

Powered Roller Conveyor System

Simplicity

This is probably the simplest conveyor of its kind. Driven by Itoh Denki motorised rollers containing dc brushless motors the conveyor consists of minimal moving parts and comes supplied with integral photocell detectors. The conveyor just needs a 24v and 0v dc supply and it runs. It will automatically switch off zones when products begin to queue up creating intelligent zero line pressure accumulation. It can even handle loads that are greater than a zone length - treating a long load as efficiently as a short one irrespective of how many sensors it covers



Zero Line Pressure (ZLP) Straight

Zero Line Pressure accumulation will effectively queue loads without contact in a series of zones until the way ahead is clear and the loads can safely proceed. Each zone comes complete with its own intelligent photocell.

- Available in LH & RH options.
- Modules up to 3 metres in length
- 83mm, 125mm roller pitch
- 500, 750 and 1000mm zone lengths.
- Speeds up to 60m/min
- Extremely quick to install - no control boxes to wire up



Zero Line Pressure (ZLP) Curve

Rollers are tapered and multi-grooved to facilitate the jump belts. Each tapered roller is connected by flexible jump belts.

- Available in LH & RH options.
- Full Range of widths
- 30, 45, 60 and 90 degree curves
- 1 and 2 zones available
- Tapered rollers
- 140mm & 180mm channel heights
- Speeds 60m / min



Merging Spur

A merge is used where a secondary conveyor needs to be feed loads into a main conveyor. The angle of the merge is 30 degrees.

- Available in LH & RH options.
- Available in all standard widths 400BB - 800BB.
- 90mm - 180mm Channel height.
- Integral photocells
- Speeds up to 60m/min



Transfer

A simple to install self contained unit that can be fitted at any point on a straight (in 83mm pitches) to divert packages from, or bring packages onto, a main line. The transfer is fitted with only four bolts, directly to standard pre-drilled holes.

- Transfer speeds up to 70m/min as standard
- Conveyor widths up to 800mm
- Complete with integral pneumatic controls and oil pressure regulation
- Lifting Stroke 25mm (10mm below and 15mm above top of roller)

Key to Success

The key to the success of this design is in the electrical connections where we have developed an innovative cable that contains all the interconnections necessary between the photocells and the motorised rollers. All thats left to do is to give it the 24v dc supply

Ease of Installation

The motorised roller and sensor connect by plug and socket and hence either can be replaced independently or without the need to terminate a single wire. Thus enabling mechanical maintenance personnel to do what would otherwise require the services of an electrician.



Transport Straight

Transport straights are the basic building blocks of any conveyor system. Designed to link to all other powered roller modules and enable bolt in accessories such as transfers. Each module is pre-fitted and ready to use.

- Available in LH & RH options.
- Modules up to 3 metres in length
- 83mm, 125mm roller pitch
- 90mm and 180mm deep channels
- Speeds up to 60m/min
- Extremely quick to install - no control boxes to wire up



Transport Curve

Transport curves come pre-fitted with tapered rollers and power cables.

- Available in LH & RH options.
- Full Range of widths
- 30, 45, 60 and 90 degree curves
- Tapered rollers
- 140mm & 180mm channel heights
- Speeds 60m / min

Further Modules and Accessories

Other modules currently available include the Curve Extension Zones.

Our commitment to the powered roller conveyor has resulted in a large investment in this project.

As a result we will be continually adding modules to our existing range.

Please contact us for details.

A full range of accessories is available including:

Curve Extension Zone

Extension zones are used to extend a zero line pressure (ZLP) zone through a 30° angle. The module is a 30° transport curve which is connected to the down stream conveyors connecting cables. The curve then becomes part of the preceding zone.

Available in 30° curve

Full Range of widths

Tapered rollers

140mm & 180mm channel heights

Speeds 60m / min

Powered Roller Conveyor System



Zero Line Pressure accumulation will effectively queue loads without contact in a series of zones until the way ahead is clear and the loads can safely proceed. Each zone comes complete with its own integral logic photocells.

