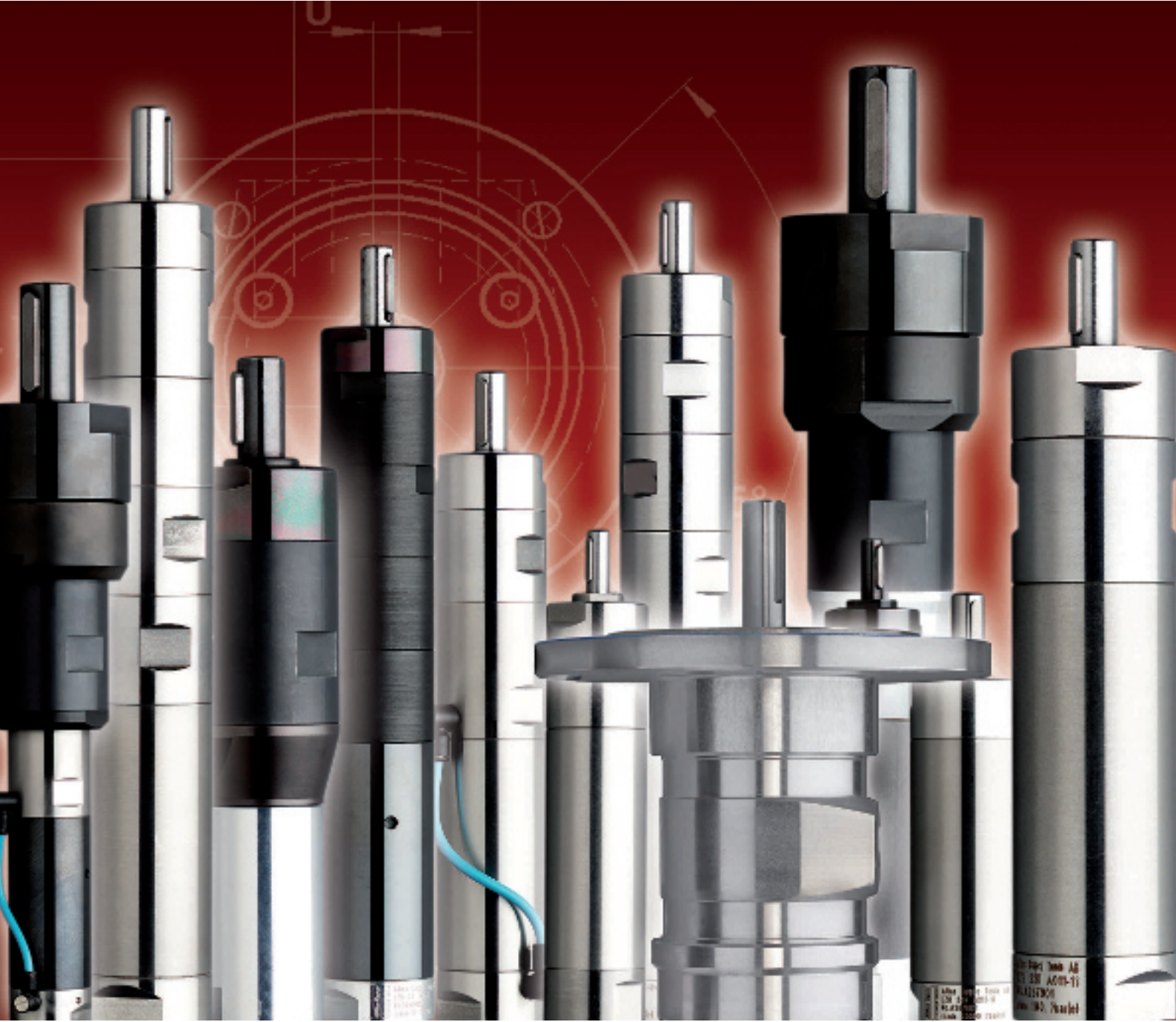


# Atlas Copco Air Motors



A man with a goatee, wearing a white lab coat over a purple shirt, is focused on working on a complex industrial machine. The machine features several pneumatic cylinders and hoses. The background is a blurred industrial setting. The text 'LZB' is prominently displayed in the upper left corner in a large, bold, yellow font with a black outline. Below it, the letters 'LZB' are repeated in a smaller, outlined font.

# LZB

LZB

# LZB Vane motors

## Introduction

LZB vane motors are designed to provide high performance and high standards of reliability. Typically, they are characterized by a high power output and small physical size, Figure 14.



Figure 14

The design of the motor is chosen to be long and slim. This gives a number of advantages like a high power to volume ratio, a low air consumption and long vane life. All motors utilise 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 Figure 15. 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.

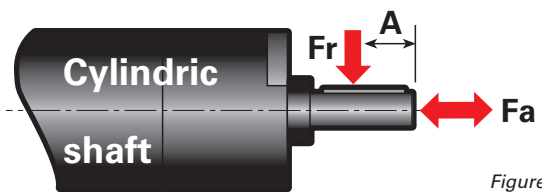
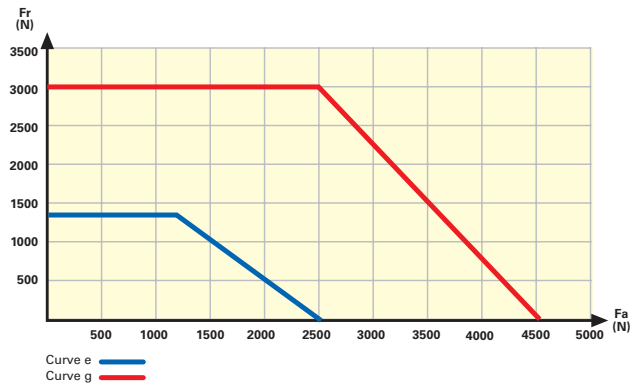
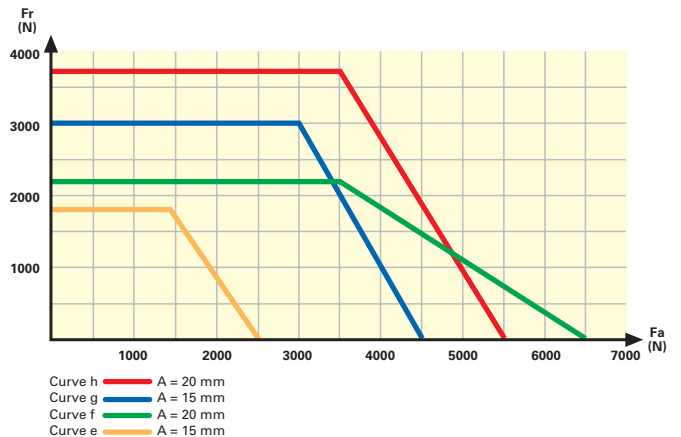
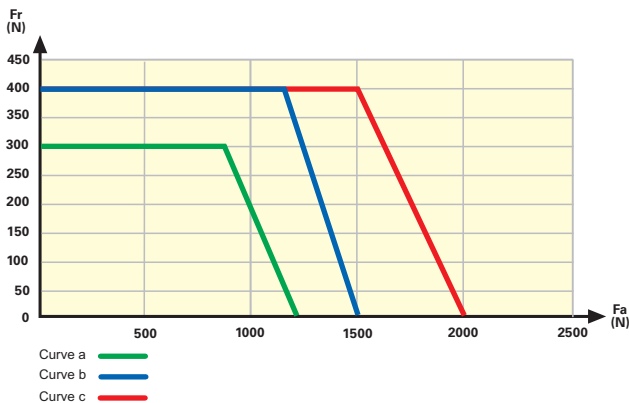
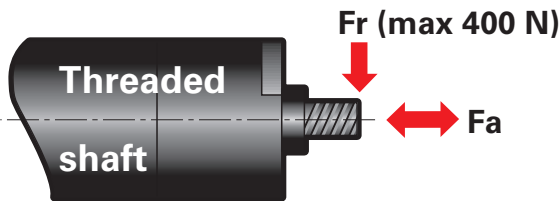
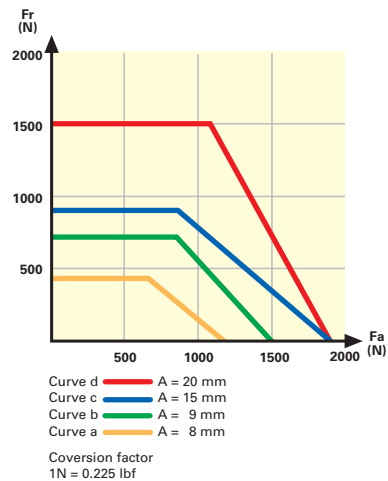


Figure 15





## Mounting

Type LZB vane motors may be mounted in any position. To facilitate this, flange and foot mounting are available for each motor, Figure 16.



Figure 16

## Connection

### Non-Reversible Motor

When the compressed air supply is connected to the inlet, the direction of rotation will be as shown in Figure 17. If the exhaust air is to be piped away, a hose should be connected to the exhaust outlet. (EXH).

Certain models have a third outlet, which can be plugged without affecting the performance of the motor.

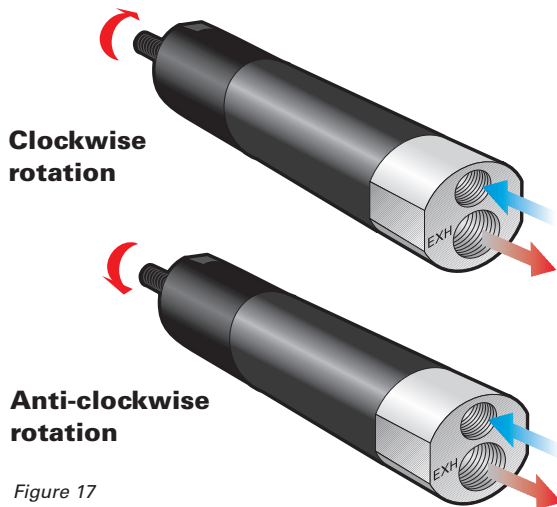


Figure 17

### Reversible Motor

The compressed air supply should be connected to the inlet that gives the desired direction of rotation, Figure 18.

The inlet not in use functions as an additional outlet: it must not be plugged.

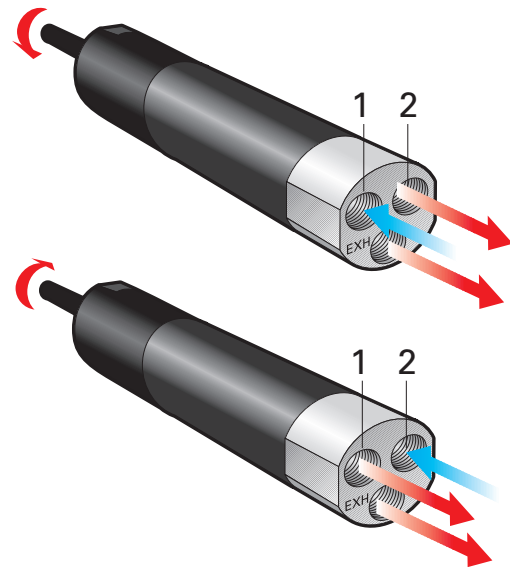


Figure 18

## Hose dimensions

Information on hose dimensions recommended for use with type LZB air motors is detailed in Table 2. 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 3m length.

Motor Type	Inlet connection thread (BSP) (NPTF)	Exhaust connection thread (mm)	Inlet hose diameter (mm)	Exhaust hose diameter (Non-reversible) (mm)	Exhaust hose diameter (Reversible) (mm)
LZB 14	1/8" -	1/8"	5.0	8.0	6.3
LZB 22	1/8" -	1/4"	6.3	10.0	8.0
LZB 33	1/4" -	1/4"	8.0	10.0	8.0
LZB 42	1/4" -	1/2"	10.0	13.0	13.0
LZB 46	1/4" -	1/2"	10.0	16.0	13.0
LZB 54	3/8" -	1/2"	13.0	16.0	13.0
LZB 66	3/8" -	3/4"	13.0	20.0	13.0
LZB 77	1/2" 1/2" - 14	-	16.0	-	16.0

Table 2

# Vane motors LZB 14

## Lubrication free versions

### LZB 14L

**0.10 – 0.16 kW**  
**0.14 – 0.22 hp**

For EX certification according to the ATEX directive (Ex II 2G T4 IIC D110°C) use Ordering No. 9834 1107 00 (book as one delivery together with motor).  
 EX certification valid for fixtured mounted use only.

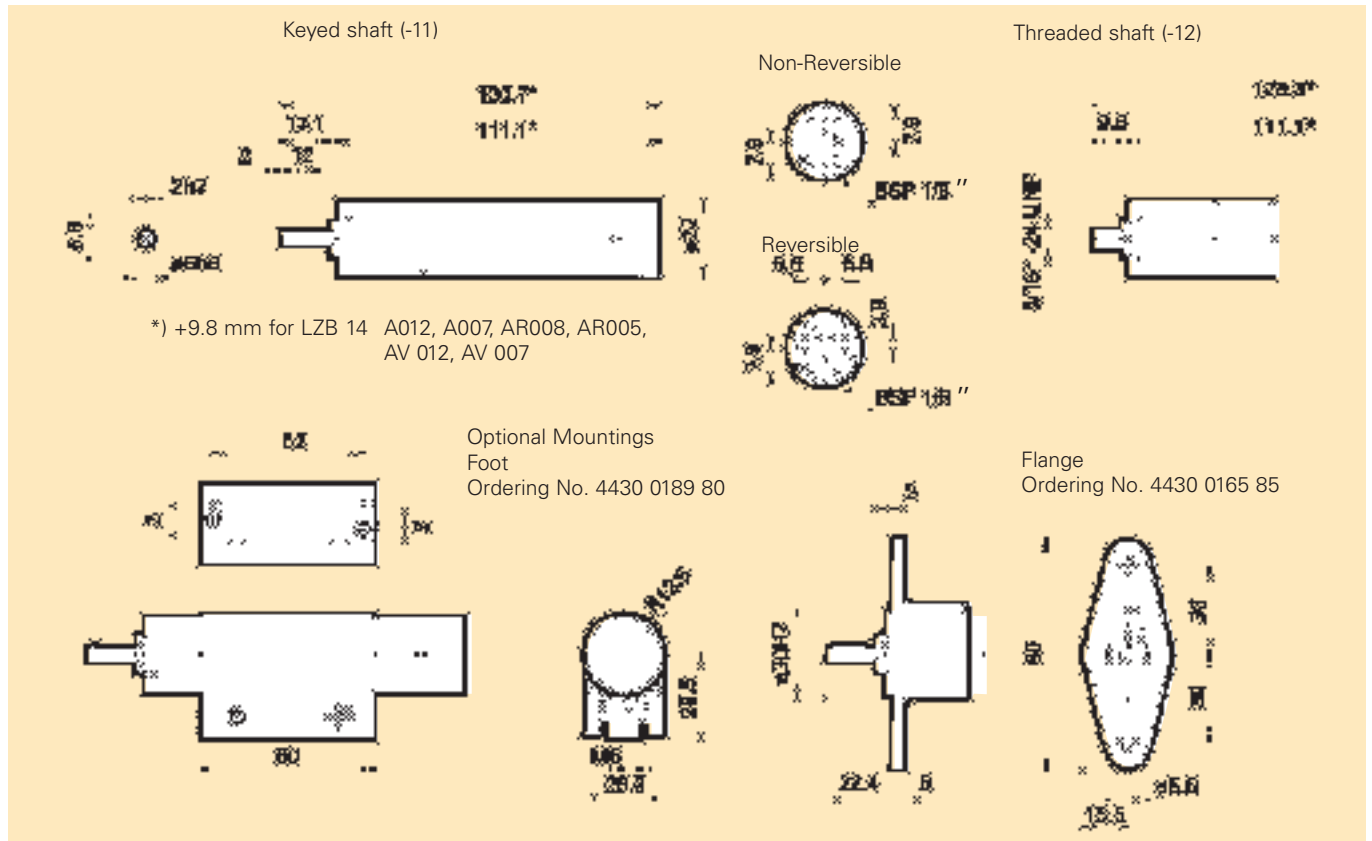


#### Data at air pressure 6.3 bar (91psi)

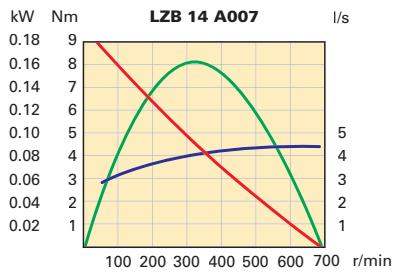
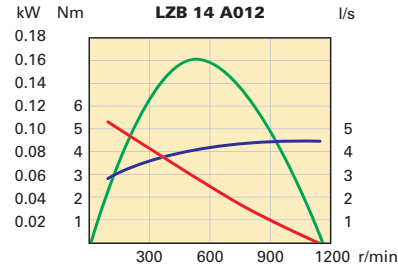
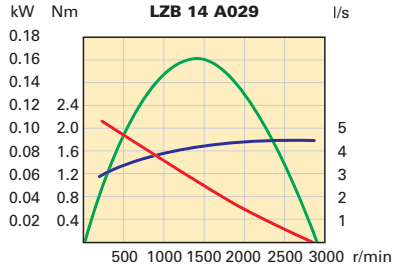
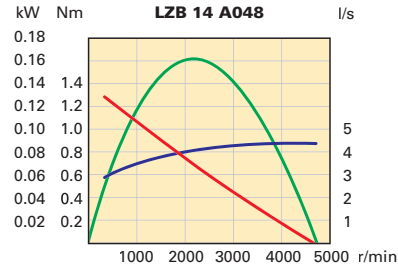
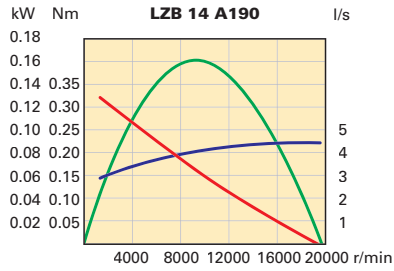
Type <sup>1)</sup>	Ordering No.		Type	Keyed Shaft	Threaded Shaft	Max output		Speed at max output	Torque at max output		Min starting torque		Air cons.			Weight		Shaft loading code <sup>2)</sup>
	Keyed Shaft	Threaded Shaft				kW	hp		r/min	Nm	lbf.ft	Nm	lbf.ft	r/min	l/s	cfm	kg	
<b>Standard</b>			<b>Lubrication free</b>															
<b>LZB 14</b>	<b>8411-</b>	<b>8411-</b>	<b>LZB 14L</b>	<b>8411-</b>	<b>8411-</b>	<b>Clockwise rotation</b>												
A190-	0110 03	0111 02	A190-	0113 00	0114 09	0.16	0.22	9100	0.17	0.12	0.26	0.19	19500	4.2	8.9	0.30	0.66	a
A048-	0110 11	0111 10	A048-	0113 18	0114 17	0.16	0.22	2200	0.70	0.50	1.0	0.73	4700	4.2	8.9	0.30	0.66	a
A029-	0110 29	0111 28	A029-	0113 26	0114 25	0.16	0.22	1400	1.1	0.78	1.7	1.2	2800	4.2	8.9	0.30	0.66	a
A012-	0110 37	0111 36	A012-	0113 34	0114 33	0.16	0.22	530	2.9	2.1	4.2	3.1	1100	4.2	8.9	0.33	0.73	a
A007-	0110 45	0111 44	A007-	0113 42	0114 41	0.16	0.22	330	4.7	3.4	7.0	5.1	690	4.2	8.9	0.33	0.73	a
<b>LZB 14</b>	<b>8411-</b>	<b>8411-</b>	<b>LZB 14L</b>	<b>8411-</b>	<b>8411-</b>	<b>Anti-clockwise rotation</b>												
AV190-	0116 07	-	AV190-	0117 06	-	0.16	0.22	9100	0.17	0.12	0.26	0.19	19500	4.2	8.9	0.30	0.66	a
AV048-	0116 15	-	AV048-	0117 14	-	0.16	0.22	2200	0.70	0.50	1.0	0.73	4700	4.2	8.9	0.30	0.66	a
AV029-	0116 23	-	AV029-	0117 22	-	0.16	0.22	1400	1.1	0.78	1.7	1.2	2800	4.2	8.9	0.30	0.66	a
AV012-	0116 31	-	AV012-	0117 30	-	0.16	0.22	530	2.9	2.1	4.2	3.1	1100	4.2	8.9	0.33	0.73	a
AV007-	0116 49	-	AV007-	0117 48	-	0.16	0.22	330	4.7	3.4	7.0	5.1	690	4.2	8.9	0.33	0.73	a
<b>LZB 14</b>	<b>8411-</b>	<b>8411-</b>	<b>LZB 14L</b>	<b>8411-</b>	<b>8411-</b>	<b>Reversible</b>												
AR140-	0112 01	-	AR140-	0115 08	-	0.10	0.14	6500	0.15	0.11	0.19	0.14	13000	3.6	7.6	0.30	0.66	a
AR034-	0112 19	-	AR034-	0115 16	-	0.10	0.14	1600	0.60	0.43	0.78	0.57	3100	3.6	7.6	0.30	0.66	a
AR020-	0112 27	-	AR020-	0115 24	-	0.10	0.14	950	1.0	0.72	1.3	0.95	1900	3.6	7.6	0.30	0.66	a
AR008-	0112 35	-	AR008-	0115 32	-	0.10	0.14	380	2.5	1.8	3.1	2.3	760	3.6	7.6	0.33	0.73	a
AR005-	0112 43	-	AR005-	0115 40	-	0.10	0.14	230	4.1	3.0	5.0	3.6	460	3.6	7.6	0.33	0.73	a

<sup>1)</sup> Suffix: -11 = Keyed Shaft -12 = Threaded Shaft.  
<sup>2)</sup> For Shaft loading curves, see page 12. NOTE: The lubrication free motors have 95% of shown free speed

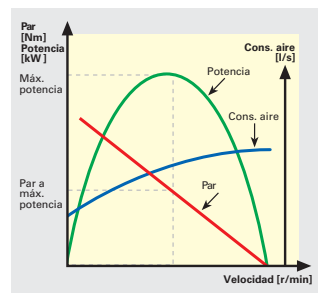
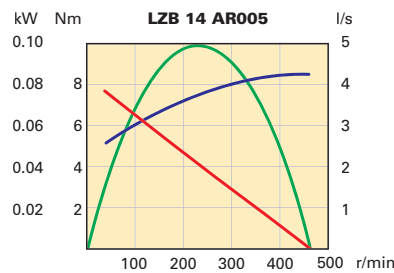
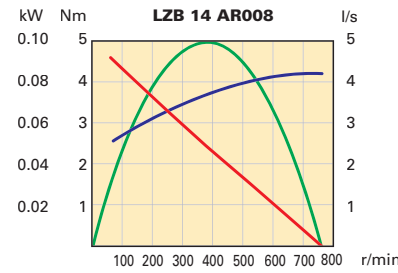
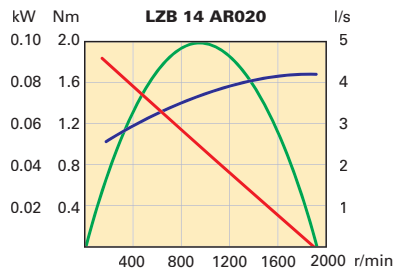
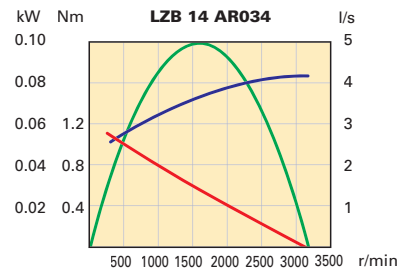
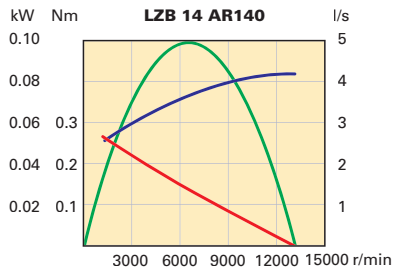
#### Dimensions (mm)



**LZB 14 Performance curves at air pressure 6.3 bar (91psi)**  
Non-Reversible



Reversible



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 more details, see page 7.

