



# ***LZB*** ***VANE MOTORS***



# LZB VANE MOTORS

## Introduction

LZB vane motors are designed to provide high performance and high standards of reliability. They are characterized by high power output and small physical size, Figure 12.



Figure 12

The design of the motor is long and slim. This gives a number of advantages, such as high power-to-volume ratio, low air consumption and long vane life. All motors utilize five vanes, which are supplied with vane air, to ensure excellent starting and low speed performance. Multi-step planetary gears are used to meet the torque and speed requirements of the application, offering high efficiency with compact dimensions.

### Shaft loading

The maximum allowable loads on a given motor's output shaft are illustrated in Figures 13, 14. The relevant load curve code for a motor is stated in the data tables for each specific motor designation, under the "Shaft load code" column. These values have been calculated for shaft and bearing working lives of 10 million turns. To achieve a working life of 100 million turns, the loading factor must be halved.

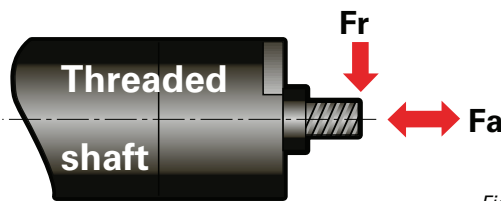


Figure 13

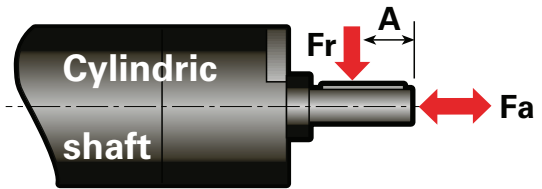
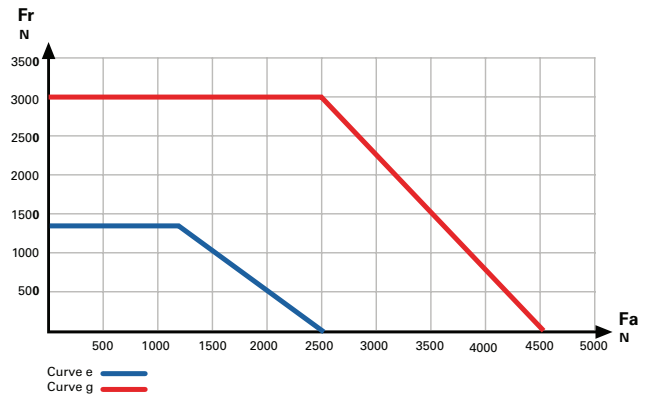
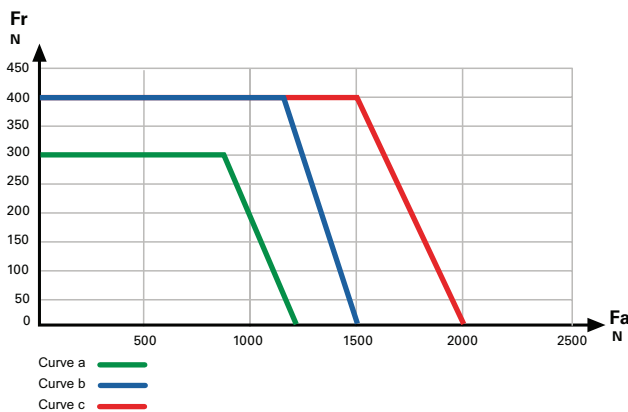
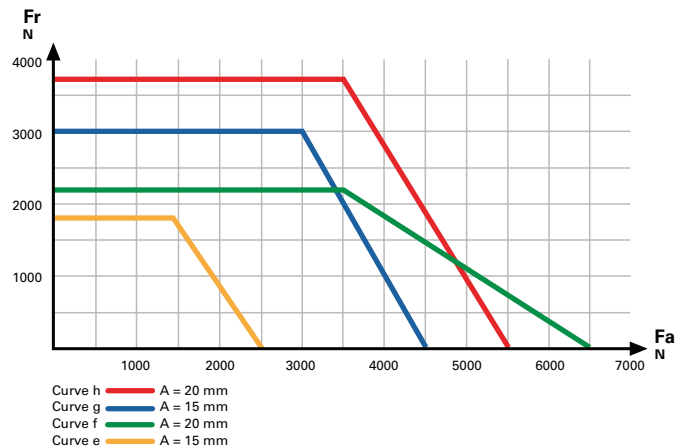
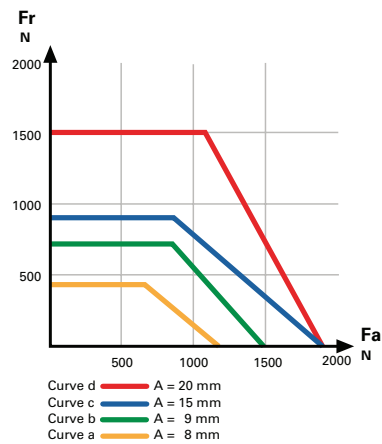


Figure 14



**Mounting**

Type LZB vane motors may be mounted in any position. To facilitate this, flange and foot mounting are available for each motor, Figure 15.

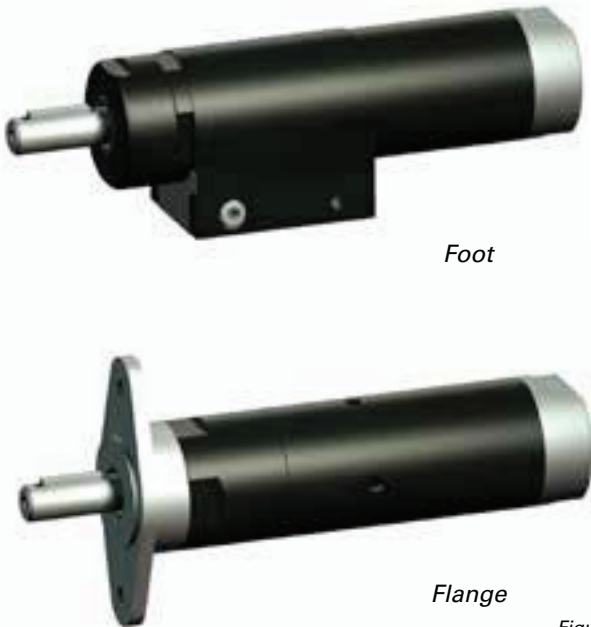


Figure 15

**Connection**

**Non-reversible motor**

When the compressed air supply is connected to the inlet, the direction of rotation will be as shown in Figure 16. If the exhaust air is to be piped away, a hose should be connected to the exhaust outlet. (EXH).

**Reversible motor**

The compressed air supply should be connected to the inlet that gives the desired direction of rotation, Figure 17. The inlet not in use functions as an additional outlet: it must not be plugged.

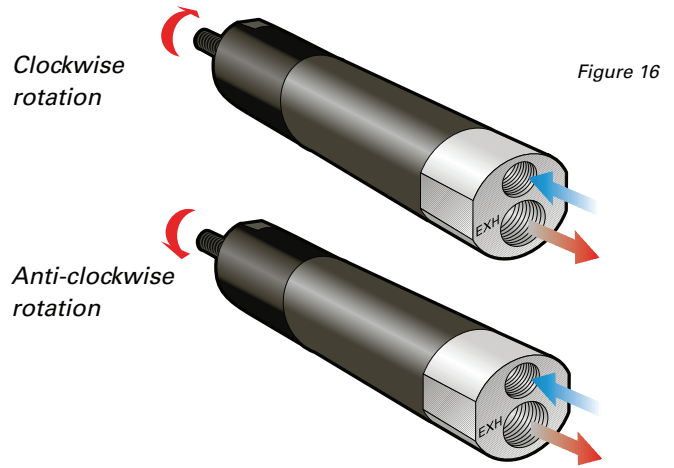


Figure 16

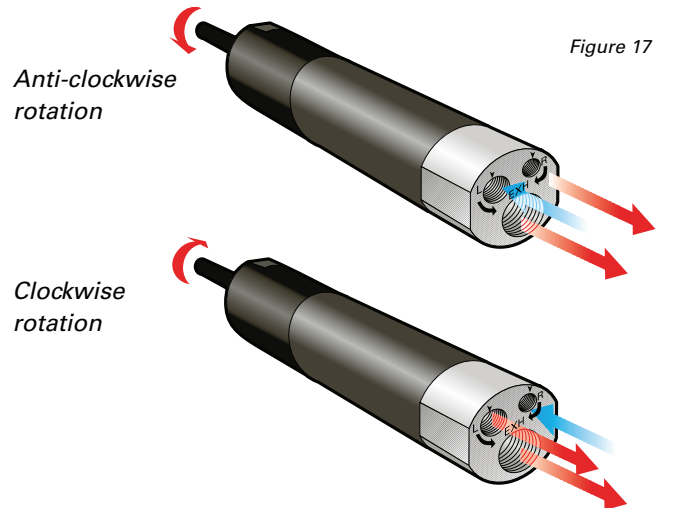


Figure 17

**Hose dimensions**

Information on hose dimensions recommended for use with type LZB air motors is detailed in table below. These dimensions are valid for hose lengths up to 3 m. If lengths above that are used, choose a one size larger hose.

**Hose size up to 3 m length**

Motor size	Rotation	Inlet connection thread		Inlet hose* mm	Inlet recommended nipple connection Ordering No.	Inlet nipple* diameter mm	Outlet connection thread		Outlet recommended nipple connection Ordering No.	Outlet nipple* diameter mm
		BSP	NPTF				BSP	mm		
LZB14	A, AV, AR	1/8	-	8	9000 0240 00	5.0	1/8	8	9000 0240 00	5.0
LZB22	A, AV	1/8	-	8	9000 0240 00	5.0	1/4	10	9000 0247 00	8.0
LZB22	AR, LR	1/8	-	8	9000 0240 00	5.0	1/8	8	9000 0240 00	5.0
LZB33, LZB34	A, AV, AR, LR	1/4	-	10	9000 0247 00	8.0	1/4	10	9000 0247 00	8.0
LZB42	A, AR	1/4	-	10	9000 0247 00	8.0	1/2	16	9000 0244 00	13.4
LZB46	A, AV, AR	1/4	-	10	9000 0247 00	8.0	1/2	16	9000 0244 00	13.4
LZB54	A, AV, AR	3/8	-	13	9000 0248 00	9.3	1/2	16	9000 0244 00	13.4
LZB66	A, AR	3/8	-	13	9000 0248 00	9.3	3/4	20	9000 0245 00	17
LZB77	A, AR	-	1/2"-14	16	9000 0244 01	13.4	-	-	-	-
LZB77	A, AR	1/2**	-	16	9000 0244 00	13.4	-	-	-	-

\* Recommended minimum inner diameter (for reversible motors, the same size should be used on both in-/outlet)

\*\* Alternative connection thread BSP 1/2" delivered with the product

# VANE MOTORS LZB14-L

## Lubrication free



**0.11 – 0.16 kW**  
**0.15 – 0.21 hp**

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

For optional vanes and accessories see chapter Accessories.

### Data at air pressure 6.3 bar (91 psi)

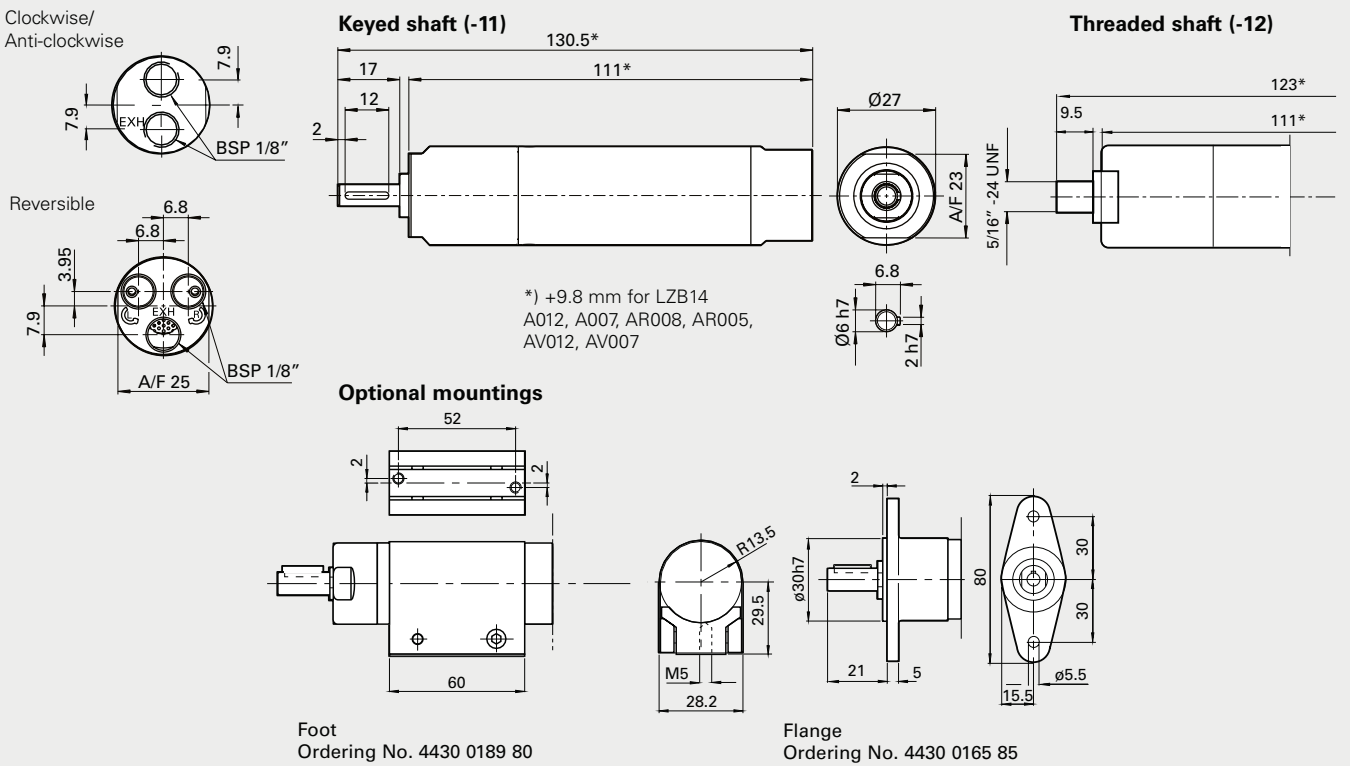
Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed		Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.
	kW	hp	r/min	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	r/min	l/s	cfm	kg	lb				
<b>Clockwise rotation (Keyed shaft)</b>																		
LZB14-L-A190-11	0.16	0.21	9100	0.17	0.13	0.29	0.21	0.34	0.25	19500	4.0	8.5	0.30	0.66	a	Ex II 2GD c T4 IIC T110°C	8411 0113 00	
LZB14-L-A048-11	0.16	0.21	2200	0.7	0.52	1.23	0.91	1.4	1.03	4800	4.0	8.5	0.30	0.66	a	Ex II 2GD c T6 IIC T85°C	8411 0113 18	
LZB14-L-A029-11	0.16	0.21	1330	1.15	0.85	2	1.48	2.3	1.7	2900	4.0	8.5	0.30	0.66	a	Ex II 2GD c T6 IIC T85°C	8411 0113 26	
LZB14-L-A012-11	0.16	0.21	530	2.9	2.1	5.1	3.8	5.8	4.28	1140	4.0	8.5	0.33	0.73	a	Ex II 2GD c T6 IIC T85°C	8411 0113 34	
LZB14-L-A007-11	0.16	0.21	320	4.8	3.5	8.5	6.27	9.6	7.1	700	4.0	8.5	0.33	0.73	a	Ex II 2GD c T6 IIC T85°C	8411 0113 42	
<b>Clockwise rotation (Threaded shaft)</b>																		
LZB14-L-A190-12	0.16	0.21	9100	0.17	0.13	0.29	0.21	0.34	0.25	19500	4.0	8.5	0.30	0.66	a	Ex II 2GD c T4 IIC T110°C	8411 0114 09	
LZB14-L-A048-12	0.16	0.21	2200	0.7	0.52	1.23	0.91	1.4	1.03	4800	4.0	8.5	0.30	0.66	a	Ex II 2GD c T6 IIC T85°C	8411 0114 17	
LZB14-L-A029-12	0.16	0.21	1330	1.15	0.85	2.0	1.48	2.3	1.7	2900	4.0	8.5	0.30	0.66	a	Ex II 2GD c T6 IIC T85°C	8411 0114 25	
LZB14-L-A012-12	0.16	0.21	530	2.9	2.1	5.1	3.8	5.8	4.28	1140	4.0	8.5	0.33	0.73	a	Ex II 2GD c T6 IIC T85°C	8411 0114 33	
LZB14-L-A007-12	0.16	0.21	320	4.8	3.5	8.5	6.27	9.6	7.1	700	4.0	8.5	0.33	0.73	a	Ex II 2GD c T6 IIC T85°C	8411 0114 41	
<b>Anti-clockwise rotation (Keyed shaft)</b>																		
LZB14-L-AV190-11	0.16	0.21	9100	0.17	0.13	0.23	0.17	0.34	0.25	19500	4.0	8.5	0.30	0.66	a	Ex II 2GD c T4 IIC T110°C	8411 0117 06	
LZB14-L-AV048-11	0.16	0.21	2200	0.7	0.52	0.99	0.73	1.4	1.03	4800	4.0	8.5	0.30	0.66	a	Ex II 2GD c T6 IIC T85°C	8411 0117 14	
LZB14-L-AV029-11	0.16	0.21	1330	1.15	0.85	1.63	1.2	2.3	1.7	2900	4.0	8.5	0.30	0.66	a	Ex II 2GD c T6 IIC T85°C	8411 0117 22	
LZB14-L-AV012-11	0.16	0.21	530	2.9	2.1	4.1	3.0	5.8	4.3	1140	4.0	8.5	0.33	0.73	a	Ex II 2GD c T6 IIC T85°C	8411 0117 30	
LZB14-L-AV007-11	0.16	0.21	320	4.8	3.5	6.8	5.0	9.6	7.1	700	4.0	8.5	0.33	0.73	a	Ex II 2GD c T6 IIC T85°C	8411 0117 48	
<b>Reversible (Keyed shaft)</b>																		
LZB14-L-AR140-11	0.11	0.15	7000	0.15	0.11	0.24	0.18	0.3	0.22	13000	3.6	7.6	0.30	0.66	a	Ex II 2GD c T4 IIC T110°C	8411 0115 08	
LZB14-L-AR034-11	0.11	0.15	1690	0.62	0.46	1.01	0.74	1.24	0.91	3400	3.6	7.6	0.30	0.66	a	Ex II 2GD c T6 IIC T85°C	8411 0115 16	
LZB14-L-AR020-11	0.11	0.15	1020	1.03	0.76	1.67	1.23	2.1	1.5	2000	3.6	7.6	0.30	0.66	a	Ex II 2GD c T6 IIC T85°C	8411 0115 24	
LZB14-L-AR008-11	0.11	0.15	410	2.6	1.92	4.2	3.1	5.2	3.8	800	3.6	7.6	0.33	0.73	a	Ex II 2GD c T6 IIC T85°C	8411 0115 32	
LZB14-L-AR005-11	0.11	0.15	250	4.3	3.2	6.9	5.1	8.6	6.3	490	3.6	7.6	0.33	0.73	a	Ex II 2GD c T6 IIC T85°C	8411 0115 40	

<sup>1)</sup> For Shaft loading curves, see page 16.

**NOTE:** - If running motors with 100% dry air and no lubrication, performance can be reduced with 5-15% at max output.  
- To optimize life time for a lubrication free motor, use lubricated air if the application allows it.

### Dimensions (mm)

Conversion factor 1 mm = 0.04 inch



# VANE MOTORS LZB14-RL

## Stainless steel and lubrication free



**0.11 – 0.16 kW**  
**0.15 – 0.21 hp**

Material in parts:

- Back head and front part stainless steel:  
ISO 683/XIII Type 17, SS 14 2346, DIN 17440 X12CrNiS188
- Outgoing shaft and casing/gear rim stainless steel:  
ISO 683/XIII Type 9b, SS 14 2321, DIN 17440 X22CrNi17
- 100% Silicon free
- Grease that conforms to Food Grade regulations



EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

For optional stainless steel motor cell, vane kits and other accessories see chapter Accessories.

### Data at air pressure 6.3 bar (91 psi)

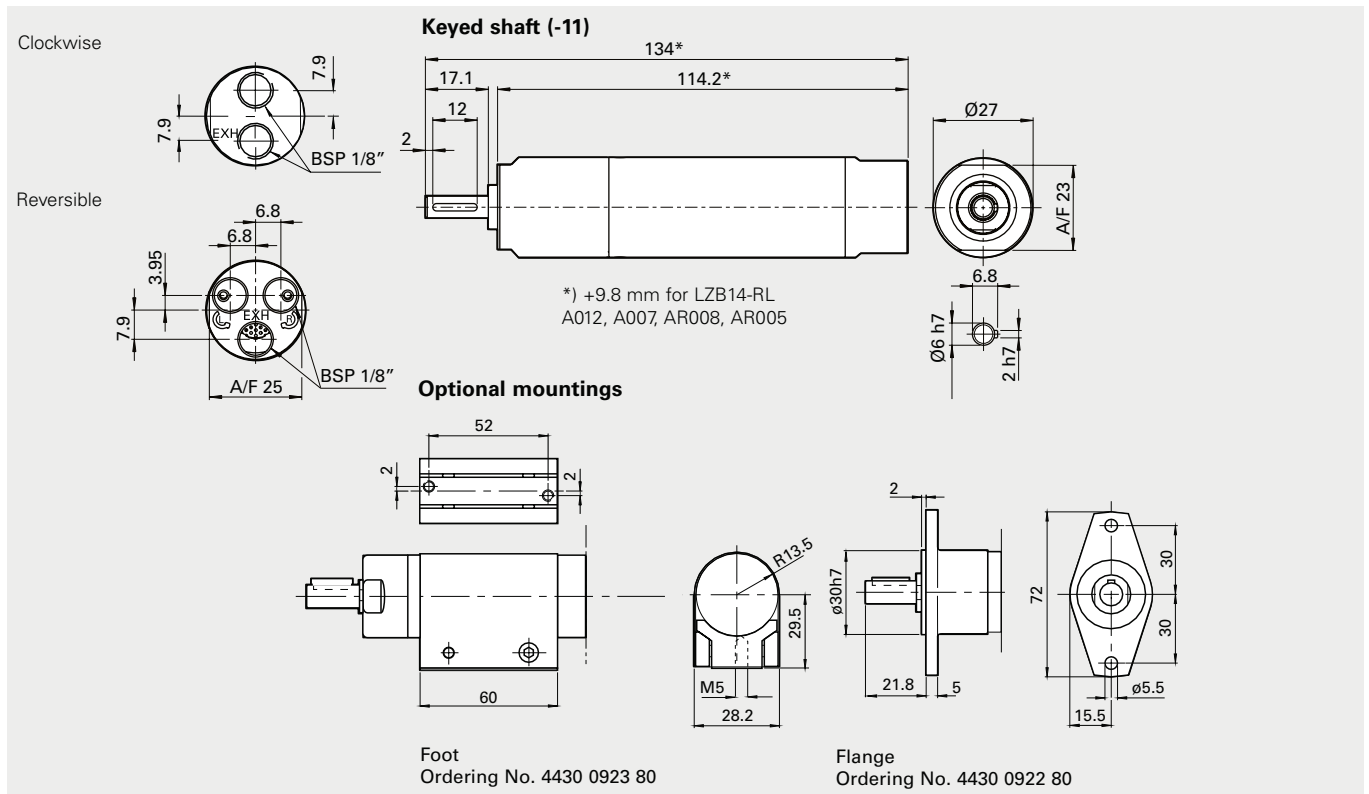
Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.	
	kW	hp		r/min	Nm	lb-ft	Nm	lb-ft	Nm		lb-ft	r/min	l/s	cfm				kg
<b>Lubrication free</b>																		
<b>Clockwise rotation (Keyed shaft)</b>																		
LZB14-RL-A190-11	0.16	0.21	9100	0.17	0.13	0.29	0.21	0.34	0.25	19500	4.0	8.5	0.37	0.82	a	Ex II 2GD c T4 IIC T110°C	8411 0122 09	
LZB14-RL-A048-11	0.16	0.21	2200	0.70	0.52	1.23	0.91	1.4	1.03	4800	4.0	8.5	0.37	0.82	a	Ex II 2GD c T6 IIC T85°C	8411 0122 17	
LZB14-RL-A029-11	0.16	0.21	1330	1.15	0.85	2.0	1.48	2.3	1.7	2900	4.0	8.5	0.37	0.82	a	Ex II 2GD c T6 IIC T85°C	8411 0122 25	
LZB14-RL-A012-11	0.16	0.21	530	2.9	2.1	5.1	3.8	5.8	4.3	1140	4.0	8.5	0.40	0.88	a	Ex II 2GD c T6 IIC T85°C	8411 0122 33	
LZB14-RL-A007-11	0.16	0.21	320	4.8	3.5	8.5	6.3	9.6	7.1	700	4.0	8.5	0.40	0.88	a	Ex II 2GD c T6 IIC T85°C	8411 0122 41	
<b>Reversible (Keyed shaft)</b>																		
LZB14-RL-AR140-11	0.11	0.15	7000	0.15	0.11	0.24	0.18	0.3	0.22	13000	3.6	7.6	0.37	0.82	a	Ex II 2GD c T4 IIC T110°C	8411 0122 58	
LZB14-RL-AR034-11	0.11	0.15	1690	0.62	0.46	1.01	0.74	1.24	0.91	3400	3.6	7.6	0.37	0.82	a	Ex II 2GD c T6 IIC T85°C	8411 0122 66	
LZB14-RL-AR020-11	0.11	0.15	1020	1.03	0.76	1.67	1.23	2.1	1.5	2000	3.6	7.6	0.37	0.82	a	Ex II 2GD c T6 IIC T85°C	8411 0122 74	
LZB14-RL-AR008-11	0.11	0.15	410	2.6	1.92	4.2	3.1	5.2	3.8	800	3.6	7.6	0.40	0.88	a	Ex II 2GD c T6 IIC T85°C	8411 0122 82	
LZB14-RL-AR005-11	0.11	0.15	250	4.3	3.2	6.9	5.1	8.6	6.3	490	3.6	7.6	0.40	0.88	a	Ex II 2GD c T6 IIC T85°C	8411 0122 90	

<sup>1)</sup> For Shaft loading curves, see page 16.

**NOTE:** - If running motors with 100% dry air and no lubrication, performance can be reduced with 5-15% at max output.  
- To optimize life time for a lubrication free motor, use lubricated air if the application allows it.

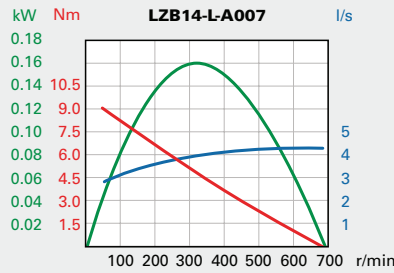
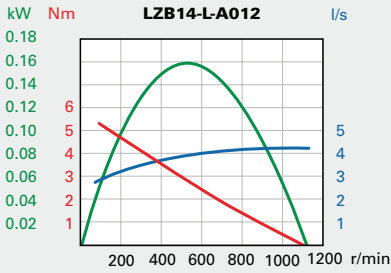
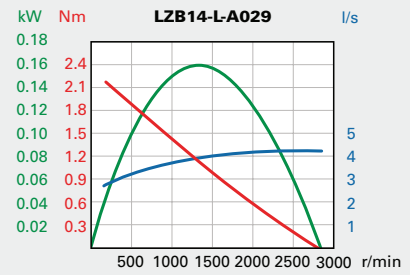
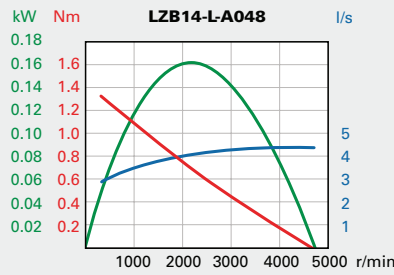
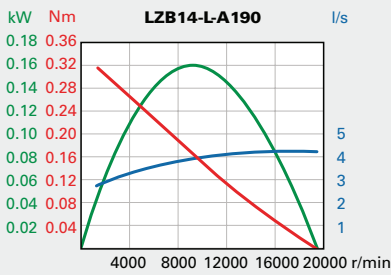
### Dimensions (mm)

Conversion factor 1 mm = 0.04 inch

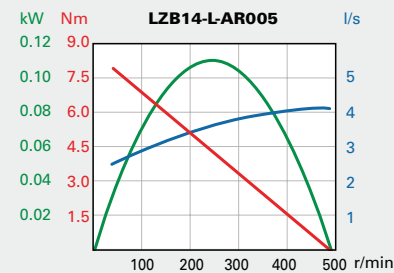
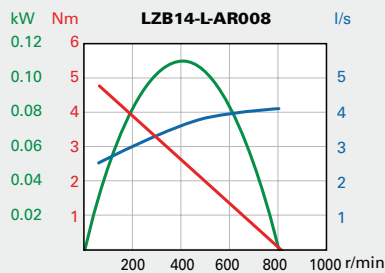
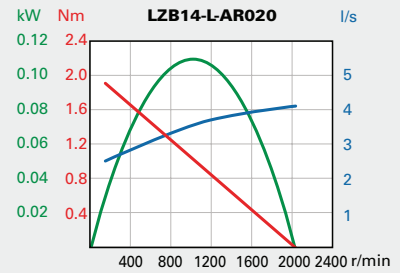
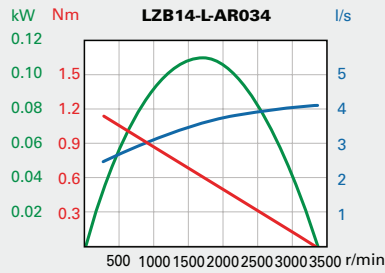
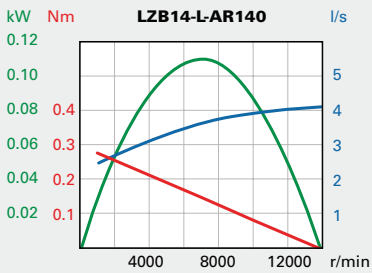


# LZB14-L, LZB14-RL: Performance curves at air pressure 6.3 bar (91 psi)

## Non-reversible (A and AV)



## Reversible (AR)



**Conversion factors**  
 1 kW = 1.34 hp  
 1 Nm = 0.74 lbf - ft  
 1 l/s = 2.1 cfm  
  
 1 hp = 0.75 kW  
 1 lbf-ft = 1.36 Nm  
 1 cfm = 0.47 l/s

For information about performance curves, see page 7.

# VANE MOTORS LZB22-L

## Lubrication free

**0.16 – 0.27 kW**  
**0.21 – 0.36 hp**

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

For optional vanes and accessories see chapter Accessories.



