# S E A C O N

### SEACON (europe) LTD PRODUCT DATASHEET

# WATER-BLOCKED WET-CON



Water-Blocked WET-CON

#### DESCRIPTION

The new water blocked bulkhead **WET-CON** was developed to be used in applications where there will be reverse pressure applied to the connector i.e. subsea electronic pods or ROV systems. This new design is back pressure rated to 100 psi.

#### **KEY FEATURES**

- Inexpensive and reliable
- Suitable for a variety of applications
- Available from 2 to 16 contacts

- · Optional materials available
- · Short delivery times

#### **DESIGN SPECIFICATION**

- Current carrying capacity 19 amps per contact (subject to cable)\*
- Contact Resistance: <0.01 ohms
- Insulation Resistance: >500 megohms after wet mating
- Mating Cycles: >500 wet matings\*\*

- Operating Voltage: 600 VDC
- · Pressure Ratings:
  - Mated condition In-line: 20,000 psi (46,000ft)
  - Mated condition Bulkhead: 10,000 psi (23,000ft)
  - Open face pressure Bulkhead: 1,000 psi (2,300ft)
- \* Maximum current carrying capacity for contacts may be affected by cable selection
- \*\* Provided proper handling procedures are adhered to

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WATER-BLOCKED WET-CON Rev 2 December 2014 Page 1 of 7

SCE-DS-0003

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





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#### **MATERIALS**

	Standard	Optional
Connector Body	Neoprene	Hypalon
Bulkhead Shell	DGS 1043 or CA630 per QQ-C-465	316 Stainless Steel (no cost option)
		6061-T6 Aluminium, Hard Anodized
Contacts	Copper Alloy Gold plated per MIL-G-45204	
Guide Pins	304 Stainless Steel	
O-Rings	Buna N, 70 Durometer	
In-Line Cable	#18 AWG SO 18 inch standard length	#14 or #16 AWG SO 18 inch standard length
Bulkhead Pigtails	Teflon® (Registered trademark for DuPont) type E hook-up wire*	
Locking Sleeves		Delrin® (DuPont trademark for Acetal Resin)
Bulkhead Nut/Washer		Brass or Stainless Steel

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

**Part Description Part Description Number of Contacts Ampacity Number of Contacts Ampacity** - BH-2-WB-FS/MP 7 amps - BH-6-WB-FS/MP 5.6 amps - BH-3-WB-FS/MP 7 amps - BH-8-WB-FS/MP 4.9 amps - BH-4-WB-FS/MP 5.6 amps

**CONFIGURATIONS** 

· See following pages

### **QUALITY**

• SEACON (europe) Ltd operate a Quality Management System accredited to 9001.



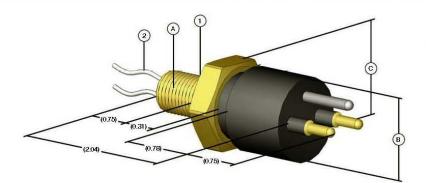
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Seacon House, Hewett Road, Gapton Hall Industrial Estate,
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## WET-CON SERIES BH-MP

WET-CON Bulkhead Connector (2-10 contacts) Mates with IL-FS **Dummy Connector: DC-FS** 

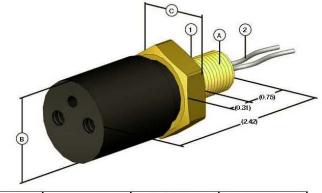
CONNECTOR	A - THREAD	1 - O-RING	B - (INCHES)	C - HEX FLATS (INCHES)	2 - HOOK-UP WIRE
BH-2-MP	7/16-20 UNF-2A	2-014	1.00	0.75	18 AWG
BH-3-MP	7/16-20 UNF-2A	2-014	1.00	0.75	18 AWG
BH-4-MP	7/16-20 UNF-2A	2-014	1.00	0.75	18 AWG
BH-6-MP	5/8-18 UNF-2A	2-017	1.25	1.00	18 AWG
BH-8-MPX	5/8-18 UNF-2A	2-017	1.25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

- 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 SEA CON® for recommendations.
- Connectors are designed for installation on one atmosphere vessels. Contact SEA CON® for recommendations if using compensated

# WET-CON SERIES BH-FS

WET-CON Bulkhead Connector (2-10 contacts) Mates with IL-MP **Dummy Connector: DC-MP** 



CONNECTOR	A - THREAD	1 - O-RING	B - (INCHES)	C - HEX FLATS (INCHES)	2 - 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-6-FS	5/8-18 UNF-2A	2-017	1.25	1.00	18 AWG
BH-8-FSX	5/8-18 UNF-2A	2-017	1.25	1.00	18 AWG
BH-10-FSX	5/8-18 UNF-2A	2-017	1.25	1.00	18 AWG

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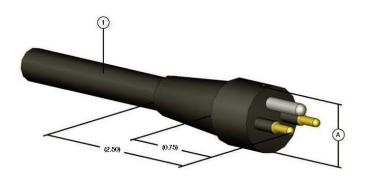
SCE-DS-0003 WATER-BLOCKED WET-CON Rev 2 December 2014 Page 3 of 7

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



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## WET-CON SERIES IL-MP

WET-CON In-Line Connector (2-10 contacts) Mates with BH-FS and IL-FS Dummy Connector: DC-FS

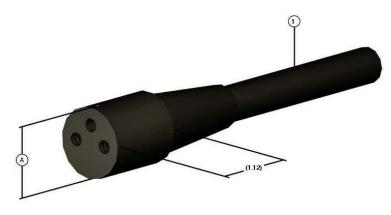
CONNECTOR	A - (INCHE8)	1 - CABLE	
IL-2-MP	1.00	18/2 SO	
IL-3-MP	1.00	18/3SO	
IL-4-MP	1.00	18/4 SO	
IL-6-MP	1.25	18/6SO	
IL-8-MPX	1 <i>2</i> 5	18/8 SO	
IL-10-MPX	1.25	18/10 SO	

#### NOTES:

- Locking Sleeve: Optional.
- Dummy Connector: Optional.
- Dummy Shorting Plug: Optional.
- Connectors must be lubricated prior to mating.

