

TSU16036 \varnothing 16mm 14/23W

Motor Data		Part Numbers			
		TSU16036H12	TSU16036H18	TSU16036H24	TSU16036H36
Nominal voltage	V	12	18	24	36
No load speed	rpm	14800	17100	15000	17200
No load current	mA	165	160	115	100
Nominal speed	rpm	11800	13800	11900	14000
Max. continuous torque	mNm	10.2	9.7	9.9	9.4
Max. continuous current	A	1.49	1.11	0.76	0.57
Stall torque	mNm	56.0	61.5	57.8	63.5
Stall current	A	7.27	6.02	3.75	3.16
Max efficiency	%	81	81	80	80
Resistance (phase-phase)	Ohm	1.65	2.99	6.40	11.4
Inductance (phase-phase)	mH	0.102	0.180	0.409	0.707
Torque constant	mNm / A	7.70	10.21	15.40	20.10
Speed constant	rpm / V	1240	935	620	475
Speed/torque gradient	rpm / mNm	266	274	258	269
Mechanical time constant	ms	1.67	1.72	1.62	1.69
Rotor inertia	gcm ²	0.6	0.6	0.6	0.6

Specification		
Bearing		Ball bearing
Max speed	rpm	30000
Axial play	mm	0..0.14
Radial play		Preloaded
Max axial load (dynamic)	N	1
Max. force for press fits (static)	N	18
Max radial load (5mm from flange)	N	6
Ambient temperature	° C	-40~+100
Max winding temperature	° C	155
Thermal resistance		
Housing - Ambient	° C / W	20.5
Winding - Housing	° C / W	3.30
Thermal time constant		
Motor	s	525
Winding	s	0.72
Number of pole pairs		1
Number of phases		3
Weight	g	44

Combination
Gearbox PG16C Ø16mm 0.5Nm 4:1-850:1 Page 44
Encoder Please contact local sales.
Option With hall sensor / Sensorless

Product Overview

Slotless Brushless DC Motor

Coreless Brushed DC Motor

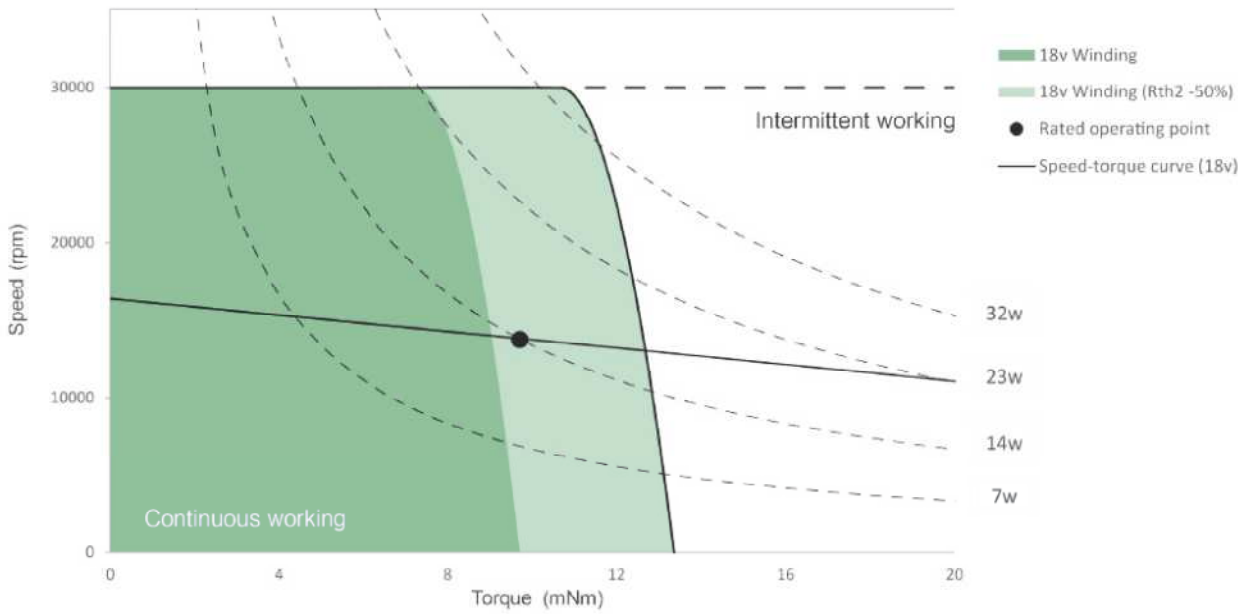
Planetary Gearbox

Encoder

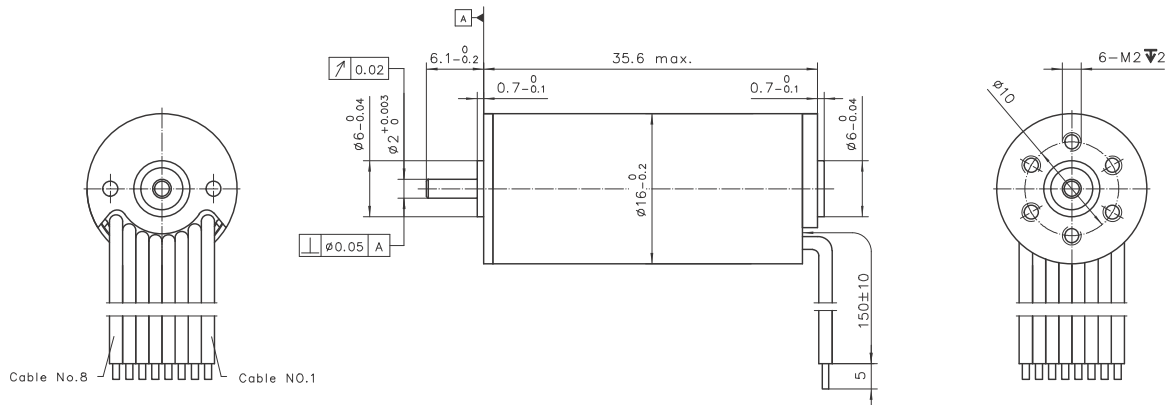
Drive

Technical

Operating Range



Dimension



Connection (Cable AWG 24)

Cable No.	Signal	Color
1	Motor winding 1	brown
2	Motor winding 2	red
3	Motor winding 3	orange
4	V _{Hall} 3...24VDC	yellow
5	GND	green
6	Hall IC 1	blue
7	Hall IC 2	violet
8	Hall IC 3	grey

TSU16036Hxx-S101