

# Sucotest 26/Sucotest 40

The test lead up to 26/40 GHz

## Product description

Sucotest 26/Sucotest 40 cable assemblies are high frequency, low loss cables which are five shielded for superior RF isolation. The internal stainless steel outer braid provides higher pull strength and lighter weight than RG style cable. Nomex and polyolefin jackets are also available.



## Product features

- Impedance 50 Ω
- Applicable up to 26/40 GHz
- Amplitude stability: < 0.1 dB at 26.5 GHz for 200 flexes  
180° in one plane around a 2" radius, 0.2 dB with 600 flexes
- Five shields for super RF shielding (-120 dB)
- Steel outer shield for high pull strength
- Low cost, available from stock

## Recommended connectors

ST26	SMA
ST40	SK

## Construction



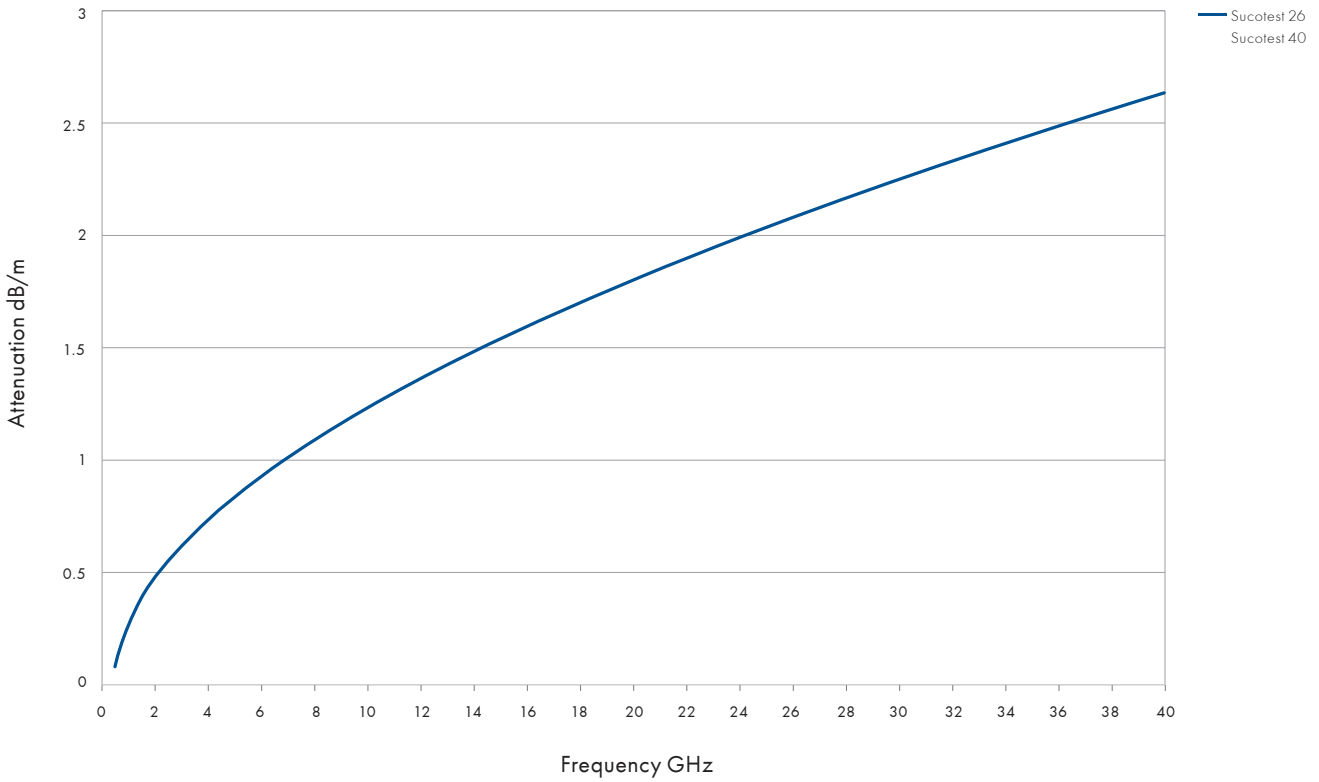
Cable	Inner conductor ①	Dielectric ②	Outer conductor ③	Barrier ④	Outer braid ⑤	Outer braid ⑥	Outer braid ⑦	Outer jacket ⑧	Outer diameter mm
Sucotest_26	CuAg wire	PTFE microporous	CuAg flat wire braid	aluminum/polyimide tape	stainless steel	CuAg	CuAg	FEP, blue	4.8
Sucotest_40									

