TECHNICAL DATA SHEET | 0.6/1 kV | DIN VDE 0250-814 basis | Basket operation

FC-SPF™ 3GSLTÖE 0.6/1 kV 42 × 2.5 mm²

Spreader and basket-operation crane cable — equivalent to Prysmian SPREADERFLEX® 3GSLTÖE, No. 20157103

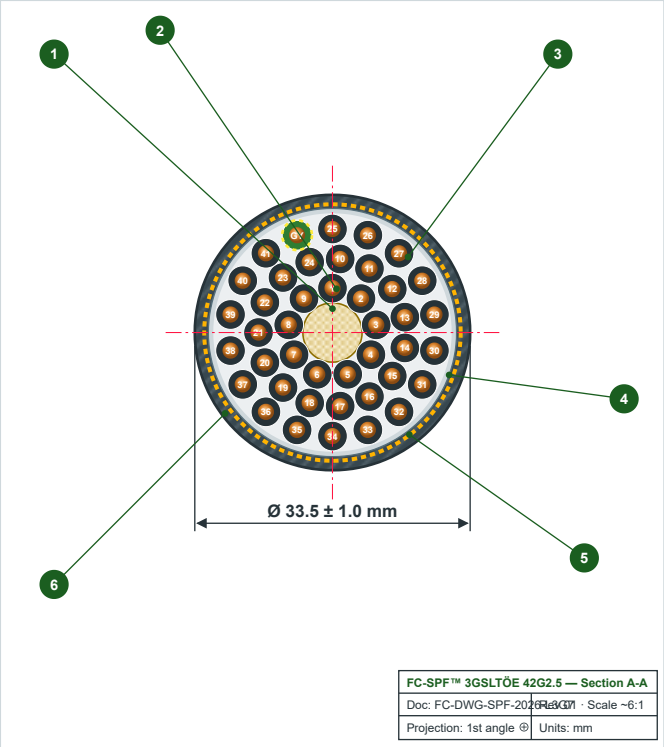
Doc No.: **FC-TDS-SPF-2026-L3G7** Rev: **01** Issued: **16 Sep 2026** Client: **IMPORTASHOP, Laredo TX**

Scope. FeiChun FC-SPF™ 3GSLTÖE is a heavy-duty rubber-sheathed control/power cable for spreader and basket (cable-collector) operation on container cranes, ship-to-shore cranes and stacking equipment. It is manufactured as a functional equivalent of Prysmian SPREADERFLEX® 3GSLTÖE 0.6/1 kV, Prysmian item no. **20157103** (42 × 2.5 mm²), requested by the client.

1. Product identification

Item	Data
FeiChun designation	FC-SPF™ 3GSLTÖE 0.6/1 kV 42G2.5
Equivalent reference	Prysmian SPREADERFLEX® 3GSLTÖE 0.6/1 kV, No. 20157103
Number of cores × cross-section	42 × 2.5 mm² (41 numbered cores + 1 green/yellow protective core)
Application	Basket operation, spreader cables, vertical hanging loops, high-speed pick-up with tensile and torsional stress
Reference standards	DIN VDE 0250-814 (design basis) · DIN VDE 0295 / IEC 60228 Class 5 · DIN VDE 0207-20/-21 · IEC 60332-1-2 · EN 60811 / EN 50396 (test methods)

2. Construction



Pos.	Element	Material / design
1	Central support element	High-tenacity aramid/polyester strain-relief element with rubber bedding
2	Conductor	Plain annealed copper, finely stranded, Class 5 (IEC 60228), 2.5 mm²
3	Insulation	Special EPR rubber compound, type 3GI3 (DIN VDE 0207-20); cores black with white printed numbers 1–41, one green/yellow
4	Core assembly & inner sheath	Cores stranded in 3 layers (9 + 15 + 18) with optimised short lay; inner sheath of special rubber
5	Anti-torsion reinforcement	Polyester textile braid vulcanised between inner and outer sheath
6	Outer sheath	Special PCP (polychloroprene) rubber compound, type 5GM5 (DIN VDE 0207-21), black, oil- and weather-resistant

Core layout per layer: 9 (inner) + 15 (middle) + 18

3. Electrical data

Parameter	Value
Rated voltage U_0/U	0.6/1 kV
Max. permissible AC voltage	0.7/1.2 kV
Test voltage (AC, 5 min)	3.5 kV
Max. conductor resistance at 20 °C	7.98 Ω/km
Min. insulation resistance at 20 °C	≥ 20 MΩ·km

Parameter	Value
Max. conductor temperature	+90 °C (continuous)
Short-circuit temperature	+200 °C (≤ 5 s)
Current rating, 2.5 mm², 30 °C, 3 loaded cores	26 A (in free air)
De-rating for 42 cores	Apply multi-core factor per DIN VDE 0298-4 Table 26 (≈ 0.35–0.40 with all cores loaded)
Flame retardancy	IEC 60332-1-2

4. Dimensional and mechanical data

Type	Nominal OD (mm)	Copper weight (kg/km)	Cable weight (kg/km)	Max. tens
FC-SPF™ 3GSLTÖE 42G2.5	33.5 ± 1.0	1,008	≈ 2,050	1,575 (15 N/mm²

Operating condition	Value
Travel speed in basket operation	up to 180 m/min (higher speeds on request with system review)
Max. free-hanging length	up to 60 m (dependent on basket geometry and acceleration)
Torsional stress	± 25 °/m
Ambient temperature — flexing	−25 °C to +80 °C
Ambient temperature — fixed installation	−40 °C to +80 °C
Resistance	Oil (EN 60811-404), ozone, UV and weather; suitable for

Basket operation guidance. Lay the cable into the basket in the same direction as the factory drum lay, avoid twisting during installation, and allow a run-in period of several cycles before full-speed operation. The basket centre cone diameter should be at least 15 × D for high-cycle duty.

5. Marking, packing and testing

Item	Detail
Sheath marking	FEICHUN FC-SPF 3GSLTOE 0.6/1kV 42G2.5 + year + metre marking
Delivery for this enquiry	2 lengths × 120 m on separate wooden drums (total 240 m)
Routine tests	Conductor resistance, AC voltage test, dimensional check, visual inspection — test report supplied with each drum
Type test evidence	Available on request

Data are nominal values for guidance and subject to manufacturing tolerances. FeiChun reserves the right to make technical improvements without notice.

Contact

Anhui FeiChun Special Cable Co., Ltd. — International Business Department
Hefei, Anhui Province, P.R. China
Zihao Yang, Global Sales Manager: zihao.yang@feichuncables.com
Technical: Tech@feichuncables.com | Mining & port: mining@feichuncables.com
WhatsApp: +86 138 5512 3218 | www.feichuncables.com

Intellectual property & trademark notice. This document is the property of Anhui FeiChun Special Cable Co., Ltd. and is protected under the Copyright Law and Anti-Unfair Competition Law of the People's Republic of China and the Copyright Act 1968 (Cth) of Australia. Reproduction or disclosure to third parties without written consent is prohibited. SPREADERFLEX® and 3GSLTÖE product references are trademarks/designations of Prysmian Group, used here solely to identify the functionally equivalent product requested; FeiChun is not affiliated with Prysmian. FeiChun supplies its own-manufactured FC-SPF™ equivalent.