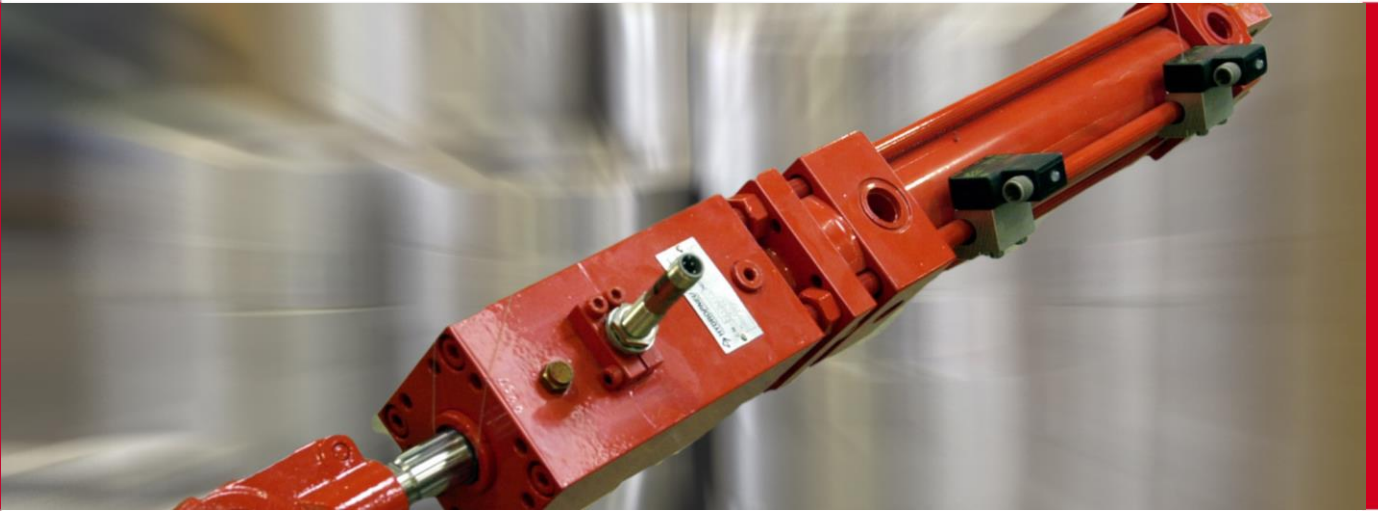


Hydraulic Cylinders with Position and Path Detection



Do you need an inexpensive way for a position detection, a high-precision path detection system, or a robust end position control?

HYDROPNEU offers a variety of hydraulic cylinders with position or path detection.

Position or path detection is possible upon request in combination with all HYDROPNEU hydraulic cylinders. Depending on the intended purpose, we design the optimal system that perfectly suits your requirements.

Possibilities for position or path detection are:

- ▶ **Attached proximity switches**
- ▶ **Cam switches**
- ▶ **Incorporated, pressure-resistant proximity switches**
- ▶ **Integrated positioning system**

We gladly respond to your individual requests and provide the optimal solution for you.

On the following page you can view the systems we offer as standard models.



Precision in Motion

Hydraulic Cylinders with Position and Path Detection



- ▶ Equipment/features upon demand with switches and path detection system
- ▶ All products are combinable
- ▶ ATEX-version

▶ Attached Proximity Switches

If you need a reliable, low-priced, and contactless detection of the piston position of hydraulic cylinders in the low- and mid-pressure range (up to a max. of 120 bar), the attached, adjustable proximity switch is highly suitable. Additionally, multiple switching points are easily realizable. Attached proximity switches allow an adjustment across the whole stroke and therefore a safe monitoring of the motion sequences of hydraulic cylinders and the connected machines.

▶ Cam Switches

Hydraulic cylinders with cam switches enable the position detection of the piston rod through a shift linkage with control cams. The position and amount of the control cams can be changed afterwards. Cam switches ensure an exact, flexible, and especially resilient position detection of the piston rod.

▶ Incorporated, Pressure-Resistant Proximity Switches

Mounted, pressure-resistant, and inductive proximity switches are a precise and inexpensive solution if you need to indicate the stroke end position. When the piston rod reaches an end position, the proximity switch will give an electronic signal. Inductive proximity switches work contactless and are therefore wear-free. They can be used for every cylinder type.

▶ Integrated Path Detection System

If you need to detect the movement of a piston rod or any piston rod position in a reliable, precise, wear-free and durable way, the integrated positioning system is the right choice. The detection via an integrated positioning system takes place within the piston rod. The position of the piston rod can therefore be detected very precisely and is available as an analogue or digital signal.

