Hydraulic Cylinder
with Hydraulic End Position Detection

In many hydraulic applications the user needs reliable information about whether a hydraulic cylinder has reached one of its end positions. Usually this is achieved through different types of position switches (inductive, roller and switch, etc.).

Alternatively, HYDROPNEU offers the option of a hydraulic end position detection.

In this system, through special constructional measures combined with a very precise design and manufacturing of the individual components, the piston produces a desired, clearly defined flow of the hydraulic fluid, as long as the piston has not reached one of its two end positions. This flow is only stopped at an end position.

The monitoring of the volume flows, which can take place at any position of the supply lines to the cylinder, generates the electric signal for the system control after reaching an end position.

Especially in systems where the drive is installed very far from the pressure supply, this option offers the advantage that no additional wiring of the proximity switches is needed. Moreover, the hydraulic end position detection is well-suited for all fields in which ideally no electrical components should be used, such as in the ATEX area, or in installations that are exposed to heavy wetness or aggressive substances.

Precision in Motion

HYDROPNEU
partner for hydraulics
cylinders - drives - special solutions

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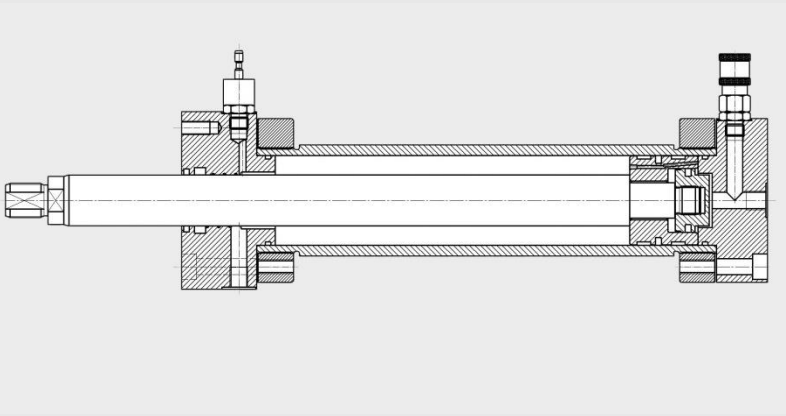

- **No long wiring between unit and cylinder**
- **Defined internal flow when end position is not reached**
- **No electrical components on the cylinder**

Example:

This hydraulic cylinder is used for the drive of knife gate valves. In this system, the unit is installed at ground level, while the hydraulic cylinders are installed at a greater depth. The special construction of the piston ensures the safe operation of the hydraulic end position detection, even if the position of the valve to the cylinder does not fit perfectly. The cylinder compensates for these inaccuracies through a floating support of the piston.

Technical Data:

Hydraulic Cylinder 11001632	
Kolben-Ø:	63 mm
Stangen-Ø:	36 mm
Zylinderhub:	250 mm
Betriebsdruck:	160bar
Befestigungsart:	Threaded holes in front
Connections:	G ¼"
Ventilation:	Walther quick fastener Coupling and nipple
Operating Fluid:	Panolin (biodegradable)
Characteristic Value Hydraulic End Position Detection:	0,3

More Options:

- ATEX version
- Various hydraulic fluids (also biodegradable)
- Cylinder size and design according to customer specifications

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