

Flexible Clamp System

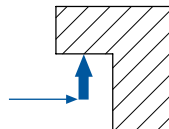
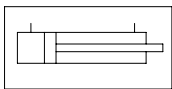
EVK with DHKZ

Application area

- For medium and large presses
- For various die dimensions
- For clamping upper dies
- For dies with U-recess
- Suitable for retrofitting



Mode of operation



- The electric positioning unit moves the clamping cylinder along the T-slot.
- A double-acting hydraulic cylinder generates the clamping force.
- Unclamping of the clamping cylinder is provided hydraulically.

Advantages

- Clamping of different die sizes
- Large clamping dimension tolerance
- Short clamping and unclamping time
- Displacement path up to 1000 mm available
- Clamping in the park position possible
- All important functions electrically monitored
- High automation level
- Central operation

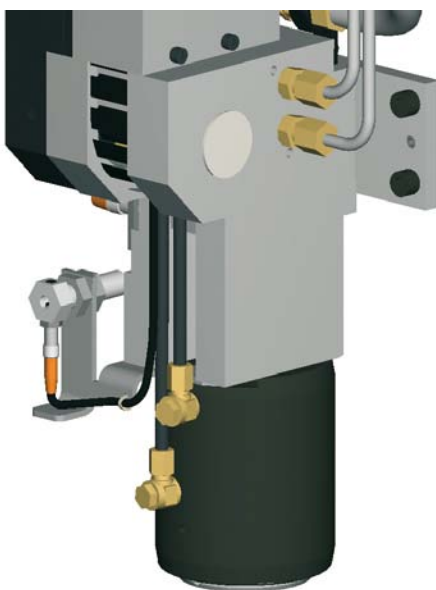
Description

The electric positioning unit moves the clamping cylinder by means of a chain. Hydraulic pressure is applied to the hydraulic cylinder to generate the clamping force. The hydraulic pressure must be maintained to secure the clamping force (e.g. with pilot-controlled check valves). Therefore, pressure control by means of a pressure switch on the hydraulic power pack is necessary.

The electric positioning units may be switched off individually by the machine control so that these clamp units remain in their park position, where they are clamped.

Accessories and fittings

- Pilot-controlled check valves
- Fittings
- Hydraulic hoses / hydraulic accessories
- Hydraulic power packs
- Limit switches / cable
- Plug connectors



Fixing is achieved with four hexagon head screws with flange (DIN 6921) M10x30, strength class 8.8 and two spring dowel pins Ø8x20. (not included)

1) Mechanical damage may occur at higher load.

Technical Data

Positioning Unit	EVK		
Motor: Type	DC	alternatively	three-phase
Supply voltage	24V		400V 50 HZ
Motor power [W]	8		90
Positioning speed [mm/s]	150		145
Limit switches: Type	<ul style="list-style-type: none"> • Inductive proximity switches • PNP normally open; 10-30V DC 		
Switch voltage			
Designation	<ul style="list-style-type: none"> • Clamp unit in park position S1 • Clamp unit at the die S2 • End of displacement path (optional) S5 		
Plug connector	Han® 25 D Han® 6 E (additionally for three-phase drive)		
Clamp Unit	DHKZ 100		
Clamping force [kN] / at operating pressure [bar]	100 / 400		
Max. loading force [kN] ¹⁾	130		
Max. operating pressure [bar]	400		
Clamping dimension tolerance [mm]	+/- 4		
Stroke [mm]	12		
Oil volume: Clamp / unclamp [cm ³]	31 / 31		
Max. operating temperature [°C]	70		
Weight [kg]	20		

Flexible Clamp System

EVK with DHKZ

Technical drawing of the Flexible Clamp System EVK with DHKZ, showing side and front views, dimensions, and a wiring diagram.

Dimensions:

- Overall width: 181
- Offset: 69,5
- Height: $H/2+300$
- Hub length: 138
- Hub offset: 20
- Displacement path: L_{SP}
- Front view width: 200
- Front view height: 50
- Front view offset: 10
- Front view hole diameter: $4 \times \varnothing 0,1$
- Front view hole offset: N
- Front view hole diameter: M
- Front view hole offset: O
- Front view hole offset: Y_s
- Front view hole offset: Y_L
- Front view hole offset: 44,5
- Front view hole offset: 46,5
- Front view hole offset: 48,5
- Front view hole offset: 74,5
- Front view hole offset: 76,5
- Front view hole offset: 78,5

Notes:

- Housings are not included
- $L=500$
- 12
- Hydraulic connection "CLAMP" G1/4
- "UNCLAMP" G1/4
- Plug connector 6-poles, male
- 24V DC
- 400V 50Hz
- Plug connector 25-poles, male
- max. 212
- max. 90
- 80
- 41.5
- S1
- S2
- $\varnothing 110$
- 68
- 82
- 225

Wiring Diagram:

The diagram shows a motor (M) connected to a slide mechanism. The slide mechanism has two positions: "clamp" and "unclamp". The "clamp" position is controlled by a 24V DC supply (S1) and a 400V 50Hz supply (S2). The "unclamp" position is controlled by a 24V DC supply (S1) and a 400V 50Hz supply (S2). The diagram also shows additional clamp units and additional clamping circuits.

Example order: EVK - 400V 50 Hz - 700 - S5 - DHKZ100 - 28 - 75

Ordering options:

- Positioning unit
- Supply voltage
- Displacement path (H)
- Limit switch (optional)
- Clamp unit
- T-slot
- Clamping dimension L_{SP}

(Custom designs available on request)