

ENVIROLEX® Flexible Multicore 90°C

CU ENVIRO RHE-1-FLEX 4X 6+2.5E OG

Contact

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Nexans Ref.: HTHR07HF004OMEM

Country Ref.: 4320

Multicore flexible copper conductor, 0.6/1kV X-90 insulated, HFS-90-TP sheathed to AS/NZS 5000.1

DESCRIPTION

ENVIROLEX® flexible multicore cable is part of the Nexans Fire Safety Offer. As a Low Fire Hazard (LFH) range, ENVIROLEX® is PVC-free, made with flame retardant compound and reduces toxic smoke emissions in the event of fire, allowing time for safe evacuation.

- Class 5 flexible conductor
- 0.6/1kV cables,
- Flexible, X-90 insulated
- HFS-90-TP sheathed to AS/NZS 5000.1 (Power)
- 90°C continuous
- Submersible to 500m
- Used for fixed application



STANDARDS

International IEC 60332-1;
IEC 60754-1

National AS/NZS 5000.1

CHARACTERISTICS

Construction characteristics

With Green/Yellow core	Yes
Conductor material	Copper
Type of conductor	Stranded copper
Insulation	X-HF-90
Outer sheath	HFS-90-TP
Colour	Orange
Conductor flexibility	Class 5
Conductor shape	Circular
Insulation colour	Red, White, Blue, Green/Yellow
With smaller neutral conductor	No

Dimensional characteristics

Conductor cross-section	6 mm ²
Number of cores	4
Approximate weight	42.3 kg/100m



Conductor flexibility
Class 5



Rated Voltage U₀/U
(Um)
0.6/1 kV



Cable flexibility
Flexible



Mechanical resistance
to impacts
-



U.V resistance
Yes



Maximum operating
temperature
90 °C



Minimum operating
temperature
-25 °C

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.

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Dimensional characteristics

Maximum diameter of wires	0.31 mm
Neutral conductor section (when smaller)	- mm²
Nominal insulation thickness	0.7 mm
Nominal outer sheath thickness	1.8 mm
Nominal overall diameter	16.2 mm
Number of earth cores	1

Electrical characteristics

Conductor AC resistance at 50 Hz	4.47 Ohm/km
Inductive reactance at 50Hz - flat touching	- Ohm/km
Inductive reactance at 50Hz - trefoil	- Ohm/km
Insulation resistance at 20°C	680 MOhm.km
Max. DC resistance of the conductor at 20°C	3.3 Ohm/km
Rated Voltage U ₀ /U (Um)	0.6/1 kV

Mechanical characteristics

Cable flexibility	Flexible
Mechanical resistance to impacts	-

Usage characteristics

U.V resistance	Yes
Maximum operating temperature	90 °C
Minimum operating temperature	-25 °C

CURRENT CARRYING CAPACITY TABLES - ENVIROLEX MULTICORE SINGLE PHASE

Flexible Copper Conductor Circular stranded Insulation X-HF-90 Max. Conductor Temperature 90C

Conductor cross-section [mm²]	 Cu	 Cu	 Cu	 Cu	 Cu	 Cu	<div>VD</div> Cu
6	61	56	48	60	58	30	7.87
 Air spaced from surface, unenclosed	 Air touching, unenclosed			 Air enclosed			
 Buried direct	 Buried in single-way duct			 Cable surrounded by thermal insulation, unenclosed			
<div>VD</div> Voltage Drop Three Phase (mV/A.m)							



Conductor flexibility
Class 5



Rated Voltage U₀/U (Um)
0.6/1 kV



Cable flexibility
Flexible



Mechanical resistance to impacts
-



U.V resistance
Yes



Maximum operating temperature
90 °C



Minimum operating temperature
-25 °C

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CURRENT CARRYING CAPACITY TABLE - ENVIROLEX-MULTICORE (THREE PHASE)

Flexible Copper Conductor Circular stranded Insulation X-HF-90 Max. Conductor Temperature 90C

Conductor cross-section [mm²]	 Cu	 Cu	 Cu	 Cu	 Cu	 Cu
6	51	47	24	48	49	48
 Air spaced from surface, unenclosed	 Air touching, unenclosed	 Cable surrounded by thermal insulation, unenclosed		 Air enclosed		
 Air enclosed	 Buried direct	 Buried in single-way duct				

SELLING AND DELIVERY INFORMATION

Nexans Fire Safety Offer ENVIROLEX® Low Fire Hazard Cables PVC-free Red List Free and Declare Labelled Green Star Flexible conductor



Conductor flexibility
Class 5



Rated Voltage U_o/U_i
(Um)
0.6/1 kV



Cable flexibility
Flexible



Mechanical resistance
to impacts
-



U.V resistance
Yes



Maximum operating
temperature
90 °C



Minimum operating
temperature
-25 °C

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