ANHUI FEICHUN SPECIAL CABLE CO., LTD · FC®

Technical Datasheet & Quotation

(N)SHTÖU-J 37G2.5 · 0.6/1 kV · Heavy-Duty Reeling Cable

Prepared for a cable-reel application in France — delivery to the Port of Marseille. Two lengths of 100 m, 37 × 2.5 mm², overall diameter within 27 – 32.5 mm.

37 × 2.5 MM² | 0.6/1 KV | Ø 29.5 ± 1.5 MM | EPR / PCP

DIN VDE 0250-812

Datasheet FC-TDS-RCF-2026-B37F **Quotation** FC-QTN-FR-2026-B7EE **Revision** 00

Issued 13 August 2026 **Origin** Hefei, PR China

1 Purpose of this document

This document answers your enquiry in full: it specifies the cable FeiChun proposes for your reel application, records how that cable meets each point you set out, and states the commercial terms. It is issued as one file so that your technical and purchasing reviewers work from the same reference.

> **One point to confirm.** Your enquiry states “37 × 2.5 mm”. We have read this as 37 cores of 2.5 mm² cross-sectional area, which is the only reading consistent with the overall diameter you require (27 – 32.5 mm). Please confirm, together with the operating voltage of the control circuits and the reel type (monospiral, cylindrical or random-wound), so that we can lock the lay length and the sheath compound for your duty.

2 Proposed cable

CHARACTERISTIC	FEICHUN SPECIFICATION
Type designation	(N)SHTÖU-J 37G2.5 — FC-FLX™ TROMMELFLEX-C
Product family	Heavy-duty flexible elastomer control cable for cable reels / drum reeling
Rated voltage U_0/U	0.6/1 kV (600/1000 V) a.c.
Highest voltage U_m	1.2 kV
Test voltage	3.5 kV a.c., 5 min (routine, every drum length)
Number of cores × section	37 × 2.5 mm² (36 numbered + 1 green/yellow protective core)
Conductor class	Class 5 fine-wire flexible, bare annealed copper, IEC 60228
Insulation compound	EPR, EI 3 (3GI3) to HD 22.1 / DIN VDE 0207-20
Sheath compound	PCP polychloroprene, 5GM5 (EM 2) to DIN VDE 0207-21
Sheath colour	Black (RAL 9005); alternative yellow / orange on request
Surface marking	FEICHUN · (N)SHTÖU-J 37G2.5 · 0.6/1 kV · YEAR · sequential metre marks
Country of manufacture / origin	People’s Republic of China — Hefei, Anhui Province
HS code (export, China)	8544.49.9000 — insulated electric conductors, ≤ 1 000 V, without connectors
EU TARIC (import, France)	8544 49 20 00 — other conductors for a voltage exceeding 80 V but not exceeding 1 000 V

