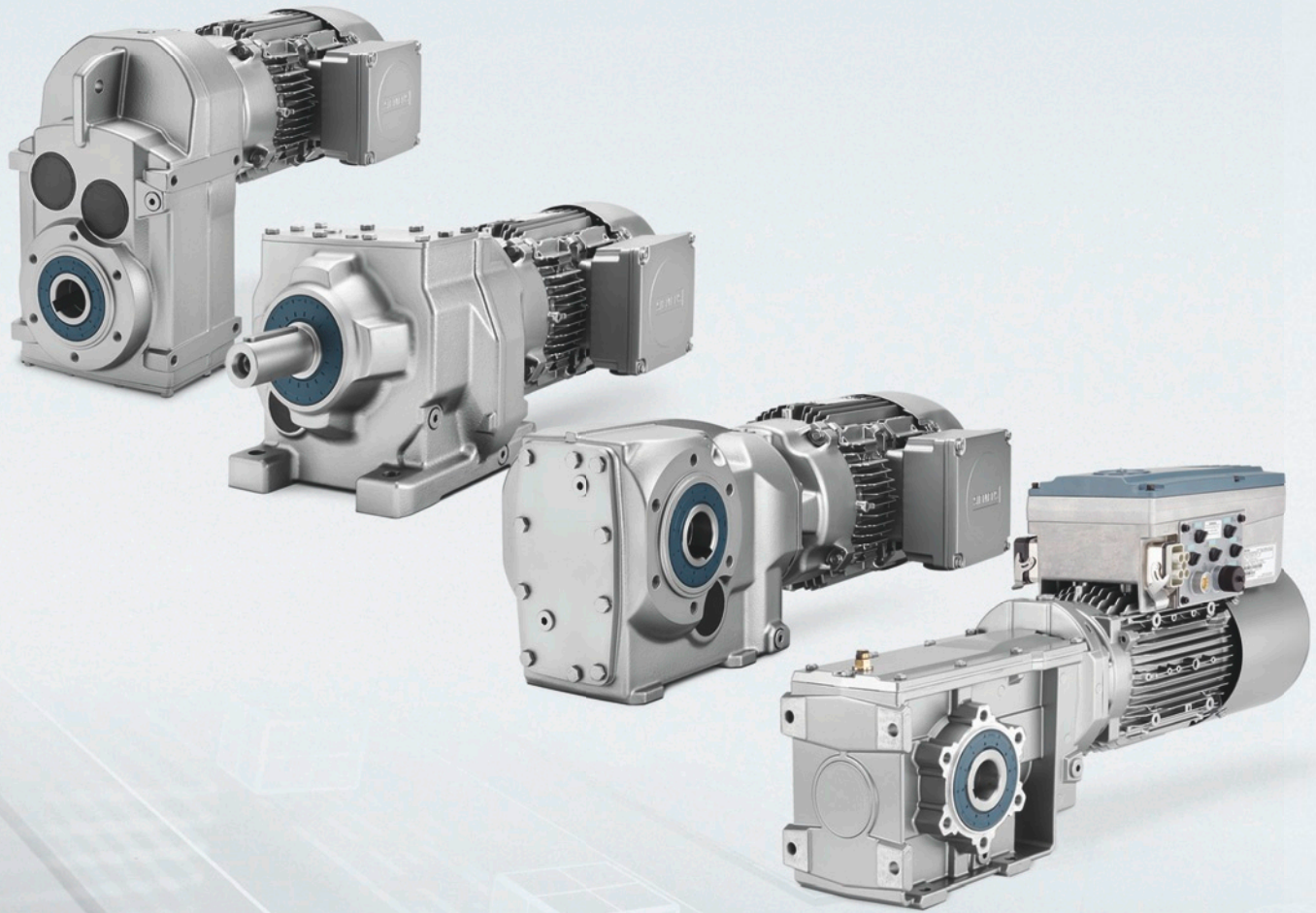


SIEMENS



Motion Control

# SIMOGEAR Geared Motors

Helical, parallel shaft, bevel, helical worm  
and worm geared motors



product  
design award

2013

Catalog  
MD 50.1

Edition  
2017

[siemens.com/gearedmotors](http://siemens.com/gearedmotors)

## Overview

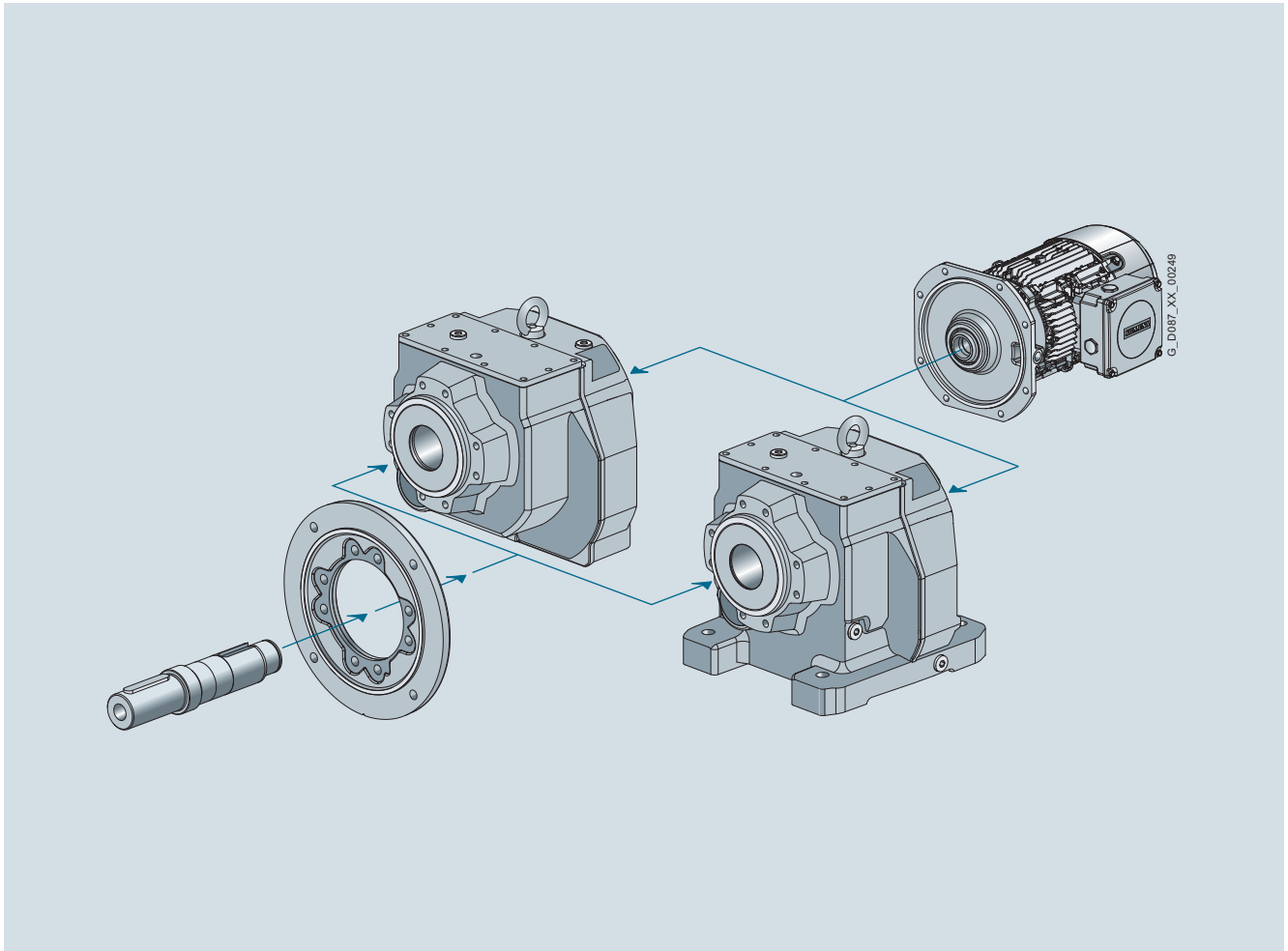
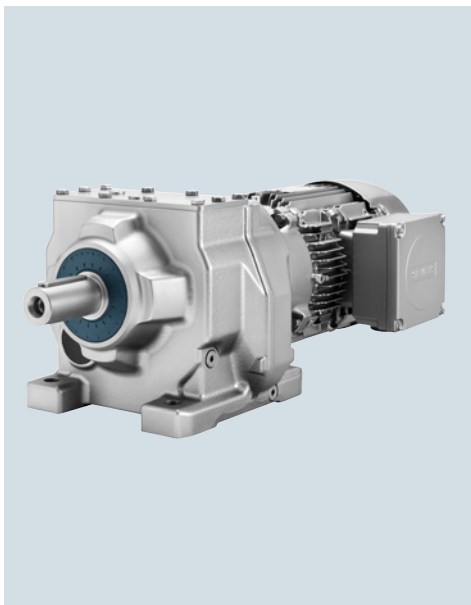
**Helical geared motors**

Fig. 1/10 Modular system, helical geared motor

SIMOGEAR helical geared motors are available in the following versions for mounting in any position:

- 2 or 3 stages
- 1 stage for high output speeds
- 4 to 6 stages for especially low output speeds
- Foot-mounted design
- Flange-mounted design
- Design with integrated housing flange
- Combined foot/flange-mounted design (frame size 29 to 89)
- Solid shaft design with and without feather key



<b>3/2</b>	<b>Orientation</b>
<b>3/3</b> 3/3	<b>Geared motors up to 55 kW</b> Selection and ordering data
<b>3/74</b> 3/74	<b>Transmission ratios and torques</b> Selection and ordering data
<b>3/87</b> 3/87	<b>Transmission ratios and torques for high speeds</b> Selection and ordering data
<b>3/90</b> 3/90	<b>Transmission ratios and torques for very low speeds</b> Selection and ordering data
<b>3/102</b>	<b>Dimensions</b>
3/102	Dimensional drawing overview
3/104	Helical geared motors D./Z.19
3/107	Helical geared motors D./Z.29
3/111	Helical geared motors D./Z.39
3/115	Helical geared motors D./Z.49
3/118	Helical geared motors D./Z.59
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3/124	Helical geared motors D./Z.79
3/127	Helical geared motors D./Z.89
3/130	Helical geared motors D./Z.109
3/133	Helical geared motors D./Z.129
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3/163	Helical tandem geared motors
3/164	Inner contour of the flange design

## SIMOGEAR helical geared motor Z and D

3

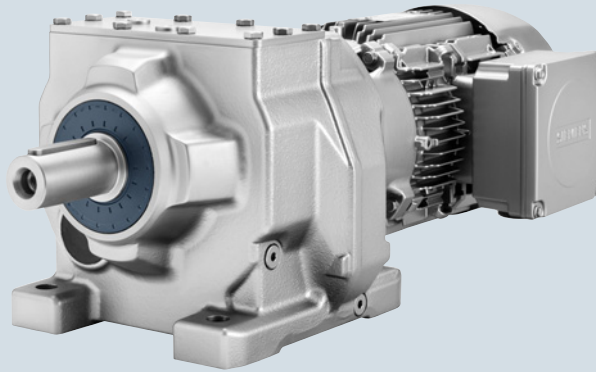


Fig. 3/1 Helical geared motor Z and D

## SIMOGEAR helical geared motor E

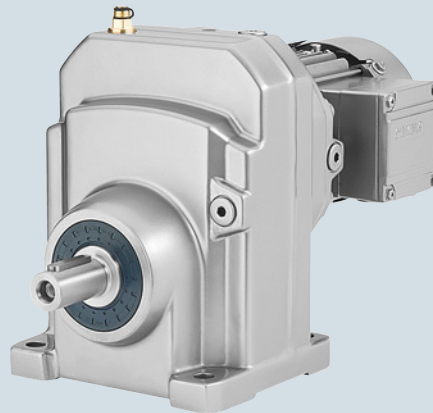


Bild 3/2 Helical geared motor E

Gearbox designation	Number of sizes	Maximum output torque	Gear ratio	Maximum motor power
		$T_{2N}$ Nm	$i$ -	$P_1$ kW
Z19 ... Z189 (2-stage)	13	100 ... 19 000	3.4 ... 57	55
D19 ... D189 (3-stage)	13	100 ... 19 000	36 ... 328	55
E39 ... E149 (1-stage)	7	30 ... 1 490	1.29 ... 9.79	55
D-29-Z19 ... D.189-D69 (4-stage to 6-stage)	12	140 ... 19 000	325 ... 27 816	7.5

SIMOGEAR helical geared motors are available in the following versions:

Transmission stages

- 2-stage or 3-stage helical geared motors
- 1-stage helical geared motors for high output speeds
- 4-stage to 6-stage helical geared motors for very low output speeds

Versions

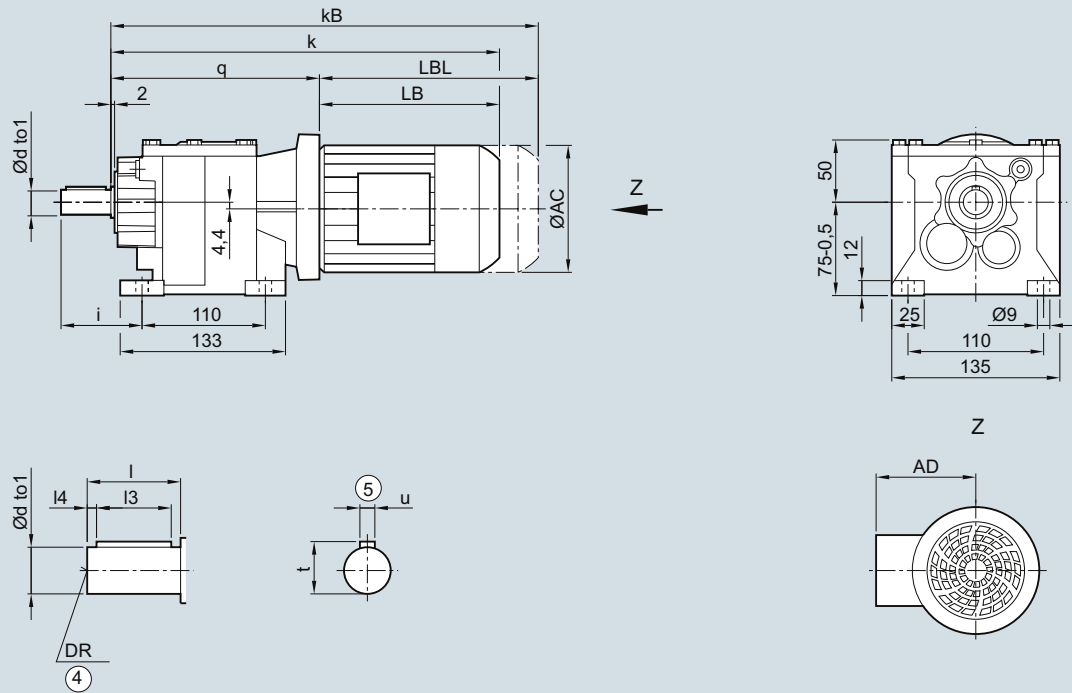
- Foot-mounted design
- Flange-mounted design
- Design with integrated housing flange
- Combined foot/flange-mounted design

D/Z19 gearbox in a foot-mounted design

DZ030

3

D/Z19



Shaft	d	to1	l	l3	l4	t	u	i	DR
	16	k6	28	22	3	18.0	5	46	M5
	16	k6	40	32	4	18.0	5	58	M8
	20	k6	40	32	4	22.5	6	58	M6x16

Motor	LA 63	71	71Z	LE 80	80Z
q	159.5	167.5	167.5	168.0	168.0
AC	117.8	138.8	138.8	156.3	156.3
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2
k	320.0	352.0	371.0	408.0	443.0
kB	364.5	407.0	426.0	468.0	503.0
LB	160.5	184.5	203.5	240.0	275.0
LBL	205.0	239.5	258.5	300.0	335.0

④ DIN 332

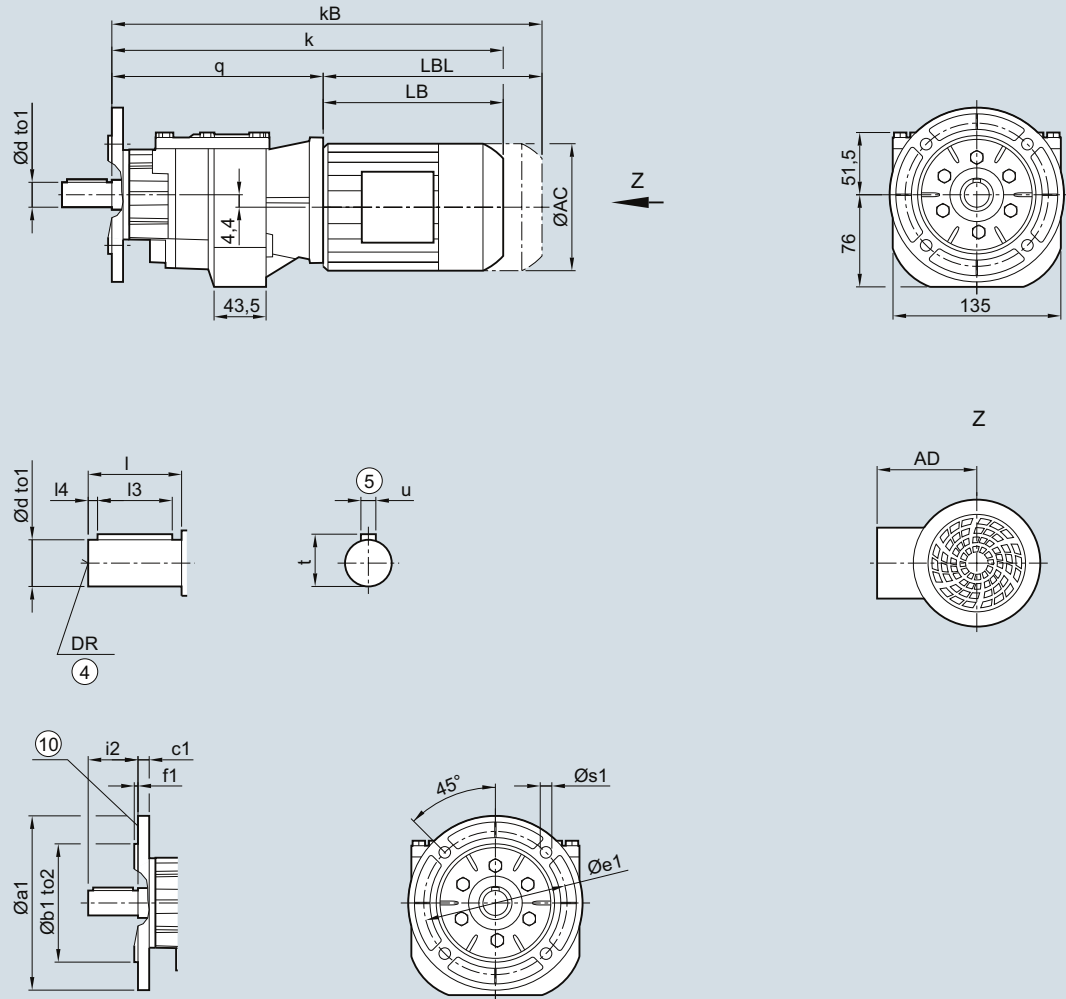
⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

DF/ZF19 gearbox in a flange-mounted design

DZF030

DF/ZF19



Flange	a1	b1	to2	c1	e1	f1	s1	Shaft	d	to1	l	l3	l4	t	u	i2	DR
	120	80	j6	8	100	3.0	6.6		16	k6	28	22	3	18.0	5	28	M5
	140	95	j6	9	115	3.0	9.0		16	k6	40	32	4	18.0	5	40	M8
	160	110	j6	9	130	3.5	9.0		20	k6	40	32	4	22.5	6	40	M6x16
Motor	LA 63			71			71Z			LE 80			80Z				
q	168.5			176.5			176.5			177.0			177.0				
AC	117.8			138.8			138.8			156.3			156.3				
AD <sup>1)</sup>	124.0			134.0			134.0			149.2			149.2				
k	329.0			361.0			380.0			417.0			452.0				
kB	373.5			416.0			435.0			477.0			512.0				
LB	160.5			184.5			203.5			240.0			275.0				
LBL	205.0			239.5			258.5			300.0			335.0				

④ DIN 332

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

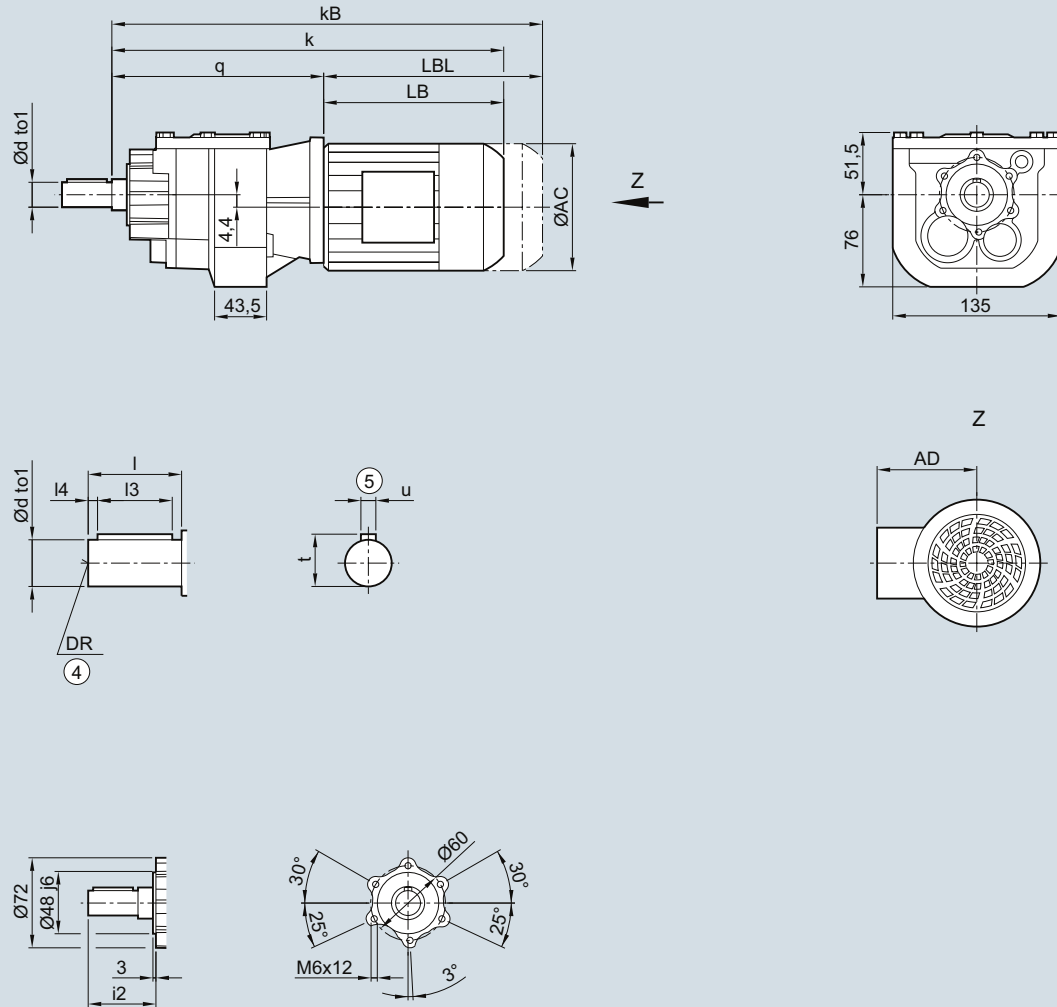
⑩ For inner contour see page 3/164

DZ/ZZ19 gearbox in a housing flange design

DZZ030

3

DZ/ZZ19



Shaft	d	to1	l	l3	l4	t	u	i2	DR
	16	k6	28	22	3	18.0	5	42	M5
	16	k6	40	32	4	18.0	5	54	M8
	20	k6	40	32	4	22.5	6	54	M6x16
Motor	LA								
	<b>63</b>		<b>71</b>		<b>71Z</b>		<b>LE 80</b>		<b>80Z</b>
q	168.5		176.5		176.5		177.0		177.0
AC	117.8		138.8		138.8		156.3		156.3
AD <sup>1)</sup>	124.0		134.0		134.0		149.2		149.2
k	329.0		361.0		380.0		417.0		452.0
kB	373.5		416.0		435.0		477.0		512.0
LB	160.5		184.5		203.5		240.0		275.0
LBL	205.0		239.5		258.5		300.0		335.0

④ DIN 332

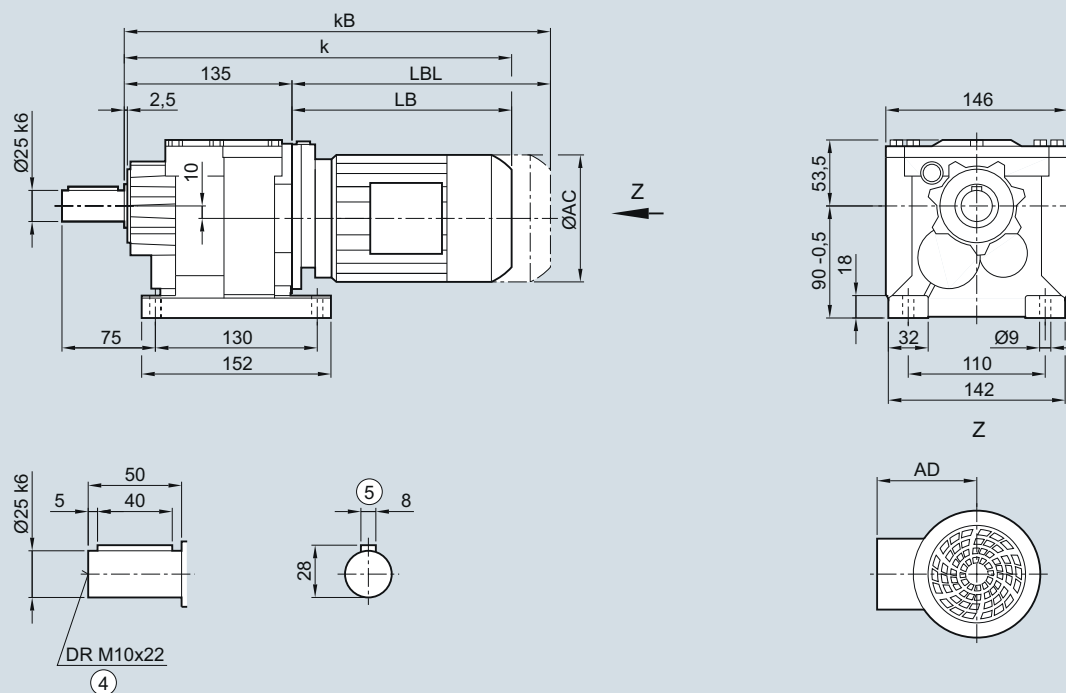
⑤ Feather key/keyway DIN 6885-1

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

## D/Z29 gearbox in a foot-mounted design

## DZ030

D/Z29



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	329.0	361.0	380.0	425.0	460.0	486.5	526.5	543.0	578.0
kB	373.5	416.0	435.0	485.0	520.0	556.5	596.5	621.5	656.5
LB	194.0	226.0	245.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	300.0	350.0	385.0	421.5	461.5	486.5	521.5

④ DIN 332

1) AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

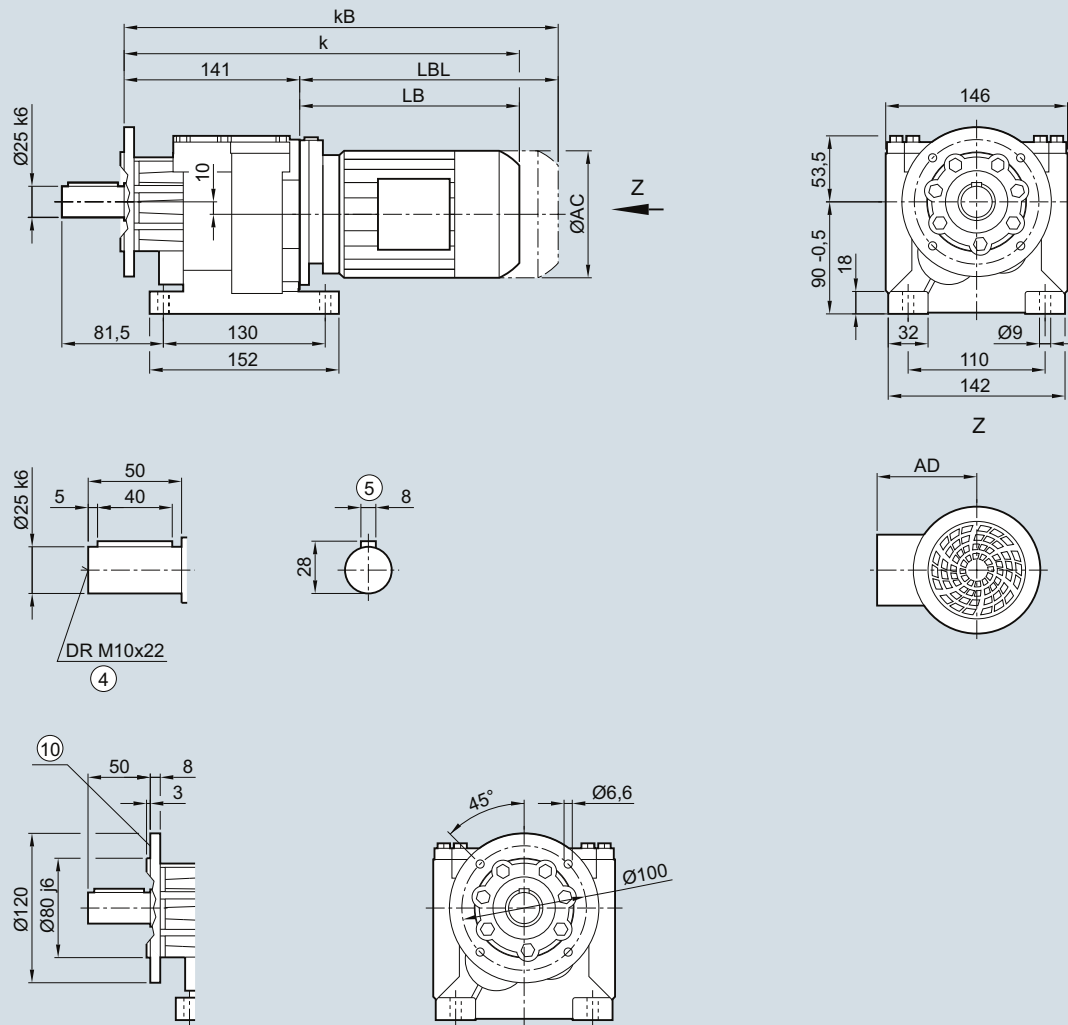


DB/ZB29 gearbox in a foot/flange-mounted design

DZB030

3

DB/ZB29



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	335.0	367.0	386.0	431.0	466.0	492.5	532.5	549.0	584.0
kB	379.5	422.0	441.0	491.0	526.0	562.5	602.5	627.5	662.5
LB	194.0	226.0	245.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	300.0	350.0	385.0	421.5	461.5	486.5	521.5

④ DIN 332

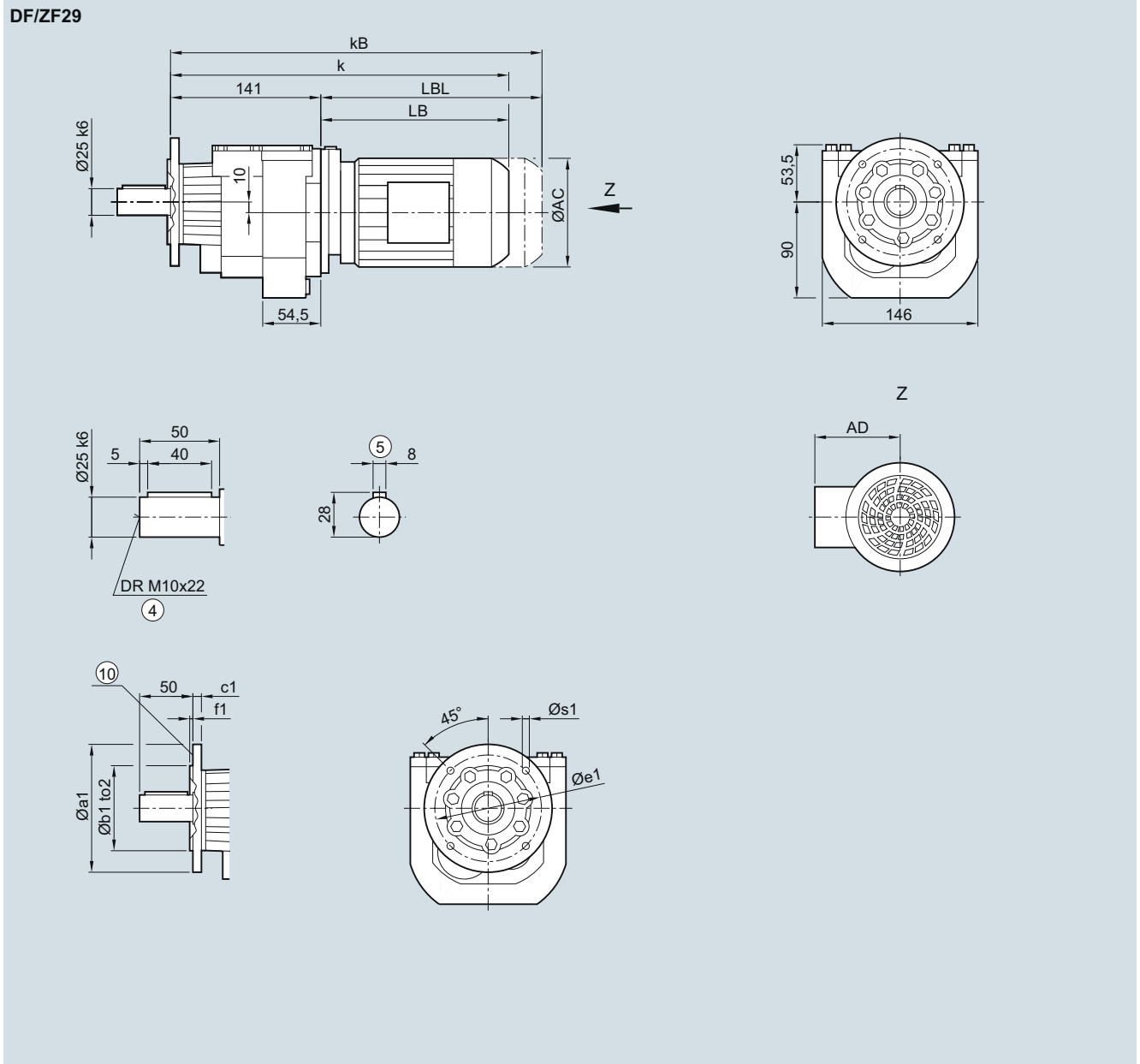
1) AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

