



SENSORS AND SIGNAL CONDITIONING / SENSORS

365C ANGLE ENCODER SET

The 365C Angle Encoder Set is a high precision sensor for angle-related measurements mainly for indicating purposes.

The optical function is based on a slot mark disk and utilises the reflection light principle. It is the most commonly used system in engine indicating technology due to the high precision in extreme operating conditions. The angle mark resolution is 0.5 degree crank angle (up to 0.1 deg. CA by means of multiplication). The electronic components are mounted separately from the sensor (crank shaft) to minimise the influence of electric interference, temperature and vibration. There is one track on the marker disks with 720 pulses for the angle information which includes trigger pulse information per revolution too for synchronisation purposes.

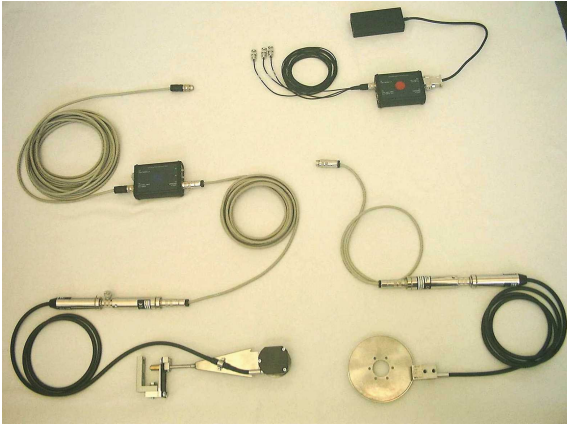
The angle information is transmitted by light pulses from the encoder through an optical cable, length 2 m, to an emitter-receiver-electronic. The necessary power is supply by AVL indicating instruments.

Open Version:

For certain applications a special Encoder solution is provided by AVL – it can be mounted between the engine and the dyno. This is the customized solution 365X. The high tensile steel disk is manufactured to customer's specification.

Current program:

The actual program is shown in the picture below. For use with Non-AVL-device an encoder set with external supply is available.



Your Benefits at a Glance

- High precision
- High resolution
- High mechanical resistance, several hundred g
- High maximum speed up to 20.000 rpm
- Temperature range -40 °C to $+70\text{ °C}$ (electronics)
- Temperature range -40 °C to $+120\text{ °C}$ (mechanics / optics)
- Rotary and torsional analysis
- Selectable output pulses per rev. 3600, 1800, 720, ... 36
- Second output 720 ... 36 pulses per rev.

Areas of Usage

The angle encoder is suitable for both test bed and in-vehicle operation, for applications from small two-stroke engines to passenger cars, from commercial vehicles right up to track engines, from racing engines to large engines such as stationary or ship engines.

