

TSH16056 \varnothing 16mm 75/90W

Motor Data		Part Numbers			
		TSH16056H18	TSH16056H24	TSH16056H36	TSH16056H48
Nominal voltage	V	18	24	36	48
No load speed	rpm	47600	40800	49600	44800
No load current	mA	560	510	680	530
Nominal speed	rpm	44700	38200	46600	42200
Max. continuous torque	mNm	15.8	16.3	13.2	13.1
Max. continuous current	A	4.93	3.41	2.57	1.82
Stall torque	mNm	302.8	299.6	317.6	310.3
Stall current	A	83.72	53.33	45.57	30.38
Max efficiency	%	90	89	89	87
Resistance (phase-phase)	Ohm	0.22	0.45	0.79	1.58
Inductance (phase-phase)	mH	0.019	0.045	0.081	0.151
Torque constant	mNm / A	3.62	5.62	6.97	10.21
Speed constant	rpm / V	2640	1700	1370	935
Speed/torque gradient	rpm / mNm	157	136	155	145
Mechanical time constant	ms	1.17	1.01	1.15	1.08
Rotor inertia	gcm ²	0.71	0.71	0.71	0.71

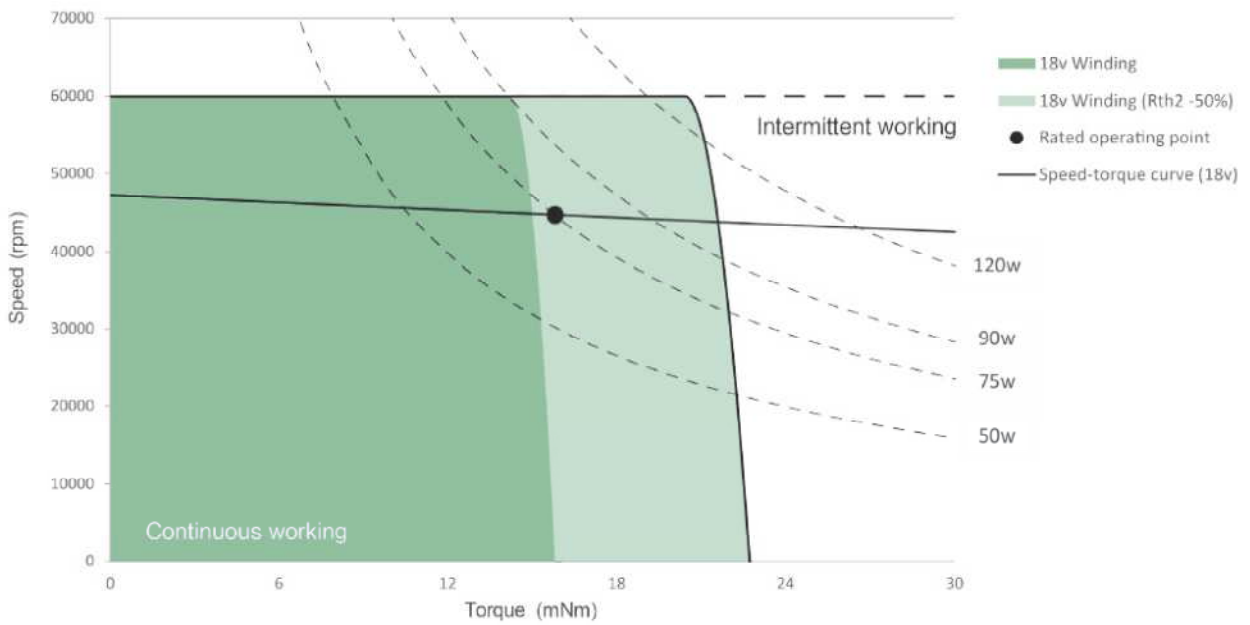
Specification		
Bearing		Ball bearing
Max speed	rpm	60000
Axial play	mm	0..0.29
Radial play		Preloaded
Max axial load (dynamic)	N	1.5
Max. force for press fits (static)	N	60
Max radial load (5mm from flange)	N	10
Ambient temperature	° C	-40~+100
Max winding temperature	° C	155
Thermal resistance		
Housing - Ambient	° C / W	9.0
Winding - Housing	° C / W	1.75
Thermal time constant		
Motor	s	588
Winding	s	1.10
Number of pole pairs		1
Number of phases		3
Weight	g	73

Combination

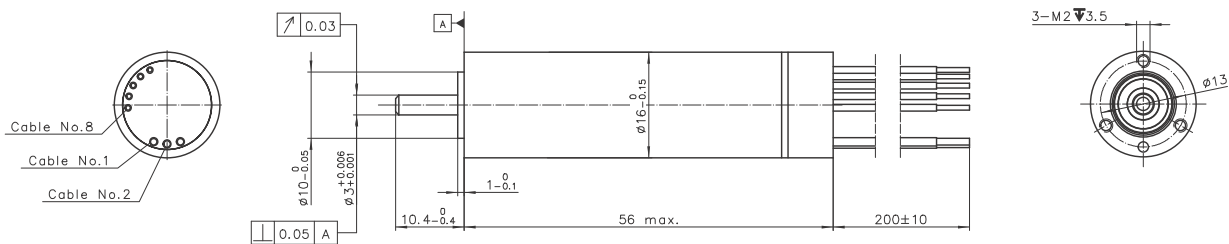
Gearbox Encoder
Please contact local sales.

Option
With hall sensor / Sensorless

Operating Range



Dimension



Connection

Cable No.	Signal	Color	Wire gage
1	Motor winding 1	red	AWG 22
2	Motor winding 2	black	
3	Motor winding 3	white	
4	V _{Hall} 3...24VDC	orange	AWG 26
5	GND	blue	
6	Hall IC 1	yellow	
7	Hall IC 2	brown	
8	Hall IC 3	grey	

TSH16056Hxx-S001