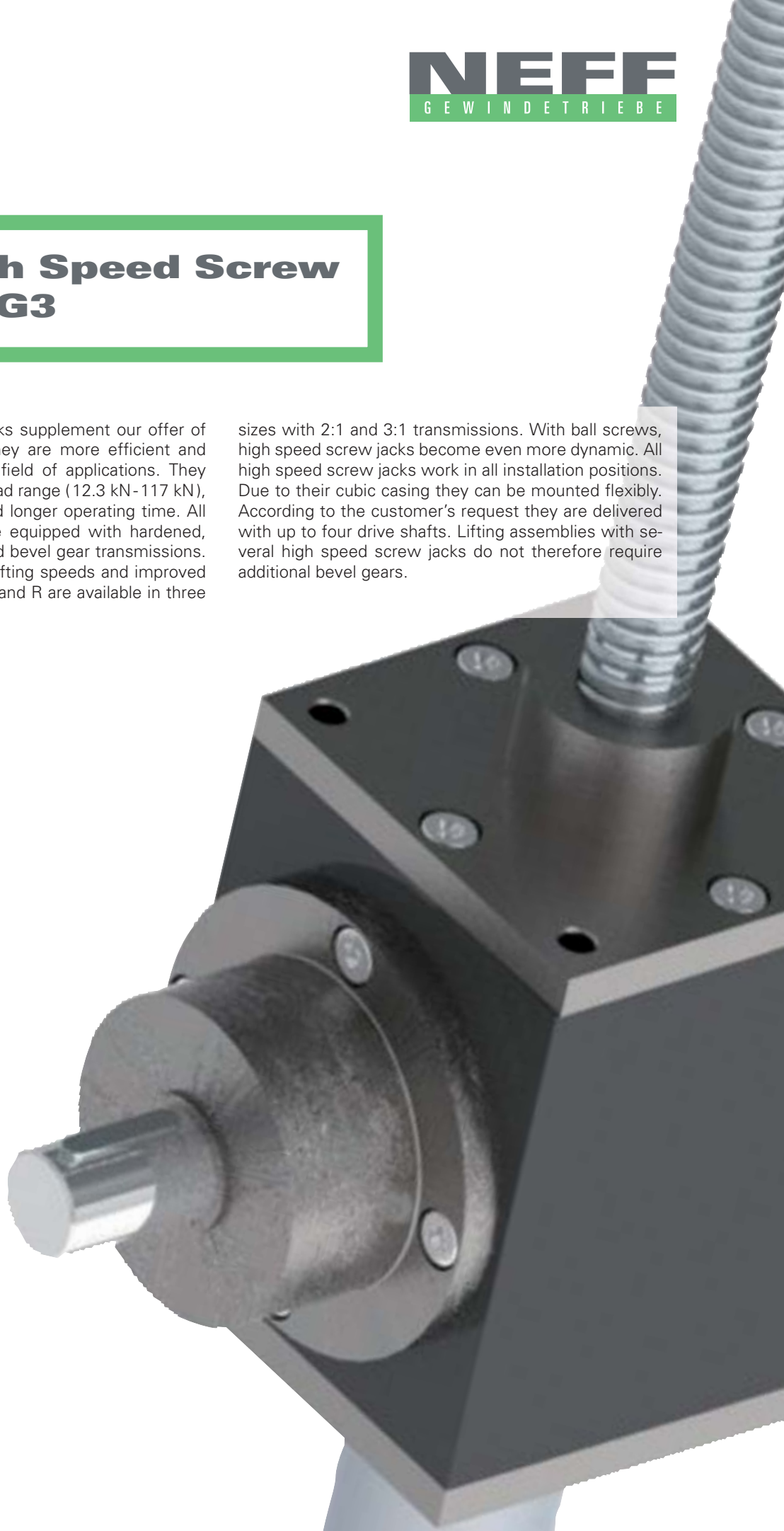


NEFF High Speed Screw Jack G1-G3

NEFF high speed screw jacks supplement our offer of worm gear screw jacks. They are more efficient and may be used in a broader field of applications. They may be used in a medium load range (12.3 kN-117 kN), with a high lifting speed and longer operating time. All high speed screw jacks are equipped with hardened, sharpened and spiral-toothed bevel gear transmissions. Therefore, they attain high lifting speeds and improved efficiency. The models N, V and R are available in three

sizes with 2:1 and 3:1 transmissions. With ball screws, high speed screw jacks become even more dynamic. All high speed screw jacks work in all installation positions. Due to their cubic casing they can be mounted flexibly. According to the customer's request they are delivered with up to four drive shafts. Lifting assemblies with several high speed screw jacks do not therefore require additional bevel gears.