For information about performance curves, see page 7

# Vane motors LZB 14R

## Lubrication free versions LZB 14RL

**0.10 – 0.16 kW**  
**0.14 – 0.22 hp**

For EX certification according to the ATEX directive (Ex II 2G T4 IIC D110°C) use Ordering No. 9834 1107 00 (book as one delivery together with motor).

The material used in the back head, casing and front part is stainless steel with the designation: ISO 683/XIII Type 17, SS 14 2346, DIN 17440 X12CrNiS188. The material used in the outgoing shaft and gear rim has the designation: ISO 683/XIII Type 9b, SS 14 2321, DIN 17440 X22CrNi17.



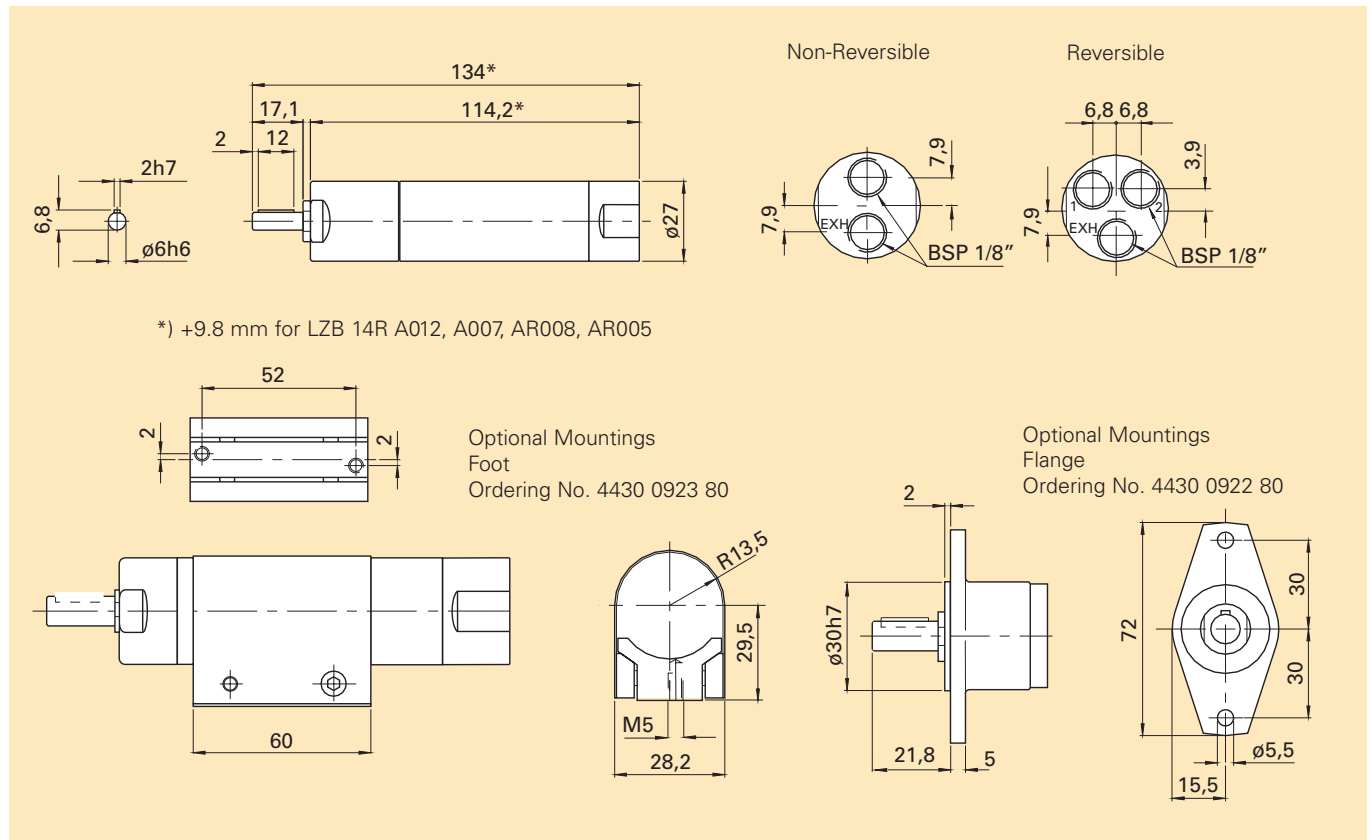
### Data at air pressure 6.3 bar (91psi)

Designation	Ordering Lubricated	Designation	Ordering Lubricated	Max output		Speed	Torque at max output		Min starting torque		Free speed	Air cons. at max output		Weight		Shaft loading code <sup>1)</sup>
				kW	hp	r/min	Nm	lbf.ft	Nm	lbf.ft		r/min	l/s	cfm	kg	
<b>LZB 14R</b>	<b>8411-</b>	<b>LZB 14RL</b>	<b>8411-</b>	<b>Clockwise rotation</b>												
A190-11	0121 00	A190-11	0122 09	0.16	0.22	9100	0.17	0.12	0.26	0.19	19500	4.2	8.9	0.37	0.82	a
A048-11	0121 18	A048-11	0122 17	0.16	0.22	2200	0.70	0.50	1.0	0.73	4700	4.2	8.9	0.37	0.82	a
A029-11	0121 26	A029-11	0122 25	0.16	0.22	1400	1.1	0.78	1.7	1.2	2800	4.2	8.9	0.37	0.82	a
A012-11	0121 34	A012-11	0122 33	0.16	0.22	530	2.9	2.1	4.2	3.1	1100	4.2	8.9	0.40	0.88	a
A007-11	0121 42	A007-11	0122 41	0.16	0.22	330	4.7	3.4	7.0	5.1	690	4.2	8.9	0.40	0.88	a
<b>LZB 14R</b>	<b>8411-</b>	<b>LZB 14RL</b>	<b>8411-</b>	<b>Reversible</b>												
AR140-11	0121 59	AR140-11	0122 58	0.10	0.14	6500	0.15	0.11	0.19	0.14	13000	3.6	7.6	0.37	0.82	a
AR034-11	0121 67	AR034-11	0122 66	0.10	0.14	1600	0.60	0.43	0.78	0.57	3100	3.6	7.6	0.37	0.82	a
AR020-11	0121 75	AR020-11	0122 74	0.10	0.14	950	1.0	0.72	1.3	0.95	1900	3.6	7.6	0.37	0.82	a
AR008-11	0121 83	AR008-11	0122 82	0.10	0.14	380	2.5	1.8	3.1	2.3	760	3.6	7.6	0.40	0.88	a
AR005-11	0121 91	AR005-11	0122 90	0.10	0.14	230	4.1	3.0	5.0	3.6	460	3.6	7.6	0.40	0.88	a

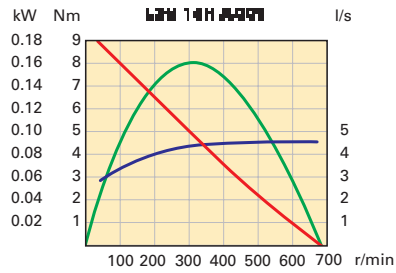
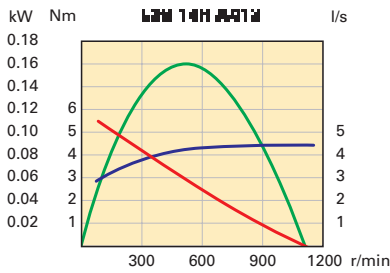
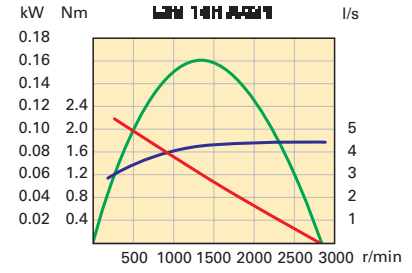
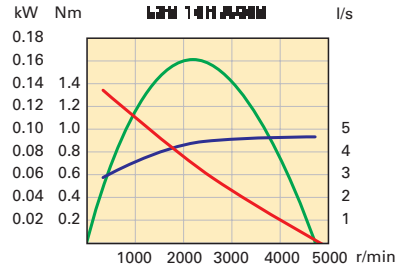
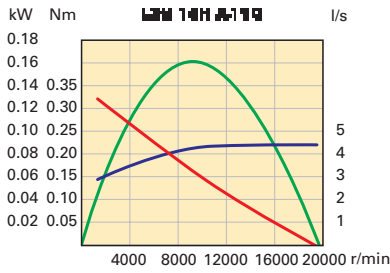
<sup>1)</sup> For Shaft loading curves, see page 12. NOTE: The lubrication free motors have 95% of shown free speed.

### Dimensions (mm)

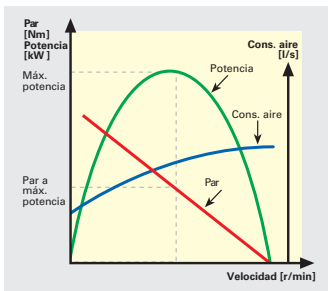
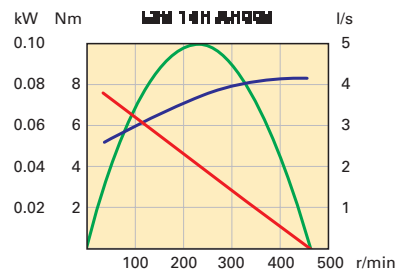
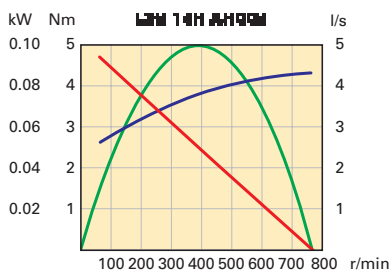
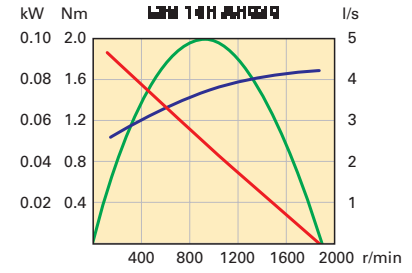
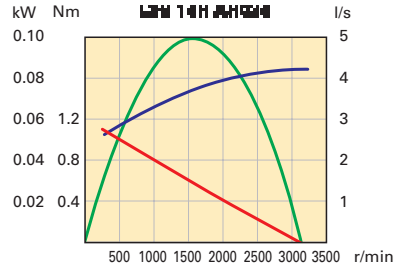
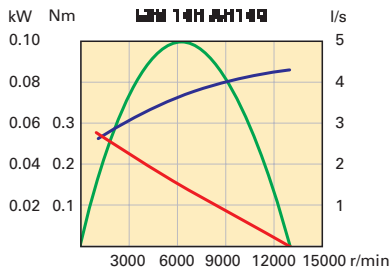
Conversion factor 1 mm = 0.04 inch



**LZB 14R Performance curves at air pressure 6.3 bar (91psi)**  
Non-Reversible



Reversible



For information about performance curves, see page 7

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 more details, see page 7



# Vane motors LZB 22

## Lubrication free versions

### LZB 22L

**0.16 – 0.25 kW**  
**0.22 – 0.34 hp**

For EX certification according to the ATEX directive (Ex II 2G T5 IIC D85°C) use Ordering No. 9834 1108 00 (book as one delivery together with motor).  
 EX certification valid for fixtured mounted use only.

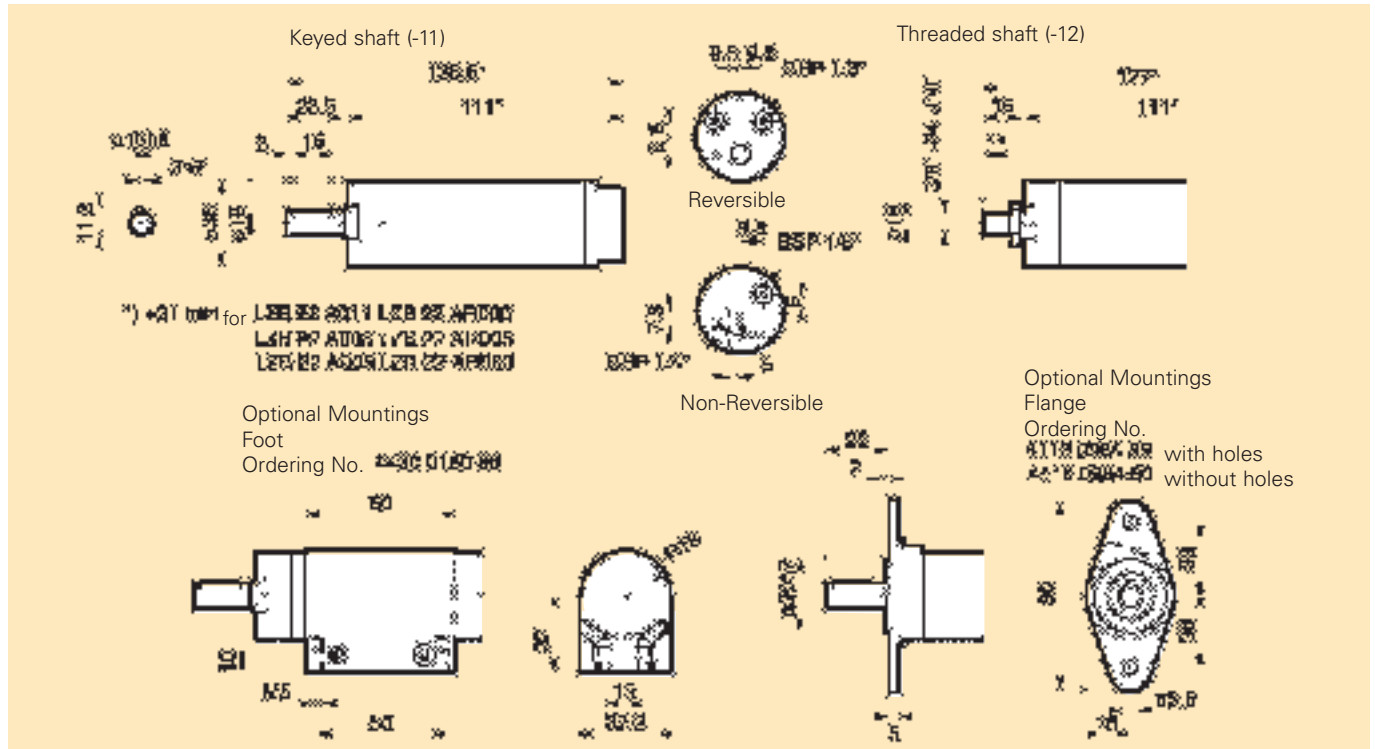


#### Data at air pressure 6.3 bar (91psi)

Ordering No.	Type <sup>1)</sup>					Max output		Speed at max output	Torque at max output		Min starting torque		Air cons. at max output		Weight		Shaft loading code <sup>2)</sup>	
	Keyed Shaft	Threaded Shaft	Type	Keyed Shaft	Threaded Shaft	kW	hp		r/min	Nm	lbf.ft	Nm	lbf.ft	l/s	cfm	kg		lb
<b>LZB 22</b>		<b>Standard</b>		<b>Lubrication free</b>														
		<b>8411-</b>	<b>8411-</b>	<b>LZB 22L</b>	<b>8411-</b>	<b>8411-</b>	<b>Clockwise rotation</b>											
A220-	0201 37	0202 36	A220-	0214 08	0214 73	0.25	0.34	9600	0.25	0.18	0.45	0.33	21500	5.3	11.2	0.55	1.21	b
A049-	0201 29	0202 28	A049-	0214 16	0214 81	0.25	0.34	2200	1.1	0.81	2.0	1.5	5000	5.3	11.2	0.55	1.21	b
A036-	0201 52	0202 51	A036-	0214 24	0214 99	0.25	0.34	1650	1.5	1.1	2.7	2.0	3750	5.3	11.2	0.55	1.21	b
A022-	0201 11	0202 10	A022-	0214 32	0215 07	0.25	0.34	1040	2.4	1.7	4.5	3.3	2250	5.3	11.2	0.55	1.21	b
A011-	0201 03	0202 02	A011-	0214 40	0215 15	0.24	0.32	535	4.3	3.2	8.0	5.9	1140	5.3	11.2	0.75	1.65	b
A008-	0201 60	0202 69	A008-	0214 57	0215 23	0.24	0.32	380	6.0	4.4	10.5	7.7	850	5.3	11.2	0.75	1.65	b
A005-	0201 45	0202 44	A005-	0214 65	0215 31	0.24	0.32	235	9.9	7.3	17.0	12.5	510	5.3	11.2	0.75	1.65	b
<b>LZB 22</b>		<b>8411-</b>	<b>8411-</b>	<b>LZB 22L</b>	<b>8411-</b>	<b>8411-</b>	<b>Reversible</b>											
AR126-	0203 35	-	AR126-	0215 49	-	0.16	0.22	6500	0.24	0.18	0.35	0.26	13800	5.0	10.6	0.55	1.21	b
AR028-	0203 27	-	AR028-	0215 56	-	0.16	0.22	1390	1.1	0.81	1.3	0.96	3000	5.0	10.6	0.55	1.21	b
AR021-	0203 68	-	AR021-	0215 64	-	0.16	0.22	1050	1.5	1.1	1.8	1.3	2200	5.0	10.6	0.55	1.21	b
AR013-	0203 19	-	AR013-	0215 72	-	0.16	0.22	650	2.4	1.7	3.0	2.2	1350	5.0	10.6	0.55	1.21	b
AR006-	0203 01	-	AR006-	0215 80	-	0.16	0.22	310	5.0	3.7	5.9	4.4	680	5.0	10.6	0.75	1.65	b
AR005-	0203 50	-	AR005-	0215 98	-	0.16	0.22	240	6.7	4.9	8.0	5.9	500	5.0	10.6	0.75	1.65	b
AR003-	0203 43	-	AR003-	0216 06	-	0.16	0.22	140	10.8	8.0	13.4	9.9	300	5.0	10.6	0.75	1.65	b

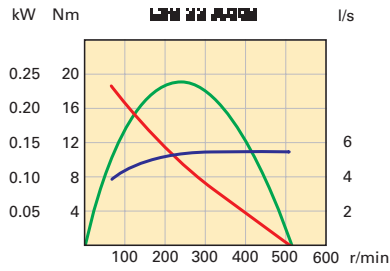
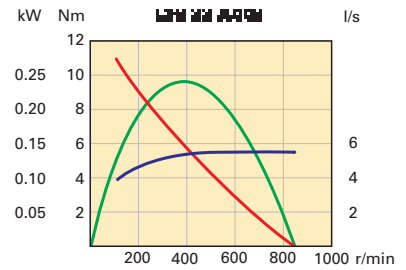
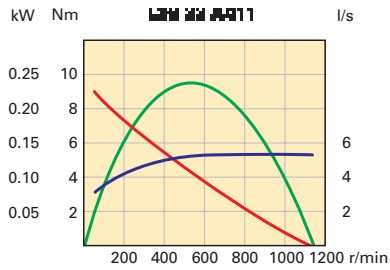
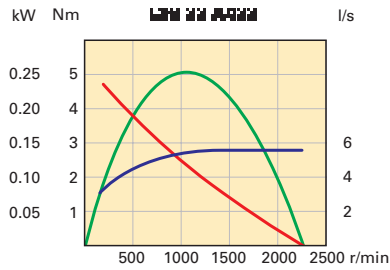
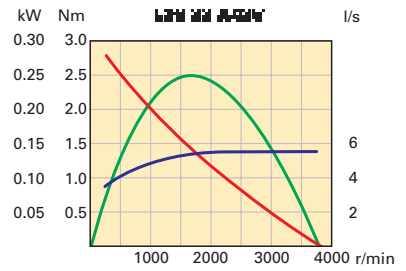
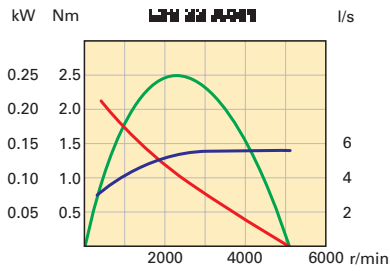
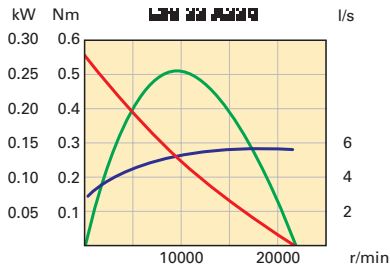
<sup>1)</sup> Suffix: -11 = Keyed Shaft -12 = Threaded Shaft. <sup>2)</sup> For Shaft loading curves, see page 12.  
 NOTE: The lubrication free motors have 95% of shown free speed.