## Technical data

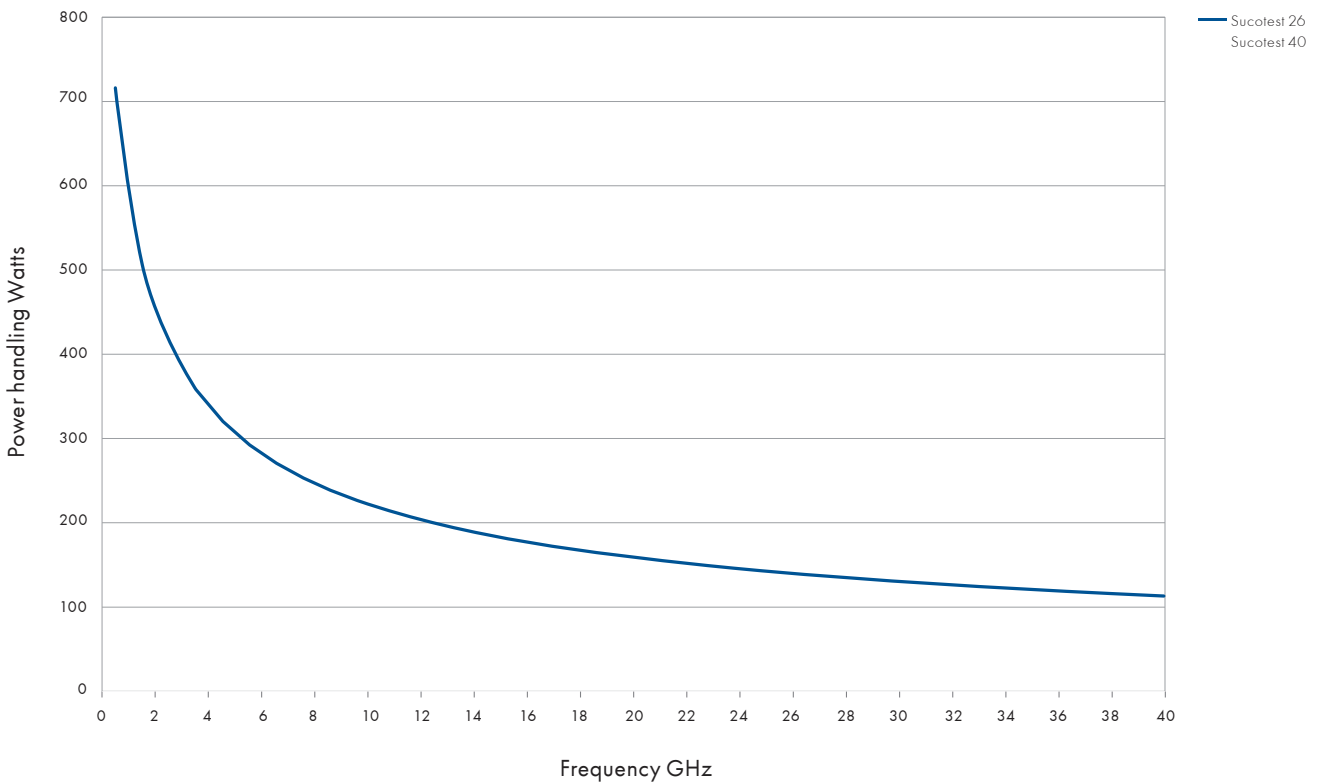
Cable	Max. operating frequency	Velocity of propagation	Weight	Min. bending radii		Temperature range
	GHz			%	g/m	
Sucotest_26	26	76.3	62.5	17.8	53.3	-55 to +200
Sucotest_40	40	76.3	62.5	17.8	53.3	-55 to +200

