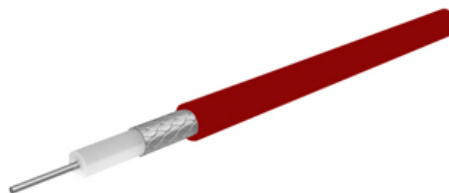


## Coaxial Cable SUCOFORM\_86\_PE

### Description

SUCOFORM, the handformable microwave cable with protective jacket



### Technical Data

#### Construction

|                  | Material                       | Detail                 | Diameter       |
|------------------|--------------------------------|------------------------|----------------|
| Centre conductor | Steel, Copper+Silver plated    | Wire                   | 0.53 mm        |
| Dielectric       | PTFE (Polytetrafluoroethylene) |                        | 1.65 mm        |
| Outer conductor  | Copper, Tin plated             | Tin soaked braid, 100% | 2.1 mm         |
| Jacket           | PE (Polyethylene)              | RAL 3004 - rd          | 3.2 mm +/- 0.1 |

Print: HUBER+SUHNER SUCOFORM 86 PE 50 Ohm (PA no.)

#### Electrical Data

|                                |                                        |
|--------------------------------|----------------------------------------|
| Impedance                      | 50 Ω +/- 2                             |
| Operating Frequency            | 40 GHz                                 |
| Capacitance                    | 95 pF/m                                |
| Velocity of signal propagation | 71 %                                   |
| Signal delay                   | 4.7 ns/m                               |
| Insulation resistance          | ≥ 1 x 10 <sup>8</sup> MΩm              |
| Min. screening effectiveness   | ≥ 100 dB (up to 18 GHz)                |
| Max. operating voltage         | ≤ 1.5 kV <sub>rms</sub> (at sea level) |
| Test voltage                   | 3 kV <sub>rms</sub> (50 Hz/1 min)      |

#### Mechanical Data

|                     |                                                         |
|---------------------|---------------------------------------------------------|
| Weight              | 1.9 kg/100 m                                            |
| Min. bending radius | static<br>6 mm<br>repeated (for ≤ 50 bendings)<br>20 mm |

#### Environmental Data

|                          |                  |
|--------------------------|------------------|
| Temperature range        | -40 °C... +85 °C |
| Installation temperature | -20 °C... +60 °C |
| 2011/65/EU (RoHS)        | compliant        |

### Additional Information

#### Ordering Information

|          |                |
|----------|----------------|
| Order as | SUCOFORM_86_PE |
|----------|----------------|

#### Remarks

(For details refer to the HUBER+SUHNER RF CABLES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

#### Suitable Connectors

|             |                   |
|-------------|-------------------|
| Cable group | Y16 2 mm / 50 Ohm |
|-------------|-------------------|

## Coaxial Cable SUCOFORM\_86\_PE

**Matrix** typical Attenuation [ formula:  $(a \cdot f^{0.5} + b \cdot f)$  ] and maximum Power CW [ formula:  $(p/f^{0.5})$  ]

Coefficients:

a = 0.6283

b = 0.04

f<sub>max</sub> = 40

P at 1GHz = 30

| Frequency<br>(GHz) | Nom. attenuation<br>(dB / m)<br>sea level 25° C<br>ambient<br>temperature | Nom. attenuation<br>(dB / ft)<br>sea level 25° C<br>ambient<br>temperature | Max. CW power<br>(watt)<br>sea level 40° C<br>ambient<br>temperature |
|--------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------|
| 2,0                | 0,97                                                                      | 0,295                                                                      | 21                                                                   |
| 4,0                | 1,42                                                                      | 0,432                                                                      | 15                                                                   |
| 6,0                | 1,78                                                                      | 0,542                                                                      | 12                                                                   |
| 8,0                | 2,1                                                                       | 0,639                                                                      | 11                                                                   |
| 10,0               | 2,39                                                                      | 0,727                                                                      | 9                                                                    |
| 12,0               | 2,66                                                                      | 0,810                                                                      | 9                                                                    |
| 14,0               | 2,91                                                                      | 0,887                                                                      | 8                                                                    |
| 16,0               | 3,15                                                                      | 0,961                                                                      | 8                                                                    |
| 18,0               | 3,39                                                                      | 1,032                                                                      | 7                                                                    |
| 20,0               | 3,61                                                                      | 1,100                                                                      | 7                                                                    |
| 22,0               | 3,83                                                                      | 1,166                                                                      | 6                                                                    |
| 24,0               | 4,04                                                                      | 1,231                                                                      | 6                                                                    |
| 26,0               | 4,24                                                                      | 1,293                                                                      | 6                                                                    |
| 28,0               | 4,44                                                                      | 1,355                                                                      | 6                                                                    |
| 30,0               | 4,64                                                                      | 1,415                                                                      | 5                                                                    |
| 32,0               | 4,83                                                                      | 1,473                                                                      | 5                                                                    |
| 34,0               | 5,02                                                                      | 1,531                                                                      | 5                                                                    |
| 36,0               | 5,21                                                                      | 1,588                                                                      | 5                                                                    |
| 38,0               | 5,39                                                                      | 1,644                                                                      | 5                                                                    |
| 40,0               | 5,57                                                                      | 1,699                                                                      | 5                                                                    |