



## **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.

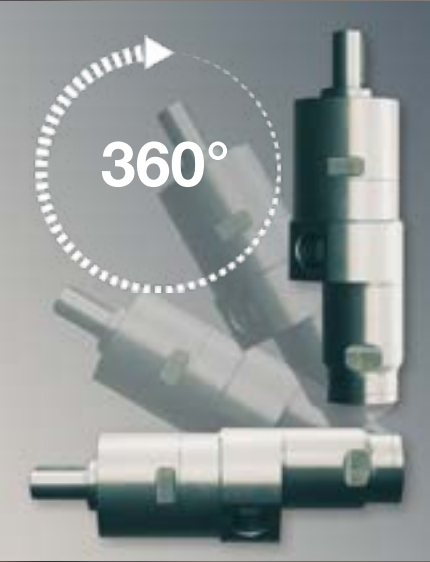
Each drive is available in a right or left rotation version.

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**

<b>C =</b>	CE	 II 2G Ex h IIC T4 Gb X
		 II 2D Ex h IIIC T130 °C Db X
<b>D =</b>	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**

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0450F0340R</b>	<b>69TX-0450F0157R</b>	<b>69TX-0450F0119R</b>
right rotation	Part no.	133848A	133848B	133848C
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0450F0340L</b>	<b>69TX-0450F0157L</b>	<b>69TX-0450F0119L</b>
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 <sup>3</sup> /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**

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0300F0340R</b>	<b>69TX-0300F0157R</b>	<b>69TX-0300F0119R</b>
right rotation	Part no.	1338481A	1338481B	1338481C
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0300F0340L</b>	<b>69TX-0300F0157L</b>	<b>69TX-0300F0119L</b>
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 <sup>3</sup> /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!**

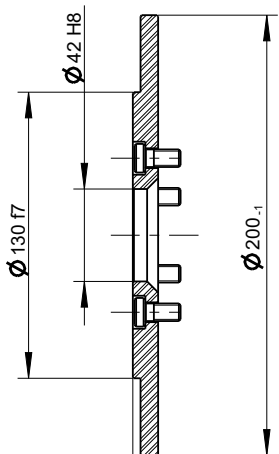
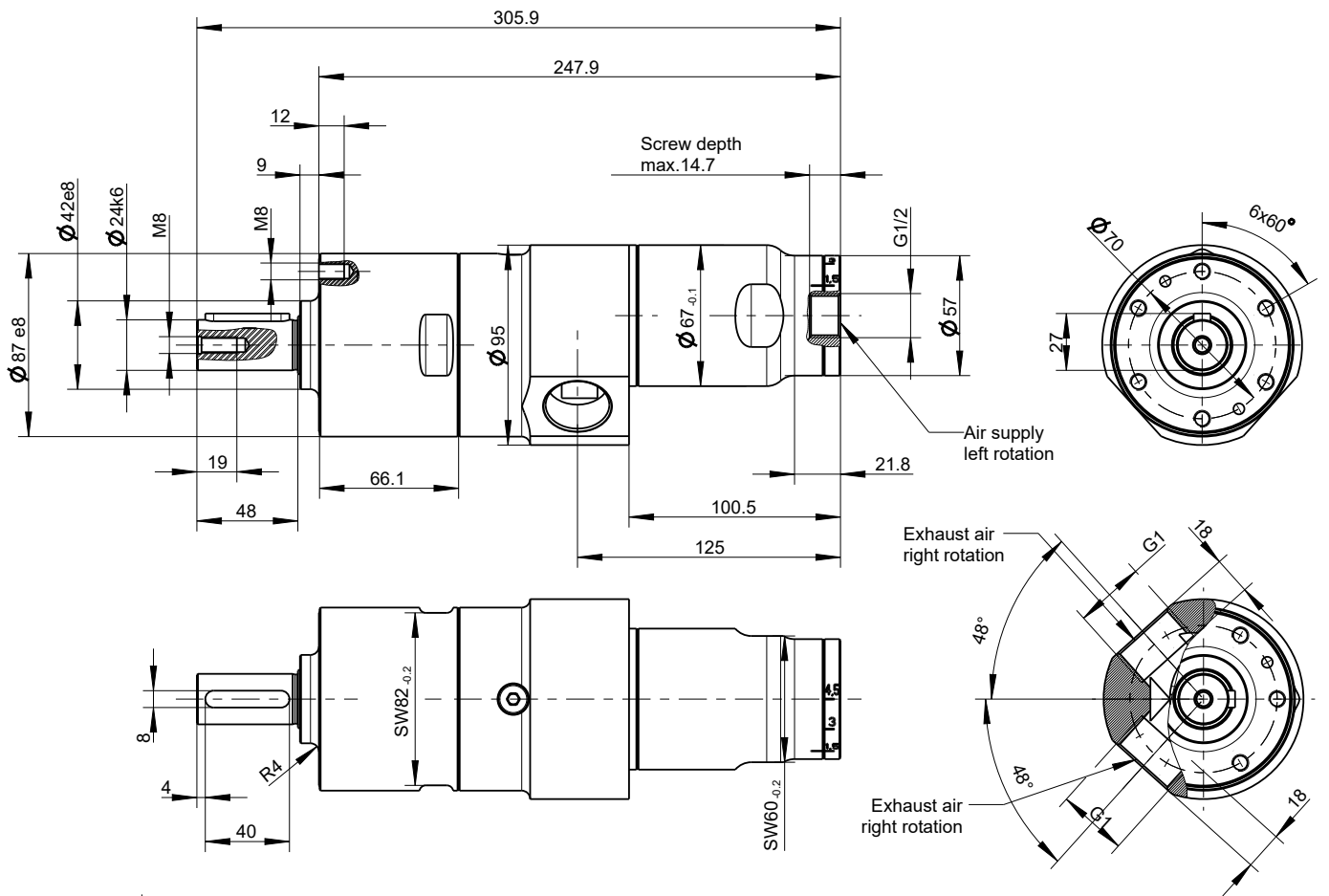
**Technical data turbine motor IEC90/100 flange design – 1500 W**

