



## AC Servomotor HDD / ICM-Series



### Power

- Rated torque 1.2 to 10.0 Nm
- Sizes 92 and 140 mm

### Features

- Very compact size
- High torque
- High torsional stiffness

### Executions

- Wide range of standard models
- Customized versions
- Hollow shaft versions

# AC Servomotor, HDD/ICM-Series

These motors are among the most compact AC-Servomotors available on the market. With their short length and their relatively big shaft they are very stiff regarding torsion. Therefore they are extremely well suited for direct drive applications for example in handling.

## Technical data

Type	Torque	Speed	Winding Ma (230VAC)		Winding Pa (400VAC)		Length [L]		
	$M_{nom}$	$n_{nom}$	$I_{nom}$	$n_{max}$ @230V	$n_{max}$ @400V	$I_{nom}$	$n_{max}$ @400V	without brake	with brake
	[Nm]	[rpm]	[Arms]	[rpm]	[rpm]	[Arms]	[rpm]	[mm]	[mm]
HDD 09E	1.20	3 000	2.80	5 000	5 000	1.10	4 700	57.8	83.2
HDD / ICM 09J	2.30	3 000	4.30	3 900	5 000	2.40	4 700	70.1	95.6
HDD / ICM 09N	3.60	3 000	6.30	3 900	5 000	3.30	3 900	97.8	123.2
HDD 09Q	3.70	3 000	–	–	–	3.00	3 900	120.2	147.8
HDD / ICM 14J	7.00	3 000	–	–	–	5.30	3 900	91.9	91.9
HDD / ICM 14N	10.00	3 000	–	–	–	7.70	3 900	125.1	125.1

## Brakes

Motor type	HDD/ICM 09	HDD/ICM 14
Torque [Nm]	9	9
Voltage [VDC]		24 (+6% – 10%)

## Standard versions

- Resolver feedback
- Protection IP-65
- Angled connectors
- PTC thermal sensor
- 230V or 400V winding

## Options

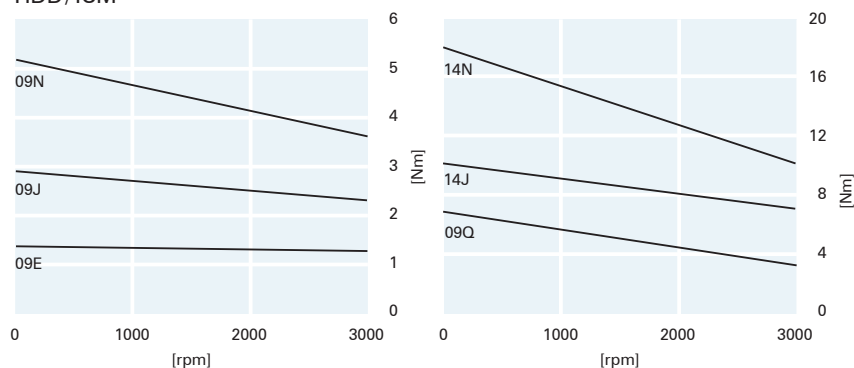
- Various types of incremental encoders, SinCos encoders, Hiperface, EnDat
- Shaft with or without keyway
- Straight connectors
- Protection IP-67
- Pressurized air connection

## Customized versions

- Shafts
- Windings
- Connections
- Executions according to customer's specification

