

## Transfer control (Bumpless transfer)

hyTRax offers functions of bumpless transfers during runtime between the closed loop position control and the closed loop force or pressure control vice versa. Such changeovers can be executed during the piston's standstill or during its moving.

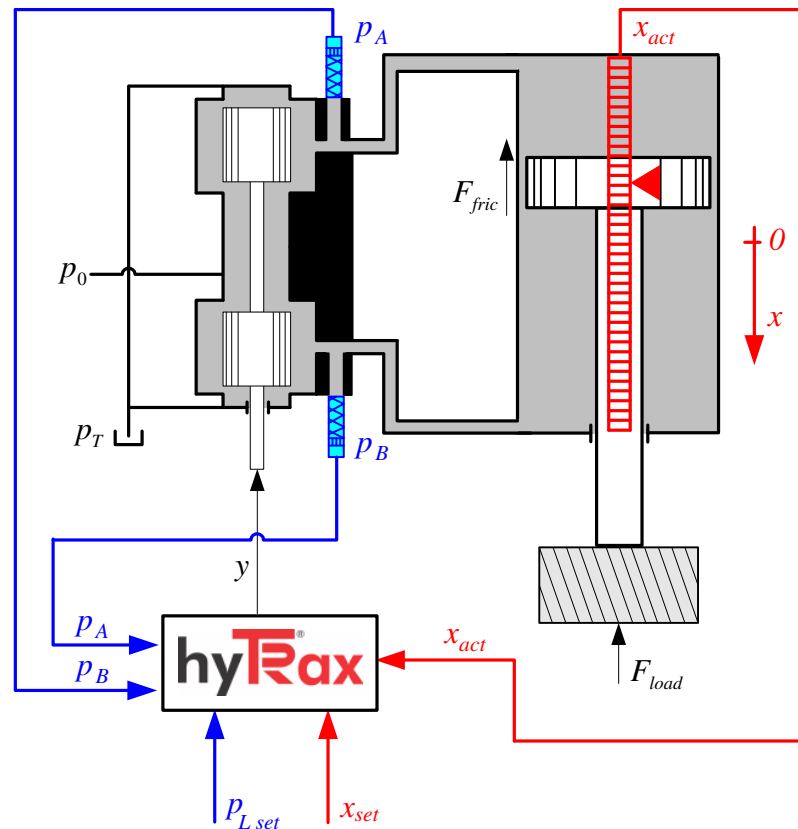


Fig.: Hydraulic cylinder drives in a transfer control system

A bumpless transfer is activated when a predefined threshold of the drive's load pressure is achieved. Afterwards hyTRax calculates the first set signal of the closed loop pressure control, which is applied automatically, whereon the bumpless changeover is executed. Now the hydraulic drive is controlled by a closed loop pressure control system.

If the bumpless transfer shall be made from pressure to position control a predefined threshold of the drive's load pressure has to be achieved. Afterwards hyTRax calculates the first set signal of the closed loop position control, which is applied automatically, whereon the bumpless changeover is executed. Now the hydraulic drive is back in position control.