3 Construction — cross-section

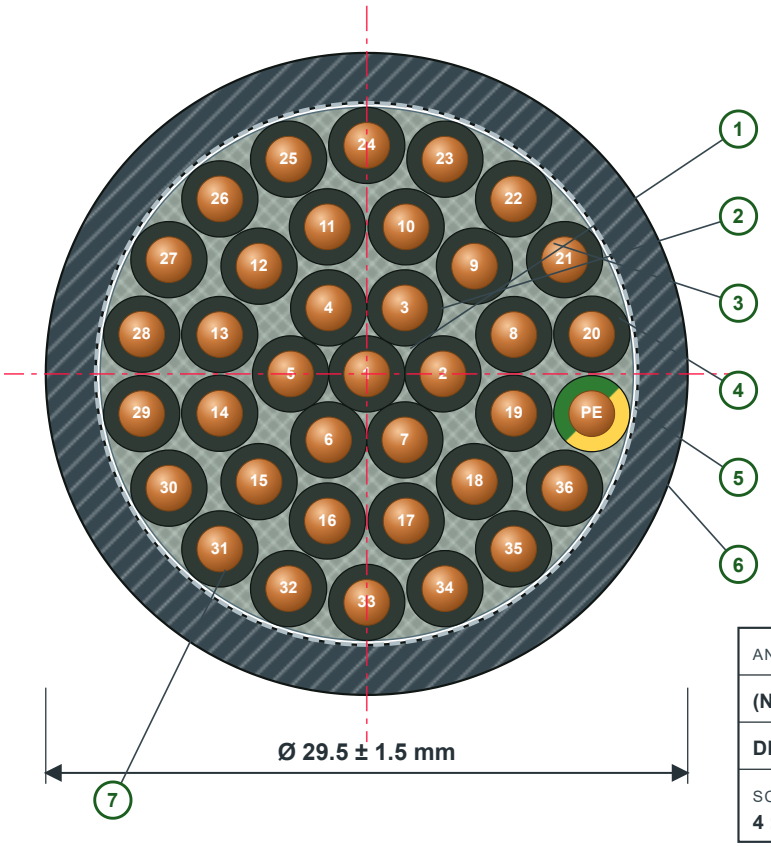
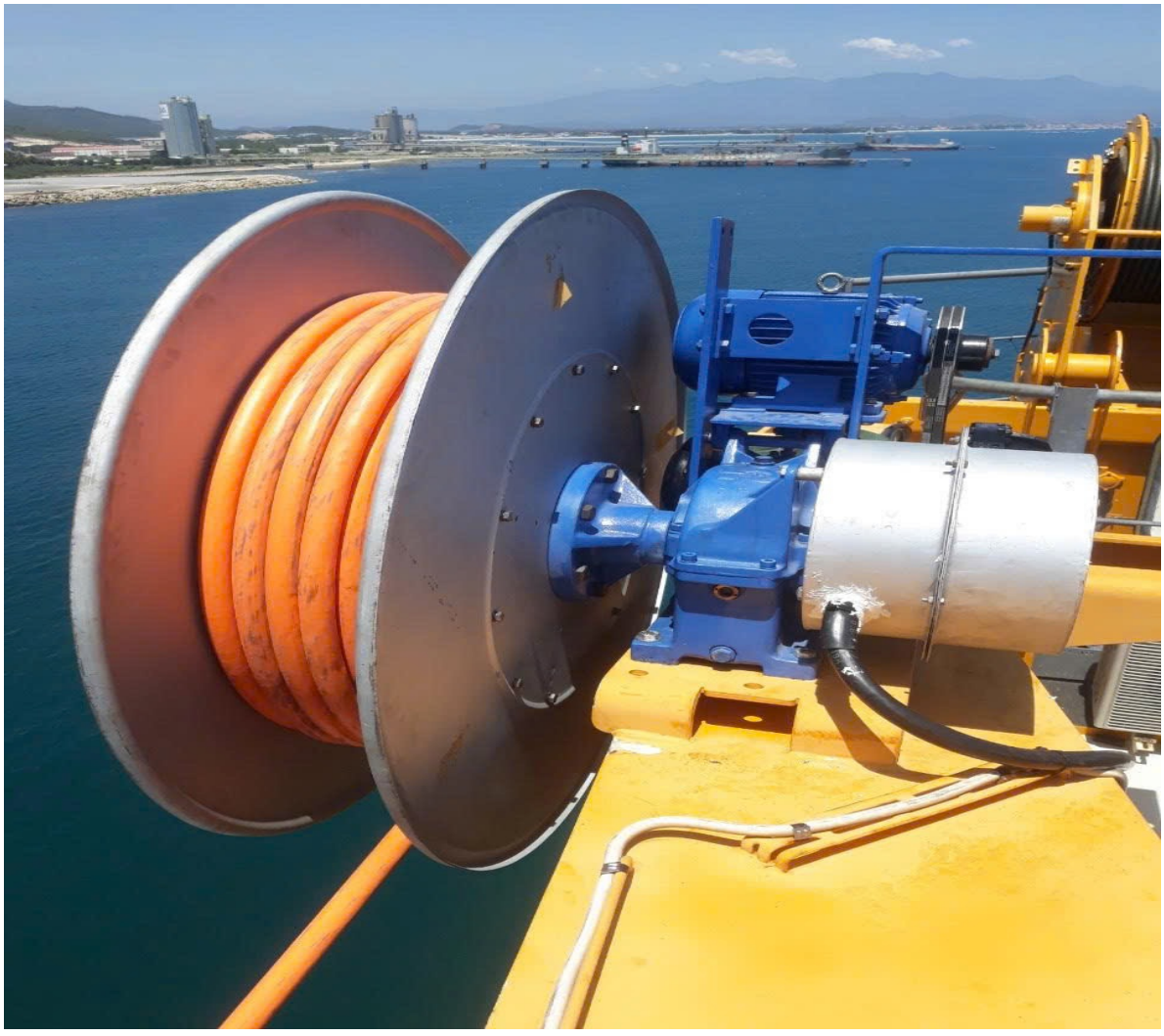


Figure 1 — Cross-section, (N)SHTÖU-J 37G2.5 0.6/1 kV. Drawing FC-DRW-RCF-2026-42D7, revision 00. Section hatching at 45° denotes the cut sheath; dashed red lines are the reference centrelines.

