



DEPRAG TURBINE TECHNOLOGY

**One Drive – 3 Power Levels:
1.5 kW / 3 kW / 4.5 kW**



TURBINE MOTORS

Our powerful turbines offer high torque performance for many applications.

The integrated speed controller ensures a constant speed under load. Whether you need a reliable compressed air starter for small and medium-sized combustion engines and gas turbines or are looking for a powerful drive in drilling machines, grinding and milling tools, our compact drives are the perfect choice for numerous applications.

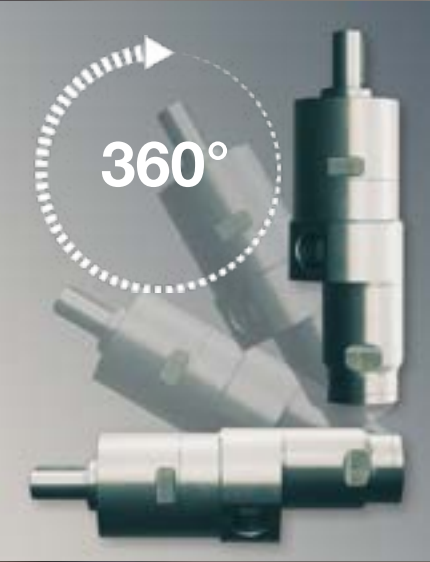
Each drive is available in a right or left rotation version.

Our advanced turbine technology uses the expansion of compressed air extremely efficiently: compared to a vane motor, this enables efficiency increases of up to 40 %.

The amount of air required to operate a 3.2 kW vane motor is sufficient to drive a 4.5 kW turbine motor.

This not only increases productivity, but also saves valuable energy.

The advantages of DEPRAG turbine motors in a clear summary:



| Feature | DEPRAG Turbine motor |
|---|---|
| ATEX | -20°C to 60°C (permissible ambient temperature) |
| Sealed | ✓ |
| Integrated speed regulator | ✓ |
| Power range | 1.5 kW, 3 kW, 4.5 kW |
| Power adjustable | ✓ |
| Nominal speed range | rpm 70/125/275/450/525/750/1000/1335/2880 |
| Speed compatible to standard electric motor | ✓ |
| Maximum permissible torque | 688 Nm |



ADVANTAGES

- **One drive - three power levels**

Each drive can be easily adjusted on the power ring to different power settings: 1.5 kW / 3 kW / 4.5 kW

- **Oil-free operation**

E.g. for use in the food industry

- **Your alternative to the asynchronous motor**

For potentially explosive atmospheres or harsh operating conditions.

Different standardised speed ranges:

| | | | | |
|----------|----------|----------|---------|----------|
| 2-pole: | 4-pole: | 6-pole: | 8-pole: | 12-pole: |
| 2880 rpm | 1335 rpm | 1000 rpm | 750 rpm | 525 rpm |

- **Sealed**





IP68 waterproof and dustproof and also suitable for underwater applications

- **Low power-to-weight ratio - compact design**

- **Food-grade lubricants:**

USDA-H1 and FDA compliant

- **For applications in potentially explosive atmospheres**

| | | |
|-----|----|--|
| C = | CE |  II 2G Ex h IIC T4 Gb X |
| | |  II 2D Ex h IIIC T130 °C Db X |
| D = | CE |  II 2G Ex h IIC T3 Gb X |
| | |  II 2D Ex h IIIC T195 °C Db X |



Permissible ambient temperature Ta: $-20^{\circ}\text{C} \leq \text{Ta} \leq 60^{\circ}\text{C}$

Of course, our range also includes ATEX-compliant silencer sets. Please contact us for further details.

- **Variable mounting options**

- through accessory flanges (IEC90/100 flange version)
- due to 1" drive spindle with two mounting options

- **Available in two rotational directions**

Right rotation or left rotation



Technical data turbine motor IEC90/100 flange design – 4500 W

| Turbine motor | Type | 69TX-0450F0340R | 69TX-0450F0157R | 69TX-0450F0119R |
|--|-------------------------|------------------------|------------------------|------------------------|
| right rotation | Part no. | 133848A | 133848B | 133848C |
| Turbine motor | Type | 69TX-0450F0340L | 69TX-0450F0157L | 69TX-0450F0119L |
| left rotation | Part no. | 1338483A | 1338483B | 1338483C |
| ATEX specification | | D | D | D |
| Nominal power | W/HP | | 4500/6 | |
| Speed (idling) | rpm | 3400 | 1570 | 1190 |
| Nominal speed | rpm | 2880 | 1335 | 1000 |
| Nominal torque | Nm/in.lbs | 14.9/131.87 | 32.2/284.97 | 43/380.55 |
| Air consumption | m ³ /min/cfm | | 3.7/130.66 | |
| Start torque | Nm/in.lbs | 29.8/263.73 | 64.4/569.94 | 86/761.1 |
| Stall torque | Nm/in.lbs | 29.8/263.73 | 64.4/569.94 | 86/761.1 |
| Hose I.D. supply air/exhaust air | mm/in. | | 19/0.74 25/0.975 | |
| Weight R/L | kg/lbs | 4.2/9.24 | 4.2/9.24 | 4.2/9.24 |
| Exhaust air connection / supply air connection | | | G1" / G1/2" | |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

Technical data turbine motor IEC90/100 flange design – 3000 W

| Turbine motor | Type | 69TX-0300F0340R | 69TX-0300F0157R | 69TX-0300F0119R |
|--|-------------------------|------------------------|------------------------|------------------------|
| right rotation | Part no. | 1338481A | 1338481B | 1338481C |
| Turbine motor | Type | 69TX-0300F0340L | 69TX-0300F0157L | 69TX-0300F0119L |
| left rotation | Part no. | 1338484A | 1338484B | 1338484C |
| ATEX specification | | D | D | D |
| Nominal power | W/HP | | 3000/4 | |
| Speed (idling) | rpm | 3400 | 1570 | 1190 |
| Nominal speed | rpm | 2880 | 1335 | 1000 |
| Nominal torque | Nm/in.lbs | 9.9/87.62 | 21.5/190.28 | 28.7/254 |
| Air consumption | m ³ /min/cfm | | 2.7/95.35 | |
| Start torque | Nm/in.lbs | 19.8/175.23 | 43/380.55 | 57.4/508 |
| Stall torque | Nm/in.lbs | 19.8/175.23 | 43/380.55 | 57.4/508 |
| Hose I.D. supply air/exhaust air | mm/in. | | 16/0.62 23/0.897 | |
| Weight R/L | kg/lbs | 4.2/9.24 | 4.2/9.24 | 4.2/9.24 |
| Exhaust air connection / supply air connection | | | G1" / G1/2" | |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

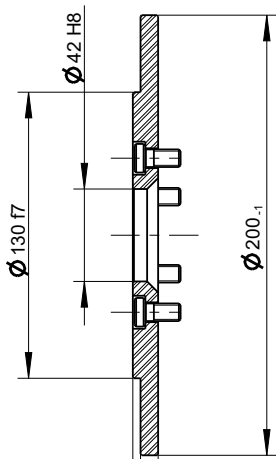
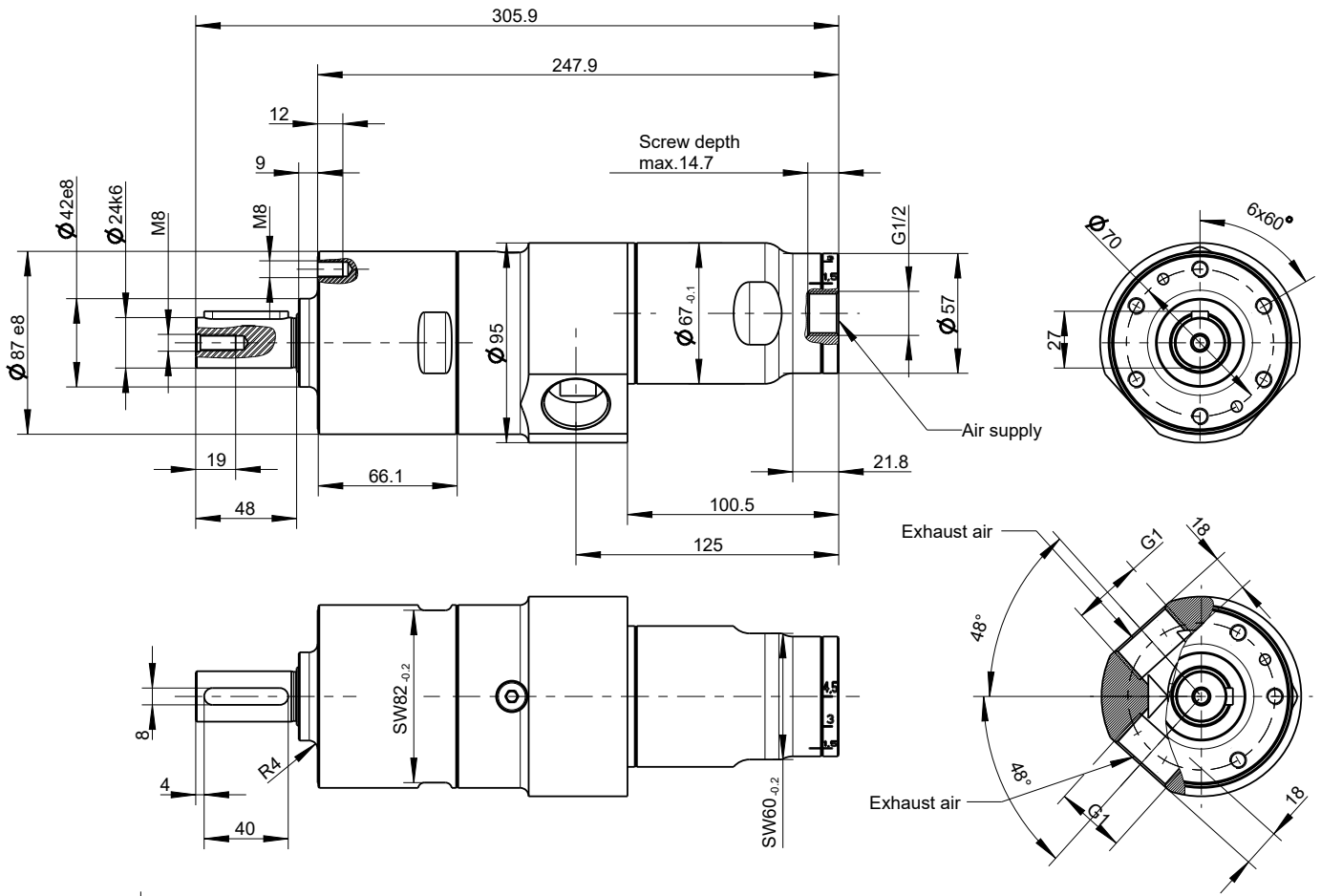
Technical data turbine motor IEC90/100 flange design – 1500 W

