

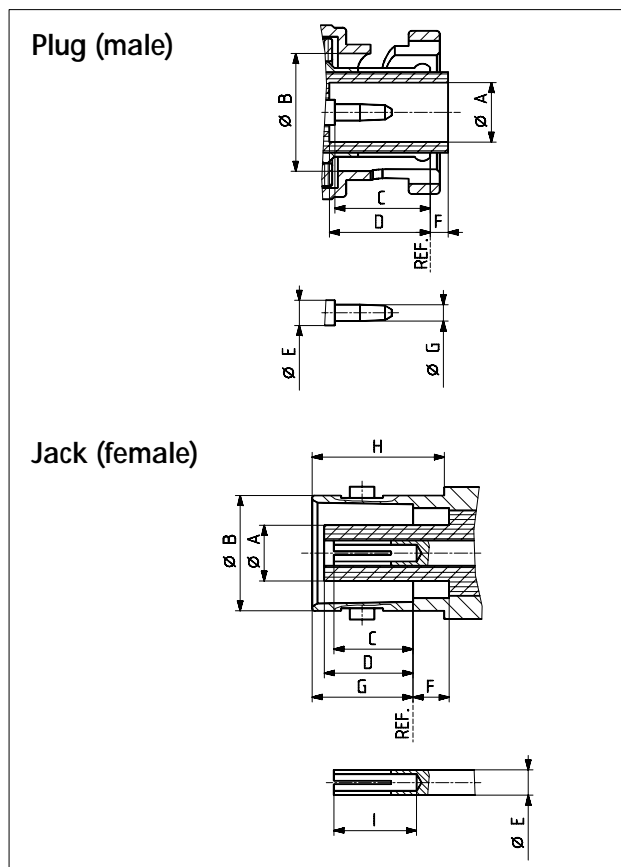


SERIES MHV (H4) HIGH VOLTAGE CONNECTORS

Description

SUHNER MHV connectors are coaxial miniature high voltage (MHV = Miniature High Voltage) connectors with 5 kV rms test voltage (mated pairs). The MHV connectors have a working voltage up to 1.6 kV rms in mated condition and are suitable for applications up to 300 MHz. MHV connectors are of similar design to BNC connectors but the insulators protrude over the outer contacts to give a degree of shock-protection when unmated. However, if a high degree of shock protection in the unmated condition is required, use of series SHV is recommended.

Interface Dimensions



Interface Dimensions in mm / inches

	Plug		Jack	
	min.	max.	min.	max.
A	4.83 / .190	---	---	4.72 / .186
B	9.78 / .385	9.91 / .390	9.60 / .378	9.70 / .382
C	7.18 / .283	---	---	7.11 / .280
D	8.10 / .319	---	---	8.05 / .317
E	---	2.31 / .091	2.06 / .081	2.31 / .091
F	---	2.18 / .086	2.18 / .086	---
G	1.32 / .052	1.37 / .054	8.31 / .327	8.51 / .335
H	---	---	10.52 / .414	---
I	---	---	6.86 / .270	---

Technical Data

ELECTRICAL DATA	REQUIREMENTS
Impedance	50 Ω
Frequency range	DC ... 300 MHz
Dielectric withstanding voltage (at sea level)	5.0 kV rms, 50 Hz (depending on cable)
Working voltage (at sea level)	\leq 1.6 kV rms, 50 Hz (depending on cable)
Corona extinction voltage (at 21000 m)	\geq 300 V rms, 50 Hz (depending on cable)
Insulation resistance	\geq 10 ⁶ M Ω
Contact resistance - centre contact - outer contact	\leq 2 m Ω \leq 1 m Ω
Current rating, continuous	\leq 10 A

MECHANICAL DATA	REQUIREMENTS
Coupling nut torque	7 Ncm ... 28 Ncm / 0.6 in. lbs ... 2.5 in. lbs
Coupling nut retention force	\geq 450 N / 101.2 lbs
Contact captivation	\geq 15 N / 6.1 lbs
Durability (matings)	\geq 500

ENVIRONMENTAL DATA	TEST CONDITIONS
Temperature range	- 65°C ... +165°C / - 85° F ... +329° F
Climatic category	IEC → 55/155/21
Thermal shock	MIL-STD-202, Method 107, Condition B
Moisture resistance	MIL-STD-202, Method 106
Corrosion	Saltspray test acc. to MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition B

MATERIAL DATA			
CONNECTOR PART	STANDARDS	MATERIAL	PLATING
Bodies Pin contact	QQ-B-626	brass	SUCOPLATE® or gold
Socket contact	QQ-C-530	beryllium-copper, hardened	gold
Crimp ferrules	SUHNER® specification	copper	SUCOPLATE®
Insulators		PTFE or PFA	

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