



Rotational frequency sensors DTK-2 is designed for contactless shaft rotational frequency transformation into alternating polarity signal.

Sensor sensitive element creates magnetic field which is changing when mark goes by sensor working surface. Magnetic field inducts voltage in sensor circuit so sensor output frequency corresponds to mark passing frequency. Toothed wheels, grooves deepings and lugs in any

ferromagnetic material can be taken as mark.

Sensor output amplitude is directly proportional to mark linear speed, which is depended on rotational frequency and distance to mark rotation axis.

Differential principle of handling sensor signal exclude influence of electromagnetic noises on accuracy of rotational frequency to output signal transformation.

It is important to comply with requirements for sensor installation relative to mark(-s). Clearance increasing between sensor working surface and mark leads to sensitivity decreasing.

DTK-2 sensors are produced in M24×1,5 housing with connector for external circuits or built-in oil- or heat-resisting cable.

It is recommended to use electronic tachometer TE-6K-TK or tachometric indicator TI-TK as measuring device.

SPECIFICATION

- Output signal amplitude, V, not less 0.2*
- Load resistance, Ohm, not less 4
- Sensitivity for clearance 0.1 mm, V·s/m, not less 0.1**
- Working clearance, mm..... 0.1..1
- Operating temperature range +5°C ..+50°C
- Dust and moisture protection..... IP41
- Housing thread..... M24×1.5
- Housing length M12×1, mm 78***

* - for mark linear speed not less than 2 m/s.
** - for load resistance not less than 4 kOhm.
*** - length of threading part of housing without connector

ORDERING DESIGNATION

Rotational frequency sensor **DTK-2-M24**.

DTK-1-M12 sensors are produced in standard modification with 2 m built-in cable without connector.

On the customer’s request sensor can be produced with non-standard parameters.