



AUG7H1EX 6,35/11kV
3x1x.../35

MEDIUM VOLTAGE CABLES

THREE SINGLE CORE CABLES IN TRIPLEX FORMATION WITH SOLID CIRCULAR ALUMINIUM CONDUCTOR
HEPR INSULATION AND POLYETHYLENE SHEATH

APPLICATIONS

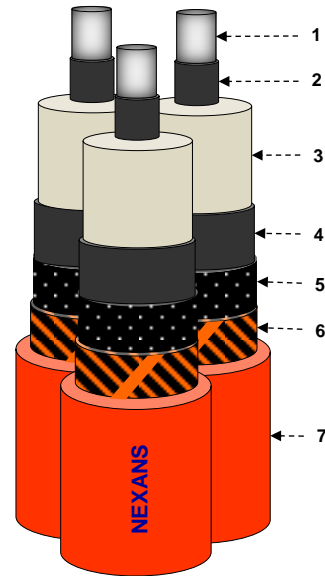
In MV energy distribution networks, for voltage systems **up to 12kV**.
For fixed installation indoor or outdoor laying in air or directly or indirectly buried,
also in wet location.

FUNCTIONAL CHARACTERISTICS

Rated voltage U_0/U :	6,35/11 kV
Maximum voltage U_m :	12 kV
Test voltage:	4 U_0
Max operating temperature of conductor:	90 °C
Max short-circuit temperature (Conductor):	250 °C (max duration 5 s)
Max short-circuit temperature (Screen):	250 °C

CONSTRUCTION

- Conductor**
*solid, circular, **ALUMINIUM** - class 1 acc. to IEC 60228*
- Conductor screen**
extruded semiconducting compound
- Insulation**
*extruded High module Ethylene Propylene Rubber (**HEPR**) compound*
*Lead free - Type **DIE5***
- Insulation screen**
*extruded semiconducting compound - **easy strippable***
- Bedding**
semiconducting tape
- Metallic screen**
copper wires** for a total cross-section of **35 mm²** - **each phase
Wires diameter > 1,04 mm - spirally applied
Counter-helix : 10x0,1 mm
Synthetic tape
- Outer sheath**
*extruded **polyethylene** compound - Type **DMP5** - Color: **red***



INSTALLATION DATA

Max pulling force during laying
30 N/mm² (applied on the conductors)
Min bending radius during laying
37,5 D_{phase} (for the pre-assembled cable along the route)
or 17.5 times the diameter of the triplexed cables
25 D_{phase} (for the single phases close to termination)
note: reduction of these values is possible according to BS 7870-1 A.4.6
Minimum temperature during laying
0 °C (dynamic condition)

STANDARDS

WPD EE SPEC: 82/1
BS 7870-4.10:2011
Customer Requirements (screen)

MARKING by embossing within 550 mm of the following legend (every phase and every line, except line 3):

On PHASE 1, LINE 1 : "NEXANS B ELECTRIC CABLE 11000 V BS7870-4.10 A 185 AL PHASE 1 <Year>"

On PHASE 1, LINE 2 : "ELECTRIC CABLE 11000 V BS7870-4.10 A"

On PHASE 1, LINE 3 : "<meter marking>"

On PHASE 2, LINE 1 : "NEXANS B ELECTRIC CABLE 11000 V BS7870-4.10 A 185 AL PHASE 2 <Year>"

On PHASE 2, LINE 2 : "ELECTRIC CABLE 11000 V BS7870-4.10 A"

On PHASE 3, LINE 1 : "NEXANS B ELECTRIC CABLE 11000 V BS7870-4.10 A 185 AL PHASE 3 <Year>"

On PHASE 3, LINE 2 : "ELECTRIC CABLE 11000 V BS7870-4.10 A"

<Year> = year of manufacturing (two digits)

<meter marking> by ink-jet

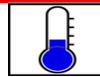
For all the phases line 1 and line 2 are offset from each other by approximately 180°



Max temperature:
90 °C



Max short circuit
temperature:



Min laying temperature:
0 °C



Min bending radius:
37,5 D_{phase}

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Type	Conductor diameter nominal	Insulation		Sheath thickness min. average	Phase diameter approx	Overall Cable		Resistance of conductor		X	C	Current capacity		Short circuit current	
n° x mm ²	mm	thickness nominal	diameter nominal	mm	mm	diameter approx	weight approx	at 20 °C - d.c. max	at 90 °C - a.c.	at 50 Hz		in ground at 20 °C	in free air at 30 °C	conductor Tmax 250°C	screen Tmax 250°C
	mm	mm	mm	mm	mm	mm	kg/km	Ω/km	Ω/km	Ω/km	μF/km	A	A	kA x 1,0 s	kA x 3,0 s
3x1x185	15,0	3,4	22,8	1,9	32,2	69,4	4.460	0,164	0,211	0,107	0,438	358	408	17,5	3,0
3x1x300	19,3	3,4	27,1	2,1	36,9	79,5	5.800	0,100	0,130	0,100	0,537	466	554	28,3	3,0

Note

Laying condition:

- laying depth: 1,0 [m]
- soil thermal resistivity : 1,0 [°Cm/W]
- metallic layers connection: solid bonding (earthed at both ends)

X = phase reactance

C = phase capacitance

Nexans reserves the right to change the technical data as a result of changes in standards and product improvements



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