ITOH DENKI

TECHNOLOGY FOR TOMORROW ®

POP-UP SERIES

TECHNICAL DOCUMENTATION

POWER MOLLER®

SUMMARY

1 - Presentation of the Power Moller® product range

POWER MOLLER® solutions

Controls

- Standard circuit board
  - CB016 | CB016B
  - CBM-105
  - CBK-109 | CBK-109B — *Replacing CB030*
  - CB018
  - CBV-108
- ZPA circuit board
  - HB510 | HB510B
  - HBK-608
  - HBV-609
- Module circuit board
  - HBR-605
  - CBR-306
  - HBM-201
- Network controller
  - IB-E
  - IB-P

Motorized rollers

- DC Brushless
  - External circuit board
    - Ø50
      - PM500 FE (KG 300) — CBM-105, HB510, IB-E
      - PM500 VE (KG 300) — CBV-108, HBV-609, IB-P
      - PM500 FE-B (KG 300) — CB016B, HB510B
    - Ø60,5
      - PM605 FE (KG 500) — CBM-105, HB510, IB-E
      - PM605 VE (KG 500) — CBV-108, HBV-609, IB-P
      - PM605 FE-B (KG 500) — CB016B, HB510B
      - PM605 KT (KG 1000) — CBK-109, HBK-608, IB-P, IB-E
      - PM605 KT-B (KG 1000) — CBK-109B
    - Ø32
      - PM320 HS (KG 10) — CB018
  - Integrated circuit board
    - Ø50
      - PM500 XE (KG 300) — B&W AS-i 5.0, Wenglor
      - PM500 XP (KG 300) — B&W AS-i 5.0, Wenglor
      - PM500 XK (KG 300) — PEPPERL-FUCHS, AS-Interface, B&W AS-i 5.0
      - PM500 XC (KG 300) — PEPPERL-FUCHS, AS-Interface, B&W AS-i 5.0
    - Ø60,5
      - PM605 XE (KG 500) — B&W AS-i 5.0, Wenglor
      - PM605 XP (KG 500) — B&W AS-i 5.0, Wenglor

Modules

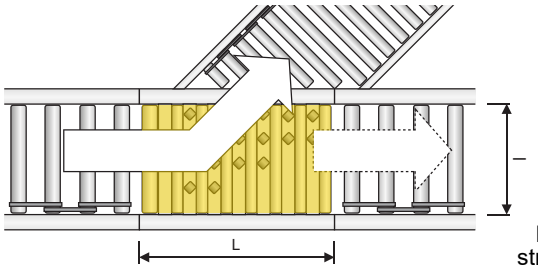
- 90° transfer
  - F-RAT-S250 — HBR-605, CBM-105, CBR-306
  - F-RAT-S300 — HBR-605, CBM-105, CBR-306
  - F-RAT-NX75 — CBK-109, CB016B, HBM-201, IB-E, IB-P
  - MRAT — CBK-109, CBM-105, IB-E, IB-P
- 45° transfer
  - POP-UP — CBM-105, CBR-306
  - POP-UP VE — IB-P05F-P-UL, IB-P01FP-UL, CBV-108FP-LF1, CBV-108FP, CBV-108FP-LF1
- 30° / 45° / 90° transfer
  - MABS — IB-E06F-M1

Corresponding circuit board | Compatible module / sensor | Max load to be conveyed | Mechanical brake version

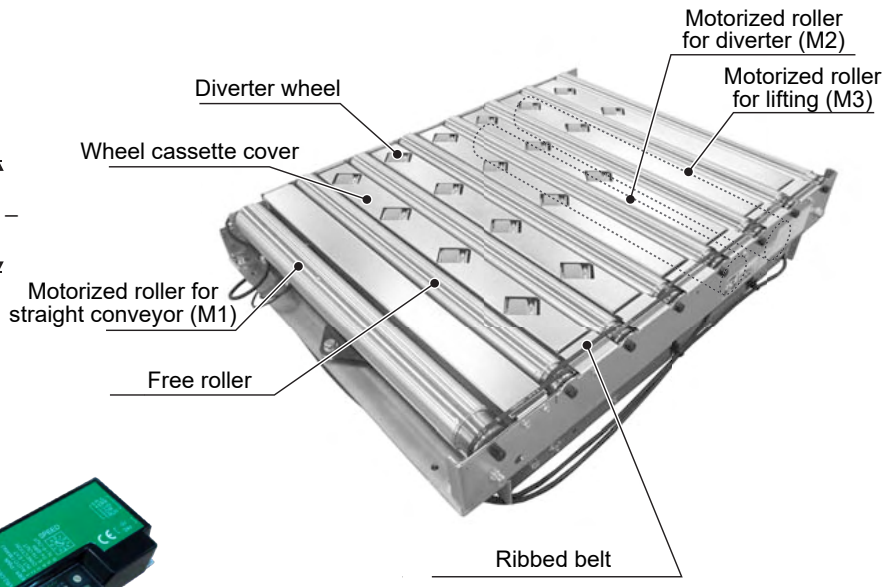
2. Presentation of «Pop-Up»

Itoh-Denki Pop-Up transfer modules use 24V DC Brushless Motorized Roller technology in a very compact « cassette » structure. This makes it easy to integrate into both new and reconditioned conveyors. It can be used on conveyor lines for order picking, distribution or on assembly lines to adapt to your logistics changes.

Structure



Size D, transfer left



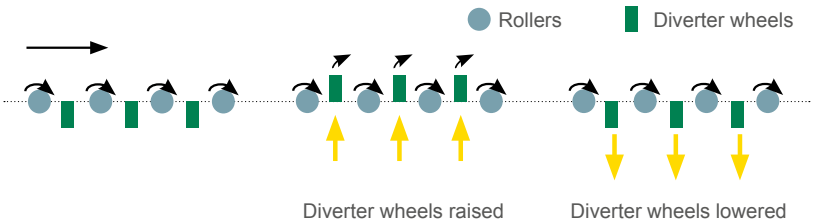
Circuit boards

CBM-105

CBR-306

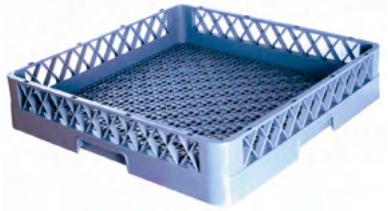
Operating principle

This diverter module works with three brushless motorized rollers, at very low voltage (24 V DC), without pneumatic or other types of energy.
The transfer works using the up and down movement of the wheel deflector. No more than two motors run at the same time, and don't exceed 147W in nominal operation.



Bottom surface of load to be conveyed

This transfer table is made to transfer carton boxes or plastic trays with flat bottom, smooth and dry.
It is not designed to transfer trays with ribbed bottom, in plastic or metal. For tote with not flat bottom, please consult us.



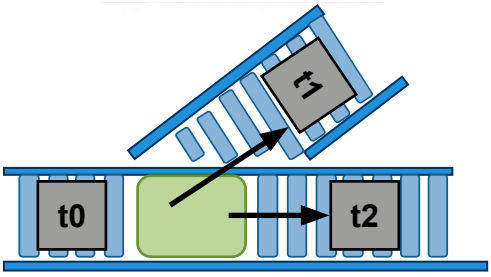
General technical data

Size		A	B	C	D
Dimension WxLxH (mm)	Width W (mm)	394	494	594	694
	Length L (mm)	760			
	Height H (mm)	169			
Frame width mini (mm)		400	500	600	700
Load dimensions WxL (mm)	Mini	300x300			
	Max.	300x650	400x650	500x650	600x650
Max load to be conveyed (Kg)		30			
Number of diverter wheels		14	18	18	24
Number of transfer free rollers		7			
Transfer angle		45° (30° option)			
Transfer direction		Right or left (to be specify on order)			
Weight (Kg)		46	49	51	54
Speed		Straight conveyor: 60m/min max (adjustable) Diverter 45° : 90m/min max (adjustable)			
Level difference transfer wheel-roller (mm)		3			
Frame		Zinc-coated steel			
Motorized rollers	Roller	ø50mm / Zinc-coated steel			
	Cable length (mm)	1500mm from motor shaft			
	Connector	JST 9p male			
	Circuit board for straight conveyor and diverter	CBM-105-FP1-EU1			
	Circuit board for lifting	CBR-306FP-B			
Proximity sensor		PNP, normally open contact 24VDC (NO)			
Diverter wheels	Dimensions (mm)	ø39,5			
	Material/hardness	Polyurethane 90ShA			
Power supply	Voltage	24VDC ± 10%			
Absorbed power	On motor start-up	192W max			
	Nominal	147W max			
Environment	Ambient temperature	0 to 40°C			
	Humidity	≤90% relative humidity without condensation			
	Vibration	≤0.5G			
Protection rating	Motorized roller	IP54			
	Circuit board	IP20			
Accessories (Optional)		Extension cable (motorized roller - circuit board) Mounting support 24VDC supply unit			

3. TRANSFER CAPACITY

SPEED AND RATE OF LOAD TRANSFER, ZONE BY ZONE, IN SINGULATION MODE

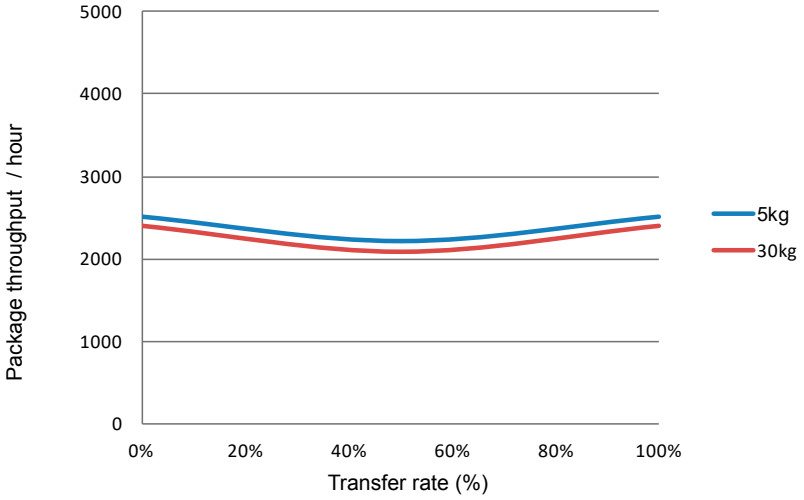
- Plastic box
- Diverter angle : 45°
- Straight transfer speed : 60m/min
  Divert transfer speed 45° : 90m/min



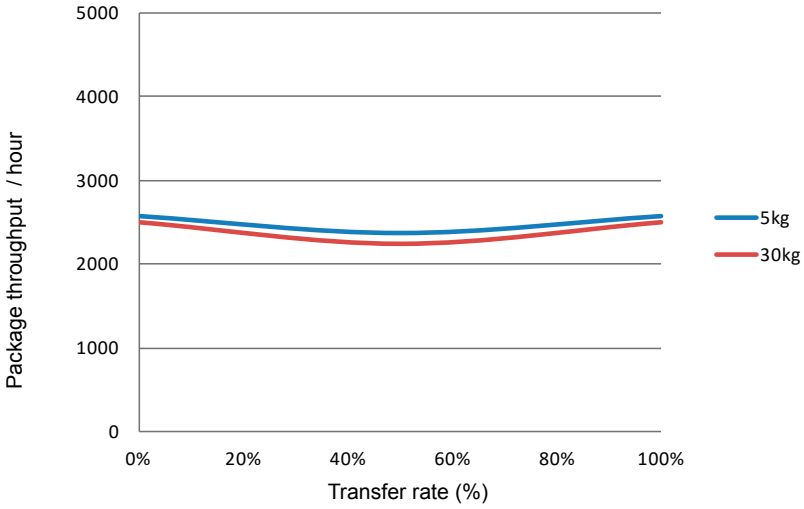
$$\text{Transfer rate (\%)} = \frac{t1}{t0} \times 100$$

Transfer capacity depends on dimension, bottom surface and material of the transported load, as well as speed, transfer mode, transfer rate...
These curves are given as a guide.

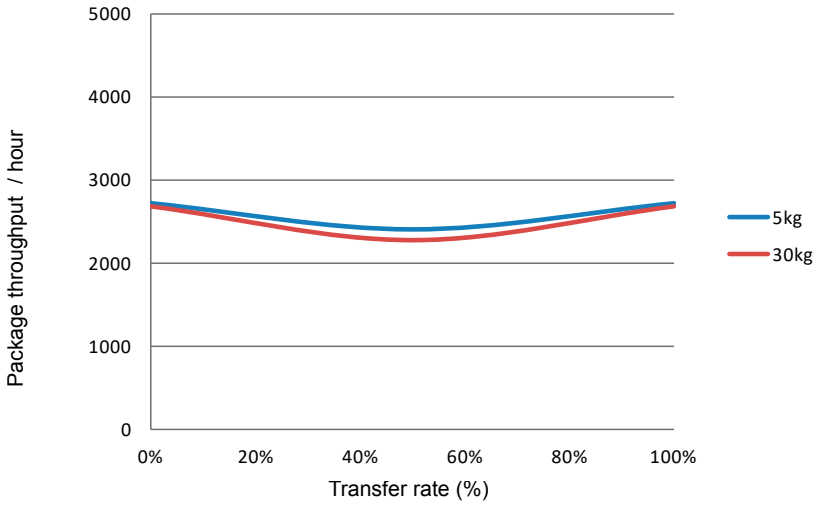
Load 600x390mm



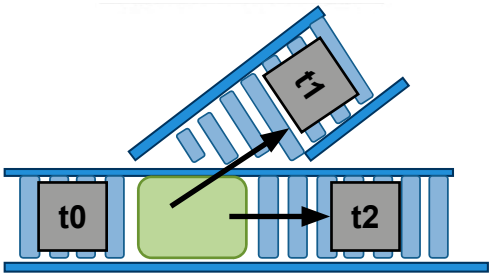
Load 450x370mm



Load 360x360mm



- Cardboard box
- Diverter angle : 45°
- Straight transfer speed : 60m/min
  Divert transfer speed 45° : 90m/min



