

## Hydro Bond Engineering Ltd

### Surface Mateable Coaxial Connectors: Metal Keyed / Rubber Keyed : HRS / HDM / HYB



## Surface Mateable Coaxial Connectors

### Metal Keyed / Rubber Keyed : HRS (Hydro Bond Rubber Sealing) HDM (Hydro Bond Deck Mate) : HYB (Hydro Bond Hybrid)

Hydro Bond Engineering Ltd offer Surface Mateable Coaxial Connectors from its extensive, high integrity range of subsea connectors.

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.



HDM: Hydro Bond Deck Mate (Connector)

### Features

- Proven Shock Tested Design
- Metal Key provides positive scoop proof connection (HYB only)
- Fully pressure blocked 50-Ohm and 75-Ohm coaxial inserts (HYB only)
- Coaxial insert trace tested to 1.6 GHz
- HYB Type tested to 86 Bar open face pressure
- HRS Connectors Depth rated to 2,450 MSW mated
- Metal Shell Construction
- Available in 2 shell sizes
- Bulkhead Mount and Panel Mount Designs available as standard
- Mounting O – Ring seals and optional Barrel seals available as standard
- Coaxial densities up to 4 of 50-Ohm or 75-Ohm Coaxial paths
- Available in Nickel Aluminium Bronze or 316 Stainless Steel and Titanium etc on request
- 0.75 metre coaxial tails on all bulkhead connectors as standard with other lengths on request
- Optional Earth Bonding
- Optional Cathodic delamination version available
- Moulding options include Polyurethane and or Polyethylene



HRS: Hydro Bond Rubber Sealing (Connector)

## Surface Mateable Coaxial Connectors

**Metal Keyed / Rubber Keyed : HRS (Hydro Bond Rubber Sealing)**  
**HDM (Hydro Bond Deck Mate) : HYB (Hydro Bond Hybrid)**

### Benefits

- Easy to use
- Proven Shock tested design
- 50-Ohm and 75-Ohm coaxial paths allow noise free high data rate transmission
- Wide variety of metal options allows for best corrosion resistant design



HRS: Hydro Bond Rubber Sealing (Connector)



HDM: Hydro Bond Hybrid (Deck Mate)



HYB: Hydro Bond Hybrid (Connector)