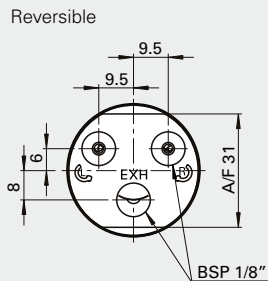
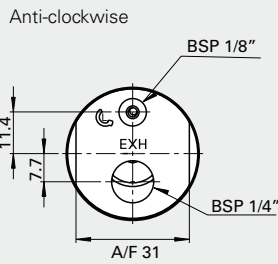
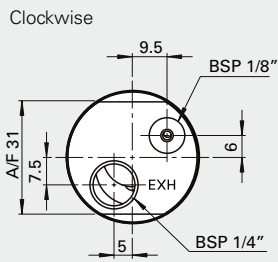
### Data at air pressure 6.3 bar (91 psi)

Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.
	kW	hp	r/min	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	r/min	l/s	cfm	kg	lb			
<b>Clockwise rotation (Keyed shaft)</b>																	
LZB22-L-A220-11	0.27	0.36	9600	0.27	0.20	0.51	0.38	0.54	0.4	21500	5.3	11.2	0.55	1.21	b	Ex II 2GD c T4 IIC T110°C	8411 0214 08
LZB22-L-A049-11	0.27	0.36	2100	1.2	0.89	2.3	1.7	2.4	1.8	4700	5.3	11.2	0.55	1.21	b	Ex II 2GD c T6 IIC T85°C	8411 0214 16
LZB22-L-A036-11	0.27	0.36	1590	1.6	1.2	3.1	2.3	3.2	2.4	3550	5.3	11.2	0.55	1.21	b	Ex II 2GD c T6 IIC T85°C	8411 0214 24
LZB22-L-A022-11	0.27	0.36	960	2.7	2.0	5.1	3.8	5.4	4.0	2100	5.3	11.2	0.55	1.21	b	Ex II 2GD c T6 IIC T85°C	8411 0214 32
LZB22-L-A011-11	0.26	0.35	480	5.3	3.9	10	7.4	10.6	7.8	1040	5.3	11.2	0.75	1.65	b	Ex II 2GD c T6 IIC T85°C	8411 0214 40
LZB22-L-A008-11	0.26	0.35	360	7.1	5.2	13.5	10	14.2	10.5	770	5.3	11.2	0.75	1.65	b	Ex II 2GD c T6 IIC T85°C	8411 0214 57
LZB22-L-A005-11	0.26	0.35	210	11.8	8.7	22	16.2	23.6	17.4	480	5.3	11.2	0.75	1.65	b	Ex II 2GD c T6 IIC T85°C	8411 0214 65
<b>Clockwise rotation (Threaded shaft)</b>																	
LZB22-L-A220-12	0.27	0.36	9600	0.27	0.20	0.51	0.38	0.54	0.4	21500	5.3	11.2	0.55	1.21	b	Ex II 2GD c T4 IIC T110°C	8411 0214 73
LZB22-L-A049-12	0.27	0.36	2100	1.2	0.89	2.3	1.7	2.4	1.8	4700	5.3	11.2	0.55	1.21	b	Ex II 2GD c T6 IIC T85°C	8411 0214 81
LZB22-L-A036-12	0.27	0.36	1590	1.6	1.2	3.1	2.3	3.2	2.4	3550	5.3	11.2	0.55	1.21	b	Ex II 2GD c T6 IIC T85°C	8411 0214 99
LZB22-L-A022-12	0.27	0.36	960	2.7	2.0	5.1	3.8	5.4	4.0	2100	5.3	11.2	0.55	1.21	b	Ex II 2GD c T6 IIC T85°C	8411 0215 07
LZB22-L-A011-12	0.26	0.35	480	5.3	3.9	10	7.4	10.6	7.8	1040	5.3	11.2	0.75	1.65	b	Ex II 2GD c T6 IIC T85°C	8411 0215 15
LZB22-L-A008-12	0.26	0.35	360	7.1	5.2	13.5	10	14.2	10.5	770	5.3	11.2	0.75	1.65	b	Ex II 2GD c T6 IIC T85°C	8411 0215 23
LZB22-L-A005-12	0.26	0.35	210	11.8	8.7	22	16.2	23.6	17.4	480	5.3	11.2	0.75	1.65	b	Ex II 2GD c T6 IIC T85°C	8411 0215 31
<b>Anti-clockwise rotation (Keyed shaft)</b>																	
LZB22-L-AV220-11	0.27	0.36	9600	0.27	0.20	0.32	0.24	0.54	0.4	21500	6.5	13.8	0.55	1.21	b	Ex II 2GD c T4 IIC T110°C	8411 0226 14
LZB22-L-AV049-11	0.27	0.36	2100	1.2	0.89	1.4	1.0	2.4	1.8	4700	6.5	13.8	0.55	1.21	b	Ex II 2GD c T6 IIC T85°C	8411 0209 62
LZB22-L-AV036-11	0.27	0.36	1590	1.6	1.2	1.9	1.4	3.2	2.4	3550	6.5	13.8	0.55	1.21	b	Ex II 2GD c T6 IIC T85°C	8411 0207 15
LZB22-L-AV022-11	0.27	0.36	960	2.7	2.0	3.2	2.3	5.4	4.0	2100	6.5	13.8	0.55	1.21	b	Ex II 2GD c T6 IIC T85°C	8411 0216 30
LZB22-L-AV011-11	0.26	0.35	480	5.3	3.9	6.0	4.4	10.6	7.8	1040	6.5	13.8	0.75	1.65	b	Ex II 2GD c T6 IIC T85°C	8411 0226 22
LZB22-L-AV008-11	0.26	0.35	360	7.1	5.2	8.5	6.2	14.2	10.5	770	6.5	13.8	0.75	1.65	b	Ex II 2GD c T6 IIC T85°C	8411 0226 30
LZB22-L-AV005-11	0.26	0.35	210	11.8	8.7	14	10.3	23.6	17.4	480	6.5	13.8	0.75	1.65	b	Ex II 2GD c T6 IIC T85°C	8411 0226 48
<b>Reversible (Keyed shaft)</b>																	
LZB22-L-AR126-11	0.16	0.21	7000	0.24	0.18	0.32	0.24	0.48	0.35	13100	5.0	10.6	0.55	1.21	b	Ex II 2GD c T4 IIC T110°C	8411 0215 49
LZB22-L-AR028-11	0.16	0.21	1570	1.1	0.81	1.4	1.0	2.2	1.6	2850	5.0	10.6	0.55	1.21	b	Ex II 2GD c T6 IIC T85°C	8411 0215 56
LZB22-L-AR021-11	0.16	0.21	1170	1.4	1.0	1.9	1.4	2.8	2.1	2100	5.0	10.6	0.55	1.21	b	Ex II 2GD c T6 IIC T85°C	8411 0215 64
LZB22-L-AR013-11	0.16	0.21	700	2.4	1.8	3.2	2.4	4.8	3.5	1300	5.0	10.6	0.55	1.21	b	Ex II 2GD c T6 IIC T85°C	8411 0215 72
LZB22-L-AR006-11	0.16	0.21	350	4.7	3.5	6.3	4.6	9.4	6.9	640	5.0	10.6	0.75	1.65	b	Ex II 2GD c T6 IIC T85°C	8411 0215 80
LZB22-L-AR005-11	0.16	0.21	260	6.3	4.6	8.5	6.3	12.6	9.3	480	5.0	10.6	0.75	1.65	b	Ex II 2GD c T6 IIC T85°C	8411 0215 98
LZB22-L-AR003-11	0.16	0.21	160	10.5	7.7	14	10.3	21	15.5	290	5.0	10.6	0.75	1.65	b	Ex II 2GD c T6 IIC T85°C	8411 0216 06

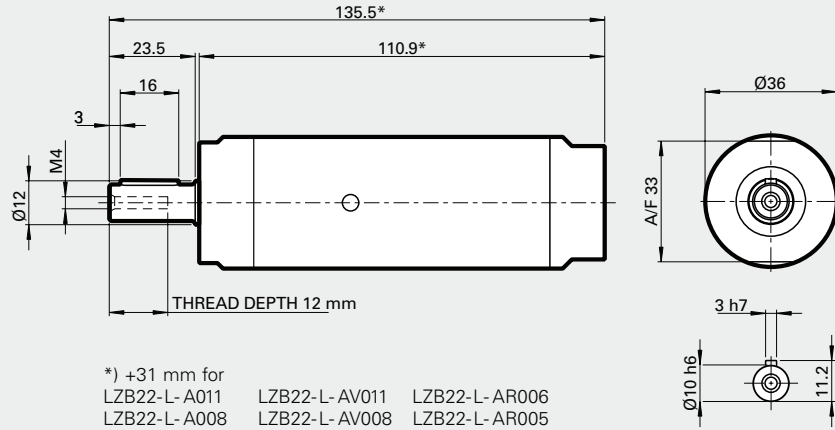
<sup>1)</sup> For Shaft loading curves, see page 16.

**NOTE:** - If running motors with 100% dry air and no lubrication, performance can be reduced with 5-15% at max output.  
- To optimize life time for a lubrication free motor, use lubricated air if the application allows it.

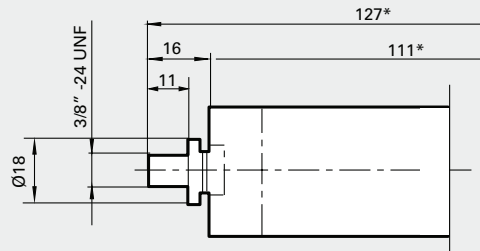




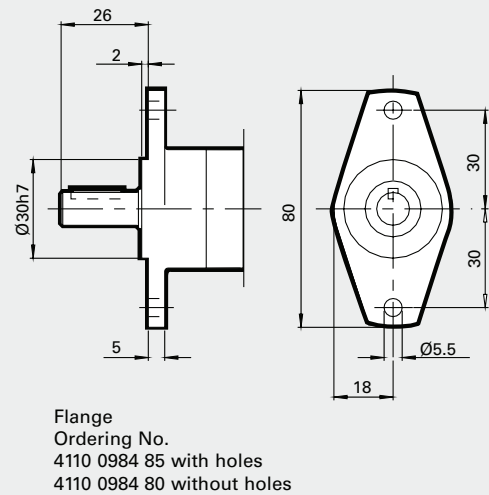
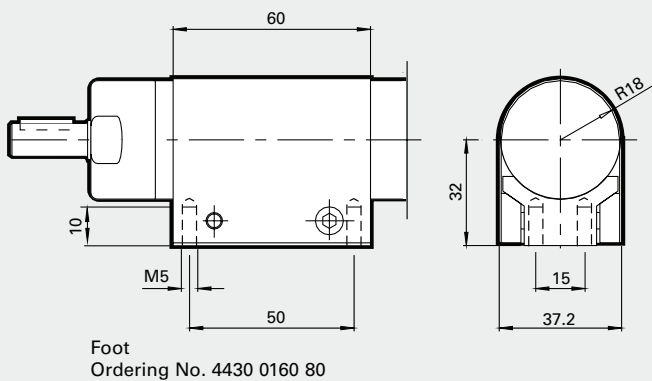
**Keyed shaft (-11)**



**Threaded shaft (-12)**



**Optional mountings**



# VANE MOTORS LZB22-RL

Stainless steel and lubrication free



LZB VANE MOTORS

**0.16 – 0.27 kW**  
**0.21 – 0.36 hp**

Material in parts:

- Back head, casing and front part stainless steel: ISO 683/ XIII Type 17, SS 14 2346, DIN 17440 X12CrNiS188
- Outgoing shaft and gear rim stainless steel: ISO 683/XIII Type 9b, SS 14 2321, DIN 17440 X22CrNi17'
- 100% Silicon free
- Grease that conforms to Food Grade regulations

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).



For optional stainless steel motor cell, vane kits and other accessories see chapter Accessories.

**Data at air pressure 6.3 bar (91 psi)**

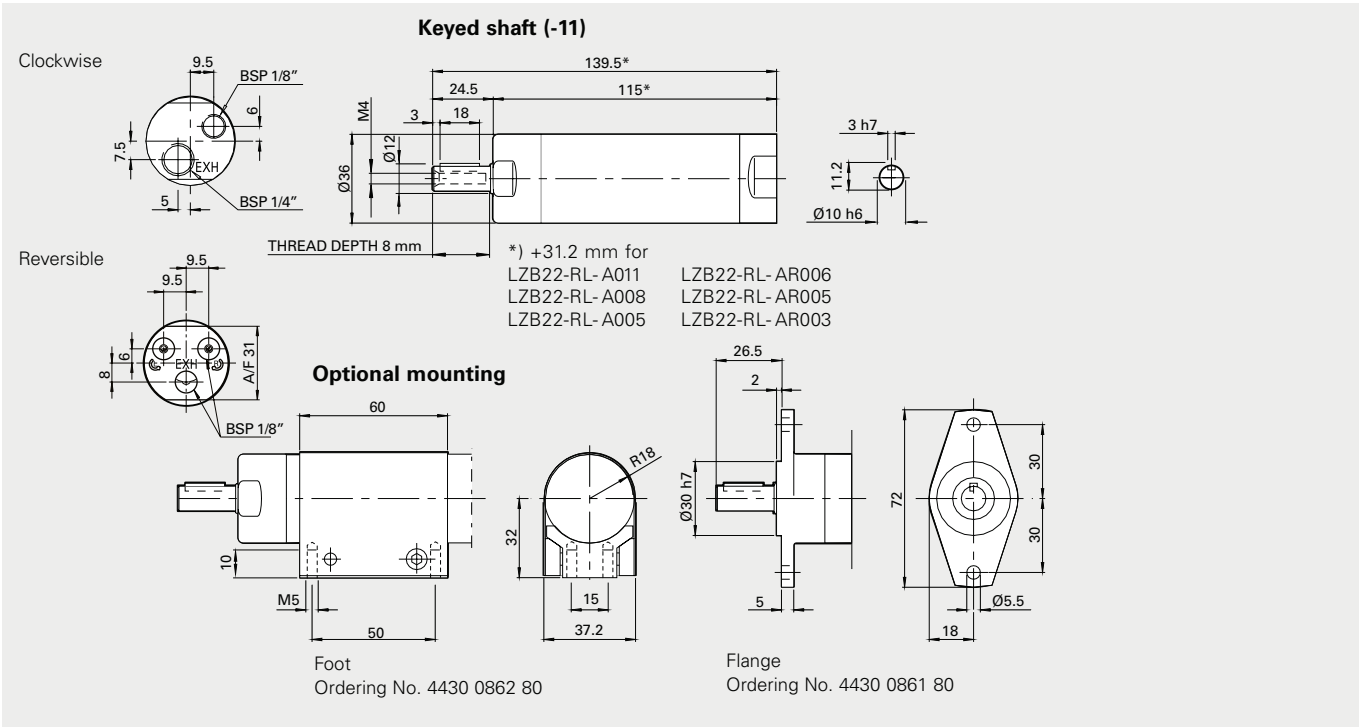
Model Lubrication free	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.	
	kW	hp	r/min	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft		r/min	l/s	cfm	kg				lb
<b>Clockwise rotation (Keyed shaft)</b>																		
LZB22-RL-A220-11	0.27	0.36	9600	0.27	0.20	0.51	0.38	0.54	0.4	19500	5.3	11.2	0.63	1.39	b	Ex II 2GD c T4 IIC T110°C	8411 0219 11	
LZB22-RL-A049-11	0.27	0.36	2100	1.2	0.89	2.3	1.7	2.4	1.8	4700	5.3	11.2	0.63	1.39	b	Ex II 2GD c T6 IIC T85°C	8411 0219 29	
LZB22-RL-A036-11	0.27	0.36	1590	1.6	1.2	3.1	2.3	3.2	2.4	3550	5.3	11.2	0.63	1.39	b	Ex II 2GD c T6 IIC T85°C	8411 0219 37	
LZB22-RL-A022-11	0.27	0.36	960	2.7	2.0	5.1	3.8	5.4	4.0	2100	5.3	11.2	0.63	1.39	b	Ex II 2GD c T6 IIC T85°C	8411 0219 45	
LZB22-RL-A011-11	0.26	0.35	480	5.3	3.9	10	7.4	10.6	7.8	1040	5.3	11.2	0.83	1.83	b	Ex II 2GD c T6 IIC T85°C	8411 0219 52	
LZB22-RL-A008-11	0.26	0.35	360	7.1	5.2	13.5	10	14.2	10.5	770	5.3	11.2	0.83	1.83	b	Ex II 2GD c T6 IIC T85°C	8411 0219 60	
LZB22-RL-A005-11	0.26	0.35	210	11.8	8.7	22	16.2	23.6	17.4	480	5.3	11.2	0.83	1.83	b	Ex II 2GD c T6 IIC T85°C	8411 0219 78	
<b>Reversible (Keyed shaft)</b>																		
LZB22-RL-AR126-11	0.16	0.21	7000	0.24	0.18	0.32	0.24	0.48	0.35	13100	5.0	10.6	0.63	1.39	b	Ex II 2GD c T4 IIC T110°C	8411 0220 83	
LZB22-RL-AR028-11	0.16	0.21	1570	1.1	0.81	1.4	1.0	2.2	1.6	2850	5.0	10.6	0.63	1.39	b	Ex II 2GD c T6 IIC T85°C	8411 0220 75	
LZB22-RL-AR021-11	0.16	0.21	1170	1.4	1.0	1.9	1.4	2.8	2.1	2100	5.0	10.6	0.63	1.39	b	Ex II 2GD c T6 IIC T85°C	8411 0222 16	
LZB22-RL-AR013-11	0.16	0.21	700	2.4	1.8	3.2	2.4	4.8	3.5	1300	5.0	10.6	0.63	1.39	b	Ex II 2GD c T6 IIC T85°C	8411 0220 67	
LZB22-RL-AR006-11	0.16	0.21	350	4.7	3.5	6.3	4.6	9.4	6.9	640	5.0	10.6	0.83	1.83	b	Ex II 2GD c T6 IIC T85°C	8411 0220 59	
LZB22-RL-AR005-11	0.16	0.21	260	6.3	4.6	8.5	6.3	12.6	9.3	480	5.0	10.6	0.83	1.83	b	Ex II 2GD c T6 IIC T85°C	8411 0222 08	
LZB22-RL-AR003-11	0.16	0.21	160	10.5	7.7	14	10.3	21	15.5	290	5.0	10.6	0.83	1.83	b	Ex II 2GD c T6 IIC T85°C	8411 0220 91	

<sup>1)</sup> For Shaft loading curves, see page 16.

**NOTE:** - If running motors with 100% dry air and no lubrication, performance can be reduced with 5-15% at max output.  
- To optimize life time for a lubrication free motor, use lubricated air if the application allows it.

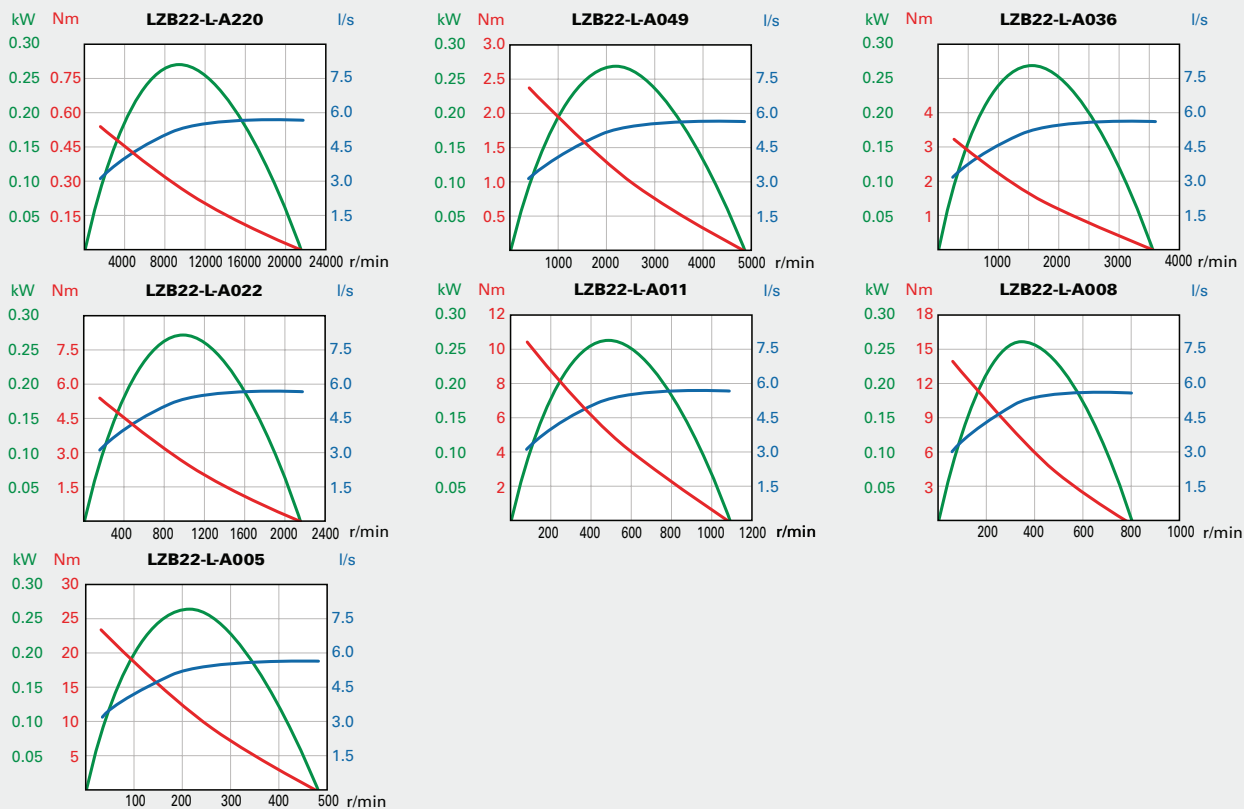
**Dimensions (mm)**

Conversion factor 1 mm = 0.04 inch



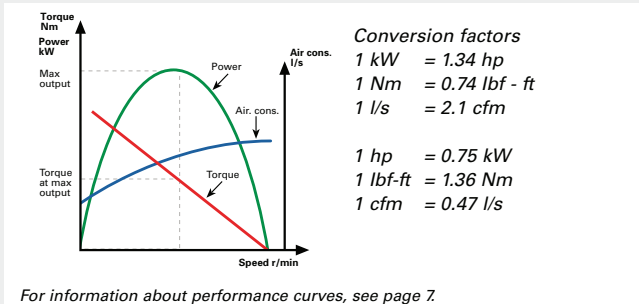
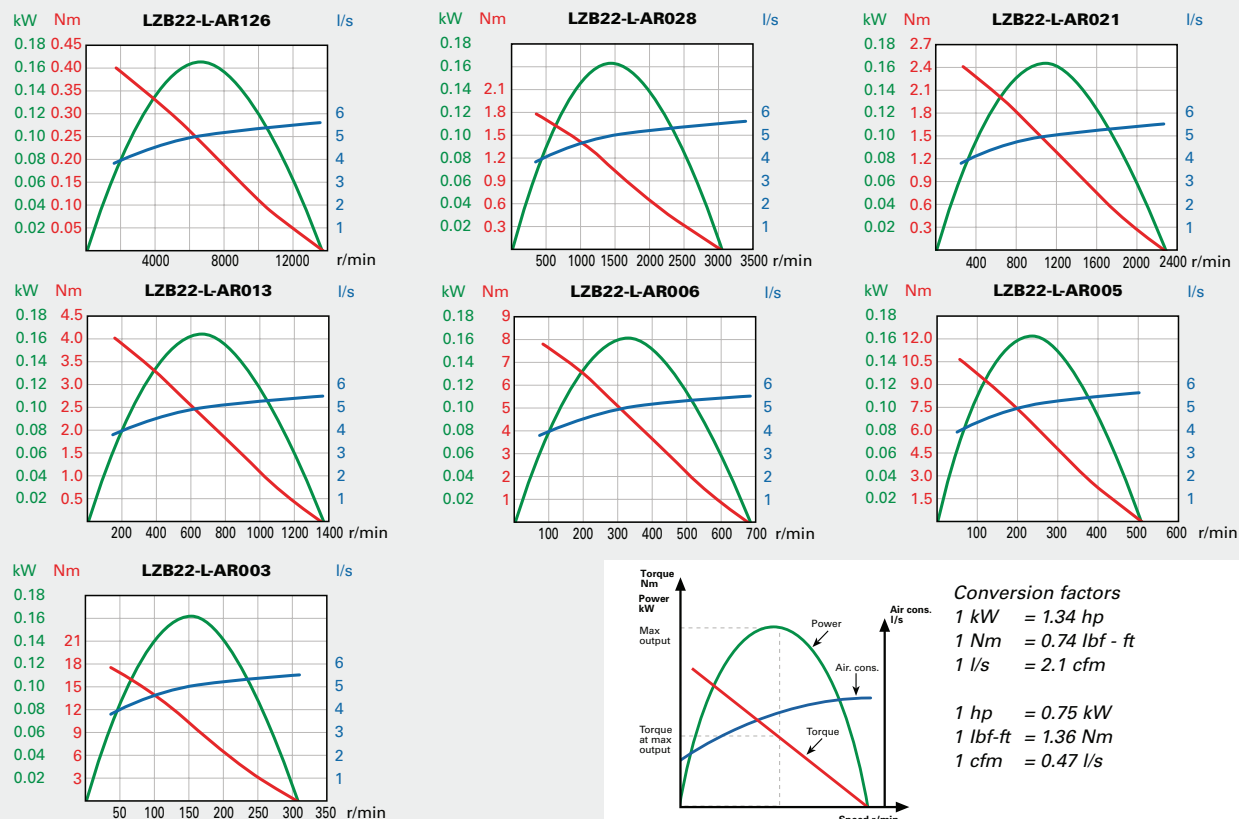
## LZB22-L, LZB22-RL: Performance curves at air pressure 6.3 bar (91 psi)

### Non-reversible (A and AV)



## LZB22-L, LZB22-RL: Performance curves at air pressure 6.3 bar (91 psi)

### Reversible (AR)



For information about performance curves, see page 7.



# VANE MOTORS LZB22-L-LR

Low speed, low torque, lubrication free and reversible

## LZB22-RL-LR

Stainless steel, low speed, low torque, lubrication free and reversible

### Maximum permitted torque 9 Nm (6.6 lb<sub>f</sub>-ft)

Within their working range these motors have a very steep torque curve. Speed and air consumption are relatively constant regardless of the load.

Stainless steel version:

- 100% Silicon free
- Grease that conforms to Food Grade regulations

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).



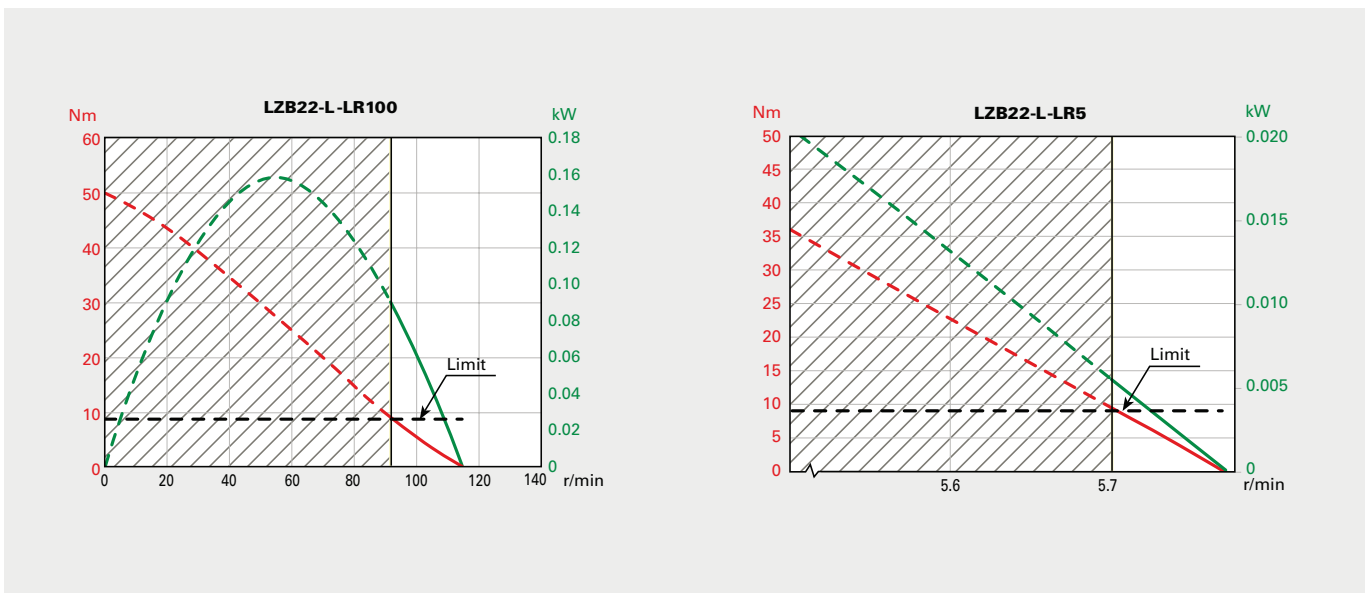
For optional stainless steel motor cell, vane kits and other accessories see Chapter accessories.

### Data at air pressure 6.3 bar (91 psi)

Model	Free speed r/min	Air consumption at free speed		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.
		l/s	cfm	kg	lb			
Lubrication free								
LZB22-L-LR100-11	110	5.8	12.3	0.95	2.09	b	Ex II 2GD c T6 IIC T85°C	8411 0216 22
LZB22-L-LR5-11	5	5.8	12.3	1.35	3.0	b	Ex II 2GD c T6 IIC T85°C	8411 0216 14
Stainless steel, Lubrication free								
LZB22-RL-LR100-11	110	5.8	12.3	1.03	2.27	b	Ex II 2GD c T6 IIC T85°C	8411 0222 40
LZB22-RL-LR5-11	5	5.8	12.3	1.43	3.15	b	Ex II 2GD c T6 IIC T85°C	8411 0222 57

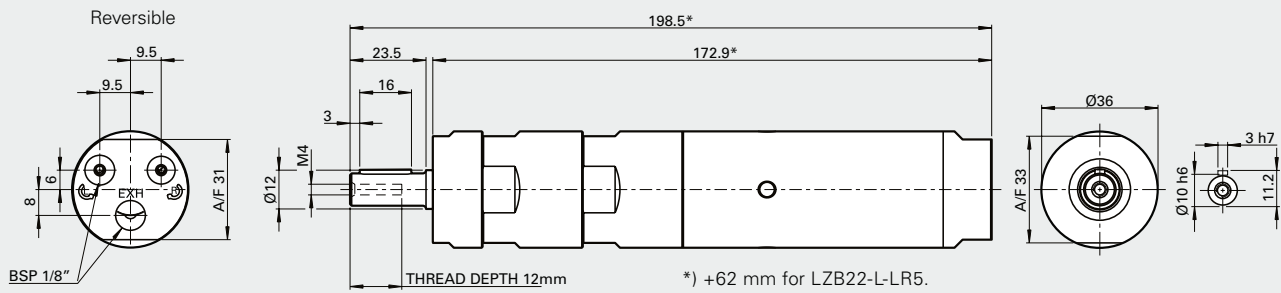
<sup>1)</sup> For Shaft loading curves, see page 16.

**NOTE:** - If running motors with 100% dry air and no lubrication, performance can be reduced with 10-20% at free speed.  
 - To optimize life time for a lubrication free motor, use lubricated air if the application allows it.

