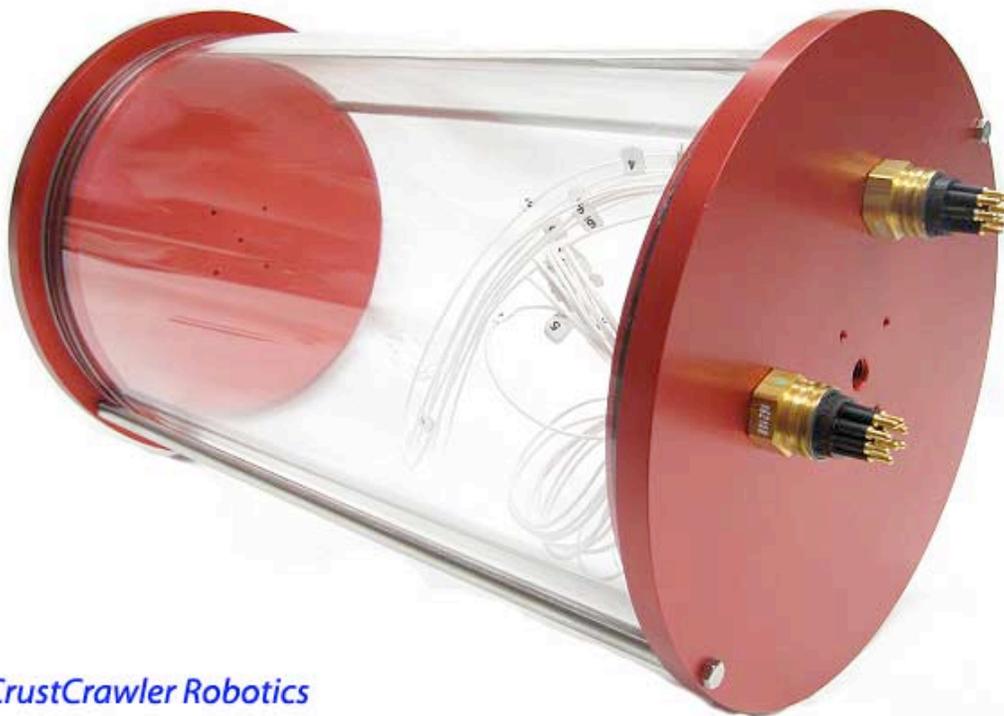


Waterproof Vessel

Technical Guide

VERSION 3.0



CrustCrawler Robotics



Author –Alex Dirks

Waterproof Vessel Specifications

Weight

- 7.25 in. Waterproof Assembly – 9.9 pounds (kg)
- 12 in. Waterproof Assembly- 11.3 pounds (kg)
- 17.25 in. Waterproof Assembly- 12.9 pounds (kg)
-

End Cap Material

- Precision machined, 6061 T6 aluminum

Finish – End Caps

- Red anodized, scratch resistant, hard finish

Cylinder Material

- Optically Clear Acrylic

Cylinder Dimensions – 7.25in. (18.41cm) Length

- 150 foot depth rating – 7.00in (17.78cm) OD X 6.50in (16.51cm) ID X 7.25in (18.41cm)
- 400 foot depth rating – 7.25in (18.41cm) OD X 6.50in (16.51cm) ID X 7.25in (18.41cm)

Cylinder length with End caps

- 8 in. (20.32cm)

Cylinder Dimensions – 12 in. (30.48cm) Length

- 150 foot depth rating – 7.00in (17.78cm) OD X 6.50in (16.51cm) ID X 12in (30.48cm) length
- 400 foot depth rating – 7.25in (18.41cm) OD X 6.50in (16.51cm) ID X 12in (30.48cm) length

Cylinder length with End caps

- 12.75 in. (32.28cm)

