PRECISION BELT CONVEYORS
PRECISION LINK CONVEYORS
PRECISION LINK CONVEYORS High Accuracy
## SUMMARY

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**INTRODUCTION**

**Introduction**

ITALPLANT conveyors are the state-of-the-art of conveyors for every kind of industry: mechanical, manufacturing, assembling, packaging, and every genre of applications: medical, cosmetic, electronic, and so on. ITALPLANT conveyors combine excellent accuracy, high speed, smooth movement, high load capacity, versatility of positioning, custom length.

Driven by a ITALPLANT indexer with globoidal cam, able to guarantee a motion given by an incredible variety of motion laws (MS, MS20, MT, CYC, etc.), both standard than personal, customer have the maximum degree of reliability. Indexer are driven by worm-gear reducer and three phase brake motor, or, if wished, by servo motor and driver provided by us. Type of motion can be, as a choice, continuous or periodic, with much longer dwell periods and custom length. Moreover, it is possible to couple the conveyor with ITALPLANT pick and place of PR or IP series, able to make loading/unloading cycles, synchronous with conveyor.

To meet exactly all customer’s needs, ITALPLANT can make a complete project that includes not only the complete system conveyor – placers with motorization, but also support base and tools to fit onto the links, or other components for load and unload. The possibility, in addition, to choose the length and the pitch of links permits to cover every customer wishes.

**The product you need**

ITALPLANT has got the widest range of conveyors, with different accuracies for any kind of applications.

The first accuracy step is the patented **Precision Belt Conveyor** type, suitable for packaging, medium accuracy mounting and warehouse indexed storage. This kind of carrier is equipped with aluminum beam, aluminum pallets fixed on an high precision timing belt, and autolubricating guides.

The patented shape of the pallets allow the this system to be used in carousel position, that is an absolute news for a belt system. This conveyor can be shipped mounted or only composed by the drive head, take-up head and the other components ready to be mounted to the beam, that can also be provided by the customer (Get And Joint patent).

The second step is the standards **Precision Link Conveyor**, composed an aluminum beam and links connected together, equipped with roller followers that runs on steel guides. This kind of system is suitable for precision mounting in several fields, like mechanical, electrical, medical, hygiene ans so on.

This PLC mounts hardened dual drive sprockets able to guarantee a transmission without backlash between drive unit and chain links. On the opposite side, a special tensioning cam designed by our skill technical office can delete the chordal effect given by the polygonal effect of the chain during motion, maintaining a precise tension level of the chain in all its way.

Also this conveyor can be shipped mounted or ready to be mounted to the beam, that can also be provided by the customer (Get And Joint patent).

The most accurate conveyor is the **Precision Link Conveyor High Accuracy**, the best that you can obtain in the field of linear indexed systems. This carrier, is equipped as the standard PLC with aluminum links connected togheter (it’s also possible steel or other materials on customer’s demand), but with a structural steel beam. This beam, that is machined with high accuracy procedures, allow to this system to reach a very high value of repeatability accuracy, suitable for fields like the microelectronics, medical, precise mounting and the automotive, thanks to the Heavy Duty PLC HA type.
## CONVEYORS PRODUCT RANGE

<table>
<thead>
<tr>
<th>PBC (pag. 15)</th>
<th>PLC (pag. 21)</th>
<th>PLC HA (pag. 31)</th>
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<tr>
<td>PBC 60 mm</td>
<td>PLC 3”</td>
<td>PLC 1.5”</td>
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<tr>
<td>PBC 80 mm</td>
<td>PLC 4”</td>
<td>PLC 2”</td>
</tr>
<tr>
<td>PBC 100 mm</td>
<td>PLC 4.5”</td>
<td>PLC 3”</td>
</tr>
<tr>
<td>PBC 160 mm</td>
<td>PLC 5.5”</td>
<td>PLC 4”</td>
</tr>
<tr>
<td></td>
<td>PLC 6”</td>
<td>PLC 4” XL</td>
</tr>
<tr>
<td></td>
<td>PLC 100 mm</td>
<td>PLC 4.5”</td>
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<tr>
<td></td>
<td>PLC 125 mm</td>
<td>PLC 5.5”</td>
</tr>
<tr>
<td></td>
<td>PLC 150 mm</td>
<td>PLC 6”</td>
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<tr>
<td></td>
<td></td>
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<td>PLC 150 mm</td>
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<td></td>
<td></td>
<td>PLC 150 mm XL</td>
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<tr>
<td></td>
<td></td>
<td>PLC 150 mm</td>
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<tr>
<td></td>
<td></td>
<td>PLC 250 mm</td>
</tr>
</tbody>
</table>

ITALPLANT srl reserves to modify quotes without advice.
STEP 1: CHOOSE YOUR CONVEYOR BY ACCURACY

Each link of ITALPLANT conveyor shows an accuracy value that can be measured along the three directions of length, width, height (X,Y,Z). All measurements will be taken at the fixture locating dowel pin and inspected one link in from the take up end. The “Y” (side to side accuracy) and “Z” (vertical accuracy) tolerance value will be remain the same at any given station along the entire length of the conveyor.

The “X” direction tolerance value will be greatest at the link farthest from the drive sprocket and will improve with closer proximity to the sprocket (index accuracy).

ITALPLANT cannot put an exact value on this accuracy improvement and will only guarantee the accuracy listed below for the entire length of the conveyor. These accuracy values relate to any given station NOT as one station relates to another.

