

# Baromax Underwater Connector



**Suburban Marine**  
YOUR UNDERWATER CONNECTOR

Baromax Underwater Connector series is the smallest high power density underwater connector rated for continuous submersion up to 10,000 psi. Wire sizes up to #18 AWG offers power capabilities up to 20 amps per contact. User configurable assemblies provide limitless configurations with one connector face.

## High Power Density

- Up to 40 amps in a compact footprint

## Lamella Female Contacts

- High amperage contact technology with 360° contact area

## Wire-to-bulkhead & Wire-to-Wire Configuration

- Connector faces are interchangeable

## Gigabit Ethernet Ready

- Minimize un-twisted cable length



**Build, Create**  
**Explore**

Baromax 8-pin connectors enabling a Gigabit Ethernet dropcam



**ORDERING INFORMATION**

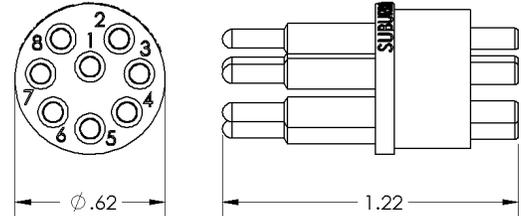
	<b>Description</b>	<b>Part Number</b>	<b>Material</b>
<b>Connectors</b>	Male 8-pin Connector	BM-A-8-M	
	Female 8-pin Connector	BM-A-8-F	
	Bulkhead Backshell	BM-A-BH-A-A	Brass
		BM-A-BH-A-B	316 Stainless Steel
	Inline Backshell	BM-A-IL-A-A	Brass
		BM-A-IL-A-B	316 Stainless Steel
<b>Accessories</b>	Locking Ring Male	BM-LR-M	POM
	Locking Ring Female	BM-LR-F	POM
	Epoxy	BM-EPOXY-A	
	Epoxy Gun	BM-DISPENSER-A	
	Epoxy Mixing Nozzle	BM-NOZZLE-A	
	Epoxy	BM-NEEDLE-A	
	O-Ring	BM-ORING-A	BUNA-N
	Snap Ring - 16mm	BM-SR-160	316 Stainless Steel
	Snap Ring - 13mm	BM-SR-130	316 Stainless Steel
	Assembly Jig	BM-JIG-A	Chipboard

## Male 8-pin Connector

BM-8-8-M

Material: Neoprene & Gold plated pins

The Baromax male 8-pin connector mates with any backshell.

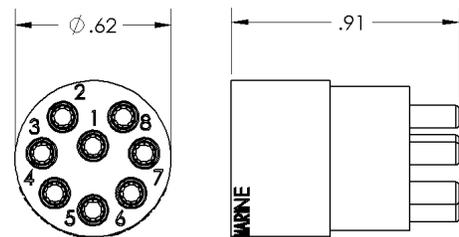


## Female 8-pin Connector

BM-8-8-F

Material: Neoprene & Gold plated pins

The Baromax female 8-pin connector mates with any backshell.

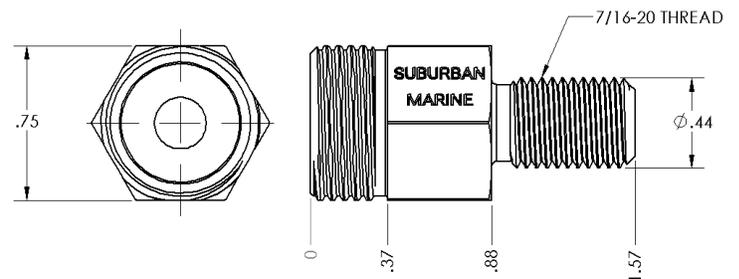


## Bulkhead Backshell

BM-A-BH-A-A Brass

BM-A-BH-A-B 316 Stainless Steel

The bulkhead backshell mates with standard 7/16-20 bulkhead threads and seals with a face-seal o-ring.

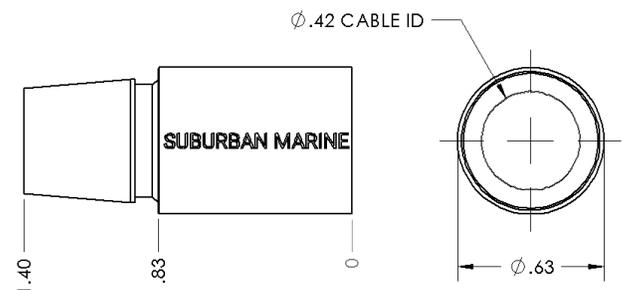


## Inline Backshell

BM-A-IL-A-A Brass

BM-A-IL-A-B 316 Stainless Steel

The inline backshell is used to make inline cable assemblies to mate with bulkheads or other inline cable assemblies.

