



SEE IT BEFORE IT HAPPENS

MOTION CONTROL

**MOTOR
POWER**
COMPANY



Motor Power Company

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WHERE DID WE EVER MEET?

Maybe we met before many times already, although you didn't know! Motor Power Company is involved in the manufacturing or processing of many equipments whose throughput are products or services that all us use everyday: wether you drank a bottle of water that was labelled, filled or capped with our torque motors, or you received a package that was sorted and handled with our motorollers, or even you had a train trip where doors and footsteps were moved by our brushless motors. Motor Power Company was there to ensure products and services to work precisely, smoothly and in a safely.



Material handling



Medical equipments



Food and beverage packaging



Precision Machining

Transport

Pharma

Semiconductor

Electric vehicles

Laser

Plastic

Robotics

Assembly

Test & Measurements

Discover other excellence in other many industry areas



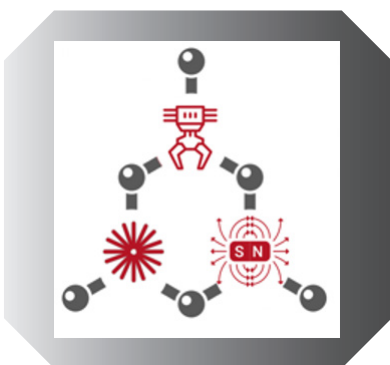
WELCOME TO MOTOR POWER COMPANY

Global and flexible approach



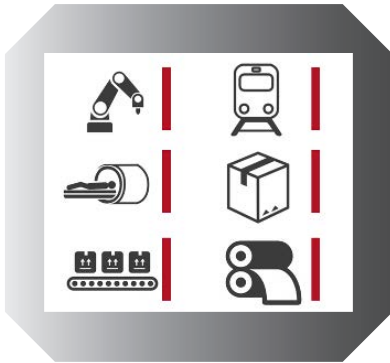
Motor Power Company market approach is based on know-how and experience: identify a need and implement a solution. Our long-term investments in the study of motion have created a deep knowledge in all aspects of motion technology. The result is an innate ability to come up with original ideas that distinguishes Motor Power Company and allow design and final performance of our products to stand out in the market.

Total governance



Motor Power Company has acquired extensive know-how through continuous research into motion power and control, that enable to effectively integrate mechanical, electromechanical and electronic technologies. The competence we have built up is based on relevant and continuous application engineering expertise along with the governance of design and critical manufacturing processes.

Constant application experience gathering



Over years experience in many fields of applications, **Motor Power Company** depth of expertise leads to reliable motors in advanced applications that moves with force, precision and efficiency, guaranteeing excellent performance and energy saving, by supporting design featuring minimal environmental impact industries.

See It before It happens



Our unique selling proposition: **see It before It happens.** Over the years, continuous design and development of innovative products for complex engineering processes has led to the creation of dedicated solutions in specific applications in the field of industrial movement and automation. Our mission is anticipating customer and market needs and implementing our core technologies to introduce innovation that allows dynamics performances and efficient throughput.

TECHNOLOGIES

DIRECT DRIVE TECHNOLOGY

Motor Power Company proposes linear and torque direct drive solutions, ensuring applications boost due to their dynamics enhancing possibilities. Direct drive rotary table, **SKA DDR** and **SKA ROTARY TABLE** achieve efficiency and precision positioning that are difficult to obtain with conventional systems. Linear direct drive technology is available in frameless version, **SKA DDL** just electric coil and magnetic track, and in a plug and play version incorporated in **SKA COMPACT** system. **MTR** gearless motorollers and **smart drives** complete the direct drive technology proposal: less components than the standard kinematic chain ensure high MTBF, system efficiency and increased throughput.

BRUSHLESS SERVOMOTORS

Brushless servomotors are products of tried-and-tested success that Motor Power Company manufacturers thanks to in-company know-how acquired during years of practical experience with motors designing and building. **TETRA** and **TETRA COMPACT** are the brushless servomotor with excellent efficiency along with high torque rate. **TETRA COMPACT-ENHANCED** and **TETRA COMPACT UL**, the third generation providing high dynamic response: superior quality standard and international certifications. **TETRA COMPACT EXTREME** controls motion in any outdoor and indoor extreme operation. And if battery automation is the need **TETRA COMPACT LOW VOLTAGE** is the answer.

TECHNOLOGIES

BRUSHED DIRECT CURRENT TECHNOLOGY

The brushed DC architecture of **PENTA**, **ESA** motors and **ROK** gearmotors is our original, most robust and consolidated technologies in the field of motion control. These motors are available in various sizes and with a range of different windings. The selected materials from which brushed DC motors are made guarantee excellent reliability and a long working life. They guarantee a high overload capacity without speed loss as well as rapid response and accurate speed control in low speed and high torque applications. Brushed DC motors and gearmotors are perfect for use in constant speed applications.