# Sucotest 26/Sucotest 40

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



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



# Sucotest 26/Sucotest 40

## Available connectors

Connector	Series, pattern	HUBER+SUHNER type	Cable	Operating frequency
				GHz
SMA	straight cable plug	29094-32-26	ST26	26.5
	right angle 90° cable plug	29200-32-26		25
	straight cable jack	29092-32-26		25
SK	straight cable plug	29094K-32-26	ST40	40
	straight cable jack	29092K-32-26		40

## Stock assemblies

Item no.	Type	Length	Frequency	Max. insertion loss at 25 °C	Max. VSWR	RoHS compliant
		mm	GHz	dB		
80391541	ST26/SMAM/SMAM/24 inch	610	26.5	1.74	1.45	RoHS 5
80391542	ST26/SMAM/SMAM/36 inch	914	26.5	2.41	1.45	RoHS 5
80391543	ST26/SMAM/SMAM/48 inch	1219	26.5	3.08	1.45	RoHS 5
80391545	ST40/SK <sub>m</sub> /SK <sub>m</sub> /24 inch	610	40	2.20	1.50	RoHS 5
80391546	ST40/SK <sub>m</sub> /SK <sub>m</sub> /36 inch	914	40	3.03	1.50	RoHS 5
80391547	ST40/SK <sub>m</sub> /SK <sub>m</sub> /48 inch	1219	40	3.87	1.50	RoHS 5

# Sucotest 18A

The test lead for harsh environment up to 18 GHz – precision at a constant high level

## Product description

Sucotest 18A armoured test assemblies offer excellent electrical performance (low insertion loss combined with unique stability and excellent return loss) for heavy duty, outdoor and harsh environment measurements up to 18 GHz.

Sucotest 18A armoured test assemblies are ideal for testing wireless communication infrastructures, defense and ground systems and in daily use in components and assembly shops.



Test assemblies

## Product features

- Impedance 50 Ω
- Applicable up to 18 GHz
- High flexibility in spite of armouring
- Phase and loss stability with flexure
- Crush-, torque- and kink-resistant
- Waterproof IP68

## Recommended connectors

ST_18A	N, 7/16
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## Construction



Cable	Inner conductor ①	Dielectric ②	Outer conductor ③ ④	Jacket ⑤	Ruggedisation ⑥	Outer diameter mm
Sucotest_18A	CuAg strand	LD-PTFE	CuAg tape CuSn braid	FEP	stainless steel/PUR, blue	10.3

## Technical data

Cable	Operating frequency GHz	Velocity of propagation %	Weight g/m	Min. bending radius for ± 180° mm	Temperature range °C
Sucotest_18A	18	77	175.0	50.0	-40 to +85

## Available connectors

Connector	Series, pattern	HUBER+SUHNER type	Cable	Operating frequency GHz	VSWR per connector
7/16	straight cable plug	11_716-403	ST_18A	7.5	1.14
	straight cable jack	21_716-403		7.5	1.14
N	straight cable plug	11_N-468		18	1.14
	straight cable jack	21_N-409		18	1.14

# Sucotest 18A

## Assemblies data

		up to 2 GHz	2 - 4 GHz	4 - 6 GHz	6 - 7.5 GHz	7.5 - 12 GHz	12 - 18 GHz		
Insertion loss stability **		< 0.03 dB	< 0.04 dB	< 0.04 dB	< 0.04 dB	< 0.05 dB	< 0.05 dB		
Phase stability **		± 2° el	± 4° el	± 4° el	± 6° el	± 6° el	± 6° el		
Min. return loss ***	N-N	> 30 dB	> 28 dB	> 25 dB	> 21 dB	> 21 dB	> 19 dB		
	N-7/16	> 21 dB	> 18 dB	> 18 dB	> 18 dB				
Max. insertion loss at +25 °C	assembly length	f (GHz)	1	2	4	6	7.5	12	18
	1500 mm	dB	0.55	0.80	1.16	1.45	1.65	2.16	2.74
	3000 mm	dB	1.06	1.53	2.24	2.80	3.18	4.17	5.30

