AmbaFlex
SCIENCE IN SPIRALS

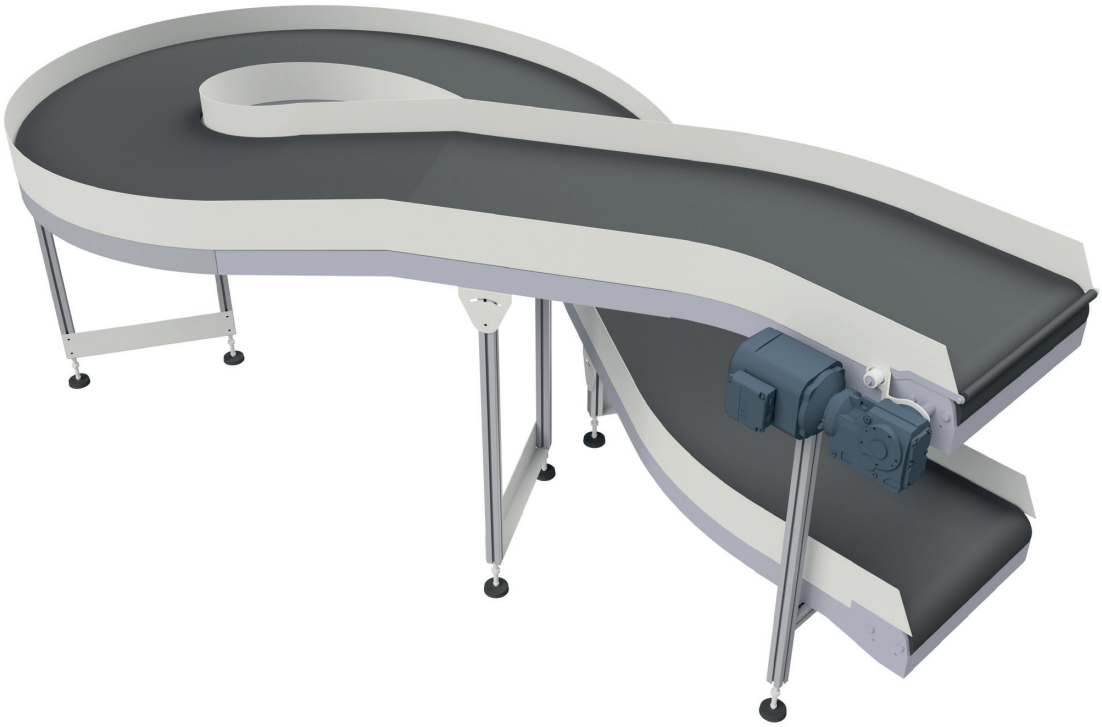
PDC

PreDefined Configuration

AmbaVeyor Curved Solutions

Endless flexibility

- **Reduce investment in conveying with the all-in-one AmbaVeyor solutions**
- **Unique modular conveyor system**
- **One continuous conveyor that incorporates straights, inclines, and curves**
- **Cut the number of drives by 30%**
- **High load capacity (up to 50 kg/meter)**
- **Internet configuration and online ordering**
- **A simple yet durable design results in low TCO**



AmbaVeyor Curved Solutions

Nine predefined curved solutions that fit almost any job
AmbaVeyor is a flexible conveyor system that can run over long distances and can include curves, straights, and inclines with just a single belt. Still, there is a demand for smaller ready to run, pre-assembled curved solutions to be integrated into traditional conveyor lines, which are able to resolve complex conveying issues. The nine most commonly used curved solutions are specified in this PDC (predefined configurations) document.

For customized or complete turn-key AmbaVeyor solutions, please contact us for advice and a tailor-made proposal. AmbaVeyor orders can either be self-installed or delivered as ready-to-run.

Reduce investment in conveying with the all-in-one AmbaVeyor conveyor solution
On top of these general AmbaVeyor features, the curved solutions program enhances the complete line by cutting drives, transfers, and reduced the space needed, even on shorter conveyor tracks. They come pre-assembled and tested, and can be fitted in most challenging areas as a quick fit.

Simplicity and durable design results in low TCO
With its combination of durability and limitless versatility, the AmbaVeyor represents real value for money. Where complicated maneuvers are involved, traditional systems can be up to four times more expensive for comparable functionalities. The favorable prices of the AmbaVeyor curved solutions prove to be unbeatable against overall track prices.

Cut the number of drives by 30%
Depending on the application, AmbaVeyors can operate along a distance of up to 50 meters with a single continuous belt and just one drive. The reduced number of drives enhances the versatility of the system as a whole and reduces cost by eliminating drives, wiring, sensors, frequency inverters, and programming.

