



instrumentation cable series

Mono Conductor Wireline

1N22 (7/32"), 1N32 (5/16") & 1N38 (3/8") mono-conductor double-armoured wireline logging



1N22 · 1N32 · 1N38

API RP 9B Wireline

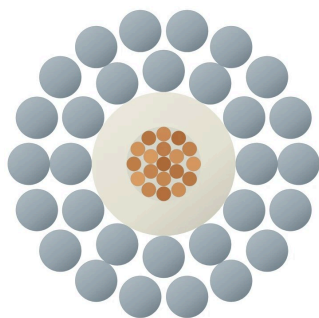
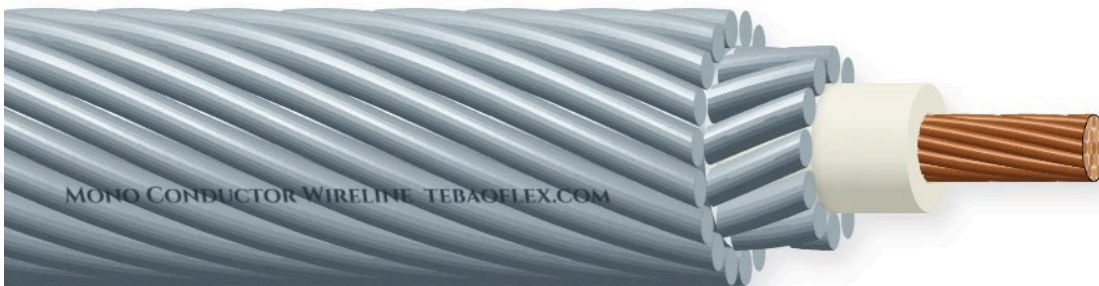
21 to 62 kN Breaking Load

Application

Mono Conductor Wireline (1N22, 1N32 & 1N38) cased-hole electromechanical logging and perforating cable with a stranded tinned-copper conductor, polypropylene/ETFE/PFA high-temp dielectric, and torque-balanced double contra-helical.

Typical uses: Cased-Hole Perforating & Plug Setting, Production Logging (PLT) & Cement Bond (CBL), Coiled Tubing Internal E-Line Strings, Geothermal & Deep Water-Well Logging, Downhole Camera & Memory-Tool Readout

Construction



Cross-section, not to scale

1 Compacted tinned copper centre conductor

2 High-pressure downhole dielectric

$\geq 15,000 \text{ M}\Omega \cdot \text{km}$ insulation resistance @ 500 V DC

3 Inner helical GIPS / UHS armour layer

4 Outer contra-helical GIPS / UHS / Alloy armour

Technical data

Typical values

Voltage rating	600 V DC (1N22) · 1,000 V DC (1N32) · 1,200 V DC (1N38)	Conductor DC resistance	29.5 Ω/km (1N22) · 14.1 Ω/km (1N32) · 9.2 Ω/km (1N38)
Armour DC resistance	13.5 Ω/km (1N22) · 6.2 Ω/km (1N32) · 4.4 Ω/km (1N38)	Capacitance @ 1 kHz	125 to 170 pF/m (conductor to armour)
Insulation resistance	≥ 15,000 MΩ·km @ 500 V DC	Temp rating (N = Polypropylene)	-40 °C to +105 °C (+220 °F)
Temp rating (Q = ETFE)	-55 °C to +165 °C (+330 °F)	Temp rating (T = PFA)	-55 °C to +260 °C (+500 °F)
Nominal breaking strength	21.4 kN (1N22) · 44.0 kN (1N32) · 62.3 kN (1N38)	Stretch coefficient	1.35 m/km/kN (1N22) · 0.65 m/km/kN (1N32) · 0.45 m/km/kN (1N38)
Min. sheave diameter	280 mm (11" on 1N22) · 355 mm (14" on 1N32) · 455 mm (18" on 1N38)	Max. hydrostatic pressure	140 MPa (20,000 psi) downhole rating
Corrosion protection	Hot-dip galvanized GIPS + internal corrosion-inhibitor flood	Sour gas option	NACE MR0175 Alloy 27-7MO / MP35N armour option
Standards	API RP 9B Application, Care & Use of Wire Rope		

Sizes

6 standard constructions

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

Order designation	Fractional size & insulation	Outer Ø mm	Weight in air kg/km	Break load kN	Cond. DC R Ω/km
1N (Polypropylene +105 °C) & 1Q/1T (ETFE/PFA +165/+260 °C) Mono Wirelines 6 sizes					
☐ 1N22-GIPS (7/32")	7/32" · PP (+105 °C) · GIPS	5.66	135	21.4	29.5
☐ 1Q22-UHS (7/32")	7/32" · ETFE (+165 °C) · UHS	5.66	138	25.8	29.5
☐ 1N32-GIPS (5/16")	5/16" · PP (+105 °C) · GIPS	8.08	280	44.0	14.1
☐ 1Q32-UHS (5/16")	5/16" · ETFE (+165 °C) · UHS	8.08	286	53.4	14.1
☐ 1T32-UHS (5/16" HT)	5/16" · PFA (+260 °C) · UHS	8.08	292	53.4	14.1
☐ 1N38-GIPS (3/8")	3/8" · PP (+105 °C) · GIPS	9.55	395	62.3	9.2

– Safe working load (pull limit) is typically 50 % of nominal breaking load; pre-seasoned and prestretched at factory.

Standards and approvals

- ✓ API RP 9B Wireline Standard
- ✓ NACE MR0175 (Alloy Option)
- ✓ RoHS 2 & REACH Compliant

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/single-conductor-double-armoured-wireline-logging-cable



Typical values for this cable type, based on API RP 9B / ASTM A475 (GIPS/UHS) / NACE MR0175. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.