## Mechanical specifications

Mechanical specifications	
Waterproof	IP68
Flex life (cycles)	100 000
Connector retention force	> 230 N

## Stock assemblies

Item no.	Type	Length mm	Frequency GHz	Max. insertion los at 25 °C	Max. VSWR	ROHS compliant
84013029	ST18A/Nm/Nm/1500 mm*	1500	18	2.74	1.25	yes
84013030	ST18A/Nm/Nf/1500 mm*	1500	18	2.74	1.25	yes
84013031	ST18A/Nm/Nm/3000 mm*	3000	18	5.30	1.25	yes
84013032	ST18A/Nm/Nf/3000 mm*	3000	18	5.30	1.25	yes

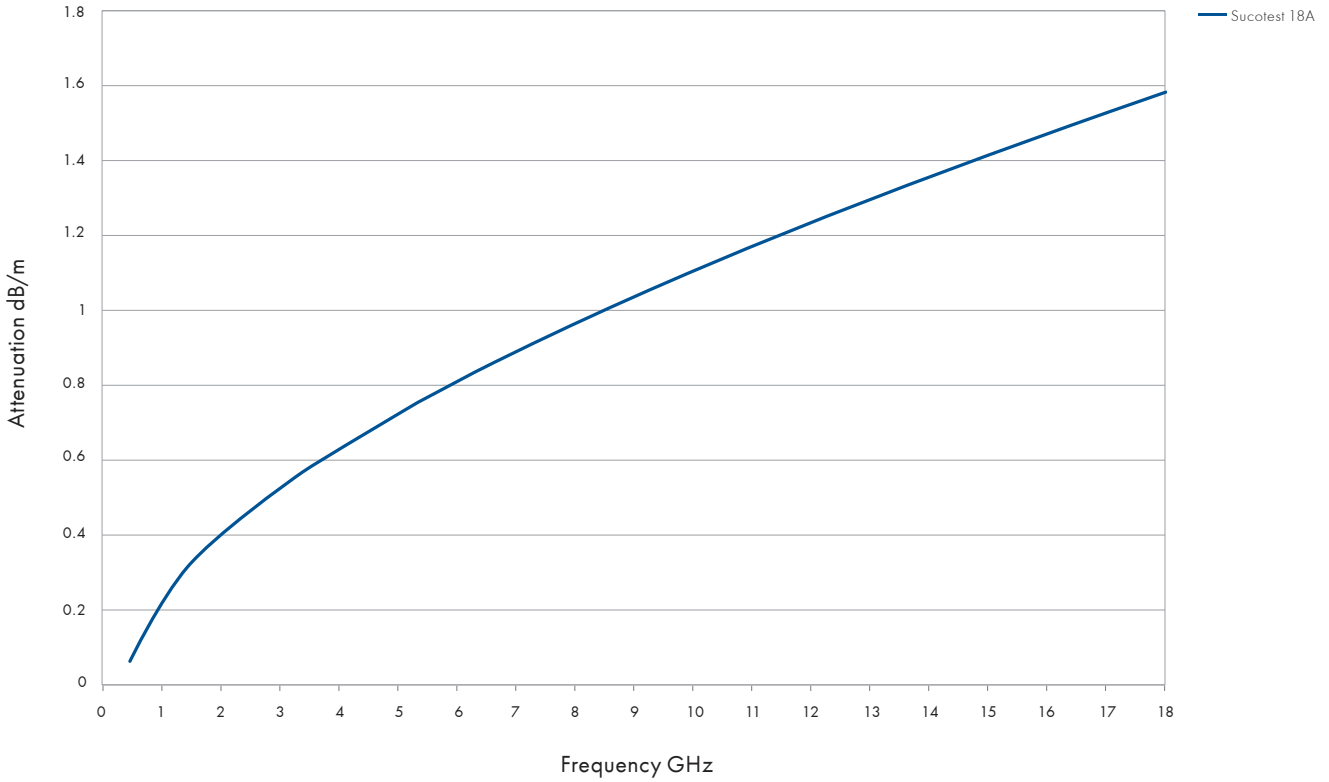
\* Available from stock.

