

SubConn® Metal Shell series



The SubConn® Metal Shell series represents an alternative to Circular series bulkhead connectors where an even more rugged, resilient and protected underwater connectivity solution is required.

SubConn® Metal Shell series connectors are manufactured from stainless steel and are available in three different shell sizes compatible with industry standards. Flange mountable and bulkhead (male and female) connectors are available as standard and connector configuration ranges from 2 to 12 contacts rated at 300 to 600 V up to 5 to 10 A. SubConn® Metal Shell connectors are designed to mate with compatible standard in-line and dummy connectors.

The connectors feature an integrated locking ring thread on the body and a special POM or stainless steel locking sleeve is used on all connectors. SubConn® Metal Shell connectors come with numbered PTFE leads and feature a high depth rating.

"The SubConn® brand has been extensively used by Valeport for both shallow and deep water product applications. Knowing it is universally accepted worldwide within the industry is important to us."

*Kevin Edwards, Sales & Marketing Manager,
Valeport Limited*

Applications include

- Mating rugged flange mounted connectors with in-line harness cables and connectors
- Defence systems and equipment
- Remotely Operated Vehicle (ROV) systems
- Oceanographic systems, equipment and instrumentation solutions
- Underwater camera, video and lighting systems
- Ocean bottom cable and seismic systems
- Slip ring assemblies

Options include

- Customer specified connector body material
- Customised mating harness cables
- Customer specified cable, pigtail and bulkhead thread lengths
- Electro-mechanical stress terminations
- Certified pressure testing to specific ocean depths

SubConn® Metal Shell 1500

2, 3, 4, 5, 6 and 8 pins and G2 2, 3 and 4 pins

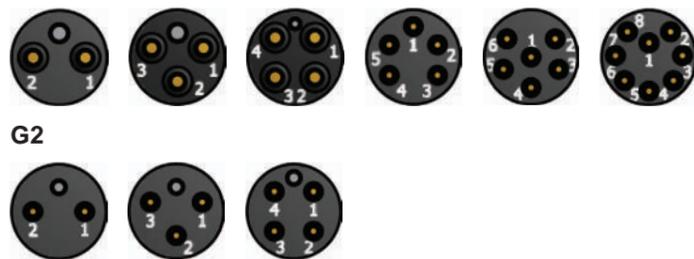
Connector specifications

Voltage rating	300 V AC rms
2, 3 and 4 pin current rating	10 A per pin (max 20 A per connector)
5, 6 and 8 pin current rating	5 A per pin (max 20 A per connector)
G2 2, 3 and 4 pin current rating	5 A per pin (max 20 A per connector)
Insulation resistance	> 200 Mohm
Contact resistance	< 0.01 ohm
Wet matings	> 500
Temperature rating (water)	- 4 to 60°C, 25 to 140°F
Temperature rating (air)	- 40 to 60°C, - 40 to 140°F
Storage temperature rating	- 40 to 60°C, - 40 to 140°F
Depth rating	700 bar, 10.000 psi

Material specifications

Connector body	Chloroprene rubber
Connector housing	Stainless steel AISI 316 (other materials on request)
Contacts	Sockets in gold plated brass UNS - C36000 Male pins in gold plated beryllium copper Stainless steel AISI 303
Location pin	Stainless steel AISI 303
Locking sleeves	ABS
Snap rings	Stainless steel AISI 302
2, 3 and 4 bulkhead leads (30 cm, 1 ft)	20 AWG 0.5 mm ² coloured PTFE
5, 6 and 8 pin bulkhead leads (30 cm, 1 ft)	22 AWG 0.32 mm ² coloured PTFE
G2 2, 3 and 4 bulkhead leads (30 cm, 1 ft)	20 AWG 0.5 mm ² coloured PTFE

Face view (male)

