

Wavecon Subsea Electrical Connectors are an off the shelf range of robust, hardshell connectors designed for the most demanding environments. The design includes a dual sealing arrangement to the mating faces.

Available as standard in AISI 316 Stainless Steel with Nickel Aluminium Bronze C63000 locking collar.

#### Features:

- 6,000 metre standard depth rating mated and open face.
- Multiple Configurations.
- Available in stainless steel AISI 316 with C63000 locking collar.
- Working voltage and current dependent on contact density and diameter.

#### Applications:

- Subsea ROVs, Trenchers and Ploughs
- Renewables
- Drill Templates
- Bespoke applications

#### Specification:

Metal Shell Housing:	AISI 316 Stainless Steel
Locking Collar:	C63000
O Rings:	Nitrile 70
Insert:	PEEK
Contacts:	1µm Gold over Nickel
Depth Rated:	6000m
Temperature:	Op: -20°C - +70°C St: -40°C - +55°C
Mating Cycles:	>1000

**Part Numbering****Plug / Receptacle Moulded**

<b>PL</b>	<b>W</b>	<b>07</b>	<b>M</b>	<b>0900</b>	<b>24</b>
PL – Plug RC – Receptacle	Shell Size	No. Contacts	Male / Female Contacts	Wire length (0900 = 900mm)	Wire Guage

**Bulkhead**

<b>BR</b>	<b>W</b>	<b>07</b>	<b>F</b>	<b>1000</b>	<b>22</b>	<b>03</b>
BR – Bulkhead Receptacle (Thread) FR – Flanged Receptacle	Shell Size	No. Contacts	Male / Female Contacts	Wire length (0900 = 900mm)	Wire Guage	Type

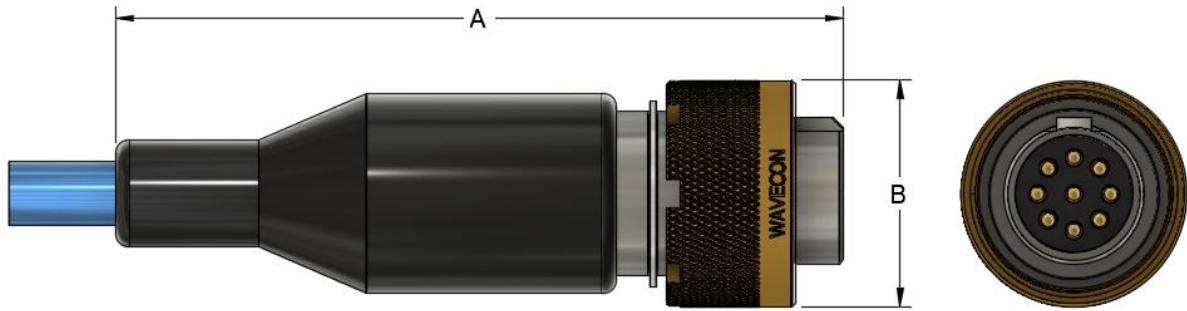
**Blanks**

<b>BR</b>	<b>W</b>
BR – Blank for Receptacle PL – Blank for Plug	Shell Size

**Material**

<b>Part</b>	<b>Material</b>
Connector Shell	Stainless Steel 316L
Locking Collar	C63000 Nickel Aluminium Bronze
Locking Collar Washers	Acetal
Contact Insert	PEEK
Electrical Contact	CuZn 1um Au over Ni
O Ring	Nitrile NI70 Shore A

