



Screwdriving technology

Automation

Air motors

Air tools

# DEPRAG

## ADVANCED LINE

### Stainless Steel Air Motors

from 20 W / 0.03 Hp up to 1.2 kW / 1.6 Hp

#### NEW MOTOR RANGE

##### High torque motors made from stainless steel:

Our ADVANCED LINE pneumatic motors are now available as high torque motors made from stainless steel. The ideal drive solution for e.g. agitators and industrial mixers.

**non corrosive**     **ATEX conform**     **oil-free**     **sealed**  
**sterilisable**     **compact**     **insensitive to cleaning solvents**

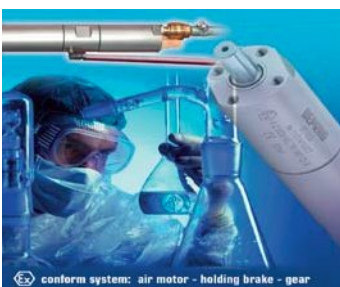
The ADVANCED LINE air motors are particularly suitable for use in the food industry, medical technology, underwater applications and the chemical industry.

All external parts (housing and spindle) of our ADVANCED LINE series are made from high quality non corrosive steel.

All air motors can be operated oil-free without special adaption and with only a 15 % reduction in power.

Our air motors are also available in an ATEX conform complete system with integrated holding brakes.

In addition our modular principle enables us to offer low cost customisations for your specific application!



conform system: air motor - holding brake - gear



## Stainless steel motors with integrated planetary gears



The vane motors of the ADVANCED LINE are particularly compact drive solutions for installation in either handheld machines or industrial systems. These top quality stainless steel motors are suitable for the chemical industry, for the paper industry, the pharmaceutical industry, medical technology and also for use in the food industry. The air motor is sealed, no dirt from the surrounding area can enter. It can also be operated oil-free.

### Performance classes:

|        |         |
|--------|---------|
| 20 W   | Page 4  |
| 30 W   | Page 4  |
| 80 W   | Page 6  |
| 120 W  | Page 8  |
| 200 W  | Page 10 |
| 300 W  | Page 10 |
| 600 W  | Page 16 |
| 900 W  | Page 16 |
| 1.2 kW | Page 20 |

## High torque stainless steel motors



The high torque motors of the ADVANCED LINE are small in size but provide extremely high output. Our high torque motors are also less apt to stall, the stalling torque for e.g. motor type 67-517 is 800 Nm. These drive solutions are particularly suitable for use in industrial agitators and mixers as used in the paint industry, food industry or pharmaceutical industry.

### Performance classes:

|       |         |
|-------|---------|
| 285 W | Page 12 |
| 570 W | Page 18 |
| 860 W | Page 18 |

## Stainless steel motors with integrated holding brake



Due to their size and design DEPRAG stainless steel motors with integrated holding brake are the optimal choice for use in any application where reliability plays an important role. The integrated holding brake can either be controlled using a separate control lead or via the motor exhaust. If pressure falls the brakes are automatically activated.

The big plus: This innovative complete system is also available with ATEX certification!

### Performance classes:

|        |         |
|--------|---------|
| 200 W  | Page 14 |
| 300 W  | Page 14 |
| 1.2 kW | Page 22 |

## ADVANTAGES OF ADVANCED LINE AIR MOTORS

### LONG LIFE-SPAN

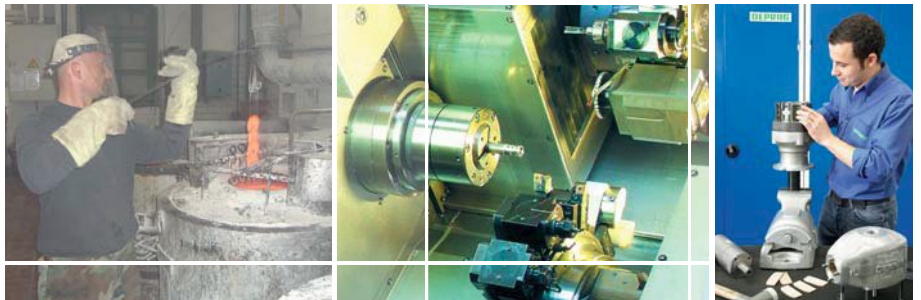
A wide product range of stainless steel motors, the use of DEPRAG high performance vanes as well as a specific surface coating on our materials all this ensures your motor's long life-span.



Airmotor - gear box - valve: a stainless steel system for the paper industry, sealed stainless steel motors, high performance vanes

### SHORT DELIVERY TIMES

Due to our large amount of in-house production we are able to deliver quickly and flexibly at short notice, even when dealing with smaller quantities.