\*\* One wrap (360°) around a 50 mm (2.0")

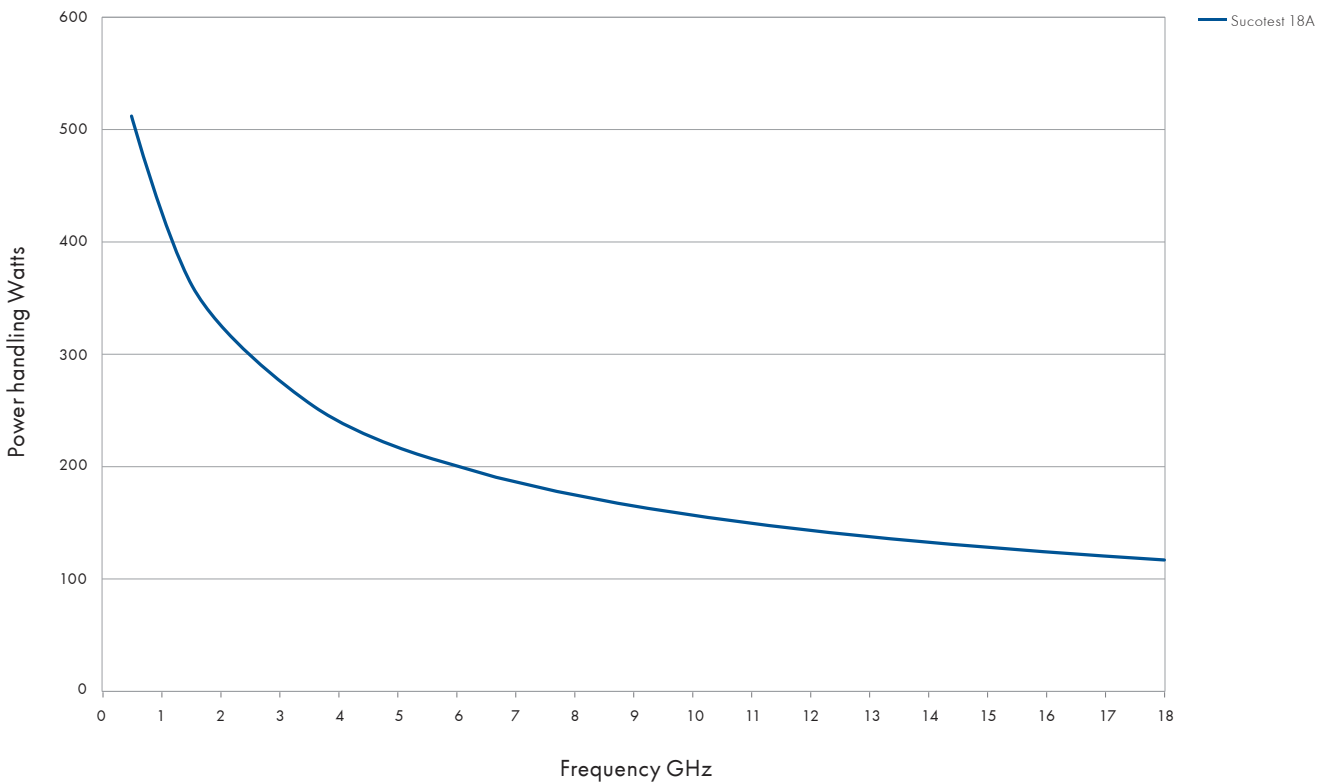
\*\*\* Return loss of on stock assemblies, for customised lengths and configurations please contact HUBER+SUHNER.

