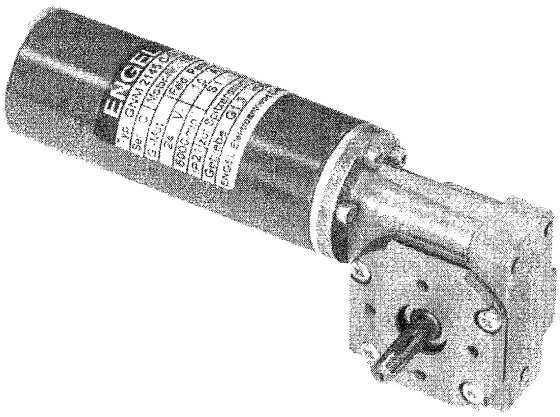
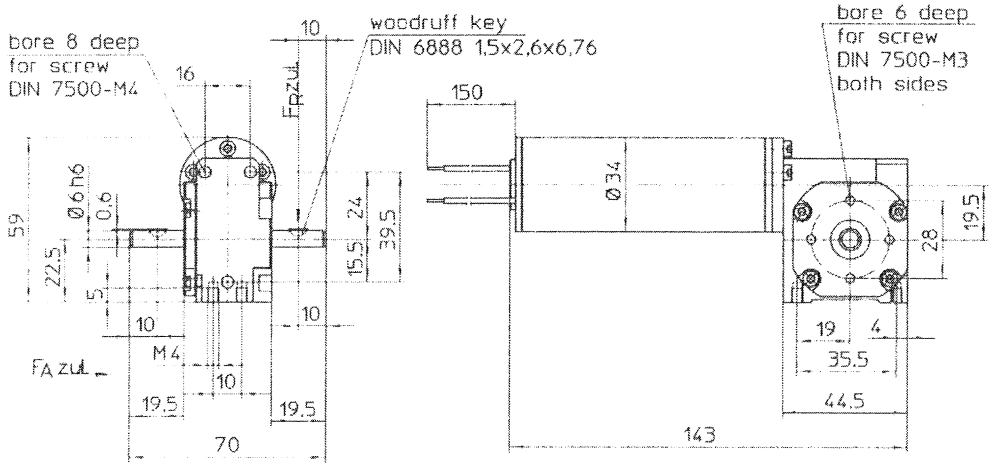


GNM 2145 - G 1.3

DC
Geared Motors
with permanent magnet [e]ld

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



type	GNM 2145 [G] 1.3
series	C
operation a[ ]lo standards [D] [0]530	[ ]
isolation a[ ]lo standards [D] [0]530	[ ]
protel[t]ion a[ ]lo standards [D] [0]530	[ ]21
[w]ld o[ ]ohnel[t]en	[s]le leads
rotating direl[t]ion	re[v]ers[i]e
[s]aring [m]otor[ ]	[a]ll [s]aring
[s]aring [g]ear [o][ ]	[a]ll [s]aring
gear [o][ ]	not se[l][e]l[g]ow noise

Motor design:
Worm pinned in the motor shaf[t], [s]ee leads,
[d]ot mo[u]nting with 4 threads [s]ee drawing
[o]tating dire[c]ion [ ]
[T]he rotating dire[c]ion [c]an [b]e changed [b]y in[v]erting the [c]onnel[t]ions.
[O]rder e[x]ample:

Motor	gear [o][ ]
GNM 2145C	[G] 1.3
24 [V] [D]00 rpm	[E][M]

[P]l[e]ase designs on re[q]uest

MICROMO.COM

ENGEL GNM 2145 - G 1.3 24VDC 261 RPM

GNM 2145C - G1.3

1 nominal voltage	2 nominal speed	3 nominal torque	4 starting torque	5 nominal torque at discontinuatory current	6 nominal power	7 nominal current	8 nominal current at discontinuatory current	9 heat current	10 power gear input	11 nominal speed gear input	12 ratio gear	13 efficiency gear	load limitations gear: 14 max power	15 max torque	16 starting torque	17 total weight motor gear	18 allow radial shaft load	19 allow axial shaft load
	rpm	Nm	Nm	Nm	W				W	rpm	i		W	Nm	Nm	kg	N	N
12	32	0.16	0.8	0.08	13	2.2	1.6	15	1	000			1	0.20	2.0	0.52	30	12
24						1.2	0.8	10										
12	522	0.23	1.3	0.13	12	2.2	1.6	15	1	000	11.56		1	0.30	2.0	0.52	30	12
24						1.2	0.8	10										
12	400	0.3	1.6	0.16	12	2.2	1.5	15	1	000	15	7	15	0.35	2.0	0.52	30	12
24						1.2	0.8	8										
12	2	0.4	2.4	0.23	11	2.2	1.5	11	1	000	23	7	14	0.50	2.0	0.52	30	12
24	261	0.41				1.2	0.8	5.8A		6000								
12	200	0.56	2.8	0.28	11	2.2	1.5	8	1	000	30	7	12	0.55	2.0	0.52	30	12
24						1.2	0.8	4										
12	15	0.9	1.2	0.35	10	2.3	1.5	4.5	1	000	3	5	11	0.8	1.2	0.52	30	12
24						1.2	0.8	2.2										

Tolerances ± 10 %

Columns 3 and 13
Values are valid at operating temperature after running period.

Columns 5 and 6
Current values should not be exceeded during operation with unidirectory current (single way rotation) with harmonic portion above 5 %

Columns 4 and 5
Values correspond with the gear load limitations. At 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
Valid gear load do not exceed the mentioned values. At oscillating operation the mentioned limitations must be multiplied by 0.8.

1) middle of the shaft extension

2) motor current must be limited to valid values of the mentioned value