# **Philtec Application Note**

No. 39 Dec 2016

## **Long Fiber Optic Cables**



The standard fiber optic cable length is 3 feet (914 mm). Maximum cable lengths are limited by the type of fiber used with specific sensor models as shown in this table.

## **Maximum Continuous Cable Length**

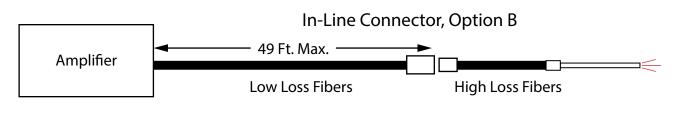
Model	Feet	Meters	Model	Feet	Meters
D6	29.5	9	RC19	49.5	15
D12	29.5	9	RC20	29.5	9
D20	49.5	15	RC22	10	3
D21	29.5	9	RC25	49.5	15
D47	29.5	9	RC32	29.5	9
D63	49.5	15	RC60	29.5	9
D64	29.5	9	RC62	49.5	15
D100	29.5	9	RC63	29.5	9
D125	29.5	9	RC90	10	3
D169	29.5	9	RC100	29.5	9
D170	10	3	RC171	10	3
D171	10	3	RC190	10	3
D240	10	3	RC290	10	3

### **OPTIONS**

Cable lengths can be extended by adding in-line connectors. ~15 m of additional length can be added between the sensor amplifier and the in-line connector using efficient low-loss fibers. The maximum cable length from the connector to the sensor tip is limited by the values in the table above.

#### **NOTES**

- 1. Sensors with long cables will have higher noise levels than standard short length cables.
- 2. Please contact the factory if long cables are needed in combination with high bandwidth and/or dark targets.





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