



TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

GMP PUR REELING CABLE

Heavy-duty polyurethane cable for random winding reels



APPLICATION

PUR round reeling cable for standard-duty random winding reels, horizontally operating machinery up to 60 m/min and ergonomic handling systems.

CONSTRUCTION

Parameter	Value
Conductor	Flexible copper, Class 5 according to IEC 60228 / VDE 0295 / BSI 6360
Insulation	Special polypropylene compound
Stranding	Short length of lay; cores assembled around a polypropylene reinforced filler
Outer sheath	Highly abrasion-resistant polyurethane jacket
Core identification	3G: green/yellow, blue, brown; 4G: green/yellow, brown, black, grey; 5G: green/yellow, blue, brown, black, grey
Sheath colour	Black

OPERATING CHARACTERISTICS

Parameter	Value
Nominal voltage U0/U	0.6/1 kV
Maximum AC operating voltage	0.7/1.2 kV
Maximum DC operating voltage	0.9/1.8 kV
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 bending radius	6 x diameter on spool; 9 x diameter on guiding device; 4 x diameter on anti-tension drum
Travel speed	Up to 60 m/min horizontal; higher speed on request
Tensile load capacity	12 N/mm ² ; refer to data table

PERFORMANCE AND USE

Parameter	Value
Flame performance	Low flammability according to IEC 60332-1, class 3 (not tested)
Voltage test	IEC 60502-1
Halogen-free	Yes
Ozone resistance	Yes
Humidity resistance	Yes
Oil resistance	Yes
UV resistance	Yes
Applications	Standard-duty random winding reels, horizontally operating machinery and ergonomic handling systems
Restrictions	Pulley use not recommended; not suitable for water use

TECHNICAL DATA

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

CABLE DIMENSIONS					
Type of cable	Conductors and cross section mm2	Outer diameter min./max. mm	Copper index kg/km	Weight kg/km	Permitted tensile load N
Control GPM	3 G 2.5	9.0 - 10.0	72	150	90
Control GPM	4 G 2.5	9.9 - 11.3	96	170	120
Control GPM	5 G 2.5	10.8 - 12.0	120	200	150
Power GPM	4 G 4	11.3 - 12.5	154	250	192
Power GPM	5 G 4	12.6 - 14.0	192	300	240
Power GPM	4 G 6	12.6 - 14.0	230	320	288
Power GPM	5 G 6	14.4 - 16.0	288	410	360

ELECTRICAL DATA			
Configuration	Current carrying capacity max A	Voltage drop V/Å.km	Resistance max Ohm/km
3 G 2.5	36	14.0	7.98
4 G 2.5	31	14.0	7.98
5 G 2.5	31	14.0	7.98
4 G 4	42	8.8	4.95
5 G 4	42	8.8	4.95
4 G 6	54	5.9	3.30
5 G 6	54	5.9	3.30

TECHNICAL DATA

THERMAL AND MECHANICAL PARAMETERS

Parameter	Value
Flexing temperature	-25 °C to +90 °C
Fixed temperature	-30 °C to +90 °C
Operating conductor temperature	+80 °C
Short-circuit conductor temperature	+200 °C
Minimum bending radius	6 x diameter on spool; 9 x diameter on guiding device; 4 x diameter on anti-tension drum
Horizontal travel speed	Up to 60 m/min; higher speed on request
Tensile load-bearing capacity	12 N/mm2; values for each configuration are listed in the cable dimensions table

MATERIALS AND CHARACTERISTICS

Parameter	Value
Insulation	Special polypropylene compound
Outer sheath	Highly abrasion-resistant polyurethane
Use environment	Dry, humid and wet rooms; outdoor use
Chemical resistance	Halogen-free, ozone-resistant, moisture-resistant, oil-resistant and UV-resistant
Restrictions	Pulley use not recommended; not suitable for water use

CERTIFICATIONS



TEBAOFLEX CABLE