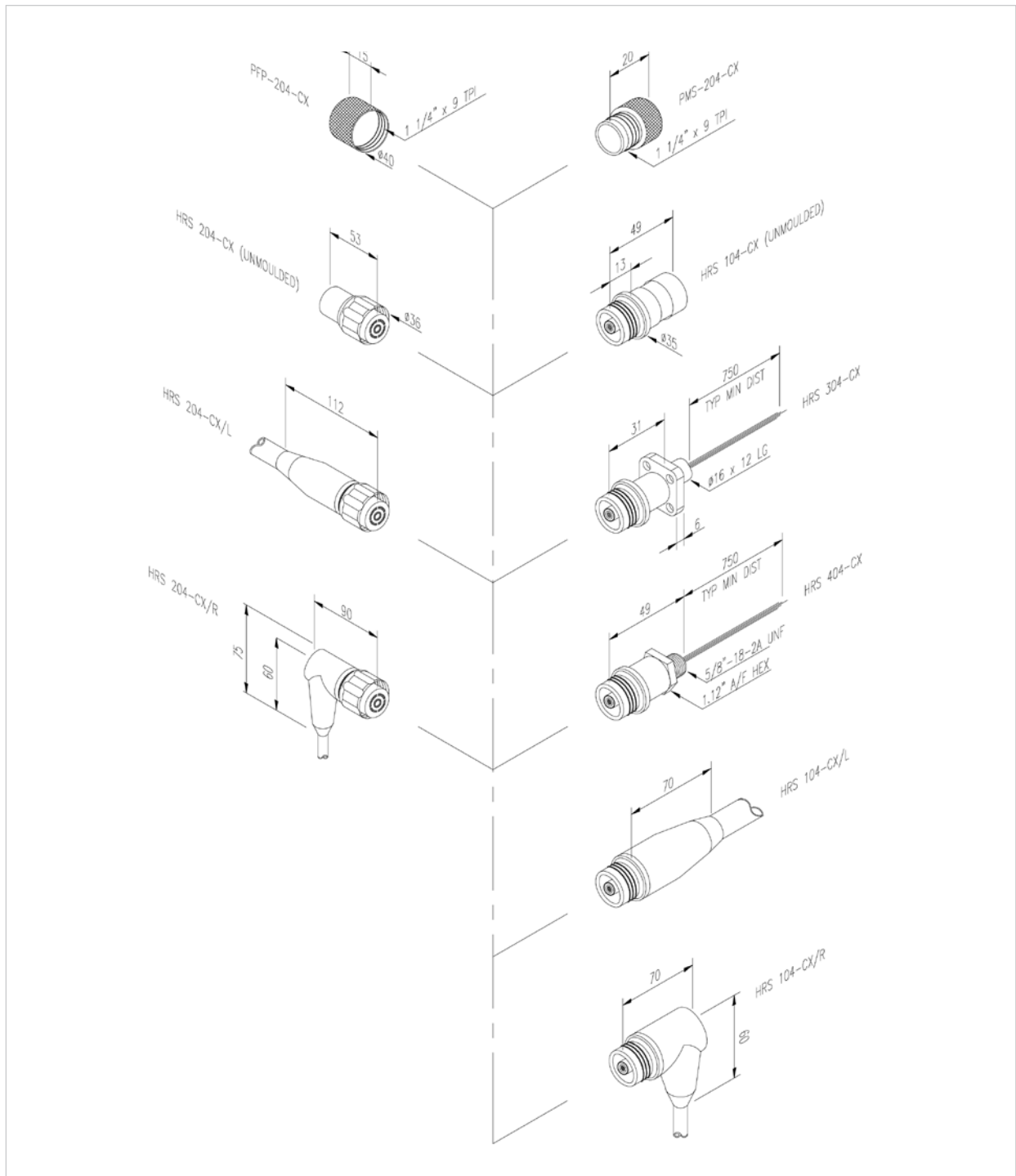
### Specifications

The following page features HRS, HDM and HYB Underwater Mateable Coaxial Connectors that have been designed, manufactured and field tested. The following chart features the socket / pin (face view) configurations, together with electrical, environmental and standard material specifications.