POS.	ELEMENT	MATERIAL AND CONSTRUCTION
1	**Conductor**	Bare annealed copper, Class 5 fine-wire flexible to IEC 60228, nominal Ø 2.10 mm, 2.5 mm²
2	**Core insulation**	EPR compound EI 3 / 3GI3, wall 0.60 mm nominal, applied by triple-extrusion
3	**Core identification**	36 × black cores with white printed numerals 1…36 + 1 × green/yellow protective core (PE)
4	**Interstitial fillers**	Elastomeric / synthetic-fibre profiled fillers, cross-hatched, laid-up in 4 concentric layers 1-6-12-18, short lay length
5	**Binder**	Elastomer-compatible non-hygroscopic separation tape, overlapped
6	**Outer sheath**	Heavy-duty PCP (polychloroprene) 5GM5, wall 2.30 mm nominal, low-adhesion to bedding, embossed marking
7	**Reference axes**	Dashed centrelines — concentric layer symmetry, sheath cut shown with 45° section hatching



4 Dimensions and mass

PROPERTY	VALUE
Nominal conductor diameter	2.10 mm
Insulation wall thickness (nominal)	0.60 mm
Core outer diameter	3.50 mm
Laying-up	4 concentric layers, 1 / 6 / 12 / 18, alternate lay direction, short lay length
Diameter over laid-up cores	24.5 mm
Sheath wall thickness (nominal)	2.30 mm
Overall diameter	29.5 ± 1.5 mm — production range 28.0 – 31.0 mm
Approximate net weight	1 500 kg/km (1.50 kg/m)
Copper content	329 kg/km

> The overall diameter sits deliberately in the centre of your 27 – 32.5 mm window. That leaves room on both sides for the reel groove and the cable guide, and it keeps the sheath wall at 2.30 mm rather than thinning it to hit a lower figure — sheath wall is what survives the reel.

5 Electrical data

PROPERTY	VALUE
Max. conductor resistance at 20 °C	7.98 Ω/km per core
Insulation resistance at 20 °C	≥ 500 MΩ · km
Current-carrying capacity, single core in free air, 30 °C	26 A
Current-carrying capacity, 37 cores loaded simultaneously, 30 °C free air	11 A per core (grouping factor 0.42)
Current-carrying capacity on a reel, ≥ 3 layers wound, 40 °C	7 A per core — see note 3
Max. conductor temperature, normal operation	+ 90 °C
Max. conductor temperature, short circuit (5 s max.)	+ 250 °C
Short-circuit current density	143 A/mm² for 1 s
Recommended control-circuit voltage	24 – 500 V a.c./d.c.

6 Mechanical and reeling data

PROPERTY	VALUE
Application	Cable reels — monospiral, cylindrical and random-wound drums; festoon, drag chain and trailing use
Max. reeling speed	120 m/min
Max. acceleration	1.5 m/s²
Max. permissible tensile load, dynamic	15 N/mm² on copper → 1 388 N total
Max. permissible tensile load, static (self weight)	20 N/mm² on copper → 1 850 N total
Min. bending radius, reeling / flexing	8 × OD = 236 mm
Min. bending radius, fixed installation	4 × OD = 118 mm
Number of bending cycles (type-test, 8 × OD)	≥ 50 000 without electrical failure
Ambient temperature, mobile use	− 25 °C to + 80 °C
Ambient temperature, fixed installation	− 40 °C to + 80 °C
Torsional capability	± 25°/m (occasional), where the reel geometry induces twist

7 Standards and testing

STANDARD	APPLICATION TO THIS CABLE
DIN VDE 0250-812	Heavy-duty rubber-sheathed flexible cables for reeling and trailing service — design basis
IEC 60228 / EN 60228	Conductors of insulated cables — Class 5 flexible copper
HD 22.1 / DIN VDE 0207-20 & -21	EPR insulation (3GI3) and PCP sheath (5GM5) compound requirements
IEC 60502-1	Routine, sample and type test procedures applied to 0.6/1 kV cables
IEC 60332-1-2	Flame propagation, single vertical wire — passed
EN 50396 / IEC 60811-403	Ozone resistance, 24 h — no cracking
IEC 60811 series	Ageing, hot set, tensile, elongation, cold bend and cold impact of insulation and sheath
IEC 60228 / IEC 60502-1	Conductor resistance and 3.5 kV a.c. 5 min voltage test on 100 % of delivered lengths
EU Directive 2011/65/EU (RoHS 3) & REACH (EC) 1907/2006	Compliant — declarations issued with the shipping documents

Every delivered length is routine-tested for conductor continuity, conductor resistance, insulation resistance and 3.5 kV a.c. withstand. A works test certificate to EN 10204 type 2.2 is issued with each shipment; type 3.1 certification is available on request at no additional cost.