DF/ZF29 gearbox in a flange-mounted design

DZF030



Flange	a1	b1	to2	c1	e1	f1	s1
	120	80	j6	8	100	3.0	6.6
	140	95	j6	9	115	3.0	9.0
	160	110	j6	9	130	3.5	9.0

Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	335.0	367.0	386.0	431.0	466.0	492.5	532.5	549.0	584.0
kB	379.5	422.0	441.0	491.0	526.0	562.5	602.5	627.5	662.5
LB	194.0	226.0	245.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	300.0	350.0	385.0	421.5	461.5	486.5	521.5

④ DIN 332

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

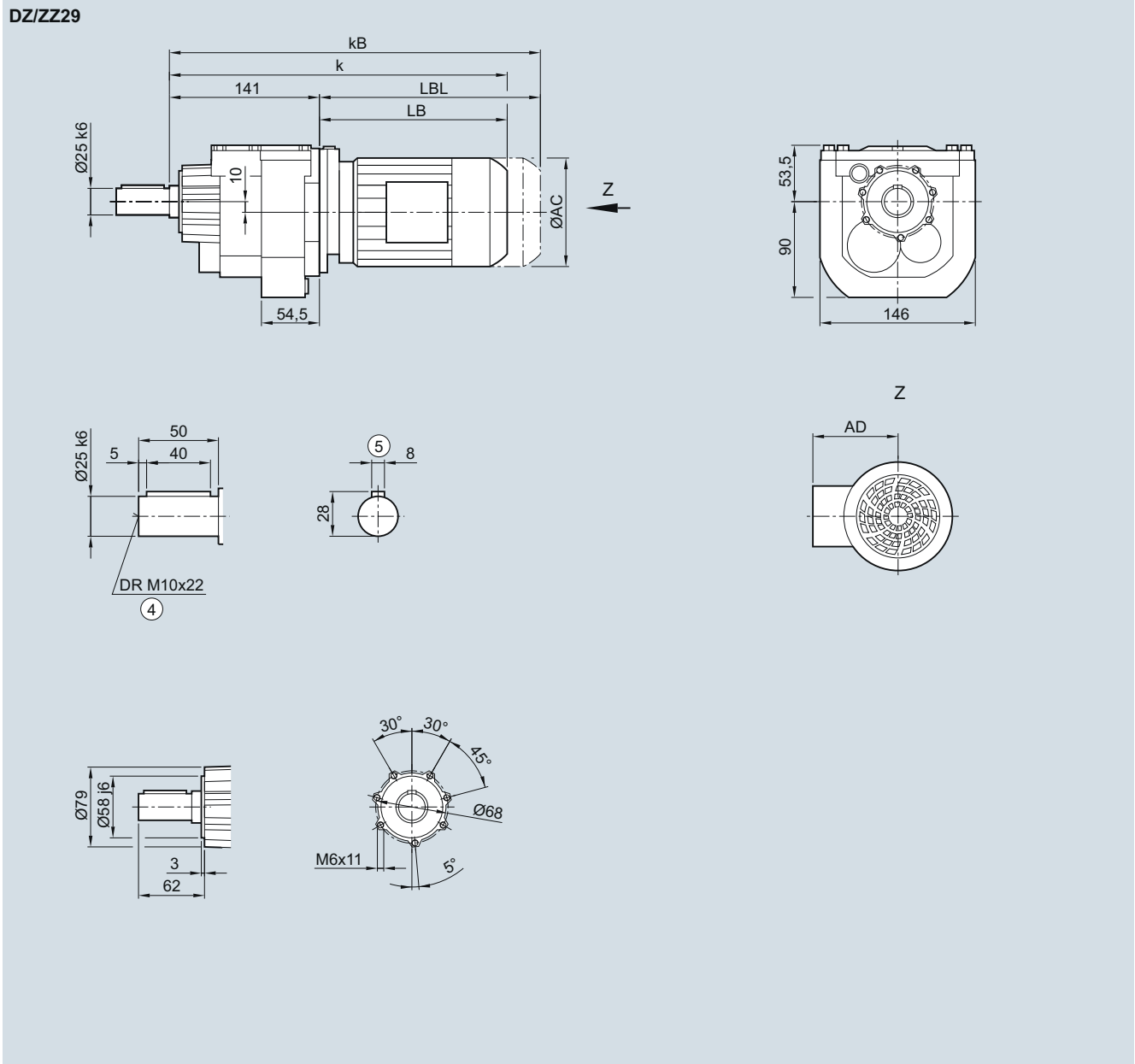
⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

DZ/ZZ29 gearbox in a housing flange design

DZZ030

3



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	335.0	367.0	386.0	431.0	466.0	492.5	532.5	549.0	584.0
kB	379.5	422.0	441.0	491.0	526.0	562.5	602.5	627.5	662.5
LB	194.0	226.0	245.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	300.0	350.0	385.0	421.5	461.5	486.5	521.5

④ DIN 332

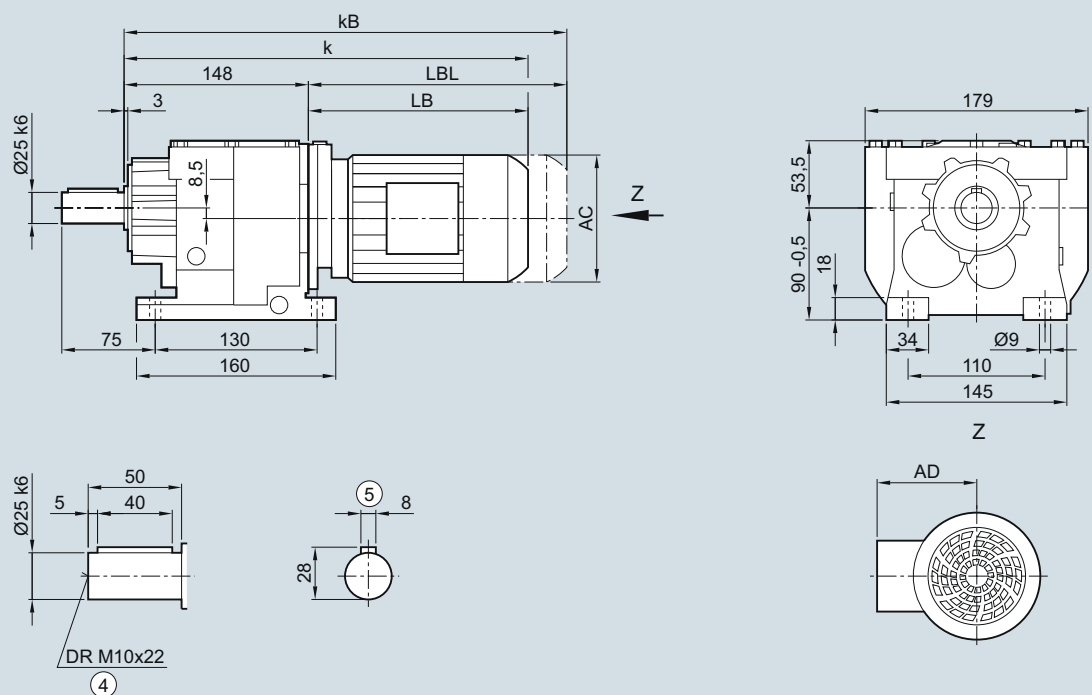
⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

## D/Z39 gearbox in a foot-mounted design

## DZ030

D/Z39



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	342.0	374.0	393.0	438.0	473.0	499.5	539.5	556.0	591.0	566.0	591.0
kB	386.5	429.0	448.0	498.0	533.0	569.5	609.5	634.5	669.5	639.0	664.0
LB	194.0	226.0	245.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	300.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

④ DIN 332

1) AD depends on the motor options, for other dimensions see page 8/36.

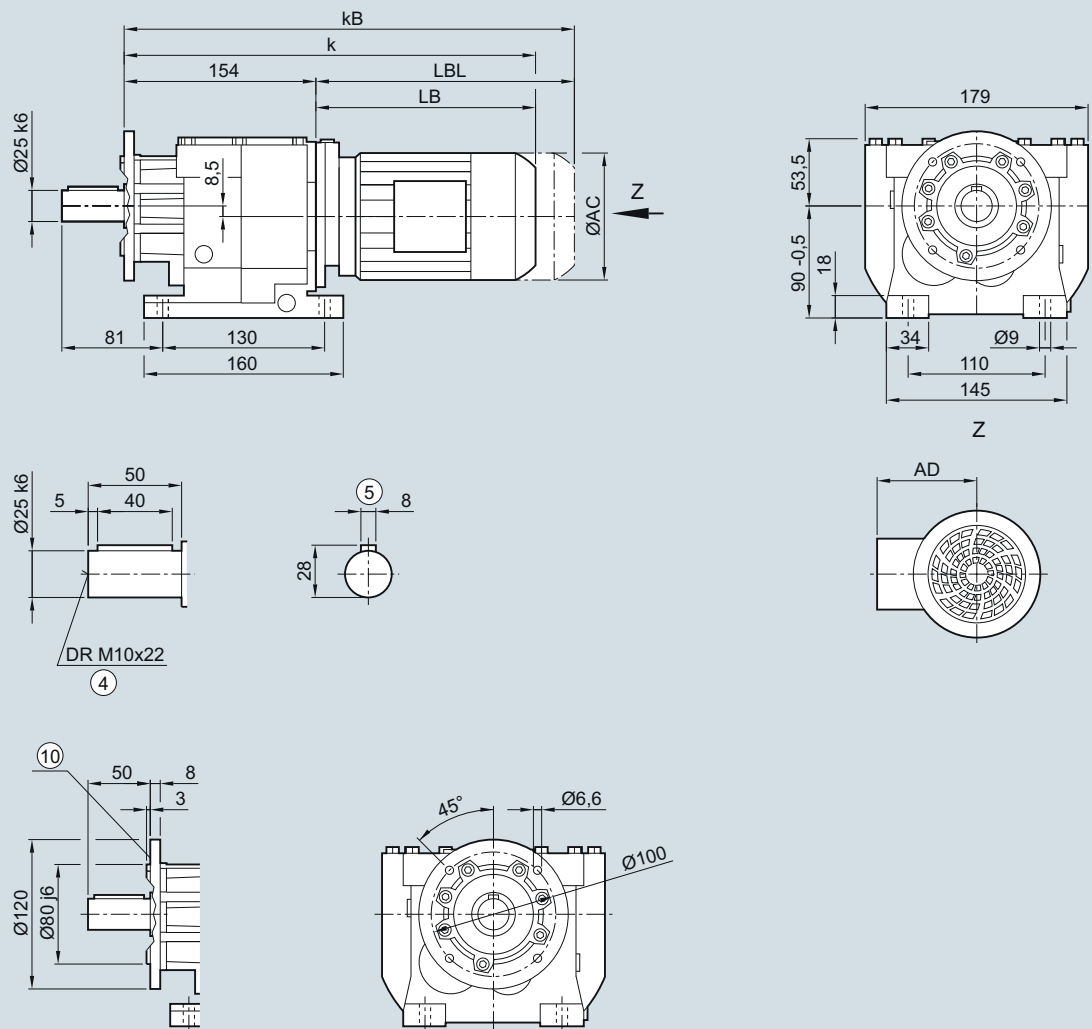
⑤ Feather key/keyway DIN 6885-1

DB/ZB39 gearbox in a foot/flange-mounted design

DZB030

3

DB/ZB39



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	348.0	380.0	399.0	444.0	479.0	505.5	545.5	562.0	597.0	572.0	597.0
kB	392.5	435.0	454.0	504.0	539.0	575.5	615.5	640.5	675.5	645.0	670.0
LB	194.0	226.0	245.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	300.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

④ DIN 332

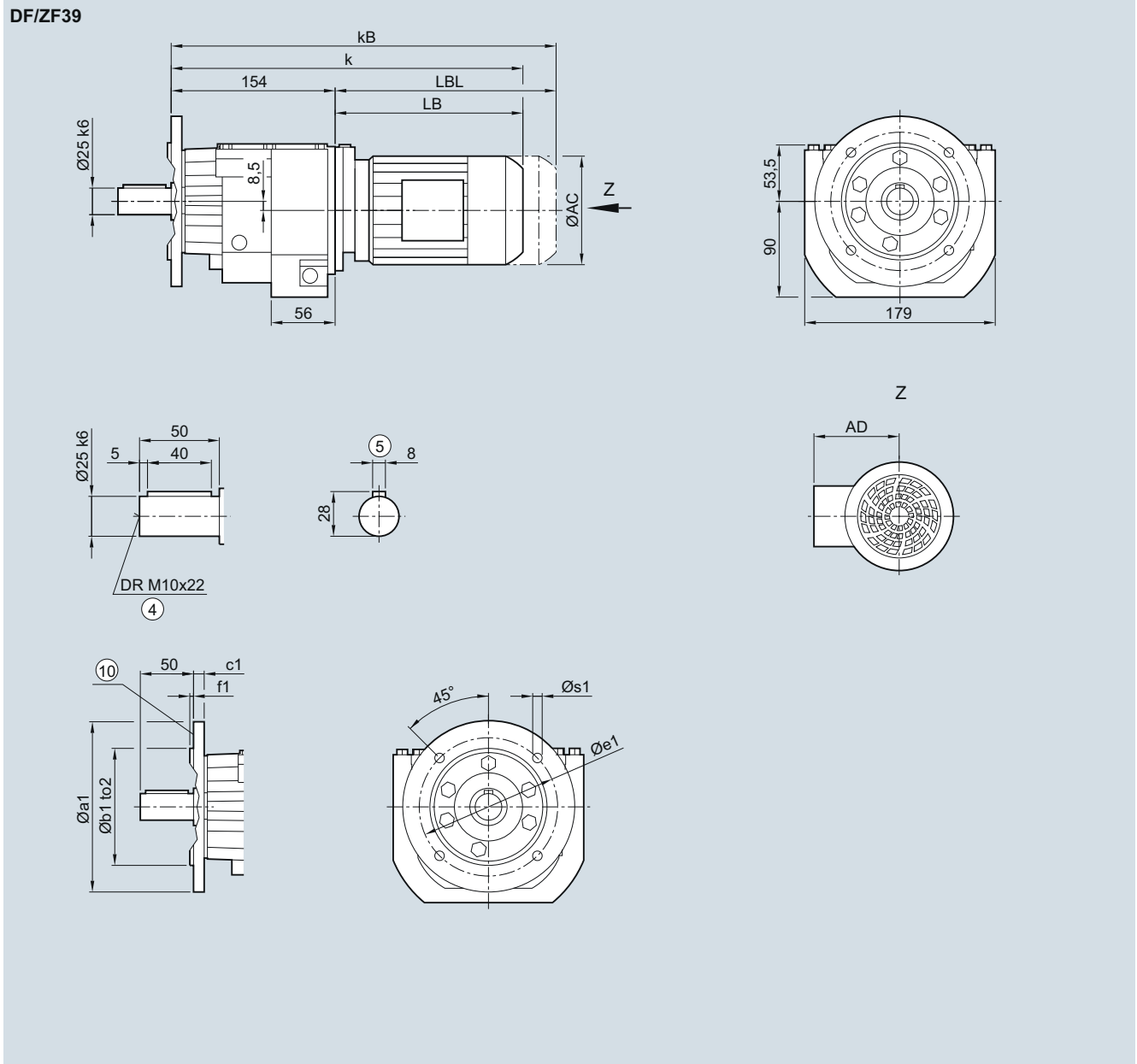
1) AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

DF/ZF39 gearbox in a flange-mounted design

DZF030



Flange	a1	b1	to2	c1	e1	f1	s1
	120	80	j6	8	100	3.0	6.6
	160	110	j6	10	130	3.5	9.0
	200	130	j6	12	165	3.5	11.0

Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	348.0	380.0	399.0	444.0	479.0	505.5	545.5	562.0	597.0	572.0	597.0
kB	392.5	435.0	454.0	504.0	539.0	575.5	615.5	640.5	675.5	645.0	670.0
LB	194.0	226.0	245.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	300.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

④ DIN 332

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

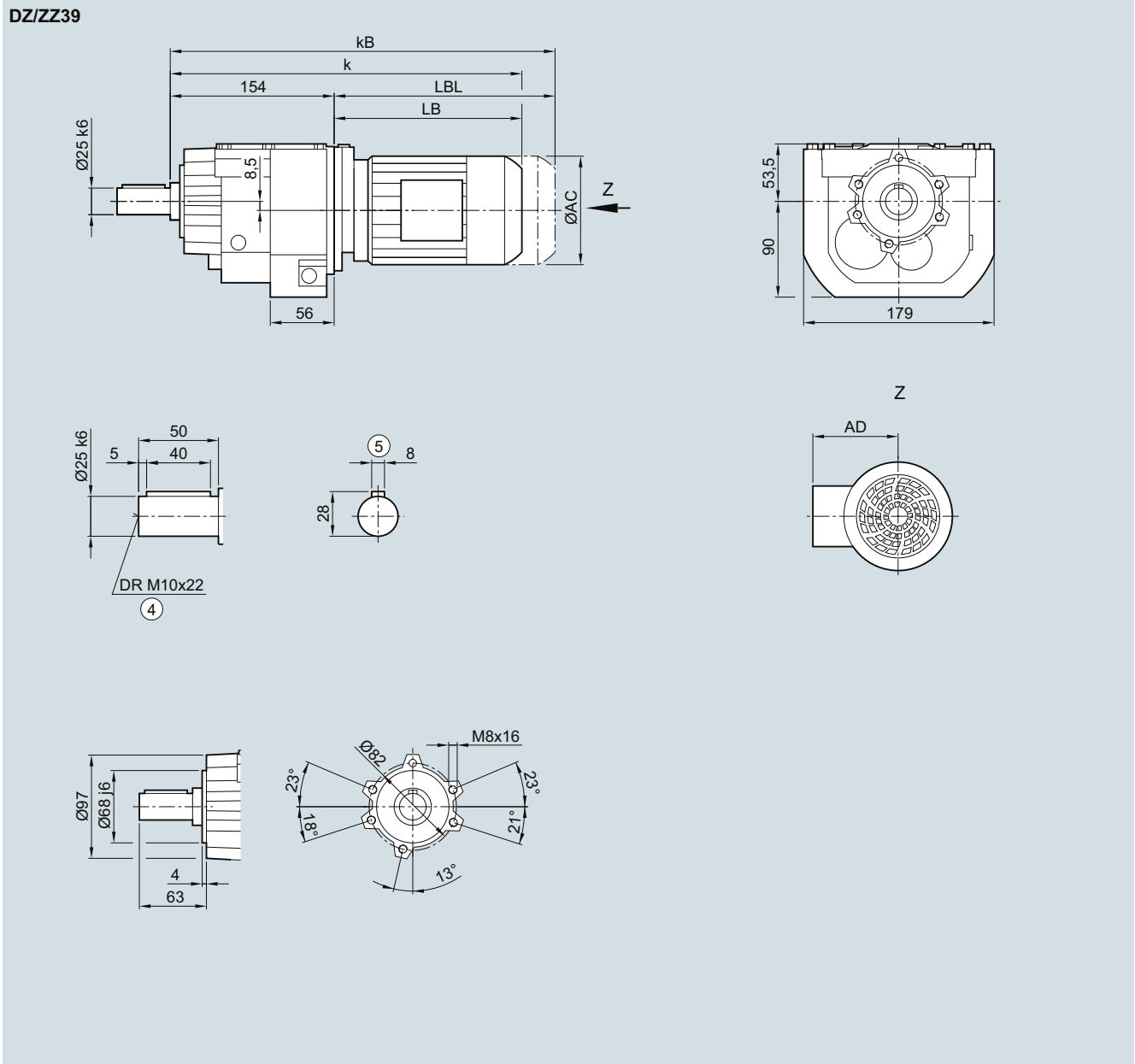
⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

DZ/ZZ39 gearbox in a housing flange design

DZZ030

3



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	348.0	380.0	399.0	444.0	479.0	505.5	545.5	562.0	597.0	572.0	597.0
kB	392.5	435.0	454.0	504.0	539.0	575.5	615.5	640.5	675.5	645.0	670.0
LB	194.0	226.0	245.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	300.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

④ DIN 332

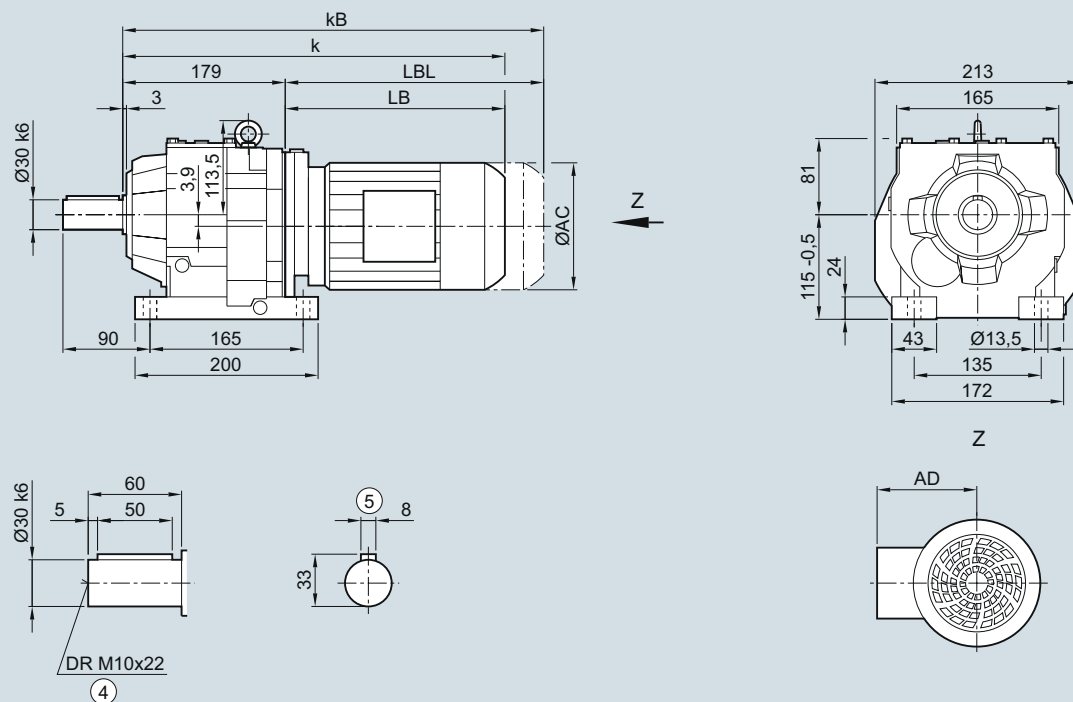
⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

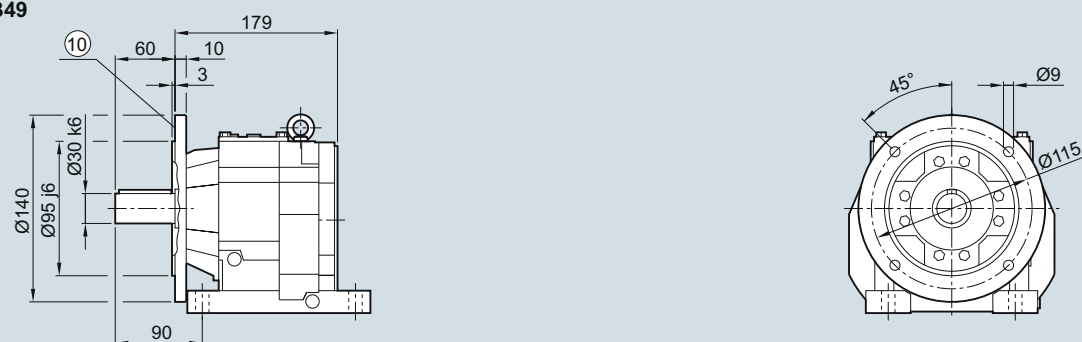
D/Z49 gearbox in a foot-mounted design and DB/ZB49 gearbox in a foot/flange-mounted design

DZ030, DZB030

D/Z49



DB/ZB49



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	363.5	395.5	414.5	459.5	494.5	521.0	561.0	577.5	612.5	587.5	622.0	640.5	690.5
kB	408.0	450.5	469.5	519.5	554.5	591.0	631.0	656.0	691.0	660.5	695.0	745.0	795.0
LB	184.5	216.5	235.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	290.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

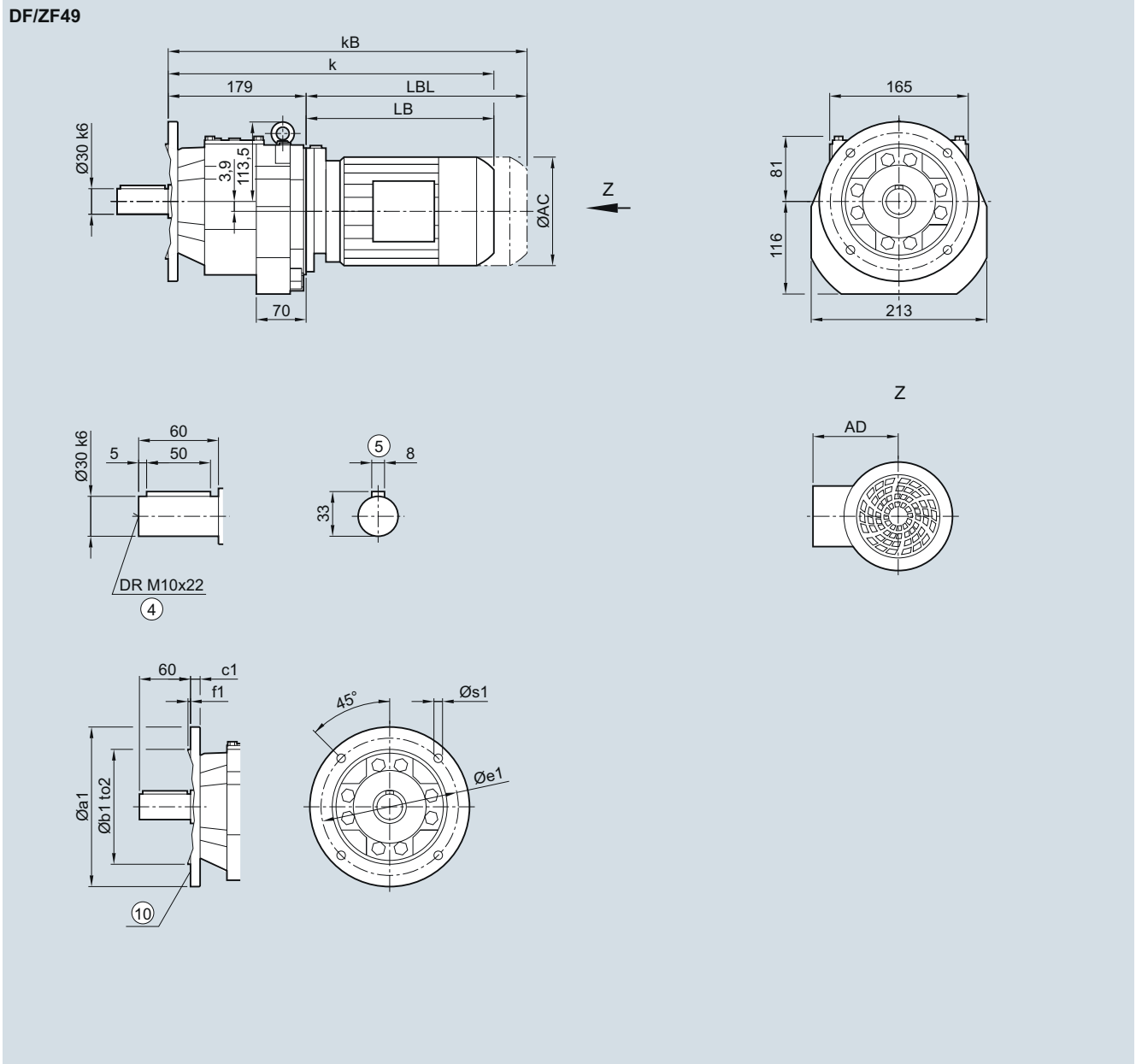
⑩ For inner contour see page 3/164



DF/ZF49 gearbox in a flange-mounted design

DZF030

3



Flange	a1	b1	to2	c1	e1	f1	s1
	140	95	j6	10	115	3.0	9.0
	160	110	j6	10	130	3.5	9.0
	200	130	j6	12	165	3.5	11.0

Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	363.5	395.5	414.5	459.5	494.5	521.0	561.0	577.5	612.5	587.5	622.0	640.5	690.5
kB	408.0	450.5	469.5	519.5	554.5	591.0	631.0	656.0	691.0	660.5	695.0	745.0	795.0
LB	184.5	216.5	235.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	290.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

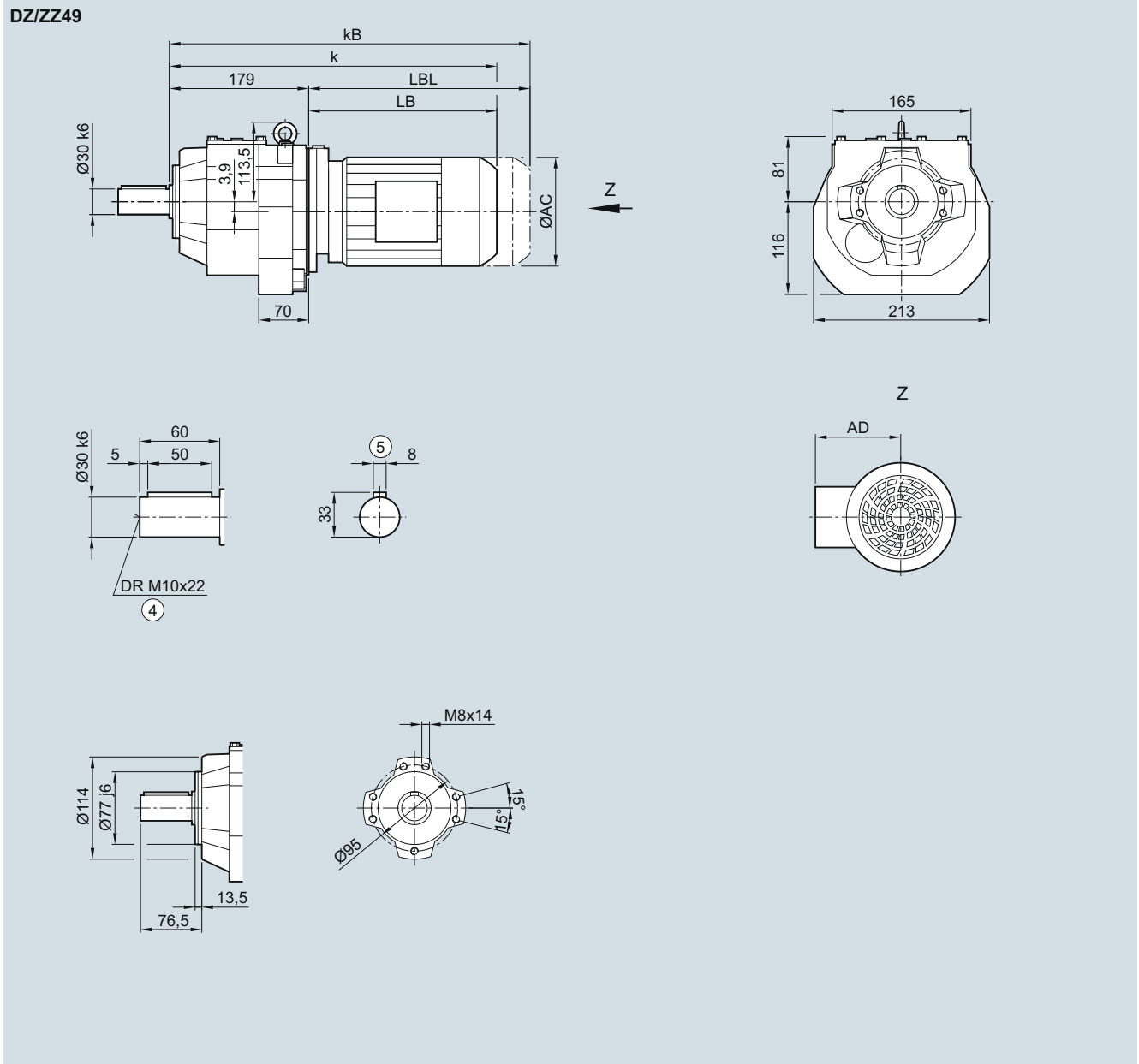
<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

DZ/ZZ49 gearbox in a housing flange design

DZZ030



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	363.5	395.5	414.5	459.5	494.5	521.0	561.0	577.5	612.5	587.5	622.0	640.5	690.5
kB	408.0	450.5	469.5	519.5	554.5	591.0	631.0	656.0	691.0	660.5	695.0	745.0	795.0
LB	184.5	216.5	235.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	290.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

