PUR underground drilling & tunnelling cables

Underground Drill Rig PUR Cable

PUR Power and Pilot Trailing Cable for Underground Drilling Rigs



0.6/1 kV halogen-free PUR power & pilot trailing cable for underground jumbo drill rigs

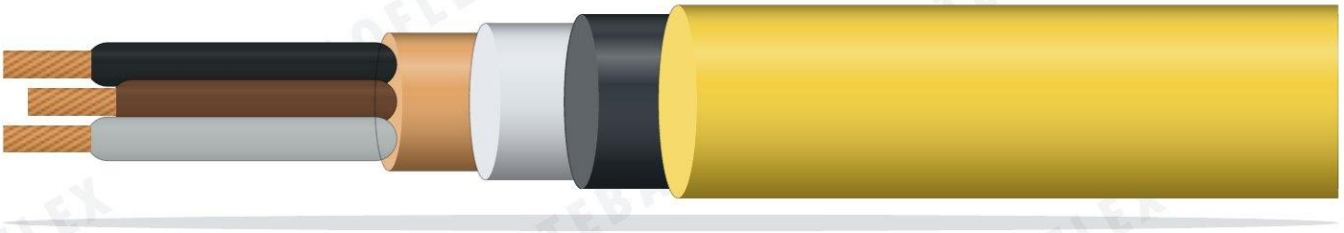
DIN VDE 0250-812 | 0.6/1 kV (Umax 1.2 kV) | EPR 3GI3 + TMPU PUR

Application

Underground Drill Rig PUR is a 0.6/1 kV halogen-free polyurethane (TMPU) power and pilot trailing cable engineered for electro-hydraulic underground face drilling jumbos, rock bolters, and shotcrete rigs operating on abrasive granite and hard-rock roadways.

Typical uses: Underground hard-rock mining, Drill & blast tunnelling, Rock bolting & scaling rigs, Cavern & hydropower excavation

Construction





Cross-section, not to scale

1	Power, earth & pilot conductors	IEC 60228 Class 5
2	Core insulation	DIN VDE 0207-20
3	Inner sheath	DIN VDE 0250-812
4	Outer sheath	EN 50363-10-2 TMPU

Technical data

Typical values

Rated voltage U0/U	0.6/1 kV (Umax 1.2 kV)	Max. operating DC voltage	1.8 kV DC
AC routine test voltage	3.5 kV rms / 5 min (power) · 2.0 kV (pilot)	Insulation resistance @ 20 °C	≥ 100 MΩ·km
Max. conductor operating temp.	+90 °C continuous	Max. short-circuit temperature	+250 °C (max. 5 s)
Ambient temp. (mobile / trailing)	-25 °C to +80 °C	Ambient temp. (fixed installation)	-40 °C to +80 °C
Max. permanent tensile load	20 N/mm² of total copper cross-section	Min. bending radius (fixed)	6 × cable outer diameter
Min. bending radius (reeling/traili	10 × cable outer diameter	Abrasion & tear resistance	DIN EN 50363-10-2 TMPU extra-heavy duty
Halogen-free & low smoke	IEC 60754-1 / IEC 60754-2 halogen-free PUR	Oil & hydraulic fluid resistance	IEC 60811-404 mineral & ester oil resistant
Flame retardancy	IEC 60332-1-2 vertical flame test	Water & hydrolysis resistance	Ether-based PUR for continuous mine water
Standards	DIN VDE 0250-812 / SS 424 14 75 / EN		

Sizes

12 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Configuration	Phase size mm²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard Underground Drill Rig PUR configurations 12 sizes						
☐ Underground Drill Rig PUR 3×16+3×16/3E+3×2.5	3×16 + 3×16/3E + 3×2.5	16	27.5	715	1,180	165
☐ Underground Drill Rig PUR 3×25+3×16/3E+3×2.5	3×25 + 3×16/3E + 3×2.5	25	31.0	975	1,520	186
☐ Underground Drill Rig PUR 3×35+3×16/3E+3×2.5	3×35 + 3×16/3E + 3×2.5	35	34.2	1,265	1,890	205
☐ Underground Drill Rig PUR 3×50+3×25/3E+3×2.5	3×50 + 3×25/3E + 3×2.5	50	38.6	1,790	2,540	232
☐ Underground Drill Rig PUR 3×70+3×35/3E+3×2.5	3×70 + 3×35/3E + 3×2.5	70	43.5	2,480	3,380	261
☐ Underground Drill Rig PUR 3×95+3×50/3E+3×2.5	3×95 + 3×50/3E + 3×2.5	95	48.8	3,390	4,450	293
☐ Underground Drill Rig PUR 3×120+3×70/3E+3×2.5	3×120 + 3×70/3E + 3×2.5	120	53.5	4,320	5,560	321
☐ Underground Drill Rig PUR 3×150+3×70/3E+3×2.5	3×150 + 3×70/3E + 3×2.5	150	58.2	5,180	6,640	349
☐ Underground Drill Rig PUR 4G35+2×1.5	4G35 + 2×1.5	35	33.8	1,375	1,950	203
☐ Underground Drill Rig PUR 4G50+2×1.5	4G50 + 2×1.5	50	38.4	1,950	2,680	230
☐ Underground Drill Rig PUR 4G70+2×2.5	4G70 + 2×2.5	70	43.8	2,735	3,620	263
☐ Underground Drill Rig PUR 4G95+2×2.5	4G95 + 2×2.5	95	49.5	3,700	4,790	297

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per DIN VDE 0250-812 / EN 50525-2-21 (TMPU).

Electrical & ampacity data

12 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C pF/m≈	AC test V rms
3×16 + 3×16/3E + 3×2.5	1.240	93	79	136	3,500
3×25 + 3×16/3E + 3×2.5	0.799	122	104	151	3,500
3×35 + 3×16/3E + 3×2.5	0.568	150	128	168	3,500
3×50 + 3×25/3E + 3×2.5	0.396	187	159	192	3,500
3×70 + 3×35/3E + 3×2.5	0.279	229	195	226	3,500
3×95 + 3×50/3E + 3×2.5	0.211	276	235	267	3,500
3×120 + 3×70/3E + 3×2.5	0.165	319	271	308	3,500

Configuration	Max. DC R @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C pF/m≈	AC test V rms
3×150 + 3×70/3E + 3×2.5	0.132	365	310	358	3,500
4G35 + 2×1.5	0.568	150	128	168	3,500
4G50 + 2×1.5	0.396	187	159	192	3,500
4G70 + 2×2.5	0.279	229	195	226	3,500
4G95 + 2×2.5	0.211	276	235	267	3,500

– Current ratings apply at +30 °C ambient in free air; apply standard derating factors for elevated ambient or drum layers.

Standards and approvals

- ✓ DIN VDE 0250-812
- ✓ EN 50363-10-2 TMPU
- ✓ IEC 60754-1/2

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

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Email
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tebaoflex.com/cables/pur-power-and-pilot-cable-for-underground-drilling-rigs

Typical values for this cable type, based on DIN VDE 0250-812 / EN 50525-2-21 (TMPU). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.