ANHUI FEICHUN SPECIAL CABLE CO., LTD. · 安徽飞纯特种电缆有限公司

FC-SPF (3GSLTÖE) 0.6/1 kV Spreader Cable — 36 G 2.5 mm² & 42 G 3.5 mm²
Technical Data Sheet & Commercial Quotation

PUR-sheathed, EPR-insulated bundled spreader feeder cable with central aramid support element, for gravity-fed collector basket operation on container spreaders — full technical equivalent to Prysmian SPREADERFLEX 3GSLTÖE. Prepared for **iPort Services, Panamá**.

FC-TDS-SPF-2026-P6S2 | FC-QTN-PA-2026-P6S2 | 36 G 2.5 mm² | 42 G 3.5 mm² | 2 × 170 m | PUR · −40 °C

Revision **01** Issue date **05 September 2026** Supersedes **FC-QTN-PA-2026-P4S8 (CORDAFLEX)**

Attention **Mr Sebastian Garcia — Sales Director** Prepared by **Zihao Yang, International Business Dept.**

1. Scope & Revision Note

Following your clarification that the required material is **SPREADERFLEX** rather than CORDAFLEX, this document supersedes our earlier quotation FC-QTN-PA-2026-P4S8 in its entirety. The offered product, FeiChun **FC-SPF (3GSLTÖE)**, is built to the same design philosophy as Prysmian SPREADERFLEX: a bundled core arrangement laid up around a central aramid support element, with a special cold-flexible PUR outer sheath, for spreader feeder duty where the cable hangs vertically in a gravity-fed collector basket.

Item	Description	Cores × size	Quantity	Delivery form
1	FC-SPF (3GSLTÖE) 0.6/1 kV spreader cable, EPR insulated, PUR sheathed, central aramid support element	36 G 2.5 mm²	170 m	1 drum × 170 m
2	FC-SPF (3GSLTÖE) 0.6/1 kV spreader cable, EPR insulated, PUR sheathed, central aramid support element	42 G 3.5 mm²	170 m	1 drum × 170 m

> **Two points for your confirmation.** (a) Both items are configured as "G", i.e. one green/yellow protective earth core included in the stated count. (b) The reference design allows individually braid-screened cores or screened twisted pairs. Your enquiry does not specify screening, so both items are quoted **unscreened**. If the spreader requires screened control cores or screened pairs for encoder/data circuits, please advise the quantity and position and we will re-quote.

2. Applicable Standards

Design reference	Prysmian SPREADERFLEX 3GSLTÖE — spreader feeder cable for collector basket operation
Conductor	IEC 60228 / VDE 0295 Class 6 (extremely fine stranded, class FS)
Insulation	Special EPR compound based on type 3GI3 to DIN VDE 0207-20, rated to −40 °C
Outer sheath	Special polyurethane (PUR) compound, black, to DIN VDE 0282-10 principles
Core identification	DIN VDE 0293-308 — light-coloured insulation with black printed numbers; PE core green/yellow
Screening (optional)	Tinned copper wire braid, transfer impedance optimised at 30 MHz; ≥ 60 % coverage on screened cores, ≥ 80 % on screened pairs
Flame behaviour	IEC 60332-1-2
Quality system	ISO 9001:2015 · ISO 14001 · CE · RoHS 3

3. Construction Details

Pos.	Element	Material & construction	36 G 2.5	42 G 3.5
1	Conductor	Bare electrolytic copper, extremely fine stranded, class FS, for maximum flex life under vertical suspension	2.5 mm² · 0.10 mm wire	3.5 mm² · 0.10 mm wire
2	Insulation	Special EPR 3GI3, cold-flexible to −40 °C, light-coloured	0.45 mm wall · Ø 3.4 mm	0.50 mm wall · Ø 3.9 mm
3	Core identification	Black printed continuous numbering on light insulation; one green/yellow PE core	1…35 + PE	1…41 + PE
4	Core assembly	Cores laid up into bundles; bundles laid up around the central support element with short lay length	6 bundles × 6 cores	6 bundles × 7 cores
5	Support element	Aramid threads woven around lead ball cords, arranged centrally; breaking load rated to give a safety factor of 5 with the cable suspended vertically over 50 m	Ø 10.0 mm	Ø 11.8 mm
6	Bedding / separator	Elastomeric filler and synthetic tape, non-hygroscopic, keeping the section circular under basket load	1.0 mm	1.05 mm
7	Outer sheath	Special PUR compound, black — abrasion-, oil-, hydrolysis-, ozone- and UV-resistant; retains flexibility at −40 °C	2.5 mm wall	2.8 mm wall
8	Surface marking	FEICHUN · FC-SPF 3GSLTÖE · 0.6/1 kV · cores × size · metre marks · year of manufacture		

