

Conventional Fire Alarm System

Fire Protective Signaling Cable

Power-Limited Multiple Conductor/Unshielded

DESCRIPTION



- ASTM bare copper
- PVC insulation • Twisted pair or cabled construction • PVC fillers as required
- Polyester binders as required • Overall 75° C PVC jacket

RATING

- NEC type FPLR
- (UL) or (ETL)us Listed
- Meets 300 volt requirements as specified in Section 760 of the NEC

APPLICATIONS

Indoor for:

- Audio circuits
- Control circuits
- Initiating circuits
- Notification circuits

SPECIAL NOTES

- Select cables are available in outdoor and direct burial versions. See Aquaseal® product line for details
- Orange ripcord under jacket
- Catalog No. 980, 982, and 990 are also available with a Blue, Green, White or Yellow jacket

Catalog No.	No. of Cond.	AWG Size & Stranding Nom. D.C.R.	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.	
			inch	mm	inch	mm	inch	mm
1084	6	22 Solid 17.5 Ω/M'	.010	.25	.020	.51	.179	4.55
1086	8	22 Solid 17.5 Ω/M'	.010	.25	.020	.51	.193	4.90
980	1 Pair	18 Solid 6.5 Ω/M'	.010	.25	.020	.51	.156	3.96
982	4	18 Solid 6.5 Ω/M'	.010	.25	.020	.51	.188	4.78
984	6	18 Solid 6.5 Ω/M'	.010	.25	.020	.51	.224	5.69
986	8	18 Solid 6.5 Ω/M'	.010	.25	.020	.51	.252	6.40
988	10	18 Solid 6.5 Ω/M'	.010	.25	.020	.51	.294	7.47
990	1 Pair	16 Solid 4.1 Ω/M'	.010	.25	.020	.51	.165	4.19
992	4	16 Solid 4.1 Ω/M'	.010	.25	.020	.51	.213	5.41
994	1 Pair	14 Solid 2.6 Ω/M'	.012	.30	.025	.64	.205	5.21
700	4	14 Solid 2.6 Ω/M'	.012	.30	.025	.64	.250	6.80
998	1 Pair	12 Solid 1.8 Ω/M'	.012	.30	.025	.64	.235	5.97

Standard spool size 1000 feet

COLOR CODE

Cond. No.	Conductor Colors	Cond. No.	Conductor Colors
1	Black	6	Yellow
2	Red	7	Purple
3	Brown	8	Green
4	Blue	9	Red/Black
5	Orange	10	Red/White

JACKET: Red

Conventional Fire Alarm System

Fire Protective Signaling Cable

DESCRIPTION

- ASTM bare copper • PVC insulation
- Twisted pair or cabled construction • PVC fillers as required
- Polyester binders as required • Overall shield 100% coverage of aluminum polyester foil with 20 AWG strd. tinned copper drain wire • Overall 75° C PVC jacket



Overall Shielded/Power-Limited Multiple Conductor

Catalog No.	No. of Cond.	AWG Size & Stranding Nom. D.C.R.	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.		Nom. Capacitance			
			inch	mm	inch	mm	inch	mm	pf/ft*	pf/m*	pf/ft**	pf/m**
1083 [†]	4	22 Solid 17.5 Ω/M'	.010	.25	.020	.51	.156	3.96	54	177	97	318
975	1 Pair	18 Solid 6.5 Ω/M'	.010	.25	.020	.51	.159	4.04	73	239	133	436
976	3	18 Solid 6.5 Ω/M'	.010	.25	.020	.51	.177	4.50	73	239	133	436
977	4	18 Solid 6.5 Ω/M'	.010	.25	.020	.51	.192	4.88	73	239	133	436
991	1 Pair	16 Solid 4.1 Ω/M'	.010	.25	.020	.51	.170	4.32	82	269	148	486
993	4	16 Solid 4.1 Ω/M'	.010	.25	.020	.51	.217	5.51	82	269	148	486
995	1 Pair	14 Solid 2.6 Ω/M'	.012	.30	.025	.64	.211	5.36	84	276	151	495
999	1 Pair	12 Solid 1.8 Ω/M'	.012	.30	.025	.64	.240	6.10	96	315	173	568