DRIVE INTEGRATED SERVOMOTORS

Cutting edge technology for decentralized architecture: all drive integrated servomotors **DUET** series are the result of the wide-ranging experience that Motor Power Company has built over 30 years as market oriented player in the motion control market. Synchronous brushless servomotors permanently excited with built-in drives: **DUET**, **DUET AD**, **DUET FLEXI** and the high voltage models **DUET HV**. Everything you need for moving and controlling an axis is built directly into these highly compact single component: servomotor, feedback and intelligent servo drive featuring CANopen, Ethercat or Profinet networking.



DIRECT DRIVE

TECHNOLOGY

Direct drive linear motors SKA DDL - Frameless



Whenever the motion you need is linear, integrations is a plus and dynamics and precision is essential in your application, linear motors of the series SKA DDL can escalate the throughput of your machine and simplify the design of the machine, ensuring as well a proven energy saving.

Iron core technology

40 – 2400N continuous force

135 – 7200N peak force

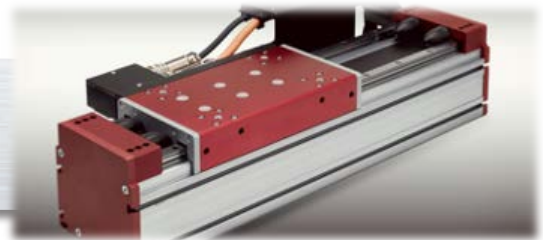
Up to 5 m/s speed

Up to 5g (50 m/s²) acceleration

Feedback: SinCos encoder, TTL sensors, absolute optical and magnetic sensors,

Hall effect sensors

Linear axis all-in-one SKA COMPACT



SKA Compact allows the integration of linear motion with a complete stage, “plug and play”, that encloses primary and secondary elements, linear guides, feedback and a mechanical structure that can be easily embedded in your machine and boost your performances.

Iron core technology

275-550N continuous force

5 m/s speed

Up to 5g (50 m/s²) acceleration

0.01 – 0.1mm accuracy

Plug & play solution, fast and easy to mount

DIRECT DRIVE

TECHNOLOGY



Direct drive torque servomotors SKA DDR

Unprecedented performance in terms of torque and acceleration, ideal for technological automation upgrades.

2 Nm to 760 Nm rated torque

Instantaneous peak torque till 2400 Nm

A high-speed operation up to 1200 rpm

IP65 protection rating (Power Pack version)

Feedback: resolver, incremental and absolute encoders, Hall effect sensors

Frameless and Power Pack version

Hollow, male and hollow through shaft versions



Direct drive torque servomotors SKA ROTARY TABLE

Ideal for applications that demand freedom from backlash and accurate control

8Nm to 760Nm rated torque

Up to 2400 Nm instantaneous peak torque

High precision indexing with over 16,000,000 CPR, after interpolation

Absolute accuracy till ± 1 arc sec

No backlash for high precision and high speed

Hollow through shaft

MOTOROLLER

TECHNOLOGY

Gearless motors

MTR - GEARLESS MOTORROLLERS AND DRIVES

Solutions particularly oriented for control, movement, storage and protection of materials and products throughout manufacturing, sorting, warehousing, distribution, consumption and disposal.

Gearless motoroller 46 - Cartridge version 800rpm@24-48 Vdc

Rated power 50 Watt and 115 Watt

Rated torque 0,6 Nm and 1,35 Nm

Hall sensors and encoder feedback for higher precision

Cartridge diameter 46 mm

Suitable for all 50 mm diameter tube

24 and 48Vdc power supply

Full speed control

Wide roller customization

Suitable for 50mm roller tube integration,



Gearless power pack motoroller 60 800rpm@60 Vdc

Ready to use motoroller 60mm diameter

Rated power 235 Watt

Rated torque 2,8 Nm

60Vdc power supply

Full speed control

Tube equipped gearless motoroller



Gearless motoroller 76 - Cartridge version 800rpm@48-65 Vdc

Rated power 260 Watt

Rated torque 3,1 Nm

Encoder feedback for higher precision

Cartridge diameter 76 mm

48 and 65 Vdc for power supply

Full speed control

Wide roller customization

Suitable for 80mm roller tube integration



MOTOROLLER

TECHNOLOGY

Drives

MTR - GEARLESS MOTORROLLERS AND DRIVES

Motor Power Company introduces these perfect matched bundles constituted by gearless motorrollers and smart drives.