## Torque curves

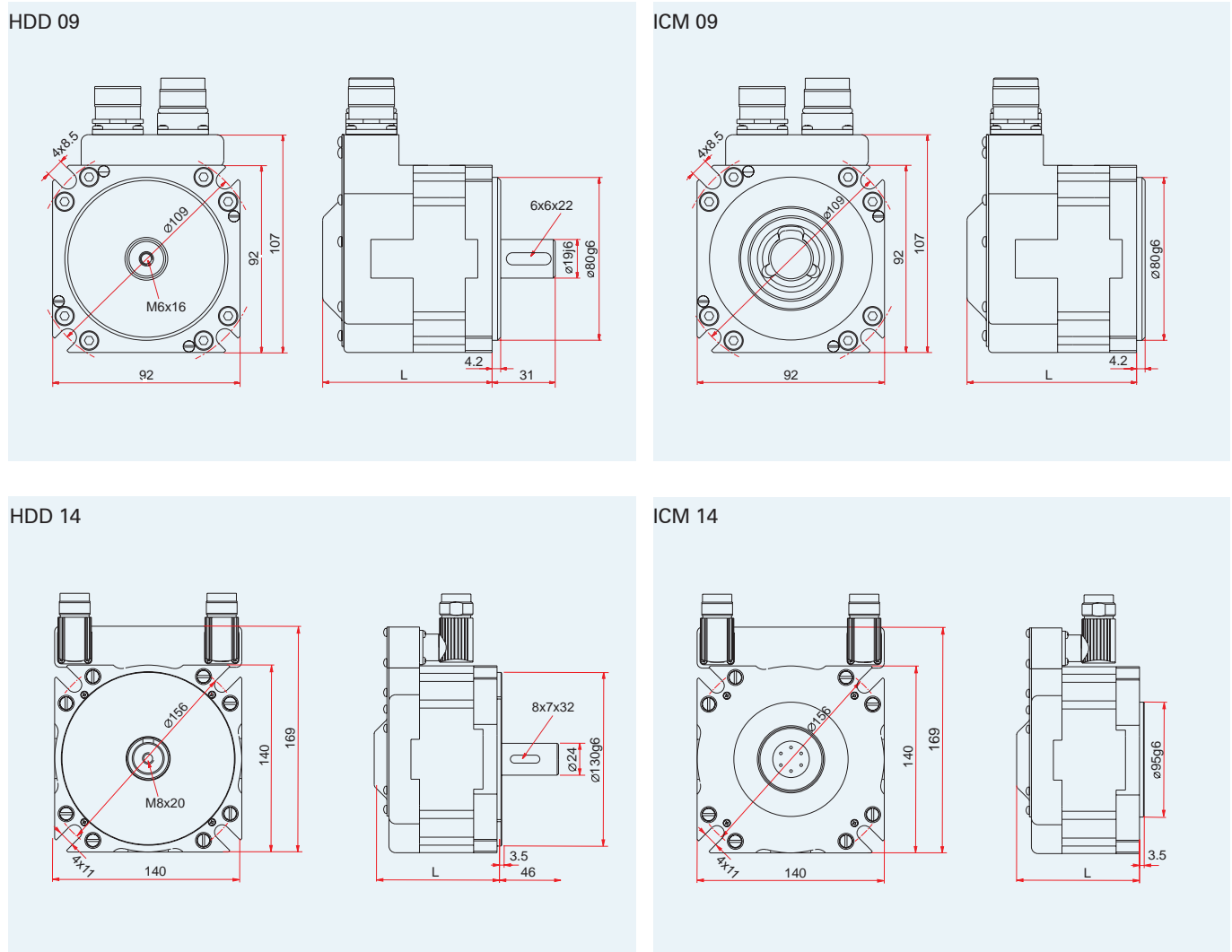
HDD/ICM



# Application example

HDD and ICM motors with cost efficient resolver feedback can be ideally combined with CD1-series and GD1-series servo drives. Direct coupled large external load inertias can be positioned fast and precise. Applications with a ratio of inertia as high as 300:1 with a positioning accuracy of 1/100° have been realized.

## Mechanical dimensions



## Additional length for encoder options

Motor type	Hiperface SRS / SRM50	SinCos ERN-1385	EnDat ECN-1313 / EQN-1325
<b>HDD 09E</b>	L + 28.5 [mm]	L + 30.5 [mm]	L + 30.5 [mm]
<b>HDD / ICM 09J</b>	L + 28.5 [mm]	L + 30.5 [mm]	L + 30.5 [mm]
<b>HDD / ICM 09N</b>	L + 28.5 [mm]	L + 30.5 [mm]	L + 30.5 [mm]
<b>HDD 09Q</b>	L + 28.5 [mm]	L + 30.5 [mm]	L + 30.5 [mm]
<b>HDD / ICM 14J</b>	L + 40.0 [mm]	-	-
<b>HDD / ICM 14N</b>	L + 40.0 [mm]	-	-

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## The Infranor Group

Infranor creates added value for its customers by providing tailor-made motion solutions.

Based on strong working relationships, Infranor offers extensive market know-how, comprehensive engineering skills and a wide range of high-quality products leading to productivity gains and therefore to comparative advantages for its customers in their respective markets.

## The Infranor Brand

The Infranor Brand is a synonym for:

- Excellence
- Cooperation
- Added value