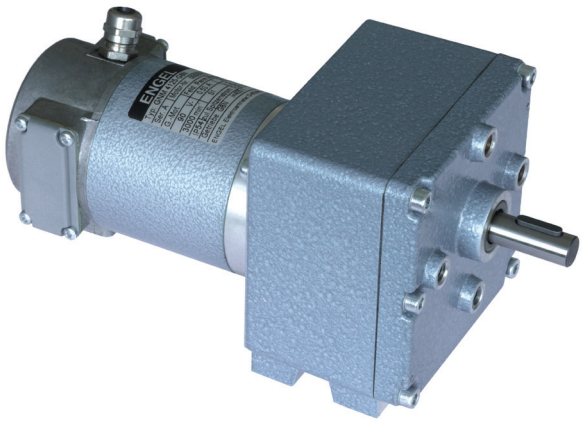
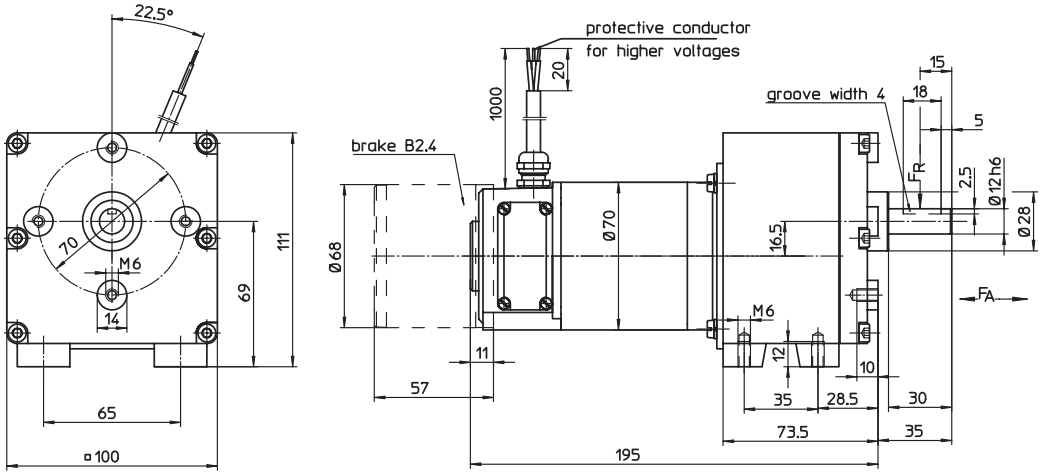


GNM 4125 - G 8N

DC
Geared Motors
with permanent magnet field

Motor series GNM 4125
with + without parking brake
Spur gear series G 8N
up to 21 Nm



type		GNM 4125 - G 8N
series		A
operation acc. to standards VDE 0530		S1
isolation acc. to standards VDE 0530		F
protection acc. to standards VDE 0530		IP 54
kind of connection		cable
rotating direction		reversible
bearing (motor)		ball bearing
bearing (gear box)		sintered bronze plain bearing
parking brake B 2:		
nominal voltage	V	24
nominal current	A	0,35
static break torque	Nm	0,8
max. number of operations/h		2000

● Motors also available with DC-tachometer and/ or incremental encoder

Motor design:
Teethed motorshaft. Brush holder opening will be accessible by removing the cover plate.
Foot- and flange mounting with 4 threads, see drawing.
Rotating direction:
The rotating direction can be changed by inverting the connections.

1. Order example

Motor	- gear box	
GNM 4125A	- G 8N	
42 V, 3000 rpm	- 15:1	

2. Order example

Motor	- gear box	- DC-tachometer
GNM 4125A	- G 8N	- T 10.05
24 V, 1600 rpm	- 180:1	- 5 V / 1000 rpm

Special designs on request.

ENGEL ElektroMotoren GmbH · Am Klingenweg 7 · D-65396 Walluf
Telefon: +49 (0) 6123 994 400 · Telefax: +49 (0) 6123 994 410 · E-Mail: kontakt@engel-elektromotoren.de · www.engel-elektromotoren.de

GNM 4125A - G 8N

1 nominal voltage [1]	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: 14 max. power	15 max. cont. torque	16 max. starting torque	17 total weight motor + gear box	18 total weight motor + gear box + parking brake	19 F_R (allow. radial shaft load) [3]	20 F_A (allow. axial shaft load)
V	rpm	Nm	Nm	Nm	W	A	A	A	W	rpm	i	%	W	Nm	Nm	kg	kg	N	N
24	200	2,3	5,0 [2]	1,5	48	3,6	2,5	11 [2]	60	3000	15 :1	80	63	3,0	5,0	2,95	3,35	100	0
42						2,1	1,5	6,5 [2]											
180						0,48	0,34	1,5 [2]											
24	100	4,1	7,0 [2]	2,6	43	3,6	2,5	8,0 [2]	60	3000	30 :1	72	47	4,5	7,0	2,95	3,35	100	0
42						2,1	1,5	4,7 [2]											
180						0,48	0,34	1,1 [2]											
24	67	6,2	10 [2]	4,0	43	3,6	2,5	7,7 [2]	60	3000	45 :1	72	43	6,2	10	2,95	3,35	100	0
42						2,1	1,5	4,5 [2]											
180						0,48	0,34	1,0 [2]											
24	50	7,6	15 [2]	4,8	40	3,6	2,5	8,5 [2]	60	3000	60 :1	66	42	8,0	15	2,95	3,35	100	0
42						2,1	1,5	5,0 [2]											
180						0,48	0,34	1,1 [2]											
24	33	11	20 [2]	7,2	40	3,6	2,5	7,7 [2]	60	3000	90 :1	66	40	11,5	20	2,95	3,35	100	0
42						2,1	1,5	4,5 [2]											
180						0,48	0,34	1,0 [2]											
24	25	14	20 [2]	8,8	36	3,6	2,5	5,9 [2]	60	3000	120 :1	60	37	14	20	2,95	3,35	100	0
42						2,1	1,5	3,5 [2]											
180						0,48	0,34	0,79 [2]											
24	22	15	20 [2]	9,9	36	3,6	2,5	5,3 [2]	60	3000	135 :1	60	37	16	20	2,95	3,35	100	0
42						2,1	1,5	3,1 [2]											
180						0,48	0,34	0,72 [2]											
24	17	19	20 [2]	12	33	3,6	2,5	4,2 [2]	60	3000	180 :1	55	33	19	20	2,95	3,35	100	0
42						2,1	1,5	2,4 [2]											
180						0,48	0,34	0,56 [2]											
24	11	20 [2]	20 [2]	18	23	2,7 [2]	2,5	3,0 [2]	42	3000	270 :1	55	23	20	20	2,95	3,35	100	0
42						1,6 [2]	1,5	1,8 [2]											
180						0,36 [2]	0,34	0,40 [2]											
24	8,9	20 [2]	20 [2]	14	19	2,1 [2]	1,5	2,3 [2]	35	1600	180 :1	55	19	20	20	2,95	3,35	100	0
180						0,28 [2]	0,21	0,32 [2]											
24	5,9	21 [2]	21 [2]	21	13	1,5 [2]	1,5	1,7 [2]	24	1600	270 :1	55	13	21	21	2,95	3,35	100	0
180						0,21 [2]	0,21	0,23 [2]											
24	4,0	21 [2]	21 [2]	21	9,0	1,1 [2]	1,1	1,2 [2]	16	1600	405 :1	55	9,0	21	21	2,95	3,35	100	0
180						0,15 [2]	0,15	0,17 [2]											

Tolerances ± 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] 180V - special voltage

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

[3] middle of the shaft-extension