

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: EZ\_86\_AL\_TP\_M17



### Description

SEMI RIGID, the formstable microwave cable

### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Wire	0.51 mm
Dielectric	PTFE		1.68 mm
Outer conductor	Aluminum / TP	Tube, 100 %	2.2 mm

#### Electrical Data

Impedance	50 $\Omega$ +/- 1.5
Max. operating frequency	40 GHz
Capacitance	105 pF/m
Velocity of signal propagation	69.5 %
Signal delay	4.8 ns/m
Insulation resistance	$\geq 1 \times 10^8 \text{ M}\Omega\text{m}$
Min. screening effectiveness	>120 dB (up to 18 GHz)
Max. operating voltage	1.5 kV <sub>rms</sub> (at sea level)
Test voltage	5 kV <sub>rms</sub> (50 Hz/1 min)

#### Mechanical Data

Weight	1.19 kg/100 m
Min. bending radius	static 3.18 mm

#### Environmental Data

Temperature range	-40 °C... + 125 °C
Installation temperature	-20 °C... + 60 °C
2002/95/EC (RoHS)	compliant

#### Ordering Information

Order as	EZ_86_AL_TP_M17
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#### 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 (Y3) clamped (Y11) soldered —
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Rev.: H

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

Coefficients:

a=	0.58454	b=	0.03967	f <sub>max.</sub> =	40	p <sub>at</sub> 1GHz =	130
	<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
	2.0		0.91		0.277		92
	4.0		1.33		0.405		65
	6.0		1.67		0.509		53
	8.0		1.97		0.600		46
	10.0		2.25		0.686		41
	12.0		2.50		0.762		38
	14.0		2.74		0.835		35
	16.0		2.97		0.905		33
	18.0		3.19		0.972		31
	20.0		3.41		1.039		29
	22.0		3.61		1.100		28
	24.0		3.82		1.164		27
	26.0		4.01		1.222		25
	28.0		4.20		1.280		25
	30.0		4.39		1.338		24
	32.0		4.58		1.396		23
	34.0		4.76		1.451		22
	36.0		4.94		1.506		22
	38.0		5.11		1.557		21
	40.0		5.28		1.609		21

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.



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