reel 500', 1000'
Consult factory for other packaging options



#CODE	#COND	STR/ SOL	DC Resistance (OHMS)	NOM. CAP. (PF/FT)	NOM. O.D. (in/mm)	AVG. WT.PER MFT (LBS)
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110034	18AWG 2C	SOL	6.25	15	0.144/3.66	19
7110035	16AWG 2C	SOL	4.07	17	0.170/4.32	26

RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED

7110234	18AWG 2C	STR			0.160/4.06	
7110235	16AWG 2C	STR			0.186/4.72	

Fire Alarm Cables – Shielded Mid. Capacitance

Construction:

Solid Bare Copper Conductors
Aluminum/Mylar Overall Shield with Drain Wire
Polypropylene Insulation
PVC Jacket
Conductor Color Code Chart 4
Jacket Colors: Red

Features:

Sunlight Resistant

Popular Packaging:

Pull Box 500', 1000'
Reel 500', 1000'
Consult factory for other packaging options



#CODE	#COND	STR/ SOL	DC Resistance (OHMS)	NOM. CAP. (PF/FT)	NOM. O.D. (in/mm)	AVG. WT.PER MFT (LBS)
RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED						
7110131	18AWG 2C	SOL	6.32	34	0.148/3.76	21
7110132	16AWG 2C	SOL	4.07	38	0.187/4.75	32

RISER RATED – FPLR, CL2R, C(UL), FT4 LISTED

7110331	18AWG 2C	STR			0.164/4.16	
7110332	16AWG 2C	STR			0.203/5.15	

SILICONE INSULATION

- ZION PH fire resistant cables are manufactured within the specific requirement of fire resistant cable standards.
- The fire resistant cable assures reliable circuit integrity to keep emergency evacuation systems operational even whilst the cable is
- ZION fire resistant cables can be used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as **Warning**, **Emergency lighting**, **Evacuation** and **Monitor** systems.
- The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found.
- These can be **Hospitals**, **Cinemas**, **Theatres**, **Schools**, **Shopping centers**, **Airports**, **Factories**, **Hotels** etc.
- ZION products have **low smoke density**, are **halogen free** and they don't emit poisonous gases.



Flame Tests:

BS 4066 part 1 & 3, EN 50266-2-4, IEC 60332-3-24, IEC/EN 60332-1

Insulation Integrity:

BS 6387 CWZ, EN 50200 PH30, IEC 60331

Smoke Density:

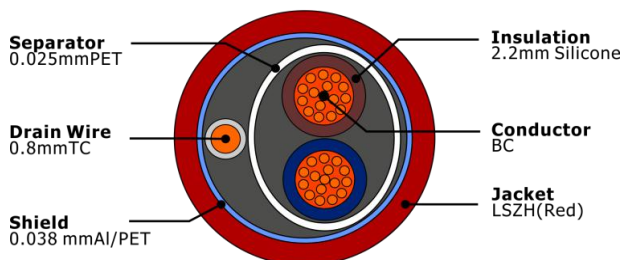
BS 7622, IEC/EN 61034, HD 606

Corrosive Gas Measurement:

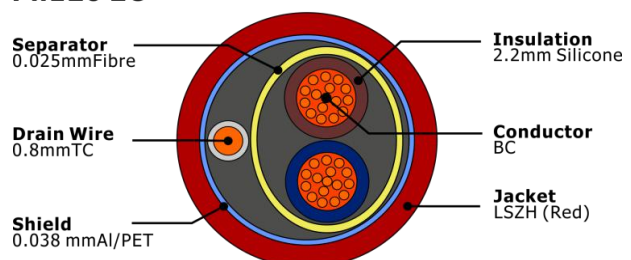
BS EN 50267-2-2, IEC 60754-2

Section View

Ph30 2C



Ph120 2C



Cable Construction

Conductor	Plain annealed copper wire, class 1,2 or 5 according to EN60228. IEC/EN 228, BS 6360, VDE 0295, HD 383
Insulation	Fire resistant silicone rubber
Insulation Color	2 Core: Blue/Brown 3 Core: Blue/Black/Grey 4 Core: Blue/Brown/Black/Grey
Shield	Aluminum laminated Polyester Tape Coverage 100 % (Overlapping 20%)
Drain Wire	Tinned Copper to BS 6360 Solid 0.80mm
Jacket	LSZH, Halogen Free Flame Retardant to EN 50290-2, BS 7655 LTS1/LTS3
Jacket Color	Red (RAL 3000) or White

