

## Flexible RF cable

**RG\_188\_A/U-60**    Item: 22511839

## Description

RG: RG type RF cables

RG188, 50 Ohm, 3 GHz, 200°C, ø2.6 mm, FEP jacket, UL AWM style 1354



## Technical Data

### Construction

|                  | Material                             | Detail        | Diameter       |
|------------------|--------------------------------------|---------------|----------------|
| Centre conductor | Steel, Copper+Silver plated          | Strand-07     | 0.54 mm        |
| Dielectric       | PTFE (Polytetrafluoroethylene)       |               | 1.55 mm        |
| Outer conductor  | Copper, Silver plated                | Braid, 94%    | 2 mm           |
| Jacket           | FEP (Fluorinated ethylene propylene) | RAL 9010 - wh | 2.6 mm +/- 0.1 |

Print: HUBER+SUHNER RG 188 A/U-60 50 Ohm (UL logo) AWM Style 1354 (production order number)

### Electrical Data

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Impedance                      | 50 Ω +/- 2                              |
| Operating Frequency            | 3 GHz                                   |
| Capacitance                    | 97 pF/m                                 |
| Velocity of signal propagation | 69 %                                    |
| Signal delay                   | 4.86 ns/m                               |
| Screening effectiveness        | ≥ 41 dB (up to 1 GHz)                   |
| Operating voltage              | ≤ 1.45 kV <sub>rms</sub> (at sea level) |
| Test voltage                   | 1.7 kV <sub>rms</sub> (50 Hz/1 min)     |
| Voltage Rating UL              | 30 V                                    |

### Mechanical Data

|                     |              |
|---------------------|--------------|
| Weight              | 1.7 kg/100 m |
| Min. bending radius | static       |
|                     | 15 mm        |
|                     | 26 mm        |
|                     | dynamic      |
|                     | 39 mm        |

### Environmental Data

|                                                      |                             |
|------------------------------------------------------|-----------------------------|
| Temperature range                                    | -65 °C ... +200 °C          |
| Temperature rating UL                                | 80 °C                       |
| Installation temperature                             | -20 °C... +60 °C            |
| Flame propagation test                               | UL (horizontal flame test), |
| Halogen free                                         | No                          |
| 2011/65/EU (RoHS - including 2015/863 and 2017/2102) | compliant                   |
| 1907/2006/EC (REACH)                                 | compliant                   |

## Additional Information

### Remarks

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

### Suitable Connectors

|             |                  |
|-------------|------------------|
| Cable group | U2 2 mm / 50 Ohm |
|-------------|------------------|

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

Coefficients:

a = 0.7501

b = 0.0884

f<sub>max</sub> = 3

P at 1GHz = 180

| Frequency | Nom. attenuation                          | Nom. attenuation                          | Max. CW power                             |
|-----------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| (GHz)     | (dB / m)                                  | (dB / ft)                                 | (W)                                       |
|           | sea level 25° C<br>ambient<br>temperature | sea level 25° C<br>ambient<br>temperature | sea level 40° C<br>ambient<br>temperature |
| 0,15      | 0,3                                       | 0,093                                     | 465                                       |
| 0,3       | 0,44                                      | 0,133                                     | 329                                       |
| 0,45      | 0,54                                      | 0,165                                     | 268                                       |
| 0,6       | 0,63                                      | 0,193                                     | 232                                       |
| 0,75      | 0,72                                      | 0,218                                     | 208                                       |
| 0,9       | 0,79                                      | 0,241                                     | 190                                       |
| 1,05      | 0,86                                      | 0,263                                     | 176                                       |
| 1,2       | 0,93                                      | 0,283                                     | 164                                       |
| 1,35      | 0,99                                      | 0,302                                     | 155                                       |
| 1,5       | 1,05                                      | 0,320                                     | 147                                       |
| 1,65      | 1,11                                      | 0,338                                     | 140                                       |
| 1,8       | 1,17                                      | 0,355                                     | 134                                       |
| 1,95      | 1,22                                      | 0,372                                     | 129                                       |
| 2,1       | 1,27                                      | 0,388                                     | 124                                       |
| 2,25      | 1,32                                      | 0,404                                     | 120                                       |
| 2,4       | 1,37                                      | 0,419                                     | 116                                       |
| 2,55      | 1,42                                      | 0,434                                     | 113                                       |
| 2,7       | 1,47                                      | 0,448                                     | 110                                       |
| 2,85      | 1,52                                      | 0,463                                     | 107                                       |
| 3,0       | 1,56                                      | 0,477                                     | 104                                       |

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