



SMP 300

SMP 400

SMP 500

PRESS-IN UNITS SMP line

Overview of the different construction sizes

Type	Models Maximum force in kN
> SMP 300	0,5 1 2
> SMP 400	5 10
> SMP 500	20 30 50 70

The correct press tool for press-in, joining and forming operations

The requirements to a press-in unit are multifaceted. The SMP series offers you products which are especially configured for your application. In the suitable size, with the suitable force, in the required precision, with the suitable stroke.

Components of SMP press-in units

- Maintenance-free servo motor
- Housing out of stainless steel and aluminium
- Compact design by the use of a motor offset

Advantages of SMP press-in units

- Simple construction for the rough industrial environment
- Insensitive against electro-magnetic radiation due to digital data transfer
- Absolut measuring system eliminates the need for a reference run
- Simple programmable at the control unit or via external PC

With force transducer and length/stroke measuring system

SMP press-in units have a digital force transducer, is located directly near the plunger. With this, the upcoming force can be collected very precise. The accuracy-deviation is max. 1 % of the final value.

The length/stroke can be measured relative or absolute. The method for the stroke measurement can be adjusted in the control system. Both systems working with a resolution of 0,003 mm and a length repeat accuracy of 0,01 mm.

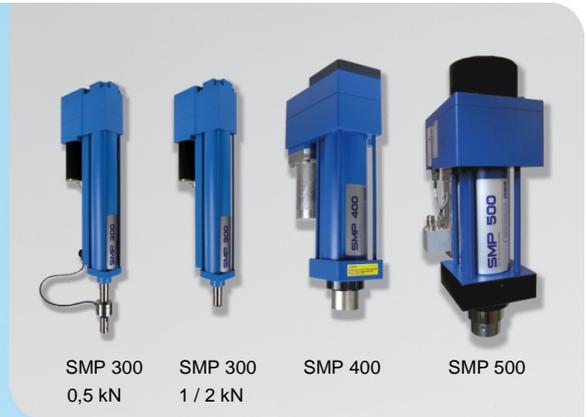
Suitable control units for presses of the SMP series



Control unit	MultiClassic FL	MultiPro FL
suitable for type	SMP, QMP	SMP, QMP

Technical data

Press-in units of the SMP series are only designed for the measurement of pressing forces. They consist out of a robust mechanic with angled servo motor, recirculating ballscrew for converting the rotary movement into a linear movement, integrated digital force transducer and absolute position encoder for control and direct measurement of force and length (stroke).



- Force control, position control and signal control are integrated
- Integrated digital parameter memory module enables error-free setup
- Drift-free force measurement
- Monitoring with envelope technology and windowing (press-in control system)
- Thanks to the high-precision DMS force transducer, only one measuring range is necessary
- Linearisation of the stroke/length (bending-up compensation)

Product designation	SMP 300	SMP 400	SMP 500
Max. force (nominal load)	0,5 1 2 kN	5 10 kN	20 30 50 70 kN
Drive motor	Electronically controlled, maintenance-free servo motor		
Motor mounting	Motor offset (angled motor)		
Accuracy force measurement (nom.force)	1% of the final value		
Execution force measurement	Digital load cell DR (press)		
Stroke	100 mm, 200 mm oder 400 mm stroke distance		
Execution stroke/length measurement	Absolute position encoder, enables absolute and relative stroke measurement		
Stroke/length repeat accuracy	< 0,01 mm (by about 20 mm/s)		
Resolution stroke/length measurement	0,003 mm		
Nominal speed	350 mm/s	200 mm/s	150 mm/s
Plunger	Recirculating ballscrew		
Stroke cycles	min. 5 million at nominal force		
Tool bracket	DIN 810 A8	Mounting holes	Mounting holes
Max. weight of additional tool	approx. 0,5 kg* / 5 kg	approx. 5 kg	approx. 10 kg
Weight of press with 100 mm stroke	approx. 6,5 kg	approx. 22 kg	approx. 100 kg
Weight of press with 200 mm stroke	approx. 7,5 kg	approx. 24 kg	approx. 120 kg
Weight of press with 400 mm stroke	approx. 9,0 kg	approx. 30 kg	approx. 150 kg
Assembly	Face side, screws as well as centring via locating flange		
	Installation position arbitrary		
Lubrication interval	600.000 force cycles		
Anti-twist protection	Fitting groove with ball bearing guide		
Internal overdrive protection	Range limits; final range driven in / driven out		
Independent emergency stop	In case of an overload (force, current, stroke, temperature motor)		
Power Pack	DS-L type 3	DS-H type 2	DS-V type 5
Main voltage power pack	220-240 V / 50 Hz	220-240 V / 50 Hz	3 x 400 VAC / 50 Hz

* Max. weight of additional tool SMP 300 / 005 in a horizontal installed position

Accessories

- Portal frame
- C-frame
- Lubrication set