Electrical & Mechanical Characteristics

Characteristic	Value			
	1.0 mm ²	1.5 mm ²	2.5 mm ²	4.0 mm ²
Max. Conductor Resistant at 20°C Class1,2(Ω/km)	18.0	12.0	7.4	4.6
Max. Conductor Resistant at 20°C Class5 (Ω/km)	19.5	13.3	8.0	4.95
Min. Insulation Resistant at 0°C (MΩxkm)	200	200	200	200
Operating Voltage	300/500 V			
Test Voltage	2000 V			
Temperature Rating (Fixed)	-30°C to + 90°C			
Temperature Rating (Flexing)	-5°C to + 60°C			
Min. Bend Radius (Fixed)	8 × D			
Min. Bend Radius (Flexing)	15 × D			

PH 30 Physical Information

Code	Nom. Cond.Cross-Sect.(mm ²)	Conductor Size (no./mm)	Drain Wire Size (no./mm)	Cable Diameter mm (±5 %)	Weight (Kg/km)
7110401	2×1.0	30/0.2	1/0.80	6.1	
7110402	2×1.5	30/0.25	1/0.80	7.5	
7110403	2×2.5	49/0.25	1/0.80	8.5	
7110404	2×4.0	56/0.3	1/0.80	9.6	
7110405	2×6.0	85/0.3	1/0.80	11.5	
7110406	3×1.0	30/0.2	1/0.80	6.5	
7110407	3×1.5	30/0.25	1/0.80	7.4	
7110408	3×2.5	49/0.25	1/0.80	8.65	
7110409	3×4.0	56/0.3	1/0.80	10.1	
7110410	4×1.0	30/0.2	1/0.80	7.1	
7110411	4×1.5	30/0.25	1/0.80	8.2	
7110412	4×2.5	49/0.25	1/0.80	9.75	
7110413	4×4.0	56/0.3	1/0.80	11.4	
7110414	7×1.0	30/0.2	1/0.80	10.0	
7110415	7×1.5	30/0.25	1/0.80	11.3	
7110416	12×1.0	30/0.2	1/0.80	12.5	
7110417	12×1.5	30/0.25	1/0.80	14.5	
7110418	19×1.0	30/0.2	1/0.80	15.0	
7110419	19×1.5	30/0.25	1/0.80	17.0	

Application



ZION FPLR TYPE-POWER LIMITED FIRE ALARM CABLE

P15

- The UL listed FPLR type shielded power limited fire alarm riser cable from Norden is suitable to be used in vertical runs in signaling & fire alarm system. It works in high temperature levels. This cable is constructed with FR-PVC insulation and outer jacket with aluminum and PE tape shielding that meets UL 1666 specifications. This cable complies with VW - 1 Flame Test requirements in ANSI/UL 1581.
- Tested as per ANSI/UL 1666 for flame propagation height of electrical and optical - Fibre Cables Installed Vertically in Shafts.