| Turbine motor | Type | 69TX-0150F0340R | 69TX-0150F0157R | 69TX-0150F0119R |
|--|-------------------------|------------------------|------------------------|------------------------|
| right rotation | Part no. | 1338482A | 1338482B | 1338482C |
| Turbine motor | Type | 69TX-0150F0340L | 69TX-0150F0157L | 69TX-0150F0119L |
| left rotation | Part no. | 1338485A | 1338485B | 1338485C |
| ATEX specification | | D | D | D |
| Nominal power | W/HP | | 1500/2 | |
| Speed (idling) | rpm | 3400 | 1570 | 1190 |
| Nominal speed | rpm | 2880 | 1335 | 1000 |
| Nominal torque | Nm/in.lbs | 5/44.25 | 10.7/94.7 | 14.3/126.56 |
| Air consumption | m ³ /min/cfm | | 1.9/67.1 | |
| Start torque | Nm/in.lbs | 10/88.5 | 21.4/189.39 | 28.6/253.11 |
| Stall torque | Nm/in.lbs | 10/88.5 | 21.4/189.39 | 28.6/253.11 |
| Hose I.D. supply air/exhaust air | mm/in. | | 13/0.51 21/0.819 | |
| Weight R/L | kg/lbs | 4.2/9.24 | 4.2/9.24 | 4.2/9.24 |
| Exhaust air connection / supply air connection | | | G1" / G1/2" | |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

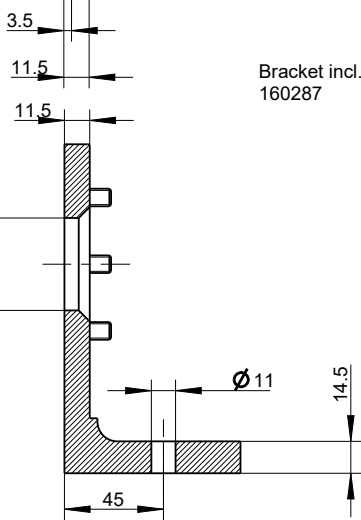
| Optional equipment | suitable for | 4500 W | 3000 W | 1500 W |
|-----------------------------|---------------------|---------------|------------------------------|---------------|
| Bracket | Part no. | 160287 | 160287 | 160287 |
| IEC90 flange | Part no. | 189618 | 189618 | 189618 |
| Silencer set ATEX-compliant | Part no. | | 139066C (hose length 2 mtr.) | |

| Noise level data | | 4500 W | 3000 W | 1500 W |
|--|--------------|--|---------------|---------------|
| Noise level LpA according to DIN EN ISO 15744 | dB(A) | without silencer at idle speed: 89.7 / without silencer under load: 96.3 with silencer at idle speed: 75.1 / with silencer under load: 83.9 | | |
| Noise power level LwA according to DIN EN ISO 15744 | dB(A) | without silencer at idle speed: 100.7 / without silencer under load: 107.3 with silencer at idle speed: 86.1 / with silencer under load: 94.9 | | |

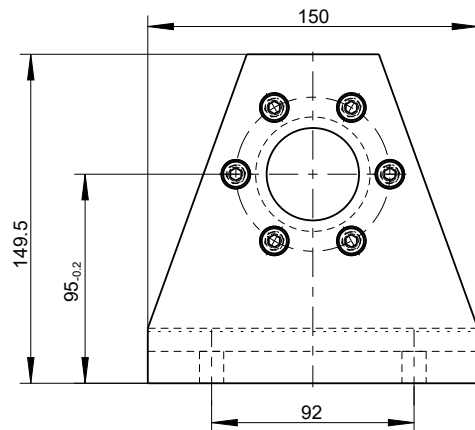
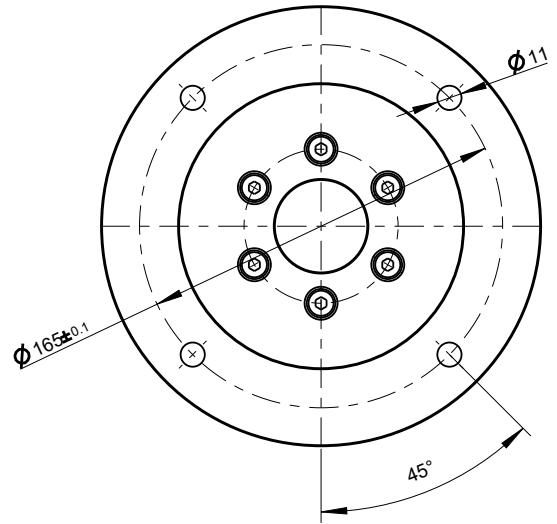


Optional equipment

IEC90-flange incl. mounting screws
189618



Bracket incl. mounting screws
160287



Technical data turbine motor IEC90/100 flange design – 4500 W

| Turbine motor | Type | 69TX-0450F0092R | 69TX-0450F0062R | 69TX-0450F0052R | 69TX-0450F0032R |
|--|-------------|------------------------|------------------------|------------------------|------------------------|
| right rotation | Part no. | 133848D | 133848E | 133848F | 133848G |
| Turbine motor | Type | 69TX-0450F0092L | 69TX-0450F0062L | 69TX-0450F0052L | 69TX-0450F0032L |
| left rotation | Part no. | 1338483D | 1338483E | 1338483F | 1338483G |
| ATEX specification | | C | C | C | C |
| Nominal power | W/HP | 4500/6 | | | |
| Speed (idling) | rpm | 925 | 615 | 525 | 325 |
| Nominal speed | rpm | 750 | 525 | 450 | 275 |
| Nominal torque | Nm/in.lbs | 57.3/507.1 | 86/761.1 | 95.5/845.18 | 156.3/1383.26 |
| Air consumption | m³/min/cfm | 3.7/130.66 | | | |
| Start torque | Nm/in.lbs | 114.6/1014.21 | 172/1522.2 | 191/1690.35 | 312.6/2766.51 |
| Stall torque | Nm/in.lbs | 114.6/1014.21 | 172/1522.2 | 191/1690.35 | 312.6/2766.51 |
| Hose I.D. supply air/exhaust air | mm/in. | 19/0.74 25/0.975 | | | |
| Weight R/L | kg/lbs | 8.7/19.14 | 8.7/19.14 | 8.7/19.14 | 8.7/19.14 |
| Exhaust air connection / supply air connection | | G1" / G1/2" | | | |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

