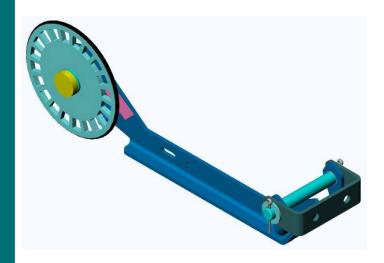


# Speed Sensor FGA 20RSLE



- Cost-efficient integration
- High reliability
- Maintenance-free storage and sealings
- Easy handling
- Completely made of galvanized steel or stainless steel
- Legal-for-trade variant for MULTIBELT<sup>®</sup>-type belt weighers
- ATEX optional category 2GD (zones 21, 22, 1 or 2)

#### **Application**

The FGA 20RSLE 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.

#### Design

The speed sensor consists of a rocker that can be pivoted around an axis. The axis is mounted in a bracket that is attached to the machine (belt conveyor) to be monitored. The measuring wheel is attached to this rocker and runs slipfree on the belt to be measured. The belt speed 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 20RSLE speed sensor is manufactured entirely of a highly corrosion-resistant galvanized steel and in the ATEX – certified model made of 1.4301 stainless steel.

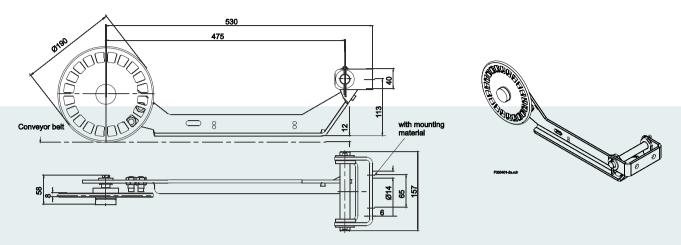
#### **Function**

The pulse 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 conveyor system. This frequency is transmitted to the evaluation electronics where it is analyzed.

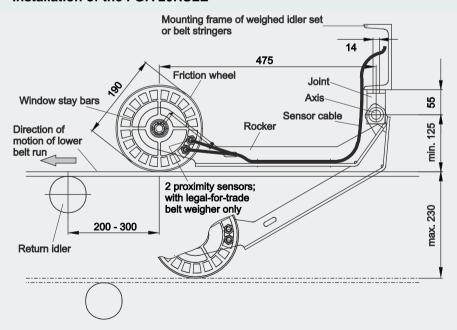


### **Dimensions [mm]**



Operating temperature	-20 °C +50 °C
Operating temperature, ATEX	-20 °C +50 °C
Belt speed	< 3.5 m/s
Pulses	20 pulses per revolution = 33.5 pulses per meter of belt
Output signal	Namur
Weight	4.55 kg
Legal-for-trade type	2 proximity sensors
ATEX (option)	Zone 21, 22, 1 or 2

#### Installation of the FGA 20RSLE



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