Large amount of in-house production, on-site salt bath heat treatment facility

### APPLICATION CONSULTANCY

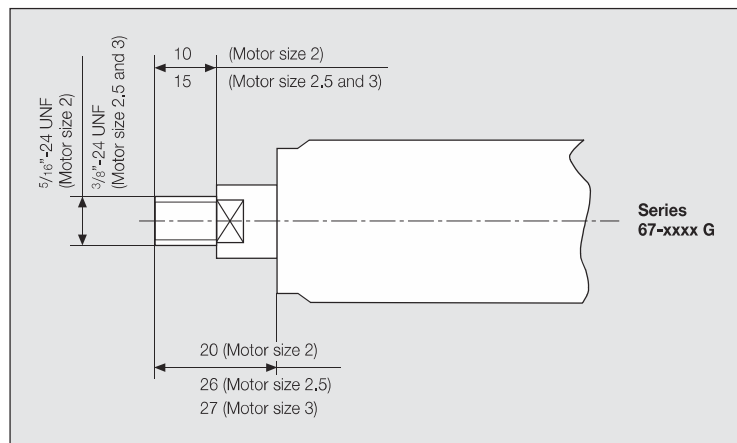
Our application engineers will gladly advise you in the selection of the most suitable drive for your application. If you would like to test or replace your existing drive we can check it for you in our innovative performance testing facility.



Performance testing facility, professional guidance from our engineers

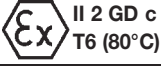
### WIDE VARIETY AND COMPREHENSIVE RANGE OF ACCESSORIES

Our standard programme is distinguished by its wide variety. All our stainless steel motors are also available with threaded spindle. Additionally due to our modular principle we are able to offer numerous variations to choose from. Do not hesitate to contact us if you have a specific mounting fixture request.



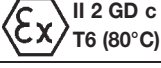
Individual customisation at an attractive price

## 200 W / 300 W ADVANCED LINE AIR MOTOR WITH INTEGRATED HOLDING BRAKE

| Motor size 2.5 with holding brake |  | reversible              |                              |                              |                              |                              |                              |                              |
|-----------------------------------|--|-------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| <b>Series 67-</b><br>ATEX conform |  <b>II 2 GD c IIC T6 (80°C)</b> | <b>Type</b><br>part no. | <b>67-0025 B</b><br>4457602B | <b>67-0125 B</b><br>4457602C | <b>67-0225 B</b><br>4457602D | <b>67-0725 B</b><br>4457602F | <b>67-0325 B</b><br>4457602E | <b>67-0425 B</b><br>4457602A |
| <b>Series 67-</b>                 |  | <b>Type</b><br>part no. | <b>67-0025 B</b><br>445760 B | <b>67-0125 B</b><br>445760 C | <b>67-0225 B</b><br>445760 D | <b>67-0725 B</b><br>445760 F | <b>67-0325 B</b><br>445760 E | <b>67-0425 B</b><br>445760 A |
| Nominal-Power                     | W / HP   |                         | 200 / 0.27                   | 200 / 0.27                   | 200 / 0.27                   | 200 / 0.27                   | 200 / 0.27                   | 200 / 0.27                   |
| Nominal-Speed                     | rpm  |                         | 7250                         | 2300                         | 1200                         | 700                          | 350                          | 160                          |
| Speed (idling)                    | rpm  |                         | 14500                        | 4600                         | 2400                         | 1400                         | 700                          | 320                          |
| Nominal-Torque                    | Nm / in.lbs  |                         | 0.26 / 2.3                   | 0.8 / 7.1                    | 1.6 / 14                     | 2.7 / 24                     | 5.4 / 48                     | 12 / 106                     |
| Start Torque min.                 | Nm / in.lbs  |                         | 0.4 / 3.5                    | 1.2 / 11                     | 2.4 / 21                     | 4.1 / 36                     | 8.2 / 73                     | 18 / 159                     |
| Stall-Torque                      | Nm / in.lbs  |                         | 0.52 / 4.6                   | 1.6 / 14.2                   | 3.2 / 28                     | 5.4 / 48                     | 10.8 / 96                    | 20 / 177*)                   |
| Brake-Torque                      | Nm / in.lbs  |                         | 1 / 9                        | 3.4 / 30                     | 6.7 / 59                     | 11.8 / 104                   | 20 / 177*)                   | 20 / 177*)                   |
| Air Consumption                   | m <sup>3</sup> /min / cfm  |                         | 0.37 / 13                    | 0.37 / 13                    | 0.37 / 13                    | 0.37 / 13                    | 0.37 / 13                    | 0.37 / 13                    |
| Weight                            | kg / lbs   |                         | 1 / 2.2                      | 1.05 / 2.3                   | 1.05 / 2.3                   | 1.15 / 2.5                   | 1.15 / 2.5                   | 1.15 / 2.5                   |
| Hose I.D.                         | mm / in.   |                         | 10 / 3/8                     | 10 / 3/8                     | 10 / 3/8                     | 10 / 3/8                     | 10 / 3/8                     | 10 / 3/8                     |

Performance data relate to an air pressure of 6 bar (85 PSI)