<table>
<thead>
<tr>
<th>Link TYPE and SIZE</th>
<th>Tolerance X within MINIMUM LENGHT (indicated)</th>
<th>Tolerance X beyond MINIMUM LENGHT EVERY 500 mm</th>
<th>Tolerances Y and Z for each link</th>
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</thead>
<tbody>
<tr>
<td><strong>PBC</strong></td>
<td></td>
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<tr>
<td>PBC 60 mm</td>
<td>± 0,23 mm (540 mm)</td>
<td>± 0,08 mm</td>
<td>± 0,25 mm</td>
</tr>
<tr>
<td>PBC 80 mm</td>
<td>± 0,20 mm (560 mm)</td>
<td>± 0,06 mm</td>
<td>± 0,15 mm</td>
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<tr>
<td>PBC 100 mm</td>
<td>± 0,20 mm (600 mm)</td>
<td>± 0,06 mm</td>
<td>± 0,15 mm</td>
</tr>
<tr>
<td>PBC 160 mm</td>
<td>± 0,25 mm (960 mm)</td>
<td>± 0,06 mm</td>
<td>± 0,15 mm</td>
</tr>
<tr>
<td><strong>PLC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLC 3&quot; (76,2 mm)</td>
<td>± 0,127 mm (609.6 mm)</td>
<td>± 0,042 mm</td>
<td>± 0,127 mm</td>
</tr>
<tr>
<td>PLC 4&quot; (101,6 mm)</td>
<td>± 0,119 mm (711,2 mm)</td>
<td>± 0,021 mm</td>
<td>± 0,127 mm</td>
</tr>
<tr>
<td>PLC 4,5&quot; (114,3 mm)</td>
<td>± 0,118 mm (685,8 mm)</td>
<td>± 0,021 mm</td>
<td>± 0,127 mm</td>
</tr>
<tr>
<td>PLC 5,5&quot; (139,7 mm)</td>
<td>± 0,118 mm (698,5 mm)</td>
<td>± 0,021 mm</td>
<td>± 0,127 mm</td>
</tr>
<tr>
<td>PLC 6&quot; (152,4 mm)</td>
<td>± 0,115 mm (609,6 mm)</td>
<td>± 0,021 mm</td>
<td>± 0,127 mm</td>
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<tr>
<td>PLC 100 mm</td>
<td>± 0,119 mm (700 mm)</td>
<td>± 0,021 mm</td>
<td>± 0,127 mm</td>
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<tr>
<td>PLC 125 mm</td>
<td>± 0,126 mm (875 mm)</td>
<td>± 0,021 mm</td>
<td>± 0,127 mm</td>
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<tr>
<td>PLC 150 mm</td>
<td>± 0,127 mm (900 mm)</td>
<td>± 0,021 mm</td>
<td>± 0,127 mm</td>
</tr>
<tr>
<td><strong>PLC High Accuracy</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>PLC HA 1,5&quot; (38,1 mm)</td>
<td>± 0,039 mm (228,6 mm)</td>
<td>± 0,008 mm</td>
<td>± 0,050 mm</td>
</tr>
<tr>
<td>PLC HA 2&quot; (50,8 mm)</td>
<td>± 0,040 mm (304,8 mm)</td>
<td>± 0,008 mm</td>
<td>± 0,050 mm</td>
</tr>
<tr>
<td>PLC HA 3&quot; (76,2 mm)</td>
<td>± 0,041 mm (381 mm)</td>
<td>± 0,008 mm</td>
<td>± 0,050 mm</td>
</tr>
<tr>
<td>PLC HA 4&quot; (101,6 mm)</td>
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<td>± 0,007 mm</td>
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<tr>
<td>PLC HA 4&quot; (101,6 mm) - XL</td>
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<td>± 0,007 mm</td>
<td>± 0,040 mm</td>
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<tr>
<td>PLC HA 4,5&quot; (114,3 mm)</td>
<td>± 0,036 mm (571,5 mm)</td>
<td>± 0,007 mm</td>
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<tr>
<td>PLC HA 5,5&quot; (139,7 mm)</td>
<td>± 0,035 mm (558,8 mm)</td>
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<td>± 0,040 mm</td>
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<tr>
<td>PLC HA 6&quot; (152,4 mm)</td>
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<td>± 0,007 mm</td>
<td>± 0,040 mm</td>
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<tr>
<td>PLC HA 8&quot; (203,2 mm)</td>
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<td>± 0,007 mm</td>
<td>± 0,040 mm</td>
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<td>PLC HA 12&quot; (304,8 mm)</td>
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<td>± 0,007 mm</td>
<td>± 0,040 mm</td>
</tr>
<tr>
<td>PLC HA 100 mm</td>
<td>± 0,035 mm (500 mm)</td>
<td>± 0,007 mm</td>
<td>± 0,040 mm</td>
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<td>PLC HA 125 mm</td>
<td>± 0,035 mm (500 mm)</td>
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<td>± 0,045 mm (1000 mm)</td>
<td>± 0,007 mm</td>
<td>± 0,040 mm</td>
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</table>
STEP 2: CHOOSE THE MOUNTING POSITION

CAROUSEL mounting position
Carousel conveyors show the links on right and left side. For this peculiarity that gives the possibility to work on both sides, it is possible to use for the stations the total length of the conveyor. This type of conveyor does not permit, anyway, to load directly on links but only by fixtures mounted laterally on itself to carry a load that rollers could bear: indispensable then to calculate every time the overturning torque on links and fixtures that are generally out of centre.

OVER-UNDER mounting position
Over-Under conveyors are imagined to work usually on the upper side, on the open view, but in comparison to the preceding ones are more suitable to be carried by a pick and place or robots, and they are able to bear loads or external forces directly on the links. Otherwise, with the same number of fixtures, you have to provide a double length than Carousel.
STEP 3: CHOOSE THE MOTORIZATION

CONVEYOR INDEXED MOTION

- ITALPLANT Rotary Table + Worm reducer + 3Phase/Servo motor
- ITALPLANT High Efficiency Reducer + Servo motor (with an own motion law)
- Epicicloidal reducer + Servo motor (with an own motion law)
- Servo motor (with an own motion law)

CONVEYOR CONTINUOUS MOTION

- ITALPLANT High Efficiency Reducer + Worm reducer + 3Phase/Servo motor
- ITALPLANT High Efficiency Reducer + 3Phase/Servo motor
- Epicicloidal reducer + 3Phase/Servo motor
- Servo motor (with an own motion law)
OPTIONAL FEATURES

PENDULAR MOUNTING

The mounting of the motorization to the conveyor is an operation that needs to follow particular specification, to maintain the isostatic position of the input shaft. Without this controls, it could be possible to damage the conveyor during its life. For this reason, Italplant has developed the Pendular Mounting option. The suspended anchorage of the rotary table allows to have the possibility to receive the conveyor with motorization, saving assembly time for the customer. This solution is available in both Carousel and Over-Under versions.

BASE FRAME

Italplant provide a wide range of base frame for the support of the conveyors. These options have got several advantages:

- To mount all the support legs and the motorization without hyperstatic situation
- Major rigidity for the shipping of the conveyor
- To save money for the mounting and adapting of the conveyor to its support structure

Every base frame can be provided for Carousel or Over-Under mounting positions.

SUPPORT LEGS

To allow to the customer to mount easily the conveyor without stress its structure, it’s possible to get ITALPLANT support legs. These legs have got a special X-Y-Z axis regulation, for a fine position of them on the support structure of the machine. These supports can be provided in aluminum or steel. In case of steel, it’s possible to ask for painting in custom RAL color, browning or phosphating. The legs can be also provided in stainless steel.
OPTIONAL FEATURES

DOUBLE BEAM CONVEYOR

In case of the necessity to have two synchronized chains, ITALPLANT can provide the double beam conveyor version.

This solution is suitable for all the applications that require a widest lateral dimension for the support of the pieces. In fact, in this solution the beam is one, and the two chains are moved by a unique shaft, with the same motion.

TWIN CONVEYORS

For all the applications where it's necessary to have two chains with independent motion, ITALPLANT can provide the twin conveyors version.

In this case the beam are two, identically, positioned in a unique structure (with their distance that can be regulated, if requested). Each beam supports a chain that has got an independent motion from the other one: this solution is suitable in case of tandem mounting, usually motorized by a servo motor.

A unique pass-through shaft can be provided on request.

SQUARED CONFIGURATION (PATENTED)

There is a particular shape of ITALPLANT transfer system studied exactly for the application where a large pass through hole is required, for big dimension passages or - in case of Carousel mounting position - to allow to the customer to position additional mounting stations inside to the quadrilateral shape.

To allow it, ITALPLANT has patented a square shape of Precision Belt Conveyors (Page 20) and Precision Link Conveyors (Page 30).

This version has got the same links of the traditional conveyor versions.
OPTIONAL FEATURES

TIMING DEVICE (PATENTED)

This patented system has been developed by ITALPLANT for all the applications where it’s necessary to change the support of the fixtures on each conveyor link, for a production batch change. Usually this operation requires much time and technicians to work on it. With this automating phasing system, without any disassembly, it’s possible in less than one minute to change the production batch.

It’s only necessary (for example for three types of pieces), to mount the fixtures in this way: A-B-C-A-B-C-A-B.. During the rephasing, automatically the conveyor will change the work position from A to B or C.

An important note is that this is a mechanical system, that eliminates any errors, which otherwise can be caused by electronically controlled systems.

CUSTOM FIXING HOLES AND OPENINGS

All the pallets fixing holes can be provided at custom specifications.