Technical data turbine motor IEC90/100 flange design – 3000 W

| Turbine motor | Type | 69TX-0300F0092R | 69TX-0300F0062R | 69TX-0300F0052R | 69TX-0300F0032R |
|--|-------------|------------------------|------------------------|------------------------|------------------------|
| right rotation | Part no. | 1338481D | 1338481E | 1338481F | 1338481G |
| Turbine motor | Type | 69TX-0300F0092L | 69TX-0300F0062L | 69TX-0300F0052L | 69TX-0300F0032L |
| left rotation | Part no. | 1338484D | 1338484E | 1338484F | 1338484G |
| ATEX specification | | C | C | C | C |
| Nominal power | W/HP | 3000/4 | | | |
| Speed (idling) | rpm | 925 | 615 | 525 | 325 |
| Nominal speed | rpm | 750 | 525 | 450 | 275 |
| Nominal torque | Nm/in.lbs | 38.2/338.07 | 57.3/507.11 | 63.7/563.75 | 104.2/922.17 |
| Air consumption | m³/min/cfm | 2.7/95.35 | | | |
| Start torque | Nm/in.lbs | 76.4/676.14 | 114.6/1014.21 | 127.4/1127.49 | 208.4/1844.34 |
| Stall torque | Nm/in.lbs | 76.4/676.14 | 114.6/1014.21 | 127.4/1127.49 | 208.4/1844.34 |
| Hose I.D. supply air/exhaust air | mm/in. | 16/0.62 23/0.897 | | | |
| Weight R/L | kg/lbs | 8.7/19.14 | 8.7/19.14 | 8.7/19.14 | 8.7/19.14 |
| Exhaust air connection / supply air connection | | G1" / G1/2" | | | |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

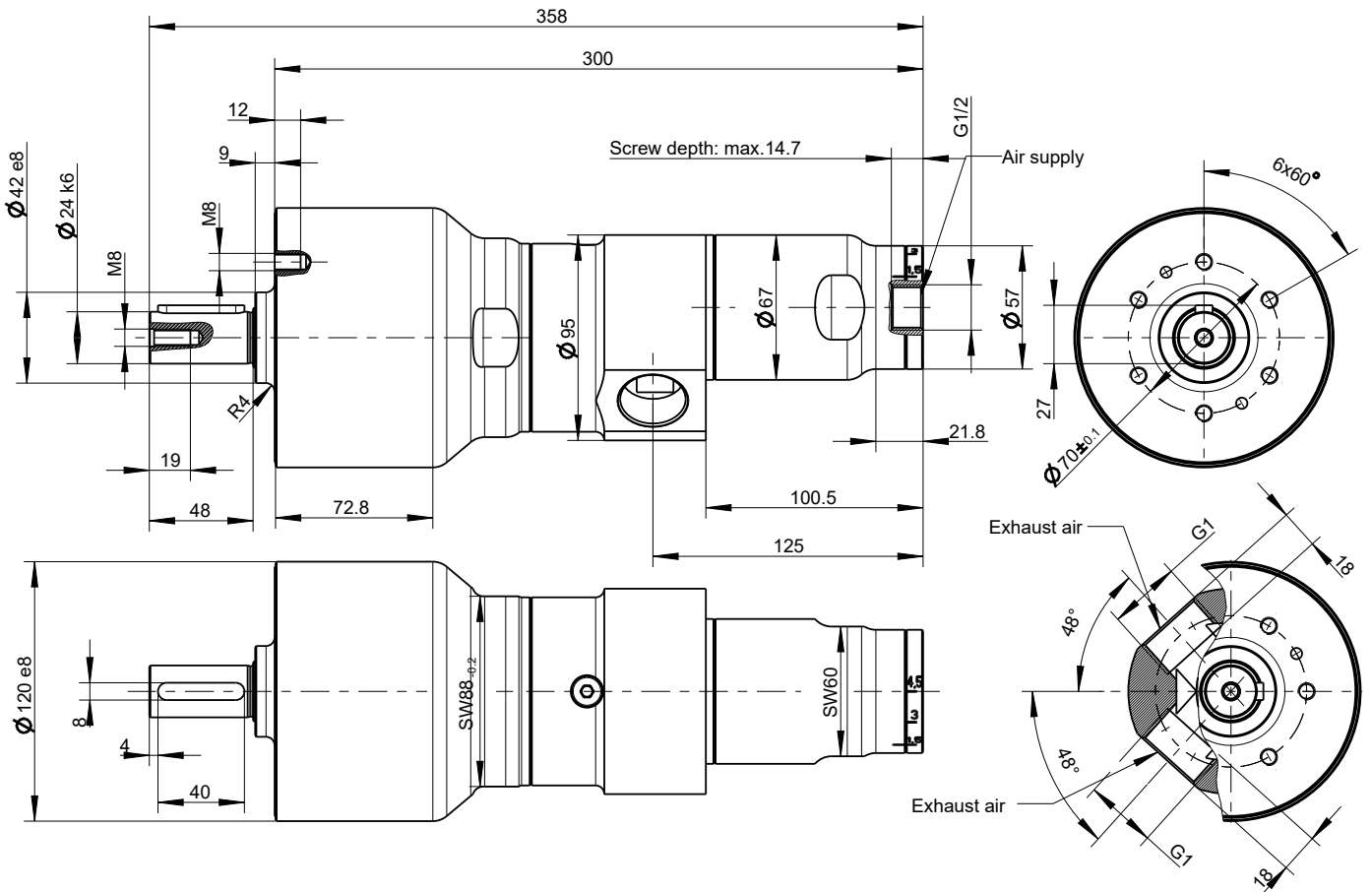
Technical data turbine motor IEC90/100 flange design – 1500 W

| Turbine motor | Type | 69TX-0150F0092R | 69TX-0150F0062R | 69TX-0150F0052R | 69TX-0150F0032R |
|--|-------------|------------------------|------------------------|------------------------|------------------------|
| right rotation | Part no. | 1338482D | 1338482E | 1338482F | 1338482G |
| Turbine motor | Type | 69TX-0150F0092L | 69TX-0150F0062L | 69TX-0150F0052L | 69TX-0150F0032L |
| left rotation | Part no. | 1338485D | 1338485E | 1338485F | 1338485G |
| ATEX specification | | C | C | C | C |
| Nominal power | W/HP | 1500/2 | | | |
| Speed (idling) | rpm | 925 | 615 | 525 | 325 |
| Nominal speed | rpm | 750 | 525 | 450 | 275 |
| Nominal torque | Nm/in.lbs | 19.1/169.04 | 28.7/254 | 31.8/281.43 | 52.1/461.09 |
| Air consumption | m³/min/cfm | 1.9/67.1 | | | |
| Start torque | Nm/in.lbs | 38.2/338.07 | 57.4/508 | 63.6/562.86 | 104.2/922.17 |
| Stall torque | Nm/in.lbs | 38.2/338.07 | 57.4/508 | 63.6/562.86 | 104.2/922.17 |
| Hose I.D. supply air/exhaust air | mm/in. | 13/0.51 21/0.819 | | | |
| Weight R/L | kg/lbs | 8.7/19.14 | 8.7/19.14 | 8.7/19.14 | 8.7/19.14 |
| Exhaust air connection / supply air connection | | G1" / G1/2" | | | |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

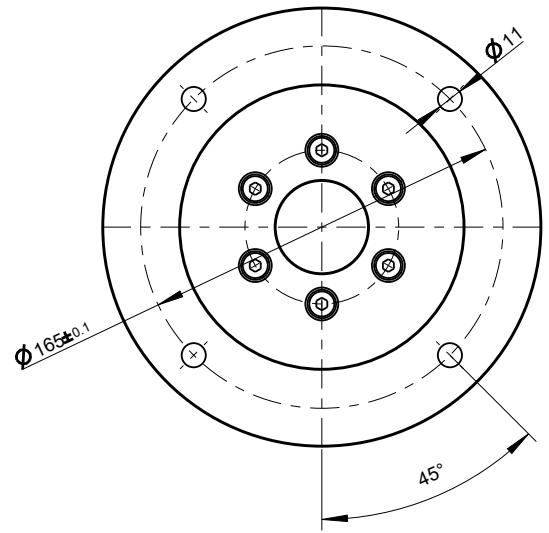
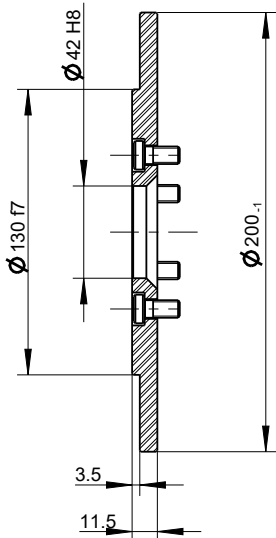
| Optional equipment | suitable for | 4500 W | 3000 W | 1500 W |
|-----------------------------|---------------------|------------------------------|---------------|---------------|
| Bracket | Part no. | 160287 | 160287 | 160287 |
| IEC90 flange | Part no. | 189618 | 189618 | 189618 |
| Silencer set ATEX-compliant | Part no. | 139066C (hose length 2 mtr.) | | |

| Noise level data | | 4500 W | 3000 W | 1500 W |
|--|--------------|--|---------------|---------------|
| Noise level LpA according to DIN EN ISO 15744 | dB(A) | without silencer at idle speed: 89.7 / without silencer under load: 96.3 with silencer at idle speed: 75.1 / with silencer under load: 83.9 | | |
| Noise power level LwA according to DIN EN ISO 15744 | dB(A) | without silencer at idle speed: 100.7 / without silencer under load: 107.3 with silencer at idle speed: 86.1 / with silencer under load: 94.9 | | |

