

Tomorrow's technology for
innovative logistics



Company

Pioneer, developer and leader in motorized roller

During the last 70 years **ITOH DENKI** has become recognized throughout the world for the design, manufacture and marketing of motorized rollers and automated systems adapted for the most innovating logistics.



Founded in Japan in 1946, **ITOH DENKI** has developed and improved its know-how and pioneering leadership in the field of motorized roller technology. **ITOH DENKI** has diversified its range of products and automated systems, in order to remain at the forefront of innovation in the fields of conveyors and logistic systems.

A philosophy of professional integrity

Animated by its values of loyalty, efficiency and courtesy, **ITOH DENKI** has always maintained a shared trust with its customers, suppliers and employees.

Always at your service

ITOH DENKI Group and its distribution network is spread all around the world. All products are developed and industrialized at the headquarters in Japan, and distributed by 4 subsidiaries in France, the USA, Shanghai and Hong Kong. Each subsidiary is responsible for selling products in its area, and to provide localised customer service. The European market is managed by **ITOH DENKI Europe**, with its headquarters in France, where the products are assembled, along with two branch offices in Great-Britain and Germany.





and automated systems



We work for your success

● Pioneer :

Since their industrialization in 1975, our research and development center has continued to improve our motorized asynchronous rollers with creative innovation.

ITO DENKI was the first company to offer motorized rollers with 24VDC Brushless technology in 1989, and has continued innovating ever since to anticipate your future needs.

● Leader :

Being the only fully autonomous manufacturer of motorized rollers, **ITO DENKI** manages the entire process from conception to marketing thanks to its know-how and its experience in the fields of mechanics, electronics, automation, and logistics.

● Innovator :

ITO DENKI is driven by values of research and innovation, to be able to develop new products that foresee and answer your needs.

● Conscious :

ITO DENKI is an environmentally conscious company with ISO 14001 certification. Furthermore we maintain a high level of product quality with our ISO 9001.

● Available :

A team of technical salesmen and engineers is ready to recommend the best products for your logistical needs, in a pro-active and timely manner.

Markets & References

The **ITO DENKI** products are recognized worldwide in all business fields:

Postal services : La Poste, Deutsch Post, Royal Mail, USPS.

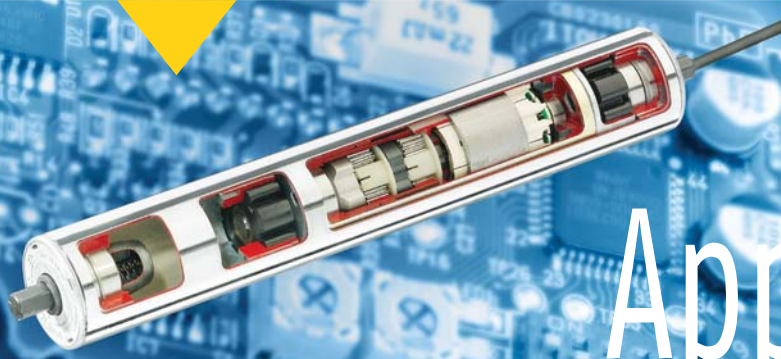
E-commerce, Distribution : Amazon, Gardners Books, Oscaro.

Automotive : Toyota, Peugeot, Michelin, Valéo, Bosch, Jaguar, Volkswagen.

Air transport, airports : SAS, KLM, Heathrow Airport, Liverpool John Lennon Airport.

Domestic appliances and Computers : Sony, Toshiba, Canon, Dell, Brandt.

Advertizing display : JC Decaux, Clear Channel.



Applications

Productivity, competitiveness, reliability and flexibility...

Innovation, modularity and security are the main features of **ITOH DENKI** products, enabling customers to create cutting edge logistics technology.

The advantages of the **POWER MOLLER**:

- + **Space saving** : compact and ready to fit inside your conveyor equipment.
- + **Flexibility and modularity** : easy integration within the conveyor, customized sizes.
- + **Security** : only 24VDC is needed, ergonomic and quiet.
- + **Environment** : low energy consumption, clean and recyclable.

POWER MOLLER® Applications

<p>Zero pressure accumulation</p>	<p>90° transfer</p>	<p>Curve</p>
<p>Turn table</p>	<p>Lifting table</p>	<p>Gate</p>
<p>Floor conveyor</p>	<p>Acceleration/Deceleration</p>	<p>Lift</p>
<p>Bifurcation/Merge</p>	<p>Cross transfer</p>	<p>Multidirectional transfer</p>
<p>60° transfer</p>	<p>Cold room</p> <p>- 30° C</p> <p>Contact us</p>	<p>Belt conveyor</p>



POWER MOLLER® 24

Itoh Denki exceeds your expectations!

24V DC Brushless motorized rollers with external circuit board



The circuit board is separated from the gear-motor, which is integrated inside the roller. This optimizes the performance and durability of the roller, and offers diverse functions such as pulse signals, acceleration/deceleration, dynamic brake, optional positioning holder, error signal, etc.

