

TITANEX® H07RN-F

H07RN-F TITANEX 3G6

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

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 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)

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.



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**

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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» USEH07RN-F - factory n° Made in France Y Eca n°DoP



Conductor flexibility
Flexible class 5



Lead free
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(Um)
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Mechanical
resistance to
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Flexible



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Flame retardant
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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	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	Cut to length
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 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 $\cos \phi = 0.8$

Minimum bending radius

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