$$\text{Transfer rate (\%)} = \frac{t1}{t0} \times 100$$

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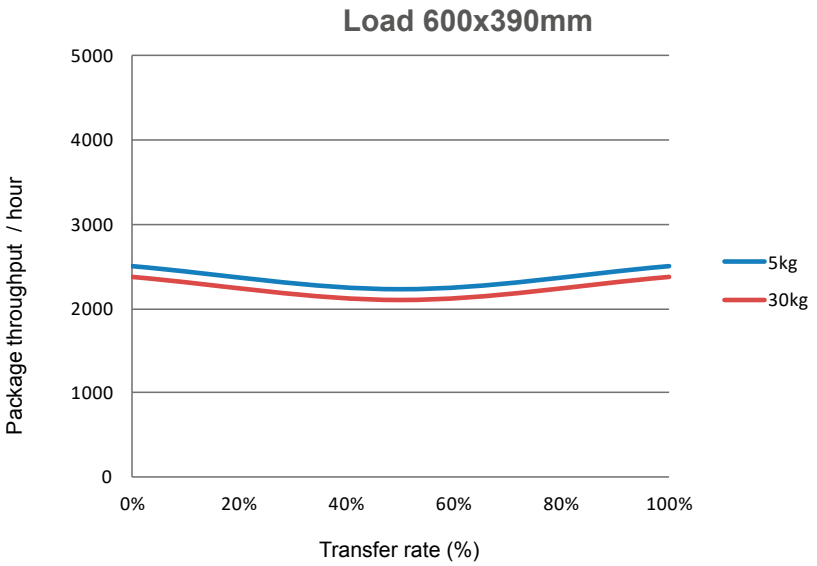
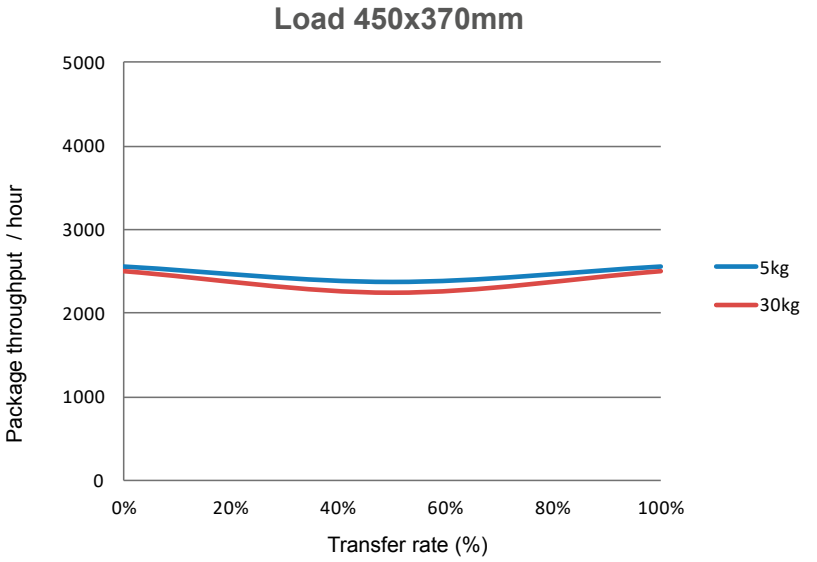
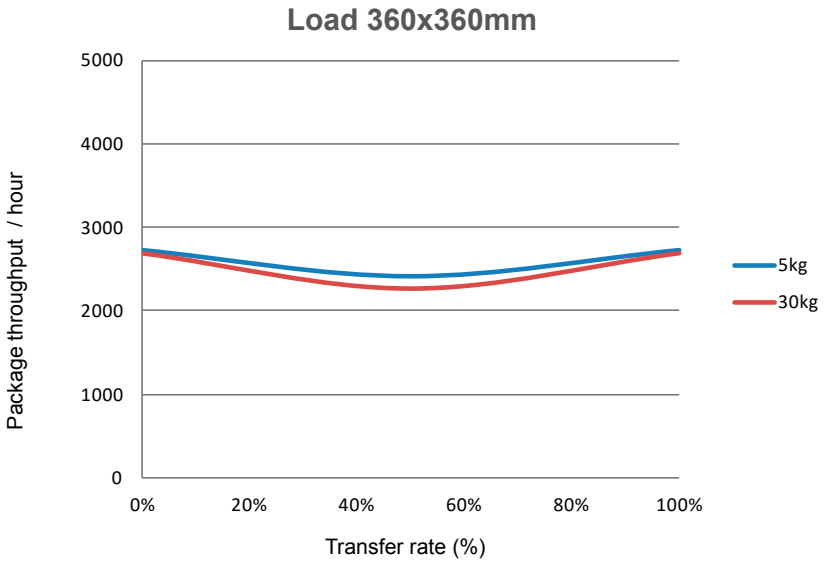
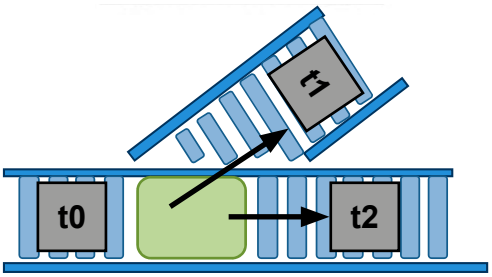






SPEED AND RATE OF LOAD TRANSFER IN TRAIN MODE

- **Plastic box**
- **Diverter angle : 45°**
- **Straight transfer speed : 60m/min**
  Divert transfer speed 45° : 90m/min



$$\text{Transfer rate (\%)} = \frac{t1}{t0} \times 100$$

⚠ Transfer capacity depends on dimension, bottom surface and material of the transported load, as well as speed, transfer mode, transfer rate...
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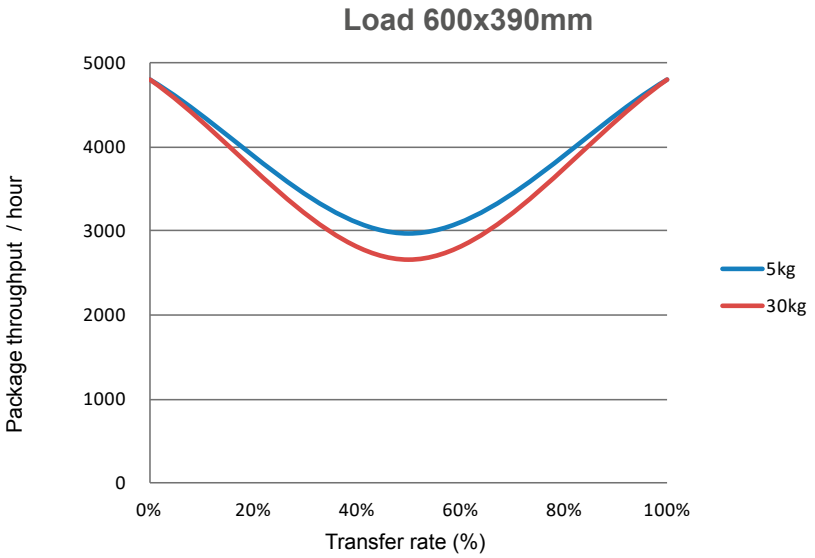
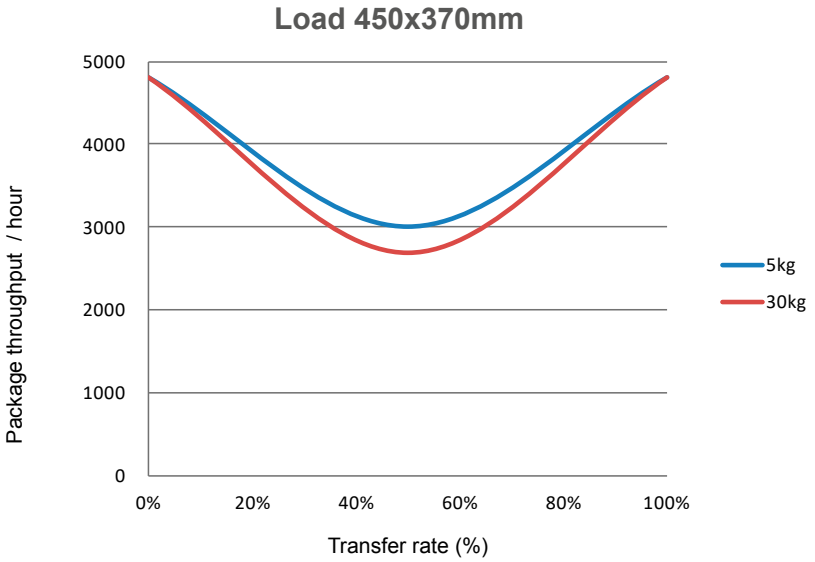
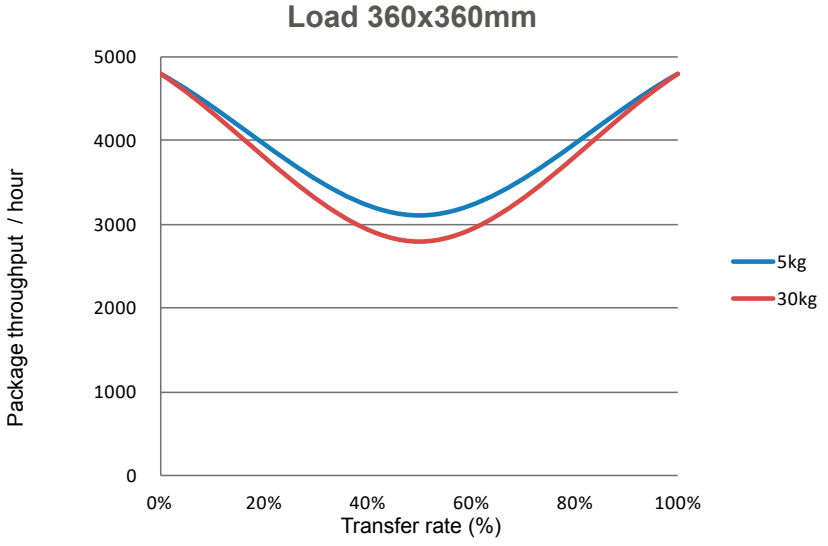
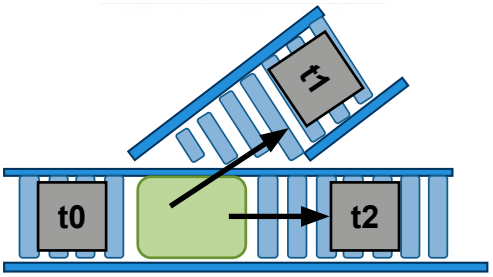






- Cardboard box
- Diverter angle : 45°
- Straight transfer speed : 60m/min
  Divert transfer speed 45° : 90m/min



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⚠ Transfer capacity depends on dimension, bottom surface and material of the transported load, as well as speed, transfer mode, transfer rate...
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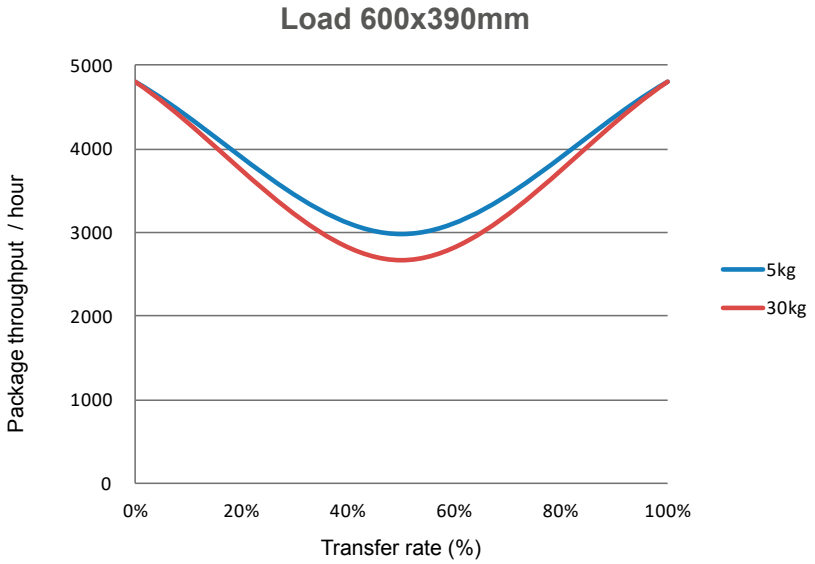
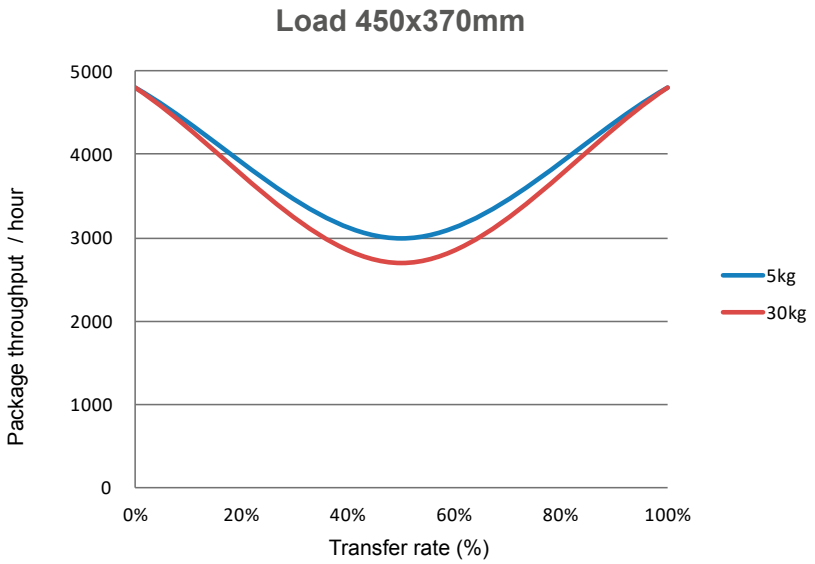
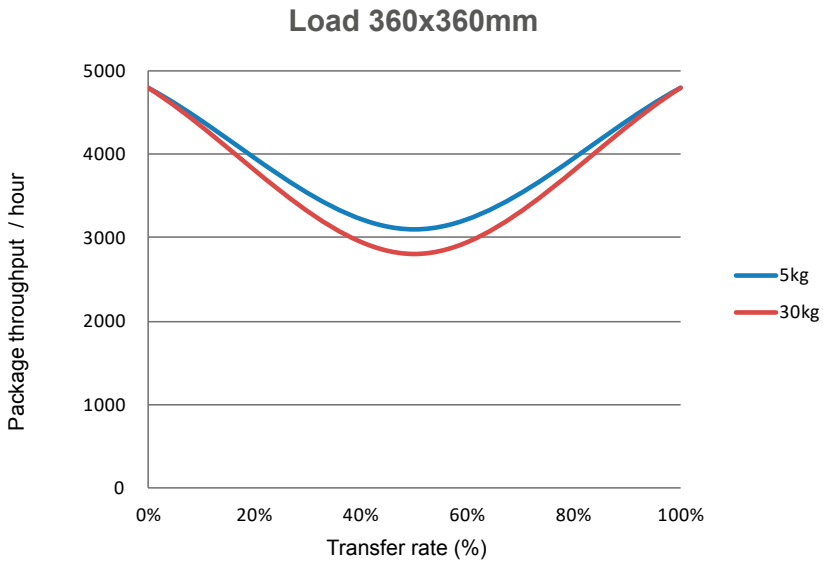


