elspec group GmbH

distribute elspec

Flexible Microwave Cable Assemblies

test & measurement applications for 44/50/70GHz

EDITION 1

STANDARD PRODUCT

The elspec group offers a variety of standard products. These cables are held on stock and are available much faster than customized cables. Customized cable assembly solutions are available on request.
For more information on our divers distribution system visit us at www.elspecgroup.de, or contact us directly and send us an email to sales@elspecgroup.de.

TM01

available frequencies: 18 GHz | 26.5 GHz | 40 GHz | 50 GHz | 70 GHz

MEASUREMENT AND TEST CRITERIA FOR TM01	
designed for day to day RF measurements	●
measuring precision at moving cable	◐
adaption of microelectronics modules	○
high connector demand	●
phase stability	◐
halogen free	○

● eminently suitable ◐ suitable ○ conditionally suitable ○ not suitable

SPECIFICATIONS

Construction Values

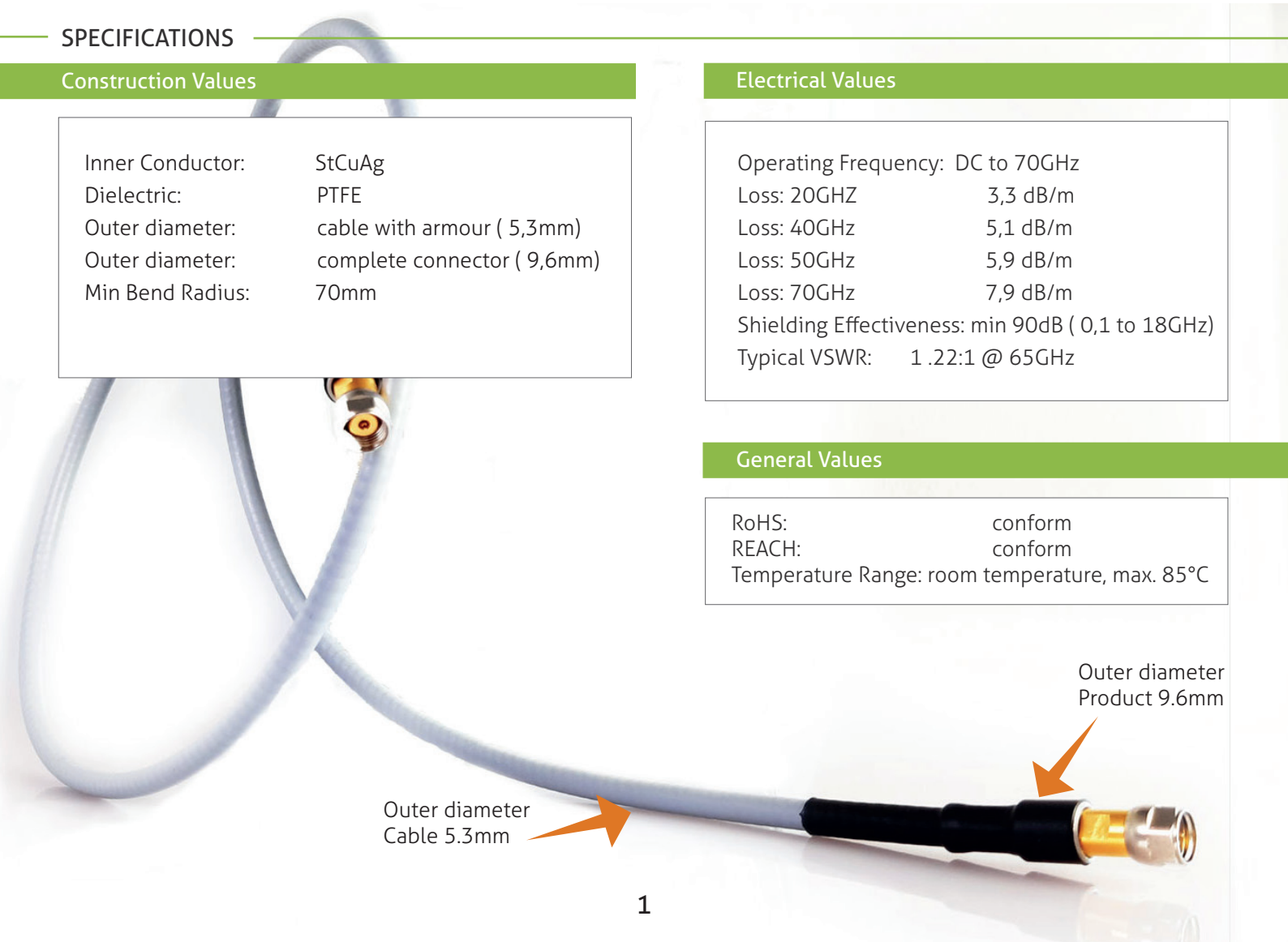
Inner Conductor:	StCuAg
Dielectric:	PTFE
Outer diameter:	cable with armour (5,3mm)
Outer diameter:	complete connector (9,6mm)
Min Bend Radius:	70mm

