

# Pressure reversing valve

- New for the US-market. Used in Europe for over 20 years.
- Reversing action without electrical components.
- Pressure relief valve is built into the valve house
- Dial with graduated scale for easy pressure adjustment
- Soft reversing action that saves other components in the system
- Compensation for pressure drop
- Reliable
- NG10 (CETOP 5) / NG6 (CETOP 3)
- Uses: waste disposal compactors, bottom sludge scraper systems, muck removal systems, chip or pellet feeders, etc.
- **Option:** The pressure reversing valve can be adapted to always start in the same direction, e.g. waste disposal compactors which, for safety reasons, should always start by reversing.



# Pressure reversing valve

## FUNCTION AND RANGE OF APPLICATION

The valve reverses the direction of the ram so that it reciprocates. The ram direction changes automatically when the set pressure is reached, e.g. when the ram is fully extended or when the load increases. The valve can replace limit switches and pressure switches.

## SIMPLE TO ADJUST

A single control dial is used to adjust both the pressure relief valve and the operating pressure for reversing the ram. Adjustments are made easily with the dial which has a scale for setting the required pressure. Tools and manometers are not needed to adjust the pressure. The valve can also be manoeuvred manually with the push buttons on each end of the valve house.

## SMOOTH REVERSING ACTION

The smooth reversing action spares the hydraulic lines and other components in the system.

## LIMITED MAX PRESSURE

To prevent inadvertent setting of too high a pressure, the control dial has a built-in stop for maximum permissible pressure. The valve is delivered from the factory with this stop set to the value requested by the customer. The range that the pressure can be set to is 70-240 bar.

## TECHNICAL DATA

Port arrangement: **NG10, CETOP 5** (DIN 24340).

Valve type: 4/2 pressure reversing

Flow (Q): The valve is suited to specific pumpflow before delivery, 1-60 l/min

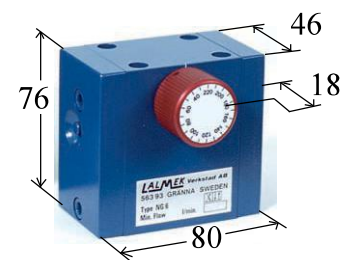
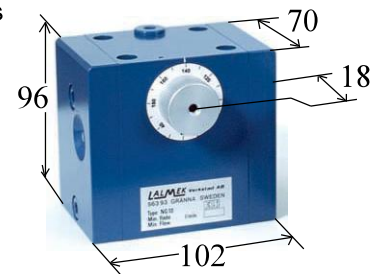
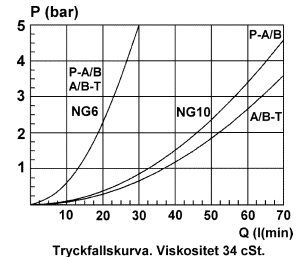
Pressure range: 40-250 bar (4-25 MPA)

Port arrangement: **NG6, CETOP 3** (DIN 24340).

Valve type: 4/2 pressure reversing

Flow (Q): The valve is suited to specific pumpflow before delivery, 0,5-30 l/min

Pressure range: 40-250 bar (4-25 MPA)



## Special built-in function for compensating pressure drop

Long hydraulic lines and narrow flow passage will, especially when the fluid is cold, cause a pressure drop between the valve and the cylinder reducing the push force of the ram. The built-in function can reduce the pressure drop by as much as 75%.

## Example of function

Let us assume that a hydraulic system has a pressure drop of 40 bar with the valve set at 150 bar. When the set pressure is reached the valve begins to shunt part of the flow directly back to the tank. When the flow to the cylinder decreases, a pressure drop, which is proportional to the square of the flow, will also occur. As much as half of the flow can be shunted the valve reverses the flow direction. The pressure drop of 40 bar is therefore reduced by 75% to 10 bar leaving 140 bar to drive the ram. Without this built-in function only 110 bar will be available to the ram. To equate the 140 bar the system would have to be set at 180 bar and in this way compensate the pressure drop.