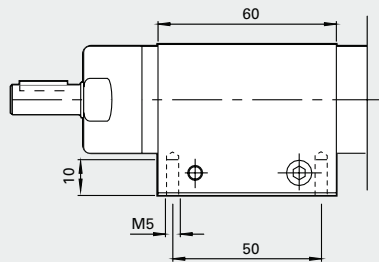


**Dimensions LZB22-L-LR (mm)**

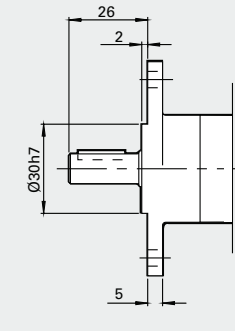
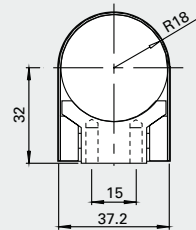
**Conversion factor 1 mm = 0.04 inch**



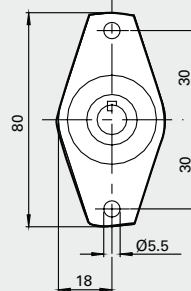
**Optional mountings**



Foot  
Ordering No. 4430 0160 80

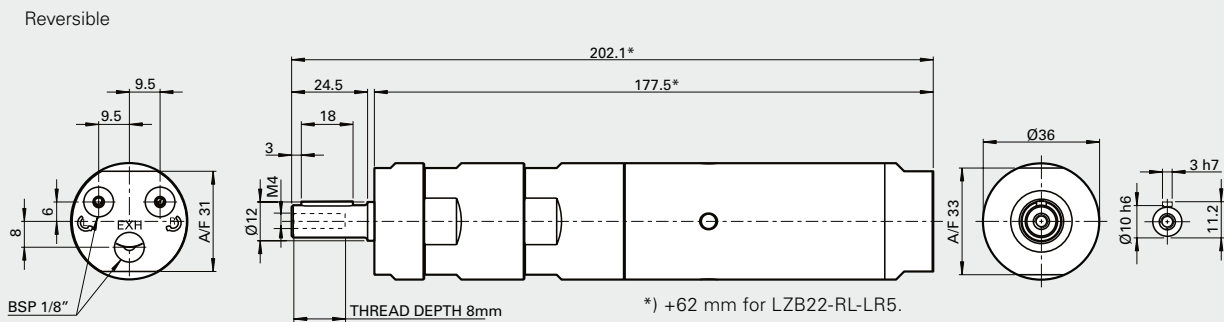


Flange  
Ordering No. 4110 0984 85 with holes  
4110 0984 80 without holes

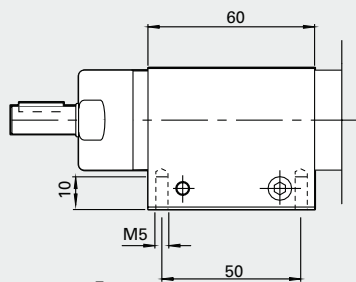


**Dimensions LZB22-RL-LR (mm)**

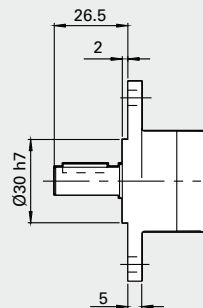
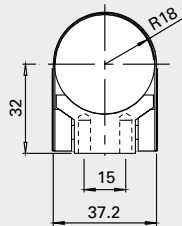
**Conversion factor 1 mm = 0.04 inch**



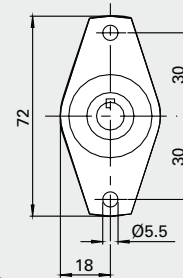
**Optional mountings**



Foot  
Ordering No. 4430 0862 80



Flange  
Ordering No. 4430 0861 80



# VANE MOTORS LZB33-L

## Lubrication free



**0.24 – 0.39 kW**  
**0.32 – 0.52 hp**

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

For optional vanes and accessories see Accessories chapter

### Data at air pressure 6.3 bar (91 psi)

Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.
	Lubrication free	kW		hp	Nm	lb-ft	Nm	lb-ft	Nm		lb-ft	r/min	l/s	cfm			
<b>Clockwise rotation (Keyed shaft)</b>																	
LZB33-L-A210-11	0.39	0.52	9400	0.4	0.3	0.76	0.56	0.8	0.59	19000	8.1	17.2	0.75	1.65	c	Ex II 2GD c T4 IIC T110°C	8411 0306 07
LZB33-L-A060-11	0.39	0.52	2600	1.4	1.0	2.7	2.0	2.8	2.1	5350	8.1	17.2	0.75	1.65	c	Ex II 2GD c T6 IIC T85°C	8411 0306 15
LZB33-L-A033-11	0.39	0.52	1450	2.6	1.9	4.9	3.6	5.2	3.8	3000	8.1	17.2	0.75	1.65	c	Ex II 2GD c T6 IIC T85°C	8411 0306 23
LZB33-L-A026-11	0.39	0.52	1170	3.2	2.4	6.1	4.5	6.4	4.7	2400	8.1	17.2	0.75	1.65	c	Ex II 2GD c T6 IIC T85°C	8411 0306 31
LZB33-L-A013-11	0.38	0.51	580	6.4	4.7	12	8.9	12.8	9.4	1180	8.1	17.2	1.02	2.25	c	Ex II 2GD c T6 IIC T85°C	8411 0306 49
LZB33-L-A007-11	0.38	0.51	320	11.5	8.5	21	15.5	23	17	650	8.1	17.2	1.02	2.25	c	Ex II 2GD c T6 IIC T85°C	8411 0306 56
LZB33-L-A005-11	0.38	0.51	260	14.2	10.5	26	19.2	28	21	520	8.1	17.2	1.02	2.25	c	Ex II 2GD c T6 IIC T85°C	8411 0306 64
LZB33-L-A0030-11 <sup>2)</sup>	0.37	0.50	160	22.3	16.4	40	30	45	33	340	8.1	17.2	1.5	3.31	d	Ex II 2GD c T6 IIC T85°C	8411 0306 72
<b>Clockwise rotation (Threaded shaft)</b>																	
LZB33-L-A210-12	0.39	0.52	9400	0.4	0.3	0.76	0.56	0.8	0.59	19000	8.1	17.2	0.75	1.65	c	Ex II 2GD c T4 IIC T110°C	8411 0306 80
LZB33-L-A060-12	0.39	0.52	2600	1.4	1.0	2.7	2.0	2.8	2.1	5350	8.1	17.2	0.75	1.65	c	Ex II 2GD c T6 IIC T85°C	8411 0306 98
LZB33-L-A033-12	0.39	0.52	1450	2.6	1.9	4.9	3.6	5.2	3.8	3000	8.1	17.2	0.75	1.65	c	Ex II 2GD c T6 IIC T85°C	8411 0307 06
LZB33-L-A026-12	0.39	0.52	1170	3.2	2.4	6.1	4.5	6.4	4.7	2400	8.1	17.2	0.75	1.65	c	Ex II 2GD c T6 IIC T85°C	8411 0307 14
LZB33-L-A013-12	0.38	0.51	580	6.4	4.7	12	8.9	12.8	9.4	1180	8.1	17.2	1.02	2.25	c	Ex II 2GD c T6 IIC T85°C	8411 0307 22
LZB33-L-A007-12	0.38	0.51	320	11.5	8.5	21	15.5	23	17	650	8.1	17.2	1.02	2.25	c	Ex II 2GD c T6 IIC T85°C	8411 0307 30
LZB33-L-A005-12	0.38	0.51	260	14.2	10.5	26	19.2	28	21	520	8.1	17.2	1.02	2.25	c	Ex II 2GD c T6 IIC T85°C	8411 0307 48
<b>Anti-clockwise rotation (Keyed shaft)</b>																	
LZB33-L-AV210-11	0.39	0.52	9400	0.4	0.3	0.69	0.51	0.8	0.59	19000	9.5	20.2	0.75	1.65	c	Ex II 2GD c T4 IIC T110°C	8411 0352 42
LZB33-L-AV060-11	0.39	0.52	2600	1.4	1.0	2.4	1.8	2.8	2.1	5350	9.5	20.2	0.75	1.65	c	Ex II 2GD c T6 IIC T85°C	8411 0352 59
LZB33-L-AV033-11	0.39	0.52	1450	2.6	1.9	4.4	3.2	5.2	3.8	3000	9.5	20.2	0.75	1.65	c	Ex II 2GD c T6 IIC T85°C	8411 0352 00
LZB33-L-AV026-11	0.39	0.52	1170	3.2	2.4	5.5	4.1	6.4	4.7	2400	9.5	20.2	0.75	1.65	c	Ex II 2GD c T6 IIC T85°C	8411 0345 91
LZB33-L-AV013-11	0.38	0.51	580	6.4	4.7	11	8.1	12.8	9.4	1180	9.5	20.2	1.02	2.25	c	Ex II 2GD c T6 IIC T85°C	8411 0336 27
LZB33-L-AV007-11	0.38	0.51	320	11.5	8.5	19.5	14.4	23	17	650	9.5	20.2	1.02	2.25	c	Ex II 2GD c T6 IIC T85°C	8411 0352 67
LZB33-L-AV005-11	0.38	0.51	260	14.2	10.5	24	17.7	28	21	520	9.5	20.2	1.02	2.25	c	Ex II 2GD c T6 IIC T85°C	8411 0336 19
LZB33-L-AV0030-11 <sup>2)</sup>	0.37	0.50	160	22	16.2	38	28	44	32	340	9.5	20.2	1.5	3.31	d	Ex II 2GD c T6 IIC T85°C	8411 0345 59
<b>Reversible (Keyed shaft)</b>																	
LZB33-L-AR150-11	0.25	0.34	7000	0.34	0.25	0.46	0.34	0.68	0.5	13300	7.9	16.8	0.75	1.65	c	Ex II 2GD c T4 IIC T110°C	8411 0307 63
LZB33-L-AR043-11	0.25	0.34	1960	1.2	0.89	1.6	1.2	2.4	1.8	3800	7.9	16.8	0.75	1.65	c	Ex II 2GD c T6 IIC T85°C	8411 0307 71
LZB33-L-AR024-11	0.25	0.34	1090	2.2	1.6	3.0	2.2	4.4	3.2	2000	7.9	16.8	0.75	1.65	c	Ex II 2GD c T6 IIC T85°C	8411 0307 89
LZB33-L-AR019-11	0.25	0.34	880	2.7	2.0	3.7	2.7	5.4	4.0	1700	7.9	16.8	0.75	1.65	c	Ex II 2GD c T6 IIC T85°C	8411 0307 97
LZB33-L-AR009-11	0.25	0.34	430	5.4	4.0	7.0	5.2	10.8	8.0	800	7.9	16.8	1.02	2.25	c	Ex II 2GD c T6 IIC T85°C	8411 0308 05
LZB33-L-AR005-11	0.25	0.34	240	9.8	7.2	12.6	9.3	19.6	14.5	450	7.9	16.8	1.02	2.25	c	Ex II 2GD c T6 IIC T85°C	8411 0308 13
LZB33-L-AR004-11	0.25	0.34	190	12.1	8.9	15.6	11.5	24	17.8	360	7.9	16.8	1.02	2.25	c	Ex II 2GD c T6 IIC T85°C	8411 0308 21
LZB33-L-AR0026-11 <sup>2)</sup>	0.24	0.32	120	19	14	20	14.8	38	28	230	7.9	16.8	1.5	3.31	d	Ex II 2GD c T6 IIC T85°C	8411 0308 70

<sup>1)</sup> For Shaft loading curves, see page 16.

<sup>2)</sup> Flange is mounted and supplied with the motor.

**NOTE:** - If running motors with 100% dry air and no lubrication, performance can be reduced with 5-15% at max output.  
- To optimize life time for a lubrication free motor, use lubricated air if the application allows it.

### LZB33-L, for mounting with IEC flange (flange has to be ordered separately)

#### Data at air pressure 6.3 bar (91 psi)

Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed	Air consumption at max output		Weight		Shaft loading code	ATEX code	Ordering No.
	Lubrication free	kW		hp	Nm	lb-ft	Nm	lb-ft	Nm		lb-ft	r/min	l/s	cfm			
<b>Clockwise rotation (Keyed shaft)</b>																	
LZB33-L-A013-20	0.38	0.51	580	6.4	4.7	12	8.9	12.8	9.4	1180	8.1	17.2	1.02	2.25	d	Ex II 2GD c T6 IIC T85°C	8411 0352 75
LZB33-L-A007-20	0.38	0.51	320	11.5	8.5	21	15.5	23	17	650	8.1	17.2	1.02	2.25	d	Ex II 2GD c T6 IIC T85°C	8411 0352 83
LZB33-L-A005-20	0.38	0.51	260	14.2	10.5	26	19.2	28	21	520	8.1	17.2	1.02	2.25	d	Ex II 2GD c T6 IIC T85°C	8411 0352 91
LZB33-L-A0030-11	0.37	0.5	160	22.3	16.4	40	30	45	33	340	8.1	17.2	1.5	3.31	d	Ex II 2GD c T6 IIC T85°C	8411 0306 72
<b>Anti-Clockwise rotation (Keyed shaft)</b>																	
LZB33-L-AV0030-11	0.37	0.5	160	22	16.2	38	28	44	32	340	9.5	20.2	1.5	3.31	d	Ex II 2GD c T6 IIC T85°C	8411 0345 59
<b>Reversible (Keyed shaft)</b>																	
LZB33-L-AR0026-11	0.24	0.32	120	19	14	20	14.8	38	28	230	7.9	16.8	1.5	3.31	d	Ex II 2GD c T6 IIC T85°C	8411 0308 70

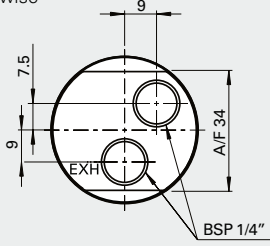
\* Not including the weight of the flange.

**NOTE:** - If running motors with 100% dry air and no lubrication, performance can be reduced with 5-15% at max output.  
- To optimize life time for a lubrication free motor, use lubricated air if the application allows it.

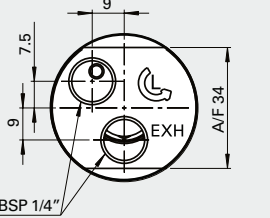
**Dimensions (mm)**

**All versions**

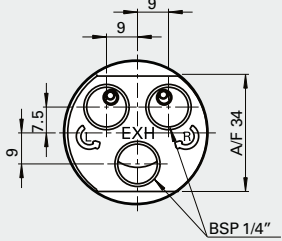
Clockwise



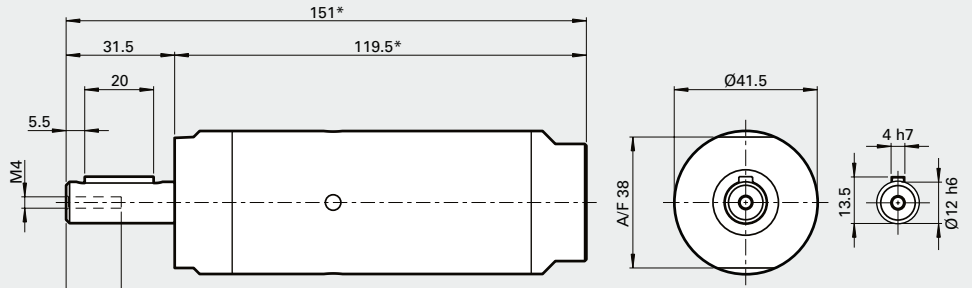
Anti-clockwise



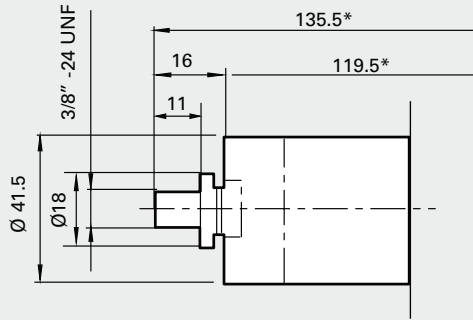
Reversible



**Keyed shaft (-11)**

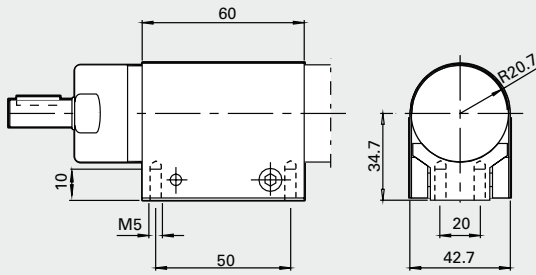


**Threaded shaft (-12)**

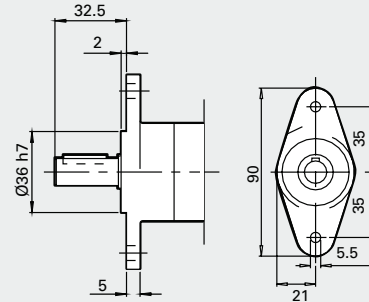


- |              |               |               |
|--------------|---------------|---------------|
| LZB33-L-A013 | LZB33-L-AV013 | LZB33-L-AR009 |
| LZB33-L-A007 | LZB33-L-AV007 | LZB33-L-AR005 |
| LZB33-L-A005 | LZB33-L-AV005 | LZB33-L-AR004 |

**Optional mounting**



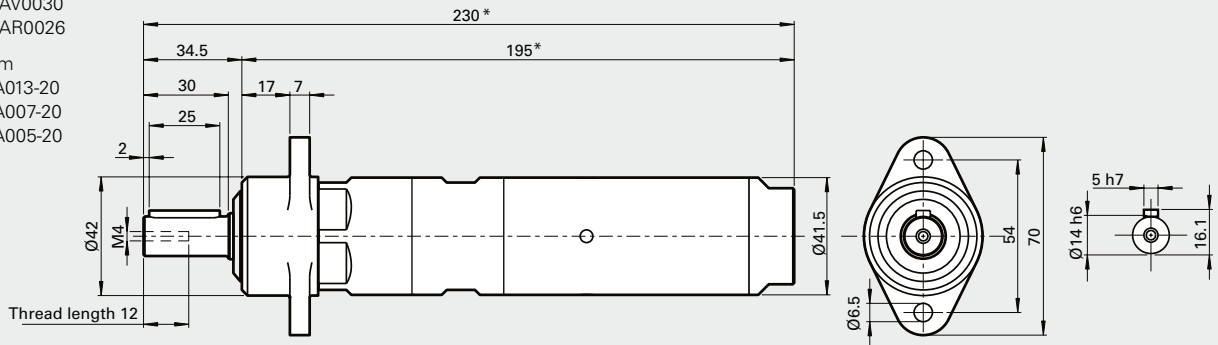
Foot  
Ordering No. 4430 0162 80



Flange  
Ordering No.  
4110 0878 85 with holes  
4110 0878 80 without holes

- LZB33-L-A0030
- LZB33-L-AV0030
- LZB33-L-AR0026

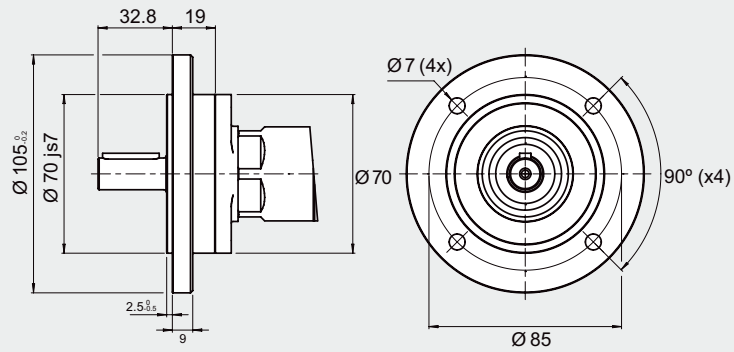
- \*) - 32 mm
- LZB33-L-A013-20
- LZB33-L-A007-20
- LZB33-L-A005-20



Dimensions (mm)

**IECff85**

Ordering No. 4430 2134 80

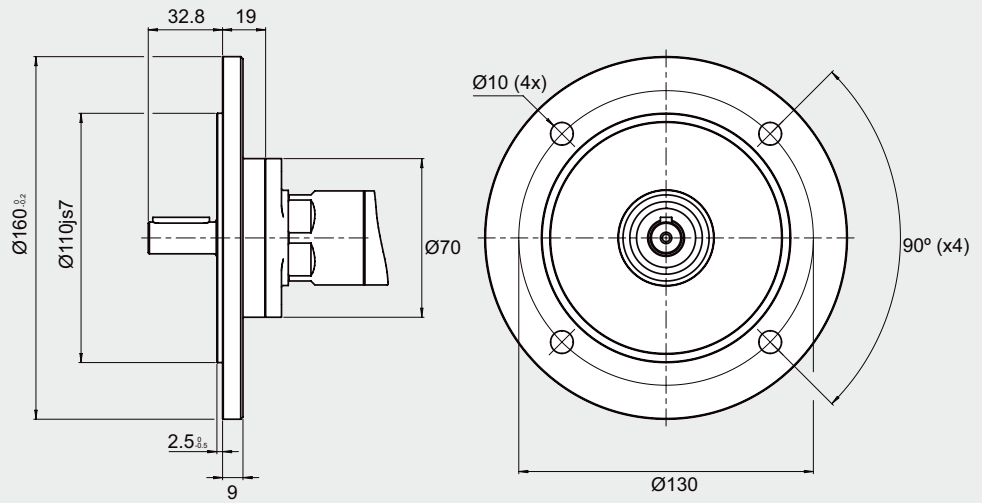


This flange can be mounted only on

- LZB33-L-A013-20 LZB33-L-A0030-11
- LZB33-L-A007-20 LZB33-L-AV0030-11
- LZB33-L-A005-20 LZB33-L-AR0026-11

**IECff130**

Ordering No. 4430 2287 80



This flange can be mounted only on

- LZB33-L-A013-20 LZB33-L-A0030-11
- LZB33-L-A007-20 LZB33-L-AV0030-11
- LZB33-L-A005-20 LZB33-L-AR0026-11



# VANE MOTORS LZB34-RL

## Stainless steel and lubrication free



**0.25 – 0.39 kW**  
**0.34 – 0.52 hp**

Material in parts:

- Back head, casing and front part stainless steel:  
ISO 683/XIII Type 17, SS 14 2346, DIN 17440 X12CrNiS188
- Outgoing shaft and gear rim stainless steel:  
ISO 683/XIII Type 9b, SS 14 2321, DIN 17440 X22CrNi17
- 100% Silicon free
- Grease that conforms to Food Grade regulations

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

For optional stainless steel motor cell, vane kits and other accessories see chapter Accessories.



### Data at air pressure 6.3 bar (91 psi)

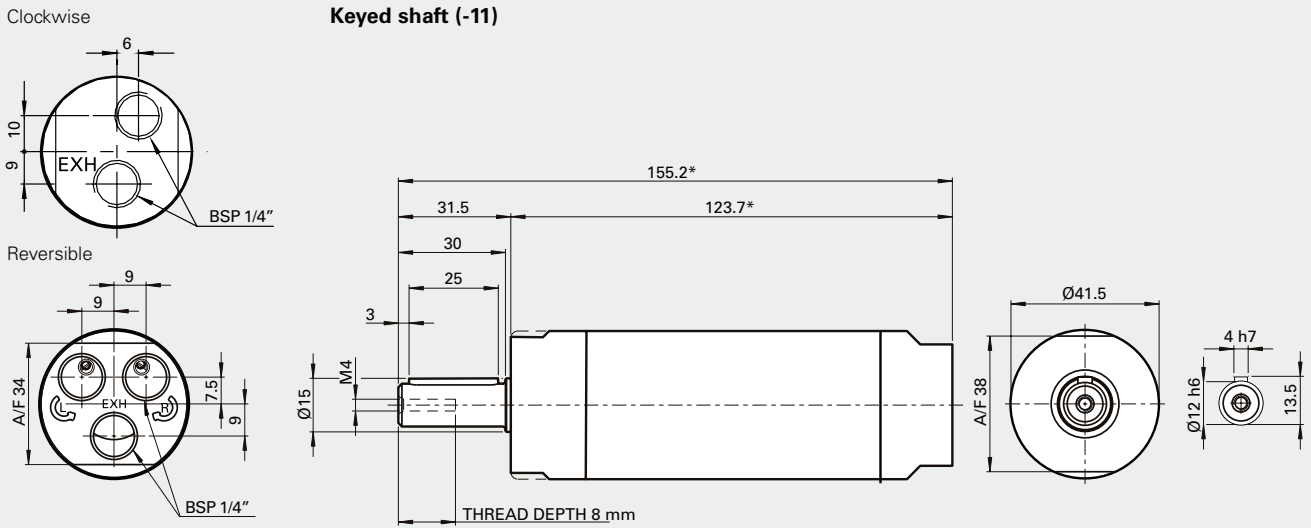
Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.
	kW	hp	r/min	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	r/min	l/s	cfm	kg	lb			
<b>Clockwise rotation (Keyed shaft)</b>																	
LZB34-RL-A210-11	0.39	0.52	9400	0.4	0.3	0.76	0.56	0.8	0.59	19000	8.1	17.2	0.95	2.09	c	Ex II 2GD c T4 IIC T110°C	8411 0338 41
LZB34-RL-A060-11	0.39	0.52	2600	1.4	1.0	2.7	2.0	2.8	2.1	5350	8.1	17.2	0.95	2.09	c	Ex II 2GD c T6 IIC T85°C	8411 0338 58
LZB34-RL-A033-11	0.39	0.52	1450	2.6	1.9	4.9	3.6	5.2	3.8	3000	8.1	17.2	0.95	2.09	c	Ex II 2GD c T6 IIC T85°C	8411 0338 66
LZB34-RL-A026-11	0.39	0.52	1170	3.2	2.4	6.1	4.5	6.4	4.7	2400	8.1	17.2	0.95	2.09	c	Ex II 2GD c T6 IIC T85°C	8411 0338 74
LZB34-RL-A013-11	0.38	0.51	580	6.4	4.7	12	8.9	12.8	9.4	1180	8.1	17.2	1.2	2.65	c	Ex II 2GD c T6 IIC T85°C	8411 0338 82
LZB34-RL-A007-11	0.38	0.51	320	11.5	8.5	21	15.5	23	17	650	8.1	17.2	1.2	2.65	c	Ex II 2GD c T6 IIC T85°C	8411 0338 90
LZB34-RL-A005-11	0.38	0.51	260	14.2	10.5	26	19.2	28	21	520	8.1	17.2	1.2	2.65	c	Ex II 2GD c T6 IIC T85°C	8411 0339 08
<b>Reversible (Keyed shaft)</b>																	
LZB34-RL-AR150-11	0.25	0.34	7000	0.34	0.25	0.46	0.34	0.68	0.5	13300	7.9	16.8	0.95	2.09	c	Ex II 2GD c T4 IIC T110°C	8411 0339 16
LZB34-RL-AR043-11	0.25	0.34	1960	1.2	0.89	1.6	1.2	2.4	1.8	3800	7.9	16.8	0.95	2.09	c	Ex II 2GD c T6 IIC T85°C	8411 0339 24
LZB34-RL-AR024-11	0.25	0.34	1090	2.2	1.6	3.0	2.2	4.4	3.2	2000	7.9	16.8	0.95	2.09	c	Ex II 2GD c T6 IIC T85°C	8411 0339 32
LZB34-RL-AR019-11	0.25	0.34	880	2.7	2.0	3.7	2.7	5.4	4.0	1700	7.9	16.8	0.95	2.09	c	Ex II 2GD c T6 IIC T85°C	8411 0339 40
LZB34-RL-AR009-11	0.25	0.34	430	5.4	4.0	7.0	5.2	10.8	8.0	800	7.9	16.8	1.2	2.65	c	Ex II 2GD c T6 IIC T85°C	8411 0339 57
LZB34-RL-AR005-11	0.25	0.34	240	9.8	7.2	12.6	9.3	19.6	14.5	450	7.9	16.8	1.2	2.65	c	Ex II 2GD c T6 IIC T85°C	8411 0339 65
LZB34-RL-AR004-11	0.25	0.34	190	12.1	8.9	15.6	11.5	24	17.7	360	7.9	16.8	1.2	2.65	c	Ex II 2GD c T6 IIC T85°C	8411 0339 73

<sup>1)</sup> For Shaft loading curves, see page 16.

**NOTE:** - If running motors with 100% dry air and no lubrication, performance can be reduced with 5-15% at max output.  
- To optimize life time for a lubrication free motor, use lubricated air if the application allows it.

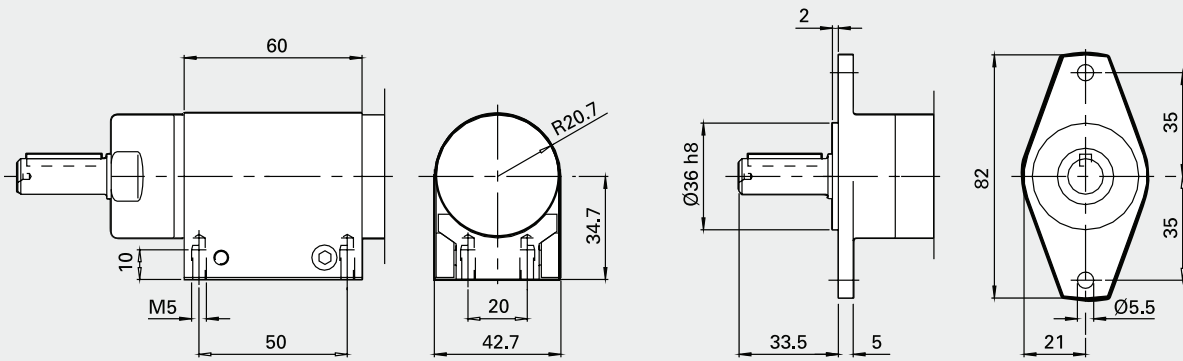
Dimensions (mm)

Conversion factor 1 mm = 0.04 inch



\*) +34.5 mm for  
 LZB34-RL-A013 LZB34-RL-AR009  
 LZB34-RL-A007 LZB34-RL-AR005  
 LZB34-RL-A005 LZB34-RL-AR004

**Optional mounting**

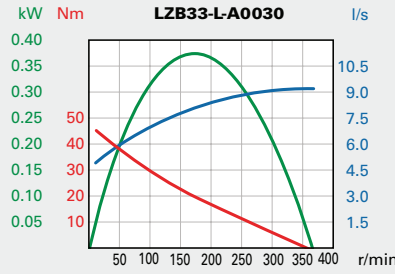
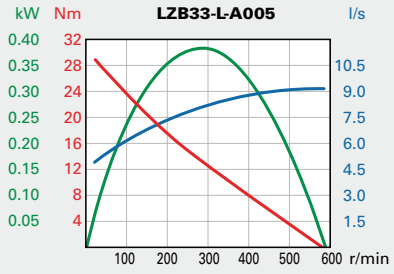
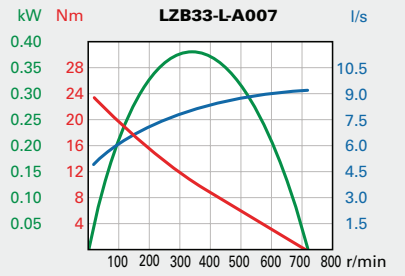
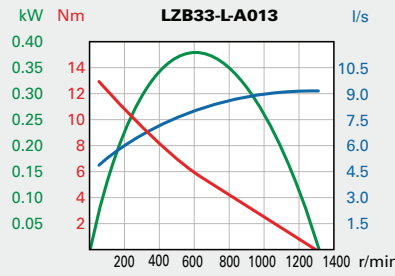
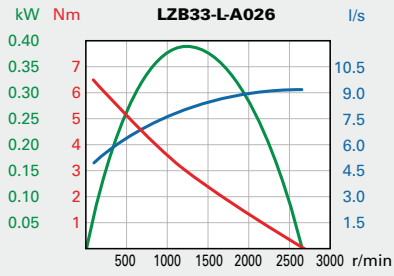
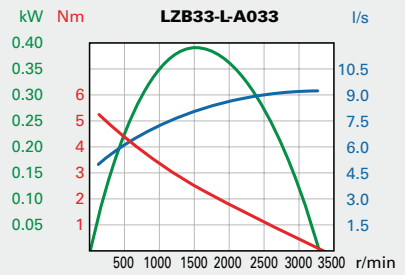
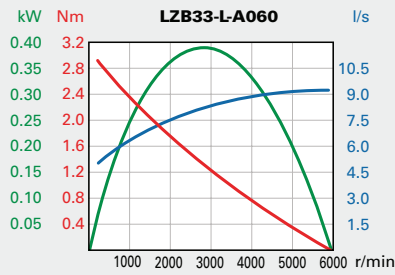
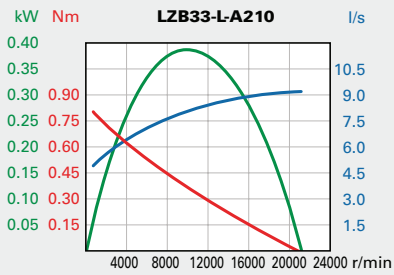


Foot  
 Ordering No. 4430 0855 80

Flange  
 Ordering No. 4430 0850 80

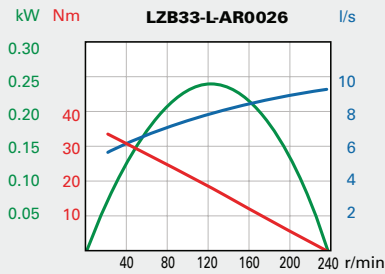
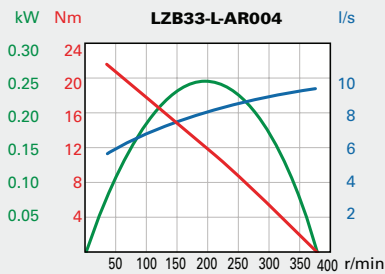
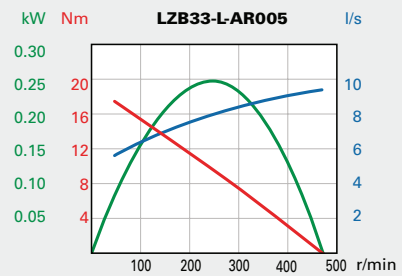
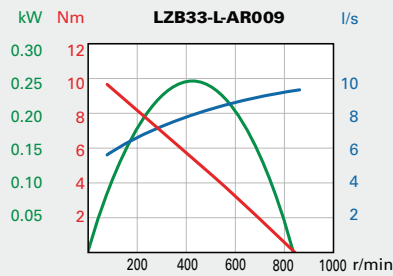
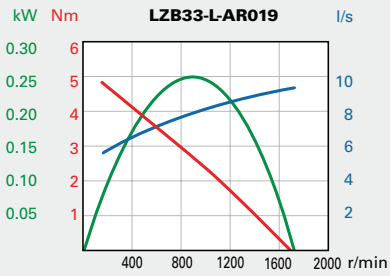
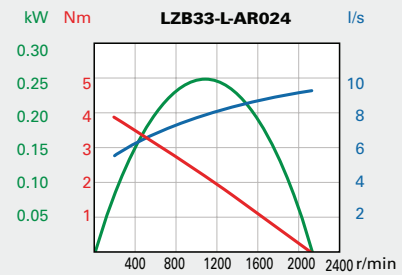
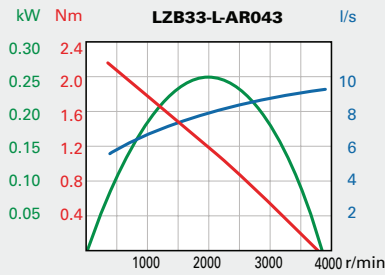
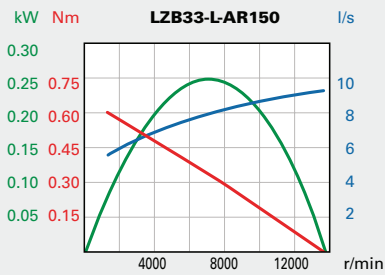
# LZB33-L, LZB34-RL: Performance curves at air pressure 6.3 bar (91 psi)

Non-reversible (A and AV)



# LZB33-L, LZB34-RL: Performance curves at air pressure 6.3 bar (91 psi)

Reversible (AR)



The diagram shows a general performance curve with three axes: Torque (Nm) and Power (kW) on the left y-axis, Air consumption (l/s) on the right y-axis, and Speed (r/min) on the x-axis. A green curve represents Power, a blue curve represents Torque, and a red curve represents Air consumption. Dashed lines indicate the 'Max output' and 'Torque at max output' points.

