

# SUCOFLEX® 126

The low loss, phase stable assembly up to 26.5 GHz

### Product description

SUCOFLEX\_126 cables combines the low loss and power of SUCOFLEX 104 with the phase stability of SUCOFLEX 104P. Where low loss, combined with phase and amplitude stability is required, SUCOFLEX\_126 must be applied.

### Product features

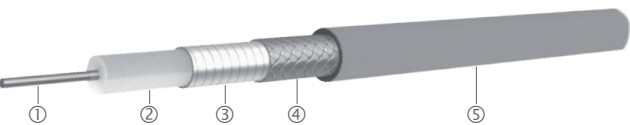
- Applicable up to 26.5 GHz
- Excellent return loss
- Excellent phase- and amplitude stability
- Low loss
- Wide range of connectors
- Crush resistant armour available
- Available from stock



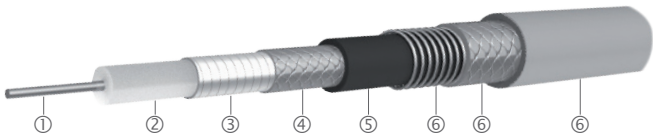
### Recommended connectors

SF126	BNC, DV, N, PC3.5; PC7, SMA, TNC, 7/16
	Other connectors available on request

### Construction



SF 126/126E






SF 126EA

Cable	Inner conductor ①	Dielectric ②	Outer conductor ③ ④	Jacket ⑤	Ruggedisation ⑥	Outer diameter
						mm
SUCOFLEX_126	CuAg stranded - low loss	LD-PTFE	CuAg tape/braid	FEP, blue	no	5.5
SUCOFLEX_126_E	CuAg stranded - low loss	LD-PTFE	CuAg tape/braid	PUR, blue	no	5.5
SUCOFLEX_126_EA	CuAg stranded - low loss	LD-PTFE	CuAg tape/braid	PUR	stainless steel/PUR, blue	10.3

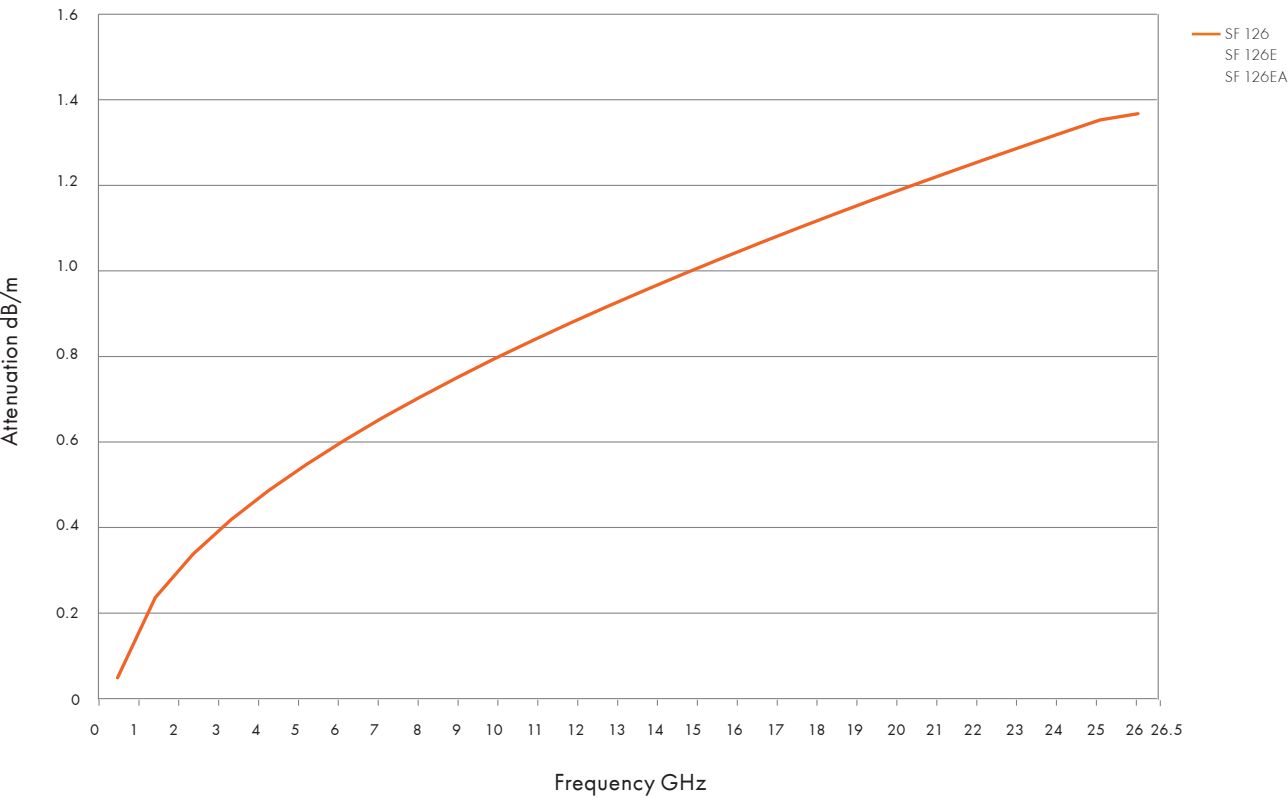
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## Assembly types

