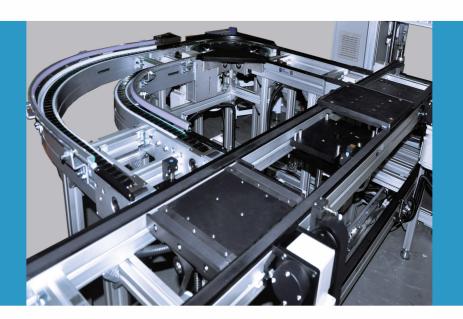
www.rulertech.cn





### RC Transfer systems catalogue:

page	Contents
P03	Common layout
P04	WT Workpiece Pallet
P08	TB Toothed belts
P10	BC Flat top chain/conveyor
P12	RT Accumulation roller chain
P16	CV Curves
P20	CU Curves
P22	HT Lift Transverse Units
P26	LF Lift Units
P30	<b>HP Lift Positioning Units</b>
P33	SP Stop gate
P36	Transfer line motor wiring diagram / parameter comparison table

### Common layout



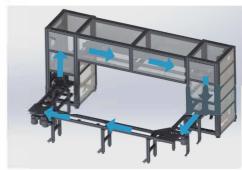
Horizontal loop layout



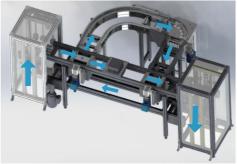
U-shaped layout



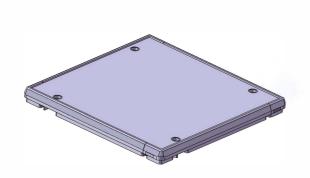
Vertical loop layout



Open horizontal loop layout



Horizontal and vertical loop layout



WT Workpiece Pallet

### **Feature**

- ①Suitable for flat top chain, toothed belt conveyor
- 2 Plastic frame module with aluminum/steel bearing plate
- Steel bearing plate thickness: 5mm
- ① Aluminum bearing plate thickness: 5mm/8mm/12mm
- **1**51 standard specifications
- € Integrated positioning pin sleeve, positioning accuracy can reach±0.1mm
- ${f O}$ Integrated positioning lock pit, positioning accuracy can reach  ${\pm}0.5$ mm
- **6** Metal induction gaskets are integrated at the bottom and side of the standard frame
- 6 Anti-static

### Scope of supply

Bearing plate!) /Plastic frame module/Locating pin sets/Spring pin

### Supply mode

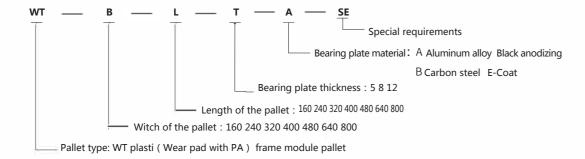
Complete set (assembled) / Parts supply (please contact us )

1)Need to add workpiece or tooling installation hole, support to figure processing

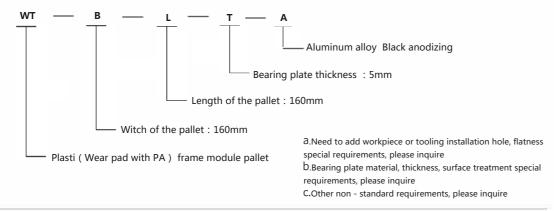
2)Size:BXL=320X400mm, The bearing plate shall have 2 additional spring pin holes for auxiliary fastening , BXL=400x 400mm, The bearing plate shall have 2 additional spring pin holes for auxiliary fastening(B, L refers to the working width and length of the pallet, Not the width and length of the pallet)

### Order number description

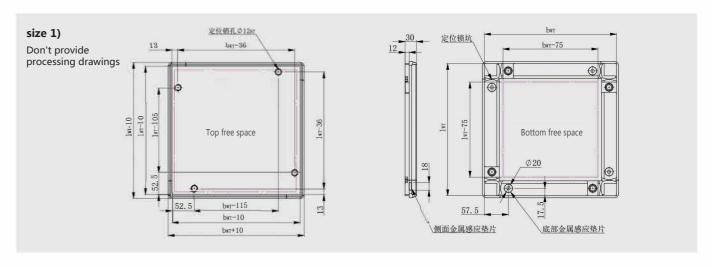
WT Workpiece Pallet



### Sample order



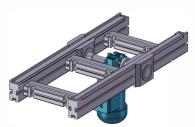
### **WT Workpiece Pallet**



### Package order number

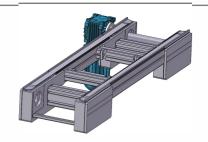
ba(m)Xl(mm)	Bearing plate thickness	Bearing plate material	Flatness T(mm)	Surface treatment of bearing plate	Pallet weight 1mp(kg
160×160	5	Aluminum alloy	0.3	Black anodizing	0.9
160×160	5	Carbon steel	0.3	Black electrophoresis	1.5
160×240	5	Aluminum alloy	0.3	Black anodizing	1.2
160×240	5	Carbon steel	0.3	Black electrophoresis	2.1
160×320	5	Aluminum alloy	0.3	Black anodizing	1.5
160×320	5	Carbon steel	0.3	Black electrophoresis	2.8
240×240	5	Aluminum alloy	0.3	Black anodizing	1.5
240×240	5	Carbon steel	0.3	Black electrophoresis	2.9
240×320	5	Aluminum alloy	0.5	Black anodizing	1.9
240×320	5	Carbon steel	0.5	Black electrophoresis	3.9
240×400	5	Aluminum alloy	0.5	Black anodizing	2.3
240×400	5	Carbon steel	0.5	Black electrophoresis	4.7
320×320	5	Aluminum alloy	0.5	Black anodizing	2.5
320×320	5	Carbon steel	0.5	Black electrophoresis	5.1
320×400	5	Aluminum allov	0.5	Black anodizing	2.9
320×400	5	Carbon steel	0.5	Black electrophoresis	6.2
320×480	5	Aluminum alloy	0.6	Black anodizing	3.5
320×480	5	Carbon steel	0.6	Black electrophoresis	7.4
400×400	5	Aluminum alloy	0.6	Black anodizing	3.4
400×400	5	Carbon steel	0.6	Black electrophoresis	7.5
400×480	5	Aluminum alloy	0.6	Black electrophoresis	4.1
400×480	5	Carbon steel	0.6	Black electrophoresis	9
400×640	5	Carbon steel	0.8	Black electrophoresis	11.8
480×480	5	Aluminum alloy	0.8	Black electrophoresis	4.8
480×640	5	Carbon steel	0.8	Black electrophoresis	10.7
480×800	5	Carbon steel	1	Black electrophoresis	13.9
640×640	5	Carbon steel	1	Black electrophoresis	18.1
240×320	8	Aluminum alloy	0.5	Black anodizing	2.6
240×400	8	Aluminum alloy	0.5	Black anodizing	3.1
320×320	8	Aluminum alloy	0.5	Black anodizing	3.3
320×400	8	Aluminum alloy	0.5	Black anodizing	3.9
320×480	8	Aluminum alloy	0.6	Black anodizing	4.6
400×400	8	Aluminum alloy	0.6	Black anodizing	4.7
400×480	8	Aluminum alloy	0.6	Black anodizing	5.6
400×460 400×640	8	Aluminum alloy	0.8	Black anodizing	6.8
480×480	8	Aluminum alloy	0.8	Black anodizing	6.6
480×640	8	Aluminum alloy	0.8	Black anodizing	8.1
480×800	8	Aluminum alloy	1	Black anodizing	10
640×640	8	Aluminum alloy	0.8	Black anodizing	9.7
	8	Aluminum alloy	0.8	Black anodizing	9.7 12.1
640×800		Aluminum alloy	1	Black anodizing	14.9
800×800	8 12	Aluminum alloy	0.5	Black anodizing	
320×480		Aluminum alloy		Black anodizing	5.5
400×400	12	,	0.5	Black anodizing	6.4
400×480	12	Aluminum alloy	0.6	Black anodizing	7.5
400×640	12	Aluminum alloy	0.8	Black anodizing	9.1
480×480	12	Aluminum alloy	0.6	Black anodizing	9
480×640	12	Aluminum alloy	0.8	Black anodizing	10.7
480×800	12	Aluminum alloy	0.8	Black anodizing	13.4
640×640	12	Aluminum alloy	1	Black anodizing	14.6
640×800	12	Aluminum alloy	1	Black anodizing	18.1
800×800	12	Aluminum alloy	1	Black anodizing	22.2

TB Toothed belts (end drive)

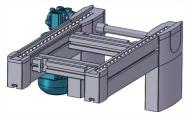


RC Pallet conveyor lines

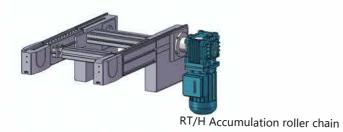
TB/M Toothed belts (center drive)



BC Flat top chain



RT Accumulation roller chain



路乐 RULERTECH

06

### Application

Highly modular design, easy installation and maintenance; Three kinds of conveying medium (toothed belt, flat belt, accumulation roller chain); Single workpiece tray weight can be achieved0-120kg;

It can be stacked, equipped with elbow unit, rotary table unit, jacking unit and hoist unit, which can easily realize various types of production line layout;

Widely used in automotive parts, electronic appliances, motor and other industries.

