

GENERAL INFORMATION

COMPONENT	MATERIAL
BULKHEAD BODY (BCR/FCR)	316 Stainless Steel
CCP BODY	316 Stainless Steel c/w CA630 engaging nut
CONTACT INSERT	Glass filled epoxy per B/A XS-2748
ELECTRICAL CONTACTS	Copper alloy gold plated per MIL-G-45204
ENGAGING NUT	CA630
O-RING	Nitrile (formerly known as Buna N)

CATEGORY	VALUE
MATED PRESSURE	Varies by product up to 20,000 psi Mated and potted depending on shell material
VOLTAGE	600 VDC as standard although higher voltage ratings are available. Please contact SEACON for further information
CURRENT RATING	Up to 23 amps dependent on contact size and cable

OPTIONS:

- Pressure Balanced Oil Filled (PBOF).
- Higher voltages.
- Field installable boots.
- Coax and fiber optic hybrids.
- Custom keying.
- Connector/cable terminations.
- Pigtails on bulkhead connectors.
- Pressure Balanced Oil Filled (PBOF) termination and assembly.
- Open face pressure ratings and testing.
- Available in alternative materials: Aluminum, Titanium, Monel™, PEEK (Polyetheretherketone) etc.

NOTES:

- Connectors are designed for installation on one atmosphere vessels. Please contact SEACON for recommendations if using compensated vessels.

STANDARD MINI-CON CONFIGURATIONS

The below table shows our standard configurations that are more cost effective and more readily available. For further details please contact SEACON.

CONNECTOR	G	K	M	O
BCR	10#22; 7#20	19#22; 10#20; 4#16	37#22; 26#20; 3#14; 4#10; 10#16	On Request
CCP	10#22; 7#20	19#22; 10#20; 4#16	37#22; 26#20; 3#14; 4#10; 10#16	56#22; 44#20
CCPL	On Request	19#22; 10#20; 4#16	37#22; 26#20; 3#14; 4#10; 10#16	On Request
FCR	10#22; 7#20	19#22; 10#20; 4#16	37#22; 26#20; 3#14; 4#10; 10#16	56#22; 44#20
FCRL	On Request	19#22; 10#20; 4#16	37#22; 26#20; 3#14; 4#10; 10#16	On Request

REVERSED MINI-CON CONNECTORS (V-MIN)

The "V" before the MIN prefix in the Part Numbering System (see page 3) represents a reversed miniature insert. Many of our bulkhead connectors are available with sockets instead of pins and the corresponding cable plugs have pins instead of sockets.

Reversed MINI-CON's are an option for applications that require design of cabling/harnessing systems to be electrically sound with respect to "power on" safety requirements.

NOTE:

Reversal of sockets and pins may not be required as the pins in the standard bulkhead connectors are recessed approximately one quarter of an inch (1/4"). Please refer to the contact configurations page for further information or contact SEACON for recommendations on your specific application.

FIBER OPTIC MINI-CON CONNECTORS

As organizations in the subsea industry continue to develop more applications with fiber optic technology in mind, there has been a dramatic increase in the quality and complexity of electro-optic connector configurations required to suit these applications. Multi-channel hybrid connectors are finding increased usage in sonar and surveillance systems, real time video applications, ROV's/AUV's and geophysical search equipment to name but a few of the industries taking advantage of the latest fiber optic connection technology.

In order to serve the changing needs of it's customers, SEACON has developed a complete range of fiber optic products built to withstand a variety of environmental conditions, including hydrostatic pressure, thermal and explosive shock and vibration. As well as developing fiber optics for specific customer requirements, SEACON has added fiber optic capabilities to existing electrical connector designs including the MINI-CON range. For further information please see the MINI-CON fiber optic contact configurations on page 20 and our Optical Hybrid Dry-Mate products section.

SELF WIPING MINI-CON CONNECTORS

We have developed self wiping connectors to meet two requirements. First, the rubber wipers at each socket location help clean the respective insulator around each male pin. This can help to remove contaminants or moisture that would otherwise lead to a low insulation resistance fault. Second, these connectors have a longer arcing path because of the wiper section and therefore can be rated for much higher voltages than would otherwise be possible in a connector of the same diameter. Please contact SEACON for additional information and availability.

MINI-CON PBOF

The time proven MINI-CON PBOF connector system has been upgraded. The new line which is called the MINI-CON-PBOF-HP (High Pressure) has actually been in service with some of our customers for the last fifteen years. At this time, it is replacing the traditional MINI-CON PBOF across the board. The HP version will intermate with all previous MINI-CON PBOF connectors but some components are different from before. For this reason, if you need replacement connector components, please contact SEACON for those needs. For new applications, the HP connectors will be delivered.

As with previous MINI-CON PBOF connectors, the HP design utilizes a high contact density layout. The HP style transfers the load without a valve by bearing on the insert. This is similar to a valve type system in that the force from the high pressure fluid in the hose is transferred to the bulkhead connector. We realize that our customers have many different applications for this type of system. Please contact us with your requirements and we can quote the appropriate bulkhead connector for your application.