Philtec Application Note

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Long Fiberoptic Cables

Problem

Shaft orbit motion measurements were needed on a very large machine that generated high EMF noise. The customer required extra long cabling to get the electronics safely away from the EMF. Additionally, the area where the data was to be read was located at a distance from the test equipment.

Philtec sensors were chosen because the fiberoptic probes were small and could measure "large" distances in comparison to other devices.

Solution

Philtec's model D169 with 49 ft long fiberoptic cables was chosen for this application. It has a tip size of 4.75 mm (3/16"), and a nominal operating gap of 5 mm.





Extra Length Cables. Standard fiberoptic cabling is 3 Ft. long. Cable lengths up to 49 Feet can be provided for most models. The table below provides maximum cable lengths that can be provided *without sacrificing performance specifications.* Note: Please consult the factory when combining Options B & E.

	Maximum Cable Length, Feet									
Model	D6	D12	D20	D63	D64	D100	D125	D169	D170	D171
Length	29	29	49	49	49	49	49	49	10	10
Model	RC12	RC20	RC25	RC62	RC63	RC90	RC100	RC140	RC171	RC190
Length	29	49	49	49	49	10	49	49	10	10



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