Orientalmotor

NewMotion

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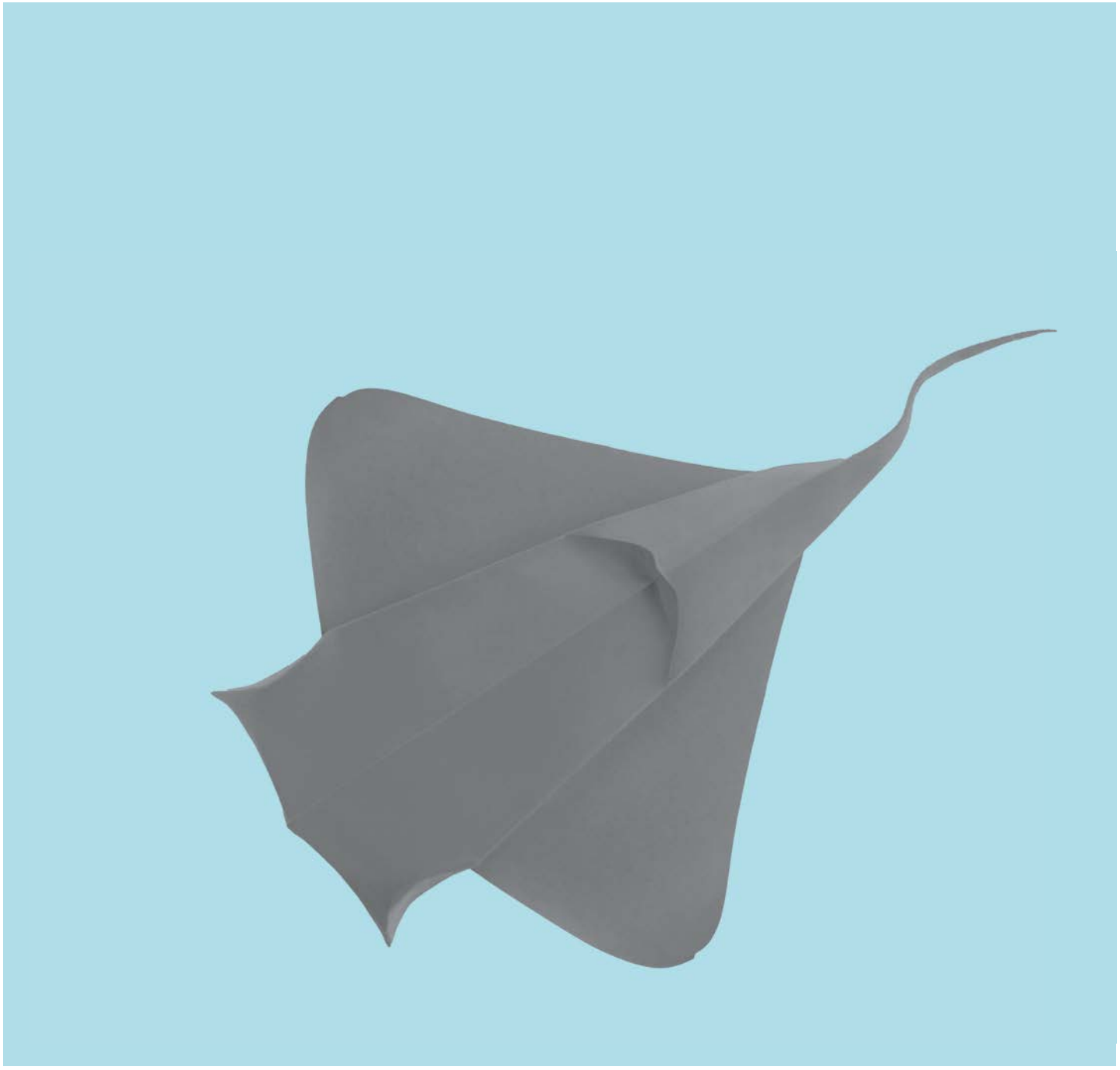
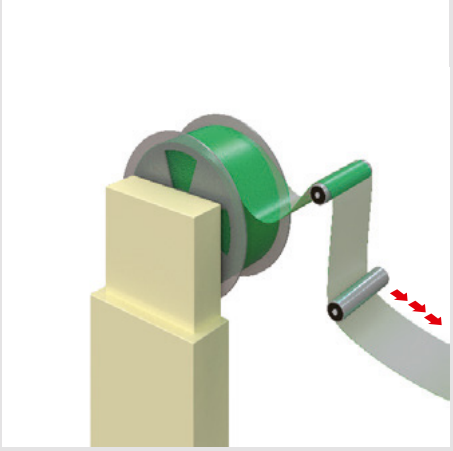


Tension Control

with motors from Oriental Motor

Winding and Tensioning
of Materials

A common task in the processing industry is the winding and unwinding of reels of material. Mechanical systems for controlling the level of tension applied to the material can be expensive and complex.



