

Planetary Gearboxes PH Series

PH28

This is a group of planetary gearboxes or planetary gearhead of PH series, commercial series 2.

Its diameter is $\varnothing 28$ mm. It has 5 stages, 5 length, and 125 models for your selection.

It is for DC, step or servo motor that the power is less than 20W. The continuous output torque is 0.5-4.0 Nm.



Table 1: Features

Stages	Length (mm / in.)		Efficiency (%)	Backlash	Weight (g / oz)
	All steel gear	First stage plastic gear			
1	23.2 / 0.91	26.2 / 1.03	90	1.2°	50 / 1.32
2	27.7 / 1.09	30.7 / 1.21	81	1.2°	65 / 1.72
3	32.2 / 1.27	35.2 / 1.39	73	2.0°	85 / 2.25
4	36.7 / 1.44	39.7 / 1.56	65	2.0°	95 / 2.51
5	41.2 / 1.62	44.2 / 1.74	60	2.0°	110 / 2.91

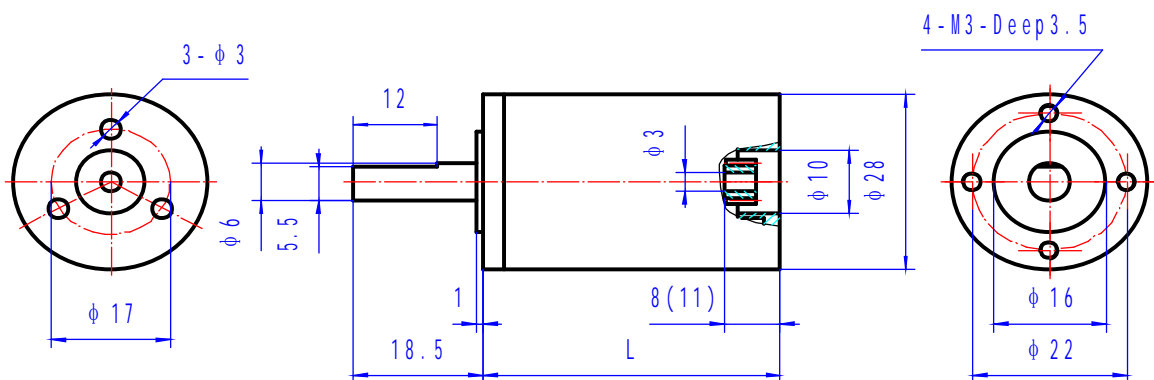


Table 2: Material and load

Items	Description
Shell Material	Stainless steel
Gear Material	Steel, hard gear surface*
Output Shaft Material	Stainless steel
Flange Material	Aluminum
Bearing on Output End	Rolling bearing
Max. Input Speed	6,000 rpm
Max. Radial Load	20N
Max. Axial Load	20N
Max. Install Force	100N
Radial Clearance	0.04mm
Axial Clearance	0.04mm
Operating Temperature	-40 to 125 °C, (-40 to 257°F) -10 to 85 °C, (-14 to 185°F) for plastic gears

*-- Optional of plastic or steel gear for first stage

Table 3: Ratio and output torque

Model #	Ratio	Output Torque (Nm)		Stages
		Continuous	Intermittent	
1228001	3.57	0.5	0.8	1
1228002	4.00			
1228003	4.60			
1228004	5.50			
1228005	12.76	2	3	2
1228006	14.29			
1228007	16.00			
1228008	16.43			
1228009	18.40			
1228010	19.64	2	3	2
1228011	21.16			
1228012	22.00			
1228013	25.30			
1228014	30.25			
1228015	45.55	3	4	3
1228016	51.02			
1228017	57.14			
1228018	58.67			
1228019	64.00			

(Continued from Table 3: Ratio and output torque)

Model #	Ratio	Output Torque (Nm)		Stages
		Continuous	Intermittent	
1228020	65.71	3	4	3
1228021	70.15			
1228022	73.60			
1228023	75.57			
1228024	78.57			
1228025	84.64	3	4	3
1228026	88.00			
1228027	90.36			
1228028	97.34			
1228029	101.20			
1228030	108.04	3	4	3
1228031	116.38			
1228032	121.00			
1228033	139.15			
1228034	166.38	2	3	
1228035	162.69	4	5	4
1228036	182.22			
1228037	204.08			
1228038	209.55			
1228039	228.57			
1228040	234.69	4	5	4
1228041	250.55			
1228042	256.00			
1228043	262.86			
1228044	269.90			
1228045	280.61	4	5	4
1228046	294.40			
1228047	302.29			
1228048	314.29			
1228049	322.70			
1228050	338.56	4	5	4
1228051	347.63			
1228052	352.00			
1228053	361.43			
1228054	385.84			
1228055	389.34	4	5	4
1228056	404.80			
1228057	415.64			
1228058	432.14			
1228059	447.75			

(Continued from Table 3: Ratio and output torque)

Model #	Ratio	Output Torque (Nm)		Stages
		Continuous	Intermittent	
1228060	465.52	4	5	4
1228061	484			
1228062	496.96			
1228063	535.35			
1228064	556.6			
1228065	594.2	4	5	4
1228066	640.09			
1228067	665.5			
1228068	765.33	3	4	
1228069	915.06			
1228070	581.05	4	5	5
1228071	650.77			
1228072	728.86			
1228073	748.39			
1228074	816.33			
1228075	838.19	4	5	5
1228076	894.81			
1228077	914.29			
1228078	938.78			
1228079	963.92			
1228080	1002.19	4	5	5
1228081	1024			
1228082	1051.43			
1228083	1079.59			
1228084	1122.45			
1228085	1152.51	4	5	5
1228086	1177.6			
1228087	1209.14			
1228088	1241.53			
1228089	1257.14			
1228090	1290.82	4	5	5
1228091	1354.24			
1228092	1378.01			
1228093	1390.51			
1228094	1408			
1228095	1445.71	4	5	5
1228096	1484.44			
1228097	1543.37			
1228098	1557.38			
1228099	1599.09			

(Continued from Table 3: Ratio and output torque)

Model #	Ratio	Output Torque (Nm)		Stages
		Continuous	Intermittent	
1228100	1619.2	4	5	5
1228101	1662.57			
1228102	1728.57			
1228103	1774.87			
1228104	1790.98			
1228105	1862.08	4	5	5
1228106	1911.96			
1228107	1936			
1228108	1987.86			
1228109	2059.63			
1228110	2122.13	4	5	5
1228111	2141.39			
1228112	2226.4			
1228113	2286.04			
1228114	2376.79			
1228115	2462.6	4	5	5
1228116	2560.36			
1228117	2662			
1228118	2733.3			
1228119	2944.41			
1228120	3061.3	4	5	5
1228121	3268.08			
1228122	3520.5			
1228123	3660.25			
1228124	4209.29	3	4	5
1228125	5032.84	2		

For more information about our planetary gearboxes in PJ series, PH series and PM series, please visit our website www.broadwaygear.com. Thanks!