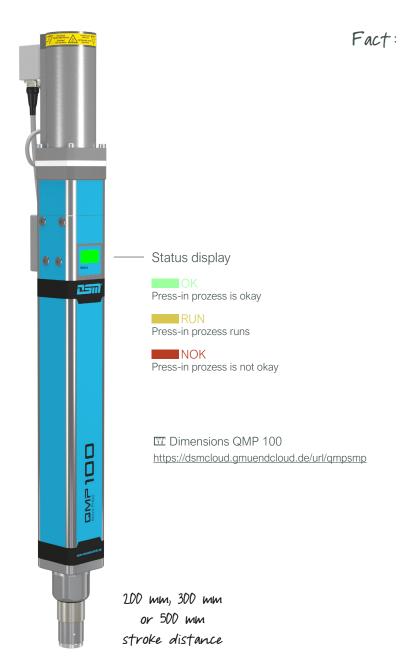
# QMP 100 series

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Press-in units of the QMP 100 series are designed for press and pull forces from **6 kN up to max. 60 kN**.



The <u>press-in unit QMP</u> is powered by a brushless servo motor, which is placed vertical or offset to the side via a motor offset. Optionally this is available with integrated holding brake (MHB) and designed as restraining brake. Furthermore, it is possible to equip the motor with an electromechanical holding brake (HB) or with a return stop (RS).

The return stop is a brake with override. Thereby the plunger is blocked against a "pressing in" in every position and therefore is able to hold a counteracting force. The permanent holding of the adjusted force is assured by the regulation via stepper motor control. By use of the return stop it is optionally possible to carry out the braking of the movement (lagging of speed down to zero) by the motor holding brake (MHB+RS).

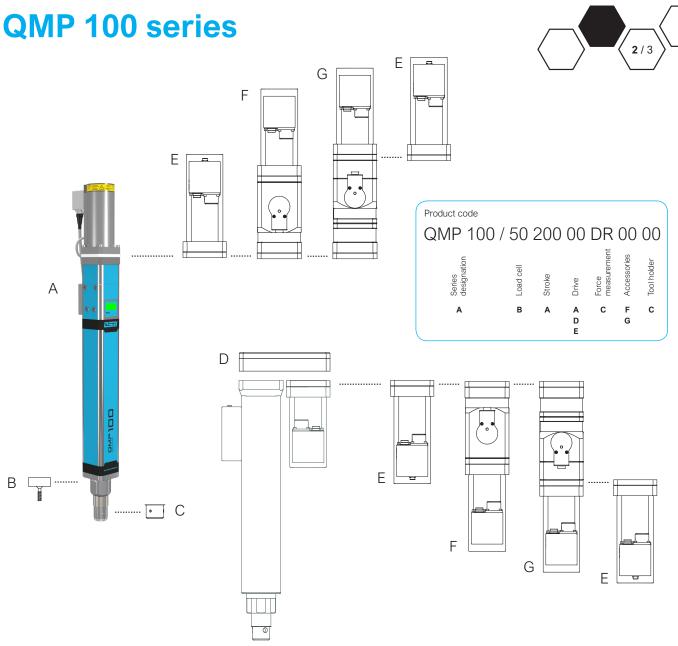
The rotational movement of the servo motor is transferred via a helical gear unit to the recirculating ball screw. The rotational movement is converted there into a linear movement and the plunger is moved.

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.

## 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 ...





#### A QMP 100 Press-in unit

Type Stroke Max. speed Article r	number
QMP 100 / XX 200 00 XX 00 00 200 mm/s QMP-100	)3002
QMP 100 / XX 300 00 XX 00 00 300 mm/s QMP-100	)3003
QMP 100 / XX 500 00 XX 00 00 500 mm 200 mm/s QMP-100	)3005

 $Resolution\ stroke\ measurement\ system\ 0,003\ mm,\ stroke\ repeat\ accuracy\ under\ force\ 0,01\ mm\ by\ about\ 20\ mm/s$ 

### B Execution load cell

Туре	Max. force	Application area	Article number
Load cell 30 kN for QMP 100	30 kN	6 - 30 kN	QMP-1000030
Load cell 40 kN for QMP 100	40 kN	8 - 40 kN	QMP-1000040
Load cell 50 kN for QMP 100	50 kN	10 - 50 kN	QMP-1000050
Load cell 60 kN for QMP 100	60 kN	12 - 60 kN	QMP-1000060

Force accuracy 0,5 % of the final value



# QMP 100 series



#### C Execution force measurement

Туре	Force measurement	Tool bracket	Article number
Execution DR for QMP 100	in direction press	DIN810 A25, Ø25H7 50 deep	QMP-1001000
Execution ZU for QMP 100	in direction pull	M24 x 1,5 55 deep	QMP-1001005
Execution DZ for QMP 100	in direction press and pull	M24 x 1,5 55 deep	QMP-1001010

#### D Motor offset

Туре	Article number
Motor offset V2	QMP-1003105

#### **E** Motor holding brake

Туре	Article number
Motor holding brake MHB	QMP-1003112

#### G Backstop

Туре	Article number
Backstop RS-L without V2 (motor offset)	QMP-1003116
Backstop RS-R with V2 (motor offset)	QMP-1003117

#### F Holding brake

Туре	Article number
Holding brake HB	QMP-1003110

### Accessories

Туре

### Ventilator unit (for cooling the motor)

grease cartridge and lubrication tube set)

Ventilator unit – right (assembly on right side) Ventilator unit – left (assembly on left side)	DSM-305903 DSM-305904
Service package – Lubrication set	
Туре	Article number
Lubrication set (grease gun, armoured hose,	DSM-281990

### Sealing air connection

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

#### Frames for QMP 100 (acc. to customers specification)

Туре	Article number
Portal frame for QMP 100	QMP-1008000
C-frame for QMP 100	QMP-1008500

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

Article number

The protected area – in which the QMP 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.

