

# TSH22060 Ø22mm 120/150W

## Motor Data

		TSH22060H24	TSH22060H36	TSH22060H48
Nominal voltage	V	24	36	48
No load speed	rpm	37000	38200	38200
No load current	mA	650	590	520
Nominal speed	rpm	35300	36600	36500
Max. continuous torque	mNm	32.8	33.8	30.6
Max. continuous current	A	5.93	4.34	3.07
Stall torque	mNm	795.8	926.6	823.7
Stall current	A	128.34	102.86	68.57
Max efficiency	%	91	91	91
Resistance (phase-phase)	Ohm	0.19	0.35	0.70
Inductance (phase-phase)	mH	0.024	0.053	0.097
Torque constant	mNm / A	6.20	9.01	12.01
Speed constant	rpm / V	1540	1060	795
Speed/torque gradient	rpm / mNm	46	41	46
Mechanical time constant	ms	1.57	1.39	1.57
Rotor inertia	gcm <sup>2</sup>	3.23	3.23	3.23

## Specification

Bearing		Ball bearing
Max speed	rpm	50000
Axial play	mm	0..0.24
Radial play		Preloaded
Max axial load (dynamic)	N	4
Max. force for press fits (static)	N	110
Max radial load (5mm from flange)	N	16
Ambient temperature	° C	-40~+100
Max winding temperature	° C	155
Thermal resistance		
Housing - Ambient	° C/ W	12.7
Winding - Housing	° C/ W	0.60
Thermal time constant		
Motor	s	400
Winding	s	1.56
Number of pole pairs		1
Number of phases		3
Weight	g	140

## Combination

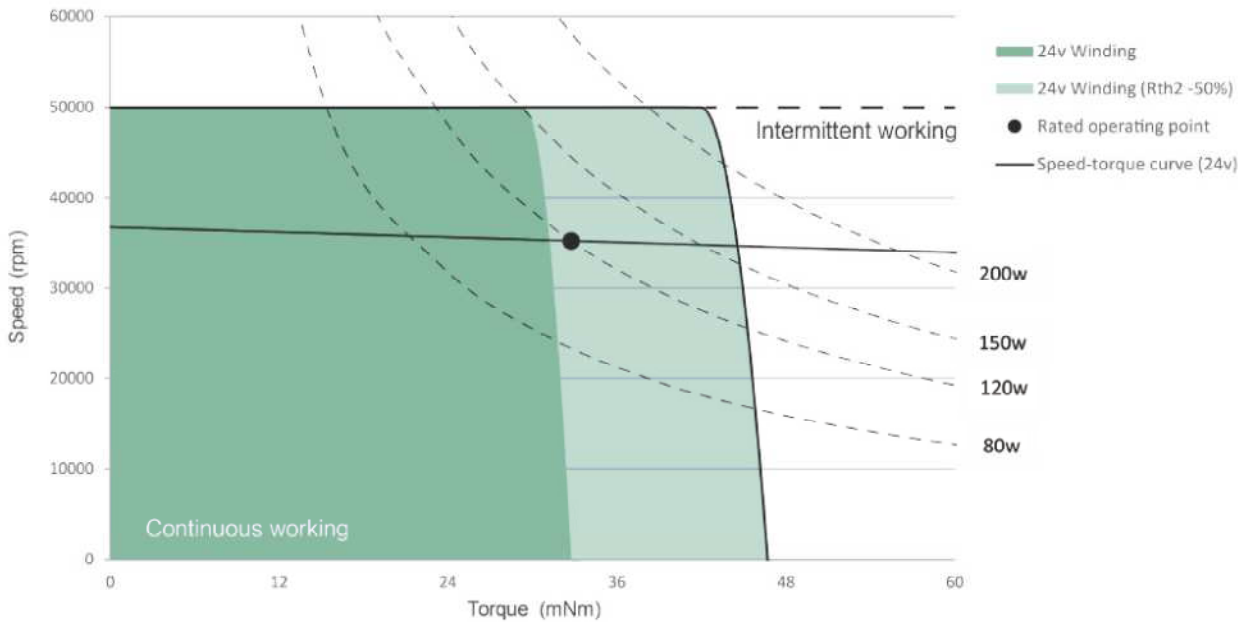
### Gearbox Encoder

Please contact local sales.

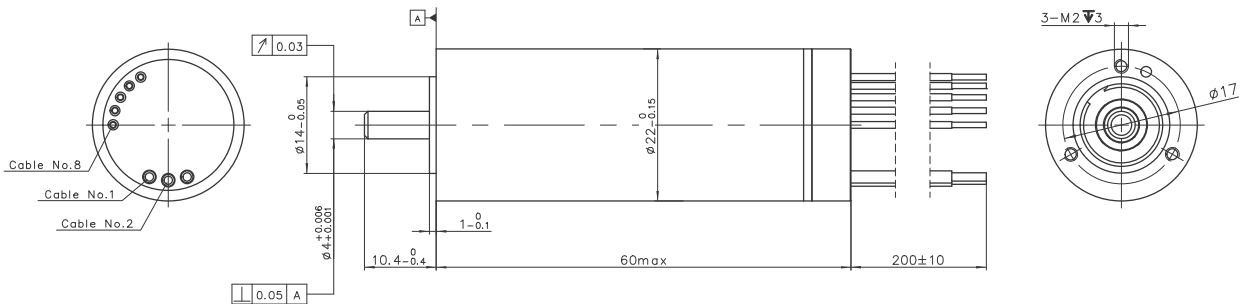
### Option

With hall sensor / Sensorless

### Operating Range



### Dimension



Connection

Cable No.	Signal	Color	Wire gage
1	Motor winding 1	red	AWG 18
2	Motor winding 2	black	
3	Motor winding 3	white	
4	Vhall 3...32VDC	orange	AWG 26
5	GND	blue	
6	Hall IC 1	yellow	
7	Hall IC 2	brown	
8	Hall IC 3	grey	

TSH22060Hxx-S001