

# Planetary Gearheads

## 3 Nm

For combination with:  
 DC-Motors:  
 M4870U  
 Brushless DC Motors:  
 M4350R

### Series M42P

	M42P...YS	M42P...YB
Housing material	powdered metal	powdered metal
Geartrain material	metal	metal
Recommended max. input speed for:		
– continuous operation	4,000 rpm	4,000 rpm
Backlash, at no-load	≤ 3°	≤ 3°
Bearings on output shaft	sintered bronze bearings	ball bearings
Shaft load, max.:		
– radial (10 mm from mounting face)	49 N	74.5 N
– axial	29.4 N	29.4 N
Shaft press fit force. max.	147 N	147 N
Shaft play (on bearing output):		
– radial	0.05 mm	0.04 mm
– axial	0.30 mm	0.30 mm
Operating temperature range	– 10 to + 60 °C	– 10 to + 60 °C

### Specifications

reduction ratio (nominal)	number of gear stages	weight without motor sintered bearing	weight without motor ball bearing	length without motor L2	length with motor M4350R L1	length with motor M4870U L1	output torque		direction of rotation (reversible)	efficiency %
		g	g	mm	mm	mm	continuous operation M max. Nm	intermittent operation M max. Nm		
4 :1	1	141	139	32.5	82.5	102.5	0.2	0.6	=	80
14 :1	2	193	191	39.2	89.2	109.2	0.6	1.9	=	70
17 :1	2	193	191	39.2	89.2	109.2	0.8	2.4	=	70
24 :1	2	193	191	39.2	*	109.2	1.0	2.9	=	70
49 :1	3	233	231	45.9	95.9	115.9	1.6	4.7	=	60
61 :1	3	233	231	45.9	95.9	115.9	1.8	5.3	=	60
84 :1	3	233	231	45.9	*	115.9	1.8	5.3	=	60
104 :1	3	233	231	45.9	*	115.9	2.0	5.9	=	60
144 :1	3	233	231	45.9	*	115.9	2.0	5.9	=	60
212 :1	4	283	281	52.6	102.6	122.6	2.5	7.4	=	50
294 :1	4	283	281	52.6	*	122.6	2.5	7.4	=	50
504 :1	4	283	281	52.6	*	122.6	2.9	8.8	=	50
624 :1	4	283	281	52.6	102.6	122.6	2.9	8.8	=	50
720 :1	4	283	281	52.6	102.6	122.6	2.9	8.8	=	50
864 :1	4	283	281	52.6	*	122.6	2.9	8.8	=	50
1,062 :1	5	328	326	59.6	109.6	129.6	2.9	8.8	=	40
1,470 :1	5	328	326	59.6	109.6	129.6	2.9	8.8	=	40
2,500 :1	5	328	326	59.6	109.6	129.6	2.9	8.8	=	40
3,000 :1	5	328	326	59.6	109.6	129.6	2.9	8.8	=	40
3,600 :1	5	328	326	59.6	109.6	129.6	2.9	8.8	=	40

\* Not available for use with Brushless Motor M4350R