\*) max. admissible Torque

| Motor size 3 with holding brake   |  | reversible              |                             |                             |                             |                             |                             |                             |
|-----------------------------------|--|-------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Series 67-</b><br>ATEX conform |  <b>II 2 GD c IIC T6 (80°C)</b> | <b>Type</b><br>part no. | <b>67-003 B</b><br>4457622A | <b>67-013 B</b><br>4457622B | <b>67-023 B</b><br>4457622C | <b>67-073 B</b><br>4457622D | <b>67-083 B</b><br>4457622E | <b>67-093 B</b><br>4457622F |
| <b>Series 67-</b>                 |  | <b>Type</b><br>part no. | <b>67-003 B</b><br>445762 A | <b>67-013 B</b><br>445762 B | <b>67-023 B</b><br>445762 C | <b>67-073 B</b><br>445762 D | <b>67-083 B</b><br>445762 E | <b>67-093 B</b><br>445762 F |
| Nominal-Power                     | W / HP   |                         | 300 / 0.4                   | 300 / 0.4                   | 300 / 0.4                   | 300 / 0.4                   | 300 / 0.4                   | 300 / 0.4                   |
| Nominal-Speed                     | rpm  |                         | 7250                        | 2300                        | 1200                        | 700                         | 300                         | 170                         |
| Speed (idling)                    | rpm  |                         | 14500                       | 4600                        | 2400                        | 1400                        | 600                         | 350                         |
| Nominal-Torque                    | Nm / in.lbs  |                         | 0.4 / 3.5                   | 1.2 / 11                    | 2.4 / 21                    | 4.1 / 36                    | 9.6 / 85                    | 16.9 / 149                  |
| Start Torque min.                 | Nm / in.lbs  |                         | 0.6 / 5.3                   | 1.9 / 17                    | 3.6 / 32                    | 6.1 / 54                    | 14.3 / 126                  | 25.3 / 224                  |
| Stall-Torque                      | Nm / in.lbs  |                         | 0.8 / 7                     | 2.4 / 21                    | 4.8 / 42                    | 8.2 / 72                    | 19.2 / 170                  | 33.8 / 299                  |
| Brake-Torque                      | Nm / in.lbs  |                         | 1 / 9                       | 3.4 / 30                    | 6.7 / 59                    | 11.8 / 104                  | 20.6 / 182                  | 36 / 318.6*)                |
| Air Consumption                   | m <sup>3</sup> /min / cfm  |                         | 0.47 / 17                   | 0.47 / 17                   | 0.47 / 17                   | 0.47 / 17                   | 0.47 / 17                   | 0.47 / 17                   |
| Weight                            | kg / lbs   |                         | 1.35 / 3                    | 1.4 / 3.1                   | 1.4 / 3.1                   | 1.45 / 3.2                  | 1.5 / 3.3                   | 1.5 / 3.3                   |
| Hose I.D.                         | mm / in.   |                         | 10 / 3/8                    | 10 / 3/8                    | 10 / 3/8                    | 10 / 3/8                    | 10 / 3/8                    | 10 / 3/8                    |

Performance data relate to an air pressure of 6 bar (85 PSI)

\*) max. admissible Torque

A pressure regulator valve is included within our shipment of the ATEX conform brake motors. This safety valve turns off the air supply in the brake leads automatically when the pressure falls under 5 bar. This prevents an irregular temperatur increase.

Allowable shaft loading see page 24.

| Optional Equipment:  | Motor size 2.5<br>Series 67- | Motor size 3<br>Series 67- |
|--|------------------------------|----------------------------|
| Flange<br>necessary 4 cylinder-screws  | part no.<br>part no.         | 444530<br>823216           |
| Bracket<br>necessary 4 cylinder-screws   | part no.<br>part no.         | 444539<br>823216           |
| <b>Silencer: motor operates in one direction<br/>(right or left rotation)</b>      |                              |                            |
| 1 Hose nozzle  | part no.                     | 823238 (1/8")              |
| 1 Silencer   | part no.                     | 802675 (1/8")              |
| 1 Silencer   | part no.                     | 802673 (1/4")              |
| <b>Silencer: motor is reversible<br/>(right and left rotation)</b>                 |                              |                            |
| 2 Hose nozzles   | part no.                     | 823238 (1/8")              |
| 1 Silencer   | part no.                     | 802673 (1/4")              |
| Maintenance unit with lubricator*<br>Connection thread                             | part no.                     | 820454 A<br>G 1/4          |
| Maintenance unit without lubricator*<br>Connection thread                          | part no.                     | 822408 A<br>G 1/4          |
| Replacement part set consisting of:<br>vanes, sealant rings, o-rings and silencers | part no.                     | 444785 A                   |

