

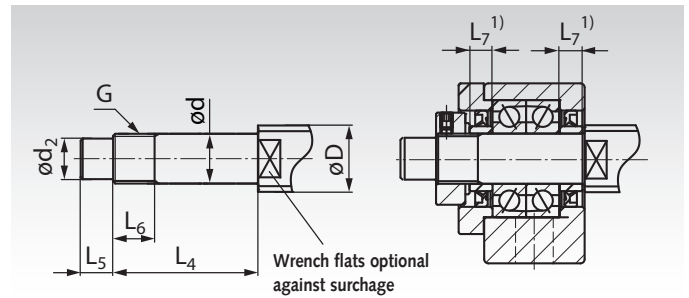
## Shaft Reworking and Bearing Load Data for Spindle Bearing Units BK, EK and FK (Fixed Side)

### Shaft Reworking:

At **MÄDLER**<sup>®</sup>, trapezoidal and ballscrew spindles can get reworked, fitting to the bearing units. The spindle reworking in the drawing is just a recommendation. Due to the customer's request, the length  $L_5$  could be shorter or longer and the shaft end could get a keyway DIN 6885.

### Bearing Load Data:

The loading rates and speed limits shown in the table are the limits just for the bearings. The limits of the spindles are much lower, depending on the diameter, length and material.



### Recommended Shaft Reworking for Fixed Side Units

Bearing-Unit Type	Spindle-Ø D		$d_8^6$ mm	$d_2^{h7}$ mm	$L_4 \pm 0,2$ mm	$L_5 \pm 0,2$ mm	G mm	$L_6 \pm 0,2$ mm	$L_7^{1)}$ mm	Bearing Load Data			
	KGT mm	TR mm								Bearing Type	Load rating axial dyn.C kN	stat. $C_0$ kN	Speed limit $\text{min}^{-1}$
EK 06 / FK 06	8	12	6	4	28	8	M6x0,75	8	5	706 A P5	2,03	0,80	46.400
EK 08 / FK 08	10/12	14	8	6	32	9	M8x1	10	5,5	708 A P5	3,35	1,45	35.200
BK 10	12/14/15	16	10	8	36	15	M10x1	16	5,5	7000 A P5	5,35	2,60	29.440
EK 10 / FK 10	12/14/15	16	10	8	36	15	M10x1	11	5,5	7000 A P5	5,35	2,60	29.440
BK 12	14/15/16	18/20	12	10	36	15	M12x1	14	5,5	7001 A P5	5,8	2,89	25.760
EK 12 / FK 12	14/15/16	18/20	12	10	36	15	M12x1	11	5,5	7001 A P5	5,8	2,89	25.760
BK 15	18/20	24	15	12	40	20	M15x1	12	6	7002 A P5	5,8	3,15	22.080
EK 15	18/20	24	15	12	47	20	M15x1	13	10	7002 A P5	5,8	3,15	22.080
FK 15	18/20	24	15	12	47	20	M15x1	13	10	7002 A P5	5,8	3,15	22.080
BK 17	20/25	24/28	17	15	53	23	M17x1	17	7	7203 A P5	10,1	5,45	18.400
FK 17	20/25	24/28	17	15	59	23	M17x1	17	10	7203 A P5	10,1	5,45	18.400
BK 20	25/28/30	30/36	20	17	53	25	M20x1	15	8	7004 A P5	10,3	6,10	16.560
EK 20 / FK 20	25/28/30	30/36	20	17	62	25	M20x1	17	11	7204 A P5	13,6	7,55	15.640
BK 25	30/32/36	36	25	20	65	30	M25x1,5	18	9	7205 A P5	15,4	9,45	13.800
FK 25	30/32/36	36	25	20	76	30	M25x1,5	20	15	7205 A P5	15,4	9,45	13.800
BK 30 / FK 30	36/40	40/44	30	25	72	38	M30x1,5	25	9	7206 A P5	21,3	13,6	11.040
BK 35	45	48/50	35	30	81	45	M35x1,5	28	12	7207 A P5	28,2	18,5	9.660
BK 40	50	52/60	40	35	93	50	M40x1,5	35	15	7208 A P5	33,5	23,3	8.832

<sup>1)</sup> The matching distance bushes are included in the scope of delivery of bearing units BK, EK and FK.

