

# SPECIFICATION

## 7/16 FEMALE CONNECTOR FOR 1/2" FEEDER CABLE

7/16 (DIN) coaxial connectors – high-quality coaxial connectors with low attenuation and inter-modulation for frequencies up to 8.3 GHz. Transmission of medium to high power with radio transmitters and low PIM transmission of received signals such as in mobile phone base stations are typical applications due to their high mechanical stability and best possible weather resistance.

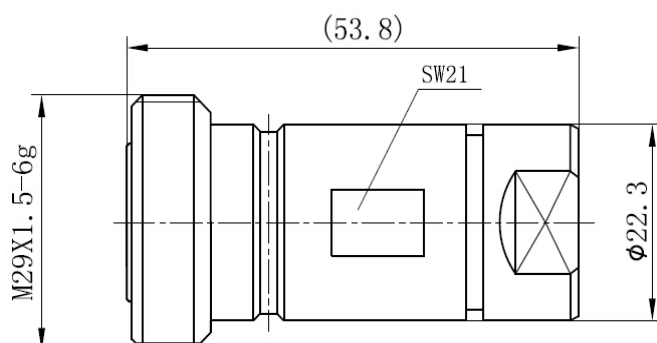
The 7-16 connector is the most rugged RF connection meeting all requirements even under the most severe environmental conditions. Sealing against outer conductor and jacket by means of the o-ring and 360° compression fit.

Watertight sealing in mated and unmated condition, i.e reduced efforts during installation and improved security during operation

Tri-alloy plating i.e. extreme resistance against corrosion even under hardest climatic and environmental circumstances

RoHS compliant can be used on a global basis

Standards		IEC60169-4	
Electrical Characteristics		Mechanical Characteristics	
Contact resistance inner conductor	$\leq 0.4 \text{ m}\Omega$	Recommended coupling torque	25-35Nm
Contact resistance outer conductor	$\leq 0.2 \text{ m}\Omega$	Durability (mating cycles)	$\geq 500$
Insulation resistance	$\geq 10 \text{ G}\Omega$	Material: spring contacts	Brass
Voltage proof	4.0KV/50Hz	Material: outer conductor	Brass
Impedance	50 $\Omega$	Material: other metal parts	Brass
Return loss: Straight style	$\geq 32 \text{ dB/4GHz}$ ; 19.1dB/6GHz	Material: insulators	PTFE
Return loss: Angle type	$\geq 40 \text{ dB/1GHz}$ ; 19.1dB/6GHz	Plating: Inner conductor	Ag/Au
Working voltage	2.7KV/50Hz	Plating: Outer conductor	Ni/Tri-alloy
Frequency range up to	8.3GHz	Plating: Other metal parts	Ni/Tri-alloy



Part Number: 7/16F-1/2

Dimensions are in millimeters

### Interface

According to

IEC 60169-4

### General Specifications

Cable Size	1/2"
Cable Type	Foam Dielectric
Connector Interface	7/16 DIN
Sealing Method	Sealing rubber and shrinking sleeve
Gender	Female

### Electrical

Characteristic Impedance	50 ohm
Frequency Range	DC-7.5GHz
VSWR	$\leq 1.10(0-3G)$
PIM Intermodulation@2-tonex20w	$\leq -163$ dBc
Dielectric Withstanding Voltage	$\geq 4000V$ RMS,50Hz,at sea level
Dielectric Resistance	$\geq 10000M\Omega$
Contact Resistance	Center Contact $\leq 0.4m\Omega$ Outer Contact $\leq 0.2m\Omega$

### Mechanical

Durability	Mating cycles $\geq 500$ cycles
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### Material and Plating

	Material	Plating
Body	Brass	Tri-Alloy
Center conductor	Phosphor Bronze	Ag
Insulator	PTFE	-
Gasket	Silicone rubber	-
Other	Brass	Tri-alloy/Ni

### Environmental

Installation Temperature CF	°C(°F)	-40 to 85(-40 to 185)
Storage Temperature CF	°C(°F)	-40 to 85(-40 to 185)



Operation Temperature CF	°C(°F)	-40 to 85(-40 to 185)
Watertightness		IP68
RoHS-compliance		Full RoHS Compliance
Salt-fog test		96h