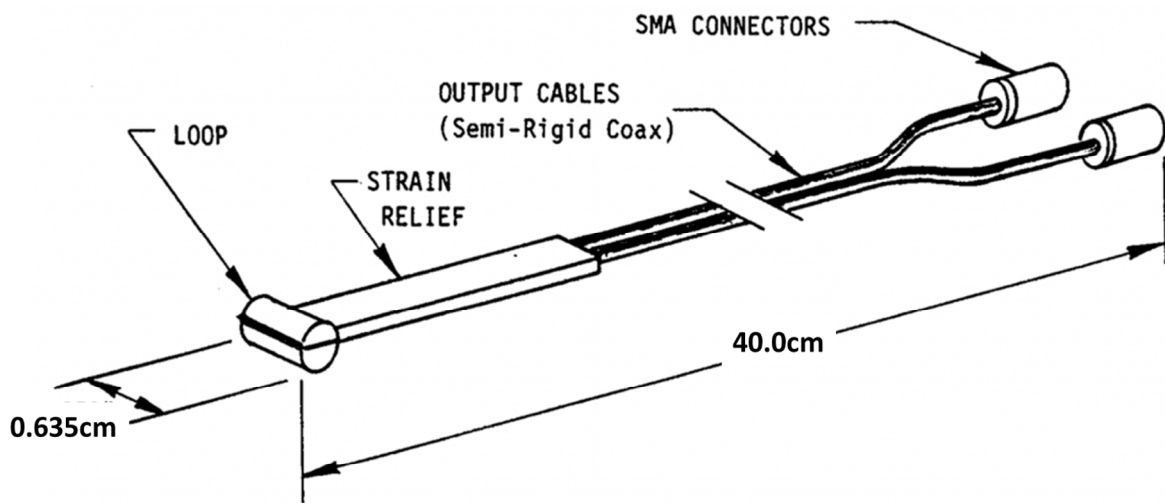


B-24 magnetic field sensors – free field, full loop

The PROLYN model B-24 is a full loop magnetic sensor that measures the time rate-of-change of a magnetic field. This is a very small, portable device designed specifically for making high frequency free field measurements.

For this type of measurement and because the sensor is fragile due to its size, it should be supported by dielectric materials and placed a minimum of two sensor diameters from conducting surface. The sensing area is encapsulated to provide breakdown resistance and protection from the environment. The sensor is a passive device; therefore, an external power source is not required. This sensor is only available in a radial output design.

SPECIFICATION



	B-24
Equivalent Area (Aeq)	$9 \times 10^{-6} \text{m}^2$
Freq. Resp.(3 db pt.)	8.5GHz
Risetime (tr 10-90)	<0.41ns
Maximum output (peak)	+ 500v
Output connector(s)	SMA (male)

EQUATION

$$V_0 = A_{eq} \frac{dB}{dt}$$

Where V_0 = sensor output (volts), A_{eq} = sensor equivalent area (m^2), B = magnetic flux density (teslas)

