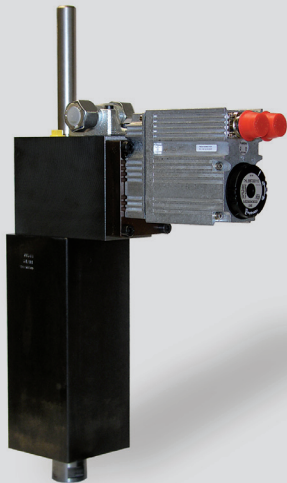


Electrohydraulic Power Rod



Design and Function

The electrohydraulic power rod is an optimised linear drive for cutting, punching and forming processes which require enhanced tool feed drive capabilities.

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 highly dynamically by the hydromechanical closed loop of hydraulic amplifier.

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

Cylinder design, surface dimensions and mounting characteristics have been adapted specially to suit the area of application.

Features

- Programmable speed, position and tool feed profiles
- Hydromechanical closed loop
- Direction-sensing overload display
- Smooth rod movement
- No measuring systems are required

Technical Data

General

Stroke length	70 / 150 mm
Return force	aprox. 10% to 20% rod force
Programmable step size	0.1 - 0.004 mm
max. rod speed	500 mm/s
Ambient temperature	-5 to +50 °C
Mounting position	any

Hydraulic

Operating pressure	max. 250 bar
Oil temperature	-10 to +70 °C
Viscosity range	10 to 300 mm ² /s

Electric

Control	2-phase amplifier digital / analog
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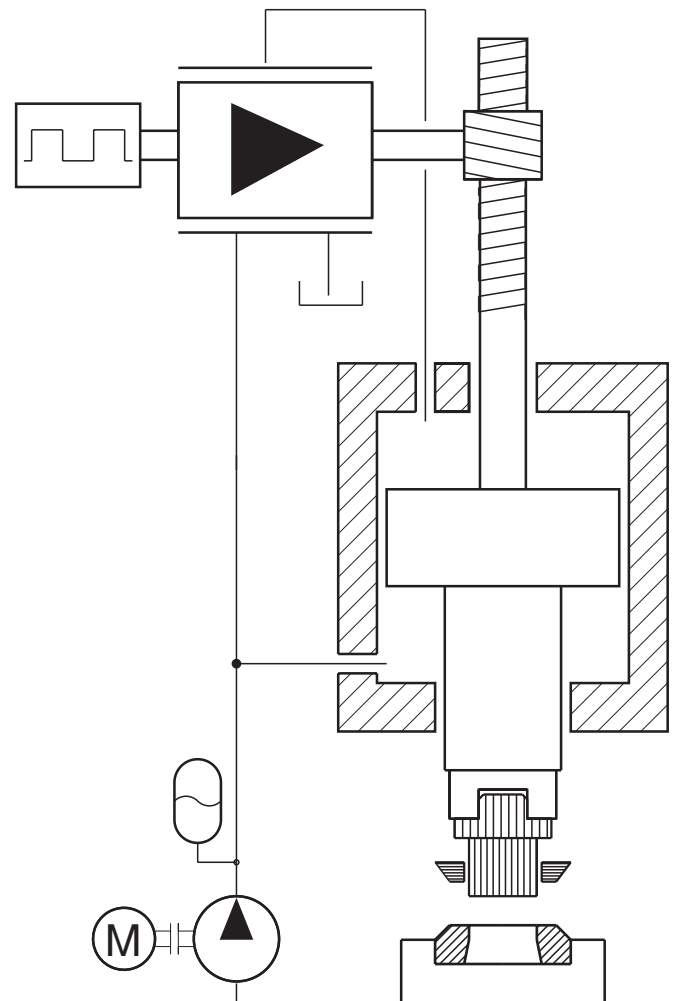
Options

- Integrated stepper motor driver
- BDC/TDC position unit to reduce cycle times
- Electronic control of stepper motor, improved performance
- Design modifications for special safety requirements

