Monitor relative speed to eliminate slip-ups

Slip monitor with integrated speed monitoring

- One switch point for rotational speed and one for slip monitoring
- High input frequency of up to 60,000 pulses / minute
- Functions with parameter setting
- Clearly readable, luminous OLED display
- Extended operating temperature range down to -40 °C

Slip monitoring
Slip is the rotational speed difference between the driven and the non-driven side of a power train. Rotational speed differences may occur as a result of a slipped coupling, V-belt or drive belt. The slip monitor calculates the rotational speed difference in per cent and switches off as soon as the limit value is reached. This avoids tear or damage caused by friction heat.

Limit values
Two separate limit values can be monitored for slip and rotational speed. The unit can be set to monitor if the limit values are exceeded or not reached.

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

Slip monitors monitor the rotational speed of the deflection rollers and detect slipped drive belts.
Application example:

Typical applications for slip monitoring can be found on couplings of internal combustion engines (for example emergency power generators in hospitals, diesel drives of ships and locomotives) but also on interlinked machines like mobile machines, spinning mills, sewing machines or machine tools.

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 synchronously. These can, for example, be connected directly to a PLC in order to transmit status messages.

Sensor wire monitoring

The slip monitor DS2603 offers sensor cable monitoring. In this case, NAMUR sensors must be applied.

Slip or synchronous monitor?

At first sight, slip and synchronous monitors seem to work identically. However, they evaluate differently and are designed for different applications.

Whereas the slip monitor detects the deviations of two rotational speeds in per cent (pulse difference per rotation), the synchronous monitor detects absolute pulse differences.