
HI
FLEX

FLEXIBLE CONVEYOR SYSTEM
FACTORY AUTOMATION
ROBOT PALLETIZING SYSTEM

Flexible conveyor system

HI FLEX Co.,Ltd

Conveyor system - HS / HL / HM / HW / HR / HB

Maximum width of goods

The maximum width of the goods conveyed depends on the shape of the goods and on the location of the center of gravity.

Maximum weight (horizontal transport)

In a horizontal conveyor, the maximum weight of the individual products conveyed is limited mainly by the desire to keep wear of the slide rails at an acceptable level.

Maximum weight (vertical transport)

In a conveyor with cleated links for vertical transport, the maximum weight of the individual products is limited by the strength of the cleats and the life of the slide rails.

Maximum weight on conveyor

The total maximum weight is mainly limited by the drive unit capacity and by the tensile strength of the chain.

Conveyor length/speed range

The maximum conveyor length and speed depends on the total load and on the drive unit capacity.

Conveyor system - HS

Features

- Chain width 44mm
- Preferable in high speed applications
- Suitable for a wide range of applications

Examples of products conveyed

Perfume bottles
Pharmaceutical bottles

Conveyor system - HL

Features

- Chain width 63mm
- Preferable in high speed applications
- Suitable for a wide range of applications

Examples of products conveyed

Yogurt bottles
Plastic bottles
Dry batteries
Medium size ball bearings

Conveyor system - HM

Features

- Chain width 78mm
- Suitable for a wide range of applications

Examples of products conveyed

Beverage cans
Milk packages*Features*
Medium size ball bearings
Paint cans
Ball valves

Conveyor system - HW

Features

- Chain width 128mm
- Suitable for larger items
- Especially if the point of balance is somewhat off-center
- Higher capacity than other types

Examples of products conveyed

Paper boxes
Plastic boxes
Heavy boxes

Conveyor system - HR

Features

- Chain width 178mm
- Suitable for larger items
- Especially if the point of balance is somewhat off-center
- Higher capacity than other types

Examples of products conveyed

Paper boxes
Plastic boxes
Heavy boxes

Conveyor system - HB

Features

- Chain width 295mm/395mm
- Suitable for larger items
- Especially if point of balance is somewhat off-center
- Higher capacity than other types

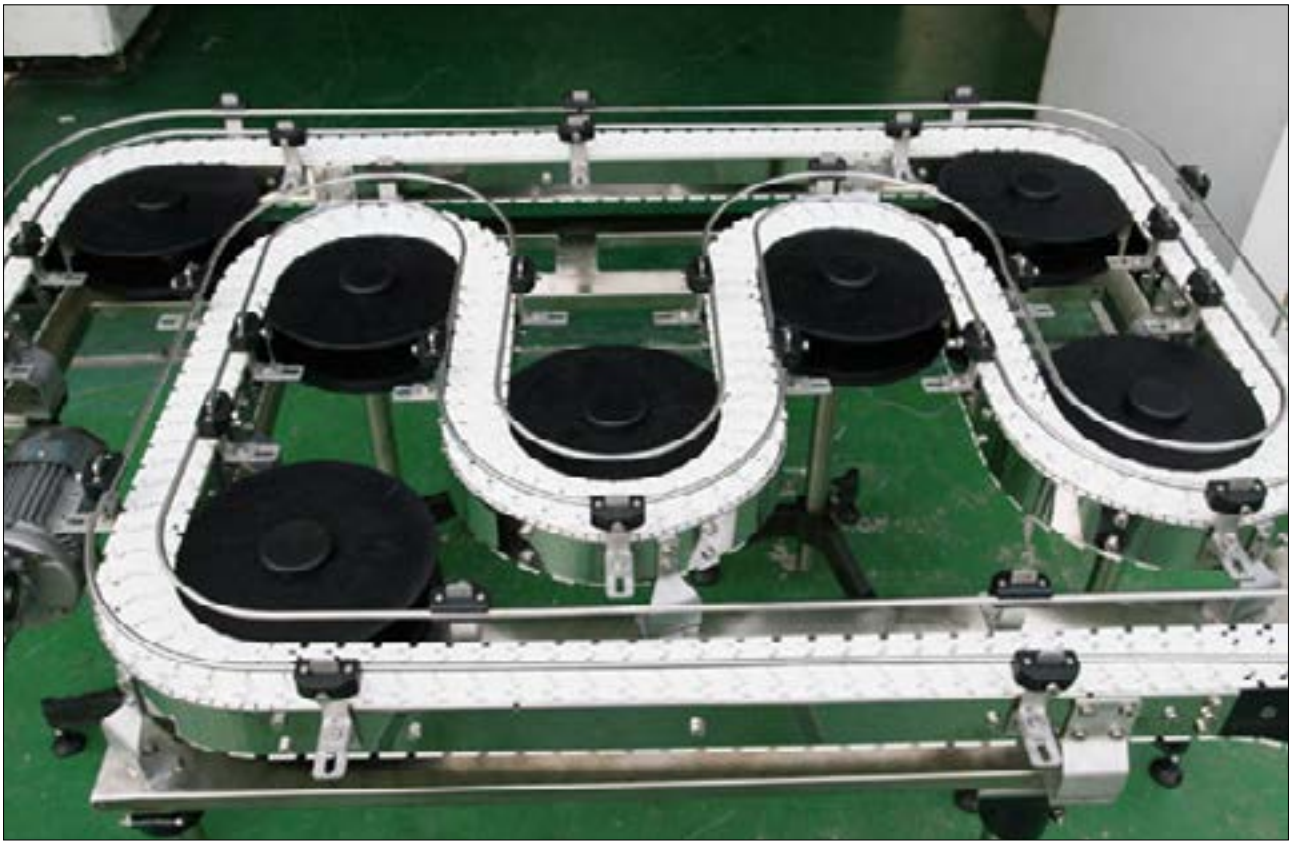
Examples of products conveyed

Paper boxes
Heavy boxes
Large size tissue paper

Application examples

APL

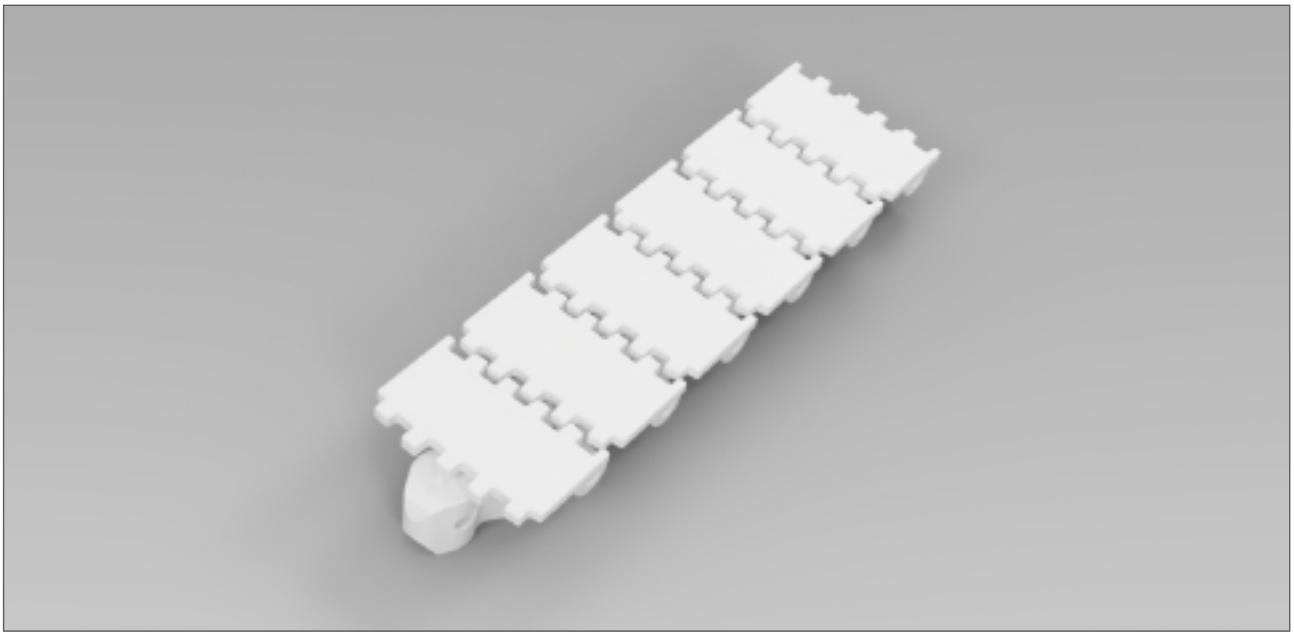
Contents




YASKAWA

Conveyor System HS

Contents



Description

The conveyor chain consists of plastic links joined together by means of plastic pivots and stainless steel pins. It can be delivered with or without cleats.

Attachment chain

The attachment chain is required for vertical or steeply inclined conveyor tracks. Cleats are available in different heights. The cleat type must be selected to suit the shape of the goods conveyed. High cleats are required for long work pieces, otherwise the ends of the work piece would rise over the top of the cleat on vertical(convex) bends.

Other chain types

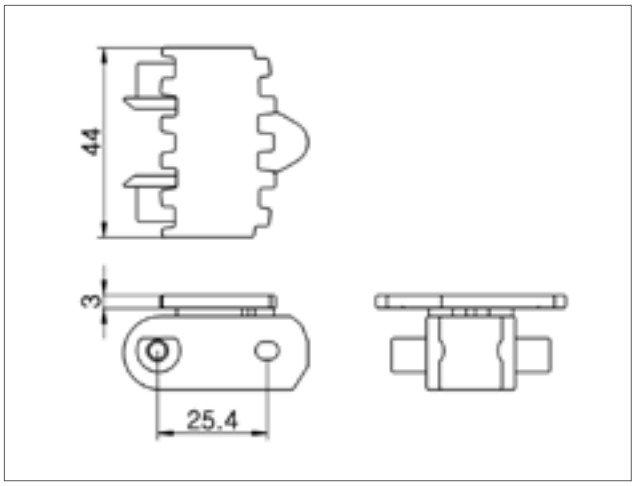
In addition to the standard types, several special-purpose chain links are available on special order. Please contact HI FLEX for additional information.

Ordering information

The chain comes in 5m lengths. Separate links can also be ordered.

Plain chain

Reference	Material
	Plate / Pin
HSTL44	Acetal / Stainless steel



Description

The chain track for straight conveyor sections is delivered as beam stock to be cut as required.

Plastic screws (HSAG 5) are used to fix the slide rail to the beam.

Ordering information

1 Determine the number of beam lengths required. Beams can be delivered in 3m, and precision cut to any length up to 3m.

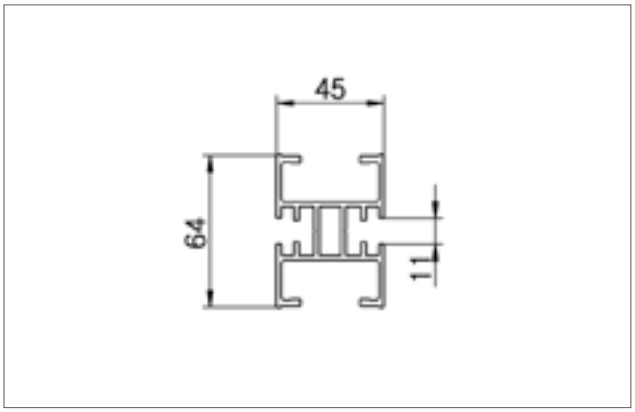
2 Determine the length of slide rail required. Four lengths of slide rail are normally required for each length of track. Do not forget bends, drive units etc.

3 Estimate the required number of plastic screws for the slide rail. Two screws are required for each separate piece of slide rail. The screws must be ordered separately.

4 Determine the number of connecting strips required. Two connecting strips must be ordered separately for each joint between straight beam sections.

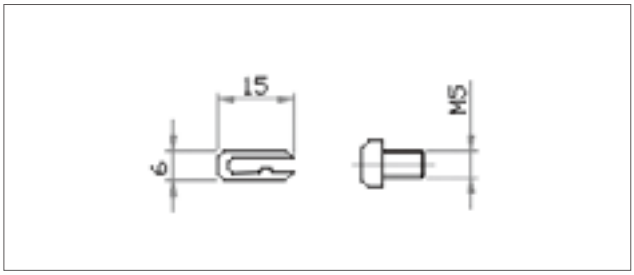
Conveyor beam

Reference	Material	Length(m)
HSCB 3	Aluminum	3
HSCB L		Length to order



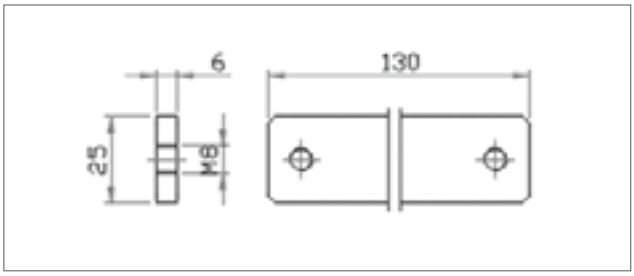
Slide rails

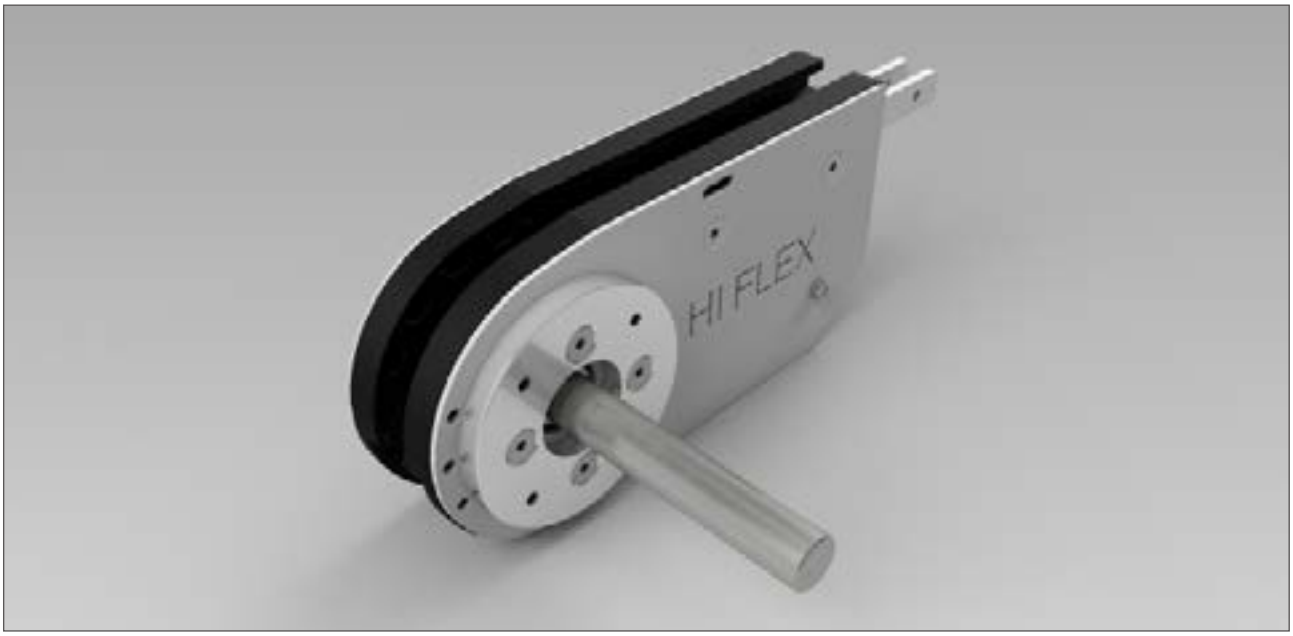
Reference	Material	Length(m)
HSCR 30	HDPE	30
		Length to order
HSAG 5	Plastic bolt	M5



Connecting strip

Reference	Material
HSCJ 6x130	Aluminium





Description

End drive unit

The end drive unit is designed to be positioned at one end of the conveyor.

Two drive configurations are available: suspended motor, transmission on the left or right side.

The drive unit can be connected in parallel with additional drive units so that a common motor can drive several conveyors synchronously.

Other motor alternatives are available.

Right side and left side are available.

Intermediate drive unit

Intermediate drive units are similar to the standard types except that they can be inserted anywhere along the conveyor. This can be an advantage if space is limited at the ends.

Other motor alternatives are available.

Right side and left side are available.

Ordering information

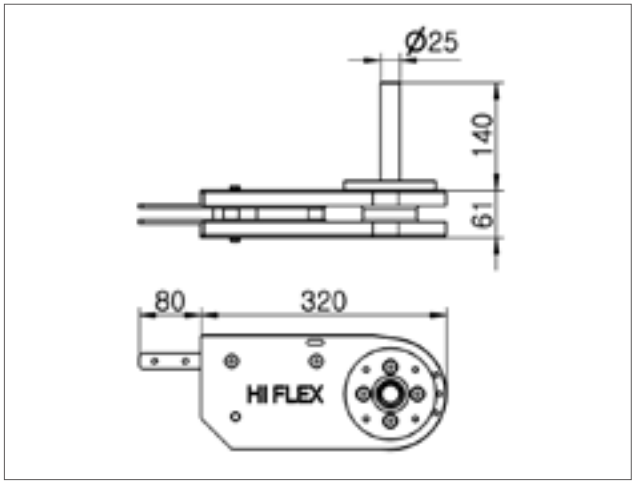
1 Select the most suitable drive unit configuration.

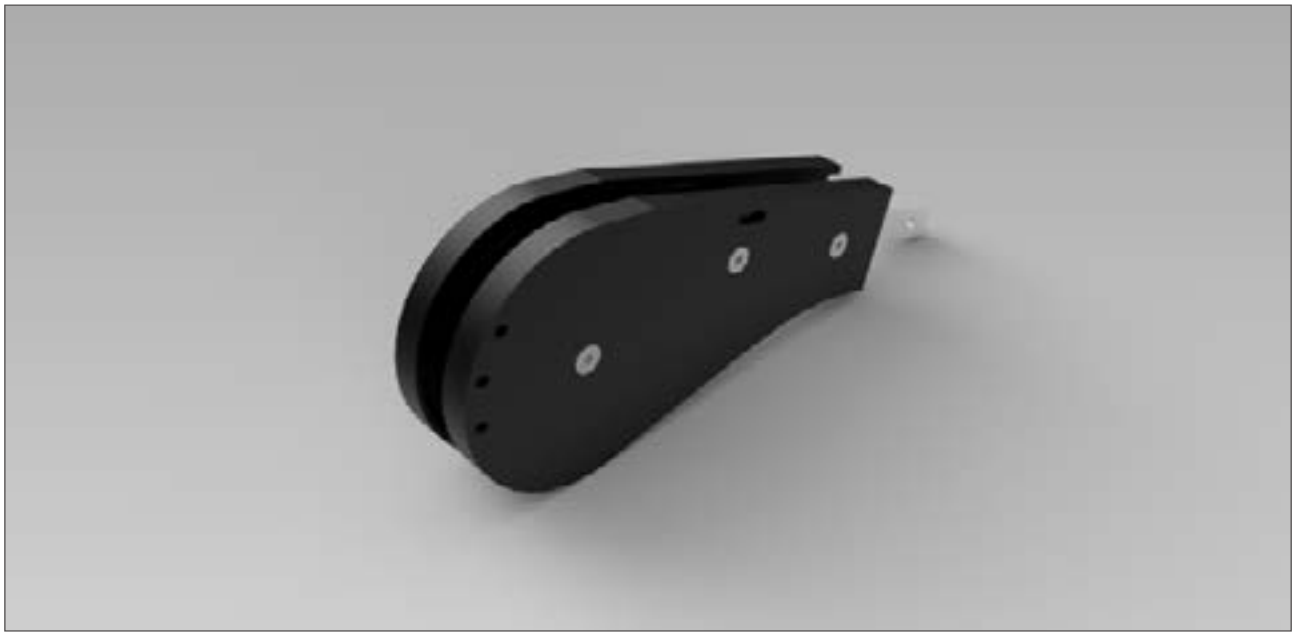
2 Calculate the actual load and compare with the capacity of the drive unit.

Connecting strips are included.

End drive unit

Reference	Material	Motor Position
HSEBR	Aluminum & P.E	Right
HSEBL		Left





Description

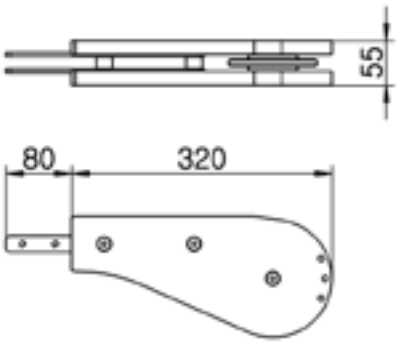
An idler unit contains a free wheel which incorporates ball bearings. The purpose of the idler unit is to change the direction of the chain with a minimum amount of friction.

In an idler unit the chain is guided by flanges to prevent it from disengaging underneath.

Ordering information

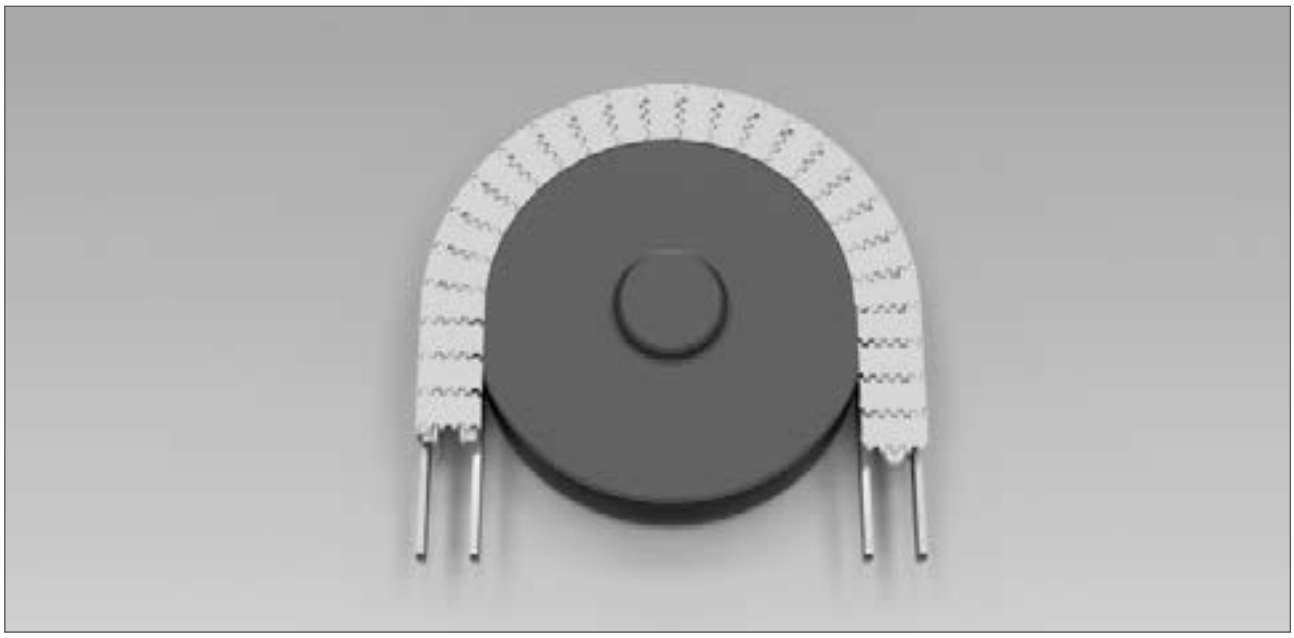
Connecting strips are included.

Idler unit



Reference	Material
HSEJ 320	Aluminium & P.E

BEND - Wheel bend



Description

Horizontal wheel bends are used to provide a horizontal change of direction in the conveyor with a minimum amount of friction. The wheel bend is designed to guide the chain in the return track as well as the top track. Each wheel is supported by two sealed deep groove ball bearings for long life and a minimum amount of friction. The wheel bend is availlable in three different versions.

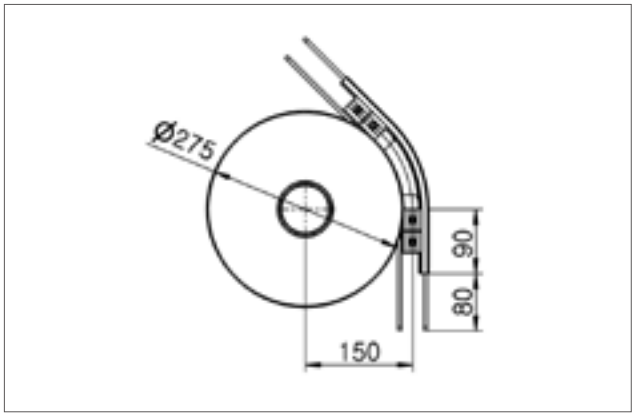
Ordering information

When calculating the required amount of slide rail, note that slide rail need only be installed on the outer bend.

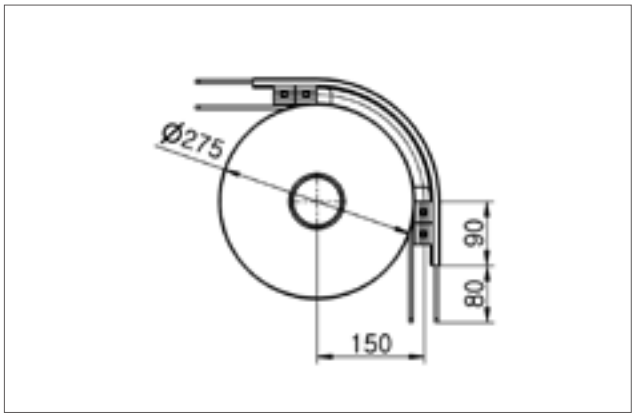
Connecting strips are included.

Wheel bend

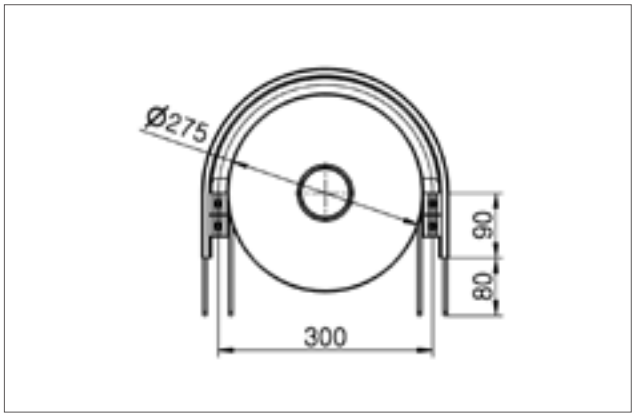
Reference	Material
HSBH 45R150	Aluminium & P.E



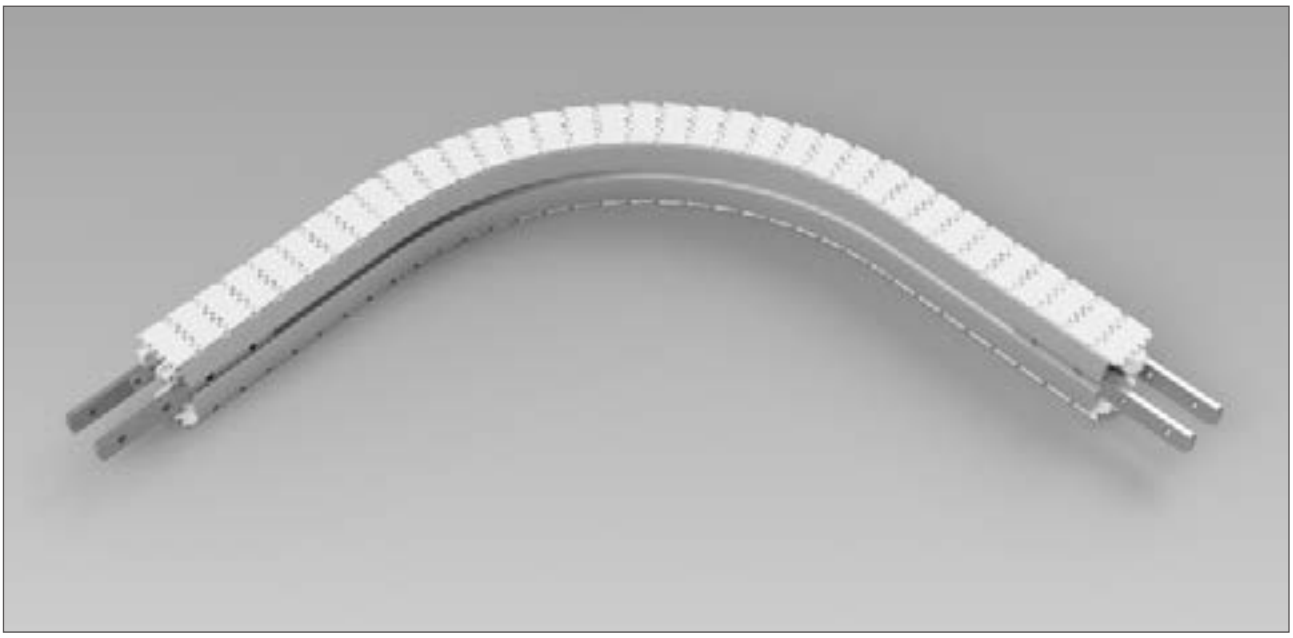
Reference	Material
HSBH 90R150	Aluminium & P.E



Reference	Material
HSBH 180R150	Aluminium & P.E



BEND - Horizontal bend



Description

Horizontal plain bends are used in cases where wheel bends are not suitable. Examples:

- Where space is restricted
- For long products, requiring large-radius turns
- When large-radius bends are desired for other reasons

Important

- Use plain bends only when wheel bends cannot be used
- Always use the largest radius possible

Plain bends increase the tension in the chain and cause higher stress on the slide rail. To ensure a reliable conveyor design with plain bends, always consult your HI FLEX representative for technical data and design assistance.

Technical specifications

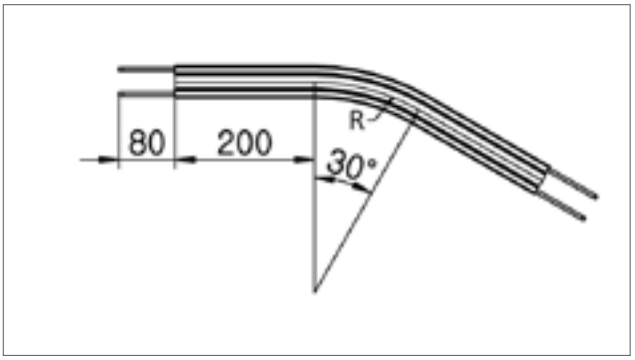
The standard range of plain bends exhibit a manufacturing tolerance of ±2% in radius and ±2% in angle.

Ordering information

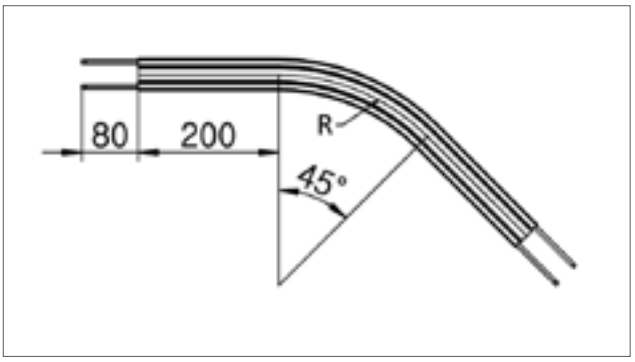
Other angles or redii can be delivered on special order.
Connecting strips are included.

Horizontal bend

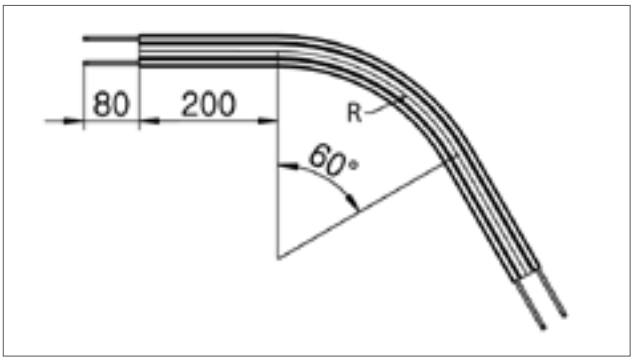
Reference	Material
HSBP 30R500	Aluminum
HSBP 30R700	
HSBP 30R1000	



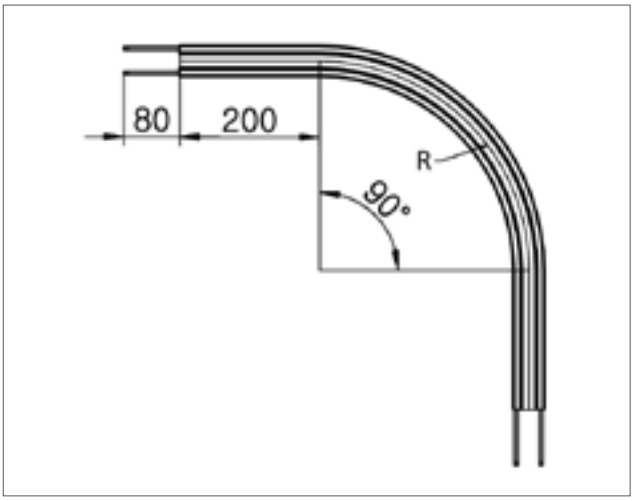
Reference	Material
HSBP 45R500	Aluminum
HSBP 45R700	
HSBP 45R1000	



Reference	Material
HSBP 60R500	Aluminum
HSBP 60R700	
HSBP 60R1000	



Reference	Material
HSBP 90R500	Aluminum
HSBP 90R700	
HSBP 90R1000	



Conveyor System HL

Contents

Description

The conveyor chain consists of plastic links joined together by means of plastic pivots and stainless steel pins. It can be delivered with or without cleats.

Attachment chain

The attachment chain is required for vertical or steeply inclined conveyor tracks. Cleats are available in different heights. The cleat type must be selected to suit the shape of the goods conveyed. High cleats are required for long work pieces, otherwise the ends of the work piece would rise over the top of the cleat on vertical(convex) bends.

Other chain types

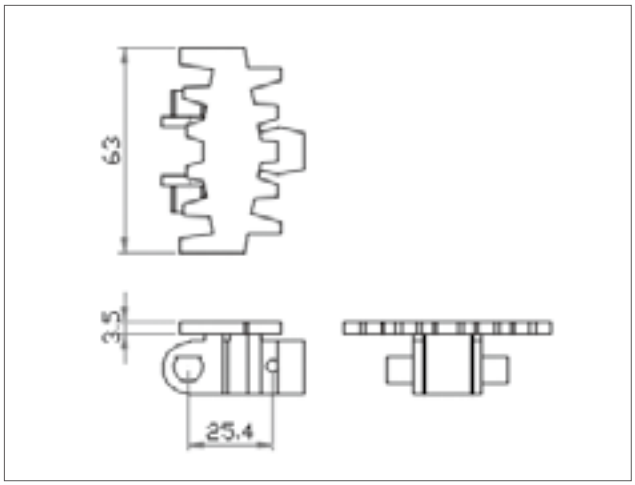
In addition to the standard types, several special-purpose chain links are available on special order. Please contact HI FLEX for additional information.

Ordering information

The chain comes in 5m lengths. Separate links can also be ordered.

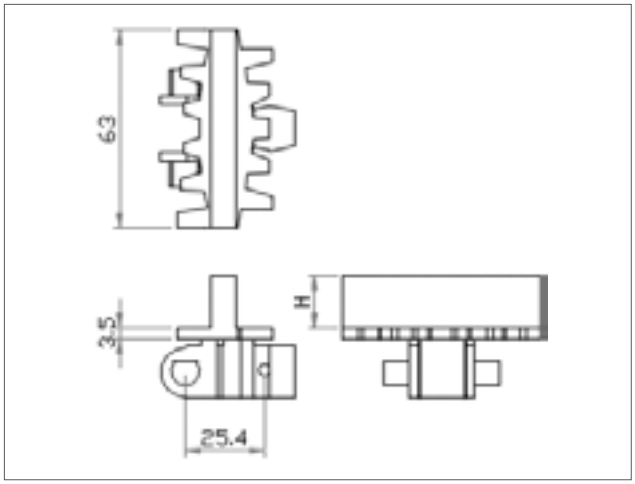
Plain chain

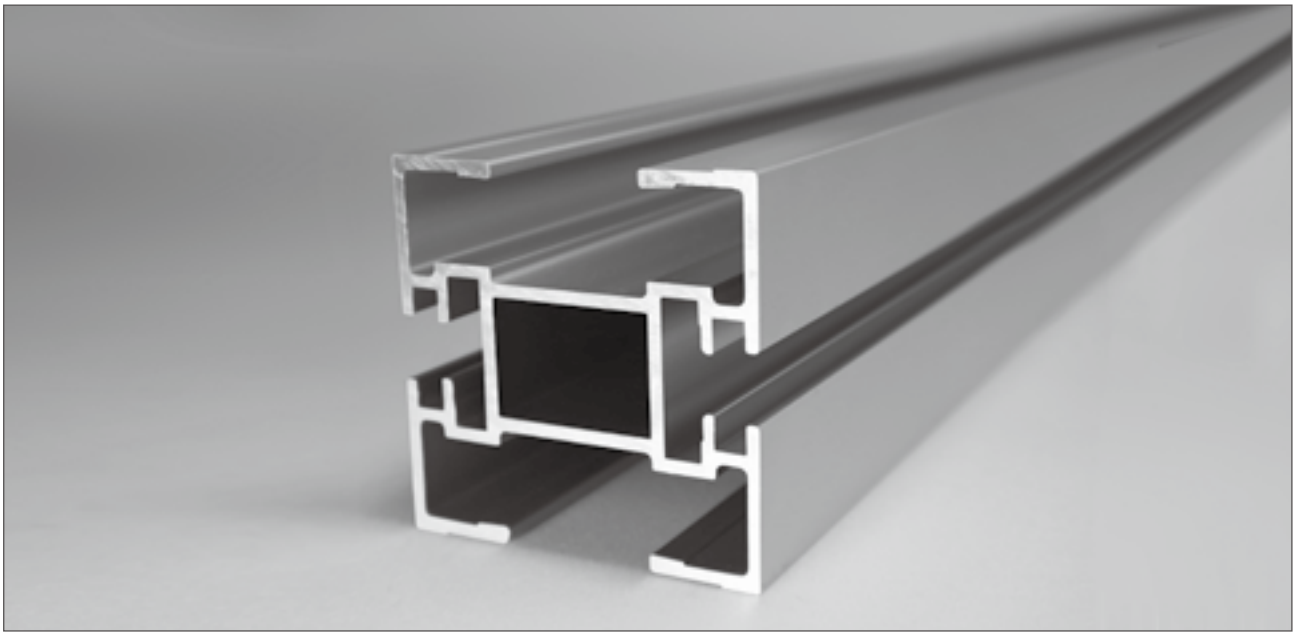
Reference	Material
	Plate / Pin
HLTL63	Acetal / Stainless steel



Attachment chain

Reference	Material
	Plate / Pin
HLTL63 x 10H	Acetal / Stainless steel
HLTL63 x 20H	
HLTL63 x 30H	
HLTL63 x 50H	





Description

The chain track for straight conveyor sections is delivered as beam stock to be cut as required.

Plastic screws (HSAG 5) are used to fix the slide rail to the beam.

Ordering information

1 Determine the number of beam lengths required. Beams can be delivered in 3m, and precision cut to any length up to 3m.

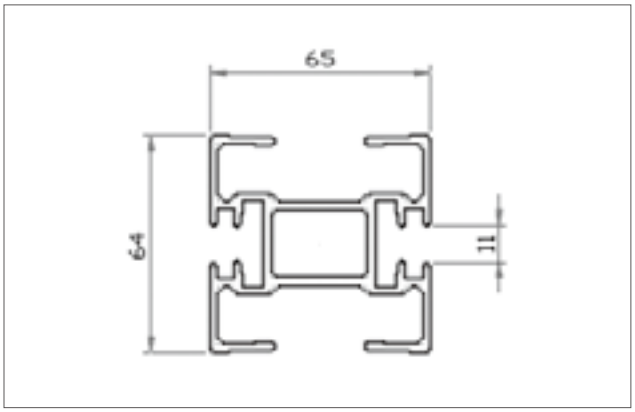
2 Determine the length of slide rail required. Four lengths of slide rail are normally required for each length of track. Do not forget bends, drive units etc.

3 Estimate the required number of plastic screws for the slide rail. Two screws are required for each separate piece of slide rail. The screws must be ordered separately.

4 Determine the number of connecting strips required. Two connecting strips must be ordered separately for each joint between straight beam sections.

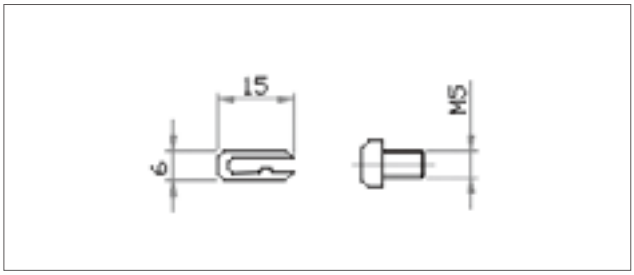
Conveyor beam

Reference	Material	Length(m)
HLCB 3	Aluminum	3
HLCB L		Length to order



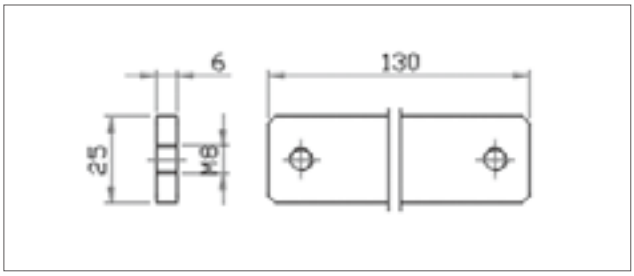
Slide rails

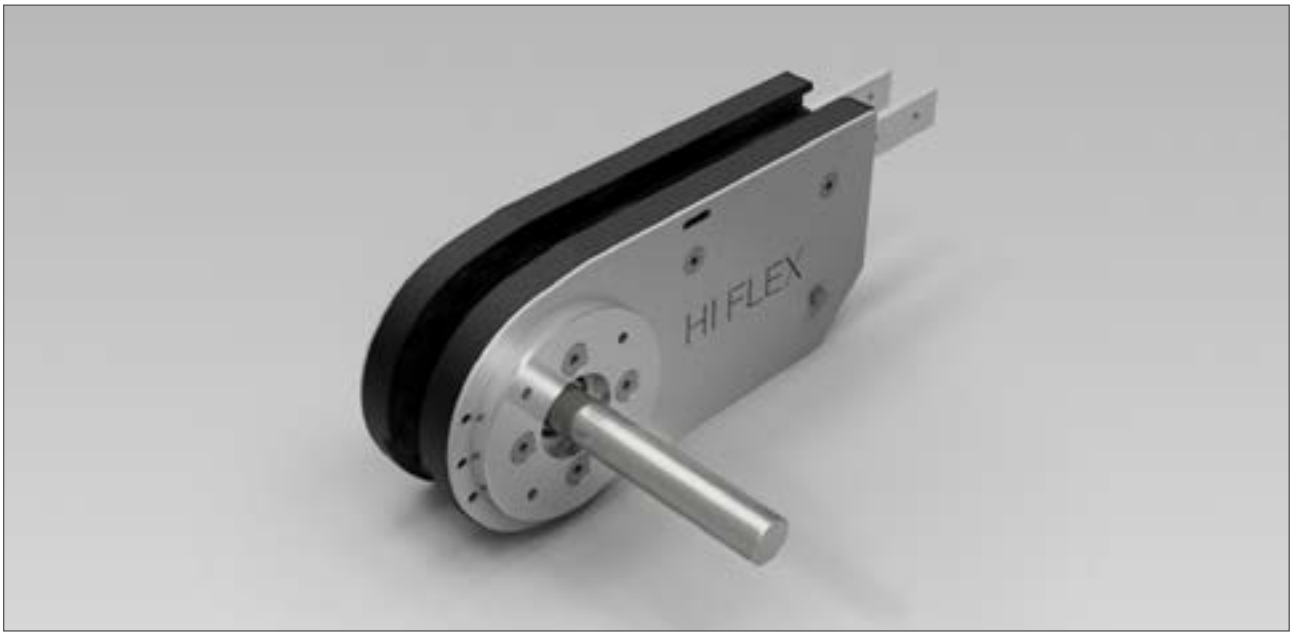
Reference	Material	Length(m)
HSCR 30	HDPE	30
		Length to order
HSAG 5	Plastic bolt	M5



Connecting strip

Reference	Material
HSCJ 6x130	Aluminium





Description

End drive unit

The end drive unit is designed to be positioned at one end of the conveyor.

Two drive configurations are available: suspended motor, transmission on the left or right side.

The drive unit can be connected in parallel with additional drive units so that a common motor can drive several conveyors synchronously.

Other motor alternatives are available.

Right side and left side are available.

Intermediate drive unit

Intermediate drive units are similar to the standard types except that they can be inserted anywhere along the conveyor. This can be an advantage if space is limited at the ends.

Other motor alternatives are available.

Right side and left side are available.

Ordering information

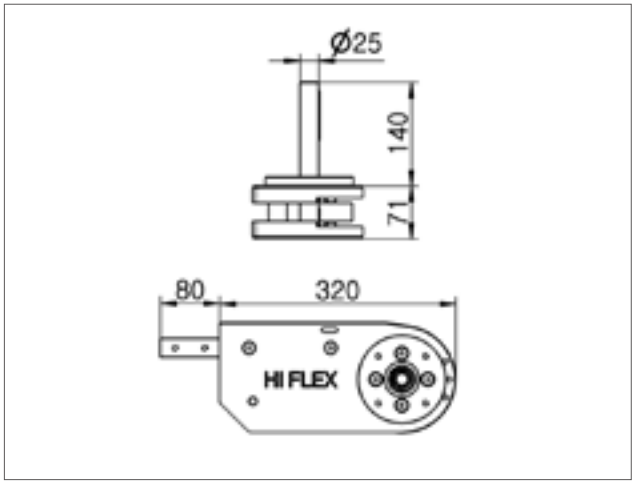
1 Select the most suitable drive unit configuration.

2 Calculate the actual load and compare with the capacity of the drive unit.

Connecting strips are included.

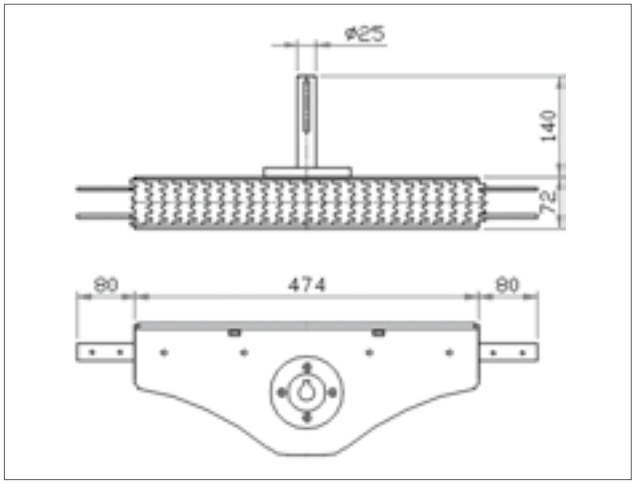
End drive unit

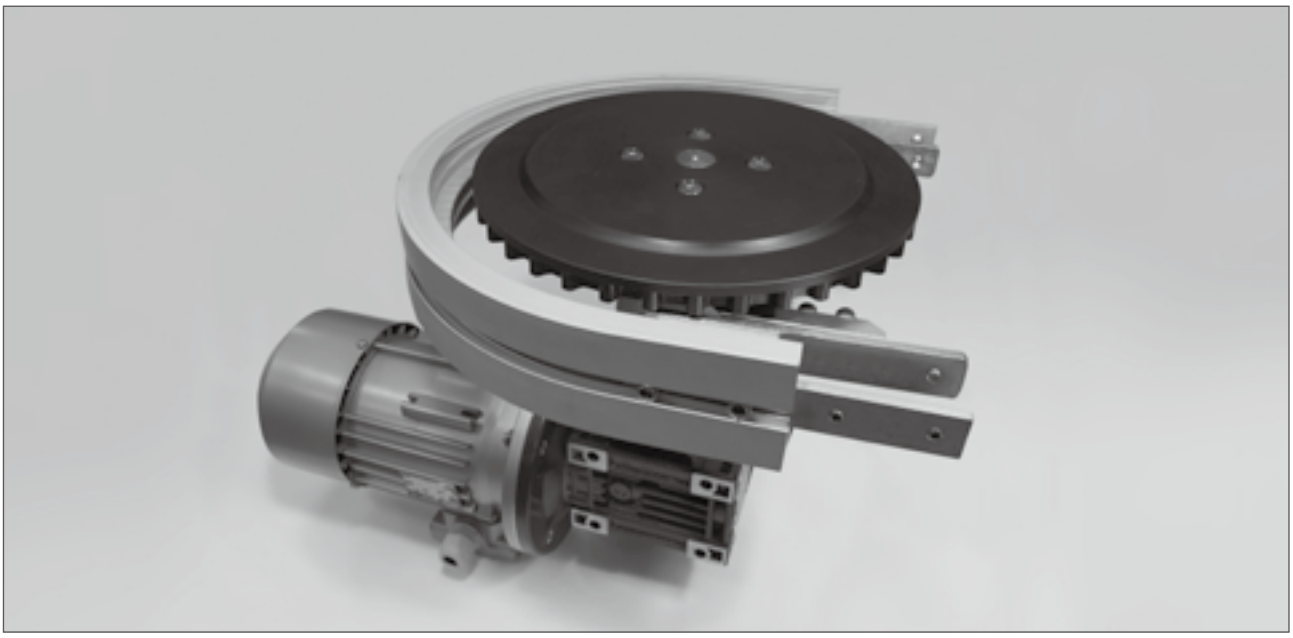
Reference	Material	Motor Position
HLEBR	Aluminum & P.E	Right
HLEBL		Left



Intermediate drive unit

Reference	Material	Motor Position
HLERR	Aluminum & P.E	Right
HLERL		Left





Description

The horizontal bend drive unit is especially suitable for endless conveyors without a return chain. In this type of drive unit, the drive wheel is a horizontal gear wheel which engages the chain on the side.

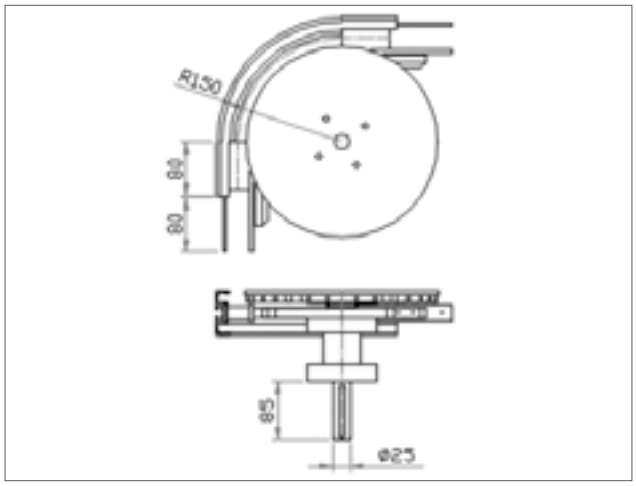
Other motor alternatives are available.

Ordering information

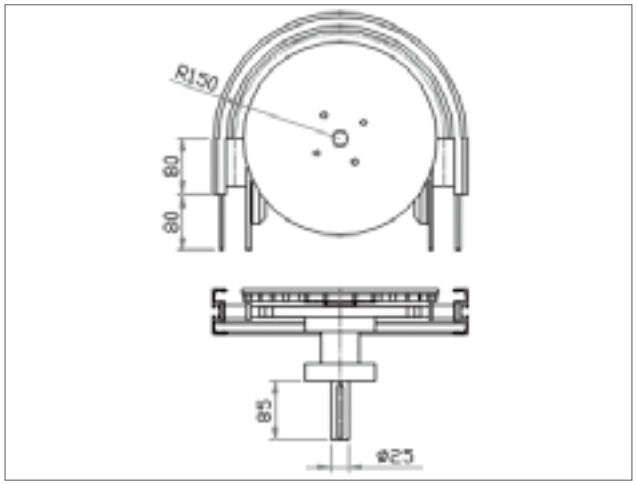
1 Calculate the actual load and compare it with the capacity of the drive unit.

Connecting strips are included.

Horizontal bend drive unit



Reference	Material	Motor Position
HLEW 90R150	Aluminum & P.E	Bottom



Reference	Material	Motor Position
HLEW 180R150	Aluminum & P.E	Bottom

Description

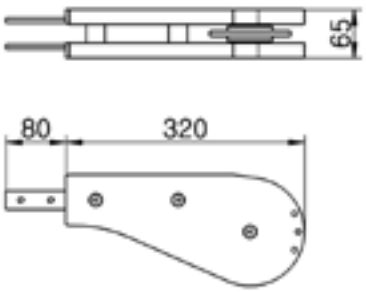
An idler unit contains a free wheel which incorporates ball bearings. The purpose of the idler unit is to change the direction of the chain with a minimum amount of friction.

In an idler unit the chain is guided by flanges to prevent it from disengaging underneath.

Ordering information

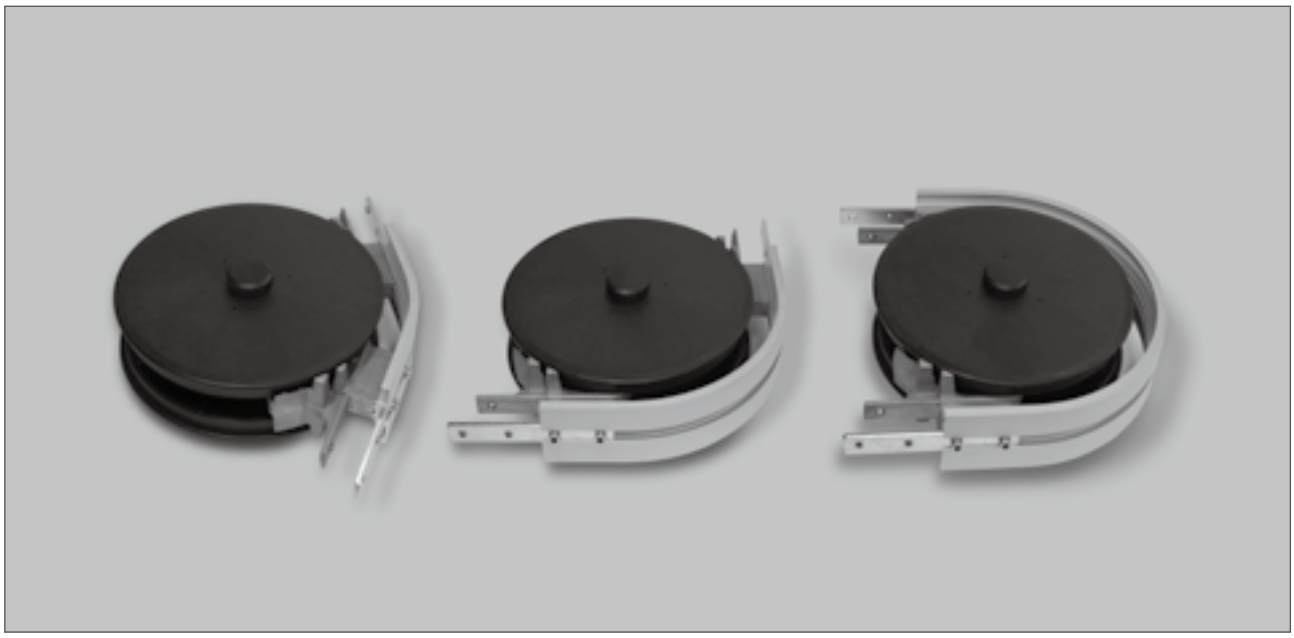
Connecting strips are included.

Idler unit



Reference	Material
HLEJ 320	Aluminium & P.E

BEND - Wheel bend



Description

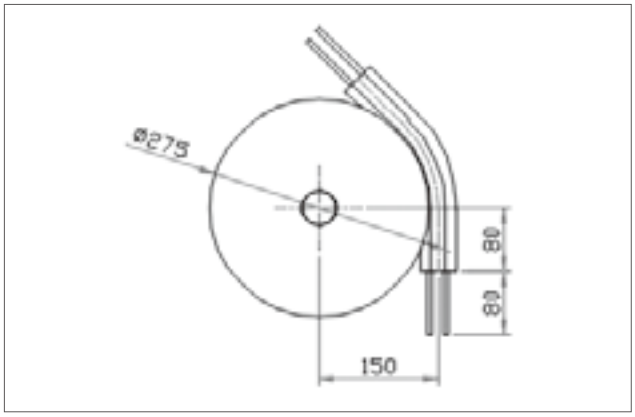
Horizontal wheel bends are used to provide a horizontal change of direction in the conveyor with a minimum amount of friction. The wheel bend is designed to guide the chain in the return track as well as the top track. Each wheel is supported by two sealed deep groove ball bearings for long life and a minimum amount of friction. The wheel bend is availlable in three different versions.

Ordering information

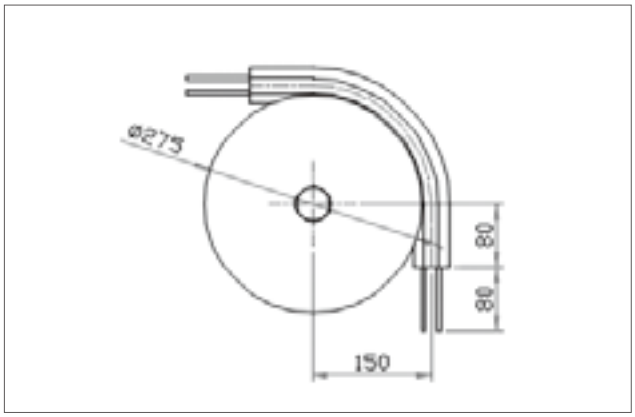
When calculating the required amount of slide rail, note that slide rail need only be installed on the outer bend.

Connecting strips are included.

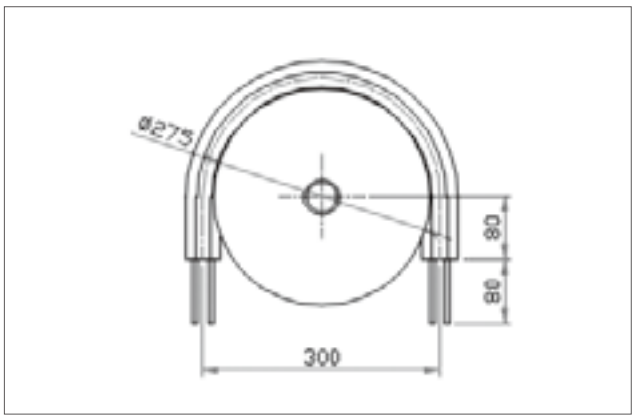
Wheel bend



Reference	Material
HLBH 45R150	Aluminium & P.E

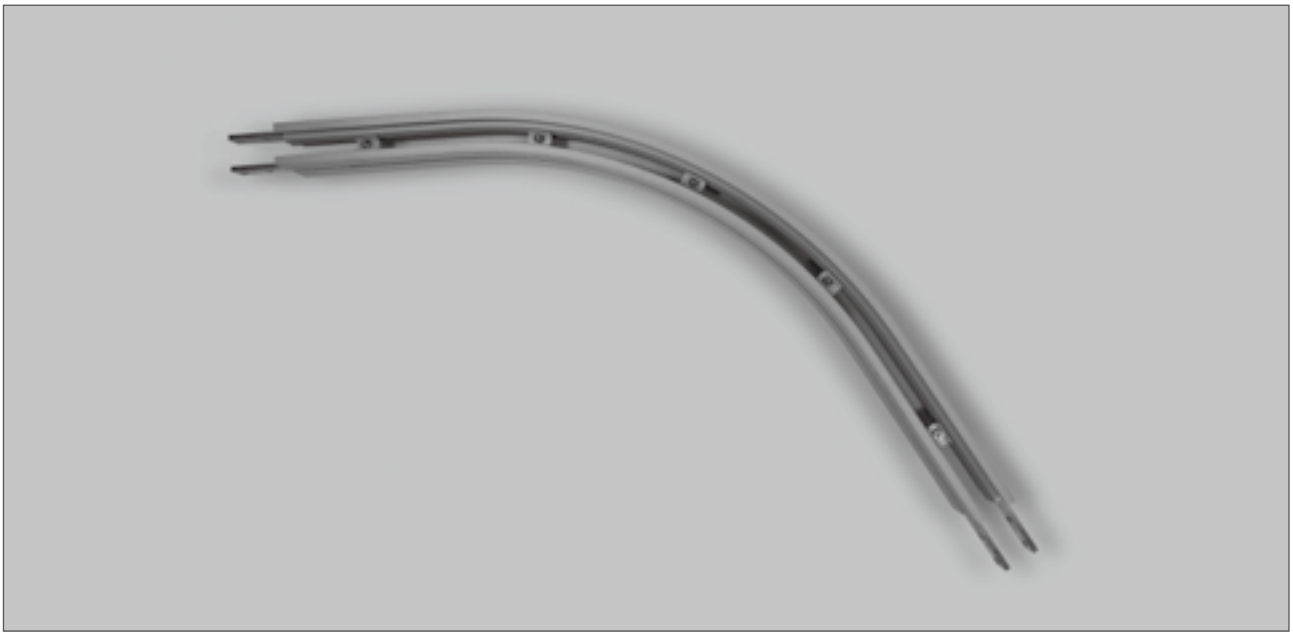


Reference	Material
HLBH 90R150	Aluminium & P.E



Reference	Material
HLBH 180R150	Aluminium & P.E

BEND - Horizontal bend



Description

Horizontal plain bends are used in cases where wheel bends are not suitable. Examples:

- Where space is restricted
- For long products, requiring large-radius turns
- When large-radius bends are desired for other reasons

Important

- Use plain bends only when wheel bends cannot be used
- Always use the largest radius possible

Plain bends increase the tension in the chain and cause higher stress on the slide rail. To ensure a reliable conveyor design with plain bends, always consult your HI FLEX representative for technical data and design assistance.