4. Cross-Sectional Drawings

4.1 Item 1 — 36 G 2.5 mm²

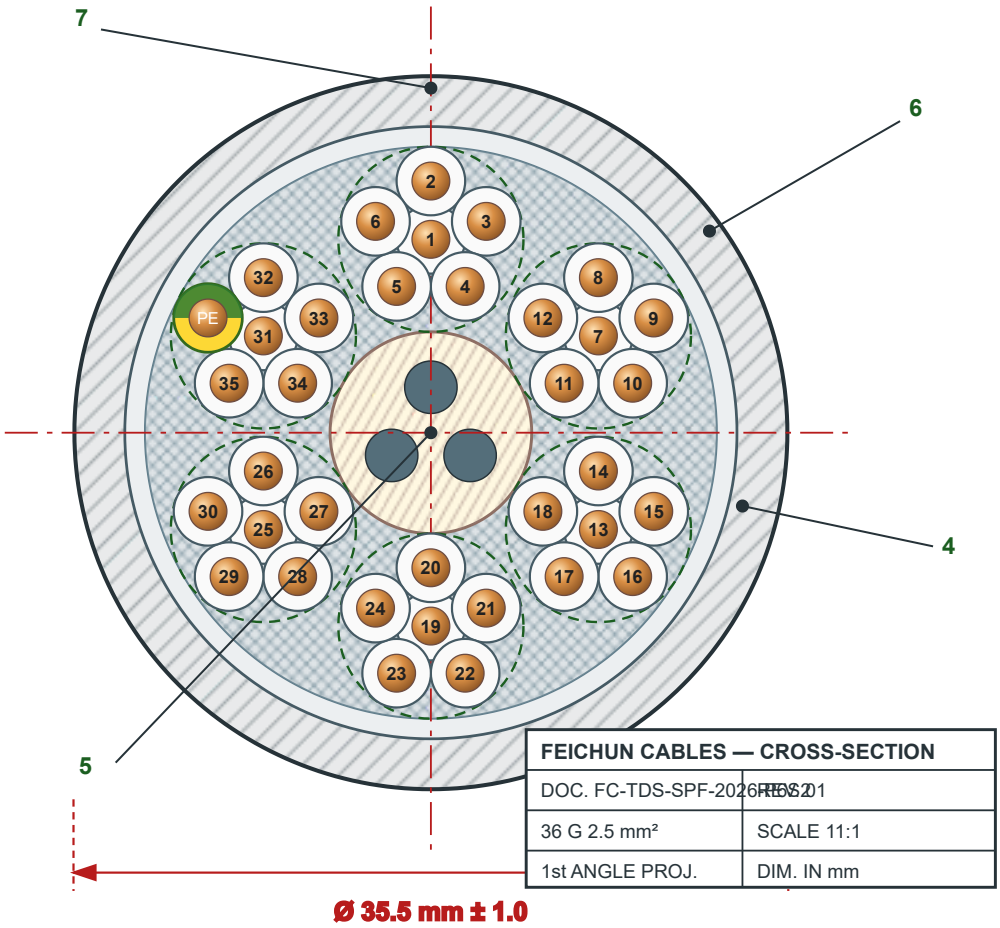


Figure 1 — Sectional view, FC-SPF 3GSLTÖE 36 G 2.5 mm². Six bundles of six cores laid up around the central aramid/lead-ball support element. 45° hatching denotes the cut PUR sheath.

Pos.	Element	Material
1	Conductor	Bare Cu, class FS extremely fine strand
2	Insulation	EPR 3GI3, light colour, black numbering
3	PE core	Green/yellow, 2.5 mm²
4	Bundle	6 cores per bundle, 6 bundles
5	Support element	Aramid threads over lead ball cords
6	Bedding / separator	Elastomeric filler + synthetic tape
7	Outer sheath	Special PUR, black, 2.5 mm

> **Why the support element matters.** In basket operation the full weight of the suspended cable is carried by the central aramid/lead-ball element, not by the copper. This is the single feature that separates a spreader cable from an ordinary reeling or festoon cable, and it is why the CORDAFLEX construction previously quoted is not interchangeable here.

