

# SCHMIDT® HydroPneumaticPress C-Frame Design



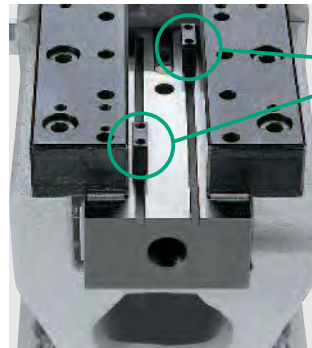
61 / 62



65

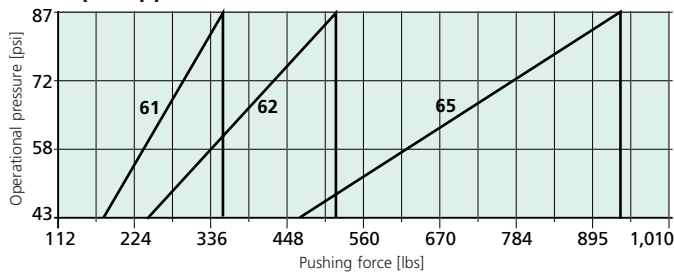
### Features:

- The C-Frame design offers full accessibility when manually inserting and removing parts.
- Easy adaptation to different tool and part heights because of simplistic height adjustment with angular gear.
- Anti-rotational rectangular ram with fully adjustable, Teflon lined gibs for precise travel. No die set required.
- High precision due to long precise guides of the rectangular ram



Adjustable switch target pieces for position detection via an inductive position sensor

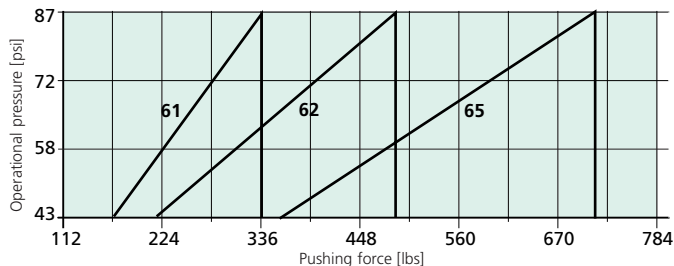
### Rapid approach stroke



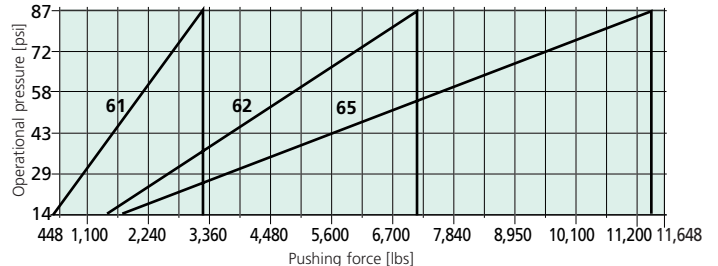
### Rectangular ram

with bilaterally adjustable, play-free gibs, precision machined bore with set screw for mounting of tooling. Some models feature additional provisions for tooling adaption.

### Return stroke



### Power stroke



# From 15 kN to 52 kN / 3,375 lbs. to 11,690 lbs. in power stroke

| Press type   |             | 61                  | 62                  | 65                  |
|--|-------------|---------------------|---------------------|---------------------|
| Total stroke – power stroke <sup>1)</sup>              | mm          | 50 – 6,<br>100 – 12 | 50 – 6,<br>100 – 12 | 50 – 6,<br>100 – 12 |
| Nominal force at 87 psi                                | lbs         | 3375                | 6745                | 11690               |
| Throat depth   | C inch      | 5.16                | 5.16                | 6.30                |
| Throat depth frame                                     | inch        | 5.94                | 5.94                | 7.28                |
| Fixture mounting plate suitable for throat depth frame |             | ○                   | ○                   | ○                   |
| Ram bore   | Ømm         | 20H7                | 20H7                | 20H7                |
| External ram dimensions                                | G x H inch  | 1.41 x 2.48         | 1.41 x 2.48         | 1.81 x 3.89         |
| Front side ram drill pattern                           |             | ○                   | ○                   | ○                   |
| <b>Working height</b>                                  | <b>F</b>    |                     |                     |                     |
| Frame No. <b>34</b>                                    | inch        | 3.94 – 9.84         | 3.94 – 9.84         |                     |
| Frame No. <b>301</b> ○                                 | inch        | 6.30 – 15.75        | 6.30 – 15.75        |                     |
| Frame No. <b>301-500</b> ○                             | inch        | 12.20 – 19.68       | 12.20 – 19.68       |                     |
| Frame No. <b>35</b>                                    | inch        |                     |                     | 3.94 – 10.63        |
| Frame No. <b>35-500</b> ○                              | inch        |                     |                     | 5.91 – 19.68        |
| Frame No. <b>35-600</b> ○                              | inch        |                     |                     | 9.84 – 23.62        |
| Weight (standard)                                      | approx. lbs | 209                 | 243                 | 353                 |

