

# Helical geared motors



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# MOTOX Geared Motors

## Helical geared motors

### Orientation

### Overview



Helical gearbox E



Helical gearbox D/Z

MOTOX helical gearboxes are part of the MOTOX modular system. With bevel helical, parallel shaft, helical worm or variable speed gearboxes, three-phase motors with and without brakes, this system covers all possible drive combinations, right up to the electronic variable speed drive.

MOTOX helical gearboxes are designed for continuous duty. The gearbox housings made of gray cast iron or aluminium are developed in 3D CAD and have an optimized structure in terms of rigidity and vibration absorption. Radial shaft seals with dust-protection lips prevent oil from leaking out of the housing, dust and water from entering it. All the gear wheels are milled and their surfaces hardened. The tooth flanks are ground or honed so that they are convex and corrected in terms of the profile.

MOTOX helical gearboxes are of 1-stage, 2-stage and 3-stage design. The MOTOX helical gearbox series can be supplied in foot-mounted or flange-mounted design for mounting in any position. Flange housings can be supplied with an integrated housing flange (C type). Combined foot / flange-mounted design or foot-mounted housings with housing flange are available on request.

**Overview** (continued)

The helical gearboxes are designated as follows:

Gearbox type:

(-)	Helical gearboxes
Transmission stage	<b>E</b> 1-stage <b>Z</b> 2-stage <b>D</b> 3-stage

Type:

Shaft	(-) Solid shaft
Mounting	(-) Foot-mounted design <b>F</b> Flange-mounted design (A-type) <b>Z</b> Housing flange (C-type) <b>R</b> Agitator flange <b>K</b> Cooling tower flange <sup>1)</sup>

Connections (-) Feather key

Special features **W** Reduced-backlash version

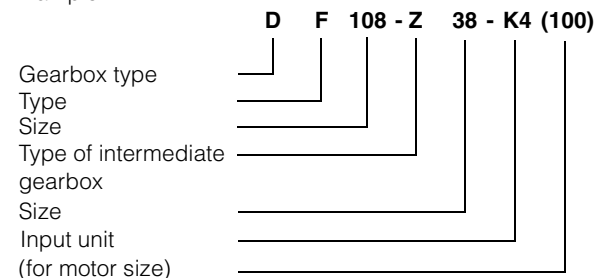
Type of intermediate gearbox

(-)	Helical gearboxes
Transmission stage	<b>Z</b> 2-stage <b>D</b> 3-stage

Input unit

<b>K2</b>	Coupling lantern with flexible coupling for connecting an IEC motor
<b>K2TC</b>	Coupling lantern with flexible coupling for connecting a NEMA motor <sup>1)</sup>
<b>K4</b>	Short coupling lantern with clamp connection for connecting an IEC motor
<b>K5</b>	Short coupling lantern with clamp connection for connecting a NEMA motor <sup>1)</sup>
<b>KQ</b>	Lantern for servomotor with feather key and zero-backlash flexible coupling for connecting a servomotor
<b>KQS</b>	Lantern for servomotor without feather key and zero-backlash flexible coupling for connecting a servomotor
<b>A</b>	Input unit with free input shaft
<b>A5</b>	Input unit with free input shaft (NEMA design) <sup>1)</sup>
<b>P</b>	Input unit with free input shaft and piggy back for connecting an IEC motor
<b>P5</b>	Input unit with free input shaft and piggy back for connecting a NEMA motor <sup>1)</sup>
<b>PS</b>	Input unit with free input shaft and piggy back with protection cover

Example:



The series currently comprises 11 sizes for D and Z gearboxes and 7 sizes for E gearboxes.

E gearboxes are available as 1-stage, Z gearboxes as 2-stage and D gearboxes as 3-stage.

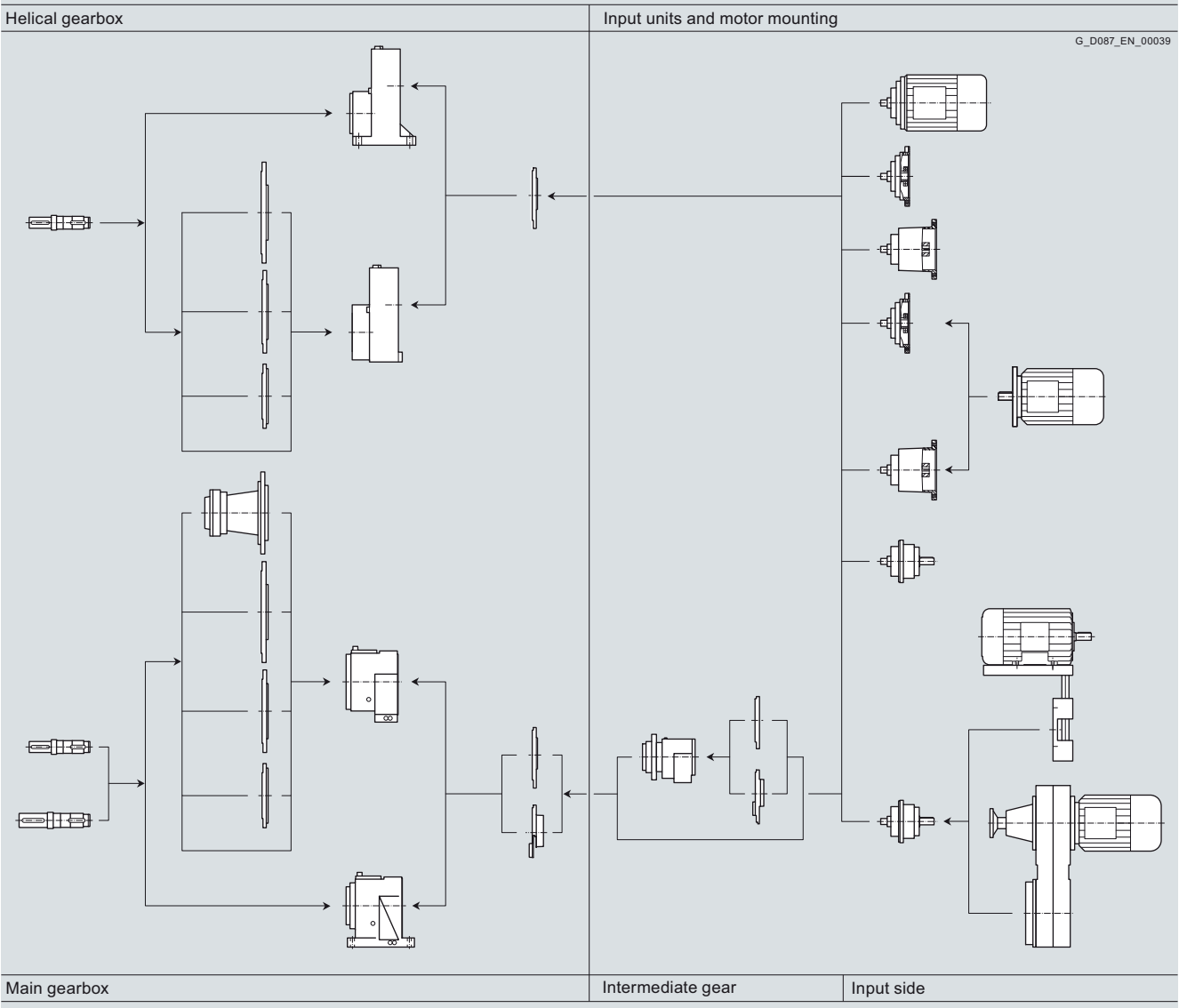
<sup>1)</sup> These designs can be selected from our MOTOX Configurator electronic catalog.

# MOTOX Geared Motors

## Helical geared motors

### Orientation

#### Modular system



### Use

MOTOX helical geared motors have a high efficiency and are characterized by their very low noise emission.

The geared motors offer high economical efficiency with their favorable price and low maintenance expenses.

The housings offer a wide range of mounting options due to their flange-mounted or foot-mounted designs.

### Oil quantities

The oil quantities corresponding to the applicable mounting positions are specified in the operating instructions and on the rating plate.

### Permissible radial force $F_{Rperm}$

#### 1-stage helical gearboxes – standard bearing arrangement

Gearbox type	d mm	l mm	y mm	z mm	a kNmm	b mm	Direction of rotation when viewing the output shaft	$F_{Rperm}$ in N with $x = l/2$ for output speeds $n_2$ in rpm					
								≤ 183	≤ 229	≤ 287	≤ 358	≤ 448	≤ 502
E.38	20	40	105	85	70.9	24.0	Left	4 070	3 722	3 209	2 978	2 358	1 918
					93.3		Right	4 227	3 805	2 603	2 423	1 657	1 152
E.48	25	50	114	89	45.7	24.0	Left	3 687	3 174	2 823	2 283	1 992	1 744
					93.9		Right	3 888	3 437	2 801	1 352	854	441
E.68	30	60	155	125	165.0	29.5	Left	7 175	6 052	4 468	3 606	2 441	2 055
					257.0		Right	6 098	4 813	2 931	2 021	713	327
E.88	40	80	171	131	668.0	32.5	Left	8 403	7 543	6 430	5 764	4 886	4 645
					755.0		Right	8 778	7 976	6 850	5 635	3 496	3 080
E.108	50	100	194	144	904.0	36.5	Left	11 241	9 759	7 901	7 118	5 017	4 933
					1 063.0		Right	9 104	7 169	4 979	4 356	1 797	1 944
E.128	60	120	228	168	2 064.0	36.5	Left	15 781	13 912	12 554	11 239	10 100	9 566
					2 277.0		Right	16 567	14 537	12 052	9 416	7 235	6 307
E.148	70	140	260	190	2 344.0	46.5	Left	19 286	17 125	15 100	13 777	10 937	10 977
					2 688.0		Right	19 631	15 610	11 864	10 015	5 915	6 451

Gearbox type	d mm	l mm	y mm	z mm	a kNmm	b mm	Direction of rotation when viewing the output shaft	$F_{Rperm}$ in N with $x = l/2$ for output speeds $n_2$ in rpm					
								≤ 562	≤ 629	≤ 705	≤ 789	≤ 884	≤ 990
E.38	20	40	105	85	70.9	24.0	Left	1 900	1 641	1 233	991	–	–
					93.3		Right	1 199	942	455	221	–	–
E.48	25	50	114	89	45.7	24.0	Left	1 688	1 663	1 712	1 752	1 666	–
					93.9		Right	475	554	719	869	846	–
E.68	30	60	155	125	165.0	29.5	Left	1 948	1 787	1 662	1 799	1 811	1 736
					257.0		Right	304	232	211	495	627	656
E.88	40	80	171	131	668.0	32.5	Left	4 424	4 113	3 911	3 891	–	–
					755.0		Right	2 756	2 175	1 879	2 055	–	–
E.108	50	100	194	144	904.0	36.5	Left	4 350	3 950	3 921	–	–	–
					1 063.0		Right	1 331	1 007	1 213	–	–	–
E.128	60	120	228	168	2 064.0	36.5	Left	9 171	8 876	8 586	8 298	7 980	7 623
					2 277.0		Right	5 696	5 443	5 283	5 191	4 950	4 681
E.148	70	140	260	190	2 344.0	46.5	Left	10 977	10 156	9 758	9 587	–	–
					2 688.0		Right	6 874	6 079	5 883	6 028	–	–

The values in the table apply to the worst-case scenario.  
 The output shaft bearing arrangement can be calculated using our MOTOX Configurator electronic catalog.  
 See Chapter 1 "Configuring guide" for more information on calculating the permissible radial force.

# MOTOX Geared Motors

## Helical geared motors

### General technical data

#### Permissible radial force $F_{Rperm}$ (continued)

2-stage and 3-stage helical gearboxes – standard bearing arrangement

Gearbox type	d mm	l mm	y mm	z mm	a kNmm	b mm	Direction of rotation when viewing the output shaft	$F_{Rperm}$ in N with $x = l/2$ for output speeds $n_2$ in rpm							
								≤ 16	≤ 25	≤ 40	≤ 63	≤ 100	≤ 160	≤ 250	≤ 400
D./Z.18	20	40	91.0	71.0	51.2	12	Left	1 600	1 600	1 600	1 600	1 600	1 600	1 550	1 420
							Right	1 600	1 600	1 600	1 600	1 600	1 600	1 480	1 370
D./Z.F18	20	40	99.0	79.0	57.2	20	Left	1 430	1 430	1 430	1 430	1 430	1 430	1 420	1 310
							Right	1 430	1 430	1 430	1 430	1 430	1 430	1 360	1 260
D./Z.28	25	50	104.0	79.0	129.5	12	Left	2 890	2 890	2 890	2 890	1 650	960	1 130	1 070
							Right	3 420	3 420	3 420	3 420	2 190	1 500	1 620	1 490
D./Z.F28	25	50	110.0	85.0	129.5	18	Left	2 540	2 540	2 540	2 540	1 450	850	990	940
							Right	3 012	3 012	3 012	3 012	1 930	1 320	1 430	1 310
D./Z.38	30	60	111.0	81.0	210.0	16	Left	4 565	4 565	4 560	3 230	1 990	1 580	1 110	1 020
							Right	4 565	4 565	4 565	3 880	2 630	2 200	1 730	1 560
	25	50	106.0	81.0	169.0	0	Left	6 760	6 310	5 010	3 570	2 180	1 740	1 230	1 110
							Right	6 760	6 010	5 080	4 140	2 890	2 430	1 910	1 710
D./Z.48	40	80	145.0	105.0	499.0	19	Left	8 457	8 457	7 480	5 470	4 150	3 400	3 020	2 350
							Right	8 457	8 457	7 600	6 300	5 130	4 280	3 690	2 950
	30	60	135.0	105.0	265.0	0	Left	8 833	8 833	8 670	6 450	4 850	3 970	3 520	2 740
							Right	8 833	8 833	8 170	6 760	5 630	4 860	4 310	3 460
D./Z.68	50	100	179.5	129.5	943.0	23	Left	12 917	12 917	10 820	7 690	4 970	3 670	3 380	3 010
							Right	12 917	12 917	12 520	9 380	6 710	5 270	4 760	3 880
	40	80	170.0	129.5	564.0	0	Left	14 100	14 100	12 230	8 650	5 630	4 180	3 810	3 390
							Right	14 100	14 100	14 100	10 600	7 580	5 960	5 400	4 380
D./Z.88	60	120	219.0	159.0	1 533.0	21	Left	18 925	18 925	18 925	18 925	16 330	14 060	11 770	11 300
							Right	18 925	18 925	18 925	18 710	15 100	12 960	11 310	10 630
	50	100	209.0	159.0	1 150.0	0	Left	23 000	23 000	23 000	21 010	17 110	14 700	12 830	12 000
							Right	23 000	23 000	23 000	19 630	15 850	13 600	11 880	11 140
D./Z.108	70	140	259.0	189.0	2 328.0	29	Left	23 515	23 515	23 515	23 515	20 860	15 920	13 780	14 760
							Right	23 515	23 515	23 515	22 340	18 830	14 350	13 280	13 690
	60	120	249.0	189.0	2 113.0	0	Left	35 216	35 216	30 120	25 340	21 740	16 980	15 170	15 400
							Right	35 216	33 940	28 090	23 210	19 610	14 940	13 820	14 220
D./Z.128	90	170	320.5	235.5	5 181.0	30	Left	45 052	45 052	36 770	31 220	26 070	22 270	18 010	19 340
							Right	45 052	44 170	34 000	28 490	23 260	19 750	15 860	18 050
	70	140	305.5	235.5	3 120.0	0	Left	44 571	44 571	38 510	32 740	27 300	23 360	18 880	20 280
							Right	44 571	44 571	35 740	29 790	24 420	20 690	16 680	18 920
D./Z.148	100	210	361.0	256.0	6 900.0	33	Left	50 000	50 000	45 040	38 930	31 140	27 200	23 760	21 590
							Right	50 000	50 000	41 490	35 280	27 600	23 660	20 600	19 330
	90	170	341.0	256.0	6 359.0	0	Left	67 600	61 030	47 700	41 090	32 920	28 780	25 140	22 870
							Right	63 750	58 650	43 850	37 450	29 170	25 030	21 780	20 410
D./Z.168	120	210	420.5	315.5	11 652	30	Left	86 311	86 311	86 311	86 311	86 311	86 311	86 311	86 311
							Right	86 311	86 311	86 311	86 311	86 311	86 311	86 311	86 311
	100	210	420.5	315.5	7 958.0	0	Left	75 790	75 790	75 790	75 790	75 790	75 790	75 790	75 790
							Right	75 790	75 790	75 790	75 790	75 790	75 790	75 790	75 790
D./Z.188	120	210	445.5	340.5	16 920	36	Left	120 000	120 000	120 000	120 000	87 920	101 570	114 610	–
							Right	120 000	120 000	120 000	120 000	106 270	116 020	120 000	–

The values in the table apply to the worst-case scenario.  
The output shaft bearing arrangement can be calculated using our MOTOX Configurator electronic catalog.  
See Chapter 1 "Configuring guide" for more information on calculating the permissible radial force.

### Permissible radial force $F_{Rperm}$ (continued)

2-stage and 3-stage helical gearboxes – radially reinforced bearing arrangement

Gearbox type	d mm	l mm	y mm	z mm	a kNmm	b mm	Direction of rotation when viewing the output shaft	$F_{Rperm}$ in N with $x = l/2$ for output speeds $n_2$ in rpm							
								≤ 16	≤ 25	≤ 40	≤ 63	≤ 100	≤ 160	≤ 250	≤ 400
D./Z.68	50	100	179.5	129.5	943	23	Left	12 917	12 917	12 917	12 917	12 917	12 917	12 917	12 917
							Right	12 917	12 917	12 917	12 917	12 917	12 917	12 917	12 917
	40	80	170.0	129.5	564	0	Left	14 100	14 100	14 100	14 100	14 100	14 100	14 100	14 100
							Right	14 100	14 100	14 100	14 100	14 100	14 100	14 100	14 100
D./Z.88	60	120	219.0	159.0	1 533	21	Left	18 925	18 925	18 925	18 925	18 820	16 250	12 320	13 710
							Right	18 925	18 925	18 925	18 925	18 925	18 925	14 570	15 540
	50	100	209.0	159.0	1 150	0	Left	23 000	23 000	23 000	23 000	20 990	18 130	13 740	15 290
							Right	23 000	23 000	23 000	23 000	23 000	21 180	16 250	17 330
D./Z.108	70	140	259.0	189.0	2 328	29	Left	23 515	23 515	23 515	23 515	23 515	15 970	13 870	21 240
							Right	23 515	23 515	23 515	23 515	23 515	20 780	18 680	23 515
	60	120	249.0	189.0	2 113	0	Left	35 216	35 216	35 216	34 530	27 240	17 390	15 080	23 240
							Right	35 216	35 216	35 216	35 216	32 630	22 790	20 530	26 160
D./Z.128	90	170	320.5	235.5	5 181	30	Left	45 052	45 052	45 052	45 052	45 052	45 052	42 010	45 052
							Right	45 052	45 052	45 052	45 052	45 052	45 052	44 110	45 052
	70	140	305.5	235.5	3 120	0	Left	44 571	44 571	44 571	44 571	44 571	44 571	44 571	44 571
							Right	44 571	44 571	44 571	44 571	44 571	44 571	44 571	44 571
D./Z.148	100	210	361.0	256.0	6 900	33	Left	50 000	50 000	50 000	50 000	50 000	50 000	50 000	50 000
							Right	50 000	50 000	50 000	50 000	50 000	50 000	50 000	50 000
	90	170	341.0	256.0	6 359	0	Left	74 811	74 811	74 811	74 811	74 811	74 811	66 220	60 710
							Right	74 811	74 811	74 811	74 811	74 811	71 170	62 530	58 280
D./Z.168	120	210	420.5	315.5	11 652	30	Left	86 311	86 311	86 311	86 311	86 311	86 311	86 311	86 311
							Right	86 311	86 311	86 311	86 311	86 311	86 311	86 311	86 311
	100	210	420.5	315.5	7 958	0	Left	75 790	75 790	75 790	75 790	75 790	75 790	75 790	75 790
							Right	75 790	75 790	75 790	75 790	75 790	75 790	75 790	75 790
D./Z.188	120	210	445.5	340.5	16 920	36	Left	120 000	120 000	120 000	120 000	87 920	101 570	114 610	–
							Right	120 000	120 000	120 000	120 000	106 270	116 020	120 000	–

The values in the table apply to the worst-case scenario.  
 The output shaft bearing arrangement can be calculated using our MOTOX Configurator electronic catalog.  
 See Chapter 1 "Configuring guide" for more information on calculating the permissible radial force.

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data

The selection tables show the most common variants and combinations. Other combinations can be selected using our MOTOX Configurator or made available on request.

At an identical power rating and output speed, priority is given in the selection tables to 4-pole geared motors.

At the available transmission ratios, they cover the majority of output speeds.

Due to their prevalence, 4-pole geared motors are easily available, with short delivery times and at a low cost. They also feature a favorable size / power ratio.

Power rating $P_{\text{Motor}}$ kW (50 Hz)	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
0.09	<b>D.48-LA71M8</b>							
	3.0	285	1.6	208.77	★ 2KJ1203 - ■CE13 - ■■S1	P02	27	
	3.4	253	1.8	185.66	2KJ1203 - ■CE13 - ■■R1	P02	27	
	3.9	220	2.0	161.05	★ 2KJ1203 - ■CE13 - ■■Q1	P02	27	
	<b>D.38-LA71M8</b>							
	3.3	262	0.84	191.75	★ 2KJ1202 - ■CE13 - ■■S1	P02	18	
	3.7	232	0.95	170.24	2KJ1202 - ■CE13 - ■■R1	P02	18	
	4.2	204	1.1	149.26	★ 2KJ1202 - ■CE13 - ■■Q1	P02	18	
	<b>D.38-LA71B6</b>							
	4.7	184	1.2	191.75	★ 2KJ1202 - ■CB13 - ■■S1	P01	18	
	5.3	163	1.3	170.24	2KJ1202 - ■CB13 - ■■R1	P01	18	
	6.0	143	1.5	149.26	★ 2KJ1202 - ■CB13 - ■■Q1	P01	18	
	6.7	128	1.7	133.57	2KJ1202 - ■CB13 - ■■P1	P01	18	
	0.12	<b>D.188-D48-LA71B4</b>						
		0.05	15 788	1.3	28 260	2KJ1236 - ■CB13 - ■■J1		604
		0.06	12 656	1.6	22 654	2KJ1236 - ■CB13 - ■■G1		604
0.06		13 965	1.4	24 996	★ 2KJ1236 - ■CB13 - ■■H1		604	
0.07		11 172	1.8	19 997	★ 2KJ1236 - ■CB13 - ■■F1		604	
0.08		10 078	2.0	18 039	2KJ1236 - ■CB13 - ■■E1		604	
<b>D.168-D48-LA71B4</b>								
0.05		15 652	0.89	28 017	★ 2KJ1234 - ■CB13 - ■■F1		460	
0.06		12 807	1.1	22 923	★ 2KJ1234 - ■CB13 - ■■D1		460	
0.06		14 120	0.99	25 274	2KJ1234 - ■CB13 - ■■E1		460	
0.07		11 668	1.2	20 886	2KJ1234 - ■CB13 - ■■C1		460	
<b>D.168-Z48-LA71B4</b>								
0.08		10 003	1.4	17 519	2KJ1232 - ■CB13 - ■■A2		459	
0.09		8 852	1.6	15 504	★ 2KJ1232 - ■CB13 - ■■X1		459	
0.10		8 047	1.7	14 094	2KJ1232 - ■CB13 - ■■W1		459	
0.11		7 229	1.9	12 661	★ 2KJ1232 - ■CB13 - ■■V1		459	
<b>D.148-D38-LA71B4</b>								
0.08		9 926	0.81	17 767	2KJ1230 - ■CB13 - ■■C1		284	
<b>D.148-Z38-LA71B4</b>								
0.09		8 467	0.94	14 830	2KJ1228 - ■CB13 - ■■X1		283	
0.11		7 530	1.1	13 188	2KJ1228 - ■CB13 - ■■W1		283	
0.12		6 532	1.2	11 440	2KJ1228 - ■CB13 - ■■V1		283	
0.13		6 103	1.3	10 689	2KJ1228 - ■CB13 - ■■U1		283	
0.15		5 368	1.5	9 401	2KJ1228 - ■CB13 - ■■T1		283	
0.17	4 701	1.7	8 233	2KJ1228 - ■CB13 - ■■S1		283		
0.19	4 158	1.9	7 282	2KJ1228 - ■CB13 - ■■R1		283		

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
<b>0.12</b>	<b>D.128-Z38-LA71B4</b>						
	<b>0.13</b>	6 007	0.85	10 521	2KJ1225 - ■CB13 - ■■W1		198
	<b>0.15</b>	5 211	0.98	9 127	★ 2KJ1225 - ■CB13 - ■■V1		198
	<b>0.16</b>	4 869	1.0	8 528	2KJ1225 - ■CB13 - ■■U1		198
	<b>0.19</b>	4 282	1.2	7 500	★ 2KJ1225 - ■CB13 - ■■T1		198
	<b>0.21</b>	3 751	1.4	6 569	2KJ1225 - ■CB13 - ■■S1		198
	<b>0.24</b>	3 317	1.5	5 810	★ 2KJ1225 - ■CB13 - ■■R1		198
	<b>0.27</b>	3 007	1.7	5 266	2KJ1225 - ■CB13 - ■■Q1		198
	<b>0.30</b>	2 654	1.9	4 648	★ 2KJ1225 - ■CB13 - ■■P1		198
		<b>D.108-Z38-LA71B4</b>					
<b>0.22</b>		3 556	0.87	6 228	2KJ1223 - ■CB13 - ■■F2		127
<b>0.25</b>		3 208	0.97	5 618	2KJ1223 - ■CB13 - ■■E2		127
<b>0.28</b>		2 910	1.1	5 096	2KJ1223 - ■CB13 - ■■D2		127
<b>0.30</b>		2 651	1.2	4 643	2KJ1223 - ■CB13 - ■■C2		127
<b>0.33</b>		2 424	1.3	4 246	2KJ1223 - ■CB13 - ■■B2		127
<b>0.37</b>		2 168	1.4	3 797	2KJ1223 - ■CB13 - ■■A2		127
<b>0.39</b>		2 069	1.5	3 624	2KJ1223 - ■CB13 - ■■X1		127
<b>0.43</b>		1 840	1.7	3 223	2KJ1223 - ■CB13 - ■■W1		127
<b>0.50</b>		1 596	1.9	2 796	2KJ1223 - ■CB13 - ■■V1		127
	<b>D.88-Z28-LA71B4</b>						
	<b>0.39</b>	2 041	0.82	3 574	2KJ1218 - ■CB13 - ■■A2		76
	<b>0.45</b>	1 778	0.94	3 114	★ 2KJ1218 - ■CB13 - ■■X1		76
	<b>0.50</b>	1 597	1.1	2 797	2KJ1218 - ■CB13 - ■■W1		76
	<b>0.55</b>	1 442	1.2	2 525	★ 2KJ1218 - ■CB13 - ■■V1		76
	<b>0.61</b>	1 307	1.3	2 290	2KJ1218 - ■CB13 - ■■U1		76
	<b>0.67</b>	1 190	1.4	2 084	★ 2KJ1218 - ■CB13 - ■■T1		76
	<b>0.76</b>	1 052	1.6	1 842	2KJ1218 - ■CB13 - ■■S1		76
	<b>0.82</b>	971	1.7	1 701	★ 2KJ1218 - ■CB13 - ■■R1		76
	<b>0.96</b>	836	2.0	1 465	2KJ1218 - ■CB13 - ■■Q1		76
	<b>D.68-Z28-LA71B4</b>						
	<b>0.84</b>	955	0.84	1 672	2KJ1214 - ■CB13 - ■■S1		46
	<b>0.91</b>	882	0.91	1 544	★ 2KJ1214 - ■CB13 - ■■R1		46
	<b>1.1</b>	759	1.1	1 329	2KJ1214 - ■CB13 - ■■Q1		46
	<b>1.2</b>	690	1.2	1 208	★ 2KJ1214 - ■CB13 - ■■P1		46
	<b>1.3</b>	627	1.3	1 098	★ 2KJ1214 - ■CB13 - ■■N1		46
	<b>1.4</b>	569	1.4	996	2KJ1214 - ■CB13 - ■■M1		46
	<b>1.5</b>	517	1.5	906	★ 2KJ1214 - ■CB13 - ■■L1		46
	<b>1.7</b>	457	1.7	801	2KJ1214 - ■CB13 - ■■K1		46
	<b>1.9</b>	423	1.9	740	★ 2KJ1214 - ■CB13 - ■■J1		46
	<b>D.68-LA71MB8</b>						
	<b>2.3</b>	499	1.6	281.01	2KJ1204 - ■CF13 - ■■U1	P02	46
	<b>2.6</b>	442	1.8	248.68	★ 2KJ1204 - ■CF13 - ■■T1	P02	46
	<b>2.9</b>	402	2.0	226.07	2KJ1204 - ■CF13 - ■■S1	P02	46

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.12	<b>D.48-Z28-LA71B4</b>						
	1.6	505	0.89	885	2KJ1212 - ■CB13 - ■■Q1		29
	1.7	460	0.98	805	★ 2KJ1212 - ■CB13 - ■■P1		29
	1.9	417	1.1	731	★ 2KJ1212 - ■CB13 - ■■N1		29
	2.1	379	1.2	663	2KJ1212 - ■CB13 - ■■M1		29
	2.3	344	1.3	603	★ 2KJ1212 - ■CB13 - ■■L1		29
	2.6	305	1.5	534	2KJ1212 - ■CB13 - ■■K1		29
	2.8	281	1.6	493	★ 2KJ1212 - ■CB13 - ■■J1		29
	<b>D.48-LA71MB8</b>						
	3.1	371	1.2	208.77	★ 2KJ1203 - ■CF13 - ■■S1	P02	27
	3.5	330	1.4	185.66	2KJ1203 - ■CF13 - ■■R1	P02	27
	<b>D.48-LA71C6</b>						
	4.1	278	1.6	208.77	★ 2KJ1203 - ■CC13 - ■■S1	P01	27
	4.6	247	1.8	185.66	2KJ1203 - ■CC13 - ■■R1	P01	27
	5.3	215	2.1	161.05	★ 2KJ1203 - ■CC13 - ■■Q1	P01	27
	<b>Z.38-Z28-LA71B4</b>						
	3.0	268	0.82	464	★ 2KJ1112 - ■CB13 - ■■H1		20
	<b>D.38-LA71MB8</b>						
	4.3	265	0.83	149.26	★ 2KJ1202 - ■CF13 - ■■Q1	P02	18
	<b>D.38-LA71C6</b>						
	4.5	256	0.86	191.75	★ 2KJ1202 - ■CC13 - ■■S1	P01	18
	5.1	227	0.97	170.24	2KJ1202 - ■CC13 - ■■R1	P01	18
	5.8	199	1.1	149.26	★ 2KJ1202 - ■CC13 - ■■Q1	P01	18
	6.4	178	1.2	133.57	2KJ1202 - ■CC13 - ■■P1	P01	18
	<b>D.38-LA71B4</b>						
	7.3	157	1.4	191.75	★ 2KJ1202 - ■CB13 - ■■S1		18
	8.2	139	1.6	170.24	2KJ1202 - ■CB13 - ■■R1		18
	9.4	122	1.8	149.26	★ 2KJ1202 - ■CB13 - ■■Q1		18
10.5	109	2.0	133.57	2KJ1202 - ■CB13 - ■■P1		18	
<b>D.28-LA71B4</b>							
6.7	170	0.82	207.96	★ 2KJ1201 - ■CB13 - ■■M1		10	
7.8	146	0.96	178.66	2KJ1201 - ■CB13 - ■■L1		10	
8.5	135	1.0	164.48	★ 2KJ1201 - ■CB13 - ■■K1		10	
9.4	122	1.1	149.53	2KJ1201 - ■CB13 - ■■J1		10	
10.6	108	1.3	132.35	★ 2KJ1201 - ■CB13 - ■■H1		10	
12.6	91	1.5	110.86	2KJ1201 - ■CB13 - ■■G1		10	
14.8	77	1.8	94.52	★ 2KJ1201 - ■CB13 - ■■F1		10	
17.4	66	2.1	80.34	★ 2KJ1201 - ■CB13 - ■■E1		10	
20	57	2.4	69.82	2KJ1201 - ■CB13 - ■■D1		10	
23	50	2.8	60.77	★ 2KJ1201 - ■CB13 - ■■C1		10	
<b>Z.28-LA71B4</b>							
27	42	3.3	51.35	2KJ1101 - ■CB13 - ■■C2		10	
32	35	3.9	43.3	★ 2KJ1101 - ■CB13 - ■■B2		10	
36	32	4.4	38.45	2KJ1101 - ■CB13 - ■■A2		10	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.12	<b>Z.28-LA71B4</b>						
	42	28	5.1	33.71	★ 2KJ1101 - ■CB13 - ■■X1		10
	46	25	5.7	30.16	2KJ1101 - ■CB13 - ■■W1		10
	52	22	6.4	26.77	★ 2KJ1101 - ■CB13 - ■■V1		10
	60	19	7.3	23.46	2KJ1101 - ■CB13 - ■■U1		10
	68	17	8.3	20.63	★ 2KJ1101 - ■CB13 - ■■T1		10
	75	15	9.2	18.63	2KJ1101 - ■CB13 - ■■S1		10
	86	13	10.5	16.24	★ 2KJ1101 - ■CB13 - ■■R1		10
	96	12	11.7	14.58	2KJ1101 - ■CB13 - ■■Q1		10
	106	11	13.0	13.17	★ 2KJ1101 - ■CB13 - ■■P1		10
	117	9.8	14.3	11.94	2KJ1101 - ■CB13 - ■■N1		10
	<b>D.18-LA71B4</b>						
	10.2	112	0.8	136.71	★ 2KJ1200 - ■CB13 - ■■L1		9
	11.3	102	0.88	124.29	2KJ1200 - ■CB13 - ■■K1		9
	12.7	90	1.0	110.01	★ 2KJ1200 - ■CB13 - ■■J1		9
	15.2	75	1.2	92.14	2KJ1200 - ■CB13 - ■■H1		9
	17.8	64	1.4	78.56	★ 2KJ1200 - ■CB13 - ■■G1		9
	21	55	1.6	66.78	★ 2KJ1200 - ■CB13 - ■■F1		9
	24	48	1.9	58.03	2KJ1200 - ■CB13 - ■■E1		9
	28	41	2.2	50.51	★ 2KJ1200 - ■CB13 - ■■D1		9
	<b>Z.18-LA71B4</b>						
	32	35	2.5	43.15	2KJ1100 - ■CB13 - ■■U1		9
	38	30	3.0	37.23	★ 2KJ1100 - ■CB13 - ■■T1		9
	44	26	3.4	31.98	2KJ1100 - ■CB13 - ■■S1		9
	48	24	3.7	29.45	★ 2KJ1100 - ■CB13 - ■■R1		9
	52	22	4.1	26.77	2KJ1100 - ■CB13 - ■■Q1		9
	59	19	4.6	23.69	★ 2KJ1100 - ■CB13 - ■■P1		9
	70	16	5.5	19.85	2KJ1100 - ■CB13 - ■■N1		9
	83	14	6.5	16.92	★ 2KJ1100 - ■CB13 - ■■M1		9
	97	12	7.6	14.38	★ 2KJ1100 - ■CB13 - ■■L1		9
	112	10	8.8	12.5	2KJ1100 - ■CB13 - ■■K1		9
	129	8.9	9.8	10.88	★ 2KJ1100 - ■CB13 - ■■J1		9
	143	8	10.3	9.81	2KJ1100 - ■CB13 - ■■H1		9
	162	7.1	11.3	8.66	2KJ1100 - ■CB13 - ■■G1		9
	189	6.1	9.1	7.42	★ 2KJ1100 - ■CB13 - ■■F1		9
217	5.3	10.0	6.45	2KJ1100 - ■CB13 - ■■E1		9	
250	4.6	11.1	5.61	★ 2KJ1100 - ■CB13 - ■■D1		9	
277	4.1	11.8	5.06	2KJ1100 - ■CB13 - ■■C1		9	
313	3.7	13.4	4.47	2KJ1100 - ■CB13 - ■■B1		9	
0.18	<b>D.188-D48-LA71C4</b>						
	0.06	21 556	0.93	22 654	2KJ1236 - ■CC13 - ■■G1		604
	0.06	23 784	0.84	24 996	★ 2KJ1236 - ■CC13 - ■■H1		604
	0.07	19 027	1.1	19 997	★ 2KJ1236 - ■CC13 - ■■F1		604
0.08	15 568	1.3	16 361	★ 2KJ1236 - ■CC13 - ■■D1		604	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.18	<b>D.188-D48-LA71C4</b>						
	0.08	17 164	1.2	18 039	2KJ1236 - ■ CC13 - ■■ E1		604
	0.09	14 184	1.4	14 907	2KJ1236 - ■ CC13 - ■■ C1		604
	<b>D.188-Z48-LA71C4</b>						
	0.11	12 159	1.6	12 504	2KJ1235 - ■ CC13 - ■■ X1		603
	0.12	10 761	1.9	11 066	★ 2KJ1235 - ■ CC13 - ■■ W1		603
	<b>D.168-Z48-LA71C4</b>						
	0.08	17 036	0.82	17 519	2KJ1232 - ■ CC13 - ■■ A2		459
	0.09	15 077	0.93	15 504	★ 2KJ1232 - ■ CC13 - ■■ X1		459
	0.10	13 705	1.0	14 094	2KJ1232 - ■ CC13 - ■■ W1		459
	0.11	12 312	1.1	12 661	★ 2KJ1232 - ■ CC13 - ■■ V1		459
	0.13	10 554	1.3	10 853	2KJ1232 - ■ CC13 - ■■ U1		459
	0.14	9 548	1.5	9 819	★ 2KJ1232 - ■ CC13 - ■■ T1		459
	0.15	8 814	1.6	9 064	2KJ1232 - ■ CC13 - ■■ S1		459
	0.17	7 664	1.8	7 881	★ 2KJ1232 - ■ CC13 - ■■ R1		459
	0.19	6 959	2.0	7 156	2KJ1232 - ■ CC13 - ■■ Q1		459
	<b>D.148-Z38-LA71C4</b>						
	0.15	9 142	0.88	9 401	2KJ1228 - ■ CC13 - ■■ T1		283
	0.17	8 006	1.0	8 233	2KJ1228 - ■ CC13 - ■■ S1		283
0.19	7 081	1.1	7 282	2KJ1228 - ■ CC13 - ■■ R1		283	
0.21	6 418	1.2	6 600	2KJ1228 - ■ CC13 - ■■ Q1		283	
0.24	5 665	1.4	5 826	2KJ1228 - ■ CC13 - ■■ P1		283	
0.26	5 111	1.6	5 256	2KJ1228 - ■ CC13 - ■■ N1		283	
0.29	4 636	1.7	4 767	2KJ1228 - ■ CC13 - ■■ M1		283	
0.32	4 223	1.9	4 343	2KJ1228 - ■ CC13 - ■■ L1		283	
<b>D.128-Z38-LA71C4</b>							
0.21	6 388	0.8	6 569	2KJ1225 - ■ CC13 - ■■ S1		198	
0.24	5 650	0.9	5 810	★ 2KJ1225 - ■ CC13 - ■■ R1		198	
0.26	5 121	1.0	5 266	2KJ1225 - ■ CC13 - ■■ Q1		198	
0.30	4 520	1.1	4 648	★ 2KJ1225 - ■ CC13 - ■■ P1		198	
0.33	4 077	1.3	4 193	2KJ1225 - ■ CC13 - ■■ N1		198	
0.36	3 698	1.4	3 803	★ 2KJ1225 - ■ CC13 - ■■ M1		198	
0.40	3 369	1.5	3 465	2KJ1225 - ■ CC13 - ■■ L1		198	
0.43	3 082	1.7	3 169	★ 2KJ1225 - ■ CC13 - ■■ K1		198	
0.48	2 756	1.9	2 834	2KJ1225 - ■ CC13 - ■■ J1		198	
0.53	2 530	2.0	2 602	★ 2KJ1225 - ■ CC13 - ■■ H1		198	
<b>D.108-Z38-LA71C4</b>							
0.36	3 692	0.84	3 797	2KJ1223 - ■ CC13 - ■■ A2		127	
0.38	3 524	0.88	3 624	2KJ1223 - ■ CC13 - ■■ X1		127	
0.42	3 134	0.99	3 223	2KJ1223 - ■ CC13 - ■■ W1		127	
0.49	2 719	1.1	2 796	2KJ1223 - ■ CC13 - ■■ V1		127	
0.52	2 540	1.2	2 612	2KJ1223 - ■ CC13 - ■■ U1		127	
0.60	2 234	1.4	2 297	2KJ1223 - ■ CC13 - ■■ T1		127	
0.68	1 957	1.6	2 012	2KJ1223 - ■ CC13 - ■■ S1		127	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.18	<b>D.108-Z38-LA71C4</b>						
	0.77	1 731	1.8	1 780	2KJ1223 - ■ CC13 - ■■ R1		127
	0.85	1 569	2.0	1 613	2KJ1223 - ■ CC13 - ■■ Q1		127
	<b>D.88-Z28-LA71C4</b>						
	0.66	2 027	0.83	2 084	★ 2KJ1218 - ■ CC13 - ■■ T1		76
	0.74	1 791	0.94	1 842	2KJ1218 - ■ CC13 - ■■ S1		76
	0.8	1 654	1.0	1 701	★ 2KJ1218 - ■ CC13 - ■■ R1		76
	0.94	1 425	1.2	1 465	2KJ1218 - ■ CC13 - ■■ Q1		76
	1.0	1 294	1.3	1 331	★ 2KJ1218 - ■ CC13 - ■■ P1		76
	1.1	1 177	1.4	1 210	★ 2KJ1218 - ■ CC13 - ■■ N1		76
	1.2	1 067	1.6	1 097	2KJ1218 - ■ CC13 - ■■ M1		76
	1.4	971	1.7	999	★ 2KJ1218 - ■ CC13 - ■■ L1		76
	1.6	859	2.0	883	2KJ1218 - ■ CC13 - ■■ K1		76
	<b>D.68-Z28-LA71C4</b>						
	1.4	969	0.83	996	2KJ1214 - ■ CC13 - ■■ M1		46
	1.5	881	0.91	906	★ 2KJ1214 - ■ CC13 - ■■ L1		46
	1.7	779	1.0	801	2KJ1214 - ■ CC13 - ■■ K1		46
	1.9	720	1.1	740	★ 2KJ1214 - ■ CC13 - ■■ J1		46
	2.2	619	1.3	637	2KJ1214 - ■ CC13 - ■■ H1		46
	<b>D.68-LA80S8</b>						
	2.4	716	1.1	281.01	2KJ1204 - ■ DB13 - ■■ U1	P02	50
	2.7	633	1.3	248.68	★ 2KJ1204 - ■ DB13 - ■■ T1	P02	50
	<b>D.68-LA71S6</b>						
	3.0	568	1.4	281.01	2KJ1204 - ■ CD13 - ■■ U1	P01	46
	3.4	503	1.6	248.68	★ 2KJ1204 - ■ CD13 - ■■ T1	P01	46
	3.8	457	1.7	226.07	2KJ1204 - ■ CD13 - ■■ S1	P01	46
	4.2	411	1.9	203.09	★ 2KJ1204 - ■ CD13 - ■■ R1	P01	46
	<b>D.48-Z28-LA71C4</b>						
	2.6	519	0.87	534	2KJ1212 - ■ CC13 - ■■ K1		29
	2.8	479	0.94	493	★ 2KJ1212 - ■ CC13 - ■■ J1		29
	<b>D.48-LA80S8</b>						
	3.2	532	0.85	208.77	★ 2KJ1203 - ■ DB13 - ■■ S1	P02	31
	3.6	473	0.95	185.66	2KJ1203 - ■ DB13 - ■■ R1	P02	31
	<b>D.48-LA71S6</b>						
	4.1	422	1.1	208.77	★ 2KJ1203 - ■ CD13 - ■■ S1	P01	27
	4.6	375	1.2	185.66	2KJ1203 - ■ CD13 - ■■ R1	P01	27
	5.3	326	1.4	161.05	★ 2KJ1203 - ■ CD13 - ■■ Q1	P01	27
	5.6	304	1.5	150.48	2KJ1203 - ■ CD13 - ■■ P1	P01	27
	<b>D.48-LA71C4</b>						
	6.6	262	1.7	208.77	★ 2KJ1203 - ■ CC13 - ■■ S1		27
	7.4	233	1.9	185.66	2KJ1203 - ■ CC13 - ■■ R1		27
	<b>D.38-LA71S6</b>						
	6.4	270	0.81	133.57	2KJ1202 - ■ CD13 - ■■ P1	P01	18

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.18	<b>D.38-LA71C4</b>						
	7.1	241	0.91	191.75	★ 2KJ1202 - ■ CC13 - ■■ S1		18
	8.0	214	1.0	170.24	2KJ1202 - ■ CC13 - ■■ R1		18
	9.2	187	1.2	149.26	★ 2KJ1202 - ■ CC13 - ■■ Q1		18
	10.3	168	1.3	133.57	2KJ1202 - ■ CC13 - ■■ P1		18
	11.6	149	1.5	118.55	★ 2KJ1202 - ■ CC13 - ■■ N1		18
	13.2	130	1.7	103.89	2KJ1202 - ■ CC13 - ■■ M1		18
	15.0	115	1.9	91.34	★ 2KJ1202 - ■ CC13 - ■■ L1		18
	16.6	104	2.1	82.52	2KJ1202 - ■ CC13 - ■■ K1		18
	<b>D.28-LA71C4</b>						
	10.4	166	0.84	132.35	★ 2KJ1201 - ■ CC13 - ■■ H1		10
	12.4	139	1.0	110.86	2KJ1201 - ■ CC13 - ■■ G1		10
	14.5	119	1.2	94.52	★ 2KJ1201 - ■ CC13 - ■■ F1		10
	17.1	101	1.4	80.34	★ 2KJ1201 - ■ CC13 - ■■ E1		10
	19.6	88	1.6	69.82	2KJ1201 - ■ CC13 - ■■ D1		10
	22	76	1.8	60.77	★ 2KJ1201 - ■ CC13 - ■■ C1		10
	<b>Z.28-LA71C4</b>						
	27	64	2.2	51.35	2KJ1101 - ■ CC13 - ■■ C2		10
	32	54	2.6	43.3	★ 2KJ1101 - ■ CC13 - ■■ B2		10
	36	48	2.9	38.45	2KJ1101 - ■ CC13 - ■■ A2		10
	41	42	3.3	33.71	★ 2KJ1101 - ■ CC13 - ■■ X1		10
	45	38	3.7	30.16	2KJ1101 - ■ CC13 - ■■ W1		10
	51	34	4.2	26.77	★ 2KJ1101 - ■ CC13 - ■■ V1		10
	58	29	4.8	23.46	2KJ1101 - ■ CC13 - ■■ U1		10
	66	26	5.4	20.63	★ 2KJ1101 - ■ CC13 - ■■ T1		10
	74	23	6.0	18.63	2KJ1101 - ■ CC13 - ■■ S1		10
	84	20	6.9	16.24	★ 2KJ1101 - ■ CC13 - ■■ R1		10
	94	18	7.7	14.58	2KJ1101 - ■ CC13 - ■■ Q1		10
	104	16	8.5	13.17	★ 2KJ1101 - ■ CC13 - ■■ P1		10
	115	15	9.3	11.94	2KJ1101 - ■ CC13 - ■■ N1		10
	126	14	10.3	10.87	★ 2KJ1101 - ■ CC13 - ■■ M1		10
	143	12	11.6	9.61	2KJ1101 - ■ CC13 - ■■ L1		10
154	11	12.6	8.87	★ 2KJ1101 - ■ CC13 - ■■ K1		10	
179	9.6	14.2	7.64	2KJ1101 - ■ CC13 - ■■ J1		10	
217	7.9	12.0	6.31	★ 2KJ1101 - ■ CC13 - ■■ G1		10	
240	7.2	13.0	5.72	2KJ1101 - ■ CC13 - ■■ F1		10	
263	6.5	14.1	5.21	★ 2KJ1101 - ■ CC13 - ■■ E1		10	
<b>D.18-LA71C4</b>							
17.4	99	0.91	78.56	★ 2KJ1200 - ■ CC13 - ■■ G1		9	
20	84	1.1	66.78	★ 2KJ1200 - ■ CC13 - ■■ F1		9	
24	73	1.2	58.03	2KJ1200 - ■ CC13 - ■■ E1		9	
27	63	1.4	50.51	★ 2KJ1200 - ■ CC13 - ■■ D1		9	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg		
0.18	<b>Z.18-LA71C4</b>								
	32	54	1.7	43.15	2KJ1100 - ■ CC13 - ■■ U1		9		
	37	47	1.9	37.23	★ 2KJ1100 - ■ CC13 - ■■ T1		9		
	43	40	2.2	31.98	2KJ1100 - ■ CC13 - ■■ S1		9		
	46	37	2.4	29.45	★ 2KJ1100 - ■ CC13 - ■■ R1		9		
	51	34	2.7	26.77	2KJ1100 - ■ CC13 - ■■ Q1		9		
	58	30	3.0	23.69	★ 2KJ1100 - ■ CC13 - ■■ P1		9		
	69	25	3.6	19.85	2KJ1100 - ■ CC13 - ■■ N1		9		
	81	21	4.2	16.92	★ 2KJ1100 - ■ CC13 - ■■ M1		9		
	95	18	5.0	14.38	★ 2KJ1100 - ■ CC13 - ■■ L1		9		
	110	16	5.7	12.5	2KJ1100 - ■ CC13 - ■■ K1		9		
	126	14	6.4	10.88	★ 2KJ1100 - ■ CC13 - ■■ J1		9		
	140	12	6.7	9.81	2KJ1100 - ■ CC13 - ■■ H1		9		
	158	11	7.4	8.66	2KJ1100 - ■ CC13 - ■■ G1		9		
	185	9.3	5.9	7.42	★ 2KJ1100 - ■ CC13 - ■■ F1		9		
	212	8.1	6.5	6.45	2KJ1100 - ■ CC13 - ■■ E1		9		
	244	7	7.2	5.61	★ 2KJ1100 - ■ CC13 - ■■ D1		9		
	271	6.3	7.7	5.06	2KJ1100 - ■ CC13 - ■■ C1		9		
	306	5.6	8.7	4.47	2KJ1100 - ■ CC13 - ■■ B1		9		
	383	4.5	10.2	3.58	★ 2KJ1100 - ■ CC13 - ■■ A1		9		
	0.18	<b>E.38-LA71C4</b>							
		147	12	2.7	9.33	★ 2KJ1001 - ■ CC13 - ■■ S1		13	
		165	10	3.1	8.3	2KJ1001 - ■ CC13 - ■■ R1		13	
		190	9	4.2	7.2	★ 2KJ1001 - ■ CC13 - ■■ Q1		13	
		0.25	<b>D.188-D48-LA71S4</b>						
			0.08	23 171	0.86	16 361	★ 2KJ1236 - ■ CD13 - ■■ D1		604
	0.09		21 112	0.95	14 907	2KJ1236 - ■ CD13 - ■■ C1		604	
	<b>D.188-Z48-LA71S4</b>								
	0.11		18 098	1.1	12 504	2KJ1235 - ■ CD13 - ■■ X1		603	
0.12	16 016		1.2	11 066	★ 2KJ1235 - ■ CD13 - ■■ W1		603		
0.15	13 080		1.5	9 037	★ 2KJ1235 - ■ CD13 - ■■ V1		603		
0.17	11 211		1.8	7 746	2KJ1235 - ■ CD13 - ■■ U1		603		
0.19	10 143		2.0	7 008	★ 2KJ1235 - ■ CD13 - ■■ T1		603		
<b>D.168-Z48-LA71S4</b>									
0.12	15 708	0.89	10 853	2KJ1232 - ■ CD13 - ■■ U1		459			
0.14	14 212	0.99	9 819	★ 2KJ1232 - ■ CD13 - ■■ T1		459			
0.15	13 119	1.1	9 064	2KJ1232 - ■ CD13 - ■■ S1		459			
0.17	11 407	1.2	7 881	★ 2KJ1232 - ■ CD13 - ■■ R1		459			
0.19	10 357	1.4	7 156	2KJ1232 - ■ CD13 - ■■ Q1		459			
0.21	9 457	1.5	6 534	★ 2KJ1232 - ■ CD13 - ■■ P1		459			
0.22	8 677	1.6	5 995	2KJ1232 - ■ CD13 - ■■ N1		459			
0.24	7 994	1.8	5 523	★ 2KJ1232 - ■ CD13 - ■■ M1		459			
0.27	7 260	1.9	5 016	2KJ1232 - ■ CD13 - ■■ L1		459			

★ Preferred transmission ratio

Shaft designs, see page 2/117

1, 2 or 9

Frequency and voltage, see page 8/20

1 to 9

Gearbox housing mounting position, see page 2/119

A, F, H or R

\*) For mounting type B3

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
<b>0.25</b>	<b>D.148-Z38-LA71S4</b>						
	<b>0.20</b>	9 553	0.84	6 600	<b>2KJ1228 - ■ CD13 - ■■ Q1</b>		283
	<b>0.23</b>	8 432	0.95	5 826	<b>2KJ1228 - ■ CD13 - ■■ P1</b>		283
	<b>0.26</b>	7 607	1.1	5 256	<b>2KJ1228 - ■ CD13 - ■■ N1</b>		283
	<b>0.28</b>	6 900	1.2	4 767	<b>2KJ1228 - ■ CD13 - ■■ M1</b>		283
	<b>0.31</b>	6 286	1.3	4 343	<b>2KJ1228 - ■ CD13 - ■■ L1</b>		283
	<b>0.34</b>	5 749	1.4	3 972	<b>2KJ1228 - ■ CD13 - ■■ K1</b>		283
	<b>0.38</b>	5 141	1.6	3 552	<b>2KJ1228 - ■ CD13 - ■■ J1</b>		283
	<b>0.41</b>	4 720	1.7	3 261	<b>2KJ1228 - ■ CD13 - ■■ H1</b>		283
	<b>0.46</b>	4 254	1.9	2 939	<b>2KJ1228 - ■ CD13 - ■■ G1</b>		283
	<b>D.128-Z38-LA71S4</b>						
	<b>0.32</b>	6 069	0.84	4 193	<b>2KJ1225 - ■ CD13 - ■■ N1</b>		198
	<b>0.36</b>	5 504	0.93	3 803	★ <b>2KJ1225 - ■ CD13 - ■■ M1</b>		198
	<b>0.39</b>	5 015	1.0	3 465	<b>2KJ1225 - ■ CD13 - ■■ L1</b>		198
	<b>0.43</b>	4 587	1.1	3 169	★ <b>2KJ1225 - ■ CD13 - ■■ K1</b>		198
	<b>0.48</b>	4 102	1.2	2 834	<b>2KJ1225 - ■ CD13 - ■■ J1</b>		198
	<b>0.52</b>	3 766	1.4	2 602	★ <b>2KJ1225 - ■ CD13 - ■■ H1</b>		198
	<b>0.58</b>	3 394	1.5	2 345	<b>2KJ1225 - ■ CD13 - ■■ G1</b>		198
	<b>0.67</b>	2 911	1.8	2 011	★ <b>2KJ1225 - ■ CD13 - ■■ E1</b>		198
	<b>0.67</b>	2 919	1.7	2 017	★ <b>2KJ1225 - ■ CD13 - ■■ F1</b>		198
<b>0.75</b>	2 602	2.0	1 798	<b>2KJ1225 - ■ CD13 - ■■ D1</b>		198	
	<b>D.108-Z38-LA71S4</b>						
	<b>0.52</b>	3 780	0.82	2 612	<b>2KJ1223 - ■ CD13 - ■■ U1</b>		127
	<b>0.59</b>	3 325	0.93	2 297	<b>2KJ1223 - ■ CD13 - ■■ T1</b>		127
	<b>0.67</b>	2 912	1.1	2 012	<b>2KJ1223 - ■ CD13 - ■■ S1</b>		127
	<b>0.76</b>	2 576	1.2	1 780	<b>2KJ1223 - ■ CD13 - ■■ R1</b>		127
	<b>0.84</b>	2 335	1.3	1 613	<b>2KJ1223 - ■ CD13 - ■■ Q1</b>		127
	<b>0.95</b>	2 061	1.5	1 424	<b>2KJ1223 - ■ CD13 - ■■ P1</b>		127
	<b>1.1</b>	1 858	1.7	1 284	<b>2KJ1223 - ■ CD13 - ■■ N1</b>		127
	<b>1.2</b>	1 686	1.8	1 165	<b>2KJ1223 - ■ CD13 - ■■ M1</b>		127
	<b>1.3</b>	1 536	2.0	1 061	<b>2KJ1223 - ■ CD13 - ■■ L1</b>		127
	<b>D.88-Z28-LA71S4</b>						
	<b>1.0</b>	1 926	0.87	1 331	★ <b>2KJ1218 - ■ CD13 - ■■ P1</b>		76
	<b>1.1</b>	1 751	0.96	1 210	★ <b>2KJ1218 - ■ CD13 - ■■ N1</b>		76
	<b>1.2</b>	1 588	1.1	1 097	<b>2KJ1218 - ■ CD13 - ■■ M1</b>		76
	<b>1.4</b>	1 446	1.2	999	★ <b>2KJ1218 - ■ CD13 - ■■ L1</b>		76
	<b>1.5</b>	1 278	1.3	883	<b>2KJ1218 - ■ CD13 - ■■ K1</b>		76
	<b>1.7</b>	1 180	1.4	815	★ <b>2KJ1218 - ■ CD13 - ■■ J1</b>		76
	<b>1.9</b>	1 016	1.7	702	<b>2KJ1218 - ■ CD13 - ■■ H1</b>		76
	<b>2.1</b>	936	1.8	647	★ <b>2KJ1218 - ■ CD13 - ■■ G1</b>		76
		<b>D.88-LA80M8</b>					
<b>2.3</b>		1 047	1.6	300.41	★ <b>2KJ1205 - ■ DC13 - ■■ V1</b>	<b>P02</b>	82
<b>2.5</b>		944	1.8	270.9	<b>2KJ1205 - ■ DC13 - ■■ U1</b>	<b>P02</b>	82
<b>2.8</b>	851	2.0	244.29	★ <b>2KJ1205 - ■ DC13 - ■■ T1</b>	<b>P02</b>	82	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.25	<b>D.88-LA71M6</b>						
	2.9	834	2.0	300.41	★ 2KJ1205 - ■CE13 - ■■V1	P01	78
	<b>D.68-Z28-LA71S4</b>						
	2.1	922	0.87	637	2KJ1214 - ■CD13 - ■■H1		46
	2.2	879	0.91	607	★ 2KJ1214 - ■CD13 - ■■G1		46
	<b>D.68-LA80M8</b>						
	2.4	979	0.82	281.01	2KJ1204 - ■DC13 - ■■U1	P02	50
	2.8	867	0.92	248.68	★ 2KJ1204 - ■DC13 - ■■T1	P02	50
	<b>D.68-LA71M6</b>						
	3.1	780	1.0	281.01	2KJ1204 - ■CE13 - ■■U1	P01	46
	3.5	690	1.2	248.68	★ 2KJ1204 - ■CE13 - ■■T1	P01	46
	3.8	628	1.3	226.07	2KJ1204 - ■CE13 - ■■S1	P01	46
	4.2	564	1.4	203.09	★ 2KJ1204 - ■CE13 - ■■R1	P01	46
	<b>D.68-LA71S4</b>						
	4.8	497	1.6	281.01	2KJ1204 - ■CD13 - ■■U1		46
	5.4	440	1.8	248.68	★ 2KJ1204 - ■CD13 - ■■T1		46
	6.0	400	2.0	226.07	2KJ1204 - ■CD13 - ■■S1		46
	<b>D.48-LA71M6</b>						
	4.6	515	0.87	185.66	2KJ1203 - ■CE13 - ■■R1	P01	27
	5.3	447	1.0	161.05	★ 2KJ1203 - ■CE13 - ■■Q1	P01	27
	5.7	418	1.1	150.48	2KJ1203 - ■CE13 - ■■P1	P01	27
	<b>D.48-LA71S4</b>						
	6.5	369	1.2	208.77	★ 2KJ1203 - ■CD13 - ■■S1		27
	7.3	328	1.4	185.66	2KJ1203 - ■CD13 - ■■R1		27
	8.4	285	1.6	161.05	★ 2KJ1203 - ■CD13 - ■■Q1		27
	9.0	266	1.7	150.48	2KJ1203 - ■CD13 - ■■P1		27
	10.2	234	1.9	132.34	★ 2KJ1203 - ■CD13 - ■■N1		27
	11.6	205	2.2	115.91	2KJ1203 - ■CD13 - ■■M1		27
	<b>D.38-LA71S4</b>						
	9.0	264	0.83	149.26	★ 2KJ1202 - ■CD13 - ■■Q1		18
	10.1	236	0.93	133.57	2KJ1202 - ■CD13 - ■■P1		18
	11.4	210	1.0	118.55	★ 2KJ1202 - ■CD13 - ■■N1		18
	13.0	184	1.2	103.89	2KJ1202 - ■CD13 - ■■M1		18
	14.8	162	1.4	91.34	★ 2KJ1202 - ■CD13 - ■■L1		18
	16.4	146	1.5	82.52	2KJ1202 - ■CD13 - ■■K1		18
	18.8	127	1.7	71.91	★ 2KJ1202 - ■CD13 - ■■J1		18
	21	114	1.9	64.58	2KJ1202 - ■CD13 - ■■H1		18
	23	103	2.1	58.3	★ 2KJ1202 - ■CD13 - ■■G1		18
	26	94	2.4	52.86	2KJ1202 - ■CD13 - ■■F1		18
	<b>D.28-LA71S4</b>						
	14.3	167	0.84	94.52	★ 2KJ1201 - ■CD13 - ■■F1		10
	16.8	142	0.99	80.34	★ 2KJ1201 - ■CD13 - ■■E1		10
	19.3	123	1.1	69.82	2KJ1201 - ■CD13 - ■■D1		10
	22	107	1.3	60.77	★ 2KJ1201 - ■CD13 - ■■C1		10

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.25	<b>Z.28-LA71S4</b>						
	26	91	1.5	51.35	2KJ1101 - ■ CD13 - ■■ C2		10
	31	77	1.8	43.3	★ 2KJ1101 - ■ CD13 - ■■ B2		10
	35	68	2.1	38.45	2KJ1101 - ■ CD13 - ■■ A2		10
	40	60	2.3	33.71	★ 2KJ1101 - ■ CD13 - ■■ X1		10
	45	53	2.6	30.16	2KJ1101 - ■ CD13 - ■■ W1		10
	50	47	3.0	26.77	★ 2KJ1101 - ■ CD13 - ■■ V1		10
	58	42	3.4	23.46	2KJ1101 - ■ CD13 - ■■ U1		10
	65	36	3.8	20.63	★ 2KJ1101 - ■ CD13 - ■■ T1		10
	72	33	4.2	18.63	2KJ1101 - ■ CD13 - ■■ S1		10
	83	29	4.9	16.24	★ 2KJ1101 - ■ CD13 - ■■ R1		10
	93	26	5.4	14.58	2KJ1101 - ■ CD13 - ■■ Q1		10
	103	23	6.0	13.17	★ 2KJ1101 - ■ CD13 - ■■ P1		10
	113	21	6.6	11.94	2KJ1101 - ■ CD13 - ■■ N1		10
	124	19	7.3	10.87	★ 2KJ1101 - ■ CD13 - ■■ M1		10
	140	17	8.2	9.61	2KJ1101 - ■ CD13 - ■■ L1		10
	152	16	8.9	8.87	★ 2KJ1101 - ■ CD13 - ■■ K1		10
	177	14	10.1	7.64	2KJ1101 - ■ CD13 - ■■ J1		10
	195	12	10.8	6.94	★ 2KJ1101 - ■ CD13 - ■■ H1		10
	214	11	8.5	6.31	★ 2KJ1101 - ■ CD13 - ■■ G1		10
	236	10	9.2	5.72	2KJ1101 - ■ CD13 - ■■ F1		10
	259	9.2	10.0	5.21	★ 2KJ1101 - ■ CD13 - ■■ E1		10
	293	8.1	10.8	4.6	2KJ1101 - ■ CD13 - ■■ D1		10
	318	7.5	12.0	4.25	★ 2KJ1101 - ■ CD13 - ■■ C1		10
	369	6.5	12.4	3.66	2KJ1101 - ■ CD13 - ■■ B1		10
	405	5.9	13.1	3.33	★ 2KJ1101 - ■ CD13 - ■■ A1		10
<b>D.18-LA71S4</b>							
23	103	0.88	58.03	2KJ1200 - ■ CD13 - ■■ E1		9	
27	89	1.0	50.51	★ 2KJ1200 - ■ CD13 - ■■ D1		9	
<b>Z.18-LA71S4</b>							
31	76	1.2	43.15	2KJ1100 - ■ CD13 - ■■ U1		9	
36	66	1.4	37.23	★ 2KJ1100 - ■ CD13 - ■■ T1		9	
42	57	1.6	31.98	2KJ1100 - ■ CD13 - ■■ S1		9	
46	52	1.7	29.45	★ 2KJ1100 - ■ CD13 - ■■ R1		9	
50	47	1.9	26.77	2KJ1100 - ■ CD13 - ■■ Q1		9	
57	42	2.1	23.69	★ 2KJ1100 - ■ CD13 - ■■ P1		9	
68	35	2.6	19.85	2KJ1100 - ■ CD13 - ■■ N1		9	
80	30	3.0	16.92	★ 2KJ1100 - ■ CD13 - ■■ M1		9	
94	25	3.5	14.38	★ 2KJ1100 - ■ CD13 - ■■ L1		9	
108	22	4.1	12.5	2KJ1100 - ■ CD13 - ■■ K1		9	
124	19	4.5	10.88	★ 2KJ1100 - ■ CD13 - ■■ J1		9	
138	17	4.8	9.81	2KJ1100 - ■ CD13 - ■■ H1		9	
156	15	5.2	8.66	2KJ1100 - ■ CD13 - ■■ G1		9	
182	13	4.2	7.42	★ 2KJ1100 - ■ CD13 - ■■ F1		9	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
0.25	<b>Z.18-LA71S4</b>							
	209	11	4.6	6.45	2KJ1100 - ■CD13 - ■■E1		9	
	241	9.9	5.1	5.61	★ 2KJ1100 - ■CD13 - ■■D1		9	
	267	8.9	5.5	5.06	2KJ1100 - ■CD13 - ■■C1		9	
	302	7.9	6.2	4.47	2KJ1100 - ■CD13 - ■■B1		9	
	377	6.3	7.3	3.58	★ 2KJ1100 - ■CD13 - ■■A1		9	
	<b>E.48-LA71S4</b>							
	119	20	2.8	11.3	2KJ1002 - ■CD13 - ■■U1		16	
	149	16	4.0	9.09	2KJ1002 - ■CD13 - ■■S1		16	
	<b>E.38-LA71S4</b>							
	145	16	1.9	9.33	★ 2KJ1001 - ■CD13 - ■■S1		13	
	163	15	2.2	8.3	2KJ1001 - ■CD13 - ■■R1		13	
	188	13	3.0	7.2	★ 2KJ1001 - ■CD13 - ■■Q1		13	
	201	12	4.0	6.73	2KJ1001 - ■CD13 - ■■P1		13	
	0.37	<b>D.188-Z48-LA71M4</b>						
		0.12	24 391	0.82	11 066	★ 2KJ1235 - ■CE13 - ■■W1		603
		0.15	19 919	1.0	9 037	★ 2KJ1235 - ■CE13 - ■■V1		603
		0.18	17 073	1.2	7 746	2KJ1235 - ■CE13 - ■■U1		603
		0.20	15 447	1.3	7 008	★ 2KJ1235 - ■CE13 - ■■T1		603
0.21		14 259	1.4	6 469	2KJ1235 - ■CE13 - ■■S1		603	
0.24		12 398	1.6	5 625	★ 2KJ1235 - ■CE13 - ■■R1		603	
0.27		11 257	1.8	5 107	2KJ1235 - ■CE13 - ■■Q1		603	
0.29		10 278	1.9	4 663	★ 2KJ1235 - ■CE13 - ■■P1		603	
<b>D.168-Z48-LA71M4</b>								
0.17		17 371	0.81	7 881	★ 2KJ1232 - ■CE13 - ■■R1		459	
0.19		15 773	0.89	7 156	2KJ1232 - ■CE13 - ■■Q1		459	
0.21		14 402	0.97	6 534	★ 2KJ1232 - ■CE13 - ■■P1		459	
0.23		13 214	1.1	5 995	2KJ1232 - ■CE13 - ■■N1		459	
0.25		12 174	1.2	5 523	★ 2KJ1232 - ■CE13 - ■■M1		459	
0.27		11 056	1.3	5 016	2KJ1232 - ■CE13 - ■■L1		459	
0.3		10 071	1.4	4 569	★ 2KJ1232 - ■CE13 - ■■K1		459	
0.33		9 227	1.5	4 186	2KJ1232 - ■CE13 - ■■J1		459	
0.37		8 233	1.7	3 735	★ 2KJ1232 - ■CE13 - ■■H1		459	
<b>D.148-Z38-LA71M4</b>								
0.32		9 573	0.84	4 343	2KJ1228 - ■CE13 - ■■L1		283	
0.34		8 755	0.91	3 972	2KJ1228 - ■CE13 - ■■K1		283	
0.39		7 829	1.0	3 552	2KJ1228 - ■CE13 - ■■J1		283	
0.42		7 188	1.1	3 261	2KJ1228 - ■CE13 - ■■H1		283	
0.47		6 478	1.2	2 939	2KJ1228 - ■CE13 - ■■G1		283	
0.54		5 557	1.4	2 521	2KJ1228 - ■CE13 - ■■E1		283	
0.54		5 572	1.4	2 528	2KJ1228 - ■CE13 - ■■F1		283	
0.61		4 968	1.6	2 254	2KJ1228 - ■CE13 - ■■D1		283	
0.66		4 563	1.8	2 070	2KJ1228 - ■CE13 - ■■C1		283	
0.74		4 111	1.9	1 865	2KJ1228 - ■CE13 - ■■B1		283	

★ Preferred transmission ratio

Shaft designs, see page 2/117

1, 2 or 9

Frequency and voltage, see page 8/20

1 to 9

Gearbox housing mounting position, see page 2/119

A, F, H or R

\*) For mounting type B3

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.37	<b>D.128-Z48-LA71M4</b>						
	1.1	2 801	1.8	1 271	2KJ1227 - ■CE13 - ■■P1		208
	1.2	2 570	2.0	1 166	2KJ1227 - ■CE13 - ■■N1		208
	<b>D.128-Z38-LA71M4</b>						
	0.48	6 247	0.82	2 834	2KJ1225 - ■CE13 - ■■J1		198
	0.53	5 735	0.89	2 602	★ 2KJ1225 - ■CE13 - ■■H1		198
	0.58	5 169	0.99	2 345	2KJ1225 - ■CE13 - ■■G1		198
	0.68	4 433	1.2	2 011	★ 2KJ1225 - ■CE13 - ■■E1		198
	0.68	4 446	1.1	2 017	★ 2KJ1225 - ■CE13 - ■■F1		198
	0.76	3 963	1.3	1 798	2KJ1225 - ■CE13 - ■■D1		198
	0.83	3 639	1.4	1 651	★ 2KJ1225 - ■CE13 - ■■C1		198
	0.92	3 280	1.6	1 488	2KJ1225 - ■CE13 - ■■B1		198
	1.1	2 821	1.8	1 280	★ 2KJ1225 - ■CE13 - ■■A1		198
	<b>D.108-Z38-LA71M4</b>						
	0.85	3 555	0.87	1 613	2KJ1223 - ■CE13 - ■■Q1		127
	0.96	3 139	0.99	1 424	2KJ1223 - ■CE13 - ■■P1		127
	1.1	2 830	1.1	1 284	2KJ1223 - ■CE13 - ■■N1		127
	1.2	2 568	1.2	1 165	2KJ1223 - ■CE13 - ■■M1		127
	1.3	2 339	1.3	1 061	2KJ1223 - ■CE13 - ■■L1		127
	1.4	2 140	1.4	971	2KJ1223 - ■CE13 - ■■K1		127
	1.6	1 913	1.6	868	2KJ1223 - ■CE13 - ■■J1		127
	1.7	1 757	1.8	797	2KJ1223 - ■CE13 - ■■H1		127
	<b>D.108-LA90SA8</b>						
	1.9	1 881	1.6	359.3	2KJ1206 - ■EB13 - ■■V1	P02	133
	2.1	1 702	1.8	325.21	★ 2KJ1206 - ■EB13 - ■■U1	P02	133
	<b>D.88-Z28-LA71M4</b>						
	1.6	1 946	0.86	883	2KJ1218 - ■CE13 - ■■K1		76
	1.7	1 796	0.94	815	★ 2KJ1218 - ■CE13 - ■■J1		76
	2.0	1 547	1.1	702	2KJ1218 - ■CE13 - ■■H1		76
	2.1	1 426	1.2	647	★ 2KJ1218 - ■CE13 - ■■G1		76
	<b>D.88-LA90SA8</b>						
	2.2	1 573	1.1	300.41	★ 2KJ1205 - ■EB13 - ■■V1	P02	85
	2.5	1 418	1.2	270.9	2KJ1205 - ■EB13 - ■■U1	P02	85
	2.8	1 279	1.3	244.29	★ 2KJ1205 - ■EB13 - ■■T1	P02	85
	<b>D.88-LA80S6</b>						
	3.1	1 154	1.5	300.41	★ 2KJ1205 - ■DB13 - ■■V1	P01	82
	3.4	1 040	1.6	270.9	2KJ1205 - ■DB13 - ■■U1	P01	82
	3.8	938	1.8	244.29	★ 2KJ1205 - ■DB13 - ■■T1	P01	82
	4.3	821	2.0	213.64	2KJ1205 - ■DB13 - ■■S1	P01	82
	<b>D.68-LA80S6</b>						
	3.7	955	0.84	248.68	★ 2KJ1204 - ■DB13 - ■■T1	P01	50
	4.1	868	0.92	226.07	2KJ1204 - ■DB13 - ■■S1	P01	50
	4.5	780	1.0	203.09	★ 2KJ1204 - ■DB13 - ■■R1	P01	50

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.37	<b>D.68-LA71M4</b>						
	4.9	725	1.1	281.01	2KJ1204 - ■CE13 - ■■U1		46
	5.5	641	1.2	248.68	★ 2KJ1204 - ■CE13 - ■■T1		46
	6.1	583	1.4	226.07	2KJ1204 - ■CE13 - ■■S1		46
	6.7	524	1.5	203.09	★ 2KJ1204 - ■CE13 - ■■R1		46
	7.9	449	1.8	174.08	2KJ1204 - ■CE13 - ■■Q1		46
	8.7	406	2.0	157.5	★ 2KJ1204 - ■CE13 - ■■P1		46
	9.4	375	2.1	145.38	2KJ1204 - ■CE13 - ■■N1		46
	<b>D.48-LA71M4</b>						
	6.6	538	0.84	208.77	★ 2KJ1203 - ■CE13 - ■■S1		27
	7.4	479	0.94	185.66	2KJ1203 - ■CE13 - ■■R1		27
	8.5	415	1.1	161.05	★ 2KJ1203 - ■CE13 - ■■Q1		27
	9.1	388	1.2	150.48	2KJ1203 - ■CE13 - ■■P1		27
	10.4	341	1.3	132.34	★ 2KJ1203 - ■CE13 - ■■N1		27
	11.8	299	1.5	115.91	2KJ1203 - ■CE13 - ■■M1		27
	13.4	264	1.7	102.52	★ 2KJ1203 - ■CE13 - ■■L1		27
	14.7	240	1.9	92.91	2KJ1203 - ■CE13 - ■■K1		27
	16.7	212	2.1	82.02	★ 2KJ1203 - ■CE13 - ■■J1		27
	<b>Z.48-LA71M4</b>						
	27	132	2.2	51.28	2KJ1103 - ■CE13 - ■■A2		27
	<b>D.38-LA71M4</b>						
	13.2	268	0.82	103.89	2KJ1202 - ■CE13 - ■■M1		18
	15.0	236	0.93	91.34	★ 2KJ1202 - ■CE13 - ■■L1		18
	16.6	213	1.0	82.52	2KJ1202 - ■CE13 - ■■K1		18
	19.1	185	1.2	71.91	★ 2KJ1202 - ■CE13 - ■■J1		18
	21	167	1.3	64.58	2KJ1202 - ■CE13 - ■■H1		18
	24	150	1.5	58.3	★ 2KJ1202 - ■CE13 - ■■G1		18
	26	136	1.6	52.86	2KJ1202 - ■CE13 - ■■F1		18
	<b>Z.38-LA71M4</b>						
	31	114	1.9	44.12	★ 2KJ1102 - ■CE13 - ■■A2		17
	35	101	2.1	39.24	2KJ1102 - ■CE13 - ■■X1		17
	40	88	2.5	34.04	★ 2KJ1102 - ■CE13 - ■■W1		17
	43	82	2.7	31.8	2KJ1102 - ■CE13 - ■■V1		17
<b>D.28-LA71M4</b>							
22	157	0.89	60.77	★ 2KJ1201 - ■CE13 - ■■C1		10	
<b>Z.28-LA71M4</b>							
27	132	1.1	51.35	2KJ1101 - ■CE13 - ■■C2		10	
32	112	1.3	43.3	★ 2KJ1101 - ■CE13 - ■■B2		10	
36	99	1.4	38.45	2KJ1101 - ■CE13 - ■■A2		10	
41	87	1.6	33.71	★ 2KJ1101 - ■CE13 - ■■X1		10	
45	78	1.8	30.16	2KJ1101 - ■CE13 - ■■W1		10	
51	69	2.0	26.77	★ 2KJ1101 - ■CE13 - ■■V1		10	
58	60	2.3	23.46	2KJ1101 - ■CE13 - ■■U1		10	
66	53	2.6	20.63	★ 2KJ1101 - ■CE13 - ■■T1		10	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.37	<b>Z.28-LA71M4</b>						
	74	48	2.9	18.63	2KJ1101 - ■CE13 - ■■S1		10
	84	42	3.3	16.24	★ 2KJ1101 - ■CE13 - ■■R1		10
	<b>Z.18-LA71M4</b>						
	32	111	0.81	43.15	2KJ1100 - ■CE13 - ■■U1		9
	37	96	0.94	37.23	★ 2KJ1100 - ■CE13 - ■■T1		9
	43	82	1.1	31.98	2KJ1100 - ■CE13 - ■■S1		9
	46	76	1.2	29.45	★ 2KJ1100 - ■CE13 - ■■R1		9
	51	69	1.3	26.77	2KJ1100 - ■CE13 - ■■Q1		9
	58	61	1.5	23.69	★ 2KJ1100 - ■CE13 - ■■P1		9
	69	51	1.8	19.85	2KJ1100 - ■CE13 - ■■N1		9
	81	44	2.1	16.92	★ 2KJ1100 - ■CE13 - ■■M1		9
	95	37	2.4	14.38	★ 2KJ1100 - ■CE13 - ■■L1		9
	110	32	2.8	12.5	2KJ1100 - ■CE13 - ■■K1		9
	126	28	3.1	10.88	★ 2KJ1100 - ■CE13 - ■■J1		9
	140	25	3.3	9.81	2KJ1100 - ■CE13 - ■■H1		9
	158	22	3.6	8.66	2KJ1100 - ■CE13 - ■■G1		9
	185	19	2.9	7.42	★ 2KJ1100 - ■CE13 - ■■F1		9
	212	17	3.2	6.45	2KJ1100 - ■CE13 - ■■E1		9
	244	14	3.5	5.61	★ 2KJ1100 - ■CE13 - ■■D1		9
	271	13	3.8	5.06	2KJ1100 - ■CE13 - ■■C1		9
	306	12	4.3	4.47	2KJ1100 - ■CE13 - ■■B1		9
	383	9.2	5.0	3.58	★ 2KJ1100 - ■CE13 - ■■A1		9
	<b>E.68-LA71M4</b>						
	110	32	2.5	12.4	★ 2KJ1003 - ■CE13 - ■■W1		26
	123	29	3.2	11.18	2KJ1003 - ■CE13 - ■■V1		26
	136	26	3.7	10.08	★ 2KJ1003 - ■CE13 - ■■U1		26
	<b>E.48-LA71M4</b>						
	121	29	1.9	11.3	2KJ1002 - ■CE13 - ■■U1		16
	137	26	3.1	10	★ 2KJ1002 - ■CE13 - ■■T1		16
	151	23	2.7	9.09	2KJ1002 - ■CE13 - ■■S1		16
	168	21	4.0	8.17	★ 2KJ1002 - ■CE13 - ■■R1		16
	<b>E.38-LA71M4</b>						
147	24	1.3	9.33	★ 2KJ1001 - ■CE13 - ■■S1		13	
165	21	1.5	8.3	2KJ1001 - ■CE13 - ■■R1		13	
190	19	2.0	7.2	★ 2KJ1001 - ■CE13 - ■■Q1		13	
204	17	2.8	6.73	2KJ1001 - ■CE13 - ■■P1		13	
231	15	3.5	5.92	★ 2KJ1001 - ■CE13 - ■■N1		13	
0.55	<b>D.188-Z48-LA71ZMP4</b>						
	0.20	23 625	0.85	7 008	★ 2KJ1235 - ■CG13 - ■■T1		603
	0.21	21 808	0.92	6 469	2KJ1235 - ■CG13 - ■■S1		603
	0.24	18 962	1.1	5 625	★ 2KJ1235 - ■CG13 - ■■R1		603
	0.27	17 216	1.2	5 107	2KJ1235 - ■CG13 - ■■Q1		603
0.29	15 719	1.3	4 663	★ 2KJ1235 - ■CG13 - ■■P1		603	

