# HELUFLON®-FEP-6Y multi core, fluorinated polymeric materials,

**-100°C up to +205°**


## Technical data

- Fluorinated polymeric insulation FEP (Fluorethylenepropylene)
- **Temperature range** -100 °C to +205 °C (up to +230 °C for short time)
- **Nominal voltage** 600 V
- **Test voltage** 2500 V
- **Insulation resistance** min. 2 GOhm x km
- **Minimum bending radius** flexing 15x cable ø fixed installation 4x cable ø
- **Radiation resistance** up to 1x10⁶ cJ/kg (up to 1 Mrad)
- **Conductor temperature range** plain copper +130 °C tinned copper +180 °C silver pl. copper +200 °C

## Cable structure

- Stranded copper wire, bare, tinned, silver
- Make-up fine wire stranded to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Core insulation FEP-HELUFLON®
- Green-yellow earth core 0,25 mm² colour code to DIN VDE 0293-308 0,5 mm² and above black cores with white imprints
- Outer jacket FEP-HELUFLON®
- Colour black (RAL 9005)

## 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/cm² in 24 hours)
- Self-extinguishing and flame retardant according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

## Note

- G = with green-yellow earth core; x = without green-yellow earth core (OZ).
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².

## Application

This cables 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 cables 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/EG.

### copper wire, tinned

| Part no. | No.cores x cross-sec. mm² | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|---|---|---|---|---|---|
| 24547 | 2 x 0,25 | 2,7 | 5,0 | 17,0 | 24 |
| 24548 | 3 G 0,25 | 2,9 | 7,5 | 22,0 | 24 |
| 24549 | 4 G 0,25 | 3,2 | 10,0 | 27,0 | 24 |
| 24550 | 5 G 0,25 | 3,5 | 12,5 | 34,0 | 24 |
| 24551 | 7 G 0,25 | 3,9 | 17,5 | 46,0 | 24 |
| 24552 | 2 x 0,5 | 3,3 | 9,8 | 21,0 | 20 |
| 24553 | 3 G 0,5 | 3,5 | 14,7 | 32,0 | 20 |
| 24554 | 4 G 0,5 | 3,9 | 19,6 | 44,0 | 20 |
| 24555 | 5 G 0,5 | 4,3 | 24,5 | 55,0 | 20 |
| 24556 | 7 G 0,5 | 4,8 | 34,3 | 70,0 | 20 |
| 24557 | 2 x 0,75 | 3,6 | 14,4 | 31,0 | 18 |
| 24558 | 3 G 0,75 | 3,9 | 21,6 | 46,0 | 18 |
| 24559 | 4 G 0,75 | 4,3 | 29,0 | 58,0 | 18 |
| 24560 | 5 G 0,75 | 4,7 | 36,0 | 69,0 | 18 |
| 24561 | 7 G 0,75 | 4,8 | 50,0 | 92,0 | 18 |
| 24562 | 2 x 1 | 4,1 | 19,0 | 41,0 | 17 |
| 24563 | 3 G 1 | 4,4 | 29,0 | 55,0 | 17 |
| 24564 | 4 G 1 | 4,9 | 38,0 | 71,0 | 17 |
| 24565 | 5 G 1 | 5,5 | 48,0 | 88,0 | 17 |

### copper wire, tinned

| Part no. | No.cores x cross-sec. mm² | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|---|---|---|---|---|---|
| 24566 | 7 G 1 | 6,0 | 67,0 | 113,0 | 17 |
| 24273 | 12 G 1 | 8,0 | 115,2 | 220,0 | 17 |
| 24274 | 18 G 1 | 9,5 | 173,0 | 321,0 | 17 |
| 24275 | 25 G 1 | 11,2 | 240,0 | 458,0 | 17 |
| 24501 | 2 x 1,5 | 4,9 | 29,0 | 45,0 | 16 |
| 24502 | 3 G 1,5 | 5,3 | 43,0 | 70,0 | 16 |
| 24503 | 4 G 1,5 | 5,8 | 58,0 | 98,0 | 16 |
| 24504 | 5 G 1,5 | 6,5 | 72,0 | 117,0 | 16 |
| 24505 | 7 G 1,5 | 7,2 | 101,0 | 184,0 | 16 |
| 24276 | 12 G 1,5 | 10,2 | 173,0 | 326,0 | 16 |
| 24277 | 18 G 1,5 | 12,3 | 260,0 | 504,0 | 16 |
| 24278 | 25 G 1,5 | 14,0 | 360,0 | 682,0 | 16 |
| 24279 | 3 G 2,5 | 6,4 | 72,0 | 121,0 | 14 |
| 24280 | 4 G 2,5 | 7,0 | 96,0 | 182,0 | 14 |
| 24281 | 5 G 2,5 | 7,9 | 120,0 | 240,0 | 14 |
| 24282 | 7 G 2,5 | 8,7 | 168,0 | 316,0 | 14 |
| 24283 | 3 G 4 | 7,5 | 115,0 | 212,0 | 12 |
| 24284 | 4 G 4 | 8,3 | 154,0 | 304,0 | 12 |
| 24285 | 5 G 4 | 9,2 | 192,0 | 386,0 | 12 |

