



HYDAC INTERNATIONAL

Electronic Area / 電子領域

Electronic Indicator GW

with additional functions for Filter Condition Monitoring

GW堵塞指示器

- 類比壓力及壓差傳感器
- 比例式的過濾情況監控

HYDAC Electronic



DESCRIPTION

The electronic GW clogging indicator was developed specifically for use in low-pressure and lubricating systems. It measures the inlet pressure and the differential pressure by means of two sensors. This means that apart from the analogue output for the differential pressure, an additional analogue output is provided for the pressure upstream of the filter element. Particular customer benefit: Two sensor signals are integrated in one device. The GW indicator is available for pressure stages of 2, 3 and 5 bar. The permissible operating pressure was limited to **25 bar** for the sake of the indication accuracy.

As with the electronic GC indicator, this indicator also issues an early warning signal at 75% of the "final value". For the first time, it is now possible to optimise this early warning signal to customer's needs.

Another novelty is that the indication range of the analogue differential pressure signal was selected sufficiently large in order to be able to monitor the function of the bypass valve (see Fig. 1).

In this way, it is possible to visualise dangerous operational states (tool for Filter Condition Monitoring). This is recommended by, among others, **the wind energy standard AGMA 6006**.

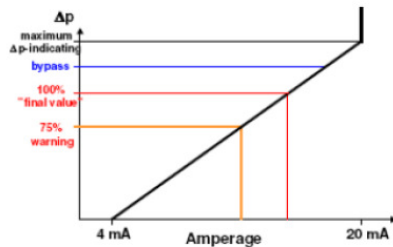


Fig. 1: Schematic diagram of the GW indicator at the differential pressure output

PRODUCT ADVANTAGES

- **Analogue pressure transducer and differential pressure sensor in one device**
- **Leakage-free** due to the separation of media there is no leakage between the clean and the dirt side
- **Unsusceptible to contamination**
No movable parts, no mechanical pistons that could jam.
- **Exact switching**, since the on and off points are adjustable due to the electronic structure (low hysteresis).
- **Precise measurements also on the long term**
The zero point can be readjusted to improve the measuring accuracy after long operation time.
- **Capable of parametrisation**
since response pressure, scope of functions, cold-start suppression, "no element" recognition and characteristics of the switching outputs/ LEDs can be adjusted
- **Filter change can be planned**
since the analogue output signal for the differential pressure is generated without response threshold (measurement from $\Delta p = 0$ bar, so the whole life cycle of the filter element can be monitored)
- **Increased system reliability by Filter Condition Monitoring**: The analogue differential pressure signal offers the possibility of filter bypass monitoring (see Fig. 1).