⑤ Feather key/keyway DIN 6885-1

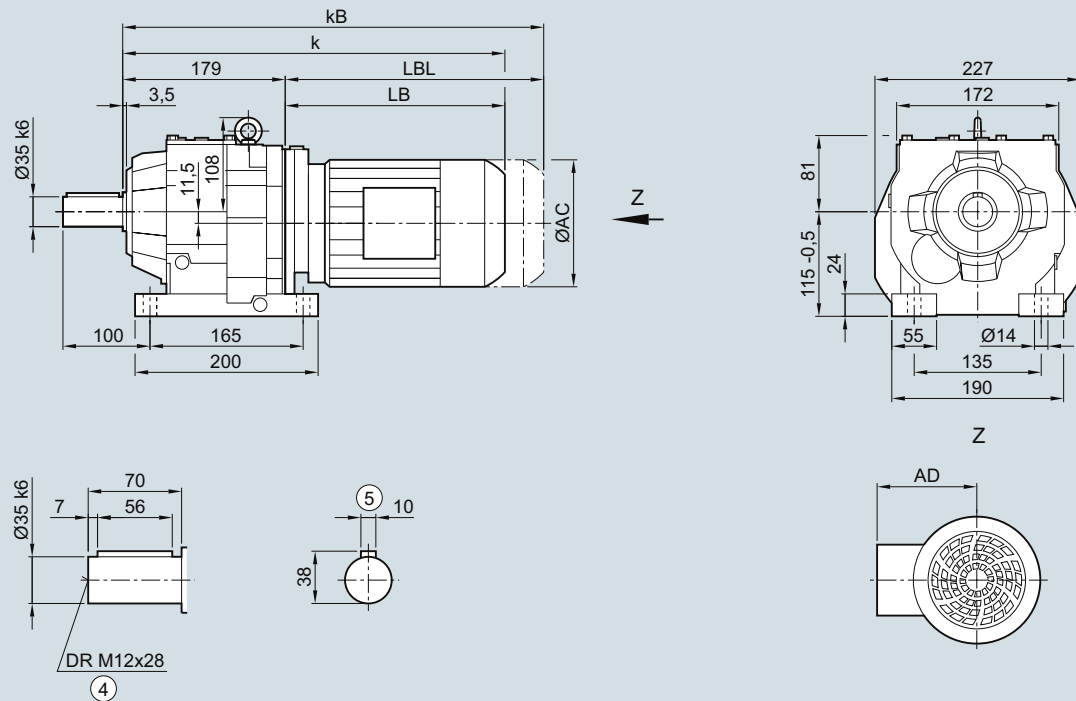
<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

D/Z59 gearbox in a foot-mounted design and DB/ZB59 gearbox in a foot/flange-mounted design

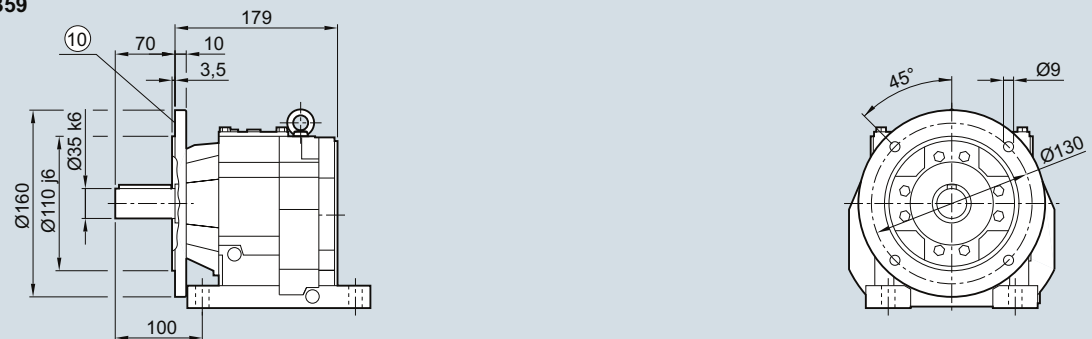
DZ030, DZB030

3

D/Z59



DB/ZB59



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	363.5	395.5	414.5	459.5	494.5	521.0	561.0	577.5	612.5	587.5	622.0	640.5	690.5
kB	408.0	450.5	469.5	519.5	554.5	591.0	631.0	656.0	691.0	660.5	695.0	745.0	795.0
LB	184.5	216.5	235.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	290.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

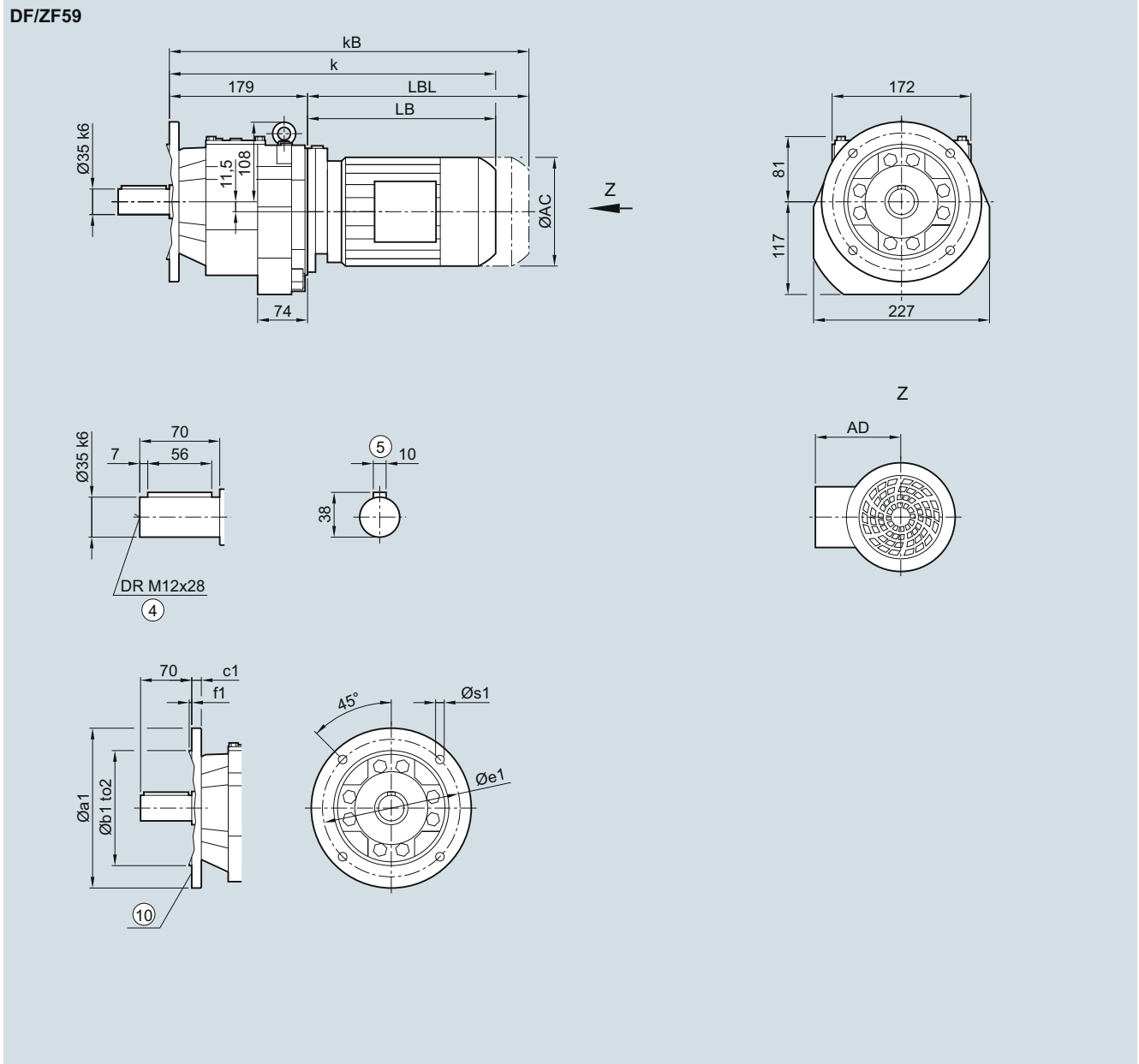
<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

DF/ZF59 gearbox in a flange-mounted design

DZF030



Flange	a1	b1	to2	c1	e1	f1	s1
	160	110	j6	10	130	3.5	9.0
	200	130	j6	12	165	3.5	11.0
	250	180	j6	15	215	4.0	13.5

Motor	LA	63	71	71Z	LE	80	80Z	90	90Z	100	100Z	112	112Z	132	132Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	264.0	264.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	207.0	207.0
k	363.5	395.5	414.5	459.5	494.5	521.0	561.0	577.5	612.5	587.5	622.0	640.5	690.5	640.5	690.5
kB	408.0	450.5	469.5	519.5	554.5	591.0	631.0	656.0	691.0	660.5	695.0	745.0	795.0	745.0	795.0
LB	184.5	216.5	235.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5	461.5	511.5
LBL	229.0	271.5	290.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0	566.0	616.0

④ DIN 332

1) AD depends on the motor options, for other dimensions see page 8/36.

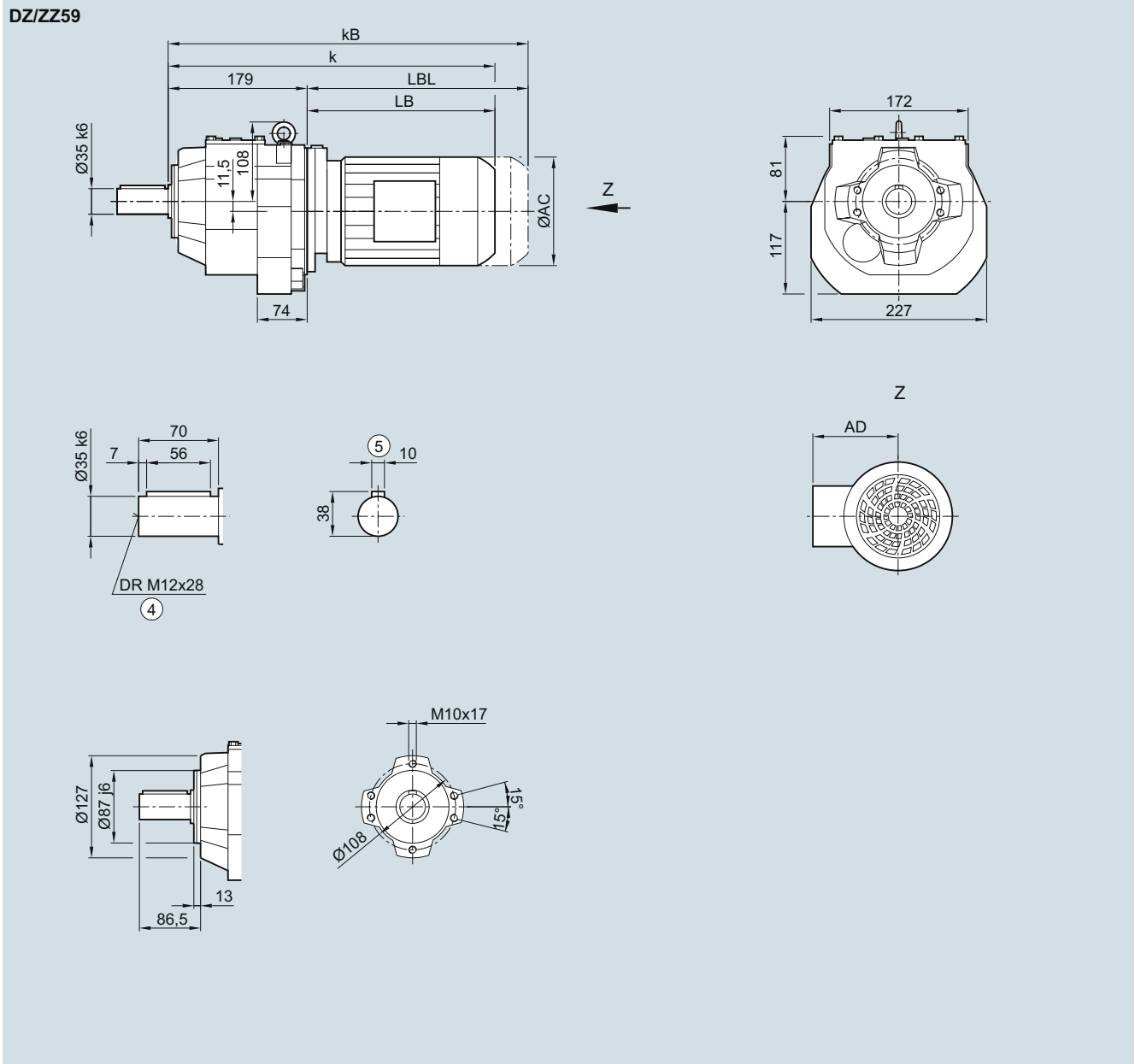
⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

DZ/ZZ59 gearbox in a housing flange design

DZZ030

3



Motor	LA 63	71	71Z	LE80 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	363.5	395.5	414.5	459.5	494.5	521.0	561.0	577.5	612.5	587.5	622.0	640.5	690.5
kB	408.0	450.5	469.5	519.5	554.5	591.0	631.0	656.0	691.0	660.5	695.0	745.0	795.0
LB	184.5	216.5	235.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	290.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

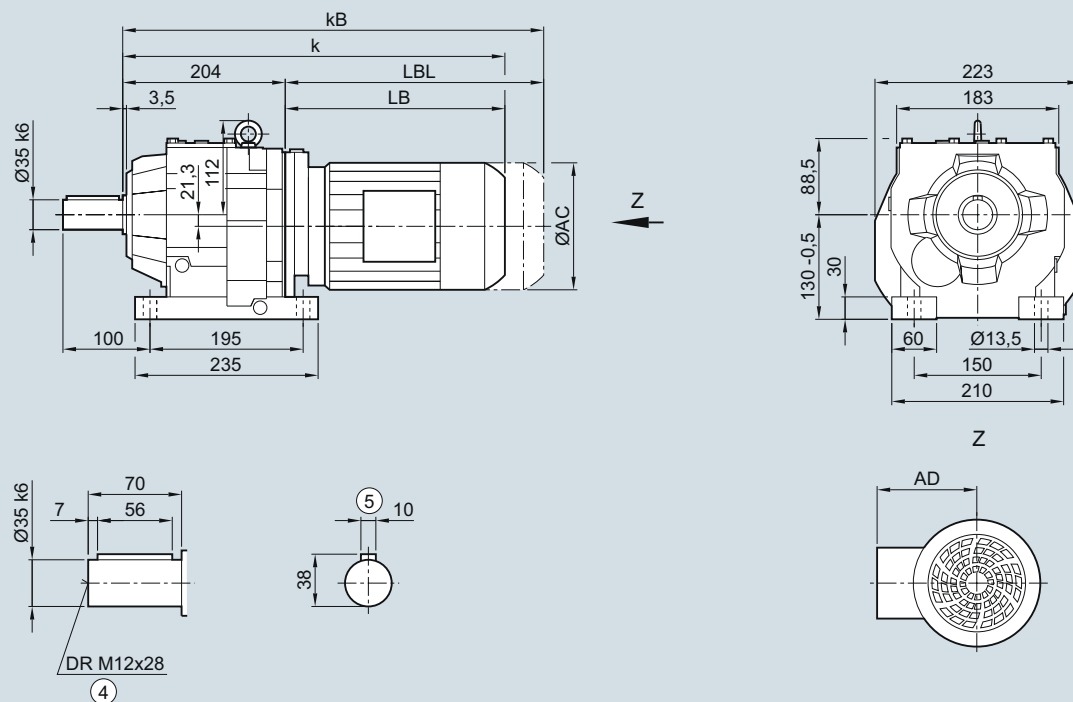
⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

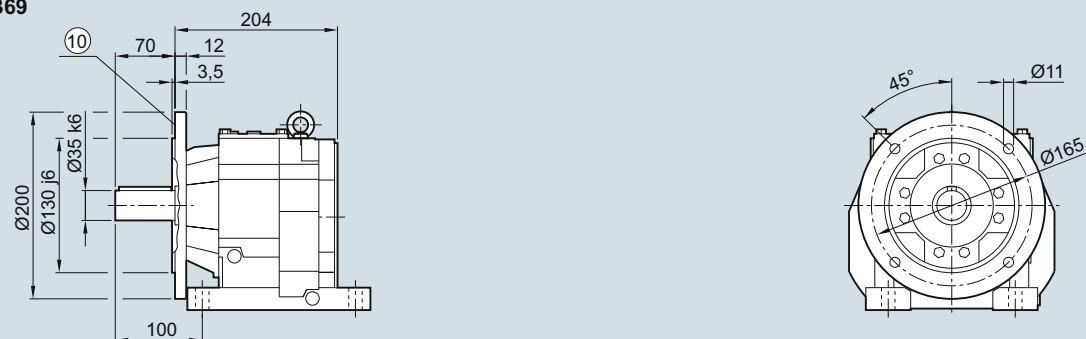
D/Z69 gearbox in a foot-mounted design and DB/ZB69 gearbox in a foot/flange-mounted design

DZ030, DZB030

D/Z69



DB/ZB69



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	388.5	420.5	439.5	484.5	519.5	546.0	586.0	602.5	637.5	612.5	647.0	665.5	715.5
kB	433.0	475.5	494.5	544.5	579.5	616.0	656.0	681.0	716.0	685.5	720.0	770.0	820.0
LB	184.5	216.5	235.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	290.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

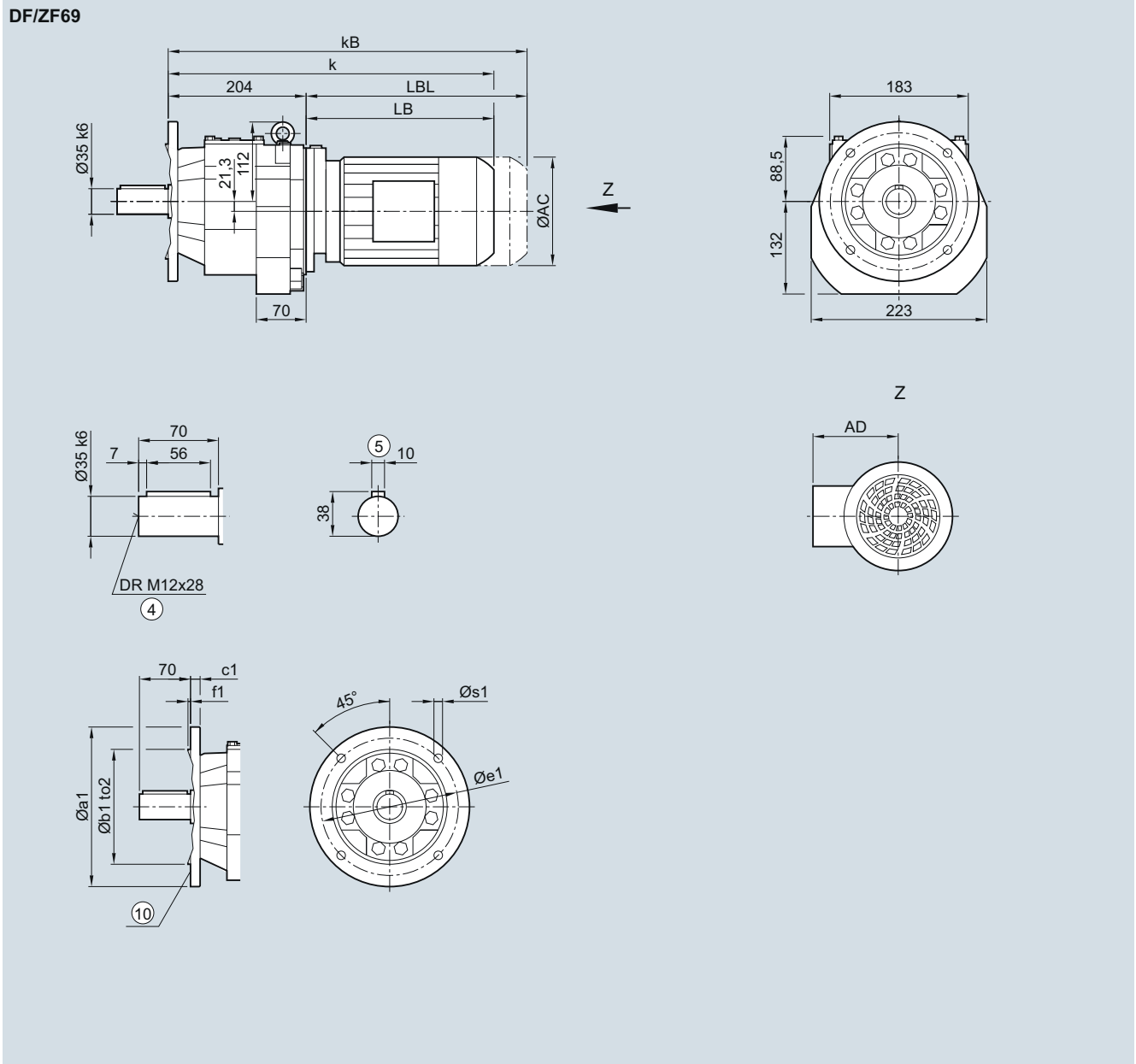
⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

DF/ZF69 gearbox in a flange-mounted design

DZF030

3



Flange	a1	b1	to2	c1	e1	f1	s1
	200	130	j6	12	165	3.5	11.0
	250	180	j6	15	215	4.0	13.5

Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	388.5	420.5	439.5	484.5	519.5	546.0	586.0	602.5	637.5	612.5	647.0	665.5	715.5
kB	433.0	475.5	494.5	544.5	579.5	616.0	656.0	681.0	716.0	685.5	720.0	770.0	820.0
LB	184.5	216.5	235.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	290.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

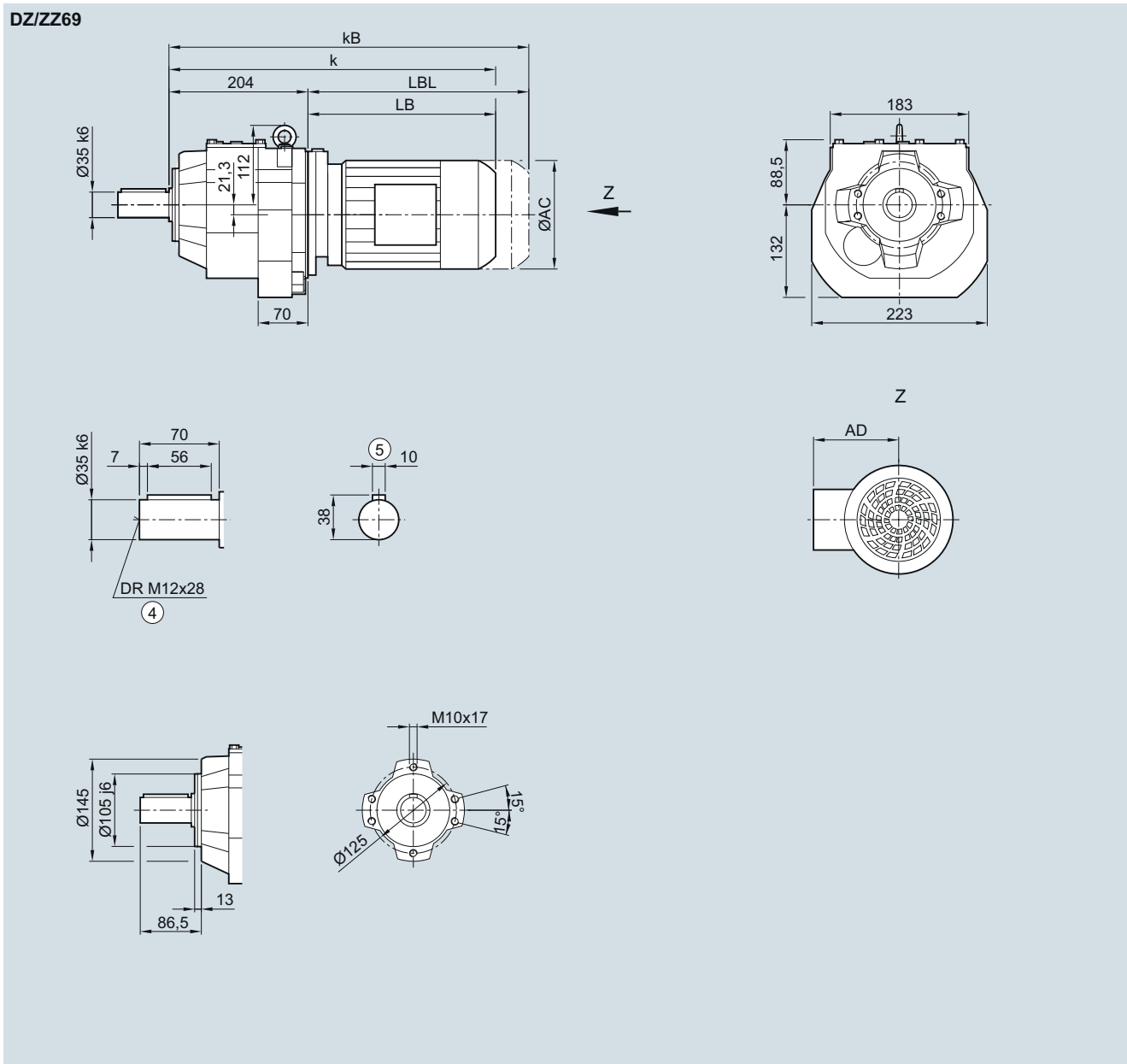
1) AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

DZ/ZZ69 gearbox in a housing flange design

DZZ030



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	388.5	420.5	439.5	484.5	519.5	546.0	586.0	602.5	637.5	612.5	647.0	665.5	715.5
kB	433.0	475.5	494.5	544.5	579.5	616.0	656.0	681.0	716.0	685.5	720.0	770.0	820.0
LB	184.5	216.5	235.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	290.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

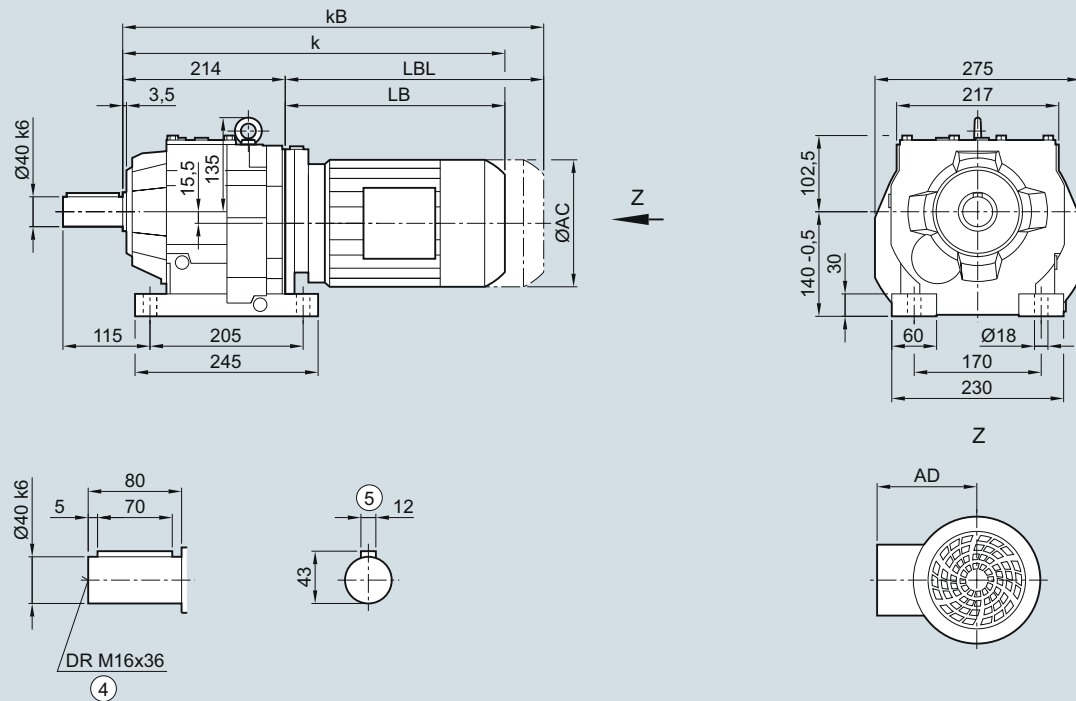


D/Z79 gearbox in a foot-mounted design and DB/ZB79 gearbox in a foot/flange-mounted design

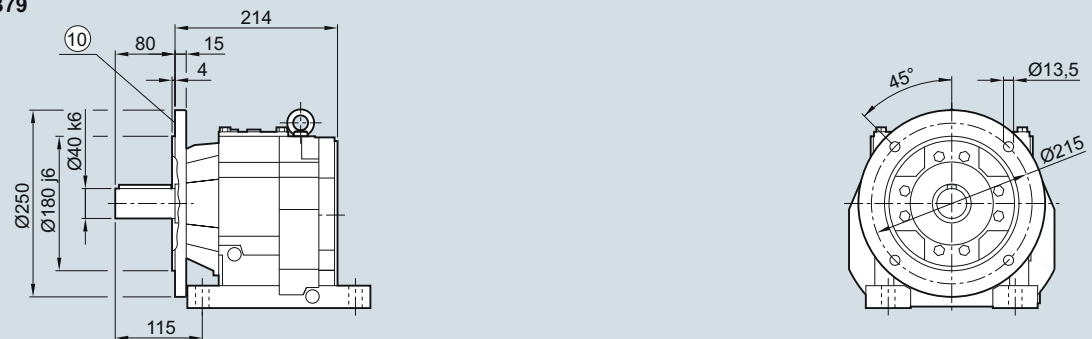
DZ030, DZB030

3

D/Z79



DB/ZB79



Motor	LA 71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z	160	160Z
AC	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD <sup>1)</sup>	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	428.5	447.5	488.5	523.5	550.0	590.0	606.5	641.5	616.5	641.5	669.5	719.5	751.5	811.5
kB	483.5	502.5	548.5	583.5	620.0	660.0	685.0	720.0	689.5	714.5	774.0	824.0	867.5	927.5
LB	214.5	233.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	288.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

④ DIN 332

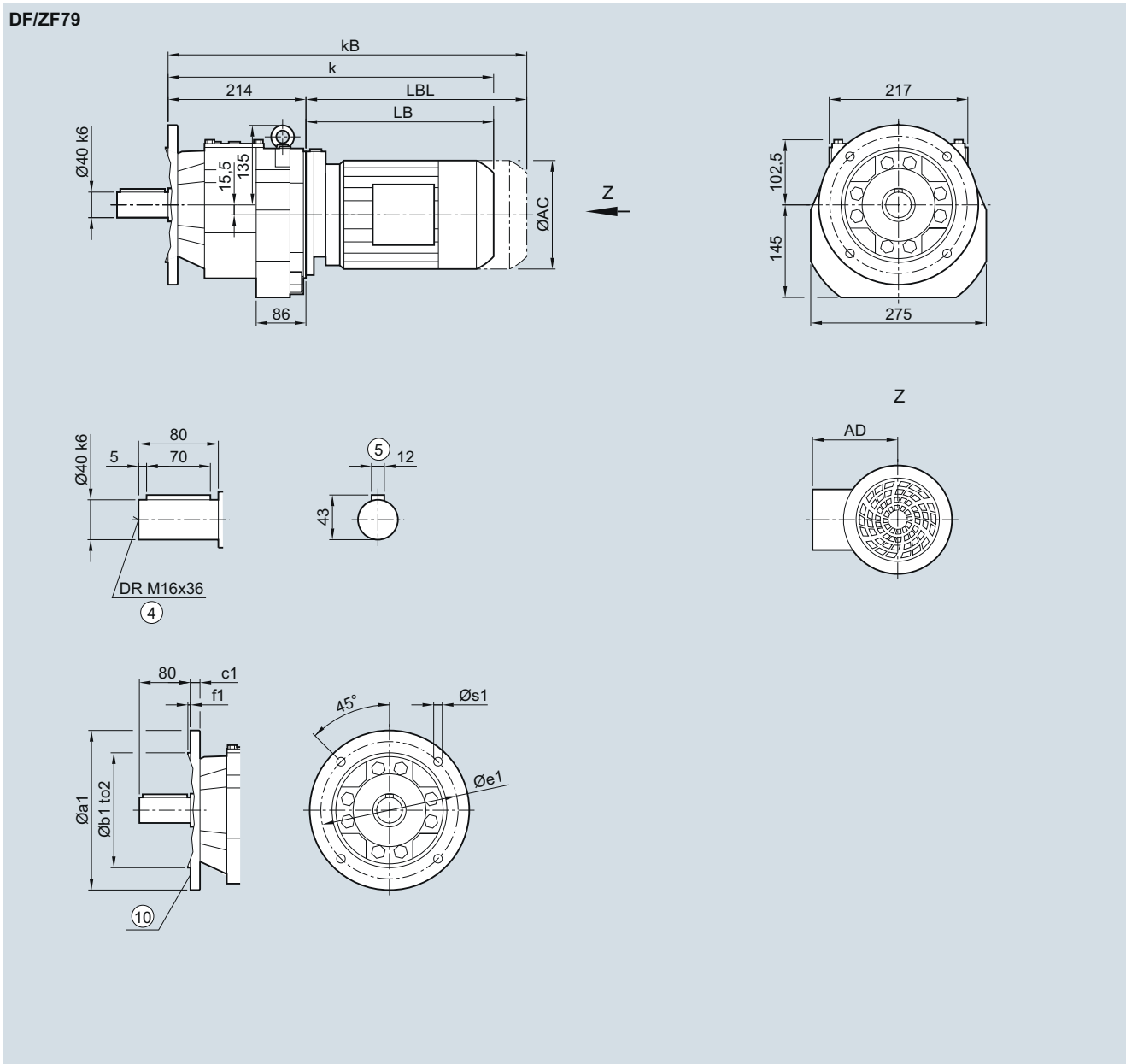
⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

⑩ For inner contour see page 3/164

DF/ZF79 gearbox in a flange-mounted design

DZF030



Flange	a1	b1	to2	c1	e1	f1	s1
	250	180	j6	15	215	4.0	13.5
	300	230	j6	16	265	4.0	13.5

Motor	LA 71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z	160	160Z
AC	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD <sup>1)</sup>	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	428.5	447.5	488.5	523.5	550.0	590.0	606.5	641.5	616.5	641.5	669.5	719.5	751.5	811.5
kB	483.5	502.5	548.5	583.5	620.0	660.0	685.0	720.0	689.5	714.5	774.0	824.0	867.5	927.5
LB	214.5	233.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	288.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

④ DIN 332

⑤ Feather key/keyway DIN 6885-1

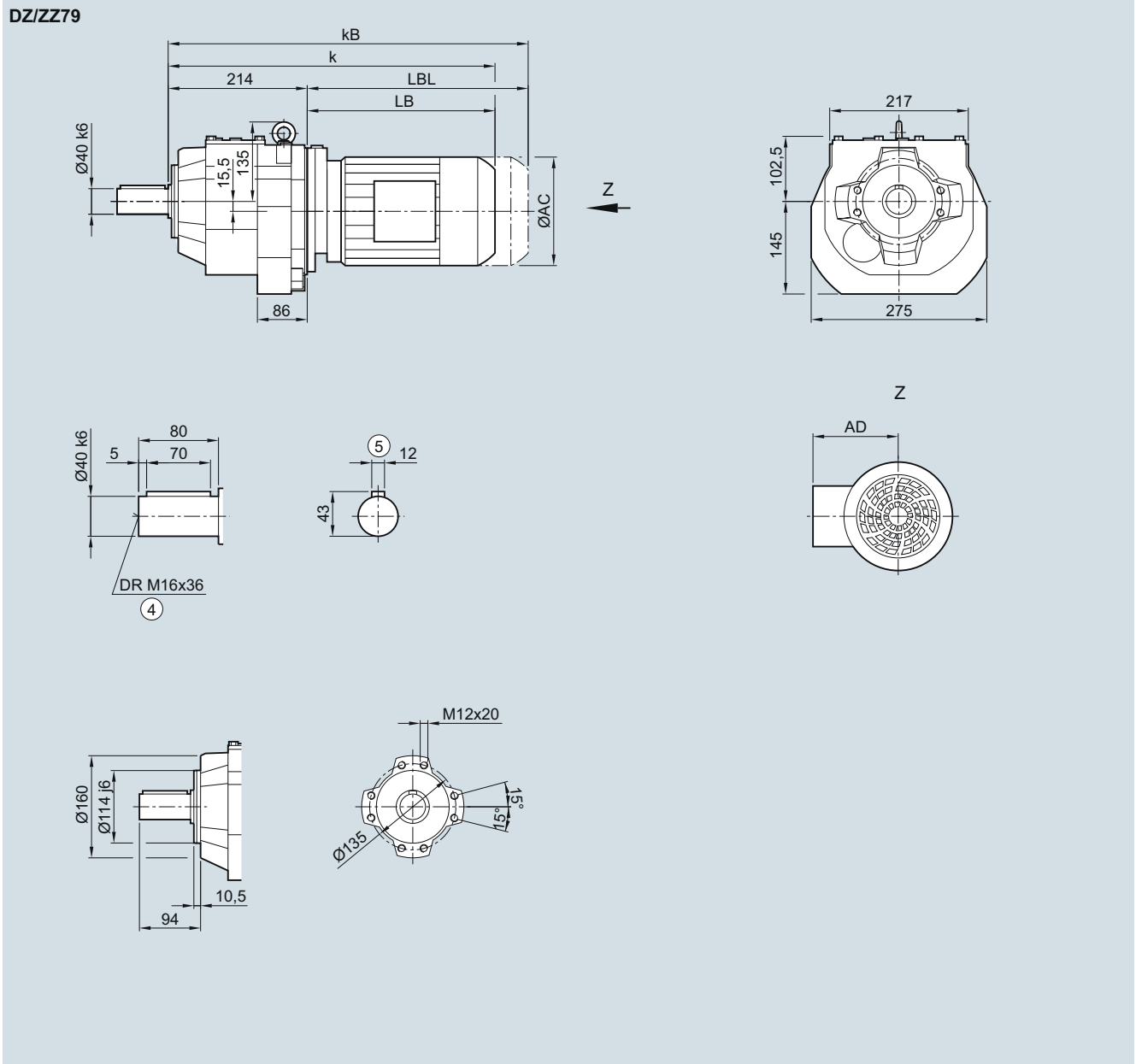
1) AD depends on the motor options, for other dimensions see page 8/36.