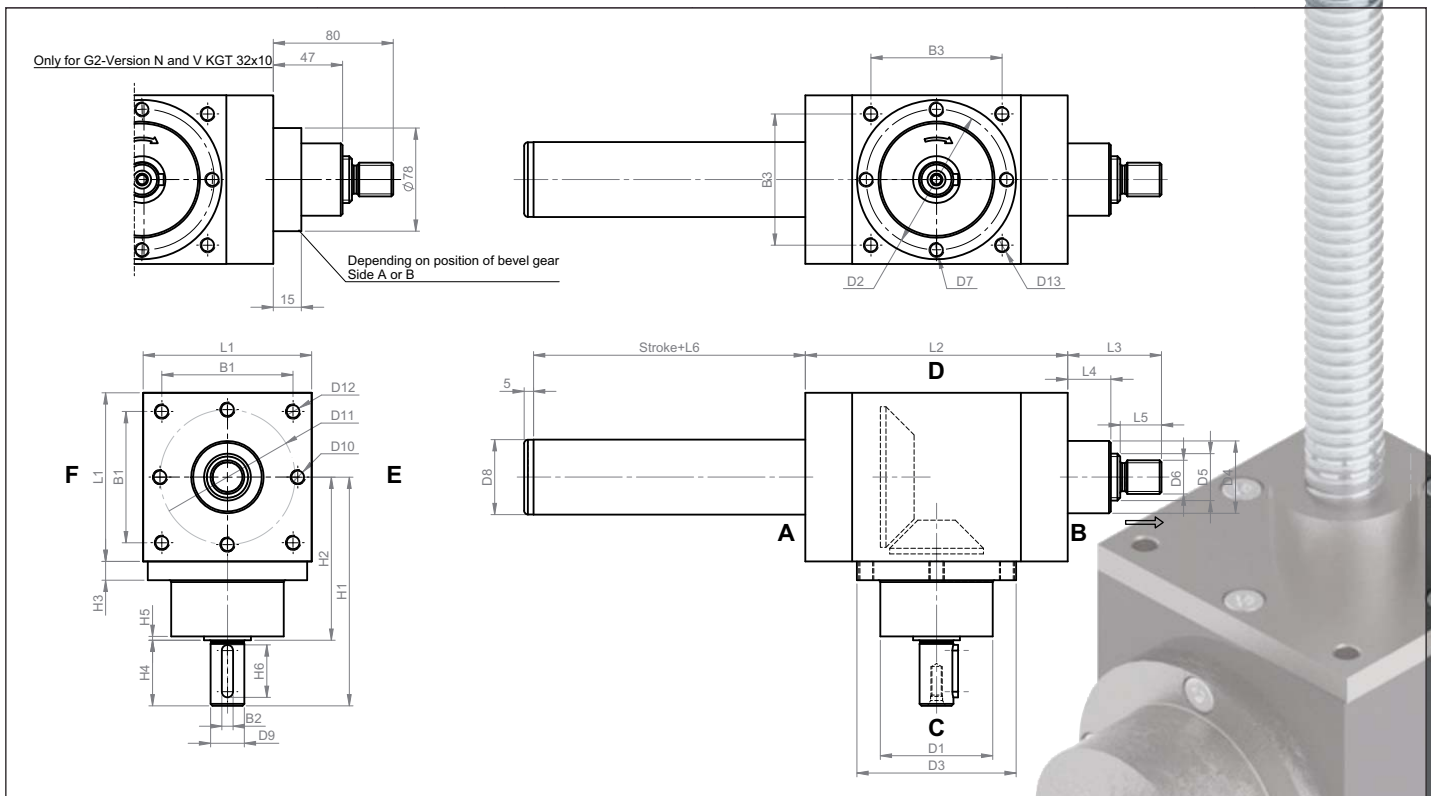
Technical Data and Dimensions, Version N/V

Technical Data Version N/V:

Size ⁷⁾	G1-N-TGS 24x5	G1-N-KGS 2505	G2-N-TGS 40x7	G2-N-KGS 3210	G2-N-KGS 4005	G3-N-TGS 60x9	G3-N-KGS 6310
Max. stroke and drag force [kN]	20,6	12,3	44,5	33,4	23,8	117	76
Stroke per full turn of the screw shaft, ratio 2:1 in [mm]	2,5	2,5	3,5	5	2,5	4,5	5
Stroke per full turn of the screw shaft, ratio 3:1 in [mm]	1,6	1,6	2,3	3,33	1,6	3	3,33
Max. stroke speed in m/min ratio 2:1, $n_{max} = 3000/min$	¹	7,5	²	15	7,5	³	15
Max. stroke speed in m/min ratio 3:1, $n_{max} = 3000/min$	⁴	5,01	⁵	10	4,99	⁶	9,99
Efficiency	0,45	0,75	0,4	0,75	0,75	0,35	0,75
Max. moment of a torque on the screw shaft in [Nm]	50	50	175	175	175	1600	1600

- 1) max. permissible screw revolution speed (max. 4,55m/min at 1820/min)
- 2) max. permissible screw revolution speed (max. 1,82m/min at 520/min)
- 3) max. permissible screw revolution speed (max. 1,44m/min at 320/min)
- 4) max. permissible screw revolution speed (max. 4,55m/min at 2730/min)
- 5) max. permissible screw revolution speed (max. 1,82m/min at 780/min)
- 6) max. permissible screw revolution speed (max. 1,44m/min at 460/min)
- 7) all screw sizes with other threads in stock

Dimensions Version N/V



Size	L1	L2	L3	L4	L5	B1	B2	B3	H1	H2	H3	H4	H5	H6	D1 f7	D2	D3 h7
G1	90	140	50	23	22	-	6	-	122	87	10	35	2	25	60	75	90
G2	140	190	65	32	29	113	10	110	180	130	14	50	2	45	90	115	135
G3	230	295	95	40	48	-	16/121	180	305/3101	215/2301	17,5	90/801	2/3,51	80/631	150/1201	-	225

Size	D4	D5	D6	D7	D8	D9 j6	D10	D11	D12	D13
G1	39	2505	M18/M20	M8	42/ 402	18/121	M10	72	-	-
G2	60	4005	M30/M20	M10	65/ 652	32	M12	113	M12	M10
G3	90	6310	M48x2	M16	90/ 902	55/401	M20	180	-	M16

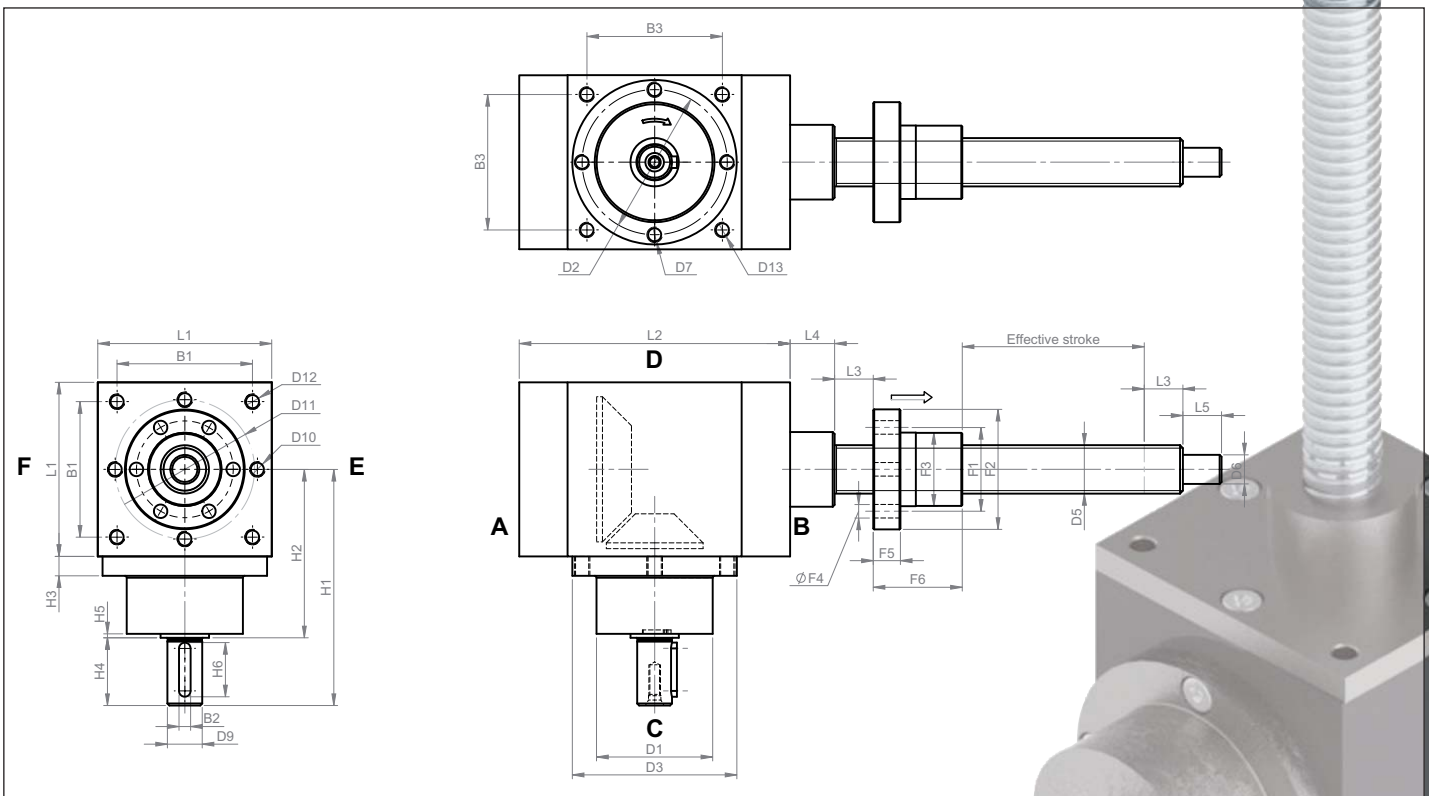
Technical Data and Dimensions, Version R

