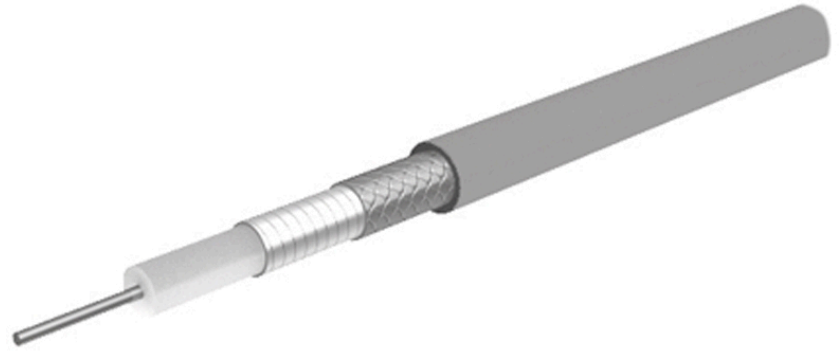


# Flexible (RG405) 50 Ohm, 40 GHz, 165°C, ø2.65 mm, FEP jacket

## MULTIFLEX\_86

### Properties

- Flexible alternative to semi-rigid cables
- Wide temperature range
- Suitable for use in applications up to 40 GHz



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.47mm
Dielectric	PTFE (Polytetrafluoroethylene)		1.48mm
Outer conductor	Copper, Silver plated	Wrapped foil, 100%	1.71mm
Outer conductor	Multi-end: Copper - Tinned	Braid, 99.4%	2.11mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 5015 - bl	2.65 mm +/- 0.1 mm

Electrical data	
Impedance	50 Ω +/-2Ω
Operating frequency	≤ 40 GHz
Capacitance	95 pF
Velocity of signal propagation	70.6 %
Signal delay	4.72 ns/m
Screening effectiveness	90 dB at frequency 0.1 GHz ... 18GHz
Insulation resistance	100000000 MΩ*m
Operating Voltage (at sea level)	≤ 1.5 kV
Test voltage (50 Hz/1 min)	≤ 3.5 kV

Mechanical data	
Weight	approx. 21 g/m
Static bending radius	≥ 6 mm
Dynamic bending radius	≥ 20 mm

Environmental data	
Operation temperature	-65 °C ... 165°C
Installation temperature	-20 °C ... 60°C
Flame propagation standard	IEC 60332-1 UL 1581 § 1080 (VW-1)

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Environmental data	
Fire characteristics	contains halogene

Suitable connectors	
Cable group	Y11

Ordering information		
Item number	Item description	Available as assembly only
22511965	MULTIFLEX_86	No

Power Matrix			
Calculation: typical Attenuation [ formula: (a*f^0.5 + b*f) ] and maximum Power CW [ formula: (p/f^0.5) ]			
a coefficient typical =	<b>0.71702</b>	b coefficient typical =	<b>0.02892</b>
fmax =	<b>40.0</b>	P at 1 GHz =	<b>140.0</b>
Frequency GHz	Nom. attenuation (dB/m)	Nom. attenuation Max. (dB/ft)	CW power (W)
	sea level 25°C ambient temperature	sea level 25°C ambient temperature	sea level 40°C ambient temperature
0.20	0.326	0.099	313
0.40	0.465	0.142	221
0.60	0.573	0.175	181
0.80	0.664	0.202	157
1.00	0.746	0.227	140
1.20	0.820	0.250	128
1.40	0.889	0.271	118
1.60	0.953	0.290	111
1.80	1.014	0.309	104
2.00	1.072	0.327	99
4.00	1.550	0.472	70
6.00	1.930	0.588	57
8.00	2.259	0.689	49
10.00	2.557	0.779	44
20.00	3.785	1.154	31
30.00	4.795	1.462	26
40.00	5.692	1.735	22

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DOCUMENT PIM-P992 / Date of publication: 07.11.2023 / uncontrolled copy