

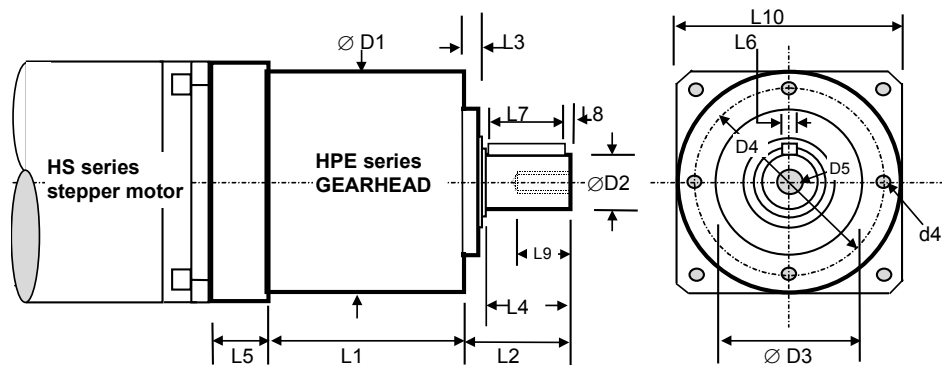
HPE Series Low backlash gearheads

HPE series gearheads provide a combination of reduced backlash and economic prices. They are specifically designed for applications that require long life, high dynamic repetitive cycle operation and high positional accuracy.



Dimensions: mm

Gearhead		HPE50		HPE70		HPE90
Version		HPE50-S	HPE50-D	HPE70-S	HPE70-D	HPE90-S
Gearbox Diameter	D1	50	50	70	70	90
Output shaft diameter	D2	12 k6	12 k6	16 k6	16 k6	22 k6
Gearbox mounting register	D3	35 h6	35 h6	52 h6	52 h6	68 h6
Gearbox mounting holes	d4	4 x M4	8 deep	4 x M5	10 deep	4 x M8/12 deep
mounting hole PCD	D4	44	44	62	62	80
Shaft fixing bolt diameter	D5	tapped	M4	tapped	M5	tapped M8
Gearbox Length	L1	53	74.5	69	91.5	109
Overall Output Shaft length	L2	24.5	24.5	36	36	46
Gearbox register length	L3	4	4	5	5	5
Free shaft length	L4	18	18	28	28	36
Adaptor length	L5	18		22		30
Output shaft key width	L6	4 h9	4 h9	5 h9	5 h9	6 h9
Output shaft Key length	L7	14	14	25	25	32
Key distance to shaft end	L8	2	2	2	2	2
Shaft fixing tapped length	L9	8	8	10	10	13
Motor adaptor size	L10	57.2	57.2	83	83	90
Suitable stepper motors		23HS (X)	23HS (X)	34HS (X)	34HS (X)	34HS (X)



Performance:

Model	Gear Ratio Options: n:1	Max. Backlash (arc. min.)	Typical Input Friction (Nm)	Typical Efficiency (%)	Maximum Continuous Torque (Nm)	Max. Peak Torque (Nm)	Maximum Emergency Torque (Nm)	Mass (Kg)
HPE 50-S	5	≤ 12	0.05	> 97	6.5	15	28	0.8
	10				5.5	12		
HPE50-D	25	≤ 15	0.04	> 95	6.5	15	28	1.0
	50				6.5	15		
	100				5.5	12		
HPE 70-S	5	≤ 12	0.14	> 97	18	33	75	2.0
	10				16.5	30		
HPE 70-D	25	≤ 15	0.12	> 95	18	33	75	2.5
	50				18	33		
	100				16.5	30		
HPE 90-D	25	≤ 15	0.51	> 95	45	82	200	5.3
	50				45	82		
	100				40	72		

General specification

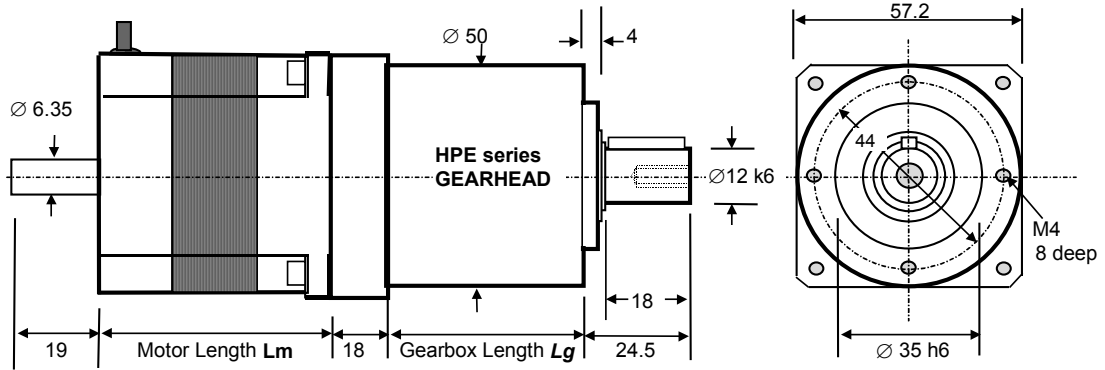
Model	Max Radial Load (N)	Max. Axial Load (N)	Torsional Rigidity (Nm/Arc min.)	Max. input speed (rpm)	Lubrication	Paint Finish	Noise Level @ 3000 rpm. Input dB(A)
HPE 50	850	700	1	8,000	grease	Stoved epoxy gloss	≤ 68
HPE 70	1650	1600	2	6,000	grease		≤ 70
HPE 90	2600	2000	6	6,000	grease		≤ 72

