

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.



Product features

- Impedance 50 Ω
- Applicable up to 18 GHz
- High flexibility in spite of armoring
- 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	Velocity of propagation	Weight	Min. bending radius for ±180°	Temperature range
	GHz	%	g /m	mm	°C
Sucotest_18A	18	77	175.0	50.0	-40 to +85

Available connectors

Connector	Series, pattern	HUBER+SUHNER type	Cable	Operating frequency	VSWR per connector
				GHz	
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

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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 *** ≤ 3000 mm	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					
Min. return loss *** > 3000 mm	N-N	> 19 dB	> 19 dB	> 19 dB	> 19 dB	> 19 dB	> 19 dB			
	N-7/16	> 18 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

* 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.