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0150F0340R</b>	<b>69TX-0150F0157R</b>	<b>69TX-0150F0119R</b>
right rotation	Part no.	1338482A	1338482B	1338482C
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0150F0340L</b>	<b>69TX-0150F0157L</b>	<b>69TX-0150F0119L</b>
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 <sup>3</sup> /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!**

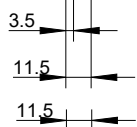
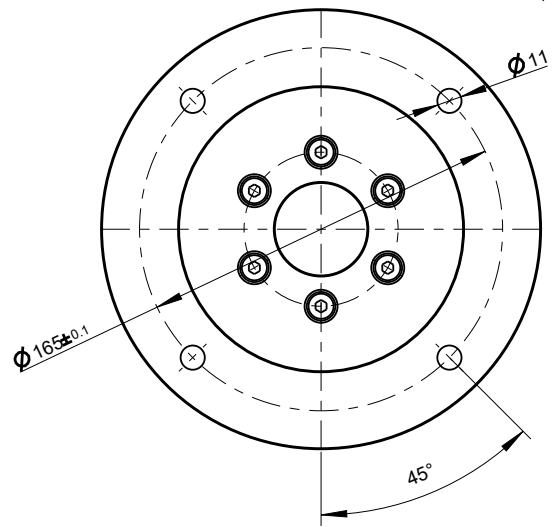
<b>Optional equipment</b>	<b>suitable for</b>	<b>4500 W</b>	<b>3000 W</b>	<b>1500 W</b>
Bracket	Part no.	160287	160287	160287
IEC90 flange	Part no.	189618	189618	189618
Silencer set ATEX-compliant	Part no.		139066C (hose length 2 mtr.)	

<b>Noise level data</b>		<b>4500 W</b>	<b>3000 W</b>	<b>1500 W</b>
<b>Noise level LpA according to DIN EN ISO 15744</b>	<b>dB(A)</b>	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		
<b>Noise power level LwA according to DIN EN ISO 15744</b>	<b>dB(A)</b>	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		

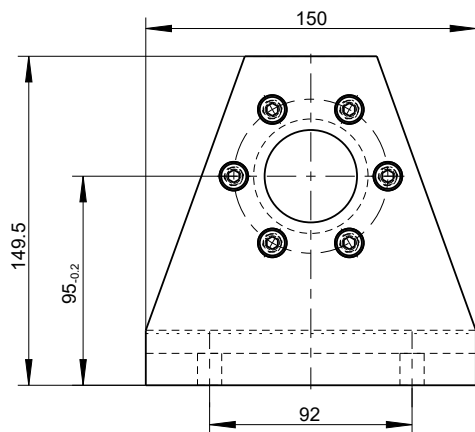
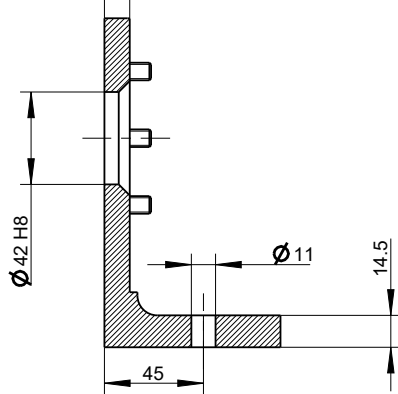


Optional equipment

IEC90-flange incl. mounting screws 189618



Bracket incl. mounting screws 160287



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

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0450F0092R</b>	<b>69TX-0450F0062R</b>	<b>69TX-0450F0052R</b>	<b>69TX-0450F0032R</b>
right rotation	Part no.	133848D	133848E	133848F	133848G
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0450F0092L</b>	<b>69TX-0450F0062L</b>	<b>69TX-0450F0052L</b>	<b>69TX-0450F0032L</b>
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**

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0300F0092R</b>	<b>69TX-0300F0062R</b>	<b>69TX-0300F0052R</b>	<b>69TX-0300F0032R</b>
right rotation	Part no.	1338481D	1338481E	1338481F	1338481G
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0300F0092L</b>	<b>69TX-0300F0062L</b>	<b>69TX-0300F0052L</b>	<b>69TX-0300F0032L</b>
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!**