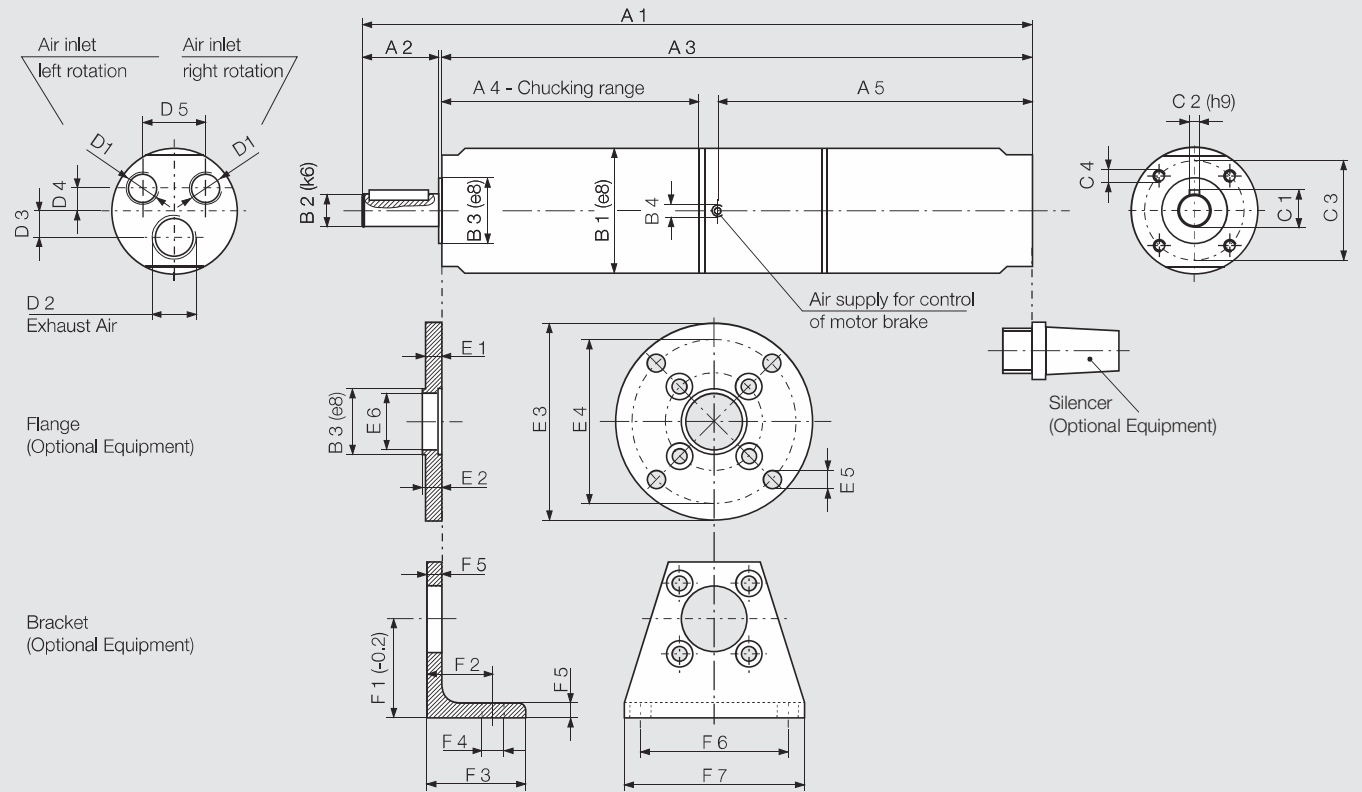
\*) Maintenance unit consists of pressure regulator valve, filter and optionally with or without lubricator

Our standard maintenance units are ATEX conform. Please contact us if this is a requirement. Of course you can also purchase individual replacement parts from us.

Further notes for soundproofing see page 25.

**Motor size 2.5 with holding brake**  
**Series 67-**  
 reversible

**Motor size 3 with holding brake**  
**Series 67-**  
 reversible



| Motor size | Series 67-<br>Type |           |           | Dimensions of Motor (mm) |    |     |    |     |    |    |    |    |      |    |    |    |      |      |    |    |    |
|------------|--------------------|-----------|-----------|--------------------------|----|-----|----|-----|----|----|----|----|------|----|----|----|------|------|----|----|----|
|            |                    |           |           | A1                       | A2 | A3  | A4 | A5  | B1 | B2 | B3 | B4 | C1   | C2 | C3 | C4 | D1   | D2   | D3 | D4 | D5 |
| 2.5        | 67-0025 B          | 67-0125 B | 67-0225 B | 194                      | 23 | 170 | 64 | 98  | 38 | 10 | 20 | M5 | 11.2 | 3  | 30 | M4 | 1/8" | 1/4" | 8  | 7  | 19 |
|            | 67-0725 B          | 67-0325 B | 67-0425 B | 210                      | 23 | 186 | 80 | 98  | 38 | 10 | 20 | M5 | 11.2 | 3  | 30 | M4 | 1/8" | 1/4" | 8  | 7  | 19 |
| 3          | 67-003 B           | 67-013 B  | 67-023 B  | 215                      | 27 | 187 | 66 | 110 | 42 | 12 | 24 | M5 | 13.5 | 4  | 34 | M5 | 1/4" | 1/4" | 11 | 7  | 20 |
|            | 67-073 B           |           |           | 231                      | 27 | 203 | 82 | 110 | 42 | 12 | 24 | M5 | 13.5 | 4  | 34 | M5 | 1/4" | 1/4" | 11 | 7  | 20 |
|            | 67-083 B           | 67-093 B  |           | 235                      | 30 | 203 | 82 | 110 | 42 | 14 | 24 | M5 | 16   | 5  | 34 | M5 | 1/4" | 1/4" | 11 | 7  | 20 |