Cylinder Dimensions – 17.25in. (43.81cm) Length

- 150 foot depth rating – 7.00in (17.78cm) OD X 6.50in (16.51cm) ID X 17.25in (43.81cm)
- 400 foot depth rating – 7.25in (18.41cm) OD X 6.50in (16.51cm) ID X 17.25in (43.81cm)

Cylinder length with End caps

- 18 in. (45.72cm)

Hull Penetrators

- Sea-Con MicroWetcon Bulkhead Penetrator (7/16 - 20 thread) with 20in (30.48cm) female connector with Delrin locking sleeve
- Each wire can handle up to 14 amps of current
- All bulkhead penetrators are 8-wire /18 gauge
- Additional threaded holes can be added at \$50.00 U.S. each for any threaded connector. Please contact us for more information (sales@crustcrawler.com)

Retention Rod Material

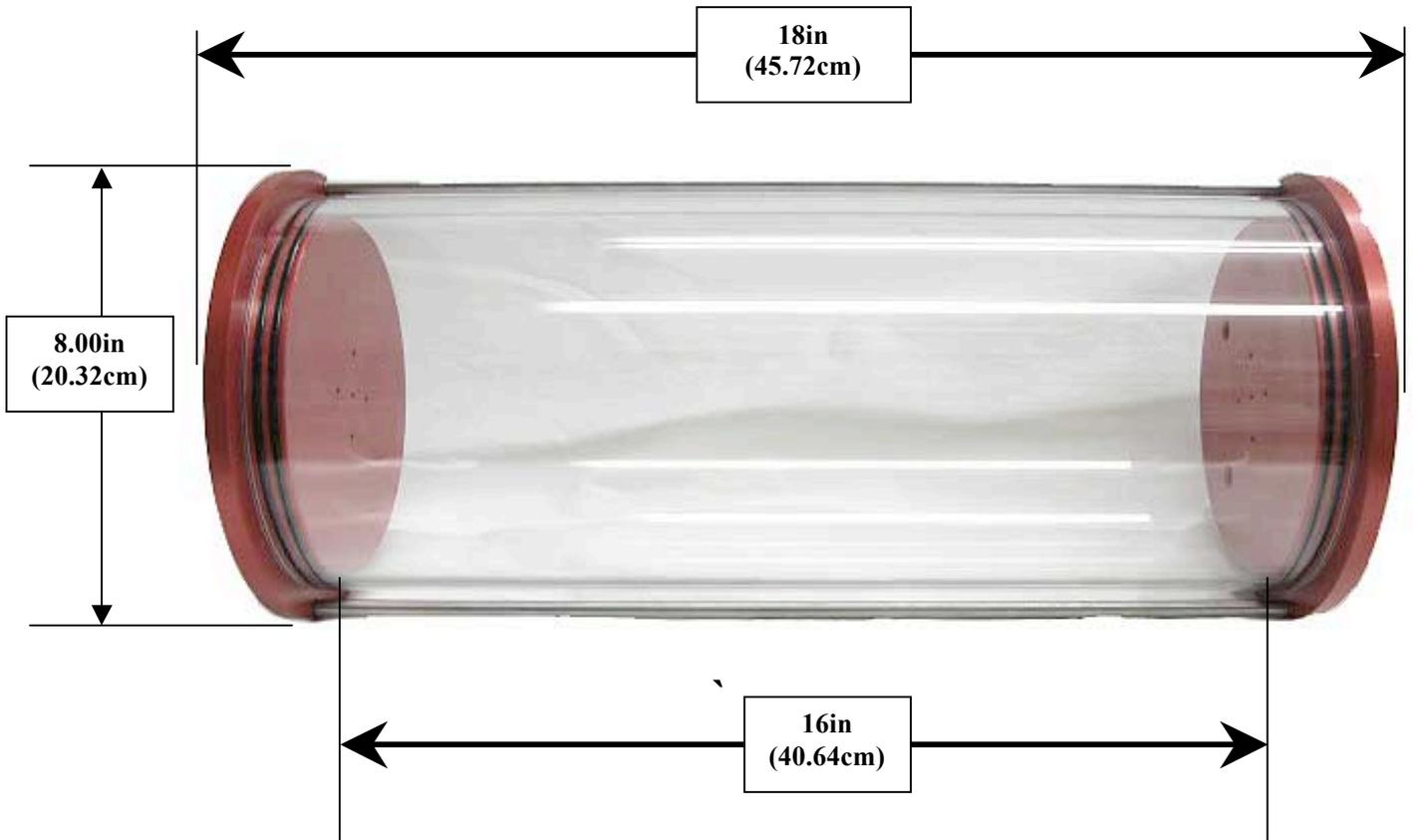
- 303 Stainless

Internal / External Mounting Points

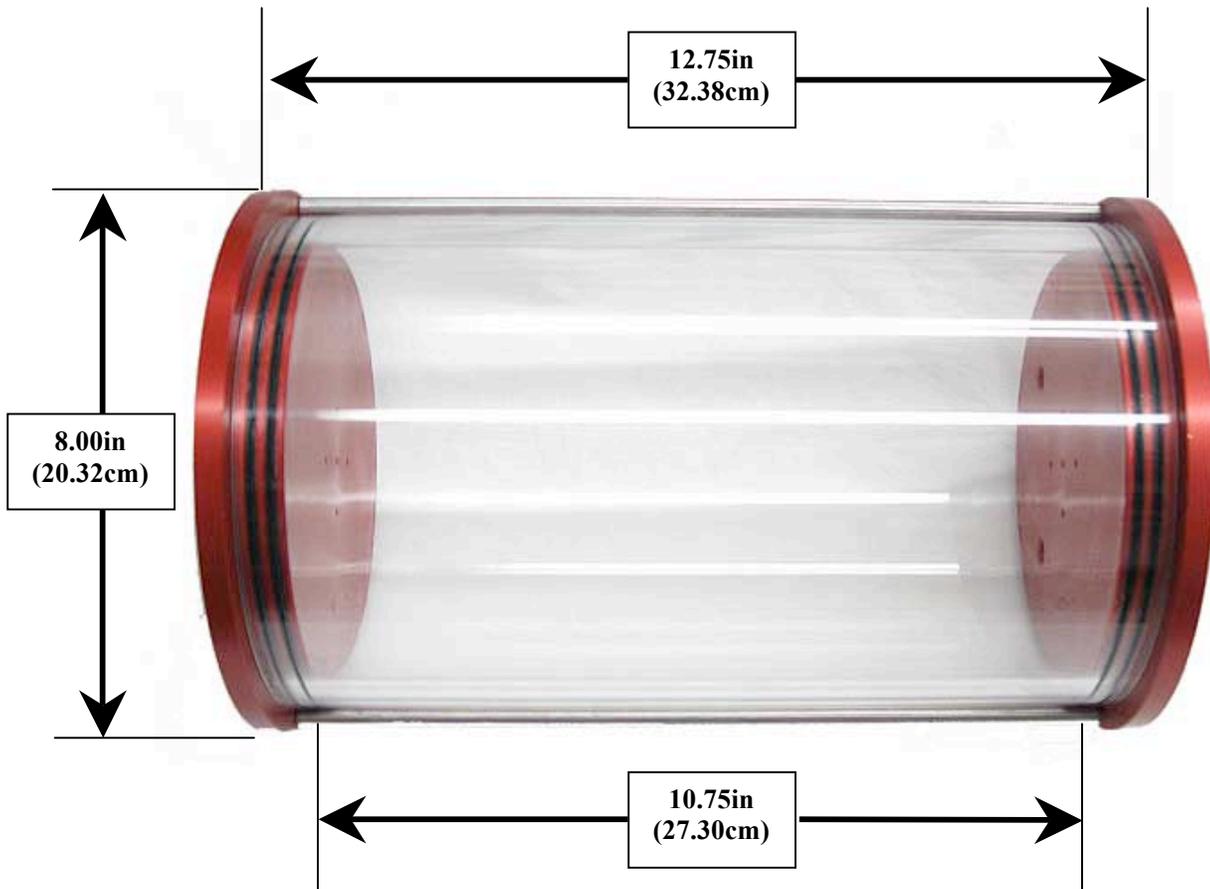
- The aluminum end caps have threaded both on the inside and outside of the end caps
- Internal Mounting Holes - M3 threaded holes (1.5in bolt circle) allows for convenient mounting of instrument brackets for electronics.
- External Mounting Holes – M3 threaded holes (1.5in bolt circle) and a single M10 threaded hole (centered) allows for the convenient installation of the waterproof vessel to your UROV or other structure using our mounting kit accessory.

