

# Port Recommendations for Ikelite Housings with Dry Lock (DL) Port System

#### **Reading the Chart**

Lenses are listed by manufacturer and are sorted in numerical order by focal length. Shorter focal lengths have a wider field of view; longer focal lengths are more narrow.

#### Port Recommendation Column

Recommendations are based on the best information we have available at the time and are subject to change without notice. Improper fit may occur due to lens hoods, optional accessories, incorrect information from the lens manufacturer, typos, or corrupt data. As with all underwater equipment, please assemble and check your system for fit with plenty of time *prior to leaving on your trip*. Some vignetting (dark shading in the corners of the image), lack of edge definition, and/or spherical aberration may be present depending on choice of lens and port.

#### **Zoom or Focus**

In general, dome ports are recommended for zoom lenses to allow maximum use of the lens' zoom range with little or no vignetting. All lenses support auto focus (AF) only unless otherwise noted. If a gear is listed for a fixed lens, this is an optional gear for manual focus.

#### +4 Close-Up Lens

Dome ports create an apparent image approximately 12" from the camera's sensor plane when taken under water. A lens must have a minimum focus distance of less than 12" to achieve focus behind a dome. This additional lens shortens the minimum focus distance of your lens to less than 12" to provide sharp images when using a dome under water. A +4 close-up lens (or diopter) is available for purchase through your local camera store, and is commonly sold in a set with +1 and +2 close-up lenses. Common brands include Tiffen and Hoya. Make sure to purchase the correct size for your lens. The thread diameter is usually referenced on the front of the lens in millimeters (ø 58mm, 67mm, etc.).

#### Lens Missing?

We do not have access to every lens on the market in order to provide a recommendation. If you need help selecting a port for a lens not listed, please email us at <a href="mailto:ikelite@ikelite.com">ikelite@ikelite.com</a> with the full lens name, and verified lens diameter and fully extended length measured with calipers from the camera's lens mount including any lens hood or projections. We are not able to provide recommendations for extending zoom lenses based on manufacturer's published specifications—the lens must be measured by hand in order to select an appropriate port. We are not able to provide information on possible vignetting or corner softness for lenses we have not tested.

### **Ikelite Port Systems**













#### Dry Lock (DL) System

The DL system was designed to accommodate larger diameter lenses, especially popular with full frame camera systems. The DL system uses the same sealing mechanism made popular on our compact DSLR and compact mirrorless housings. This system utilizes a unique "external o-ring seal" which makes the port sealing o-ring highly visible and keeps water from dropping onto the camera body and sensor during lens changes. The DL system has a rugged locking mechanism which is simple and secure without any complex gearing or parts that may break in a remote location. The system is designed with positive orientation and virtually no movement when secured properly—perfect for use in the surf and at depths up to 200' (60m).

#### Dry Lock Micro (DLM) System

The DLM system is a miniaturized version of the DL system featured on housings for mirrorless and micro four-thirds cameras with compact body styles. It is also used on the compact DSLR housing for the Canon EOS 100D Rebel SL1.

#### Four Lock (FL) System

The FL system was a 2009 update to the legacy Two Lock port system that originated with film SLR housings in the late 1970s. Though the locking mechanism is reliable and simple to use, the system supports a maximum lens diameter of only 3.4". This limitation is particularly difficult when working with newer full frame lenses which feature more advanced image stabilization and are brighter than their predecessors. Because the DL port opening is so much larger and has an external sealing mechanism, older lens ports designed for our Two and Four Lock systems **cannot** be used with the newer DL system.