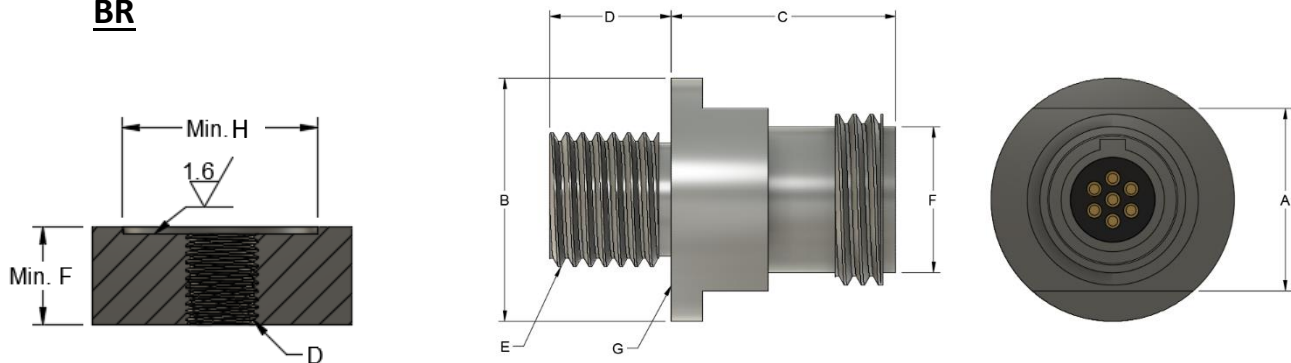
**Plug – Molded (PL)**



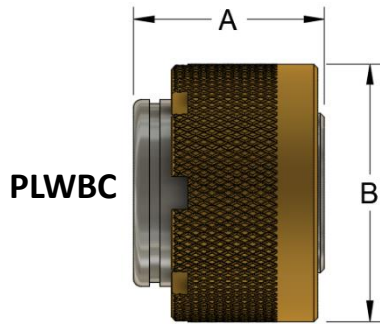
<b>A</b>	<b>B</b>
<b>Approx. 56</b>	<b>16</b>

**Bulkheads**

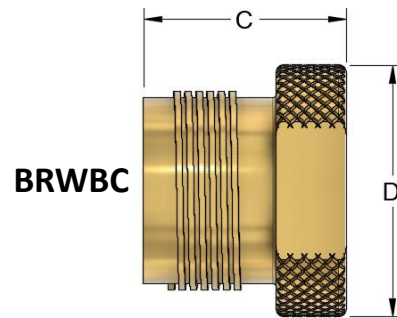
**BR**



<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G O Ring</b>	<b>H</b>	<b>Type</b>
<b>15</b>	<b>∅ 20</b>	<b>∅18.5</b>	<b>10</b>	<b>7/16-20 UNF</b>	<b>12</b>	<b>16x1 &amp; 12x1</b>	<b>21</b>	<b>03</b>

**Blanks**

A	B
12	16



C	D
16	16

**Pin Face View**



3 WAY  
600 VDC



4 WAY  
600 VDC



5 WAY  
600 VDC



6 WAY  
600 VDC



7 WAY  
600 VDC

**Socket Face View**



3 WAY  
600 VDC



4 WAY  
600 VDC



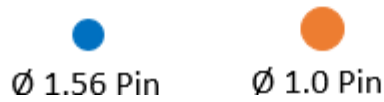
5 WAY  
600 VDC



6 WAY  
600 VDC



7 WAY  
600 VDC



### Current Capacity and Wire Recommendations

- The wire options for bulkheads are governed by the through bore of the bulkhead body and the dimensions of the solder bucket on the contact.
- Heat, caused by an electrical current flowing through a conductor will determine the amount of current that the wire will handle.
- The current rating follows industry standards for a single wire in free air at 30 deg. C with derating for bundled wires.
- The table below shows the current required to raise the temperature of a single insulated conductor to the limits of its insulation temperature.

<b>Contact Dia.</b>	<b>0.75</b>	<b>1.0</b>
Wire Size	24awg	22awg
Current	7A	11A

<b>Derating Factor for Bundled Cables</b>	
Bundle No.	Derating Factor (x Amps)
2 -5	0.8
6 – 15	0.7
16 – 30	0.5

### BC Bulkhead Torque Recommendations

Thread	Torque N/m (Lubricated)	Torque Inch Pound (Lubricated)
7/16-20 UNF	3 – 4	30 – 35
5/8-18 UNF	5 – 7	40 – 45