RATING

- NEC type FPLR
- (UL) or (ETL)us Listed
- Meets 300 volt requirements as specified in Section 760 of the NEC

APPLICATIONS

Indoor for:

- Audio circuits
- Control circuits
- Initiating circuits
- Notification circuits

SPECIAL NOTES

- [†] 1083 has a 22 AWG solid tinned copper drain wire
- Select cables are available in outdoor and direct burial versions. See Aquaseal[®] product line for details
- Orange ripcord under jacket
- Catalog No. 975 and 991 are also available with a Blue, Green, White or Yellow jacket

Standard spool size 1000 feet

*Capacitance between conductors.

**Capacitance between one conductor and the other connected to the shield.

COLOR CODE

Cond. No.	Conductor Colors	Cond. No.	Conductor Colors
1	Black	6	Yellow
2	Red	7	Purple
3	Brown	8	Green
4	Blue	9	Red/Black
5	Orange	10	Red/White

JACKET: Red

Conventional Fire Alarm System

Fire Protective Signaling Plenum Cable

Power - Limited/Unshielded

Plenecon II[®] Extra Flexible



DESCRIPTION

- ASTM bare copper
- Polymer alloy insulation
- Twisted pair or cabled construction
- Polyester binders as required
- Flexible plenum jacket

RATING

- NEC type FPLP
- (UL) or (ETL)us Listed
- Meets 300 volt requirements as specified in Section 760 of the NEC

APPLICATIONS

Indoor within ducts, plenums, and other spaces used for environmental air for:

- Audio circuits
- Control circuits
- Initiating circuits
- Notification circuits

SPECIAL NOTES

- Capacitance of unshielded cable may vary depending on the installation environment.
- **INSTALLATION PRECAUTIONS** for plenum cable: refer to the Technical Reference Section

Catalog No.	No. of Conds.	AWG Size & Stranding Nom. D.C.R.	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.		Nom. Capacitance	
			inch	mm	inch	mm	inch	mm	pf/ft*	pf/m*
60980B	1 Pair	18 Solid 6.5 Ω/M'	.010	.25	.015	.38	.142	3.61	29	95
60982B	4	18 Solid 6.5 Ω/M'	.010	.25	.015	.38	.175	4.45	29	95
60991B	1 Pair	16 Solid 4.1 Ω/M'	.010	.25	.015	.38	.161	4.09	32	105
60164B	4	16 Solid 4.1 Ω/M'	.010	.25	.015	.38	.220	5.59	32	105
60993B	1 Pair	14 Solid 2.6 Ω/M'	.012	.30	.015	.38	.191	4.86	35	115
60700B	4	14 Solid 2.6 Ω/M'	.012	.30	.015	.38	.252	6.40	35	115
60995B	1 Pair	12 Solid 1.8 Ω/M'	.012	.30	.015	.38	.225	5.72	45	148

Standard spool size 1000 feet

*Capacitance between conductors.

COLOR CODE

All Cables

1. Black, 2. Red, 3. Brown, 4. Blue

JACKET: Red

Conventional Fire Alarm System

Fire Protective Signaling Plenum Cable

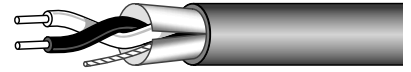
DESCRIPTION

- ASTM bare copper • Polymer alloy insulation
- Twisted pair or cabled construction • Polyester binders as required • Overall shield 100% coverage of aluminum polyester foil with 20 AWG strd. TC drain wire • Flexible plenum jacket

Overall Shielded/**Power-Limited**



Extra Flexible *Plenecon II*®



Catalog No.	No. of Conds.	AWG Size & Stranding Nom. D.C.R.	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.		Nom. Capacitance			
			inch	mm	inch	mm	inch	mm	pf/ft*	pf/m*	pf/ft**	pf/m**
60975B	1 Pair	18 Solid 6.5 Ω/M'	.010	.25	.015	.38	.148	3.76	54	177	97	318
60977B	4	18 Solid 6.5 Ω/M'	.010	.25	.015	.38	.178	4.52	54	177	97	318
60990B	1 Pair	16 Solid 4.1 Ω/M'	.010	.25	.015	.38	.166	4.22	61	200	110	361
603164B	4	16 Solid 4.1 Ω/M'	.010	.25	.015	.38	.210	5.33	61	200	110	361
60992B	1 Pair	14 Solid 2.6 Ω/M'	.012	.30	.015	.38	.198	5.03	84	276	151	495

Standard spool size 1000 feet

*Capacitance between conductors.
**Capacitance between one conductor and the other connected to the shield.