One continuous conveyor incorporates that straights, inclines, and curves
The AmbaVeyor runs effortlessly through curves, inclines, and straights with a continuous 3D-flexing belt. This centrally guided belt a unique type based on composite slats fitted on a durable steel base chain. The reduced number of transfers avoids jams and increases versatility.

High load capacity (up to 50 kg/meter)
The load per linear meter can be up to 50 kg, depending on the application. Such heavy loads make the AmbaVeyor suitable for almost all indoor unit handling applications.

Internet configuration and online ordering
In addition to the product features and low investment costs, the AmbaVeyor comes with online technical catalogs, CAD models, and even a price and drawing wizard. Save time and calculate your AmbaVeyor in as little as ten questions and order it on the fly.

Distinctive features

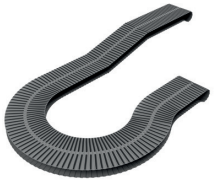
One Minute Maintenance
The only spiral conveyor that does not require tools for belt maintenance. Slats can quickly be snapped on and off by hand. A quick, one minute fix for those rare cases it's needed at all ..... <ask more>

Uniform spareparts
Different from conveyor systems build up from various elements like belt conveyors, belt curves, matt top or roller conveyors, the AmbaVeyor is one technology with just a limited number of spare parts ..... <ask more>

AmbaVeyor Curved Solutions

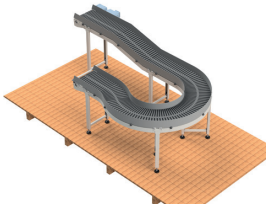
AmbaVeyor in General
The AmbaVeyor is built up from a frame (figure 1), a flexing slat belt (figure 2) and accessories like a drive, supports, transfer rollers, and guides (figure 3). This results in a curved solution.


frame

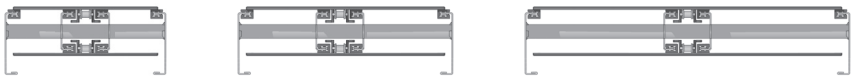

slat belt


AmbaVeyor

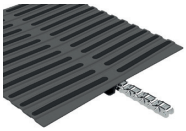
Delivery
Predefined curved solutions are delivered pre-assembled, and shipped in one piece on a pallet. In case the pallet becomes too big (max. 2.3 x 4 m) the curved solution will be cut in segments that easily fit together on site. In some cases, the support legs and drive will be dismantled for easy shipping. If not supplied in one piece, this will be confirmed in the order confirmation.



Belt width
The curved solutions come standard in 3 belt widths, 300, 400 and 600 mm.



Belt
The side flexing slat belt starts with a side bow roller chain as the central drive element. On top of this belt, flexible yet stiff slat elements are snapped on, overlapping each other to build up a closed belt. Optionally, the belt can be fitted with friction inserts to enable inclines and or secure product positioning on the belt. See the option “Friction inserts.”.



Frame
The frames support guides the belt through its curved path. The frame is made of aluminum extruded profiles with T-slots, galvanized inner profiles and cross members. The frame is fitted with extruded HDPE profiles to slide the belt on the frame.

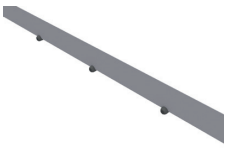
OPTIONS

Friction slats
Depending on the application, friction slats on AmbaVeyor are standard or optional if not considered mandatory in the PDC.

