Electrohydraulic Power Rod -MINI-
Technical Data Sheet

**Design and Function**

The electrohydraulic power rod is a highly dynamic, compact linear drive. With model type -MINI-, the application range up to flow rates of 30 l/min can be covered.

The electronic control circuit converts the input parameters like speed, position and tool movement profile into signals which drive a low-power stepper motor. This movement is amplified by the highly dynamic mechanical closed loop system of the power rod.

The hydromechanical closed loop operates without measuring systems or additional electronic control devices. This straightforward design concept ensures the ruggedness and reliability typical of Voith compact units.
Technical Data

General
- Stroke length: 50/100/150 mm
- Return force: approx. 10% to 20% rod force
- Programmable step size: 0.1 - 0.004 mm
- Max. speed: 500 mm/s
- Ambient temperature: +5 to +50 °C
- Mounting position: any

Hydraulic
- Operating pressure: max. 100 bar
- Flow: max. 30 l/min
- Hydraulic oil temperature: -10 to +70 °C
- Viscosity range: 10 to 300 mm²/s

Electric
- Pilot motor: stepper motor, 2 phase, 24 V; 1.5 A
- Control: 2 phase power amplifier digital / analog

Features
- Programmable speed, position and tool feed profiles
- Hydromechanical closed loop, 4-way control
- High dynamic drive, smooth rod movement
- Modular system, flexible cylinder make
- No measuring systems are required
- Compact design

Options
- Additional cylinder dimensions

Applications
- Positioning
- Forming
- Punching
- Shearing

Functional Diagram
### Basic Dimensional Drawing

- **Ø piston**
- **Ø rod**

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Dimensions in mm
Type Code

SDPA 04 SSK 268 G3 U040 / 040 - 20 - 150

cylinder stroke
diameter rod
diameter piston
diameter pinion
connection
electric diagram
stepper motor
size power rod
power rod
material number

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