⑩ For inner contour see page 3/164

DZ/ZZ79 gearbox in a housing flange design

DZZ030

3



Motor	LA 71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z	160	160Z
AC	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD <sup>1)</sup>	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	428.5	447.5	488.5	523.5	550.0	590.0	606.5	641.5	616.5	641.5	669.5	719.5	751.5	811.5
kB	483.5	502.5	548.5	583.5	620.0	660.0	685.0	720.0	689.5	714.5	774.0	824.0	867.5	927.5
LB	214.5	233.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	288.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

④ DIN 332

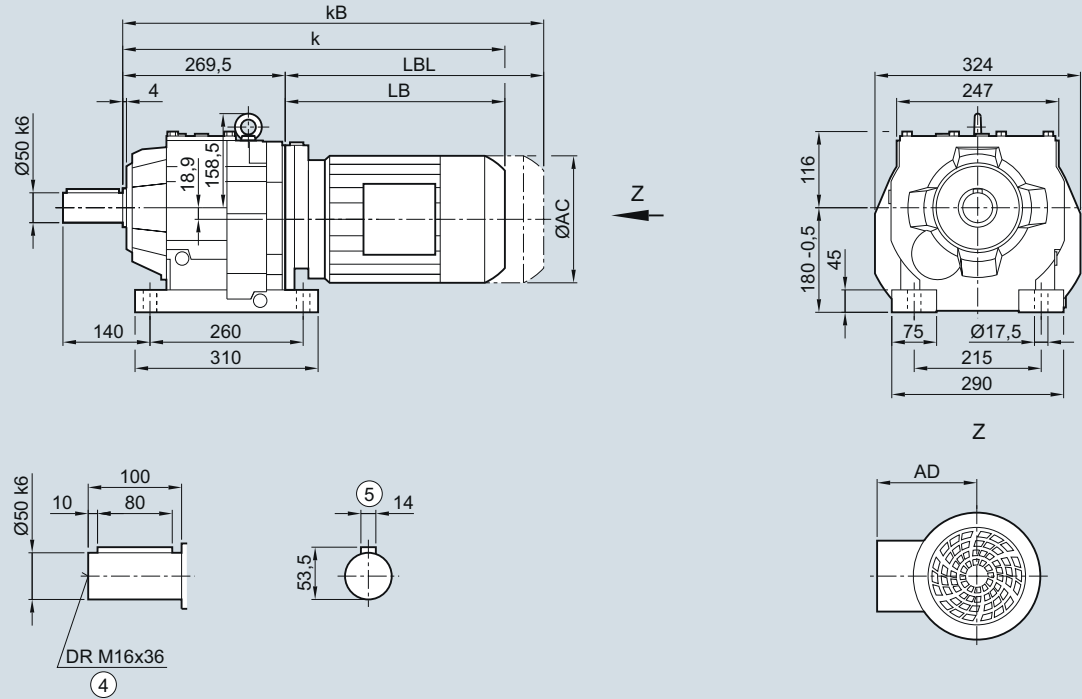
⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

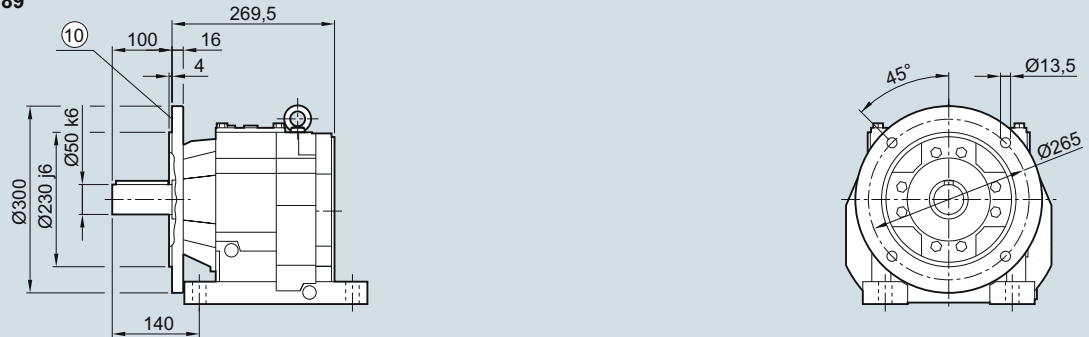
D/Z89 gearbox in a foot-mounted design and DB/ZB89 gearbox in a foot/flange-mounted design

DZ030, DZB030

D/Z89



DB/ZB89



Motor	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD <sup>1)</sup>	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	531.0	566.0	592.5	632.5	645.0	680.0	655.0	680.0	708.0	758.0	790.0	850.0	863.0	893.0
kB	591.0	626.0	662.5	702.5	723.5	758.5	728.0	753.0	812.5	862.5	906.0	966.0	992.0	1 022.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

④ DIN 332

1) AD depends on the motor options, for other dimensions see page 8/36.

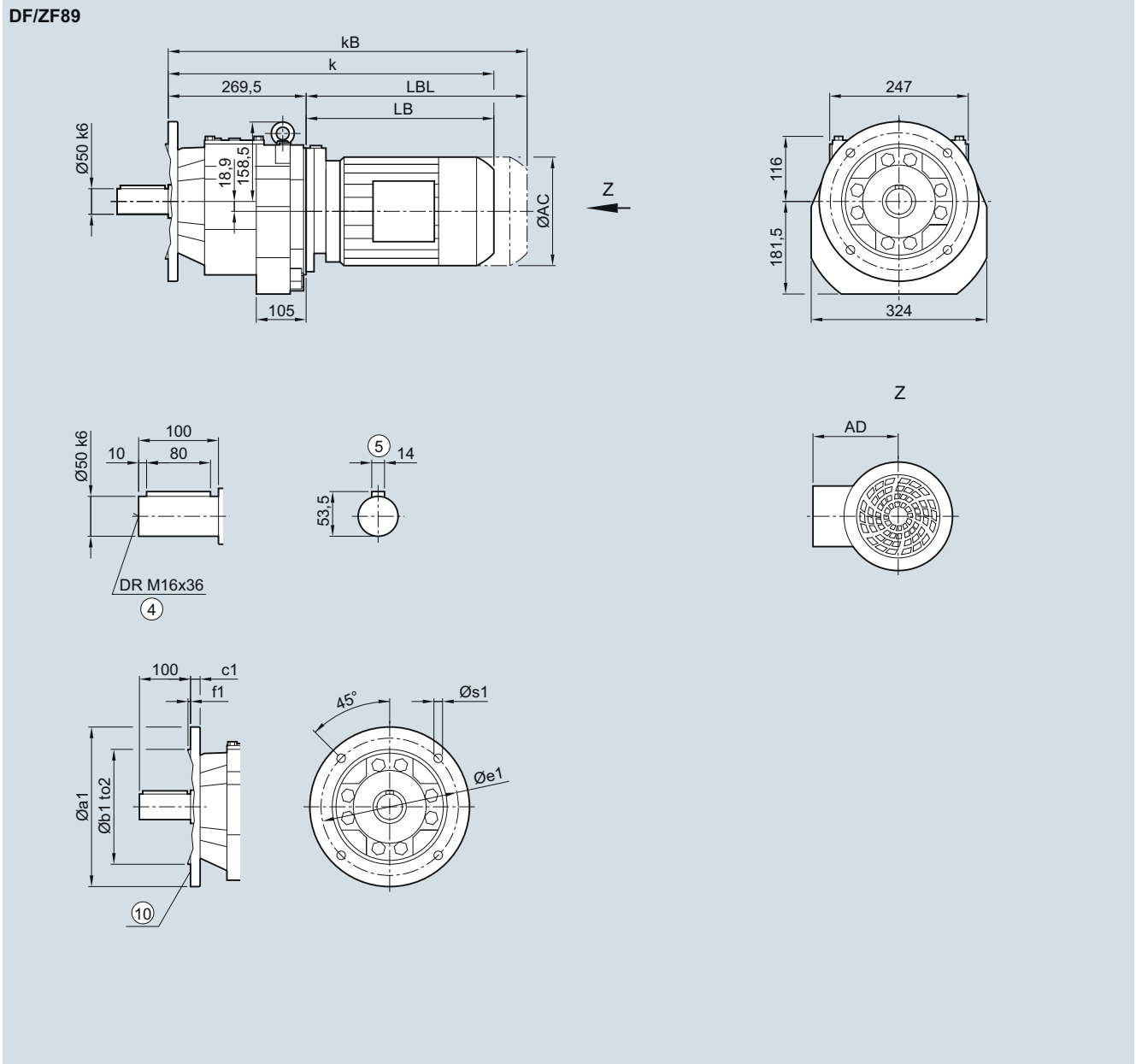
⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

DF/ZF89 gearbox in a flange-mounted design

DZF030

3



Flange	a1	b1	to2	c1	e1	f1	s1
	300	230	j6	16	265	4.0	13.5
	350	250	j6	18	300	5.0	17.5

Motor	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD <sup>1)</sup>	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	531.0	566.0	592.5	632.5	645.0	680.0	655.0	680.0	708.0	758.0	790.0	850.0	863.0	893.0
kB	591.0	626.0	662.5	702.5	723.5	758.5	728.0	753.0	812.5	862.5	906.0	966.0	992.0	1 022.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

④ DIN 332

⑤ Feather key/keyway DIN 6885-1

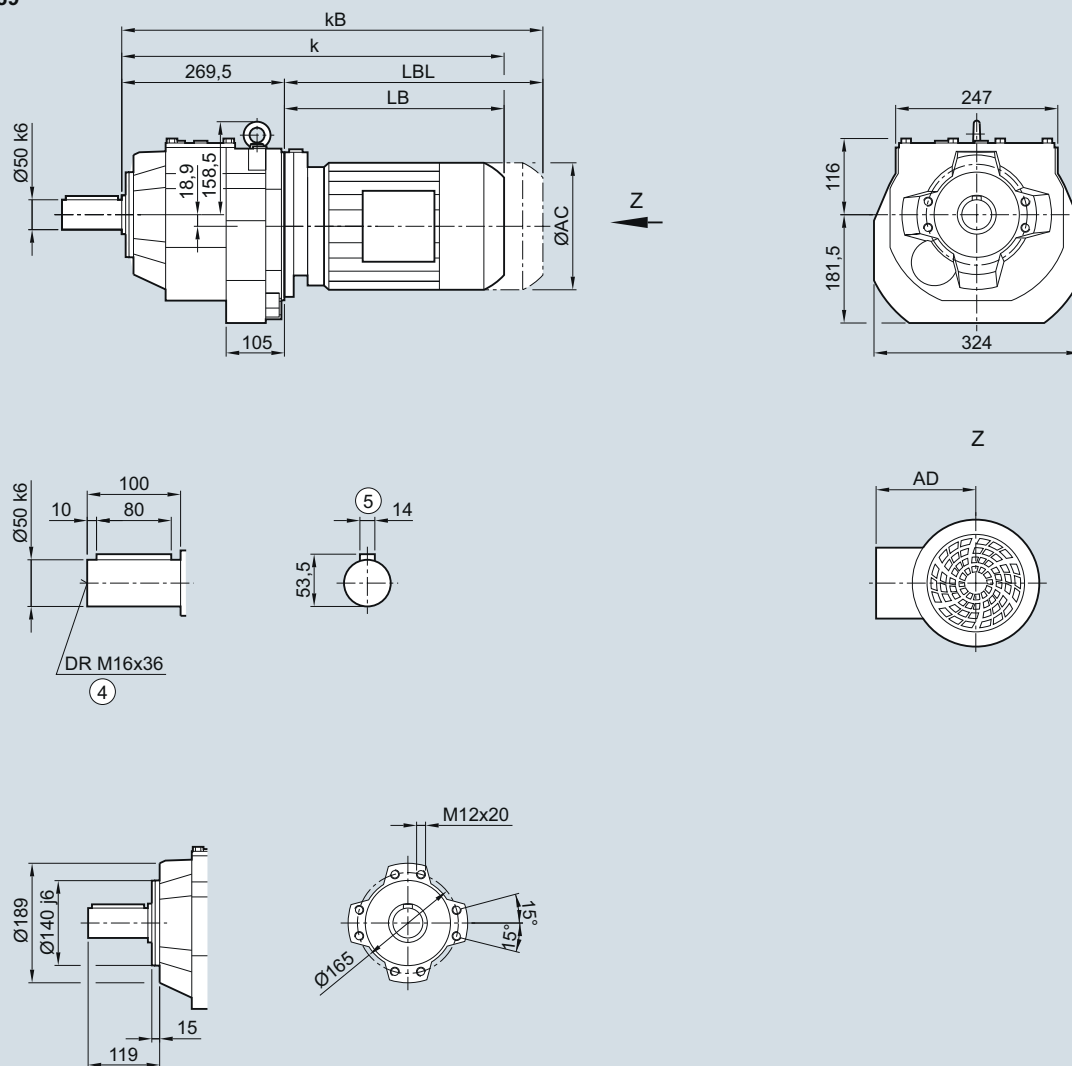
1) AD depends on the motor options, for other dimensions see page 8/36.

⑩ For inner contour see page 3/164

DZ/ZZ89 gearbox in a housing flange design

DZZ030

DZ/ZZ89



Motor	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD <sup>1)</sup>	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	531.0	566.0	592.5	632.5	645.0	680.0	655.0	680.0	708.0	758.0	790.0	850.0	863.0	893.0
kB	591.0	626.0	662.5	702.5	723.5	758.5	728.0	753.0	812.5	862.5	906.0	966.0	992.0	1 022.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

④ DIN 332

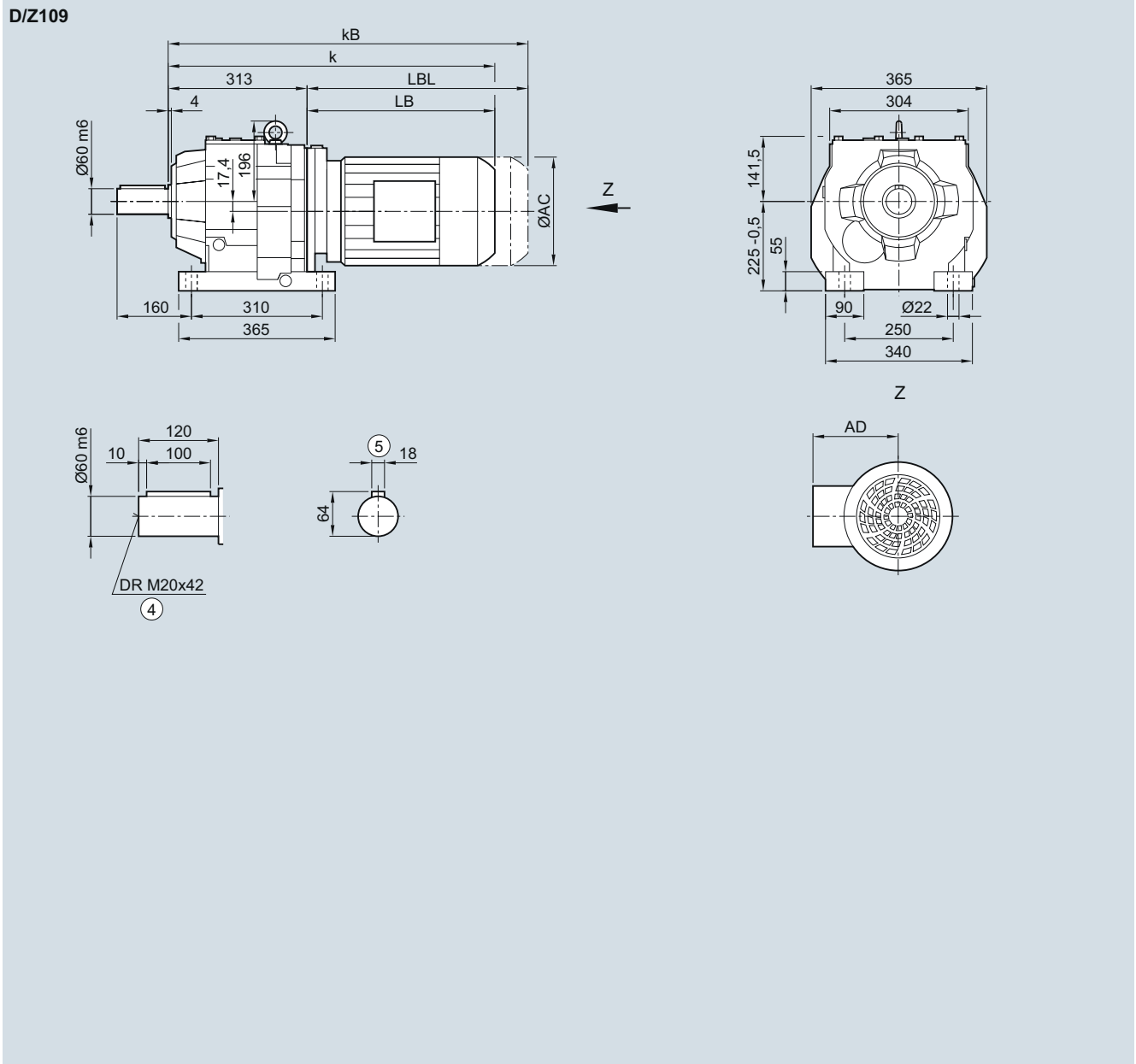
⑤ Feather key/keyway DIN 6885-1

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

D/Z109 gearbox in a foot-mounted design

DZ030

3



Motor	LE 90S	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD <sup>1)</sup>	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0
k	629.0	669.0	679.5	714.5	689.5	714.5	742.5	792.5	824.5	884.5	897.5	927.5	965.5	990.5	1 011.0	1 071.0
kB	699.0	739.0	758.0	793.0	762.5	787.5	847.0	897.0	940.5	1 000.5	1 026.5	1 056.5	1 112.5	1 137.5	1 239.0	1 299.0
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.0	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

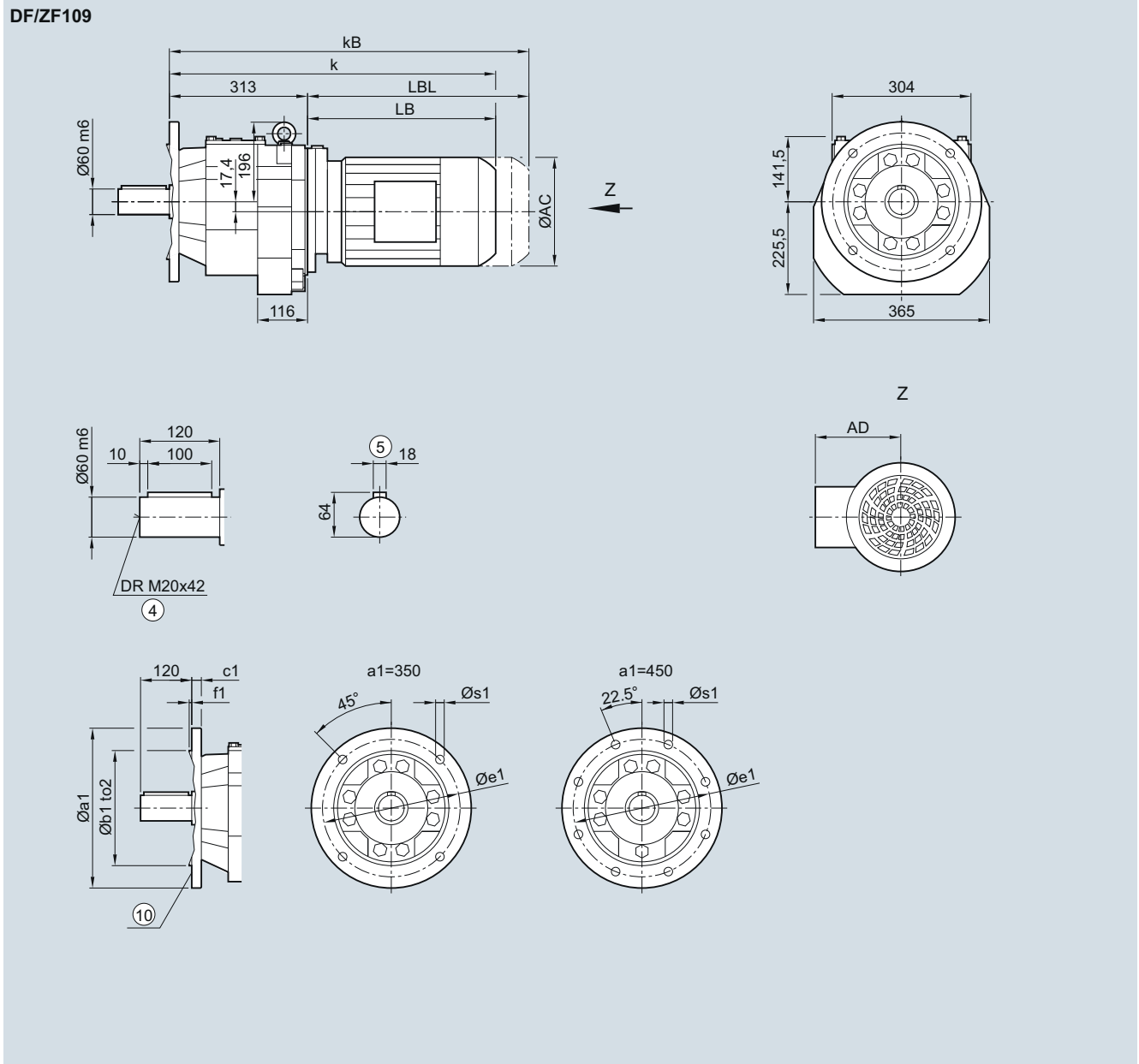
④ DIN 332

⑤ Feather key/keyway DIN 6885-1

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

DF/ZF109 gearbox in a flange-mounted design

DZF030



Flange	a1	b1	to2	c1	e1	f1	s1
	350	250	h6	18	300	5	17.5
	450	350	h6	22	400	5	17.5

Motor	LE										LES					
	90S	90Z	100	100Z	112	112Z	132	132Z	160	160Z	180	180Z	200	200Z	225	225Y
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD <sup>1)</sup>	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0
k	629.0	669.0	679.5	714.5	689.5	714.5	742.5	792.5	824.5	884.5	897.5	927.5	965.5	990.5	1 011.0	1 071.0
kB	699.0	739.0	758.0	793.0	762.5	787.5	847.0	897.0	940.5	1 000.5	1 026.5	1 056.5	1 112.5	1 137.5	1 239.0	1 299.0
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.0	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

④ DIN 332

⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

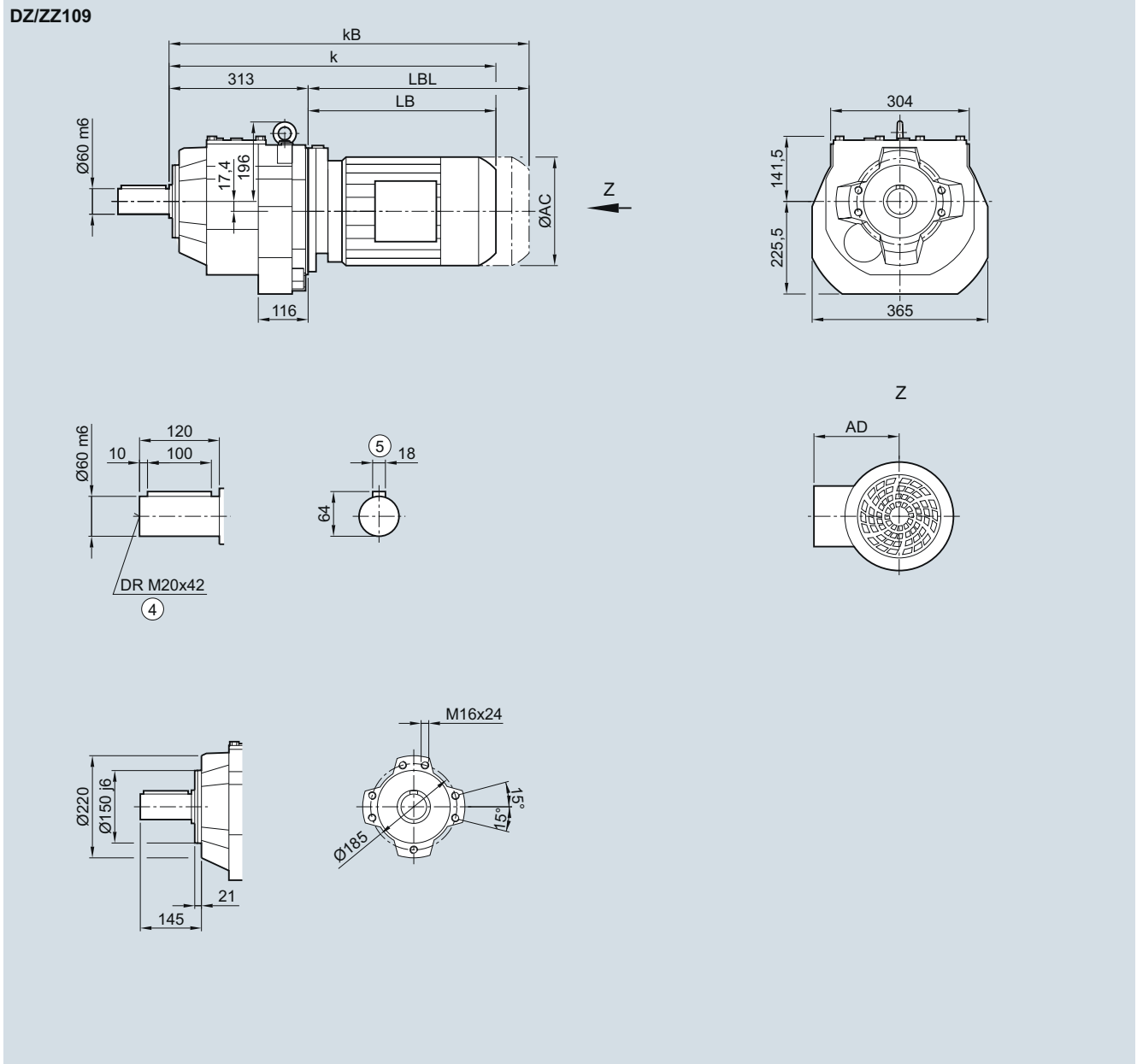
⑩ For inner contour see page 3/164



DZ/ZZ109 gearbox in a housing flange design

DZZ030

3



Motor	LE 90S	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD <sup>1)</sup>	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0
k	629.0	669.0	679.5	714.5	689.5	714.5	742.5	792.5	824.5	884.5	897.5	927.5	965.5	990.5	1 011.0	1 071.0
kB	699.0	739.0	758.0	793.0	762.5	787.5	847.0	897.0	940.5	1 000.5	1 026.5	1 056.5	1 112.5	1 137.5	1 239.0	1 299.0
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.0	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

④ DIN 332

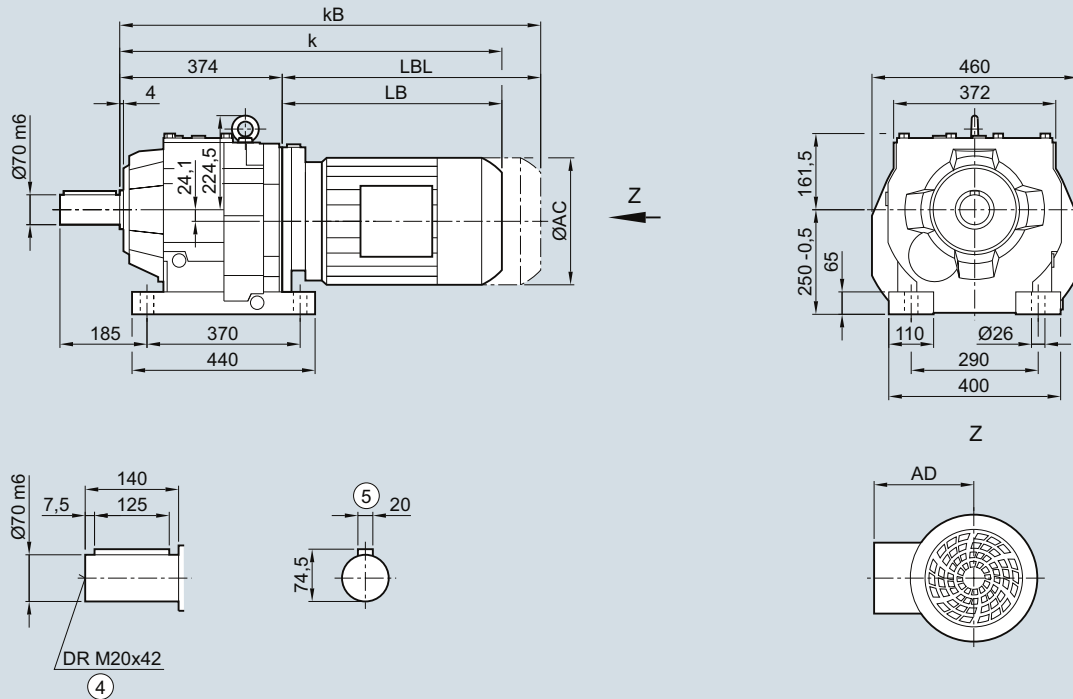
⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

D/Z129 gearbox in a foot-mounted design

DZ030

D/Z129



Motor	LE 90S	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	683.0	723.0	731.5	766.5	741.5	766.5	792.5	842.5	874.5	934.5	947.5	977.5	1 015.5	1 040.5	1 067.0	1 127.0	1 172.5
kB	753.0	793.0	810.0	845.0	814.5	839.5	897.0	947.0	990.5	1 050.5	1 076.5	1 106.5	1 162.5	1 187.5	1 295.0	1 355.0	1 397.5
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5