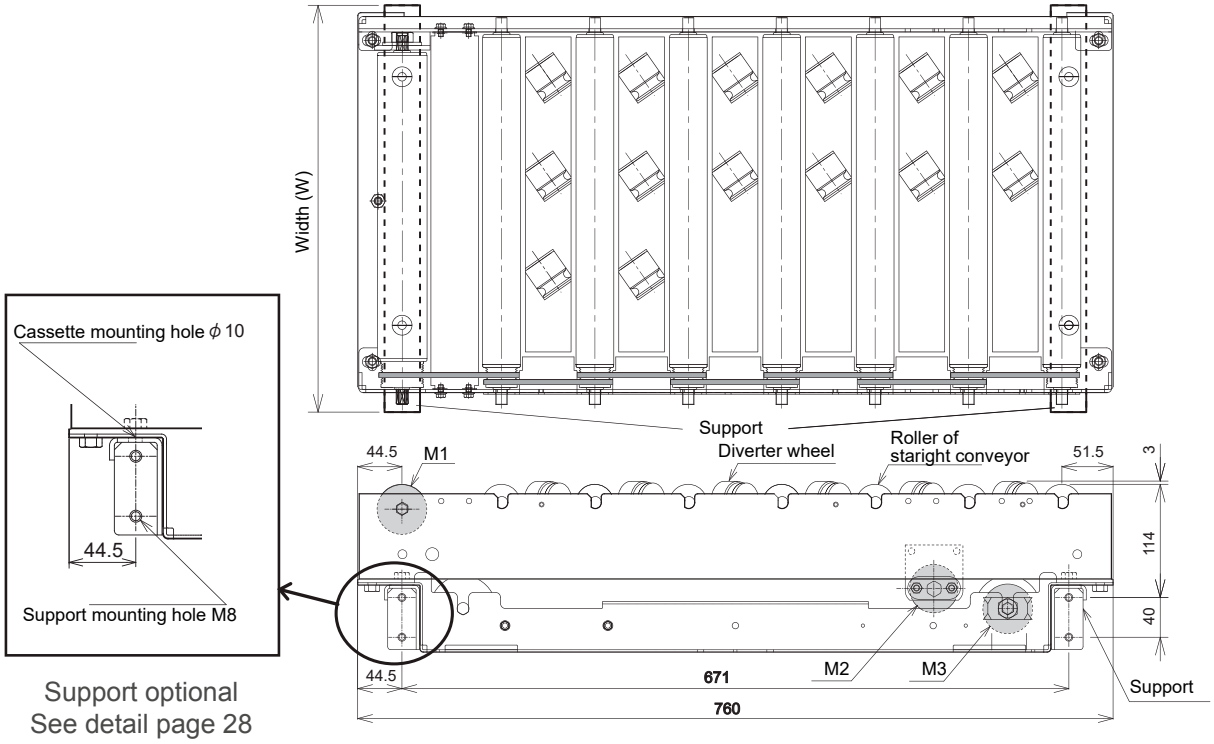




4. Installation of the module

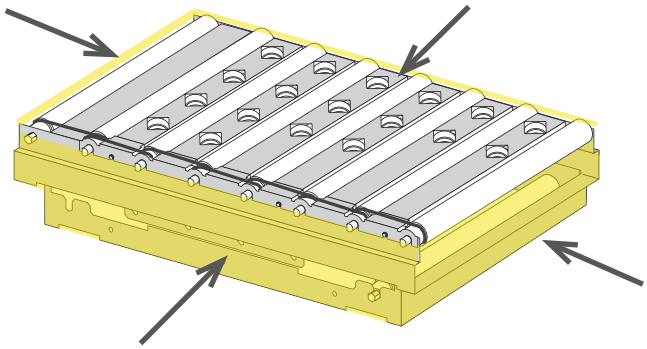
Assembly principle

The cassette-type structure is inserted between the conveyor frame and fixed to two brackets with the help of four M8 screws.
Optional mounting supports are available upon request.



⚠ The level of the straight conveyor, before and after the “pop-up”, should be aligned with the straight conveyor roller.

⚠ The level of the angled conveyor should be aligned with the deflector roller.



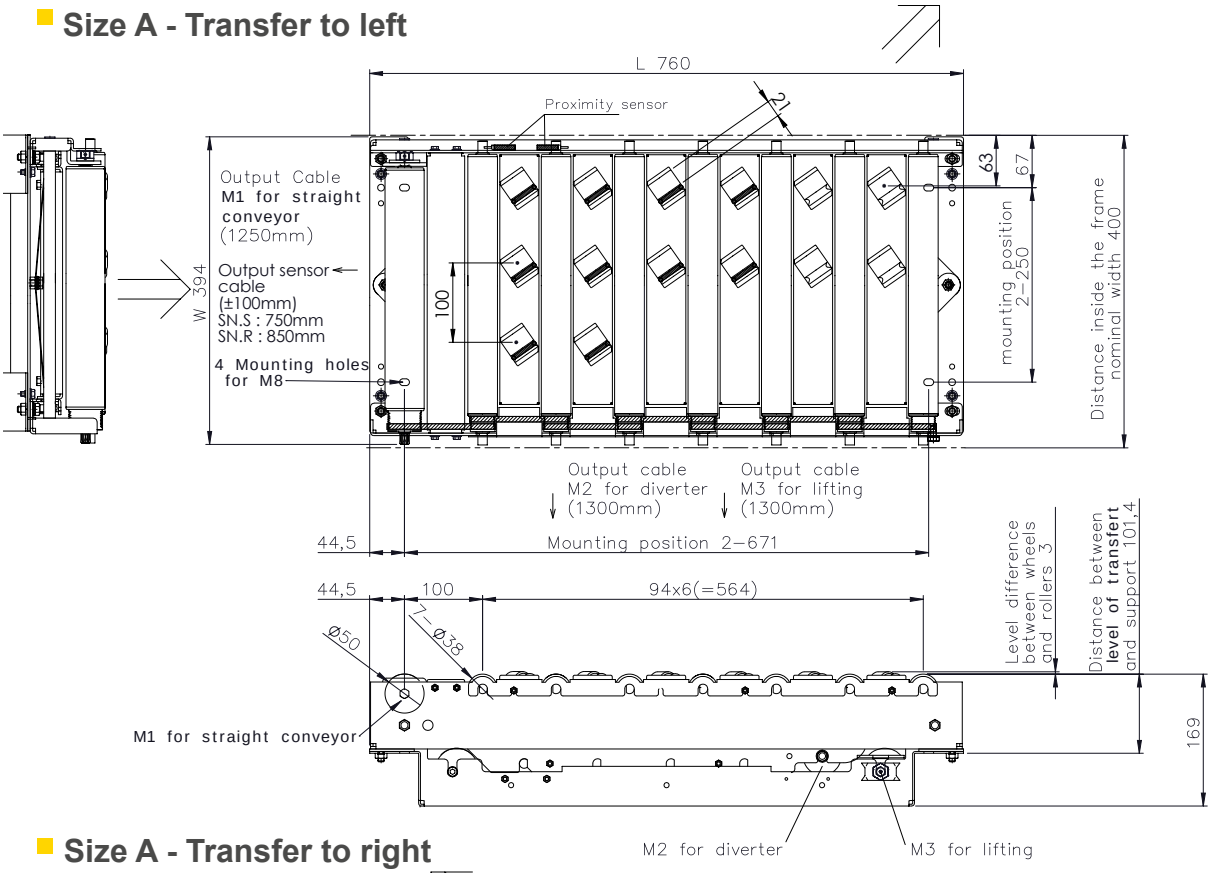
The lateral and lower parts of the transfer cassette are unprotected against mechanical risks. Appropriate protection should be applied depending on the structure and environment in which it will be installed and in accordance with local safety regulations.

⚠ Integration of the “pop-up” transfer cassette should be designed in order to enable easy insertion/extraction for maintenance purposes.

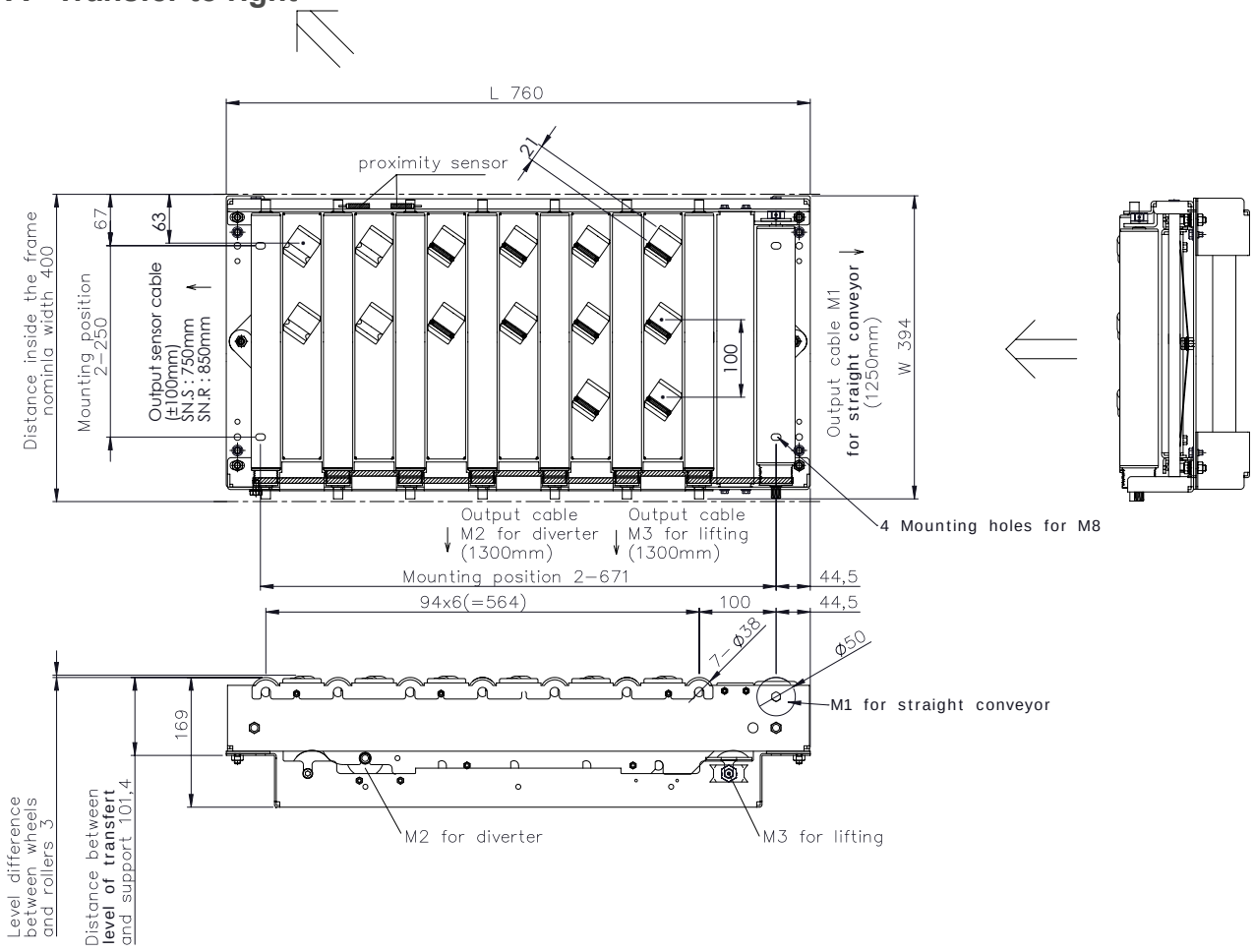
⚠ 3 circuit boards for the motorized rollers should be placed near the cassette with extension leads as required.