# Surface Mateable Coaxial Connectors

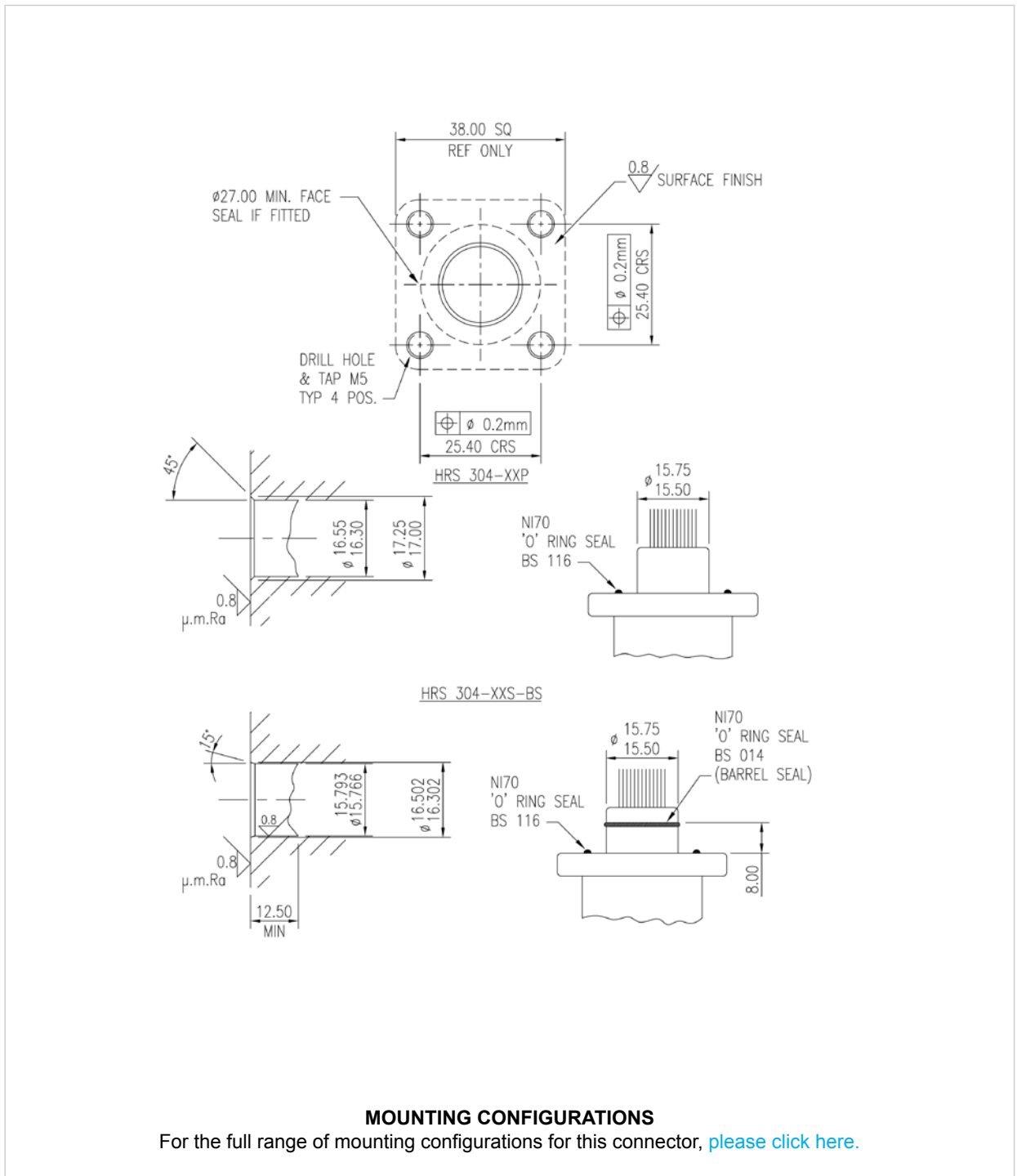
Metal Keyed / Rubber Keyed

HRS (Hydro Bond Rubber Sealing): **Shell Size 4 / Connector Details**



# Surface Mateable Coaxial Connectors

## Metal Keyed / Rubber Keyed HRS (Hydro Bond Rubber Sealing): Shell Size 4 / Mounting Details

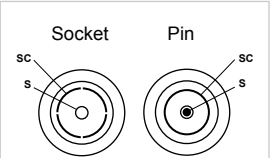


# Surface Mateable Coaxial Connectors

## Metal Keyed / Rubber Keyed HRS (Hydro Bond Rubber Sealing): Specifications

Electrical and Environmental	Standard Material Specification	Face Views
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### HRS (Hydro Bond Rubber Sealing) Surface Mateable Coaxial Connector

Pin Current Rating: N/A Pin Voltage Rating: N/A Contact to Contact IR: >1,000 MOhms @ 1,000 V dc Contact to Body IR: >1,000 MOhms @ 1,000 V dc Mated Depth Rating: 2,440 MSW Temperature Rating: -20 ° C to +60 ° C Conductor Tail Size: 50 ? Ohm Solder Bucket Size: N/A	Body: 316 Stainless Steel Fix Ring: Aluminium Silicon Bronze Back Shell: N/A Contact Pins: CZ121/Au Contact Sockets: CZ121/Au Insert Material: Neoprene Conductor Tails: Spec RG58 x 0.75 m O – Rings: NI70	 <p>Socket Pin</p> <p>sc s sc s</p> <p>Ref: HRS 04-CX (coaxial)</p>
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### Custom Product Design

Not found what you are looking for ?

