

Type Marking System

RFBM-2 250H1 J18 LAS2 -E2

Model

L Foot mounted, helical gearbox

T Shaft mounted, helical gearbox

~~K Foot mounted, bevel gearbox~~

~~R Shaft mounted, bevel gearbox~~

Range

A F G D X

G RANGE

Foot

A B C D

Motor adapter

Number of reduction stages

1 2 3 4 5

Gearbox size

Output shaft, options

H1 Hollow shaft, normal

H2 Hollow shaft, stepped

H3 Hollow shaft, shrink disc

Additional equipment

J Backstop

T Fan

V Water cooling coil

Z Pressure lubrication unit

P Lubrication oil pump

K Centralised lubrication system

Ratio

Shaft arrangement

L Output shaft to the left

R Output shaft to the right

V Input and output shaft to the left

H Input and output shaft to the right

Mounting positions

A Horizontal

B Vertical, output horizontal at bottom

C Vertical, output horizontal at top

D Output shaft vertical at left

E Output shaft vertical at right

Foot positions

N Underneath

P Above

S The same side as the output shaft

O The opposite side as output shaft

Rotation directions of shafts

1 Output shaft clockwise

2 Output shaft counter-clockwise

3 Output shaft clockwise, input shaft clockwise

4 Output shaft counter-clockwise, input shaft clockwise

5 Output shaft clockwise, input shaft counter-clockwise

6 Output shaft counter-clockwise, input shaft counter-clockwise

IEC code for flange of the electric motor

Code of special construction - E2

Detailed type marking instructions are available on request

Helical gears / Lieriövaihteet

Gear type	Transmission ratio		Output torque [kNm]	
	min	max	min	max
LX	1.25	6.3	1	403
LF	5.6	400	0.5	12
LG	5.6	630	17.5	100
LD	5.6	630	150	610
TF	5.6	400	0.5	12
TG	5.6	630	17.5	100
TD	5.6	630	150	610

Bevel gears / Kartiovaihteet

Gear type	Transmission ratio		Output torque [kNm]	
	min	max	min	max
KA	1	7.1	0.55	35
KF	11.2	1600	0.5	12
KG	5.6	3550	14.5	105
KD	5.6	560	145	610
RF	11.2	1600	0.5	12
RG	5.6	3550	14.5	105
RD	5.6	560	145	610

Agitator gears / Sekoitinvaihteet

Gear type	Transmission ratio		Output torque [kNm]	
	min	max	min	max
SF	5.6	100	0.5	12
SGL	5.6	100	17.5	100
SGT	5.6	100	17.5	100
LE	5.6	630	45	850
SEL	5.6	630	45	850
UF	11.2	100	0.5	12

HUOM! Toisiomomentin voit laskea "By Power" toiminnolla.
Secondary torque can be calculated with the "By Power" feature

Exact Ratios for Helical Gearboxes**Cumpact LG series****Cumpact TG series**

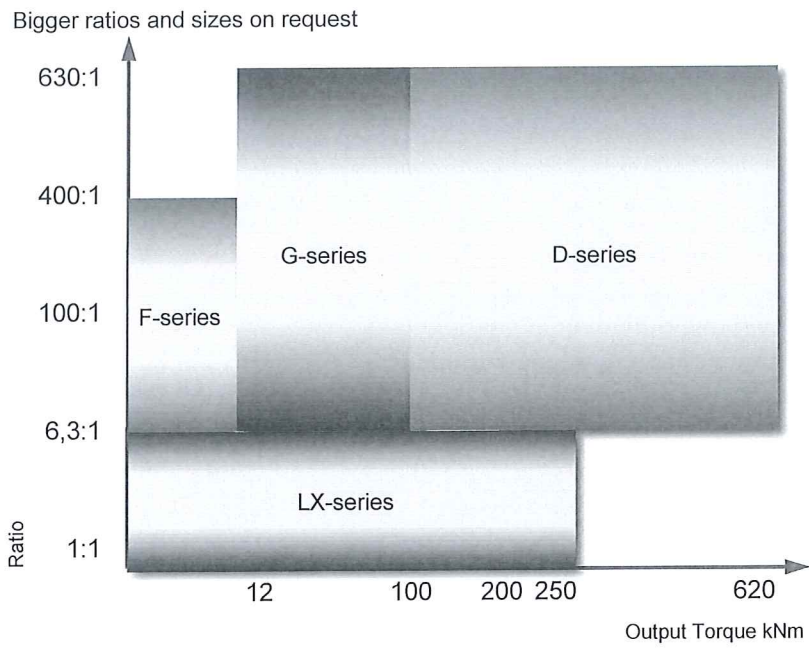
i	2225	2250	2280	2315	2355	2400
5,6:1	5,7496	5,7496	5,5833	5,7496	5,4725	5,6580
6,3:1	6,3941	6,1959	6,2727	6,4910	6,1810	6,3905
7,1:1	7,2813	7,0190	7,1000	7,2813	6,9351	7,1702
8:1	7,9248	7,7944	7,8889	8,0858	7,6823	7,9342
9:1	8,8097	8,6940	8,8040	9,0189	8,8863	8,8158
10:1	9,8421	9,7500	9,7239	10,114	9,9657	9,8443
11,2:1	11,062	10,843	11,157	11,248	10,739	11,060
12,5:1	12,526	12,347	12,705	12,809	12,166	12,518
14:1	14,145	13,800	13,845	13,958	13,753	13,929
16:1	16,011	15,717	15,581	15,906	15,673	15,868
18:1	17,447	17,767	17,336	17,354	17,556	17,550
20:1	19,500	20,116	20,189	19,741	19,750	19,041