★ Preferred transmission ratio

Shaft designs, see page 2/117

1, 2 or 9

Frequency and voltage, see page 8/20

1 to 9

Gearbox housing mounting position, see page 2/119

A, F, H or R

\*) For mounting type B3

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.55	<b>D.188-Z48-LA71ZMP4</b>						
	0.32	14 425	1.4	4 279	2KJ1235 - ■CG13 - ■■N1		603
	0.35	13 289	1.5	3 942	★ 2KJ1235 - ■CG13 - ■■M1		603
	0.38	12 068	1.7	3 580	2KJ1235 - ■CG13 - ■■L1		603
	0.42	10 993	1.8	3 261	★ 2KJ1235 - ■CG13 - ■■K1		603
	0.46	10 073	2.0	2 988	2KJ1235 - ■CG13 - ■■J1		603
	<b>D.168-Z48-LA71ZMP4</b>						
	0.27	16 909	0.83	5 016	2KJ1232 - ■CG13 - ■■L1		459
	0.30	15 402	0.91	4 569	★ 2KJ1232 - ■CG13 - ■■K1		459
	0.33	14 111	0.99	4 186	2KJ1232 - ■CG13 - ■■J1		459
	0.37	12 591	1.1	3 735	★ 2KJ1232 - ■CG13 - ■■H1		459
	0.59	7 818	1.8	2 319	★ 2KJ1232 - ■CG13 - ■■D1		459
	<b>D.148-Z48-LA71ZMP4</b>						
	0.84	5 498	1.5	1 631	2KJ1231 - ■CG13 - ■■N1		292
	0.91	5 063	1.6	1 502	2KJ1231 - ■CG13 - ■■M1		292
1	4 598	1.7	1 364	2KJ1231 - ■CG13 - ■■L1		292	
1.1	4 190	1.9	1 243	2KJ1231 - ■CG13 - ■■K1		292	
<b>D.148-Z38-LA71ZMP4</b>							
0.47	9 908	0.81	2 939	2KJ1228 - ■CG13 - ■■G1		283	
0.54	8 498	0.94	2 521	2KJ1228 - ■CG13 - ■■E1		283	
0.54	8 522	0.94	2 528	2KJ1228 - ■CG13 - ■■F1		283	
0.61	7 598	1.1	2 254	2KJ1228 - ■CG13 - ■■D1		283	
0.66	6 978	1.1	2 070	2KJ1228 - ■CG13 - ■■C1		283	
0.74	6 287	1.3	1 865	2KJ1228 - ■CG13 - ■■B1		283	
0.85	5 407	1.5	1 604	2KJ1228 - ■CG13 - ■■A1		283	
<b>D.128-Z38-LA71ZMP4</b>							
0.76	6 061	0.84	1 798	2KJ1225 - ■CG13 - ■■D1		198	
0.83	5 566	0.92	1 651	★ 2KJ1225 - ■CG13 - ■■C1		198	
0.92	5 016	1.0	1 488	2KJ1225 - ■CG13 - ■■B1		198	
1.1	4 315	1.2	1 280	★ 2KJ1225 - ■CG13 - ■■A1		198	
<b>D.128-Z48-LA71ZMP4</b>							
1.1	4 285	1.2	1 271	2KJ1227 - ■CG13 - ■■P1		208	
1.2	3 931	1.3	1 166	2KJ1227 - ■CG13 - ■■N1		208	
1.3	3 621	1.4	1 074	2KJ1227 - ■CG13 - ■■M1		208	
1.4	3 287	1.6	975	2KJ1227 - ■CG13 - ■■L1		208	
1.5	2 997	1.7	889	2KJ1227 - ■CG13 - ■■K1		208	
1.7	2 744	1.9	814	2KJ1227 - ■CG13 - ■■J1		208	
<b>D.108-Z38-LA71ZMP4</b>							
1.3	3 577	0.87	1 061	2KJ1223 - ■CG13 - ■■L1		127	
1.4	3 273	0.95	971	2KJ1223 - ■CG13 - ■■K1		127	
1.6	2 926	1.1	868	2KJ1223 - ■CG13 - ■■J1		127	
1.7	2 687	1.2	797	2KJ1223 - ■CG13 - ■■H1		127	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.55	<b>D.108-LA90LA8</b>						
	1.9	2 796	1.1	359.3	2KJ1206 - ■EE13 - ■■V1	P02	136
	2.1	2 531	1.2	325.21	★ 2KJ1206 - ■EE13 - ■■U1	P02	136
	2.4	2 216	1.4	284.73	2KJ1206 - ■EE13 - ■■T1	P02	136
	<b>D.108-LA80M6</b>						
	2.5	2 074	1.5	359.3	2KJ1206 - ■DC13 - ■■V1	P01	130
	2.8	1 877	1.7	325.21	★ 2KJ1206 - ■DC13 - ■■U1	P01	130
	3.2	1 643	1.9	284.73	2KJ1206 - ■DC13 - ■■T1	P01	130
	<b>D.88-LA90LA8</b>						
	2.5	2 108	0.8	270.9	2KJ1205 - ■EE13 - ■■U1	P02	88
	2.8	1 901	0.88	244.29	★ 2KJ1205 - ■EE13 - ■■T1	P02	88
	<b>D.88-LA80M6</b>						
	3.0	1 734	0.97	300.41	★ 2KJ1205 - ■DC13 - ■■V1	P01	82
	3.4	1 564	1.1	270.9	2KJ1205 - ■DC13 - ■■U1	P01	82
	3.7	1 410	1.2	244.29	★ 2KJ1205 - ■DC13 - ■■T1	P01	82
	4.3	1 233	1.4	213.64	2KJ1205 - ■DC13 - ■■S1	P01	82
	<b>D.88-LA71ZMP4</b>						
	4.6	1 152	1.5	300.41	★ 2KJ1205 - ■CG13 - ■■V1		78
	5.1	1 039	1.6	270.9	2KJ1205 - ■CG13 - ■■U1		78
	5.6	937	1.8	244.29	★ 2KJ1205 - ■CG13 - ■■T1		78
	6.4	819	2.1	213.64	2KJ1205 - ■CG13 - ■■S1		78
	<b>D.68-LA71ZMP4</b>						
	5.5	953	0.84	248.68	★ 2KJ1204 - ■CG13 - ■■T1		46
	6.1	867	0.92	226.07	2KJ1204 - ■CG13 - ■■S1		46
	6.7	779	1	203.09	★ 2KJ1204 - ■CG13 - ■■R1		46
	7.9	667	1.2	174.08	2KJ1204 - ■CG13 - ■■Q1		46
	8.7	604	1.3	157.5	★ 2KJ1204 - ■CG13 - ■■P1		46
9.4	557	1.4	145.38	2KJ1204 - ■CG13 - ■■N1		46	
10.8	485	1.7	126.41	★ 2KJ1204 - ■CG13 - ■■M1		46	
11.9	440	1.8	114.78	2KJ1204 - ■CG13 - ■■L1		46	
13.1	402	2.0	104.8	★ 2KJ1204 - ■CG13 - ■■K1		46	
14.2	369	2.2	96.16	2KJ1204 - ■CG13 - ■■J1		46	
<b>D.48-LA71ZMP4</b>							
10.4	507	0.89	132.34	★ 2KJ1203 - ■CG13 - ■■N1		27	
11.8	444	1.0	115.91	2KJ1203 - ■CG13 - ■■M1		27	
13.4	393	1.1	102.52	★ 2KJ1203 - ■CG13 - ■■L1		27	
14.7	356	1.3	92.91	2KJ1203 - ■CG13 - ■■K1		27	
16.7	314	1.4	82.02	★ 2KJ1203 - ■CG13 - ■■J1		27	
18.5	284	1.6	73.99	2KJ1203 - ■CG13 - ■■H1		27	
20	257	1.7	67.1	★ 2KJ1203 - ■CG13 - ■■G1		27	
22	234	1.9	61.14	2KJ1203 - ■CG13 - ■■F1		27	
27	192	2.3	50	2KJ1203 - ■CG13 - ■■D1		27	
<b>Z.48-LA71ZMP4</b>							
27	197	1.5	51.28	2KJ1103 - ■CG13 - ■■A2		27	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.55	<b>D.38-LA71ZMP4</b>						
	19.1	276	0.8	71.91	★ 2KJ1202 - ■CG13 - ■■J1		18
	21	248	0.89	64.58	2KJ1202 - ■CG13 - ■■H1		18
	24	224	0.98	58.3	★ 2KJ1202 - ■CG13 - ■■G1		18
	26	203	1.1	52.86	2KJ1202 - ■CG13 - ■■F1		18
	<b>Z.38-LA71ZMP4</b>						
	31	169	1.3	44.12	★ 2KJ1102 - ■CG13 - ■■A2		17
	35	150	1.4	39.24	2KJ1102 - ■CG13 - ■■X1		17
	40	131	1.7	34.04	★ 2KJ1102 - ■CG13 - ■■W1		17
	43	122	1.8	31.8	2KJ1102 - ■CG13 - ■■V1		17
	49	107	2.1	27.97	★ 2KJ1102 - ■CG13 - ■■U1		17
	56	94	2.3	24.5	2KJ1102 - ■CG13 - ■■T1		17
	63	83	2.6	21.67	★ 2KJ1102 - ■CG13 - ■■S1		17
	70	75	2.9	19.64	2KJ1102 - ■CG13 - ■■R1		17
	<b>Z.28-LA71ZMP4</b>						
	32	166	0.84	43.3	★ 2KJ1101 - ■CG13 - ■■B2		10
	36	147	0.95	38.45	2KJ1101 - ■CG13 - ■■A2		10
	41	129	1.1	33.71	★ 2KJ1101 - ■CG13 - ■■X1		10
	45	116	1.2	30.16	2KJ1101 - ■CG13 - ■■W1		10
	51	103	1.4	26.77	★ 2KJ1101 - ■CG13 - ■■V1		10
	58	90	1.6	23.46	2KJ1101 - ■CG13 - ■■U1		10
	66	79	1.8	20.63	★ 2KJ1101 - ■CG13 - ■■T1		10
	74	71	2.0	18.63	2KJ1101 - ■CG13 - ■■S1		10
	84	62	2.2	16.24	★ 2KJ1101 - ■CG13 - ■■R1		10
	94	56	2.5	14.58	2KJ1101 - ■CG13 - ■■Q1		10
	104	50	2.8	13.17	★ 2KJ1101 - ■CG13 - ■■P1		10
	115	46	3.1	11.94	2KJ1101 - ■CG13 - ■■N1		10
	126	42	3.4	10.87	★ 2KJ1101 - ■CG13 - ■■M1		10
	143	37	3.8	9.61	2KJ1101 - ■CG13 - ■■L1		10
	217	24	3.9	6.31	★ 2KJ1101 - ■CG13 - ■■G1		10
	240	22	4.2	5.72	2KJ1101 - ■CG13 - ■■F1		10
	263	20	4.6	5.21	★ 2KJ1101 - ■CG13 - ■■E1		10
	298	18	5	4.6	2KJ1101 - ■CG13 - ■■D1		10
	<b>Z.18-LA71ZMP4</b>						
	46	113	0.8	29.45	★ 2KJ1100 - ■CG13 - ■■R1		9
	51	103	0.88	26.77	2KJ1100 - ■CG13 - ■■Q1		9
	58	91	0.99	23.69	★ 2KJ1100 - ■CG13 - ■■P1		9
	69	76	1.2	19.85	2KJ1100 - ■CG13 - ■■N1		9
	81	65	1.4	16.92	★ 2KJ1100 - ■CG13 - ■■M1		9
	95	55	1.6	14.38	★ 2KJ1100 - ■CG13 - ■■L1		9
110	48	1.9	12.5	2KJ1100 - ■CG13 - ■■K1		9	
126	42	2.1	10.88	★ 2KJ1100 - ■CG13 - ■■J1		9	
140	38	2.2	9.81	2KJ1100 - ■CG13 - ■■H1		9	
158	33	2.4	8.66	2KJ1100 - ■CG13 - ■■G1		9	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
0.55	<b>Z.18-LA71ZMP4</b>							
	185	28	1.9	7.42	★ 2KJ1100 - ■CG13 - ■■F1		9	
	212	25	2.1	6.45	2KJ1100 - ■CG13 - ■■E1		9	
	244	22	2.4	5.61	★ 2KJ1100 - ■CG13 - ■■D1		9	
	271	19	2.5	5.06	2KJ1100 - ■CG13 - ■■C1		9	
	306	17	2.9	4.47	2KJ1100 - ■CG13 - ■■B1		9	
	383	14	3.4	3.58	★ 2KJ1100 - ■CG13 - ■■A1		9	
	<b>E.68-LA71ZMP4</b>							
	110	48	1.7	12.4	★ 2KJ1003 - ■CG13 - ■■W1		26	
	123	43	2.1	11.18	2KJ1003 - ■CG13 - ■■V1		26	
	136	39	2.5	10.08	★ 2KJ1003 - ■CG13 - ■■U1		26	
	<b>E.48-LA71ZMP4</b>							
	121	43	1.3	11.3	2KJ1002 - ■CG13 - ■■U1		16	
	137	38	2.1	10	★ 2KJ1002 - ■CG13 - ■■T1		16	
	151	35	1.8	9.09	2KJ1002 - ■CG13 - ■■S1		16	
	168	31	2.7	8.17	★ 2KJ1002 - ■CG13 - ■■R1		16	
	196	27	3.6	7	2KJ1002 - ■CG13 - ■■Q1		16	
	<b>E.38-LA71ZMP4</b>							
	147	36	0.89	9.33	★ 2KJ1001 - ■CG13 - ■■S1		13	
	165	32	1.0	8.3	2KJ1001 - ■CG13 - ■■R1		13	
	190	28	1.4	7.2	★ 2KJ1001 - ■CG13 - ■■Q1		13	
	204	26	1.9	6.73	2KJ1001 - ■CG13 - ■■P1		13	
	231	23	2.3	5.92	★ 2KJ1001 - ■CG13 - ■■N1		13	
	264	20	3.5	5.18	2KJ1001 - ■CG13 - ■■M1		13	
	299	18	4.4	4.58	★ 2KJ1001 - ■CG13 - ■■L1		13	
	330	16	3.9	4.15	2KJ1001 - ■CG13 - ■■K1		13	
	373	14	5.0	3.67	★ 2KJ1001 - ■CG13 - ■■J1		13	
	414	13	5.1	3.31	2KJ1001 - ■CG13 - ■■H1		13	
	0.75	<b>D.188-Z48-LA80ZMB4E</b>						
		0.27	23 327	0.86	5 107	2KJ1235 - ■DE13 - ■■Q1		607
		0.30	21 299	0.94	4 663	★ 2KJ1235 - ■DE13 - ■■P1		607
		0.33	19 545	1.0	4 279	2KJ1235 - ■DE13 - ■■N1		607
		0.36	18 006	1.1	3 942	★ 2KJ1235 - ■DE13 - ■■M1		607
0.39		16 352	1.2	3 580	2KJ1235 - ■DE13 - ■■L1		607	
0.43		14 895	1.3	3 261	★ 2KJ1235 - ■DE13 - ■■K1		607	
0.47		13 648	1.5	2 988	2KJ1235 - ■DE13 - ■■J1		607	
0.52		12 177	1.6	2 666	★ 2KJ1235 - ■DE13 - ■■H1		607	
0.59		10 866	1.8	2 379	2KJ1235 - ■DE13 - ■■G1		607	
<b>D.168-Z48-LA80ZMB4E</b>								
0.38		17 060	0.82	3 735	★ 2KJ1232 - ■DE13 - ■■H1		463	
0.42		15 224	0.92	3 333	2KJ1232 - ■DE13 - ■■G1		463	
0.50		12 931	1.1	2 831	2KJ1232 - ■DE13 - ■■F1		463	
0.59		10 766	1.3	2 357	★ 2KJ1232 - ■DE13 - ■■E1		463	
0.60		10 592	1.3	2 319	★ 2KJ1232 - ■DE13 - ■■D1		463	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.75	<b>D.168-Z48-LA80ZMB4E</b>						
	0.68	9 455	1.5	2 070	2KJ1232 - ■DE13 - ■■C1		463
	0.80	8 030	1.7	1 758	2KJ1232 - ■DE13 - ■■B1		463
	<b>D.148-Z48-LA80ZMB4E</b>						
	0.86	7 450	1.1	1 631	2KJ1231 - ■DE13 - ■■N1		296
	0.93	6 861	1.2	1 502	2KJ1231 - ■DE13 - ■■M1		296
	1.0	6 230	1.3	1 364	2KJ1231 - ■DE13 - ■■L1		296
	1.1	5 678	1.4	1 243	2KJ1231 - ■DE13 - ■■K1		296
	1.2	5 203	1.5	1 139	2KJ1231 - ■DE13 - ■■J1		296
	1.4	4 641	1.7	1 016	2KJ1231 - ■DE13 - ■■H1		296
	1.5	4 143	1.9	907	2KJ1231 - ■DE13 - ■■G1		296
	<b>D.148-Z38-LA80ZMB4E</b>						
	0.68	9 455	0.85	2 070	2KJ1228 - ■DE13 - ■■C1		287
	0.75	8 519	0.94	1 865	2KJ1228 - ■DE13 - ■■B1		287
	0.87	7 326	1.1	1 604	2KJ1228 - ■DE13 - ■■A1		287
	<b>D.128-Z48-LA80ZMB4E</b>						
	1.1	5 805	0.88	1 271	2KJ1227 - ■DE13 - ■■P1		212
	1.2	5 326	0.96	1 166	2KJ1227 - ■DE13 - ■■N1		212
	1.3	4 906	1.0	1 074	2KJ1227 - ■DE13 - ■■M1		212
	1.4	4 453	1.1	975	2KJ1227 - ■DE13 - ■■L1		212
	1.6	4 061	1.3	889	2KJ1227 - ■DE13 - ■■K1		212
	1.7	3 718	1.4	814	2KJ1227 - ■DE13 - ■■J1		212
	1.9	3 316	1.5	726	2KJ1227 - ■DE13 - ■■H1		212
2.2	2 960	1.7	648	2KJ1227 - ■DE13 - ■■G1		212	
<b>D.128-Z38-LA80ZMB4E</b>							
1.1	5 847	0.87	1 280	★ 2KJ1225 - ■DE13 - ■■A1		202	
<b>D.128-LA100LA8</b>							
2.5	2 825	1.8	268.16	★ 2KJ1207 - ■FB13 - ■■U1	P02	221	
2.8	2 590	2.0	245.93	2KJ1207 - ■FB13 - ■■T1	P02	221	
<b>D.108-Z38-LA80ZMB4E</b>							
1.8	3 640	0.85	797	2KJ1223 - ■DE13 - ■■H1		131	
<b>D.108-LA100LA8</b>							
2.4	2 999	1.0	284.73	2KJ1206 - ■FB13 - ■■T1	P02	144	
<b>D.108-LA90SB6E</b>							
2.6	2 782	1.1	359.3	2KJ1206 - ■ED13 - ■■V1	P01	133	
2.8	2 518	1.2	325.21	★ 2KJ1206 - ■ED13 - ■■U1	P01	133	
3.2	2 205	1.4	284.73	2KJ1206 - ■ED13 - ■■T1	P01	133	
3.6	1 989	1.6	256.86	★ 2KJ1206 - ■ED13 - ■■S1	P01	133	
<b>D.108-LA80ZMB4E</b>							
3.9	1 838	1.7	359.3	2KJ1206 - ■DE13 - ■■V1		130	
4.3	1 664	1.9	325.21	★ 2KJ1206 - ■DE13 - ■■U1		130	
<b>D.88-LA90SB6E</b>							
3.4	2 098	0.80	270.9	2KJ1205 - ■ED13 - ■■U1	P01	85	
3.8	1 892	0.89	244.29	★ 2KJ1205 - ■ED13 - ■■T1	P01	85	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.75	<b>D.88-LA90SB6E</b>						
	4.3	1 654	1.0	213.64	2KJ1205 - ■ DE13 - ■■ S1	P01	85
	<b>D.88-LA80ZMB4E</b>						
	4.7	1 537	1.1	300.41	★ 2KJ1205 - ■ DE13 - ■■ V1		82
	5.2	1 386	1.2	270.9	2KJ1205 - ■ DE13 - ■■ U1		82
	5.7	1 250	1.3	244.29	★ 2KJ1205 - ■ DE13 - ■■ T1		82
	6.6	1 093	1.5	213.64	2KJ1205 - ■ DE13 - ■■ S1		82
	7.3	981	1.7	191.8	★ 2KJ1205 - ■ DE13 - ■■ R1		82
	8.0	896	1.9	175.18	2KJ1205 - ■ DE13 - ■■ Q1		82
	9.0	795	2.1	155.46	★ 2KJ1205 - ■ DE13 - ■■ P1		82
	<b>D.68-LA80ZMB4E</b>						
	8.0	891	0.90	174.08	2KJ1204 - ■ DE13 - ■■ Q1		50
	8.9	806	0.99	157.5	★ 2KJ1204 - ■ DE13 - ■■ P1		50
	9.6	744	1.1	145.38	2KJ1204 - ■ DE13 - ■■ N1		50
	11.1	647	1.2	126.41	★ 2KJ1204 - ■ DE13 - ■■ M1		50
	12.2	587	1.4	114.78	2KJ1204 - ■ DE13 - ■■ L1		50
	13.4	536	1.5	104.8	★ 2KJ1204 - ■ DE13 - ■■ K1		50
	14.6	492	1.6	96.16	2KJ1204 - ■ DE13 - ■■ J1		50
	15.8	453	1.8	88.59	★ 2KJ1204 - ■ DE13 - ■■ H1		50
	17.4	412	1.9	80.46	2KJ1204 - ■ DE13 - ■■ G1		50
	19.1	375	2.1	73.3	★ 2KJ1204 - ■ DE13 - ■■ F1		50
	21	343	2.3	67.14	2KJ1204 - ■ DE13 - ■■ E1		50
	<b>Z.68-LA80ZMB4E</b>						
	29	246	2.2	48.09	★ 2KJ1104 - ■ DE13 - ■■ X1		48
	<b>D.48-LA80ZMB4E</b>						
	13.7	524	0.86	102.52	★ 2KJ1203 - ■ DE13 - ■■ L1		31
	15.1	475	0.95	92.91	2KJ1203 - ■ DE13 - ■■ K1		31
	17.1	420	1.1	82.02	★ 2KJ1203 - ■ DE13 - ■■ J1		31
	18.9	379	1.2	73.99	2KJ1203 - ■ DE13 - ■■ H1		31
	21	343	1.3	67.1	★ 2KJ1203 - ■ DE13 - ■■ G1		31
	23	313	1.4	61.14	2KJ1203 - ■ DE13 - ■■ F1		31
	25	286	1.6	55.92	★ 2KJ1203 - ■ DE13 - ■■ E1		31
	28	256	1.8	50	2KJ1203 - ■ DE13 - ■■ D1		31
<b>Z.48-LA80ZMB4E</b>							
27	262	1.1	51.28	2KJ1103 - ■ DE13 - ■■ A2		31	
31	232	1.9	45.38	★ 2KJ1103 - ■ DE13 - ■■ X1		31	
34	211	2.1	41.26	2KJ1103 - ■ DE13 - ■■ W1		31	
38	190	2.4	37.06	★ 2KJ1103 - ■ DE13 - ■■ V1		31	
<b>D.38-LA80ZMB4E</b>							
26	270	0.81	52.86	2KJ1202 - ■ DE13 - ■■ F1		22	
<b>Z.38-LA80ZMB4E</b>							
32	226	0.97	44.12	★ 2KJ1102 - ■ DE13 - ■■ A2		21	
36	201	1.0	39.24	2KJ1102 - ■ DE13 - ■■ X1		21	
41	174	1.3	34.04	★ 2KJ1102 - ■ DE13 - ■■ W1		21	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.75	<b>Z.38-LA80ZMB4E</b>						
	44	163	1.4	31.8	2KJ1102 - DE13 - V1		21
	50	143	1.5	27.97	★ 2KJ1102 - DE13 - U1		21
	57	125	1.8	24.5	2KJ1102 - DE13 - T1		21
	65	111	2.0	21.67	★ 2KJ1102 - DE13 - S1		21
	71	100	2.2	19.64	2KJ1102 - DE13 - R1		21
	81	89	2.5	17.33	★ 2KJ1102 - DE13 - Q1		21
	90	80	2.7	15.64	2KJ1102 - DE13 - P1		21
	99	72	3.0	14.18	★ 2KJ1102 - DE13 - N1		21
	108	66	3.3	12.92	2KJ1102 - DE13 - M1		21
	118	60	3.6	11.82	★ 2KJ1102 - DE13 - L1		21
	<b>Z.28-LA80ZMB4E</b>						
	42	172	0.81	33.71	★ 2KJ1101 - DE13 - X1		14
	46	154	0.91	30.16	2KJ1101 - DE13 - W1		14
	52	137	1.0	26.77	★ 2KJ1101 - DE13 - V1		14
	60	120	1.2	23.46	2KJ1101 - DE13 - U1		14
	68	106	1.3	20.63	★ 2KJ1101 - DE13 - T1		14
	75	95	1.5	18.63	2KJ1101 - DE13 - S1		14
	86	83	1.7	16.24	★ 2KJ1101 - DE13 - R1		14
	96	75	1.9	14.58	2KJ1101 - DE13 - Q1		14
	106	67	2.1	13.17	★ 2KJ1101 - DE13 - P1		14
	117	61	2.3	11.94	2KJ1101 - DE13 - N1		14
	129	56	2.5	10.87	★ 2KJ1101 - DE13 - M1		14
	146	49	2.8	9.61	2KJ1101 - DE13 - L1		14
	158	45	3.1	8.87	★ 2KJ1101 - DE13 - K1		14
	183	39	3.5	7.64	2KJ1101 - DE13 - J1		14
	202	36	3.7	6.94	★ 2KJ1101 - DE13 - H1		14
	222	32	2.9	6.31	★ 2KJ1101 - DE13 - G1		14
	245	29	3.2	5.72	2KJ1101 - DE13 - F1		14
	269	27	3.5	5.21	★ 2KJ1101 - DE13 - E1		14
	304	24	3.7	4.6	2KJ1101 - DE13 - D1		14
	329	22	4.1	4.25	★ 2KJ1101 - DE13 - C1		14
	383	19	4.3	3.66	2KJ1101 - DE13 - B1		14
	420	17	4.5	3.33	★ 2KJ1101 - DE13 - A1		14
	<b>E.68-LA80ZMB4E</b>						
	113	63	1.3	12.4	★ 2KJ1003 - DE13 - W1		30
	125	57	1.6	11.18	2KJ1003 - DE13 - V1		30
	139	52	1.8	10.08	★ 2KJ1003 - DE13 - U1		30
	159	45	3.3	8.82	2KJ1003 - DE13 - T1		30
	177	40	4.2	7.92	★ 2KJ1003 - DE13 - S1		30
	194	37	4.1	7.23	2KJ1003 - DE13 - R1		30
	<b>E.48-LA80ZMB4E</b>						
124	58	0.95	11.3	2KJ1002 - DE13 - U1		20	
140	51	1.6	10	★ 2KJ1002 - DE13 - T1		20	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
0.75	<b>E.48-LA80ZMB4E</b>						
	154	46	1.4	9.09	2KJ1002 - ■ DE13 - ■■ S1		20
	171	42	2.0	8.17	★ 2KJ1002 - ■ DE13 - ■■ R1		20
	200	36	2.7	7	2KJ1002 - ■ DE13 - ■■ Q1		20
	221	32	3.6	6.33	★ 2KJ1002 - ■ DE13 - ■■ P1		20
	239	30	4.0	5.85	2KJ1002 - ■ DE13 - ■■ N1		20
	276	26	4.6	5.08	★ 2KJ1002 - ■ DE13 - ■■ M1		20
	<b>E.38-LA80ZMB4E</b>						
	194	37	1.0	7.2	★ 2KJ1001 - ■ DE13 - ■■ Q1		17
	208	34	1.4	6.73	2KJ1001 - ■ DE13 - ■■ P1		17
	236	30	1.7	5.92	★ 2KJ1001 - ■ DE13 - ■■ N1		17
	270	26	2.6	5.18	2KJ1001 - ■ DE13 - ■■ M1		17
	306	23	3.3	4.58	★ 2KJ1001 - ■ DE13 - ■■ L1		17
	337	21	2.9	4.15	2KJ1001 - ■ DE13 - ■■ K1		17
	381	19	3.7	3.67	★ 2KJ1001 - ■ DE13 - ■■ J1		17
	423	17	3.8	3.31	2KJ1001 - ■ DE13 - ■■ H1		17
	467	15	5.2	3	★ 2KJ1001 - ■ DE13 - ■■ G1		17
	513	14	5.7	2.73	2KJ1001 - ■ DE13 - ■■ F1		17
560	13	5.7	2.5	★ 2KJ1001 - ■ DE13 - ■■ E1		17	
1.1	<b>D.188-Z48-LA90SB4E</b>						
	0.40	23 626	0.85	3 580	2KJ1235 - ■ EM13 - ■■ L1		610
	0.44	21 521	0.93	3 261	★ 2KJ1235 - ■ EM13 - ■■ K1		610
	0.48	19 719	1.0	2 988	2KJ1235 - ■ EM13 - ■■ J1		610
	0.54	17 594	1.1	2 666	★ 2KJ1235 - ■ EM13 - ■■ H1		610
	0.60	15 700	1.3	2 379	2KJ1235 - ■ EM13 - ■■ G1		610
	0.71	13 337	1.5	2 021	2KJ1235 - ■ EM13 - ■■ F1		610
	0.86	11 100	1.8	1 682	★ 2KJ1235 - ■ EM13 - ■■ E1		610
	0.87	10 922	1.8	1 655	★ 2KJ1235 - ■ EM13 - ■■ D1		610
	<b>D.168-Z48-LA90SB4E</b>						
	0.61	15 555	0.90	2 357	★ 2KJ1232 - ■ EM13 - ■■ E1		466
	0.62	15 304	0.91	2 319	★ 2KJ1232 - ■ EM13 - ■■ D1		466
	0.70	13 661	1.0	2 070	2KJ1232 - ■ EM13 - ■■ C1		466
	0.82	11 602	1.2	1 758	2KJ1232 - ■ EM13 - ■■ B1		466
	0.98	9 655	1.5	1 463	★ 2KJ1232 - ■ EM13 - ■■ A1		466
	<b>D.168-Z68-LA90SB4E</b>						
	0.99	9 642	1.5	1 461	2KJ1233 - ■ EM13 - ■■ J1		483
	1.2	8 091	1.7	1 226	2KJ1233 - ■ EM13 - ■■ H1		483
	1.4	6 903	2.0	1 046	2KJ1233 - ■ EM13 - ■■ G1		483
	<b>D.148-Z48-LA90SB4E</b>						
	0.96	9 912	0.81	1 502	2KJ1231 - ■ EM13 - ■■ M1		299
	1.1	9 002	0.89	1 364	2KJ1231 - ■ EM13 - ■■ L1		299
	1.2	8 203	0.98	1 243	2KJ1231 - ■ EM13 - ■■ K1		299
	1.3	7 517	1.1	1 139	2KJ1231 - ■ EM13 - ■■ J1		299
	1.4	6 705	1.2	1 016	2KJ1231 - ■ EM13 - ■■ H1		299

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
1.1	<b>D.148-Z48-LA90SB4E</b>						
	1.6	5 986	1.3	907	2KJ1231 - ■EM13 - ■■G1		299
	1.9	5 082	1.6	770	2KJ1231 - ■EM13 - ■■F1		299
	<b>D.148-LA100L8</b>						
	2.0	5 192	1.5	336.11	2KJ1208 - ■FL13 - ■■W1	P02	311
	2.3	4 655	1.7	301.34	★ 2KJ1208 - ■FL13 - ■■V1	P02	311
	2.5	4 267	1.9	276.23	2KJ1208 - ■FL13 - ■■U1	P02	311
	2.7	3 935	2.0	254.7	★ 2KJ1208 - ■FL13 - ■■T1	P02	311
	<b>D.128-Z48-LA90SB4E</b>						
	1.6	5 867	0.87	889	2KJ1227 - ■EM13 - ■■K1		215
	1.8	5 372	0.95	814	2KJ1227 - ■EM13 - ■■J1		215
	2.0	4 791	1.1	726	2KJ1227 - ■EM13 - ■■H1		215
	2.2	4 276	1.2	648	2KJ1227 - ■EM13 - ■■G1		215
	<b>D.128-LA100L8</b>						
	2.5	4 143	1.2	268.16	★ 2KJ1207 - ■FL13 - ■■U1	P02	221
	2.8	3 799	1.3	245.93	2KJ1207 - ■FL13 - ■■T1	P02	221
	3.1	3 394	1.5	219.72	★ 2KJ1207 - ■FL13 - ■■S1	P02	221
	<b>D.128-LA90ZLD6E</b>						
	3.5	2 997	1.7	268.16	★ 2KJ1207 - ■EQ13 - ■■U1	P01	213
	3.8	2 748	1.9	245.93	2KJ1207 - ■EQ13 - ■■T1	P01	213
	<b>D.108-LA90ZLD6E</b>						
	2.9	3 634	0.85	325.21	★ 2KJ1206 - ■EQ13 - ■■U1	P01	136
	3.3	3 182	0.97	284.73	2KJ1206 - ■EQ13 - ■■T1	P01	136
	3.7	2 871	1.1	256.86	★ 2KJ1206 - ■EQ13 - ■■S1	P01	136
	<b>D.108-LA90SB4E</b>						
	4.0	2 621	1.2	359.3	2KJ1206 - ■EM13 - ■■V1		133
	4.4	2 372	1.3	325.21	★ 2KJ1206 - ■EM13 - ■■U1		133
	5.1	2 077	1.5	284.73	2KJ1206 - ■EM13 - ■■T1		133
	5.6	1 874	1.7	256.86	★ 2KJ1206 - ■EM13 - ■■S1		133
	6.1	1 716	1.8	235.19	2KJ1206 - ■EM13 - ■■R1		133
	6.9	1 526	2.0	209.21	★ 2KJ1206 - ■EM13 - ■■Q1		133
	<b>D.88-LA90SB4E</b>						
	5.3	1 976	0.85	270.9	2KJ1205 - ■EM13 - ■■U1		85
	5.9	1 782	0.94	244.29	★ 2KJ1205 - ■EM13 - ■■T1		85
	6.7	1 559	1.1	213.64	2KJ1205 - ■EM13 - ■■S1		85
	7.5	1 399	1.2	191.8	★ 2KJ1205 - ■EM13 - ■■R1		85
	8.2	1 278	1.3	175.18	2KJ1205 - ■EM13 - ■■Q1		85
	9.3	1 134	1.5	155.46	★ 2KJ1205 - ■EM13 - ■■P1		85
	10.0	1 047	1.6	143.5	2KJ1205 - ■EM13 - ■■N1		85
	11.1	947	1.8	129.79	★ 2KJ1205 - ■EM13 - ■■M1		85
	12.0	872	1.9	119.52	2KJ1205 - ■EM13 - ■■L1		85
	13.0	806	2.1	110.54	★ 2KJ1205 - ■EM13 - ■■K1		85
	14.0	749	2.2	102.61	2KJ1205 - ■EM13 - ■■J1		85

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
1.1	<b>D.68-LA90SB4E</b>						
	11.4	922	0.87	126.41	★ 2KJ1204 - ■EM13 - ■■M1		53
	12.5	837	0.96	114.78	2KJ1204 - ■EM13 - ■■L1		53
	13.7	765	1.0	104.8	★ 2KJ1204 - ■EM13 - ■■K1		53
	15	702	1.1	96.16	2KJ1204 - ■EM13 - ■■J1		53
	16.3	646	1.2	88.59	★ 2KJ1204 - ■EM13 - ■■H1		53
	17.9	587	1.4	80.46	2KJ1204 - ■EM13 - ■■G1		53
	19.6	535	1.5	73.3	★ 2KJ1204 - ■EM13 - ■■F1		53
	21	490	1.6	67.14	2KJ1204 - ■EM13 - ■■E1		53
	24	437	1.8	59.91	★ 2KJ1204 - ■EM13 - ■■D1		53
27	390	2.1	53.47	2KJ1204 - ■EM13 - ■■C1		53	
<b>Z.68-LA90SB4E</b>							
30	351	1.5	48.09	★ 2KJ1104 - ■EM13 - ■■X1		51	
34	307	2.6	42.06	2KJ1104 - ■EM13 - ■■W1		51	
<b>D.48-LA90SB4E</b>							
19.5	540	0.83	73.99	2KJ1203 - ■EM13 - ■■H1		34	
22	490	0.92	67.1	★ 2KJ1203 - ■EM13 - ■■G1		34	
24	446	1.0	61.14	2KJ1203 - ■EM13 - ■■F1		34	
26	408	1.1	55.92	★ 2KJ1203 - ■EM13 - ■■E1		34	
29	365	1.2	50	2KJ1203 - ■EM13 - ■■D1		34	
<b>Z.48-LA90SB4E</b>							
32	331	1.4	45.38	★ 2KJ1103 - ■EM13 - ■■X1		34	
35	301	1.5	41.26	2KJ1103 - ■EM13 - ■■W1		34	
39	270	1.7	37.06	★ 2KJ1103 - ■EM13 - ■■V1		34	
45	232	1.9	31.77	2KJ1103 - ■EM13 - ■■U1		34	
50	210	2.1	28.74	★ 2KJ1103 - ■EM13 - ■■T1		34	
54	194	2.3	26.53	2KJ1103 - ■EM13 - ■■S1		34	
62	168	2.7	23.07	★ 2KJ1103 - ■EM13 - ■■R1		34	
69	153	2.9	20.95	2KJ1103 - ■EM13 - ■■Q1		34	
75	140	3.2	19.13	★ 2KJ1103 - ■EM13 - ■■P1		34	
<b>Z.38-LA90SB4E</b>							
42	248	0.89	34.04	★ 2KJ1102 - ■EM13 - ■■W1		24	
45	232	0.95	31.8	2KJ1102 - ■EM13 - ■■V1		24	
52	204	1.1	27.97	★ 2KJ1102 - ■EM13 - ■■U1		24	
59	179	1.2	24.5	2KJ1102 - ■EM13 - ■■T1		24	
66	158	1.4	21.67	★ 2KJ1102 - ■EM13 - ■■S1		24	
73	143	1.5	19.64	2KJ1102 - ■EM13 - ■■R1		24	
83	126	1.7	17.33	★ 2KJ1102 - ■EM13 - ■■Q1		24	
92	114	1.9	15.64	2KJ1102 - ■EM13 - ■■P1		24	
102	103	2.1	14.18	★ 2KJ1102 - ■EM13 - ■■N1		24	
111	94	2.3	12.92	2KJ1102 - ■EM13 - ■■M1		24	
122	86	2.6	11.82	★ 2KJ1102 - ■EM13 - ■■L1		24	
136	77	2.7	10.57	2KJ1102 - ■EM13 - ■■K1		24	
148	71	2.8	9.7	★ 2KJ1102 - ■EM13 - ■■J1		24	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
1.1	<b>Z.38-LA90SB4E</b>						
	165	64	3.1	8.75	2KJ1102 - ■EM13 - ■■H1		24
	191	55	3.5	7.52	★ 2KJ1102 - ■EM13 - ■■G1		24
	192	55	3.4	7.5	★ 2KJ1102 - ■EM13 - ■■F1		24
	215	49	3.7	6.71	2KJ1102 - ■EM13 - ■■D1		24
	234	45	3.8	6.16	★ 2KJ1102 - ■EM13 - ■■C1		24
	259	40	4.1	5.55	2KJ1102 - ■EM13 - ■■B1		24
	302	35	4.6	4.77	★ 2KJ1102 - ■EM13 - ■■A1		24
	<b>Z.38-LA80ZMB2E</b>						
	165	64	3.5	17.33	★ 2KJ1102 - ■DN13 - ■■Q1	P00	21
	183	57	3.8	15.64	2KJ1102 - ■DN13 - ■■P1	P00	21
	202	52	4.2	14.18	★ 2KJ1102 - ■DN13 - ■■N1	P00	21
	<b>Z.28-LA90SB4E</b>						
	61	171	0.82	23.46	2KJ1101 - ■EM13 - ■■U1		17
	70	150	0.93	20.63	★ 2KJ1101 - ■EM13 - ■■T1		17
	77	136	1.0	18.63	2KJ1101 - ■EM13 - ■■S1		17
	89	118	1.2	16.24	★ 2KJ1101 - ■EM13 - ■■R1		17
	99	106	1.3	14.58	2KJ1101 - ■EM13 - ■■Q1		17
	109	96	1.5	13.17	★ 2KJ1101 - ■EM13 - ■■P1		17
	121	87	1.6	11.94	2KJ1101 - ■EM13 - ■■N1		17
	132	79	1.8	10.87	★ 2KJ1101 - ■EM13 - ■■M1		17
	150	70	2.0	9.61	2KJ1101 - ■EM13 - ■■L1		17
	162	65	2.2	8.87	★ 2KJ1101 - ■EM13 - ■■K1		17
	188	56	2.4	7.64	2KJ1101 - ■EM13 - ■■J1		17
	207	51	2.6	6.94	★ 2KJ1101 - ■EM13 - ■■H1		17
	228	46	2.1	6.31	★ 2KJ1101 - ■EM13 - ■■G1		17
	252	42	2.2	5.72	2KJ1101 - ■EM13 - ■■F1		17
	276	38	2.4	5.21	★ 2KJ1101 - ■EM13 - ■■E1		17
	313	34	2.6	4.6	2KJ1101 - ■EM13 - ■■D1		17
	339	31	2.9	4.25	★ 2KJ1101 - ■EM13 - ■■C1		17
	393	27	3.0	3.66	2KJ1101 - ■EM13 - ■■B1		17
	432	24	3.2	3.33	★ 2KJ1101 - ■EM13 - ■■A1		17
	<b>E.88-LA90SB4E</b>						
139	75	3.1	10.33	★ 2KJ1004 - ■EM13 - ■■S1		50	
152	69	3.0	9.46	2KJ1004 - ■EM13 - ■■R1		50	
171	61	4.0	8.42	★ 2KJ1004 - ■EM13 - ■■Q1		50	
<b>E.68-LA90SB4E</b>							
116	90	0.9	12.4	★ 2KJ1003 - ■EM13 - ■■W1		33	
129	82	1.1	11.18	2KJ1003 - ■EM13 - ■■V1		33	
143	74	1.3	10.08	★ 2KJ1003 - ■EM13 - ■■U1		33	
163	64	2.3	8.82	2KJ1003 - ■EM13 - ■■T1		33	
182	58	2.9	7.92	★ 2KJ1003 - ■EM13 - ■■S1		33	
199	53	2.8	7.23	2KJ1003 - ■EM13 - ■■R1		33	
224	47	3.6	6.42	★ 2KJ1003 - ■EM13 - ■■P1		33	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
1.1	<b>E.68-LA90SB4E</b>						
	243	43	4.4	5.92	2KJ1003 - ■EM13 - ■■N1		33
	<b>E.48-LA90SB4E</b>						
	144	73	1.1	10	★ 2KJ1002 - ■EM13 - ■■T1		23
	158	66	0.97	9.09	2KJ1002 - ■EM13 - ■■S1		23
	176	60	1.4	8.17	★ 2KJ1002 - ■EM13 - ■■R1		23
	206	51	1.9	7	2KJ1002 - ■EM13 - ■■Q1		23
	227	46	2.5	6.33	★ 2KJ1002 - ■EM13 - ■■P1		23
	246	43	2.8	5.85	2KJ1002 - ■EM13 - ■■N1		23
	283	37	3.2	5.08	★ 2KJ1002 - ■EM13 - ■■M1		23
	312	34	3.9	4.62	2KJ1002 - ■EM13 - ■■L1		23
	342	31	4.9	4.21	★ 2KJ1002 - ■EM13 - ■■K1		23
	404	26	5.4	3.56	★ 2KJ1002 - ■EM13 - ■■H1		23
	<b>E.38-LA90SB4E</b>						
	214	49	0.98	6.73	2KJ1001 - ■EM13 - ■■P1		20
	243	43	1.2	5.92	★ 2KJ1001 - ■EM13 - ■■N1		20
	278	38	1.9	5.18	2KJ1001 - ■EM13 - ■■M1		20
	314	33	2.3	4.58	★ 2KJ1001 - ■EM13 - ■■L1		20
	347	30	2.0	4.15	2KJ1001 - ■EM13 - ■■K1		20
392	27	2.6	3.67	★ 2KJ1001 - ■EM13 - ■■J1		20	
435	24	2.7	3.31	2KJ1001 - ■EM13 - ■■H1		20	
480	22	3.7	3	★ 2KJ1001 - ■EM13 - ■■G1		20	
527	20	4.0	2.73	2KJ1001 - ■EM13 - ■■F1		20	
576	18	4.0	2.5	★ 2KJ1001 - ■EM13 - ■■E1		20	
643	16	4.4	2.24	2KJ1001 - ■EM13 - ■■D1		20	
702	15	5.3	2.05	★ 2KJ1001 - ■EM13 - ■■C1		20	
778	14	6.1	1.85	2KJ1001 - ■EM13 - ■■B1		20	
906	12	6.2	1.59	★ 2KJ1001 - ■EM13 - ■■A1		20	
1.5	<b>D.188-Z68-LA90ZLB4E</b>						
	1.2	11 342	1.8	1 251	2KJ1237 - ■EQ13 - ■■J1		630
	<b>D.188-Z48-LA90ZLB4E</b>						
	0.54	24 171	0.83	2 666	★ 2KJ1235 - ■EQ13 - ■■H1		613
	0.60	21 569	0.93	2 379	2KJ1235 - ■EQ13 - ■■G1		613
	0.71	18 323	1.1	2 021	2KJ1235 - ■EQ13 - ■■F1		613
	0.86	15 250	1.3	1 682	★ 2KJ1235 - ■EQ13 - ■■E1		613
	0.87	15 005	1.3	1 655	★ 2KJ1235 - ■EQ13 - ■■D1		613
	0.98	13 391	1.5	1 477	2KJ1235 - ■EQ13 - ■■C1		613
	1.1	11 378	1.8	1 255	2KJ1235 - ■EQ13 - ■■B1		613
	<b>D.168-Z48-LA90ZLB4E</b>						
	0.82	15 939	0.88	1 758	2KJ1232 - ■EQ13 - ■■B1		469
	0.98	13 264	1.1	1 463	★ 2KJ1232 - ■EQ13 - ■■A1		469
	<b>D.168-Z68-LA90ZLB4E</b>						
	0.99	13 246	1.1	1 461	2KJ1233 - ■EQ13 - ■■J1		486
	1.2	11 116	1.3	1 226	2KJ1233 - ■EQ13 - ■■H1		486

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

2

**Selection and ordering data** (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
1.5	<b>D.168-Z68-LA90ZLB4E</b>						
	1.4	9 484	1.5	1 046	2KJ1233 - ■EQ13 - ■■G1		486
	<b>D.148-Z48-LA90ZLB4E</b>						
	1.4	9 212	0.87	1 016	2KJ1231 - ■EQ13 - ■■H1		302
	1.6	8 223	0.97	907	2KJ1231 - ■EQ13 - ■■G1		302
	1.9	6 981	1.1	770	2KJ1231 - ■EQ13 - ■■F1		302
	<b>D.148-LA112M8</b>						
	2.1	6 829	1.2	336.11	2KJ1208 - ■GG13 - ■■W1	P02	318
	2.3	6 123	1.3	301.34	★ 2KJ1208 - ■GG13 - ■■V1	P02	318
	2.6	5 613	1.4	276.23	2KJ1208 - ■GG13 - ■■U1	P02	318
	<b>D.148-LA100ZLP6E</b>						
	2.8	5 149	1.6	336.11	2KJ1208 - ■FM13 - ■■W1	P01	311
	3.1	4 617	1.7	301.34	★ 2KJ1208 - ■FM13 - ■■V1	P01	311
	3.4	4 232	1.9	276.23	2KJ1208 - ■FM13 - ■■U1	P01	311
	<b>D.128-Z48-LA90ZLB4E</b>						
	2.2	5 875	0.87	648	2KJ1227 - ■EQ13 - ■■G1		218
	<b>D.128-LA112M8</b>						
	2.6	5 449	0.94	268.16	★ 2KJ1207 - ■GG13 - ■■U1	P02	228
	2.9	4 997	1.0	245.93	2KJ1207 - ■GG13 - ■■T1	P02	228
	3.2	4 465	1.1	219.72	★ 2KJ1207 - ■GG13 - ■■S1	P02	228
	<b>D.128-LA100ZLP6E</b>						
	3.5	4 108	1.2	268.16	★ 2KJ1207 - ■FM13 - ■■U1	P01	221
	3.8	3 768	1.4	245.93	2KJ1207 - ■FM13 - ■■T1	P01	221
	4.3	3 366	1.5	219.72	★ 2KJ1207 - ■FM13 - ■■S1	P01	221
	4.6	3 083	1.7	201.22	2KJ1207 - ■FM13 - ■■R1	P01	221
	5.0	2 840	1.8	185.36	★ 2KJ1207 - ■FM13 - ■■Q1	P01	221
	<b>D.128-LA90ZLB4E</b>						
	5.4	2 668	1.9	268.16	★ 2KJ1207 - ■EQ13 - ■■U1		213
	5.9	2 446	2.1	245.93	2KJ1207 - ■EQ13 - ■■T1		213
	<b>D.108-LA90ZLB4E</b>						
	4.0	3 574	0.87	359.3	2KJ1206 - ■EQ13 - ■■V1		136
	4.4	3 235	0.96	325.21	★ 2KJ1206 - ■EQ13 - ■■U1		136
	5.1	2 832	1.1	284.73	2KJ1206 - ■EQ13 - ■■T1		136
	5.6	2 555	1.2	256.86	★ 2KJ1206 - ■EQ13 - ■■S1		136
	6.1	2 340	1.3	235.19	2KJ1206 - ■EQ13 - ■■R1		136
	6.9	2 081	1.5	209.21	★ 2KJ1206 - ■EQ13 - ■■Q1		136
	7.5	1 902	1.6	191.21	2KJ1206 - ■EQ13 - ■■P1		136
	8.2	1 749	1.8	175.78	★ 2KJ1206 - ■EQ13 - ■■N1		136
	8.9	1 616	1.9	162.4	2KJ1206 - ■EQ13 - ■■M1		136
	9.6	1 499	2.1	150.7	★ 2KJ1206 - ■EQ13 - ■■L1		136
	10.3	1 396	2.2	140.37	2KJ1206 - ■EQ13 - ■■K1		136
	<b>D.88-LA90ZLB4E</b>						
	7.5	1 908	0.88	191.8	★ 2KJ1205 - ■EQ13 - ■■R1		88
	8.2	1 743	0.96	175.18	2KJ1205 - ■EQ13 - ■■Q1		88

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
1.5	<b>D.88-LA90ZLB4E</b>						
	9.3	1 547	1.1	155.46	★ 2KJ1205 - ■EQ13 - ■■P1		88
	10.0	1 428	1.2	143.5	2KJ1205 - ■EQ13 - ■■N1		88
	11.1	1 291	1.3	129.79	★ 2KJ1205 - ■EQ13 - ■■M1		88
	12.0	1 189	1.4	119.52	2KJ1205 - ■EQ13 - ■■L1		88
	13.0	1 100	1.5	110.54	★ 2KJ1205 - ■EQ13 - ■■K1		88
	14.0	1 021	1.6	102.61	2KJ1205 - ■EQ13 - ■■J1		88
	15.9	901	1.9	90.53	★ 2KJ1205 - ■EQ13 - ■■H1		88
	17.2	831	2.0	83.58	2KJ1205 - ■EQ13 - ■■G1		88
	19.2	745	2.3	74.88	★ 2KJ1205 - ■EQ13 - ■■F1		88
	21	687	2.4	69.05	2KJ1205 - ■EQ13 - ■■E1		88
	<b>D.68-LA90ZLB4E</b>						
	15.0	957	0.84	96.16	2KJ1204 - ■EQ13 - ■■J1		56
	16.3	881	0.91	88.59	★ 2KJ1204 - ■EQ13 - ■■H1		56
	17.9	800	1.0	80.46	2KJ1204 - ■EQ13 - ■■G1		56
19.6	729	1.1	73.3	★ 2KJ1204 - ■EQ13 - ■■F1		56	
21	668	1.2	67.14	2KJ1204 - ■EQ13 - ■■E1		56	
24	596	1.3	59.91	★ 2KJ1204 - ■EQ13 - ■■D1		56	
27	532	1.5	53.47	2KJ1204 - ■EQ13 - ■■C1		56	
<b>Z.68-LA90ZLB4E</b>							
30	478	1.1	48.09	★ 2KJ1104 - ■EQ13 - ■■X1		54	
34	418	1.9	42.06	2KJ1104 - ■EQ13 - ■■W1		54	
38	376	2.1	37.76	★ 2KJ1104 - ■EQ13 - ■■V1		54	
42	343	2.3	34.49	2KJ1104 - ■EQ13 - ■■U1		54	
47	304	2.6	30.6	★ 2KJ1104 - ■EQ13 - ■■T1		54	
51	281	2.8	28.25	2KJ1104 - ■EQ13 - ■■S1		54	
<b>D.48-LA90ZLB4E</b>							
26	556	0.81	55.92	★ 2KJ1203 - ■EQ13 - ■■E1		37	
29	497	0.90	50	2KJ1203 - ■EQ13 - ■■D1		37	
<b>Z.48-LA90ZLB4E</b>							
32	451	1.0	45.38	★ 2KJ1103 - ■EQ13 - ■■X1		37	
35	410	1.1	41.26	2KJ1103 - ■EQ13 - ■■W1		37	
39	369	1.2	37.06	★ 2KJ1103 - ■EQ13 - ■■V1		37	
45	316	1.4	31.77	2KJ1103 - ■EQ13 - ■■U1		37	
50	286	1.6	28.74	★ 2KJ1103 - ■EQ13 - ■■T1		37	
54	264	1.7	26.53	2KJ1103 - ■EQ13 - ■■S1		37	
62	229	2.0	23.07	★ 2KJ1103 - ■EQ13 - ■■R1		37	
69	208	2.2	20.95	2KJ1103 - ■EQ13 - ■■Q1		37	
75	190	2.4	19.13	★ 2KJ1103 - ■EQ13 - ■■P1		37	
82	175	2.6	17.55	2KJ1103 - ■EQ13 - ■■N1		37	
89	161	2.7	16.17	★ 2KJ1103 - ■EQ13 - ■■M1		37	
98	146	2.9	14.68	2KJ1103 - ■EQ13 - ■■L1		37	
108	133	3.1	13.38	★ 2KJ1103 - ■EQ13 - ■■K1		37	
118	122	3.3	12.25	2KJ1103 - ■EQ13 - ■■J1		37	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
1.5	<b>Z.48-LA90ZLB4E</b>						
	132	109	3.6	10.93	★ 2KJ1103 - ■EQ13 - ■■H1		37
	148	97	3.9	9.76	2KJ1103 - ■EQ13 - ■■G1		37
	212	68	4.0	6.79	★ 2KJ1103 - ■EQ13 - ■■D1		37
	238	60	4.5	6.06	2KJ1103 - ■EQ13 - ■■C1		37
	<b>Z.38-LA90ZLB4E</b>						
	59	244	0.9	24.5	2KJ1102 - ■EQ13 - ■■T1		27
	66	216	1.0	21.67	★ 2KJ1102 - ■EQ13 - ■■S1		27
	73	195	1.1	19.64	2KJ1102 - ■EQ13 - ■■R1		27
	83	172	1.3	17.33	★ 2KJ1102 - ■EQ13 - ■■Q1		27
	92	156	1.4	15.64	2KJ1102 - ■EQ13 - ■■P1		27
	102	141	1.6	14.18	★ 2KJ1102 - ■EQ13 - ■■N1		27
	111	129	1.7	12.92	2KJ1102 - ■EQ13 - ■■M1		27
	122	118	1.9	11.82	★ 2KJ1102 - ■EQ13 - ■■L1		27
	136	105	2.0	10.57	2KJ1102 - ■EQ13 - ■■K1		27
	148	96	2.1	9.7	★ 2KJ1102 - ■EQ13 - ■■J1		27
	165	87	2.2	8.75	2KJ1102 - ■EQ13 - ■■H1		27
	191	75	2.5	7.52	★ 2KJ1102 - ■EQ13 - ■■G1		27
	192	75	2.5	7.5	★ 2KJ1102 - ■EQ13 - ■■F1		27
	215	67	2.7	6.71	2KJ1102 - ■EQ13 - ■■D1		27
	234	61	2.8	6.16	★ 2KJ1102 - ■EQ13 - ■■C1		27
	259	55	3.0	5.55	2KJ1102 - ■EQ13 - ■■B1		27
	302	48	3.4	4.77	★ 2KJ1102 - ■EQ13 - ■■A1		27
	<b>Z.38-LA90SB2E</b>						
	167	86	2.6	17.33	★ 2KJ1102 - ■EM13 - ■■Q1	P00	24
	185	78	2.8	15.64	2KJ1102 - ■EM13 - ■■P1	P00	24
	204	70	3.1	14.18	★ 2KJ1102 - ■EM13 - ■■N1	P00	24
	224	64	3.4	12.92	2KJ1102 - ■EM13 - ■■M1	P00	24
	245	59	3.8	11.82	★ 2KJ1102 - ■EM13 - ■■L1	P00	24
	273	52	4.0	10.57	2KJ1102 - ■EM13 - ■■K1	P00	24
	298	48	4.2	9.7	★ 2KJ1102 - ■EM13 - ■■J1	P00	24
	330	43	4.5	8.75	2KJ1102 - ■EM13 - ■■H1	P00	24
	384	37	5.1	7.52	★ 2KJ1102 - ■EM13 - ■■G1	P00	24
	385	37	5.0	7.5	★ 2KJ1102 - ■EM13 - ■■F1	P00	24
	431	33	5.4	6.71	2KJ1102 - ■EM13 - ■■D1	P00	24
	469	30	5.6	6.16	★ 2KJ1102 - ■EM13 - ■■C1	P00	24
	<b>Z.28-LA90ZLB4E</b>						
	89	162	0.87	16.24	★ 2KJ1101 - ■EQ13 - ■■R1		20
	99	145	0.97	14.58	2KJ1101 - ■EQ13 - ■■Q1		20
	109	131	1.1	13.17	★ 2KJ1101 - ■EQ13 - ■■P1		20
	121	119	1.2	11.94	2KJ1101 - ■EQ13 - ■■N1		20
	132	108	1.3	10.87	★ 2KJ1101 - ■EQ13 - ■■M1		20
	150	96	1.5	9.61	2KJ1101 - ■EQ13 - ■■L1		20
	162	88	1.6	8.87	★ 2KJ1101 - ■EQ13 - ■■K1		20

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
1.5	<b>Z.28-LA90ZLB4E</b>						
	188	76	1.8	7.64	2KJ1101 - ■EQ13 - ■■J1		20
	207	69	1.9	6.94	★ 2KJ1101 - ■EQ13 - ■■H1		20
	228	63	1.5	6.31	★ 2KJ1101 - ■EQ13 - ■■G1		20
	252	57	1.6	5.72	2KJ1101 - ■EQ13 - ■■F1		20
	276	52	1.8	5.21	★ 2KJ1101 - ■EQ13 - ■■E1		20
	313	46	1.9	4.6	2KJ1101 - ■EQ13 - ■■D1		20
	339	42	2.1	4.25	★ 2KJ1101 - ■EQ13 - ■■C1		20
	393	36	2.2	3.66	2KJ1101 - ■EQ13 - ■■B1		20
	432	33	2.3	3.33	★ 2KJ1101 - ■EQ13 - ■■A1		20
	<b>E.88-LA90ZLB4E</b>						
	139	103	2.2	10.33	★ 2KJ1004 - ■EQ13 - ■■S1		53
	152	94	2.2	9.46	2KJ1004 - ■EQ13 - ■■R1		53
	171	84	2.9	8.42	★ 2KJ1004 - ■EQ13 - ■■Q1		53
	187	76	3.2	7.69	2KJ1004 - ■EQ13 - ■■P1		53
	204	70	4.1	7.07	★ 2KJ1004 - ■EQ13 - ■■N1		53
	238	60	4.6	6.06	★ 2KJ1004 - ■EQ13 - ■■L1		53
	<b>E.68-LA90ZLB4E</b>						
	129	111	0.83	11.18	2KJ1003 - ■EQ13 - ■■V1		36
	143	100	0.95	10.08	★ 2KJ1003 - ■EQ13 - ■■U1		36
	163	88	1.7	8.82	2KJ1003 - ■EQ13 - ■■T1		36
	182	79	2.2	7.92	★ 2KJ1003 - ■EQ13 - ■■S1		36
	199	72	2.1	7.23	2KJ1003 - ■EQ13 - ■■R1		36
	224	64	2.7	6.42	★ 2KJ1003 - ■EQ13 - ■■P1		36
	243	59	3.2	5.92	2KJ1003 - ■EQ13 - ■■N1		36
	269	53	4.1	5.36	★ 2KJ1003 - ■EQ13 - ■■M1		36
	292	49	4.6	4.93	2KJ1003 - ■EQ13 - ■■L1		36
	316	45	4.8	4.56	★ 2KJ1003 - ■EQ13 - ■■K1		36
	<b>E.48-LA90ZLB4E</b>						
	144	100	0.8	10	★ 2KJ1002 - ■EQ13 - ■■T1		26
	176	81	1.0	8.17	★ 2KJ1002 - ■EQ13 - ■■R1		26
	206	70	1.4	7	2KJ1002 - ■EQ13 - ■■Q1		26
	227	63	1.8	6.33	★ 2KJ1002 - ■EQ13 - ■■P1		26
	246	58	2.1	5.85	2KJ1002 - ■EQ13 - ■■N1		26
	283	50	2.4	5.08	★ 2KJ1002 - ■EQ13 - ■■M1		26
	312	46	2.8	4.62	2KJ1002 - ■EQ13 - ■■L1		26
342	42	3.6	4.21	★ 2KJ1002 - ■EQ13 - ■■K1		26	
372	38	4.2	3.87	2KJ1002 - ■EQ13 - ■■J1		26	
404	35	4.0	3.56	★ 2KJ1002 - ■EQ13 - ■■H1		26	
444	32	4.7	3.24	2KJ1002 - ■EQ13 - ■■G1		26	
787	18	6.3	1.83	2KJ1002 - ■EQ13 - ■■B1		26	
<b>E.38-LA90ZLB4E</b>							
243	59	0.9	5.92	★ 2KJ1001 - ■EQ13 - ■■N1		23	
278	52	1.4	5.18	2KJ1001 - ■EQ13 - ■■M1		23	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
1.5	<b>E.38-LA90ZLB4E</b>						
	314	46	1.7	4.58	★ 2KJ1001 - ■EQ13 - ■■L1		23
	347	41	1.5	4.15	2KJ1001 - ■EQ13 - ■■K1		23
	392	36	1.9	3.67	★ 2KJ1001 - ■EQ13 - ■■J1		23
	435	33	2.0	3.31	2KJ1001 - ■EQ13 - ■■H1		23
	480	30	2.7	3	★ 2KJ1001 - ■EQ13 - ■■G1		23
	527	27	2.9	2.73	2KJ1001 - ■EQ13 - ■■F1		23
	576	25	2.9	2.5	★ 2KJ1001 - ■EQ13 - ■■E1		23
	643	22	3.2	2.24	2KJ1001 - ■EQ13 - ■■D1		23
	702	20	3.9	2.05	★ 2KJ1001 - ■EQ13 - ■■C1		23
	778	18	4.5	1.85	2KJ1001 - ■EQ13 - ■■B1		23
906	16	4.6	1.59	★ 2KJ1001 - ■EQ13 - ■■A1		23	
2.2	<b>D.188-Z48-LA100ZLP4E</b>						
	0.85	22 590	0.89	1 682	★ 2KJ1235 - ■FM13 - ■■E1		621
	0.87	22 228	0.9	1 655	★ 2KJ1235 - ■FM13 - ■■D1		621
	0.97	19 837	1.0	1 477	2KJ1235 - ■FM13 - ■■C1		621
	1.1	16 855	1.2	1 255	2KJ1235 - ■FM13 - ■■B1		621
	1.4	14 022	1.4	1 044	★ 2KJ1235 - ■FM13 - ■■A1		621
	<b>D.188-Z68-LA100ZLP4E</b>						
	1.1	16 802	1.2	1 251	2KJ1237 - ■FM13 - ■■J1		638
	1.4	14 102	1.4	1 050	2KJ1237 - ■FM13 - ■■H1		638
	1.6	12 034	1.7	896	★ 2KJ1237 - ■FM13 - ■■G1		638
	1.9	10 019	2.0	746	2KJ1237 - ■FM13 - ■■F1		638
	<b>D.168-Z68-LA100ZLP4E</b>						
	1.2	16 466	0.85	1 226	2KJ1233 - ■FM13 - ■■H1		494
	1.4	14 048	1.0	1 046	2KJ1233 - ■FM13 - ■■G1		494
	1.6	11 698	1.2	871	2KJ1233 - ■FM13 - ■■F1		494
	<b>D.168-LA132S8</b>						
	2.0	10 253	1.4	341.61	★ 2KJ1210 - ■HE13 - ■■U1	P02	499
	2.2	9 407	1.5	313.41	2KJ1210 - ■HE13 - ■■T1	P02	499
	2.4	8 681	1.6	289.23	★ 2KJ1210 - ■HE13 - ■■S1	P02	499
	2.6	8 053	1.7	268.29	2KJ1210 - ■HE13 - ■■R1	P02	499
	<b>D.148-LA132S8</b>						
	2.3	9 045	0.88	301.34	★ 2KJ1208 - ■HE13 - ■■V1	P02	328
	2.5	8 291	0.96	276.23	2KJ1208 - ■HE13 - ■■U1	P02	328
	2.7	7 645	1.0	254.7	★ 2KJ1208 - ■HE13 - ■■T1	P02	328
	<b>D.148-LA112ZMP6E</b>						
	2.8	7 394	1.1	336.11	2KJ1208 - ■GJ13 - ■■W1	P01	318
	3.2	6 629	1.2	301.34	★ 2KJ1208 - ■GJ13 - ■■V1	P01	318
	3.5	6 077	1.3	276.23	2KJ1208 - ■GJ13 - ■■U1	P01	318
	3.7	5 603	1.4	254.7	★ 2KJ1208 - ■GJ13 - ■■T1	P01	318
	4.0	5 193	1.5	236.05	2KJ1208 - ■GJ13 - ■■S1	P01	318

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
<b>2.2</b>	<b>D.148-LA100ZLP4E</b>						
	4.3	4 921	1.6	336.11	2KJ1208 - ■ FM13 - ■■ W1		311
	4.8	4 412	1.8	301.34	★ 2KJ1208 - ■ FM13 - ■■ V1		311
	5.2	4 044	2.0	276.23	2KJ1208 - ■ FM13 - ■■ U1		311
	5.6	3 729	2.1	254.7	★ 2KJ1208 - ■ FM13 - ■■ T1		311
	<b>D.128-LA112ZMP6E</b>						
	3.6	5 900	0.86	268.16	★ 2KJ1207 - ■ GJ13 - ■■ U1	P01	228
	3.9	5 410	0.94	245.93	2KJ1207 - ■ GJ13 - ■■ T1	P01	228
	4.3	4 834	1.1	219.72	★ 2KJ1207 - ■ GJ13 - ■■ S1	P01	228
	4.7	4 427	1.2	201.22	2KJ1207 - ■ GJ13 - ■■ R1	P01	228
	5.2	4 078	1.3	185.36	★ 2KJ1207 - ■ GJ13 - ■■ Q1	P01	228
	<b>D.128-LA100ZLP4E</b>						
	5.4	3 926	1.3	268.16	★ 2KJ1207 - ■ FM13 - ■■ U1		221
	5.8	3 601	1.4	245.93	2KJ1207 - ■ FM13 - ■■ T1		221
	6.5	3 217	1.6	219.72	★ 2KJ1207 - ■ FM13 - ■■ S1		221
	7.1	2 946	1.7	201.22	2KJ1207 - ■ FM13 - ■■ R1		221
	7.7	2 714	1.9	185.36	★ 2KJ1207 - ■ FM13 - ■■ Q1		221
	8.4	2 513	2.0	171.62	2KJ1207 - ■ FM13 - ■■ P1		221
	<b>D.108-LA100ZLP4E</b>						
	5.6	3 761	0.82	256.86	★ 2KJ1206 - ■ FM13 - ■■ S1		144
6.1	3 443	0.90	235.19	2KJ1206 - ■ FM13 - ■■ R1		144	
6.9	3 063	1.0	209.21	★ 2KJ1206 - ■ FM13 - ■■ Q1		144	
7.5	2 800	1.1	191.21	2KJ1206 - ■ FM13 - ■■ P1		144	
8.2	2 574	1.2	175.78	★ 2KJ1206 - ■ FM13 - ■■ N1		144	
8.8	2 378	1.3	162.4	2KJ1206 - ■ FM13 - ■■ M1		144	
9.5	2 206	1.4	150.7	★ 2KJ1206 - ■ FM13 - ■■ L1		144	
10.2	2 055	1.5	140.37	2KJ1206 - ■ FM13 - ■■ K1		144	
11.3	1 858	1.7	126.9	★ 2KJ1206 - ■ FM13 - ■■ J1		144	
12.3	1 711	1.8	116.83	2KJ1206 - ■ FM13 - ■■ H1		144	
13.7	1 538	2.0	105.08	★ 2KJ1206 - ■ FM13 - ■■ G1		144	
14.8	1 419	2.2	96.94	2KJ1206 - ■ FM13 - ■■ F1		144	
<b>D.88-LA100ZLP4E</b>							
10.0	2 101	0.80	143.5	2KJ1205 - ■ FM13 - ■■ N1		96	
11.1	1 900	0.88	129.79	★ 2KJ1205 - ■ FM13 - ■■ M1		96	
12.0	1 750	0.96	119.52	2KJ1205 - ■ FM13 - ■■ L1		96	
13.0	1 618	1.0	110.54	★ 2KJ1205 - ■ FM13 - ■■ K1		96	
14.0	1 502	1.1	102.61	2KJ1205 - ■ FM13 - ■■ J1		96	
15.9	1 325	1.3	90.53	★ 2KJ1205 - ■ FM13 - ■■ H1		96	
17.2	1 224	1.4	83.58	2KJ1205 - ■ FM13 - ■■ G1		96	
19.2	1 096	1.5	74.88	★ 2KJ1205 - ■ FM13 - ■■ F1		96	
21	1 011	1.7	69.05	2KJ1205 - ■ FM13 - ■■ E1		96	
25	848	2.0	57.93	2KJ1205 - ■ FM13 - ■■ D1		96	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
2.2	<b>Z.88-LA100ZLP4E</b>						
	28	743	2.0	50.73	2KJ1105 - ■ FM13 - ■■ B2		94
	31	670	2.5	45.76	★ 2KJ1105 - ■ FM13 - ■■ A2		94
	<b>D.68-LA100ZLP4E</b>						
	21	983	0.81	67.14	2KJ1204 - ■ FM13 - ■■ E1		64
	24	877	0.91	59.91	★ 2KJ1204 - ■ FM13 - ■■ D1		64
	27	783	1.0	53.47	2KJ1204 - ■ FM13 - ■■ C1		64
	<b>Z.68-LA100ZLP4E</b>						
	34	616	1.3	42.06	2KJ1104 - ■ FM13 - ■■ W1		62
	38	553	1.4	37.76	★ 2KJ1104 - ■ FM13 - ■■ V1		62
	42	505	1.6	34.49	2KJ1104 - ■ FM13 - ■■ U1		62
	47	448	1.8	30.6	★ 2KJ1104 - ■ FM13 - ■■ T1		62
	51	414	1.9	28.25	2KJ1104 - ■ FM13 - ■■ S1		62
	56	374	2.1	25.55	★ 2KJ1104 - ■ FM13 - ■■ R1		62
	61	345	2.3	23.53	2KJ1104 - ■ FM13 - ■■ Q1		62
	66	319	2.5	21.76	★ 2KJ1104 - ■ FM13 - ■■ P1		62
	71	296	2.7	20.2	2KJ1104 - ■ FM13 - ■■ N1		62
	80	261	3.1	17.82	★ 2KJ1104 - ■ FM13 - ■■ M1		62
	87	241	3.3	16.45	2KJ1104 - ■ FM13 - ■■ L1		62
	<b>D.48-LA100ZLP4E</b>						
	40	521	0.86	35.59	2KJ1203 - ■ FM13 - ■■ A1		45
	<b>Z.48-LA100ZLP4E</b>						
	45	465	0.97	31.77	2KJ1103 - ■ FM13 - ■■ U1		45
	50	421	1.1	28.74	★ 2KJ1103 - ■ FM13 - ■■ T1		45
	54	388	1.2	26.53	2KJ1103 - ■ FM13 - ■■ S1		45
	62	338	1.3	23.07	★ 2KJ1103 - ■ FM13 - ■■ R1		45
	68	307	1.5	20.95	2KJ1103 - ■ FM13 - ■■ Q1		45
	75	280	1.6	19.13	★ 2KJ1103 - ■ FM13 - ■■ P1		45
	82	257	1.8	17.55	2KJ1103 - ■ FM13 - ■■ N1		45
	89	237	1.8	16.17	★ 2KJ1103 - ■ FM13 - ■■ M1		45
	98	215	2.0	14.68	2KJ1103 - ■ FM13 - ■■ L1		45
	107	196	2.1	13.38	★ 2KJ1103 - ■ FM13 - ■■ K1		45
	117	179	2.2	12.25	2KJ1103 - ■ FM13 - ■■ J1		45
	131	160	2.4	10.93	★ 2KJ1103 - ■ FM13 - ■■ H1		45
	147	143	2.7	9.76	2KJ1103 - ■ FM13 - ■■ G1		45
	173	121	3.0	8.29	2KJ1103 - ■ FM13 - ■■ F1		45
	208	101	3.4	6.9	★ 2KJ1103 - ■ FM13 - ■■ E1		45
	211	99	2.7	6.79	★ 2KJ1103 - ■ FM13 - ■■ D1		45
	237	89	3.0	6.06	2KJ1103 - ■ FM13 - ■■ C1		45
	279	75	3.6	5.15	2KJ1103 - ■ FM13 - ■■ B1		45
	335	63	4.1	4.28	★ 2KJ1103 - ■ FM13 - ■■ A1		45
	<b>Z.48-LA90ZLB2E</b>						
	151	139	3.2	19.13	★ 2KJ1103 - ■ EQ13 - ■■ P1	P00	37
	165	128	3.5	17.55	2KJ1103 - ■ EQ13 - ■■ N1	P00	37

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
<b>2.2</b>							
<b>Z.48-LA90ZLB2E</b>							
179		118	3.7	16.17	★ 2KJ1103 - ■EQ13 - ■■M1	P00	37
197		107	3.9	14.68	2KJ1103 - ■EQ13 - ■■L1	P00	37
216		97	4.2	13.38	★ 2KJ1103 - ■EQ13 - ■■K1	P00	37
236		89	4.5	12.25	2KJ1103 - ■EQ13 - ■■J1	P00	37
426		49	5.5	6.79	★ 2KJ1103 - ■EQ13 - ■■D1	P00	37
<b>Z.38-LA100ZLP4E</b>							
83	254	0.87		17.33	★ 2KJ1102 - ■FM13 - ■■Q1		35
92	229	0.96		15.64	2KJ1102 - ■FM13 - ■■P1		35
101	208	1.1		14.18	★ 2KJ1102 - ■FM13 - ■■N1		35
111	189	1.2		12.92	2KJ1102 - ■FM13 - ■■M1		35
121	173	1.3		11.82	★ 2KJ1102 - ■FM13 - ■■L1		35
136	155	1.4		10.57	2KJ1102 - ■FM13 - ■■K1		35
148	142	1.4		9.7	★ 2KJ1102 - ■FM13 - ■■J1		35
164	128	1.5		8.75	2KJ1102 - ■FM13 - ■■H1		35
191	110	1.7		7.5	★ 2KJ1102 - ■FM13 - ■■F1		35
191	110	1.7		7.52	★ 2KJ1102 - ■FM13 - ■■G1		35
214	98	1.8		6.71	2KJ1102 - ■FM13 - ■■D1		35
233	90	1.9		6.16	★ 2KJ1102 - ■FM13 - ■■C1		35
259	81	2.0		5.55	2KJ1102 - ■FM13 - ■■B1		35
301	70	2.3		4.77	★ 2KJ1102 - ■FM13 - ■■A1		35
<b>Z.38-LA90ZLB2E</b>							
167	126	1.7		17.33	★ 2KJ1102 - ■EQ13 - ■■Q1	P00	27
185	114	1.9		15.64	2KJ1102 - ■EQ13 - ■■P1	P00	27
204	103	2.1		14.18	★ 2KJ1102 - ■EQ13 - ■■N1	P00	27
224	94	2.3		12.92	2KJ1102 - ■EQ13 - ■■M1	P00	27
245	86	2.6		11.82	★ 2KJ1102 - ■EQ13 - ■■L1	P00	27
273	77	2.7		10.57	2KJ1102 - ■EQ13 - ■■K1	P00	27
298	70	2.8		9.7	★ 2KJ1102 - ■EQ13 - ■■J1	P00	27
330	64	3.1		8.75	2KJ1102 - ■EQ13 - ■■H1	P00	27
384	55	3.5		7.52	★ 2KJ1102 - ■EQ13 - ■■G1	P00	27
385	54	3.4		7.5	★ 2KJ1102 - ■EQ13 - ■■F1	P00	27
431	49	3.7		6.71	2KJ1102 - ■EQ13 - ■■D1	P00	27
469	45	3.8		6.16	★ 2KJ1102 - ■EQ13 - ■■C1	P00	27
521	40	4.1		5.55	2KJ1102 - ■EQ13 - ■■B1	P00	27
606	35	4.6		4.77	★ 2KJ1102 - ■EQ13 - ■■A1	P00	27
<b>E.128-LA100ZLP4E</b>							
142	148	3.7		10.14	★ 2KJ1006 - ■FM13 - ■■T1		119
<b>E.88-LA100ZLP4E</b>							
139	151	1.5		10.33	★ 2KJ1004 - ■FM13 - ■■S1		61
152	139	1.5		9.46	2KJ1004 - ■FM13 - ■■R1		61
170	123	2.0		8.42	★ 2KJ1004 - ■FM13 - ■■Q1		61
187	113	2.2		7.69	2KJ1004 - ■FM13 - ■■P1		61
203	104	2.8		7.07	★ 2KJ1004 - ■FM13 - ■■N1		61

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
2.2	<b>E.88-LA100ZLP4E</b>						
	220	96	3.1	6.53	2KJ1004 - FM13 - M1		61
	237	89	3.2	6.06	★ 2KJ1004 - FM13 - L1		61
	254	83	3.9	5.65	2KJ1004 - FM13 - K1		61
	281	75	4.9	5.11	★ 2KJ1004 - FM13 - J1		61
	<b>E.68-LA100ZLP4E</b>						
	163	129	1.2	8.82	2KJ1003 - FM13 - T1		44
	181	116	1.5	7.92	★ 2KJ1003 - FM13 - S1		44
	198	106	1.4	7.23	2KJ1003 - FM13 - R1		44
	224	94	1.8	6.42	★ 2KJ1003 - FM13 - P1		44
	242	87	2.2	5.92	2KJ1003 - FM13 - N1		44
	268	78	2.8	5.36	★ 2KJ1003 - FM13 - M1		44
	291	72	3.1	4.93	2KJ1003 - FM13 - L1		44
	315	67	3.3	4.56	★ 2KJ1003 - FM13 - K1		44
	338	62	3.7	4.24	2KJ1003 - FM13 - J1		44
	384	55	4.2	3.74	★ 2KJ1003 - FM13 - H1		44
	416	50	4.8	3.45	2KJ1003 - FM13 - G1		44
	464	45	5.5	3.09	★ 2KJ1003 - FM13 - F1		44
	<b>E.48-LA100ZLP4E</b>						
	205	102	0.95	7	2KJ1002 - FM13 - Q1		34
227	93	1.2	6.33	★ 2KJ1002 - FM13 - P1		34	
245	86	1.4	5.85	2KJ1002 - FM13 - N1		34	
282	74	1.6	5.08	★ 2KJ1002 - FM13 - M1		34	
311	68	1.9	4.62	2KJ1002 - FM13 - L1		34	
341	62	2.4	4.21	★ 2KJ1002 - FM13 - K1		34	
371	57	2.8	3.87	2KJ1002 - FM13 - J1		34	
403	52	2.7	3.56	★ 2KJ1002 - FM13 - H1		34	
443	47	3.2	3.24	2KJ1002 - FM13 - G1		34	
486	43	3.9	2.95	★ 2KJ1002 - FM13 - F1		34	
531	40	4.0	2.7	2KJ1002 - FM13 - E1		34	
595	35	4.3	2.41	★ 2KJ1002 - FM13 - D1		34	
667	32	4.3	2.15	2KJ1002 - FM13 - C1		34	
784	27	4.3	1.83	2KJ1002 - FM13 - B1		34	
944	22	4.5	1.52	★ 2KJ1002 - FM13 - A1		34	
<b>E.38-LA100ZLP4E</b>							
277	76	0.92	5.18	2KJ1001 - FM13 - M1		31	
313	67	1.2	4.58	★ 2KJ1001 - FM13 - L1		31	
346	61	1.0	4.15	2KJ1001 - FM13 - K1		31	
391	54	1.3	3.67	★ 2KJ1001 - FM13 - J1		31	
434	48	1.3	3.31	2KJ1001 - FM13 - H1		31	
478	44	1.8	3	★ 2KJ1001 - FM13 - G1		31	
526	40	2.0	2.73	2KJ1001 - FM13 - F1		31	
574	37	2.0	2.5	★ 2KJ1001 - FM13 - E1		31	
641	33	2.2	2.24	2KJ1001 - FM13 - D1		31	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
<b>2.2</b>	<b>E.38-LA100ZLP4E</b>						
<b>700</b>		30	2.7	2.05	★ 2KJ1001 - ■ FM13 - ■■ C1		31
<b>776</b>		27	3.0	1.85	2KJ1001 - ■ FM13 - ■■ B1		31
<b>903</b>		23	3.1	1.59	★ 2KJ1001 - ■ FM13 - ■■ A1		31
<b>3</b>	<b>D.188-Z68-LA100ZLD4E</b>						
<b>1.1</b>		22 996	0.87	1 251	2KJ1237 - ■ FP13 - ■■ J1		638
<b>1.4</b>		19 301	1.0	1 050	2KJ1237 - ■ FP13 - ■■ H1		638
<b>1.6</b>		16 470	1.2	896	★ 2KJ1237 - ■ FP13 - ■■ G1		638
<b>1.9</b>		13 713	1.5	746	2KJ1237 - ■ FP13 - ■■ F1		638
<b>2.3</b>		11 378	1.8	619	★ 2KJ1237 - ■ FP13 - ■■ E1		638
<b>2.6</b>		10 037	2.0	546	2KJ1237 - ■ FP13 - ■■ D1		638
	<b>D.188-Z48-LA100ZLD4E</b>						
<b>1.1</b>		23 069	0.87	1 255	2KJ1235 - ■ FP13 - ■■ B1		621
<b>1.4</b>		19 191	1.0	1 044	★ 2KJ1235 - ■ FP13 - ■■ A1		621
	<b>D.188-LA132MA8</b>						
<b>2.9</b>		9 979	2.0	243.82	2KJ1211 - ■ HG13 - ■■ N1	P02	652
	<b>D.168-Z68-LA100ZLD4E</b>						
<b>1.6</b>		16 011	0.87	871	2KJ1233 - ■ FP13 - ■■ F1		494
	<b>D.168-LA132MA8</b>						
<b>2.0</b>		13 982	1.0	341.61	★ 2KJ1210 - ■ HG13 - ■■ U1	P02	507
<b>2.2</b>		12 827	1.1	313.41	2KJ1210 - ■ HG13 - ■■ T1	P02	507
<b>2.4</b>		11 838	1.2	289.23	★ 2KJ1210 - ■ HG13 - ■■ S1	P02	507
<b>2.6</b>		10 981	1.3	268.29	2KJ1210 - ■ HG13 - ■■ R1	P02	507
	<b>D.168-LA132SB6E</b>						
<b>2.8</b>		10 302	1.4	341.61	★ 2KJ1210 - ■ HF13 - ■■ U1	P01	507
<b>3.0</b>		9 452	1.5	313.41	2KJ1210 - ■ HF13 - ■■ T1	P01	507
<b>3.3</b>		8 723	1.6	289.23	★ 2KJ1210 - ■ HF13 - ■■ S1	P01	507
<b>3.5</b>		8 091	1.7	268.29	2KJ1210 - ■ HF13 - ■■ R1	P01	507
<b>3.8</b>		7 632	1.8	253.08	★ 2KJ1210 - ■ HF13 - ■■ Q1	P01	507
<b>4.0</b>		7 139	2.0	236.72	2KJ1210 - ■ HF13 - ■■ P1	P01	507
	<b>D.148-LA132SB6E</b>						
<b>3.2</b>		9 088	0.88	301.34	★ 2KJ1208 - ■ HF13 - ■■ V1	P01	336
<b>3.4</b>		8 331	0.96	276.23	2KJ1208 - ■ HF13 - ■■ U1	P01	336
<b>3.7</b>		7 681	1.0	254.7	★ 2KJ1208 - ■ HF13 - ■■ T1	P01	336
<b>4.0</b>		7 119	1.1	236.05	2KJ1208 - ■ HF13 - ■■ S1	P01	336
	<b>D.148-LA100ZLD4E</b>						
<b>4.3</b>		6 710	1.2	336.11	2KJ1208 - ■ FP13 - ■■ W1		311
<b>4.8</b>		6 016	1.3	301.34	★ 2KJ1208 - ■ FP13 - ■■ V1		311
<b>5.2</b>		5 515	1.5	276.23	2KJ1208 - ■ FP13 - ■■ U1		311
<b>5.6</b>		5 085	1.6	254.7	★ 2KJ1208 - ■ FP13 - ■■ T1		311
<b>6.1</b>		4 713	1.7	236.05	2KJ1208 - ■ FP13 - ■■ S1		311
<b>6.4</b>		4 481	1.8	224.43	★ 2KJ1208 - ■ FP13 - ■■ R1		311
<b>6.8</b>		4 188	1.9	209.76	2KJ1208 - ■ FP13 - ■■ Q1		311

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
3	<b>D.128-LA132SB6E</b>						
	4.7	6 068	0.84	201.22	2KJ1207 - ■ HF13 - ■■ R1	P01	246
	5.1	5 590	0.91	185.36	★ 2KJ1207 - ■ HF13 - ■■ Q1	P01	246
<b>D.128-LA100ZLD4E</b>							
	5.4	5 354	0.95	268.16	★ 2KJ1207 - ■ FP13 - ■■ U1		221
	5.8	4 910	1.0	245.93	2KJ1207 - ■ FP13 - ■■ T1		221
	6.5	4 387	1.2	219.72	★ 2KJ1207 - ■ FP13 - ■■ S1		221
	7.1	4 017	1.3	201.22	2KJ1207 - ■ FP13 - ■■ R1		221
	7.7	3 701	1.4	185.36	★ 2KJ1207 - ■ FP13 - ■■ Q1		221
	8.4	3 426	1.5	171.62	2KJ1207 - ■ FP13 - ■■ P1		221
	9.0	3 186	1.6	159.6	★ 2KJ1207 - ■ FP13 - ■■ N1		221
	9.6	2 975	1.7	148.99	2KJ1207 - ■ FP13 - ■■ M1		221
	10.8	2 661	1.9	133.3	★ 2KJ1207 - ■ FP13 - ■■ L1		221
	11.6	2 466	2.1	123.53	2KJ1207 - ■ FP13 - ■■ K1		221
<b>D.108-LA100ZLD4E</b>							
	7.5	3 818	0.81	191.21	2KJ1206 - ■ FP13 - ■■ P1		144
	8.2	3 509	0.88	175.78	★ 2KJ1206 - ■ FP13 - ■■ N1		144
	8.8	3 242	0.96	162.4	2KJ1206 - ■ FP13 - ■■ M1		144
	9.5	3 009	1.0	150.7	★ 2KJ1206 - ■ FP13 - ■■ L1		144
	10.2	2 803	1.1	140.37	2KJ1206 - ■ FP13 - ■■ K1		144
	11.3	2 534	1.2	126.9	★ 2KJ1206 - ■ FP13 - ■■ J1		144
	12.3	2 333	1.3	116.83	2KJ1206 - ■ FP13 - ■■ H1		144
	13.7	2 098	1.5	105.08	★ 2KJ1206 - ■ FP13 - ■■ G1		144
	14.8	1 935	1.6	96.94	2KJ1206 - ■ FP13 - ■■ F1		144
	17.5	1 640	1.9	82.14	2KJ1206 - ■ FP13 - ■■ E1		144
	20	1 429	2.2	71.59	★ 2KJ1206 - ■ FP13 - ■■ D1		144
<b>Z.108-LA100ZLD4E</b>							
	24	1 179	2	59.05	★ 2KJ1106 - ■ FP13 - ■■ E2		140
	26	1 081	2.1	54.15	2KJ1106 - ■ FP13 - ■■ D2		140
<b>D.88-LA100ZLD4E</b>							
	14.0	2 049	0.82	102.61	2KJ1205 - ■ FP13 - ■■ J1		96
	15.9	1 807	0.93	90.53	★ 2KJ1205 - ■ FP13 - ■■ H1		96
	17.2	1 669	1.0	83.58	2KJ1205 - ■ FP13 - ■■ G1		96
	19.2	1 495	1.1	74.88	★ 2KJ1205 - ■ FP13 - ■■ F1		96
	21	1 379	1.2	69.05	2KJ1205 - ■ FP13 - ■■ E1		96
	25	1 157	1.5	57.93	2KJ1205 - ■ FP13 - ■■ D1		96
<b>Z.88-LA100ZLD4E</b>							
	28	1 013	1.4	50.73	2KJ1105 - ■ FP13 - ■■ B2		94
	31	914	1.8	45.76	★ 2KJ1105 - ■ FP13 - ■■ A2		94
	34	837	2.0	41.9	2KJ1105 - ■ FP13 - ■■ X1		94
	38	744	2.3	37.27	★ 2KJ1105 - ■ FP13 - ■■ W1		94
	42	680	2.5	34.07	2KJ1105 - ■ FP13 - ■■ V1		94
	46	625	2.7	31.32	★ 2KJ1105 - ■ FP13 - ■■ U1		94

★ Preferred transmission ratio

Shaft designs, see page 2/117

1, 2 or 9

Frequency and voltage, see page 8/20

1 to 9

Gearbox housing mounting position, see page 2/119

A, F, H or R

\*) For mounting type B3

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
<b>3</b>	<b>Z.68-LA100ZLD4E</b>						
	<b>34</b>	840	0.95	42.06	<b>2KJ1104 - FP13 - W1</b>		62
	<b>38</b>	754	1.1	37.76	★ <b>2KJ1104 - FP13 - V1</b>		62
	<b>42</b>	689	1.2	34.49	<b>2KJ1104 - FP13 - U1</b>		62
	<b>47</b>	611	1.3	30.6	★ <b>2KJ1104 - FP13 - T1</b>		62
	<b>51</b>	564	1.4	28.25	<b>2KJ1104 - FP13 - S1</b>		62
	<b>56</b>	510	1.6	25.55	★ <b>2KJ1104 - FP13 - R1</b>		62
	<b>61</b>	470	1.7	23.53	<b>2KJ1104 - FP13 - Q1</b>		62
	<b>66</b>	434	1.8	21.76	★ <b>2KJ1104 - FP13 - P1</b>		62
	<b>71</b>	403	2.0	20.2	<b>2KJ1104 - FP13 - N1</b>		62
	<b>80</b>	356	2.2	17.82	★ <b>2KJ1104 - FP13 - M1</b>		62
	<b>87</b>	328	2.4	16.45	<b>2KJ1104 - FP13 - L1</b>		62
	<b>97</b>	294	2.7	14.74	★ <b>2KJ1104 - FP13 - K1</b>		62
	<b>106</b>	271	2.9	13.59	<b>2KJ1104 - FP13 - J1</b>		62
	<b>126</b>	228	3.4	11.4	<b>2KJ1104 - FP13 - H1</b>		62
	<b>147</b>	194	3.8	9.73	★ <b>2KJ1104 - FP13 - G1</b>		62
	<b>242</b>	118	4.1	5.93	<b>2KJ1104 - FP13 - D1</b>		62
	<b>284</b>	101	4.8	5.06	★ <b>2KJ1104 - FP13 - C1</b>		62
	<b>Z.48-LA100ZLD4E</b>						
	<b>54</b>	530	0.85	26.53	<b>2KJ1103 - FP13 - S1</b>		45
<b>62</b>	461	0.98	23.07	★ <b>2KJ1103 - FP13 - R1</b>		45	
<b>68</b>	418	1.1	20.95	<b>2KJ1103 - FP13 - Q1</b>		45	
<b>75</b>	382	1.2	19.13	★ <b>2KJ1103 - FP13 - P1</b>		45	
<b>82</b>	350	1.3	17.55	<b>2KJ1103 - FP13 - N1</b>		45	
<b>89</b>	323	1.3	16.17	★ <b>2KJ1103 - FP13 - M1</b>		45	
<b>98</b>	293	1.4	14.68	<b>2KJ1103 - FP13 - L1</b>		45	
<b>107</b>	267	1.5	13.38	★ <b>2KJ1103 - FP13 - K1</b>		45	
<b>117</b>	245	1.6	12.25	<b>2KJ1103 - FP13 - J1</b>		45	
<b>131</b>	218	1.8	10.93	★ <b>2KJ1103 - FP13 - H1</b>		45	
<b>147</b>	195	2.0	9.76	<b>2KJ1103 - FP13 - G1</b>		45	
<b>173</b>	166	2.2	8.29	<b>2KJ1103 - FP13 - F1</b>		45	
<b>208</b>	138	2.5	6.9	★ <b>2KJ1103 - FP13 - E1</b>		45	
<b>211</b>	136	2.0	6.79	★ <b>2KJ1103 - FP13 - D1</b>		45	
<b>237</b>	121	2.2	6.06	<b>2KJ1103 - FP13 - C1</b>		45	
<b>279</b>	103	2.6	5.15	<b>2KJ1103 - FP13 - B1</b>		45	
<b>335</b>	86	3.0	4.28	★ <b>2KJ1103 - FP13 - A1</b>		45	
<b>Z.48-LA100ZLB2E</b>							
<b>151</b>	190	2.4	19.13	★ <b>2KJ1103 - FM13 - P1</b>		45	
<b>165</b>	174	2.6	17.55	<b>2KJ1103 - FM13 - N1</b>		45	
<b>179</b>	160	2.7	16.17	★ <b>2KJ1103 - FM13 - M1</b>		45	
<b>197</b>	146	2.9	14.68	<b>2KJ1103 - FM13 - L1</b>		45	
<b>216</b>	133	3.1	13.38	★ <b>2KJ1103 - FM13 - K1</b>		45	
<b>236</b>	121	3.3	12.25	<b>2KJ1103 - FM13 - J1</b>		45	
<b>264</b>	108	3.6	10.93	★ <b>2KJ1103 - FM13 - H1</b>		45	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
3	<b>Z.48-LA100ZLB2E</b>						
	296	97	3.9	9.76	2KJ1103 - ■ FM13 - ■■ G1	P00	45
	349	82	4.4	8.29	2KJ1103 - ■ FM13 - ■■ F1	P00	45
	419	68	5.0	6.9	★ 2KJ1103 - ■ FM13 - ■■ E1	P00	45
	426	67	4.0	6.79	★ 2KJ1103 - ■ FM13 - ■■ D1	P00	45
	477	60	4.5	6.06	2KJ1103 - ■ FM13 - ■■ C1	P00	45
	561	51	5.3	5.15	2KJ1103 - ■ FM13 - ■■ B1	P00	45
	675	42	6.1	4.28	★ 2KJ1103 - ■ FM13 - ■■ A1	P00	45
	<b>Z.38-LA100ZLD4E</b>						
	111	258	0.85	12.92	2KJ1102 - ■ FP13 - ■■ M1		35
	121	236	0.93	11.82	★ 2KJ1102 - ■ FP13 - ■■ L1		35
	136	211	1.0	10.57	2KJ1102 - ■ FP13 - ■■ K1		35
	148	194	1.0	9.7	★ 2KJ1102 - ■ FP13 - ■■ J1		35
	164	175	1.1	8.75	2KJ1102 - ■ FP13 - ■■ H1		35
	191	150	1.2	7.5	★ 2KJ1102 - ■ FP13 - ■■ F1		35
	191	150	1.3	7.52	★ 2KJ1102 - ■ FP13 - ■■ G1		35
	214	134	1.3	6.71	2KJ1102 - ■ FP13 - ■■ D1		35
	233	123	1.4	6.16	★ 2KJ1102 - ■ FP13 - ■■ C1		35
	259	111	1.5	5.55	2KJ1102 - ■ FP13 - ■■ B1		35
	301	95	1.7	4.77	★ 2KJ1102 - ■ FP13 - ■■ A1		35
	<b>Z.38-LA100ZLB2E</b>						
	167	172	1.3	17.33	★ 2KJ1102 - ■ FM13 - ■■ Q1	P00	35
	185	155	1.4	15.64	2KJ1102 - ■ FM13 - ■■ P1	P00	35
	204	141	1.6	14.18	★ 2KJ1102 - ■ FM13 - ■■ N1	P00	35
	224	128	1.7	12.92	2KJ1102 - ■ FM13 - ■■ M1	P00	35
	245	117	1.9	11.82	★ 2KJ1102 - ■ FM13 - ■■ L1	P00	35
	273	105	2.0	10.57	2KJ1102 - ■ FM13 - ■■ K1	P00	35
	298	96	2.1	9.7	★ 2KJ1102 - ■ FM13 - ■■ J1	P00	35
	330	87	2.2	8.75	2KJ1102 - ■ FM13 - ■■ H1	P00	35
	384	74	2.5	7.52	★ 2KJ1102 - ■ FM13 - ■■ G1	P00	35
385	74	2.5	7.5	★ 2KJ1102 - ■ FM13 - ■■ F1	P00	35	
431	66	2.7	6.71	2KJ1102 - ■ FM13 - ■■ D1	P00	35	
469	61	2.8	6.16	★ 2KJ1102 - ■ FM13 - ■■ C1	P00	35	
521	55	3.0	5.55	2KJ1102 - ■ FM13 - ■■ B1	P00	35	
606	47	3.4	4.77	★ 2KJ1102 - ■ FM13 - ■■ A1	P00	35	
<b>Z.28-LA100ZLD4E</b>							
188	153	0.89	7.64	2KJ1101 - ■ FP13 - ■■ J1		28	
207	139	0.95	6.94	★ 2KJ1101 - ■ FP13 - ■■ H1		28	
251	114	0.81	5.72	2KJ1101 - ■ FP13 - ■■ F1		28	
275	104	0.88	5.21	★ 2KJ1101 - ■ FP13 - ■■ E1		28	
312	92	0.96	4.6	2KJ1101 - ■ FP13 - ■■ D1		28	
338	85	1.1	4.25	★ 2KJ1101 - ■ FP13 - ■■ C1		28	
392	73	1.1	3.66	2KJ1101 - ■ FP13 - ■■ B1		28	
431	66	1.2	3.33	★ 2KJ1101 - ■ FP13 - ■■ A1		28	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
<b>3</b>	<b>E.128-LA100ZLD4E</b>						
	<b>142</b>	202	2.7	10.14	★ 2KJ1006 - FP13 - T1		119
	<b>153</b>	188	3.1	9.4	2KJ1006 - FP13 - S1		119
	<b>161</b>	178	3.6	8.94	★ 2KJ1006 - FP13 - R1		119
	<b>E.88-LA100ZLD4E</b>						
	<b>139</b>	206	1.1	10.33	★ 2KJ1004 - FP13 - S1		61
	<b>152</b>	189	1.1	9.46	2KJ1004 - FP13 - R1		61
	<b>170</b>	168	1.5	8.42	★ 2KJ1004 - FP13 - Q1		61
	<b>187</b>	154	1.6	7.69	2KJ1004 - FP13 - P1		61
	<b>203</b>	141	2.1	7.07	★ 2KJ1004 - FP13 - N1		61
	<b>220</b>	130	2.3	6.53	2KJ1004 - FP13 - M1		61
	<b>237</b>	121	2.3	6.06	★ 2KJ1004 - FP13 - L1		61
	<b>254</b>	113	2.8	5.65	2KJ1004 - FP13 - K1		61
	<b>281</b>	102	3.6	5.11	★ 2KJ1004 - FP13 - J1		61
	<b>305</b>	94	4.1	4.7	2KJ1004 - FP13 - H1		61
	<b>339</b>	84	4.7	4.23	★ 2KJ1004 - FP13 - G1		61
	<b>368</b>	78	4.9	3.9	2KJ1004 - FP13 - F1		61
	<b>E.68-LA100ZLD4E</b>						
	<b>163</b>	176	0.85	8.82	2KJ1003 - FP13 - T1		44
	<b>181</b>	158	1.1	7.92	★ 2KJ1003 - FP13 - S1		44
	<b>198</b>	144	1.0	7.23	2KJ1003 - FP13 - R1		44
	<b>224</b>	128	1.3	6.42	★ 2KJ1003 - FP13 - P1		44
	<b>242</b>	118	1.6	5.92	2KJ1003 - FP13 - N1		44
	<b>268</b>	107	2.1	5.36	★ 2KJ1003 - FP13 - M1		44
	<b>291</b>	98	2.3	4.93	2KJ1003 - FP13 - L1		44
	<b>315</b>	91	2.4	4.56	★ 2KJ1003 - FP13 - K1		44
	<b>338</b>	85	2.7	4.24	2KJ1003 - FP13 - J1		44
	<b>384</b>	75	3.1	3.74	★ 2KJ1003 - FP13 - H1		44
	<b>416</b>	69	3.5	3.45	2KJ1003 - FP13 - G1		44
	<b>464</b>	62	4.1	3.09	★ 2KJ1003 - FP13 - F1		44
	<b>504</b>	57	4.4	2.85	2KJ1003 - FP13 - E1		44
	<b>600</b>	48	4.8	2.39	2KJ1003 - FP13 - D1		44
	<b>703</b>	41	5.2	2.04	★ 2KJ1003 - FP13 - C1		44
	<b>844</b>	34	5.2	1.7	2KJ1003 - FP13 - B1		44
	<b>1 018</b>	28	5.3	1.41	★ 2KJ1003 - FP13 - A1		44
	<b>E.48-LA100ZLD4E</b>						
	<b>227</b>	126	0.91	6.33	★ 2KJ1002 - FP13 - P1		34
	<b>245</b>	117	1.0	5.85	2KJ1002 - FP13 - N1		34
	<b>282</b>	101	1.2	5.08	★ 2KJ1002 - FP13 - M1		34
	<b>311</b>	92	1.4	4.62	2KJ1002 - FP13 - L1		34
	<b>341</b>	84	1.8	4.21	★ 2KJ1002 - FP13 - K1		34
	<b>371</b>	77	2.1	3.87	2KJ1002 - FP13 - J1		34
	<b>403</b>	71	2.0	3.56	★ 2KJ1002 - FP13 - H1		34
	<b>443</b>	65	2.3	3.24	2KJ1002 - FP13 - G1		34

