

PROTECTIVE SLEEVING

Expando® HTNS/HO

Thick-wall braided sleeve

Applications

Expando HTNS/HO is a thick-wall braided sleeve manufactured from meta aramid Nomex™. Its highly expandable structure allows easy installation over long lengths, even after the fitting of end connectors.

Expando HTNS/HO is flexible, expandable and non-flammable, ensuring excellent performance in the most diverse and aggressive environments. HTNS/HO is designed for the protection of wire and cable bundles against flame, high temperatures and mechanical abrasion.

Expando HTNS/HO has an oil and water repellent treatment (HO) to reduce humidity absorption and to improve impermeability to fluids. HTNS/HO also offers excellent resistance to gamma and x-rays.

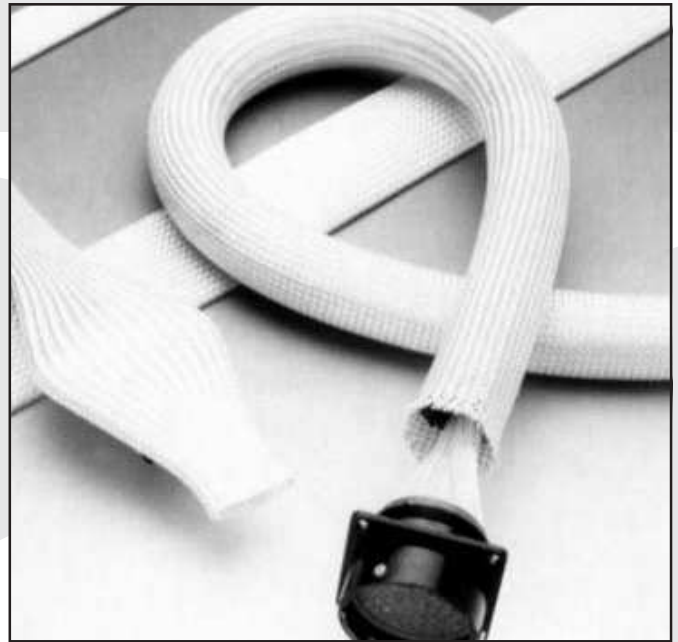
HTNS/HO is used on a variety of applications in the military, marine, aeronautical, railway and electrical equipment industries.

Features & Benefits

- 1 : 2 Expansion ratio
- Low temperature flexibility to -60°C
- Thick wall
- Flame resistant
- Self-extinguishing
- Excellent abrasion protection
- Resistant to gamma & x-rays

Operating Temperature

- -60°C to +240°C



Note: For further information on the **Expando HTNS/HO** product range or assistance with your specific sleeving requirements, please contact **IS-Rayfast**.

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Technical Performance

Properties	Test	Results
Working temperature		-60°C to +240°C (continuous) Up to +310°C (short term)
Carbonisation	Above +370°C	Does not melt
Abrasion resistance	EN 6059 Part 403	Pass
Bending strength	50,000 bending cycles at +180°C	Excellent
Flame resistance	UL 224	Sleeve classified VWI
(Self-extinguishing properties)	UL 94 FAR 25 AMDT.25-72§ 853(b)	Base material classified V0 Pass
Fluid resistance	EN 6059 Part 303	
• Fuel: JP5 (NATO F44)	(24hrs with various temperatures)	Pass
• Hydraulic fluids:		
• Skydrol 500B4 & L D4		Pass
• Mineral oil: MIL-L-7870A		Pass
• Synthetic oil: MIL-L 23699		Pass
• Cleaning fluids:		
Forane 141B & MIL-L-87936		Pass
• De-icing fluid: MIL-A-8243		Pass
Humidity resistance	1000h at +150°C in air saturated with water vapor	Retains 70% of its original tensile strength

Note: Longitude shrinkage should be taken into account when utilizing the full expansion properties of the sleeve.

Expando HTNS/HO Dimensions (all dimensions are in mm's)

Description	Recommended Diameter range (mm)		Weight (g/100m)	Standard Packaging (m)	Ordering Description
	Min.	Max.			
HTNS/HO 4	4	8	1800	50	HTNS-HO-4mm-9
HTNS/HO 6	6	10	2100	50	HTNS-HO-6mm-9
HTNS/HO 8	8	15	2500	50	HTNS-HO-8mm-9
HTNS/HO 10	10	18	3000	50	HTNS-HO-10mm-9
HTNS/HO 12	12	20	3500	50	HTNS-HO-12mm-9
HTNS/HO 15	15	25	4000	25	HTNS-HO-15mm-9
HTNS/HO 20	20	30	5000	25	HTNS-HO-20mm-9
HTNS/HO 30	30	45	7500	25	HTNS-HO-30mm-9
HTNS/HO 40	40	60	10000	25	HTNS-HO-40mm-9

Ordering Information

Standard colour: 9 = (Ivory).

special colours are available, subject to a minimum order quantity.

Ordering description: Specify product name, size and colour; **HTNS-HO-6mm-9** (9=Ivory).

Ordering Example: A Ivory protective sleeve capable of covering a 15mm cable diameter is required = **HTNS-HO-12mm-9** (9=Ivory).
A black protective sleeve capable of covering a 45mm cable diameter is required = **HTNS-HO-40mm-9** (9=Ivory).