



Single core non-sheathed cables with halogen-free thermoplastic insulation and low emission of smoke, temperature of conductors up to 70°C, at rated voltage 450/750V

**Application:** locations where a low level of emission of smoke and corrosive gases are required in case of fire or burning; installation in surface-mounted or embedded conduits, or similar closed systems. Suitable for fixed protected installation in, lighting and control gear for voltages up to and including 1 000 V d.c. or up to 750 V a.c. to earth. The defined tests for smoke and halogen free gases relates only to the cables, and not to cable and conduit together. These cables are not intended to provide circuit integrity in case of fire.

**Standard:** PN-EN 50525-3-31:2011 (EN 50525-3-31:2011)



**Rated voltage:** 450/750 V  
**No. and cross-section of cores:** 1x1,5÷630 mm<sup>2</sup>;  
Test voltage: 2,5 kV AC



**Core colours:** yellow-green, black, blue, brown, grey, orange, pink, red, turquoise, violet, white



**Cables construction:**  
Conductors: acc. to PN-EN 60228:2007  
1,5÷630 copper rigid stranded conductor class 2;  
**Insulation:** thermoplastic compound LSZH



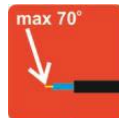
**Cable properties:**  
Flame retardant TYPE 1: EN 60332-1-2  
Smoke density: EN 61034-2  
Assessment of halogens: EN 50525-1:2011 –anex B  
CPR class : D<sub>CA</sub>  
Working temp.: max 70°C  
At the cable surface: max 70°C  
Max. short circuit: 160°C  
The lowest acc. Temp. During installation cables without heating: +5°C  
storage: max 40°C  
fixed installation permitted operation temp.: -30°C to +70°C



**Cable bending radius min:** 6 x D  
D – cable outer diameter



**Packaging:** coils or spools



No and cross-section of conductors	Min. number wires in conductor	Insulation thickness nominal	Upper limit diameter of the cable	Max. resistance conductor at 20°C	Cable weight approx
$n \times \text{mm}^2$	mm	mm	mm	$\Omega / \text{km}$	kg/km
1 × 1,5	7	0,7	3,3	12,1	20
1 × 2,5	7	0,8	4,0	7,41	33
1 × 4	7	0,8	4,6	4,61	49
1 × 6	7	0,8	5,2	3,08	69
1 × 10	7	1,0	6,7	1,83	111
1 × 16	7	1,0	7,8	1,15	169
1 × 25	7	1,2	9,7	0,727	264
1 × 35	7	1,2	10,9	0,524	348
1 × 50	7	1,4	12,8	0,387	480
1 × 70	19	1,4	14,6	0,268	667
1 × 95	19	1,6	17,1	0,193	919
1 × 120	19	1,6	18,8	0,153	1 125
1 × 150	19	1,8	20,9	0,124	1 378
1 × 185	37	2,0	23,3	0,0991	1 728
1 × 240	37	2,2	26,6	0,0754	2 263
1 × 300	37	2,4	29,6	0,0601	2 918
1 × 400	53	2,6	33,2	0,0470	3 738
1 × 500	53	2,8	36,9	0,0366	4 694
1 × 630	53	2,8	41,1	0,0283	6 253