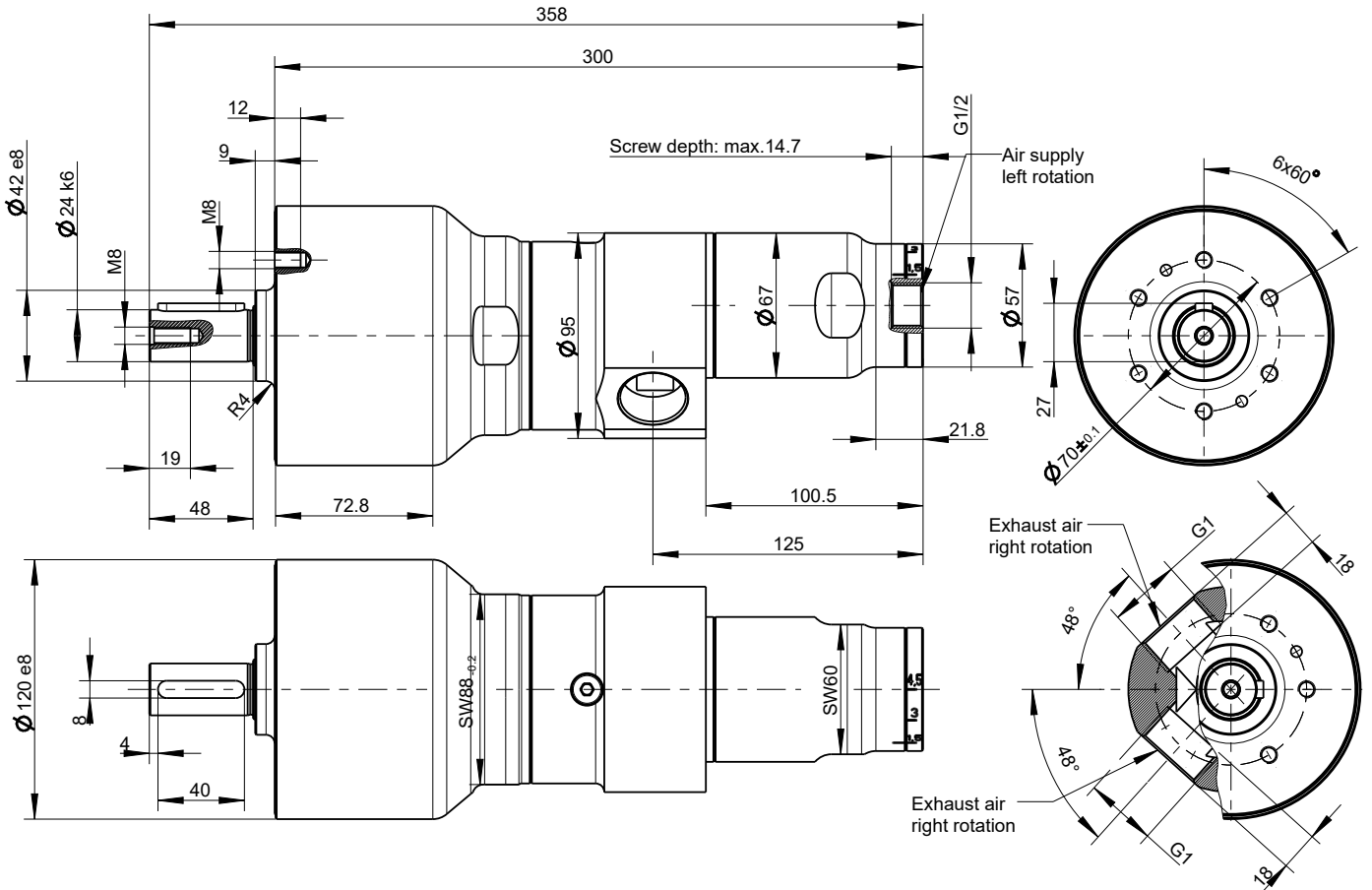
**Technical data turbine motor IEC90/100 flange design – 1500 W**

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0150F0092R</b>	<b>69TX-0150F0062R</b>	<b>69TX-0150F0052R</b>	<b>69TX-0150F0032R</b>
right rotation	Part no.	1338482D	1338482E	1338482F	1338482G
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0150F0092L</b>	<b>69TX-0150F0062L</b>	<b>69TX-0150F0052L</b>	<b>69TX-0150F0032L</b>
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!**

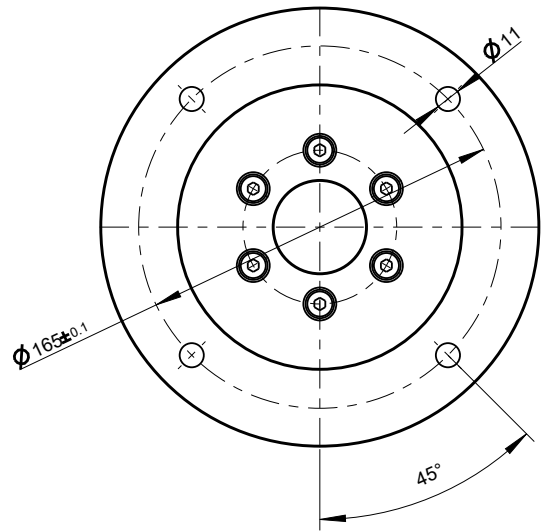
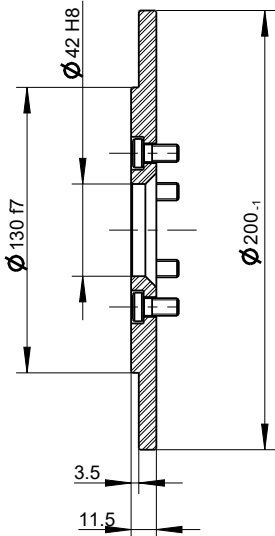
<b>Optional equipment</b>	<b>suitable for</b>	<b>4500 W</b>	<b>3000 W</b>	<b>1500 W</b>
Bracket	Part no.	160287	160287	160287
IEC90 flange	Part no.	189618	189618	189618
Silencer set ATEX-compliant	Part no.	139066C (hose length 2 mtr.)		