# **DL System Products**

|                                    | Product Number | Weight | Description                                                                                                                                                                                                                                                                           |
|------------------------------------|----------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 20MM PORT EXTENSION                | 75020          | 162g   | Extends a DL system dome or flat port by approximately 20mm (actual 0.81").                                                                                                                                                                                                           |
| 28MM PORT EXTENSION                | 75028          | 197g   | Extends a DL system dome or flat port by approximately 28mm (actual 1.025").                                                                                                                                                                                                          |
| 42MM PORT EXTENSION                | 75042          | 244g   | Extends a DL system dome or flat port by approximately 42mm (actual 1.667").                                                                                                                                                                                                          |
| 50MM PORT EXTENSION                | 75050          | 267g   | Extends a DL system dome or flat port by approximately 50mm (actual 2.00").                                                                                                                                                                                                           |
| MACRO FLAT PORT M67                | 75301          | 230g   | Port with flat optical glass element. 67mm threaded outer front for the attachment of external macro wet lenses. Accepts Ikelite 3.0" diameter filters and accessories. May be attached directly to the DL port base or combined with extension(s).                                   |
| 8" DOME PORT                       | 75340          | 983g   | 8" diameter dome made of optical grade acrylic. Comparable quality to glass but significantly lighter and easier to handle, especially at the surface of the water. Not compatible with external filters. May be attached directly to the DL port base or combined with extension(s). |
| 8" DOME PORT<br>WITH EXTENDED BASE | 75342          |        | A special longer 8" diameter dome port designed for extremely large lenses like the Canon EF 11-24mm. See port charts for compatibility. Not compatible with external filters. May be attached directly to the DL port base or combined with extension(s).                            |
| COMPACT 8" DOME PORT               | 75344          | 230g   | A low volume dome which provides similar image quality to our standard 8" dome port in with a reduced size ideal for close focus wide angle and great for travel.                                                                                                                     |
| ZOOM GEAR RETAINER                 | 75900          |        | Required when using a zoom or focus gear. Included with DL housings.                                                                                                                                                                                                                  |
| O-RING FOR DL SERIES PORTS         | 0139.41        | 5g     | Gray o-ring for DL port base and extensions.                                                                                                                                                                                                                                          |
| SILICONE LUBRICANT (2CC)           | 0184.2         | 6g     | Liquid silicone lubricant in a re-sealable tube.                                                                                                                                                                                                                                      |
| THUMB SCREWS (SET OF 3)            | 9249.7         |        | Spare thumb screws to attach any DL extension or port.                                                                                                                                                                                                                                |

# Canon Lens Port Chart

|                                                                                                                 | Port Recommendation                               | Zoom or Focus       | Alternative Option                                |
|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------|---------------------------------------------------|
| Canon 8-15 mm f/4L EF USM Fisheye                                                                               | <b>75340</b> DOME                                 | 5509.28 GEAR        | -                                                 |
| Canon 10-18 mm f/4.5-5.6 EF-S IS STM                                                                            | 75344 DOME + 75028 EXTENSION                      | 5509.27 GEAR        | 75340 DOME + 75028 EXTENSION                      |
| Canon 10-22 mm f/3.5-4.5 EF-S USM                                                                               | 75340 DOME + 75028 EXTENSION                      | <b>5509.28</b> GEAR |                                                   |
| Canon 11-24 mm f/4L EF USM                                                                                      | TO BE DETERMINED                                  |                     |                                                   |
| Canon 14 mm EF 1:2.8<br>Canon 14 mm EF f/2.8L II USM                                                            | <b>75340</b> DOME                                 |                     |                                                   |
| Canon 15 mm EF f/2.8 Fisheye                                                                                    | <b>75340</b> DOME                                 |                     |                                                   |
| Canon 16-35 mm f/2.8L II USM<br>Canon 16-35 mm f/2.8L III USM                                                   | 75340 DOME + 75020 EXTENSION<br>+ 75042 EXTENSION | <b>5509.28</b> GEAR | 75340 DOME + 75042 EXTENSION                      |
| Canon 16-35 mm f/4L EF IS USM                                                                                   | TO BE DETERMINED                                  |                     |                                                   |
| Canon 17-40 mm f/4L EF USM                                                                                      | 75340 DOME + 75050 EXTENSION                      | <b>5509.28</b> GEAR | 75344 DOME + 75050 EXTENSION                      |
| Canon 17-85 mm f4-5.6 EF-S IS USM                                                                               | 75340 DOME + 75042 EXTENSION                      | <b>5509.28</b> GEAR | 75344 DOME + 75020 EXTENSION<br>+ 75042 EXTENSION |
| Canon 18-55 mm f/3.5-5.6 EF-S II<br>Canon 18-55 mm f/3.5-5.6 EF-S IS II<br>Canon 18-55 mm f/3.5-5.6 EF-S IS STM | 75340 DOME + 75028 EXTENSION                      | <b>5509.27</b> GEAR | 75344 DOME + 75042 EXTENSION                      |
| Canon 18-135 mm f/3.5-5.6 IS                                                                                    | TO BE DETERMINED                                  |                     |                                                   |
| Canon 20 mm f/2.8 USM                                                                                           | <b>75340</b> DOME                                 |                     |                                                   |

