



The motorized roller PM605FE with brushless technology 24VDC, used with circuit board CBM-105 is designed for conveying light and medium loads for order preparation, distribution, and for assembly lines. This circuit board is separated from the gear-motor in order to optimize the performance, durability of the roller and to offer diverse functions such as pulse signals, acceleration/déceleration, optional position holder... The assembly can be controlled by PLC.

# ADVANTAGES

## HIGH CAPACITY AND RELIABLE

The transfer speed is high with a rate of up to 1800 start up / hour. Stops are accurate and reliable thanks to the dynamic brake, without wear off.

## FLEXIBILITY AND MODULARITY

Decentralized motorization, mounting and ease of use, simplified and fast line modification.

## ERROR SIGNAL AND PROTECTION

Defects are detected and reported. The motor and circuit board are protected against overload, overheating, incorrect wiring, the current return, etc..

## SIGNAL PULSE

This signal is used to measure data such as distance, speed, etc.. to achieve a more precise control of loads.

## ECOLOGY AND SAFETY

No noise or oil rejection. Everything works with very low voltage, without compressed air.

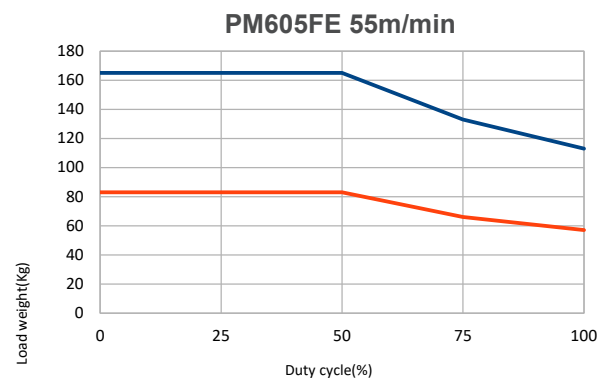
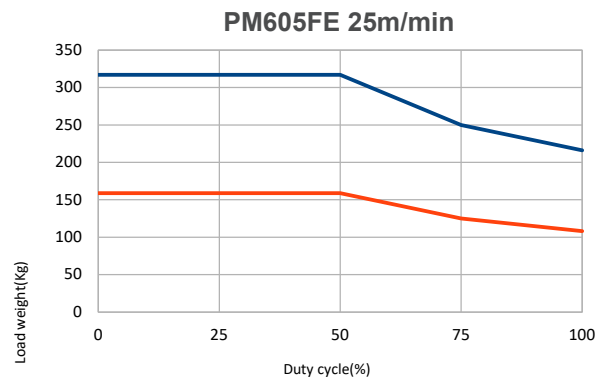
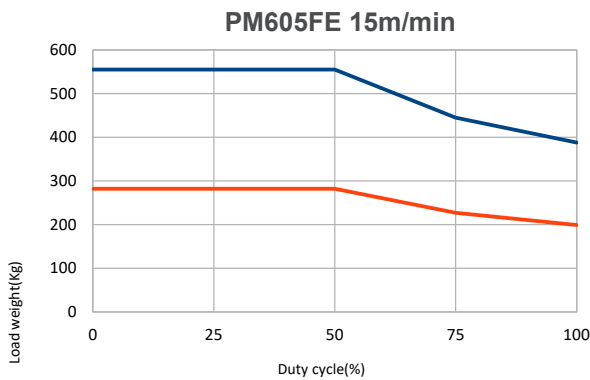
## ACCELERATION / DECELERATION

It is possible to adjust the transport speed (from 0 to 2.5 sec) with a soft acceleration and deceleration allowing the safe transport of loads that could be unstable.

## SERVO BRAKE

In addition to the dynamic braking, there is a possibility to activate or deactivate the maintaining electronic brake for retaining the charges in position.

# TRANSFER CAPACITY



- Load to transport
  - Plastic box ( $\mu = 0,03$ )
  - Cardboard box ( $\mu = 0,06$ )
- 9 slave rollers driven by 1 motorized roller



*These curves are given as a guide. Transfer capacity depends on the nature and quality of the transported load, the belt tension, the quality of the bearings, the nature of the sleeves, the ambient temperature...*

