

Superscreened connectors

for nucleonic systems

Key features

- Designed to maintain the superior screening performance of superscreened cables
- Available in HNS, HN, N, PET, BNC and TNC standard mating faces
- Resistance to age degradation through unique crimped termination
- Available in small or large quantities
- Specialist assembly and fitting service available

Overview

A key requirement of high-performance instrumentation systems is the provision of adequate interference immunity. Standard co-axial signal cables and connectors are inadequate in dealing with these problems. From Curtiss-Wright's extensive experience in military and civil nuclear energy, a range of matching cables and connectors have been developed.

Widely in use throughout the UK's nuclear industry, these superscreened connectors are available in a range of standard mating faces. Designed to maintain the superior screening performance of Curtiss-Wright's matching superscreened cables, they resist degradation to aging by virtue of a unique crimped termination.

Dimensions conform to industry standards. Body and inner body and most metal parts are brass, silver plated and passivated. Insulators are PTFE and Polypenco. Centre contact is soldered to the inner conductor of the superscreened cable. Braid connection is made using a double crimp to a ferrule.

Technical data

Type	Mating face	Coupling	Styles	Sealing	Working voltage	Screening performance	Characteristic impedance	Ambient temperature
BNC	Standard BNC	Full hand tightening of locking ring required to obtain full electrical performance	Collet locking plug and bulkhead jack	No barriers or seals on plugs or jacks. Mating face sealed by silicon rubber gasket held compressed axially by locking ring. Cable jacket sealed using thermofit tube. Bulkhead socket has barrier seal using o rings.	500 V peak	Zt<20 μΩ from 200 kHz to 5mHz, Zt<20 μΩ at 30 MHz	Nominal 50 Ω	-55° to +150°C continuous
HN	Standard HN		Free plug, free jack and bulkhead jack		V = 2.5 kV	Zt<1 μΩ from 200 kHz to 5 MHz, Zt<10 μΩ at 30 MHz		-15° to +90°C continuous
HNS	Proprietary HNS					Zt<1 μΩ from 200 kHz to 5 MHz, Zt<10 μΩ at 30 MHz		
TNC	Standard TNC				500 V peak	Zt<20 μΩ from 200 kHz to 5 MHz, Zt<20 μΩ at 30 MHz	-55° to +150°C continuous	
N	Standard N				1000 V peak	Zt<10 μΩ from 200 kHz to 5 MHz, Zt<10 μΩ at 30 MHz		
PET	Standard PET		Free plug and bulkhead jack		2.5 kV	Zt<10 μΩ from 200 kHz to 5 MHz, Zt<20 μΩ at 30 MHz		

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About Curtiss-Wright

Curtiss-Wright Round Rock and Wimborne have worked with nuclear and industrial customers for over 60 years. We support customers across the world from facilities located in the US and UK. Our solutions are embedded in strategic national infrastructure and our people are active partners in customer programs that are focused on delivering advanced future nuclear and industrial capabilities.

Curtiss-Wright Corporation (NYSE: CW) is a global integrated business that provides highly engineered products, solutions and services mainly to Aerospace & Defense markets, as well as critical technologies in demanding commercial power, process and industrial markets. We leverage a workforce of approximately 8,600 highly skilled employees who develop, design and build what we believe are the best engineered solutions to the markets we serve. Building on the heritage of Glenn Curtiss and the Wright brothers, Curtiss-Wright has a long tradition of providing innovative solutions through trusted customer relationships.