Technical specifications

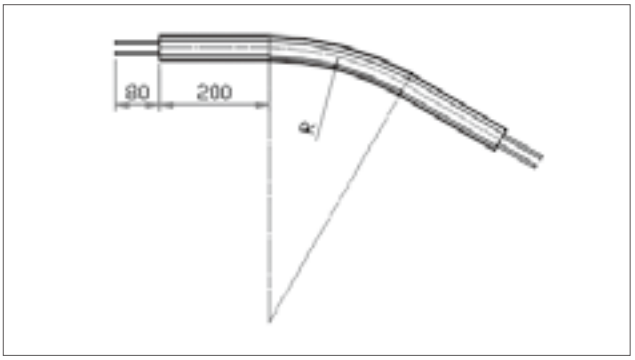
The standard range of plain bends exhibit a manufacturing tolerance of ±2% in radius and ±2% in angle.

Ordering information

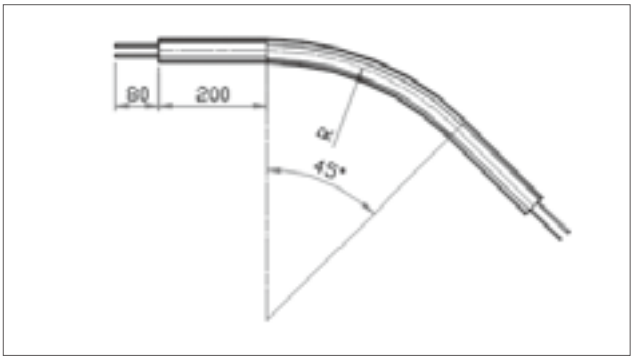
Other angles or redii can be delivered on special order.
Connecting strips are included.

Horizontal bend

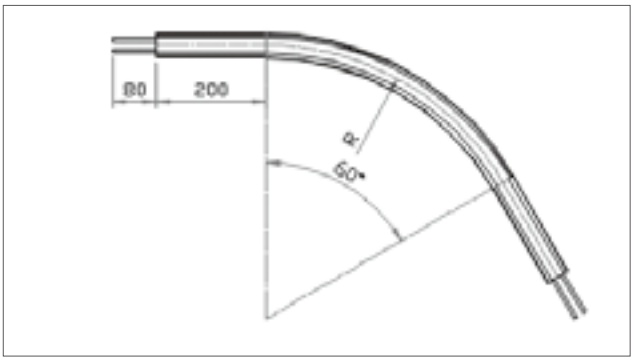
Reference	Material
HLBP 30R500	Aluminum
HLBP 30R700	
HLBP 30R1000	



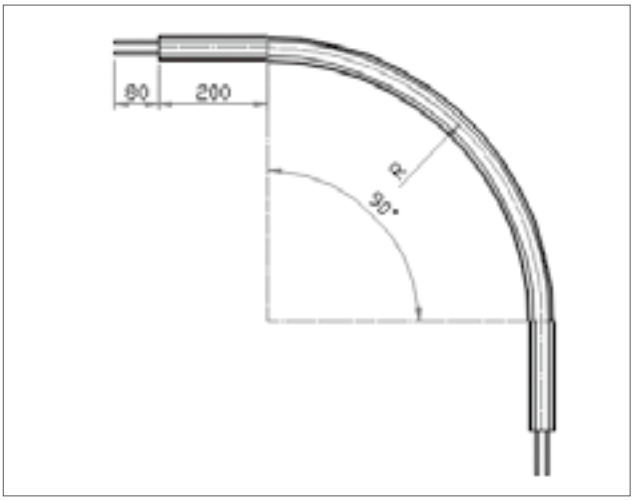
Reference	Material
HLBP 45R500	Aluminum
HLBP 45R700	
HLBP 45R1000	



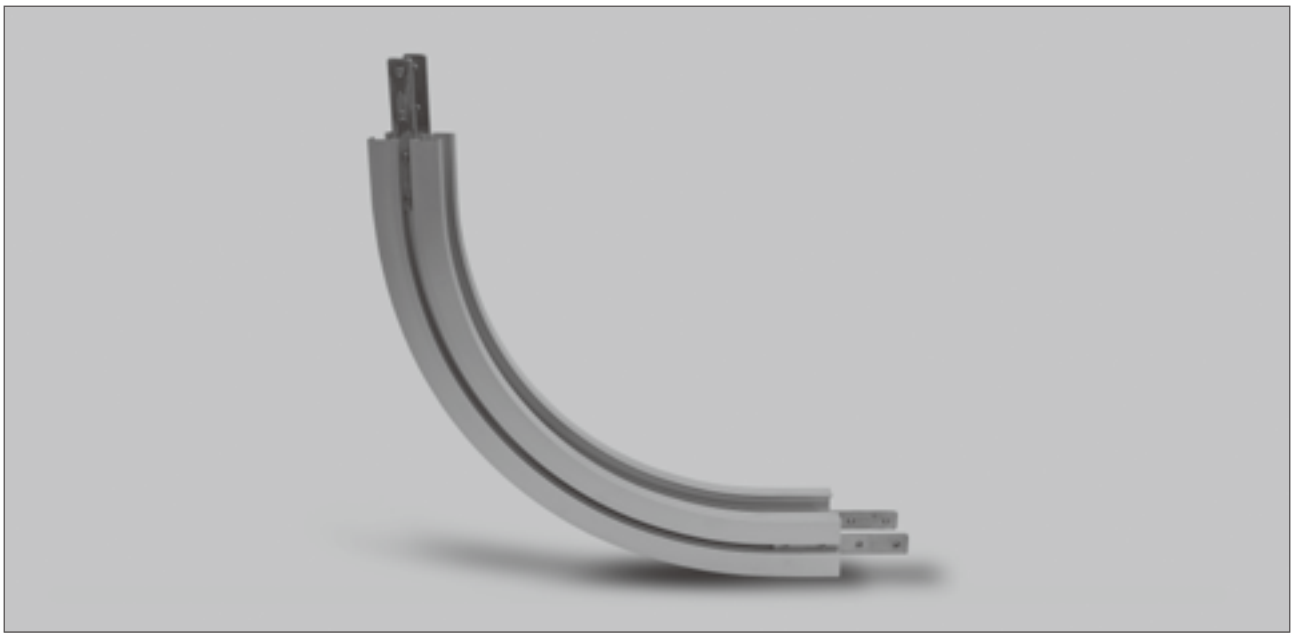
Reference	Material
HLBP 60R500	Aluminum
HLBP 60R700	
HLBP 60R1000	



Reference	Material
HLBP 90R500	Aluminum
HLBP 90R700	
HLBP 90R1000	



BEND - Vertical bend



Description

Vertical bends can be used either as convex or concave bends. They are available for 5 ˚ ,7 ˚ , 30 ˚ , 45 ˚ , 60 ˚ and 90 ˚ change of direction.

For conveyors with an incline exceeding 5 ˚ , a cleated chain is recommended. Otherwise, the products might slip back on the chain. Attachment chain can be used in inclines up to 45 ˚ .

Important

Vertical bends increase the tension in the chain and cause higher stress on the slide rail. Avoid using more than four 90 ˚ vertical bends in one conveyor.

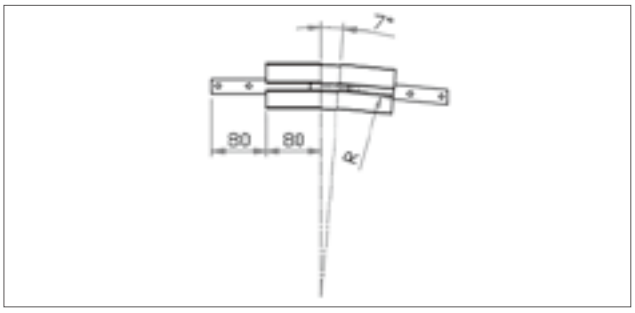
To ensure a reliable conveyor design with vertical bends, always consult your HI FLEX representative for technical data and design assistance.

Ordering information

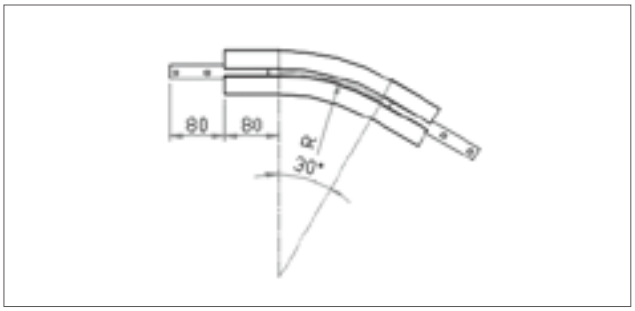
Connecting strips are included.

Vertical bend

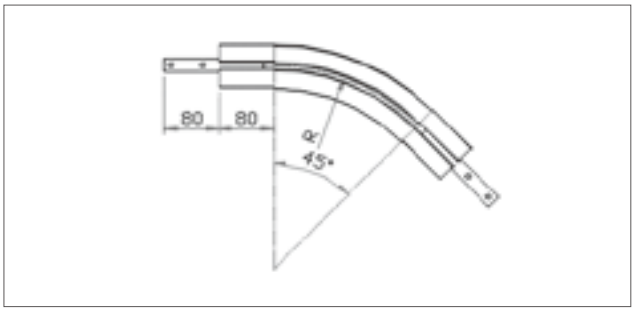
Reference	Material
HLBV 5R300	Aluminum
HLBV 7R300	



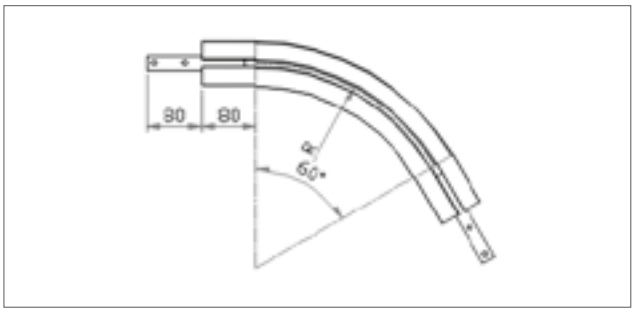
Reference	Material
HLBV 15R300	Aluminum
HLBV 30R300	



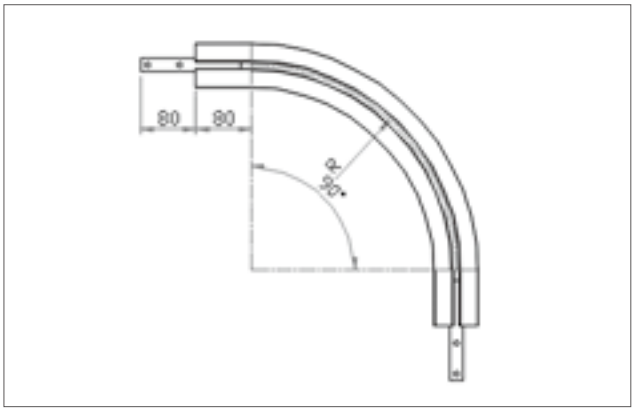
Reference	Material
HLBV 45R500	Aluminum
HLBV 45R1000	



Reference	Material
HLBV 60R500	Aluminum
HLBV 60R1000	

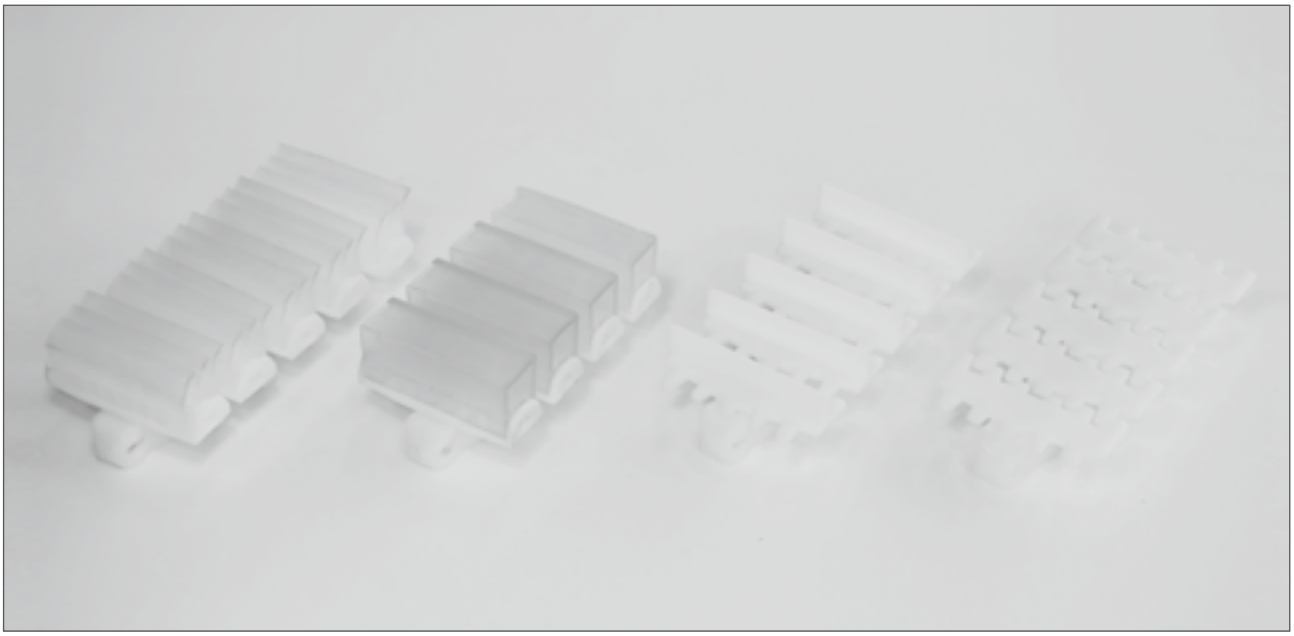


Reference	Material
HLBV 90R500	Aluminum
HLBV 90R1000	



Conveyor System HM

Contents



Description

The conveyor chain consists of plastic links joined together by means of plastic pivots and stainless steel pins. It can be delivered with or without cleats. The chain is also available with composite chain links based on the standard link design, combined with a special chain top. The basic link has the same technical properties as the standard link.

Attachment chain

The attachment chain is required for vertical or steeply inclined conveyor tracks. Cleats are available in different heights and shapes. The cleat type must be selected to suit the shape of the goods conveyed. High cleats are required for long work pieces, otherwise the ends of the work piece would rise over the top of the cleat on vertical(convex) bends.

Pad chain

The pad chain is especially suitable for track configurations with inclines up to 20 °, and where a standard cleated chain is unsuitable. A pad insert moulded into the link increases the pad between goods and chain.

Flexible cleat chain

The flexible cleat chain is intended for high speed vertical transport in vertical wedge conveyors. Suitable products include glass and plastic bottles, soda cans. Two conveyors with flexible cleat chains facing each other form the vertical wedge conveyor.

Roller top chain

The roller top chain is especially suitable for sensitive goods in buffering areas, and for long buffer sections where the accumulating pressure could become high with the standard chain. The rollers on the chain top reduce the friction between the chain and the goods, so that scratch sensitive goods can be conveyed without being damaged.

Other chain types

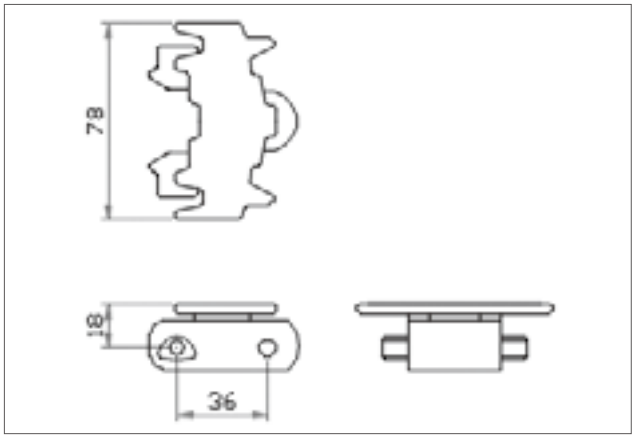
In addition to the standard types, several special-purpose chain links are available on special order. Please contact HI FLEX for additional information.

Ordering information

The chain comes in 5m lengths. Separate links can also be ordered.

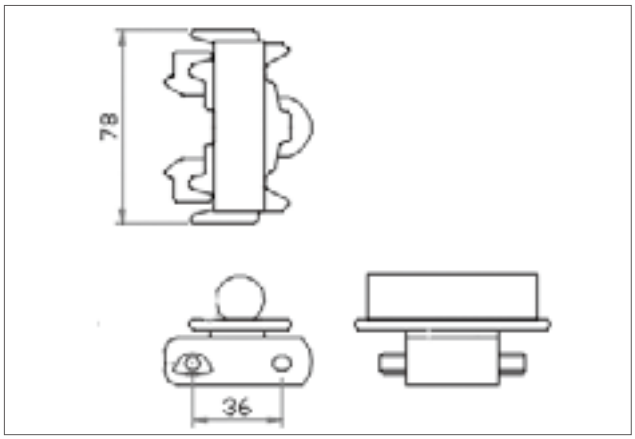
Plain chain

Reference	Material
	Plate / Pin
HMTL78	Acetal / Stainless steel



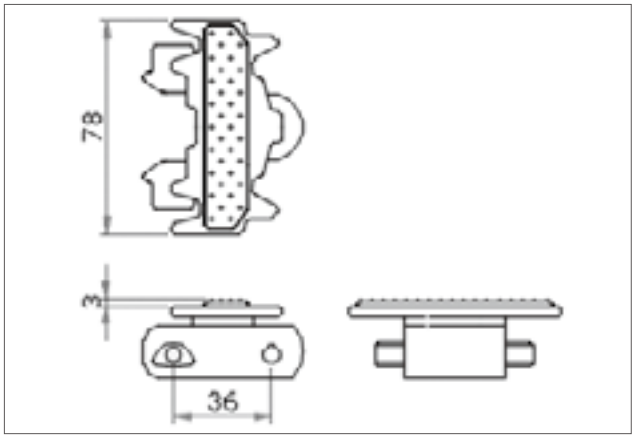
Attachment chain

Reference	Material
	Plate / Pin
HMTL78 x 10H	Acetal / Stainless steel
HMTL78 x 20H	
HMTL78 x 30H	
HMTL78 x 50H	



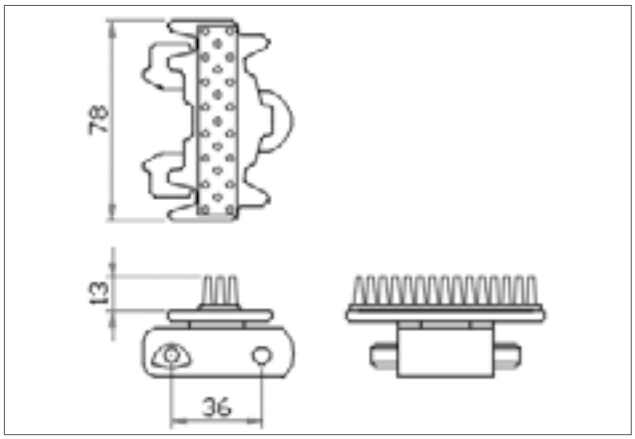
Pad chain

Reference	Material
	Plate / Pin
HMTL78P	Acetal / Stainless steel



Brush chain

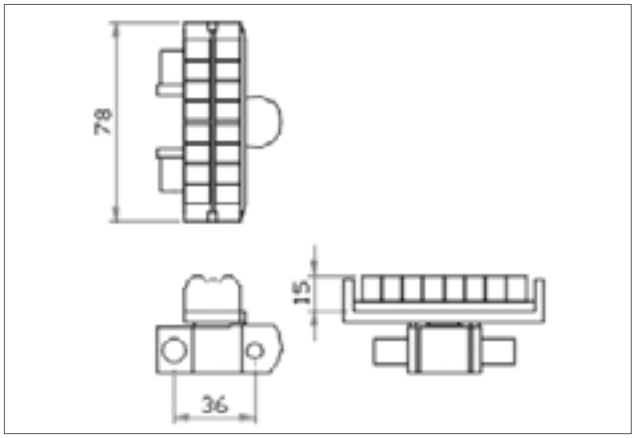
Reference	Material
	Plate / Pin
HMTL78B	Acetal(Rubber) / Stainless steel



Roller top chain

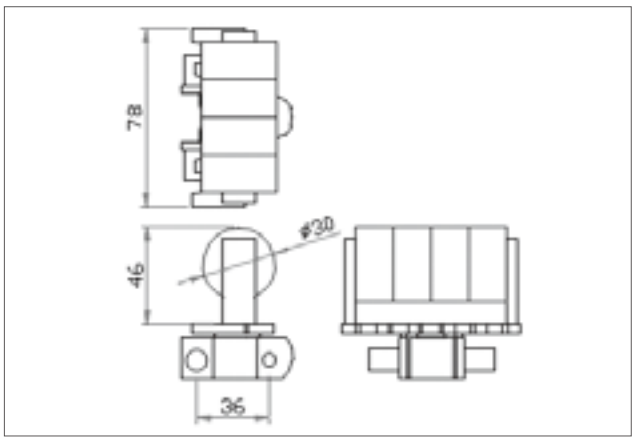
Roller chain

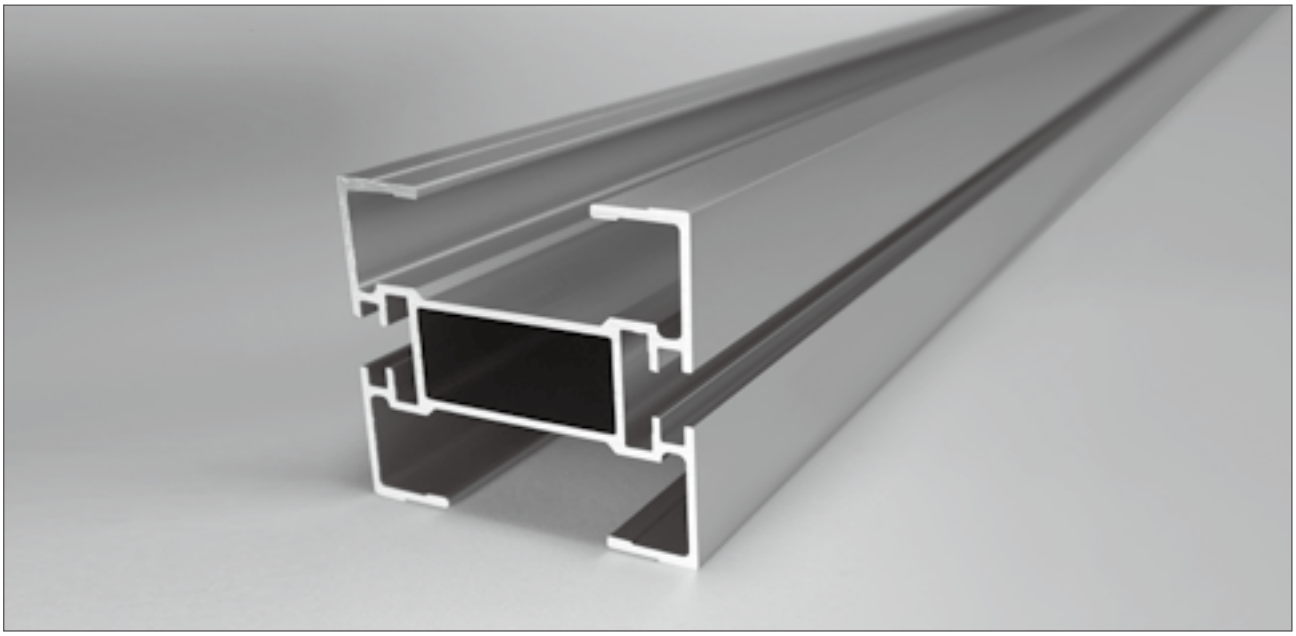
Reference	Material
	Plate / Pin
HMTL78R	Acetal / Stainless steel



Roller creat chain

Reference	Material
	Plate / Pin
HMTL78 x 46R	Acetal / Stainless steel





Description

The chain track for straight conveyor sections is delivered as beam stock to be cut as required.

Plastic screws (HSAG 5) are used to fix the slide rail to the beam.

Ordering information

1 Determine the number of beam lengths required. Beams can be delivered in 3m, and precision cut to any length up to 3m.

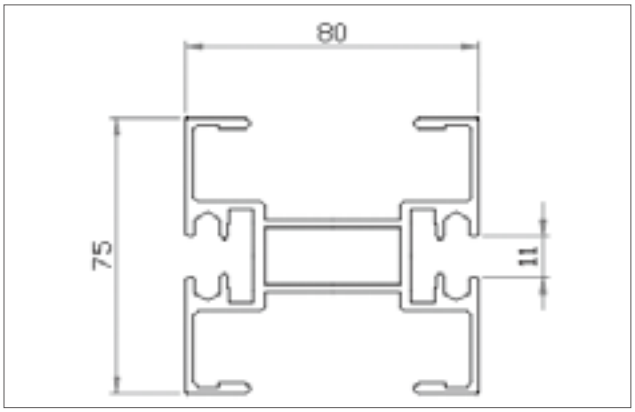
2 Determine the length of slide rail required. Four lengths of slide rail are normally required for each length of track. Do not forget bends, drive units etc.

3 Estimate the required number of plastic screws for the slide rail. Two screws are required for each separate piece of slide rail. The screws must be ordered separately.

4 Determine the number of connecting strips required. Two connecting strips must be ordered separately for each joint between straight beam sections.

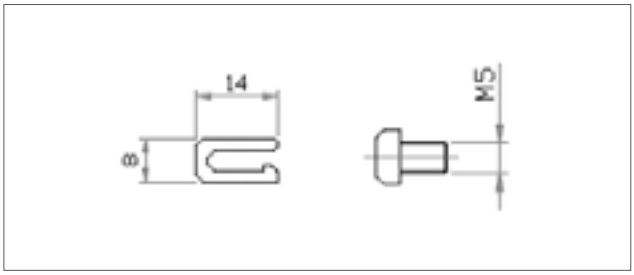
Conveyor beam

Reference	Material	Length(m)
HMCB 3	Aluminum	3
HMCB L		Length to order



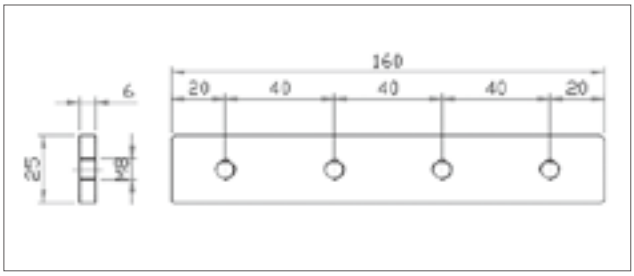
Slide rails

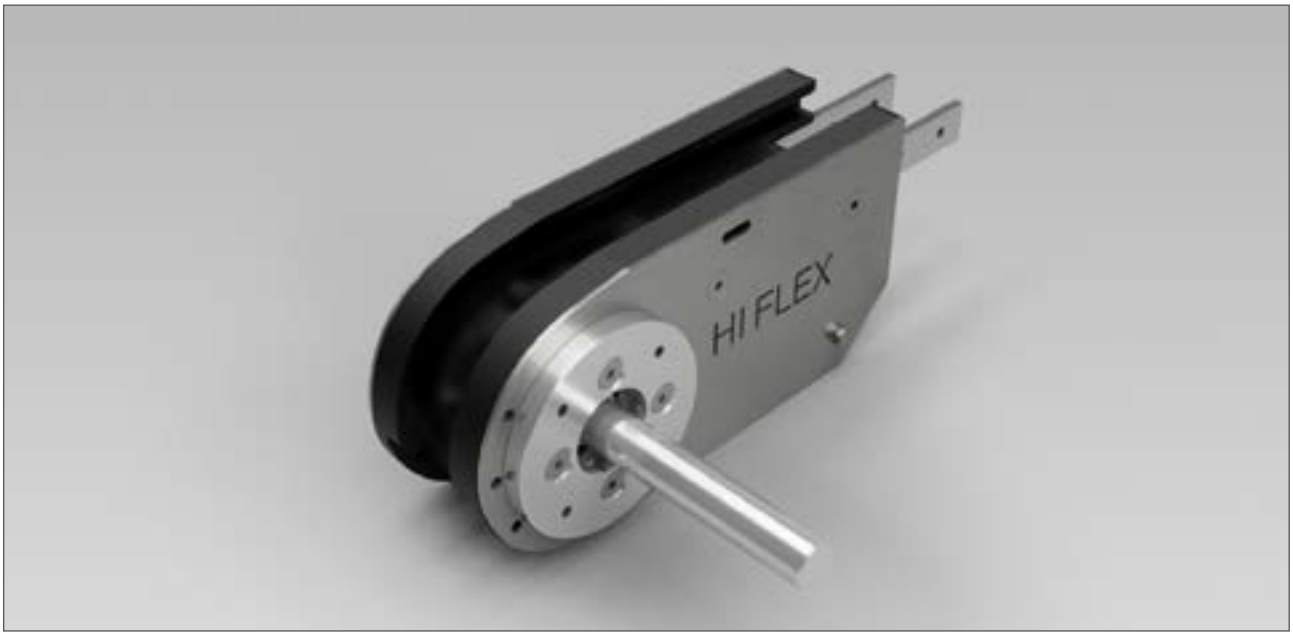
Reference	Material	Length(m)
HSCR 30	HDPE	30
		Length to order
HSAG 5	Plastic bolt	M5



Connecting strip

Reference	Material
HSCJ 6x130	Aluminium





Description

End drive unit

The end drive unit is designed to be positioned at one end of the conveyor.

Two drive configurations are available: suspended motor, transmission on the left or right side.

The drive unit can be connected in parallel with additional drive units so that a common motor can drive several conveyors synchronously.

Other motor alternatives are available.

Right side and left side are available.

Intermediate drive unit

Intermediate drive units are similar to the standard types except that they can be inserted anywhere along the conveyor. This can be an advantage if space is limited at the ends.

Other motor alternatives are available.

Right side and left side are available.

Ordering information

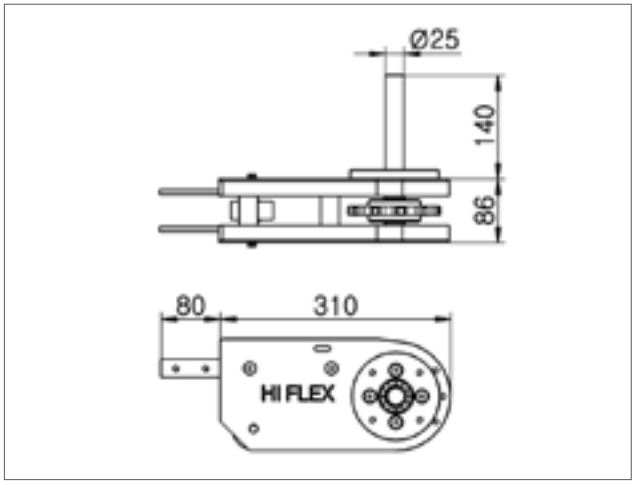
1 Select the most suitable drive unit configuration.

2 Calculate the actual load and compare with the capacity of the drive unit.

Connecting strips are included.

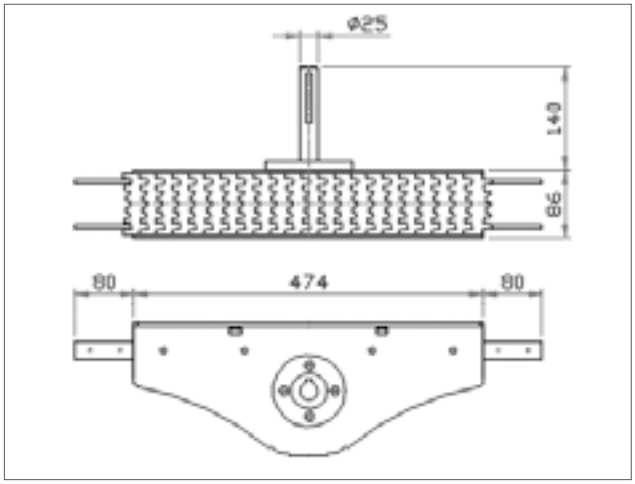
End drive unit

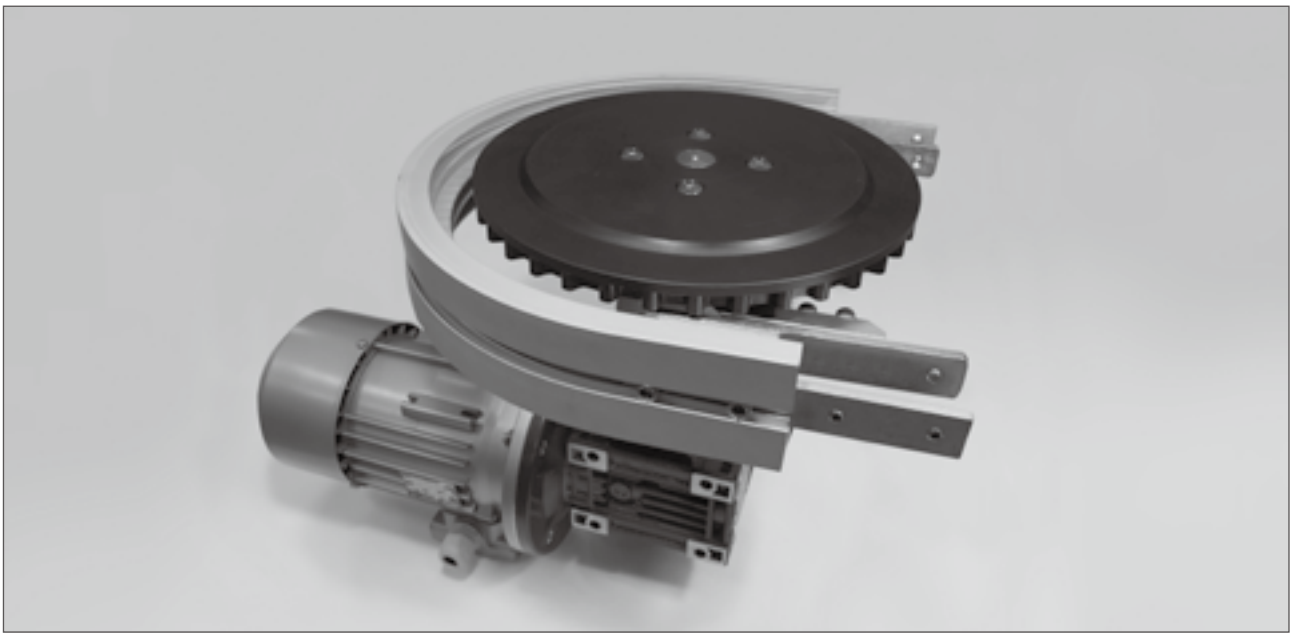
Reference	Material	Motor Position
HMEBR	Aluminum & P.E	Right
HMEBL		Left



Intermediate drive unit

Reference	Material	Motor Position
HMERR	Aluminum & P.E	Right
HMERL		Left





Description

The horizontal bend drive unit is especially suitable for endless conveyors without a return chain. In this type of drive unit, the drive wheel is a horizontal gear wheel which engages the chain on the side.

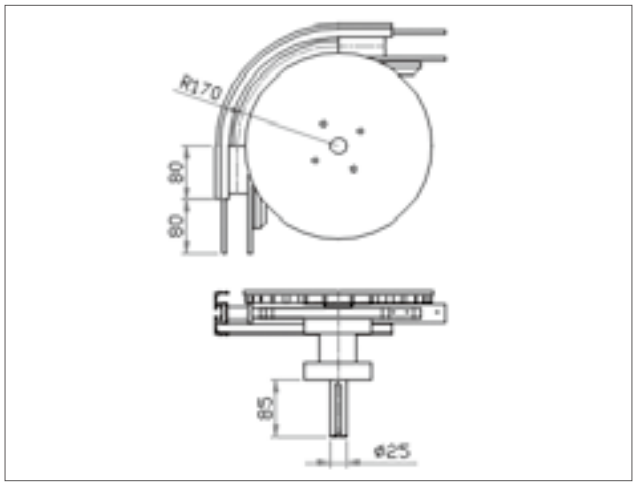
Other motor alternatives are available.

Ordering information

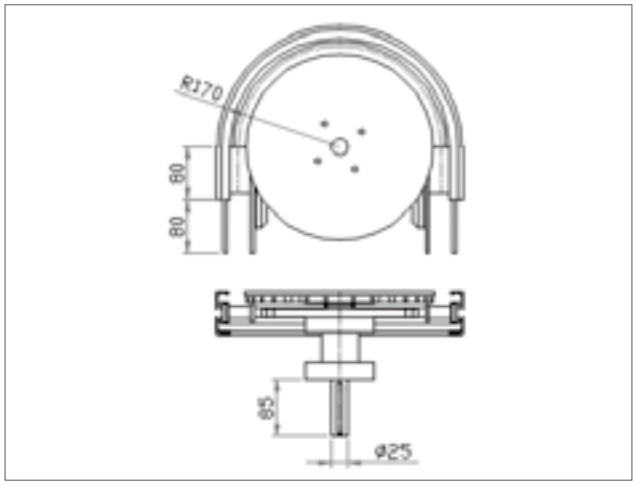
1 Calculate the actual load and compare it with the capacity of the drive unit.

Connecting strips are included.

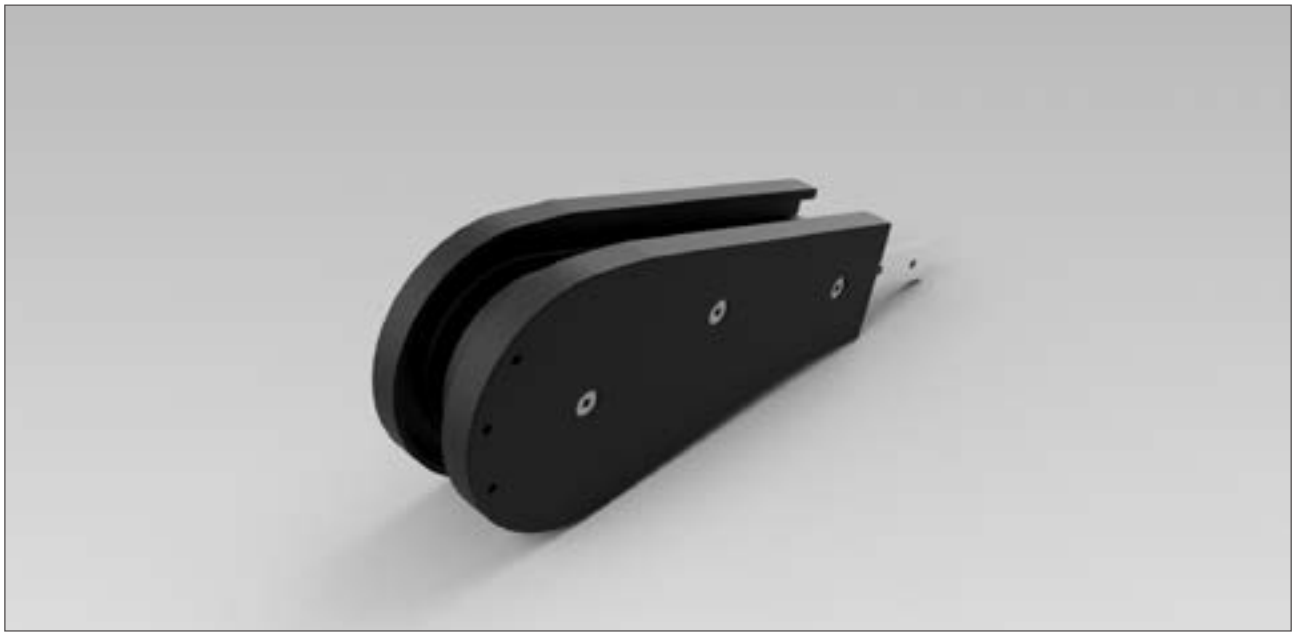
Horizontal bend drive unit



Reference	Material	Motor Position
HMEW 90R160	Aluminum & P.E	Bottom



Reference	Material	Motor Position
HMEW 180R160	Aluminum & P.E	Bottom



Description

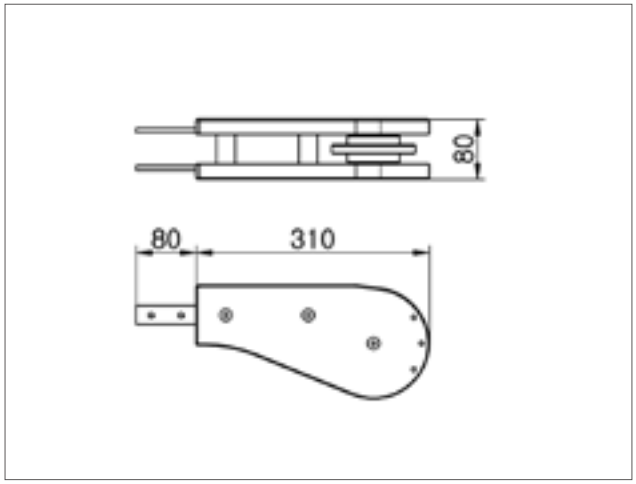
An idler unit contains a free wheel which incorporates ball bearings. The purpose of the idler unit is to change the direction of the chain with a minimum amount of friction.

In an idler unit the chain is guided by flanges to prevent it from disengaging underneath.

Ordering information

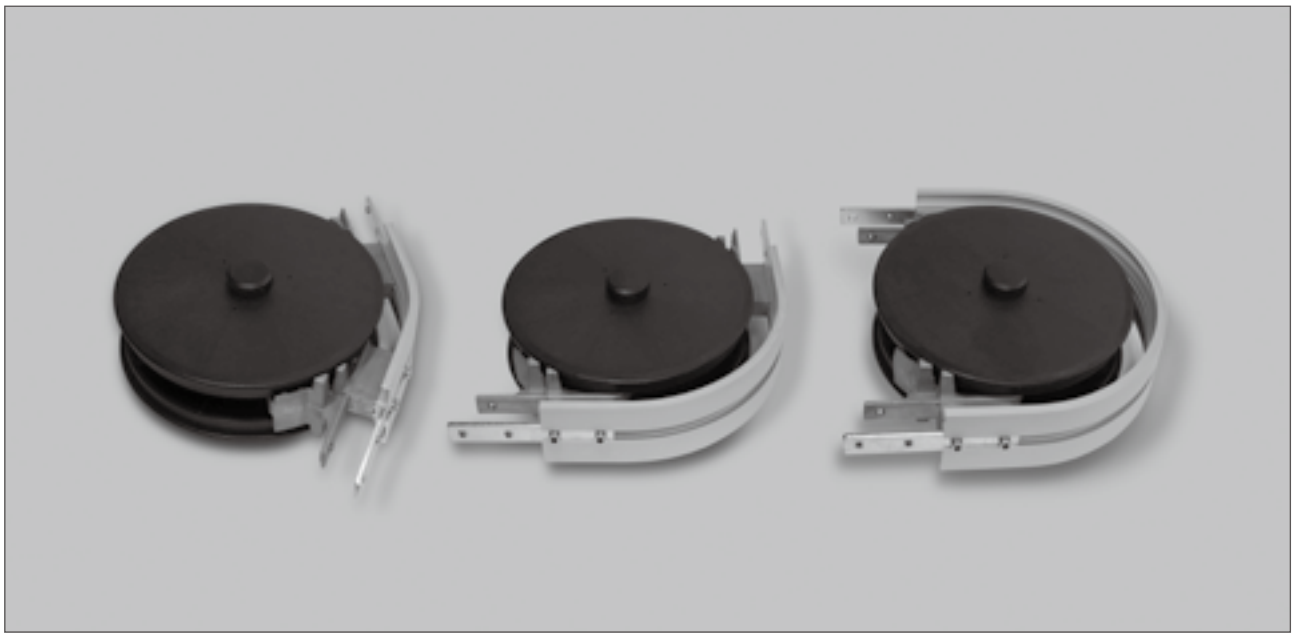
Connecting strips are included.

Idler unit



Reference	Material
HMEJ 320	Aluminium & P.E

BEND - Wheel bend



Description

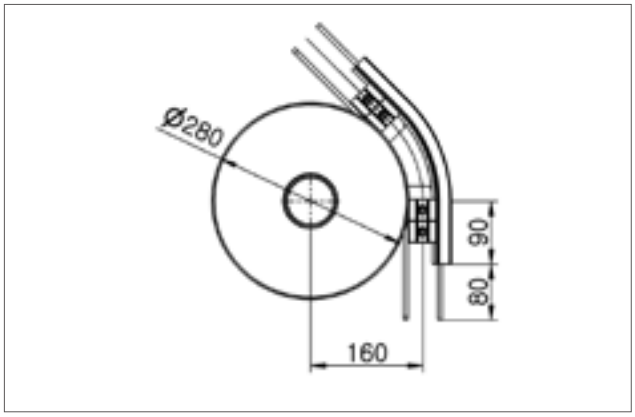
Horizontal wheel bends are used to provide a horizontal change of direction in the conveyor with a minimum amount of friction. The wheel bend is designed to guide the chain in the return track as well as the top track. Each wheel is supported by two sealed deep groove ball bearings for long life and a minimum amount of friction. The wheel bend is availlable in three different versions.

Ordering information

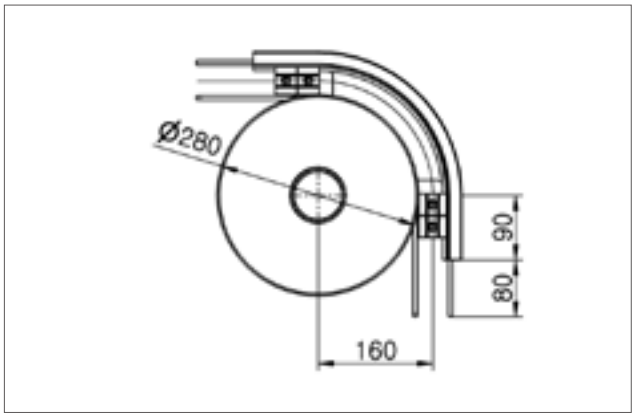
When calculating the required amount of slide rail, note that slide rail need only be installed on the outer bend.

Connecting strips are included.

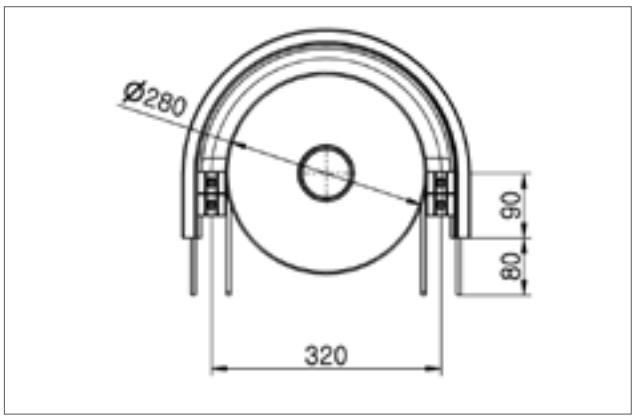
Wheel bend



Reference	Material
HMBH 45R170	Aluminium & P.E

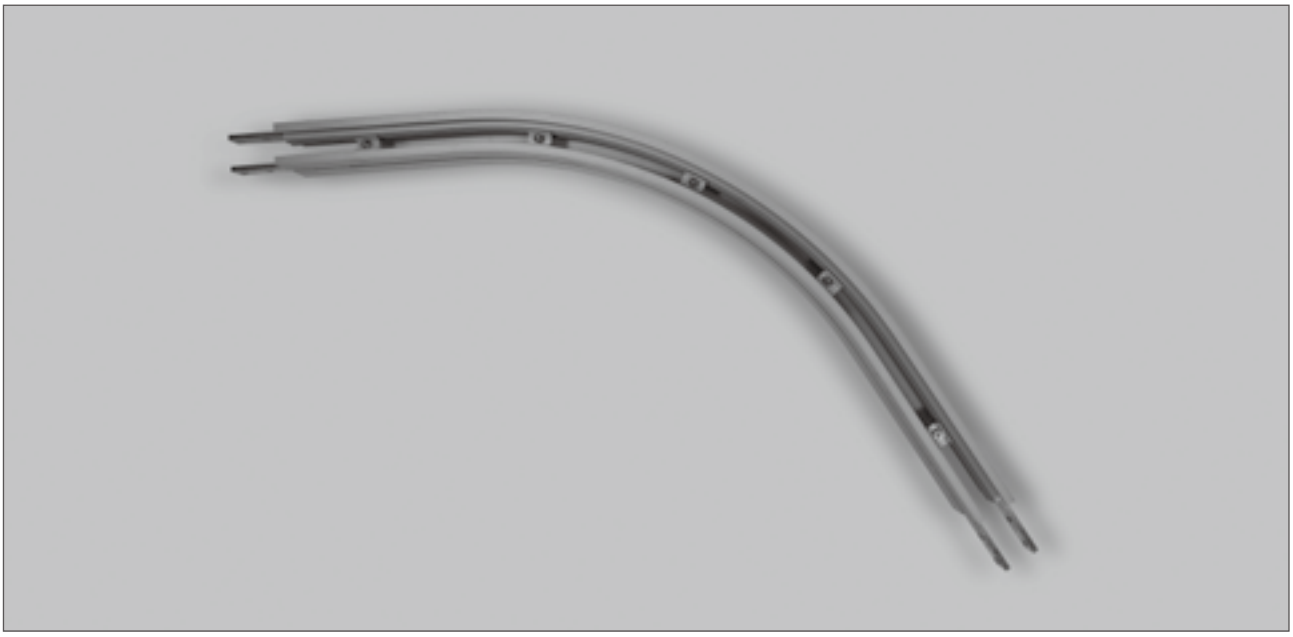


Reference	Material
HMBH 90R170	Aluminium & P.E



Reference	Material
HMBH 180R170	Aluminium & P.E

BEND - Horizontal bend



Description

Horizontal plain bends are used in cases where wheel bends are not suitable. Examples:

- Where space is restricted
- For long products, requiring large-radius turns
- When large-radius bends are desired for other reasons

Important

- Use plain bends only when wheel bends cannot be used
- Always use the largest radius possible

Plain bends increase the tension in the chain and cause higher stress on the slide rail. To ensure a reliable conveyor design with plain bends, always consult your HI FLEX representative for technical data and design assistance.

Technical specifications

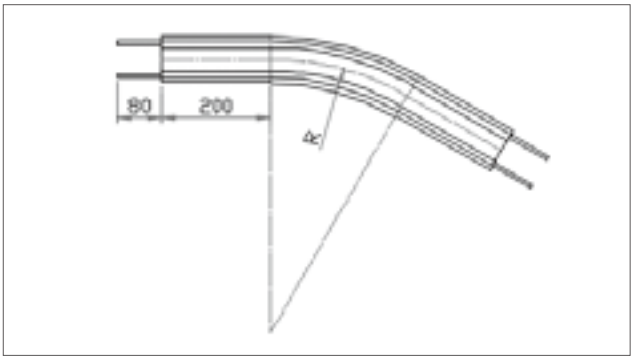
The standard range of plain bends exhibit a manufacturing tolerance of ±2% in radius and ±2% in angle.

Ordering information

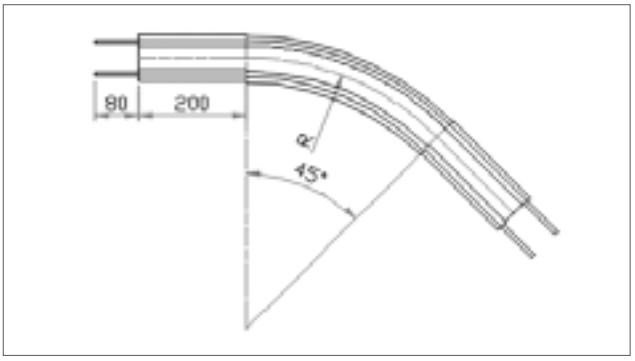
Other angles or redii can be delivered on special order.
Connecting strips are included.

Horizontal bend

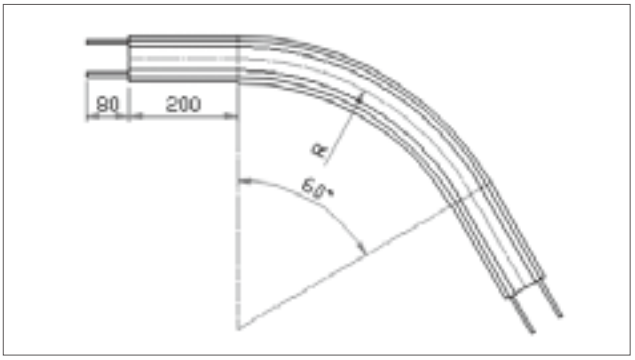
Reference	Material
HMBP 30R500	Aluminum
HMBP 30R700	
HMBP 30R1000	



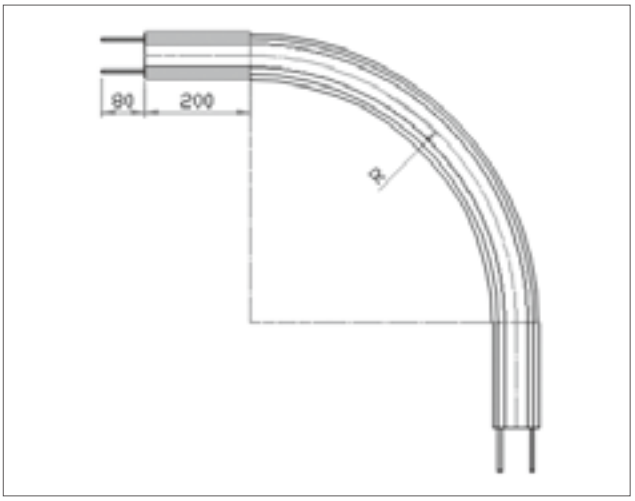
Reference	Material
HMBP 45R500	Aluminum
HMBP 45R700	
HMBP 45R1000	

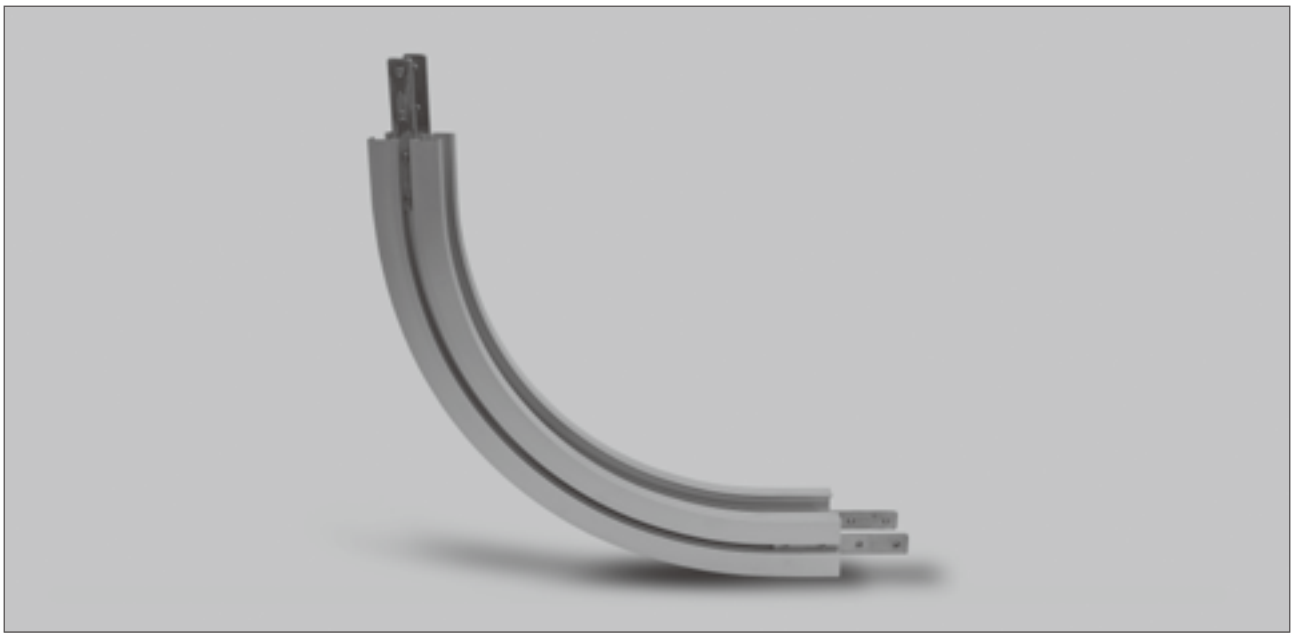


Reference	Material
HMBP 60R500	Aluminum
HMBP 60R700	
HMBP 60R1000	



Reference	Material
HMBP 90R500	Aluminum
HMBP 90R700	
HMBP 90R1000	





Description

Vertical bends can be used either as convex or concave bends. They are available for 5 ˚ ,7 ˚ , 30 ˚ , 45 ˚ , 60 ˚ and 90 ˚ change of direction.

For conveyors with an incline exceeding 5 ˚ , a cleated chain is recommended. Otherwise, the products might slip back on the chain. Attachment chain can be used in inclines up to 45 ˚ .

Important

Vertical bends increase the tension in the chain and cause higher stress on the slide rail. Avoid using more than four 90 ˚ vertical bends in one conveyor.

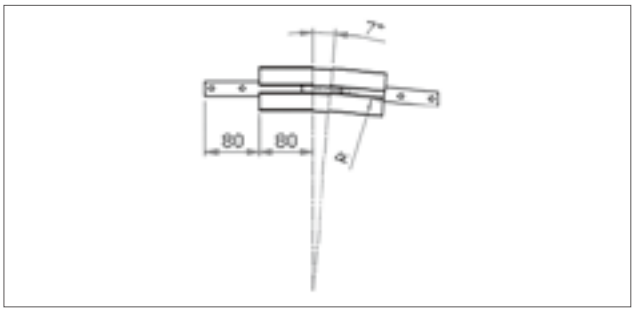
To ensure a reliable conveyor design with vertical bends, always consult your HI FLEX representative for technical data and design assistance.

Ordering information

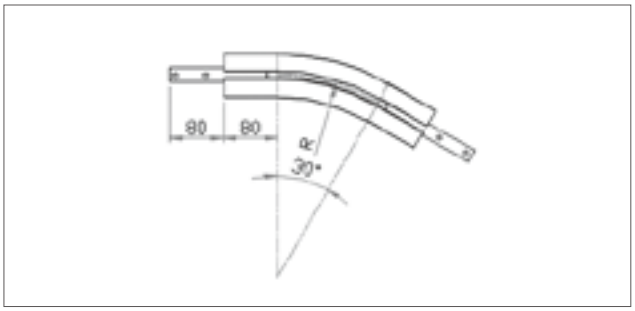
Connecting strips are included.

Vertical bend

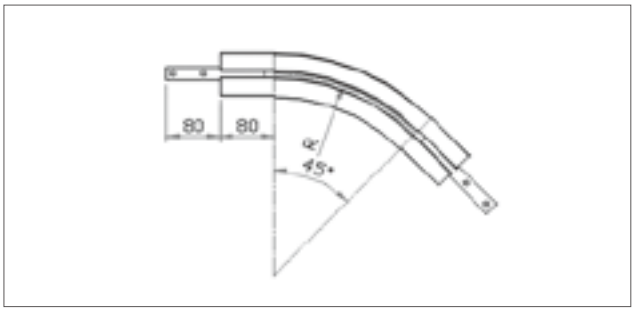
Reference	Material
HMBV 5R400	Aluminum
HMBV 7R400	



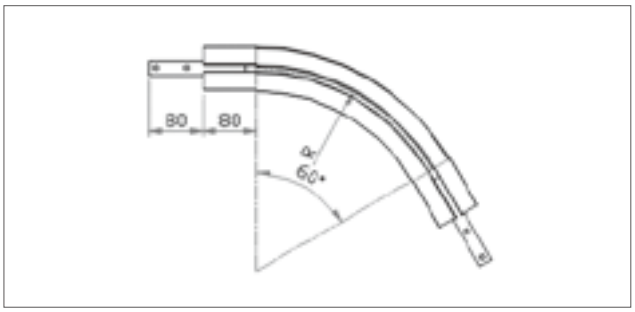
Reference	Material
HMBV 15R400	Aluminum
HMBV 30R400	



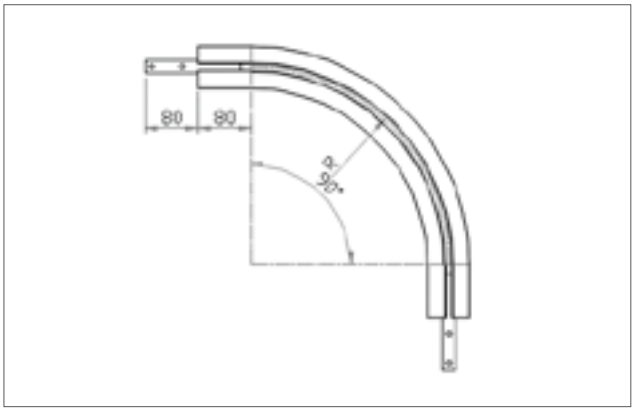
Reference	Material
HMBV 45R500	Aluminum
HMBV 45R1000	



Reference	Material
HMBV 60R500	Aluminum
HMBV 60R1000	



Reference	Material
HMBV 90R500	Aluminum
HMBV 90R1000	



Conveyor System HW

Contents

Description

The conveyor chain consists of plastic links joined together by means of plastic pivots and stainless steel pins. It can be delivered with or with out cleats. The chain is also available with composite chain links based on the standard link design, combined with a special chain top. The basic link has the same technical properties as the standard link.

Pad chain

The pad chain is especially suitable for track configurations with inclines up to 20 ° , and where a standard cleated chain is unsuitable. A pad insert moulded into the link increases the pad between goods and chain.

Flexible cleat chain

The flexible cleat chain is intended for high speed vertical transport in vertical wedge conveyors. Suitable products include glass and plastic bottles, soda cans. Two conveyors with flexible cleat chains facing each other form the vertical wedge conveyor.

Other chain types

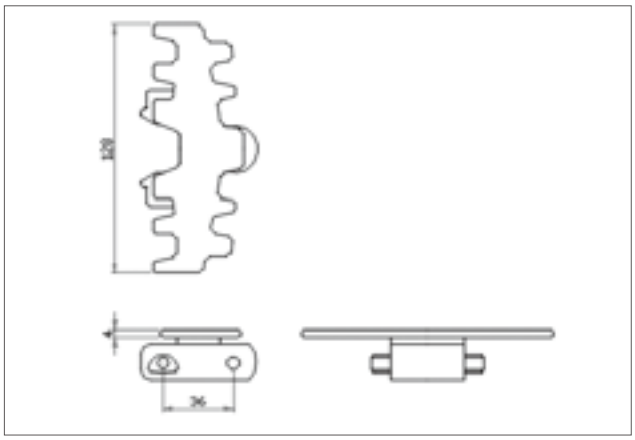
In addition to the standard types, several special-purpose chain links are available on special order. Please contact HI FLEX for additional information.

Ordering information

The chain comes in 5m lengths. Separate links can also be ordered.

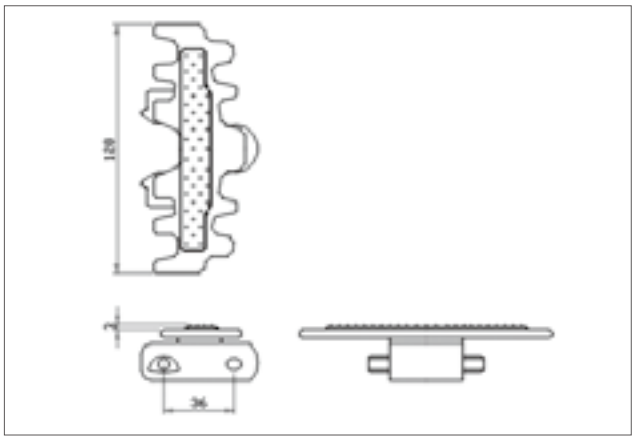
Plain chain

Reference	Material
	Plate / Pin
HWTL128	Acetal / Stainless steel



Pad chain

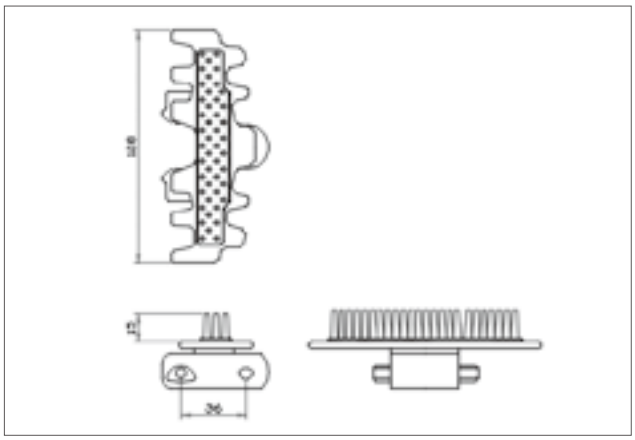
Reference	Material
	Plate / Pin
HWTL128P	Acetal(Rubber) / Stainless steel

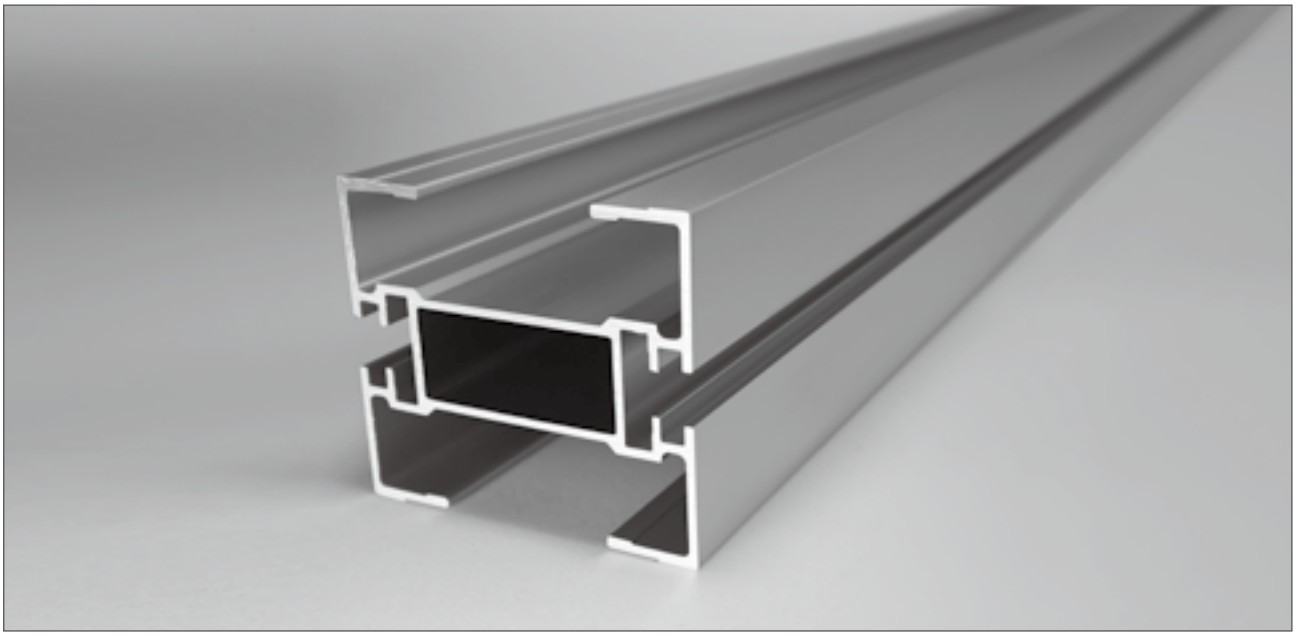


Flexible cleat chain

Brush chain

Reference	Material
	Plate / Pin
HWTL128B	Acetal(Rubber) / Stainless steel





Description

The chain track for straight conveyor sections is delivered as beam stock to be cut as required.

Plastic screws (HSAG 5) are used to fix the slide rail to the beam.

Ordering information

1 Determine the number of beam lengths required. Beams can be delivered in 3m, and precision cut to any length up to 3m.

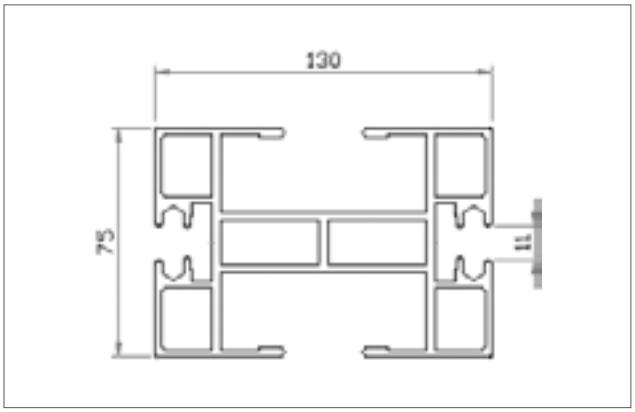
2 Determine the length of slide rail required. Four lengths of slide rail are normally required for each length of track. Do not forget bends, drive units etc.

3 Estimate the required number of plastic screws for the slide rail. Two screws are required for each separate piece of slide rail. The screws must be ordered separately.

4 Determine the number of connecting strips required. Two connecting strips must be ordered separately for each joint between straight beam sections.

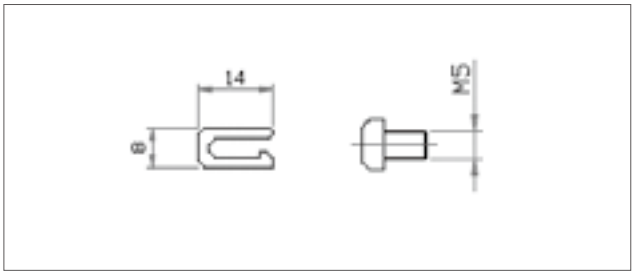
Conveyor beam

Reference	Material	Length(m)
HWCB 3	Aluminum	3
HWCB L		Length to order



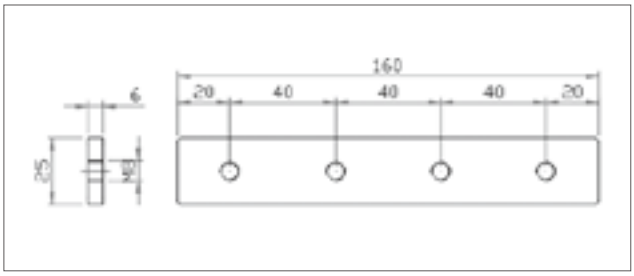
Slide rails

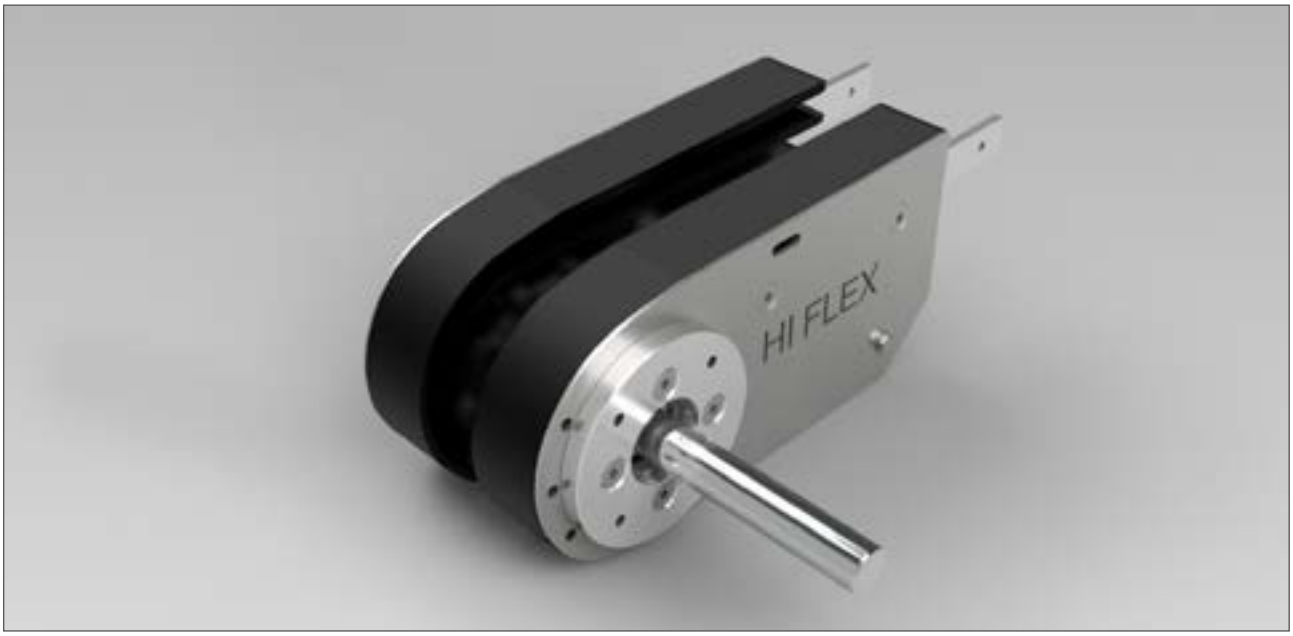
Reference	Material	Length(m)
HSCR 30	HDPE	30
		Length to order
HSAG 5	Plastic bolt	M5



Connecting strip

Reference	Material
HSCJ 6x130	Aluminium





Description

End drive unit

The end drive unit is designed to be positioned at one end of the conveyor.

Two drive configurations are available: suspended motor, transmission on the left or right side.

The drive unit can be connected in parallel with additional drive units so that a common motor can drive several conveyors synchronously.

Other motor alternatives are available.

Right side and left side are available.

Intermediate drive unit

Intermediate drive units are similar to the standard types except that they can be inserted anywhere along the conveyor. This can be an advantage if space is limited at the ends.

Other motor alternatives are available.

Right side and left side are available.

Ordering information

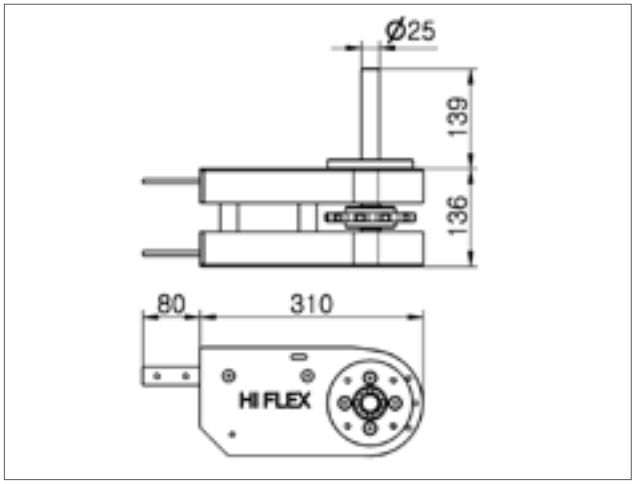
1 Select the most suitable drive unit configuration.

2 Calculate the actual load and compare with the capacity of the drive unit.

Connecting strips are included.

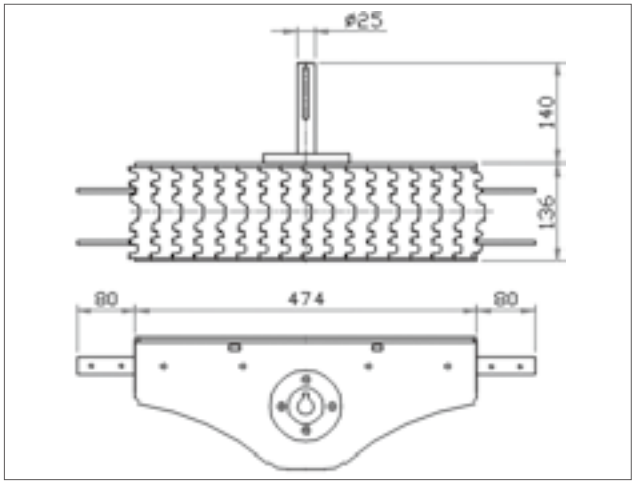
End drive unit

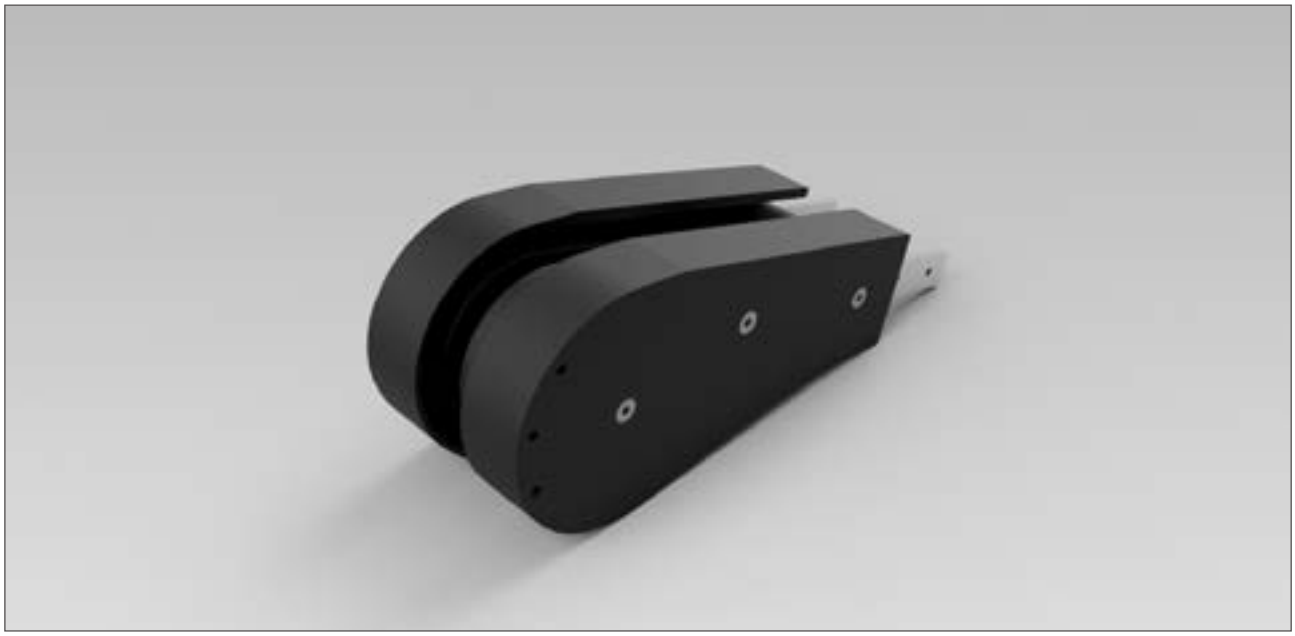
Reference	Material	Motor Position
HWEBR	Aluminum & P.E	Right
HWEBL		Left



Intermediate drive unit

Reference	Material	Motor Position
HWERR	Aluminum & P.E	Right
HWERL		Left





Description

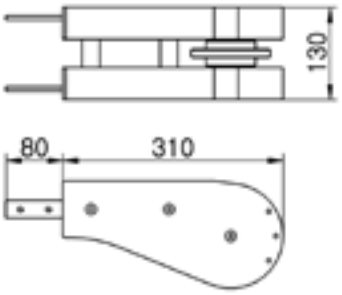
An idler unit contains a free wheel which incorporates ball bearings. The purpose of the idler unit is to change the direction of the chain with a minimum amount of friction.

In an idler unit the chain is guided by flanges to prevent it from disengaging underneath.

Ordering information

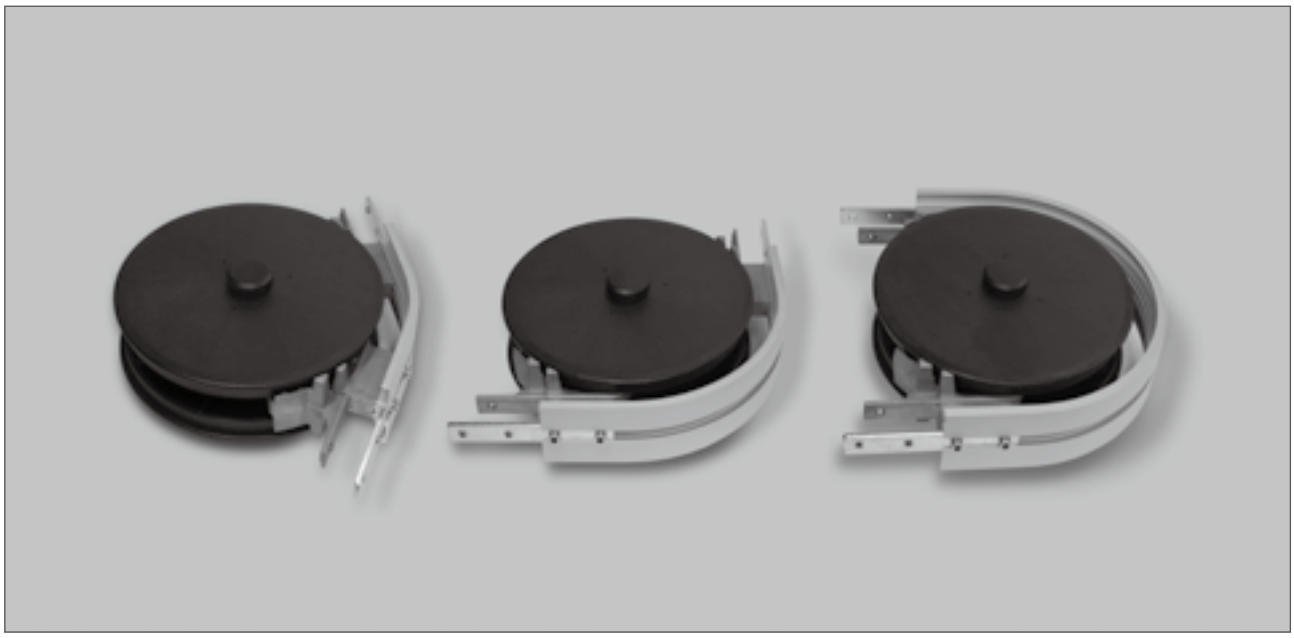
Connecting strips are included.

Idler unit



Reference	Material
HWEJ315	Aluminium & P.E

BEND - Wheel bend



Description

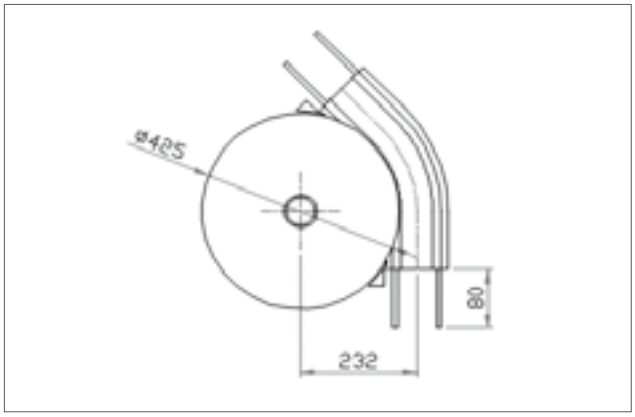
Horizontal wheel bends are used to provide a horizontal change of direction in the conveyor with a minimum amount of friction. The wheel bend is designed to guide the chain in the return track as well as the top track. Each wheel is supported by two sealed deep groove ball bearings for long life and a minimum amount of friction. The wheel bend is availlable in three different versions.

Ordering information

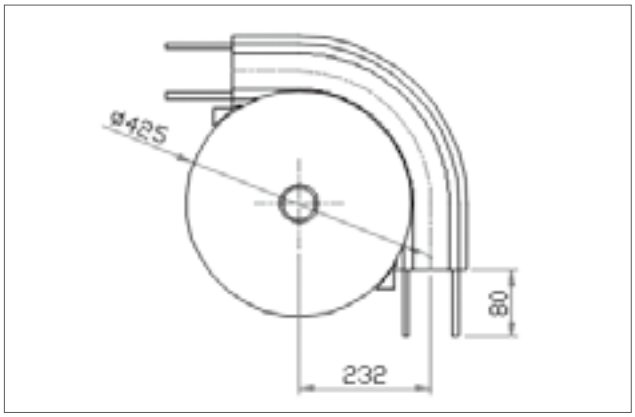
When calculating the required amount of slide rail, note that slide rail need only be installed on the outer bend.

Connecting strips are included.

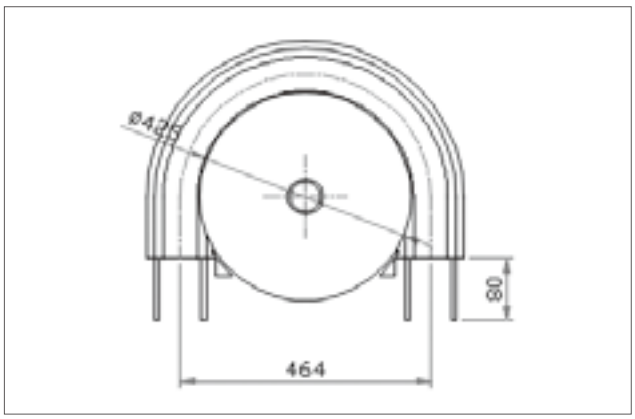
Wheel bend



Reference	Material
HWBH 45R232	Aluminium & P.E

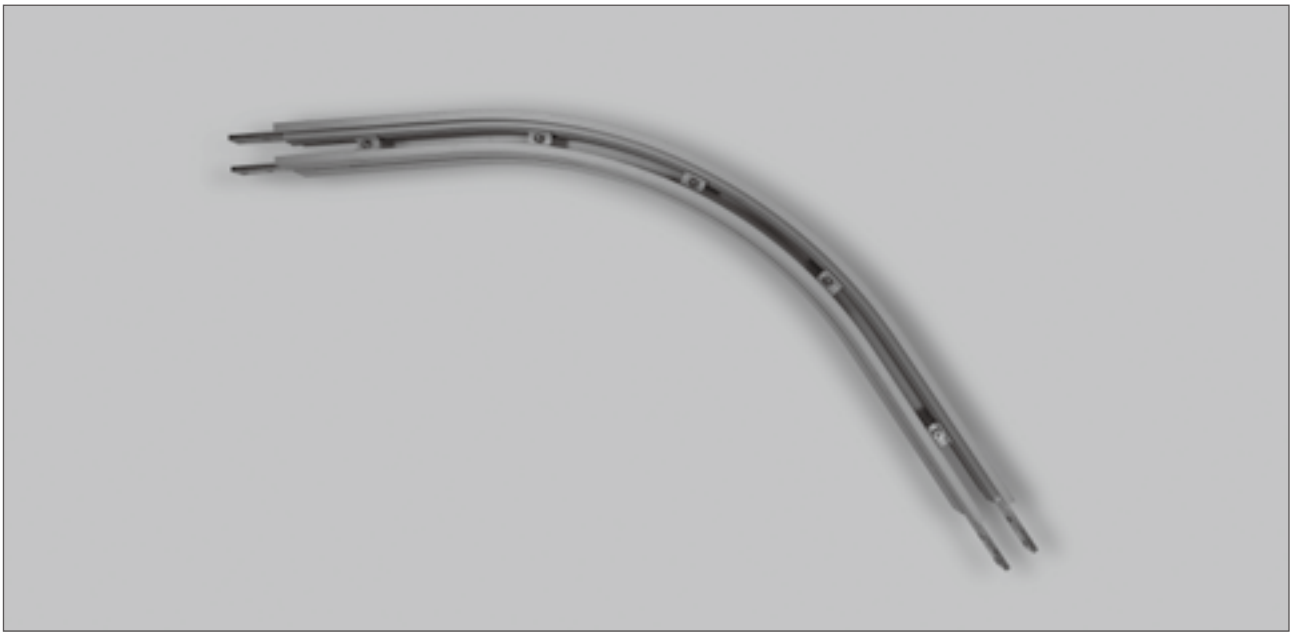


Reference	Material
HWBH 90R232	Aluminium & P.E



Reference	Material
HWBH 180R232	Aluminium & P.E

BEND - Horizontal bend



Description

Horizontal plain bends are used in cases where wheel bends are not suitable. Examples:

- Where space is restricted
- For long products, requiring large-radius turns
- When large-radius bends are desired for other reasons

Important

- Use plain bends only when wheel bends cannot be used
- Always use the largest radius possible

Plain bends increase the tension in the chain and cause higher stress on the slide rail. To ensure a reliable conveyor design with plain bends, always consult your HI FLEX representative for technical data and design assistance.

Technical specifications

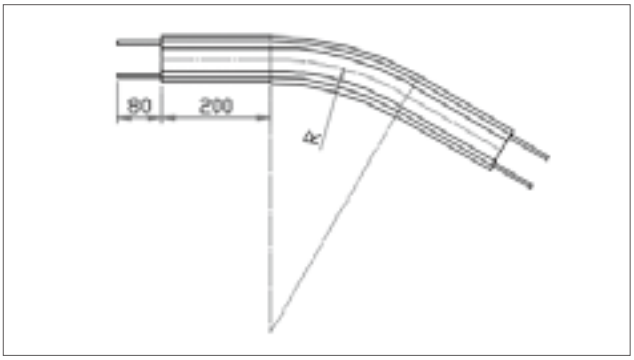
The standard range of plain bends exhibit a manufacturing tolerance of ±2% in radius and ±2% in angle.

