

SCHMIDT® Rack-and-Pinion Presses

Constant force over the entire stroke

Do you need force over a longer stroke distance for assembly processes? Then **SCHMIDT® Rack-and Pinion Presses** are the right choice.

Characteristics

- Long stroke
- Linear force progression
- Precise adjustment of the press depth via an integrated hardened adjustable stop
- Honed ram guiding and ground rams provide a long service life and a precise guidance



Press Type 5



Press Type 3 or 6



Press Type 1 or 2



Improved return stroke mechanism for rack-and-pinion presses No. 3 und 6 with stroke 100 mm and 160 mm

The use of a spring package optimized specifically for large strokes improves ergonomics significantly. In addition, the use of the **Ergohandle** ensures that even with angles of rotation $>360^\circ$ no hand position switching of is necessary. The force feedback on the hand lever is kept as constant as possible over the entire stroke by a balance weight.



Press Head

No.1 and No.2 have a ground guidance plate and teflon-coated adjustable gibs for precise and torsion-proof guidance.

From 1.6 kN to 2.5 kN

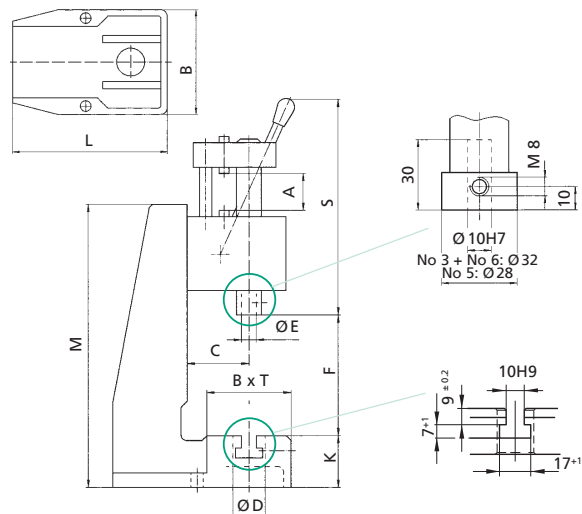
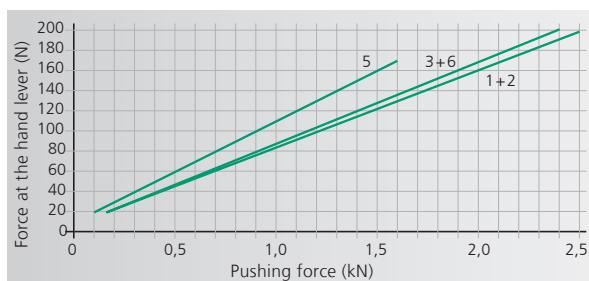
Press Type		5	5R	3	3R	6	6R	1	1R	2	2R
Press head type		5	5R	3	3R	3	3R	1	1R	1	1R
Nominal force	kN	1.6	1.6	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
Working stroke	A mm	40	40	70	70	70	70	80	80	80	80
				160	100	160	100	100	100	100	100
Press head height	S mm	240	240	350	350	350	350	400	400	400	400
				350	350	350	350				
Throat depth	C mm	65	65	86	86	86	86	86	86	86	86
Ram bore	Ø mm	10H7	10H7	10H7	10H7	10H7	10H7				
Collet (standard Ø10)	Ø mm							1-17	1-17	1-17	1-17
Hand lever left		o	o	o	o	o	o	•	•	•	•
Angle of rotation/mm stroke		4.1°	4.1°	3.2°	3.2°	3.2°	3.2°	2.2°	2.2°	2.2°	2.2°
Max. weight of the upper tool ²⁾	kg	1.5	1.0	2.5	2.0	2.5	2.0	1.0	1.0	1.0	1.0
Return stroke lock¹⁾											
Minimum working stroke	mm		17		18		18		26		26
Locked position 1	mm bef. BDC		11.5		13		13		19.5		19.5
Locked position 2	mm bef. BDC		3.5		4.5		4.5		7		7
Disengaging accuracy	mm		0.06		0.07		0.07		0.08		0.08
Working height³⁾											
Frame No. 13	mm	55-200	55-200								
Frame No. 3	mm			75-220	75-220			120-260	120-260		
Frame No. 2	mm					100-355	100-355			145-360	145-360
Frame No. 2-600 o	mm			200-600	200-600	200-600	200-600	245-650	245-650	245-650	245-650
Frame No. 2-1000 o	mm			330-1030	330-1030	330-1030	330-1030	380-1080	380-1080	380-1080	380-1080
Weight	approx. kg	11	11	22	22	30	30	23	23	31	31
Accessories		5	5R	3	3R	6	6R	1	1R	2	2R
Mechanical counter		o	o	o	o	o	o	o	o	o	o
Throat depth frame (total depth) 111 mm, 131 mm, 160 mm, 200 mm				o	o	o	o	o	o	o	o
Additional fixture mounting plate suitable for throat depth frame				o	o	o	o	o	o	o	o
Micrometer stop		o	o	o	o	o	o				
Frame Overview		Press Type	Frame Height M without height adj. (mm)		Table Size B x T (mm)		Table Bore D (Ø mm)		Table Height K (mm)		Mounting Surface B x L (mm)
No. 13		5	330		110 x 80		20H7		46		110 x 185
No. 3		3, 1	400		150 x 110		20H7		60		150 x 260
No. 2		6, 2	536		185 x 110		20H7		60		185 x 280
No. 2-600		3, 6, 1, 2	810		200 x 160		20H7		98		200 x 290
No. 2-1000		3, 6, 1, 2	1250		200 x 160		20H7		98		200 x 290

Options

- Series with no additional charge o Additional charge applies
- ¹⁾ Adjustment of locking position on request
- ²⁾ The weight was determined with hand lever position 45° forward (guide)
- ³⁾ Typical values; can vary ± 3 mm due to casting and production tolerances

Other available options

- Nickel plated – cast parts are electroless nickel plated, steel components black oxide finished, aluminum anodized, precision steel surfaces are untreated
- Custom paint – press and column can be painted to customer's color specification
- Bores for adapting tooling – customer specific sizes can be supplied



Detailed dimensional drawings can be downloaded: www.schmidttechnology.de