

HUBER+SUHNER® DATA SHEET

Coaxial Cable: MULTIFLEX_86



Description

The flexible microwave cable

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.47 mm
Dielectric	PTFE		1.48 mm
Outer conductor	Copper, Silver plated	wrapped Foil, 100 %	1.71 mm
Outer conductor	Copper, Silver plated	Braid, 99 %	2.11 mm
Jacket	FEP	RAL 5015 - bl	2.65 mm +/- 0.1
Print	HUBER+SUHNER MULTIFLEX 86 (PA no.)		

Electrical Data

Impedance	50 Ω +/- 2
Max. operating frequency	40 GHz
Capacitance	95 pF/m
Velocity of signal propagation	70.6 %
Signal delay	4.72 ns/m
Insulation resistance	$\geq 1 \times 10^8$ M Ω m
Min. screening effectiveness	>90 dB (up to 18 GHz)
Max. operating voltage	1.5 kV _{rms} (at sea level)
Test voltage	3.5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	2.1 kg/100 m	
Min. bending radius	static	6 mm
	dynamic	20 mm

Environmental Data

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

Ordering Information

Order as	MULTIFLEX_86
----------	--------------

Additional Information

Remarks

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

Suitable Connectors

Cable group	crimped (Y11)
	clamped —
	soldered —

HUBER+SUHNER® DATA SHEET

Coaxial Cable: MULTIFLEX_86



Rev.: H

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

Coefficients:

a=	0.71702	b=	0.02892	f _{max.} =	40	p _{at} 1GHz =	140
	Frequency		Nom. attenuation		Nom. attenuation		Max. CW power
	(GHz)		(dB / m)		(dB / ft)		(watt)
			sea level 25° C ambient temperature		sea level 25° C ambient temperature		sea level 40° C ambient temperature
	2.0		1.07		0.326		99
	4.0		1.55		0.472		70
	6.0		1.93		0.588		57
	8.0		2.26		0.689		49
	10.0		2.56		0.780		44
	12.0		2.83		0.863		40
	14.0		3.09		0.942		37
	16.0		3.33		1.015		35
	18.0		3.56		1.085		33
	20.0		3.79		1.155		31
	22.0		4.00		1.219		30
	24.0		4.21		1.283		29
	26.0		4.41		1.344		27
	28.0		4.60		1.402		26
	30.0		4.79		1.460		26
	32.0		4.98		1.518		25
	34.0		5.16		1.573		24
	36.0		5.34		1.628		23
	38.0		5.52		1.682		23
	40.0		5.69		1.734		22

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