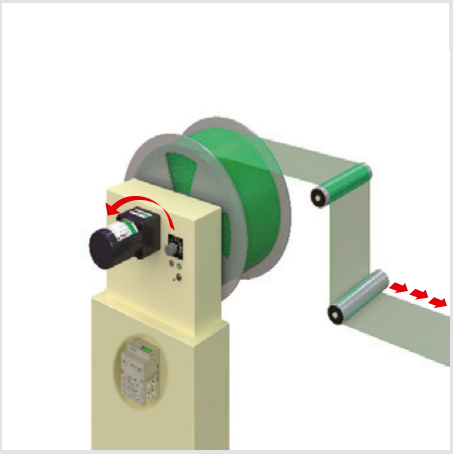
Application: Film Winder

When no tension is applied to the unwind reel the material can be pulled loose, leading to sagging, and potentially uneven amounts of the film being supplied.

Torque Motors
in Action

Solution

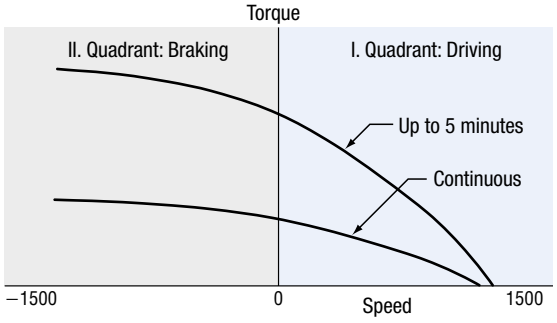
TM Series torque motors with power controller



Application: Film Winder

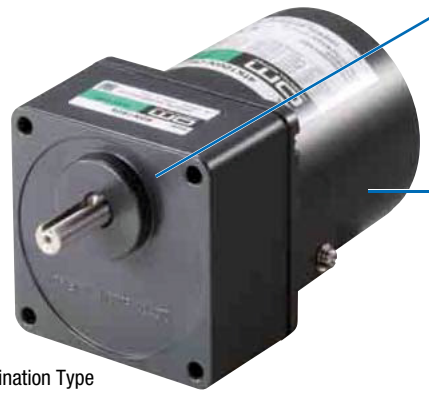
Torque Motor as a Brake

The motor is set to rotate in the opposite direction to the unwinding direction of the material, allowing it to maintain tension on the material. Keeping the torque in the operational brake quadrant ensures that this tension remains uniform.



Solution:

TM Series Torque Motors with Power Controller



Combination Type

Gearhead (Long life, low noise GN-S gearhead)

The proven **GN-S** Series gearhead has a service life of 10,000 hours, twice as long as a conventional gearhead.

Motor

The lifespan of a motor is determined by its bearings. We use high-performance bearing grease to lubricate this important component. The service life of the bearing is twice as long as that of a conventional type.

Worldwide Power Supply Voltages

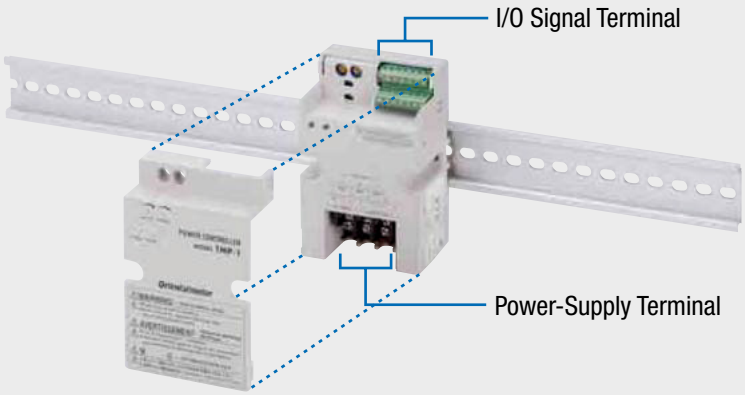
The **TM** Series power controller supports all common international power supply voltages (single-phase 100 to 230 VAC).