| Motor size | Series 67-<br>Type |           |           | Dimensions of Flange (mm) |    |    |    |    |    |    |     | Dimensions of Bracket (mm) |    |     |    |    |    |    |     |     |    |    |
|------------|--------------------|-----------|-----------|---------------------------|----|----|----|----|----|----|-----|----------------------------|----|-----|----|----|----|----|-----|-----|----|----|
|            |                    |           |           | B3                        | E1 | E2 | E3 | E4 | E5 | E6 | F1  | F2                         | F3 | F4  | F5 | F6 | F7 |    |     |     |    |    |
| 2.5        | 67-0025 B          | 67-0125 B | 67-0225 B |                           |    |    |    |    | 20 | 5  | 5.8 | 60                         | 50 | 5.5 | 17 | 30 | 20 | 30 | 6.6 | 4.5 | 45 | 55 |
|            | 67-0725 B          | 67-0325 B | 67-0425 B |                           |    |    |    |    | 20 | 5  | 5.8 | 60                         | 50 | 5.5 | 17 | 30 | 20 | 30 | 6.6 | 4.5 | 45 | 55 |
| 3          | 67-003 B           | 67-013 B  | 67-023 B  |                           |    |    |    |    | 24 | 6  | 6.8 | 65                         | 55 | 5.5 | 21 | 30 | 20 | 30 | 6.6 | 4.5 | 50 | 60 |
|            | 67-073 B           |           |           |                           |    |    |    |    | 24 | 6  | 6.8 | 65                         | 55 | 5.5 | 21 | 30 | 20 | 30 | 6.6 | 4.5 | 50 | 60 |
|            | 67-083 B           | 67-093 B  |           |                           |    |    |    |    | 24 | 6  | 6.8 | 65                         | 55 | 5.5 | 21 | 30 | 20 | 30 | 6.6 | 4.5 | 50 | 60 |

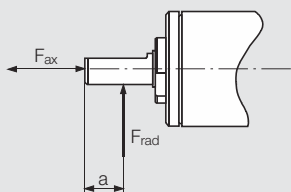


Pressure Regulator Valve:

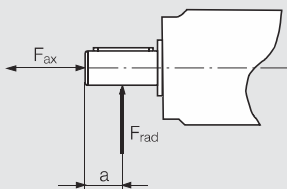
Included within our shipment of the ATEX conform brake motors.

## Maximum allowable shaft load of the drive shaft

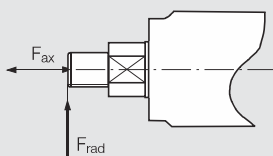
flattened shaft  
Motor size 0 and 1



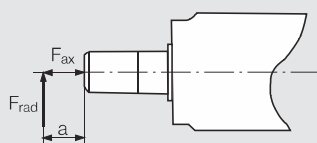
parallel key shaft  
Motor size 2 to 8



threaded shaft



drill chuck



### Motors with flattened shaft

| Motor size | part no.    |  | F <sub>ax</sub><br>[N] | F <sub>rad</sub><br>[N] | a<br>[mm] |
|------------|-------------|--|------------------------|-------------------------|-----------|
| MG 0       | 445115 D, E |  | 140                    | 180                     | 6         |
| MG 0       | 445462 E    |  | 140                    | 180                     | 6         |
| MG 1       | 445127 A-D  |  | 200                    | 220                     | 7         |

Allowable force for 10 million spindle rotations with 90 % survival probability of bearing.

### Motors with parallel key shaft

| Motor size | part no.       | part no.<br>with holding brake | F <sub>ax</sub><br>[N] | F <sub>rad</sub><br>[N] | a<br>[mm] |
|------------|----------------|--------------------------------|------------------------|-------------------------|-----------|
| MG 2       | 444550 A-H     |                                | 380                    | 160                     | 9         |
| MG 2.5     | 444500 A-H     | 445760 A-F                     | 570                    | 720                     | 12        |
| MG 2.5     | 445184 A, B    |                                | 1100                   | 1200                    | 22        |
| MG 3       | 444560 A-D     | 445762 A-D                     | 570                    | 1130                    | 14        |
| MG 3       | 444560 E-H, K  | 445762 E, F                    | 790                    | 1070                    | 15        |
| MG 3       | 445183 A, B    |                                | 1100                   | 1200                    | 22        |
| MG 3       | 444560 I, L, M |                                | 1500                   | 3500                    | 21        |
| MG 3       | 444560 N, O    |                                | 1500                   | 3500                    | 20        |
| MG 6       | 444570 A-D, H  |                                | 1110                   | 1300                    | 15        |
| MG 6       | 444570 E-G     |                                | 1130                   | 2090                    | 18        |
| MG 6       | 444570 I, K, L |                                | 1500                   | 3500                    | 21        |
| MG 6       | 444570 M       |                                | 1500                   | 3500                    | 22.5      |
| MG 7       | 440066 A-D, H  |                                | 1110                   | 1300                    | 15        |
| MG 7       | 440066 E-F     |                                | 1130                   | 2090                    | 18        |
| MG 7       | 440066 I, K, L |                                | 1500                   | 3500                    | 21        |
| MG 7       | 440066 M       |                                | 1500                   | 3500                    | 22.5      |
| MG 8       | 444580 A-C     | 440097 A-C, 4400971A-C         | 2330                   | 2260                    | 18        |
| MG 8       | 444580 D-F     | 440097 D-E, 4400971D-E         | 2330                   | 2700                    | 30        |

Allowable force for 10 million spindle rotations with 90 % survival probability of bearing.

### Motors with threaded spindle

| Motor size | part no.   |  | F <sub>ax</sub><br>[N] | F <sub>rad</sub><br>[N] | a<br>[mm] |
|------------|------------|--|------------------------|-------------------------|-----------|
| MG 2       | 444950 A-H |  | 380                    | 110                     | 0         |
| MG 2.5     | 445314 A-L |  | 570                    | 450                     | 0         |
| MG 3       | 445682 A-D |  | 570                    | 860                     | 0         |
| MG 3       | 445682 E-H |  | 790                    | 820                     | 0         |

Allowable force for 10 million spindle rotations with 90 % survival probability of bearing.