<b>Noise level data</b>		<b>4500 W</b>	<b>3000 W</b>	<b>1500 W</b>
<b>Noise level LpA according to DIN EN ISO 15744</b>	<b>dB(A)</b>	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		
<b>Noise power level LwA according to DIN EN ISO 15744</b>	<b>dB(A)</b>	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		

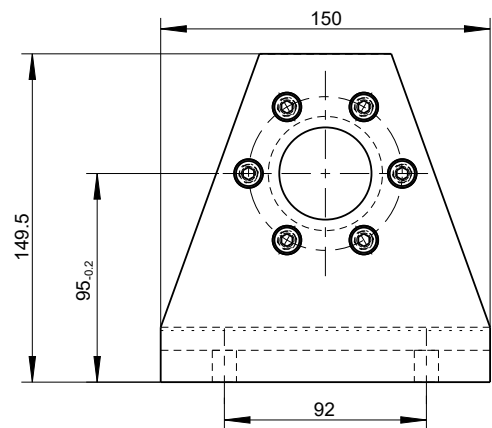
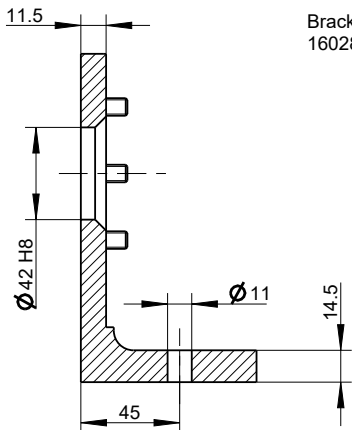


Optional equipment

IEC90-flange incl. mounting screws  
189618



Bracket incl. mounting screws  
160287





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

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0450F0015R</b>
right rotation	Part no.	133848H
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0450F0015L</b>
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

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0300F0015R</b>
right rotation	Part no.	1338481H
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0300F0015L</b>
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

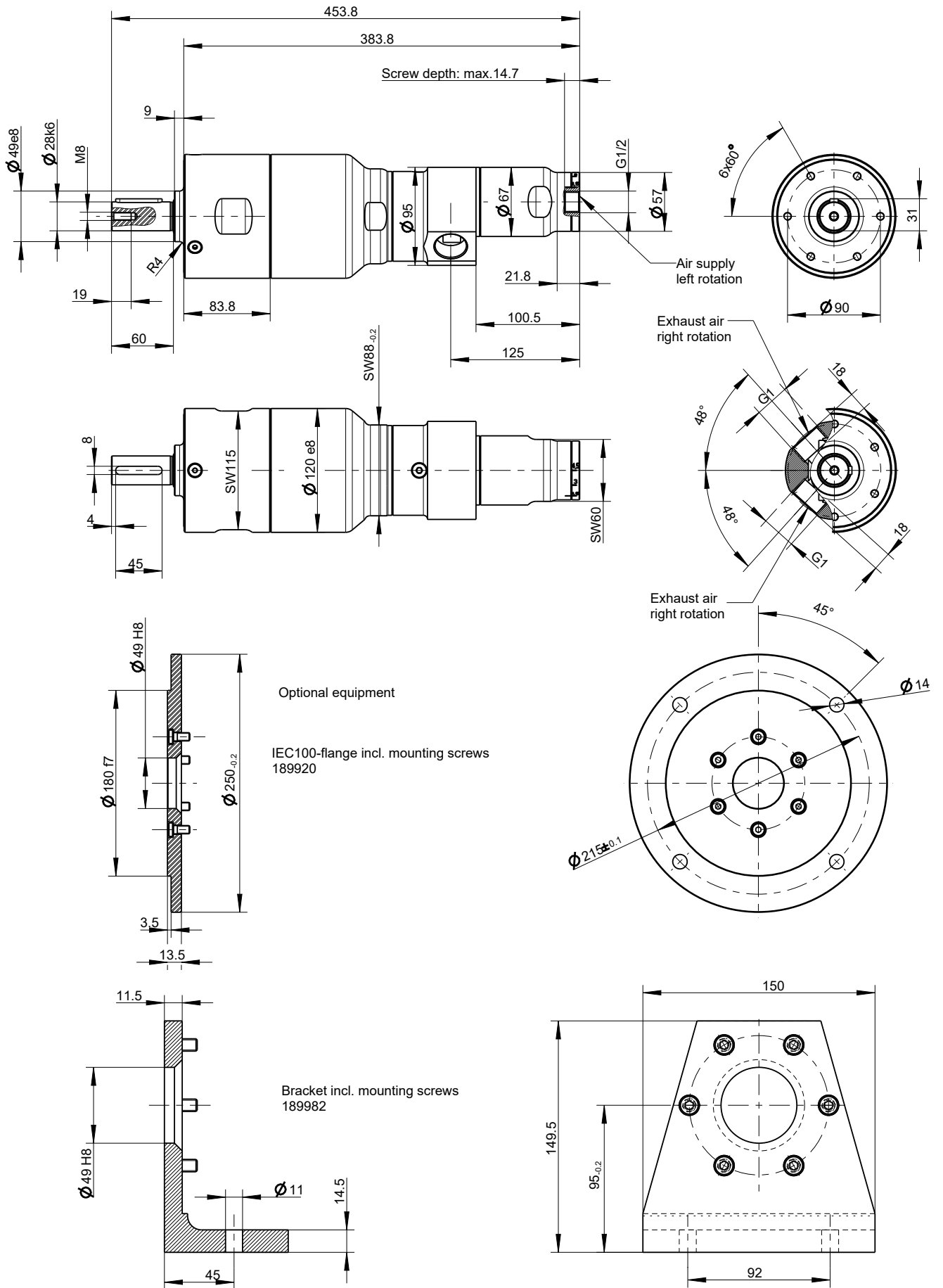
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0150F0015R</b>	<b>69TX-0150F0008R</b>
right rotation	Part no.	1338482H	1338482I
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0150F0015L</b>	<b>69TX-0150F0008L</b>
left rotation	Part no.	1338485H	1338485I
ATEX specification		C	C
Nominal power	W/HP		1500/2
Speed (idling)	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
<b>Noise level LpA according to DIN EN ISO 15744</b>	<b>dB(A)</b>	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		
<b>Noise power level LwA according to DIN EN ISO 15744</b>	<b>dB(A)</b>	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**

