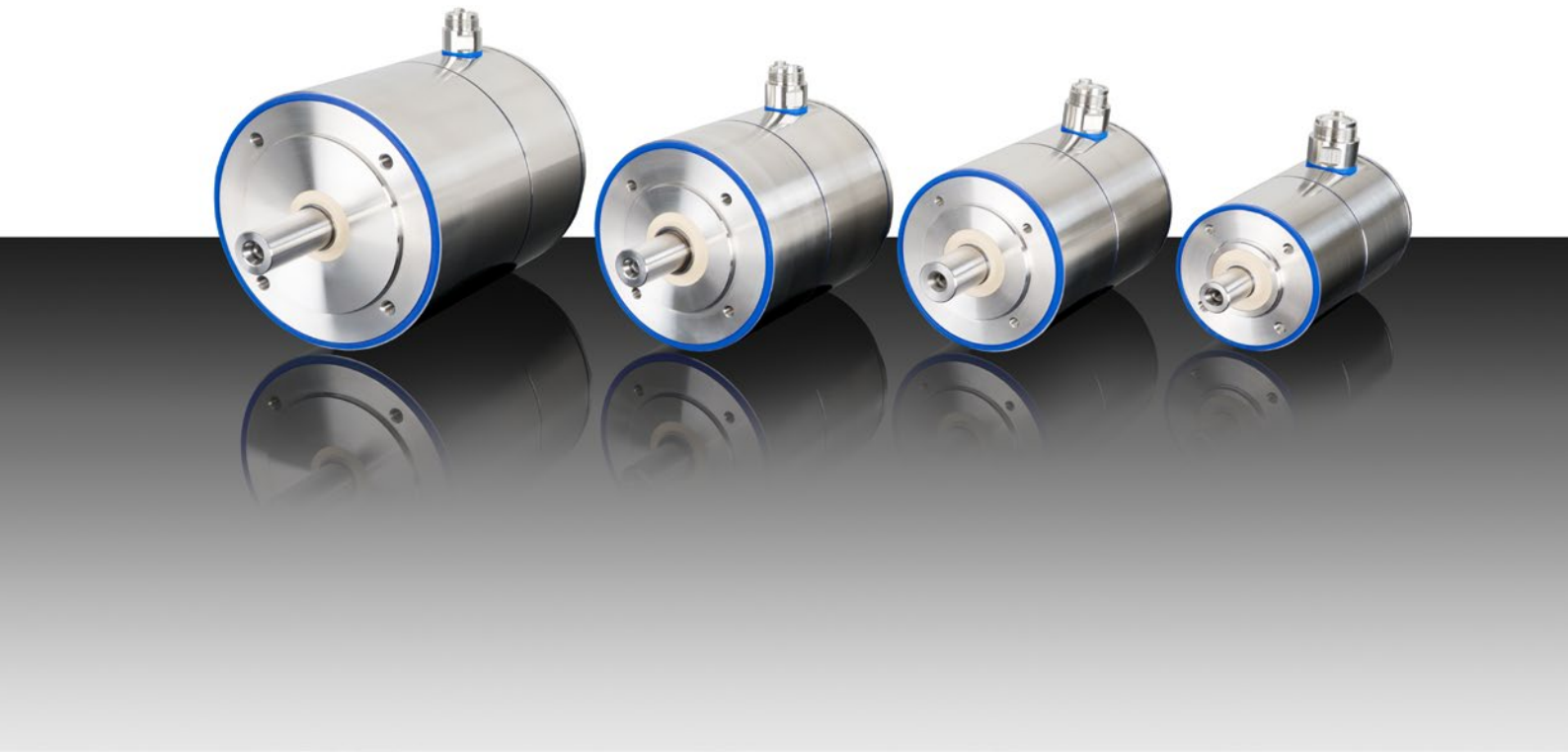
Heidrive

An Allient Company



Stainless Steel - Servo Drive Systems

HeiMotion

STAINLESS STEEL

Introduction

Heidrive‘s stainless steel motors have been specially developed for the food, beverage and medical industries, as well as for industries with very high demands on cleanliness, hygiene and corrosion protection.

They are also ideally suited for use in the chemical or pharmaceutical industry, and for areas that require special cleaning or disinfection.

The sealing concept prevents water or dust from penetrating the inside of the motor. No dirt particles adhere to the deadspace-free design. The stainless steel servo motor solution is also perfect for use in areas where high-pressure cleaning is required, as it complies with protection class IP69K. The smooth surface material of the drives has been developed in accordance with EHEDG and FDA guidelines.

The motor shaft, housing and flange are made of food-grade stainless steel. The shaft seal is FDA-compliant and also has a long service life even under the harshest environmental conditions. In addition, the motors are maintenance-free and the magnetic circuits of the motors are based on the proven HeiMotion series. A further outstanding feature is the motor version with integrated electronics of the HMSi06 series, because here the servo controller is integrated directly in the motor. In combination with an integrated single or absolute encoder, a very compact drive unit is obtained. A clear advantage of a decentralized controller solution is the significantly lower cabling effort.

As standard, the series is equipped with a stainless steel connector qualified for this environment. On request, a cable version can also be implemented in the project business.

To round off the drive package perfectly, planetary gear units are also available in a stainless steel version.

The HeiMotion Stainless Steel motors are available in four different flange sizes:

- 68 mm - HMS06
- 88 mm - HMS08
- 108 mm - HMS10
- 138 mm - HMS13

Order Code

HMS08-024-320-31-0PE1MI17W

Flange Dimension

68 mm	→	06
88 mm	→	08
108 mm	→	10
138 mm	→	13

Coil Size

HMS06	→	011
	→	019
	→	026
HMS08	→	024
	→	032
	→	042
	→	057
HMS10	→	039
	→	057
	→	076
	→	105
HMS13	→	133
	→	190
	→	245

DC Link Voltage

320 V	→	320
560 V	→	560

Rated Speed

1,500 rpm	→	15
2,000 rpm	→	20
2,500 rpm	→	25
3,100 rpm	→	31

Options

Without brake	0XXXXXXXX
With brake	BXXXXXXXX
Without featherkey	X0XXXXXXX
With featherkey	XPXXXXXXX
Resolver[1) 3)]	XXR1PXXXX
Resolver securely attached[1) 3)]	XXRAPXXXX
HES 1 (1.0 Vss)[3)]	XXM2SXXXX
HEM 1 (1.0 Vss with battery)[1) 3)]	XXM2MXXXX
HS16[3)]	XXS1SXXXX
HM16[3)]	XXB1MXXXX
ECI 1119	XXE1SXXXX
EQI 1131	XXE1MXXXX
ECI 1319[2)]	XXE3SXXXX
EQI 1331[2)]	XXE3MXXXX
SEK 37[1) 3)]	XXH1SXXXX
SEL 37[1) 3)]	XXH1MXXXX
EES 37	XXD1SXXXX
EES 37-2 securely attached[1)]	XXDASXXXX
EEM 37	XXD1MXXXX
EEM 37-2 securely attached[1)]	XXDAMXXXX
M17 H-Tec	XXXXXI17X
Without RWDR	XXXXXXXX0
With RWDR	XXXXXXXXW

1) Only on request
2) Only for HMS10 and HMS13
3) In combination of motor with brake, the temperature sensor is not required

Example: HMS08-024-320-31-0PE1MI17W

Flange dimension 88 mm
Coil size 024
DC link voltage 320 V
Rated speed 3,100 min^{-1}

Options:
Without brake
With key
SKM 36 encoder
Angled M23 plug
With radial shaft seal

HMS06

Technical Information

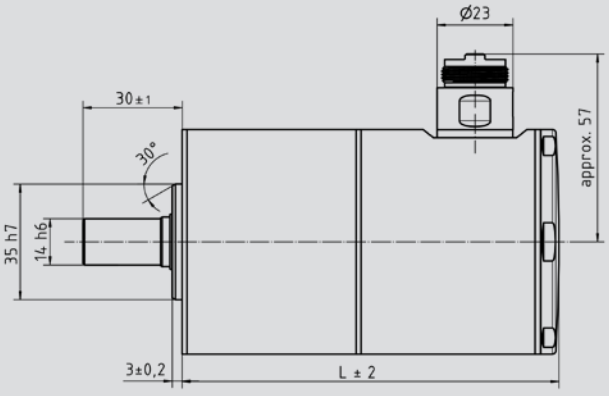
Flange dimensions	Ø 68 mm
Rated speed	3,100 rpm
Protection class	IP69K
Power / signal plug	Plug for single-cable solution radial
Encoder	EnDat® 2,2, HIPERFACE DSL®, Resolver*, SSI*, Biss-C*, HIPERFACE®*
Brake	Permanent magnet brake*
Planetary gear	Optionally available, currently in development
Integrated electronics	Optionally available, currently in development

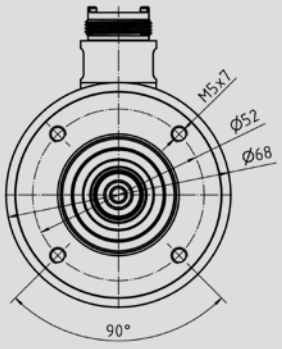
* In combination of motor with brake, the temperature sensor is not included
Derating in S1 mode on request

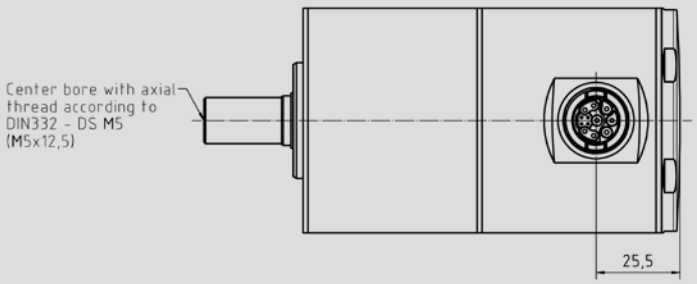
Motor Type	U_{bus} [V_{DC}]	n_n [rpm]	M_o [Nm]	M_n [Nm]	M_o** [Nm]	M_n** [Nm]
HMS06-011	320 / 560	3,100	0.80	0.70	0.75	0.60
HMS06-019			1.25	0.80	1.00	0.70
HMS06-026			1.70	0.90	1.30	0.80

** Encoder version: EnDat®, HIPERFACE®, HIPERFACE DSL®, SSI, BiSS-C

Dimensions







Motor	L [mm] without brake	L [mm] with brake
HMS06-011	114 mm	148 mm
HMS06-019	139 mm	173 mm
HMS06-026	164 mm	198 mm

HMS08

Technical Information

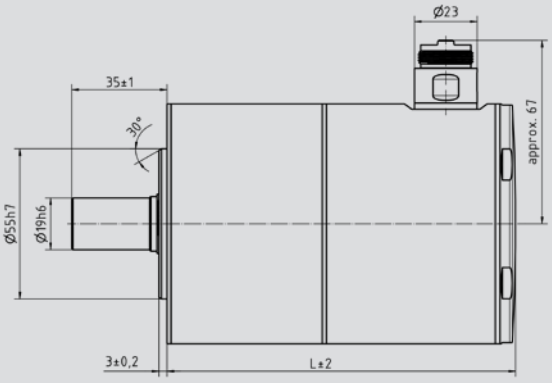
Flange dimensions	Ø 88 mm
Rated speed	3,100 rpm
Protection class	IP69K
Power / Signal plug	Plug for single-cable solution radial
Encoder	EnDat® 2,2, HIPERFACE DSL®, Resolver*, SSI*, Biss-C*, HIPERFACE®*
Brake	Permanent magnet brake*
Planetary gear	Optionally available, currently in development
Integrated electronics	Optionally available, currently in development

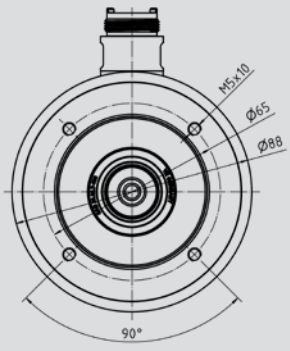
* In combination of motor with brake, the temperature sensor is not included
Derating in S1 mode on request

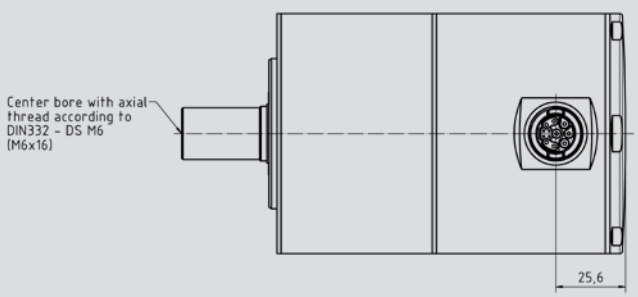
Motor Type	U_{bus} [V_{DC}]	n_n [rpm]	M_o [Nm]	M_n [Nm]	M_o** [Nm]	M_n** [Nm]
HMS08-024	320 / 560	3,100	1.50	1.20	1.40	0.80
HMS08-032			2.30	1.80	2.10	1.20
HMS08-042			3.10	2.40	2.80	1.50
HMS08-057			4.10	3.00	3.80	1.80

** Encoder version: EnDat®, HIPERFACE®, HIPERFACE DSL®, SSI, BiSS-C

Dimensions







Motor	L [mm] without brake	L [mm] with brake
HMS08-024	128 mm	163 mm
HMS08-032	143 mm	178 mm
HMS08-042	158 mm	193 mm
HMS08-057	188 mm	223 mm

HMS10

Technical Information

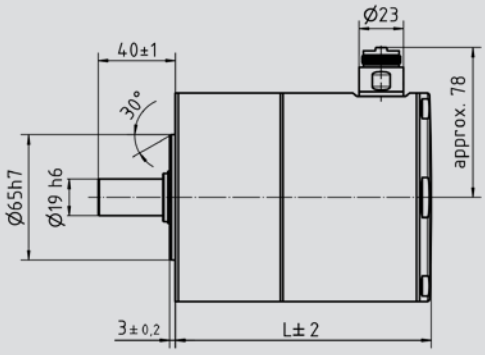
Flange dimensions	Ø 108 mm
Rated speed	2,000 rpm, 2,500 rpm
Protection class	IP69K
Power / Signal plug	Plug for single-cable solution radial
Encoder	EnDat® 2,2, HIPERFACE DSL®, Resolver*, SSI*, Biss-C*, HIPERFACE®*
Brake	Permanent magnet brake*

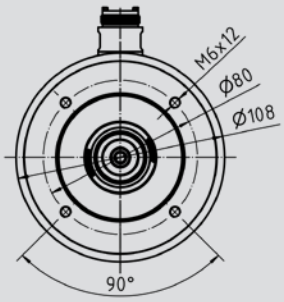
* In combination of motor with brake, the temperature sensor is not included
Derating in S1 mode on request

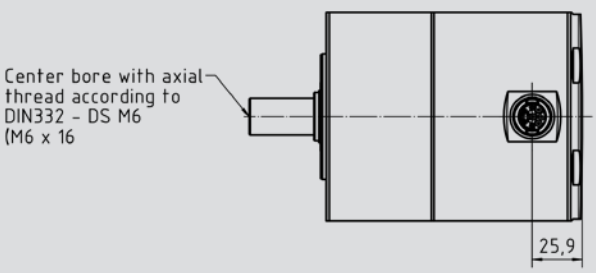
Motor Type	U_{bus} [V_{DC}]	n_n [rpm]	M_o [Nm]	M_n [Nm]	M_o** [Nm]	M_n** [Nm]
HMS10-039	320 / 560	2,500	3.10	2.20	2.90	1.40
HMS10-057			4.80	3.30	4.40	2.10
HMS10-076			6.50	4.50	5.90	2.80
HMS10-105		2,000	9.20	6.80	7.30	3.50

** Encoder version: EnDat®, HIPERFACE®, HIPERFACE DSL®, SSI, BiSS-C

Dimensions







Motor	L [mm] without brake	L [mm] with brake
HMS10-039	127[1] / 133[2] mm	164[1] / 170[2] mm
HMS10-057	142[1] / 148[2] mm	179[1] / 185[2] mm
HMS10-076	157[1] / 163[2] mm	194[1] / 200[2] mm
HMS10-105	187[1] / 193[2] mm	224[1] / 230[2] mm

[1] With encoder: ECI 1319, EQI 1331
[2] Other encoders

HMS13

Technical Information

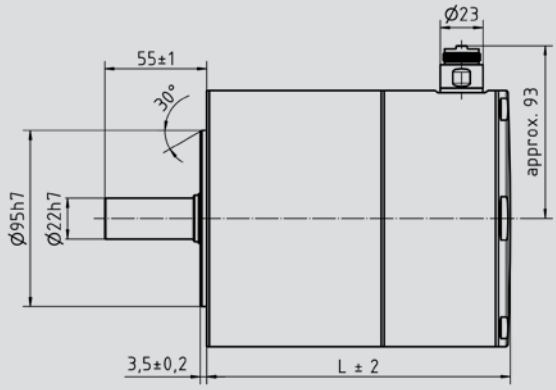
Flange dimensions	Ø 138 mm
Rated speed	2,000 rpm, 1,500 rpm
Protection class	IP69K
Power / Signal plug	Plug for single-cable solution radial
Encoder	EnDat® 2,2, HIPERFACE DSL®, Resolver*, SSI*, Biss-C*, HIPERFACE®*
Brake	Permanent magnet brake*

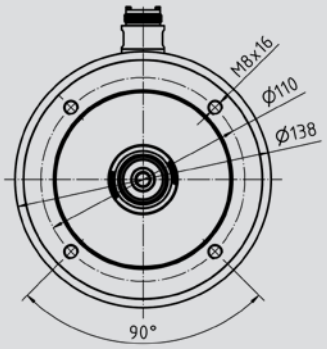
* In combination of motor with brake, the temperature sensor is not included
Derating in S1 mode on request

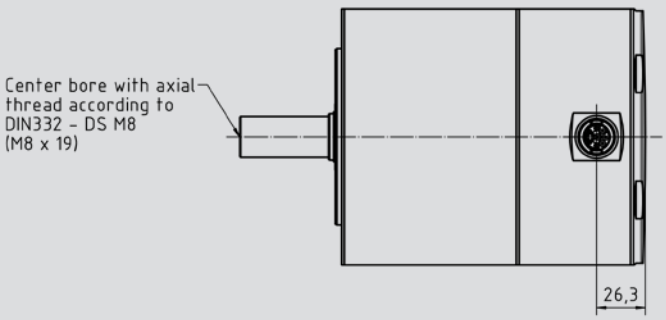
Motortyp	U_{bus} [V_{DC}]	n_n [rpm]	M_o [Nm]	M_n [Nm]	M_o** [Nm]	M_n** [Nm]
HMS13-133	560	2,000	12.00	9.70	11.00	6.20
HMS13-190			15.50	10.50	15.00	7.60
HMS13-245		1,500	19.20	12.00	19.20	9.00

** Encoder version: EnDat®, HIPERFACE®, HIPERFACE DSL®, SSI, BiSS-C

Dimensions







	L [mm]	
Motortyp	ohne Bremse	mit Bremse
HMS13-133	164[1] / 169[2] mm	211[1] / 216[2] mm
HMS13-190	194[1] / 199[2] mm	241[1] / 246[2] mm
HMS13-245	224[1] / 229[2] mm	271[1] / 276[2] mm

[1] With encoder: ECI 1319, EQI 1331
[2] Other encoders

Customized Applications

Examples from the development of customer-specific applications:

Stainless steel motors with directly mounted gears and cable version

The stainless steel series, like the HMD Next Generation and HMP series, can be combined with a directly mounted gear.

Stainless steel motors with integrated electronics and cable version

As known from the HeiMotion Dynamic servo motor series, the stainless steel motors are also available with 48 volt windings and integrated servo controller.

More detailed information is available upon request.

Notes

Notes

Notes

Technical data subject to change! Last changes: 07/2025

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