**Conversion factors**

- 1 kW = 1.34 hp
- 1 Nm = 0.74 lbf - ft
- 1 l/s = 2.1 cfm
- 1 hp = 0.75 kW
- 1 lbf-ft = 1.36 Nm
- 1 cfm = 0.47 l/s

For information about performance curves, see page 7.

# VANE MOTORS LZB33-L-LR

Low speed, low torque, lubrication free and reversible

## LZB34-RL-LR

Stainless steel, low speed, low torque, lubrication free and reversible



### Maximum permitted torque 14 Nm (10.3 lb ft)

For applications where low speed and high torque are required LZB33 high torque/low speed motors should be considered, see page 36. Within their working range these motors have a very steep torque curve. Speed and air consumption are relatively constant regardless of the load.

Stainless steel version:

- 100% Silicon free
- Grease that conforms to Food Grade regulations

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

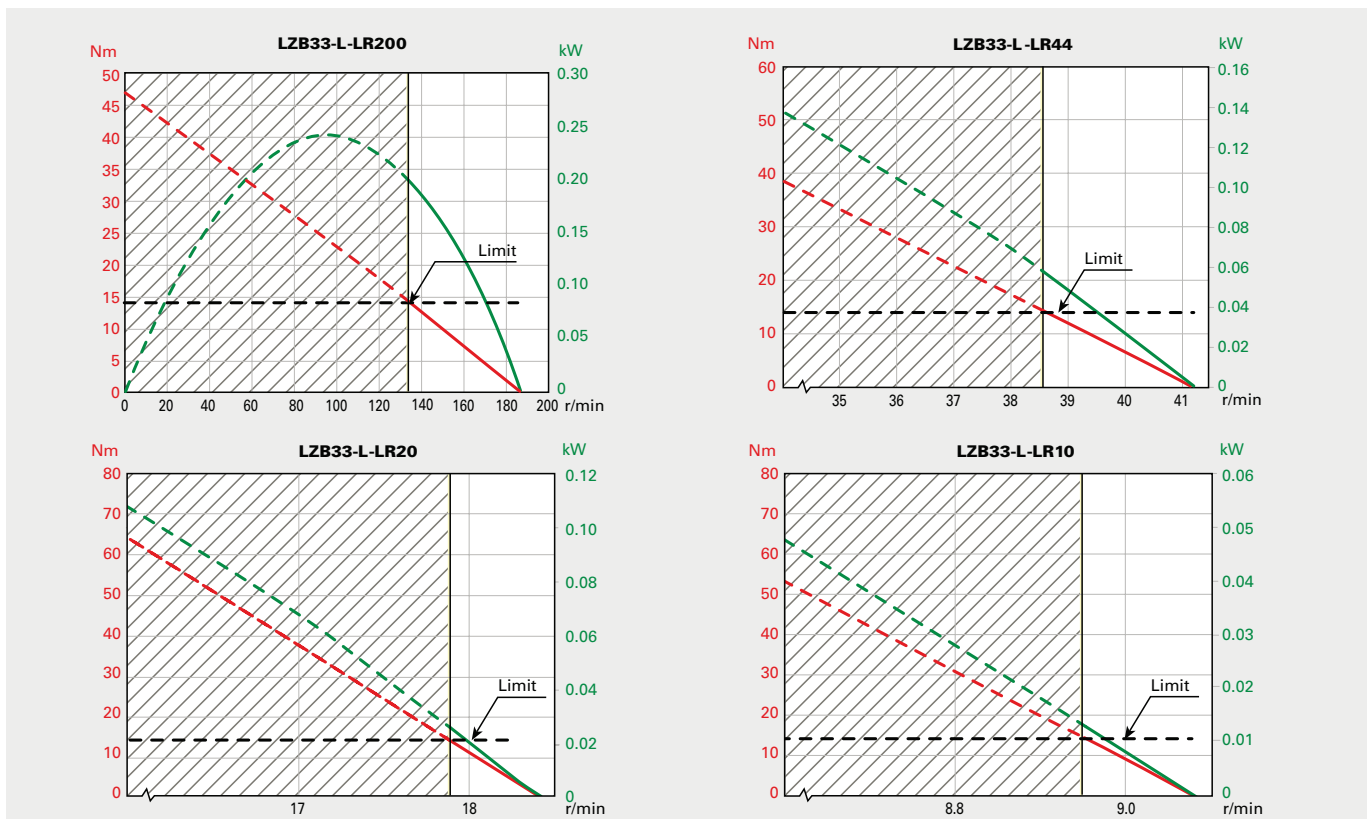
For optional stainless steel motor cell, vane kits and other accessories see chapter Accessories.

### Data at air pressure 6.3 bar (91 psi)

Model Lubrication free	Free speed r/min	Air consumption at free speed		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.
		l/s	cfm	kg	lb			
<b>Reversible (Keyed shaft)</b>								
LZB33-L-LR200-11	180	9.9	21.0	1.25	2.78	c	Ex II 2GD c T6 IIC T85°C	8411 0308 62
LZB33-L-LR44-11	42	9.9	21.0	1.55	3.44	c	Ex II 2GD c T6 IIC T85°C	8411 0308 54
LZB33-L-LR20-11	18	9.9	21.0	1.55	3.44	c	Ex II 2GD c T6 IIC T85°C	8411 0308 47
LZB33-L-LR10-11	10	9.9	21.0	1.8	4.0	c	Ex II 2GD c T6 IIC T85°C	8411 0308 39
<b>Stainless steel Reversible (Keyed shaft)</b>								
LZB34-RL-LR200-11	180	9.9	21.0	1.45	3.2	c	Ex II 2GD c T6 IIC T85°C	8411 0343 44
LZB34-RL-LR44-11	42	9.9	21.0	1.75	3.86	c	Ex II 2GD c T6 IIC T85°C	8411 0343 51
LZB34-RL-LR20-11	18	9.9	21.0	1.75	3.86	c	Ex II 2GD c T6 IIC T85°C	8411 0343 69
LZB34-RL-LR10-11	10	9.9	21.0	2.0	4.4	c	Ex II 2GD c T6 IIC T85°C	8411 0343 77

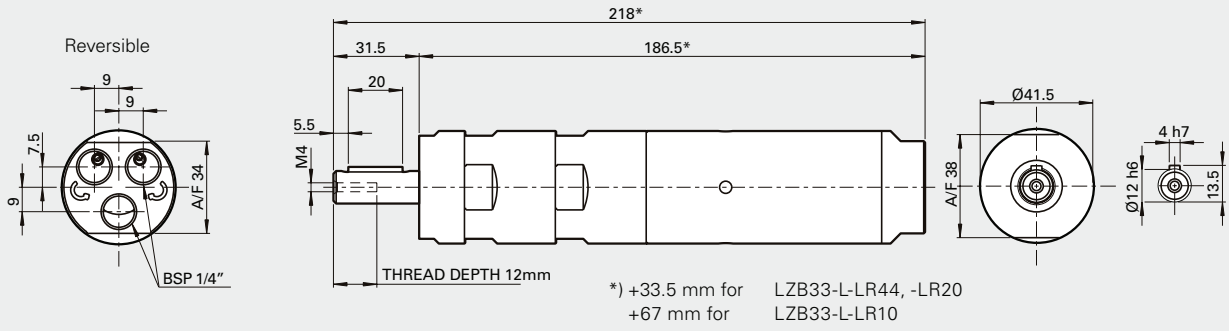
<sup>1)</sup> For Shaft loading curves, see page 16.

**NOTE:** - If running motors with 100% dry air and no lubrication, performance can be reduced with 10-20% at free speed.  
- To optimize life time for a lubrication free motor, use lubricated air if the application allows it.

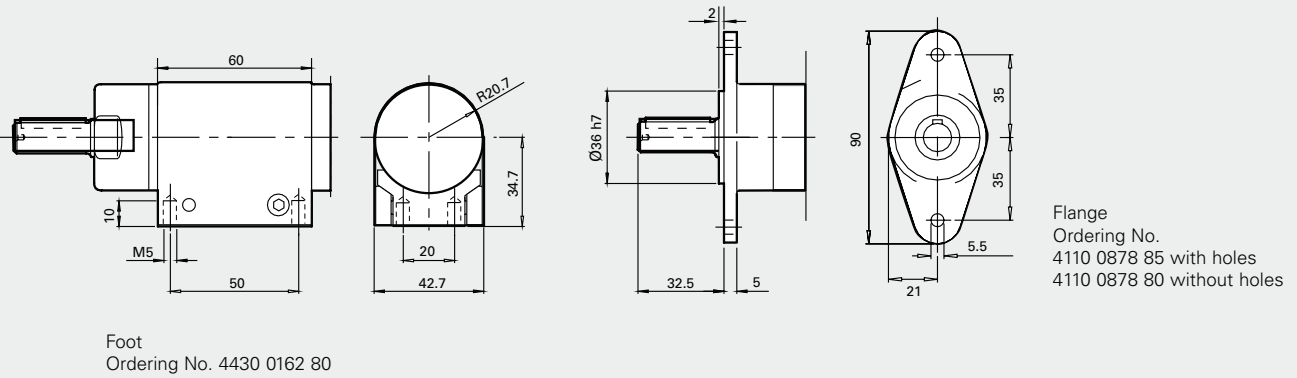


Dimensions LZB33-L-RL, LZB34-RL-LR (mm)

Conversion factor 1 mm = 0.04 inch

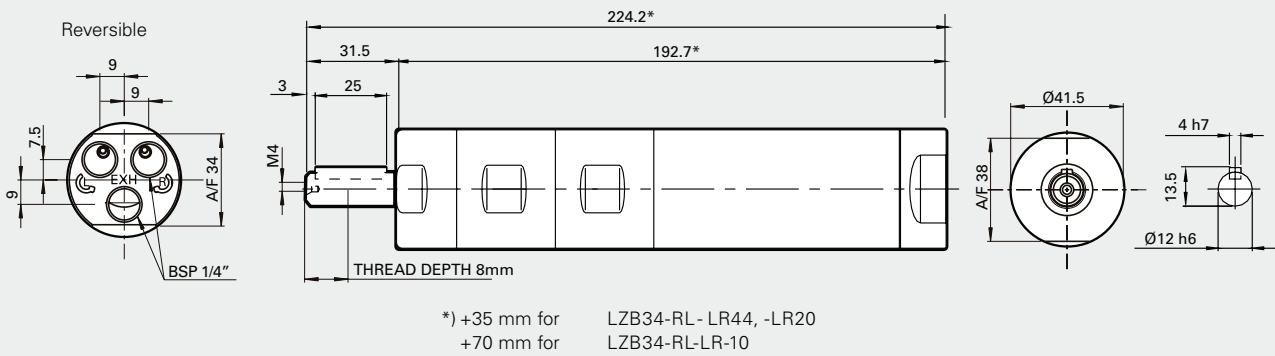


Optional mounting

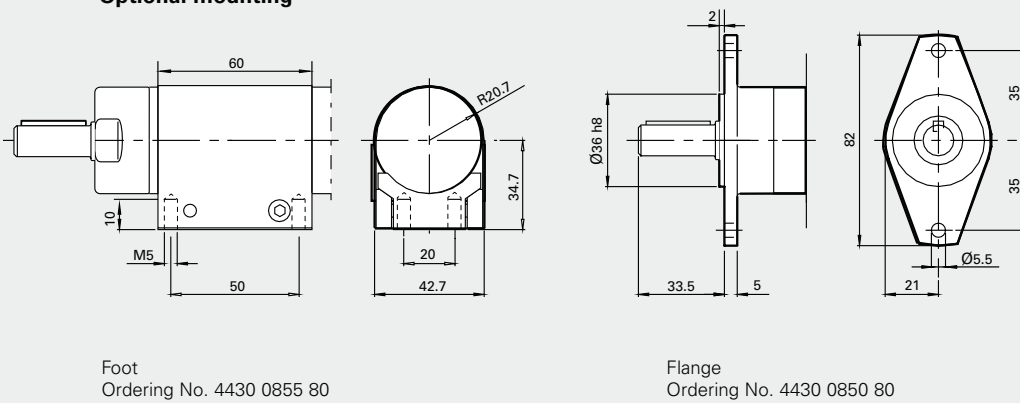


Dimensions LZB34-RL-LR

Conversion factor 1 mm = 0.04 inch



Optional mounting



# VANE MOTORS LZB33-L

## High torque and lubrication free



**0.23 – 0.37 kW**  
**0.31 – 0.50 hp**

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

For optional vanes and accessories see chapter Accessories.



### Data at air pressure 6.3 bar (91 psi)

Model	Max output		Speed at max output r/min	Torque at max output		Min starting torque		Stall torque		Free speed r/min	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.
	kW	hp		Nm	lb-ft	Nm	lb-ft	Nm	lb-ft		l/s	cfm	kg	lb			
<b>Lubrication free</b>																	
<b>Clockwise rotation (Keyed shaft)</b>																	
LZB33-L-A0020-11	0.37	0.50	100	36	27	66	49	72	53	210	8.1	17.2	2.6	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0322 07
LZB33-L-A0015-11	0.37	0.50	75	49	36	90	66	98	72	150	8.1	17.2	2.6	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0322 15
LZB33-L-A0011-11	0.37	0.50	55	65	48	118	87	130	96	115	8.1	17.2	2.6	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0322 23
LZB33-L-A0008-11	0.37	0.50	41	88	65	158	117	176	130	80	8.1	17.2	2.6	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0322 31
LZB33-L-A0007-11	0.37	0.50	33	110	81	200	148	220	162	70	8.1	17.2	2.6	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0322 49
LZB33-L-A0005-11	0.36	0.48	24	145	107	274	202	290	214	50	8.1	17.2	5.0	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0322 56
LZB33-L-A0004-11	0.36	0.48	18	195	144	360	266	390	288	38	8.1	17.2	5.0	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0322 64
LZB33-L-A0003-11	0.36	0.48	13	260	192	490	361	520	384	26	8.1	17.2	5.0	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0322 72
LZB33-L-A0002-11	0.36	0.48	10	349	257	680	502	698	515	20	8.1	17.2	5.0	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0322 80
<b>Reversible (Keyed shaft)</b>																	
LZB33-L-AR0015-11	0.24	0.32	75	31	23	41	30	62	46	140	7.9	16.8	2.6	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0323 06
LZB33-L-AR0011-11	0.24	0.32	55	42	31	56	41	84	62	100	7.9	16.8	2.6	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0323 14
LZB33-L-AR0008-11	0.24	0.32	41	56	41	74	55	112	83	75	7.9	16.8	2.6	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0323 22
LZB33-L-AR0006-11	0.24	0.32	31	75	55	100	74	150	111	60	7.9	16.8	2.6	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0323 30
LZB33-L-AR0005-11	0.24	0.32	25	93	69	125	92	186	137	45	7.9	16.8	2.6	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0323 48
LZB33-L-AR0004-11	0.23	0.31	18	120	89	169	125	240	177	35	7.9	16.8	5.0	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0323 55
LZB33-L-AR0003-11	0.23	0.31	13	165	122	230	170	330	243	25	7.9	16.8	5.0	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0323 63
LZB33-L-AR0002-11	0.23	0.31	10	220	162	305	225	440	325	20	7.9	16.8	5.0	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0323 71
LZB33-L-AR0001-11	0.23	0.31	7	300	221	412	304	600	443	14	7.9	16.8	5.0	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0323 89

<sup>1)</sup> For Shaft loading curves, see page 16.

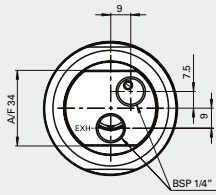
**NOTE:** - If running motors with 100% dry air and no lubrication, performance can be reduced with 5-15% at max output.  
 - To optimize life time for a lubrication free motor, use lubricated air if the application allows it.

Dimensions (mm)

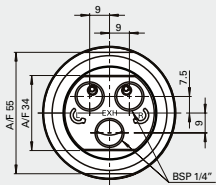
Conversion factor 1 mm = 0.04 inch

All versions

Clockwise



Reversible

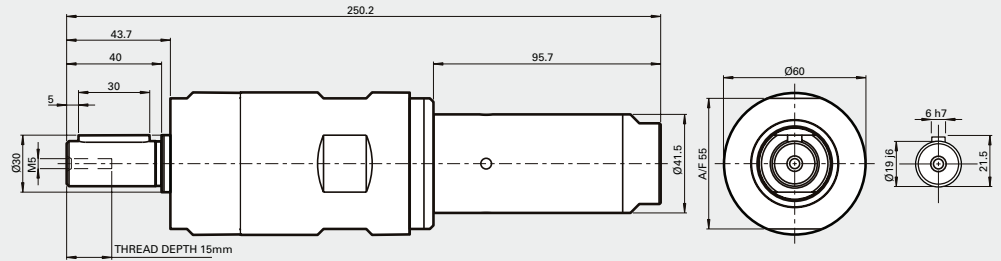


Clockwise

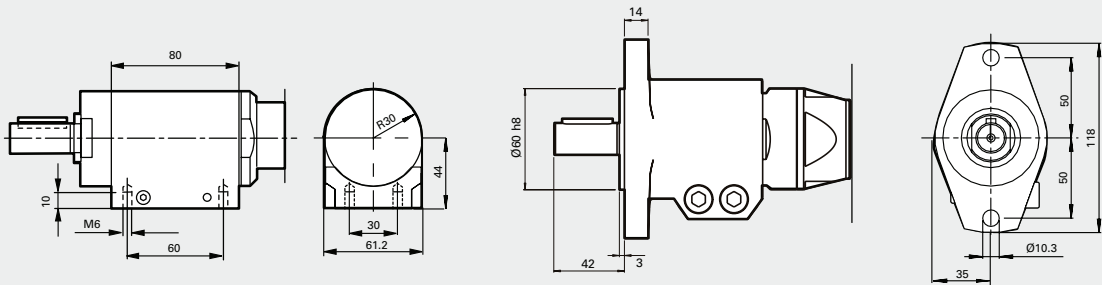
- LZB33-L-A0020
- LZB33-L-A0015
- LZB33-L-A0011
- LZB33-L-A0008
- LZB33-L-A0007

Reversible

- LZB33-L-AR0015
- LZB33-L-AR0011
- LZB33-L-AR0008
- LZB33-L-AR0006
- LZB33-L-AR0005



Optional mounting



Foot  
Ordering No. 4430 0178 80

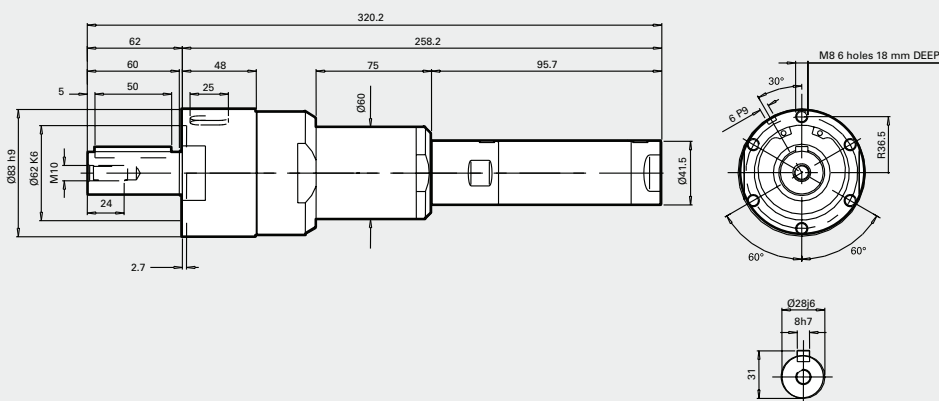
Flange  
Ordering No. 4430 0569 84

Clockwise

- LZB33-L-A0005
- LZB33-L-A0004
- LZB33-L-A0003
- LZB33-L-A0002

Reversible

- LZB33-L-AR0004
- LZB33-L-AR0003
- LZB33-L-AR0002
- LZB33-L-AR0001







# VANE MOTORS LZB33-LB

Brake module, lubrication free and reversible  
LZB34-RLB

Stainless steel, brake module, lubrication free  
and reversible



0.23 – 0.25 kW

0.31 – 0.34 hp

Braking torque from 0.55–520 Nm.

The brake is activated by spring force and released by air pressure.

Stainless steel version:

- 100% Silicon free
- Grease that conforms to Food Grade regulations

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

For optional stainless steel motor cell, vane kits and other accessories see chapter Accessories.

### Data at air pressure 6.3 bar (91 psi)

Model Lubrication free	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Braking torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.
	kW	hp	r/min	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	r/min	l/s	cfm	kg	lb			
<b>Reversible (Keyed shaft)</b>																			
LZB33-LB-AR150-11	0.25	0.34	7000	0.34	0.25	0.46	0.34	0.68	0.5	0.55	0.4	13300	7.9	16.8	1.35	2.97	c	Ex II 2GD c T4 IIC T110°C	8411 0340 05
LZB33-LB-AR043-11	0.25	0.34	1960	1.2	0.89	1.6	1.2	2.4	1.8	2.0	1.5	3800	7.9	16.8	1.35	2.97	c	Ex II 2GD c T6 IIC T85°C	8411 0340 13
LZB33-LB-AR024-11	0.25	0.34	1090	2.2	1.6	3.0	2.2	4.4	3.2	3.5	2.6	2000	7.9	16.8	1.35	2.97	c	Ex II 2GD c T6 IIC T85°C	8411 0340 21
LZB33-LB-AR019-11	0.25	0.34	880	2.7	2.0	3.7	2.7	5.4	4.0	4.4	3.2	1700	7.9	16.8	1.35	2.97	c	Ex II 2GD c T6 IIC T85°C	8411 0340 39
LZB33-LB-AR009-11	0.25	0.34	430	5.4	4.0	7.0	5.2	10.8	8.0	8.9	6.6	800	7.9	16.8	1.63	3.59	c	Ex II 2GD c T6 IIC T85°C	8411 0340 47
LZB33-LB-AR005-11	0.25	0.34	240	9.8	7.2	12.6	9.3	19.6	14.5	16	12	450	7.9	16.8	1.63	3.59	c	Ex II 2GD c T6 IIC T85°C	8411 0340 54
LZB33-LB-AR004-11	0.25	0.34	190	12.1	8.9	15.6	11.5	24	17.8	20	15	360	7.9	16.8	1.63	3.59	c	Ex II 2GD c T6 IIC T85°C	8411 0340 62
LZB33-LB-AR0026-11 <sup>2)</sup>	0.24	0.32	120	19	14	20	14.8	38	28	32	24	230	7.9	16.8	2.1	4.6	d	Ex II 2GD c T6 IIC T85°C	8411 0340 70
LZB33-LB-AR0015-11	0.24	0.32	75	31	23	41	30	62	46	52	38	140	7.9	16.8	3.2	7.0	g	Ex II 2GD c T6 IIC T85°C	8411 0340 88
LZB33-LB-AR0011-11	0.24	0.32	55	42	31	56	41	84	62	71	52	100	7.9	16.8	3.2	7.0	g	Ex II 2GD c T6 IIC T85°C	8411 0340 96
LZB33-LB-AR0008-11	0.24	0.32	41	56	41	74	55	112	83	93	67	75	7.9	16.8	3.2	7.0	g	Ex II 2GD c T6 IIC T85°C	8411 0341 04
LZB33-LB-AR0006-11	0.24	0.32	31	75	55	100	74	150	111	130	95	60	7.9	16.8	3.2	7.0	g	Ex II 2GD c T6 IIC T85°C	8411 0341 12
LZB33-LB-AR0005-11	0.24	0.32	25	93	69	125	92	186	137	160	120	45	7.9	16.8	3.2	7.0	g	Ex II 2GD c T6 IIC T85°C	8411 0341 20
LZB33-LB-AR0004-11	0.23	0.31	18	120	89	169	125	240	177	210	160	35	7.9	16.8	5.6	12.3	h	Ex II 2GD c T6 IIC T85°C	8411 0341 38
LZB33-LB-AR0003-11	0.23	0.31	13	165	122	230	170	330	243	290	210	25	7.9	16.8	5.6	12.3	h	Ex II 2GD c T6 IIC T85°C	8411 0341 46
LZB33-LB-AR0002-11	0.23	0.31	10	220	162	305	225	440	325	380	280	20	7.9	16.8	5.6	12.3	h	Ex II 2GD c T6 IIC T85°C	8411 0341 53
LZB33-LB-AR0001-11	0.23	0.31	7	300	221	412	304	600	443	520	380	14	7.9	16.8	5.6	12.3	h	Ex II 2GD c T6 IIC T85°C	8411 0341 61
<b>Stainless steel Reversible (Keyed shaft)</b>																			
LZB34-RLB-AR150-11	0.25	0.34	7000	0.34	0.25	0.46	0.34	0.68	0.5	0.55	0.4	13300	7.9	16.8	1.39	3.06	c	Ex II 2GD c T4 IIC T110°C	8411 0341 79
LZB34-RLB-AR043-11	0.25	0.34	1960	1.2	0.89	1.6	1.2	2.4	1.8	2.0	1.5	3800	7.9	16.8	1.39	3.06	c	Ex II 2GD c T6 IIC T85°C	8411 0341 87
LZB34-RLB-AR024-11	0.25	0.34	1090	2.2	1.6	3.0	2.2	4.4	3.2	3.5	2.6	2000	7.9	16.8	1.39	3.06	c	Ex II 2GD c T6 IIC T85°C	8411 0341 95
LZB34-RLB-AR019-11	0.25	0.34	880	2.7	2.0	3.7	2.7	5.4	4.0	4.4	3.2	1700	7.9	16.8	1.39	3.06	c	Ex II 2GD c T6 IIC T85°C	8411 0342 03
LZB34-RLB-AR009-11	0.25	0.34	430	5.4	4.0	7.0	5.2	10.8	8.0	9.0	6.6	800	7.9	16.8	1.66	3.66	c	Ex II 2GD c T6 IIC T85°C	8411 0342 11
LZB34-RLB-AR005-11	0.25	0.34	240	9.8	7.2	12.6	9.3	19.6	14.5	16	12	450	7.9	16.8	1.66	3.66	c	Ex II 2GD c T6 IIC T85°C	8411 0342 29
LZB34-RLB-AR004-11	0.25	0.34	190	12.1	8.9	15.6	11.5	24	17.7	20	15	360	7.9	16.8	1.66	3.66	c	Ex II 2GD c T6 IIC T85°C	8411 0342 37

<sup>1)</sup> For Shaft loading curves, see page 16.

<sup>2)</sup> Flange is mounted and supplied with the motor.

The brake needs minimum 3 bar to release. Performance curves same as standard motors, see page 33 and 38.

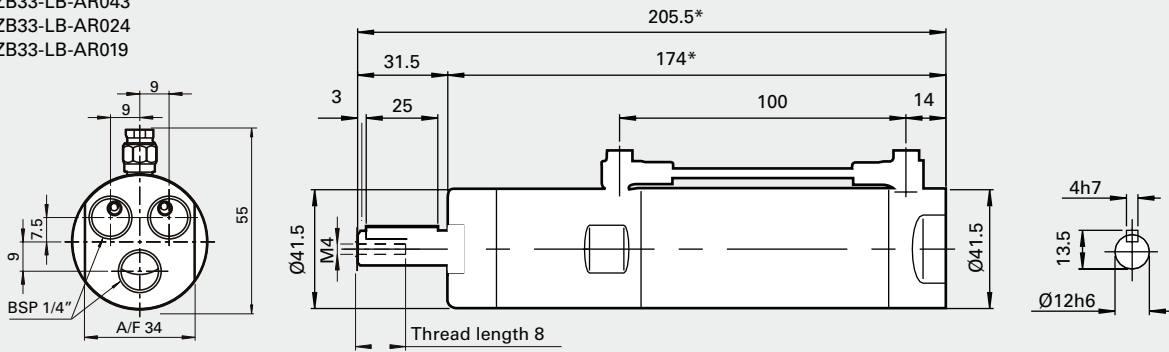
**NOTE:** - If running motors with 100% dry air and no lubrication, performance can be reduced with 5-15% at max output.  
- To optimize life time for a lubrication free motor, use lubricated air if the application allows it.