In addition to that, for the Precision Link Conveyors High Accuracy, thanks to the fact that the beam is composed by structural steel, it’s possible to ask for special fixing holes, centering holes and openings with fully customizable size and position. Our Technical Dept. will follow customer’s specifications in the co-engineering phase, up to confirmation of the custom installation drawing.

HHA ACCURACY

The accuracy chart (page 5) allows to the customers to choose between a wide range of accuracy in terms of repeatability in X-Y-Z directions. In case of a extremely high accuracy required also in the planarity, ITALPLANT can provided special PLC with HHA accuracy links, that has got better repeatability in X-Y-Z directions, plus certified planarity accuracy value (up to ± 0.005 mm).
**SOTL+ATT (PATENTED)**

This patented systems, included in all the ITALPLANT rotary table, allows to the system motorization+conveyors to protect himself in case of external jamming, on the links. The protection it’s possible thanks to a friction positioned internally to the rotary table mechanism, that in case of jamming - after the reach of a max. allowable torque - that it’s possible to set manually - disengages the internal mechanism, giving an electrical emergency signal and protect the rotary table. Thanks to this feature the Warranty of the rotary tables becomes 5 Years.

**HIGH TEMPERATURE/ SPECIAL COATING**

In case of applications with temperature higher than 100°C (373 K), instead of aluminum - that is used to give better performance thanks to its low specific density - the links can be provided in cast iron, due to its low thermal expansion.

In case of white room applications or specific requirements (food, explosive, hygiene...) the pallets can be provided also in stainless steel, as per the PLC HA beam, that can be also painted in custom RAL color, browned or phosphated.

**GET AND JOINT SYSTEM (PATENTED)**

This patented system, allows to the customer to receive the main conveyor components into a small wood box and mounts them on the aluminum beam of standard model type, that easily can be found on the market. In this way - expecially for long conveyors - it’s possible to save money and time, simply following the instruction provided by ITALPLANT. This option can be provided for the Precision Belt Conveyors (Page 13) and Precision Link Conveyors (Page 19), and in this catalogue its highlighted by the Get And Joint logo on the right.
EXAMPLES OF APPLICATIONS

PBC 80 x 1000 mm - Drawer guides assembly

PLC HA 5.5 x 196" - Pencil ignition coils assembly
EXAMPLES OF APPLICATIONS

PLC HA 4" x 200" - Tools assembly

PLC HA 5.5 x 77" - Furniture components assembly
PRECISION BELT CONVEYORS

The ITALPLANT patented Precision Belt Conveyors PBC represents an absolute innovation in the sector of pallets transport.

It’s almost an all-aluminum structure, that combines two basic concepts for the customer: modular structure according to the customers needs and hugely lower costs, compared to other transport belt systems.

This has been possible by a combination of design essential and rigid mechanical linkages: the result is a conveyor suitable for many applications at higher level than its competitors belt, and yet much cheaper.

The motorizations applicable may provide an intermittent motion - Italplant rotary tables or HER/servo motor with an own motion law - or continuous - HER/servo motor - (page 7).

Features:
- ITALPLANT patented system
- Metric version
- Lightweight structure with aluminum profile
- Autolubricating guides
- Get And Joint version available (see page 11)
- Squared version available (see page 12)
- Over-Under / Carousel mounting options
- Length and size of the aluminium pallets, other specifications
- General specifications: height, total length, even or odd pallets, disposition

Available link sizes

60 mm - 80 mm - 100 mm - 160 mm
**PBC 60 mm**

**Link length:** 60 mm  
**Centre distance:** from 540 to 7380 mm

**Load capacity:**  
- Every second link: 20 kg  
- Every single link: 10 kg

**Overhung load capacity:** 30 Nm

**Length deviation:** + 0.05 mm/link

**Accuracy:**  
- X axis: ± 0.23 mm up to 540 mm + 0.08 mm every 500 mm  
- Y axis: ± 0.25 mm  
- Z axis: ± 0.25 mm

**Links tilts displacements:**  
- X axis: ± 0.18 mm  
- Y axis: ± 0.18 mm  
- Z axis: ± 0.18 mm

**Load capacity:**  
- Every second link: 20 kg  
- Every single link: 10 kg

**Overhung load capacity:** 30 Nm

**Length deviation:** + 0.05 mm/link

**Accuracy:**  
- X axis: ± 0.23 mm up to 540 mm + 0.08 mm every 500 mm  
- Y axis: ± 0.25 mm  
- Z axis: ± 0.25 mm

**Links tilts displacements:**  
- X axis: ± 0.18 mm  
- Y axis: ± 0.18 mm  
- Z axis: ± 0.18 mm

**Optionals on request**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- Additional T-slots nuts  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Additional features**  
- 8 pockets sprockets  
- ITALPLANT patented system  
- Aluminum profile beam  
- Squared version available (see page 20)  
- Get And Joint version available  
- Over-Under / Carousel mounting options

**Available strokes**  
- 15 - 30 - 60 - 120 - 180 - 240 - 300 - 360 - 420 - 480 mm  
- Other strokes available with servomotors

<table>
<thead>
<tr>
<th>Available strokes</th>
<th>Center distance dimension</th>
<th>Denomination</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 - 30 - 60 - 120 - 180 - 240 - 300 - 360 - 420 - 480 mm</td>
<td>540 mm to 7380 mm</td>
<td>PBC 60</td>
</tr>
</tbody>
</table>
**PBC 80 mm**

**Link length:** 80 mm  
**Centre distance:** from 560 to 7360 mm

**Load capacity:**  
- Every second link: 30 kg  
- Every single link: 15 kg  

**Overhung load capacity:** 50 Nm

**Length deviation:** $\pm 0.05$ mm/link

**Accuracy:**  
- $X$ axis $\pm 0.20$ mm up to 560 mm + $\pm 0.06$ mm every 500 mm  
- $Y$ axis $\pm 0.15$ mm  
- $Z$ axis $\pm 0.15$ mm

**Links tilts displacements:**  
- $X$ axis $\pm 0.18$ mm  
- $Y$ axis $\pm 0.18$ mm  
- $Z$ axis $\pm 0.18$ mm

**Optionals on request**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- Additional T-slots nuts  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Available strokes**  

<table>
<thead>
<tr>
<th>Centre distance dimension</th>
<th>Denomination</th>
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</thead>
<tbody>
<tr>
<td>560 mm to 7360 mm</td>
<td>PBC 80</td>
</tr>
</tbody>
</table>

**Get And Joint version available**

**Additional features**  
- 6 pockets sprockets  
- ITALPLANT patented system  
- Aluminum profile beam  
- Squared version available (see page 20)  
- Get And Joint version available  
- Over-Under / Carousel mounting options

**VIEW FROM “A”**

**GET AND JOINT version available**

**Available strokes**  
20 - 40 - 80 - 160 - 240 - 320 - 400 - 480 mm  
**FLEXIBLE STROKES WITH SERVO MOTOR**
PBC 100 mm

**Link length:** 100 mm  
**Centre distance:** from 600 to 7300 mm

**Load capacity:**  
- Every second link: 40 kg  
- Every single link: 20 kg

**Overhung load capacity:** 60 Nm

**Length deviation:** $+0.05 \text{ mm/link}$

**Accuracy:**  
- $X$ axis $\pm 0.20 \text{ mm up to 600 mm} + 0.06 \text{ mm every 500 mm}$  
- $Y$ axis $\pm 0.15 \text{ mm}$  
- $Z$ axis $\pm 0.15 \text{ mm}$

**Links tilts displacements:**  
- $X$ axis $\pm 0.18 \text{ mm}$  
- $Y$ axis $\pm 0.18 \text{ mm}$  
- $Z$ axis $\pm 0.18 \text{ mm}$