Electrical Values

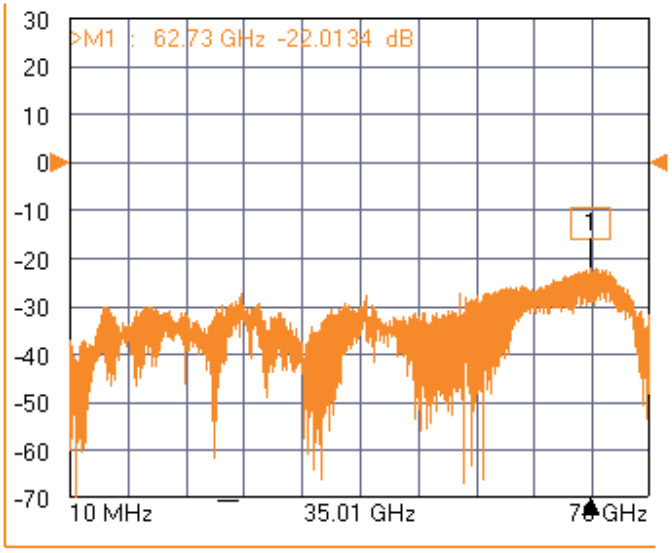
Operating Frequency:	DC to 70GHz
Loss: 20GHZ	3,3 dB/m
Loss: 40GHz	5,1 dB/m
Loss: 50GHz	5,9 dB/m
Loss: 70GHz	7,9 dB/m
Shielding Effectiveness:	min 90dB (0,1 to 18GHz)
Typical VSWR:	1 .22:1 @ 65GHz

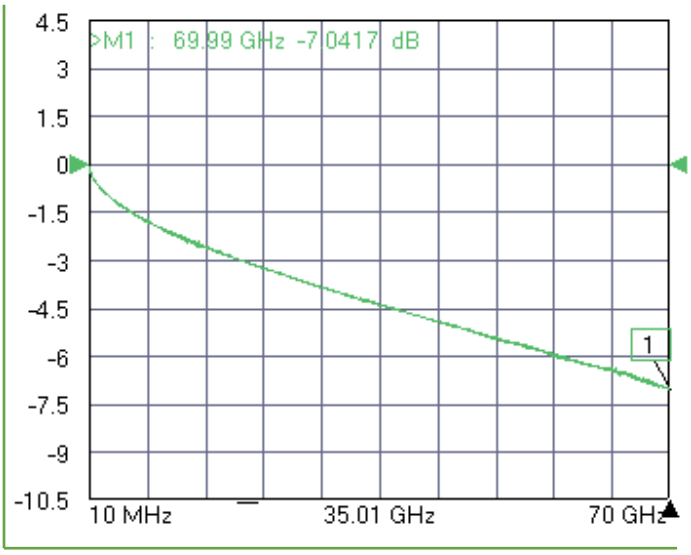
General Values

RoHS:	conform
REACH:	conform
Temperature Range:	room temperature, max. 85°C



TYPICAL PERFORMANCE WITH A CABLE LENGTH OF 1 METER





Article	Product	Descritpion	Connector
20952	70GHz Cable Assembly	TM01-185_11-185_11-1000	1.85 (70G) Straight PLUG auf 1.85 (70G) Straight Plug 1Meter long
21002	70GHz Cable Assembly	TM01-185_11-185_21-1000	1.85 (70G) Straight PLUG auf 1.85(70G) Straight JACK 1Meter long

HOW TO ORDER CORRECTLY IN JUST THREE STEPS

Assembly is a composition of a cable + connector 1 & connector 2 + length. Please name the elspec article number when ordering one of our standardized products. This makes it much easier for our sales team to coordinate and process your order correctly. If not mentioned otherwise we have the product available on stock at elspec **group.**

