



PE2-PA submersible motor winding wire

PE2-PA

Polyamide-Jacketed Polyethylene Submersible Motor Winding

DIN 46399 PE2-PA dual-layer polyethylene + polyamide wet-wound submersible motor winding



DIN 46399 PE2-PA

Ø 0.80 – 6.00 mm Cu

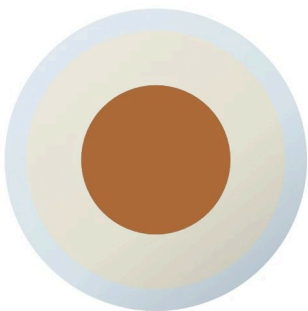
600 V – 1,000 V / 3.0 kV Wet

Application

Standard dual-extruded submersible motor magnet wire (PE2-PA) built to DIN 46399 for rewindable 6", 8", 10", 12" and 14" water-filled borehole, irrigation, fountain and mine-dewatering motors rated up to 1,000 V AC (with 3.0 kV high-build options).

Typical uses: 6", 8", 10", 12" & 14" Rewindable Deep-Well Borehole Motors, Agricultural Centre-Pivot & Deep-Aquifer Irrigation Pumps, Municipal Water-Supply, Booster & Fountain Submersible Pumps, Construction Trench, Quarry & Tunnel Dewatering Pumps, Submersible Motor Rewind & Repair Workshops

Construction



Cross-section, not to scale

- 1 Solid soft-annealed oxygen-free copper (Cu-ETP1 / Cu-OF)
- 2 High-purity Polyethylene (PE2) or XLPE primary wet dielectric
- 3 Co-extruded Polyamide (PA / Nylon) mechanical gliding skin

Technical data

Typical values

Rated operating voltage	Up to 1,000 V AC (standard DIN 46399) · up to 3,000 V AC (heavy-wall build)	Routine water-bath AC hipot	3.0 kV to 6.0 kV AC rms after immersion in water
In-line dry spark test	10 kV to 20 kV DC 100 % spark test during extrusion	Insulation resistance (in +20 °C water)	≥ 10,000 MΩ·km
Max continuous winding temp	+70 °C (standard PE2-PA) · +90 °C (XLPE-PA / PP-PA)	Low-temperature limit	–25 °C
Solid copper diameter range	Ø 0.80 mm to Ø 6.00 mm (in 0.05 / 0.10 mm steps per DIN 46399)	Copper elongation at break	≥ 30 % (soft-annealed for easy stator slot insertion)
Min. winding bend radius	3 × OD	Motor fill fluid compatibility	Clean water, OEM-ionized water + propylene glycol & white mineral oil
Slot abrasion resistance	High cut-through & scrape resistance via outer PA nylon skin	Standards	DIN 46399 (Winding wires for water-filled submersible motors)

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	Bare Cu Ø mm	Cu Area mm ²	PE2 + PA Wall mm	Nom. OD mm	Max R20 Ω/km	Weight kg/km
Small & Medium Borehole Stator Sizes (Ø 1.00 mm to Ø 2.20 mm — 6" & 8" Motors) 6 sizes						
☐ PE2-PA-1.00	1.00	0.79	0.35 + 0.08	1.86	22.40	8.9
☐ PE2-PA-1.25	1.25	1.23	0.38 + 0.08	2.17	14.34	13.3
☐ PE2-PA-1.50	1.50	1.77	0.40 + 0.10	2.50	9.96	18.6
☐ PE2-PA-1.80	1.80	2.54	0.42 + 0.10	2.84	6.91	26.0
☐ PE2-PA-2.00	2.00	3.14	0.45 + 0.10	3.10	5.60	31.8
☐ PE2-PA-2.20	2.20	3.80	0.48 + 0.10	3.36	4.63	38.2
Large Borehole & Dewatering Stator Sizes (Ø 2.50 mm to Ø 4.50 mm — 10", 12" & 14" Motors) 6 sizes						
☐ PE2-PA-2.50	2.50	4.91	0.50 + 0.10	3.70	3.58	48.6
☐ PE2-PA-2.80	2.80	6.16	0.55 + 0.10	4.10	2.86	60.5
☐ PE2-PA-3.00	3.00	7.07	0.55 + 0.12	4.34	2.49	69.2
☐ PE2-PA-3.50	3.50	9.62	0.60 + 0.12	4.94	1.83	93.0
☐ PE2-PA-4.00	4.00	12.57	0.65 + 0.12	5.54	1.40	120.5
☐ PE2-PA-4.50	4.50	15.90	0.70 + 0.15	6.20	1.11	152.0

– Intermediate diameters (e.g., 1.10, 1.30, 1.40, 1.60, 1.70, 1.90, 2.10, 2.30, 2.40, 2.60, 2.70, 2.90, 3.20, 5.00, 5.50, 6.00 mm) are stocked for exact stator rewind matching.

Standards and approvals

- ✓ DIN 46399 Submersible Motor Winding Wire Compliant
- ✓ RoHS & Drinking-Water Glycol Coolant Compatible

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.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/pe2-pa-polyamide-jacketed-polyethylene-submersible-motor-winding-wire



Typical values for this cable type, based on DIN 46399 / IEC 60317 / NEMA MG 1. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.