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
3	<b>E.48-LA100ZLD4E</b>							
	486	59	2.9	2.95	★ 2KJ1002 - ■FP13 - ■■F1		34	
	531	54	3.0	2.7	2KJ1002 - ■FP13 - ■■E1		34	
	595	48	3.1	2.41	★ 2KJ1002 - ■FP13 - ■■D1		34	
	667	43	3.1	2.15	2KJ1002 - ■FP13 - ■■C1		34	
	784	36	3.1	1.83	2KJ1002 - ■FP13 - ■■B1		34	
	944	30	3.3	1.52	★ 2KJ1002 - ■FP13 - ■■A1		34	
	<b>E.38-LA100ZLD4E</b>							
	313	91	0.85	4.58	★ 2KJ1001 - ■FP13 - ■■L1		31	
	391	73	0.96	3.67	★ 2KJ1001 - ■FP13 - ■■J1		31	
	434	66	0.98	3.31	2KJ1001 - ■FP13 - ■■H1		31	
	478	60	1.3	3	★ 2KJ1001 - ■FP13 - ■■G1		31	
	526	54	1.5	2.73	2KJ1001 - ■FP13 - ■■F1		31	
	574	50	1.5	2.5	★ 2KJ1001 - ■FP13 - ■■E1		31	
	641	45	1.6	2.24	2KJ1001 - ■FP13 - ■■D1		31	
	700	41	2.0	2.05	★ 2KJ1001 - ■FP13 - ■■C1		31	
	776	37	2.2	1.85	2KJ1001 - ■FP13 - ■■B1		31	
	903	32	2.3	1.59	★ 2KJ1001 - ■FP13 - ■■A1		31	
	4	<b>D.188-Z68-LA112ZMP4E</b>						
		1.6	21 939	0.91	896	★ 2KJ1237 - ■GJ13 - ■■G1		645
		1.9	18 266	1.1	746	2KJ1237 - ■GJ13 - ■■F1		645
		2.3	15 157	1.3	619	★ 2KJ1237 - ■GJ13 - ■■E1		645
		2.6	13 369	1.5	546	2KJ1237 - ■GJ13 - ■■D1		645
		<b>D.188-LA160M8</b>						
2.9		13 026	1.5	243.82	2KJ1211 - ■JE13 - ■■N1	P02	676	
3.2		11 763	1.7	220.17	2KJ1211 - ■JE13 - ■■M1	P02	676	
3.5		11 024	1.8	206.34	2KJ1211 - ■JE13 - ■■L1	P02	676	
<b>D.188-LA132ZMB6E</b>								
3.9		9 804	2.0	243.82	2KJ1211 - ■HJ13 - ■■N1	P01	652	
<b>D.168-LA132ZMB6E</b>								
2.8		13 736	1.0	341.61	★ 2KJ1210 - ■HJ13 - ■■U1	P01	507	
3.0		12 602	1.1	313.41	2KJ1210 - ■HJ13 - ■■T1	P01	507	
3.3		11 630	1.2	289.23	★ 2KJ1210 - ■HJ13 - ■■S1	P01	507	
3.5		10 788	1.3	268.29	2KJ1210 - ■HJ13 - ■■R1	P01	507	
3.8		10 176	1.4	253.08	★ 2KJ1210 - ■HJ13 - ■■Q1	P01	507	
4.0		9 519	1.5	236.72	2KJ1210 - ■HJ13 - ■■P1	P01	507	
<b>D.148-LA132ZMB6E</b>								
4.0		9 492	0.84	236.05	2KJ1208 - ■HJ13 - ■■S1	P01	336	
<b>D.148-LA112ZMP4E</b>								
4.3		8 916	0.9	336.11	2KJ1208 - ■GJ13 - ■■W1		318	
4.8		7 994	1.0	301.34	★ 2KJ1208 - ■GJ13 - ■■V1		318	
5.2		7 328	1.1	276.23	2KJ1208 - ■GJ13 - ■■U1		318	
5.7	6 757	1.2	254.7	★ 2KJ1208 - ■GJ13 - ■■T1		318		
6.1	6 262	1.3	236.05	2KJ1208 - ■GJ13 - ■■S1		318		

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
4	<b>D.148-LA112ZMP4E</b>						
	6.4	5 954	1.3	224.43	★ 2KJ1208 - ■ GJ13 - ■■■ R1		318
	6.9	5 564	1.4	209.76	2KJ1208 - ■ GJ13 - ■■■ Q1		318
	7.8	4 908	1.6	185.03	★ 2KJ1208 - ■ GJ13 - ■■■ P1		318
	8.3	4 630	1.7	174.53	2KJ1208 - ■ GJ13 - ■■■ N1		318
	9.2	4 148	1.9	156.38	★ 2KJ1208 - ■ GJ13 - ■■■ M1		318
	10.0	3 830	2.1	144.39	2KJ1208 - ■ GJ13 - ■■■ L1		318
	<b>D.128-LA112ZMP4E</b>						
	6.6	5 829	0.87	219.72	★ 2KJ1207 - ■ GJ13 - ■■■ S1		228
	7.2	5 338	0.96	201.22	2KJ1207 - ■ GJ13 - ■■■ R1		228
	7.8	4 917	1.0	185.36	★ 2KJ1207 - ■ GJ13 - ■■■ Q1		228
	8.4	4 553	1.1	171.62	2KJ1207 - ■ GJ13 - ■■■ P1		228
	9.0	4 234	1.2	159.6	★ 2KJ1207 - ■ GJ13 - ■■■ N1		228
	9.7	3 952	1.3	148.99	2KJ1207 - ■ GJ13 - ■■■ M1		228
	10.8	3 536	1.4	133.3	★ 2KJ1207 - ■ GJ13 - ■■■ L1		228
	11.7	3 277	1.6	123.53	2KJ1207 - ■ GJ13 - ■■■ K1		228
	12.7	3 004	1.7	113.24	★ 2KJ1207 - ■ GJ13 - ■■■ J1		228
	13.9	2 754	1.9	103.8	2KJ1207 - ■ GJ13 - ■■■ H1		228
	16.3	2 347	2.2	88.46	2KJ1207 - ■ GJ13 - ■■■ G1		228
<b>D.108-LA112ZMP4E</b>							
10.3	3 724	0.83	140.37	2KJ1206 - ■ GJ13 - ■■■ K1		151	
11.3	3 366	0.92	126.9	★ 2KJ1206 - ■ GJ13 - ■■■ J1		151	
12.3	3 099	1.0	116.83	2KJ1206 - ■ GJ13 - ■■■ H1		151	
13.7	2 788	1.1	105.08	★ 2KJ1206 - ■ GJ13 - ■■■ G1		151	
14.9	2 572	1.2	96.94	2KJ1206 - ■ GJ13 - ■■■ F1		151	
17.5	2 179	1.4	82.14	2KJ1206 - ■ GJ13 - ■■■ E1		151	
20	1 899	1.6	71.59	★ 2KJ1206 - ■ GJ13 - ■■■ D1		151	
24	1 616	1.9	60.9	2KJ1206 - ■ GJ13 - ■■■ C1		151	
<b>Z.108-LA112ZMP4E</b>							
24	1 566	1.5	59.05	★ 2KJ1106 - ■ GJ13 - ■■■ E2		147	
27	1 436	1.6	54.15	2KJ1106 - ■ GJ13 - ■■■ D2		147	
30	1 283	2.4	48.38	★ 2KJ1106 - ■ GJ13 - ■■■ C2		147	
<b>D.88-LA112ZMP4E</b>							
19.2	1 986	0.85	74.88	★ 2KJ1205 - ■ GJ13 - ■■■ F1		103	
21	1 832	0.92	69.05	2KJ1205 - ■ GJ13 - ■■■ E1		103	
25	1 537	1.1	57.93	2KJ1205 - ■ GJ13 - ■■■ D1		103	
<b>Z.88-LA112ZMP4E</b>							
32	1 214	1.4	45.76	★ 2KJ1105 - ■ GJ13 - ■■■ A2		101	
34	1 112	1.5	41.9	2KJ1105 - ■ GJ13 - ■■■ X1		101	
39	989	1.7	37.27	★ 2KJ1105 - ■ GJ13 - ■■■ W1		101	
42	904	1.9	34.07	2KJ1105 - ■ GJ13 - ■■■ V1		101	
46	831	2.0	31.32	★ 2KJ1105 - ■ GJ13 - ■■■ U1		101	
50	767	2.2	28.93	2KJ1105 - ■ GJ13 - ■■■ T1		101	
54	712	2.4	26.85	★ 2KJ1105 - ■ GJ13 - ■■■ S1		101	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
4	<b>Z.88-LA112ZMP4E</b>						
	58	663	2.5	25.01	2KJ1105 - ■ GJ13 - ■■ R1		101
	64	600	2.8	22.61	★ 2KJ1105 - ■ GJ13 - ■■ Q1		101
	69	552	3.0	20.81	2KJ1105 - ■ GJ13 - ■■ P1		101
	<b>Z.68-LA112ZMP4E</b>						
	38	1 002	0.80	37.76	★ 2KJ1104 - ■ GJ13 - ■■ V1		69
	42	915	0.87	34.49	2KJ1104 - ■ GJ13 - ■■ U1		69
	47	812	0.99	30.6	★ 2KJ1104 - ■ GJ13 - ■■ T1		69
	51	749	1.1	28.25	2KJ1104 - ■ GJ13 - ■■ S1		69
	56	678	1.2	25.55	★ 2KJ1104 - ■ GJ13 - ■■ R1		69
	61	624	1.3	23.53	2KJ1104 - ■ GJ13 - ■■ Q1		69
	66	577	1.4	21.76	★ 2KJ1104 - ■ GJ13 - ■■ P1		69
	71	536	1.5	20.2	2KJ1104 - ■ GJ13 - ■■ N1		69
	81	473	1.7	17.82	★ 2KJ1104 - ■ GJ13 - ■■ M1		69
	88	436	1.8	16.45	2KJ1104 - ■ GJ13 - ■■ L1		69
	98	391	2.0	14.74	★ 2KJ1104 - ■ GJ13 - ■■ K1		69
	106	361	2.2	13.59	2KJ1104 - ■ GJ13 - ■■ J1		69
	126	302	2.6	11.4	2KJ1104 - ■ GJ13 - ■■ H1		69
	148	258	2.9	9.73	★ 2KJ1104 - ■ GJ13 - ■■ G1		69
	178	215	3.3	8.11	2KJ1104 - ■ GJ13 - ■■ F1		69
	214	178	3.6	6.72	★ 2KJ1104 - ■ GJ13 - ■■ E1		69
	243	157	3.1	5.93	2KJ1104 - ■ GJ13 - ■■ D1		69
	285	134	3.6	5.06	★ 2KJ1104 - ■ GJ13 - ■■ C1		69
	341	112	4.2	4.22	2KJ1104 - ■ GJ13 - ■■ B1		69
	413	93	4.5	3.49	★ 2KJ1104 - ■ GJ13 - ■■ A1		69
	<b>Z.68-LA112ZMP2E</b>						
	163	234	3.4	17.82	★ 2KJ1104 - ■ GJ13 - ■■ M1	P00	69
	177	216	3.7	16.45	2KJ1104 - ■ GJ13 - ■■ L1	P00	69
	197	194	4.1	14.74	★ 2KJ1104 - ■ GJ13 - ■■ K1	P00	69
	214	179	4.5	13.59	2KJ1104 - ■ GJ13 - ■■ J1	P00	69
	<b>Z.48-LA112ZMP4E</b>						
	69	556	0.81	20.95	2KJ1103 - ■ GJ13 - ■■ Q1		52
	75	507	0.89	19.13	★ 2KJ1103 - ■ GJ13 - ■■ P1		52
	82	466	0.97	17.55	2KJ1103 - ■ GJ13 - ■■ N1		52
	89	429	1.0	16.17	★ 2KJ1103 - ■ GJ13 - ■■ M1		52
	98	389	1.1	14.68	2KJ1103 - ■ GJ13 - ■■ L1		52
	108	355	1.2	13.38	★ 2KJ1103 - ■ GJ13 - ■■ K1		52
	118	325	1.2	12.25	2KJ1103 - ■ GJ13 - ■■ J1		52
	132	290	1.3	10.93	★ 2KJ1103 - ■ GJ13 - ■■ H1		52
	148	259	1.5	9.76	2KJ1103 - ■ GJ13 - ■■ G1		52
	174	220	1.6	8.29	2KJ1103 - ■ GJ13 - ■■ F1		52
	209	183	1.9	6.9	★ 2KJ1103 - ■ GJ13 - ■■ E1		52
	212	180	1.5	6.79	★ 2KJ1103 - ■ GJ13 - ■■ D1		52
	238	161	1.7	6.06	2KJ1103 - ■ GJ13 - ■■ C1		52

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
4	<b>Z.48-LA112ZMP4E</b>						
	280	137	2.0	5.15	2KJ1103 - ■GJ13 - ■■B1		52
	336	114	2.3	4.28	★ 2KJ1103 - ■GJ13 - ■■A1		52
	<b>Z.48-LA112ZMP2E</b>						
	152	252	1.8	19.13	★ 2KJ1103 - ■GJ13 - ■■P1	P00	52
	166	231	1.9	17.55	2KJ1103 - ■GJ13 - ■■N1	P00	52
	180	213	2.0	16.17	★ 2KJ1103 - ■GJ13 - ■■M1	P00	52
	198	193	2.2	14.68	2KJ1103 - ■GJ13 - ■■L1	P00	52
	217	176	2.3	13.38	★ 2KJ1103 - ■GJ13 - ■■K1	P00	52
	237	161	2.5	12.25	2KJ1103 - ■GJ13 - ■■J1	P00	52
	266	144	2.7	10.93	★ 2KJ1103 - ■GJ13 - ■■H1	P00	52
	298	128	3.0	9.76	2KJ1103 - ■GJ13 - ■■G1	P00	52
	350	109	3.3	8.29	2KJ1103 - ■GJ13 - ■■F1	P00	52
	421	91	3.7	6.9	★ 2KJ1103 - ■GJ13 - ■■E1	P00	52
	428	89	3.0	6.79	★ 2KJ1103 - ■GJ13 - ■■D1	P00	52
	479	80	3.4	6.06	2KJ1103 - ■GJ13 - ■■C1	P00	52
	564	68	4.0	5.15	2KJ1103 - ■GJ13 - ■■B1	P00	52
	679	56	4.6	4.28	★ 2KJ1103 - ■GJ13 - ■■A1	P00	52
	<b>Z.38-LA112ZMP4E</b>						
	165	232	0.84	8.75	2KJ1102 - ■GJ13 - ■■H1		42
	191	199	0.95	7.52	★ 2KJ1102 - ■GJ13 - ■■G1		42
	192	199	0.93	7.5	★ 2KJ1102 - ■GJ13 - ■■F1		42
	215	178	1.0	6.71	2KJ1102 - ■GJ13 - ■■D1		42
	234	163	1.0	6.16	★ 2KJ1102 - ■GJ13 - ■■C1		42
	259	147	1.1	5.55	2KJ1102 - ■GJ13 - ■■B1		42
	302	127	1.3	4.77	★ 2KJ1102 - ■GJ13 - ■■A1		42
	<b>Z.38-LA112ZMP2E</b>						
	168	228	0.97	17.33	★ 2KJ1102 - ■GJ13 - ■■Q1	P00	42
	186	206	1.1	15.64	2KJ1102 - ■GJ13 - ■■P1	P00	42
	205	186	1.2	14.18	★ 2KJ1102 - ■GJ13 - ■■N1	P00	42
	225	170	1.3	12.92	2KJ1102 - ■GJ13 - ■■M1	P00	42
	246	155	1.4	11.82	★ 2KJ1102 - ■GJ13 - ■■L1	P00	42
	275	139	1.5	10.57	2KJ1102 - ■GJ13 - ■■K1	P00	42
	299	128	1.6	9.7	★ 2KJ1102 - ■GJ13 - ■■J1	P00	42
	332	115	1.7	8.75	2KJ1102 - ■GJ13 - ■■H1	P00	42
	386	99	1.9	7.52	★ 2KJ1102 - ■GJ13 - ■■G1	P00	42
	387	99	1.9	7.5	★ 2KJ1102 - ■GJ13 - ■■F1	P00	42
	433	88	2.0	6.71	2KJ1102 - ■GJ13 - ■■D1	P00	42
	472	81	2.1	6.16	★ 2KJ1102 - ■GJ13 - ■■C1	P00	42
	523	73	2.3	5.55	2KJ1102 - ■GJ13 - ■■B1	P00	42
	609	63	2.6	4.77	★ 2KJ1102 - ■GJ13 - ■■A1	P00	42
	<b>E.128-LA112ZMP4E</b>						
	142	269	2.0	10.14	★ 2KJ1006 - ■GJ13 - ■■T1		126
	153	249	2.3	9.4	2KJ1006 - ■GJ13 - ■■S1		126

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
4	<b>E.128-LA112ZMP4E</b>						
	161	237	2.7	8.94	★ 2KJ1006 - ■GJ13 - ■■R1		126
	172	222	3.2	8.35	2KJ1006 - ■GJ13 - ■■Q1		126
	195	196	4.2	7.37	★ 2KJ1006 - ■GJ13 - ■■P1		126
	<b>E.108-LA112ZMP4E</b>						
	264	145	4.6	5.46	★ 2KJ1005 - ■GJ13 - ■■K1		89
	<b>E.88-LA112ZMP4E</b>						
	139	274	0.84	10.33	★ 2KJ1004 - ■GJ13 - ■■S1		68
	152	251	0.84	9.46	2KJ1004 - ■GJ13 - ■■R1		68
	171	223	1.1	8.42	★ 2KJ1004 - ■GJ13 - ■■Q1		68
	187	204	1.2	7.69	2KJ1004 - ■GJ13 - ■■P1		68
	204	188	1.5	7.07	★ 2KJ1004 - ■GJ13 - ■■N1		68
	221	173	1.7	6.53	2KJ1004 - ■GJ13 - ■■M1		68
	238	161	1.7	6.06	★ 2KJ1004 - ■GJ13 - ■■L1		68
	255	150	2.1	5.65	2KJ1004 - ■GJ13 - ■■K1		68
	282	136	2.7	5.11	★ 2KJ1004 - ■GJ13 - ■■J1		68
	306	125	3.1	4.7	2KJ1004 - ■GJ13 - ■■H1		68
	340	112	3.6	4.23	★ 2KJ1004 - ■GJ13 - ■■G1		68
	369	103	3.7	3.9	2KJ1004 - ■GJ13 - ■■F1		68
	436	88	5.1	3.3	2KJ1004 - ■GJ13 - ■■E1		68
	500	76	5.7	2.88	★ 2KJ1004 - ■GJ13 - ■■D1		68
	<b>E.68-LA112ZMP4E</b>						
	182	210	0.81	7.92	★ 2KJ1003 - ■GJ13 - ■■S1		51
	224	170	1.0	6.42	★ 2KJ1003 - ■GJ13 - ■■P1		51
	243	157	1.2	5.92	2KJ1003 - ■GJ13 - ■■N1		51
	269	142	1.5	5.36	★ 2KJ1003 - ■GJ13 - ■■M1		51
	292	131	1.7	4.93	2KJ1003 - ■GJ13 - ■■L1		51
	316	121	1.8	4.56	★ 2KJ1003 - ■GJ13 - ■■K1		51
	340	112	2.0	4.24	2KJ1003 - ■GJ13 - ■■J1		51
	385	99	2.3	3.74	★ 2KJ1003 - ■GJ13 - ■■H1		51
	417	92	2.6	3.45	2KJ1003 - ■GJ13 - ■■G1		51
	466	82	3.0	3.09	★ 2KJ1003 - ■GJ13 - ■■F1		51
	505	76	3.3	2.85	2KJ1003 - ■GJ13 - ■■E1		51
603	63	3.6	2.39	2KJ1003 - ■GJ13 - ■■D1		51	
706	54	3.9	2.04	★ 2KJ1003 - ■GJ13 - ■■C1		51	
847	45	3.9	1.7	2KJ1003 - ■GJ13 - ■■B1		51	
1 021	37	4.0	1.41	★ 2KJ1003 - ■GJ13 - ■■A1		51	
<b>E.48-LA112ZMP4E</b>							
283	135	0.89	5.08	★ 2KJ1002 - ■GJ13 - ■■M1		41	
312	123	1.1	4.62	2KJ1002 - ■GJ13 - ■■L1		41	
342	112	1.3	4.21	★ 2KJ1002 - ■GJ13 - ■■K1		41	
372	103	1.6	3.87	2KJ1002 - ■GJ13 - ■■J1		41	
404	94	1.5	3.56	★ 2KJ1002 - ■GJ13 - ■■H1		41	
444	86	1.7	3.24	2KJ1002 - ■GJ13 - ■■G1		41	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
4	<b>E.48-LA112ZMP4E</b>							
	488	78	2.2	2.95	★ 2KJ1002 - ■GJ13 - ■■F1		41	
	533	72	2.2	2.7	2KJ1002 - ■GJ13 - ■■E1		41	
	598	64	2.3	2.41	★ 2KJ1002 - ■GJ13 - ■■D1		41	
	670	57	2.4	2.15	2KJ1002 - ■GJ13 - ■■C1		41	
	787	48	2.4	1.83	2KJ1002 - ■GJ13 - ■■B1		41	
	947	40	2.5	1.52	★ 2KJ1002 - ■GJ13 - ■■A1		41	
	<b>E.38-LA112ZMP4E</b>							
	480	80	1.0	3	★ 2KJ1001 - ■GJ13 - ■■G1		38	
	527	72	1.1	2.73	2KJ1001 - ■GJ13 - ■■F1		38	
	702	54	1.5	2.05	★ 2KJ1001 - ■GJ13 - ■■C1		38	
	778	49	1.7	1.85	2KJ1001 - ■GJ13 - ■■B1		38	
	906	42	1.7	1.59	★ 2KJ1001 - ■GJ13 - ■■A1		38	
	5.5	<b>D.188-Z68-LA132SP4E</b>						
		1.9	25 081	0.8	746	2KJ1237 - ■HG13 - ■■F1		663
		2.3	20 811	0.96	619	★ 2KJ1237 - ■HG13 - ■■E1		663
		2.6	18 357	1.1	546	2KJ1237 - ■HG13 - ■■D1		663
		<b>D.188-LA160MB8</b>						
2.9		18 038	1.1	243.82	2KJ1211 - ■JF13 - ■■N1	P02	676	
3.2		16 288	1.2	220.17	2KJ1211 - ■JF13 - ■■M1	P02	676	
3.4		15 265	1.3	206.34	2KJ1211 - ■JF13 - ■■L1	P02	676	
<b>D.188-LA132ZMD6E</b>								
3.9		13 340	1.5	243.82	2KJ1211 - ■HK13 - ■■N1	P01	652	
4.4		12 046	1.7	220.17	2KJ1211 - ■HK13 - ■■M1	P01	652	
4.7		11 290	1.8	206.34	2KJ1211 - ■HK13 - ■■L1	P01	652	
5.4		9 697	2.1	177.23	★ 2KJ1211 - ■HK13 - ■■K1	P01	652	
<b>D.168-LA132ZMD6E</b>								
3.1		17 148	0.82	313.41	2KJ1210 - ■HK13 - ■■T1	P01	507	
3.3		15 825	0.88	289.23	★ 2KJ1210 - ■HK13 - ■■S1	P01	507	
3.6		14 679	0.95	268.29	2KJ1210 - ■HK13 - ■■R1	P01	507	
3.8		13 847	1.0	253.08	★ 2KJ1210 - ■HK13 - ■■Q1	P01	507	
<b>D.168-LA132SP4E</b>								
4.2		12 417	1.1	341.61	★ 2KJ1210 - ■HG13 - ■■U1		507	
4.6		11 392	1.2	313.41	2KJ1210 - ■HG13 - ■■T1		507	
5.0		10 513	1.3	289.23	★ 2KJ1210 - ■HG13 - ■■S1		507	
5.4		9 752	1.4	268.29	2KJ1210 - ■HG13 - ■■R1		507	
5.7		9 199	1.5	253.08	★ 2KJ1210 - ■HG13 - ■■Q1		507	
6.1		8 605	1.6	236.72	2KJ1210 - ■HG13 - ■■P1		507	
6.9		7 651	1.8	210.49	★ 2KJ1210 - ■HG13 - ■■N1		507	
7.3		7 223	1.9	198.71	2KJ1210 - ■HG13 - ■■M1		507	
<b>D.148-LA132SP4E</b>								
5.2		10 041	0.80	276.23	2KJ1208 - ■HG13 - ■■U1		336	
5.7		9 258	0.86	254.7	★ 2KJ1208 - ■HG13 - ■■T1		336	
6.1	8 580	0.93	236.05	2KJ1208 - ■HG13 - ■■S1		336		

★ Preferred transmission ratio

Shaft designs, see page 2/117

1, 2 or 9

Frequency and voltage, see page 8/20

1 to 9

Gearbox housing mounting position, see page 2/119

A, F, H or R

\*) For mounting type B3

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
5.5	<b>D.148-LA132SP4E</b>						
	6.4	8 158	0.98	224.43	★ 2KJ1208 - ■ HG13 - ■■ R1		336
	6.9	7 625	1.0	209.76	2KJ1208 - ■ HG13 - ■■ Q1		336
	7.8	6 726	1.2	185.03	★ 2KJ1208 - ■ HG13 - ■■ P1		336
	8.3	6 344	1.3	174.53	2KJ1208 - ■ HG13 - ■■ N1		336
	9.2	5 684	1.4	156.38	★ 2KJ1208 - ■ HG13 - ■■ M1		336
	10.0	5 249	1.5	144.39	2KJ1208 - ■ HG13 - ■■ L1		336
	11.7	4 484	1.8	123.37	2KJ1208 - ■ HG13 - ■■ K1		336
	13.0	4 053	2.0	111.5	★ 2KJ1208 - ■ HG13 - ■■ J1		336
	13.5	3 905	2.0	107.42	2KJ1208 - ■ HG13 - ■■ H1		336
<b>Z.148-LA132SP4E</b>							
25	2 090	2.2	57.5	2KJ1108 - ■ HG13 - ■■ B2		324	
<b>D.128-LA132SP4E</b>							
8.4	6 238	0.82	171.62	2KJ1207 - ■ HG13 - ■■ P1		246	
9.1	5 801	0.88	159.6	★ 2KJ1207 - ■ HG13 - ■■ N1		246	
9.7	5 416	0.94	148.99	2KJ1207 - ■ HG13 - ■■ M1		246	
10.8	4 845	1.1	133.3	★ 2KJ1207 - ■ HG13 - ■■ L1		246	
11.7	4 490	1.1	123.53	2KJ1207 - ■ HG13 - ■■ K1		246	
12.8	4 116	1.2	113.24	★ 2KJ1207 - ■ HG13 - ■■ J1		246	
13.9	3 773	1.4	103.8	2KJ1207 - ■ HG13 - ■■ H1		246	
16.3	3 215	1.6	88.46	2KJ1207 - ■ HG13 - ■■ G1		246	
18.5	2 837	1.8	78.06	★ 2KJ1207 - ■ HG13 - ■■ F1		246	
22	2 415	2.1	66.43	2KJ1207 - ■ HG13 - ■■ E1		246	
25	2 092	2.4	57.56	★ 2KJ1207 - ■ HG13 - ■■ D1		246	
<b>Z.128-LA132SP4E</b>							
33	1 606	2.0	44.19	★ 2KJ1107 - ■ HG13 - ■■ D2		237	
35	1 489	2.1	40.96	2KJ1107 - ■ HG13 - ■■ C2		237	
<b>D.108-LA132SP4E</b>							
13.8	3 820	0.81	105.08	★ 2KJ1206 - ■ HG13 - ■■ G1		169	
14.9	3 524	0.88	96.94	2KJ1206 - ■ HG13 - ■■ F1		169	
17.6	2 986	1.0	82.14	2KJ1206 - ■ HG13 - ■■ E1		169	
20	2 602	1.2	71.59	★ 2KJ1206 - ■ HG13 - ■■ D1		169	
24	2 214	1.4	60.9	2KJ1206 - ■ HG13 - ■■ C1		169	
<b>Z.108-LA132SP4E</b>							
30	1 759	1.8	48.38	★ 2KJ1106 - ■ HG13 - ■■ C2		165	
33	1 611	1.9	44.31	2KJ1106 - ■ HG13 - ■■ B2		165	
35	1 484	2.1	40.82	★ 2KJ1106 - ■ HG13 - ■■ A2		165	
38	1 374	2.3	37.79	2KJ1106 - ■ HG13 - ■■ X1		165	
41	1 277	2.4	35.14	★ 2KJ1106 - ■ HG13 - ■■ W1		165	
44	1 193	2.6	32.81	2KJ1106 - ■ HG13 - ■■ V1		165	
<b>D.88-LA132SP4E</b>							
25	2 106	0.80	57.93	2KJ1205 - ■ HG13 - ■■ D1		121	
29	1 796	0.94	49.42	★ 2KJ1205 - ■ HG13 - ■■ C1		121	
35	1 497	1.1	41.19	2KJ1205 - ■ HG13 - ■■ B1		121	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
5.5	<b>Z.88-LA132SP4E</b>						
	39	1 355	1.2	37.27	★ 2KJ1105 - ■ HG13 - ■■ W1		119
	42	1 238	1.4	34.07	2KJ1105 - ■ HG13 - ■■ V1		119
	46	1 138	1.5	31.32	★ 2KJ1105 - ■ HG13 - ■■ U1		119
	50	1 052	1.6	28.93	2KJ1105 - ■ HG13 - ■■ T1		119
	54	976	1.7	26.85	★ 2KJ1105 - ■ HG13 - ■■ S1		119
	58	909	1.8	25.01	2KJ1105 - ■ HG13 - ■■ R1		119
	64	822	2.0	22.61	★ 2KJ1105 - ■ HG13 - ■■ Q1		119
	69	756	2.2	20.81	2KJ1105 - ■ HG13 - ■■ P1		119
	77	680	2.5	18.72	★ 2KJ1105 - ■ HG13 - ■■ N1		119
	84	628	2.7	17.27	2KJ1105 - ■ HG13 - ■■ M1		119
	99	532	3.0	14.63	2KJ1105 - ■ HG13 - ■■ L1		119
	113	463	3.3	12.75	★ 2KJ1105 - ■ HG13 - ■■ K1		119
	133	394	3.7	10.85	2KJ1105 - ■ HG13 - ■■ J1		119
	325	162	4.9	4.45	★ 2KJ1105 - ■ HG13 - ■■ C1		119
	381	138	5.4	3.79	★ 2KJ1105 - ■ HG13 - ■■ B1		119
	<b>Z.68-LA132SP4E</b>						
	57	929	0.86	25.55	★ 2KJ1104 - ■ HG13 - ■■ R1		87
	61	855	0.94	23.53	2KJ1104 - ■ HG13 - ■■ Q1		87
	66	791	1.0	21.76	★ 2KJ1104 - ■ HG13 - ■■ P1		87
	72	734	1.1	20.2	2KJ1104 - ■ HG13 - ■■ N1		87
	81	648	1.2	17.82	★ 2KJ1104 - ■ HG13 - ■■ M1		87
	88	598	1.3	16.45	2KJ1104 - ■ HG13 - ■■ L1		87
	98	536	1.5	14.74	★ 2KJ1104 - ■ HG13 - ■■ K1		87
	106	494	1.6	13.59	2KJ1104 - ■ HG13 - ■■ J1		87
	127	414	1.9	11.4	2KJ1104 - ■ HG13 - ■■ H1		87
	149	354	2.1	9.73	★ 2KJ1104 - ■ HG13 - ■■ G1		87
	178	295	2.4	8.11	2KJ1104 - ■ HG13 - ■■ F1		87
	215	244	2.7	6.72	★ 2KJ1104 - ■ HG13 - ■■ E1		87
	244	216	2.3	5.93	2KJ1104 - ■ HG13 - ■■ D1		87
	286	184	2.6	5.06	★ 2KJ1104 - ■ HG13 - ■■ C1		87
	342	153	3.1	4.22	2KJ1104 - ■ HG13 - ■■ B1		87
414	127	3.3	3.49	★ 2KJ1104 - ■ HG13 - ■■ A1		87	
	<b>Z.68-LA132SB2E</b>						
	164	319	2.5	17.82	★ 2KJ1104 - ■ HF13 - ■■ M1	P00	79
	178	295	2.7	16.45	2KJ1104 - ■ HF13 - ■■ L1	P00	79
	199	264	3.0	14.74	★ 2KJ1104 - ■ HF13 - ■■ K1	P00	79
	216	244	3.3	13.59	2KJ1104 - ■ HF13 - ■■ J1	P00	79
	257	204	3.8	11.4	2KJ1104 - ■ HF13 - ■■ H1	P00	79
	301	174	4.3	9.73	★ 2KJ1104 - ■ HF13 - ■■ G1	P00	79
	361	145	4.8	8.11	2KJ1104 - ■ HF13 - ■■ F1	P00	79
	436	120	5.4	6.72	★ 2KJ1104 - ■ HF13 - ■■ E1	P00	79
	494	106	4.6	5.93	2KJ1104 - ■ HF13 - ■■ D1	P00	79
579	91	5.3	5.06	★ 2KJ1104 - ■ HF13 - ■■ C1	P00	79	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

2

**Selection and ordering data** (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
5.5	<b>Z.68-LA132SB2E</b>						
	694	76	6.2	4.22	2KJ1104 - ■ HF13 - ■■ B1	P00	79
	<b>Z.48-LA132SP4E</b>						
	108	486	0.84	13.38	★ 2KJ1103 - ■ HG13 - ■■ K1		70
	118	445	0.90	12.25	2KJ1103 - ■ HG13 - ■■ J1		70
	132	397	0.98	10.93	★ 2KJ1103 - ■ HG13 - ■■ H1		70
	148	355	1.1	9.76	2KJ1103 - ■ HG13 - ■■ G1		70
	174	301	1.2	8.29	2KJ1103 - ■ HG13 - ■■ F1		70
	209	251	1.4	6.9	★ 2KJ1103 - ■ HG13 - ■■ E1		70
	213	247	1.1	6.79	★ 2KJ1103 - ■ HG13 - ■■ D1		70
	238	220	1.2	6.06	2KJ1103 - ■ HG13 - ■■ C1		70
	281	187	1.4	5.15	2KJ1103 - ■ HG13 - ■■ B1		70
	338	156	1.7	4.28	★ 2KJ1103 - ■ HG13 - ■■ A1		70
	<b>Z.48-LA132SB2E</b>						
	153	343	1.3	19.13	★ 2KJ1103 - ■ HF13 - ■■ P1	P00	62
	167	315	1.4	17.55	2KJ1103 - ■ HF13 - ■■ N1	P00	62
	181	290	1.5	16.17	★ 2KJ1103 - ■ HF13 - ■■ M1	P00	62
	200	263	1.6	14.68	2KJ1103 - ■ HF13 - ■■ L1	P00	62
	219	240	1.7	13.38	★ 2KJ1103 - ■ HF13 - ■■ K1	P00	62
	239	220	1.8	12.25	2KJ1103 - ■ HF13 - ■■ J1	P00	62
	268	196	2.0	10.93	★ 2KJ1103 - ■ HF13 - ■■ H1	P00	62
	300	175	2.2	9.76	2KJ1103 - ■ HF13 - ■■ G1	P00	62
	353	149	2.4	8.29	2KJ1103 - ■ HF13 - ■■ F1	P00	62
	425	124	2.7	6.9	★ 2KJ1103 - ■ HF13 - ■■ E1	P00	62
	432	122	2.2	6.79	★ 2KJ1103 - ■ HF13 - ■■ D1	P00	62
	483	109	2.5	6.06	2KJ1103 - ■ HF13 - ■■ C1	P00	62
	569	92	2.9	5.15	2KJ1103 - ■ HF13 - ■■ B1	P00	62
	685	77	3.4	4.28	★ 2KJ1103 - ■ HF13 - ■■ A1	P00	62
	<b>E.148-LA132SP4E</b>						
	106	497	1.2	13.67	★ 2KJ1007 - ■ HG13 - ■■ U1		168
	115	456	1.3	12.54	2KJ1007 - ■ HG13 - ■■ T1		168
	125	421	1.6	11.57	★ 2KJ1007 - ■ HG13 - ■■ S1		168
	135	390	1.9	10.73	2KJ1007 - ■ HG13 - ■■ R1		168
	143	368	2.2	10.13	★ 2KJ1007 - ■ HG13 - ■■ Q1		168
	153	344	2.7	9.47	2KJ1007 - ■ HG13 - ■■ P1		168
	172	306	3.3	8.42	★ 2KJ1007 - ■ HG13 - ■■ N1		168
	182	289	3.7	7.95	2KJ1007 - ■ HG13 - ■■ M1		168
	202	260	4.3	7.14	★ 2KJ1007 - ■ HG13 - ■■ L1		168
	<b>E.128-LA132SP4E</b>						
	143	369	1.5	10.14	★ 2KJ1006 - ■ HG13 - ■■ T1		144
	154	342	1.7	9.4	2KJ1006 - ■ HG13 - ■■ S1		144
	162	325	2.0	8.94	★ 2KJ1006 - ■ HG13 - ■■ R1		144
	173	304	2.3	8.35	2KJ1006 - ■ HG13 - ■■ Q1		144
	196	268	3.0	7.37	★ 2KJ1006 - ■ HG13 - ■■ P1		144

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
5.5	<b>E.128-LA132SP4E</b>						
	208	253	3.5	6.95	2KJ1006 - ■HG13 - ■■N1		144
	232	226	4.1	6.23	★ 2KJ1006 - ■HG13 - ■■M1		144
	251	209	4.6	5.75	2KJ1006 - ■HG13 - ■■L1		144
	<b>E.108-LA132SP4E</b>						
	265	198	3.3	5.46	★ 2KJ1005 - ■HG13 - ■■K1		107
	289	182	3.7	5	2KJ1005 - ■HG13 - ■■J1		107
	339	155	4.6	4.26	2KJ1005 - ■HG13 - ■■H1		107
	384	137	4.4	3.76	★ 2KJ1005 - ■HG13 - ■■G1		107
	<b>E.88-LA132SP4E</b>						
	172	306	0.80	8.42	★ 2KJ1004 - ■HG13 - ■■Q1		86
	188	280	0.88	7.69	2KJ1004 - ■HG13 - ■■P1		86
	204	257	1.1	7.07	★ 2KJ1004 - ■HG13 - ■■N1		86
	221	237	1.3	6.53	2KJ1004 - ■HG13 - ■■M1		86
	238	220	1.3	6.06	★ 2KJ1004 - ■HG13 - ■■L1		86
256	205	1.6	5.65	2KJ1004 - ■HG13 - ■■K1		86	
283	186	2.0	5.11	★ 2KJ1004 - ■HG13 - ■■J1		86	
307	171	2.3	4.7	2KJ1004 - ■HG13 - ■■H1		86	
342	154	2.6	4.23	★ 2KJ1004 - ■HG13 - ■■G1		86	
371	142	2.7	3.9	2KJ1004 - ■HG13 - ■■F1		86	
438	120	3.8	3.3	2KJ1004 - ■HG13 - ■■E1		86	
502	105	4.2	2.88	★ 2KJ1004 - ■HG13 - ■■D1		86	
590	89	4.7	2.45	2KJ1004 - ■HG13 - ■■C1		86	
691	76	5.5	2.09	★ 2KJ1004 - ■HG13 - ■■B1		86	
845	62	5.7	1.71	★ 2KJ1004 - ■HG13 - ■■A1		86	
<b>E.68-LA132SP4E</b>							
244	215	0.88	5.92	2KJ1003 - ■HG13 - ■■N1		69	
270	195	1.1	5.36	★ 2KJ1003 - ■HG13 - ■■M1		69	
293	179	1.3	4.93	2KJ1003 - ■HG13 - ■■L1		69	
317	166	1.3	4.56	★ 2KJ1003 - ■HG13 - ■■K1		69	
341	154	1.5	4.24	2KJ1003 - ■HG13 - ■■J1		69	
386	136	1.7	3.74	★ 2KJ1003 - ■HG13 - ■■H1		69	
419	125	1.9	3.45	2KJ1003 - ■HG13 - ■■G1		69	
468	112	2.2	3.09	★ 2KJ1003 - ■HG13 - ■■F1		69	
507	104	2.4	2.85	2KJ1003 - ■HG13 - ■■E1		69	
605	87	2.6	2.39	2KJ1003 - ■HG13 - ■■D1		69	
708	74	2.8	2.04	★ 2KJ1003 - ■HG13 - ■■C1		69	
850	62	2.8	1.7	2KJ1003 - ■HG13 - ■■B1		69	
1 025	51	2.9	1.41	★ 2KJ1003 - ■HG13 - ■■A1		69	
<b>E.48-LA132SP4E</b>							
343	153	0.98	4.21	★ 2KJ1002 - ■HG13 - ■■K1		59	
373	141	1.1	3.87	2KJ1002 - ■HG13 - ■■J1		59	
406	129	1.1	3.56	★ 2KJ1002 - ■HG13 - ■■H1		59	
446	118	1.3	3.24	2KJ1002 - ■HG13 - ■■G1		59	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
5.5	<b>E.48-LA132SP4E</b>						
	490	107	1.6	2.95	★ 2KJ1002 - ■HG13 - ■■F1		59
	535	98	1.6	2.7	2KJ1002 - ■HG13 - ■■E1		59
	600	88	1.7	2.41	★ 2KJ1002 - ■HG13 - ■■D1		59
	672	78	1.7	2.15	2KJ1002 - ■HG13 - ■■C1		59
	790	66	1.7	1.83	2KJ1002 - ■HG13 - ■■B1		59
	951	55	1.8	1.52	★ 2KJ1002 - ■HG13 - ■■A1		59
7.5	<b>D.188-Z68-LA132ZMP4E</b>						
	2.7	24 896	0.80	546	2KJ1237 - ■HK13 - ■■D1		663
	<b>D.188-LA160LB8</b>						
	2.9	24 425	0.82	243.82	2KJ1211 - ■JJ13 - ■■N1	P02	688
	3.2	22 055	0.91	220.17	2KJ1211 - ■JJ13 - ■■M1	P02	688
	3.5	20 670	0.97	206.34	2KJ1211 - ■JJ13 - ■■L1	P02	688
	<b>D.188-LA160MD6E</b>						
	4.0	18 097	1.1	243.82	2KJ1211 - ■JJ13 - ■■N1	P01	688
	4.4	16 342	1.2	220.17	2KJ1211 - ■JJ13 - ■■M1	P01	688
	4.7	15 315	1.3	206.34	2KJ1211 - ■JJ13 - ■■L1	P01	688
	5.4	13 155	1.5	177.23	★ 2KJ1211 - ■JJ13 - ■■K1	P01	688
	<b>D.188-LA132ZMP4E</b>						
	6.0	12 002	1.7	243.82	2KJ1211 - ■HK13 - ■■N1		652
	6.6	10 838	1.8	220.17	2KJ1211 - ■HK13 - ■■M1		652
	7.1	10 157	2.0	206.34	2KJ1211 - ■HK13 - ■■L1		652
	<b>D.168-LA132ZMP4E</b>						
	4.3	16 816	0.83	341.61	★ 2KJ1210 - ■HK13 - ■■U1		507
	4.6	15 428	0.91	313.41	2KJ1210 - ■HK13 - ■■T1		507
	5.0	14 238	0.98	289.23	★ 2KJ1210 - ■HK13 - ■■S1		507
	5.4	13 207	1.1	268.29	2KJ1210 - ■HK13 - ■■R1		507
	5.7	12 458	1.1	253.08	★ 2KJ1210 - ■HK13 - ■■Q1		507
	6.1	11 653	1.2	236.72	2KJ1210 - ■HK13 - ■■P1		507
	6.9	10 362	1.4	210.49	★ 2KJ1210 - ■HK13 - ■■N1		507
	7.3	9 782	1.4	198.71	2KJ1210 - ■HK13 - ■■M1		507
	8.2	8 781	1.6	178.38	★ 2KJ1210 - ■HK13 - ■■L1		507
	8.9	8 059	1.7	163.72	2KJ1210 - ■HK13 - ■■K1		507
	10.3	6 955	2	141.28	2KJ1210 - ■HK13 - ■■J1		507
	<b>D.148-LA132ZMP4E</b>						
	7.9	9 108	0.88	185.03	★ 2KJ1208 - ■HK13 - ■■P1		336
	8.3	8 592	0.93	174.53	2KJ1208 - ■HK13 - ■■N1		336
	9.3	7 698	1.0	156.38	★ 2KJ1208 - ■HK13 - ■■M1		336
	10.1	7 108	1.1	144.39	2KJ1208 - ■HK13 - ■■L1		336
	11.8	6 073	1.3	123.37	2KJ1208 - ■HK13 - ■■K1		336
13.0	5 489	1.5	111.5	★ 2KJ1208 - ■HK13 - ■■J1		336	
13.5	5 288	1.5	107.42	2KJ1208 - ■HK13 - ■■H1		336	
15.7	4 574	1.7	92.91	2KJ1208 - ■HK13 - ■■G1		336	
18.0	3 989	2.0	81.04	★ 2KJ1208 - ■HK13 - ■■F1		336	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
7.5	<b>D.148-LA132ZMP4E</b>						
	21	3 414	2.3	69.36	★ 2KJ1208 - ■HK13 - ■■E1		336
	<b>Z.148-LA132ZMP4E</b>						
	25	2 831	1.6	57.5	2KJ1108 - ■HK13 - ■■B2		324
	<b>D.128-LA132ZMP4E</b>						
	11.8	6 081	0.84	123.53	2KJ1207 - ■HK13 - ■■K1		246
	12.8	5 574	0.91	113.24	★ 2KJ1207 - ■HK13 - ■■J1		246
	14.0	5 110	1.0	103.8	2KJ1207 - ■HK13 - ■■H1		246
	16.4	4 355	1.2	88.46	2KJ1207 - ■HK13 - ■■G1		246
	18.6	3 843	1.3	78.06	★ 2KJ1207 - ■HK13 - ■■F1		246
	22	3 270	1.6	66.43	2KJ1207 - ■HK13 - ■■E1		246
	25	2 833	1.8	57.56	★ 2KJ1207 - ■HK13 - ■■D1		246
	30	2 385	2.1	48.44	★ 2KJ1207 - ■HK13 - ■■C1		246
	33	2 152	2.4	43.71	2KJ1207 - ■HK13 - ■■B1		246
	<b>Z.128-LA132ZMP4E</b>						
	33	2 175	1.5	44.19	★ 2KJ1107 - ■HK13 - ■■D2		237
	36	2 016	1.6	40.96	2KJ1107 - ■HK13 - ■■C2		237
	<b>D.108-LA132ZMP4E</b>						
	20	3 524	0.88	71.59	★ 2KJ1206 - ■HK13 - ■■D1		169
	24	2 998	1.0	60.9	2KJ1206 - ■HK13 - ■■C1		169
	<b>Z.108-LA132ZMP4E</b>						
	30	2 382	1.3	48.38	★ 2KJ1106 - ■HK13 - ■■C2		165
	33	2 181	1.4	44.31	2KJ1106 - ■HK13 - ■■B2		165
	36	2 009	1.5	40.82	★ 2KJ1106 - ■HK13 - ■■A2		165
	38	1 860	1.7	37.79	2KJ1106 - ■HK13 - ■■X1		165
	41	1 730	1.8	35.14	★ 2KJ1106 - ■HK13 - ■■W1		165
	44	1 615	1.9	32.81	2KJ1106 - ■HK13 - ■■V1		165
	50	1 445	2.1	29.35	★ 2KJ1106 - ■HK13 - ■■U1		165
	54	1 339	2.3	27.2	2KJ1106 - ■HK13 - ■■T1		165
	58	1 228	2.5	24.94	★ 2KJ1106 - ■HK13 - ■■S1		165
	64	1 125	2.8	22.86	2KJ1106 - ■HK13 - ■■R1		165
	75	959	3.2	19.48	2KJ1106 - ■HK13 - ■■Q1		165
	278	258	4.4	5.24	★ 2KJ1106 - ■HK13 - ■■D1		165
	<b>D.88-LA132ZMP4E</b>						
	35	2 028	0.83	41.19	2KJ1205 - ■HK13 - ■■B1		121
	<b>Z.88-LA132ZMP4E</b>						
	39	1 835	0.92	37.27	★ 2KJ1105 - ■HK13 - ■■W1		119
	43	1 677	1.0	34.07	2KJ1105 - ■HK13 - ■■V1		119
	46	1 542	1.1	31.32	★ 2KJ1105 - ■HK13 - ■■U1		119
	50	1 424	1.2	28.93	2KJ1105 - ■HK13 - ■■T1		119
	54	1 322	1.3	26.85	★ 2KJ1105 - ■HK13 - ■■S1		119
	58	1 231	1.4	25.01	2KJ1105 - ■HK13 - ■■R1		119
	64	1 113	1.5	22.61	★ 2KJ1105 - ■HK13 - ■■Q1		119
	70	1 024	1.6	20.81	2KJ1105 - ■HK13 - ■■P1		119

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
7.5	<b>Z.88-LA132ZMP4E</b>						
	78	922	1.8	18.72	★ 2KJ1105 - ■HK13 - ■■N1		119
	84	850	2.0	17.27	2KJ1105 - ■HK13 - ■■M1		119
	100	720	2.2	14.63	2KJ1105 - ■HK13 - ■■L1		119
	114	628	2.5	12.75	★ 2KJ1105 - ■HK13 - ■■K1		119
	134	534	2.8	10.85	2KJ1105 - ■HK13 - ■■J1		119
	157	456	3.0	9.26	★ 2KJ1105 - ■HK13 - ■■H1		119
	192	374	3.5	7.59	★ 2KJ1105 - ■HK13 - ■■G1		119
	209	343	3.7	6.96	2KJ1105 - ■HK13 - ■■F1		119
	245	292	4.1	5.94	★ 2KJ1105 - ■HK13 - ■■E1		119
	299	240	4.6	4.87	★ 2KJ1105 - ■HK13 - ■■D1		119
	327	219	3.7	4.45	★ 2KJ1105 - ■HK13 - ■■C1		119
	384	187	4.0	3.79	★ 2KJ1105 - ■HK13 - ■■B1		119
	468	153	4.3	3.11	★ 2KJ1105 - ■HK13 - ■■A1		119
	<b>Z.88-LA132ZSD2E</b>						
	157	458	3.7	18.72	★ 2KJ1105 - ■HJ13 - ■■N1	P00	119
	170	422	4.0	17.27	2KJ1105 - ■HJ13 - ■■M1	P00	119
	<b>Z.68-LA132ZMP4E</b>						
	72	994	0.80	20.2	2KJ1104 - ■HK13 - ■■N1		87
	82	877	0.91	17.82	★ 2KJ1104 - ■HK13 - ■■M1		87
	88	810	0.99	16.45	2KJ1104 - ■HK13 - ■■L1		87
	99	726	1.1	14.74	★ 2KJ1104 - ■HK13 - ■■K1		87
	107	669	1.2	13.59	2KJ1104 - ■HK13 - ■■J1		87
	128	561	1.4	11.4	2KJ1104 - ■HK13 - ■■H1		87
	150	479	1.6	9.73	★ 2KJ1104 - ■HK13 - ■■G1		87
	179	399	1.8	8.11	2KJ1104 - ■HK13 - ■■F1		87
	217	331	2.0	6.72	★ 2KJ1104 - ■HK13 - ■■E1		87
	245	292	1.7	5.93	2KJ1104 - ■HK13 - ■■D1		87
	288	249	1.9	5.06	★ 2KJ1104 - ■HK13 - ■■C1		87
	345	208	2.3	4.22	2KJ1104 - ■HK13 - ■■B1		87
	417	172	2.4	3.49	★ 2KJ1104 - ■HK13 - ■■A1		87
	<b>Z.68-LA132ZSD2E</b>						
	164	436	1.8	17.82	★ 2KJ1104 - ■HJ13 - ■■M1	P00	87
	178	402	2.0	16.45	2KJ1104 - ■HJ13 - ■■L1	P00	87
	199	360	2.2	14.74	★ 2KJ1104 - ■HJ13 - ■■K1	P00	87
	216	332	2.4	13.59	2KJ1104 - ■HJ13 - ■■J1	P00	87
	257	279	2.8	11.4	2KJ1104 - ■HJ13 - ■■H1	P00	87
	301	238	3.1	9.73	★ 2KJ1104 - ■HJ13 - ■■G1	P00	87
	361	198	3.5	8.11	2KJ1104 - ■HJ13 - ■■F1	P00	87
	436	164	4.0	6.72	★ 2KJ1104 - ■HJ13 - ■■E1	P00	87
	494	145	3.4	5.93	2KJ1104 - ■HJ13 - ■■D1	P00	87
	579	124	3.9	5.06	★ 2KJ1104 - ■HJ13 - ■■C1	P00	87
	694	103	4.6	4.22	2KJ1104 - ■HJ13 - ■■B1	P00	87
	840	85	4.9	3.49	★ 2KJ1104 - ■HJ13 - ■■A1	P00	87

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
7.5	<b>Z.48-LA132ZMP4E</b>						
	176	408	0.88	8.29	2KJ1103 - ■HK13 - ■■F1		70
	211	340	1.0	6.9	★ 2KJ1103 - ■HK13 - ■■E1		70
	214	334	0.81	6.79	★ 2KJ1103 - ■HK13 - ■■D1		70
	240	298	0.91	6.06	2KJ1103 - ■HK13 - ■■C1		70
	283	254	1.1	5.15	2KJ1103 - ■HK13 - ■■B1		70
	340	211	1.2	4.28	★ 2KJ1103 - ■HK13 - ■■A1		70
	<b>Z.48-LA132ZSD2E</b>						
	153	468	0.96	19.13	★ 2KJ1103 - ■HJ13 - ■■P1	P00	70
	167	429	1.0	17.55	2KJ1103 - ■HJ13 - ■■N1	P00	70
	181	395	1.1	16.17	★ 2KJ1103 - ■HJ13 - ■■M1	P00	70
	200	359	1.2	14.68	2KJ1103 - ■HJ13 - ■■L1	P00	70
	219	327	1.3	13.38	★ 2KJ1103 - ■HJ13 - ■■K1	P00	70
	239	299	1.3	12.25	2KJ1103 - ■HJ13 - ■■J1	P00	70
	268	267	1.5	10.93	★ 2KJ1103 - ■HJ13 - ■■H1	P00	70
	300	239	1.6	9.76	2KJ1103 - ■HJ13 - ■■G1	P00	70
	353	203	1.8	8.29	2KJ1103 - ■HJ13 - ■■F1	P00	70
	425	169	2.0	6.9	★ 2KJ1103 - ■HJ13 - ■■E1	P00	70
	432	166	1.6	6.79	★ 2KJ1103 - ■HJ13 - ■■D1	P00	70
	483	148	1.8	6.06	2KJ1103 - ■HJ13 - ■■C1	P00	70
	569	126	2.1	5.15	2KJ1103 - ■HJ13 - ■■B1	P00	70
	685	105	2.5	4.28	★ 2KJ1103 - ■HJ13 - ■■A1	P00	70
	<b>E.148-LA132ZMP4E</b>						
	106	673	0.89	13.67	★ 2KJ1007 - ■HK13 - ■■U1		168
	116	617	0.97	12.54	2KJ1007 - ■HK13 - ■■T1		168
	126	570	1.2	11.57	★ 2KJ1007 - ■HK13 - ■■S1		168
	136	528	1.4	10.73	2KJ1007 - ■HK13 - ■■R1		168
	144	499	1.6	10.13	★ 2KJ1007 - ■HK13 - ■■Q1		168
154	466	2.0	9.47	2KJ1007 - ■HK13 - ■■P1		168	
173	414	2.4	8.42	★ 2KJ1007 - ■HK13 - ■■N1		168	
183	391	2.7	7.95	2KJ1007 - ■HK13 - ■■M1		168	
204	351	3.2	7.14	★ 2KJ1007 - ■HK13 - ■■L1		168	
222	322	3.6	6.55	2KJ1007 - ■HK13 - ■■K1		168	
<b>E.128-LA132ZMP4E</b>							
143	499	1.1	10.14	★ 2KJ1006 - ■HK13 - ■■T1		144	
155	463	1.3	9.4	2KJ1006 - ■HK13 - ■■S1		144	
163	440	1.5	8.94	★ 2KJ1006 - ■HK13 - ■■R1		144	
174	411	1.7	8.35	2KJ1006 - ■HK13 - ■■Q1		144	
197	363	2.2	7.37	★ 2KJ1006 - ■HK13 - ■■P1		144	
209	342	2.6	6.95	2KJ1006 - ■HK13 - ■■N1		144	
234	307	3.0	6.23	★ 2KJ1006 - ■HK13 - ■■M1		144	
253	283	3.4	5.75	2KJ1006 - ■HK13 - ■■L1		144	
296	242	4.0	4.91	2KJ1006 - ■HK13 - ■■K1		144	
328	219	4.6	4.44	★ 2KJ1006 - ■HK13 - ■■J1		144	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
7.5	<b>E.128-LA132ZMP4E</b>						
	340	211	4.7	4.28	2KJ1006 - ■HK13 - ■■H1		144
	<b>E.108-LA132ZMP4E</b>						
	266	269	2.5	5.46	★ 2KJ1005 - ■HK13 - ■■K1		107
	291	246	2.8	5	2KJ1005 - ■HK13 - ■■J1		107
	342	210	3.4	4.26	2KJ1005 - ■HK13 - ■■H1		107
	387	185	3.2	3.76	★ 2KJ1005 - ■HK13 - ■■G1		107
	455	158	4.7	3.2	2KJ1005 - ■HK13 - ■■F1		107
	525	136	4.9	2.77	★ 2KJ1005 - ■HK13 - ■■E1		107
	624	115	5.9	2.33	★ 2KJ1005 - ■HK13 - ■■C1		107
690	104	6.0	2.11	2KJ1005 - ■HK13 - ■■B1		107	
804	89	6.2	1.81	★ 2KJ1005 - ■HK13 - ■■A1		107	
<b>E.88-LA132ZMP4E</b>							
206	348	0.83	7.07	★ 2KJ1004 - ■HK13 - ■■N1		86	
223	321	0.93	6.53	2KJ1004 - ■HK13 - ■■M1		86	
240	298	0.94	6.06	★ 2KJ1004 - ■HK13 - ■■L1		86	
258	278	1.2	5.65	2KJ1004 - ■HK13 - ■■K1		86	
285	252	1.5	5.11	★ 2KJ1004 - ■HK13 - ■■J1		86	
310	231	1.7	4.7	2KJ1004 - ■HK13 - ■■H1		86	
344	208	1.9	4.23	★ 2KJ1004 - ■HK13 - ■■G1		86	
373	192	2.0	3.9	2KJ1004 - ■HK13 - ■■F1		86	
441	162	2.8	3.3	2KJ1004 - ■HK13 - ■■E1		86	
505	142	3.1	2.88	★ 2KJ1004 - ■HK13 - ■■D1		86	
594	121	3.5	2.45	2KJ1004 - ■HK13 - ■■C1		86	
696	103	4.1	2.09	★ 2KJ1004 - ■HK13 - ■■B1		86	
851	84	4.2	1.71	★ 2KJ1004 - ■HK13 - ■■A1		86	
<b>E.68-LA132ZMP4E</b>							
271	264	0.83	5.36	★ 2KJ1003 - ■HK13 - ■■M1		69	
295	243	0.93	4.93	2KJ1003 - ■HK13 - ■■L1		69	
319	224	0.98	4.56	★ 2KJ1003 - ■HK13 - ■■K1		69	
343	209	1.1	4.24	2KJ1003 - ■HK13 - ■■J1		69	
389	184	1.2	3.74	★ 2KJ1003 - ■HK13 - ■■H1		69	
422	170	1.4	3.45	2KJ1003 - ■HK13 - ■■G1		69	
471	152	1.6	3.09	★ 2KJ1003 - ■HK13 - ■■F1		69	
511	140	1.8	2.85	2KJ1003 - ■HK13 - ■■E1		69	
609	118	2.0	2.39	2KJ1003 - ■HK13 - ■■D1		69	
713	100	2.1	2.04	★ 2KJ1003 - ■HK13 - ■■C1		69	
856	84	2.1	1.7	2KJ1003 - ■HK13 - ■■B1		69	
1 032	69	2.2	1.41	★ 2KJ1003 - ■HK13 - ■■A1		69	
<b>E.48-LA132ZMP4E</b>							
376	191	0.84	3.87	2KJ1002 - ■HK13 - ■■J1		59	
409	175	0.80	3.56	★ 2KJ1002 - ■HK13 - ■■H1		59	
449	159	0.94	3.24	2KJ1002 - ■HK13 - ■■G1		59	
493	145	1.2	2.95	★ 2KJ1002 - ■HK13 - ■■F1		59	
539	133	1.2	2.7	2KJ1002 - ■HK13 - ■■E1		59	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
9.2	<b>D.188-LA160MB4E</b>						
	6.0	14 723	1.4	243.82	2KJ1211 - ■JP13 - ■■N1		676
	6.6	13 295	1.5	220.17	2KJ1211 - ■JP13 - ■■M1		676
	7.1	12 460	1.6	206.34	2KJ1211 - ■JP13 - ■■L1		676
	8.2	10 702	1.9	177.23	★ 2KJ1211 - ■JP13 - ■■K1		676
	<b>D.168-LA160MB4E</b>						
	5.7	15 282	0.92	253.08	★ 2KJ1210 - ■JP13 - ■■Q1		531
	6.1	14 294	0.98	236.72	2KJ1210 - ■JP13 - ■■P1		531
	6.9	12 710	1.1	210.49	★ 2KJ1210 - ■JP13 - ■■N1		531
	7.3	11 999	1.2	198.71	2KJ1210 - ■JP13 - ■■M1		531
	8.2	10 771	1.3	178.38	★ 2KJ1210 - ■JP13 - ■■L1		531
	8.9	9 886	1.4	163.72	2KJ1210 - ■JP13 - ■■K1		531
	10.3	8 531	1.6	141.28	2KJ1210 - ■JP13 - ■■J1		531
	11.8	7 463	1.9	123.59	2KJ1210 - ■JP13 - ■■H1		531
	13.5	6 490	2.2	107.48	2KJ1210 - ■JP13 - ■■G1		531
	<b>D.148-LA160MB4E</b>						
9.3	9 443	0.85	156.38	★ 2KJ1208 - ■JP13 - ■■M1		360	
10.1	8 719	0.92	144.39	2KJ1208 - ■JP13 - ■■L1		360	
11.8	7 450	1.1	123.37	2KJ1208 - ■JP13 - ■■K1		360	
13.0	6 733	1.2	111.5	★ 2KJ1208 - ■JP13 - ■■J1		360	
13.5	6 487	1.2	107.42	2KJ1208 - ■JP13 - ■■H1		360	
15.7	5 610	1.4	92.91	2KJ1208 - ■JP13 - ■■G1		360	
18.0	4 894	1.6	81.04	★ 2KJ1208 - ■JP13 - ■■F1		360	
21	4 188	1.9	69.36	★ 2KJ1208 - ■JP13 - ■■E1		360	
23	3 751	2.1	62.12	2KJ1208 - ■JP13 - ■■D1		360	
<b>Z.148-LA160MB4E</b>							
27	3 275	2.4	54.24	★ 2KJ1108 - ■JP13 - ■■A2		348	
<b>D.128-LA160MB4E</b>							
14.0	6 268	0.81	103.8	2KJ1207 - ■JP13 - ■■H1		270	
16.4	5 342	0.95	88.46	2KJ1207 - ■JP13 - ■■G1		270	
18.6	4 714	1.1	78.06	★ 2KJ1207 - ■JP13 - ■■F1		270	
22	4 011	1.3	66.43	2KJ1207 - ■JP13 - ■■E1		270	
25	3 476	1.5	57.56	★ 2KJ1207 - ■JP13 - ■■D1		270	
30	2 925	1.7	48.44	★ 2KJ1207 - ■JP13 - ■■C1		270	
33	2 639	1.9	43.71	2KJ1207 - ■JP13 - ■■B1		270	
<b>Z.128-LA160MB4E</b>							
37	2 351	2.2	38.94	★ 2KJ1107 - ■JP13 - ■■B2		261	
40	2 197	2.3	36.39	2KJ1107 - ■JP13 - ■■A2		261	
45	1 939	2.6	32.11	★ 2KJ1107 - ■JP13 - ■■X1		261	
48	1 828	2.8	30.28	2KJ1107 - ■JP13 - ■■W1		261	
<b>D.108-LA160MB4E</b>							
24	3 677	0.84	60.9	2KJ1206 - ■JP13 - ■■C1		193	
28	3 138	0.99	51.97	★ 2KJ1206 - ■JP13 - ■■B1		193	
34	2 573	1.2	42.61	★ 2KJ1206 - ■JP13 - ■■A1		193	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
9.2	<b>Z.108-LA160MB4E</b>						
	41	2 122	1.5	35.14	★ 2KJ1106 - JP13 - W1		189
	44	1 981	1.6	32.81	2KJ1106 - JP13 - V1		189
	50	1 772	1.7	29.35	★ 2KJ1106 - JP13 - U1		189
	54	1 642	1.9	27.2	2KJ1106 - JP13 - T1		189
	58	1 506	2.1	24.94	★ 2KJ1106 - JP13 - S1		189
	64	1 380	2.2	22.86	2KJ1106 - JP13 - R1		189
	75	1 176	2.6	19.48	2KJ1106 - JP13 - Q1		189
	85	1 038	3.0	17.19	★ 2KJ1106 - JP13 - P1		189
	100	883	3.5	14.63	2KJ1106 - JP13 - N1		189
	205	429	4.2	7.1	★ 2KJ1106 - JP13 - H1		189
	227	387	4.5	6.41	2KJ1106 - JP13 - G1		189
	278	316	3.6	5.24	★ 2KJ1106 - JP13 - D1		189
	330	266	4.3	4.41	★ 2KJ1106 - JP13 - C1		189
	366	240	4.7	3.98	2KJ1106 - JP13 - B1		189
425	207	5.2	3.42	★ 2KJ1106 - JP13 - A1		189	
	<b>Z.88-LA160MB4E</b>						
	54	1 621	1.0	26.85	★ 2KJ1105 - JP13 - S1		143
	58	1 510	1.1	25.01	2KJ1105 - JP13 - R1		143
	64	1 365	1.2	22.61	★ 2KJ1105 - JP13 - Q1		143
	70	1 257	1.3	20.81	2KJ1105 - JP13 - P1		143
	78	1 130	1.5	18.72	★ 2KJ1105 - JP13 - N1		143
	84	1 043	1.6	17.27	2KJ1105 - JP13 - M1		143
	100	883	1.8	14.63	2KJ1105 - JP13 - L1		143
	114	770	2.0	12.75	★ 2KJ1105 - JP13 - K1		143
	134	655	2.2	10.85	2KJ1105 - JP13 - J1		143
	157	559	2.5	9.26	★ 2KJ1105 - JP13 - H1		143
	192	458	2.8	7.59	★ 2KJ1105 - JP13 - G1		143
	209	420	3.0	6.96	2KJ1105 - JP13 - F1		143
	245	359	3.3	5.94	★ 2KJ1105 - JP13 - E1		143
	299	294	3.8	4.87	★ 2KJ1105 - JP13 - D1		143
	327	269	3.0	4.45	★ 2KJ1105 - JP13 - C1		143
	384	229	3.2	3.79	★ 2KJ1105 - JP13 - B1		143
	468	188	3.5	3.11	★ 2KJ1105 - JP13 - A1		143
	<b>Z.68-LA160MB4E</b>						
	88	993	0.81	16.45	2KJ1104 - JP13 - L1		111
	99	890	0.90	14.74	★ 2KJ1104 - JP13 - K1		111
	107	821	0.97	13.59	2KJ1104 - JP13 - J1		111
	128	688	1.1	11.4	2KJ1104 - JP13 - H1		111
	150	588	1.3	9.73	★ 2KJ1104 - JP13 - G1		111
	179	490	1.4	8.11	2KJ1104 - JP13 - F1		111
	217	406	1.6	6.72	★ 2KJ1104 - JP13 - E1		111
	245	358	1.4	5.93	2KJ1104 - JP13 - D1		111
288	306	1.6	5.06	★ 2KJ1104 - JP13 - C1		111	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
9.2	<b>Z.68-LA160MB4E</b>						
	345	255	1.8	4.22	2KJ1104 - ■JP13 - ■■B1		111
	417	211	2.0	3.49	★ 2KJ1104 - ■JP13 - ■■A1		111
	<b>E.148-LA160MB4E</b>						
	144	612	1.3	10.13	★ 2KJ1007 - ■JP13 - ■■Q1		192
	154	572	1.6	9.47	2KJ1007 - ■JP13 - ■■P1		192
	173	508	2.0	8.42	★ 2KJ1007 - ■JP13 - ■■N1		192
	183	480	2.2	7.95	2KJ1007 - ■JP13 - ■■M1		192
	204	431	2.6	7.14	★ 2KJ1007 - ■JP13 - ■■L1		192
	222	396	2.9	6.55	2KJ1007 - ■JP13 - ■■K1		192
	258	341	4.0	5.65	2KJ1007 - ■JP13 - ■■J1		192
	295	298	4.7	4.94	2KJ1007 - ■JP13 - ■■H1		192
	338	260	5.1	4.3	2KJ1007 - ■JP13 - ■■G1		192
	<b>E.128-LA160MB4E</b>						
	163	540	1.2	8.94	★ 2KJ1006 - ■JP13 - ■■R1		168
	174	504	1.4	8.35	2KJ1006 - ■JP13 - ■■Q1		168
	197	445	1.8	7.37	★ 2KJ1006 - ■JP13 - ■■P1		168
	209	420	2.1	6.95	2KJ1006 - ■JP13 - ■■N1		168
	234	376	2.5	6.23	★ 2KJ1006 - ■JP13 - ■■M1		168
	253	347	2.8	5.75	2KJ1006 - ■JP13 - ■■L1		168
	296	296	3.2	4.91	2KJ1006 - ■JP13 - ■■K1		168
	328	268	3.7	4.44	★ 2KJ1006 - ■JP13 - ■■J1		168
	340	258	3.9	4.28	2KJ1006 - ■JP13 - ■■H1		168
	393	223	4.5	3.7	2KJ1006 - ■JP13 - ■■G1		168
	450	195	5.1	3.23	★ 2KJ1006 - ■JP13 - ■■F1		168
	<b>E.108-LA160MB4E</b>						
	266	330	2.0	5.46	★ 2KJ1005 - ■JP13 - ■■K1		131
	291	302	2.3	5	2KJ1005 - ■JP13 - ■■J1		131
	342	257	2.8	4.26	2KJ1005 - ■JP13 - ■■H1		131
	387	227	2.6	3.76	★ 2KJ1005 - ■JP13 - ■■G1		131
	455	193	3.9	3.2	2KJ1005 - ■JP13 - ■■F1		131
	525	167	4.0	2.77	★ 2KJ1005 - ■JP13 - ■■E1		131
	624	141	4.8	2.33	★ 2KJ1005 - ■JP13 - ■■C1		131
	690	127	4.9	2.11	2KJ1005 - ■JP13 - ■■B1		131
	804	109	5.0	1.81	★ 2KJ1005 - ■JP13 - ■■A1		131
	<b>E.88-LA160MB4E</b>						
	258	341	0.94	5.65	2KJ1004 - ■JP13 - ■■K1		110
	285	309	1.2	5.11	★ 2KJ1004 - ■JP13 - ■■J1		110
	310	284	1.4	4.7	2KJ1004 - ■JP13 - ■■H1		110
	344	255	1.6	4.23	★ 2KJ1004 - ■JP13 - ■■G1		110
	373	236	1.6	3.9	2KJ1004 - ■JP13 - ■■F1		110
	441	199	2.3	3.3	2KJ1004 - ■JP13 - ■■E1		110
	505	174	2.5	2.88	★ 2KJ1004 - ■JP13 - ■■D1		110
	594	148	2.8	2.45	2KJ1004 - ■JP13 - ■■C1		110

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
9.2	<b>E.88-LA160MB4E</b>						
	696	126	3.3	2.09	★ 2KJ1004 - ■JP13 - ■■B1		110
	851	103	3.4	1.71	★ 2KJ1004 - ■JP13 - ■■A1		110
	<b>E.68-LA160MB4E</b>						
	319	275	0.8	4.56	★ 2KJ1003 - ■JP13 - ■■K1		93
	343	256	0.9	4.24	2KJ1003 - ■JP13 - ■■J1		93
	389	226	1.0	3.74	★ 2KJ1003 - ■JP13 - ■■H1		93
	422	208	1.2	3.45	2KJ1003 - ■JP13 - ■■G1		93
	471	187	1.3	3.09	★ 2KJ1003 - ■JP13 - ■■F1		93
	511	172	1.5	2.85	2KJ1003 - ■JP13 - ■■E1		93
	609	144	1.6	2.39	2KJ1003 - ■JP13 - ■■D1		93
	713	123	1.7	2.04	★ 2KJ1003 - ■JP13 - ■■C1		93
	856	103	1.7	1.7	2KJ1003 - ■JP13 - ■■B1		93
	1 032	85	1.8	1.41	★ 2KJ1003 - ■JP13 - ■■A1		93
11	<b>D.188-LA160ZLP6E</b>						
	4.4	24 093	0.83	220.17	2KJ1211 - ■JT13 - ■■M1	P01	688
	4.7	22 579	0.89	206.34	2KJ1211 - ■JT13 - ■■L1	P01	688
	5.4	19 394	1.0	177.23	★ 2KJ1211 - ■JT13 - ■■K1	P01	688
	<b>D.188-LA160MP4E</b>						
	6.0	17 543	1.1	243.82	2KJ1211 - ■JQ13 - ■■N1		676
	6.6	15 842	1.3	220.17	2KJ1211 - ■JQ13 - ■■M1		676
	7.1	14 847	1.3	206.34	2KJ1211 - ■JQ13 - ■■L1		676
	8.2	12 752	1.6	177.23	★ 2KJ1211 - ■JQ13 - ■■K1		676
	9.5	11 017	1.8	153.12	2KJ1211 - ■JQ13 - ■■J1		676
	10.8	9 725	2.1	135.16	2KJ1211 - ■JQ13 - ■■H1		676
	<b>D.168-LA160MP4E</b>						
	6.2	17 032	0.82	236.72	2KJ1210 - ■JQ13 - ■■P1		531
	6.9	15 145	0.92	210.49	★ 2KJ1210 - ■JQ13 - ■■N1		531
	7.3	14 298	0.98	198.71	2KJ1210 - ■JQ13 - ■■M1		531
	8.2	12 835	1.1	178.38	★ 2KJ1210 - ■JQ13 - ■■L1		531
	8.9	11 780	1.2	163.72	2KJ1210 - ■JQ13 - ■■K1		531
	10.3	10 165	1.4	141.28	2KJ1210 - ■JQ13 - ■■J1		531
	11.8	8 893	1.6	123.59	2KJ1210 - ■JQ13 - ■■H1		531
	13.6	7 733	1.8	107.48	2KJ1210 - ■JQ13 - ■■G1		531
	15.5	6 785	2.1	94.3	★ 2KJ1210 - ■JQ13 - ■■F1		531
	<b>D.148-LA160MP4E</b>						
	11.8	8 877	0.9	123.37	2KJ1208 - ■JQ13 - ■■K1		360
	13.1	8 023	1.0	111.5	★ 2KJ1208 - ■JQ13 - ■■J1		360
	13.6	7 729	1.0	107.42	2KJ1208 - ■JQ13 - ■■H1		360
	15.7	6 685	1.2	92.91	2KJ1208 - ■JQ13 - ■■G1		360
	18.0	5 831	1.4	81.04	★ 2KJ1208 - ■JQ13 - ■■F1		360
	21	4 991	1.6	69.36	★ 2KJ1208 - ■JQ13 - ■■E1		360
	24	4 470	1.8	62.12	2KJ1208 - ■JQ13 - ■■D1		360

★ Preferred transmission ratio

Shaft designs, see page 2/117

1, 2 or 9

Frequency and voltage, see page 8/20

1 to 9

Gearbox housing mounting position, see page 2/119

A, F, H or R

\*) For mounting type B3

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
<b>11</b>	<b>Z.148-LA160MP4E</b>						
	<b>27</b>	3 903	2.0	54.24	★ 2KJ1108 - ■ JQ13 - ■■ A2		348
	<b>29</b>	3 651	2.2	50.74	2KJ1108 - ■ JQ13 - ■■ X1		348
	<b>32</b>	3 246	2.5	45.11	★ 2KJ1108 - ■ JQ13 - ■■ W1		348
	<b>34</b>	3 064	2.6	42.59	2KJ1108 - ■ JQ13 - ■■ V1		348
	<b>D.128-LA160MP4E</b>						
	<b>16.5</b>	6 365	0.80	88.46	2KJ1207 - ■ JQ13 - ■■ G1		270
	<b>18.7</b>	5 617	0.91	78.06	★ 2KJ1207 - ■ JQ13 - ■■ F1		270
	<b>22</b>	4 780	1.1	66.43	2KJ1207 - ■ JQ13 - ■■ E1		270
	<b>25</b>	4 142	1.2	57.56	★ 2KJ1207 - ■ JQ13 - ■■ D1		270
	<b>30</b>	3 485	1.5	48.44	★ 2KJ1207 - ■ JQ13 - ■■ C1		270
	<b>33</b>	3 145	1.6	43.71	2KJ1207 - ■ JQ13 - ■■ B1		270
	<b>Z.128-LA160MP4E</b>						
	<b>38</b>	2 802	1.8	38.94	★ 2KJ1107 - ■ JQ13 - ■■ B2		261
	<b>40</b>	2 618	1.9	36.39	2KJ1107 - ■ JQ13 - ■■ A2		261
	<b>46</b>	2 310	2.2	32.11	★ 2KJ1107 - ■ JQ13 - ■■ X1		261
	<b>48</b>	2 179	2.3	30.28	2KJ1107 - ■ JQ13 - ■■ W1		261
	<b>54</b>	1 952	2.6	27.13	★ 2KJ1107 - ■ JQ13 - ■■ V1		261
	<b>58</b>	1 802	2.8	25.05	2KJ1107 - ■ JQ13 - ■■ U1		261
	<b>D.108-LA160MP4E</b>						
	<b>28</b>	3 739	0.83	51.97	★ 2KJ1206 - ■ JQ13 - ■■ B1		193
	<b>34</b>	3 066	1.0	42.61	★ 2KJ1206 - ■ JQ13 - ■■ A1		193
	<b>Z.108-LA160MP4E</b>						
	<b>42</b>	2 528	1.2	35.14	★ 2KJ1106 - ■ JQ13 - ■■ W1		189
	<b>44</b>	2 361	1.3	32.81	2KJ1106 - ■ JQ13 - ■■ V1		189
	<b>50</b>	2 112	1.5	29.35	★ 2KJ1106 - ■ JQ13 - ■■ U1		189
	<b>54</b>	1 957	1.6	27.2	2KJ1106 - ■ JQ13 - ■■ T1		189
	<b>58</b>	1 794	1.7	24.94	★ 2KJ1106 - ■ JQ13 - ■■ S1		189
	<b>64</b>	1 645	1.9	22.86	2KJ1106 - ■ JQ13 - ■■ R1		189
	<b>75</b>	1 402	2.2	19.48	2KJ1106 - ■ JQ13 - ■■ Q1		189
	<b>85</b>	1 237	2.5	17.19	★ 2KJ1106 - ■ JQ13 - ■■ P1		189
	<b>100</b>	1 053	2.9	14.63	2KJ1106 - ■ JQ13 - ■■ N1		189
	<b>115</b>	912	3.4	12.68	★ 2KJ1106 - ■ JQ13 - ■■ M1		189
	<b>206</b>	511	3.5	7.1	★ 2KJ1106 - ■ JQ13 - ■■ H1		189
	<b>228</b>	461	3.8	6.41	2KJ1106 - ■ JQ13 - ■■ G1		189
	<b>265</b>	396	4.3	5.51	★ 2KJ1106 - ■ JQ13 - ■■ E1		189
	<b>279</b>	377	3.0	5.24	★ 2KJ1106 - ■ JQ13 - ■■ D1		189
	<b>331</b>	317	3.6	4.41	★ 2KJ1106 - ■ JQ13 - ■■ C1		189
	<b>367</b>	286	3.9	3.98	2KJ1106 - ■ JQ13 - ■■ B1		189
	<b>427</b>	246	4.4	3.42	★ 2KJ1106 - ■ JQ13 - ■■ A1		189
	<b>Z.88-LA160MP4E</b>						
	<b>54</b>	1 932	0.87	26.85	★ 2KJ1105 - ■ JQ13 - ■■ S1		143
	<b>58</b>	1 800	0.93	25.01	2KJ1105 - ■ JQ13 - ■■ R1		143
	<b>65</b>	1 627	1.0	22.61	★ 2KJ1105 - ■ JQ13 - ■■ Q1		143

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
11	<b>Z.88-LA160MP4E</b>							
	70	1 497	1.1	20.81	2KJ1105 - ■JQ13 - ■■P1		143	
	78	1 347	1.2	18.72	★ 2KJ1105 - ■JQ13 - ■■N1		143	
	84	1 243	1.4	17.27	2KJ1105 - ■JQ13 - ■■M1		143	
	100	1 053	1.5	14.63	2KJ1105 - ■JQ13 - ■■L1		143	
	115	917	1.7	12.75	★ 2KJ1105 - ■JQ13 - ■■K1		143	
	135	781	1.9	10.85	2KJ1105 - ■JQ13 - ■■J1		143	
	158	666	2.1	9.26	★ 2KJ1105 - ■JQ13 - ■■H1		143	
	192	546	2.4	7.59	★ 2KJ1105 - ■JQ13 - ■■G1		143	
	210	501	2.5	6.96	2KJ1105 - ■JQ13 - ■■F1		143	
	246	427	2.8	5.94	★ 2KJ1105 - ■JQ13 - ■■E1		143	
	300	350	3.2	4.87	★ 2KJ1105 - ■JQ13 - ■■D1		143	
	328	320	2.5	4.45	★ 2KJ1105 - ■JQ13 - ■■C1		143	
	385	273	2.7	3.79	★ 2KJ1105 - ■JQ13 - ■■B1		143	
	469	224	2.9	3.11	★ 2KJ1105 - ■JQ13 - ■■A1		143	
		<b>Z.68-LA160MP4E</b>						
107		978	0.82	13.59	2KJ1104 - ■JQ13 - ■■J1		111	
128		820	0.96	11.4	2KJ1104 - ■JQ13 - ■■H1		111	
150		700	1.1	9.73	★ 2KJ1104 - ■JQ13 - ■■G1		111	
180		584	1.2	8.11	2KJ1104 - ■JQ13 - ■■F1		111	
217		484	1.3	6.72	★ 2KJ1104 - ■JQ13 - ■■E1		111	
246		427	1.1	5.93	2KJ1104 - ■JQ13 - ■■D1		111	
289		364	1.3	5.06	★ 2KJ1104 - ■JQ13 - ■■C1		111	
346		304	1.5	4.22	2KJ1104 - ■JQ13 - ■■B1		111	
418		251	1.7	3.49	★ 2KJ1104 - ■JQ13 - ■■A1		111	
		<b>E.148-LA160MP4E</b>						
		144	729	1.1	10.13	★ 2KJ1007 - ■JQ13 - ■■Q1		192
	154	681	1.4	9.47	2KJ1007 - ■JQ13 - ■■P1		192	
	173	606	1.7	8.42	★ 2KJ1007 - ■JQ13 - ■■N1		192	
	184	572	1.9	7.95	2KJ1007 - ■JQ13 - ■■M1		192	
	204	514	2.2	7.14	★ 2KJ1007 - ■JQ13 - ■■L1		192	
	223	471	2.4	6.55	2KJ1007 - ■JQ13 - ■■K1		192	
	258	407	3.3	5.65	2KJ1007 - ■JQ13 - ■■J1		192	
	296	355	3.9	4.94	2KJ1007 - ■JQ13 - ■■H1		192	
	340	309	4.3	4.3	2KJ1007 - ■JQ13 - ■■G1		192	
	387	271	5.0	3.77	★ 2KJ1007 - ■JQ13 - ■■F1		192	
		<b>E.128-LA160MP4E</b>						
163		643	0.99	8.94	★ 2KJ1006 - ■JQ13 - ■■R1		168	
175		601	1.2	8.35	2KJ1006 - ■JQ13 - ■■Q1		168	
198		530	1.5	7.37	★ 2KJ1006 - ■JQ13 - ■■P1		168	
210		500	1.8	6.95	2KJ1006 - ■JQ13 - ■■N1		168	
234		448	2.1	6.23	★ 2KJ1006 - ■JQ13 - ■■M1		168	
254		414	2.3	5.75	2KJ1006 - ■JQ13 - ■■L1		168	
297		353	2.7	4.91	2KJ1006 - ■JQ13 - ■■K1		168	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
11	<b>E.128-LA160MP4E</b>						
	329	319	3.1	4.44	★ 2KJ1006 - ■ JQ13 - ■■ J1		168
	341	308	3.2	4.28	2KJ1006 - ■ JQ13 - ■■ H1		168
	395	266	3.8	3.7	2KJ1006 - ■ JQ13 - ■■ G1		168
	452	232	4.3	3.23	★ 2KJ1006 - ■ JQ13 - ■■ F1		168
	529	199	5.0	2.76	★ 2KJ1006 - ■ JQ13 - ■■ E1		168
	591	178	5.3	2.47	2KJ1006 - ■ JQ13 - ■■ D1		168
	695	151	5.7	2.1	★ 2KJ1006 - ■ JQ13 - ■■ C1		168
	807	130	6.1	1.81	2KJ1006 - ■ JQ13 - ■■ B1		168
	<b>E.108-LA160MP4E</b>						
	267	393	1.7	5.46	★ 2KJ1005 - ■ JQ13 - ■■ K1		131
	292	360	1.9	5	2KJ1005 - ■ JQ13 - ■■ J1		131
	343	307	2.3	4.26	2KJ1005 - ■ JQ13 - ■■ H1		131
	388	271	2.2	3.76	★ 2KJ1005 - ■ JQ13 - ■■ G1		131
	456	230	3.2	3.2	2KJ1005 - ■ JQ13 - ■■ F1		131
	527	199	3.4	2.77	★ 2KJ1005 - ■ JQ13 - ■■ E1		131
	627	168	4.1	2.33	★ 2KJ1005 - ■ JQ13 - ■■ C1		131
	692	152	4.1	2.11	2KJ1005 - ■ JQ13 - ■■ B1		131
	807	130	4.2	1.81	★ 2KJ1005 - ■ JQ13 - ■■ A1		131
	<b>E.88-LA160MP4E</b>						
	286	368	1.0	5.11	★ 2KJ1004 - ■ JQ13 - ■■ J1		110
	311	338	1.1	4.7	2KJ1004 - ■ JQ13 - ■■ H1		110
	345	304	1.3	4.23	★ 2KJ1004 - ■ JQ13 - ■■ G1		110
	374	281	1.4	3.9	2KJ1004 - ■ JQ13 - ■■ F1		110
	442	237	1.9	3.3	2KJ1004 - ■ JQ13 - ■■ E1		110
	507	207	2.1	2.88	★ 2KJ1004 - ■ JQ13 - ■■ D1		110
	596	176	2.4	2.45	2KJ1004 - ■ JQ13 - ■■ C1		110
	699	150	2.8	2.09	★ 2KJ1004 - ■ JQ13 - ■■ B1		110
	854	123	2.9	1.71	★ 2KJ1004 - ■ JQ13 - ■■ A1		110
	<b>E.68-LA160MP4E</b>						
	390	269	0.85	3.74	★ 2KJ1003 - ■ JQ13 - ■■ H1		93
	423	248	0.97	3.45	2KJ1003 - ■ JQ13 - ■■ G1		93
	472	222	1.1	3.09	★ 2KJ1003 - ■ JQ13 - ■■ F1		93
512	205	1.2	2.85	2KJ1003 - ■ JQ13 - ■■ E1		93	
1 035	101	1.5	1.41	★ 2KJ1003 - ■ JQ13 - ■■ A1		93	
15	<b>D.188-LA160ZLP4E</b>						
	6.0	23 923	0.84	243.82	2KJ1211 - ■ JT13 - ■■ N1		688
	6.6	21 602	0.93	220.17	2KJ1211 - ■ JT13 - ■■ M1		688
	7.1	20 245	0.99	206.34	2KJ1211 - ■ JT13 - ■■ L1		688
	8.2	17 389	1.2	177.23	★ 2KJ1211 - ■ JT13 - ■■ K1		688
	9.5	15 024	1.3	153.12	2KJ1211 - ■ JT13 - ■■ J1		688
	10.8	13 261	1.5	135.16	2KJ1211 - ■ JT13 - ■■ H1		688
	12.0	11 938	1.7	121.67	★ 2KJ1211 - ■ JT13 - ■■ G1		688
	14.5	9 906	2.0	100.96	★ 2KJ1211 - ■ JT13 - ■■ F1		688

