

## ■ HDGs(żo) PH90 300/500 V

### Safety and halogen-free cables



#### TECHNICAL INFORMATION:

Power cable with single-wire copper conductors (D) with silicone rubber insulation (Gs) and halogen-free material sheath (H), with or without a green-yellow protective conductor (żo).

#### CONSTRUCTION:

Conductors	copper single-wire class 1, to PN-EN 60228
Insulation	special ceramisation silicon
Insulation colour	<p>HDGs</p> <p>2-conductor: blue, brown</p> <p>3-conductor: black, brown, grey or blue, brown, black</p> <p>4-conductor: blue, brown, black, grey</p> <p>5-conductor: blue, brown, black, grey, black more than 5 conductors - in each layer: brown (metering conductor), blue (directional conductor) and other conductors - the same colours except for green-yellow, brown and blue</p> <p>HDGs(żo)</p> <p>3-conductor: green-yellow, blue, brown</p> <p>4-conductor: yellow-green, black, brown, grey or yellow-green, blue, brown, black</p> <p>5-conductor: green-yellow, blue, brown, black, grey more than 5 conductors - in the external layer: green-yellow (metering conductor), blue (directional conductor) and other conductors - the same colours except for green-yellow, brown and blue in other layers: brown (metering conductor), blue (directional conductor) and other conductors - the same colours except for green-yellow, brown and blue</p>
Sheath	special halogen-free, self-extinguishing, flame-retardant, red colour
Operating temperature	od -30°C do +80°C
Rated voltage	300/500 V
Bending radius	10 x conductor outer diameter
Application	halogen-free fire-resistant cables used in locations requiring equipment operation during fire; recommended for emergency illumination, smoke removal, signalling, DSO, control, fire signalling systems and fire-fighting automation systems as well as other systems ensuring safety in fire conditions; in fire conditions, such cables ensure correct operation of equipment for at least 90 minutes (PH90) and insulation durability for 180 minutes (FE180); no emission of toxic, suffocating gases and thick smoke during combustion; suitable for permanent installation inside buildings

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Test	resistance of a single cable to flame propagation (fire resistance): PN-EN 60332-1, IEC 60332-1, DIN-VDE 0482-332-1 cable installation function maintenance- E30-E90: DIN-VDE 4102-12 insulation resistance to long-term fire impact (insulation durability) FE180: IEC 60331-11, IEC 60331-21, IEC 60331-31, DIN-VDE 0472-814 resistance of a cable bundle to flame propagation PN-EN 60332-3-24, IEC 60332-3, DIN-VDE 482-266-2 emission of corrosive gases during combustion: PN-EN 50267, IEC 60754-2, DIN-VDE 0472-813 emission of smoke density during combustion: PN-EN 61034-1(-2), IEC 61034-1(-2), DIN-VDE 0482-103-2
Packing	coils, drums

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Conductor number and rated cross-section [n x mm <sup>2</sup> ]	Approximate external cable diameter [mm]	Approximate cable weight [kg/km]
2 x 1,0	6,7	54
2 x 1,5	7,5	67
2 x 2,5	9,1	103
2 x 4,0	10,0	136
3 x 1,0	7,1	69
3 x 1,5	7,9	88
3 x 2,5	9,6	136
3 x 4,0	10,8	189
4 x 1,0	8,0	90
4 x 1,5	9,1	120
4 x 2,5	10,8	176
4 x 4,0	11,9	240
5 x 1,0	8,7	116
5 x 1,5	9,8	150
5 x 2,5	11,6	223
5 x 4,0	12,9	301
7 x 1,0	9,5	143
7 x 1,5	10,9	191
7 x 2,5	12,7	278
10 x 1,0	12,0	204
10 x 1,5	13,6	265
10 x 2,5	16,6	411
12 x 1,0	12,4	234
12 x 1,5	14,0	306
12 x 2,5	17,1	475
14 x 1,0	13,0	265
14 x 1,5	14,7	348
14 x 2,5	19,0	541
16 x 1,0	13,8	302
16 x 1,5	16,1	427
16 x 2,5	19,6	655
19 x 1,0	14,4	344
19 x 1,5	17,0	477
19 x 2,5	20,6	735
20 x 1,0	15,9	384

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20 x 1,5	18,6	546
20 x 2,5	21,8	801
24 x 1,0	17,3	452
24 x 1,5	20,3	622
24 x 2,5	24,5	949
30 x 1,0	18,9	569
30 x 1,5	21,4	747
30 x 2,5	25,9	1144
37 x 1,0	20,3	680
37 x 1,5	23,7	929
37 x 2,5	27,9	1375

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