

# Overview

## Equipment for Network Analyzers



				ELSPEC	
				HUBER+SUHNER	
				SPINNER	

THE BEST FOR OUR CUSTOMERS.

# HUBER+SUHNER®

## SUCOTEST 18A - the outdoor TEST+MEASUREMENT cable assembly

Part no.: SUCOTEST 18A / 11N468 / 11N468 / 1500 mm  
Item no.: 84013029



### Electrical specifications

Impedance	50 Ohms
Operating frequency	18 GHz
Velocity of propagation	77 %
Capacitance	87 pF/m
Time delay	4.3 ns/m
Insulation resistance	> 5 x 10 <sup>3</sup> MΩ
Dielectric withstand voltage	1'500 V rms
Screening effectiveness @ 1 GHz	> 100 dB



### Electrical table

		up to 2 GHz	2.01 to 4 GHz	4.01 to 6 GHz	6.01 to 12 GHz	12.01 to 18 GHz
Min. return loss	(dB)	30	28	25	21	19
Max. insertion loss at 25°C	(dB)	< 0.80	< 1.16	< 1.45	< 2.16	< 2.74
Max. insertion loss vs. shaking	(dB)	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Max. insertion loss vs. bending	(dB)	< 0.03	< 0.04	< 0.04	< 0.05	< 0.05
Max. insertion loss vs. torsion	(dB)	< 0.03	< 0.04	< 0.04	< 0.05	< 0.05
Phase stability vs. bending	(degree)	+/- 2.0	+/- 4.0	+/- 4.0	+/- 6.0	+/- 6.0

More cable types available on request.

### Mechanical specifications

Armoured cable diameter	10.3 mm
Min. bending radius dynamic	50 mm
Flex life (cycles)	100'000
Connector retention force (N)	> 230
Crush resistance (kN/m)	> 80
Recommended mating torque	0.68 Nm... 1.13 Nm
Connector interface	MIL-STD-348A/304

### Materials and finishes

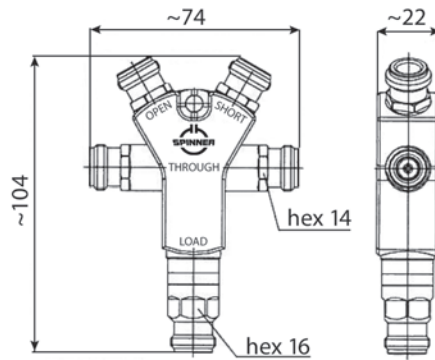
Armour jacket	PUR, blue
Cable dielectric	LDPTFE
Taper sleeves	Santoprene, black
Marking sleeve	Crosslinked polyolefin
Connector contacts	Copper alloy
Connector insulation	PTFE
Connector body	Stainless steel, passivated
Connector nut	Stainless steel, passivated

### Environmental specifications

Temperature range	-55 °C to +85 °C
Humidity range	10 to 95 °C RH
Water tightness	IP 68

# Spinner

## OSLT COMPACT CALIBRATION KIT (4-IN-1)



<b>Part number</b>	<b>BN 53 38 43</b>
Connector type	N socket
Impedance	50 Ω
Frequency range	0 - 9 GHz

### Electrical data

Standard	Electrical length	Return loss				Insertion loss	
Through		0 - 4 GHz	4 - 8 GHz	8 - 9 GHz		0 - 4 GHz	4 - 9 GHz
Socket-socket	72.3 mm	≥ 36 dB	≥ 31 dB	≥ 28 dB		≤ 0.05 dB	≤ 0.1 dB
Standard	Offset length	$\frac{CO}{fF}$	$\frac{C1}{fF/GHz}$	$\frac{C2}{fF/GHz^2}$	$\frac{C3}{fF/GHz^3}$	Phase error	
Open						0 - 4 GHz	4 - 9 GHz
Socket	14.8 mm	1)	1)	1)	1)	≤ 2°	≤ 3°
Standard	Offset length	$\frac{L0}{pH}$	$\frac{L1}{pH/GHz}$	$\frac{L2}{pH/GHz^2}$	$\frac{L3}{pH/GHz^3}$	Phase error	
Short						0 - 9 GHz	
Socket	16 mm	1)	1)	1)	1)	≤ 1.25°	
Standard	DC-resistance	Return loss				Power rating	
Load		0 - 6 GHz		6 - 9 GHz			
Socket	50 Ω ± 0.5	≥ 42 dB		≥ 35 dB		0.5 W max.	

### Material and surface

Inner conductor	CuBe age hardened copper alloy	gold-plated gold-plated
Outer conductor	copper alloy	CuSnZn-plated
Other metal parts	aluminium	anodised (blue)
Insulation	PTFE, cross linked polystyrene, PMP	

Standards	IEC 61169-16
Temperature range	+5 °C - +40 °C
Weight	approx. 0.25 kg
Included in delivery	certificate of calibration, protective caps, protective bag

1) The phase error spec is relative to calibration coefficients documented in the data sheet shipped with the product.

# elspec. Ihr Spezialist für HF-Kabel und Konfektion. Your specialist for RF cables and assembling.

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Die **elspec GmbH** ist spezialisiert auf den Vertrieb und die Konfektionierung innovativer Hochfrequenz-Kabel.

Die Konfektionierung von HF-Leitungen in flexibler und in Semi-Rigid-Ausführung gehört traditionell zu unseren Stärken. Unsere hauseigene Produktion fertigt Standardkonfektionen und applikationsoptimierte Spezialverbindungen nach Vorgabe oder entwickelt sie in enger Kooperation mit dem Kunden.

Ab Lager Geretsried liefern wir ein breites Sortiment an Standard- und Spezial-HF-Kabeln, z.B. nach MIL-C17-Standard, Semi-Rigid, Low Loss und Low Noise sowie HF-Steckverbinder. Bei HF-Steckverbindern entwickeln wir unter anderem auch kundenspezifische Verbindungslösungen.

elspec ist Partner führender Hersteller wie MICRO-COAX und Harbour Industries.



elspec GmbH is specialized on sale and assembling the innovative high-frequency cables. We deliver from stock Geretsried – located 35Km south from Munich in Germany – a wide product line on RF cables in standard configuration as well as special design, e.g according to MIL-C17-standard, semi-rigid, low loss and low noise and last but not least RF-connectors.

elspec is co-operation partner of some leading manufacturer as MICRO-COAX and Harbour Industries.

The assembly of RF-lines in flexible and semi-rigid design is traditional belonging to our strengths.

Our own fabrication produces assemblies and special-connections optimized for applications in accordance with customer's specification or proactively accompany developments of customers in close co-operation.

With RF-connectors we also design custom-made solution of connections.



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