H07RN-F TITANEX®

H07RN-F

TITANEX, the Nexans H07RN-F is a flexible cable, elastomer insulated and sheathed cable with a copper core.

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.

Laying cable conductors

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

Lead free	Cable flexibility	Chemical resistance	Water proof	Max.conductor temp.in service	Oil resistance	Operating temp.	RoHS compliant
Yes	**Flexible**	**Accidental**	**Good**	**90 °C**	**Yes**	**-25 ... 55 °C**	**Yes**

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

Lead free
Yes


Cable flexibility
Flexible


Chemical resistance
Accidental


Water proof
Good


Max.conductor temp.in service
90 °C


Oil resistance
Yes


Operating temp.
-25 ... 55 °C

RoHS compliant
Yes

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CHARACTERISTICS

Construction characteristics	
Conductor material	Bare copper
Insulation	Special cross-linked elastomer
Outer sheath	Special cross-linked elastomer
Sheath colour	Black
Lead free	Yes
Conductor shape	Circular
Dimensional characteristics	
Average sheath thickness	- mm
Mechanical characteristics	
Cable flexibility	Flexible
Usage characteristics	
Silicone free	Yes
Chemical resistance	Accidental
Water proof	Good
Length	- m
Max. conductor temperature in service	90 °C
Oil resistance	Yes
Operating temperature, range	-25 ... 55 °C
RoHS compliant	Yes
Short-circuit max. conductor temperature	250 °C

TWO CORES

Green/ Yellow core	Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Av. insul. thickness [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
No	1.5	26	27.0	0.8	8.5	11.0	111
No	4	49	10.1	1.0	11.8	15.1	238

THREE CORES

Green/ Yellow core	Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Av. insul. thickness [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
Yes	1	20	39.4	0.8	8.3	10.7	117
Yes	1.5	26	27.0	0.8	9.2	11.9	134
Yes	6	63	7.0	1.0	14.1	18.0	346

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FOUR CORES

Green/ Yellow core	Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Av. insul. thickness [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
Yes	1.5	23	23.3	0.8	10.2	13.1	165
Yes	6	54	5.84	1.0	15.7	20.0	443
Yes	16	100	2.2	1.2	23.8	30.1	1150
Yes	25	127	1.44	1.4	28.9	36.6	1700
Yes	35	158	1.04	1.4	32.5	41.1	2180
Yes	50	192	0.75	1.6	37.7	47.5	3030
Yes	70	246	0.56	1.6	42.7	54.0	3990
Yes	95	298	0.44	1.8	48.4	61.0	5360
Yes	150	395	0.31	2.0	58.0	73.0	7990

FIVE CORES

Green/ Yellow core	Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Av. insul. thickness [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
Yes	10	75	3.43	1.2	22.9	29.1	1001
Yes	16	100	2.2	1.2	26.4	33.3	1430
Yes	25	127	1.44	1.4	32.0	40.4	2096
Yes	35	158	1.04	1.4	35.6	45.1	2690
Yes	50	192	1.04	1.6	41.8	53.0	3840

SEVEN CORES

Green/ Yellow core	Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Av. insul. thickness [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
Yes	1.5	17	23.3	0.8	14.7	18.7	349

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

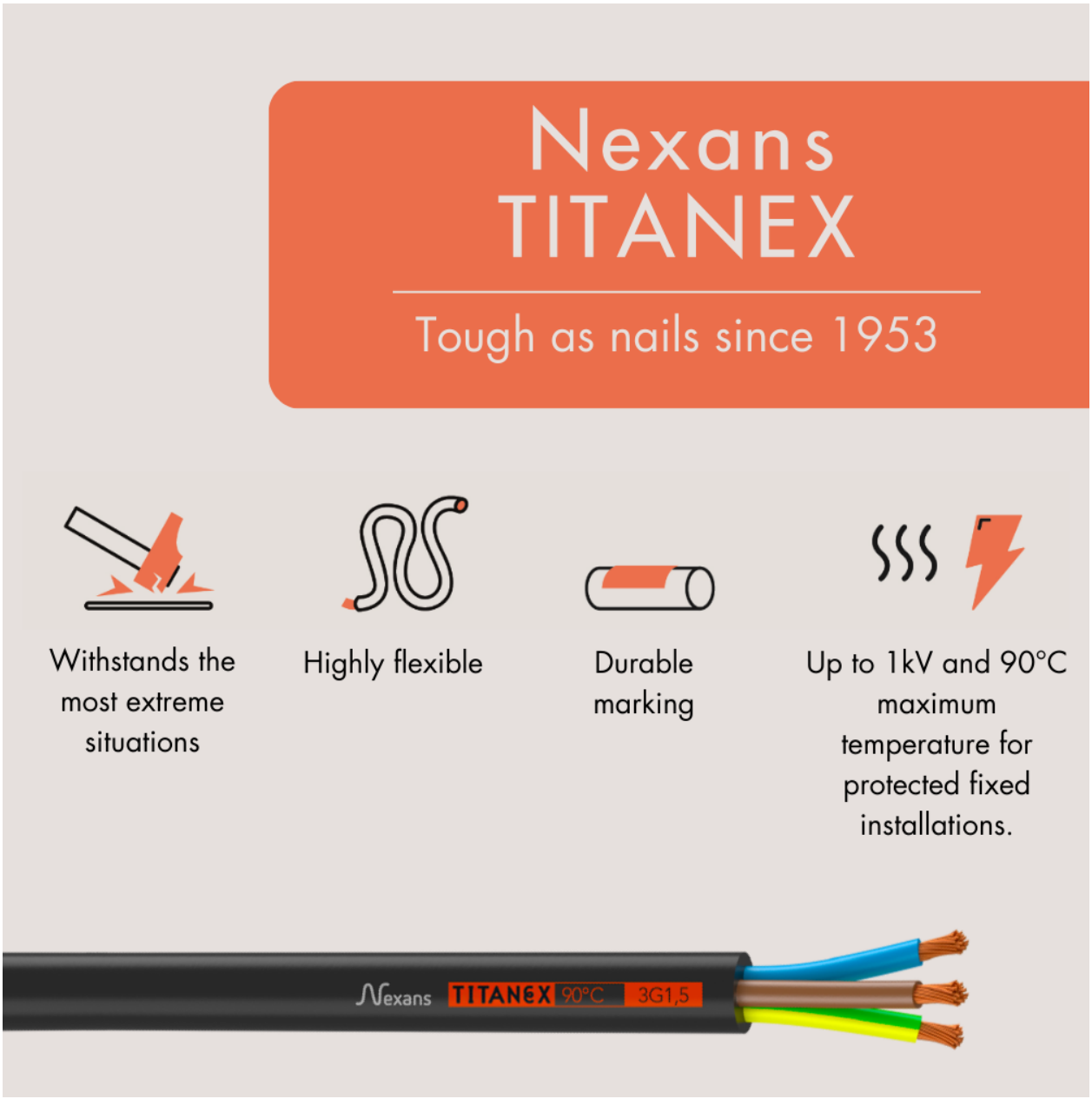
Voltage drop

The data are based on Cos ø = 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 FEATURES