Power stainless steel linear dosing valve- Data sheet

Application

This type of valve is generally used in industrial systems for water, gas and corrosive media. This specific version is intended to be used as a dosing valve in industry, water treatment, agri- and horticulture.

Figure 1: Power LinValve

Function

The LinValve is intended to dose fertilizers, acid, chemicals, etc. Over the most part of the range (of 90°), the flow shows a direct linear relationship with the angular rotation of the valve. In combination with a specially developed motor, the flow can easily be controlled. If desired, the valve can also be modularly controlled and/or build in twin version. The last option is to make sure the AB tanks run parallel. In this case, the twin-valve also has an option to easily compensate for viscosity differences.

Advantages Power LinValve

- Linear flow curve
- Various capacities
- Stainless steel 316 ball valve
- High chemical resistance
- High reliability
- Compact installation
- Optimal price-quality ratio

Design

Besides the extreme positions of the valve, the rectangular slot opening in the stainless steel ball (instead of a round passage) creates a linear flow characteristic. Depending on the length and width of the slot, the valve has a certain (maximum) capacity. We currently supply the LinValve in the following 5 nominal capacities: 100, 350, 750, 1500 and 2500 l/h. (see graphs on the other side)

Point of attention

For the right choice of the valve, partly depending on the pressure, the nominally required flow in l/h must be considered. Ideally, this flow should be in the middle range of the angular rotation of the valve. In this way, there is sufficient control margin left, both upwards and downwards.

Flow medium

The used materials are resistant to (concentrated) fertilizers, acids, etc. ; Stainless steel 316 housing, ball and spindle. Seals are from Teflon and FPM.

Nominal pressure and flow

The dosing valves are tested in a suction pipe and at common pressures up to 3 bar and flows corresponding to the size. For test results, see the accompanying graphs with the trend lines. Incidentally, the used stainless steel valves are mounted at a maximum pressure of 68 bar.

Connection size

Depending on the flow, the LinValves are available in 1/4", 1/2" and 3/4" BSP female thread.