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
15	<b>D.188-LA160ZLP4E</b>						
	15.9	9 033	2.2	92.06	2KJ1211 - ■JT13 - ■■E1		688
	<b>D.168-LA160ZLP4E</b>						
	8.2	17 502	0.8	178.38	★ 2KJ1210 - ■JT13 - ■■L1		543
	8.9	16 064	0.87	163.72	2KJ1210 - ■JT13 - ■■K1		543
	10.3	13 862	1.0	141.28	2KJ1210 - ■JT13 - ■■J1		543
	11.8	12 126	1.2	123.59	2KJ1210 - ■JT13 - ■■H1		543
	13.6	10 546	1.3	107.48	2KJ1210 - ■JT13 - ■■G1		543
	15.5	9 252	1.5	94.3	★ 2KJ1210 - ■JT13 - ■■F1		543
	18.3	7 825	1.8	79.75	★ 2KJ1210 - ■JT13 - ■■E1		543
20	7 100	2.0	72.36	2KJ1210 - ■JT13 - ■■D1		543	
23	6 189	2.3	63.08	★ 2KJ1210 - ■JT13 - ■■C1		543	
<b>Z.168-LA160ZLP4E</b>							
31	4 573	2.2	46.61	2KJ1110 - ■JT13 - ■■V1		524	
<b>D.148-LA160ZLP4E</b>							
15.7	9 116	0.88	92.91	2KJ1208 - ■JT13 - ■■G1		372	
18	7 951	1.0	81.04	★ 2KJ1208 - ■JT13 - ■■F1		372	
21	6 805	1.2	69.36	★ 2KJ1208 - ■JT13 - ■■E1		372	
24	6 095	1.3	62.12	2KJ1208 - ■JT13 - ■■D1		372	
<b>Z.148-LA160ZLP4E</b>							
27	5 322	1.5	54.24	★ 2KJ1108 - ■JT13 - ■■A2		360	
29	4 978	1.6	50.74	2KJ1108 - ■JT13 - ■■X1		360	
32	4 426	1.8	45.11	★ 2KJ1108 - ■JT13 - ■■W1		360	
34	4 179	1.9	42.59	2KJ1108 - ■JT13 - ■■V1		360	
38	3 751	2.1	38.23	★ 2KJ1108 - ■JT13 - ■■U1		360	
42	3 443	2.3	35.09	2KJ1108 - ■JT13 - ■■T1		360	
48	2 971	2.7	30.28	2KJ1108 - ■JT13 - ■■S1		360	
<b>D.128-LA160ZLP4E</b>							
25	5 648	0.9	57.56	★ 2KJ1207 - ■JT13 - ■■D1		282	
30	4 753	1.1	48.44	★ 2KJ1207 - ■JT13 - ■■C1		282	
33	4 289	1.2	43.71	2KJ1207 - ■JT13 - ■■B1		282	
<b>Z.128-LA160ZLP4E</b>							
38	3 821	1.3	38.94	★ 2KJ1107 - ■JT13 - ■■B2		273	
40	3 570	1.4	36.39	2KJ1107 - ■JT13 - ■■A2		273	
46	3 151	1.6	32.11	★ 2KJ1107 - ■JT13 - ■■X1		273	
48	2 971	1.7	30.28	2KJ1107 - ■JT13 - ■■W1		273	
54	2 662	1.9	27.13	★ 2KJ1107 - ■JT13 - ■■V1		273	
58	2 458	2.1	25.05	2KJ1107 - ■JT13 - ■■U1		273	
68	2 101	2.4	21.41	2KJ1107 - ■JT13 - ■■T1		273	
76	1 899	2.7	19.35	★ 2KJ1107 - ■JT13 - ■■S1		273	
78	1 829	2.8	18.64	2KJ1107 - ■JT13 - ■■R1		273	
91	1 582	3.2	16.12	2KJ1107 - ■JT13 - ■■Q1		273	
104	1 380	3.5	14.06	★ 2KJ1107 - ■JT13 - ■■P1		273	
200	715	3.6	7.29	★ 2KJ1107 - ■JT13 - ■■J1		273	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
15	<b>Z.128-LA160ZLP4E</b>						
	234	612	4.1	6.24	★ 2KJ1107 - ■ JT13 - ■■ H1		273
	261	548	4.8	5.59	★ 2KJ1107 - ■ JT13 - ■■ F1		273
	<b>Z.108-LA160ZLP4E</b>						
	42	3 448	0.90	35.14	★ 2KJ1106 - ■ JT13 - ■■ W1		201
	44	3 219	0.96	32.81	2KJ1106 - ■ JT13 - ■■ V1		201
	50	2 880	1.1	29.35	★ 2KJ1106 - ■ JT13 - ■■ U1		201
	54	2 669	1.2	27.2	2KJ1106 - ■ JT13 - ■■ T1		201
	58	2 447	1.3	24.94	★ 2KJ1106 - ■ JT13 - ■■ S1		201
	64	2 243	1.4	22.86	2KJ1106 - ■ JT13 - ■■ R1		201
	75	1 911	1.6	19.48	2KJ1106 - ■ JT13 - ■■ Q1		201
	85	1 687	1.8	17.19	★ 2KJ1106 - ■ JT13 - ■■ P1		201
	100	1 435	2.2	14.63	2KJ1106 - ■ JT13 - ■■ N1		201
	115	1 244	2.5	12.68	★ 2KJ1106 - ■ JT13 - ■■ M1		201
	137	1 047	3.0	10.67	★ 2KJ1106 - ■ JT13 - ■■ L1		201
152	944	3.3	9.62	2KJ1106 - ■ JT13 - ■■ K1		201	
177	811	3.8	8.27	★ 2KJ1106 - ■ JT13 - ■■ J1		201	
206	697	2.6	7.1	★ 2KJ1106 - ■ JT13 - ■■ H1		201	
228	629	2.8	6.41	2KJ1106 - ■ JT13 - ■■ G1		201	
265	541	3.1	5.51	★ 2KJ1106 - ■ JT13 - ■■ E1		201	
279	514	2.2	5.24	★ 2KJ1106 - ■ JT13 - ■■ D1		201	
331	433	2.6	4.41	★ 2KJ1106 - ■ JT13 - ■■ C1		201	
367	391	2.9	3.98	2KJ1106 - ■ JT13 - ■■ B1		201	
427	336	3.2	3.42	★ 2KJ1106 - ■ JT13 - ■■ A1		201	
<b>Z.88-LA160ZLP4E</b>							
70	2 042	0.82	20.81	2KJ1105 - ■ JT13 - ■■ P1		155	
78	1 837	0.91	18.72	★ 2KJ1105 - ■ JT13 - ■■ N1		155	
84	1 694	0.99	17.27	2KJ1105 - ■ JT13 - ■■ M1		155	
100	1 435	1.1	14.63	2KJ1105 - ■ JT13 - ■■ L1		155	
115	1 251	1.2	12.75	★ 2KJ1105 - ■ JT13 - ■■ K1		155	
135	1 065	1.4	10.85	2KJ1105 - ■ JT13 - ■■ J1		155	
158	909	1.5	9.26	★ 2KJ1105 - ■ JT13 - ■■ H1		155	
192	745	1.7	7.59	★ 2KJ1105 - ■ JT13 - ■■ G1		155	
210	683	1.8	6.96	2KJ1105 - ■ JT13 - ■■ F1		155	
246	583	2.0	5.94	★ 2KJ1105 - ■ JT13 - ■■ E1		155	
300	478	2.3	4.87	★ 2KJ1105 - ■ JT13 - ■■ D1		155	
328	437	1.8	4.45	★ 2KJ1105 - ■ JT13 - ■■ C1		155	
385	372	2.0	3.79	★ 2KJ1105 - ■ JT13 - ■■ B1		155	
469	305	2.2	3.11	★ 2KJ1105 - ■ JT13 - ■■ A1		155	
<b>Z.68-LA160ZLP4E</b>							
180	796	0.88	8.11	2KJ1104 - ■ JT13 - ■■ F1		123	
217	659	0.99	6.72	★ 2KJ1104 - ■ JT13 - ■■ E1		123	
246	582	0.84	5.93	2KJ1104 - ■ JT13 - ■■ D1		123	
289	496	0.97	5.06	★ 2KJ1104 - ■ JT13 - ■■ C1		123	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
15	<b>Z.68-LA160ZLP4E</b>						
	346	414	1.1	4.22	2KJ1104 - ■JT13 - ■■B1		123
	418	342	1.2	3.49	★ 2KJ1104 - ■JT13 - ■■A1		123
	<b>E.148-LA160ZLP4E</b>						
	144	994	0.80	10.13	★ 2KJ1007 - ■JT13 - ■■Q1		204
	154	929	0.99	9.47	2KJ1007 - ■JT13 - ■■P1		204
	173	826	1.2	8.42	★ 2KJ1007 - ■JT13 - ■■N1		204
	184	780	1.4	7.95	2KJ1007 - ■JT13 - ■■M1		204
	204	701	1.6	7.14	★ 2KJ1007 - ■JT13 - ■■L1		204
	223	643	1.8	6.55	2KJ1007 - ■JT13 - ■■K1		204
	258	554	2.5	5.65	2KJ1007 - ■JT13 - ■■J1		204
	296	485	2.9	4.94	2KJ1007 - ■JT13 - ■■H1		204
	340	422	3.2	4.3	2KJ1007 - ■JT13 - ■■G1		204
	387	370	3.6	3.77	★ 2KJ1007 - ■JT13 - ■■F1		204
	458	313	5.0	3.19	★ 2KJ1007 - ■JT13 - ■■E1		204
503	285	4.9	2.9	2KJ1007 - ■JT13 - ■■D1		204	
579	247	4.9	2.52	★ 2KJ1007 - ■JT13 - ■■C1		204	
682	210	5.7	2.14	2KJ1007 - ■JT13 - ■■B1		204	
890	161	6.0	1.64	★ 2KJ1007 - ■JT13 - ■■A1		204	
<b>E.128-LA160ZLP4E</b>							
175	819	0.87	8.35	2KJ1006 - ■JT13 - ■■Q1		180	
198	723	1.1	7.37	★ 2KJ1006 - ■JT13 - ■■P1		180	
210	682	1.3	6.95	2KJ1006 - ■JT13 - ■■N1		180	
234	611	1.5	6.23	★ 2KJ1006 - ■JT13 - ■■M1		180	
254	564	1.7	5.75	2KJ1006 - ■JT13 - ■■L1		180	
297	482	2.0	4.91	2KJ1006 - ■JT13 - ■■K1		180	
329	436	2.3	4.44	★ 2KJ1006 - ■JT13 - ■■J1		180	
341	420	2.4	4.28	2KJ1006 - ■JT13 - ■■H1		180	
395	363	2.8	3.7	2KJ1006 - ■JT13 - ■■G1		180	
452	317	3.2	3.23	★ 2KJ1006 - ■JT13 - ■■F1		180	
529	271	3.7	2.76	★ 2KJ1006 - ■JT13 - ■■E1		180	
591	242	3.9	2.47	2KJ1006 - ■JT13 - ■■D1		180	
695	206	4.2	2.1	★ 2KJ1006 - ■JT13 - ■■C1		180	
807	178	4.5	1.81	2KJ1006 - ■JT13 - ■■B1		180	
1 074	133	5.1	1.36	★ 2KJ1006 - ■JT13 - ■■A1		180	
<b>E.108-LA160ZLP4E</b>							
267	536	1.2	5.46	★ 2KJ1005 - ■JT13 - ■■K1		143	
292	491	1.4	5	2KJ1005 - ■JT13 - ■■J1		143	
343	418	1.7	4.26	2KJ1005 - ■JT13 - ■■H1		143	
388	369	1.6	3.76	★ 2KJ1005 - ■JT13 - ■■G1		143	
456	314	2.4	3.2	2KJ1005 - ■JT13 - ■■F1		143	
527	272	2.5	2.77	★ 2KJ1005 - ■JT13 - ■■E1		143	
627	229	3.0	2.33	★ 2KJ1005 - ■JT13 - ■■C1		143	
692	207	3.0	2.11	2KJ1005 - ■JT13 - ■■B1		143	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
15	<b>E.108-LA160ZLP4E</b>							
	807	178	3.1	1.81	★ 2KJ1005 - ■JT13 - ■■A1		143	
	<b>E.88-LA160ZLP4E</b>							
	311	461	0.83	4.7	2KJ1004 - ■JT13 - ■■H1		122	
	345	415	0.96	4.23	★ 2KJ1004 - ■JT13 - ■■G1		122	
	374	383	1.0	3.9	2KJ1004 - ■JT13 - ■■F1		122	
	442	324	1.4	3.3	2KJ1004 - ■JT13 - ■■E1		122	
	507	283	1.5	2.88	★ 2KJ1004 - ■JT13 - ■■D1		122	
	596	240	1.7	2.45	2KJ1004 - ■JT13 - ■■C1		122	
	699	205	2.0	2.09	★ 2KJ1004 - ■JT13 - ■■B1		122	
	854	168	2.1	1.71	★ 2KJ1004 - ■JT13 - ■■A1		122	
	<b>E.68-LA160ZLP4E</b>							
	472	303	0.82	3.09	★ 2KJ1003 - ■JT13 - ■■F1		105	
	512	280	0.89	2.85	2KJ1003 - ■JT13 - ■■E1		105	
	18.5	<b>D.188-LG180ZMB4E</b>						
		7.1	24 799	0.81	206.34	2KJ1211 - ■KL13 - ■■L1		743
		8.3	21 301	0.94	177.23	★ 2KJ1211 - ■KL13 - ■■K1		743
		9.6	18 403	1.1	153.12	2KJ1211 - ■KL13 - ■■J1		743
		10.9	16 244	1.2	135.16	2KJ1211 - ■KL13 - ■■H1		743
12.1		14 623	1.4	121.67	★ 2KJ1211 - ■KL13 - ■■G1		743	
14.6		12 134	1.6	100.96	★ 2KJ1211 - ■KL13 - ■■F1		743	
16.0		11 064	1.8	92.06	2KJ1211 - ■KL13 - ■■E1		743	
18.2		9 708	2.1	80.77	★ 2KJ1211 - ■KL13 - ■■D1		743	
21		8 342	2.4	69.41	2KJ1211 - ■KL13 - ■■C1		743	
<b>Z.188-LG180ZMB4E</b>								
28		6 292	2.5	52.35	2KJ1111 - ■KL13 - ■■P1		709	
<b>D.168-LG180ZMB4E</b>								
10.4		16 980	0.82	141.28	2KJ1210 - ■KL13 - ■■J1		598	
11.9		14 854	0.94	123.59	2KJ1210 - ■KL13 - ■■H1		598	
13.7		12 918	1.1	107.48	2KJ1210 - ■KL13 - ■■G1		598	
15.6		11 334	1.2	94.3	★ 2KJ1210 - ■KL13 - ■■F1		598	
18.4		9 585	1.5	79.75	★ 2KJ1210 - ■KL13 - ■■E1		598	
20		8 697	1.6	72.36	2KJ1210 - ■KL13 - ■■D1		598	
23		7 581	1.8	63.08	★ 2KJ1210 - ■KL13 - ■■C1		598	
27		6 437	2.2	53.56	2KJ1210 - ■KL13 - ■■B1		598	
<b>Z.168-LG180ZMB4E</b>								
32		5 602	1.8	46.61	2KJ1110 - ■KL13 - ■■V1		579	
<b>D.148-LG180ZMB4E</b>								
18.1		9 740	0.82	81.04	★ 2KJ1208 - ■KL13 - ■■F1		427	
21		8 336	0.96	69.36	★ 2KJ1208 - ■KL13 - ■■E1		427	
24		7 466	1.1	62.12	2KJ1208 - ■KL13 - ■■D1		427	
28		6 323	1.3	52.61	★ 2KJ1208 - ■KL13 - ■■C1		427	
<b>Z.148-LG180ZMB4E</b>								
33		5 422	1.5	45.11	★ 2KJ1108 - ■KL13 - ■■W1		415	

★ Preferred transmission ratio

Shaft designs, see page 2/117

1, 2 or 9

Frequency and voltage, see page 8/20

1 to 9

Gearbox housing mounting position, see page 2/119

A, F, H or R

\*) For mounting type B3

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
18.5	<b>Z.148-LG180ZMB4E</b>						
	34	5 119	1.6	42.59	2KJ1108 - ■ KL13 - ■■ V1		415
	38	4 595	1.7	38.23	★ 2KJ1108 - ■ KL13 - ■■ U1		415
	42	4 217	1.9	35.09	2KJ1108 - ■ KL13 - ■■ T1		415
	48	3 639	2.2	30.28	2KJ1108 - ■ KL13 - ■■ S1		415
	56	3 184	2.5	26.49	2KJ1108 - ■ KL13 - ■■ R1		415
	64	2 769	2.9	23.04	2KJ1108 - ■ KL13 - ■■ Q1		415
	<b>D.128-LG180ZMB4E</b>						
	30	5 822	0.88	48.44	★ 2KJ1207 - ■ KL13 - ■■ C1		337
	34	5 253	0.97	43.71	2KJ1207 - ■ KL13 - ■■ B1		337
	39	4 515	1.1	37.57	★ 2KJ1207 - ■ KL13 - ■■ A1		337
	<b>Z.128-LG180ZMB4E</b>						
	46	3 859	1.3	32.11	★ 2KJ1107 - ■ KL13 - ■■ X1		328
	48	3 639	1.4	30.28	2KJ1107 - ■ KL13 - ■■ W1		328
	54	3 261	1.6	27.13	★ 2KJ1107 - ■ KL13 - ■■ V1		328
	59	3 011	1.7	25.05	2KJ1107 - ■ KL13 - ■■ U1		328
	69	2 573	2.0	21.41	2KJ1107 - ■ KL13 - ■■ T1		328
	76	2 326	2.2	19.35	★ 2KJ1107 - ■ KL13 - ■■ S1		328
	79	2 240	2.3	18.64	2KJ1107 - ■ KL13 - ■■ R1		328
	91	1 937	2.6	16.12	2KJ1107 - ■ KL13 - ■■ Q1		328
	105	1 690	2.9	14.06	★ 2KJ1107 - ■ KL13 - ■■ P1		328
	122	1 446	3.3	12.03	★ 2KJ1107 - ■ KL13 - ■■ N1		328
	136	1 296	3.6	10.78	2KJ1107 - ■ KL13 - ■■ M1		328
	161	1 097	4.0	9.13	★ 2KJ1107 - ■ KL13 - ■■ L1		328
	202	876	2.9	7.29	★ 2KJ1107 - ■ KL13 - ■■ J1		328
	236	750	3.4	6.24	★ 2KJ1107 - ■ KL13 - ■■ H1		328
	263	672	3.9	5.59	★ 2KJ1107 - ■ KL13 - ■■ F1		328
	304	581	4.3	4.83	2KJ1107 - ■ KL13 - ■■ E1		328
	311	568	4.2	4.73	★ 2KJ1107 - ■ KL13 - ■■ D1		328
	359	492	4.8	4.09	★ 2KJ1107 - ■ KL13 - ■■ C1		328
	405	436	5.3	3.63	★ 2KJ1107 - ■ KL13 - ■■ B1		328
	<b>Z.108-LG180ZMB4E</b>						
	50	3 527	0.88	29.35	★ 2KJ1106 - ■ KL13 - ■■ U1		256
	54	3 269	0.95	27.2	2KJ1106 - ■ KL13 - ■■ T1		256
	59	2 997	1.0	24.94	★ 2KJ1106 - ■ KL13 - ■■ S1		256
	64	2 747	1.1	22.86	2KJ1106 - ■ KL13 - ■■ R1		256
	76	2 341	1.3	19.48	2KJ1106 - ■ KL13 - ■■ Q1		256
	86	2 066	1.5	17.19	★ 2KJ1106 - ■ KL13 - ■■ P1		256
	100	1 758	1.8	14.63	2KJ1106 - ■ KL13 - ■■ N1		256
116	1 524	2.0	12.68	★ 2KJ1106 - ■ KL13 - ■■ M1		256	
138	1 282	2.4	10.67	★ 2KJ1106 - ■ KL13 - ■■ L1		256	
153	1 156	2.7	9.62	2KJ1106 - ■ KL13 - ■■ K1		256	
178	994	3.1	8.27	★ 2KJ1106 - ■ KL13 - ■■ J1		256	
207	853	2.1	7.1	★ 2KJ1106 - ■ KL13 - ■■ H1		256	
229	770	2.3	6.41	2KJ1106 - ■ KL13 - ■■ G1		256	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
18.5	<b>Z.108-LG180ZMB4E</b>						
	267	662	2.6	5.51	★ 2KJ1106 - ■ KL13 - ■■■ E1		256
	281	630	1.8	5.24	★ 2KJ1106 - ■ KL13 - ■■■ D1		256
	333	530	2.2	4.41	★ 2KJ1106 - ■ KL13 - ■■■ C1		256
	369	478	2.3	3.98	2KJ1106 - ■ KL13 - ■■■ B1		256
	430	411	2.6	3.42	★ 2KJ1106 - ■ KL13 - ■■■ A1		256
	<b>Z.88-LG180ZMB4E</b>						
	85	2 076	0.81	17.27	2KJ1105 - ■ KL13 - ■■■ M1		210
	100	1 758	0.92	14.63	2KJ1105 - ■ KL13 - ■■■ L1		210
	115	1 532	1.0	12.75	★ 2KJ1105 - ■ KL13 - ■■■ K1		210
	135	1 304	1.1	10.85	2KJ1105 - ■ KL13 - ■■■ J1		210
	159	1 113	1.2	9.26	★ 2KJ1105 - ■ KL13 - ■■■ H1		210
	194	912	1.4	7.59	★ 2KJ1105 - ■ KL13 - ■■■ G1		210
	211	837	1.5	6.96	2KJ1105 - ■ KL13 - ■■■ F1		210
	247	714	1.7	5.94	★ 2KJ1105 - ■ KL13 - ■■■ E1		210
	302	585	1.9	4.87	★ 2KJ1105 - ■ KL13 - ■■■ D1		210
	330	535	1.5	4.45	★ 2KJ1105 - ■ KL13 - ■■■ C1		210
	388	456	1.6	3.79	★ 2KJ1105 - ■ KL13 - ■■■ B1		210
	473	374	1.8	3.11	★ 2KJ1105 - ■ KL13 - ■■■ A1		210
	<b>E.148-LG180ZMB4E</b>						
	175	1 012	0.99	8.42	★ 2KJ1007 - ■ KL13 - ■■■ N1		259
	185	955	1.1	7.95	2KJ1007 - ■ KL13 - ■■■ M1		259
	206	858	1.3	7.14	★ 2KJ1007 - ■ KL13 - ■■■ L1		259
	224	787	1.5	6.55	2KJ1007 - ■ KL13 - ■■■ K1		259
	260	679	2.0	5.65	2KJ1007 - ■ KL13 - ■■■ J1		259
	298	594	2.4	4.94	2KJ1007 - ■ KL13 - ■■■ H1		259
	342	517	2.6	4.3	2KJ1007 - ■ KL13 - ■■■ G1		259
390	453	3.0	3.77	★ 2KJ1007 - ■ KL13 - ■■■ F1		259	
461	383	4.0	3.19	★ 2KJ1007 - ■ KL13 - ■■■ E1		259	
507	349	4.0	2.9	2KJ1007 - ■ KL13 - ■■■ D1		259	
583	303	4.0	2.52	★ 2KJ1007 - ■ KL13 - ■■■ C1		259	
687	257	4.7	2.14	2KJ1007 - ■ KL13 - ■■■ B1		259	
896	197	4.9	1.64	★ 2KJ1007 - ■ KL13 - ■■■ A1		259	
<b>E.128-LG180ZMB4E</b>							
199	886	0.92	7.37	★ 2KJ1006 - ■ KL13 - ■■■ P1		235	
212	835	1.1	6.95	2KJ1006 - ■ KL13 - ■■■ N1		235	
236	749	1.2	6.23	★ 2KJ1006 - ■ KL13 - ■■■ M1		235	
256	691	1.4	5.75	2KJ1006 - ■ KL13 - ■■■ L1		235	
299	590	1.6	4.91	2KJ1006 - ■ KL13 - ■■■ K1		235	
331	534	1.9	4.44	★ 2KJ1006 - ■ KL13 - ■■■ J1		235	
343	514	1.9	4.28	2KJ1006 - ■ KL13 - ■■■ H1		235	
397	445	2.2	3.7	2KJ1006 - ■ KL13 - ■■■ G1		235	
455	388	2.6	3.23	★ 2KJ1006 - ■ KL13 - ■■■ F1		235	
533	332	3.0	2.76	★ 2KJ1006 - ■ KL13 - ■■■ E1		235	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
18.5	<b>E.128-LG180ZMB4E</b>						
	595	297	3.2	2.47	2KJ1006 - ■ KL13 - ■■ D1		235
	700	252	3.4	2.1	★ 2KJ1006 - ■ KL13 - ■■ C1		235
	812	218	3.7	1.81	2KJ1006 - ■ KL13 - ■■ B1		235
	1 081	163	4.2	1.36	★ 2KJ1006 - ■ KL13 - ■■ A1		235
	<b>E.108-LG180ZMB4E</b>						
	269	656	1.0	5.46	★ 2KJ1005 - ■ KL13 - ■■ K1		198
	294	601	1.1	5	2KJ1005 - ■ KL13 - ■■ J1		198
	345	512	1.4	4.26	2KJ1005 - ■ KL13 - ■■ H1		198
	391	452	1.3	3.76	★ 2KJ1005 - ■ KL13 - ■■ G1		198
	459	385	1.9	3.2	2KJ1005 - ■ KL13 - ■■ F1		198
	531	333	2.0	2.77	★ 2KJ1005 - ■ KL13 - ■■ E1		198
	631	280	2.4	2.33	★ 2KJ1005 - ■ KL13 - ■■ C1		198
	697	254	2.4	2.11	2KJ1005 - ■ KL13 - ■■ B1		198
	812	218	2.5	1.81	★ 2KJ1005 - ■ KL13 - ■■ A1		198
	<b>E.88-LG180ZMB4E</b>						
	377	469	0.82	3.9	2KJ1004 - ■ KL13 - ■■ F1		177
	445	397	1.1	3.3	2KJ1004 - ■ KL13 - ■■ E1		177
	510	346	1.3	2.88	★ 2KJ1004 - ■ KL13 - ■■ D1		177
	703	251	1.7	2.09	★ 2KJ1004 - ■ KL13 - ■■ B1		177
860	206	1.7	1.71	★ 2KJ1004 - ■ KL13 - ■■ A1		177	
22	<b>D.188-LG180ZLB4E</b>						
	9.6	21 959	0.91	153.12	2KJ1211 - ■ KP13 - ■■ J1		758
	10.8	19 384	1.0	135.16	2KJ1211 - ■ KP13 - ■■ H1		758
	12.0	17 449	1.1	121.67	★ 2KJ1211 - ■ KP13 - ■■ G1		758
	14.5	14 479	1.4	100.96	★ 2KJ1211 - ■ KP13 - ■■ F1		758
	15.9	13 203	1.5	92.06	2KJ1211 - ■ KP13 - ■■ E1		758
	18.1	11 583	1.7	80.77	★ 2KJ1211 - ■ KP13 - ■■ D1		758
	21	9 954	2.0	69.41	2KJ1211 - ■ KP13 - ■■ C1		758
	<b>Z.188-LG180ZLB4E</b>						
	28	7 508	2.1	52.35	2KJ1111 - ■ KP13 - ■■ P1		724
	30	6 915	2.3	48.22	2KJ1111 - ■ KP13 - ■■ N1		724
	<b>D.168-LG180ZLB4E</b>						
	13.6	15 414	0.91	107.48	2KJ1210 - ■ KP13 - ■■ G1		613
	15.5	13 524	1.0	94.3	★ 2KJ1210 - ■ KP13 - ■■ F1		613
	18.4	11 437	1.2	79.75	★ 2KJ1210 - ■ KP13 - ■■ E1		613
	20	10 377	1.3	72.36	2KJ1210 - ■ KP13 - ■■ D1		613
	23	9 046	1.5	63.08	★ 2KJ1210 - ■ KP13 - ■■ C1		613
	27	7 681	1.8	53.56	2KJ1210 - ■ KP13 - ■■ B1		613
	<b>Z.168-LG180ZLB4E</b>						
	31	6 684	1.5	46.61	2KJ1110 - ■ KP13 - ■■ V1		594
35	6 036	2.3	42.09	2KJ1110 - ■ KP13 - ■■ U1		594	
37	5 658	2.5	39.45	2KJ1110 - ■ KP13 - ■■ T1		594	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
<b>22</b>	<b>D.148-LG180ZLB4E</b>						
	<b>21</b>	9 947	0.80	69.36	★ 2KJ1208 - ■ KP13 - ■■ E1		442
	<b>24</b>	8 909	0.90	62.12	2KJ1208 - ■ KP13 - ■■ D1		442
	<b>28</b>	7 545	1.1	52.61	★ 2KJ1208 - ■ KP13 - ■■ C1		442
	<b>Z.148-LG180ZLB4E</b>						
	<b>32</b>	6 469	1.2	45.11	★ 2KJ1108 - ■ KP13 - ■■ W1		430
	<b>34</b>	6 108	1.3	42.59	2KJ1108 - ■ KP13 - ■■ V1		430
	<b>38</b>	5 483	1.5	38.23	★ 2KJ1108 - ■ KP13 - ■■ U1		430
	<b>42</b>	5 032	1.6	35.09	2KJ1108 - ■ KP13 - ■■ T1		430
	<b>48</b>	4 343	1.8	30.28	2KJ1108 - ■ KP13 - ■■ S1		430
	<b>55</b>	3 799	2.1	26.49	2KJ1108 - ■ KP13 - ■■ R1		430
	<b>64</b>	3 304	2.4	23.04	2KJ1108 - ■ KP13 - ■■ Q1		430
	<b>72</b>	2 898	2.8	20.21	★ 2KJ1108 - ■ KP13 - ■■ P1		430
	<b>86</b>	2 451	3.3	17.09	★ 2KJ1108 - ■ KP13 - ■■ N1		430
	<b>170</b>	1 239	3.9	8.64	★ 2KJ1108 - ■ KP13 - ■■ H1		430
	<b>187</b>	1 124	4.3	7.84	2KJ1108 - ■ KP13 - ■■ G1		430
	<b>D.128-LG180ZLB4E</b>						
	<b>34</b>	6 269	0.81	43.71	2KJ1207 - ■ KP13 - ■■ B1		352
	<b>39</b>	5 388	0.95	37.57	★ 2KJ1207 - ■ KP13 - ■■ A1		352
	<b>Z.128-LG180ZLB4E</b>						
	<b>46</b>	4 605	1.1	32.11	★ 2KJ1107 - ■ KP13 - ■■ X1		343
	<b>48</b>	4 343	1.2	30.28	2KJ1107 - ■ KP13 - ■■ W1		343
	<b>54</b>	3 891	1.3	27.13	★ 2KJ1107 - ■ KP13 - ■■ V1		343
	<b>58</b>	3 592	1.4	25.05	2KJ1107 - ■ KP13 - ■■ U1		343
	<b>68</b>	3 070	1.7	21.41	2KJ1107 - ■ KP13 - ■■ T1		343
	<b>76</b>	2 775	1.8	19.35	★ 2KJ1107 - ■ KP13 - ■■ S1		343
	<b>79</b>	2 673	1.9	18.64	2KJ1107 - ■ KP13 - ■■ R1		343
	<b>91</b>	2 312	2.2	16.12	2KJ1107 - ■ KP13 - ■■ Q1		343
	<b>104</b>	2 016	2.4	14.06	★ 2KJ1107 - ■ KP13 - ■■ P1		343
	<b>122</b>	1 725	2.7	12.03	★ 2KJ1107 - ■ KP13 - ■■ N1		343
	<b>136</b>	1 546	3.0	10.78	2KJ1107 - ■ KP13 - ■■ M1		343
	<b>160</b>	1 309	3.4	9.13	★ 2KJ1107 - ■ KP13 - ■■ L1		343
	<b>186</b>	1 130	3.8	7.88	2KJ1107 - ■ KP13 - ■■ K1		343
	<b>201</b>	1 045	2.4	7.29	★ 2KJ1107 - ■ KP13 - ■■ J1		343
	<b>235</b>	895	2.8	6.24	★ 2KJ1107 - ■ KP13 - ■■ H1		343
	<b>247</b>	850	4.6	5.93	★ 2KJ1107 - ■ KP13 - ■■ G1		343
	<b>262</b>	802	3.3	5.59	★ 2KJ1107 - ■ KP13 - ■■ F1		343
	<b>303</b>	693	3.6	4.83	2KJ1107 - ■ KP13 - ■■ E1		343
	<b>310</b>	678	3.5	4.73	★ 2KJ1107 - ■ KP13 - ■■ D1		343
	<b>358</b>	587	4.0	4.09	★ 2KJ1107 - ■ KP13 - ■■ C1		343
	<b>404</b>	521	4.4	3.63	★ 2KJ1107 - ■ KP13 - ■■ B1		343
	<b>477</b>	440	5.0	3.07	★ 2KJ1107 - ■ KP13 - ■■ A1		343

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

2

**Selection and ordering data** (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
<b>22</b>	<b>Z.108-LG180ZLB4E</b>						
	59	3 577	0.87	24.94	★ 2KJ1106 - ■ KP13 - ■■ S1		271
	64	3 278	0.95	22.86	2KJ1106 - ■ KP13 - ■■ R1		271
	75	2 794	1.1	19.48	2KJ1106 - ■ KP13 - ■■ Q1		271
	85	2 465	1.3	17.19	★ 2KJ1106 - ■ KP13 - ■■ P1		271
	100	2 098	1.5	14.63	2KJ1106 - ■ KP13 - ■■ N1		271
	116	1 818	1.7	12.68	★ 2KJ1106 - ■ KP13 - ■■ M1		271
	137	1 530	2.0	10.67	★ 2KJ1106 - ■ KP13 - ■■ L1		271
	152	1 380	2.2	9.62	2KJ1106 - ■ KP13 - ■■ K1		271
	177	1 186	2.6	8.27	★ 2KJ1106 - ■ KP13 - ■■ J1		271
	206	1 018	1.8	7.1	★ 2KJ1106 - ■ KP13 - ■■ H1		271
	229	919	1.9	6.41	2KJ1106 - ■ KP13 - ■■ G1		271
	266	790	2.2	5.51	★ 2KJ1106 - ■ KP13 - ■■ E1		271
	280	751	1.5	5.24	★ 2KJ1106 - ■ KP13 - ■■ D1		271
	332	632	1.8	4.41	★ 2KJ1106 - ■ KP13 - ■■ C1		271
368	571	2.0	3.98	2KJ1106 - ■ KP13 - ■■ B1		271	
428	490	2.2	3.42	★ 2KJ1106 - ■ KP13 - ■■ A1		271	
	<b>Z.88-LG180ZLB4E</b>						
	115	1 829	0.85	12.75	★ 2KJ1105 - ■ KP13 - ■■ K1		225
	135	1 556	0.94	10.85	2KJ1105 - ■ KP13 - ■■ J1		225
	158	1 328	1.0	9.26	★ 2KJ1105 - ■ KP13 - ■■ H1		225
	193	1 089	1.2	7.59	★ 2KJ1105 - ■ KP13 - ■■ G1		225
	210	998	1.3	6.96	2KJ1105 - ■ KP13 - ■■ F1		225
	247	852	1.4	5.94	★ 2KJ1105 - ■ KP13 - ■■ E1		225
	301	698	1.6	4.87	★ 2KJ1105 - ■ KP13 - ■■ D1		225
	329	638	1.3	4.45	★ 2KJ1105 - ■ KP13 - ■■ C1		225
	387	544	1.4	3.79	★ 2KJ1105 - ■ KP13 - ■■ B1		225
	471	446	1.5	3.11	★ 2KJ1105 - ■ KP13 - ■■ A1		225
	<b>E.148-LG180ZLB4E</b>						
	174	1 208	0.83	8.42	★ 2KJ1007 - ■ KP13 - ■■ N1		274
	184	1 140	0.93	7.95	2KJ1007 - ■ KP13 - ■■ M1		274
	205	1 024	1.1	7.14	★ 2KJ1007 - ■ KP13 - ■■ L1		274
	224	939	1.2	6.55	2KJ1007 - ■ KP13 - ■■ K1		274
	259	810	1.7	5.65	2KJ1007 - ■ KP13 - ■■ J1		274
	297	708	2.0	4.94	2KJ1007 - ■ KP13 - ■■ H1		274
	341	617	2.2	4.3	2KJ1007 - ■ KP13 - ■■ G1		274
	389	541	2.5	3.77	★ 2KJ1007 - ■ KP13 - ■■ F1		274
	459	457	3.4	3.19	★ 2KJ1007 - ■ KP13 - ■■ E1		274
	505	416	3.4	2.9	2KJ1007 - ■ KP13 - ■■ D1		274
581	361	3.4	2.52	★ 2KJ1007 - ■ KP13 - ■■ C1		274	
685	307	3.9	2.14	2KJ1007 - ■ KP13 - ■■ B1		274	
893	235	4.1	1.64	★ 2KJ1007 - ■ KP13 - ■■ A1		274	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
22	<b>E.128-LG180ZLB4E</b>							
	211	997	0.88	6.95	2KJ1006 - ■ KP13 - ■■ N1		250	
	235	893	1.0	6.23	★ 2KJ1006 - ■ KP13 - ■■ M1		250	
	255	825	1.2	5.75	2KJ1006 - ■ KP13 - ■■ L1		250	
	298	704	1.4	4.91	2KJ1006 - ■ KP13 - ■■ K1		250	
	330	637	1.6	4.44	★ 2KJ1006 - ■ KP13 - ■■ J1		250	
	342	614	1.6	4.28	2KJ1006 - ■ KP13 - ■■ H1		250	
	396	531	1.9	3.7	2KJ1006 - ■ KP13 - ■■ G1		250	
	454	463	2.2	3.23	★ 2KJ1006 - ■ KP13 - ■■ F1		250	
	531	396	2.5	2.76	★ 2KJ1006 - ■ KP13 - ■■ E1		250	
	593	354	2.7	2.47	2KJ1006 - ■ KP13 - ■■ D1		250	
	698	301	2.9	2.1	★ 2KJ1006 - ■ KP13 - ■■ C1		250	
	809	260	3.1	1.81	2KJ1006 - ■ KP13 - ■■ B1		250	
	1 077	195	3.5	1.36	★ 2KJ1006 - ■ KP13 - ■■ A1		250	
		<b>E.108-LG180ZLB4E</b>						
268		783	0.84	5.46	★ 2KJ1005 - ■ KP13 - ■■ K1		213	
293		717	0.95	5	2KJ1005 - ■ KP13 - ■■ J1		213	
344		611	1.2	4.26	2KJ1005 - ■ KP13 - ■■ H1		213	
390		539	1.1	3.76	★ 2KJ1005 - ■ KP13 - ■■ G1		213	
458		459	1.6	3.2	2KJ1005 - ■ KP13 - ■■ F1		213	
529		397	1.7	2.77	★ 2KJ1005 - ■ KP13 - ■■ E1		213	
629		334	2.0	2.33	★ 2KJ1005 - ■ KP13 - ■■ C1		213	
694		303	2.0	2.11	2KJ1005 - ■ KP13 - ■■ B1		213	
809		260	2.1	1.81	★ 2KJ1005 - ■ KP13 - ■■ A1		213	
		<b>E.88-LG180ZLB4E</b>						
	444	473	0.95	3.3	2KJ1004 - ■ KP13 - ■■ E1		192	
	509	413	1.1	2.88	★ 2KJ1004 - ■ KP13 - ■■ D1		192	
30	<b>D.188-LG200LB4E</b>							
	12.1	23 633	0.85	121.67	★ 2KJ1211 - ■ LM13 - ■■ G1		808	
	14.6	19 610	1.0	100.96	★ 2KJ1211 - ■ LM13 - ■■ F1		808	
	16.0	17 881	1.1	92.06	2KJ1211 - ■ LM13 - ■■ E1		808	
	18.3	15 689	1.3	80.77	★ 2KJ1211 - ■ LM13 - ■■ D1		808	
	21	13 482	1.5	69.41	2KJ1211 - ■ LM13 - ■■ C1		808	
	27	10 500	1.9	54.06	★ 2KJ1211 - ■ LM13 - ■■ B1		808	
	34	8 342	2.4	42.95	★ 2KJ1211 - ■ LM13 - ■■ A1		808	
		<b>Z.188-LG200LB4E</b>						
		28	10 168	1.5	52.35	2KJ1111 - ■ LM13 - ■■ P1		774
		31	9 366	1.7	48.22	2KJ1111 - ■ LM13 - ■■ N1		774
		35	8 129	2.0	41.85	★ 2KJ1111 - ■ LM13 - ■■ M1		774
		40	7 165	2.3	36.89	2KJ1111 - ■ LM13 - ■■ L1		774
		<b>D.168-LG200LB4E</b>						
		18.5	15 490	0.90	79.75	★ 2KJ1210 - ■ LM13 - ■■ E1		663
20		14 055	1.0	72.36	2KJ1210 - ■ LM13 - ■■ D1		663	
23		12 252	1.1	63.08	★ 2KJ1210 - ■ LM13 - ■■ C1		663	

★ Preferred transmission ratio

Shaft designs, see page 2/117

1, 2 or 9

Frequency and voltage, see page 8/20

1 to 9

Gearbox housing mounting position, see page 2/119

A, F, H or R

<sup>\*)</sup> For mounting type B3



# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
30	<b>D.168-LG200LB4E</b>						
	28	10 403	1.3	53.56	2KJ1210 - ■ LM13 - ■■ B1		663
	<b>Z.168-LG200LB4E</b>						
	32	9 053	1.1	46.61	2KJ1110 - ■ LM13 - ■■ V1		644
	35	8 175	1.7	42.09	2KJ1110 - ■ LM13 - ■■ U1		644
	37	7 663	1.8	39.45	2KJ1110 - ■ LM13 - ■■ T1		644
	44	6 581	2.1	33.88	★ 2KJ1110 - ■ LM13 - ■■ S1		644
	50	5 685	2.5	29.27	2KJ1110 - ■ LM13 - ■■ Q1		644
	57	5 019	2.8	25.84	2KJ1110 - ■ LM13 - ■■ P1		644
	<b>Z.148-LG200LB4E</b>						
	33	8 762	0.91	45.11	★ 2KJ1108 - ■ LM13 - ■■ W1		480
	35	8 273	0.97	42.59	2KJ1108 - ■ LM13 - ■■ V1		480
	39	7 426	1.1	38.23	★ 2KJ1108 - ■ LM13 - ■■ U1		480
	42	6 816	1.2	35.09	2KJ1108 - ■ LM13 - ■■ T1		480
	49	5 882	1.4	30.28	2KJ1108 - ■ LM13 - ■■ S1		480
	56	5 145	1.6	26.49	2KJ1108 - ■ LM13 - ■■ R1		480
	64	4 475	1.8	23.04	2KJ1108 - ■ LM13 - ■■ Q1		480
	73	3 926	2.0	20.21	★ 2KJ1108 - ■ LM13 - ■■ P1		480
	86	3 320	2.4	17.09	★ 2KJ1108 - ■ LM13 - ■■ N1		480
	95	3 013	2.7	15.51	2KJ1108 - ■ LM13 - ■■ M1		480
	109	2 626	3.0	13.52	★ 2KJ1108 - ■ LM13 - ■■ L1		480
	128	2 230	3.6	11.48	2KJ1108 - ■ LM13 - ■■ K1		480
	171	1 678	2.9	8.64	★ 2KJ1108 - ■ LM13 - ■■ H1		480
	188	1 523	3.2	7.84	2KJ1108 - ■ LM13 - ■■ G1		480
	195	1 470	3.8	7.57	★ 2KJ1108 - ■ LM13 - ■■ F1		480
	216	1 329	3.6	6.84	★ 2KJ1108 - ■ LM13 - ■■ E1		480
	229	1 249	4.3	6.43	2KJ1108 - ■ LM13 - ■■ D1		480
	254	1 127	3.7	5.8	2KJ1108 - ■ LM13 - ■■ C1		480
	332	862	4.5	4.44	★ 2KJ1108 - ■ LM13 - ■■ A1		480
	<b>Z.128-LG200LB4E</b>						
	46	6 237	0.82	32.11	★ 2KJ1107 - ■ LM13 - ■■ X1		393
	49	5 882	0.87	30.28	2KJ1107 - ■ LM13 - ■■ W1		393
	54	5 270	0.97	27.13	★ 2KJ1107 - ■ LM13 - ■■ V1		393
59	4 866	1.0	25.05	2KJ1107 - ■ LM13 - ■■ U1		393	
69	4 159	1.2	21.41	2KJ1107 - ■ LM13 - ■■ T1		393	
76	3 758	1.4	19.35	★ 2KJ1107 - ■ LM13 - ■■ S1		393	
79	3 621	1.4	18.64	2KJ1107 - ■ LM13 - ■■ R1		393	
92	3 131	1.6	16.12	2KJ1107 - ■ LM13 - ■■ Q1		393	
105	2 731	1.8	14.06	★ 2KJ1107 - ■ LM13 - ■■ P1		393	
123	2 337	2.0	12.03	★ 2KJ1107 - ■ LM13 - ■■ N1		393	
137	2 094	2.2	10.78	2KJ1107 - ■ LM13 - ■■ M1		393	
162	1 773	2.5	9.13	★ 2KJ1107 - ■ LM13 - ■■ L1		393	
187	1 531	2.8	7.88	2KJ1107 - ■ LM13 - ■■ K1		393	
202	1 416	1.8	7.29	★ 2KJ1107 - ■ LM13 - ■■ J1		393	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
30	<b>Z.128-LG200LB4E</b>						
	236	1 212	2.1	6.24	★ 2KJ1107 - LM13 - H1		393
	249	1 152	3.4	5.93	★ 2KJ1107 - LM13 - G1		393
	264	1 086	2.4	5.59	★ 2KJ1107 - LM13 - F1		393
	305	938	2.7	4.83	2KJ1107 - LM13 - E1		393
	312	919	2.6	4.73	★ 2KJ1107 - LM13 - D1		393
	361	794	3.0	4.09	★ 2KJ1107 - LM13 - C1		393
	406	705	3.3	3.63	★ 2KJ1107 - LM13 - B1		393
	480	596	3.7	3.07	★ 2KJ1107 - LM13 - A1		393
	<b>Z.108-LG200LB4E</b>						
76	3 784	0.82	19.48	2KJ1106 - LM13 - Q1		321	
86	3 339	0.93	17.19	★ 2KJ1106 - LM13 - P1		321	
101	2 842	1.1	14.63	2KJ1106 - LM13 - N1		321	
116	2 463	1.3	12.68	★ 2KJ1106 - LM13 - M1		321	
138	2 073	1.5	10.67	★ 2KJ1106 - LM13 - L1		321	
153	1 869	1.7	9.62	2KJ1106 - LM13 - K1		321	
178	1 606	1.9	8.27	★ 2KJ1106 - LM13 - J1		321	
208	1 379	1.3	7.1	★ 2KJ1106 - LM13 - H1		321	
230	1 245	1.4	6.41	2KJ1106 - LM13 - G1		321	
268	1 070	1.6	5.51	★ 2KJ1106 - LM13 - E1		321	
281	1 018	1.1	5.24	★ 2KJ1106 - LM13 - D1		321	
334	857	1.3	4.41	★ 2KJ1106 - LM13 - C1		321	
371	773	1.4	3.98	2KJ1106 - LM13 - B1		321	
431	664	1.6	3.42	★ 2KJ1106 - LM13 - A1		321	
<b>E.148-LG200LB4E</b>							
207	1 387	0.81	7.14	★ 2KJ1007 - LM13 - L1		324	
225	1 272	0.90	6.55	2KJ1007 - LM13 - K1		324	
261	1 097	1.2	5.65	2KJ1007 - LM13 - J1		324	
299	960	1.5	4.94	2KJ1007 - LM13 - H1		324	
343	835	1.6	4.3	2KJ1007 - LM13 - G1		324	
391	732	1.8	3.77	★ 2KJ1007 - LM13 - F1		324	
462	620	2.5	3.19	★ 2KJ1007 - LM13 - E1		324	
509	563	2.5	2.9	2KJ1007 - LM13 - D1		324	
585	489	2.5	2.52	★ 2KJ1007 - LM13 - C1		324	
689	416	2.9	2.14	2KJ1007 - LM13 - B1		324	
899	319	3.0	1.64	★ 2KJ1007 - LM13 - A1		324	
<b>E.128-LG200LB4E</b>							
257	1 117	0.86	5.75	2KJ1006 - LM13 - L1		300	
300	954	1.0	4.91	2KJ1006 - LM13 - K1		300	
332	862	1.2	4.44	★ 2KJ1006 - LM13 - J1		300	
345	831	1.2	4.28	2KJ1006 - LM13 - H1		300	
399	719	1.4	3.7	2KJ1006 - LM13 - G1		300	
457	627	1.6	3.23	★ 2KJ1006 - LM13 - F1		300	
534	536	1.9	2.76	★ 2KJ1006 - LM13 - E1		300	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
30	<b>E.128-LG200LB4E</b>							
	597	480	2.0	2.47	2KJ1006 - ■LM13 - ■■D1		300	
	702	408	2.1	2.1	★ 2KJ1006 - ■LM13 - ■■C1		300	
	815	352	2.3	1.81	2KJ1006 - ■LM13 - ■■B1		300	
	1 085	264	2.6	1.36	★ 2KJ1006 - ■LM13 - ■■A1		300	
	<b>E.108-LG200LB4E</b>							
	346	827	0.87	4.26	2KJ1005 - ■LM13 - ■■H1		263	
	392	730	0.82	3.76	★ 2KJ1005 - ■LM13 - ■■G1		263	
	461	622	1.2	3.2	2KJ1005 - ■LM13 - ■■F1		263	
	532	538	1.2	2.77	★ 2KJ1005 - ■LM13 - ■■E1		263	
	633	453	1.5	2.33	★ 2KJ1005 - ■LM13 - ■■C1		263	
	699	410	1.5	2.11	2KJ1005 - ■LM13 - ■■B1		263	
	815	352	1.6	1.81	★ 2KJ1005 - ■LM13 - ■■A1		263	
	37	<b>D.188-LG225S4E</b>						
		14.6	24 268	0.82	100.96	★ 2KJ1211 - ■ME13 - ■■F1		888
16.0		22 129	0.90	92.06	2KJ1211 - ■ME13 - ■■E1		888	
18.2		19 415	1.0	80.77	★ 2KJ1211 - ■ME13 - ■■D1		888	
21		16 684	1.2	69.41	2KJ1211 - ■ME13 - ■■C1		888	
27		12 995	1.5	54.06	★ 2KJ1211 - ■ME13 - ■■B1		888	
34		10 324	1.9	42.95	★ 2KJ1211 - ■ME13 - ■■A1		888	
<b>Z.188-LG225S4E</b>								
28		12 584	1.2	52.35	2KJ1111 - ■ME13 - ■■P1		854	
30		11 591	1.4	48.22	2KJ1111 - ■ME13 - ■■N1		854	
35		10 060	1.6	41.85	★ 2KJ1111 - ■ME13 - ■■M1		854	
40		8 867	1.9	36.89	2KJ1111 - ■ME13 - ■■L1		854	
45		7 781	2.4	32.37	2KJ1111 - ■ME13 - ■■K1		854	
<b>D.168-LG225S4E</b>								
20		17 393	0.80	72.36	2KJ1210 - ■ME13 - ■■D1		743	
23		15 163	0.92	63.08	★ 2KJ1210 - ■ME13 - ■■C1		743	
27		12 874	1.1	53.56	2KJ1210 - ■ME13 - ■■B1		743	
<b>Z.168-LG225S4E</b>								
35		10 117	1.4	42.09	2KJ1110 - ■ME13 - ■■U1		724	
37		9 483	1.5	39.45	2KJ1110 - ■ME13 - ■■T1		724	
43		8 144	1.7	33.88	★ 2KJ1110 - ■ME13 - ■■S1		724	
50		7 036	2.0	29.27	2KJ1110 - ■ME13 - ■■Q1		724	
57		6 211	2.3	25.84	2KJ1110 - ■ME13 - ■■P1		724	
63		5 591	2.5	23.26	★ 2KJ1110 - ■ME13 - ■■N1		724	
76		4 639	3.0	19.3	★ 2KJ1110 - ■ME13 - ■■M1		724	
84		4 231	3.3	17.6	2KJ1110 - ■ME13 - ■■L1		724	
159		2 226	3.5	9.26	★ 2KJ1110 - ■ME13 - ■■G1		724	
204		1 731	4.1	7.2	★ 2KJ1110 - ■ME13 - ■■E1		724	
<b>Z.148-LG225S4E</b>								
38		9 190	0.87	38.23	★ 2KJ1108 - ■ME13 - ■■U1		560	
42	8 435	0.95	35.09	2KJ1108 - ■ME13 - ■■T1		560		

★ Preferred transmission ratio

Shaft designs, see page 2/117

1, 2 or 9

Frequency and voltage, see page 8/20

1 to 9

Gearbox housing mounting position, see page 2/119

A, F, H or R

\*) For mounting type B3

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
37	<b>Z.148-LG225S4E</b>						
	48	7 279	1.1	30.28	2KJ1108 - ■ME13 - ■■S1		560
	56	6 368	1.3	26.49	2KJ1108 - ■ME13 - ■■R1		560
	64	5 538	1.4	23.04	2KJ1108 - ■ME13 - ■■Q1		560
	73	4 858	1.6	20.21	★ 2KJ1108 - ■ME13 - ■■P1		560
	86	4 108	1.9	17.09	★ 2KJ1108 - ■ME13 - ■■N1		560
	95	3 728	2.1	15.51	2KJ1108 - ■ME13 - ■■M1		560
	109	3 250	2.5	13.52	★ 2KJ1108 - ■ME13 - ■■L1		560
	128	2 759	2.9	11.48	2KJ1108 - ■ME13 - ■■K1		560
	167	2 113	3.8	8.79	★ 2KJ1108 - ■ME13 - ■■J1		560
	170	2 077	2.3	8.64	★ 2KJ1108 - ■ME13 - ■■H1		560
	188	1 885	2.5	7.84	2KJ1108 - ■ME13 - ■■G1		560
	194	1 820	3.1	7.57	★ 2KJ1108 - ■ME13 - ■■F1		560
	215	1 644	2.9	6.84	★ 2KJ1108 - ■ME13 - ■■E1		560
	229	1 546	3.5	6.43	2KJ1108 - ■ME13 - ■■D1		560
	253	1 394	3.0	5.8	2KJ1108 - ■ME13 - ■■C1		560
	299	1 183	4.3	4.92	★ 2KJ1108 - ■ME13 - ■■B1		560
	331	1 067	3.6	4.44	★ 2KJ1108 - ■ME13 - ■■A1		560
	<b>Z.128-LG225S4E</b>						
	59	6 021	0.85	25.05	2KJ1107 - ■ME13 - ■■U1		473
	69	5 146	0.99	21.41	2KJ1107 - ■ME13 - ■■T1		473
	76	4 651	1.1	19.35	★ 2KJ1107 - ■ME13 - ■■S1		473
	79	4 481	1.1	18.64	2KJ1107 - ■ME13 - ■■R1		473
	91	3 875	1.3	16.12	2KJ1107 - ■ME13 - ■■Q1		473
	105	3 380	1.4	14.06	★ 2KJ1107 - ■ME13 - ■■P1		473
	122	2 892	1.6	12.03	★ 2KJ1107 - ■ME13 - ■■N1		473
	136	2 591	1.8	10.78	2KJ1107 - ■ME13 - ■■M1		473
	161	2 195	2.0	9.13	★ 2KJ1107 - ■ME13 - ■■L1		473
	187	1 894	2.2	7.88	2KJ1107 - ■ME13 - ■■K1		473
	202	1 752	1.4	7.29	★ 2KJ1107 - ■ME13 - ■■J1		473
	236	1 500	1.7	6.24	★ 2KJ1107 - ■ME13 - ■■H1		473
	248	1 425	2.7	5.93	★ 2KJ1107 - ■ME13 - ■■G1		473
	263	1 344	1.9	5.59	★ 2KJ1107 - ■ME13 - ■■F1		473
304	1 161	2.2	4.83	2KJ1107 - ■ME13 - ■■E1		473	
311	1 137	2.1	4.73	★ 2KJ1107 - ■ME13 - ■■D1		473	
359	983	2.4	4.09	★ 2KJ1107 - ■ME13 - ■■C1		473	
405	873	2.6	3.63	★ 2KJ1107 - ■ME13 - ■■B1		473	
479	738	3.0	3.07	★ 2KJ1107 - ■ME13 - ■■A1		473	
<b>Z.108-K4-LGI225S4E</b>							
100	3 517	0.88	14.63	2KJ1106 - ■ME13 - ■■N1		401	
116	3 048	1.0	12.68	★ 2KJ1106 - ■ME13 - ■■M1		401	
138	2 565	1.2	10.67	★ 2KJ1106 - ■ME13 - ■■L1		401	
153	2 312	1.3	9.62	2KJ1106 - ■ME13 - ■■K1		401	
178	1 988	1.6	8.27	★ 2KJ1106 - ■ME13 - ■■J1		401	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
37	<b>Z.108-K4-LGI225S4E</b>							
	207	1 707	1.1	7.1	★ 2KJ1106 - ■ME13 - ■■H1		401	
	229	1 541	1.1	6.41	2KJ1106 - ■ME13 - ■■G1		401	
	267	1 324	1.3	5.51	★ 2KJ1106 - ■ME13 - ■■E1		401	
	281	1 260	0.91	5.24	★ 2KJ1106 - ■ME13 - ■■D1		401	
	333	1 060	1.1	4.41	★ 2KJ1106 - ■ME13 - ■■C1		401	
	369	957	1.2	3.98	2KJ1106 - ■ME13 - ■■B1		401	
	430	822	1.3	3.42	★ 2KJ1106 - ■ME13 - ■■A1		401	
	<b>E.148-LG225S4E</b>							
	260	1 358	1.0	5.65	2KJ1007 - ■ME13 - ■■J1		404	
	298	1 187	1.2	4.94	2KJ1007 - ■ME13 - ■■H1		404	
	342	1 034	1.3	4.3	2KJ1007 - ■ME13 - ■■G1		404	
	390	906	1.5	3.77	★ 2KJ1007 - ■ME13 - ■■F1		404	
	461	767	2.0	3.19	★ 2KJ1007 - ■ME13 - ■■E1		404	
	507	697	2.0	2.9	2KJ1007 - ■ME13 - ■■D1		404	
	583	606	2.0	2.52	★ 2KJ1007 - ■ME13 - ■■C1		404	
	687	514	2.3	2.14	2KJ1007 - ■ME13 - ■■B1		404	
	896	394	2.4	1.64	★ 2KJ1007 - ■ME13 - ■■A1		404	
	<b>E.128-LG225S4E</b>							
	299	1 180	0.81	4.91	2KJ1006 - ■ME13 - ■■K1		380	
	331	1 067	0.94	4.44	★ 2KJ1006 - ■ME13 - ■■J1		380	
	343	1 029	0.97	4.28	2KJ1006 - ■ME13 - ■■H1		380	
	397	889	1.1	3.7	2KJ1006 - ■ME13 - ■■G1		380	
	455	776	1.3	3.23	★ 2KJ1006 - ■ME13 - ■■F1		380	
	533	663	1.5	2.76	★ 2KJ1006 - ■ME13 - ■■E1		380	
	595	594	1.6	2.47	2KJ1006 - ■ME13 - ■■D1		380	
	700	505	1.7	2.1	★ 2KJ1006 - ■ME13 - ■■C1		380	
	812	435	1.8	1.81	2KJ1006 - ■ME13 - ■■B1		380	
	1 081	327	2.1	1.36	★ 2KJ1006 - ■ME13 - ■■A1		380	
	<b>E.108-K4-LGI225S4E</b>							
	459	769	0.97	3.2	2KJ1005 - ■ME13 - ■■F1		343	
	531	666	1.0	2.77	★ 2KJ1005 - ■ME13 - ■■E1		343	
	45	<b>D.188-LG225ZM4E</b>						
		18.3	23 533	0.85	80.77	★ 2KJ1211 - ■MU13 - ■■D1		888
		21	20 223	0.99	69.41	2KJ1211 - ■MU13 - ■■C1		888
		27	15 751	1.3	54.06	★ 2KJ1211 - ■MU13 - ■■B1		888
		34	12 514	1.6	42.95	★ 2KJ1211 - ■MU13 - ■■A1		888
<b>Z.188-LG225ZM4E</b>								
28		15 252	1.0	52.35	2KJ1111 - ■MU13 - ■■P1		854	
31		14 049	1.1	48.22	2KJ1111 - ■MU13 - ■■N1		854	
35		12 193	1.3	41.85	★ 2KJ1111 - ■MU13 - ■■M1		854	
40		10 748	1.5	36.89	2KJ1111 - ■MU13 - ■■L1		854	
46		9 431	2.0	32.37	2KJ1111 - ■MU13 - ■■K1		854	
50		8 502	2.4	29.18	★ 2KJ1111 - ■MU13 - ■■J1		854	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
45	<b>Z.188-LG225ZM4E</b>						
	60	7 217	2.8	24.77	★ 2KJ1111 - ■ MU13 - ■■ H1		854
	64	6 704	3.0	23.01	2KJ1111 - ■ MU13 - ■■ G1		854
<b>D.168-LG225ZM4E</b>							
28	15 605	0.90		53.56	2KJ1210 - ■ MU13 - ■■ B1		743
<b>Z.168-LG225ZM4E</b>							
35	12 263	1.1		42.09	2KJ1110 - ■ MU13 - ■■ U1		724
37	11 494	1.2		39.45	2KJ1110 - ■ MU13 - ■■ T1		724
44	9 871	1.4		33.88	★ 2KJ1110 - ■ MU13 - ■■ S1		724
50	8 528	1.6		29.27	2KJ1110 - ■ MU13 - ■■ Q1		724
57	7 529	1.9		25.84	2KJ1110 - ■ MU13 - ■■ P1		724
63	6 777	2.1		23.26	★ 2KJ1110 - ■ MU13 - ■■ N1		724
76	5 623	2.5		19.3	★ 2KJ1110 - ■ MU13 - ■■ M1		724
84	5 128	2.7		17.6	2KJ1110 - ■ MU13 - ■■ L1		724
96	4 499	3.0		15.44	★ 2KJ1110 - ■ MU13 - ■■ K1		724
111	3 866	3.4		13.27	2KJ1110 - ■ MU13 - ■■ J1		724
159	2 698	2.9		9.26	★ 2KJ1110 - ■ MU13 - ■■ G1		724
205	2 098	3.4		7.2	★ 2KJ1110 - ■ MU13 - ■■ E1		724
238	1 806	4.2		6.2	★ 2KJ1110 - ■ MU13 - ■■ D1		724
263	1 635	4.1		5.61	★ 2KJ1110 - ■ MU13 - ■■ C1		724
299	1 436	4.9		4.93	★ 2KJ1110 - ■ MU13 - ■■ B1		724
331	1 299	5.0		4.46	★ 2KJ1110 - ■ MU13 - ■■ A1		724
<b>D.148-LG225ZM4E</b>							
43	9 950	0.80		34.15	★ 2KJ1208 - ■ MU13 - ■■ A1		572
<b>Z.148-LG225ZM4E</b>							
49	8 822	0.91		30.28	2KJ1108 - ■ MU13 - ■■ S1		560
56	7 718	1.0		26.49	2KJ1108 - ■ MU13 - ■■ R1		560
64	6 713	1.2		23.04	2KJ1108 - ■ MU13 - ■■ Q1		560
73	5 888	1.4		20.21	★ 2KJ1108 - ■ MU13 - ■■ P1		560
86	4 979	1.6		17.09	★ 2KJ1108 - ■ MU13 - ■■ N1		560
95	4 519	1.8		15.51	2KJ1108 - ■ MU13 - ■■ M1		560
109	3 939	2.0		13.52	★ 2KJ1108 - ■ MU13 - ■■ L1		560
128	3 345	2.4		11.48	2KJ1108 - ■ MU13 - ■■ K1		560
168	2 561	3.1		8.79	★ 2KJ1108 - ■ MU13 - ■■ J1		560
171	2 517	1.9		8.64	★ 2KJ1108 - ■ MU13 - ■■ H1		560
188	2 284	2.1		7.84	2KJ1108 - ■ MU13 - ■■ G1		560
195	2 206	2.5		7.57	★ 2KJ1108 - ■ MU13 - ■■ F1		560
216	1 993	2.4		6.84	★ 2KJ1108 - ■ MU13 - ■■ E1		560
229	1 873	2.9		6.43	2KJ1108 - ■ MU13 - ■■ D1		560
254	1 690	2.5		5.8	2KJ1108 - ■ MU13 - ■■ C1		560
300	1 433	3.5		4.92	★ 2KJ1108 - ■ MU13 - ■■ B1		560
332	1 294	3.0		4.44	★ 2KJ1108 - ■ MU13 - ■■ A1		560

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
45	<b>Z.128-LG225ZM4E</b>						
	69	6 238	0.82	21.41	2KJ1107 - ■MU13 - ■■T1		473
	76	5 638	0.90	19.35	★ 2KJ1107 - ■MU13 - ■■S1		473
	79	5 431	0.94	18.64	2KJ1107 - ■MU13 - ■■R1		473
	92	4 697	1.1	16.12	2KJ1107 - ■MU13 - ■■Q1		473
	105	4 096	1.2	14.06	★ 2KJ1107 - ■MU13 - ■■P1		473
	123	3 505	1.3	12.03	★ 2KJ1107 - ■MU13 - ■■N1		473
	137	3 141	1.5	10.78	2KJ1107 - ■MU13 - ■■M1		473
	162	2 660	1.7	9.13	★ 2KJ1107 - ■MU13 - ■■L1		473
	187	2 296	1.9	7.88	2KJ1107 - ■MU13 - ■■K1		473
	202	2 124	1.2	7.29	★ 2KJ1107 - ■MU13 - ■■J1		473
	236	1 818	1.4	6.24	★ 2KJ1107 - ■MU13 - ■■H1		473
	249	1 728	2.3	5.93	★ 2KJ1107 - ■MU13 - ■■G1		473
	264	1 629	1.6	5.59	★ 2KJ1107 - ■MU13 - ■■F1		473
	305	1 407	1.8	4.83	2KJ1107 - ■MU13 - ■■E1		473
	312	1 378	1.7	4.73	★ 2KJ1107 - ■MU13 - ■■D1		473
	361	1 192	2.0	4.09	★ 2KJ1107 - ■MU13 - ■■C1		473
	406	1 058	2.2	3.63	★ 2KJ1107 - ■MU13 - ■■B1		473
	480	894	2.5	3.07	★ 2KJ1107 - ■MU13 - ■■A1		473
	<b>Z.108-K4-LGI225ZM4E</b>						
	116	3 690	0.84	12.68	★ 2KJ1106 - ■MU13 - ■■M1		401
	138	3 105	1.0	10.67	★ 2KJ1106 - ■MU13 - ■■L1		401
	153	2 799	1.1	9.62	2KJ1106 - ■MU13 - ■■K1		401
	178	2 407	1.3	8.27	★ 2KJ1106 - ■MU13 - ■■J1		401
	208	2 066	0.87	7.1	★ 2KJ1106 - ■MU13 - ■■H1		401
	230	1 865	0.94	6.41	2KJ1106 - ■MU13 - ■■G1		401
	268	1 603	1.1	5.51	★ 2KJ1106 - ■MU13 - ■■E1		401
	334	1 283	0.89	4.41	★ 2KJ1106 - ■MU13 - ■■C1		401
	371	1 158	0.97	3.98	2KJ1106 - ■MU13 - ■■B1		401
	431	995	1.1	3.42	★ 2KJ1106 - ■MU13 - ■■A1		401
	<b>E.148-LG225ZM4E</b>						
	261	1 646	0.83	5.65	2KJ1007 - ■MU13 - ■■J1		404
	299	1 439	0.97	4.94	2KJ1007 - ■MU13 - ■■H1		404
	343	1 253	1.1	4.3	2KJ1007 - ■MU13 - ■■G1		404
	391	1 098	1.2	3.77	★ 2KJ1007 - ■MU13 - ■■F1		404
	462	929	1.7	3.19	★ 2KJ1007 - ■MU13 - ■■E1		404
	509	845	1.7	2.9	2KJ1007 - ■MU13 - ■■D1		404
	585	734	1.7	2.52	★ 2KJ1007 - ■MU13 - ■■C1		404
	689	624	1.9	2.14	2KJ1007 - ■MU13 - ■■B1		404
	899	478	2.0	1.64	★ 2KJ1007 - ■MU13 - ■■A1		404
	<b>E.128-LG225ZM4E</b>						
	345	1 247	0.80	4.28	2KJ1006 - ■MU13 - ■■H1		380
	399	1 078	0.93	3.7	2KJ1006 - ■MU13 - ■■G1		380
	457	941	1.1	3.23	★ 2KJ1006 - ■MU13 - ■■F1		380

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
45	<b>E.128-LG225ZM4E</b>							
	534	804	1.2	2.76	★ 2KJ1006 - ■MU13 - ■■E1		380	
	815	527	1.5	1.81	2KJ1006 - ■MU13 - ■■B1		380	
	1 085	396	1.7	1.36	★ 2KJ1006 - ■MU13 - ■■A1		380	
	<b>E.108-K4-LGI225ZM4E</b>							
	461	931	0.80	3.2	2KJ1005 - ■MU13 - ■■F1		343	
	532	806	0.83	2.77	★ 2KJ1005 - ■MU13 - ■■E1		343	
	55	<b>D.188-LG250ZM4E</b>						
		21	24 634	0.81	69.41	2KJ1211 - ■NN13 - ■■C1		978
		27	19 186	1.0	54.06	★ 2KJ1211 - ■NN13 - ■■B1		978
34		15 243	1.3	42.95	★ 2KJ1211 - ■NN13 - ■■A1		978	
<b>Z.188-LG250ZM4E</b>								
31		17 113	0.93	48.22	2KJ1111 - ■NN13 - ■■N1		944	
35		14 853	1.1	41.85	★ 2KJ1111 - ■NN13 - ■■M1		944	
40		13 092	1.3	36.89	2KJ1111 - ■NN13 - ■■L1		944	
46		11 488	1.6	32.37	2KJ1111 - ■NN13 - ■■K1		944	
51		10 356	1.9	29.18	★ 2KJ1111 - ■NN13 - ■■J1		944	
60		8 791	2.3	24.77	★ 2KJ1111 - ■NN13 - ■■H1		944	
64		8 166	2.4	23.01	2KJ1111 - ■NN13 - ■■G1		944	
75		7 013	2.9	19.76	★ 2KJ1111 - ■NN13 - ■■F1		944	
88		5 984	3.3	16.86	2KJ1111 - ■NN13 - ■■E1		944	
178		2 946	3.6	8.3	2KJ1111 - ■NN13 - ■■A1		944	
<b>Z.168-LG250ZM4E</b>								
38		14 001	1.0	39.45	2KJ1110 - ■NN13 - ■■T1		814	
44		12 024	1.2	33.88	★ 2KJ1110 - ■NN13 - ■■S1		814	
51		10 388	1.3	29.27	2KJ1110 - ■NN13 - ■■Q1		814	
57		9 171	1.5	25.84	2KJ1110 - ■NN13 - ■■P1		814	
64		8 255	1.7	23.26	★ 2KJ1110 - ■NN13 - ■■N1		814	
77		6 850	2.0	19.3	★ 2KJ1110 - ■NN13 - ■■M1		814	
84		6 246	2.2	17.6	2KJ1110 - ■NN13 - ■■L1		814	
96		5 480	2.5	15.44	★ 2KJ1110 - ■NN13 - ■■K1		814	
112		4 710	2.8	13.27	2KJ1110 - ■NN13 - ■■J1		814	
143		3 670	3.4	10.34	★ 2KJ1110 - ■NN13 - ■■H1		814	
160		3 286	2.4	9.26	★ 2KJ1110 - ■NN13 - ■■G1		814	
180		2 914	4.0	8.21	★ 2KJ1110 - ■NN13 - ■■F1		814	
206		2 555	2.8	7.2	★ 2KJ1110 - ■NN13 - ■■E1		814	
239		2 200	3.4	6.2	★ 2KJ1110 - ■NN13 - ■■D1		814	
264		1 991	3.4	5.61	★ 2KJ1110 - ■NN13 - ■■C1		814	
300		1 750	4.0	4.93	★ 2KJ1110 - ■NN13 - ■■B1		814	
332		1 583	4.1	4.46	★ 2KJ1110 - ■NN13 - ■■A1		814	
<b>Z.148-LG250ZM4E</b>								
56		9 401	0.85	26.49	2KJ1108 - ■NN13 - ■■R1		650	
64		8 177	0.98	23.04	2KJ1108 - ■NN13 - ■■Q1		650	
73		7 173	1.1	20.21	★ 2KJ1108 - ■NN13 - ■■P1		650	

★ Preferred transmission ratio

Shaft designs, see page 2/117

1, 2 or 9

Frequency and voltage, see page 8/20

1 to 9

Gearbox housing mounting position, see page 2/119

A, F, H or R

\*) For mounting type B3



# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
55	<b>Z.148-LG250ZM4E</b>							
	87	6 065	1.3	17.09	★ 2KJ1108 - ■NN13 - ■■N1		650	
	95	5 504	1.5	15.51	2KJ1108 - ■NN13 - ■■M1		650	
	109	4 798	1.7	13.52	★ 2KJ1108 - ■NN13 - ■■L1		650	
	129	4 074	2.0	11.48	2KJ1108 - ■NN13 - ■■K1		650	
	168	3 120	2.6	8.79	★ 2KJ1108 - ■NN13 - ■■J1		650	
	171	3 066	1.6	8.64	★ 2KJ1108 - ■NN13 - ■■H1		650	
	189	2 782	1.7	7.84	2KJ1108 - ■NN13 - ■■G1		650	
	196	2 687	2.1	7.57	★ 2KJ1108 - ■NN13 - ■■F1		650	
	216	2 428	2.0	6.84	★ 2KJ1108 - ■NN13 - ■■E1		650	
	230	2 282	2.4	6.43	2KJ1108 - ■NN13 - ■■D1		650	
	255	2 058	2.0	5.8	2KJ1108 - ■NN13 - ■■C1		650	
	301	1 746	2.9	4.92	★ 2KJ1108 - ■NN13 - ■■B1		650	
	333	1 576	2.4	4.44	★ 2KJ1108 - ■NN13 - ■■A1		650	
	<b>Z.128-K4-LGI250ZM4E</b>							
	92	5 721	0.87		16.12	2KJ1107 - ■NN13 - ■■Q1		563
	105	4 990	0.98		14.06	★ 2KJ1107 - ■NN13 - ■■P1		563
	123	4 269	1.1		12.03	★ 2KJ1107 - ■NN13 - ■■N1		563
	137	3 826	1.2		10.78	2KJ1107 - ■NN13 - ■■M1		563
	162	3 240	1.4		9.13	★ 2KJ1107 - ■NN13 - ■■L1		563
	188	2 797	1.5		7.88	2KJ1107 - ■NN13 - ■■K1		563
	203	2 587	0.98		7.29	★ 2KJ1107 - ■NN13 - ■■J1		563
	237	2 215	1.1		6.24	★ 2KJ1107 - ■NN13 - ■■H1		563
	250	2 105	1.9		5.93	★ 2KJ1107 - ■NN13 - ■■G1		563
	265	1 984	1.3		5.59	★ 2KJ1107 - ■NN13 - ■■F1		563
	306	1 714	1.5		4.83	2KJ1107 - ■NN13 - ■■E1		563
	313	1 679	1.4		4.73	★ 2KJ1107 - ■NN13 - ■■D1		563
	362	1 452	1.6		4.09	★ 2KJ1107 - ■NN13 - ■■C1		563
	408	1 288	1.8		3.63	★ 2KJ1107 - ■NN13 - ■■B1		563
	482	1 090	2.0		3.07	★ 2KJ1107 - ■NN13 - ■■A1		563
	<b>E.148-LG250ZM4E</b>							
	300	1 753	0.80		4.94	2KJ1007 - ■NN13 - ■■H1		494
	344	1 526	0.87		4.3	2KJ1007 - ■NN13 - ■■G1		494
393	1 338	1.0		3.77	★ 2KJ1007 - ■NN13 - ■■F1		494	
464	1 132	1.4		3.19	★ 2KJ1007 - ■NN13 - ■■E1		494	
510	1 029	1.4		2.9	2KJ1007 - ■NN13 - ■■D1		494	
692	759	1.6		2.14	2KJ1007 - ■NN13 - ■■B1		494	
902	582	1.6		1.64	★ 2KJ1007 - ■NN13 - ■■A1		494	
<b>E.128-K4-LGI250ZM4E</b>								
458	1 146	0.87		3.23	★ 2KJ1006 - ■NN13 - ■■F1		470	
536	980	1.0		2.76	★ 2KJ1006 - ■NN13 - ■■E1		470	
75	<b>D.188-K4-LGI280S4E</b>							
	35	20 716	0.97		42.95	★ 2KJ1211 - ■PG13 - ■■A1	1 103	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
75	<b>Z.188-K4-LGI280S4E</b>						
	40	17 793	0.93	36.89	2KJ1111 - ■ PG13 - ■■ L1		1 069
	46	15 613	1.2	32.37	2KJ1111 - ■ PG13 - ■■ K1		1 069
	51	14 074	1.4	29.18	★ 2KJ1111 - ■ PG13 - ■■ J1		1 069
	60	11 947	1.7	24.77	★ 2KJ1111 - ■ PG13 - ■■ H1		1 069
	64	11 098	1.8	23.01	2KJ1111 - ■ PG13 - ■■ G1		1 069
	75	9 531	2.1	19.76	★ 2KJ1111 - ■ PG13 - ■■ F1		1 069
	88	8 132	2.5	16.86	2KJ1111 - ■ PG13 - ■■ E1		1 069
	112	6 405	2.9	13.28	★ 2KJ1111 - ■ PG13 - ■■ D1		1 069
	139	5 156	3.1	10.69	★ 2KJ1111 - ■ PG13 - ■■ C1		1 069
	160	4 481	3.2	9.29	2KJ1111 - ■ PG13 - ■■ B1		1 069
	179	4 003	2.7	8.3	2KJ1111 - ■ PG13 - ■■ A1		1 069
		<b>Z.168-K4-LGI280S4E</b>					
51		14 118	0.99	29.27	2KJ1110 - ■ PG13 - ■■ Q1		939
58		12 463	1.1	25.84	2KJ1110 - ■ PG13 - ■■ P1		939
64		11 219	1.2	23.26	★ 2KJ1110 - ■ PG13 - ■■ N1		939
77		9 309	1.5	19.3	★ 2KJ1110 - ■ PG13 - ■■ M1		939
84		8 489	1.6	17.6	2KJ1110 - ■ PG13 - ■■ L1		939
96		7 447	1.8	15.44	★ 2KJ1110 - ■ PG13 - ■■ K1		939
112		6 400	2.0	13.27	2KJ1110 - ■ PG13 - ■■ J1		939
144		4 987	2.5	10.34	★ 2KJ1110 - ■ PG13 - ■■ H1		939
160		4 466	1.8	9.26	★ 2KJ1110 - ■ PG13 - ■■ G1		939
181		3 960	2.9	8.21	★ 2KJ1110 - ■ PG13 - ■■ F1		939
206		3 473	2.0	7.2	★ 2KJ1110 - ■ PG13 - ■■ E1		939
240		2 990	2.5	6.2	★ 2KJ1110 - ■ PG13 - ■■ D1		939
265		2 706	2.5	5.61	★ 2KJ1110 - ■ PG13 - ■■ C1		939
301		2 378	3.0	4.93	★ 2KJ1110 - ■ PG13 - ■■ B1		939
333		2 151	3.0	4.46	★ 2KJ1110 - ■ PG13 - ■■ A1		939
	<b>Z.148-K4-LGI280S4E</b>						
	74	9 748	0.82	20.21	★ 2KJ1108 - ■ PG13 - ■■ P1		775
	87	8 243	0.97	17.09	★ 2KJ1108 - ■ PG13 - ■■ N1		775
	96	7 481	1.1	15.51	2KJ1108 - ■ PG13 - ■■ M1		775
	110	6 521	1.2	13.52	★ 2KJ1108 - ■ PG13 - ■■ L1		775
	129	5 537	1.4	11.48	2KJ1108 - ■ PG13 - ■■ K1		775
	169	4 240	1.9	8.79	★ 2KJ1108 - ■ PG13 - ■■ J1		775
	172	4 167	1.2	8.64	★ 2KJ1108 - ■ PG13 - ■■ H1		775
	189	3 781	1.3	7.84	2KJ1108 - ■ PG13 - ■■ G1		775
	196	3 651	1.5	7.57	★ 2KJ1108 - ■ PG13 - ■■ F1		775
	217	3 299	1.5	6.84	★ 2KJ1108 - ■ PG13 - ■■ E1		775
	231	3 101	1.7	6.43	2KJ1108 - ■ PG13 - ■■ D1		775
	256	2 797	1.5	5.8	2KJ1108 - ■ PG13 - ■■ C1		775
	302	2 373	2.1	4.92	★ 2KJ1108 - ■ PG13 - ■■ B1		775
334	2 142	1.8	4.44	★ 2KJ1108 - ■ PG13 - ■■ A1		775	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
75	<b>E.148-K4-LGI280S4E</b>						
	466	1 539	1.0	3.19	★ 2KJ1007 - ■ PG13 - ■■ E1		619
	512	1 399	1.0	2.9	2KJ1007 - ■ PG13 - ■■ D1		619
90	<b>D.188-K4-LGI280ZM4E</b>						
	35	24 859	0.80	42.95	★ 2KJ1211 - ■ PW13 - ■■ A1		1 143
	<b>Z.188-K4-LGI280ZM4E</b>						
	46	18 735	0.98	32.37	2KJ1111 - ■ PW13 - ■■ K1		1 109
	51	16 889	1.2	29.18	★ 2KJ1111 - ■ PW13 - ■■ J1		1 109
	60	14 337	1.4	24.77	★ 2KJ1111 - ■ PW13 - ■■ H1		1 109
	64	13 318	1.5	23.01	2KJ1111 - ■ PW13 - ■■ G1		1 109
	75	11 437	1.7	19.76	★ 2KJ1111 - ■ PW13 - ■■ F1		1 109
	88	9 758	2.0	16.86	2KJ1111 - ■ PW13 - ■■ E1		1 109
	112	7 686	2.4	13.28	★ 2KJ1111 - ■ PW13 - ■■ D1		1 109
	139	6 187	2.6	10.69	★ 2KJ1111 - ■ PW13 - ■■ C1		1 109
	160	5 377	2.7	9.29	2KJ1111 - ■ PW13 - ■■ B1		1 109
	179	4 804	2.2	8.3	2KJ1111 - ■ PW13 - ■■ A1		1 109
	<b>Z.168-K4-LGI280ZM4E</b>						
	51	16 941	0.83	29.27	2KJ1110 - ■ PW13 - ■■ Q1		979
	58	14 956	0.94	25.84	2KJ1110 - ■ PW13 - ■■ P1		979
	64	13 463	1.0	23.26	★ 2KJ1110 - ■ PW13 - ■■ N1		979
	77	11 171	1.3	19.3	★ 2KJ1110 - ■ PW13 - ■■ M1		979
	84	10 187	1.4	17.6	2KJ1110 - ■ PW13 - ■■ L1		979
	96	8 936	1.5	15.44	★ 2KJ1110 - ■ PW13 - ■■ K1		979
	112	7 681	1.7	13.27	2KJ1110 - ■ PW13 - ■■ J1		979
	144	5 985	2.1	10.34	★ 2KJ1110 - ■ PW13 - ■■ H1		979
	160	5 360	1.5	9.26	★ 2KJ1110 - ■ PW13 - ■■ G1		979
	181	4 752	2.4	8.21	★ 2KJ1110 - ■ PW13 - ■■ F1		979
	206	4 167	1.7	7.2	★ 2KJ1110 - ■ PW13 - ■■ E1		979
	240	3 588	2.1	6.2	★ 2KJ1110 - ■ PW13 - ■■ D1		979
	265	3 247	2.1	5.61	★ 2KJ1110 - ■ PW13 - ■■ C1		979
	301	2 853	2.5	4.93	★ 2KJ1110 - ■ PW13 - ■■ B1		979
	333	2 581	2.5	4.46	★ 2KJ1110 - ■ PW13 - ■■ A1		979
	<b>Z.148-K4-LGI280ZM4E</b>						
	87	9 891	0.81	17.09	★ 2KJ1108 - ■ PW13 - ■■ N1		815
	96	8 977	0.89	15.51	2KJ1108 - ■ PW13 - ■■ M1		815
	110	7 825	1.0	13.52	★ 2KJ1108 - ■ PW13 - ■■ L1		815
129	6 644	1.2	11.48	2KJ1108 - ■ PW13 - ■■ K1		815	
169	5 088	1.6	8.79	★ 2KJ1108 - ■ PW13 - ■■ J1		815	
172	5 001	0.96	8.64	★ 2KJ1108 - ■ PW13 - ■■ H1		815	
189	4 538	1.1	7.84	2KJ1108 - ■ PW13 - ■■ G1		815	
196	4 381	1.3	7.57	★ 2KJ1108 - ■ PW13 - ■■ F1		815	
217	3 959	1.2	6.84	★ 2KJ1108 - ■ PW13 - ■■ E1		815	
231	3 722	1.5	6.43	2KJ1108 - ■ PW13 - ■■ D1		815	
256	3 357	1.3	5.8	2KJ1108 - ■ PW13 - ■■ C1		815	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed $n_2$ (50 Hz) rpm	Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
90	<b>Z.148-K4-LGI280ZM4E</b>						
	302	2 848	1.8	4.92	★ 2KJ1108 - ■PW13 - ■■B1		815
	334	2 570	1.5	4.44	★ 2KJ1108 - ■PW13 - ■■A1		815
	<b>E.148-K4-LGI280ZM4E</b>						
	466	1 846	0.84	3.19	★ 2KJ1007 - ■PW13 - ■■E1		659
	512	1 678	0.83	2.9	2KJ1007 - ■PW13 - ■■D1		659
110	<b>Z.188-K2-LGI315S4E</b>						
	88	11 887	1.7	16.86	2KJ1111 - ■■QQ13 - ■■E1		1 289
	112	9 363	2.0	13.28	★ 2KJ1111 - ■■QQ13 - ■■D1		1 289
	139	7 537	2.1	10.69	★ 2KJ1111 - ■■QQ13 - ■■C1		1 289
	160	6 550	2.2	9.29	2KJ1111 - ■■QQ13 - ■■B1		1 289
	180	5 852	1.8	8.3	2KJ1111 - ■■QQ13 - ■■A1		1 289
132	<b>Z.188-K2-LGI315ZM4E</b>						
	88	14 312	1.4	16.86	2KJ1111 - ■■QS13 - ■■E1		1 344
	112	11 273	1.7	13.28	★ 2KJ1111 - ■■QS13 - ■■D1		1 344
	139	9 075	1.8	10.69	★ 2KJ1111 - ■■QS13 - ■■C1		1 344
	160	7 886	1.8	9.29	2KJ1111 - ■■QS13 - ■■B1		1 344
	179	7 046	1.5	8.3	2KJ1111 - ■■QS13 - ■■A1		1 344
160	<b>Z.188-K2-LGI315L4E</b>						
	88	17 348	1.2	16.86	2KJ1111 - ■■QU13 - ■■E1		1 469
	112	13 665	1.4	13.28	★ 2KJ1111 - ■■QU13 - ■■D1		1 469
	139	11 000	1.5	10.69	★ 2KJ1111 - ■■QU13 - ■■C1		1 469
	160	9 559	1.5	9.29	2KJ1111 - ■■QU13 - ■■B1		1 469
	179	8 540	1.3	8.3	2KJ1111 - ■■QU13 - ■■A1		1 469
200	<b>Z.188-K2-LGI315ZLB4E</b>						
	88	21 612	0.93	16.86	2KJ1111 - ■■QV13 - ■■E1		1 584
	112	17 023	1.1	13.28	★ 2KJ1111 - ■■QV13 - ■■D1		1 584
	139	13 703	1.2	10.69	★ 2KJ1111 - ■■QV13 - ■■C1		1 584
	160	11 909	1.2	9.29	2KJ1111 - ■■QV13 - ■■B1		1 584
	180	10 640	1.0	8.3	2KJ1111 - ■■QV13 - ■■A1		1 584

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

## Selection and ordering data

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]															
						2.5x the value is permissible for a brief period (e.g. motor starting torque)															
Max. gearbox torque	Order No.	$i_{tot}$	$n_2$ (50 Hz)	$\varphi$	$T_{2N}$ ( $f_B=1$ )	Motor size															
Nm	15th and 16th position					rpm	arcmin	Nm	3	3	5	10	20	26	61	98	198	198	291	356	580
1-stage helical gearbox with 4-pole motors																					
E.38 32 ... 82	S1	9.33 ★	155	15	32	•	•														
	R1	8.30	175	15	32	•	•	•													
	Q1	7.20 ★	201	16	38	•	•	•	•												
	P1	6.73	215	16	48	•	•	•	•												
	N1	5.92 ★	245	17	53	•	•	•	•	•											
	M1	5.18	280	17	70	•	•	•	•	•											
	L1	4.58 ★	317	17	78	•	•	•	•	•	•										
	K1	4.15	349	18	62	•	•	•	•	•	•	•									
	J1	3.67 ★	395	18	70	•	•	•	•	•	•	•									
	H1	3.31	438	18	65	•	•	•	•	•	•	•									
	G1	3.00 ★	483	19	80	•	•	•	•	•	•	•									
	F1	2.73	531	20	80	•	•	•	•	•	•	•									
	E1	2.50 ★	580	22	73	•	•	•	•	•	•	•									
D1	2.24	647	22	72	•	•	•	•	•	•	•										
C1	2.05 ★	707	22	80	•	•	•	•	•	•	•										
B1	1.85	784	22	82	•	•	•	•	•	•	•										
A1	1.59 ★	912	24	72	•	•	•	•	•	•	•										
E.48 55 ... 170	U1	11.30	128	12	55	•	•	•													
	T1	10.00 ★	145	12	80	•	•	•	•												
	S1	9.09	160	13	64	•	•	•	•												
	R1	8.17 ★	177	13	85	•	•	•	•												
	Q1	7.00	207	13	97	•	•	•	•	•											
	P1	6.33 ★	229	13	115	•	•	•	•	•	•										
	N1	5.85	248	13	120	•	•	•	•	•	•										
	M1	5.08 ★	285	14	120	•	•	•	•	•	•	•									
	L1	4.62	314	14	130	•	•	•	•	•	•	•									
	K1	4.21 ★	344	14	150	•	•	•	•	•	•	•									
	J1	3.87	375	15	160	•	•	•	•	•	•	•									
	H1	3.56 ★	407	15	140	•	•	•	•	•	•	•									
	G1	3.24	448	15	150	•	•	•	•	•	•	•									
	F1	2.95 ★	492	15	170	•	•	•	•	•	•	•									
	E1	2.70	537	15	160	•	•	•	•	•	•	•									
	D1	2.41 ★	602	15	150	•	•	•	•	•	•	•									
	C1	2.15	674	18	135			•	•	•	•	•									
B1	1.83	792	19	115			•	•	•	•	•										
A1	1.52 ★	954	22	100			•	•	•	•	•										

★ Preferred transmission ratio

1) Only possible with integrated adapter.

2) Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]															
						2.5x the value is permissible for a brief period (e.g. motor starting torque)															
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\phi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	3	3	5	10	20	26	61	98	198	198	291	356	580	1290		
Nm						Motor size															
						63	71	80	90	100	112	132	160	180	200	225	250	280	315		
<b>E68</b> 81 ... 250	<b>W1</b>	12.40 ★	117	10	81	•	•	•	•												
	<b>V1</b>	11.18	130	10	92	•	•	•	•												
	<b>U1</b>	10.08 ★	144	11	95	•	•	•	•												
	<b>T1</b>	8.82	164	11	150	•	•	•	•	•											
	<b>S1</b>	7.92 ★	183	11	170	•	•	•	•	•	•										
	<b>R1</b>	7.23	201	11	150	•	•	•	•	•	•										
	<b>P1</b>	6.42 ★	226	11	170	•	•	•	•	•	•	•									
	<b>N1</b>	5.92	245	11	190	•	•	•	•	•	•	•	•								
	<b>M1</b>	5.36 ★	271	11	220	•	•	•	•	•	•	•	•								
	<b>L1</b>	4.93	294	12	225	•	•	•	•	•	•	•	•								
	<b>K1</b>	4.56 ★	318	12	220	•	•	•	•	•	•	•	•	•	•						
	<b>J1</b>	4.24	342	12	230	•	•	•	•	•	•	•	•	•	•	•					
	<b>H1</b>	3.74 ★	388	12	230	•	•	•	•	•	•	•	•	•	•	•	•				
	<b>G1</b>	3.45	420	13	240	•	•	•	•	•	•	•	•	•	•	•	•				
	<b>F1</b>	3.09 ★	469	13	250	•	•	•	•	•	•	•	•	•	•	•	•				
	<b>E1</b>	2.85	509	15	250			•	•	•	•	•	•	•	•	•	•				
	<b>D1</b>	2.39	607	15	230			•	•	•	•	•	•	•	•	•	•				
<b>C1</b>	2.04 ★	711	17	210			•	•	•	•	•	•	•	•	•	•					
<b>B1</b>	1.70	853	17	175					•	•	•	•	•	•	•	•					
<b>A1</b>	1.41 ★	1 028	19	150					•	•	•	•	•	•	•	•					
<b>E88</b> 210 ... 450	<b>S1</b>	10.33 ★	140	8	230				•	•	•										
	<b>R1</b>	9.46	153	8	210				•	•	•										
	<b>Q1</b>	8.42 ★	172	8	245				•	•	•	•									
	<b>P1</b>	7.69	189	8	245				•	•	•	•									
	<b>N1</b>	7.07 ★	205	9	290				•	•	•	•									
	<b>M1</b>	6.53	222	9	300				•	•	•	•									
	<b>L1</b>	6.06 ★	239	9	280				•	•	•	•	•								
	<b>K1</b>	5.65	257	9	320				•	•	•	•	•	•							
	<b>J1</b>	5.11 ★	284	9	370				•	•	•	•	•	•	•						
	<b>H1</b>	4.70	309	9	385				•	•	•	•	•	•	•	•					
	<b>G1</b>	4.23 ★	343	9	400				•	•	•	•	•	•	•	•	•				
	<b>F1</b>	3.90	372	11	385				•	•	•	•	•	•	•	•	•				
	<b>E1</b>	3.30	439	11	450				•	•	•	•	•	•	•	•	•				
	<b>D1</b>	2.88 ★	503	12	435				•	•	•	•	•	•	•	•	•				
	<b>C1</b>	2.45	592	13	420				•	•	•	•	•	•	•	•	•				
<b>B1</b>	2.09 ★	694	13	420				•	•	•	•	•	•	•	•	•					
<b>A1</b>	1.71 ★	848	14	355				•	•	•	•	•	•	•	•	•					

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QKS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]													
						2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>E108</b> 550 ... 745	<b>K1</b>	5.46 ★	266	8	660				•	•	•	•	•	•	•	•	•	•	•
	<b>J1</b>	5.00	290	9	680				•	•	•	•	•	•	•	•	•	•	•
	<b>H1</b>	4.26	340	9	720				•	•	•	•	•	•	•	•	•	•	•
	<b>G1</b>	3.76 ★	386	9	600				•	•	•	•	•	•	•	•	•	•	•
	<b>F1</b>	3.20	453	10	745					•	•	•	•	•	•	•	•	•	•
	<b>E1</b>	2.77 ★	523	10	670					•	•	•	•	•	•	•	•	•	•
	<b>C1</b>	2.33 ★	622	10	680					•	•	•	•	•	•	•	•	•	•
	<b>B1</b>	2.11	687	11	620						•	•	•	•	•	•	•	•	•
<b>A1</b>	1.81 ★	801	12	550							•	•	•	•	•	•	•	•	
<b>E128</b> 544 ... 1000	<b>T1</b>	10.14 ★	143	6	544				•	•	•								
	<b>S1</b>	9.40	154	7	584				•	•	•								
	<b>R1</b>	8.94 ★	162	7	640				•	•	•	•							
	<b>Q1</b>	8.35	174	7	712				•	•	•	•							
	<b>P1</b>	7.37 ★	197	7	816				•	•	•	•	•						
	<b>N1</b>	6.95	209	7	880				•	•	•	•	•						
	<b>M1</b>	6.23 ★	233	7	928				•	•	•	•	•	•					
	<b>L1</b>	5.75	252	8	960				•	•	•	•	•	•					
	<b>K1</b>	4.91	295	8	960				•	•	•	•	•	•					
	<b>J1</b>	4.44 ★	327	8	1 000				•	•	•	•	•	•					
	<b>H1</b>	4.28	339	9	1 000				•	•	•	•	•	•	•				
	<b>G1</b>	3.70	392	9	1 000				•	•	•	•	•	•	•	•			
	<b>F1</b>	3.23 ★	449	9	1 000				•	•	•	•	•	•	•	•	•		
	<b>E1</b>	2.76 ★	525	9	1 000				•	•	•	•	•	•	•	•	•	•	
	<b>D1</b>	2.47	587	9	950					•	•	•	•	•	•	•	•	•	
	<b>C1</b>	2.10 ★	690	10	860						•	•	•	•	•	•	•	•	
<b>B1</b>	1.81	801	10	800							•	•	•	•	•	•	•		
<b>A1</b>	1.36 ★	1 066	12	680								•	•	•	•	•	•		
<b>E148</b> 600 ... 1550	<b>U1</b>	13.67 ★	106	5	600						•								
	<b>T1</b>	12.54	116	5	600						•								
	<b>S1</b>	11.57 ★	125	6	680						•								
	<b>R1</b>	10.73	135	6	760						•								
	<b>Q1</b>	10.13 ★	143	6	800						•	•							
	<b>P1</b>	9.47	153	6	920						•	•							
	<b>N1</b>	8.42 ★	172	6	1 000						•	•	•						
	<b>M1</b>	7.95	182	6	1 060						•	•	•	•					
	<b>L1</b>	7.14 ★	203	6	1 120						•	•	•	•	•				
	<b>K1</b>	6.55	221	7	1 150						•	•	•	•	•				
	<b>J1</b>	5.65	257	7	1 360						•	•	•	•	•	•			
	<b>H1</b>	4.94	294	7	1 400						•	•	•	•	•	•	•		
	<b>G1</b>	4.30	337	8	1 330						•	•	•	•	•	•	•	•	
	<b>F1</b>	3.77 ★	385	8	1 350						•	•	•	•	•	•	•	•	
	<b>E1</b>	3.19 ★	455	8	1 550						•	•	•	•	•	•	•	•	
	<b>D1</b>	2.90	500	9	1 400						•	•	•	•	•	•	•	•	
	<b>C1</b>	2.52 ★	575	9	1 220						•	•	•	•	•	•	•	•	
	<b>B1</b>	2.14	678	9	1 200							•	•	•	•	•	•	•	
<b>A1</b>	1.64 ★	884	10	960								•	•	•	•	•	•		

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]													
						2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>2-stage and 3-stage helical gearbox with 4-pole motors, 50 Hz</b> (at service factor $f_B = 1$ and ambient temperature of 20 °C)																			
<b>D18</b> <b>90</b>	<b>P1</b>	200.36	7.2	31	90	•													
	<b>N1</b>	172.85 ★	8.4	31	90	•													
	<b>M1</b>	148.50	9.8	31	90	•													
	<b>L1</b>	136.71 ★	10.6	31	90	•													
	<b>K1</b>	124.29	11.7	31	90	•													
	<b>J1</b>	110.01 ★	13.2	31	90	•													
	<b>H1</b>	92.14	15.7	31	90	•													
	<b>G1</b>	78.56 ★	18.5	31	90	•													
	<b>F1</b>	66.78 ★	22.0	31	90	•													
	<b>E1</b>	58.03	25.0	31	90	•													
	<b>D1</b>	50.51 ★	29.0	31	90	•													
	<b>C1</b>	45.56	32.0	31	90	•													
<b>B1</b>	40.21	36.0	31	90	•														
<b>A1</b>	32.26 ★	45.0	31	90	•														
<b>Z18</b> <b>46 ... 90</b>	<b>U1</b>	43.15	34	28	90	•													
	<b>T1</b>	37.23 ★	39	28	90	•													
	<b>S1</b>	31.98	45	29	90	•													
	<b>R1</b>	29.45 ★	49	29	90	•													
	<b>Q1</b>	26.77	54	29	90	•													
	<b>P1</b>	23.69 ★	61	29	90	•													
	<b>N1</b>	19.85	73	29	90	•													
	<b>M1</b>	16.92 ★	86	29	90	•													
	<b>L1</b>	14.38 ★	101	29	90	•													
	<b>K1</b>	12.50	116	30	90	•													
	<b>J1</b>	10.88 ★	133	30	87	•													
	<b>H1</b>	9.81	148	30	83	•													
	<b>G1</b>	8.66	167	30	80	•													
	<b>F1</b>	7.42 ★	195	38	55	•													
	<b>E1</b>	6.45	225	39	53	•													
	<b>D1</b>	5.61 ★	258	40	51	•													
	<b>C1</b>	5.06	286	40	49	•													
	<b>B1</b>	4.47	325	40	49	•													
<b>A1</b>	3.58 ★	405	41	46	•														

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.



## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]													
						2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $i_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D28</b> <b>140</b>	<b>N1</b>	241.05	6.0	26	140	•													
	<b>M1</b>	207.96 ★	7.0	26	140	•	•												
	<b>L1</b>	178.66	8.1	26	140	•	•												
	<b>K1</b>	164.48 ★	8.8	26	140	•	•	•											
	<b>J1</b>	149.53	9.7	26	140	•	•	•											
	<b>H1</b>	132.35 ★	11.0	26	140	•	•	•											
	<b>G1</b>	110.86	13.1	26	140	•	•	•											
	<b>F1</b>	94.52 ★	15.3	26	140	•	•	•											
	<b>E1</b>	80.34 ★	18.0	26	140	•	•	•											
	<b>D1</b>	69.82	21.0	26	140	•	•	•											
	<b>C1</b>	60.77 ★	24.0	26	140	•	•	•											
	<b>B1</b>	54.82	26.0	26	140	•	•	•											
<b>A1</b>	48.38	30.0	26	140	•	•	•												
<b>Z28</b> <b>77 ... 140</b>	<b>C2</b>	51.35	28	24	140	•													
	<b>B2</b>	43.30 ★	33	24	140	•	•												
	<b>A2</b>	38.45	38	24	140	•	•												
	<b>X1</b>	33.71 ★	43	24	140	•	•	•											
	<b>W1</b>	30.16	48	24	140	•	•	•											
	<b>V1</b>	26.77 ★	54	24	140	•	•	•											
	<b>U1</b>	23.46	62	24	140	•	•	•											
	<b>T1</b>	20.63 ★	70	24	140	•	•	•	•										
	<b>S1</b>	18.63	78	25	140	•	•	•	•	•									
	<b>R1</b>	16.24 ★	89	25	140	•	•	•	•	•									
	<b>Q1</b>	14.58	99	25	140	•	•	•	•	•									
	<b>P1</b>	13.17 ★	110	25	140	•	•	•	•	•	•								
	<b>N1</b>	11.94	121	25	140	•	•	•	•	•	•								
	<b>M1</b>	10.87 ★	133	25	140	•	•	•	•	•	•								
	<b>L1</b>	9.61	151	26	140	•	•	•	•	•	•								
	<b>K1</b>	8.87 ★	163	26	140	•	•	•	•	•	•								
	<b>J1</b>	7.64	190	26	136	•	•	•	•	•	•								
	<b>H1</b>	6.94 ★	209	26	132	•	•	•	•	•	•								
	<b>G1</b>	6.31 ★	230	35	95	•	•	•	•	•	•								
	<b>F1</b>	5.72	253	35	93	•	•	•	•	•	•								
<b>E1</b>	5.21 ★	278	36	92	•	•	•	•	•	•									
<b>D1</b>	4.60	315	36	88	•	•	•	•	•	•									
<b>C1</b>	4.25 ★	341	36	90	•	•	•	•	•	•									
<b>B1</b>	3.66	396	37	80	•	•	•	•	•	•									
<b>A1</b>	3.33 ★	436	37	77	•	•	•	•	•	•									

★ Preferred transmission ratio

1) Only possible with integrated adapter.

2) Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]																		
						2.5x the value is permissible for a brief period (e.g. motor starting torque)																		
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $i_B=1$ ) Nm	Motor size																		
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290					
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315					
<b>Z.38-D28</b> <b>220</b>	<b>M1</b>	5 905	0.24	–	220	•																		
	<b>L1</b>	5 094	★ 0.27	–	220	•	•																	
	<b>K1</b>	4 376	0.32	–	220	•	•																	
	<b>J1</b>	4 029	★ 0.35	–	220	•	•	•																
	<b>H1</b>	3 663	0.38	–	220	•	•	•																
	<b>G1</b>	3 242	★ 0.43	–	220	•	•	•																
	<b>F1</b>	2 715	0.52	–	220	•	•	•																
	<b>E1</b>	2 315	★ 0.60	–	220	•	•	•																
	<b>D1</b>	1 968	★ 0.71	–	220	•	•	•																
	<b>C1</b>	1 710	0.82	–	220	•	•	•																
	<b>B1</b>	1 489	★ 0.94	–	220	•	•	•																
	<b>A1</b>	1 343	1.00	–	220	•	•	•																
<b>Z38-Z28</b> <b>220</b>	<b>R1</b>	1 258	1.1	–	220	•																		
	<b>Q1</b>	1 061	★ 1.3	–	220	•	•																	
	<b>P1</b>	942	1.5	–	220	•	•																	
	<b>N1</b>	890	1.6	–	220	•																		
	<b>M1</b>	751	★ 1.9	–	220	•	•																	
	<b>L1</b>	666	2.1	–	220	•	•																	
	<b>K1</b>	584	★ 2.4	–	220	•	•	•																
	<b>J1</b>	523	2.7	–	220	•	•	•																
	<b>H1</b>	464	★ 3.0	–	220	•	•	•																
	<b>G1</b>	407	3.4	–	220	•	•	•																
	<b>F1</b>	358	★ 3.9	–	220	•	•	•																
	<b>E1</b>	323	4.3	–	220	•	•	•	•															
	<b>D1</b>	281	★ 5.0	–	220	•	•	•																
	<b>C1</b>	253	5.5	–	220	•	•	•																
<b>B1</b>	228	★ 6.1	–	220	•	•	•	•																
<b>A1</b>	207	6.8	–	220	•	•	•	•																

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]															
						2.5x the value is permissible for a brief period (e.g. motor starting torque)															
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size															
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290		
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315		
<b>D38</b> <b>220</b>	<b>S1</b>	191.75 ★	7.6	19	220	•	•	•													
	<b>R1</b>	170.24	8.5	19	220	•	•	•													
	<b>Q1</b>	149.26 ★	9.7	19	220	•	•	•	•												
	<b>P1</b>	133.57	10.9	19	220	•	•	•	•												
	<b>N1</b>	118.55 ★	12.2	19	220	•	•	•	•												
	<b>M1</b>	103.89	14.0	19	220	•	•	•	•												
	<b>L1</b>	91.34 ★	15.9	19	220	•	•	•	•												
	<b>K1</b>	82.52	17.6	19	220	•	•	•	•												
	<b>J1</b>	71.91 ★	20.0	20	220	•	•	•	•												
	<b>H1</b>	64.58	22.0	20	220	•	•	•	•												
	<b>G1</b>	58.30 ★	25.0	20	220	•	•	•	•												
	<b>F1</b>	52.86	27.0	20	220	•	•	•	•												
	<b>E1</b>	48.10 ★	30.0	20	220	•	•	•	•												
	<b>D1</b>	42.53	34.0	20	220	•	•	•	•												
	<b>C1</b>	39.28 ★	37.0	20	220	•	•	•	•												
<b>B1</b>	33.82	43.0	20	220	•	•	•	•													
<b>A1</b>	30.74 ★	47.0	20	220	•	•	•	•													
<b>Z38</b> <b>160 ... 220</b>	<b>A2</b>	44.12 ★	33	18	220	•	•	•													
	<b>X1</b>	39.24	37	18	208	•	•	•													
	<b>W1</b>	34.04 ★	43	19	220	•	•	•	•												
	<b>V1</b>	31.80	46	19	220	•	•	•	•												
	<b>U1</b>	27.97 ★	52	19	220	•	•	•	•												
	<b>T1</b>	24.50	59	19	220	•	•	•	•	•											
	<b>S1</b>	21.67 ★	67	19	220	•	•	•	•	•	•										
	<b>R1</b>	19.64	74	19	220	•	•	•	•	•	•										
	<b>Q1</b>	17.33 ★	84	19	220	•	•	•	•	•	•										
	<b>P1</b>	15.64	93	19	220	•	•	•	•	•	•										
	<b>N1</b>	14.18 ★	102	19	220	•	•	•	•	•	•										
	<b>M1</b>	12.92	112	19	220	•	•	•	•	•	•										
	<b>L1</b>	11.82 ★	123	20	220	•	•	•	•	•	•										
	<b>K1</b>	10.57	137	20	210	•	•	•	•	•	•										
	<b>J1</b>	9.70 ★	149	20	200	•	•	•	•	•	•										
	<b>H1</b>	8.75	166	20	195	•	•	•	•	•	•										
	<b>G1</b>	7.52 ★	193	20	190	•	•	•	•	•	•										
	<b>F1</b>	7.50 ★	193	24	185	•	•	•	•	•	•										
<b>D1</b>	6.71	216	24	180	•	•	•	•	•	•											
<b>C1</b>	6.16 ★	235	24	170	•	•	•	•	•	•											
<b>B1</b>	5.55	261	24	165	•	•	•	•	•	•											
<b>A1</b>	4.77 ★	304	24	160	•	•	•	•	•	•											

★ Preferred transmission ratio

1) Only possible with integrated adapter.

2) Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]															
						2.5x the value is permissible for a brief period (e.g. motor starting torque)															
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size															
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290		
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315		
<b>D48-D28</b> 450	<b>N1</b>	27 940	0.05	–	450	•															
	<b>M1</b>	24 104	★ 0.06	–	450	•	•														
	<b>L1</b>	20 708	0.07	–	450	•	•														
	<b>K1</b>	19 065	★ 0.07	–	450	•	•	•													
	<b>J1</b>	17 332	0.08	–	450	•	•	•													
	<b>H1</b>	15 341	★ 0.09	–	450	•	•	•													
	<b>G1</b>	12 849	0.11	–	450	•	•	•													
	<b>F1</b>	10 956	★ 0.13	–	450	•	•	•													
	<b>E1</b>	9 312	★ 0.15	–	450	•	•	•													
	<b>D1</b>	8 093	0.17	–	450	•	•	•													
	<b>C1</b>	7 044	★ 0.20	–	450	•	•	•													
	<b>B1</b>	6 354	0.22	–	450	•	•	•													
<b>A1</b>	5 608	0.25	–	450	•	•	•														
<b>D48-Z28</b> 450	<b>H2</b>	5 019	★ 0.28	–	450	•	•														
	<b>G2</b>	4 456	0.31	–	450	•	•														
	<b>F2</b>	3 907	★ 0.36	–	450	•	•	•													
	<b>E2</b>	3 496	0.40	–	450	•	•	•													
	<b>D2</b>	3 103	★ 0.45	–	450	•	•	•													
	<b>C2</b>	2 720	0.51	–	450	•	•	•													
	<b>B2</b>	2 391	★ 0.59	–	450	•	•	•													
	<b>A2</b>	2 160	0.65	–	450	•	•	•	•												
	<b>X1</b>	1 882	★ 0.74	–	450	•	•	•													
	<b>W1</b>	1 690	0.83	–	450	•	•	•													
	<b>V1</b>	1 526	★ 0.92	–	450	•	•	•	•												
	<b>U1</b>	1 384	1.00	–	450	•	•	•	•												
	<b>T1</b>	1 259	★ 1.10	–	450	•	•	•	•												
	<b>S1</b>	1 113	1.30	–	450	•	•	•	•												
	<b>R1</b>	1 028	★ 1.40	–	450	•	•	•	•												
	<b>Q1</b>	885	1.60	–	450	•	•	•	•												
	<b>P1</b>	805	★ 1.70	–	450	•	•	•	•												
	<b>N1</b>	731	★ 1.90	–	450	•	•	•	•												
	<b>M1</b>	663	2.10	–	450	•	•	•	•												
	<b>L1</b>	603	★ 2.30	–	450	•	•	•	•												
	<b>K1</b>	534	2.60	–	450	•	•	•	•												
	<b>J1</b>	493	★ 2.80	–	450	•	•	•	•												
	<b>H1</b>	424	3.30	–	450	•	•	•	•												
	<b>G1</b>	423	★ 3.30	–	450	•	•	•	•												
	<b>F1</b>	384	3.70	–	450	•	•	•	•												
	<b>E1</b>	349	★ 4.00	–	450	•	•	•	•												
	<b>D1</b>	309	4.50	–	450	•	•	•	•												
<b>C1</b>	285	★ 4.90	–	450	•	•	•	•													
<b>B1</b>	246	5.70	–	450	•	•	•	•													
<b>A1</b>	223	★ 6.30	–	450	•	•	•	•													

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]													
						2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D48</b> <b>450</b>	<b>S1</b>	208.77 ★	6.9	17	450	•	•	•											
	<b>R1</b>	185.66	7.8	17	450	•	•	•											
	<b>Q1</b>	161.05 ★	9.0	17	450	•	•	•	•										
	<b>P1</b>	150.48	9.6	17	450	•	•	•	•										
	<b>N1</b>	132.34 ★	11.0	17	450	•	•	•	•										
	<b>M1</b>	115.91	12.5	17	450	•	•	•	•	•									
	<b>L1</b>	102.52 ★	14.1	17	450	•	•	•	•	•									
	<b>K1</b>	92.91	15.6	17	450	•	•	•	•	•									
	<b>J1</b>	82.02 ★	17.7	17	450	•	•	•	•	•									
	<b>H1</b>	73.99	19.6	18	450	•	•	•	•	•									
	<b>G1</b>	67.10 ★	22.0	18	450	•	•	•	•	•									
	<b>F1</b>	61.14	24.0	18	450	•	•	•	•	•									
	<b>E1</b>	55.92 ★	26.0	18	450	•	•	•	•	•									
	<b>D1</b>	50.00	29.0	18	450	•	•	•	•	•									
	<b>C1</b>	45.91 ★	32.0	18	450	•	•	•	•	•									
	<b>B1</b>	41.38	35.0	18	450	•	•	•	•	•									
<b>A1</b>	35.59	41.0	18	450	•	•	•	•	•										
<b>Z48</b> <b>260 ... 450</b>	<b>A2</b>	51.28	28	16	292	•	•	•											
	<b>X1</b>	45.38 ★	32	16	450	•	•	•	•										
	<b>W1</b>	41.26	35	16	450	•	•	•	•										
	<b>V1</b>	37.06 ★	39	17	450	•	•	•	•										
	<b>U1</b>	31.77	46	17	450	•	•	•	•	•									
	<b>T1</b>	28.74 ★	50	17	450	•	•	•	•	•									
	<b>S1</b>	26.53	55	17	450	•	•	•	•	•									
	<b>R1</b>	23.07 ★	63	17	450	•	•	•	•	•	•								
	<b>Q1</b>	20.95	69	17	450	•	•	•	•	•	•								
	<b>P1</b>	19.13 ★	76	17	450	•	•	•	•	•	•								
	<b>N1</b>	17.55	83	17	450	•	•	•	•	•	•								
	<b>M1</b>	16.17 ★	90	17	430	•	•	•	•	•	•								
	<b>L1</b>	14.68	99	17	420	•	•	•	•	•	•								
	<b>K1</b>	13.38 ★	108	17	410	•	•	•	•	•	•								
	<b>J1</b>	12.25	118	17	400	•	•	•	•	•	•								
	<b>H1</b>	10.93 ★	133	17	390	•	•	•	•	•	•								
	<b>G1</b>	9.76	149	18	380			•	•	•	•								
	<b>F1</b>	8.29	175	18	360			•	•	•	•								
	<b>E1</b>	6.90 ★	210	19	340			•	•	•	•								
	<b>D1</b>	6.79 ★	214	19	270	•	•	•	•	•	•								
<b>C1</b>	6.06	239	20	270			•	•	•	•									
<b>B1</b>	5.15	282	20	270			•	•	•	•									
<b>A1</b>	4.28 ★	339	21	260			•	•	•	•									

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QKS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]																				
						2.5x the value is permissible for a brief period (e.g. motor starting torque)																				
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size																				
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290							
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315							
<b>D68-D28</b> <b>800</b>	<b>N1</b>	41 961	0.03	–	800	•																				
	<b>M1</b>	36 200	★ 0.04	–	800	•	•																			
	<b>L1</b>	31 101	0.05	–	800	•	•																			
	<b>K1</b>	28 633	★ 0.05	–	800	•	•	•																		
	<b>J1</b>	26 030	0.05	–	800	•	•	•																		
	<b>H1</b>	23 039	★ 0.06	–	800	•	•	•																		
	<b>G1</b>	19 297	0.07	–	800	•	•	•																		
	<b>F1</b>	16 454	★ 0.09	–	800	•	•	•																		
	<b>E1</b>	13 986	★ 0.10	–	800	•	•	•																		
	<b>D1</b>	12 154	0.12	–	800	•	•	•																		
	<b>C1</b>	10 579	★ 0.13	–	800	•	•	•																		
	<b>B1</b>	9 543	0.15	–	800	•	•	•																		
	<b>A1</b>	8 422	0.17	–	800	•	•	•																		
<b>D68-Z28</b> <b>800</b>	<b>H2</b>	7 538	★ 0.19	–	800	•	•																			
	<b>G2</b>	6 693	0.21	–	800	•	•																			
	<b>F2</b>	5 868	★ 0.24	–	800	•	•	•																		
	<b>E2</b>	5 251	0.27	–	800	•	•	•																		
	<b>D2</b>	4 660	★ 0.30	–	800	•	•	•																		
	<b>C2</b>	4 084	0.34	–	800	•	•	•																		
	<b>B2</b>	3 591	★ 0.39	–	800	•	•	•																		
	<b>A2</b>	3 244	0.43	–	800	•	•	•	•																	
	<b>X1</b>	2 827	★ 0.50	–	800	•	•	•																		
	<b>W1</b>	2 539	0.55	–	800	•	•	•																		
	<b>V1</b>	2 292	★ 0.61	–	800	•	•	•	•																	
	<b>U1</b>	2 078	0.67	–	800	•	•	•	•																	
	<b>T1</b>	1 891	★ 0.74	–	800	•	•	•	•																	
	<b>S1</b>	1 672	0.84	–	800	•	•	•	•																	
	<b>R1</b>	1 544	★ 0.91	–	800	•	•	•	•																	
	<b>Q1</b>	1 329	1.10	–	800	•	•	•	•																	
	<b>P1</b>	1 208	★ 1.20	–	800	•	•	•	•																	
	<b>N1</b>	1 098	★ 1.30	–	800	•	•	•	•																	
	<b>M1</b>	996	1.40	–	800	•	•	•	•																	
	<b>L1</b>	906	★ 1.50	–	800	•	•	•	•																	
	<b>K1</b>	801	1.80	–	800	•	•	•	•																	
	<b>J1</b>	740	★ 1.90	–	800	•	•	•	•																	
	<b>H1</b>	637	2.20	–	800	•	•	•	•																	
	<b>G1</b>	607	★ 2.30	–	800	•	•	•	•																	
	<b>F1</b>	550	2.50	–	800	•	•	•	•																	
	<b>E1</b>	501	★ 2.80	–	800	•	•	•	•																	
	<b>D1</b>	443	3.20	–	800	•	•	•	•																	
<b>C1</b>	409	★ 3.40	–	800	•	•	•	•																		
<b>B1</b>	352	4.00	–	800	•	•	•	•																		
<b>A1</b>	320	★ 4.40	–	800	•	•	•	•																		

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]																			
						2.5x the value is permissible for a brief period (e.g. motor starting torque)																			
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $i_B=1$ ) Nm	Motor size																			
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290						
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315						
<b>D68</b> <b>800</b>	<b>U1</b>	281.01	5.2	–	800	•	•	•																	
	<b>T1</b>	248.68 ★	5.8	15	800	•	•	•	•																
	<b>S1</b>	226.07	6.4	15	800	•	•	•	•																
	<b>R1</b>	203.09 ★	7.1	15	800	•	•	•	•																
	<b>Q1</b>	174.08	8.3	15	800	•	•	•	•	•															
	<b>P1</b>	157.50 ★	9.2	15	800	•	•	•	•	•															
	<b>N1</b>	145.38	10.0	15	800	•	•	•	•	•															
	<b>M1</b>	126.41 ★	11.5	15	800	•	•	•	•	•															
	<b>L1</b>	114.78	12.6	15	800	•	•	•	•	•															
	<b>K1</b>	104.80 ★	13.8	15	800	•	•	•	•	•															
	<b>J1</b>	96.16	15.1	15	800	•	•	•	•	•															
	<b>H1</b>	88.59 ★	16.4	15	800	•	•	•	•	•															
	<b>G1</b>	80.46	18.0	15	800	•	•	•	•	•															
	<b>F1</b>	73.30 ★	19.8	15	800	•	•	•	•	•															
	<b>E1</b>	67.14	22.0	15	800	•	•	•	•	•															
	<b>D1</b>	59.91 ★	24.0	15	800	•	•	•	•	•															
<b>C1</b>	53.47	27.0	15	800			•	•	•																
<b>B1</b>	45.41	32.0	15	800			•	•	•																
<b>A1</b>	37.80	38.0	15	800			•	•	•																
<b>Z68</b> <b>420 ... 800</b>	<b>X1</b>	48.09 ★	30	14	535	•	•	•	•																
	<b>W1</b>	42.06	34	14	800	•	•	•	•	•															
	<b>V1</b>	37.76 ★	38	14	800	•	•	•	•	•	•														
	<b>U1</b>	34.49	42	14	800	•	•	•	•	•	•														
	<b>T1</b>	30.60 ★	47	14	800	•	•	•	•	•	•	•													
	<b>S1</b>	28.25	51	14	800	•	•	•	•	•	•	•													
	<b>R1</b>	25.55 ★	57	14	800	•	•	•	•	•	•	•													
	<b>Q1</b>	23.53	62	14	800	•	•	•	•	•	•	•													
	<b>P1</b>	21.76 ★	67	14	800	•	•	•	•	•	•	•	•												
	<b>N1</b>	20.20	72	14	800	•	•	•	•	•	•	•	•												
	<b>M1</b>	17.82 ★	81	14	800	•	•	•	•	•	•	•	•	•											
	<b>L1</b>	16.45	88	14	800	•	•	•	•	•	•	•	•	•											
	<b>K1</b>	14.74 ★	98	14	800	•	•	•	•	•	•	•	•	•											
	<b>J1</b>	13.59	107	15	800			•	•	•	•	•	•	•	•										
	<b>H1</b>	11.40	127	15	785			•	•	•	•	•	•	•	•										
	<b>G1</b>	9.73 ★	149	15	745			•	•	•	•	•	•	•	•										
	<b>F1</b>	8.11	179	15	700				•	•	•	•	•	•	•										
	<b>E1</b>	6.72 ★	216	16	650					•	•	•	•	•	•										
	<b>D1</b>	5.93	245	19	490						•	•	•	•	•										
	<b>C1</b>	5.06 ★	287	20	480							•	•	•	•										
<b>B1</b>	4.22	344	20	470								•	•	•											
<b>A1</b>	3.49 ★	415	21	420									•	•											

★ Preferred transmission ratio

1) Only possible with integrated adapter.

2) Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]																	
						2.5x the value is permissible for a brief period (e.g. motor starting torque)																	
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size																	
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290				
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315				
<b>D.88-D.28</b> <b>800</b>	<b>N1</b>	46 233	0.03	–	1 680	•																	
	<b>M1</b>	39 885	★ 0.04	–	1 680	•	•																
	<b>L1</b>	34 267	0.04	–	1 680	•	•																
	<b>K1</b>	31 547	★ 0.04	–	1 680	•	•	•															
	<b>J1</b>	28 679	0.05	–	1 680	•	•	•															
	<b>H1</b>	25 384	★ 0.06	–	1 680	•	•	•															
	<b>G1</b>	21 262	0.07	–	1 680	•	•	•															
	<b>F1</b>	18 129	★ 0.08	–	1 680	•	•	•															
	<b>E1</b>	15 409	★ 0.09	–	1 680	•	•	•															
	<b>D1</b>	13 391	0.10	–	1 680	•	•	•															
	<b>C1</b>	11 656	★ 0.12	–	1 680	•	•	•															
	<b>B1</b>	10 514	0.13	–	1 680	•	•	•															
<b>A1</b>	9 279	0.15	–	1 680	•	•	•																
<b>D.88-Z.28</b> <b>800</b>	<b>H2</b>	8 305	★ 0.17	–	1 680	•	•																
	<b>G2</b>	7 374	0.19	–	1 680	•	•																
	<b>F2</b>	6 465	★ 0.22	–	1 680	•	•	•															
	<b>E2</b>	5 785	0.24	–	1 680	•	•	•															
	<b>D2</b>	5 134	★ 0.27	–	1 680	•	•	•															
	<b>C2</b>	4 500	0.31	–	1 680	•	•	•															
	<b>B2</b>	3 957	★ 0.35	–	1 680	•	•	•															
	<b>A2</b>	3 574	0.39	–	1 680	•	•	•	•														
	<b>X1</b>	3 114	★ 0.45	–	1 680	•	•	•															
	<b>W1</b>	2 797	0.50	–	1 680	•	•	•															
	<b>V1</b>	2 525	★ 0.55	–	1 680	•	•	•	•														
	<b>U1</b>	2 290	0.61	–	1 680	•	•	•	•														
	<b>T1</b>	2 084	★ 0.67	–	1 680	•	•	•	•														
	<b>S1</b>	1 842	0.76	–	1 680	•	•	•	•														
	<b>R1</b>	1 701	★ 0.82	–	1 680	•	•	•	•														
	<b>Q1</b>	1 465	0.96	–	1 680	•	•	•	•														
	<b>P1</b>	1 331	★ 1.10	–	1 680	•	•	•	•														
	<b>N1</b>	1 210	★ 1.20	–	1 680	•	•	•	•														
	<b>M1</b>	1 097	0.130	–	1 680	•	•	•	•														
	<b>L1</b>	999	★ 1.40	–	1 680	•	•	•	•														
	<b>K1</b>	883	1.60	–	1 680	•	•	•	•														
	<b>J1</b>	815	★ 1.70	–	1 680	•	•	•	•														
	<b>H1</b>	702	2.00	–	1 680	•	•	•	•														
	<b>G1</b>	647	★ 2.20	–	1 680	•	•	•	•														
	<b>F1</b>	587	2.40	–	1 680	•	•	•	•														
	<b>E1</b>	534	★ 2.60	–	1 680	•	•	•	•														
	<b>D1</b>	472	3.00	–	1 680	•	•	•	•														
<b>C1</b>	436	★ 3.20	–	1 680	•	•	•	•															
<b>B1</b>	375	3.70	–	1 680	•	•	•	•															
<b>A1</b>	341	★ 4.10	–	1 680	•	•	•	•															

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.



## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]													
						2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D.88</b> <b>1 680</b>	<b>V1</b>	300.41 ★	4.8	12	1 680	•	•	•	•										
	<b>U1</b>	270.90	5.4	12	1 680	•	•	•	•										
	<b>T1</b>	244.29 ★	5.9	12	1 680	•	•	•	•										
	<b>S1</b>	213.64	6.8	12	1 680	•	•	•	•	•									
	<b>R1</b>	191.80 ★	7.6	12	1 680	•	•	•	•	•	•								
	<b>Q1</b>	175.18	8.3	12	1 680	•	•	•	•	•	•								
	<b>R1</b>	155.46 ★	9.3	12	1 680	•	•	•	•	•	•	•							
	<b>N1</b>	143.50	10.1	12	1 680	•	•	•	•	•	•	•	•						
	<b>M1</b>	129.79 ★	11.2	12	1 680	•	•	•	•	•	•	•	•						
	<b>L1</b>	119.52	12.1	12	1 680	•	•	•	•	•	•	•	•						
	<b>K1</b>	110.54 ★	13.1	12	1 680	•	•	•	•	•	•	•	•						
	<b>J1</b>	102.61	14.1	12	1 680	•	•	•	•	•	•	•	•						
	<b>H1</b>	90.53 ★	16.0	12	1 680	•	•	•	•	•	•	•	•						
	<b>G1</b>	83.58	17.3	12	1 680	•	•	•	•	•	•	•	•						
	<b>F1</b>	74.88 ★	19.4	12	1 680	•	•	•	•	•	•	•	•						
	<b>E1</b>	69.05	21.0	12	1 680				•	•	•	•	•						
	<b>D1</b>	57.93	25.0	12	1 680				•	•	•	•	•						
<b>C1</b>	49.42 ★	29.0	12	1 680				•	•	•	•	•							
<b>B1</b>	41.19	35.0	12	1 680					•	•	•	•							
<b>A1</b>	34.14 ★	42.0	12	1 680						•	•	•							
<b>Z.88</b> <b>660 ... 1 680</b>	<b>B2</b>	50.73	29	11	1 468				•	•	•	•							
	<b>A2</b>	45.76 ★	32	11	1 680				•	•	•	•							
	<b>X1</b>	41.90	35	11	1 680				•	•	•	•							
	<b>W1</b>	37.27 ★	39	11	1 680				•	•	•	•							
	<b>V1</b>	34.07	43	11	1 680				•	•	•	•							
	<b>U1</b>	31.32 ★	46	11	1 680				•	•	•	•							
	<b>T1</b>	28.93	50	11	1 680				•	•	•	•							
	<b>S1</b>	26.85 ★	54	11	1 680				•	•	•	•	•						
	<b>R1</b>	25.01	58	11	1 680				•	•	•	•	•						
	<b>Q1</b>	22.61 ★	64	11	1 680				•	•	•	•	•	•					
	<b>P1</b>	20.81	70	11	1 680				•	•	•	•	•	•	•				
	<b>N1</b>	18.72 ★	77	11	1 680				•	•	•	•	•	•	•	•			
	<b>M1</b>	17.27	84	12	1 680				•	•	•	•	•	•	•	•			
	<b>L1</b>	14.63	99	12	1 620				•	•	•	•	•	•	•	•			
	<b>K1</b>	12.75 ★	114	12	1 550				•	•	•	•	•	•	•	•			
	<b>J1</b>	10.85	134	12	1 470					•	•	•	•	•	•	•			
	<b>H1</b>	9.26 ★	157	12	1 390					•	•	•	•	•	•	•			
<b>G1</b>	7.59 ★	191	13	1 300					•	•	•	•	•	•	•				
<b>F1</b>	6.96	208	15	1 260					•	•	•	•	•	•	•				
<b>E1</b>	5.94 ★	244	16	1 190					•	•	•	•	•	•	•				
<b>D1</b>	4.87 ★	298	16	1 110					•	•	•	•	•	•	•				
<b>C1</b>	4.45 ★	326	19	800					•	•	•	•	•	•	•				
<b>B1</b>	3.79 ★	383	20	740					•	•	•	•	•	•	•				
<b>A1</b>	3.11 ★	466	20	660					•	•	•	•	•	•	•				

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]																
						2.5x the value is permissible for a brief period (e.g. motor starting torque)																
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size																
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290			
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315			
<b>D.108-D38</b> <b>3 100</b>	<b>P1</b>	68 896	0.02	–	3 100	*	*	*														
	<b>N1</b>	61 169	0.02	–	3 100	*	*	*														
	<b>M1</b>	53 627	0.03	–	3 100	*	*	*	*													
	<b>L1</b>	47 990	0.03	–	3 100	*	*	*	*													
	<b>K1</b>	42 595	0.03	–	3 100	*	*	*	*													
	<b>J1</b>	37 326	0.04	–	3 100	*	*	*	*													
	<b>H1</b>	32 819	0.04	–	3 100	*	*	*	*													
	<b>G1</b>	29 650	0.05	–	3 100	*	*	*	*													
	<b>F1</b>	25 836	0.06	–	3 100	*	*	*	*													
	<b>E1</b>	23 204	0.06	–	3 100	*	*	*	*													
	<b>D1</b>	20 948	0.07	–	3 100	*	*	*	*													
	<b>C1</b>	18 993	0.08	–	3 100	*	*	*	*													
	<b>B1</b>	17 282	0.08	–	3 100	*	*	*	*													
<b>A1</b>	15 280	0.09	–	3 100	*	*	*	*														
<b>D.108-Z38</b> <b>3 100</b>	<b>P2</b>	15 853	0.09	–	3 100	*	*	*														
	<b>N2</b>	14 098	0.10	–	3 100	*	*	*														
	<b>M2</b>	12 229	0.12	–	3 100	*	*	*	*													
	<b>L2</b>	11 426	0.13	–	3 100	*	*	*	*													
	<b>K2</b>	10 049	0.14	–	3 100	*	*	*	*													
	<b>J2</b>	8 801	0.16	–	3 100	*	*	*	*	*												
	<b>H2</b>	7 785	0.19	–	3 100	*	*	*	*	*												
	<b>G2</b>	7 055	0.21	–	3 100	*	*	*	*	*												
	<b>F2</b>	6 228	0.23	–	3 100	*	*	*	*	*												
	<b>E2</b>	5 618	0.26	–	3 100	*	*	*	*	*												
	<b>D2</b>	5 096	0.28	–	3 100	*	*	*	*	*												
	<b>C2</b>	4 643	0.31	–	3 100	*	*	*	*	*												
	<b>B2</b>	4 246	0.34	–	3 100	*	*	*	*	*												
	<b>A2</b>	3 797	0.38	–	3 100	*	*	*	*	*												
	<b>X1</b>	3 624	0.40	–	3 100	*	*	*	*	*												
	<b>W1</b>	3 223	0.45	–	3 100	*	*	*	*	*												
	<b>V1</b>	2 796	0.52	–	3 100	*	*	*	*	*	*											
	<b>U1</b>	2 612	0.56	–	3 100	*	*	*	*	*	*											
	<b>T1</b>	2 297	0.63	–	3 100	*	*	*	*	*	*											
	<b>S1</b>	2 012	0.72	–	3 100	*	*	*	*	*	*	*										
	<b>R1</b>	1 780	0.81	–	3 100	*	*	*	*	*	*	*										
	<b>Q1</b>	1 613	0.90	–	3 100	*	*	*	*	*	*	*										
	<b>P1</b>	1 424	1.00	–	3 100	*	*	*	*	*	*	*										
	<b>N1</b>	1 284	1.10	–	3 100	*	*	*	*	*	*	*										
	<b>M1</b>	1 165	1.20	–	3 100	*	*	*	*	*	*	*										
	<b>L1</b>	1 061	1.40	–	3 100	*	*	*	*	*	*	*										
	<b>K1</b>	971	1.50	–	3 100	*	*	*	*	*	*	*										
	<b>J1</b>	868	1.70	–	3 100	*	*	*	*	*	*	*										
	<b>H1</b>	797	1.80	–	3 100	*	*	*	*	*	*	*										
	<b>G1</b>	718	2.00	–	3 100	*	*	*	*	*	*	*										
<b>F1</b>	618	2.30	–	3 100	*	*	*	*	*	*	*											
<b>E1</b>	616	2.40	–	3 100	*	*	*	*	*	*	*											
<b>D1</b>	551	2.60	–	3 100	*	*	*	*	*	*	*											
<b>C1</b>	506	2.90	–	3 100	*	*	*	*	*	*	*											
<b>B1</b>	456	3.20	–	3 100	*	*	*	*	*	*	*											
<b>A1</b>	392	3.70	–	3 100	*	*	*	*	*	*	*											

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QKS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot} \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]														
						2.5x the value is permissible for a brief period (e.g. motor starting torque)														
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $i_B=1$ ) Nm	Motor size														
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290	
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315	
<b>D.108</b> <b>3 100</b>	<b>V1</b>	359.30	4.0	10	3 100			•	•											
	<b>U1</b>	325.21 ★	4.5	10	3 100			•	•											
	<b>T1</b>	284.73	5.1	10	3 100			•	•	•										
	<b>S1</b>	256.86 ★	5.6	10	3 100			•	•	•	•									
	<b>R1</b>	235.19	6.2	10	3 100			•	•	•	•									
	<b>Q1</b>	209.21 ★	6.9	10	3 100			•	•	•	•	•								
	<b>P1</b>	191.21	7.6	10	3 100			•	•	•	•	•	•							
	<b>N1</b>	175.78 ★	8.2	10	3 100			•	•	•	•	•	•							
	<b>M1</b>	162.40	8.9	10	3 100			•	•	•	•	•	•							
	<b>L1</b>	150.70 ★	9.6	10	3 100			•	•	•	•	•	•	•						
	<b>K1</b>	140.37	10.3	10	3 100			•	•	•	•	•	•	•						
	<b>J1</b>	126.90 ★	11.4	10	3 100			•	•	•	•	•	•	•						
	<b>H1</b>	116.83	12.4	10	3 100			•	•	•	•	•	•	•						
	<b>G1</b>	105.08 ★	13.8	10	3 100			•	•	•	•	•	•	•						
	<b>F1</b>	96.94	15.0	10	3 100			•	•	•	•	•	•	•						
	<b>E1</b>	82.14	17.7	10	3 100			•	•	•	•	•	•	•						
<b>D1</b>	71.59 ★	20.0	10	3 100			•	•	•	•	•	•	•							
<b>C1</b>	60.90	24.0	10	3 100					•	•	•	•	•							
<b>B1</b>	51.97 ★	28.0	10	3 100					•	•	•	•	•							
<b>A1</b>	42.61 ★	34.0	10	3 100					•	•	•	•	•							
<b>Z.108</b> <b>1 080 ... 3 100</b>	<b>E2</b>	59.05 ★	25	9	2 368			•	•	•										
	<b>D2</b>	54.15	27	9	2 306			•	•	•										
	<b>C2</b>	48.38 ★	30	9	3 100			•	•	•	•									
	<b>B2</b>	44.31	33	9	3 100			•	•	•	•									
	<b>A2</b>	40.82 ★	36	9	3 100			•	•	•	•									
	<b>X1</b>	37.79	38	9	3 100				•	•	•	•								
	<b>W1</b>	35.14 ★	41	9	3 100				•	•	•	•	•							
	<b>V1</b>	32.81	44	9	3 100				•	•	•	•	•							
	<b>U1</b>	29.35 ★	49	9	3 100				•	•	•	•	•	•						
	<b>T1</b>	27.20	53	9	3 100				•	•	•	•	•	•						
	<b>S1</b>	24.94 ★	58	9	3 100				•	•	•	•	•	•	•					1)
	<b>R1</b>	22.86	63	9	3 100				•	•	•	•	•	•	•	•				1)
	<b>Q1</b>	19.48	74	9	3 100				•	•	•	•	•	•	•	•	•			1)
	<b>P1</b>	17.19 ★	84	10	3 100				•	•	•	•	•	•	•	•	•			1)
	<b>N1</b>	14.63	99	10	3 100					•	•	•	•	•	•	•	•			1)
	<b>M1</b>	12.68 ★	114	10	3 100					•	•	•	•	•	•	•	•			1)
	<b>L1</b>	10.67 ★	136	10	3 100					•	•	•	•	•	•	•	•			1)
	<b>K1</b>	9.62	151	10	3 100							•	•	•	•	•	•			1)
	<b>J1</b>	8.27 ★	175	10	3 100								•	•	•	•	•			1)
	<b>H1</b>	7.10 ★	204	12	1 800					•	•	•	•	•	•	•	•			1)
<b>G1</b>	6.41	226	12	1 760							•	•	•	•	•	•			1)	
<b>E1</b>	5.51 ★	263	13	1 700								•	•	•	•	•			1)	
<b>D1</b>	5.24 ★	277	15	1 140									•	•	•	•			1)	
<b>C1</b>	4.41 ★	329	16	1 140										•	•	•			1)	
<b>B1</b>	3.98 ★	364	16	1 120											•	•			1)	
<b>A1</b>	3.42 ★	424	16	1 080												•			1)	

★ Preferred transmission ratio

1) Only possible with integrated adapter.

2) Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]													
						2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D.128-D38</b> 5 100	P1	51 420	★	0.03	–	5 100	•	•	•										
	N1	45 652		0.03	–	5 100	•	•	•										
	M1	40 024	★	0.04	–	5 100	•	•	•	•									
	L1	35 817		0.04	–	5 100	•	•	•	•									
	K1	31 790	★	0.05	–	5 100	•	•	•	•									
	J1	27 858		0.05	–	5 100	•	•	•	•									
	H1	24 494	★	0.06	–	5 100	•	•	•	•									
	G1	22 129		0.07	–	5 100	•	•	•	•									
	F1	19 282	★	0.08	–	5 100	•	•	•	•									
	E1	17 318		0.08	–	5 100	•	•	•	•									
	D1	15 634	★	0.09	–	5 100	•	•	•	•									
	C1	14 175		0.10	–	5 100	•	•	•	•									
	B1	12 898	★	0.11	–	5 100	•	•	•	•									
A1	11 404		0.13	–	5 100	•	•	•	•										
<b>D.128-Z38</b> 5 100	X1	11 831	★	0.12	–	5 100	•	•	•										
	W1	10 521		0.14	–	5 100	•	•	•										
	V1	9 127	★	0.16	–	5 100	•	•	•	•									
	U1	8 528		0.17	–	5 100	•	•	•	•									
	T1	7 500	★	0.19	–	5 100	•	•	•	•									
	S1	6 569		0.22	–	5 100	•	•	•	•	•								
	R1	5 810	★	0.25	–	5 100	•	•	•	•	•								
	Q1	5 266		0.28	–	5 100	•	•	•	•	•								
	P1	4 648	★	0.31	–	5 100	•	•	•	•	•								
	N1	4 193		0.35	–	5 100	•	•	•	•	•								
	M1	3 803	★	0.38	–	5 100	•	•	•	•	•								
	L1	3 465		0.42	–	5 100	•	•	•	•	•								
	K1	3 169	★	0.46	–	5 100	•	•	•	•	•								
	J1	2 834		0.51	–	5 100	•	•	•	•	•								
	H1	2 602	★	0.56	–	5 100	•	•	•	•	•								
	G1	2 345		0.62	–	5 100	•	•	•	•	•								
	F1	2 017	★	0.72	–	5 100	•	•	•	•	•								
	E1	2 011	★	0.72	–	5 100	•	•	•	•	•								
	C1	1 798		0.81	–	5 100	•	•	•	•	•								
D1	1 651	★	0.88	–	5 100	•	•	•	•	•									
B1	1 488		0.97	–	5 100	•	•	•	•	•									
A1	1 280	★	1.10	–	5 100	•	•	•	•	•									
<b>D.128-Z48</b> 5 100	P1	1 271		1.1	–	5 100	•	•	•	•	•								
	N1	1 166		1.2	–	5 100	•	•	•	•	•								
	M1	1 074		1.4	–	5 100	•	•	•	•	•								
	L1	975		1.5	–	5 100	•	•	•	•	•								
	K1	889		1.6	–	5 100	•	•	•	•	•								
	J1	814		1.8	–	5 100	•	•	•	•	•								
	H1	726		2.0	–	5 100	•	•	•	•	•								
	G1	648		2.2	–	5 100			•	•	•	•							
	F1	551		2.6	–	5 100			•	•	•	•							
	E1	458		3.2	–	5 100			•	•	•	•							
	D1	451		3.2	–	5 100	•	•	•	•	•								
	C1	403		3.6	–	5 100			•	•	•	•							
	B1	342		4.2	–	5 100			•	•	•	•							
A1	285		5.1	–	5 100			•	•	•	•								

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QKS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]													
						2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $i_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D.128</b> <b>5 100</b>	<b>K1</b>	268.16 ★	5.4	10	5 100				•	•	•								
	<b>T1</b>	245.93	5.9	10	5 100				•	•	•								
	<b>S1</b>	219.72 ★	6.6	10	5 100				•	•	•	•							
	<b>R1</b>	201.22	7.2	10	5 100				•	•	•	•							
	<b>Q1</b>	185.36 ★	7.8	10	5 100				•	•	•	•							
	<b>P1</b>	171.62	8.4	10	5 100				•	•	•	•							
	<b>N1</b>	159.60 ★	9.1	10	5 100				•	•	•	•	•						
	<b>M1</b>	148.99	9.7	10	5 100				•	•	•	•	•						
	<b>L1</b>	133.30 ★	10.9	10	5 100				•	•	•	•	•	•					
	<b>K1</b>	123.53	11.7	10	5 100				•	•	•	•	•	•					
	<b>J1</b>	113.24 ★	12.8	10	5 100				•	•	•	•	•	•	•				
	<b>H1</b>	103.80	14.0	10	5 100				•	•	•	•	•	•	•				
	<b>G1</b>	88.46	16.4	10	5 100				•	•	•	•	•	•	•				
	<b>F1</b>	78.06 ★	18.6	10	5 100				•	•	•	•	•	•	•				
	<b>E1</b>	66.43	22.0	10	5 100					•	•	•	•	•	•				
	<b>D1</b>	57.56 ★	25.0	10	5 100					•	•	•	•	•	•				
	<b>C1</b>	48.44 ★	30.0	10	5 100					•	•	•	•	•	•				
<b>B1</b>	43.71	33.0	10	5 100								•	•	•	•				
<b>A1</b>	37.57 ★	39.0	10	5 100								•	•	•	•				
<b>Z.128</b> <b>2 220 ... 5 100</b>	<b>D2</b>	44.19 ★	33	9	3 275					•	•	•							
	<b>C2</b>	40.96	35	9	3 196					•	•	•							
	<b>B2</b>	38.94 ★	37	9	5 100					•	•	•	•						
	<b>A2</b>	36.39	40	9	5 100					•	•	•	•						
	<b>X1</b>	32.11 ★	45	9	5 100					•	•	•	•	•					
	<b>W1</b>	30.28	48	9	5 100					•	•	•	•	•					
	<b>V1</b>	27.13 ★	53	9	5 100					•	•	•	•	•	•				
	<b>U1</b>	25.05	58	9	5 100					•	•	•	•	•	•				
	<b>T1</b>	21.41	68	9	5 100					•	•	•	•	•	•	•			
	<b>S1</b>	19.35 ★	75	10	5 100					•	•	•	•	•	•	•	•		
	<b>R1</b>	18.64	78	10	5 100					•	•	•	•	•	•	•	•		
	<b>Q1</b>	16.12	90	10	4 993					•	•	•	•	•	•	•	•	•	
	<b>P1</b>	14.06 ★	103	10	4 868					•	•	•	•	•	•	•	•	•	
	<b>N1</b>	12.03 ★	121	10	4 716					•	•	•	•	•	•	•	•	•	
	<b>M1</b>	10.78	135	10	4 603								•	•	•	•	•	•	
	<b>L1</b>	9.13 ★	159	10	4 425								•	•	•	•	•	•	
	<b>K1</b>	7.88	184	10	4 258									•	•	•	•	•	
	<b>J1</b>	7.29 ★	199	12	2 540										•	•	•	•	
	<b>H1</b>	6.24 ★	232	12	2 530											•	•	•	
	<b>G1</b>	5.93 ★	245	12	3 908											•	•	•	
<b>F1</b>	5.59 ★	259	12	2 607												•	•		
<b>E1</b>	4.83	300	12	2 512												•	•		
<b>D1</b>	4.73 ★	307	13	2 375												•	•		
<b>C1</b>	4.09 ★	355	13	2 360												•	•		
<b>B1</b>	3.63 ★	399	13	2 310												•	•		
<b>A1</b>	3.07 ★	472	14	2 220												•	•		

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]																
						2.5x the value is permissible for a brief period (e.g. motor starting torque)																
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size																
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290			
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315			
<b>D.148-D38</b> 8 000	P1	64 450	0.02	–	8 000	*	*	*														
	N1	57 221	0.03	–	8 000	*	*	*														
	M1	50 166	0.03	–	8 000	*	*	*	*													
	L1	44 893	0.03	–	8 000	*	*	*	*	*												
	K1	39 846	0.04	–	8 000	*	*	*	*	*												
	J1	34 917	0.04	–	8 000	*	*	*	*	*												
	H1	30 701	0.05	–	8 000	*	*	*	*	*												
	G1	27 736	0.05	–	8 000	*	*	*	*	*												
	F1	24 169	0.06	–	8 000	*	*	*	*	*												
	E1	21 707	0.07	–	8 000	*	*	*	*	*												
	D1	19 596	0.07	–	8 000	*	*	*	*	*												
	C1	17 767	0.08	–	8 000	*	*	*	*	*												
	B1	16 167	0.09	–	8 000	*	*	*	*	*												
A1	14 294	0.10	–	8 000	*	*	*	*	*													
<b>D.148-Z38</b> 8 000	X1	14 830	0.10	–	8 000	*	*	*														
	W1	13 188	0.11	–	8 000	*	*	*														
	V1	11 440	0.13	–	8 000	*	*	*	*													
	U1	10 689	0.14	–	8 000	*	*	*	*													
	T1	9 401	0.15	–	8 000	*	*	*	*													
	S1	8 233	0.18	–	8 000	*	*	*	*	*												
	R1	7 282	0.20	–	8 000	*	*	*	*	*												
	Q1	6 600	0.22	–	8 000	*	*	*	*	*												
	P1	5 826	0.25	–	8 000	*	*	*	*	*												
	N1	5 256	0.28	–	8 000	*	*	*	*	*												
	M1	4 767	0.30	–	8 000	*	*	*	*	*												
	L1	4 343	0.33	–	8 000	*	*	*	*	*												
	K1	3 972	0.37	–	8 000	*	*	*	*	*												
	J1	3 552	0.41	–	8 000	*	*	*	*	*												
	H1	3 261	0.44	–	8 000	*	*	*	*	*												
	G1	2 939	0.49	–	8 000	*	*	*	*	*												
	F1	2 528	0.57	–	8 000	*	*	*	*	*												
	E1	2 521	0.58	–	8 000	*	*	*	*	*												
D1	2 254	0.64	–	8 000	*	*	*	*	*													
C1	2 070	0.70	–	8 000	*	*	*	*	*													
B1	1 865	0.78	–	8 000	*	*	*	*	*													
A1	1 604	0.90	–	8 000	*	*	*	*	*													
<b>D.148-Z48</b> 8 000	N1	1 631	0.89	–	8 000	*	*	*	*	*												
	M1	1 502	0.97	–	8 000	*	*	*	*	*												
	L1	1 364	1.10	–	8 000	*	*	*	*	*												
	K1	1 243	1.20	–	8 000	*	*	*	*	*												
	J1	1 139	1.30	–	8 000	*	*	*	*	*												
	H1	1 016	1.40	–	8 000	*	*	*	*	*												
	G1	907	1.60	–	8 000	*	*	*	*	*												
	F1	770	1.90	–	8 000	*	*	*	*	*												
	E1	641	2.30	–	8 000	*	*	*	*	*												
	D1	631	2.30	–	8 000	*	*	*	*	*												
	C1	563	2.60	–	8 000	*	*	*	*	*												
B1	478	3.00	–	8 000	*	*	*	*	*													
A1	398	3.60	–	8 000	*	*	*	*	*													

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]																					
						2.5x the value is permissible for a brief period (e.g. motor starting torque)																					
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size																					
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290								
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315								
<b>D.148</b> <b>8 000</b>	<b>W1</b>	336.11	4.3	7	8 000					•	•																
	<b>V1</b>	301.34 ★	4.8	7	8 000					•	•	•															
	<b>U1</b>	276.23	5.2	7	8 000					•	•	•															
	<b>T1</b>	254.70 ★	5.7	7	8 000					•	•	•															
	<b>S1</b>	236.05	6.1	7	8 000					•	•	•															
	<b>R1</b>	224.43 ★	6.5	7	8 000					•	•	•	•														
	<b>Q1</b>	209.76	6.9	7	8 000					•	•	•	•														
	<b>P1</b>	185.03 ★	7.8	7	8 000					•	•	•	•	•	•	•											
	<b>N1</b>	174.53	8.3	7	8 000					•	•	•	•	•	•	•											
	<b>M1</b>	156.38 ★	9.3	7	8 000					•	•	•	•	•	•	•	•										
	<b>L1</b>	144.39	10.0	7	8 000					•	•	•	•	•	•	•	•										
	<b>K1</b>	123.37	11.8	7	8 000					•	•	•	•	•	•	•	•										
	<b>J1</b>	111.50 ★	13.0	7	8 000					•	•	•	•	•	•	•	•										
	<b>H1</b>	107.42	13.5	7	8 000						•	•	•	•	•	•	•										
	<b>G1</b>	92.91	15.6	7	8 000						•	•	•	•	•	•	•										
	<b>F1</b>	81.04 ★	17.9	7	8 000						•	•	•	•	•	•	•										
	<b>E1</b>	69.36 ★	21.0	7	8 000						•	•	•	•	•	•	•										
<b>D1</b>	62.12	23.0	7	8 000							•	•	•	•	•	•											
<b>C1</b>	52.61 ★	28.0	7	8 000								•	•	•	•	•											
<b>B1</b>	45.44	32.0	7	8 000									•	•	•	•											
<b>A1</b>	34.15 ★	42.0	7	8 000										•	•	•	•										
<b>Z.148</b> <b>3 850 ... 8 000</b>	<b>B2</b>	57.50	25	7	4 664							•															
	<b>A2</b>	54.24 ★	27	7	8 000								•	•													
	<b>X1</b>	50.74	29	7	8 000									•	•												
	<b>W1</b>	45.11 ★	32	7	8 000										•	•	•	•									
	<b>V1</b>	42.59	34	7	8 000											•	•	•									
	<b>U1</b>	38.23 ★	38	7	8 000												•	•									
	<b>T1</b>	35.09	41	7	8 000													•									
	<b>S1</b>	30.28	48	7	8 000														•								
	<b>R1</b>	26.49	55	7	8 000															•							
	<b>Q1</b>	23.04	63	7	8 000																•						
	<b>P1</b>	20.21 ★	72	7	8 000																	•					
	<b>N1</b>	17.09 ★	85	7	8 000																		•				
	<b>M1</b>	15.51	93	7	8 000																			•			
	<b>L1</b>	13.52 ★	107	7	8 000																				•		
	<b>K1</b>	11.48	126	7	8 000																					•	
	<b>J1</b>	8.79 ★	165	9	8 000																						•
	<b>H1</b>	8.64 ★	168	9	4 800																						
<b>G1</b>	7.84 ★	185	9	4 800																							•
<b>F1</b>	7.57 ★	192	10	5 600																							•
<b>E1</b>	6.84 ★	212	10	4 800																							•
<b>D1</b>	6.43	226	10	5 400																							•
<b>C1</b>	5.80 ★	250	10	4 200																							•
<b>B1</b>	4.92 ★	295	10	5 050																							•
<b>A1</b>	4.44 ★	327	–	3 850																							•

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]													
						2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D.168-D48</b> 14 000	P1	71 317	★	0.02	–	14 000	•	•	•										
	N1	63 421		0.02	–	14 000	•	•	•										
	M1	55 016	★	0.03	–	14 000	•	•	•	•									
	L1	51 404		0.03	–	14 000	•	•	•	•									
	K1	45 210	★	0.03	–	14 000	•	•	•	•									
	J1	39 595		0.04	–	14 000	•	•	•	•	•								
	H1	35 022	★	0.04	–	14 000	•	•	•	•	•								
	G1	31 740		0.05	–	14 000	•	•	•	•	•								
	F1	28 017	★	0.05	–	14 000	•	•	•	•	•								
	E1	25 274		0.06	–	14 000	•	•	•	•	•								
	D1	22 923	★	0.06	–	14 000	•	•	•	•	•								
	C1	20 886		0.07	–	14 000	•	•	•	•	•								
	B1	19 103	★	0.08	–	14 000	•	•	•	•	•								
A1	17 080		0.08	–	14 000	•	•	•	•	•									
<b>D.168-Z48</b> 14 000	A2	17 519		0.08	–	14 000	•	•	•										
	X1	15 504	★	0.09	–	14 000	•	•	•	•									
	W1	14 094		0.10	–	14 000	•	•	•	•									
	V1	12 661	★	0.11	–	14 000	•	•	•	•									
	U1	10 853		0.13	–	14 000	•	•	•	•	•								
	T1	9 819	★	0.15	–	14 000	•	•	•	•	•								
	S1	9 064		0.16	–	14 000	•	•	•	•	•								
	R1	7 881	★	0.18	–	14 000	•	•	•	•	•								
	Q1	7 156		0.20	–	14 000	•	•	•	•	•								
	P1	6 534	★	0.22	–	14 000	•	•	•	•	•								
	N1	5 995		0.24	–	14 000	•	•	•	•	•								
	M1	5 523	★	0.26	–	14 000	•	•	•	•	•								
	L1	5 016		0.29	–	14 000	•	•	•	•	•								
	K1	4 569	★	0.32	–	14 000	•	•	•	•	•								
	J1	4 186		0.35	–	14 000	•	•	•	•	•								
	H1	3 735	★	0.39	–	14 000	•	•	•	•	•								
	G1	3 333		0.44	–	14 000	•	•	•	•	•								
	F1	2 831		0.51	–	14 000		•	•	•	•								
	E1	2 357	★	0.62	–	14 000		•	•	•	•								
	D1	2 319	★	0.63	–	14 000	•	•	•	•	•								
C1	2 070		0.70	–	14 000		•	•	•	•									
B1	1 758		0.82	–	14 000		•	•	•	•									
A1	1 463	★	0.99	–	14 000		•	•	•	•									
<b>D.168-Z68</b> 14 000	H1	1 226		1.2	–	14 000		•	•	•	•	•							
	G1	1 046		1.4	–	14 000		•	•	•	•	•							
	F1	871		1.7	–	14 000			•	•	•	•							
	E1	722		2.0	–	14 000			•	•	•	•							
	D1	637		2.3	–	14 000			•	•	•	•							
	C1	544		2.7	–	14 000			•	•	•	•							
	B1	453		3.2	–	14 000			•	•	•	•							
	A1	376		3.9	–	14 000			•	•	•	•							

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QKS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot} \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.



# MOTEX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]													
						2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $i_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D.168</b> <b>14000</b>	<b>U1</b>	341.61 ★	4.2	7	14 000														
	<b>T1</b>	313.41	4.6	7	14 000														
	<b>S1</b>	289.23 ★	5.0	7	14 000														
	<b>R1</b>	268.29	5.4	7	14 000														
	<b>Q1</b>	253.08 ★	5.7	7	14 000														
	<b>P1</b>	236.72	6.1	7	14 000														
	<b>N1</b>	210.49 ★	6.9	7	14 000														
	<b>M1</b>	198.71	7.3	7	14 000														
	<b>L1</b>	178.38 ★	8.1	7	14 000														
	<b>K1</b>	163.72	8.9	7	14 000														
	<b>J1</b>	141.28	10.3	7	14 000														
	<b>H1</b>	123.59	11.7	7	14 000														
	<b>G1</b>	107.48	13.5	7	14 000														
	<b>F1</b>	94.30 ★	15.4	7	14 000														
	<b>E1</b>	79.75 ★	18.2	7	14 000														
	<b>D1</b>	72.36	20.0	7	14 000														
	<b>C1</b>	63.08 ★	23.0	7	14 000														
<b>B1</b>	53.56	27.0	7	14 000															
<b>A1</b>	40.99 ★	35.0	7	14 000															
<b>Z.168</b> <b>6 470 ...</b> <b>14 000</b>	<b>V1</b>	46.61	31	6	10 100														
	<b>U1</b>	42.09	34	6	14 000														
	<b>T1</b>	39.45	37	6	14 000														
	<b>S1</b>	33.88 ★	43	6	14 000														
	<b>Q1</b>	29.27	50	7	14 000														
	<b>P1</b>	25.84	56	7	14 000														
	<b>N1</b>	23.26 ★	62	7	14 000														
	<b>M1</b>	19.30 ★	75	7	14 000														
	<b>L1</b>	17.60	82	7	13 826														
	<b>K1</b>	15.44 ★	94	7	13 486														
	<b>J1</b>	13.27	109	7	13 081														
	<b>H1</b>	10.34 ★	140	7	12 345														
	<b>G1</b>	9.26 ★	157	-	7 850														
	<b>F1</b>	8.21 ★	177	7	11 622														
	<b>E1</b>	7.20 ★	201	9	7 100														
	<b>D1</b>	6.20 ★	234	9	7 507														
	<b>C1</b>	5.61 ★	258	10	6 780														
<b>B1</b>	4.93 ★	294	10	7 064															
<b>A1</b>	4.46 ★	325	10	6 470															

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]														
						2.5x the value is permissible for a brief period (e.g. motor starting torque)														
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size														
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290	
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315	
<b>D.188-D48</b> 20 000	P1	50 901	★	0.03	–	20 000	•	•	•											
	N1	45 266		0.03	–	20 000	•	•	•											
	M1	39 267	★	0.04	–	20 000	•	•	•	•										
	L1	36 689		0.04	–	20 000	•	•	•	•										
	K1	32 268	★	0.04	–	20 000	•	•	•	•										
	I1	28 260		0.05	–	20 000	•	•	•	•										
	H1	24 996	★	0.06	–	20 000	•	•	•	•	•									
	G1	22 654		0.06	–	20 000	•	•	•	•	•									
	F1	19 997	★	0.07	–	20 000	•	•	•	•	•									
	E1	18 039		0.08	–	20 000	•	•	•	•	•									
	D1	16 361	★	0.09	–	20 000	•	•	•	•	•									
	C1	14 907		0.10	–	20 000	•	•	•	•	•									
	B1	13 634	★	0.11	–	20 000	•	•	•	•	•									
A1	12 191		0.12	–	20 000	•	•	•	•	•										
<b>D.188-Z48</b> 20 000	X1	12 504		0.12	–	20 000	•	•	•											
	W1	11 066	★	0.13	–	20 000	•	•	•	•										
	V1	9 037	★	0.16	–	20 000	•	•	•	•										
	U1	7 746		0.19	–	20 000	•	•	•	•	•									
	T1	7 008	★	0.21	–	20 000	•	•	•	•	•	•								
	S1	6 469		0.22	–	20 000	•	•	•	•	•	•								
	R1	5 625	★	0.26	–	20 000	•	•	•	•	•	•								
	Q1	5 107		0.28	–	20 000	•	•	•	•	•	•								
	P1	4 663	★	0.31	–	20 000	•	•	•	•	•	•								
	N1	4 279		0.34	–	20 000	•	•	•	•	•	•								
	M1	3 942	★	0.37	–	20 000	•	•	•	•	•	•								
	L1	3 580		0.41	–	20 000	•	•	•	•	•	•								
	K1	3 261	★	0.44	–	20 000	•	•	•	•	•	•								
	J1	2 988		0.49	–	20 000	•	•	•	•	•	•								
	H1	2 666	★	0.54	–	20 000	•	•	•	•	•	•								
	G1	2 379		0.61	–	20 000			•	•	•	•								
	F1	2 021		0.72	–	20 000			•	•	•	•								
	E1	1 682	★	0.86	–	20 000			•	•	•	•								
	D1	1 655	★	0.88	–	20 000	•	•	•	•	•	•								
	C1	1 477		0.98	–	20 000			•	•	•	•								
B1	1 255		1.20	–	20 000			•	•	•	•									
A1	1 044	★	1.40	–	20 000			•	•	•	•									
<b>D.188-Z68</b> 20 000	G1	896	★	1.6	–	20 000			•	•	•	•	•							
	F1	746		1.9	–	20 000				•	•	•								
	E1	619	★	2.3	–	20 000					•	•	•							
	D1	546		2.7	–	20 000					•	•	•	•						
	C1	466	★	3.1	–	20 000					•	•	•	•	•					
	B1	388		3.7	–	20 000						•	•	•						
A1	322	★	4.5	–	20 000							•	•	•						

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed	Twisting angle <sup>2)</sup>	Nominal torque	Permissible input torque $T_1$ [Nm]													
						2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$\varphi$ arcmin	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D.188</b> <b>20 000</b>	<b>N1</b>	243.82	5.9	6	20 000					•	•	•	•						
	<b>M1</b>	220.17	6.6	6	20 000					•	•	•	•	•					
	<b>L1</b>	206.34	7.0	6	20 000					•	•	•	•	•	•				
	<b>K1</b>	177.23 ★	8.2	6	20 000					•	•	•	•	•	•				
	<b>J1</b>	153.12	9.5	6	20 000					•	•	•	•	•	•	•			
	<b>H1</b>	135.16	10.7	6	20 000					•	•	•	•	•	•	•			
	<b>G1</b>	121.67 ★	11.9	6	20 000					•	•	•	•	•	•	•			
	<b>F1</b>	100.96 ★	14.4	6	20 000					•	•	•	•	•	•	•			
	<b>E1</b>	92.06	15.8	6	20 000					•	•	•	•	•	•	•	•		
	<b>D1</b>	80.77 ★	18.0	6	20 000					•	•	•	•	•	•	•	•		
	<b>C1</b>	69.41	21.0	6	20 000					•	•	•	•	•	•	•	•		
	<b>B1</b>	54.06 ★	27.0	6	20 000					•	•	•	•	•	•	•	•		
<b>A1</b>	42.95 ★	34.0	–	20 000					•	•	•	•	•	•	•	•			
<b>Z.188</b> <b>13 040 ...</b> <b>20 000</b>	<b>P1</b>	52.35	28	6	15 710								•	•	•	•			
	<b>N1</b>	48.22	30	6	15 920								•	•	•	•	•		
	<b>M1</b>	41.85 ★	35	6	16 110								•	•	•	•	•		
	<b>L1</b>	36.89	39	6	16 600								•	•	•	•	•	•	
	<b>K1</b>	32.37	45	6	18 450								•	•	•	•	•	•	
	<b>J1</b>	29.18 ★	50	6	20 000								•	•	•	•	•	•	
	<b>H1</b>	24.77 ★	59	6	20 000								•	•	•	•	•	•	
	<b>G1</b>	23.01	63	6	20 000								•	•	•	•	•	•	
	<b>F1</b>	19.76 ★	73	6	20 000								•	•	•	•	•	•	
	<b>E1</b>	16.86	86	6	20 000								•	•	•	•	•	•	
	<b>D1</b>	13.28 ★	109	6	18 820								•	•	•	•	•	•	
	<b>C1</b>	10.69 ★	136	6	16 170									•	•	•	•	•	
<b>B1</b>	9.29	156	6	14 310										•	•	•	•		
<b>A1</b>	8.30	175	6	13 040											•	•	•		

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

<sup>2)</sup> Twisting angle applies to reduced-backlash gearboxes.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

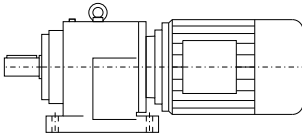
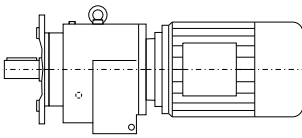
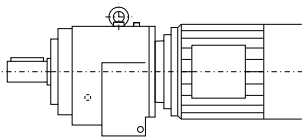
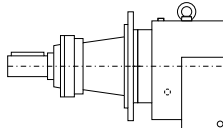
If  $T_{2max} \geq T_{2N}$  the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Mounting types

#### Selection and ordering data

Mounting type	Order No. 14th position	Code in type designation 2nd position	Representation
Foot-mounted design	A	-	
Flange-mounted design (A-type)	F	F	
Housing flange (C-type)	H	Z	
Agitator flange	R	R	

#### *Helical gearbox with agitator flange, sizes 68 to 168*

The agitator flange is fitted with a heavy-duty spherical roller bearing with a sizable bearing span for absorbing large radial and axial forces.

The optimized design ensures that no axial forces are transferred.

Helical gearboxes with an agitator flange are particularly well suited to agitator applications with very high radial forces.

Bearing life can be calculated on request or using the MOTOX Configurator calculation program.

## Selection and ordering data

Shaft design	Order No. 8th position	Shaft dimensions					
<b>1-stage helical gearbox E</b>							
Size		<b>E38</b>	<b>E48</b>	<b>E68</b>	<b>E88</b>	<b>E108</b>	<b>E128</b>
Solid shaft with feather key	1	V20 x 40 *)	V25 x 50 *)	V30 x 60 *)	V40 x 80 *)	V50 x 100 *)	V60 x 120 *)
	2	V25 x 50	V30 x 60	V40 x 80	V45 x 90	V55 x 110	
Size		<b>E148</b>					
Solid shaft with feather key	1	V70 x 140 *)					
	2						
<b>2-stage helical gearbox Z</b>							
Size		<b>Z18</b>	<b>Z28</b>	<b>Z38</b>	<b>Z48</b>	<b>Z68</b>	<b>Z88</b>
Solid shaft with feather key	1	V16 x 28	V25 x 50 *)	V25 x 50 *)	V30 x 60 *)	V40 x 80 *)	V50 x 100 *)
	2	V20 x 40 *)		V30 x 60	V40 x 80	V50 x 100	V60 x 120
	3				V35 x 70	V35 x 70	
Size		<b>Z108</b>	<b>Z128</b>	<b>Z148</b>	<b>Z168</b>	<b>Z188</b>	
Solid shaft with feather key	1	V60 x 120 *)	V70 x 140 *)	V90 x 170 *)	V100 x 210 *)	V120 x 210 *)	
	2	V70 x 140	V90 x 170	V100 x 210	V120 x 210		
	3				V110 x 210		
<b>3-stage helical gearbox D</b>							
Size		<b>D18</b>	<b>D28</b>	<b>D38</b>	<b>D48</b>	<b>D68</b>	<b>D88</b>
Solid shaft with feather key	1	V16 x 28	V25 x 50 *)	V25 x 50 *)	V30 x 60 *)	V40 x 80 *)	V50 x 100 *)
	2	V20 x 40 *)		V30 x 60	V40 x 80	V50 x 100	V60 x 120
	3				V35 x 70	V35 x 70	
Size		<b>D108</b>	<b>D128</b>	<b>D148</b>	<b>D168</b>	<b>D188</b>	
Solid shaft with feather key	1	V60 x 120 *)	V70 x 140 *)	V90 x 170 *)	V100 x 210 *)	V120 x 210 *)	
	2	V70 x 140	V90 x 170	V100 x 210	V120 x 210		
	3				V110 x 210		

\*) Preferred series

## Shaft designs for helical gearbox with agitator flange

Shaft design	Order No. 8th position	Order No. suffix	Shaft dimensions					
<b>2-stage helical gearbox ZR</b>								
Size			<b>ZR68</b>	<b>ZR88</b>	<b>ZR108</b>	<b>ZR128</b>	<b>ZR148</b>	<b>ZR168</b>
Solid shaft with feather key	2		V50 x 100	V60 x 120	V70 x 140		V100 x 210	
	9	<b>H1A</b>				V80 x 170		V110 x 210
<b>3-stage helical gearbox DR</b>								
Size			<b>DR68</b>	<b>DR88</b>	<b>DR108</b>	<b>DR128</b>	<b>DR148</b>	<b>DR168</b>
Solid shaft with feather key	2		V50 x 100	V60 x 120	V70 x 140		V100 x 210	
	9	<b>H1A</b>				V80 x 170		V110 x 210

# MOTOX Geared Motors

## Helical geared motors

### Flange-mounted designs (A-type)

#### Selection and ordering data

Order code	Flange diameter										
<b>Helical gearbox EF, 1-stage</b>											
Size	EF38	EF48	EF68	EF88	EF108	EF128	EF148				
H01	120	120									
H02	140	140	200	250	300	350	350				
H03	160	160	250	300	350	450	450				
H04	200	200	300	350	450		550				
H05	250	250									
<b>Helical gearbox ZF, 2-stage</b>											
Size	ZF18	ZF28	ZF38	ZF48	ZF68	ZF88	ZF108	ZF128	ZF148	ZF168	ZF188
H02	120	120	120								550
H03	140	140	140	200	250	300	350	350	450	450	660
H04	160	160	160	250	300	350	450	450	550	550	
H05			200	300	350	450		550		660	
H06			250								
<b>Helical gearbox DF, 3-stage</b>											
Size	DF18	DF28	DF38	DF48	DF68	DF88	DF108	DF128	DF148	DF168	DF188
H02	120	120	120								550
H03	140	140	140	200	250	300	350	350	450	450	660
H04	160	160	160	250	300	350	450	450	550	550	
H05			200	300	350	450		550		660	
H06			250								

#### Selection and ordering data

The mounting type / mounting position must be specified when, you place your order to ensure that the gearbox is supplied with the correct quantity of oil.

Please contact customer service if you wish to use a mounting position which is not shown here.

#### Position of the terminal box

The terminal box of the motor can be mounted in four different positions. See Chapter 8 for an accurate representation of the terminal box position and the corresponding order codes.

#### 1-stage helical gearbox, foot-mounted design

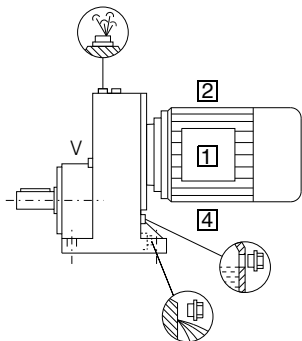
##### Oil control valves:

- Size 38: V Oil inlet
- From size 48 up:  Oil level  Ventilation  Oil drain  Oil dipstick \* On opposite side

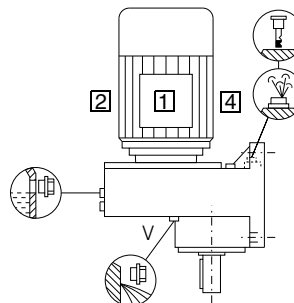
**1** ... **4** Position of the terminal box, see Chapter 8

<sup>1)</sup> Standard mounting type

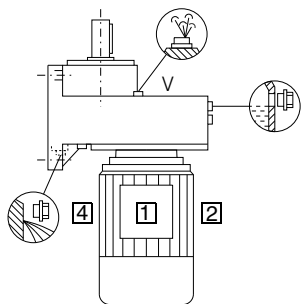
B3 (IM B3)<sup>1)</sup>  
Order code: **D04**



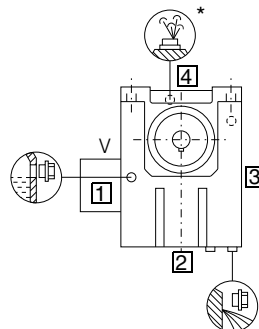
V5 (IM V5)  
Order code: **E02**



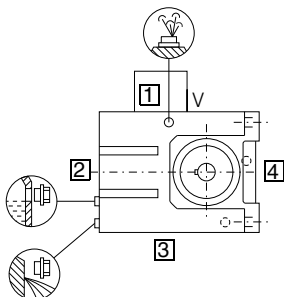
V6 (IM V6)  
Order code: **E14**



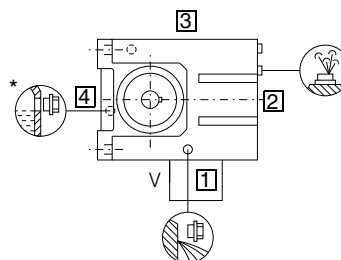
B8 (IM B8)  
Order code: **D66**



B7 (IM B7)  
Order code: **D57**



B6 (IM B6)  
Order code: **D36**



# MOTOX Geared Motors

## Helical geared motors




### Mounting types and mounting positions

#### Selection and ordering data (continued)

##### 1-stage helical gearbox, flange-mounted design (EF) and with housing flange (EZ)

##### Oil control valves:

• Size 38: V Oil inlet

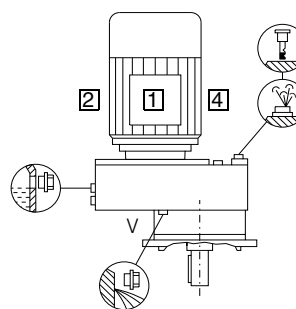
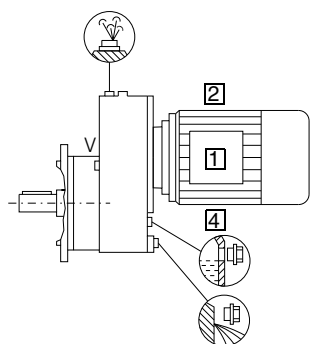
• From size 48 up:  Oil level  Ventilation  Oil drain  Oil dipstick \* On opposite side

**1** ... **4** Position of the terminal box, see Chapter 8

<sup>1)</sup> Standard mounting type

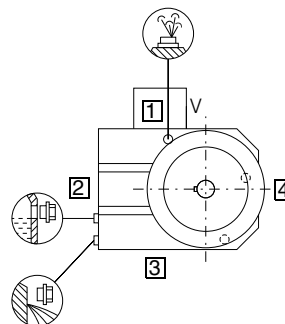
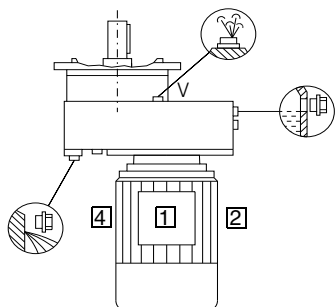
EF: B5 (IM B5)<sup>1)</sup>  
Order code: **D16**  
EZ: B14 (IM B14)  
Order code: **D00**

EF: V1 (IM V1)  
Order code: **D88**  
EZ: V18 (IM V18)  
Order code: **D94**



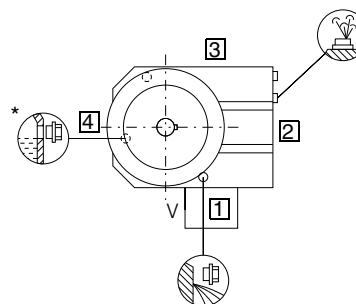
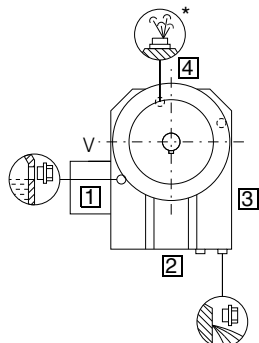
EF: V3 (IM V3)  
Order code: **D96**  
EZ: V19 (IM V19)  
Order code: **D95**

EF: B5-02 (IM B5-02)  
Order code: **D26**  
EZ: B14-02 (IM B14-02)  
Order code: **D02**



EF: B5-03 (IM B5-03)  
Order code: **D31**  
EZ: B14-03 (IM B14-03)  
Order code: **D03**

EF: B5-00 (IM B5-00)  
Order code: **D17**  
EZ: B14-00 (IM B14-00)  
Order code: **D01**





**Selection and ordering data (continued)**

**2- and 3-stage helical gearbox, foot-mounted design, sizes 18 - 88**

**Oil control valves:**

• Size 18/28: These types are lubricated for life. No ventilation, oil level, or drain plugs are present.