DMR 50-5/50 dual axes drive

The perfect matched drive for enhancing motoroller 46 features

Dual axes operation

24 and 48 Vdc operating supply voltage

Encoder and Hall Sensor feedback

CanOpen Fieldbus

RS485 programming interface

I/O programmability for speed, start and stop control



Lite Pro drive

Lite Pro drive is ideal for controlling motoroller 60

24 and 48 Vdc operating supply

voltage

Encoder and Hall Sensor feedback

CanOpen Fieldbus

I/O programmability for speed, start and stop control



DMR 76-10/65

Motoroller 76 matches drive DMR 76-10/65 for the perfect bundle

24 and 65 Vdc operating supply voltage

Encoder and Hall Sensor feedback

Profibus Fieldbus

I/O programmability for speed, start and stop control

I/O proxy dual loop



MOTOROLLER

TECHNOLOGY

Geared solution for driving pallet conveyor application ***Pallet conveyor MOTOROLLER***

Pallet Conveyor allows efficient transport, accumulation, lifting and sorting of heavy loads as an alternative to forklifts handling.

Ready to use pallet conveyor motoroller

Rated power 400 Watt

Planetary gear box ratio 1:45

Tube diameter 70 and 89mm

Conveyor velocity 22,4 m/min (0,37 m/sec)

Load up to 1500 Kg

Supply voltage available: 48 Vdc, 230 Vac, 400 Vac



DC BRUSHED TECHNOLOGY

Brushed D.C. servomotors **ESA**



This series is based on consolidated technology and incorporate the latest advances in mechanical design.

- 0.32 Nm to 15 Nm rated torque
- Integrated 4-pole tacho generator
- IP54
- Dedicated electromagnetic circuit to reduce cogging effect
- Multi-segment commutator
- Option: brake, encoder

Brushed D.C. motors **PENTA**



This series guarantee a high overload capacity without speed loss as well as rapid response and accurate speed control in low speed and high torque applications.

- 45 W to 1500 W rated output power
- IP 54
- Insulation class F
- Ferrite permanent magnets
- Copper-silver commutator
- Options: tacho generator, brake, encoder

Brushed D.C. gearmotor **ROK**



This series is designed as one single, compact unit with exceptional durability and wear resistance.

- 45 W to 250 W rated power
- Gearbox size 31 mm and 33 mm
- Aluminum gearbox casing
- Low noise
- Direct coupling between servo motor and worm gear for improved efficiency
- Planetary gearbox available on request

BRUSHLESS TECHNOLOGY

The turnkey brushless bundle **TETRA COMPACT E & FLEXI PRO DRIVE**



The brushless bundle result of innovative design and production concepts, excellent quality, international certifications, carefully selected components and a wide range of power ratings for highly dynamic, accurate and reliable automation.

0.16 Nm to 45 Nm rated torque

50 W to 7 kW rated power

Maximum servomotor speed up to 6000rpm

Built-in 20 bit proprietary absolute magnetic encoder

Options: TTL encoder, absolute multiturn encoder (Hiperface)

Extended ambient operation temperature from -20° C to +40° C

UL [UL 1004], CSA, CE, Rohs certified

The adaptable series **TETRA & TETRA COMPACT**



A wide range of power ratings and in high and low inertia versions to provide targeted solutions for a variety of applications.

60 W to 8 kW rated output power

Up to 5000 rpm

IP 65 protection rating

Feedback: 2-pole resolver, TTL encoder, multiturn absolute encoder

Optional zero backlash, permanent magnet emergency brake

UL insulation file

The UL certified series **TETRA & TETRA COMPACT**



International certification for these servo motors, ideal for any movement and positioning requirement

60 W to 2kW rated output power

Up to 5000 rpm

IP 65 protection rating

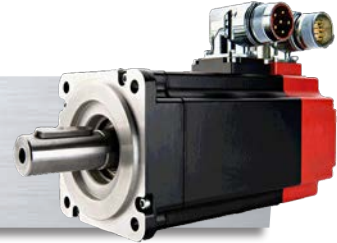
Built-in feedback resolver 2 poles, TTL Encoder, Absolute Multiturn Encoder (Hiperface)

Optional zero backlash, permanent magnet emergency brake

UL recognized

BRUSHLESS TECHNOLOGY

24-48 Vdc operation **TETRA COMPACT LOW VOLTAGE**



The compact synchronous servomotors with high power density for low voltage applications in many different uses in logistics, medical, agriculture or any device that is battery operated or must respond to specific voltage limitations for safety reasons: Tetra Compact is the perfect combination of compactness, performance and reliability.

