

Incremental encoders with high resolution and accuracy

158, CK58, I65/IT65, and I58SK series incremental encoders can be equipped with **high resolution and high accuracy glass disks** and electronics as an alternative to unbreakable disks for lower resolution and standard accuracy. In this configuration they offer higher resolution up to 10,000 PPR and higher signal precision for use in high-end applications.

- Incremental encoders with digital outputs (NPN, PNP, HTL, TTL, Universal)
- Glass disk version and unbreakable disk version
- High resolution up to 10,000 PPR and high accuracy
- IT65 with US size square flange
- I58SK stainless steel version



Digital versions (NPN o.c., PNP o.c., Push-Pull, Line Driver and Universal output circuits) are now available also with **new glass disks and electronics** which allow to reach higher resolution up to 10,000 PPR and higher accuracy. They can be mounted as an alternative to the standard unbreakable disks.

So the series are offered in two options:

- encoder with unbreakable disk, resolution up to 5,000 PPR and standard accuracy: it is intended for use in normal industrial applications;
- encoder with glass disk, designed for high resolution up to 10,000 PPR and high accuracy demands; it is aimed at advanced automation applications; this encoder is distinguished by the letter K following the resolution value in the order code (i.e., "5000" = 5,000 PPR, standard version; "5K" = 5,000 PPR, high accuracy version, see the datasheet).

I58 and I58S are industrial encoders with \emptyset 58 mm (\emptyset 2.283") servo or clamp flange and solid shaft. The shaft diameter ranges from 6 to 12 mm (0.24" to 0.47").

CK58, CK59, and CK60 are the 14-mm and 15-mm diameter (0.55" and 0.59") hollow shaft corresponding versions. **I65 and IT65** offer a more rugged structure that enables high shaft load and IP66 protection rate. IT65 further provides US size square flange (4-bolt 2.063" bolt center-to-center square flange).

I58SK is the AISI 303 stainless steel incremental encoder for use in demanding food-grade applications: it offers stainless steel structure, 58-mm clamp flange, 6 to 12 mm diameter (0.24" to 0.47") solid shaft, specific hygienic design and features.

The max. counting frequency is up to 300 kHz in all encoders while the range of the extended operating temperature $-40^{\circ}\text{C} + 100^{\circ}\text{C} (-40^{\circ}\text{F} + 212^{\circ}\text{F})$ can be required as an optional. Cable and connector outputs are both available.