④ DIN 332

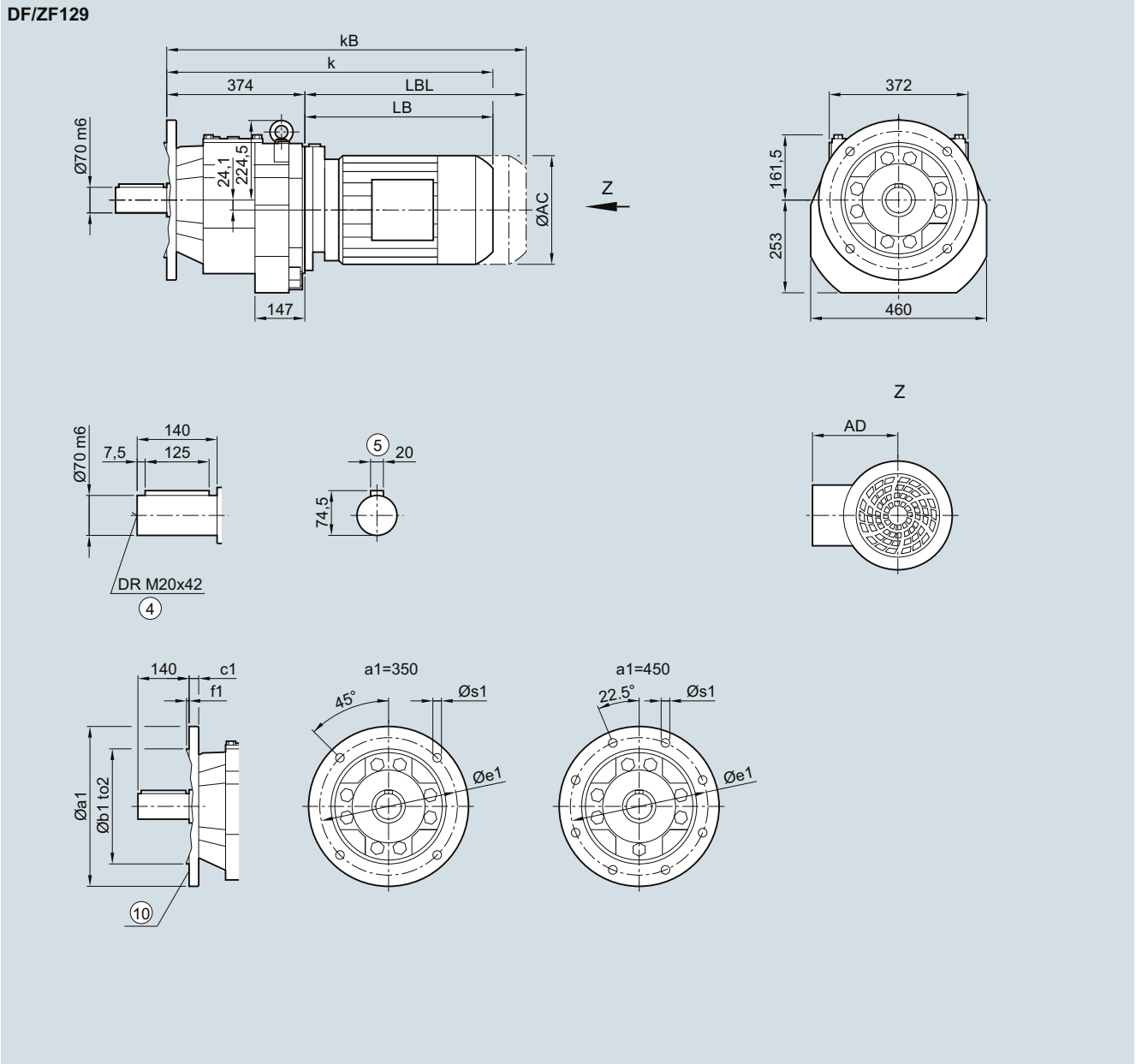
1) AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

DF/ZF129 gearbox in a flange-mounted design

DZF030

3



Flange	a1	b1	to2	c1	e1	f1	s1										
	350	250	h6	20	300	5	17.5										
		350	h6	22	400	5	17.5										
Motor	LE 90S	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	683.0	723.0	731.5	766.5	741.5	766.5	792.5	842.5	874.5	934.5	947.5	977.5	1 015.5	1 040.5	1 067.0	1 127.0	1 172.5
kB	753.0	793.0	810.0	845.0	814.5	839.5	897.0	947.0	990.5	1 050.5	1 076.5	1 106.5	1 162.5	1 187.5	1 295.0	1 355.0	1 397.5
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5

④ DIN 332

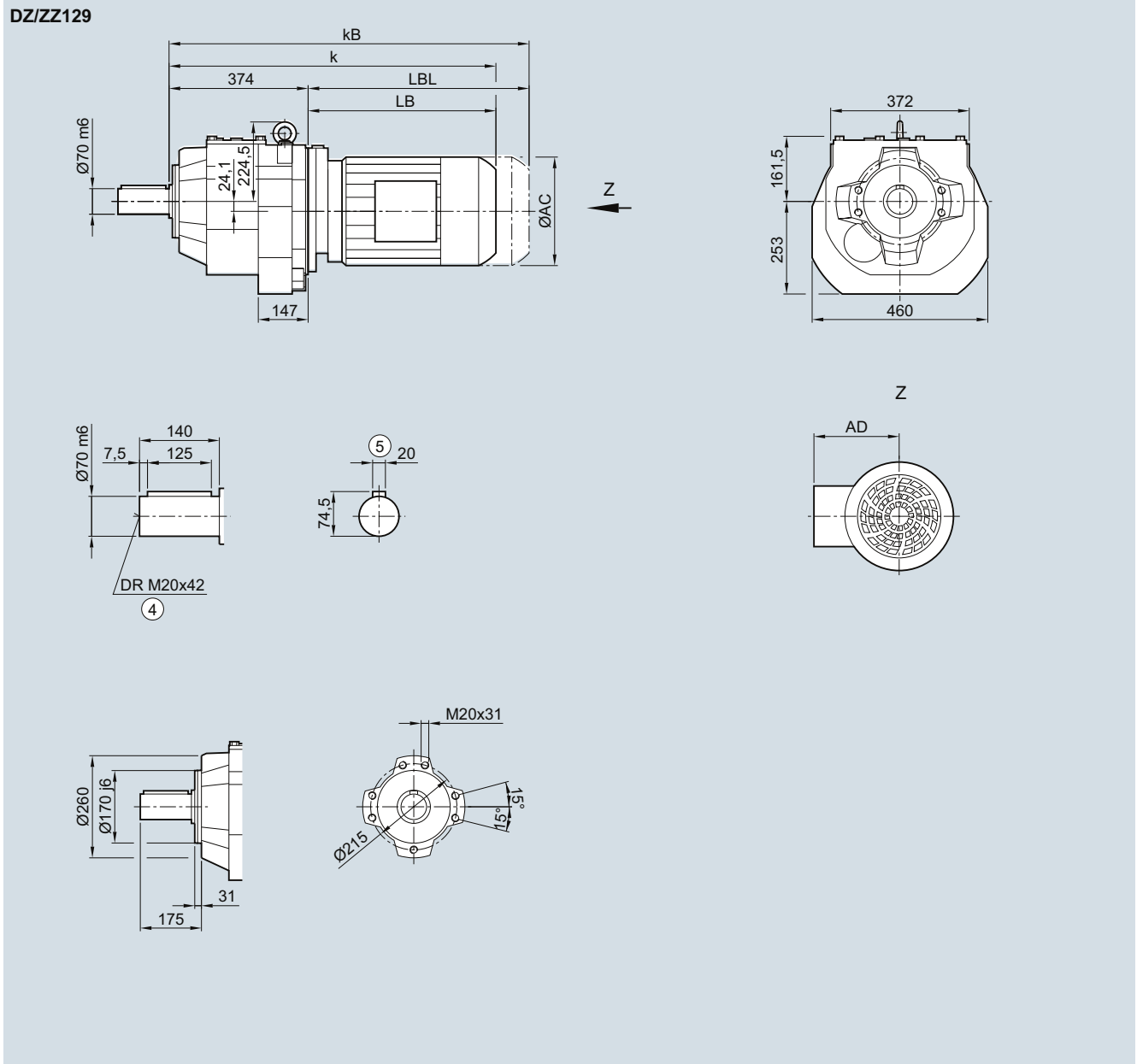
⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

⑩ For inner contour see page 3/164

DZ/ZZ129 gearbox in a housing flange design

DZZ030



Motor	LE 90S	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	683.0	723.0	731.5	766.5	741.5	766.5	792.5	842.5	874.5	934.5	947.5	977.5	1 015.5	1 040.5	1 067.0	1 127.0	1 172.5
kB	753.0	793.0	810.0	845.0	814.5	839.5	897.0	947.0	990.5	1 050.5	1 076.5	1 106.5	1 162.5	1 187.5	1 295.0	1 355.0	1 397.5
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5

④ DIN 332

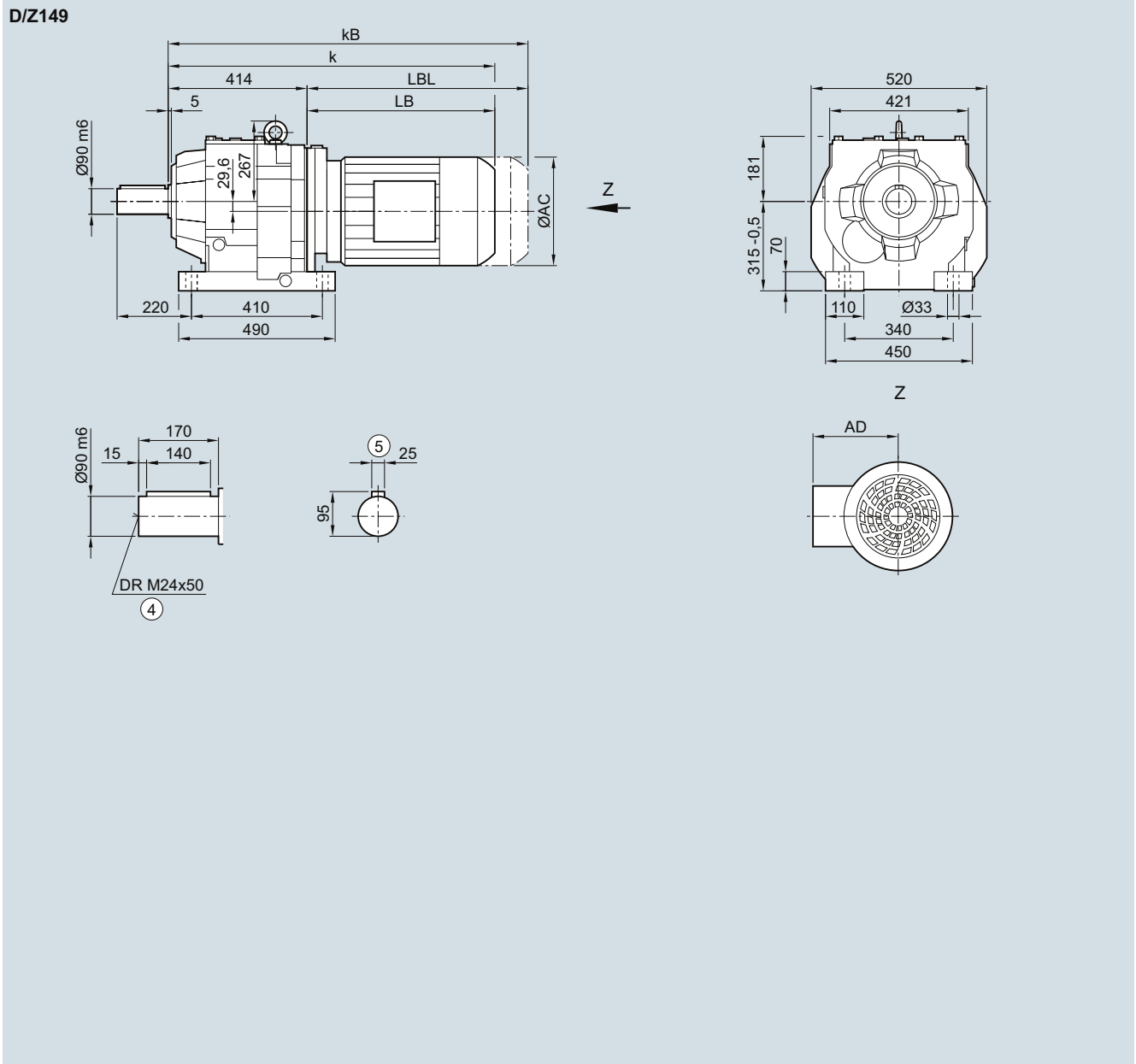
⑤ Feather key/keyway DIN 6885-1

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

D/Z149 gearbox in a foot-mounted design

DZ030

3



Motor	LE 100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	770.0	805.0	780.0	805.0	826.0	876.0	908.0	968.0	981.0	1 011.0	1 049.0	1 074.0	1 094.5	1 154.5	1 206.0
kB	848.5	883.5	853.0	878.0	930.5	980.5	1 024.0	1 084.0	1 110.0	1 140.0	1 196.0	1 221.0	1 322.5	1 382.5	1 431.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.5	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	1 017.0

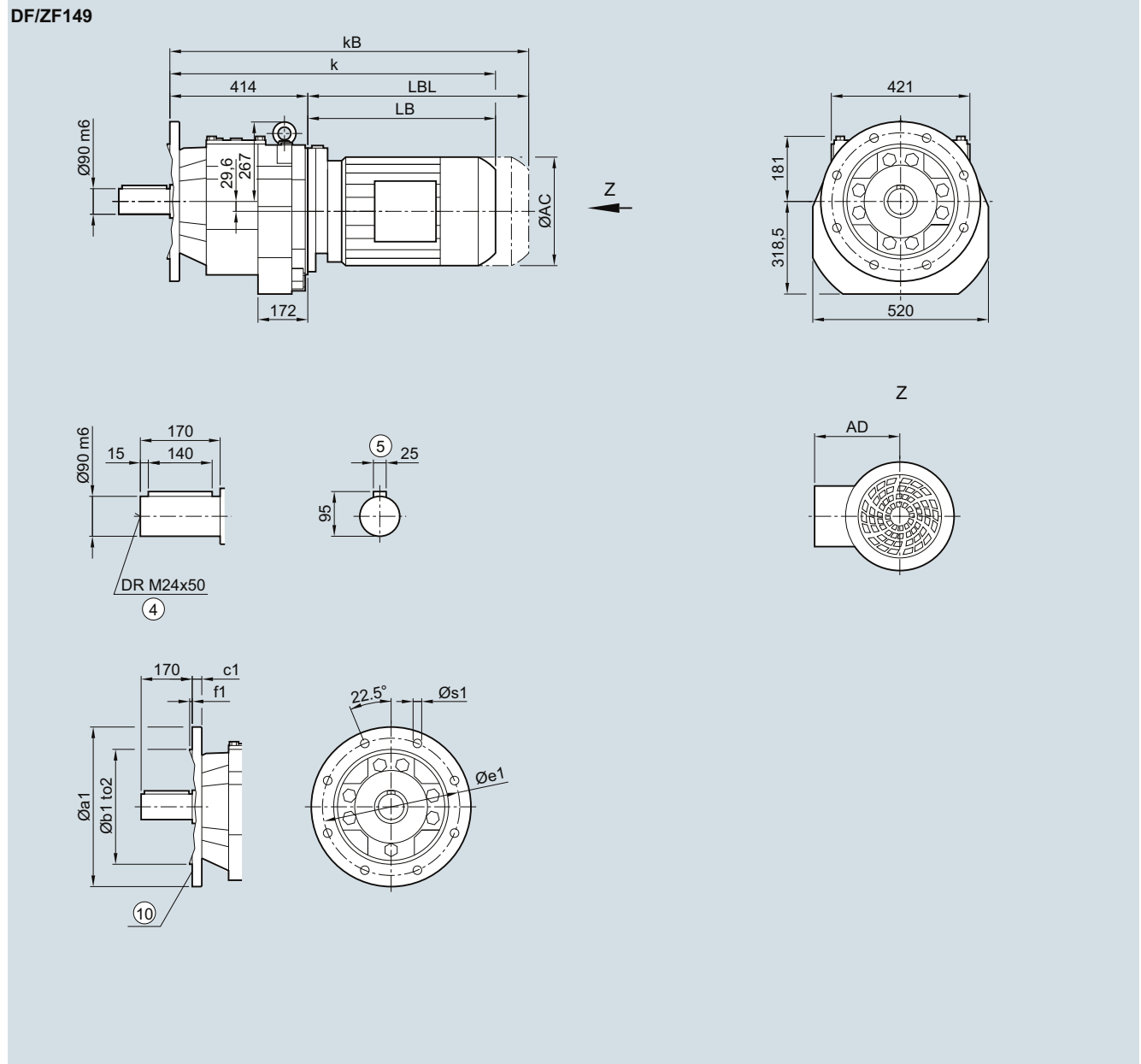
④ DIN 332

⑤ Feather key/keyway DIN 6885-1

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

DF/ZF149 gearbox in a flange-mounted design

DZF030



Flange	a1	b1	to2	c1	e1	f1	s1								
	450	350	h6	22	400	5	17.5								
	550	450	h6	25	500	5	17.5								
Motor	LE 100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	770.0	805.0	780.0	805.0	826.0	876.0	908.0	968.0	981.0	1 011.0	1 049.0	1 074.0	1 094.5	1 154.5	1 206.0
kB	848.5	883.5	853.0	878.0	930.5	980.5	1 024.0	1 084.0	1 110.0	1 140.0	1 196.0	1 221.0	1 322.5	1 382.5	1 431.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.5	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	1 017.0

④ DIN 332

1) AD depends on the motor options, for other dimensions see page 8/36.

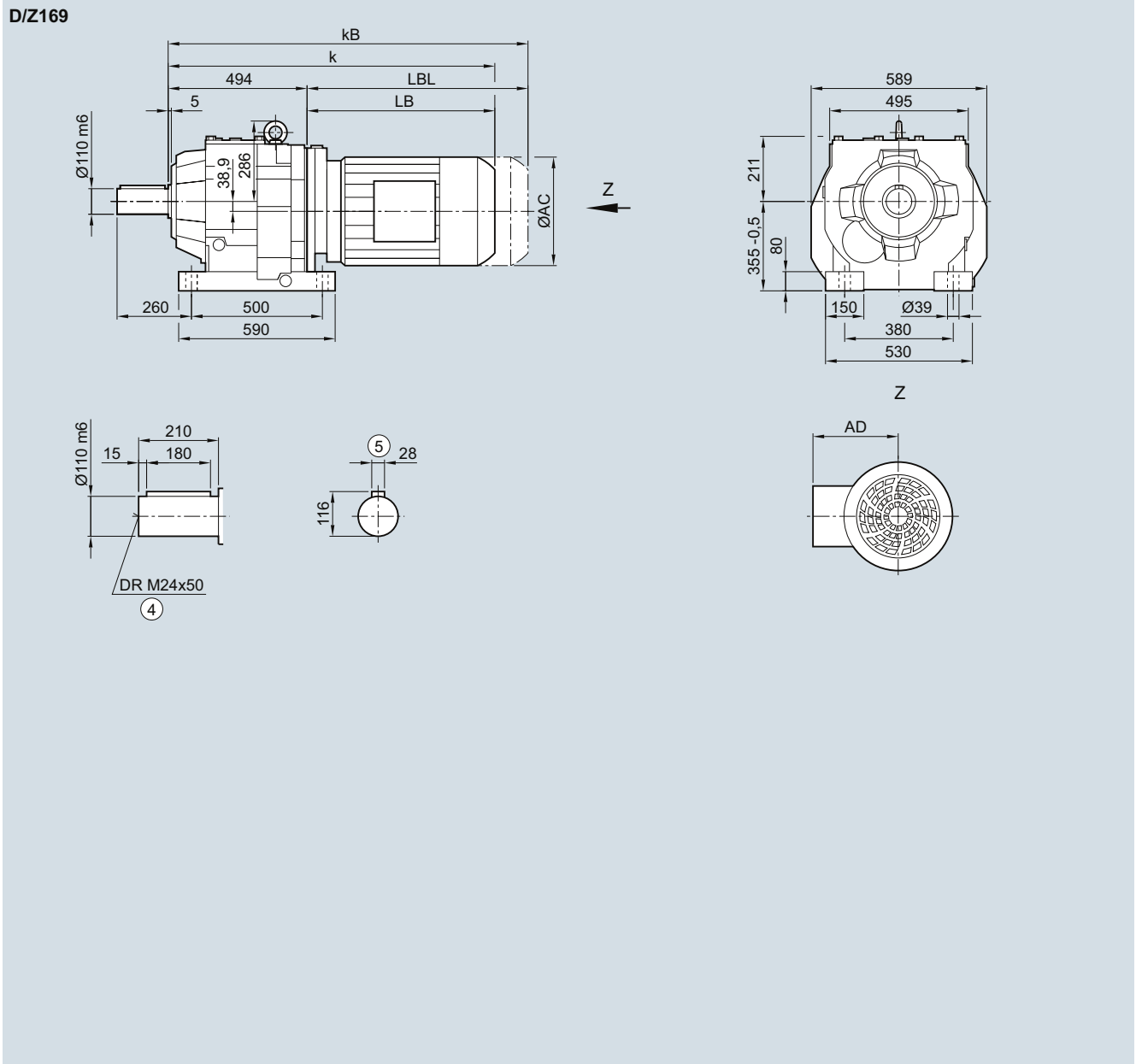
⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

D/Z169 gearbox in a foot-mounted design

DZ030

3



Motor	LE 112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	847.5	872.5	893.0	943.0	975.0	1 035.0	1 047.5	1 077.5	1 115.5	1 140.5	1 160.0	1 220.0	1 267.5
kB	920.5	945.5	997.5	1 047.5	1 091.0	1 151.0	1 176.5	1 206.5	1 262.5	1 287.5	1 388.0	1 448.0	1 492.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

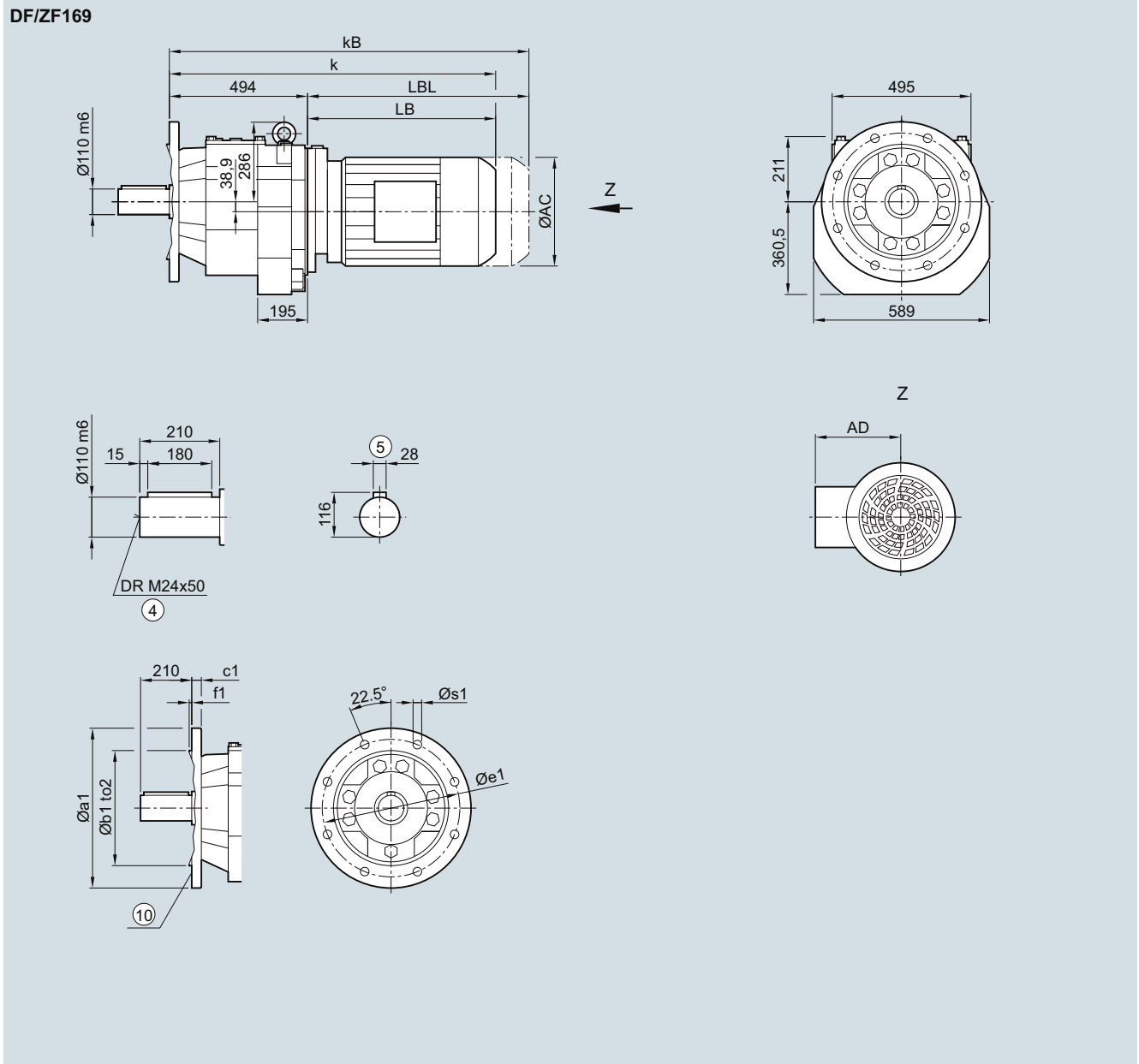
④ DIN 332

1) AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

DF/ZF169 gearbox in a flange-mounted design

DZF030



Flange	a1	b1	to2	c1	e1	f1	s1
	450	350	h6	22	400	5	17.5
	550	450	h6	25	500	5	17.5

Motor	LE 112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	847.5	872.5	893.0	943.0	975.0	1 035.0	1 047.5	1 077.5	1 115.5	1 140.5	1 160.0	1 220.0	1 267.5
kB	920.5	945.5	997.5	1 047.5	1 091.0	1 151.0	1 176.5	1 206.5	1 262.5	1 287.5	1 388.0	1 448.0	1 492.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

④ DIN 332

⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

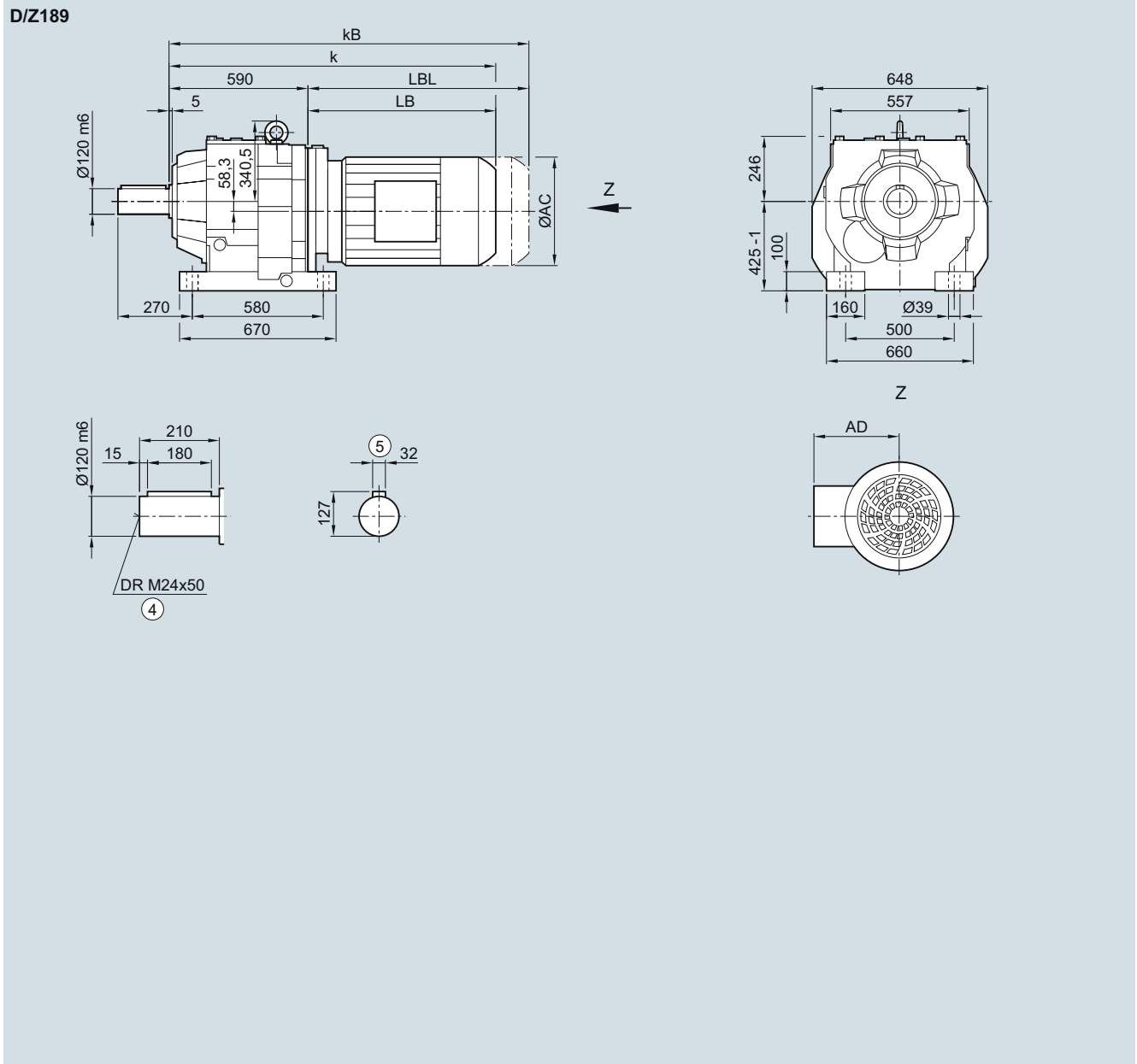
⑩ For inner contour see page 3/164



D/Z189 gearbox in a foot-mounted design

DZ030

3



Motor	LE 112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	943.5	968.5	989.0	1 039.0	1 071.0	1 131.0	1 143.5	1 173.5	1 211.5	1 236.5	1 256.0	1 316.0	1 363.5
kB	1 016.5	1 041.5	1 093.5	1 143.5	1 187.0	1 247.0	1 272.5	1 302.5	1 358.5	1 383.5	1 484.0	1 544.0	1 588.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

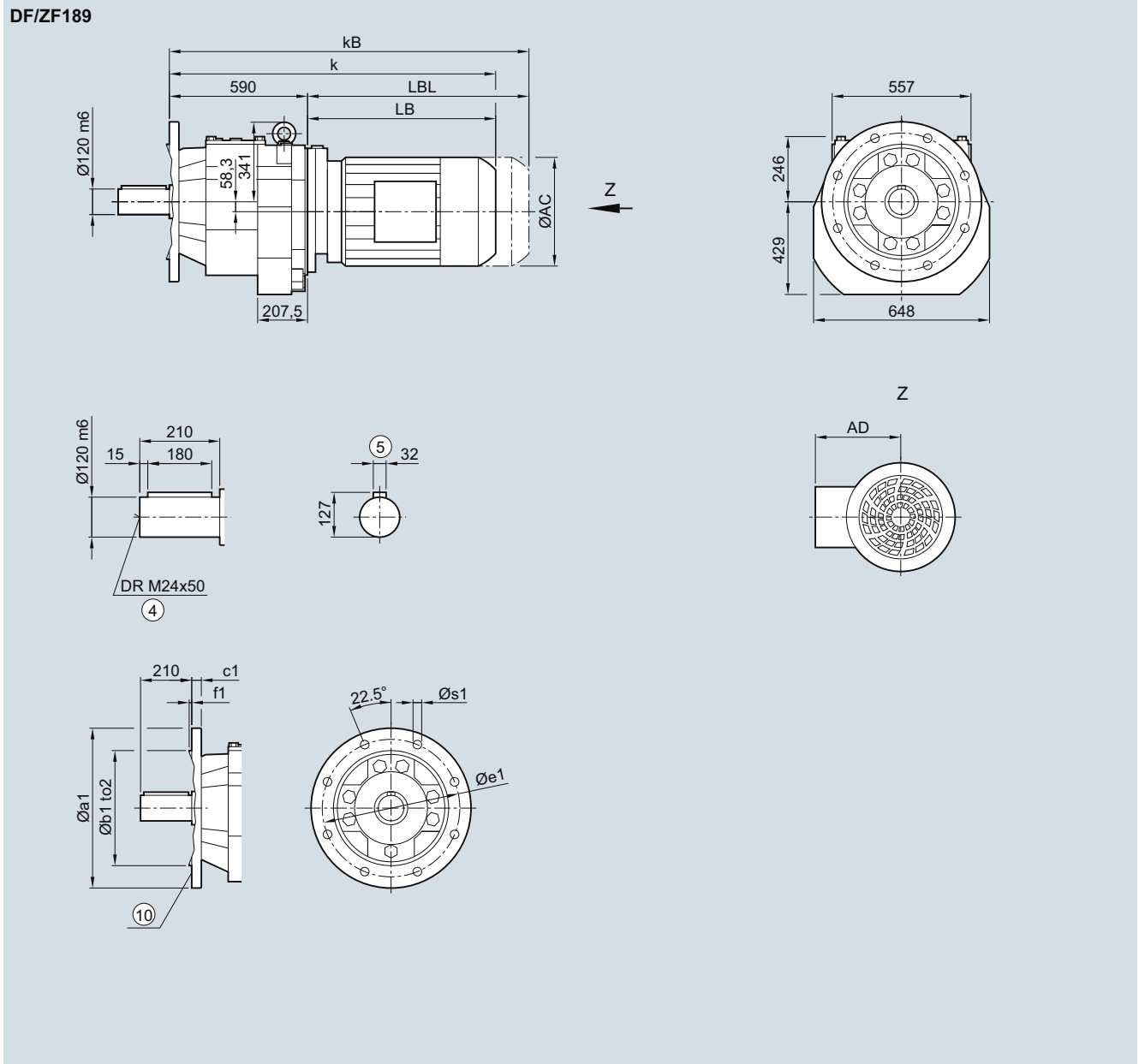
④ DIN 332

1) AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

DF/ZF189 gearbox in a flange-mounted design

DZF030



Flange	a1	b1	to2	c1	e1	f1	s1
	550	450	h6	25	500	5	17.5
	660	550	h6	28	600	6	22.0

Motor	LE 112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	943.5	968.5	989.0	1 039.0	1 071.0	1 131.0	1 143.5	1 173.5	1 211.5	1 236.5	1 256.0	1 316.0	1 363.5
kB	1 016.5	1 041.5	1 093.5	1 143.5	1 187.0	1 247.0	1 272.5	1 302.5	1 358.5	1 383.5	1 484.0	1 544.0	1 588.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

④ DIN 332

1) AD depends on the motor options, for other dimensions see page 8/36.

