

H07RN-F

Industrial flexible cable, insulation and outer sheath in elastomer.
Oil resistant, flame retardant according to IEC/EN 60332-1-2 standard. H07RN-F

DESCRIPTION

Application

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. For more than 50 years the TITANEX® cable range properties have been recognized as the best choice for all mobile and fixed installations in industrial environments such as construction sites, cranes, machines tools, factories, generators etc.

TITANEX® is also suitable for public environments and temporary events such as festivals or sports competitions, where the cable is often laid directly on the ground with no protection.

The cable may be rated 0,6/1 kV where the installation has built-in protection and for motors in lifting appliances - machine tools - etc.

Installation

This cable can be installed in open air or be buried but with extra mechanical protection.

Conductors laid up

Assembled conductors.

NEW ! MArking : The cross section marking is enlarged to allow easy identification during installation.

USE $\langle \text{har} \rangle N (x \text{ or } G) S \text{ TITANEX}^\circledast$

- N = Number of conductor
- G = with Green/Yellow
- x = without Green/Yellow
- S = cross-section en mm²



STANDARDS

International EN 50525-2-21;
HD 22.4; HD 516;
IEC 60245-4 type 66

National NF C 32-102-4



Lead free
Yes



Cable flexibility
Flexible



Chemical
resistance
Accidental



Water proof
Good



RoHS compliant
Yes



Operating temp.
-25 .. 55 °C



Oil resistance
Yes



Max. conductor
temp.in service
90 °C

CHARACTERISTICS

Construction characteristics

Conductor material	Bare copper
Insulation	Special cross-linked elastomer
Outer sheath	Special cross-linked elastomer
Sheath colour	Black
Lead free	Yes

Mechanical characteristics

Cable flexibility	Flexible
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Usage characteristics

Silicone free	Yes
Chemical resistance	Accidental
Water proof	Good
RoHS compliant	Yes
Operating temperature, range	-25 .. 55 °C
Short-circuit max. conductor temperature	200 °C
Oil resistance	Yes
Max. conductor temperature in service	90 °C

SINGLE CORE

Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Min. outer diam. [mm]	Approx. weight [kg/km]
6	58	5.9	9.8	7.9	109
10	80	3.4	11.9	9.5	182
16	107	2.2	13.4	10.8	256
25	138	1.4	15.8	12.7	369
35	169	1.04	17.9	14.3	482
50	207	0.75	20.6	16.5	662
70	268	0.56	23.3	18.6	895
95	328	0.44	26.0	20.8	1144
120	382	0.36	28.6	22.8	1430
150	441	0.31	31.4	25.2	1740
185	506	0.28	34.4	27.6	2160
240	599	0.23	38.3	30.6	2730
300	693	0.2	41.9	33.5	3480
400	825	0.18	46.8	37.4	4510

TWO CORES

Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Min. outer diam. [mm]	Approx. weight [kg/km]
1.5	26	27.0	11.0	8.5	111

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.

Cross section [mm ²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Min. outer diam. [mm]	Approx. weight [kg/km]
2.5	36	16.2	13.2	10.2	161
4	49	10.1	15.1	11.8	238
6	63	6.7	16.8	13.1	279
10	86	3.8	22.6	17.7	538
16	115	2.5	25.7	20.2	744
25	149	1.68	30.7	24.3	1074

THREE CORES

Cross section [mm ²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Min. outer diam. [mm]	Approx. weight [kg/km]	Green/ Yellow core
1	20	39.4	10.7	8.3	117	Yes
1.5	23	27.0	11.9	9.2	134	No
1.5	26	27.0	11.9	9.2	134	Yes
2.5	31	16.2	14.0	10.9	195	No
2.5	36	16.2	14.0	10.9	195	Yes
4	49	10.1	16.2	12.7	290	Yes
6	63	7.0	18.0	14.1	346	Yes
10	86	4.0	24.2	19.1	663	Yes
16	115	2.5	27.6	21.8	924	Yes
35	185	1.21	37.1	29.3	1760	Yes
50	225	0.87	42.9	34.1	2390	Yes
70	289	0.64	48.3	38.4	3110	Yes
95	352	0.5	54.0	43.3	4170	Yes