**Optionals on request**
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- Additional T-slots nuts  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Available strokes**  
<table>
<thead>
<tr>
<th>Center distance dimension</th>
<th>Denomination</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 mm to 7300 mm</td>
<td>PBC 100</td>
</tr>
</tbody>
</table>

**Additional features**
- 6 pockets sprockets  
- ITALPLANT patented system  
- Aluminum profile beam  
- Squared version available (see page n.20)  
- Get And Joint version available  
- Over-Under / Carousel mounting options
PBC 160 mm

**Link length:** 160 mm  
**Centre distance:** from 960 to 7040 mm

**Load capacity:**  
- Every second link: 60 kg  
- Every single link: 30 kg

**Overhung load capacity:** 80 Nm

**Length deviation:** ± 0.05 mm/link

**Accuracy:**  
- **X axis** ± 0.25 mm up to 960 mm + 0.06 mm every 500 mm  
- **Y axis** ± 0.15 mm  
- **Z axis** ± 0.15 mm

**Links tilts displacements:**  
- **X axis** ± 0.18 mm  
- **Y axis** ± 0.18 mm  
- **Z axis** ± 0.18 mm

**Optionals on request**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- Additional T-slots nuts  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Available strokes**  
- 40 - 80 - 160 - 320 - 480 - 640 - 800 - 960 mm

**Center distance dimension**  
- 960 mm to 7040 mm

**Denomination**  
- PBC 160

**Additional features**  
- 6 pockets sprockets  
- ITALPLANT patented system  
- Aluminum profile beam  
- Squared version available (see page n.20)  
- Get And Joint version available  
- Over-Under / Carousel mounting options
PBC SQUARE 60 - 80 - 100 - 160 mm

Link length: 60-80-100-160 mm
Centre distance: (various values)

Load capacity: (pages 16-19)
Overhung load capacity: (pages 16-19)

Additional features
- ITALPLANT patented system
- Aluminum profile beam
- Autolubricating guides
- Get And Joint version available
- Over-Under / Carousel mounting options

Optionals on request
- Globoidal Indexer as motorization
- Special input shaft
- Customized pallets fixing holes
- Additional T-slots nut
- Pendular mounting of the motorization
- Legs with X-Y-Z regulation
- Base frame

<table>
<thead>
<tr>
<th>Available strokes</th>
<th>Center distance dimension</th>
<th>Denomination</th>
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<tbody>
<tr>
<td>(VARIOUS IN REFERENCE TO THE LINK SIZE)</td>
<td>(VARIOUS VALUES)</td>
<td>PBC SQUARE 60-80-100-160</td>
</tr>
<tr>
<td>FLEXIBLE STROKES WITH SERVO MOTOR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The ITALPLANT Precision Link Conveyor is the carrier used for accurated mounting and operations in automation field.

It’s composed by aluminum beam and chain (other materials up to request), steel guides and rollers greased for life. The structure is modular, according to the customers needs.

This conveyor is suitable for all the accurated mounting operations that request precision, rigidity and speed.

The applicable motorizations may provide an intermittent motion - Italplant rotary tables or HER/servo motor with an own motion law - or continuous - HER/servo motor - (page 7).

Features:
- Imperial / Metric versions
- Lightweight structure with aluminum profile
- Rollers greased for life
- Get And Joint version available (see page 11)
- Squared version available (see page 12)
- Over-Under / Carousel mounting options
- Length and size of the aluminium pallets, other specifications
- General specifications: height, total length, even or odd pallets, disposition

**Dimensional evaluation:** If the lateral size of workpiece holder is larger than pallets nominal quote, to avoid the collision with the conveyor corner radius, it’s necessary to remove the indicated value - please ask to our Technical Department -

**Available link sizes**

3" - 4" - 4.5" - 5.5" - 6" - 100 mm - 125 mm - 150 mm
**PLC 3" (76,2 mm)**

**Link length**: 76,2 mm  
**Centre distance**: from 609,6 to 8229,6 mm

**Load capacity**:
- Every single pallet: 90 kg  
- Every single pallet: 45 kg

**Overhung load capacity**: 45 Nm

**Link overview**

**Accuracy**:
- X axis ± 0,127 mm up to 609,6 mm + 0,042 mm every 500 mm  
- Y axis ± 0,127 mm  
- Z axis ± 0,127 mm

**Links tilts displacements**:
- X axis ± 0,092 mm  
- Y axis ± 0,060 mm  
- Z axis ± 0,060 mm

**Length deviation**: + 0,0127 mm/link

**Dimensional evaluation**:
- X axis ± mm (page 21)
- Y axis ± mm
- Z axis ± mm

**Available strokes**

<table>
<thead>
<tr>
<th>Available strokes</th>
<th>Center distance dimension</th>
<th>Denomination</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.75&quot; - 1.5&quot; - 3&quot; - 6&quot; - 9&quot; - 12&quot; - 15&quot; - 18&quot; - 21&quot; - 24&quot;</td>
<td>24&quot; (609,6 mm) to 324&quot; (8229,6 mm)</td>
<td>PLC 3&quot;</td>
</tr>
</tbody>
</table>

**Optionals on request**
- Globald Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Additional features**
- 8 pockets sprockets  
- Aluminum profile beam  
- Squared version available (see page n.30)  
- Get And Joint version available  
- Over-Under / Carousel mounting options

**View from "A"**

**Dimensional view**

**Get And Joint version available**
**PLC 4" (101,6 mm)**

**Link length:** 101.6 mm  
**Centre distance:** from 711.2 to 8229.6 mm

**Load capacity:**  
- Every two pallets: 150 kg  
- Every single pallet: 75 kg

**Overhung load capacity:** 130 Nm

**Length deviation:** + 0.0127 mm/link

**Accuracy:**  
- **X axis** ± 0.119 mm up to 711.2 mm  
  ± 0.021 mm every 500 mm  
- **Y axis** ± 0.127 mm  
- **Z axis** ± 0.127 mm

**Links tilts displacements:**  
- **X axis** ± 0.092 mm  
- **Y axis** ± 0.060 mm  
- **Z axis** ± 0.060 mm

**Optionals on request**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Additional features**  
- 8 pockets sprockets  
- Aluminum profile beam  
- Squared version available (see page n.30)  
- Get And Joint version available  
- Over-Under / Carousel mounting options

**Available strokes**  
1" - 2" - 4" - 8" - 12" - 16" - 20" - 24" - 28" - 32"

**Center distance dimension**  
28" (711.2 mm) to 324" (8229.6 mm)

**Denomination**  
PLC 4"
**PLC 4,5” (114,3 mm)**

**Link length:** 114,3 mm  
**Centre distance:** from 685,8 to 8229,6 mm

**Load capacity:**  
- Every single pallet: 150 kg  
- Every single pallet: 75 kg

**Overhung load capacity:** 130 Nm

**Length deviation:** + 0,0127 mm/link

**Accuracy:**  
- X axis $\pm 0,118$ mm up to 685,8 mm + $\pm 0,021$ mm every 500 mm  
- Y axis $\pm 0,127$ mm  
- Z axis $\pm 0,127$ mm

**Links tilts displacements:**  
- X axis $\pm 0,092$ mm  
- Y axis $\pm 0,060$ mm  
- Z axis $\pm 0,060$ mm

**Optionals on request**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Available strokes**  
1,125” - 2,25” - 4,5” - 9” - 13,5” - 18” - 22,5” - 27” - 31,5” - 36”  
**Flexible strokes with servo motor**