| Frame overview   |            |                           |                               |                    |                           |                                   |
|--|------------|---------------------------|-------------------------------|--------------------|---------------------------|-----------------------------------|
| Frame type   | Press type | Frame height<br>M<br>inch | Table size<br>W x D<br>inch   | Table bore<br>Ø mm | Table height<br>K<br>inch | Mounting surface<br>W x L<br>inch |
| No. <b>34</b>  | 61, 62     | 24.8                      | 7.87 x 6.30                   | 25H7               | 4.37                      | 7.87 x 14.57                      |
| No. <b>301</b>   | 61, 62     | 32.7                      | 9.84 x 7.87                   | 40H7               | 5.71                      | 9.84 x 18.11                      |
| No. <b>301-500</b>   | 61, 62     | 39.0                      | 9.84 x 7.87                   | 40H7               | 5.71                      | 9.84 x 18.90                      |
| Special fixture mounting platen ○<br>with 3 longitudinal slots |            |                           | 11.81 x 8.66<br>15.75 x 9.05  | 40H7<br>40H7       |                           |                                   |
| No. <b>35</b>  | 65         | 27.6                      | 11.81 x 8.66                  | 40H7               | 5.55                      | 11.8 x 18.9                       |
| No. <b>35-500</b>  | 65         | 39.0                      | 11.81 x 8.66                  | 40H7               | 6.54                      | 11.8 x 22.0                       |
| No. <b>35-600</b>  | 65         | 43.7                      | 11.81 x 8.66                  | 40H7               | 6.54                      | 11.8 x 23.0                       |
| Special fixture mounting platen ○<br>with 3 longitudinal slots |            |                           | 13.97 x 8.86<br>15.75 x 11.02 | 40H7<br>40H7       |                           |                                   |

### Options

○ = Additional charge applies

<sup>1)</sup> = Special models total stroke / power stroke on request

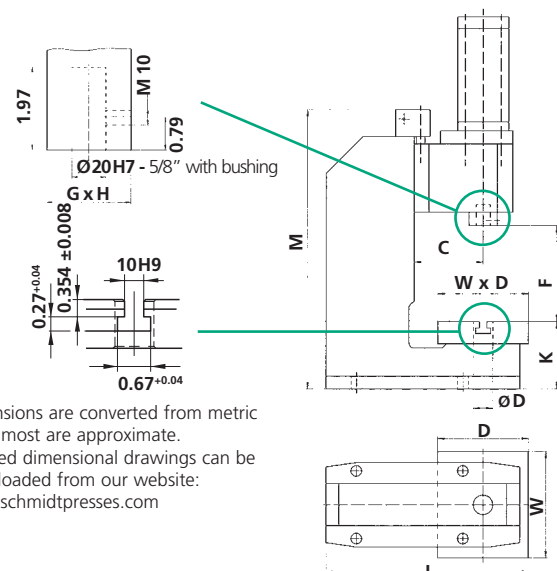
**5/8 inch bushing available upon request for imperial version.** Please consult our sales department or representative.

### Stroke Length Conversions

|        |           |
|--------|-----------|
| 50 mm  | 1.97 inch |
| 100 mm | 3.94 inch |
| 150 mm | 5.90 inch |
| 6 mm   | 0.24 inch |
| 12 mm  | 0.47 inch |
| 20 mm  | 0.79 inch |
| 30 mm  | 1.18 inch |
| 36 mm  | 1.42 inch |

### Tolerance conversion of typical sizes of SCHMIDT® Presses

| Metric  | Nominal Inch | Tolerance Inch |
|---------|--------------|----------------|
| 10H7    | 0.3937       | -0 / +0.0006   |
| 20H7    | 0.7874       | -0 / +0.0008   |
| 25H7    | 0.9842       | -0 / +0.0008   |
| 40H7    | 1.5748       | -0 / +0.0010   |
| 10H9    | 0.3937       | -0 / +0.0014   |
| Threads | Pitch        |                |
| M8      | 1.25 mm      |                |
| M10     | 1.50 mm      |                |



