

**S E A C O N**

**WET-CON / Micro WET-CON /  
Micro WET-CON SPLIT**

UNDERWATER ELECTRICAL WET-MATE CONNECTORS



**S E A C O N**



# **WET-CON** SERIES

---

**UNDERWATER ELECTRICAL WET-MATE CONNECTORS**

SECTION	PAGE
<b>WET-CON SERIES</b>	
Product News - Connector Enhancements .....	WC 3
IP68 and IPX8 Awarded to SEACON (europe) Ltd .....	WC 3
Introduction .....	WC 4
Availability .....	WC 4
Applications .....	WC 4
Special Assemblies .....	WC 4
Part Number Description System .....	WC 4
General Information .....	WC 5
Ampacity Chart for Standard Parts .....	WC 5
Standard Wiring Color Code .....	WC 5
Dimension Details:	
BH-MP (2 - 10 Contacts) .....	WC 6
BH-FS (2 - 10 Contacts) .....	WC 6
IL-MP (2 - 10 Contacts) .....	WC 7
IL-FS (2 - 10 Contacts) .....	WC 7
BH-MP (12 - 16 Contacts) .....	WC 8
BH-FS (12 - 16 Contacts) .....	WC 8
IL-MP (12 - 16 Contacts) .....	WC 9
IL-FS (12 - 16 Contacts) .....	WC 9
DLS-F .....	WC 10
DLS-M .....	WC 10
LPBH-MP .....	WC 11
LPBH-FS .....	WC 11
LPIL-MP .....	WC 12
LPIL-FS .....	WC 12
Interface Details .....	WC 13
Contact Configurations .....	WC 14
<b>Micro WET-CON SERIES SECTION</b> .....	MWC 1-17
<b>Micro WET-CON SPLIT SERIES SECTION</b> .....	MWC 18-24

# PRODUCT NEWS

## WET-CON SERIES CONNECTOR ENHANCEMENTS

### INTRODUCTION

As part of our continuous improvement process the SEACON Group consistently reviews its product ranges through both customer feedback and internal improvements. It is via these processes that SEACON identified a design enhancement to the WET-CON connector ranges.

### DESIGN FEATURES

The design change is associated with the Male Pin connectors only and has been introduced to improve and extend the life of the connectors by decreasing the stresses that are applied to the sealing interface between the male contact pin and the sealing rubber around the pin during the connectors mate and de-mate cycles.

The newly designed male contact has a "Lead in" as part of the contact pin itself which replaces the current rubber lead in. The introduction of the new pin removes any potential wear to the sealing interface between the male contact pin and the sealing rubber around the pin which may occur with many repeated make and breaks of the connector pairs. The new pin will maintain the full connector sealing properties and will provide a greater life expectancy of the connectors.

The incorporation of this design change to the Male Pin connectors will not affect the existing Female Socket connectors currently being used by SEACON's customers and therefore full intermateability will be maintained. In addition, SEACON would also like to confirm that pricing will also not be affected.

### TESTING

This new pin design concept has been fully tested and has been utilized in both the U-MATE and SEA-MATE connector ranges for a number of years.

## IP68 AND IPX8 CERTIFICATION AWARDED TO SEACON (europe) LTD

SEACON (europe) Ltd is pleased to advise that its WET-CON connector series is now approved to IP Codes (Ingress Protection) 68 and X8. These two international standards classify the level of protection provided against the intrusion of dust and water in electrical enclosures.

In order to meet the requirements of the IP68 and IPX8 standards, sample connectors were sent to an independent testing house and subjected to various tests as per the agreed program including pressure testing to 101 bar for a 24 hour period. All test samples successfully passed and therefore conform to the following conditions:

- Dust tight - No ingress of dust, complete protection against contact with dust.
- Immersion beyond 1 meter - Suitable for continuous immersion in water, under conditions specified by SEACON (europe) Ltd.



**INTRODUCTION**

SEACON's WET-CON connector series was developed to provide inexpensive yet reliable rubber molded connectors that allow the user to make and break connections both on the surface and underwater.

Manufactured using only high quality materials, the WET-CON bulk-head connector's metal shell is produced using DGS 1043 (UK spec) or CA630 per QQ-C-465 as standard, although other materials are available upon request including PEEK (Polyetheretherketone) which offers superior chemical resistance, excellent electrical properties, wear and abrasion resistance and is light weight. Contacts are gold plated to ASTM B488 providing superior corrosion resistance and stainless steel guide pins ensure "no miss" mating.

**AVAILABILITY**

This connector range is available in a number of configurations ranging from 1 to 16 contacts rated upto 19 amps maximum current (dependent on cable) and a mated pressure rating of upto 20,000 psi.

The WET-CON series is also available with a metal shell body, individual single tail, extended metal shoulder. For further information please contact SEACON.

**APPLICATIONS**

The WET-CON series is suitable for a variety of applications including underwater television and lights, diver communications, ROV systems, recreational submersibles, towed-array cable systems, current meters, animal migration and research and food processing equipment.

**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.

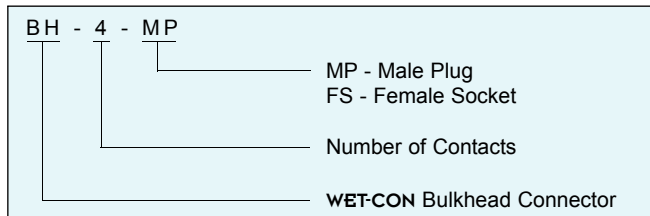
**NOTES:**

WET-CON connectors are intended to mate with WET-CON connectors only. Although the WET-CON and ALL-WET connectors look similar, the numbering pattern and color codes are not the same.

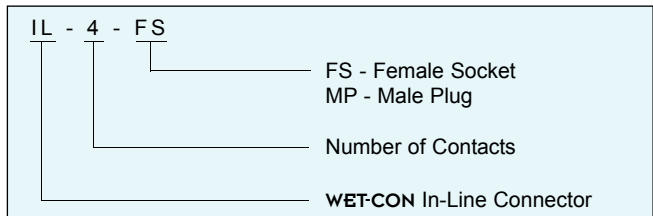
We recommend, as general practice, to verify color code and pin location before installation.

**PART NUMBER DESCRIPTION SYSTEM - EXAMPLE**

**WET-CON BULKHEAD CONNECTORS**

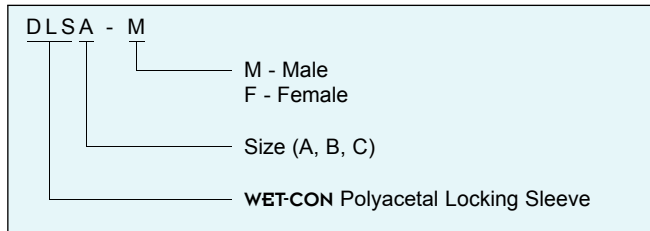


**WET-CON IN-LINE CONNECTORS**



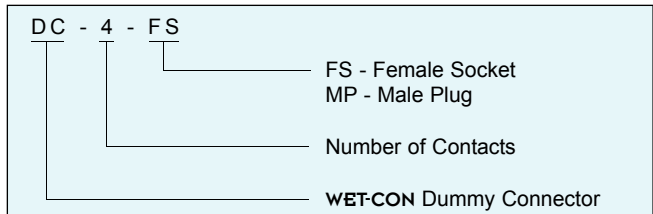
**WET-CON LOCKING SLEEVES**

Locking Sleeves are available for WET-CON connectors as an option.



**WET-CON DUMMY CONNECTORS**

Dummy connectors are available parts in the WET-CON Series.



**NOTES:**

- Size A fits 2, 3, 4 and 5 contact patterns.
- Size B fits 6, 8 and 10 contact patterns.
- Size C fits 12 and 16 contact patterns.

## GENERAL INFORMATION

COMPONENT	MATERIAL
<b>BULKHEAD BODY:</b> <b>STANDARD:</b> <b>OPTIONAL:</b>	DGS 1043 or CA630 per QQ-C-465 316 Stainless Steel (no cost option), 6061-T6 Aluminum, Hard Anodized
<b>CONNECTOR BODY:</b> <b>STANDARD:</b> <b>OPTIONAL:</b>	Neoprene per B/A X5727 Hypalon per B/A X6830 or PEEK (Polyetheretherketone)
<b>CONTACTS</b>	Copper Alloy Gold Plated per ASTM B488
<b>GUIDE PINS</b>	304 Stainless Steel
<b>O-RINGS</b>	Nitrile (formerly known as Buna N)
<b>IN-LINE CABLE</b>	#18 AWG SO Cable as standard #14 or #16 AWG SO Cable available dependent on connector size
<b>BULKHEAD PIGTAILS</b>	TFE insulated wire, type E hook-up wire, 18 inches

CATEGORY	VALUE
<b>OPEN FACE PRESSURE BULKHEAD</b>	Up to 1,000 psi (2,300 ft)
<b>MATED PRESSURE BULKHEAD</b>	Up to 10,000 psi (23,000 ft)
<b>MATED PRESSURE IN-LINES</b>	Up to 20,000 psi (46,000 ft)
<b>VOLTAGE</b>	600 VDC (with standard cable)
<b>CURRENT</b>	Up to 19 amps per contact
<b>CONTACT RESISTANCE</b>	<0.01 ohms
<b>INSULATION RESISTANCE</b>	>500 megohms after wet mating
<b>MATING CYCLES</b>	>500 wet matings
<b>OPERATING TEMPERATURE</b>	25° to 140°F (-4° to 60°C)

## NOTES:

- Locking sleeves are not standard and must be ordered separately. Available in Polyacetal.
- Bulkhead nut/washer is not standard and must be ordered separately. Available in Brass or 316 Stainless Steel.
- In-line cable and hook up wire is 18 inch standard length. Longer length to be specified when ordering.
- In-line cable is available in #14 or #16 AWG SO. Cable other than SO will be terminated and over-molded to a bulkhead connector.

## AMPACITY CHART FOR STANDARD PARTS (18 AWG SO CABLE)

PART DESCRIPTION NUMBER OF CONTACTS	AMPACITY
IL-BH-2	10 amps
IL-BH-3	7 amps
IL-BH-4	5.6 amps
IL-BH-5	5.6 amps
IL-BH-6	5.6 amps

PART DESCRIPTION NUMBER OF CONTACTS	AMPACITY
IL-BH-8	4.9 amps
IL-BH-10	3.5 amps
IL-BH-12	3.5 amps
IL-BH-16	3.5 amps

## NOTE:

- Higher ampacities are available.

## STANDARD IN-LINE WIRING COLOR CODE (SO CABLE)

CONTACT #	COLOR
1	BLACK
2	WHITE
3	RED *
4	GREEN
5	ORANGE
6	BLUE
7	WHITE/BLACK
8	RED/BLACK

CONTACT #	COLOR
9	GREEN/BLACK
10	ORANGE/BLACK
11	BLUE/BLACK
12	BLACK/WHITE
13	RED/WHITE
14	GREEN/WHITE
15	BLUE/WHITE
16	BLACK/RED

## NOTE:

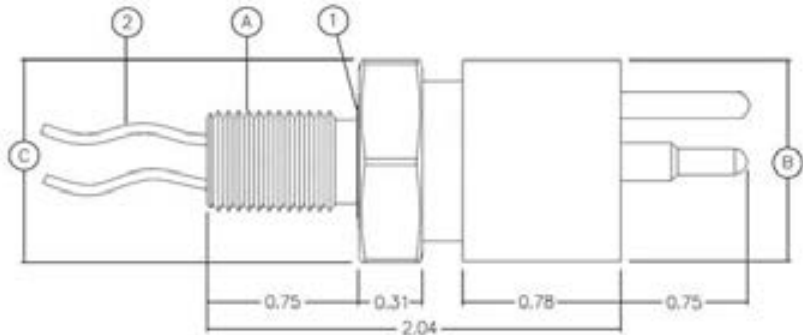
- \* For 3 contact configurations wiring color code is GREEN.

## CAUTION:

WET-CON connectors are intended to mate with WET-CON connectors only. Although the WET-CON and ALL-WET connectors look similar, the numbering pattern and color codes are not the same. We recommend, as general practice, to verify color code and pin location before installation.