**Center distance dimension**  
27” (685,8 mm) to 324” (8229,6 mm)

**Denomination**  
PLC 4,5”
PLC 5.5” (139.7 mm)

Link length: 139.7 mm
Centre distance: from 698.5 to 8242.3 mm

Load capacity:
- Every two pallets: 150 kg
- Every single pallet: 75 kg

Overhung load capacity: 130 Nm

Length deviation: ± 0.0120 mm/link

Accuracy:
- X axis ± 0.118 mm up to 698.5 mm + ± 0.021 mm every 500 mm
- Y axis ± 0.127 mm
- Z axis ± 0.127 mm

Links tilts displacements:
- X axis ± 0.092 mm
- Y axis ± 0.060 mm
- Z axis ± 0.060 mm

Dimensional evaluation: __mm (page 21)

Additional features
- 6 pockets sprockets
- Aluminum profile beam
- Squared version available (see page n.30)
- Get And Joint version available
- Over-Under / Carousel mounting options

Optionals on request
- Globoidal Indexer as motorization
- Special Input shaft
- Customized pallets fixing holes
- High temperature pallet version
- Pendular mounting of the motorization
- Legs with X-Y-Z regulation
- Base frame

Available strokes
- 1.375” - 2.75” - 5.5” - 11” - 16.5” - 22” - 27.5” - 33”
FLEXIBLE STROKES WITH SERVO MOTOR

Center distance dimension
27.5” (698.5 mm) to 324.5” (8242.3 mm)

Denomination
PLC 5.5”
**PLC 6” (152,4 mm)**

**Link length**: 152.4 mm  
**Centre distance**: from 609.6 to 8229.6 mm

**Load capacity**:
- Every single pallet: 150 kg  
- Every single pallet: 75 kg

**Overhung load capacity**: 130 Nm

**Length deviation**: +0.0120 mm/link

**Accuracy**:
- **X axis**: ±0.115 mm up to 609.6 mm + ±0.021 m every 500 mm  
- **Y axis**: ±0.127 mm  
- **Z axis**: ±0.127 mm

**Links tilts displacements**:
- **X axis**: ±0.092 mm  
- **Y axis**: ±0.060 mm  
- **Z axis**: ±0.060 mm

**Dimensional evaluation**: mm² (page 21)

**Additional features**
- 6 pockets sprockets  
- Aluminum profile beam  
- Squared version available (see page n.30)  
- Get And Joint version available  
- Over-Under / Carousel mounting options

**Optionals on request**
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Available strokes**  
2” - 3” - 6” - 12” - 18” - 24” - 60” - 36”  
FLEXIBLE STROKES WITH SERVO MOTOR

**Center distance dimension**  
24” (609.6 mm) to 324” (8229.6 mm)

**Denomination**  
PLC 6”
PLC 100 mm

Link length: 100 mm  
Centre distance: from 700 to 8200 mm

Load capacity:
- Every two pallets: 15 kg
- Every single pallet: 75 kg

Overhung load capacity: 130 Nm

Length deviation: +0.0127 mm/link

Accuracy:
- X axis ±0.119 mm up to 700 mm + ±0.021 mm every 500 mm
- Y axis ±0.127 mm
- Z axis ±0.127 mm

Links tilts displacements:
- X axis ±0.092 mm
- Y axis ±0.060 mm
- Z axis ±0.060 mm

Optionals on request
- Globoidal Indexer as motorization
- Special Input shaft
- Customized pallets fixing holes
- High temperature pallet version
- Pendular mounting of the motorization
- Legs with X-Y-Z regulation
- Base frame

Available strokes
- 25 - 50 - 100 - 200 - 300 - 400 - 500 - 600 - 700 - 800 mm

FLEXIBLE STROKES WITH SERVOMOTORS

Center distance dimension: 700 mm to 8200 mm

Denomination: PLC 100
**PLC 125 mm**

**Link length:** 125 mm  
**Centre distance:** from 875 to 8250 mm

**Load capacity:**  
- Every single pallet: 150 kg  
- Every single pallet: 75 kg

**Overhung load capacity:** 130 Nm

**Length deviation:** $+0,0127$ mm/link

**Accuracy:**  
- X axis: $0,126$ mm up to 875 mm, $+0,021$ mm every 500 mm  
- Y axis: $0,127$ mm  
- Z axis: $0,127$ mm

**Links tilts displacements:**  
- X axis: $0,092$ mm  
- Y axis: $0,060$ mm  
- Z axis: $0,060$ mm

**Dimensional evaluation:**__mm² (page 21)

**Additional features:**  
- 8 pockets sprockets  
- Aluminum profile beam  
- Squared version available (see page 30)  
- Get And Joint version available  
- Over-Under / Carousel mounting options

**Optionals on request:**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

<table>
<thead>
<tr>
<th>Available strokes</th>
<th>Center distance dimension</th>
<th>Denomination</th>
</tr>
</thead>
<tbody>
<tr>
<td>31,25 - 62,5 - 125 - 250 - 375 - 500 - 625 - 750 - 875 - 1000 mm</td>
<td>875 mm to 8250 mm</td>
<td>PLC 125</td>
</tr>
</tbody>
</table>
PLC 150 mm

**Link length:** 150 mm

**Centre distance:** from 900 to 8400 mm

**Load capacity:**
- Every two pallets: 150 kg
- Every single pallet: 75 kg

**Overhung load capacity:** 130 Nm

**Length deviation:** $\pm 0.0120$ mm/link

**Accuracy:**
- **X axis:** $\pm 0.127$ mm up to 900 mm + $\pm 0.021$ mm every 500 mm
- **Y axis:** $\pm 0.127$ mm
- **Z axis:** $\pm 0.127$ mm

**Links tilts displacements:**
- **X axis:** $\pm 0.092$ mm
- **Y axis:** $\pm 0.060$ mm
- **Z axis:** $\pm 0.060$ mm

**Optionals on request**
- Globoidal Indexer as motorization
- Special Input shaft
- Customized pallets fixing holes
- High temperature pallet version
- Pendular mounting of the motorization
- Legs with X-Y-Z regulation
- Base frame

**Dimensional evaluation:** _mm* (page 21)

**Additional features**
- 6 pockets sprockets
- Aluminum profile beam
- Squared version available (see page n.30)
- Get And Joint version available
- Over-Under / Carousel mounting options
PLC SQUARE 3”-4”-4,5”-5,5”-6” - 100-125-150 mm

**Link length:** 60-80-100-160 mm  
**Centre distance:** (various values)  
**Load capacity:** (pages 22-29)  
**Overhung load capacity:** (pages 22-29)

**Additional features**  
- Aluminum profile beam  
- Roller follower greased for life  
- High overhung load capacity  
- Get And Joint version available  
- Over-Under / Carousel mounting options

**Optionals on request**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

<table>
<thead>
<tr>
<th>Available strokes</th>
<th>Center distance dimension</th>
<th>Denomination</th>
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</thead>
<tbody>
<tr>
<td>(VARIOUS IN REFERENCE TO THE LINK SIZE) FLEXIBLE STROKES WITH SERVO MOTOR</td>
<td>(VARIOUS VALUES)</td>
<td>PLC SQUARE 3”-4”-4,5”-5,5”-6” - 100-125-150 mm</td>
</tr>
</tbody>
</table>
The ITALPLANT Precision Link Conveyor is the carrier used for very high accurated mounting and operations in automation and testing fields. It's composed by structural steel beam and aluminum chain (other materials up to request), steel guides and rollers greased for life.