Note: - See CAD drawing on page #6 for more information.

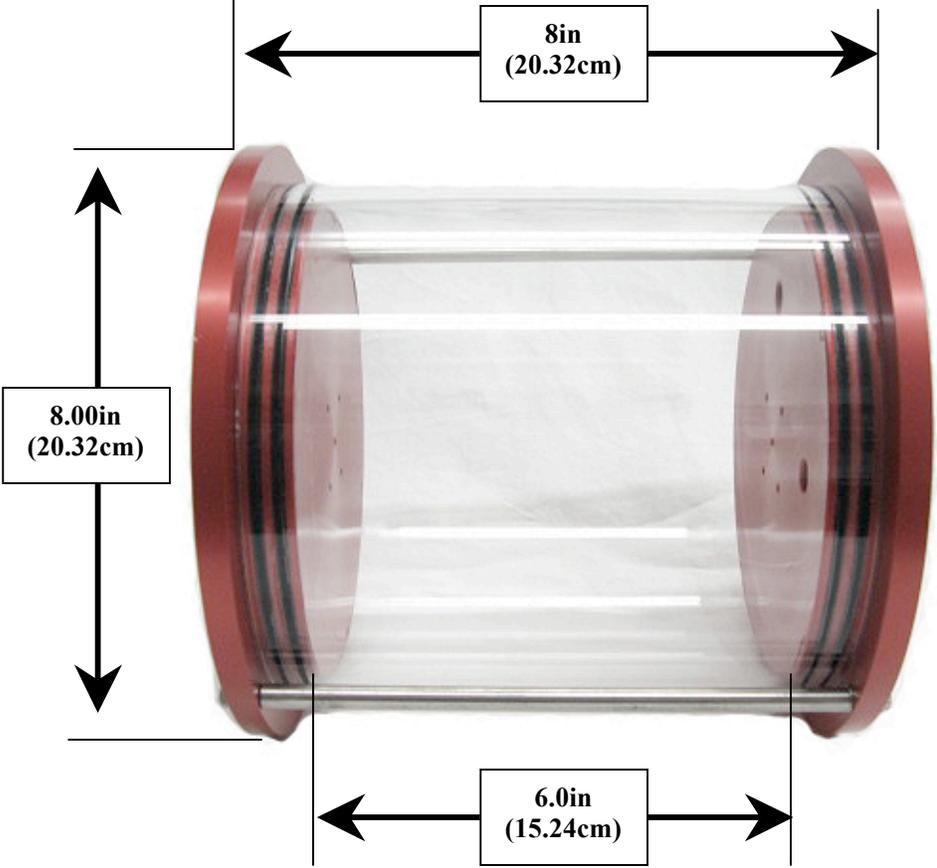
Overall Dimensions – 17.25in. (43.81cm) Cylinder