**Dimensions (mm)**

**Conversion factor 1 mm = 0.04 inch**

**Reversible with brake**

LZB33-LB-AR150  
LZB33-LB-AR043  
LZB33-LB-AR024  
LZB33-LB-AR019

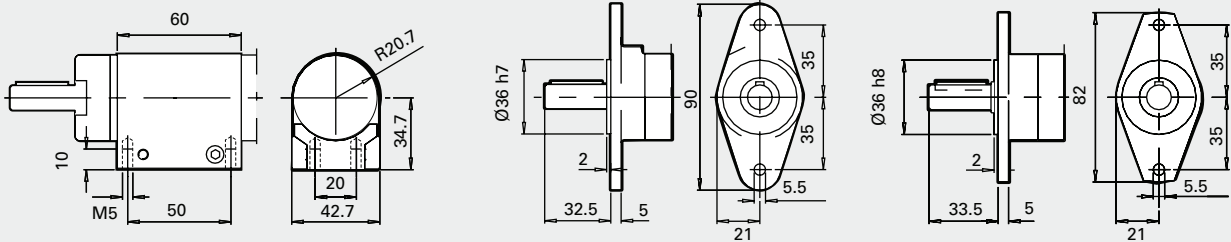


\*) +4 mm for LZB34-RLB-AR150  
LZB34-RLB-AR043  
LZB34-RLB-AR024  
LZB34-RLB-AR019

\*) +34 mm for LZB33-LB-AR009  
LZB33-LB-AR005  
LZB33-LB-AR004

\*) +39 mm for LZB34-RLB-AR009  
LZB34-RLB-AR005  
LZB34-RLB-AR004

**Optional mounting**



Foot  
Ordering No. 4430 0162 80

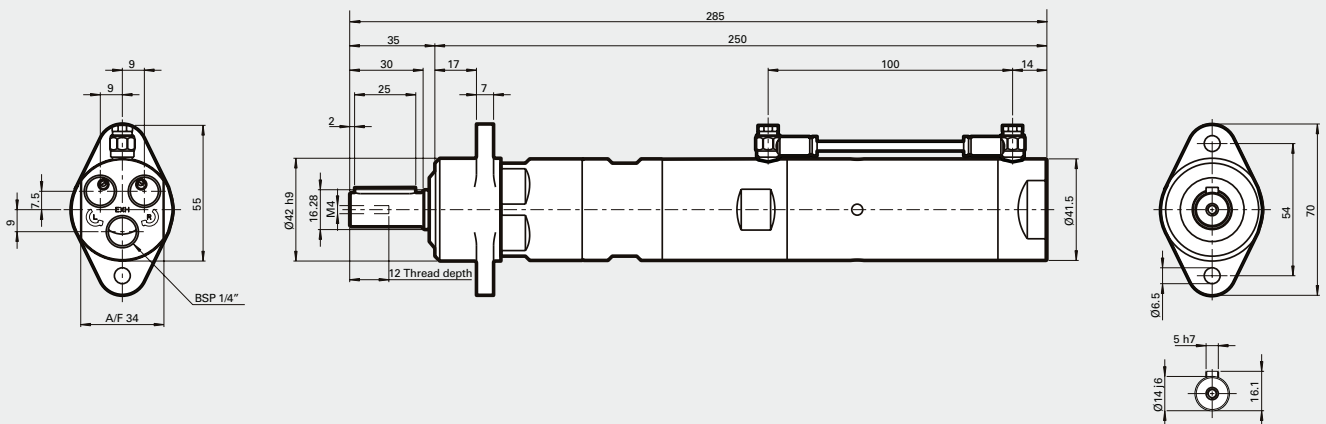
Stainless foot  
Ordering No. 4430 0855 80

LZB33-LB, Flange  
Ordering No.  
4110 0878 85 with holes  
4110 0878 80 without holes

LZB34-RLB, Stainless flange  
Ordering No. 4430 0850 80

**Reversible with brake**

LZB33-LB-AR0026

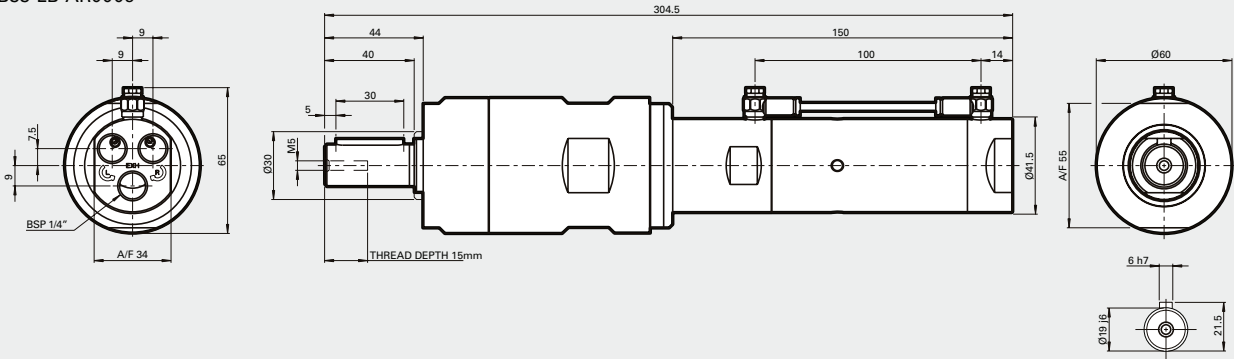


**Dimensions (mm)**

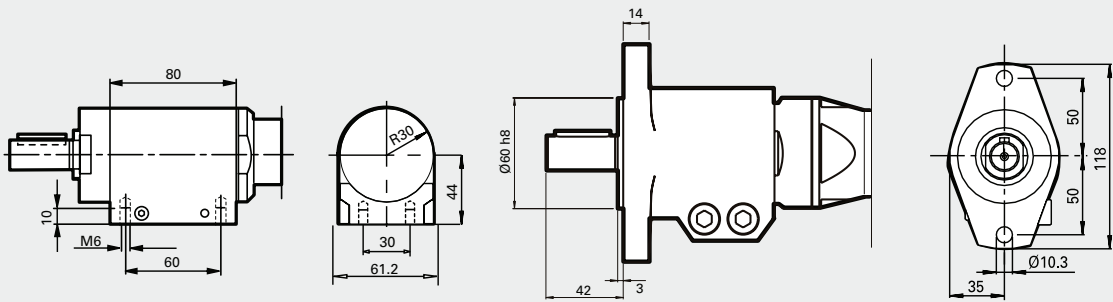
Conversion factor 1 mm = 0.04 inch

**Reversible with brake**

- LZB33-LB-AR0015
- LZB33-LB-AR0011
- LZB33-LB-AR0008
- LZB33-LB-AR0006



**Optional mounting**

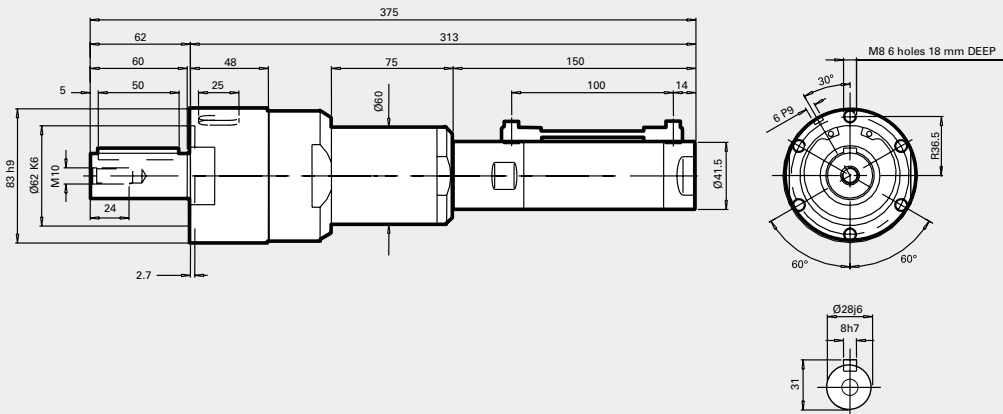


Foot  
Ordering No. 4430 0178 80

Flange  
Ordering No. 4430 0569 84

**Reversible with brake**

- LZB33-LB-AR0004
- LZB33-LB-AR0003
- LZB33-LB-AR0002
- LZB33-LB-AR0001



# VANE MOTORS LZB42



**0.50 – 0.71 kW**  
**0.67 – 0.95 hp**

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

For optional vanes and accessories see chapter Accessories.



## Data at air pressure 6.3 bar (91 psi)

Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.	
	Lubricated	kW		hp	r/min	Nm	lb-ft	Nm	lb-ft		Nm	lb-ft	r/min	l/s				cfm
<b>Clockwise rotation (Keyed shaft)</b>																		
LZB42-A200-11		0.71	0.95	10000	0.68	0.5	1.09	0.8	1.4	1.0	19000	13.0	28.0	1.2	2.65	e	Ex II 2GD c T4 IIC T110°C	8411 0420 08
LZB42-A065-11		0.71	0.95	3100	2.2	1.6	3.5	2.6	4.4	3.2	6100	13.0	28.0	1.2	2.65	e	Ex II 2GD c T4 IIC T110°C	8411 0420 16
LZB42-A040-11		0.71	0.95	1960	3.5	2.6	5.6	4.1	7.0	5.2	3800	13.0	28.0	1.2	2.65	e	Ex II 2GD c T4 IIC T110°C	8411 0420 24
LZB42-A025-11		0.71	0.95	1180	5.8	4.3	9.3	6.9	11.6	8.6	2200	13.0	28.0	1.2	2.65	e	Ex II 2GD c T4 IIC T110°C	8411 0420 32
LZB42-A015-11		0.70	0.94	690	9.7	7.2	15.5	11.4	19.4	14.3	1300	13.0	28.0	1.25	2.75	e	Ex II 2GD c T6 IIC T85°C	8411 0420 40
LZB42-A010-11		0.70	0.94	440	15.1	11.1	24	18	30	22	850	13.0	28.0	1.25	2.75	e	Ex II 2GD c T6 IIC T85°C	8411 0420 57
LZB42-A005-11		0.70	0.94	260	25	18.4	40	30	50	37	500	13.0	28.0	1.25	2.75	e	Ex II 2GD c T6 IIC T85°C	8411 0420 65
LZB42-A0030-11		0.68	0.91	150	44	32	70	52	88	65	270	13.0	28.0	2.7	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0420 73
LZB42-A0020-11		0.68	0.91	95	69	51	110	81	138	102	180	13.0	28.0	2.7	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0420 81
LZB42-A0012-11		0.68	0.91	55	114	84	182	134	228	168	105	13.0	28.0	2.7	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0420 99
LZB42-A0008-11		0.66	0.89	37	173	128	277	204	346	255	70	13.0	28.0	4.9	10.7	h	Ex II 2GD c T6 IIC T85°C	8411 0421 07
LZB42-A0005-11		0.66	0.89	23	272	201	435	321	544	401	42	13.0	28.0	4.9	10.7	h	Ex II 2GD c T6 IIC T85°C	8411 0421 15
<b>Reversible (Keyed shaft)</b>																		
LZB42-AR170-11		0.53	0.71	8000	0.63	0.46	0.85	0.63	1.3	1.0	14200	12.5	27.0	1.2	2.65	e	Ex II 2GD c T4 IIC T110°C	8411 0423 05
LZB42-AR050-11		0.53	0.71	2500	2.0	1.5	2.7	2.0	4.0	3.0	4500	12.5	27.0	1.2	2.65	e	Ex II 2GD c T4 IIC T110°C	8411 0423 13
LZB42-AR030-11		0.53	0.71	1570	3.2	2.4	4.3	3.2	6.4	4.7	2800	12.5	27.0	1.2	2.65	e	Ex II 2GD c T4 IIC T110°C	8411 0423 21
LZB42-AR020-11		0.53	0.71	940	5.4	4.0	7.3	5.4	10.8	8.0	1700	12.5	27.0	1.2	2.65	e	Ex II 2GD c T4 IIC T110°C	8411 0423 39
LZB42-AR010-11		0.52	0.70	550	9.0	6.6	12.2	9.0	18	13.3	980	12.5	27.0	1.25	2.75	e	Ex II 2GD c T6 IIC T85°C	8411 0423 47
LZB42-AR007-11		0.52	0.70	350	14	10.3	18.9	13.9	28	21	640	12.5	27.0	1.25	2.75	e	Ex II 2GD c T6 IIC T85°C	8411 0423 54
LZB42-AR004-11		0.52	0.70	210	23	17	31	23	46	34	375	12.5	27.0	1.25	2.75	e	Ex II 2GD c T6 IIC T85°C	8411 0423 62
LZB42-AR0025-11		0.51	0.68	120	41	30	55	41	82	60	210	12.5	27.0	2.7	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0423 70
LZB42-AR0015-11		0.51	0.68	75	64	47	86	63	128	94	140	12.5	27.0	2.7	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0423 88
LZB42-AR0010-11		0.51	0.68	46	106	78	143	105	212	156	80	12.5	27.0	2.7	5.8	g	Ex II 2GD c T6 IIC T85°C	8411 0423 96
LZB42-AR0006-11		0.50	0.67	29	162	119	219	162	324	239	50	12.5	27.0	4.9	10.7	h	Ex II 2GD c T6 IIC T85°C	8411 0424 04
LZB42-AR0004-11		0.50	0.67	19	255	188	344	254	510	376	33	12.5	27.0	4.9	10.7	h	Ex II 2GD c T6 IIC T85°C	8411 0424 12

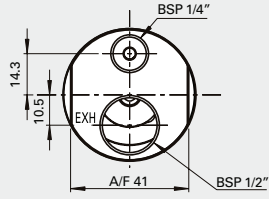
<sup>1)</sup> For Shaft loading curves, see page 16.

Dimensions (mm)

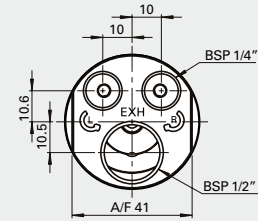
Conversion factor 1 mm = 0.04 inch

All versions

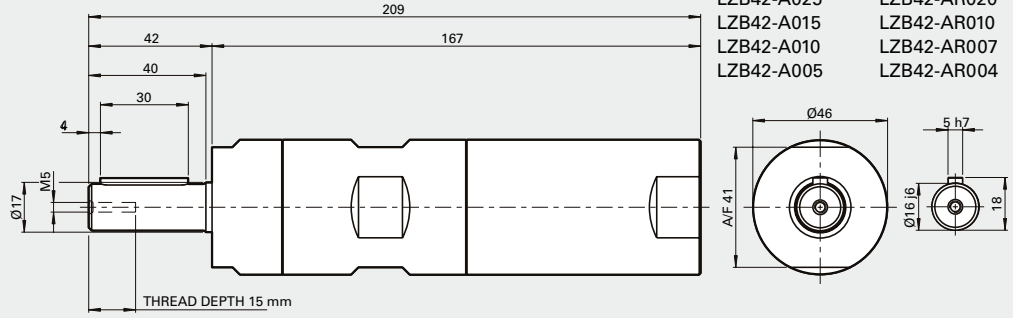
Clockwise



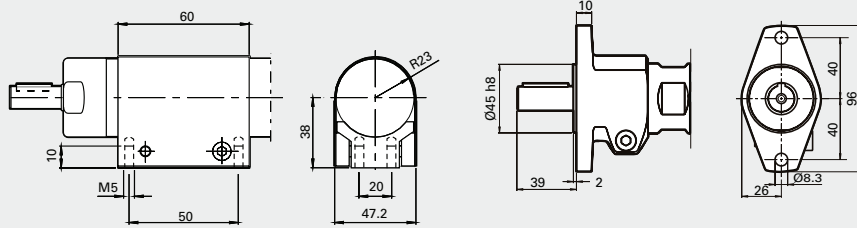
Reversible



Clockwise	Reversible
LZB42-A200	LZB42-AR170
LZB42-A065	LZB42-AR050
LZB42-A040	LZB42-AR030
LZB42-A025	LZB42-AR020
LZB42-A015	LZB42-AR010
LZB42-A010	LZB42-AR007
LZB42-A005	LZB42-AR004



Optional mountings



Foot Ordering No. 4430 0575 80

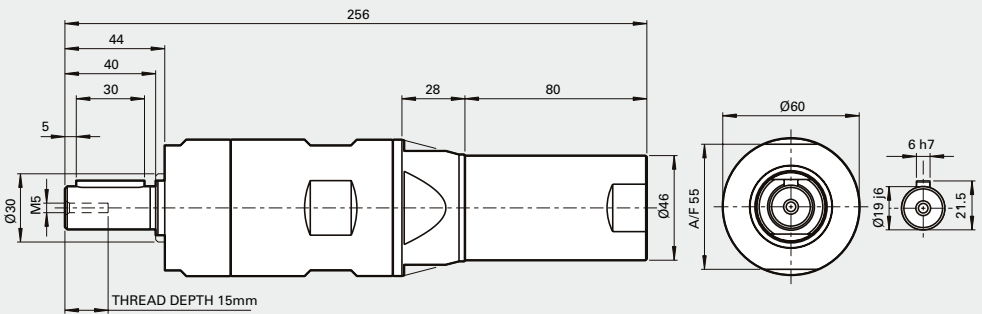
Flange Ordering No. 4430 0490 81

Clockwise

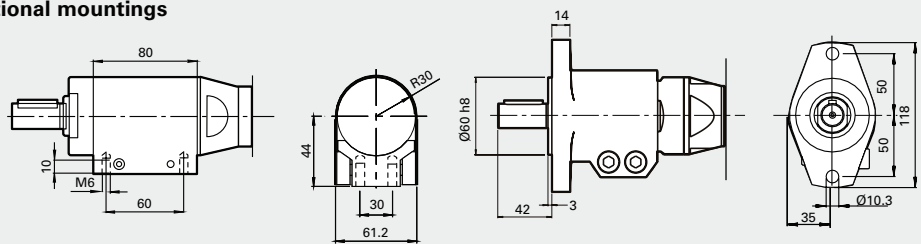
- LZB42-A0030
- LZB42-A0020
- LZB42-A0012

Reversible

- LZB42-AR0025
- LZB42-AR0015
- LZB42-AR0010



Optional mountings



Foot Ordering No. 4430 0178 80

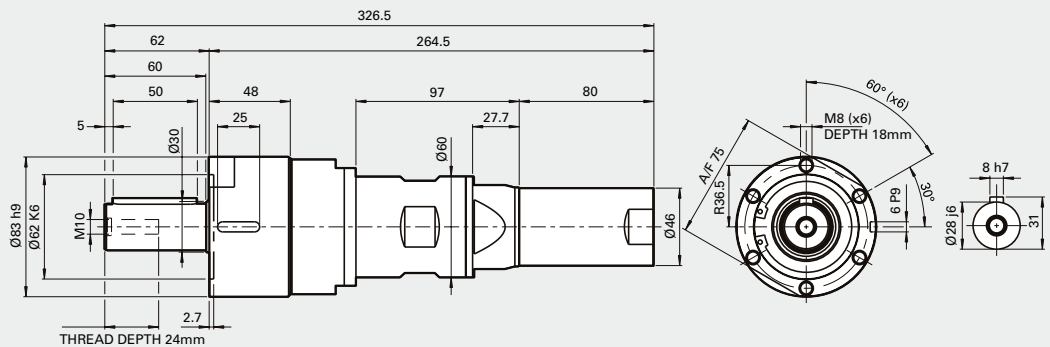
Flange Ordering No. 4430 0569 84

Clockwise

- LZB42-A0008
- LZB42-A0005

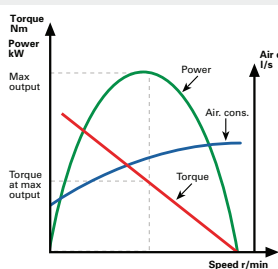
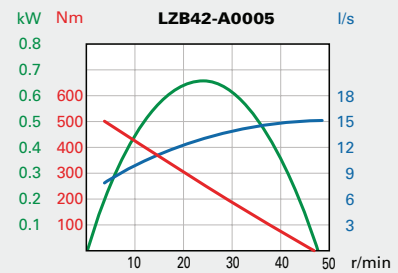
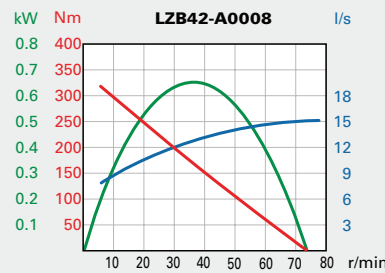
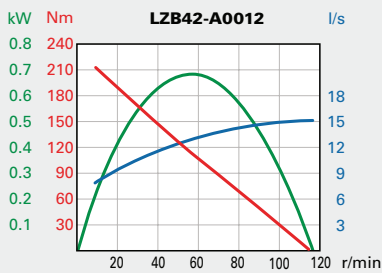
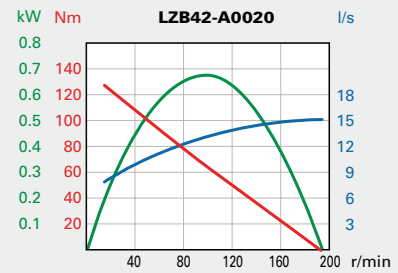
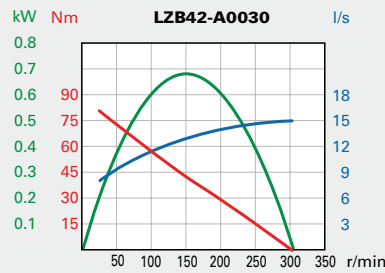
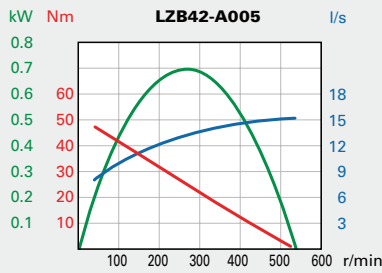
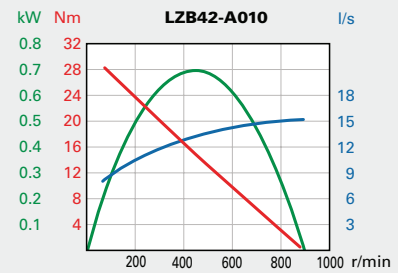
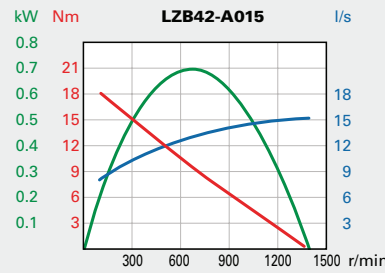
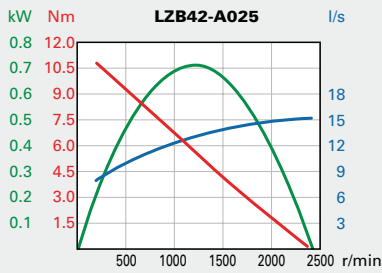
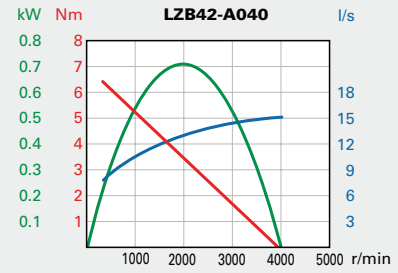
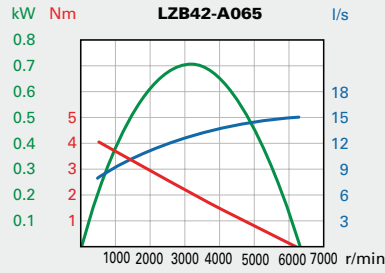
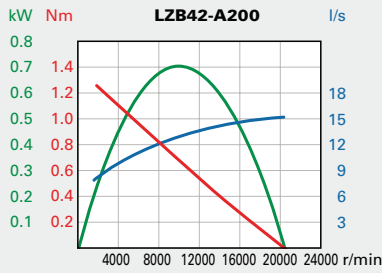
Reversible

- LZB42-AR0006
- LZB42-AR0004



# LZB42: Performance curves at air pressure 6.3 bar (91 psi)

Non-reversible (A)



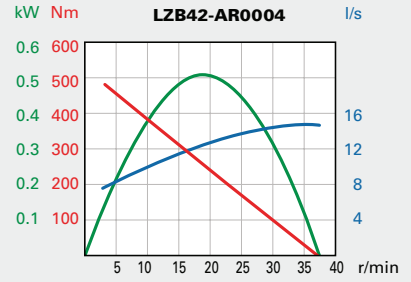
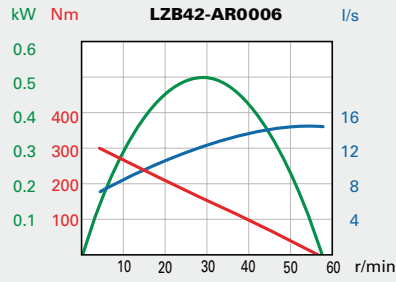
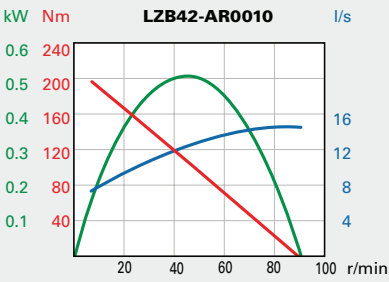
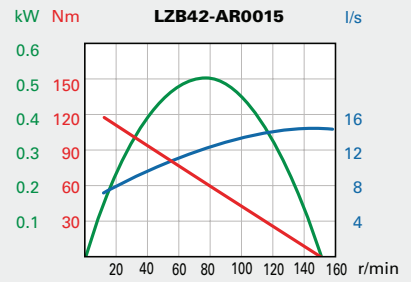
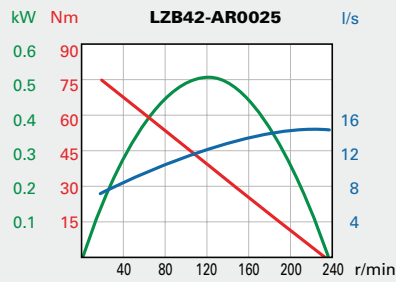
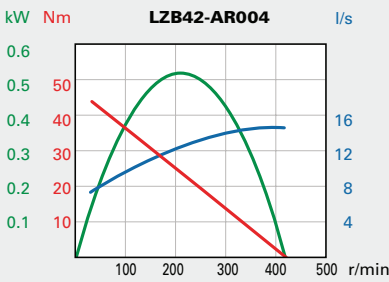
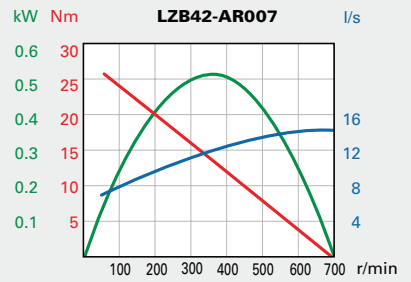
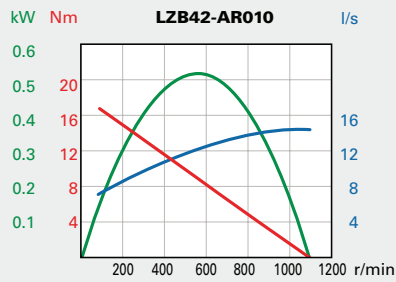
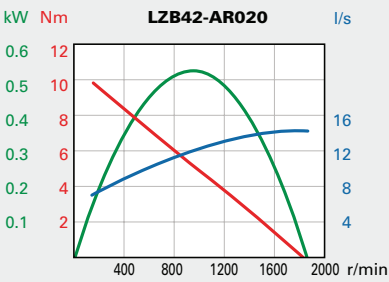
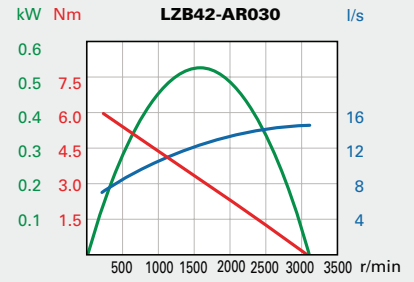
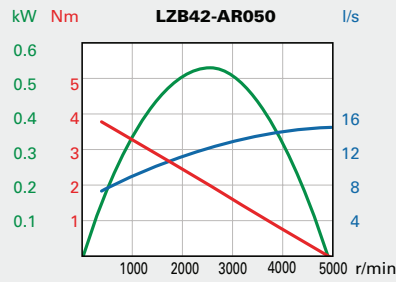
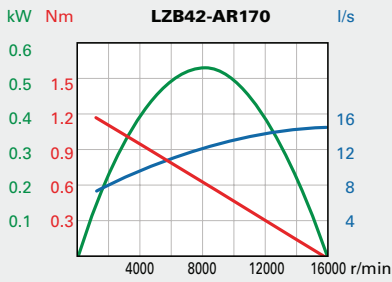
Conversion factors  
 1 kW = 1.34 hp  
 1 Nm = 0.74 lbf-ft  
 1 l/s = 2.1 cfm

1 hp = 0.75 kW  
 1 lbf-ft = 1.36 Nm  
 1 cfm = 0.47 l/s

For information about performance curves, see page 7.

# LZB42: Performance curves at air pressure 6.3 bar (91 psi)

Reversible (AR)



**Conversion factors**  
 1 kW = 1.34 hp  
 1 Nm = 0.74 lbf - ft  
 1 l/s = 2.1 cfm  
 1 hp = 0.75 kW  
 1 lbf-ft = 1.36 Nm  
 1 cfm = 0.47 l/s

For information about performance curves, see page 7.



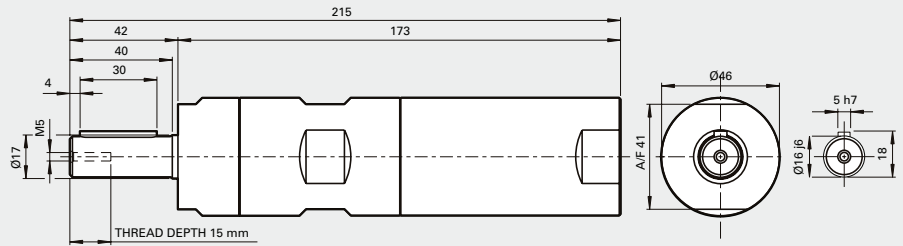


Dimensions (mm)

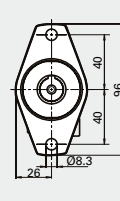
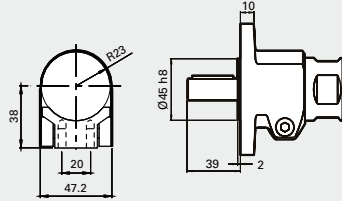
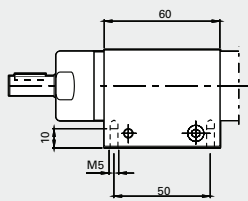
Conversion factor 1 mm = 0.04 inch

- |                                      |                   |
|--------------------------------------|-------------------|
| <b>Clockwise/<br/>Anti-clockwise</b> | <b>Reversible</b> |
| LZB46-A200                           | LZB46-AR170       |
| LZB46-A065                           | LZB46-AR050       |
| LZB46-A040                           | LZB46-AR030       |
| LZB46-A025                           | LZB46-AR020       |
| LZB46-A015                           | LZB46-AR010       |
| LZB46-A010                           | LZB46-AR007       |
| LZB46-A005                           | LZB46-AR004       |
| LZB46-AV200                          |                   |
| LZB46-AV065                          |                   |
| LZB46-AV040                          |                   |
| LZB46-AV025                          |                   |
| LZB46-AV015                          |                   |
| LZB46-AV010                          |                   |
| LZB46-AV005                          |                   |

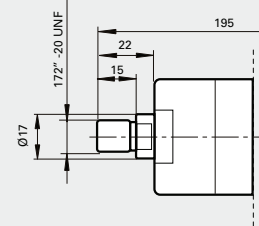
Keyed shaft (-11)



Optional mountings



Threaded shaft (-12)

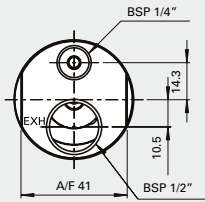


Foot Ordering No. 4430 0575 80

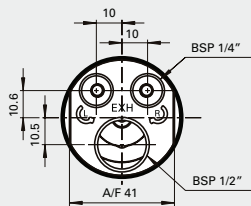
Flange Ordering No. 4430 0490 81

All versions

Clockwise/  
Anti-clockwise

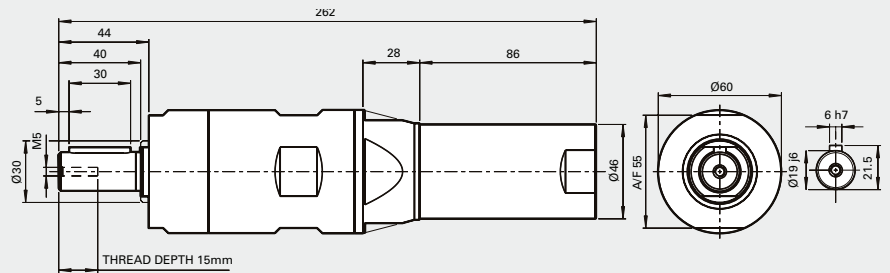


Reversible

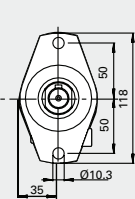
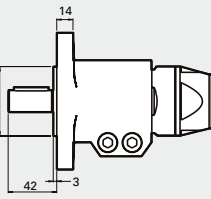
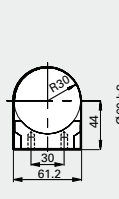
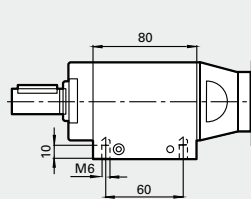


- |                                      |                   |
|--------------------------------------|-------------------|
| <b>Clockwise/<br/>Anti-clockwise</b> | <b>Reversible</b> |
| LZB46-A0030                          | LZB46-AR0025      |
| LZB46-A0020                          | LZB46-AR0015      |
| LZB46-A0012                          | LZB46-AR0010      |
| LZB46-AV0030                         |                   |
| LZB46-AV0020                         |                   |
| LZB46-AV0012                         |                   |

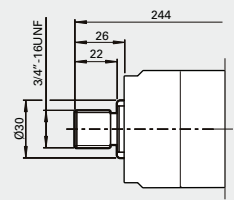
Keyed shaft (-11)



Optional mountings



Threaded shaft (-12)



Foot Ordering No. 4430 0178 80

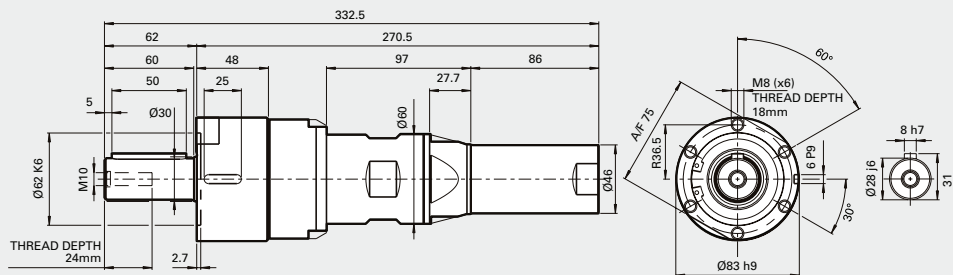
Flange Ordering No. 4430 0569 84

Clockwise/  
Anti-clockwise

- LZB46-A0008
- LZB46-A0005
- LZB46-AV0008
- LZB46-AV0005

Reversible

- LZB46-AR0006
- LZB46-AR0004



# VANE MOTORS LZB46-RL

## Stainless steel and lubrication free



**0.60 – 0.84 kW**  
**0.80 – 1.13 hp**

Material in parts:

- Casing and front part stainless steel: ISO 683/XIII Type 17, SS 14 2346, DIN 17440 X12CrNiS188
- Outgoing shaft and gear rim stainless steel: ISO 683/XIII Type 9b, SS 14 2321, DIN 17440 X22CrNi17
- 100% Silicon free
- Grease that conforms to Food Grade regulations

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

For optional stainless steel motor cell, vane kits and other accessories see chapter Accessories.