The structure is modular, according to the customers needs (special holes and fixture can be provided also on the beam structure).

This conveyor is suitable for all the mounting operations that request very high precision, rigidity and speed.

For this type of conveyors there are two additional variants: the large beam XL version and the Heavy Duty version, suitable for high loads and (automotive applications).

The applicable motorizations may provide an intermittent motion - Italplant rotary tables or HER/servo motor with an own motion law - or continuous - HER/servo motor - (page 7).

Features:

- High repeatability accuracy
- High overhung load capacity
- Imperial / Metric versions
- Structural steel beam with high rigidity
- Rollers greased for life
- Over-Under / Carousel mounting options
- Length and size of the aluminium pallets, other specifications
- General specifications: height, total length, even or odd pallets, dispositions

**Dimensional evaluation:** If the lateral size of workpiece holder is larger than pallets nominal quote, to avoid the collision with the conveyor corner radius, it's necessary to remove the indicated value - please ask to our Technical Department -
PLC HA 1,5” (38,1 mm)

Link length: 31,1 mm
Centre distance: from 228,6 to 5943,6 mm

Load capacity:
- Every single pallet: 70 kg
- Every single pallet: 35 kg

Overhung load capacity: 20 Nm

Length deviation: ± 0,0127 mm/link

Accuracy:
- X axis ± 0,039 mm up to 228,6 mm + ± 0,008 m every 500 mm
- Y axis ± 0,050 mm
- Z axis ± 0,050 mm

Links tilts displacements:
- X axis ± 0,076 mm
- Y axis ± 0,040 mm
- Z axis ± 0,040 mm

Optionals on request
- Globoidal Indexer as motorization
- Special Input shaft
- Customized pallets fixing holes
- High temperature pallet version
- Pendular mounting of the motorization
- Legs with X-Y-Z regulation
- Base frame

Dimensional evaluation: __mm x (page 31)

Additional features
- 12 pockets sprockets
- Structural steel beam with high rigidity
- High repeatability accuracy
- High overhung load capacity
- Get And Joint version available

Available strokes
0,375° - 0,75° - 1,5° - 3° - 4,5° - 6° - 7,5° - 9° - 10,5° - 12° - 13,5° - 15° - 16,5° - 18°
FLEXIBLE STROKES WITH SERVO MOTOR

Center distance dimension
9° (228,6 mm) to 234° (5943,6 mm)

Denomination
PLC HA 1,5”
PLC HA 2” (50,8 mm)

**Link length:** 50,8 mm  
**Centre distance:** from 304,8 to 5892,8 mm

**Load capacity:**  
- Every two pallets: 90 kg  
- Every single pallet: 45 kg

**Overhung load capacity:** 45 Nm

**Length deviation:** + 0,0127 mm/link

**Accuracy:**  
- **X axis** ± 0,040 mm up to 304,8 mm + ± 0,008 mm every 500 mm  
- **Y axis** ± 0,050 mm  
- **Z axis** ± 0,050 mm

**Links tilts displacements:**  
- **X axis** ± 0,076 mm  
- **Y axis** ± 0,040 mm  
- **Z axis** ± 0,040 mm

**Dimensional evaluation:** __mm² (page 31)

**Additional features:**  
- 12 pockets sprockets  
- Structural steel beam with high rigidity  
- High repeatability accuracy  
- High overhung load capacity  
- Get And Joint version available

**Optionals on request**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Available strokes**  
0,5” - 1” - 2” - 4” - 6” - 8” - 10” - 12” - 14” - 16” - 18” - 20” - 22” - 24”  
FLEXIBLE STROKES WITH SERVO MOTOR

**Center distance dimension**  
12” (304,8 mm) to 232” (5892,8 mm)

**Denomination**  
PLC HA 2”
PLC HA 3” (76.2 mm)

Link length: 76.2 mm
Centre distance: from 381 to 5867.4 mm

Load capacity:
- Every single pallet: 90 kg
- Every single pallet: 45 kg

Overhung load capacity: 45 Nm

Length deviation: + 0.0127 mm/link

Accuracy:
- X axis ± 0.041 mm up to 381 mm +
  ± 0.008 mm every 500 mm
- Y axis ± 0.050 mm
- Z axis ± 0.050 mm

Links tilts displacements:
- X axis ± 0.076 mm
- Y axis ± 0.040 mm
- Z axis ± 0.040 mm

Optionals on request
- Globoidal Indexer as motorization
- Special input shaft
- Customized pallets fixing holes
- High temperature pallet version
- Pendular mounting of the motorization
- Legs with X-Y-Z regulation
- Base frame

Dimensional evaluation: _mm* (page 31)

Additional features
- 8 pockets sprockets
- Structural steel beam with high rigidity
- High repeatability accuracy
- High overhung load capacity
- Get And Joint version available

<table>
<thead>
<tr>
<th>Available strokes</th>
<th>Center distance dimension</th>
<th>Denomination</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.75” - 1.5” - 3” - 6” - 9” - 12” - 15” - 18” - 21” - 24”</td>
<td>15” (381 mm) to 231” (5867.4 mm)</td>
<td>PLC HA 3”</td>
</tr>
</tbody>
</table>
PLC HA 4” (101,6 mm)

Link length: 101,6 mm
Centre distance: from 508 to 11887,2 mm

Load capacity:
- Every two pallets: 150 kg
- Every single pallet: 75 kg

Overhung load capacity: 130 Nm

Length deviation: +0,0127 mm/link

Accuracy:
- X axis ±0,035 mm up to 508 mm +
  ±0,007 mm every 500 mm
- Y axis ±0,040 mm
- Z axis ±0,040 mm

Links tilts displacements:
- X axis ±0,076 mm
- Y axis ±0,040 mm
- Z axis ±0,040 mm

Dimensional evaluation: _mm² (page 31)

Optionals on request
- Globoidal Indexer as motorization
- Special input shaft
- Customized pallets fixing holes
- High temperature pallet version
- Pendular mounting of the motorization
- Legs with X-Y-Z regulation
- Base frame

Additional features
- 8 pockets sprockets
- Structural steel beam with high rigidity
- High repeatability accuracy
- High overhung load capacity
- Get And Joint version available

Available strokes
<table>
<thead>
<tr>
<th>Center distance dimension</th>
<th>Denomination</th>
</tr>
</thead>
<tbody>
<tr>
<td>1” - 2” - 4” - 8” - 12” - 16” - 20” - 24” - 28” - 32”</td>
<td>PLC HA 4”</td>
</tr>
</tbody>
</table>
PLC HA 4” (101.6 mm) - XL Version

**Link length:** 101.6 mm  
**Centre distance:** from 609.6 to 11887.2 mm

**Load capacity:**  
- Every single pallet: 150 kg  
- Every single pallet: 75 kg

**Overhung load capacity:** 130 Nm

**Length deviation:** ± 0.0127 mm/link

**Accuracy:**  
- X axis: ± 0.040 mm up to 609.6 mm + ± 0.007 m every 500 mm  
- Y axis: ± 0.040 mm  
- Z axis: ± 0.040 mm

**Links tilts displacements:**  
- X axis: ± 0.076 mm  
- Y axis: ± 0.040 mm  
- Z axis: ± 0.040 mm

**Optionals on request**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Available strokes**  
- 1” - 2” - 4” - 8” - 12” - 16” - 20” - 24” - 28” - 32” - 36” - 40” - 44” - 48”
- FLEXIBLE STROKES WITH SERVO MOTOR