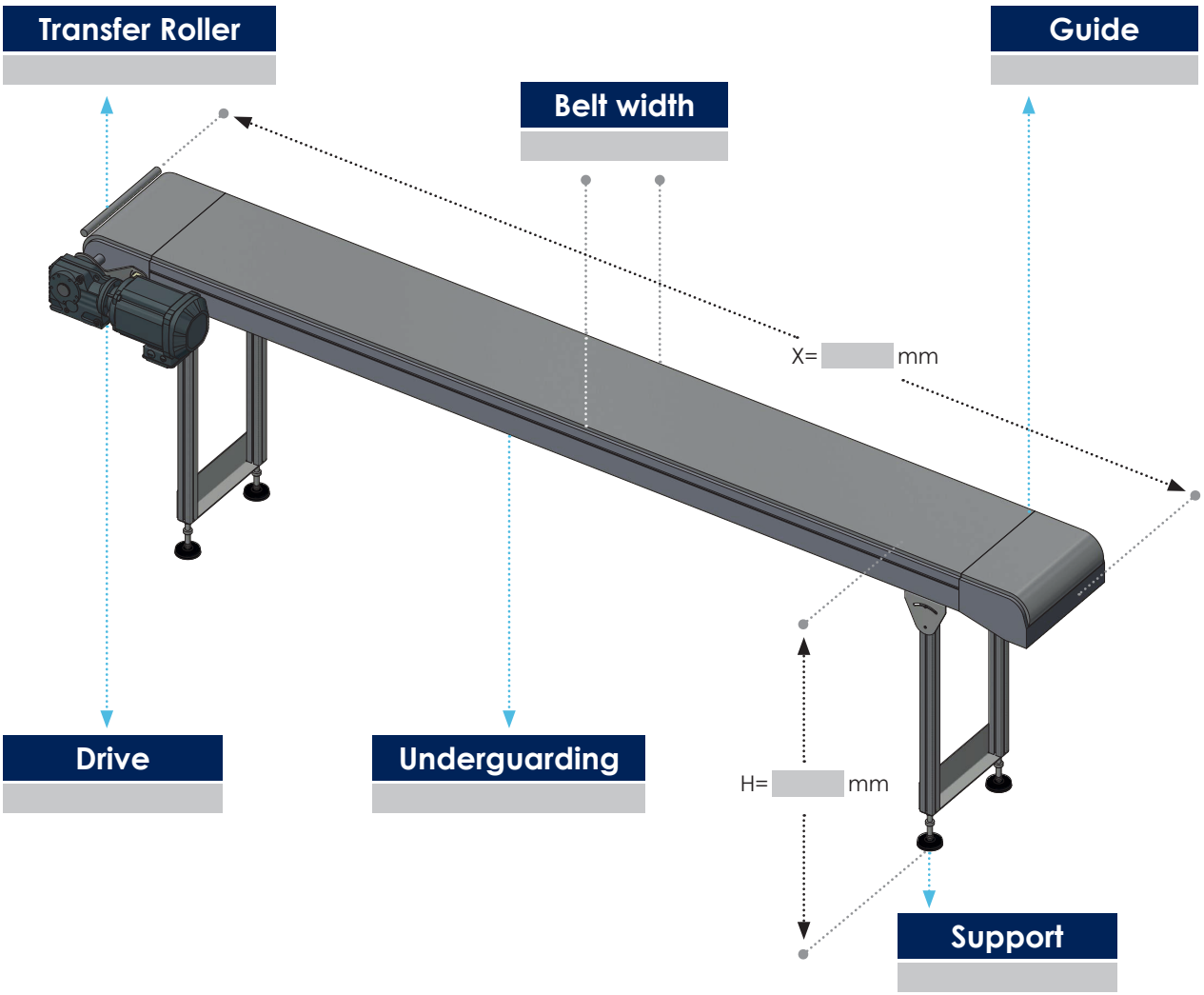
Support
Floor supports are optional within a height range of 300-1500 mm (top-of-belt).
The recommended positions of the floor supports are specified in the confirmation order.
Supports are adjustable +/- 35 mm. Supports, when ordered, are pre-assembled unless specified in the confirmation order.

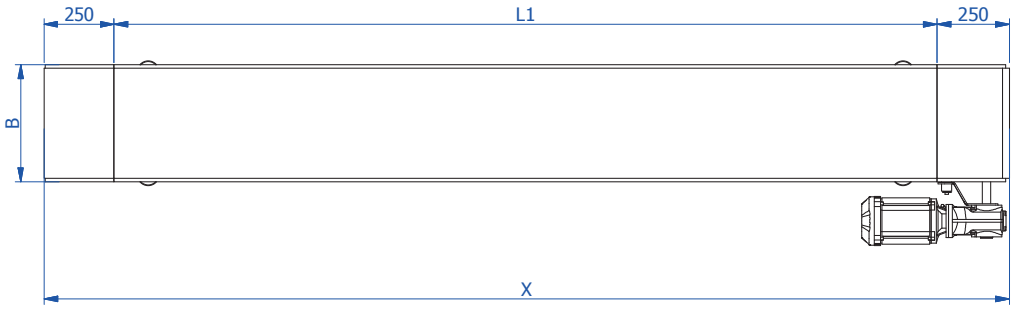
Transfer rollers
Non-driven 25 mm transfer rollers are available as an option to ease the transfer of small items.

Side guides
Plate style side guides are optionally available in two heights 50 and 100 mm to top belt.