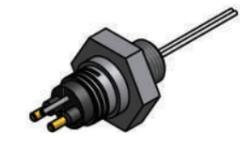
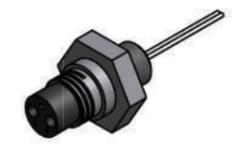
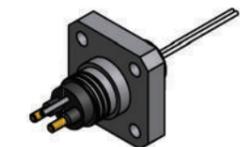
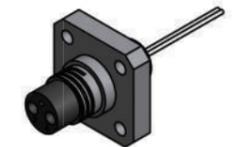
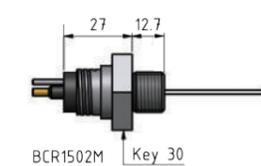
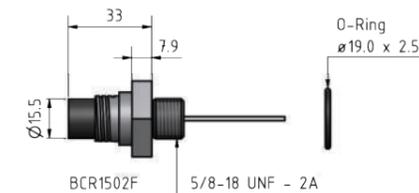
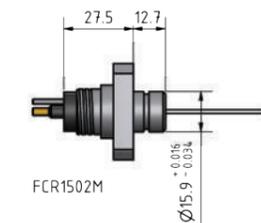
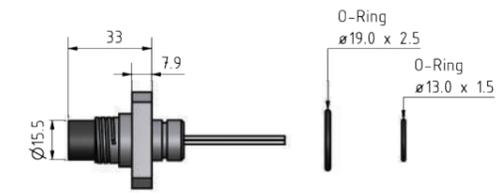
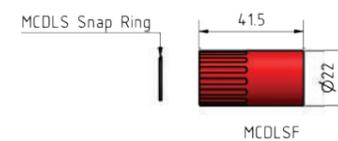


Additional information

Nuts and washers can be supplied in stainless steel AISI 316

For mounting and torque information - see "general technical information" (page 96)

For SubConn® handling instructions - see "general technical information" (page 98)



Metal Shell

Drawing information

Dimensions in mm (1 mm = 0.03937 inch)
Threads in inches (1 inch = 25.4 mm)

SubConn® Metal Shell 2000

2, 3, 4 pins and Micro 10 and 12 pins

Connector specifications

2, 3 and 4 pin voltage rating	600 V AC rms
10 and 12 pin voltage rating	300 V AC rms
2, 3 and 4 pin current rating	10 A per pin (max 30 A per connector)
10 and 12 pin current rating	5 A per pin (max 30 A per connector)
Insulation resistance	> 200 Mohm
Contact resistance	< 0.01 ohm
Wet matings	> 500
Temperature rating (water)	- 4 to 60°C, 25 to 140°F
Temperature rating (air)	- 40 to 60°C, - 40 to 140°F
Storage temperature rating	- 40 to 60°C, - 40 to 140°F
Depth rating	700 bar, 10,000 psi

Material specifications

Connector body	Chloroprene rubber
Connector housing	Stainless steel AISI 316 (other materials on request)
2, 3 and 4 pin contacts	Brass UNS - C36000
10 and 12 pin contacts	Sockets in gold plated brass UNS - C36000
	Male pins in gold plated beryllium copper
Location pin	Stainless steel AISI 303
O-rings	Nitrile
Locking sleeves	POM
Snap rings	Stainless steel AISI 302
2, 3 and 4 pin bulkhead leads (30 cm, 1 ft)	18 AWG 1.0 mm ² tagged PTFE
10 and 12 pin bulkhead leads (30 cm, 1 ft)	20 AWG 0.5 mm ² tagged PTFE

Face view (male)