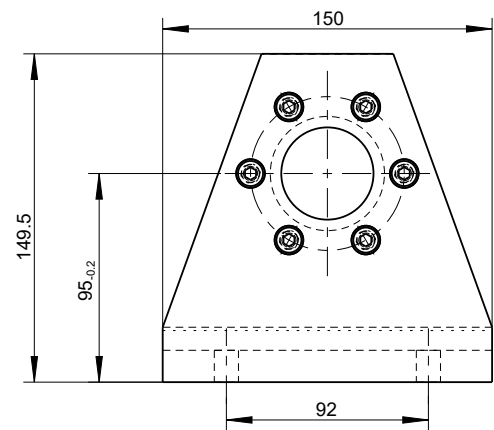
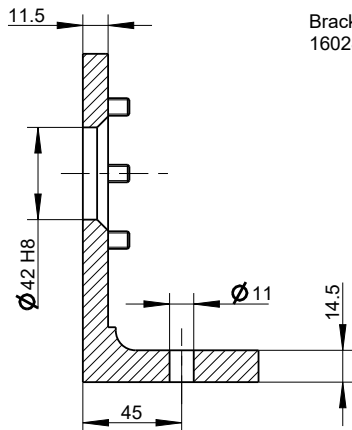


Optional equipment

IEC90-flange incl. mounting screws
189618



Bracket incl. mounting screws
160287



Technical data turbine motor IEC90/100 flange design – 4500 W

| | | |
|--|-------------|------------------------|
| Turbine motor | Type | 69TX-0450F0015R |
| right rotation | Part no. | 133848H |
| Turbine motor | Type | 69TX-0450F0015L |
| left rotation | Part no. | 1338483H |
| ATEX specification | | C |
| Nominal power | W/HP | 4500/6 |
| Speed (idling) | rpm | 155 |
| Nominal speed | rpm | 125 |
| Nominal torque | Nm/in.lbs | 343.8/3042.6 |
| Air consumption | m³/min/cfm | 3.7/130.66 |
| Start torque | Nm/in.lbs | 687.6/6085.3 |
| Stall torque | Nm/in.lbs | 687.6/6085.3 |
| Hose I.D. supply air/exhaust air | mm/in. | 19/0.74 25/0.975 |
| Weight R/L | kg/lbs | 14.4/31.68 |
| Exhaust air connection / supply air connection | | G1" / G1/2" |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

Technical data turbine motor IEC90/100 flange design – 3000 W

| | | |
|--|-------------|------------------------|
| Turbine motor | Type | 69TX-0300F0015R |
| right rotation | Part no. | 1338481H |
| Turbine motor | Type | 69TX-0300F0015L |
| left rotation | Part no. | 1338484H |
| ATEX specification | | C |
| Nominal power | W/HP | 3000/4 |
| Speed (idling) | rpm | 155 |
| Nominal speed | rpm | 125 |
| Nominal torque | Nm/in.lbs | 229.2/2028.42 |
| Air consumption | m³/min/cfm | 2.7/95.35 |
| Start torque | Nm/in.lbs | 458.4/4056.8 |
| Stall torque | Nm/in.lbs | 458.4/4056.8 |
| Hose I.D. supply air/exhaust air | mm/in. | 16/0.62 23/0.897 |
| Weight R/L | kg/lbs | 14.4/31.68 |
| Exhaust air connection / supply air connection | | G1" / G1/2" |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

Technical data turbine motor IEC90/100 flange design – 1500 W

| | | | |
|--|-------------|------------------------|------------------------|
| Turbine motor | Type | 69TX-0150F0015R | 69TX-0150F0008R |
| right rotation | Part no. | 1338482H | 1338482I |
| Turbine motor | Type | 69TX-0150F0015L | 69TX-0150F0008L |
| left rotation | Part no. | 1338485H | 1338485I |
| ATEX specification | | C | C |
| Nominal power | W/HP | | 1500/2 |
| Speed (idling) | rpm | 155 | 80 |
| Nominal speed | rpm | 125 | 70 |
| Nominal torque | Nm/in.lbs | 114.6/1014.21 | 204.6/1810.71 |
| Air consumption | m³/min/cfm | | 1.9/67.1 |
| Start torque | Nm/in.lbs | 229.2/2028.42 | 409.2/3621.42 |
| Stall torque | Nm/in.lbs | 229.2/2028.42 | 409.2/3621.42 |
| Hose I.D. supply air/exhaust air | mm/in. | | 13/0.51 21/0.819 |
| Weight R/L | kg/lbs | | 14.4/31.68 |
| Exhaust air connection / supply air connection | | | G1" / G1/2" |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

| Optional equipment | suitable for | 4500 W | 3000 W | 1500 W |
|-----------------------------|--------------|------------------------------|--------|--------|
| Bracket | Part no. | 189982 | 189982 | 189982 |
| IEC100 flange | Part no. | 189920 | 189920 | 189920 |
| Silencer set ATEX-compliant | Part no. | 139066C (hose length 2 mtr.) | | |

| Noise level data | | 4500 W | 3000 W | 1500 W |
|--|--------------|--|--------|--------|
| Noise level LpA according to DIN EN ISO 15744 | dB(A) | without silencer at idle speed: 89.7 / without silencer under load: 96.3 with silencer at idle speed: 75.1 / with silencer under load: 83.9 | | |
| Noise power level LwA according to DIN EN ISO 15744 | dB(A) | without silencer at idle speed: 100.7 / without silencer under load: 107.3 with silencer at idle speed: 86.1 / with silencer under load: 94.9 | | |

Technical data turbine motor 1" output spindle with two mounting options – 4500 W

| Turbine motor | Type | 69TX-0450F0340RA | 69TX-0450F0157RA | 69TX-0450F0119RA |
|--|-------------|-------------------------|-------------------------|-------------------------|
| right rotation | Part no. | 134248A | 134248B | 134248C |
| Turbine motor | Type | 69TX-0450F0340LA | 69TX-0450F0157LA | 69TX-0450F0119LA |
| left rotation | Part no. | 1342483A | 1342483B | 1342483C |
| ATEX specification | | D | D | D |
| Nominal power | W/HP | 4500/6 | | |
| Speed (idling) | rpm | 3400 | 1570 | 1190 |
| Nominal speed | rpm | 2880 | 1335 | 1000 |
| Nominal torque | Nm/in.lbs | 14.9/131.87 | 32.2/284.97 | 43/380.55 |
| Air consumption | m³/min/cfm | 3.7/130.66 | | |
| Start torque | Nm/in.lbs | 29.8/263.73 | 64.4/569.94 | 86/761.1 |
| Stall torque | Nm/in.lbs | 29.8/263.73 | 64.4/569.94 | 86/761.1 |
| Hose I.D. supply air/exhaust air | mm/in. | 19/0.74 25/0.975 | | |
| Weight RA/LA | kg/lbs | 4.8/10.56 | 4.8/10.56 | 4.8/10.56 |
| Exhaust air connection / supply air connection | | G1" / G1/2" | | |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

Technical data turbine motor 1" output spindle with two mounting options – 3000 W

| Turbine motor | Type | 69TX-0300F0340RA | 69TX-0300F0157RA | 69TX-0300F0119RA |
|--|-------------|-------------------------|-------------------------|-------------------------|
| right rotation | Part no. | 1342481A | 1342481B | 1342481C |
| Turbine motor | Type | 69TX-0300F0340LA | 69TX-0300F0157LA | 69TX-0300F0119LA |
| left rotation | Part no. | 1342484A | 1342484B | 1342484C |
| ATEX specification | | D | D | D |
| Nominal power | W/HP | 3000/4 | | |
| Speed (idling) | rpm | 3400 | 1570 | 1190 |
| Nominal speed | rpm | 2880 | 1335 | 1000 |
| Nominal torque | Nm/in.lbs | 9.9/87.62 | 21.5/190.28 | 28.7/254 |
| Air consumption | m³/min/cfm | 2.7/95.35 | | |
| Start torque | Nm/in.lbs | 19.8/175.23 | 43/380.55 | 57.4/508 |
| Stall torque | Nm/in.lbs | 19.8/175.23 | 43/380.55 | 57.4/508 |
| Hose I.D. supply air/exhaust air | mm/in. | 16/0.62 23/0.897 | | |
| Weight RA/LA | kg/lbs | 4.8/10.56 | 4.8/10.56 | 4.8/10.56 |
| Exhaust air connection / supply air connection | | G1" / G1/2" | | |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