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0450F0340RA</b>	<b>69TX-0450F0157RA</b>	<b>69TX-0450F0119RA</b>
right rotation	Part no.	134248A	134248B	134248C
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0450F0340LA</b>	<b>69TX-0450F0157LA</b>	<b>69TX-0450F0119LA</b>
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**

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0300F0340RA</b>	<b>69TX-0300F0157RA</b>	<b>69TX-0300F0119RA</b>
right rotation	Part no.	1342481A	1342481B	1342481C
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0300F0340LA</b>	<b>69TX-0300F0157LA</b>	<b>69TX-0300F0119LA</b>
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!**

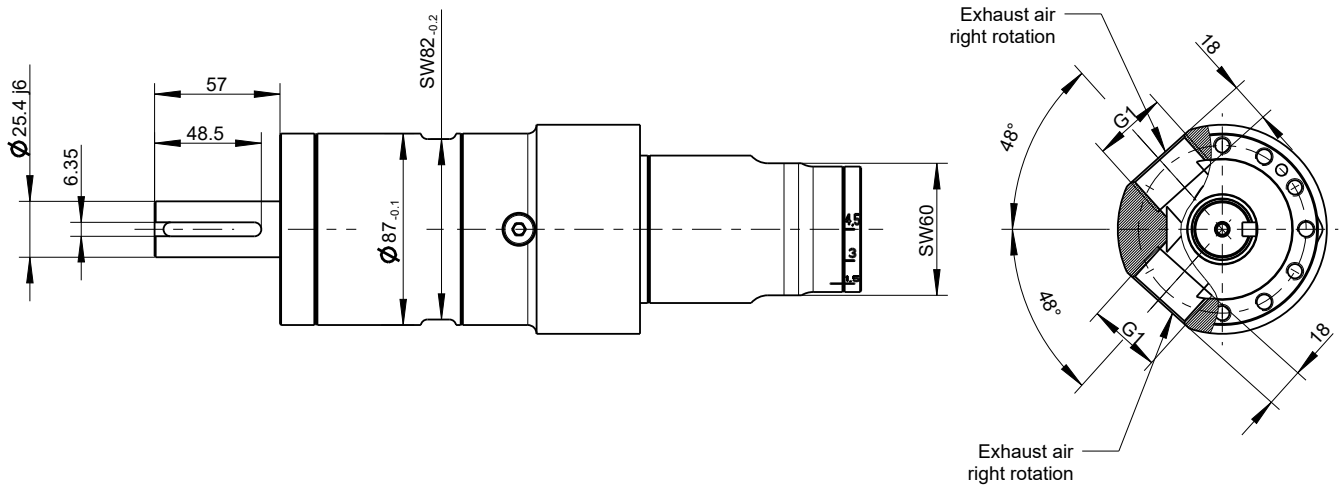
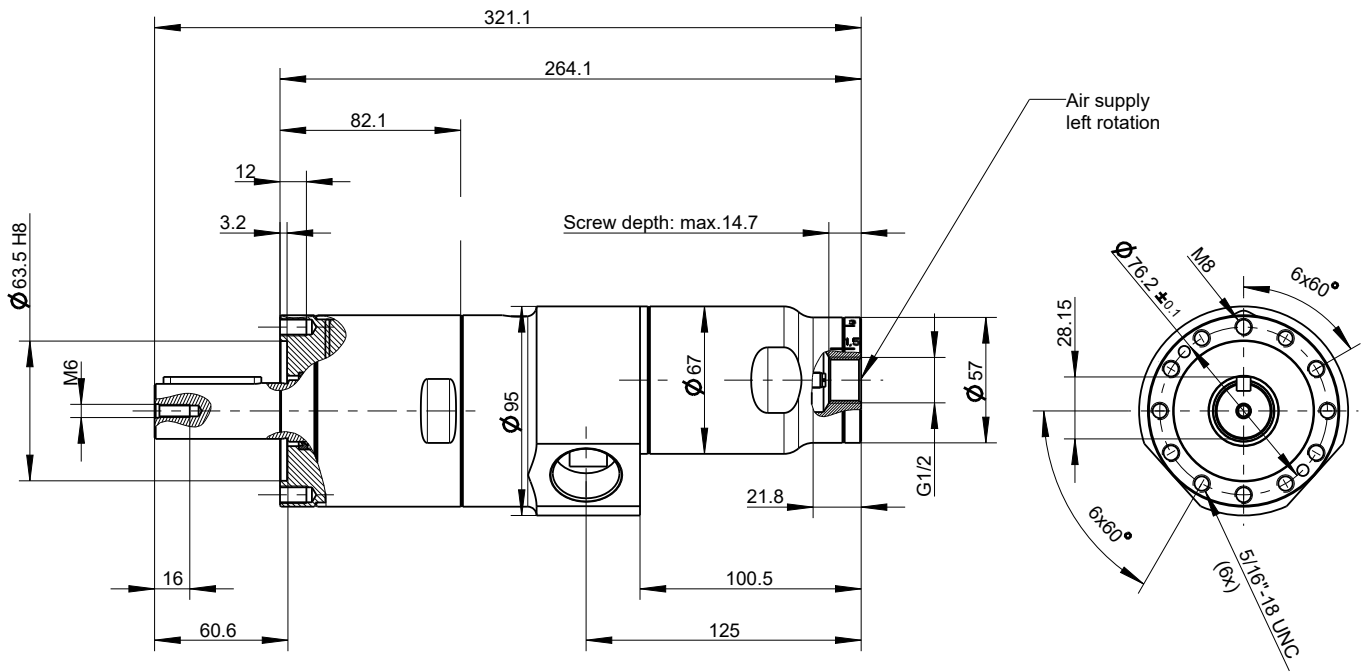
**Technical data turbine motor 1" output spindle with two mounting options – 1500 W**

