

# PRHD2 Highly Dynamic Servo Motors

The PRHD2 electromechanical design features low and speed ripple, minimal temperature rise, high torque density and high overload capacity.



## Optimal servo motor solution for high-performance motion applications

PRHD2 servo motors combine excellent dynamics and torque accuracy with a compact design and high power density. The series' electromechanical design ensures the accuracy and smoothness of motion required for automated precision processes such as robotic manufacturing, machine tooling and electronics assembly.

- Rated output power range of 50 W to 7.5 kW
- Rated/Peak output torque of 0.16/0.56 to 48/120 Nm
- Rated/Maximum speed of up to 3000/6000 rpm

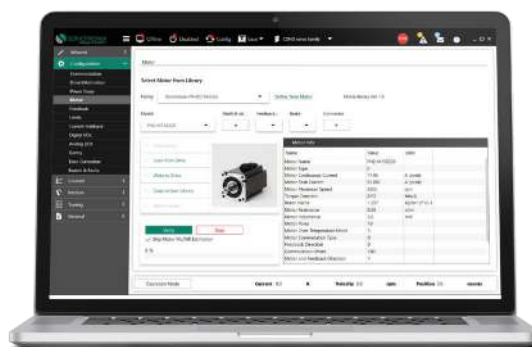
## Broad range of motor options

- 6 frame sizes
- Winding option for 230 VAC and 400 VAC
- Absolute 20-bit single-turn or multi-turn encoder as standard
- Medium and low inertia motors
- IP65 protection class
- Scratch-resistant motor body
- Optional holding brake
- Extended ambient air temperature of -10°C...+40°C

Other encoder types (such as Nikon, Resolver) as well as additional winding, cable, and connector options are available upon request and can be customized to the specific application needs.

## Seamless integration with Servotronix CDHD2 Servo Drives for optimal performance

The PRHD2 series is bundled with the flagship CDHD and CDHD2 servo drives. The combined servo drive and motor are optimized for best performance, offering advanced functionality, high power density, and seamless commissioning in a cost-effective package.



## Key benefits

- Frame size: 40-60-80-100-130-180 mm
- 0.16 to 48 Nm rated output torque
- 50 to 7500 W rated output power
- Low cogging, less than 2% of nominal torque
- High efficiency
- Low temperature rise during operation
- High motor overload capability
- 20-bit proprietary absolute magnetic encoder
- IP65 protection class (IP67 with oil seal)
- Optional holding brake
- High volume OEM customizations



## Related products

	<b>softMC</b> Multi-Axis Motion Controller
	<b>CDHD2</b> High-Performance Servo Drive

## PRHD2 product offering

Each motor base model can be ordered with the following options:

- **Shaft:** smooth, smooth with oil seal, key, key with oil seal
- **Brake:** with brake, without brake
- **Feedback:** senAR 20-bit single turn, sensAR 20-bit multi turn, Tamagawa SSI 23-bit multi turn

## Available models

230 VAC models	Frame size (mm)	Power (W)
PH2-L04A230	40	50
PH2-L04B230	40	100
PH2-M04A230	40	50
PH2-M04B230	40	100
PH2-L06A230	60	200
PH2-L06B230	60	400
PH2-M06A230	60	200
PH2-M06B230	60	400
PH2-L08A230	80	750
PH2-M08A230	80	750
PH2-L10A230	100	1000
PH2-L10B230	100	1500
PH2-L10C230	100	2000
PH2-M13A215	130	1000
PH2-M13B215	130	1500
PH2-M13B220	130	2000
PH2-M13C220	130	1100
PH2-M13D220	130	1750
PH2-M13E220	130	2400
PH2-M18A215	180	3000
PH2-M18B215	180	4500
PH2-M18C215	180	5500
PH2-M18D215	180	7500
400 VAC models	Frame size (mm)	Power (W)
PH2-L10A430	100	1000
PH2-L10B430	100	1500
PH2-L10C430	100	2000
PH2-M13C420	130	1100
PH2-M13D420	130	1750
PH2-M13E420	130	2400
PH2-M18A415	180	3000
PH2-M18B415	180	4500
PH2-M18C415	180	5500
PH2-M18D415	180	7500

## Ordering information

	PH2	-	M	04	A	2	30	2	5	S3	0	D
PRHD2 Servo Motor												
<b>Inertia</b>												
L	Low inertia											
M	Medium inertia											
<b>Frame Size</b>												
04	40 mm											
06	60 mm											
08	80 mm											
10	100 mm											
13	130 mm											
18	180 mm											
<b>Length</b>												
A	Type A											
B	Type B											
C	Type C											
D	Type D											
E	Type E											
<b>AC Bus Voltage</b>												
1	Custom low voltage											
2	230 VAC											
4	400 VAC											
<b>Rated Speed</b>												
10	1000 rpm											
15	1500 rpm											
20	2000 rpm											
30	3000 rpm											
<b>Shaft &amp; Oil seal</b>												
0	Smooth											
1	Smooth and oil seal											
2	Keyed											
3	Keyed and oil seal											
<b>IP Rating</b>												
5	IP65											
<b>Feedback Device</b>												
S3	sensAR single turn absolute encoder 20-bit											
M3	sensAR multi- absolute encoder 20-bit											
T4	Tamagawa multi-turn absolute encoder 23-bit											
<b>Brake</b>												
0	No brake											
1	With brake											
<b>Connector</b>												
D	Amp connector											
A	MIL connector											

PRHD2 Flyer\_EN\_2021\_V11