4.2 Item 2 — 42 G 3.5 mm²

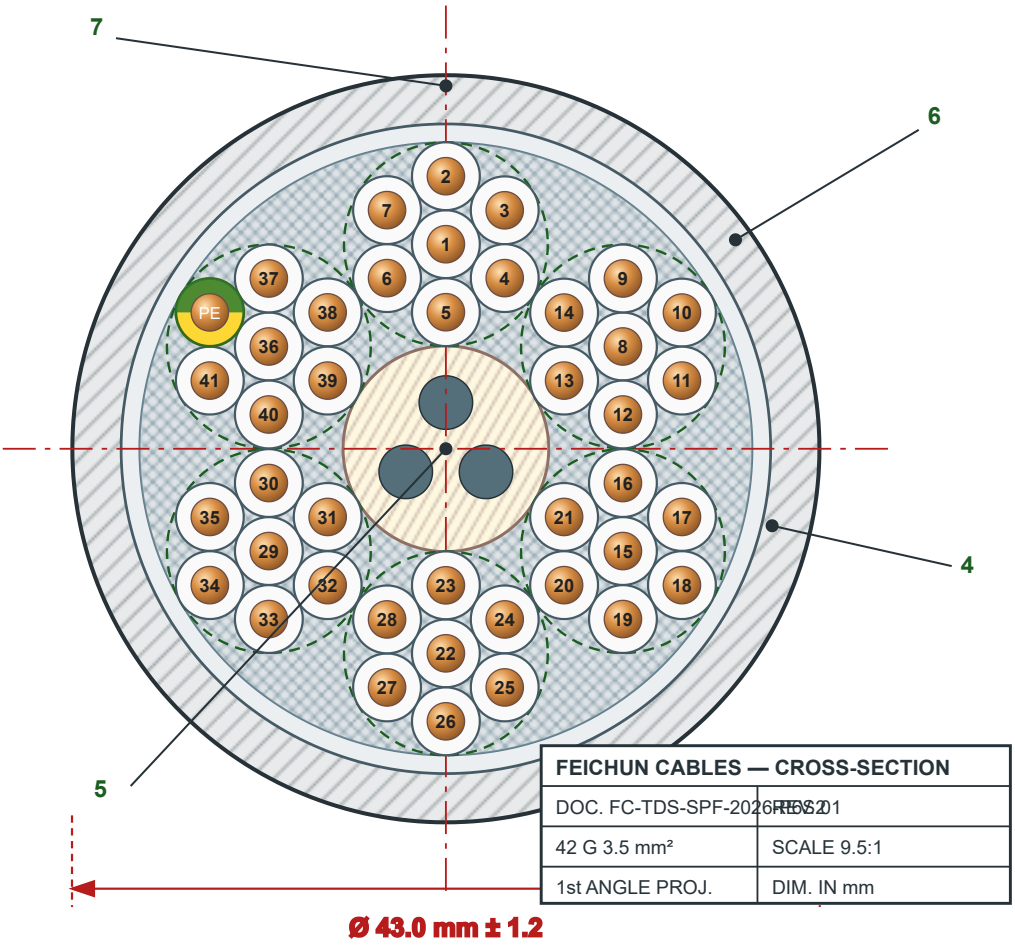


Figure 2 — Sectional view, FC-SPF 3GSLTÖE 42 G 3.5 mm². Six bundles of seven cores; support element enlarged in proportion to the increased suspended weight.

Pos.	Element	Material
1	Conductor	Bare Cu, class FS extremely fine strand
2	Insulation	EPR 3GI3, light colour, black numbering
3	PE core	Green/yellow, 3.5 mm^2
4	Bundle	7 cores per bundle, 6 bundles
5	Support element	Aramid threads over lead ball cords
6	Bedding / separator	Elastomeric filler + synthetic tape
7	Outer sheath	Special PUR, black, 2.8 mm

> **On 3.5 mm^2.** This is a metric size held specifically for spreader applications. If your end user is working to AWG, the nearest equivalent is 12 AWG (3.31 mm^2); confirm which basis the drawing calls for and we will match it exactly.

5. Electrical & Mechanical Characteristics

Parameter	36 G 2.5 mm²	42 G 3.5 mm²
Rated voltage U_0/U	0.6/1 kV	0.6/1 kV
Test voltage (routine, 5 min)	3.5 kV a.c.	3.5 kV a.c.
Conductor resistance at 20 °C	≤ 7.98 Ω/km	≤ 5.65 Ω/km
Insulation resistance at 20 °C	≥ 200 MΩ·km	≥ 200 MΩ·km
Current rating (30 °C, free air, single core)	21 A	26 A
Nominal overall diameter	35.5 mm ± 1.0	43.0 mm ± 1.2
Approximate weight	1,760 kg/km	2,590 kg/km
Min. bending radius — fixed / basket operation	5 × Ø (178 mm) / 10 × Ø (355 mm)	5 × Ø (215 mm) / 10 × Ø (430 mm)
Support element breaking load	≥ 6.5 kN	≥ 9.0 kN
Free suspension length (safety factor 5)	≥ 50 m vertical	≥ 50 m vertical
Max. conductor temperature	90 °C continuous · 250 °C short-circuit (max 5 s)	
Ambient temperature range	−40 °C to +80 °C, mobile use — suitable for cold-climate terminals	
Resistance	Abrasion, oil, hydrolysis, ozone, UV, salt spray — PUR sheath is the preferred choice for coastal container terminals	
Flexing life	> 2 million cycles under standard basket duty at the specified radius	

De-rating. With all cores loaded simultaneously, apply a group factor of 0.45–0.55 in accordance with IEC 60364-5-52. In spreader service, only the power cores normally carry continuous load, so this rarely governs the design.