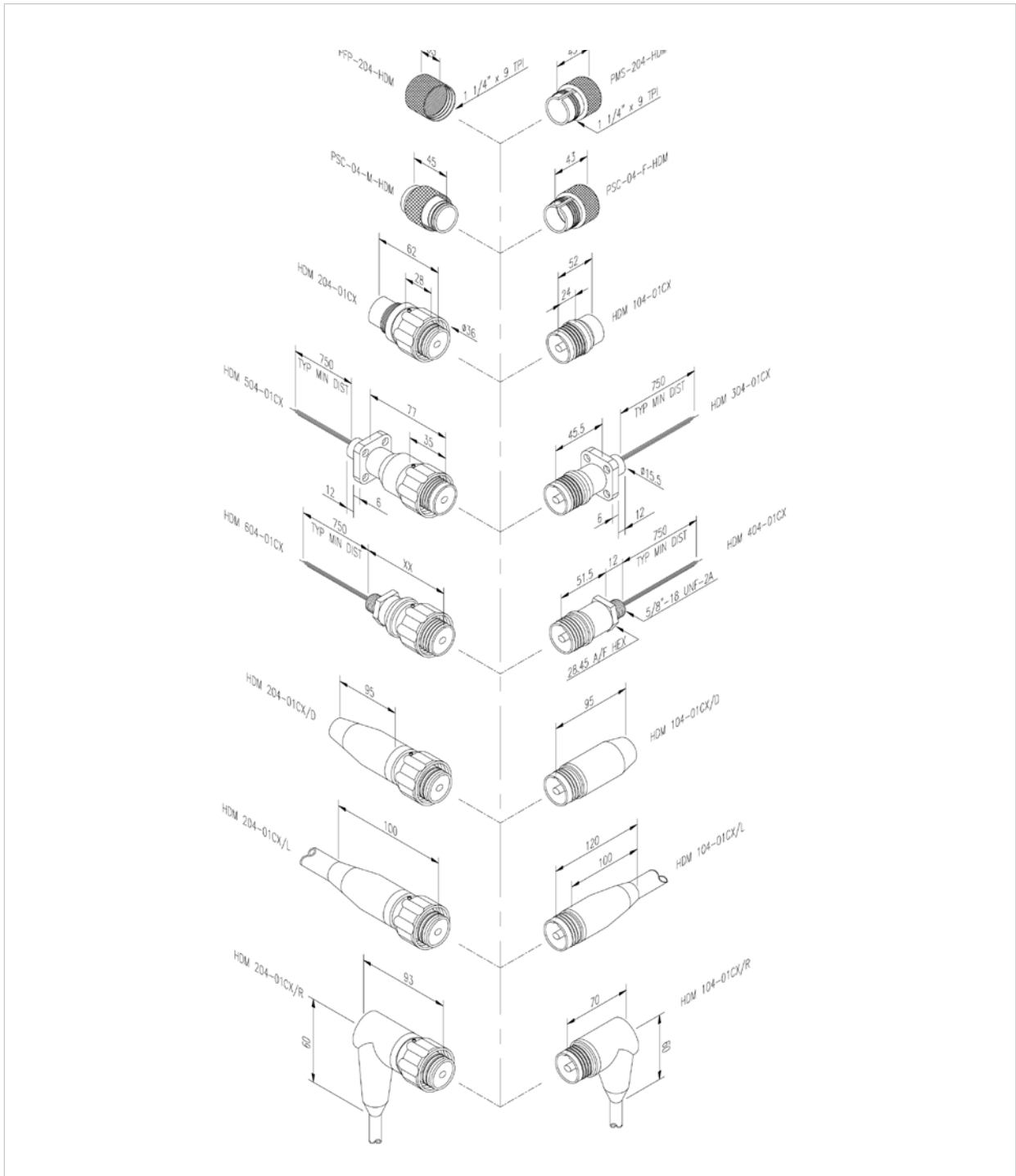
Our in house engineers design, develop, manufacture and test new products to customer specifications.