**Center distance dimension**  
24” (609.6 mm) to 468” (11887.2 mm)

**Denomination**  
PLC HA 4” XL
PLC HA 4.5" (114,3 mm)

**Link length:** 114.3 mm  
**Centre distance:** from 571,5 to 11887,2 mm  

**Load capacity:**  
- Every two pallets: 150 kg  
- Every single pallet: 75 kg  

**Overhung load capacity:** 130 Nm  

**Length deviation:** $+0,0127 \text{ mm/link}$

**Accuracy:**  
- **X axis** $\pm 0,036 \text{ mm up to } 571,5 \text{ mm } + \pm 0,007 \text{ mm every } 500 \text{ mm}$  
- **Y axis** $\pm 0,040 \text{ mm}$  
- **Z axis** $\pm 0,040 \text{ mm}$

**Links tilts displacements:**  
- **X axis** $\pm 0,076 \text{ mm}$  
- **Y axis** $\pm 0,040 \text{ mm}$  
- **Z axis** $\pm 0,040 \text{ mm}$

**Optionals on request**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Dimensional evaluation:** $\_\text{mm}^a$ (page 31)

**Additional features**  
- 8 pockets sprockets  
- Structural steel beam with high rigidity  
- High repeatability accuracy  
- High overhung load capacity  
- Get And Joint version available

---

**Available strokes**  
1.125" - 2.25" - 4.5" - 9" - 13.5" - 18" - 22.5" - 27" - 31.5" - 36"  
**FLEXIBLE STROKES WITH SERVO MOTOR**

**Center distance dimension**  
22.5" (571.5 mm) to 468" (11887.2 mm)

**Denomination**  
PLC HA 4.5"
**PLC HA 5,5” (139.7 mm)**

**Link length:** 139.7 mm  
**Centre distance:** from 558.8 to 11874.5 mm

**Load capacity:**  
- Every single pallet: 150 kg  
- Every single pallet: 75 kg

**Overhung load capacity:** 130 Nm

**Length deviation:** + 0.0120 mm/link

**Accuracy:**  
- **X axis** ± 0.035 mm up to 558.8 mm + ± 0.007 m every 500 mm  
- **Y axis** ± 0.040 mm  
- **Z axis** ± 0.040 mm

**Links tilts displacements:**  
- **X axis** ± 0.076 mm  
- **Y axis** ± 0.040 mm  
- **Z axis** ± 0.040 mm

**Optionals on request**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Available strokes**  
- 1,375” - 2,75” - 5,5” - 11” - 16,5” - 22” - 27,5” - 33”  
- Flexible strokes with servo motor

**Center distance dimension**  
- 22” (558.8 mm) to 467,5” (11874.5 mm)

**Denomination**  
- PLC HA 5,5”
**PLC HA 6” (152,4 mm)**

**Link length:** 152.4 mm  
**Centre distance:** from 609.6 to 11887.2 mm

**Load capacity:**  
- Every two pallets: 150 kg  
- Every single pallet: 75 kg

**Overhung load capacity:** 130 Nm

**Length deviation:** \( \pm 0.0120 \text{ mm/link} \)

**Accuracy:**  
- **X axis:** \( \pm 0.036 \text{ mm up to 609.6 mm} \) \+ \( \pm 0.007 \text{ mm every 500 mm} \)  
- **Y axis:** \( \pm 0.040 \text{ mm} \)  
- **Z axis:** \( \pm 0.040 \text{ mm} \)

**Links tilts displacements:**  
- **X axis:** \( \pm 0.076 \text{ mm} \)  
- **Y axis:** \( \pm 0.040 \text{ mm} \)  
- **Z axis:** \( \pm 0.040 \text{ mm} \)

**Optionals on request**  
- Globoidal Indexer as motorization  
- Special input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Additional features**  
- 6 pockets sprockets  
- Structural steel beam with high rigidity  
- High repeatability accuracy  
- High overhung load capacity  
- Get And Joint version available

**Available strokes**  
2” - 3” - 6” - 12” - 18” - 24” - 60” - 36”  
**Flexible strokes with servo motor**

<table>
<thead>
<tr>
<th>Center distance dimension</th>
<th>Denomination</th>
</tr>
</thead>
<tbody>
<tr>
<td>24” (609.6 mm) to 468” (11887.2 mm)</td>
<td>PLC HA 6”</td>
</tr>
</tbody>
</table>
PLC HA 8" (203.2 mm) - HEAVY DUTY Version

**Link length:** 203.2 mm  
**Centre distance:** from 812.8 to 11785.6 mm

**Load capacity:**  
- Every single pallet: 150 kg  
- Every single pallet: 75 kg

**Overhung load capacity:** 180 Nm

**Length deviation:** $\pm 0.0120$ mm/link

**Accuracy:**  
- X axis $\pm 0.043$ mm up to 812.8 mm + $\pm 0.007$ mm every 500 mm  
- Y axis $\pm 0.040$ mm  
- Z axis $\pm 0.040$ mm

**Links tilts displacements:**  
- X axis $\pm 0.076$ mm  
- Y axis $\pm 0.040$ mm  
- Z axis $\pm 0.040$ mm

**Optionals on request:**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Available strokes**  
<table>
<thead>
<tr>
<th>2&quot; - 4&quot; - 8&quot; - 16&quot; - 24&quot; - 32&quot; - 40&quot; - 48&quot; - 56&quot; - 64&quot;</th>
<th>Center distance dimension</th>
<th>Denomination</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLEXIBLE STROKES WITH SERVO MOTOR</td>
<td>32&quot; (812.8 mm) to 464&quot; (11785.6 mm)</td>
<td>PLC HA 8&quot;</td>
</tr>
</tbody>
</table>

**Dimensional evaluation:** (page 31)

**Additional features:**  
- 8 pockets sprockets  
- Structural steel beam with high rigidity  
- High repeatability accuracy  
- High overhung load capacity  
- Get And Joint version available
PLC HA 12" (304,8 mm) - HEAVY DUTY Version

Link length: 304.8 mm
Centre distance: from 1219.2 to 11887.2 mm

Load capacity:
- Every two pallets: 150 kg
- Every single pallet: 75 kg

Overhung load capacity: 180 Nm

Length deviation: ± 0.0120 mm/link

Accuracy:
- X axis ± 0.049 mm up to 1219.2 mm + ± 0.007 mm every 500 mm
- Y axis ± 0.040 mm
- Z axis ± 0.040 mm

Links tilts displacements:
- X axis ± 0.076 mm
- Y axis ± 0.040 mm
- Z axis ± 0.040 mm

Optionals on request
- Globoidal Indexer as motorization
- Special Input shaft
- Customized pallets fixing holes
- High temperature pallet version
- Pendular mounting of the motorization
- Legs with X-Y-Z regulation
- Base frame

Dimensional evaluation: __mm² (page 31)

Additional features
- 8 pockets sprockets
- Structural steel beam with high rigidity
- High repeatability accuracy
- High overhung load capacity
- Get And Joint version available

<table>
<thead>
<tr>
<th>Available strokes</th>
<th>Center distance dimension</th>
<th>Denomination</th>
</tr>
</thead>
<tbody>
<tr>
<td>3&quot; - 6&quot; - 12&quot; - 24&quot; - 36&quot; - 48&quot; - 60&quot; - 72&quot; - 84&quot; - 96&quot; FLEXIBLE STROKES WITH SERVOMOTORS</td>
<td>48&quot; (1219.2 mm) to 468&quot; (11887.2 mm)</td>
<td>PLC HA 12&quot;</td>
</tr>
</tbody>
</table>
**PLC HA 100 mm**

