

INTRODUCTION

The **SEACON 55 SERIES** of underwater electrical dry-mate connectors contain significant design improvements over other industry standard connectors, whilst maintaining compatibility and interchangeability with them. This connector range is also available in PEEK (Polyetheretherketone) which was selected for its superior chemical resistance, excellent electrical properties, wear and abrasion resistance and light weight. This PEEK series of connectors are not affected by corrosion or cathodic delamination.

Key features include:-

- Industry Standard Compatibility
- Proven Sealing Technology
- Heavy Duty Stub Acme Threads (except shell size 15)
- Pressure Rated Blanking Caps available

AVAILABILITY

Pressure rated to 10,000 psi (22,500ft/7,000m), the **55 SERIES** is available in 5 shell sizes with up to 24 contacts with PBOF (Pressure Balanced Oil Filled) options. Manufactured from 316L Stainless Steel as standard, other materials are also available upon request including Titanium, Aluminium Bronze and Alloy 625.

APPLICATIONS

This connector range is suitable for a variety of applications including ROV's, underwater cameras, diver communications, lights and pan and tilts.

TESTING

Please contact **SEACON** for details.

SPECIAL ASSEMBLIES

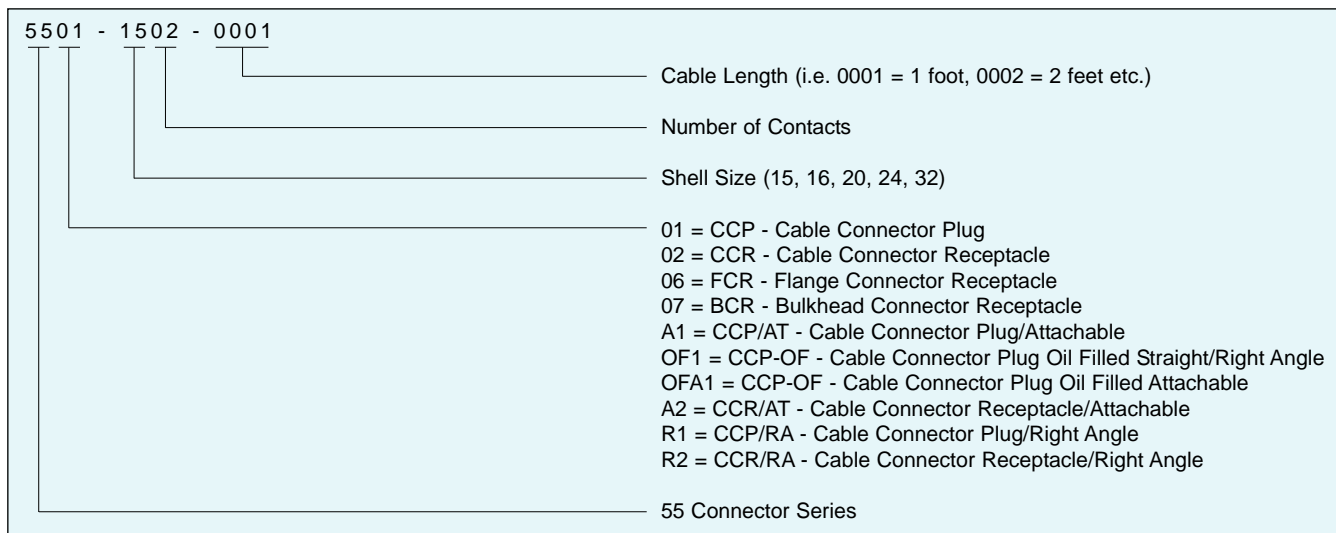
SEACON maintains all facilities necessary to furnish complete underwater and environmental electrical connector/cable systems, including Research and Development, Engineering, Manufacturing, Quality Control and Pressure Testing. As well as supplying our standard 'off-the-shelf' items, we have the capability to design and manufacture **SPECIAL CUSTOMIZED CONNECTORS AND CABLE ASSEMBLIES** to suit your individual needs. **SEACON** also prides itself with the ability to perform stringent quality conformance testing procedures which are in accordance with the MIL-SPEC programs.

Please contact **SEACON** for further information.

ETHERNET

Ethernet compatible connectors in the **55 SERIES** include the 1504 and 2004 for speeds up to 100 mbit/s compatible with Cat5 systems (cable dependant).

The 1508 and 2008 are suitable for speeds up to 1 Gbit/s compatible with Cat5e/6 and the 2013 for speeds up to 1 Gbit/s with the option to have an additional 4 power cores plus a screen, also compatible with Cat5e/6 systems (cable dependant).

PART NUMBER SYSTEM - EXAMPLE**NOTE:**

- Dummy connectors are available. Please contact **SEACON** for details.
- For new high power version availability please see page 10.

GENERAL INFORMATION

COMPONENT	MATERIAL
CONNECTOR SHELL	STANDARD: 316L Stainless Steel electro polished. OPTIONAL: Titanium, Aluminium Bronze, Alloy 625 & PEEK. Others available upon request.
ENGAGING NUT	STANDARD: 316L Stainless Steel coated with a special anti-galling compound. OPTIONAL: Titanium, Aluminium Bronze & Alloy 625. Others available upon request.
ELECTRICAL CONTACTS	Copper Alloy and gold plated per MIL-G-45204.
CONNECTOR BODY	STANDARD: Neoprene. OPTIONAL: Nitrile, Hypalon. Others available upon request.
OVERMOULD (STANDARD)	Neoprene, Nitrile, Hypalon. Others available upon request.
CABLE	STANDARD: Neoprene. OPTIONAL: Polyurethane & Polyethylene. Others available upon request.
BULKHEAD TAILS	P.T.F.E insulated #16 AWG. Others available upon request. Please contact SEACON.

CATEGORY	VALUE
PRESSURE	10,000 psi mated and un-mated.
VOLTAGE RATING (STANDARD)	600 VDC/440 VAC. 3kVDC for new high power version.
CURRENT (MAXIMUM)	5 to 18 amps dependant on contact and cable conductor size. 50 amps for new high power version.
OPERATING TEMPERATURE	-4°F to 194°F (-20°C to 90°C).
BULKHEAD MOUNTING TORQUE	15 shell size = 125 inch/lbs.* 16 shell size = 125 inch/lbs.* 20 shell size = 165 inch/lbs.* 24 shell size = 225 inch/lbs.* 32 shell size = 325 inch/lbs.*
MATING CYCLES	500.

NOTES:

- * Torque values refers to installation into dry metal threads.

CURRENT TABLE

WIRE GAUGE	CAPACITY AMPS			
	1-3 Conductors	4-6 Conductors	7-9 Conductors	10-25 Conductors
18	7	5	4	4
16	10	8	6	5
14	15	12	10	9
12	20	20	14	12
8	50	40	32	30