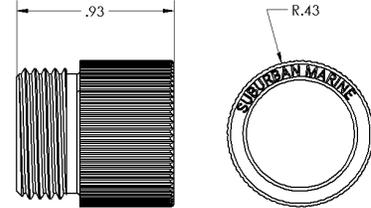


## Locking Ring Male

BM-LR-M-A-B

Material: POM

The male locking ring ensures a secure connection when mating inline cable assemblies.

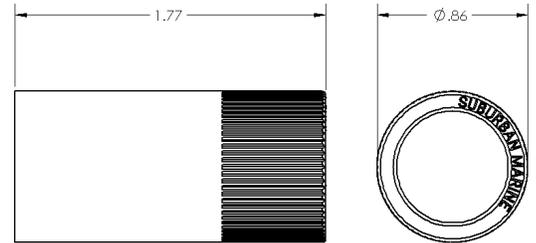


## Locking Ring Female

BM-LR-F-A-B

Material: POM

The female locking ring ensures a secure connection when mating inline cable assemblies to bulkheads or



## Snap Ring - 16mm

BM-SR-160

Material: 316 Stainless Steel

This snap ring installs on the inside diameter of the locking rings to secure connectors when they are mated.



## Snap Ring - 13mm

BM-SR-130

Material: 316 Stainless Steel

The 13mm snap ring is installed on the outside diameter of the inline backshell (BM-IL-X) to unmate the connectors when the locking ring is backed off.



# Baromax Accessories



## O-Ring

BM-ORING-A

Material: Buna-N

Durometer: 70A

Dash Number: 014

Fractional Width: 1/16 inch

The O-ring is used on the Baromax bulkhead face seal.



## Epoxy

BM-EPOXY-A

B-45TH Flexible two-part thixotropic epoxy 2:1 mix ratio

The Epoxy is used to bond and pot the Baromax connector to a backshell. It provides exceptional adhesion to metal and rubber as well as providing waterproofing and electrical insulation.



## Epoxy Gun

BM-DISPENSER-A

The dispenser is used to consistently and precisely dispense the Epoxy. A full squeeze dispenses 4.1grams of epoxy and features a no-drip design. Made of an impact resistant hardened plastic body.



## Epoxy Mixing Nozzle

BM-NOZZLE-A

The mixing nozzle for Epoxy features a Luer slip tip for direct installation of luer lock needles for potting your Baromax connector. The 20 mixing elements ensure complete mixing.



# Baromax Accessories



## Epoxy Needle

BM-NEEDLE-A

Material: Polypropylene with 304 stainless steel needle

Length: 1.5 inches

Size: 14 gauge tip (0.065in outside diameter)

The Epoxy Needle is a stainless steel blunt needle that attaches directly to the epoxy mixing nozzle. It provides easy potting directly into an assembled Baromax connector with backshell.



## Assembly Jig

BM-JIG-A

Material: Chipboard

The Assembly Jig holds everything in place during assembly and bonding. Assemble and pot up to 6 connectors at a time.



# Baromax Specifications



# Suburban Marine

## Electrical

Current Rating (Amperes)	20 per contact, 40 max per connector
Voltage Rating (VDC)	400
Typical Contact Resistance (mΩ)	< 2 after 30 mate cycles
Final Contact Resistance (mΩ)	< 10 after 500 mate cycles
Insulation Resistance (MΩ)	> 200 @ 300VDC between adjacent terminals

## Mechanical

Poles	8
Wire Size Range (AWG)	24 to 18
Maximum Cable Outside Diameter	0.35 inches
Operating Temperature Air (°C)	-40 to 60
Operating Temperature Water (°C)	-4 to 60
Mating Cycles	500
Mated Pressure (psi)	10,000

## Materials

Connector Body	Neoprene
Connector Contacts	30 microinch Gold Plated Brass

# Baromax Mechanical Mounting



## Bulkhead Mounting

BM-A-BH-X-A

The Baromax Bulkhead (BM-BH-X) can be installed in a machined hole matching the specifications shown. Alternate threads available by request.

