

For reliable measurement, control and indication of rotational speeds



rotas

Programmable speed monitor.
Flexible monitoring, reliable protection.



Ordering information:

Order No.	Type	Description
Supply Voltage 18 - 36 VDC:		
5810.100	CR	Speed monitor with one relay, without analogue output
5810.200	CRR	Speed monitor with two relays, without analogue output
5820.100	CRA	Speed monitor with one relay, with analogue output
5820.200	CRRA	Speed monitor with two relays, with analogue output
Supply Voltage 10 - 36 VDC with approvals for ship board use:		
5813.100	CR	Speed monitor with one relay, without analogue output
5813.200	CRR	Speed monitor with two relays, without analogue output
5823.100	CRA	Speed monitor with one relay, with analogue output
5823.200	CRRA	Speed monitor with two relays, with analogue output

If required, the instrument parameters can be programmed to a customer's specific requirements, and supplied with a customer reference number on the rating plate. Use the order form on the Internet under www.rheintacho.com or call us.



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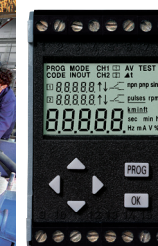
We reserve the right to make technical changes.
March 2024



As versatile as it is adaptable

The speed monitor has numerous applications in many areas of technology, whether it be for protection of people, machines or manufactured products, to ensure that a plant operates at optimum efficiency, or for speed-dependent switching of system functions in a process.

Application examples are: internal combustion engines in power station and marine applications; gas, water and wind turbines; pumps, mixing plants and conveyor systems; paper, foil and textile production plants; machine tools and processing centres. Please utilize our free application engineering to learn of the significant benefits that ROTAS can provide for your application.



Extremely flexible and reliable

The programmable speed monitor can be configured in many different ways to meet a wide variety of application requirements. Its functional features allow the alarm situation to be clearly defined and safely detected.

Scaleable analogue output (optional)

An analogue output is available on all models.

Variable scaling

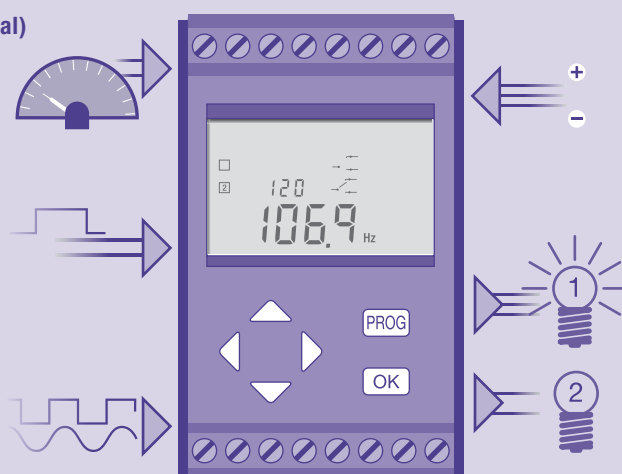
15 different measurement units variable range

Easy to use

simple 6-key operation

Variable signal input

- ▶ 2-wire and 3-wire sensors
- ▶ PNP, NPN or sine wave signals
- ▶ programmable trigger threshold



The main information at a glance

The LCD display shows the measured value, and, if a limit is set, this limit value will be shown along with the state and the unit of measurement.

Quick reaction measuring method

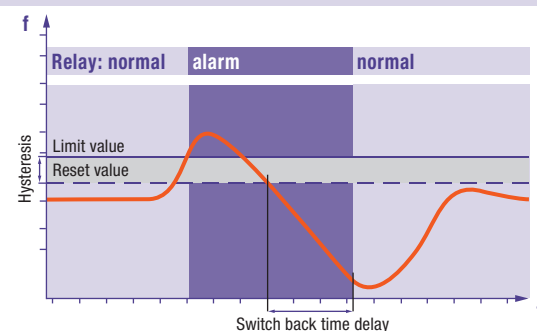
- ▶ cycle duration measurement adjustable frequency
- ▶ permits averaging of the measured value.