- Available in LH & RH options.
- Modules up to 3 metres in length
- 83mm, 125mm roller pitch
- 500, 750 and 1000mm zone lengths.
- Speeds up to 60m/min
- Extremely quick to install - no control boxes to wire up

Powered Roller Conveyor System

Conveyed Loads

Loads must be dry with a smooth base, cardboard on plastic being ideal.

Max product load no greater than 10 kg. per roller.

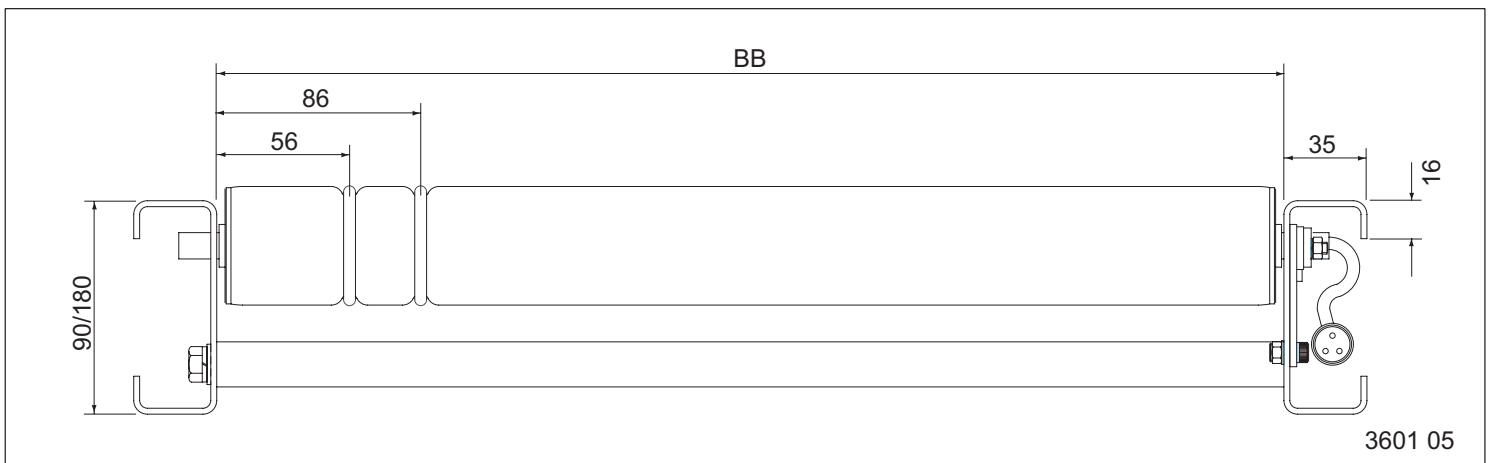
Max product weight of any single carton is 30 kg.

Environment

To be used indoors in a dry environment only between 5°C and 40°C ambient temperature.

Weight - kg

83mm Pitch					
500mm	13	14	15	17	20
750mm	19	21	23	25	32
1000mm	26	28	31	33	43
1500mm	39	42	45	50	63
2000mm	44	47	50	56	69
2250mm	47	51	55	60	73
3000mm	54	63	68	73	82
125mm Pitch					
3000mm	50	53	57	63	76