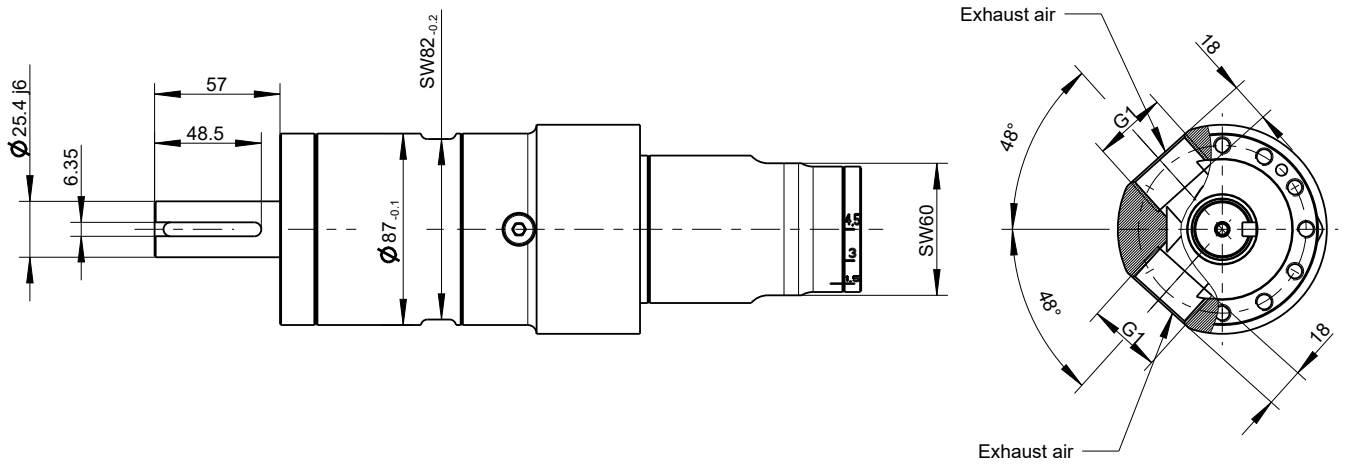
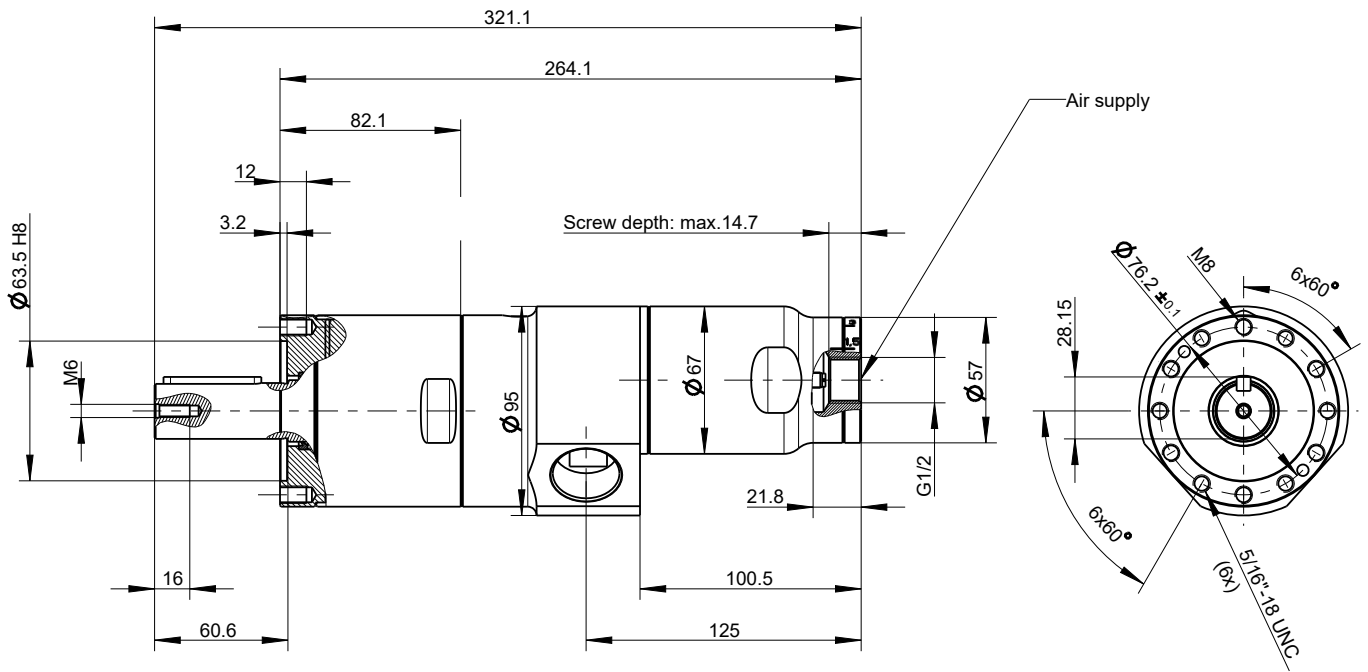
Technical data turbine motor 1" output spindle with two mounting options – 1500 W

| Turbine motor | Type | 69TX-0150F0340RA | 69TX-0150F0157RA | 69TX-0150F0119RA |
|--|-------------|-------------------------|-------------------------|-------------------------|
| right rotation | Part no. | 1342482A | 1342482B | 1342482C |
| Turbine motor | Type | 69TX-0150F0340LA | 69TX-0150F0157LA | 69TX-0150F0119LA |
| left rotation | Part no. | 1342485A | 1342485B | 1342485C |
| ATEX specification | | D | D | D |
| Nominal power | W/HP | 1500/2 | | |
| Speed (idling) | rpm | 3400 | 1570 | 1190 |
| Nominal speed | rpm | 2880 | 1335 | 1000 |
| Nominal torque | Nm/in.lbs | 5/44.25 | 10.7/94.7 | 14.3/126.56 |
| Air consumption | m³/min/cfm | 1.9/67.1 | | |
| Start torque | Nm/in.lbs | 10/88.5 | 21.4/189.4 | 28.6/253.1 |
| Stall torque | Nm/in.lbs | 10/88.5 | 21.4/189.4 | 28.6/253.1 |
| Hose I.D. supply air/exhaust air | mm/in. | 13/0.51 21/0.819 | | |
| Weight RA/LA | kg/lbs | 4.8/10.56 | 4.8/10.56 | 4.8/10.56 |
| Exhaust air connection / supply air connection | | G1" / G1/2" | | |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

| Optional equipment | suitable for | 4500 W | 3000 W | 1500 W |
|-----------------------------|---------------------|--|---------------|---------------|
| Flange | | Customised flange connections on request | | |
| Silencer set ATEX-compliant | Part no. | 139066C (hose length 2 mtr.) | | |

| Noise level data | | 4500 W | 3000 W | 1500 W |
|--|--------------|--|---------------|---------------|
| Noise level LpA according to DIN EN ISO 15744 | dB(A) | without silencer at idle speed: 89.7 / without silencer under load: 96.3 with silencer at idle speed: 75.1 / with silencer under load: 83.9 | | |
| Noise power level LwA according to DIN EN ISO 15744 | dB(A) | without silencer at idle speed: 100.7 / without silencer under load: 107.3 with silencer at idle speed: 86.1 / with silencer under load: 94.9 | | |



Dimensions in mm

p199821

Technical data turbine motor 1" output spindle with two mounting options – 4500 W

| Turbine motor | Type | 69TX-0450F0092RA | 69TX-0450F0062RA | 69TX-0450F0052RA | 69TX-0450F0032RA |
|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| right rotation | Part no. | 134248D | 134248E | 134248F | 134248G |
| Turbine motor | Type | 69TX-0450F0092LA | 69TX-0450F0062LA | 69TX-0450F0052LA | 69TX-0450F0032LA |
| left rotation | Part no. | 1342483D | 1342483E | 1342483F | 1342483G |
| ATEX specification | | C | C | C | C |
| Nominal power | W/HP | 4500/6 | | | |
| Speed (idling) | rpm | 925 | 615 | 525 | 325 |
| Nominal speed | rpm | 750 | 525 | 450 | 275 |
| Nominal torque | Nm/in.lbs | 57.3/507.1 | 86/761.1 | 95.5/845.18 | 156.3/1383.26 |
| Air consumption | m ³ /min/cfm | 3.7/130.66 | | | |
| Start torque | Nm/in.lbs | 114.6/1014.21 | 172/1522.2 | 191/1690.35 | 312.6/2766.51 |
| Stall torque | Nm/in.lbs | 114.6/1014.21 | 172/1522.2 | 191/1690.35 | 312.6/2766.51 |
| Hose I.D. supply air/exhaust air | mm/in. | 19/0.74 25/0.975 | | | |
| Weight RA/LA | kg/lbs | 9.6/21.12 | 9.6/21.12 | 9.6/21.12 | 9.6/21.12 |
| Exhaust air connection / supply air connection | | G1" / G1/2" | | | |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

