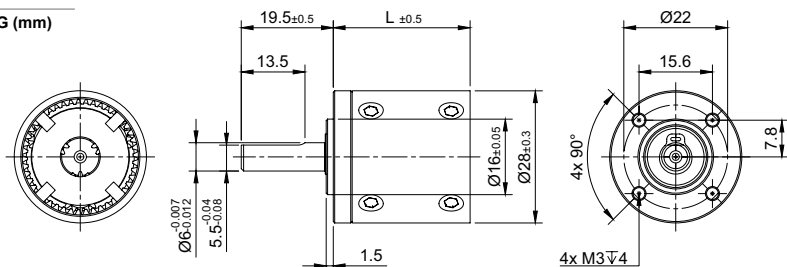


HP28 | Ø 28 mm | HIGH PRECISION PLANETARY GEARBOX



DRAWING (mm)



PHOTO



MODEL NO. DESIGNATION

HP28 - GEAR RATIO

Example: HP28-003.7

ACCESSORIES

● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

PLANETARY GEARBOX DATA STAGE 1 TO 2

C

Gear ratio		3.7:1	4.3:1	5:1	7:1	14:1	16:1	18:1	19:1	22:1	25:1	27:1	29:1	35:1	46:1
Gear stage		1	1	1	1	2	2	2	2	2	2	2	2	2	2
Max. nominal input speed	rpm	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000
Max. nominal torque	Nm	0.66	0.66	0.66	0.66	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Peak torque	Nm	0.98	0.98	0.98	0.98	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Efficiency	%	80	80	80	80	75	75	75	75	75	75	75	75	75	75
Length L	mm	29	29	29	29	38.95	38.95	38.95	38.95	38.95	38.95	38.95	38.95	38.95	38.95
Weight	g	160	160	160	160	210	210	210	210	210	210	210	210	210	210
Backlash no load	°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Radial load ¹	N	39	39	39	39	69	69	69	69	69	69	69	69	69	69
Shaft axial load	N	9.8	9.8	9.8	9.8	20	20	20	20	20	20	20	20	20	20

PLANETARY GEARBOX DATA STAGE 3

C

Gear ratio		51:1	59:1	68:1	71:1	82:1	93:1	95:1	100:1	107:1	115:1	124:1	130:1	139:1	150:1	169:1	181:1	195:1	236:1	308:1
Gear stage		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Max. nominal input speed	rpm	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000
Max. nominal torque	Nm	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Peak torque	Nm	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Efficiency	%	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Length L	mm	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7
Weight	g	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260
Backlash no load	°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Radial load ¹	N	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
Shaft axial load	N	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29

OTHER GEARBOX DATA

C

Service life	h	1000
Performance tolerances	%	15
Operating temperature	°C	-30 to 100
Relative humidity	%	20 to 85
Noise level ²	dB(A)	Depending on motor model
IP rating		IP40
Manufacturing standard		ISO 9001 ISO 14001 ISO 5001
CE label UL label		No No
Shaft press fit force max.	N	98
Radial play	mm	0.05
Thrust play	mm	0.3
Bearing type		Ball bearing
Shaft material		Steel
Housing material		Steel
Direction of rotation		CW and CCW

MOTOR COMPATIBILITY³

Compatible motor types Brushed DC motors, brushless DC motors, and stepping motors.

EXAMPLE GEAR MOTOR DATA FOR COMPATIBLE MODEL

Motor model	BT2838-12
Gearbox	HP28-018
Gear ratio	18:1
Nominal speed	rpm 290
Nominal torque	Nm 0.078
Nominal power	W 2.4

NOTES

1. 10 mm from flange.
2. Contact us for more detailed information.
3. Transmotec offers a range of different compatible motors. Visit www.transmotec.com for more information.