#### Dimensions (mm)

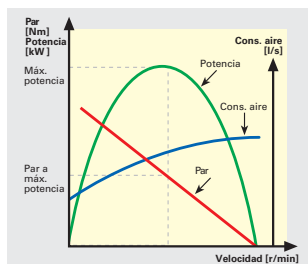
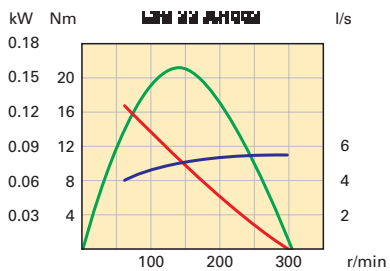
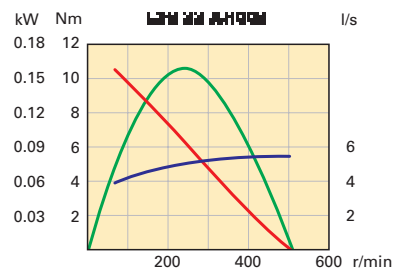
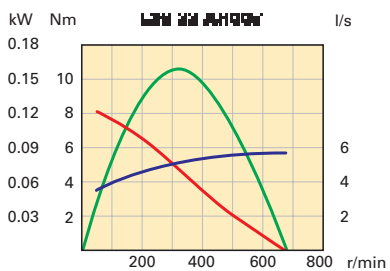
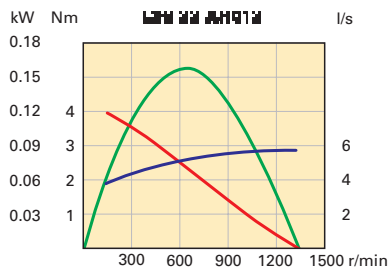
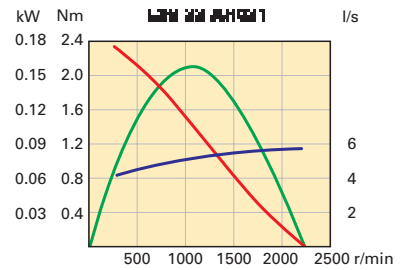
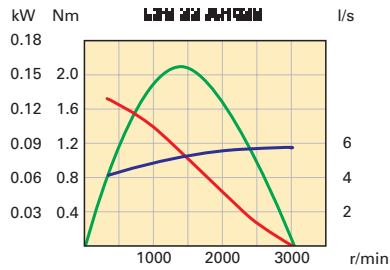
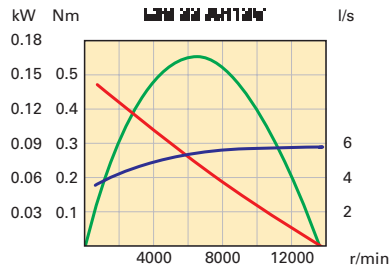


**Optional accessories**  
 page 42.

**LZB 22, LZB 22R Performance curves at air pressure 6.3 bar (91psi)**  
Non-Reversible



**Reversible**



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 more details, see page 7

For information about performance curves, see page 7

# Stainless steel vane motors LZB 22R Lubrication free versions LZB 22RL

**0.16 – 0.25 kW**  
**0.22 – 0.34 hp**

For EX certification according to the ATEX directive (Ex II 2G T5 IIC D85°C) use Ordering No. 9834 1108 00 (book as one delivery together with motor).  
The material used in the back head, casing and front part is stainless steel with the designation: ISO 683/XIII Type 17, SS 14 2346, DIN 17440 X12CrNiS188. The material used in the outgoing shaft and gear rim has the designation: ISO 683/XIII Type 9b, SS 14 2321, DIN 17440 X22CrNi17.

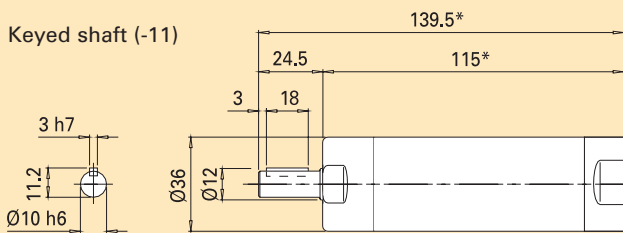


## Data at air pressure 6.3 bar (91psi)

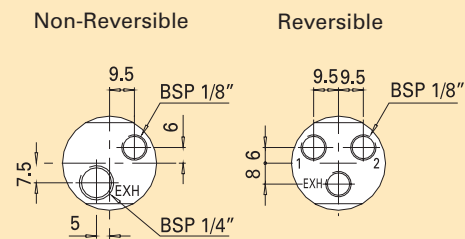
Designation	Ordering No.	Designation		Max output kW	Max output hp	Speed at max output r/min	Torque at max output		Min starting torque		Free speed r/min	Air cons. at max output		Weight		Shaft loading code <sup>1)</sup>
		Lubrication free	Ordering No.				Nm	lbf.ft	Nm	lbf.ft		l/s	cfm	kg	lb	
<b>LZB 22R</b>		<b>LZB 22RL</b>		<b>Clockwise rotation</b>												
A220-11	8411 0217 05	A220-11	8411 0219 11	0.25	0.34	9600	0.25	0.18	0.45	0.33	21500	5.3	11.2	0.63	1.21	b
A049-11	8411 0217 13	A049-11	8411 0219 29	0.25	0.34	2200	1.1	0.81	2.0	1.5	5000	5.3	11.2	0.63	1.21	b
A036-11	8411 0217 21	A036-11	8411 0219 37	0.25	0.34	1650	1.5	1.1	2.7	2.0	3750	5.3	11.2	0.63	1.21	b
A022-11	8411 0217 39	A022-11	8411 0219 45	0.25	0.34	1040	2.4	1.7	4.5	3.3	2250	5.3	11.2	0.63	1.21	b
A011-11	8411 0217 47	A011-11	8411 0219 52	0.24	0.32	535	4.3	3.2	8.0	5.9	1140	5.3	11.2	0.83	1.65	b
A008-11	8411 0217 54	A008-11	8411 0219 60	0.24	0.32	380	6.0	4.4	10.5	7.7	850	5.3	11.2	0.83	1.65	b
A005-11	8411 0217 62	A005-11	8411 0219 78	0.24	0.32	235	9.9	7.3	17.0	12.5	510	5.3	11.2	0.83	1.65	b
<b>LZB 22R</b>		<b>LZB 22RL</b>		<b>Reversible</b>												
AR126-11	8411 0218 79	AR126-11	8411 0220 83	0.16	0.22	6500	0.24	0.18	0.35	0.26	13800	5.0	10.6	0.63	1.21	b
AR028-11	8411 0218 61	AR028-11	8411 0220 75	0.16	0.22	1390	1.1	0.81	1.3	0.96	3000	5.0	10.6	0.63	1.21	b
AR021-11	8411 0219 03	AR021-11	8411 0222 16	0.16	0.22	1050	1.5	1.1	1.8	1.3	2200	5.0	10.6	0.63	1.21	b
AR013-11	8411 0218 53	AR013-11	8411 0220 67	0.16	0.22	650	2.4	1.7	3.0	2.2	1350	5.0	10.6	0.63	1.21	b
AR006-11	8411 0218 46	AR006-11	8411 0220 59	0.16	0.22	310	5.0	3.7	5.9	4.4	680	5.0	10.6	0.83	1.65	b
AR005-11	8411 0218 95	AR005-11	8411 0222 08	0.16	0.22	240	6.7	4.9	8.0	5.9	500	5.0	10.6	0.83	1.65	b
AR003-11	8411 0218 87	AR003-11	8411 0220 91	0.16	0.22	140	10.8	8.0	13.4	9.9	300	5.0	10.6	0.83	1.65	b

1) For Shaft loading curves, see page 12.  
Performance curves are given on page 19. NOTE: The lubrication free motors have 95% of shown free speed.

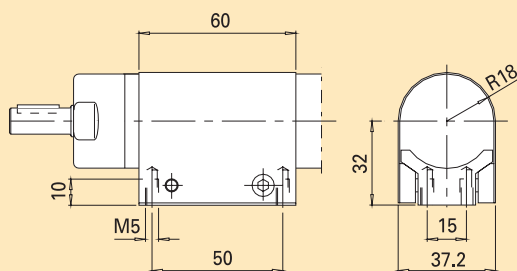
## Dimensions (mm)



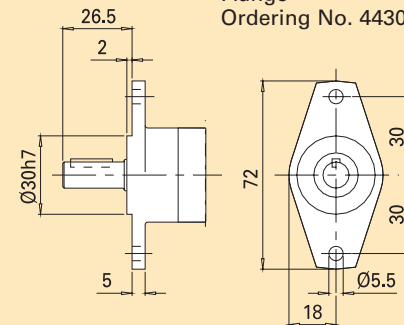
\* +31.2 mm for LZB 22R A011 LZB 22R AR006  
LZB 22R A008 LZB 22R AR005  
LZB 22R A005 LZB 22R AR003



Optional Mounting  
Foot  
Ordering No. 4430 0862 80



Optional Mounting  
Flange  
Ordering No. 4430 0861 80



# Vane motors LZB 22 LR, LZB 22R LR

## Low speed reversible

**Maximum permitted torque 9 Nm (6.6 lbf.ft).**

For EX certification according to the ATEX directive (Ex II 2G T5 IIC D85°C) use Ordering No. 9834 1108 00 (book as one delivery together with motor). EX certification for LZB 22 LR valid for fixtured mounted use only. Within their working range these motors have a very steep torque curve. Speed and air consumption is relatively constant regardless of the load.

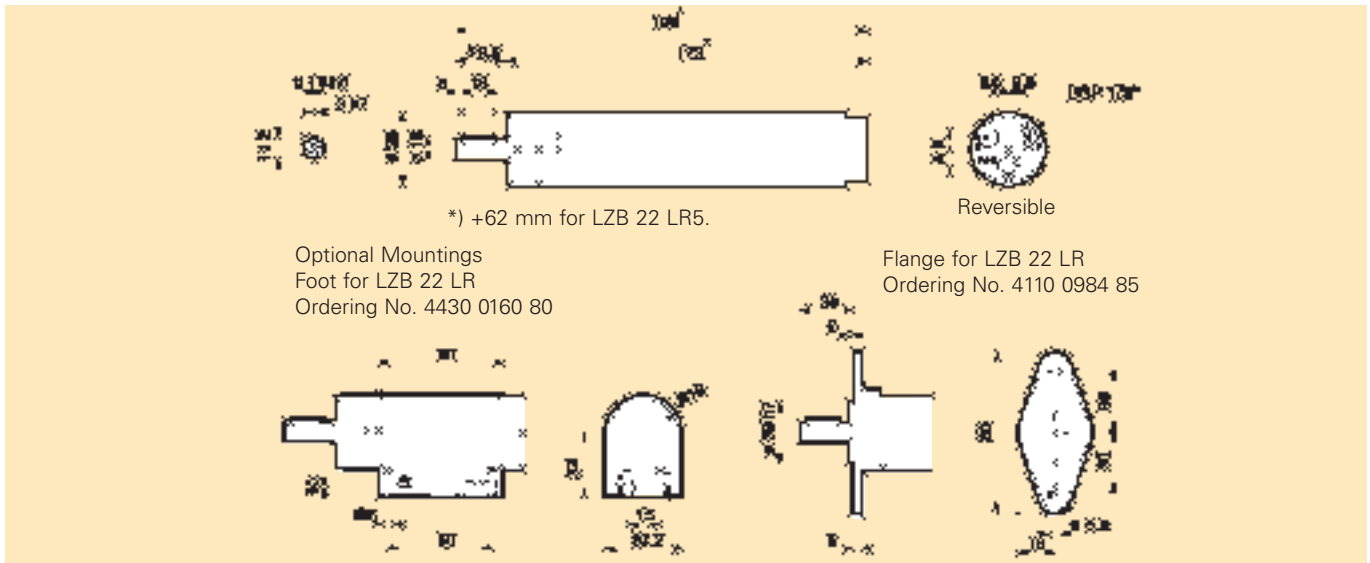


### Data at air pressure 6.3 bar (91psi)

Designation	Ordering No.	Designation	Ordering No.	Free speed r/min	Air consumption		Weight		Shaft loading code <sup>1)</sup>
Lubricated		Lubrication free			l/s	cfm	kg	lb	
LZB 22 LR100-11	8411 0212 18	LZB 22L LR100-11	8411 0216 22	100	5.8	12.3	0.95	2.11	b
LZB 22 LR5-11	8411 0212 00	LZB 22L LR5-11	8411 0216 14	5	5.8	12.3	1.35	3.00	b
<b>Stainless steel</b>									
LZB 22R LR100-11	8411 0222 24	LZB 22RL LR100-11	8411 0222 40	100	5.8	12.3	1.03	2.11	b
LZB 22R LR5-11	8411 0222 32	LZB 22RL LR5-11	8411 0222 57	5	5.8	12.3	1.43	3.00	b

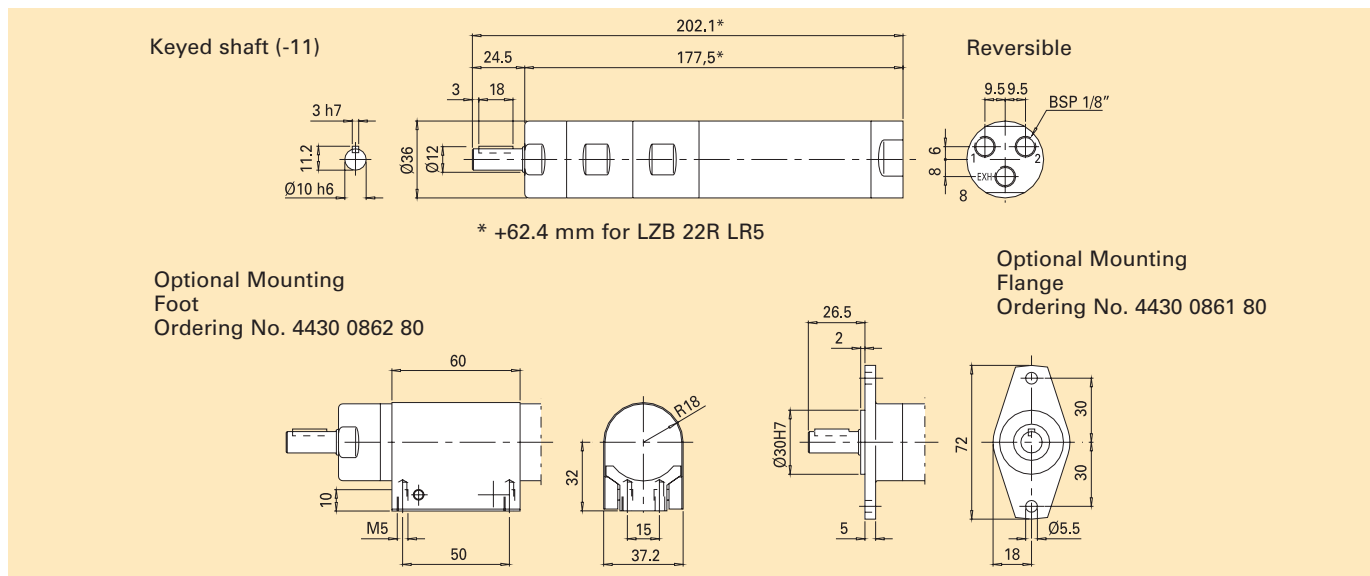
1) For Shaft loading curves, see page 12.

### Dimensions LZB 22 RL (mm)



### Dimensions LZB 22R LR (mm)

Conversion factor 1mm = 0.04 inch



### Optional accessories

# Vane motors LZB 33

## Lubrication free versions LZB 33L

**0.23 – 0.39 kW**  
**0.31 – 0.52 hp**

For EX certification according to the ATEX directive (Ex II 2G T5 IIC D85°C) use Ordering No. 9834 1108 00 (book as one delivery together with motor). EX certification valid for fixtured mounted use only.

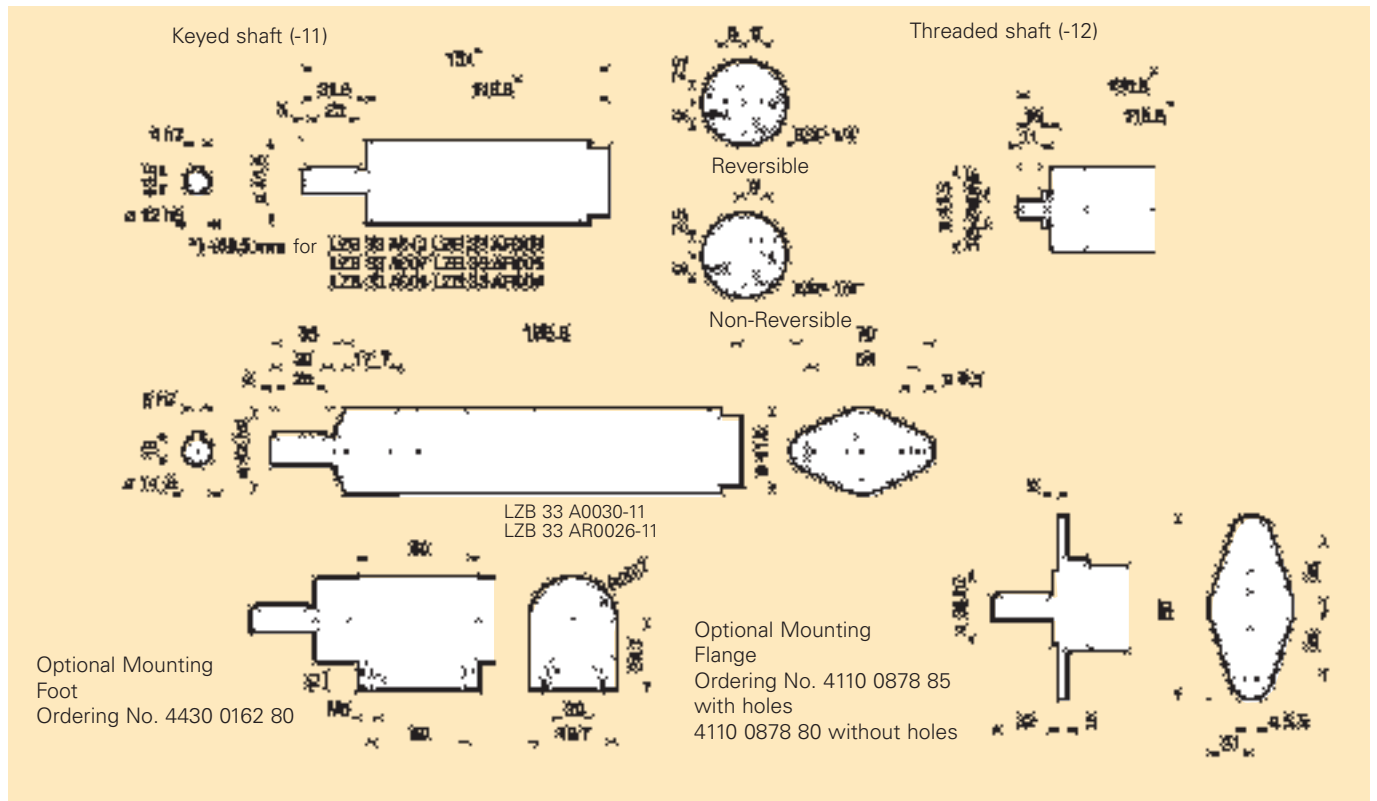


### Data at air pressure 6.3 bar (91 psi)

Ordering No.						Max output	Speed at max output	Torque at max output		Min starting torque		Air cons.			Shaft loading code <sup>2)</sup>			
Type <sup>1)</sup>	Keyed Shaft	Threaded Shaft	Type	Keyed Shaft	Threaded Shaft			kW	hp	Nm	lbf.ft	Nm	lbf.ft	Free speed		at max output	Weight	
												r/min	l/s	cfm	kg	lb		
<b>Standard</b>			<b>Lubrication free</b>															
<b>LZB 33</b>	<b>8411-</b>	<b>8411-</b>	<b>LZB 33L</b>	<b>8411-</b>	<b>8411-</b>	<b>Clockwise rotation</b>												
A210-	0301 51	0302 50	A210-	0306 07	0306 80	0.39	0.52	9400	0.40	0.30	0.76	0.56	20000	8.3	17.6	0.75	1.65	c
A060-	0301 44	0302 43	A060-	0306 15	0306 98	0.39	0.52	2600	1.4	1.0	2.7	2.0	5600	8.3	17.6	0.75	1.65	c
A033-	0301 36	0302 35	A033-	0306 23	0307 06	0.39	0.52	1460	2.6	1.9	4.9	3.6	3100	8.3	17.6	0.75	1.65	c
A026-	0301 28	0302 27	A026-	0306 31	0307 14	0.39	0.52	1180	3.2	2.3	6.1	4.5	2500	8.3	17.6	0.75	1.65	c
A013-	0301 10	0302 19	A013-	0306 49	0307 22	0.38	0.51	580	6.3	4.6	12.0	8.9	1230	8.3	17.6	1.02	2.25	c
A007-	0301 02	0302 01	A007-	0306 56	0307 30	0.38	0.51	320	11.3	8.4	21.6	15.9	680	8.3	17.6	1.02	2.25	c
A005-	0301 69	0302 68	A005-	0306 64	0307 48	0.38	0.51	259	14.0	10.3	26.8	19.8	550	8.3	17.6	1.02	2.25	c
A0030-	0301 77	-	A0030-	0306 72	-	0.36	0.48	160	21.5	15.9	40.7	30.0	340	8.3	17.6	1.50	3.31	d
<b>LZB 33</b>	<b>8411-</b>	<b>8411-</b>	<b>LZB 33L</b>	<b>8411-</b>	<b>8411-</b>	<b>Reversible</b>												
AR150-	0303 59	-	AR150-	0307 63	-	0.24	0.32	7000	0.34	0.25	0.46	0.34	14000	7.8	16.5	0.75	1.65	c
AR043-	0303 42	-	AR043-	0307 71	-	0.24	0.32	1960	1.2	0.89	1.6	1.2	3840	7.8	16.5	0.75	1.65	c
AR024-	0303 34	-	AR024-	0307 89	-	0.24	0.32	1090	2.1	1.6	3.0	2.2	2090	7.8	16.5	0.75	1.65	c
AR019-	0303 26	-	AR019-	0307 97	-	0.24	0.32	880	2.7	2.0	3.7	2.7	1760	7.8	16.5	0.75	1.65	c
AR009-	0303 18	-	AR009-	0308 05	-	0.23	0.31	435	4.9	3.6	7.0	5.2	840	7.8	16.5	1.02	2.25	c
AR005-	0303 00	-	AR005-	0308 13	-	0.23	0.31	240	9.1	6.7	12.6	9.3	480	7.8	16.5	1.02	2.25	c
AR004-	0303 67	-	AR004-	0308 21	-	0.23	0.31	190	11.4	8.4	15.6	11.5	385	7.8	16.5	1.02	2.25	c
AR0026-	0303 75	-	AR0026-	0308 70	-	0.23	0.31	120	18.3	13.5	20.0	14.8	240	7.8	16.5	1.50	3.31	d

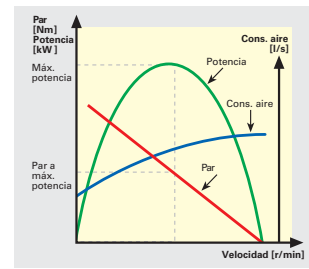
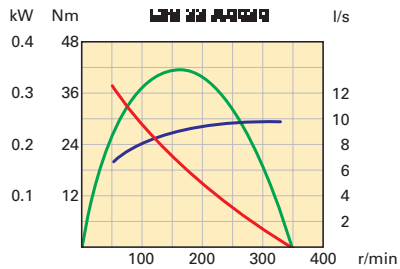
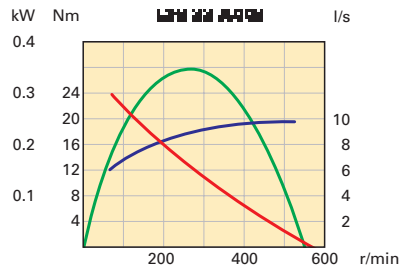
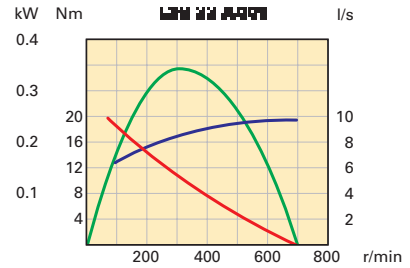
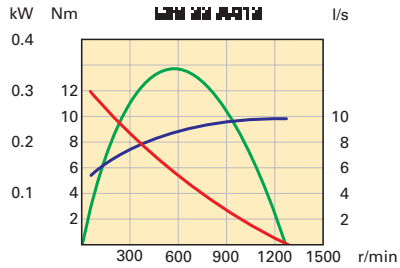
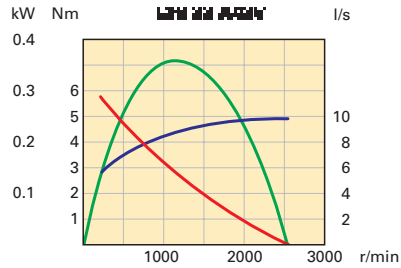
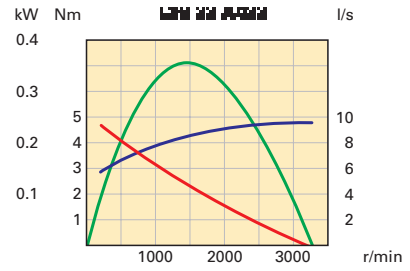
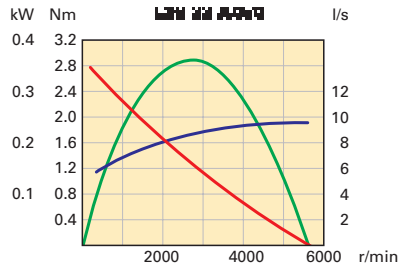
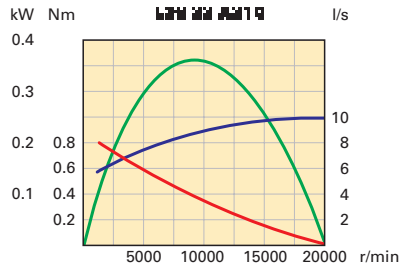
<sup>1)</sup> Suffix: -11 = Keyed Shaft -12 = Threaded Shaft. <sup>2)</sup> For Shaft loading curves, see page 12.  
 NOTE: The lubrication free motors have 95% of shown free speed.

