SPEC NO. MCI-Draka / MS / 526 / 16

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SPECIFICATION

FOR

500V. FIRE RESISTANT CABLE WITH OVERALL SCREEN

(MAX-FOH-OSCR)

Prepared by : _____

Jintana Butkham

Design Engineer

Reviewed by : _____

Hatthakrit Klinjan

R&D Manager

Acknowledged by : _____

Customer

MCI-Draka Cable Co.,Ltd.

Office : 2170 Bangkok Tower, New Petchburi Rd.
Bangkapi, Huaykhwang, Bangkok 10310

Tel : +66 2308 0830
Fax : +66 2308 0054
Email : TH-DCAP-mcidraka.com

Factory : 2/7 Moo 2, Banbung-Bankhai Rd,
Nongbua, Bankhai, Rayong 21120

Tel : +66 3896 1158 - 60
Fax : +66 3896 1167

SPECIFICATION

FOR

500V. FIRE RESISTANT CABLE WITH OVERALL SCREEN

(MAX-FOH-OSCR)

1. Scope

This specification covers 500V. high conductivity concentric stranded plain annealed copper conductor, cross-linked polyethylene (XLPE) compound insulated , overall screen, low smoke halogen free (LSHF) compound sheathed fire resistant cable comply to BS EN50288-7, BS 6387 Cat.CWZ, IEC60332-3-22, IEC60754-1, IEC60754-2, IEC61034,IEC60332-1.

2. Conductor

The conductor shall be concentric stranded plain annealed copper wires in accordance with BS 6360 class 2.

3. Fire barrier

The fire barrier shall be two layer of mica tape applied over the conductor with overlap of 30 % minimum The thickness of mica tape shall be approximately 0.14 mm.

4. Insulation

The insulation shall be extruded with cross-linked polyethylene (XLPE) compound and meet requirement BS EN50288-7.

The average thickness of insulation shall be not less than the nominal value give in the attached table.

The minimum thickness at any point shall be not fall below the nominal value by more than 10% + 0.1 mm.

5. Identification of pair

Each pair shall be identified by :

1 Pair : Black and White

6. Stranded core

The cores shall be stranded together to form a pair or triad.The optional PP-Yarn filler and/or the binder tape may be use to maintain a circular formation.

7. Overall shielded

The laminated shielded tape shall be comprise aluminum bonded to mylar tape, applied with a minimum overlap of 30% and with the metallic side down in contact with a drain wire run longitudinally over the pair or triad.

A drain wire shall be tinned annealed copper wires with a total cross-section not less than 0.5 mm^2

8. sheath

The outer sheath shall be extruded with low smoke halogen free (LSHF) compound and meet the requirement to BS EN50288-7, IEC 60332-3-22.

The colour shall be orange.

The average thickness of inner sheath shall be not less than the nominal value given in the attached table.

The minimum thickness shall be not fall below the nominal value by more than 15% + 0.1 mm.

9. Inspection and Test

The following test on the cable shall be performed BS EN50288-7 e.g.

1. Routine test
   - Conductor resistance measurement.
   - A.C. High voltage test.
2. Special test
   - Hot set test for XLPE insulation.
   - IEC60332-3 : Tests on electric cable under fire conditions Part 3 test on bunched wires or cables
   - BS6387 / SS299 Part 1 : Performance requirements for cables required to maintain circuit integrity under fire conditions -
     Category C fire alone
     Categoty W fire with water
     Category Z fire with mechanical shock

10. Marking

Type of marking: Ink-Jet or Roller

Cable Marking: DRAKA 500V MGT/XLPE/OSCR/LSHF _Pr x _MM2 BSEN50288-7, IEC60332-3-22, IEC60331-21, SS299/BS6387 CAT.CWZ YR-YYYY

* including length mark interval 1 meter.

11. Packing

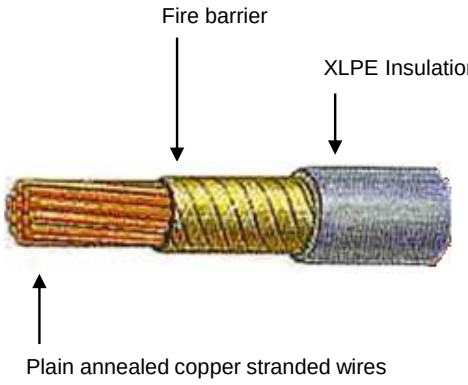
The length of cable shall be wound on a non-returnable wooden drum. Each drum shall have clearly at least information as follow :-

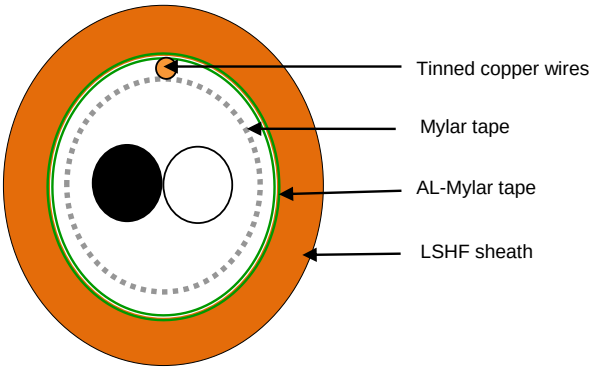
1. Manufacturer's name and/or trade mark.
2. Type of cable.
3. Number core and size of conductor
4. Length of the cable.
5. Net weight and gross weight
6. Drum number.

Attached Table

No. of Pair	Conductor		Insulation thickness	Sheath thickness	Overall diameter ±10%	Conductor resistance at 20 °C	Allowable Ampacities In free air at 40 oC (ambient)	Cable weight	Standard length
	Size	Diameter							
	mm^2	No./mm.	mm. (Nominal)	mm. (Nominal)	mm. (Approx.)	Ω / km. (Max.)		kg./km. (Approx.)	m/Drum (Approx.)
1	**1.5**	1.59	0.6	0.9	9.3	12.1	17	89	1000
1	**2.5**	2.01	0.7	1.0	10.7	7.41	31	121	1000

Illustration of Cable





Description	Material
Conductor	Plain annealed copper stranded wires
Fire barrier	Mica tape
Insulation	Cross-linked polyethylene (XLPE)
Binder tape	Non hygroscopic mylar tape (Optional)
Overall shielded	Tinned annnealed copper wires Aluminum bonded mylar tape
Sheath	Low smoke halogen free (LSHF) compound