i	3225	3250	3280	3315	3355	3400
22,4:1	22,506	22,433	21,954	22,884	21,849	22,120
25:1	24,583	24,898	25,104	24,907	24,263	24,577
28:1	27,877	27,758	27,893	27,688	27,063	27,428
31,5:1	31,263	30,643	31,147	30,932	30,350	30,294
35,5:1	35,294	34,594	34,993	34,767	33,752	34,759
40:1	40,035	39,377	39,608	39,368	38,435	39,582
45:1	44,831	44,513	45,248	44,457	42,957	43,133
50:1	50,765	50,689	51,527	50,626	48,663	48,822
56:1	57,326	56,653	56,149	55,167	55,011	53,996
63:1	62,468	64,042	62,476	60,189	61,620	60,080
71:1	68,594	70,200	69,323	68,128	70,178	67,611
80:1	77,928	78,000	79,913	76,143	79,457	78,737
90:1	88,206	88,833	89,931	86,772	90,550	89,700
100:1	98,583	100,58	104,73	98,704	101,87	97,322

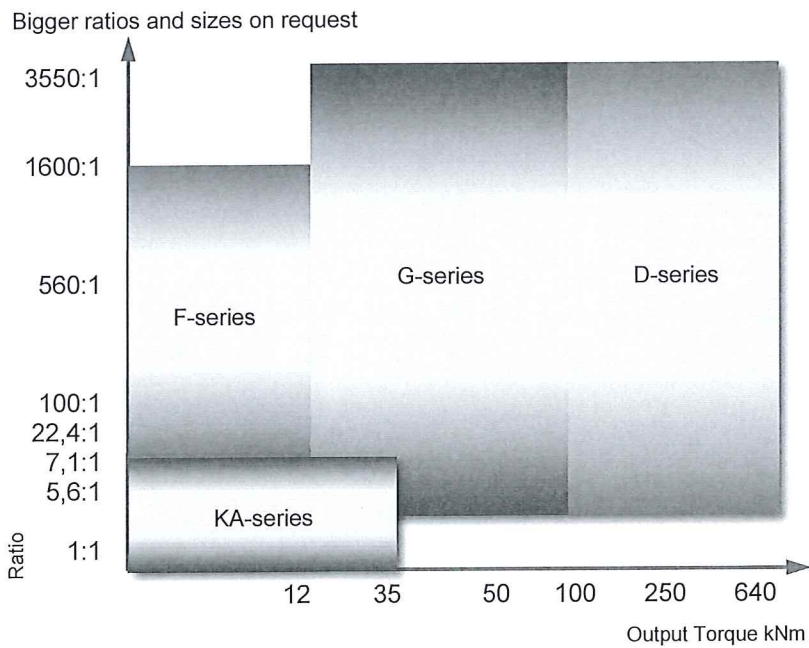
i	4225	4250	4280	4315	4355	4400
112:1	114,65	115,26	112,30	112,24	113,81	106,89
125:1	126,94	127,99	124,78	122,59	126,32	122,23
140:1	141,11	142,76	139,25	139,02	140,83	135,81
160:1	157,65	160,11	156,24	155,91	155,46	151,65
180:1	177,19	178,05	176,47	176,01	175,51	170,38
200:1	200,64	202,76	198,00	199,65	199,78	192,85
224:1	221,04	216,86	225,72	222,66	226,32	223,29
250:1	250,29	246,95	253,26	252,57	257,60	252,73
280:1	282,65	276,00	280,10	282,83	291,21	288,72
315:1	319,93	314,33	315,21	310,56	319,21	320,37
355:1	361,77	340,94	346,43	352,82	354,67	369,31
400:1	394,22	385,41	385,46	384,94	397,29	408,45
450:1	446,22	438,94	433,79	438,68	452,75	465,32
500:1	498,72	496,98	505,17	499,00	509,34	504,86
560:1	555,54	571,53	566,03	563,58	543,13	543,27
630:1	612,66	636,16	648,86	627,79	624,59	608,72