• Size 38: V Oil inlet

• From size 48 up:  Oil level  Ventilation  Oil drain \* On opposite side

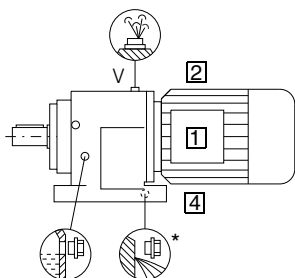
② 2-stage gearbox

③ 3-stage gearbox

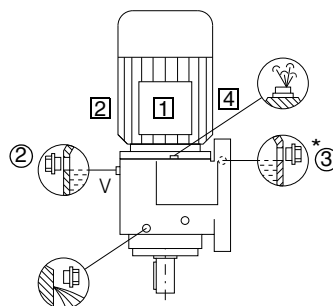
① ... ④ Position of the terminal box, see Chapter 8

1) Standard mounting type

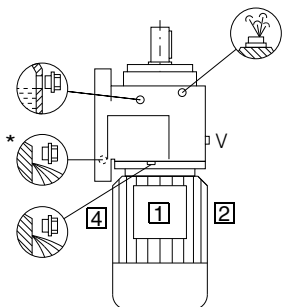
B3 (IM B3) <sup>1)</sup>  
Order code: **D04**



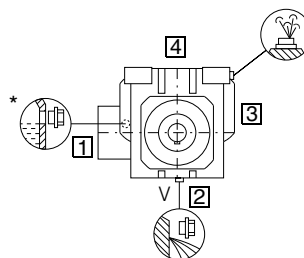
V5 (IM V5)  
Order code: **E02**



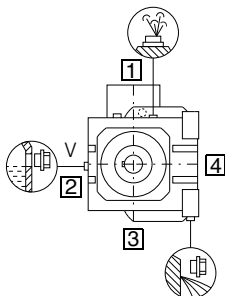
V6 (IM V6)  
Order code: **E14**



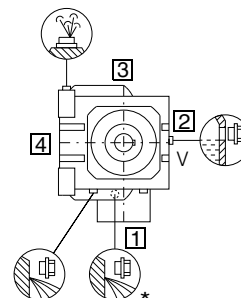
B8 (IM B8)  
Order code: **D66**



B7 (IM B7)  
Order code: **D57**



B6 (IM B6)  
Order code: **D36**



# MOTOX Geared Motors

## Helical geared motors

### Mounting types and mounting positions

#### Selection and ordering data (continued)

#### 2- and 3-stage helical gearbox, foot-mounted design, sizes 108-168

##### Oil control valves:

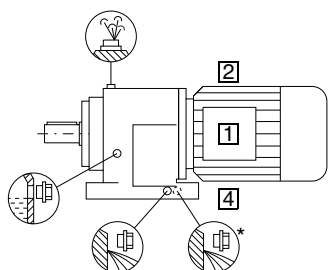
-  Oil level
-  Ventilation
-  Oil drain
- \* On opposite side

- ② 2-stage gearbox
- ③ 3-stage gearbox

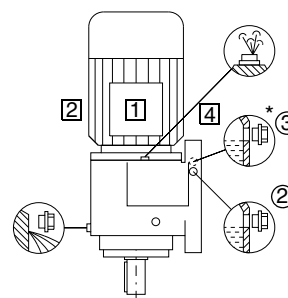
① ... ④ Position of the terminal box, see Chapter 8

1) Standard mounting type

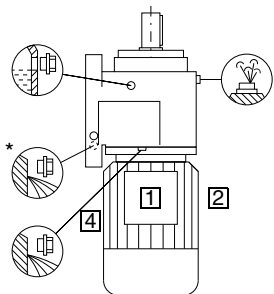
B3 (IM B3) <sup>1)</sup>  
Order code: **D04**



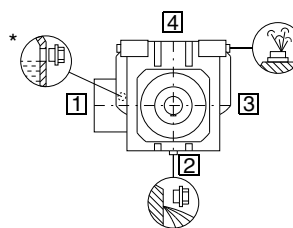
V5 (IM V5)  
Order code: **E02**



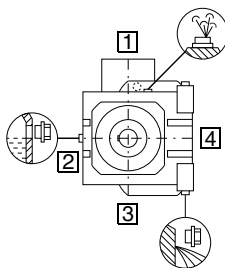
V6 (IM V6)  
Order code: **E14**



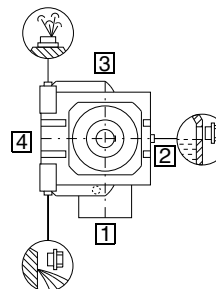
B8 (IM B8)  
Order code: **D66**



B7 (IM B7)  
Order code: **D57**



B6 (IM B6)  
Order code: **D36**



**Selection and ordering data** (continued)

**2- and 3-stage helical gearbox, foot-mounted design, size 188**

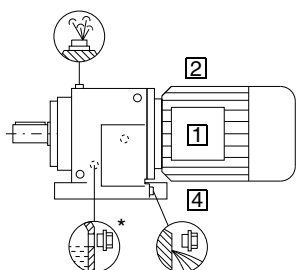
**Oil control valves:**

-  Oil level
-  Ventilation
-  Oil drain
- \* On opposite side

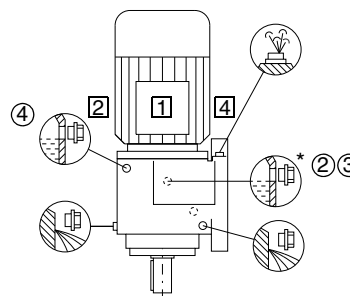
- ② 2-stage gearbox
- ③ 3-stage gearbox
- ④ Tandem gearbox

- ① ... ④ Position of the terminal box, see Chapter 8
- 1) Standard mounting type

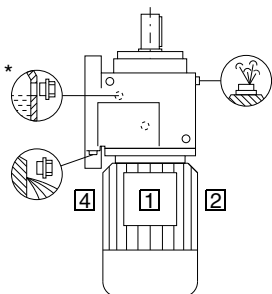
B3 (IM B3) <sup>1)</sup>  
Order code: **D04**



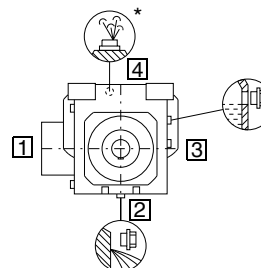
V5 (IM V5)  
Order code: **E02**



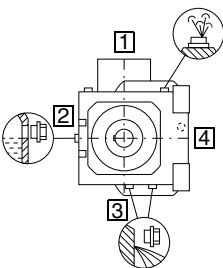
V6 (IM V6)  
Order code: **E14**



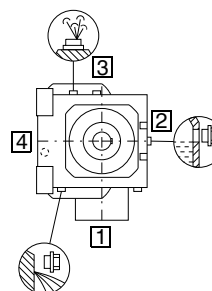
B8 (IM B8)  
Order code: **D66**



B7 (IM B7)  
Order code: **D57**



B6 (IM B6)  
Order code: **D36**



# MOTOX Geared Motors





## Helical geared motors

### Mounting types and mounting positions

#### Selection and ordering data (continued)

2- and 3-stage helical gearbox, flange-mounted design (DF/ZF) or with housing flange (DZ/ZZ), sizes 18 - 88

#### Oil control valves:

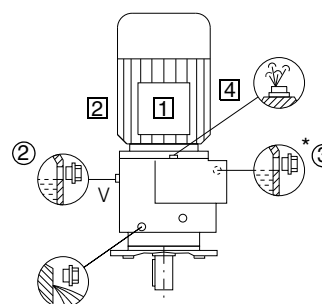
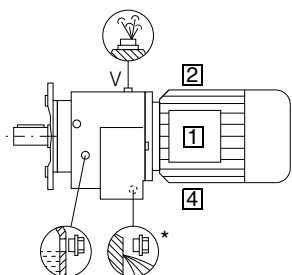
- Size 18/28: These types are lubricated for life. No ventilation, oil level, or drain plugs are present.
- Size 38: V Oil inlet
- From size 48 up:  Oil level  Ventilation  Oil drain  Oil dipstick \* On opposite side

1 ... 4 Position of the terminal box, see Chapter 8

1) Standard mounting type

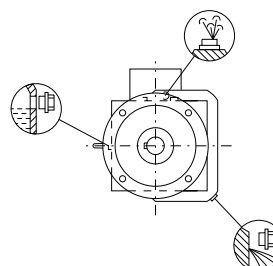
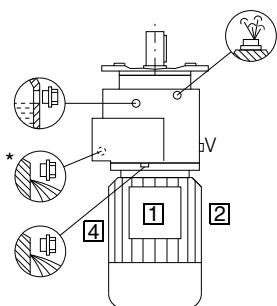
DF/ZF: B5 (IM B5) <sup>1)</sup>  
Order code: **D16**  
DZ/ZZ: B14 (IM B14)  
Order code: **D00**

DF/ZF: V1 (IM V1)  
Order code: **D88**  
DZ/ZZ: V18 (IM V18)  
Order code: **D94**



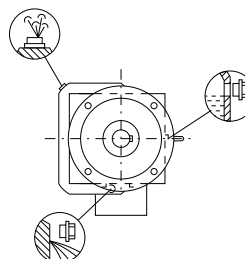
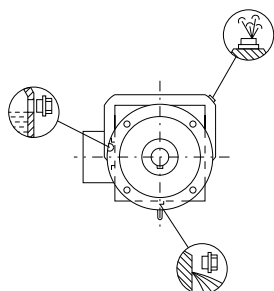
DF/ZF: V3 (IM V3)  
Order code: **D96**  
DZ/ZZ: V19 (IM V19)  
Order code: **D95**

DF/ZF: B5-02 (IM B5-02)  
Order code: **D26**  
DZ/ZZ: B14-02 (IM B14-02)  
Order code: **D02**



DF/ZF: B5-03 (IM B5-03)  
Order code: **D31**  
DZ/ZZ: B14-03 (IM B14-03)  
Order code: **D03**

DF/ZF: B5-00 (IM B5-00)  
Order code: **D17**  
DZ/ZZ: B14-00 (IM B14-00)  
Order code: **D01**



**Selection and ordering data** (continued)

*2- and 3-stage helical gearbox, flange-mounted design (DF/ZF) or with housing flange (DZ/ZZ), sizes 108 - 168*

**Oil control valves:**

-  Oil level
-  Ventilation
-  Oil drain
- \* On opposite side

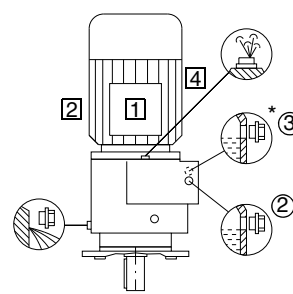
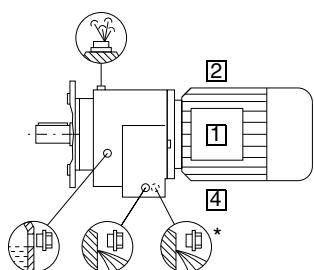
- ② 2-stage gearbox
- ③ 3-stage gearbox

① ... ④ Position of the terminal box, see Chapter 8

1) Standard mounting type

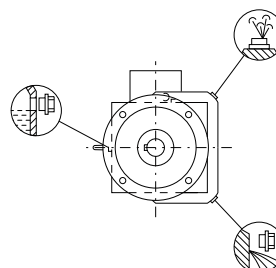
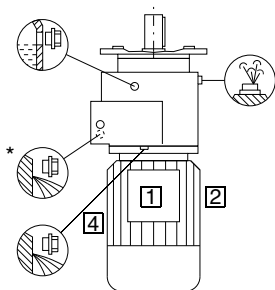
DF/ZF: B5 (IM B5) <sup>1)</sup>  
 Order code: **D16**  
 DZ/ZZ: B14 (IM B14)  
 Order code: **D00**

DF/ZF: V1 (IM V1)  
 Order code: **D88**  
 DZ/ZZ: V18 (IM V18)  
 Order code: **D94**



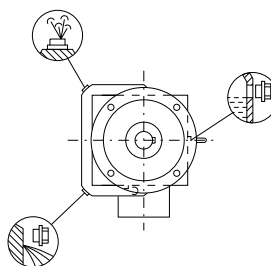
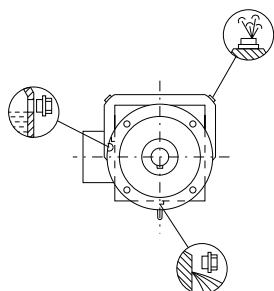
DF/ZF: V3 (IM V3)  
 Order code: **D96**  
 DZ/ZZ: V19 (IM V19)  
 Order code: **D95**

DF/ZF: B5-02 (IM B5-02)  
 Order code: **D26**  
 DZ/ZZ: B14-02 (IM B14-02)  
 Order code: **D02**



DF/ZF: B5-03 (IM B5-03)  
 Order code: **D31**  
 DZ/ZZ: B14-03 (IM B14-03)  
 Order code: **D03**

DF/ZF: B5-00 (IM B5-00)  
 Order code: **D17**  
 DZ/ZZ: B14-00 (IM B14-00)  
 Order code: **D01**



# MOTOX Geared Motors

## Helical geared motors

### Mounting types and mounting positions

#### Selection and ordering data (continued)

#### 2- and 3-stage helical gearbox, flange-mounted design (DF/ZF) or with housing flange (DZ/ZZ), size 188

##### Oil control valves:

-  Oil level
-  Ventilation
-  Oil drain
- \* On opposite side

- ② 2-stage gearbox
- ③ 3-stage gearbox
- ④ Tandem gearbox

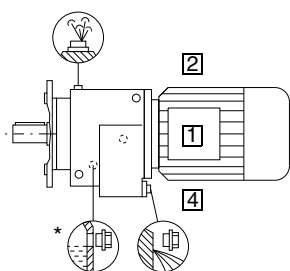
- ① ... ④ Position of the terminal box, see Chapter 8
- 1) Standard mounting type

DF/ZF: B5 (IM B5) 1)

Order code: **D16**

DZ/ZZ: B14 (IM B14) 1)

Order code: **D00**

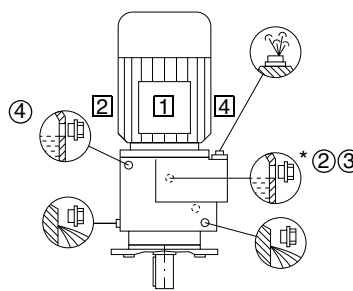


DF/ZF: V1 (IM V1)

Order code: **D88**

DZ/ZZ: V18 (IM V18)

Order code: **D94**

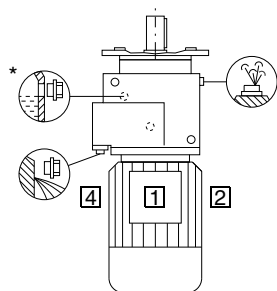


DF/ZF: V3 (IM V3)

Order code: **D96**

DZ/ZZ: V19 (IM V19)

Order code: **D95**

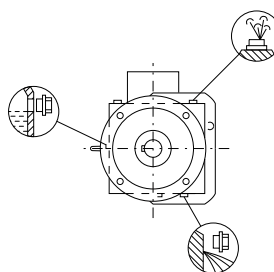


DF/ZF: B5-02 (IM B5-02)

Order code: **D26**

DZ/ZZ: B14-02 (IM B14-02)

Order code: **D02**

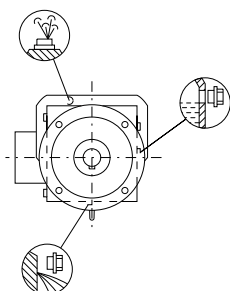


DF/ZF: B5-03 (IM B5-03)

Order code: **D31**

DZ/ZZ: B14-03 (IM B14-03)

Order code: **D03**

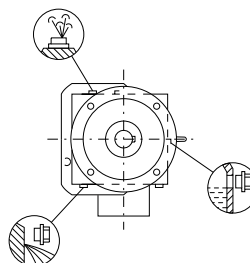


DF/ZF: B5-00 (IM B5-00)

Order code: **D17**

DZ/ZZ: B14-00 (IM B14-00)

Order code: **D01**



**Selection and ordering data** (continued)

**2- and 3-stage helical gearbox with agitator flange (DR/ZR), sizes 68 - 88**

**Oil control valves:**

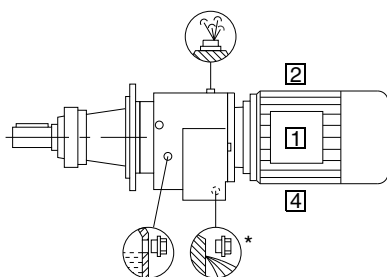
-  Oil level
-  Ventilation
-  Oil drain
- \* On opposite side

- ② 2-stage gearbox
- ③ 3-stage gearbox

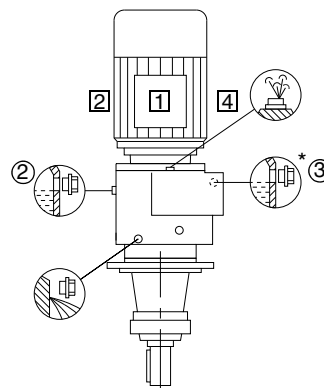
① ... ④ Position of the terminal box, see Chapter 8

<sup>1)</sup> Standard mounting type

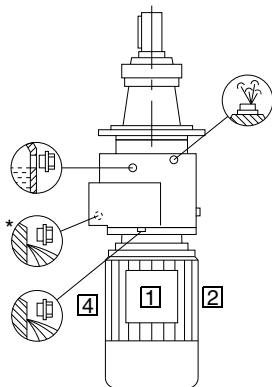
DR/ZR: B5 (IM B5) <sup>1)</sup>  
Order code: **D16**



DR/ZR: V1 (IM V1)  
Order code: **D88**



DR/ZR: V3 (IM V3)  
Order code: **D96**



# MOTOX Geared Motors

## Helical geared motors

### Mounting types and mounting positions

#### Selection and ordering data (continued)

#### 2- and 3-stage helical gearbox with agitator flange (DR/ZR), sizes 108 - 168

##### Oil control valves:

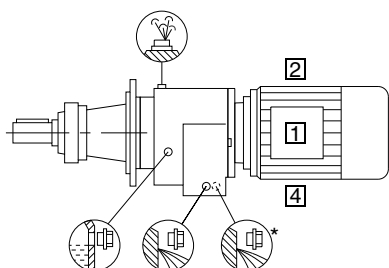
-  Oil level
-  Ventilation
-  Oil drain
- \* On opposite side

- ② 2-stage gearbox
- ③ 3-stage gearbox

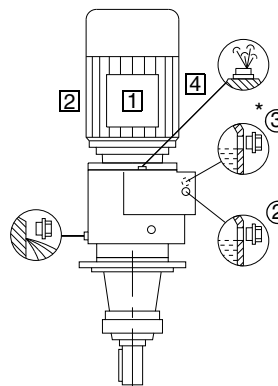
① ... ④ Position of the terminal box, see Chapter 8

<sup>1)</sup> Standard mounting type

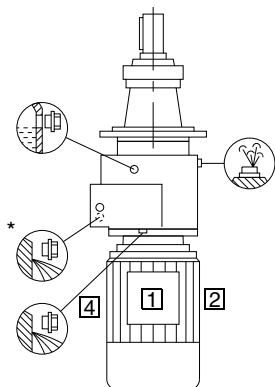
DR/ZR: B5 (IM B5) <sup>1)</sup>  
Order code: **D16**



DR/ZR: V1 (IM V1)  
Order code: **D88**



DR/ZR: V3 (IM V3)  
Order code: **D96**





#### Selection and ordering data (continued)

##### Helical tandem gearbox

The mounting type / mounting position of the tandem gearbox corresponds to that of the main gearbox. The figures below are only designed to show the position of the oil control valves of the 2nd gearbox.

##### Note:

In a horizontal operating position the bulging part of the housing of the 2nd gearbox generally faces vertically downwards.

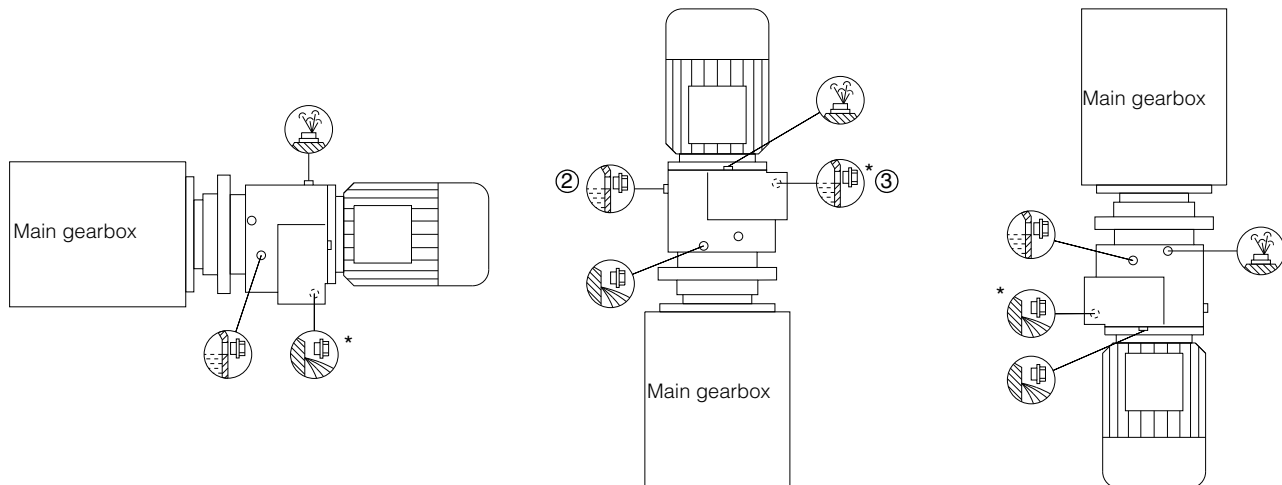
##### Oil control valves:

- Size 28/38 (2nd gearbox): These types are lubricated for life. No ventilation, oil level, or drain plugs are present.

- From size 48 up:  Oil level  Ventilation  Oil drain \* On opposite side

② 2-stage gearbox

③ 3-stage gearbox



# MOTOX Geared Motors

## Helical geared motors

### Special versions

#### Lubricants

Helical gearboxes are filled with mineral oil and supplied ready for use as standard.

If the gearbox is to be used in an application with special requirements, the lubricants listed in the table below can be used.

Area of application	Ambient temperature <sup>1)</sup>	DIN ISO designation	Order code
<b>Standard oils</b>			
Standard temperature	-10 ... +40 °C	CLP ISO VG220	<b>K06</b>
Improved oil service life	-20 ... +50 °C	CLP ISO PG VG220	<b>K07</b>
High temperature usage	0 ... +60 °C	CLP ISO PG VG460	<b>K08</b>
Low temperature usage	-40 ... +40 °C	CLP ISO PAO VG220	<sup>2)</sup>
Lowest temperature usage	-40 ... +10 °C	CLP ISO PAO VG68	<sup>2)</sup>
<b>Physiologically safe oils (for use in the food industry) in acc. with NSF (USDA)-H1</b>			
Standard temperature	-30 ... +40 °C	CLP ISO H1 VG460	<b>K11</b>
<b>Biologically degradable oils</b>			
Standard temperature	-20 ... +40 °C	CLP ISO E VG220	<b>K10</b>

<sup>1)</sup> Recommendation

<sup>2)</sup> On request

Sizes 18 to 28 do not feature any ventilation, oil level, or drain plugs. The lubricant does not need to be changed, due to the low thermal load the gearbox is subjected to.

Helical gearboxes of size 38 have an oil screw; these gearboxes do not require ventilation or ventilation elements.

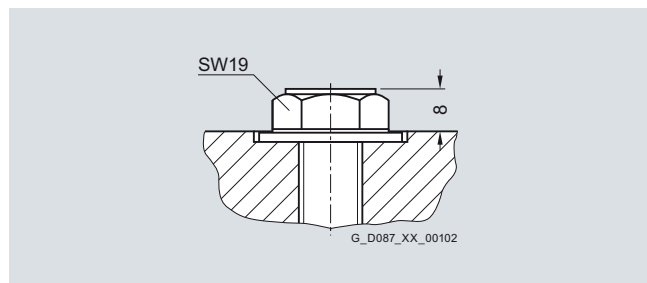
Gearboxes of sizes 48 to 188 are fitted with filler, oil level, and drain plugs as standard. The ventilation and vent filter, which is delivered loose, must be attached in place of the filler plug prior to startup.

#### Oil level control

##### Oil sight glass

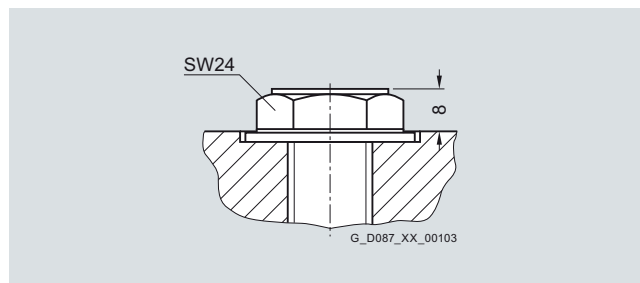
For size 48 and above, gearboxes can be equipped with a visual oil level indicator (oil sight glass) for most mounting types and mounting positions.

Order code:  
Oil sight glass **G34**



SW = Wrench width

Gearbox	Size
Helical gearbox	E.48 ... E.128 D./Z.48 ... D./Z.128



SW = Wrench width

Gearbox	Size
Helical gearbox	E.148 D./Z.148 ... D./Z.188

##### Electrical oil level monitoring system

On request, the gearbox can be supplied with an electrical oil level monitoring system, which enables the oil level of the gearbox to be monitored remotely. The oil level is monitored by a capacitive sensor only when the gearbox starts up; it is not measured continuously during operation.

### Gearbox ventilation

The positions of the ventilation and ventilation elements can be seen on the mounting position diagrams.

If required, a pressure ventilation valve can be used for size 48 and above.

Order code	E.48 ... E.128 D./Z.48 ... D./Z.128	E.148 D./Z.148 ... D./Z.188
Vent filter		
Order code: <b>G44</b>		
Pressure ventilation valve		
Order code: <b>G45</b>		

SW = Wrench width

### Oil drain

#### Magnetic oil drain plug

A magnetic oil drain plug for inserting in the oil drainage hole is available for helical gearboxes of size 48 and above. This serves to collect any metal grit contained in the gear lubricant.

Order code:  
Magnetic oil drain plug **G53**

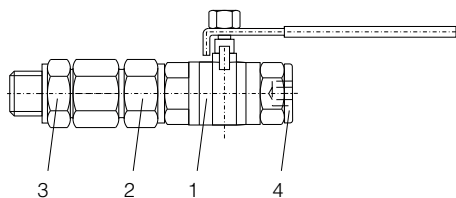
#### Oil drain valve

An oil drain valve is available for helical gearboxes of size 48 and above.

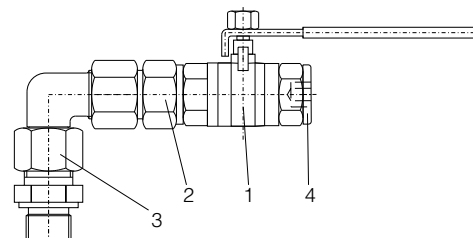
The oil drain valve may be designed as a complete unit featuring a screw plug, depending on the corresponding mounting position.

Order code:  
Oil drain valve, straight **G54**

An angled oil drain valve is also available on request.



Pos.1 Oil drain valve  
Pos.2 Screwed connection EGE  
Pos.3 Screwed connection GE  
Pos.4 Screw plug



Pos.1 Oil drain valve  
Pos.2 Screwed connection EGE  
Pos.3 Screwed connection GE  
Pos.4 Screw plug

# MOTOX Geared Motors

## Helical geared motors

### Special versions

#### Sealing

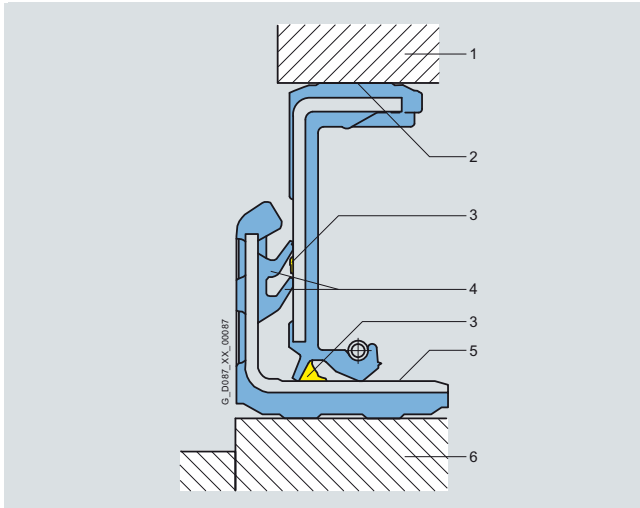
##### Combination shaft sealing

A combination shaft sealing, which helps to prevent oil from leaking, is available for helical gearboxes of sizes 38 to 168.

A combination shaft sealing is particularly well suited to external use.

Order code:

Combination shaft sealing **G24**



- 2 • Housing
- 3 • Rubberized inner and outer diameter
- 4 • Grease filling prevents dry running of the sealing lips
- 5 • Additional sealing lips to protect against dirt
  - Decoupled sealing system prevents scoring of the shaft as a result of corrosion or dirt
- 6 • Protected running surface for radial shaft sealing ring
  - No damage when mounting
- 7 • Shaft

##### Double sealing

Double sealing is possible for helical gearboxes of sizes 18, 28 and 188. Double sealing is particularly well suited to external use.

Order code:

Double sealing MSS1 (sizes 18, 28)

**G23**

Double radial shaft seal (size 188)

**G22+G31**

##### High temperature resistant sealing

High temperature resistant sealings (Viton/fluorinated rubber) for high operating and ambient temperatures of +60 °C and above are available for helical gearboxes.

Order code:

High temperature resistant sealing **G25**

### Radially reinforced output shaft bearings

If required, gearboxes are available with a radially reinforced output shaft bearing arrangement. The reinforced bearings allow higher radial forces to be transferred.

Order code:

Radially reinforced output shaft bearing **G20**

### Axially reinforced output shaft bearings

The gearboxes can be fitted with axially reinforced output shaft bearings on request.

Order code:

Axially reinforced output shaft bearing **G21**

### Agitator flange in dry-well design

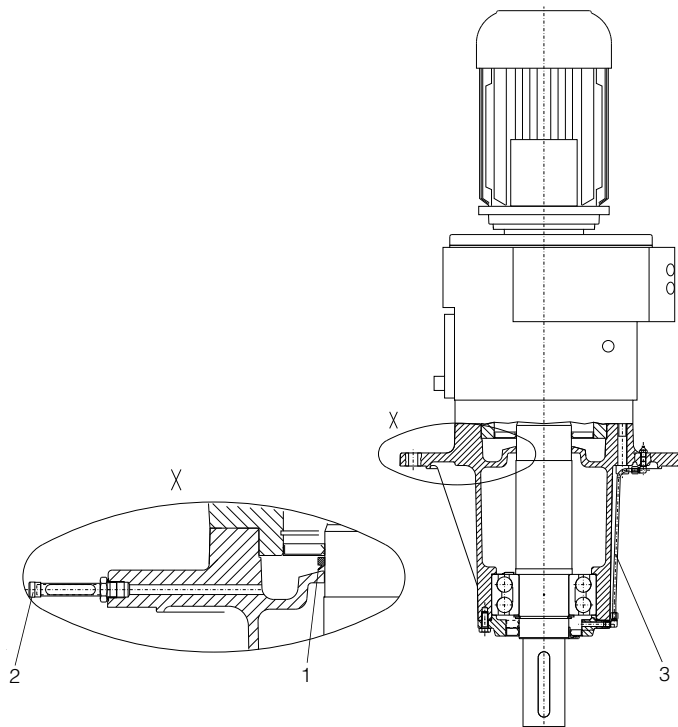
The agitator flange can be fitted with an additional "V" ring (1) in mounting position V1 in order to drain off any leak oil to a safety chamber and protect the equipment against the effects of leak-ages.

The oil can either be viewed through a sight glass, or its presence indicated by an electrical sensor (2).

Order codes:

Design with sight glass **G89**

Design with sensor **G90**



### Regreasing device for the agitator flange (3)

The agitator flange gearbox can be fitted with a regreasing device on request.

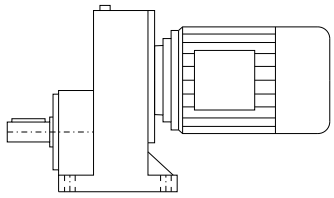
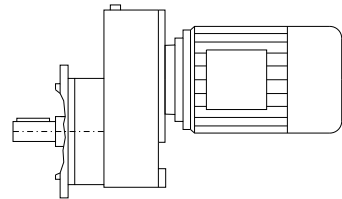
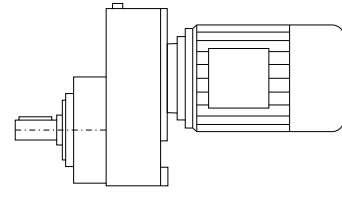
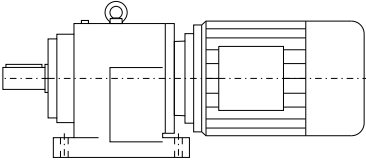
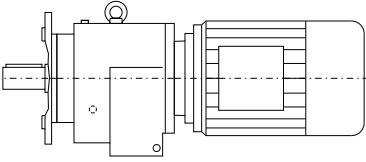
# MOTOX Geared Motors

## Helical geared motors

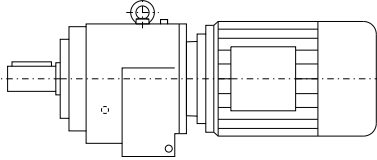
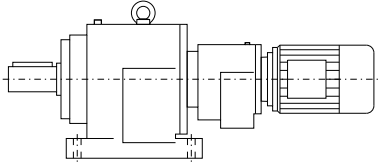
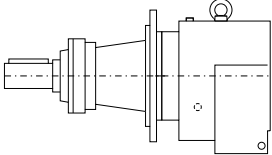
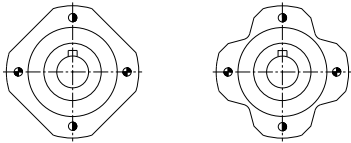
### Dimensions

#### Dimension drawing overview

2

Representation	Gearbox type	Dimension drawing on page
	E38	2/136
	E48	2/139
	E68	2/142
	E88	2/145
	E108	2/148
	E128	2/151
	E148	2/154
	EF38	2/137
	EF48	2/140
	EF68	2/143
	EF88	2/146
	EF108	2/149
	EF128	2/152
	EF148	2/155
	EZ38	2/138
	EZ48	2/141
	EZ68	2/144
	EZ88	2/147
	EZ108	2/150
	EZ128	2/153
	EZ148	2/156
	D/Z18	2/157
	D/Z28	2/159
	D/Z38	2/161
	D/Z48	2/164
	D/Z68	2/167
	D/Z88	2/170
	D/Z108	2/173
	D/Z128	2/176
	D/Z148	2/179
	D/Z168	2/182
	D/Z188	2/185
	DF/ZF18	2/158
	DF/ZF28	2/160
	DF/ZF38	2/162
	DF/ZF48	2/165
	DF/ZF68	2/168
	DF/ZF88	2/171
	DF/ZF108	2/174
	DF/ZF128	2/177
	DF/ZF148	2/180
	DF/ZF168	2/183
	DF/ZF188	2/186

**Dimension drawing overview (continued)**

Representation	Gearbox type	Dimension drawing on page
	DZ/ZZ38	2/163
	DZ/ZZ48	2/166
	DZ/ZZ68	2/169
	DZ/ZZ88	2/172
	DZ/ZZ108	2/175
	DZ/ZZ128	2/178
	DZ/ZZ148	2/181
	DZ/ZZ168	2/184
	DZ/ZZ188	2/187
	D./Z.38-Z28 ... D.188-Z68	2/188
	DR/ZR68 ... DR/ZR168	2/191
	Pin holes	2/192

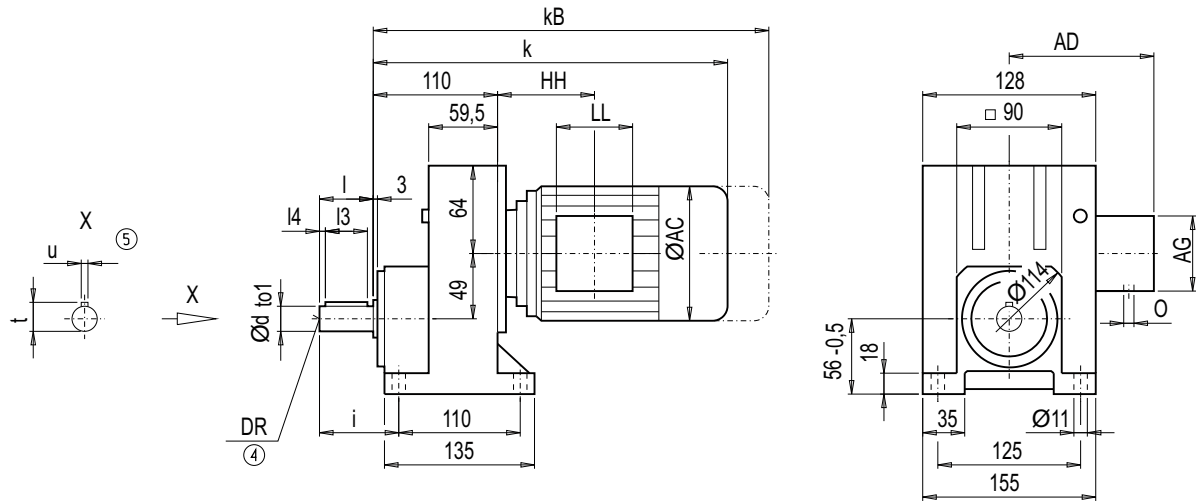
# MOTEX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox E38 (1-stage), foot-mounted design

E011



d	to1	l	l4	l3	t	u	i	DR
20 *)	k6	40	5	30	22.5	6	56	M6x16
25	k6	50	7	40	28.0	8	66	M10x22

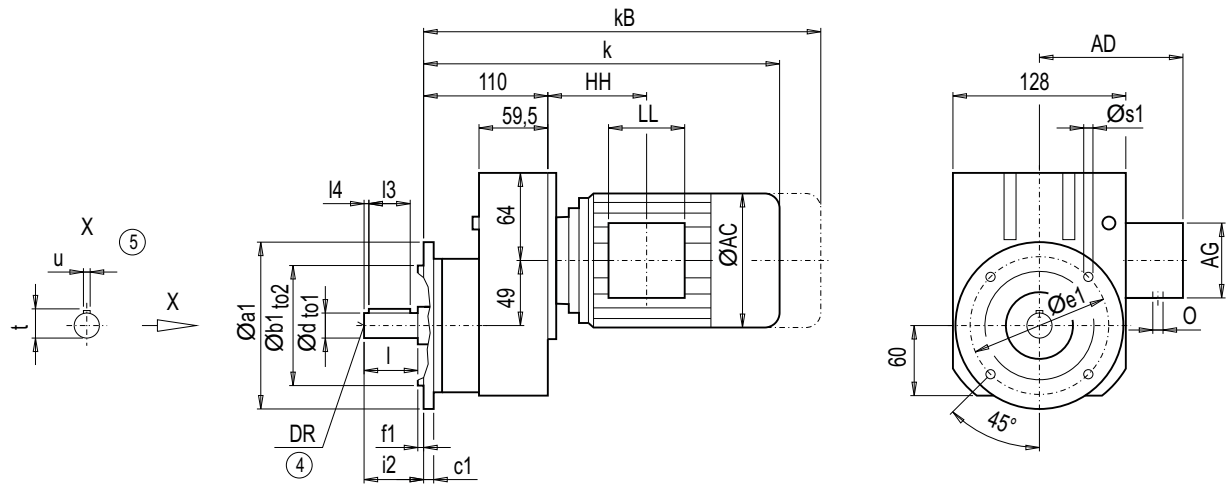
\*) Preferred series

Motor	E38								Weight E38
	k	kB	AC	AD	AG	LL	HH	O	
LA71	368.5	423.5	139.0	146	90	90	114.5	M20x1.5/M25x1.5	12
LA71Z	387.5	442.5	139.0	146	90	90	114.5	M20x1.5/M25x1.5	12
LA80	405.5	469.0	156.5	155	90	90	114.0	M20x1.5/M25x1.5	16
LA80Z	428.0	491.5	156.5	155	90	90	187.0	M20x1.5/M25x1.5	20
LA90S/L	436.5	507.5	174.0	163	90	90	114.0	M20x1.5/M25x1.5	21
LA90ZL	481.5	552.5	174.0	163	90	90	238.0	M20x1.5/M25x1.5	27
LA100L	482.5	563.5	195.0	168	120	120	154.5	2xM32x1.5	30
LA100ZL	552.5	633.5	195.0	168	120	120	286.5	2xM32x1.5	40
LA112M	512.5	593.5	219.0	181	120	120	160.5	2xM32x1.5	41
LA112ZM	540.5	621.5	219.0	181	120	120	264.5	2xM32x1.5	48



### Gearbox EF38 (1-stage), flange-mounted design (A-type)

EF011



Flange	a1	b1	to2	c1	e1	f1	s1	d	to1	l	l4	l3	t	u	i2	DR
A120	120	80	j6	8	100	3.0	6.8	20 <sup>*)</sup>	k6	40	5	30	22.5	6	40	M6x16
								25	k6	50	7	40	28.0	8	50	M10x22
A140	140	95	j6	10	115	3.0	9.0	20 <sup>*)</sup>	k6	40	5	30	22.5	6	40	M6x16
								25	k6	50	7	40	28.0	8	50	M10x22
A160	160	110	j6	10	130	3.5	9.0	20 <sup>*)</sup>	k6	40	5	30	22.5	6	40	M6x16
								25	k6	50	7	40	28.0	8	50	M10x22
A200	200	130	j6	12	165	3.5	11.0	20 <sup>*)</sup>	k6	40	5	30	22.5	6	40	M6x16
								25	k6	50	7	40	28.0	8	50	M10x22
A250	250	180	j6	15	215	4.0	13.5	20 <sup>*)</sup>	k6	40	5	30	22.5	6	40	M6x16
								25	k6	50	7	40	28.0	8	50	M10x22

\*) Preferred series

Motor	EF38									Weight EF38
	k	kB	AC	AD	AG	LL	HH	O		
LA71	368.5	423.5	139.0	146	90	90	114.5	M20x1.5/M25x1.5	14	
LA71Z	387.5	442.5	139.0	146	90	90	114.5	M20x1.5/M25x1.5	14	
LA80	405.5	469.0	156.5	155	90	90	114.0	M20x1.5/M25x1.5	19	
LA80Z	428.0	491.5	156.5	155	90	90	187.0	M20x1.5/M25x1.5	23	
LA90S/L	436.5	507.5	174.0	163	90	90	114.0	M20x1.5/M25x1.5	24	
LA90ZL	481.5	552.5	174.0	163	90	90	238.0	M20x1.5/M25x1.5	30	
LA100L	482.5	563.5	195.0	168	120	120	154.5	2xM32x1.5	33	
LA100ZL	552.5	633.5	195.0	168	120	120	286.5	2xM32x1.5	43	
LA112M	512.5	593.5	219.0	181	120	120	160.5	2xM32x1.5	43	
LA112ZM	540.5	621.5	219.0	181	120	120	264.5	2xM32x1.5	50	

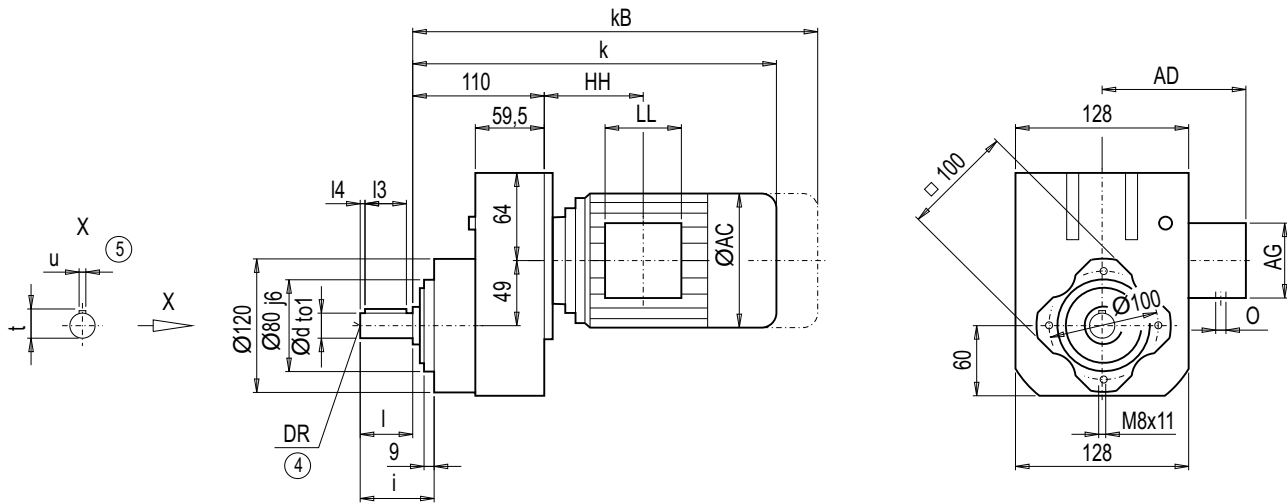
# MOTEX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox EZ38 (1-stage), housing-flange-mounted design (C-type)

EZ011



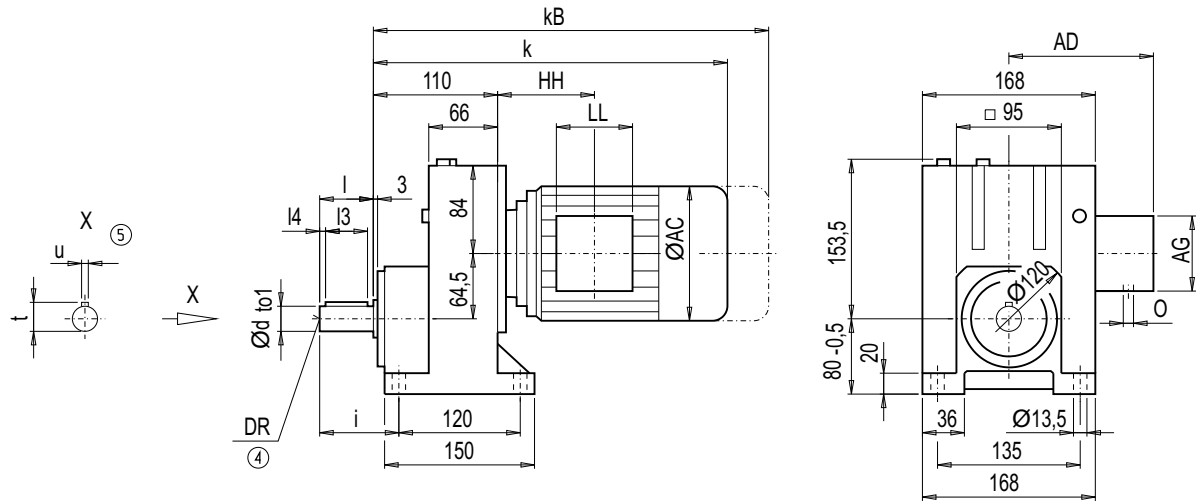
d	to1	l	l4	l3	t	u	i	DR
20 <sup>*)</sup>	k6	40	5	30	22.5	6	53	M6x16
25	k6	50	7	40	28.0	8	63	M10x22

\*) Preferred series

Motor	EZ38								Weight
	k	kB	AC	AD	AG	LL	HH	O	EZ38
LA71	368.5	423.5	139.0	146	90	90	114.5	M20x1.5/M25x1.5	11
LA71Z	387.5	442.5	139.0	146	90	90	114.5	M20x1.5/M25x1.5	11
LA80	405.5	469.0	156.5	155	90	90	114.0	M20x1.5/M25x1.5	16
LA80Z	428.0	491.5	156.5	155	90	90	187.0	M20x1.5/M25x1.5	20
LA90S/L	436.5	507.5	174.0	163	90	90	114.0	M20x1.5/M25x1.5	20
LA90ZL	481.5	552.5	174.0	163	90	90	238.0	M20x1.5/M25x1.5	26
LA100L	482.5	563.5	195.0	168	120	120	154.5	2xM32x1.5	29
LA100ZL	552.5	633.5	195.0	168	120	120	286.5	2xM32x1.5	39
LA112M	512.5	593.5	219.0	181	120	120	160.5	2xM32x1.5	40
LA112ZM	540.5	621.5	219.0	181	120	120	264.5	2xM32x1.5	47

### Gearbox E48 (1-stage), foot-mounted design

E011



d	to1	l	l4	l3	t	u	i	DR
25 *)	k6	50	7	40	28	8	75	M10x22
30	k6	60	7	50	33	8	85	M10x22

\*) Preferred series

Motor	E48								Weight E48
	k	kB	AC	AD	AG	LL	HH	O	
LA71	363.0	418.0	139.0	146	90	90	109.0	M20x1.5/M25x1.5	15
LA71Z	382.0	437.0	139.0	146	90	90	109.0	M20x1.5/M25x1.5	15
LA80	400.0	463.5	156.5	155	90	90	108.5	M20x1.5/M25x1.5	20
LA80Z	422.5	486.0	156.5	155	90	90	181.5	M20x1.5/M25x1.5	24
LA90S/L	431.0	502.0	174.0	163	90	90	108.5	M20x1.5/M25x1.5	25
LA90ZL	476.0	547.0	174.0	163	90	90	232.5	M20x1.5/M25x1.5	31
LA100L	477.0	558.0	195.0	168	120	120	149.0	2xM32x1.5	34
LA100ZL	547.0	628.0	195.0	168	120	120	281.0	2xM32x1.5	44
LA112M	506.0	587.0	219.0	181	120	120	154.0	2xM32x1.5	45
LA112ZM	534.0	615.0	219.0	181	120	120	258.0	2xM32x1.5	52
LA132S/M	568.5	670.5	259.0	195	140	140	197.0	2xM32x1.5	55
LA132ZM	614.5	716.5	259.0	195	140	140	305.0	2xM32x1.5	76

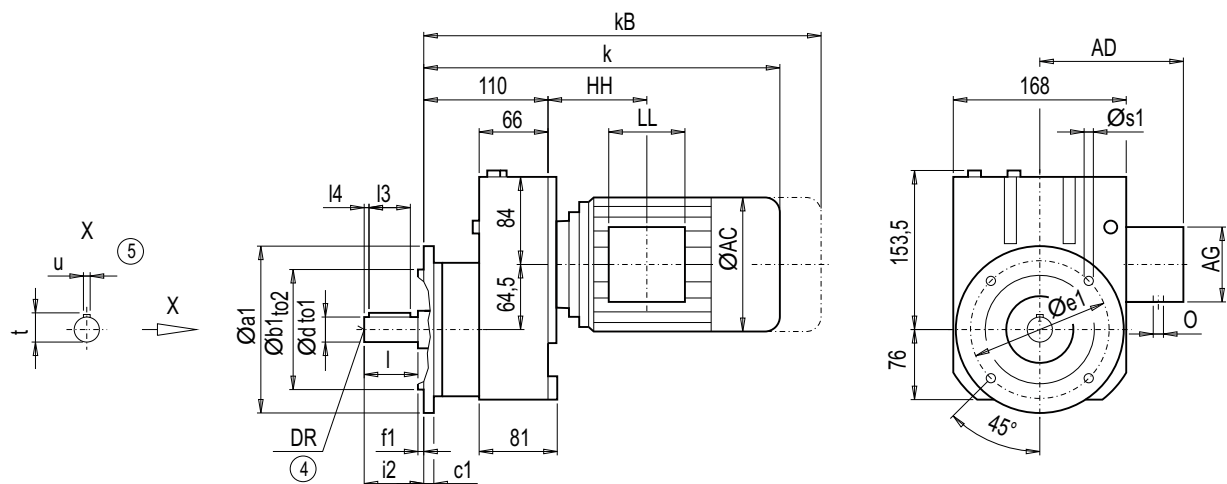
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox EF48 (1-stage), flange-mounted design (A-type)

EF011



Flange	a1	b1	to2	c1	e1	f1	s1	d	to1	l	I3	I4	t	u	i2	DR
A120	120	80	j6	8	100	3.0	6.8	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
								30	k6	60	7	50	33	8	60	M10x22
A140	140	95	j6	10	115	3.0	9.0	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
								30	k6	60	7	50	33	8	60	M10x22
A160	160	110	j6	10	130	3.5	9.0	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
								30	k6	60	7	50	33	8	60	M10x22
A200	200	130	j6	12	165	3.5	11.0	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
								30	k6	60	7	50	33	8	60	M10x22
A250	250	180	j6	15	215	4.0	13.5	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
								30	k6	60	7	50	33	8	60	M10x22

\*) Preferred series

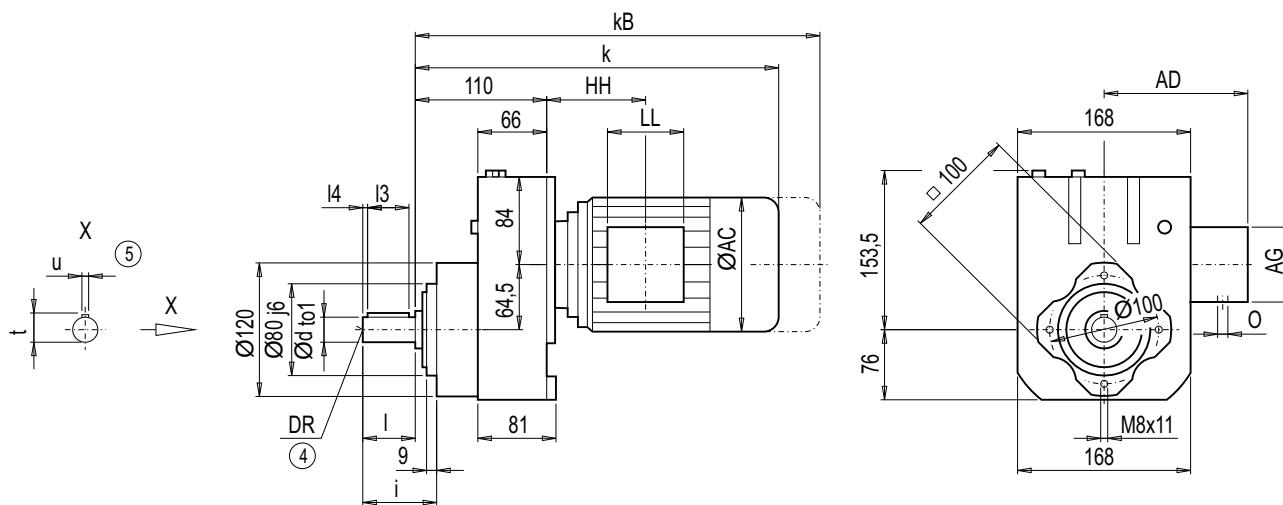
Motor	EF48								Weight EF48
	k	kB	AC	AD	AG	LL	HH	O	
LA71	363.0	418.0	139.0	146	90	90	109.0	M20x1.5/M25x1.5	17
LA71Z	382.0	437.0	139.0	146	90	90	109.0	M20x1.5/M25x1.5	17
LA80	400.0	463.5	156.5	155	90	90	108.5	M20x1.5/M25x1.5	22
LA80Z	422.5	486.0	156.5	155	90	90	181.5	M20x1.5/M25x1.5	26
LA90S/L	431.0	502.0	174.0	163	90	90	108.5	M20x1.5/M25x1.5	27
LA90ZL	476.0	547.0	174.0	163	90	90	232.5	M20x1.5/M25x1.5	33
LA100L	477.0	558.0	195.0	168	120	120	149.0	2xM32x1.5	36
LA100ZL	547.0	628.0	195.0	168	120	120	281.0	2xM32x1.5	46
LA112M	506.0	587.0	219.0	181	120	120	154.0	2xM32x1.5	47
LA112ZM	534.0	615.0	219.0	181	120	120	258.0	2xM32x1.5	54
LA132S/M	568.5	670.5	259.0	195	140	140	197.0	2xM32x1.5	57
LA132ZM	614.5	716.5	259.0	195	140	140	305.0	2xM32x1.5	78

④ DIN 332

⑤ Feather key / keyway DIN 6885

### Gearbox EZ48 (1-stage), housing-flange-mounted design (C-type)

EZ011



d	to1	l	l4	l3	t	u	i	DR
25 <sup>*)</sup>	k6	50	7	40	28	8	63	M10x22
30	k6	60	7	50	33	8	73	M10x22

\*) Preferred series

Motor	EZ48								Weight EZ48
	k	kB	AC	AD	AG	LL	HH	O	
LA71	363.0	418.0	139.0	146	90	90	109.0	M20x1.5/M25x1.5	14
LA71Z	382.0	437.0	139.0	146	90	90	109.0	M20x1.5/M25x1.5	14
LA80	400.0	463.5	156.5	155	90	90	108.5	M20x1.5/M25x1.5	19
LA80Z	422.5	486.0	156.5	155	90	90	181.5	M20x1.5/M25x1.5	23
LA90S/L	431.0	502.0	174.0	163	90	90	108.5	M20x1.5/M25x1.5	23
LA90ZL	476.0	547.0	174.0	163	90	90	232.5	M20x1.5/M25x1.5	29
LA100L	477.0	558.0	195.0	168	120	120	149.0	2xM32x1.5	33
LA100ZL	547.0	628.0	195.0	168	120	120	281.0	2xM32x1.5	43
LA112M	506.0	587.0	219.0	181	120	120	154.0	2xM32x1.5	44
LA112ZM	534.0	615.0	219.0	181	120	120	258.0	2xM32x1.5	51
LA132S/M	568.5	670.5	259.0	195	140	140	197.0	2xM32x1.5	54
LA132ZM	614.5	716.5	259.0	195	140	140	305.0	2xM32x1.5	75

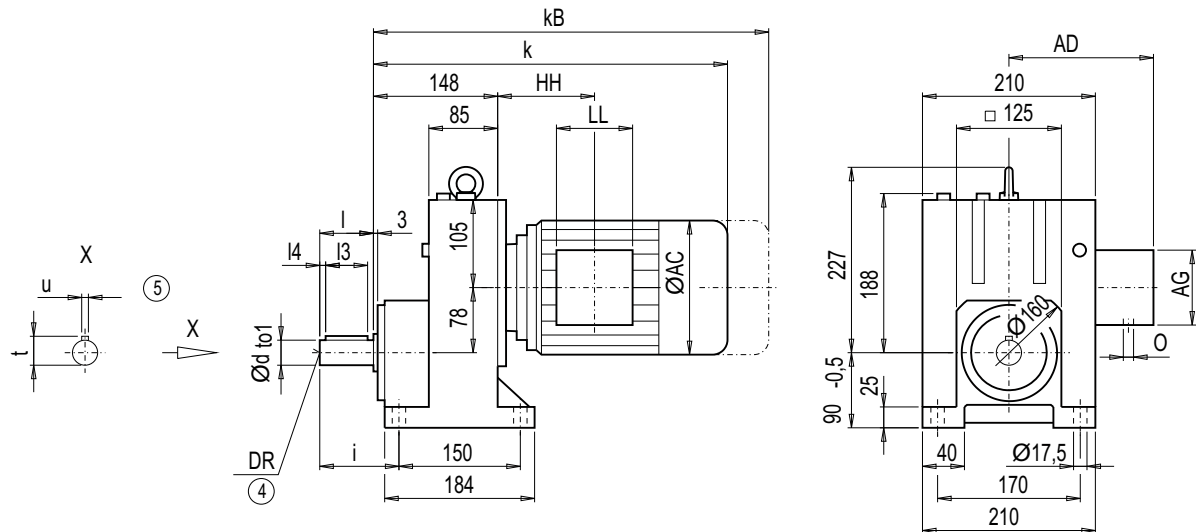
# MOTEX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox E68 (1-stage), foot-mounted design

E011



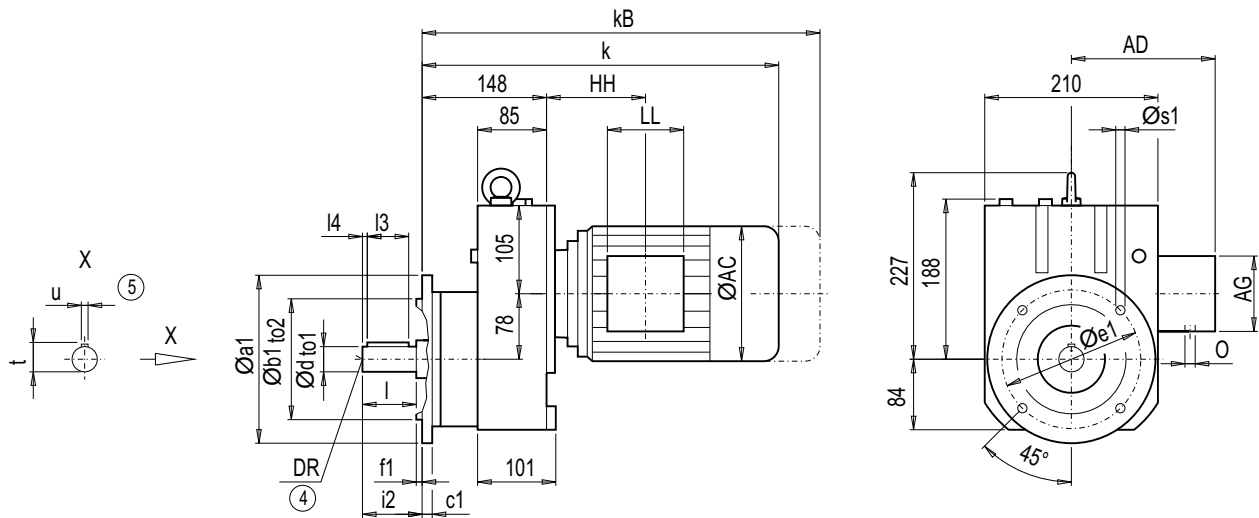
d	to1	l	l4	l3	t	u	i	DR
30 <sup>*)</sup>	k6	60	3.5	50	33	8	85	M10x22
40	k6	80	5	70	43	12	105	M16x36

\*) Preferred series

Motor	E68								Weight E68
	k	kB	AC	AD	AG	LL	HH	O	
LA71	395.0	450.0	139.0	146	90	90	103.0	M20x1.5/M25x1.5	25
LA71Z	414.0	469.0	139.0	146	90	90	103.0	M20x1.5/M25x1.5	25
LA80	432.0	495.5	156.5	155	90	90	102.5	M20x1.5/M25x1.5	30
LA80Z	454.5	518.0	156.5	155	90	90	175.5	M20x1.5/M25x1.5	34
LA90S/L	463.0	534.0	174.0	163	90	90	102.5	M20x1.5/M25x1.5	40
LA90ZL	508.0	579.0	174.0	163	90	90	226.5	M20x1.5/M25x1.5	34
LA100L	509.0	590.0	195.0	168	120	120	143.0	2xM32x1.5	44
LA100ZL	579.0	660.0	195.0	168	120	120	275.0	2xM32x1.5	54
LA112M	536.0	617.0	219.0	181	120	120	146.0	2xM32x1.5	55
LA112ZM	564.0	645.0	219.0	181	120	120	250.0	2xM32x1.5	62
LA132S/M	596.0	698.0	259.0	195	140	140	186.5	2xM32x1.5	68
LA132ZM	642.0	744.0	259.0	195	140	140	294.5	2xM32x1.5	89
LA160M/L	699.0	817.5	313.5	227	165	165	212.5	2xM40x1.5	101
LA160ZL	747.0	865.5	313.5	227	165	165	365.5	2xM40x1.5	140

### Gearbox EF68 (1-stage), flange-mounted design (A-type)

EF011



Flange	a1	b1	to2	c1	e1	f1	s1	d	to1	l	l4	l3	t	u	i2	DR
A200	200	130	j6	12	165	3.5	11.0	30 <sup>*)</sup>	k6	60	3.5	50	33	8	60	M10x22
								40	k6	80	5	70	43	12	80	M16x36
A250	250	180	j6	15	215	4.0	13.5	30 <sup>*)</sup>	k6	60	3.5	50	33	8	60	M10x22
								40	k6	80	5	70	43	12	80	M16x36
A300	300	230	j6	16	265	4.0	13.5	30 <sup>*)</sup>	k6	60	3.5	50	33	8	60	M10x22
								40	k6	80	5	70	43	12	80	M16x36

\*) Preferred series

Motor	EF68								Weight EF68
	k	kB	AC	AD	AG	LL	HH	O	
LA71	395.0	450.0	139.0	146	90	90	103.0	M20x1.5/M25x1.5	27
LA71Z	414.0	469.0	139.0	146	90	90	103.0	M20x1.5/M25x1.5	27
LA80	432.0	495.5	156.5	155	90	90	102.5	M20x1.5/M25x1.5	32
LA80Z	454.5	518.0	156.5	155	90	90	175.5	M20x1.5/M25x1.5	36
LA90S/L	463.0	534.0	174.0	163	90	90	102.5	M20x1.5/M25x1.5	36
LA90ZL	508.0	579.0	174.0	163	90	90	226.5	M20x1.5/M25x1.5	42
LA100L	509.0	590.0	195.0	168	120	120	143.0	2xM32x1.5	46
LA100ZL	579.0	660.0	195.0	168	120	120	275.0	2xM32x1.5	56
LA112M	536.0	617.0	219.0	181	120	120	146.0	2xM32x1.5	57
LA112ZM	564.0	645.0	219.0	181	120	120	250.0	2xM32x1.5	64
LA132S/M	596.0	698.0	259.0	195	140	140	186.5	2xM32x1.5	70
LA132ZM	642.0	744.0	259.0	195	140	140	294.5	2xM32x1.5	91
LA160M/L	699.0	817.5	313.5	227	165	165	212.5	2xM40x1.5	103
LA160ZL	747.0	865.5	313.5	227	165	165	365.5	2xM40x1.5	142

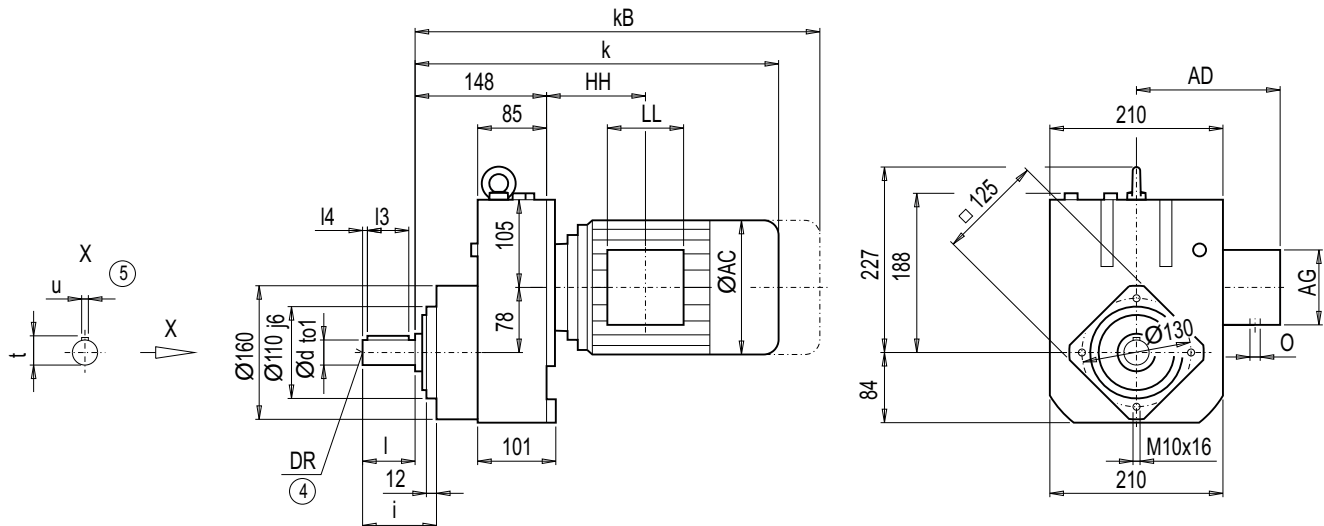
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox EZ68 (1-stage), housing-flange-mounted design (C-type)

EZ011



d	to1	l	l4	l3	t	u	i	DR
30 <sup>*)</sup>	k6	60	3.5	50	33	8	77	M10x22
40	k6	80	5	70	43	12	97	M16x36

\*) Preferred series

Motor	EZ68								Weight EZ68
	k	kB	AC	AD	AG	LL	HH	O	
LA71	395.0	450.0	139.0	146	90	90	103.0	M20x1.5/M25x1.5	22
LA71Z	414.0	469.0	139.0	146	90	90	103.0	M20x1.5/M25x1.5	22
LA80	432.0	495.5	156.5	155	90	90	102.5	M20x1.5/M25x1.5	27
LA80Z	454.5	518.0	156.5	155	90	90	175.5	M20x1.5/M25x1.5	31
LA90S/L	463.0	534.0	174.0	163	90	90	102.5	M20x1.5/M25x1.5	32
LA90ZL	508.0	579.0	174.0	163	90	90	226.5	M20x1.5/M25x1.5	38
LA100L	509.0	590.0	195.0	168	120	120	143.0	2xM32x1.5	41
LA100ZL	579.0	660.0	195.0	168	120	120	275.0	2xM32x1.5	51
LA112M	536.0	617.0	219.0	181	120	120	146.0	2xM32x1.5	53
LA112ZM	564.0	645.0	219.0	181	120	120	250.0	2xM32x1.5	60
LA132S/M	596.0	698.0	259.0	195	140	140	186.5	2xM32x1.5	66
LA132ZM	642.0	744.0	259.0	195	140	140	294.5	2xM32x1.5	87
LA160M/L	699.0	817.5	313.5	227	165	165	212.5	2xM40x1.5	99
LA160ZL	747.0	865.5	313.5	227	165	165	365.5	2xM40x1.5	138

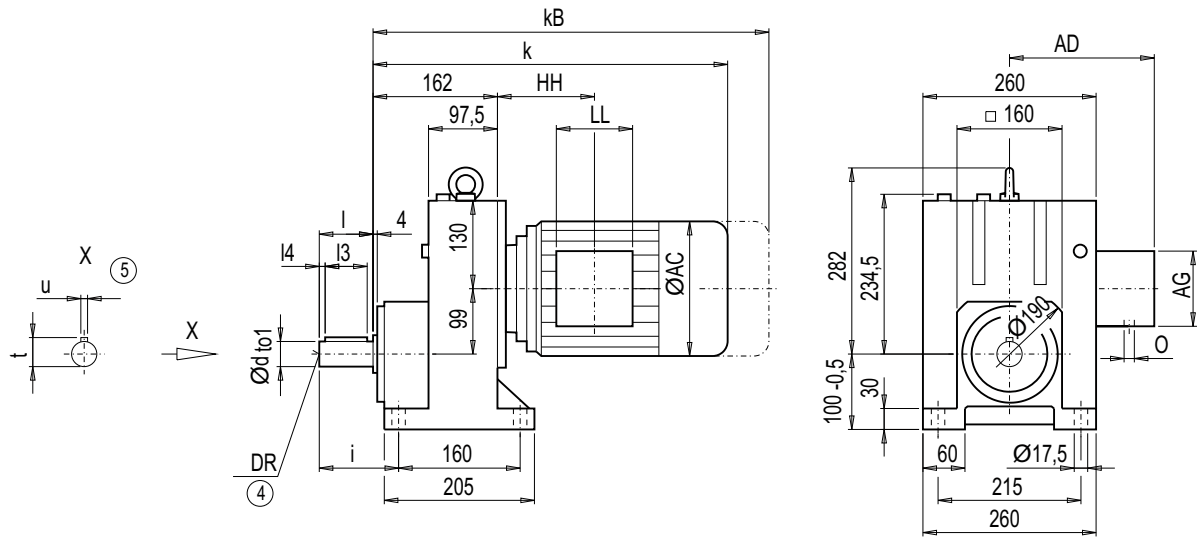
④ DIN 332

⑤ Feather key / keyway DIN 6885



#### Gearbox E88 (1-stage), foot-mounted design

E011



d	to1	l	l4	l3	t	u	i	DR
40 *)	k6	80	5	70	43	12	110	M16x36
45	k6	90	5	80	48.5	14	120	M16x36

\*) Preferred series

Motor	E88								Weight
	k	kB	AC	AD	AG	LL	HH	O	E88
LA90S/L	462.0	533.0	174.0	163.0	90	90	87.5	M20x1.5/M25x1.5	52
LA90ZL	507.0	578.0	174.0	163.0	90	90	211.5	M20x1.5/M25x1.5	58
LA100L	505.5	586.5	195.0	168.0	120	120	125.5	2xM32x1.5	60
LA100ZL	575.5	656.5	195.0	168.0	120	120	257.5	2xM32x1.5	70
LA112M	531.5	612.5	219.0	181.0	120	120	127.5	2xM32x1.5	72
LA112ZM	559.5	640.5	219.0	181.0	120	120	231.5	2xM32x1.5	79
LA132S/M	591.5	693.5	259.0	195.0	140	140	168.0	2xM32x1.5	84
LA132ZM	637.5	739.5	259.0	195.0	140	140	276.0	2xM32x1.5	105
LA160M/L	696.0	814.5	313.5	227.0	165	165	195.5	2xM40x1.5	119
LA160ZL	744.0	862.5	313.5	227.0	165	165	348.5	2xM40x1.5	158
LG180M/L	756.0	878.0	348.0	322.5	260	192	213.0	2xM40x1.5	211
LG180ZM/ZL	807.0	929.0	348.0	322.5	260	192	213.0	2xM40x1.5	241

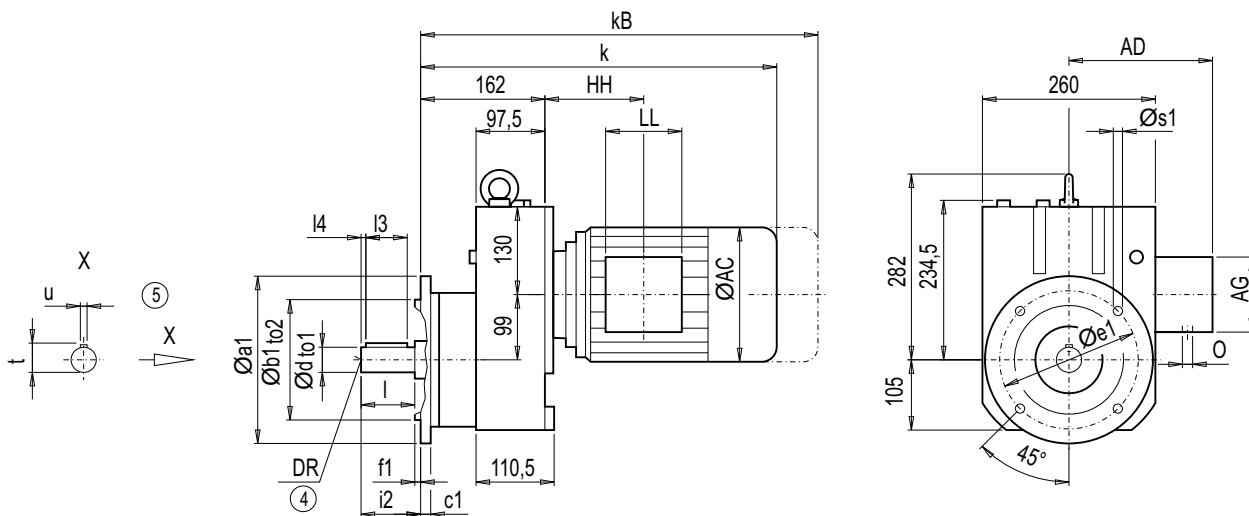
# MOTEX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox EF88 (1-stage), flange-mounted design (A-type)

EF011



Flange	a1	b1	to2	c1	e1	f1	s1	d	to1	l	l4	l3	t	u	i2	DR
<b>A250</b>	250	180	j6	15	215	4	13.5	40 <sup>*)</sup>	k6	80	5	70	43	12	80	M16x36
								45	k6	90	5	80	48.5	14	90	M16x36
<b>A300</b>	300	230	j6	16	265	4	13.5	40 <sup>*)</sup>	k6	80	5	70	43	12	80	M16x36
								45	k6	90	5	80	48.5	14	90	M16x36
<b>A350</b>	350	250	h6	18	300	4	17.5	40 <sup>*)</sup>	k6	80	5	70	43	12	80	M16x36
								45	k6	90	5	80	48.5	14	90	M16x36

\*) Preferred series

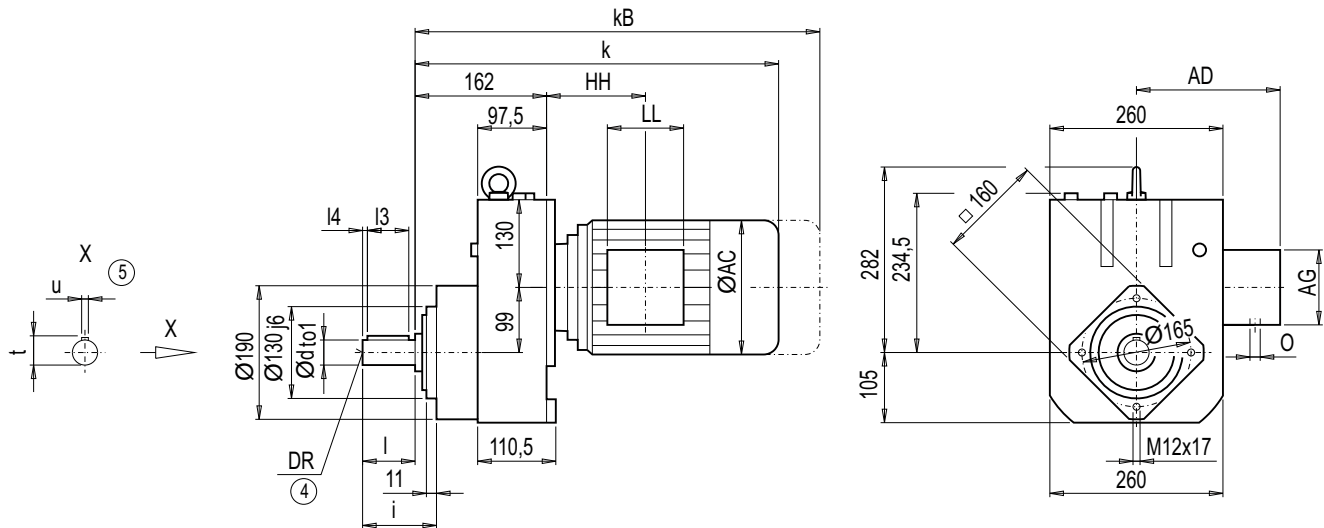
Motor	EF88									Weight
	k	kB	AC	AD	AG	LL	HH	O	EF88	
LA90S/L	462.0	533.0	174.0	163.0	90	90	87.5	M20x1.5/M25x1.5	54	
LA90ZL	507.0	578.0	174.0	163.0	90	90	211.5	M20x1.5/M25x1.5	60	
LA100L	505.5	586.5	195.0	168.0	120	120	125.5	2xM32x1.5	62	
LA100ZL	575.5	656.5	195.0	168.0	120	120	257.5	2xM32x1.5	72	
LA112M	531.5	612.5	219.0	181.0	120	120	127.5	2xM32x1.5	74	
LA112ZM	559.5	640.5	219.0	181.0	120	120	231.5	2xM32x1.5	81	
LA132S/M	591.5	693.5	259.0	195.0	140	140	168.0	2xM32x1.5	85	
LA132ZM	637.5	739.5	259.0	195.0	140	140	276.0	2xM32x1.5	107	
LA160M/L	696.0	814.5	313.5	227.0	165	165	195.5	2xM40x1.5	120	
LA160ZL	744.0	862.5	313.5	227.0	165	165	348.5	2xM40x1.5	159	
LG180M/L	756.0	878.0	348.0	322.5	260	192	213.0	2xM40x1.5	212	
LG180ZM/ZL	807.0	929.0	348.0	322.5	260	192	213.0	2xM40x1.5	242	

④ DIN 332

⑤ Feather key / keyway DIN 6885

### Gearbox EZ88 (1-stage), housing-flange-mounted design (C-type)

EZ011



d	to1	l	l4	l3	t	u	i	DR
40 *)	k6	80	5	70	43	12	98	M16x36
45	k6	90	5	80	48.5	14	108	M16x36

\*) Preferred series

Motor	EZ88								Weight
	k	kB	AC	AD	AG	LL	HH	O	EZ88
LA90S/L	462.0	533.0	174.0	163.0	90	90	87.5	M20x1.5/M25x1.5	47
LA90ZL	507.0	578.0	174.0	163.0	90	90	211.5	M20x1.5/M25x1.5	53
LA100L	505.5	586.5	195.0	168.0	120	120	125.5	2xM32x1.5	55
LA100ZL	575.5	656.5	195.0	168.0	120	120	257.5	2xM32x1.5	65
LA112M	531.5	612.5	219.0	181.0	120	120	127.5	2xM32x1.5	67
LA112ZM	559.5	640.5	219.0	181.0	120	120	231.5	2xM32x1.5	74
LA132S/M	591.5	693.5	259.0	195.0	140	140	168.0	2xM32x1.5	79
LA132ZM	637.5	739.5	259.0	195.0	140	140	276.0	2xM32x1.5	100
LA160M/L	696.0	814.5	313.5	227.0	165	165	195.5	2xM40x1.5	114
LA160ZL	744.0	862.5	313.5	227.0	165	165	348.5	2xM40x1.5	153
LG180M/L	756.0	878.0	348.0	322.5	260	192	213.0	2xM40x1.5	206
LG180ZM/ZL	807.0	929.0	348.0	322.5	260	192	213.0	2xM40x1.5	236

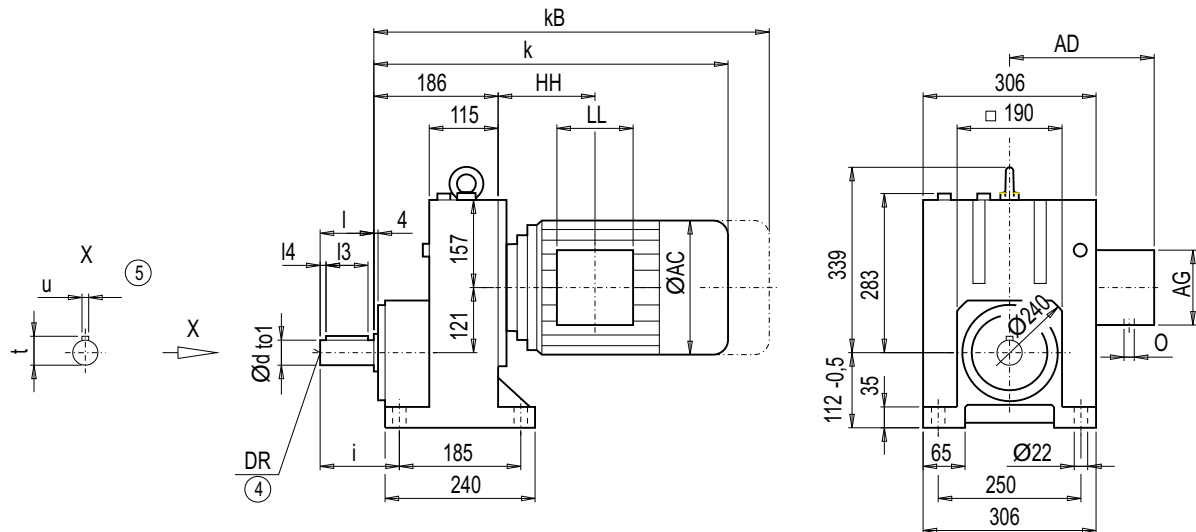
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox E108 (1-stage), foot-mounted design

E011



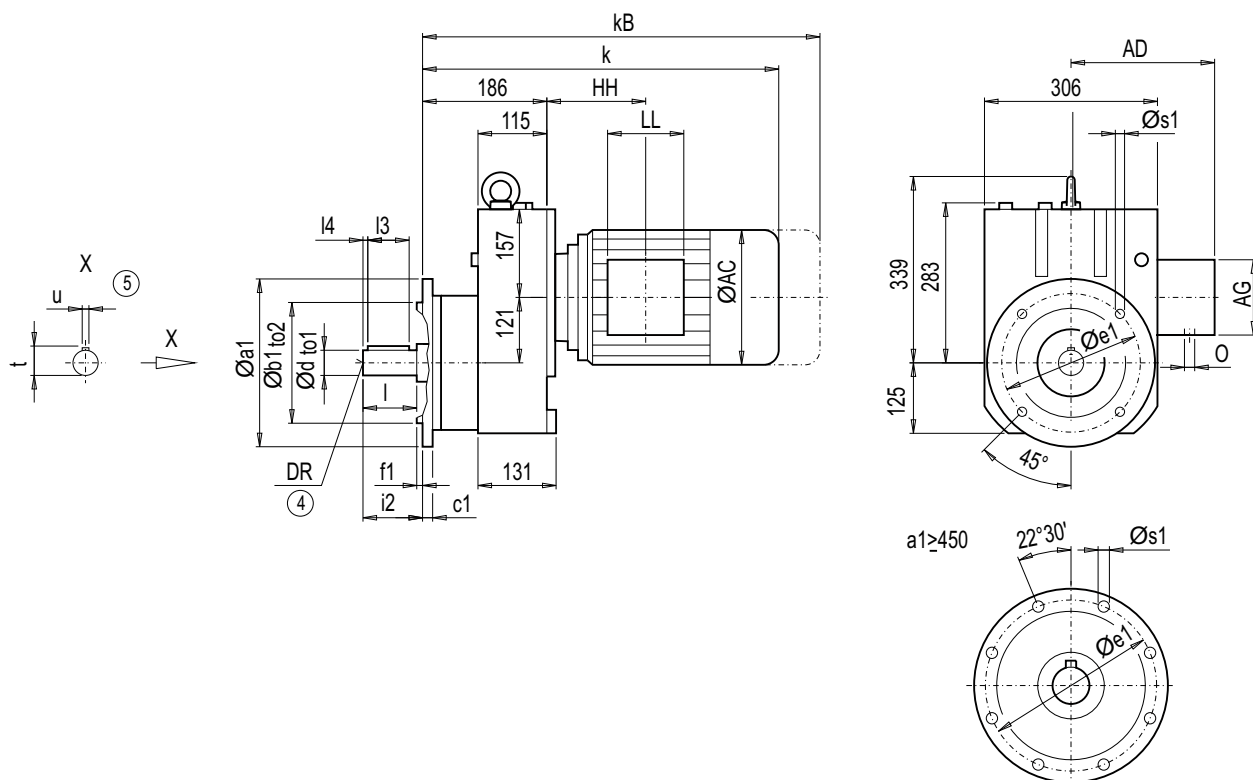
d	to1	l	l4	l3	t	u	i	DR
50 *)	k6	100	10	80	53.5	14	140	M16x36
55	k6	110	5	100	59.0	16	150	M20x42

\*) Preferred series

Motor	E108								Weight E108
	k	kB	AC	AD	AG	LL	HH	O	
LA90S/L	474.5	545.5	174.0	163.0	90	90	76.0	M20x1.5/M25x1.5	74
LA90ZL	519.5	590.5	174.0	163.0	90	90	200.0	M20x1.5/M25x1.5	80
LA100L	517.5	598.5	195.0	168.0	120	120	113.5	2xM32x1.5	82
LA100ZL	587.5	668.5	195.0	168.0	120	120	245.5	2xM32x1.5	92
LA112M	544.0	625.0	219.0	181.0	120	120	116.0	2xM32x1.5	94
LA112ZM	572.0	653.0	219.0	181.0	120	120	220.0	2xM32x1.5	101
LA132S/M	603.0	705.0	259.0	195.0	140	140	155.5	2xM32x1.5	105
LA132ZM	649.0	751.0	259.0	195.0	140	140	263.5	2xM32x1.5	126
LA160M/L	708.5	827.0	313.5	227.0	165	165	184.0	2xM40x1.5	139
LA160ZL	756.5	875.0	313.5	227.0	165	165	337.0	2xM40x1.5	178
LG180M/L	765.0	887.0	348.0	322.5	260	192	198.0	2xM40x1.5	236
LG180ZM/ZL	816.0	938.0	348.0	322.5	260	192	198.0	2xM40x1.5	266
LG200L	821.0	947.0	385.0	301.0	260	192	228.0	2xM50x1.5	316
K4-LGI225S	1 082.0	1 321.0	442.0	325.0	260	192	443.0	2xM50x1.5	472
K4-LGI225M	1 082.0	1 321.0	442.0	325.0	260	192	443.0	2xM50x1.5	460
K4-LGI225ZM	1 142.0	1 381.0	442.0	325.0	260	192	443.0	2xM50x1.5	518

### Gearbox EF108 (1-stage), flange-mounted design (A-type)

EF011



Flange	a1	b1	to2	c1	e1	f1	s1	d	to1	l	l4	l3	t	u	i2	DR
A300	300	230	j6	16	265	4	13.5	50 <sup>*)</sup>	k6	100	10	80	53.5	14	100	M16x36
								55	k6	110	5	100	59.0	16	110	M20x42
A350	350	250	h6	18	300	5	17.5	50 <sup>*)</sup>	k6	100	10	80	53.5	14	100	M16x36
								55	k6	110	5	100	59.0	16	110	M20x42
A450	450	350	h6	22	400	5	17.5	50 <sup>*)</sup>	k6	100	10	80	53.5	14	100	M16x36
								55	k6	110	5	100	59.0	16	110	M20x42

\*) Preferred series

Motor	EF108									Weight EF108
	k	kB	AC	AD	AG	LL	HH	O		
LA90S/L	474.5	545.5	174.0	163.0	90	90	76.0	M20x1.5/M25x1.5	84	
LA90ZL	519.5	590.5	174.0	163.0	90	90	200.0	M20x1.5/M25x1.5	90	
LA100L	517.5	598.5	195.0	168.0	120	120	113.5	2xM32x1.5	92	
LA100ZL	587.5	668.5	195.0	168.0	120	120	245.5	2xM32x1.5	102	
LA112M	544.0	625.0	219.0	181.0	120	120	116.0	2xM32x1.5	104	
LA112ZM	572.0	653.0	219.0	181.0	120	120	220.0	2xM32x1.5	111	
LA132S/M	603.0	705.0	259.0	195.0	140	140	155.5	2xM32x1.5	114	
LA132ZM	649.0	751.0	259.0	195.0	140	140	263.5	2xM32x1.5	135	
LA160M/L	708.5	827.0	313.5	227.0	165	165	184.0	2xM40x1.5	149	
LA160ZL	756.5	875.0	313.5	227.0	165	165	337.0	2xM40x1.5	188	
LG180M/L	765.0	887.0	348.0	322.5	260	192	198.0	2xM40x1.5	245	
LG180ZM/ZL	816.0	938.0	348.0	322.5	260	192	198.0	2xM40x1.5	275	
LG200L	821.0	947.0	385.0	301.0	260	192	228.0	2xM50x1.5	325	
K4-LGI225S	1 082.0	1 321.0	442.0	325.0	260	192	443.0	2xM50x1.5	481	
K4-LGI225M	1 082.0	1 321.0	442.0	325.0	260	192	443.0	2xM50x1.5	469	
K4-LGI225ZM	1 142.0	1 381.0	442.0	325.0	260	192	443.0	2xM50x1.5	527	

© DIN 332

© Feather key / keyway DIN 6885

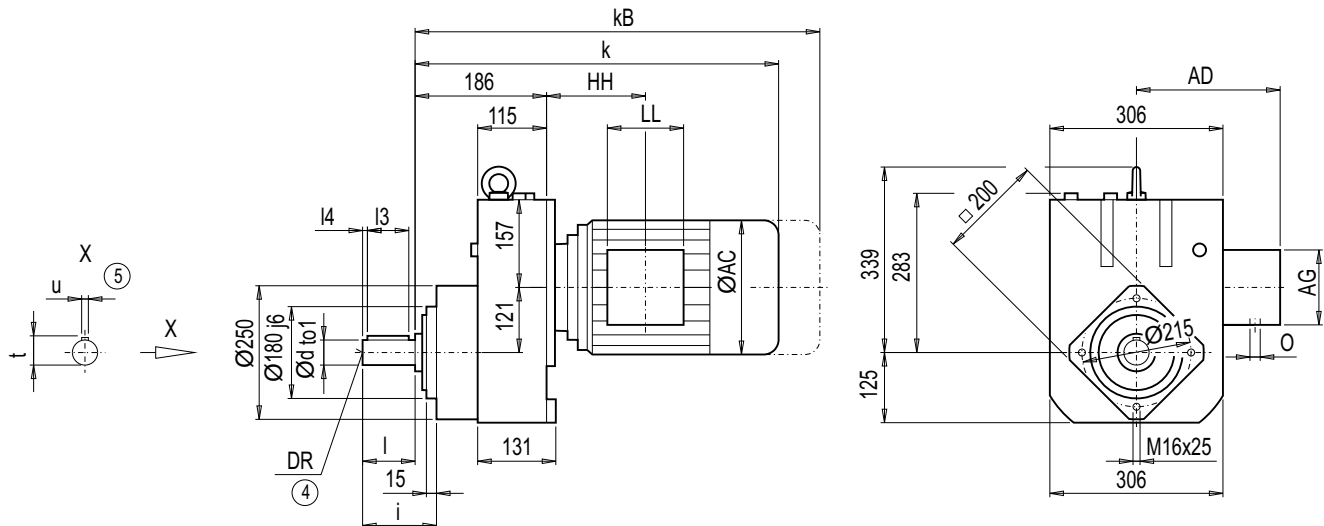
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox EZ108 (1-stage), housing-flange-mounted design (C-type)

EZ011



d	to1	l	l4	l3	t	u	i	DR
50 *)	k6	100	10	80	53.5	14	122	M16x36
55	k6	110	5	100	59.0	16	132	M20x42

\*) Preferred series

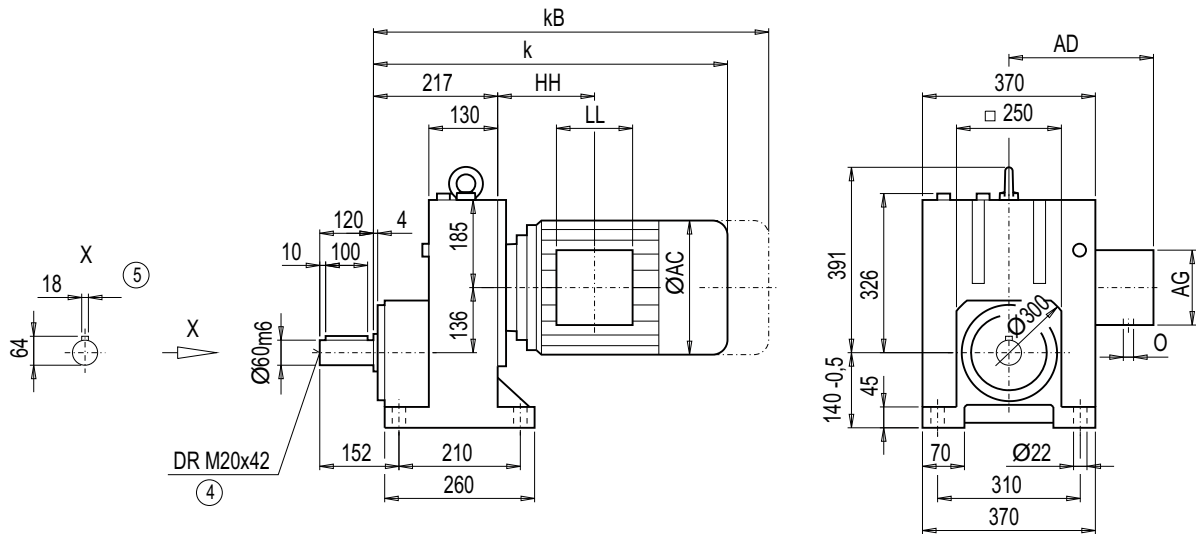
EZ108									Weight
Motor	k	kB	AC	AD	AG	LL	HH	O	EZ108
LA90S/L	474.5	545.5	174.0	163.0	90	90	76.0	M20x1.5/M25x1.5	67
LA90ZL	519.5	590.5	174.0	163.0	90	90	200.0	M20x1.5/M25x1.5	73
LA100L	517.5	598.5	195.0	168.0	120	120	113.5	2xM32x1.5	75
LA100ZL	587.5	668.5	195.0	168.0	120	120	245.5	2xM32x1.5	85
LA112M	544.0	625.0	219.0	181.0	120	120	116.0	2xM32x1.5	87
LA112ZM	572.0	653.0	219.0	181.0	120	120	220.0	2xM32x1.5	94
LA132S/M	603.0	705.0	259.0	195.0	140	140	155.5	2xM32x1.5	98
LA132ZM	649.0	751.0	259.0	195.0	140	140	263.5	2xM32x1.5	119
LA160M/L	708.5	827.0	313.5	227.0	165	165	184.0	2xM40x1.5	132
LA160ZL	756.5	875.0	313.5	227.0	165	165	337.0	2xM40x1.5	171
LG180M/L	765.0	887.0	348.0	322.5	260	192	198.0	2xM40x1.5	229
LG180ZM/ZL	816.0	938.0	348.0	322.5	260	192	198.0	2xM40x1.5	259
LG200L	821.0	947.0	385.0	301.0	260	192	228.0	2xM50x1.5	309
K4-LGI225S	1 082.0	1 321.0	442.0	325.0	260	192	443.0	2xM50x1.5	465
K4-LGI225M	1 082.0	1 321.0	442.0	325.0	260	192	443.0	2xM50x1.5	453
K4-LGI225ZM	1 142.0	1 381.0	442.0	325.0	260	192	443.0	2xM50x1.5	511