Standard:

ANSI/UL 1424, Cables for Power-Limited Fire-Alarm Circuits

All these cables comply to:

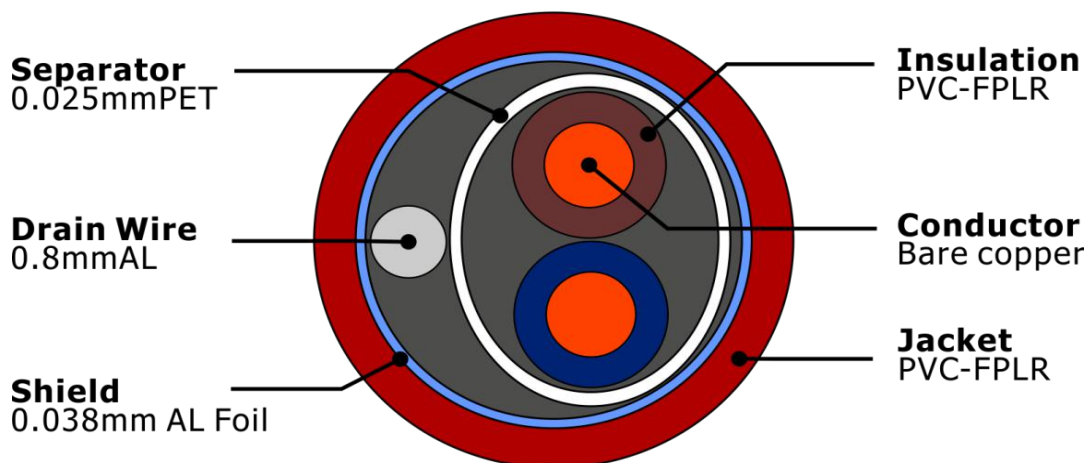
Application of insulation	BS 7629-1-2008
Inner Conductor Diameter	BS EN 60228
Insulation Type	BS 50363-5
Corrosive and Acid Gas Emission	BS EN 50267-2-1
Flame Propagation(bunched cable)	IEC332-3/TS EN50266
Flame Propagation(single cable)	IEC332-1/TS EN60332-1-2
Sheath	BS 7656-6-1/LTS 3

UL File No

E491510

SECTION VIEW

FPLR



ZION FPLR TYPE-POWER LIMITED FIRE ALARM CABLE

P16

Cable Construction

Conductor Solid Bare Copper	Outer Jacket FR - PVC	Drain Wire 1/0.8 AL	Temperature Range -35°C to +105°C
Insulation FR - PVC	Jacket Colour Red	Jacket Thickness 0.85 mm	
Insulation Colour 2 Core: Brown/Blue	Shielding PET+AL/PET	Nylon Rip Cord 150D	