Technical data turbine motor 1" output spindle with two mounting options – 3000 W

| Turbine motor | Type | 69TX-0300F0092RA | 69TX-0300F0062RA | 69TX-0300F0052RA | 69TX-0300F0032RA |
|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| right rotation | Part no. | 1342481D | 1342481E | 1342481F | 1342481G |
| Turbine motor | Type | 69TX-0300F0092LA | 69TX-0300F0062LA | 69TX-0300F0052LA | 69TX-0300F0032LA |
| left rotation | Part no. | 1342484D | 1342484E | 1342484F | 1342484G |
| ATEX specification | | C | C | C | C |
| Nominal power | W/HP | 3000/4 | | | |
| Speed (idling) | rpm | 925 | 615 | 525 | 325 |
| Nominal speed | rpm | 750 | 525 | 450 | 275 |
| Nominal torque | Nm/in.lbs | 38.2/338.07 | 57.3/507.11 | 63.7/563.75 | 104.2/922.17 |
| Air consumption | m ³ /min/cfm | 2.7/95.35 | | | |
| Start torque | Nm/in.lbs | 76.4/676.14 | 114.6/1014.21 | 127.4/1127.49 | 208.4/1844.34 |
| Stall torque | Nm/in.lbs | 76.4/676.14 | 114.6/1014.21 | 127.4/1127.49 | 208.4/1844.34 |
| Hose I.D. supply air/exhaust air | mm/in. | 16/0.62 23/0.897 | | | |
| Weight RA/LA | kg/lbs | 9.6/21.12 | 9.6/21.12 | 9.6/21.12 | 9.6/21.12 |
| Exhaust air connection / supply air connection | | G1" / G1/2" | | | |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

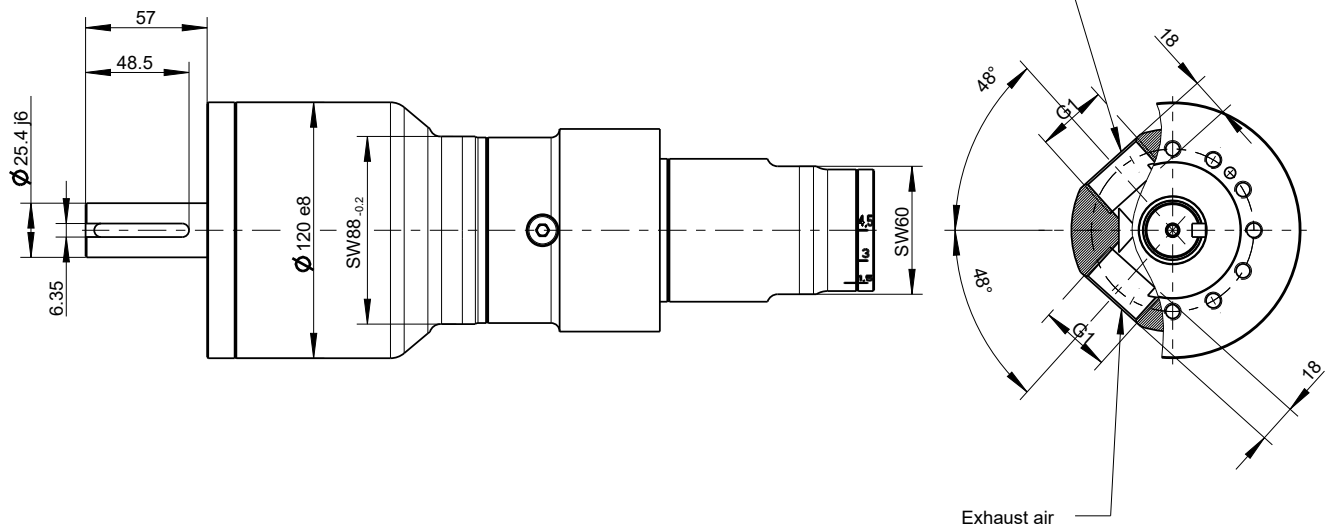
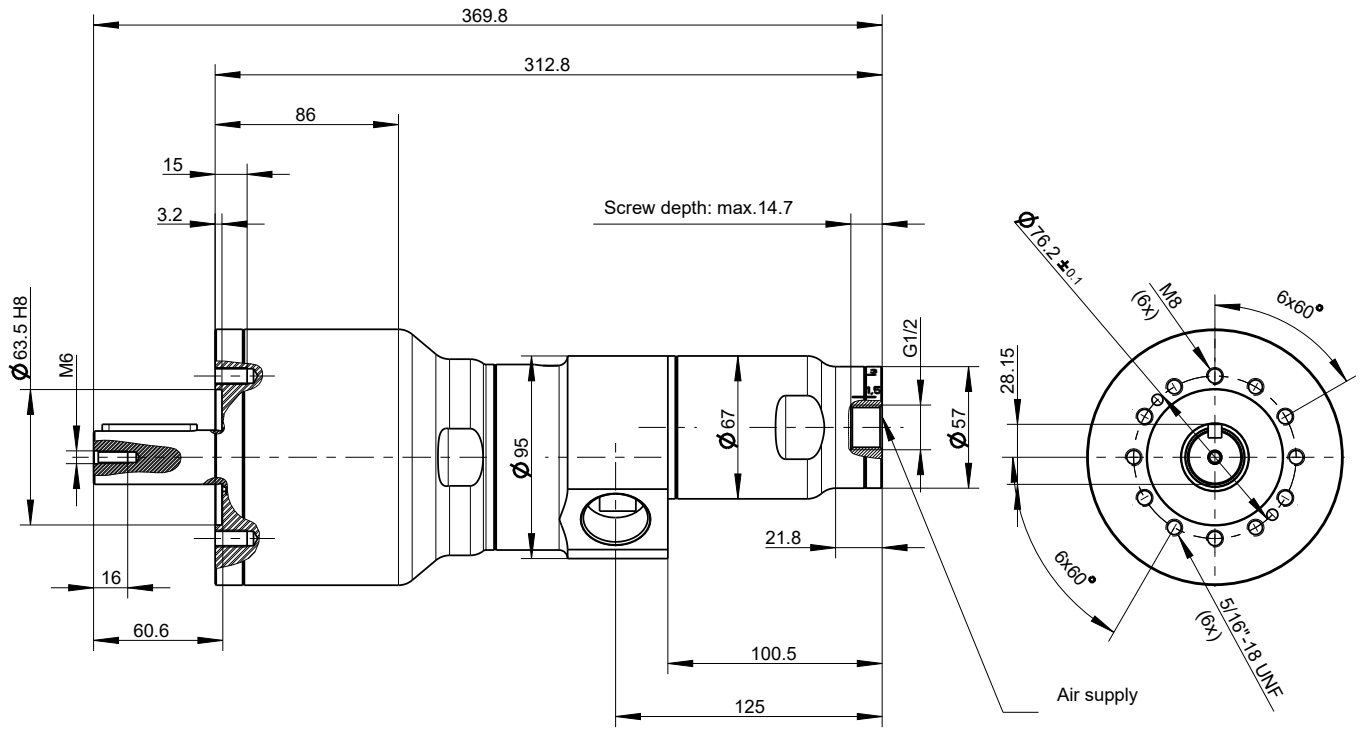
Technical data turbine motor 1" output spindle with two mounting options – 1500 W

| Turbine motor | Type | 69TX-0150F0092RA | 69TX-0150F0062RA | 69TX-0150F0052RA | 69TX-0150F0032RA |
|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| right rotation | Part no. | 1342482D | 1342482E | 1342482F | 1342482G |
| Turbine motor | Type | 69TX-0150F0092LA | 69TX-0150F0062LA | 69TX-0150F0052LA | 69TX-0150F0032LA |
| left rotation | Part no. | 1342485D | 1342485E | 1342485F | 1342485G |
| ATEX specification | | C | C | C | C |
| Nominal power | W/HP | 1500/2 | | | |
| Speed (idling) | rpm | 925 | 615 | 525 | 325 |
| Nominal speed | rpm | 750 | 525 | 450 | 275 |
| Nominal torque | Nm/in.lbs | 19.1/169.04 | 28.7/254 | 31.8/281.43 | 52.1/461.09 |
| Air consumption | m ³ /min/cfm | 1.9/67.1 | | | |
| Start torque | Nm/in.lbs | 38.2/338.07 | 57.4/508 | 63.6/562.86 | 104.2/922.17 |
| Stall torque | Nm/in.lbs | 38.2/338.07 | 57.4/508 | 63.6/562.86 | 104.2/922.17 |
| Hose I.D. supply air/exhaust air | mm/in. | 13/0.51 21/0.819 | | | |
| Weight RA/LA | kg/lbs | 9.6/21.12 | 9.6/21.12 | 9.6/21.12 | 9.6/21.12 |
| Exhaust air connection / supply air connection | | G1" / G1/2" | | | |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

| Optional equipment | suitable for | 4500 W | 3000 W | 1500 W |
|-----------------------------|---------------------|--|---------------|---------------|
| Flange | | Customised flange connections on request | | |
| Silencer set ATEX-compliant | Part no. | 139066C (hose length 2 mtr.) | | |

| Noise level data | | 4500 W | 3000 W | 1500 W |
|--|--------------|--|---------------|---------------|
| Noise level LpA according to DIN EN ISO 15744 | dB(A) | without silencer at idle speed: 89.7 / without silencer under load: 96.3 with silencer at idle speed: 75.1 / with silencer under load: 83.9 | | |
| Noise power level LwA according to DIN EN ISO 15744 | dB(A) | without silencer at idle speed: 100.7 / without silencer under load: 107.3 with silencer at idle speed: 86.1 / with silencer under load: 94.9 | | |



