

Hydro Bond Engineering Ltd

Electrical Penetrators: Manned and Unmanned Systems HPS (Hydro Bond Penetrator Series)



Electrical Penetrators

For Manned and Unmanned Systems HPS (Hydro Bond Penetrator Series)

Hydro Bond Engineering Ltd offer Electrical Penetrators for Manned and Unmanned Systems from its extensive, high integrity range of underwater penetrators.

Our in house engineered and developed electrical technology is at the forefront of harsh environment requirements. Our products have been extensively tested both internally and externally and are field proven on major local, national and international projects.

Our Electrical Engineers and Technicians are fully trained and certified on our equipment by City & Guilds.



HPS: (Unmanned Electrical Penetrator)

Features

- Fully pressure blocked
- Right Angled or In Line designs
- Smooth Bore O-Ring sealed NPT, UNF, Flanged seal and other sealing configurations available
- Robust Design
- Mono and bi-directional Pressure Designs
- Mono Directional depth rated to 1,500 MSW with additional depth ratings available on request
- Bi-Directional Manned pressure vessel depth rated to 455 MSW
- Electrical, Coaxial and Optical designs available
- Inboard conductor tails meet requirements for manned systems
- Wide variety of outboard composite cable designs available
- Lloyd's, DNV, ABS and other third party tests certificates available on request
- Metal Shell Construction
- Mounting O – Ring face seals and optional Barrel seals available as standard
- Voltage ratings up to 3,000 Volts RMS
- Current ratings up to 140 Amps with higher ratings available on request
- Available in 316 Stainless Steel as standard or Titanium, Aluminium Silicon Bronze etc on request
- Non Magnetic versions available
- Optional Earth Bonding
- Optional Cathodic delamination version available
- Termination options include fully water blocked, moulded to cable or oil filled options



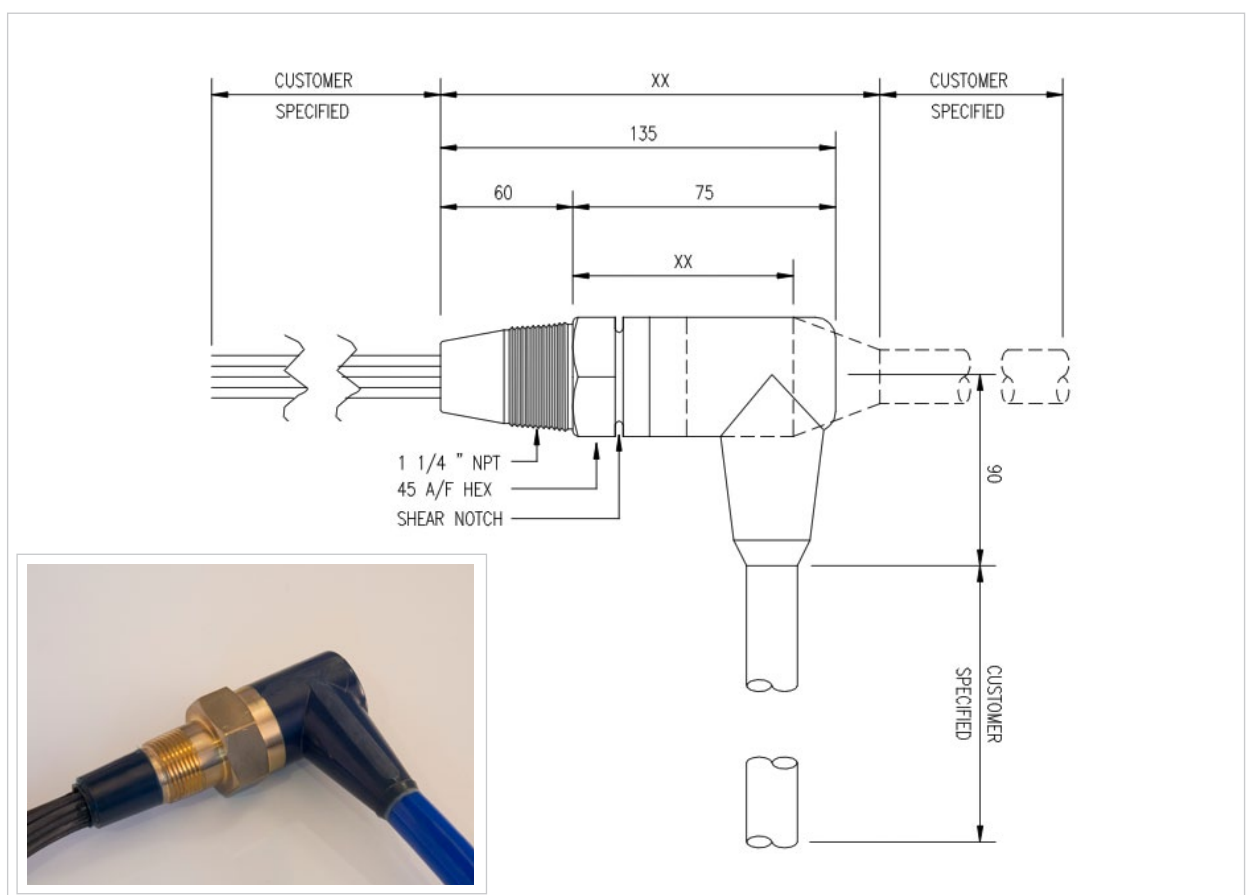
HPS: (Manned Electrical Penetrator)