Technical Data Version R:

Size ⁷⁾	G1-R-TGS 24x5	G1-R-KGS 2505	G2-R-TGS 40x7	G2-R-KGS 3210	G2-R-KGS 4005	G3-R-TGS 60x9	G3-R-KGS 6310
Max. stroke and drag force [kN]	19,6	12,3	56,5	33,4	23,8	117	76
Stroke per full turn of the screw shaft, ratio 2:1 in [mm]	2,5	2,5	3,5	5	2,5	4,5	5
Stroke per full turn of the screw shaft, ratio 3:1 in [mm]	1,6	1,6	2,3	3,33	1,6	3	3,33
Max. stroke speed in m/min ratio 2:1, $n_{max} = 3000/min$	-. ¹	7,5	-. ²	15	7,5	-. ³	15
Max. stroke speed in m/min ratio 3:1, $n_{max} = 3000/min$	-. ⁴	5,01	-. ⁵	10	4,99	-. ⁶	9,99
Efficiency	0,45	0,75	0,4	0,75	0,75	0,35	0,75
Max. moment of a torque on the screw shaft in [Nm]	50	50	175	175	175	1600	1600

- 1) max. permissible screw revolution speed (max. 4,55m/min at 1820/min)
- 2) max. permissible screw revolution speed (max. 1,82m/min at 520/min)
- 3) max. permissible screw revolution speed (max. 1,44m/min at 320/min)
- 4) max. permissible screw revolution speed (max. 4,55m/min at 2730/min)
- 5) max. permissible screw revolution speed (max. 1,82m/min at 780/min)
- 6) max. permissible screw revolution speed (max. 1,44m/min at 460/min)
- 7) all screw sizes with other threads in stock