Continuation ▸

# HELUFLON®-FEP-6Y multi core, fluorinated polymeric materials,

## -100°C up to +205°

### copper wire, bare

| Part no. | No.cores x cross-sec. mm² | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|---|---|---|---|---|---|
| 25914 | 2 x 0,25 | 2,7 | 5,0 | 17,0 | 24 |
| 25915 | 3 G 0,25 | 2,9 | 7,5 | 22,0 | 24 |
| 25916 | 4 G 0,25 | 3,2 | 10,0 | 27,0 | 24 |
| 25917 | 5 G 0,25 | 3,5 | 12,5 | 34,0 | 24 |
| 25918 | 7 G 0,25 | 3,9 | 17,5 | 46,0 | 24 |
| 25919 | 2 x 0,5 | 3,3 | 9,8 | 21,0 | 20 |
| 25920 | 3 G 0,5 | 3,5 | 14,7 | 32,0 | 20 |
| 25921 | 4 G 0,5 | 3,9 | 19,6 | 44,0 | 20 |
| 25922 | 5 G 0,5 | 4,3 | 24,5 | 55,0 | 20 |
| 25923 | 7 G 0,5 | 4,8 | 34,3 | 70,0 | 20 |
| 25924 | 2 x 0,75 | 3,6 | 14,4 | 31,0 | 18 |
| 25925 | 3 G 0,75 | 3,9 | 21,6 | 46,0 | 18 |
| 25926 | 4 G 0,75 | 4,3 | 29,0 | 58,0 | 18 |
| 25927 | 5 G 0,75 | 4,7 | 36,0 | 69,0 | 18 |
| 25928 | 7 G 0,75 | 5,4 | 50,0 | 92,0 | 18 |
| 25929 | 2 x 1 | 4,1 | 19,0 | 41,0 | 17 |
| 25930 | 3 G 1 | 4,4 | 29,0 | 55,0 | 17 |
| 25931 | 4 G 1 | 4,9 | 38,0 | 71,0 | 17 |
| 25932 | 5 G 1 | 5,5 | 48,0 | 88,0 | 17 |
| 25933 | 7 G 1 | 6,0 | 67,0 | 113,0 | 17 |
| 25934 | 12 G 1 | 8,0 | 115,2 | 220,0 | 17 |
| 25935 | 18 G 1 | 9,5 | 173,0 | 321,0 | 17 |
| 25936 | 25 G 1 | 11,2 | 240,0 | 458,0 | 17 |
| 25937 | 2 x 1,5 | 4,9 | 29,0 | 45,0 | 16 |
| 25938 | 3 G 1,5 | 5,3 | 43,0 | 70,0 | 16 |
| 25939 | 4 G 1,5 | 5,8 | 58,0 | 98,0 | 16 |
| 25940 | 5 G 1,5 | 6,5 | 72,0 | 117,0 | 16 |
| 25941 | 7 G 1,5 | 7,2 | 101,0 | 184,0 | 16 |
| 25942 | 12 G 1,5 | 10,2 | 173,0 | 326,0 | 16 |
| 25943 | 18 G 1,5 | 12,3 | 260,0 | 504,0 | 16 |
| 25944 | 25 G 1,5 | 14,0 | 360,0 | 682,0 | 16 |
| 25945 | 3 G 2,5 | 6,4 | 72,0 | 121,0 | 14 |
| 25946 | 4 G 2,5 | 7,0 | 96,0 | 182,0 | 14 |
| 25947 | 5 G 2,5 | 7,9 | 120,0 | 240,0 | 14 |
| 25948 | 7 G 2,5 | 8,7 | 168,0 | 316,0 | 14 |
| 25949 | 3 G 4 | 7,5 | 115,0 | 212,0 | 12 |
| 25950 | 4 G 4 | 8,3 | 154,0 | 304,0 | 12 |
| 25951 | 5 G 4 | 9,2 | 192,0 | 386,0 | 12 |