### Motors with drill chuck

| Motor size | part no.      |  | F <sub>ax</sub><br>[N] | F <sub>rad</sub><br>[N] | a<br>[mm] |
|------------|---------------|--|------------------------|-------------------------|-----------|
| MG 6       | 445353 B-D, H |  | 1100                   | 150                     | 80        |
| MG 6       | 445353 E-G    |  | 1100                   | 265                     | 80        |

Allowable force for 10 million spindle rotations with 90 % survival probability of bearing.

## TECHNICAL DATA

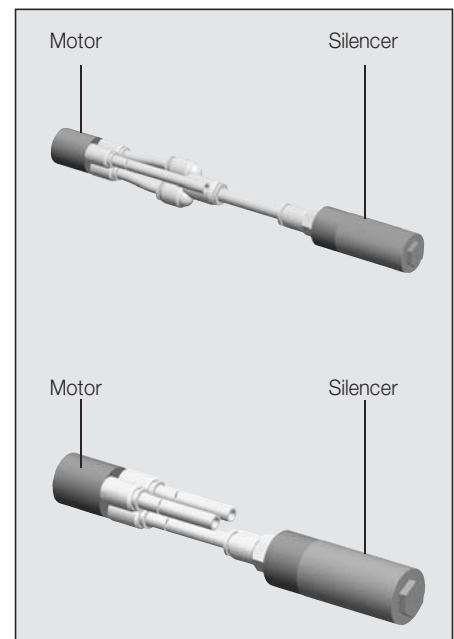
### Noise level of the motors

| Noise level for motors of the series 67 - without or with silencer (see optional equipment) |                                     |                                  |                   |
|---|-------------------------------------|----------------------------------|-------------------|
| for Motor size  | Noise level dB (A) without silencer | Noise level dB (A) with silencer | part no. silencer |
| 0   | 98                                  | 85                               | 811355            |
| 1   | 95                                  | 85                               | 823236            |
| 2   | 99                                  | 92                               | 823236            |
| 2.5   | 100                                 | 82                               | 802675 / 802673   |
| 3   | 103                                 | 91                               | 802673            |
| 6   | 104                                 | 94                               | 802671 / 802666   |
| 7   | 106                                 | 88                               | 802671 / 802666   |
| 8   | 108                                 | 95                               | 802666 / 822086   |

### Optional Silencer sets for further reduction of the noise level

| Silencer sets for motors of the build series 67 - Attachment for only one rotation direction (clockwise or anticlockwise rotation) |          |                |                        |
|--|----------|----------------|------------------------|
| for Motor size   | part no. | Hose length mm | Noise level ca. dB (A) |
| 1  | 446354 B | 500            | 71                     |
| 2  | 440015 B | 500            | 70                     |
| 2.5  | 440016 B | 500            | 71                     |
| 3  | 440018 B | 500            | 70                     |
| 6  | 440019 B | 500            | 76                     |
| 7  | 440019 B | 500            | 79                     |
| 8  | 440020 B | 500            | 87                     |

| Silencer sets for motors of the build series 67 - Attachment adjustable (clockwise and anticlockwise rotation) |          |                |                        |
|--|----------|----------------|------------------------|
| for Motor size   | part no. | Hose length mm | Noise level ca. dB (A) |
| 1  | 446354 A | 500            | 71                     |
| 2  | 440015 A | 500            | 70                     |
| 2.5  | 440016 A | 500            | 71                     |
| 3  | 440018 A | 500            | 70                     |
| 6  | 440019 A | 500            | 76                     |
| 7  | 440019 A | 500            | 79                     |
| 8  | 440020 A | 500            | 87                     |



Use in potentially explosive environments



The correspondingly marked motors are suitable for use in potentially explosive environments.