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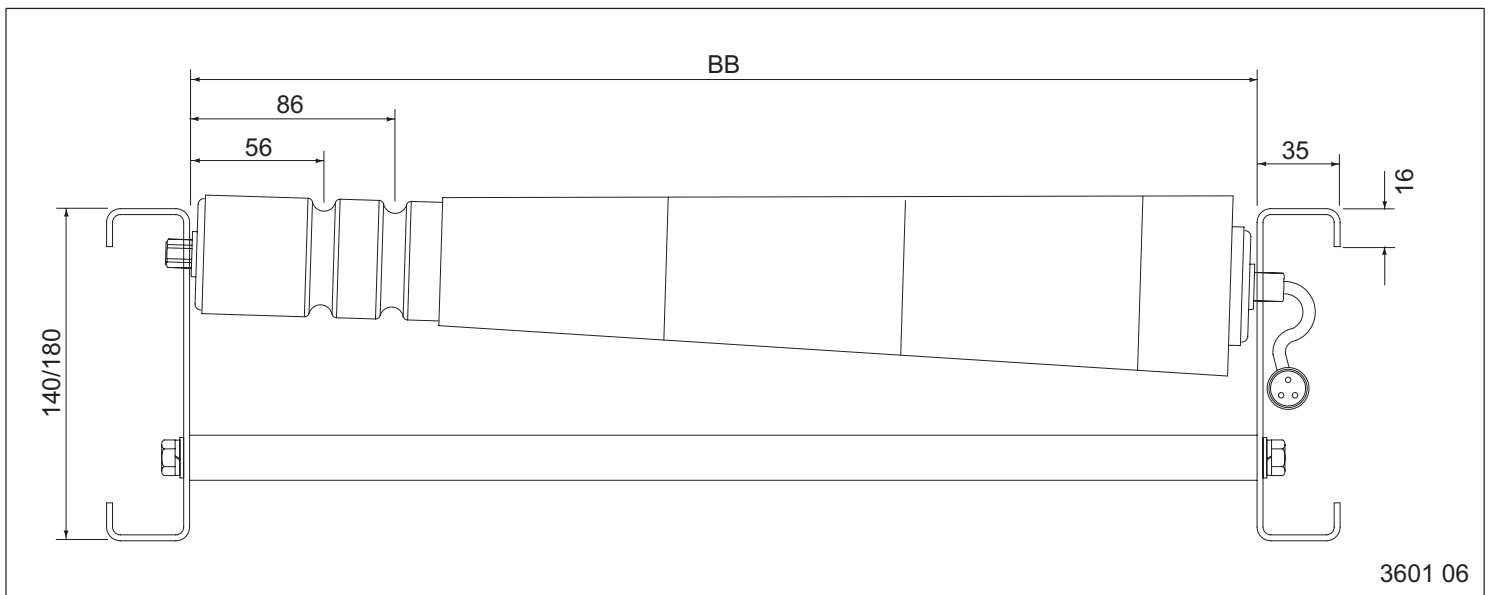
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Environment

To be used indoors in a dry environment only between 5°C and 40°C ambient temperature.

Weight - kg

83mm Pitch					
Angle	400BB	450BB	500BB	600BB	800BB
90°	30	33	35	39	47



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Powered Roller Conveyor System



The powered roller conveyor merge can be bolted to a conveyor straight anywhere along its length. It is attached via two clamp plates to the straight conveyor. It is separately powered by two identical powered rollers to that used on straight sections of conveyor.

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- Available in all standard widths 400BB - 800BB.
- 90mm - 180mm Channel height.
- Integral photocells
- Speeds up to 60m/min