# OPTIONS / VARIANTS

## Motor shaft :

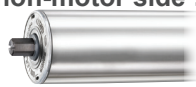


Plain hexagonal



Threaded hexagonal

## Shaft on the non-motor side :



Hexagonal spring loaded



Set screw

## Protection index :



IP 54



IP 65

## Material :



Zinc plated steel



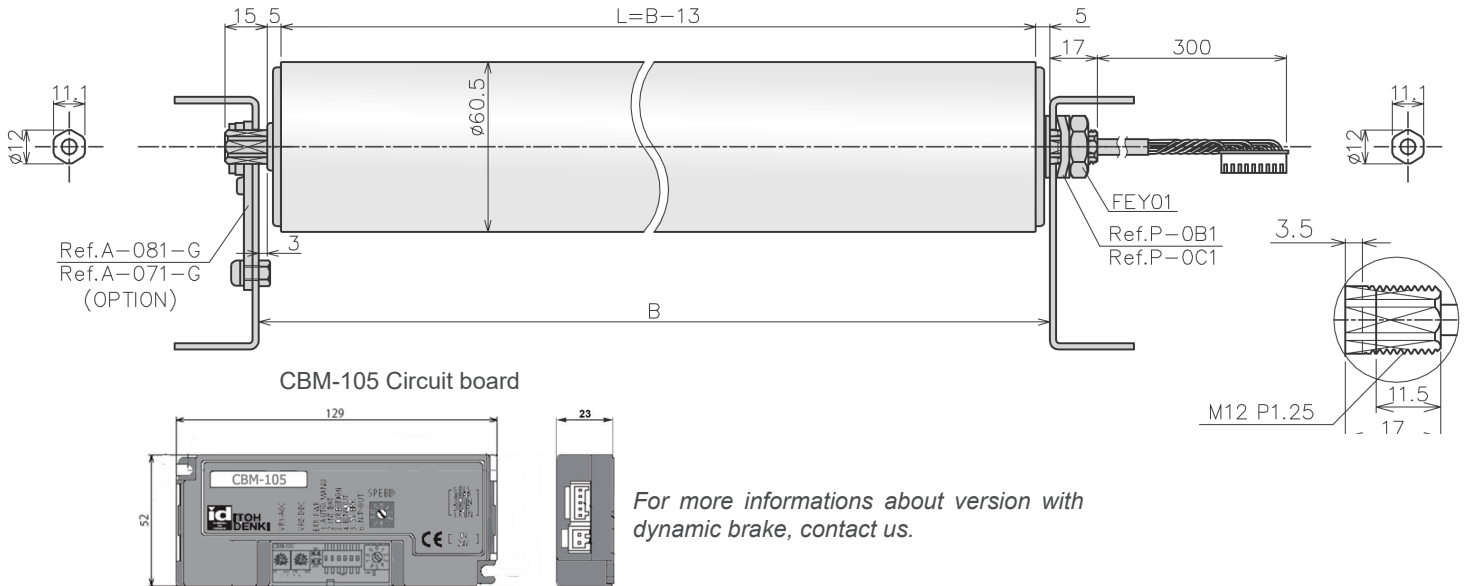
Stainless steel

Contact us for more specifics.

The elements of this document

# STRUCTURES AND DIMENSIONS

Motorized roller without brake : PM605FE



# ELECTRO-MECHANICAL CHARACTERISTICS

CHARACTERISTICS		SPEED CODE 15	SPEED CODE 25	SPEED CODE 55	
ELECTRO-MECHANICAL	Motor	Direct current and brushless 24 VDC			
	Absorbed power (W)	nominal	25 - 67,2		
		start-up	96		
	Tangential force (N)	nominal	110,7 - 118,9	64,5 - 71,1	35,4 - 38
		start-up	289	186	92,4
	Operation	Continuous or intermittent 1800 starts/h max. Minimum duty cycle : 1s ON / 1s OFF			
	Brake	Dynamic braking			
	Nominal speed (m/min)	no load	2,7 - 21,1	4,5 - 35,5	9,3 - 74,7
		nominal	2,7 - 16,1	4,5 - 30,7	9,3 - 57,2
	Protection index (motor roller)	IP54, 65 (Contact us for other classes)			
Lenght	280 à 1500 mm	300 à 1500 mm	300 à 1500 mm		
Static load max.	300 - 1500 mm = 160 - 60 kg per roller				
CONTROL	Input signal	Start / Stop, Direction of rotation			
	Selection of rotation direction	By dip switch (CW/CCW) or input signal			
	Speed setting	20 speeds with a rotating switch			
		20 speeds by external analog voltage of 0-10VDC			
	Acceleration / Deceleration	Adjustable with potentiometer from 0 to 2,5s			
	Servo-brake activation	ON/OFF by dip switch			
	Pulse signal out-put (imp./tour)	89,9	53,34	25,28	
	Error signal out-put	Over-heating, wiring error, under-voltage, over-voltage...			
Protection	Against polarity reversal 0/24V and power backfeed, fuse, integrated thermal protection				

Shape :



Crowned

Pulley :



Ribbed

Lagging :

