



MovingCAP compact drives
Electrical drive technology –
simply automated

MovingCap

Optimal configuration
for every application



Toothed belt axis as linear drive

- none
- 400mm
- 600mm
- 800mm
- custom



Low backlash planetary gears with short direct mounting

- none
- 5:1
- 20_1
- 35:1
- 50:1
- custom



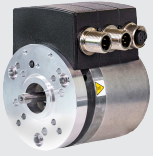
Encoder systems

- Rotor position sensor
120 inc/rev.
- Incremental encoder
1024 inc/rev.
- Absolute encoder
1024 inc/rev.

As an “all-in-one” solution, the compact drive units of the MovingCap series are a favorite for transport, feeding and positioning tasks.

The modular drive configuration enables you to innovate your drive concepts and find economical solutions for your motion tasks.

One drive - many possibilities.



Motor variants

- EC-Motor
- Stepper

MovingCap Control

- CANopen
- Ethernet TCP/IP
- Python programs



**One drive –
many possibilities.**

Figure Customer Application:
Confeed Feeding Module



MovingCap-Motor

The MC349 – MC634 motor family –
one standard in many variants

Type		MC349_ 1000	MC349_ 2000	MC349_ 4000	MC632_ 4000	MC634_ 4000
Rated voltage (motor)	V DC	24	24/48	24/48	24/48	24/48
Rated voltage (logic)	V DC	24	24/48	24/48	24	24
Rated speed	min ⁻¹	1000	2000	4000	4000	4000
Idle speed	min ⁻¹	1500	2600	4500	5000	5000
Nominal torque S1	mNm	320	250	150	425	600
Short-term torque S3	mNm	600	400	200	850	1200
Peak torque	mNm	1100	600	300	1480	1500 (3000)
Current	A	2,6	2,6/1,3	2,6/1,3	6/4	8/6
Peak current	A	8	8/4	8/4	12	12
Nominal power output	W	63	63	63	178	251
Peak power for a short time	W	180	180	180	480	480
Protection		IP54	IP54	IP54	IP54	IP54
Perm. ambient temperature	°C	0 ... + 60	0 ... + 60	0 ... + 60	0 ... + 60	0 ... + 60
Mass	kg	0,7	0,7	0,7	1,0	1,3

Optional

STEPPER Nema 23
or customer-specific EC/
STEPPER variants

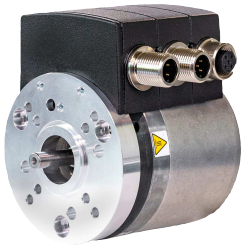
Product key: Motor variants

EC motor

- MC349_1000_xxx_xx_lxx_Lxxxx
- MC349_2000_xxx_xx_lxx_Lxxxx
- MC349_4000_xxx_xx_lxx_Lxxxx
- MC632_4000_xxx_xx_lxx_Lxxxx
- MC634_4000_xxx_xx_lxx_Lxxxx

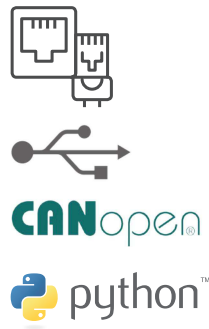
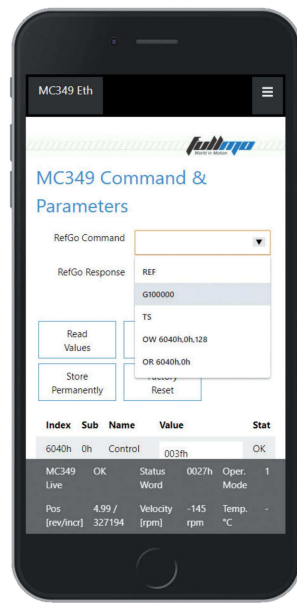
Stepper

- MCN23_065_xxx_xx_lxx_Lxxxx
- MCN23_112_xxx_xx_lxx_Lxxxx



MovingCap-Control

The integrated control electronics with CANopen or TCP/IP Ethernet interface



Facts

- Compact design
- 4Q servo control
- sinus commutation, field-oriented control
- speed control up to $n = 0 \text{ min}^{-1}$ with holding torque
- Programming functionality
- Digital inputs
- Different operating modes according to Cia DS402
- LED status display according to Cia DS303
- Electronics in robust metal housing
- M12 plug connections in sealed industrial standard
- Python command interpreter for customized application and motion profiles
- Intuitively configuration software

Product key: Fieldbus interface

CANopen

- MCxxx_xxxx_CAN_xx_lxx_Lxxxx

Ethernet TCP/IP

- MCxxx_xxxx_ETH_xx_lxx_Lxxxx

MovingCap - Encoder systems

Always at the correct position

Depending on the requirements of the application with regard to position resolution and repeat accuracy, the actuators of the MovingCap 349 series can be supplied with different encoder systems.



Standard

- rotor position sensor
- 120 increments / revolution



Option 1

- incremental encoder
- 1024 increments / revolution



Option 2

- absolute encoders
- 1024 increments / revolution

Product key Encoder systems

Rotor position sensor

- MCxxx_xxxx_xxx_RE_lxx_Lxxxx

Incremental encoder

- MCxxx_xxxx_xxx_IE_lxx_Lxxxx

Absolute encoder

- MCxxx_xxxx_xxx_AE_lxx_Lxxxx

MovingCap - Transmission and toothed belt axis

Modular output solutions tailored
to your requirements

Low backlash planetary gears with needle bearing.
Planetary gears allow flexible adaptation to the desired
output specification.

Due to the direct mounting of the planetary gear units,
the compact design is retained even with the gear unit.

The following standard reduction ratios are available for
direct mount: 5:1, 20:1, 35:1, 50:1

Robust and durable toothed belt axes enable high flexibility
even with linear motion sequences.

The toothed belt axes are available in different versions up
to a length of 4 meters.

Our standard lengths are 418 mm, 618 mm,
818 mm, 1018 mm.



Product key gear and/or linear axis

Planetary gear

- MCxxx_xxxx_xxx_XX_I05_Lxxxx

Toothed belt axis

- MCxxx_xxxx_xxx_lxx_L0400



Fullmo GmbH
Robert-Bosch-Straße 5
88677 Markdorf / Germany

phone +49 7544 30 73 39-0
fax +49 7544 30 73 39-9

Mail info@fullmo.de
Web www.fullmo.de