



Product Portfolio

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Rated power	0.31 - 13.92 kW
Rated speed	up to 6,000 rpm
Stall torque	1.0 - 105 Nm

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Rated power	0.05 - 3.75 kW
Rated speed	up to 9,000 rpm
Stall torque	0.18 - 18.5 Nm

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Rated power	0.2 - 3.0 kW
Rated speed	up to 3,000 rpm
Stall torque	0.7 - 18.5 Nm

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Rated power	0.05 - 1.0 kW
Rated speed	up to 6,000 rpm
Rated torque	0.17 - 2.9 Nm

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Rated power	0.05 - 5.0 kW
Rated speed	31 - 3,000 rpm
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Rated speed	up to 2,600 rpm
Rated torque	0.0026 - 0.1080 Nm

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Input power	35 - 540 W
Rated speed	up to 2,750 rpm
Rated torque	0.042 - 1.45 Nm

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Rated power	35 - 600 W
Rated speed	up to 3,000 rpm
Stall torque	0.17 - 2.4 Nm

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- HCF servo drive - DC 24 / 48 V
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# Servo motors


- HeiMotion Dynamic Next Generation



Type	$U_{ZK}$ [Vdc]	$M_o$ [Nm]	$M_n$ [Nm]	$n_n$ [min <sup>-1</sup> ]	$P_n (S1)$ [W]		
HMD06	24 / 48 320 / 560	1.0	1.0	3,000	315		
			1.0	6,000	630		
	48 320 / 560	1.9	1.7	3,000	530		
			1.45	6,000	915		
			2.5	3,000	785		
			2.0	6,000	1250		
HMD08	24 / 48 320 / 560	2.4	2.3	3,000	720		
			2.1	5,500	1210		
		3.2	3.0	3,000	940		
			2.6	5,500	1500		
		4.2	3.9	3,000	1225		
			3.4	5,500	1950		
		5.7	5.3	3,000	1665		
			4.3	5,500	2480		
		HMD10	48 320 / 560	3.9	3.6	3,000	1130
					3.2	5,000	1675
5.7	5.2			3,000	1635		
	4.0			5,000	2095		
7.6	6.5			3,000	2000		
	4.8			5,000	2500		
10.5	8.6			3,000	2700		
	5.5			5,000	2900		
HMD13	560	13.3	11.5	2,000	2400		
			9.0	3,600	3400		
		19.0	16.0	2,000	3350		
			11.2	3,600	4200		
		24.5	20.5	2,000	4300		
			13.3	3,600	5000		
HMD15	560	36.0	28.0	2,000	5850		
			21.0	3,000	6600		
		42.5	32.5	2,000	6800		
			25.0	3,000	7850		
		49.0	37.0	2,000	7750		
			29.0	3,000	9110		
HMD19	560	51.0	35.5	2,000	7435		
			25.5	3,000	8000		
		78.0	51.5	2,000	10780		
			34.0	3,000	10680		
		105.0	66.5	2,000	13920		



## Ambient conditions and technical characteristics

Motor type	Permanent magnet three-phase synchronous servo motor	
Ambient temperature (during operation)	- 10 °C to + 40 °C	
Storage temperature (not in operation)	- 20 °C to + 70 °C	
Humidity	< 90 % relative humidity (without condensation)	
Isolation class	F (= up to 155 °C) $\Delta T = 115 K$	
Protection class	IP65 (standard version) (except drive end, here protection class is IP21)	
Cooling	Convective (natural cooling)	
Bearing lifetime	20,000 h under rated operation conditions ( $M_r$ )	
Temperature sensor	KTY84-130	
Voltage slew rate dU/dt	<b>14 kV / <math>\mu</math>s</b>	
Max. installation altitude	4,000 meters above sealevel; starting on from 1,000 meters, derate per 1 % /100 meters will occur.	
Concentricity, coaxiality and axial run-out acc. to DIN 42955	N (normal)	
Intensity of vibration acc. to ISO 2373	Stage N	
Cogging torque factor $c_q$	HMD06 HMD08 HMD10 HMD13 HMD15 HMD19	< 2.0 % based on the stall torque ( $M_0$ ) < 1.5 % based on the stall torque ( $M_0$ ) < 1.2 % based on the stall torque ( $M_0$ ) < 1.0 % based on the stall torque ( $M_0$ ) < 1.0 % based on the stall torque ( $M_0$ ) < 1.0 % based on the stall torque ( $M_0$ )
Coating	Black top coat, RAL 9005	
Magnet material	Neodymium-Iron-Boron (NdFeB)	
Shaft end	Cylindrical shaft end with / without keyway	
Balancing quality	Q 2.5	
Encoder systems	Resolver, HIPERFACE®, HIPERFACE DSL®, Incremental encoder, SSI, EnDat 2.2	
Approvals	CE,  US - certification *	

\* UL in preparation


# Servo motors HeiMotion Premium



Type	$U_{bus}$	$I_o$	$I_n$	$M_o$	$M_n$	$M_{max}$	$n_n$	$J$	$P_n (S1)$
	[V <sub>dc</sub> ]	[A]	[A]	[Nm]	[Nm]	[Nm]	[rpm]	[kg-cm <sup>2</sup> ]	[W]
HMP04	48	1.8 - 3.4	1.7 - 3.0	0.18	0.14 - 0.16	0.6 - 0.7	3,000 / 6,000	3.00E-02	50 - 85
	320	0.8	0.7		0.12	0.7	9,000		110
	48	3.5 - 6.3	3.3 - 5.7	0.35	0.28 - 0.32	1.3	3,000 / 6,000	5.40E-02	100 - 175
	320	1.6	1.2		0.21	1.4	9,000		200
HMP06	320	0.9 - 1.6	0.8 - 1.3	0.7	0.5 - 0.6	2.8	3,000 / 6,000	2.20E-01	200 - 325
	320	1.8 - 3.3	1.5 - 2.2	1.5	0.9 - 1.2	6.0		4.13E-01	400 - 550
HMP08	320	3.1 - 5.6	2.6 - 3.7	2.8	1.7 - 2.4	11.2	3,000 / 5,500	1.40E00	750 - 1,000
	560	1.8 - 3.3	1.6 - 2.2		1.7 - 2.3				
	320	3.9 - 7.1	3.7 - 4.8	3.5	2.1 - 3.2	14.0		1.93E00	1,000 - 1,200
	560	2.2 - 3.9	2.1 - 2.8		2.1 - 3.2				
HMP10	560	3.4 - 5.4	3.0 - 3.7	5.6	3.4 - 4.8	22.4	3,000 / 5,000	4.84E00	1,500 - 1,800
	560	4.6 - 7.5	4.1 - 5.3	7.5	4.8 - 6.4	30.0		6.41E00	2,000 - 2,500
HMP13	320	4.8 - 8.2	4.1 - 6.0	5.5	4.0 - 4.8	22.0	2,000 / 3,600	9.82E00	1,000 - 1,500
		2.7 - 4.7	2.3 - 3.4		4.0 - 4.8	22.0			
	560	4.4 - 7.7	3.4 - 5.0	9.1	6.0 - 7.2	36.4		1.40E01	1,500 - 2,250
		4.7 - 10.3	4.5 - 6.7	12.3	8.0 - 9.6	49.2		2.11E01	2,000 - 3,000
		8.4 - 14.8	6.5 - 8.0	18.5	10.0 - 14.4	74.0		3.38E01	3,000 - 3,750



## Ambient conditions and technical characteristics

Motor type	Permanent magnet three-phase synchronous servo motor	
Ambient temperature (during operation)	- 10 °C to + 40 °C	
Storage temperature (not in operation)	- 20 °C to + 70 °C	
Humidity	< 90 % relative humidity (without condensation)	
Isolation class	F (= up to 155 °C) $\Delta T = 115 K$	
Protection class	IP65 (standard version) (except drive end, here protection class is IP21)	
Cooling	Convective (natural cooling)	
Bearing lifetime	20,000 h under rated operation conditions ( $M_r$ )	
Temperature sensor	KTY84-130	
Voltage slew rate dU/dt	8 kV / $\mu s$	
Max. installation altitude	4,000 meters above sealevel; starting on from 1,000 meters, derate per 1 % /100 meters will occur.	
Concentricity, coaxiality and axial run-out acc. to DIN 42955	N (normal)	
Intensity of vibration acc. to ISO 2373	Stage N	
Cogging torque factor $c_q$	HMP04 HMP06 HMP08 HMP10 HMP13	< 2.8 % based on the stall torque ( $M_0$ ) < 2.5 % based on the stall torque ( $M_0$ ) < 2.0 % based on the stall torque ( $M_0$ ) < 1.7 % based on the stall torque ( $M_0$ ) < 1.5 % based on the stall torque ( $M_0$ )
Coating	Black top coat, RAL 9005	
Magnet material	Neodymium-Iron-Boron (NdFeB)	
Shaft end	Cylindrical shaft end with / without keyway	
Balancing quality	Q 2.5	
Encoder systems	Resolver, HIPERFACE®, HIPERFACE DSL®, Inkrementalgeber, SSI, EnDat 2.2	
Approvals	CE,  US - certification	