### WET-CON SERIES BH-MP (2 - 10 contacts)

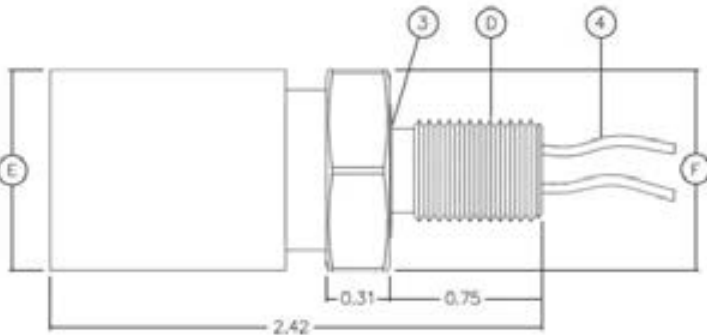
WET-CON Bulkhead Connector Male Plug  
Mates with IL-FS  
Dummy Connector: DC-FS



CONNECTOR	A - THREAD	1 - O-RING	B - Ø (INCHES)	C - HEX FLATS (INCHES)	2 - HOOK-UP WIRE
BH-2-MP	7/16-20 UNF-2A	2-014	1.00	0.75	18 AWG
BH-3-MP	7/16-20 UNF-2A	2-014	1.00	0.75	18 AWG
BH-4-MP	7/16-20 UNF-2A	2-014	1.00	0.75	18 AWG
BH-5-MP	7/16-20 UNF-2A	2-014	1.00	0.75	18 AWG
BH-6-MP	5/8-18 UNF-2A	2-017	1.25	1.00	18 AWG
BH-8-MP/MPX*	5/8-18 UNF-2A	2-017	1.25	1.00	18 AWG
BH-10-MP	5/8-18 UNF-2A	2-017	1.25	1.00	18 AWG

### WET-CON SERIES BH-FS (2 - 10 contacts)

WET-CON Bulkhead Connector Female Socket  
Mates with IL-MP  
Dummy Connector: DC-MP



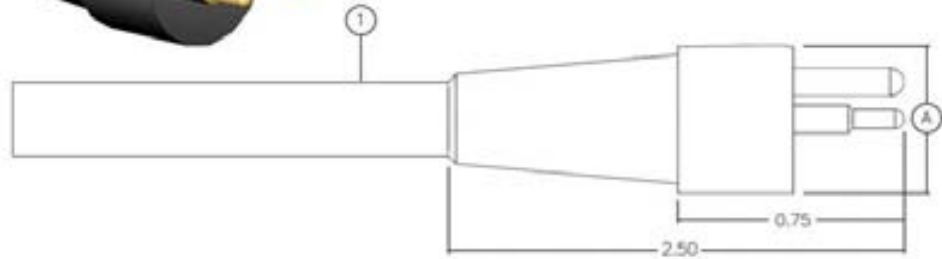
CONNECTOR	D - THREAD	3 - O-RING	E - Ø (INCHES)	F - HEX FLATS (INCHES)	4 - HOOK-UP WIRE
BH-2-FS	7/16-20 UNF-2A	2-014	1.00	0.75	18 AWG
BH-3-FS	7/16-20 UNF-2A	2-014	1.00	0.75	18 AWG
BH-4-FS	7/16-20 UNF-2A	2-014	1.00	0.75	18 AWG
BH-5-FS	7/16-20 UNF-2A	2-014	1.00	0.75	18 AWG
BH-6-FS	5/8-18 UNF-2A	2-017	1.25	1.00	18 AWG
BH-8-FS/FSX*	5/8-18 UNF-2A	2-017	1.25	1.00	18 AWG
BH-10-FS	5/8-18 UNF-2A	2-017	1.25	1.00	18 AWG

**NOTES:**

- Bulkhead mounting torque: 7/16 thread = 50 inch pounds. 5/8 thread = 85 inch pounds.
- Nut and washer: Optional.
- Dummy Connector: Optional.
- Dummy Shorting Plug: Optional.
- O-Ring: Nitrile (formerly known as Buna N).
- Bulkhead leads are tagged with pin number.
- Connectors must be lubricated prior to mating.
- Torque values referenced in this literature assume installation into dry metal threads. For other applications, please contact SEACON for recommendations.
- Connectors are designed for installation on one atmosphere vessels. Contact SEACON for recommendations if using compensated vessels.
- For contact configurations please refer to page 14.
- \* No guide pin. MPX/FSX connectors are recommended for new applications.

**WET-CON SERIES  
IL-MP  
(2 - 10 contacts)**

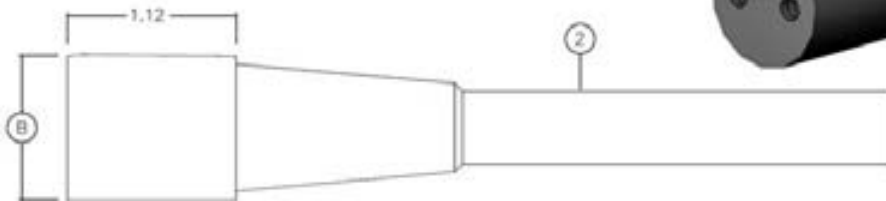
WET-CON In-Line Connector Male Plug  
Mates with BH-FS and IL-FS  
Dummy Connector: DC-FS



CONNECTOR	A - Ø (INCHES)	1 - CABLE
IL-2-MP	1.00	18/2 SO
IL-3-MP	1.00	18/3 SO
IL-4-MP	1.00	18/4 SO
IL-5-MP	1.00	18/5 SO
IL-6-MP	1.25	18/6 SO
IL-8-MP/MPX*	1.25	18/8 SO
IL-10-MP	1.25	18/10 SO

**WET-CON SERIES  
IL-FS  
(2 - 10 contacts)**

WET-CON In-Line Connector Female Socket  
Mates with BH-MP and IL-MP  
Dummy Connector: DC-MP



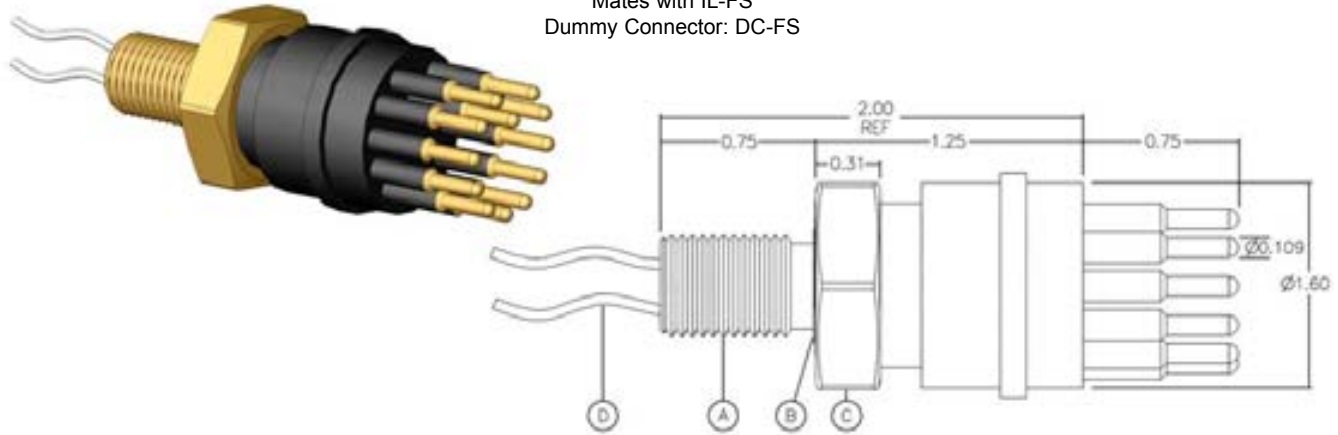
CONNECTOR	B - Ø (INCHES)	2 - CABLE
IL-2-FS	1.00	18/2 SO
IL-3-FS	1.00	18/3 SO
IL-4-FS	1.00	18/4 SO
IL-5-FS	1.00	18/5 SO
IL-6-FS	1.25	18/6 SO
IL-8-FS/FSX*	1.25	18/8 SO
IL-10-FS	1.25	18/10 SO

**NOTES:**

- Locking Sleeve: Optional (see page 10).
- Dummy Connector: Optional.
- Dummy Shorting Plug: Optional.
- Connectors must be lubricated prior to mating.
- \* No guide pin. MPX/FSX connectors are recommended for new applications.

**WET-CON SERIES  
BH-MP  
(12 - 16 contacts)**

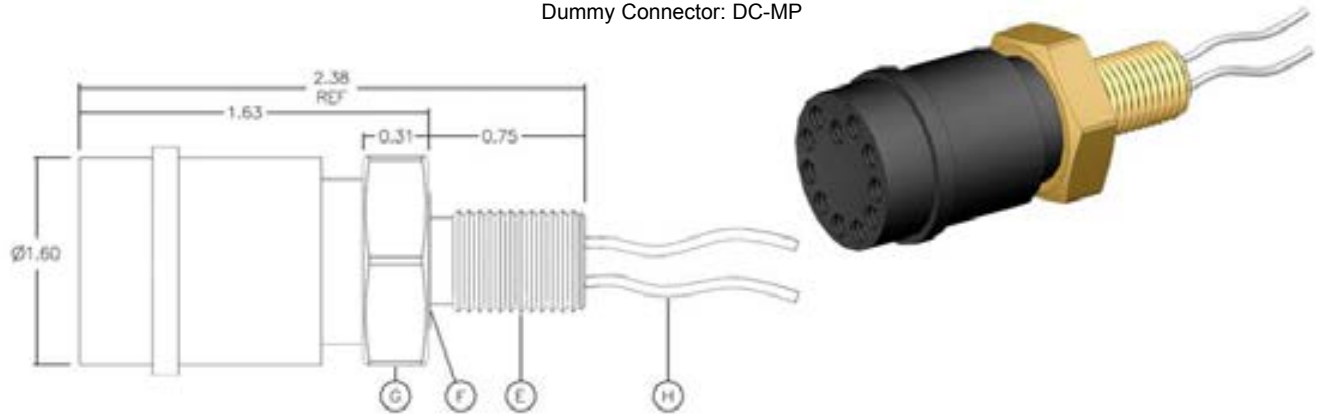
WET-CON Bulkhead Connector Male Plug  
Mates with IL-FS  
Dummy Connector: DC-FS



CONNECTOR	A - THREAD	B - O-RING	C - HEX FLATS (INCHES)	D - HOOK-UP WIRE
BH-12-MP	5/8-18 UNF-2A	2-017	1.00	18 AWG
BH-16-MP	3/4-16 UNF-2A	2-118	1.25	18 AWG

**WET-CON SERIES  
BH-FS  
(12 - 16 contacts)**

WET-CON Bulkhead Connector Female Socket  
Mates with IL-MP  
Dummy Connector: DC-MP



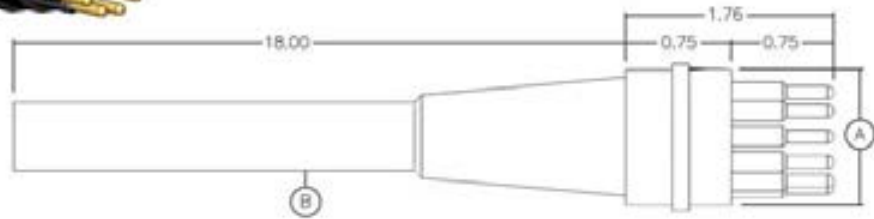
CONNECTOR	E - THREAD	F - O-RING	G - HEX FLATS (INCHES)	H - HOOK-UP WIRE
BH-12-FS	5/8-18 UNF-2A	2-017	1.00	18 AWG
BH-16-FS	3/4-16 UNF-2A	2-118	1.25	18 AWG

**NOTES:**

- Bulkhead Mounting Torque: 5/8 Thread = 85 inch pounds. 3/4 Thread = 85 inch pounds.
- Locking Sleeve: Optional (see page 10).
- Nut and washer: Optional.
- Dummy Connector: Optional.
- Dummy Shorting Plug: Optional.
- O-Ring: Nitrile (formerly known as Buna N).
- Bulkhead leads are tagged with pin number.
- Connectors must be lubricated before mating.
- Torque values referenced in this literature assume installation into dry metal threads. For other applications, please contact SEACON for recommendations.
- Connectors are designed for installation on one atmosphere vessels. Contact SEACON for recommendations if using compensated vessels.
- For contact configurations please refer to page 14.

**WET-CON SERIES  
IL-MP  
(12 - 16 contacts)**

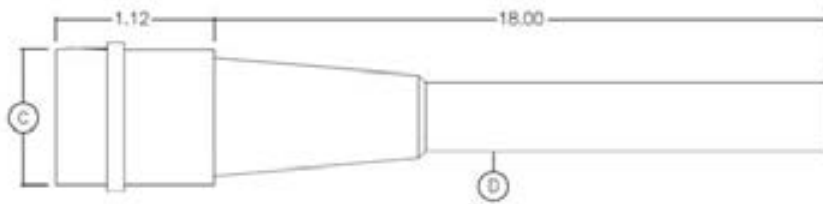
WET-CON In-Line Connector Male Plug  
Mates with BH-FS and IL-FS  
Dummy Connector: DC-FS



CONNECTOR	A - Ø (INCHES)	B - CABLE
IL-12-MP	1.60	18/12 SO
IL-16-MP	1.60	18/16 SO

**WET-CON SERIES  
IL-FS  
(12 - 16 contacts)**

WET-CON In-Line Connector Female Socket  
Mates with BH-MP and IL-MP  
Dummy Connector: DC-MP



CONNECTOR	C - Ø (INCHES)	D - CABLE
IL-12-FS	1.60	18/12 SO
IL-16-FS	1.60	18/16 SO

**NOTES:**

- IL-16-MP WOC is not available, substitute with BH-16-MP.
- Locking Sleeve: Optional (see page 10).
- Dummy Connector: Optional.
- Connectors must be lubricated prior to mating.
- Shorting plugs are available should you require the ability of looping together 'like' circuits for testing purposes within the dummy. Pin to pin shorting details need to be supplied at time of order placement.

