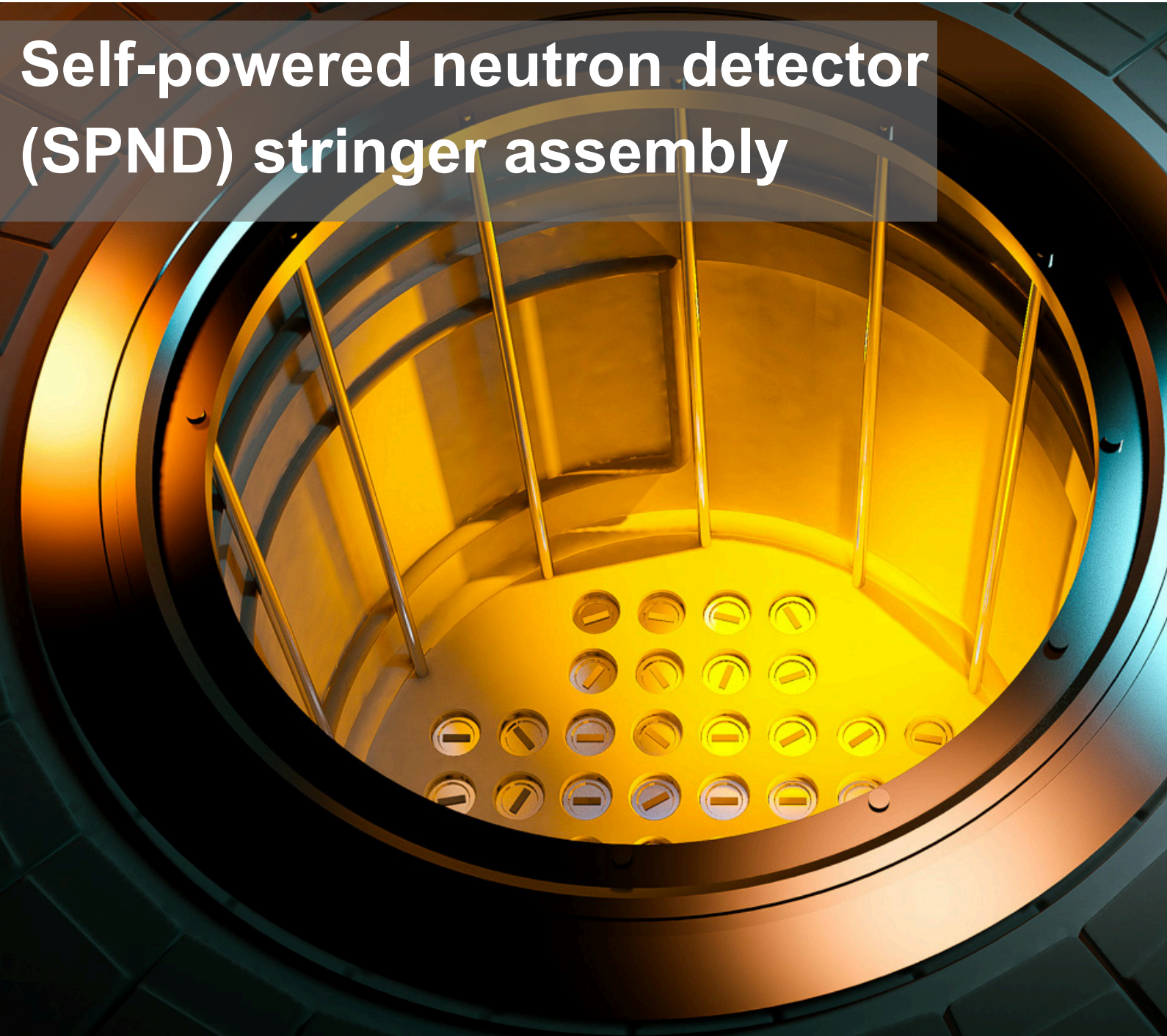


Self-powered neutron detector (SPND) stringer assembly



Overview

Curtiss-Wright's self powered neutron detector (SPND) stringer assembly is ideal for dual neutron flux and temperature monitoring of nuclear reactors. The modular design allows bespoke internal compositions so customers can achieve the monitoring solutions for their needs. The individual SPND can be constructed from a variety of materials, dependent on environment and requirements, and is available with or without gamma background compensation.