### Data at air pressure 6.3 bar (91 psi)

Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.	
	kW	hp		r/min	Nm	lb-ft	Nm	lb-ft	Nm		lb-ft	r/min	l/s	cfm				kg
<b>Clockwise rotation (Keyed shaft)</b>																		
LZB46-RL-A200-11	0.84	1.13	10800	0.74	0.55	1.2	0.89	1.48	1.09	20000	16.2	34.4	1.8	4.0	e	Ex II 2GD c T4 IIC T110°C	8411 0472 15	
LZB46-RL-A065-11	0.84	1.13	3300	2.4	1.8	3.9	2.9	4.8	3.5	6300	16.2	34.4	1.8	4.0	e	Ex II 2GD c T4 IIC T110°C	8411 0472 23	
LZB46-RL-A040-11	0.84	1.13	2100	3.8	2.8	6.1	4.5	7.6	5.6	4000	16.2	34.4	1.8	4.0	e	Ex II 2GD c T4 IIC T110°C	8411 0472 31	
LZB46-RL-A025-11	0.84	1.13	1270	6.3	4.6	10	7.4	12.6	9.3	2400	16.2	34.4	1.8	4.0	e	Ex II 2GD c T4 IIC T110°C	8411 0472 49	
LZB46-RL-A015-11	0.82	1.10	740	10.5	7.7	17	12.5	21	15.5	1400	16.2	34.4	1.9	4.2	e	Ex II 2GD c T4 IIC T110°C	8411 0470 82	
LZB46-RL-A010-11	0.82	1.10	480	16.5	12.2	26	19.2	33	24.3	900	16.2	34.4	1.9	4.2	e	Ex II 2GD c T4 IIC T110°C	8411 0471 08	
LZB46-RL-A005-11	0.82	1.10	280	27	20	44	32	55	41	540	16.2	34.4	1.9	4.2	e	Ex II 2GD c T4 IIC T110°C	8411 0471 16	
LZB46-RL-A0030-11	0.81	1.09	160	48	35	77	57	95	70	300	16.2	34.4	3.8	8.4	g	Ex II 2GD c T6 IIC T85°C	8411 0471 24	
LZB46-RL-A0020-11	0.81	1.09	105	75	55	121	89	149	110	200	16.2	34.4	3.8	8.4	g	Ex II 2GD c T6 IIC T85°C	8411 0471 32	
LZB46-RL-A0012-11	0.81	1.09	62	124	91	201	148	248	183	115	16.2	34.4	3.8	8.4	g	Ex II 2GD c T6 IIC T85°C	8411 0471 40	
<b>Reversible (Keyed shaft)</b>																		
LZB46-RL-AR170-11	0.63	0.84	8500	0.71	0.52	0.96	0.71	1.42	1.0	15800	14.0	29.7	1.8	4.0	e	Ex II 2GD c T4 IIC T110°C	8411 0472 56	
LZB46-RL-AR050-11	0.63	0.84	2600	2.3	1.7	3.1	2.3	4.6	3.4	5000	14.0	29.7	1.8	4.0	e	Ex II 2GD c T4 IIC T110°C	8411 0472 64	
LZB46-RL-AR030-11	0.63	0.84	1670	3.6	2.7	4.9	3.6	7.2	5.3	3200	14.0	29.7	1.8	4.0	e	Ex II 2GD c T4 IIC T110°C	8411 0472 72	
LZB46-RL-AR020-11	0.63	0.84	1000	6.0	4.4	8.1	6.0	12	8.9	1900	14.0	29.7	1.8	4.0	e	Ex II 2GD c T4 IIC T110°C	8411 0472 80	
LZB46-RL-AR010-11	0.62	0.83	590	10.1	7.4	13.5	10	20	14.9	1100	14.0	29.7	1.9	4.2	e	Ex II 2GD c T4 IIC T110°C	8411 0471 57	
LZB46-RL-AR007-11	0.62	0.83	370	15.8	11.7	21	15.5	32	23.3	700	14.0	29.7	1.9	4.2	e	Ex II 2GD c T4 IIC T110°C	8411 0471 65	
LZB46-RL-AR004-11	0.62	0.83	220	26	19.5	35	26	53	39	420	14.0	29.7	1.9	4.2	e	Ex II 2GD c T4 IIC T110°C	8411 0471 73	
LZB46-RL-AR0025-11	0.60	0.80	125	46	34	61	45	91	67	230	14.0	29.7	3.8	8.4	g	Ex II 2GD c T6 IIC T85°C	8411 0471 81	
LZB46-RL-AR0015-11	0.60	0.80	80	72	53	96	71	143	105	150	14.0	29.7	3.8	8.4	g	Ex II 2GD c T6 IIC T85°C	8411 0471 99	
LZB46-RL-AR0010-11	0.60	0.80	49	119	88	161	119	238	175	90	14.0	29.7	3.8	8.4	g	Ex II 2GD c T6 IIC T85°C	8411 0472 07	

<sup>1)</sup> For Shaft loading curves, see page 16.

NOTE: - If running motors with 100% dry air and no lubrication, performance can be reduced with 5-15% at max output.

- To optimize life time for a lubrication free motor, use lubricated air if the application allows it.

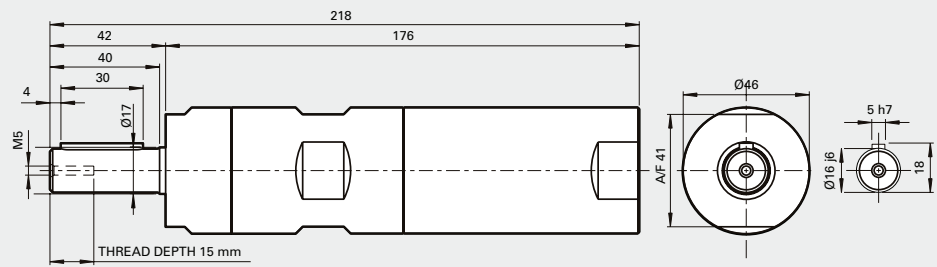
Dimensions (mm)

Conversion factor 1 mm = 0.04 inch

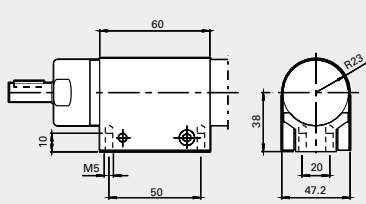
Clockwise Reversible

- LZB46-RL-A200 LZB46-RL-AR170
- LZB46-RL-A065 LZB46-RL-AR050
- LZB46-RL-A040 LZB46-RL-AR030
- LZB46-RL-A025 LZB46-RL-AR020
- LZB46-RL-A015 LZB46-RL-AR010
- LZB46-RL-A010 LZB46-RL-AR007
- LZB46-RL-A005 LZB46-RL-AR004

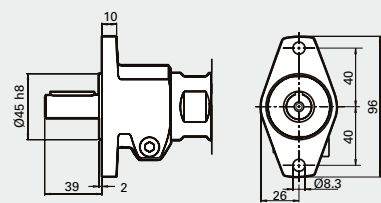
Keyed shaft (-11)



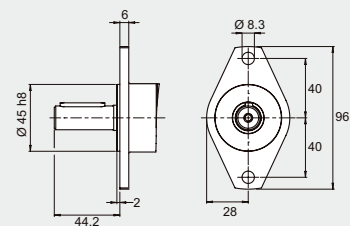
Optional mountings



Foot Ordering No. 4430 0575 81



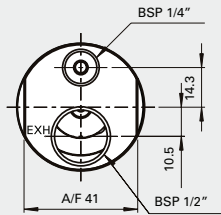
Aluminium Flange Ordering No. 4430 0490 81



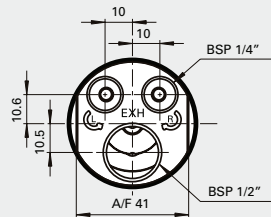
Stainless steel Flange Ordering No. 4430 1483 80

All versions

Clockwise/  
Anti-clockwise



Reversible



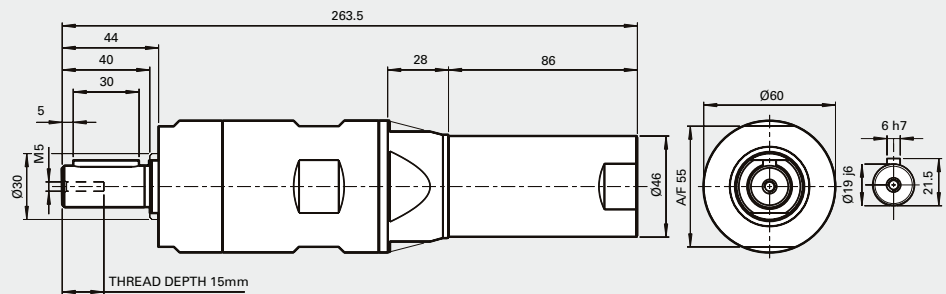
Keyed shaft (-11)

Clockwise

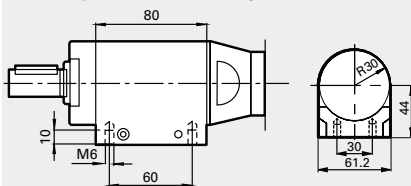
- LZB46-RL-A0030
- LZB46-RL-A0020
- LZB46-RL-A0012

Reversible

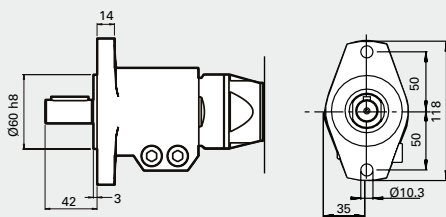
- LZB46-RL-AR0025
- LZB46-RL-AR0015
- LZB46-RL-AR0010



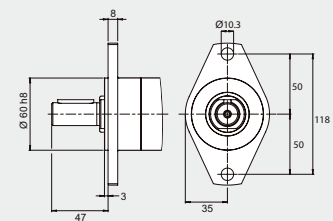
Optional mountings



Foot Ordering No. 4430 0178 81



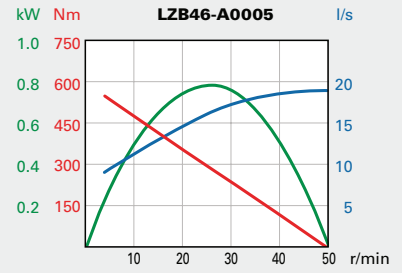
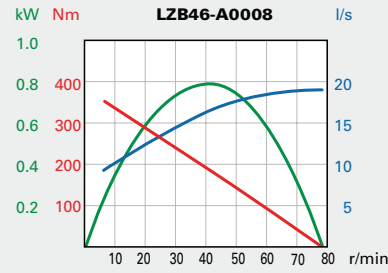
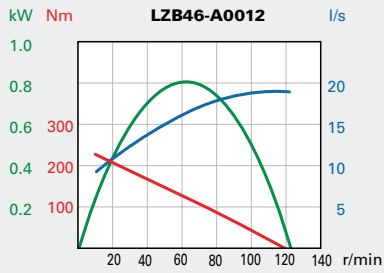
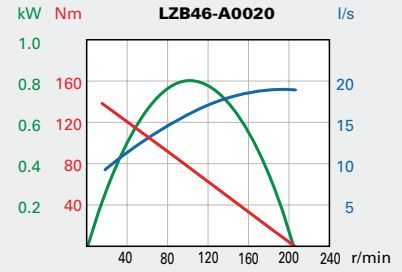
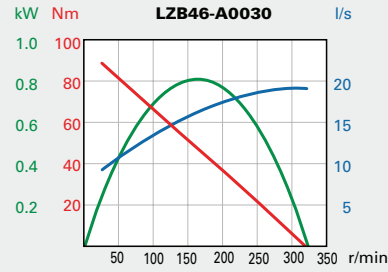
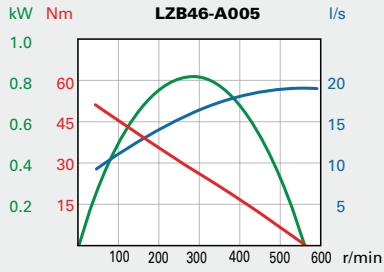
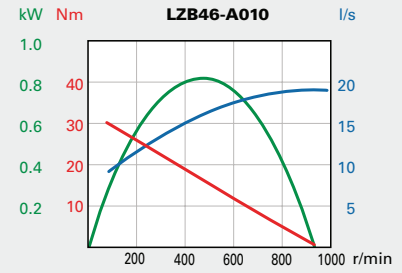
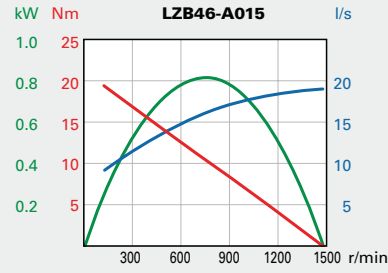
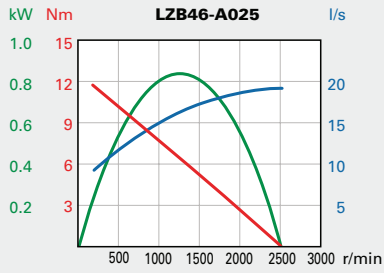
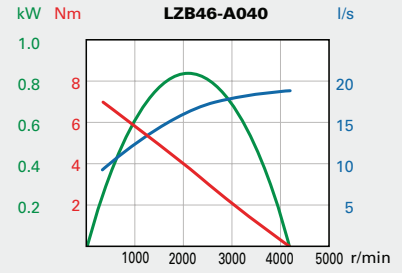
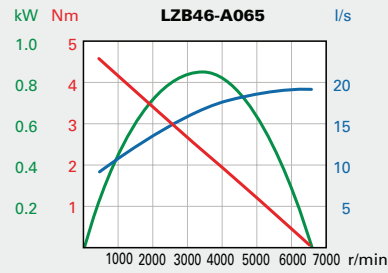
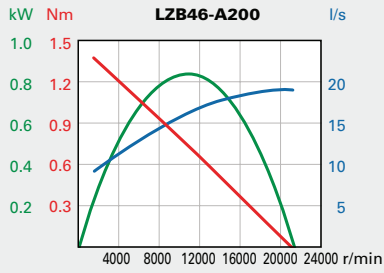
Aluminium Flange Ordering No. 4430 0569 84



Stainless steel Flange Ordering No. 4430 2357 80

# LZB46, LZB46-RL: Performance curves at air pressure 6.3 bar (91 psi)

Non-reversible (A and AV)



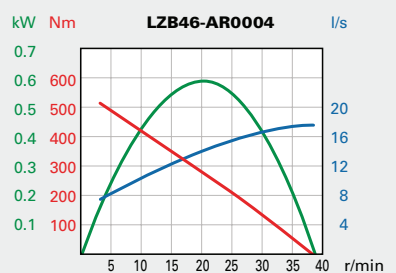
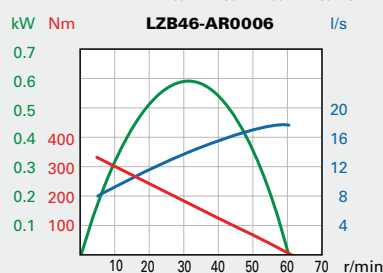
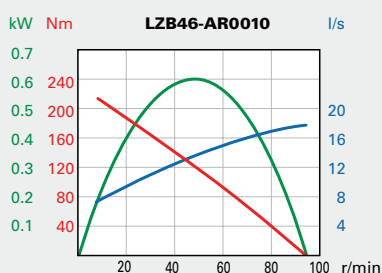
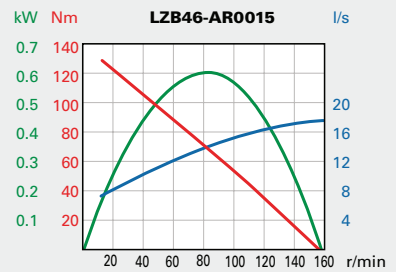
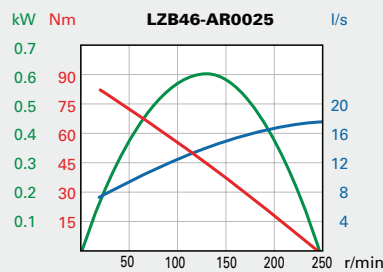
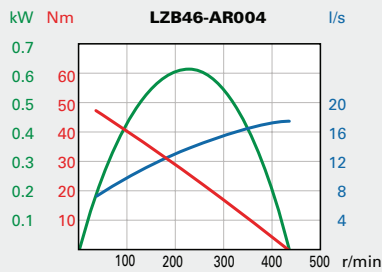
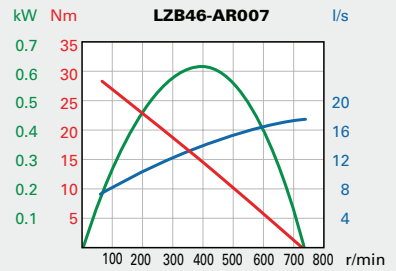
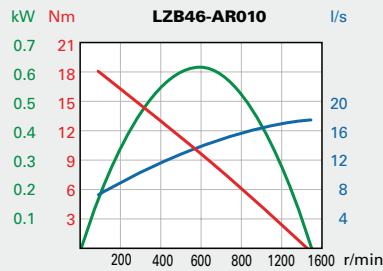
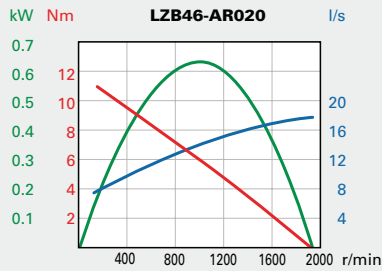
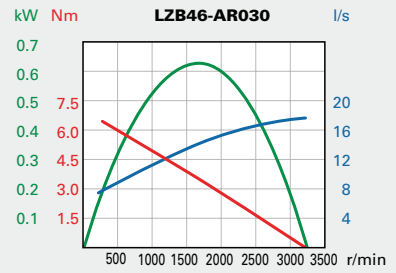
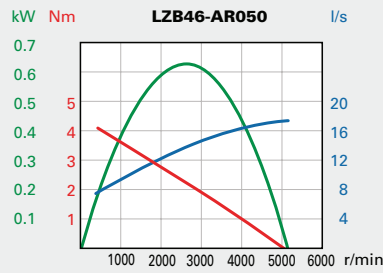
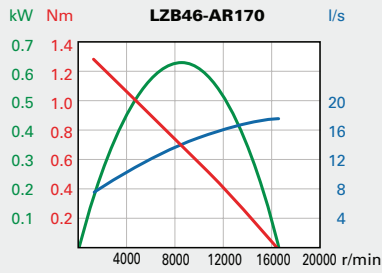
**Conversion factors**

- 1 kW = 1.34 hp
- 1 Nm = 0.74 lbf - ft
- 1 l/s = 2.1 cfm
- 1 hp = 0.75 kW
- 1 lbf-ft = 1.36 Nm
- 1 cfm = 0.47 l/s

For information about performance curves, see page 7.

# LZB46, LZB46-RL: Performance curves at air pressure 6.3 bar (91 psi)

Reversible (AR)



**Conversion factors**

- 1 kW = 1.34 hp
- 1 Nm = 0.74 lbf - ft
- 1 l/s = 2.1 cfm
- 1 hp = 0.75 kW
- 1 lbf-ft = 1.36 Nm
- 1 cfm = 0.47 l/s

For information about performance curves, see page 7.

# VANE MOTORS LZB54



**0.79 – 1.20 kW**  
**1.06 – 1.61 hp**

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

For optional vanes and accessories see chapter Accessories.



## Data at air pressure 6.3 bar (91 psi)

Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.	
	Lubricated	kW		hp	r/min	Nm	lb-ft	Nm	lb-ft		Nm	lb-ft	r/min	l/s				cfm
<b>Clockwise rotation (Keyed shaft)</b>																		
LZB54-A180-11		1.20	1.61	10000	1.15	0.85	1.8	1.33	2.3	1.7	17500	22.0	47.0	2.4	5.2	g	Ex II 2GD c T4 IIC T110°C	8411 0560 08
LZB54-A050-11		1.20	1.61	2900	4.0	3.0	6.4	4.7	8.0	5.9	5100	22.0	47.0	2.4	5.2	g	Ex II 2GD c T4 IIC T110°C	8411 0560 16
LZB54-A030-11		1.20	1.61	1750	6.6	4.9	10.5	7.7	13.2	9.7	3100	22.0	47.0	2.4	5.2	g	Ex II 2GD c T4 IIC T110°C	8411 0560 24
LZB54-A020-11		1.20	1.61	1300	8.9	6.6	14	10.3	17.8	13.1	2300	22.0	47.0	2.4	5.2	g	Ex II 2GD c T4 IIC T110°C	8411 0560 32
LZB54-A010-11		1.18	1.58	630	18	13.3	29	21	36	27	1050	22.0	47.0	2.5	5.5	g	Ex II 2GD c T6 IIC T85°C	8411 0560 40
LZB54-A007-11		1.18	1.58	380	30	22	48	35	60	44	650	22.0	47.0	2.5	5.5	g	Ex II 2GD c T6 IIC T85°C	8411 0560 57
LZB54-A005-11		1.18	1.58	280	40	30	65	48	80	59	500	22.0	47.0	2.5	5.5	g	Ex II 2GD c T6 IIC T85°C	8411 0560 65
LZB54-A0025-11		1.15	1.54	150	72	53	117	86	144	106	270	22.0	47.0	4.7	10.3	h	Ex II 2GD c T6 IIC T85°C	8411 0560 73
LZB54-A0017-11		1.15	1.54	95	119	88	193	142	238	176	160	22.0	47.0	4.7	10.3	h	Ex II 2GD c T6 IIC T85°C	8411 0560 81
LZB54-A0012-11		1.15	1.54	70	161	119	261	193	322	237	120	22.0	47.0	4.7	10.3	h	Ex II 2GD c T6 IIC T85°C	8411 0560 99
<b>Anti-clockwise rotation (Keyed shaft)</b>																		
LZB54-AV180-11		1.20	1.61	10000	1.15	0.85	1.8	1.33	2.3	1.7	17500	22.0	47.0	2.4	5.2	g	Ex II 2GD c T4 IIC T110°C	8411 0564 04
LZB54-AV050-11		1.20	1.61	2900	4.0	3.0	6.4	4.7	8.0	5.9	5100	22.0	47.0	2.4	5.2	g	Ex II 2GD c T4 IIC T110°C	8411 0564 12
LZB54-AV030-11		1.20	1.61	1750	6.6	4.9	10.5	7.7	13.2	9.7	3100	22.0	47.0	2.4	5.2	g	Ex II 2GD c T4 IIC T110°C	8411 0564 20
LZB54-AV020-11		1.20	1.61	1300	8.9	6.6	14	10.3	17.8	13.1	2300	22.0	47.0	2.4	5.2	g	Ex II 2GD c T4 IIC T110°C	8411 0564 38
LZB54-AV010-11		1.18	1.58	630	18	13.3	29	21	36	27	1050	22.0	47.0	2.5	5.5	g	Ex II 2GD c T6 IIC T85°C	8411 0564 46
LZB54-AV007-11		1.18	1.58	380	30	22	48	35	60	44	650	22.0	47.0	2.5	5.5	g	Ex II 2GD c T6 IIC T85°C	8411 0564 53
LZB54-AV005-11		1.18	1.58	280	40	30	65	48	80	59	500	22.0	47.0	2.5	5.5	g	Ex II 2GD c T6 IIC T85°C	8411 0564 61
LZB54-AV0025-11		1.15	1.54	150	72	53	117	86	144	106	270	22.0	47.0	4.7	10.3	h	Ex II 2GD c T6 IIC T85°C	8411 0564 79
LZB54-AV0017-11		1.15	1.54	95	119	88	193	142	238	176	160	22.0	47.0	4.7	10.3	h	Ex II 2GD c T6 IIC T85°C	8411 0564 87
LZB54-AV0012-11		1.15	1.54	70	161	119	261	193	322	237	120	22.0	47.0	4.7	10.3	h	Ex II 2GD c T6 IIC T85°C	8411 0564 95
<b>Reversible (Keyed shaft)</b>																		
LZB54-AR130-11		0.82	1.10	6800	1.15	0.85	1.4	1.03	2.3	1.7	12000	18.0	38.0	2.4	5.2	g	Ex II 2GD c T4 IIC T110°C	8411 0563 05
LZB54-AR035-11		0.82	1.10	1960	4.0	3.0	5.1	3.8	8.0	5.9	3700	18.0	38.0	2.4	5.2	g	Ex II 2GD c T4 IIC T110°C	8411 0563 13
LZB54-AR020-11		0.82	1.10	1190	6.6	4.9	8.4	6.2	13.2	9.7	2300	18.0	38.0	2.4	5.2	g	Ex II 2GD c T4 IIC T110°C	8411 0563 21
LZB54-AR015-11		0.82	1.10	880	8.9	6.6	11	8.1	17.8	13.1	1700	18.0	38.0	2.4	5.2	g	Ex II 2GD c T4 IIC T110°C	8411 0563 39
LZB54-AR008-11		0.80	1.07	430	18	13.3	23	17	36	27	800	18.0	38.0	2.5	5.5	g	Ex II 2GD c T6 IIC T85°C	8411 0563 47
LZB54-AR005-11		0.80	1.07	260	30	22	38	28	60	44	500	18.0	38.0	2.5	5.5	g	Ex II 2GD c T6 IIC T85°C	8411 0563 54
LZB54-AR004-11		0.80	1.07	190	40	30	51	38	80	59	370	18.0	38.0	2.5	5.5	g	Ex II 2GD c T6 IIC T85°C	8411 0563 62
LZB54-AR0020-11		0.79	1.06	105	72	53	93	69	144	106	190	18.0	38.0	4.7	10.3	h	Ex II 2GD c T6 IIC T85°C	8411 0563 70
LZB54-AR0012-11		0.79	1.06	65	119	88	153	113	238	176	120	18.0	38.0	4.7	10.3	h	Ex II 2GD c T6 IIC T85°C	8411 0563 88
LZB54-AR0009-11		0.79	1.06	47	161	119	207	153	322	237	90	18.0	38.0	4.7	10.3	h	Ex II 2GD c T6 IIC T85°C	8411 0563 96

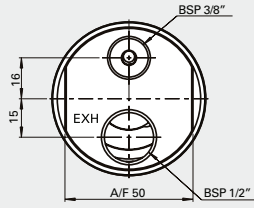
<sup>1)</sup> For Shaft loading curves, see page 16.

Dimensions (mm)

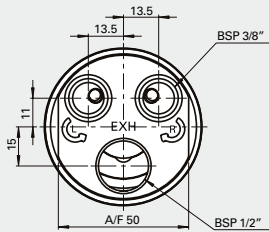
Conversion factor 1 mm = 0.04 inch

All versions

Clockwise/  
Anti-clockwise



Reversible



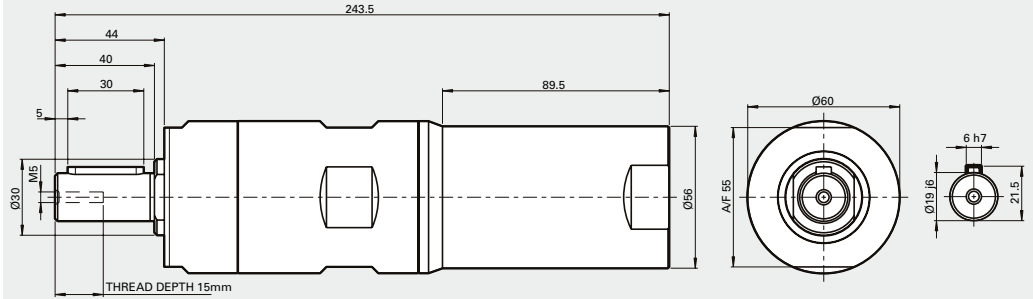
Clockwise/  
Anti-clockwise

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- LZB54-A050
- LZB54-A030
- LZB54-A020
- LZB54-A010
- LZB54-A007
- LZB54-A005

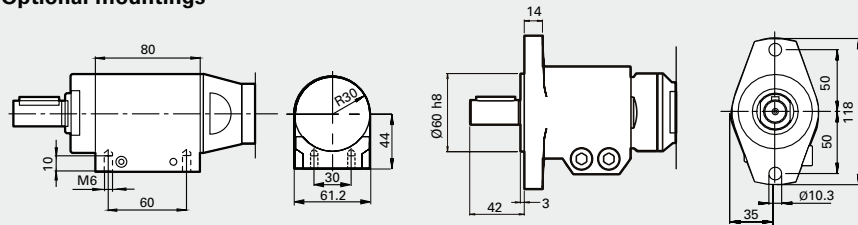
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- LZB54-AV050
- LZB54-AV030
- LZB54-AV020
- LZB54-AV010
- LZB54-AV007
- LZB54-AV005

Reversible

- LZB54-AR130
- LZB54-AR035
- LZB54-AR020
- LZB54-AR015
- LZB54-AR008
- LZB54-AR005
- LZB54-AR004



Optional mountings



Foot Ordering No. 4430 0178 80

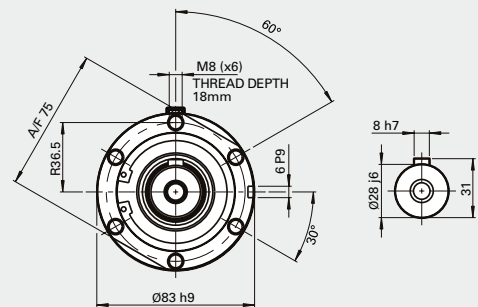
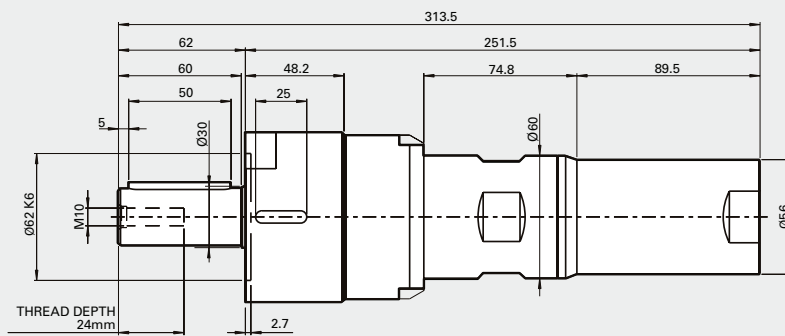
Flange Ordering No. 4430 0569 84

Clockwise/  
Anti-clockwise

- LZB54-A0025
- LZB54-A0017
- LZB54-A0012
- LZB54-AV0025
- LZB54-AV0017
- LZB54-AV0012

Reversible

- LZB54-AR0020
- LZB54-AR0012
- LZB54-AR0009





# VANE MOTORS LZB54-LB

## Brake module, lubrication free and reversible



**0.79 – 0.82 kW**  
**1.05 – 1.10 hp**

Braking torque from 15–200 Nm.  
The brake is activated by spring force and released by air pressure.

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

For optional vanes and accessories see chapter Accessories.



### Data at air pressure 6.3 bar (91 psi)

Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Braking torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.
	kW	hp	r/min	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	r/min	l/s	cfm	kg	lb			
<b>Reversible (Keyed shaft)</b>																			
LZB54-LB-AR015-11	0.82	1.1	880	8.9	6.6	11	8.1	17.8	13.1	15	11	1700	18	38	4.1	9	g	Ex II 2GD c T4 IIC T110°C	8411 0568 42
LZB54-LB-AR005-11	0.8	1.07	260	30	22	38	28	60	44	50	37	500	18	38	4.3	9.4	g	Ex II 2GD c T6 IIC T85°C	8411 0568 59
LZB54-LB-AR004-11	0.8	1.07	190	40	30	51	38	80	59	70	52	370	18	38	4.3	9.4	g	Ex II 2GD c T6 IIC T85°C	8411 0568 67
LZB54-LB-AR0020-11	0.79	1.06	105	72	53	93	69	144	106	125	92.5	190	18	38	6.4	14	h	Ex II 2GD c T6 IIC T85°C	8411 0568 75
LZB54-LB-AR0012-11	0.79	1.06	65	119	88	153	113	238	176	200	148	120	18	38	6.4	14	h	Ex II 2GD c T6 IIC T85°C	8411 0568 83
LZB54-LB-AR0009-11	0.79	1.06	47	161	119	207	153	322	237	280	206	90	18	38	6.4	14	h	Ex II 2GD c T6 IIC T85°C	8411 0569 10

<sup>1)</sup> For Shaft loading curves, see page 16.