Overview

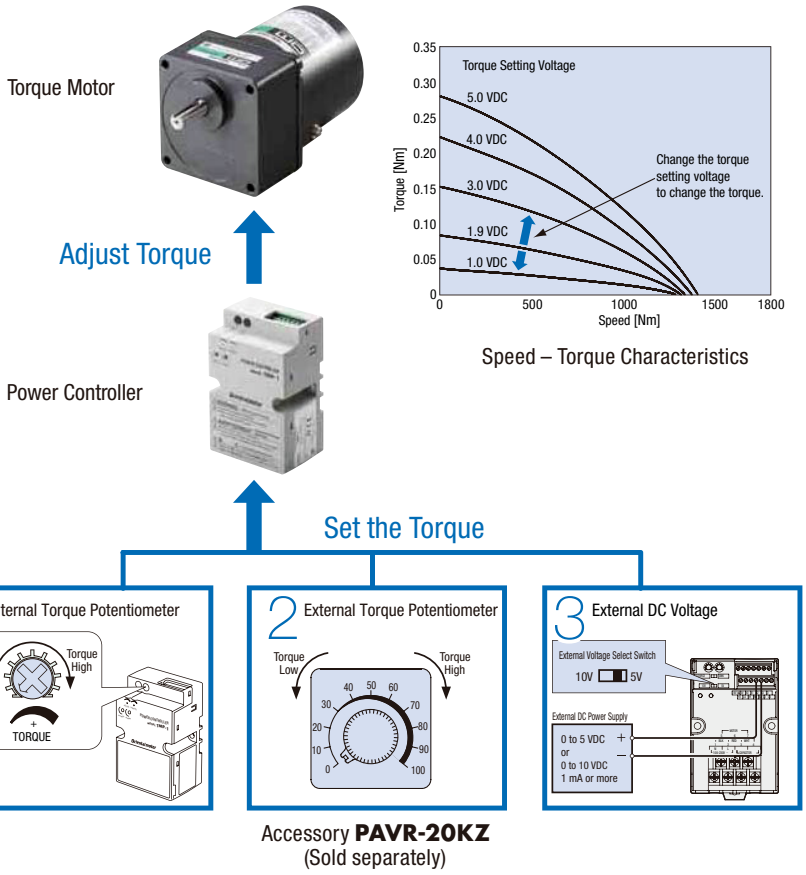
- **Output Power:** 3 W, 6 W, 10 W, 20 W
- **Type:** Round shaft type, Pinion shaft type
- **Power Supply Voltage:**
  Single-phase 100 VAC,
  Single-phase 110/115 VAC,
  Single-phase 200 VAC,
  Single-phase 220/230 VAC

Simple Wiring, DIN Rail Mountable

The power controller has been designed with separate terminals for the power supply and I/O signals for easy wiring. It can be mounted directly on a mounting plate or to the DIN rail.



Simple Torque Setting
with different Setting Options

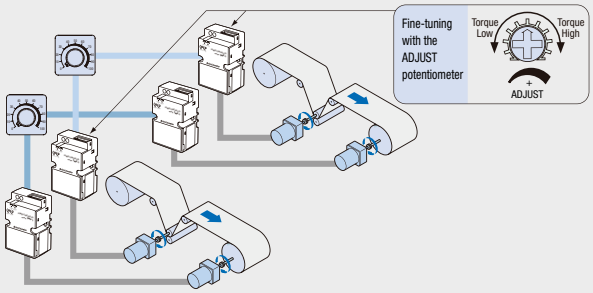


Speed – Torque Characteristics

Accessory **PAVR-20KZ**
(Sold separately)

Torque setting options

The torque can be set using one of three methods to suit the application. You can also select 2 different torque values by using a digital input to switch between methods 1 and 2, or 1 and 3.

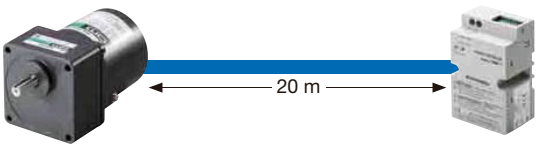


Torque Fine-Tuning Function

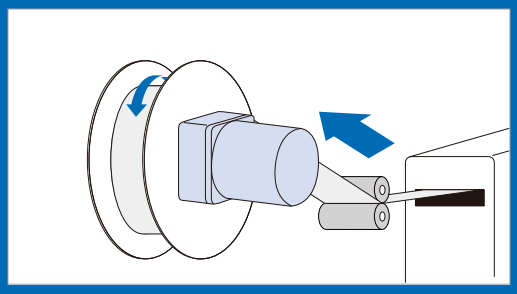
The motor will have some minor variation between the set torque value and the actual torque output by the motor, due to real world variables. The power controller paired with the **TM** Series has a torque fine-tuning potentiometer (ADJUST potentiometer) to correct this variation. This means that in an application where several motor-driven machines are run in parallel, the differences between the individual motors can be corrected with ease.