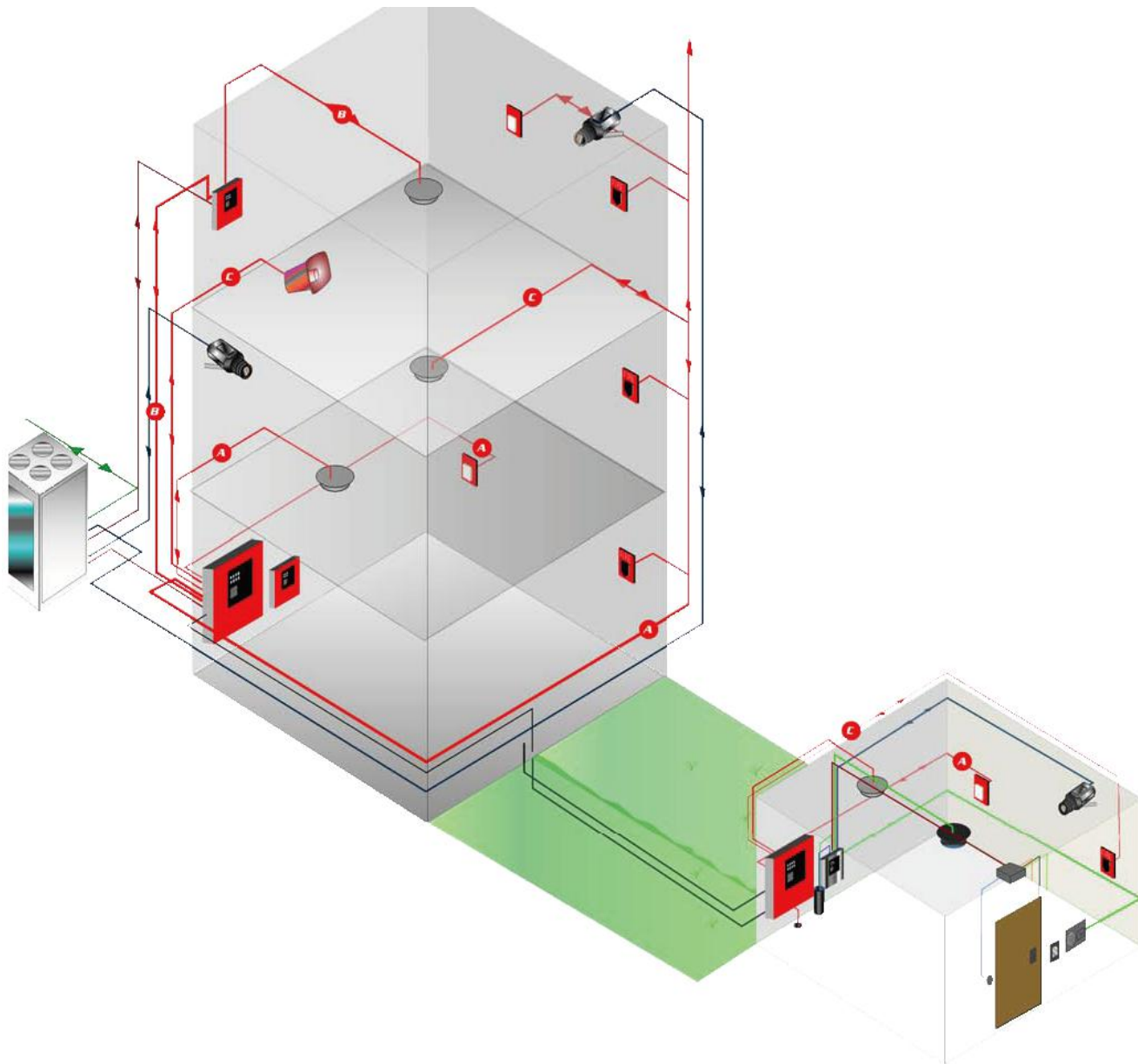
Physical Characteristics

No.of Codes	No. of Cores/Cross-Section(mm ²)	Cable diameter (mm)	Insulation diameter mm (+/- 0.08)	Jacket diameter (mm)
7110601	2×1.0	1.13	2.2	6.2
7110602	2×1.5	1.36	2.4	6.8
7110603	2×2.5	1.76	2.8	7.6
7110604	3×1.0	1.13	2.2	6.4
7110605	3×1.5	1.36	2.4	7.0
7110606	3×2.5	1.76	2.8	7.8
7110607	4×1.0	1.13	2.2	6.9
7110608	4×1.5	1.36	2.4	7.6
7110609	4×2.5	1.76	2.8	8.5
7110610	5×1.5	1.36	2.4	8.5
7110611	7×1.5	1.36	2.4	9.6

Application



Application Scenarios



FIRE ALARM CABLE

P18

FRLS or FRFH

- ZION PH fire resistant cables are manufactured within the specific requirement of fire resistant cable standards.
- The fire resistant cable assures reliable circuit integrity to keep emergency evacuation systems operational even whilst the cable is
- ZION fire resistant cables can be used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as **Warning**, **Emergency lighting**, **Evacuation** and **Monitor** systems.
- The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found.
- These can be **Hospitals**, **Cinemas**, **Theatres**, **Schools**, **Shopping centers**, **Airports**, **Factories**, **Hotels** etc.
- ZION products have **low smoke density** , are **halogen free** and they don't emit poisonous gases.