### Dimensions (mm)

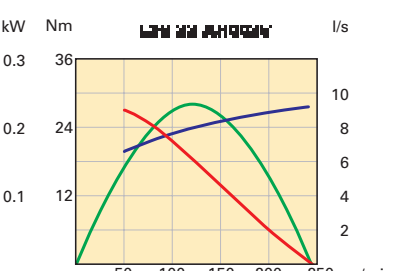
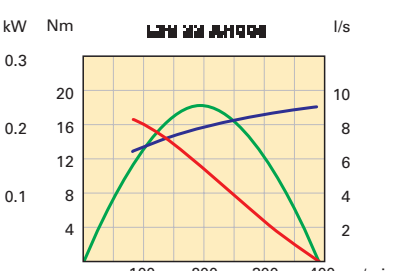
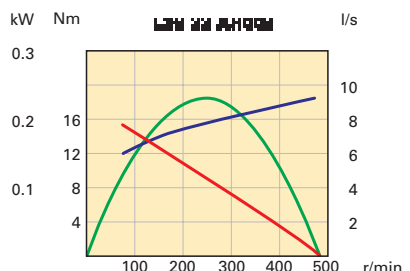
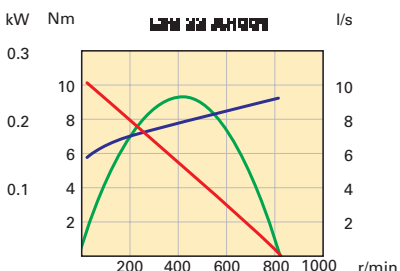
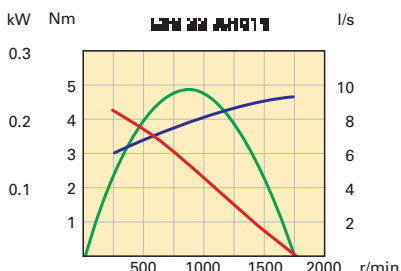
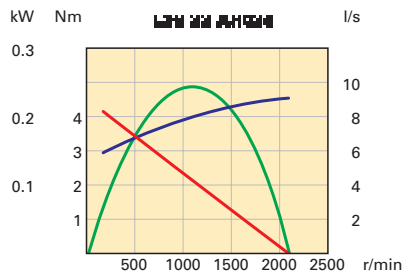
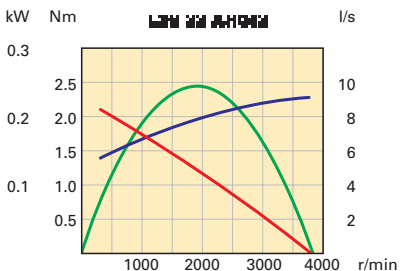
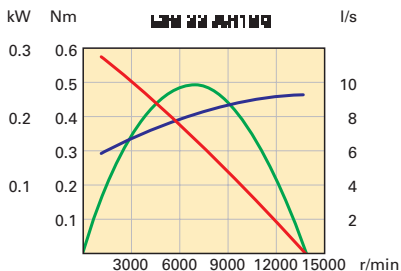




**LZB 33, LZB 34R Performance curves at air pressure 6.3 bar (91psi)**  
Non-Reversible



**Reversible**



**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 more details, see page 7.

# Stainless steel vane motors LZB 34R Lubrication free versions LZB 34RL

**0.23 – 0.39kW  
0.31 – 0.52 hp**

For EX certification according to the ATEX directive (Ex II 2G T5 IIC D85°C) use Ordering No. 9834 1108 00 (book as one delivery together with motor).

The material used in the back head, casing and front part is stainless steel with the designation: ISO 683/XIII Type 17, SS 142346, DIN 17440 X12CrNiS188. The material used in the outgoing shaft and gear rim has the designation: ISO 683/XIII Type 9b, SS 142321, DIN 17440 X22CrNi17.



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

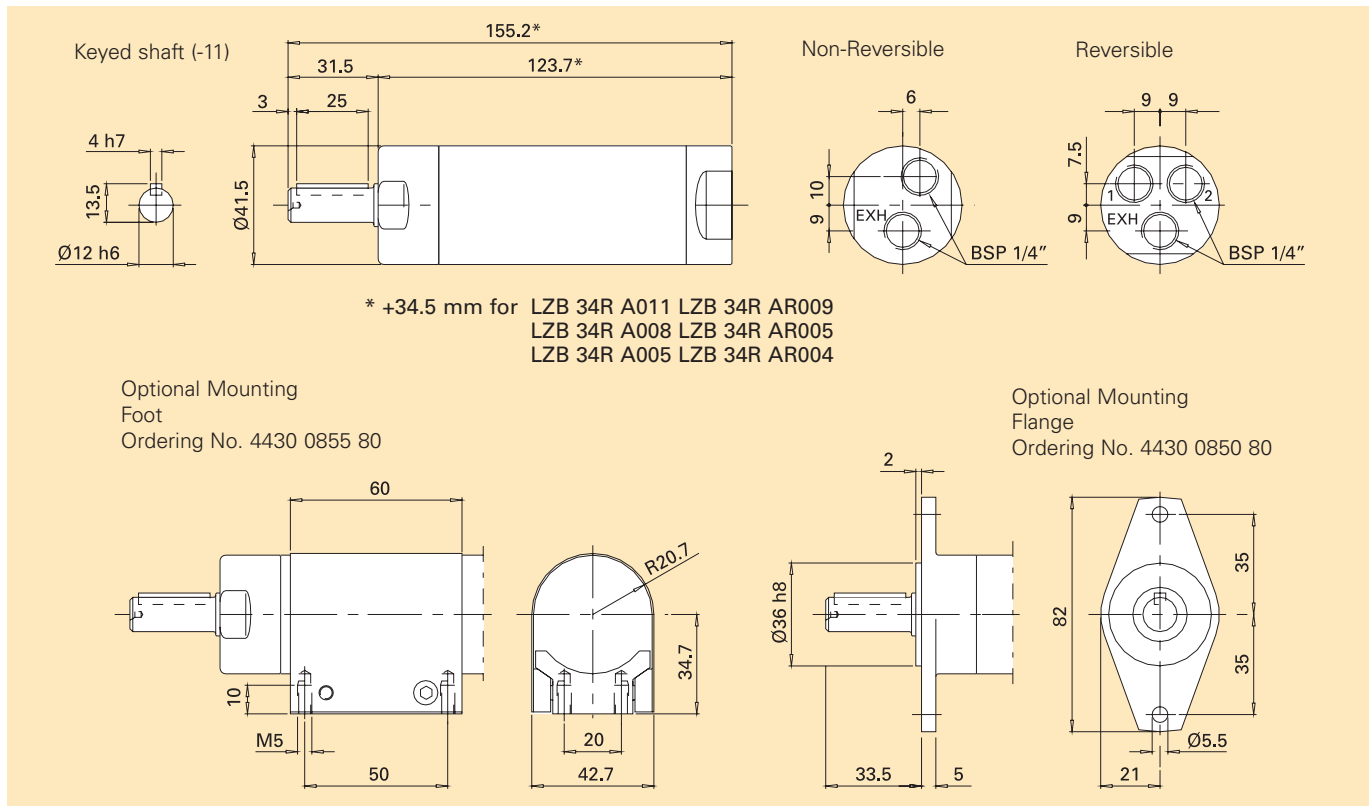
Designation	Ordering No.	Designation		Max output kW	Max output hp	Speed at max output r/min	Torque at max output		Min starting torque		Free speed r/min	Air cons. at max output		Weight		Shaft loading code <sup>1)</sup>
		Lubricated	Lubrication free				Ordering No.	Ordering No.	Nm	lbf.ft		Nm	lbf.ft	l/s	cfm	
<b>LZB 34R</b>		<b>LZB 34RL</b>		<b>Clockwise rotation</b>												
A210-11	8411 0337 00	A210-11	8411 0338 41	0.39	0.52	9400	0.40	0.30	0.76	0.56	20000	8.3	17.6	0.95	1.65	c
A060-11	8411 0337 18	A060-11	8411 0338 58	0.39	0.52	2600	1.4	1.0	2.7	2.0	5600	8.3	17.6	0.95	1.65	c
A033-11	8411 0337 26	A033-11	8411 0338 66	0.39	0.52	1460	2.6	1.9	4.9	3.6	3100	8.3	17.6	0.95	1.65	c
A026-11	8411 0337 34	A026-11	8411 0338 74	0.39	0.52	1180	3.2	2.3	6.1	4.5	2500	8.3	17.6	0.95	1.65	c
A013-11	8411 0337 42	A013-11	8411 0338 82	0.38	0.51	580	6.3	4.6	12.0	8.9	1230	8.3	17.6	1.2	2.25	c
A007-11	8411 0337 59	A007-11	8411 0338 90	0.38	0.51	320	11.3	8.4	21.6	15.9	680	8.3	17.6	1.2	2.25	c
A005-11	8411 0337 67	A005-11	8411 0339 08	0.38	0.51	259	14.0	10.3	26.8	19.8	550	8.3	17.6	1.2	2.25	c
<b>LZB 34R</b>		<b>LZB 34RL</b>		<b>Reversible</b>												
AR150-11	8411 0337 75	AR150-11	8411 0339 16	0.24	0.32	7000	0.34	0.25	0.46	0.34	14000	7.8	16.5	0.95	1.65	c
AR043-11	8411 0337 83	AR043-11	8411 0339 24	0.24	0.32	1960	1.2	0.89	1.6	1.2	3840	7.8	16.5	0.95	1.65	c
AR024-11	8411 0337 91	AR024-11	8411 0339 32	0.24	0.32	1090	2.1	1.6	3.0	2.2	2090	7.8	16.5	0.95	1.65	c
AR019-11	8411 0338 09	AR019-11	8411 0339 40	0.24	0.32	880	2.7	2.0	3.7	2.7	1500	7.8	16.5	0.95	1.65	c
AR009-11	8411 0338 17	AR009-11	8411 0339 57	0.23	0.31	435	4.9	3.6	7.0	5.2	840	7.8	16.5	1.2	2.25	c
AR005-11	8411 0338 27	AR005-11	8411 0339 65	0.23	0.31	240	9.1	6.7	12.6	9.3	480	7.8	16.5	1.2	2.25	c
AR004-11	8411 0338 33	AR004-11	8411 0339 73	0.23	0.31	190	11.4	8.4	15.6	11.5	385	7.8	16.5	1.2	2.25	c

<sup>1)</sup> For Shaft loading curves, see page 12.

Performance curves are given on page 23. NOTE: The lubrication free motors have 95% of shown free speed.

## Dimensions (mm)

Conversion factor 1mm = 0.04 inch



# Vane motors LZB 33 LR, LZB 34R LR

## Low speed reversible

**Maximum permitted torque 14 Nm (10.3 lbf.ft)**

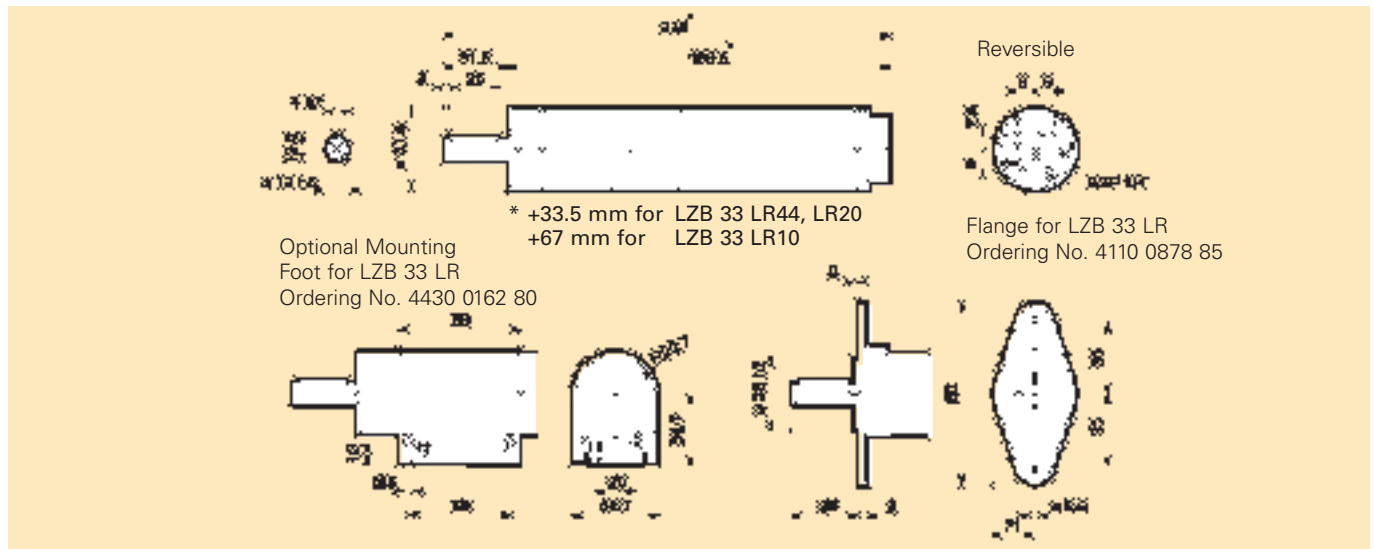
For EX certification according to the ATEX directive (Ex II 2GT5 IIC D85°C) use Ordering No. 9834 1108 00 (book as one delivery together with motor). EX certification for LZB 33 LR valid for fixtured mounted use only. For applications where low speed and high torque are required the LZB 33 high torque/low speed motors should be considered, see page 26. Within their working range these motors have a very steep torque curve. Speed and air consumption is relatively constant regardless of the load.

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

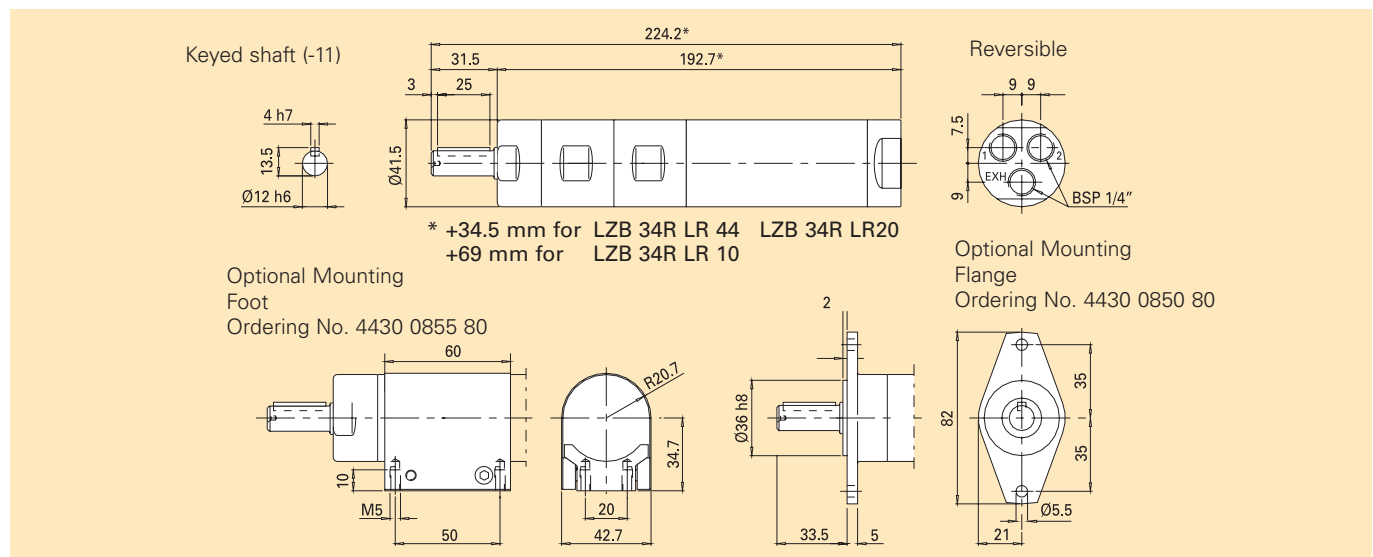
Designation	Ordering	Designation	Ordering	Free speed	Air consumption		Weight		Shaft loading code <sup>1)</sup>
					r/min	l/s	cfm	kg	
LZB 33 LR200-11	8411 0314 31	LZB 33L LR200-11	8411 0308 62	200	9.9	21.0	1.25	2.78	c
LZB 33 LR44-11	8411 0314 23	LZB 33L LR44-11	8411 0308 54	44	9.9	21.0	1.55	3.44	c
LZB 33 LR20-11	8411 0314 15	LZB 33L LR20-11	8411 0308 47	20	9.9	21.0	1.55	3.44	c
LZB 33 LR10-11	8411 0314 07	LZB 33L LR10-11	8411 0308 39	10	9.9	21.0	1.80	4.00	c
<b>Stainless steel</b>									
LZB 34R LR200-11	8411 0343 02	LZB 34RL LR200-11	8411 0343 44	200	9.9	21.0	1.45	2.78	c
LZB 34R LR44-11	8411 0343 10	LZB 34RL LR44-11	8411 0343 51	44	9.9	21.0	1.75	3.44	c
LZB 34R LR20-11	8411 0343 28	LZB 34RL LR20-11	8411 0343 69	20	9.9	21.0	1.75	3.44	c
LZB 34R LR10-11	8411 0343 36	LZB 34RL LR10-11	8411 0343 77	10	9.9	21.0	2.0	4.00	c

<sup>1)</sup> For Shaft loading curves, see page 12.

### Dimensions LZB 33 LR (mm)



### Dimensions LZB 34R LR (mm)



### Optional accessories

page 42.

# High torque LZB 33 vane motors

## Lubrication free versions LZB 33L

**0.23 – 0.36 kW**  
**0.31 – 0.49 hp**

For EX certification according to the ATEX directive (Ex II 2G T5 IIC D85°C) use Ordering No. 9834 1108 00 (book as one delivery together with motor). EX certification valid for fixtured mounted use only.