Programmable switching action one, optional second relay (changeover)

- ▶ contact direction in the alarm condition
- ▶ limit value
- ▶ reset switching value (hysteresis)
- ▶ overspeed or underspeed monitoring
- ▶ active starting-bridge (0 to 99.9 sec)
- ▶ switch back time delay (0 to 99.9 sec)

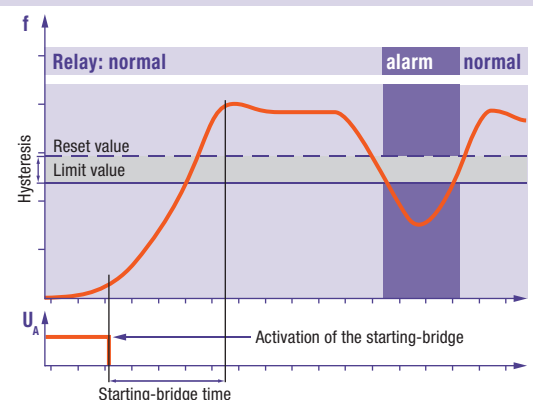
Speed permanently in sight

The programmable speed monitor monitors the motion of machines and systems. It detects the signals of most speed and motion sensors. If the measured value exceeds or falls below a preset limit value, the relay is automatically switched and the alarm function connected to it is activated. The following types of monitoring are possible:



Overspeed monitoring with reset switching delay

Once the speed has fallen below the switch back value and the switch back time delay has expired, the relay switches to its normal status again.



Underspeed monitoring with run-up bridging

Monitoring does not start until after the start signal of the starting-bridge has de-energized and the starting bridge time has elapsed.

Technical data

Frequency range	0.01 Hz ... 20,000 Hz
Accuracy	+/- 0.03 % of full scale +/- 1 digit
Temperature coefficient	+/- 0.01 % of full scale
Switching delay	< 20 ms + measuring period entered

Supply

Voltage / Current	18 ... 36 VDC / < 160 mA
... with DC/DC converter	10 ... 36 VDC / < 120 mA

Signal input

Trigger level	On/Off adjustable
Min. pulse duration	20 µs
Sensor supply	12 VDC, max. 60 mA

„Active starting-bridge“ input

Trigger level On/Off	> 2.5 / < 1.0 V
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Relay outputs (one, optional two relays)

Switching voltage	AC: ≤ 250 V / DC: ≤ 42 V
Nom. switching current max.	AC: 5 A / DC: 2 A

Analogue output (optional)

Accuracy	+/- 1,0 % of full scale
Maximum burden	400 Ω

Installation conditions

Operating temperature	-25 ... +70 °C (-13 ... +158 °F)
Protection (IEC 529)	IP 20 (installation in enclosure)
Vibration (IEC 68-2-6)	0.7 g @ 1... 100 Hz

Mounting

Standard rail-mounting case for 35 mm (1.378 inch) DIN-rail

We are known as the specialists for customized solutions for rotational speed measurement. Less well-known is what our success is due to.

Rheintacho is a family-owned company and intends to remain as such. Our company policy is to foster familiarity among our employees: this means an inclusive approach, emphasizing that each employee has an equal part to play in the team as a whole.

Our employees feel at home in this atmosphere of acceptance and trust. A select team in which everyone has high-level technical expertise and a sense of responsibility.

With flat hierarchies, short routes and eye-level communication, we can fully concentrate on our priorities: customer satisfaction, innovation, flexibility, quality, efficiency, growth.

It is our goal to provide the best rotational speed measurement and control product at a competitive price for whatever requirement our customers may have. For this, there are other essential features as well: as much co-operation as possible, reliability and continuity.

Because we do this successfully, we approach our work with pleasure and passion – even under pressure. This is how we intend to continue growing, in a harmonious and sustainable fashion: in terms of employees, sales, innovation and challenges.

Find a challenge for us.