FOUR CORES

Cross section [mm ²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Min. outer diam. [mm]	Approx. weight [kg/km]
1	18	34.08	12.0	9.6	144
1.5	23	23.3	13.1	10.2	165
2.5	31	14.0	15.5	12.5	245
4	42	8.71	18.0	14.0	357
6	54	5.84	20.0	15.7	443
10	75	3.42	26.5	20.8	818
16	100	2.2	30.1	23.8	1150
25	127	1.44	36.6	28.9	1700
35	158	1.04	41.1	32.5	2180
50	192	0.75	47.5	37.7	3030
70	246	0.56	54.0	42.7	3990
95	298	0.44	61.0	48.4	5360

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Cross section [mm ²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Min. outer diam. [mm]	Approx. weight [kg/km]
120	346	0.36	66.0	53.0	6500
150	395	0.31	73.0	58.0	7990

FIVE CORES

Cross section [mm ²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Min. outer diam. [mm]	Approx. weight [kg/km]
1	18	34.1	14.0	10.9	180
1.5	23	23.6	14.4	11.2	238
2.5	31	14.0	17.0	13.3	297
4	42	8.72	19.9	15.6	453
6	54	5.84	22.2	17.5	557
10	75	3.43	29.1	22.9	1001
16	100	2.2	33.3	26.4	1430
25	127	1.44	40.4	32.0	2096
35	158	1.04	45.1	35.6	2690
50	192	1.04	53.0	41.8	3840
70	246	0.56	60.0	47.5	4996
95	298	0.44	67.0	54.0	6640

SEVEN CORES

Cross section [mm ²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Min. outer diam. [mm]	Approx. weight [kg/km]
1.5	17	23.3	18.7	14.7	349
2.5	21	13.9	21.8	17.1	487

TWELVE CORES

Cross section [mm ²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Min. outer diam. [mm]	Approx. weight [kg/km]
1.5	12	23.3	22.14	17.6	510
2.5	16	13.9	26.2	20.6	702

EIGHTEEN CORES

Cross section [mm ²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Min. outer diam. [mm]	Approx. weight [kg/km]
1.5	10	20.7	26.3	20.7	730
2.5	14	13.9	30.9	24.4	1018

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THIRTY SIX CORES

Cross section [mm ²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
1.5	7	23.3	27.8	35.2	1325
2.5	9	13.9	33.2	41.8	1879

NEW CORES IDENTIFICATION

Core identification in accordance with HD 308 S2 - Identification of cores in cables and flexible cords.

Number of cores	HD 308 S2 since january 2004	
	G (earth core)	X (without earth core)
1		Black (preferential)
2		Blue + Brown
3*	Green - Yellow + Blue + Brown	Brown + Black + Grey
3**		Blue + Brown + Black
4	Green - Yellow + Brown + Black + Grey	Blue + Brown + Black + Grey
5	Green - Yellow + Blue + Brown + Black + Grey	Blue + Brown + Black + Grey + Black
> 5	White printed numbers + 1 Green - Yellow	White printed numbers

* For the cables without Green/Yellow with a cross-section >4mm²

** For the cables without Green/Yellow with a cross-section of 1,5mm² & 2,5mm²

COMPLEMENTS

Maximum Operating Temperature

Fixed and protected installation: 90°C

Mobile installation: 60°C

In short-circuit: 200°C

Minimum bending radius

- Dynamic use: 6 to 8x cable outer diameter
- Static use: 3x outer cable diameter if the outer diam is < or =12mm, 4x outer cable diameter if the outer diam is >12mm.

NEW! PACKAGING

- Improved labelling for easy identification of the product
- Key features and specifications highlighted
- Scan QR code to get full technical specifications