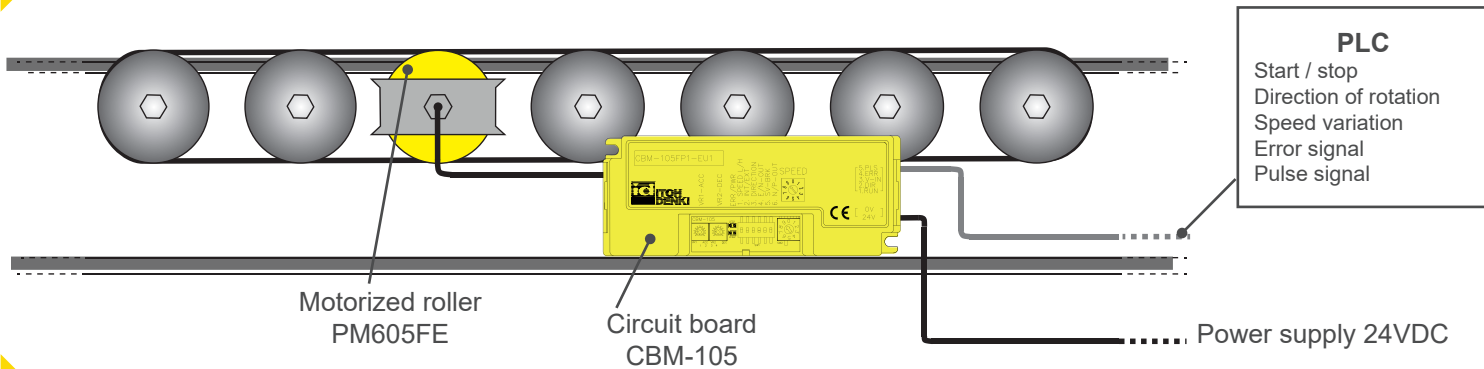


Polyurethane

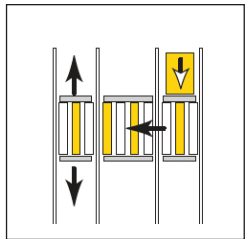


Natural / nitrile

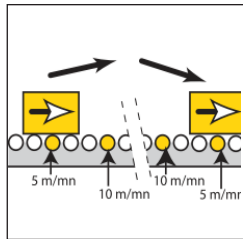
## WIRING



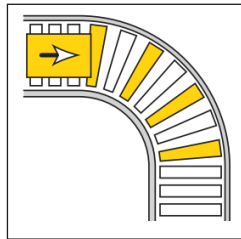
## APPLICATIONS



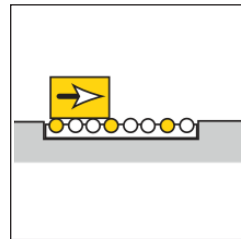
90° ANGLE TRANSFER



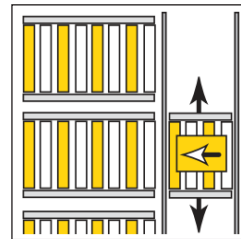
ACCELERATION  
DECCELERATION



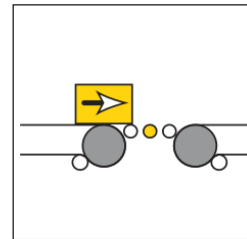
CURVE



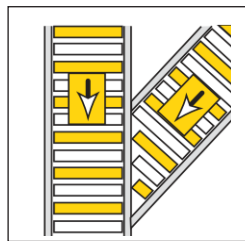
FLOOR CONVEYOR



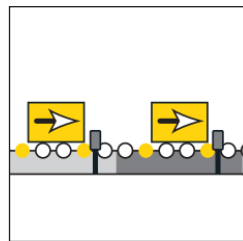
CROSS TRANSFER



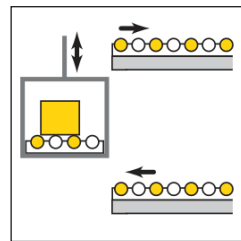
LINK



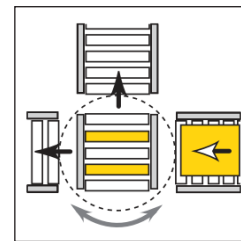
BIFURCATION  
MERGE



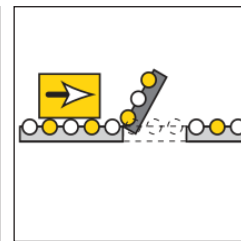
ZERO PRESSURE  
ACCUMULATION  
(ZPA)



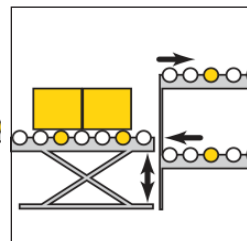
LIFT



TURN TABLE



GATE



LIFTING TABLE

## REFERENCES

### ORDER



### DISTRIBUTION



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