HANS-G Series

Frame Inner Rotor Torque Motor

The HANS-G series is a framed inner-rotor torque motor with direct-drive architecture, delivering high dynamic response and precise positioning. It integrates a BISS-C absolute encoder and is available in standard or custom configurations.

Features

- Inner rotor or outer rotor structure
- High speed or low speed winding design
- Reliable performance, mature process, fast delivery
- Integrated BISS-C interface absolute position feedback

Applications

- 3C Devices
- Display Panels
- Semiconductors
- Medical Equipment
- Precision Machine Tools
- PCB Equipment and Other Applications

Parameters

HAN'S MOTOR

HANS-G-xxx-Dxxx -Hxxx-T43-1-x	Symbol	Unit	G-015	G-025	G-050
Cable Outlet			1	1	1
Outer Diameter	D1	mm	235	208	208
Center Hole	D2	mm	50	43	43
Installation Height	H	mm	42	90	130
Continuous Torque (Tmax)	Tc	Nm	14	25	50
Peak Torque	Tp	Nm	43	75	150
Vmax, Tc @ Vbu s= 310 Vdc	Nmax, Tc	Rpm	550	530	250
Vmax, Tp @ Vbus = 310 Vdc	Nmax, Tp	Rpm	420	460	190
Vmax, 0 @ Vbus = 310 Vdc	Nmax, 0	Rpm	620	600	300
Encoder (BISS-C)		P / rev	23 bits	23 bits	23 bits
Positioning Accuracy		arc sec	± 10 / ± 5	± 10 / ± 5	± 10 / ± 5
Repeat Accuracy		arc sec	±1.5	±1.0	±1.0
Maximum Axial Load (recommend)	Fa	N	3000	3000	3000
Maximum Torque Load (recommend)	T	Nm	200	200	200
Motor Outlet		M	0.2	0.2	0.2
Cable Bending Radius (Within Drag Chain）		mm	37.5	37.5	37.5
Continuous Current (Tmax)	Ic	Arms	3.0	4.3	4.3
Peak Current (1 s)	Ip	Arms	9.0	13.0	13.0
Torque Constant (Within 25 ℃ ± 5 ℃）	Tf	Nm / Arms	4.70	5.75	11.50
Electromotive constant (within 25℃±5℃）	Te	Vrms / rad / s	1.58	1.92	3.83
Resistance (Within 25 ℃ ± 5 ℃）	R	Ω (p-p)	5.6	2.5	4.5
Inductance (Within 25 ℃ ± 5 ℃）	L	mH (p-p)	15.0	7.4	12.2
Pole Pairs	p		16	16	16
Max. Coil Temperature	Tmax	℃	120	120	120
Motor Mass		KG	8	17	27
Mover Mass	Mc	KG	2.5	6	8.3
Rotor Moment of Inertia	Jm	Kg * m²	0.009	0.015	0.027
Axial Runout		mm	0.03	0.05	0.05
Radial Runout		mm	0.03	0.05	0.05

* All specifications are typical data and subject to change without notice due to product improvements.

