The ROTEC 4-fold sensor is used in order to detect the direction of rotation in rotational speed measurements. The sensor comprises two differential magnetoresistive elements with a permanent magnet enclosed in a stainless steel casing with M10x1 outer thread. The sensor requires an accompanying electronic unit which converts its analogue output voltage to square wave TTL level. The sensor is contactless, exhibits minimal temperature dependence and its operation is not impaired by dirt or oil films.

The sensor’s stainless steel cylindrical housing has an M10x1 outer thread. The target wheel should have a pitch around 2.5 mm and a thickness of at least 5 mm. A sensing gap from sensor to wheel of up to 1.5 mm is allowed for. The magnetoresistive arrangements require the sensor to be properly aligned for both optimal adjustment of orientation w.r.t. the target wheel and setting of sensing distance.

**MEASUREMENT PRINCIPLE:**

**TECHNICAL SPECIFICATIONS**

- outer thread M10x1
- target wheel made of ferromagnetic material
- pitch approx. 2.5 mm
- sensing gap: up to 1.5 mm
- sensor only analog Typ A
- cable length 2 m
- thread length 60 mm
- total sensor length approx. 180 mm incl. bending protection