PDC Straight

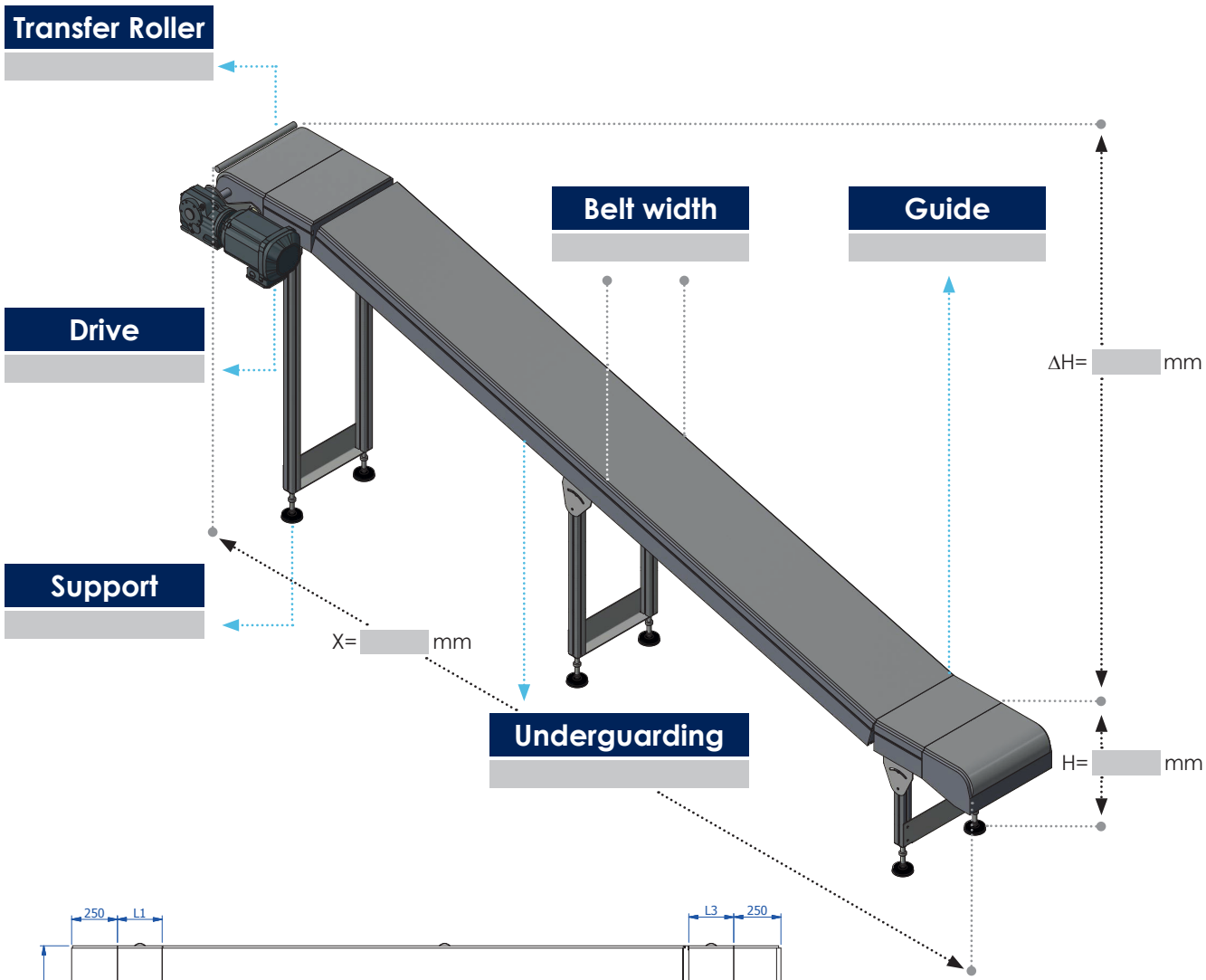


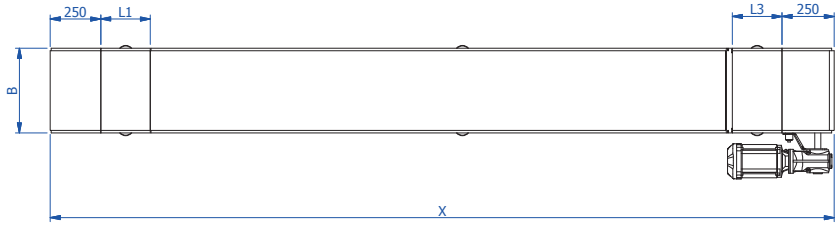


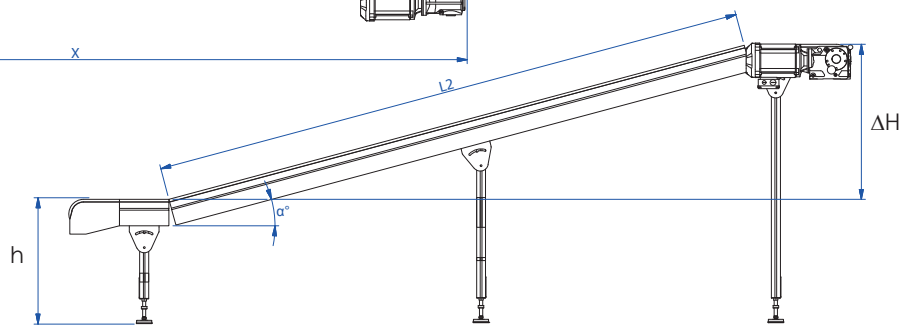
	General	AFa300	AFa400	AFa600
Belt width B		300	400	600
Frame width		326	426	626
Length X		750 < X < 6000	750 < X < 6000	750 < X < 6000
L1	≥ 250	= X - 500	= X - 500	= X - 500
h, top of belt	350 < h < 1500			