Presentation of Gearboxes

Helical Gearboxes



Bevel Gearboxes



Type plate

The type plate contains the identification and lubrication recommendations of the gearbox. It includes information how to order e.g. spare parts. The serial number of the gearbox is always individual. All information concerning the gearbox can be found with the serial number at our factory.

Example of the gearbox type plate:

RFBM-2250H1J-18-LA2-E2

 		FINLAND	
Type	GEAR BOX, RFBM-3180H1J-14-LBS4-E1		
Serial No.	SO0006833/12-10/1	Year	2012
Gear ratio	14.211:1	Weight	230 kg
Lubricant	ISO VG 220 AGMA 5EP	Oil qty	16.6 l
P_{1N} (n1)	68kW (1500 rpm)	K_{sf}	2.2
www.kumera.com			

 II 2GD ck T3

ATEX class example

Type	Gearbox type (see page 6)
Serial No.	Gearbox serial number
Year	Manufacturing year
Gear ratio	Exact gear ratio
Weight	Weight without oil
Lubricant	Recommended viscosity of lubrication oil
Oil qty	Indicative oil capacity, to be checked using the oil sight glass or dipstick
P_{1N} (n1)	Nominal power of the gearbox
K_{sf}	Selection factor
ATEX	Note: If the gearbox is ATEX certified, ATEX mark and class are marked in the down left corner