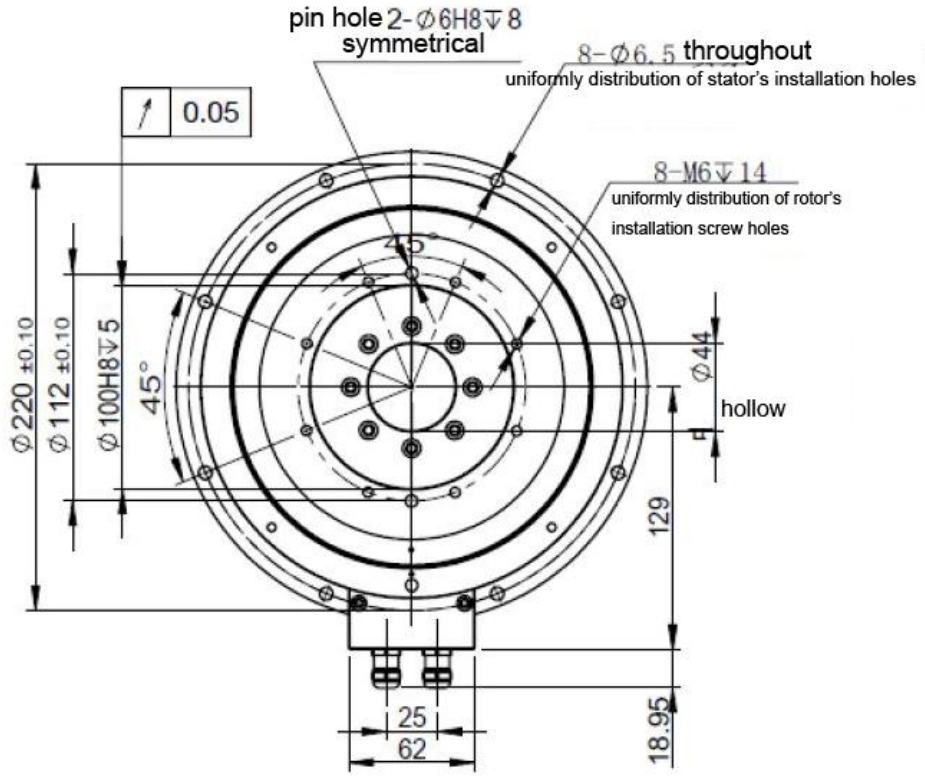
Parameters

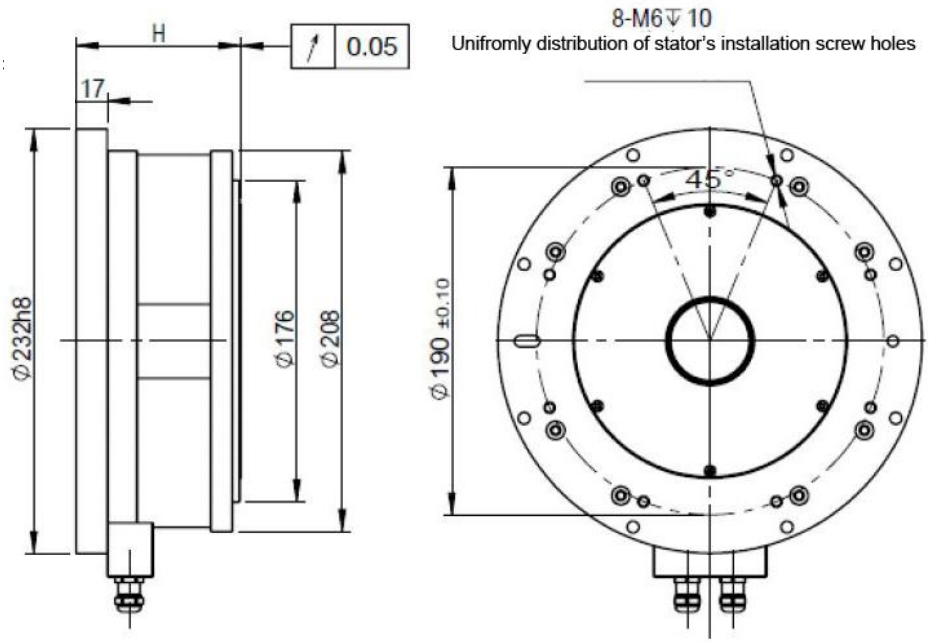
HAN'S MOTOR

HANS-G-xxx-Dxxx -Hxxx-T43-1-x	Symbol	Unit	G-070	G-120
Cable Outlet			1	1
Outer Diameter	D1	mm	208	235
Center Hole	D2	mm	43	42
Installation Height	H	mm	170	165
Continuous Torque (Tmax)	Tc	Nm	74	120
Peak Torque	Tp	Nm	222	310
Vmax, Tc @ Vbu s= 310 Vdc	Nmax, Tc	Rpm	160	120
Vmax, Tp @ Vbus = 310 Vdc	Nmax, Tp	Rpm	110	55
Vmax, 0 @ Vbus = 310 Vdc	Nmax, 0	Rpm	200	150
Encoder (BISS-C)		P / rev	23 bits	23 bits
Positioning Accuracy		arc sec	± 10 / ± 5	± 10 / ± 5
Repeat Accuracy		arc sec	± 1.0	± 1.5
Maximum Axial Load (recommend)	Fa	N	3000	3000
Maximum Torque Load (recommend)	T	Nm	200	200
Motor Outlet		M	0.2	0.2
Cable Bending Radius (Within Drag Chain）		mm	37.5	37.5
Continuous Current (Tmax)	Ic	Arms	4.3	5.5
Peak Current (1 s)	Ip	Arms	13.0	15.0
Torque Constant (Within 25 ℃ ± 5 ℃）	Tf	Nm / Arms	17.20	21.82
Electromotive constant (within 25℃±5℃）	Te	Vrms / rad / s	5.73	7.27
Resistance (Within 25 ℃ ± 5 ℃）	R	Ω (p-p)	5.7	7.1
Inductance (Within 25 ℃ ± 5 ℃）	L	mH (p-p)	16.0	24.0
Pole Pairs	p		16	16
Max. Coil Temperature	Tmax	℃	120	120
Motor Mass		KG	32	35
Mover Mass	Mc	KG	9.2	8.7
Rotor Moment of Inertia	Jm	Kg * m²	0.031	0.041
Axial Runout		mm	0.05	0.05
Radial Runout		mm	0.05	0.05

* All specifications are typical data and subject to change without notice due to product improvements.

Laser Dimensions (mm)





Motor type	"H"
HANS-G-015-D235-H42-T50-1-A	42