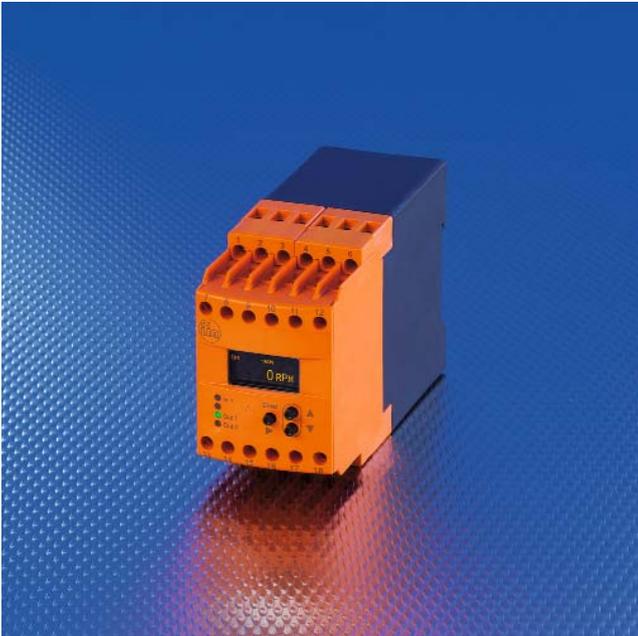
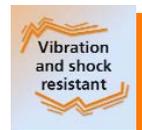
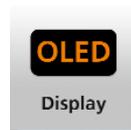


# Rotational speed monitoring and standstill detection



## Speed monitor family with extended functions

- Monitoring of two limit values with separate output relays
- High input frequency of up to 60,000 pulses / minute
- Configurable functions, speed-proportional analogue output
- Clearly readable, luminous OLED display
- Extended operating temperature range down to -40 °C



### Versatile speed monitoring

The speed monitors calculate the rotational speed by evaluating pulses. The transistor and relay outputs switch when adjustable limit values are exceeded or not reached. This allows, for example, reliable overspeed and standstill detection.

### Versions

The speed monitors DD2503 and DD2603 monitor the rotational speed of one channel with two separately adjustable limit values. A separate output is assigned to each limit value.

The speed monitors DD2505 and DD2605 monitor two separate input channels, each having one switch point.

### Convenient

The high-contrast luminous OLED display and the menu-guided parameter setting are designed for maximum user-friendliness.



Speed monitors switch when critical rotational speeds are exceeded or not reached.

Switching function	Nominal voltage [V]	Analogue outputs	Pulse inputs	Order no.
<b>Application:</b> Single pulse evaluation system with microprocessor for frequency; rotational speed; speed; pulses and machine cycles				
1 input with 2 switch points to monitor if the preset value is exceeded or not reached or to indicate the acceptable range	110...240 AC (50...60 Hz) / 27 DC (typ. 24 DC)	0/4...20 mA	PNP / NPN; NAMUR (24 V)	<b>DD2503</b>
2 inputs having 1 switch point each to monitor if the preset value is exceeded or not reached or to indicate the acceptable range	110...240 AC (50...60 Hz) / 27 DC (typ. 24 DC)	–	PNP / NPN; NAMUR (24 V)	<b>DD2505</b>
1 input with 2 switch points to monitor if the preset value is exceeded or not reached or to indicate the acceptable range	110...240 AC (50...60 Hz) / 27 DC (typ. 24 DC)	0/4...20 mA	NAMUR (EN 50227)	<b>DD2603</b>
2 inputs having 1 switch point each to monitor if the preset value is exceeded or not reached or to indicate the acceptable range	110...240 AC (50...60 Hz) / 27 DC (typ. 24 DC)	–	NAMUR (EN 50227)	<b>DD2605</b>

### Overspeed monitoring:

Centrifuges, carousels or wind turbines are monitored for exceeded maximum rotational speed. The speed monitor gives a switch-off signal as soon as the speed is too high. This makes sure that the resulting centrifugal forces will not destroy the system.

### Standstill monitoring

Standstill monitoring is used to detect torn conveyor belts, to monitor the V-belts of ventilators or to detect blocked screw conveyors.

The speed monitor signals a dysfunction in case of unexpected standstills of the non-driven side of the machine.

### Versions including wire monitoring

The monitors DD2603 and DD2605 offer sensor cable monitoring. In this case, NAMUR sensors must be applied.

### Configurable output functions

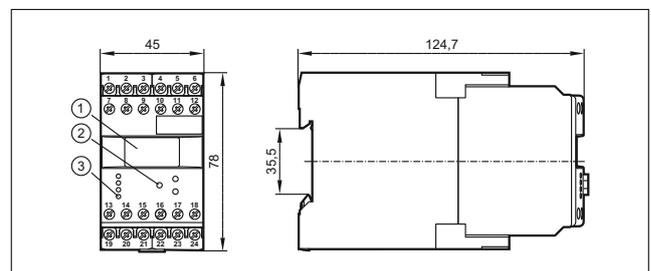
The relay outputs are switched on or off in case the limit values are exceeded or not reached. They may also remain switched until they are manually reset. Optionally, the reset can take place automatically after an adjustable period of time.

The transistor outputs that can be used alternatively are switched to the relays simultaneously. These can, for example, be connected directly to a PLC in order to transmit status messages.

### Further technical data DD2503, DD2505, DD2603, DD2605

Relay outputs	2 changeover contacts 6 A (250 V AC); B300, R300
Transistor outputs	2 x PNP; externally supplied 24 V DC / max. 15 mA; short-circuit protection
Setting range	[Imp/min] 1...60000 (0.1...1000 Hz)
Ambient temperature	[°C] -40...60
Storage temperature	[°C] -40...85
Housing protection rating	IP 50
Terminal protection rating	IP 20
Function display	OLED display; 128 x 64 pixels luminous
Input signal indication	LED yellow
Switching status indication	LED green

### Dimensions



- 1) OLED display
- 2) Programming buttons
- 3) LEDs