DIMENSIONS

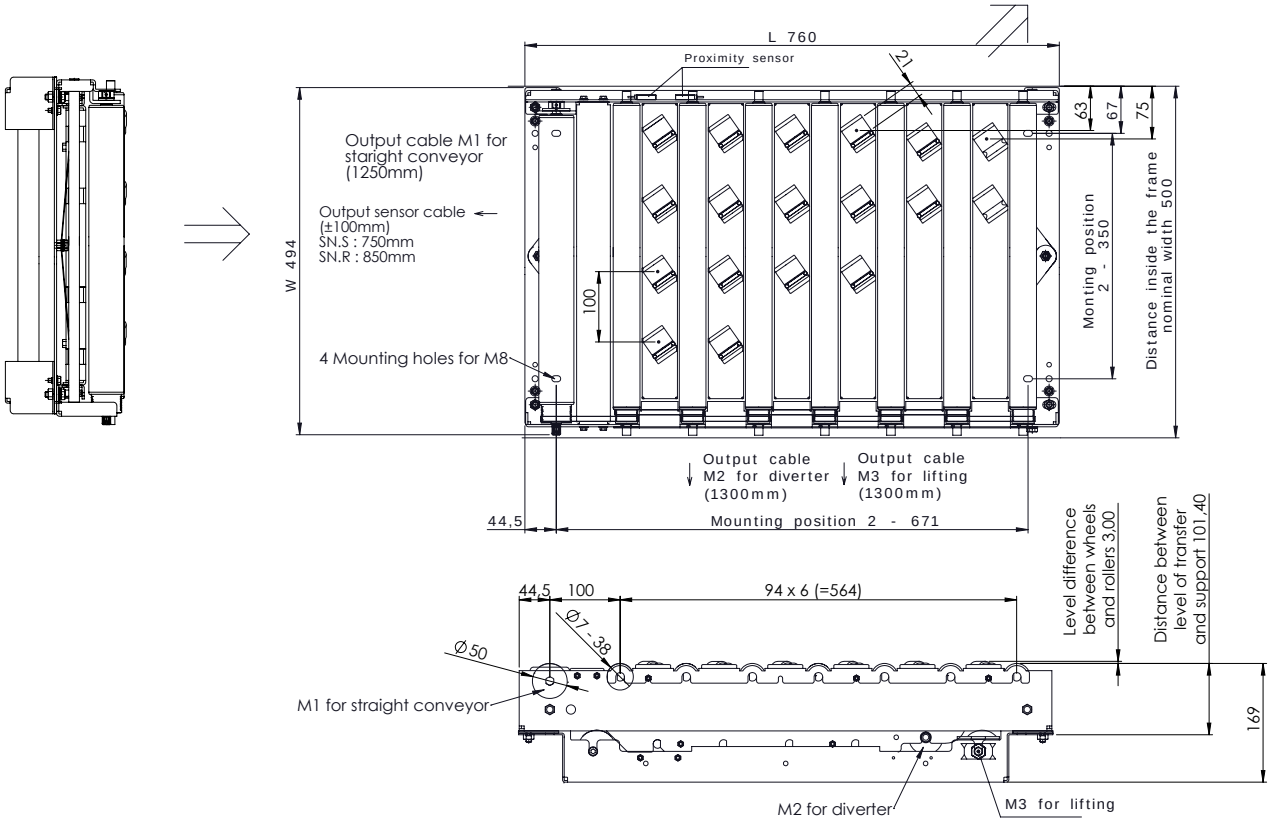
Size A - Transfer to left



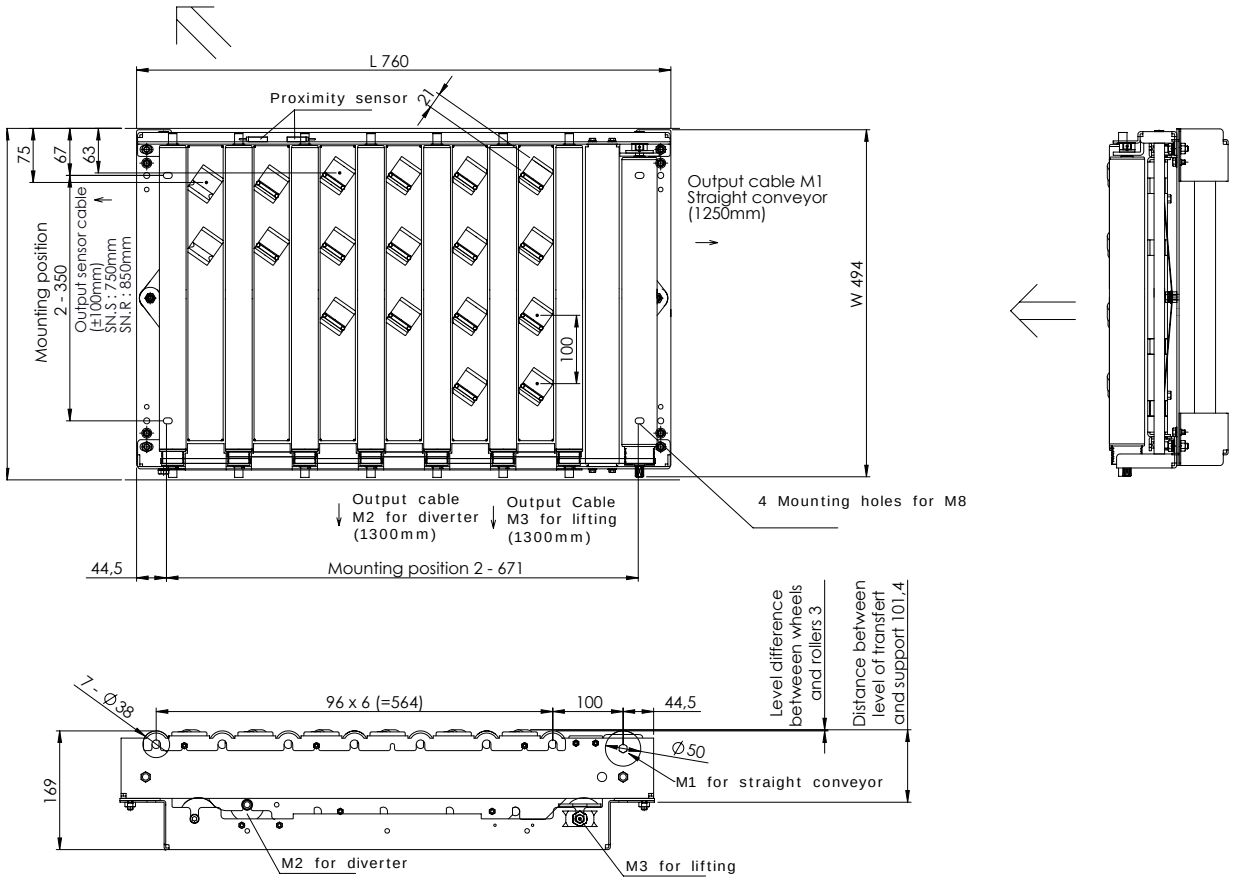
Size A - Transfer to right



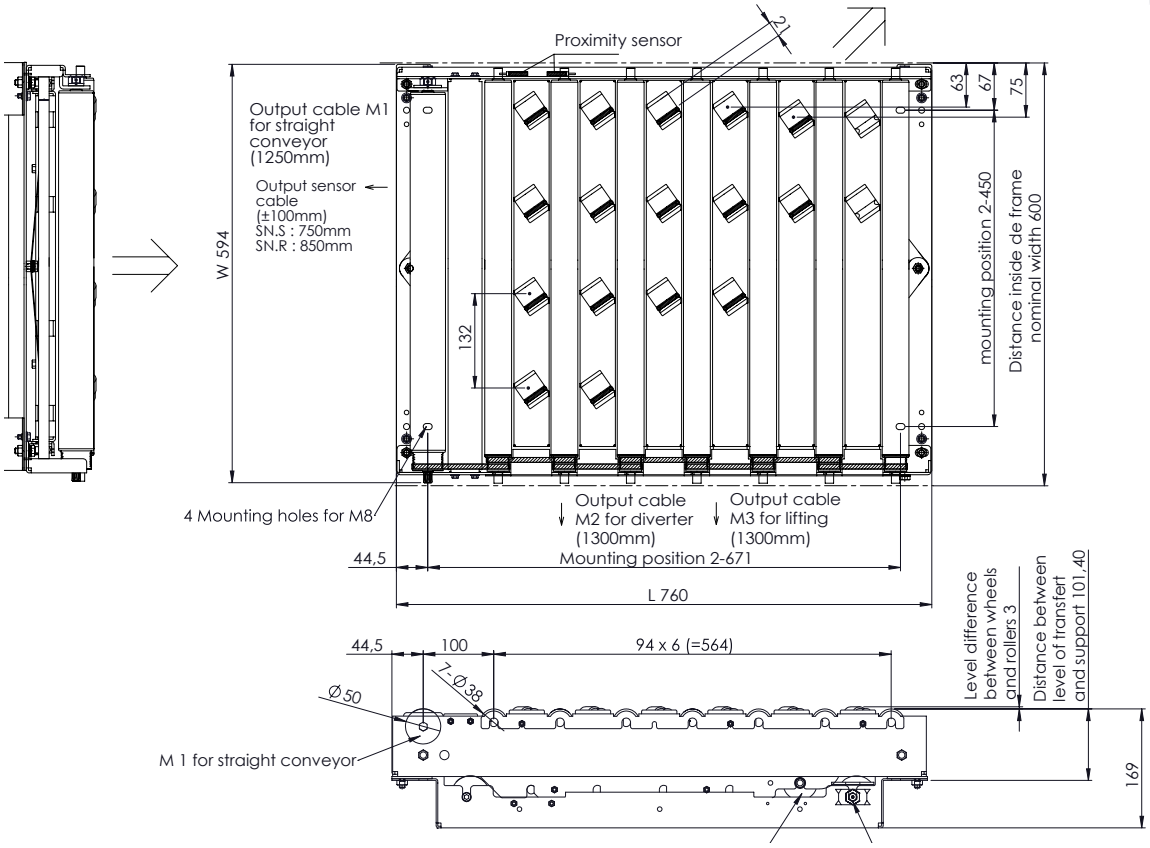
Size B - Transfer to left



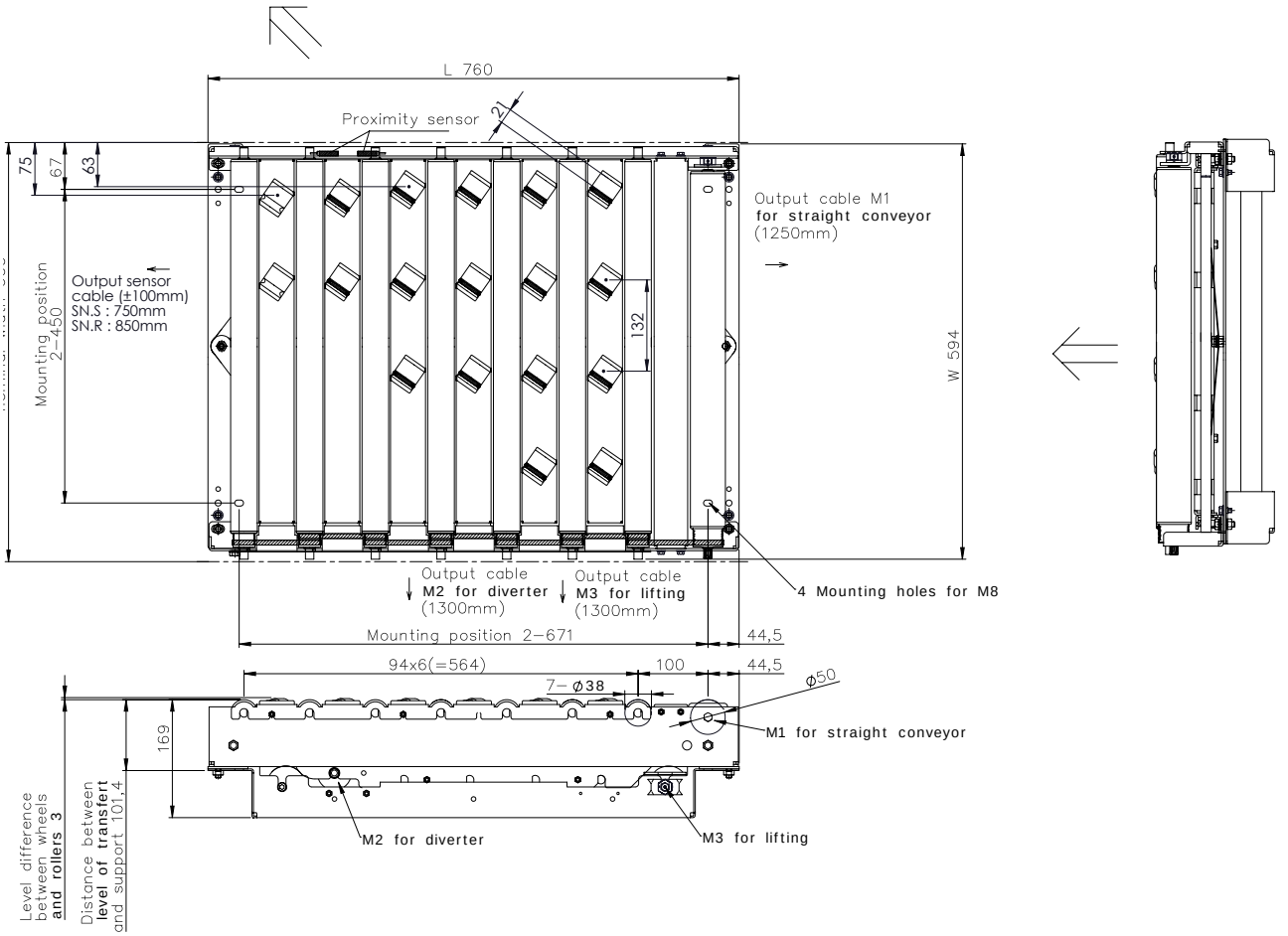
Size B - Transfer to right



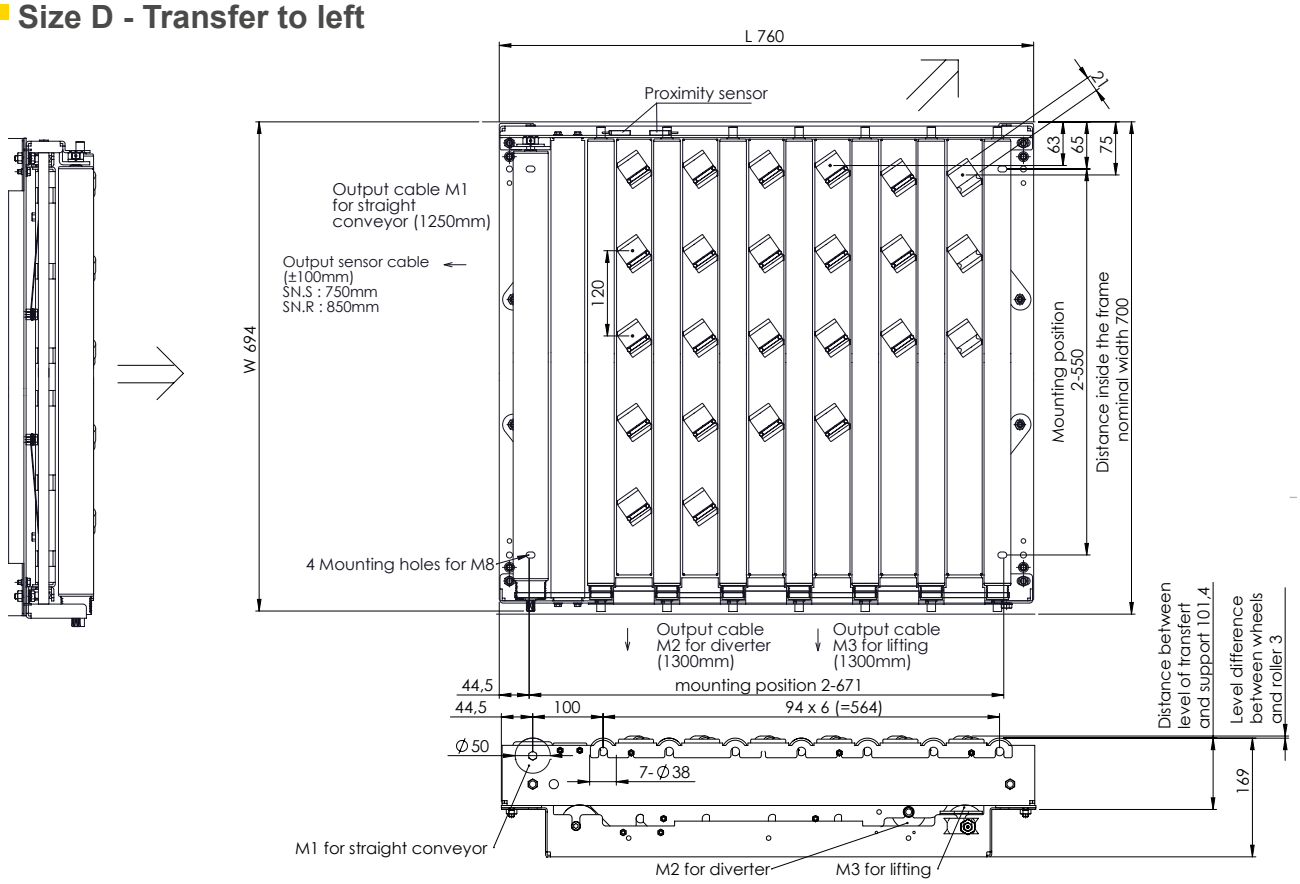
Size C - Transfer to left



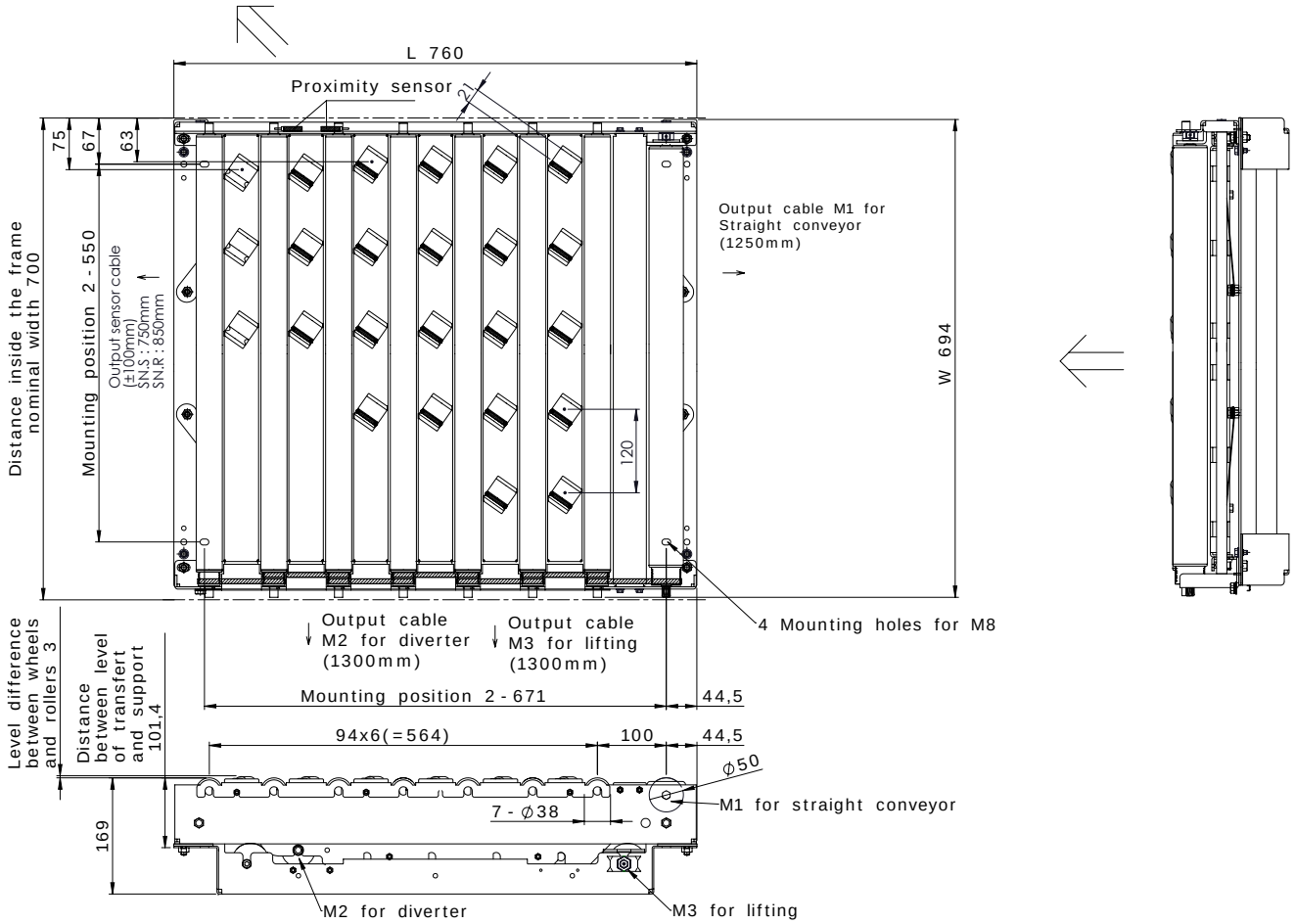
Size C - Transfer to right



Size D - Transfer to left

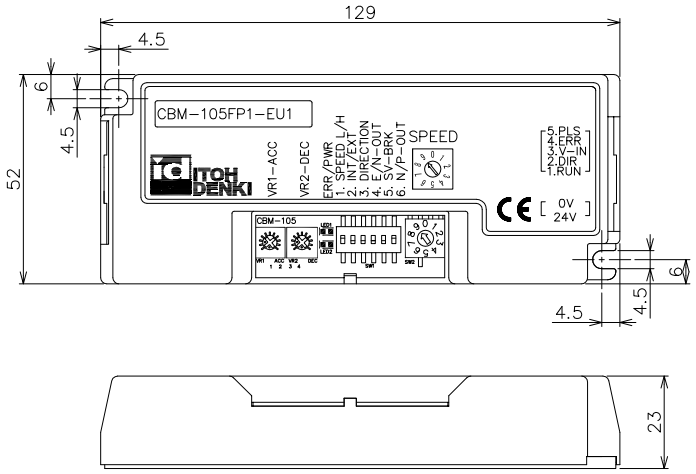


Size D - Transfer to right

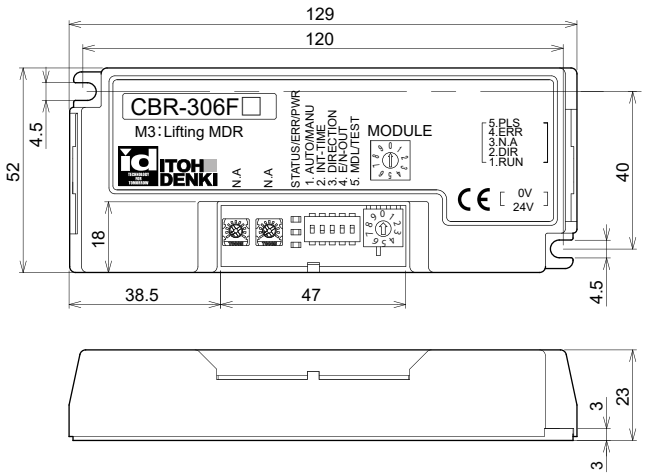


5. TECHNICAL DATA OF CIRCUIT BOARDS

CBM-105



CBR-306

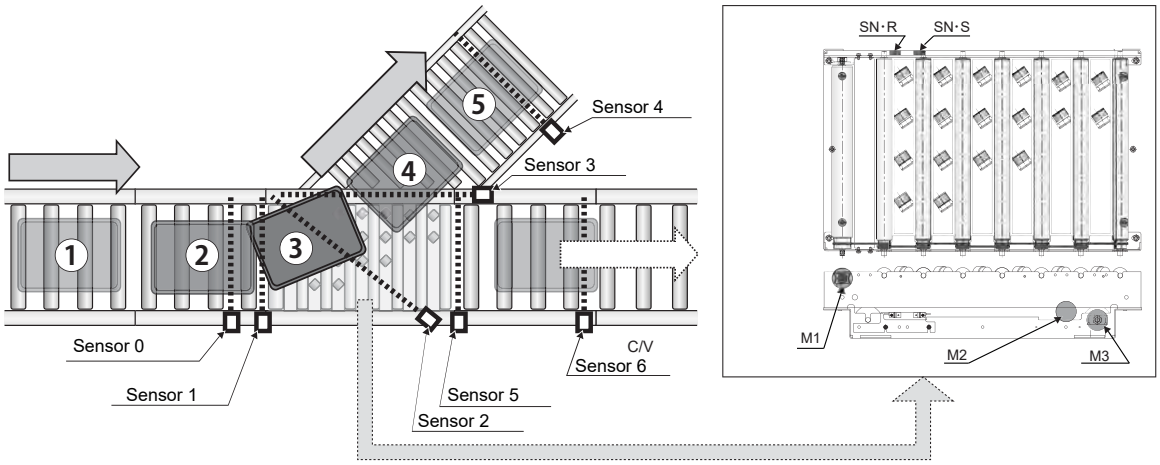


		CBM-105 + PM500FE / FC	CBR-306 + PM500FE
Power supply		24 V DC ±10%	
Nominal voltage		24 V DC	
Intensity	**static**	0,03 A	
	nominal	2,9 A / 3,2 A	2,9 A
	start-up	4,0 A	
Cable dimension	**Connector 24V CN1**	0,5 to 1,5 mm2 (AWG : 20 ~ 14), WAGO 734-102	
	Control connector CN2	0,08 to 0,5mm2 (AWG : 28 ~ 20), WAGO 733-105	
Time difference between the ON signal and the motor start		Less than 15ms	
Electrical protection		Fuse 6,3A	Fuse7A
		Diode against wiring fault	
Thermal protection		95°C for circuit board	
		105°C for motor	
Current Limiter		4,0A	
Ambient temperature		0 to 40°C	
Humidity		Lower than 90 % relative humidity without condensation	
Atmosphere		No corrosive gas	
Vibrations		Less than 0,5 G	
Installation		Inside	
Automatic stop function		NA	After 160 pulses

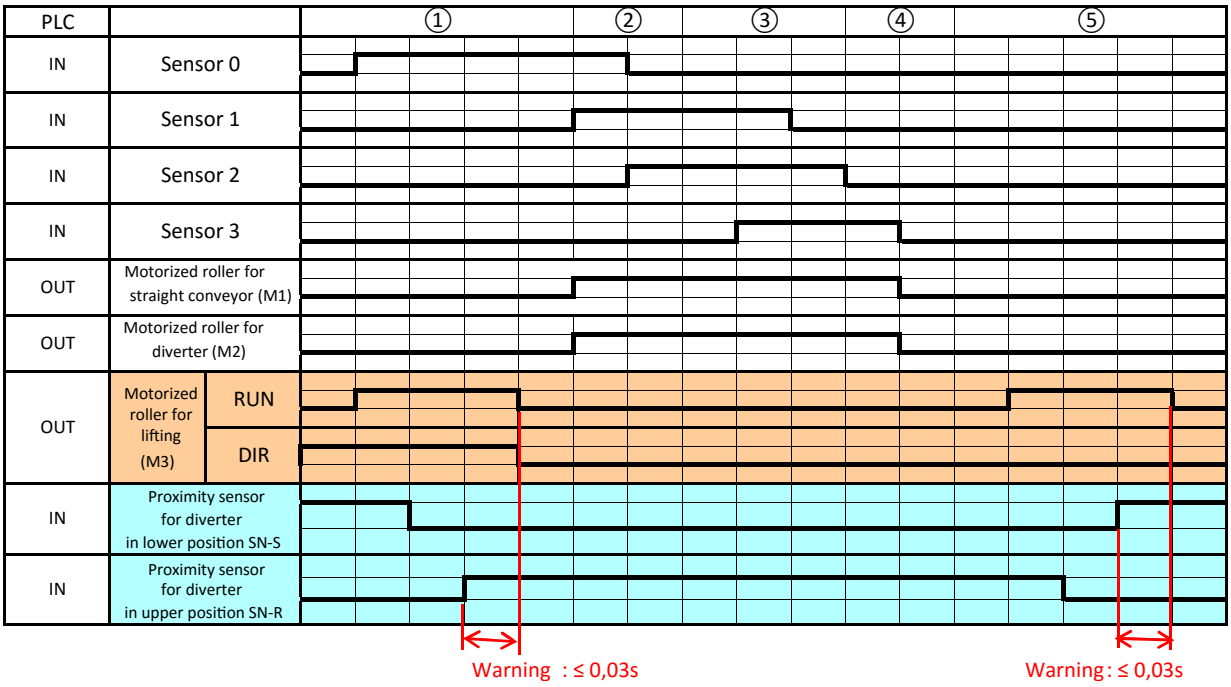
