

# **PRODUCT PORTFOLIO**

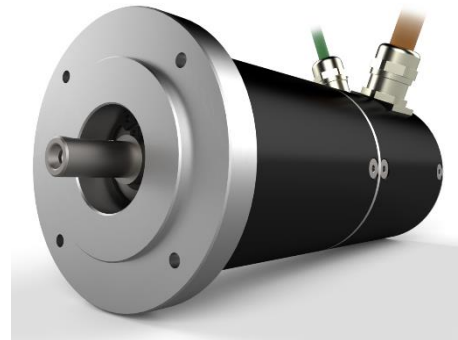
## **GEARED MOTORS**

MTA geared motors are highly efficient gear motors with a high power density.

Different motor sizes and gear ratios are available for diverse applications.

A wide selection of drives, motor controllers, gears, brakes, and encoder systems ensure individual solutions.

With different performance classes up to 730 W in a compact package, MTA geared motors are the ideal solution for challenging tasks: Conveyor, storage and sorting systems, as well as driverless transport systems.



### **Properties:**

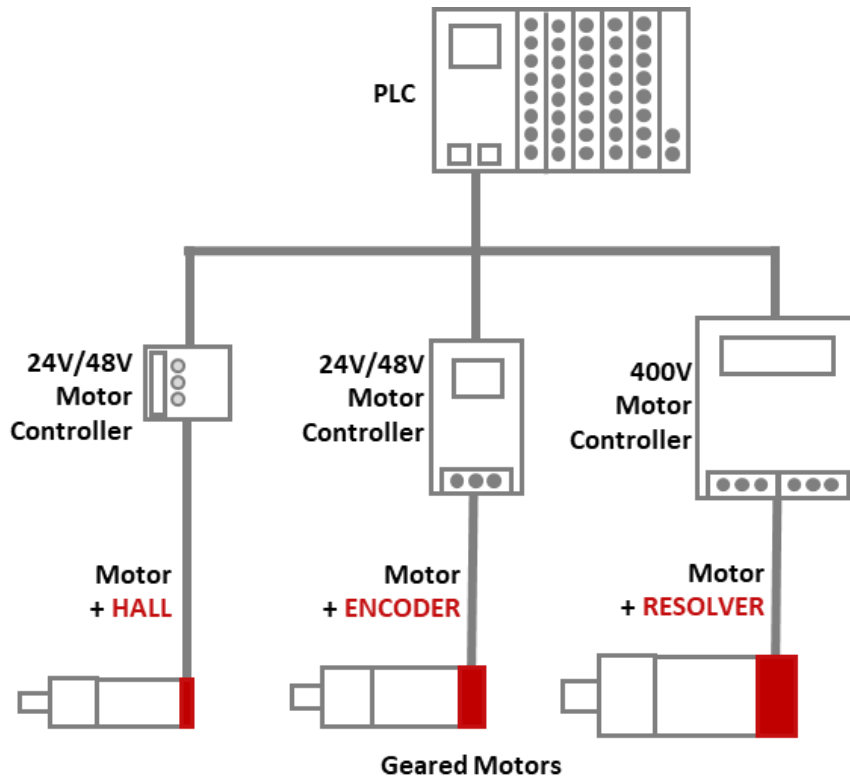
- Triple-phase electronically commutated internal rotor with high-performance magnets
- Different motor types can be combined with planetary or angular gears
- Scalable power spectrum up to 730 W nominal power
- Very high torque
- Nominal Voltage 24 VDC or 48 VDC or 400 VAC
- Integrated holding or service brake
- Equipped with hall sensor, magnetic encoder or resolver

### **Advantages/Benefits:**

- Special solutions for windings and mechanical adaptations
- Robust design
- Maintenance-free and low-wearing
- Numerous possible combinations of motors, gears, brakes, encoders, and connectors
- High efficiency in even the smallest installation space
- Degrees of efficiency > 90%
- High dynamics through three-fold overload capacity

## System integration:

MTA geared motors can be effortlessly integrated in standardised automation systems.



## Areas of application:

Geared motors are used in a wide variety of applications. The main focuses are transport tasks in production and distribution centres.

