

# NHXMH HP 300/500V

[D]CPR Cca-s1,d2,a1

Model Product: B81-B82 - 20241114



Rigid class 1 and class 2 red copper conductor.  
 XLPE Crosslinked polyethylene insulation, 2X11  
 Not fibrous and not hygroscopic filler  
 LSZH thermoplastic sheath, HM2.

## STANDARDS

DIN VDE 0250-214 DIN VDE 0207 DIN VDE 0472  
 EN 50575:2014 + EN 50575/A1:2016

Accordingly to the standards BT 2014/35/UE- 2011/65/EU (RoHS 3)

## COMMON FEATURES

Halogen-free plastic sheathed cable with enhanced characteristics in case of fire, used for applications where harm to human life and damage to property must be prevented in the event of fire, e.g. industrial installations, communal establishment, hotels, airports, underground stations, railway stations, hospitals, departmental stores, banks, schools, theaters, multi storey buildings, process control centres. Suitable for installation in dry, damp or wet environments, for installation above and below plaster as well as masonry walls and in concrete, nevertheless not suitable for direct use in compacted or tamped concrete. Also suitable for outdoor applications. Supply of electricity and communications in buildings and other civil engineering works with the objective of limiting the generation and spread of fire and smoke.

## EMPLOYMENT

Minimum bending radius per D cable diameter (in mm):  
 Normal use = 4D <8 - 5D <12 - 6D >12  
 Accurate bending close to the terminal = 2D <8 - 3D <12 - 4D >12  
 Maximum pulling stress: 50 N/mm<sup>2</sup>

## PACKING

100mt. rings in thermoplastic film or drums to agree.

XLPE INSULATED CABLES OF RATED VOLTAGES UP TO 300/500V WITH CROSSLINKED POLYMER AND L.S.O.H.

Nominal voltage U0: 300 V

Nominal voltage U: 500 V

Maximum operating temperature: +70°C

Maximum short circuit temperature: +160°C

Minimum installation and laying temperature: +5°C

Min. operating temperature (without mechanical shocks): -40°C

## CORE COLOURS

Single core: NHXMH-O black; NHXMH-J Y/G

Two cores: blue-brown

Three cores: Y/G-blue-brown

Four cores: Y/G-brown-black-grey

Five cores: Y/G-blue-brown-black-grey

## SHEATH COLOUR

grey

## INK MARKING

GENERAL CAVI Cca-s1,d2,a1 <VDE> NHXMH HP 300/500V n° x sect year

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Cores number (N°)	Cross section (mm <sup>2</sup> )	Insulation medium thickness (mm)	Sheath medium thickness (mm)	Approx external production diameter		Approx cable weight (kg/km)	Electric resistance at 20°C (Ohm/km)	Heat index (kWh/m)	Max short circuit current (kA)
				min (mm)	max (mm)				
Single core									
1x	4RE	0.6	1.4	6.0	10.0	-	4.61	0.42	0.46
1x	6RE	0.6	1.4	6.4	10.5	-	3.08	0.44	0.69
1x	10RE	0.7	1.4	7.4	12.0	-	1.83	0.53	1.15
1x	16RM	0.7	1.4	8.6	13.5	-	1.15	0.64	1.84
Two cores									
2x	1.5RE	0.5	1.4	8.0	9.4	120	12.1	0.36	0.17
2x	2.5RE	0.5	1.4	8.8	10.5	150	7.41	0.42	0.29
2x	4RE	0.6	1.4	10.0	12.0	215	4.61	0.56	0.46
2x	6RE	0.6	1.4	11.5	13.2	295	3.08	1.5	0.69
2x	10RE	0.7	1.6	12.5	16.2	448	1.83	1.5	1.15
2x	16RM	0.7	1.6	18.8	23.2	670	1.15	1.8	1.84
2X	25RM	0.9	1.6	22.5	25.5	1080	0.727	2.6	2.88
2X	35RM	0.9	1.8	24.9	26.6	1400	0.524	3.1	4.02
Three cores									
3x	1.5RE	0.5	1.4	8.4	9.8	133	12.1	0.42	0.17
3x	2.5RE	0.5	1.4	9.3	11.0	176	7.41	0.47	0.26
3x	4RE	0.6	1.4	10.5	12.5	247	4.61	0.61	0.46
3x	6RE	0.6	1.6	12.0	14.0	335	3.08	0.78	0.69
3x	10RE	0.7	1.6	14.5	16.5	496	1.83	1.1	1.15
3x	16RM	0.7	1.6	18.2	21.5	755	1.15	1.8	1.84
3x	25RM	0.9	1.8	22.9	25.3	1200	0.727	2.6	2.88
3x	35RM	0.9	1.8	25.9	28.1	1300	0.524	3.1	4.02
Four cores									
4x	1.5RE	0.5	1.4	9.0	10.5	142	12.1	0.47	0.17
4x	2.5RE	0.5	1.4	10.0	11.5	188	7.41	0.56	0.29
4x	4RE	0.6	1.6	12.0	14.0	279	4.61	0.78	0.46
4x	6RE	0.6	1.6	12.5	15.5	371	1.83	1.3	1.15
4x	10RE	0.7	1.6	15.5	18.0	569	1.83	1.3	1.15
4x	16RM	0.7	1.6	19.0	22.5	849	1.15	1.8	1.84
4x	25RM	0.9	1.8	23.5	28.0	1298	0.73	2.6	2.88
4x	35RM	0.9	1.8	26.5	31.0	1731	0.52	3.1	4.02
Five cores									
5x	1.5RE	0.5	1.4	9.6	11.5	183	12.1	0.56	0.17
5x	2.5RE	0.5	1.4	10.5	12.5	249	7.41	0.64	0.29
5x	4RE	0.6	1.6	13.0	15.5	370	4.61	0.98	0.46



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				min (mm)	max (mm)				
5x	6RE	0.6	1.6	14.5	16.5	488	3.08	1.1	0.69
5x	10RE	0.7	1.6	17.0	19.5	739	1.83	1.5	1.15
5x	16RM	0.7	1.8	21.0	25.0	-	1.15	2.2	1.84
5x	25RM	0.9	1.8	25.5	30.5	-	0.73	2.6	2.88
5x	35RM	0.9	1.8	31.9	34.5	2210	0.52	3.1	4.02
Multicores									
7x	1.5RE	0.5	1.4	10.0	12.0	250	12.1	0.64	0.17
7x	2.5RE	0.5	1.6	12.0	14.0	350	7.41	0.81	0.29

RE=rigid single wire conductor class 1

RM=rigid stranded multiwires conductor class 2