

# **MINIMAT Screwdrivers**

The basic solution for almost all screwdriving tasks angle head design – torque from 0.3 - 65 Nm / 3 to 575 in.lbs

- robust
- highest precision
- ergonomic
- long-life
- low noise level

The particular strength of the MINIMAT screwdriver in angle head design is that it can carry out screw assemblies with torque ranges from 0.3 Nm to 65 Nm. In these ranges you can not only assemble screws but also adjust them. Screwdrivers with angle head design are preferably used for assemblies in tight areas. Because of the angle head design even large torque values can be managed by hand without problems. The handle is linked with the angle head by a plug connection and can be arrested in different positions.

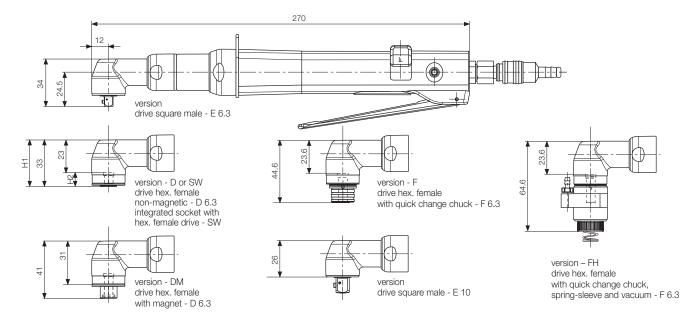
# Handheld Screwdriver pneumatic Motor size 2 Motor size 2.5 Motor size 3

The ergonomic MINIMAT screwdriver is extremely durable due to its extraordinary processing quality and design for heavy industrial use.

The MINIMAT clutch works with the tried and tested principle of a mechanical separation and shut-off clutch. This highly precise shut-off clutch allows torque preci-sion of  $<\pm3\%$  standard deviation, which is maintained for millions of assemblies.

When used under the correct conditions DEPRAG pneumatic screwdrivers with shut-off clutch conform with a Cmk value of  $\geq$ 1.67 with a tolerance requirement of  $\pm$ 10% in relation to 6 Sigma according to ISO 5393.

In other words a Cmk value of 1.67 means that there is a failure rate of 0.6 per million screw assemblies.



<sup>\*)</sup> Measurement plus length of bit or sockets is space requirement.

390981

### **Technical Data**

| Screwdriver Style  |  | Motor Size 2  |  |   |  |
|--|--|---|--|---|--|
| Driver reversible, right shut-off drive square male 1/4"   | <b>Type</b><br>Part no.                      | <b>377-321U</b><br>386530B  | <b>377-421U</b><br>386530D                   | <b>377-521U</b><br>386530C  |  |
| Driver reversible, right shut-off drive square male 3/8"   | <b>Type</b><br>Part no.                      | <b>377-321U-E10</b><br>390887B  | <b>377-421U-E10</b><br>390887D               | <b>377-521U-E10</b><br>390887C  |  |
| Driver reversible, right shut-off<br>drive hex. female 1/4"<br>non-magnetic                              | <b>Type</b><br>Part no.                      | <b>377-321U-D</b><br>390883B  | <b>377-421U-D</b><br>390883D                 | <b>377-521U-D</b><br>390883C  |  |
| Driver reversible, right shut-off<br>drive hex. female 1/4"<br>with magnet                               | <b>Type</b><br>Part no.                      | <b>377-321U-DM</b><br>390884B   | <b>377-421U-DM</b><br>390884D                | <b>377-521U-DM</b><br>390884C   |  |
| Driver reversible, right shut-off<br>drive hex. female '1/4"<br>with quick change chuck                  | <b>Type</b><br>Part no.                      | <b>377-321U-F</b><br>390885B  | <b>377-421U-F</b><br>390885D                 | <b>377-521U-F</b><br>390885C  |  |
| Driver reversible, right shut-off<br>drive hex. female 1/4"<br>with quick change chuck and spring-sleeve | <b>Type</b><br>Part no.                      | <b>377-321U-FH</b><br>390886B   | <b>377-421U-FH</b><br>390886D                | <b>377-521U-FH</b><br>390886C   |  |
| Driver reversible, right shut-off integrated socket with   | Туре   | 377-32 U-SW   | 377-421U-SW                                  | 377-521U-SW   |  |
| hex. female drive  AF 6 mm  AF 8 mm  AF 10 mm  AF 13 mm  | Part no.<br>Part no.<br>Part no.<br>Part no. | 3909251B<br>3909252B<br>3909253B<br>3909254B                              | 3909251D<br>3909252D<br>3909253D<br>3909254D | 3909251C<br>3909252C<br>3909253C<br>3909254C                              |  |
| Screws   | up to  | M 4   | M 5  | M 5   |  |
| Torque min.  | Nm / in, lbs                                 | 0.4 / 4   | 0.4 / 4                                      | 0.3 / 3   |  |
| Torque max.  | Nm / in. lbs                                 | 3.5 / 31  | 4.5 / 40                                     | 6.5 / 57  |  |
| Speed, idling  | rpm  | 780   | 500  | 350   |  |
| Air consumption  | m³/min / cfm                                 | 0.3 / 11  | 0.3 / 11                                     | 0.3 / 11  |  |
| Height (H1) for AF 6 - AF 10 / AF 13   | mm   | 29 / 30.5   | 29 / 30.5                                    | 29 / 30.5   |  |
|  | in.  | 1 <sup>9</sup> /64 / 1 <sup>13</sup> /64                                  | 1 <sup>9</sup> /64 / 1 <sup>13</sup> /64     | 1 <sup>9</sup> /64 / 1 <sup>13</sup> /64                                  |  |
| Height (H 2) for AF 6 / AF 8 / AF 10 / AF 13   | mm   | 3.5 / 4 / 4 / 5.5   | 3.5 / 4 / 4 / 5.5                            | 3.5 / 4 / 4 / 5.5   |  |
|  | in.  | <sup>9</sup> /64 / <sup>5</sup> /32 / <sup>5</sup> /32 / <sup>7</sup> /32 | 9/64 / 5/32 / 5/32 / 7/32                    | <sup>9</sup> /64 / <sup>5</sup> /32 / <sup>5</sup> /32 / <sup>7</sup> /32 |  |
| Weight   | kg / lbs                                     | 0.85 / 1.9  | 0.85 / 1.9                                   | 0.85 / 1.9  |  |
| Noise level  | dB (A)                                       | 67  | 67   | 67  |  |
| Air hose dia.  | mm / in.                                     | 6 / 1/4   | 6 / 1/4                                      | 6 / <sup>1</sup> /4   |  |
| Air inlet pipe thread size   |  | 1/8" m  | 1/8" m                                       | ¹/8" m  |  |

