

Worm gear screw jacks

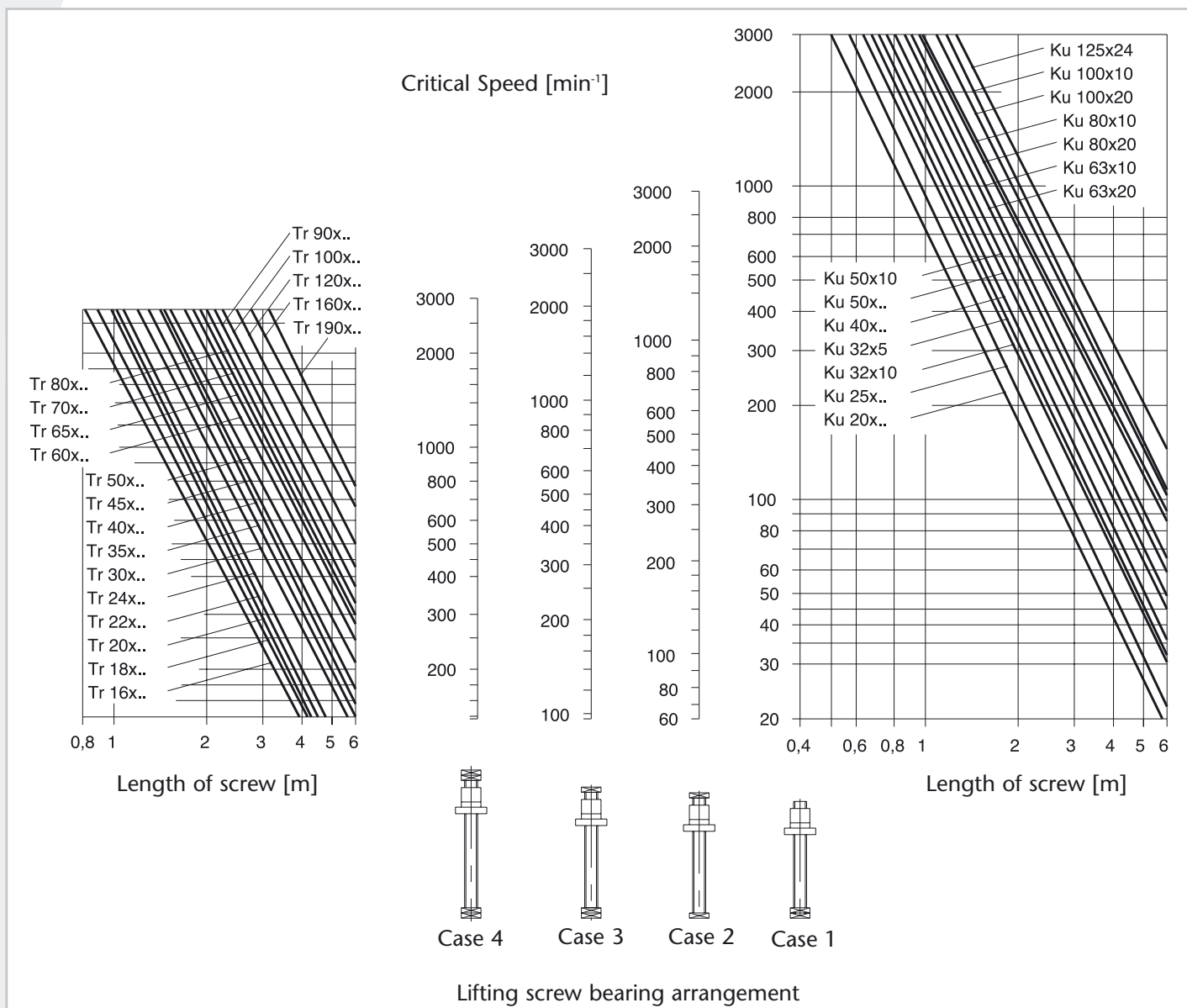
3.3 Technical information

3.3.5.4 Spindle efficiency ratings η_{sp} (steel/bronze lubricated)

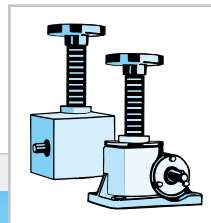
Tr spindle	14x4	18x6	18x4	20x4	22x5	26x6,28	30x6	35x8	40x7
Spindle efficiency rating[%]	49	54	42,5	40	43	45	40	43	36,5
Tr spindle	40x8	50x9	58x12	60x12	60x9	65x12	70x10	70x12	80x10
Spindle efficiency rating[%]	40	37	40,5	39,5	32,5	37,5	31,6	35,5	29
Tr spindle	90x16	100x10	100x16	120x14	120x16	140x20	160x20	190x24	220x28
Spindle efficiency rating[%]	36,5	24	34	28	30	31,6	28,5	28,8	29

3.3.6 Critical spindle turning speed

The critical turning speed (only configuration type 2) is dependent on the spindle diameter, the spindle length and the spindle bearing (see case 1-4).



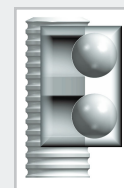
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3.3 Technical information

3.3.7 Ball screw spindle Ku

Standard dimensions and load capacities for configuration type 1. Other pitches and load capacities on request. Reinforced spindles with other pitches and higher load capacities can be used with configuration type 2.



SHE range

Size	Ku spindle	C _{dyn} [kN]	C _{stat} [kN]
2,5	25 x 5	24,1	49,9
	25 x 10	14,8	27,2
5	32 x 5	27,0	75,1
	32 x 10	16,6	42,4
10	50 x 5	111,5	326,8
	50 x 24	44,2	72,9
15	50 x 5	111,5	326,8
	50 x 24	44,2	72,9
20	50 x 5	111,5	326,8
	50 x 24	44,2	72,9
25	80 x 10	134,6	575,4
	63 x 20	92,1	288,8
35	100 x 10	145,9	735,5
	80 x 20	145,9	735,5
50	125 x 10	157,6	931,5
	100 x 20	304,4	1041
75	on request	on request	on request
100	160 x 20	172,9	1216
	125 x 24	328,1	1601

HSE range

Size	Ku spindle	C _{dyn} [kN]	C _{stat} [kN]
36	20 x 5	19,3	23,1
	20 x 10	11,19	14,5
50	32 x 5	27,0	75,1
	32 x 10	27,0	75,1
63	40 x 10	78,7	170,5
	40 x 24	48,4	85,2
80	63 x 10	136	511
	50 x 24	158	247,3
100	80 x 10	134,6	575,4
	63 x 20	92,1	288,8
125	100 x 20	304,4	1041
	80 x 20	280,5	798,3
140	125 x 10	157,6	931,5
	100 x 20	304,4	1041
200	160 x 20	172,9	1216
	125 x 24	328,1	1601

Merkur range

Size	Ku spindle	C _{dyn} [kN]	C _{stat} [kN]
M 0			
M 1	16 x 5	7	12,7
M 2	20 x 5	8	17
M 3	25 x 5	9,5	22,7
M 4	40 x 5	19	63,5
	40 x 10	30	70
M 5	50 x 10	55	153
M 6	80 x 10	69	260
M 7			
M 8			

$$\eta_{sp} \approx 0,9$$

SHG range

Size	Ku spindle	C _{dyn} [kN]	C _{stat} [kN]
G 15	25 x 5	9,5	22,4
G 25	25 x 5	24,1	49,9
	25 x 10	19,7	40,8
G 40	40 x 5	19	63,5
	32 x 10	25,7	56
G 90	63 x 10	60	200

Further Ku spindles on request.
Please ask for a copy!