

H07RN-F TITANEX® (industrial flexible)

Industrial flexible cable, insulation and outer sheath in elastomer

Description

Application

TITANEX® flexible cable is intended for installations with moving equipment, electric appliances and for building sites. 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.

This cable can be used in refrigerating installations.

Installation

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

Conductors laid up

Assembled conductors.

Marking

USE <har>N (x ou G) S TITANEX®

- N = number of cores
- G = with Green-Yellow
- x = without Green-Yellow
- S = section in mm²

Nota

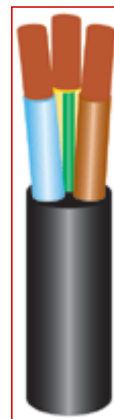
Max continuous operating conductor temperature in normal use :

+60°C (in every case of mobile installation)

+85°C (fixed protected installation)

+200°C (in short circuit)

Permissible current rating is measured for an ambient temperature of 30°C and a maximum operating and conductor temperature of 85°C . For other temperature please refer to correction factors .



Standards

International HD 22.4; HD 516;
IEC 60245-4 type 66

National NF C 32-102-4



Lead free
Yes



Mechanical resistance to
impacts
Very good



Cable flexibility
Flexible



Chemical resistance
Accidental



Water proof
Good



Operating temp.
range
-25 .. 55 °C

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Characteristics

Construction characteristics	
Outer sheath	Special cross-linked elastomer
Sheath colour	Black
Insulation	Special cross-linked elastomer
Conductor material	Bare copper
Lead free	Yes
Mechanical characteristics	
Mechanical resistance to impacts	Very good
Cable flexibility	Flexible
Usage characteristics	
Chemical resistance	Accidental
Water proof	Good
Short-circuit max. conductor temperature	200 °C
Operating temperature, range	-25 .. 55 °C
Max. conductor temperature in service	60 °C

New cores identification

Core identification in accordance with HD 308 S2 (October 2001) 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)	Black (preferential)
2	Blue + Brown	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 >4mm ²		
** For the cables without Green/Yellow with a cross-section of 1,5mm ² & 2,5mm ²		

Single Core

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	23	23.3	7.1	5.7	50
2.5	32	14.0	7.9	6.3	66
4	43	8.7	9	7.2	94
6	56	5.9	9.8	7.9	109
10	77	3.4	11.9	9.5	182
16	102	2.2	13.4	10.8	256
25	136	1.4	15.8	12.7	369

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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]
35	168	1.04	17.9	14.3	482
50	203	0.75	20.6	16.5	662
70	254	0.56	23.3	18.6	895
95	-	-	-	-	1144
120	363	0.36	28.6	22.8	1430
150	416	0.31	31.4	25.2	1740
185	475	0.28	34.4	27.6	2160
240	559	0.23	38.3	30.6	2730
240	637	0.2	41.9	33.5	3480
500	833	0.16	52	41.3	5700

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	18	39.4	10	7.7	99
1.5	23	27.0	11	8.5	111
4	43	10.1	15.1	11.8	238
6	56	6.7	16.8	13.1	279
10	77	3.8	22.6	17.7	538
16	102	2.5	25.7	20.2	744
25	136	1.68	30.7	24.3	1074

Three 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	18	39.4	10.7	8.3	117
1.5	23	27.0	11.9	9.2	134
1.5	23	27.0	11.9	9.2	134
2.5	32	16.2	14	10.9	195
2.5	32	16.2	14	10.9	195
6	56	7.0	18	14.1	346
10	77	4.0	24.2	19.1	663
16	102	2.5	27.6	21.8	924
25	136	1.7	33	26.1	1345
35	168	1.21	37.1	29.3	1760
50	203	0.87	42.9	34.1	2390
70	262	0.64	48.3	38.4	3110
95	320	0.5	54	43.3	4170
120	373	0.4	60	47.4	5080
150	432	0.35	66	52	6220
185	495	0.3	72	57	7730
240	587	0.26	82	65	9780

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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]
300	680	0.22	90	72	12620

Four 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	16	34.08	12	9.6	144
1.5	21	23.3	13.1	10.2	165
1.5	21	23.3	13.1	10.2	165
2.5	29	14.0	15.5	12.5	245
4	38	8.71	18	14	357
6	50	5.84	20	15.7	443
10	68	3.42	26.5	20.8	818
16	92	2.2	30.1	23.8	1150
25	122	1.44	36.6	28.9	1700
35	150	1.04	41.1	32.5	2180
50	182	0.75	47.5	37.7	3030
70	232	0.56	54	42.7	3990
95	281	0.44	61	48.4	5360
120	325	0.36	66	53	6500
150	373	0.31	73	58	7990
185	425	0.28	80	64	9910
240	500	0.23	91	72	13120

Five 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	16	34.1	14	10.9	180
1.5	21	23.6	14.4	11.2	238
2.5	29	14.0	17	13.3	297
4	38	8.72	19.9	15.6	453
6	50	5.84	22.2	17.5	557
10	68	3.43	29.1	22.9	1001
16	92	2.2	33.3	26.4	1430
25	122	1.44	40.4	32	2096

Seven 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	-	-	-	-	349
2.5	-	-	-	-	487

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Twelve 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	11	23.3	22.1	17.6	510
2.5	-	-	-	-	702

Eighteen 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	9	20.7	26.3	20.7	730
2.5	-	-	-	-	1018

twenty four cores

Cross section [mm²]	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	8	-	24.3	30.7	1000

thirty six cores

Cross section [mm²]	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	6	-	27.8	35.2	1325
2.5	-	-	-	-	1879