6. Packing, Marking & Delivery

Parameter	Detail
Delivery lengths	Item 1: 1 × 170 m · Item 2: 1 × 170 m — continuous, no joints (split drums available on request at no extra cost)
Length tolerance	+2 % / −0 % per drum
Drum type	Fumigation-free plywood/timber drums, ISPM 15 compliant, both ends sealed with heat-shrink caps
Drum marking	Order no., cable type, cores × size, length, net/gross weight, drum no., rotation arrow, FeiChun logo, "MADE IN CHINA"
Estimated net weight	Item 1 approx. 299 kg · Item 2 approx. 440 kg · total approx. 739 kg
Estimated gross weight	approx. 960 kg including drums
Documentation supplied	Routine test report per drum, certificate of conformity, packing list, commercial invoice, certificate of origin (Form CO); consular or legalisation documents for Panamá available at cost
Samples	Sample lengths of approx. 500 mm of each construction, sectioned for inspection, can be despatched by courier free of charge — see the covering note below

7. Commercial Quotation — FC-QTN-PA-2026-P6S2

To: **iPort Services**, Urb. Los Ángeles, C.63 Oeste, Panamá — attention Mr Sebastian Garcia, Sales Director. This quotation supersedes FC-QTN-PA-2026-P4S8.

Item	Description	Qty	Unit price USD/m	Amount USD
1	FC-SPF (3GSLTÖE) SPREADERFLEX-equivalent spreader cable 0.6/1 kV **36 G 2.5 mm²**, EPR insulated, PUR sheathed, central aramid support element, unscreened	170 m	72.00	12,240.00
2	FC-SPF (3GSLTÖE) SPREADERFLEX-equivalent spreader cable 0.6/1 kV **42 G 3.5 mm²**, EPR insulated, PUR sheathed, central aramid support element, unscreened	170 m	110.00	18,700.00
3	Export drums, sealing caps, marking and seaworthy packing	2 drums	included	0.00
4	Routine test reports, certificate of conformity, Form CO	1 set	included	0.00
5	Sample lengths, approx. 500 mm of each construction, sectioned	2 pcs	free of charge	0.00
TOTAL — EX-WORKS HEFEI, INCOTERMS 2020				**USD 30,940.00**

Amount in words: *United States Dollars thirty thousand nine hundred and forty only.*

7.1 Terms and conditions

Price basis	Ex-Works Hefei, Anhui, Incoterms® 2020 (converted from the RMB ex-works price at the reference rate USD 1 = RMB 7.10)
Currency	United States Dollars (USD)
Payment terms	T/T — 50 % deposit with the purchase order, 50 % balance against copy of the bill of lading prior to shipment
Production lead time	20–25 working days from receipt of the deposit and confirmed technical approval (the aramid support element and PUR compound are longer-lead items than standard rubber constructions)
Onward terms	FOB Shanghai or CFR Balboa / Colón available on request; inland haulage, export clearance and freight quoted separately at cost
Country of origin	People's Republic of China
HS code	8544.49 (indicative; final classification per customs declaration)
Warranty	12 months from commissioning or 18 months from bill of lading date, whichever occurs first, against defects in material and workmanship
Price adjustment	All prices are ex-works figures subject to fluctuation of the LME copper market and to the prevailing USD/RMB exchange rate, and are to be reconfirmed at the time of order placement

> **Options available on request.** Individually braid-screened cores or screened twisted pairs; integrated optical fibre elements for spreader data links; factory-fitted terminations and strain-relief clamps; and matched drum barrel dimensions for a specific basket or reeler unit.

8. General Notes

Technical values stated are nominal design figures determined under standard test conditions and may vary within the tolerances permitted by the referenced standards. Overall diameters and weights are calculated for the constructions described and are confirmed on the first production sample. Installation, termination and basket tensioning must follow the manufacturer's handling instructions; the support element must be terminated at both cable ends into the designated strain-relief clamp so that the copper cores carry no suspended load. Failure to observe this, or to respect the minimum bending radius, will void the warranty.

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