

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: MULTIFLEX\_141



### Description

The flexible microwave cable

### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.92 mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.93 mm
Outer conductor	Copper, Silver plated	wrapped Foil, 100 %	3.21 mm
Outer conductor	Copper, Silver plated	Braid, 83 %	3.53 mm
Jacket	FEP (Fluorinated ethylene propylene)		RAL 5015 - bl 4.14 mm +/-
Print	HUBER+SUHNER MULTIFLEX 141 (PA no.)		

#### Electrical Data

Impedance	50 $\Omega$ +/- 2
Max. operating frequency	33 GHz
Capacitance	95 pF/m
Velocity of signal propagation	70.6 %
Signal delay	4.7 ns/m
Insulation resistance	$\geq 1 \times 10^8$ M $\Omega$ m
Min. screening effectiveness	>90 dB (up to 18 GHz)
Max. operating voltage	1.9 kV <sub>rms</sub> (at sea level)
Test voltage	5 kV <sub>rms</sub> (50 Hz/1 min)

#### Mechanical Data

Weight	4.5 kg/100 m
Min. bending radius	static 10 mm
	dynamic 40 mm

#### Environmental Data

Temperature range	-20 °C... + 60 °C	-65 °C... + 165 °C
Installation temperature		
Flammability	IEC 60332-1, UL 1581 § 1080 (VW-1)	
2002/95/EC (RoHS)	compliant	

#### Ordering Information

Order as	MULTIFLEX_141
----------	---------------

#### Additional Information

##### Remarks

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

<b>Cable group</b>	Y17 3 mm / 50 Ohm
--------------------	-------------------

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: MULTIFLEX\_141



Rev.: J

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

Coefficients:

a=	0.3732	b=	0.0279	f <sub>max</sub> =	33	p <sub>at</sub> 1GHz =	373
	<b>Frequency</b>		<b>Nom. attenuation</b>		<b>Nom. attenuation</b>		<b>Max. CW power</b>
	<b>(GHz)</b>		<b>(dB / m)</b>		<b>(dB / ft)</b>		<b>(watt)</b>
			sea level 25° C ambient temperature		sea level 25° C ambient temperature		sea level 40° C ambient temperature
	1.7		0.53		0.162		286
	3.3		0.77		0.235		205
	5.0		0.97		0.296		167
	6.6		1.14		0.347		145
	8.3		1.31		0.399		129
	9.9		1.45		0.442		119
	11.6		1.59		0.485		110
	13.2		1.72		0.524		103
	14.9		1.86		0.567		97
	16.5		1.98		0.603		92
	18.2		2.10		0.640		87
	19.8		2.21		0.674		84
	21.5		2.33		0.710		80
	23.1		2.44		0.744		78
	24.8		2.55		0.777		75
	26.4		2.65		0.808		73
	28.1		2.76		0.841		70
	29.7		2.86		0.872		68
	31.4		2.97		0.905		67
	33.0		3.06		0.933		65

HUBER+SUHNER is certified according to ISO 9001 and ISO 14001

**WAIVER!**

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.



**HUBER+SUHNER AG**  
**RF Industrial**  
**9100 Herisau, Switzerland**  
 Phone +41 (0)71 353 41 11  
 Fax +41 (0)71 353 45 90  
 www.hubersuhner.com

**HUBER+SUHNER – Excellence in Connectivity Solutions**