

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	A	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	A	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	Wire length (0900 = 900mm)	Wire Gauge	Type

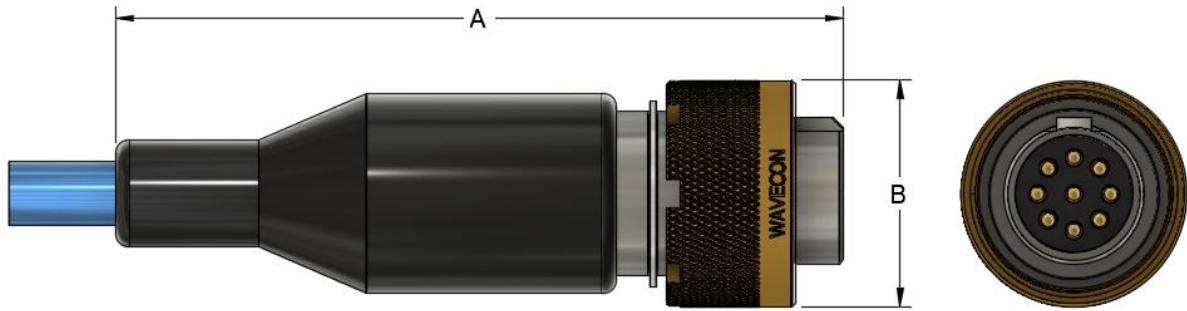
Blanks

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

Material

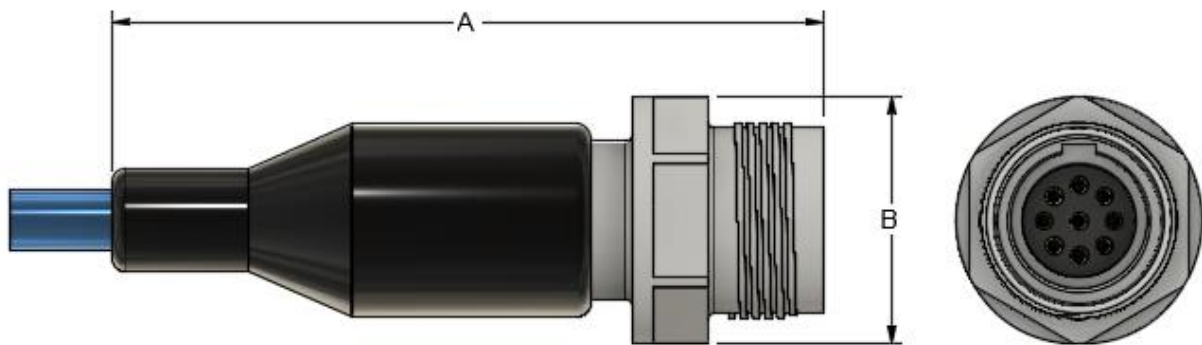
Part	Material
Connector Shell	Stainless Steel 316L
Locking Collar	C63000 Nickel Aluminium Bronze
Locking Collar Washers	Acetal
Contact Insert	PEEK
Electrical Contact	CuZn 1um Au over Ni
O Ring	Nitrile NI70 Shore A

Plug – Molded (PL)



A	B
Approx. 85	25

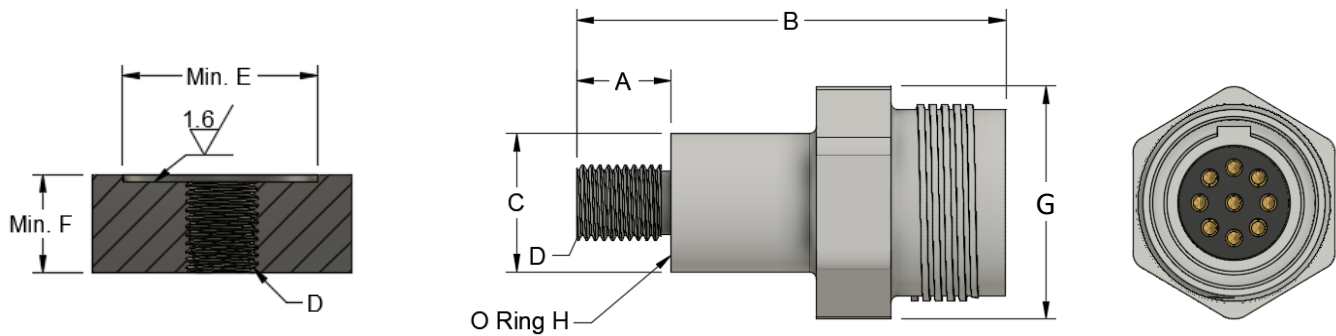
Receptacle – Molded (RC)