Dimensions are converted from metric units, most are approximate. Detailed dimensional drawings can be downloaded from our website: [www.schmidtpresses.com](http://www.schmidtpresses.com)

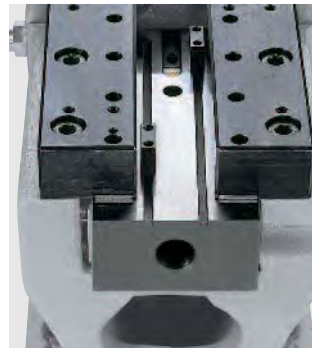
# SCHMIDT® HydroPneumaticPress

## Welded C-Frame Design

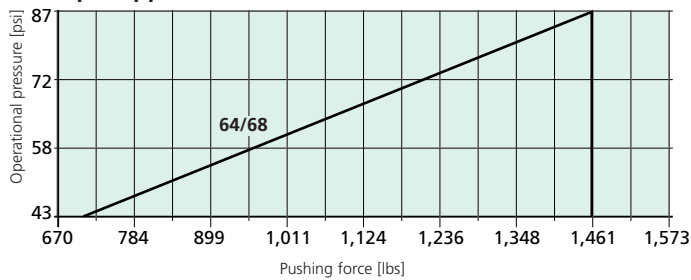


### Features:

- The welded press frame offers highest stability.
- Space-saving and compact due to separate working cylinder for press No. 68



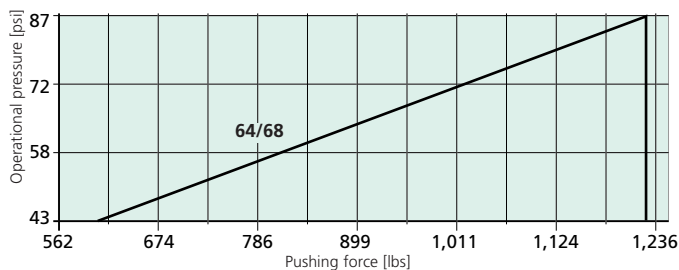
### Rapid approach stroke



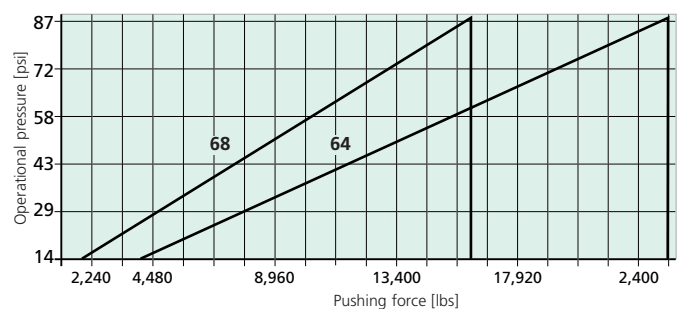
**Rectangular ram** with bilaterally adjustable, play-free gibs, precision ground bore with set screw for mounting of tooling. Some models feature additional provisions for tooling adaption.

**Fixture mounting plate** (for press No. 64) with 3 T-slots and precision-machined bore for tool location.

### Return stroke



### Power stroke



# From 72 kN to 100 kN / 16,185 lbs. to 22,480 lbs. in power stroke



| Press type                                |             | 64                  | 68                  |
|---|-------------|---------------------|---------------------|
| Total stroke – power stroke <sup>1)</sup> | mm          | 50 – 6,<br>100 – 12 | 50 – 6,<br>100 – 12 |
| Nominal force at 87 psi                   | lbs         | 22480               | 16185               |
| Throat depth                              | C inch      | 6.30                | 6.30                |
| Ram bore                                  | D Ø mm      | 25H7                | 20H7                |
| External ram dimensions                   | G x H inch  | 2.36 x 3.54         | 2.36 x 3.54         |
| <b>Working height</b>                     | <b>F</b>    |                     |                     |
| Frame No. 64                              | inch        | 7.09 – 13.78        |                     |
| Frame No. 64-600 ○                        | inch        | 16.93 – 23.62       |                     |
| Frame No. 68 <sup>2)</sup>                | inch        |                     | 5.11 – 11.81        |
| Frame No. 68/5 <sup>2)</sup> ○            | inch        |                     | 7.48 – 18.11        |
| Weight (standard)                         | approx. lbs | 925                 | 770                 |

