IPF ELECTRONIC

Data sheet [WS200120] • Subject to alteration! Version: 05.10.2017

WS200120
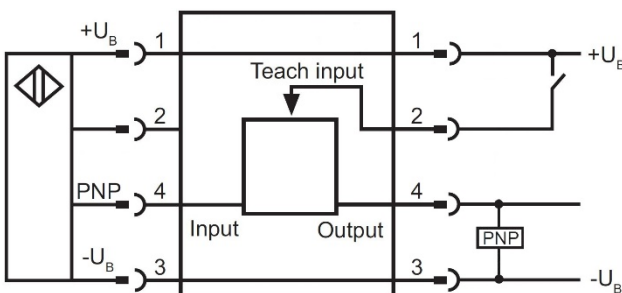### Monitors
Rotation speed and zero speed monitoring

/ monitoring of rotation speed and frequency undershoot
/ direct adaption between sensor and cable socket
/ rotation speed and frequency adjustable

**easy programming via external teach-in
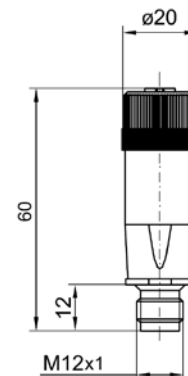no additional installation necessary**

TECHNICAL DATA

dimensions	Ø20 x 60mm
frequency range	0.015 … 1000Hz
operating voltage	10 … 30V DC
residual ripple	≤ 10% of U_B
current consumption (w/o load)	< 10mA
input resistance	> 10kΩ
switching output	PNP transistor
output current (max. load)	400mA
short-circuit protection	+
display (function)	LED red
input frequency (impulse:pause = 1:1)	≤ 1kHz
temperature (operating)	0 … 60°C
temperature (storage)	-20 … +60°C
degree of protection	IP 67 (EN 60529)
housing	plastic PBTP / PA
connection	M12-socket / M12-connector, 4-pin

Connection

Colors: 1 brown, 2 white, 3 blue, 4 black

Dimensional drawing

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Function

The rotation speed monitor WS200120 monitors the frequency of the signals of the sensor that is connected. The output is activated as soon as the adjusted frequency falls below approx. 5%.

Adjustment

1. Align a suitable sensor with the WS200120 to the object to be detected in a way that the sensor switches safely.
2. Move the object in the nominal speed.
3. Connect the teach-input to +U_B at least for the time of a complete motion cycle.
4. Disconnect the teach-input from +U_B.
5. Ready. If the input frequency drops by 5%, the output of the WS200120 is activated.

Applications

- Zero speed monitoring
- Rotation speed monitoring
- Jam monitoring

SAFETY WARNINGS:

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!

Never use these articles in applications where the safety of a person depends on their functionality.