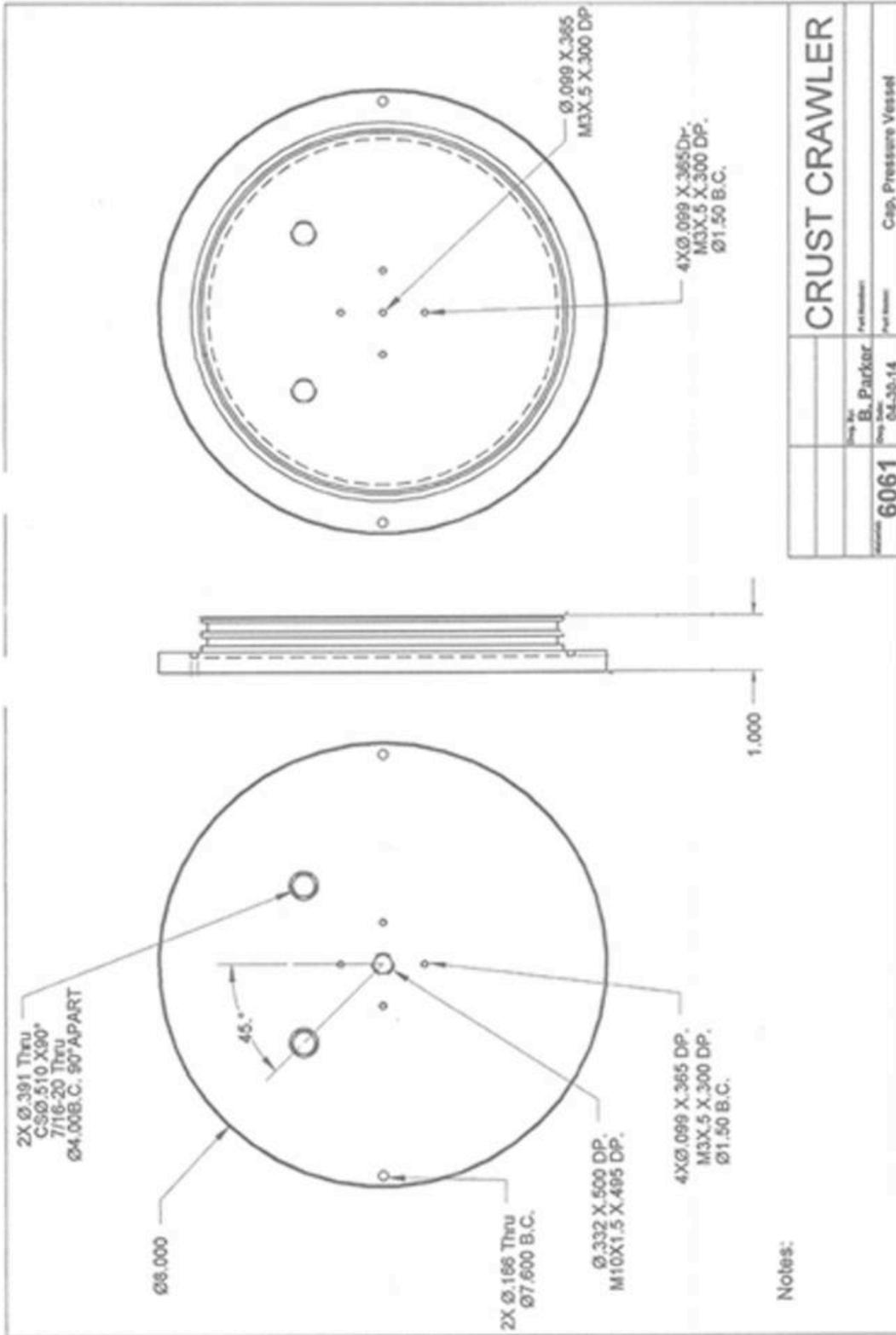


Overall Dimensions – 12in. (30.48cm) Cylinder



Overall Dimensions – 7.25in. (18.41cm) Cylinder





CRUST CRAWLER			
Part Number	B. Parker		
Part Name	Cap. Pressure Vessel		
Revision	6061	Date	04-20-14