Precision Geared hybrid stepper motor HPE50-23HSX series

Features:

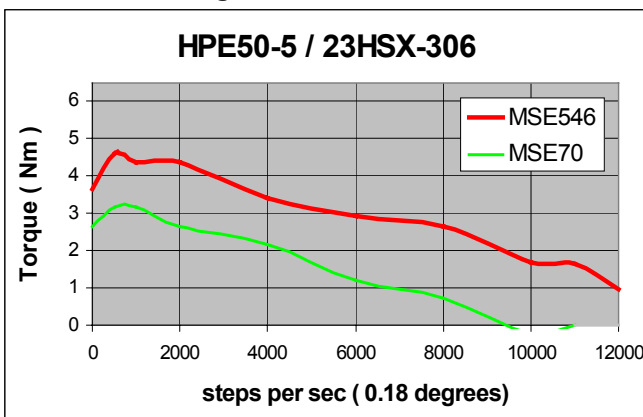
- Advanced magnet technology provides increased motor torque.
- Increased output torque due to integral high efficiency planetary gearhead
- Capable of driving high inertia loads due to integrated planetary gear reduction system
- High precision gear system provides increased resolution combined with accuracy & repeatability
- High strength planetary gear system provides long operating life

Dimensions: mm



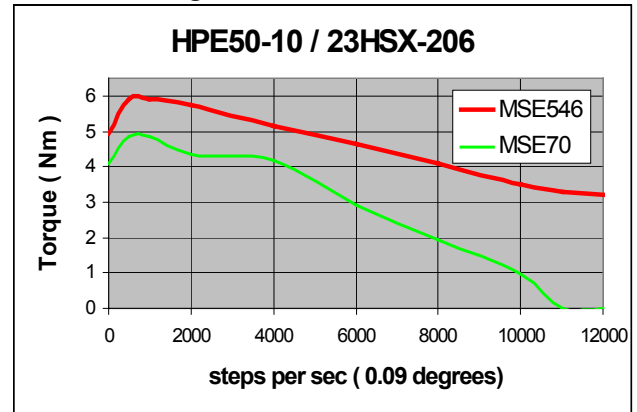
Typical Performance

L_m : 78.5 mm L_g : 53 mm



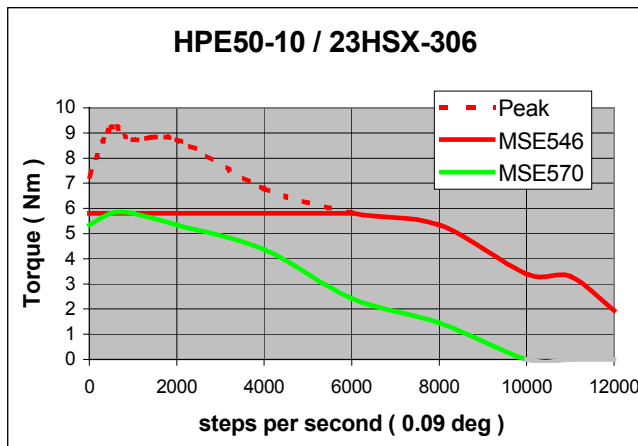
Repeatability: ± 1 step

L_m : 55 mm L_g : 53 mm



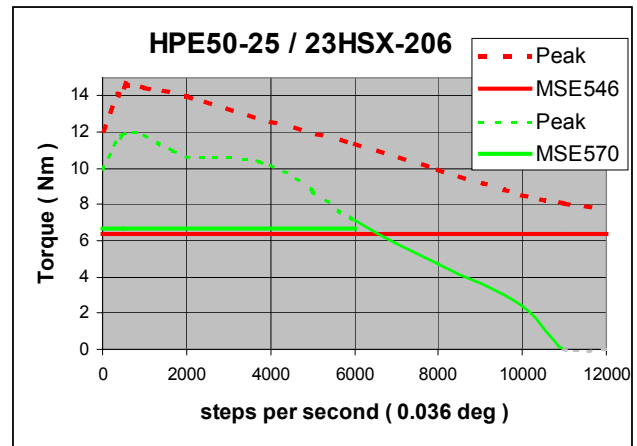
Repeatability: ± 2 steps

L_m : 78.5 mm L_g : 53 mm



Repeatability: ± 2 step

L_m : 55 mm L_g : 74.5 mm



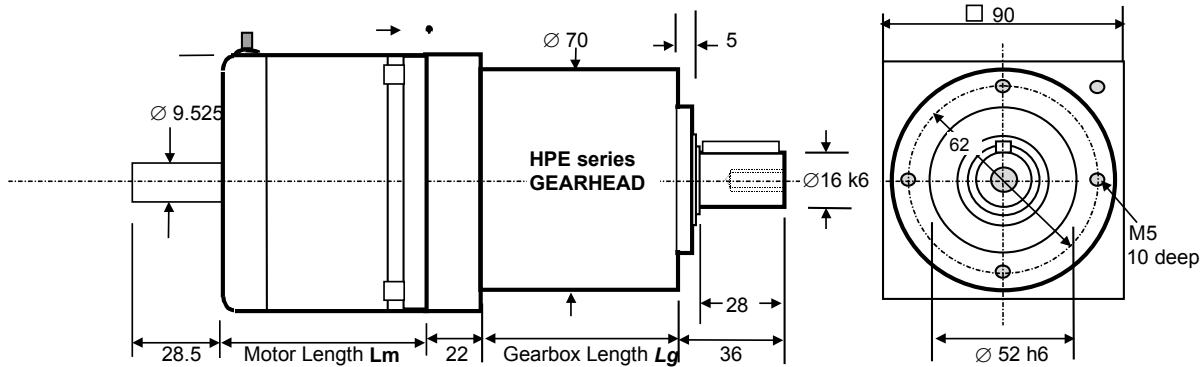
