

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

PL	B	07	M		0900	24
PL – Plug RC – Receptacle	Shell Size A or B	No. Contacts	Male / Female Contacts	H / H1 Hybrid Contact Pattern	Wire length (0900 = 900mm)	Wire Gauge

Bulkhead

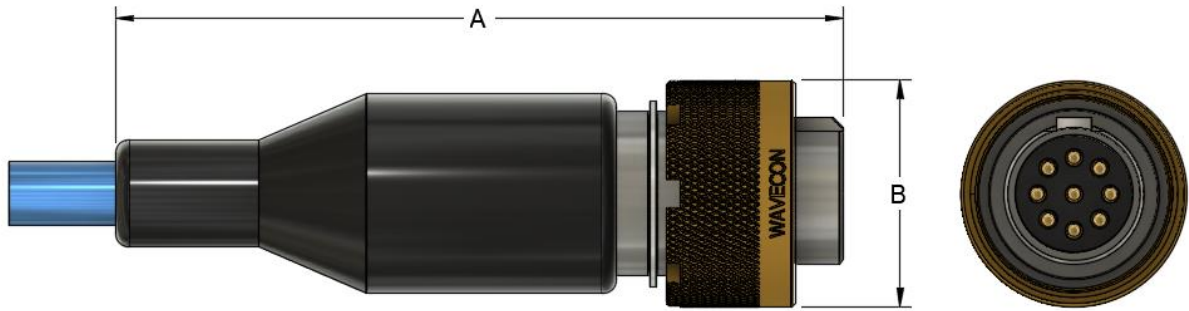
BR	B	07	F		1000	22	18
BR – Bulkhead Receptacle (Thread) FR – Flanged Receptacle	Shell Size A or B	No. Contacts	Male / Female Contacts	H / H1 Hybrid	H / H1 Hybrid Contact Pattern	Wire Gauge	Type

Blanks

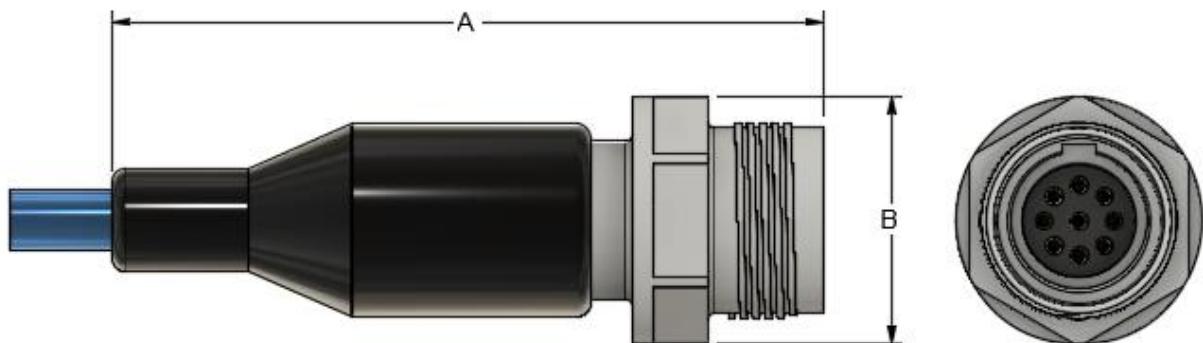
BR	B
BR – Blank for Plug PL – Blank for Receptacle	Shell Size A or B

Material

Part	Material
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)

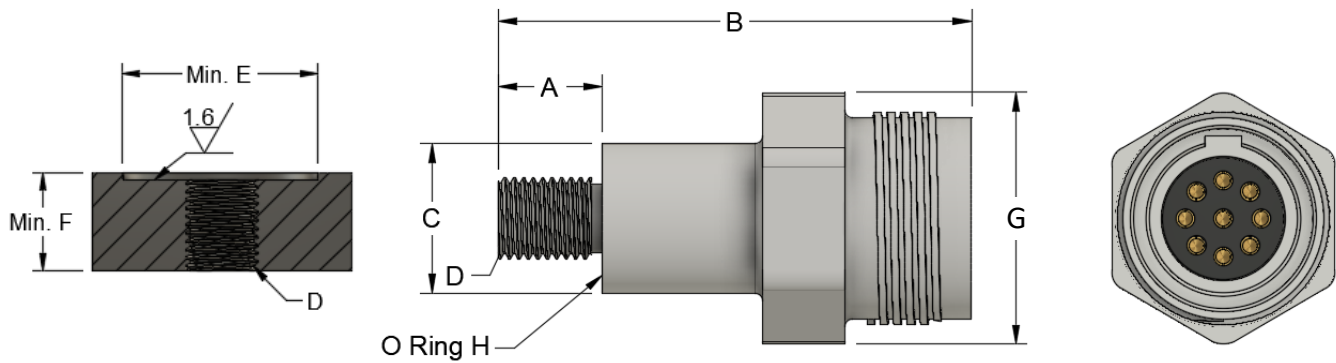
A	B
Approx. 100	32

Receptacle – Molded (RC)

