

Switching position monitoring for spool and poppet valves

Wandfluh monitors hydraulic systems quickly, safely and precisely. As a result of the modular structure of the WANDFLUH product range, the spool and poppet valves with the nominal sizes NG4, NG6 and NG10 can be supplemented by simple or redundant switching position monitoring. The inductive switching technology used offers a lot of security as a result of its contact-free and therefore wear-free switching properties.

Inductive switching technology is a very long lasting and secure method for monitoring the switching positions of a valve. By applying an electrical voltage, a magnetic field is generated at the tip of the switch. In the case of approaching magnetisable material, e.g. a valve spool, this magnetic field changes and this is something which results in an activation of the switch. The advantages over a mechanical switch are not just in terms of wear and tear, but in particular, they also lie in the early detection of a cable break or defective switch.

Switching position monitoring is suitable for the installation in safety valves in the case of monitored systems, in the case of pre-defined movement sequences with a risk of injury or accident in the case of system failure, for controlling large forces as a switching point sensor (hydroelectric power station) and for releasing successive valves in a complex hydraulic system.



Fig. 1 Redundant switching position monitoring integrated into a Wandfluh spool valve

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Oil-hydraulic control and closed circuit control equipment NG3 to NG10 (2/2-directional control built-in valves up to NG40); proportional control valves, incl. electronics; valves with integrated electronics; miniature hydraulics NG3 and NG4; poppet valves, flow in both directions; spool valves with minimum leakage rates; modular design technology with slip-on - / screw-in cartridges ISO 7789; feed systems; soft-switching valves; special surface protection; explosion-protected valves; drive units; hydraulic systems; special equipment for oil-hydraulics and other fluids.

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