

SMAB, robust bearingless encoder with low profile

SMAB is Lika Electronic's absolute bearingless encoder with flat ring and large through hollow shaft suitable for large diameter axles or drive shafts and harsh environments.

Slim profile makes integration into confined space easier.

- Flat ring & large through hollow shaft (Ø80 mm / 3.149")
- Lateral magnetic reading, 16-bit resolution
- High protection up to IP69K
- For integration into robots, radars, antennas, motors

SMAB bearingless absolute encoder + MRAB flat ring combines the advantages of the shaftless design with the benefits of the contactless and wear-free magnetic scanning.

It is distinguished by its 6 mm/0.236"-thick flat ring with **large through hollow shaft** (80 mm / 3.149" bore, up to 95 mm / 3.74" on request) and the unconventional installation. The poles in fact are oriented axially and the low profile sensing head is mounted over the flat surface of the ring instead of radially as usually.

SMAB encompasses fully overmoulded electronics and guarantees up to **IP69K** protection rate and great resistance to dust, liquids, shocks, and vibrations as well as immunity to contaminants and interference.

Furthermore it affords excellent durability under adverse conditions and even wash down applications. Comfortable mounting tolerances make installation easier.

SMAB has a resolution of **16 bits** (higher resolutions on request) and provides the absolute information through the SSI interface.

Along with standard functions such as zero setting and counting direction, it also delivers warning and error bit information. In addition it is fitted with an integral LED to signal correct operation and compliance with mounting tolerances. Cable and M12 connector outputs are both available. By virtue of the compact slim design and the high rotational speed allowed, SMAB modular encoder is well suited for **position control of motors, direct drives, industrial robots, radars and antennas**, and applications with confined measurement and installation space.



More information on the extensive range of Lika Electronic's bearingless encoders.