

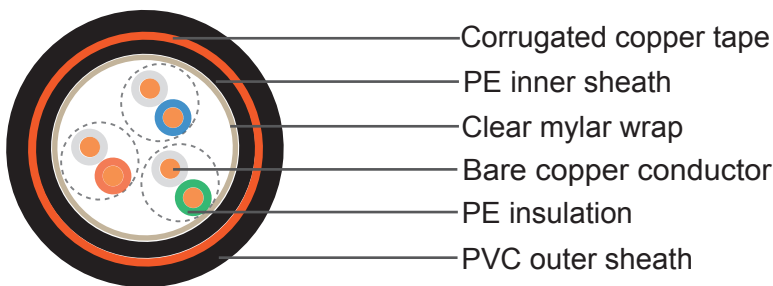


IMSA 39-6/40-6(Communication Cable)

Application

These cables are designed for use in underground conduit or as aerial cable supported by a messenger, or for direct earth burial or for installation in race way in buildings, not including trays, either as fire protective signaling cable or traffic communications and data acquisition cable suitable for power limited use, suitable for use in either wet or dry locations.

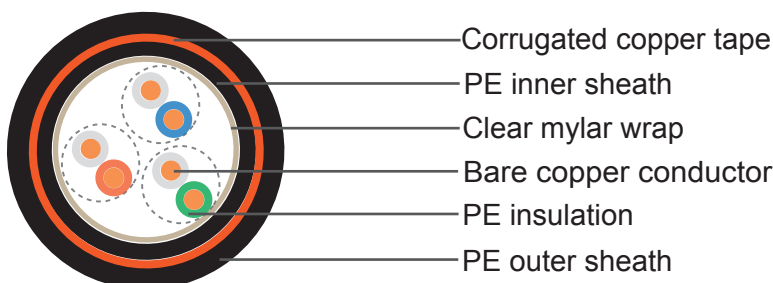
Cable Construction



IMSA 39-6

- **Conductor:** Solid bare copper per ASTM B-3(stranded copper is optional)
- **Insulation:** Polyethylene(PE)
- **Pairing:** Two insulated conductors twisted together
- **Binder tape:** Clear mylar wrap – 100% coverage
- **Inner sheath:** Polyethylene(PE)
- **Shield:** Corrugated copper tape- 15% minimum overlap
- **Outer sheath:** IMSA 39-6-Black Polyvinyl chloride (PVC)/

IMSA 40-6-Black Polyethylene(PE)



IMSA 40-6





Color Code

Conductor No.	Insulation Color		Conductor No.	Insulation Color	
	A wire	B wire		A wire	B wire
1	White	Blue	14	Black	Brown
2	White	Orange	15	Black	Slate
3	White	Green	16	Yellow	Blue
4	White	Brown	17	Yellow	Orange
5	White	Slate	18	Yellow	Green
6	Red	Blue	19	Yellow	Brown
7	Red	Orange	20	Yellow	Slate
8	Red	Green	21	Violet	Blue
9	Red	Brown	22	Violet	Orange
10	Red	Slate	23	Violet	Green
11	Black	Blue	24	Violet	Brown
12	Black	Orange	25	Violet	Slate
13	Black	Green			

Binding Tape Color Code: cables containing more than 25 pairs are assembled insub-sectors/ groups. These are identified by spirally applied color-coded nonhygroscopicbinding tapes. The binding tapes use the same 25 pair color code.

Temperature Rating

75°C

Voltage Rating


300 V



Cable Parameter

AWG	No. of Pairs	Solid or Stranded	Insulation Thickness		Inner Sheath thickness		Outer Sheath thickness		Overall Diameter		Cable Weight	
			inches	mm	inches	mm	inches	mm	inches	mm	Lbs./Kft	Kg/Km
19	3	Solid	0.015	0.38	0.045	1.14	0.06	1.52	0.57	14.48	115	171
19	6	Solid	0.015	0.38	0.045	1.14	0.06	1.52	0.63	16.00	157	234
19	12	Solid	0.015	0.38	0.045	1.14	0.06	1.52	0.756	19.20	248	369
19	18	Solid	0.015	0.38	0.045	1.14	0.08	2.03	0.89	22.61	352	524
19	25	Solid	0.015	0.38	0.045	1.14	0.08	2.03	1.01	25.65	444	661
19	50	Solid	0.015	0.38	0.06	1.52	0.08	2.03	1.255	31.88	783	1165
16	3	Solid	0.02	0.51	0.045	1.14	0.06	1.52	0.66	16.76	161	240
16	6	Solid	0.02	0.51	0.045	1.14	0.06	1.52	0.78	19.81	247	368
16	12	Solid	0.02	0.51	0.06	1.52	0.08	2.03	0.97	24.64	421	626
16	18	Solid	0.02	0.51	0.06	1.52	0.08	2.03	1.22	30.99	607	903
16	25	Solid	0.02	0.51	0.075	1.91	0.11	2.79	1.31	33.27	772	1149
16	50	Solid	0.02	0.51	0.045	1.14	0.06	1.52	1.83	46.48	1493	2222



 **British Standard**

 **International Municipal Signal Association**

 **National Motorway Communications System Specifications**

British Standard

**Traffic Signal Cable to BS 6346
Loop Feeder Cable to BS6346
Loop Detector Cable to BS6500 and BS6195**