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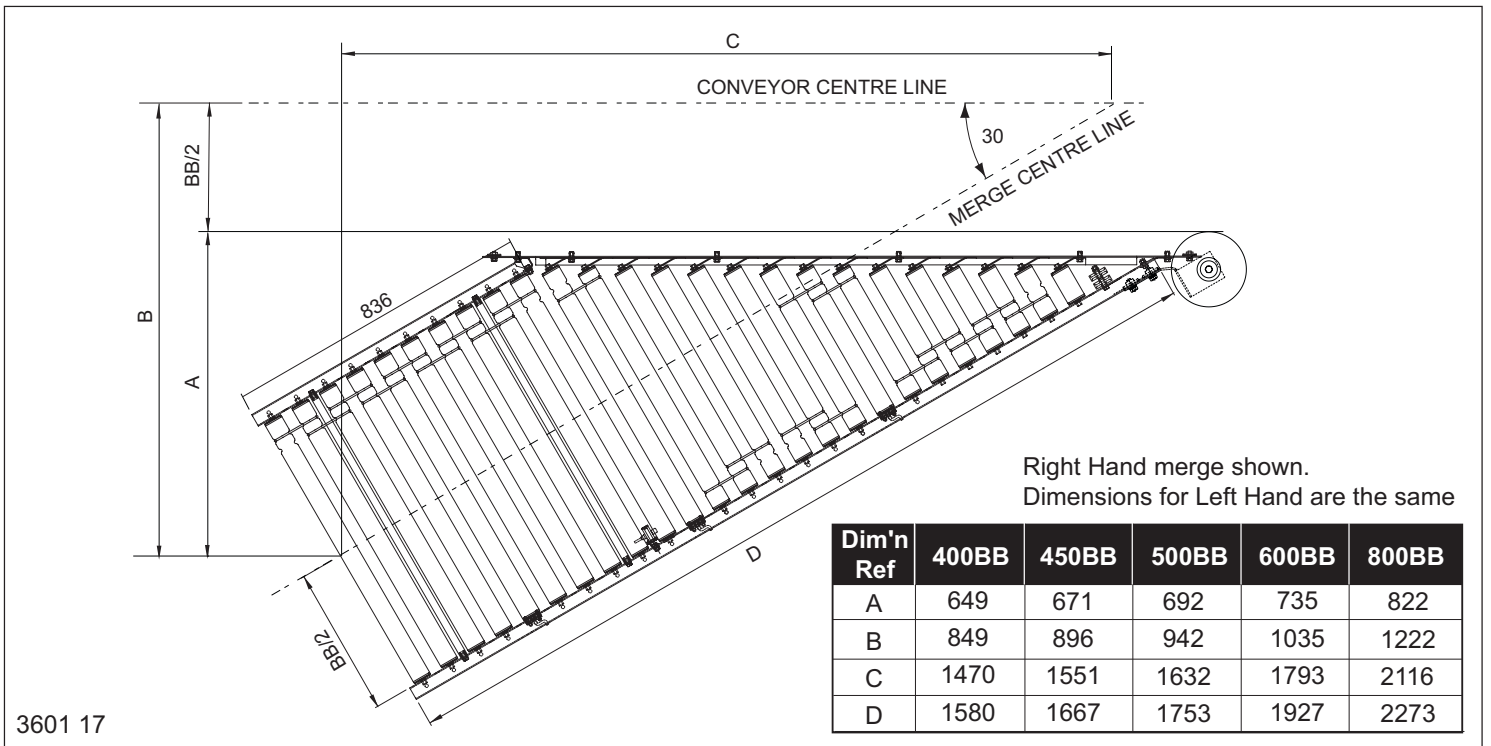
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Environment

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Weight - kg

83mm Pitch					
Angle	400BB	450BB	500BB	600BB	800BB
30°	19	26	29	34	46



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Powered Roller Conveyor System



A simple to install self contained unit that can be fitted at any point on a straight (in 83mm pitches) to divert packages from, or bring packages onto, a main line. The transfer is fitted with only four bolts, directly to standard pre-drilled holes.

The lifting mechanism is a pneumatic cylinder connected to a lifting shaft. The transfer has the valve pre-fitted at manufacture and requires only to be supplied with mains air when on site.

- **Transfer speeds up to 70m/min as standard**
- **Conveyor widths up to 800mm**
- **Complete with integral pneumatic controls and oil pressure regulation**
- **Lifting Stroke 25mm (10mm below and 15mm above top of roller)**