All these cables comply to:

BS 7629-1:2008

IEC 60754-1-99

IEC 61034-2-2005

BS EN 61034-2:2005

IEC 60754-2-99

IEC 60331-21:1999

BS EN 50267-2-1:1999

IEC 60331-23-2003

IEC 60332-22-2005

Cable Construction

	КПС нг(А)	КПСЭ нг(А)
Conductor	Bare copper class 1	
Insulation	Fire resistant silicone rubber	
Insulation Color	2 Core: Blue/Brown	
	4 Core: Blue/Brown/Black/Grey	
Shield 1	None	PET
Drain Wire	None	0.80 mm Tinned Copper
Shield 2	None	AL/PET
Jacket	FRLS or FRFH(PVC)	
Jacket Color	Red (RAL 3000) or Orange	

Electrical & Mechanical Characteristics

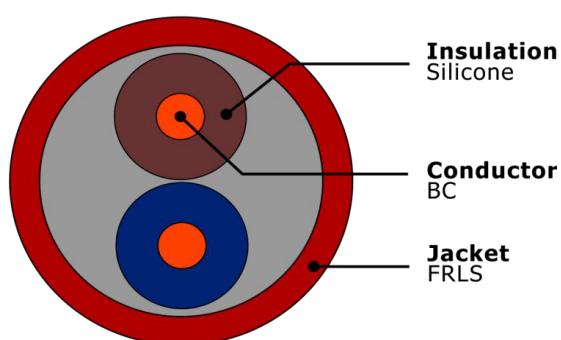
Characteristic	Value
Min. Insulation Resistant	200 MΩ/km
Max. Operating Voltage	300/500 V
Test Voltage	1000 V
Temperature Rating	-15°C to + 90°C
Min. Bend Radius	8 × D

КПС нг(A) Physical Information

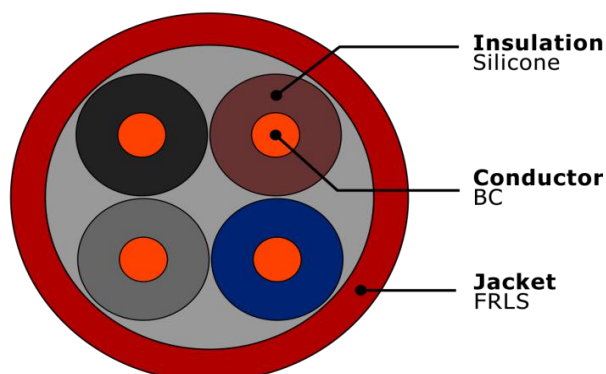
Code	Nom. Cond.Cross-Sect.(mm ²)	Conductor Size (no./mm)	Insulation/ Thickness(mm)	Cable Diameter mm (±5 %)	Level of twisting
7110501	2×0.22	BC 1/0.5	Silicone/0.45	3.90	38.00
7110502	2×0.5	BC 1/0.78	Silicone/0.53	4.80	58.00
7110503	2×0.75	BC 1/0.96	Silicone/0.64	5.70	74.80
7110504	2×1.0	BC 1/1.13	Silicone/0.58	6.10	74.80
7110505	2×1.5	BC 1/1.38	Silicone/0.71	6.70	74.80
7110506	2×2.5	BC 1/1.78	Silicone/0.82	8.30	75.80
7110507	4×0.22	BC 1/0.5	Silicone/0.45	4.50	37.96/45.98
7110508	4×0.5	BC 1/0.78	Silicone/0.53	5.60	58/62.99
7110509	4×0.75	BC 1/0.96	Silicone/0.64	6.60	74.83/84.27
7110510	4×1.0	BC 1/1.13	Silicone/0.58	7.10	74.83/84.27
7110511	4×1.5	BC 1/1.38	Silicone/0.71	7.80	74.83/84.27
7110512	4×2.5	BC 1/1.78	Silicone/0.82	13.00	75.83/84.27