### copper wire, silvered

| Part no. | No.cores x cross-sec. mm² | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|---|---|---|---|---|---|
| 25952 | 2 x 0,25 | 2,7 | 5,0 | 17,0 | 24 |
| 25953 | 3 G 0,25 | 2,9 | 7,5 | 22,0 | 24 |
| 25954 | 4 G 0,25 | 3,2 | 10,0 | 27,0 | 24 |
| 25955 | 5 G 0,25 | 3,5 | 12,5 | 34,0 | 24 |
| 25956 | 7 G 0,25 | 3,9 | 17,5 | 46,0 | 24 |
| 25957 | 2 x 0,5 | 3,3 | 9,8 | 21,0 | 20 |
| 25958 | 3 G 0,5 | 3,5 | 14,7 | 32,0 | 20 |
| 25959 | 4 G 0,5 | 3,9 | 19,6 | 44,0 | 20 |
| 25960 | 5 G 0,5 | 4,3 | 24,5 | 55,0 | 20 |
| 25961 | 7 G 0,5 | 4,8 | 34,3 | 70,0 | 20 |
| 25962 | 2 x 0,75 | 3,6 | 14,4 | 31,0 | 18 |
| 25963 | 3 G 0,75 | 3,9 | 21,6 | 46,0 | 18 |
| 25964 | 4 G 0,75 | 4,3 | 29,0 | 58,0 | 18 |
| 25965 | 5 G 0,75 | 4,7 | 36,0 | 69,0 | 18 |
| 25966 | 7 G 0,75 | 5,4 | 50,0 | 92,0 | 18 |
| 25967 | 2 x 1 | 4,1 | 19,0 | 41,0 | 17 |
| 25968 | 3 G 1 | 4,4 | 29,0 | 55,0 | 17 |
| 25969 | 4 G 1 | 4,9 | 38,0 | 71,0 | 17 |
| 25970 | 5 G 1 | 5,5 | 48,0 | 88,0 | 17 |
| 25971 | 7 G 1 | 6,0 | 67,0 | 113,0 | 17 |
| 25972 | 12 G 1 | 8,0 | 115,2 | 220,0 | 17 |
| 25973 | 18 G 1 | 9,5 | 173,0 | 321,0 | 17 |
| 25974 | 25 G 1 | 11,2 | 240,0 | 458,0 | 17 |
| 25975 | 2 x 1,5 | 4,9 | 29,0 | 45,0 | 16 |
| 25976 | 3 G 1,5 | 5,3 | 43,0 | 70,0 | 16 |
| 25977 | 4 G 1,5 | 5,8 | 58,0 | 98,0 | 16 |
| 25978 | 5 G 1,5 | 6,5 | 72,0 | 117,0 | 16 |
| 25979 | 7 G 1,5 | 7,2 | 101,0 | 184,0 | 16 |
| 25980 | 12 G 1,5 | 10,2 | 173,0 | 326,0 | 16 |
| 25981 | 18 G 1,5 | 12,3 | 260,0 | 504,0 | 16 |
| 25982 | 25 G 1,5 | 14,0 | 360,0 | 682,0 | 16 |
| 25983 | 3 G 2,5 | 6,4 | 72,0 | 121,0 | 14 |
| 25984 | 4 G 2,5 | 7,0 | 96,0 | 182,0 | 14 |
| 25985 | 5 G 2,5 | 7,9 | 120,0 | 240,0 | 14 |
| 25986 | 7 G 2,5 | 8,7 | 168,0 | 316,0 | 14 |
| 25987 | 3 G 4 | 7,5 | 115,0 | 212,0 | 12 |
| 25989 | 4 G 4 | 8,3 | 154,0 | 304,0 | 12 |
| 25990 | 5 G 4 | 9,2 | 192,0 | 386,0 | 12 |

Dimensions and specifications may be changed without prior notice. (RE01)