Distance between Motor and Power Controller

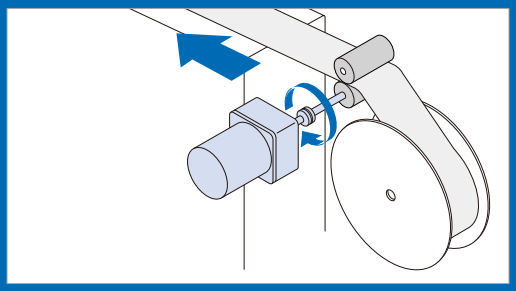
The distance between the motor and power controller can be extended up to 20 m. This is ideal in situations where the motor is installed some distance from the control panel.



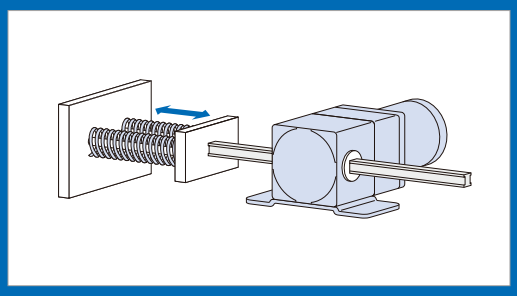
Outstanding Features
of Torque Motors



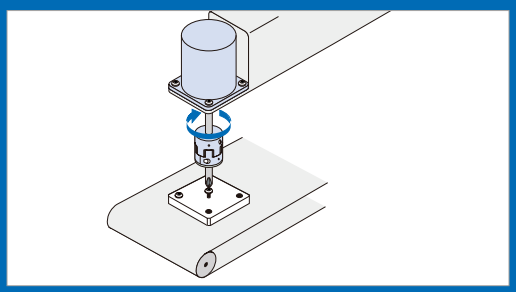
Winding
The characteristics of a torque motor are ideal for applications where the work is wound at a constant speed and tension.



Tensioning (Brake)
The braking force of a torque motor can be used to tension the material to remove slack as it is wound.



Push-Motion
As torque motors provide stable torque in a locked state or near-locked operation at low speed, they are suitable for push-motion operation.

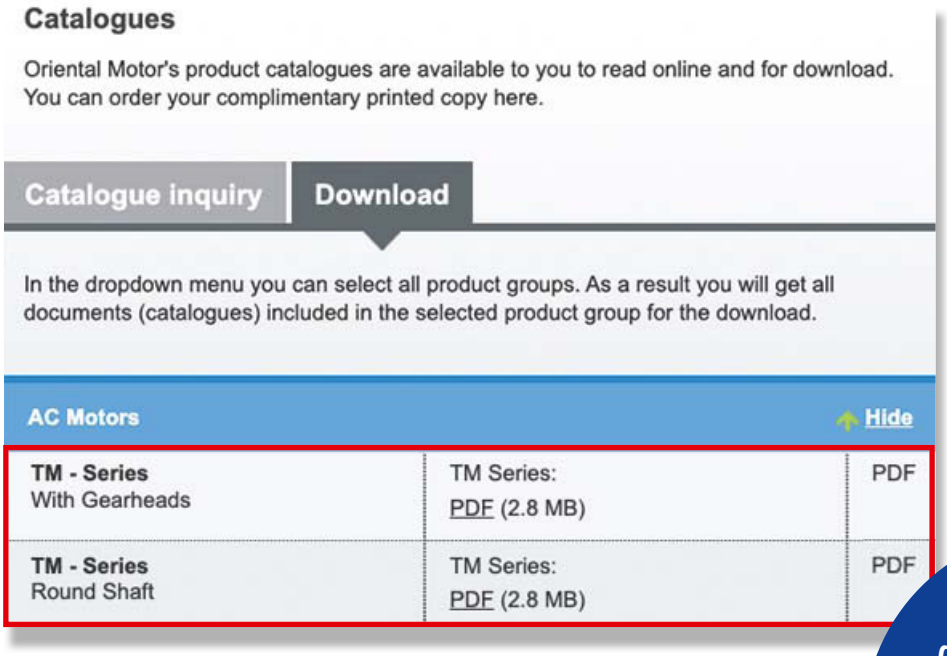


Tightening
Torque motors provide stable torque in a locked state or near-locked operation at low speed, making them suitable for tightening applications, such as tightening a screw.

Service
Catalogues

Oriental Motor's product catalogues are available to you to read online and for download.
You can order your complimentary printed copy here.

Please visit our website at:
www.orientalmotor.eu/Info_center



If you have any questions, please do not hesitate to contact us on 00800 22 55 66 22 (Free Call Europe).

NewMotion

ORIGAMI MANTA RAY

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HANNOVER MESSE
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HANNOVER MESSE

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IMPRESSUM

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The information in this brochure is presented as general information. For accurate technical specifications please contact the Oriental Motor (Europa) GmbH office.

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