

MotionTek Drive Systems

Global Motion technology Inc.

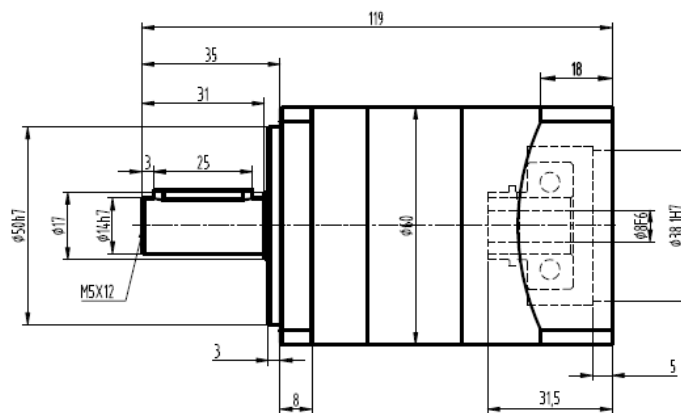
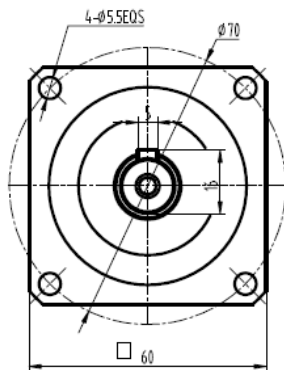
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PLF060 Planetary Gearbox Reducer — Technical Specifications & Catalogue

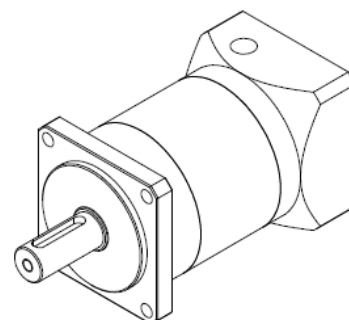
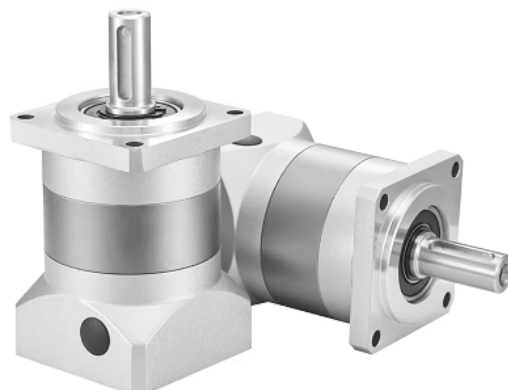
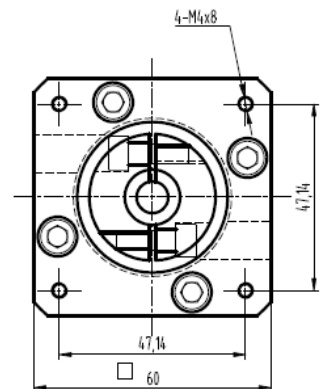
- PLF060 series planetary gearbox reducer (PLF060-L1 profile), a single-stage precision planetary reducer for servo and stepper motor applications, available in 8 reduction ratios from 16:1 to 70:1.
- Output flange is a 60mm square pattern with a $\varnothing 14h7$ output shaft; input side accepts a motor shaft via bushing (distribution size $\varnothing 8 \times 21$), secured with an M5x12 set screw.
- Rated for 3000 rpm continuous input speed (6000 rpm maximum), IP65 protection, and a 20,000-hour average life span under synthetic grease lubrication.

PLF060 — GENERAL SPECIFICATIONS

Output terminal



Input terminal



Parameter	Value
Fault Stop Torque	2 × Rated Output Torque (2TN Nm)
Full Load Efficiency	96%
Rated Input Speed	3000 min ⁻¹ (rpm)
Maximum Input Speed	6000 min ⁻¹ (rpm)
Working Temperature	-25°C to +90°C
Lubrication Mode	Synthetic grease lubrication
Installation Mode	Arbitrary orientation
Protection Level	IP65
Average Life Span	20,000 hours
Flange Accuracy	DIN 42955-R
Maximum Output Radial Force (Fr)	485N (at rated service life, 100 rpm output speed, stress point at 1/2 output shaft length)
Maximum Output Axial Force (Fa)	380N (at rated service life, 100 rpm output speed, stress point at 1/2 output shaft length)
Output Shaft Key Standard	Round head plain key (Type A), GB1096-79

PLF060 — REDUCTION RATIO & RATED TORQUE

Model	Speed Ratio	Rated Output Torque (Kgcm ²)	Rated Output Torque (Nm)
PLF060-L2-16-S2-P2	16:1	0.094	30
PLF060-L2-20-S2-P2	20:1	0.092	30
PLF060-L2-25-S2-P2	25:1	0.092	33
PLF060-L2-28-S2-P2	28:1	0.091	30
PLF060-L2-35-S2-P2	35:1	0.091	33
PLF060-L2-40-S2-P2	40:1	0.091	30
PLF060-L2-50-S2-P2	50:1	0.091	33
PLF060-L2-70-S2-P2	70:1	0.091	21.5

Rated output torque (TN) is the continuous-duty torque rating; fault stop torque allows up to 2× the rated value for momentary stops. Torque figures shown are read directly from the manufacturer drawing.

PLF060 — DIMENSIONAL SPECIFICATIONS (ALL DIMENSIONS IN mm)

Dimension	Value
Output Flange (Square)	60mm (□ 60)
Output Flange Bolt Circle	47.14 x 47.14mm
Output Mounting Holes	4× Ø5.5 EQS
Output Pilot Diameter	Ø70mm
Output Shaft Diameter	Ø14h7
Output Shaft Bearing Bore	Ø38.1H7
Overall Length	119mm
Gearbox Body Diameter	Ø60mm
Input Flange (Square)	60mm (□ 60)
Input Flange Bolt Circle	47.14 x 47.14mm
Input Mounting Holes	4× M4x8
Input Bushing Bore	Ø17mm (sleeve), Ø14h7 (motor shaft bore)
Input Bushing Set Screw	M5x12
Distribution / Input Bushing Size	Ø8x21 / Ø38.1x1.6 / 4-Ø4.5-47.14x47.14

Non-standard reducer configurations are for reference only; the parameters above apply to the standard PLF060 reducer profile. Confirm input bushing bore against your specific motor shaft diameter before ordering.