All dimensions in mm

PDC Gooseneck



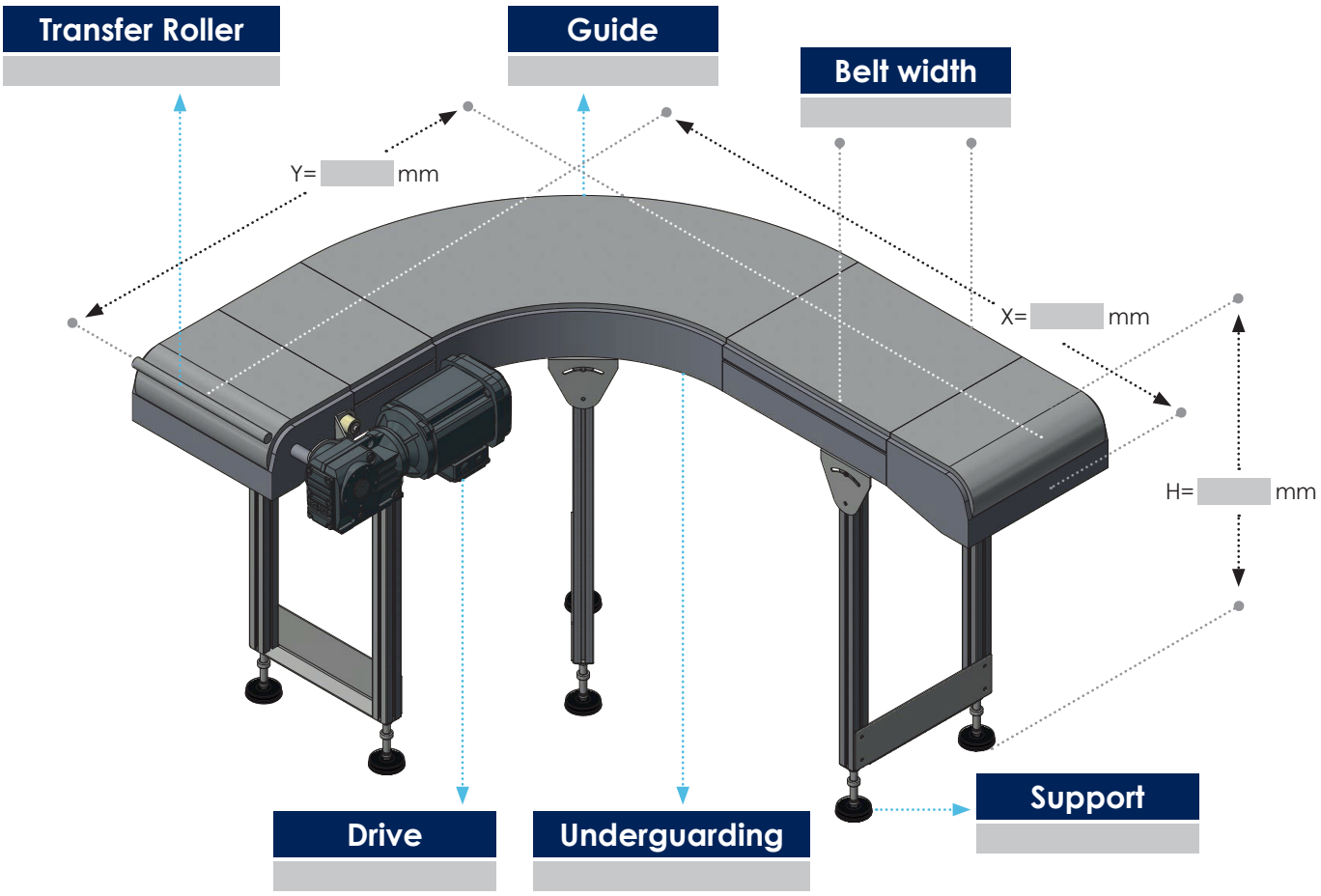


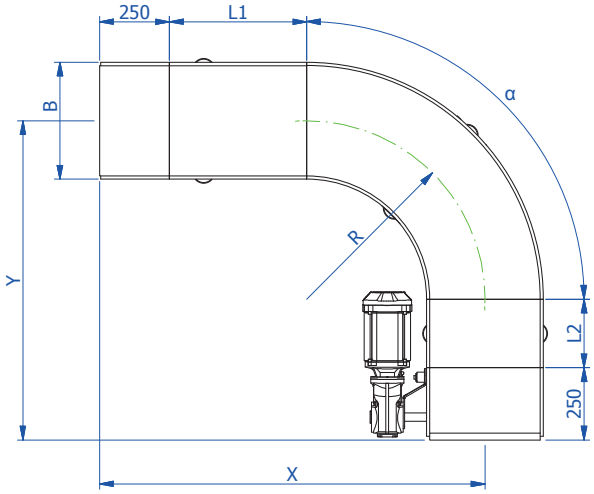


	General	AFa300	AFa400	AFa600
Belt width B		300	400	600
Frame width		326	426	626
Length X	L2 = (X-L1-L3-500)/cos(a)	1250 < X < 6000	1250 < X < 6000	1250 < X < 6000
L1 & L2 & L3	≥ 250			
a (in°)		0 < a < 15	0 < a < 15	0 < a < 15
h, top of belt	350 < h < 1500			
ΔH elevation	L2 * sin (a)			