# Surface Mateable Coaxial Connectors

## Metal Keyed / Rubber Keyed HDM (Hydro Bond Deck Mate): Shell Size 4 / Connector Details





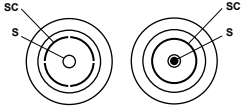


# Surface Mateable Coaxial Connectors

## Metal Keyed / Rubber Keyed: HDM (Hydro Bond Deck Mate): Specifications

Electrical and Environmental	Standard Material Specification	Face Views
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### HDM (Hydro Bond Deck Mate) Surface Mateable Coaxial Connector

<p>Coax Impedance: 50 Ohm or 75 Ohm            Coax Power Rating: 120 Watts            Coax Freq'y Rating: 1,600 Mhz            Contact to Contact IR: &gt;1,000 MOhms @ 1,000 V dc            Contact to Body IR: &gt;1,000 MOhms @ 1,000 V dc            Mated Depth Rating: 3,450 MSW            Temperature Rating: -20 ° C to +60 ° C            Coax Tail Size: Contact office for full list            Coax Connection: To fit SMC Plug</p>	<p>Body: 316 Stainless Steel            Fix Ring: Aluminium Silicon Bronze            Back Shell: N/A            Coax Pins: BeCu/Au            Coax Sockets: BeCu/Au            Insert Material: Peek            Conductor Tails: 1 metre standard            O – Rings: NI70</p>	<p>Socket      Pin</p>  <p>Ref: HDM 04-01CX</p>
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### Custom Product Design

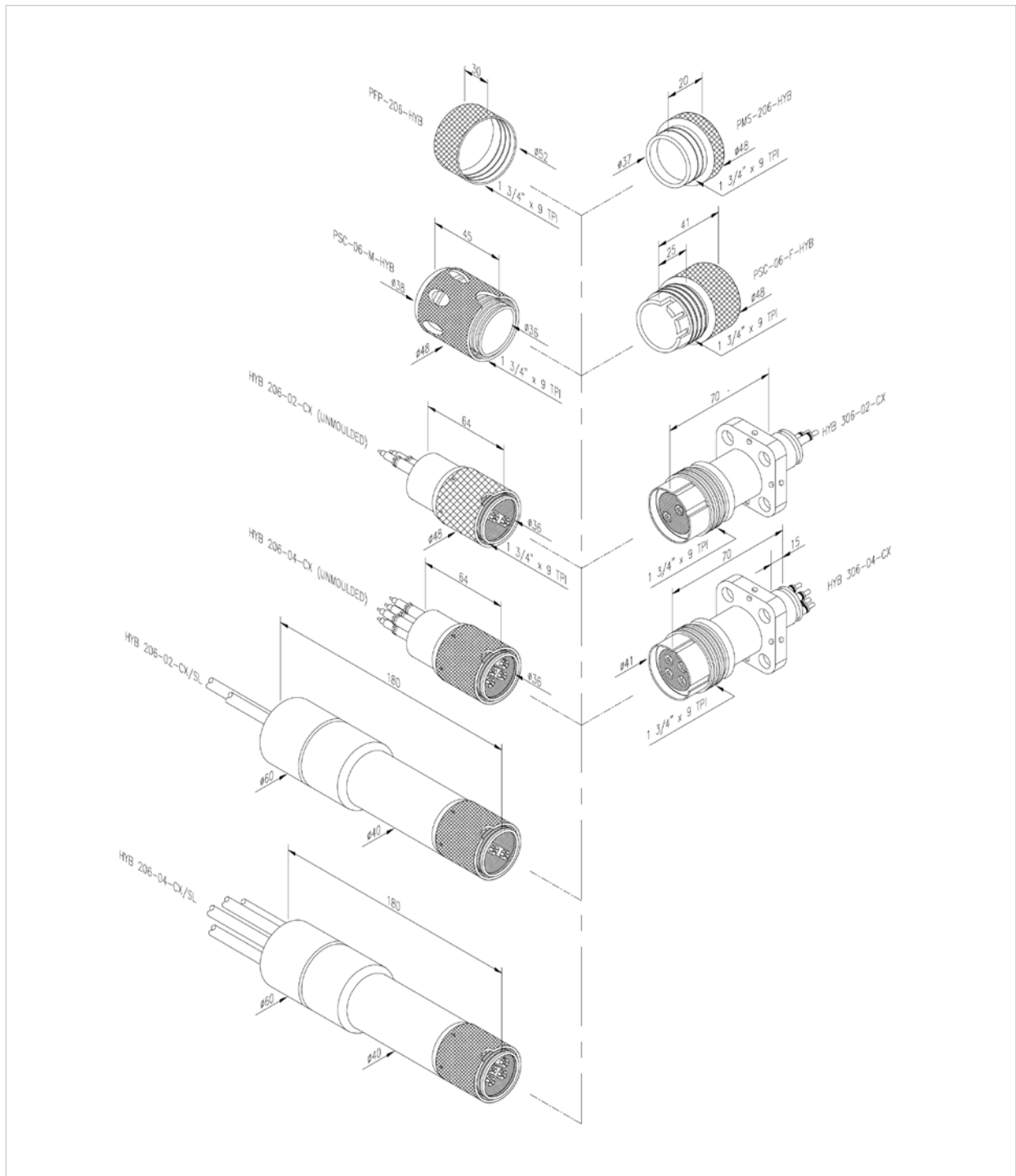
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# Surface Mateable Coaxial Connectors