RATING

- NEC type FPLP
- (UL) or (ETL)us Listed
- Meets 300 volt requirements as specified in Section 760 of the NEC

APPLICATIONS

Indoor (non-conduit per NEC) within ducts, plenums, and other spaces used for environmental air for:

- Audio circuits
- Control circuits
- Initiating circuits
- Notification circuits

SPECIAL NOTES

- INSTALLATION PRECAUTIONS for plenum cable: refer to the Technical Reference Section

COLOR CODE	
All Cables	1. Black, 2. Red, 3. Brown, 4. Blue
	JACKET: Red

Conventional Fire Alarm System

Fire Protective Signaling Plenum Cable

Power - Limited/Unshielded

Plenecon® Extra Flexible



DESCRIPTION

- ASTM bare copper
- Fluoropolymer insulation
- Twisted pair or cabled construction
- Polyester binders as required
- Flexible 75° C plenum jacket

RATING

- NEC type FPLP
- (UL) or (ETL)us Listed
- Meets 300 volt requirements as specified in Section 760 of the NEC

APPLICATIONS

Indoor within ducts, plenums, and other spaces used for environmental air for:

- Audio circuits
- Control circuits
- Initiating circuits
- Notification circuits

Catalog No.	No. of Conds.	AWG Size & Stranding Nom. D.C.R.	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.	
			inch	mm	inch	mm	inch	mm
60980	1 Pair	18 Solid 6.5 Ω/M'	.007	.18	.015	.38	.138	3.51
60982	4	18 Solid 6.5 Ω/M'	.007	.18	.015	.38	.174	4.42
60991	1 Pair	16 Solid 4.1 Ω/M'	.007	.18	.015	.38	.156	3.96
60993	1 Pair	14 Solid 2.6 Ω/M'	.010	.25	.015	.38	.200	5.08
60995	1 Pair	12 Solid 1.8 Ω/M'	.010	.25	.015	.38	.228	5.79
60996	4	22 Solid 17.5 Ω/M'	.007	.18	.015	.38	.138	3.51
60997	6	22 Solid 17.5 Ω/M'	.007	.18	.015	.38	.161	4.09
60998	8	22 Solid 17.5 Ω/M'	.007	.18	.015	.38	.173	4.39

Standard spool size 1000 feet

COLOR CODE

All Cables

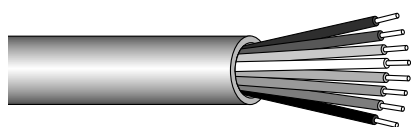
1. Black, 2. Red, 3. Brown, 4. Blue,
5. Orange, 6. Yellow, 7. Violet, 8. Green

JACKET: Red

Conventional Fire Alarm System

Fire Protective Signaling Cable

Nonpower - Limited/Unshielded



DESCRIPTION

- ASTM bare copper
- PVC insulation with nylon
- Twisted pair or cabled construction
- Polyester binders as required
- Overall 75° C PVC jacket

RATING

- NEC type NPLF
- (UL) or (ETL)us Listed
- Intended for NPLF systems operating at 150 volts or less as defined in NEC Article 760

APPLICATIONS

Indoor for:

- Audio circuits
- Control circuits
- Initiating circuits
- Notification circuits