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Benefits

- Easy to use
- Cost effective
- Less connections to worry about
- Low optical losses
- Low failure rate
- Fast Delivery lead times
- Wide variety of insert configurations allows cost effective system design
- Wide variety of metal options allows for best corrosion resistant design



Specifications

The following pages feature a range of HPS (Hydro Bond Penetrator Series) Manned and Unmanned Electrical Penetrators that have been designed, manufactured and field tested. The following charts feature a range of configurations, together with electrical, environmental, standard material specifications and General Information.

Electrical Penetrators

Manned and Unmanned Systems HPS (Hydro Bond Penetrator Series): Specifications

Ref. No:	UNF Diving Bell	Face View	Ref. No:	UNF Diving Bell	Face View
HPS-20-*/1 HPS-21-*/1 HPS-22-*/1	1 Way / 1.75" 1 Way / 1.50" 1 Way / 1.00"		HPS-20-*/40	40 Way / 1.75" UNF Diving Bell	
HPS-22-*/2	2 Way / 1.00"		HPS-20-*/46	46 Way / 1.75" UNF Diving Bell	
HPS-20-*/4 HPS-21-*/4	4 Way / 1.75" 4 Way / 1.50"		HPS-20-*/55	55 Way / 1.75" UNF Diving Bell	
HPS-22-*/5	5 Way / 1.00"				
HPS-22-*/6	6 Way / 1.00"				
HPS-20-*/10 HPS-21-*/10	10 Way / 1.75" 10 Way / 1.50"				
HPS-20-*/12	12 Way / 1.75"				
HPS-22-*/15	15 Way / 1.50"				
HPS-20-*/19 HPS-21-*/19 HPS-22-NM-*/19	19 Way / 1.75" 19 Way / 1.50" 19 Way / 1.00" (NM)				
HPS-20-*/30	30 Way / 1.75"				
			Ref. No:	DDC	Face View
			HPS-29-*/1	1 Way / 1.50" shank 80 Amp	
			HPS-29-*/?	1 Way / 1.50" shank 80 Amp	
			HPS-29-*/1	1 Way / 1.50" shank 80 Amp	
			HPS-29-*/?	1 Way / 1.50" shank 80 Amp	
			HPS-29-*/1	1 Way / 1.50" shank 80 Amp	
			HPS-29-*/?	1 Way / 1.50" shank 80 Amp	
			HPS-29-*/1	1 Way / 1.50" shank 80 Amp	

KEY: (NM) : None-Manned DDC : Deck Decompression Chamber