



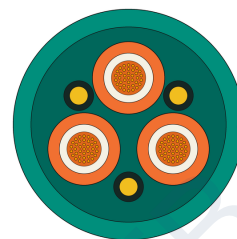
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

GPM-RF HEAVY-DUTY REELING PUR CABLE

PUR round cable for random-winding and monospiral reels



APPLICATION

PUR round reeling cable for continuous heavy-duty service on random-winding and monospiral reels, supplying horizontally operating machinery up to 90 m/min.

CONSTRUCTION

Parameter	Value
Conductor	Flexible copper, Class 5 according to IEC 60228 / DIN VDE 0295 / BSI 6360
Power insulation	4G and 3+3 phase: special cross-linked elastomer
Earth insulation	4G earth: special cross-linked elastomer; 3+3 earth: polypropylene
Control insulation	Polypropylene insulation
Inner sheath	Special polyurethane compound
Outer sheath	Highly abrasion-resistant polyurethane compound
Stranding	Short lay; assembled conductors around reinforced filler
Core coding	Power: green/yellow, brown, black, grey; control: green/yellow and numbered black
Jacket colour	Green, RAL 6032

OPERATING CHARACTERISTICS

Parameter	Value
Rated voltage U ₀ /U	0.6/1 kV
Maximum AC operating voltage	0.7/1.2 kV
Maximum DC operating voltage	0.9/1.8 kV
Travel speed	Up to 90 m/min horizontal
Ambient temperature, flexing	-25 °C to +90 °C
Ambient temperature, fixed	-30 °C to +90 °C
Maximum conductor temperature	+80 °C
Short-circuit conductor temperature	+200 °C
Minimum radius, spool	6 x diameter
Minimum radius, guiding device	9 x diameter
Minimum radius, anti-tension drum	4 x diameter
Pulley use	Not recommended; technical consultation required
Tensile load capacity	20 N/mm ² ; refer to data tables

PERFORMANCE AND USE

Parameter	Value
Flame performance	Low flammability according to IEC 60332-1, class 3 (not tested)
Voltage test	According to IEC 60502-1
Halogen-free	Yes
Ozone resistance	Yes
Humidity / UV / oil	Resistant; suitable outdoors and in dry, humid and wet rooms
Typical applications	Power supply for horizontally operating machinery, spring and motorized reels
Restrictions	Not suitable for level-wind reels, water use or deflecting pulleys without consultation
Anchoring	Use adapted anchor devices, cable mesh grips and spring shock absorbers

TECHNICAL DATA

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

GPM-RF CONTROL AND POWER CABLE DIMENSIONS					
Cable family	Conductors and cross section mm2	Outer diameter min./max. mm	Copper approx. kg/km	Weight approx. kg/km	Tensile load N
Control	7 G 2.5	13.0-15.0	155	280	350
Control	12 G 2.5	15.0-17.5	260	410	600
Control	20 G 2.5	19.0-21.0	445	660	1000
Control	24 G 2.5	21.0-24.0	533	820	1200
Control	30 G 2.5	22.0-24.0	648	900	1500
Control	39 G 2.5	25.0-28.0	855	1160	1950
Power	4 G 10	16.0-18.0	384	550	800
Power	4 G 16	19.3-21.5	614	850	1280
Power	4 G 25	23.9-26.5	960	1300	2000
Power	3 x 25 + 3 G 6	23.2-25.8	856	1200	1500
Power	3 x 35 + 3 G 6	26.6-29.5	1030	1500	2100
Power	3 x 50 + 3 G 10	29.5-32.5	1500	2150	3000
Power	3 x 70 + 3 G 16	34.0-37.5	2222	3100	4200
Power	3 x 95 + 3 G 16	39.0-42.0	2814	3750	5700
Power	3 x 120 + 3 G 25	44.0-47.0	3570	4900	7200
Power	3 x 150 + 3 G 25	49.0-52.5	4380	5900	9000
Power	3 x 185 + 3 G 35	54.4-58.8	6750	7400	11100

TECHNICAL DATA

ELECTRICAL, THERMAL, MECHANICAL AND MATERIAL DATA

Parameter	Value
Rated voltage	600/1000 V
Maximum AC operating voltage	700/1200 V
Maximum DC operating voltage	900/1800 V
AC test voltage	According to IEC 60502-1
Flexing temperature	-25 °C to +90 °C
Fixed temperature	-30 °C to +90 °C
Maximum conductor temperature	+80 °C
Short-circuit temperature	+200 °C
Minimum radius, spool	6 x diameter
Minimum radius, anti-tension drum	4 x diameter
Minimum radius, guiding device	9 x diameter; pulley not recommended
Tensile load	According to data table
Ampacity	According to data table
Conductor	Flexible copper, category 5
Power insulation	Cross-linked elastomer; polypropylene earth core where specified
Control insulation	Polypropylene
Inner sheath	Special polyurethane compound
Outer sheath	Special polyurethane compound
Standards	IEC 60228 / DIN VDE 0295 / BSI 6360; IEC 60502-1
Design code	GPM-RF
Colour	Green RAL 6032

CURRENT-CARRYING CAPACITY AND ELECTRICAL VALUES

Configuration	Current A	Voltage drop V/A.km	Resistance max Ohm/km
7 G 2.5	20	14.0	7.98
12 G 2.5	16	14.0	7.98
20 G 2.5	13	14.0	7.98
24 G 2.5	12	14.0	7.98
30 G 2.5	11	14.0	7.98
39 G 2.5	10	14.0	7.98
4 G 10	75	3.46	1.91
4 G 16	100	2.22	1.21
4 G 25	127	1.46	0.78
3x25+3G6	127	1.46	0.78
3x35+3G6	158	1.06	0.55
3x50+3G10	192	0.76	0.39
3x70+3G16	246	0.56	0.27
3x95+3G25	298	0.44	0.21
3x120+3G20	346	0.36	0.16
3x150+3G25	395	0.31	0.13
3x185+3G35	450	0.26	0.11

CERTIFICATIONS



TEBAOFLEX CABLE