|                                                                                    | Port Recommendation                            | Zoom or Focus                            | Alternative Option                                |
|------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------|---------------------------------------------------|
| Canon 24 mm f/1.4L EF USM Canon 24 mm f/1.4L II EF USM Canon 24 mm f/2.8 EF IS USM | <b>75340</b> DOME                              | -                                        |                                                   |
| Canon 24-70 mm f/2.8L II EF USM                                                    | TO BE DETERMINED                               |                                          |                                                   |
| Canon 24-70 mm f/4L IS USM                                                         | 75340 DOME + 75042 EXTENSION                   | <b>5509.21</b> GEAR                      | 75344 DOME + 75020 EXTENSION<br>+ 75042 EXTENSION |
| Canon 24-105 mm f/4L IS II EF USM                                                  | TO BE DETERMINED                               |                                          |                                                   |
| Canon 28 mm f/1.8 USM                                                              | <b>75340</b> DOME                              |                                          |                                                   |
| Canon 35 mm f/1.4L USM                                                             | <b>75340</b> DOME                              |                                          |                                                   |
| Canon 35 mm f/1.4L II USM                                                          | 75340 DOME + 75020 EXTENSION                   |                                          |                                                   |
| Canon 35 mm f/2 IS USM                                                             | <b>75340</b> DOME                              |                                          |                                                   |
| Canon 60 mm f/2.8 EF-S Macro                                                       | <b>75301</b> PORT                              | 5509.28 GEAR AF/MF switch not accessible |                                                   |
| Canon 100 mm f/2.8 EF Macro<br>Canon 100 mm f/2.8L EF IS USM Macro                 | 75301 PORT + 75020 EXTENSION + 75050 EXTENSION | TO BE DETERMINED                         |                                                   |