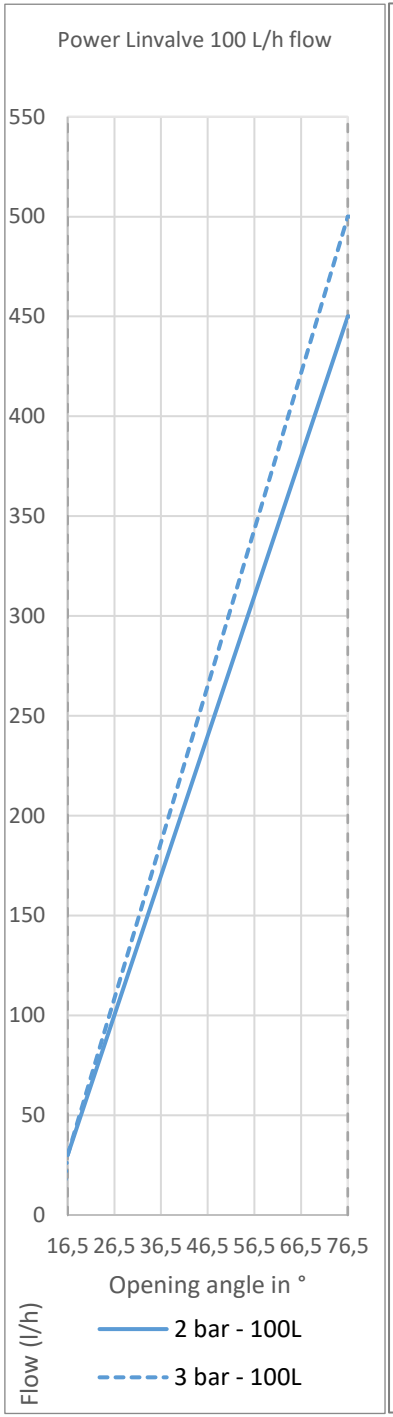
Flow direction

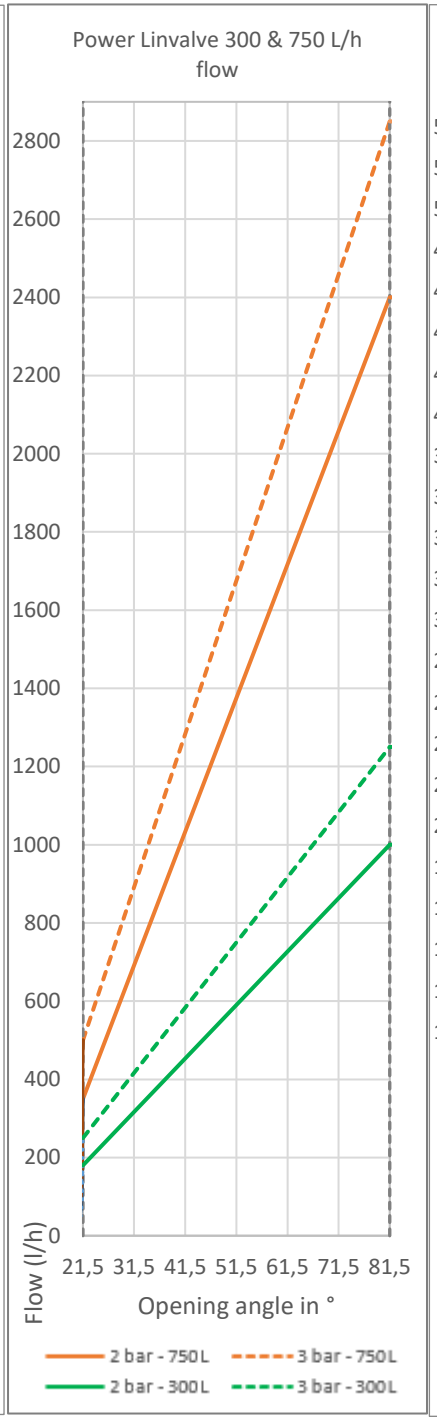
The flow direction off the dosing valve, is indicated by an arrow on the valve. To be complete; the orientation of the ball is such that the water flows in through of round passage and flows out through the slot.

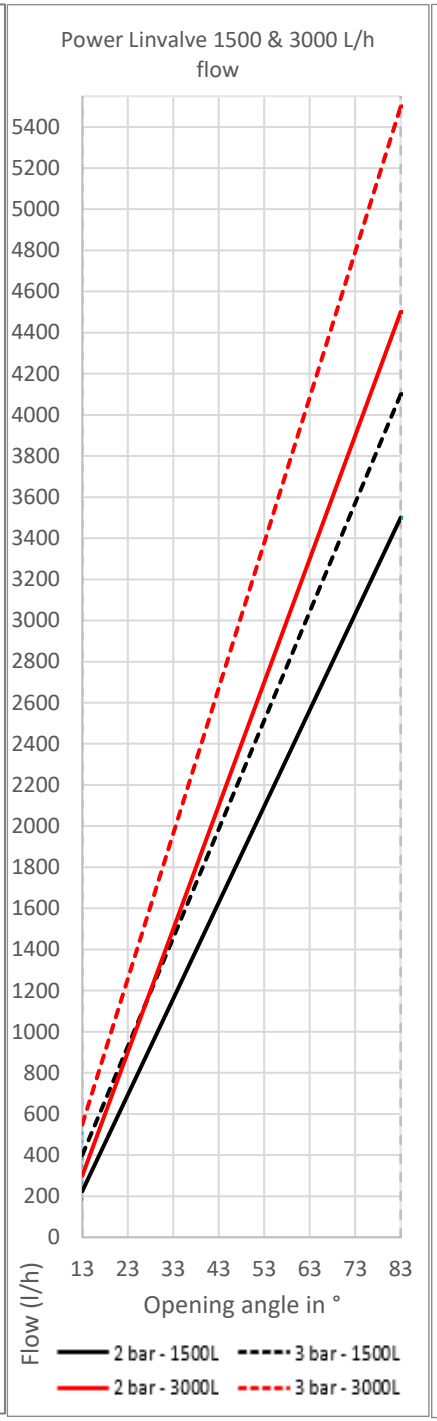
Figure 2: Twin Lin version for AB tanks

For more info please call: +31 252 21 66 50 or mail: info@powerplastics.com

Flow characteristics in free-range discharge pipe:







Flow characteristics in suction pipe: