

OJ Drives™



OJ MRHX Stepper Motor

- 1Nm to 14Nm
- Sealing grade of IP 54
- Silent operation
- Three-phase supply
- UL 1004 / CSA C22.2.100

Silent control

The MRHX stepper motor is ideal for use with the DRHX drive. Together, they form a system designed especially for rotary heat exchangers. The system enables accurate and silent control of rotary heat exchangers in ventilation systems.

Even torque

The MRHX stepper motor provides an even torque curve throughout the entire speed range from 1 to 400* rpm. The rotor can be accurately controlled over a wide operating range, resulting in energy-optimised heat recovery and precise temperature control.

*8Nm motor only up to 250 rpm.

Direct drive

To achieve correct rotor speed, simply mount a suitable pulley on the shaft of the MRHX stepper motor. Energy loss is reduced due to the non-gear solution, which means that motor power is utilized to its maximum. This also helps prolong the life-span of the equipment and minimize service costs.

Hygroscopic applications

The OJ solution supports hygroscopic rotors that typically require a higher speed than traditional rotors. Depending on application and torque requirement, you can either upgrade in motor size or select a larger pulley.

UL approval

Motor are UL approval as unlisted component according to UL 1004 / CSA C22.2.100 for use in combination with OJ DRHX drive products.



	Type	MRHX-3P01N-03C5	MRHX-3P02N-03Cx	MRHX-3P04N-03Cx
Torque	Nm	1.0	2.0	4.0
Weight	Kg	≈ 1.4 kg	≈ 2.4 kg	≈ 3.5Kg
Sealing grade	IP	54	54	54
Operating temperature	°C	-40°C/+40°C	-40°C/+40°C -40°F/+104°F	-40°C/+40°C -40°F/+104°F
Storage temperature	°C	-40°C/+70°C	-40°C/+70°C -40°F/+158°F	-40°C/+70°C -40°F/+158°F
Dimensions	mm	56 x 56 x 97	85 x 85 x 67 *1	85 x 85 x 97 *1
Shaft diameter	mm	12	12	12
Cable length (with connector)	m	0.3	0.3	0.3
Max. radial force (20 mm from the flange)	N	75	250	250
Max. axial force	N	15	60	60

x=5: CE approval, x=7 UL recognized, *1: +3mm in length (only for variants with x=7/UL)

	Type	MRHX-3P08N-03Cx	MRHX-3P14N-03C5	MRHX-3P20N-03C7
Torque	Nm	8.0	14.0	14.0
Weight	Kg	≈ 5 Kg	≈ 13.2	≈ 13.2
Sealing grade	IP	54	54	54
Operating temperature	°C	-40°C/+40°C -40°F/+104°F	-40°C/+40°C	-40°C/+40°C -40°F/+104°F
Storage temperature	°C	-40°C/+70°C -40°F/+158°F	-40°C/+70°C	-40°C/+70°C -40°F/+158°F
Dimensions	mm	85 x 85 x 156 *1	134 x 134 x 170	134 x 134 x 170
Shaft diameter	mm	12	19	19
Cable length (with connector)	m	0.3	0.3	0.3
Max. radial force (20 mm from the flange)	N	250	250	250
Max. axial force	N	60	60	60

x=5: CE approval, x=7 UL recognized, *1: +3mm in length (only for variants with x=7/UL)