The assembly can be controlled by PLC. Some models provide Zero Pressure Accumulation (ZPA) function thanks to the HB circuit board, to allow separate management of the zones and secure transport of the conveyed loads.

SERIES	DIAMETER	MAX LOAD TO BE CONVEYED	CORRESPONDING CIRCUIT BOARD			
			STANDARD	WITH ZPA FUNCTION	NETWORK CONTROLLER	MECHANICAL BRAKE
PM320HS	∅ 32 mm	10 kg	CB018			
PM500FE	∅ 50 mm	300 kg	CBM-105	HB510	IB-E	
PM605FE	∅ 60.5 mm	500 kg	CBM-105	HB510	IB-E	
PM500FE-B	∅ 50 mm	300 kg	CB016B	HB510B	IB-E	Brake
PM605FE-B	∅ 60.5 mm	500 kg	CB016B	HB510B	IB-E	Brake
PM500VE	∅ 50 mm	300 kg	CBV-108		IB-P	
PM605VE	∅ 60.5 mm	500 kg	CBV-108		IB-P	
PM605KT	∅ 60.5 mm	1000 kg	CB030	HBK608	IB-E	



OPTIONS / VARIANTS

• For all other options, please contact us •

Motor shaft:



plain hexagonal



threaded hexagonal

Shaft on the non-motor side:



hexagonal spring loaded



set screw

Protection index:



IP54



IP 65



Cold room -30°

Material:



zinc-plated steel



stainless steel

Products and VARIATIONS

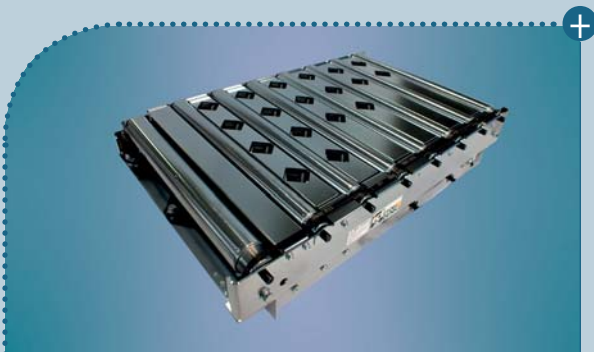
24V DC Brushless motorized rollers with integrated circuit board



The circuit board and gear-motor are integrated within the roller to give a higher level of IP protection, easy wiring with M8-5pins connector and space saving. It can be easily controlled by: PLC, Asi-Bus via Bihl+Wiedemann module, PEPPERL+FUCHS, logic sensors with integrated ZPA from Wenglor, etc.

SERIES	DIAMETER	MAX LOAD TO BE CONVEYED	MODULE ASI-BUS
PM500XE	ø 50 mm	300 kg	Bihl+Wiedemann
PM605XE	ø 60.5 mm	500 kg	
PM500XP	ø 50 mm	300 kg	
PM605XP	ø 60.5 mm	500 kg	
PM500XC	ø 50 mm	300 kg	PEPPERL+FUCHS
PM500XK	ø 50 mm	300 kg	

POWER MOLLER® Pop-Up module



The Pop-Up is a 45° transfer module, in the form of a cassette, that can be integrated within the conveyor frame. It requires only a 24VDC supply with 150W, and has a transfer capacity of about 3000 packages/hour, when the transfer rate is at 50%.

MOTORIZATION	CORRESPONDING CIRCUIT BOARD	CONTROL
PM500FE	CBM-105 CBR-306	To be programmed with PLC

CBM 105



CBR-306



Shape:



grooves



crowned

Pulley:



ribbed



grooves

Sleeve:



tapered



PVC

Lagging:



polyurethane



natural rubber / nitrile

MODULES and Accessories



POWER MOLLER® F-RAT module



MOTORIZATION	CORRESPONDING CIRCUIT BOARD	CONTROL
PM500FE	CBM-105 CBR-306	To be programmed with PLC
	HBR-605	Autonomous controller with integrated transfer program
PM500XP		To be programmed with PLC or ASI module



The F-RAT is a 90° multidirectional transfer unit supplied complete in a highly compact cassette module, that can be easily integrated within the conveyor frame. It requires only a 24VDC supply with 100W. It has a transfer capacity of about 2500 packages/hour, when the transfer rate is at 50% and without making a level change of the transported goods.

Accessories

- 1) 24VDC power supply
- 2) Ribbed belts
- 3) Sensor Wenglor
- 4) Extension cable with M8 connector
- 5) Communication cable
- 6) Motor extension cable
- 7) Speed adaptor
- 8) Power supply connector
- 9) Round belts
- 10) Module ASI PEPPERL+FUCHS
- 11) Module ASI Bihl+Wiedemann



for all the accessories and more information: CONTACT US





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