

# SCHMIDT® Rack-and-Pinion Presses

## Constant Force over the entire Stroke

Do you need a long stroke and a constant force progression for assembly processes? Then, **SCHMIDT® Rack-and-Pinion Presses** are just the right choice.

### Features

- Long stroke
- Linear force progression
- Precise adjustment of the press depth via hardened lower stop
- Honed bores and ground rams provide a long service life and a precise guidance



Press Type 5



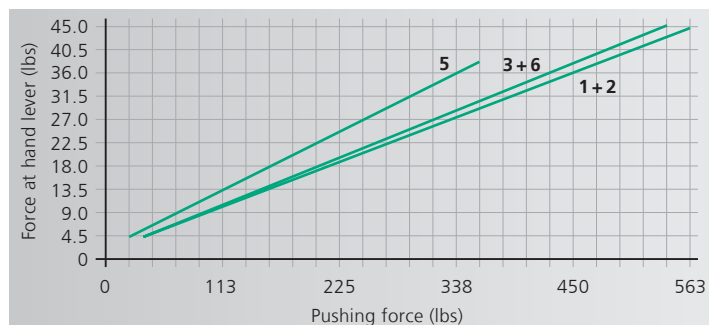
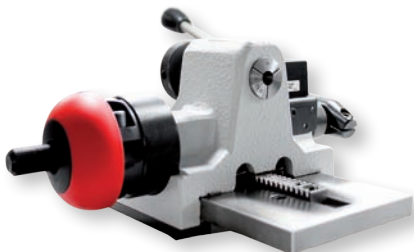
Press Type 3/6



Press Type 1/2

### 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 / 360 lbs. to 560 lbs.

| 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                                                                     |         | lbs  | 360     | 360       | 540       | 540       | 540       | 540       | 560       | 560       | 560       | 560       |
| Working stroke                                                                    | A       | inch | 0-1.57  | 0.66-1.57 | 0-2.75    | 0.70-2.75 | 0-2.75    | 0.70-2.75 | 0-3.14    | 1.02-3.14 | 0-3.14    | 1.02-3.14 |
| Special strokes                                                                   |         |      |         |           | 0-6.29    | 0.70-3.93 | 0-6.29    | 0.70-3.93 | 0-3.93    | 1.02-3.93 | 0-3.93    | 1.02-3.93 |
| Throat depth                                                                      | C       | inch | 2.55    | 2.55      | 3.38      | 3.38      | 3.38      | 3.38      | 3.38      | 3.38      | 3.38      | 3.38      |
| Press head height                                                                 | S       | inch | 9.4     | 9.4       | 13.7      | 13.7      | 13.7      | 13.7      | 15.7      | 15.7      | 15.7      | 15.7      |
| 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                                                                   |         |      |         | ○         | ○         | ○         | ○         | ○         | ●         | ●         | ●         | ●         |
| Angle of rotation/0.1 inch stroke                                                 |         |      | 10.4°   | 10.4°     | 8.2°      | 8.2°      | 8.2°      | 8.2°      | 5.6°      | 5.6°      | 5.6°      | 5.6°      |
| Max. weight upper tool*                                                           |         | lbs  | 3       | 2         | 6         | 4.5       | 6         | 4.5       | 2         | 2         | 2         | 2         |
| <b>Return stroke lock<sup>1)</sup></b>                                            |         |      |         |           |           |           |           |           |           |           |           |           |
| Locked position 1                                                                 |         | inch |         | 0.45      |           | 0.5       |           | 0.5       |           | 0.76      |           | 0.76      |
| Locked position 2                                                                 |         | inch |         | 0.13      |           | 0.17      |           | 0.17      |           | 0.27      |           | 0.27      |
| Disengaging accuracy approx.                                                      |         | inch |         | 0.0023    |           | 0.0027    |           | 0.0027    |           | 0.0031    |           | 0.0031    |
| <b>Working height F</b>                                                           |         |      |         |           |           |           |           |           |           |           |           |           |
| Frame No. 13                                                                      |         | inch | 2.1-7.4 | 2.1-7.4   |           |           |           |           |           |           |           |           |
| Frame No. 3                                                                       |         | inch |         |           | 3.1-8.26  | 3.1-8.26  |           |           | 4.7-10.2  | 4.7-10.2  |           |           |
| Frame No. 2                                                                       |         | inch |         |           |           |           | 4.7-14.1  | 4.7-14.1  |           |           | 5.7-14.9  | 5.7-14.9  |
| Frame No. 2-600 ○                                                                 |         | inch |         |           | 7.8-23.6  | 7.8-23.6  | 7.8-23.6  | 7.8-23.6  | 9.6-25.5  | 9.6-25.5  | 9.6-25.5  | 9.6-25.5  |
| Frame No. 2-1000 ○                                                                |         | inch |         |           | 12.9-40.5 | 12.9-40.5 | 12.9-40.5 | 14.9-42.5 | 14.9-42.5 | 14.9-42.5 | 14.9-42.5 | 14.9-42.5 |
| Weight                                                                            | approx. | lbs  | 24      | 24        | 49        | 49        | 66        | 66        | 50        | 50        | 70        | 70        |
| Accessories                                                                       |         |      | 5       | 5R        | 3         | 3R        | 6         | 6R        | 1         | 1R        | 2         | 2R        |
| Mechanical counter                                                                |         |      | ○       | ○         | ○         | ○         | ○         | ○         | ○         | ○         | ○         | ○         |
| Throat depth frame (total depth)<br>4.37 inch, 5.15 inch, 6.29 inch,<br>7.87 inch |         |      |         |           | ○         | ○         | ○         | ○         | ○         | ○         | ○         | ○         |
| Additional fixture mounting plate<br>suitable for throat depth frame              |         |      |         |           | ○         | ○         | ○         | ○         | ○         | ○         | ○         | ○         |
| Micrometer stop                                                                   |         |      | ○       | ○         | ○         | ○         | ○         | ○         |           |           |           |           |