# Sucotest 18A

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



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



# Sucotest 18

The test lead up to 18 GHz - for the highest standard of measurement

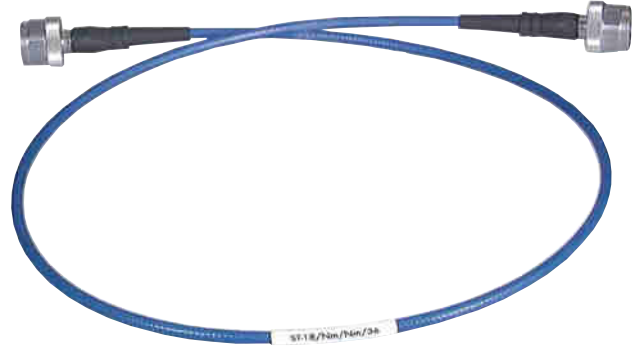
## Product description

Sucotest 18 cable assemblies feature excellent electrical performance (low insertion loss combined with unique loss stability and excellent return loss).

Sucotest 18 is ideal for daily use in components and assembly shops, test labs and automatic test equipment applications.

## Product features

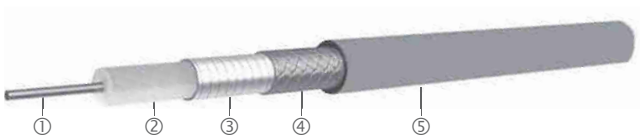
- Impedance 50 Ω
- Applicable up to 18 GHz
- Low insertion loss
- Excellent VSWR
- Unique loss stability
- There is no cable spring back during measurement procedures; the assembly stays in position.



## Recommended connectors

ST_18	SMA, QMA, N
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## Construction



Cable	Inner conductor ①	Dielectric ②	Outer conductor ③ ④	Jacket ⑤	Outer diameter mm
Sucotest_18	CuAg wire	LD-PTFE	CuAg tape CuSn braid	FEP, blue	4.6

## Technical data

Cable	Operating frequency GHz	Velocity of propagation %	Weight g/m	Preferred bending radius mm	Temperature range °C
Sucotest_18	18	77	53.0	100.0	-55 to +105

# Sucotest 18

## Specifications

Frequency range	2 GHz	2.01 - 4 GHz	4.01 - 6 GHz	6.01 - 12 GHz	12.01 - 18 GHz
Power handling 25 °C, sea level (W)	> 391	> 277	> 225	> 160	> 131
Return loss (dB)	> 30	>28	> 25	> 21	> 19
Insertion loss stability vs. shaking (dB)	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Insertion loss stability vs. bending (dB)	< 0.03	< 0.04	< 0.04	< 0.05	< 0.05
Insertion loss stability vs. torsion (dB)	< 0.03	< 0.04	< 0.04	< 0.05	< 0.05

## Stock assemblies

HUBER+SUHNER cable type	Item no.	Assembly length (ref. - ref.) mm/in	Weight gram	Insertion loss dB				
				up to 2 GHz	2.01 - 4 GHz	4.01 - 6 GHz	6.01 - 12 GHz	12.01 - 18 GHz
ST-18/SMAm/SMAm/36 inch	84002061	914/36	68	< 0.48	< 0.68	< 0.84	< 1.21	< 1.51
ST-18/Nm/Nm/36 inch	84002060	914/36	110	< 0.48	< 0.68	< 0.84	< 1.21	< 1.51
ST-18/SMAm/Nm/36 inch	84004594	914/36	90	< 0.48	< 0.68	< 0.84	< 1.21	< 1.51
ST-18/SMAm/SMAm/48 inch	84003373	1219/48	80	< 0.61	< 0.88	< 1.09	< 1.57	< 1.95
ST-18/Nm/Nm/48 inch	84003372	1219/48	122	< 0.61	< 0.88	< 1.09	< 1.57	< 1.95
ST-18/SMAm/Nm/48 inch	84004006	1219/48	101	< 0.61	< 0.88	< 1.09	< 1.57	< 1.95
ST-18/SMAm/SMAm/72 inch	84004007	1829/72	108	< 0.89	< 1.28	< 1.58	< 2.29	< 2.85
ST-18/Nm/Nm/72 inch	84004070	1829/72	157	< 0.89	< 1.28	< 1.58	< 2.29	< 2.85
ST-18/SMAm/Nm/72 inch	84004595	1829/72	134	< 0.89	< 1.28	< 1.58	< 2.29	< 2.85

Other lengths on request with minimum order quantity of 50 pcs.