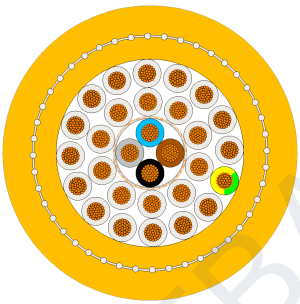
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

RP / RP-D PUR REELING CABLE

Heavy-duty polyurethane cable for random and monospiral reels



APPLICATION

PUR round reeling cable for continuous standard-duty service on random winding and monospiral reels, horizontal machinery up to 80 m/min, handling systems and small to medium hoisting equipment.

CONSTRUCTION

Parameter	Value
Conductor	Flexible copper, Class 5 or 6 according to IEC 60228
Insulation	Special PE compound
Stranding	Short length of lay; layered stranding
Outer sheath	Highly abrasion-resistant polyurethane jacket
Jacket colour	Yellow or black
Core coding	According to DIN VDE 0293; green/yellow earth conductor

OPERATING CHARACTERISTICS

Parameter	Value
Rated voltage U0/U	0.6/1 kV; 0.3/0.5 kV for special design
Maximum AC operating voltage	0.7/1.2 kV
Maximum DC operating voltage	0.9/1.8 kV
Ambient temperature, flexing	-20 °C to +80 °C
Ambient temperature, fixed	-30 °C to +80 °C
Maximum conductor temperature	+90 °C
Short-circuit conductor temperature	+250 °C
Minimum bending radius	8 x diameter for reeling; 6 x diameter on request; 6 x diameter fixed
Guide pulley distance	20 x diameter between changes of direction
Tensile load capacity	15 N/mm2; refer to data tables

PERFORMANCE AND USE

Parameter	Value
Flame performance	Low flammability according to IEC 60332-1
Halogen-free	Yes
Ozone resistance	Yes
Humidity and moisture resistance	Yes
Oil resistance	Yes
UV resistance	Yes
Silicone / LBS	Free
Applications	Random winding reels, monospiral reels, horizontal machinery, ergonomic handling systems and hoisting gear
Restrictions	Not suitable for water use; pulley use requires the specified guide geometry

TECHNICAL DATA

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

CONTROL AND POWER RP DIMENSIONS

Cable family	Conductors and cross section mm2	Outer diameter min./max. mm	Copper kg/km	Weight kg/km	Tensile load N
Control RP	7 x 1.5	11.5 - 13.2	105	245	158
Control RP	12 x 1.5	16.5 - 18.5	180	337	270
Control RP	18 x 1.5	16.5 - 18.6	270	525	405
Control RP	24 x 1.5	19.0 - 21.5	360	660	540
Control RP	36 x 1.5	27.0 - 29.5	540	950	810
Control RP	4 G 2.5	11.4 - 12.0	100	205	150
Control RP	5 G 2.5	12.4 - 13.0	122	260	188
Control RP	7 x 2.5	12.5 - 14.8	176	320	263
Control RP	12 x 2.5	18.5 - 20.5	332	530	450
Control RP	18 x 2.5	19.0 - 21.5	454	725	675
Control RP	24 x 2.5	22.5 - 24.9	656	990	900
Control RP	36 x 2.5	25.5 - 28.3	900	1410	1350
Power RP	4 G 4	11.3 - 12.8	160	270	240
Power RP	4 G 6	14.7 - 16.9	240	405	360
Power RP	4 G 10	16.8 - 19.8	400	630	600
Power RP	4 G 16	20.0 - 23.8	640	935	960

TECHNICAL DATA

POWER RP DIMENSIONS

Cable family	Conductors and cross section mm2	Outer diameter min./max. mm	Copper kg/km	Weight kg/km	Tensile load N
Power RP	4 G 25	26.0 - 27.9	1000	1483	1500
Power RP	3 x 25 + 3 G 6	23.5 - 25.5	893	1240	1125
Power RP	3 x 35 + 3 G 6	27.0 - 29.5	1181	1640	1575
Power RP	3 x 50 + 3 G 10	30.0 - 32.5	1728	2240	2250
Power RP	3 x 70 + 3 G 16	35.0 - 37.5	2477	3100	3150
Power RP	3 x 95 + 3 G 16	39.0 - 42.0	3197	3890	4275
Power RP	3 x 120 + 3 G 25	44.0 - 47.0	4176	5080	5400
Power RP	3 x 150 + 3 G 25	49.0 - 53.0	5040	6160	6750
Power RP	3 x 185 + 3 G 35	54.5 - 59.0	6048	7680	8325

RP-D CONTROL, DATA AND POWER DIMENSIONS

Cable family	Conductors and cross section mm2	Outer diameter min./max. mm	Copper kg/km	Weight kg/km	Tensile load N
Control & Data RP-D	26 G 2.5 + (4 x 1.5)C	24.5 - 27.0	683	933	975
Control & Data RP-D	26 G 2.5 + (4 x 2.5)C	24.5 - 27.0	720	1012	1270
Control & Data RP-D	26 G 2.5 + 2 x (2 x AWG22) PN	24.5 - 27.0	663	1060	975
Power & Control RP-D	4 G 25 + 2 x 4 x 2.5	31.0 - 33.0	1152	1590	1500

TECHNICAL DATA

ELECTRICAL, THERMAL AND MECHANICAL DATA

Parameter	Value
Rated voltage	600/1000 V; 300/500 V for special design
Ampacity	According to table data; otherwise according to VDE 0298 Part 4
AC test voltage	3.5 kV; control cable 2.5 kV
Flexing temperature	-20 °C to +70 °C; consult for temperatures below -25 °C
Fixed temperature	-30 °C to +70 °C
Maximum conductor temperature	+90 °C
Short-circuit temperature	+250 °C
Minimum radius	8 x diameter for continuous reeling; 6 x diameter fixed
Direction-change distance	20 x diameter
Tensile load	According to data table
Design	Double sheath with embedded anti-torsion braid
Materials	XLPE or PE insulation; special polyurethane inner and outer sheath
Standards	IEC 60228; DIN VDE 0293; IEC 60332-1
Colour	Yellow or black; other colours available on request

CERTIFICATIONS