| Frame Overview | Press Type | Frame Height<br>M (inch) | Table Size<br>B x T (inch) | Table Bore<br>Ø (mm) | Table Height<br>K (inch) | Mounting Surface<br>B x L (inch) |
|----------------|------------|--------------------------|----------------------------|----------------------|--------------------------|----------------------------------|
| No. 13         | 5          | 12.99                    | 4.33 x 3.15                | 20H7                 | 1.81                     | 4.33 x 7.28                      |
| No. 3          | 3, 1       | 15.74                    | 5.91 x 4.33                | 20H7                 | 2.36                     | 5.9 x 10.23                      |
| No. 2          | 6, 2       | 21.10                    | 7.28 x 4.33                | 20H7                 | 2.36                     | 7.28 x 11.02                     |
| No. 2-600      | 3, 6, 1, 2 | 31.89                    | 7.87 x 6.30                | 20H7                 | 3.86                     | 7.87 x 11.41                     |
| No. 2-1000     | 3, 6, 1, 2 | 49.21                    | 7.87 x 6.30                | 20H7                 | 3.86                     | 7.87 x 11.41                     |

#### Options

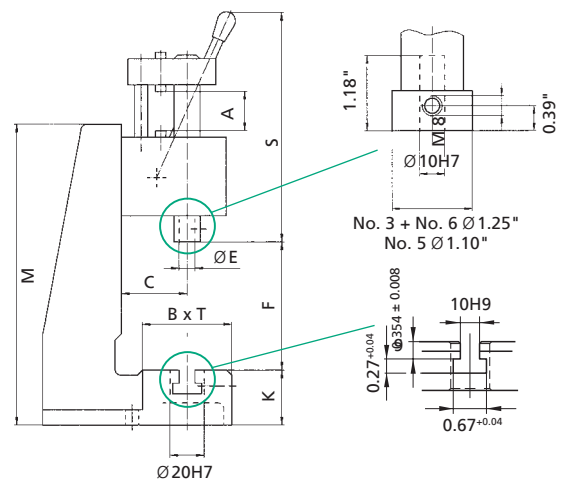
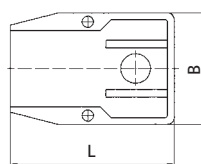
- Standard with no additional charge ○ Additional charges apply

<sup>1)</sup> Adjustment of locking position on request

\* The weight was determined with hand lever position 45° forward (guidelines)

#### 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



Please consult our Sales Department or Representative.

Detailed dimensional drawings can be downloaded: [www.schmidtpresses.com](http://www.schmidtpresses.com)