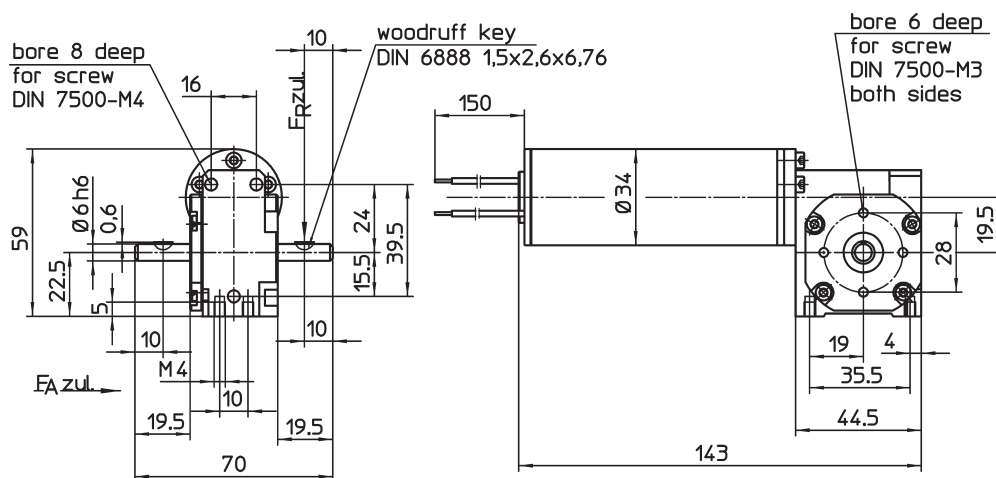


GNM 2145 - G 1.3

DC
Geared Motors
with permanent magnet field

Motor series GNM 2145
Worm gear series G 1.3
up to 2 Nm



type	GNM 2145 - G 1.3
series	C
operation acc. to standards VDE 0530	S1
isolation acc. to standards VDE 0530	F
protection acc. to standards VDE 0530	IP 21
kind of connection	free leads
rotating direction	reversible
bearing (motor)	ball bearing
bearing (gear box)	ball bearing
gear box	not self-locking, low noise

Motor design:

Worm pinned in the motor shaft. Free leads.

Foot mounting with 4 threads, see drawing.

Rotating direction:

The rotating direction can be changed by inverting the connections.

Order example

Motor - gear box

GNM 2145C - G 1.3

24 V, 6000 rpm - 7,3:1

Special designs on request.

GNM 2145C - G1.3

1 nominal voltage	2 nominal speed	3 nominal torque	4 starting torque	5 nominal torque at undulatory current	6 nominal power	7 nominal current	8 nominal current at undulatory current	9 peak current	10 power gear box input	11 nominal speed gear box input	12 ratio gear box	13 efficiency gear box	load limitations gear box			17 total weight motor + gear box	18 F _r (allow. radial shaft load)	19 F _a (allow. axial shaft load) ¹⁾
													14 max. power	15 max. cont. torque	16 max. starting torque			
V	rpm	Nm	Nm	Nm	W	A	A	A	W	rpm	i	%	W	Nm	Nm	kg	N	N
12 24	822	0,15	0,84	0,08	13	2,2 1,2	1,5 0,81	15 10	16	6000	7,3 :1	79	17	0,20	2,0	0,52	30	12
12 24	522	0,23	1,3	0,13	12	2,2 1,2	1,5 0,81	15 10	16	6000	11,5 :1	77	16	0,30	2,0	0,52	30	12
12 24	400	0,28	1,7	0,16	12	2,2 1,2	1,5 0,81	15 8,7 ²⁾	16	6000	15 :1	73	15	0,35	2,0	0,52	30	12
12 24	261	0,41	2,0 ²⁾	0,23	11	2,2 1,2	1,5 0,81	11 5,8 ²⁾	16	6000	23 :1	70	14	0,50	2,0	0,52	30	12
12 24	200	0,50	2,0 ²⁾	0,28	11	2,2 1,2	1,5 0,81	8,7 ²⁾ 4,6 ²⁾	16	6000	30 :1	66	12	0,55	2,0	0,52	30	12
12 24	158	0,63	1,2 ²⁾	0,35	10	2,2 1,2	1,5 0,81	4,5 ²⁾ 2,4 ²⁾	16	6000	38 :1	65	11	0,65	1,2	0,52	30	12

Tolerances $\pm 10\%$

Columns 3 and 13

Values are valid at operating temperature after run-in period.

Columns 5 and 8

Current values should not exceeded during operation with undulatory current (single way rectification) with harmonic portion above 5%.

Columns 4 and 9

Figures correspond with the gearbox load limitations. For high gear ratios the allowed currents may be lower than the motors rated current. If so, please the current has to be limited, e.g. through adjusting the servo controller.

Columns 14, 15 and 16

To avoid gear box overload do not exceed the mentioned values. For oscillating operation the mentioned limitations must be multiplied by 0,75.

¹⁾ middle of the shaft-extension

²⁾ motor current must be limited to avoid excess of the mentioned value