Introduction to OD Probes

Industrial
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OD probes are used to inspect the exterior of rods, tubes, solid wire and other metallic spherical parts. OD probe’s coil encircle the material as it passes through the internal diameter on the probe. OD probes are often called encircling probes.

OD probes are available in three coil configurations:

1. Absolute: Absolute coils detect longer axial flaws, changes in conductivity, and are used in monitoring the heat-treating process.
   This coil configuration can also be used to monitor wall thickness to detect thinning in the tube wall.
2. Differential: Primarily used for pit and crack detection.
3. Switchable: These can be used in either mode with the switch of a toggle.

OD coils are manufactured with long-wearing stainless-steel faceplates.
Standard probe hole sizes range from 0.015 in. (0.038 mm) to 1.50 in. (38.1 mm).
Due to the wide variety of sizes and frequencies, OD coils are manufactured to customer specifications when ordered.

How to Order

To order OD probes, provide the probe type, frequency, probe diameter, and coil type

OD/50kHz-500kHz/.525/A

- Probe type (1)
- Frequency range
- Actual probe diameter (2)
- Coil type: A: Absolute
  D: Differential
  S: Switchable

(1) For the POWERLINK™ version probes, order probe type ODL.
(2) The amount of clearance needed is dictated by the frequency, fill-factor, and the material to be inspected. If you are unsure, please contact your local sales representative for more details.

Probes are manufactured for easy mounting. The probe size is (L × W × H) 3 in. × 1.2 in. × 3.1 in. (7.62 cm × 3.05 cm × 7.87 cm).

Cables and Connectors

The standard OD probes are fitted with a detachable LEMO Triax connector. For standard probes (LEMO Triax), use the standard detachable cable SPO-6472 (P/N 9122244) [U8800091].

POWERLINK OD probes are fitted with a 7-pin LEMO connector. Cables are sold separately. For POWERLINK probes, use the detachable cable CL/SC/6 (P/N 9122083) [U8800073].

For pricing or additional information, contact your local sales representative or reach out to us online at EvidentScientific.com.