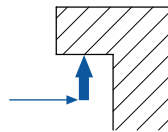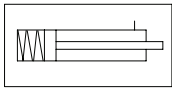# Flexible Clamp System
EVK with ZSF

Application area

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

Mode of operation

- The electric positioning unit moves the spring clamp unit along the T-slot.
- A single-acting spring clamp cylinder generates the clamping force.
- Unclamping of the spring clamp units is effected hydraulically.

Description

The electric positioning unit moves the spring clamp unit by means of a chain. For clamping, the clamp unit is depressurized so that the springs generate the clamping force. Hydraulic pressure is required for unclamping respectively positioning of the clamp units.
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.

Advantages

- Clamping of different die sizes
- Short clamping time
- Clamping force is generated mechanically by springs
- Displacement path up to 1000 mm available
- All important functions electrically monitored
- High automation level
- Central operation

Accessories

- 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 (DIN 1481) 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 DC		400V 50 HZ
Motor power [W]	8		90
Positioning speed [mm/s]	150		145

Limit switches: Type
                Switch voltage
                Designation
	• Inductive proximity switches
	• PNP normally open; 10-30V DC
	• Clamp unit in park position S1
	• Clamp unit at the die S2
	• End of displacement path (optional) 5S		

Plug connector	Han° 25 D Han° 6E (additionally for three-phase drive)		

Clamp Unit	ZSF 100
Clamping force [kN]	100
Max. loading force [kN] [1]	125
Clamping dimension tolerance [mm]	+/- 0,5
Stroke [mm]	5
Unclamp pressure / max. unclamp pressure [bar]	300 / 320
Oil volume: Unclamp [cm^3]	20
Max. operating temperature [°C]	70
Weight [kg]	26

Flexible Clamp System
EVK with ZSF

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69,5

H/2+300

Housings are
not included

L=500

12

Hydraulic connection
"UNCLAMP" G1/4

Y_L

stroke=5

3

0,5 0,5

0,5

L_{SP}

140

10

H

max. 212

max. 90

Steckverbindung
6-polig, Stift

Plug connector
25-poles, male

24V DC

400V 50Hz

80

S1

28

S2

65

Ø140

78

225

200

4x

Ø0,1

M10 - 20 deep

N

O

50

10

T-slot DIN 650

M

M

slide

S1   S2

unclamp

Additional
clamp units

Additional
clamping
circuits

P   R

Fsp [kN]

144 150   300
110
100   198
84
50

-1   Lsp   +1   +2   +3   [mm]

p [bar]

Example order   EVK - 400V 50 Hz - 700 - S5 - ZSF100 - 28 - 75

Positioning unit

Supply voltage

Displacement path (H)

Limit switch (optional)

Clamp Unit

T-slot

Clamping dimension L_{SP}

T-Slot	M	N	O	Y_L
28	28	44	18	62,5
32	32	50	20	64,5
36	36	54	22	66,5

(Custom designs available on request)