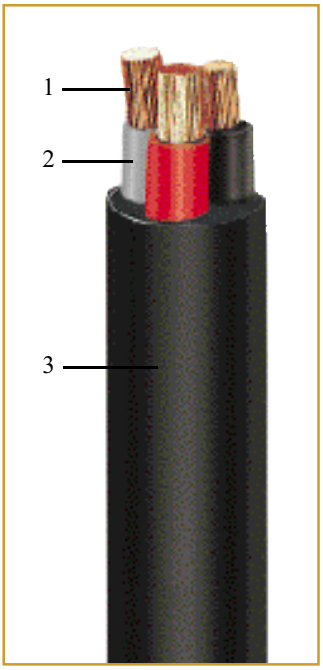
12.1 - 450 / 750 V Termoplastic rubber, round orflat flexibe cable	ACCORDING TO NF C 32-102 HD 22.4 S2 Water absorption tests: IEC 811.1.3 VDE 0472 Teil 802 NF C 32-026 HD 505-1-3 s1 Maximum conductor temperature : 90° C

CONSTRUCTION



1 - Conductor
Bare or tinned copper
Flexible-class 5
NF C 32-013
IEC 228

2 - Insulation
Thermoplastic
rubber

3 - Outersheath
Thermoplastic
rubber
colour : black

N.B.:
Colours and other constructional details can be according to customer special requirements.

Marking
- Name of manufacturer
- Metric marking
- Size
- Other : as per customer requirements

Application
These cables are designed for submersible power supply used into water.

CURRENT RATING GENERAL CONDITIONS
The following current data are indicated for continuous duty operation and apply to :

- Maximum conductor temperature **90°C**
- Industrial frequency **50Hz**
- Free air ambient temperature **30°C**

Cables (mm^2)	Permissible current rating (A)	Voltage drop cos φ = 0.8 (V/Ax km)	Outerdiam.		Min. bending radius (mm)①	Weight approx. (kg/km)
			Min. (mm)	Max. (mm)		
3 G 1.5	24	28.0	9.6	12.5	50	160
3 G 2.5	33	16.9	11.5	14.5	60	220
3 G 4	45	10.5	13.0	16.0	65	300
3 G 6	58	7.0	14.5	20.0	80	410
3 G 10	80	4.0	20.0	25.5	105	720
3 G 16	107	2.5	22.5	29.5	120	1010
3 G 25	142	1.68	26.5	34.0	140	1450
3 G 35	175	1.22	29.5	38.0	155	1900
3 G 50	212	0.87	34.5	44.0	180	2580
4 G 1.5	22	23.3	10.5	13.5	55	195
4 G 2.5	30	14.0	12.5	15.5	65	270
4 G 4	40	8.74	14.5	18.0	75	380
4 G 6	52	5.86	16.5	22.0	90	520
4 G 10	71	3.44	21.5	28.0	115	900
4 G 16	96	2.21	24.5	32.0	130	1260
4 G 25	127	1.46	29.5	37.5	150	1850
4 G 35	157	1.07	33.0	42.0	170	2400
4 G 50	190	0.78	38.0	48.5	200	3290

G = with green / yellow core
① Values to be doubled during laying operations
• Other sizes are also available

12.2 - 0.6 / 1 K/V PE / PE Round Cables

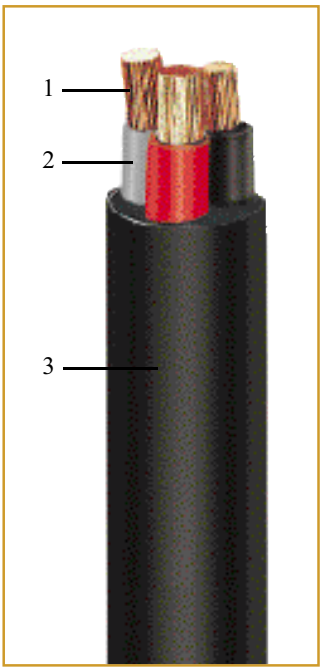
Maximum conductor temperature : 70° C

CONSTRUCTION

1 - Conductor
Flexible bare copper class 5
NF C 32-013
IEC 228

2 - Insulation
Polyethylen

3 - Outersheath
Polyethylen
colour : black



N.B.:
Colours and other constructional details can be according to customer special requirements.
(+ green / yellow conductor when required)

Sheath marking
- Name of manufacturer
- Metric marking
- Size
- Other : as per customer requirements

Application
Submersible pump power supply cables must have excellent water tightness and very good insulation. Polyethylen is the material that best meets these requirements. The special PVC sheath improves the cable flexibility compared to a PE sheath. The designed materials are suitable for use in drinking water.

Cables with food-grade flexible PVC sheath, can also be manufactured

Use ambient temperature :
- in the water : up to 40°C
- in the air : -20°C to + 60°C

Maximum use depth : up to 200 m.

