



SERIES 7/16 COAXIAL CONNECTORS

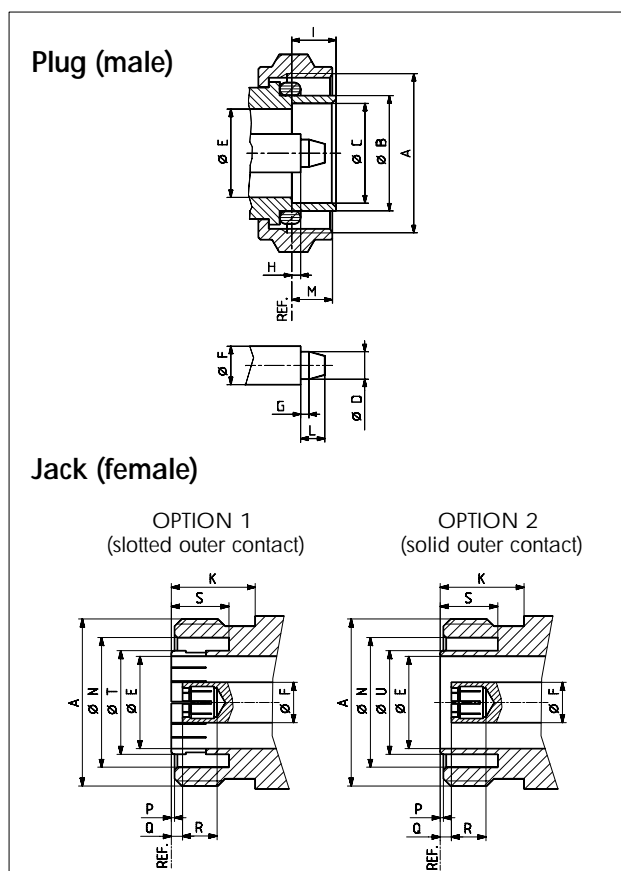
Description

SUHNER 7/16 connectors are mechanically very rugged coaxial connectors with screw lock. They have a characteristic impedance of 50Ω and are applicable with excellent electrical properties up to 7.5 GHz.

Transmission of medium to high power in transmitting stations and low loss transmission of received signals such as in mobile phone base stations are typical applications.

For these purposes low intermodulation product and water-proof types are also available.

Interface Dimensions



Interface Dimensions in mm / inches

	Plug		Jack	
	min.	max.	min.	max.
A	M29 × 1.5		M29 × 1.5	
B	20.60 / .811	21.40 / .843	--	--
C	18.03 / .710	18.21 / .717	--	--
D	4.96 / .195	5.04 / .198	--	--
E	15.85 / .624	16.25 / .640	15.85 / .624	16.25 / .640
F	7.00 / .276 nom.		7.00 / .276 nom.	
G	1.40 / .055	1.60 / .063	--	--
H	1.47 / .058	1.77 / .070	--	--
I	7.00 / .276	8.00 / .315	--	--
K	--	--	10.00 / .394	--
L	--	4.50 / .177	--	--
M	7.00 / .276	9.00 / .354	--	--
N	--	--	22.10 / .870	22.90 / .902
P	--	--	0.50 / .020	0.70 / .028
Q	--	--	1.77 / .070	2.07 / .082
R	--	--	5.00 / .197	--
S	--	--	8.10 / .319	--
T	--	--	--	18.5 / .728*
U	--	--	--	18.00 / .709

* prior to slotting

Interface dimensions conformable to the Standards:

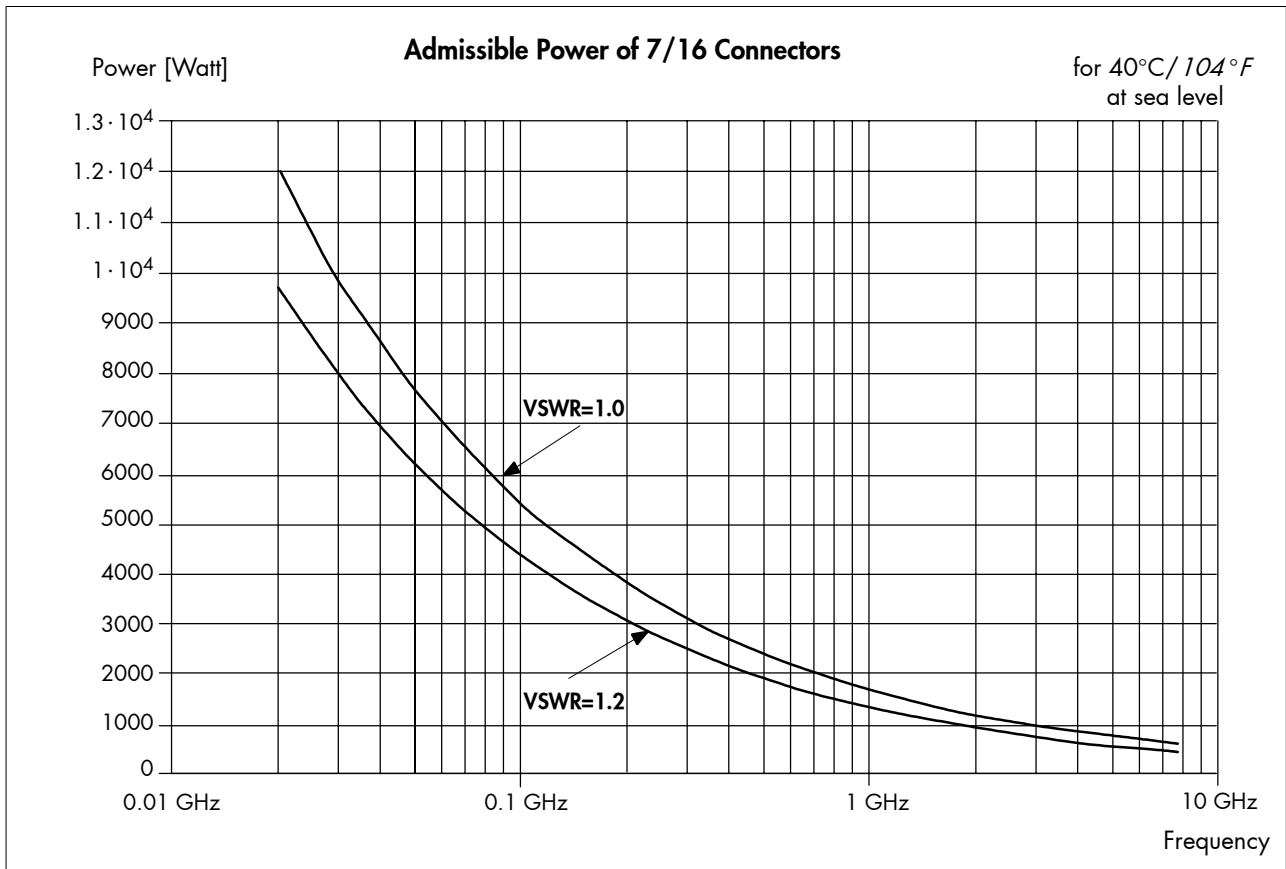
International **IEC 169-4**
 Europe: **CECC 22 190**
 Germany **DIN 47223, VG 95250**

Technical Data

ELECTRICAL DATA	REQUIREMENTS
Impedance	50 Ω
Frequency range	DC ... 7.5 GHz combination types: DC - 1 GHz
VSWR	see table below
RF-leakage (at 1 GHz)	≥ 128 dB
Dielectric withstanding voltage (at sea level) - combination system	4.0 kV rms, 50 Hz 2.0 kV rms, 50 Hz
Working voltage (at sea level) - combination system	≤ 2.7 kV rms, 50 Hz ≤ 1.0 kV rms, 50 Hz
Insulation resistance	≥ 10 ⁴ MΩ
Contact resistance - centre contact - outer contact	≤ 0.4 mΩ ≤ 1.5 mΩ

TYPICAL VSWR	FREQUENCY RANGE			CABLE GROUP
CONNECTOR TYPE	1 GHz	2.5 GHz	5 GHz	
straight connectors	1.04	1.05	1.12	M 5, M 7
	1.05	1.07	1.10	U 29, U 32
	1.03	1.05	1.10	S 39
right angle connectors	1.04	1.05	1.12	M 5, M 7

Other connectors and cables on request



MECHANICAL DATA	REQUIREMENTS
Coupling nut torque - recommended - proof torque	25 Nm ... 30 Nm / 221 in. lbs ... 260 in. lbs 35 Nm / 310 in. lbs
Coupling nut retention force	≥ 1000 N / 225.0 lbs
Contact captivation	≥ 200 N / 45.0 lbs
Durability (matings)	≥ 500

ENVIRONMENTAL DATA	CECC 22190 TEST CONDITIONS	EQUIVALENT MIL TEST CONDITIONS
Temperature range		- 65°C ... + 165°C / - 85°F ... + 329°F
Climatic category acc. to IEC	4.6.5 → 55/155/56	
Corrosion (mated connectors)	4.6.10 → IEC-68-2-11 Ka	Saltspray test acc. to MIL-STD-202, Method 101, Condition B
Vibration	4.6.3 → IEC 68-2-6 Fc	

MATERIAL DATA

CONNECTOR PART	STANDARDS	MATERIAL	PLATING
Bodies Pin contact	QQ-B-626	brass	SUCOPLATE® silver
Outer contacts, jacks Socket contact	DIN 17660	spring bronze	silver
Crimp ferrules	SUHNER® specification	copper	SUCOPLATE®
Insulators, standard version		PTFE or PFA	
Gaskets		silicone rubber	

Some connectors may have a specification that differs from the above mentioned data.