Example specifications

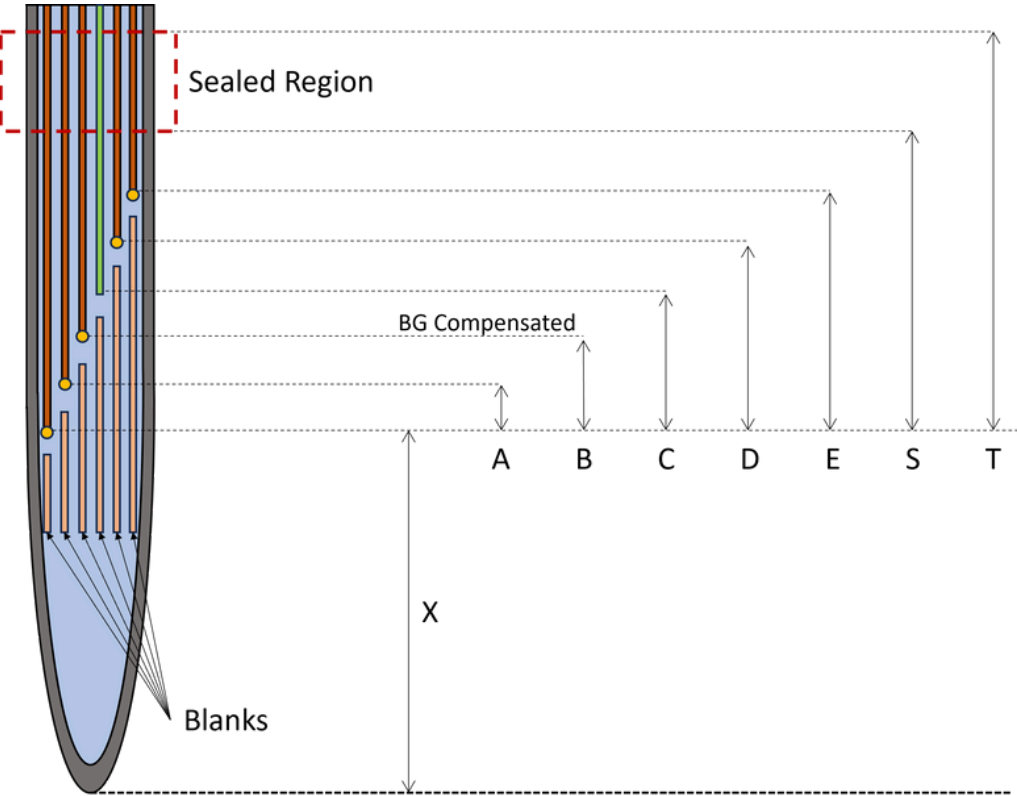
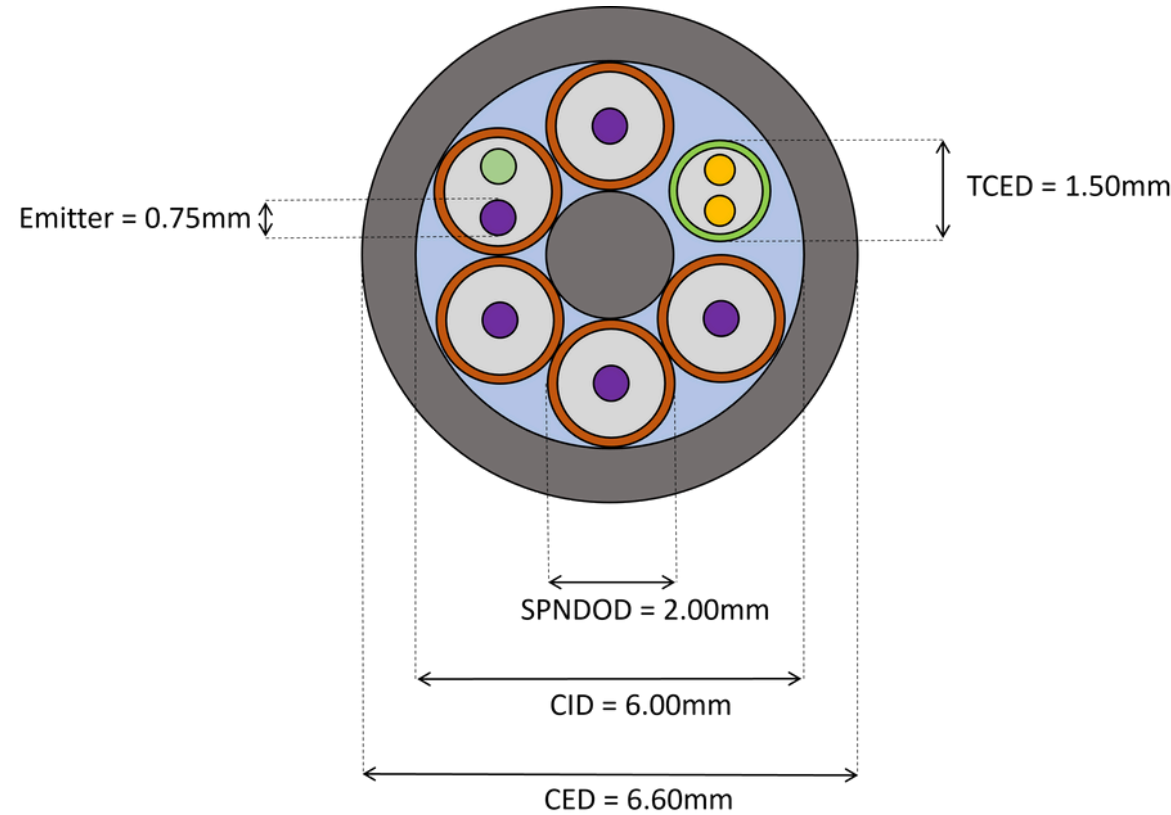
SPND stringer assembly	
Cable external diameter (CED)	6.60mm \pm 0.25mm (\pm 0.125mm at sealed region)
Cable internal diameter (CID)	6.00mm \pm 0.25mm
SPND outer diameter (SPNDOD)	2.00mm (nominal)
Thermocouple external diameter (TCED)	1.50mm (nominal)
Sensors within main cable	<ul style="list-style-type: none"> • SPND (single purple core in diagram): x 4 • SPND with background wire (dual purple and green core in diagram): x 1 • Thermocouple (dual yellow core in diagram): x1
Overall cable length	20.0m
Temperature range	20° C to 400° C
SPND emitter diameter	1.00mm (nominal)
SPND length	400.00mm \pm 0.25mm
SPND operational neutron flux	10 ¹¹ - 10 ¹⁴ neutrons/cm ² /s
Gamma flux at full power	Able to operate up to 10 ⁸ Gy/h
Pressure range	Up to 2300PSI
Thermocouple technology	Type K
Cold-end connector type	Lemo-00



