



Nexans Ref.: 10055790
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FIRE PERFORMANCE CLASS



Eca



CONTACT

Building Products Information
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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

STANDARDS

Product 2014/68/EU; EN 50525-2-21; HD 516; IEC 60245-4 type 66; NF C32-102-4

Test IEC 60332-1; NF C32-070/C2

International EU Directive 2011/65/EU (RoHS)

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 strength 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, construction 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 to 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)



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

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 additional mechanical protection. Additionally, they can also be installed 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.

Laying cable conductors

When pulling the cable, all conductors must be equally stressed. The tensile force must never exceed 15N/mm² of total cross-sections.

The 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» USE H07RN-F - factory n° Made in France Y Eca n°DoP

Metric marking

Marking every metre, so that only the required length is unwound.

CHARACTERISTICS

Construction characteristics

| | |
|--------------------------------|--------------------------------|
| Conductor material | Bare copper |
| Conductor flexibility | Flexible class 5 |
| Conductor shape | Circular |
| Insulation | Special cross-linked elastomer |
| Outer sheath | Special cross-linked elastomer |
| Sheath colour | Black |
| With smaller neutral conductor | No |
| With Green/Yellow core | Yes |
| Lead free | Yes |

Dimensional characteristics

| | |
|--|-------------------|
| Number of cores | 3 |
| Conductor cross-section | 6 mm ² |
| Average insulation thickness | 1.0 mm |
| Average sheath thickness | - mm |
| Approximate weight | 346 kg/km |
| Maximum outer diameter | 18.0 mm |
| Minimum outer diameter | 14.1 mm |
| Neutral conductor section (when smaller) | - mm ² |

Electrical characteristics

| | |
|---|------------|
| Rated Voltage U ₀ /U (U _m) | 450/750 V |
| Permissible current rating in open air | 63 A |
| Voltage drop, single phase | 7.0 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 | Coil |
| Field of application | - |
| Length | - m |
| Max. conductor temperature in service | 90 °C |
| Minimum dynamic operating bending radius | 108.0 mm |
| Minimum static operating bending radius | 54 mm |
| Oil resistance | Yes |
| Operating temperature, range | -25 ... 55 °C |
| RoHS compliant | Yes |
| Short-circuit max. conductor temperature | 250 °C |

ADDITIONAL INFORMATIONS NEXANS 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 $\cos \varphi = 0.8$

Minimum bending radius

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

NEXANS TITANEX, MADE TO SURVIVE

Nexans TITANEX

Tough as nails since 1953



Withstands the most extreme situations



Highly flexible



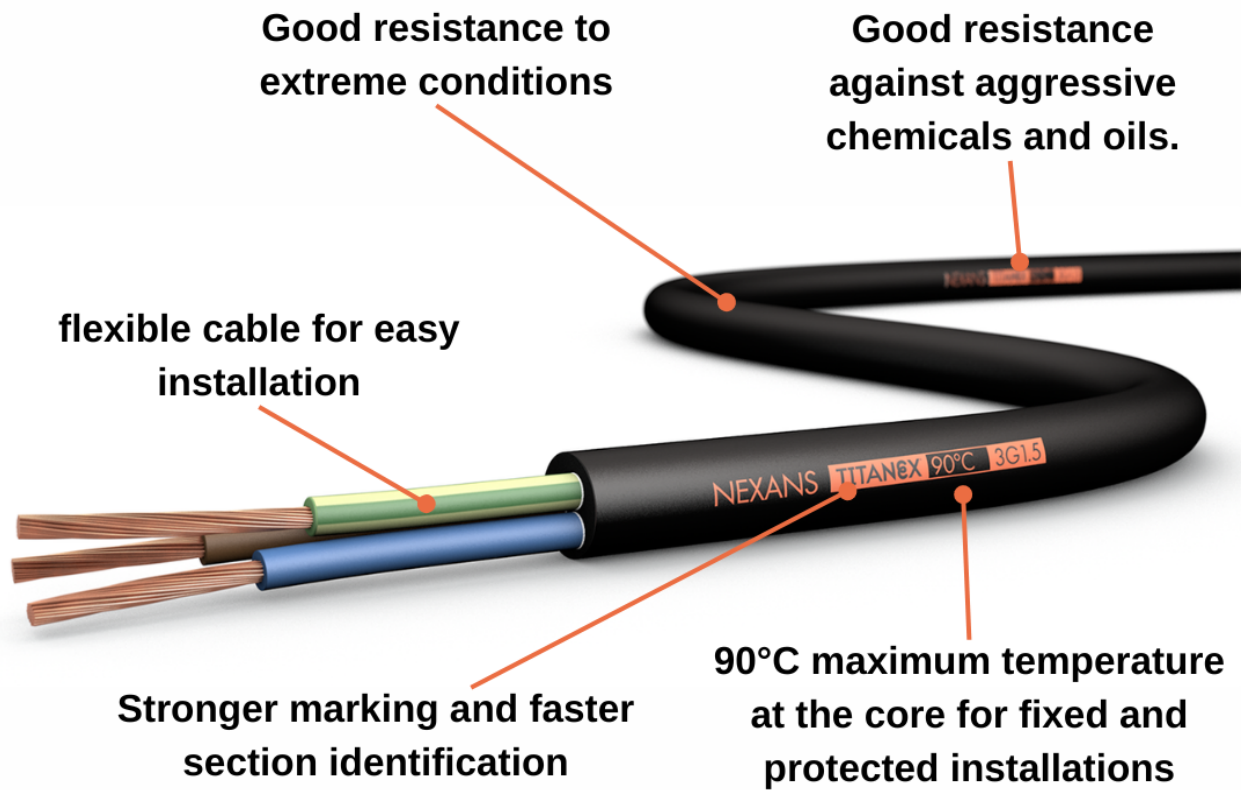
Durable marking



Up to 1kV and 90°C maximum temperature for protected fixed installations.



NEXANS TITANEX FEATURES



TITANEX