Dimensions in mm

p199823

Technical data turbine motor 1" output spindle with two mounting options – 4500 W

| | | |
|--|-------------------------|-------------------------|
| Turbine motor | Type | 69TX-0450F0015RA |
| right rotation | Part no. | 134248H |
| Turbine motor | Type | 69TX-0450F0015LA |
| left rotation | Part no. | 1342483H |
| ATEX specification | | C |
| Nominal power | W/HP | 4500/6 |
| Speed (idling) | rpm | 155 |
| Nominal speed | rpm | 125 |
| Nominal torque | Nm/in.lbs | 343.8/3042.6 |
| Air consumption | m ³ /min/cfm | 3.7/130.66 |
| Start torque | Nm/in.lbs | 687.6/6085.3 |
| Stall torque | Nm/in.lbs | 687.6/6085.3 |
| Hose I.D. supply air/exhaust air | mm/in. | 19/0.74 25/0.975 |
| Weight RA/LA | kg/lbs | 15.2/33.44 |
| Exhaust air connection / supply air connection | | G1" / G1/2" |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

Technical data turbine motor 1" output spindle with two mounting options – 3000 W

| | | |
|--|-------------------------|-------------------------|
| Turbine motor | Type | 69TX-0300F0015RA |
| right rotation | Part no. | 1342481H |
| Turbine motor | Type | 69TX-0300F0015LA |
| left rotation | Part no. | 1342484H |
| ATEX specification | | C |
| Nominal power | W/HP | 3000/4 |
| Speed (idling) | rpm | 155 |
| Nominal speed | rpm | 125 |
| Nominal torque | Nm/in.lbs | 229.2/2028.42 |
| Air consumption | m ³ /min/cfm | 2.7/95.35 |
| Start torque | Nm/in.lbs | 458.4/4056.8 |
| Stall torque | Nm/in.lbs | 458.4/4056.8 |
| Hose I.D. supply air/exhaust air | mm/in. | 16/0.62 23/0.897 |
| Weight RA/LA | kg/lbs | 15.2/33.44 |
| Exhaust air connection / supply air connection | | G1" / G1/2" |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

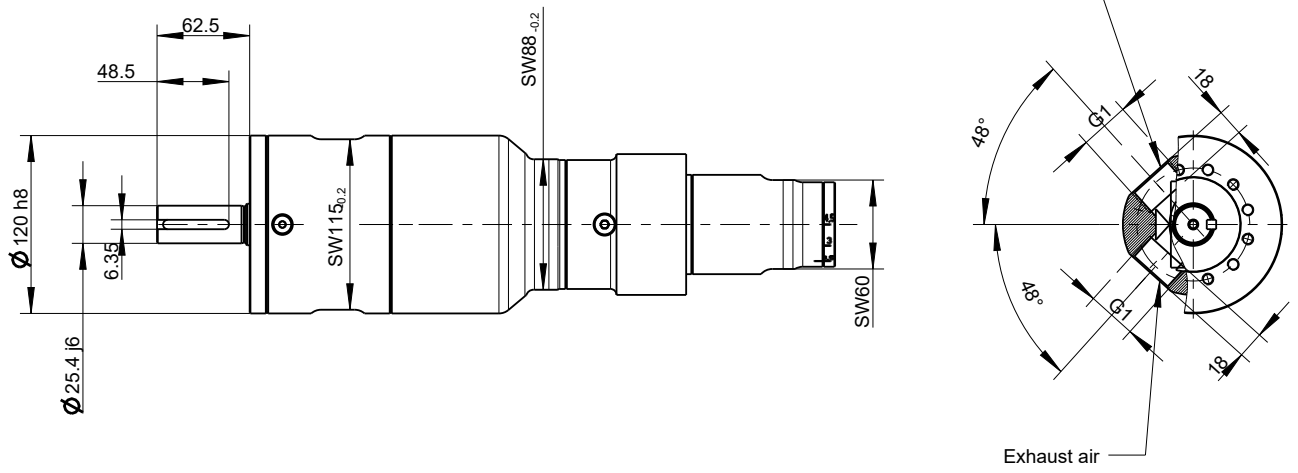
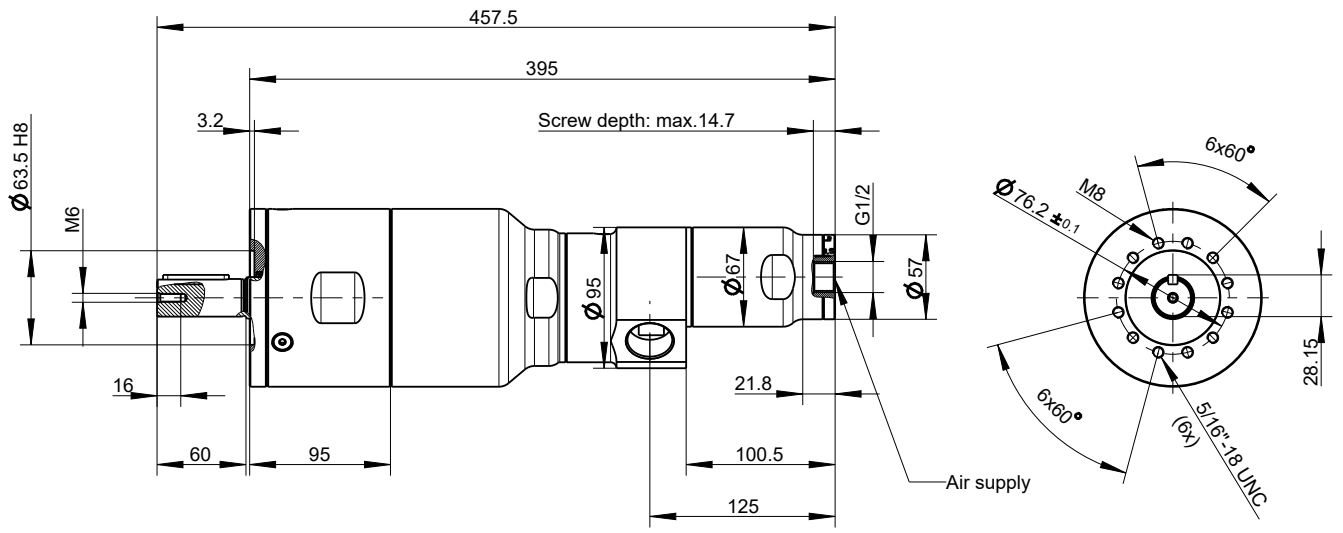
Technical data turbine motor 1" output spindle with two mounting options– 1500 W

| | | | |
|--|-------------------------|-------------------------|-------------------------|
| Turbine motor | Type | 69TX-0150F0015RA | 69TX-0150F0008RA |
| right rotation | Part no. | 1342482H | 1342482I |
| Turbine motor | Type | 69TX-0150F0015LA | 69TX-0150F0008LA |
| left rotation | Part no. | 1342485H | 1342485I |
| ATEX specification | | C | C |
| Nominal power | W/HP | | 1500/2 |
| Speed (idling) | rpm | 155 | 80 |
| Nominal speed | rpm | 125 | 70 |
| Nominal torque | Nm/in.lbs | 114.6/1014.21 | 204.6/1810.71 |
| Air consumption | m ³ /min/cfm | | 1.9/67.1 |
| Start torque | Nm/in.lbs | 229.2/2028.42 | 409.2/3621.42 |
| Stall torque | Nm/in.lbs | 229.2/2028.42 | 409.2/3621.42 |
| Hose I.D. supply air/exhaust air | mm/in. | | 13/0.51 21/0.819 |
| Weight RA/LA | kg/lbs | 15.2/33.44 | 15.2/33.44 |
| Exhaust air connection / supply air connection | | | G1" / G1/2" |

Performance data relate to an operating pressure of 6.3 bar (90PSI) and unlubricated supply air. **Only operate your turbine unlubricated!**

| Optional equipment | suitable for | 4500 W | 3000 W | 1500 W |
|-----------------------------|--------------|--|--------|--------|
| Flange | | Customised flange connections on request | | |
| Silencer set ATEX-compliant | Part no. | 139066C (hose length 2 mtr.) | | |

| Noise level data | | 4500 W | 3000 W | 1500 W |
|--|--------------|--|--------|--------|
| Noise level LpA according to DIN EN ISO 15744 | dB(A) | without silencer at idle speed: 89.7 / without silencer under load: 96.3 with silencer at idle speed: 75.1 / with silencer under load: 83.9 | | |
| Noise power level LwA according to DIN EN ISO 15744 | dB(A) | without silencer at idle speed: 100.7 / without silencer under load: 107.3 with silencer at idle speed: 86.1 / with silencer under load: 94.9 | | |



Dimensions in mm

p199824

What you need to consider when using your turbine!