## Metal Keyed / Rubber Keyed HYB (Hydro Bond Hybrid): Shell Size 6 / Connector Details



## Surface Mateable Coaxial Connectors

Metal Keyed / Rubber Keyed

HYB (Hydro Bond Hybrid): **Shell Size 6 / Mounting Details**

### MOUNTING CONFIGURATIONS

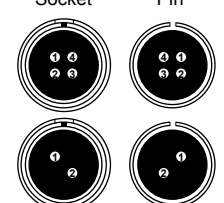
We are currently working on the mounting configurations for this connector.

# Surface Mateable Coaxial Connectors

## Metal Keyed / Rubber Keyed: HYB (Hydro Bond Hybrid): Specifications

Electrical and Environmental	Standard Material Specification	Face Views
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### HYB (Hydro Bond Hybrid) Surface Mateable Coaxial Connector, Metal Keyed

<p>Coax Impedance: 50 Ohm or 75 Ohm          Coax Power Rating: 120 Watts          Coax Freq'y Rating: 1,600 Mhz          Contact to Contact IR: &gt;1,000 MOhms @ 1,000 V dc          Contact to Body IR: &gt;1,000 MOhms @ 1,000 V dc          Mated Depth Rating: 1,000 MSW          Temperature Rating: -20 ° C to +60 ° C          Coax Tail Size: Contact office for full list          Coax Connection: To fit SMC Plug</p>	<p>Body: 316 Stainless Steel          Fix Ring: Aluminium Silicon Bronze          Back Shell: N/A          Coax Pins: BeCu/Au          Coax Sockets: BeCu/Au          Insert Material: Neoprene          Conductor Tails: 1 metre standard          O – Rings: NI70</p>	<p>Socket      Pin</p>  <p>Ref: HYB 06-02CX HYB 06-04CX</p>
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### HYB (Hydro Bond Hybrid) Surface Mateable Coaxial & Electrical Hybrid Connector, Metal Keyed

<p>Coax Impedance: 50 Ohm or 75 Ohm          Coax Power Rating: 120 Watts          Coax Freq'y Rating: 1,600 Mhz          Pin Current Rating: 4x25 Amps &amp; 14x10 Amps          Pin Voltage Rating: 1,000 Volts RMS          Contact to Contact IR: &gt;1,000 MOhms @ 1,000 V dc          Contact to Body IR: &gt;1,000 MOhms @ 1,000 V dc          Mated Depth Rating: 1,000 MSW          Temperature Rating: -20 ° C to +60 ° C          Coax Tail Size: Contact office for full list          Solder Bucket Size: 4x4.0mm dia, 14x2.5 mm dia          Coax Connection: To fit SMC Plug</p>	<p>Body: Aluminium Nickel Bronze          Fix Ring: Aluminium Nickel Bronze          Back Shell: N/A          Contact Pins: CZ121/Au          Contact Sockets: CZ121/Au          Coax Pins: BeCu/Au          Coax Sockets: BeCu/Au          Insert Material: Neoprene          Conductor Tails: Spec 44x1.0 Metre          Coax Tails: 1 metre standard          O – Rings: NI70</p>	<p>Socket      Pin</p>  <p>Ref: HYB 09-04CX-18</p>
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## Custom Product Design

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