# Nikon Lens Port Chart

|                                                                                                                          | Port Recommendation                                                                            | Zoom or Focus                               | Alternative Option                                                                         |
|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------------------------------------------------------------------|
| Nikon 10-24 mm f/3.5-4.5G ED AF-S DX                                                                                     | TO BE DETERMINED                                                                               |                                             |                                                                                            |
| Nikon 10.5 mm f/2.8G ED AF DX Fisheye                                                                                    | 75340 DOME Slight vignetting will be present; Remove dome shade to reduce vignetting           |                                             |                                                                                            |
| Nikon 12-24 mm f/4 IF-ED AF-S DX                                                                                         | <b>75340</b> DOME                                                                              | <b>5509.27</b> GEAR                         |                                                                                            |
| Nikon 14 mm f/2.8D ED                                                                                                    | <b>75340</b> DOME                                                                              |                                             |                                                                                            |
| Nikon 14-24 mm f/2.8G ED AF-S                                                                                            | TO BE DETERMINED                                                                               |                                             |                                                                                            |
| Nikon 16 mm f/2.8D AF Fisheye                                                                                            | 75340 DOME Some vignetting may be present; remove dome shade to reduce or eliminate vignetting |                                             |                                                                                            |
| Nikon 16-35 mm f/4G ED VR AF-S                                                                                           | 75340 DOME + 75042 EXTENSION                                                                   | <b>5509.27</b> GEAR                         |                                                                                            |
| Nikon 17-35 mm f/2.8D IF-ED AF-S                                                                                         | <b>75340</b> DOME                                                                              | <b>5509.17</b> GEAR                         |                                                                                            |
| Nikon 17-55 mm f/2.8D IF-ED AF-S DX                                                                                      | 75340 DOME + 75020 EXTENSION                                                                   | May operate with 5509.28 gear (unconfirmed) |                                                                                            |
| Nikon 18-35 mm f/3.5-4.5G ED                                                                                             | <b>75340</b> DOME                                                                              | <b>5509.28</b> GEAR                         |                                                                                            |
| Nikon 18-55 mm f/3.5-5.6G ED II AF-S DX<br>Nikon 18-55 mm f/3.5-5.6G VR AF-S DX<br>Nikon 18-55mm f/3.5-5.6 VR II AF-S DX | 75340 DOME + 75042 EXTENSION                                                                   | <b>5509.28</b> GEAR                         | Use of extension recommended for best image sharpness. Dome may be used without extension. |
| Nikon 18-70 mm f/3.5-4.5G IF-ED AF-S DX                                                                                  | +4 CLOSE-UP LENS REQUIRED<br>75340 DOME + 75020 EXTENSION                                      | <b>5509.28</b> GEAR                         | Use of extension recommended for best image sharpness. Dome may be used without extension. |

|                                                                           | Port Recommendation                                       | Zoom or Focus       | Alternative Option                      |
|---------------------------------------------------------------------------|-----------------------------------------------------------|---------------------|-----------------------------------------|
| Nikon 18-105 mm f/3.5-5.6G ED VR AF-S DX                                  | +4 CLOSE-UP LENS REQUIRED<br>75340 DOME + 75042 EXTENSION | <b>5509.28</b> GEAR | -                                       |
| Nikon 20 mm f/1.8G ED AF-S                                                | <b>75340</b> DOME                                         |                     |                                         |
| Nikon 24 mm f/1.4G ED AF-S<br>Nikon 24 mm f/1.8G ED AF-S                  | <b>75340</b> DOME                                         |                     |                                         |
| Nikon 24-70 mm f/2.8G ED AF-S                                             | TO BE DETERMINED                                          |                     |                                         |
| Nikon 24-85 mm f/3.5-4.5G ED VR                                           | TO BE DETERMINED                                          |                     |                                         |
| Nikon 28 mm f/1.8G                                                        | <b>75340</b> DOME                                         |                     |                                         |
| Nikon 35 mm f/1.4G AF-S                                                   | TO BE DETERMINED                                          |                     |                                         |
| Nikon 35 mm f/1.8G<br>Nikon 35 mm f/1.8G AF-S DX                          | <b>75301</b> PORT                                         |                     | <b>75340</b> DOME                       |
| Nikon 40 mm f/2.8G                                                        | <b>75301</b> PORT                                         |                     | +4 CLOSE-UP LENS REQUIRED<br>75340 DOME |
| Nikon 50 mm f/1.4D AF<br>Nikon 50 mm f/1.4G AF-S<br>Nikon 50 mm f/1.8D AF | +4 CLOSE-UP LENS REQUIRED<br>75301 PORT                   |                     | <b>75340</b> DOME                       |
| Nikon 85 mm f/1.4G AF-S                                                   | TO BE DETERMINED                                          |                     |                                         |
| Nikon 85 mm f/1.8G AF-S                                                   | <b>75301</b> PORT                                         |                     |                                         |
| Nikon 85 mm f/3.5G ED VR AF-S Macro                                       | 75301 PORT + 75028 EXTENSION                              |                     |                                         |
| Nikon 105 mm Macro D                                                      | TO BE DETERMINED                                          |                     |                                         |

|                                         | Port Recommendation                            | Zoom or Focus    | Alternative Option |
|-----------------------------------------|------------------------------------------------|------------------|--------------------|
| Nikon 105 mm Macro f/2.8G ED-IF AF-S VR | 75301 PORT + 75020 EXTENSION + 75050 EXTENSION | TO BE DETERMINED |                    |