SPECIAL NOTES

- Orange ripcord under jacket

Catalog No.	No. of Conds.	AWG Size & Stranding Nom. D.C.R.	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.	
			inch	mm	inch	mm	inch	mm
1980	1 Pair	18 Solid 6.5 Ω/M'	.016 PVC .005 Nylon	.40 .13	.037	.94	.232	5.89
1982	4	18 Solid 6.5 Ω/M'	.016 PVC .005 Nylon	.40 .13	.037	.94	.253	6.43
1984	6	18 Solid 6.5 Ω/M'	.016 PVC .005 Nylon	.40 .13	.042	1.06	.317	8.05
1986	8	18 Solid 6.5 Ω/M'	.016 PVC .005 Nylon	.40 .13	.042	1.06	.363	9.22
1988	10	18 Solid 6.5 Ω/M'	.016 PVC .005 Nylon	.40 .13	.052	1.32	.420	10.67
1990	1 Pair	16 Solid 4.1 Ω/M'	.016 PVC .005 Nylon	.40 .13	.037	.94	.252	6.40
1992	4	16 Solid 4.1 Ω/M'	.016 PVC .005 Nylon	.40 .13	.037	.94	.276	7.01
1994	1 Pair	14 Solid 2.6 Ω/M'	.016 PVC .005 Nylon	.40 .13	.037	.94	.278	7.06

Standard spool size 1000 feet

COLOR CODE

All Cables	1. Black, 2. Red, 3. Brown, 4. Blue, 5. Orange, 6. Yellow, 7. Violet, 8. Green, 9. Red/Black, 10. Red/White
	JACKET: Red

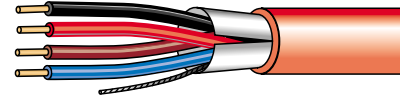
Conventional Fire Alarm System

Fire Protective Signaling Cable

Overall Shielded/Nonpower - Limited

DESCRIPTION

- ASTM bare copper • PVC insulation with nylon • Twisted pair or cabled construction
- Polyester binders as required • Shield 100% coverage of aluminum polyester foil with 20 AWG strd. TC drain wire • Overall 75° C PVC jacket



Catalog No.	No. of Conds	AWG Size & Stranding Nom. D.C.R.	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.		Nom. Capacitance			
			inch	mm	inch	mm	inch	mm	pf/ft*	pf/m*	pf/ft**	pf/m**
1975	1 Pair	18 Solid 6.5 Ω/M'	.016 PVC .005 Nylon	.40 .13	.037 .94	.244 6.20	52	171	94	308		
1977	4	18 Solid 6.5 Ω/M'	.016 PVC .005 Nylon	.40 .13	.037 .94	.265 6.73	52	171	94	308		
1991	1 Pair	16 Solid 4.1 Ω/M'	.016 PVC .005 Nylon	.40 .13	.037 .94	.264 6.71	57	187	103	338		
1993	4	16 Solid 4.1 Ω/M'	.016 PVC .005 Nylon	.40 .13	.042 1.07	.288 7.31	57	187	103	338		
1995	1 Pair	14 Solid 2.6 Ω/M'	.016 PVC .005 Nylon	.40 .13	.037 .94	.284 7.21	64	210	115	377		
1997	4	14 Solid 2.6 Ω/M'	.016 PVC .005 Nylon	.40 .13	.042 1.07	.388 9.86	64	210	115	377		
1999	1 Pair	12 Solid 1.8 Ω/M'	.016 PVC .005 Nylon	.40 .13	.042 1.07	.328 8.33	73	240	131	430		

RATING

- NEC type NPLF
- (UL) or (ETL)us Listed
- Intended for NPLF systems operating at 150 volts or less as defined in NEC Article 760

APPLICATIONS

- Indoor for:
- Audio circuits
 - Control circuits
 - Initiating circuits
 - Notification circuits

SPECIAL NOTES

- Orange ripcord under jacket

Standard spool size 1000 feet

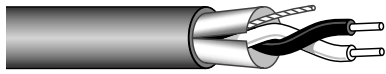
*Capacitance between conductors.
**Capacitance between one conductor and the other connected to the shield.