Ordering information

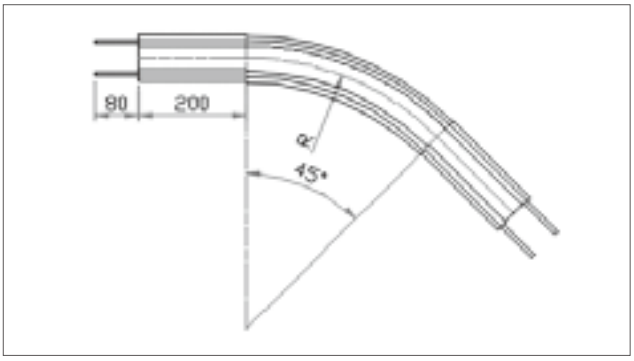
Other angles or redii can be delivered on special order.
Connecting strips are included.

Horizontal bend

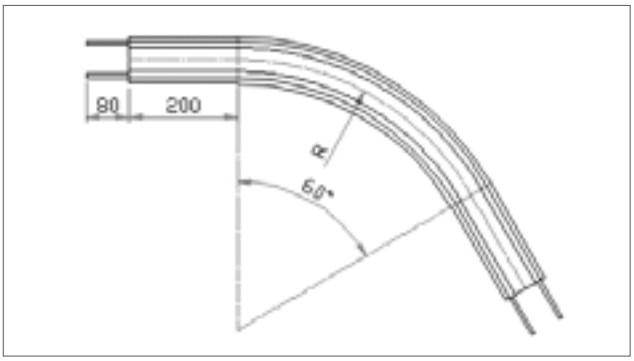
Reference	Material
HWBP 30R650	Aluminum
HWBP 30R1000	



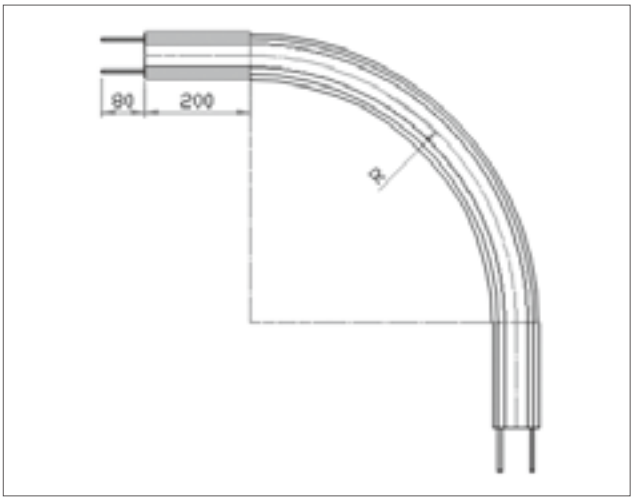
Reference	Material
HWBP 45R650	Aluminum
HWBP 45R1000	

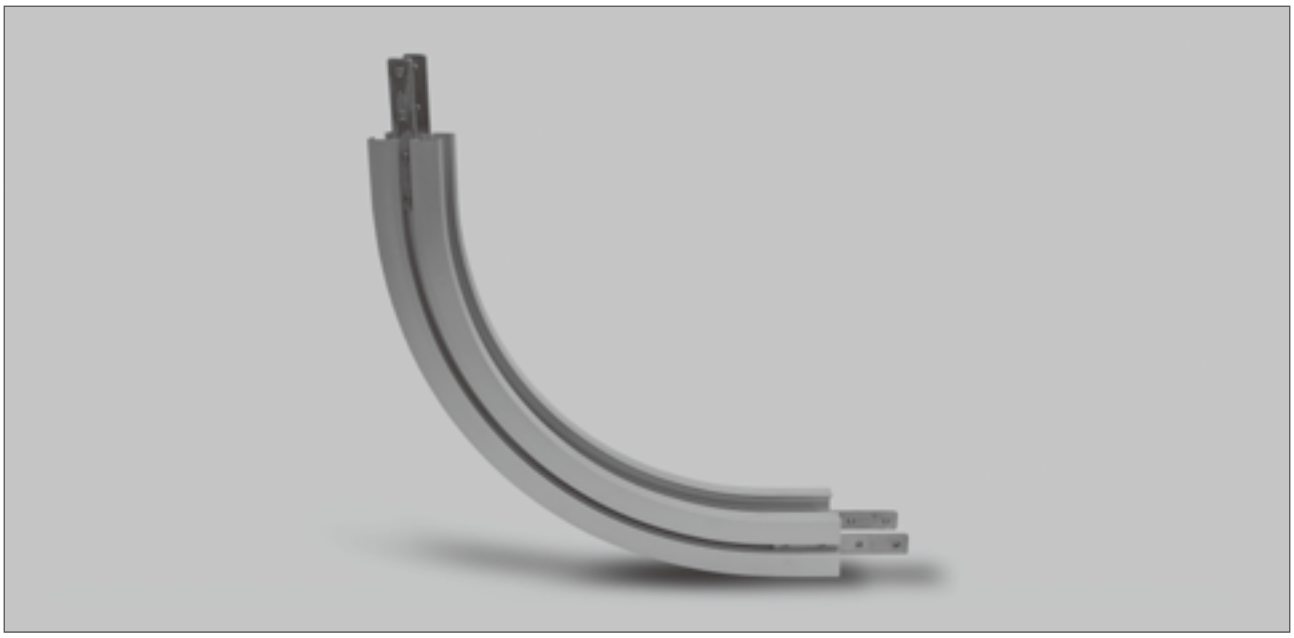


Reference	Material
HWBP 60R650	Aluminum
HWBP 60R1000	



Reference	Material
HWBP 90R650	Aluminum
HWBP 90R1000	





Description

Vertical bends can be used either as convex or concave bends. They are available for 5 ˚ ,7 ˚ , 30 ˚ , 45 ˚ , 60 ˚ and 90 ˚ change of direction.

For conveyors with an incline exceeding 5 ˚ , a cleated chain is recommended. Otherwise, the products might slip back on the chain. Attachment chain can be used in inclines up to 45 ˚ .

Important

Vertical bends increase the tension in the chain and cause higher stress on the slide rail. Avoid using more than four 90 ˚ vertical bends in one conveyor.

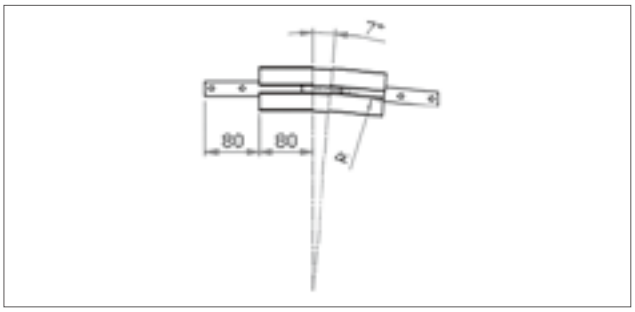
To ensure a reliable conveyor design with vertical bends, always consult your HI FLEX representative for technical data and design assistance.

Ordering information

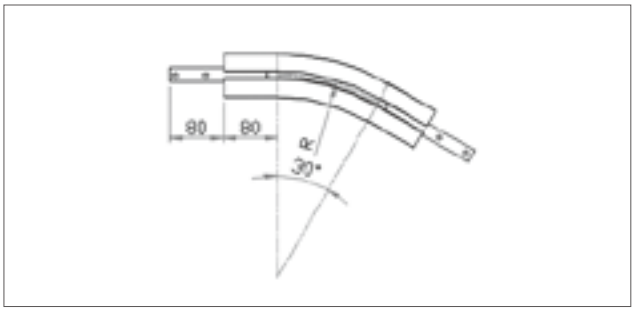
Connecting strips are included.

Vertical bend

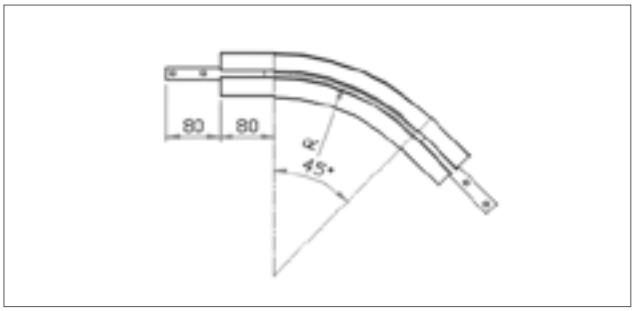
Reference	Material
HWBV 5R650	Aluminum
HWBV 7R650	



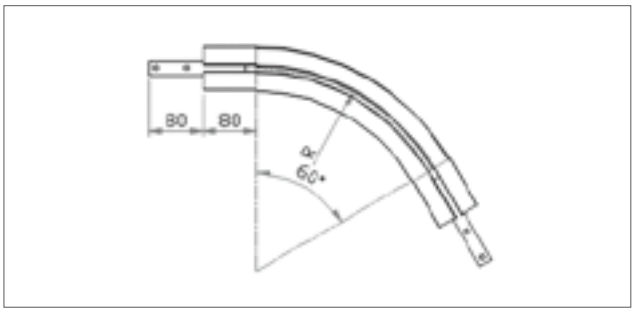
Reference	Material
HWBV 15R650	Aluminum
HWBV 30R650	



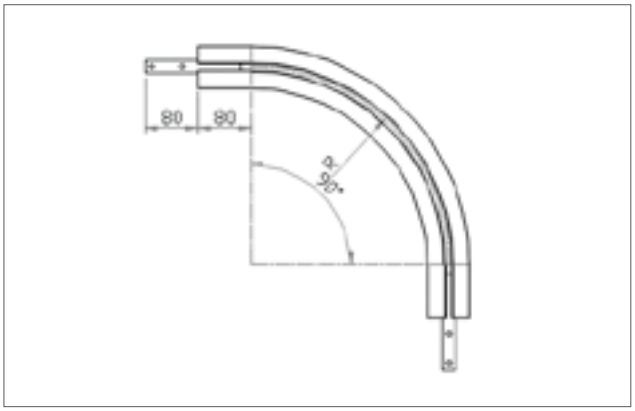
Reference	Material
HWBV 45R650	Aluminum
HWBV 45R1000	



Reference	Material
HWBV 60R650	Aluminum
HWBV 60R1000	



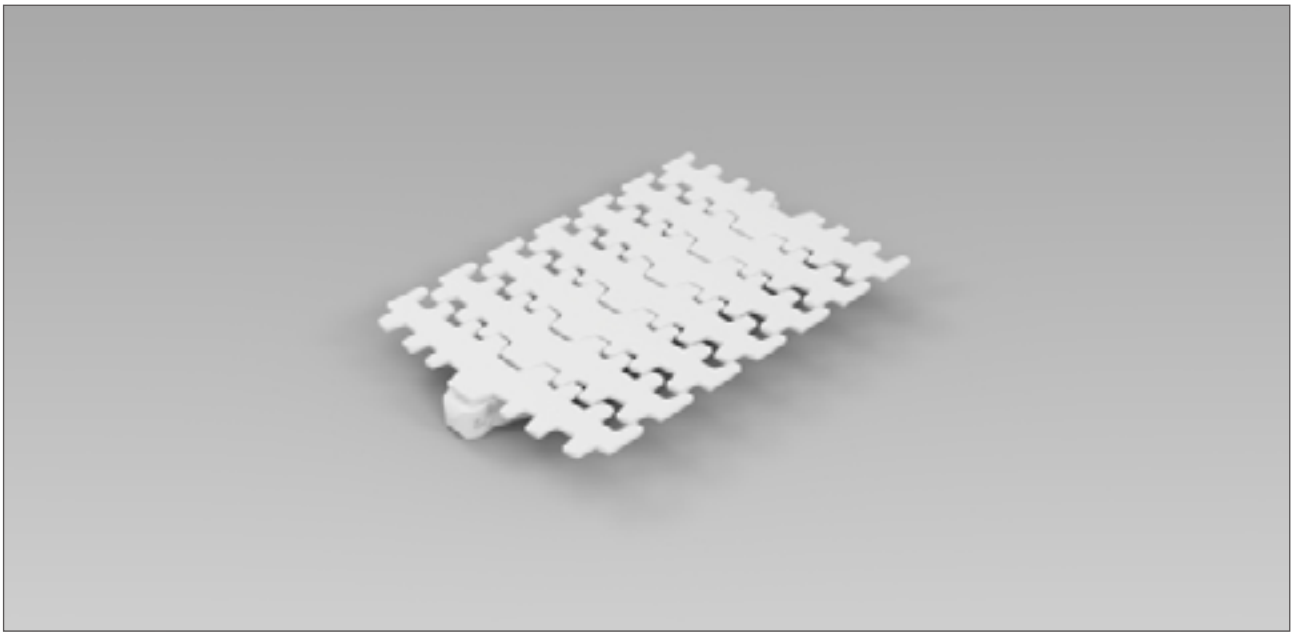
Reference	Material
HWBV 90R650	Aluminum
HWBV 90R1000	



Conveyor System

HR

Contents



Description

The conveyor chain consists of plastic links joined together by means of plastic pivots and stainless steel pins. It can be delivered with or with out cleats. The chain is also available with composite chain links based on the standard link design, combined with a special chain top. The basic link has the same technical properties as the standard link.

Pad chain

The pad chain is especially suitable for track configurations with inclines up to 20 ˚, and where a standard cleated chain is unsuitable. A pad insert moulded into the link increases the pad between goods and chain.

Other chain types

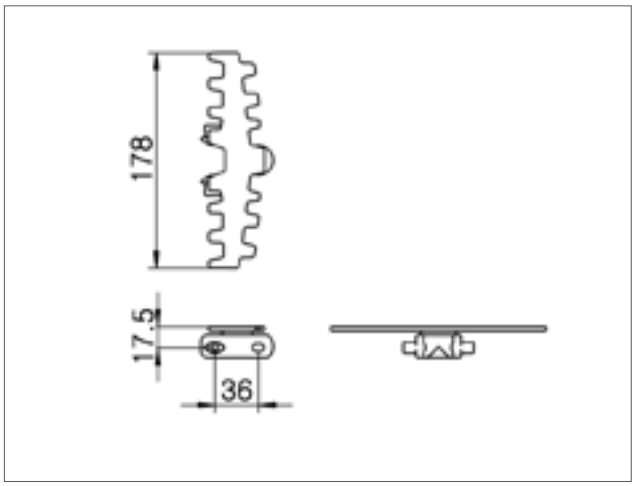
In addition to the standard types, several special-purpose chain links are available on special order. Please contact HI FLEX for additional information.

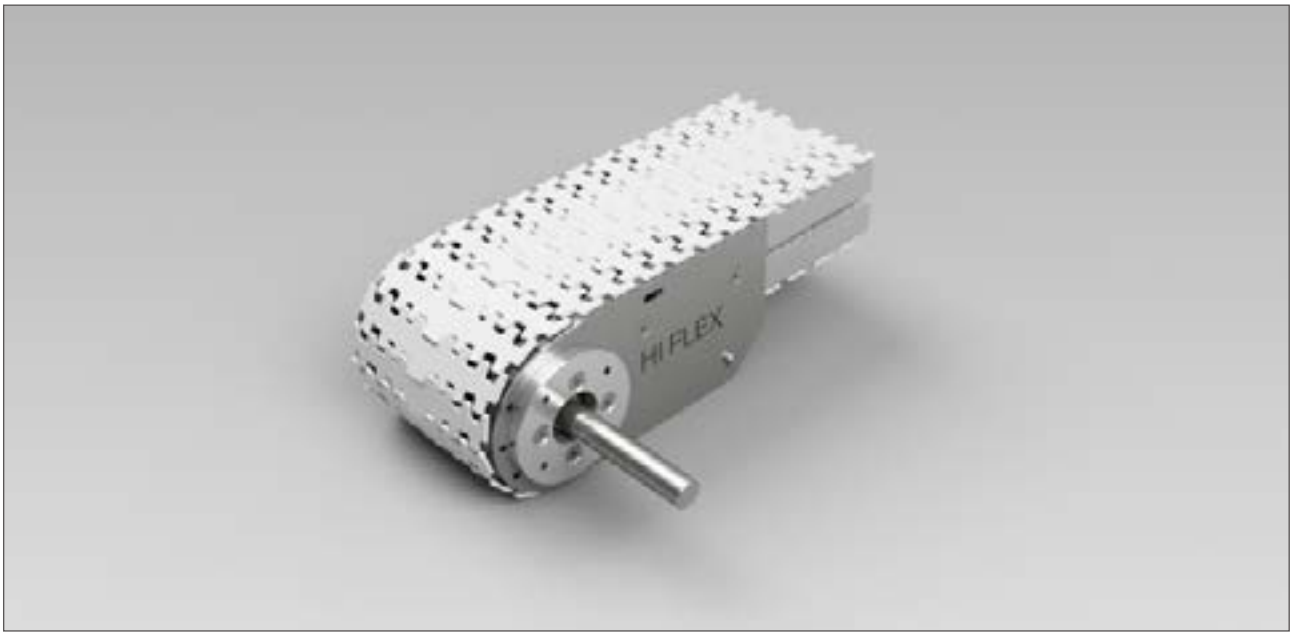
Ordering information

The chain comes in 5m lengths. Separate links can also be ordered.

Plain chain

Reference	Material
	Plate / Pin
HRTL178	Acetal / Stainless steel





Description

The end drive unit is designed to be positioned at one end of the conveyor.

Two drive configurations are available: suspended motor, transmission on the left or right side.

The drive unit can be connected in parallel with additional drive units so that a common motor can drive several conveyor synchronously.

Other motor alternatives are available.

Right side and left side are available.

Ordering information

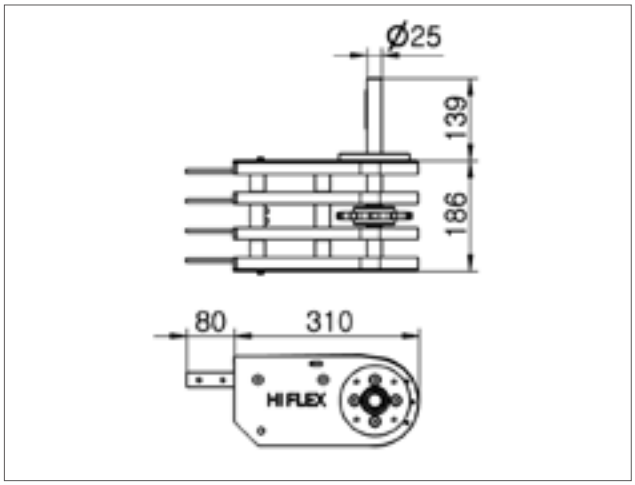
1 Select the most suitable drive unit configuration.

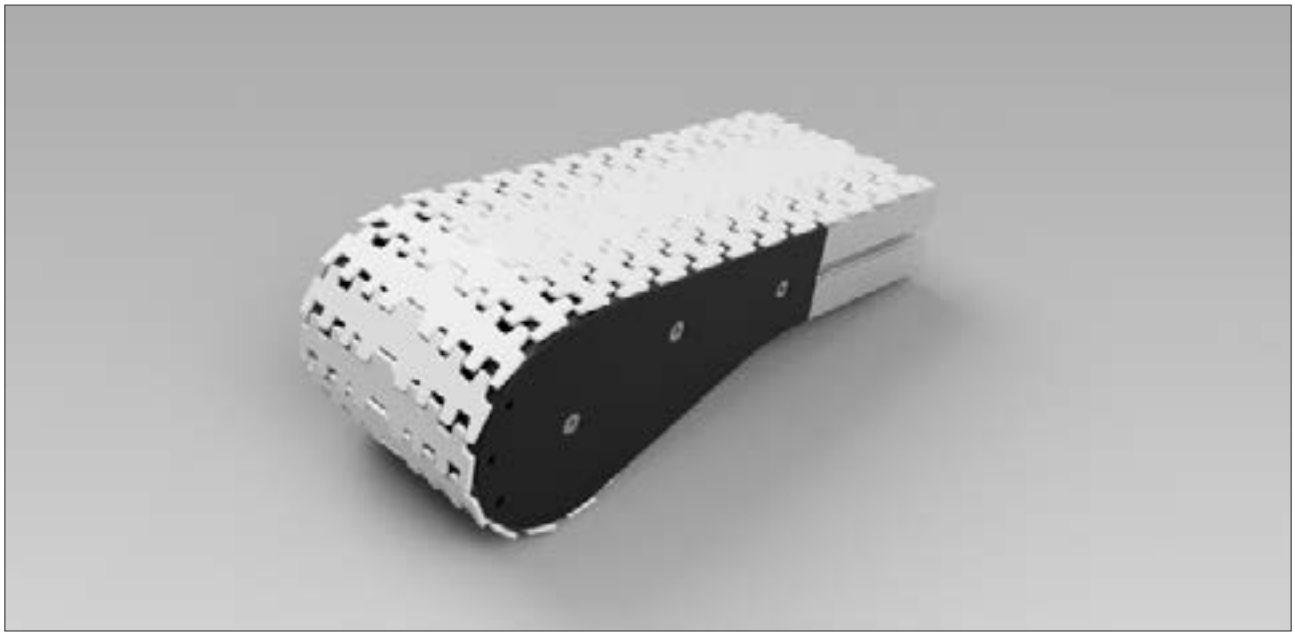
2 Calculate the actual load and compare with the capacity of the drive unit.

Connecting strips are included.

End drive unit

Reference	Material	Motor Position
HREB180R	Aluminum & P.E	Right
HREB180L		Left





Description

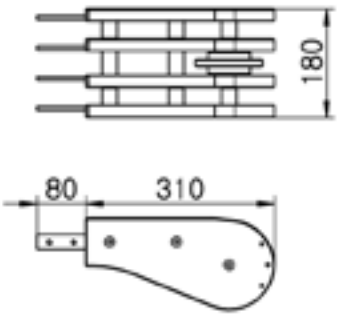
An idler unit contains a free wheel which incorporates ball bearings. The purpose of the idler unit is to change the direction of the chain with a minimum amount of friction.

In an idler unit the chain is guided by flanges to prevent it from disengaging underneath.

Ordering information

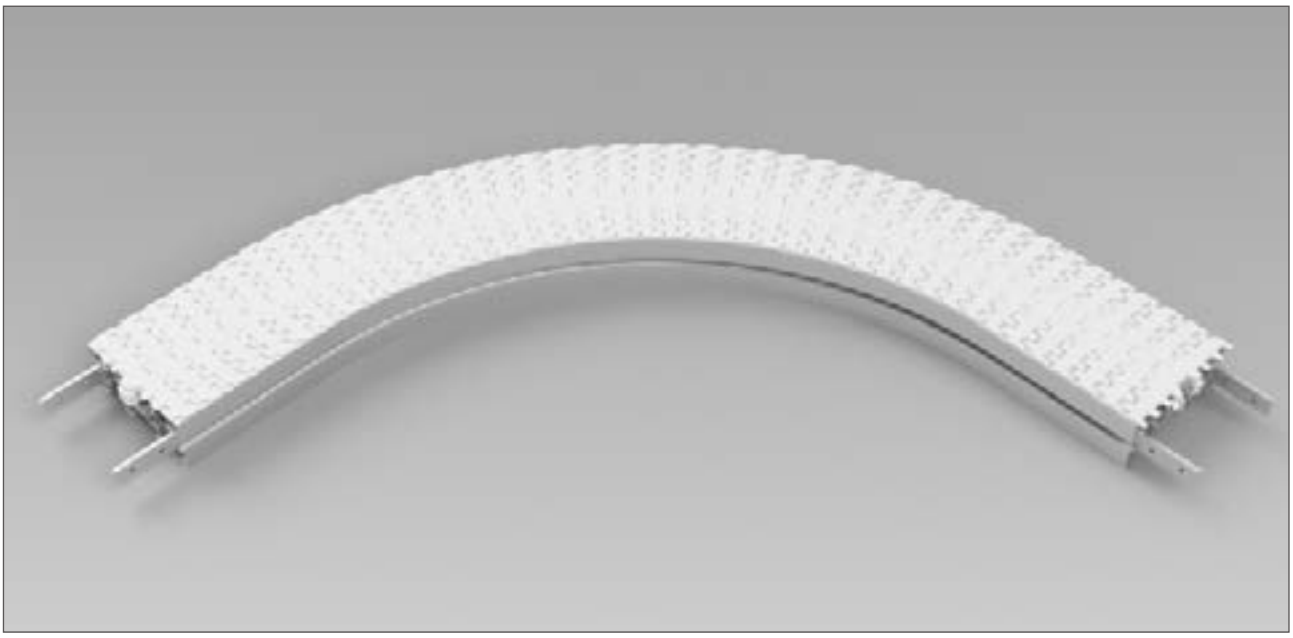
Connecting strips are included.

Idler unit



Reference	Material
HREJ180	Aluminium & P.E

BEND - Horizontal bend



Description

Horizontal plain bends are used in cases where wheel bends are not suitable. Examples:

- Where space is restricted
- For long products, requiring large-radius turns
- When large-radius bends are desired for other reasons

Important

- Use plain bends only when wheel bends cannot be used
- Always use the largest radius possible

Plain bends increase the tension in the chain and cause higher stress on the slide rail. To ensure a reliable conveyor design with plain bends, always consult your HI FLEX representative for technical data and design assistance.

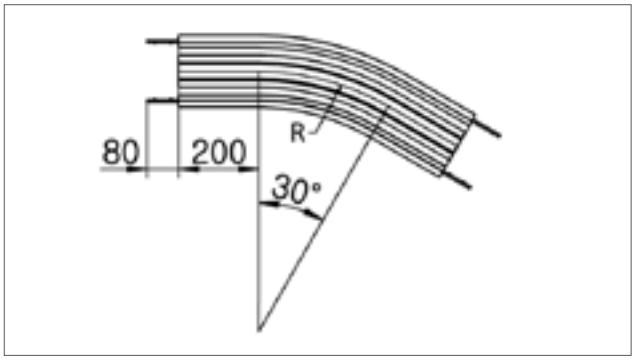
Technical specifications

The standard range of plain bends exhibit a manufacturing tolerance of ±2% in radius and ±2% in angle.

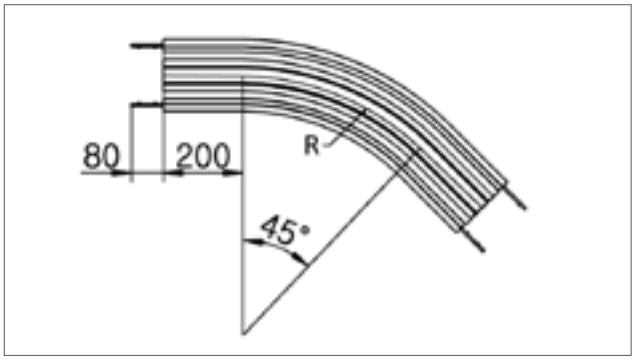
Ordering information

Other angles or redii can be delivered on special order.
Connecting strips are included.

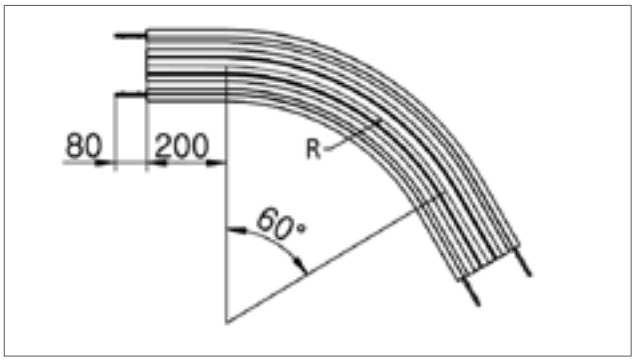
Horizontal bend



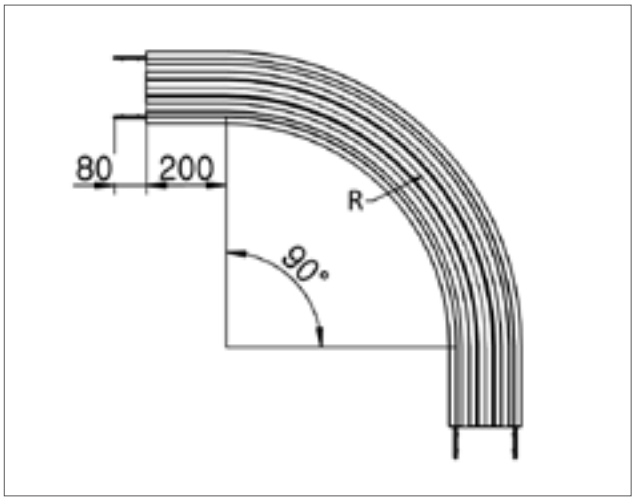
Reference	Material
HRBP 30R650	Aluminum
HRBP 30R1000	



Reference	Material
HRBP 45R650	Aluminum
HRBP 45R1000	



Reference	Material
HRBP 60R650	Aluminum
HRBP 60R1000	



Reference	Material
HRBP 90R650	Aluminum
HRBP 90R1000	

Conveyor System

HB

Contents

Description

The conveyor chain consists of plastic links joined together by means of plastic pivots and stainless steel pins. It can be delivered with or with out cleats. The chain is also available with composite chain links based on the standard link design, combined with a special chain top. The basic link has the same technical properties as the standard link.

Pad chain

The pad chain is especially suitable for track configurations with inclines up to 20 ˚, and where a standard cleated chain is unsuitable. A pad insert moulded into the link increases the pad between goods and chain.

Other chain types

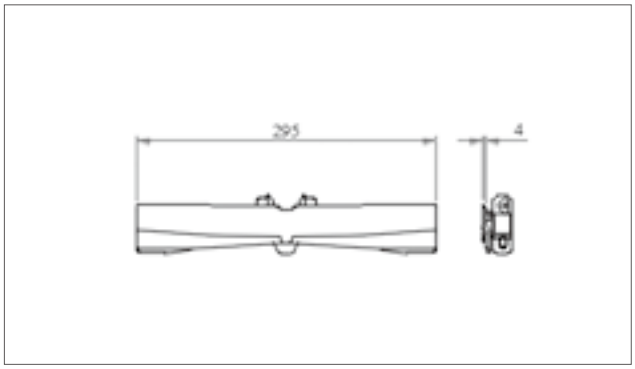
In addition to the standard types, several special-purpose chain links are available on special order. Please contact HI FLEX for additional information.

