PRESENTATION

They are used as a Subscriber line cable in local distribution networks for short and medium distances.

STANDARD

VDE 816

CABLE STRUCTURE

1- Conductor

Each conductor consists of a solid wire of annealed, grade A copper, having a diameter of 0.6 mm or 0.8 mm

2- Insulation

Each conductor is insulated with a layer of solid polyethylene. The thickness shall be according to DIN VDE 0816 table 4

3- Stranding

- Quadding

Four appropriately coloured insulated conductors are assembled together to form a quad.

- Unit stranding
- Five star quads stranded to sub units; each 5 or 10 sub units stranded to main units and the sub or main units stranded to cable core.

4- Wrapping

A wrapping tape is applied over the cable core. It consist of a layer of insulating polyester tape.

5- Moisture barrier

Over the wrapping tape, is applied an aluminum tape (0.2 mm of thickness) coated on both sides with polymer.

6- Sheath

The sheath is black low density polyethylene (2YM2) containing 2,5 0.5% carbon black.

ELECTRICAL PROPERTIES

1- Electrical resistance

Conductor diameter (mm)	Resistance max. (? /km)
0,6	65
0,8	36,6

2- Dielectric strength

The insulation shall resists without any defect to the application of a tension for 60 sec, according to the table below:

Conductor	Between conductors	Between screen and conductors
0,6 mm et 0,8 mm	0,5 kV	2 kV

3- Insulation resistance

> 500 M? .km

4- Mutual capacitance

Conductor	100% of values (nF / km)	95% of values (nF / km)	80% of values (nF / km)
0.6 mm	< 52	< 50	< 48
0.8 mm	< 55	< 53	< 50

PRESENTATION

They are used as a subscriber line cable in local distribution networks for short and medium distances.
The cavities of the cable core are filled continuously with viscous compound to avoid water penetration.

STANDARD

VDE 816

CABLE STRUCTURE

1- Conductor

Each conductor consists of a solid wire of annealed, grade A copper, having a diameter of 0.6 mm or 0.8 mm.

2- Insulation

Each conductor is insulated with a layer of solid polyethylene. The thickness shall be according to DIN VDE 0816 table 4

3- Stranding

- Quadding

Four appropriately coloured insulated conductors are assembled together to form a quad.

- Unit stranding
- Five star quads stranded to sub units; each 5 or 10 sub units stranded to main units and the sub or main units stranded to cable core.

4- Filling

The cables are fully filled with a high grade, high drop point, petroleum based, jelly compound..

5- Wrapping

A wrapping tape is applied over the cable core It consists of:

- An outer layer of absorbing paper materiel.
- An inner layer of insulating polyester tape.

6- Moisture barrier

Over the wrapping tape, is applied an aluminum tape (0.2 mm of thickness) coated on both sides with polymer.

7- Sheath

The sheath is black low density polyethylene (2YM2) containing 2,5 ± 0.5% carbon black

ELECTRICAL PROPERTIES

1- Electrical resistance.

Conductor diameter (mm)	Resistance max. (? /km)
0,6	65
0,8	36,6

2- Dielectric strength

The insulation shall resists without any defect to the application of a tension for 60 sec, according to the table below:

Conductor	Between conductors	Between screen and conductors
0,6 mm et 0,8 mm	0,5 kV	2 kV

3- Insulation resistance

>1500 M? .km

4- Mutual capacitance

Conductor	100% of values (nF / km)	95% of values (nF / km)	80% of values (nF / km)
0.6 mm	< 52	< 50	< 48
0.8 mm	< 55	< 53	< 50