

**ITOH DENKI** was founded in 1946. We started out as a small shop repairing conventional motors and soldering tools. From these humble roots, we expanded into the design and sale of our own electric motors. In 1975, we developed the motorized conveyor roller. It consisted of a standard roller tube with our own electric motor and gear set inside. These units were AC powered. Today, we continue to pioneer the Motor Driven Roller (MDR) market with our 24V brushless DC Power Moller® 24.

The Power Moller® 24 provides a safe and energy efficient alternative to traditional conveyors powered by large electric motors. Our Power Moller® 24 can be used in virtually any application. In addition to our standard and high torque rollers, we have rollers that can be used in low temp. operations, belted applications, heavy duty pallet handling, and wash-down areas.

# **POPULAR 24V DC ROLLERS**



## PM486FE - STANDARD TORQUE PM486FP - HIGH TORQUE

- \_\_\_ 1.91" diameter
- 7/16" plain hex shaft standard on PM486FE
- 7/16" threaded hex shaft standard on PM486FP
- Spring-loaded end for ease of installation
- Zinc plated, carbon steel tube
- Dynamic braking standard
- Transports up to 400 lbs.
- Waterproof and low temp. options available



## PM635FS - STANDARD TORQUE PM635KE/KT - HIGH TORQUE

- 2.5" diameter
- Robust 11 gauge carbon steel tubing
- 11/16" threaded hex shaft standard
- Transports product up to 4000 lbs.
- Speeds up to 855 FPM
- Available with roller chain sprockets and poly V belt drive
- Easy retro-fit for existing pallet handling systems



Intralox® patented MDR sprocket



- 2.24" diameter
- High torque
- Splined aluminum tube
- IP54 enclosure
- Class E insulation
- .53" plain hex shaft standard
- Compatible with Intralox® sprocket and Intralox® Modular Plastic Belting



Modular Plastic Belting by Intralox®

## **POPULAR MODULES**



#### FLAT RIGHT ANGLE TRANSFER (F-RAT-NX75)

- Allows for forward, backward, left and right directional product transfer
- Powered by 24V DC motorized conveyor rollers
- Transfer speed: up to 197 FPM (60 m/min)
- Weight capacity: up to 110 lbs.
- 15 different sizes available
- No pneumatics
- Energy efficient due to Run-on-Demand operation

## **SLIDE OPEN GATE (SOG2)**

- Retracts and extends to allow easy access for conveyor maintenance
- Putting two back to back will allow enough space for a forklift or AGV to pass
- Powered by 24V DC motorized conveyor rollers
- Standard speed: 200 FPM
- Compatible with Rockwell Automation controls for increased customization
- Available in 8 between-frame widths
- Energy efficient due to Run-on-Demand operation





#### **MULTI-ANGLE BALL SORTER (MABS2)**

- Allows packages to be transferred at any angle, including 30, 45 and 90 degrees
- Powered by 24V DC motorized conveyor rollers
- Conveying speed: 295 FPM (90 m/min)
- Scalable place multiple units together to increase weight capacity and transfer surface
- No pneumatics
- Processing power: 4000-6000 totes/hr.
- Energy efficient due to Run-on-Demand operation

#### **2 ZONE**

### IB-E03B IB-E04F

#### HBM-604B-UL



## Controls up to two Power Mollers (brake and non-brake models)

- IB-E03B: 10 pin, 4 amp
- IB-E04F: 12 pin, 7 amp
- Two port Ethernet switch simplifies network design
- Life cycle monitoring feature displays remaining useful motor life
- Rockwell Automation Add-On-Profile (AOP) available for seamless integration
- Built-in Device-Level Ring (DLR) technology maintains continuous communication
- Ethernet/IP Conformance Tested™
- UL and cUL recognized component

EtherNet/IP

- Controls up to two Power Mollers (brake and non-brake models)
- Standard 10 pin connector
- Dynamic brake control
- Stable speed function to ensure articles of different weights travel at the same rate
- Flexible Zone Recognition
  (patented) to handle long articles
  which simultaneously block
  multiple sensors
- Logic for general Zero Pressure
   Accumulation (ZPA) control is built
   in
- UL and cUL recognized component



### **SINGLE ZONE**

## CB-016S7 CB-016BS7 (BRAKE CARD)



- Controls one Power Moller
- Standard 9 pin connector on nonbrake card
- Standard 10 pin connector on brake card
- Direction control by on board DIP switch or external signal output
- Variable speed control by one DIP switch combined with one rotary switch or by external voltage input up to 20 speeds
- Adjustable acceleration and deceleration time (0 to 2.5s)
- Stable speed function to ensure articles of different weights travel at the same rate
- UL and cUL recognized version available



HB-510



- Controls one Power Moller
- Standard 9 pin connector on non-brake card
- Standard 10 pin connector on brake card
- Dynamic brake control
- Stable speed function to ensure articles of different weights travel at the same rate
- Flexible Zone Recognition (patented) to handle long articles which simultaneously block multiple sensors
- Logic for general Zero Pressure
  Accumulation (ZPA) control is
  built in

Power Moller	CB-016S7	CB-018N2	CBK-109F	CBM-103F	CBM-105F	HB-510	HBK-608F	HBM-604B- UL	IB-E03B	IB-E04F	IB-E04F- CR-HT.1
PM320HS		Х									
PM486FE	Х				Х	Х		Х*	X*		
PM486FH			Х				Х			Х	Х
PM486FP	Х				Х	Х		X*	X*		
PM486FS	X				X	X		X*	X*		
PM570KT			Х				Х			Х	Х
PM635FS	X				X	Х		X*	X*		
PM635KE				Х							
PM635KT			Х				Х			Х	Х

<sup>\*</sup> In order for the rollers to plug into these cards, roller needs to have a BR option (if available), a Z060, Z100, Z200, or Z300 option, or external 9/10 pin extension cables need to be purchased separately.