COLOR CODE	
All Cables	1. Black, 2. Red, 3. Brown, 4. Blue
	JACKET: Red

Conventional Fire Alarm System

Fire Protective Signaling Plenum Cable

Nonpower - Limited/Overall Shielded and Unshielded Plenum Cable



DESCRIPTION

- ASTM bare copper • Fluoropolymer insulation
- Twisted pair or cabled construction • Polyester binders as required
- Shield 100% coverage of aluminum polyester foil with 20 AWG strd. TC drain wire
- Overall fluoropolymer jacket

RATING

- NEC type NPLFP
- (UL) or (ETL)us Listed
- Intended for NPLF systems operating at 150 volts or less as defined in NEC Article 760

APPLICATIONS

Indoor environmental air, Article 760 of the NEC:

- Control circuits
- Initiating circuits
- Notification circuits

SPECIAL NOTES

- Orange ripcord under jacket
- † Unshielded cable design

Catalog No.	No. of Conds.	AWG Size & Stranding Nom. D.C.R.	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.	
			inch	mm	inch	mm	inch	mm
251980 [†]	1 Pair	18 Solid 6.5 Ω/M'	.020	.51	.010	.25	.185	4.70
251975	1 Pair	18 Solid 6.5 Ω/M'	.020	.51	.010	.25	.195	4.95
251976	3	18 Solid 6.5 Ω/M'	.020	.51	.010	.25	.205	5.21
251977	4	18 Solid 6.5 Ω/M'	.020	.51	.010	.25	.215	5.46
251991	1 Pair	16 Solid 4.1 Ω/M'	.020	.51	.010	.25	.214	5.44
251989	3	16 Solid 4.1 Ω/M'	.020	.51	.010	.25	.225	5.72
251993	4	16 Solid 4.1 Ω/M'	.020	.51	.010	.25	.250	6.35
251994 [†]	1 Pair	14 Solid 2.6 Ω/M'	.020	.51	.010	.25	.210	5.33
251995	1 Pair	14 Solid 2.6 Ω/M'	.020	.51	.010	.25	.220	5.59
251997	4	14 (19x27) 2.7 Ω/M'	.020	.51	.010	.25	.344	8.74

Standard spool size 1000 feet

COLOR CODE

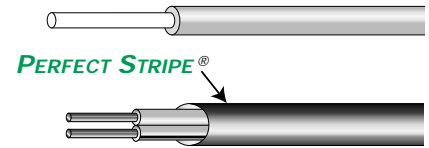
All Cables	1. Black, 2. Red, 3. Brown, 4. Blue
	JACKET: Red

Conventional Fire Alarm System

Fire Protective Signaling Cable

DESCRIPTION

- ASTM bare copper
- 105° C PVC insulation
- Two conductor parallel features **PERFECT STRIPE®**



One and Two Conductor/Power - Limited

Catalog No.	No. of Cond.	AWG Size & Stranding Nom. D.C.R.	Nom. Insulation Thickness		Nom. O.D.		Colors
			inch	mm	inch	mm	
961	1	16 Solid 4.1 Ω/M'	.020	.51	.091	2.31	Black, Green, Brown, White, Red, Orange, Yellow
962	1	14 Solid 2.6 Ω/M'	.020	.51	.104	2.64	

Standard spool size 1000 feet

RATING

- NEC type FPL
- (UL) or (ETL)us Listed
- Meets 300 volt requirement as specified in NEC Article 760

APPLICATIONS

Indoor for:

- Power-Limited Fire Protective Circuits

Catalog No.	No. of Cond.	AWG Size & Stranding Nom. D.C.R.	Nom. Insulation Thickness		Nom. O.D.		Colors
			inch	mm	inch	mm	
970	2	18 Solid 6.5 Ω/M'	.032	.81	.104 x .204	2.64 x 5.18	Red, White, Orange, Brown, Blue, Black
971	2	16 Solid 4.1 Ω/M'	.032	.81	.115 x .225	2.92 x 5.72	White, Red, Black
972	2	14 Solid 2.6 Ω/M'	.032	.81	.128 x .250	3.25 x 6.35	White, Red, Black
974	2	12 Solid 1.8 Ω/M'	.032	.81	.146 x .300	3.71 x 7.62	White, Red, Black

Standard spool size 1000 feet

To learn more about B-I-A please visit us at our
WEB site: www.BiaGmbH.com

