

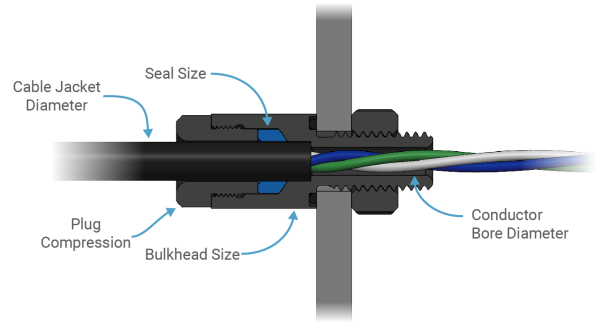
## Performance Characteristics<sup>1</sup>

Depth Rating	1000 msw / 3280 fsw
Design Lifetime <sup>2</sup>	3 years or 500 cycles to rated depth

<sup>1</sup> For reference only, performance may vary depending on application and cable construction, it is the responsibility of the customer to determine suitability for their application  
<sup>2</sup> Design life was used to inform testing in an accelerated environment, does not reflect warranty period

### Size Index

Seal Size	Bulkhead Sizes	Conductor Bore Diameter [mm]	Plug Compression	Jacket Diameter Range <sup>3</sup> [mm]	Part Number
4.5	M06	3.3 mm	High (HC)	4.0 ± 0.3	BR-100870-345
	M10				BR-100870-145
	M06		Low (LC)	4.5 ± 0.3	BR-100870-245
					M10
5.5	M10	4.0 mm	High (HC)	5.0 ± 0.3	BR-100870-155
			Low (LC)	5.5 ± 0.3	BR-100870-055
6.5	M10	4.8 mm	High (HC)	6.0 ± 0.3	BR-100870-165
			Low (LC)	6.5 ± 0.3	BR-100870-065
7.5	M10	5.7 mm	High (HC)	7.0 ± 0.3	BR-100870-175
			Low (LC)	7.5 ± 0.3	BR-100870-075
8.5	M10	6.5 mm	High (HC)	8.0 ± 0.3	BR-100870-185
			Low (LC)	8.5 ± 0.3	BR-100870-085
9.5	M14	7.5 mm	High (HC)	9.0 ± 0.3	BR-100870-195
			Low (LC)	9.5 ± 0.3	BR-100870-095



<sup>3</sup> Jacket diameter range varies for foam jacketed cables, see guides for more details

### Tools

Seal Size	Bulkhead Size	Bulkhead Wrench	Bulkhead/Nut Flat Size	Bulkhead Torque	Plug Wrench	Plug Hex Size	Plug Torque
4.5	M06	BR-100977-006	12 mm	1 N·m	BR-100369-011	11 mm	14 N·m
4.5	M10	BR-100977-010	16 mm	3.5 N·m	BR-100369-011	11 mm	14 N·m
5.5, 6.5, 7.5, 8.5	M10	BR-100977-010	16 mm	3.5 N·m	BR-100369-014	14 mm	14 N·m
9.5	M14	BR-100977-014	20 mm	3.5 N·m	BR-100369-018	18 mm	20 N·m

### Tested Cables

Compatible WetLink Penetrator Part Number	Cable Part Name / Number	Manufacturer	Application	Jacket Diameter [mm]	Jacket Material	Conductors	Tested Current <sup>1</sup>	Nominal Voltage	Max Temp <sup>2</sup>
BR-100875-345 BR-100875-145	Fathom Slim Tether (BR-100638)	Blue Robotics	Tether	4.0	PUR Foam	1x UTP 26AWG	-	-	50°C
BR-100875-245 BR-100875-045	Lumen/Gripper Cable (BR-101050)	Blue Robotics	Power / PWM	4.5	PUR	3x 22AWG	-	-	60°C
	Ping Cable (BR-100452)	Blue Robotics	Power / Serial	4.5	PUR	4x 24AWG	-	-	60°C
BR-100875-055	chainflex® control cable CF9 (CF9-02-06)	IGUS	Power / Signal	5.4	TPE	6x 24AWG	-	300V	60°C
	Ping 360 Cable (BR-100452)	Blue Robotics	Power / Ethernet	5.5	PUR	3x UTP 26AWG	-	-	50°C
BR-100875-165	T200 Thruster Cable (BR-100997)	Blue Robotics	Power	6.4	PUR	3x 16AWG	48A	-	60°C
	Etherline® (2170300)	LAPP	Cat5e	6.3	PUR	4x SFTP 26AWG	-	1000V	60°C
BR-100875-175	Fathom ROV Tether (BR-100987)	Blue Robotics	Cat5 / Tether	7.6	PUR Foam	4x UTP 26AWG	-	-	50°C
BR-100875-075	Ethernet and Power Cable (BR-100897)	Blue Robotics	Cat5 + Power	7.5	PUR	4x UTP 26AWG + 2x 22AWG	-	-	60°C
BR-100875-185	chainflex® control cable CF9 (CF9-02-12)	IGUS	Power / Signal	7.7	TPE	12x 24AWG	-	300V	60°C
BR-100875-085	Power Cable, 2-conductor (BR-101093)	Blue Robotics	Power	8.3	PUR	2x 12AWG	60A	-	60°C
BR-100875-195	T500 Thruster Cable (BR-100235)	Blue Robotics	Power	9.0	PUR	3x 12AWG	100A	-	60°C

<sup>1</sup> Current ratings evaluated at ambient temperatures in water

<sup>2</sup> Sustained high temperatures can lead to performance loss over long periods of time

### Physical Properties

	M06	M10	M14
Bulkhead Size	M06	M10	M14
Seal Sizes (A)	4.5	4.5, 5.5, 6.5, 7.5, 8.5	9.5
Bulkhead Thread (B)	M6 x 1	M10 x 1.5	M14 x 1.5
Bulkhead Thread Length (C)	10 mm	20 mm	25 mm
Recommended Bulkhead Through Hole Size	6.2	10.2	14.2
Assembled Height from Endcap (D)	23.5 mm	18 – 26 mm	23 mm
Overall Outer Diameter (E)	13 mm	18 mm	22 mm
O-ring Size (F)	1.5x7 Buna-N 70A	-013 Buna-N 70A	1.5x15 Buna-N 70A
Nut Height (G)	4 mm	8 mm	8 mm
Nut Slot Width (H)	3.5 mm	5 mm	9 mm
Assembled air weight (no cable)	7.6 g	13.9 – 15.6 g	24.9 g
Assembled water weight (no cable)	5.1 g	10.2 – 10.7 g	16.4 g
Seal Material	FKM		
Seal Material Temperature Range	-25°C to 200°C		
Bulkhead & Plug Material	7075-T6 Aluminum, Type III Anodized		

### Test Procedure<sup>1</sup>

Minimum Number of Test Samples	36
Test Pressure	1000 msw
Number of Cycles	500 cycles
Water Temperatures at Pressure	2°C to 40°C
Tested Current at Pressure (if applicable)	✓
Temperature Shock Cycling in Air	-30°C to 70°C
Cable Axial Strain (10 cycles)	3.5 to 7.5 kg
Cable Radial & Torsional Straining	✓
1000V Hipot Test & Continuity Test	✓
Accelerated Age Test	✓

<sup>1</sup> Test values shown for reference only, it is the responsibility of the customer to determine suitability for their application