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

Designation	Ordering No.	Designation	Ordering No.	Max output		Speed	Torque		Min starting torque		Free speed	Air cons.		Weight		Shaft loading code <sup>1)</sup>
				kW	hp	r/min	Nm	lbf.ft	Nm	lbf.ft	r/min	l/s	cfm	kg	lb	
<b>LZB 33</b>	<b>8411-</b>	<b>LZB 33L</b>	<b>8411-</b>	<b>Clockwise rotation</b>												
A0020-11	0320 09	A0020-11	0322 07	0.36	0.49	104	33	24	66	49	212	8.3	17.6	2.6	5.8	g
A0015-11	0320 17	A0015-11	0322 15	0.36	0.49	77	44	32	90	66	156	8.3	17.6	2.6	5.8	g
A0011-11	0320 25	A0011-11	0322 23	0.36	0.49	58	59	44	118	87	118	8.3	17.6	2.6	5.8	g
A0008-11	0320 33	A0008-11	0322 31	0.36	0.49	43	79	58	158	117	87	8.3	17.6	2.6	5.8	g
A0007-11	0320 41	A0007-11	0322 49	0.36	0.49	34	100	74	200	147	70	8.3	17.6	2.6	5.8	g
A0005-11	0320 58	A0005-11	0322 56	0.36	0.49	25	137	101	274	202	52	8.3	17.6	5.0	11.1	h
A0004-11	0320 66	A0004-11	0322 64	0.36	0.49	19	180	133	360	265	38	8.3	17.6	5.0	11.1	h
A0003-11	0320 74	A0003-11	0322 72	0.36	0.49	14	245	181	490	361	29	8.3	17.6	5.0	11.1	h
A0002-11	0320 82	A0002-11	0322 80	0.36	0.49	10	340	251	680	501	21	8.3	17.6	5.0	11.1	h
<b>LZB 33</b>	<b>8411-</b>	<b>LZB 33L</b>	<b>8411-</b>	<b>Reversible</b>												
AR0015-11	0321 08	AR0015-11	0323 06	0.23	0.31	71	31	23	41	30	143	8.5	18.0	2.6	5.8	g
AR0011-11	0321 16	AR0011-11	0323 14	0.23	0.31	53	42	31	56	41	105	8.5	18.0	2.6	5.8	g
AR0008-11	0321 24	AR0008-11	0323 22	0.23	0.31	40	55	41	74	55	80	8.5	18.0	2.6	5.8	g
AR0006-11	0321 32	AR0006-11	0323 30	0.23	0.31	29	75	55	100	74	59	8.5	18.0	2.6	5.8	g
AR0005-11	0321 40	AR0005-11	0323 48	0.23	0.31	24	93	69	125	92	48	8.5	18.0	2.6	5.8	g
AR0004-11	0321 57	AR0004-11	0323 55	0.23	0.31	18	125	92	169	125	35	8.5	18.0	5.0	11.1	h
AR0003-11	0321 65	AR0003-11	0323 63	0.23	0.31	13	169	125	230	170	26	8.5	18.0	5.0	11.1	h
AR0002-11	0321 73	AR0002-11	0323 71	0.23	0.31	10	220	162	305	225	20	8.5	18.0	5.0	11.1	h
AR0001-11	0321 81	AR0001-11	0323 89	0.23	0.31	7	305	225	412	304	14	8.5	18.0	5.0	11.1	h

<sup>1)</sup> For Shaft loading curves, see page 12.

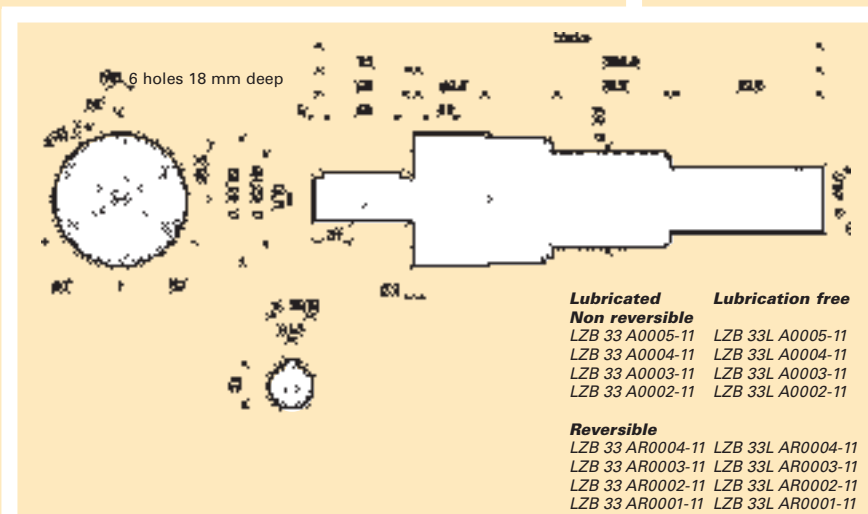
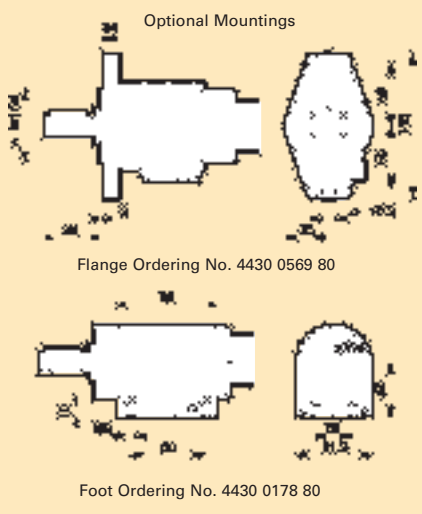
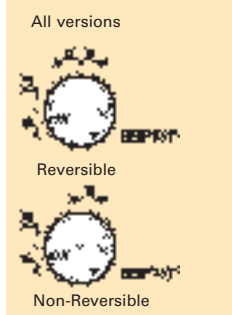
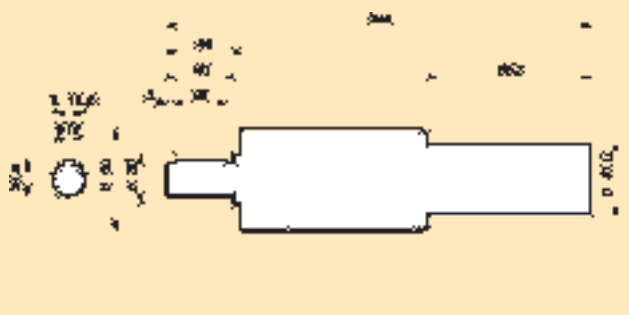
NOTE: The lubrication free motors have 95% of shown free speed.

### Dimensions (mm)

Conversion factor 1mm = 0.04 inch

**Lubricated Non reversible**  
LZB 33 A0020-11 LZB 33L A0020-11  
LZB 33 A0015-11 LZB 33L A0015-11  
LZB 33 A0011-11 LZB 33L A0011-11  
LZB 33 A0008-11 LZB 33L A0008-11  
LZB 33 A0007-11 LZB 33L A0007-11

**Reversible**  
LZB 33 AR0015-11 LZB 33L AR0015-11  
LZB 33 AR0011-11 LZB 33L AR0011-11  
LZB 33 AR0008-11 LZB 33L AR0008-11  
LZB 33 AR0006-11 LZB 33L AR0006-11  
LZB 33 AR0005-11 LZB 33L AR0005-11







# Vane motors LZB 33 LB, LZB 34RLB with brake module

Lubrication free and reversible

0.23-0.24 kW  
0.31-0.32 hp

Braking torque from 0.55–520 Nm.

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

For EX certification according to the ATEX directive (Ex II 2G T5 IIC D85°C)  
use Ordering No. 9834 1108 00 (book as one delivery together with motor).

EX certification valid for fixtured mounted use only.



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

Designation	Ordering No.	Max output		Speed at max output	Torque at max output		Min start torque		Braking torque		Free speed	Air cons. at max		Weight		Shaft loading code <sup>1)</sup>
		kW	hp		Nm	lbt.ft	Nm	lbt.ft	Nm	lbt.ft		l/s	cfm	kg	lb	
LZB 33LB AR150-11	8411 0340 05	0.24	0.32	7000	0.34	0.25	0.46	0.34	0.55	0.40	14000	7.8	16.5	1.35	2.97	c
LZB 33LB AR043-11	8411 0340 13	0.24	0.32	1960	1.2	0.89	1.6	1.2	2.0	1.5	3840	7.8	16.5	1.35	2.97	c
LZB 33LB AR024-11	8411 0340 21	0.24	0.32	1090	2.1	1.6	3.0	2.2	3.5	2.6	2090	7.8	16.5	1.35	2.97	c
LZB 33LB AR019-11	8411 0340 39	0.24	0.32	880	2.7	2.0	3.7	2.7	4.4	3.2	1760	7.8	16.5	1.35	2.97	c
LZB 33LB AR009-11	8411 0340 47	0.23	0.31	435	4.9	3.6	7.0	5.2	8.9	6.6	840	7.8	16.5	1.63	3.59	c
LZB 33LB AR005-11	8411 0340 54	0.23	0.31	240	9.1	6.7	12.6	9.3	16	12	480	7.8	16.5	1.63	3.59	c
LZB 33LB AR004-11	8411 0340 62	0.23	0.31	190	11.4	8.4	15.6	11.5	20	15	385	7.8	16.5	1.63	3.59	c
LZB 33LB AR0026-11	8411 0340 70	0.23	0.31	120	18.3	13.5	20.0	14.8	32	24	240	7.8	16.5	2.1	4.6	d
LZB 33LB AR0015-11	8411 0340 88	0.23	0.31	71	31	23	41	30	52	38	143	8.5	18.0	3.2	7.0	g
LZB 33LB AR0011-11	8411 0340 96	0.23	0.31	53	42	31	56	41	71	52	105	8.5	18.0	3.2	7.0	g
LZB 33LB AR0008-11	8411 0341 04	0.23	0.31	40	55	41	74	55	93	67	80	8.5	18.0	3.2	7.0	g
LZB 33LB AR0006-11	8411 0341 12	0.23	0.31	29	75	55	100	74	130	95	59	8.5	18.0	3.2	7.0	g
LZB 33LB AR0005-11	8411 0341 20	0.23	0.31	24	93	69	125	92	160	120	48	8.5	18.0	3.2	7.0	g
LZB 33LB AR0004-11	8411 0341 38	0.23	0.31	18	125	92	169	125	210	160	35	8.5	18.0	5.6	12.3	h
LZB 33LB AR0003-11	8411 0341 46	0.23	0.31	13	169	125	230	170	290	210	26	8.5	18.0	5.6	12.3	h
LZB 33LB AR0002-11	8411 0341 53	0.23	0.31	10	220	162	305	225	380	280	20	8.5	18.0	5.6	12.3	h
LZB 33LB AR0001-11	8411 0341 61	0.23	0.31	7	305	225	412	304	520	380	14	8.5	18.0	5.6	12.3	h
<b>Stainless steel</b>																
LZB 34RLB AR150-11	8411 0341 79	0.24	0.32	7000	0.34	0.25	0.46	0.34	0.55	0.40	14000	7.8	16.5	1.39	3.06	c
LZB 34RLB AR043-11	8411 0341 87	0.24	0.32	1960	1.2	0.89	1.6	1.2	2.0	1.5	3840	7.8	16.5	1.39	3.06	c
LZB 34RLB AR024-11	8411 0341 95	0.24	0.32	1090	2.1	1.6	3.0	2.2	3.5	2.6	2090	7.8	16.5	1.39	3.06	c
LZB 34RLB AR019-11	8411 0342 03	0.24	0.32	880	2.7	2.0	3.7	2.7	4.4	3.2	1760	7.8	16.5	1.39	3.06	c
LZB 34RLB AR009-11	8411 0342 11	0.23	0.31	435	4.9	3.6	7.0	5.2	9	6.6	840	7.8	16.5	1.66	3.65	c
LZB 34RLB AR005-11	8411 0342 29	0.23	0.31	240	9.1	6.7	12.6	9.3	16	12	480	7.8	16.5	1.66	3.65	c
LZB 34RLB AR004-11	8411 0342 37	0.23	0.31	190	11.4	8.4	15.6	11.5	20	15	385	7.8	16.5	1.66	3.65	c

<sup>1)</sup> For Shaft loading curves, see page 12.

The brake needs minimum 3 bar to release. Performance curves are given on page 23 and 27.

## Dimensions (mm)

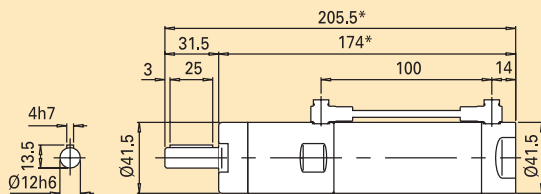
Conversion factor 1mm = 0.04 inch

LZB 33LB AR150-11 \* +33.5 mm for  
LZB 33LB AR043-11  
LZB 33LB AR024-11  
LZB 33LB AR019-11

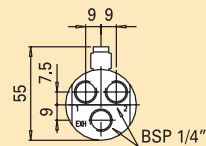
\* +33.5 mm for LZB 33LB AR009-11  
LZB 33LB AR005-11  
LZB 33LB AR004-11

LZB 34RLB AR150-11 \* +38.5 mm for  
LZB 34RLB AR043-11  
LZB 34RLB AR024-11  
LZB 34RLB AR019-11

\* +38.5 mm for LZB 34RLB AR009-11  
LZB 34RLB AR005-11  
LZB 34RLB AR004-11



All versions

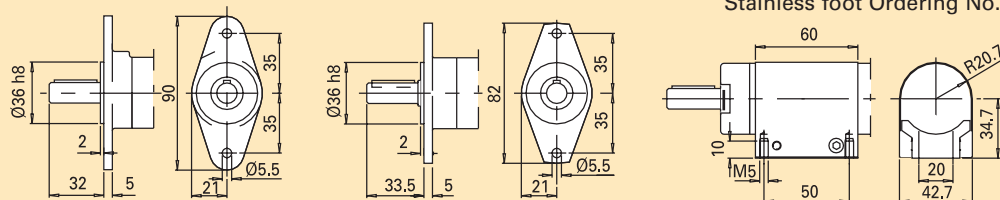


LZB 33LB, Flange Ordering No. 4110 0878 85

LZB 34RLB, Ordering No. 4430 0850 80

Foot ordering No. 4430 0162 80

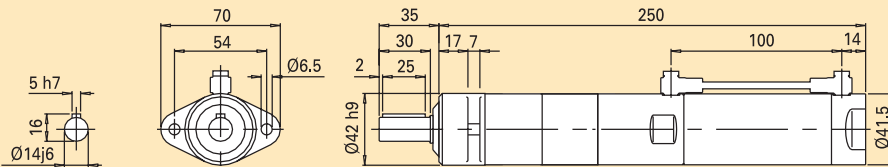
Stainless foot Ordering No. 4430 0855 80



**Dimensions (mm)**

**Conversion factor 1mm = 0.04 inch**

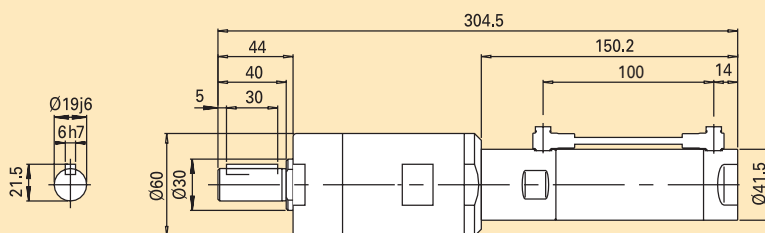
LZB 33LB AR0026-11



**Dimensions (mm)**

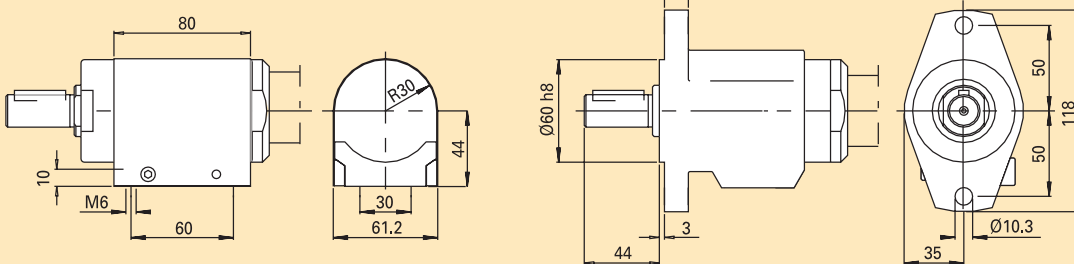
**Conversion factor 1mm = 0.04 inch**

LZB 33LB AR0015-11  
LZB 33LB AR0011-11  
LZB 33LB AR0008-11  
LZB 33LB AR0006-11  
LZB 33LB AR0005-11



Foot Ordering No. 4430 0178 80

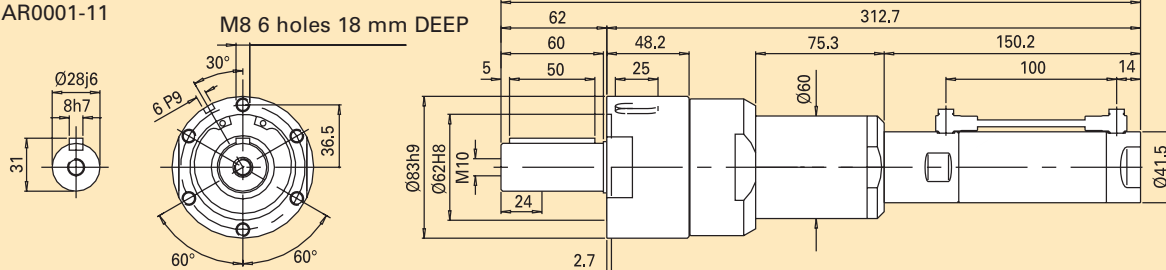
Flange Ordering No. 4430 0569 80



**Dimensions (mm)**

**Conversion factor 1mm = 0.04 inch**

LZB 33LB AR0004-11  
LZB 33LB AR0003-11  
LZB 33LB AR0002-11  
LZB 33LB AR0001-11



# Vane motors LZB 42

**0.50 – 0.65 kW**  
**0.67 – 0.87 hp**

For EX certification according to the ATEX directive (Ex II 2G T4 IIC D110°C) use Ordering No. 9834 1107 00 (book as one delivery together with motor).  
EX certification valid for fixtured mounted use only.

For optional lubrication free vanes and/or threaded shafts see page 42.



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

Type	Ordering No.	Max output		Speed at max	Torque at max		Min starting torque		Free speed	Air cons. at max		Weight		Shaft loading code <sup>1)</sup>
		kW	hp	output	output	Nm	lbf.ft	Nm	lbf.ft	r/min	l/s	cfm	kg	
<b>Clockwise rotation</b>														
LZB 42 A200-11	8411 0420 08	0.65	0.87	10500	0.59	0.44	1.1	0.8	20000	13	28	1.2	2.65	e
LZB 42 A065-11	8411 0420 16	0.65	0.87	3200	1.9	1.4	3.5	2.6	6200	13	28	1.2	2.65	e
LZB 42 A040-11	8411 0420 24	0.65	0.87	2000	3	2.2	5.5	4.1	4000	13	28	1.2	2.65	e
LZB 42 A025-11	8411 0420 32	0.65	0.87	1200	5	3.7	9	6.6	2400	13	28	1.2	2.65	e
LZB 42 A015-11	8411 0420 40	0.64	0.86	730	8.4	6.2	15	11.0	1400	13	28	1.25	2.80	e
LZB 42 A010-11	8411 0420 57	0.64	0.86	460	13	9.6	23	17.0	900	13	28	1.25	2.80	e
LZB 42 A005-11	8411 0420 65	0.64	0.86	280	22	16	40	30.0	550	13	28	1.25	2.80	e
LZB 42 A0030-11	8411 0420 73	0.62	0.83	160	37	27	65	48.0	300	13	28	2.65	5.80	g
LZB 42 A0020-11	8411 0420 81	0.62	0.83	100	59	44	105	77.1	200	13	28	2.65	5.80	g
LZB 42 A0012-11	8411 0420 99	0.62	0.83	60	98	72	175	130	115	13	28	2.65	5.80	g
LZB 42 A0008-11	8411 0421 07	0.61	0.82	39	150	110	275	200	70	13	28	4.85	10.70	h
LZB 42 A0005-11	8411 0421 15	0.61	0.82	25	236	174	430	315	45	13	28	4.85	10.70	h

Type	Ordering No.	Max output		Speed at max	Torque at max		Min starting torque		Free speed	Air cons. at max		Weight		Shaft loading code <sup>1)</sup>
		kW	hp	output	output	Nm	lbf.ft	Nm	lbf.ft	r/min	l/s	cfm	kg	
<b>Anti-clockwise rotation</b>														
LZB 42 AV200-11	8411 0425 03	0.65	0.87	10500	0.59	0.44	1.1	0.8	20000	13	28	1.2	2.65	e
LZB 42 AV065-11	8411 0425 11	0.65	0.87	3200	1.9	1.4	3.5	2.6	6200	13	28	1.2	2.65	e
LZB 42 AV040-11	8411 0425 29	0.65	0.87	2000	3	2.2	5.5	4.1	4000	13	28	1.2	2.65	e
LZB 42 AV025-11	8411 0425 37	0.65	0.87	1200	5	3.7	9	6.6	2400	13	28	1.2	2.65	e
LZB 42 AV015-11	8411 0425 45	0.64	0.86	730	8.4	6.2	15	11.0	1400	13	28	1.25	2.80	e
LZB 42 AV010-11	8411 0425 52	0.64	0.86	460	13	9.6	23	17.0	900	13	28	1.25	2.80	e
LZB 42 AV005-11	8411 0425 60	0.64	0.86	280	22	16	40	30.0	550	13	28	1.25	2.80	e
LZB 42 AV0030-11	8411 0425 78	0.62	0.83	160	37	27	65	48.0	300	13	28	2.65	5.80	g
LZB 42 AV0020-11	8411 0425 86	0.62	0.83	100	59	44	105	77.1	200	13	28	2.65	5.80	g
LZB 42 AV0012-11	8411 0425 94	0.62	0.83	60	98	72	175	130	115	13	28	2.65	5.80	g
LZB 42 AV0008-11	8411 0426 02	0.61	0.82	39	150	110	275	200	70	13	28	4.85	10.70	h
LZB 42 AV0005-11	8411 0426 10	0.61	0.82	25	236	174	430	315	45	13	28	4.85	10.70	h

Type	Ordering No.	Max output		Speed at max	Torque at max		Min starting torque		Free speed	Air cons. at max		Weight		Shaft loading code <sup>1)</sup>
		kW	hp	output	output	Nm	lbf.ft	Nm	lbf.ft	r/min	l/s	cfm	kg	
<b>Reversible</b>														
LZB 42 AR170-11	8411 0423 05	0.53	0.71	8100	0.62	0.46	0.7	0.52	15000	12.5	27	1.2	2.65	e
LZB 42 AR050-11	8411 0423 13	0.53	0.71	2500	2.0	1.5	2.2	1.60	4700	12.5	27	1.2	2.65	e
LZB 42 AR030-11	8411 0423 21	0.53	0.71	1600	3.1	2.3	3.5	2.60	3000	12.5	27	1.2	2.65	e
LZB 42 AR020-11	8411 0423 39	0.53	0.71	950	5.3	3.9	5.9	4.40	1800	12.5	27	1.2	2.65	e
LZB 42 AR010-11	8411 0423 47	0.52	0.70	560	8.9	6.6	9.7	7.20	1000	12.5	27	1.25	2.80	e
LZB 42 AR007-11	8411 0423 54	0.52	0.70	350	14	10	15	11.0	690	12.5	27	1.25	2.80	e
LZB 42 AR004-11	8411 0423 62	0.52	0.70	215	23	17	25	18.0	400	12.5	27	1.25	2.80	e
LZB 42 AR0025-11	8411 0423 70	0.51	0.68	120	40	30	44	32.0	225	12.5	27	2.65	5.80	g
LZB 42 AR0015-11	8411 0423 88	0.51	0.68	77	63	46	70	52.0	143	12.5	27	2.65	5.80	g
LZB 42 AR0010-11	8411 0423 96	0.51	0.68	46	105	77	115	85.0	86	12.5	27	2.65	5.80	g
LZB 42 AR0006-11	8411 0424 04	0.50	0.67	30	160	118	170	125	55	12.5	27	4.85	10.70	h
LZB 42 AR0004-11	8411 0424 12	0.50	0.67	19	250	184	270	200	35	12.5	27	4.85	10.70	h

<sup>1)</sup> For Shaft loading curves, see page 12.