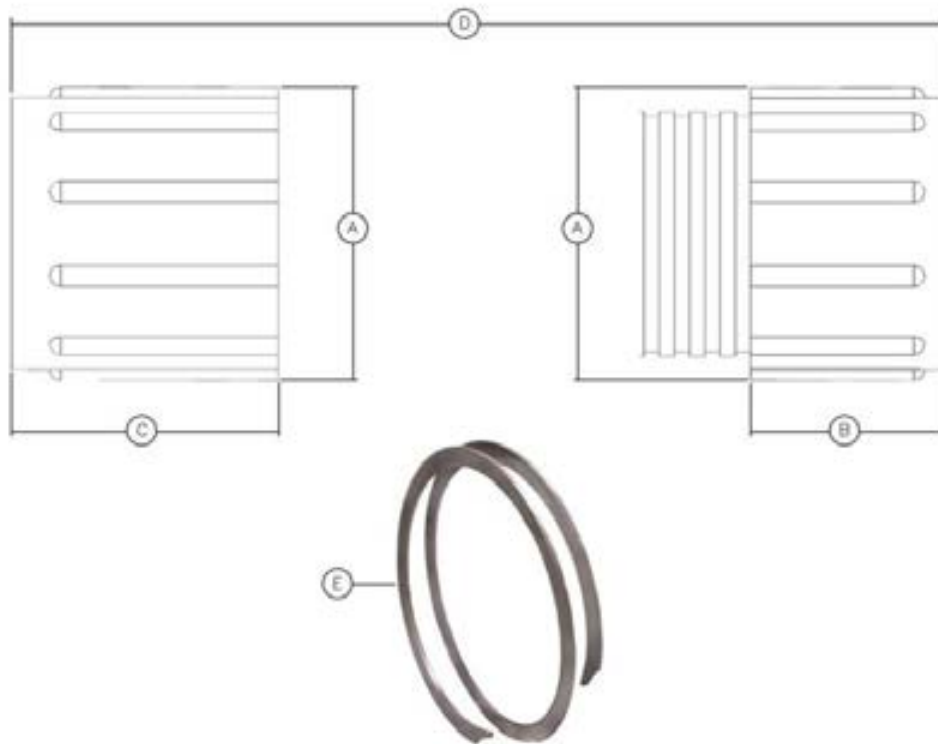
**WET-CON SERIES  
DLS-F**

WET-CON Locking Sleeve Female



**WET-CON SERIES  
DLS-M**

WET-CON Locking Sleeve Male



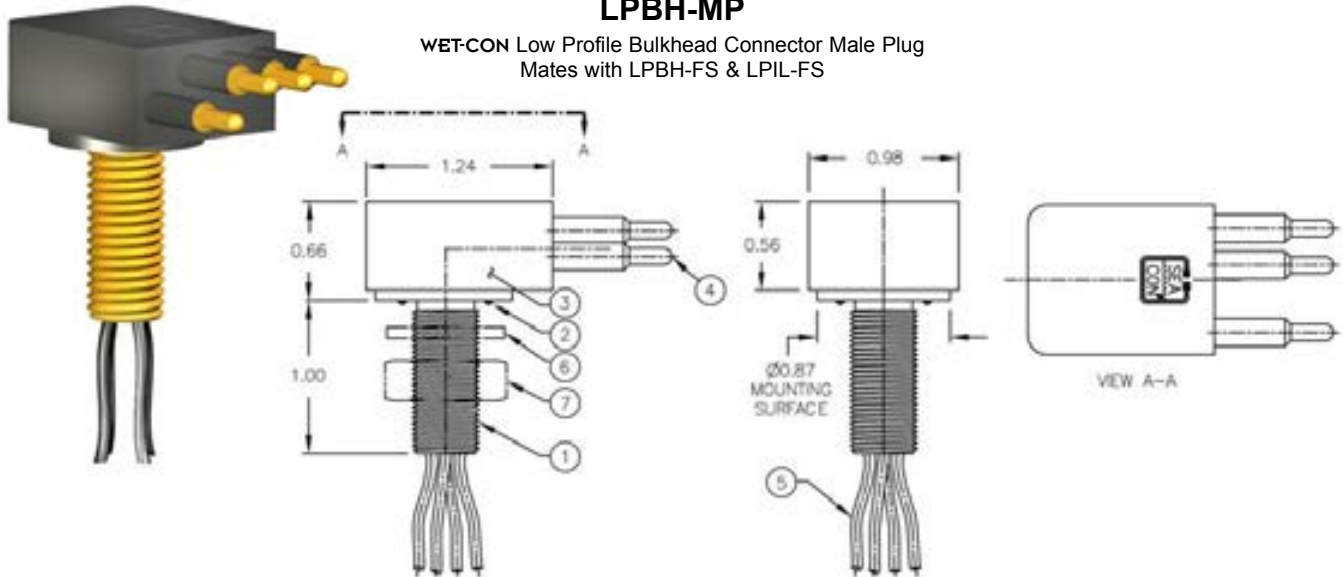
LOCKING SLEEVE	A - Ø (INCHES)	B - (INCHES)	C - (INCHES)	D - MATED LENGTH (INCHES)	E - SPIROLOX*
DLSA-M	1.40	0.90	-	2.19	RR 103
DLSA-F	1.40	-	1.29	2.19	RR 103
DLSB-M	1.62	0.94	-	2.26	RR 125
DLSB-F	1.62	-	1.32	2.26	RR 125
DLSC-M	2.37	0.78	-	1.95	RR 187
DLSC-F	2.38	-	1.17	1.95	RR 187

**NOTES:**

· \* SPIROLOX RINGS: Stainless Steel.

### WET-CON SERIES LPBH-MP

WET-CON Low Profile Bulkhead Connector Male Plug  
Mates with LPBH-FS & LPIL-FS



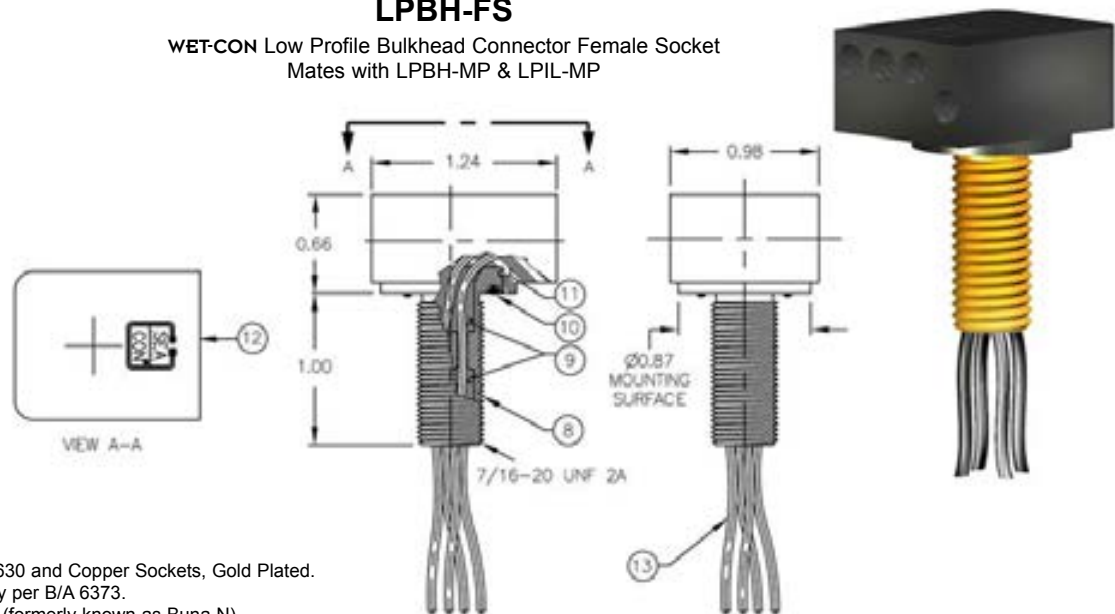
**NOTES:**

- 1 - LPBH-BC SHELL: CA 630 and Copper Contacts, Gold Plated.
- 2 - O-RING: 2-014 Nitrile (formerly known as Buna N).
- 3 - LPBH-3/4-MP: Neoprene Molding per B/A X-5727.
- 4 - PIN: Copper Alloy and Gold Plated per MIL-G-45204.
- 5 - #18 AWG TFE insulated wire. WIRE: 12 inches long.
- 6 - WASHER (OPTIONAL): Brass.
- 7 - HEX NUT (OPTIONAL): Brass.

- MOUNTING TORQUE: 40 inch lbs.
- PRESSURE RATING: 20,000 psi mated.

### WET-CON SERIES LPBH-FS

WET-CON Low Profile Bulkhead Connector Female Socket  
Mates with LPBH-MP & LPIL-MP



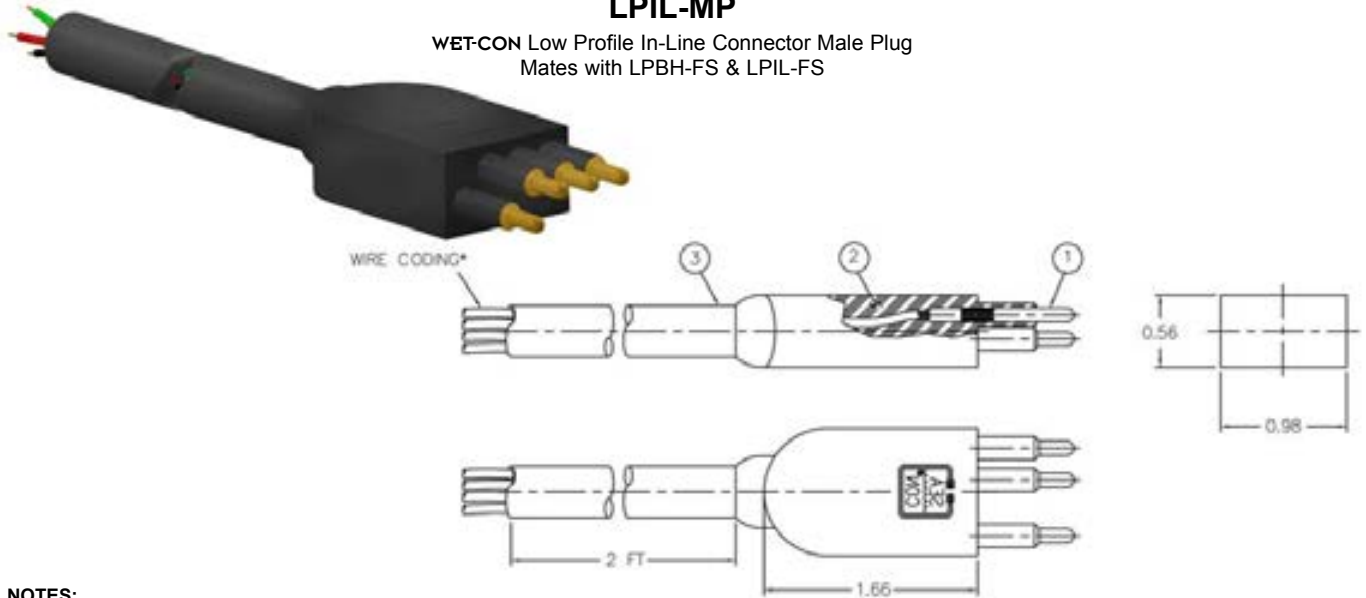
**NOTES:**

- 8 - LPBH-BC SHELL: CA 630 and Copper Sockets, Gold Plated.
- 9 - POTTING: White Epoxy per B/A 6373.
- 10 - O-RING: 2-014 Nitrile (formerly known as Buna N).
- 11 - MOLDED BODY: Neoprene Molding per B/A X-5727.
- 12 - SOCKET: Copper Alloy 360 per QQ-B-626 or 61A; Gold Plated per MIL-G-45204, Type II, Grade C, Class I, with Flash Nickel Undercoat.
- 13 - #18 AWG TFE insulated wire. WIRE: 12 inches long.

- MOUNTING TORQUE: 40 inch lbs.
- PRESSURE RATING: 20,000 psi mated.

### WET-CON SERIES LPIL-MP

WET-CON Low Profile In-Line Connector Male Plug  
Mates with LPBH-FS & LPIL-FS



**NOTES:**

- 1 - PIN: CA 630 & Gold Plated per ASTM-B488-95.
- 2 - RUBBER MOLD: Neoprene Mold per B/A X-5727.
- 3 - CABLE: 16/3 SOW or 16/4 SOW.

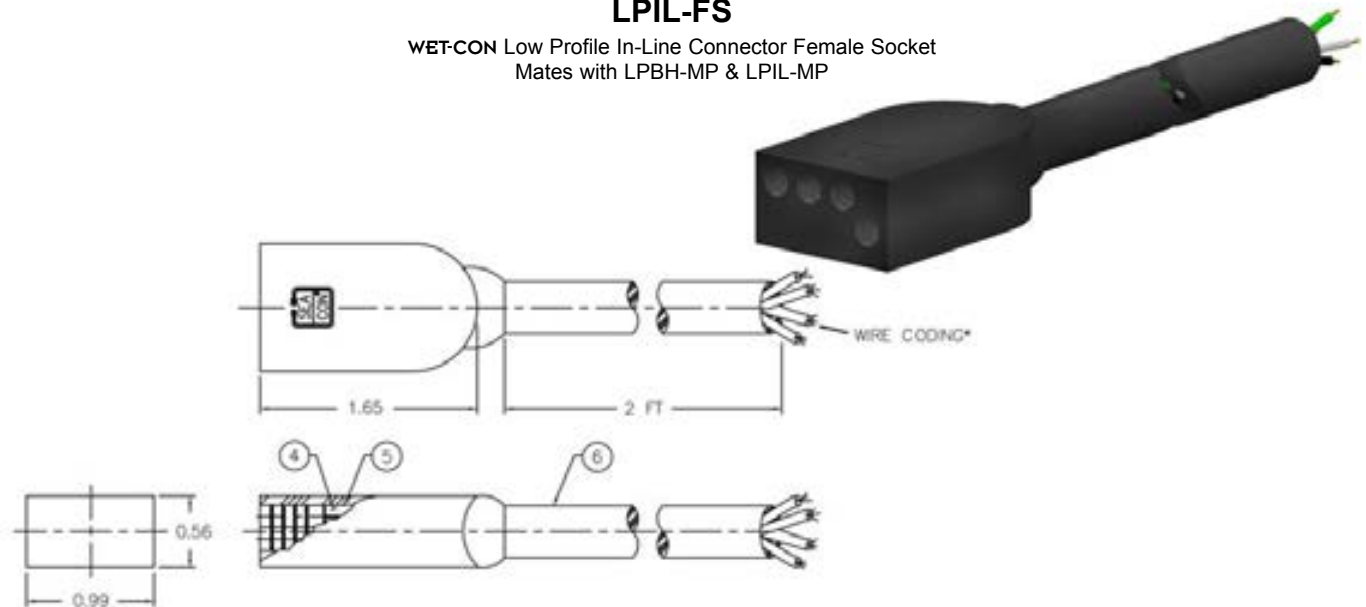
· PRESSURE RATING: 20,000 psi mated.

