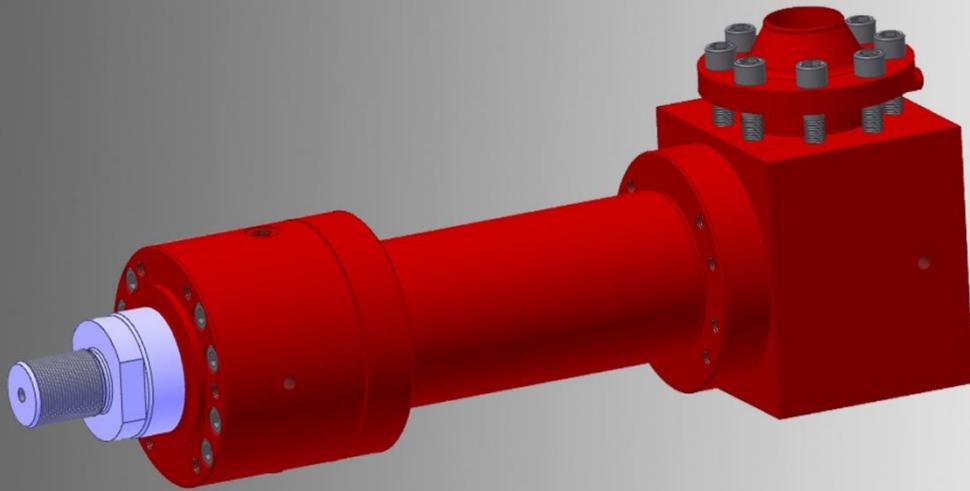


Hydraulic Cylinder with Rapid Traverse Function



The hydraulics provides the highest power density in comparison to all other drive options. As a result, extreme forces can be implemented in a small installation space that otherwise could not be generated or only with very high efforts. A typical scope of application in which the advantages of hydraulics can be accessed, are hydraulic presses, where enormous forces are at work depending on the design.

However, these forces are not always needed on the entire travel of the press. Often, most of the press stroke is only used to keep the working space clear for the mounting. The actual pressing process takes place in only a small area of the total travel. The system runs almost without load during the rest of the stroke.

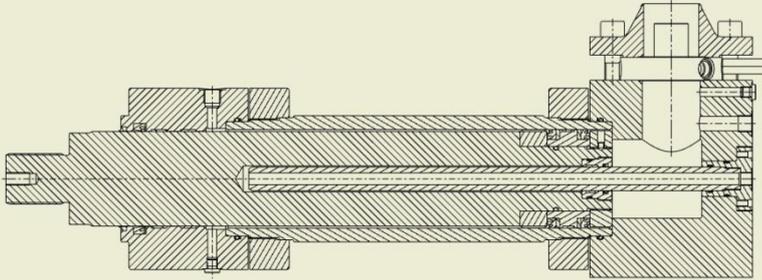
To save time in such cases, and especially energy, HYDROPNEU provides specially designed hydraulic cylinders with a rapid traverse function. These cylinders have an additional option of control through which the cylinder can be moved into the actual working position quickly with a small oil volume. The full piston surface is impinged only for the short part of the press stroke when the actual pressing is carried out under high pressure and with great force. The press can be operated with a constant oil volume flow at a reduced lifting speed, without a major impact on the overall cycle time.

The rapid traverse function reduces the work cycles of a press significantly and extremely decreases the required volume flow for an operating cycle.



Precision in Motion

Hydraulic Cylinder with Rapid Traverse Function



- ▶ Minimization of the installed capacity
- ▶ Fast travel without load
- ▶ High pressing force
- ▶ Fast stroke and pressing stroke selectable

Example:

This hydraulic cylinder is operating in a press that requires the maximum pressing force only during a small section of the total path. The rest of the travel is needed to ensure that the working space is accessible and can be equipped. In order to prevent a vacuum or the generation of high interior back pressure, the press cylinder contains a pre-fill valve. The valve unblocks a large cross section to the tank during the rapid traverse function, and thus ensures the filling and emptying of the cylinder space without the need to provide conveying capacity.

Technical Data:

Hydraulic Cylinder: SZ.000.11.2.0-125-120-0400-0264	
Piston-Ø:	125 mm
Piston Rod-Ø	120 mm
Stroke:	400 mm
Operating Pressure:	280 bar
Test Pressure:	375 bar
Operating Mode:	double-acting in rapid traverse single-acting during the pressing
End Position Cushioning:	none
Max. Piston Speed:	max. 0,5 m/s
Operating Fluid:	Hydraulic Oil HLP 46
Special Features:	<ul style="list-style-type: none">• Rapid function for quick positioning without load• Pre-fill valve for rapid filling/emptying of the cylinder space