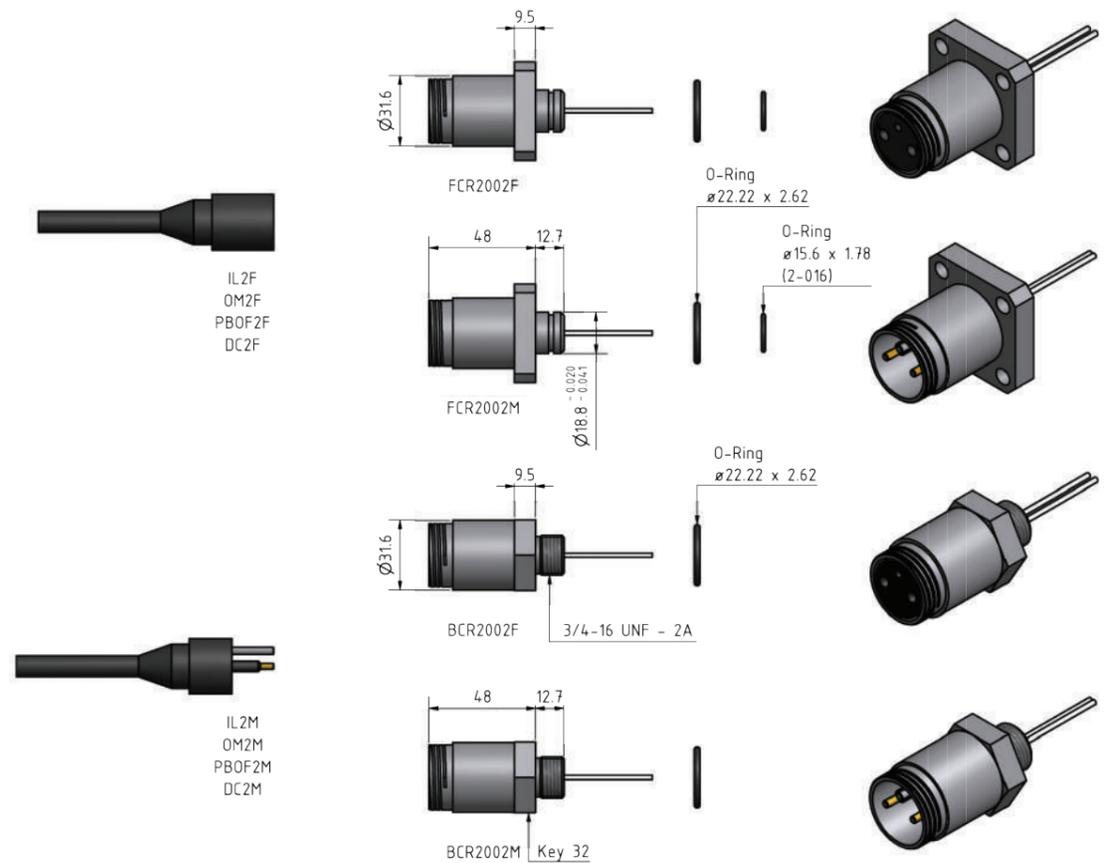
Additional information

Nuts and washers can be supplied in stainless steel AISI 316

Mounting screws can be supplied in stainless steel AISI 316

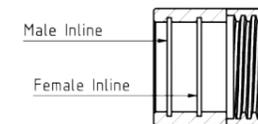
For mounting and torque information - see "general technical information" (page 96)

For SubConn® handling instructions - see "general technical information" (page 98)



Metal Shell

Snap ring placement



With male inline connector - snap ring in outer groove

With female inline connector - snap ring in inner groove

Drawing information

Dimensions in mm (1 mm = 0.03937 inch)
Threads in inches (1 inch = 25.4 mm)

SubConn® Metal Shell 2400

6, 8 and 10 pins

Connector specifications

Voltage rating	600 V AC rms
Current rating	10 A per pin (max 50 A per connector)
Insulation resistance	> 200 Mohm
Contact resistance	< 0.01 ohm
Wet matings	> 500
Temperature rating (water)	- 4 to 60°C, 25 to 140°F
Temperature rating (air)	- 40 to 60°C, - 40 to 140°F
Storage temperature rating	- 40 to 60°C, - 40 to 140°F
Depth rating	700 bar, 10,000 psi

Material specifications

Connector body	Chloroprene rubber
Bulkhead body	AISI 316 (other materials on request)
Contacts	Brass UNS - C36000
Location pin	Stainless steel AISI 303
O-rings	Nitrile
Locking sleeves	POM
Snap rings	Stainless steel AISI 302
Bulkhead leads (30 cm, 1 ft)	18 AWG 1.0 mm ² tagged PTFE

Face view (male)