A	B
Approx. 85	27.5

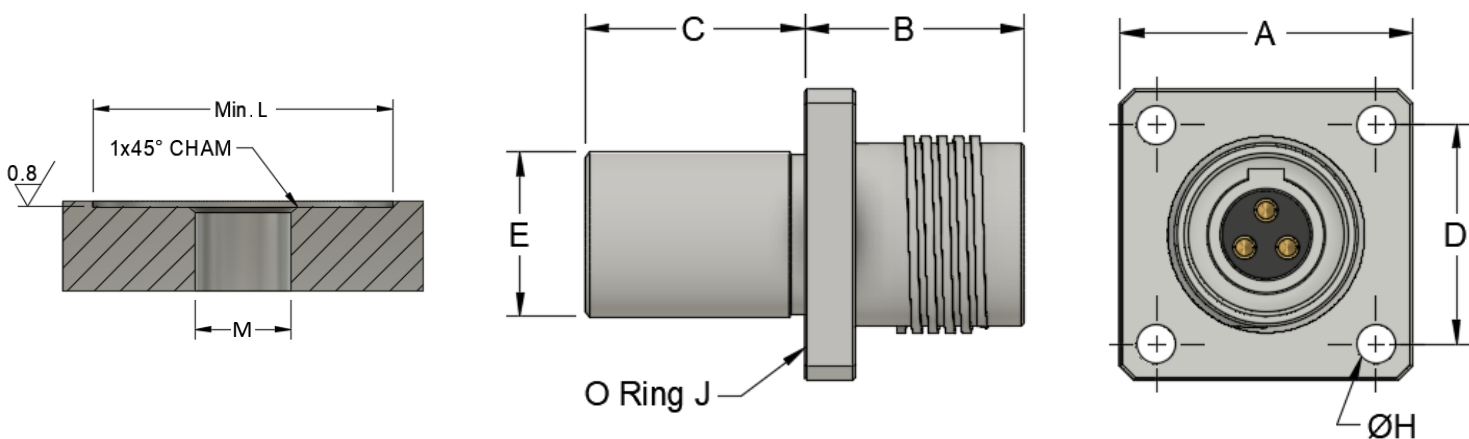
Bulkheads

BR

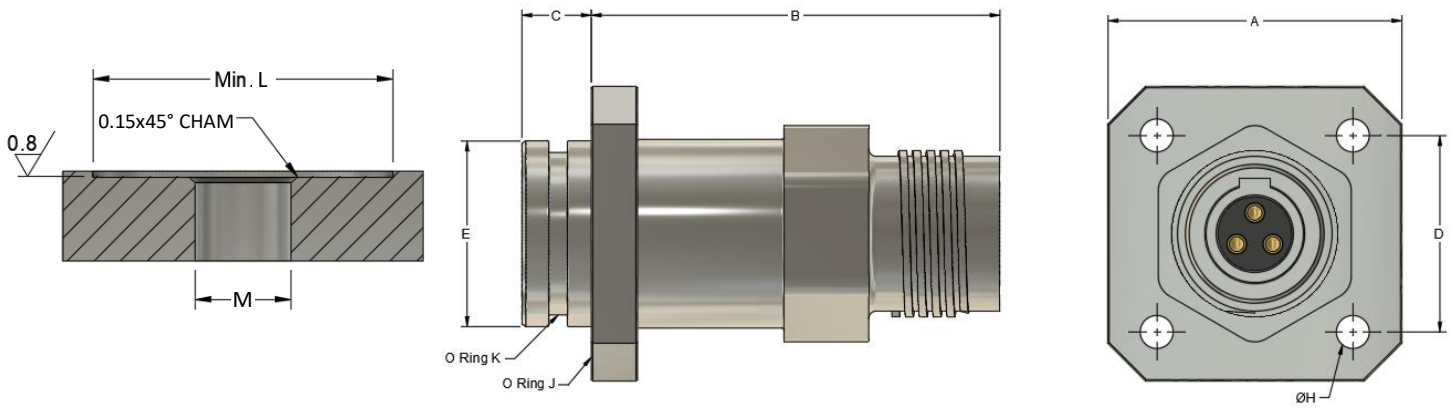


A	B	C	D	E	F	G (A/F)	H	Type
15	62	Ø24.4	5/8-18 UNF	Ø26	12	28	BS017	08
19	66	Ø20	7/16-20 UNF	Ø21	12	24.5	BS014	13
14.5	61.5	Ø23.5	9/16-18 UNF	Ø25	12	25	BS016	03
10	57	Ø23.5	9/16-18 UNF	Ø25	12	25	BS016	04

