

STARK Pressure booster – clamping made fast and safe

The pressure booster converts compressed air into hydraulic pressure and is suitable for applications in the range between 30 and 110 bar for releasing the zero point mounting system.

The pressure booster is available with or without "Third Hand" function (THF).

Pressure boosters with the "Third Hand" function (THF), stop in the locked position after correct introducing of the retractable nipple the workpiece or palette. Workpieces and palettes are therefore safeguarded against falling and the operating personnel does not have to hold them. This speeds up the clamping process and makes it even safer.

Pressure booster

The pressure booster converts air pressure into hydraulic pressure.
The "Third Hand" function (THF) safeguards the workpiece or palette after positioning against falling until the clamping process is completed.

Pressure booster RECORD 80 bar

| Order no. | Releases approx. pieces | System pressure | Air pressure | Weight |
|-----------|---------------------------|-----------------|--------------|----------|
| 804 412 | 14 x SPEEDY 6 kN | 40 | 6 | 8,80 kg |
| | 7 x SPEEDY 20 kN | 40 | 6 | |
| 804 429 | 14 x SPEEDY 6 kN with THF | 40 | 6 | 10,50 kg |
| | 7 x SPEEDY 20 kN with THF | 40 | 6 | |



Pressure booster KOLOSS 110 bar

| Order no. | Releases approx. pieces | System pressure | Air pressure | Weight |
|-----------|----------------------------|-----------------|--------------|----------|
| 804 414 | 12 x SPEEDY 10 kN | 80 | 6 | 14,10 kg |
| 804 430 | 12 x SPEEDY 20 kN with THF | 80 | 6 | 15,80 kg |



Pressure booster BOOSTER 40/80 bar

| Order no. | Releases approx. pieces | System pressure | Air pressure | Weight |
|-----------|--------------------------|-----------------|--------------|----------|
| 804 435 | 45 x SPEEDY 6 kN | 40 bar | 6 bar | 27,30 kg |
| | 23 x SPEEDY 20 kN | 40 bar | 6 bar | |
| | 7 x SPEEDY 30 kN | 30 bar | 5 bar | |
| 804 436 | 22 x SPEEDY 10 kN | 80 bar | 6 bar | 27,30 kg |
| | 6 x SPEEDY Sweeper 20 kN | 60 bar | 5 bar | |

The pressure booster BOOSTER is also available with THF.



Accessories for the pressure booster

A hydraulic hose of 1,5 meter in length is included in the delivery (other hose lengths upon request).

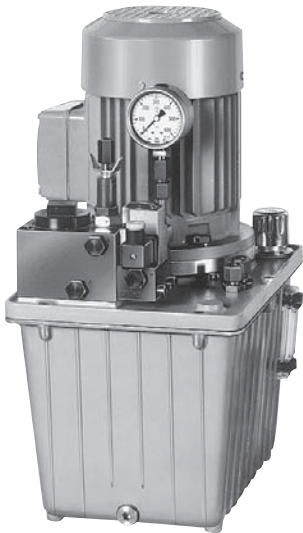
| Order no. | Designation | Weight |
|-----------|---|---------|
| 804 419 | Indexing foot pedal for the pressure booster complete | 2,40 kg |
| 804 428 | THF-controller in the housing with foot pedal | 1,70 kg |



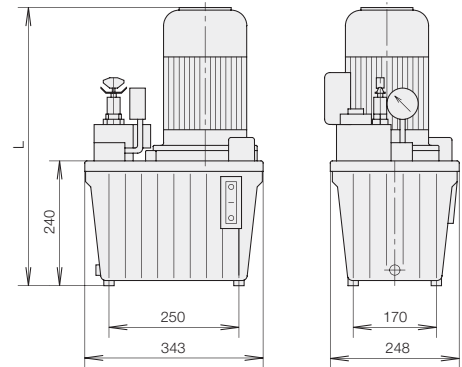
All pressure boosters can be equipped with indexing footpedals upon request.

Pumping unit

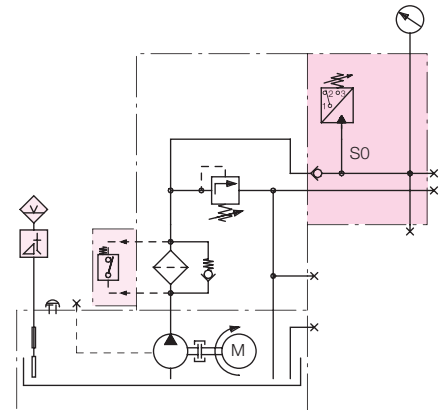
Electrical pumping unit



The pumping unit is specially suited for small to medium size clamping and assembly devices with one-way cylinders that mainly operate during intermittent operation (pressure build up and pressure maintenance).



Hydraulic diagram



The pictured pressure switch, the oil level and oil temperature gauges and the filter monitors are not part of the base equipment.
Oil level and oil temperature gauge:
Order no. 3822-008.

| Order no. Base equipment | Order no. With filter check | Blower output ccm/s | l/ min. | Operating pressure | | Nominal output KW | L2 mm | kg |
|--------------------------------|-----------------------------------|---------------------------|------------|--------------------|---------------|-------------------------|----------|----|
| | | | | 100% ED bar | 40% ED bar | | | |
| 8223-310 | 8223-910 | 15 | 0,9 | 350 | 500 | 0,75 | 489 | 27 |
| 8122-300 | 8122-900 | 25 | 1,5 | 150 | 200 | 0,75 | 489 | 27 |
| 8223-308 | 8223-908 | 25 | 1,5 | 360 | 500 | 1,1 | 504 | 30 |
| 8223-323 | 8223-923 | 86/12 | 5,2 | 100/500 | 100/500 | 0,75 | 489 | 29 |
| 8223-311 | 8223-911 | 41 | 2,5 | 220 | 300 | 1,1 | 504 | 30 |
| 8142-300 | 8142-900 | 70 | 4,5 | 64 | 85 | 0,75 | 489 | 27 |
| 8143-300 | 8143-900 | 70 | 4,5 | 104 | 142 | 1,1 | 504 | 30 |
| 8144-300 | 8144-900 | 70 | 4,5 | 142 | 180 | 1,5 | 531 | 34 |
| 8152-300 | 8152-900 | 102 | 6,2 | 50 | 65 | 0,75 | 489 | 27 |
| 8153-300 | 8153-900 | 102 | 6,2 | 73 | 100 | 1,1 | 504 | 30 |
| 8154-300 | 8154-900 | 102 | 6,2 | 100 | 125 | 1,5 | 531 | 34 |

General specifications

- Type: 81XX-toothed wheel pumps, 82XX-radial piston pumps, 8223-323 2-stage pump
- Mounting: Foot mount, connection gauge G 1/4
- Rotation: Bidirectional for radial piston pumps, clockwise for toothed wheel pumps, counter clockwise for 2-stage pumps (looking down on the drive shafts)
- Fitting: Vertical, container volume 11 l, usable volume $V_n = 6$ l
- Efficiency: Vol. efficiency $h_{vol} = 85-95\%$ for toothed wheel pumps, $h_{vol} = 92-96\%$ for radial piston pumps
- Accessories: Upon request the pumping units are available with electrically activated directional control valves. Order valves separately.

Electrical specifications

- Nominal voltage: 230/400 V, 50 Hz
- Fusing: IP 54
- The calculation of the relative duty cycle is based on a cycle of 10 min. With 40% ED e.g. the maximum load within the cycle should not exceed 4 min. During the remaining time, the motor can carry a load off up to 50% of the nominal output and should run continuously.