All dimensions in mm

PDC Curve

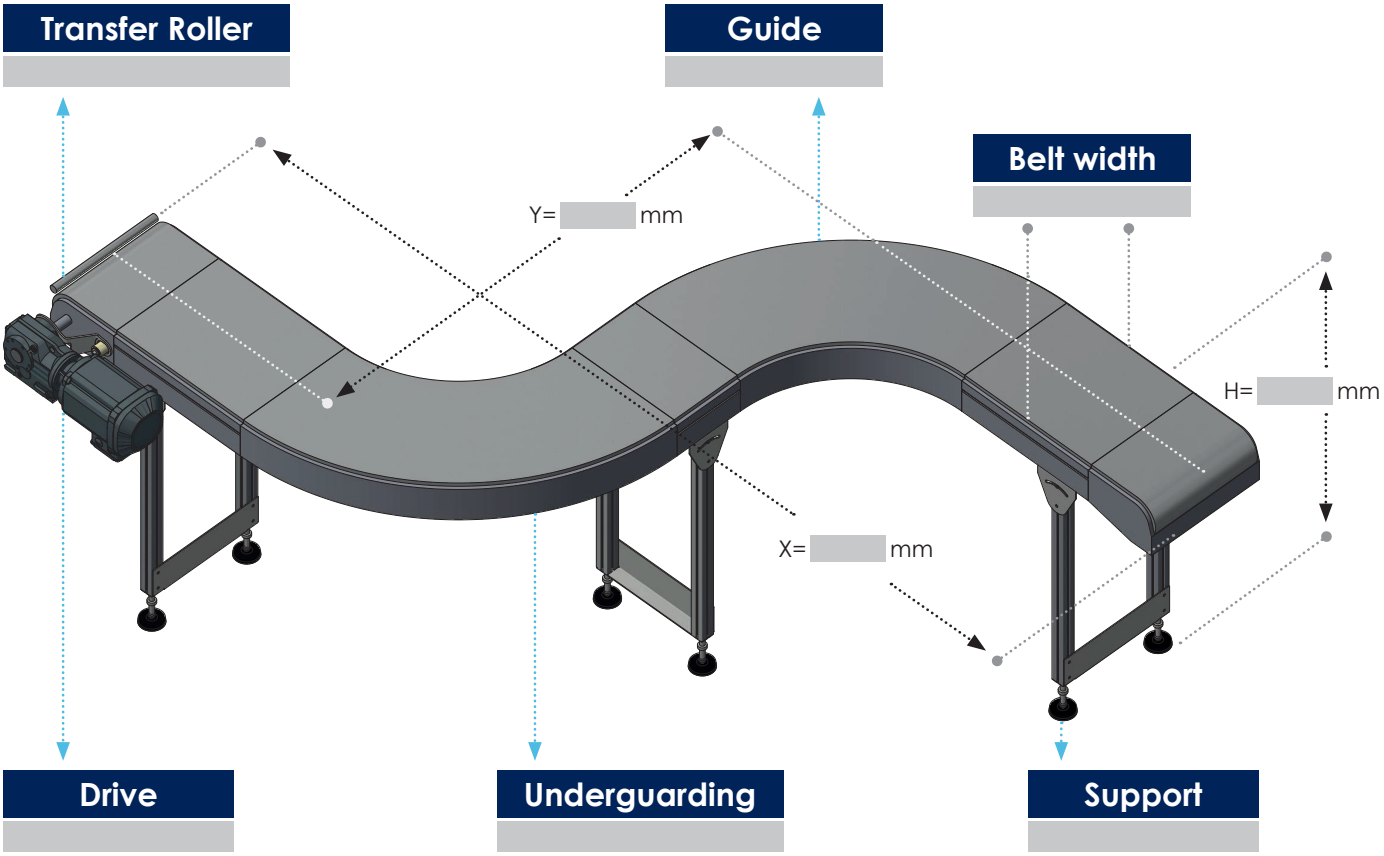


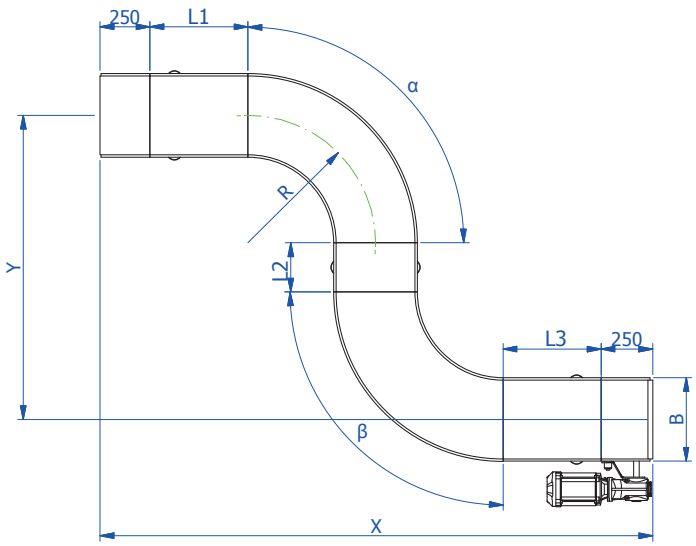


	General	AFa300	AFa400	AFa600
Belt width B		300	400	600
Central radius R		650	650	800
Frame width		326	426	626
Length Y		900=Y or 1150<Y<3000	900=Y or 1150<Y<3000	1050=Y or 1300<Y<3000
Length X		900=X or 1150<X<3000	900=X or 1150<X<3000	1050=X or 1300<X<3000
L1 & L2	0 ^ ≥ 250			
h, top of belt	350 < h < 1500			

