



Rotational frequency sensors DTK-1 is designed for contactless shaft rotational frequency transformation into voltage square wave sequence. Output pulses frequency corresponds to mark passing near sensor working surface. Toothed wheels, grooves deepings and lugs in any ferromagnetic material can be taken as mark. Sensor provides dynamic determination of operating threshold on every turning on. This guarantee sensor operability for mark parameters changing during working.

Main sensor advantage is output signal independence from rotational frequency of object. Sensors have wide measuring range: from one to hundreds of thousands rotations per minute. Differential principle of operation exclude outer magnetic fields and machine vibration influence on rotational frequency to output pulses transformation precision.

It is important to comply with requirements for sensor installation relative to mark(-s). Flats for wrench on sensor housing should be parallel (with precision up to  $\pm 15^\circ$ ) marks moving direction.

Sensors has different housing which are varying in size and thread pitch, can have built-in oil- or heat-resisting cable and/or ends with connector for external lines.

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

## SPECIFICATION

- Switching frequency, Hz ..... 0.05..10000
- Working clearance, mm..... 0.1..2
- Supply voltage ..... 15..28 VDC
- Load current, up to, mA..... 50
- Operating temperature range .....  $+5^\circ\text{C} \dots +50^\circ\text{C}$
- Dust and moisture protection..... IP67
- Housing thread..... M12×1, M24×1,5
- Housing length M12×1, mm ..... 50, 80, 120
- Housing length M24×1,5, mm ..... 78\*

\* - length of threading part of housing without connector.

## SCOPE OF SUPPLY

Rotational frequency sensor **DTK-1-MXX-YYY**, где

XX – housing thread;

YYY – housing length, mm.

DTK-1-M12 sensors are produced in standard modification with 2 m built-in cable without connector, housing length can be choose from 50, 80 or 120 mm.

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