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0150F0340RA</b>	<b>69TX-0150F0157RA</b>	<b>69TX-0150F0119RA</b>
right rotation	Part no.	1342482A	1342482B	1342482C
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0150F0340LA</b>	<b>69TX-0150F0157LA</b>	<b>69TX-0150F0119LA</b>
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!**

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

<b>Noise level data</b>		<b>4500 W</b>	<b>3000 W</b>	<b>1500 W</b>
<b>Noise level LpA according to DIN EN ISO 15744</b>	<b>dB(A)</b>	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		
<b>Noise power level LwA according to DIN EN ISO 15744</b>	<b>dB(A)</b>	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

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

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0450F0092RA</b>	<b>69TX-0450F0062RA</b>	<b>69TX-0450F0052RA</b>	<b>69TX-0450F0032RA</b>
right rotation	Part no.	134248D	134248E	134248F	134248G
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0450F0092LA</b>	<b>69TX-0450F0062LA</b>	<b>69TX-0450F0052LA</b>	<b>69TX-0450F0032LA</b>
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	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 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**

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0300F0092RA</b>	<b>69TX-0300F0062RA</b>	<b>69TX-0300F0052RA</b>	<b>69TX-0300F0032RA</b>
right rotation	Part no.	1342481D	1342481E	1342481F	1342481G
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0300F0092LA</b>	<b>69TX-0300F0062LA</b>	<b>69TX-0300F0052LA</b>	<b>69TX-0300F0032LA</b>
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	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 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!**

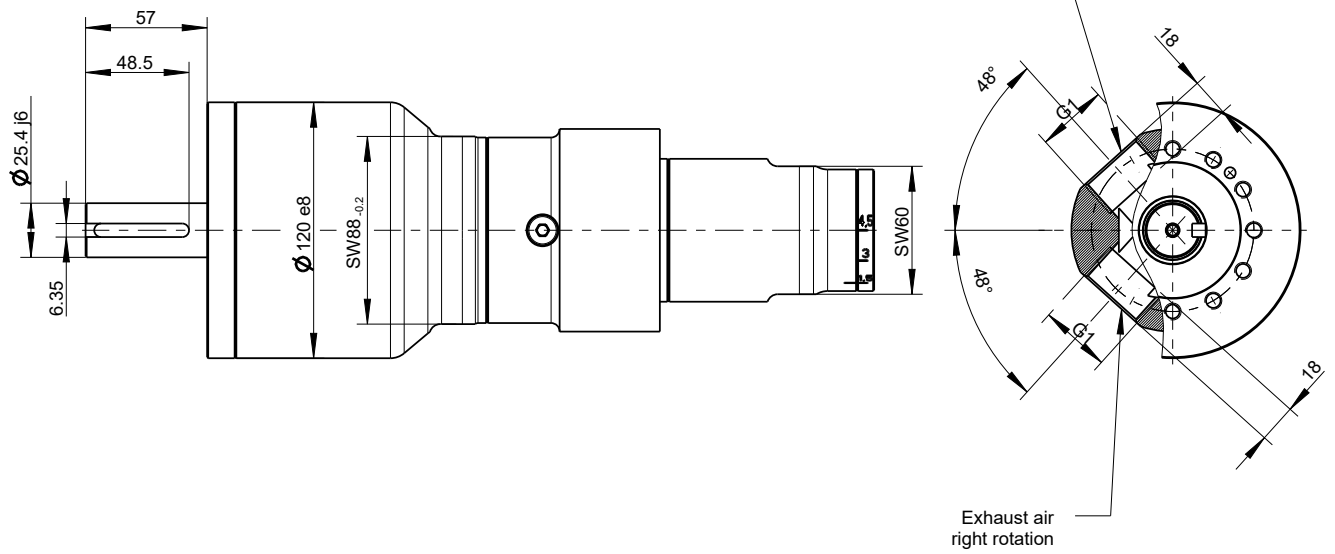
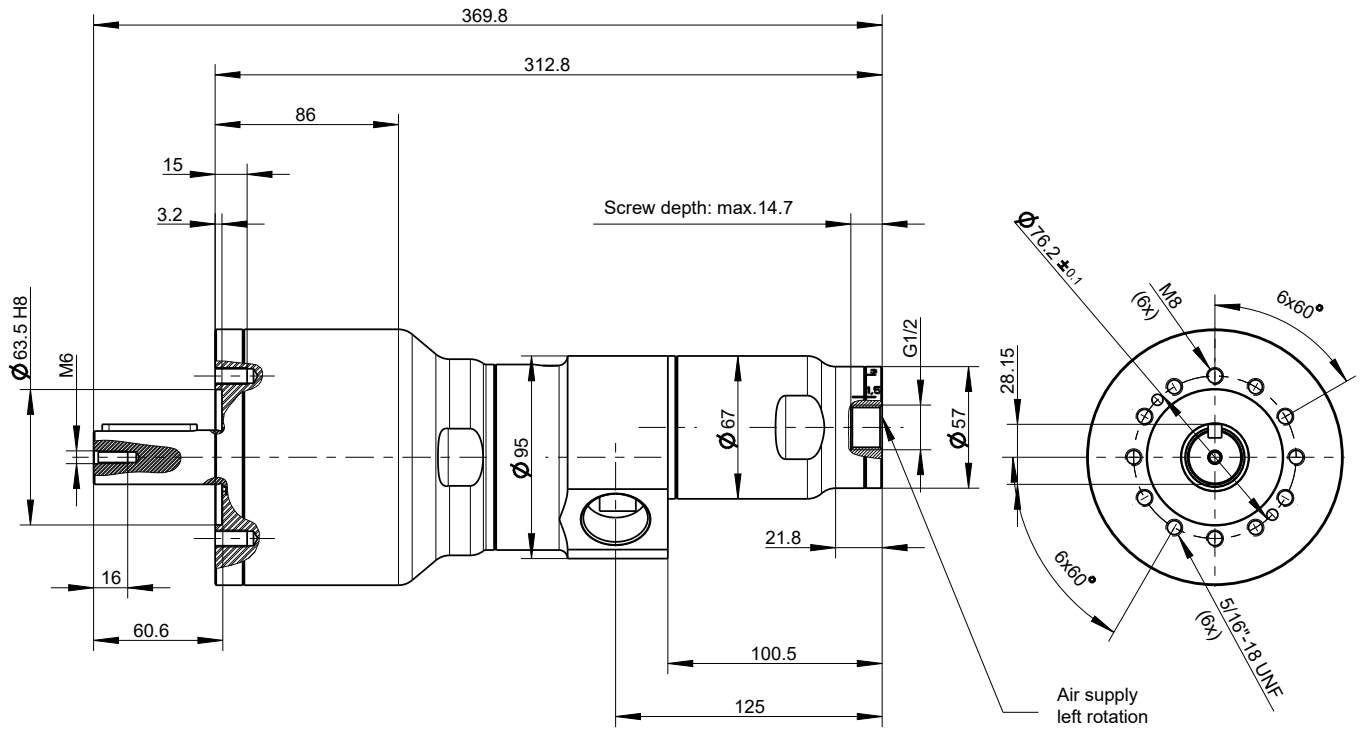
**Technical data turbine motor 1" output spindle with two mounting options – 1500 W**