### Speed standard values (rpm) for HSS spiral drills

| Cutting Speed        | 35 m/min (115 ft./min)                             | 28 m/min (90 ft./min)                                   | 25 m/min (80 ft./min)                              | 14 m/min (45 ft./min)                                   | 11 m/min (35 ft./min)                                    | 7 m/min (23 ft./min) | 22 m/min (70 ft./min)                              | 12 m/min (40 ft./min)                              | 50 m/min (165 ft./min) | 90 m/min (300 ft./min)                | 165 m/min (540 ft./min) | 210 m/min (690 ft./min)       |
|----------------------|--|---|--|---|--|----------------------|--|--|------------------------|---------------------------------------|-------------------------|-------------------------------|
| Drill dia. mm/in.    | up to 500 N/mm <sup>2</sup> (30 long tons/sq. in.) | Carbon steel  |  | Alloy steel   |  | Stainless steel      | Cast-Iron  |  | Copper Bronze Brass    | Lightweight-Metal                     |                         | Magnesium-Alloy <sup>2)</sup> |
|                      |  | 500 - 700 N/mm <sup>2</sup> (30 - 45 long tons/sq. in.) | above 700 N/mm <sup>2</sup> (45 long tons/sq. in.) | 700 - 900 N/mm <sup>2</sup> (45 - 55 long tons/sq. in.) | 900 - 1100 N/mm <sup>2</sup> (55 - 70 long tons/sq. in.) |                      | up to 180 N/mm <sup>2</sup> (10 long tons/sq. in.) | above 180 N/mm <sup>2</sup> (10 long tons/sq. in.) |                        | common alloy mild brass <sup>1)</sup> | hard                    |                               |
| 1/0.04               | 11000  | 8800  | 7800   | 4400  | 3400   | 2200                 | 7000   | 3800   | 16000                  | 28000                                 | 52000                   | 66000                         |
| 2 <sup>5</sup> /64   | 5500   | 4400  | 3900   | 2200  | 1700   | 1100                 | 3500   | 1900   | 8000                   | 14000                                 | 26000                   | 33000                         |
| 3 <sup>1</sup> /8    | 3700   | 3000  | 2600   | 1500  | 1100   | 730                  | 2300   | 1300   | 5300                   | 9000                                  | 17300                   | 22000                         |
| 4 <sup>5</sup> /32   | 2800   | 2200  | 2000   | 1100  | 850  | 550                  | 1700   | 950  | 4000                   | 7000                                  | 13000                   | 16500                         |
| 5 <sup>13</sup> /64  | 2200   | 1800  | 1600   | 880   | 680  | 440                  | 1400   | 760  | 3200                   | 5600                                  | 10400                   | 13200                         |
| 6 <sup>15</sup> /64  | 1900   | 1500  | 1300   | 735   | 570  | 365                  | 1200   | 630  | 2700                   | 4800                                  | 8700                    | 11000                         |
| 7 <sup>9</sup> /32   | 1600   | 1300  | 1100   | 630   | 485  | 315                  | 1000   | 540  | 2300                   | 4000                                  | 7400                    | 9400                          |
| 8 <sup>5</sup> /16   | 1400   | 1100  | 975  | 550   | 425  | 275                  | 875  | 475  | 2000                   | 3500                                  | 6500                    | 8300                          |
| 9 <sup>23</sup> /64  | 1200   | 975   | 865  | 490   | 380  | 245                  | 780  | 420  | 1800                   | 3100                                  | 5800                    | 7400                          |
| 10 <sup>25</sup> /64 | 1100   | 880   | 780  | 440   | 340  | 220                  | 700  | 380  | 1600                   | 2800                                  | 5200                    | 6600                          |

1) Speed for machining of thermoset plastics, laminates and hard laminates, however instead of the HSS-drills we recommend high-speed steel drills made with hard-metal K 10