The brake needs minimum 5 bar to release. Performance curves same as standard motors.

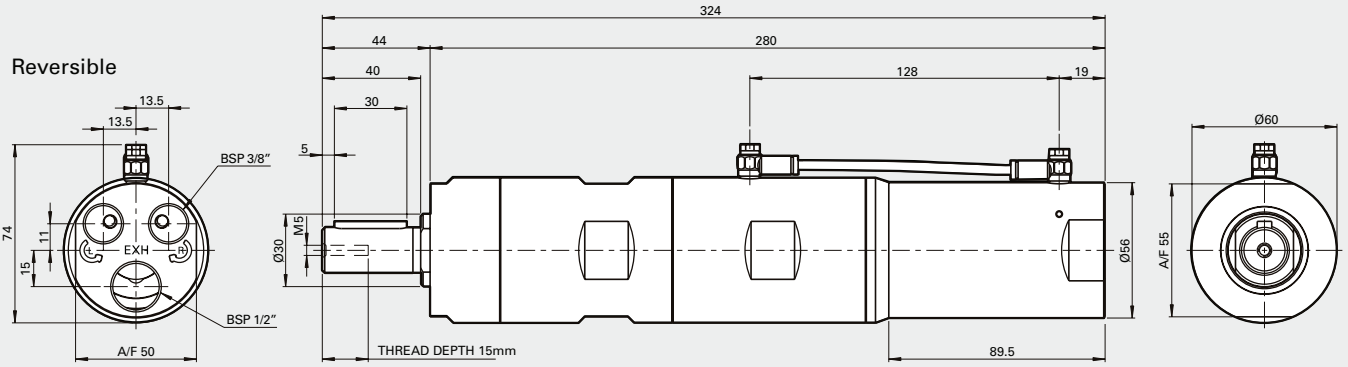
**NOTE:** - If running motors with 100% dry air and no lubrication, performance can be reduced with 5-15% at max output.  
- To optimize life time for a lubrication free motor, use lubricated air if the application allows it.

**Dimensions (mm)**

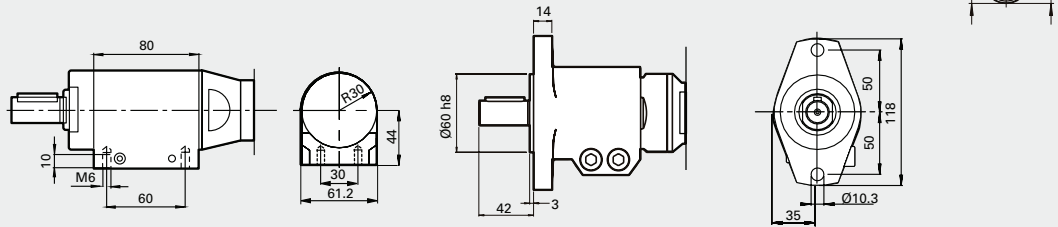
**Conversion factor 1 mm = 0.04 inch**

**Reversible with brake**

- LZB54-LB-AR015
- LZB54-LB-AR005
- LZB54-LB-AR004



**Optional mountings**

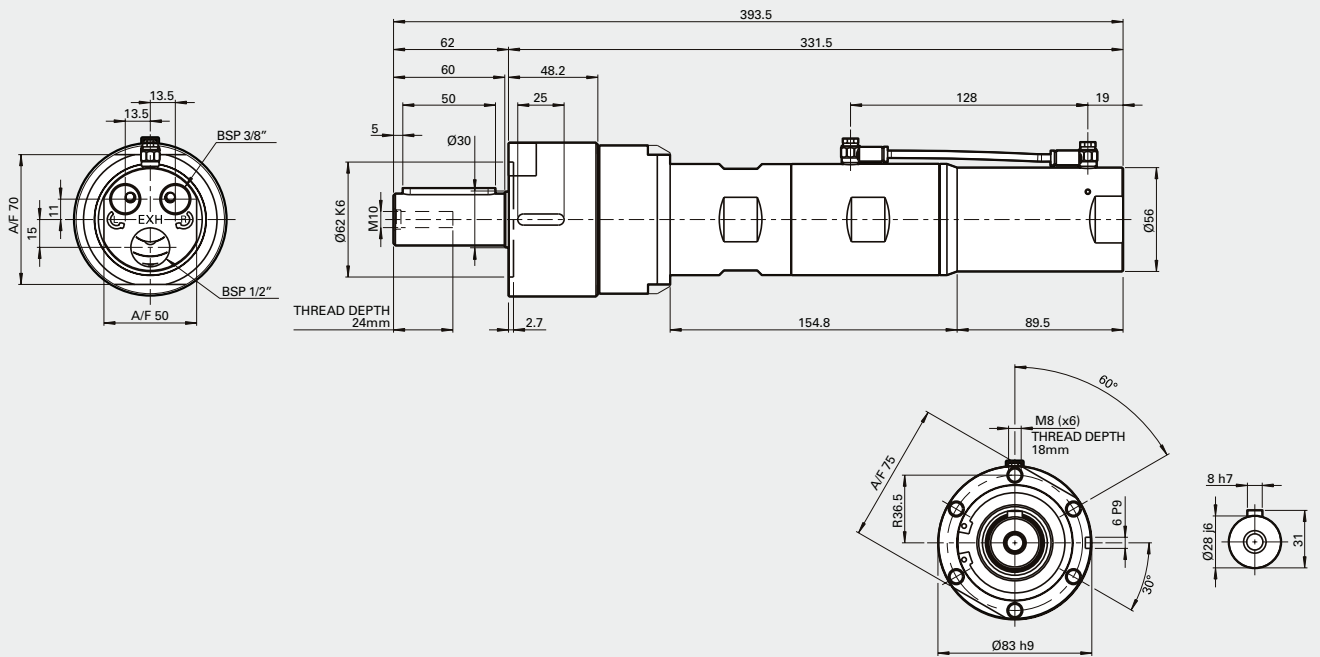


Foot Ordering No. 4430 0178 80

Flange Ordering No. 4430 0569 84

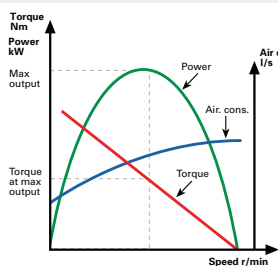
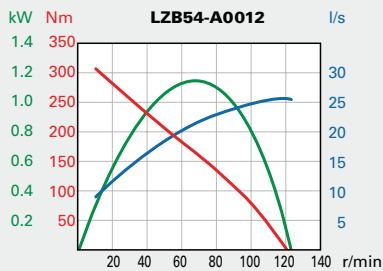
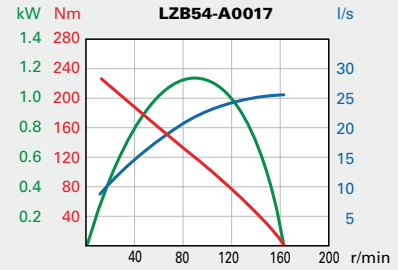
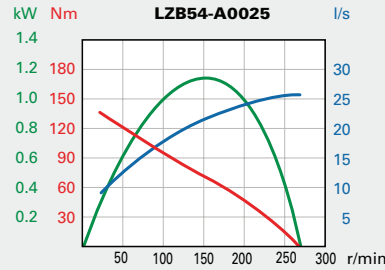
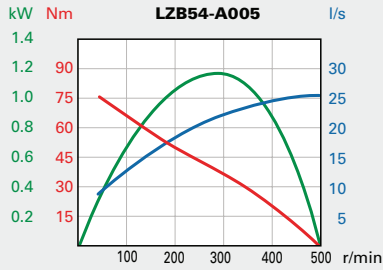
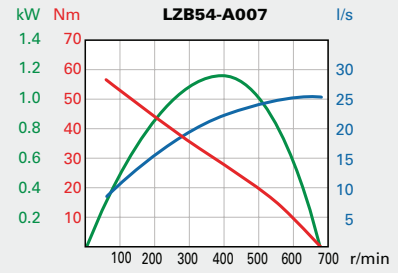
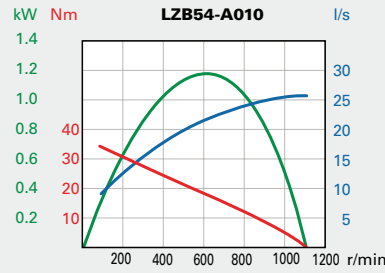
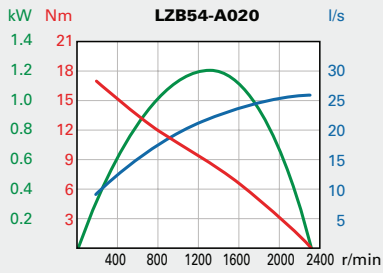
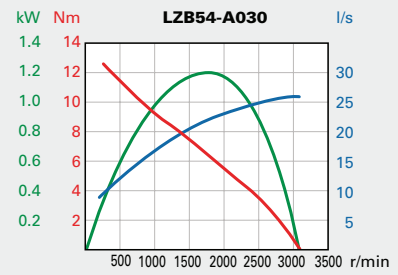
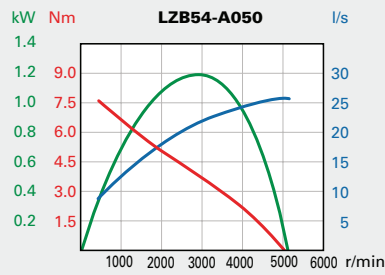
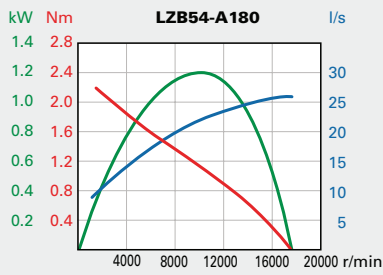
**Reversible with brake**

- LZB54-LB-AR0020
- LZB54-LB-AR0012
- LZB54-LB-AR0009



# LZB54: Performance curves at air pressure 6.3 bar (91 psi)

Non-reversible (A and AV)

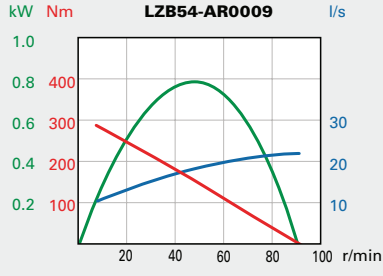
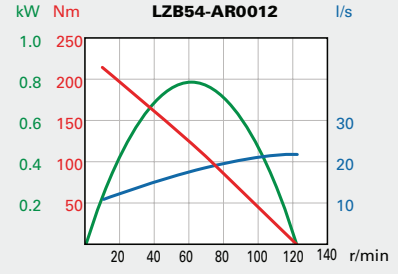
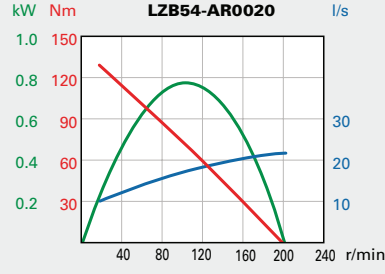
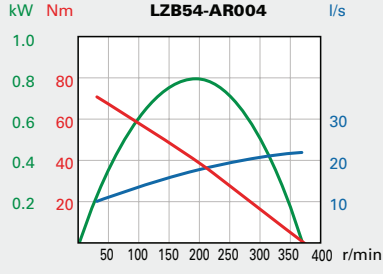
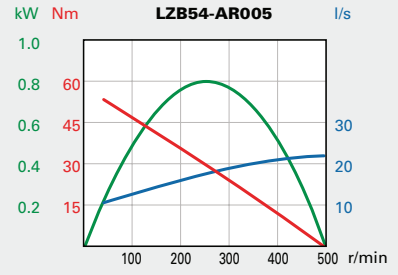
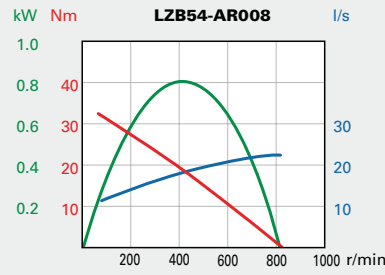
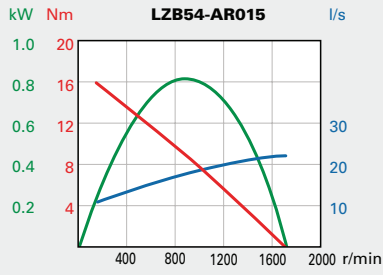
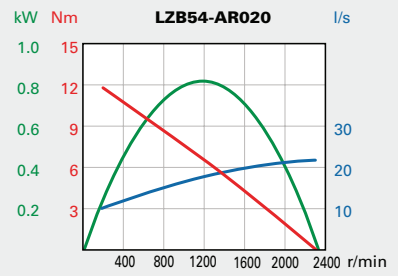
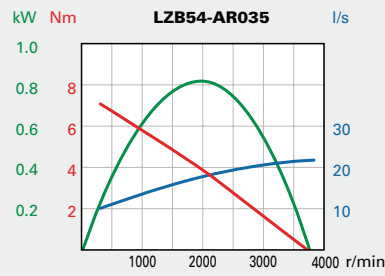
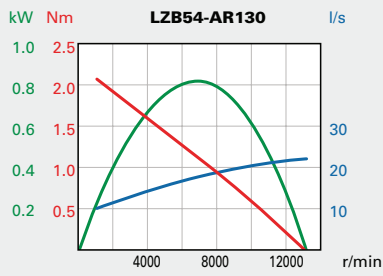


Conversion factors  
 1 kW = 1.34 hp  
 1 Nm = 0.74 lbf - ft  
 1 l/s = 2.1 cfm  
  
 1 hp = 0.75 kW  
 1 lbf-ft = 1.36 Nm  
 1 cfm = 0.47 l/s

For information about performance curves, see page 7.

# LZB54: Performance curves at air pressure 6.3 bar (91 psi)

Reversible (AR)



**Conversion factors**

- 1 kW = 1.34 hp
- 1 Nm = 0.74 lbf - ft
- 1 l/s = 2.1 cfm
- 1 hp = 0.75 kW
- 1 lbf-ft = 1.36 Nm
- 1 cfm = 0.47 l/s

For information about performance curves, see page 7.

# VANE MOTORS LZB66



**1.41 – 1.87 kW**  
**1.89 – 2.51 hp**

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

For optional vanes and accessories see chapter Accessories.

## Data at air pressure 6.3 bar (91 psi)

Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.	
	Lubricated	kW		hp	r/min	Nm	lb-ft	Nm	lb-ft		Nm	lb-ft	r/min	l/s				cfm
<b>Clockwise rotation (Keyed shaft)</b>																		
LZB66-A180-11		1.87	2.51	8200	2.2	1.62	3.2	2.4	4.4	3.2	16000	34	72	2.8	6.2	g	Ex II 2GD c T4 IIC T110°C	8411 0602 59
LZB66-A050-11		1.87	2.51	2400	7.6	5.6	11.3	8.3	15.2	11.2	4500	34	72	2.8	6.2	g	Ex II 2GD c T4 IIC T110°C	8411 0602 67
LZB66-A030-11		1.87	2.51	1440	12.5	9.2	18.6	13.7	25	18.4	2700	34	72	2.8	6.2	g	Ex II 2GD c T4 IIC T110°C	8411 0602 75
LZB66-A020-11		1.87	2.51	1060	17	12.5	25	18.4	34	25	2000	34	72	2.8	6.2	g	Ex II 2GD c T4 IIC T110°C	8411 0602 42
LZB66-A010-11		1.83	2.45	510	34	25	51	38	68	50	950	34	72	2.9	6.4	g	Ex II 2GD c T6 IIC T85°C	8411 0600 59
LZB66-A007-11		1.83	2.45	310	57	42	84	62	114	84	600	34	72	2.9	6.4	g	Ex II 2GD c T6 IIC T85°C	8411 0600 67
LZB66-A005-11		1.83	2.45	230	77	57	113	83	154	114	440	34	72	2.9	6.4	g	Ex II 2GD c T6 IIC T85°C	8411 0600 75
LZB66-A0025-11		1.80	2.41	125	139	103	205	151	278	205	230	34	72	5.1	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0600 83
LZB66-A0017-11		1.80	2.41	75	227	167	337	249	454	335	145	34	72	5.1	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0600 91
LZB66-A0012-11		1.80	2.41	55	308	227	456	336	616	454	110	34	72	5.1	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0602 83
<b>Reversible (Keyed shaft)</b>																		
LZB66-AR130-11		1.46	1.96	7500	1.9	1.4	2.4	1.8	3.8	2.8	13500	31	66	2.8	6.2	g	Ex II 2GD c T4 IIC T110°C	8411 0602 91
LZB66-AR035-11		1.46	1.96	2200	6.4	4.7	8.3	6.1	12.8	9.4	3900	31	66	2.8	6.2	g	Ex II 2GD c T4 IIC T110°C	8411 0603 09
LZB66-AR020-11		1.46	1.96	1320	10.5	7.7	13.5	10	21	15.5	2400	31	66	2.8	6.2	g	Ex II 2GD c T4 IIC T110°C	8411 0603 17
LZB66-AR015-11		1.46	1.96	970	14.3	10.5	18.5	13.6	29	21	1750	31	66	2.8	6.2	g	Ex II 2GD c T4 IIC T110°C	8411 0603 25
LZB66-AR008-11		1.43	1.92	470	29	21	37	27	58	43	830	31	66	2.9	6.4	g	Ex II 2GD c T6 IIC T85°C	8411 0601 25
LZB66-AR005-11		1.43	1.92	290	48	35	62	46	96	71	500	31	66	2.9	6.4	g	Ex II 2GD c T6 IIC T85°C	8411 0601 33
LZB66-AR004-11		1.43	1.91	210	64	47	84	62	128	94	370	31	66	2.9	6.4	g	Ex II 2GD c T6 IIC T85°C	8411 0601 41
LZB66-AR0020-11		1.41	1.89	115	117	86	151	111	233	172	200	31	66	5.1	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0601 58
LZB66-AR0012-11		1.41	1.89	70	191	141	249	184	382	282	120	31	66	5.1	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0601 66
LZB66-AR0009-11		1.41	1.89	50	259	191	337	249	518	382	90	31	66	5.1	11.1	h	Ex II 2GD c T6 IIC T85°C	8411 0603 33

<sup>1)</sup> For Shaft loading curves, see page 16.

## Compact mounting

### Data at air pressure 6.3 bar (91 psi)

Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.	
	Lubricated	kW		hp	r/min	Nm	lb-ft	Nm	lb-ft		Nm	lb-ft	r/min	l/s				cfm
<b>Clockwise rotation (Keyed shaft)</b>																		
LZB66-A0025-15		1.80	2.41	125	139	103	205	151	278	205	230	34	72	5.3	11.7	h	Ex II 2GD c T6 IIC T85°C	8411 0600 18
LZB66-A0017-15		1.80	2.41	75	227	167	337	249	454	335	145	34	72	5.3	11.7	h	Ex II 2GD c T6 IIC T85°C	8411 0600 26
<b>Reversible (Keyed shaft)</b>																		
LZB66-AR0020-15		1.41	1.89	115	117	86	151	111	233	172	200	31	66	5.3	11.7	h	Ex II 2GD c T6 IIC T85°C	8411 0601 09
LZB66-AR0012-15		1.41	1.89	70	191	141	249	184	382	282	120	31	66	5.3	11.7	h	Ex II 2GD c T6 IIC T85°C	8411 0601 17

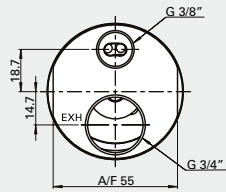
<sup>1)</sup> For Shaft loading curves, see page 16.

Dimensions (mm)

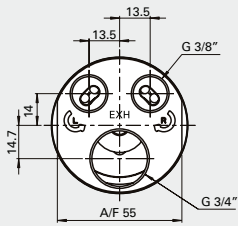
Conversion factor 1 mm = 0.04 inch

All versions

Clockwise



Reversible



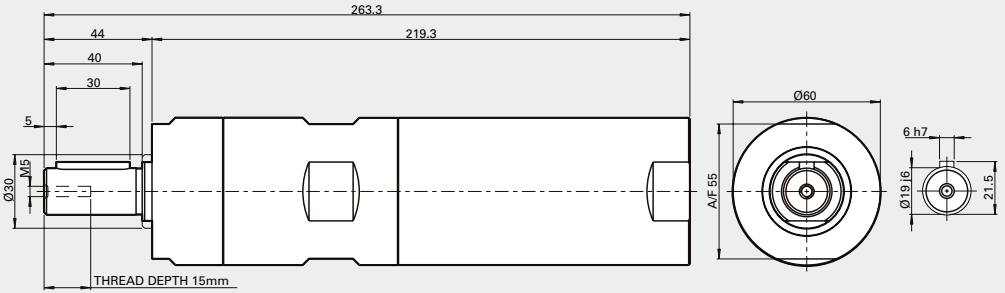
Clockwise

- LZB66-A180
- LZB66-A050
- LZB66-A030
- LZB66-A020

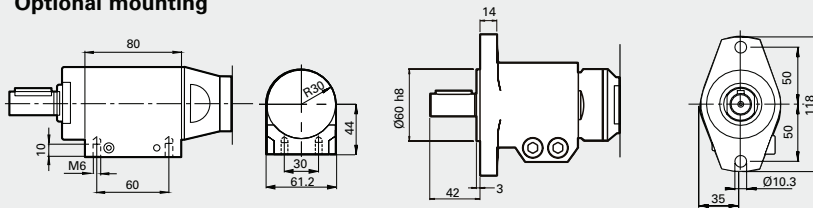
- LZB66-A010
- LZB66-A007
- LZB66-A005

Reversible

- LZB66-AR130
- LZB66-AR035
- LZB66-AR020
- LZB66-AR015
- LZB66-AR008
- LZB66-AR005
- LZB66-AR004



Optional mounting



Foot Ordering No. 4430 0178 80

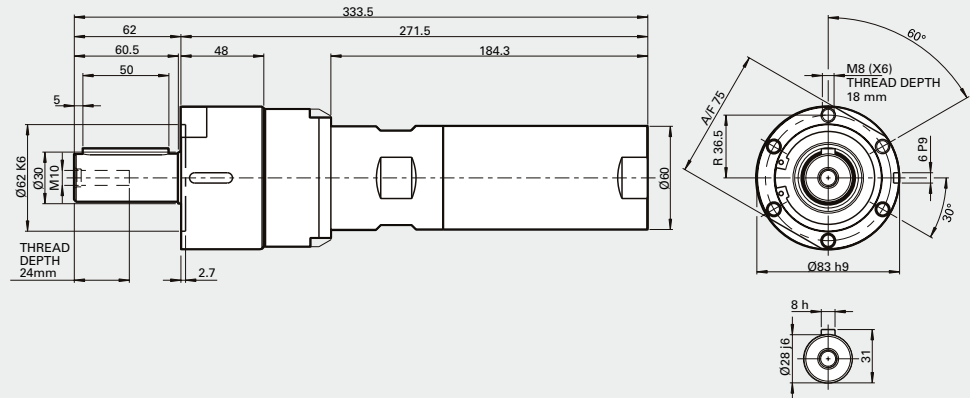
Flange Ordering No. 4430 0569 84

Clockwise

- LZB66-A0025-11
- LZB66-A0017-11
- LZB66-A0012-11

Reversible

- LZB66-AR0020-11
- LZB66-AR0012-11
- LZB66-AR0009-11

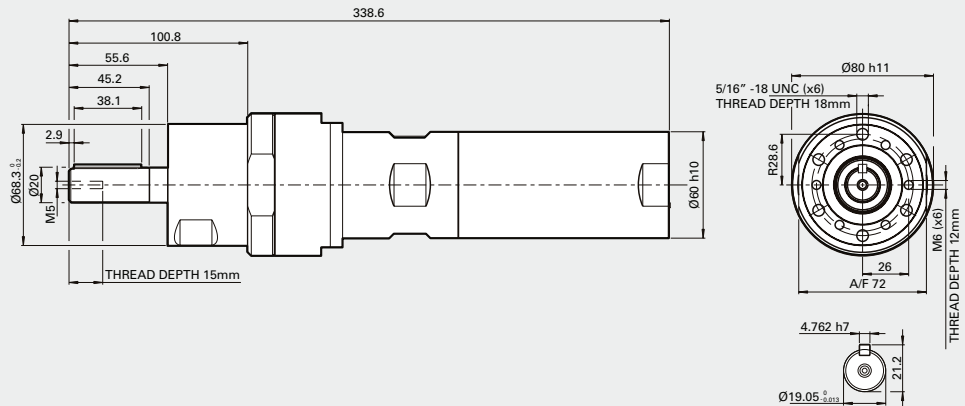


Clockwise

- LZB66-A0025-15
- LZB66-A0017-15

Reversible

- LZB66-AR0020-15
- LZB66-AR0012-15



# VANE MOTORS LZB66

With right angle



**1.79 kW**  
**2.40 hp**

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

For optional vanes and accessories see chapter Accessories.

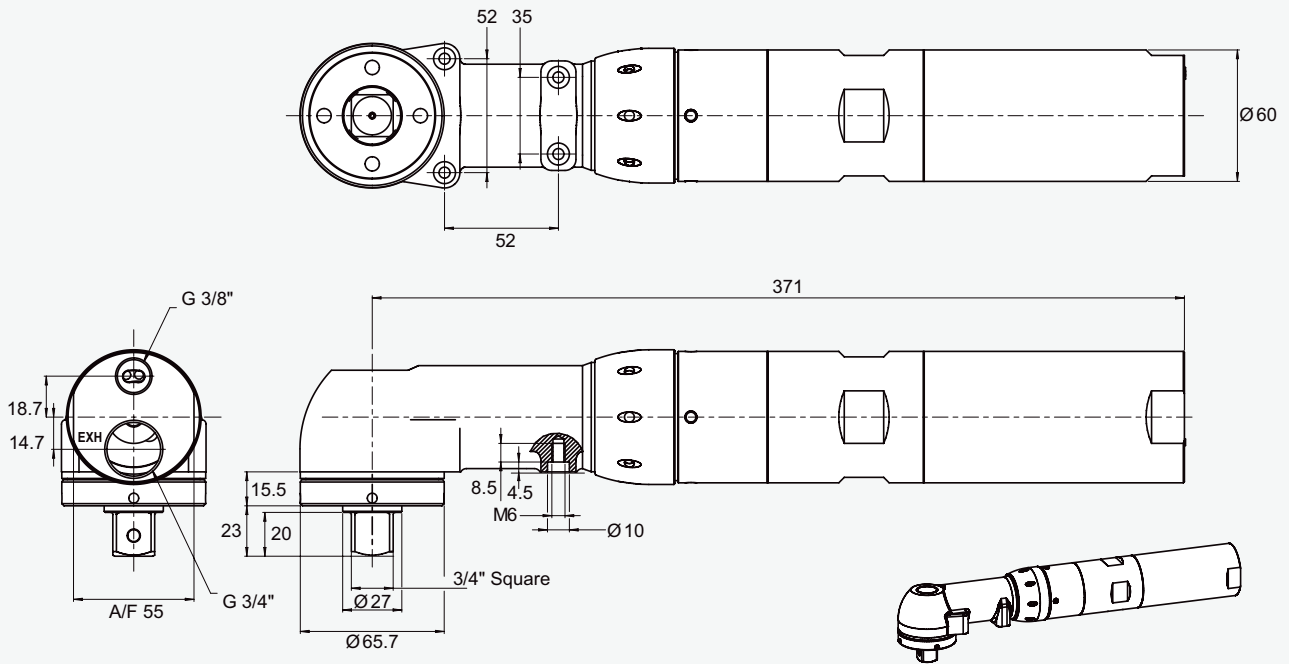


## Data at air pressure 6.3 bar (91 psi)

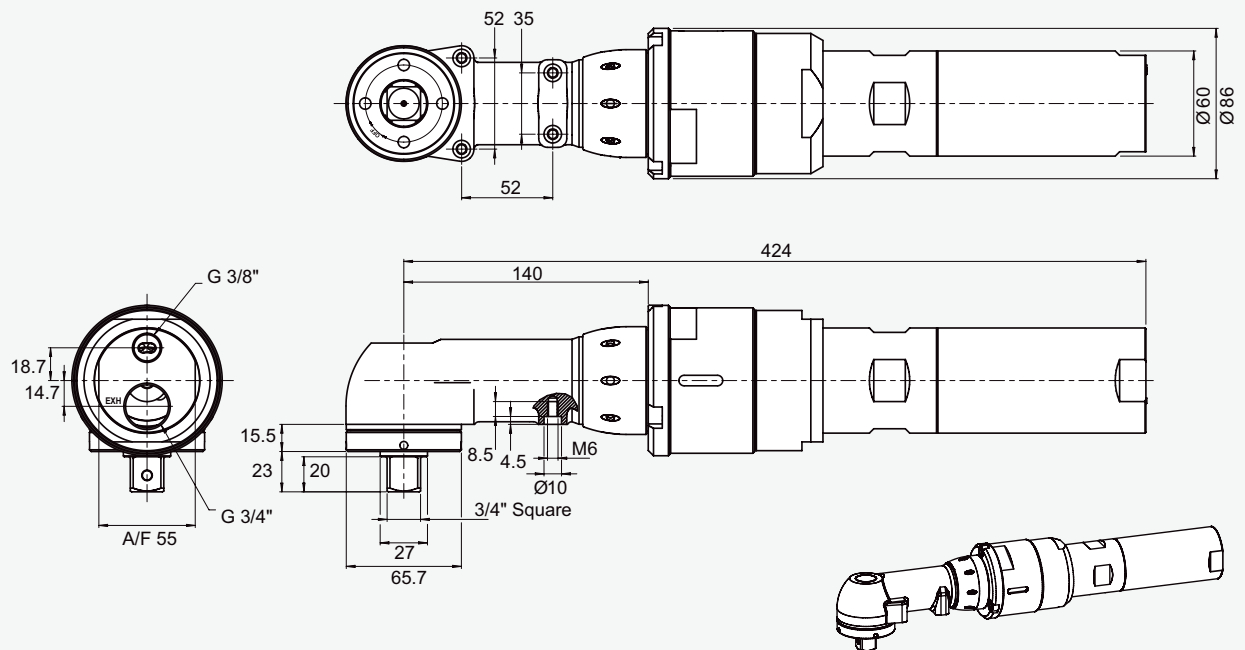
Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.
	kW	hp		r/min	Nm	lb-ft	Nm	lb-ft	Nm		lb-ft	r/min	l/s	cfm			
LZB66-A005-16	1.79	2.40	128	136	101	199	146	272	201	244	34	72	6.0	13.1	-	Ex II 2GD c T6 IIC T85°C	8411 0603 82
LZB66-A0025-16	1.76	2.36	69	245	182	362	266	-	-	128	34	72	8.3	18.2	-	Ex II 2GD c T6 IIC T85°C	8411 0603 90

<sup>1)</sup> For Shaft loading curves, see page 16.