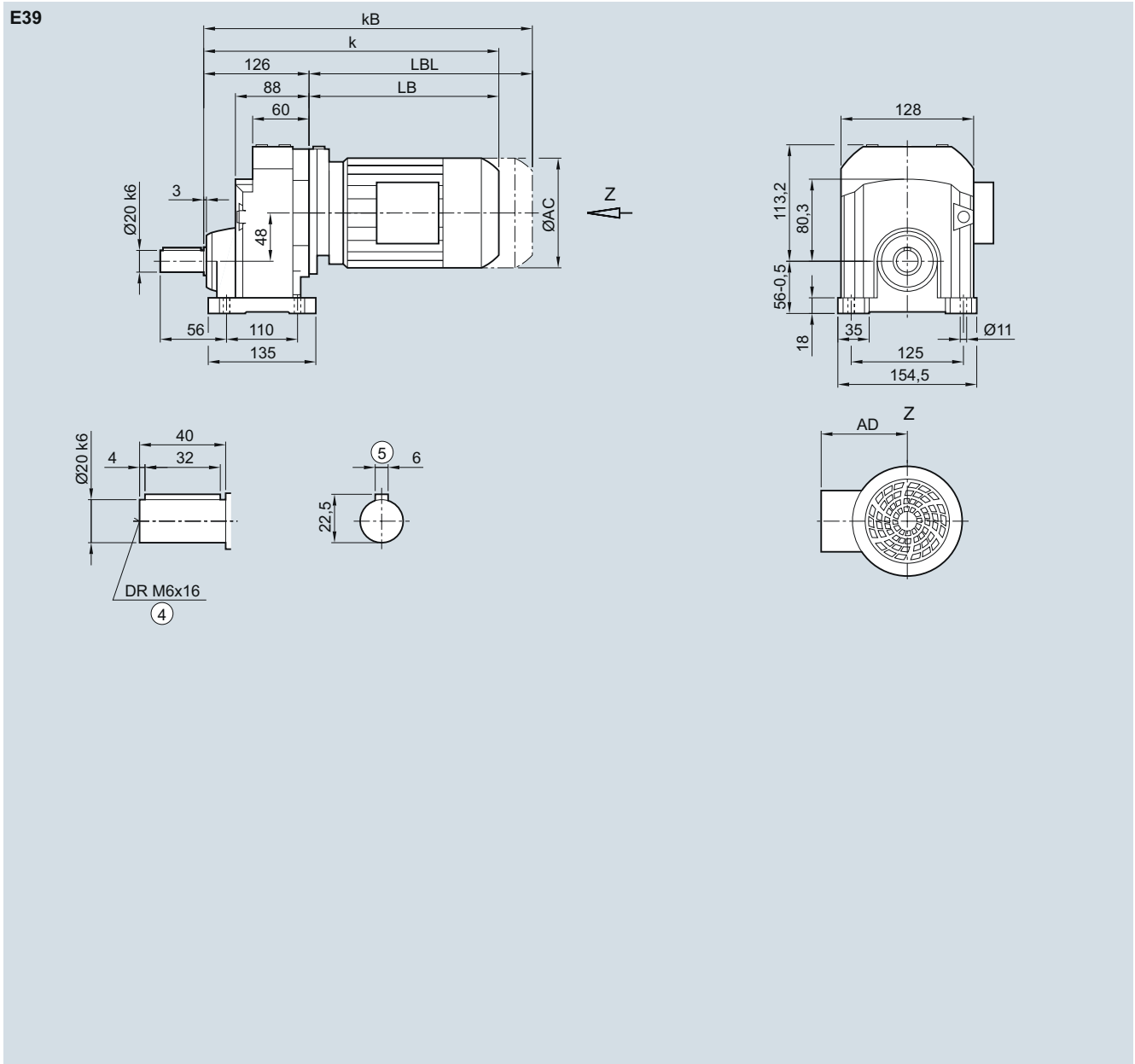
⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

E39 gearbox in a foot-mounted design

E030

3



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	320.0	352.0	371.0	416.0	451.0	477.5	517.5	534.0	569.0	544.0	569.0
kB	364.5	407.0	426.0	476.0	511.0	547.5	587.5	612.5	647.5	617.0	642.0
LB	194.0	226.0	245.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	300.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

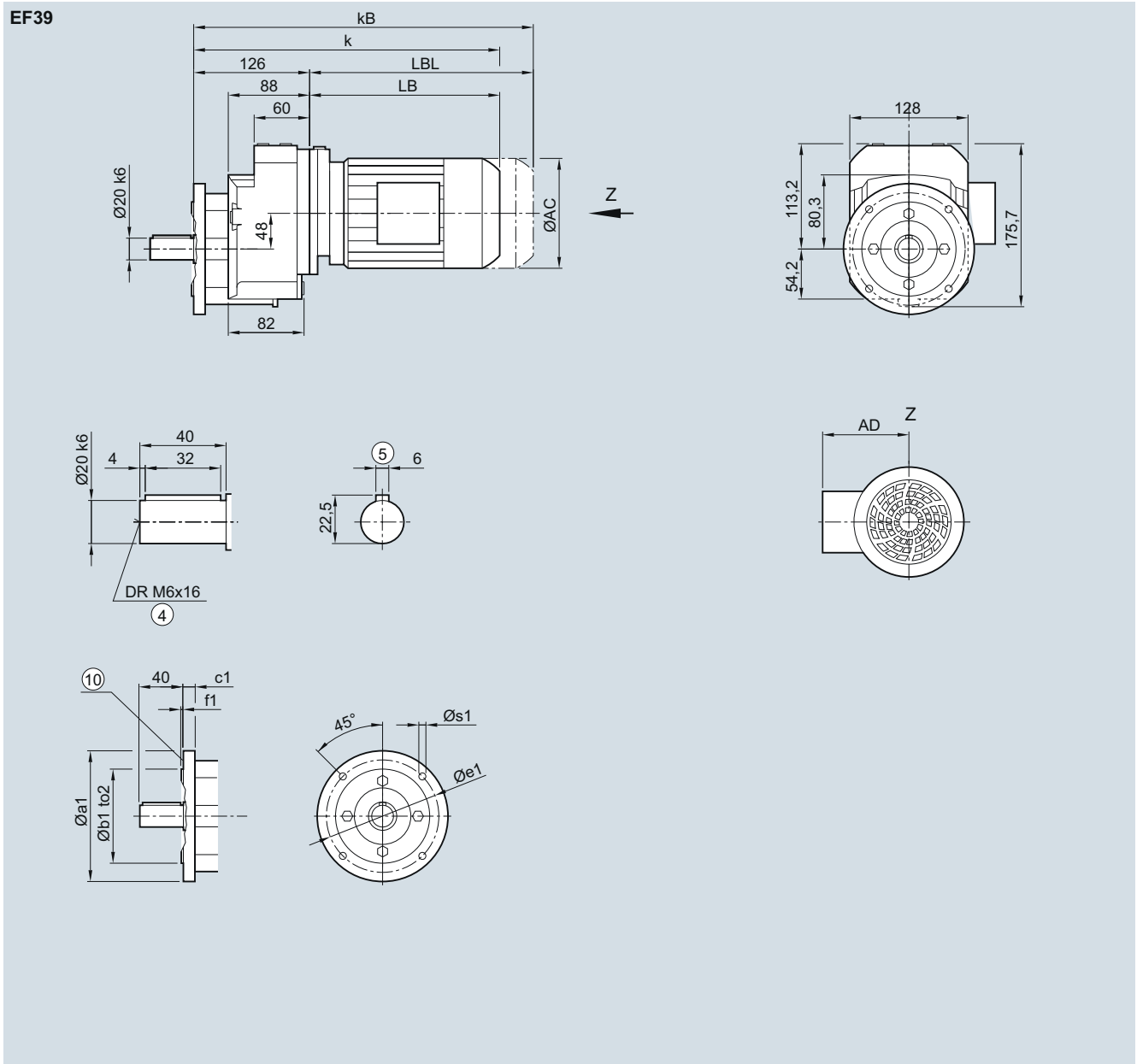
④ DIN 332

⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

EF39 gearbox in a flange-mounted design

EF030



Flange	a1	b1	to2	c1	e1	f1	s1
	120	80	j6	8	100	3.0	6.8
	140	95	j6	7	115	3.0	9.0
	160	110	j6	10	130	3.5	9.0
	200	130	j6	12	165	3.5	11.0

Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	320.0	352.0	371.0	416.0	451.0	477.5	517.5	534.0	569.0	544.0	569.0
k <sub>B</sub>	364.5	407.0	426.0	476.0	511.0	547.5	587.5	612.5	647.5	617.0	642.0
LB	194.0	226.0	245.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	300.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

④ DIN 332

1) AD depends on the motor options, for other dimensions see page 8/36.

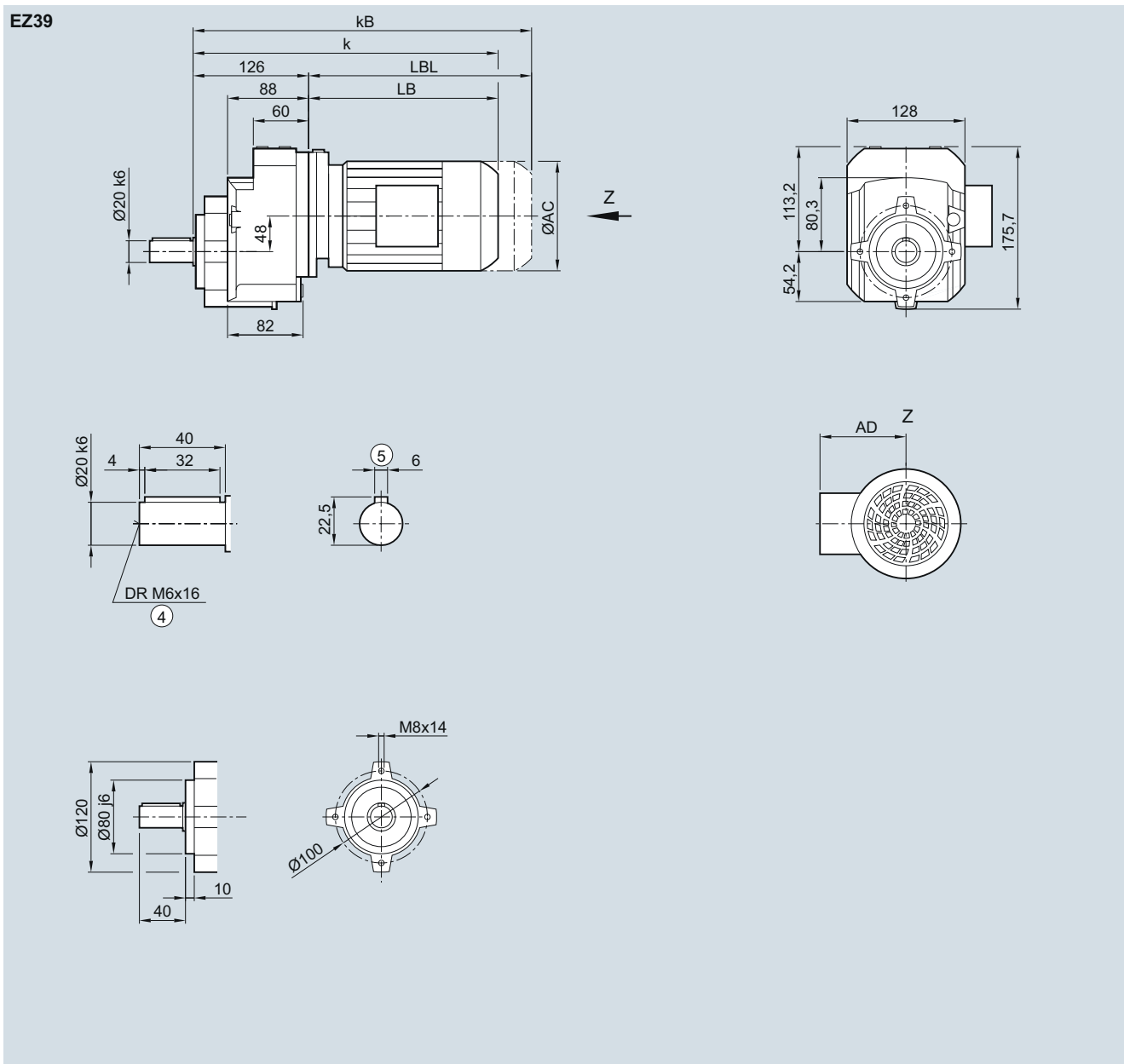
⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

**EZ39 gearbox in a housing flange design**

**EZ030**

3



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	320.0	352.0	371.0	416.0	451.0	477.5	517.5	534.0	569.0	544.0	569.0
k <sub>B</sub>	364.5	407.0	426.0	476.0	511.0	547.5	587.5	612.5	647.5	617.0	642.0
LB	194.0	226.0	245.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	300.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

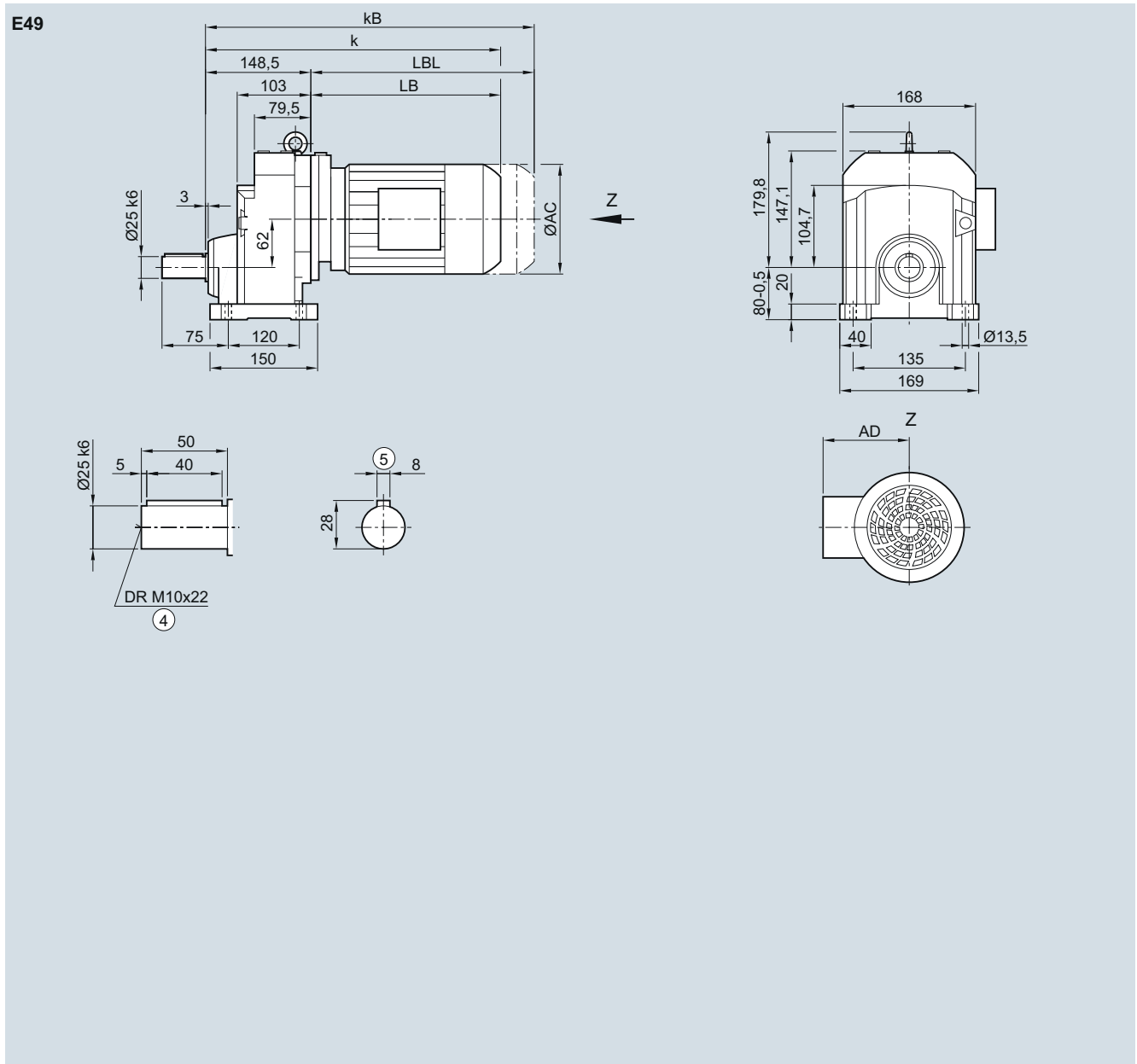
④ DIN 332

⑤ Feather key/keyway DIN 6885-1

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

E49 gearbox in a foot-mounted design

E030



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	333.0	365.0	384.0	429.0	464.0	490.5	530.5	547.0	582.0	557.0	591.5	610.0	660.0
kB	377.5	420.0	439.0	489.0	524.0	560.5	600.5	625.5	660.5	630.0	664.5	714.5	764.5
LB	184.5	216.5	235.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	290.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

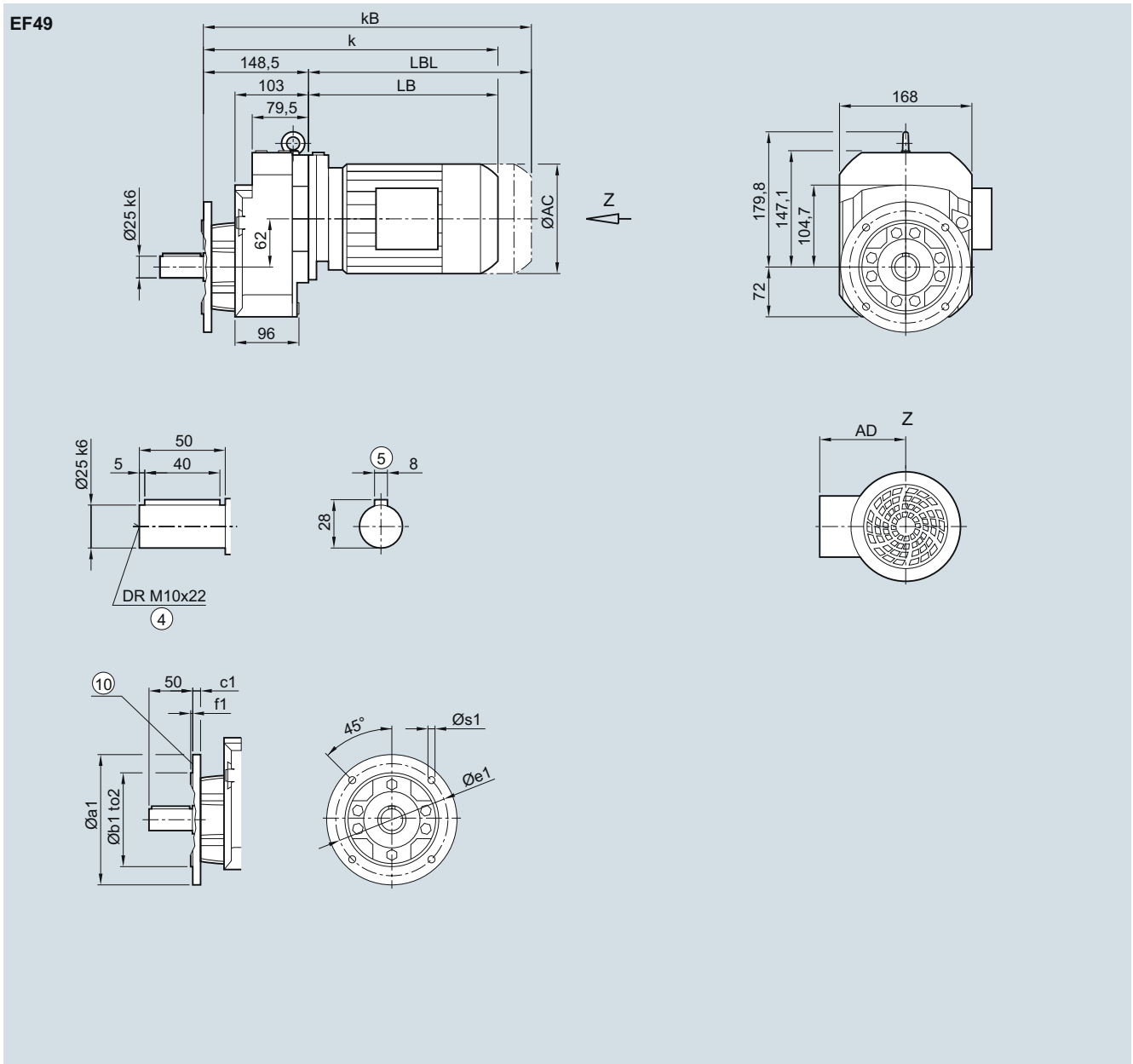
1) AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

EF49 gearbox in a flange-mounted design

EF030

3



Flange	a1	b1	to2	c1	e1	f1	s1
	160	110	j6	10	130	3.5	9.0
	200	130	j6	12	165	3.5	11.0
	250	180	j6	15	215	4.0	13.5

Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	333.0	365.0	384.0	429.0	464.0	490.5	530.5	547.0	582.0	557.0	591.5	610.0	660.0
k <sub>B</sub>	377.5	420.0	439.0	489.0	524.0	560.5	600.5	625.5	660.5	630.0	664.5	714.5	764.5
LB	184.5	216.5	235.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	290.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

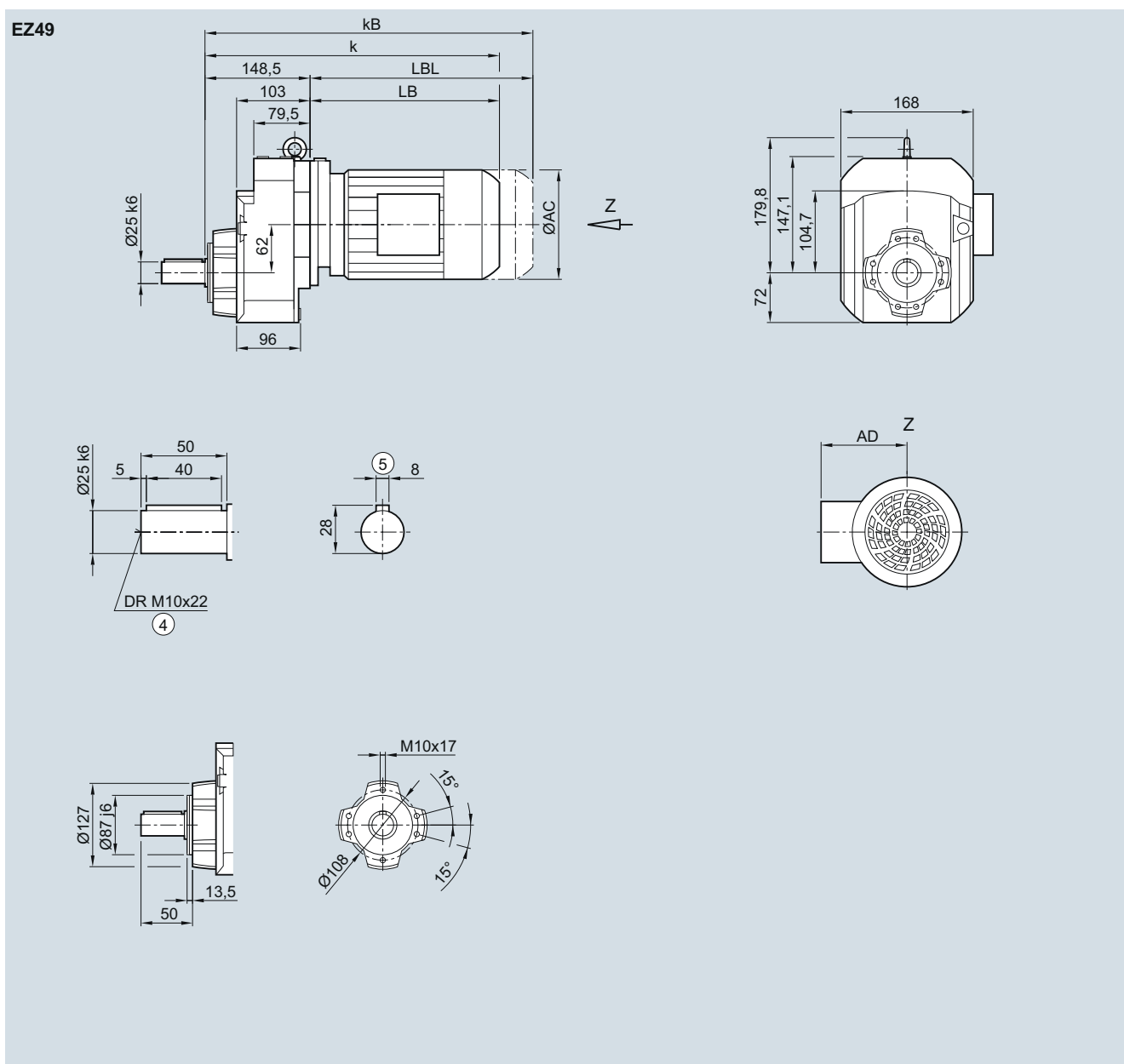
1) AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

**EZ49 gearbox in a housing flange design**

**EZ030**



Motor	LA 63	71	71Z	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z
AC	117.8	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD <sup>1)</sup>	124.0	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	333.0	365.0	384.0	429.0	464.0	490.5	530.5	547.0	582.0	557.0	591.5	610.0	660.0
kB	377.5	420.0	439.0	489.0	524.0	560.5	600.5	625.5	660.5	630.0	664.5	714.5	764.5
LB	184.5	216.5	235.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	290.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

1) AD depends on the motor options, for other dimensions see page 8/36.

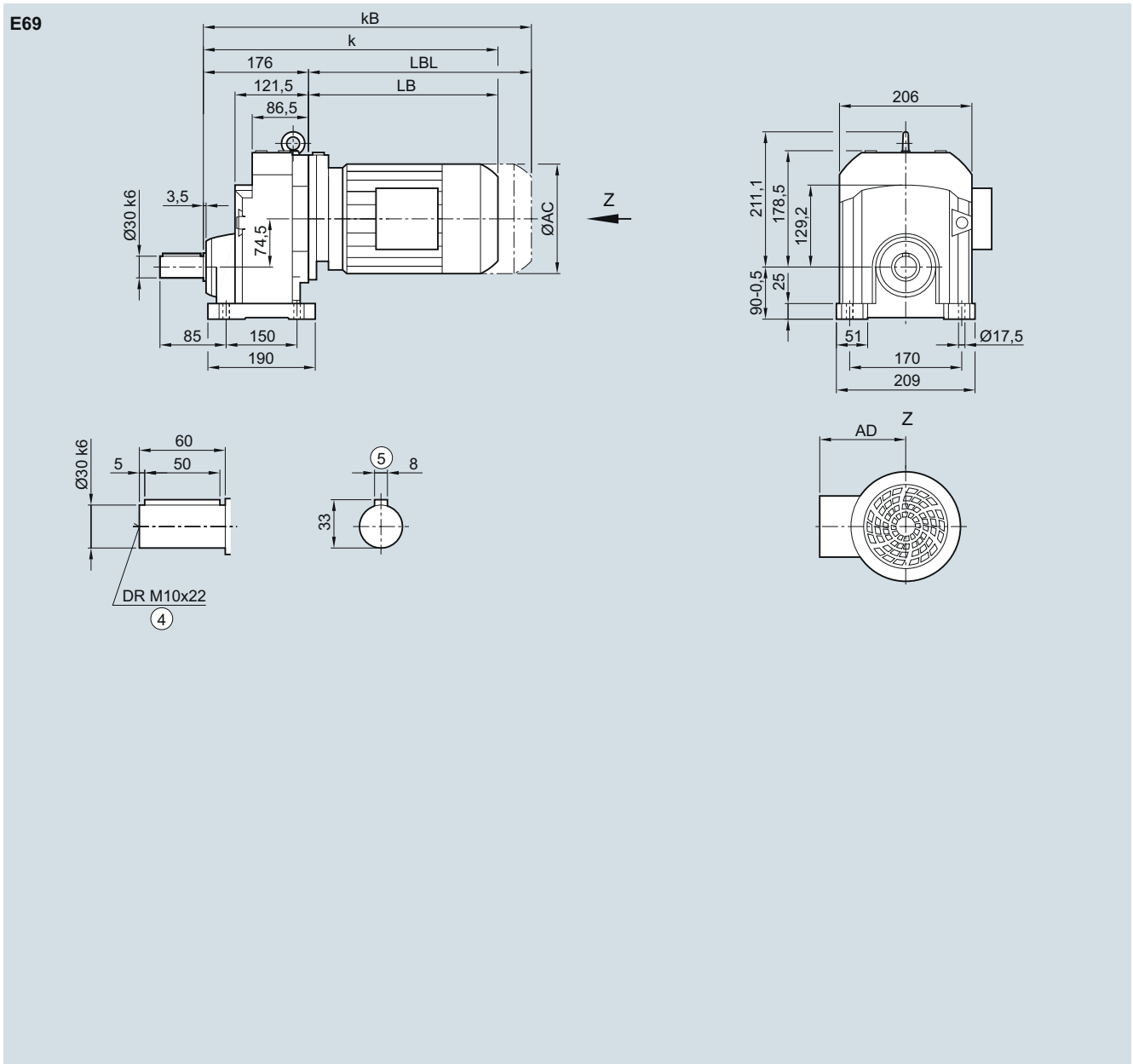
⑤ Feather key/keyway DIN 6885-1



E69 gearbox in a foot-mounted design

E030

3



Motor	LA 71	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z	160	160Z
AC	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0
AD <sup>1)</sup>	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0
k	390.5	409.5	450.5	485.5	512.0	552.0	568.5	603.5	578.5	603.5	631.5	681.5	713.5
kB	445.5	464.5	510.5	545.5	582.0	622.0	647.0	682.0	651.5	676.5	736.0	786.0	829.5
LB	214.5	233.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5
LBL	269.5	288.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5

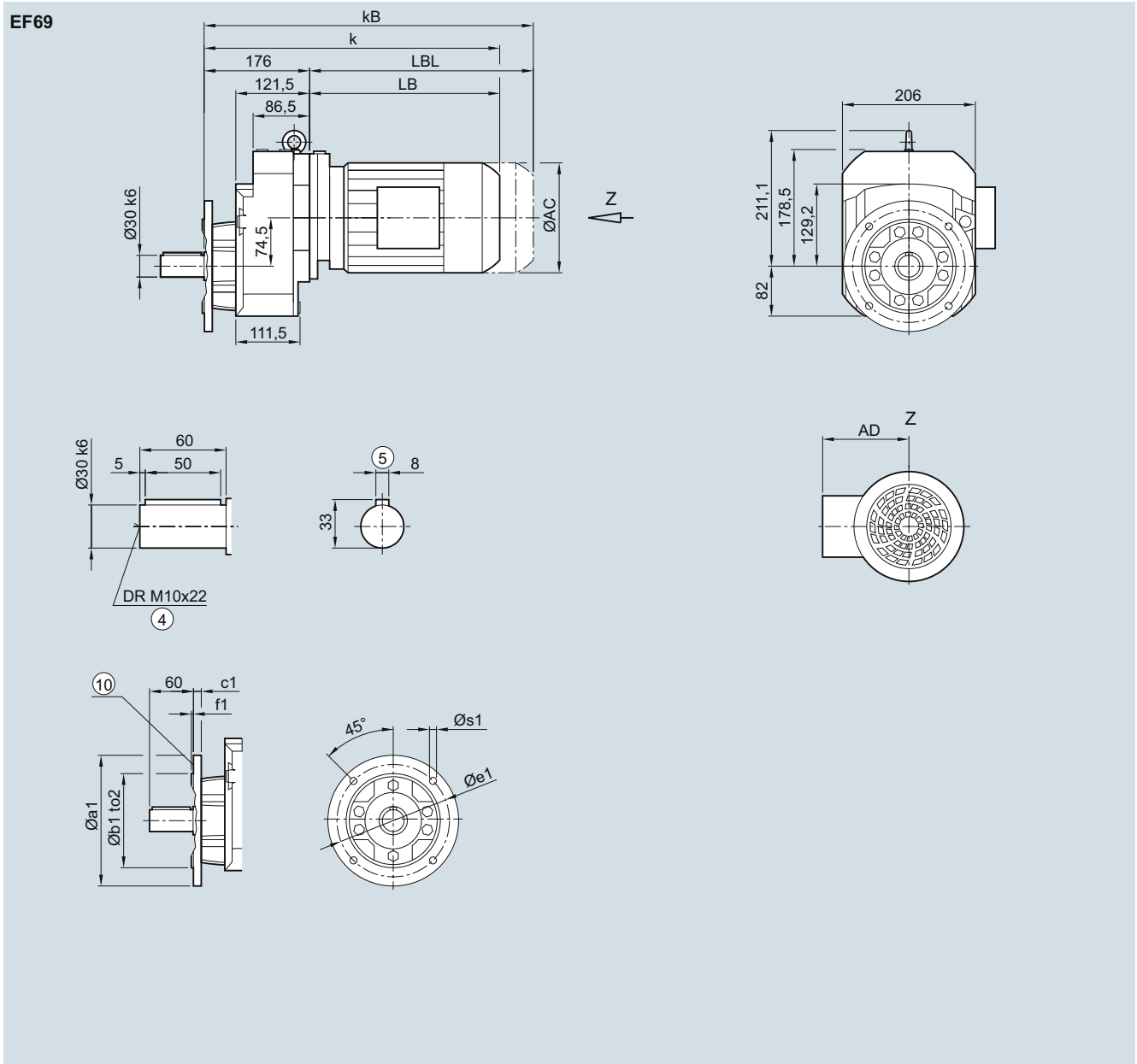
④ DIN 332

⑤ Feather key/keyway DIN 6885-1

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

EF69 gearbox in a flange-mounted design

EF030



Flange	a1	b1	to2	c1	e1	f1	s1
200		130	j6	12	165	3.5	11.0
250		180	j6	15	215	4.0	13.5

Motor	LA 71	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z	160	160Z
AC	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0
AD <sup>1)</sup>	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0
k	390.5	409.5	450.5	485.5	512.0	552.0	568.5	603.5	578.5	603.5	631.5	681.5	713.5
kB	445.5	464.5	510.5	545.5	582.0	622.0	647.0	682.0	651.5	676.5	736.0	786.0	829.5
LB	214.5	233.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5
LBL	269.5	288.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5

