

MGCH 0.6/1 kV

Halogen Free Power Cables with screen (armour) 0.6/1 kV

Description

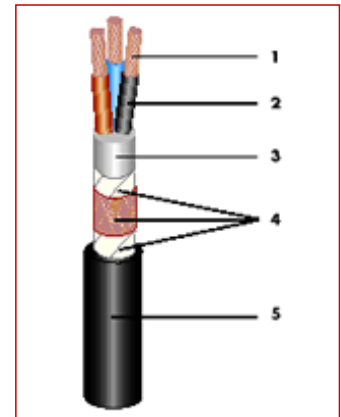
Applications

For fixed installations on ships and offshore-units in all locations and open deck.

The good screening qualities of the copper braid also reduce radio interferences and electrical influences to electronic installation.

The cables meet the flame test requirement for bunched cables acc. to IEC 60332-3-22 and IEEE45-18.13, and perform to the SOLAS requirements.

All cable materials are free of halogens. This design ensures that non corrosive and low toxic gases are emitted in case of fire. Therefore, these cables are especially suitable for the installation on passenger ships.



Design

1. Conductor: Stranded bare copper class 2
2. Insulation: HEPR (crosslinked hardgrade ethylene propylene rubber)
3. Common covering: filler (extruded) or tape
4. Armouring: separator tape, bare copper braid, separator tape(optional)
5. Outer sheath: Polyolefin, colour:black

Standards

International IEC 60092-353;
IEC 60332-3; IEC 60754-1;
IEC 60754-2; IEC 61034

National DIN 89158/98;
DIN 89158/98

Marking

e.g.: | NEXANS | MGCH 1000 V 85 GRAD C DIN 89158, IEC 60092-353, IEC 60332-3 HALOGENFREE 9 x 1,5 + 1,5 E/10,0 mm² + Metric Marking

Core Identification

1 core: natural colour (beige)

2 cores: black / blue

3 cores: black / blue / brown

4 cores: black / blue / brown / black

5 cores: black / blue / brown / black / black

7 to 24 core cable: all cores natural coloured, printed with numbers, starting in centre with number 1.

Cables with 3 cores and above also with green-yellow core (must be stated in order).



Conductor flexibility
Stranded class
2



Halogen free
Yes



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



Max.conductor
temp.in service
85 °C



Flame
retardant
IEC 60332-3
Cat. A



Smoke
density
IEC 61034



Gases
corrosivity
No IEC
60754-2



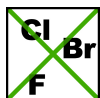
Gases toxicity
No toxicity to IEC
60754-1

MGCH 0.6/1 kV

Characteristics

Construction characteristics	
Conductor material	Bare copper
Conductor flexibility	Stranded class 2
Insulation	HEPR
Protection	Filler or tape
Outer sheath	Polyolefin
Sheath colour	Black
Halogen free	Yes
Armour type	Bare copper braid
Electrical characteristics	
Rated Voltage U ₀ /U (Um)	0.6/1 kV
Test voltage	3500 V
Usage characteristics	
Max. conductor temperature in service	85 °C
Flame retardant	IEC 60332-3 Cat. A
Smoke density	IEC 61034
Gases corrosivity	No IEC 60754-2
Gases toxicity	No toxicity to IEC 60754-1
Standard	DIN VDE and IEC

Nb. of cores	Cross section [mm ²]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
1	4	6.0	8.5	110
1	6	7.0	9.5	140
1	10	8.0	10.5	190
1	16	9.0	11.5	270
1	25	11.0	13.5	380
1	35	12.0	14.5	480
1	50	14.0	16.5	660
1	70	16.0	18.5	900
1	95	18.0	21.0	1170
1	120	19.5	22.5	1410
1	150	21.5	25.0	1750
1	185	23.5	27.0	2160
1	240	26.5	30.0	2770
1	300	29.0	32.5	3440
2	1.5	10.0	12.5	180


 Conductor flexibility
 Stranded class 2

 Halogen free
 Yes

 Rated Voltage
 U₀/U (Um)
 0.6/1 kV

 Max. conductor
 temp. in service
 85 °C

 Flame
 retardant
 IEC 60332-3
 Cat. A

 Smoke
 density
 IEC 61034

 Gases
 corrosivity
 No IEC
 60754-2

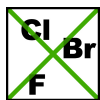
 Gases toxicity
 No toxicity to IEC
 60754-1

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Nb. of cores	Cross section [mm ²]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
2	2.5	11.0	13.5	220
2	4	12.0	14.5	280
2	6	14.0	16.5	380
2	10	15.5	18.5	500
2	16	18.0	21.0	710
2	25	20.5	24.5	1020
3	1.5	10.5	13.0	210
3	2.5	11.5	14.0	260
3	4	12.5	15.0	330
3	6	14.5	17.0	450
3	10	16.5	19.5	620
3	16	19.0	22.0	870
3	25	22.0	25.5	1280
3	35	24.5	28.5	1680
3	50	28.0	31.5	2180
3	70	32.5	37.0	3020
3	95	37.0	41.5	4050
3	120	40.5	46.0	5000
4	1.5	11.0	13.5	240
4	2.5	12.5	16.0	300
4	4	14.0	16.5	430
4	6	15.5	18.5	540
4	10	18.0	21.0	780
4	16	20.5	24.0	1090
4	25	24.5	28.0	1630
4	35	27.0	31.0	2120
4	50	30.5	35.5	2750
4	70	36.5	41.0	3900
4	95	41.5	46.0	5160
5	1.5	12.0	14.5	290
5	2.5	14.0	16.5	400
7	1.5	13.0	15.5	380
10	1.5	15.5	18.5	450
12	1.5	16.5	19.5	500
14	1.5	17.0	20.0	560
16	1.5	18.5	21.0	630
19	1.5	19.0	22.0	710
24	1.5	22.5	25.5	880



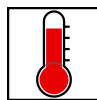
Conductor flexibility
Stranded class
2



Halogen free
Yes



Rated Voltage
U₀/U (Um)
0.6/1 kV



Max. conductor
temp. in service
85 °C



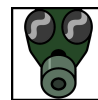
Flame
retardant
IEC 60332-3
Cat. A



Smoke
density
IEC 61034



Gases
corrosivity
No IEC
60754-2



Gases toxicity
No toxicity to IEC
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Additional Cable Characteristics

Minimum internal bending radius

- for all cables









6 x cable diameter

Current ratings for continuous operation and further hints for cable installation are according to IEC 60092-352

Approval

Type Approval Certificates

- American Bureau of Shipping
- Bureau Veritas
- Det Norske Veritas
- Germanischer Lloyd
- Lloyd's Register of Shipping

							
Conductor flexibility Stranded class 2	Halogen free Yes	Rated Voltage U ₀ /U (Um) 0.6/1 kV	Max. conductor temp.in service 85 °C	Flame retardant IEC 60332-3 Cat. A	Smoke density IEC 61034	Gases corrosivity No IEC 60754-2	Gases toxicity No toxicity to IEC 60754-1