A	B
Approx. 100	36

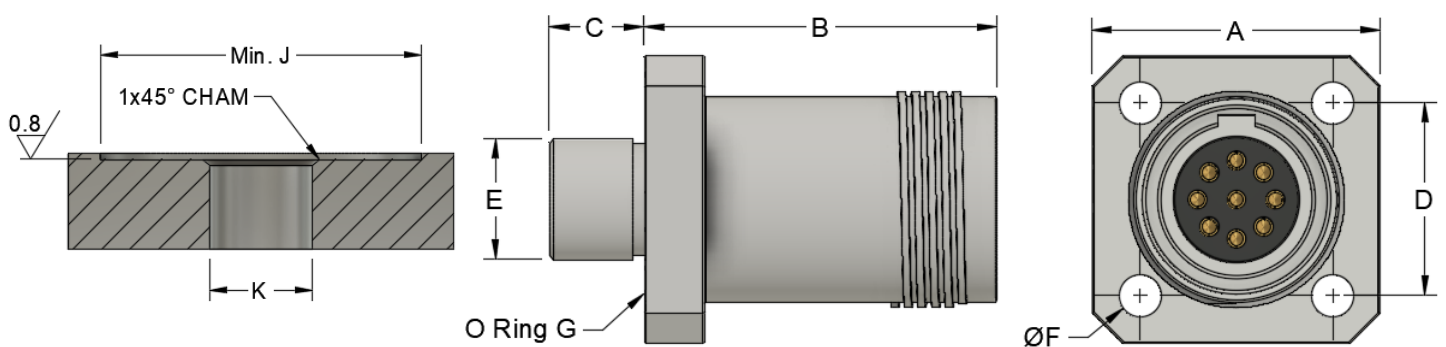
Bulkheads

BR

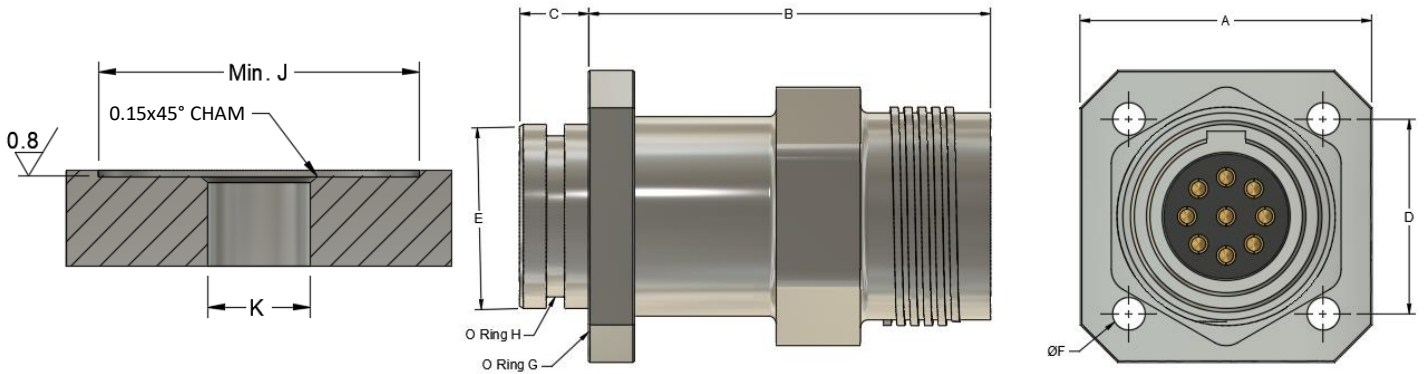


A	B	C	D	E	F	G (A/F)	H	Type
14	60.5	Ø26	5/8-18 UNF	Ø27	10	30	BS017	18
14	63.5	Ø20	7/16-20 UNF	Ø21	10	30	BS014	21
14	60.5	Ø29	3/4-16 UNF	Ø30	10	30	BS019	03