Powered Roller Conveyor System

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Air Supply

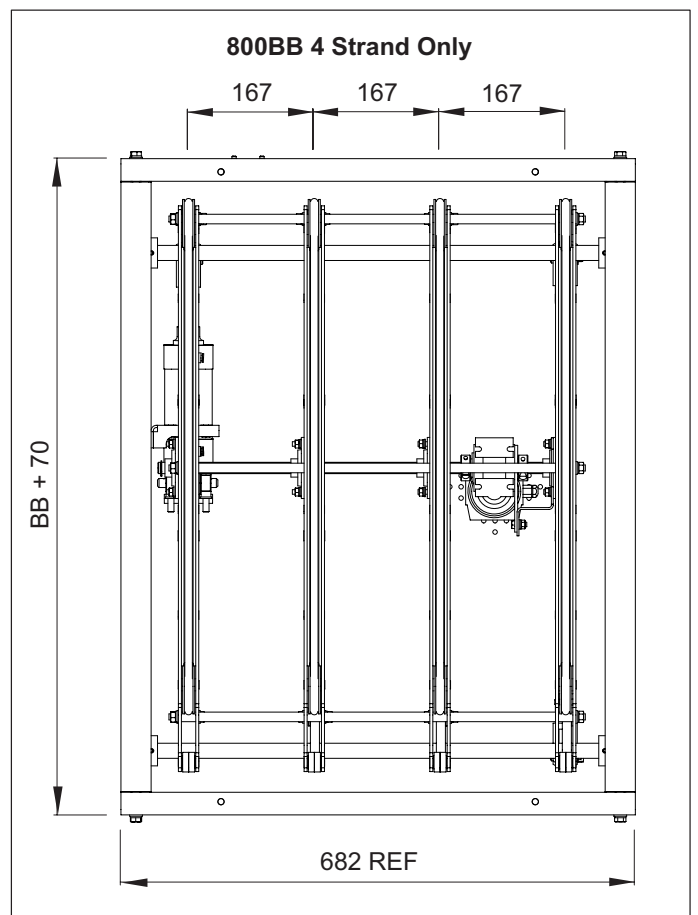
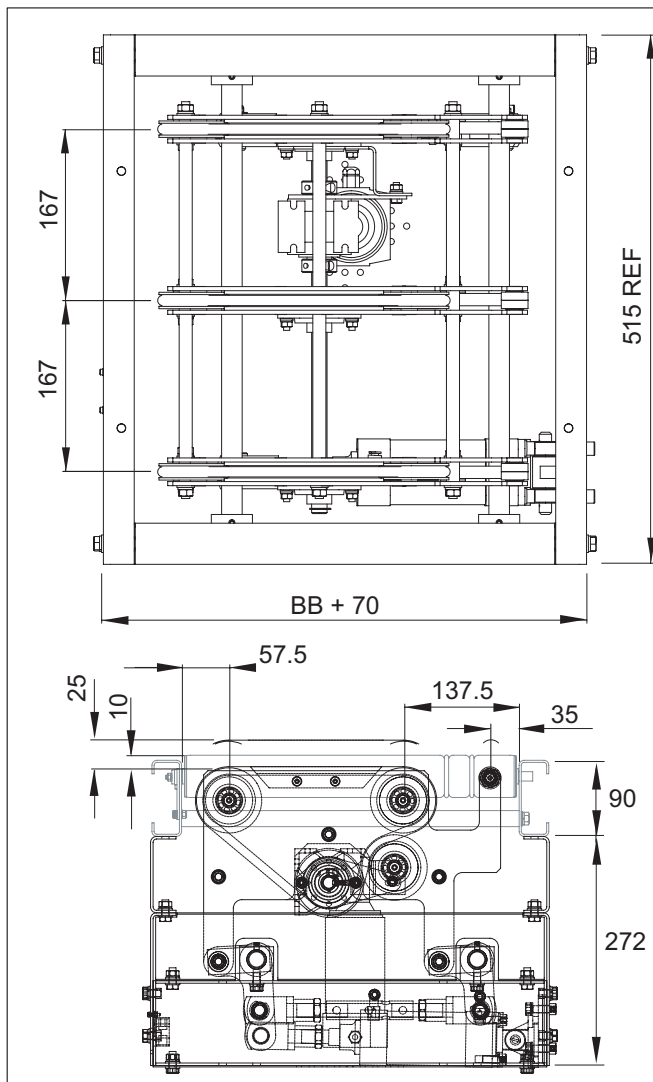
To be supplied with dry, unlubricated at 6 bar.

Transfer air consumption = 1.26 litres of free air per operation

Electrical Power

Motors should be connected to 24v dc power supply.

Transfer Speed (m/min)	Running Current (A)	Max. Demagnetisation Current (A)
All Speeds	6.7	44



Note: Pneumatic Solenoid valve and geared motor come with cables ready to connect to power supply.

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