Refer to CBM-105 and CBR-306 technical documentation for more details.

6. POP-UP CONTROL

TIMING PRINCIPLE FOR CONTROLS

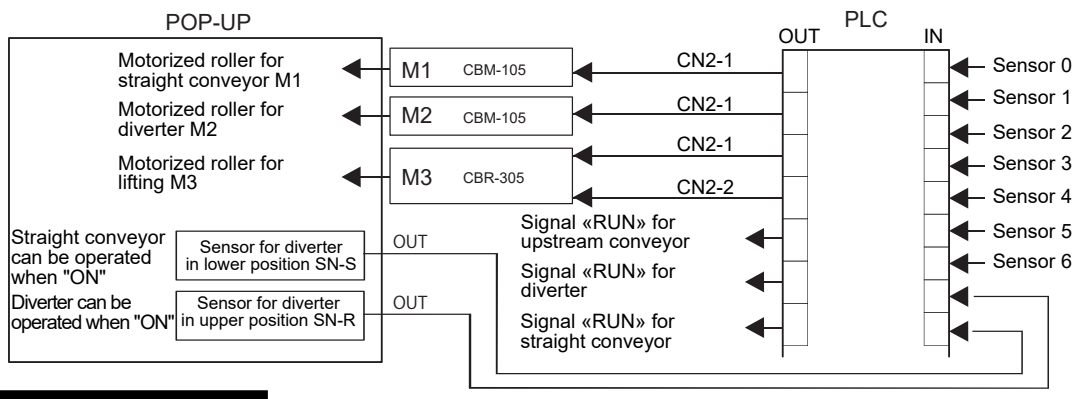


TIMETABLE



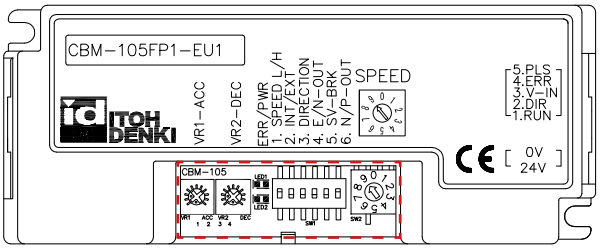
⚠ Warning : the transmission time for the stop signal should be fixed at less than 0.03 seconds following detection of sensor SN-S and SN-R

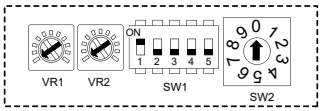
PRINCIPLE CONTROL BY PLC



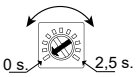
PARAMETERS SETTINGS

Circuit board for M1 and M2



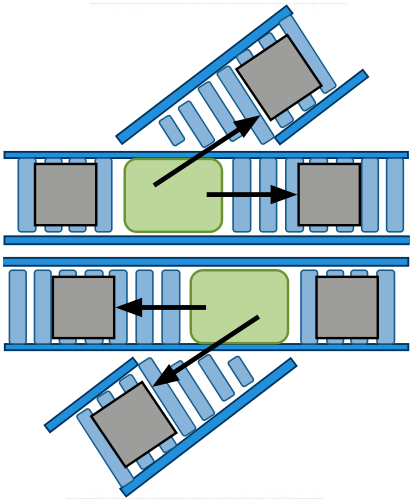


VR1 - Acceleration
VR2 - Deceleration



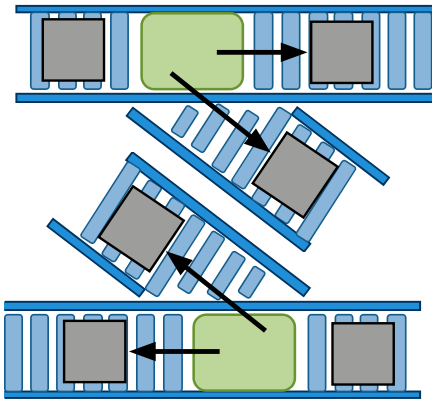
The factory setting is set to 0s (turned fully left)

- **TRANSFER TO LEFT**



	Acceleration / Deceleration	Direction of rotation	Output error signal	Selection fixed speed
M1 for straight conveyor	VR1 VR2	SW1-3 1 2 3 4 5 OFF	—	SW1-1 ON SW1-2 OFF SW2
M2 for diverter	VR1 VR2	SW1-3 ON 1 2 3 4 5	—	

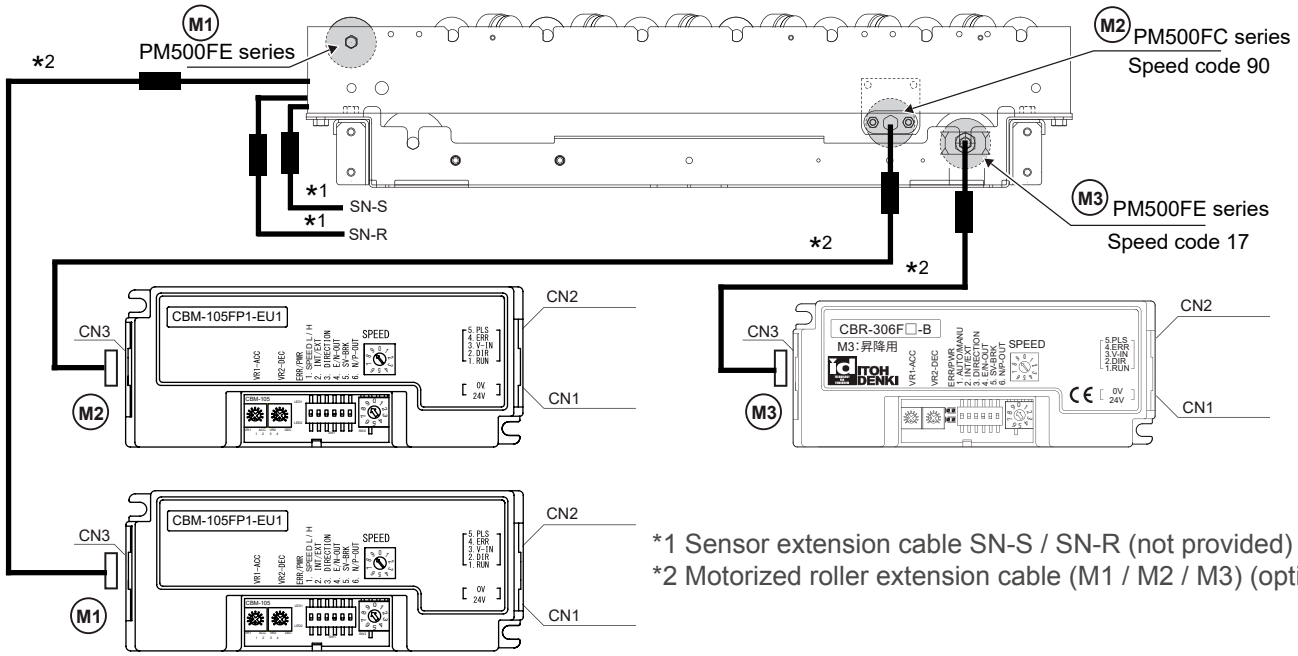
- **TRANSFER TO RIGHT**



	Acceleration / Deceleration	Direction of rotation	Output error signal	Selection fixed speed
M1 for straight conveyor	VR1 VR2	SW1-3 ON 1 2 3 4 5	—	SW1-1 ON SW1-2 OFF SW2
M2 for diverter	VR1 VR2	SW1-3 1 2 3 4 5 OFF	—	

For M1 : Adjust the potentiometers VR1 and VR2 at least by turning the button completely to the left.
For M2 : Adjust the potentimeter VR1 to minimum by turning the button completely to the left, and VR2 to by turning the button completely to the right.
Refer to the CBM-105 technical documentation for details.