**WIRE COLOR CODE**

CONTACT NUMBER	COLOR
1	BLACK
2	WHITE
3	RED
4	GREEN

### WET-CON SERIES LPIL-FS

WET-CON Low Profile In-Line Connector Female Socket  
Mates with LPBH-MP & LPIL-MP



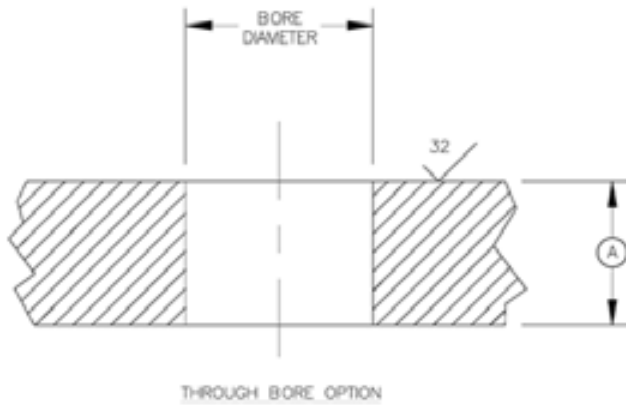
**NOTES:**

- 1 - SOCKET: CA 630 per MSBA-019.
- 2 - RUBBER MOLD: Neoprene per MSNBA-027.
- 3 - CABLE: 16/3 SOW or 16/4 SOW.

· PRESSURE RATING: 20,000 psi mated.

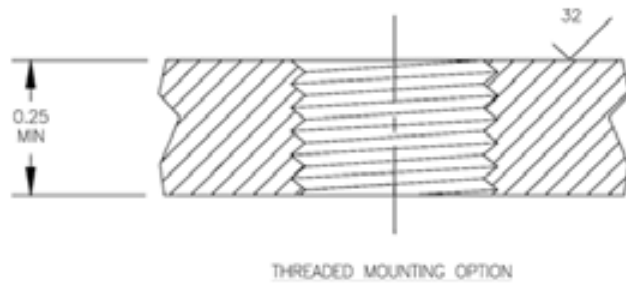
**WET-CON SERIES  
BH-MP/FS  
THROUGH BORE OPTION**

WET-CON Bulkhead Connector Male Plug/Female Socket















**WET-CON SERIES  
BH-MP/FS  
THREADED MOUNTING OPTION**

WET-CON Bulkhead Connector Male Plug/Female Socket



CONNECTOR	THREAD	BORE Ø (INCHES)	MOUNTING TORQUE (INCH POUNDS)	SPOT FACE Ø (INCHES)	A - MAX (INCHES)
BH-MP/FS (2/3/4/5)	7/16-20 UNF-2B	0.437 +0.015 -0.000	50	1.00	0.44
BH-MP/FS (6/8/10/12)	5/8-18 UNF-2B	0.625 +0.015 -0.000	85	1.25	0.44
BH-MP/FS (16)	3/4-16 UNF-2B	0.750 +0.015 -0.000	85	1.50	0.44

SIZE	WET-CON SERIES BULKHEAD/IN-LINE CONTACT CONFIGURATIONS (MALE FACE VIEW ONLY - NOT TO SCALE)*	
1	 <p style="text-align: center;">MP</p>	
2	 <p style="text-align: center;">MP</p>	
3	 <p style="text-align: center;">MP</p>	
4	 <p style="text-align: center;">MP</p>	
5	 <p style="text-align: center;">MP</p>	 <p style="text-align: center;">MP (A)</p>
6	 <p style="text-align: center;">MP</p>	
8	 <p style="text-align: center;">MP</p>	
10	 <p style="text-align: center;">MP</p>	
12	 <p style="text-align: center;">MP</p>	<p style="text-align: center;">16</p>  <p style="text-align: center;">MP</p>  <p style="text-align: center;">MP (A)</p>

**NOTES:**

\* For female face view contact configurations please contact SEA CON.

**KEY**

● GUIDE PIN

**S E A C O N**



# **Micro WET-CON** SERIES

---

**UNDERWATER ELECTRICAL WET-MATE CONNECTORS**

SECTION	PAGE
<b>Micro WET-CON</b>	
Product News - Connector Enhancements.....	MWC 3
Introduction .....	MWC 4
Availability .....	MWC 4
Applications .....	MWC 4
Special Assemblies .....	MWC 4
Part Number Description System .....	MWC 4
General Information .....	MWC 5
Ampacity Chart for Standard Parts .....	MWC 5
Standard Wiring Color Code .....	MWC 5
Dimension Details:	
MC-BH-M (2 to 8 Contacts) .....	MWC 6
MC-BH-F (2 to 8 Contacts) .....	MWC 6
MC-BH-M (10 to 16 Contacts) .....	MWC 7
MC-BH-F (10 to 16 Contacts) .....	MWC 7
MC-BH-M-DO (2 to 8 Contacts) .....	MWC 8
MC-BH-F-DO (2 to 8 Contacts) .....	MWC 8
MC-BH-M-DO (10 to 16 Contacts) .....	MWC 9
MC-BH-F-DO (10 to 16 Contacts) .....	MWC 9
MC-IL-M (2 to 8 Contacts) .....	MWC 10
MC-IL-F (2 to 8 Contacts) .....	MWC 10
MC-IL-M (10 to 16 Contacts) .....	MWC 11
MC-IL-F (10 to 16 Contacts) .....	MWC 11
MC-DC-M (2 to 8 Contacts) .....	MWC 12
MC-DC-F (2 to 8 Contacts) .....	MWC 12
MC-DC-M (10 to 16 Contacts) .....	MWC 13
MC-DC-F (10 to 16 Contacts) .....	MWC 13
MC-DLS-M (2 to 8 Contacts) .....	MWC 14
MC-DLS-F (2 to 8 Contacts) .....	MWC 14
DLSA-M (10 to 16 Contacts) .....	MWC 14
DLSA-F (10 to 16 Contacts) .....	MWC 14
Interface Details .....	MWC 15
Contact Configurations .....	MWC 16
<b>Micro WET-CON SPLIT SERIES SECTION</b> .....	<b>MWC 17-23</b>

## PRODUCT NEWS

# Micro WET-CON and Micro WET-CON SPLIT SERIES CONNECTOR ENHANCEMENTS

### INTRODUCTION

As part of our continuous improvement process the SEACON Group consistently reviews its product ranges through both customer feedback and internal improvements. It is via these processes that SEACON identified a design enhancement to the Micro WET-CON connector ranges. This new design improvement has now been implemented not only across this connector range, but also the new Micro WET-CON Split Series.

### DESIGN FEATURES

The design change is associated with the Male Pin connectors only and has been introduced to improve and extend the life of the connectors by decreasing the stresses that are applied to the sealing interface between the male contact pin and the sealing rubber around the pin during the connectors mate and de-mate cycles.

The newly designed male contact has a "Lead in" as part of the contact pin itself which replaces the current rubber lead in. The introduction of the new pin removes any potential wear to the sealing interface between the male contact pin and the sealing rubber around the pin which may occur with many repeated make and breaks of the connector pairs. The new pin will maintain the full connector sealing properties and will provide a greater life expectancy of the connectors.

The incorporation of this design change to the Male Pin connectors will not affect the existing Female Socket connectors currently being used by SEACON's customers and therefore full intermateability will be maintained. In addition, SEACON would also like to confirm that pricing will also not be affected.

### TESTING

This new pin design concept has been fully tested and has been utilized in both the U-MATE and SEA-MATE connector ranges for a number of years.

### MCAT ATTACHABLE Micro WETCON

Due to global demand to terminate standard rubber molded connectors onto specialized or customer furnished cable, SEACON Global Production has introduced an MCAT version of the successful Micro WET-CON connector series.

This new connector can be terminated virtually anywhere eliminating the need for shipping bulky long lengths of cable. In addition the end user is able to produce a reduced length termination without the need for additional cable splices and have one continuous cable diameter for the total length of the cable.

The MCAT connector is fully inter-mateable with like configured Micro WET-CON inline and bulkhead connectors. For further information and for cable jacket materials that can be accommodated please contact SEACON.



**INTRODUCTION**

The Micro WET-CON connector series was developed to provide all the features of SEACON's ALL-WET connector series, but in a miniature, industry standard configuration. The small size offers the same flexibility and reliability as our rubber molded connectors, in a light-weight and user friendly model.

The Micro WET-CON series allows for smaller through ports in a pressure vessel and a greater density of conductors in a compact area. The smaller cables decrease the overall weight and drag of an ROV or other vessel. This connector range is wet-mateable and therefore enables connections to be made underwater, on-deck or in any weather condition.

**AVAILABILITY**

The Micro WET-CON series is a stocked item, which ensures quick delivery (in reasonable quantities) of standard configurations. Custom cable lengths are available upon request. Shorting plugs are available should you require the ability of looping together 'like' circuits for testing purposes within the dummy. Pin to pin shorting details need to be supplied at time of order placement.

**MATERIALS**

The Micro WET-CON is made from a proprietary grade Neoprene. The standard locking sleeves are Polyacetal, which is lightweight, durable and user-friendly in the working environment (Brass and Stainless Steel are also available upon request).

**APPLICATIONS**

Possible applications include: underwater television and lights, diver communications, ROV systems, submersibles, towed-array cable systems, current meters, animal migration research and food processing equipment.

**TESTING**

The Micro WET-CON range has undergone complete Qualification testing including low pressure soak tests, full mate/de-mate and high pressure cycling to 10,000 psi.

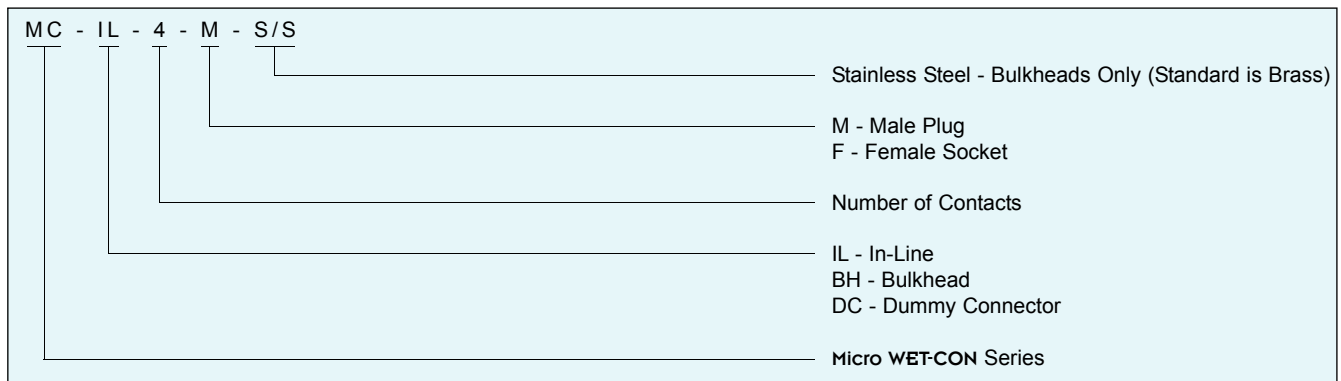
**SPECIAL ASSEMBLIES**

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.

**PART NUMBER DESCRIPTION SYSTEM - EXAMPLE**



**NOTES:**

· For Locking Sleeves see page MWC 14.

**GENERAL INFORMATION**

COMPONENT	MATERIAL
MOLDED BODY	Neoprene
BULKHEAD BODY	Brass (CA #360)
CONTACTS	Brass-gold plated (CA #360)
GUIDE PINS	Stainless Steel (303 SS or 304 SS)
BULKHEAD N & W	Brass (CA #360)
O-RING	Nitrile (formerly known as Buna N)
LOCKING SLEEVE	Polyacetal
IN-LINE CABLE (2, 3 & 4 PIN): (5, 6, 8, 10, 12 & 16 PIN): STANDARD LENGTH:	Neoprene #18 AWG (SO Cable) #20 AWG 1m, 2m, 5m
HOOK-UP WIRE (BH) (2, 3 & 4 PIN): (5, 6 & 8 PIN): (10, 12 & 16 PIN): STANDARD LENGTH:	TFE insulated wire #20 AWG #22 AWG #20 AWG 0.5m

CATEGORY	VALUE
OPEN FACE PRESSURE	10,000 psi (700 bar) optional and needs to be specified Dummy cap recommended above 100 psi
MATED PRESSURE	10,000 psi (700 bar)
VOLTAGE RATING	2, 3 & 4 pin 600 VDC 5, 6, 8, 10, 12 & 16 pin 300 VDC
CURRENT RATING	Up to 19 amps per contact
INSULATION RESISTANCE	>200 megohms @ 300 VDC
CONTACT RESISTANCE	<0.01 ohms
AIR MATE	>1,000 cycles
UNDERWATER MATE	>500
OPERATING TEMPERATURE	25° to 140°F (-4° to 60°C)
MOUNTING TORQUE	85 in-lb* In dry stainless 1/2" long Female threads
APPROVALS	Lead-free and Restriction of Hazardous Substances Directive (RoHS) compliant

**NOTES:**

- Contact SEACON for special order materials.
- Incorporation of special order cables will be determined on a case by case basis.
- Connectors are designed for installation on one atmosphere vessels. Contact SEACON for recommendations if using compensated vessels.
- \* For metal shells only, for other materials contact SEACON for recommendations.