### Type

Tooth belt conveyor , conveyor section can carry 1kg/cm;
TB Toothed belts ( end drive )
TB/M Toothed belts ( center drive )

Flat top chain, conveyor section can carry 1kg/cm; BC Flat top chain

Accumulation roller chain , conveyor section can carry  $1.5 kg/cm_{\circ}$ 

RT Accumulation roller chain
RT/H Accumulation roller chain

### Considerations for model selection:

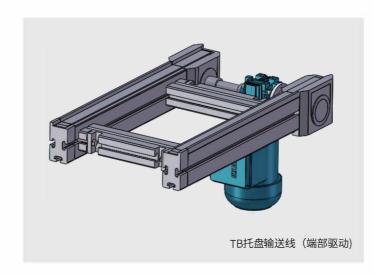
Tooth belt conveyor line, flat belt conveyor line is suitable for light load dry clean environment, roller chain is suitable for heavy load harsh environment 1);

With the use of non-square pallet, horizontal and vertical wheel feed line allows the maximum load of a single pallet may be different, the short side of the maximum load of a single pallet plays a decisive role;

During the design, it is necessary to ensure that the total weight of the stacking workpiece tray is equal to the maximum allowable load of the small 1000 conveying section.

1)Suggested call for advice;

### **TB Toothed belts**



### **Feature**

①Independent three-phase motor drive □; ②It can be stacked and transported in reverse; ③Highly modular design.

### Scope of supply

Drive unit / Driven unit / Conveying section profile /TS tooth belt / Friction plate / Transverse joint section

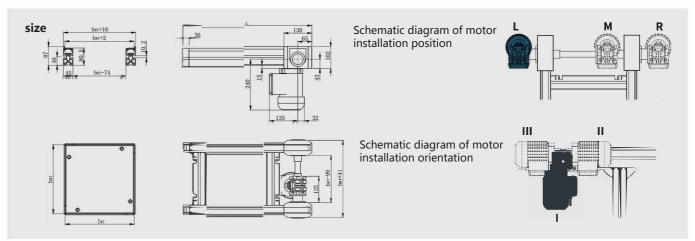
### Recommended spare parts

Holder / Connecting suite<sub>2)</sub> /Foot connecting suite

### Supply mode

Complete set (assembled) / Parts supply (please contact us )

- 1)Other types of deceleration motor can be selected, please contact us:
- 2) Fastening connection parts between conveying segments.



### Parameter configuration

Conveying medium	TS Toothed belt (black, anti-static
Accumulation conveyor allows maximum load	60KG
Full load rated speed VN	0,6,9,12,15,18 1) (m/min)
Width of the nellet D	160,240,320,400,480,640,800 (mm)
Width of the pallet B	160 - 800 2)
Line length L	300 - 6000 (mm)
Drive way	Direct drive
Voltage	220/380AC <sub>3)</sub>
Frequency	50HZ 4)
Motor mounting position	R,L,Ms
Motor power connection mode	Junction box 0
Motor mounting bearing	,    ,     ŋ

1)a.Full load rated speed is not recommended to exceed 20m/min; b.VN=0, No reduction motor; c.Other full load rated speed requirements are available.

2)Can be customized for other width types up to the maximum width1200mm;

3)Other power supply voltage requirements, please inquire;

4)Other frequency requirements, please call advisory;

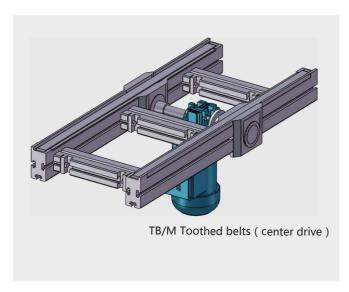
5)Machine body in the middle of the installation only suitable for onlineoccasions B ≥240 occasions ;

6)a.The default position of junction box and outgoing line is shown in the circle. For other requirements, please contact us; b.Other motor power connection requirements please contact us.

7)Other motor installation location requirements please contact us.

- ① Total load of single pallet≤15kg.
- It is recommended to transport the tray in the opposite direction, if the reverse transport, the transport capacity will be reduced 1/3.
- When the intermediate drive is selected, the drive unit shall be arranged close to the head end, and within 1/3 of the length of the whole line body.

**TB Toothed belts** 



### **Feature**

●Independent three-phase motor drive D; ②Can be stacked, allowing reverse transport; ③Highly modular design; ④ Low noise.

### Scope of supply

Drive unit / Driven unit / Conveying section profile /TS tooth belt / Friction plate / Transverse joint section

### **Recommended spare parts**

Holder / Connecting suite2) /Foot connecting suite

### Supply mode

Complete set (assembled) / Parts supply (please contact us )

- 1)Other types of deceleration motor can be selected, please contact us;
- 2) Fastening connection parts between conveying segments.

### Parameter configuration

Conveying medium	TS Toothed belt (black, anti-static)
Accumulation conveyor allows maximum load	60KG
Full load rated speed VN	0,6,9,12,15,18 <sub>1)</sub> (m/min)
NAC dala and alan and last D	160,240,320,400,480,640,800 (mm)
Width of the pallet B	160 - 800 ข(mm)
Line length L	300 - 6000 (mm)
Drive way	Direct drive
Voltage	220/380AC <sub>3)</sub>
Frequency	50HZ 4)
Motor mounting position	R,L,M5)
Motor power connection mode	Junction box 0
Motor mounting bearing	I, II, III η

1)a.Full load rated speed is not recommended to exceed 20m/min; b.VN=0, No reduction motor; c.Other full load rated speed requirements are available.

2)Can be customized for other width types up to the maximum width1200mm;

3)Other power supply voltage requirements, please inquire;

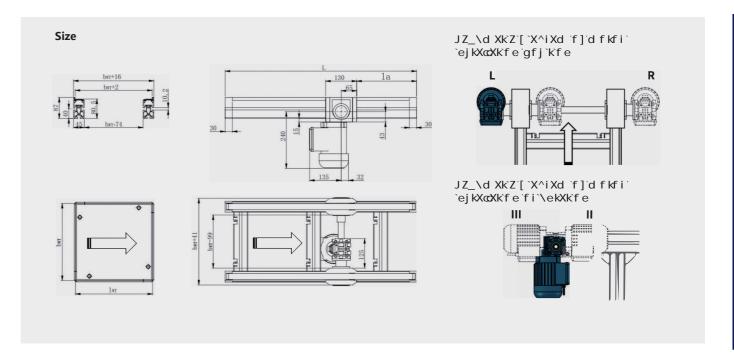
4)Other frequency requirements, please call advisory;

5)Machine body in the middle of the installation only suitable for onlineoccasions B ≥240 occasions; 6)a.The default position of junction box and outgoing line is shown in the circle. For other requirements, please contact us; b.Other motor power connection requirements please contact us.

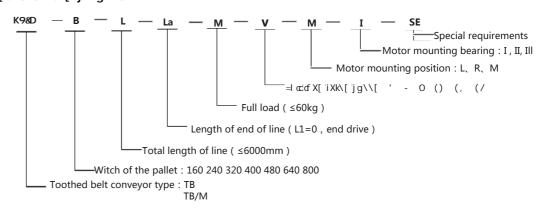
7)Other motor installation location requirements please contact us.

- ① Total load of single pallet≤15kg.
- It is recommended to transport the tray in the opposite direction, if the reverse transport, the transport capacity will be reduced 1/3.
- When the intermediate drive is selected, the drive unit shall be arranged close to the head end, and within 1/3 of the length of the whole line body.

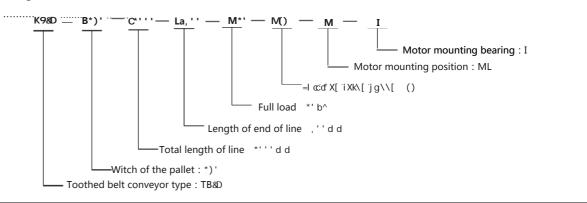
### $K9"Kffk_{["Y\dj]}$



### Fi[\iˈeldY\iˈ[\jZi`gk`fe



### JXdgo∖fi[\i





# BC Flat top chain

### **Feature**

●Independent three-phase motor drive; ②Can be stacked, do not allow reverse transport; ③Highly modular design; ④Low noise.

### Scope of supply

Drive unit / Driven unit / Conveying section profile /Flat top belt / Friction plate / Intermediate connection kit 1/Transverse joint section

### **Recommended spare parts**

Holder / Connecting suite 2)/Foot connecting suite

### Supply mode

Complete set (assembled) / Parts supply (please contact us )

1)Fastening connection parts between sections of conveying section ;

2) Fastening connection parts between conveying segments.

### Parameter configuration

BC Flat top chain

Conveying medium	Flat top belt
Accumulation conveyor allows maximum load	250KG
Full load rated speed VN	0,6,9,12,15,18 <sub>1)</sub> (m/min)
Width of the wellet D	160,240,320,400,480,640,800 (mm)
Width of the pallet B	160 - 800 2) (mm)
Line length L	1000 - 30000 (mm)
Drive way	Direct drive
Voltage	220/380AC <sub>3)</sub>
Frequency	50HZ 4)
Motor mounting position	R,L
Motor power connection mode	Junction box s
Motor mounting bearing	I, II, III o

1)a.Full load rated speed is not recommended to exceed 20m/min; b.VN=0, No reduction motor; c.Other full load rated speed requirements are available.

2)Can be customized for other width types up to the maximum width1200mm;

3)Other power supply voltage requirements, please inquire;

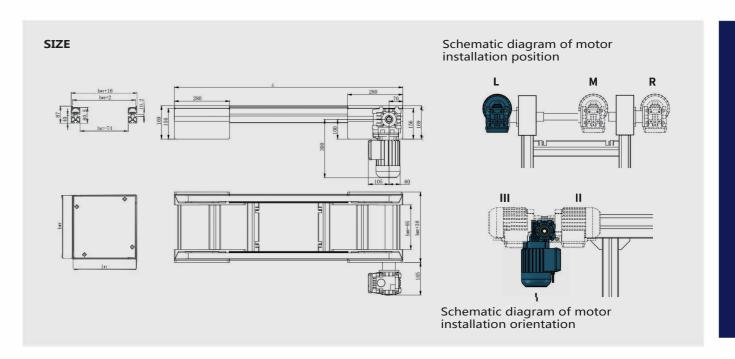
4)Other frequency requirements, please inquire;

5)a.The default position of junction box and outgoing line is shown in the circle. For other requirements, please contact us; b.Other motor power connection requirements please contact us.

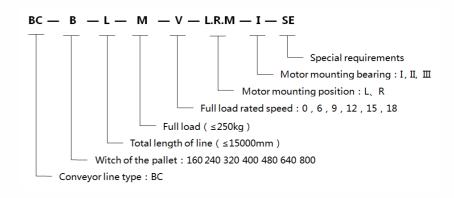
6)Other motor installation location requirements please contact us.

### 路乐

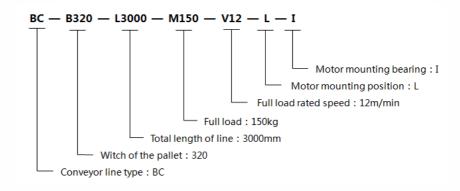
### **BC Flat top chain**



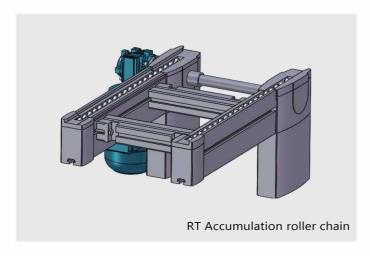
### Order number description



### Sample order



# RT Accumulation roller chain



### **Feature**

●Independent three-phase motor drive; ②Can be stacked; **3**When length L≤1800mm and there is no protective cover modular design;

### Scope of supply

Drive unit / Driven unit / Conveying section profile /Flat top belt / Article friction pad / Transverse joint section

### Recommended spare parts

Holder / Connecting suite 1)/Foot connecting suite

Complete set (assembled) / Parts supply (please contact us

1)Fastening connection parts between conveying segments.

### Parameter configuration

RT Accumulation roller chain

Conveying medium 1)	Steel roller chain Stacked steel roller chain with small protective cover plate
Accumulation conveyor allows maximum load	600kg
Full load rated speed VN	0,6,9,12,15,18 <sub>2 )</sub> (m/min)
Width of the pallet B	160,240,320,400,480,640,800
	160至800 3 ) (mm)
Line length L	300至6000 4) (mm)
Drive way	Direct drive
Voltage	220/380AC 5)
Frequency	50HZ 6)
Motor mounting position	R,L
Motor power connection mode	Junction box 7)
Motor mounting bearing	I,Ⅲ,Ⅲ8)

1)Single speed roller chain, pitch:12.7mm;

2)a.Full load rated speed is not recommended to exceed 20m/min; b.VN=0 , No reduction motor ; c.Other full load rated speed requirements are available:

3)Can be customized for other width types up to the , maximum width 1200mm:

4)When the transport line length of RT roller chain exceeds 6000mm, the driving tail structure is the same as RT/H;

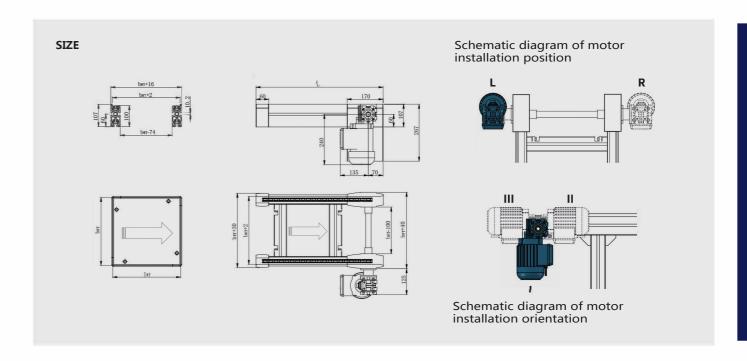
5)Other power supply voltage requirements, please inquire;

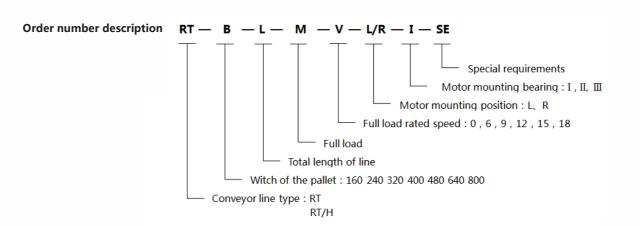
6)Other frequency requirements, please inquire;

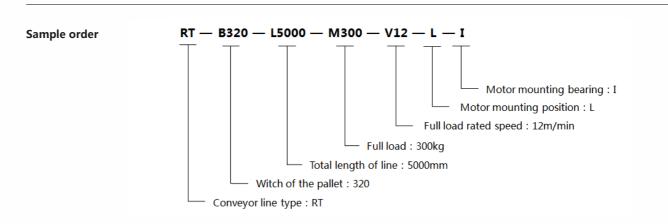
7) a.The default position of junction box and outgoing line is shown in the circle. For other requirements, please contact us; b.Other motor power connection requirements please contact us;

8)Other motor installation location requirements please contact us.

### **RT Accumulation roller chain**









## RT/H Accumulation roller chain

### **Feature**

●Independent three-phase motor drive; ②Can be stacked; 3Non-reverse transport; 4Highly modular design;

### Scope of supply

Drive unit / Driven unit / Conveying section profile /Flat top belt / Article friction pad / Transverse joint section

### **Recommended spare parts**

Holder / Connecting suite 1) /Foot connecting suite

### Supply mode

Complete set (assembled) / Parts supply (please contact us )

1)Fastening connection parts between conveying segments.

### Parameter configuration

Accumulation roller chain

Conveying medium 1)	Steel roller chain Stacked steel roller chain with small protective cover plate
Accumulation conveyor allows maximum load	2000kg <sub>2 )</sub>
Full load rated speed VN	0,6,9,12,15,18 3) (m/min)
Width of the pollet D	160,240,320,400,480,640,800
Width of the pallet B	160至800 4) (mm)
Line length L	1000至22000 s) (mm)
Drive way	Direct drive
Voltage	220/380AC 6)
Frequency	50HZ <sub>7</sub> )
Motor mounting position	R,L
Motor power connection mode	Junction box 8)
Motor mounting bearing	I,II,III 9)
	1

- 1)Single speed roller chain, pitch:12.7mm;
- 2) The conveying medium is nylon stacking roller chain. It is suggested that the full load of stacking should not exceed 1200kg;

3)a.Full load rated speed is not recommended to exceed 20m/min; b.VN=0 , No reduction motor ; c. VN≥18, suggest full load is less than 1500 kg; d.Other full load rated speed requirements are available:

4)Can be customized for other width types up to the , maximum

5)The transmission medium is nylon stacking roller chain. It is suggested that the track length should not exceed 12m;

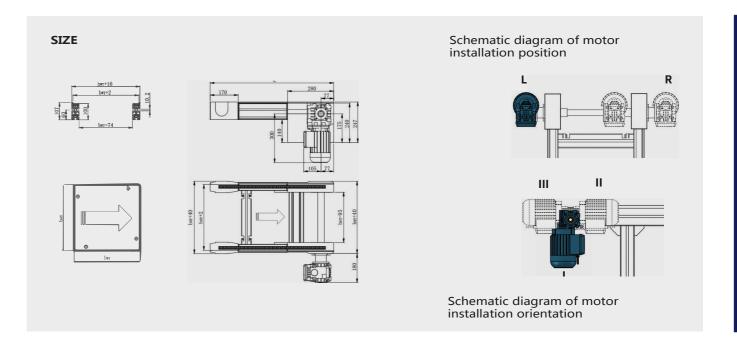
6)Other power supply voltage requirements, please inquire;

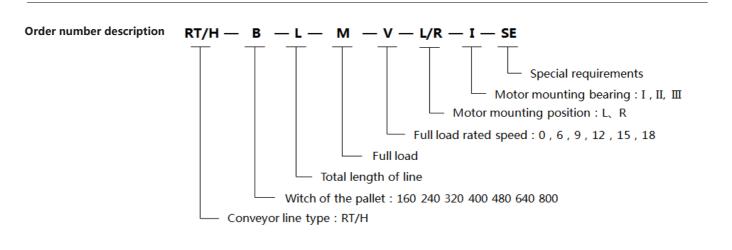
7)Other frequency requirements, please inquire;

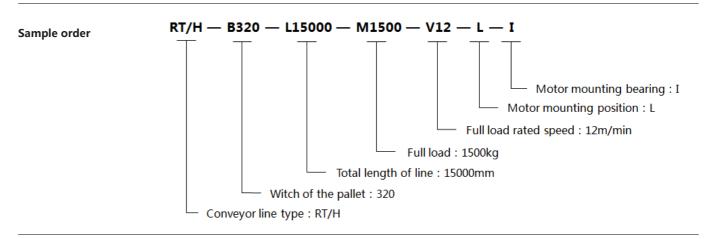
8) a.The default position of junction box and outgoing line is shown in the circle. For other requirements, please contact us; b.Other motor power connection requirements please contact us;

9)Other motor installation location requirements please contact us.

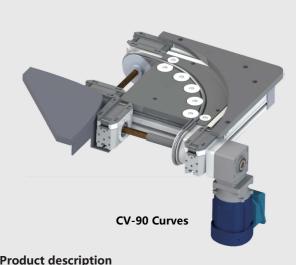
### **RT Accumulation roller chain**











Curves

S

Curve cv-90 / with circular belt conveying medium has its own drive device at the end of the curve. They can be used for combination of horizontal belt or longitudinal conveying section of toothed synchronous belt. The frame is standard strength aluminum profile, which can be installed on other equipment or other accessories (such as sensor, support frame, etc.).

### Feature

●Workpiece pallet 90° bend conveyor; ②Maximum total weight of workpiece pallet 20 kg; STransmission medium: antistatic circular belt; 4 Suitable for grease-free and oil-free environment; 5Do not change the direction of the pallet; **1** The motor is mounted at the end of the conveyor direction of the pallet; It can be combined with WT/SA and WT/SE.

### Scope of supply

curve, equipped with drive motor

### State of supply

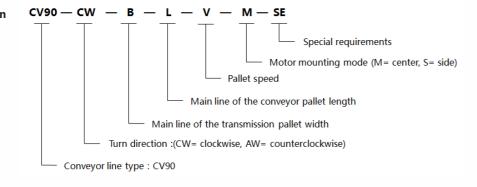
Partial assembly / including internal baffle and motor

Special note: heap operations are not allowed.

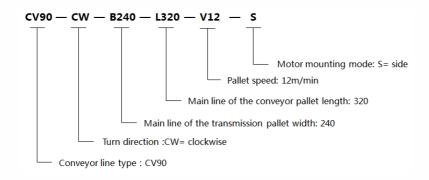
### application specification

- ●Full load of a single pallet≤20kg;
- 2 Turning mechanism can only pass through a single tray at a time. It is forbidden to push the pallet here;
- 3 Modular design, independent parts, simple structure,
- convenient assembly, easy maintenance;
- ODo not change the direction of the pallet;
- **5**The frame is standard high-strength aluminum profile, which can be used to install the conveying section on other equipment or other accessories (such as sensors, support frames, etc.);
- **6**The motor is mounted at the end of the conveyor direction of the pallet.

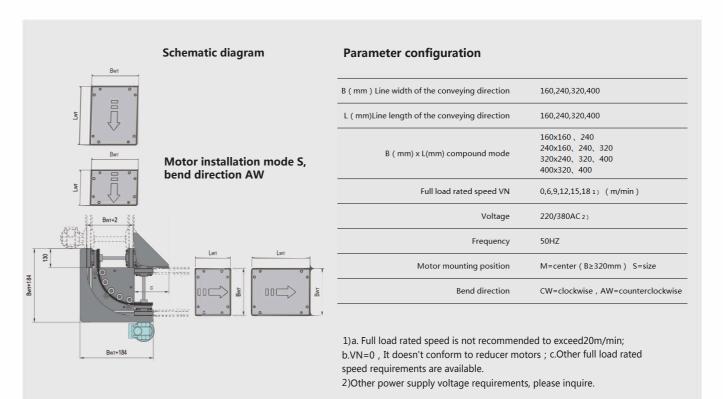
### Order number description



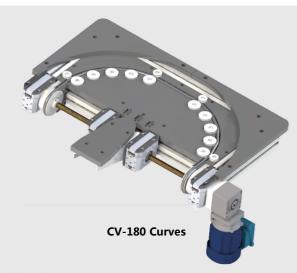
### Sample order



### **CV Curves**



Measure Your Production



Curve cv-90 / with circular belt conveying medium has its own drive device at the end of the curve. They can be used for combination of horizontal belt or longitudinal conveying section of toothed synchronous belt. The frame is standard strength aluminum profile, which can be installed on other equipment or other accessories (such as sensor, support frame, etc.).

### **Feature**

①Workpiece pallet 180° bend conveyor; ②Maximum total weight of workpiece pallet 20 kg; ②Transmission medium: antistatic circular belt; ③Suitable for grease-free and oil-free environment; ③Do not change the direction of the pallet; ③The motor is mounted at the of the conveyor direction of the pallet; ④It can be combined with TB and BC.

### Scope of supply

ourve, equipped wdrive motor

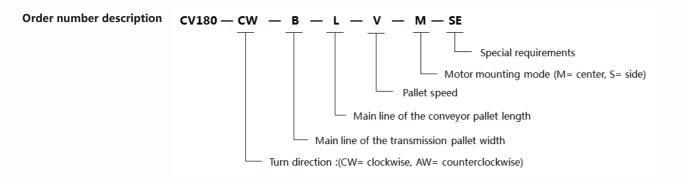
### State of supply

Partial assembly / including internal baffle and motor

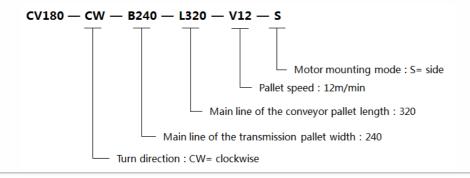
Special note: heap operations are not allowed.

### application specification

- ●Full load of a single pallet≤20kg;
- 2 Turning mechanism can only pass through a single tray at a time. It is forbidden to push the pallet here;
- **S**Modular design, independent parts, simple structure, convenient assembly, easy maintenance;
- ODo not change the direction of the pallet;
- **6**The frame is standard high-strength aluminum profile, which can be used to install the conveying section on other equipment or other accessories (such as sensors, support frames, etc.);
- **6**The motor is mounted at the end of the conveyor direction of the pallet.



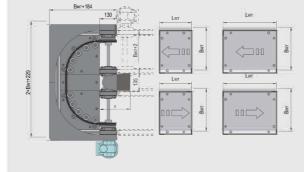




### **CV Curves**

### Schematic diagram

Motor installation mode S, bend direction AW



### **Parameter configuration**

B ( mm ) Line width of the conveying direction	160,240,320,400
L ( mm)Line length of the conveying direction	160,240,320,400
a(mm) Conveying interval	135
B ( mm) x L(mm) compound mode	160x160 、240 240x160、240、320 320x240、320、400 400x320、400
Full load rated speed VN	0,6,9,12,15,18 1) ( m/min )
Voltage	220/380AC 2 )
Frequency	50HZ
Motor mounting position	M=center ( B≥320mm ) S=size
Bend direction	CW=clockwise , AW=counterclockwise

1)a. Full load rated speed is not recommended to exceed20m/min; b.VN=0 , It doesn't conform to reducer motors ; c.Other full load rated speed requirements are available.

2)Other power supply voltage requirements, please inquire.

Measure Your Production

CU Curves



### Feature

**①**Can be stacked; **②**Plastic chain guide; **③**Curved road, with drive device; **③**It can be combined with WT.

### Accessories

Legs, mounting blocks

### Scope of supply

Includes mounting material / drive motor

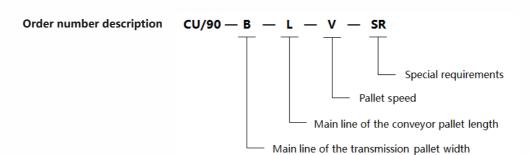
### State of supply

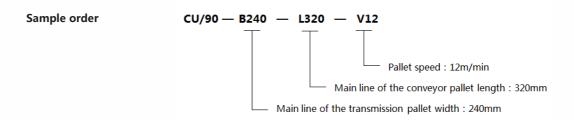
Has been installed

# SIZE Schematic diagram Parameter configuration B ( mm ) Line width of the conveying direction 160,240,320,400,480 L ( mm)Line length of the conveying direction 160,240,320,400,480 160x160 , 240, 320 240x160 , 240, 320 240x160 , 240, 320 , 400 , 480 400x240 , 320, 400 , 480 400x240 , 320, 400 , 480 480x320 , 400 , 480

### 路乐 RULERTECH Measure Your Production

### **CU Curves**

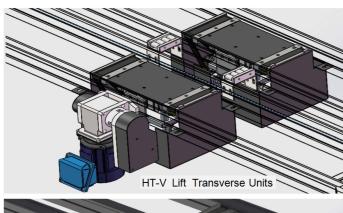




Measure Your Production

21

### HT Lift Transverse Units





### **Product description**

Move the workpiece tray from one longitudinal conveying section through one transverse belt conveying section to another parallel longitudinal conveying section which is far apart.

### **Features**

- A complete set of assembly modules for connecting two small spacing parallel longitudinal conveying segments;
- ②Spacing a = 45... Series design of 135 mm BC conveying section:
- Sprocket chain is used in series transmission;
- Pneumatic equipment for 2 (upper, middle) or 3 (upper,
- middle, lower) lifting positions;

Suitable for TB/BC with profile width of 45 mm... RT/... on conveying section or profile width of 50 mm -h transport section;

It can be combined with WT/ E, WT and WT/F.

### Accessories

Two position sensors (upper/lower), one chain buckle, one cylinder gas connection connected with a pipe 4 or 6, and one side stop plate.

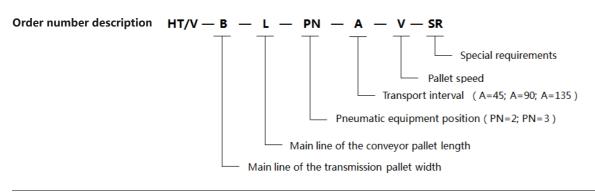
### Scope of supply

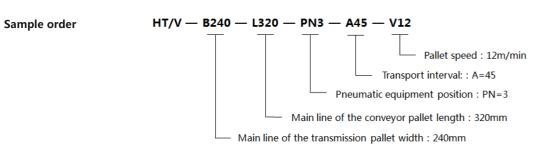
Includes mounting material / 2 or 3 position pneumatic device/ position induction electrical package (2x sensor)/housing/drive motor/chain buckle.

### State of supply

Ht-V lifting lateral conveyor unit installed/connected components/ motor mounting kit, including drive motor/roller conveyor section with roller components/housing unassembled/chain buckles uninstalled.

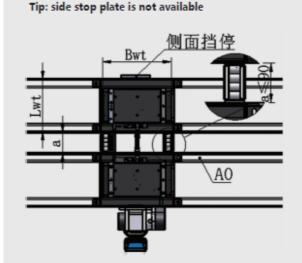
Special note: you can run in the opposite direction, but stacking is not allowed

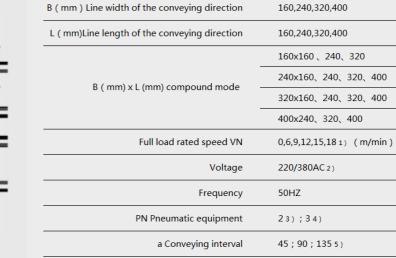




### **HT Lift Transverse Units**

Schematic diagram





**Parameter configuration** 

Unit with pneumatic device:
When PN=2, the top and bottom
go up.
When PN=3, upper, middle, and
lower elevations. When in the
middle, use the hard limit spring
device to lift, at this time the
cylinder is in the deflated attitude.

- 1)a.Full load rated speed is not recommended to exceed 20m/min; b. When VN=0, no deceleration motor is configured; c. Can be configured with other full load rated speed requirements.
- 2) Other power supply voltage requirements, please call to consult...
- 3) PN=2: upper and middle elevated positions.
- 4) PN=3: upper, middle and lower lifting positions.
- 5) a=90mm, only when bl≥240mm; A =135mm, only when bl≥320mm;

The above is applicable to the standard tray size of this mechanism.

If the size of the tray has special requirements, non - standard customization, please inquire.

### application specification

- •• The full load of a single pallet is less than or equal to 30KG, which can be customized for special requirements. Welcome to consult us.
- The horizontal conveying unit can only pass through a single pallet at a time. It is forbidden to pile up pallets here.
- Modular design, independent parts, simple structure, convenient assembly, easy maintenance.
- Transfer from the current line body to another parallel line body without changing the transport direction of the tray (single use is to change the transport direction of the tray).
- **6** The frame is standard high-strength aluminum profile, which can be used to install the conveying section on other equipment or other accessories (such as sensors, support frames, etc.).
- Transmission medium is anti-static toothed synchronous belt.
- **O**Can be used individually, can be used together in series, the whole motor driving medium for sprocket chain drive.
- 3Accept non-standard custom size, welcome to inquire.

### HT-U 顶升横移



### **Product description**

HT Lift Transverse Units

Move the workpiece tray from one longitudinal conveying section through one transverse belt conveying section to another parallel longitudinal conveying section which is far apart.

### **Features**

- 1 The whole set of assembly modules are used for connecting the horizontal and vertical conveying line segments into vertical arrangement.
- 2 Pneumatic equipment, for 2 (upper, middle) or 3 (upper, middle, lower) lifting position.
- 3 Suitable for installation in the profile width of 45 mm TB/BC... RT/... on conveying section or profile width of 50 mm -H transport section.
- It can be combined with WT/ E, WT and WT/F.

### Accessories

Two position sensors (upper/lower), one chain buckle, one cylinder gas connection connected with a pipe 4 or 6, and one side stop plate.

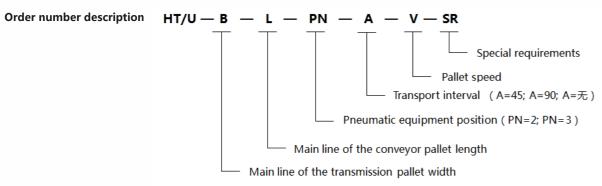
### Scope of supply

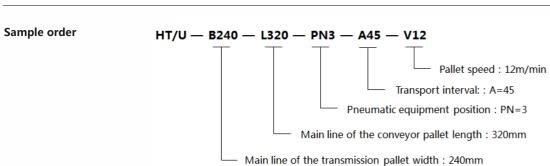
Includes mounting material / 2 or 3 position pneumatic device/ position induction electrical package (2x sensor)/housing/drive motor/chain buckle.

### State of supply

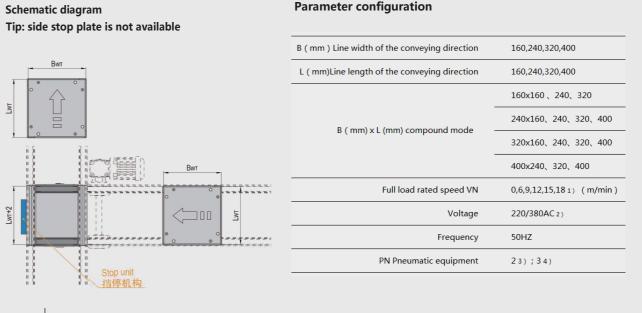
HT-U lifting lateral conveyor unit installed / connected components / housing unassembled.

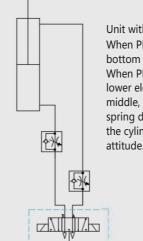
Special note: reverse operation is possible, but no stacking operation is allowed. Lift the lateral conveyor unit to lift the workpiece tray from the longitudinal conveyor and transfer it horizontally to the higher lateral conveyor 10mm.





### **HT Lift Transverse Units**





- Unit with pneumatic device:
  When PN=2, the top and
  bottom go up.
  When PN=3, upper, middle, and
  lower elevations. When in the
  middle, use the hard limit
  spring device to lift, at this time
  the cylinder is in the deflated
  attitude.
- 1) a.Full load rated speed is not recommended to exceed 20m/min; b. When VN=0, no deceleration motor is configured; c. Can be configured with other full load rated speed requirements.
- 2 ) Other power supply voltage requirements, please call to consult..
- 3 fiPN=2: upper and middle elevated positions.
- 4 fiPN=3: upper, middle and lower lifting positions.

The above is applicable to the standard tray size of this mechanism.

If the size of the tray has special requirements, non - standard customization, please inquire.

### **Application specification**

- ••The full load of a single pallet is less than or equal to 30KG, which can be customized for special requirements. Welcome to consult us.
- The horizontal conveying unit can only pass through a single pallet at a time. It is forbidden to pile up pallets here.
- Modular design, independent parts, simple structure, convenient assembly, easy maintenance.
- Transfer from the current line body to another parallel line body without changing the transport direction of
- the tray (single use is to change the transport direction of the tray).
- The frame is standard high-strength aluminum profile, which can be used to install the conveying section on other equipment or other accessories (such as sensors, support frames, etc.).
- Transmission medium is anti-static toothed synchronous belt.
- Accept non-standard custom size, welcome to inquire.



LF Lift Units

Installed in both ends of TB /BC /RT conveying system, it is used for lifting double or multi-layer line bodies to realize the connection between double or multi-layer line bodies.

### **Features**

**OCOMPLET** • Complete assembly module for cylinder drive lift; **⊘Two** positions are promoted; **⊙**Accuracy is generally.

### accessories

Cylinder two position sensor 2, cylinder gas connector connected with six pipe, buffer stop, foot connector.

### Scope of supply

Includes mounting material/position sensing electrical package (2x sensor)

### State of supply

LP/P cylinder hoist unit has been installed/debugged

### Application specification

OThe full load of a single pallet is less than or equal to 30kg, which can be customized for special requirements. Welcome to consult

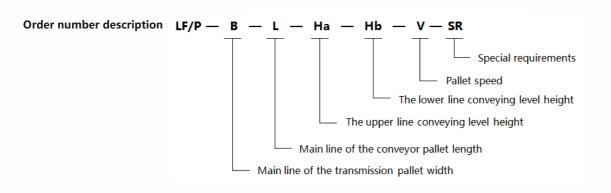
The elevator can only pass through a single tray at a time. It is forbidden to push the pallet here;

Modular design, independent parts, simple structure, convenient assembly, easy maintenance;

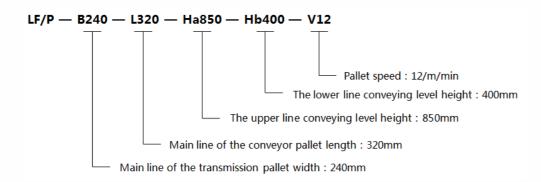
②Aluminum profile frame, standard stroke cylinder, hydraulic buffer, stroke can be fine-tuned, can realize the vertical circulation between the high and low layer conveying line, change the direction of the pallet;

The frame is standard high-strength aluminum profile, which facilitates the installation of other accessories (such as sensor, support frame, etc.);

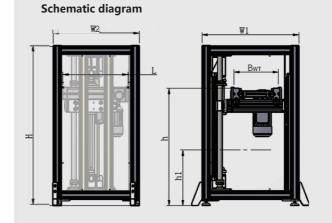
**©**Accept non-standard customized size, non-standard customized itinerary, welcome to inquire.



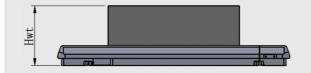




### **LF Lift Units**



### **Total carrier height**



### Parameter configuration

B ( mm ) Line width of the conveying direction	160,240,320,400
L ( mm ) Line length of the conveying direction	160,240,320,400
-	160x160 、240、320
	240x160、240、320、400
B ( mm) x L (mm) compound mode	320x160、240、320、400
	400x240、320、400
Full load rated speed VN	0,6,9,12,15,18 1)
L	L=LWT+150
W1	W1=BwT+380
W2	W2=LWT+300
На	h≥h1+HWT
Hb	h1≥350
Н	H≥2HWT+350

1) a.Full load rated speed is not recommended to exceed 20m/min; b. When VN=0, no deceleration motor is configured; c. Can be configured with other full load rated speed requirements.

The above is applicable to the standard tray size of this mechanism.

If the size of the tray has special requirements, non - standard customization, please inquire.

Measure Your Production

27

LF Lift Units

Installed in both ends of TB /BC /RT conveying system, it is used for lifting double or multi-layer line bodies to realize the connection between double or multi-layer line bodies.

### **Features**

①Complete assembly module for cylinder drive lift; ②Three or more promotion positions; ③ High precision.

### accessories

Panasonic servo motor (optional), buffer stop, foot connector.

### Scope of supply

Includes mounting material/position sensing electrical package (3x sensor)/Panasonic servo motor (optional)

### State of supply

LP/S screw elevator unit has been installed/debugged

### Application specification

OThe full load of a single pallet is less than or equal to 30kg, which can be customized for special requirements. Welcome to consult

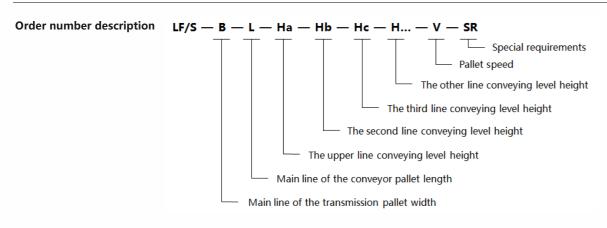
The elevator can only pass through a single tray at a time. It is forbidden to push the pallet here;

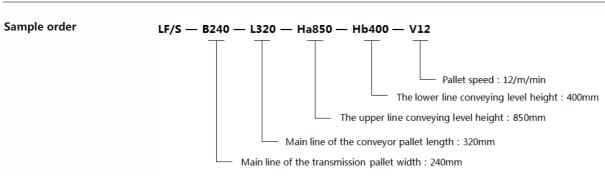
**3** Modular design, independent parts, simple structure, convenient assembly, easy maintenance;

②Aluminum profile frame, standard stroke cylinder, hydraulic buffer, stroke can be fine-tuned, can realize the vertical circulation between the high and low layer conveying line, change the direction of the pallet;

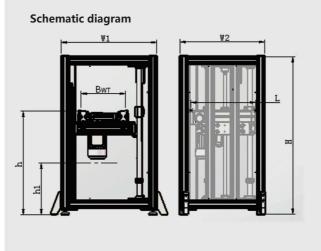
The frame is standard high-strength aluminum profile, which facilitates the installation of other accessories (such as sensor, support frame, etc.);

**O**Accept non-standard customized size, non-standard customized itinerary, welcome to inquire.





### **LF Lift Units**



### Kf kXcZXii`\i`\_\`^\_k



### **Parameter configuration**

B ( mm ) Line width of the conveying direction	160,240,320,400
L ( mm ) Line length of the conveying direction	160,240,320,400
	160x160 、240、320
-	240x160、240、320、400
B ( mm) x L (mm) compound mode	320x160、240、320、400
	400x240、320、400
Full load rated speed VN	0,6,9,12,15,18 1)
L	L=LWT+150
W1	W1=BWT+380
W2	W2=LWT+300
На	h≥h1+HWT
Hb	h1≥350
Н	H≥2HWT+350

1) a.Full load rated speed is not recommended to exceed 20m/min; b. When VN=0, no deceleration motor is configured; c. Can be configured with other full load rated speed requirements.

The above is applicable to the standard tray size of this mechanism.

If the size of the tray has special requirements, non - standard customization, please inquire.

Measure Your Production



### **Parameter configuration**

**HP Lift Positioning Units** 

160, 240, 320, 400
160x160 、240、320
240x160、240、320、400
320x160、240、320、400
400x240、320、400

### **Features**

- Position the pallet at manual or automatic machining station;
- **2** The positioning accuracy was  $\pm 0.1$ ;
- OIT can be used in combination with all WT to 400x400 workpiece pallet:
- The lifting positioning unit lifts the travel of WT above the conveying level by 2.5mm
- **⑤**The maximum total mass of the workpiece tray is ≤30kg.

### Accessories

Stop gate, position sensor, pneumatic quick plug connector g1/8 interface  $\phi$  6.

### Scope of supply

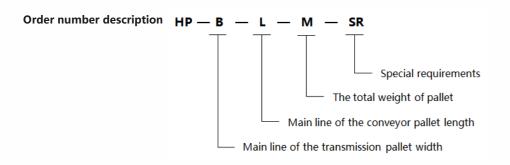
Includes mounting material/position sensing electrical package (2x sensor)

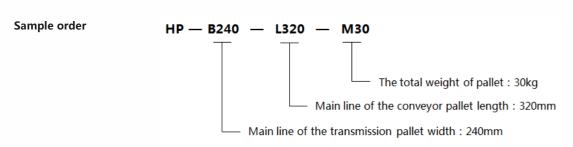
### State of supply

Already assembled

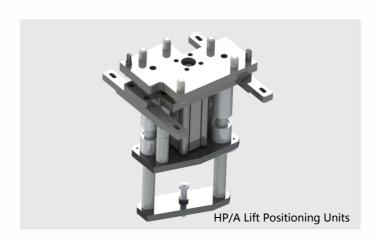
### **Application specification**

- The full load of a single pallet is less than or equal to 30kg, which can be customized for special requirements, Welcome to consult us
- 2The jacking positioning unit can only pass through a single pallet each time. It is forbidden to push the pallet here.
- 3Modular design, independent parts, simple structure, convenient assembly, easy maintenance.
- ②Lifting positioning unit lifts the travel of WT above the conveying level by 2.5mm.
- **⑤**Accept non-standard customized size, non-standard customized itinerary, welcome to inquire.





### **HP Lift Positioning Units**



### Parameter configuration

B (mm) Line width of the conveying direction	160, 240, 320, 400
L (mm) Line length of the conveying direction	160, 240, 320, 400
	160x160 、240、320
	240x160、240、320、400
B(mm) x L (mm) compound mode	320x160、240、320、400
	400x240、320、400
Rated stroke H (mm)	WT in conveying horizontal plane trip HO (mm)
50	0-28
	0 20
100	35-78
100 150	
	35–78
150	35-78 85-128

### **Features**

- Position the pallet on the positioning station with high precision. Position the palleton HP/A through the positioning pin and position the sleeve on the WT workpiece pallet;
   The positioning accuracy was ±0.05;
- SIt can be used in combination with all WT to 400x400 workpiece pallet;
- **1** The maximum total mass of the workpiece tray is ≤40kg.

### Accessories

Stop gate, position sensor, pneumatic quick plug connector  $\phi 8 \text{mm}.$ 

### Scope of supply

Includes mounting material/position sensing electrical package (2x sensor)

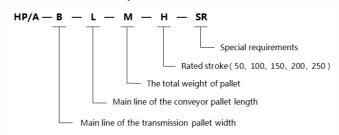
### State of supply

Already assembled

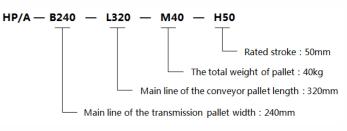
### **Application specification**

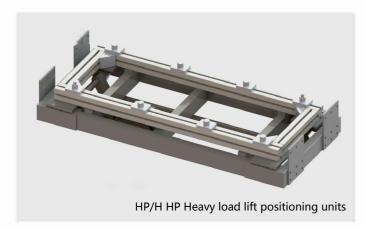
- **O**The full load of a single pallet is less than or equal to 40kg, which can be customized for special requirements, Welcome to consult us.
- The jacking positioning unit can only pass through a single pallet each time. It is forbidden to push the pallet here.
- **3**Modular design, independent parts, simple structure, convenient assembly, easy maintenance.
- ②Lifting positioning unit lifting WT is optional above the transport level, and it is not standard customization. Welcome to inquire.
- **6**Accept non-standard customized size, non-standard customized itinerary, welcome to inquire.

### Order number description



### Sample order





### **Parameter configuration**

**HP Lift Positioning Units** 

B ( mm ) Line width of the conveying direction	720,800,1320	
L ( mm ) Line length of the conveying direction	320,400,1200	
B ( mm) x L (mm) compound mode	720x320 、400、480	
	800x320 、400、480	
	1320x320 、400、480,	

### **Features**

- **OP**osition the pallet at manual or automatic machining station;
- Cylinder drives CAM mechanism through connecting rod to realize jacking;
- 3 The positioning accuracy was ±0.1mm; 3 Can be used in combination with all WT-1200xl320 workpiece
- Can be used in combination with all W1-1200xl320 workpied pallet;
- **S**Lifting positioning unit lifts WT 5mm above the transport level;
- GThe maximum total mass of the workpiece tray is ≤30kg; Uarger weight lift positioning unit can be customized.

### Accessories

Stop gate, position sensor, pneumatic quick plug connector g1/8 interface  $\phi$  6.

### Scope of supply

Includes mounting material/position sensing electrical package (2x sensor)

### State of supply

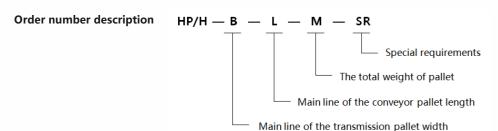
Already assembled

### **Application specification**

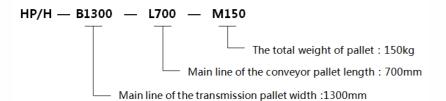
The full load of a single pallet is less than or equal to 200kg, which can be customized for special requirements, Welcome to consult us.