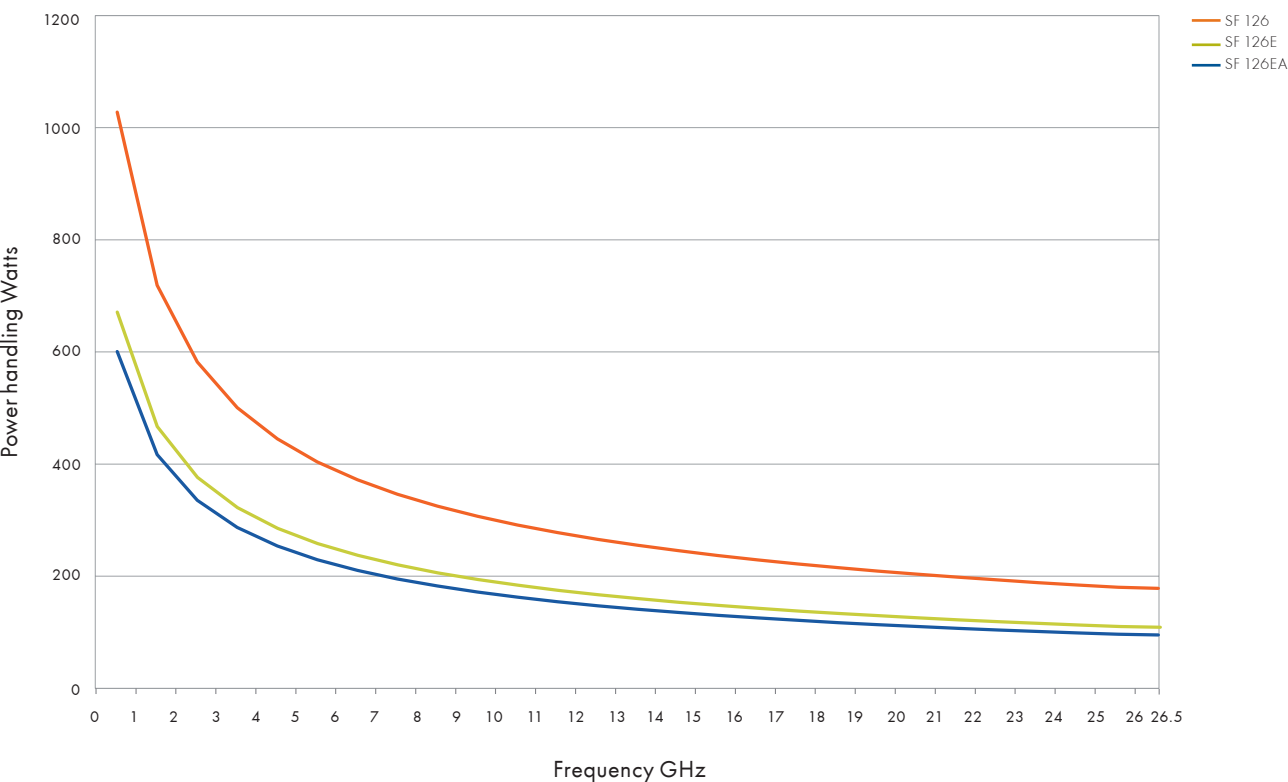
		SUCOFLEX 126	SUCOFLEX 126E	SUCOFLEX 126EA
Construction				
Max. operating frequency	GHz	26.5	26.5	26.5
Application		dynamic	dynamic	dynamic
Velocity of propagation	%	77	77	77
Weight	g/m	70	66	171
Min. bending radius static	mm	16	16	30
Min. bending radius repeated	mm	25	25	50
Temperature range	°C	−55 to +125	−40 to +85	−40 to +85
Crush resistance	kN/m	8	8	80
Tensile load	N	250	250	500
Inner conductor		stranded - low loss	stranded - low loss	stranded - low loss
Dielectric		LD-PTFE	LD-PTFE	LD-PTFE
Outer conductor		tape/braid	tape/braid	tape/braid
Jacket		FEP	PUR	PUR
Ruggedisation		no	no	stainless steel/PUR
Outer diameter	mm	5.5	5.5	10.3
Screening effectiveness (up to 18 GHz)	dB	> 90	> 90	> 90
Phase stability vs. flexure (360°, diameter 55 mm)	°el/GHz	< 0.9	< 0.9	< 0.9
Phase stability vs. temperature (−40 to +85 °C)	ppm	< 1500	< 1500	< 1500
Assembly phase matching tolerances	°el/GHz	± 0.5	± 0.5	± 0.5
Cable attenuation at 25 °C	dB/m	see graph	see graph	see graph
Insertion loss stability vs. bending	dB	± 0.2	± 0.2	± 0.2
Insertion loss stability vs. temperature	%/°C	< 0.2	< 0.2	< 0.2
Insertion loss stability vs. shaking	dB	± 0.1	± 0.1	± 0.1
Power handling	watt	see graph	see graph	see graph