Repeatability: ± 7 steps

Precision Geared hybrid stepper motor HPE70-34HSX series

Features:

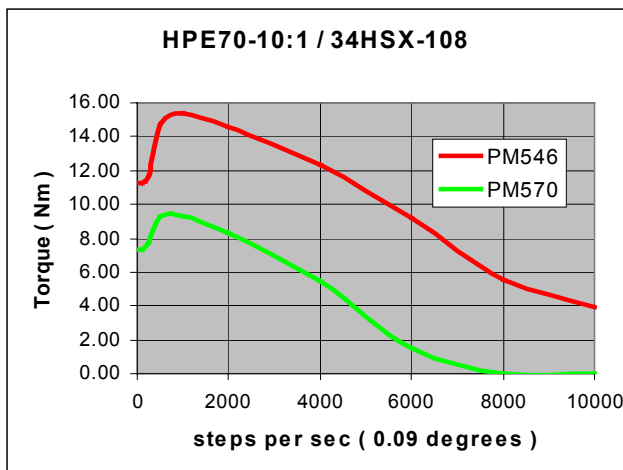
- Advanced magnet technology provides increased motor torque.
- Increased output torque due to integral high efficiency planetary gearhead
- Capable of driving high inertia loads due to integrated planetary gear reduction system
- High precision gear system provides increased resolution combined with accuracy & repeatability
- High strength planetary gear system provides long operating life

Dimensions: mm

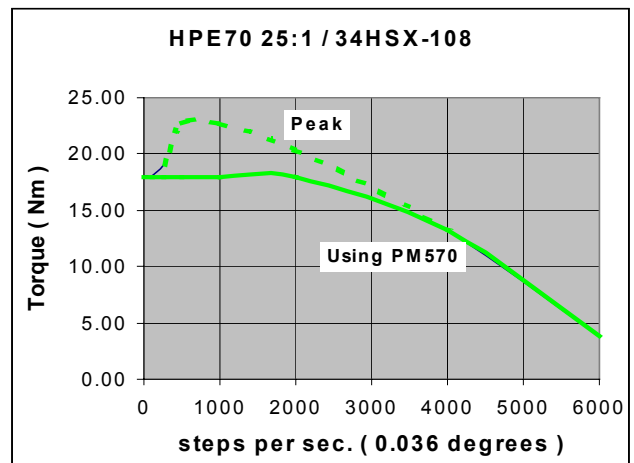


Typical Performance

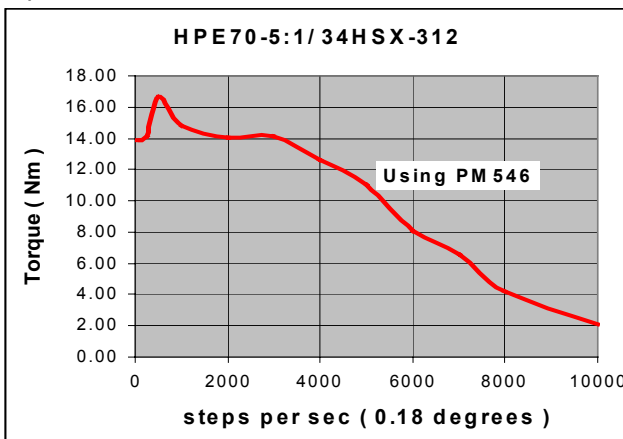
L_m : 67mm L_g : 69 mm Repeatability: ± 2 steps



L_m : 67mm L_g : 91.5 mm Repeatability: ± 7 steps



L_g : 125 mm L_m : 69 mm Repeatability: ± 1 step steps



L_m : 94 mm L_g : 69 mm Repeatability: ± 2