- **2**The jacking positioning unit can only pass through a single pallet each time. It is forbidden to push the pallet here.
- 6 Modular design, independent parts, simple structure,
- convenient assembly, easy maintenance.

  \*\*OLifting positioning unit lifts the travel of WT above the conveying level by 5mm.
- **6**Accept non-standard customized size, non-standard customized itinerary, welcome to inquire.



### Sample order



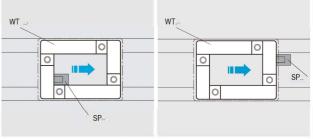
### **SP Stop gate**

### Stop gate classification

Pneumatic stop gate is an important member of the transport control system, its main role is to stop the pallet, through, separation and position induction, to achieve automatic flexible control of the pallet transport process.



SP/N Stop gate SP/R Stop gate SP/D Stop gate SP/D-200 Stop gate



According to the occasion and different space, blocking and stopping mode can choose the inner and outer two ways

### **Features**

- Pneumatic stop gate.
- 2 Can achieve the pallet stop, through, and can achieve multiple pallet products and separation.
- 3 Do not run backwards.
- O Low noise; Low noise on and off;
- It can be combined with WT pallet;
- **6** It also has an access switch installed on the stop-blocker to detect whether the workpiece tray has stopped or passed the stop-blocker (optional).

### Accessories

Switch bracket (optional) and sweep-sensor

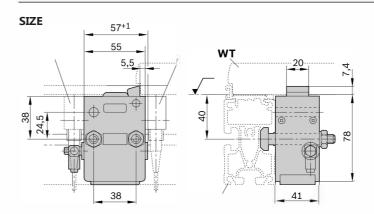
### Scope of supply

Including installation materials/pneumatic quick plug connector φ6mm.

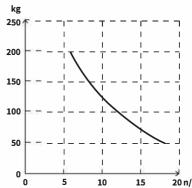
### State of supply

SP/N Stop gate

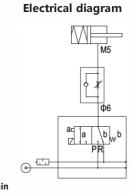
Already assembled



Material: main housing -- aluminum alloy (black) stop rod -- brass



The ratio of the maximum speed of the pallet to the maximum stopping capacity of the



Note: solenoid valve in the figure is not within the scope of supply

Product description	Weight(g)	Order number	Delivery list
SP/N pneumatic stop	380	SP/N.PN.0101 (With proximity switch bracket)	T screw x2, nut x2, connection key x1, switch bracket x1
gate		SP/N.PN.0101 (No proximity switch bracket)	T screw x2, nut x2, connection key x1

SP Stop gate

### Features

1 The check prevents rebound from the stop stop to the workpiece tray if the transmission medium is used in combination with the roller chain without damping stop.

②For the workpiece tray, the minimum total mass is 3kg and the maximum total mass is 60kg.

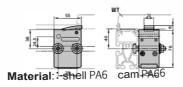
3Under the normal state, the spring will stop the device to close, the direction of the workpiece tray through.

Olt can be combined with WT pallet

5R unning noise < 50dB

### Scope of supply

Includes installation materials/ pneumatic quick plug joints with parameters of  $\phi 6 \text{mm}$ .



### State of supply

Already assembled

### **Features**

SP/R check stop

•Pneumatic stop stop is used for tray smooth buffer stop and separation occasions, can avoid the tray by hard stop and the rebound.

**2**For the total weight of 60 kg workpiece tray damping effect is the best.

**3** The adjusting screw on the back of the stop can reduce shock and adjust stepless.

Olt can be combined with WT pallet

Running noise<SOdB</p>

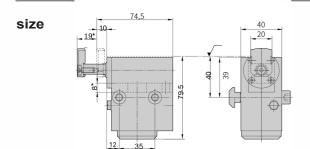
### Scope of supply

Includes installation materials/pneumatic quick plug joints with parameters of  $\phi 6 \text{mm}$ .

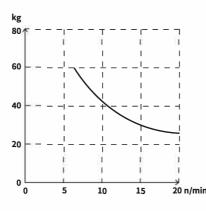
### State of supply

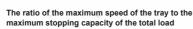
Already assembled

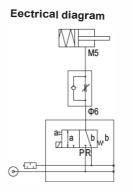
### SP/D buffer stop











Note: solenoid valve in the figure is not within the scope of supply

Product description	Weight(g)	Order number	Delivery list	
SP/R check stop gate	485	SP/R.PN.0301	T screw x2, nut x2, connection key x1	
SP/D buffer stop gate	580	SP/D.PN.0201	T screw x2, nut x2, connection key x1	

### sp stop device

### SP/D-200 buffer stop

### Features

•Pneumatic stop stop is used for tray smooth buffer stop and separation occasions, can avoid the tray by hard stop and the rehound

**2** For the total weight of 200 kg workpiece tray damping effect is the best.

**3**The adjusting screw on the back of the stop can reduce shock and adjust stepless.

(a) It can be combined with WT pallet;

5Running noise<SOdB</p>

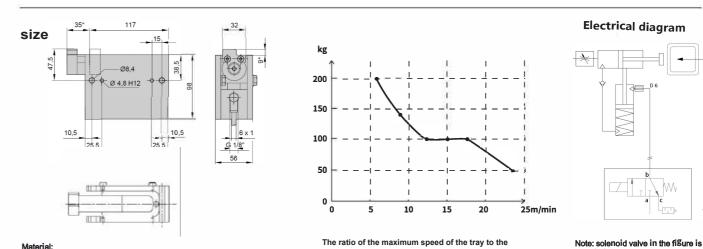
### Scope of supply

Includes installation materials/pneumatic quick plug joints with parameters of  $\phi 6 \text{mm}.$ 

not within the scope of supply

### **Delivery status**

Already assembled



Product description	Weight(g)	Order number	Delivery list
SP/D-200 check stop gate	485	SP/R.PN.0301	T screw x2, nut x2, connection key x1

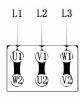
maximum stopping capacity of the total load

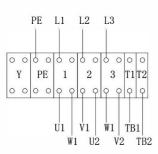
34 35

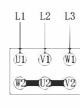
steel, Quenching

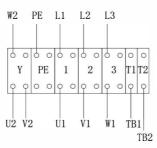
# Transfer line motor wiring diagram

### Transfer line motor wiring diagram / parameter comparison table







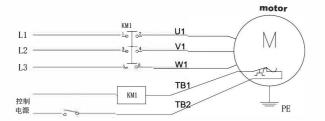


 $\triangle$  Type connection, power supply voltage 220AC motor junction box terminal wiring diagram

Y-type connection, wiring diagram of terminal of 380AC motor junction box

### **Motor wiring diagram**

36



### Special notes:

- A. All motors are built in with a metal hot contact connected with the overload circuit breaker, metalHot contact at 150°C±5°C, terminal TB1, TB2;
- B. The motor is suitable for continuous operation, periodic clearance operation, frequent start and stop and positive and negative rotation Run;
- C. When frequency control by frequency conversion, the power frequency of the motor after frequency conversion: motor rating Frequency  $\pm$  20% range;
- D. Power supply voltage: within the range of rated voltage ± 10%;
- E. Working environment temperature: -20°C +40°C;
- F. Protection grade IP65;
- G. Provide motor specifications.

### Conveying line motor parameter comparison table

Line type	Rated speed VN(m/min)	Heap transport allows maximum load (kg)	Frequency(HZ)	Motor power (KW)
	18	60	50HZ	0.2
TD	15	60	50HZ	0.2
TB TB/M	12	60	50HZ	0.2
1 D/ III	9	60	50HZ	0.1
	6	60	50HZ	0.1
	18	250	50HZ	0.4
	15	250	50HZ	0.4
BC	12	250	50HZ	0.4
	9	250	50HZ	0.25
	6	250	50HZ	0.25
	18	600	50HZ	0.55
	15	600	50HZ	0.55
RT	12	600	50HZ	0.55
	9	600	50HZ	0.4
	6	600	50HZ	0.4
	18	1200	50HZ	0.75
	15	1200	50HZ	0.75
RT/H	12	1200	50HZ	0.75
	9	1200	50HZ	0.55
	6	1200	50HZ	0.55