| Frame type   | Press type | Frame height<br>M<br>inch | Table size<br>W x D<br>inch | Table bore<br>Ø mm | Table height<br>K<br>inch | Mounting surface<br>W x L<br>inch |
|--|------------|---------------------------|-----------------------------|--------------------|---------------------------|-----------------------------------|
| No. 64   | 64         | 37.01                     | 15.75 x 11.42               | 40H7               | 7.28                      |                                   |
| No. 64-600   | 64         | 47.24                     | 15.75 x 11.42               | 40H7               | 7.28                      | 15.75 x 11.42                     |
| No. 68 <sup>2)</sup>   | 68         | 31.89                     | 11.81 x 9.05                | 40H7               | 5.79                      | 11.81 x 21.65                     |
| No. 68/5 <sup>2)</sup>   | 68         | 38.98                     | 11.81 x 9.05                | 40H7               | 5.79                      | 11.81 x 24.41                     |
| Special fixture mounting platen ○<br>with 3 longitudinal slots |            |                           | 15.75 x 11.02               | 40H7               |                           |                                   |
|  |            |                           | 19.68 x 11.02               | 40H7               |                           |                                   |

## Options

○ = Additional charge applies

<sup>1)</sup> = Special models total stroke / power stroke on request

<sup>2)</sup> = Frame 68/5 required for 30 mm power stroke

**5/8 inch bushing available upon request for imperial version.**

Please consult our sales department or representative.

## Stroke Length Conversions

|        |           |
|--------|-----------|
| 50 mm  | 1.97 inch |
| 100 mm | 3.94 inch |
| 150 mm | 5.90 inch |
| 6 mm   | 0.24 inch |
| 12 mm  | 0.47 inch |
| 20 mm  | 0.79 inch |
| 30 mm  | 1.18 inch |
| 36 mm  | 1.42 inch |

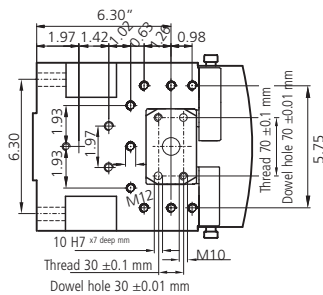
## Tolerance conversion of typical sizes of SCHMIDT® Presses

| Metric         | Nominal Inch | Tolerance Inch |
|----------------|--------------|----------------|
| 10H7           | 0.3937       | -0 / +0.0006   |
| 20H7           | 0.7874       | -0 / +0.0008   |
| 25H7           | 0.9842       | -0 / +0.0008   |
| 40H7           | 1.5748       | -0 / +0.0010   |
| 10H9           | 0.3937       | -0 / +0.0014   |
| <b>Threads</b> | <b>Pitch</b> |                |
| M8             | 1.25 mm      |                |
| M10            | 1.50 mm      |                |

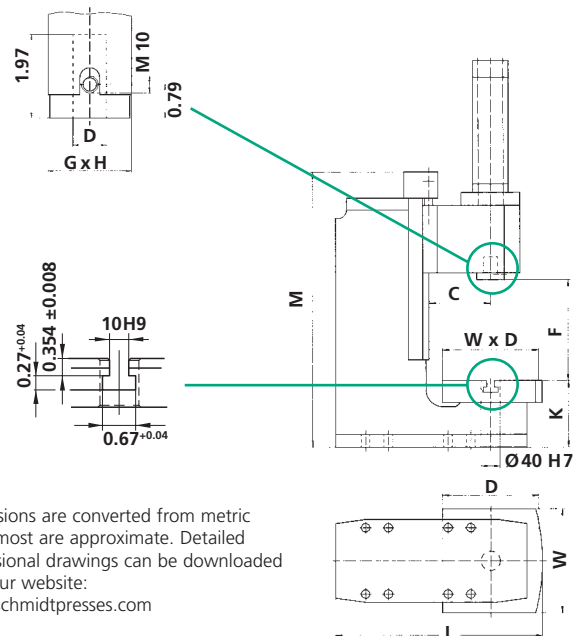
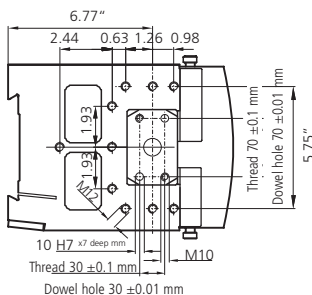
## Bottom view of the press head

Mounting drill pattern flange / ram

64



68



Dimensions are converted from metric units, most are approximate. Detailed dimensional drawings can be downloaded from our website:  
[www.schmidtpresses.com](http://www.schmidtpresses.com)