NEW

Lenze
engineered to win

Motor driven roller MDR
o450

Endless opportunities for designing your conveyor system

The new active motor driven roller from Lenze

Intralogistics solutions in warehouses or distribution centers benefit from the endless opportunities offered by our new motorized roller for designing conveyor systems.

- Up to **2x as powerful** as other MDRs thanks to the innovative drive concept
- Up to **30% energy savings** compared to conventional MDR due to low friction losses – comparable with efficiency classes IE7 to IE9
- **Pleasantly quiet** during operation thanks to the Vernier principle
- **Reduced number of variants** – one for all speeds and torques
- **Voltage flexibility** with 24 and 48 VDC

Accumulating roller, roller and belt conveyors

Horizontal transportation of full and empty crates, cartons or sensitive goods in polybags is guaranteed to run smoothly with the motor driven roller.

Diverter

The number of parcels shipped each year is set to increase by the billions. Parcel logistics therefore, requires efficient, dynamic and reliable conveyor solutions that evolve with the company.

Cross conveyor

Quick changes of direction, sideways movements, and applications in the industry, the motor driven roller is so reliable. Peak torques of up to 5 Nm are possible.

Innovative motor design

The so-called Vernier motor combines a three-phase AC motor with a loss-free magnetic gear effect and thus ensures speed.

Sustainable savings

– 335 MWh power
– 145 t CO_2
That's how much less electricity and CO_2 **20,000 motorized rollers** consume in a logistics center with a **20 km conveyor line.**

Super quiet

Regardless of whether you are driving conveyor belts or roller conveyors, the MDR motor driven roller is gearless and pleasantly quiet.

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Partner for **automation solutions in intralogistics**

Every automation concept presents unique challenges, whether your priority is decentralized flexibility, energy efficiency, simple configuration or compact size.

Intralogistics conveyor systems can be designed much more precisely with the **new Lenze MDR** than with comparable MDRs, and oversizing with the corresponding energy losses is avoided.

Powerful Performer

The new motor driven roller is twice as powerful as conventional motorized rollers and enables goods to be transported much faster.
The innovative, brushless motor design works according to the vernier principle: a magnetic gear effect is generated, which makes the o450 motor driven roller powerful and efficient. The power electronics are integrated inside. With a diameter of 50 mm, the roller is extremely compact.

Application Allrounder

The gearless design reduces your variants by up to 85%, reducing excess stock and minimizing design variables.
This maximizes your flexibility from an operational and maintenance perspective. With fewer variants in the warehouse, you gain the flexibility to solve the diverse load and speed challenges faced in today's intralogistics operations.

Efficiency Superstar

Cost and energy savings are the result of the compact and gearless design. Friction losses are completely eliminated. The efficiency of the motorized roller is 30% higher than that of conventional motor driven rollers with gears.
The motor design not only uses less active material but is also based on a newly developed type of magnet that requires 30% less rare earths than conventional magnets. In total, >50% less rare earths are used.

Control of the motor driven roller

24 V or 48 V, with an analog setpoint specification of 0 - 10 V for speed control and ramp adjustment, such as with the G20 module from Pepperl+Fuchs.
One control module can drive up to 4 motorized rollers.