④ DIN 332

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

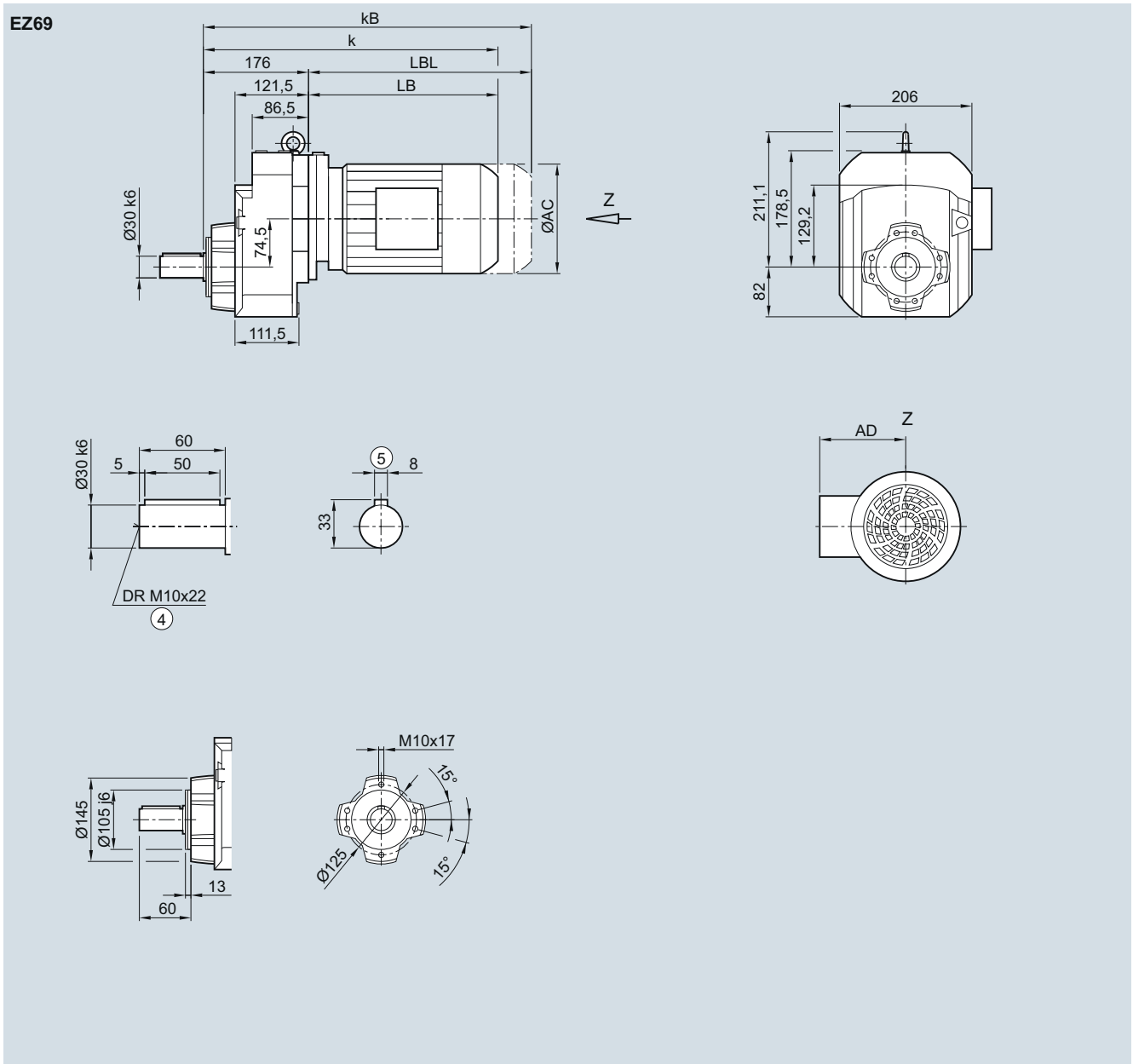
⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

**EZ69 gearbox in a housing flange design**

**EZ030**

3



Motor	LA 71	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z	160	160Z
AC	138.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0
AD <sup>1)</sup>	134.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0
k	390.5	409.5	450.5	485.5	512.0	552.0	568.5	603.5	578.5	603.5	631.5	681.5	713.5
KB	445.5	464.5	510.5	545.5	582.0	622.0	647.0	682.0	651.5	676.5	736.0	786.0	829.5
LB	214.5	233.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5
LBL	269.5	288.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5

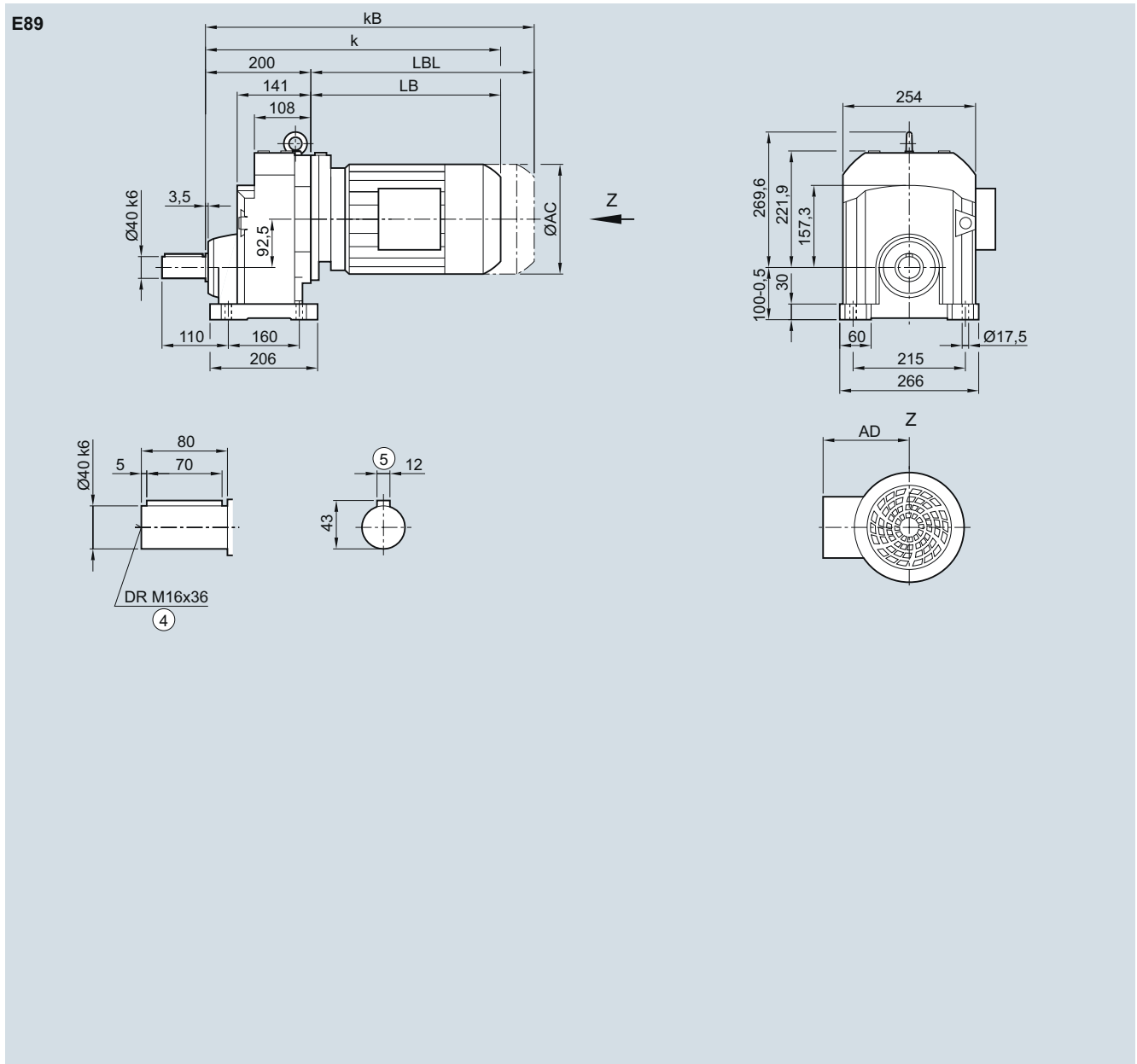
④ DIN 332

⑤ Feather key/keyway DIN 6885-1

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

**E89 gearbox in a foot-mounted design**

**E030**



Motor	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD <sup>1)</sup>	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	461.5	496.5	523.0	563.0	575.5	610.5	585.5	610.5	638.5	688.5	720.5	780.5	793.5	823.5
kB	521.5	556.5	593.0	633.0	654.0	689.0	658.5	683.5	743.0	793.0	836.5	896.5	922.5	952.5
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

④ DIN 332

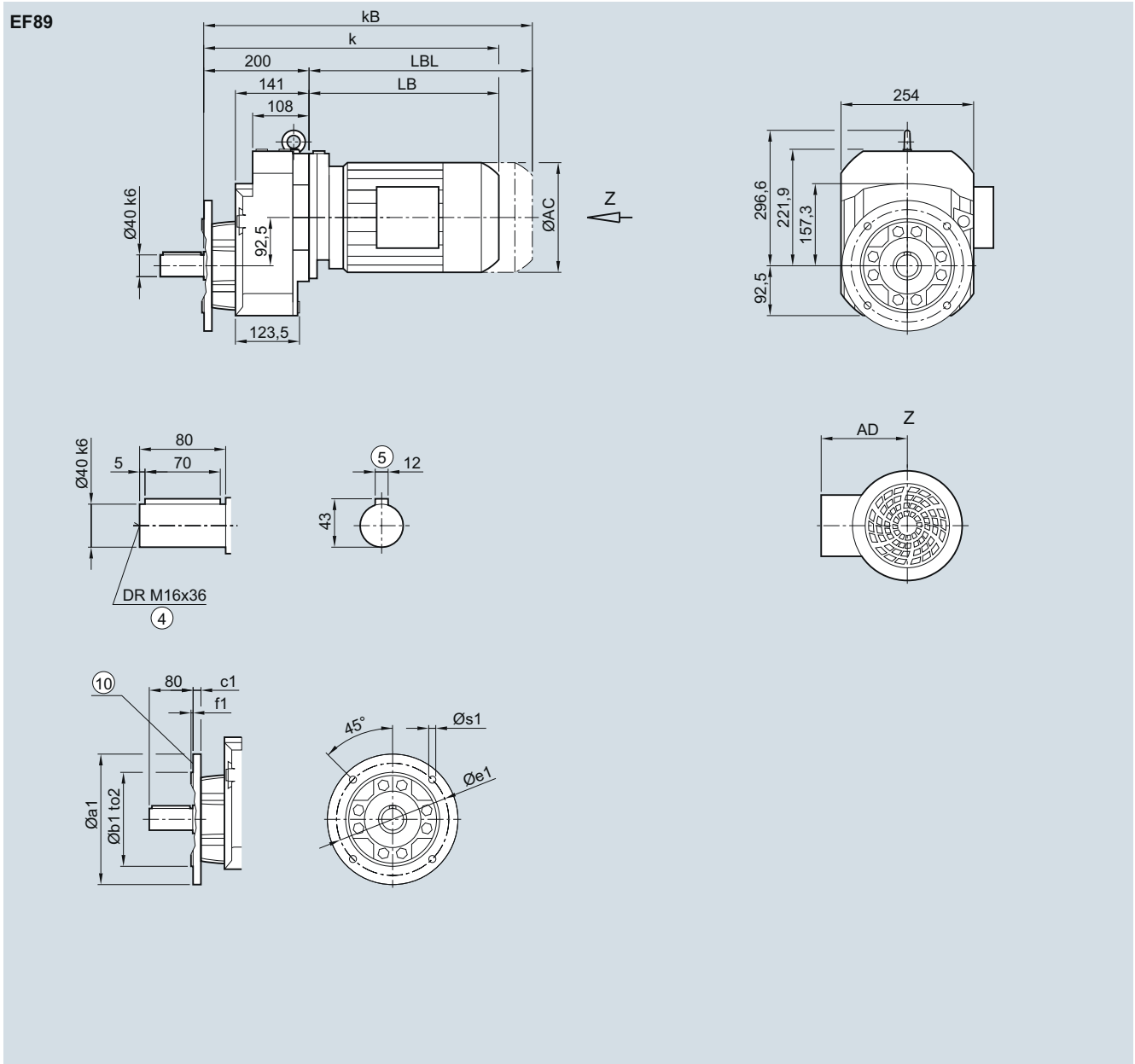
⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

EF89 gearbox in a flange-mounted design

EF030

3



Flange	a1	b1	to2	c1	e1	f1	s1
	250	180	j6	15	215	4.0	13.5
	300	230	j6	16	265	4.0	13.5

Motor	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD <sup>1)</sup>	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	461.5	496.5	523.0	563.0	575.5	610.5	585.5	610.5	638.5	688.5	720.5	780.5	793.5	823.5
kB	521.5	556.5	593.0	633.0	654.0	689.0	658.5	683.5	743.0	793.0	836.5	896.5	922.5	952.5
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

④ DIN 332

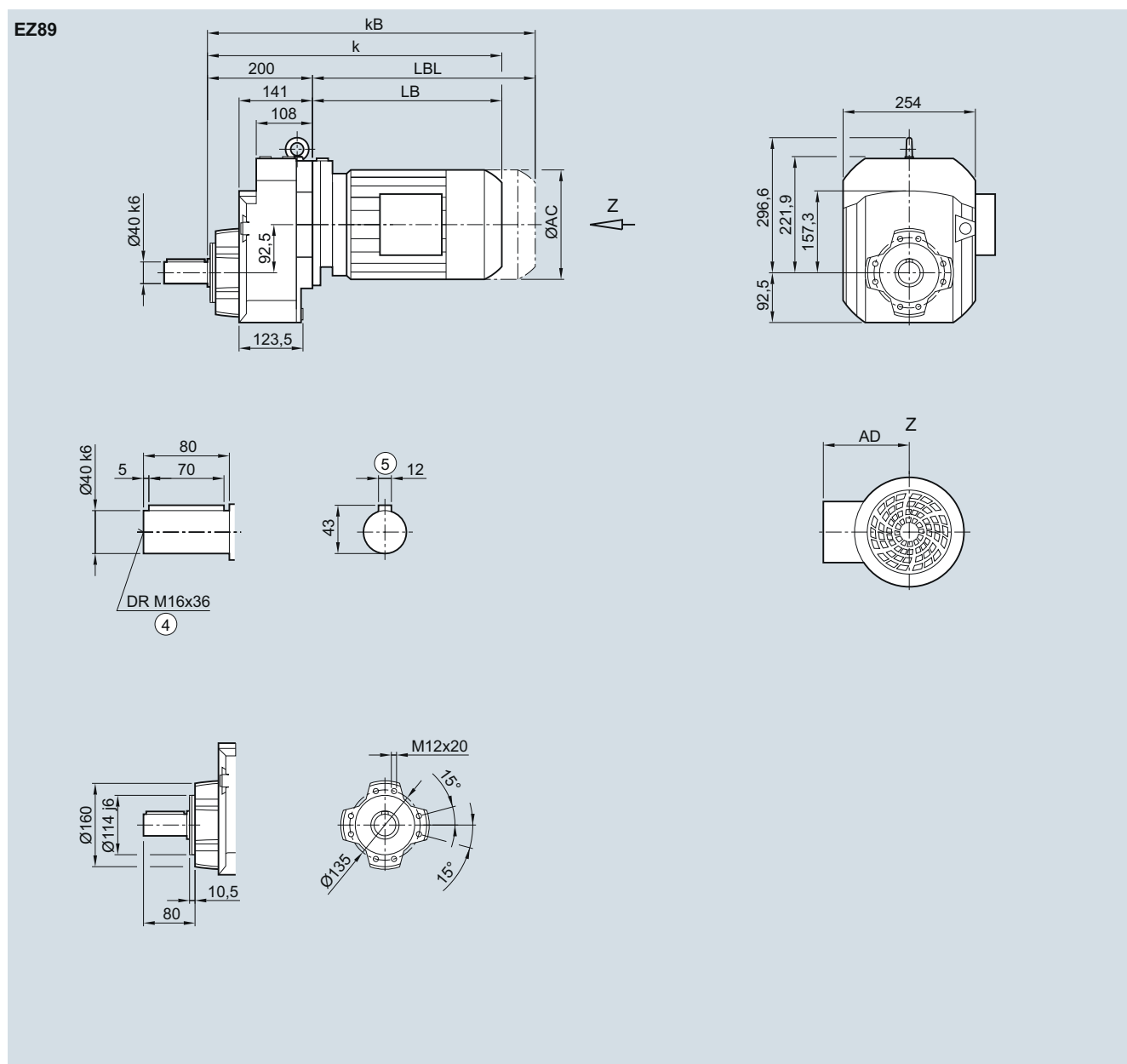
1) AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

**EZ89 gearbox in a housing flange design**

**EZ030**



Motor	LE 80	80Z	90	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD <sup>1)</sup>	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	461.5	496.5	523.0	563.0	575.5	610.5	585.5	610.5	638.5	688.5	720.5	780.5	793.5	823.5
k <sub>B</sub>	521.5	556.5	593.0	633.0	654.0	689.0	658.5	683.5	743.0	793.0	836.5	896.5	922.5	952.5
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

④ DIN 332

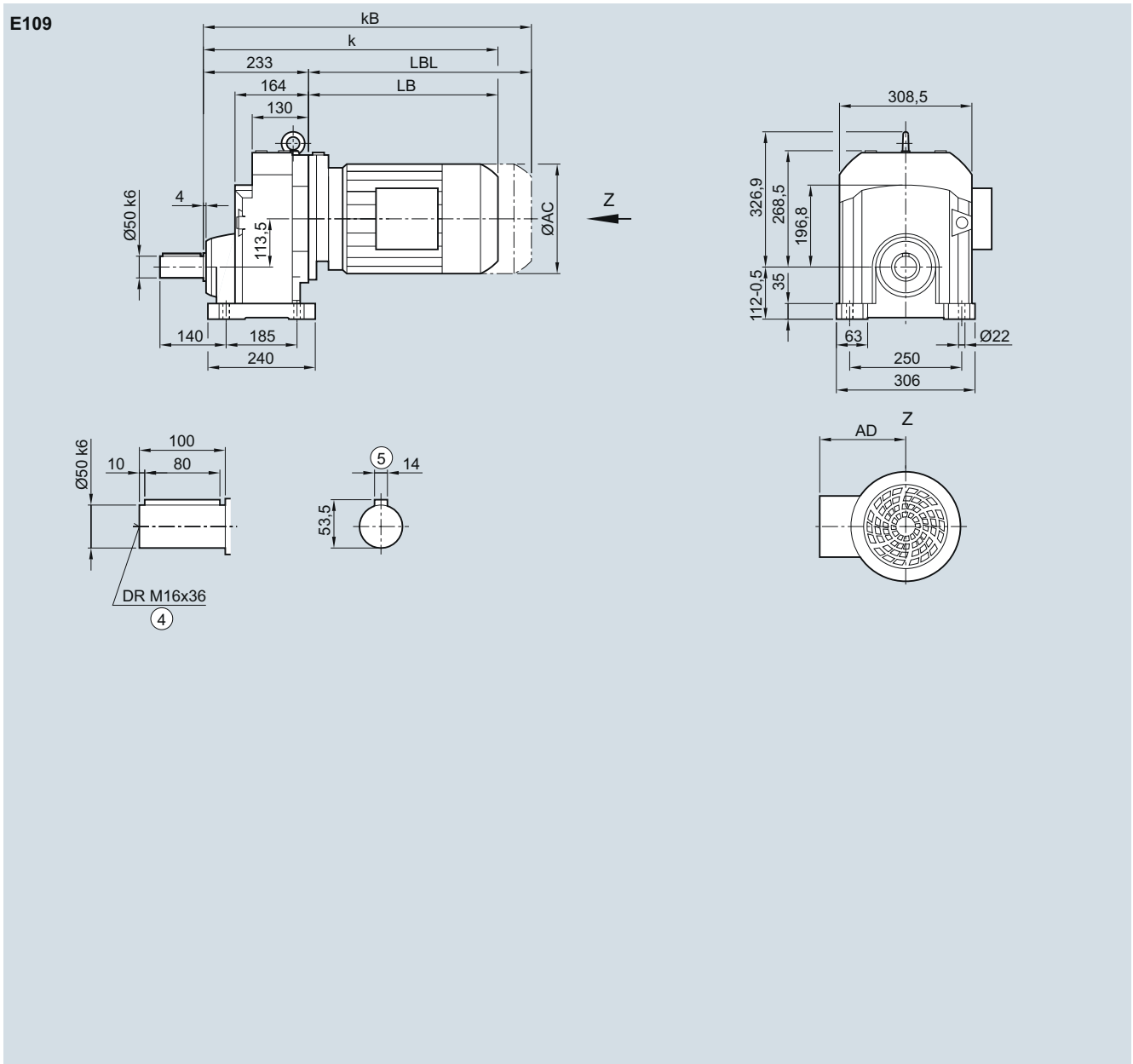
⑤ Feather key/keyway DIN 6885-1

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

E109 gearbox in a foot-mounted design

E030

3



Motor	LE 90	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD <sup>1)</sup>	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0
k	549.0	589.0	599.5	634.5	609.5	634.5	662.5	712.5	744.5	804.5	817.5	847.5	885.5	910.5	931.0	991.0
kB	619.0	659.0	678.0	713.0	682.5	707.5	767.0	817.0	860.5	920.5	946.5	976.5	1 032.5	1 057.5	1 159.0	1 219.0
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.0	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

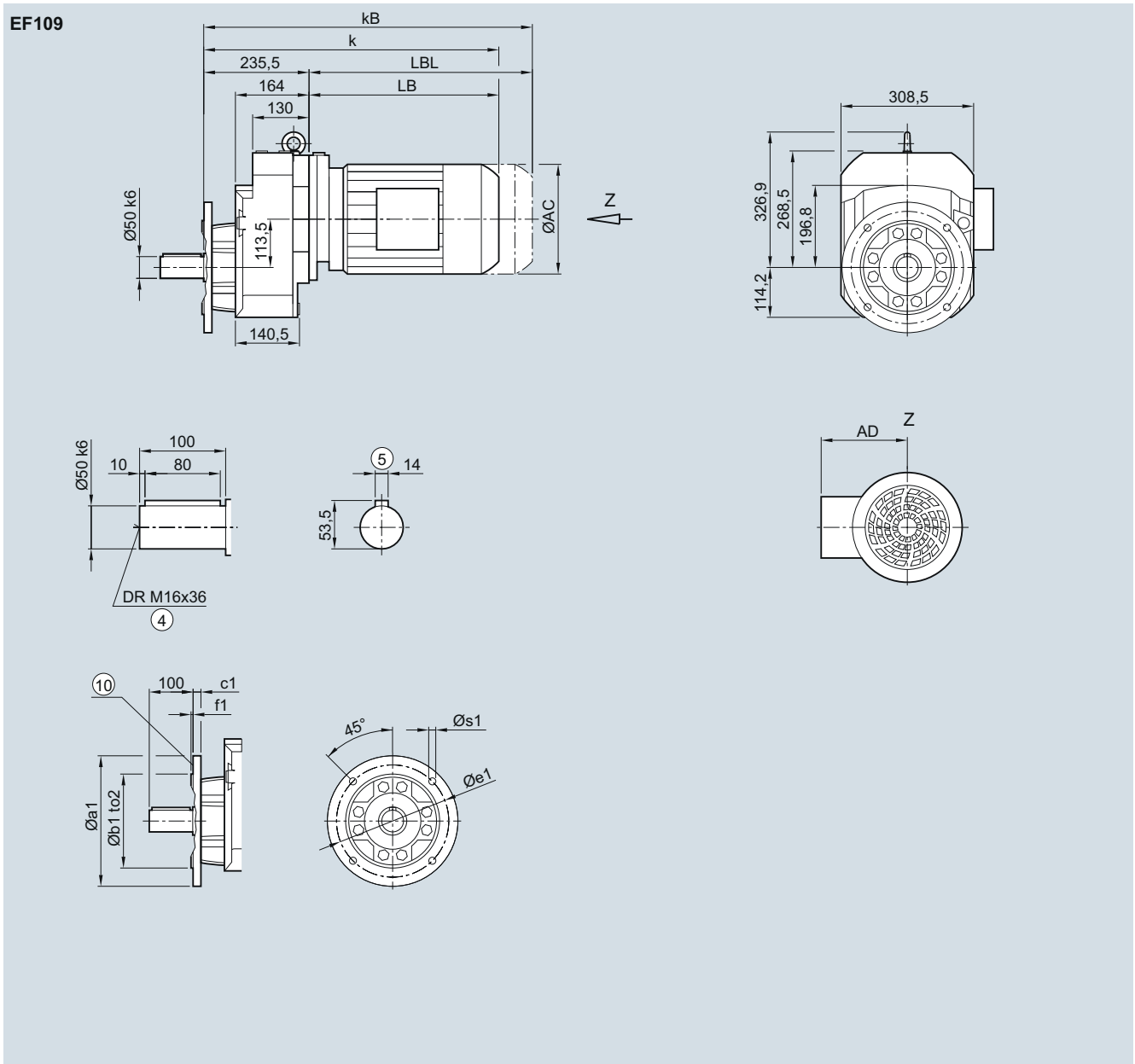
④ DIN 332

⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

EF109 gearbox in a flange-mounted design

EF030



Flange	a1	b1	to2	c1	e1	f1	s1
300		230	j6	16	265	4.0	13.5
350		250	j6	18	300	5.0	17.5

Motor	LE 90	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD <sup>1)</sup>	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0
k	551.5	591.5	602.0	637.0	612.0	637.0	665.0	715.0	747.0	807.0	820.0	850.0	888.0	913.0	933.5	993.5
kB	621.5	661.5	680.5	715.5	685.0	710.0	769.5	819.5	863.0	923.0	949.0	979.0	1 035.0	1 060.0	1 161.5	1 221.5
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.0	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

④ DIN 332

1) AD depends on the motor options, for other dimensions see page 8/36.

⑤ Feather key/keyway DIN 6885-1

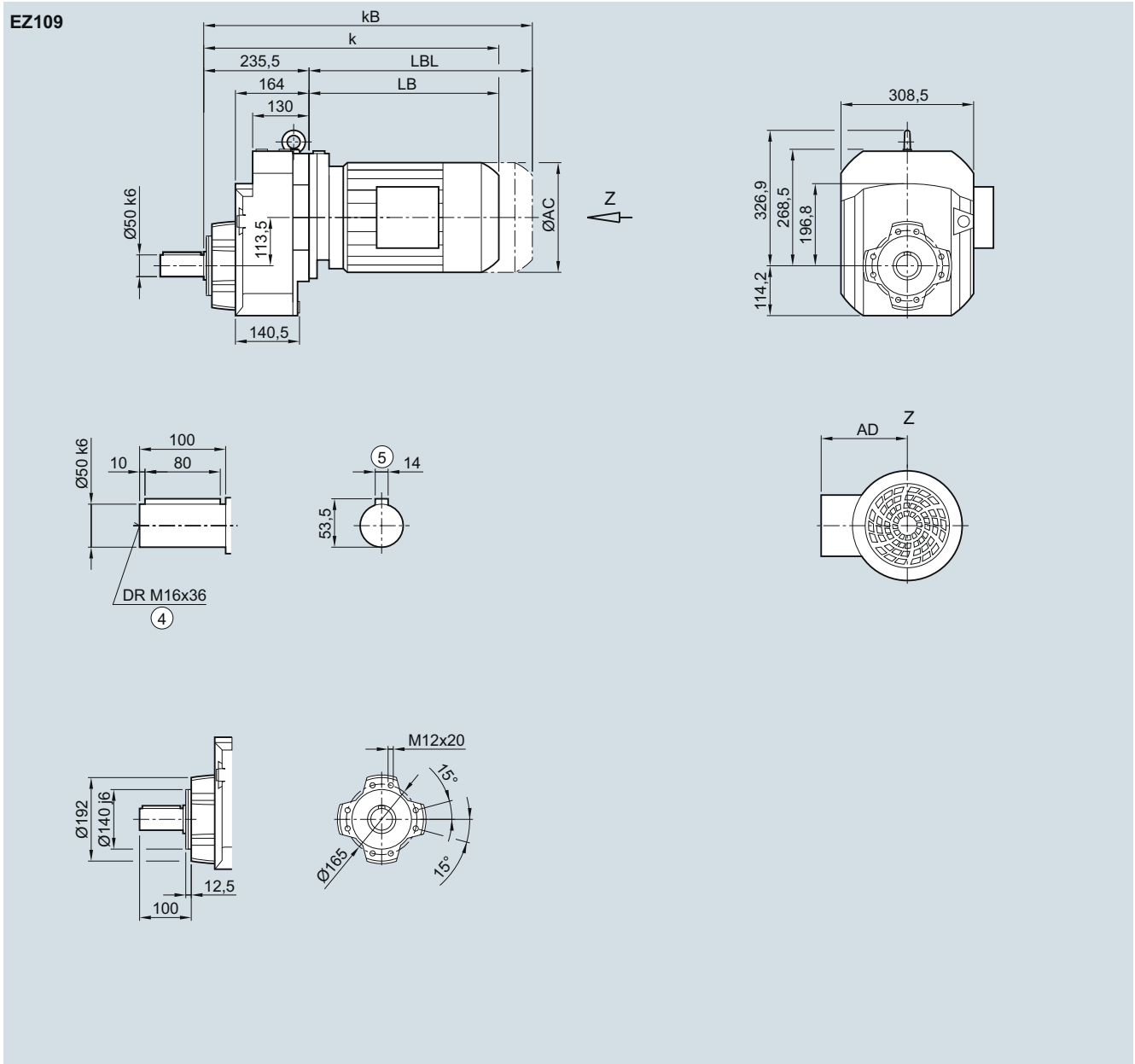
⑩ For inner contour see page 3/164



EZ109 gearbox in a housing flange design

EZ030

3



Motor	LE 90	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD <sup>1)</sup>	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0
k	549.0	589.0	599.5	634.5	609.5	634.5	662.5	712.5	744.5	804.5	817.5	847.5	885.5	910.5	931.0	991.0
kB	619.0	659.0	678.0	713.0	682.5	707.5	767.0	817.0	860.5	920.5	946.5	976.5	1 032.5	1 057.5	1 159.0	1 219.0
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.0	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

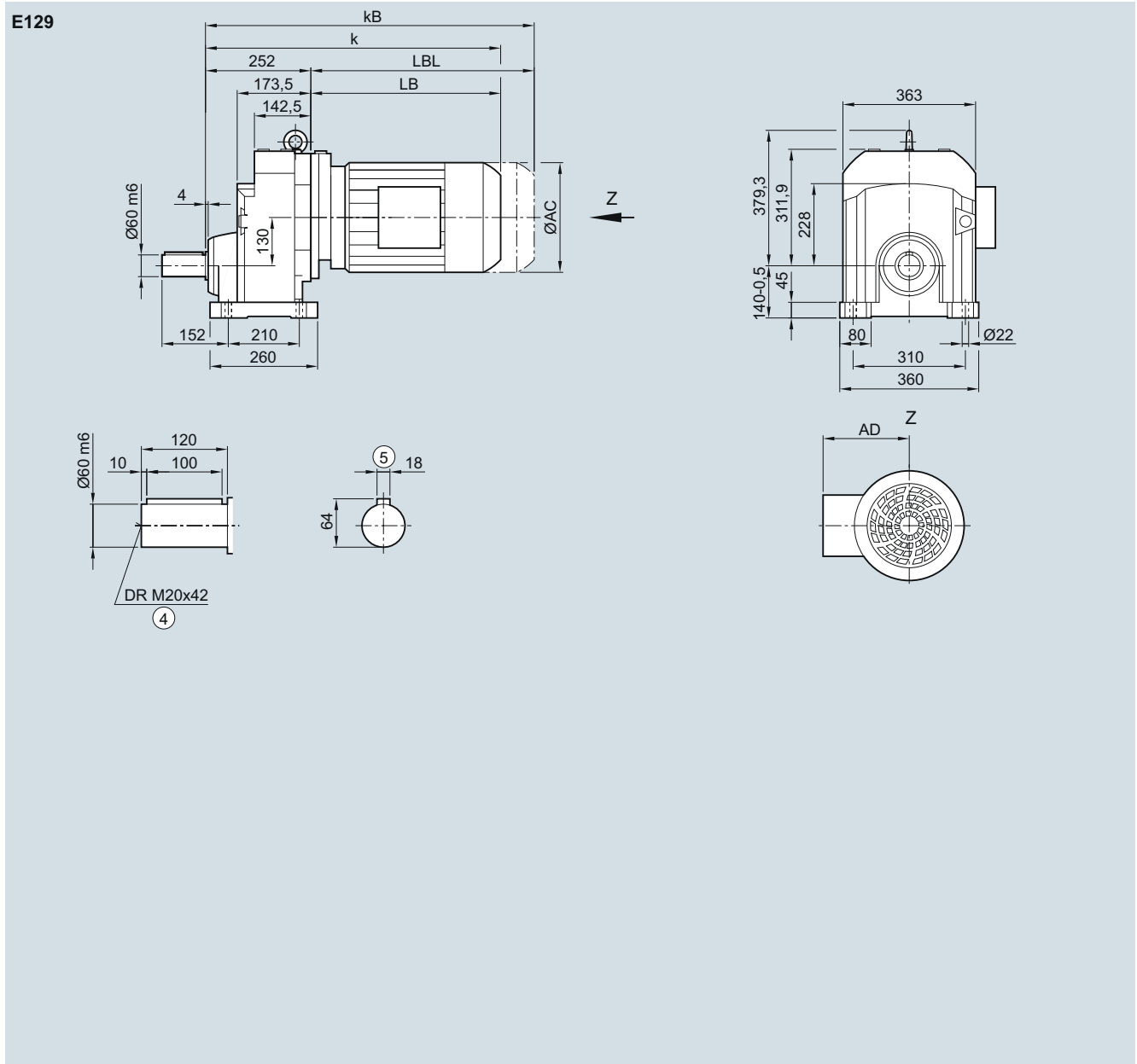
④ DIN 332

⑤ Feather key/keyway DIN 6885-1

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

E129 gearbox in a foot-mounted design

E030



Motor	LE 90S	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.0
k	561.0	601.0	609.5	644.5	619.5	644.5	670.5	720.5	752.5	812.5	825.5	855.5	893.5	918.5	945.0	1 005.0	1 050.5
kB	631.0	671.0	688.0	723.0	692.5	717.5	775.0	825.0	868.5	928.5	954.5	984.5	1 040.5	1 065.5	1 173.0	1 233.0	1 275.5
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5

④ DIN 332

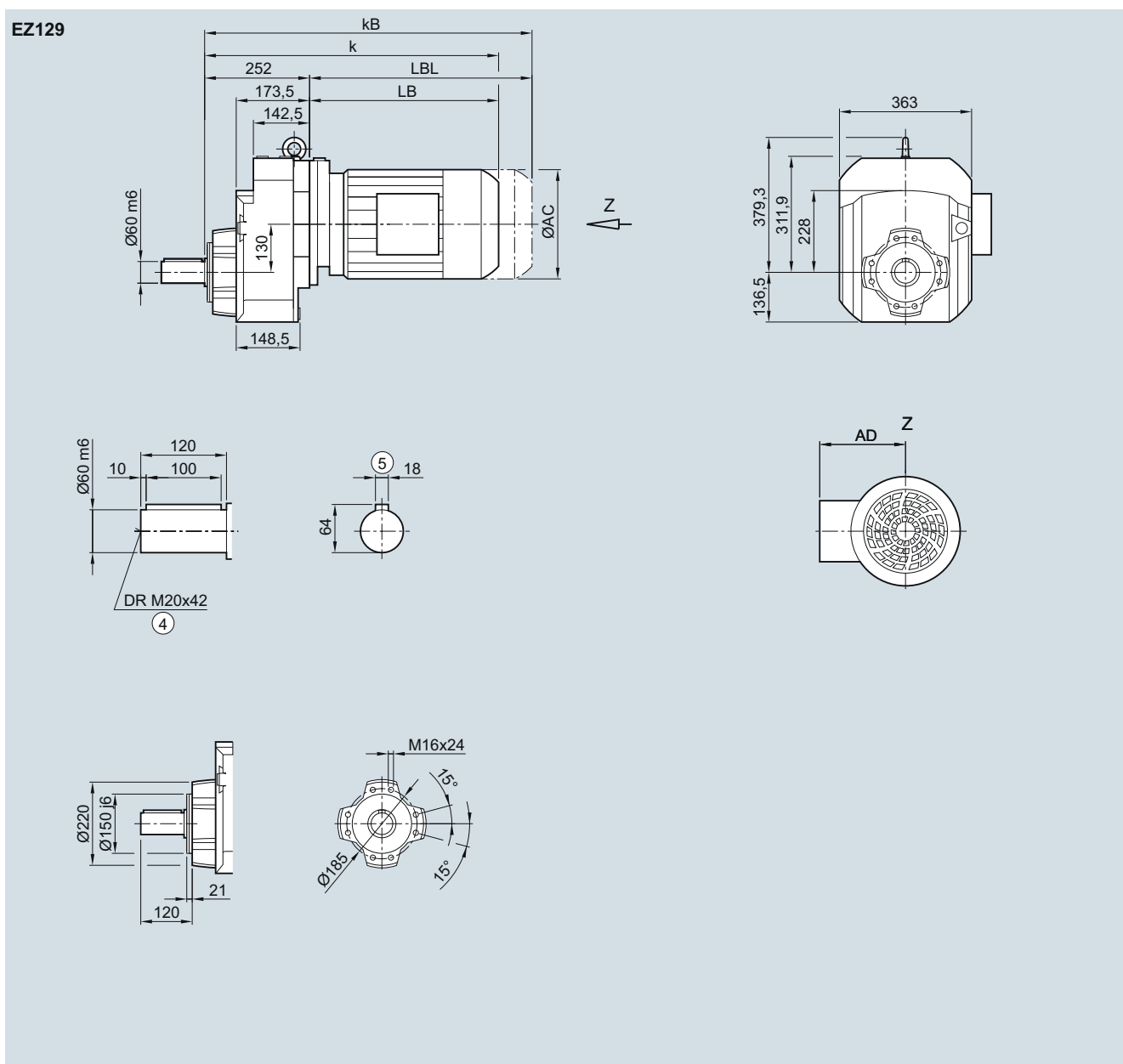
⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.