**Link length:** 100 mm  
**Centre distance:** from 500 to 11900 mm

**Load capacity:**  
- Every single pallet: 150 kg  
- Every single pallet: 75 kg

**Overhung load capacity:** 130 Nm

**Length deviation:** ± 0.0127 mm/link

**Accuracy:**  
- **X axis** ± 0.035 mm up to 500 mm + ± 0.007 mm every 500 mm  
- **Y axis** ± 0.040 mm  
- **Z axis** ± 0.040 mm

**Links tilts displacements:**  
- **X axis** ± 0.076 mm  
- **Y axis** ± 0.040 mm  
- **Z axis** ± 0.040 mm

**Optionals on request**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Available strokes**  
25 - 50 - 100 - 200 - 300 - 400 - 500 - 600 - 700 - 800 mm  
FLEXIBLE STROKES WITH SERVO MOTOR

**Center distance dimension**  
500 mm to 11900 mm

**Denomination**  
PLC HA 100

**Dimensional evaluation:** mm² (page 31)

**Additional features**  
- 8 pockets sprockets  
- Structural steel beam with high rigidity  
- High repeatability accuracy  
- High overhung load capacity  
- Get And Joint version available
PLC HA 125 mm

Link length: 125 mm
Centre distance: from 500 to 11875 mm

Load capacity:
- Every two pallets: 150 kg
- Every single pallet: 75 kg

Overhang load capacity: 130 Nm

Length deviation: ± 0.0127 mm/link

Accuracy:
- X axis ± 0.035 mm up to 500 mm + ± 0.007 mm every 500 mm
- Y axis ± 0.040 mm
- Z axis ± 0.040 mm

Links tilts displacements:
- X axis ± 0.076 mm
- Y axis ± 0.040 mm
- Z axis ± 0.040 mm

Optionals on request:
- Globoidal Indexer as motorization
- Special Input shaft
- Customized pallets fixing holes
- High temperature pallet version
- Pendular mounting of the motorization
- Legs with X-Y-Z regulation
- Base frame

Available strokes
31.25 - 62.5 - 125 - 250 - 375 - 500 - 625 - 750 - 875 - 1000 mm
FLEXIBLE STROKES WITH SERVOMOTORS

Center distance dimension
500 mm to 11875 mm

Denomination
PLC HA 125

Dimensional evaluation: [dimensions] (page 31)

Additional features
- 8 pockets sprockets
- Structural steel beam with high rigidity
- High repeatability accuracy
- High overhang load capacity
- Get And Joint version available
PLC HA 150 mm

Link length: 150 mm
Centre distance: from 600 to 11850 mm

Load capacity:
- Every single pallet: 150 kg
- Every single pallet: 75 kg

Overhung load capacity: 130 Nm

Length deviation: ± 0.0120 mm/link

Accuracy:
- X axis: ± 0.036 mm up to 600 mm + ± 0.007 mm every 500 mm
- Y axis: ± 0.040 mm
- Z axis: ± 0.040 mm

Links tilts displacements:
- X axis: ± 0.076 mm
- Y axis: ± 0.040 mm
- Z axis: ± 0.040 mm

Dimensional evaluation: __mm² (page 31)

Additional features
- 6 pockets sprockets
- Structural steel beam with high rigidity
- High repeatability accuracy
- High overhung load capacity
- Get And Joint version available

Optionals on request
- Globoidal Indexer as motorization
- Special Input shaft
- Customized pallets fixing holes
- High temperature pallet version
- Pendular mounting of the motorization
- Legs with X-Y-Z regulation
- Base frame

Available strokes
- 37.5 - 75 - 150 - 300 - 450 - 600 - 750 - 900 mm

Center distance dimension
- 600 mm to 11850 mm

Denomination
- PLC HA 150
PLC HA 150 mm - XL Version

Link length: 150 mm  
Centre distance: from 750 to 11850 mm

Load capacity:
- Every two pallets: 150 kg  
- Every single pallet: 75 kg

Overhung load capacity: 130 Nm

Length deviation: ± 0,0120 mm/link

Accuracy:
- X axis ± 0,042 mm up to 750 mm + ± 0,007 mm every 500 mm  
- Y axis ± 0,040 mm
- Z axis ± 0,040 mm

Links tilts displacements:
- X axis ± 0,076 mm
- Y axis ± 0,040 mm
- Z axis ± 0,040 mm

Optionals on request
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

Available strokes  
Center distance dimension  
Denomination
37,5 - 75 - 150 - 300 - 450 - 600 - 750 - 900 - 1050 - 1200 - 1350 - 1500 - 1650 - 1800 mm  
750 mm to 11850 mm  
PLC HA 150 XL
**PLC HA 250 mm**

**Link length:** 250 mm  
**Centre distance:** from 1000 to 11750 mm

**Load capacity:**  
- Every single pallet: 150 kg  
- Every single pallet: 75 kg

**Overhung load capacity:** 180 Nm

**Length deviation:** $\pm 0.0120$ mm/link

**Accuracy:**  
- $X$ axis $\pm 0.045$ mm up to 1000 mm + $\pm 0.007$ mm every 500 mm  
- $Y$ axis $\pm 0.040$ mm  
- $Z$ axis $\pm 0.040$ mm

**Dimensions:**  
- $X$ axis $\pm 0.076$ mm  
- $Y$ axis $\pm 0.040$ mm  
- $Z$ axis $\pm 0.040$ mm

**Optionals on request**  
- Globoidal Indexer as motorization  
- Special Input shaft  
- Customized pallets fixing holes  
- High temperature pallet version  
- Pendular mounting of the motorization  
- Legs with X-Y-Z regulation  
- Base frame

**Dimensional evaluation:** (page 31)

**Additional features**  
- 8 pockets sprockets  
- Structural steel beam with high rigidity  
- High repeatability accuracy  
- High overhung load capacity  
- Get And Joint version available

<table>
<thead>
<tr>
<th>Available strokes</th>
<th>Center distance dimension</th>
<th>Denomination</th>
</tr>
</thead>
<tbody>
<tr>
<td>62.5 - 125 - 250 - 500 - 750 - 1000 - 1250 - 1500 - 1750 - 2000 mm</td>
<td>1000 mm to 11750 mm</td>
<td>PLC HA 250</td>
</tr>
</tbody>
</table>
## DATA SHEET

### Conveyor model

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center distance [mm /&quot;]</td>
<td>( I = )</td>
</tr>
<tr>
<td>Linear stroke [mm /&quot;]</td>
<td>( L = )</td>
</tr>
<tr>
<td>N° of stops</td>
<td>( n = )</td>
</tr>
<tr>
<td>Load for each pallet [kg]</td>
<td>( W = )</td>
</tr>
<tr>
<td>Additional forces [N]</td>
<td>( F = )</td>
</tr>
<tr>
<td>Additional moments [N]</td>
<td>( M = )</td>
</tr>
</tbody>
</table>

### Indexer

- or
- High Efficiency Reducer
  - Continuous motion
    - Indexed motion (servo)
  - Cycle on Demand
    - or
    - Continuous running

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>t. index [s]</td>
<td>( t_i = )</td>
</tr>
<tr>
<td>t. dwell [s]</td>
<td>( t_d = )</td>
</tr>
<tr>
<td>t. cycle [s]</td>
<td>( t_c = )</td>
</tr>
<tr>
<td>Frequency of cycle (Cam angle) ( \text{[°]} )</td>
<td>( \alpha = )</td>
</tr>
</tbody>
</table>

### Notes for the conveyor

- Notes for the indexer

### Contact information

- Name
- Company
- Address
- Email
- Rif.