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0150F0092RA</b>	<b>69TX-0150F0062RA</b>	<b>69TX-0150F0052RA</b>	<b>69TX-0150F0032RA</b>
right rotation	Part no.	1342482D	1342482E	1342482F	1342482G
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0150F0092LA</b>	<b>69TX-0150F0062LA</b>	<b>69TX-0150F0052LA</b>	<b>69TX-0150F0032LA</b>
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	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 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!**

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

<b>Noise level data</b>		<b>4500 W</b>	<b>3000 W</b>	<b>1500 W</b>
<b>Noise level LpA according to DIN EN ISO 15744</b>	<b>dB(A)</b>	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		
<b>Noise power level LwA according to DIN EN ISO 15744</b>	<b>dB(A)</b>	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

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

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0450F0015RA</b>
right rotation	Part no.	134248H
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0450F0015LA</b>
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 <sup>3</sup> /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**

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0300F0015RA</b>
right rotation	Part no.	1342481H
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0300F0015LA</b>
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 <sup>3</sup> /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!**

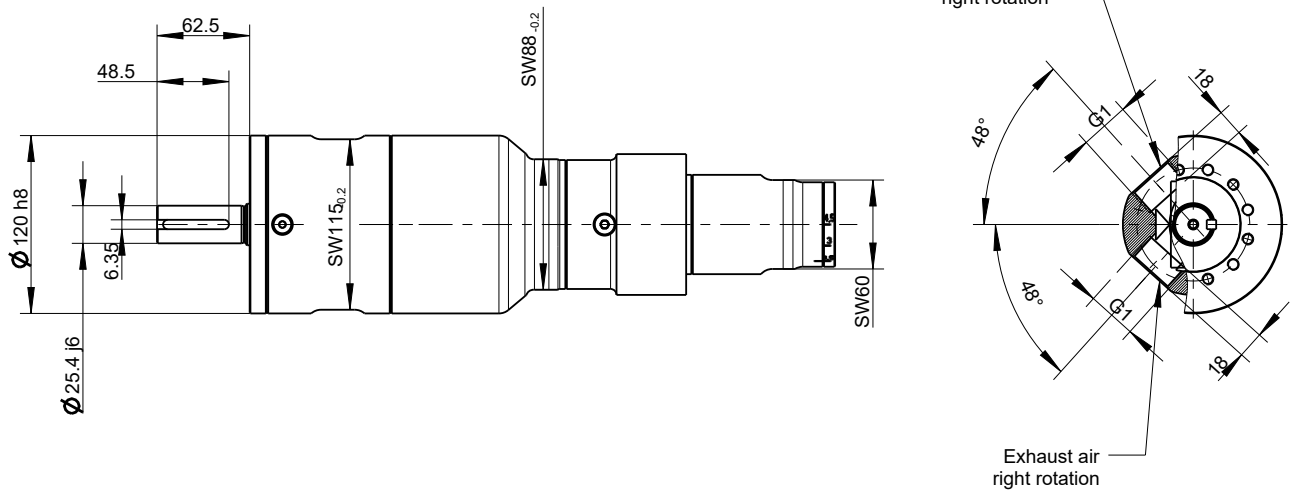
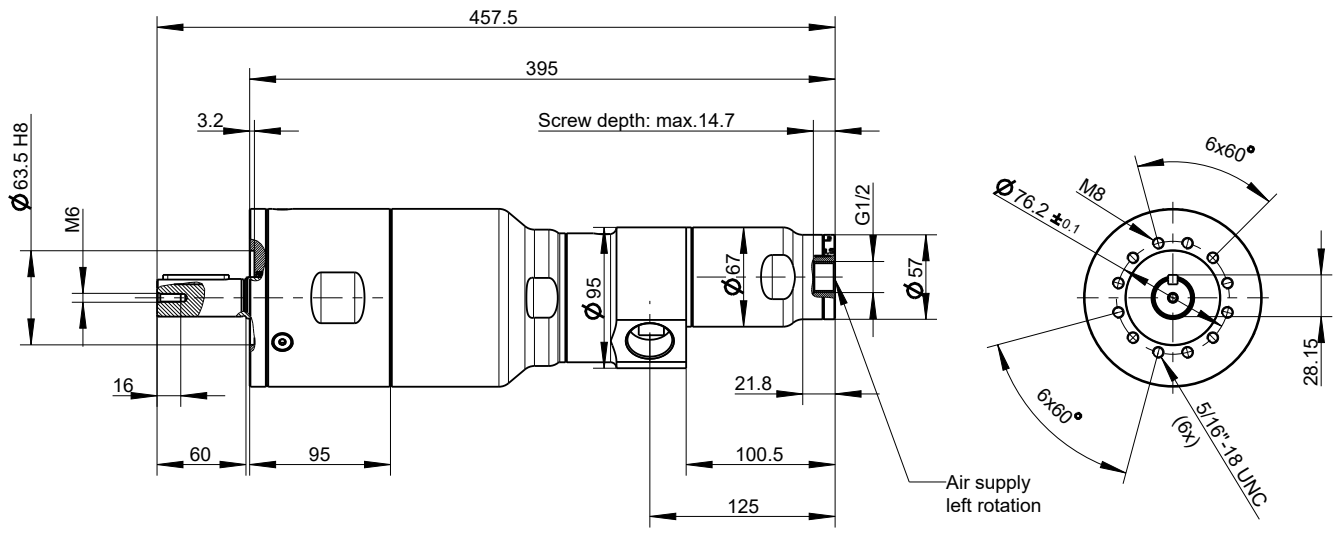
**Technical data turbine motor 1" output spindle with two mounting options– 1500 W**