EZ129 gearbox in a housing flange design

EZ030



Motor	LE 90S	90Z	100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.0
k	561.0	601.0	609.5	644.5	619.5	644.5	670.5	720.5	752.5	812.5	825.5	855.5	893.5	918.5	945.0	1 005.0	1 050.5
kB	631.0	671.0	688.0	723.0	692.5	717.5	775.0	825.0	868.5	928.5	954.5	984.5	1 040.5	1 065.5	1 173.0	1 233.0	1 275.5
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5

④ DIN 332

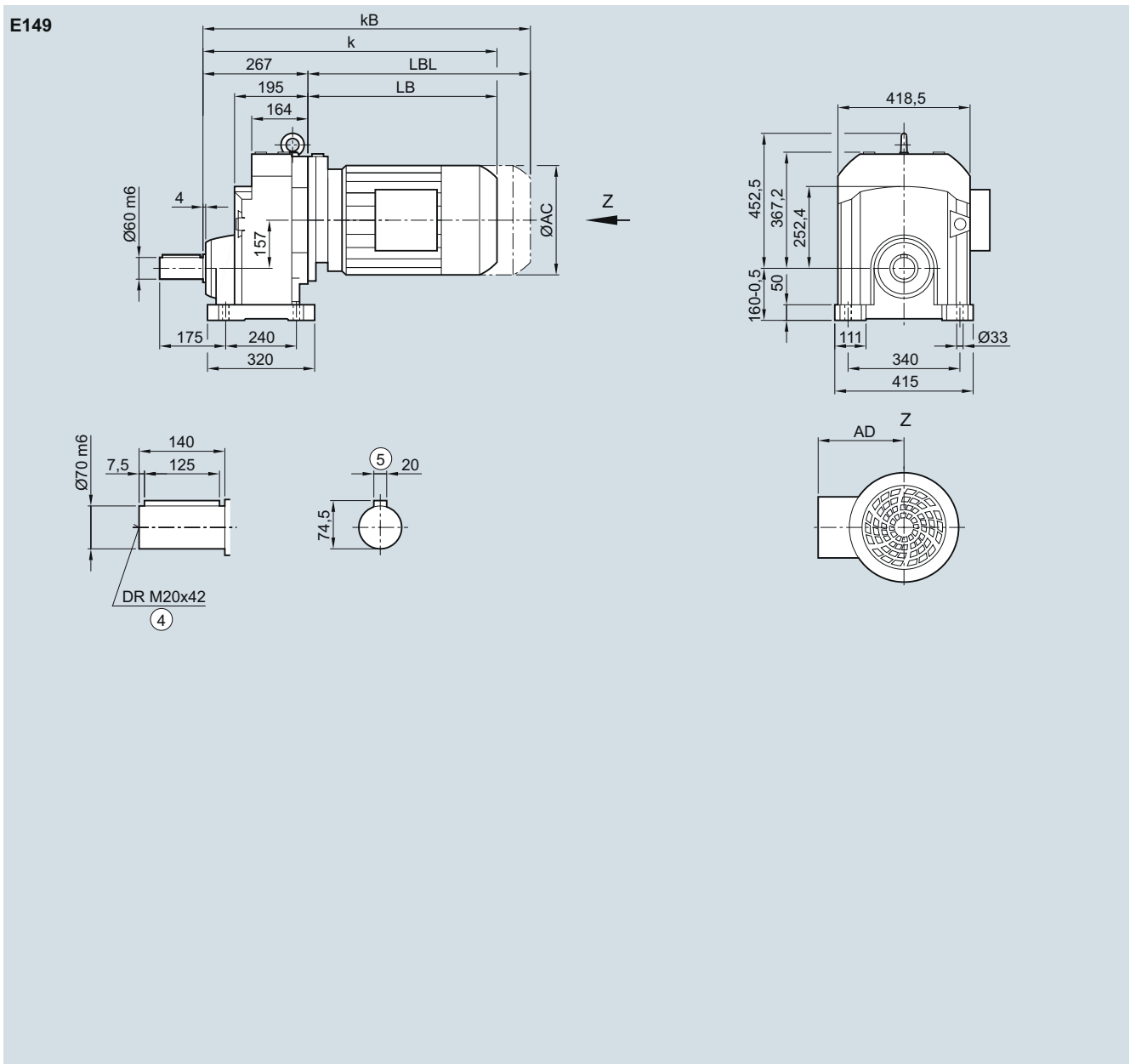
⑤ Feather key/keyway DIN 6885-1

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

E149 gearbox in a foot-mounted design

E030

3



Motor	LE 100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.0
k	623.0	658.0	633.0	658.0	679.0	729.0	761.0	821.0	834.0	864.0	902.0	927.0	947.5	1 007.5	1 059.0
kB	701.5	736.5	706.0	731.0	783.5	833.5	877.0	937.0	963.0	993.0	1 049.0	1 074.0	1 175.5	1 235.5	1 284.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.5	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	1 017.0

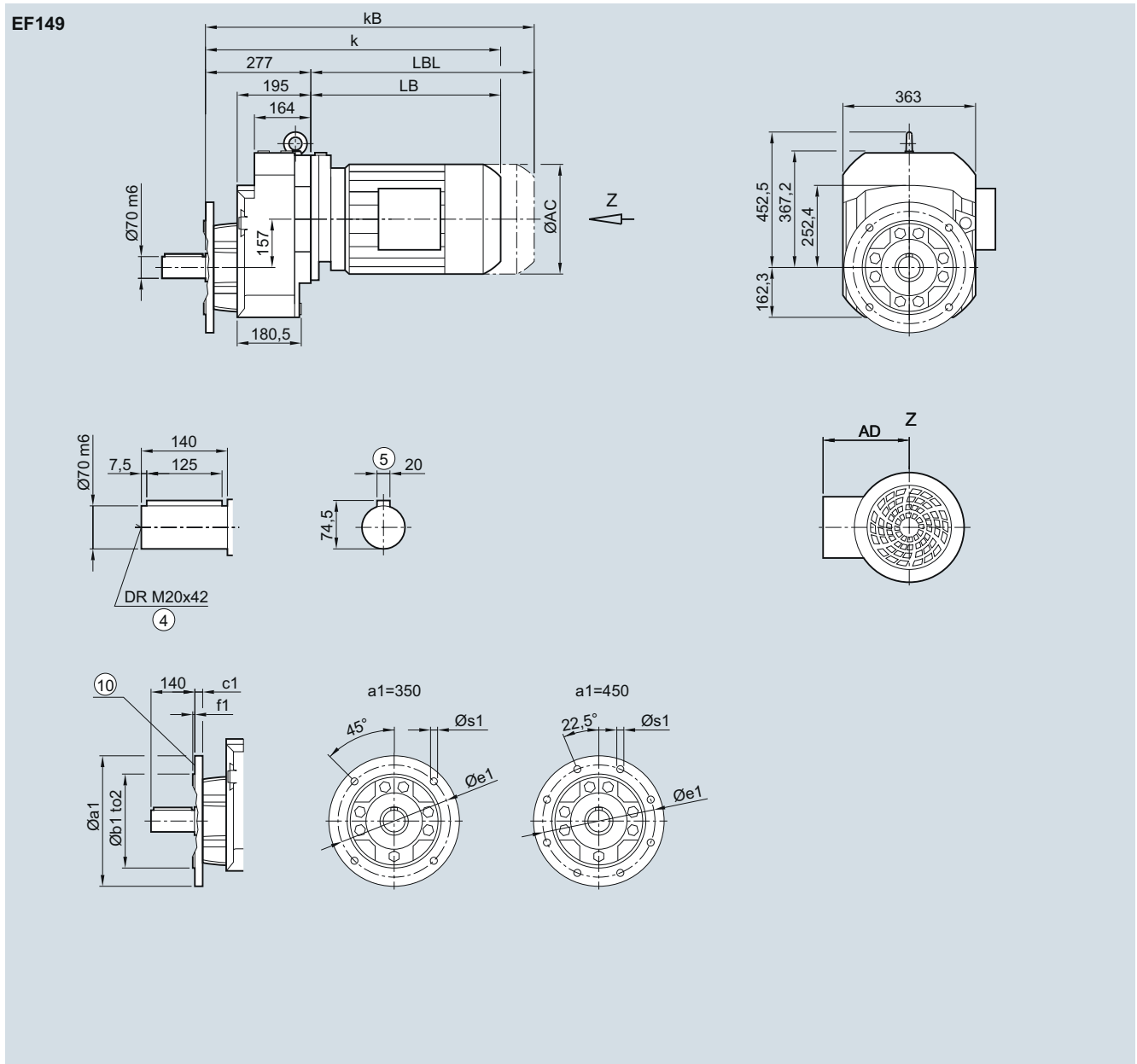
④ DIN 332

⑤ Feather key/keyway DIN 6885-1

1) AD depends on the motor options, for other dimensions see page 8/36.

EF149 gearbox in a flange-mounted design

EF030



Flange	a1	b1	to2	c1	e1	f1	s1
	350	250	h6	20	300	5	17.5
		350	h6	22	400	5	17.5

Motor	LE 100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.0
k	633.0	668.0	643.0	668.0	689.0	739.0	771.0	831.0	844.0	874.0	912.0	937.0	957.5	1 017.5	1 069.0
KB	711.5	746.5	716.0	741.0	793.5	843.5	887.0	947.0	973.0	1 003.0	1 059.0	1 084.0	1 185.5	1 245.5	1 294.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.5	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	1 017.0

④ DIN 332

1) AD depends on the motor options, for other dimensions see page 8/36.

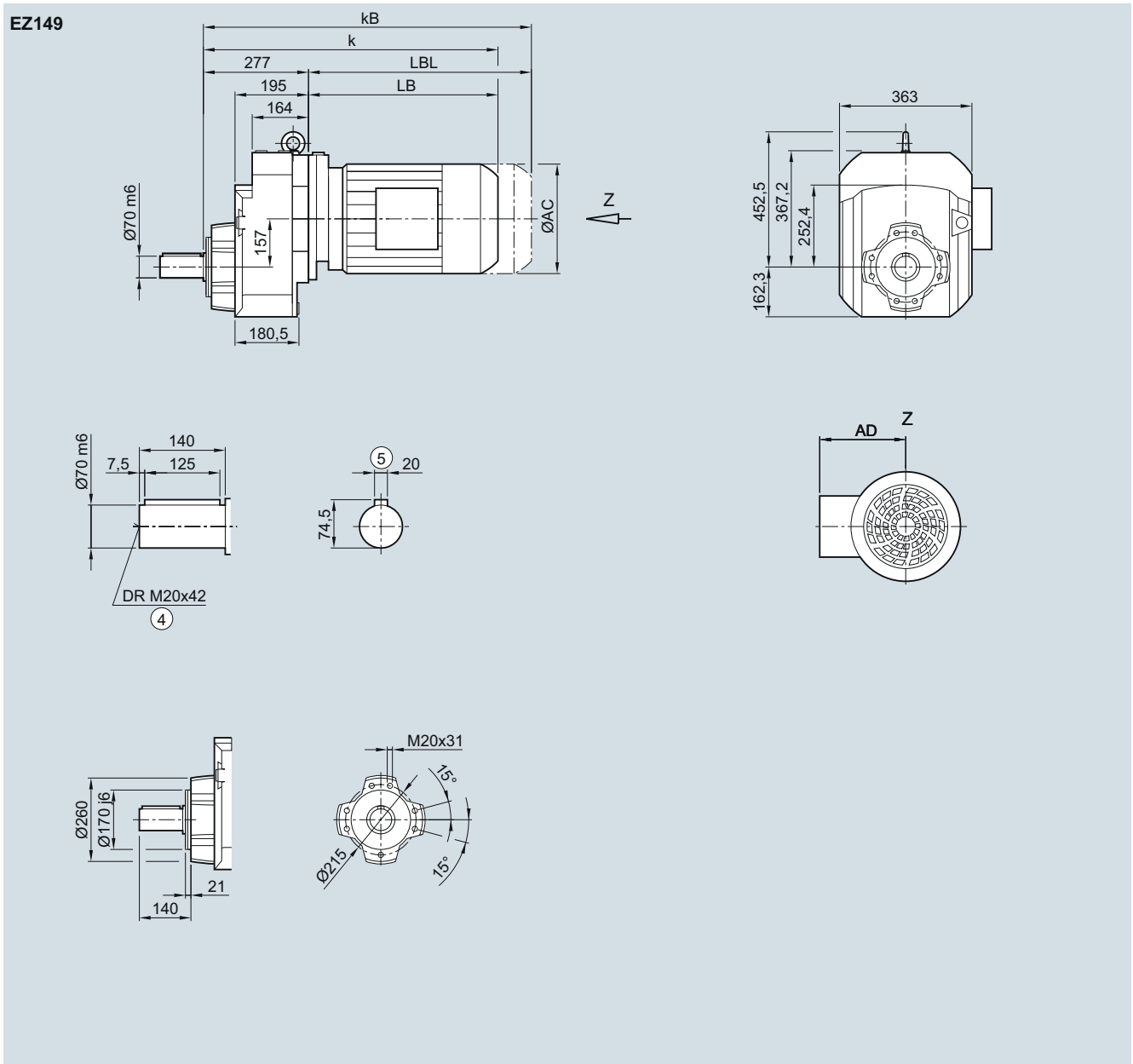
⑤ Feather key/keyway DIN 6885-1

⑩ For inner contour see page 3/164

EZ149 gearbox in a housing flange design

EZ030

3



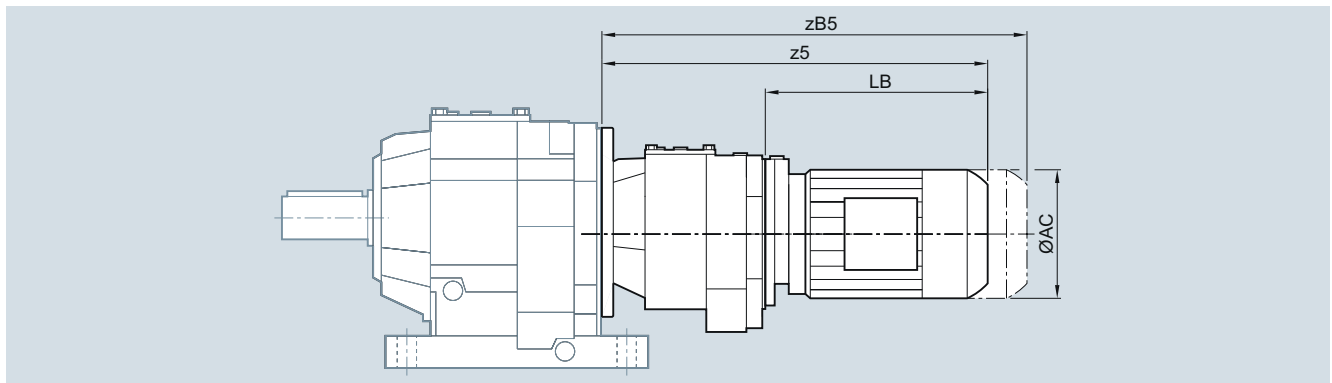
Motor	LE 100	100Z	112	112Z	132	132Z	160	160Z	LES 180	180Z	200	200Z	225	225Y	250
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD <sup>1)</sup>	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.0
k	623.0	658.0	633.0	658.0	679.0	729.0	761.0	821.0	834.0	864.0	902.0	927.0	947.5	1 007.5	1 059.0
k <sub>B</sub>	701.5	736.5	706.0	731.0	783.5	833.5	877.0	937.0	963.0	993.0	1 049.0	1 074.0	1 175.5	1 235.5	1 284.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.5	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	1 017.0

④ DIN 332

⑤ Feather key/keyway DIN 6885-1

<sup>1)</sup> AD depends on the motor options, for other dimensions see page 8/36.

## Helical tandem geared motors



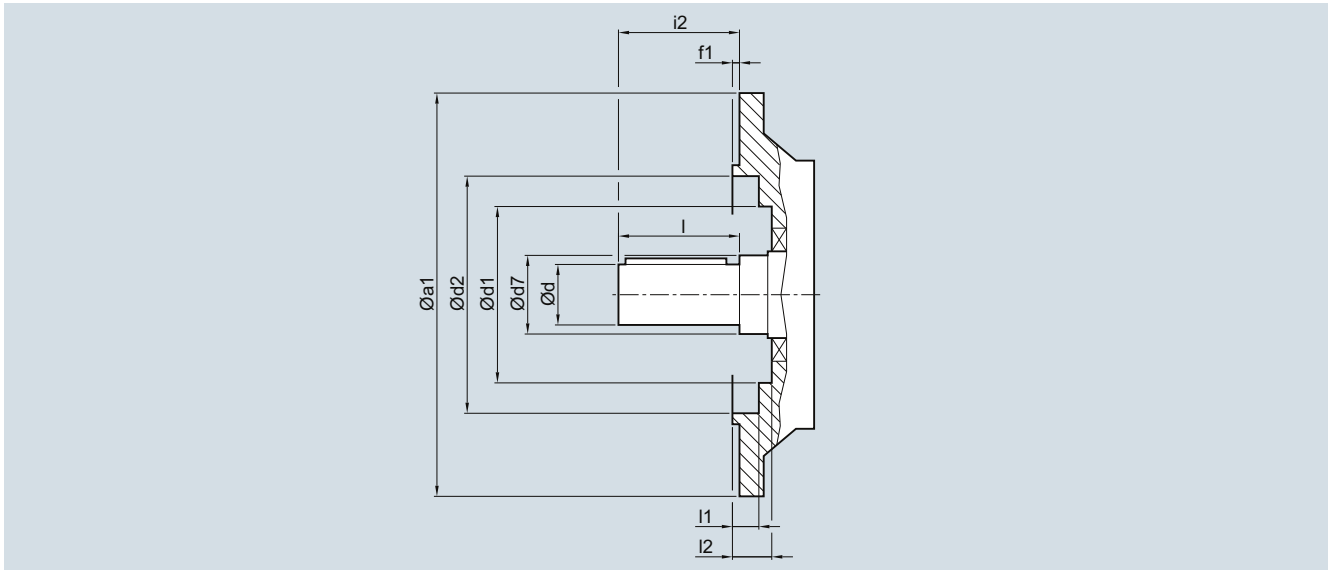
Gearbox	Motor	AC	z5	zB5	LB	Gearbox	Motor	AC	z5	zB5	LB
D./Z.29-D/Z19	LA63	117.8	331.0	375.5	160.5	D.129-D/Z49	LE100	198.0	590.5	669.0	398.5
D./Z.39-D/Z19	LA63	117.8	331.0	375.5	160.5		LE100Z	198.0	625.5	704.0	433.5
	LA71	138.8	363.0	418.0	184.5		LE112	222.0	600.5	673.5	408.5
	LA71Z	138.8	382.0	437.0	203.5		LE112Z	222.0	635.0	708.0	443.0
D./Z.49-D/Z19	LA63	117.8	322.0	366.5	160.5	D.149-D/Z49	LA63	117.8	366.0	410.5	184.5
	LA71	138.8	354.0	409.0	184.5		LA71	138.8	398.0	453.0	216.5
	LA71Z	138.8	373.0	428.0	203.5		LA71Z	138.8	417.0	472.0	235.5
D./Z.59-D/Z19	LA63	117.8	322.0	366.5	160.5		LE80	156.3	462.0	522.0	280.5
	LA71	138.8	354.0	409.0	184.5		LE80Z	156.3	497.0	557.0	315.5
	LA71Z	138.8	373.0	428.0	203.5		LE90	173.8	523.5	593.5	342.0
	LE80	156.3	410.0	470.0	240.0		LE90Z	173.8	563.5	633.5	382.0
D./Z.69-D/Z19	LE80Z	156.3	445.0	505.0	275.0		LE100	198.0	580.0	658.5	398.5
	LA63	117.8	322.0	366.5	160.5		LE100Z	198.0	615.0	693.5	433.5
	LA71	138.8	354.0	409.0	184.5		LE112	222.0	590.0	663.0	408.5
	LA71Z	138.8	373.0	428.0	203.5	LE112Z	222.0	624.5	697.5	443.0	
	LE80	156.3	410.0	470.0	240.0	LE132	264.0	643.0	747.5	461.5	
D./Z.79-D/Z39	LE80Z	156.3	445.0	505.0	275.0	D.169-D/Z69	LE132Z	264.0	693.0	797.5	511.5
	LA63	117.8	373.5	418.0	194.0		LA63	117.8	391.5	436.0	184.5
	LA71	138.8	405.5	460.5	226.0		LA71	138.8	423.5	478.5	216.5
	LA71Z	138.8	424.5	479.5	245.0		LA71Z	138.8	442.5	497.5	235.5
	LE80	156.3	469.5	529.5	290.0		LE80	156.3	487.5	547.5	280.5
D./Z.89-D/Z39	LE80Z	156.3	504.5	564.5	325.0		LE80Z	156.3	522.5	582.5	315.5
	LA63	117.8	356.5	401.0	194.0		LE90	173.8	549.0	619.0	342.0
	LA71	138.8	388.5	443.5	226.0		LE90Z	173.8	589.0	659.0	382.0
	LA71Z	138.8	407.5	462.5	245.0		LE100	198.0	605.5	684.0	398.5
	LE80	156.3	452.5	512.5	290.0		LE100Z	198.0	640.5	719.0	433.5
	LE80Z	156.3	487.5	547.5	325.0	LE112	222.0	615.5	688.5	408.5	
D.109-D/Z39	LE90	173.8	514.0	584.0	351.5	LE112Z	222.0	650.0	723.0	443.0	
	LE90Z	173.8	554.0	624.0	391.5	LE132	264.0	668.5	773.0	461.5	
	LA63	117.8	347.5	392.0	194.0	LE132Z	264.0	718.5	823.0	511.5	
	LA71	138.8	379.5	434.5	226.0	D.189-D/Z69	LA63	117.8	391.5	436.0	184.5
	LA71Z	138.8	398.5	453.5	245.0		LA71	138.8	423.5	478.5	216.5
	LE80	156.3	443.5	503.5	290.0		LA71Z	138.8	442.5	497.5	235.5
LE80Z	156.3	478.5	538.5	325.0	LE80		156.3	487.5	547.5	280.5	
LE90	173.8	505.0	575.0	351.5	LE80Z		156.3	522.5	582.5	315.5	
LE90Z	173.8	545.0	615.0	391.5	LE90		173.8	549.0	619.0	342.0	
D.129-D/Z49	LE100	198.0	561.5	640.0	408.0		LE90Z	173.8	589.0	659.0	382.0
	LE100Z	198.0	596.5	675.0	443.0		LE100	198.0	605.5	684.0	398.5
	LA63	117.8	376.5	421.0	184.5		LE100Z	198.0	640.5	719.0	433.5
	LA71	138.8	408.5	463.5	216.5		LE112	222.0	615.5	688.5	408.5
	LA71Z	138.8	427.5	482.5	235.5	LE112Z	222.0	650.0	723.0	443.0	
	LE80	156.3	472.5	532.5	280.5	LE132	264.0	668.5	773.0	461.5	
LE80Z	156.3	507.5	567.5	315.5	LE132Z	264.0	718.5	823.0	511.5		
LE90	173.8	534.0	604.0	342.0							
LE90Z	173.8	574.0	644.0	382.0							



Inner contour of the flange design

Notes regarding the design of the customer's interface.

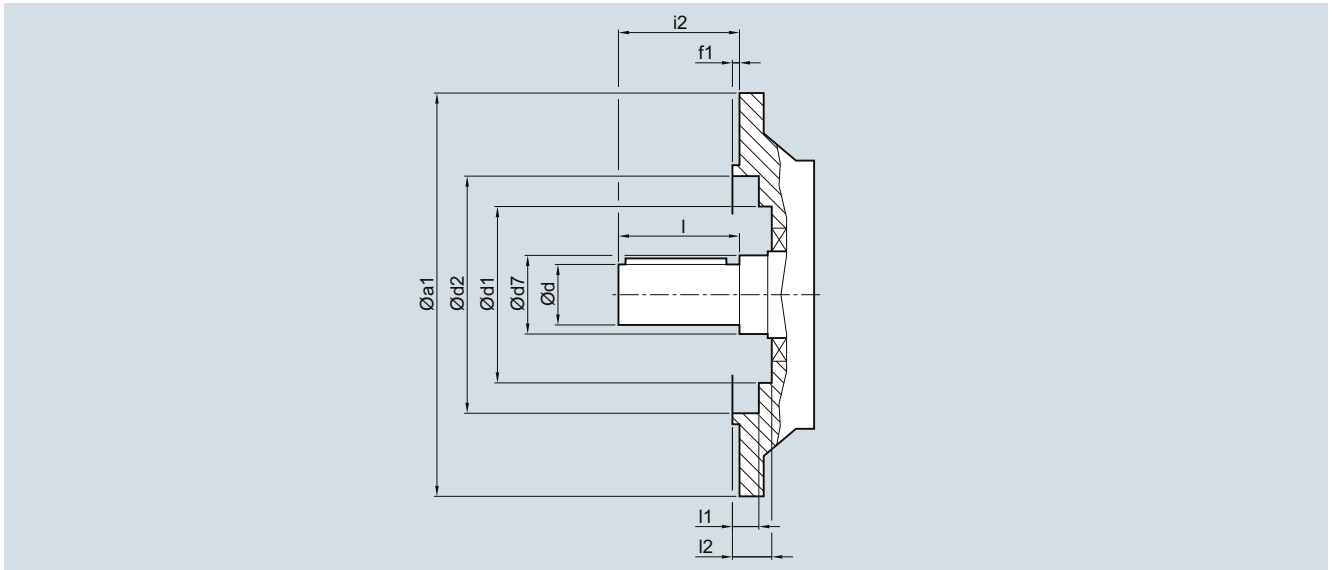
3



Gearbox	a1	d	d7	d1 DF/ZF	d1 DB/ZB	d2	f1	i2	l	l1 DF/ZF	l1 DB/ZB	i2
<b>Helical gearbox DF/ZF or DB/ZB</b>												
DF/ZF19, DB/ZB19	120	16	25	48.0	48.0	72.0	3.0	40	28	1.0	1.0	6.0
	120	16	25	48.0	48.0	72.0	3.0	40	40	1.0	1.0	6.0
	120	20	25	48.0	48.0	72.0	3.0	40	40	1.0	1.0	6.0
DF/ZF19	140	20	25	48.0	-	87.0	3.0	40	40	1.0	-	6.0
	160	20	25	48.0	-	102.0	3.5	40	40	1.0	-	6.5
DF/ZF29, DB/ZB29	120	25	30	56.0	56.0	72.0	3.0	50	50	2.0	2.0	8.0
DF/ZF29	140	25	30	56.0	-	87.0	3.5	50	50	2.0	-	7.0
	160	25	30	56.0	-	102.0	3.5	50	50	2.0	-	7.5
DF/ZF39, DB/ZB39	120	25	35	69.0	66.0	72.0	3.0	50	50	4.0	4.0	9.0
DF/ZF39	160	25	35	66.5	-	102.0	3.5	50	50	1.5	-	6.5
	200	25	35	66.5	-	120.0	3.5	50	50	1.5	-	6.5
DF/ZF49, DB/ZB49	140	30	35	79.0	79.0	84.5	3.0	60	60	4.0	4.0	9.5
DF/ZF49	160	30	35	79.0	-	94.5	3.5	60	60	5.5	-	11.0
	200	30	35	79.0	-	121.0	3.5	60	60	4.5	-	10.0
DF/ZF59, DB/ZB59	160	35	40	88.0	88.0	94.5	3.5	70	70	4.5	4.5	11.0
DF/ZF59, EF49	200	35	40	88.0	-	115.0	3.5	70	70	4.5	-	9.0
	250	35	40	88.0	-	168.0	4.0	70	70	4.0	-	10.5
DF/ZF69, DB/ZB69	200	35	47	105.0	105.0	115.0	3.5	70	70	4.5	4.5	11.0
DF/ZF69	250	35	47	105.0	-	168.0	4.0	70	70	4.0	-	10.5
DF/ZF79, DB/ZB79	250	40	52	113.0	114.5	168.0	4.0	80	80	0.5	2.5	8.0
DF/ZF79, EF89	300	40	52	113.0	-	217.0	4.0	80	80	0.5	-	8.0
DF/ZF89, DB/ZB89	300	50	62	143.0	143.0	218.0	4.0	100	100	1.5	1.5	9.0
DF/ZF89	350	50	62	143.0	-	238.0	5.0	100	100	2.5	-	10.0
DF/ZF109	350	60	65	157.0	-	236.0	5.0	120	120	2.0	-	12.0
	450	60	65	168.0	-	335.0	5.0	120	120	2.0	-	12.0
DF/ZF129	350	70	75	180.0	-	236.0	5.0	140	140	7.5	-	20.0
	450	70	75	180.0	-	330.0	5.0	140	140	7.5	-	20.0
DF/ZF149	450	90	100	225	-	330	5.0	170	170	2.5	-	10.0
	550	90	100	225	-	430	5.0	170	170	2.5	-	10.0
DF/ZF169	450	110	120	235	-	330	5	210	210	0.5	-	10.0
	550	110	120	235	-	430	5	210	210	0.5	-	10
DF/ZF189	550	120	140	274	-	430	5	210	210	0	-	10
	660	120	140	274	-	530	6	210	210	1	-	11

**Inner contour of the flange design** (continued)

Notes regarding the design of the customer's interface.



Gearbox	a1	d	d7	d1	d2	f1	i2	l	i1	i2
<b>Helical gearbox EF</b>										
EF39	120	20	35	-	72	3	40	40	6	-
	140	20	35	-	80	3	40	40	6	-
	160	20	35	87	100	3.5	40	40	5.5	6.5
	200	20	35	87	121	3.5	40	40	5.5	6.5
EF49	160	25	40	88.0	94.5	3.5	50	50	4.5	11.0
	200	25	40	88.0	115.0	3.5	50	50	4.5	9.0
	250	25	40	88.0	168.0	4.0	50	50	4.0	10.5
EF69	200	30	40	105.0	115.0	3.5	60	60	4.5	11.0
	250	30	40	105.0	168.0	4.0	60	60	4.0	10.5
EF89	250	40	45	113.0	168.0	4.0	80	80	0.5	8.0
	300	40	45	113.0	217.0	4.0	80	80	0.5	8.0
EF109	300	50	55	143.0	218.0	4.0	97.5	100	1.5	9.0
	350	50	55	143.0	238.0	5.0	97.5	100	2.5	10.0
EF129	350	60	65	157.0	236.0	5.0	120	120	2.0	12.0
	450	60	65	168.0	335.0	5.0	120	120	2.0	12.0
EF149	350	70	75	180.0	236.0	5.0	130	140	7.5	20.0
	450	70	75	180.0	330.0	5.0	130	140	7.5	20.0