**AMPACITY CHART FOR STANDARD PARTS (18 & 20 AWG SO CABLE)**

PART DESCRIPTION NUMBER OF CONTACTS	AMPACITY
MCBH/IL-2	10 amps
MCBH/IL-3	6 amps
MCBH/IL-4	6 amps
MCBH/IL-5	3 amps
MCBH/IL-6	3 amps

PART DESCRIPTION NUMBER OF CONTACTS	AMPACITY
MCBH/IL-8	3 amps
MCBH/IL-10	2.5 amps
MCBH/IL-12	2.5 amps
MCBH/IL-16	2 amps

**STANDARD IN-LINE WIRING COLOR CODE (SO CABLE)**

CONTACT #	COLOR
1	BLACK
2	WHITE
3	RED **
4	GREEN
5	ORANGE
6	BLUE
7	WHITE/BLACK
8	RED/BLACK

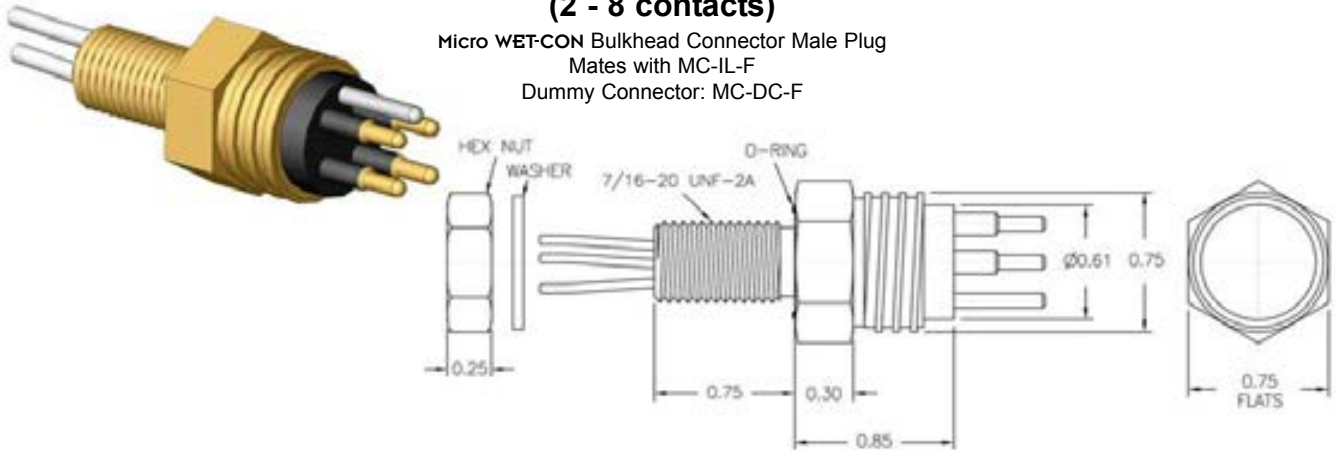
CONTACT #	COLOR
9	GREEN/BLACK
10	ORANGE/BLACK
11	BLUE/BLACK
12	BLACK/WHITE
13	RED/WHITE
14	GREEN/WHITE
15	BLUE/WHITE
16	BLACK/RED

**NOTE:**

- \*\* For 3 contact configurations wiring color code is GREEN.

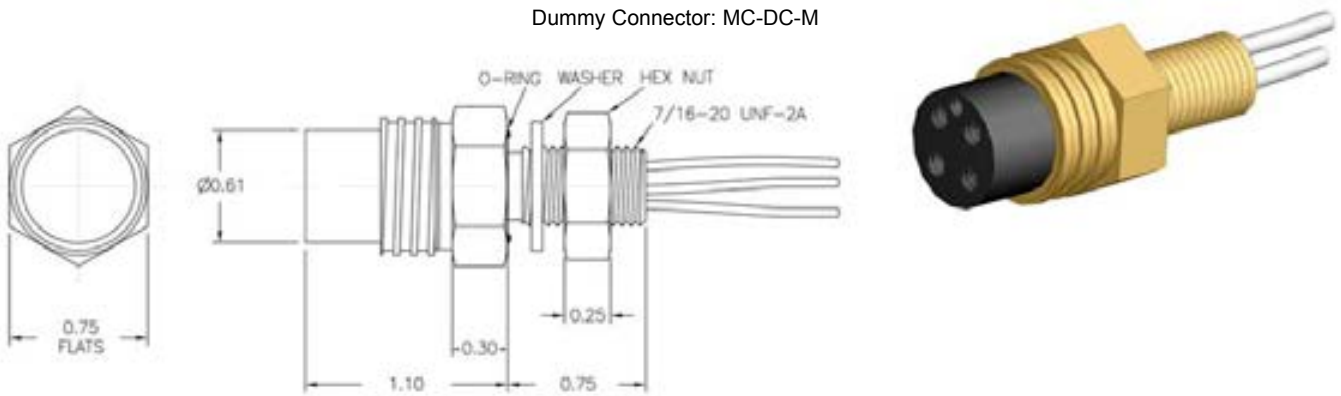
**Micro WET-CON SERIES  
MC-BH-M  
(2 - 8 contacts)**

Micro WET-CON Bulkhead Connector Male Plug  
Mates with MC-IL-F  
Dummy Connector: MC-DC-F



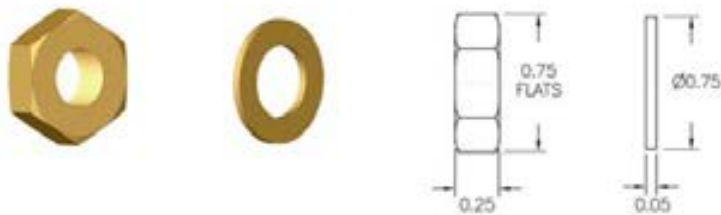
**Micro WET-CON SERIES  
MC-BH-F  
(2 - 8 contacts)**

Micro WET-CON Bulkhead Connector Female Socket  
Mates with MC-IL-M  
Dummy Connector: MC-DC-M



**Micro WET-CON SERIES  
HEX NUT AND WASHER  
(2 - 8 contacts)**

Micro WET-CON Bulkhead Connector



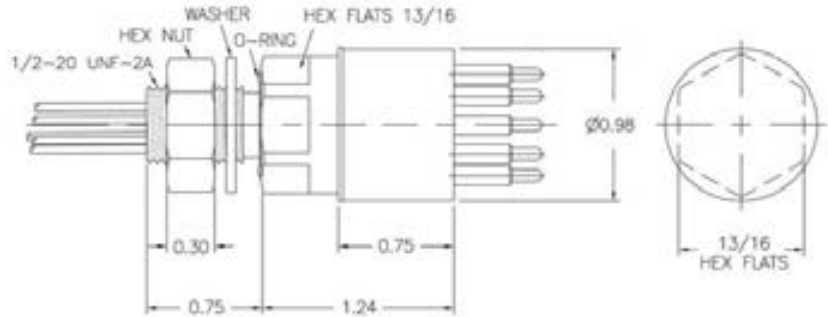
STD - BRASS  
(Stainless Steel and others upon request)

**NOTES:**

- Hex Nut and Washer: Optional.
- O-Ring: 2-014.
- Dummy Connector: Optional.
- Dummy Shorting Plug Connector: Optional.
- Connectors must be lubricated prior to mating.
- Torque values referenced in this literature assume installation into dry metal threads. For other applications, please contact SEACON for recommendations.
- Connectors are designed for installation on one atmosphere vessels. Contact SEACON for recommendations if using compensated vessels.

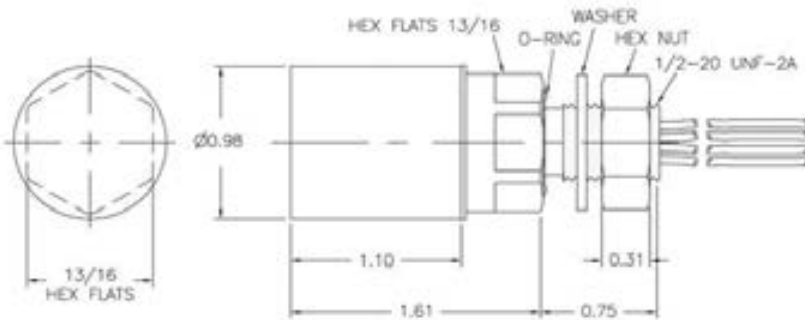
**Micro WET-CON SERIES  
MC-BH-M  
(10 - 16 contacts)**

Micro WET-CON Bulkhead Connector Male Plug  
Mates with MC-IL-F  
Dummy Connector: MC-DC-F



**Micro WET-CON SERIES  
MC-BH-F  
(10 - 16 contacts)**

Micro WET-CON Bulkhead Connector Female Socket  
Mates with MC-IL-M  
Dummy Connector: MC-DC-M



**Micro WET-CON SERIES  
HEX NUT AND WASHER  
(10 - 16 contacts)**

Micro WET-CON Bulkhead Connector



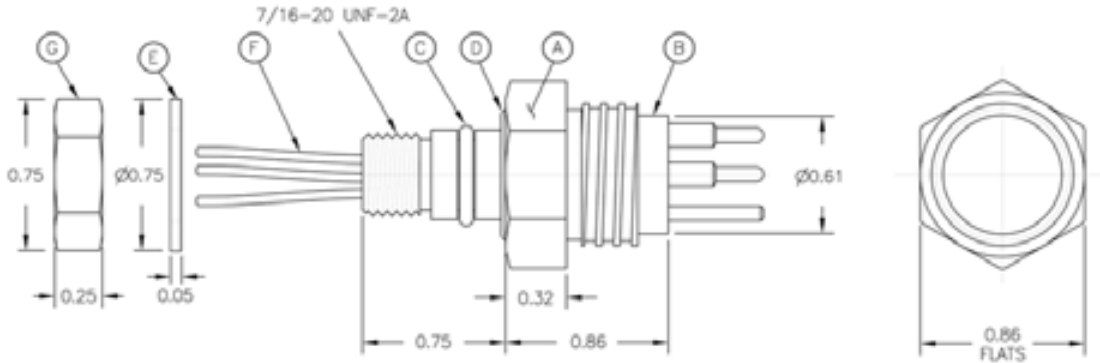
STD - BRASS  
(Stainless Steel and others upon request)

**NOTES:**

- Hex Nut and Washer: Optional.
- O-Ring: 2-015.
- Dummy Connector: Optional.
- Dummy Shorting Plug Connector: Optional.
- Connectors must be lubricated prior to mating.
- Torque values referenced in this literature assume installation into dry metal threads. For other applications, please contact SEACON for recommendations.
- Connectors are designed for installation on one atmosphere vessels. Contact SEACON for recommendations if using compensated vessels.

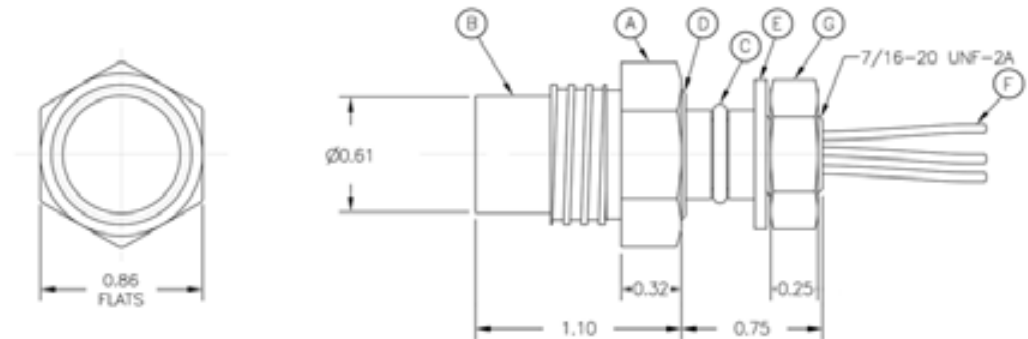
### Micro WET-CON SERIES MC-BH-M-DO (DOUBLE O-RING) (2 - 8 contacts)

Micro WET-CON Bulkhead Connector Male Plug with Double O-Ring  
Mates with MC-IL-F  
Dummy Connector: MC-DC-F



### Micro WET-CON SERIES MC-BH-F-DO (DOUBLE O-RING) (2 - 8 contacts)

Micro WET-CON Bulkhead Connector Female Socket with Double O-Ring  
Mates with MC-IL-M  
Dummy Connector: MC-DC-M



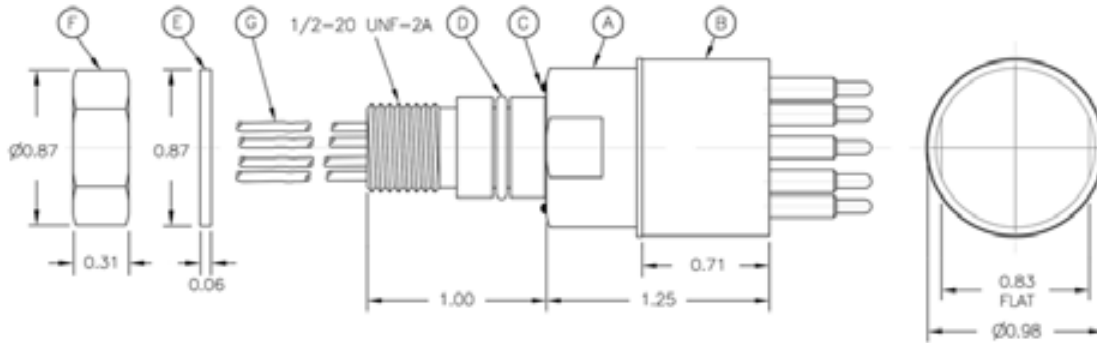
PART NUMBER	PART DESCRIPTION
A	MC-BH DOUBLE O-RING SHELL
B	NEOPRENE MOLDING
C	O-RING 2-012
D	O-RING 06-10525-1
E	WASHER
F	BULKHEAD LEADS
G	HEX NUT 7/16 - 20

**NOTES:**

- Hex Nut and Washer: Optional.
- Dummy Connector: Optional.
- Dummy Shorting Plug Connector: Optional. (Shorting plugs are available should you require the ability of looping together 'like' circuits for testing purposes within the dummy. Pin to pin shorting details need to be supplied at time of order placement).
- Connectors must be lubricated prior to mating.
- Torque values referenced in this literature assume installation into dry metal threads. For other applications, please contact SEACON for recommendations.
- Connectors are designed for installation on one atmosphere vessels. Contact SEACON for recommendations if using compensated vessels.

