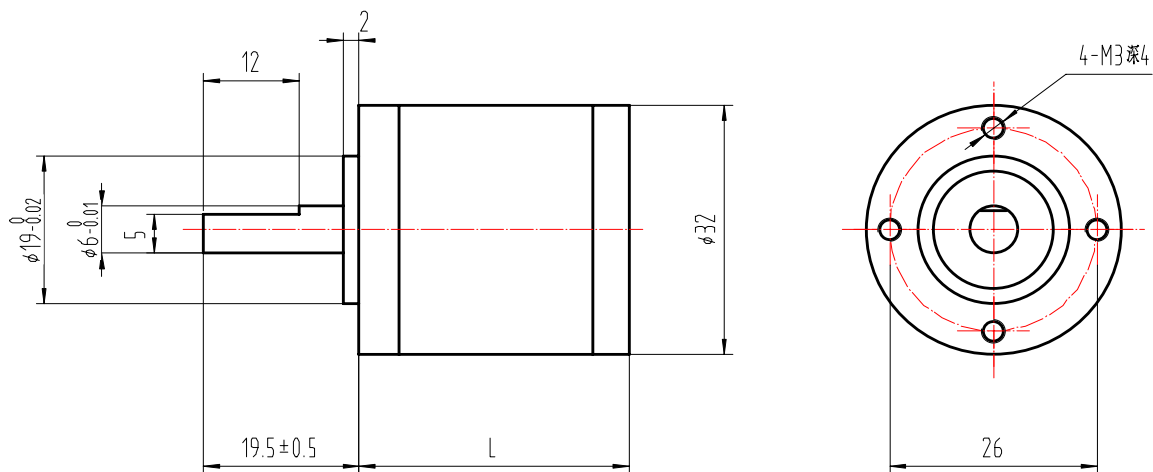




Number of Gear Stages	Length (mm)	Output Torque (N.m)		Efficiency (%)	Backlash (without load)	Weight (g)
		Continuous Operation	Intermittent Operation			
1	33	1	1.3	90	$\leq 1^\circ$	140
2	39.3	3	3.9	81	$\leq 1.5^\circ$	155
3	45.6	6	7.2	73	$\leq 1.5^\circ$	170
4	51.9	6	7.2	65	$\leq 1.5^\circ$	185
5	58.2	6	7.2	59	$\leq 1.5^\circ$	200



Housing material	Stainless steel
Gear material	Steel
Recommended maximum input speed for:	
- Continuous operation	6,000 rpm
Direction of rotation (Input / Output)	=
Bearings on output shaft	Ball bearing
Output shaft load:	
- Radial (6mm from flange)	$\leq 140\text{N}$
- Axial	$\leq 100\text{N}$
Shaft press fit force	$\leq 140\text{N}$
Shaft play	
- Radial(5mm from flange)	$\leq 0.05\text{ mm}$
- Axial	$\leq 0.1\text{ mm}$
Recommended operating temperature range.	-30 to +105°C



Model	Diameter (mm)	Reduction Ratio	Number of gear stages
1232001	φ 32	--	--
1232002	φ 32	3.11	1
1232003	φ 32	3.714	1
1232004	φ 32	4.8	1
1232005	φ 32	5.75	1
1232006	φ 32	--	--
1232007	φ 32	9.679	2
1232009	φ 32	11.56	2
1232010	φ 32	13.8	2
1232013	φ 32	14.93	2
1232014	φ 32	17.8	2
1232015	φ 32	17.89	2
1232016	φ 32	21.36	2
1232017	φ 32	22.81	2
1232018	φ 32	23	2
1232023	φ 32	27.2	2
1232024	φ 32	27.6	2
1232025	φ 32	33.06	2
1232026	φ 32	35.2	2
1232027	φ 32	42.17	2
1232028	φ 32	102.8611	2
1232029	φ 32	122.8036	2
1232030	φ 32	158.7	2
1232031	φ 32	190.1094	2
1232032	φ 32	242.4583	2
1232033	φ 32	394.3704	2
1232034	φ 32	----	--
1232035	φ 32	30.11248	3
1232036	φ 32	35.95062	3
1232037	φ 32	42.92063	3
1232038	φ 32	46.45926	3



Model	Diameter (mm)	Reduction Ratio	Number of gear stages
1232039	φ 32	51.242	3
1232062	φ 32	55.46667	3
1232063	φ 32	66.2204	3
1232064	φ 32	70.97942	3
1232065	φ 32	71.68	3
1232066	φ 32	84.74074	3
1232067	φ 32	85.5771	3
1232068	φ 32	101.1701	3
1232069	φ 32	109.5111	3
1232070	φ 32	110.592	3
1232071	φ 32	130.7429	3
1232072	φ 32	167.3086	3
1232073	φ 32	168.96	3
1232074	φ 32	199.746	3
1232075	φ 32	591.451	3
1232076	φ 32	706.121	3
1232077	φ 32	912.525	3
1232078	φ 32	1093.13	3
1232079	φ 32	1394.14	3
1232080	φ 32	2892.05	3
1232081	φ 32	---	---
1232082	φ 32	245.96	4
1232083	φ 32	317.86	4
1232084	φ 32	375.775	4
1232085	φ 32	410.77	4
1232086	φ 32	485.62	4
1232087	φ 32	530.84	4
1232088	φ 32	627.57	4
1232089	φ 32	741.914	4
1232090	φ 32	811.01	4



Model	Diameter (mm)	Reduction Ratio	Number of gear stages
1232091	φ 32	958.78	4
1232092	φ 32	1093.13	4
1232093	φ 32	1239	4
1232094	φ 32	1394.14	4
1232095	φ 32	1464.8	4
1232096	φ 32	2892.05	4
1232097	φ 32	21208.4	4
---	φ 32	--	5
1232122	φ 32	4602.15	5
---	φ 32	-----	6
1232162	φ 32	155528	6