**Non reversible**

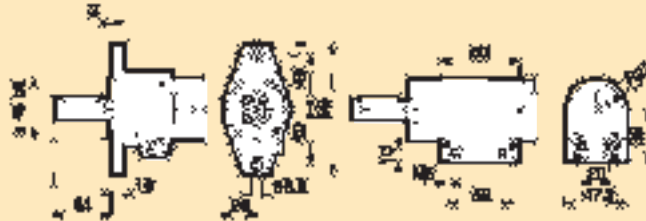
- LZB 42 A200-11
- LZB 42 A065-11
- LZB 42 A040-11
- LZB 42 A025-11
- LZB 42 A015-11
- LZB 42 A010-11
- LZB 42 A005-11
- LZB 42 AV200-11
- LZB 42 AV065-11
- LZB 42 AV040-11
- LZB 42 AV025-11
- LZB 42 AV015-11
- LZB 42 AV010-11
- LZB 42 AV005-11

**Reversible**

- LZB 42 AR170-11
- LZB 42 AR050-11
- LZB 42 AR030-11
- LZB 42 AR020-11
- LZB 42 AR010-11
- LZB 42 AR007-11
- LZB 42 AR004-11



Optional Mountings



Flange Ordering No. 4430 0490 80 Foot Ordering No. 4430 0575 80



Reversible



Non-Reversible

All versions

**Non reversible**

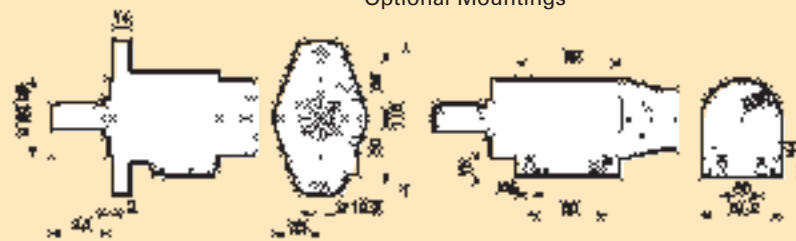
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- LZB 42 A0020-11
- LZB 42 A0012-11
- LZB 42 AV0030-11
- LZB 42 AV0020-11
- LZB 42 AV0012-11

**Reversible**

- LZB 42 AR0025-11
- LZB 42 AR0015-11
- LZB 42 AR0010-11



Optional Mountings



Flange Ordering No. 4430 0569 80

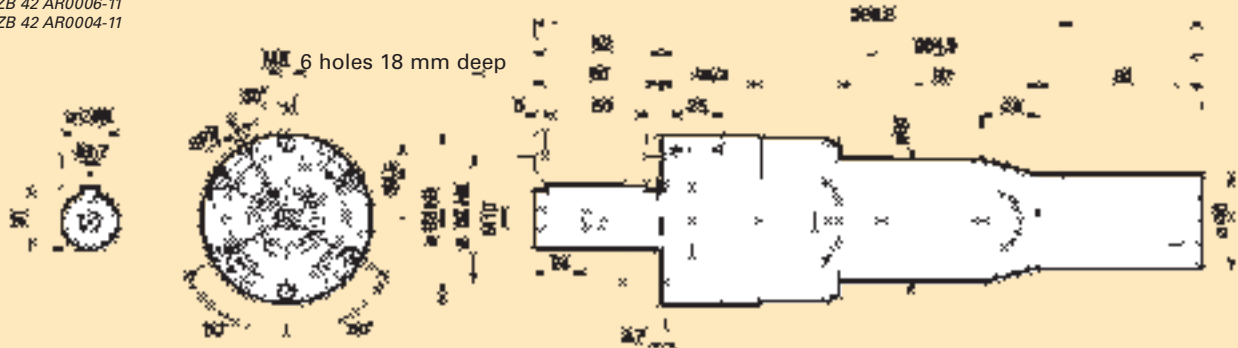
Foot Ordering No. 4430 0178 80

**Non reversible**

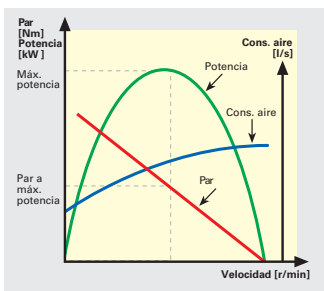
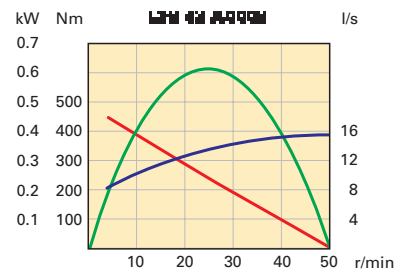
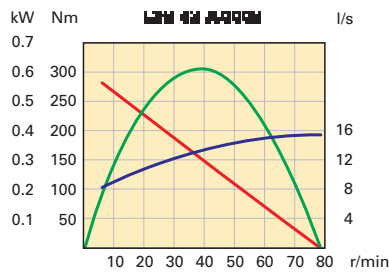
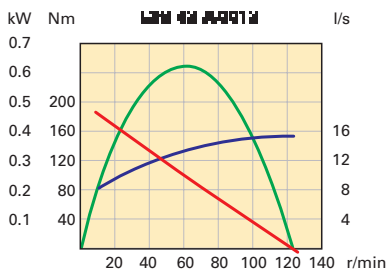
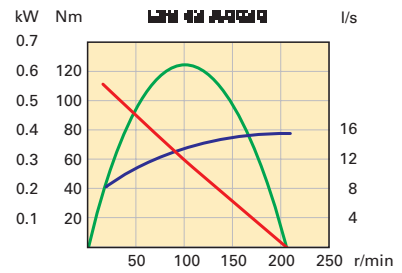
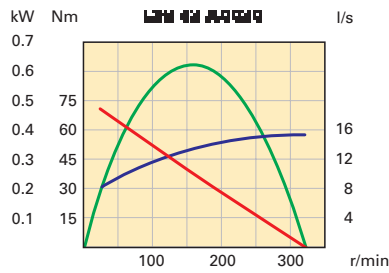
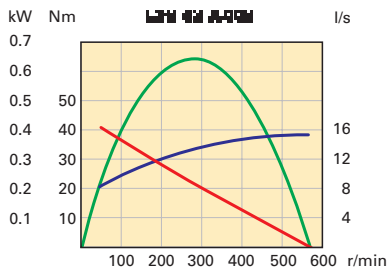
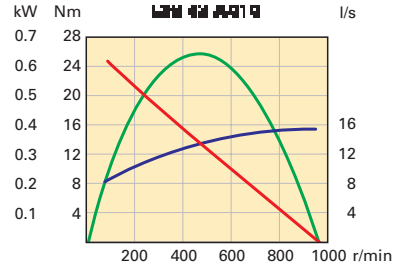
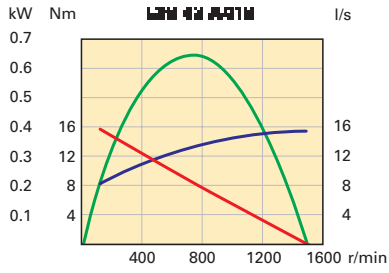
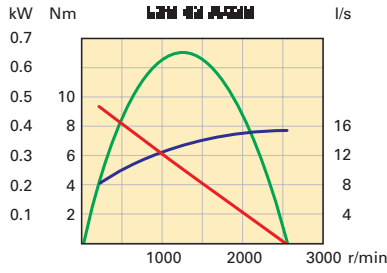
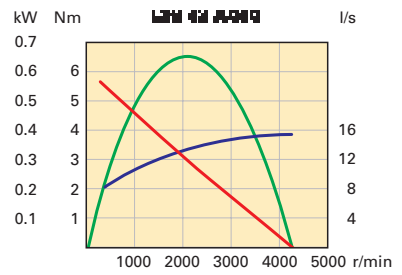
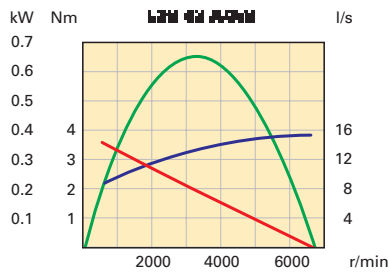
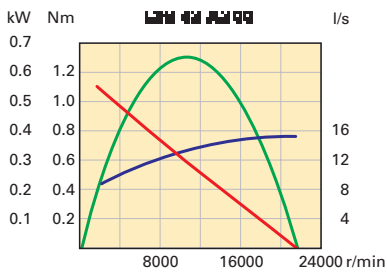
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- LZB 42 A0005-11
- LZB 42 AV0008-11
- LZB 42 AV0005-11

**Reversible**

- LZB 42 AR0006-11
- LZB 42 AR0004-11



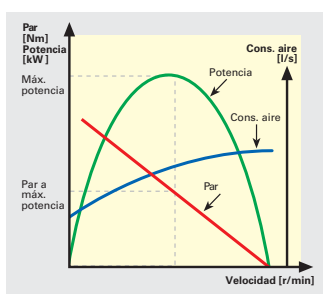
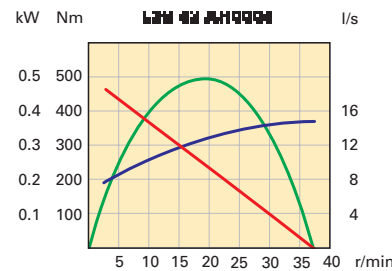
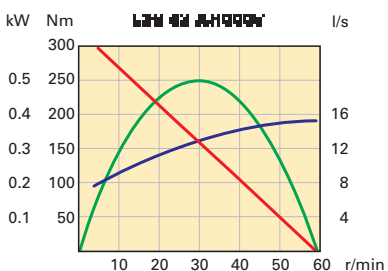
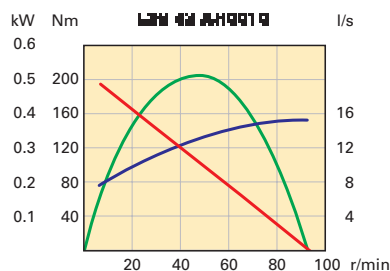
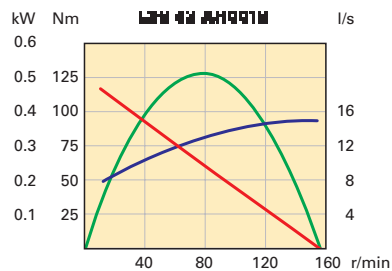
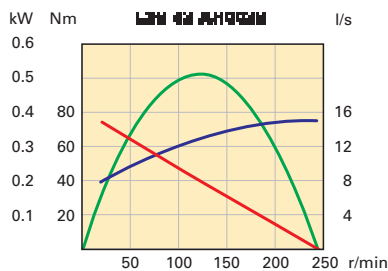
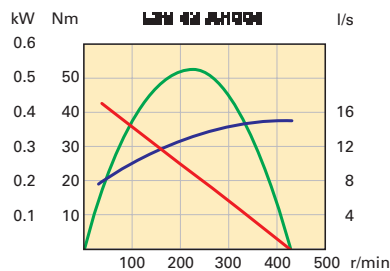
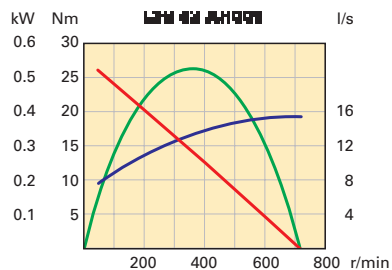
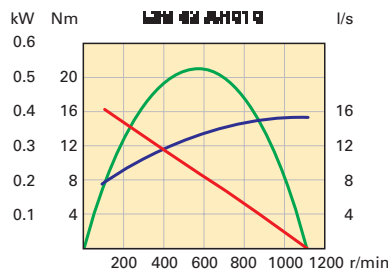
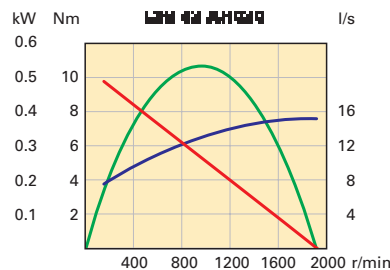
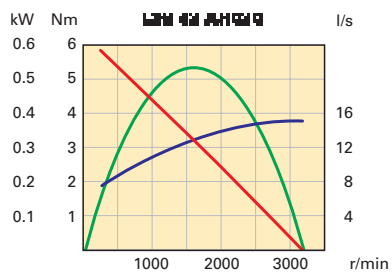
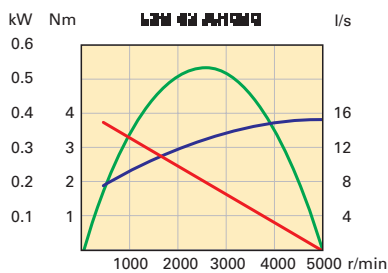
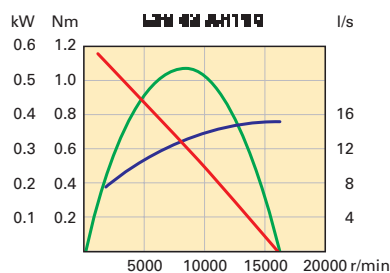
**LZB 42 Performance curves at air pressure 6.3 bar (91psi)**  
*Non-Reversible*



For information about performance curves, see page 7



**LZB 42 Performance curves at air pressure 6.3 bar (91psi)**  
Reversible



For information about performance curves, see page 7

**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 more details, see page 7.

# Vane motors LZB 46

**0.58 – 0.84 kW**  
**0.78 – 1.13 hp**

For EX certification according to the ATEX directive (Ex II 2G T4 IIC D110°C) use Ordering No. 9834 1107 00 (book as one delivery together with motor).  
EX certification valid for fixtured mounted use only.

For optional lubrication free vanes see page 42.



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

Type <sup>2)</sup>	Ordering No.		Max output		Speed at max output r/min	Torque at max output		Min starting torque		Free speed r/min	Air cons. at max output		Weight		Shaft loading code <sup>1)</sup>
	Keyed Shaft 8411-	Threaded Shaft 8411-	kW	hp		Nm	lbf.ft	Nm	lbf.ft		l/s	cfm	kg	lb	
<b>Clockwise rotation</b>															
A200-	0460 09	0469 00	0.84	1.13	10800	0.74	0.55	1.2	0.88	21000	16.5	35	1.2	2.65	e
A065-	0460 17	0469 18	0.84	1.13	3300	2.4	1.8	3.9	2.9	6700	16.5	35	1.2	2.65	e
A040-	0460 25	0469 26	0.84	1.13	2100	3.8	2.8	6.2	4.6	4200	16.5	35	1.2	2.65	e
A025-	0460 33	0469 34	0.84	1.13	1280	6.3	4.6	10	7.4	2550	16.5	35	1.2	2.65	e
A015-	0460 41	0469 42	0.83	1.11	750	10.6	7.8	16	12	1500	16.5	35	1.3	2.9	e
A010-	0460 58	0469 59	0.83	1.11	480	17	12	25	18	960	16.5	35	1.3	2.9	e
A005-	0460 66	0469 67	0.83	1.11	290	27	20	45	33	570	16.5	35	1.3	2.9	e
A0030-	0460 74	0469 75	0.81	1.09	160	48	35	75	55	320	16.5	35	2.7	6.0	g
A0020-	0460 82	0469 83	0.81	1.09	100	75	55	120	88	200	16.5	35	2.7	6.0	g
A0012-	0460 90	0469 91	0.81	1.09	62	125	92	200	150	125	16.5	35	2.7	6.0	g
A0008-	0461 08	-	0.79	1.06	40	190	140	310	230	80	16.5	35	4.9	10.8	h
A0005-	0461 16	-	0.79	1.06	25	300	220	490	360	50	16.5	35	4.9	10.8	h

Type	Ordering No.	Max output		Speed at max output r/min	Torque at max output		Min starting torque		Free speed r/min	Air cons. at max output		Weight		Shaft loading code <sup>1)</sup>
		kW	hp		Nm	lbf.ft	Nm	lbf.ft		l/s	cfm	kg	lb	
<b>Anti-clockwise rotation</b>														
LZB 46 AV200-11	8411 0465 04	0.84	1.13	10800	0.74	0.55	1.2	0.88	21000	16.5	35	1.2	2.65	e
LZB 46 AV065-11	8411 0465 12	0.84	1.13	3300	2.4	1.8	3.9	2.9	6700	16.5	35	1.2	2.65	e
LZB 46 AV040-11	8411 0465 20	0.84	1.13	2100	3.8	2.8	6.2	4.6	4200	16.5	35	1.2	2.65	e
LZB 46 AV025-11	8411 0465 38	0.84	1.13	1280	6.3	4.6	10	7.4	2550	16.5	35	1.2	2.65	e
LZB 46 AV015-11	8411 0465 46	0.83	1.11	750	10.6	7.8	16	12	1500	16.5	35	1.3	2.9	e
LZB 46 AV010-11	8411 0465 53	0.83	1.11	480	17	12	25	18	960	16.5	35	1.3	2.9	e
LZB 46 AV005-11	8411 0465 61	0.83	1.11	290	27	20	45	33	570	16.5	35	1.3	2.9	e
LZB 46 AV0030-11	8411 0465 79	0.81	1.09	160	48	35	75	55	320	16.5	35	2.7	6.0	g
LZB 46 AV0020-11	8411 0465 87	0.81	1.09	100	75	55	120	88	200	16.5	35	2.7	6.0	g
LZB 46 AV0012-11	8411 0465 95	0.81	1.09	62	125	92	200	150	125	16.5	35	2.7	6.0	g
LZB 46 AV0008-11	8411 0466 03	0.79	1.06	40	190	140	310	230	80	16.5	35	4.9	10.8	h
LZB 46 AV0005-11	8411 0466 11	0.79	1.06	25	300	220	490	360	50	16.5	35	4.9	10.8	h

Type	Ordering No.	Max output		Speed at max output r/min	Torque at max output		Min starting torque		Free speed r/min	Air cons. at max output		Weight		Shaft loading code <sup>1)</sup>
		kW	hp		Nm	lbf.ft	Nm	lbf.ft		l/s	cfm	kg	lb	
<b>Reversible</b>														
LZB 46 AR170-11	8411 0463 06	0.62	0.83	8600	0.68	0.5	0.75	0.55	17000	14.5	31	1.2	2.65	e
LZB 46 AR050-11	8411 0463 14	0.62	0.83	2650	2.2	1.6	2.5	1.8	5250	14.5	31	1.2	2.65	e
LZB 46 AR030-11	8411 0463 22	0.62	0.83	1700	3.5	2.6	4.0	2.6	3350	14.5	31	1.2	2.65	e
LZB 46 AR020-11	8411 0463 30	0.62	0.83	1020	5.8	4.3	6.5	4.8	2000	14.5	31	1.2	2.65	e
LZB 46 AR010-11	8411 0463 48	0.61	0.82	600	9.8	7.2	10.5	7.7	1170	14.5	31	1.3	2.9	e
LZB 46 AR007-11	8411 0463 55	0.61	0.82	380	15	11	16	12	750	14.5	31	1.3	2.9	e
LZB 46 AR004-11	8411 0463 63	0.61	0.82	230	25	18	27	20	450	14.5	31	1.3	2.9	e
LZB 46 AR0025-11	8411 0463 71	0.60	0.80	130	44	32	48	35	250	14.5	31	2.7	6.0	g
LZB 46 AR0015-11	8411 0463 89	0.60	0.80	80	70	52	75	55	160	14.5	31	2.7	6.0	g
LZB 46 AR0010-11	8411 0463 97	0.60	0.80	50	115	85	125	92	95	14.5	31	2.7	6.0	g
LZB 46 AR0006-11	8411 0464 05	0.58	0.78	32	175	130	190	140	62	14.5	31	4.9	10.8	h
LZB 46 AR0004-11	8411 0464 13	0.58	0.78	20	275	200	300	220	40	14.5	31	4.9	10.8	h

<sup>1)</sup> For Shaft loading curves, see page 12. <sup>2)</sup> Suffix: -11 = Keyed Shaft -12 = Threaded Shaft.

