# SMP 500 series

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Press-in units of the SMP 500 series are designed for press forces from **4 kN up to max. 70 kN**.



Fact:

The <u>press-in unit SMP</u> is powered by a brushless servo motor, which is placed to the side via a motor offset. Optionally this is available with integrated holding brake (MHB) and designed as restraining brake.

The rotational movement of the servo motor is transferred via a helical gear unit to the recirculating ball screw. The rotational movement is converted there into a linear movement and the plunger is moved.

The high-precision load cell and the absolute displacement measuring system – in combination with the <u>MultiPro 3G</u> – ensure assembly accuracy and complete documentation of the production data.

Dimensions SMP 500 https://dsmcloud.gmuendcloud.de/url/qmpsmp

100 mm, 200 mm or 400 mm stroke distance

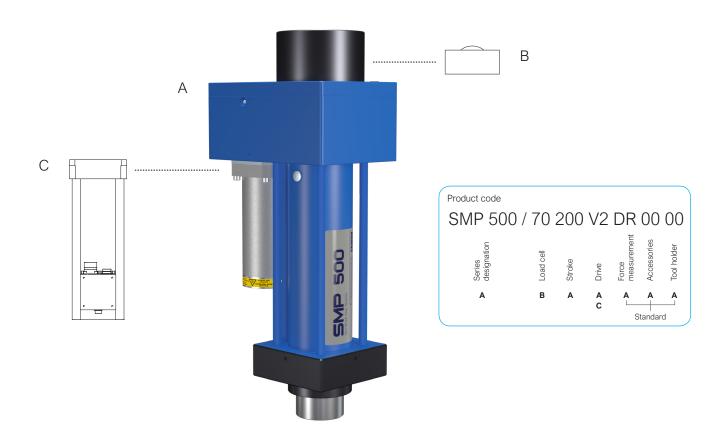
# Fields of application of DSM press-in technology

Precision press-in, Press-in to end stop, Clinch, Bending, Embossing / Forming, Testing / Measuring, Caulking, Clipping, Test switch / snap-in point, Calibration ...



# **SMP 500 series**





### A SMP 500 Press-in unit

Туре	Stroke	Max. speed	Article number
SMP 500 / XX 100 V2 DR 00 00	100 mm	150 mm/s	SMP-503001
SMP 500 / XX 200 V2 DR 00 00	200 mm	150 mm/s	SMP-503002
SMP 500 / XX 400 V2 DR 00 00	400 mm	150 mm/s	SMP-503004

Resolution stroke measurement system 0,003 mm, stroke repeat accuracy under force 0,01 mm by about 20 mm/s V2: Motor offset DR: Force measurement in direction press, Tool holder with mounting drill holes

#### **B** Execution load cell

Туре	Max. force	Application area	Article number
Load cell 20 kN for SMP 500	20 kN	4 - 20 kN	SMP-500020
Load cell 30 kN for SMP 500	30 kN	6 - 30 kN	SMP-500030
Load cell 50 kN for SMP 500	50 kN	10 - 50 kN	SMP-500050
Load cell 70 kN for SMP 500	70 kN	14 - 70 kN	SMP-500070

Force accuracy 1 % of the final value



# **SMP 500 series**



# C Motor holding brake

Туре	Article number
Motor holding brake MHB	SMP-5003112

#### Accessories

### Ventilator unit (for cooling the motor)

Туре	Article number
Ventilator unit for SMP 500	DSM-305905

## Service package - Lubrication set

Туре	Article number
Lubrication set (grease gun, armoured hose,	DSM-281990
grease cartridge and lubrication tube set)	

### Sealing air connection

Туре	Article number
Sealing air connection (avoids the ingression	QMP-3000100
of dirt particles into the press-in unit)	

## Frames for SMP 500 (acc. to customers specification)

Туре	Article number
Portal frame for SMP 500	SMP-5008000
C-frame for SMP 500	SMP-5008500

... or as a complete solution, installed in a <u>workstation</u>, for customer-specific joining applications.

The protected area – in which the SMP press-in unit mounted on a frame is located – is closed on 3 sides with a protective enclosure and is monitored by a lifting door or a safety light curtain in conjunction with a safety PLC. The joining process is controlled with the MultiPro 3G and the force and simultaneously the stroke are measured, regulated and controlled.

