

High Power Coaxial Cable Sets for Plasma, Nuclear, MRI Applications

Uses High Quality HN Connectors, Double Shielded Teflon Dielectric Cables

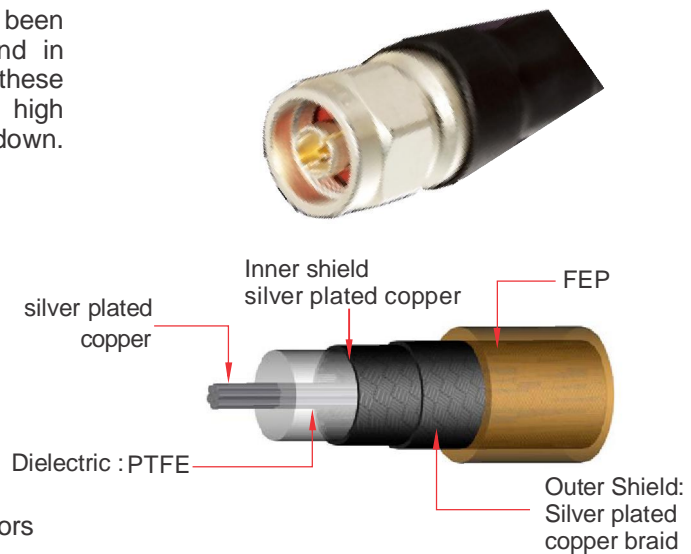
HPS.. Series RF cable sets from us have been designed for high power RF transmission and in frequencies upto 100MHz. Main feature of these cables is the seamless operation of carrying high power RF under high voltage without any breakdown.

APPLICATIONS

- RF Matching Networks in plasma
- Nuclear Physics research
- Magnetic Resonance Imaging

MIL STANDARDS CONFORMANCE

- MIL-C-17 conformant Cable
- MIL-PRF-39012 conformant HN, 7/16 Connectors



Cable Specifications

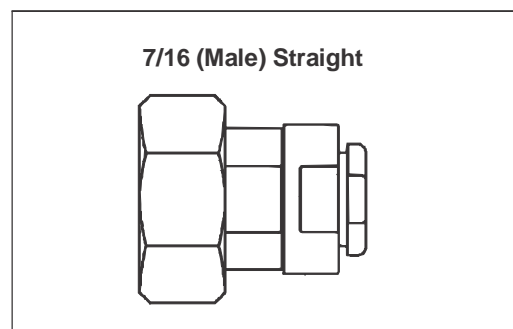
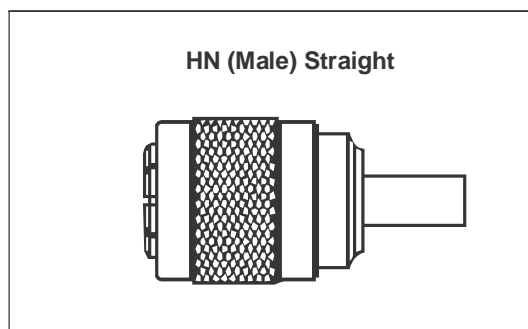
Parameter	R93
Inner Conductor	Silver Plated Copper
Dielectric	PTFE
Shield 1	Silver Plated Copper Braid
Shield 2	Silver Plated Copper Braid
Jacket	FEP, 9.9mm
Weight	0.24 Kg/m

Parameter	R93
Impedance	50Ω
Frequency	DC~2.5 GHz
Capacitance	94pF/meter
Velocity of Propagation	70%
Temperature range	-55°C ~ +200°C

Attenuation & Power Handling Vs Frequency

Frequency (MHz)	13.56	50	100	1000	1500
Attenuation dB/100feet	0.72	1.41	2.03	7.24	9.2
Attenuation dB/100m	2.36	4.63	6.7	23.8	30.2
Power (kW)	10	5.9	3.6	1.1	0.9

Connector Choices for High Power Cable Sets



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Connectors Specifications

Specifications	HN Connectors	N Connectors	7/16 Connectors
Outer Conductor	Copper alloy	Copper alloy	Copper Alloy
Center Conductor	Brass, Silver Plated	Brass, Gold Plated	Brass, Silver Plated
Insulation	PTFE	PTFE	PTFE
Gasket	Silicone Rubber	Silicone Rubber	Silicone Rubber
Frequency range	DC~2.5 GHz	DC~2.5 GHz	DC~2.5 GHz
Nominal Impedance	50 Ω	50 Ω	50 Ω
Mating/Unmating	500 operations	500 operations	500 operations
Vibration	As per MIL-STD-202, method 204, test condition D		
Mechanical Shock	As per MIL-STD-202, method 213, test condition I		
Thermal Shock	As per MIL-STD-202, method 107, test condition B		
Humidity	As per MIL-STD-202, method 106		
Temperature Cycle	As per MIL-STD-202, method 102A, test condition C		

Ordering Codes Description

(Length) (Connector 1) (Connector 2)
 HPS-R93 - □ □ - □ (□ / □) - □ (□ / □) - □
L L 1 2 3 1 2 3 U

LL	Length	0.5 = 0.5 ; 1 = 1.0 ; 2 = 2.0
1	Connector Series	HN = HN ; N = N ; 7/16 = 7/16
2	Male/Female Designator	M = Male ; F = Female
3	Orientation of Connector	ST = Straight
U	Unit of Length	M = Meter ; F = Feet ; I = Inch

1 meter RG93 cable set with HN (Male) on both sides = HPS-R93-1.0-HN(M/ST)-HN(M/ST)-M

Cable Set Ordering Codes

Ordering Code	Length	Conn 1	Conn 2
With HN(Male) - HN(Male) Connectors on both sides			
HPS-R93-0.5-HN(M/ST)-HN(M/ST)-M	0.5 m	HN, Male, Straight	HN, Male, Straight
HPS-R93-1.0-HN(M/ST)-HN(M/ST)-M	1.0 m	HN, Male, Straight	HN, Male, Straight
HPS-R93-1.5-HN(M/ST)-HN(M/ST)-M	1.5 m	HN, Male, Straight	HN, Male, Straight
HPS-R93-2.0-HN(M/ST)-HN(M/ST)-M	2.0 m	HN, Male, Straight	HN, Male, Straight
HPS-R93-3.0-HN(M/ST)-HN(M/ST)-M	3 m	HN, Male, Straight	HN, Male, Straight
With 7/16(Male) - 7/16(Male) Connectors on both sides			
HPS-R93-0.5-7/16(M/ST)-7/16(M/ST)-M	0.5 m	7/16, Male, Straight	7/16, Male, Straight
HPS-R93-1.0-7/16(M/ST)-7/16(M/ST)-M	1.0 m	7/16, Male, Straight	7/16, Male, Straight
HPS-R93-1.5-7/16(M/ST)-7/16(M/ST)-M	1.5 m	7/16, Male, Straight	7/16, Male, Straight
HPS-R93-2.0-7/16(M/ST)-7/16(M/ST)-M	2.0 m	7/16, Male, Straight	7/16, Male, Straight
HPS-R93-3.0-7/16(M/ST)-7/16(M/ST)-M	3 m	7/16, Male, Straight	7/16, Male, Straight

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