18:1

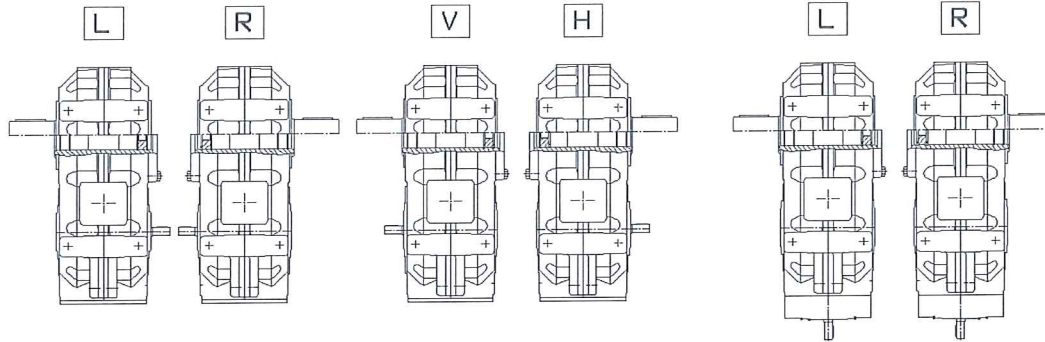
$P_{1N} = 220 \text{ kW}$

2017

Shaft and Mounting arrangements

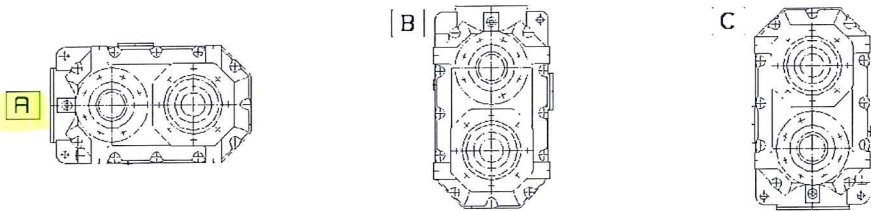
Shaft arrangements

Seen from above



Mounting positions

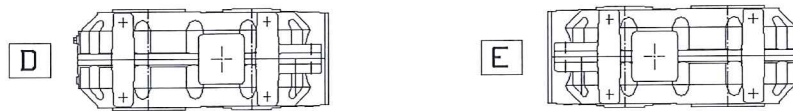
Horizontal output shaft



F-series only

F-series only

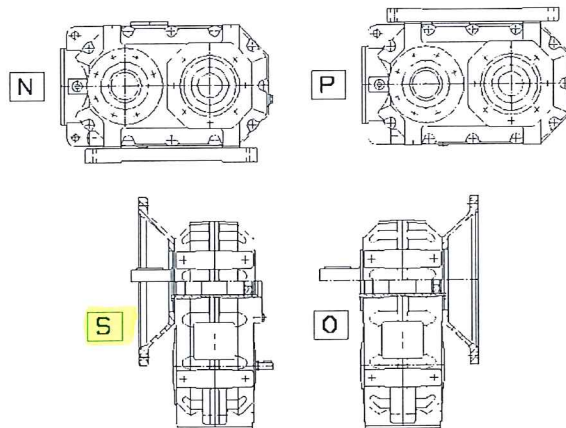
Vertical output shaft



F- and G-series only

F- and G-series only

Foot positions

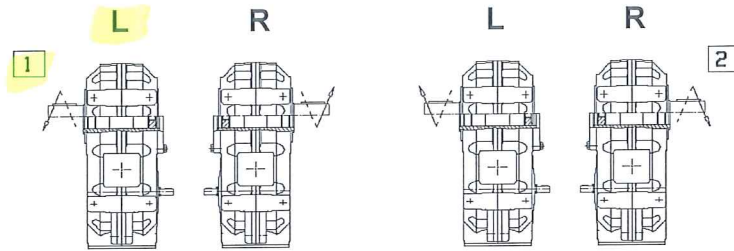


Type code with S when the foot is on the same side as the output shaft.
 Type code with O when the foot is on the opposite side as output shaft.

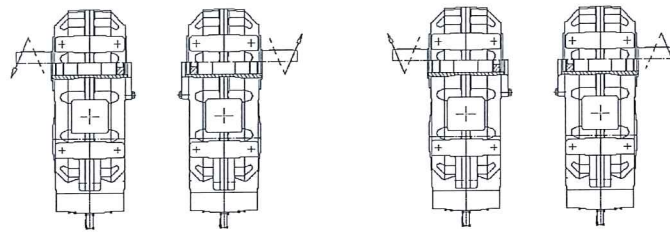
Rotation directions of Shafts

Shaft arrangement

Helical Gearbox



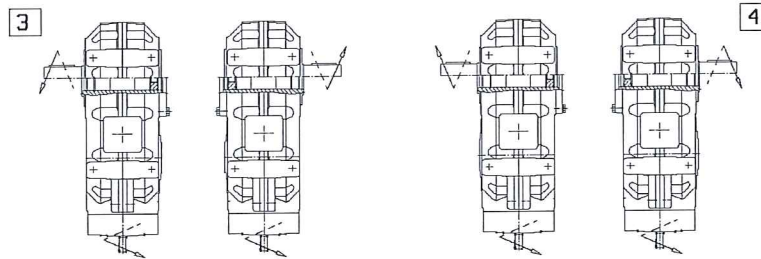
Bevel Gearbox



Output shaft clockwise

Output shaft counter-clockwise

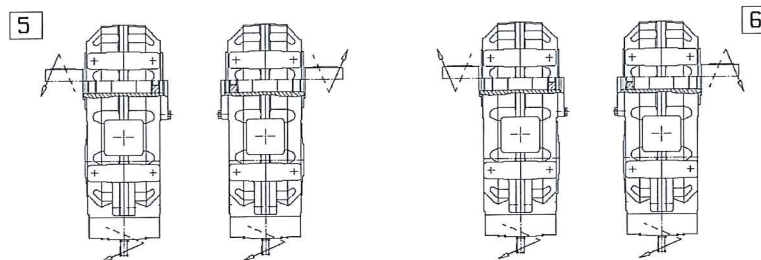
Bevel Gearbox



Output shaft clockwise
Input shaft clockwise

Output shaft counter-clockwise
Input shaft clockwise

Bevel Gearbox



Output shaft clockwise
Input shaft counter-clockwise

Output shaft counter-clockwise
Input shaft counter-clockwise