- Conveyor, storage, and sorting applications
- Traction drives
- Shutter applications
- Lifting applications

## Portfolio overview:

MTA geared motors are a combination of synchronous motors, gears, encoder systems and brakes.

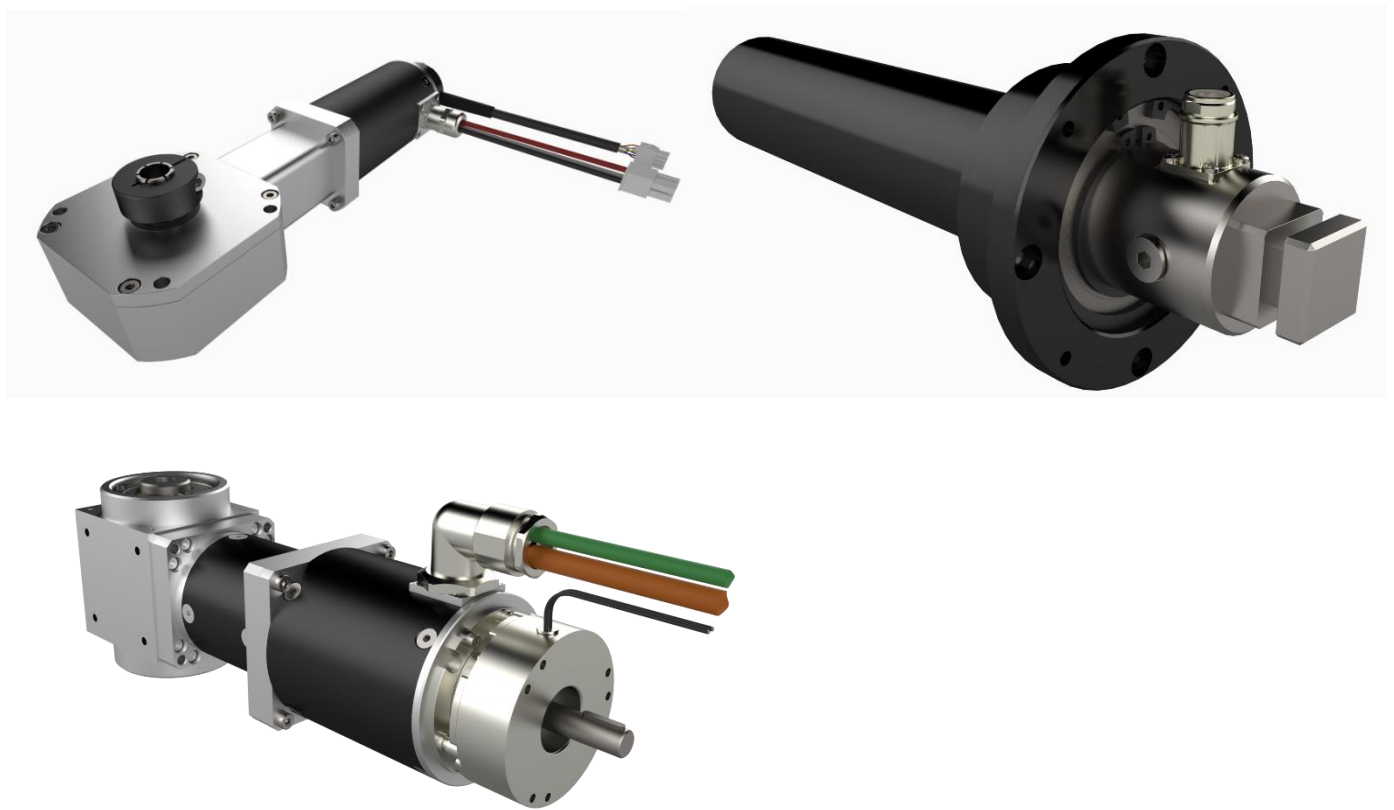
## Product versions:

Motors		Size 42L43	Size 42L43	Size 53L45	Size 53L45	Size 53L60	Size 53L75	Size 72L20	Size 72L30	Size 72L55	Size 72L55	Size 200L20	Size 200L20
Nominal voltage	VDC	24	48	24	48	48	48	48	48	48	400VAC/ 560VDC	24	48
Nominal torque	Nm	0,15	0,16	0,50	0,50	0,65	0,83	0,60	0,78	1,40	1,40	6,00	9,30
Nominal current	A	4,10	2,91	8,60	8,80	11,20	11,45	7,21	8,45	14,61	1,22	34,50	20,50
Nominal power output	W	71	75	131	262	272	348	251	327	586	586	628	682
Nominal speed	rpm	4500	4500	2500	5000	4000	4000	4000	4000	4000	4000	1000	700
Maximum torque	Nm	1,0	1,0	2,5	2,5	3,5	4,5	2,8	5,0	8,0	8,0	18,0	18,0
Maximum current	A	22,2	11,8	44,0	44,0	56,0	56,0	42,0	70,0	103,1	8,6	103,0	46,0
Outer diameter	mm	42	42	53	53	53	53	72	72	72	72	200	200
Stator length	mm	43	43	45	45	60	75	20	30	55	55	20	20

Gearbox			PM40	PM52	PM64	PM72	PM84	PM118	PM150
Number of stages									
	Nominal torque	Nm	<b>up to 6.5</b>	<b>up to 26.0</b>	<b>up to 26.0</b>	<b>up to 54.0</b>	<b>up to 54.0</b>	<b>up to 120.0</b>	<b>up to 310.0</b>
			3	3	3	3	3	3	3
			4	4	4	4	4	4	4
1	Translation	i	5	5	5	5	5	5	5
			7	7	7	7	7	7	7
			10	10	10	10	10	10	10
	Nominal torque	Nm	<b>up to 14.0</b>	<b>up to 44.0</b>	<b>up to 44.0</b>	<b>up to 100.0</b>	<b>up to 100.0</b>	<b>up to 210.0</b>	<b>up to 340.0</b>
			12	12	12	12	12	12	12
			16	16	16	16	16	16	16
			20	20	20	20	20	20	20
2	Translation	i	25	25	25	25	25	25	25
			35	35	35	35	35	35	35
			40	40	40	40	40	40	40
			49	49	49	49	49	49	49

Possible combinations with	PM40	PM52	PM64	PM72	PM84	PM118	PM150
Motors							
Size 42L43	•						
Size 53L45	•	•	•				
Size 53L60	•	•	•				
Size 53L75		•	•				
Size 72L20		•	•	•	•	•	•
Size 72L30		•	•	•	•	•	•
Size 72L55		•	•	•	•	•	•
Size 200L20						•	•

**Product images:**



## Type code:

Geared Motors		GM	2	7	4	- 0045 -	1	3	A	1	- S0	- 1A	- C111
Geared motor		GM											
Motor size	75 mm		3										
	53 mm		2										
	42 mm		1										
Mechanical power	730 W			9									
	500 W			8									
	400 W			7									
	300 W			6									
	250 W			5									
	200 W			4									
	150 W			3									
	100 W			2									
	70 W			1									
Nominal voltage	48 VDC				4								
	24 VDC				2								
Output speed	4500 rpm					4500							
	450 rpm					0450							
	375 rpm					0375							
	280 rpm					0280							
	225 rpm					0225							
	180 rpm					0180							
	90 rpm					0090							
	45 rpm					0045							
Gear type	Flat gear						5						
	Helical gearbox						4						
	Bevel gearbox						3						
	Worm gears						2						
	Planetary gear						1						
Feedback system	Resolver							4					
	Magnetic encoder							3					
	Hall sensor							2					
	Sensor-less							1					
Protection class	IP54								A				
Brake	Service brake 1.00 Nm									D			
	Service brake 0.50 Nm									C			
	Holding brake 2.6 Nm									7			
	Holding brake 1.5 Nm									6			
	Holding brake 0.75 Nm									5			
	No brake									1			
Safety systems	Attached safety sensor										S1		
	No safety sensor										S0		
Cable and connector	Length 0.5 m, M16 screwable connector												1D
	Length 0.5 m, connector M8 snap-in												1C
	Length 0.5 m, M8 screwable connector												1B
	Length 0.5 m, open ends												1A
Customer-specific version													C111