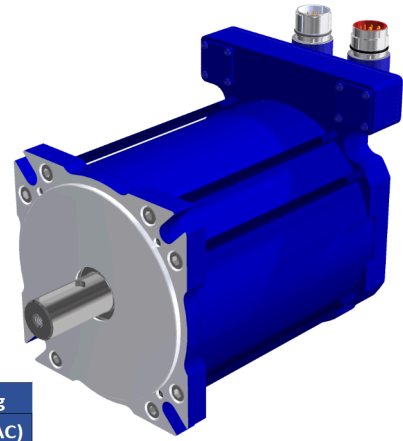




Swedish Innovative Servo Motion
Engineering Since 1994



HDD 14R - Data sheet

Electric data

Value	Unit	Winding
		Pa (400VAC)
Number of poles		20
Number of pole pairs		10
Inductance/Phase	mH	1.78
Resistance/Phase	Ohm	0.24
Resistance/Phase-Phase	Ohm	0.48
Back EMF/Phase-Phase RMS	Vs/rad	1.02
Back EMF @ 1000 rpm	V	106
Torque constant (RMS)	Nm/A	1.76
Max rail voltage	V	750
Recommended peak current	A	54
Torque at recommended peak current	Nm	93

Mechanical data (resolver feedback)

Value	Unit	HDD14R	
		no brake	brake
J	kgcm ²	71.0	71.4
Mass	kg	16.0	16.5

Holding brake

Value	Unit	
Torque	Nm	9
J	kgcm ²	0.4
Voltage	V DC	24
Power	W	12

Thermistors

Overheat protection consists of triple PTC thermistors. One on each phase.	
R @ 25 C	100 to 350 Ohm
R @ 145 C	< 1650 Ohm
R @ 155 C	> 4 kOhm

Protection class

HDD motors comply with the requirements for IP 65. IP-67 is available on request.

Insulation class

The insulation system complies with the requirements of EEC LV Directive 73/23/EEC and 93/68/EEC. Test report E9911111E01.

Motor name structure

Type	Flange size	Stator length	Winding	Feedback	Power connector	Brake	Shaft key	Options
HDD	14	R	-Pa	-A	-A	-A	-A	-AAA

Type

HDD = shaft motor, ICM = internal coupling motor.

Flange size

Approximate in cm. 14 = 140 mm.

Stator length

HDD: J(shortest), N, Q, R (longest), ICM: J (shortest), N (longest).

Winding

Suitable rail voltage at 2000 rpm.

Pa	560V
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Feedback

See the feedback list on www.hddservo.com/product-options/

Power connector

Many different pinouts available; see www.hddservo.com/product-options/

Brake

A = no brake, D = holding brake. Data see above.

Shaft key

A = shaft with key, B = shaft without key.

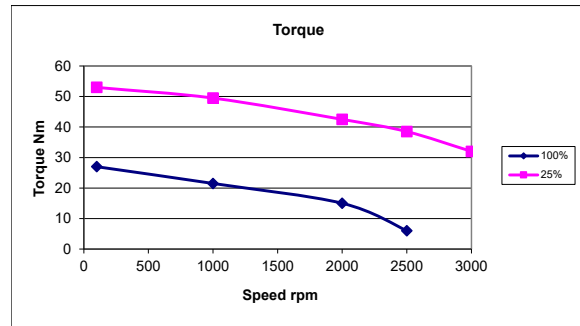
Options

AAA = standard. For other options please contact HDD.

Torque

Torque in Nm at 90°C temp rise (median temp rise, i.e. average between min and max temp for 25% cycle).

Duty cycle	100%	25%
100rpm	27	53
1000rpm	21.5	49.5
2000rpm	15	42.5
2500rpm	6	38.5
3000rpm	-	32



Current

Current at 90°C temp rise, in Ampere rms.

Winding	Pa	
Duty cycle	100%	25%
100rpm	15.5	30.5
1000rpm	12.5	28.5
2000rpm	9	26
2500rpm	4	25
3000rpm	0	22.5