# Sigma Lens Port Chart

|                                                                                                                      | Port Recommendation                                                  | Zoom or Focus       | Alternative Option                                                                            |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------|-----------------------------------------------------------------------------------------------|
| Sigma 8 mm f/3.5 EX DG Circular Fisheye                                                                              | <b>75340</b> DOME                                                    |                     |                                                                                               |
| Sigma 8-16 mm F4.5-5.6 DC HSM                                                                                        | <b>75340</b> DOME <b>+ 75042</b> EXTENSION                           | <b>5509.68</b> GEAR | 42mm extension recommended for best image sharpness. Dome port may be used without extension. |
| Sigma 10 mm F2.8 EX DC Fisheye HSM                                                                                   | 75340 DOME Some vignetting may be present with full frame cameras    | <del></del>         |                                                                                               |
| Sigma 10-20 mm f/4.0-5.6 EX DC HSM                                                                                   | TO BE DETERMINED                                                     |                     |                                                                                               |
| Sigma 12-24 mm f/4 DG HSM   A<br>Sigma 12-24 mm f/4.5-5.6 DG HSM                                                     | TO BE DETERMINED                                                     |                     |                                                                                               |
| Sigma 15 mm F2.8 EX DG Diagonal Fisheye                                                                              | 75340 DOME Slight vignetting will be present with full frame cameras |                     |                                                                                               |
| Sigma 17-70 mm f/2.8-4.5 DC Macro<br>Sigma 17-70 mm f/2.8-4.5 DC Macro HSM<br>Sigma 17-70 mm f/2.8-4 DC Macro OS HSM | TO BE DETERMINED                                                     |                     |                                                                                               |
| Sigma 24 mm f/1.4 DG HSM   A<br>Sigma 24 mm f/1.8 EX DG Aspherical Macro                                             | <b>75340</b> DOME                                                    |                     |                                                                                               |

|                                                                         | Port Recommendation                            | Zoom or Focus                                        | Alternative Option                       |
|-------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------------|------------------------------------------|
| Sigma 24-35 mm f/2 DG HSM   A                                           | 75340 DOME + 75042 EXTENSION                   | NOT AVAILABLE  Must be used at a fixed focal  length |                                          |
| Sigma 35 mm f/1.4 DG HSM   A                                            | 75340 DOME + 75028 EXTENSION                   |                                                      |                                          |
| Sigma 50 mm f/1.4 DG HSM   A                                            | TO BE DETERMINED                               |                                                      |                                          |
| Sigma 50 mm f/1.4 EX DG HSM                                             | <b>75301</b> PORT                              |                                                      | + 4 CLOSE-UP LENS REQUIRED<br>75340 DOME |
| Sigma 50 mm f/2.8 EX DG Macro                                           | <b>75301</b> PORT                              | <b>5509.28</b> GEAR                                  | <b>75340</b> DOME                        |
| Sigma 70 mm f/2.8 EX DG Macro                                           | 75301 PORT + 75020 EXTENSION + 75050 EXTENSION | AF ONLY                                              |                                          |
| Sigma 105 mm f/2.8 EX DG Macro<br>Sigma 105 mm f/2.8 EX DG OS HSM Macro | TO BE DETERMINED                               |                                                      |                                          |

# **Tokina Lens Port Chart**

|                                   | Port Recommendation | Zoom or Focus | Alternative Option                         |
|-----------------------------------|---------------------|---------------|--------------------------------------------|
| Tokina 10-17 mm AT-X 107 AF DX    | 75340 DOME          | 5509.28 GEAR  | <b>75344</b> DOME <b>+ 75020</b> EXTENSION |
| Tokina 11-16 mm f/2.8 AT-X Pro DX | TO BE DETERMINED    |               |                                            |