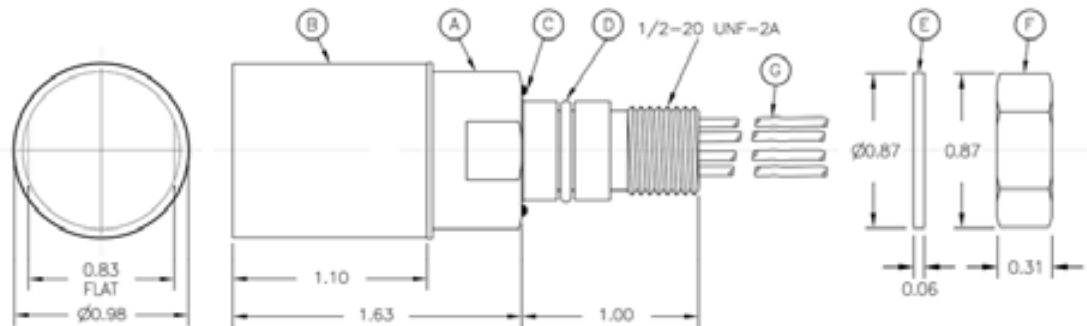
### Micro WET-CON SERIES MC-BH-M-DO (DOUBLE O-RING) (10 - 16 contacts)

Micro WET-CON Bulkhead Connector Male Plug with Double O-Ring  
Mates with MC-IL-F  
Dummy Connector: MC-DC-F



### Micro WET-CON SERIES MC-BH-F-DO (DOUBLE O-RING) (10 - 16 contacts)

Micro WET-CON Bulkhead Connector Female Socket with Double O-Ring  
Mates with MC-IL-M  
Dummy Connector: MC-DC-M



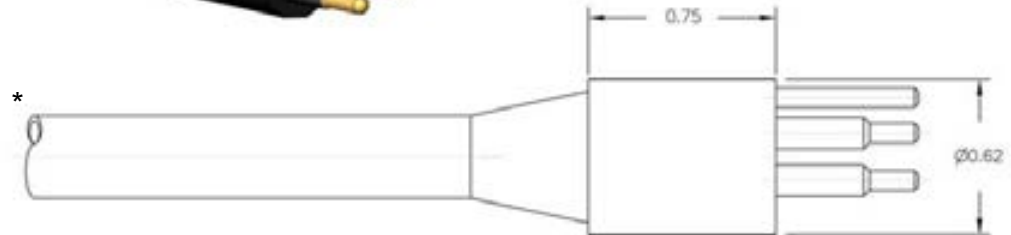
PART NUMBER	PART DESCRIPTION
A	MC-BH DOUBLE O-RING SHELL
B	NEOPRENE MOLDING
C	O-RING 06-10583-1
D	O-RING 06-10437-1
E	WASHER
F	HEX NUT 1/2-20
G	BULKHEAD LEADS

**NOTES:**

- Bulkhead Locking Sleeve: Optional.
- Hex Nut and Washer: Optional.
- Dummy Connector: Optional.
- Dummy Shorting Plug Connector: Optional. (Shorting plugs are available should you require the ability of looping together 'like' circuits for testing purposes within the dummy. Pin to pin shorting details need to be supplied at time of order placement).
- Connectors must be lubricated prior to mating.
- Torque values referenced in this literature assume installation into dry metal threads. For other applications, please contact SEACON for recommendations.
- Connectors are designed for installation on one atmosphere vessels. Contact SEACON for recommendations if using compensated vessels.

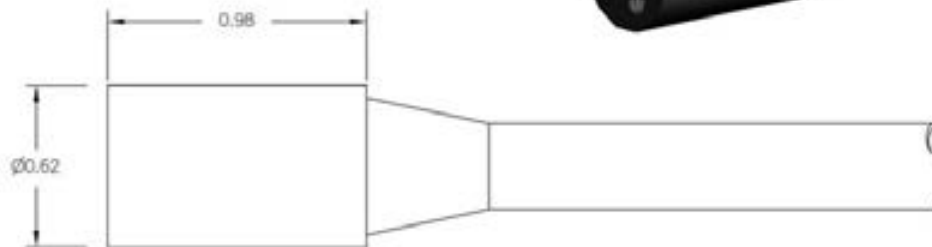
**Micro WET-CON SERIES**  
**MC-IL-M**  
**(2 - 8 contacts)**

Micro WET-CON In-Line Connector Male Plug  
 Mates with MC-IL-F & MC-BH-F  
 Dummy Connector: MC-DC-F



**Micro WET-CON SERIES**  
**MC-IL-F**  
**(2 - 8 contacts)**

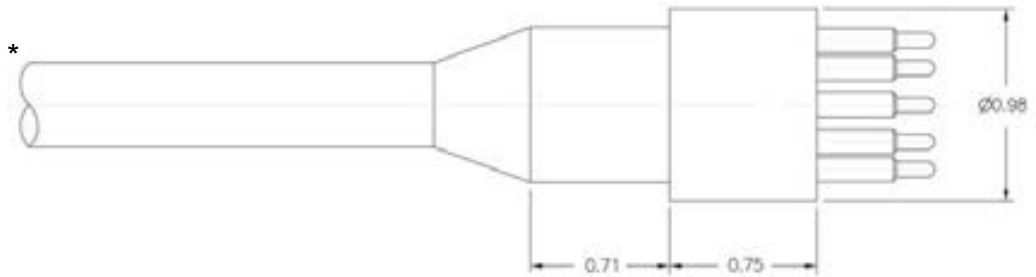
Micro WET-CON In-Line Connector Female Socket  
 Mates with MC-IL-M & MC-BH-M  
 Dummy Connector: MC-DC-M

**NOTES:**

- Locking Sleeve: Optional (see page MWC 14).
- Dummy Connector: Optional.
- Dummy Shorting Plug Connector: Optional. (Shorting plugs are available should you require the ability of looping together 'like' circuits for testing purposes within the dummy. Pin to pin shorting details need to be supplied at time of order placement).
- Connectors must be lubricated prior to mating.
- \* Incorporation of special order cables will be determined on a case-by-case basis.

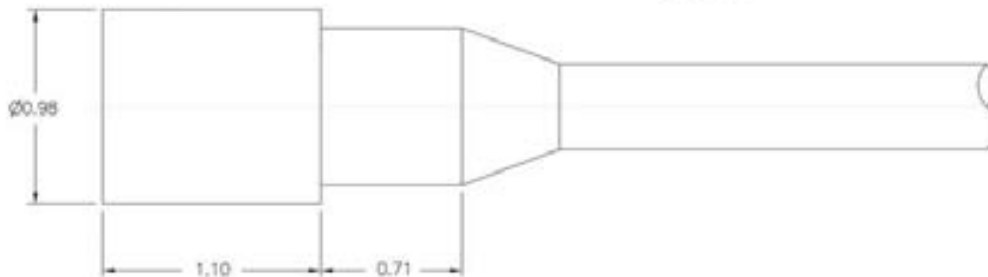
**Micro WET-CON SERIES  
MC-IL-M  
(10 - 16 contacts)**

Micro WET-CON In-Line Connector Male Plug  
Mates with MC-IL-F & MC-BH-F  
Dummy Connector: MC-DC-F



**Micro WET-CON SERIES  
MC-IL-F  
(10 - 16 contacts)**

Micro WET-CON In-Line Connector Female Socket  
Mates with MC-IL-M & MC-BH-M  
Dummy Connector: MC-DC-M



**NOTES:**

- Locking Sleeve: Optional (see page MWC 14).
- Dummy Connector: Optional.
- Dummy Shorting Plug Connector: Optional. (Shorting plugs are available should you require the ability of looping together 'like' circuits for testing purposes within the dummy. Pin to pin shorting details need to be supplied at time of order placement).
- Connectors must be lubricated prior to mating.
- \* Incorporation of special order cables will be determined on a case-by-case basis.

**Micro WET-CON SERIES  
MC-DC-M  
(2 - 8 contacts)**

Micro WET-CON Dummy Connector Male Plug  
Mates with MC-IL-F & MC-BH-F



**Micro WET-CON SERIES  
MC-DC-F  
(2 - 8 contacts)**

Micro WET-CON Dummy Connector Female Socket  
Mates with MC-IL-M & MC-BH-M

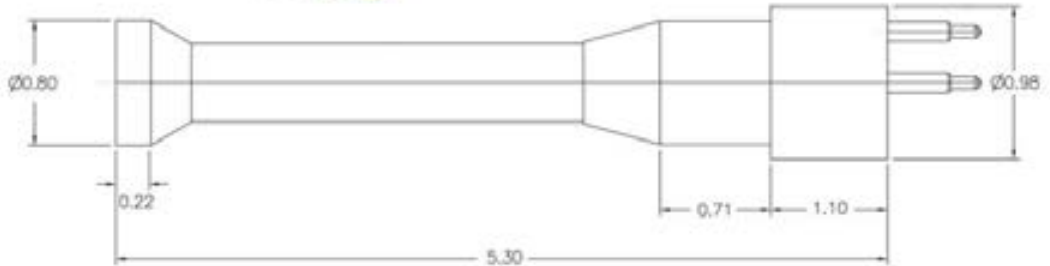
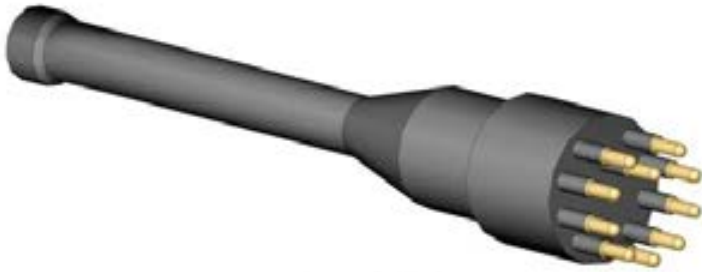


**NOTES:**

- Locking Sleeve: Optional (see page MWC 14).
- Dummy Shorting Plug Connector: Optional. (Shorting plugs are available should you require the ability of looping together 'like' circuits for testing purposes within the dummy. Pin to pin shorting details need to be supplied at time of order placement).
- Connectors must be lubricated prior to mating.

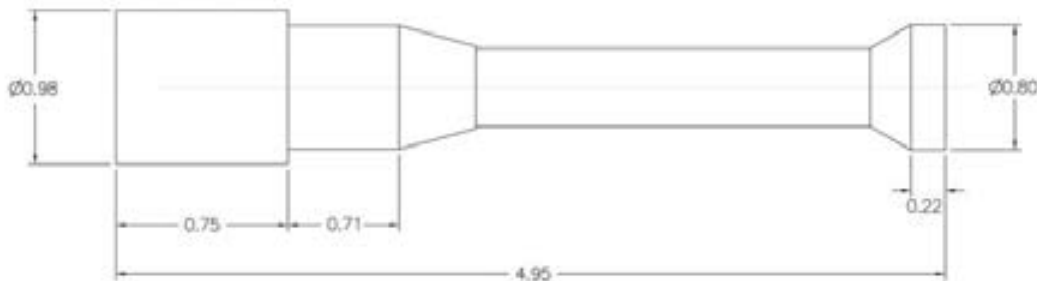
**Micro WET-CON SERIES  
MC-DC-M  
(10 - 16 contacts)**

Micro WET-CON Dummy Connector Male Plug  
Mates with MC-IL-F & MC-BH-F



**Micro WET-CON SERIES  
MC-DC-F  
(10 - 16 contacts)**

Micro WET-CON Dummy Connector Female Socket  
Mates with MC-IL-M & MC-BH-M

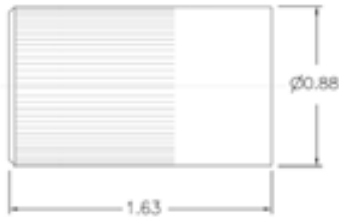


**NOTES:**

- Locking Sleeve: Optional (see page MWC 14).
- Dummy Shorting Plug Connector: Optional. (Shorting plugs are available should you require the ability of looping together 'like' circuits for testing purposes within the dummy. Pin to pin shorting details need to be supplied at time of order placement).
- Connectors must be lubricated prior to mating.

**Micro WET-CON SERIES  
MC-DLS-F  
(2 - 8 contacts)**

Micro WET-CON Locking Sleeve Female



**Micro WET-CON SERIES  
MC-DLS-M  
(2 - 8 contacts)**

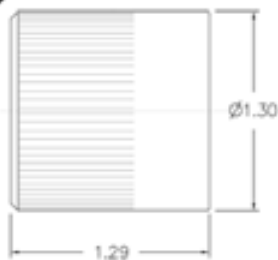
Micro WET-CON Locking Sleeve Male



\*

**Micro WET-CON SERIES  
DLSA-F  
(10 - 16 contacts)**

Micro WET-CON Locking Sleeve Female



**Micro WET-CON SERIES  
DLSA-M  
(10 - 16 contacts)**

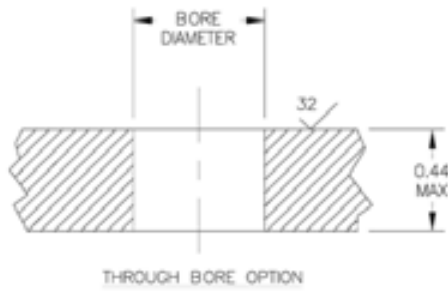
Micro WET-CON Locking Sleeve Male



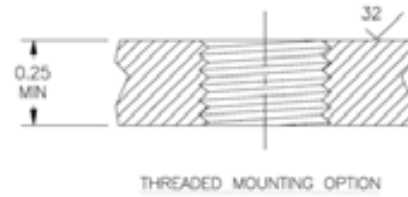
**NOTES:**

- \* Not required for 2 to 8 way Bulkhead connectors. For In-Lines only.
- Locking Sleeves: Polyacetal.