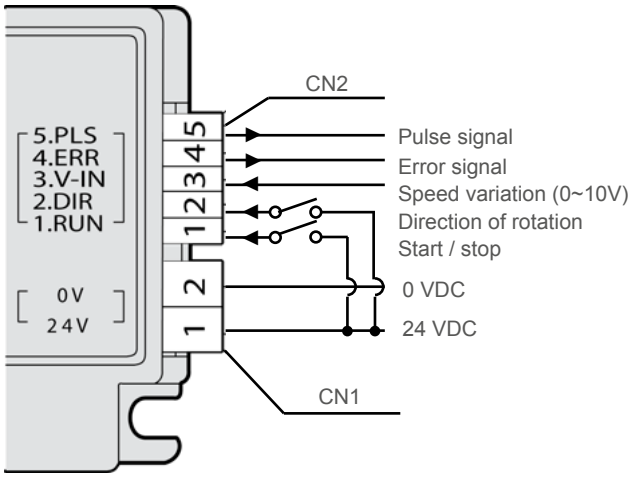
WIRING OF CBM105 / CBR306 CIRCUIT BOARDS



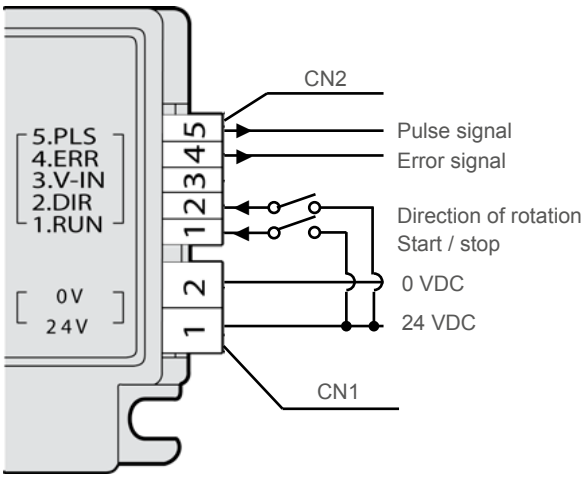
*1 Sensor extension cable SN-S / SN-R (not provided)
*2 Motorized roller extension cable (M1 / M2 / M3) (optional)

⚠ Extension cables for the sensor and motorized rollers must be provided, depending on the location of the circuit boards, PLC, etc.

➪ PNP version : CBM-105

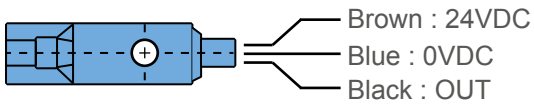


➪ PNP version : CBR-306



Connection and characteristic of sensors SN-R and SN-S

Model	GX-F12A-P (PANASONIC)
Supply voltage	12~24 VDC +10-15%
Absorbed power	≤15mA
Output signal	Power max : 100mA Open collector PNP normaly open contact (NO) If output is connected to inductive load (Ex. Relay coil , solenoid , actuator , etc.), make sure to protect output from Back voltage with a free-wheeling diode.



Setting of speed motorized roller for straight conveyor (M1) and motorized roller for diverter (M2)

By SW1 and SW2 on circuit board CBM105-FP1-EU1

Do not change speed of motorized roller for lifting (M3)

SELECTION OF NO LOAD FIXED SPEED

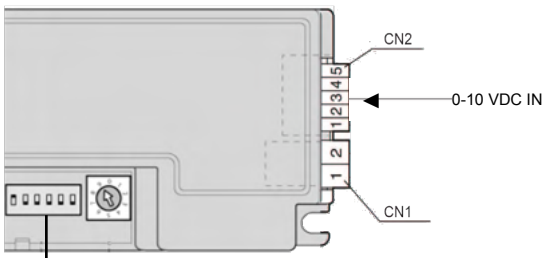
SW1 (1 - ON) SW2

SW2	Code 60 (M1)	Code 90 (M2)
9	53,5	90,2
8	53,5	90,2
7	53,5	90,2
6	51,4	85,8
5	47,3	81,5
4	46,3	77,4
3	41,1	68,6
2	38,6	64,4
1	26	60,0
0	33,4	55,9

SW1 (1 - OFF) SW2

SW2	Code 60 (M1)	Code 90 (M2)
9	30,9	51,6
8	28,3	47,2
7	25,7	42,9
6	23,1	38,5
5	20,6	34,4
4	18	30,2
3	15,4	25,8
2	12,9	21,5
1	10,3	17,1
0	7,7	12,8

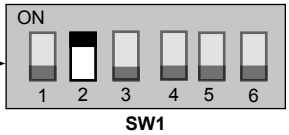
By external analog voltage



• Speed variation by external analog voltage between 0 and 10 VDC when selector 2 of SW1 is «ON».
• Input current 2 mA to maximum 10 VDC.

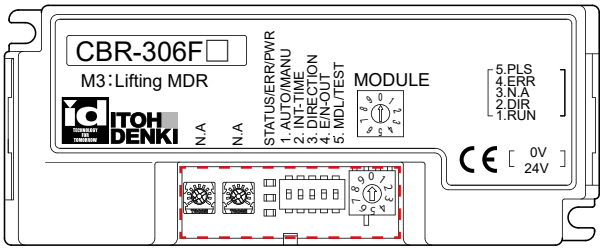
Connect the 0VDC of the external analog power supply to the 0VDC of the power supply to the circuit board.

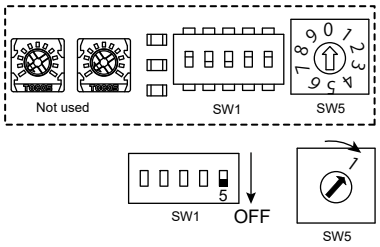
Do not exceed 10VDC



SW1

CIRCUIT BOARD FOR M3





• The rotary switch SW5 selects the type of module to be controlled. For POP-UP module, set to «1».
• Dip-switch SW1-5 has the «Test Mode» which is used to adjust the conveyor level from upstream and downstream to the transfer table. To do this, set SW1-5 to «ON». To switch on the module, set it to «OFF».
• Refer to the CBR-306 technical documentation and installation manual.

7. Repair / Replacement

In order to avoid accident or damage during operations, confirm safety.
The illustration used for repair and inspection is size C, left diversion. Use caution for different shape when other size or right diversion is used.(Refer to 4. Dimensions)

• Safety check before repairing or replacing a part.

In order to avoid interference by power circuit and signals, turn off the power of all connected devices.
(a) After turning off the power switch, leave for more than 3 minutes for discharging the DC power supply.
(b) Indicate warning to prevent other people from turning the power.

• Part repair and replacement

Perform repair or replacement operations by wearing protective means such as gloves.
Working without protective means results in hand injury such as cut by metal part.

- When a damaged component is discovered, promptly replace with a new component.
- Do not perform disassembly other than in a designated place. Unexpected accident may occur.
- Repair/replacement operation sometimes requires turning or lifting a component. Use caution for being caught or pinched by other parts and injured.

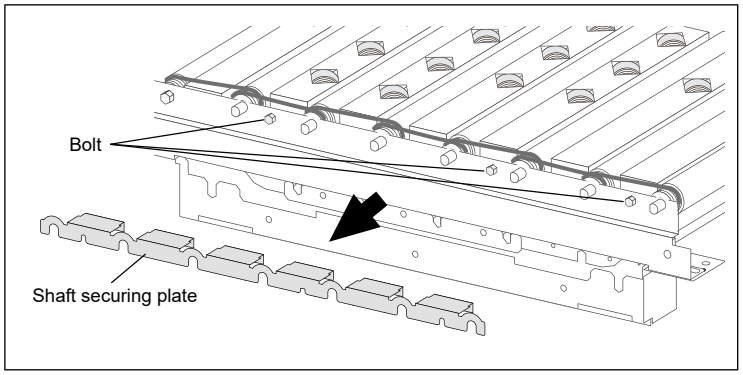
• Component repair and confirmation after replacement

When component repair and replacement is completed, check the following before starting trial run.
(a) Roller link belt and diversion roller link belt are attached in the right groove.
(b) The removed cover is securely closed.
(c) All removed components and parts are attached.

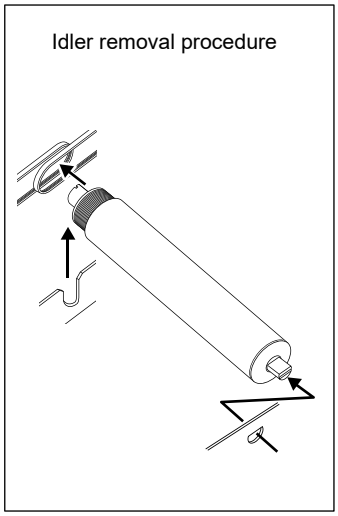
Replacement of Idlers, Roller Link Belt, Straight MDR

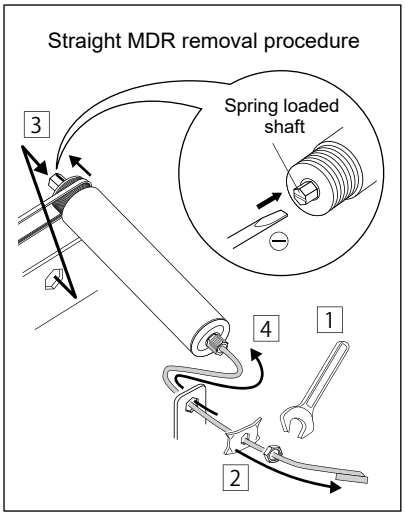
Tools to be used : 8mm - 19mm spanners, flat-tip screw-driver, nipper

1 - Remove the shaft securing plate.
Loosen the bolts on the shaft securing plate, and pull out the plate to remove.



2 - Remove idlers or straight MDR from the end of the module.
• A roller without a power cable is a idler.
• For removing straight MDR, loosen the attachment bracket on the power cable side and remove the cable tie which secures the MDR connector and cable.

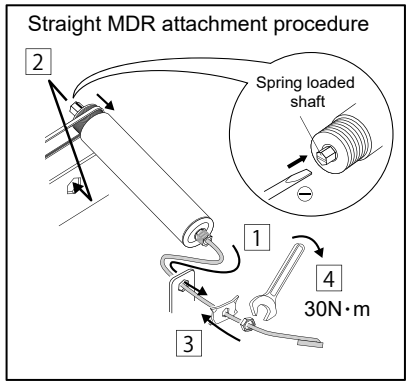


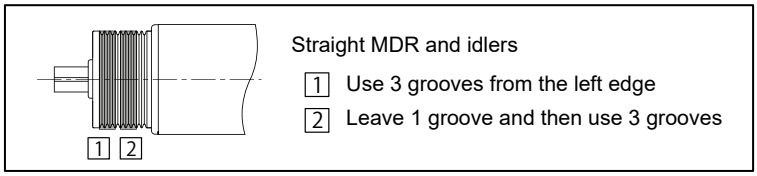


3 - Replace and assemble idlers, roller link belt, straight MDR.
Attach the straight MDR, and assemble idlers from the straight MDR side toward the end of the module.
After assembling straight MDR, attach the MDR connector to the driver card and secure the cable with general-purpose cable-ties.

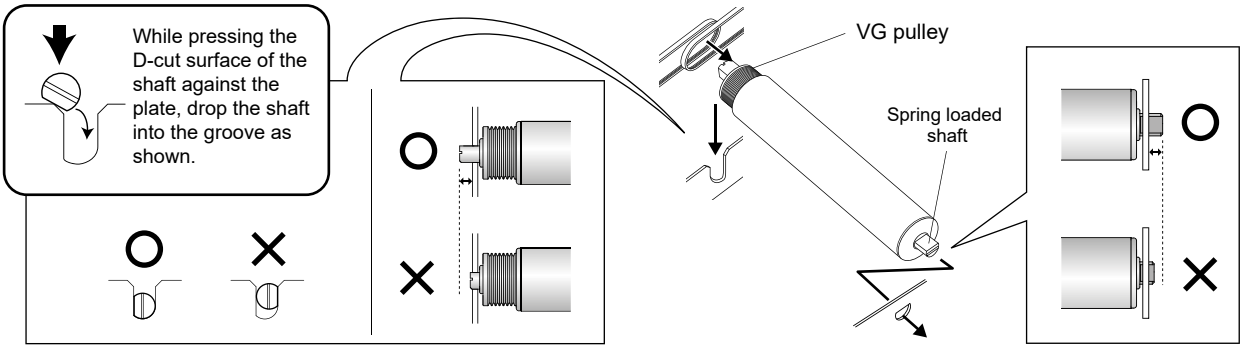
3-1 - Engage the link belt on all rollers.
Refer to the following chart for groove position on which the link belt is attached.

- ●Linking the straight MDR and idlers : PJ316 (3PJ316)
- ●Linking idlers : PJ286 (3PJ286)





3-2 - Assemble idlers one by one in the order of the «shaft opposite from the VG roller» → «VG pulley side shaft».

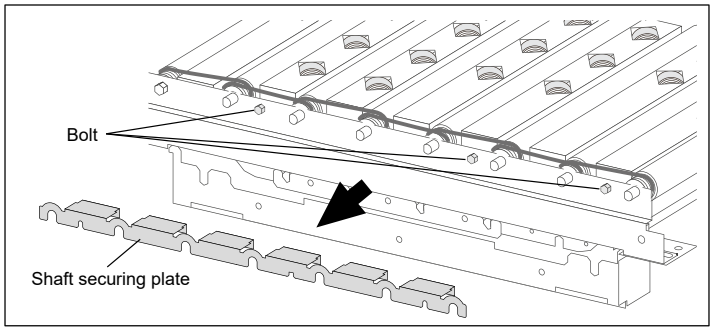


4 - Attach the shaft securing plate.

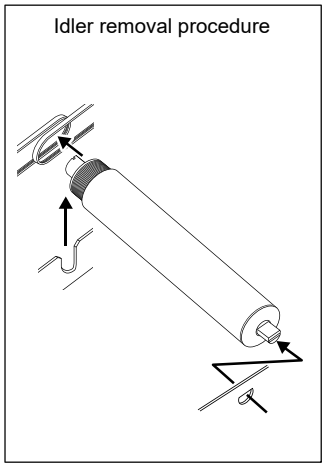
Replacement of a Diverter wheel

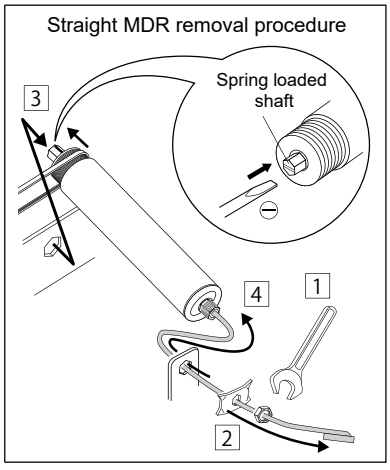
Tools to be used : 8mm - 19mm spanners, cross-tip screw-driver, flat-tip screw-driver, nipper, 10mm socket wrench.

1 - Remove the shaft securing plate.
Loosen the bolts on the shaft securing plate, and pull out the plate to remove.

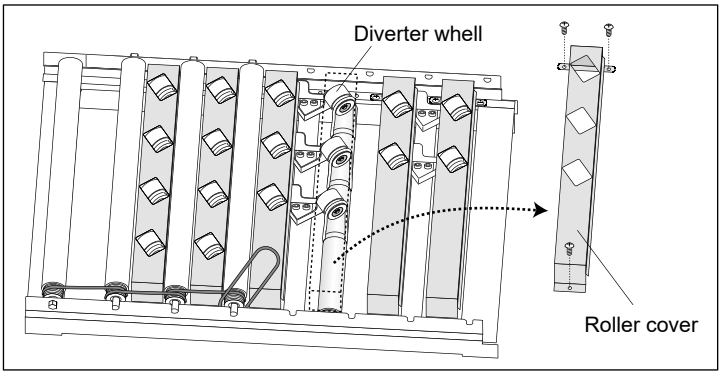


2 - Remove idler or straight MDR from the end of the module.
Remove idlers until those on both sides of the diverter wheel to be replaced can be removed.
• A roller without a power cable is a idler.
• For removing straight MDR, loosen the attachment bracket on the power cable side and remove the cable tie which secures the MDR connector and cable.

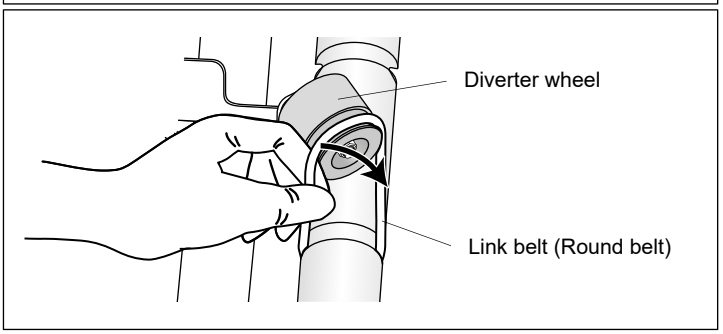




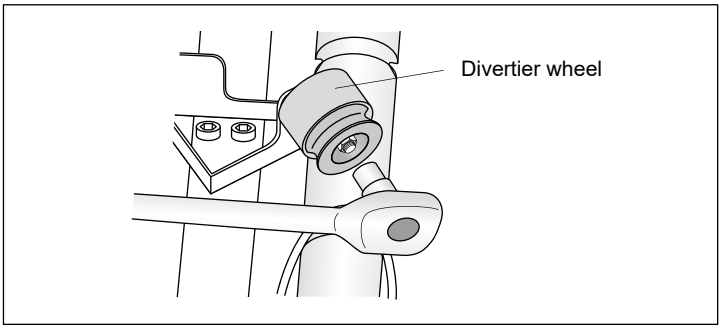
3 - Remove the roller cover of the diverter wheel to be replaced.



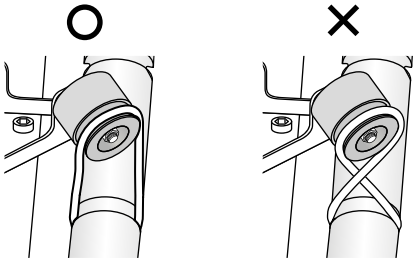
4 - Remove the link belt of the diverter wheel to be replaced (Round belt).

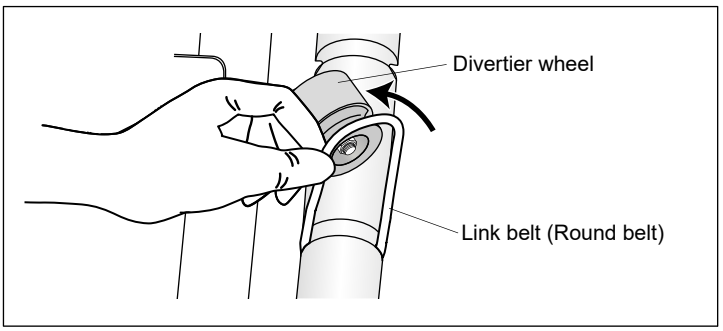


5 - Replace the diverter wheel.
• Check the direction of the diverter wheel when assembling. (Fastening torque 5.4N•m)
• Always use a new nut.
Old nut may not be fully fastened.

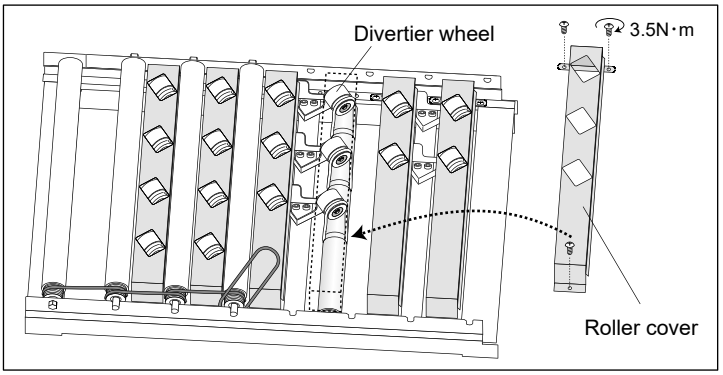


6 - Attach the link belt (Round belt) around the diverter wheel.
• Use caution for the link belt not to be twisted.





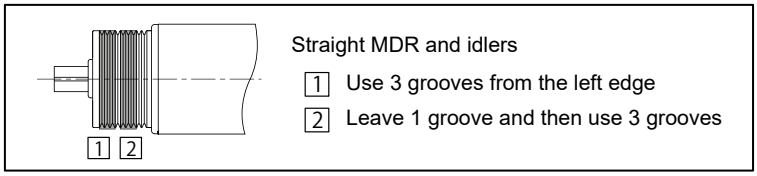
7 - Attach the roller cover on the diverter wheel. (Fastening torque 3.5N•m)

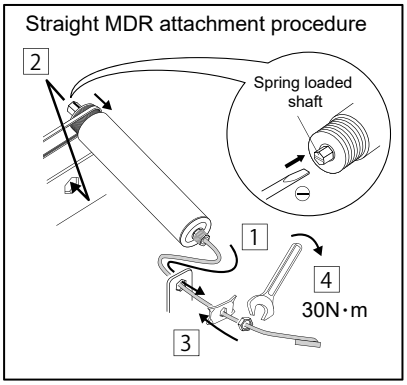


8 - Replace and assemble idlers, roller link belt, straight MDR.
Attach the straight MDR, and assemble idlers from the straight MDR side toward the end of the module.
After assembling straight MDR, attach the MDR connector to the driver card and secure the cable with general-purpose cable-ties.

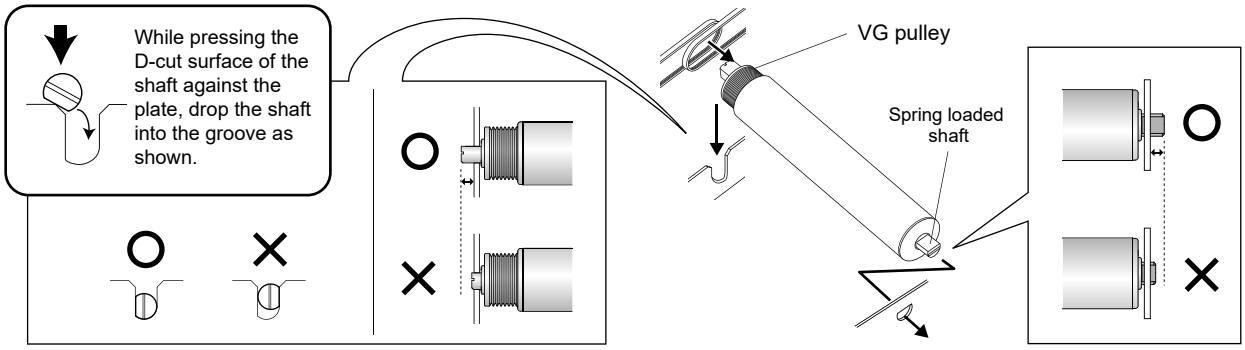
8-1 - Engage the link belt on all rollers.
Refer to the following chart for groove position on which the link belt is attached.

- Linking the straight MDR and idlers : PJ316 (3PJ316)
- Linking idlers : PJ286 (3PJ286)





8-2 - Assemble idlers one by one in the order of the «shaft opposite from the VG roller» → «VG pulley side shaft».

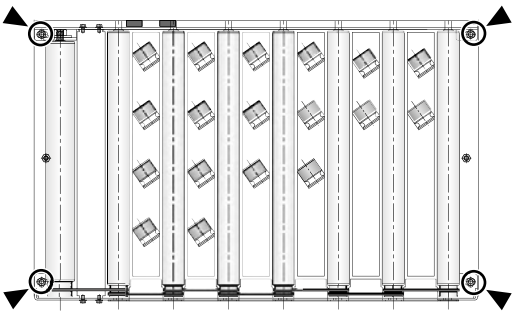


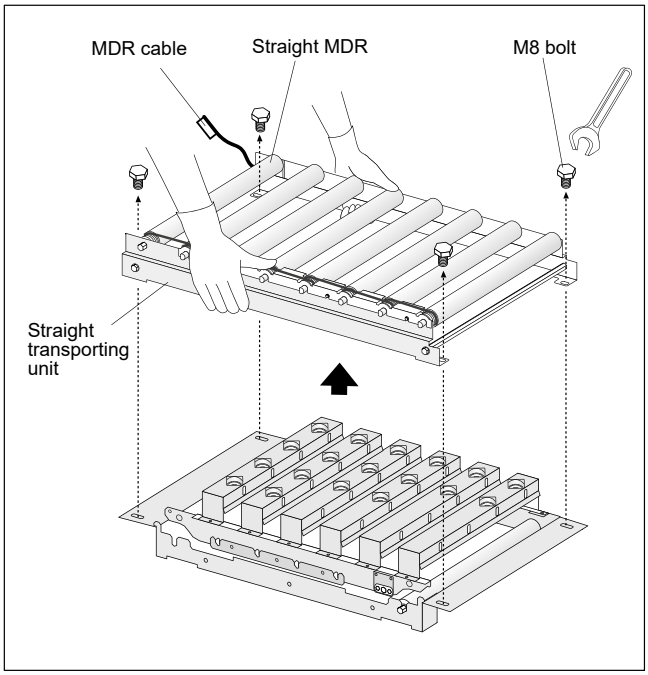
9 - Attach the shaft securing plate.

Replacing/assembling Linking Belts (round belt) of Diverter wheels

Tools to be used : 13mm spanner (2), 19mm spanner, Phillips head screw-driver, flat-tip screw-driver, nipper, 8mm box wrench

1 - Loosen the M8 bolts at the 4 corners of Pop-up Diverter and remove the straight transporting unit.

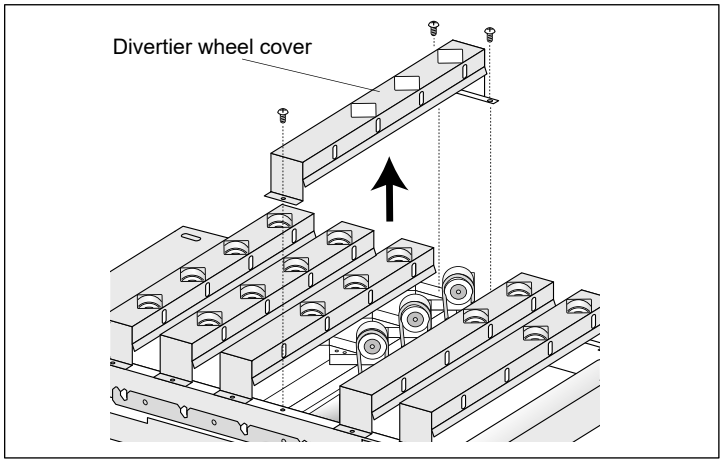




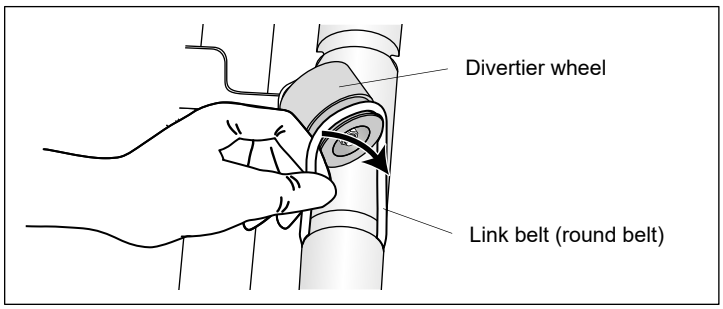
- Disconnect the straight MDR connector from the driver card.
- Remove the cable tie which secures the cable.
- When lifting the straight transport unit for removal, hold the unit as shown.

Because the straight MDR is heavy, use caution for not dropping or giving strong impacts.
Use caution not to damage the straight MDR cable by pinching, hooking, or forcibly pulling.

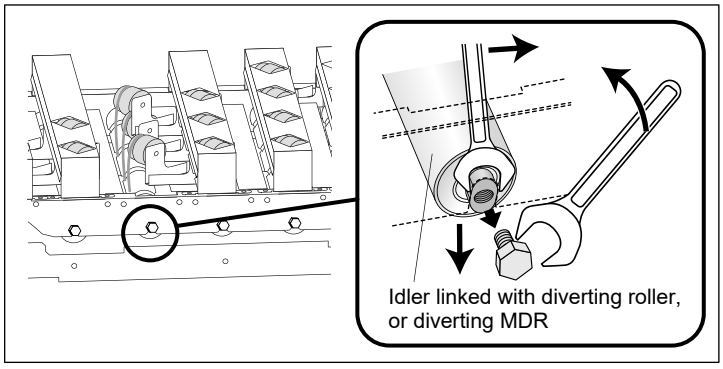
2 - Remove the diverter wheel cover.