<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0150F0015RA</b>	<b>69TX-0150F0008RA</b>
right rotation	Part no.	1342482H	1342482I
<b>Turbine motor</b>	<b>Type</b>	<b>69TX-0150F0015LA</b>	<b>69TX-0150F0008LA</b>
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 <sup>3</sup> /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
<b>Noise level LpA according to DIN EN ISO 15744</b>	<b>dB(A)</b>	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		
<b>Noise power level LwA according to DIN EN ISO 15744</b>	<b>dB(A)</b>	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 <sup>3</sup>	µm	mg/m <sup>3</sup>	DTP °C	g/m <sup>3</sup>
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 <sup>2</sup>	414 mm <sup>2</sup>	336 mm <sup>2</sup>

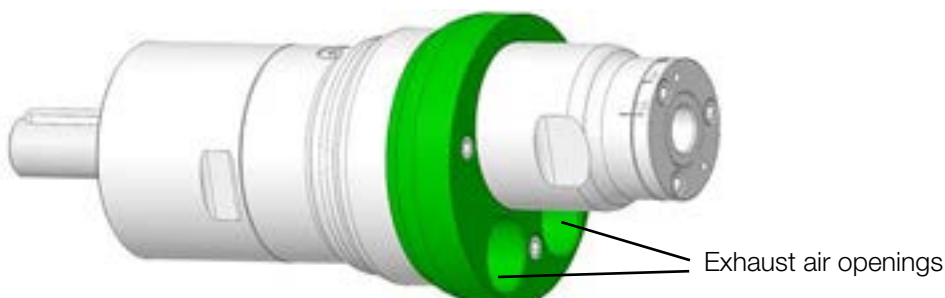
Please select a more powerful turbine, if the exhaust air cross-section is not compatible with your design.

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"



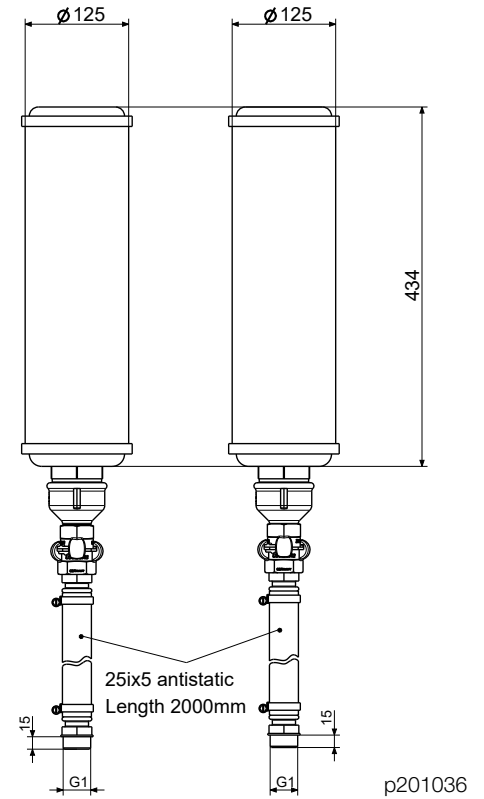
#### 4. Influence (effect) of silencer:

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.

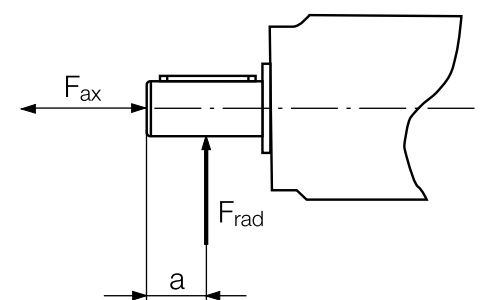
#### Silencer Set to reduce the noise level

Material no. 139066C	hose length 2 metres ATEX-compliant 25x5 antistatic
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### 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](mailto: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	
<b>Personal Data:</b>	
Name*	
Company*	
City, Street, Number	
Country*	
Phone	
E-Mail*	

\* Fields marked with \* are obligatory

# DEPRAG

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CERTIFIED AS PER DIN EN ISO 9001

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