Performance data relate to an air pressure of 6.3 bar (90 PSI)

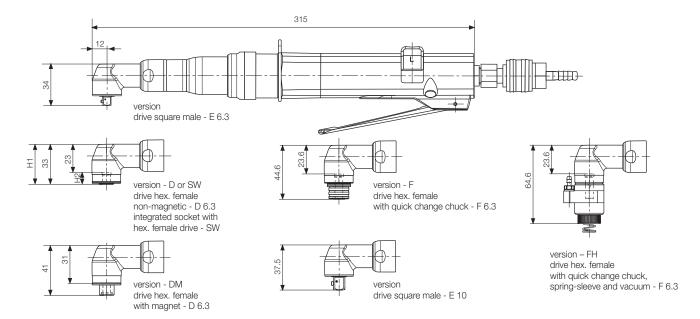
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Hose coupling with nozzle and nipple  $\cdot$  Torque adjustment tool  $\cdot$  Assortment of clutch springs

| O        | Equipment  |
|----------|------------|
| Untional | Fallinment |
|          |            |

Exhaust hose (1 m /3.3 ft.) part no. 389653A

suitable for 377-...U-FH types: vacuum connector for screw suction part no. 392636A



<sup>\*)</sup> Measurement plus length of bit or sockets is space requirement.

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### **Technical Data**

| 76-3251U<br>78385B<br>76-3251U-E10<br>32687B<br>76-3251U-D<br>32683B<br>76-3251U-DM<br>32684B<br>76-3251U-F<br>32685B |
|---|
| 76-3251U-D<br>32683B<br>76-3251U-DM<br>32684B<br>76-3251U-F   |
| <b>76-3251U-DM</b><br>32684B<br><b>76-3251U-F</b>   |
| 32684B<br>7 <b>6-3251U-F</b>  |
|   |
|   |
| <b>76-3251U-FH</b><br>32686B  |
| 76-3251U-SW   |
| 361391B   |
| 361392B   |
| 361393B   |
| 861394B   |
| 6   |
| 5 / 13  |
| 5 / 133   |
| 10  |
| 35 / 12   |
| 9 / 30.5  |
| <sup>9</sup> /64 / <b>1</b> <sup>13</sup> /64   |
| 5/4/4/5.5   |
| 64 / <sup>5</sup> /32 / <sup>5</sup> /32 / <sup>7</sup> /32   |
| 2 / 2.6   |
| 2 / 2.0   |
| 2 / 2.0<br>)  |
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|   |

