Marine Cables

Ships Power

Technical data

- **Conductor operating temperature** max. +85 ℃
- **Nominal voltage** 0.6/1 kV
- **Minimum bending radius** 4 x cable diameter

Cable structure

- Conductor: bare copper
- Insulation: XLPE
- Cores wrapping in foil
- Screen: copper braiding
- Sheath: PO basis-compound

Marine Telecommunication

Technical data

- **Conductor operating temperature** max. +85 ℃
- **Nominal voltage** 250 V
- **Minimum bending radius** 5 x cable diameter

Cable structure

- Conductor: bare copper
- Insulation: EPR
- Cores quad twisting
- Filling compound covering all cores
- Screen: copper braiding
- Polyester foil taping
- Sheath: chloroprene

Application

Marine cable is for the fixed installation on marine craft and below decks. Some are for power application and some are for the communication purpose.

Properties

- Halogen free
- Flame retardant

Ships Power

AWG-no.	NO. Cores x Cross-sec. mm^2	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
12	1x4	7.3	81	105
10	1x6	7.8	104	130
8	1x10	8.9	149	180
6	1x16	9.8	214	250
4	1x25	11.7	311	380
2	1x35	12.7	416	480
1	1x50	14.8	572	660
16	2x1.5	3.9	105	130
14	2x2.5	10.2	132	160
12	2x4	11.4	170	205
10	2x6	12.6	217	290
8	2x10	14.8	400	307

Marine Telecommunication

18	2 x 2 x 0.75	9.0	89	110
18	4 x 2 x 0.75	12.5	142	190
18	6 x 2 x 0.75	14.5	189	260
18	8 x 2 x 0.75	15.5	225	310
18	10 x 2 x 0.75	17.0	272	380
18	14 x 2 x 0.75	18.5	338	465
18	16 x 2 x 0.75	20.0	373	520

Flat Cable

Technical data

- **Temperature range**
  flexible -5 ℃ to +70 ℃
  fixed installation -40 ℃ to 80 ℃
- **Nominal voltage**
  up to 1mm² 300/500 V
  ≥ 1.5mm² 450/750V
- **Test voltage**
  up to 1mm² 2000 V
  ≥ 1.5mm² 2500 V
- **Minimum bending radius**
  10 x cable diameter

Cable structure

- Conductor: bare copper
- Insulation: PVC
- Cores laying parallel
- Green-yellow earth core
- PVC/PUR/LSZH/Rubber Sheath

Properties

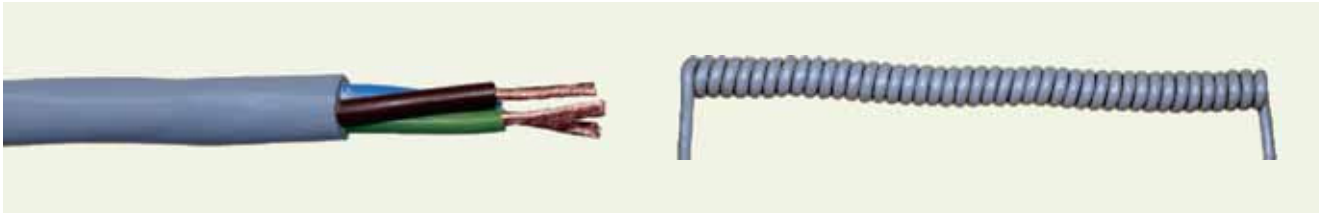
- Extensive oil resistant
- Chemical resistant
- Extremely small bending radius
- High Flexibility
- Minimum waste of space

Application

Flat cables are used mainly as trailing cable for crane installations, floor conveyer system and self control units.

AWG-no.	No. Cores x Cross-sec. mm²	Outer Diameter mm	Copper weight kg/km	Cable Weight kg/km
18	4 G 0.75	4.3 x 12.6	28.8	90
18	5 G 0.75	4.3 x 16.1	36.0	115
18	6 G 0.75	4.3 x 19.4	43.2	141
18	9 G 0.75	4.3 x 26.4	64.8	198
18	10 G 0.75	4.3 x 30.1	72.0	224
18	12 G 0.75	4.3 x 33.8	84.4	258
18	16 G 0.75	4.3 x 44.4	115.2	340
18	18 G 0.75	4.3 x 49.2	129.6	380

Spiral Cable



Technical data

- **Temperature range**
  -20 ℃ to +80 ℃
- **Nominal voltage** 300/500 V
- **Min. insulation DC resistance**
  ≥200 MOhm x km)

Cable structure

- Conductor: bare copper
- Insulation: PVC
- Filler: chalk
- PVC/PUR

Properties

- Good retraction force
- Flame retardant: IEC60332-1

Application

Spiral cables are widely used in telephone, lamp and motor vehicle industry.

No. Cores x Cross-sec. mm^2	Conductor Construction NO. x mm	Insulation Diameter mm	Outer Diameter mm	Spiral Diameter mm
3 x 0.25	0.10 x 30	1.3	4.2	14.5
3 x 0.75	0.10 x 90	2.4	6.5	20.0
3 x 1.00	0.15 x 52	2.5	7.2	24.0
3 x 1.50	0.15 x 80	3.0	8.2	28.0