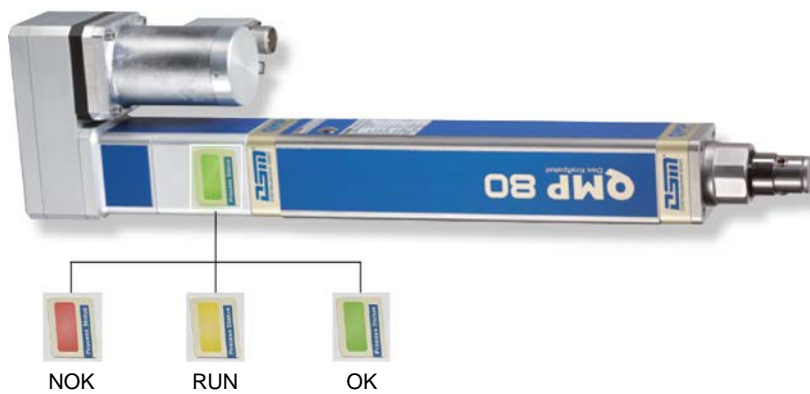




PRESS-IN UNITS QMP line

Overview of the different construction sizes

Type	Models Maximum force in kN
> QMP 80	2,5 5 10 20
> QMP 100	30 40 50 60
> QMP 140	70 100 120



The illuminated field at the tool shows the status of the joining process.

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

The requirements to a press-in unit are multifaceted. The QMP 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 QMP press-in units

- Maintenance-free servo motor
- Robust square-cut stainless steel case
- Optimisation of the frame size by the use of a motor offset
- Hold force with electromechanical brake, backstop and force control

Advantages of QMP press-in units

- Insensitive against electro-magnetic radiation due to digital data transfer
- Designed for press forces and pull forces
- Absolute measuring system eliminates the need for a reference run
- Illuminated field for indication of the joining status
- Simple programmable at the control unit or via external PC

With force transducer and length/stroke measuring system

QMP press-in units have a digital force transducer, is located directly in the plunger. With this, the upcoming force can be collected very precise. The accuracy-deviation is max. 0,5 % 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 QMP series



Classic

Pro

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

Technical data

Press-in units of the QMP series are designed for the measurement of pulling and pressing forces. They consist out of a robust square-cut stainless steel case with a 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). LED status report at the press-unit show the operating status and the result.

- 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	QMP 80	QMP 100	QMP 140
Max. force (nominal load)	2,5 5 10 20 kN	30 40 50 60 kN	70 100 120 kN
Drive motor	Electronically controlled, maintenance-free servo motor		
Motor mounting	Vertical Motor offset	Vertical Motor offset	Motor offset
Accuracy force measurement (nom.force)	0,5 % of the final value		
Executions force measurement	Digital load cell DR (press), ZU (pull) oder DZ (press and pull)		
Hold time of the nominal force	max. 2,5 s / holding force via backstop RS, hold time arbitrary		
Stroke	200 mm, 300 mm oder 500 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	200 mm/s	200 mm/s	100 mm/s
Plunger	Recirculating ballscrew		
Stroke cycles	min. 5 million at nominal force		
Tool bracket DR (execution press)	DIN 810 A20	DIN 810 A25	DIN 810 A50
Tool bracket ZU (execution pull)	M20 x 1,5 40 deep	M24 x 1,5 55 deep	M36 x 3 50 deep
Max. weight of additional tool	approx. 10 kg	approx. 10 kg	approx. 10 kg
Weight of press with 200 mm stroke	approx. 21 kg	approx. 45 kg	approx. 145 kg
Weight of press with 300 mm stroke	approx. 25 kg	approx. 50 kg	approx. 175 kg
Weight of press with 500 mm stroke	approx. 35 kg	approx. 60 kg	approx. 215 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-H Typ 2, type 5	DS-V type 5	DS-V type 5
Main voltage power pack	220-240 V / 50 Hz	3 x 400 VAC / 50 Hz	3 x 400 VAC / 50 Hz

Accessories

- Portal frame / C-frame
- Motor offset
- Force-hold-break / Backstop (Hold force)
- Lubrication set