Example specifications

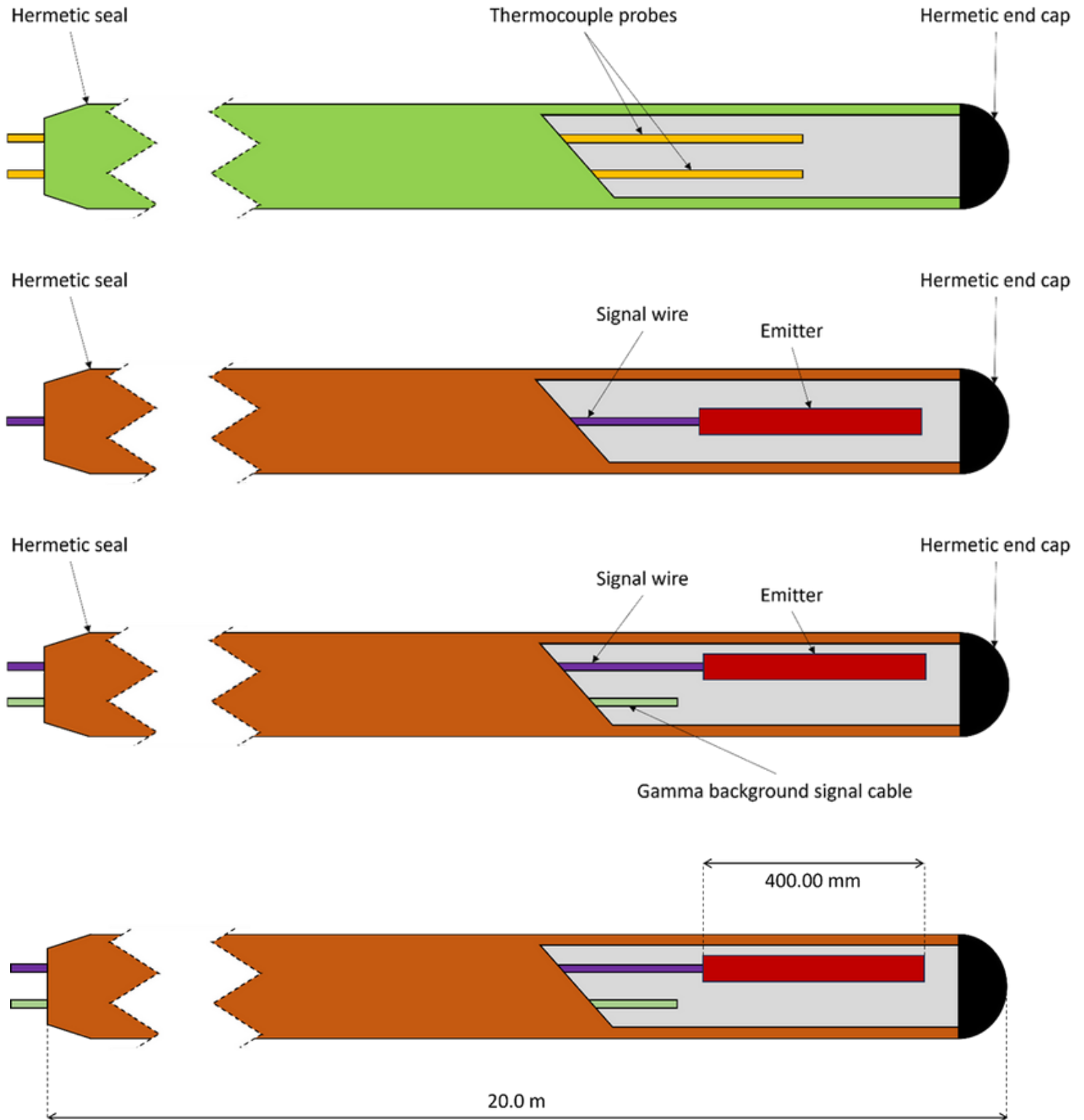
SPND stringer assembly	
Cable material	Stainless Steel 316
Estimated service life	20 years
SPND active materials	Rhodium or vanadium as standard (other materials may be available on request)

Example specifications



X	500mm
A	750mm
B	1500mm
C	2250mm
D	3000mm
E	3750mm
S	4000mm
T	4500mm

Example specifications



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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.