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Attenuation (nominal values at +25 °C ambient temperature)



Power handling (maximum values at 25 °C ambient temperature and sea level)



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## Available connectors

Connector	Series, pattern	HUBER+SUHNER connector type	SF126 SF126E	SF126EA	Operating frequency (GHz)	VSWR per connector	Remarks
BNC	Straight cable plug	11_BNC-452	•	•	4.0	1.14	
DV	Straight cable plug	11_DV-41	•	•	26.5	1.16	3.5mm connector for Agilent Technologies instrument
N	straight cable plug	11_N-47	•	•	15 18	1.12 1.16	
	Straight cable plug	11_N-452	•	•	18.0	1.12	
	Straight cable plug	11_N-454	•	•	15 18	1.12 1.16	Hexagonal nut w. safety holes
	Right angle cable plug	16_N-457	•	•	12.4 18.0	1.14 1.18	
	Straight cable jack	21_N-452	•	•	18	1.12	
	Straight panel bulkhead cable jack	24_N-452	•	•	18	1.12	Mounting hole size 12
PC 3.5	Straight cable plug	11_PC3.5-43	•	•	18 26.5	1.12 1.16	
	Straight cable jack	21_PC3.5-43	•	•	18 26.5	1.12 1.16	
PC 7	Straight cable plug	11_PC7-42	•	•	18	1.1	
SMA	Straight cable plug	11_SMA-451	•	•	18	1.12	
	Straight cable plug	11_SMA-452	•	•	18	1.16	phase matching connector
	Straight cable plug	11_SMA-456	•	•	18	1.12	Hexagonal nut w. safety holes
	Straight cable plug	11_SMA-468	•	•	18	1.12	Quick lock nut
	Right angle cable plug	16_SMA-452	•	•	18	1.12	
	Straight cable jack	21_SMA-451	•	•	18	1.12	
TNC	Straight panel bulkhead cable jack	24_SMA-451	•	•	18	1.12	Mounting hole size 35
	Straight cable plug	11_TNC-456	•	•	18	1.12	
7/16	Straight panel bulkhead cable jack	24_TNC-456	•	•	18	1.12	Mounting hole size 4
	Straight cable plug	11_716-402	•	•	7.5	1.12	
	Straight cable jack	21_716-402	•		7.5	1.12	

## Stock assemblies

Item no.	Type	Length	Frequency	Max. insertion loss at 25 °C	Max. VSWR	RoHS compliant
		mm	GHz	dB		
<b>SUCOFLEX_126_E</b>						
85072824	SF126E/SMAm/SMAm/500mm	500	18.0	0.82	1.25	yes
85072825	SF126E/SMAm/SMAm/1000mm	1000	18.0	1.43	1.25	yes
85072826	SF126E/PC35m/PC35m/1000mm	1000	26.5	1.77	1.35	yes
<b>SUCOFLEX_126_EA (armoured)</b>						
85072828	SF126EA/Nm/Nm/1000mm	1000	18.0	1.43	1.25	yes
85072827	SF126EA/SMAm/SMAm/1000mm	1000	18.0	1.43	1.25	yes
85072830	SF126EA/Nm/Nm/1500mm	1500	18.0	2.03	1.25	yes