8 Compliance against your enquiry

REQUIREMENT	YOUR ENQUIRY	FEICHUN OFFER	STATUS
Quantity	2 cables × 100 m	2 × 100 m, each on a separate reel	Complies
Application	Electrical cable for cable reel	(N)SHTÖU-J reeling cable, purpose-designed for drum service	Complies
Configuration	37 × 2.5 mm	37 × 2.5 mm², 0.6/1 kV, 36 numbered cores + PE	Complies — see note 1
Outer diameter	27 – 32.5 mm	29.5 ± 1.5 mm (28.0 – 31.0 mm)	Complies — centred in the required window
Condition of goods	New and original equipment	Brand-new, first-quality, factory-fresh production; no reclaimed or re-reeled material	Complies
Technical datasheet	Required with the offer	This document	Complies
Country of origin	To be stated	China — Hefei, Anhui Province	Stated
HS code	To be stated	8544.49.9000 (CN export) / 8544 49 20 00 (EU import)	Stated
Warranty	To be stated	12 months from bill of lading date	Stated
Delivery time	To be stated	2 – 3 weeks after receipt of the advance payment	Stated
Delivery to Marseille	Shipping cost required	FOB Shanghai quoted; indicative CFR Marseille given in section 8	Stated

There are no technical deviations from your stated requirements.

9 Commercial offer

QUOTATION FC-QTN-FR-2026-B7EE · INCOTERMS® 2020	
Item	01
Description	(N)SHTÖU-J 37G2.5, 0.6/1 kV heavy-duty PCP-sheathed reeling cable, OD 29.5 ± 1.5 mm, new and original factory production
Quantity	2 × 100 m = 200 m
Unit price	**USD 36.78 per metre** — FOB Shanghai
Total, 200 m	**USD 7 356.00 — FOB Shanghai**
Ocean freight, indicative	USD 860.00 — LCL Shanghai → Marseille Fos, approx. 0.64 m³ / 400 kg gross, transit 30 – 36 days
Indicative total, CFR Marseille	USD 8 216.00
Payment terms	T/T 50 % with the order, balance 50 % against the copy bill of lading
Production lead time	2 – 3 weeks after receipt of the advance payment
Port of loading	Shanghai, China
Warranty	12 months from the bill of lading date, against defects in material and workmanship
Condition	New and original equipment — first-quality factory production, no reclaimed, surplus or re-reeled material
Currency basis	Converted at USD 1 = RMB 6.77

Prices are subject to fluctuation of the LME copper market. This cable carries 329 kg of copper per kilometre, so the metal is a material part of the price. The freight figure is indicative only and is confirmed at the time of booking; we are pleased to quote firm CFR or DAP Marseille once you confirm the order date. Duties, VAT and customs clearance in France are for the buyer’s account under both FOB and CFR terms.

10 Packing and shipping data

DETAIL	DRUM 1	DRUM 2	TOTAL
Delivery length	100 m	100 m	200 m
Packing	1 non-returnable wooden drum	1 non-returnable wooden drum	2 drums
Drum size (flange × width)	Ø 800 × 500 mm	Ø 800 × 500 mm	—
Net weight	150 kg	150 kg	300 kg
Gross weight	200 kg	200 kg	400 kg
Volume	0.32 m³	0.32 m³	0.64 m³

Non-returnable wooden drums, ISPM 15 heat-treated and stamped. Both cable ends are sealed with heat-shrink caps and secured to the flange; the drum carries a weatherproof label showing type, length, drum number, net and gross weight, and the sequential metre marks of the outer end. Export documents provided: commercial invoice, packing list, bill of lading, certificate of origin (CO or Form A/E as applicable), works test certificate, and RoHS and REACH declarations.

11 Notes

NO.	NOTE
1	“37G2.5” denotes 37 cores of 2.5 mm² including a green/yellow protective conductor. If your circuit requires 37 numbered cores *plus* a separate earth, the designation becomes 37×2.5+G and the overall diameter rises to approximately 30.2 mm — still inside your window. Advise and we will re-issue.
2	Current ratings assume no more than three cables grouped together and no thermal insulation around the reel. For continuous duty at ambient temperatures above 40 °C, apply the derating factors of IEC 60364-5-52.
3	Cable wound on a drum dissipates heat poorly. The reel rating given in section 5 assumes the cable is fully wound with three or more layers; where the cable is largely paid out in service, the free-air figure applies.
4	Options available at no change to the delivery time: tinned copper conductors for humid or saline environments; an aramid central strength member where the reel imposes tension above 1 000 N; a PUR sheath in place of PCP for abrasion-dominated duty; and a yellow or orange sheath for visibility.
5	Continuous production lengths beyond 100 m are available; for repeat orders we hold the compound formulation and lay parameters on file under this document number so that later deliveries match the first.

Contact

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