**Micro WET-CON SERIES  
MC-BH-M/F  
THROUGH BORE OPTION**  
Micro WET-CON Bulkhead Connector Male/Female



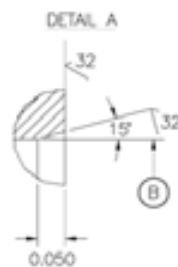
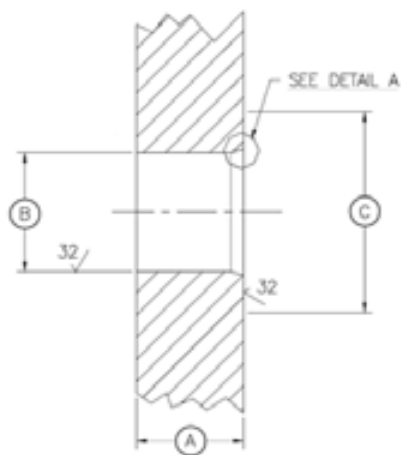
**Micro WET-CON SERIES  
MC-BH-M/F  
THREADED MOUNTING OPTION**  
Micro WET-CON Bulkhead Connector Male/Female



CONNECTOR	BORE Ø (INCHES)	THREAD	SPOT FACE Ø (INCHES)
MC-BH (2-8)	0.437 <sup>+0.015</sup> / <sub>-0.000</sub>	7/16-20 UNF-2B	0.88
MC-BH (10-16)	0.500 <sup>+0.015</sup> / <sub>-0.000</sub>	1/2-20 UNF-2B	0.94

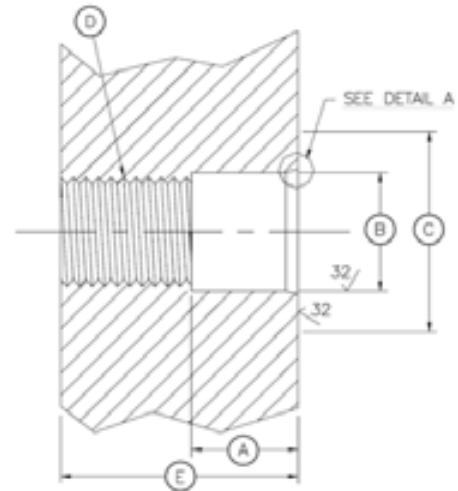
**Micro WET-CON SERIES  
MC-BH-M/F-DO (DOUBLE O-RING)  
THROUGH BORE OPTION**

Micro WET-CON Bulkhead Connector Male/Female with Double O-Ring



**Micro WET-CON SERIES  
MC-BH-M/F-DO (DOUBLE O-RING)  
THREADED MOUNTING OPTION**

Micro WET-CON Bulkhead Connector Male/Female with Double O-Ring



CONNECTOR	A - LENGTH (INCHES)	B - Ø (INCHES)	C - Ø (INCHES)	D - THREAD	E - Ø (INCHES)
MC-BH-DO (2-8)	0.425	0.475 0.473	0.88	7/16-20 UNF-2B	0.750 MIN
MC-BH-DO (10-16)	0.500	0.553 0.552	0.94	1/2-20 UNF-2B	1.000 MIN

SIZE	Micro WET-CON SERIES BULKHEAD/IN-LINE CONTACT CONFIGURATIONS (MALE FACE VIEW ONLY - NOT TO SCALE)*
2-8	<p>MC-BH / MC-IL-2    MC-BH / MC-IL-3    MC-BH / MC-IL-4    MC-BH / MC-IL-5    MC-BH / MC-IL-6    MC-BH / MC-IL-8 **</p>
10-16	<p>MC-BH / MC-IL-10    MC-BH / MC-IL-12    MC-BH / MC-IL-16</p>
	<p><b>KEY</b></p> <p>● GUIDE PIN</p>

**NOTES:**  
 · \* For female face view contact configurations available please contact SEACON.  
 · \*\* Ethernet version available.

**S E A C O N**



# **Micro WET-CON SPLIT** SERIES

---

**UNDERWATER ELECTRICAL WET-MATE CONNECTORS**

SECTION	PAGE
<b>WET-CON SPLIT SERIES</b>	
Introduction .....	MWC 19
Availability .....	MWC 19
Applications .....	MWC 19
Testing .....	MWC 19
Special Assemblies .....	MWC 19
Part Number Description System .....	MWC 19
General Information .....	MWC 19
In-Line Cable .....	MWC 19
Dimension Details:	
MC-BH-F (6 Contacts) .....	MWC 20
MC-IL-M (6 Contacts) .....	MWC 20
MC-DLS-F (6 Contacts) .....	MWC 20
MC-BH-F (12 to 16 Contacts) .....	MWC 21
MC-IL-M (12 to 16 Contacts) .....	MWC 21
MC-DLSA-F/M (12 to 16 Contacts) .....	MWC 21
Interface Details .....	MWC 22
Contact Configurations .....	MWC 23

**INTRODUCTION**

SEACON has added a range of split connectors to its popular Micro WET-CON wet-mate series. This series of connectors was originally developed to provide all the features of the ALL-WET connector range, but in a miniature industry standard configuration. The split connector range prevents costly 'Y' assemblies and allows ease of replacement of break-outs by the customer. This smaller connector series offers the same flexibility and reliability as SEACON's standard rubber molded connectors, in a lightweight and user-friendly model.

**AVAILABILITY**

The Micro WET-CON Split series is currently available in six different configurations ranging from 6 to 16 contacts rated upto 600 VDC (dependent on cable) with a mated pressure rating of 10,000 psi.

**APPLICATIONS**

Applications include underwater television and lights, diver communications, ROV systems, submersibles, towed-array cable systems, current meters, animal migration research and food processing equipment.

**TESTING**

The Micro WET-CON Split range has undergone complete Qualification testing including low pressure soak tests, full mate/demate and high pressure cycling to 10,000 psi.

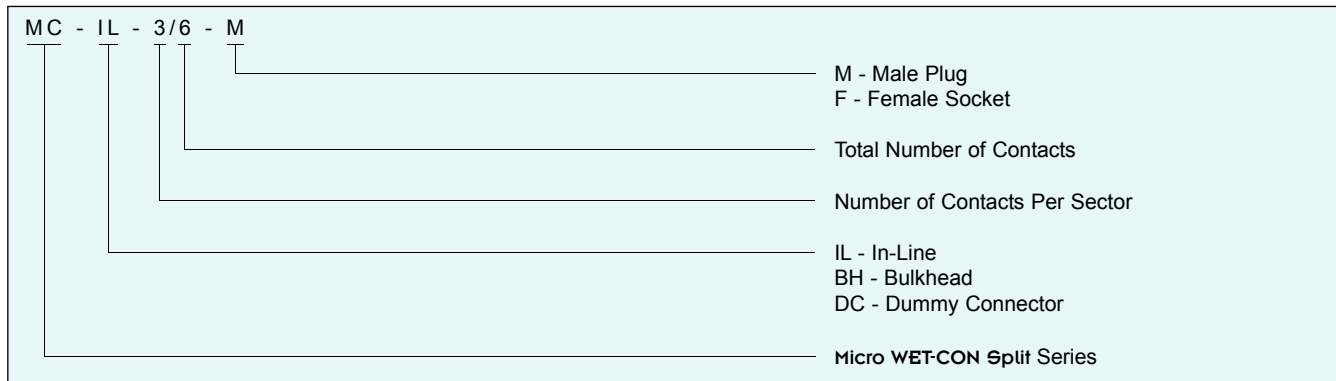
**SPECIAL ASSEMBLIES**

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.

**PART NUMBER DESCRIPTION SYSTEM - EXAMPLE**



**GENERAL INFORMATION**

COMPONENT	MATERIAL
MOLDED BODY	Neoprene
BULKHEAD BODY	Brass (CA #360)
CONTACTS	Brass-gold plated
BULKHEAD N & W	Brass (CA #360)
O-RING	Nitrile (formerly known as Buna N)
LOCKING SLEEVE	Polyacetal
HOOK-UP WIRE	TFE insulated wire, #20 AWG

CATEGORY	VALUE
OPEN FACE PRESSURE	Up to 10,000 psi (700 bar) optional and needs to be specified
MATED PRESSURE	Up to 10,000 psi (700 bar)
VOLTAGE RATING	Up to 600 VDC (dependent on cable)
CURRENT RATING	Up to 19 amps per contact*
INSULATION RESISTANCE	>200 megohms @ 300 VDC
CONTACT RESISTANCE	<0.01 ohms
AIR MATE	>1,000 cycles
UNDERWATER MATE	>500
OPERATING TEMPERATURE	25° to 140°F (-4° to 60°C)
MOUNTING TORQUE	85 in-lb** In dry stainless 1/2" long Female threads

**IN-LINE CABLE**

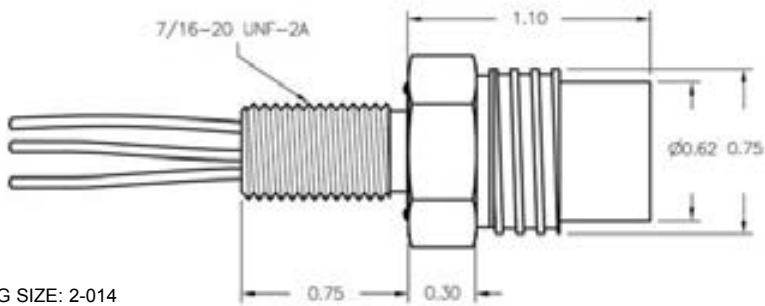
- MC-5/15                    20/5 Neoprene jacket, rubber insulated 2.8 amp (300V).  
Color code: Contact 1 Black, Contact 2 White, Contact 3 Red, Contact 4 Green, Contact 5 Orange.
- MC-2/6 & MC-2/12      22/2 Neoprene jacket, TFE insulated wire 1.5 amp (600V).  
All contacts white and individually identified by color or flagged ends.
- MC-8/16                    22/8 Neoprene jacket, TFE insulated wire 1.0 amp (600V).  
All contacts white and individually identified by color or flagged ends.
- MC-3/6 & MC-3/15      22/TSP Neoprene jacket, TSP (Twisted Shielded Pair), TFE insulated wire 1.5 amp (600V).  
Color code: Contact 1 Black, Contact 2 White, Contact 3 Shield.

**NOTES:**

- \* Maximum carrying capacity for contacts may be affected by cable selection.
- \*\* For metal shells only, for other materials contact SEACON for recommendations.
- Connectors are designed for installation on one atmosphere vessels. Contact SEACON for recommendations if using compensated vessels.

**Micro WET-CON SPLIT SERIES  
MC-BH-F  
(6 contacts)**

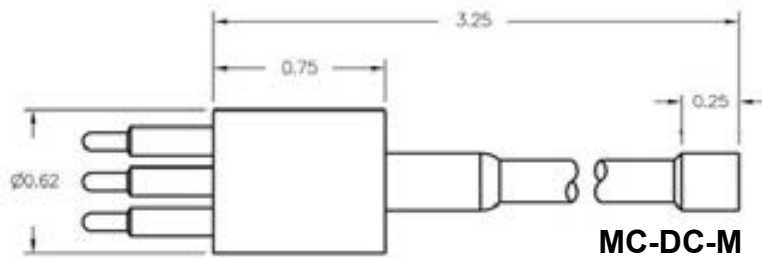
Micro WET-CON Split Bulkhead Connector Female Socket



**NOTE:**  
· O-RING SIZE: 2-014

**Micro WET-CON SPLIT SERIES  
MC-IL-M  
(6 contacts)**

Micro WET-CON Split In-Line Connector Male Plug



**OPTIONAL PARTS**

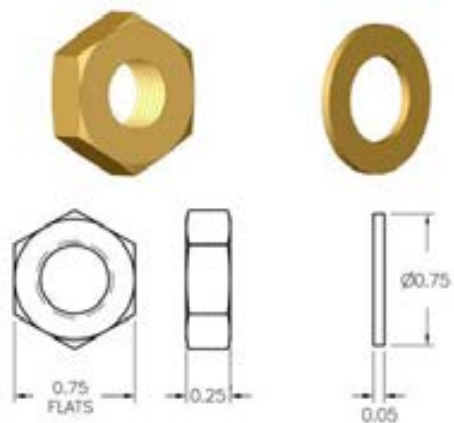
**Micro WET-CON SPLIT SERIES  
MC-DLS-F  
(6 contacts)**

Micro WET-CON Split Dummy Locking Sleeve Female Socket



**Micro WET-CON SPLIT SERIES  
HEX NUT AND WASHER  
(6 contacts)**

Micro WET-CON Split Bulkhead Connector

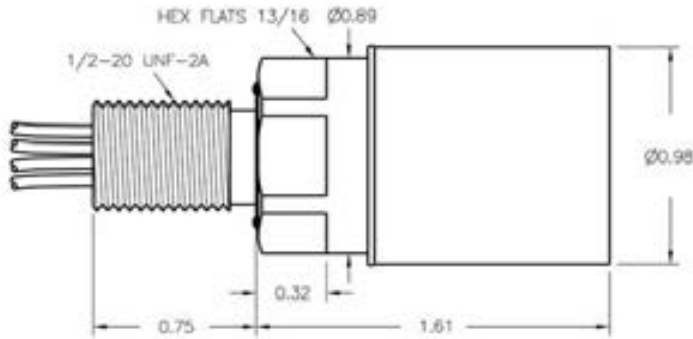


STD - BRASS  
(Stainless Steel and others available upon request)