Ⓔ DIN 332

Ⓔ Feather key / keyway DIN 6885

#### Gearbox E128 (1-stage), foot-mounted design

E011



2

Motor	E128								Weight
	k	kB	AC	AD	AG	LL	HH	O	E128
LA100L	539.0	620.0	195.0	168.0	120	120	104.0	2xM32x1.5	121
LA100ZL	609.0	690.0	195.0	168.0	120	120	236.0	2xM32x1.5	131
LA112M	564.5	645.5	219.0	181.0	120	120	105.5	2xM32x1.5	132
LA112ZM	592.5	673.5	219.0	181.0	120	120	209.5	2xM32x1.5	139
LA132S/M	623.5	725.5	259.0	195.0	140	140	145.0	2xM32x1.5	142
LA132ZM	669.5	771.5	259.0	195.0	140	140	253.0	2xM32x1.5	163
LA160M/L	723.0	841.5	313.5	227.0	165	165	167.5	2xM40x1.5	181
LA160ZL	771.0	889.5	313.5	227.0	165	165	320.5	2xM40x1.5	220
LG180M/L	782.5	904.5	348.0	322.5	260	192	184.5	2xM40x1.5	272
LG180ZM/ZL	833.5	955.5	348.0	322.5	260	192	184.5	2xM40x1.5	302
LG200L	838.5	964.5	385.0	301.0	260	192	214.5	2xM50x1.5	352
LG225S	909.5	1 148.5	442.0	325.0	260	192	250.5	2xM50x1.5	428
LG225M	909.5	1 148.5	442.0	325.0	260	192	250.5	2xM50x1.5	416
LG225ZM	969.5	1 208.5	442.0	325.0	260	192	250.5	2xM50x1.5	474
K4-LGI250M	1 197.0	1 422.0	495.0	392.0	300	236	470.0	2xM63x1.5	596
K4-LGI250ZM	1 267.0	1 492.0	495.0	392.0	300	236	470.0	2xM63x1.5	699

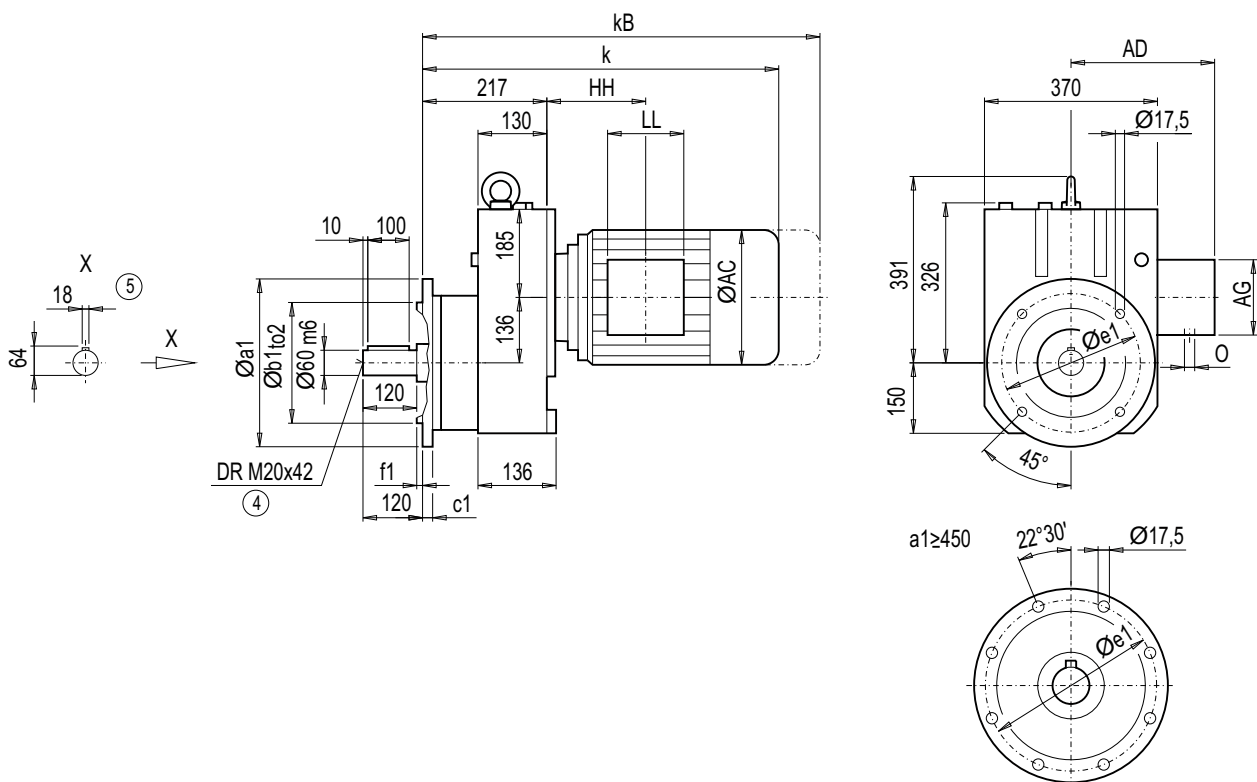
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox EF128 (1-stage), flange-mounted design (A-type)

EF011



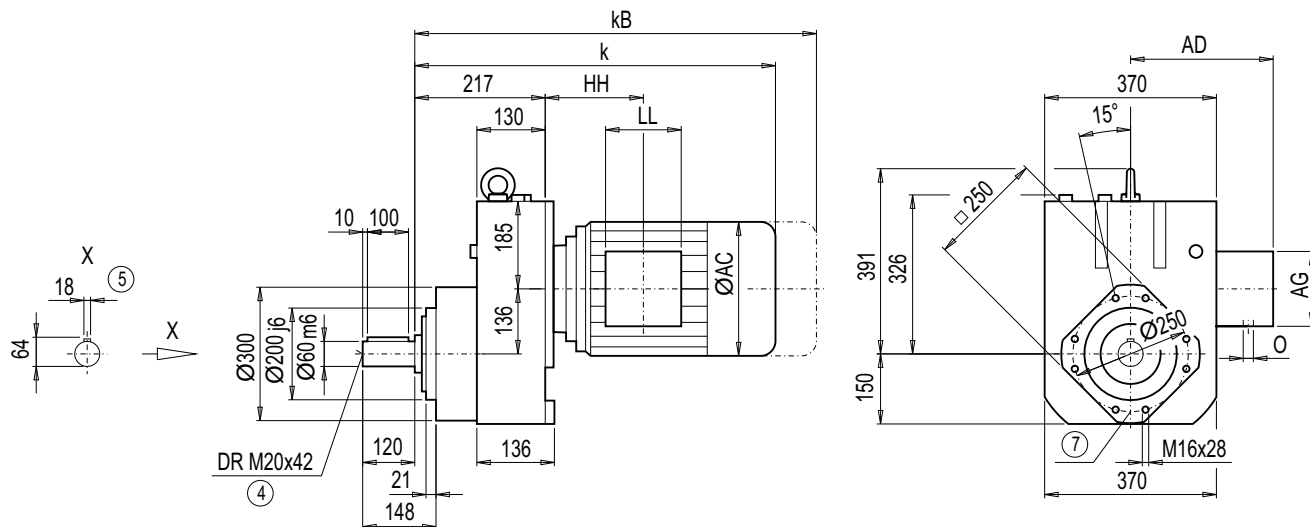
Flange	a1	b1	to2	c1	e1	f1	s1
A350	350	250	h6	18	300	5	17.5
A450	450	350	h6	20	400	5	17.5

Motor	EF128								Weight EF128
	k	kB	AC	AD	AG	LL	HH	O	
LA100L	539.0	620.0	195.0	168.0	120	120	104.0	2xM32x1.5	125
LA100ZL	609.0	690.0	195.0	168.0	120	120	236.0	2xM32x1.5	135
LA112M	564.5	645.5	219.0	181.0	120	120	105.5	2xM32x1.5	137
LA112ZM	592.5	673.5	219.0	181.0	120	120	209.5	2xM32x1.5	144
LA132S/M	623.5	725.5	259.0	195.0	140	140	145.0	2xM32x1.5	146
LA132ZM	669.5	771.5	259.0	195.0	140	140	253.0	2xM32x1.5	167
LA160M/L	723.0	841.5	313.5	227.0	165	165	167.5	2xM40x1.5	185
LA160ZL	771.0	889.5	313.5	227.0	165	165	320.5	2xM40x1.5	224
LG180M/L	782.5	904.5	348.0	322.5	260	192	184.5	2xM40x1.5	276
LG180ZM/ZL	833.5	955.5	348.0	322.5	260	192	184.5	2xM40x1.5	306
LG200L	838.5	964.5	385.0	301.0	260	192	214.5	2xM50x1.5	356
LG225S	909.5	1 148.5	442.0	325.0	260	192	250.5	2xM50x1.5	432
LG225M	909.5	1 148.5	442.0	325.0	260	192	250.5	2xM50x1.5	420
LG225ZM	969.5	1 208.5	442.0	325.0	260	192	250.5	2xM50x1.5	478
K4-LGI250M	1 197.0	1 422.0	495.0	392.0	300	236	470.0	2xM63x1.5	600
K4-LGI250ZM	1 267.0	1 492.0	495.0	392.0	300	236	470.0	2xM63x1.5	703



### Gearbox EZ128 (1-stage), housing-flange-mounted design (C-type)

EZ011



EZ128									Weight
Motor	k	kB	AC	AD	AG	LL	HH	O	EZ128
LA100L	539.0	620.0	195.0	168.0	120	120	104.0	2xM32x1.5	108
LA100ZL	609.0	690.0	195.0	168.0	120	120	236.0	2xM32x1.5	118
LA112M	564.5	645.5	219.0	181.0	120	120	105.5	2xM32x1.5	119
LA112ZM	592.5	673.5	219.0	181.0	120	120	209.5	2xM32x1.5	126
LA132S/M	623.5	725.5	259.0	195.0	140	140	145.0	2xM32x1.5	129
LA132ZM	669.5	771.5	259.0	195.0	140	140	253.0	2xM32x1.5	150
LA160M/L	723.0	841.5	313.5	227.0	165	165	167.5	2xM40x1.5	168
LA160ZL	771.0	889.5	313.5	227.0	165	165	320.5	2xM40x1.5	207
LG180M/L	782.5	904.5	348.0	322.5	260	192	184.5	2xM40x1.5	259
LG180ZM/ZL	833.5	955.5	348.0	322.5	260	192	184.5	2xM40x1.5	289
LG200L	838.5	964.5	385.0	301.0	260	192	214.5	2xM50x1.5	339
LG225S	909.5	1 148.5	442.0	325.0	260	192	250.5	2xM50x1.5	415
LG225M	909.5	1 148.5	442.0	325.0	260	192	250.5	2xM50x1.5	403
LG225ZM	969.5	1 208.5	442.0	325.0	260	192	250.5	2xM50x1.5	461
K4-LGI250M	1 197.0	1 422.0	495.0	392.0	300	236	470.0	2xM63x1.5	583
K4-LGI250ZM	1 267.0	1 492.0	495.0	392.0	300	236	470.0	2xM63x1.5	686

④ DIN 332

⑤ Feather key / keyway DIN 6885

⑦ For note, see page 2/192

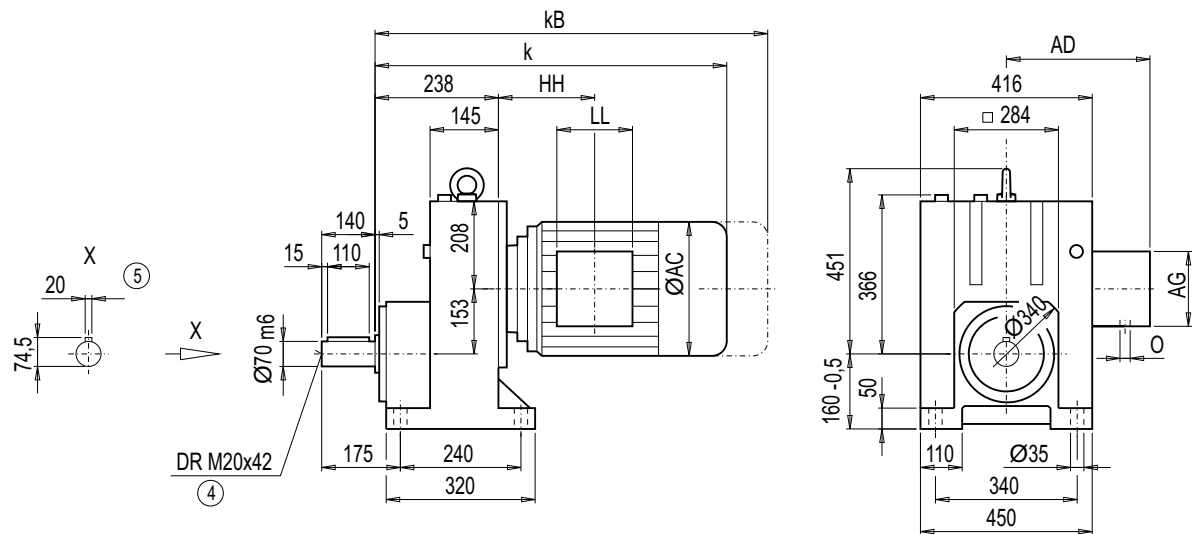
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox E148 (1-stage), foot-mounted design

E011



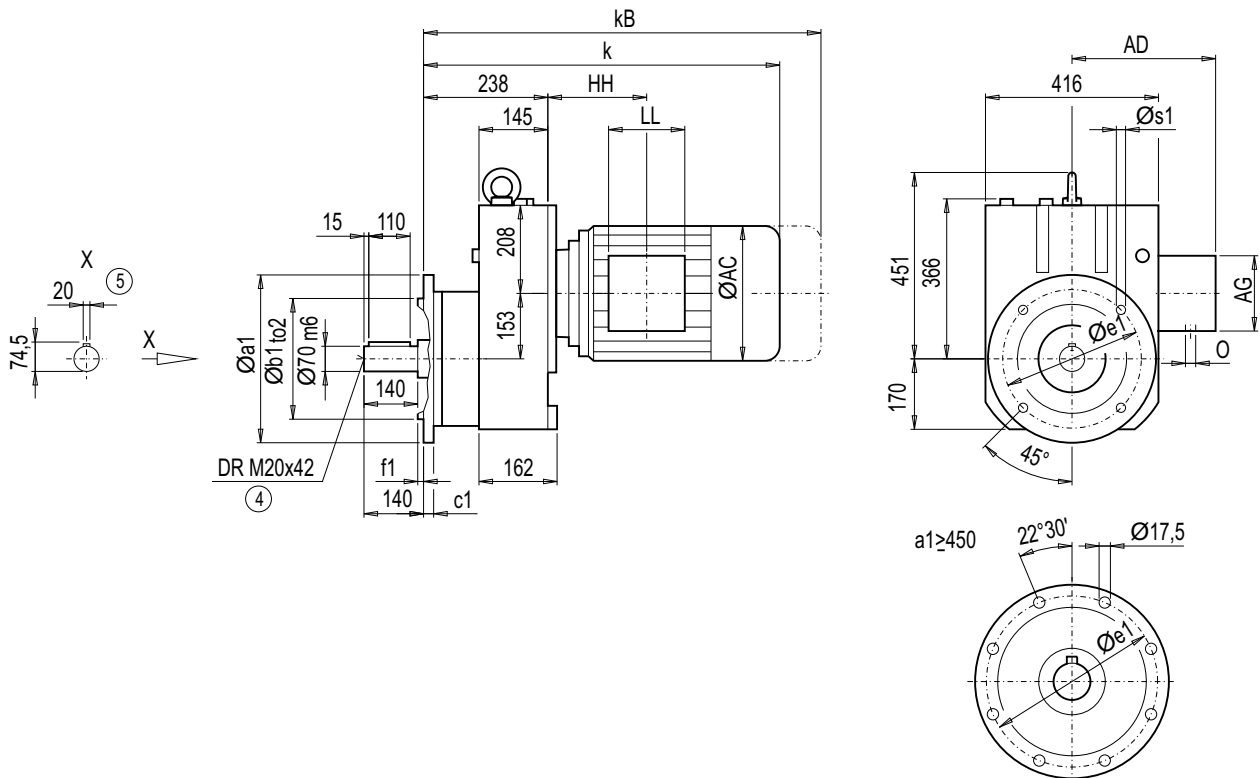
Motor	E148								Weight E148
	k	kB	AC	AD	AG	LL	HH	O	
LA132S/M	636.5	738.5	259.0	195.0	140	140	137.0	2xM32x1.5	169
LA132ZM	682.5	784.5	259.0	195.0	140	140	245.0	2xM32x1.5	190
LA160M/L	736.5	855.0	313.5	227.0	165	165	160.0	2xM40x1.5	203
LA160ZL	784.5	903	313.5	227.0	165	165	313.0	2xM40x1.5	242
LG180M/L	796.0	918.0	348.0	322.5	260	192	177.0	2xM40x1.5	298
LG180ZM/ZL	847.0	969.0	348.0	322.5	260	192	177.0	2xM40x1.5	328
LG200L	852.0	978.0	385.0	301.0	260	192	207.0	2xM50x1.5	378
LG225S	923.0	1 162.0	442.0	325.0	260	192	243.0	2xM50x1.5	452
LG225M	923.0	1 162.0	442.0	325.0	260	192	243.0	2xM50x1.5	440
LG225ZM	983.0	1 222.0	442.0	325.0	260	192	243.0	2xM50x1.5	498
LG250M	1 016.5	1 241.5	495.0	392.0	300	236	278.5	2xM63x1.5	542
LG250ZM	1 086.5	1 312.0	495.0	392.0	300	236	278.5	2xM63x1.5	645
K4-LGI280S	1 296.0	1 523.0	555.0	432.0	300	236	490.0	2xM63x1.5	774
K4-LGI280M	1 296.0	1 523.0	555.0	432.0	300	236	490.0	2xM63x1.5	785
K4-LGI280ZM	1 406.0	1 633.0	555.0	432.0	300	236	490.0	2xM63x1.5	874

④ DIN 332

⑤ Feather key / keyway DIN 6885

### Gearbox EF148 (1-stage), flange-mounted design (A-type)

EF011



Flange	a1	b1	to2	c1	e1	f1	s1
A350	350	250	h6	18	300	5	17.5
A450	450	350	h6	22	400	5	17.5
A550	550	450	h6	25	500	5	17.5

Motor	EF148								Weight EF148
	k	kB	AC	AD	AG	LL	HH	O	
LA132S/M	636.5	738.5	259.0	195.0	140	140	137.0	2xM32x1.5	180
LA132ZM	682.5	784.5	259.0	195.0	140	140	245.0	2xM32x1.5	202
LA160M/L	736.5	855.0	313.5	227.0	165	165	160.0	2xM40x1.5	214
LA160ZL	784.5	903	313.5	227.0	165	165	313.0	2xM40x1.5	253
LG180M/L	796.0	918.0	348.0	322.5	260	192	177.0	2xM40x1.5	310
LG180ZM/ZL	847.0	969.0	348.0	322.5	260	192	177.0	2xM40x1.5	340
LG200L	852.0	978.0	385.0	301.0	260	192	207.0	2xM50x1.5	390
LG225S	923.0	1 162.0	442.0	325.0	260	192	243.0	2xM50x1.5	464
LG225M	923.0	1 162.0	442.0	325.0	260	192	243.0	2xM50x1.5	452
LG225ZM	983.0	1 222.0	442.0	325.0	260	192	243.0	2xM50x1.5	510
LG250M	1 016.5	1 241.5	495.0	392.0	300	236	278.5	2xM63x1.5	554
LG250ZM	1 086.5	1 312.0	495.0	392.0	300	236	278.5	2xM63x1.5	657
K4-LGI280S	1 296.0	1 523.0	555.0	432.0	300	236	490.0	2xM63x1.5	786
K4-LGI280M	1 296.0	1 523.0	555.0	432.0	300	236	490.0	2xM63x1.5	797
K4-LGI280ZM	1 406.0	1 633.0	555.0	432.0	300	236	490.0	2xM63x1.5	886

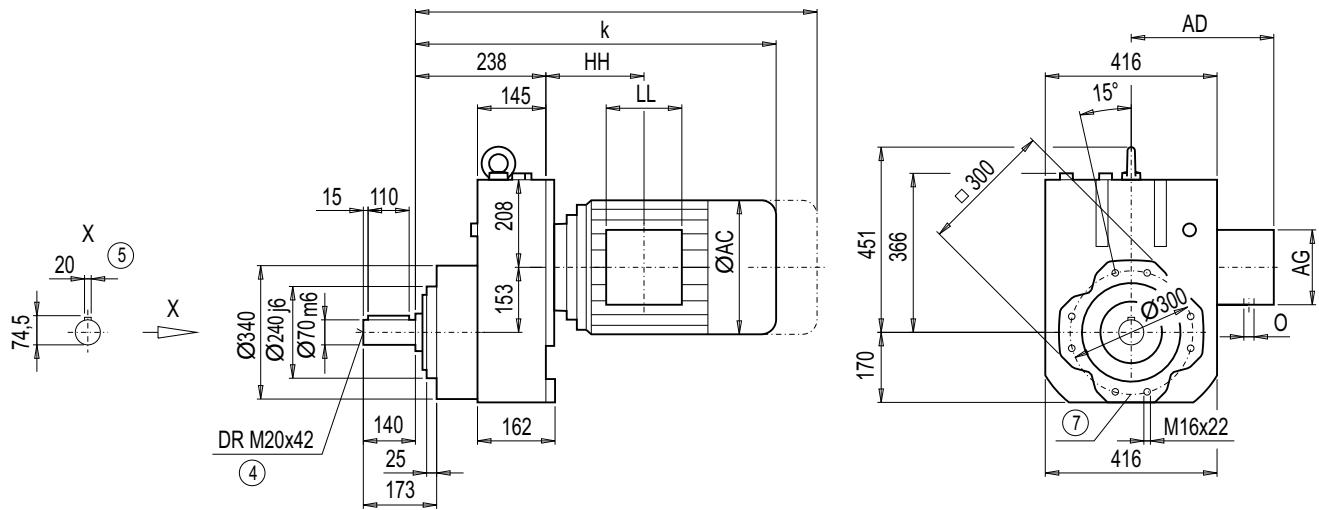
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox EZ148 (1-stage), housing-flange-mounted design (C-type)

EZ011



Motor	EZ148								Weight EZ148
	k	kB	AC	AD	AG	LL	HH	O	
LA132S/M	636.5	738.5	259.0	195.0	140	140	137.0	2xM32x1.5	154
LA132ZM	682.5	784.5	259.0	195.0	140	140	245.0	2xM32x1.5	175
LA160M/L	736.5	855.0	313.5	227.0	165	165	160.0	2xM40x1.5	188
LA160ZL	784.5	903	313.5	227.0	165	165	313.0	2xM40x1.5	227
LG180M/L	796.0	918.0	348.0	322.5	260	192	177.0	2xM40x1.5	283
LG180ZM/ZL	847.0	969.0	348.0	322.5	260	192	177.0	2xM40x1.5	313
LG200L	852.0	978.0	385.0	301.0	260	192	207.0	2xM50x1.5	363
LG225S	923.0	1 162.0	442.0	325.0	260	192	243.0	2xM50x1.5	437
LG225M	923.0	1 162.0	442.0	325.0	260	192	243.0	2xM50x1.5	425
LG225ZM	983.0	1 222.0	442.0	325.0	260	192	243.0	2xM50x1.5	483
LG250M	1 016.5	1 241.0	495.0	392.0	300	236	278.5	2xM63x1.5	527
LG250ZM	1 086.5	1 312.0	495.0	392.0	300	236	278.5	2xM63x1.5	630
K4-LGI280S	1 296.0	1 523.0	555.0	432.0	300	236	490.0	2xM63x1.5	759
K4-LGI280M	1 296.0	1 523.0	555.0	432.0	300	236	490.0	2xM63x1.5	770
K4-LGI280ZM	1 406.0	1 633.0	555.0	432.0	300	236	490.0	2xM63x1.5	859

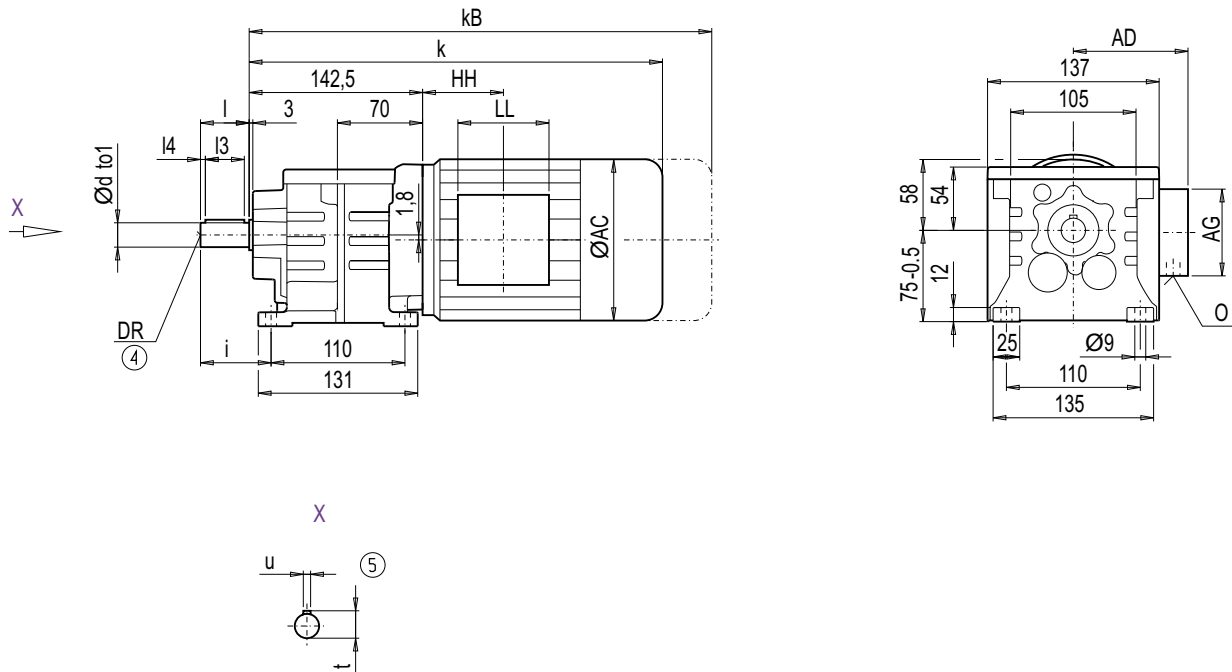
④ DIN 332

⑤ Feather key / keyway DIN 6885

⑦ For note, see page 2/192

### Gearbox D/Z18 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
16	k6	28	3	22	18	5	46	M6x16
20 <sup>*)</sup>	k6	40	4	32	22.5	6	58	M6x16

\*) Preferred series

Motor	Z18		D18		AC	AD	AG	LL	HH	O	Weight	
	k	kB	k	kB							Z18	D18
LA71	327	382	327	382	139	146	90	90	40.5	M20x1.5/M25x1.5	8	8
LA71Z	346	401	346	401	139	146	90	90	40.5	M20x1.5/M25x1.5	8	8

# MOTOX Geared Motors

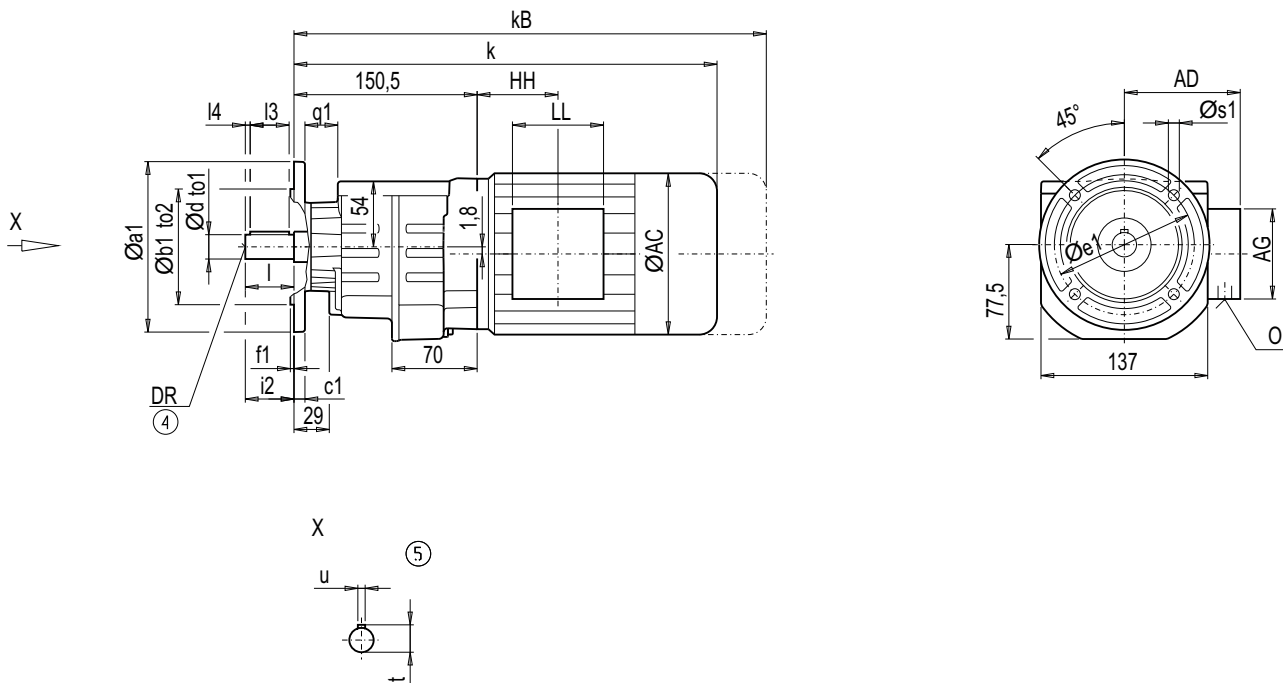
## Helical geared motors

### Dimensions

#### Gearbox DF/ZF18 (3- / 2-stage), flange-mounted design (A-type)

DZF011

2



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A120	120	80	j6	8	100	3.0	28	6.6	16	k6	28	3	22	18	5	28	M6x16
									20 <sup>*)</sup>	k6	40	4	32	22.5	6	40	M6x16
A140	140	95	j6	9	115	3.0	27	9.0	16	k6	28	3	22	18	5	28	M6x16
									20 <sup>*)</sup>	k6	40	4	32	22.5	6	40	M6x16
A160	160	110	j6	9	130	3.5	27	9.0	16	k6	28	3	22	18	5	28	M6x16
									20 <sup>*)</sup>	k6	40	4	32	22.5	6	40	M6x16

\*) Preferred series

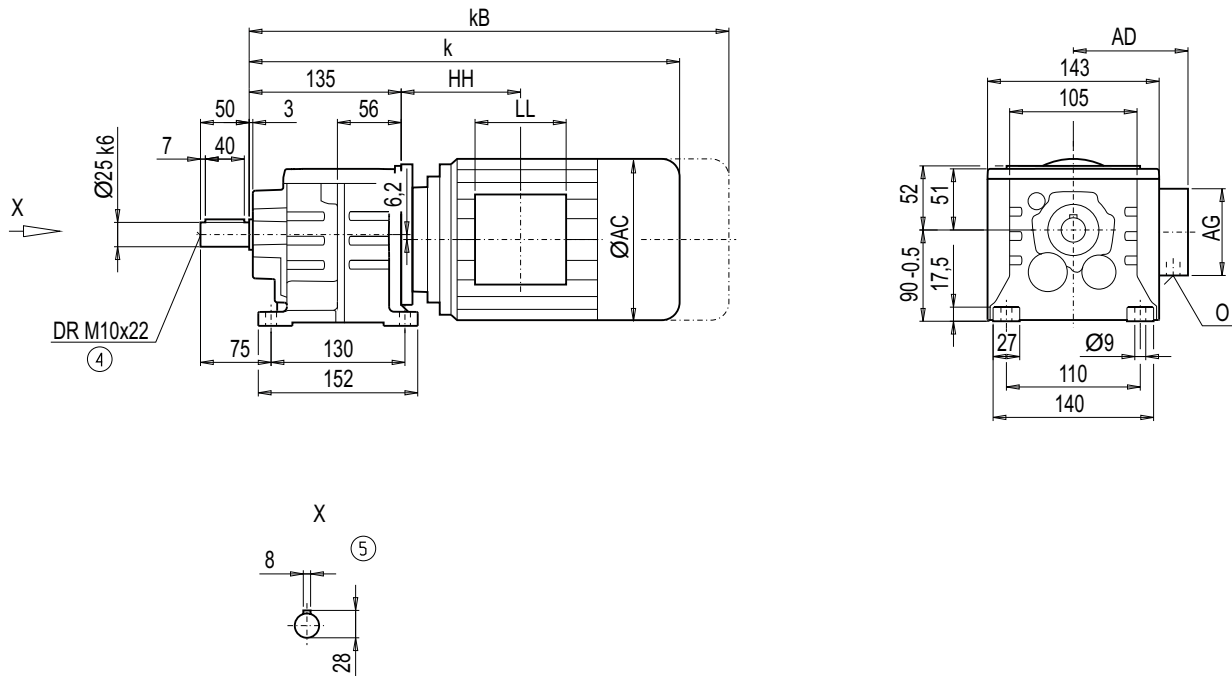
Motor	ZF18		DF18		AC	AD	AG	LL	HH	O	Weight	
	k	kB	k	kB							ZF18	DF18
LA71	335	390	335	390	139	146	90	90	40.5	M20x1.5/M25x1.5	8	9
LA71Z	354	409	354	409	139	146	90	90	40.5	M20x1.5/M25x1.5	8	9

④ DIN 332

⑤ Feather key / keyway DIN 6885

### Gearbox D/Z28 (3- / 2-stage), foot-mounted design

DZ011



2

Motor	Z28		D28		AC	AD	AG	LL	HH	O	Weight	
	k	kB	k	kB							Z28	D28
LA71	337.5	392.5	337.5	392.5	139	146	90	90	58.5	M20x1.5/M25x1.5	9	9
LA71Z	356.5	411.5	356.5	411.5	139	146	90	90	58.5	M20x1.5/M25x1.5	9	9
LA80	439.5	503.0	439.5	503.0	156.5	155	90	90	123.0	M20x1.5/M25x1.5	14	14
LA80Z	462.0	525.5	462.0	525.5	156.5	155	90	90	196.0	M20x1.5/M25x1.5	18	18
LA90S/L	434.5	505.5	434.5	505.5	174	163	90	90	87.0	M20x1.5/M25x1.5	18	19
LA90ZL	479.5	550.5	479.5	550.5	174	163	90	90	211.0	M20x1.5/M25x1.5	27	28
LA100L	516.5	597.5	-	-	195	168	120	120	163.5	2xM32x1.5	28	-
LA100ZL	586.5	667.5	-	-	195	168	120	120	295.5	2xM32x1.5	38	-

④ DIN 332

⑤ Feather key / keyway DIN 6885

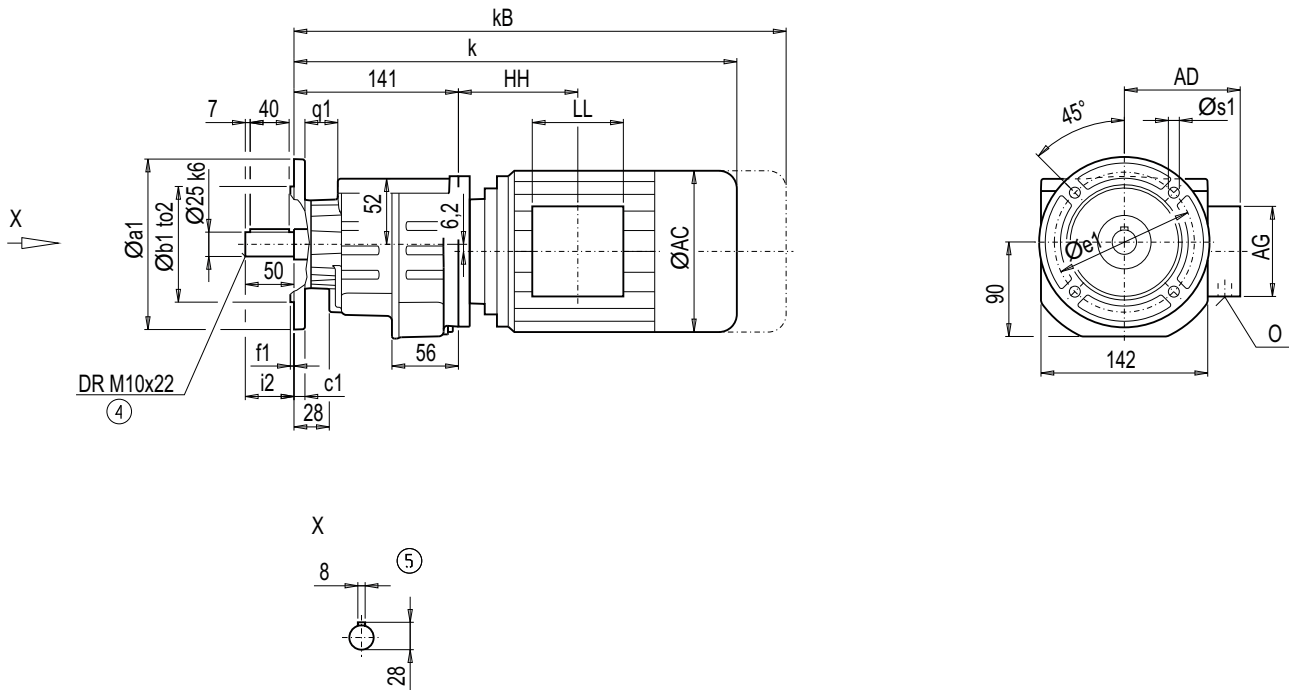
# MOTEX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DF/ZF28 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	i2
A120	120	80	j6	8	100	3.0	28	6.6	50
A140	140	95	j6	9	115	3.0	27	9.0	50
A160	160	110	j6	9	130	3.5	27	9.0	50

Motor	ZF28		DF28		AC	AD	AG	LL	HH	O	Weight	
	k	kB	k	kB							ZF28	DF28
LA71	343.5	398.5	343.5	398.5	139	146	90	90	58.5	M20x1.5/M25x1.5	9	9
LA71Z	362.5	417.5	362.5	417.5	139	146	90	90	58.5	M20x1.5/M25x1.5	9	9
LA80	445.5	509.0	445.5	509.0	156.5	155	90	90	123.0	M20x1.5/M25x1.5	14	14
LA80Z	468.0	530.5	468.0	530.5	156.5	155	90	90	196.0	M20x1.5/M25x1.5	18	18
LA90S/L	440.5	511.5	440.5	511.5	174	163	90	90	87.0	M20x1.5/M25x1.5	18	19
LA90ZL	485.5	556.5	485.5	556.5	174	163	90	90	211.0	M20x1.5/M25x1.5	27	28
LA100L	522.5	603.5	-	-	195	168	120	120	163.5	2xM32x1.5	28	-
LA100ZL	592.5	673.5	-	-	195	168	120	120	295.5	2xM32x1.5	38	-

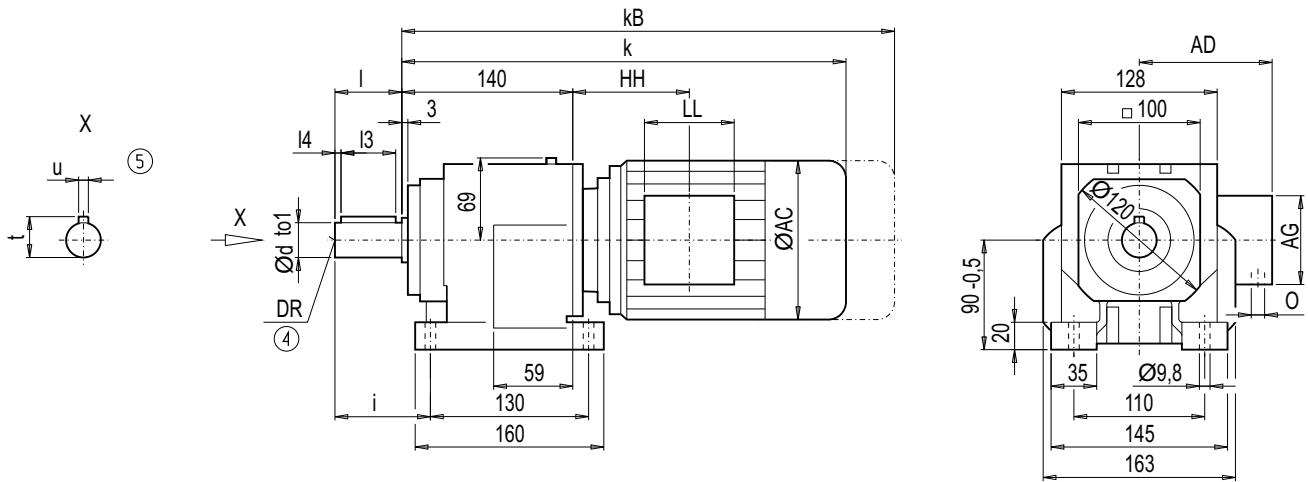
④ DIN 332

⑤ Feather key / keyway DIN 6885



#### Gearbox D/Z38 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
25 *)	k6	50	7	40	28	8	75	M10x22
30	k6	60	7	50	33	8	85	M10x22

\*) Preferred series

Motor	Z38		D38		AC	AD	AG	LL	Z38	D38	O	Weight	
	k	kB	k	kB					HH	HH		Z38	D38
LA71	398.5	453.5	413.5	468.5	139.0	146	90	90	114.5	129.5	M20x1.5/M25x1.5	16	17
LA71Z	417.5	472.5	432.5	487.5	139.0	146	90	90	114.5	129.5	M20x1.5/M25x1.5	16	17
LA80	435.5	499.0	450.5	514.0	156.5	155	90	90	114.0	129.0	M20x1.5/M25x1.5	21	22
LA80Z	458.0	521.5	473.0	536.5	156.5	155	90	90	187.0	202.0	M20x1.5/M25x1.5	25	26
LA90S/L	466.5	537.5	481.5	552.5	174.0	163	90	90	114.0	129.0	M20x1.5/M25x1.5	26	27
LA90ZL	511.5	582.5	526.5	597.5	174.0	163	90	90	238.0	253.0	M20x1.5/M25x1.5	32	33
LA100L	512.5	593.5	-	-	195.0	168	120	120	154.5	-	2xM32x1.5	35	-
LA100ZL	582.5	663.5	-	-	195.0	168	120	120	286.5	-	2xM32x1.5	45	-
LA112M	542.0	623.0	-	-	219.0	181	120	120	160.0	-	2xM32x1.5	45	-
LA112ZM	570.0	651.0	-	-	219.0	181	120	120	264.0	-	2xM32x1.5	52	-

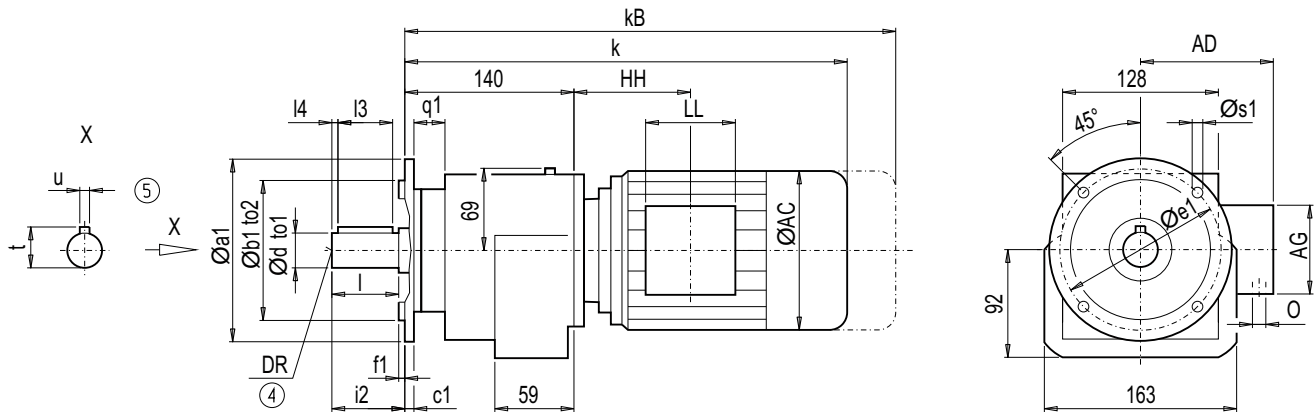
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DF/ZF38 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A120	120	80	j6	8	100	3.0	23	6.8	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
									30	k6	60	7	50	33	8	60	M10x22
A140	140	95	j6	7	115	3.0	26	9.0	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
									30	k6	60	7	50	33	8	60	M10x22
A160	160	110	j6	10	130	3.5	26	9.0	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
									30	k6	60	7	50	33	8	60	M10x22
A200 <sup>1)</sup>	200	130	j6	12	165	3.5	24	11.0	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
									30	k6	60	7	50	33	8	60	M10x22
A250	250	180	j6	15	215	4.0	21	13.5	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
									30	k6	60	7	50	33	8	60	M10x22

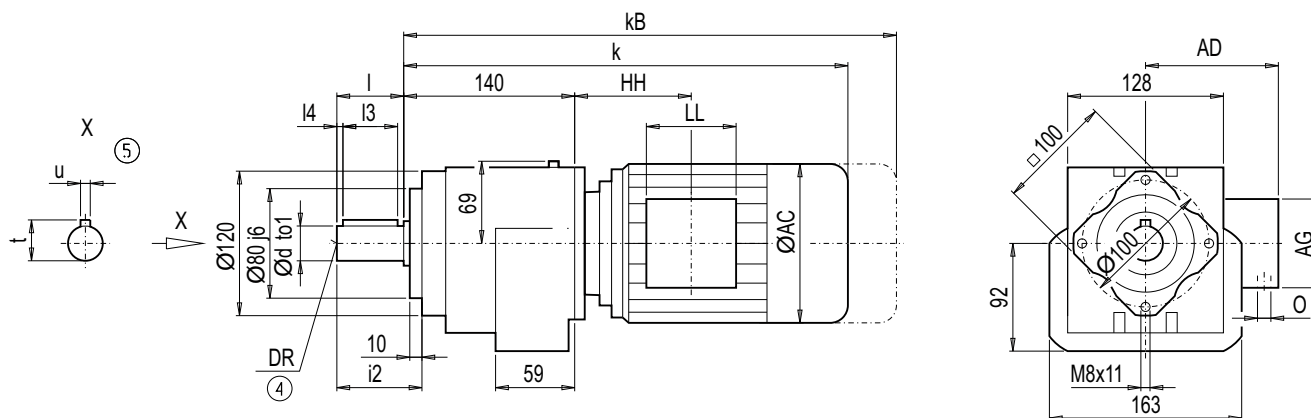
1) The A200 flange is connected to the machine using stud bolts.

\*) Preferred series

Motor	ZF38		DF38		AC	AD	AG	LL	ZF38	DF38	O	Weight	
	k	kB	k	kB					HH	HH		ZF38	DF38
LA71	398.5	453.5	413.5	468.5	139.0	146	90	90	114.5	129.5	M20x1.5/M25x1.5	17	18
LA71Z	417.5	472.5	432.5	487.5	139.0	146	90	90	114.5	129.5	M20x1.5/M25x1.5	17	18
LA80	435.5	499.0	450.5	514.0	156.5	155	90	90	114.0	129.0	M20x1.5/M25x1.5	22	22
LA80Z	458.0	521.5	473.0	536.5	156.5	155	90	90	187.0	202.0	M20x1.5/M25x1.5	26	26
LA90S/L	466.5	537.5	481.5	552.5	174.0	163	90	90	114.0	129.0	M20x1.5/M25x1.5	26	27
LA90ZL	511.5	582.5	526.5	597.5	174.0	163	90	90	238.0	253.0	M20x1.5/M25x1.5	32	33
LA100L	512.5	593.5	-	-	195.0	168	120	120	154.5	-	2xM32x1.5	35	-
LA100ZL	582.5	663.5	-	-	195.0	168	120	120	286.5	-	2xM32x1.5	45	-
LA112M	542.0	623.0	-	-	219.0	181	120	120	160.0	-	2xM32x1.5	46	-
LA112ZM	570.0	651.0	-	-	219.0	181	120	120	264.0	-	2xM32x1.5	53	-

### Gearbox DZ/ZZ38 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



2

d	to1	l	l4	l3	t	u	i2	DR
25 *)	k6	50	7	40	28	8	63	M10x22
30	k6	60	7	50	33	8	73	M10x22

\*) Preferred series

Motor	ZZ38		DZ38		AC	AD	AG	LL	ZZ38	DZ38	O	Weight	
	k	kB	k	kB					HH	HH		ZZ38	DZ38
LA71	398.5	453.5	413.5	468.5	139.0	146	90	90	114.5	129.5	M20x1.5/M25x1.5	15	16
LA71Z	417.5	472.5	432.5	487.5	139.0	146	90	90	114.5	129.5	M20x1.5/M25x1.5	15	16
LA80	435.5	499.0	450.5	514.0	156.5	155	90	90	114.0	129.0	M20x1.5/M25x1.5	20	21
LA80Z	458.0	521.5	473.0	536.5	156.5	155	90	90	187.0	202.0	M20x1.5/M25x1.5	24	25
LA90S/L	466.5	537.5	481.5	552.5	174.0	163	90	90	114.0	129.0	M20x1.5/M25x1.5	24	25
LA90ZL	511.5	582.5	526.5	597.5	174.0	163	90	90	238.0	253.0	M20x1.5/M25x1.5	30	31
LA100L	512.5	593.5	-	-	195.0	168	120	120	154.5	-	2xM32x1.5	33	-
LA100ZL	582.5	663.5	-	-	195.0	168	120	120	286.5	-	2xM32x1.5	43	-
LA112M	542.0	623.0	-	-	219.0	181	120	120	160.0	-	2xM32x1.5	44	-
LA112ZM	570.0	651.0	-	-	219.0	181	120	120	264.0	-	2xM32x1.5	51	-

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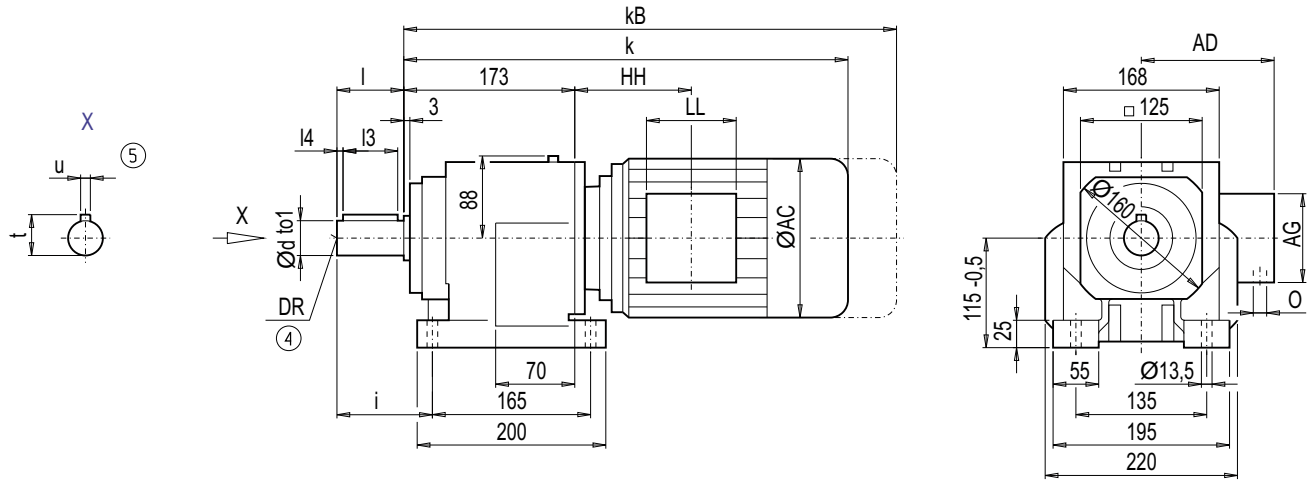
# MOTEX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox D/Z48 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
30 *)	k6	60	7	50	33	8	90	M10x22
35	k6	70	63	4	38	10	100	M10x22
40	k6	80	5	70	43	12	110	M16x36

\*) Preferred series

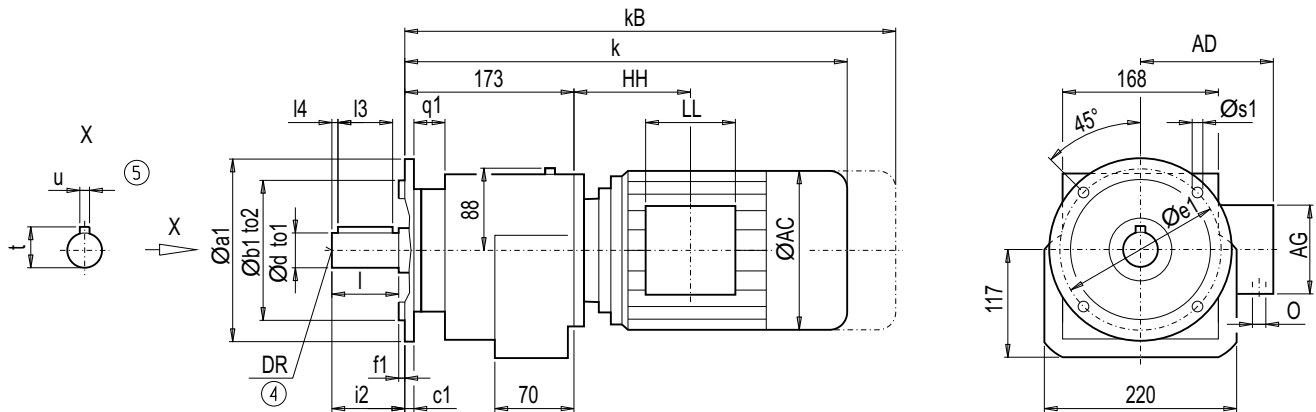
Motor	Z48		D48		AC	AD	AG	LL	Z48		D48		Weight	
	k	kB	k	kB					HH	HH	O	Z48	D48	
LA71	426.0	481.0	443.0	498.0	139.0	146	90	90	109.0	126.0	M20x1.5/M25x1.5	26	27	
LA71Z	445.0	500.0	462.0	517.0	139.0	146	90	90	109.0	126.0	M20x1.5/M25x1.5	26	27	
LA80	463.0	526.5	480.0	543.5	156.5	155	90	90	108.5	125.5	M20x1.5/M25x1.5	31	32	
LA80Z	485.5	549.0	502.5	566.0	156.5	155	90	90	181.5	198.5	M20x1.5/M25x1.5	35	36	
LA90S/L	494.0	565.0	511.0	582.0	174.0	163	90	90	108.5	125.5	M20x1.5/M25x1.5	35	36	
LA90ZL	539.0	610.0	556.0	627.0	174.0	163	90	90	232.5	249.5	M20x1.5/M25x1.5	41	41	
LA100L	540.0	621.0	557.0	638.0	195.0	168	120	120	149.0	166.0	2xM32x1.5	44	45	
LA100ZL	610.0	691.0	627.0	708.0	195.0	168	120	120	281.0	298.0	2xM32x1.5	54	55	
LA112M	569.0	650.0	-	-	219.0	181	120	120	154.0	-	2xM32x1.5	56	-	
LA112ZM	597.0	678.0	-	-	219.0	181	120	120	258.0	-	2xM32x1.5	63	-	
LA132S/M	631.0	733.0	-	-	259.0	195	140	140	196.5	-	2xM32x1.5	66	-	
LA132ZM	677.0	779.0	-	-	259.0	195	140	140	304.5	-	2xM32x1.5	87	-	

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#### Gearbox DF/ZF48 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A200	200	130	j6	12	165	3.5	29	11.0	30 <sup>*)</sup>	k6	60	7	50	33	8	60	M10x22
									35	k6	70	4	63	38	10	70	M10x22
									40	k6	80	5	70	43	12	80	M16x36
A250 <sup>1)</sup>	250	180	j6	15	215	4.0	26	13.5	30 <sup>*)</sup>	k6	60	7	50	33	8	60	M10x22
									35	k6	70	4	63	38	10	70	M10x22
									40	k6	80	5	70	43	12	80	M16x36
A300	300	230	j6	15	265	4.0	26	13.5	30 <sup>*)</sup>	k6	60	7	50	33	8	60	M10x22
									35	k6	70	4	63	38	10	70	M10x22
									40	k6	80	5	70	43	12	80	M16x36

1) The A250 flange is connected to the machine using stud bolts.

\*) Preferred series

Motor	ZF48		DF48		ZF48		DF48		ZF48		DF48		Weight	
	k	kB	k	kB	AC	AD	AG	LL	HH	HH	O	ZF48	DF48	
LA71	426.0	481.0	443.0	498.0	139.0	146	90	90	109.0	126.0	M20x1.5/M25x1.5	27	28	
LA71Z	445.0	500.0	462.0	517.0	139.0	146	90	90	109.0	126.0	M20x1.5/M25x1.5	27	28	
LA80	463.0	526.5	480.0	543.5	156.5	155	90	90	108.5	125.5	M20x1.5/M25x1.5	32	33	
LA80Z	485.5	549.0	502.5	566.0	156.5	155	90	90	181.5	198.5	M20x1.5/M25x1.5	36	37	
LA90S/L	494.0	565.0	511.0	582.0	174.0	163	90	90	108.5	125.5	M20x1.5/M25x1.5	37	38	
LA90ZL	539.0	610.0	556.0	627.0	174.0	163	90	90	232.5	249.5	M20x1.5/M25x1.5	43	44	
LA100L	540.0	621.0	557.0	638.0	195.0	168	120	120	149.0	166.0	2xM32x1.5	46	47	
LA100ZL	610.0	691.0	627.0	708.0	195.0	168	120	120	281.0	298.0	2xM32x1.5	56	57	
LA112M	569.0	650.0	–	–	219.0	181	120	120	154.0	–	2xM32x1.5	57	–	
LA112ZM	597.0	678.0	–	–	219.0	181	120	120	258.0	–	2xM32x1.5	64	–	
LA132S/M	631.0	733.0	–	–	259.0	195	140	140	196.5	–	2xM32x1.5	67	–	
LA132ZM	677.0	779.0	–	–	259.0	195	140	140	304.5	–	2xM32x1.5	88	–	

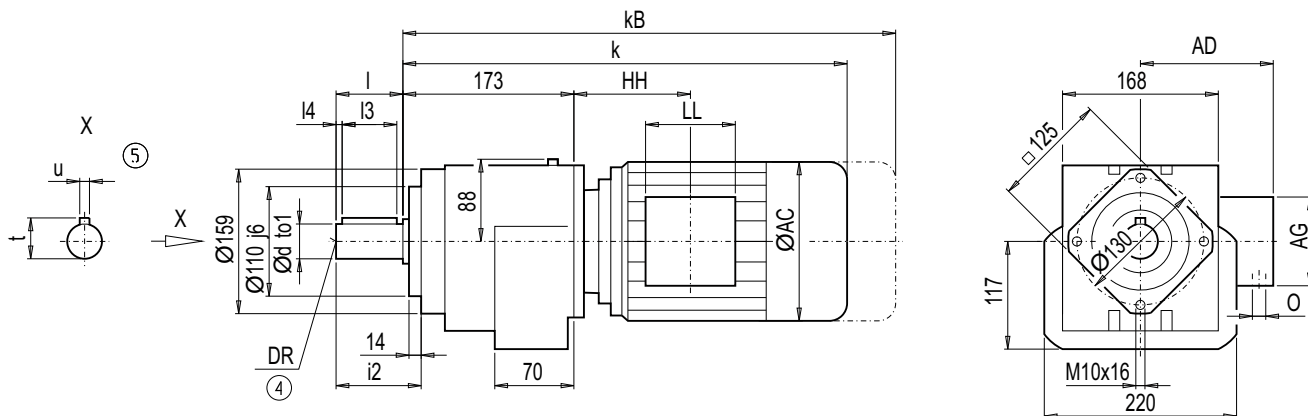
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DZ/ZZ48 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



d	to1	l	l4	l3	t	u	i2	DR
30 <sup>*)</sup>	k6	60	7	50	33	8	77	M10x22
35	k6	70	4	63	38	10	87	M10x22
40	k6	80	5	70	43	12	97	M16x36

<sup>\*)</sup> Preferred series

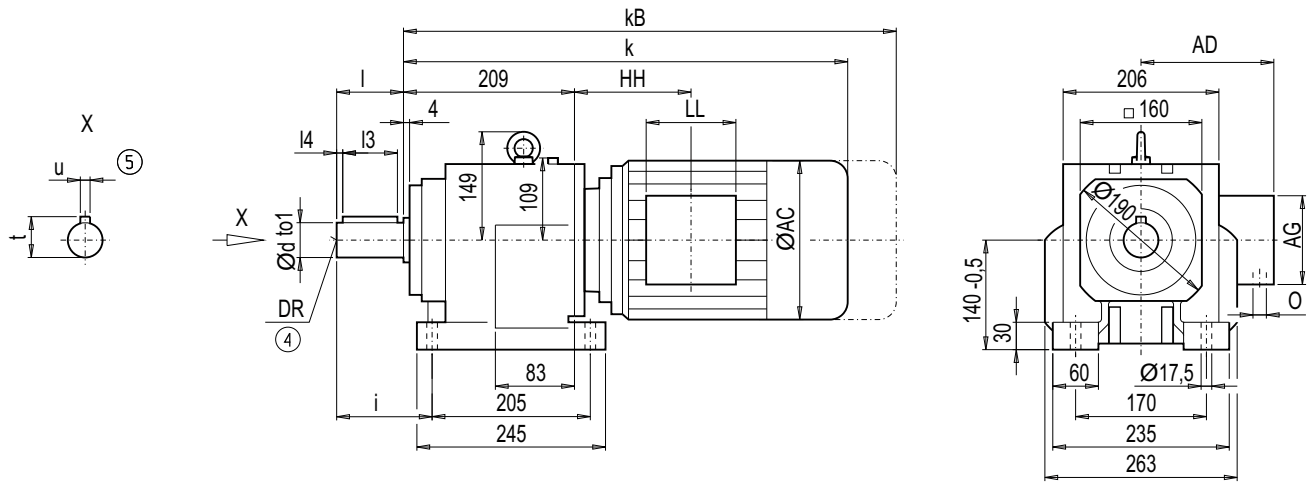
Motor	ZZ48		DZ48		AC	AD	AG	LL	ZZ48	DZ48	O	Weight	
	k	kB	k	kB								ZZ48	DZ48
LA71	426.0	481.0	443.0	498.0	139.0	146	90	90	109.0	126.0	M20x1.5/M25x1.5	24	25
LA71Z	445.0	500.0	462.0	517.0	139.0	146	90	90	109.0	126.0	M20x1.5/M25x1.5	24	25
LA80	463.0	526.5	480.0	543.5	156.5	155	90	90	108.5	125.5	M20x1.5/M25x1.5	29	30
LA80Z	485.5	549.0	502.5	566.0	156.5	155	90	90	181.5	198.5	M20x1.5/M25x1.5	33	34
LA90S/L	494.0	565.0	511.0	582.0	174.0	163	90	90	108.5	125.5	M20x1.5/M25x1.5	33	34
LA90ZL	539.0	610.0	556.0	627.0	174.0	163	90	90	232.5	249.5	M20x1.5/M25x1.5	39	40
LA100L	540.0	621.0	557.0	638.0	195.0	168	120	120	149.0	166.0	2xM32x1.5	42	43
LA100ZL	610.0	691.0	627.0	708.0	195.0	168	120	120	281.0	298.0	2xM32x1.5	52	53
LA112M	569.0	650.0	–	–	219.0	181	120	120	154.0	–	2xM32x1.5	54	–
LA112ZM	597.0	678.0	–	–	219.0	181	120	120	258.0	–	2xM32x1.5	61	–
LA132S/M	631.0	733.0	–	–	259.0	195	140	140	196.5	–	2xM32x1.5	64	–
LA132ZM	677.0	779.0	–	–	259.0	195	140	140	304.5	–	2xM32x1.5	85	–

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### Gearbox D/Z68 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
35	k6	70	5	56	38.0	10	105	M12x28
40 *)	k6	80	5	70	43.0	12	115	M16x36
50	k6	100	10	80	53.5	14	135	M16x36

\*) Preferred series

Motor	Z68		D68		AC	AD	AG	LL	Z68	D68	O	Weight	
	k	kB	k	kB					HH	HH		Z68	D68
LA71	456.0	511.0	474.5	529.5	139.0	146	90	90	103.0	121.5	M20x1.5/M25x1.5	43	45
LA71Z	475.0	530.0	493.5	548.5	139.0	146	90	90	103.0	121.5	M20x1.5/M25x1.5	43	45
LA80	493.0	556.5	511.5	575.0	156.5	155	90	90	102.5	121.0	M20x1.5/M25x1.5	48	50
LA80Z	515.5	579.0	534.0	597.5	156.5	155	90	90	175.5	194.0	M20x1.5/M25x1.5	52	54
LA90S/L	524.0	595.0	542.5	613.5	174.0	163	90	90	102.5	121.0	M20x1.5/M25x1.5	52	55
LA90ZL	569.0	640.0	587.5	658.5	174.0	163	90	90	226.5	245.0	M20x1.5/M25x1.5	58	61
LA100L	570.0	651.0	588.5	669.5	195.0	168	120	120	143.0	161.5	2xM32x1.5	61	64
LA100ZL	640.0	721.0	658.5	739.5	195.0	168	120	120	275.0	293.5	2xM32x1.5	71	74
LA112M	597.0	678.0	-	-	219.0	181	120	120	146.0	-	2xM32x1.5	73	-
LA112ZM	625.0	706.0	-	-	219.0	181	120	120	250.0	-	2xM32x1.5	80	-
LA132S/M	657.0	759.0	-	-	259.0	195	140	140	186.5	-	2xM32x1.5	86	-
LA132ZM	703.0	805.0	-	-	259.0	195	140	140	294.5	-	2xM32x1.5	107	-
LA160M/L	759.5	878.0	-	-	313.5	227	165	165	212.0	-	2xM40x1.5	119	-
LA160ZL	807.5	926.0	-	-	313.5	227	165	165	365.0	-	2xM40x1.5	158	-

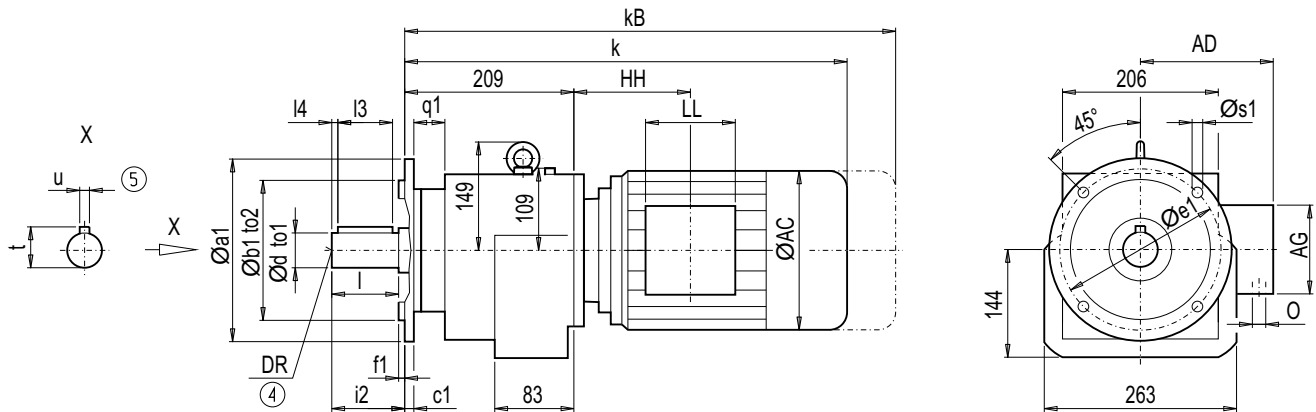
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DF/ZF68 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A250	250	180	j6	15	215	4	40	13.5	35	k6	70	5	56	38.0	10	70	M12x28
									40 <sup>*)</sup>	k6	80	5	70	43.0	12	80	M16x36
									50	k6	100	10	80	53.5	14	100	M16x36
A300	300	230	j6	16	265	4	39	13.5	35	k6	70	5	56	38.0	10	70	M12x28
									40 <sup>*)</sup>	k6	80	5	70	43.0	12	80	M16x36
									50	k6	100	10	80	53.5	14	100	M16x36
A350	350	250	j6	18	300	4	39	17.5	35	k6	70	5	56	38.0	10	70	M12x28
									40 <sup>*)</sup>	k6	80	5	70	43.0	12	80	M16x36
									50	k6	100	10	80	53.5	14	100	M16x36

\*) Preferred series

Motor	ZF68		DF68		AC	AD	AG	LL	ZF68	DF68	O	Weight	
	k	kB	k	kB					HH	HH		ZF68	DF68
LA71	456.0	511.0	474.5	529.5	139.0	146	90	90	103.0	121.5	M20x1.5/M25x1.5	45	47
LA71Z	475.0	530.0	493.5	548.5	139.0	146	90	90	103.0	121.5	M20x1.5/M25x1.5	45	47
LA80	493.0	556.5	511.5	575.0	156.5	155	90	90	102.5	121.0	M20x1.5/M25x1.5	49	52
LA80Z	515.5	579.0	534.0	597.5	156.5	155	90	90	175.5	194.0	M20x1.5/M25x1.5	53	56
LA90S/L	524.0	595.0	542.5	613.5	174.0	163	90	90	102.5	121.0	M20x1.5/M25x1.5	54	56
LA90ZL	569.0	640.0	587.5	658.5	174.0	163	90	90	226.5	245.0	M20x1.5/M25x1.5	60	62
LA100L	570.0	651.0	588.5	669.5	195.0	168	120	120	143.0	161.5	2xM32x1.5	63	65
LA100ZL	640.0	721.0	658.5	739.5	195.0	168	120	120	275.0	293.5	2xM32x1.5	73	75
LA112M	597.0	678.0	-	-	219.0	181	120	120	146.0	-	2xM32x1.5	75	-
LA112ZM	625.0	706.0	-	-	219.0	181	120	120	250.0	-	2xM32x1.5	82	-
LA132S/M	657.0	759.0	-	-	259.0	195	140	140	186.5	-	2xM32x1.5	88	-
LA132ZM	703.0	805.0	-	-	259.0	195	140	140	294.5	-	2xM32x1.5	109	-
LA160M/L	759.5	878.0	-	-	313.5	227	165	165	212.0	-	2xM40x1.5	121	-
LA160ZL	807.5	926.0	-	-	313.5	227	165	165	365.0	-	2xM40x1.5	160	-

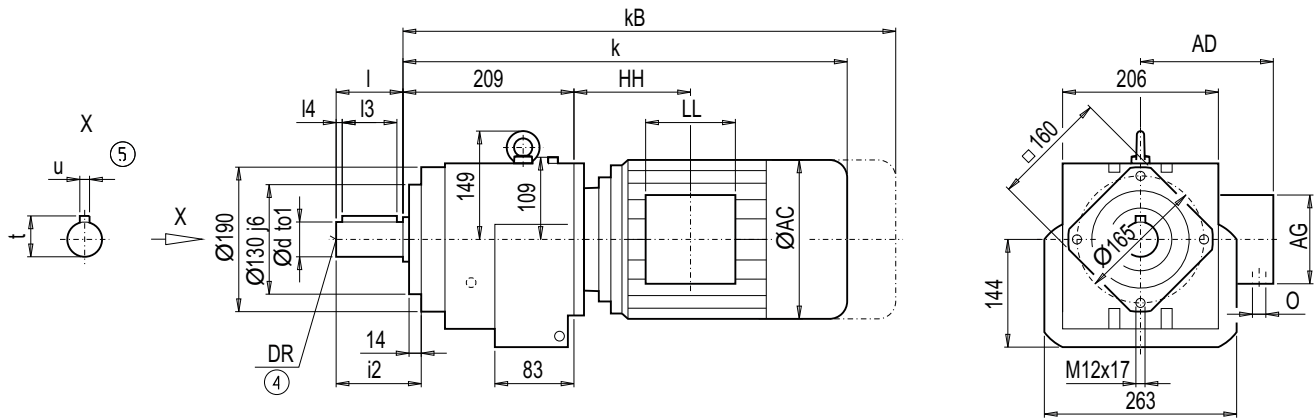
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### Gearbox DZ/ZZ68 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



d	to1	l	l4	l3	t	u	i2	DR
35	k6	70	5	56	38.0	10	88	M12x28
40 <sup>*)</sup>	k6	80	5	70	43.0	12	98	M16x36
50	k6	100	10	80	53.5	14	118	M16x36

\*) Preferred series

Motor	ZZ68		DZ68		AC	AD	AG	LL	ZZ68 HH	DZ68 HH	O	Weight	
	k	kB	k	kB								ZZ68	DZ68
LA71	456.0	511.0	474.5	529.5	139.0	146	90	90	103.0	121.5	M20x1.5/M25x1.5	39	41
LA71Z	475.0	530.0	493.5	548.5	139.0	146	90	90	103.0	121.5	M20x1.5/M25x1.5	39	41
LA80	493.0	556.5	511.5	575.0	156.5	155	90	90	102.5	121.0	M20x1.5/M25x1.5	44	46
LA80Z	515.5	579.0	534.0	597.5	156.5	155	90	90	175.5	194.0	M20x1.5/M25x1.5	48	50
LA90S/L	524.0	595.0	542.5	613.5	174.0	163	90	90	102.5	121.0	M20x1.5/M25x1.5	49	51
LA90ZL	569.0	640.0	587.5	658.5	174.0	163	90	90	226.5	245.0	M20x1.5/M25x1.5	55	57
LA100L	570.0	651.0	588.5	669.5	195.0	168	120	120	143.0	161.5	2xM32x1.5	58	60
LA100ZL	640.0	721.0	658.5	739.5	195.0	168	120	120	275.0	293.5	2xM32x1.5	68	70
LA112M	597.0	678.0	–	–	219.0	181	120	120	146.0	–	2xM32x1.5	69	–
LA112ZM	625.0	706.0	–	–	219.0	181	120	120	250.0	–	2xM32x1.5	76	–
LA132S/M	657.0	759.0	–	–	259.0	195	140	140	186.5	–	2xM32x1.5	82	–
LA132ZM	703.0	805.0	–	–	259.0	195	140	140	294.5	–	2xM32x1.5	104	–
LA160M/L	759.5	878.0	–	–	313.5	227	165	165	212.0	–	2xM40x1.5	115	–
LA160ZL	807.5	926.0	–	–	313.5	227	165	165	365.0	–	2xM40x1.5	154	–

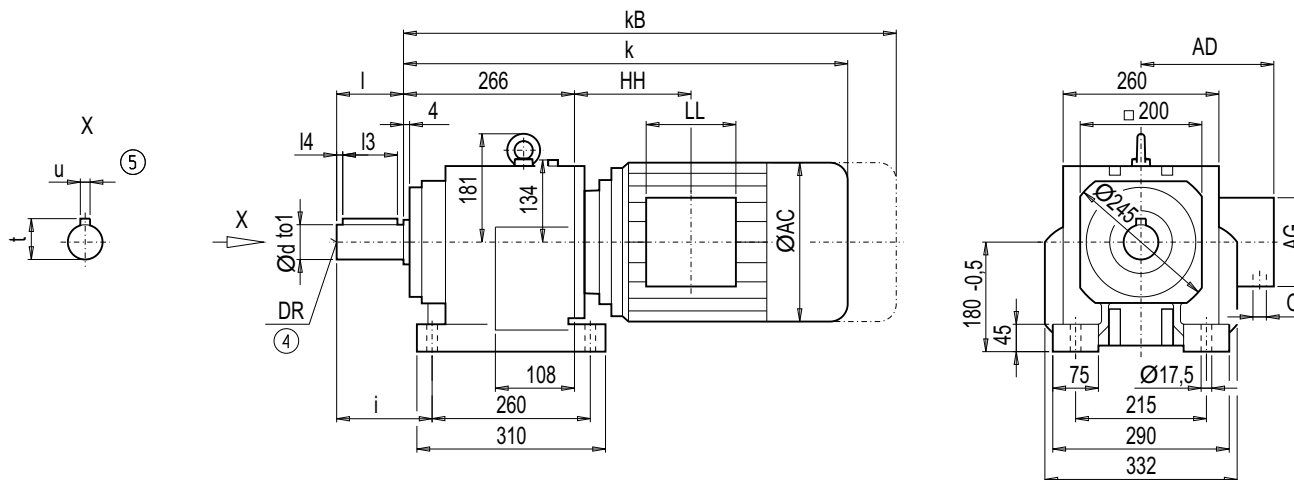
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox D/Z88 (3- / 2-stage), foot-mounted design

DZ011



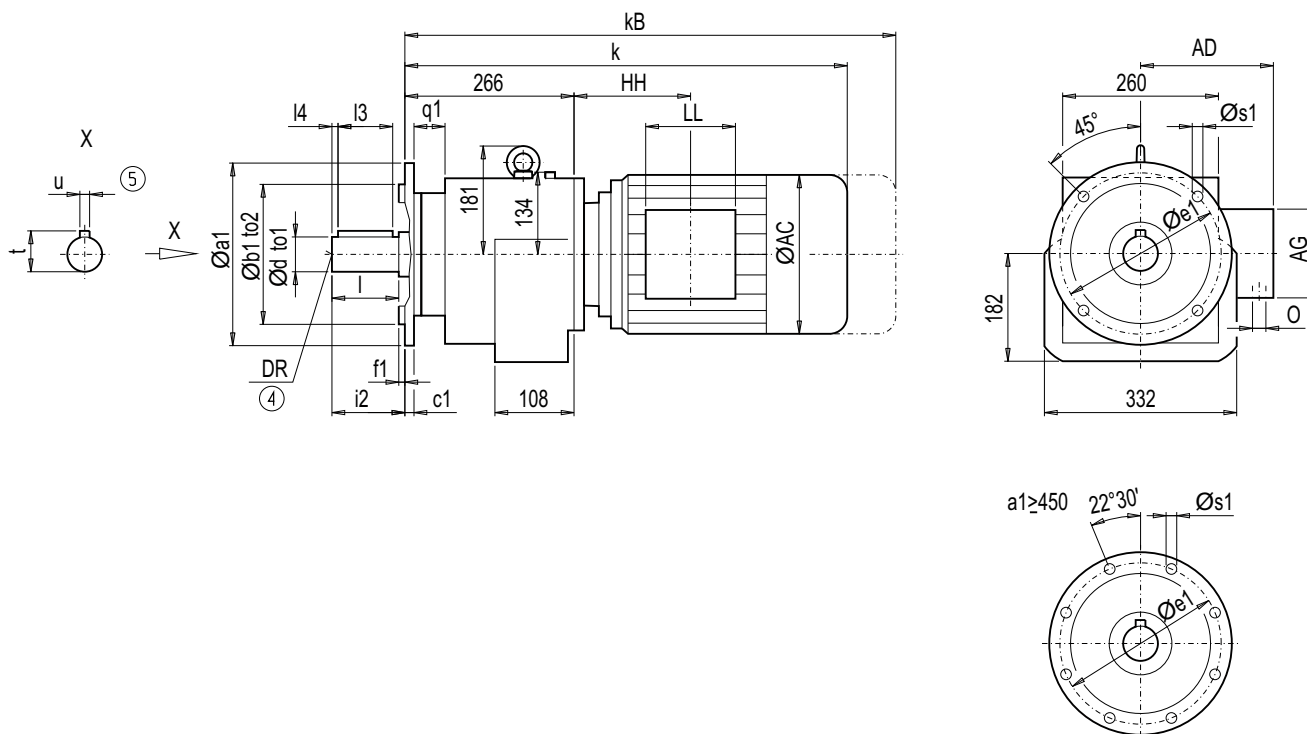
d	to1	l	l4	l3	t	u	i	DR
50 <sup>*)</sup>	k6	100	10	80	53.5	14	140	M16x36
60	m6	120	10	100	64.0	18	160	M20x42

\*) Preferred series

Motor	Z88		D88		AC	AD	AG	LL	Z88		D88		Weight	
	k	kB	k	kB					HH	HH	O	Z88	D88	
LA71	-	-	523.0	578.0	139.0	146.0	90	90	-	113.0	M20x1.5/M25x1.5	-	76	
LA71Z	-	-	542.0	597.0	139.0	146.0	90	90	-	113.0	M20x1.5/M25x1.5	-	76	
LA80	-	-	560.0	623.5	156.5	155.0	90	90	-	112.5	M20x1.5/M25x1.5	-	81	
LA80Z	-	-	582.5	646.0	156.5	155.0	90	90	-	185.5	M20x1.5/M25x1.5	-	85	
LA90S/L	566.0	637.0	591.0	662.0	174.0	163.0	90	90	87.5	112.5	M20x1.5/M25x1.5	85	86	
LA90ZL	611.0	682.0	636.0	707.0	174.0	163.0	90	90	211.5	236.5	M20x1.5/M25x1.5	91	92	
LA100L	609.5	690.5	637.0	718.0	195.0	168.0	120	120	125.5	153.0	2xM32x1.5	93	95	
LA100ZL	679.5	760.5	707.0	788.0	195.0	168.0	120	120	257.5	285.0	2xM32x1.5	103	105	
LA112M	635.5	716.5	664.5	745.5	219.0	181.0	120	120	127.5	156.5	2xM32x1.5	106	107	
LA112ZM	663.5	744.6	692.5	773.5	219.0	181.0	120	120	231.5	260.5	2xM32x1.5	113	114	
LA132S/M	695.5	797.5	723.5	825.5	259.0	195.0	140	140	168.0	196.0	2xM32x1.5	117	120	
LA132ZM	741.5	843.5	769.5	871.5	259.0	195.0	140	140	276.0	304.0	2xM32x1.5	138	141	
LA160M/L	800.0	918.5	-	-	313.5	227.0	165	165	195.5	-	2xM40x1.5	152	-	
LA160ZL	848.0	966.5	-	-	313.5	227.0	165	165	348.5	-	2xM40x1.5	191	-	
LG180M/L	859.5	981.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	244	-	
LG180ZM/ZL	910.5	1 032.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	274	-	

### Gearbox DF/ZF88 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	i4	i3	t	u	i2	DR
A300	300	230	j6	16	265	4	54	13.5	50 <sup>*)</sup>	k6	100	10	80	53.5	14	100	M16x36
									60	m6	120	10	100	64.0	18	120	M20x42
A350	350	250	j6	18	300	5	52	17.5	50 <sup>*)</sup>	k6	100	10	80	53.5	14	100	M16x36
									60	m6	120	10	100	64.0	18	120	M20x42
A450	450	350	j6	18	400	5	52	17.5	50 <sup>*)</sup>	k6	100	10	80	53.5	14	100	M16x36
									60	m6	120	10	100	64.0	18	120	M20x42

<sup>\*)</sup> Preferred series

Motor	ZF88		DF88		AC	AD	AG	LL	ZF88	DF88	O	Weight	
	k	kB	k	kB								ZF88	DF88
LA71	-	-	523.0	578.0	139.0	146.0	90	90	-	113.0	M20x1.5/M25x1.5	-	78
LA71Z	-	-	542.0	597.0	139.0	146.0	90	90	-	113.0	M20x1.5/M25x1.5	-	78
LA80	-	-	560.0	623.5	156.5	155.0	90	90	-	112.5	M20x1.5/M25x1.5	-	83
LA80Z	-	-	582.5	646.0	156.5	155.0	90	90	-	185.5	M20x1.5/M25x1.5	-	87
LA90S/L	566.0	637.0	591.0	662.0	174.0	163.0	90	90	87.5	112.5	M20x1.5/M25x1.5	87	88
LA90ZL	611.0	682.0	636.0	707.0	174.0	163.0	90	90	211.5	236.5	M20x1.5/M25x1.5	93	94
LA100L	609.5	690.5	637.0	718.0	195.0	168.0	120	120	125.5	153.0	2xM32x1.5	95	97
LA100ZL	679.5	760.5	707.0	788.0	195.0	168.0	120	120	257.5	285.0	2xM32x1.5	105	107
LA112M	635.5	716.5	664.5	745.5	219.0	181.0	120	120	127.5	156.5	2xM32x1.5	108	109
LA112ZM	663.5	744.6	692.5	773.5	219.0	181.0	120	120	231.5	260.5	2xM32x1.5	115	116
LA132S/M	695.5	797.5	723.5	825.5	259.0	195.0	140	140	168.0	196.0	2xM32x1.5	119	122
LA132ZM	741.5	843.5	769.5	871.5	259.0	195.0	140	140	276.0	304.0	2xM32x1.5	140	143
LA160M/L	800.0	918.5	-	-	313.5	227.0	165	165	195.5	-	2xM40x1.5	154	-
LA160ZL	848.0	966.5	-	-	313.5	227.0	165	165	348.5	-	2xM40x1.5	193	-
LG180M/L	859.5	981.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	246	-
LG180ZM/ZL	910.5	1 032.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	276	-

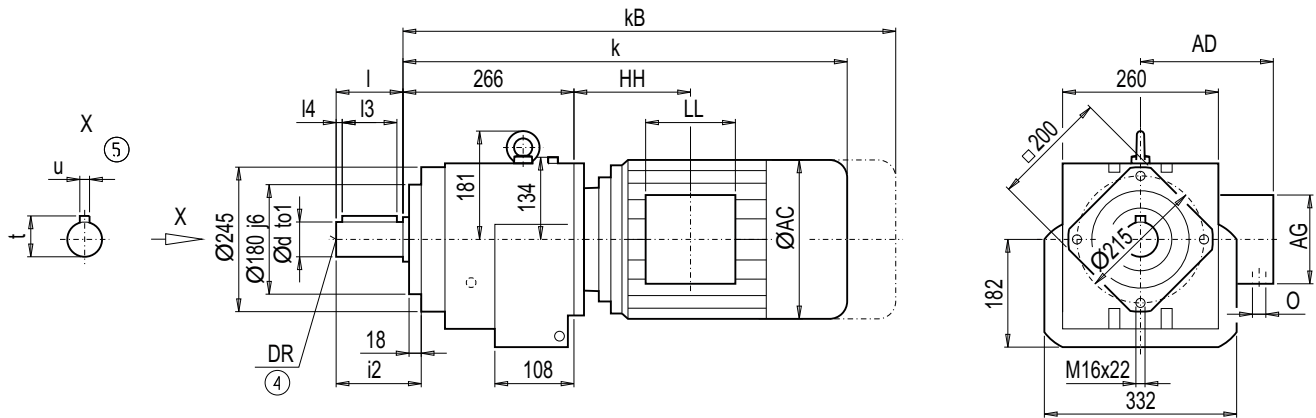
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DZ/ZZ88 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



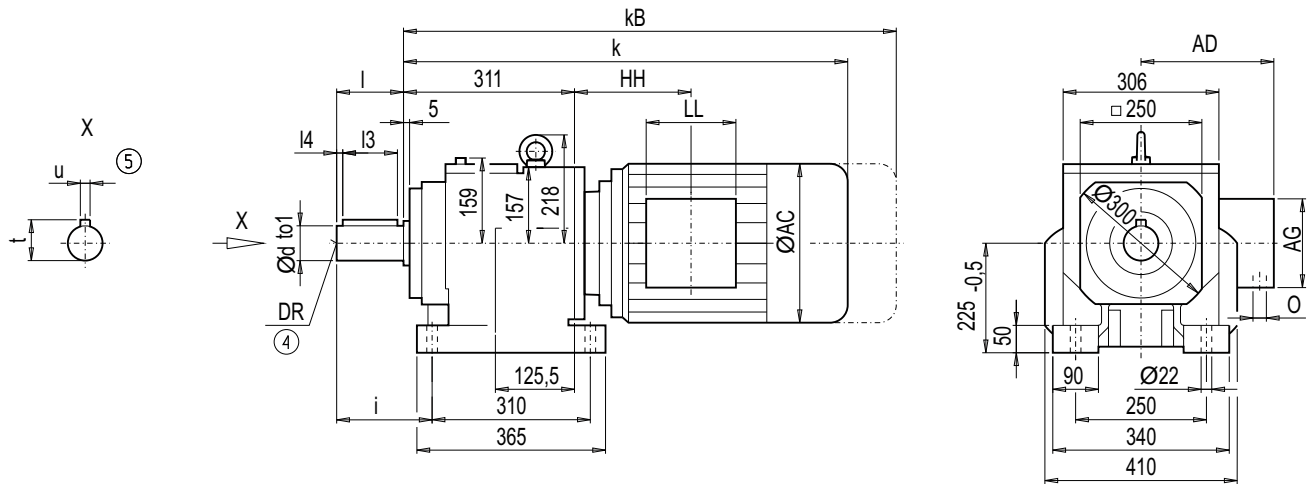
d	to1	l	l4	l3	t	u	i2	DR
50 *)	k6	100	10	80	53.5	14	122	M16x36
60	m6	120	10	100	64.0	18	142	M20x42

