

FGA 30R2 Speed Sensor



- High degree of reliability
- Robust design
- Maintenance-free storage and seals
- Made entirely of steel
- Legal-for-trade variant for MULTIBELT-model beltweighers
- Designed for operation with friction wheel and rocker arm
- Drive system with clutch available
- Successor to the FGA 30R with identical connection dimensions

Application

FGA 30R2 model speed sensors are designed for measuring the belt speed of belt feeder systems.

They are optional equipment for beltweighers of the MULTIBELT[®] series.

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 switches 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 arm and a friction wheel for use as a friction wheel speedometer for registering the speed of the returning belt. Alternatively, with a clutch the FGA 30R2 can be run by e.g. the tail pulley of a belt feeder system.

Operating Principle

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.



Dimensions (mm)



Operational temperature: Maximum speed: Characteristic Values: Output signal: Weight: Standard design: Legal for trade design: -20°C to +50°C up to 3000 r.p.m. 30 Pulse per rotation Namur 3.2 kg 1 Sensor, V037006.B01 2 Sensors, V037006.B02

Installation with friction wheel, rocker arm and support V047813.B01



Schenck Process GmbH Pallaswiesenstr. 100 64293 Darmstadt, Germany Phone: +49 6151 1531-1216 Fax: +49 6151 1531-1172 sales@schenckprocess.com www.schenckprocess.com