**NOTES:**  
· For interface details please contact SEACON.

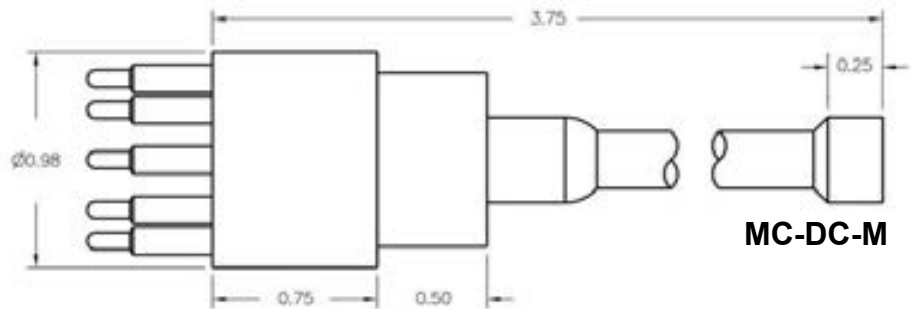
**Micro WET-CON SPLIT SERIES  
MC-BH-F  
(12 - 16 contacts)**

Micro WET-CON Split Bulkhead Connector Female Socket



**Micro WET-CON SPLIT SERIES  
MC-IL-M  
(12 - 16 contacts)**

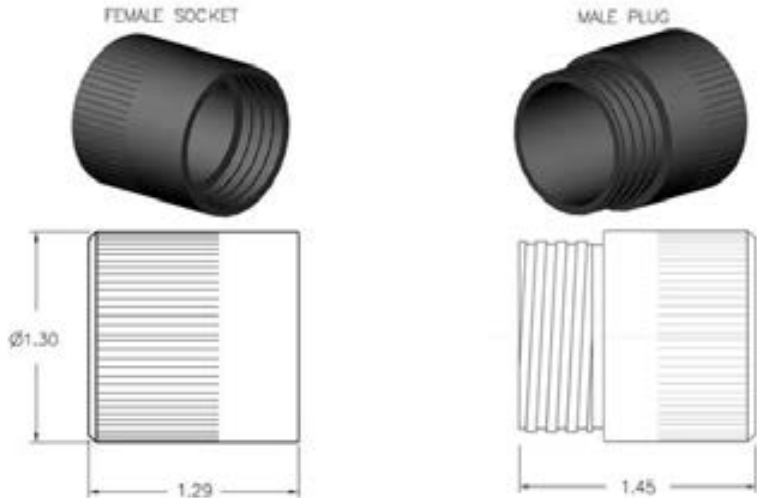
Micro WET-CON Split In-Line Connector Male Plug



**OPTIONAL PARTS**

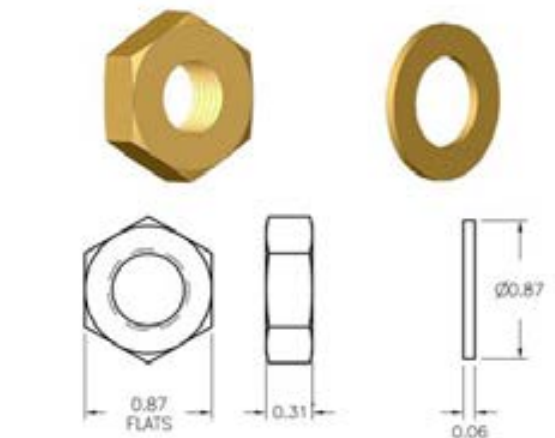
**Micro WET-CON SPLIT SERIES  
MC-DLSA-F/M  
(12 - 16 contacts)**

Micro WET-CON Split Dummy Locking Sleeve Female Socket/Male Plug



**Micro WET-CON SPLIT SERIES  
HEX NUT AND WASHER  
(12 - 16 contacts)**

Micro WET-CON Split Bulkhead Connector

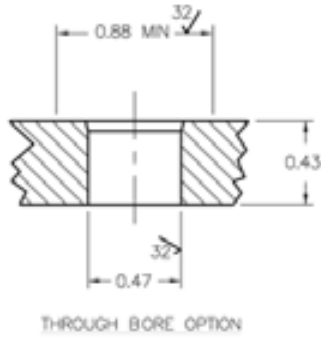


STD - BRASS  
(Stainless Steel and others available upon request)

**NOTES:**  
· For interface details please contact SEACON.

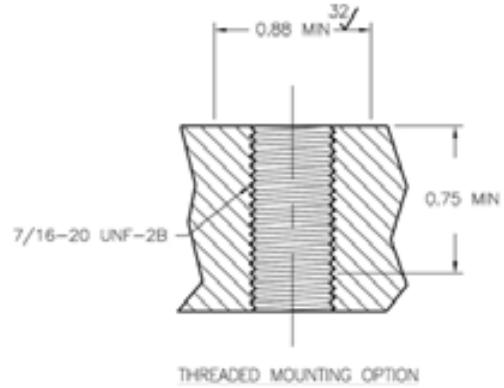
**Micro WET-CON SPLIT SERIES  
MC-BH \*  
(6 contacts)  
THROUGH BORE OPTION**

Micro WET-CON Bulkhead Connector



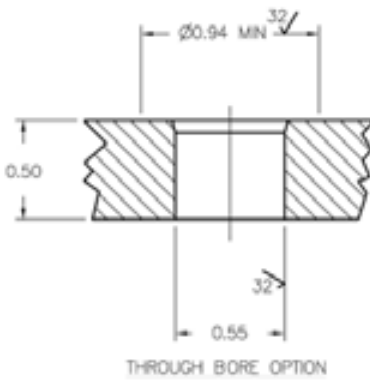
**Micro WET-CON SPLIT SERIES  
MC-BH  
(6 contacts)  
THREADED MOUNTING OPTION**

Micro WET-CON Bulkhead Connector



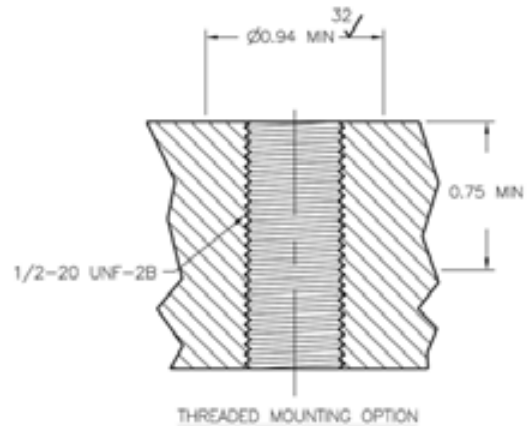
**Micro WET-CON SPLIT SERIES  
MC-BH \*\*  
(12 - 16 contacts)  
THROUGH BORE OPTION**

Micro WET-CON Bulkhead Connector







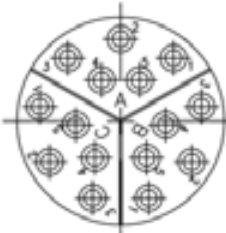

**Micro WET-CON SPLIT SERIES  
MC-BH  
(12 - 16 contacts)  
THREADED MOUNTING OPTION**

Micro WET-CON Bulkhead Connector



**NOTES:**

- \* This option requires the 7/16 Hex Nut, Washer and MIN Ø0.88 clearance on low pressure side of wall.
- \*\* This option requires the 7/16 Hex Nut, Washer and MIN Ø0.94 clearance on low pressure side of wall.

SIZE	Micro WET-CON SPLIT CONTACT CONFIGURATIONS (FEMALE FACE VIEW ONLY - NOT TO SCALE)*			
6	 <p data-bbox="245 386 406 407">MC-BH-2/6-FS SPLIT</p>	 <p data-bbox="570 386 730 407">MC-BH-3/6-FS SPLIT</p>		
12-16	 <p data-bbox="258 701 430 722">MC-BH-2/12-FS SPLIT</p>	 <p data-bbox="583 701 755 722">MC-BH-3/15-FS SPLIT</p>	 <p data-bbox="899 701 1071 722">MC-BH-5/15-FS SPLIT</p>	 <p data-bbox="1213 701 1385 722">MC-BH-8/16-FS SPLIT</p>

**NOTES:**

· \* For male face view contact configurations available please contact SEACON.

## HANDLING PROCEDURES AND SPECIAL CAPABILITIES

### SEACON GLOBAL PRODUCTION

Callejon Terrazos #8, Local 2-C, Las Brisas 1ra. Seccion,  
Tijuana, B.C., Mexico C.P. 22610.  
TEL: +52 (664) 626-2726  
FAX: +52 (664) 686-8922  
E-Mail: sales@seaconglobal.com  
Website: www.seaconglobal.com  
Dial from U.S.A. TEL: +1 (619) 308-7901  
TOLL FREE: (888) 562-7072  
FAX: +1 (619) 308-7900

### SEACON (europe) LTD

Seacon House, Hewett Road, Gapton Hall Industrial Estate,  
Great Yarmouth, Norfolk, NR31 0RB, UK.  
TEL: +44 (0) 1493-652733  
FAX: +44 (0) 1493-652840  
E-Mail: sales@seaconeurope.com  
Website: www.seaconeurope.com

### SEACON

1700 Gillespie Way,  
El Cajon, California 92020, USA.  
TEL: +1 (619) 562-7071  
FAX: +1 (619) 562-9706  
E-Mail: seacon@seaconworldwide.com  
Website: www.seaconworldwide.com

### SEACON US GULF AREA SALES OFFICE

14511 Old Katy Road, Suite 300,  
Houston, Texas 77079, USA.  
TEL: +1 (281) 599-3509  
FAX: +1 (281) 599-3517  
E-Mail: gulfcoastsales@seaconworldwide.com  
Website: www.seaconworldwide.com

### SEACON ADVANCED PRODUCTS, LLC

1321 Nelius Road, P.O. Box 767,  
Bellville, Texas 77418, USA.  
TEL: +1 (979) 865-8846  
FAX: +1 (979) 865-8859  
E-Mail: sales@seacon-ap.com  
Website: www.seacon-ap.com

### SEACON BRAZIL

Rua Conde de Bonfim 120 sala 212, Tijuca,  
Rio de Janeiro, Brazil, CEP: 20520-053.  
TEL: +55 (11) 2103-6262  
CELL: +55 (21) 9-7626-6062  
E-mail: adalberto.bromberg@te.com  
Website: www.seaconworldwide.com

### SEACON PHOENIX

15 Gray Lane, Suite 108, Hopkinton Industrial Park,  
Ashaway, Rhode Island 02804, USA.  
TEL: +1 (401) 637-4952  
FAX: +1 (401) 637-4953  
E-Mail: sales@seaconphoenixllc.com  
Website: www.seaconphoenix.com

Even though these procedures appear simple, only qualified technicians should perform the installation and maintenance. Connectors are designed for installation on one atmosphere vessels. Contact SEACON for recommendations if using compensated vessels.

### INSTALLATION PROCEDURES

Torque values referenced in this literature assume installation into dry metal threads. For other applications, please contact SEACON for recommendations.

**BULKHEAD CONNECTOR (BC):** The BC may be installed using one of two methods. The preferred method is to spotface the bulkhead surface and thread the hole, then screw the connector by means of a nut and washer. The bored hole (or threaded hole) should be free of any "burrs" and all o-ring sealing surfaces polished to a number 32 finish. Lubricate the BC o-ring with an appropriate silicon spray or grease before installing. This lubrication should be applied to form an adequate film. Excessive lubrication is detrimental to the operation of the connector. Bulkhead nut, if used, should not be over-torqued.

**IN-LINE CONNECTOR:** Lubricate the sealing areas around the male pins, using an appropriate silicon spray, or grease lightly.

### CARE AND MAINTENANCE

The WET-CON and Micro WET-CON connectors require very little maintenance. They are designed to be used in harsh environments and thus limited amounts of dirt and grit do not affect their performance.

It is recommended that, upon disconnecting or retrieving the system, the connectors be cleaned, to storage (if possible, remate with dummy plugs). Prior to deployment the following maintenance procedure is recommended:

1. Demate the connector set.
2. Flush connector interface with fresh water (deionized water if available), remove all dirt, grit and grease.
3. Inspect for damage in sealing areas, excessive corrosion, debonding of the cable and connector interface and cuts in the cable jacket.
4. Apply thin film of dielectric compound (DC) grease, silicon based, to sealing areas of male connector and across the face of the female connector\*. If the BC is removed from its housing then replace facial o-ring and make sure that o-rings are lubricated and in good condition.
5. Mate the connector halves, wipe away any excess grease off the interface line of the mated set.

\* **CAUTION:** The use of some oil-based propellants in spray cans can cause conductivity problems in neoprene.

### CABLE AND CONTINUITY PRESERVATION

Avoid sharp bends in cables. Cables subjected to vibration or exposed to seawater drag should be adequately clamped to prevent conductor fatigue and ultimate failure.

All reasonable efforts have been taken to ensure that the information contained herein is accurate at the date of publication, but no representation or warranty as to the accuracy or completeness of such information is intended or to be implied by its inclusion herein. Any and all representations and warranties pertaining to the information and products referred to herein shall be set forth in SEACON standard sales order form. In addition, SEACON reserves the right to make changes to the contents hereof without notice, therefore it is suggested that at the time of inquiry, the appropriate sales office or factory be contacted directly for verification of published specifications and products availability.

© 2018 SEACON  
ALL RIGHTS RESERVED