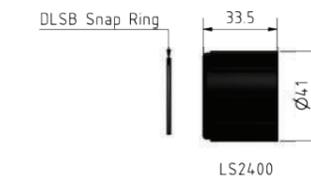
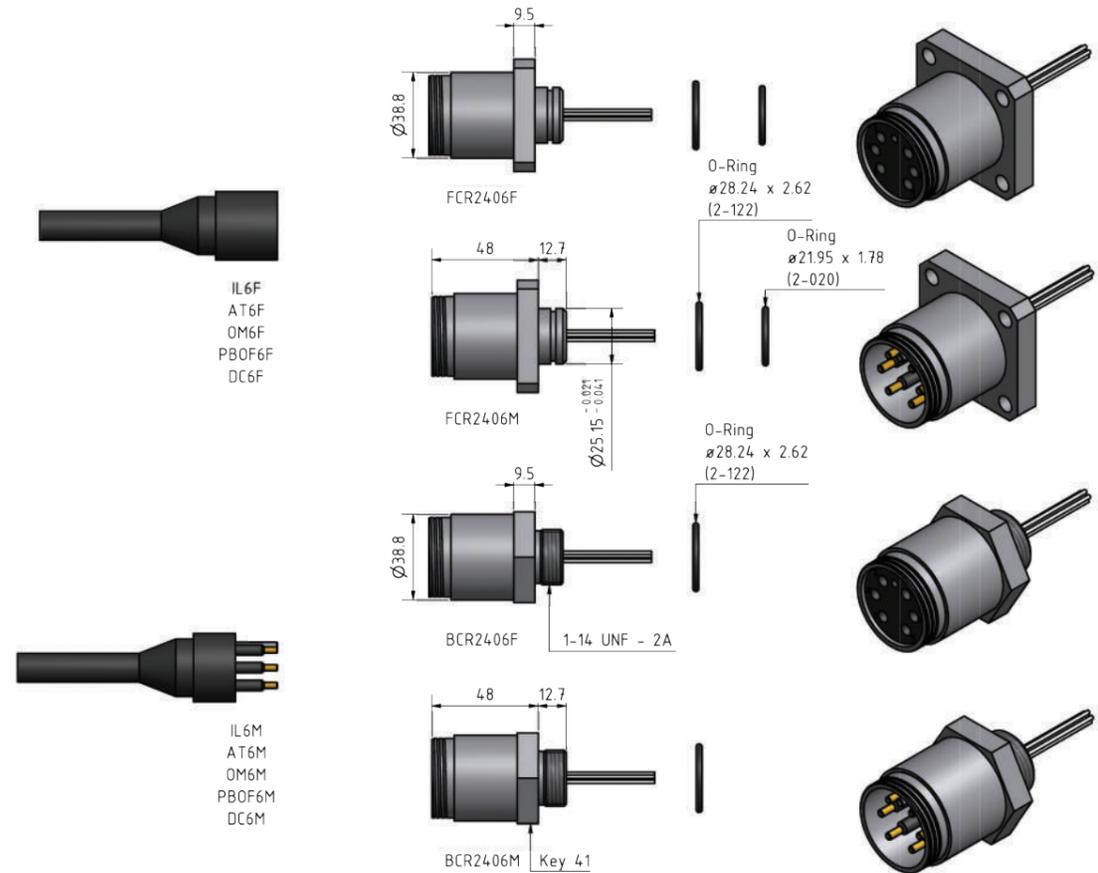
Additional information

Nuts and washers can be supplied in stainless steel AISI 316

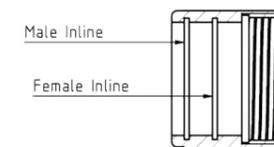
Mounting screws can be supplied in stainless steel AISI 316

For mounting and torque information - see "general technical information" (page 96)

For SubConn® handling instructions - see "general technical information" (page 98)



Snap ring placement



With male inline connector - snap ring in outer groove

With female inline connector - snap ring in inner groove

Drawing information

Dimensions in mm (1 mm = 0.03937 inch)
Threads in inches (1 inch = 25.4 mm)