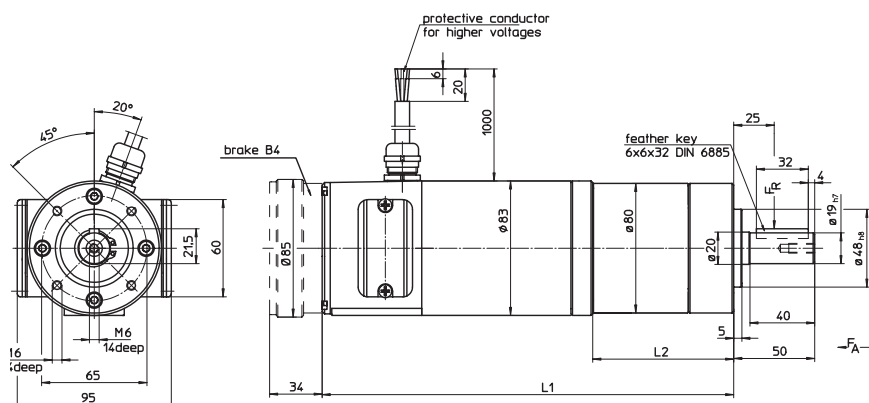




GNM 5480 - GP 80

DC
Geared Motors
with permanent magnet field

Motor series GNM 5480
with + without parking brake
Planetary gear series GP 80
up to 120 Nm



Type	Gear Ratio	Dimension	
		L1	L2
GNM 5480E	5,8:1 - 9 :1	273	65
GNM 5480E	23 :1 - 52,2 :1	295,5	87,5
GNM 5480E	92,8:1 - 302 :1*)	314,5	106,5

*) Shortened designs on request.

type	GNM 5480 - GP 80		
series	E		
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 and gear box)	ball bearing		
gear box	not self-locking		
parking brake B 4:			
nominal voltage	V	24	
nominal current	A	0,14	
static break torque	Nm	1	
max. number of operations/h		2000	

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

Motor design:

Brush holder opening will be accessible by removing the cover plate.

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 5480E - GP 80
42 V, 3000 rpm - 9:1

2. Order example

Motor - parking brake - gear box
GNM 5480E - B 4 - GP 80
24 V, 3000 rpm - 24 V - 16:1

Special designs on request.

GNM 5480E - GP 80

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			17 max. backlash	18 moment of inertia gear box ³⁾	19 total weight motor + gear box	20 total weight motor + gear box + parking brake	21 F _r (allow. radial shaft load) ⁴⁾	22 F _a (allow. axial shaft load)
													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	< min	kgm ²	kg	kg	N	N
24	517	4,4	23	2,9	240	12,9	9,0	115	250	3000	5,8:1	95	2710	50	70	20	0,00274x10 ⁻³	5,8	6,9	900	400
42						7,5	5,3	65													
180						1,7	1,2	14													
24	333	6,8	35	4,5	240	12,9	9,0	115	250	3000	9 :1	95	700	20	40	20	0,00121x10 ⁻³	5,8	6,9	900	400
42						7,5	5,3	65													
180						1,7	1,2	14													
24	129	17	91	11	225	12,9	9,0	115	250	3000	23,2:1	90	1355	100	120	25	0,00215x10 ⁻³	6,9	8,0	900	400
42						7,5	5,3	65													
180						1,7	1,2	14													
24	89	24	120 ²⁾	16	225	12,9	9,0	105 ²⁾	250	3000	33,6:1	90	935	100	120	25	0,00208x10 ⁻³	6,9	8,0	900	400
42						7,5	5,3	61 ²⁾													
180						1,7	1,2	14 ²⁾													
24	57	37	120 ²⁾	25	225	12,9	9,0	68 ²⁾	250	3000	52,2:1	90	600	100	120	25	0,00087x10 ⁻³	6,9	8,0	900	400
42						7,5	5,3	40 ²⁾													
180						1,7	1,2	9,0 ²⁾													
24	32	63	120 ²⁾	42	215	12,9	9,0	39 ²⁾	250	3000	92,8:1	85	340	100	120	30	0,00213x10 ⁻³	7,5	8,6	900	400
42						7,5	5,3	23 ²⁾													
180						1,7	1,2	5,1 ²⁾													
24	22	91	120 ²⁾	61	215	12,9	9,0	27 ²⁾	250	3000	134,5:1	85	235	100	120	30	0,00213x10 ⁻³	7,5	8,6	900	400
42						7,5	5,3	16 ²⁾													
180						1,7	1,2	3,6 ²⁾													
24	15	100 ²⁾	120 ²⁾	88	160	10 ²⁾	9,0	19 ²⁾	190	3000	195 :1	85	160	100	120	30	0,00206x10 ⁻³	7,5	8,6	900	400
42						5,9 ²⁾	5,3	11 ²⁾													
180						1,3 ²⁾	1,2	2,6 ²⁾													
24	10	100 ²⁾	120 ²⁾	100	105	7,0 ²⁾	7,0	13 ²⁾	125	3000	302 :1	85	105	100	120	30	0,00086x10 ⁻³	7,5	8,6	900	400
42						4,1 ²⁾	4,1	7,6 ²⁾													
180						0,92 ²⁾	0,92	1,7 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⁾ values are reduced to motor shaft

⁴⁾ middle of the shaft-extension