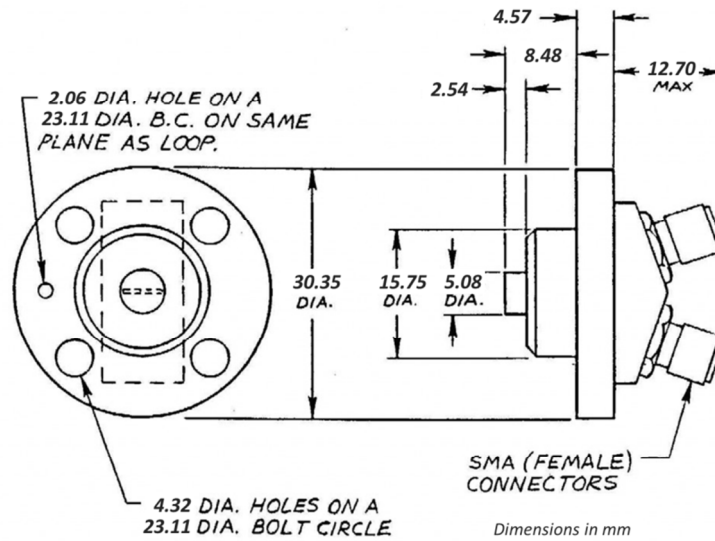


B-15 ground plane/surface current magnetic field sensor

PRODYN ground plane/surface current type magnetic field sensors can be used as a B-DOT sensor or to measure the time rate-of-change of surface current density. The sensor consists of a half-cylinder loop on a base plate that when mounted to a conducting surface produces a voltage output in response to a time variant B-field. Each sensor has a parallel-series wiring configuration that cancels the electric field induced signals and makes the sensor's output signal the result of only the magnetic field.



The PRODYN Model B-15 B-Dot current probe was designed to measure current in an intense radiation field (up to 300 K rad). The B-15 has two identical loops with opposite polarity to allow signals to be added, thus providing common-mode rejection capability. Accuracy in manufacturing produces consistent results of better than 5%. Other body styles with different hole patterns are available.

SPECIFICATION

| | B15 |
|-----------------------|--------------------------------------|
| Equivalent Area (Aeq) | 1.7x 10 ⁻⁶ m ² |
| Freq. Resp.(3 db pt.) | >500MHz |
| Maximum output (peak) | + 400V |
| Output connector(s) | 100ohm Twinax (modified GR-874) |
| Mass | 43g |