



**HUBER+SUHNER®**  
**SUCOTEST 18A - the outdoor TEST+MEASUREMENT cable assembly**

Part no.: SUCOTEST 18A/11N468/11716403/1500 mm  
 Item no.: 84013033

**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 × 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 7.5 GHz
Min. return loss	(dB)	21	18	18	18
Max. insertion loss at 25 °C	(dB)	< 0.80	< 1.16	< 1.45	< 1.65
Max. insertion loss vs. shaking	(dB)	< 0.03	< 0.03	< 0.03	< 0.03
Max. insertion loss vs. bending	(dB)	< 0.03	< 0.04	< 0.04	< 0.05
Max. insertion loss vs. torsion	(dB)	< 0.03	< 0.04	< 0.04	< 0.05
Phase stability vs. bending	(degree)	+/- 2.0	+/- 4.0	+/-4.0	+/- 6.0

**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 N	0.68 Nm... 1.13 Nm
Recommended mating torque 7/16	max. 25 Nm
Connector interface N	MIL-STD-348A/304
Connector interface 7/16	IEC-60169-4

**Materials and finishes**

Armour jacket	PUR, blue
Cable dielectric	LDPTFE
Taper sleeves	Santoprene, black
Marking sleeve	Crosslinked polyolefin
Connector contacts	N 7/16 Copper alloy, gold plated Copper alloy, silver plated
Connector insulation	PTFE
Connector body	N 7/16 Stainless steel, passivated Brass, SUCOPLATE®
Connector nut	N 7/16 Stainless steel, passivated Brass, SUCOPLATE®

**Environmental specifications**

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

## Care and handling instructions for HUBER+SUHNER microwave cables

HUBER+SUHNER microwave cable assemblies of all types offer a long service life providing they are treated with the appropriate care and attention. Microwave cable assemblies are high precision system components and require proper handling in order to ensure that measuring performance values are maintained.

To achieve the maximum measuring performance the following guidelines should be followed:

1. Assemblies should remain in their original packaging for delivery and storage. Storage temperature should be between +13 °C and +80 °C and the relative humidity should not exceed 85%.
2. Carefully unpack assemblies before measurement. Avoid kinking cables when straightening from a coil or reel.
3. Ensure that the surroundings are clean and free of dust, dirt and any other particles that could enter unsealed connector interfaces.
4. Use protective caps to prevent contamination whenever connectors are unmated.
5. Where interfaces are contaminated, particles can be removed with dry, oil-free compressed air. Please use eye-protection. Interfaces can be cleaned with dry cotton swabs. Do not use hard hand-tools or solvents. Do not blow into interfaces or use normal compressed-air.
6. Choose the measurement routing using the largest bend radii possible. Small bend radii may affect electrical performance. Exceeding the specified limits during the measurement process could cause a permanent degradation.
7. Avoid twisting microwave cable assemblies. Torsion of this type of assembly can alter the relative diameters of cable layers and affects the electrical characteristics. Exceeding the limit of 10° per metre during measuring process could cause a permanent degradation.
8. Examine interfaces for damage and/or contamination before mating.
9. Discharge connectors before mating or ensure that they are connected to a suitable ground.
10. When mating connectors with a screwed interface always hold the connector bodies and turn only the coupling nut. This avoids twisting the cable and ensures minimum wear on the connector pins.
11. Do not exceed the torque specified.

**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  
Tel. +41 (71) 353 41 11  
Fax+41 (71) 353 45 90  
[www.hubersuhner.com](http://www.hubersuhner.com)