Ordering information

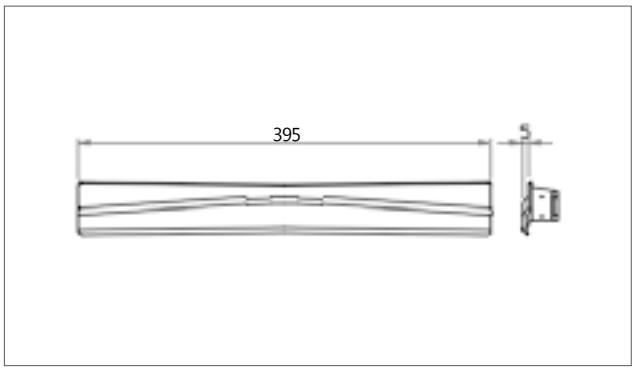
The chain comes in 5m lengths. Separate links can also be ordered.

Plain chain

Reference	Material
	Plate / Pin
HBTL295	Acetal / Stainless steel

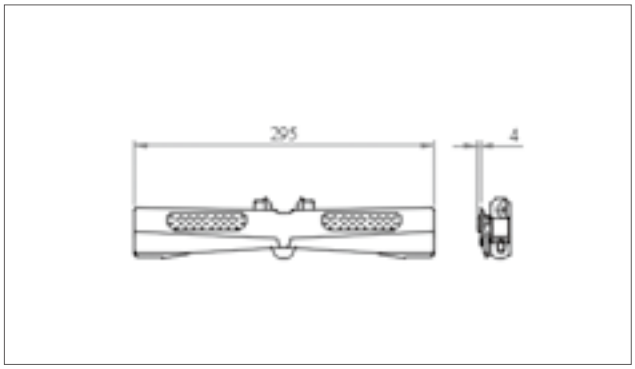


Reference	Material
	Plate / Pin
HBTL395	Acetal / Stainless steel

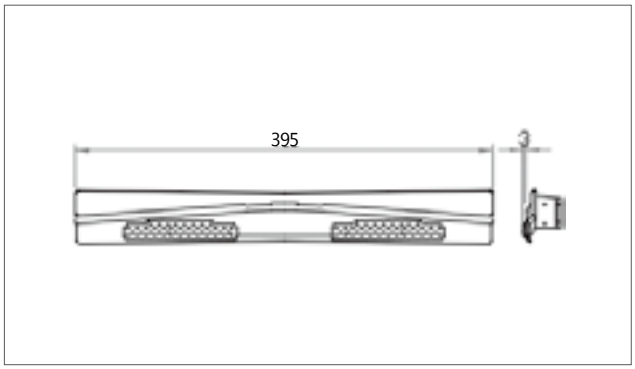


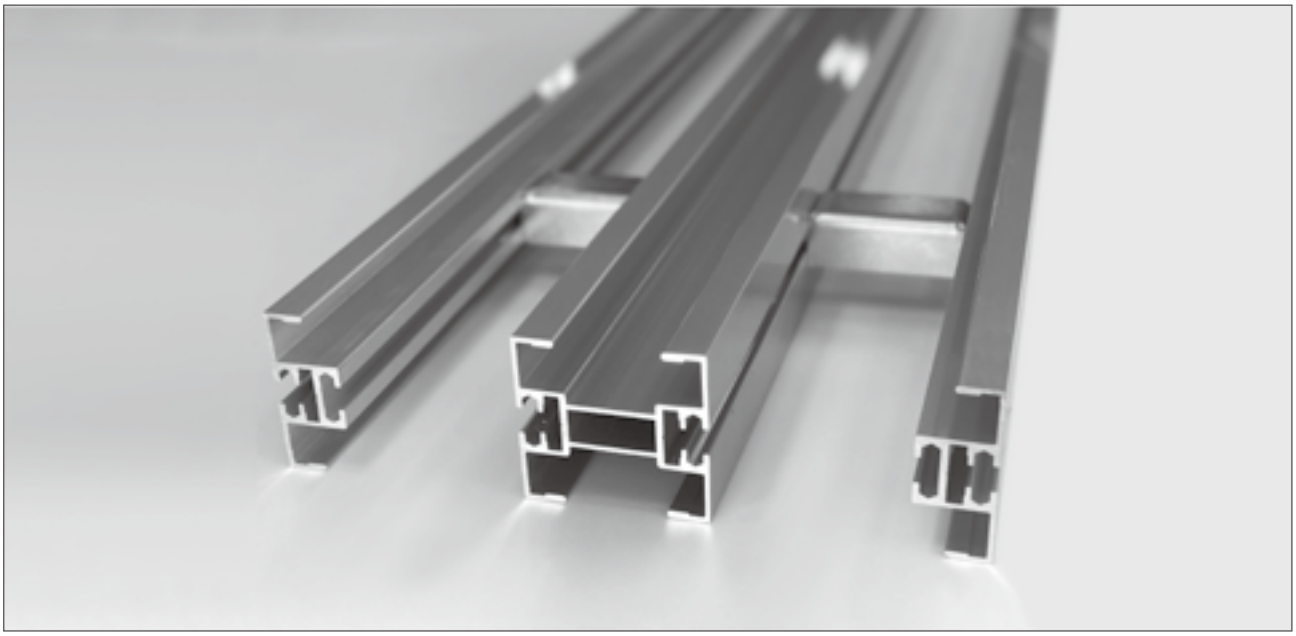
Pad chain

Reference	Material
	Plate / Pin
HBTL295P	Acetal / Stainless steel



Reference	Material
	Plate / Pin
HBTL395P	Acetal / Stainless steel





Description

The chain track for straight conveyor sections is delivered as beam stock to be cut as required.

Plastic screws (HSAG 5) are used to fix the slide rail to the beam.

Ordering information

1 Determine the number of beam lengths required. Beams can be delivered in 3m, and precision cut to any length up to 3m.

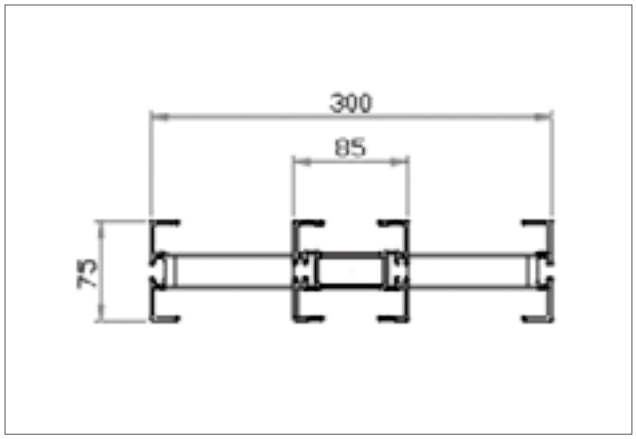
2 Determine the length of slide rail required. Four lengths of slide rail are normally required for each length of track. Do not forget bends, drive units etc.

3 Estimate the required number of plastic screws for the slide rail. Two screws are required for each separate piece of slide rail. The screws must be ordered separately.

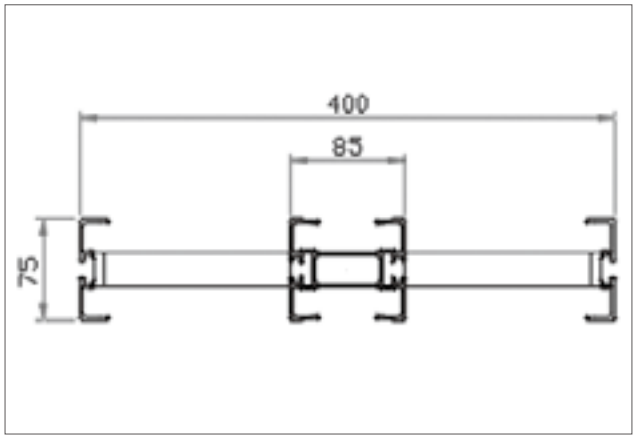
4 Determine the number of connecting strips required. Two connecting strips must be ordered separately for each joint between straight beam sections.

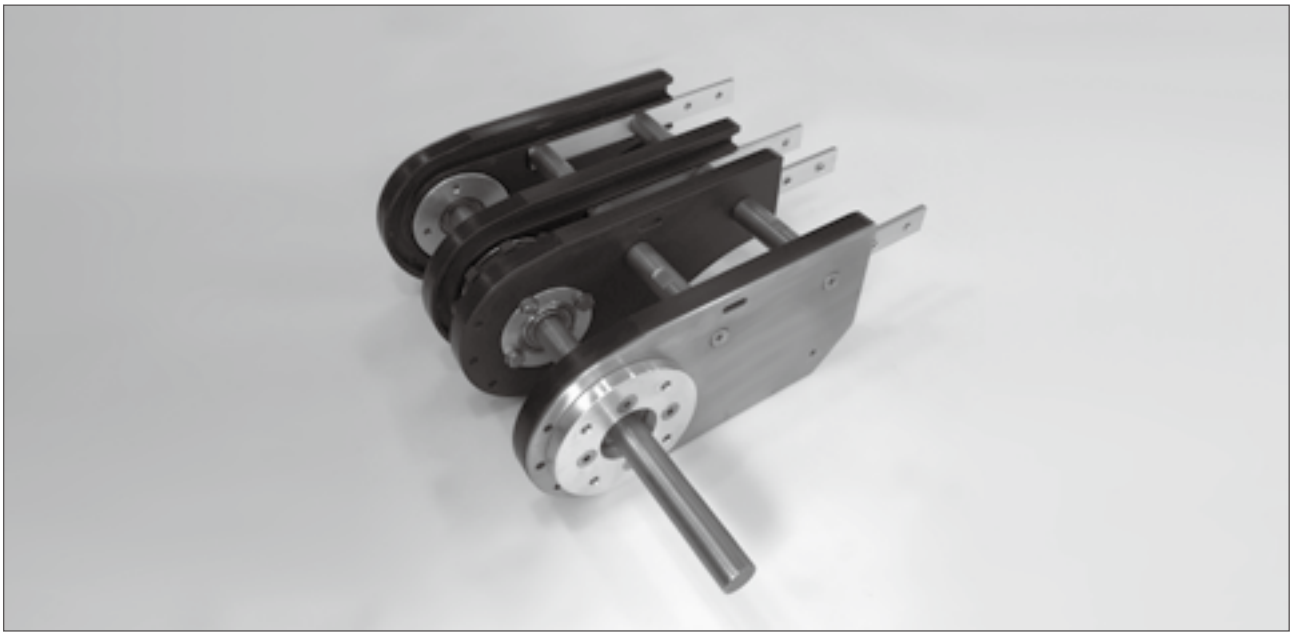
Conveyor beam

Reference	Material	Length(m)
HBCB300 3	Aluminum	3
HBCB300 L		Length to order



Reference	Material	Length(m)
HBCB400 3	Aluminum	3
HBCB400 L		Length to order





Description

The end drive unit is designed to be positioned at one end of the conveyor.

Two drive configurations are available: suspended motor, transmission on the left or right side.

The drive unit can be connected in parallel with additional drive units so that a common motor can drive several conveyor synchronously.

Other motor alternatives are available.

Right side and left side are available.

Ordering information

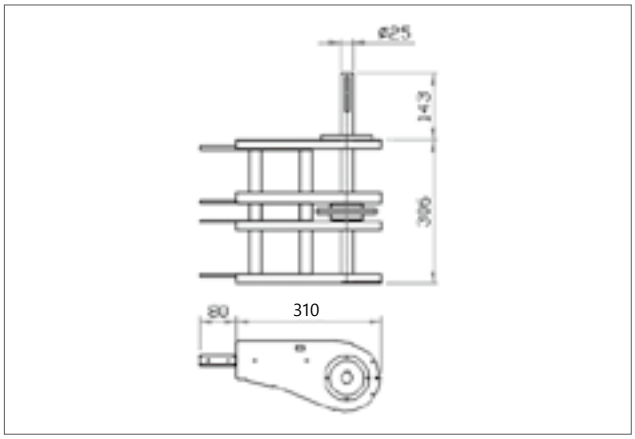
1 Select the most suitable drive unit configuration.

2 Calculate the actual load and compare with the capacity of the drive unit.

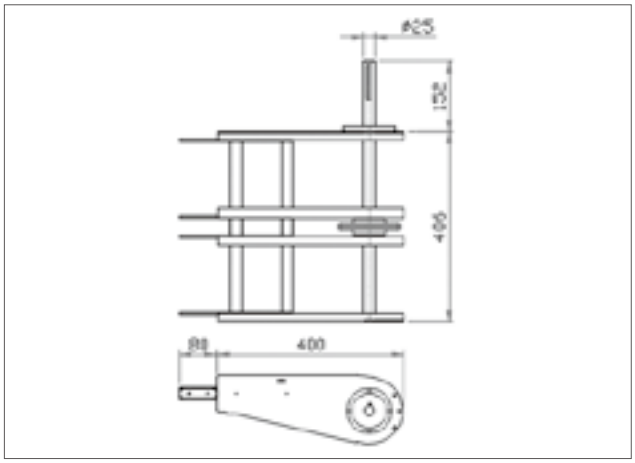
Connecting strips are included.

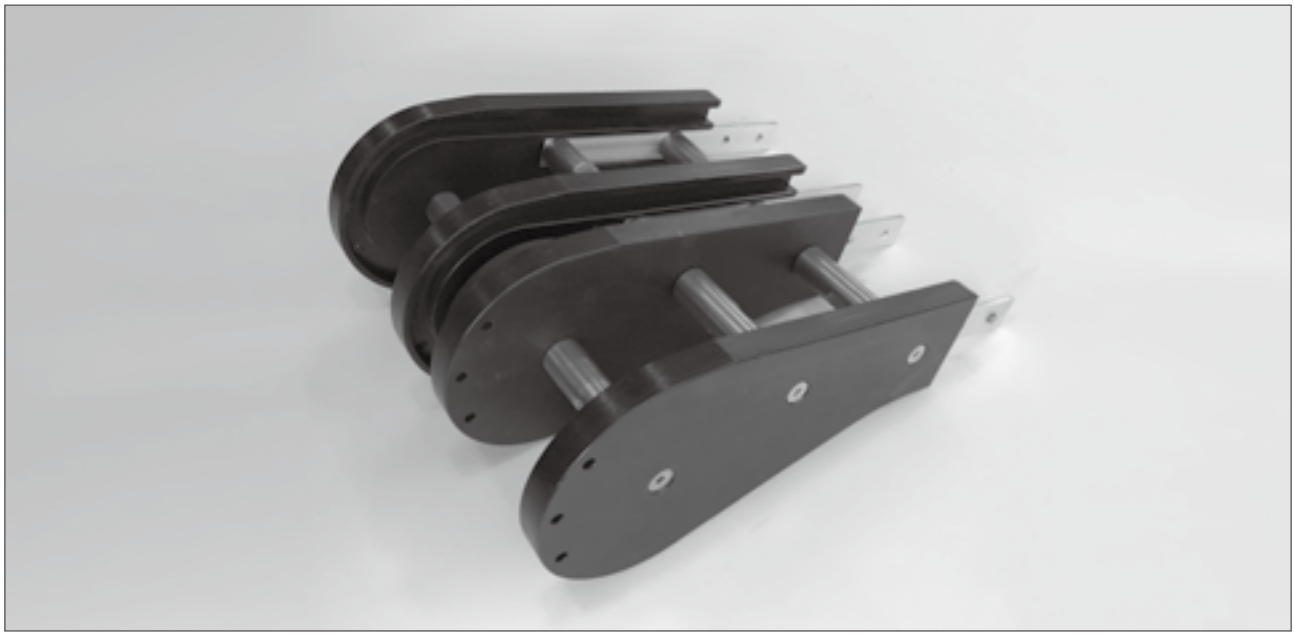
End drive unit

Reference	Material	Motor Position
HBEB300R	Aluminum & P.E	Right
HBEB300L		Left



Reference	Material	Motor Position
HBEB400R	Aluminum & P.E	Right
HBEB400L		Left





Description

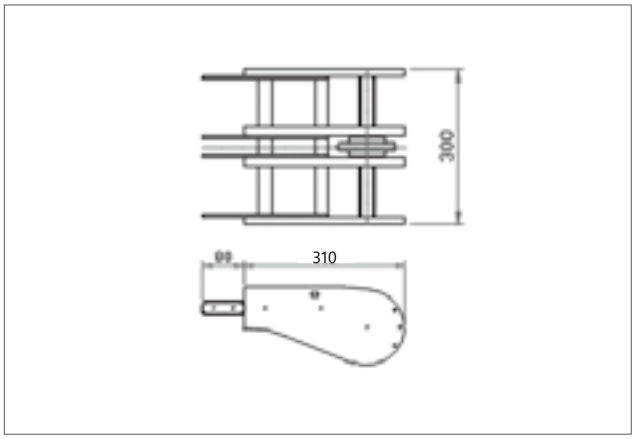
An idler unit contains a free wheel which incorporates ball bearings. The purpose of the idler unit is to change the direction of the chain with a minimum amount of friction.

In an idler unit the chain is guided by flanges to prevent it from disengaging underneath.

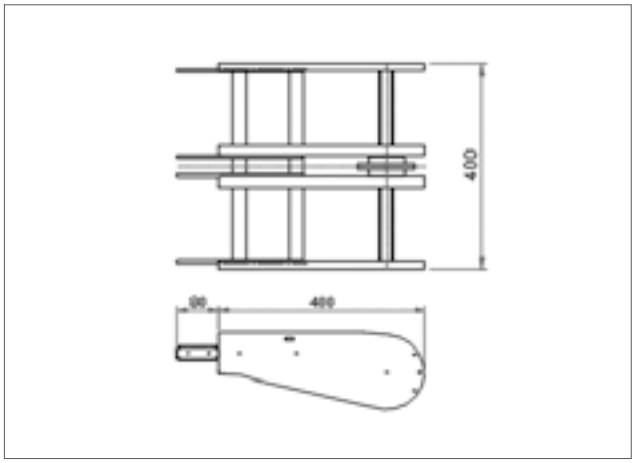
Ordering information

Connecting strips are included.

Idler unit

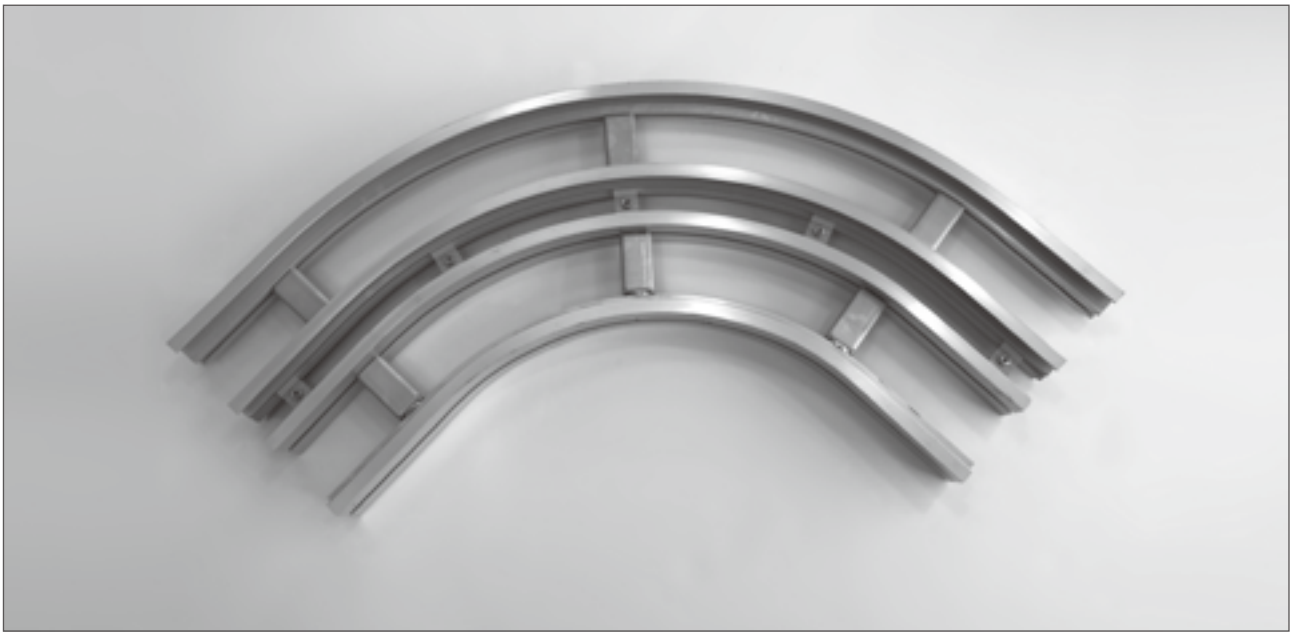


Reference	Material
HBEJ300	Aluminium & P.E



Reference	Material
HBEJ400	Aluminium & P.E

BEND - Horizontal bend



Description

Horizontal plain bends are used in cases where wheel bends are not suitable. Examples:

- Where space is restricted
- For long products, requiring large-radius turns
- When large-radius bends are desired for other reasons

Important

- Use plain bends only when wheel bends cannot be used
- Always use the largest radius possible

Plain bends increase the tension in the chain and cause higher stress on the slide rail. To ensure a reliable conveyor design with plain bends, always consult your HI FLEX representative for technical data and design assistance.

Technical specifications

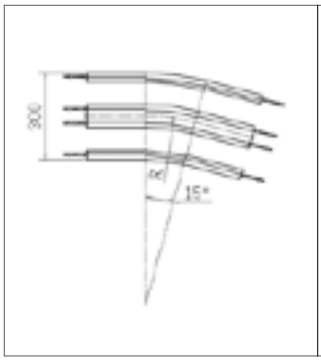
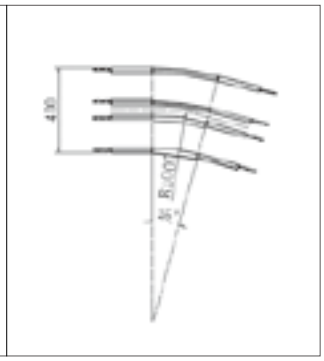
The standard range of plain bends exhibit a manufacturing tolerance of ±2% in radius and ±2% in angle.

Ordering information

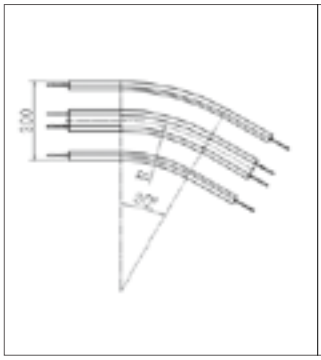
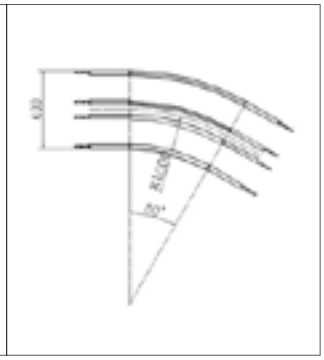
Other angles or redii can be delivered on special order.
Connecting strips are included.

Horizontal bend

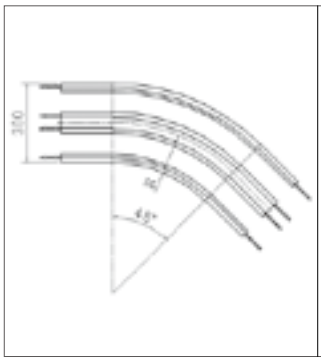
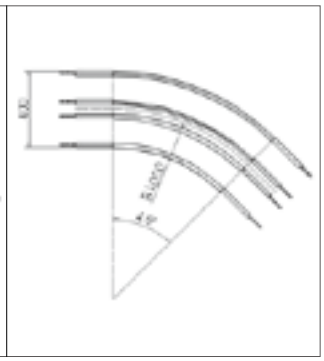
Reference	Material
HBBP15R650	Aluminium
HBBP15R1000	Aluminium

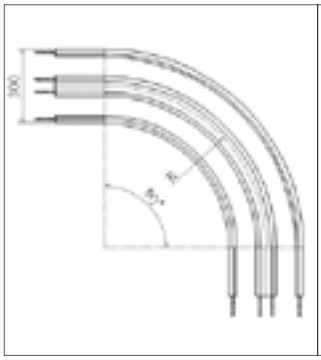
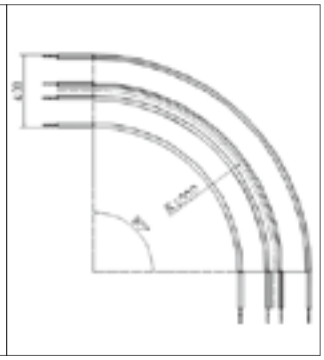
Reference	Material
HBBP30R650	Aluminium
HBBP30R1000	Aluminium

Reference	Material
HBBP45R650	Aluminium
HBBP45R1000	Aluminium

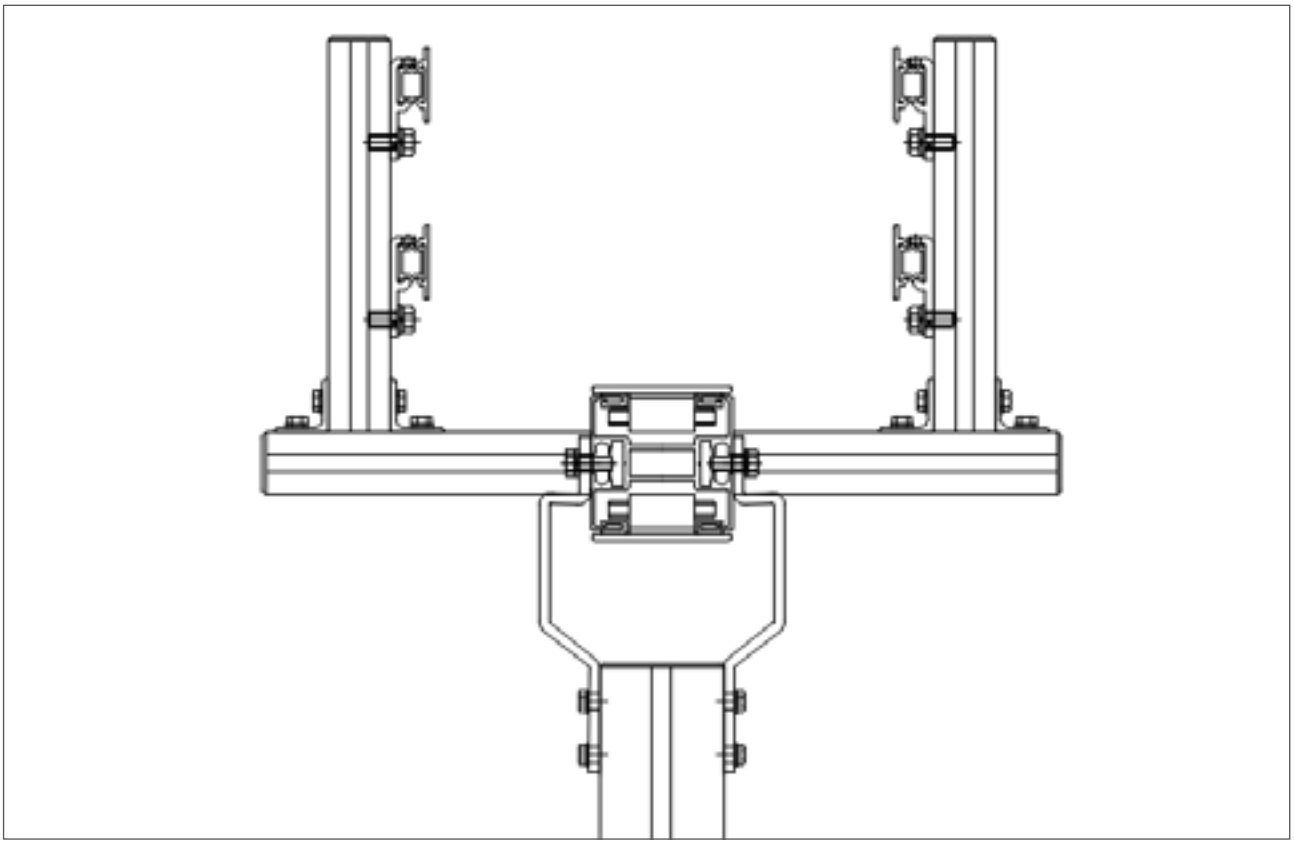
Reference	Material
HBBP90R650	Aluminium
HBBP90R1000	Aluminium

Conveyor System

HA

Contents



Description

Accessories for the HI FLEX conveyor include the following main groups:

– Guide rail components
– Conveyor beam support brackets

Types

Guide rail

Guide rails are used to guide the products being conveyed and also to prevent them from falling off the conveyor. The HI FLEX conveyor system includes a versatile system of guide rails and guide rail brackets which make it possible to accommodate many different product sizes and shapes.

Guide Bracket

The guide rails are supported by brackets which are attached to the beams by means of T-bolts and nuts.

The fixed guide brackets are available in several different sizes. Adjustable guide brackets are recommended when quick adjustment of the conveyor track width is important.

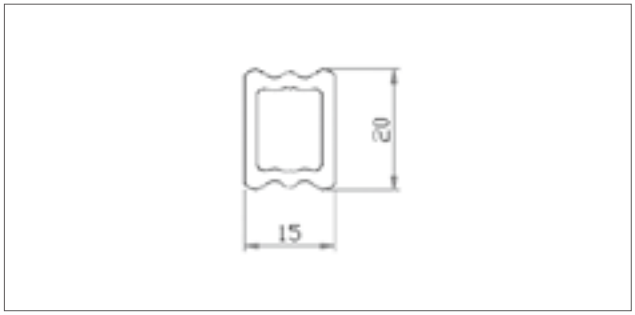
Conveyor beam support bracket

The conveyor beams are connected to the support system by means of beam support brackets.