\*) Preferred series

Motor	ZZ88		DZ88		AC	AD	AG	LL	ZZ88	DZ88	O	Weight	
	k	kB	k	kB								HH	HH
LA71	-	-	523.0	578.0	139.0	146.0	90	90	-	113.0	M20x1.5/M25x1.5	-	69
LA71Z	-	-	542.0	597.0	139.0	146.0	90	90	-	113.0	M20x1.5/M25x1.5	-	69
LA80	-	-	560.0	623.5	156.5	155.0	90	90	-	112.5	M20x1.5/M25x1.5	-	74
LA80Z	-	-	582.5	646.0	156.5	155.0	90	90	-	185.5	M20x1.5/M25x1.5	-	78
LA90S/L	566.0	637.0	591.0	662.0	174.0	163.0	90	90	87.5	112.5	M20x1.5/M25x1.5	79	79
LA90ZL	611.0	682.0	636.0	707.0	174.0	163.0	90	90	211.5	236.5	M20x1.5/M25x1.5	85	85
LA100L	609.5	690.5	637.0	718.0	195.0	168.0	120	120	125.5	153.0	2xM32x1.5	87	88
LA100ZL	679.5	760.5	707.0	788.0	195.0	168.0	120	120	257.5	285.0	2xM32x1.5	97	98
LA112M	635.5	716.5	664.5	745.5	219.0	181.0	120	120	127.5	156.5	2xM32x1.5	99	101
LA112ZM	663.5	744.6	692.5	773.5	219.0	181.0	120	120	231.5	260.5	2xM32x1.5	106	108
LA132S/M	695.5	797.5	723.5	825.5	259.0	195.0	140	140	168.0	196.0	2xM32x1.5	110	113
LA132ZM	741.5	843.5	769.5	871.5	259.0	195.0	140	140	276.0	304.0	2xM32x1.5	132	134
LA160M/L	800.0	918.5	-	-	313.5	227.0	165	165	195.5	-	2xM40x1.5	145	-
LA160ZL	848.0	966.5	-	-	313.5	227.0	165	165	348.5	-	2xM40x1.5	184	-
LG180M/L	859.5	981.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	237	-
LG180ZM/ZL	910.5	1 032.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	267	-

### Gearbox D/Z108 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
60 *)	m6	120	10	100	64.0	18	159.5	M20x42
70	m6	140	15	110	74.5	20	179.5	M20x42

\*) Preferred series

Motor	Z108		D108		AC	AD	AG	LL	Z108	D108	O	Weight	
	k	kB	k	kB					HH	HH		Z108	D108
LA80	-	-	599.0	662.5	156.5	155.0	90	90	-	106.5	M20x1.5/M25x1.5	-	130
LA80Z	-	-	621.5	685.0	156.5	155.0	90	90	-	179.5	M20x1.5/M25x1.5	-	134
LA90S/L	599.5	670.5	630.0	701.0	174.0	163.0	90	90	76.0	106.5	M20x1.5/M25x1.5	133	135
LA90ZL	644.5	715.5	675.0	746.0	174.0	163.0	90	90	200.0	230.5	M20x1.5/M25x1.5	139	141
LA100L	642.5	723.5	676.0	757.0	195.0	168.0	120	120	113.5	147.0	2xM32x1.5	141	144
LA100ZL	712.5	793.5	746.0	827.0	195.0	168.0	120	120	245.5	279.0	2xM32x1.5	151	154
LA112M	669.0	750.0	700.5	781.5	219.0	181.0	120	120	116.0	147.5	2xM32x1.5	152	156
LA112ZM	697.0	778.0	728.5	809.5	219.0	181.0	120	120	220.0	251.5	2xM32x1.5	159	163
LA132S/M	728.0	830.0	760.5	862.5	259.0	195.0	140	140	155.5	188.0	2xM32x1.5	163	168
LA132ZM	774.0	876.0	806.5	908.5	259.0	195.0	140	140	263.5	296.0	2xM32x1.5	184	189
LA160M/L	833.5	952.0	863.0	981.5	313.5	227.0	165	165	184.0	213.5	2xM40x1.5	198	205
LA160ZL	881.5	1 000.0	911.0	1 029.5	313.5	227.0	165	165	337.0	366.5	2xM40x1.5	237	244
LG180M/L	890.0	1 012.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	294	-
LG180ZM/ZL	941.0	1 063.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	324	-
LG200L	946.0	1 072.0	-	-	385.0	301.0	260	192	228.0	-	2xM50x1.5	374	-
K4-LGI225S	1 206.5	1 445.5	-	-	442.0	325.0	260	192	443.0	-	2xM50x1.5	530	-
K4-LGI225M	1 206.5	1 445.5	-	-	442.0	325.0	260	192	443.0	-	2xM50x1.5	518	-
K4-LGI225ZM	1 266.5	1 505.5	-	-	442.0	325.0	260	192	443.0	-	2xM50x1.5	576	-

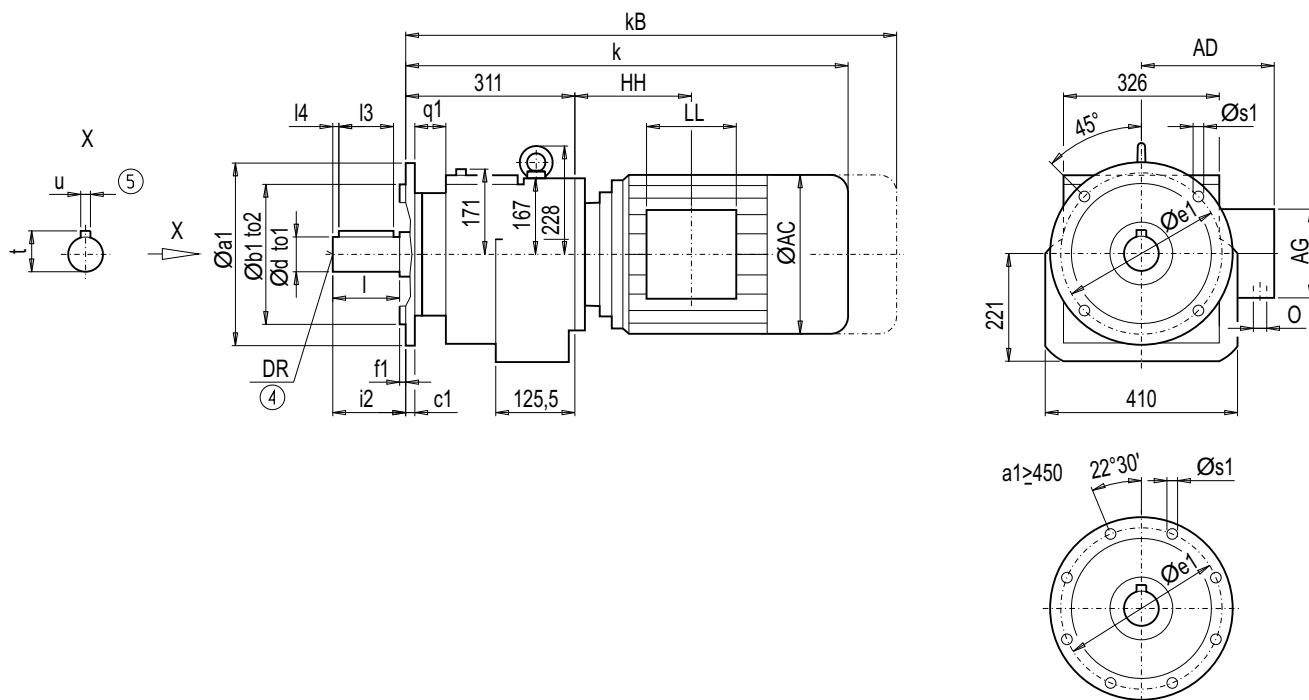
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DF/ZF108 (3- / 2-stage), flange-mounted design (A-type)

##### DZF011



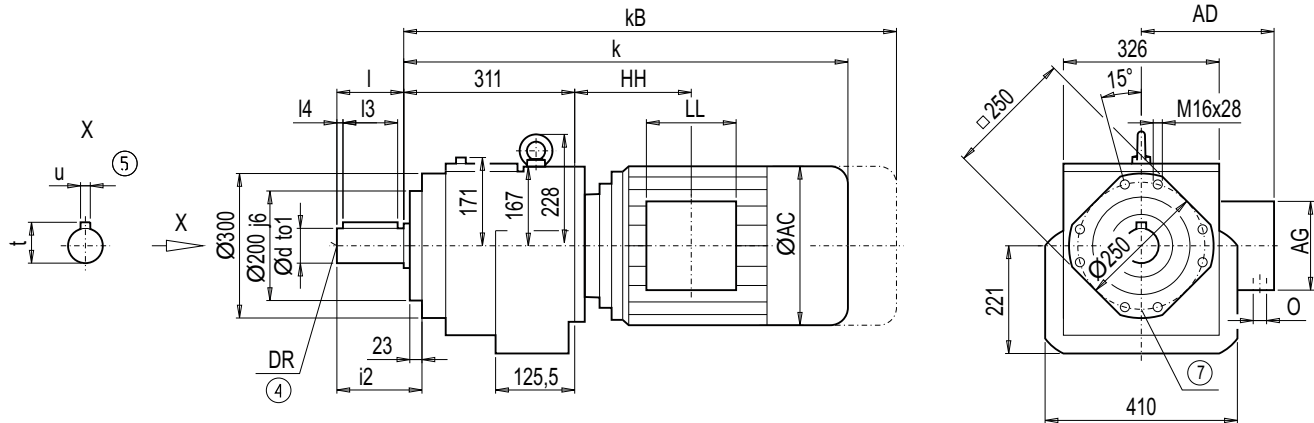
Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A350	350	250	h6	18	300	5	41	17.5	60 <sup>*)</sup>	m6	120	10	100	64.0	18	120	M20x42
									70	m6	140	15	110	74.5	20	140	M20x42
A450	450	350	h6	20	400	5	39	17.5	60 <sup>*)</sup>	m6	120	10	100	64.0	18	120	M20x42
									70	m6	140	15	110	74.5	20	140	M20x42

<sup>\*)</sup> Preferred series

Motor	ZF108		DF108		AC	AD	AG	LL	ZF108	DF108	O	Weight	
	k	kB	k	kB					HH	HH		ZF108	DF108
LA80	-	-	599.0	662.5	156.5	155.0	90	90	-	106.5	M20x1.5/M25x1.5	-	129
LA80Z	-	-	621.5	685.0	156.5	155.0	90	90	-	179.5	M20x1.5/M25x1.5	-	133
LA90S/L	599.5	670.5	630.0	701.0	174.0	163.0	90	90	76.0	106.5	M20x1.5/M25x1.5	131	134
LA90ZL	644.5	715.5	675.0	746.0	174.0	163.0	90	90	200.0	230.5	M20x1.5/M25x1.5	137	140
LA100L	642.5	723.5	676.0	757.0	195.0	168.0	120	120	113.5	147.0	2xM32x1.5	139	143
LA100ZL	712.5	793.5	746.0	827.0	195.0	168.0	120	120	245.5	279.0	2xM32x1.5	149	153
LA112M	669.0	750.0	700.5	781.5	219.0	181.0	120	120	116.0	147.5	2xM32x1.5	151	155
LA112ZM	697.0	778.0	728.5	809.5	219.0	181.0	120	120	220.0	251.5	2xM32x1.5	158	162
LA132S/M	728.0	830.0	760.5	862.5	259.0	195.0	140	140	155.5	188.0	2xM32x1.5	162	167
LA132ZM	774.0	876.0	806.5	908.5	259.0	195.0	140	140	263.5	296.0	2xM32x1.5	183	188
LA160M/L	833.5	952.0	863.0	981.5	313.5	227.0	165	165	184.0	213.5	2xM40x1.5	196	204
LA160ZL	881.5	1 000.0	911.0	1 029.5	313.5	227.0	165	165	337.0	366.5	2xM40x1.5	235	243
LG180M/L	890.0	1 012.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	293	-
LG180ZM/ZL	941.0	1 063.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	323	-
LG200L	946.0	1 072.0	-	-	385.0	301.0	260	192	228.0	-	2xM50x1.5	373	-
K4-LGI225S	1 206.5	1 445.5	-	-	442.0	325.0	260	192	443.0	-	2xM50x1.5	529	-
K4-LGI225M	1 206.5	1 445.5	-	-	442.0	325.0	260	192	443.0	-	2xM50x1.5	517	-
K4-LGI225ZM	1 266.5	1 505.5	-	-	442.0	325.0	260	192	443.0	-	2xM50x1.5	575	-

### Gearbox DZ/ZZ108 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



d	to1	l	l4	l3	t	u	i2	DR
60 *)	m6	120	10	100	64.0	18	148	M20x42
70	m6	140	15	110	74.5	20	168	M20x42

\*) Preferred series

Motor	ZZ108		DZ108		AC	AD	AG	LL	ZZ108	DZ108	O	Weight	
	k	kB	k	kB								HH	HH
LA80	-	-	599.0	662.5	156.5	155.0	90	90	-	106.5	M20x1.5/M25x1.5	-	121
LA80Z	-	-	621.5	685.0	156.5	155.0	90	90	-	179.5	M20x1.5/M25x1.5	-	125
LA90S/L	599.5	670.5	630.0	701.0	174.0	163.0	90	90	76.0	106.5	M20x1.5/M25x1.5	124	126
LA90ZL	644.5	715.5	675.0	746.0	174.0	163.0	90	90	200.0	230.5	M20x1.5/M25x1.5	130	132
LA100L	642.5	723.5	676.0	757.0	195.0	168.0	120	120	113.5	147.0	2xM32x1.5	132	135
LA100ZL	712.5	793.5	746.0	827.0	195.0	168.0	120	120	245.5	279.0	2xM32x1.5	142	145
LA112M	669.0	750.0	700.5	781.5	219.0	181.0	120	120	116.0	147.5	2xM32x1.5	144	147
LA112ZM	697.0	778.0	728.5	809.5	219.0	181.0	120	120	220.0	251.5	2xM32x1.5	151	154
LA132S/M	728.0	830.0	760.5	862.5	259.0	195.0	140	140	155.5	188.0	2xM32x1.5	154	159
LA132ZM	774.0	876.0	806.5	908.5	259.0	195.0	140	140	263.5	296.0	2xM32x1.5	175	180
LA160M/L	833.5	952.0	863.0	981.5	313.5	227.0	165	165	184.0	213.5	2xM40x1.5	189	196
LA160ZL	881.5	1 000.0	911.0	1 029.5	313.5	227.0	165	165	337.0	366.5	2xM40x1.5	228	235
LG180M/L	890.0	1 012.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	285	-
LG180ZM/ZL	941.0	1 063.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	315	-
LG200L	946.0	1 072.0	-	-	385.0	301.0	260	192	228.0	-	2xM50x1.5	365	-
K4-LGI225S	1 206.5	1 445.5	-	-	442.0	325.0	260	192	443.0	-	2xM50x1.5	521	-
K4-LGI225M	1 206.5	1 445.5	-	-	442.0	325.0	260	192	443.0	-	2xM50x1.5	509	-
K4-LGI225ZM	1 266.5	1 505.5	-	-	442.0	325.0	260	192	443.0	-	2xM50x1.5	567	-

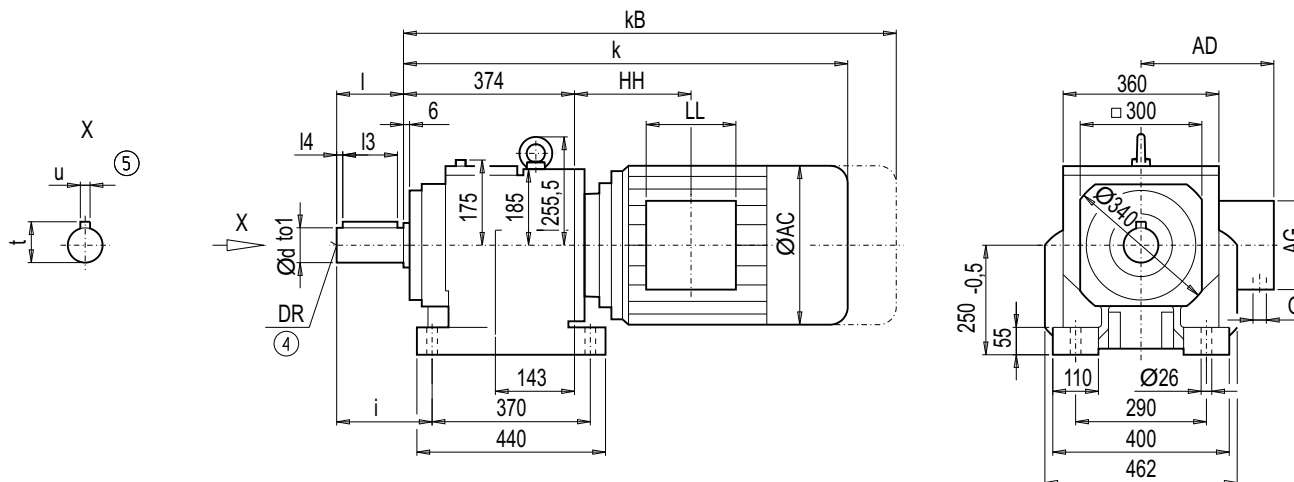
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox D/Z128 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
70 *)	m6	140	15	110	74.5	20	186	M20x42
90	m6	170	15	140	95.0	25	216	M24x50

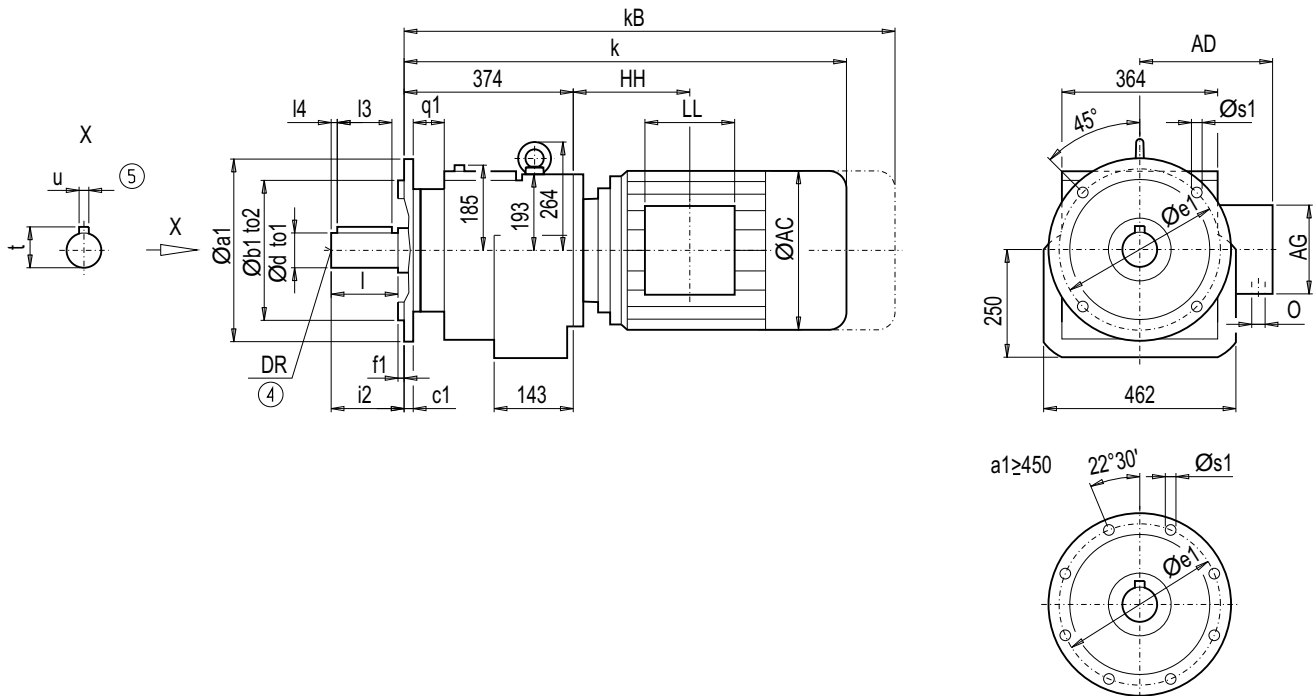
\*) Preferred series

Motor	Z128		D128		AC	AD	AG	LL	Z128	D128	O	Weight	
	k	kB	k	kB								Z128	D128
LA90S/L	-	-	686.0	757.0	174.0	163.0	90	90	-	99.5	M20x1.5/M25x1.5	-	212
LA90ZL	-	-	731.0	802.0	174.0	163.0	90	90	-	223.5	M20x1.5/M25x1.5	-	218
LA100L	696.0	777.0	732.0	813.0	195.0	168.0	120	120	104.0	140.0	2xM32x1.5	214	221
LA100ZL	766.0	847.0	802.0	883.0	195.0	168.0	120	120	236.0	272.0	2xM32x1.5	224	231
LA112M	721.5	802.5	755.5	836.5	219.0	181.0	120	120	105.5	139.5	2xM32x1.5	226	233
LA112ZM	749.5	830.5	783.5	864.5	219.0	181.0	120	120	209.5	243.5	2xM32x1.5	233	240
LA132S/M	780.5	882.5	814.5	916.5	259.0	195.0	140	140	145.0	179.0	2xM32x1.5	235	246
LA132ZM	826.5	928.5	860.5	962.5	259.0	195.0	140	140	253.0	287.0	2xM32x1.5	256	267
LA160M/L	880.0	998.5	917.0	1 035.5	313.5	227.0	165	165	167.5	204.5	2xM40x1.5	274	282
LA160ZL	928.0	1 046.5	965.0	1 083.5	313.5	227.0	165	165	320.5	357.5	2xM40x1.5	313	321
LG180M/L	939.5	1 061.5	976.5	1 098.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	365	378
LG180ZM/ZL	990.5	1 112.5	1 027.5	1 149.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	395	408
LG200L	995.5	1 121.5	1 032.5	1 158.5	385.0	301.0	260	192	214.5	251.5	2xM50x1.5	445	458
LG225S	1 066.5	1 305.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	522	-
LG225M	1 066.5	1 305.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	510	-
LG225ZM	1 126.5	1 365.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	568	-
K4-LGI250M	1 353.5	1 578.5	-	-	495.0	392.0	300	236	469.5	-	2xM63x1.5	689	-
K4-LGI250ZM	1 423.5	1 648.5	-	-	495.0	392.0	300	236	469.5	-	2xM63x1.5	792	-



### Gearbox DF/ZF128 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A350 <sup>1)</sup>	350	250	h6	18	300	5	60	17.5	70 <sup>*)</sup>	m6	140	15	110	74.5	20	140	M20x42
									90	m6	170	15	140	95.0	25	170	M24x50
A450	450	350	h6	22	400	5	56	17.5	70 <sup>*)</sup>	m6	140	15	110	74.5	20	140	M20x42
									90	m6	170	15	140	95.0	25	170	M24x50
A550	550	450	h6	22	500	5	56	17.5	70 <sup>*)</sup>	m6	140	15	110	74.5	20	140	M20x42
									90	m6	170	15	140	95.0	25	170	M24x50

<sup>1)</sup> If torque > 3500 Nm, the flange must be pinned. We recommend you use 2 pins with a 12 mm diameter

<sup>\*)</sup> Preferred series

Motor	ZF128		DF128		AC	AD	AG	LL	ZF128	DF128	O	Weight	
	k	kB	k	kB								ZF128	DF128
LA90S/L	-	-	686.0	757.0	174.0	163.0	90	90	-	99.5	M20x1.5/M25x1.5	-	206
LA90ZL	-	-	731.0	802.0	174.0	163.0	90	90	-	223.5	M20x1.5/M25x1.5	-	212
LA100L	696.0	777.0	732.0	813.0	195.0	168.0	120	120	104.0	140.0	2xM32x1.5	209	216
LA100ZL	766.0	847.0	802.0	883.0	195.0	168.0	120	120	236.0	272.0	2xM32x1.5	219	226
LA112M	721.5	802.5	755.5	836.5	219.0	181.0	120	120	105.5	139.5	2xM32x1.5	220	227
LA112ZM	749.5	830.5	783.5	864.5	219.0	181.0	120	120	209.5	243.5	2xM32x1.5	227	234
LA132S/M	780.5	882.5	814.5	916.5	259.0	195.0	140	140	145.0	179.0	2xM32x1.5	230	240
LA132ZM	826.5	928.5	860.5	962.5	259.0	195.0	140	140	253.0	287.0	2xM32x1.5	251	261
LA160M/L	880.0	998.5	917.0	1035.5	313.5	227.0	165	165	167.5	204.5	2xM40x1.5	269	276
LA160ZL	928.0	1046.5	965.0	1083.5	313.5	227.0	165	165	320.5	357.5	2xM40x1.5	308	315
LG180M/L	939.5	1061.5	976.5	1098.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	360	372
LG180ZM/ZL	990.5	1112.5	1027.5	1149.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	390	402
LG200L	995.5	1121.5	1032.5	1158.5	385.0	301.0	260	192	214.5	251.5	2xM50x1.5	440	452
LG225S	1066.5	1305.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	517	-
LG225M	1066.5	1305.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	505	-
LG225ZM	1126.5	1365.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	563	-
K4-LGI250M	1353.5	1578.5	-	-	495.0	392.0	300	236	469.5	-	2xM63x1.5	684	-
K4-LGI250ZM	1423.5	1648.5	-	-	495.0	392.0	300	236	469.5	-	2xM63x1.5	787	-

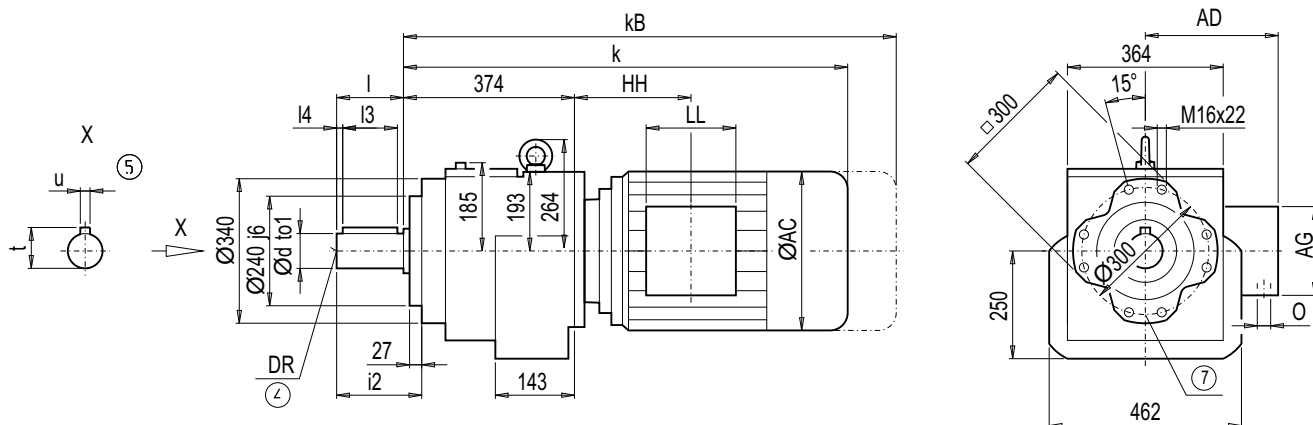
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DZ/ZZ128 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



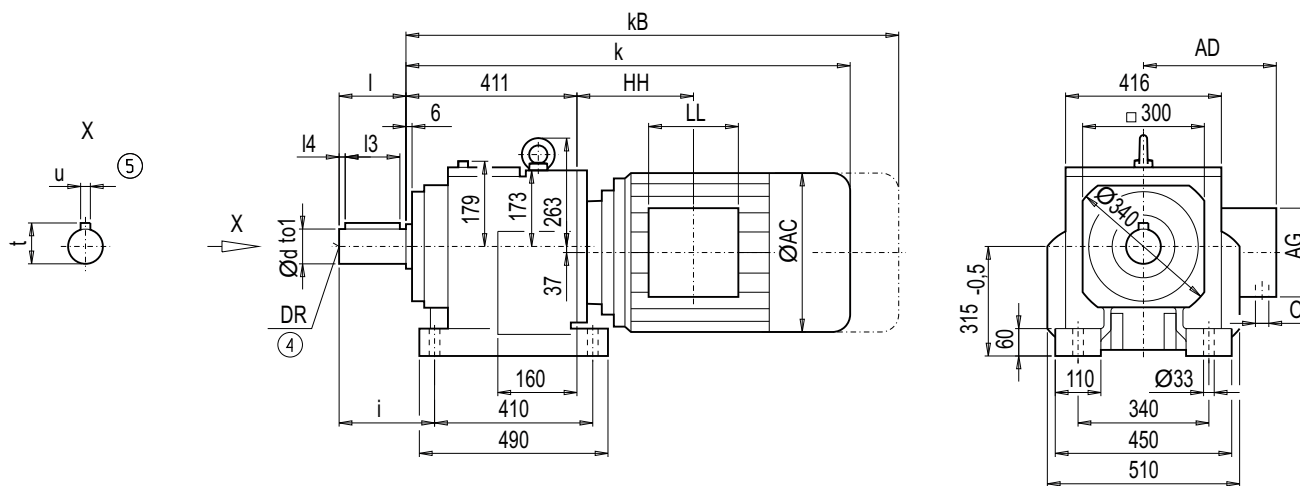
d	to1	l	l4	l3	t	u	i2	DR
70 *)	m6	140	15	110	74.5	20	173	M20x42
90	m6	170	15	140	95.0	25	203	M24x50

\*) Preferred series

Motor	ZZ128		DZ128		AC	AD	AG	LL	ZZ128	DZ128	O	Weight	
	k	kB	k	kB								ZZ128	DZ128
LA90S/L	-	-	686.0	757.0	174.0	163.0	90	90	-	99.5	M20x1.5/M25x1.5	-	190
LA90ZL	-	-	731.0	802.0	174.0	163.0	90	90	-	223.5	M20x1.5/M25x1.5	-	196
LA100L	696.0	777.0	732.0	813.0	195.0	168.0	120	120	104.0	140.0	2xM32x1.5	192	199
LA100ZL	766.0	847.0	802.0	883.0	195.0	168.0	120	120	236.0	272.0	2xM32x1.5	202	209
LA112M	721.5	802.5	755.5	836.5	219.0	181.0	120	120	105.5	139.5	2xM32x1.5	203	210
LA112ZM	749.5	830.5	783.5	864.5	219.0	181.0	120	120	209.5	243.5	2xM32x1.5	210	217
LA132S/M	780.5	882.5	814.5	916.5	259.0	195.0	140	140	145.0	179.0	2xM32x1.5	213	223
LA132ZM	826.5	928.5	860.5	962.5	259.0	195.0	140	140	253.0	287.0	2xM32x1.5	234	245
LA160M/L	880.0	998.5	917.0	1 035.5	313.5	227.0	165	165	167.5	204.5	2xM40x1.5	252	259
LA160ZL	928.0	1 046.5	965.0	1 083.5	313.5	227.0	165	165	320.5	357.5	2xM40x1.5	291	298
LG180M/L	939.5	1 061.5	976.5	1 098.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	343	355
LG180ZM/ZL	990.5	1 112.5	1 027.5	1 149.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	373	385
LG200L	995.5	1 121.5	1 032.5	1 158.5	385.0	301.0	260	192	214.5	251.5	2xM50x1.5	423	435
LG225S	1 066.5	1 305.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	500	-
LG225M	1 066.5	1 305.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	488	-
LG225ZM	1 126.5	1 365.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	546	-
K4-LGI250M	1 353.5	1 578.5	-	-	495.0	392.0	300	236	469.5	-	2xM63x1.5	667	-
K4-LGI250ZM	1 423.5	1 648.5	-	-	495.0	392.0	300	236	469.5	-	2xM63x1.5	770	-

### Gearbox D/Z148 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
90 *)	m6	170	15	140	95	25	220	M24x50
100	m6	210	15	180	106	28	260	M24x50

\*) Preferred series

Motor	Z148		D148		AC	AD	AG	LL	Z148	D148	O	Weight	
	k	kB	k	kB					HH	HH		Z148	D148
LA100L	-	-	764.0	845.0	195.0	168.0	120	120	-	135.0	2xM32x1.5	-	313
LA100ZL	-	-	834.0	915.0	195.0	168.0	120	120	-	267.0	2xM32x1.5	-	323
LA112M	-	-	789.5	870.5	219.0	181.0	120	120	-	136.5	2xM32x1.5	-	324
LA112ZM	-	-	817.5	898.5	219.0	181.0	120	120	-	240.5	2xM32x1.5	-	331
LA132S/M	809.5	911.5	847.5	949.5	259.0	195.0	140	140	137.0	175.0	2xM32x1.5	325	336
LA132ZM	855.5	957.5	893.5	995.5	259.0	195.0	140	140	245.0	283.0	2xM32x1.5	346	357
LA160M/L	909.5	1 028.0	947.5	1 066.0	313.5	227.0	165	165	160.0	198.0	2xM40x1.5	359	371
LA160ZL	957.5	1 076.0	995.5	1 114.0	313.5	227.0	165	165	313.0	351.0	2xM40x1.5	398	410
LG180M/L	969.0	1 091.0	1 007.0	1 129.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	455	467
LG180ZM/ZL	1 020.0	1 142.0	1 058.0	1 180.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	485	497
LG200L	1 025.0	1 151.0	1 063.0	1 189.0	385.0	301.0	260	192	207.0	245.0	2xM50x1.5	535	547
LG225S	1 096.0	1 335.0	1 134.0	1 373.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	608	621
LG225M	1 096.0	1 335.0	1 134.0	1 373.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	596	609
LG225ZM	1 156.0	1 395.0	1 194.0	1 433.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	654	667
LG250M	1 189.5	1 414.5	-	-	495.0	392.0	300	236	278.5	-	2xM63x1.5	698	-
LG250ZM	1 259.5	1 485.0	-	-	495.0	392.0	300	236	278.5	-	2xM63x1.5	801	-
K4-LGI280S	1 468.5	1 695.5	-	-	555.0	432.0	300	236	489.5	-	2xM63x1.5	929	-
K4-LGI280M	1 468.5	1 695.5	-	-	555.0	432.0	300	236	489.5	-	2xM63x1.5	941	-
K4-LGI280ZM	1 578.5	1 805.5	-	-	555.0	432.0	300	236	489.5	-	2xM63x1.5	1 029	-

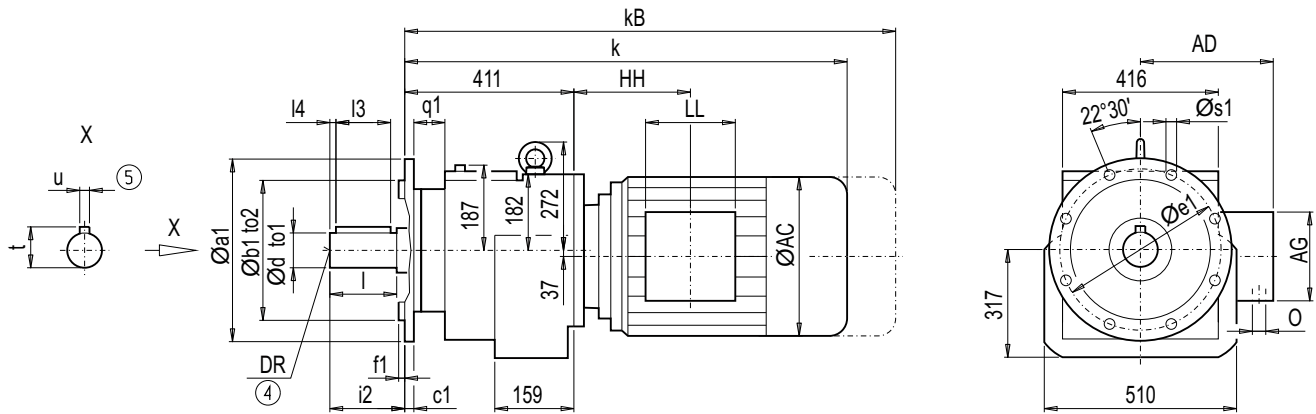
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DF/ZF148 (3- / 2-stage), flange-mounted design (A-type)

##### DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A450	450	350	h6	22	400	5	68	17.5	90 <sup>*)</sup>	m6	170	15	140	95	25	170	M24x50
									100	m6	210	15	180	106	28	210	M24x50
A550	550	450	h6	25	500	5	65	17.5	90 <sup>*)</sup>	m6	170	15	140	95	25	170	M24x50
									100	m6	210	15	180	106	28	210	M24x50

<sup>\*)</sup> Preferred series

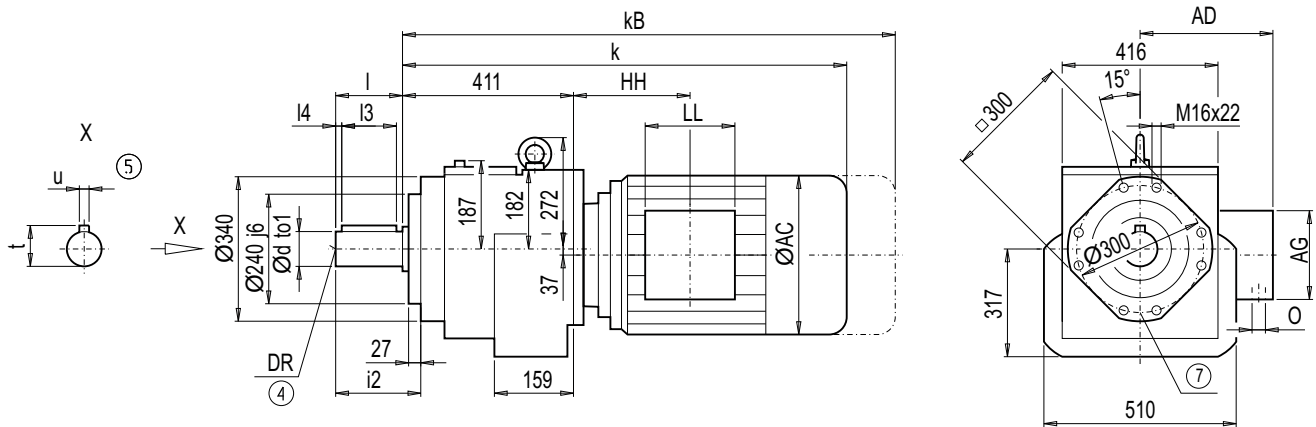
Motor	ZF148		DF148		AC	AD	AG	LL	ZF148	DF148	O	Weight	
	k	kB	k	kB					HH	HH		ZF148	DF148
LA100L	-	-	764.0	845.0	195.0	168.0	120	120	-	135.0	2xM32x1.5	-	307
LA100ZL	-	-	834.0	915.0	195.0	168.0	120	120	-	267.0	2xM32x1.5	-	317
LA112M	-	-	789.5	870.5	219.0	181.0	120	120	-	136.5	2xM32x1.5	-	318
LA112ZM	-	-	817.5	898.5	219.0	181.0	120	120	-	240.5	2xM32x1.5	-	325
LA132S/M	809.5	911.5	847.5	949.5	259.0	195.0	140	140	137.0	175.0	2xM32x1.5	319	330
LA132ZM	855.5	957.5	893.5	995.5	259.0	195.0	140	140	245.0	283.0	2xM32x1.5	340	351
LA160M/L	909.5	1 028.0	947.5	1 066.0	313.5	227.0	165	165	160.0	198.0	2xM40x1.5	353	365
LA160ZL	957.5	1 076.0	995.5	1 114.0	313.5	227.0	165	165	313.0	351.0	2xM40x1.5	392	404
LG180M/L	969.0	1 091.0	1 007.0	1 129.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	449	461
LG180ZM/ZL	1 020.0	1 142.0	1 058.0	1 180.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	479	491
LG200L	1 025.0	1 151.0	1 063.0	1 189.0	385.0	301.0	260	192	207.0	245.0	2xM50x1.5	529	541
LG225S	1 096.0	1 335.0	1 134.0	1 373.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	602	615
LG225M	1 096.0	1 335.0	1 134.0	1 373.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	590	603
LG225ZM	1 156.0	1 395.0	1 194.0	1 433.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	648	661
LG250M	1 189.5	1 414.5	-	-	495.0	392.0	300	236	278.5	-	2xM63x1.5	692	-
LG250ZM	1 259.5	1 485.0	-	-	495.0	392.0	300	236	278.5	-	2xM63x1.5	795	-
K4-LGI280S	1 468.5	1 695.5	-	-	555.0	432.0	300	236	489.5	-	2xM63x1.5	923	-
K4-LGI280M	1 468.5	1 695.5	-	-	555.0	432.0	300	236	489.5	-	2xM63x1.5	941	-
K4-LGI280ZM	1 578.5	1 805.5	-	-	555.0	432.0	300	236	489.5	-	2xM63x1.5	1 029	-

© DIN 332

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### Gearbox DZ/ZZ148 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



d	to1	l	l4	l3	t	u	i2	DR
90 *)	m6	170	15	140	95	25	203	M24x50
100	m6	210	15	180	106	28	243	M24x50

\*) Preferred series

Motor	ZZ148		DZ148		AC	AD	AG	LL	ZZ148	DZ148	O	Weight	
	k	kB	k	kB								HH	HH
LA100L	-	-	764.0	845.0	195.0	168.0	120	120	-	135.0	2xM32x1.5	-	283
LA100ZL	-	-	834.0	915.0	195.0	168.0	120	120	-	267.0	2xM32x1.5	-	293
LA112M	-	-	789.5	870.5	219.0	181.0	120	120	-	136.5	2xM32x1.5	-	294
LA112ZM	-	-	817.5	898.5	219.0	181.0	120	120	-	240.5	2xM32x1.5	-	301
LA132S/M	809.5	911.5	847.5	949.5	259.0	195.0	140	140	137.0	175.0	2xM32x1.5	302	306
LA132ZM	855.5	957.5	893.5	995.5	259.0	195.0	140	140	245.0	283.0	2xM32x1.5	323	327
LA160M/L	909.5	1 028.0	947.5	1 066.0	313.5	227.0	165	165	160.0	198.0	2xM40x1.5	336	341
LA160ZL	957.5	1 076.0	995.5	1 114.0	313.5	227.0	165	165	313.0	351.0	2xM40x1.5	375	380
LG180M/L	969.0	1 091.0	1 007.0	1 129.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	432	437
LG180ZM/ZL	1 020.0	1 142.0	1 058.0	1 180.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	462	467
LG200L	1 025.0	1 151.0	1 063.0	1 189.0	385.0	301.0	260	192	207.0	245.0	2xM50x1.5	512	517
LG225S	1 096.0	1 335.0	1 134.0	1 373.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	585	547
LG225M	1 096.0	1 335.0	1 134.0	1 373.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	573	591
LG225ZM	1 156.0	1 395.0	1 194.0	1 433.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	631	637
LG250M	1 189.5	1 414.5	-	-	495.0	392.0	300	236	278.5	-	2xM63x1.5	675	-
LG250ZM	1 259.5	1 485.0	-	-	495.0	392.0	300	236	278.5	-	2xM63x1.5	778	-
K4-LGI280S	1 468.5	1 695.5	-	-	555.0	432.0	300	236	489.5	-	2xM63x1.5	906	-
K4-LGI280M	1 468.5	1 695.5	-	-	555.0	432.0	300	236	489.5	-	2xM63x1.5	918	-
K4-LGI280ZM	1 578.5	1 805.5	-	-	555.0	432.0	300	236	489.5	-	2xM63x1.5	1 006	-

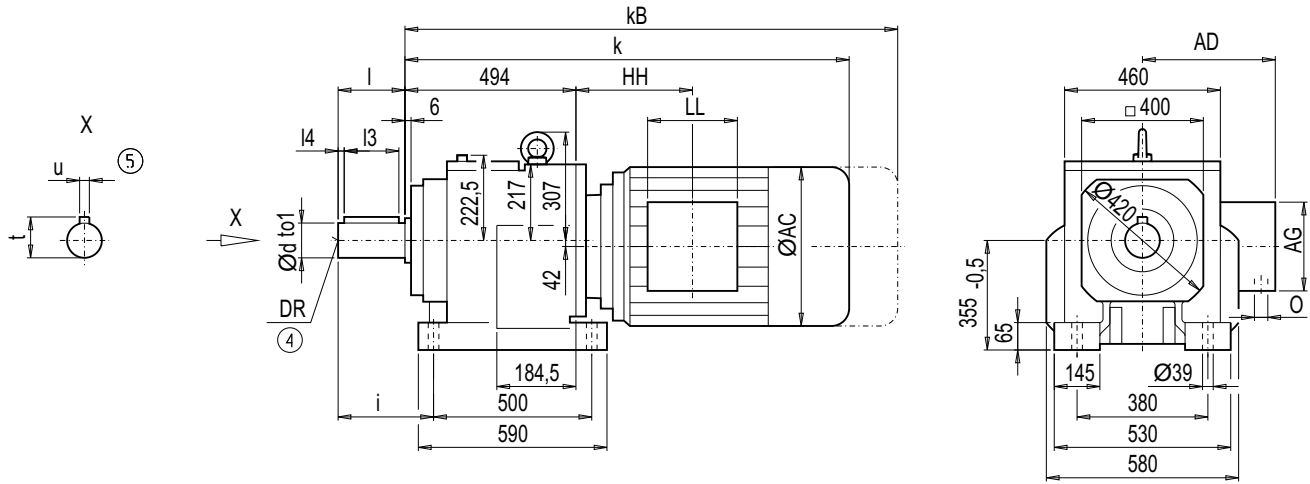
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox D/Z168 (3- / 2-stage), foot-mounted design

DZ011



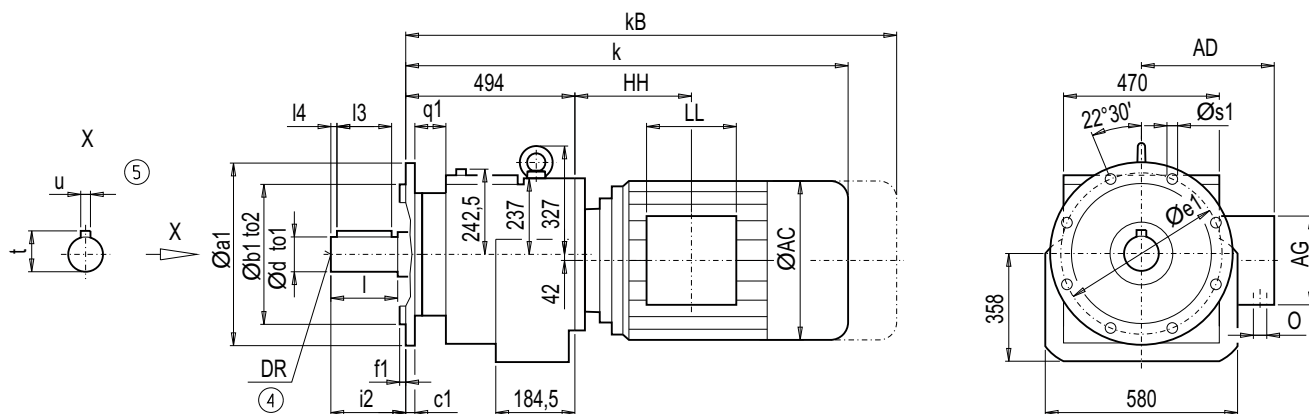
d	to1	l	l4	l3	t	u	i	DR
100 *)	m6	210	15	180	106	28	260	M24x50
110	m6	210	15	180	116	28	260	M24x50
120	m6	210	15	180	127	32	260	M24x50

\*) Preferred series

Motor	Z168		D168		AC	AD	AG	LL	Z168	D168	O	Weight	
	k	kB	k	kB					HH	HH		Z168	D168
LA132S/M	878.0	980.0	919.0	1 021.0	259.0	195.0	140	140	122.5	163.5	2xM32x1.5	491	508
LA132ZM	924.0	1 026.0	965.0	1 067.0	259.0	195.0	140	140	230.5	271.5	2xM32x1.5	512	529
LA160M/L	978.0	1 096.5	1 019.0	1 137.5	313.5	227.0	165	165	145.5	186.5	2xM40x1.5	524	543
LA160ZL	1 026.0	1 144.5	1 067.0	1 185.5	313.5	227.0	165	165	298.5	339.5	2xM40x1.5	563	582
LG180M/L	1 037.5	1 159.5	1 078.5	1 200.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	620	639
LG180ZM/ZL	1 088.5	1 210.5	1 129.5	1 251.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	650	669
LG200L	1 093.5	1 219.5	1 134.5	1 260.5	385.0	301.0	260	192	192.5	233.5	2xM50x1.5	700	719
LG225S	1 164.5	1 403.5	1 205.5	1 444.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	772	792
LG225M	1 164.5	1 403.5	1 205.5	1 444.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	760	780
LG225ZM	1 224.5	1 463.5	1 265.5	1 504.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	818	838
LG250M	1 258.0	1 483.0	-	-	495.0	392.0	300	236	264.0	-	2xM63x1.5	862	-
LG250ZM	1 328.0	1 553.5	-	-	495.0	392.0	300	236	264.0	-	2xM63x1.5	965	-
K4-LGI280S	1 537.5	1 764.5	-	-	555.0	432.0	300	236	475.5	-	2xM63x1.5	991	-
K4-LGI280M	1 537.5	1 764.5	-	-	555.0	432.0	300	236	475.5	-	2xM63x1.5	1 097	-
K4-LGI280ZM	1 647.5	1 874.5	-	-	555.0	432.0	300	236	475.5	-	2xM63x1.5	1 185	-

### Gearbox DF/ZF168 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A450	450	350	h6	31	400	5	65	17.5	100 <sup>*)</sup>	m6	210	15	180	106	28	210	M24x50
									110	m6	210	15	180	116	28	210	M24x50
									120	m6	210	15	180	127	32	210	M24x50
A550	550	450	h6	31	500	5	65	17.5	100 <sup>*)</sup>	m6	210	15	180	106	28	210	M24x50
									110	m6	210	15	180	116	28	210	M24x50
									120	m6	210	15	180	127	32	210	M24x50
A660	660	550	h6	31	600	5	65	22.0	100 <sup>*)</sup>	m6	210	15	180	106	28	210	M24x50
									110	m6	210	15	180	116	28	210	M24x50
									120	m6	210	15	180	127	32	210	M24x50

\*) Preferred series

Motor	ZF168		DF168		AC	AD	AG	LL	ZF168	DF168	O	Weight	
	k	kB	k	kB					HH	HH		ZF168	DF168
LA132S/M	878.0	980.0	919.0	1 021.0	259.0	195.0	140	140	122.5	163.5	2xM32x1.5	466	484
LA132ZM	924.0	1 026.0	965.0	1 067.0	259.0	195.0	140	140	230.5	271.5	2xM32x1.5	487	505
LA160M/L	978.0	1 096.5	1 019.0	1 137.5	313.5	227.0	165	165	145.5	186.5	2xM40x1.5	500	518
LA160ZL	1 026.0	1 144.5	1 067.0	1 185.5	313.5	227.0	165	165	298.5	339.5	2xM40x1.5	539	557
LG180M/L	1 037.5	1 159.5	1 078.5	1 200.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	595	614
LG180ZM/ZL	1 088.5	1 210.5	1 129.5	1 251.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	625	644
LG200L	1 093.5	1 219.5	1 134.5	1 260.5	385.0	301.0	260	192	192.5	233.5	2xM50x1.5	675	694
LG225S	1 164.5	1 403.5	1 205.5	1 444.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	747	767
LG225M	1 164.5	1 403.5	1 205.5	1 444.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	735	755
LG225ZM	1 224.5	1 463.5	1 265.5	1 504.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	793	813
LG250M	1 258.0	1 483.0	–	–	495.0	392.0	300	236	264.0	–	2xM63x1.5	837	–
LG250ZM	1 328.0	1 553.5	–	–	495.0	392.0	300	236	264.0	–	2xM63x1.5	940	–
K4-LGI280S	1 537.5	1 764.5	–	–	555.0	432.0	300	236	475.5	–	2xM63x1.5	966	–
K4-LGI280M	1 537.5	1 764.5	–	–	555.0	432.0	300	236	475.5	–	2xM63x1.5	1 072	–
K4-LGI280ZM	1 647.5	1 874.5	–	–	555.0	432.0	300	236	475.5	–	2xM63x1.5	1 160	–

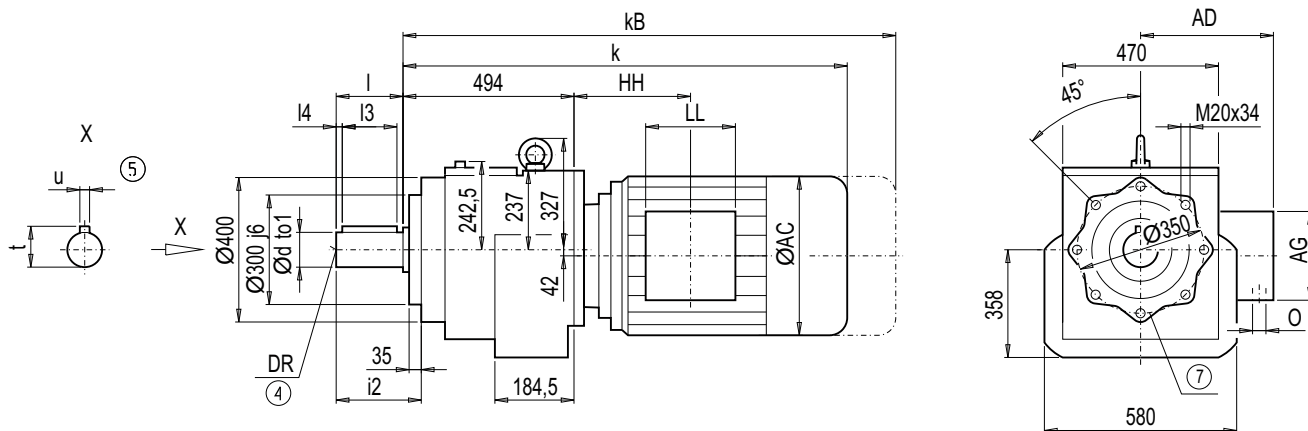
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DZ/ZZ168 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



d	to1	l	l4	l3	t	u	i2	DR
100	m6	210	15	180	106	28	251	M24x50
110	m6	210	15	180	116	28	251	M24x50
120 <sup>*)</sup>	m6	210	15	180	127	32	251	M24x50

\*) Preferred series

Motor	ZZ168		DZ168		AC	AD	AG	LL	ZZ168	DZ168	O	Weight	
	k	kB	k	kB								ZZ168	DZ168
LA132S/M	878.0	980.0	919.0	1 021.0	259.0	195.0	140	140	122.5	163.5	2xM32x1.5	447	465
LA132ZM	924.0	1 026.0	965.0	1 067.0	259.0	195.0	140	140	230.5	271.5	2xM32x1.5	468	486
LA160M/L	978.0	1 096.5	1 019.0	1 137.5	313.5	227.0	165	165	145.5	186.5	2xM40x1.5	481	499
LA160ZL	1 026.0	1 144.5	1 067.0	1 185.5	313.5	227.0	165	165	298.5	339.5	2xM40x1.5	520	538
LG180M/L	1 037.5	1 159.5	1 078.5	1 200.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	576	595
LG180ZM/ZL	1 088.5	1 210.5	1 129.5	1 251.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	606	625
LG200L	1 093.5	1 219.5	1 134.5	1 260.5	385.0	301.0	260	192	192.5	233.5	2xM50x1.5	656	675
LG225S	1 164.5	1 403.5	1 205.5	1 444.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	728	748
LG225M	1 164.5	1 403.5	1 205.5	1 444.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	716	736
LG225ZM	1 224.5	1 463.5	1 265.5	1 504.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	774	794
LG250M	1 258.0	1 483.0	–	–	495.0	392.0	300	236	264.0	–	2xM63x1.5	818	–
LG250ZM	1 328.0	1 553.5	–	–	495.0	392.0	300	236	264.0	–	2xM63x1.5	921	–
K4-LGI280S	1 537.5	1 764.5	–	–	555.0	432.0	300	236	475.5	–	2xM63x1.5	947	–
K4-LGI280M	1 537.5	1 764.5	–	–	555.0	432.0	300	236	475.5	–	2xM63x1.5	1 053	–
K4-LGI280ZM	1 647.5	1 874.5	–	–	555.0	432.0	300	236	475.5	–	2xM63x1.5	1 141	–

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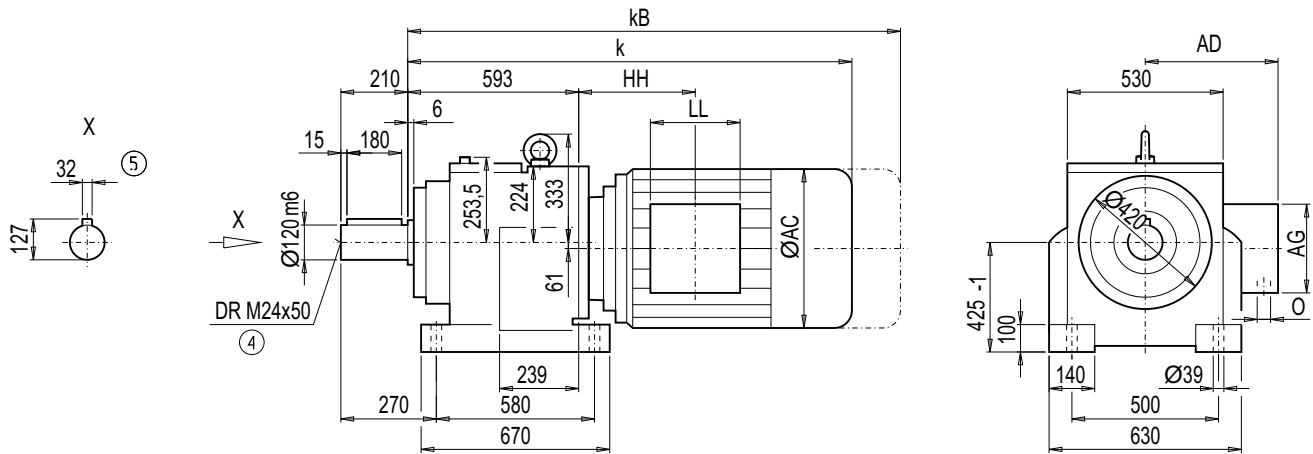
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⑦ For note, see page 2/192



#### Gearbox D/Z188 (3- / 2-stage), foot-mounted design

DZ011



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Motor	Z188		D188		AC	AD	AG	LL	Z188 HH	D188 HH	O	Weight	
	k	kB	k	kB								Z188 Z188	D188 D188
LA132S/M	-	-	977.0	1 079.0	259.0	195.0	140	140	-	122.5	2xM32x1.5	-	652
LA132ZM	-	-	1 023.0	1 125.0	259.0	195.0	140	140	-	230.5	2xM32x1.5	-	673
LA160M/L	1 077.0	1 195.5	1 077.0	1 195.5	313.5	227.0	165	165	145.5	145.5	2xM40x1.5	654	684
LA160ZL	1 125.0	1 243.5	1 125.0	1 243.5	313.5	227.0	165	165	298.5	298.5	2xM40x1.5	693	723
LG180M/L	1 136.5	1 258.5	1 136.5	1 258.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	750	779
LG180ZM/ZL	1 187.5	1 309.5	1 187.5	1 309.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	780	809
LG200L	1 192.5	1 318.5	1 192.5	1 318.5	385.0	301.0	260	192	192.5	192.5	2xM50x1.5	830	859
LG225S	1 263.5	1 502.5	1 263.5	1 502.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	903	932
LG225M	1 263.5	1 502.5	1 263.5	1 502.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	891	920
LG225ZM	1 323.5	1 562.5	1 323.5	1 562.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	949	978
LG250M	1 357.0	1 582.0	1 357.0	1 582.0	495.0	392.0	300	236	264.0	264.0	2xM63x1.5	993	1022
LG250ZM	1 427.0	1 652.5	1 427.0	1 652.5	495.0	392.0	300	236	264.0	264.0	2xM63x1.5	1 096	1 125
K4-LGI280S	1 636.5	1 863.5	1 636.5	1 863.5	555.0	432.0	300	236	475.5	475.5	2xM63x1.5	1 121	1 151
K4-LGI280M	1 636.5	1 863.5	1 636.5	1 863.5	555.0	432.0	300	236	475.5	475.5	2xM63x1.5	1 227	1 256
K4-LGI280ZM	1 746.5	1 973.5	1 746.5	1 973.5	555.0	432.0	300	236	475.5	475.5	2xM63x1.5	1 315	1 344
K2-LGI315S/M	1 824.5	2 089.5	-	-	610.0	500.0	380	307	584.5	-	2xM63x1.5	1 356	-
K2-LGI315ZM	1 984.5	2 249.5	-	-	610.0	500.0	380	307	584.5	-	2xM63x1.5	1 511	-
K2-LGI315L	1 984.5	2 249.5	-	-	610.0	500.0	380	307	584.5	-	2xM63x1.5	1 651	-
K2-LGI315ZL	2 124.5	2 389.5	-	-	610.0	500.0	380	307	584.5	-	2xM63x1.5	1 851	-

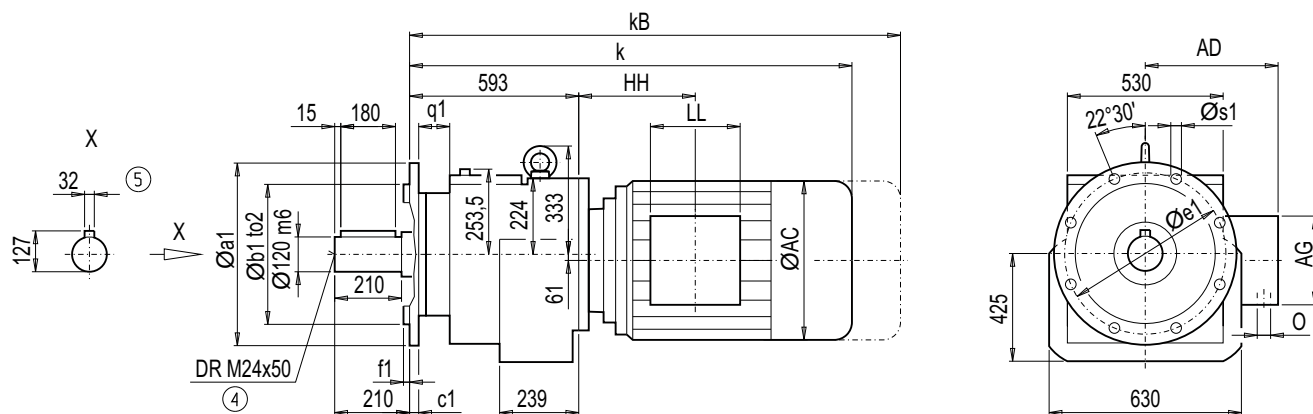
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DF/ZF188 (3- / 2-stage), flange-mounted design (A-type)

DZF011

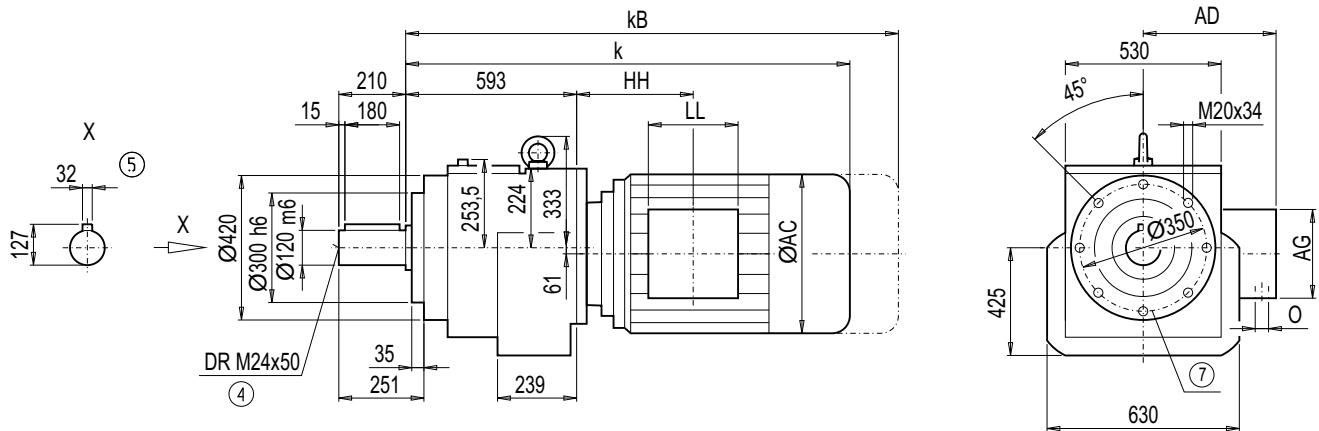


Flange	a1	b1	to2	c1	e1	f1	q1	s1
A550	550	450	h6	31	500	5	83	17.5
A660	660	550	h6	31	600	6	83	22.0

Motor	ZF188		DF188		AC	AD	AG	LL	ZF188	DF188	O	Weight	
	k	kB	k	kB					HH	HH		ZF188	DF188
LA132S/M	–	–	977.0	1 079.0	259.0	195.0	140	140	–	122.5	2xM32x1.5	–	600
LA132ZM	–	–	1 023.0	1 125.0	259.0	195.0	140	140	–	230.5	2xM32x1.5	–	609
LA160M/L	1 077.0	1 195.5	1 077.0	1 195.5	313.5	227.0	165	165	145.5	145.5	2xM40x1.5	602	632
LA160ZL	1 125.0	1 243.5	1 125.0	1 243.5	313.5	227.0	165	165	298.5	298.5	2xM40x1.5	602	632
LG180M/L	1 136.5	1 258.5	1 136.5	1 258.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	698	727
LG180ZM/ZL	1 187.5	1 309.5	1 187.5	1 309.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	728	757
LG200L	1 192.5	1 318.5	1 192.5	1 318.5	385.0	301.0	260	192	192.5	192.5	2xM50x1.5	778	807
LG225S	1 263.5	1 502.5	1 263.5	1 502.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	851	880
LG225M	1 263.5	1 502.5	1 263.5	1 502.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	839	868
LG225ZM	1 323.5	1 562.5	1 323.5	1 562.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	897	926
LG250M	1 357.0	1 582.0	1 357.0	1 582.0	495.0	392.0	300	236	264.0	264.0	2xM63x1.5	941	970
LG250ZM	1 427.0	1 652.5	1 427.0	1 652.5	495.0	392.0	300	236	264.0	264.0	2xM63x1.5	1 044	1 073
K4-LGI280S	1 636.5	1 863.5	1 636.5	1 863.5	555.0	432.0	300	236	475.5	475.5	2xM63x1.5	1 069	1 099
K4-LGI280M	1 636.5	1 863.5	1 636.5	1 863.5	555.0	432.0	300	236	475.5	475.5	2xM63x1.5	1 175	1 204
K4-LGI280ZM	1 746.5	1 973.5	1 746.5	1 973.5	555.0	432.0	300	236	475.5	475.5	2xM63x1.5	1 263	1 292
K2-LGI315S/M	1 824.5	2 089.5	–	–	610.0	500.0	380	307	584.5	–	2xM63x1.5	1 304	–
K2-LGI315ZM	1 984.5	2 249.5	–	–	610.0	500.0	380	307	584.5	–	2xM63x1.5	1 459	–
K2-LGI315L	1 984.5	2 249.5	–	–	610.0	500.0	380	307	584.5	–	2xM63x1.5	1 599	–
K2-LGI315ZL	2 124.5	2 389.5	–	–	610.0	500.0	380	307	584.5	–	2xM63x1.5	1 801	–

### Gearbox DZ/ZZ188 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



Motor	ZZ188		DZ188				ZZ188		DZ188		Weight		
	k	kB	k	kB	AC	AD	AG	LL	HH	HH	O	ZZ188	DZ188
LA132S/M	–	–	977.0	1 079.0	259.0	195.0	140	140	–	122.5	2xM32x1.5	–	580
LA132ZM	–	–	1 023.0	1 125.0	259.0	195.0	140	140	–	230.5	2xM32x1.5	–	589
LA160M/L	1 077.0	1 195.5	1 077.0	1 195.5	313.5	227.0	165	165	145.5	145.5	2xM40x1.5	582	612
LA160ZL	1 125.0	1 243.5	1 125.0	1 243.5	313.5	227.0	165	165	298.5	298.5	2xM40x1.5	582	612
LG180M/L	1 136.5	1 258.5	1 136.5	1 258.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	678	707
LG180ZM/ZL	1 187.5	1 309.5	1 187.5	1 309.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	708	737
LG200L	1 192.5	1 318.5	1 192.5	1 318.5	385.0	301.0	260	192	192.5	192.5	2xM50x1.5	758	787
LG225S	1 263.5	1 502.5	1 263.5	1 502.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	831	860
LG225M	1 263.5	1 502.5	1 263.5	1 502.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	819	848
LG225ZM	1 323.5	1 562.5	1 323.5	1 562.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	877	906
LG250M	1 357.0	1 582.0	1 357.0	1 582.0	495.0	392.0	300	236	264.0	264.0	2xM63x1.5	921	950
LG250ZM	1 427.0	1 652.5	1 427.0	1 652.5	495.0	392.0	300	236	264.0	264.0	2xM63x1.5	1 024	1 053
K4-LGI280S	1 636.5	1 863.5	1 636.5	1 863.5	555.0	432.0	300	236	475.5	475.5	2xM63x1.5	1 049	1 079
K4-LGI280M	1 636.5	1 863.5	1 636.5	1 863.5	555.0	432.0	300	236	475.5	475.5	2xM63x1.5	1 155	1 184
K4-LGI280ZM	1 746.5	1 973.5	1 746.5	1 973.5	555.0	432.0	300	236	475.5	475.5	2xM63x1.5	1 243	1 272
K2-LGI315S/M	1 824.5	2 089.5	–	–	610.0	500.0	380	307	584.5	–	2xM63x1.5	1 284	–
K2-LGI315ZM	1 984.5	2 249.5	–	–	610.0	500.0	380	307	584.5	–	2xM63x1.5	1 511	–
K2-LGI315L	1 984.5	2 249.5	–	–	610.0	500.0	380	307	584.5	–	2xM63x1.5	1 651	–
K2-LGI315ZL	2 124.5	2 389.5	–	–	610.0	500.0	380	307	584.5	–	2xM63x1.5	1 851	–

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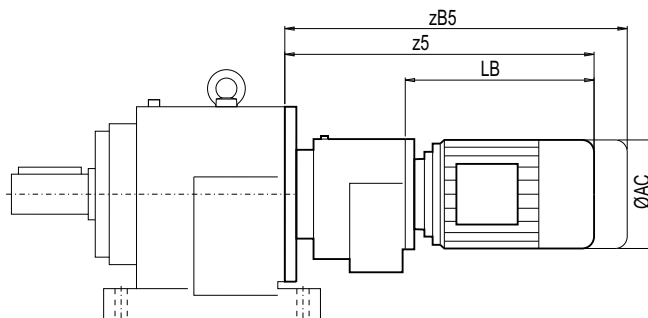
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# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Helical tandem geared motors

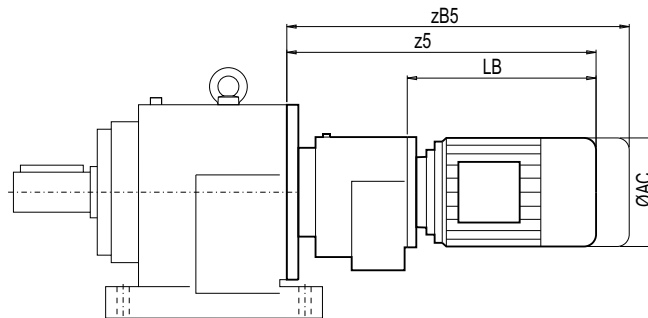


Gearbox	Motor	AC	z5	zB5	LB
Z.38-Z28	LA71	139.0	363.0	418.0	202.5
	LA71Z	139.0	382.0	437.0	221.5
	LA80	156.5	465.0	528.5	304.5
	LA80Z	156.5	487.5	551.0	327.0
	LA90S/L	174.0	460.0	531.0	299.5
	LA90ZL	174.0	505.0	576.0	344.5
	LA100L	195.0	542.0	623.0	381.5
	LA100ZL	195.0	612.0	693.0	451.5
Z.38-D28	LA71	139.0	363.0	418.0	202.5
	LA71Z	139.0	382.0	437.0	221.5
	LA80	156.5	465.0	528.5	304.5
	LA80Z	156.5	487.5	551.0	327.0
	LA90S/L	174.0	460.0	531.0	299.5
	LA90ZL	174.0	505.0	576.0	344.5
D.48-Z28	LA71	139.0	374.5	429.5	202.5
	LA71Z	139.0	393.5	448.5	221.5
	LA80	156.5	476.5	540.0	304.5
	LA80Z	156.5	499.0	562.5	327.0
	LA90S/L	174.0	471.5	542.5	299.5
	LA90ZL	174.0	516.5	587.5	344.5
	LA100L	195.0	553.5	634.5	381.5
D.48-D28	LA71	139.0	374.5	429.5	202.5
	LA71Z	139.0	393.5	448.5	221.5
	LA80	156.5	476.5	540.0	304.5
	LA80Z	156.5	499.0	562.5	327.0
	LA90S/L	174.0	471.5	542.5	299.5
	LA90ZL	174.0	516.5	587.5	344.5
	LA100L	195.0	553.5	634.5	381.5
D.68-Z28	LA71	139.0	370.0	425.0	202.5
	LA71Z	139.0	389.0	444.0	221.5
	LA80	156.5	472.0	535.5	304.5
	LA80Z	156.5	494.5	558.0	327.0
	LA90S/L	174.0	467.0	538.0	299.5
	LA90ZL	174.0	512.0	583.0	344.5
	LA100L	195.0	549.0	630.0	381.5
	LA100ZL	195.0	619.0	700.0	451.5

Gearbox	Motor	AC	z5	zB5	LB
D.68-D28	LA71	139.0	370.0	425.0	202.5
	LA71Z	139.0	389.0	444.0	221.5
	LA80	156.5	472.0	535.5	304.5
	LA80Z	156.5	494.5	558.0	327.0
	LA90S/L	174.0	467.0	538.0	299.5
	LA90ZL	174.0	512.0	583.0	344.5
D.88-Z28	LA71	139.0	361.5	416.5	202.5
	LA71Z	139.0	380.5	435.5	221.5
	LA80	156.5	463.5	527.0	304.5
	LA80Z	156.5	486.0	549.5	327.0
	LA90S/L	174.0	458.5	529.5	299.5
	LA90ZL	174.0	503.5	574.5	344.5
D.88-D28	LA71	139.0	361.5	416.5	202.5
	LA71Z	139.0	380.5	435.5	221.5
	LA80	156.5	463.5	527.0	304.5
	LA80Z	156.5	486.0	549.5	327.0
	LA90S/L	174.0	458.5	529.5	299.5
	LA90ZL	174.0	503.5	574.5	344.5
D.108-Z38	LA71 <sup>1)</sup>	139.0	484.5	539.5	258.5
	LA71Z <sup>1)</sup>	139.0	503.5	558.5	277.5
	LA80 <sup>1)</sup>	156.5	521.5	585.0	295.5
	LA80Z <sup>1)</sup>	156.5	544.0	607.5	318.0
	LA90S/L <sup>1)</sup>	174.0	552.5	623.5	326.5
	LA90ZL <sup>1)</sup>	174.0	597.5	668.5	371.5
	LA100L <sup>1)</sup>	195.0	598.5	679.5	372.5
	LA100ZL <sup>1)</sup>	195.0	668.5	749.5	442.5
	LA112M <sup>1)</sup>	219.0	628.0	709.0	402.0
	LA112ZM <sup>1)</sup>	219.0	656.0	737.0	430.0
	LA71 <sup>2)</sup>	139.0	496.0	551.0	258.5
	LA71Z <sup>2)</sup>	139.0	515.0	570.0	277.5
	LA80 <sup>2)</sup>	156.5	533.0	596.5	295.5
	LA80Z <sup>2)</sup>	156.5	555.5	619.0	318.0
LA90S/L <sup>2)</sup>	174.0	564.0	635.0	326.5	
LA90ZL <sup>2)</sup>	174.0	609.0	680.0	371.5	
LA100L <sup>2)</sup>	195.0	610.0	691.0	372.5	
LA100ZL <sup>2)</sup>	195.0	680.0	761.0	442.5	
LA112M <sup>2)</sup>	219.0	639.5	720.5	402.0	
LA112ZM <sup>2)</sup>	219.0	667.5	748.5	430.0	

1)  $i_{tot} \geq 3797$ 2)  $i_{tot} < 3797$

## Helical tandem geared motors (continued)



Gearbox	Motor	AC	z5	zB5	LB	
D.108-D38	LA71	139.0	499.5	554.5	273.5	
	LA71Z	139.0	518.5	573.5	292.5	
	LA80	156.5	536.5	600.0	310.5	
	LA80Z	156.5	559.0	622.5	333.0	
	LA90S/L	174.0	567.5	638.5	341.5	
	LA90ZL	174.0	612.5	683.5	386.5	
D.128-Z38	LA71	139.0	488.0	543.0	258.5	
	LA71Z	139.0	507.0	562.0	277.5	
	LA80	156.5	525.0	588.5	295.5	
	LA80Z	156.5	547.5	611.0	318.0	
	LA90S/L	174.0	556.0	627.0	326.5	
	LA90ZL	174.0	601.0	672.0	371.5	
	LA100L	195.0	602.0	683.0	372.5	
	LA100ZL	195.0	672.0	753.0	442.5	
	LA112M	219.0	631.5	712.5	402.0	
	LA112ZM	219.0	659.5	740.5	430.0	
D.128-D38	LA71	139.0	503.0	558.0	273.5	
	LA71Z	139.0	522.0	577.0	292.5	
	LA80	156.5	540.0	603.5	310.5	
	LA80Z	156.5	562.5	626.0	333.0	
	LA90S/L	174.0	571.0	642.0	341.5	
	LA90ZL	174.0	616.0	687.0	386.5	
D.128-Z48	LA71	139.0	555.5	610.5	253.0	
	LA71Z	139.0	574.5	629.5	272.0	
	LA80	156.5	592.5	656.0	290.0	
	LA80Z	156.5	615.0	678.5	312.5	
	LA90S/L	174.0	623.5	694.5	321.0	
	LA90ZL	174.0	668.5	739.5	366.0	
	LA100L	195.0	669.5	750.5	367.0	
	LA100ZL	195.0	739.5	820.5	437.0	
	LA112M	219.0	698.5	779.5	396.0	
	LA112ZM	219.0	726.5	807.5	424.0	
	LA132S/M	259.0	760.5	862.5	458.0	
	LA132ZM	259.0	806.5	908.5	504.0	
	D.148-Z38	LA71	139.0	485.0	540.0	258.5
		LA71Z	139.0	504.0	559.0	277.5
LA80		156.5	522.0	585.5	295.5	
LA80Z		156.5	544.5	608.0	318.0	

Gearbox	Motor	AC	z5	zB5	LB
D.148-Z38	LA90S/L	174.0	553.0	624.0	326.5
	LA90ZL	174.0	598.0	669.0	371.5
	LA100L	195.0	599.0	680.0	372.5
	LA100ZL	195.0	669.0	750.0	442.5
	LA112M	219.0	628.5	709.5	402.0
	LA112ZM	219.0	656.5	737.5	430.0
D.148-D38	LA71	139.0	500.0	555.0	273.5
	LA71Z	139.0	519.0	574.0	292.5
	LA80	156.5	537.0	600.5	310.5
	LA80Z	156.5	559.5	623.0	333.0
	LA90S/L	174.0	568.0	639.0	341.5
	LA90ZL	174.0	613.0	684.0	386.5
D.148-Z48	LA71	139.0	551.5	606.5	253.0
	LA71Z	139.0	570.5	625.5	272.0
	LA80	156.5	588.5	652.0	290.0
	LA80Z	156.5	611.0	674.5	312.5
	LA90S/L	174.0	619.5	690.5	321.0
	LA90ZL	174.0	664.5	735.5	366.0
	LA100L	195.0	665.5	746.5	367.0
	LA100ZL	195.0	735.5	816.5	437.0
	LA112M	219.0	694.5	775.5	396.0
	LA112ZM	219.0	722.5	803.5	424.0
D.168-Z48	LA132S/M	259.0	756.5	858.5	458.0
	LA132ZM	259.0	802.5	904.5	504.0
	LA71	139.0	540.0	595.0	253.0
	LA71Z	139.0	559.0	614.0	272.0
D.168-Z48	LA80	156.5	577.0	640.5	290.0
	LA80Z	156.5	599.5	663.0	312.5
	LA90S/L	174.0	608.0	679.0	321.0
	LA90ZL	174.0	653.0	724.0	366.0
	LA100L	195.0	654.0	735.0	367.0
	LA100ZL	195.0	724.0	805.0	437.0
	LA112M	219.0	683.0	764.0	396.0
	LA112ZM	219.0	711.0	792.0	424.0
	LA132S/M	259.0	745.0	847.0	458.0
	LA132ZM	259.0	791.0	893.0	504.0

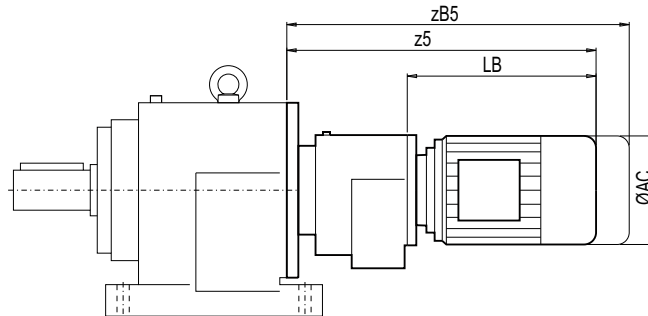
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Helical tandem geared motors (continued)

2

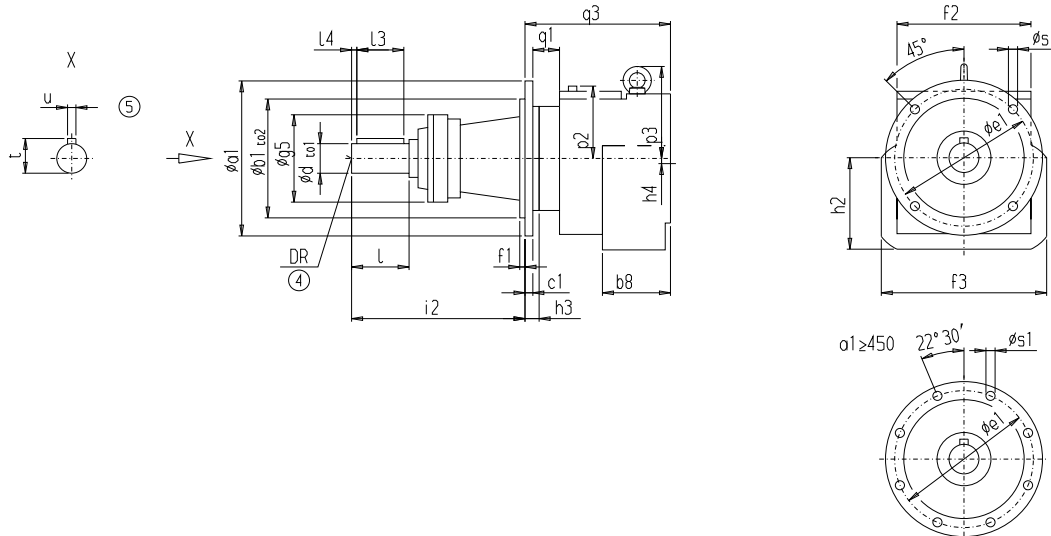


Gearbox	Motor	AC	z5	zB5	LB
D.168-D48	LA71	139.0	557.0	612.0	270.0
	LA71Z	139.0	576.0	631.0	289.0
	LA80	156.5	594.0	657.5	307.0
	LA80Z	156.5	616.5	680.0	329.5
	LA90S	174.0	625.0	696.0	338.0
	LA90L	174.0	625.0	696.0	338.0
	LA90ZL	174.0	670.0	741.0	383.0
	LA100L	195.0	671.0	752.0	384.0
	LA100ZL	195.0	741.0	822.0	454.0
	D.168-Z68	LA71	139.0	626.0	681.0
LA71Z		139.0	645.0	700.0	266.0
LA80		156.5	663.0	726.5	284.0
LA80Z		156.5	685.5	749.0	306.5
LA90S/L		174.0	694.0	765.0	315.0
LA90ZL		174.0	739.0	810.0	360.0
LA100L		195.0	740.0	821.0	361.0
LA100ZL		195.0	810.0	891.0	431.0
LA132S/M		259.0	827.0	929.0	448.0
LA132ZM		259.0	873.0	975.0	494.0
LA160M/L		313.5	929.5	1 048.0	550.5
LA160ZL		313.5	977.5	1 096.0	598.5
D.188-Z48	LA71	139.0	499.0	554.0	253.0
	LA71Z	139.0	518.0	573.0	272.0
	LA80	156.5	536.0	599.5	290.0
	LA80Z	156.5	558.5	622.0	312.5
	LA90S/L	174.0	567.0	638.0	321.0
	LA90ZL	174.0	612.0	683.0	366.0
	LA100L	195.0	613.0	694.0	367.0
	LA100ZL	195.0	683.0	764.0	437.0
	LA112M	219.0	642.0	723.0	396.0
	LA112ZM	219.0	670.0	751.0	424.0
	LA132S/M	259.0	704.0	806.0	458.0
	LA132ZM	259.0	750.0	852.0	504.0

Gearbox	Motor	AC	z5	zB5	LB	
D.188-D48	LA71	139.0	516.0	571.0	270.0	
	LA71Z	139.0	535.0	590.0	289.0	
	LA80	156.5	553.0	616.5	307.0	
	LA80Z	156.5	575.5	639.0	329.5	
	LA90S/L	174.0	584.0	655.0	338.0	
	LA90ZL	174.0	629.0	700.0	383.0	
	LA100L	195.0	630.0	711.0	384.0	
	LA100ZL	195.0	700.0	781.0	454.0	
	D.188-Z68	LA71	139.0	585.0	640.0	247.0
		LA71Z	139.0	604.0	659.0	266.0
LA80		156.5	622.0	685.5	284.0	
LA80Z		156.5	644.5	708.0	306.5	
LA90S/L		174.0	653.0	724.0	315.0	
LA90ZL		174.0	698.0	769.0	360.0	
LA100L		195.0	699.0	780.0	361.0	
LA100ZL		195.0	769.0	850.0	431.0	
LA132S/M		259.0	786.0	888.0	448.0	
LA132ZM		259.0	832.0	934.0	494.0	
D.188-Z48	LA160M/L	313.5	888.5	1 007.0	550.5	
	LA160ZL	313.5	936.5	1 055.0	598.5	

#### Gearbox DR/ZR68-168 (3- / 2-stage) with agitator flange

DZZ011



Gearbox	p2	p3	h2	b8	q3	f3	f2	h4	Additional weight <sup>1)</sup>
DR/ZR68	109.0	149	144.0	91.5	248	263	206	0	24
DR/ZR88	134.0	181	182.0	129.0	306	332	260	0	46
DR/ZR108	177.0	228	219.5	126.5	355	410	326	0	82
DR/ZR128	194.0	263	250.0	146.0	422	462	364	0	85
DR/ZR148	190.5	270	317.0	160.0	459	510	416	37	94
DR/ZR168	248.0	325	358.0	188.5	539	580	470	42	248

Gearbox	a1	b1	to2	c1	e1	f1	q1	s1	g5	h3	d	to1	l	l4	l3	t	u	DR	i2
DR/ZR68	350	250	h6	18	300	7	79	17.5	165	57	50	k6	100	10.0	80	53.5	14	M16x36	300
DR/ZR88	350	250	h6	18	300	7	92	17.5	185	62	60	m6	120	10.0	100	64.0	18	M20x42	360
DR/ZR108	450	350	h6	22	400	7	78	17.5	210	72	70	m6	140	7.5	125	74.5	20	M20x42	420
DR/ZR128	550	450	h6	25	500	8	101	17.5	252	81	80	m6	170	20.0	125	85.0	22	M20x42	500
DR/ZR148	550	450	h6	25	500	8	113	17.5	252	81	100	m6	210	15.0	180	106	28	M24x50	600
DR/ZR168	660	550	h6	28	600	8	113	22.0	270	86	110	m6	210	15.0	180	116	28	M24x50	660

1) To calculate the overall weight of the drive, add the additional weight to the weight of the DZ/ZZ gearbox, flange-mounted design.  
For example: weight of DZ88-M112M (97 kg) + additional weight DR88 (46 kg) = total weight of DR88-M112M (143 kg).

# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Pin holes

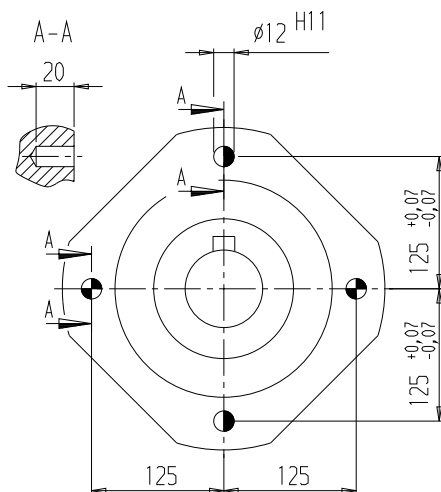
The customer's interface can be pinned to the housing flange (C-type) for sizes EZ128 to EZ148 and DZ/ZZ108 to DZ/ZZ188.

The output flanges have been designed to ensure the reliable transmission of the permissible torques and radial forces by the bolt connections.

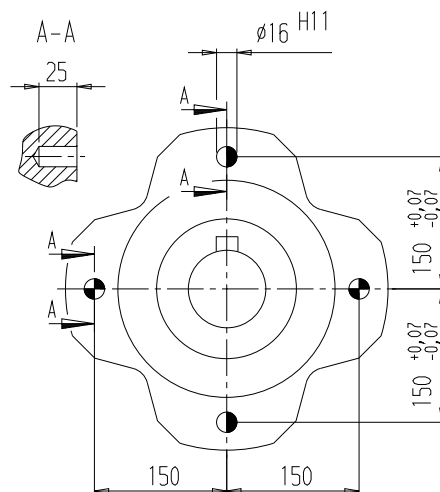
If an additional fuse, e. g. for high shock loads, is required, the existing pin holes can be used.

The gearbox and the machine can be drilled and pinned together. To do so, the provided dimensions must be observed.

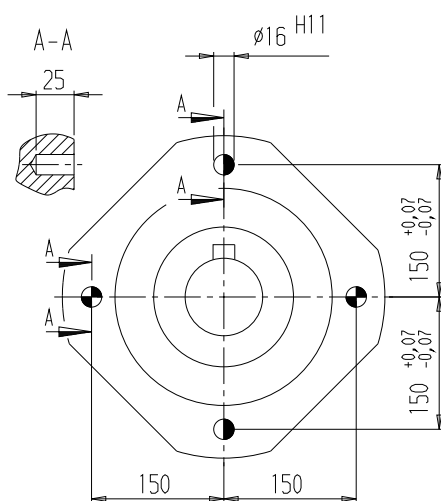
**EZ128, DZ/ZZ108**



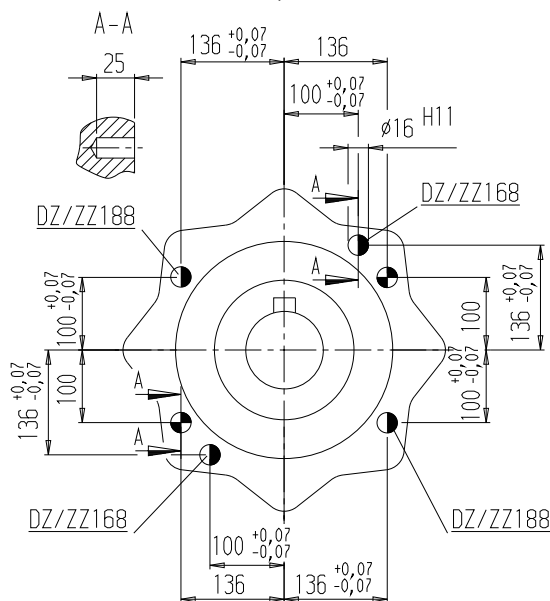
**EZ148, DZ/ZZ128**



**DZ/ZZ148**



**DZ/ZZ168, DZ/ZZ188**



- Spring pins, heavy-duty design, to DIN 1481: Use pin holes provided in the housing flange.
- Grooved cylindrical pins with chamfer to DIN EN 28740 / ISO 8740: Drill connecting component together with housing.



# Parallel shaft geared motors



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