

General information

The invention of the booster cylinder is not new. Its use was limited to few specific applications due to design flaws and was pushed aside by the score of hydro-aggregates used. Modern seal technology and important design improvements as well as the demand for energy efficient, environmental friendly and cost effective solutions lead now to optimal capabilities of booster cylinders.

Combination options to the point of compact power units arise in conjunction with our proven hydraulic elements like the standard cylinder series **SZ 100, SZ 160, SZ 250** the short stroke cylinders **HBZ 500, HWZ 400, HKZ 500** and the hydraulic rotational drive cylinders **HDZ 120**.

Individual advantages:

- Realization of high forces with small dimensions of cylinders.
- No energy consumption during extended duration or constant pressure applications
- Exact continuous feed as well as synchronous speed control
- Maintenance-free, explosion-proof, closed loop control.
- Operation with water allows applications, which reduce the cost in comparison to a hydraulic power unit considerably.

Operating conditions

Operating pressure: on air side (= primary side) max. 10bar, on oil side (secondary side) depending on the amplification ratio chosen

Operating fluids: filtered and lubricated air on primary side, on secondary side hydraulic oil on the basis of mineral oil for example H, HL, HLP-oils per DIN 51524/51525. Other operating fluids like fire resisting fluids or water may be used upon request.

Operating temperature: By default the Booster Cylinder PHU is equipped with seals for a temperature range from -20°C to +80°C. High temperature resistant seals can be fitted without changes in design. If required please add order-index "X6" when ordering (see special designs – type designations).

Piston travel speed: Maximum 0,5 m/s, please contact us for higher speeds.

Special designs: The most common special equipment with the related order-index "X" is mentioned in the type designation section.

Additional piston sizes, multi-position rotational drive cylinders or rotational drive cylinders with position encoding and other configurations are available upon request.