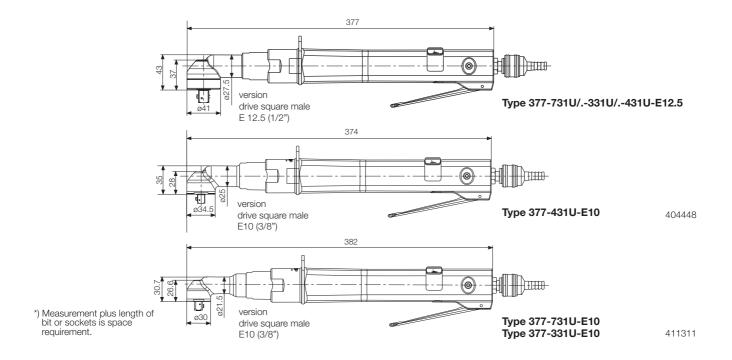
Performance data relate to an air pressure of 6.3 bar (90 PSI)

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Hose coupling with nozzle and nipple  $\cdot$  Torque adjustment tool  $\cdot$  Assortment of clutch springs

| Optional | Equipment |
|----------|-----------|
|----------|-----------|

Exhaust hose (0.6 m / 2 ft.), part no. 398703B



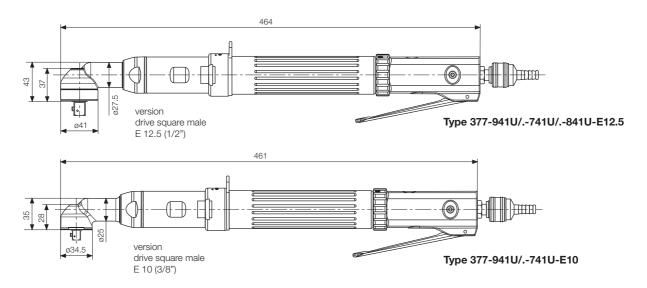
### **Technical Data**

| Screwdriver Style                 |              |                                       | Motor Size 3                           |                            |
|-----------------------------------|--------------|---------------------------------------|--|----------------------------|
| Driver reversible, right shut-off | Туре         | 377-731U-E12.5                        | 377-331U-E12.5                         | 377-431U-E12.5             |
| drive square male E12.5 (1/2")    | Part no.     | 396037C                               | 396037D                                | 396037E                    |
| Screws                            | up to        | M 6                                   | M 8                                    | M 10                       |
| Torque min.                       | Nm / in. lbs | 4 / 35                                | 4 / 35                                 | 4 / 35                     |
| Torque max.                       | Nm / in. lbs | 11 / 97                               | 20 / 177                               | 35 / 310                   |
| Speed, idling                     | rpm          | 700                                   | 350                                    | 180                        |
| Air consumption                   | m³/min / cfm | 0.4 / 14                              | 0.4 / 14                               | 0.4 / 14                   |
| Length (L)                        | mm / in.     | 377 / 14 <sup>27</sup> /32            | 377 / 14 <sup>27</sup> / <sub>32</sub> | 377 / 14 <sup>27</sup> /32 |
| Weight                            | kg / lbs     | 2 / 4.4                               | 2 / 4.4                                | 2 / 4.4                    |
| Noise level                       | dB (A)       | 75                                    | 75                                     | 75                         |
| Air hose dia.                     | mm / in.     | 10 / <sup>3</sup> /8                  | 10 / 3/8                               | 10 / <sup>3</sup> /8       |
| Air inlet pipe thread size        |              | ¹/4" f                                | ¹/4" f                                 | ¹/4" f                     |
| Driver reversible, right shut-off | Туре         | 377-731U-E10                          | 377-331U-E10                           | 377-431U-E10               |
| drive square male E10 (3/8")      | Part no.     | 411310C                               | 411310D                                | 400611E                    |
| Screws                            | up to        | M 6                                   | M 8                                    | M 10                       |
| Torque min.                       | Nm / in. lbs | 4 / 35                                | 4 / 35                                 | 4 / 35                     |
| Torque max.                       | Nm / in. lbs | 10 / 88.5                             | 19 / 168                               | 33 / 292                   |
| Speed, idling                     | rpm          | 730                                   | 365                                    | 190                        |
| Air consumption                   | m³/min / cfm | 0.4 / 14                              | 0.4 / 14                               | 0.4 / 14                   |
| Length (L)                        | mm / in.     | 382 / 15 <sup>1</sup> / <sub>32</sub> | 382 / 15 <sup>1</sup> / <sub>32</sub>  | 374 / 14 <sup>23</sup> /32 |
| Weight                            | kg / lbs     | 1.9 / 4.2                             | 1.9 / 4.2                              | 1.9 / 4.2                  |
| Noise level                       | dB (A)       | 75                                    | 75                                     | 75                         |
| Air hose dia.                     | mm / in.     | 10 / 3/8                              | 10 / <sup>3</sup> /8                   | 10 / 3/8                   |
| Air inlet pipe thread size        | <b> </b>     | <sup>1</sup> /4" f                    | ¹/4" f                                 | ¹/4" f                     |