Min. order quantity 1 pc

■ Servo motors  
HeiMotion Compact



	Type	$U_{bus}$	$I_o$	$I_n$	$M_o$	$M_n$	$M_{max}$	$n_n$	$J$	$P_n (S_1)$
		[Vdc]	[A]	[A]	[Nm]	[Nm]	[Nm]	[rpm]	[kg-cm <sup>2</sup> ]	[W]
Low inertia <i>Low inertia for highest dynamic applications</i>	HMC06	320	0.9	0.8	<b>0.7</b>	0.6	2.8	3,000	2.20E-01	200
		320	1.8	1.5	<b>1.5</b>	1.2	6.0	3,000	4.13E-01	400
	HMC08	320	3.1	2.6	<b>2.8</b>	2.4	11.2	3,000	1.40E00	750
		560	1.8	1.6	<b>2.8</b>	2.3	11.2	3,000	1.40E00	750
		320	3.9	3.7	<b>3.5</b>	3.2	14.0	3,000	1.93E00	1,000
		560	2.2	2.1	<b>3.5</b>	3.2	14.0	3,000	1.93E00	1,000
Middle inertia <i>Balanced inertia for optimized synchronization of load and drive</i>	HMC13	320	4.8	4.1	<b>5.5</b>	4.8	22.0	2,000	9.82E00	1,000
		560	2.7	2.3	<b>5.5</b>	4.8	22.0	2,000	9.82E00	1,000
		320	7.7	6.1	<b>9.1</b>	7.2	36.4	2,000	1.40E01	1,500
		560	4.4	3.4	<b>9.1</b>	7.2	36.4	2,000	1.40E01	1,500
		560	4.7	4.5	<b>12.3</b>	9.6	49.2	2,000	2.11E01	2,000
		560	8.4	6.5	<b>18.5</b>	14.4	74.0	2,000	3.38E01	3,000





## Ambient conditions and technical characteristics

Motor type	Permanent magnet three-phase synchronous servo motor	
Ambient temperature (during operation)	- 10 °C to + 40 °C	
Storage temperature (not in operation)	- 20 °C to + 70 °C	
Humidity	< 90 % relative humidity (without condensation)	
Isolation class	F (= up to 155 °C) $\Delta T = 115 K$	
Protection class	IP65 (standard version) (except drive end, here protection class is IP54)	
Cooling	Convective (natural cooling)	
Bearing lifetime	20,000 h under rated operation conditions ( $M_r$ )	
Voltage slew rate dU/dt	8 kV / $\mu s$	
Max. installation altitude	4,000 meters above sealevel; starting on from 1,000 meters, derate per 1 % /100 meters will occur.	
Concentricity, coaxiality and axial run-out acc. to DIN 42955	N (normal)	
Intensity of vibration acc. to ISO 2373	Stage N	
Cogging torque factor $c_t$	HMC06	< 2.5 % based on the stall torque ( $M_0$ )
	HMC08	< 2.0 % based on the stall torque ( $M_0$ )
	HMC13	< 1.5 % based on the stall torque ( $M_0$ )
Coating	Black top coat, RAL 9005	
Magnet material	Neodymium-Iron-Boron (NdFeB)	
Shaft end	Cylindrical shaft end with / without keyway	
Balancing quality	Q 2.5	
Encoder systems	Resolver, HIPERFACE®	
Approvals	CE	

Min. order quantity 25 pcs

# Decentralized drive solutions



## Servo motors HeiTronX Economy - CanBus

Type	Supply voltage [V]	Rated speed $n_n$ [rpm]	Rated torque $M_n$ [Nm]	Peak torque $M_{max}$ [Nm]	Model			
HMPi 04 HTE	24 V <sub>DC</sub>	3,000	0.16	0.3	HMP04-002			
			0.20	0.3	HMP04-004			
	48 V <sub>DC</sub>	3,000	0.16	0.4	HMP04-002			
			0.25	0.4	HMP04-004			
		6,000	0.13	0.3	HMP04-002			
			0.17	0.3	HMP04-004			
HMDi 06 HTE	24 V <sub>DC</sub>	3,000	0.40	0.9	HMD06-005			
			0.50	0.9	HMD06-010			
			0.60	0.9	HMD06-015			
			0.75	1.0	HMD06-020			
		6,000	0.20	0.4	HMD06-005			
			0.30	0.5	HMD06-010			
			0.35	0.5	HMD06-015			
			0.40	0.5	HMD06-020			
	48 V <sub>DC</sub>	3,000	0.30	1.8	HMD06-005			
			0.40	1.8	HMD06-010			
			0.60	1.8	HMD06-015			
			0.90	1.8	HMD06-020			
		6,000	0.30	0.9	HMD06-005			
			0.35	0.9	HMD06-010			
			0.40	0.9	HMD06-015			
			0.50	0.9	HMD06-020			
			HMDa 08 HTE	24 V <sub>DC</sub>	3,000	1.0	2.1	HMD08-020
						1.2	2.4	HMD08-028
1.3	2.6	HMD08-035						
1.5	3.0	HMD08-050						
5,500	0.7	1.4			HMD08-020			
	0.8	1.6			HMD08-028			
48 V <sub>DC</sub>	3,000	0.9	1.8	HMD08-035				
		1.0	2.0	HMD08-050				
		1.0	3.5	HMD08-020				
		1.4	3.9	HMD08-028				
	5,500	1.8	4.1	HMD08-035				
		2.3	4.5	HMD08-050				
		0.6	2.0	HMD08-020				
		0.8	2.3	HMD08-028				
		1.0	2.4	HMD08-035				
		1.2	2.6	HMD08-050				



### Servo Motors HeiTronX Basic - EtherCAT, CanBus

Type	Supply voltage [V]	Rated speed $n_n$ [rpm]	Rated torque $M_n$ [Nm]	Peak torque $M_{max}$ [Nm]	Model
HMD06 HTB	48 V <sub>DC</sub>	3,000	1.0	2.5	HMD06-011
			1.5	3.6	HMD06-019
		5,000	1.0	2.5	HMD06-011
HMD08 HTB	48 V <sub>DC</sub>	3,000	1.7	6.0	HMD08-024
			2.1	8.0	HMD08-032
			2.7	10.0	HMD08-042
		5,000	1.6	6.0	HMD08-024
			1.8	6.0	HMD08-032
			2.0	6.0	HMD08-042



### Servo motors HeiTronX Performance - EtherCAT, Profibus, CanBus

Type	Supply voltage [V]	Rated speed $n_n$ [rpm]	Rated torque $M_n$ [Nm]	Peak torque $M_{max}$ [Nm]	Model
HMD06 HTP	24 V <sub>DC</sub>	3,000	1.03	3.8	HMD06-015-048-30
			1.42	5.0	HMD06-020-048-30
			0.83	3.8	HMD06-015-048-30
			1.06	5.0	HMD06-020-048-30
HMD08 HTP	24 V <sub>DC</sub>	3,000	1.55	7.1	HMD08-028-048-30
			2.7	7.3	HMD08-035-048-30
			1.35	7.1	HMD08-028-048-30
			2.2	7.3	HMD08-035-048-30
HMPa 06 HTP	230 V <sub>DC</sub>	3,000	0.4	2.5	HMP06-007
			1.0	3.5	HMP06-015
		6,000	0.3	1.5	HMP06-007

Min. order quantity 10 pcs



# Servo motors with planetary gears



## General information

The servo motor series **HeiMotion Premium** and **HeiMotion Dynamic Next Generation** can be complemented by compact, directly mounted gear units with diameters from 40 mm to 100 mm. The modular flanges allow besides the standard combinations even to combine different motor and gearbox sizes to realize special requirements such as high radial loads or various mounting types on the machine.

The **HeiMotion Premium** motors are available in five standard frame sizes:

- 40 mm - HMP04
- 60 mm - HMP06
- 80 mm - HMP08
- 100 mm - HMP10
- 130 mm - HMP13

...and can be combined with the following gear unit sizes:

- E04 / P05
- E06 / E07 / P07 / H06 / F06
- E06 / E07 / E08 / E09 / P07 / P09 / H06 / H08 / F06 / F09
- E08 / E09 / E10 / P09 / H08 / F09
- E10

The **HeiMotion Dynamic Next Generation** motors are available in four standard frame sizes:

- 60 mm - HMD06
- 80 mm - HMD08
- 100 mm - HMD10
- 130 mm - HMD13

...and can be combined with the following gear unit sizes:

- E06 / E07 / P07 / H06 / F06 / V06
- E06 / E07 / E08 / E09 / P07 / P09 / H06 / H08 / F06 / F09 / V06 / V09
- E08 / E09 / E10 / P09 / H08 / F09 / V09 / V10
- E10 / V10

### V-Getriebe

Economical gearbox with flange output  
Compact design  
Optimized for use in industrial trucks (AGV's)  
High tilting rigidity

### F-Getriebe

Economical flange-gear  
Output flange according to DIN ISO 9409  
Low backlash  
High tilting rigidity

### H-Getriebe

Highest radial and axial forces  
Low backlash

### P-Getriebe

Economical gear  
Higher radial and axial forces

### E-Getriebe

Economical flange-gear  
Output flange according to DIN ISO 9409  
Low backlash  
High tilting rigidity



## Ambient conditions and technical characteristics

Service life at the rated operating conditions	20,000 h *
Minimum operating temperature	- 10 °C
Maximum operating temperature	40 °C
Maximum gear temperature	90 °C *
Lubrication	Lifetime lubrication
Coating motor and gear	Black top coat, RAL 9005
Protection class motor / gear (E, P, F)	IP65 / IP54
Protection class motor / gear (H, V)	IP65 / IP65

\* Depending on application and environmental conditions

## Optional angular gearbox



As an additional option for the servo modular servo system, an angular stage is possible in two different ratios ( $i=1$  and  $i=2$ ). These can be combined with the familiar planetary gearbox in sizes 40, 60 and 80. The angular stage is characterized by its compact design and the efficiency-optimized bevel gears with low noise emission. Due to  $i=2$  ratio in the angular stage, a lot of space and costs can be saved with using a single stage gearbox.

## Features of gear units

- Low rotational clearance
- High output torques
- High efficiency
- Low noise
- The highest standards for quality
- Flexible mounting position
- Lifetime lubrication
- Same rotating direction of gear unit and motor
- Modular design with additional options available upon request

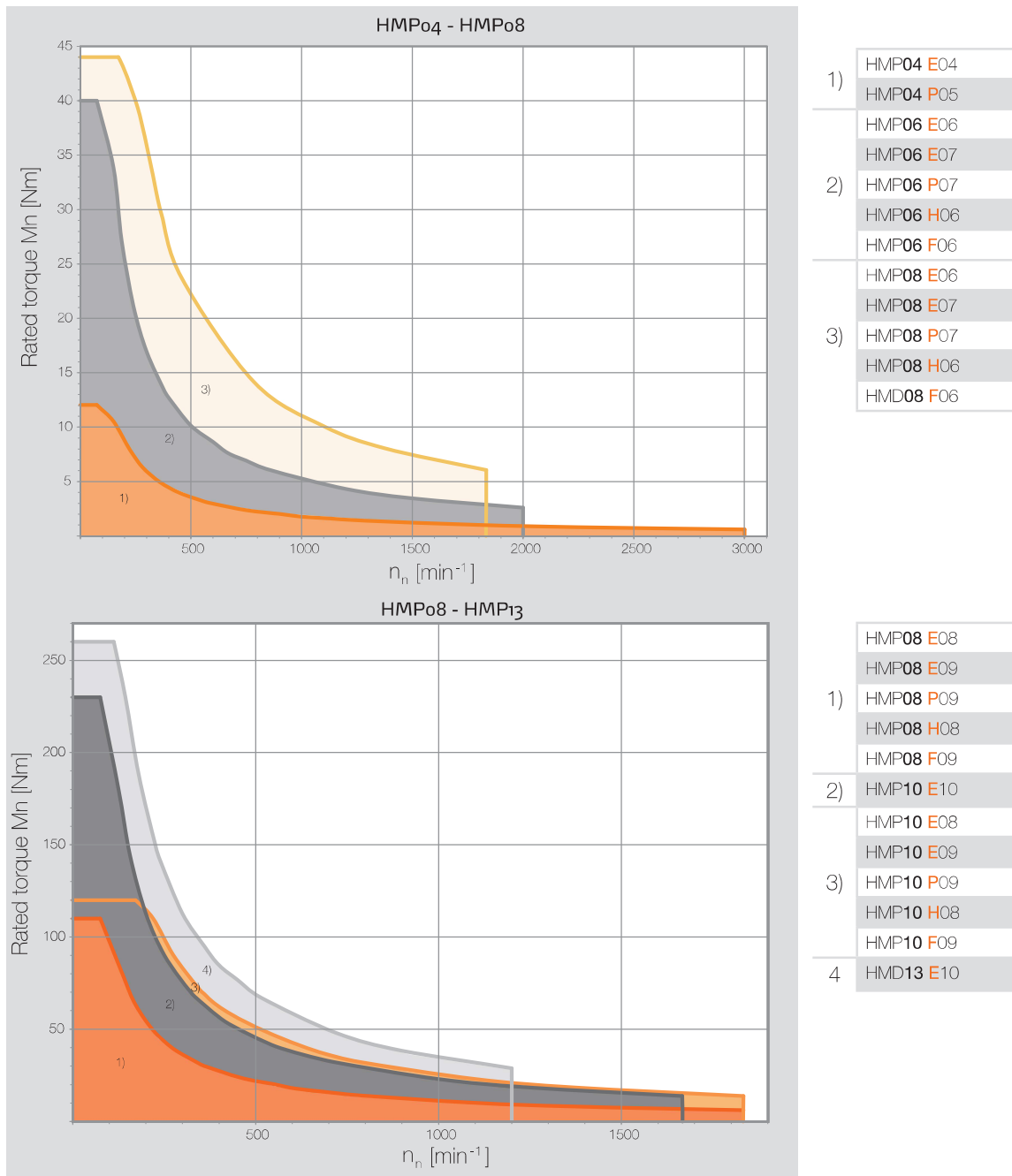
## Advantages of the motor-gear combination

- Short length
- Low moment of inertia
- Lightweight
- Low noise
- High efficiency

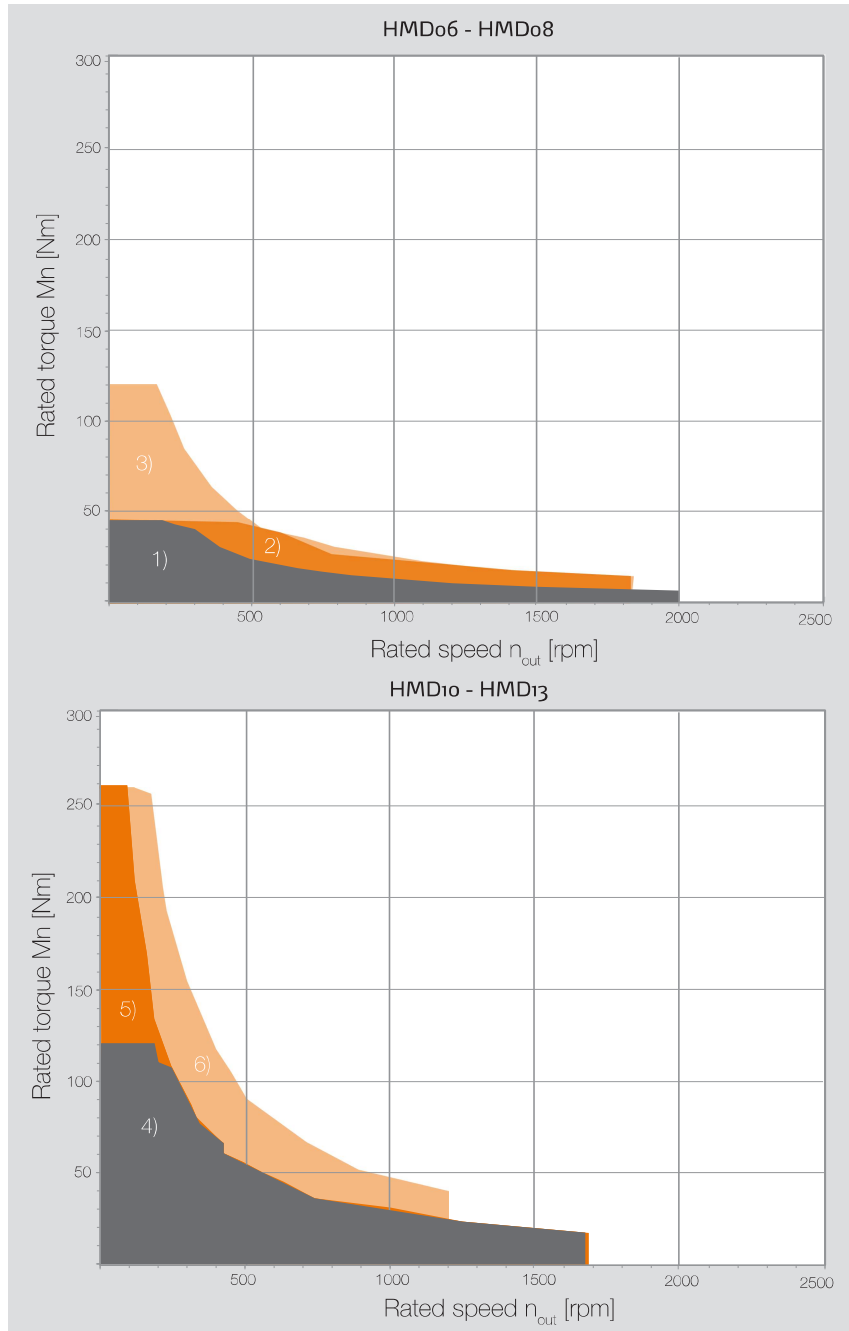
For more information you can also view the catalogs „HMD Next Generation - Servo motors with planetary gears“ or „HMP - Servo motors with planetary gears“.

# Servo motors with planetary gears

Rated torque ( $M_n$ ) of HMPo4 - HMPo8



## Rated torque ( $M_n$ ) of HMD06 - HMD08

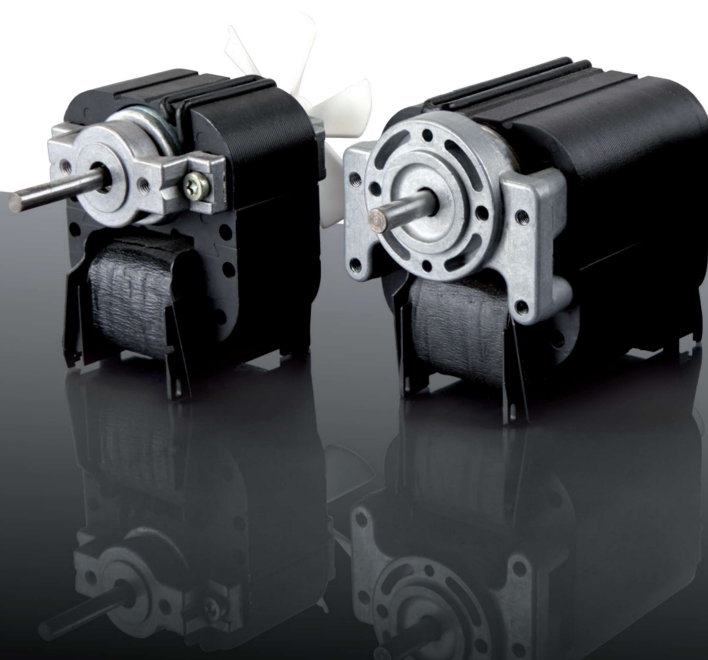


- HMD06 E06
- HMD06 E07
- 1) HMD06 P07
- HMD06 H06
- HMD06 F06
- HMD06 V06
- HMD08 E06
- HMD08 E07
- 2) HMD08 P07
- HMD08 H06
- HMD08 F06
- HMD08 V06
- HMD08 E08
- HMD08 E09
- 3) HMD08 P09
- HMD08 H08
- HMD08 F09
- HMD08 V09

- HMD10 E08
- HMD10 E09
- 4) HMD10 P09
- HMD10 H08
- HMD10 F09
- HMD10 V09
- 5) HMD10 E10
- HMD10 V10
- 6) HMD13 E10
- HMD13 V10

## ■ Shaded pole motors

Type	Options	Input power	Output power	Rated speed	Rated torque	Protection class
		[W]	[W]	[rpm]	[Nm]	[IP]
123	Without fan standard die cast bearing brackets	10,5 - 22,0	0,7 - 5,4	2,600	0,0026 - 0,0200	00
	With fan standard die cast bearing brackets	33,0 - 51,0	6,5 - 10,9	2,600	0,0240 - 0,0400	00
	Without fan long-life bearing brackets	10,5 - 22,0	0,7 - 5,4	2,600	0,0026 - 0,0200	00
	With fan long-life bearing brackets	33,0 - 51,0	6,5 - 10,9	2,600	0,0240 - 0,0400	00
	With fan reinforced bearing brackets	59,0 - 97,0	16,3 - 29,4	2,600	0,0600 - 0,1080	00





## General information

Shaded pole motors are asynchronous squirrel-cage motors for connection to singlephase AC-current. They permit low-cost drive solutions in all fields of electrical engineering, mechanical engineering, appliance and apparatus construction. Their simple, robust and maintenance-free design turns them into successfully usable drive elements.

Heidrive 2-pole shaded motors run with a rated speed of 2,200 to 2,600 rpm at 50 Hz. The 4-pole version runs with 1,200 rpm at 50 Hz. Clockwise or counter clockwise rotation has to be specified with order. A subsequent modification is not possible.

## High quality and wide range

Shaded pole motors are characterized by:

- Total reliability
- Long service life
- Maintenance-free

## Applications

Heater blowers, ventilators, projectors, photocopying machines, printing machines, refrigerators and cooling air blowers, pumps, medical instruments, machine tools, office machines, scanners, electronical devices.

Min. order quantity 100 pcs

# Three-phase-/ capacitor motors

Type	Model	Input-power [W]	Output-power [W]	Rated speed [rpm]	Rated torque [Nm]	Protection class [IP]
Type 203 Ø 58	Three-phase / Capacitor motor	35 - 64	11 - 21	1,200 / 2,600	0.042 - 0.17	40
Type 211 Ø 70	Capacitor motor	60 - 157	26 - 89	2,600	0.095 - 0.325	00 / 40
Type 232 Ø 80	Capacitor motor	102 - 255	48 - 143	2,600 / 2,750	0.17 - 0.53	00 / 40
Type 235 Ø 80	Three-phase / Capacitor motor	69 - 142	32 - 70	1,200 / 1,350	0.227 - 0.60	00 / 40
Type 242 Ø 80	Three-phase motor	140 - 310	80 - 215	2,750	0.28 - 0.74	00 / 40
Type 234 Ø 90	Capacitor motor	162 - 222	94 - 123	1,200 / 2,600	0.33 - 0.98	00 / 40
Type 244 Ø 90	Three-phase motor	330 - 540	216 - 403	2,750	0.75 - 1.40	40
Type 263 Ø 90	Three-phase motor	190 - 305	110 - 205	1,350	0.78 - 1.45	00 / 40



## General information

Three-phase motors are asynchronous squirrelcage motors for connection to three-phase current.

Capacitor motors are asynchronous squirrel-cage motors for connection to AC voltage.

## Options

- Electronic speed control
- Encoder
- Break
- Axial fan
- Special shaft
- Special flange
- Connection in different types
- Finishing
- Adjustment of characteristic curves

## High quality and wide range

Three-phase motors are characterized by:

- Total reliability
- Long service life
- Different capabilities
- Maintenance-free
- Round, balanced operation, symmetrical rotating field
- High starting torque
- High efficiency

Capacitor motors are characterized by:

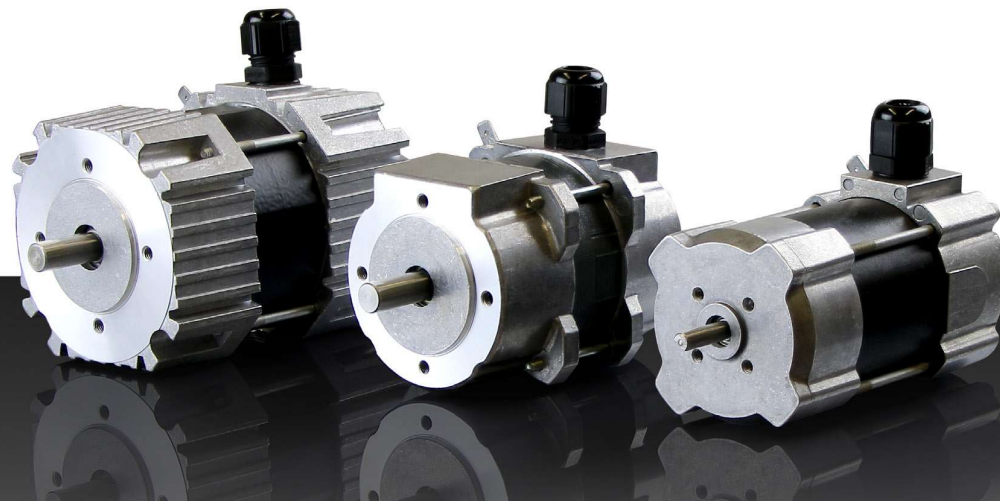
- Total reliability
- Long service life
- Different capabilities
- Maintenance-free

Min. order quantity 50 pcs

## ■ EC and BLDC motors

Type	Model	$U_{bus}$ [V <sub>dc</sub> ]	$I_o$ [A]	$I_n$ [A]	$M_o$ [Nm]	$M_n$ [Nm]	$M_{max}$ [Nm]	$n_n$ [rpm]	J [kg-cm <sup>2</sup> ]	$P_n$ (St) [W]
EC06	EC06-017	24*	2.6	1.7	0.17	0.11	0.5	3,000	1.30E-05	35
		48	1.3	0.9	0.17	0.11	0.5	3,000	1.30E-05	35
		320	0.2	0.1	0.17	0.11	0.5	3,000	1.30E-05	35
	EC06-028	24*	4.4	3.0	0.28	0.19	0.8	3,000	2.17E-05	60
		48	2.2	1.5	0.28	0.19	0.8	3,000	2.17E-05	60
		320	0.3	0.2	0.28	0.19	0.8	3,000	2.17E-05	60
EC07	EC07-034	48	2.8	2.5	0.34	0.30	1.0	3,000	3.19E-05	95
		320	0.4	0.4	0.34	0.30	1.0	3,000	3.19E-05	95
		560	0.3	0.2	0.34	0.30	1.0	3,000	3.19E-05	95
	EC07-051	48	4.0	3.2	0.51	0.41	1.5	3,000	4.79E-05	130
		320	0.7	0.5	0.51	0.41	1.5	3,000	4.79E-05	130
		560	0.4	0.3	0.51	0.41	1.5	3,000	4.79E-05	130
EC08	EC08-075	48*	5.6	3.8	0.75	0.51	2.3	3,000	1.17E-04	160
		320	0.9	0.6	0.75	0.51	2.3	3,000	1.17E-04	160
		560	0.5	0.4	0.75	0.51	2.3	3,000	1.17E-04	160
	EC08-100	48*	7.4	5.2	1.0	0.70	3.0	3,000	1.61E-04	220
		320	1.2	0.8	1.0	0.70	3.0	3,000	1.61E-04	220
		560	0.7	0.5	1.0	0.70	3.0	3,000	1.61E-04	220
BLDC07	BLDC07-067	48	5.7	5.4	0.67	0.64	2.7	3,000	2.55E-05	200
		320	0.9	0.9	0.67	0.64	2.7	3,000	2.55E-05	200
		560	0.5	0.5	0.67	0.64	2.7	3,000	2.55E-05	200
BLDC09	BLDC09-240	48*	19.1	15.2	2.4	1.91	9.6	3,000	1.76E-04	600
		320	3.0	2.4	2.4	1.91	9.6	3,000	1.76E-04	600
		560	1.8	1.4	2.4	1.91	9.6	3,000	1.76E-04	600

\* On request



## Ambient conditions and technical characteristics

Motor type	Permanent magnet three-phase synchronous motor
Ambient temperature (during operation)	- 10 °C to + 40 °C
Storage temperature (not in operation)	- 20 °C to + 70 °C
Humidity	< 90 % relative humidity (without condensation)
Isolation class	F (= up to 155 °C) $\Delta T = 115 K$
Protection class	IP40
Cooling	Convective (natural cooling)
Bearing lifetime	20,000 h under rated operation conditions ( $M_n$ )
Temperature sensor	EC motor: Overheating protection, BLDC motor: KTY 84-130 and PT1000**
Voltage slew rate dU/dt	8 kV / $\mu s$
Max. installation altitude	4,000 meters above sealevel; starting on from 1,000 meters, derate per 1 % / 100 meters will occur.
Concentricity, coaxiality and axial run-out according to DIN 42955	N (normal)
Intensity of vibration acc. to ISO 2373	Stage N
Coating	Stator core: Black top coat, RAL 9005 Bearing shield: Bright aluminium
Magnet material	EC motor: polymer-bonded neodymium ring, BLDC motor: sintered NdFeB
Shaft end	Cylindrical shaft end
Balancing quality	Q 2.5
Encoder systems	EC motor: RLE *, BLDC motor: HES
Approvals	CE, UL isolation system of Heidrive GmbH

\* For type EC07 also HES is applicable

\*\* Optional

Min. order quantity 25 pcs

## ■ Notes

### HCF servo drive - DC 24 / 48 V

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The HCF servo drive is specially designed for direct supply from a 24 / 48 V mains. This enables an extremely compact and cost-optimised design which is limited to the essential elements of the drive unit.

### HCD servo drive - AC 230 V

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The servo drive HCD is specially designed for supply with single-phase mains supply. It can be controlled either via digital and analog inputs, PLC Motion or via the CANopen fieldbus.

### HCB servo drive - The compact

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The compact single-axis servo drives of the HCB series are true all-rounders in drive technology. They combine maximum power density with extensive motion control functions.

### HCJ servo drive - The allrounder

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The modular single-axis servo drives of the HCJ series combine high performance volume and extensive motion control functions in four compact sizes. The high variance of the fieldbus connection and the encoder interfaces enables fast integration into existing industrial plants as well as a solid and future-proof basis for new plants and projects.



Technical data subject to change! Last changes: 04/2022

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**Heidrive GmbH**

Starenstraße 23  
93309 Kelheim

Phone +49 9441/707-0  
Fax +49 9441/707-259

info@heidrive.de  
www.heidrive.com