# WetLink Penetrator (WLP) Technical Specifications

*Version 1.5.2 (Nov 2026)*

## Performance Characteristics[1]

| | |
|---|---|
| Depth Rating | 1000 msw / 3280 ftsw |
| Design Lifetime[2] | 3 years or 500 cycles to rated depth |

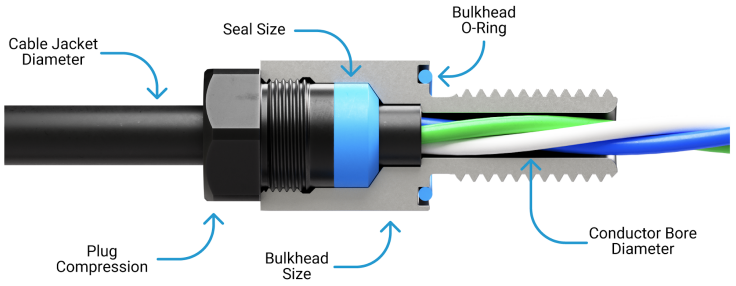
[1] *For reference only, performance may vary depending on application and cable construction, it is the responsibility of the customer to determine suitability for their application*

[2] *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[1] [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 | | | | **BR-100870-045** |
| 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** |

[1] *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

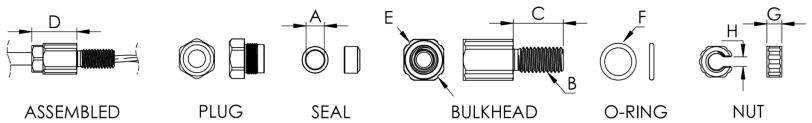
| Compatible WetLink Penetrator Part Number | Cable Part Name / Number | Manufacturer | Application | Jacket Diameter [mm] | Jacket Material | Conductors | Tested Current[1] | Nominal Voltage | Max Temp[2] |
|---|---|---|---|---|---|---|---|---|---|
| **BR-100875-345 BR-100875-145** | Fathom Slim Tether (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 |

[1] *Current ratings evaluated at ambient temperatures in water*

[2] *Sustained high temperatures can lead to performance loss over long periods of time*

## Physical Properties

| 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 | 29.5 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[1]

| | |
|---|---|
| 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 | ✓ |

[1] *Test values shown for reference only, it is the responsibility of the customer to determine suitability for their application*