CURRENT RATING GENERAL CONDITIONS
The following current data are indicated for continuous duty operation and apply to :

- Maximum conductor temperature **70°C**
- Industrial frequency **50Hz**
- Free air ambient temperature **30°C**

Technical Data

PE / PE Round cables

Specifications can change according to customer requirements

Cables (mm^2)	Permissible current rating (A)	Voltage drop cos φ = 0.8 (V/Ax km)	Outerdiam.		Min. bending radius (mm)①	Weight approx. (kg/km)
			Min. (mm)	Max. (mm)		
3 x 1.5	17.5	21.5	10.0	11.0	70	130
3 x 2.5	24	12.8	11.0	12.5	75	170
3 x 4	32	8.0	12.0	13.2	80	220
3 x 6	41	5.4	13.2	14.5	90	285
3 x 10	57	3.2	15.1	16.6	100	430
3 x 16	76	2.1	17.2	18.8	115	650
3 x 25	96	1.35	21.5	23.5	145	1 020
3 x 35	119	1.0	23.5	26.5	160	1 320
3 x 50	144	0.75	27.4	30.0	180	1 810
3 x 70	184	0.55	31.8	35.0	210	2 620
3 x 95	223	0.42	36.5	40.0	240	3 320
3 x 120	259	0.35	40.0	44.0	260	4 200
4 G 1.5	17.5	21.5	10.5	11.6	70	150
4 G 2.5	24	12.8	11.5	13.0	80	200
4 G 4	32	8.0	12.5	14.0	85	270
4 G 6	41	5.4	14.0	15.5	95	350
4 G 10	57	3.2	16.0	18.0	110	540
4 G 16	76	2.1	19.5	22.0	135	820
4 G 25	96	1.35	24.0	26.5	160	1 290
4 G 35	119	1.0	26.5	29.5	180	1 680
4 G 50	144	0.75	30.0	33.0	200	2 300

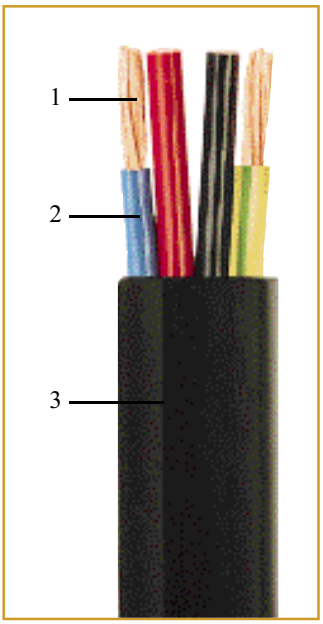
Also single core cables : on special request
G = with green / yellow core
① Values to be doubled during laying operations
• Other sizes are also available

Ambient temperature °C	5	10	15	20	25	30	35	40	45	50	55	60
Correction factors	1.27	1.22	1.17	1.12	1.06	1.00	0.94	0.87	0.79	0.71	0.61	0.50

12.3 - 0.6 / 1 K/V PE / PE Flat Flexible Cables

Maximum conductor temperature : 70° C

CONSTRUCTION



1 - Conductor
Flexible bare copper class 5
NF C 32-013
IEC 228

2 - Insulation
Polyethylen

3 - Outer shearth
Polyethylen
colour : black

N.B.:
Colours and other constructional details can be according to customer special requirements.

Core Identification
According to customer requirements (+ green / yellow for 4 core cables).

Laying up
Conductors are side by side and parallel.

Sheath marking
- Name of manufacturer
- Metric marking
- Size
- Other : as per customer requirements

Application
Submersible pump power supply cables must have excellent water tightness and very good insulation. Polyethylen is the material that best meets these requirements. The flat shape makes it possible to obtain smaller overall dimensions and a tighter bending radius.
The designed materials are suitable for use in drinking water.

Cables with food grade flexible PVC sheath, can also be manufactured.
Use ambient temperature :
- in the water : up to 40°C
- in the air : -20°C to + 60°C

Maximum use depth : up to 200 m.

CURRENT RATING GENERAL CONDITIONS
The following current data are indicated for continuous duty operation and apply to :

- Maximum conductor temperature **70°C**
- Industrial frequency **50Hz**
- Free air ambient temperature **30°C**

Technical Data

PE / PE Flat cables

Specifications can change according to customer requirements

Cables (mm^2)	Permissible current rating (A)	Voltage drop cos φ = 0.8 (V/Ax km)	External nominal dimensions (mm)	Min. bending radius (mm)①	Weight approx. (kg/km)
3 x 1.5	17.5	21.5	13.1 x 5.7	25	90
3 x 2.5	24	12.8	14.4 x 5.6	25	125
3 x 4	32	8.0	15.9 x 6.5	30	180
3 x 6	41	5.4	18.4 x 7.2	30	235
3 x 10	57	3.2	21.6 x 8.8	40	390
3 x 16	76	2.1	26.4 x 10.5	45	600
3 x 25	96	1.35	32.4 x 13.2	55	920
3 x 35	119	1.0	36.0 x 14.4	60	1 280
3 x 50	144	0.75	39.7 x 15.9	65	1 720
3 x 70	184	0.55	47.5 x 18.9	80	2 460
4 G 1.5	17.5	21.5	15.8 x 5.0	20	115
4 G 2.5	24	12.8	19.5 x 5.6	25	170
4 G 4	32	8.0	21.5 x 6.5	30	240
4 G 6	41	5.4	23.6 x 7.2	30	330
4 G 10	57	3.2	29.1 x 8.8	40	530
4 G 16	76	2.1	35.3 x 10.4	45	810
4 G 25	96	1.35	43.6 x 13.2	55	1 220
4 G 35	119	1.0	48.4 x 14.4	60	1 700
4 G 50	144	0.75	53.5 x 15.9	65	2 500

G = with green / yellow core
① Values to be doubled during laying operations
• Other sizes are also available

Ambient temperature °C	5	10	15	20	25	30	35	40	45	50	55	60
Correction factors	1.27	1.22	1.17	1.12	1.06	1.00	0.94	0.87	0.79	0.71	0.61	0.50