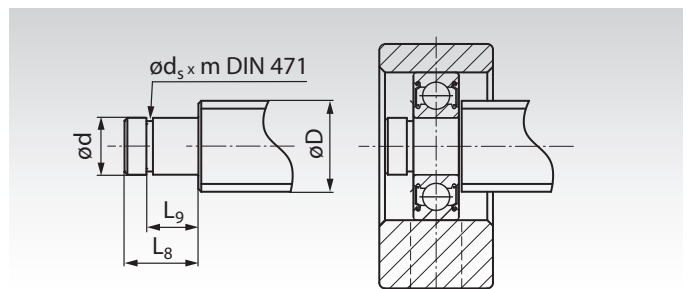
## Shaft Reworking and Bearing Load Data for Spindle Bearing Units BF, EF and FF (Support Side)

### Shaft Reworking:

At **MÄDLER**<sup>®</sup>, trapezoidal and ballscrew spindles can get reworked, fitting to the bearing units. The spindle reworking in the drawing is just a recommendation. Due to the customer's request, the length  $L_8$  could be shorter or longer and the shaft end could get a keyway DIN 6885.

### Bearing Load Data:

The loading rates and speed limits shown in the table are the limits just for the bearings. The limits of the spindles are much lower, depending on the diameter, length and material.



### Recommended Shaft Reworking for Support Side Units

Bearing-Unit Type	Spindle-Ø D		$d_8^6$ mm	$d_5^{-0,15}$ mm	$L_8 \pm 0,2$ mm	$L_9 \pm 0,2$ mm	$m^{H13}$ mm	DIN 471 <sup>1)</sup> mm	Bearing Load Data			
	KGT mm	TR mm							Bearing Type	Load rating axial dyn.C kN	stat. $C_0$ kN	Speed limit $\text{min}^{-1}$
EF 06 / FF 06	8	12	6	5,7	9	6,8	0,8	6	606-2Z / -2RS	2,3	0,8	37.000
EF 08	10/12	14	6	5,7	9	6,8	0,8	6	606-2Z / -2RS	2,3	0,8	37.000
BF 10 / EF 10 / FF 10	12/14/15	16	8	7,6	10	7,9	0,9	8	608-2Z / -2RS	3,3	1,4	34.000
BF 12 / EF 12 / FF 12	14/15/16	18/20	10	9,6	11	9,15	1,15	10	6000-2Z / -2RS	4,6	2,0	31.000
BF 15 / EF 15 / FF 15	18/20	24	15	14,3	13	10,15	1,15	15	6002-2Z / -2RS	5,6	2,8	23.000
BF 17 / FF 17	20/25	24/28	17	16,2	16	13,15	1,15	17	6203-2Z / -2RS	9,6	4,8	17.000
BF 20	25/28/30	30/36	20	19,0	16	13,15	1,15	20	6004-2Z / -2RS	9,4	5,0	15.000
EF 20 / FF 20	25/28/30	30/36	20	19,0	19	15,35	1,35	20	6204-2Z / -2RS	12,8	6,7	14.000
BF 25 / FF 25	30/32/36	36	25	23,9	20	16,35	1,35	25	6205-2Z / -2RS	14,0	7,9	12.000
BF 30 / FF 30	36/40	40/44	30	28,6	21	17,75	1,75	30	6206-2Z / -2RS	19,5	11,3	9.500
BF 35	40/45	48/50	35	33	22	18,75	1,75	35	6207-2Z / -2RS	25,7	15,2	8.500
BF 40	50	52/60	40	38	23	19,95	1,95	40	6208-2Z / -2RS	29,5	18,0	8.000

<sup>1)</sup> The retaining ring DIN 471 is included in the scope of delivery of bearing units BF, EF and FF.