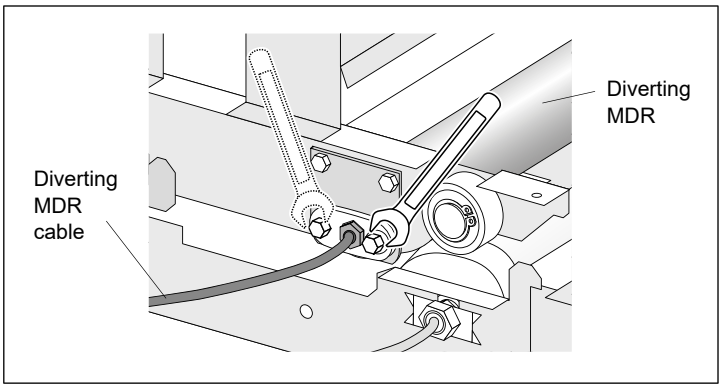
3 - Remove all link belts (round belts) attached on the diverter wheels.



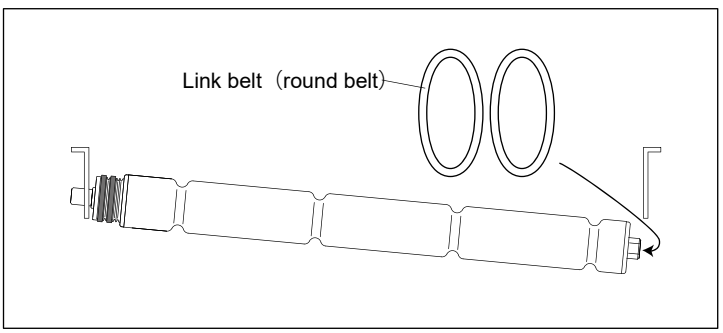
4 - Remove the idler linked with diverter wheel, or diverting MDR.
• Remove only the attachment shaft opposite from VG pulley. (It is not necessary to completely remove the idler linked with diverter wheel or diverting MDR.)
If the spanner cannot be inserted in the gap, move the roller to VG pulley to secure a gap for inserting the spanner.



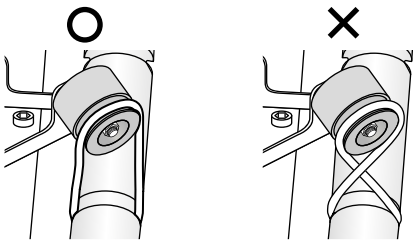
• When replacing a diverting MDR link belt (round belt), first, loosen the 2 hex bolts on the attachment bracket on VG pulley side.

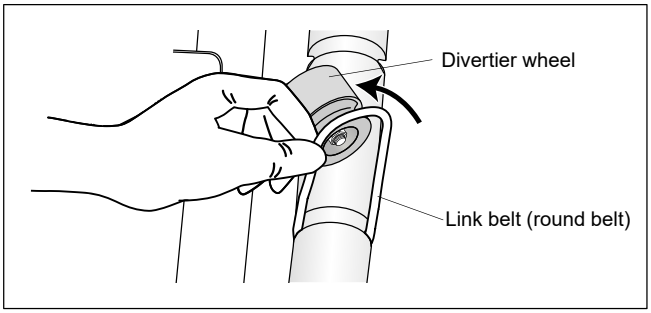


5 - Attach and replace a link belt from the attachment shaft side.

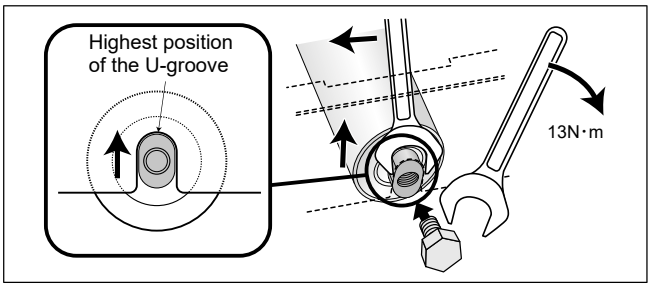


6 - Attach a link belt (round belt) on the diverter wheel.
• Use caution for not twisting the link belt.

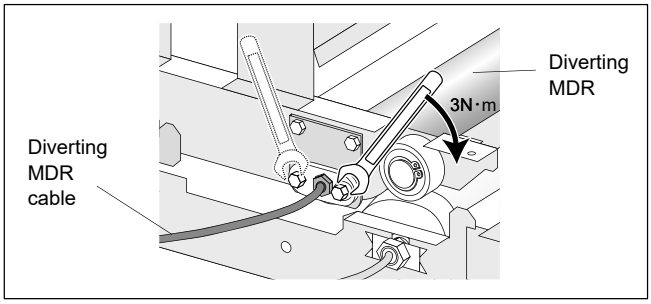




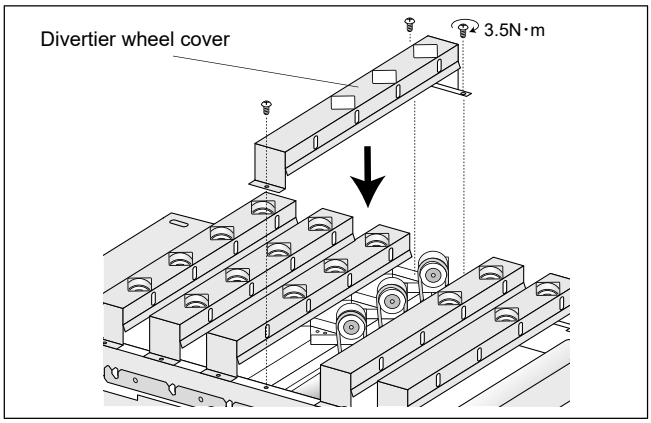
7 - Secure the idler linked with diverter wheel, or diverting MDR.
• Fasten the hex bolt of attachment shaft at the highest position of the U-groove for securing.



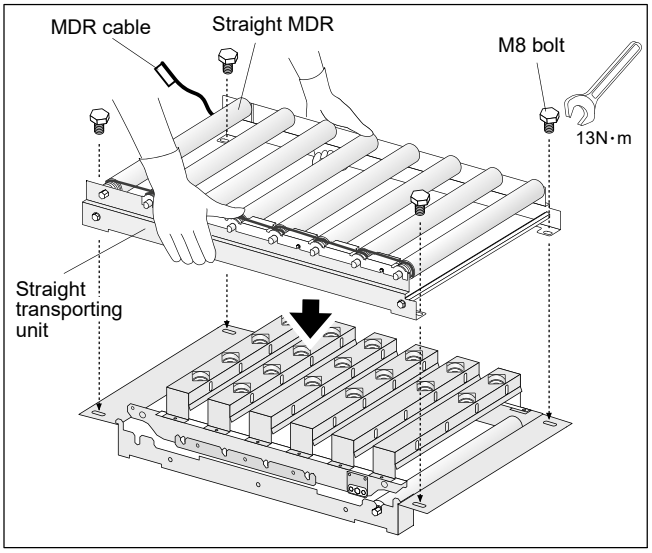
When the link belt (round belt) of a diverting MDR, tighten the 2 hex bolts the VG pulley side attachment bracket. (Fastening torque 3N•m)



8 - Attach the roller cover of the diverter wheel.
• Use caution for avoiding interference between roller cover of the diverter wheel and diverter wheel.
(Fastening torque 3.5N•m)



9 - Attach the straight transport unit and secure the 4 corners.
• Use caution for the orientation of the unit to be attached
• Avoid MDR cable being pinched by other objects.
• During attachment operation, avoid interference between the straight transport unit rollers and roller cover of the diverter wheel.
• Attach the connector of straight MDR to the driver card.
• Secure the cable with general-purpose cable ties.



8. Product references, accessories and spare parts

References for standard Pop-Up

Size	Evacuation left	Evacuation right
A	PUP-45L60P-A-F0002	PUP-45R60P-A-F0002
B	PUP-45L60P-B-F0002	PUP-45R60P-B-F0002
C	PUP-45L60P-C-F0002	PUP-45R60P-C-F0002
D	PUP-45L60P-D-F0002	PUP-45R60P-D-F0002

PUP – [1] [2] [3] [4] - [5] - [6] [7]

[1] Deviation angle
45° … 45° (30° … 30° optional)

[2] Direction of evacuation
L … Evacuation left
R … Evacuation right

[3] Straight conveyor speed
60 ... Speed code 60 (60m/min)

[4] Proximity sensor logic
N ... NPN
P ... PNP

[5] Size
A … W 394 x L 760 mm
B … W 494 x L 760 mm
C … W 594 x L 760 mm
D … W 694 x L 760 mm

[6] Type of motorized roller
F ... PM500FE serie

[7] Index variant
0 ... standard
1 ... new cover design
2 ... new cable length
3 ... new free roller design

Example :

PUP-45L60P-B-F0002

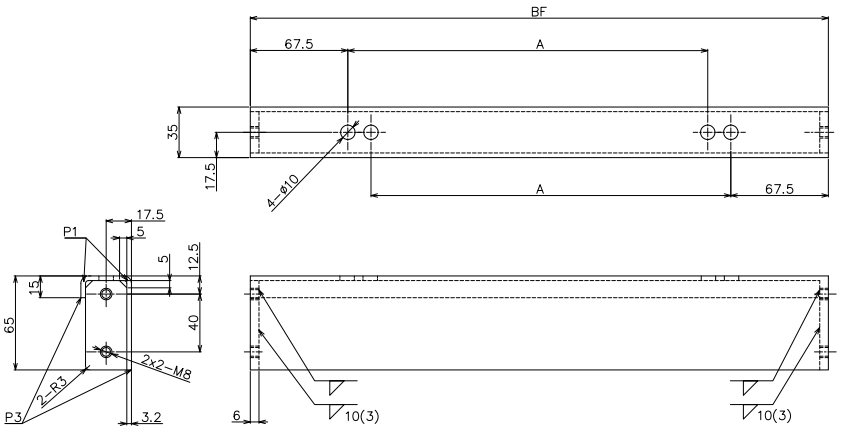
(Angle 45°, evacuation left,
Speed code 60m/min, PNP, 494x760mm,
motorized roller PM500FE, index 0).

List of accessories (Optional)

Mounting support

Size	Dimension		Number of support	Reference
	BF	A		
A	400	250	2	PUP-SUP-A
B	500	350	2	PUP-SUP-B
C	600	450	2	PUP-SUP-C
D	700	550	2	PUP-SUP-D

Screw are included.



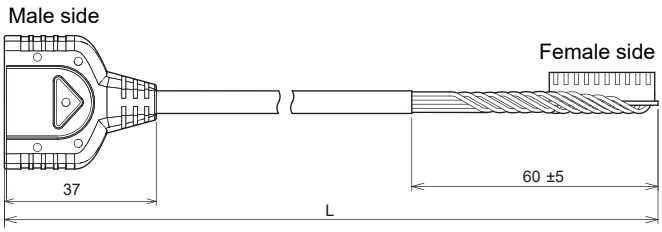
24 VDC power supply

Reference	Input	Output	Power	Start-up boost
CT-10-241	380~480V 3 ph	24V-10A	240W	120%
QT-20-241		24V-20A	480W	150%
QT-40-241		24V-40A	960W	150%

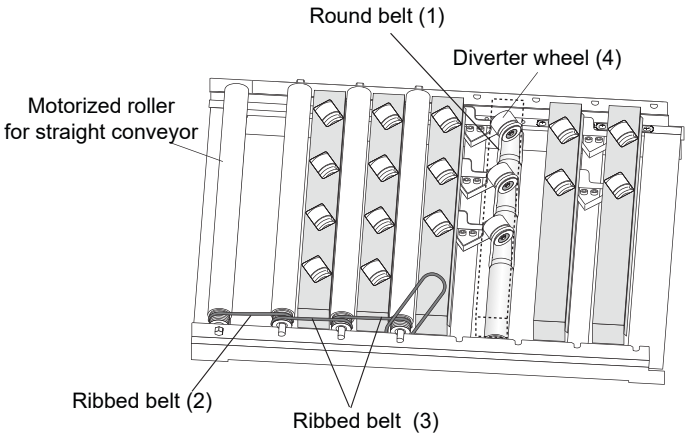
- Very low inrush current.
- Can accomodate over current of 120 to 150% at startup (according to model)

Extension cable for motorized rollers

Cable length (mm)	Reference
600	ACE-CBM-B0600
1200	ACE-CBM-B1200



Wear parts and frequency change



		Reference	Frequency*
1	Round belt	MXP5-04/87F L=260mm	5 millions
2	Ribbed belt for straight conveyor	3PJ316	10 millions
3		3PJ286	
4	Diverter wheel	POP-UP-IW-A	5 millions

* The frequency of change in number of packages processed is given as an indication.

List of components (excluding wear parts)

Motorized roller	Size A	Size B	Size C	Size D
M1 (straight conveyor)	PM500FE0600305XP0CN400	PM500FE0600405XP0CN400	PM500FE0600505XP0CN400	PM500FE0600605XP0CN400
M2 (diverter)	PM500FC0900256XP0DN400	PM500FC0900356XP0DN400	PM500FC0900456XP0DN400	PM500FC0900556XP0DN400
M3 (lifting)	PM500FE0170269XP0LN400	PM500FE0170369XP0LN400	PM500FE0170469XP0LN400	PM500FE0170569XP0LN400

Free roller (from version F0000 to F0002)	Size A	Size B	Size C	Size D
Free roller	FR380IDZDS0326XV0SN400	FR380IDZDS0426XV0SN400	FR380IDZDS0526XV0SN400	FR380IDZDS0626XV0SN400

Free roller (from version F0002)	Size A	Size B	Size C	Size D
Free roller right side*	FR380IDZDS0326XP0CN40R	FR380IDZDS0426XP0CN40R	FR380IDZDS0526XP0CN40R	FR380IDZDS0626XP0CN40R
Free roller left side*	FR380IDZDS0326XP0CN40L	FR380IDZDS0426XP0CN40L	FR380IDZDS0526XP0CN40L	FR380IDZDS0626XP0CN40L

** To identify the right or the left version please refer to Chapter 8 P27.*

Circuit board of motorized rollers PNP logic	M1 and M2	CBM-105FP1-EU1
	M3	CBR-305FP-B
Proximity sensor SN-S and SN-R	GX-F12A -P (PANASONIC)	

ANNEX 1

The manufacturer:

ITOH DENKI CO., Ltd
1146-2 Asazuma-Cho, Kasai, Hyogo 679-0105 Japan

Distributed in Europe by :

ITOH DENKI Europe SAS
490 avenue des Jourdies - PAE les Jourdies - BP 323
74807 St Pierre en Faucigny Cedex - France

hereby declares that the product series :

POP-UP

is an incomplete machine as defined in the EC Machinery Directive and therefore does not fully meet the requirements of this Directive. Commissioning is prohibited until the whole machine/system in which it is incorporated is declared to be in compliance with the EC Machinery Directive

Person authorized to compile the technical documentation :

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ITOH DENKI EUROPE SAS
Masayuki SHIMODA
490 Avenue des Jourdies, 74800 St Pierre en Faucigny - France

EC Directives applied :
• European EMC Directive 2014/30/EC
• European RoHS Directive 2011/65/EU

ITOH DENKI EUROPE SAS, undertakes to forward, following a duly motivated request from the national authorities, the relevant information concerning the quasi-machine.

Saint Pierre en Faucigny, 19 July 2021
T. AKASHI, General Director

ITOH DENKI EUROPE S.A.S.

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