

Micro-Seal Insulation Fittings that Seal and Flex

Part# M-2 and F-2

Thin Wall Cross-linked Polyolefin Shrink Boots,....

M-2 Mounted to a Ridged 1/8 IPS Threaded Male Fitting, (Jam Nut Available)

F-2 Mounted to a Ridged 1/8 IPS Threaded Female Body, (Threaded Insert Available)

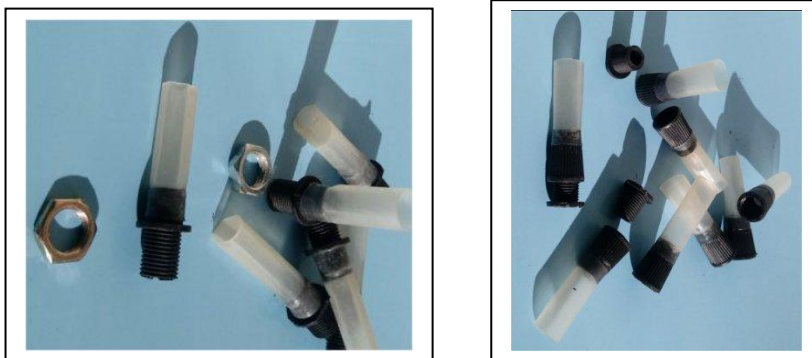
Problem: A leading supplier of Wind and Solar Energy Generation equipment was looking for a low cost solution to insulate control boxes and electrical lighting. The challenge was to displace expensive larger oversized and outdated thickwalled cable entry seals using modern UL approved alternatives to provide a cost effective electrical cable penetration seal. Plastic electrically insulated shrink fittings were needed to connect power panels and control boxes to the low voltage underground electrical transmission and distribution cable network that supplies electricity to the grid. The application required moisture proofing as well as a means of re-enforcing the cable at the point of penetration from vibration during daily movement of panels. Standard sized fittings were requested for simplicity. A Male and Female corrosion proof joining seal, ridged to hold the cable and at the same time; flexible at entry to allow as a vibration dampener to prevent wire fatigue, while bending at the junction. Standard fitting threads of 1/8 IPS were chosen to allow interfacing with common 110v electrical appliances. Also requested was the ability for double sealing on both sides for critical cable entry points.

Solution: HeBran's Micro-Seal M-2 and a matching Micro-Seal F-2 was recommended to insulate all of cable and wire penetration points. The critical cable entry points could be protected on both sides of the penetration by joining both flexible M-2 and F-2 fittings through the appropriate panels simply by threading them together through a small 3/8" hole. Both the M-2 and F-2 can also be secured independently with an appropriate Nut or Threaded Insert. Well suited for household usage rated to 600 V, flame retardant and a cost effective solution that provides excellent electrical, thermal and physical properties.

In terms of application, the HeBran Micro-Seal is a Fast, Easy way to Waterproof, protect and insulate Cable and Wire penetrations into control boxes, panels or 110v electrical appliances.

Product Name

HeBran Micro-Seal M-2 (with Nut) & Micro-Seal F-2 (with Threaded Insert)



Product Description

Cable Entry Seal a Ridged plastic threaded body mounted to a flexible, thin wall, flame retardant heat shrink boot

- Suitable for color coding various penetrations and different cable runs
- Suitable for sealing cable & wire entry points protecting against common fluids and solvents
- Ideal for wiring devices where abrasion resistance and electrical protection are required
- Suitable for use in environments where flame retardancy is required for health and safety reasons.

Market Segments

Aerospace, Automotive, Electronics, Electrical, Solar, Marine

Advantages

- Waterproof, Corrosion proof wire management device to secure cable entries and penetrations
- Multi purpose HeBran Shrink-fitting seals from moisture and ingress of fluids and is Flame resistant
- Resistant to a wide range of fluids and solvents
- 2:1 shrink ratio allows for coverage of irregularly shaped wires and cable assemblies
- In addition to weather proofing the connection, it also provides strain relief and vibration resistance

Other Potential Users

Auto electrical, 110v Lamp and Lighting, Electrical OEMs 12v & 24v electrical feed-thru, Power distribution and panel sealing

HeBran

Micro-Seal Fittings Thin Wall Cross-linked Polyolefin Boots

Dimensions

Order Reference Number	Expanded			
	Internal Diameter (min)		Internal Diameter (max)	
	mm	in	mm	in
M-2	7.12	.28	4.70	.185
M-2 Nut	NA	NA	NA	NA
F-2	7.12	.28	4.70	.185
F-2 Nut	6.61	.26	6.61	.26

Standards

- UL 224, 125°C; CSA C22.2 No. 198.1, 125°C; MIL-DTL-23053/5, Class 1 and 2, AMS 3636 and 3637; DEF STAN 59-97, Issue 3, Type 2a

Ordering

- Select a dimension which will shrink snugly over the component to be covered. If recovery is restricted the resultant wall thickness will be less than specified.
- Please specify the product name plus the options you require.
- Example Order: Male threaded M-2 or Female threaded F-2
- Standard Product Thread; 3/8 IPS to fit industry related products

Options

- Boot: choice of colors Red, White, Clear, Blue, Yellow, Green
- Body: Metal or Plastic with choice of colors Black, White, Clear



Please contact your Customer Service Representative for information on custom colors, metal bodies, sizes and lengths

USA: 336-579-4217

HeBran

www.HeBran.com