Performance data relate to an air pressure of 6.3 bar (90 PSI)

| Included in delivery | Hose coupling with nozzle and nipple · Torque adjustment tool · Assortment of clutch springs |
|----------------------|--|
| Optional Equipment   | Exhaust hose (0.6 m / 2 ft.), part no. 398703A   |

| Screwdriver Style                               | Suitable tool inserts and connecting components |
|---|---|
| External square drive DIN 3121 – E 6.3 (1/4")   | with a drive as per DIN 3121 - G 6.3 (1/4")     |
| External square drive DIN 3121 – E 10 (3/8")    | with a drive as per DIN 3121 - G 10 (3/8")      |
| External square drive DIN 3121 - E 12.5 (1/2")  | with a drive as per DIN 3121 - G 12.5 (1/2")    |
| Internal hex. drive DIN ISO 1173 - D 6.3 (1/4") | with a drive as per DIN ISO 1173 - C 6.3 (1/4") |
| Internal hex. drive DIN ISO 1173 - F 6.3 (1/4") | with a drive as per DIN ISO 1173 - E 6.3 (1/4") |
| Internal hex. drive DIN ISO 1173 - D 8 (5/16")  | with a drive as per DIN ISO 1173 - C 8 (5/16")  |



<sup>\*)</sup> Measurements plus length of bit or sockets in space requirement

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## **Technical Data**

| Screwdriver Style                 |              |                                       | Motor Size 4                          |                      |
|-----------------------------------|--------------|---------------------------------------|---------------------------------------|----------------------|
| Driver reversible, right shut-off | Туре         | 377-941U-E12.5                        | 377-741U-E12.5                        | 377-841U-E12.5       |
| drive square male E12.5 (1/2")    | Part no.     | 379100B                               | 379100C                               | 379100D              |
| Screws                            | up to        | M 10                                  | M 10                                  | M 12                 |
| Torque min.                       | Nm / in. lbs | 8 / 70.8                              | 8 / 70.8                              | 8 / 70.8             |
| Torque max.                       | Nm / in. lbs | 32 / 283                              | 46 / 407                              | 65 / 575             |
| Speed, idling                     | rpm          | 410                                   | 270                                   | 185                  |
| Air consumption                   | m³/min / cfm | 1 / 35.3                              | 1 / 35.3                              | 1 / 35.3             |
| Length (L)                        | mm / in.     | 464 / 18                              | 464 / 18                              | 464 / 18             |
| Weight                            | kg / lbs     | 2.3 / 5                               | 2.3 / 5                               | 2.3 / 5              |
| Noise level                       | dB (A)       | 78                                    | 78                                    | 78                   |
| Air hose dia.                     | mm / in.     | 10 / <sup>3</sup> /8                  | 10 / 3/8                              | 10 / <sup>3</sup> /8 |
| Air inlet pipe thread size        |              | <sup>1</sup> /4" f                    | 1/4" f                                | 1/4" f               |
| Driver reversible, right shut-off | Туре         | 377-941U-E10                          | 377-741U-E10                          |                      |
| drive square male E10 (3/8")      | Part no.     | 400638B                               | 400638C                               |                      |
| Screws                            | up to        | M 10                                  | M 10                                  |                      |
| Torque min.                       | Nm / in. lbs | 7 / 62                                | 7 / 62                                |                      |
| Torque max.                       | Nm / in. lbs | 30 / 265.5                            | 44 / 389                              |                      |
| Speed, idling                     | rpm          | 430                                   | 285                                   |                      |
| Air consumption                   | m³/min / cfm | 1 / 35.3                              | 1 / 35.3                              |                      |
| Length (L)                        | mm / in.     | 461 / 18 <sup>5</sup> / <sub>32</sub> | 461 / 18 <sup>5</sup> / <sub>32</sub> |                      |
| Weight                            | kg / lbs     | 2.2 / 4.8                             | 2.2 / 4.8                             |                      |
| Noise level                       | dB (A)       | 78                                    | 78                                    |                      |
| Air hose dia.                     | mm / in.     | 10 / 3/8                              | 10 / 3/8                              |                      |
| Air inlet pipe thread size        |              | 1/4" f                                | ¹/4" f                                |                      |

Performance data relate to an air pressure of 6.3 bar (90 PSI)

| Included in delivery | Hose coupling with nozzle and nipple $\cdot$ Torque adjustment tool $\cdot$ Assortment of clutch springs |
|----------------------|--|
| Optional Equipment   | Exhaust hose (0.6 m / 2 ft.), part no. 398703A   |



It is necessary to use a torque support (e.g. stand, handgrip) for maximum torque: over 60 Nm for angle design.

Suitable torque supports can be found in our brochure D3345E.