Section View

КПС нг(A)2C Unshielded Cable



КПС нг(A) 4C Unshielded Cable

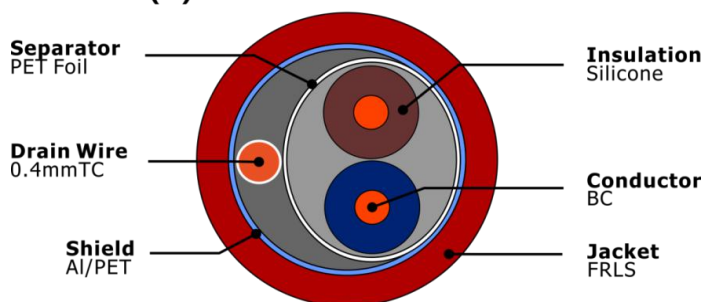


КПСЭ нг(A) Physical Information

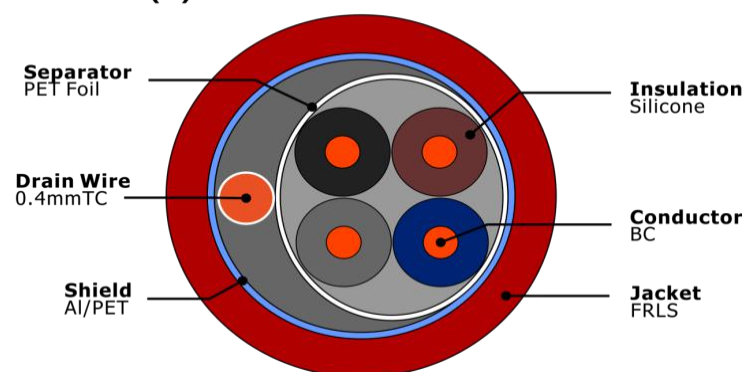
Code	Type (mm ²)	Conduct or Size (no./mm)	Insulation/ Thickness(mm)	Shielded1/ Drian Wire/ Shielded2	Cable Diameter mm (±5 %)	Level of twisting
7110541	2×0.22	BC 1/0.5	Silicone/0.45	PET/TC/AL-Foil	4.10	38.00
7110542	2×0.5	BC 1/0.78	Silicone/0.53	PET/TC/AL-Foil	5.00	58.00
7110543	2×0.75	BC 1/0.96	Silicone/0.64	PET/TC/AL-Foil	5.90	74.80
7110544	2×1.0	BC 1/1.13	Silicone/0.58	PET/TC/AL-Foil	6.30	74.80
7110545	2×1.5	BC 1/1.38	Silicone/0.71	PET/TC/AL-Foil	6.90	74.80
7110546	2×2.5	BC 1/1.78	Silicone/0.82	PET/TC/AL-Foil	8.40	75.80
7110547	4×0.22	BC 1/0.5	Silicone/0.45	PET/TC/AL-Foil	4.80	37.96/45.98
7110548	4×0.5	BC 1/0.78	Silicone/0.53	PET/TC/AL-Foil	5.85	58/62.99
7110549	4×0.75	BC 1/0.96	Silicone/0.64	PET/TC/AL-Foil	6.85	74.83/84.27
7110550	4×1.0	BC 1/1.13	Silicone/0.58	PET/TC/AL-Foil	7.30	74.83/84.27
7110551	4×1.5	BC 1/1.38	Silicone/0.71	PET/TC/AL-Foil	8.00	74.83/84.27
7110552	4×2.5	BC 1/1.78	Silicone/0.82	PET/TC/AL-Foil	13.50	75.83/84.27

Section View

КПСЭ нг(A) 2C shielded Cable



КПСЭ нг(A) 4C shielded Cable





Order Informations

Package	100M/Reel,200M/Reel,500M/Wooden Spool
Delivery time	Normally 25 days after received the deposit.
Brand	HELLOSIGNAL™ OR OEM

Online Service

Skype	kingtone3
ICQ	246632889
Whatsapp	0086 18268009191
Email	michael@zion-communication.com



www.zion-communication.com
HANGZHOU ZION COMMUNICATION CO.,LTD