Speed Sensor FGA 30R2

- **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)**

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.

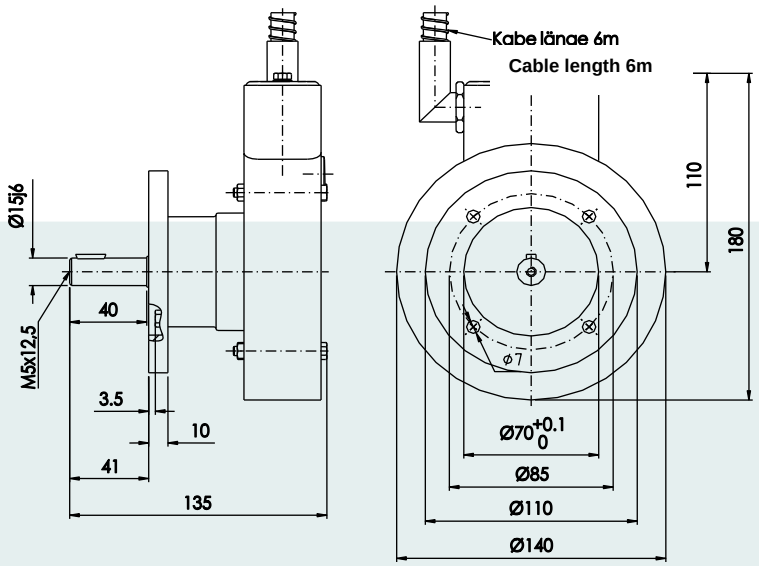
Equipment

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

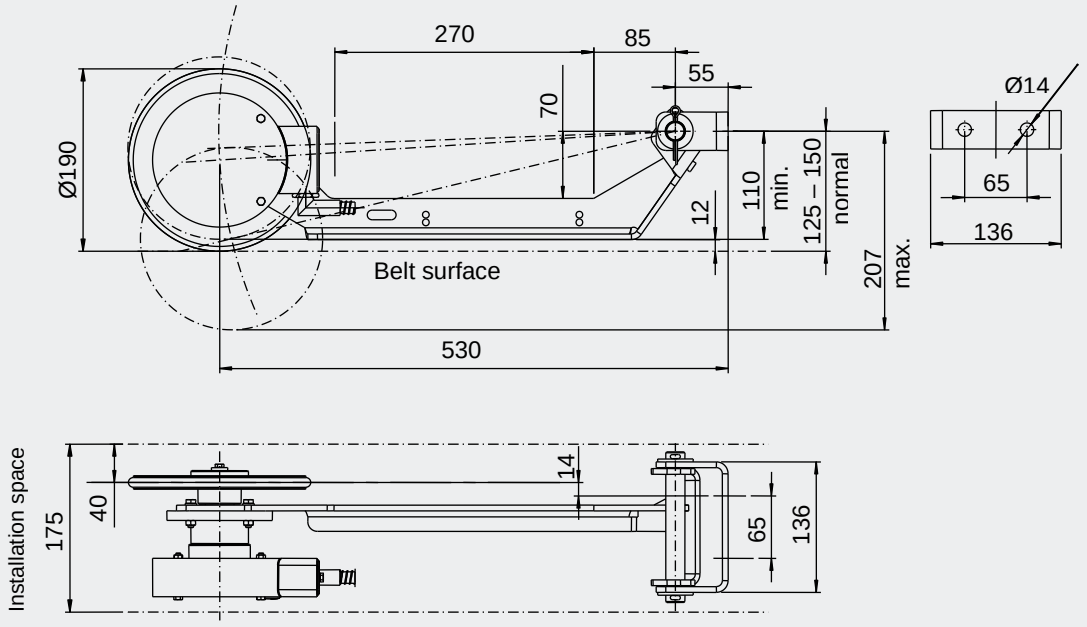
If operated as a friction wheel speedometer:
The friction wheel runs on the interior of the empty, returning belt of a belt feeder system with a rubber ring. Under its own weight, the wheel is friction-locked against the belt and is made to rotate by the belt movement. The non-slip motion means that 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.

Dimensions [mm]



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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