TOX®-PowerKurver
Type KKG

Data sheet 90.30
2021/03
TOX®-PowerKurver

Function:
The piston of the TOX®-PowerKurver, when pressurized with air, pushes the high capacity rollers against the cam surface in the cam lever. The in-house developed and patented cam shape produces a constant force over the adjustable stroke.

The TOX®-PowerKurver offers the following features:
- Constant Force-Travel characteristic over the working stroke
- Fast approach stroke
- Smooth power stroke initiation
- High press forces with low air pressure
- Low air consumption
- High stroke frequency
- Compact design
- Adjustment possibility of longitudinal and transverse tool axes

Advantages:
- Part accessibility
- Higher force compared to toggle lever
- Force in hard to reach places
- Robust pneumatic cylinder drive
- Clamping and Clinching at the same time

Modular system

Our modular system gives you the freedom to match the TOX®-PowerKurver to your specific requirements. We solve your application and quality assurance requirements with clear defined interfaces.

The TOX®-PowerKurver consists of the base unit KK 90, the jaws, the tools and accessories. The jaws, tools and accessories are matched to your specific requirements. Following are the technical details of the base unit. The complete unit is referred KKG.
TOX®-PowerKurver with pneumatic drive

Technical data:
The press force depends on the throat depth and opening between the tools. Refer to the diagram shown on this page. The KKG 90 generates 60 kN at 100 mm throat depth and 8 mm tool opening. At the end of the stroke it provides up to 90 kN over a travel distance of 3.5 mm.

KKG 90: Press force dependent on tool opening and throat depth (at 6 bar air pressure)

Note:
In punching operations only 50 % of the nominal force of the TOX®-PowerKurver may be utilised.

Opening angle:
There are two main positions: 90° opened and 0° closed. The working range of the TOX®-PowerKurver lies in between these values. The distance between the tools during the approach stroke is designated as the tool opening. For various reasons, it might be necessary to restrict the opening angle. The TOX®-PowerKurver can be ordered with standard opening angles of 30°/45°/60°/75°/90° fixed. Please specify the required opening angle as shown in the ordering example.

Scope of delivery:
The TOX®-PowerKurver assembled according to order number. The jaws are not included with the base unit and need to be ordered separately.

Ordering example:
KKG 090.00.90

Opening angle
00 = Version number
Position for special versions
Press force (kN)
TOX®-PowerKurver

Additional function: End position cushion
Min. air pressure: 3 bar
Max. air pressure: 6 bar
Weight: approx. (without jaws): 53 kg
Max. Press force: 90 kN
Opening angle: 30°/45°/60°/75°/90° fixed
Power stroke (adjustable): 3.5 mm

Scope of delivery:
The TOX®-PowerKurver assembled according to order number. The jaws are not included with the base unit and need to be ordered separately.

Ordering example:
KKG 090.00.90

Opening angle
00 = Version number
Position for special versions
Press force (kN)
TOX®-PowerKurver

Additional function: End position cushion
Min. air pressure: 3 bar
Max. air pressure: 6 bar
Weight: approx. (without jaws): 53 kg
Max. Press force: 90 kN
Opening angle: 30°/45°/60°/75°/90° fixed
Power stroke (adjustable): 3.5 mm

Note:
In punching operations only 50 % of the nominal force of the TOX®-PowerKurver may be utilised.

Opening angle:
There are two main positions: 90° opened and 0° closed. The working range of the TOX®-PowerKurver lies in between these values. The distance between the tools during the approach stroke is designated as the tool opening. For various reasons, it might be necessary to restrict the opening angle. The TOX®-PowerKurver can be ordered with standard opening angles of 30°/45°/60°/75°. Please specify the required opening angle as shown in the ordering example.
**Accessories**

**Bearing pedestal KKZ 06 for KK 90**

The TOX®-PowerKurver can be mounted in various ways. One of the common ways is with the TOX® swivel equalizing pedestal.

**Mounting variants without bearing pedestal**

**Scope of delivery:**
Bearing pedestal complete with bushings and dampening elements, without mounting screws.

**Order No.** KKZ 06

**Mounting variant with bearing pedestal**

**End position switch**
Contactless 24 V. The end position switch can be used as a tool position sensor within the power stroke, as due to the large mechanical intensification ratio a accuracy of for example ± 1/100 mm at a jaw length of 100 mm is achieved.

**Order No.** KKZ 03.000

---

**Swivel angle**
approx. 6.5°