Guide rail

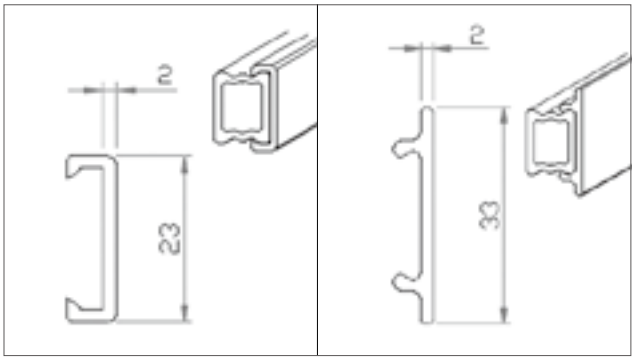
Guide beam

Reference	Material
HARS 3x15	Aluminum



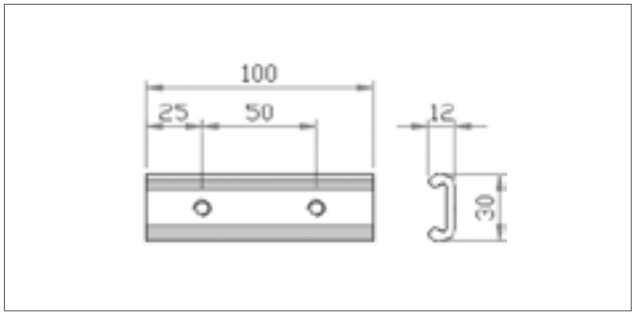
Guide beam cover

Reference	Material
HART 23	HDPE
HART 33	



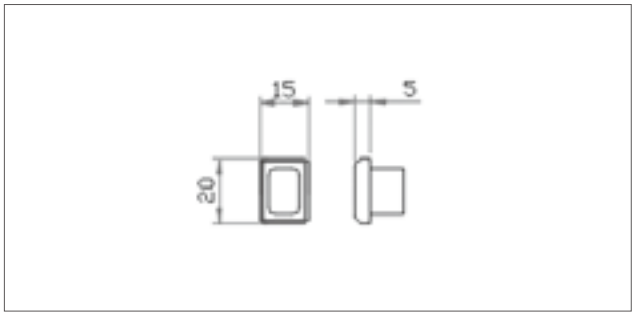
Guide connector

Reference	Material
HARJ 100	Aluminum

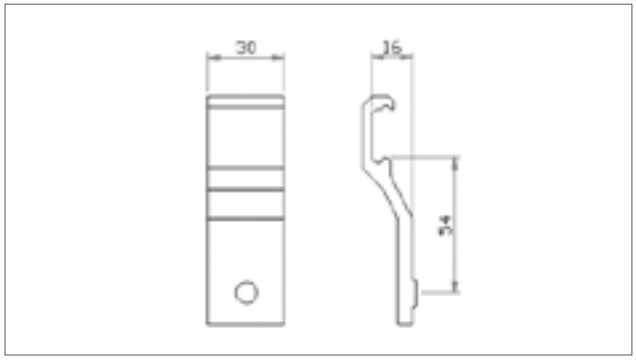


Guide rail end cap

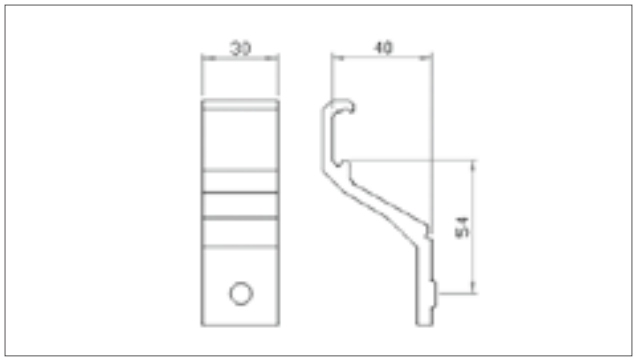
Reference	Material
HARE 15 (End cap)	P.E



Fixed guide bracket

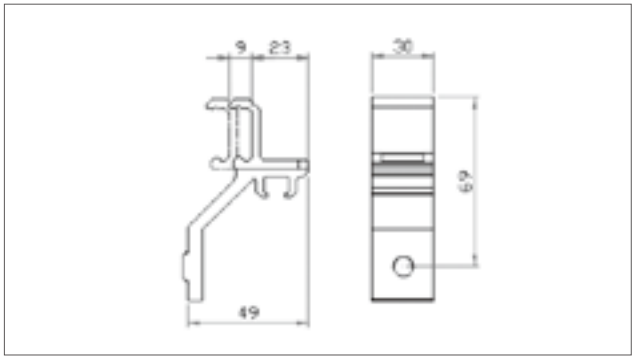


Reference	Material
HARB 16x54	Aluminum

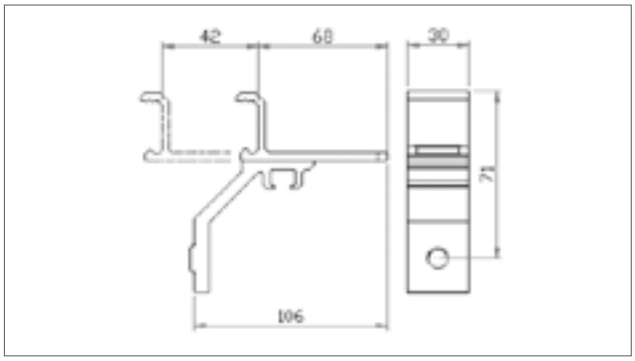


Reference	Material
HARB 40x54	Aluminum

Adjustable guide bracket



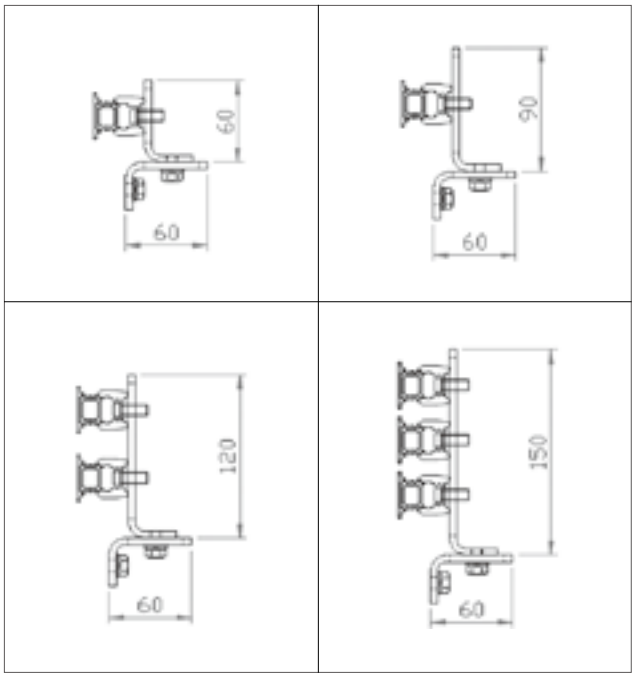
Reference	Material
HARA 26x9x45	Aluminum



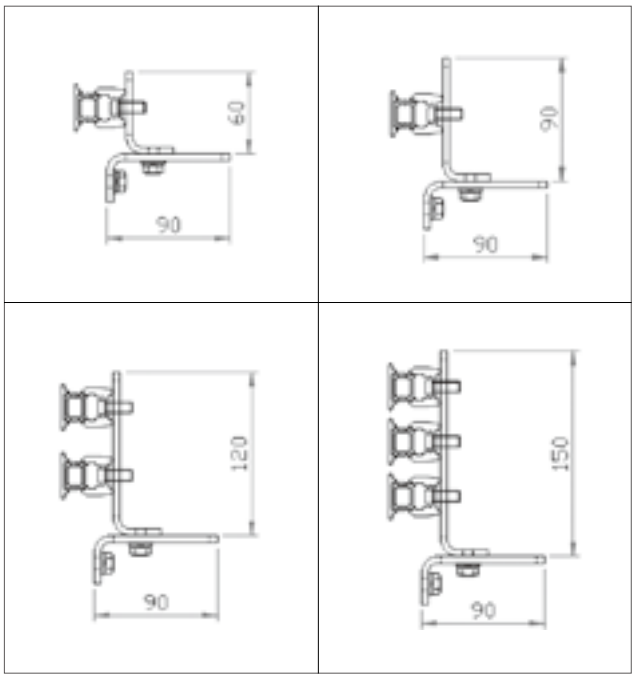
Reference	Material
HARA 26x39x45	Aluminum

Adjustable guide bracket

Reference	Material
HASA 60x60	SUS 304
HASA 60x90	
HASA 60x120	
HASA 60x150	

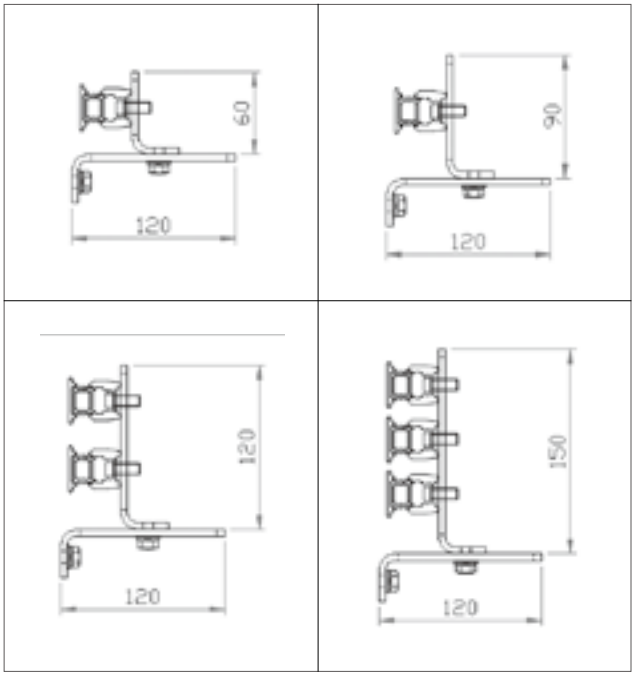


Reference	Material
HASB 90x60	SUS 304
HASB 90x90	
HASB 90x120	
HASB 90x150	

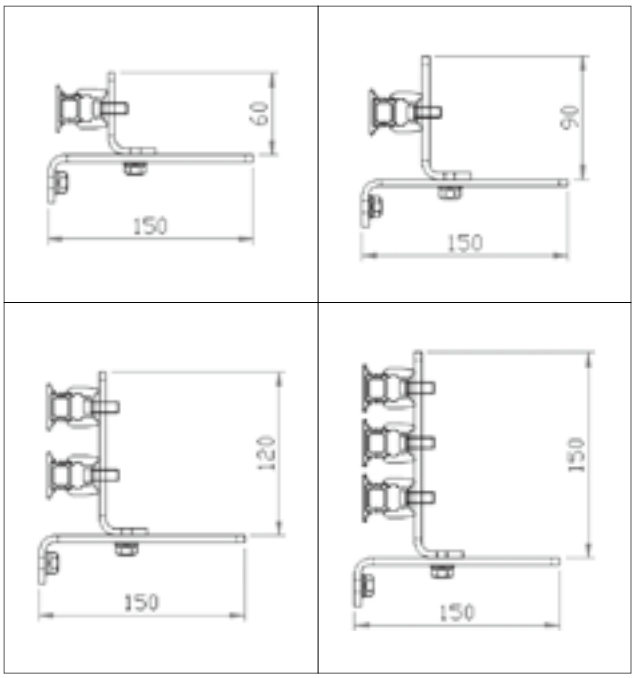


Adjustable guide bracket

Reference	Material
HASC 120x60	SUS 304
HASC 120x90	
HASC 120x120	
HASC 120x150	

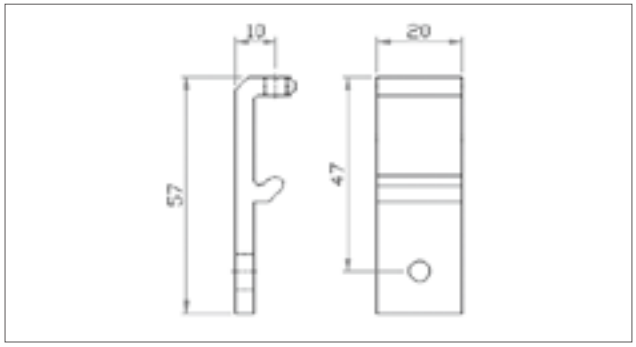


Reference	Material
HASD 150x60	SUS 304
HASD 150x90	
HASD 150x120	
HASD 150x150	

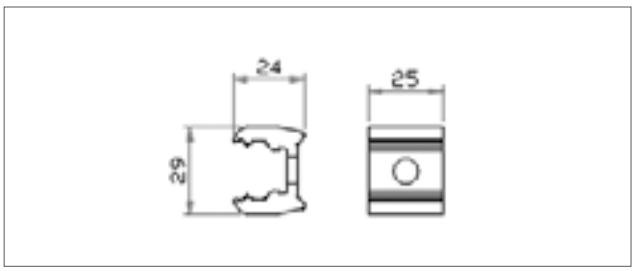


Built-up guide rail clamp

Guide rail bracket



Reference	Material
HARC 20	Aluminum

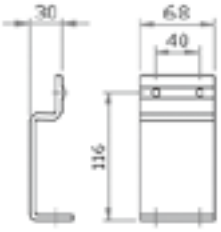


Reference	Material
HARK	Aluminum

Conveyor beam support bracket

Crossing support beam

Reference	Material
HACT 30	Aluminum



Conveyor beam support bracket

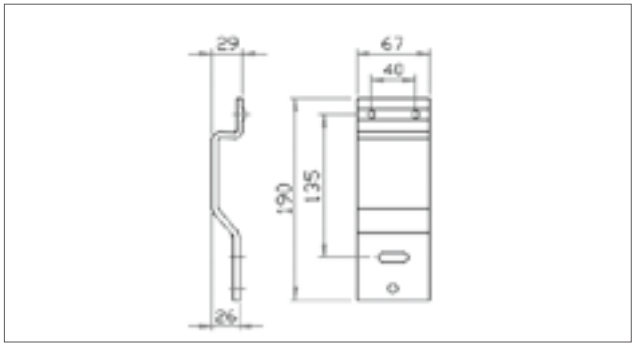
Vertical support beam

Reference	Material
HACU 78	Aluminum

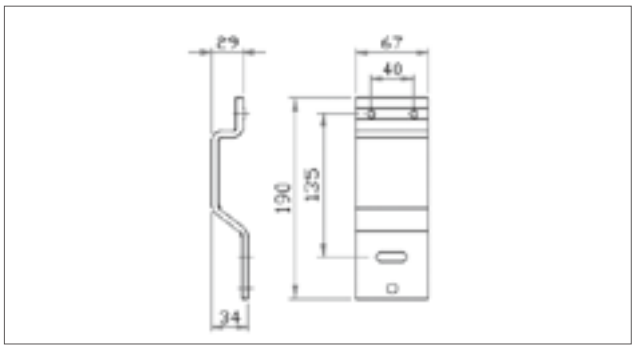
Conveyor beam support bracket

Vertical support beam

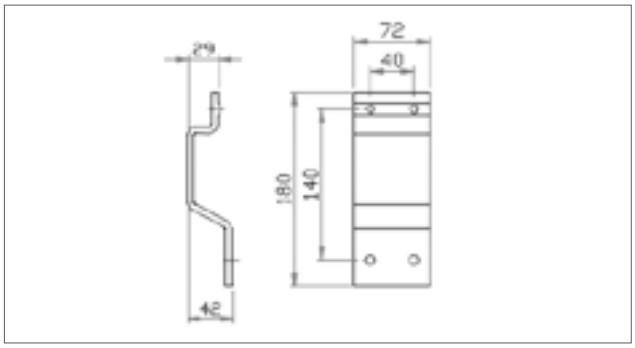
Reference	Material
HACS 26	Aluminum



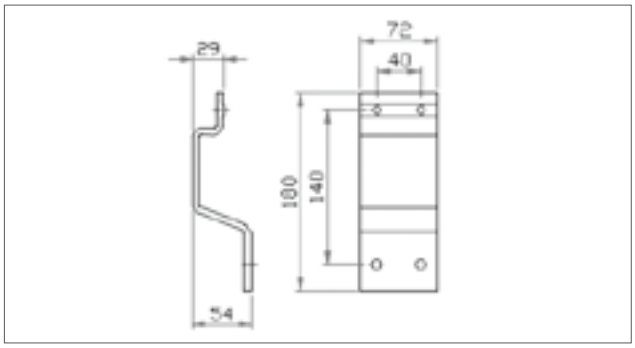
Reference	Material
HACS 34	Aluminum



Reference	Material
HACS 42	Aluminum



Reference	Material
HACS 54	Aluminum



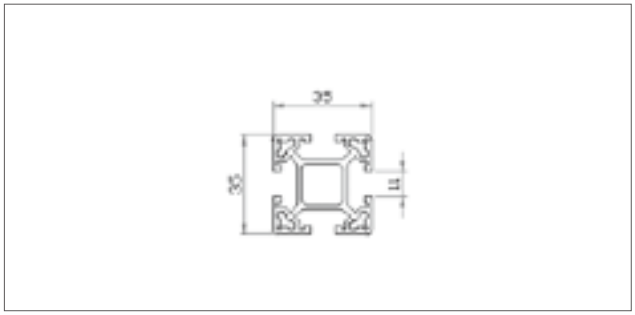
Conveyor System

HC

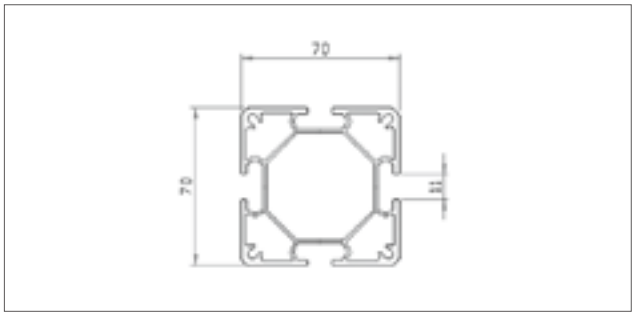
Contents

Support beam

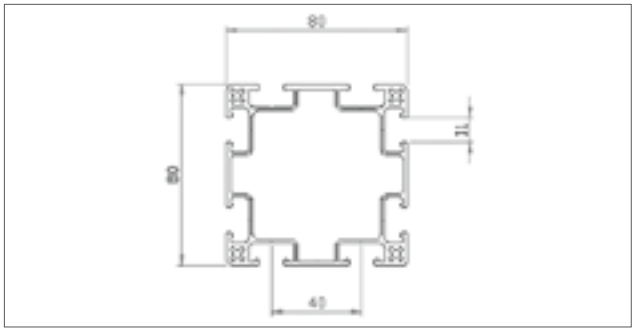
Reference	Material
HCBM 3x35	Aluminum



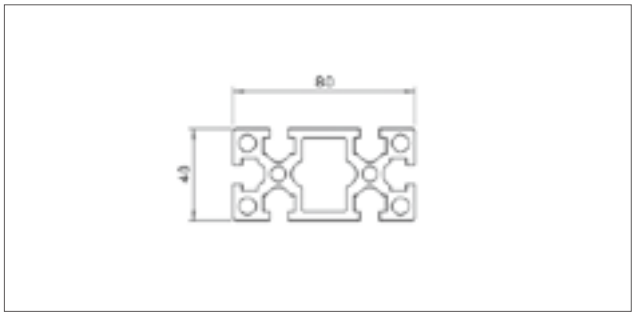
Reference	Material
HCBM 3x70	Aluminum



Reference	Material
HCBM 3x80	Aluminum

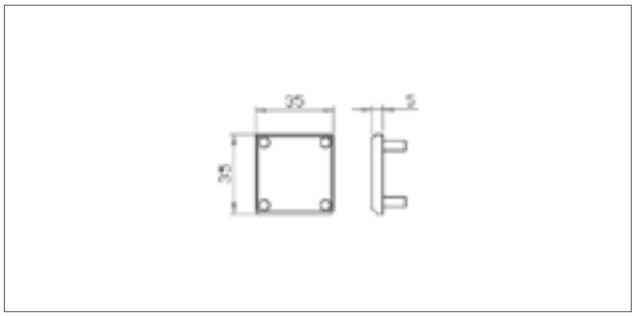


Reference	Material
HCBM 40x80	Aluminum

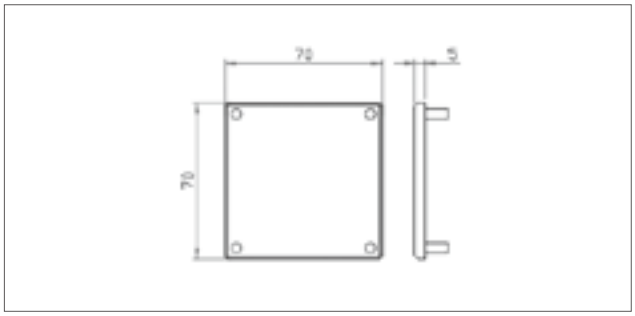


End cap

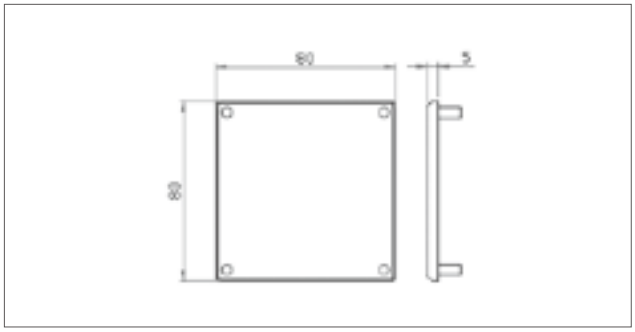
Reference	Material
HCBE 35 (End cap)	P.E



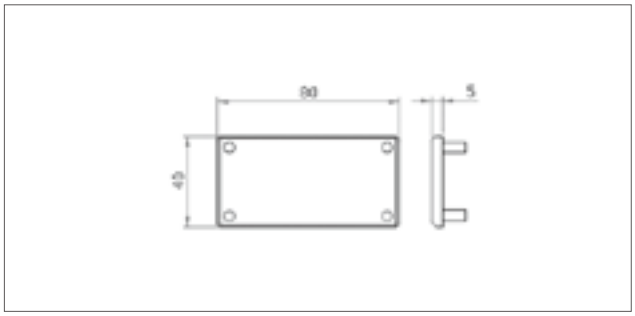
Reference	Material
HCBE 70 (End cap)	P.E



Reference	Material
HCBE 80 (End cap)	P.E

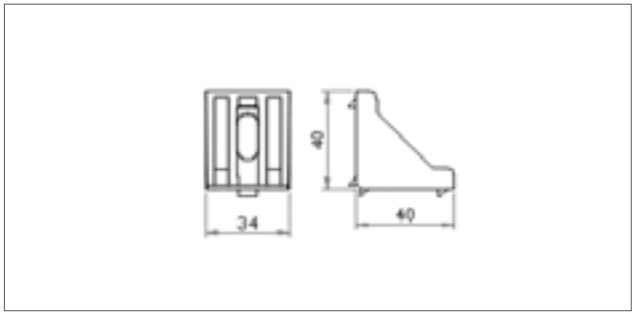


Reference	Material
HCBE 40x80 (End cap)	P.E

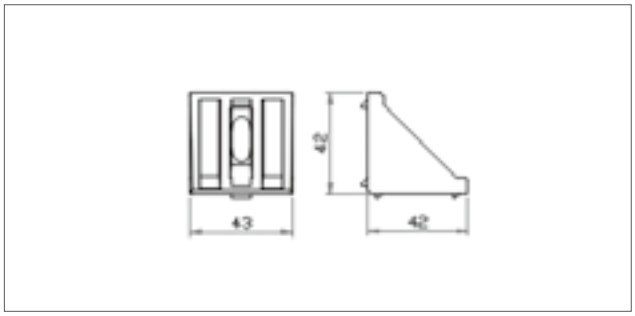


Angle bracket - connector

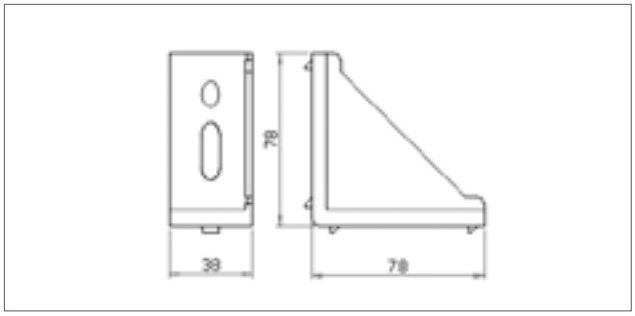
Reference	Material
HCFA 40	Aluminum



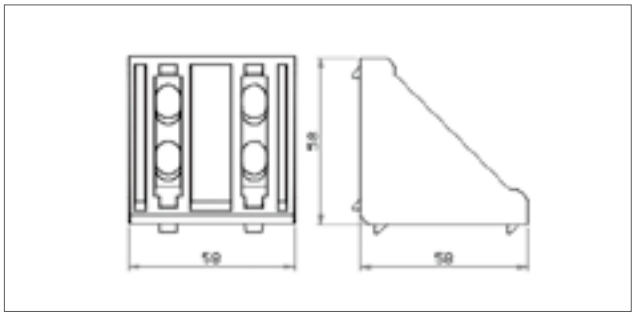
Reference	Material
HCFA 44B	Aluminum



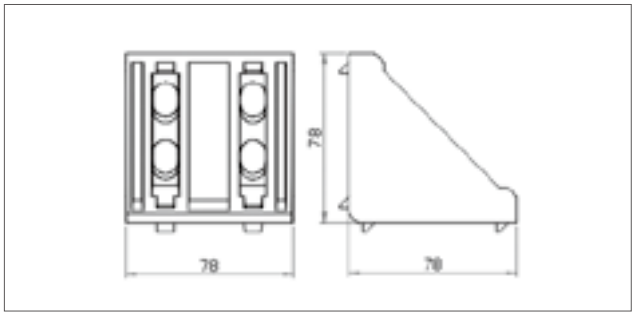
Reference	Material
HCFA 78B	Aluminum



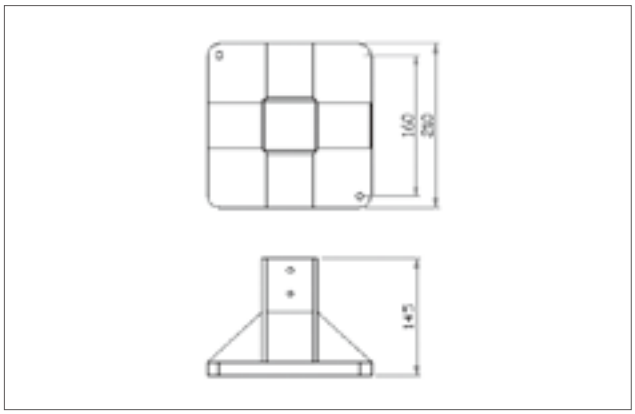
Reference	Material
HCFA 58A	Aluminum



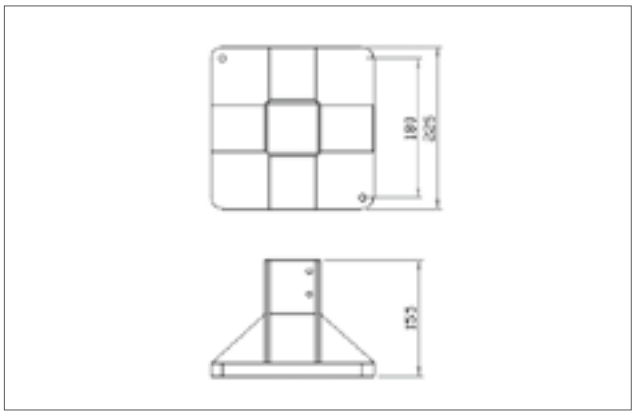
Reference	Material
HCFA 78A	Aluminum



Foot base

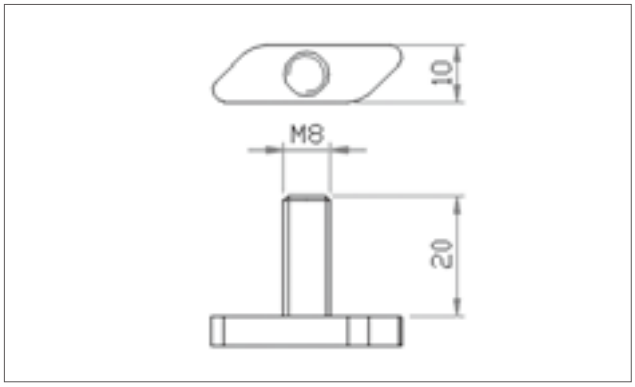


Reference	Material
HCFF 70x210	Aluminum



Reference	Material
HCFF 80x225	Aluminum

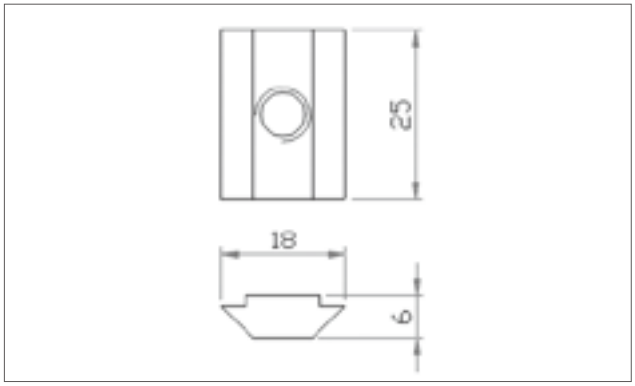
Bolt - connector



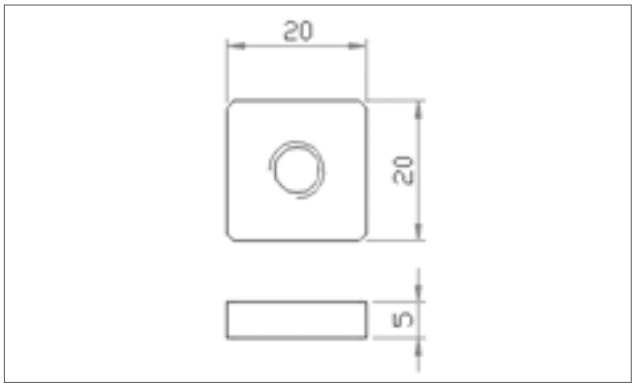
Reference	Length
HCAT20	L = 20mm

Nut - connector

Reference	Remarks
HCAN6	M6
HCAN8	M8



Reference	Remarks
HCAQ6	M6
HCAQ8	M8



Reference	Remarks
HCAN6	M6
HCAN8	M8