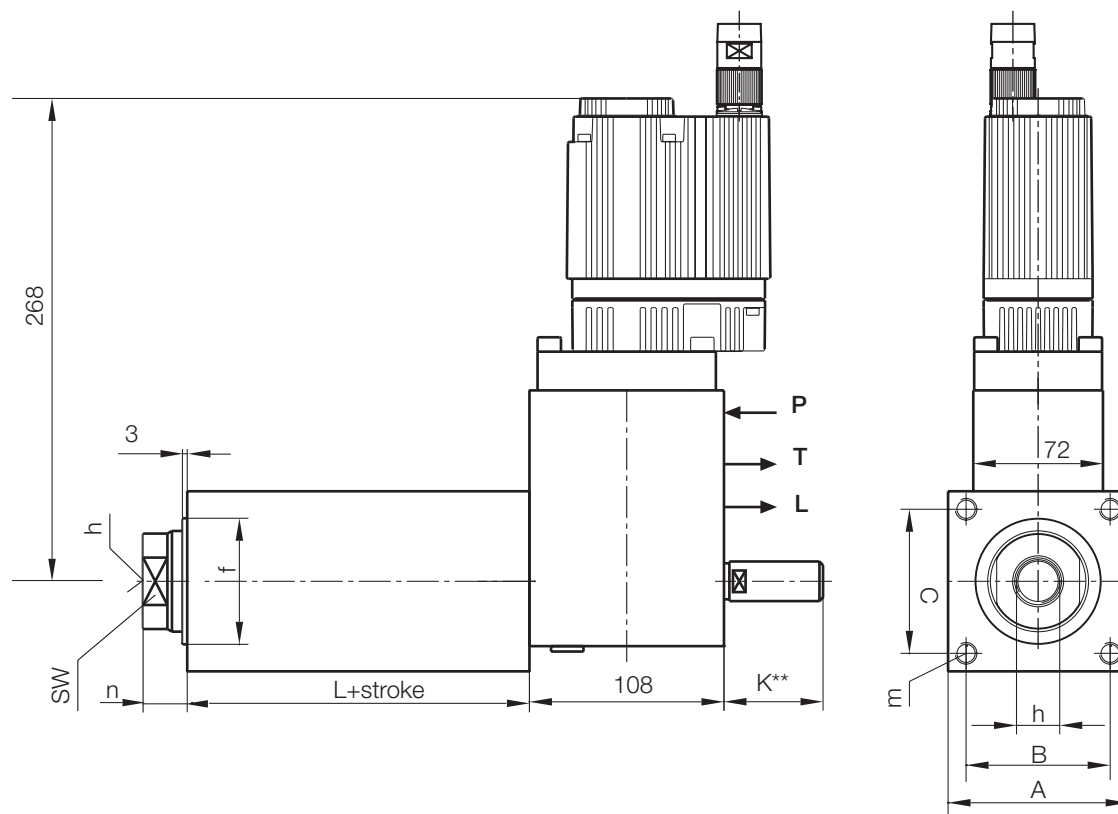
Applications

- Bending
- Cutting
- Stamping
- Shearing
- Blanking

Functional Diagram



Basic Dimensional Drawing Power Rod Size 1



Ø piston	Ø rod	L+stroke*	A	B/C	Ø f	h	m	n
40	28 / 36	110	76	56	50	M16x1.5	M10	18
50	36 / 45	110	76	56	65	M20x1.5	M12	20
63	45 / 56	120	100	80	70	M24x1.5	M12	25
80	56 / 70	125	130	100	90	M30x1.5	M16	25
100	79 / 90	170	160	120	110	M42x1.5	M20	30
110	80 / 100	170	170	130	120	M42x1.5	M20	35
120	85 / 105	175	180	140	140	M48x1.5	M24	35
140	100 / 125	205	200	140	140	M48x1.5	M24	40
160	120 / 140	210	240	190	170	M64x1.5	M30	40

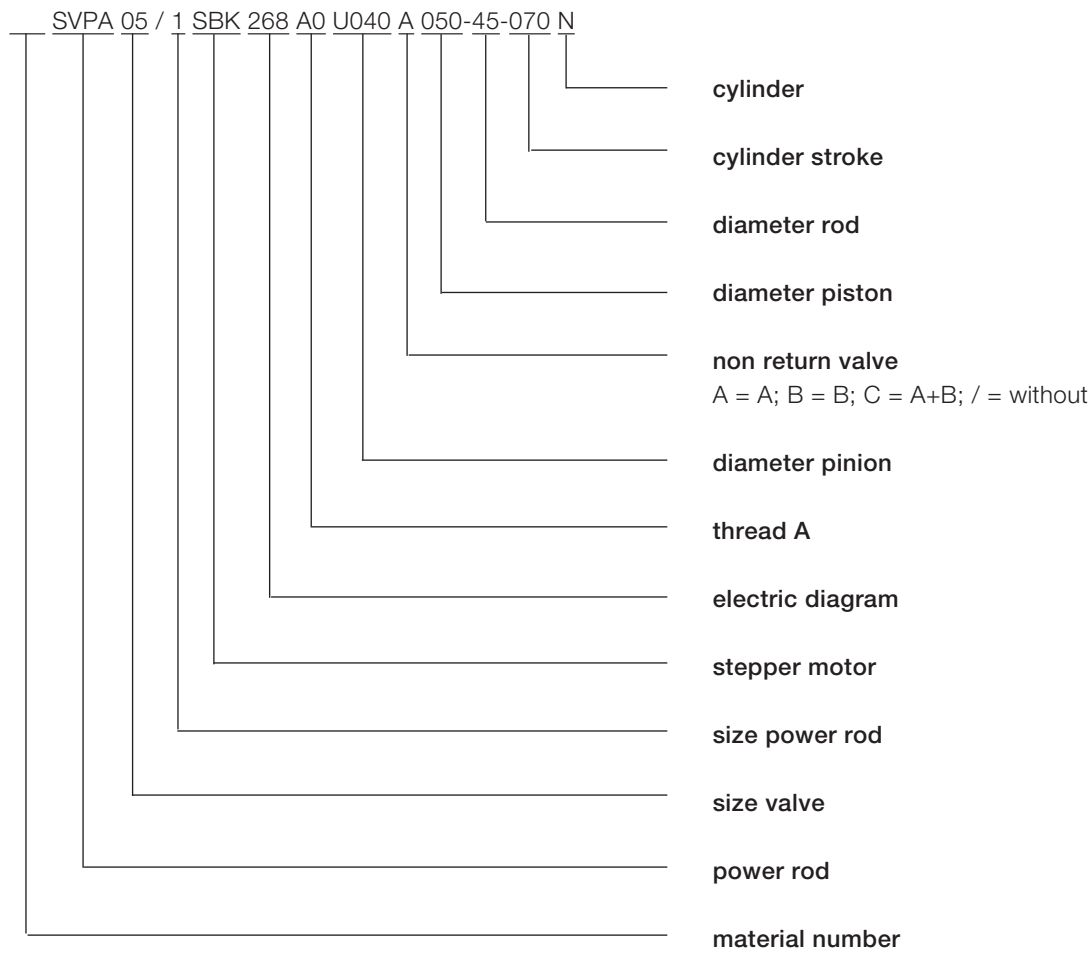
electric connection plug not included

*measurements given are minimum

**measure K on request

all dimensions in mm

Type Code



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