



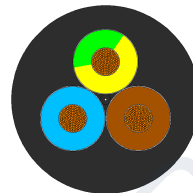
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

PUR-HF LOW VOLTAGE FESTOON CABLE

Low voltage festoon, reeling and chain cable



APPLICATION

Energy and control cable for festoon systems and chain systems. Also suitable for drum reeling under moderate mechanical stresses, torsion, tension and torque. The polyurethane jacket protects against hydrolysis, solvents, alkalines and oils.

CONSTRUCTION

Component	Description
Conductor	Class 5 flexible stranded tinned copper
Insulation	HF halogen-free compound based on polyester
Lay up	Central textile strength member; cores laid up in concentric layers with short length of lay
Outer sheath	PUR HFFR polyurethane, halogen-free and flame retardant
Core identification	3 core: green/yellow, blue, brown; 4 core: green/yellow, brown, black, grey; 5 core: green/yellow, blue, brown, black, grey; from 6 cores: white cores with black numbers
Sheath colour	Black, yellow or orange

CHARACTERISTICS

- Flexible tinned copper conductor and textile strength member.
- Suitable for festoon, chain and moderate reeling duty.
- Halogen-free, flame-retardant polyurethane jacket.
- Available sheath colours: black, yellow or orange.

OPERATING CHARACTERISTICS

Parameter	Value
Voltage rating U _o /U	0.6/1 kV
Fixed installation	-50 °C to +80 °C
Mobile operation	-40 °C to +80 °C
Minimum bending radius	6 x overall diameter fixed; 8 x overall diameter mobile
Maximum tensile load	15 N/mm ²
Maximum torsion	+/-25 °/m
Travel speed	Festoon up to 200 m/min; reeling up to 60 m/min horizontal; chain up to 200 N/mm

STANDARDS

Parameter	Value
Standards	IEC 60228; generally to IEC 60502; DIN VDE 0250-1
Material tests	DIN VDE 0472-501/-502/-503/-508; DIN VDE 0472-401/-402/-602/-303/-615
Flame performance	IEC 60332-1; HD/EN/IEC 60811-2-1; DIN VDE 0473-811-2-1
Additional	DIN VDE 0298-4; RoHS and REACH compliant

TECHNICAL DATA

Nominal dimensional data from the source technical sheet; source ordering codes omitted.

DIMENSIONS				
No. of cores	Nominal cross sectional area mm2	Nominal overall diameter min. mm	Nominal overall diameter max. mm	Nominal weight kg/km
3	1.5	6.5	7.5	118
4	1.5	8.1	9.1	124
7	1.5	9.0	10.0	220
12	1.5	14.3	15.5	320
18	1.5	14.5	15.7	380
24	1.5	16.5	17.8	500
30	1.5	19.6	21.0	680
3	2.5	8.1	9.1	130
4	2.5	9.2	10.2	160
5	2.5	9.8	11.0	180
7	2.5	11.5	12.7	250
12	2.5	16.5	17.7	470
18	2.5	16.7	17.9	580
24	2.5	19.2	20.4	770
30	2.5	24.9	26.5	1040
4	4	10.3	11.5	234
5	4	11.6	12.7	280
4	6	12.1	13.2	320
5	6	14.0	15.2	420
4	10	15.0	16.2	520
5	10	16.2	17.5	630
4	16	17.7	18.9	750
5	16	19.4	20.6	930
4	25	21.1	22.5	1160
5	25	23.2	24.5	1380
4	35	25.8	27.4	1660
4	50	31.0	33.0	2400

NOTES

- Overall diameter and weight are nominal values. Manufacturing tolerances may apply.
- Core identification follows the source specification for 3, 4, 5 and 6+ core constructions.

TECHNICAL DATA

CURRENT CARRYING CAPACITY									
Nominal cross sectional area mm2	Laying on the floor A	Free in air A	Reeled 1 layer A	2 layer A	3 layer A	4 layer A	5 layer A	6 layer A	7 layer A
1.5	24	25	19	15	12	10	9	6	5
2.5	30	32	24	18	15	13	11	8	7
4	41	43	33	25	20	17	16	11	9
6	53	56	42	32	26	22	20	14	12
10	74	78	59	45	36	31	28	20	16
16	99	104	79	60	49	42	38	27	22
25	131	138	105	80	64	55	50	35	29
35	162	170	130	99	79	68	62	44	36
50	202	212	162	123	99	85	77	55	44
70	250	263	200	153	123	105	95	68	55
95	301	316	241	184	147	126	114	81	66
120	352	370	282	215	172	148	134	95	77
150	404	424	323	246	198	170	154	109	89
185	461	484	369	281	226	194	175	124	101

DE-RATING FACTORS																
Ambient temp. °C	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
De-rating factor	1.15	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65	0.58	0.50	0.41	

- NOTES
- Current ratings are based on an ambient temperature of 30 °C.
 - Reeled ratings are stated for one to seven layers as specified in the source data.

CERTIFICATIONS