FR

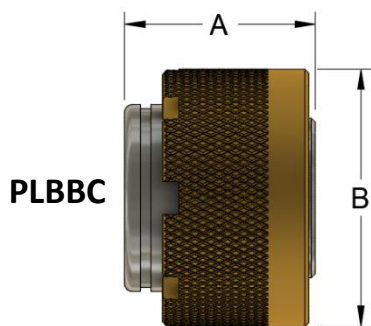


A	B	C	D	E	F	G	J	K	Type
38	46.5	12.5	25.4	Ø15.88	5.6	BS116	Ø50	Ø15.97/16.02	01

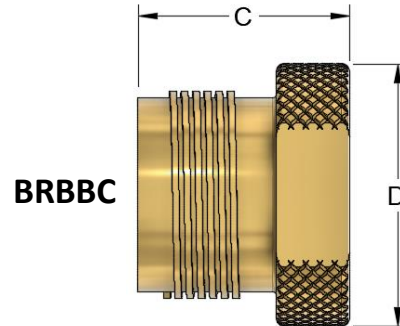


A	B	C	D	E	F	G	H	J	K	Type
38.1	53	9	25.4	Ø 24	Ø 4.25	BS022	BS019	Ø 52	Ø 24.05/24.10	99

Blanks

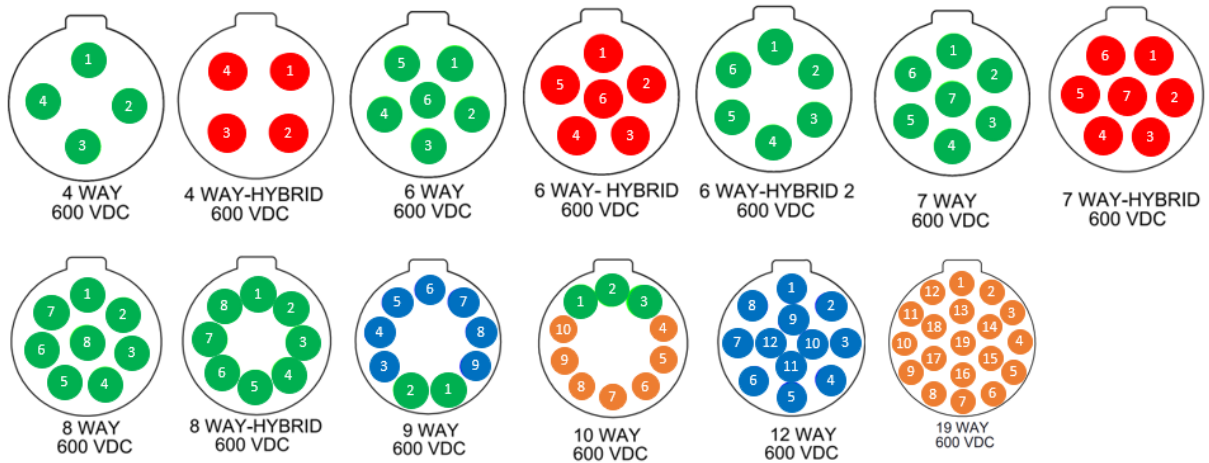


A	B
23.5	32

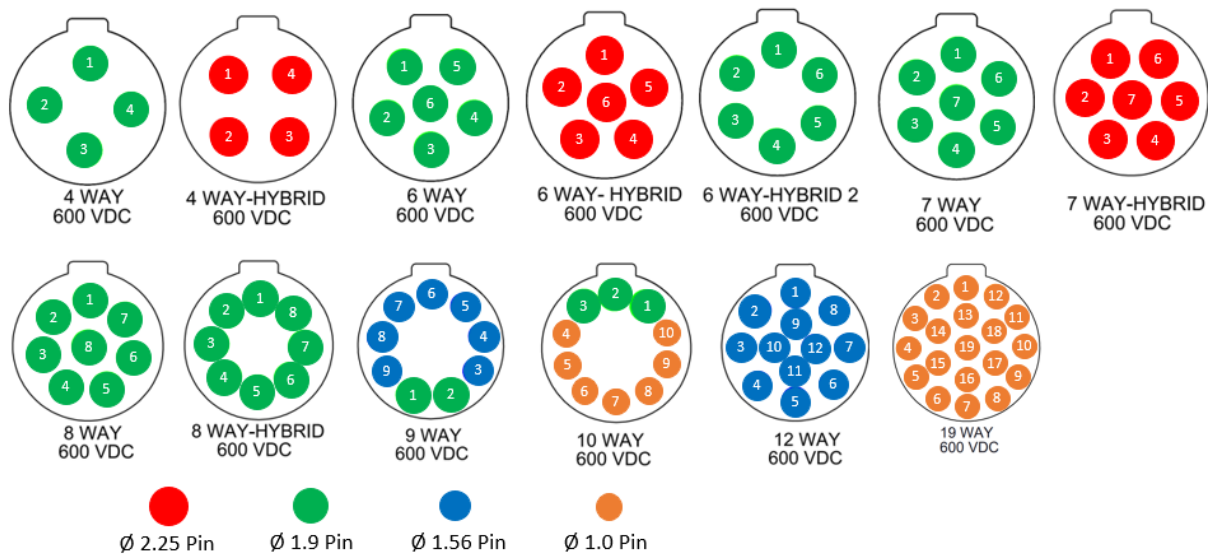


C	D
29	36

Pin Face View



Socket Face View



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.

Contact Dia.	0.75	1.0	1.56	1.9	2.25
Wire Size	24awg	22awg	16awg	14awg	12awg
Current	7A	11A	22A	25A	32A

<u>Derating Factor for Bundled Cables</u>	
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
3/4-16 UNF	7 – 9	60 – 65