2) for thermoplastics use approx. double the values

## The layout of your air motor:

### Calculating the motor power

$$P = \frac{M \times n}{9550}$$

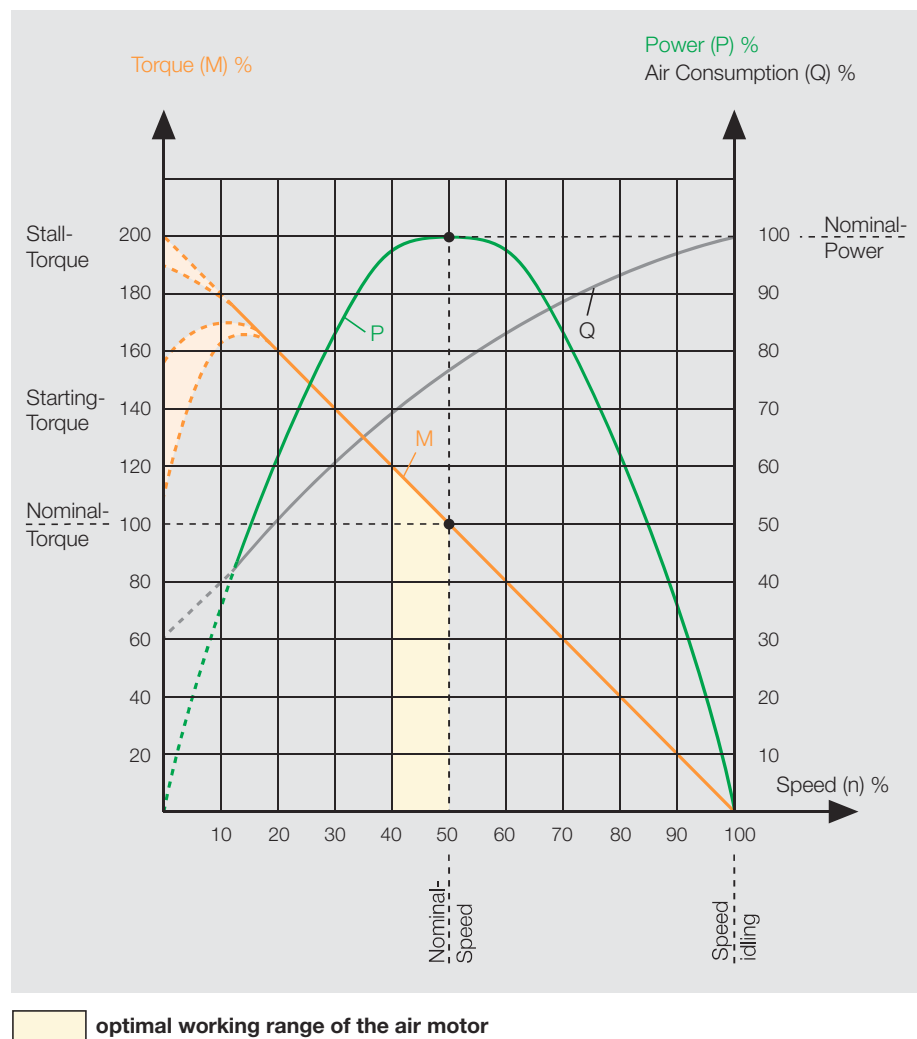
**P = Power Output in kW**

**M = Nominal Torque in Nm**

**n = Nominal Speed in rpm**

The optimal working range of an air motor is close to the nominal speed. If you need lower speeds than are mentioned in the catalogue you can reduce the speed by throttling the exhaust air with only a slight loss of power. By throttling the supply air or decreasing the operating pressure the speed, torque and power are reduced.

All performance data of the DEPRAG air motors is based on operating pressure of 6 bar and the opening cross-section mentioned in the motor data. If your application conditions are different from this then you will find a comprehensive guide to the layout of our motors in brochure D 6000 E.



## Do you need support in selecting the right drive system?

Tell us your operational conditions and our application consultants will be happy to help:

|   |  |  |                                     |
|---|--|--|-------------------------------------|
| <b>Application:</b>   | <input type="text"/>   |  |                                     |
| <b>In what kind of environment will the motor be installed?</b> | <b>ATEX requirement / explosion safety?</b>                                  | <input type="checkbox"/> yes               | <input type="checkbox"/> no         |
|   | if yes, which safety class:  | <input type="text"/>                       |                                     |
|   | <b>food industry conformity?</b>   | <input type="checkbox"/> yes               | <input type="checkbox"/> no         |
|   | <b>sterilisable?</b>   | <input type="checkbox"/> yes               | <input type="checkbox"/> no         |
|   | <b>acid resistant?</b>   | <input type="checkbox"/> yes               | <input type="checkbox"/> no         |
|   | <b>steam resistant?</b>  | <input type="checkbox"/> yes               | <input type="checkbox"/> no         |
| <b>Application conditions:</b>                                  | <b>constant operation (24 hrs, non-stop)</b>                                 | <input type="checkbox"/> yes               | <input type="checkbox"/> no         |
|   | <b>duty cycle in hrs/day:</b>  | <input type="text"/>                       |                                     |
|   | <b>days/year:</b>  | <input type="text"/>                       |                                     |
|   | <b>cycle time (s):</b>   | <input type="text"/>                       |                                     |
|   | <b>motor loaded to stall?</b>  | <input type="checkbox"/> yes               | <input type="checkbox"/> no         |
|   | <b>self-locking?</b>   | <input type="checkbox"/> yes               | <input type="checkbox"/> no         |
| <b>Required turn direction:</b>                                 | <input type="checkbox"/> left  | <input type="checkbox"/> right             | <input type="checkbox"/> reversible |
|   | (view from air inlet)  |  |                                     |
| <b>Motor performance:</b>                                       | <b>power:</b>  | <input type="text"/>                       | W                                   |
|   | <b>nominal torque:</b>   | <input type="text"/>                       | Nm                                  |
|   | <b>nominal speed:</b>  | <input type="text"/>                       | rpm                                 |
| <b>Performance influencing application conditions:</b>          | <b>operating pressure (at motor inlet):</b>                                  | <input type="text"/>                       | bar                                 |
|   | <b>operation with lubricated air possible?</b>                               | <input type="checkbox"/> yes               | <input type="checkbox"/> no         |
|   | <b>smallest opening cross-section of connection pieces and hoses?</b>        | <input type="text"/>                       | mm                                  |
| <b>External motor design:</b>                                   | <input type="checkbox"/> standard steel                                      | <input type="checkbox"/> non-corrosive     | <input type="checkbox"/> aluminium  |
|   | <input type="checkbox"/> plastics  | <input type="checkbox"/> ceramics          |                                     |
|   | <b>other:</b>  | <input type="text"/>                       |                                     |
| <b>Drive spindle design:</b>                                    | <b>drive shaft requirements:</b>   | <input type="text"/>                       |                                     |
|   | (e. g. keyed shafts, square end, hexagonal, collet, drill chuck taper, etc.) |  |                                     |
|   | <b>required dimensions:</b>  | <input type="text"/>                       |                                     |
| <b>Motor fixture design:</b>                                    | <b>mounting requirements:</b> (bracket, flange, etc.)                        | <input type="text"/>                       |                                     |
|   | <b>required dimensions:</b>  | <input type="text"/>                       |                                     |
| <b>Additional components:</b>                                   | <input type="checkbox"/> holding brake                                       | <input type="checkbox"/> operational brake |                                     |
|   | <b>gear box:</b>   | <input type="text"/>                       |                                     |
| <b>Price range:</b>   | <input type="text"/>   |  |                                     |
| <b>Annual requirement:</b>                                      | <input type="text"/>   |  |                                     |

# DEPRAG

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CERTIFIED AS PER DIN EN ISO 9001

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