1 CHOOSE A CABLE — 2 CHOOSE TWO CONNECTORS — 3 CHOOSE A LENGHT

ORDERING INFORMATION

Test and Measurements Series
(Name of the cable)

Cable length in mm (eg.1000)

TM01-AAAAA-BBBBB-YYYY (eg. TM01-185_11-185_21-1000)

Side A — Side B

Connector Codes

185_11 = 1.85mm Male
185_21 = 1.85mm Female
24_11 = 2.4mm Male (only for 50GHz)
24_21 = 2.4mm Female (only for 50GHz)

Care and Handling Guidelines
50 & 70 GHz cable assemblies are sensitive components. This product can easily be forced beyond the recommended minimum bend radius. This will likely degrade or destroy the RF performance. Keep the microwave connectors interfaces clean and the center contacts concentric within the outer contact. DO NOT mate connectors that are dirty, suspected of being damaged or outside concentric tolerances.

ACCESSORIES FOR TEST & MEASUREMENTS

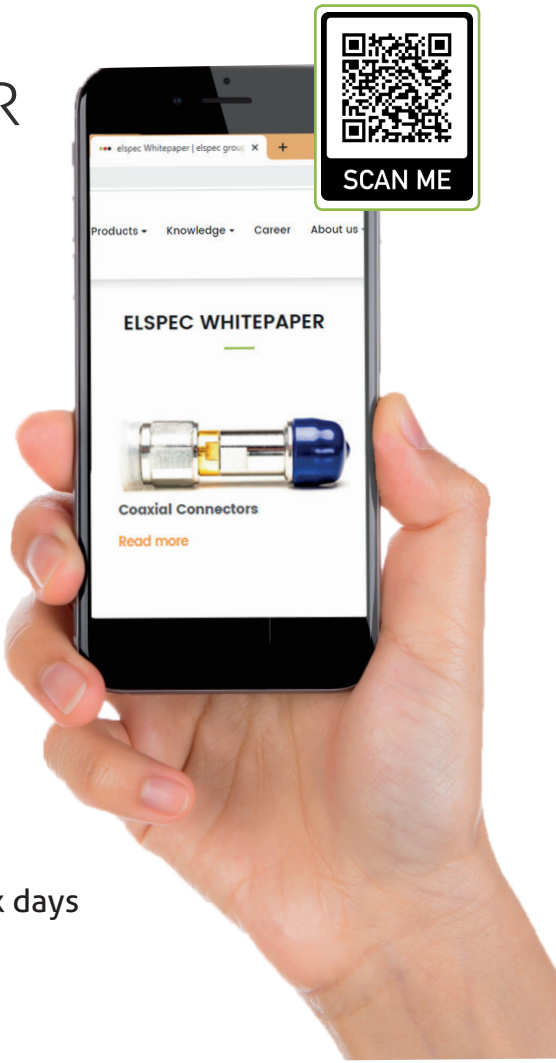
Additional the elspec group also distributes a variety of RF-connectors and torque wrenches.

Article-No.	Product	Description	Price p.p.
14992	Torque Wrench SMA	SMA SW: 8mm, 0.9 Nm	100.00 €
16312	Torque Wrench N	N SW: 19 mm, 1.0 Nm	135.00 €
19680	Adapter	N Plug (male) / N Jack (female)	28.00 €
16294	Adapter	N Plug (male) / SMA Jack (female)	18.25 €
16297	Adapter	N Plug (male) / BNC Jack (female)	32.50 €
16290	Adapter	N Jack (female) / SMA Jack (female)	30.85 €
19452	Adapter	N Plug (male) / SMA Plug (male)	31.45 €
17075	Adapter	BNC Jack (female) / SMA Plug (male)	12.75 €
14666	Adapter	BNC Plug (male) / SMA Jack (female)	43.00 €

THE FAMOUS ELSPEC WHITEPAPER

Stay **up-to-date** and read our **Whitepapers** to learn more about the wide world of Low Loss.

Optimally choosing your measuring cables. The optimum measuring cable is not found by accident but is chosen after precise consideration of all relevant criteria. How to pose the right questions, whether „more expensive" equals „better", etc. – we have put this together for you.



OUR CORE VALUES

- Connectors
- Coaxial Cables
- In-House Production
- Quality made by elspec in Bavaria
- 45 years of experience
- Research and Development
- Delivery within 3 work days

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10/2020 | Error and comission excepted. Subject to change without notice.