

# HELUFロン®-PTFE-5Y fluorinated polymeric materials, single core,

600 V or 1000 V



## Technical data

- Fluorinated polymeric insulation PTFE (Polytetrafluorethylene)
- Design to DIN VDE 0881 an IEC 60673
- **Temperature range**  
- 190°C to +260°C  
(up to +300°C for short time)
- **Nominal voltage**  
type E = 600 V  
type EE = 1000 V
- **Test voltage**  
type E = 3,4 kV  
type EE = 5 kV
- **Insulation resistance**  
min. 1 GOhm x km
- **Minimum bending radius**  
10x core Ø
- **Radiation resistance**  
up to 1x10<sup>5</sup> cJ/kg (up to 0,1 Mrad)
- **Conductor temperature range**  
bare copper +130°C  
tinned copper +180°C  
silver pl. copper +200°C  
nickel pl. copper +260°C

## Cable structure

- Stranded copper wire, silver
- Core insulation PTFE-HELUFロン® to DIN VDE 207 part 6
- PTFE as per MIL-W 16878

## Properties

- Higher insulation resistance
- Low dielectric loss
- Not flammable
- Resistant to micro-cultures
- Do not permit any fungus-formation
- Absolute ozone resistant
- Absolute weather resistant
- Water absorption <0,01 %
- Minimal water vapour permeability (approx. 0,18 mgr/cm<sup>2</sup> in 24 hours)
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

## Tests

- self-extinguishing and flame retardant acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)

## Note

- Please complete the above part-no. for the colour required using the following table:  
1 = black, 2 = red, 3 = blue,  
4 = brown, 5 = white, 6 = transparent,  
7 = 2-colour, 8 = other colour
- Conductor bare, tinned or nickel plated on request

## Application

HELUFロン® single cores are predominantly used for installing in control cabinets subjected to high thermal effects as well as in brickworks, heaters, kitchen fitments and measuring appliances as well as in the chemical industry. These single cores are non-flammable and resistant to acids, alkalis, solvents, oil and petrol.

CE= The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

### 600 V

Part no.	AWG-No.	No. cond.	Cross-section mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Silv. weight kg / km	Weight app. kg / km
2511x	32	7	0,03	0,70	0,4	0,03	0,4
2512x	30	7	0,06	0,81	0,6	0,04	0,59
2513x	28	7	0,09	0,89	0,9	0,06	0,93
2514x	26	7	0,14	0,99	1,4	0,07	1,47
2515x	26	19	0,14	0,99	1,4	0,09	1,58
2516x	24	7	0,21	1,12	2,3	0,07	2,31
2517x	24	19	0,24	1,12	2,3	0,13	2,52
2518x	22	7	0,35	1,27	3,5	0,10	3,68
2519x	22	19	0,38	1,27	3,5	0,17	3,99
2520x	20	7	0,57	1,47	5,6	0,12	6,0
2521x	20	19	0,57	1,47	6,1	0,18	6,4
2522x	18	7	0,90	1,74	9,6	0,22	9,45
2523x	18	19	0,95	1,74	9,6	0,27	10,2
2524x	16	19	1,23	2,04	13,5	0,29	12,9
2525x	14	19	1,94	2,40	18,0	0,38	20,3

### 1000 V

Part no.	AWG-No.	No. cond.	Cross-section mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Silv. weight kg / km	Weight app. kg / km
2531x	32	7	0,03	1,00	0,4	0,03	0,42
2532x	30	7	0,06	1,07	0,6	0,04	0,65
2533x	28	7	0,09	1,14	0,9	0,06	1,0
2534x	26	7	0,14	1,24	1,4	0,07	1,56
2535x	26	19	0,14	1,24	1,4	0,09	1,68
2536x	24	7	0,21	1,37	2,3	0,07	2,4
2537x	24	19	0,24	1,37	2,3	0,13	2,65
2538x	22	7	0,35	1,52	3,5	0,10	3,85
2539x	22	19	0,38	1,50	3,5	0,17	4,2
2540x	20	7	0,57	1,72	5,6	0,12	6,3
2541x	20	19	0,57	1,72	6,1	0,18	6,9
2542x	18	7	0,90	2,00	9,6	0,22	10,65
2543x	18	19	0,95	2,00	9,6	0,27	13,65
2544x	16	19	1,23	2,26	13,5	0,29	21,38
2545x	14	19	1,94	2,76	18,0	0,38	33,95

Dimensions and specifications may be changed without prior notice. (RK01)