FC® **FeiChun Special Cables**

Anhui FeiChun Special Cable Co., Ltd. | 安徽飞纯特种电缆有限公司

TYPE: H07RN-F | EN 50525-2-21 | IEC 60245-4 | 450/750 V | 3 × 16 mm²

Project: Yemen, 1,000 m

Technical Datasheet: H07RN-F 3 × 16 mm² Heavy-Duty Rubber Flexible Cable

EPR-insulated, polychloroprene-sheathed flexible power cable for mobile equipment, generators, pumps and industrial machinery in hot, dusty and outdoor environments.

Doc no. FC-TDS-H07-2026-844E **Revision** 0 **Issued** 08 October 2026

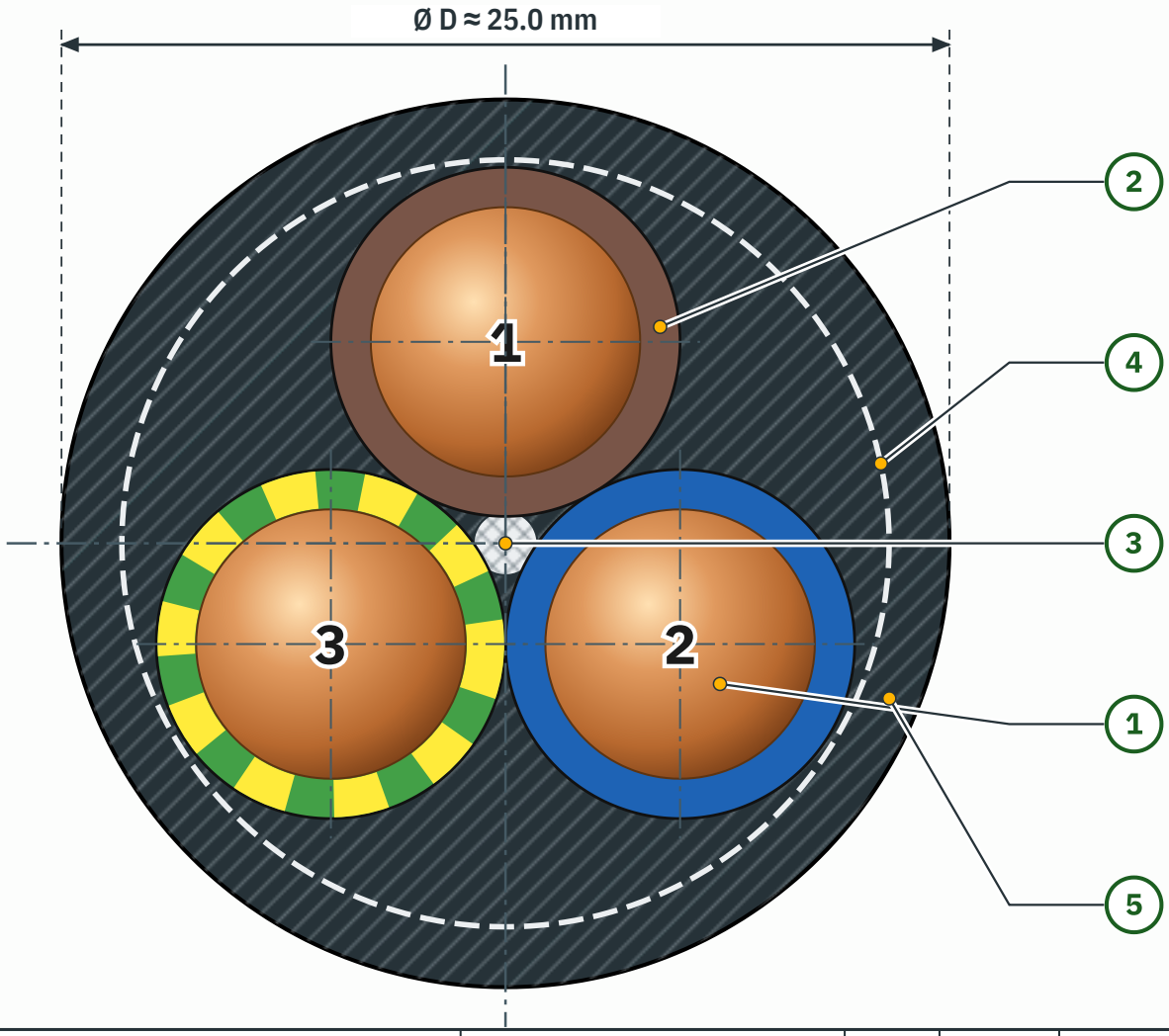
Prepared for Customer, Republic of Yemen

1 Application

H07RN-F is the harmonised heavy-duty rubber flexible cable for medium mechanical stress in dry, damp and wet locations and outdoors. It suits permanent outdoor exposure, including strong sunlight and high ambient temperature.

Typical uses	Diesel generator sets and portable power distribution, submersible and surface pumps, construction site equipment, workshop and industrial machinery, temporary power on building and oil & gas sites
Installation	Flexible connection of mobile equipment; fixed installation in dry, damp or wet locations, in conduit, on cable trays or outdoors
Fixed protected installations	May be used up to 1,000 V AC (U_0/U 0.6/1 kV) in fixed, protected installation per EN 50565-1
Water	Suitable for temporary immersion (AD7). For permanent immersion we recommend H07RN8-F

2 Construction



Title	Doc no.	Rev.	Scale	Projection
H07RN-F 3×16, section A–A	FC-TDS-H07-2026-844E	0	NTS	ISO-E

Fig. 1. Cross-section of H07RN-F 3G16. Core 3 is green-yellow in the 3G version; in the 3X version (no protective earth) cores are brown, black and grey.

