SORTER COMPONENTS

Sorter motors

At the heart of the sorter are **MTA sorter motors** with a proven track record. These gearless direct drives operate at very **low noise levels**, ensuring smooth operation and a **long service life**.

Two motor sizes and power ratings are available to suit different requirements and customer-developed systems.



Type		SUD53-AAA	SUD53-ACA	SUD53-BAA	SUD53-BDA
Rated voltage	VDC	24	24	48	48
Performance	W	15	41	28	40
Speed	m/s	0 - 2.5	0 - 2.5	0 - 2.5	0 - 2.5
Rated torque	Nm	0.16	0.43	0.16	0.43
Maximum torque	Nm	0.39	0.85	0.40	1.3
Rated current	Arms	1.6	2.7	1.6	1.4
Maximum current	Arms	4.4	6.9	5.1	5.3

Swivel drive

For precise sorting at high conveying speeds, it is essential to move to the swivel positions as quickly as possible.

The swivel drive uses a **highly dynamic synchronous motor with an integrated Motor Controller** and a high-resolution encoder for precise positioning. Its CANopen interface enables **full digital integration**. The integrated Motor Controller reduces cabling to the power supply and CANopen connection.



Type		SMG50I	
Rated voltage	VDC	24	48
Rated power	W	100	118
Speed	°/s	0 - 1560	0 - 1560
Rated torque	Nm	3.7	4.4
Maximum torque	Nm	14.0	14.0
Rated current	Arms	5.9	3.4
Maximum current	Arms	28.6	12.2

The high-resolution encoder and integrated positioning function allow **continuous positioning at any swivel angle, such as ±30°, ±45° or 0-90°**. No limit switches or proximity switches are required. After startup, the sorter line automatically performs a homing cycle. The swivel motor determines both end positions and positions itself continuously between them as required.

Motor Controller for multiple axes



The Motor Controllers enable **complete digitalization** of the sorting system.

Each motor is individually speed-controlled via **CANopen**.

Advanced software functions provide extensive diagnostics and **predictive maintenance**. Alternatively, the motors can be controlled via an **I/O interface**.

Controllers with different numbers of motor outputs are available to suit the mechanical design and application.

		MMAC-24/48-04	MMAC-24/48-08	MMAC-24/48-12
Number of motor outputs		4	8	12
Power supply	VDC	24/48	24/48	24/48
Control voltage	VDC	24	24	24
CANopen interface		●	●	●
I/O interface		1x analog input for speed 1x digital input for direction of rotation 1x digital input for controller enable 1x digital output for error output		
Brake chopper		●	●	●
Dimensions (L x W x H)	mm	186 x 82 x 33	242 x 82 x 33	298 x 82 x 33

- **Supply of power section and control section galvanically isolated**
- **Control via Profinet, CANopen interface or I/Os**
- **Brake chopper onboard**
- **LEDs for diagnosis and display of error states, brake chopper and CANopen communication**
- **Dip switch for CANopen terminating resistor and node ID**
- **Reverse polarity protection, over-voltage protection, over-current protection and temperature monitoring**