**Dimensions (mm)**

Conversion factor 1mm = 0.04 inch

**Threaded shaft**

**Non reversible**  
 LZB 46 A200-11/12  
 LZB 46 A065-11/12  
  
 LZB 46 A040-11/12  
 LZB 46 A025-11/12  
 LZB 46 A015-11/12  
 LZB 46 A010-11/12  
 LZB 46 A005-11/12  
  
 LZB 46 AV200-11  
 LZB 46 AV065-11  
 LZB 46 AV040-11  
 LZB 46 AV025-11  
 LZB 46 AV015-11  
 LZB 46 AV010-11  
 LZB 46 AV005-11

**Reversible**  
 LZB 46 AR170-11  
 LZB 46 AR050-11  
 LZB 46 AR030-11  
 LZB 46 AR020-11  
 LZB 46 AR010-11  
 LZB 46 AR007-11  
 LZB 46 AR004-11

194.8  
 22  
 15  
 1/2" - 20 UNF  
 Ø17

**Keyed shaft**

Optional Mountings

Flange Ordering No. 4430 0490 80 Foot Ordering No. 4430 0575 80

Reversible

Non-Reversible

All versions

**Threaded shaft**

**Non reversible**  
 LZB 46 A0030-11/12  
  
 LZB 46 A0020-11/12  
 LZB 46 A0012-11/12  
  
 LZB 46 AV0030-11  
 LZB 46 AV0020-11  
 LZB 46 AV0012-11

**Reversible**  
 LZB 46 AR0025-11  
 LZB 46 AR0015-11  
 LZB 46 AR0010-11

244  
 26  
 22  
 3/4" - 16 UNF  
 Ø30

**Keyed shaft**

Optional Mountings

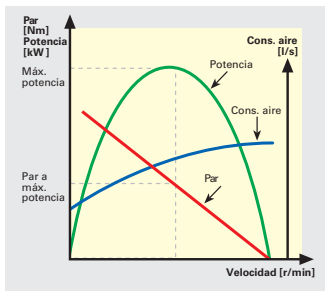
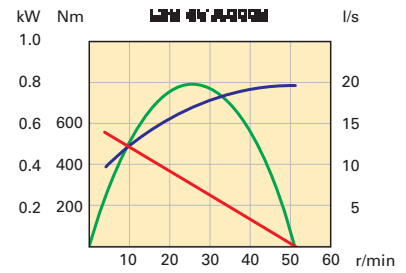
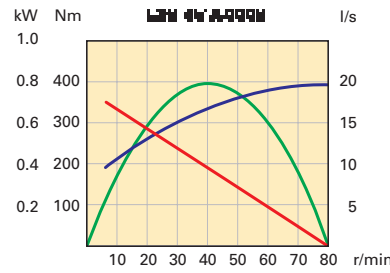
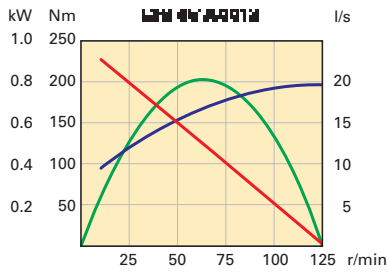
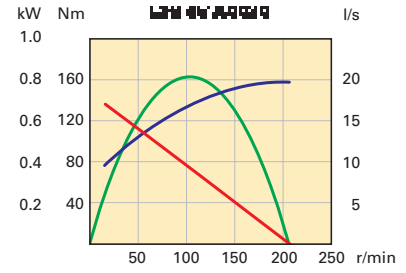
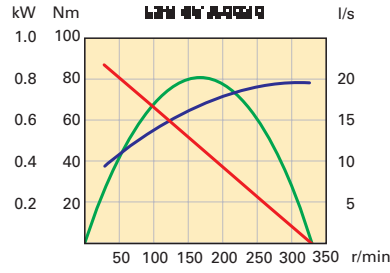
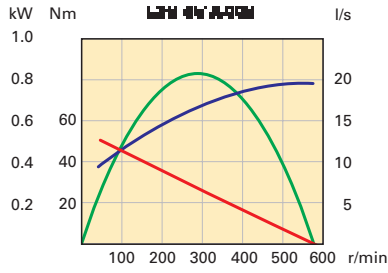
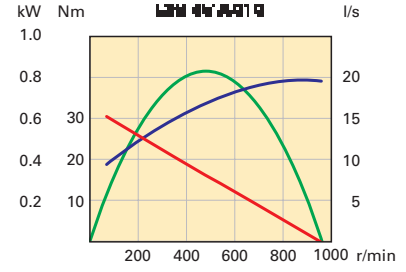
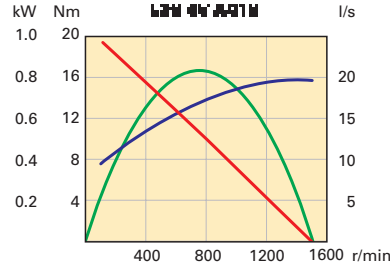
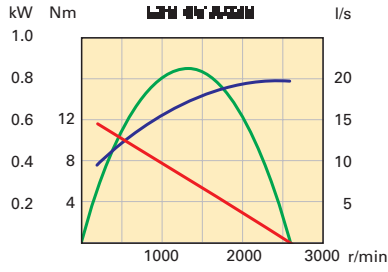
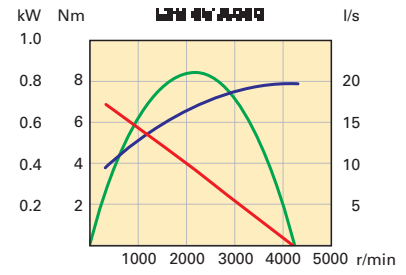
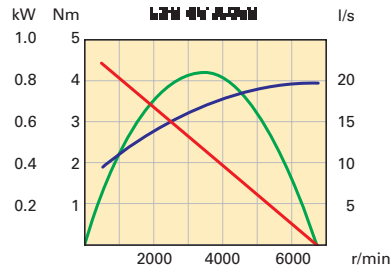
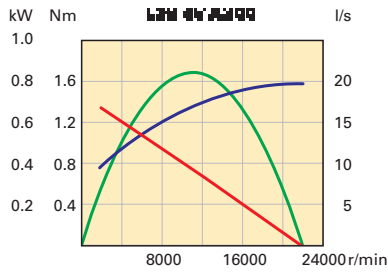
Flange Ordering No. 4430 0569 80 Foot Ordering No. 4430 0178 80

**Non reversible**  
 LZB 46 A0008-11-----  
 LZB 46 A0005-11  
 LZB 46 AV0008-11  
 LZB 46 AV0005-11

**Reversible**  
 LZB 46 AR0006-11  
 LZB 46 AR0004-11

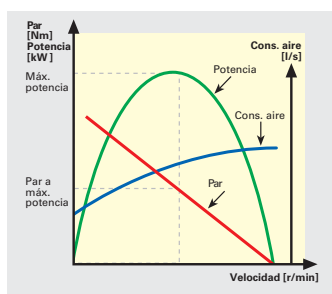
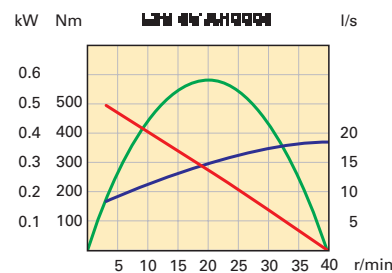
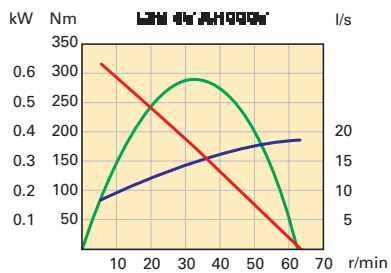
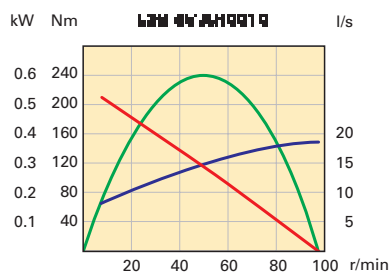
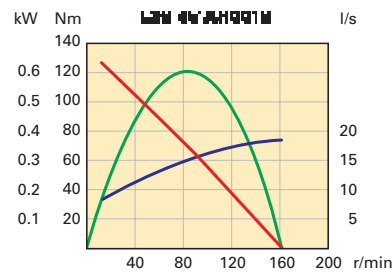
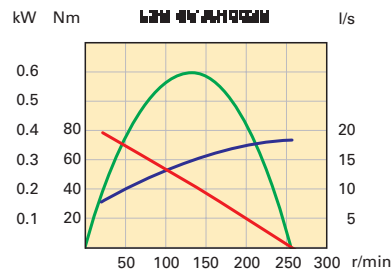
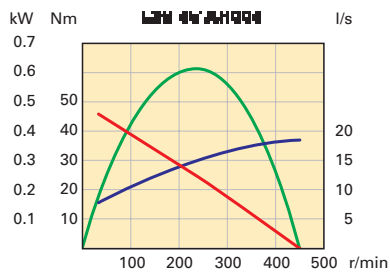
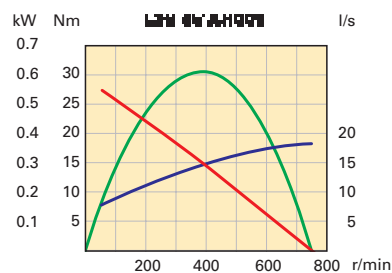
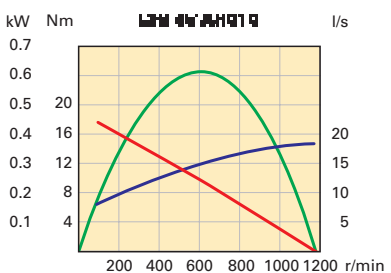
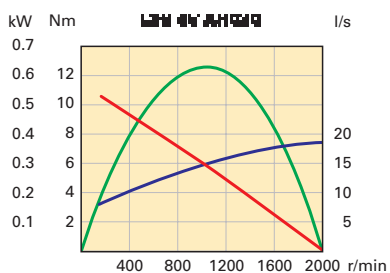
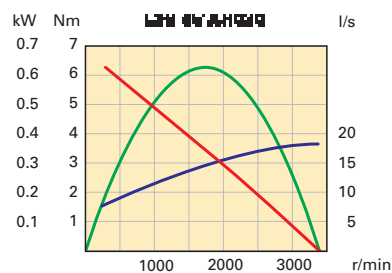
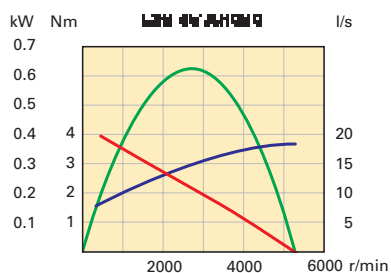
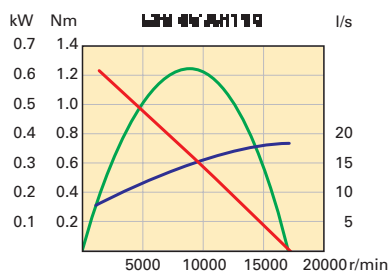
6 holes 18 mm deep

**LZB 46 Performance curves at air pressure 6.3 bar (91psi)**  
*Non-Reversible*



For information about performance curves, see page 7

**LZB 46 Performance curves at air pressure 6.3 bar (91psi)**  
Reversible



For information about performance curves, see page 7



# Vane motors LZB 54

**0.78 – 1.20 kW**  
**1.05 – 1.61 hp**

For EX certification according to the ATEX directive (Ex II 2G T4 IIC D110°C) use Ordering No. 9834 1107 00 (book as one delivery together with motor).  
EX certification valid for fixtured mounted use only.

For optional lubrication free vanes and/or threaded shafts see page 42.



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

Type	Ordering No.	Max output		Speed at max output r/min	Torque at max output		Min starting torque		Free speed r/min	Air cons. at max output		Weight		Shaft loading code <sup>1)</sup>
		kW	hp		Nm	lbf.ft	Nm	lbf.ft		l/s	cfm	kg	lb	
<b>Clockwise rotation</b>														
LZB 54 A180-11	8411 0560 08	1.2	1.61	9300	1.2	0.88	1.8	1.3	18000	22.5	53	2.35	5.2	g
LZB 54 A050-11	8411 0560 16	1.2	1.61	2700	4.3	3.2	6.5	4.8	5200	22.5	53	2.35	5.2	g
LZB 54 A030-11	8411 0560 24	1.2	1.61	1600	7.0	5.2	10	7.4	3100	22.5	53	2.35	5.2	g
LZB 54 A020-11	8411 0560 32	1.2	1.61	1200	9.5	7.0	13.5	10	2300	22.5	53	2.35	5.2	g
LZB 54 A010-11	8411 0560 40	1.17	1.57	590	19	14	28	21	1120	22.5	53	2.50	5.5	g
LZB 54 A007-11	8411 0560 57	1.17	1.57	360	31	23	47	35	680	22.5	53	2.50	5.5	g
LZB 54 A005-11	8411 0560 65	1.17	1.57	260	42	31	64	47	500	22.5	53	2.50	5.5	g
LZB 54 A0025-11	8411 0560 73	1.15	1.54	140	78	58	110	81	275	22.5	53	4.65	10.3	h
LZB 54 A0017-11	8411 0560 81	1.15	1.54	85	130	96	190	140	165	22.5	53	4.65	10.3	h
LZB 54 A0012-11	8411 0560 99	1.15	1.54	65	175	129	250	180	125	22.5	53	4.65	10.3	h

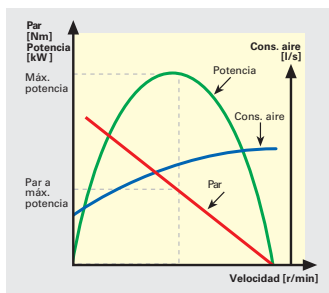
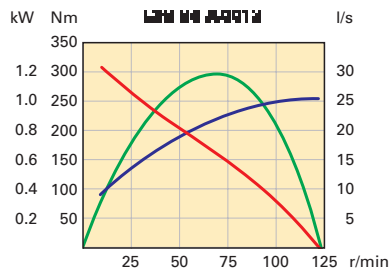
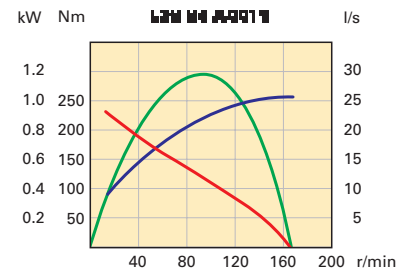
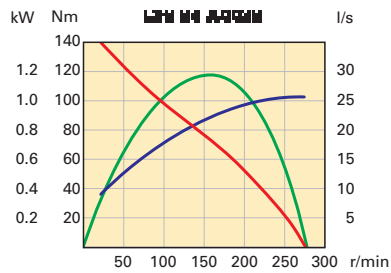
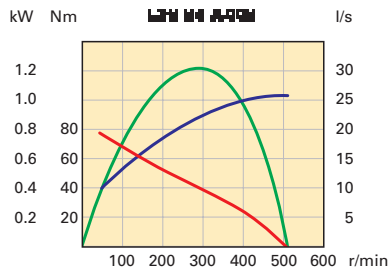
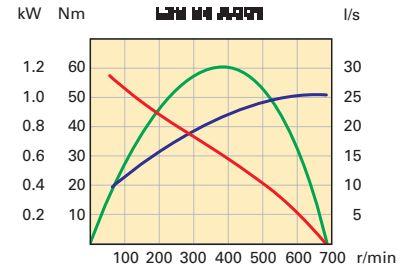
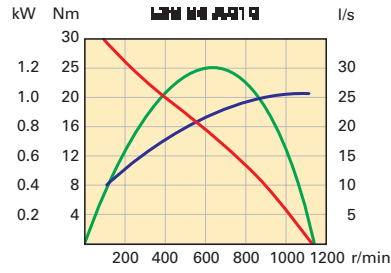
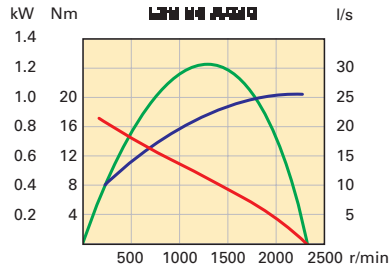
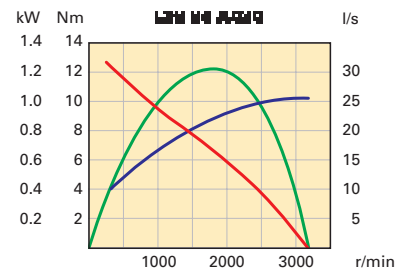
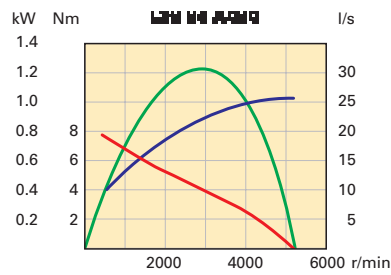
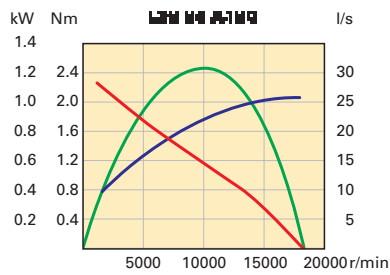
Type	Ordering No.	Max output		Speed at max output r/min	Torque at max output		Min starting torque		Free speed r/min	Air cons. at max output		Weight		Shaft loading code <sup>1)</sup>
		kW	hp		Nm	lbf.ft	Nm	lbf.ft		l/s	cfm	kg	lb	
<b>Anti-clockwise rotation</b>														
LZB 54 AV180-11	8411 0564 04	1.2	1.61	9300	1.2	0.88	1.8	1.3	18000	22.5	53	2.35	5.2	g
LZB 54 AV050-11	8411 0564 12	1.2	1.61	2700	4.3	3.2	6.5	4.8	5200	22.5	53	2.35	5.2	g
LZB 54 AV030-11	8411 0564 20	1.2	1.61	1600	7.0	5.2	10	7.4	3100	22.5	53	2.35	5.2	g
LZB 54 AV020-11	8411 0564 38	1.2	1.61	1200	9.5	7.0	13.5	10	2300	22.5	53	2.35	5.2	g
LZB 54 AV010-11	8411 0564 46	1.17	1.57	590	19	14	28	21	1120	22.5	53	2.50	5.5	g
LZB 54 AV007-11	8411 0564 53	1.17	1.57	360	31	23	47	35	680	22.5	53	2.50	5.5	g
LZB 54 AV005-11	8411 0564 61	1.17	1.57	260	42	31	64	47	500	22.5	53	2.50	5.5	g
LZB 54 AV0025-11	8411 0564 79	1.15	1.54	140	78	58	110	81	275	22.5	53	4.65	10.3	h
LZB 54 AV0017-11	8411 0564 87	1.15	1.54	85	130	96	190	140	165	22.5	53	4.65	10.3	h
LZB 54 AV0012-11	8411 0564 95	1.15	1.54	65	175	129	250	180	125	22.5	53	4.65	10.3	h

Type	Ordering No.	Max output		Speed at max output r/min	Torque at max output		Min starting torque		Free speed r/min	Air cons. at max output		Weight		Shaft loading code <sup>1)</sup>
		kW	hp		Nm	lbf.ft	Nm	lbf.ft		l/s	cfm	kg	lb	
<b>Reversible</b>														
LZB 54 AR130-11	8411 0563 05	0.82	1.10	6800	1.2	0.88	1.3	1.0	13000	17.5	37	2.35	5.2	g
LZB 54 AR035-11	8411 0563 13	0.82	1.10	1970	4.0	3.0	4.3	3.2	3850	17.5	37	2.35	5.2	g
LZB 54 AR020-11	8411 0563 21	0.82	1.10	1200	6.5	4.8	7.1	5.2	2350	17.5	37	2.35	5.2	g
LZB 54 AR015-11	8411 0563 39	0.82	1.10	890	8.8	6.5	9.6	7.1	1730	17.5	37	2.35	5.2	g
LZB 54 AR008-11	8411 0563 47	0.80	1.07	425	18	13	20	14	835	17.5	37	2.50	5.5	g
LZB 54 AR005-11	8411 0563 54	0.80	1.07	260	29	21	31	23	500	17.5	37	2.50	5.5	g
LZB 54 AR004-11	8411 0563 62	0.80	1.07	190	40	30	43	32	375	17.5	37	2.50	5.5	g
LZB 54 AR0020-11	8411 0563 70	0.78	1.05	100	74	55	80	59	200	17.5	37	4.65	10.3	h
LZB 54 AR0012-11	8411 0563 88	0.78	1.05	65	115	85	125	92	115	17.5	37	4.65	10.3	h
LZB 54 AR0009-11	8411 0563 96	0.78	1.05	45	165	122	179	132	90	17.5	37	4.65	10.3	h

<sup>1)</sup> For Shaft loading curves, see page 12.

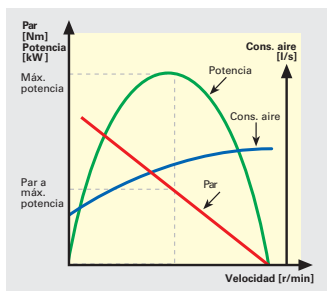
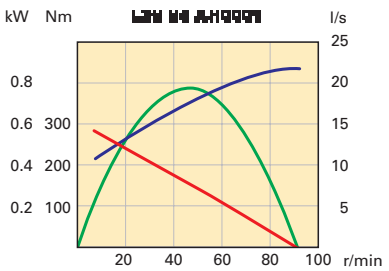
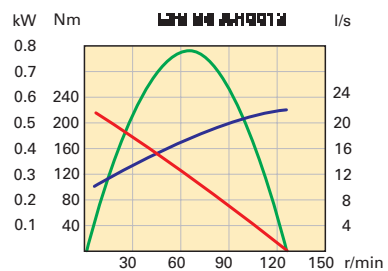
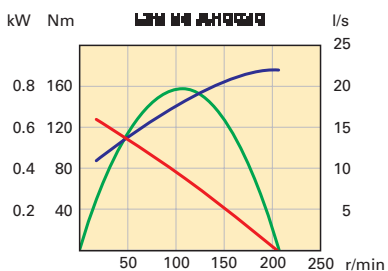
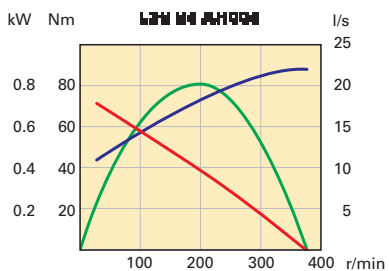
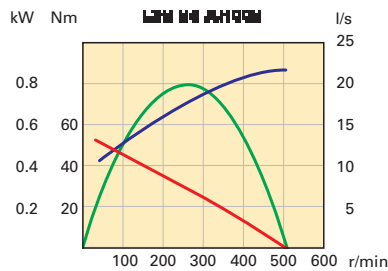
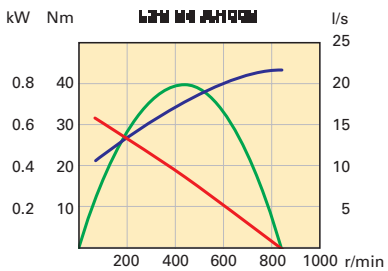
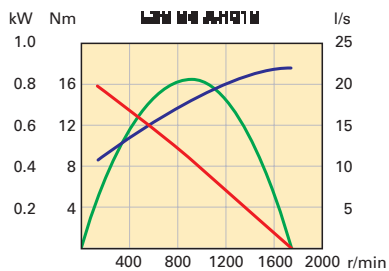
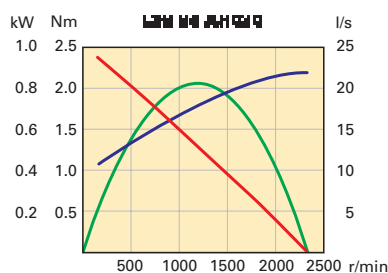
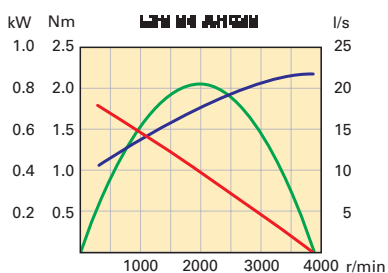
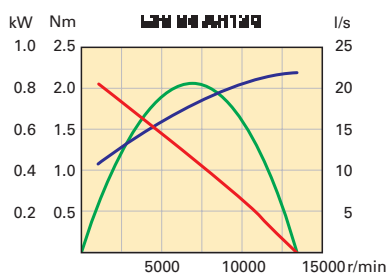


**LZB 54 Performance curves at air pressure 6.3 bar (91psi)**  
Non-Reversible



For information about performance curves, see page 7

**LZB 54 Performance curves at air pressure 6.3 bar (91psi)**  
Reversible



For information about performance curves, see page 7

**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 more details, see page 7.

# Vane motors LZB 66

**1.40 – 1.83 kW**  
**1.88 – 2.45 hp**

For EX certification according to the ATEX directive (Ex II 2G T4 IIC D110°C) use Ordering No. 9834 1107 00 (book as one delivery together with motor).  
EX certification valid for fixtured mounted use only.