# WET-CON SERIES IL-FS

WET-CON In-Line Connector (2-10 contacts) Mates with BH-MP and IL-MP Dummy Connector: DC-MP



CONNECTOR	A - (INCHEB)	1 - CABLE
IL-2-F8	1.00	18/2 SO
IL-3-FS	1.00	18/3 SO
IL-4-FS	1.00	18/4 SO
IL-6-FS	1.25	18/6 SO
IL-8-FSX	1.25	18/8 SO
IL-10-FSX	1 <i>2</i> 5	18/10SO

MPX/FSX connectors are recommended for new applications.

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WATER-BLOCKED WET-CON Rev 2

December 2014 Page 4 of 7 SEACON (europe) Ltd

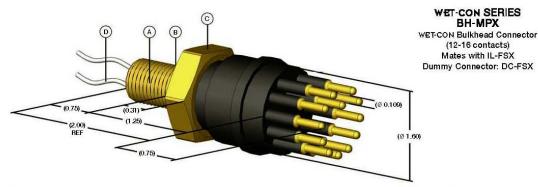
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TEL: +44 (0) 1493 652733 FAX: +44 (0) 1493 652840 Website: www.seaconeurope.com



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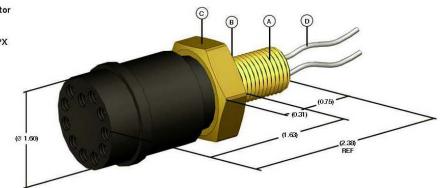
CONNECTOR	A - THREAD	B - O-RING	C - HEX FLAT8 (INCHE8)	CONNECTOR Ø	D - HOOK-UP WIRE
BH-12-MPX	5/8-18 UNF-2A	2-017	1.00	1.60	18 AWG
BH-16-MPX	3/4-16 UNF-2A	2-118	1.25	1.60	18 AWG

#### NOTES:

- Bulkhead Mounting Torque: 5/8 Thread = 85 inch pounds 3/4 Thread = 85 inch pounds
- Locking Sleeve: Optional.
- · 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 €EA CON® for recommendations.
- Connectors are designed for installation on one atmosphere vessels. Contact SEA CON® for recommendations if using compensated vessels.

# WET-CON SERIES BH-FSX

WET-CON Bulkhead Connector (12-16 contacts) Mates with IL-MPX **Dummy Connector: DC-MPX** 



CONNECTOR	A - THREAD	B - O-RING	C - HEX FLATS (INCHES)	CONNECTOR Ø	D - HOOK-UP WIRE
BH-12-FSX	5/8-18 UNF-2A	2-017	1.00	1.60	18 AWG
BH-16-FSX	3/4-16 UNF-2A	2-118	1.25	1.60	18 AWG

MPX/FSX connectors are recommended for new applications.

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WATER-BLOCKED WET-CON Rev 2 December 2014 Page 5 of 7

**SEACON** (europe) Ltd Seacon House, Hewett Road, Gapton Hall Industrial Estate, Great Yarmouth, NR31 0RB, United Kingdom TEL: +44 (0) 1493 652733 FAX: +44 (0) 1493 652840 E-Mail: info@seaconeurope.com Website: www.seaconeurope.com



(12-16 contacts) Mates with IL-FSX

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## WET-CON SERIES IL-MPX

WET-CON In-Line Connector (12-16 contacts) Mates with BH-FSX and IL-FSX Dummy Connector: DC-FSX

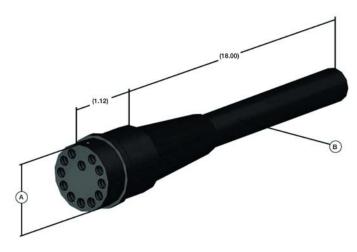
CONNECTOR	A - (INCHES)	B - CABLE
IL-12-MPX	1.60	18/12 SO
IL-16-MPX	1.60	18/16 SO

#### NOTES:

- IL-16-MPX WOC is not available, substitute with BH-16-MPX.
- Locking Sleeve: Optional.
- . Dummy Connector: Optional.
- Connectors must be lubricated before 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 IL-FSX

WET-CON Bulkhead Connector (12-16 contacts) Mates with BH-MPX and IL-MPX Dummy Connector: DC-MPX



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

MPX/FSX connectors are recommended for new applications.

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#### **FACE PATTERNS**



IL-1-FS



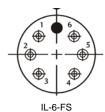
IL-2-FS



IL-3-FS

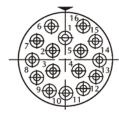


IL-4-FS









#### NOTE:

Female face view only. For male face view contact configurations please contact SEACON (europe) Ltd.

### STANDARD WIRING COLOR CODE

### STANDARD IN-LINE 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
	ODEEN/DI AOI/
9	GREEN/BLACK
10	ORANGE/BLACK
11	BLUE/BLACK
12	BLACK/WHITE
13	RED/WHITE
14	GREEN/WHITE
15	BLUE/WHITE
16	BLACK/RED

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Page 7 of 7

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