Speed Sensor FGA 30R2

Application
FGA 30R2 speed sensors are designed for measuring the belt speed of belt conveyor systems. They are used as optional equipment for MULTIBELT®-type belt weighers. A customized speed sensor can be used in ATEX zones 21, 22, 1 or 2.

Equipment
The speed sensor consists of a housing with an internal impulse wheel mounted on a drive shaft. The angular velocity of the shaft is measured as a frequency signal through windows in the measuring wheel and with one or two (legal-for-trade) proximity sensor/s and processed using an evaluation device.

The FGA 30R2 speed sensor is made entirely of steel with a powder-coated surface. The FGA 30R2 can be fitted with a rocker and a friction wheel for use as a friction wheel speedometer for registering the speed of the returning belt. Alternatively, with a coupling the FGA 30R2 can be run by e.g. the tail pulley of a belt feeder system.

Function
If operated as a friction wheel speedometer:

- The friction wheel runs on the interior of the empty, returning belt of a belt feeder system with a rubber ring. Under its own weight, the wheel is friction-locked against the belt and is made to rotate by the belt movement. The non-slip motion means that the wheel circumferential velocity corresponds to the belt speed. The rotational speed of the wheel is registered by a sensor that records the speed by means of transmitting a signal through an alternating series of windows and bars, recording a frequency that corresponds to the belt speed of the belt feeder system. This frequency is transmitted to the evaluation electronics where it is analyzed.

- High degree of reliability
- Robust design
- Maintenance-free storage and seals
- Made completely from steel
- Legal-for-trade variant for MULTIBELT-type belt weighers
- Designed for operation with friction wheel and rocker
- Drive system with coupling available
- Successor to the FGA 30R with identical connection dimensions
- ATEX optional category 2GD (Zone 21, 22, 1 or 2)
### Operational temperature
-25 °C ... +60 °C

### Operational temperature, ATEX
-25 °C ... +60 °C

### Belt speed
< 5 m/s

### Max. rotational speed
3000 min⁻¹

### Pulses
30 Pulses/revolution

### Output signal
Namur

### Weight
3.2 kg

### Standard design
1 Proximity sensor

### Legal for trade design
2 Proximity sensors

### ATEX (option)
Zone 21, 22, 1 or 2

### Installation situation

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