FR

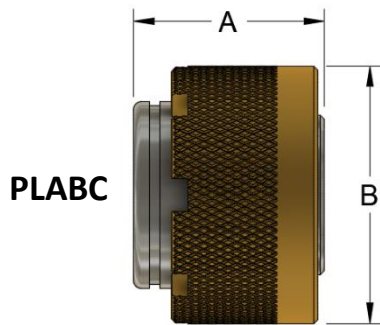


A	B	C	D	E	H	J	L	M	Type
32	24	24	24	Ø18	4.3	BS116	Ø45	Ø18.05/18.1	07

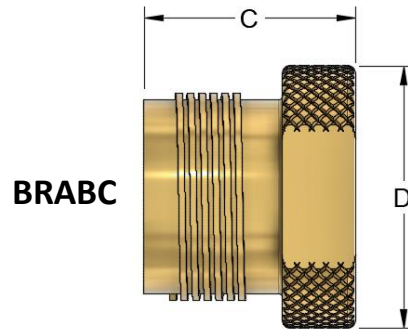


A	B	C	D	E	H	J	K	L	M	Type
38.1	53	9	25.4	Ø 24	Ø 4.25	BS022	BS019	Ø 52	Ø 24.05/24.10	99

Blanks

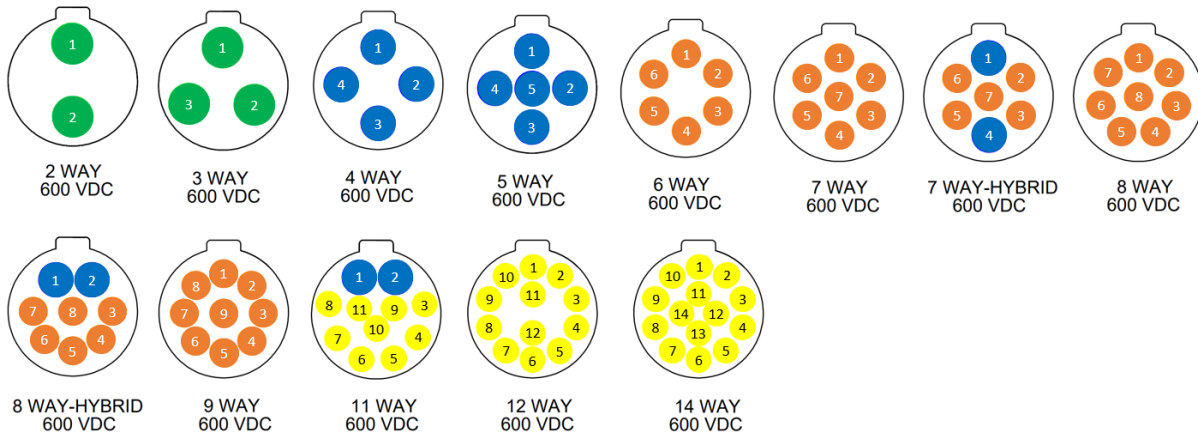


A	B
23.5	25

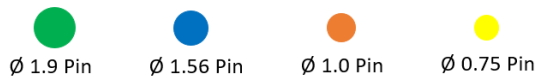
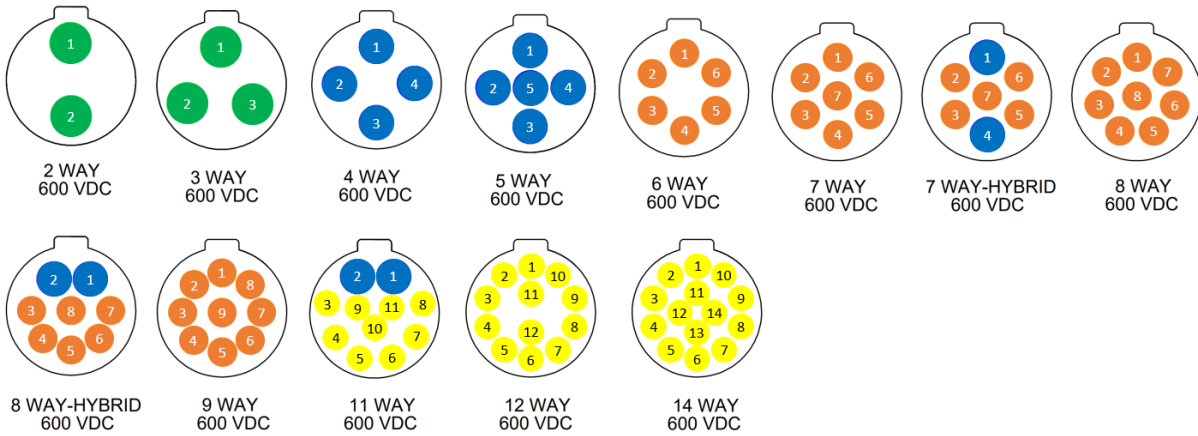


C	D
29	28

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
9/16-18 UNF	5 – 7	40 – 45