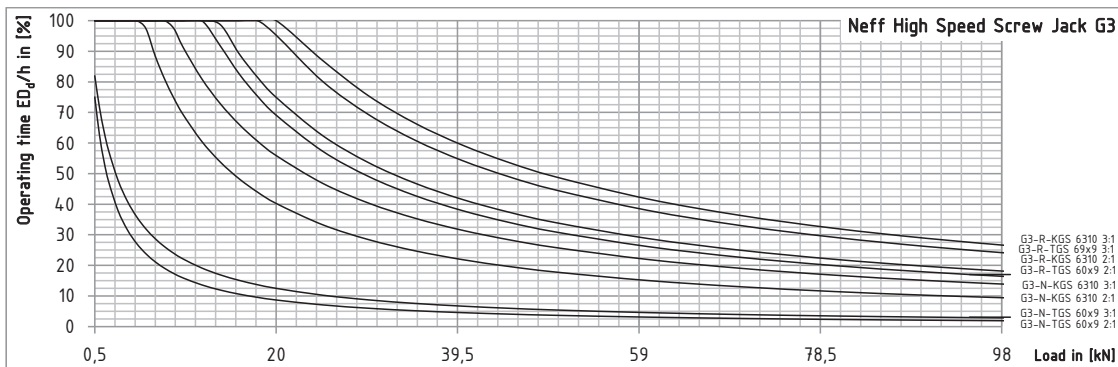
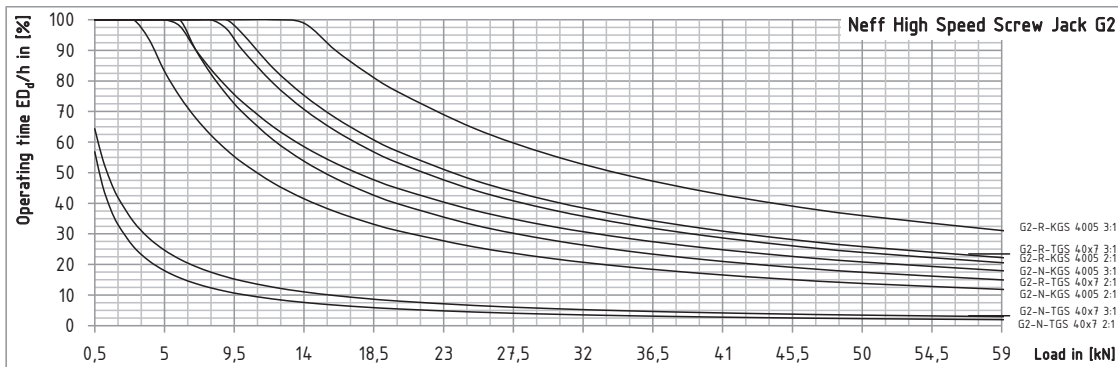
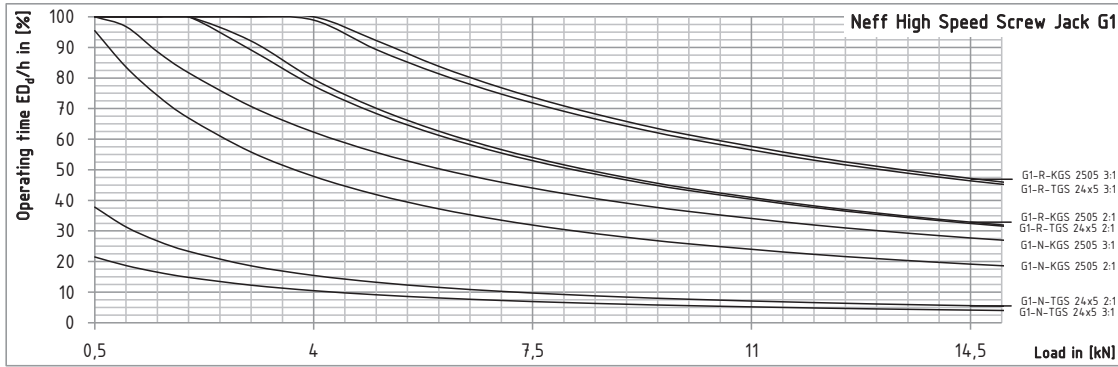
Dimensions Version R



Size	L1	L2	L3	L4	L5	B1	B2	B3	H1	H2	H3	H4	H5	H6	D1 f7	D2	D3 h7
G1	90	140	20	23	25	-	6	-	122	87	10	35	2	25	60	75	90
G2	140	190	25	32	30	113	10	110	180	130	14	50	2	45	90	115	135
G3	230	295	40	40	55	180	16/121	180	305/3101	215/2301	17	90/801	7,5	80/631	150/1201	180	225

Size	D4	D5	D6 j6	D7	D9 j6	D10	D11	D12	D13	F1	F2	F3	F4	F5	F6
G1	39	2505	20	M8	18/121	M10	72	-	-	50	62	38	7	14	46
G2	60	4005	25	M10	32	M12	113	M12	M10	68	80	53	7	16	59
G3	90	6310	45	M16	55/401	M20	-	-	M16	105	125	85	11	20	99

Operating time-Chart (at 1500/min and 20° ambient temperature)



To calculate the Operating time ED_n/h for other speeds, multiply the Operating time in [%] with the speed-factor fn_{neff} :

$$ED_n/h \text{ in } [\%] = ED_d \times fn_{neff}$$

If different speeds determine the average of speed:

$$n_m = n_1 \cdot q_1 + n_2 \cdot q_2 + \dots + n_i \cdot q_i / 100$$

n_m = Average speed in [1/min]

n_1, n_2, \dots = Speed in [1/min] during the clearance

q_1, q_2, \dots = Dues of load duration in [%]

speed	speed-factor fn_{neff}
3000	0,5
2500	0,6
2000	0,75
1000	1,5
750	2
500	3
250	6