From 60W to 800W rated output power

40 - 60 and 80mm flange

Maximum servomotor speed up to 5000rpm

Low voltage motion control

Extreme environmental application **TETRA COMPACT- EXTREME**



Whenever your motion is performed in areas where environmental conditions can be extremely high or low (-40°/+80°C), this series of motors is the way to secure uncompromised performances without tradeoff in reliability and dynamics. Motors that have been designed and equipped with material capable of standing harsh conditions typical of transportation, operations in refrigerated warehouses, defense and many more applications where conventional motors might be limited in their resistance to humidity or severe temperatures.

Rated output power from 60W to 1600W

Maximum servomotor speed up to 5000rpm

Insulation class F (155 °C)

IP 65 on motor body

Temperature protection by PT 1000 (excluding TC 40)

Smooth or keyed shaft

Built-in feedback resolver 2 poles

Cable flange with connectors for TC 40

90° round circular turnable connectors (IP 67) for all other models

Special internal tropical insulation

Stainless steel external screws

Special additional external coating with Primer Extra and Sigma Fast black paint

SERVO DRIVES

The A.C. series drives **FLEXI PRO Servodrive**



High performance, digital, AC servo drives combines advanced functionalities with beautifully simple start-up. They boast an excellent power/size ratio and offer extremely dynamic and accurate motion control.

120/240 and 400/480 VAC

1,5 – 30A rated current

4,5 – 90A peak current

Multifeedback

HD advanced control loop with adaptive gain

Safe torque off (STO) SIL2

Programmable digital I/Os

CANopen, EtherCAT

The D.C. series drives **LITE PRO Servodrive**



4-quadrant, DC servo drives are extraordinarily compact and ideal for controlling brushless servo motors.

48 VDC

5 – 10A rated current

15 – 30A peak current

Encoder feedback

Can Open DS 301/402

Programming of internal script

Compact design, suitable for integration

DRIVE INTEGRATED

BRUSHLESS TECHNOLOGY

Brushless drive integrated systems

DUET, DUET AD AND DUET FLEXI

These models are everything you need for moving and controlling an axis is built directly into these highly compact single component: servomotor, feedback and intelligent servo drive featuring CANopen, Profinet or Ethercat networking.

Supply voltage 48 Vdc

Built - in digital drive

60 W to 520 W output power

Brake control

Integrated 2 pole resolver

Absolute encoder

Connectors

Ethercat, CanOpen and Profinet



The adaptable series

DUET HV

DUET HV is the new high voltage DUET series, a line consisting of brushless servomotor with integrated incorporating as well absolute encoder for uncompromised precision in positioning.

Nominal power supply 560Vdc

Stall torque 1,3 - 2,8 - 4 - 5,6 - 8 - 14 Nm

Nominal speed 3000 rpm

Absolute multi and singleturn encoder

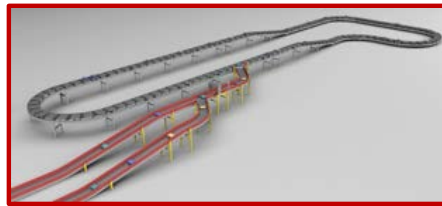
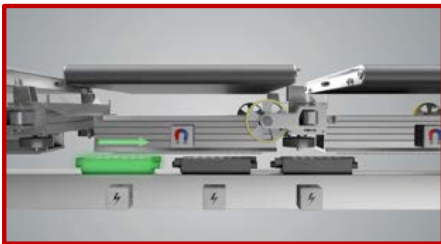
Ethercat



MECHATRONIC SOLUTIONS

LSM - LINEAR SYNCHRONOUS MOTORS

Modular direct drive traction system for reliable and sustainable material handling and logistics sectors. Modular system composed by: SKA DDL frameless motors, drives, encoder and control.



Drastic reduction in noise

No maintenance

No friction

Quick stop

Built-in encoder with 8 mm accuracy

Precise speed control

High energy efficiency

Easy to use

Accuracy

Precise speed control

High energy efficiency, easy to use

MECHATRONIC SOLUTIONS

ILSM - INDEPENDENT LINEAR SYNCHRONOUS MOTOR

A comprehensive full direct drive mechatronic solution, based on independent carriers, operated by linear motors.



Customizable length and shape

Rise in productivity without affecting machine footprint

Process flow optimization

Maximization of efficiency in productivity

Flexibility for future implementations on the machine

Cost cutting thanks to working units reduction

Settable acceleration and deceleration rates, ideal for fragile products

Customizable motion speed

Fast change of setup

Easy-low maintenance, compared to traditional mechanical transfer

Compatibility with every PLC



motorpowerco.com

MOTION CONTROL

MECHATRONICS

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**MOTOR
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