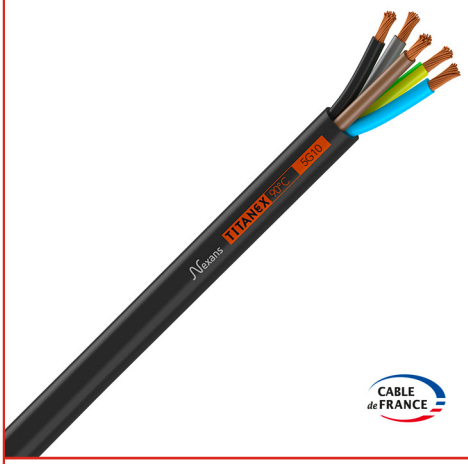
# TITANEX® H07RN-F

**H07RN-F TITANEX 5G10**

**Nexans Ref.:** 20072098-901-05
**Country Ref.:** 0547765
**EAN 13:** 3427680015501

The TITANEX® flexible rubber cable range offers exceptional performances and is designed to release you from all your constraints. Robust yet flexible, TITANEX® is easy to use and withstands the toughest of conditions, such as hard-wearing situations, extreme temperatures and most chemicals




## DESCRIPTION

### Advantages

- Very high flexibility
- Very high crush resistance
- Good resistance to chemicals, oils and vibrations

TITANEX® H07RN-F cables with EPR rubber insulation and rubber sheathing offer outstanding mechanical properties to meet your most varied requirements. No matter what the installation conditions are, whether indoors or outdoors, in cramped and hazardous environments or in the presence of oils and chemicals, TITANEX combines strengh and flexibility to meet all your requirements.
For more than 50 years the TITANEX® cables have been recognized and are the guarantee of reliable installations in industrial environments (factories, contruction sites, ports, ...) whether they are fixed or mobile such as for cranes, machines tool connections, motor power supplies .... The mechanical qualities of TITANEX cables also make them suitable for use in event environments, such as festivals, concerts and sport events, where the cable is exposed without protection and can be used several times.

- Core temperature : 90°C
- Operating Voltage : 450/750V mobile, 0.6/1kV fixed. TITANEX H07RN-F cables have been designed tio limit the generation and spread of fire and smoke.
- Reaction to fire : Eca (according to EN 50575:2014+A1:2016)
- Flame retardant (IEC 60332-1, C2)

### Installation

TITANEX H07RN-F cables can be laid in cable trays, on shelves, inside ducts or fixed to walls, outside with or without protection. They can also be immersed with additionnal mechanical protection. Additionnaly, they can also be intalled outdoors without protection (UV resistance).

### Minimum bending radius

- Dynamic : 6 to 8 x outer diameter of the cable.
- Static : 3 x outer diameter of the cable if OD< or = 12mm ; 4x if OD > 12mm.

## DECLARATION OF PERFORMANCE

Eca

## STANDARDS

**International** 2014/68/EU; EN 50525-2-21;
EU Directive 2011/65/ EU (RoHS); HD 516;
IEC 60245-4 type 66

**National** NF C 32-102-4

Conductor flexibility
**Flexible class 5**

Lead free
**Yes**

Rated Voltage Uo/U (Um)
**450 / 750 V**

Mechanical resistance to impacts
**AG3**

Cable flexibility
**Flexible**

Chemical resistance
**Accidental**

Water proof
**Good**

Flame retardant
**C2, NF C 32-070 & IEC 60332-1**

### Laying cable conductors

When pulling the cable, all conductors must be equally stressed. Th tensils force must never exceed 15N/mm2 of total cross-sections.
Th maximum tensile force should never exceed 1000N  in total, although the above rule may lead to higher values for large cross-sections.

### Marking

TITANEX 90°C n (x or G) s NEXANS CE «har» USEH07RN-F - factory n° Made in France Y Eca n°DoP


Conductor flexibility
**Flexible class 5**

Lead free
**Yes**


Rated Voltage Uo/U (Um)
**450 / 750 V**


Mechanical resistance to impacts
**AG3**


Cable flexibility
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Chemical resistance
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# TITANEX® H07RN-F

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## CHARACTERISTICS

| | |
|---|---|
| **Construction characteristics** | |
| Conductor material | Bare copper |
| Conductor flexibility | Flexible class 5 |
| Insulation | Special cross-linked elastomer |
| Outer sheath | Special cross-linked elastomer |
| Sheath colour | Black |
| Lead free | Yes |
| With Green/Yellow core | Yes |
| Conductor shape | Circular |
| Permissible current rating, pipes | - |
| With smaller neutral conductor | No |
| **Dimensional characteristics** | |
| Number of cores | 5 |
| Conductor cross-section | 10 mm² |
| Average insulation thickness | 1.2 mm |
| Average sheath thickness | - mm |
| Approximate weight | 1001 kg/km |
| Maximum outer diameter | 29.1 mm |
| Minimum outer diameter | 22.9 mm |
| Neutral conductor section (when smaller) | - mm² |
| **Electrical characteristics** | |
| Rated Voltage Uo/U (Um) | 450 / 750 V |
| Permissible current rating in open air | 75 A |
| Voltage drop, single phase | 3.43 V/A.km |
| **Mechanical characteristics** | |
| Mechanical resistance to impacts | AG3 |
| Cable flexibility | Flexible |
| **Usage characteristics** | |
| Silicone free | Yes |
| Chemical resistance | Accidental |
| Water proof | Good |
| Flame retardant | C2, NF C 32-070 & IEC 60332-1 |
| Packaging | Cut to length |
| Field of application | - |
| Length | - m |
| Max. conductor temperature in service | 90 °C |
| Minimum dynamic operating bending radius | 174.6 mm |
| Minimum static operating bending radius | 87.3 mm |
| Oil resistance | Yes |
| Operating temperature, range | -25 - 55 °C |
| RoHS compliant | Yes |
| Short-circuit max. conductor temperature | 250 °C |

## ADDITIONAL INFORMATIONS TITANEX

### Core identification

**(In accordance with european harmonization HD308 S2)**

1x: black
2x: brown - blue
3x: brown - black - grey (brown - black - blue if the conductor cross-section is 1.5 or 2.5mm²)
3G: brown - blue - green/yellow
4x: brown - black - grey - blue
4G: brown - black - grey - green/yellow
5x: black cores with printed numbers
5G: blue - brown - black - grey - green/yellow
7 cores and above : black cores with printed numbers

### Current rating capacities

The data are indicated for continuous duty operation and apply to:

- Maximum conductor temperature = 90 °C
- Nominal frequencies = 50 or 60 Hz
- One cable in free air (on perforated trays)
- Ambient temperature = 30 °C

Data recording from IEC 60364-5-52 or NF C 15-100

### Voltage drop

The data are based on Cos ø = 0.8

### Minimum bending radius

- Static use: 3 x cable outer diameter
- Dynamic use: 6 to 8 x outer cable diameter.