LZB66-A005-16



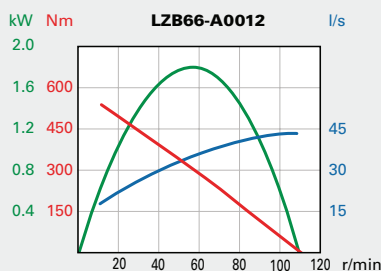
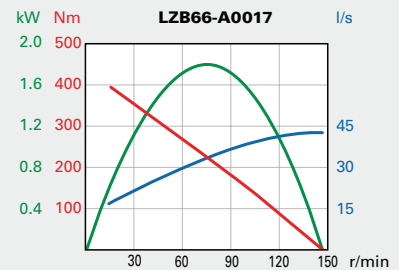
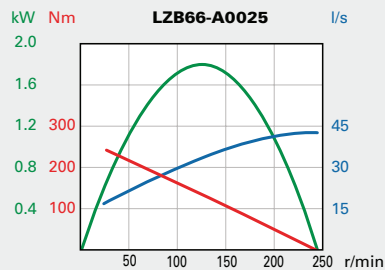
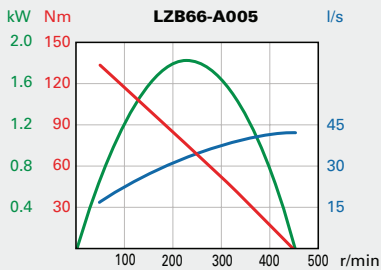
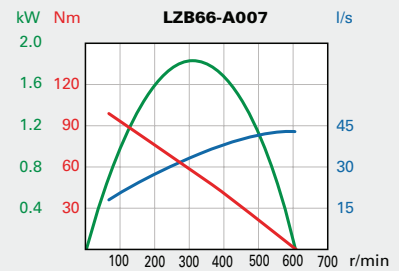
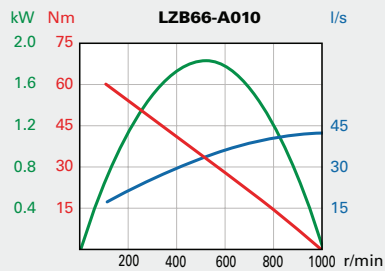
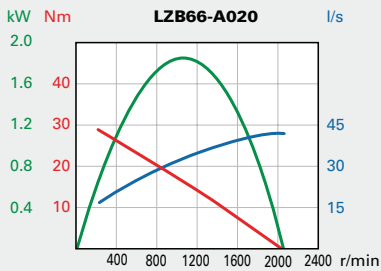
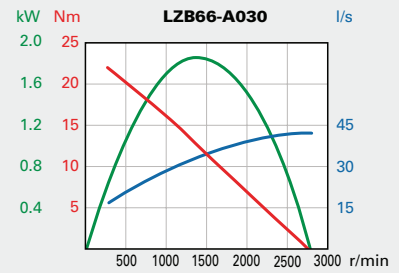
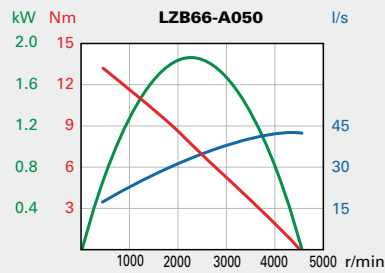
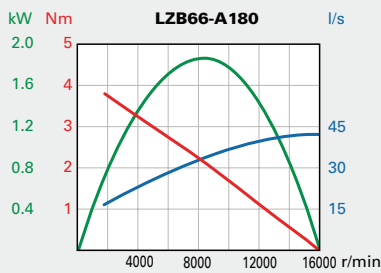
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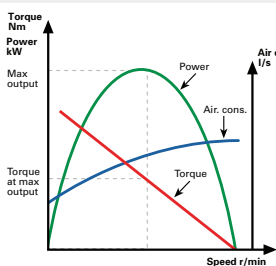
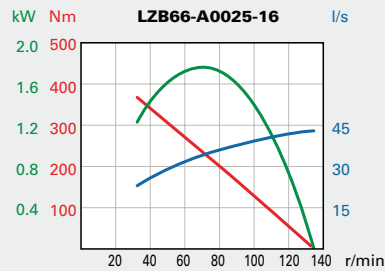
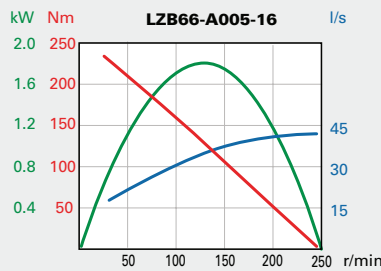


## LZB66: Performance curves at air pressure 6.3 bar (91 psi)

### Non-reversible (A)



### With right angle head

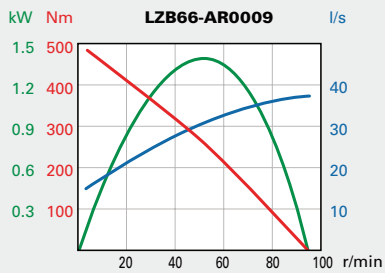
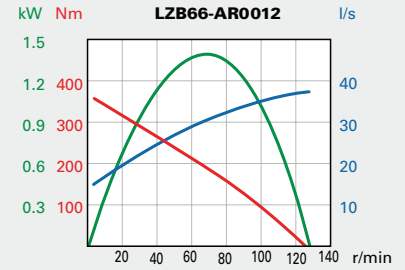
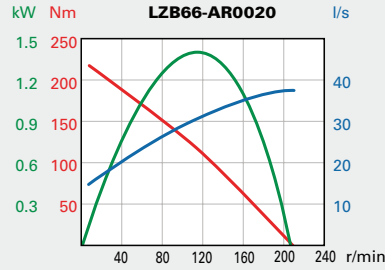
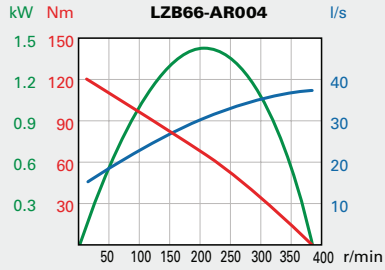
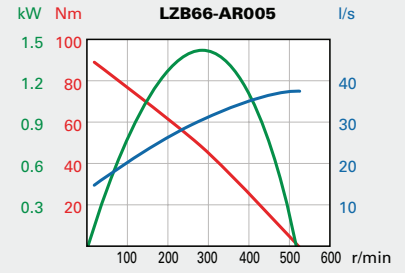
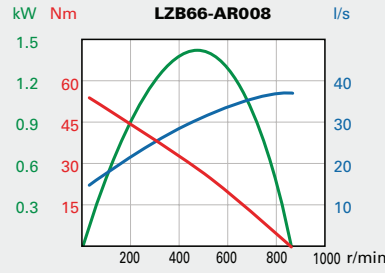
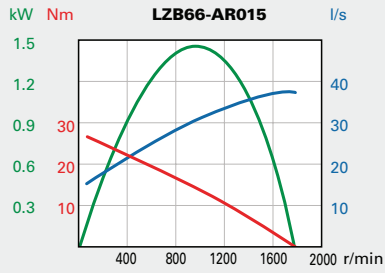
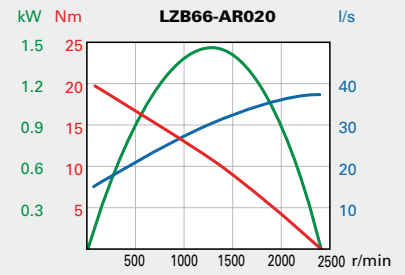
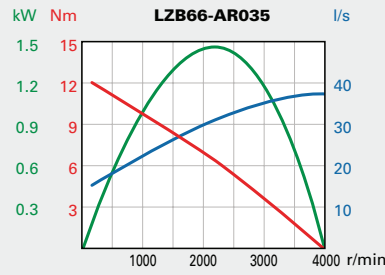
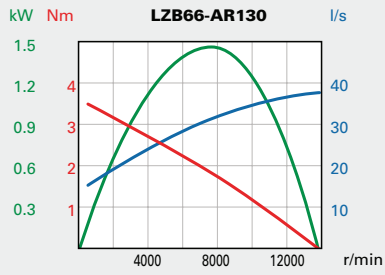


**Conversion factors**  
 1 kW = 1.34 hp  
 1 Nm = 0.74 lbf-ft  
 1 l/s = 2.1 cfm  
  
 1 hp = 0.75 kW  
 1 lbf-ft = 1.36 Nm  
 1 cfm = 0.47 l/s

For information about performance curves, see page 7.

# LZB66: Performance curves at air pressure 6.3 bar (91 psi)

Reversible (AR)



**Conversion factors**

- 1 kW = 1.34 hp
- 1 Nm = 0.74 lbf - ft
- 1 l/s = 2.1 cfm
- 1 hp = 0.75 kW
- 1 lbf-ft = 1.36 Nm
- 1 cfm = 0.47 l/s

For information about performance curves, see page 7.

# VANE MOTORS LZB77



**2.35 – 2.80 kW**  
**3.15 – 3.75 hp**

EX certification valid for fixture mounted use only with a maximum surrounding temperature of +40°C (104°F).

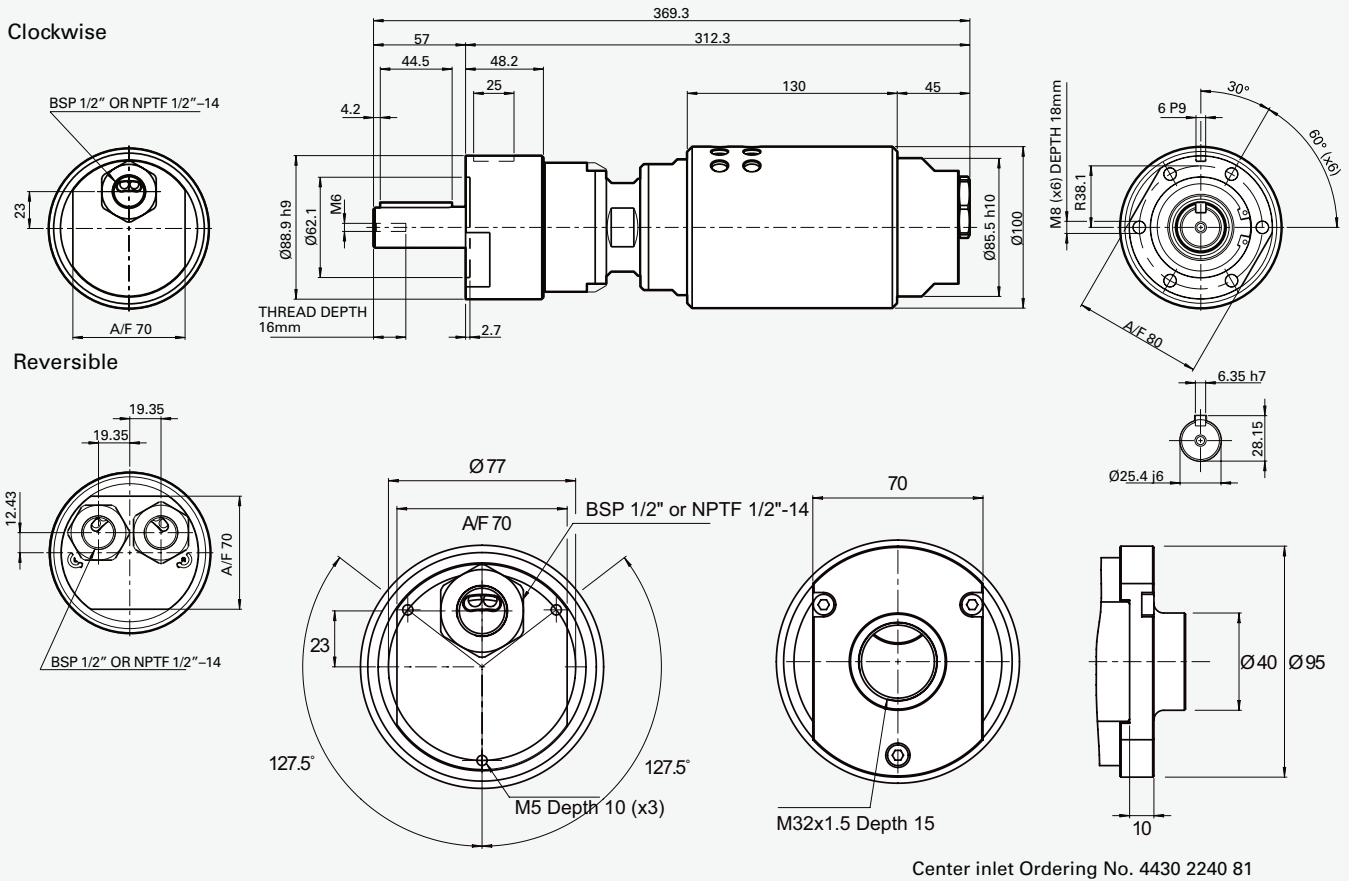
For optional vanes and accessories see chapter Accessories.



## Data at air pressure 6.3 bar (91 psi)

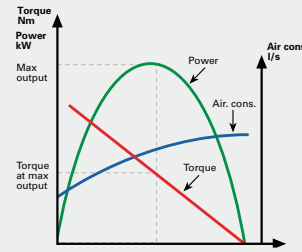
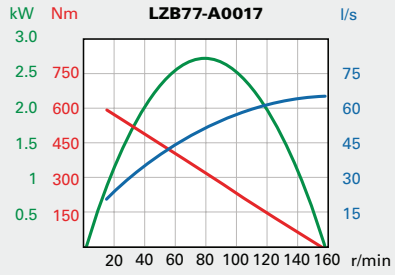
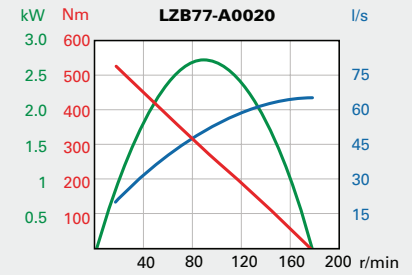
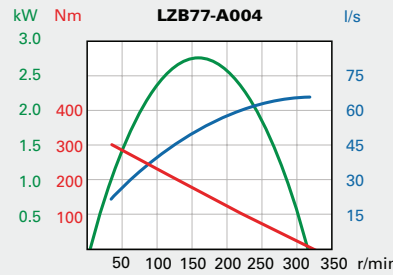
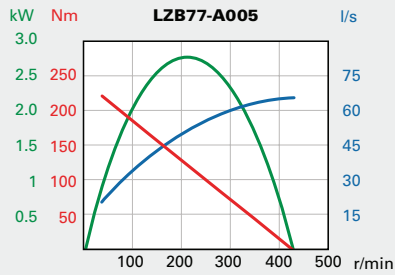
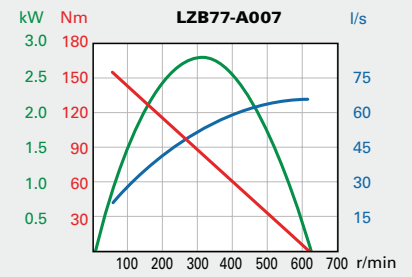
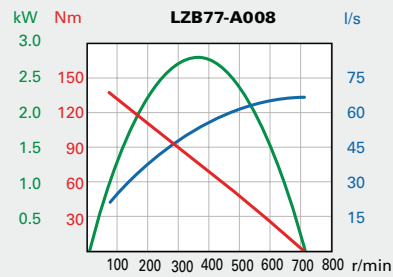
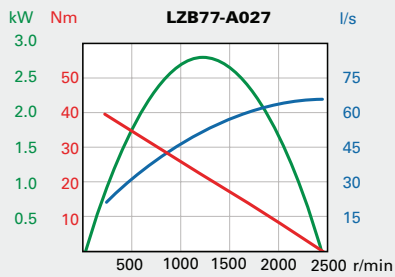
Model	Max output		Speed at max output	Torque at max output		Min starting torque		Stall torque		Free speed	Air consumption at max output		Weight		Shaft loading code <sup>1)</sup>	ATEX code	Ordering No.
	kW	hp	r/min	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	r/min	l/s	cfm	kg	lb			
<b>Lubricated</b>																	
<b>Clockwise rotation (Keyed shaft)</b>																	
LZB77-A027-15	2.80	3.75	1220	22	16	35	26	44	32	2600	52	110	8.4	18.5	h	Ex II 2GD c T4 IIC T110°C	8411 0700 25
LZB77-A008-15	2.77	3.71	350	75	55	121	89	150	111	750	52	110	8.4	18.5	h	Ex II 2GD c T6 IIC T85°C	8411 0700 70
LZB77-A007-15	2.77	3.71	310	85	63	137	101	170	125	660	52	110	8.4	18.5	h	Ex II 2GD c T6 IIC T85°C	8411 0700 17
LZB77-A005-15	2.77	3.71	210	123	91	199	147	246	181	460	52	110	8.4	18.5	h	Ex II 2GD c T6 IIC T85°C	8411 0700 88
LZB77-A004-15	2.77	3.71	160	166	122	269	198	332	245	340	52	110	8.4	18.5	h	Ex II 2GD c T6 IIC T85°C	8411 0700 96
LZB77-A0020-15	2.74	3.67	90	293	216	474	350	586	432	190	52	110	8.7	19.1	h	Ex II 2GD c T6 IIC T85°C	8411 0701 00
LZB77-A0017-15	2.74	3.67	80	332	245	536	395	664	490	165	52	110	8.7	19.1	h	Ex II 2GD c T6 IIC T85°C	8411 0700 09
<b>Reversible (Keyed shaft)</b>																	
LZB77-AR024-15	2.40	3.22	1280	18	13.3	24	18	36	27	2300	52	110	8.4	18.5	h	Ex II 2GD c T4 IIC T110°C	8411 0700 58
LZB77-AR007-15	2.38	3.19	370	62	46	84	62	124	91	680	52	110	8.4	18.5	h	Ex II 2GD c T6 IIC T85°C	8411 0701 18
LZB77-AR006-15	2.38	3.19	320	70	52	96	71	140	103	600	52	110	8.4	18.5	h	Ex II 2GD c T6 IIC T85°C	8411 0700 41
LZB77-AR004-15	2.38	3.19	220	102	75	139	103	204	150	420	52	110	8.4	18.5	h	Ex II 2GD c T6 IIC T85°C	8411 0701 26
LZB77-AR003-15	2.38	3.19	170	137	101	188	139	274	202	310	52	110	8.4	18.5	h	Ex II 2GD c T6 IIC T85°C	8411 0701 34
LZB77-AR0018-15	2.35	3.15	95	242	178	331	244	484	357	170	52	110	8.7	19.1	h	Ex II 2GD c T6 IIC T85°C	8411 0701 42
LZB77-AR0015-15	2.35	3.15	80	274	202	374	276	548	404	155	52	110	8.7	19.1	h	Ex II 2GD c T6 IIC T85°C	8411 0700 33

<sup>1)</sup> For Shaft loading curves, see page 16. NOTE: The motors have built-in silencer.



## LZB77: Performance curves at air pressure 6.3 bar (91 psi)

### Non-reversible (A)

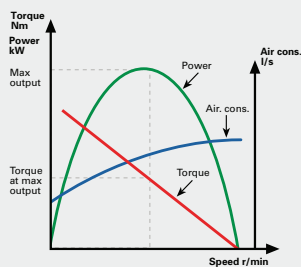
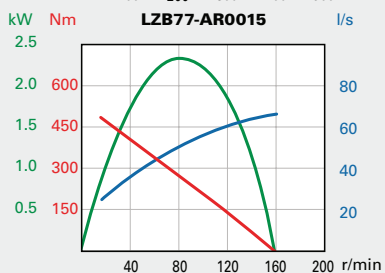
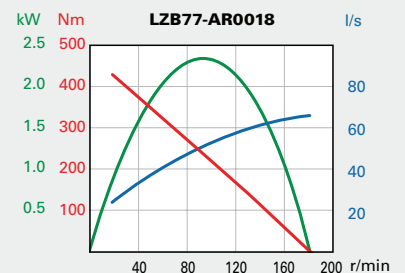
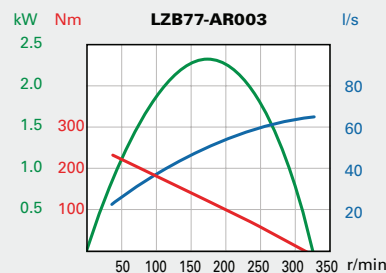
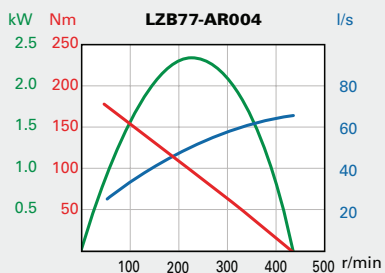
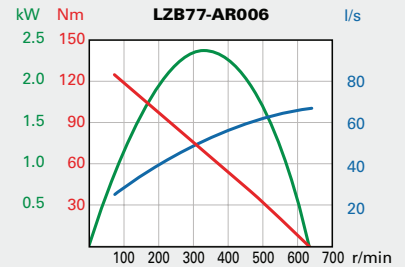
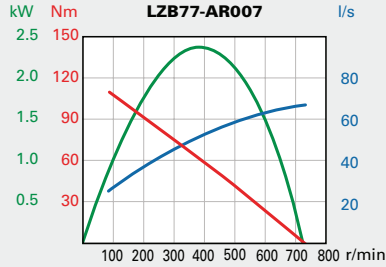
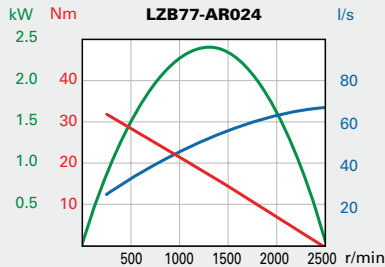


**Conversion factors**  
 1 kW = 1.34 hp  
 1 Nm = 0.74 lbf-ft  
 1 l/s = 2.1 cfm

1 hp = 0.75 kW  
 1 lbf-ft = 1.36 Nm  
 1 cfm = 0.47 l/s

For information about performance curves, see page 7.

### Reversible (AR)



**Conversion factors**  
 1 kW = 1.34 hp  
 1 Nm = 0.74 lbf-ft  
 1 l/s = 2.1 cfm

1 hp = 0.75 kW  
 1 lbf-ft = 1.36 Nm  
 1 cfm = 0.47 l/s

For information about performance curves, see page 7.

# ACCESSORIES FOR AIR MOTORS



Key chuck and quick chuck for LZB22/33-12

Chuck type	Mount	Body diameter mm	Capacity mm	Ordering No.
Key chuck	3/8"-24 UNF	30	0 - 6.5	4021 0283 00
Key chuck	3/8"-24 UNF	36	2.0 - 10.0	4021 0416 00
Key chuck	3/8"-24 UNF	46	2.0 - 13.0	4021 0289 00
Key chuck	1/2"-20 UNF	42.8	1.5 - 13	4021 0289 01
Quick chuck	3/8"-24 UNF	34	0 - 6.5	4021 0401 00
Quick chuck	3/8"-24 UNF	36	0 - 10.0	4021 0402 00
Quick chuck	3/8"-24 UNF	36	2.0 - 13.0	4021 0403 00



Threaded shafts for re-building standard motors

Motor	Thread dimension	Ordering No.
LZB42-A200	1/2"-20 UNF	4430 0868 80
LZB42-A065	1/2"-20 UNF	4430 0868 80
LZB42-A040	1/2"-20 UNF	4430 0868 81
LZB42-A025	1/2"-20 UNF	4430 0868 82
LZB42-A015	1/2"-20 UNF	4430 0869 80
LZB42-A010	1/2"-20 UNF	4430 0869 80
LZB42-A005	1/2"-20 UNF	4430 0869 80
LZB42-A0030	3/4"-16 UNF	4430 0870 80
LZB42-A0020	3/4"-16 UNF	4430 0870 80
LZB42-A0012	3/4"-16 UNF	4430 0870 80
LZB54 / LZB66-A180	1/2"-20 UNF	4430 0871 80
LZB54 / LZB66-A050	1/2"-20 UNF	4430 0871 80
LZB54 / LZB66-A030	1/2"-20 UNF	4430 0871 81
LZB54 / LZB66 -A020	1/2"-20 UNF	4430 0871 82
LZB54 / LZB66-A010	3/4"-16 UNF	4430 0870 80
LZB54 / LZB66- A007	3/4"-16 UNF	4430 0870 80
LZB54 / LZB66-A005	3/4"-16 UNF	4430 0870 80



Collet chuck and collets for LZB22-12 to LZB66-12

Type	Capacity		Ordering No.
	mm	in	
Collet holder cpl.			4110 0844 90
Collet	3		4150 0081 00
Collet	5		4150 0075 01
Collet	6		4150 0075 00
Collet	8	5/16"	4150 0074 00
Collet		1/8"	4150 0082 00
Collet		5/32"	4150 0648 00
Collet		3/16"	4150 0649 00
Collet		1/4"	4150 0076 00



Safety remote control

Type	Ordering No.
Safety remote control	4430 2218 80

# ACCESSORIES FOR AIR MOTORS



## Stainless steel motor cell, LZB14

Model	Air Motor Ordering No.	Motor cell Ordering No.
<b>Clockwise rotation (Key shaft)</b>		
LZB14-RL-A190-11	8411 0122 09	4430 2194 80
LZB14-RL-A048-11	8411 0122 17	4430 2194 80
LZB14-RL-A029-11	8411 0122 25	4430 2194 80
LZB14-RL-A12-11	8411 0122 33	4430 2194 80
LZB14-RL-A007-11	8411 0122 41	4430 2194 80
<b>Reversible (Key shaft)</b>		
LZB14-RL-AR140-11	8411 0122 58	4430 2194 84
LZB14-RL-AR034-11	8411 0122 66	4430 2194 84
LZB14-RL-AR020-11	8411 0122 74	4430 2194 84
LZB14-RL-AR008-11	8411 0122 82	4430 2194 84
LZB14-RL-AR005-11	8411 0122 90	4430 2194 84

## Stainless steel motor cell, LZB34

Model	Air Motor Ordering No.	Motor cell Ordering No.
<b>Clockwise rotation (Key shaft)</b>		
LZB34-RL-A210-11	8411 0338 41	4430 2290 83
LZB34-RL-A060-11	8411 0338 58	4430 2290 83
LZB34-RL-A033-11	8411 0338 66	4430 2290 83
LZB34-RL-A026-11	8411 0338 74	4430 2291 83
LZB34-RL-A013-11	8411 0338 82	4430 2290 83
LZB34-RL-A007-11	8411 0338 90	4430 2290 83
LZB34-RL-A005-11	8411 0339 08	4430 2291 83
<b>Reversible (Key shaft)</b>		
LZB34-RL-AR150-11	8411 0339 16	4430 2290 84
LZB34-RL-AR043-11	8411 0339 24	4430 2290 84
LZB34-RL-AR024-11	8411 0339 32	4430 2290 84
LZB34-RL-AR019-11	8411 0339 40	4430 2291 84
LZB34-RL-AR009-11	8411 0339 57	4430 2290 84
LZB34-RL-AR005-11	8411 0339 65	4430 2290 84
LZB34-RL-AR004-11	8411 0339 73	4430 2291 84

For the complete range LZB34-RLB- Ordering No. 4430 2291 84

## Stainless steel motor cell, LZB22

Model	Air Motor Ordering No.	Motor cell Ordering No.
<b>Clockwise rotation (Key shaft)</b>		
LZB22-RL-A120-11	8411 0219 11	4430 2304 83
LZB22-RL-A049-11	8411 0219 29	4430 2304 83
LZB22-RL-A036-11	8411 0219 37	4430 2305 83
LZB22-RL-A022-11	8411 0219 45	4430 2304 83
LZB22-RL-A011-11	8411 0219 52	4430 2304 83
LZB22-RL-A008-11	8411 0219 60	4430 2305 83
LZB22-RL-A005-11	8411 0219 78	4430 2304 83
<b>Reversible (Key shaft)</b>		
LZB22-RL-AR126-11	8411 0220 83	4430 2304 84
LZB22-RL-AR028-11	8411 0220 75	4430 2304 84
LZB22-RL-AR021-11	8411 0220 16	4430 2305 84
LZB22-RL-AR013-11	8411 0220 67	4430 2304 84
LZB22-RL-AR006-11	8411 0220 59	4430 2304 84
LZB22-RL-AR005-11	8411 0220 08	4430 2305 84
LZB22-RL-AR003-11	8411 0220 91	4430 2304 84

## Stainless steel motor cell, LZB46

Model	Air Motor Ordering No.	Motor cell Ordering No.
<b>Clockwise rotation (Key shaft)</b>		
LZB46-RL-A200-11	8411 0472 15	4430 1076 83
LZB46-RL-A065-11	8411 0472 23	4430 1076 83
LZB46-RL-A040-11	8411 0472 31	4430 1076 83
LZB46-RL-A025-11	8411 0472 49	4430 1206 80
LZB46-RL-A015-11	8411 0470 82	4430 1076 83
LZB46-RL-A010-11	8411 0471 08	4430 1076 83
LZB46-RL-A005-11	8411 0471 16	4430 1206 80
LZB46-RL-A0030-11	8411 0471 24	4430 1076 83
LZB46-RL-A0020-11	8411 0471 32	4430 1076 83
LZB46-RL-A0012-11	8411 0471 40	4430 1206 80
<b>Reversible (Key shaft)</b>		
LZB46-RL-AR170-11	8411 0472 56	4430 1076 84
LZB46-RL-AR050-11	8411 0472 64	4430 1076 84
LZB46-RL-AR030-11	8411 0472 72	4430 1076 84
LZB46-RL-AR020-11	8411 0472 80	4430 1206 84
LZB46-RL-AR010-11	8411 0471 57	4430 1076 84
LZB46-RL-AR007-11	8411 0471 65	4430 1076 84
LZB46-RL-AR004-11	8411 0471 73	4430 1206 84
LZB46-RL-AR0025-11	8411 0471 81	4430 1076 84
LZB46-RL-AR0015-11	8411 0471 99	4430 1076 84
LZB46-RL-AR0010-11	8411 0472 07	4430 1206 84

### Vane sets, lubrication not needed

Motor	Ordering No.
LZB14	4210 0479 97
LZB22	4110 0861 97
LZB33/34	4110 0621 97
LZB42	4430 0517 97
LZB46	4430 0525 97
LZB54	4430 0543 97
LZB66	4430 1355 97
LZB77	4430 1487 97
LZL03	4430 1327 97
LZL05	4430 0282 97
LZL15	4430 0290 97
LZL25	4430 0298 97
LZL35	4430 1086 97

**NOTE:** If running motors with 100% dry air and no lubrication, performance can be reduced by 5-15% at max output.

### Vane sets, lubrication needed

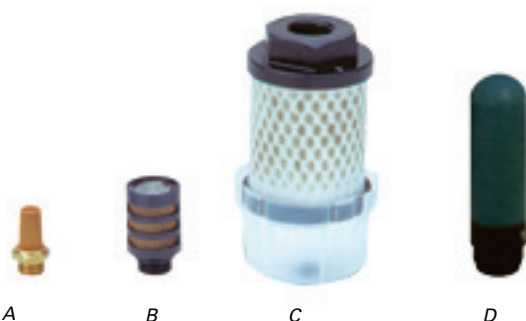
Motor	Ordering No.
LZB14	4210 0479 90
LZB22	4110 0861 90
LZB33/34	4110 0621 90
LZB42	4430 0517 90
LZB46	4430 0525 90
LZB54	4430 0543 90
LZB66	4430 1355 90
LZB77	4430 1487 90
LZL03	4430 1327 90
LZL05	4430 0282 90
LZL15	4430 0290 90
LZL25	4430 0298 90
LZL35	4430 1086 90



### Spring supported lubrication free vane sets

Not to be used over 3 bar

Motor	Ordering No.
LZB22	4430 0686 97
LZB33/34	4430 1349 97



### Silencers

Motor	A	B	C	D
	Sinter bronze Ordering No.	LBB Ordering No.	ECSB-2 Ordering No.	Blue Ordering No.
LZB14	9090 0507 00	-	9090 2100 01	-
LZB22 A, AV	9090 0508 00	4250 1878 83	9090 2100 01	-
LZB22 AR, LR	9090 0507 00	4250 1878 83	9090 2100 01	-
LZB33, LZB34	9090 0508 00	-	9090 2100 01	-
LZB42	9090 0510 00	-	9090 2100 01	0803 5011 07
LZB46	9090 0510 00	-	9090 2100 01	0803 5011 07
LZB54	9090 0510 00	-	9090 2100 01	0803 5011 07
LZB66	-	-	9090 2100 02	-
LZB77	-	Build in silencer	-	-
LZL03	-	-	9090 2100 01	0803 5011 06
LZL05	-	-	9090 2100 02	0803 5011 07
Noise damp dB(A)	15	20	25	15
Power loss %	10	10	7	10

**NOTE:** The noise damping and power loss values are approximate. The ECSB-2 silencer -01 has 1/2" and the -02 has 1" threaded port. They need to be connected to the motor via tube or hose with suitable connections.

### Different noise reduction possibilities and the effects thereof:

0.36 – kW motor No-load speed Anechoic room Interval of 1 m	Measure	Noise level dB(A)
	None	94
	Silencer only	77
	Hose only	84
	Hose with silencer	75