Pos.	Element	Material and design
1	Conductor	Plain annealed copper, class 5 flexible, EN 60228 / IEC 60228; max. wire Ø 0.41 mm. Tinned copper on request
2	Insulation	Rubber compound type EI4 (EPR), EN 50363-1; 1.2 mm nominal. Core colours to HD 308: brown, blue, green-yellow (3G) or brown, black, grey (3X)
3	Centre filler	Elastomer filler for a round, stable lay-up
4	Separator	Non-hygroscopic tape over the laid-up cores (where required)
5	Outer sheath	Polychloroprene (PCP) compound type EM2, EN 50363-2-1; 3.2 mm nominal; black; flame-retardant, oil, ozone and UV resistant

Sheath marking

FEICHUN H07RN-F 3G16 450/750V CE, year of manufacture and continuous metre marking. Customer marking available on request.

3 Technical data

Electrical and thermal

Rated voltage U_0/U	450/750 V AC
Maximum operating voltage	U_0/U 0.6/1 kV in fixed, protected installation
AC test voltage	2.5 kV, 50 Hz, 5 min
Max. conductor resistance at 20 °C	1.21 Ω/km
Max. conductor temperature	+60 °C in operation; +200 °C short circuit (≤ 5 s)
Ambient temperature	Flexing −25 °C to +60 °C; fixed −40 °C to +60 °C

Mechanical and environmental

Min. bending radius, fixed	4 × D (approx. 100 mm)
Min. bending radius, flexing	6 × D (approx. 150 mm)
Max. tensile load	15 N/mm² of conductor cross-section; 720 N
Flame retardance	EN 60332-1-2 / IEC 60332-1-2
Oil resistance	EN 60811-404
Ozone and UV resistance	EN 50396 (ozone); HD 605 (UV and weathering)

Dimensions and weight

Part no.	Designation	Cores × cross-section (mm²)	Insulation (mm)	Sheath (mm)	Outer Ø approx. (mm)	Copper weight (kg/km)	Cable weight approx. (kg/km)
FC-H07-0316G	**H07RN-F 3G16**	3 × 16 (incl. PE)	1.2	3.2	25.0	461	920
FC-H07-0316X	**H07RN-F 3X16**	3 × 16 (no PE)	1.2	3.2	25.0	461	920

4 Current rating and ambient temperature

The base rating is 76 A for a single cable in free air at 30 °C with three loaded cores, to DIN VDE 0298-4 (rubber cables, conductor temperature 60 °C). Because summer ambient temperatures in Yemen frequently exceed 40 °C, the cable should be selected on the derated value below.

Ambient temperature (°C)	20	25	30	35	40	45	50	55
Correction factor	1.15	1.08	1.00	0.91	0.82	0.71	0.58	0.41
Permissible current, 3 × 16 mm² (A)	87	82	76	69	62	54	44	31

Further derating applies to cables wound on drums, grouped with other loaded cables or exposed to direct solar radiation. For a pump or generator duty above approx. 55 A at 45 °C, FeiChun can propose a 25 mm² H07RN-F or a 90 °C rated NSSHÖU cable.

5 Standards and tests

Reference standards

EN 50525-1 and EN 50525-2-21 (cable design); IEC 60245-4, type 60245 IEC 66; EN 60228 (conductors); EN 50363-1 and EN 50363-2-1 (compounds); EN 50565-1 and -2 (guide to use); HD 308 (core identification).

Routine tests on every drum

Conductor resistance, AC voltage test 2.5 kV, spark test on cores, dimensional and marking checks. An in-house laboratory test report is supplied with the delivery; third-party inspection (e.g. SGS, BV) can be arranged at the buyer's cost.

CE | VDE | IECEx | ATEX | UKCA | EAC

6 Packing and supply for this enquiry

Quantity	1,000 m, H07RN-F 3 × 16 mm²
Packing	One wooden drum of 1,000 m, or 2 × 500 m on request; ISPM 15 treated drums, ends sealed with heat-shrink caps
Net cable weight	Approx. 920 kg
Production lead time	2–3 weeks after order confirmation
Warranty	Minimum 3 years against manufacturing defects

Intellectual property notice. This document and its drawings are the property of Anhui FeiChun Special Cable Co., Ltd. and are issued to the named customer for evaluation of this enquiry only. They are protected under the Copyright Law and the 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 not permitted.

Data are subject to change in line with continuous product development.

No. 1 Park, Private Science & Technology Park
Hefei National Economic & Technological Development Zone
Hefei, Anhui, P.R. China
www.feichuncables.com

Technical and sales contacts

Technical: Tech@feichuncables.com
Mining cables: mining@feichuncables.com
Zihao Yang, Global Sales Manager: zihao.yang@feichuncables.com
WhatsApp: +86 138 5512 3218

FC-TDS-H07-2026-844E | Rev. 0 | 08 October 2026
© 2026 FeiChun Special Cables. All rights reserved.

FEICHUN CABLES