1. Only operate your turbine unlubricated!

2. The compressed air quality according to ISO 8573-1:

| | Class | Residual Oil Content | Residual Dust | | Residual Water | |
|------------------|-------|----------------------|---------------|-------------------|----------------|------------------|
| | | mg/m ³ | µm | mg/m ³ | DTP °C | g/m ³ |
| Unlubricated Air | 3 | 1 | 5 | 5 | -20 | 0,88 |

To ensure efficient and smooth use, we recommend drying or heating the supply air. This prevents ice formation during continuous operation.

3. Effect of the housing:

When installing in a housing, it is particularly important to ensure that there are no further throttle points. Any restriction will reduce the power of your turbine.

Please note the following exhaust air cross-sections:

| | 4500 W | 3000 W | 1500 W |
|---|---------------------|---------------------|---------------------|
| Exhaust air cross-section per exhaust air opening | 491 mm ² | 414 mm ² | 336 mm ² |

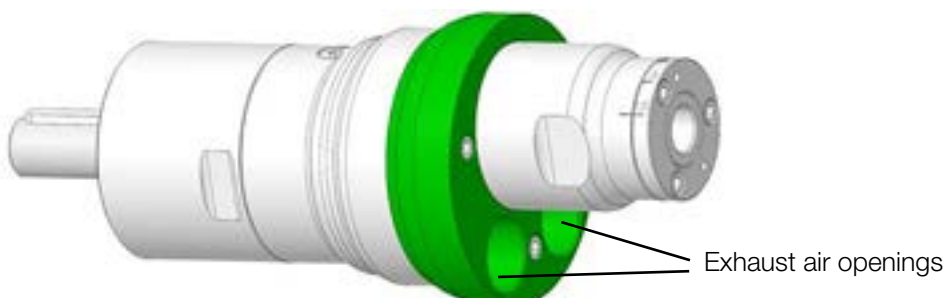
Please select a more powerful turbine, if the exhaust air cross-section is not compatible with your design.

On request, we can also offer our turbine motors as an installation solution with various exhaust air variants:

- Standard exhaust air discharge: radial
- Optional exhaust air discharge: axial via sieve holder



- Optional exhaust air discharge: axial with connection adapter 2xG1"



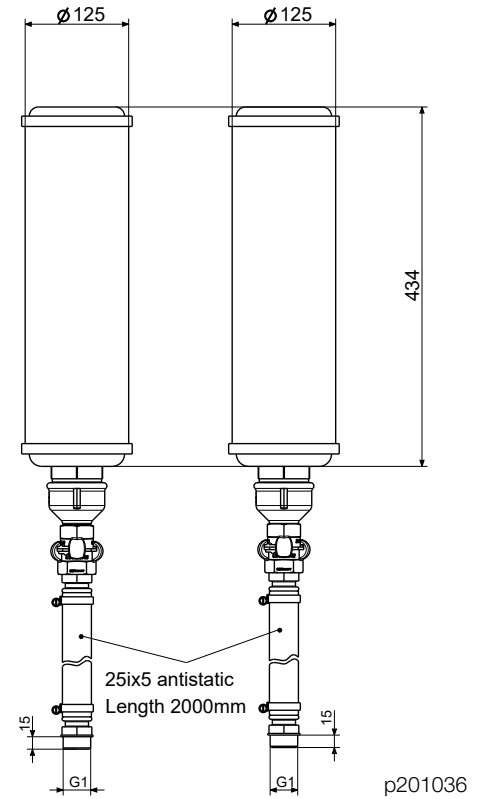
4. Influence (effect) of silencer:

Any reduction in the opening cross-section, even to the exhaust air, has a throttling effect on the power and speed of your turbine. Therefore, when fitting additional silencers and connection pieces, ensure that the opening cross-section is sufficient.

The performance data in the catalog are based on the optionally available silencer set 139066C.

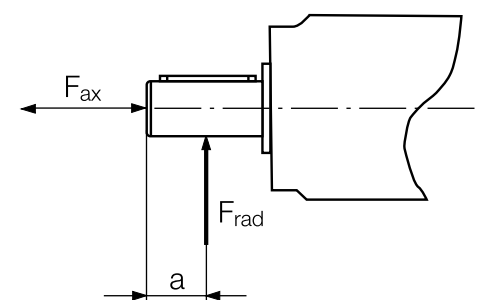
Silencer Set to reduce the noise level

| | |
|----------------------|---|
| Material no. 139066C | hose length 2 metres ATEX-compliant 25x5 antistatic |
|----------------------|---|



Maximum allowable shaft load of the drive shaft

| Power (W) | Material number | Fax (N) | Frad (N) | a (mm) |
|-----------|--|---------|----------|--------|
| 4500 | 133848A, 1338483A, 134248A, 1342483A | 1580 | 4900 | 24 |
| | 133848B/C, 1338483B/C, 134248B/C, 1342483B/C | 1410 | 4900 | 24 |
| | 133848D/E/F/G, 1338483D/E/F/G, 134248D/E/F/G, 1342483D/E/F/G | 3300 | 4900 | 24 |
| | 133848H, 1338483H, 134248H, 1342483H | 4980 | 5850 | 26.5 |
| 3000 | 1338481A, 1338484A, 1342481A, 1342484A | 1580 | 4900 | 24 |
| | 1338481B/C, 1338484B/C, 1342481B/C, 1342484B/C | 1410 | 4900 | 24 |
| | 1338481D/E/F/G, 1338484D/E/F/G, 1342481D/E/F/G, 1342484D/E/F/G | 3300 | 4900 | 24 |
| | 1338481H, 1338484H, 1342481H, 1342484H | 4980 | 5850 | 26.5 |
| 1500 | 1338482A, 1338485A, 1342482A, 1342485A | 1580 | 4900 | 24 |
| | 1338482B/C, 1338485B/C, 1342482B/C, 1342485B/C | 1410 | 4900 | 24 |
| | 1338482D/E/F/G, 1338485D/E/F/G, 1342482D/E/F/G, 1342485D/E/F/G | 3300 | 4900 | 24 |
| | 1338482H/I, 1338485H/I, 1342482H/I, 1342485H/I | 4980 | 5850 | 26.5 |



Application Examples

Starter motors:

In their function as starter motors, turbines are used as drives to start other drive systems with the help of compressed air.

Pneumatic turbines are primarily used when electric motors reach their limits. For example, in explosion-protected areas where the EC motor represents too great a risk due to sparking. Compressed air starters, on the other hand, can be used without any risk.

The advantages of DEPRAG turbines are obvious: high performance in the smallest possible installation space! Turbines are unbeatable in their efficiency compared to other compressed air drives. The right combination of power and speed results in an extremely efficient drive.

- 3 power levels (1.5 kW - 4.5 kW)
- Constant speed under load thanks to the integrated speed controller
- Protection class IP68 and ATEX certified

Drilling application:

DEPRAG turbines also offer a powerful and reliable drive solution for drilling applications. They are ideal for use in confined spaces, such as in drilling units, due to their power-to-weight ratio.

Turbines deliver three times the power compared to an EC drive of the same size. The required drive power can be realised with a turbine 1/3 to 1/5 lighter and more space-saving.

Thanks to their fast response time, turbines can speed up and slow down quickly. This is another significant advantage when precise control over the drilling process is essential, as is the case in aircraft construction and the automotive industry, for example. There, turbines are also a perfect solution for use with lightweight materials and for fast cycle times.

Due to their simple design, turbines are insensitive to dirt and moisture, they do not require oil and, compared to vane motors, there are no wear parts such as vanes. This makes them durable and reliable companions. In addition, turbines can be loaded to a standstill without damage, which would lead to unacceptable overheating in an electric motor.

Select Your Turbine

Discover our turbine motors, which are customised for your specific application. We offer solutions that go far beyond our standard range. For this we need some technical information. Please use the enquiry form below and send it to: airmotors@deprag.de. Alternatively, you can find the [enquiry form](#) on our website.

| | |
|--|--|
| Application (i.e. for use in power tools or to recover energy) | |
| Medium* (type of gas, fluids) | |
| Inlet pressure* | |
| Outlet pressure* | |
| Inlet or outlet temperature* | |
| Mass flow* | |
| Power | |
| Speed | |
| Turn direction (as seen from the air-inlet side) | left / right |
| Non-Stop operation (24 hours non-stop) | yes / no |
| Duty cycle in hours per day | |
| Days per year | |
| Cycle time (s) | |
| Material request | Standard steel / Plastics / Stainless / Ceramics / Aluminum / others |
| Material request other | |
| Mounting preference | Bracket / Flange / others |
| Mounting preference other | |
| Dimensional preference | |
| Required quantity | |
| Target price | |
| Personal Data: | |
| Name* | |
| Company* | |
| City, Street, Number | |
| Country* | |
| Phone | |
| E-Mail* | |

* Fields marked with * are obligatory

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