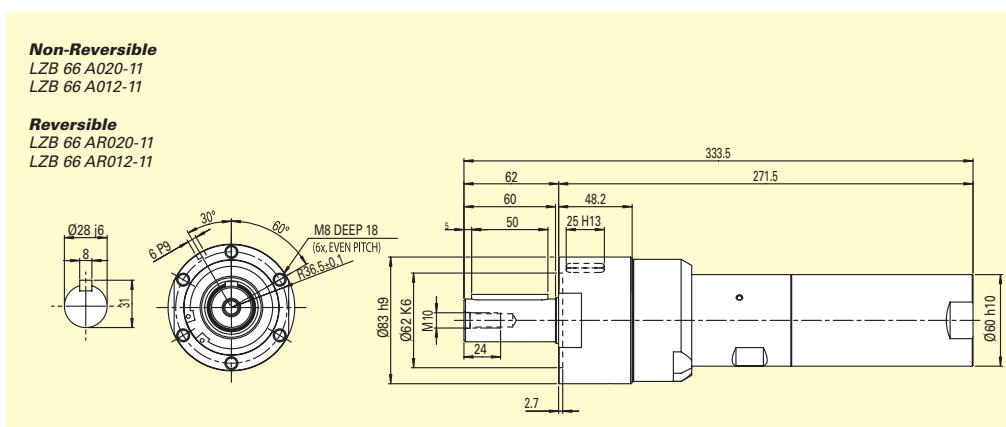
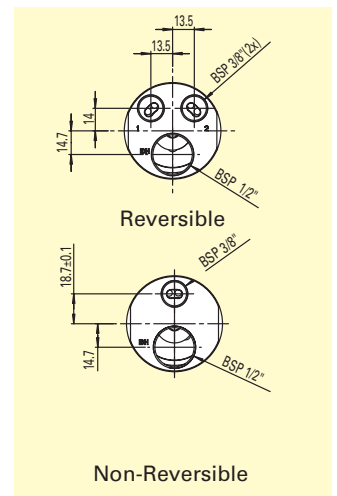
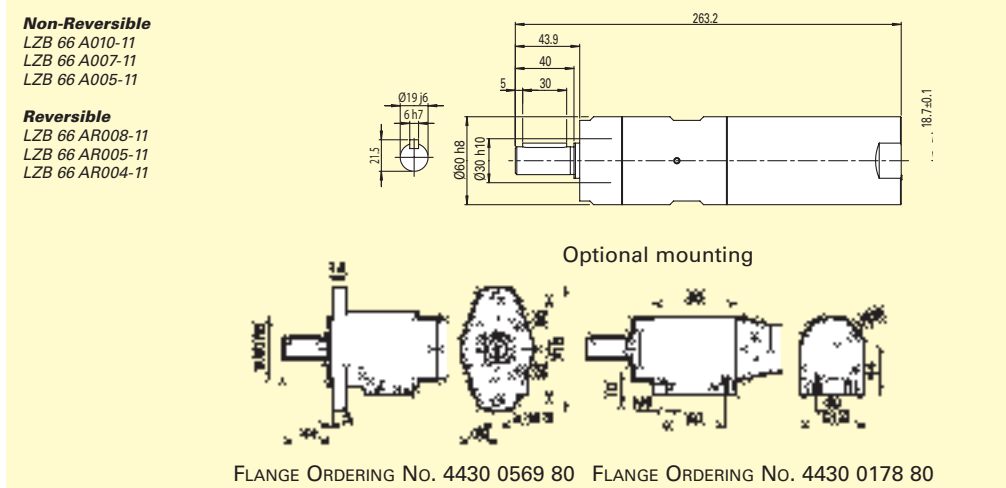
## Data at air pressure 6.3 bar (91psi)

Model	Ordering No.	Max output		Speed at max output r/min	Torque at max output		Min starting torque		Free speed r/min	Air cons. at max output		Weight		Shaft loading code <sup>1</sup>
		kW	hp		Nm	lbf.ft	Nm	lbf.ft		l/s	cfm	kg	lb	
<b>Clockwise rotation</b>														
LZB 66 A010-11	8411 0600 59	1.83	2.45	524	33	24	52	39	1026	36	76.3	2.9	6.4	g
LZB 66 A007-11	8411 0600 67	1.83	2.45	319	55	41	86	64	614	36	76.3	2.9	6.4	g
LZB 66 A005-11	8411 0600 75	1.83	2.45	235	74	55	117	87	461	36	76.3	2.9	6.4	g
LZB 66 A0025-11	8411 0600 83	1.8	2.41	128	135	100	217	160	250	36	76.3	5.1	11.1	h
LZB 66 A0017-11	8411 0600 91	1.8	2.41	77	222	164	333	245	154	36	76.3	5.1	11.1	h
LZB 66 A0025-15	8411 0600 18	1.8	2.41	128	135	100	217	160	250	36	76.3	5.3	11.7	h
LZB 66 A0017-15	8411 0600 26	1.8	2.41	77	222	164	333	245	154	36	76.3	5.3	11.7	h
<b>Reversible</b>														
LZB 66 AR008-11	8411 0601 25	1.43	1.92	473	29	22	46	33	875	31	65.7	2.9	6.4	g
LZB 66 AR005-11	8411 0601 33	1.43	1.92	289	47	35	75	55	532	31	65.7	2.9	6.4	g
LZB 66 AR004-11	8411 0601 41	1.43	1.92	213	64	48	101	75	393	31	65.7	2.9	6.4	g
LZB 66 AR0020-11	8411 0601 58	1.4	1.88	115	116	86	187	138	213	31	65.7	5.1	11.1	h
LZB 66 AR0012-11	8411 0601 66	1.4	1.88	70	190	141	308	227	130	31	65.7	5.1	11.1	h
LZB 66 AR0020-15	8411 0601 09	1.4	1.88	115	116	86	187	138	213	31	65.7	5.3	11.7	h
LZB 66 AR0012-15	8411 0601 17	1.4	1.88	70	190	141	308	227	130	31	65.7	5.3	11.7	h

NOTE: The motors -15 have built-in silencers. <sup>1)</sup> For shaft loading curves, see page 12.

## Dimensions (mm)

Conversion factor 1 mm = 0.04 inch

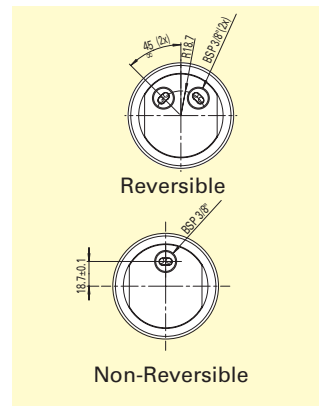
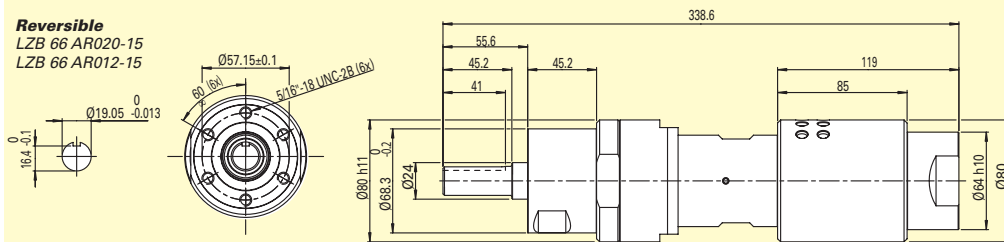


**Dimensions (mm)**

**Conversion factor 1 mm = 0.04 inch**

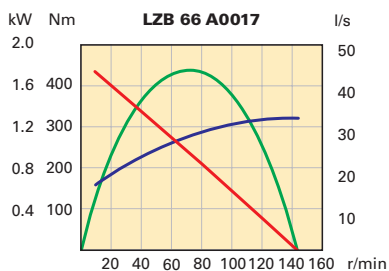
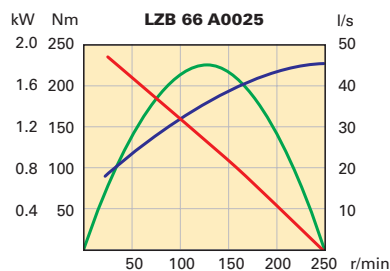
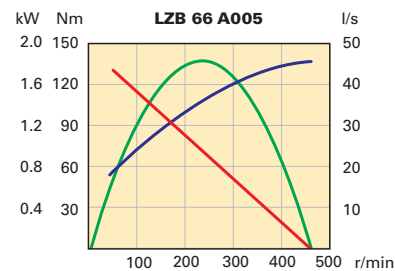
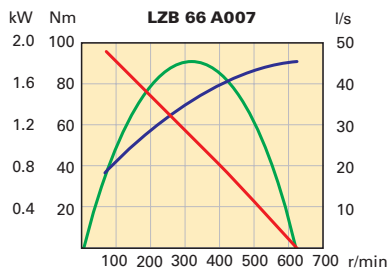
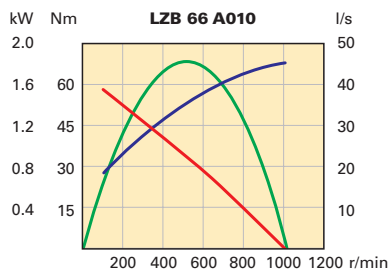
**Non-Reversible**  
LZB 66 A025-15  
LZB 66 A017-15

**Reversible**  
LZB 66 AR020-15  
LZB 66 AR012-15



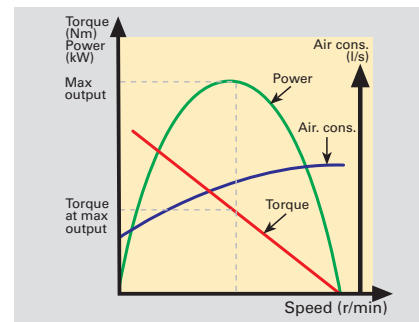
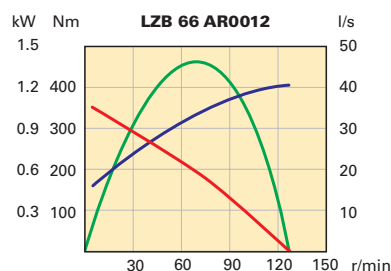
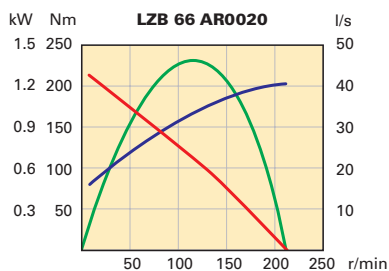
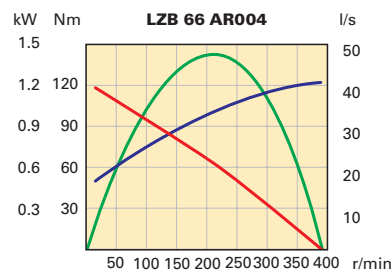
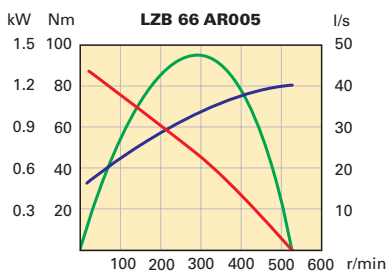
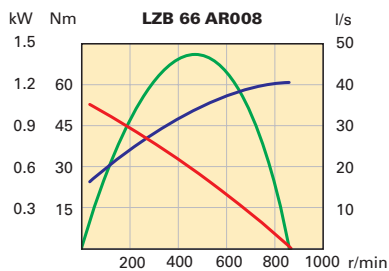
**LZB 66 Performance curves at air pressure 6.3 bar (91 psi)**

**Non-Reversible**



**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

**Reversible**





# Vane motors LZB 77

**2.52 – 2.91 kW**  
**3.38 – 3.90 hp**

For EX certification according to the ATEX directive (Ex II 2G T4 IIC D110°C) use Ordering No. 9834 1107 00 (book as one delivery together with motor).  
 EX certification valid for fixtured mounted use only.



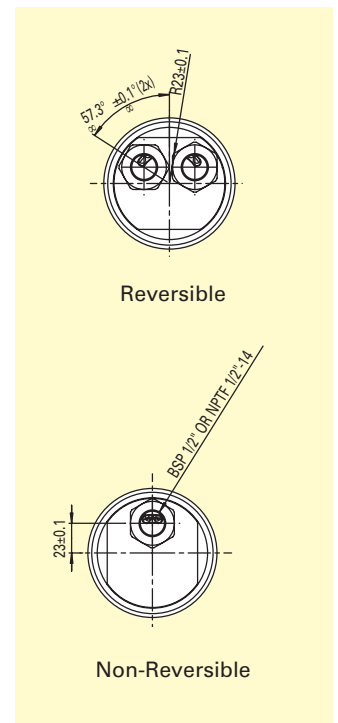
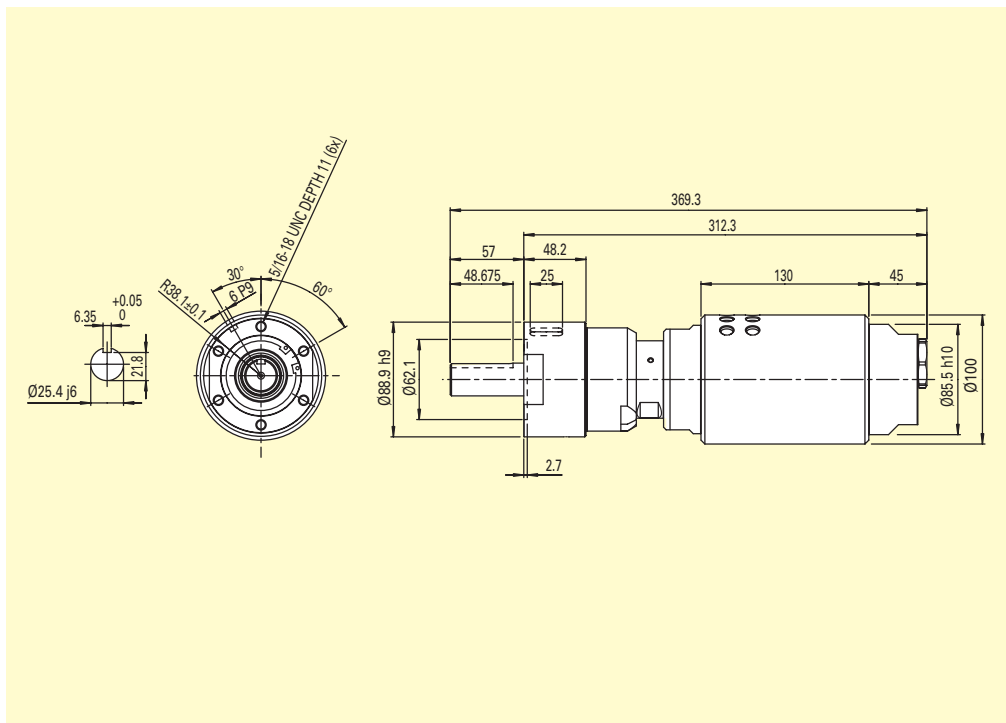
## Data at air pressure 6.3 bar (91psi)

Model	Ordering No.	Max output		Speed at max output r/min	Torque at max output		Min starting torque		Free speed r/min	Air cons. at max output		Weight		Shaft loading code <sup>1</sup>	
		kW	hp		Nm	lbf.ft	Nm	lbf.ft		l/s	cfm	kg	lb		
<b>Clockwise rotation</b>															
LZB 77 A027-15	8411 0700 25	2.91	3.9	1325	21	15.5	30	22	2660	55	116	8.4	18.5	h	
LZB 77 A007-15	8411 0700 17	2.91	3.9	341	81	60	120	89	682	55	116	8.4	18.5	h	
LZB 77 A0017-15	8411 0700 09	2.86	3.84	87	314	231	471	347	174	55	116	8.7	19.1	h	
<b>Reversible</b>															
LZB 77 AR024-15	8411 0700 58	2.56	3.43	1250	20	15	29	21	2500	51	108	8.4	18.5	h	
LZB 77 AR006-15	8411 0700 41	2.56	3.43	317	77	57	115	85	634	51	108	8.4	18.5	h	
LZB 77 AR0015-15	8411 0700 33	2.52	3.38	79	304	224	456	336	158	51	108	8.7	19.1	h	

NOTE: The motors have built-in silencers. <sup>1)</sup> For shaft loading curves, see page 12.

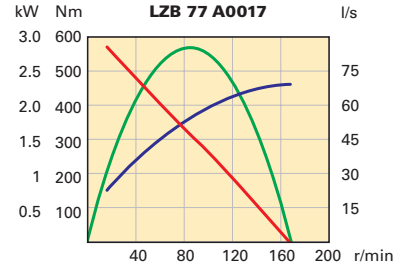
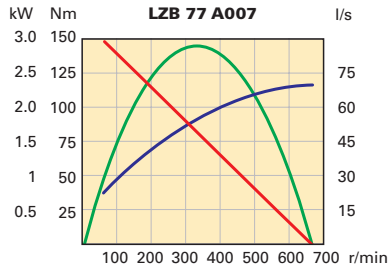
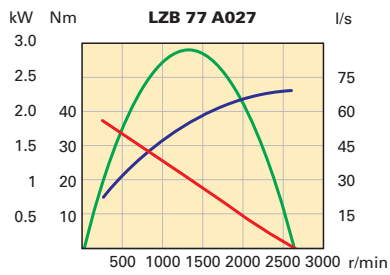
## Dimensions (mm)

Conversion factor 1 mm = 0.04 inch

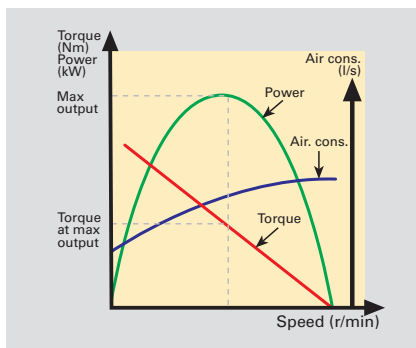
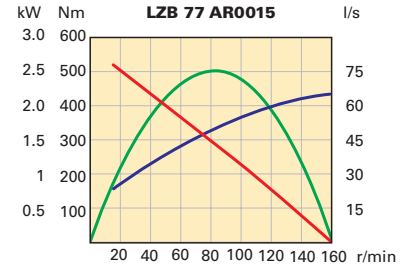
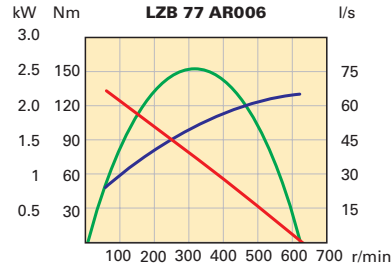
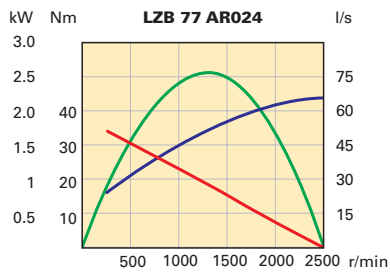


**LZB 77 Performance curves at air pressure 6.3 bar (91 psi)**

*Non-Reversible*



*Reversible*



*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

# Accessories for LZB air motors



## Key chuck and quick chuck for LZB 22/33-12

Chuck type	Mount	Body diameter		Capacity (mm)	Ordering No. (mm)
		mm	in		
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
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



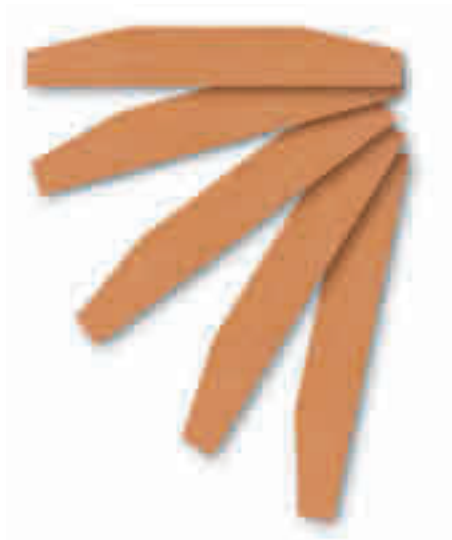
## Collet chuck and collets for LZB 22/33-12

	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



## Threaded shafts for re-building standard motors

Motor	Thread dimension	Ordering No.
LZB 42 A200	1/2"-20 UNF	4430 0868 80
LZB 42 A065	1/2"-20 UNF	4430 0868 80
LZB 42 A040	1/2"-20 UNF	4430 0868 81
LZB 42 A025	1/2"-20 UNF	4430 0868 82
LZB 42 A015	1/2"-20 UNF	4430 0869 80
LZB 42 A010	1/2"-20 UNF	4430 0869 80
LZB 42 A005	1/2"-20 UNF	4430 0869 80
LZB 42 A0030	3/4"-16 UNF	4430 0870 80
LZB 42 A0020	3/4"-16 UNF	4430 0870 80
LZB 42 A0012	3/4"-16 UNF	4430 0870 80
LZB 54 A180	1/2"-20 UNF	4430 0871 80
LZB 54 A050	1/2"-20 UNF	4430 0871 80
LZB 54 A030	1/2"-20 UNF	4430 0871 81
LZB 54 A020	1/2"-20 UNF	4430 0871 82
LZB 54 A010	3/4"-16 UNF	4430 0870 80
LZB 54 A007	3/4"-16 UNF	4430 0870 80
LZB 54 A005	3/4"-16 UNF	4430 0870 80



### Lubrication free vane sets

Motor	Ordering No.
LZB 42	4430 0517 97
LZB 46	4430 0525 97
LZB 54	4430 0543 97



Motor	A	B	C
	Sinter bronze	LBB	ECSB-2
LZB 14	9090 0507 00	4250 1878 83	9090 2100 01
LZB 22	9090 0508 00	4250 1878 83	9090 2100 01
LZB 33	9090 0508 00	4250 1878 83	9090 2100 01
LZB 42	9090 0510 00	4250 1878 83	9090 2100 01
LZB 46	9090 0510 00	4250 1878 83	9090 2100 01
LZB 54	9090 0510 00	4250 1878 83	9090 2100 02
Noise damp dB(A)	15	20	25
Power loss %	10	10	7

Note: The noise damp 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. The LBB silencer has 3/8" threaded port. LZB 14, 22 and 33 need to be connected via tube or hose with suitable connections. For LZB 42, 46 and 54 a bushing has to be used, Ordering No. 9090 0797 00.

