

Servo Motors for SIMOVERT MASTERDRIVES

Gearboxes for 1FK7 Standard Type Motors

LP Series Planetary Gearbox

Selection and Ordering Data

Ordering data: **1FK7 ...-A.71-1.** **■ -Z**



Order No. of the motor (standard type) with code “-Z” and code for mounting the planetary gearbox assigned to the motor, Requirement: Keyless motor shaft

Motor Natural cooling	Planetary Gearbox Single-Stage Torsional backlash ≤ 12 arcmin	Gearbox Weight, Approx. kg (lb)	Available Gear Ratios $i =$		Max. Permiss. Input Speed ¹⁾ n_{G1} rpm	Max. Permiss. Output Torque ¹⁾ M_{G2} where $i = 5$ Nm (lb _f -ft)	M_{G2} where $i = 10$ Nm (lb _f -ft)	Max. Perm. Outgoing Shaft Radial Force ²⁾ F_r N (lb _f)	Moment of Inertia Gears J_G where $i = 5/10$ 10^{-4} kgm ² (lb _f -in-s ²)
Type	Type		5	10					
1FK7 022	LP 050-M01	0.77 (1.7)	○		8000	11.5 (8.5)	10.5 (7.7)	650 (146.1)	0.059 (0.00005)
1FK7 022	LP 070-M01	1.9 (4.2)		○	6000	32 (23.6)	29 (21.4)	1450 (326)	0.28 (0.00025)
1FK7 032			○	○					
1FK7 033			○	○					
1FK7 040	LP 090-M01	4.1 (9)	○	○	6000	80 (59)	72 (53.1)	2400 (540)	1.77 (0.0016)
1FK7 042			○	○					
1FK7 043			○	○					
1FK7 044			○	○					
1FK7 060	LP 120-M01	9 (19.8)	○	○	4800	200 (147.5)	180 (132.8)	4600 (1034.1)	5.42 (0.0048)
1FK7 061			○	○					
1FK7 063			○	○					
1FK7 064			○						
1FK7 080	LP 155-M01	17.5 (38.6)	○	○	3600	400 (295)	320 (236)	7500 (1686.1)	25.73 (0.0228)
1FK7 082			○	○					
1FK7 083			○	○					
1FK7 085			○						
1FK7 100			○						25.73 (0.0228)
1FK7 101			○						
1FK7 103			○						
1FK7 105			○						

Order Code

• Gear shaft with key

V40

V42

Continuous duty S1

At the rated speed and rated torque, continuous duty is permissible. The gearbox temperature must not exceed +90 °C (+194 °F).

Planetary Gearbox Single-Stage Torsional backlash ≤ 12 arcmin	Rated Input Speed	Rated Output Torque	
Type	n_{rated1} rpm	M_{rated2} where $i = 5$ Nm (lb _f -ft)	M_{rated2} where $i = 10$ Nm (lb _f -ft)
LP 050-M01	4000	5.7 (4.2)	5.2 (3.8)
LP 070-M01	3700	16 (11.8)	15 (11.1)
LP 090-M01	3400	40 (29.5)	35 (25.8)
LP 120-M01	2600	100 (73.8)	90 (66.4)
LP 155-M01	2000	290 (213.9)	170 (125.4)

1) Values for positioning duty S5.

2) With reference to the center of the outgoing shaft at 100 rpm.