All dimensions in mm

PDC S-Curve

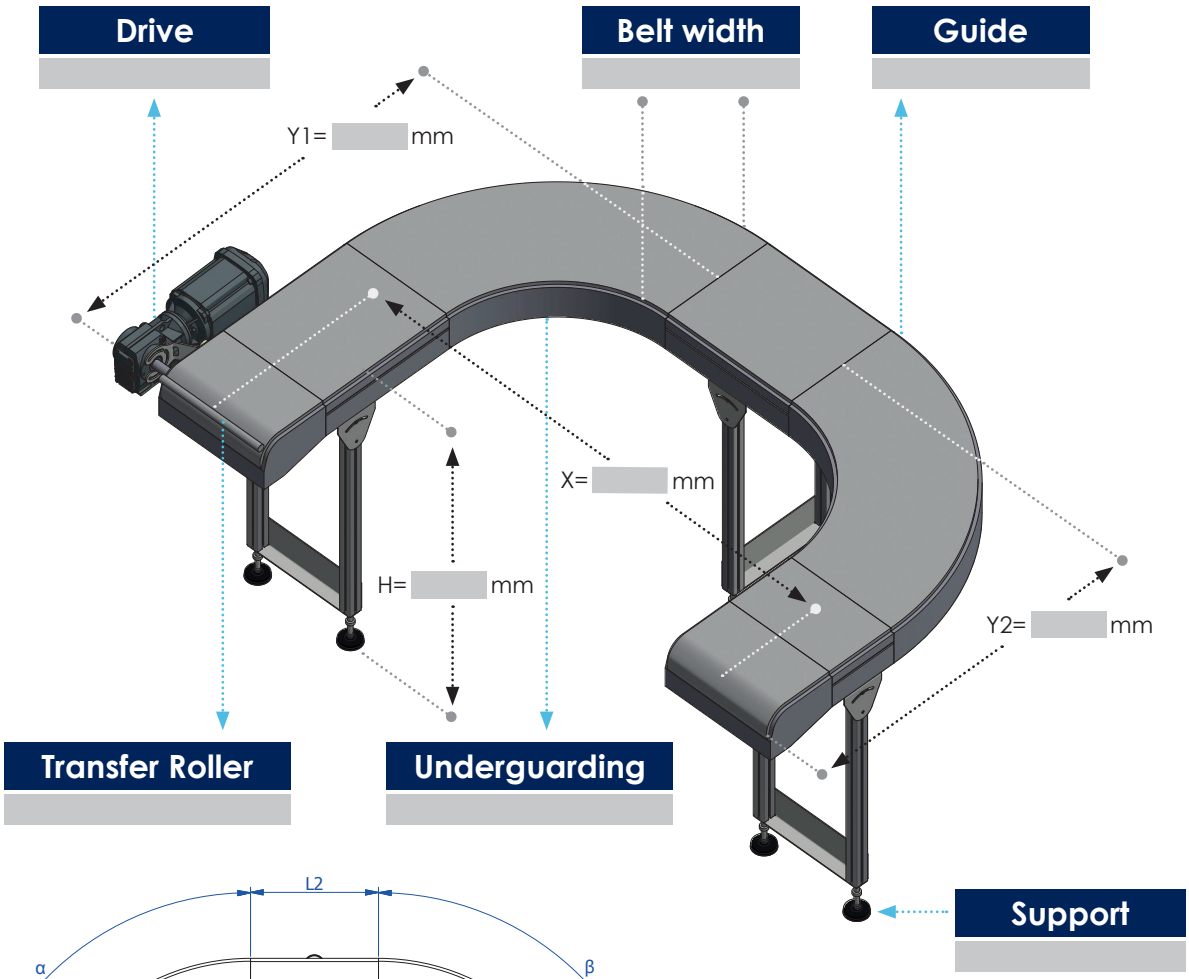


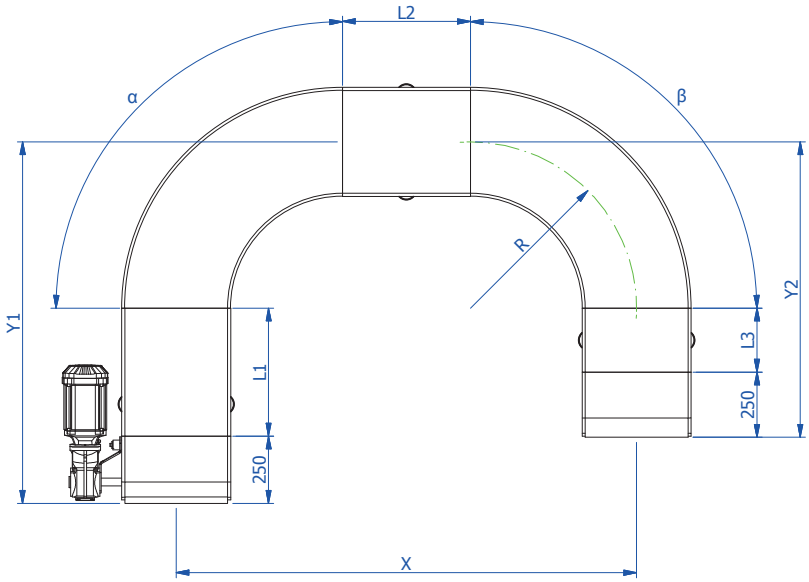


	General	AFa300	AFa400	AFa600
Belt width B		300	400	600
Central radius R		650	650	800
Frame width		326	426	626
Length Y		1300=Y or 1550<Y<5000	1300=Y or 1550<Y<5000	1600=Y or 1850<Y<5000
Length X		1800=X or 2050<X<5000	1800=X or 2050<X<5000	2100=X or 2350<X<5000
L1 & L2 & L3	0 ^ ≥ 250			
h, top of belt	350 < h < 1500			

All dimensions in mm

PDC U-Shape

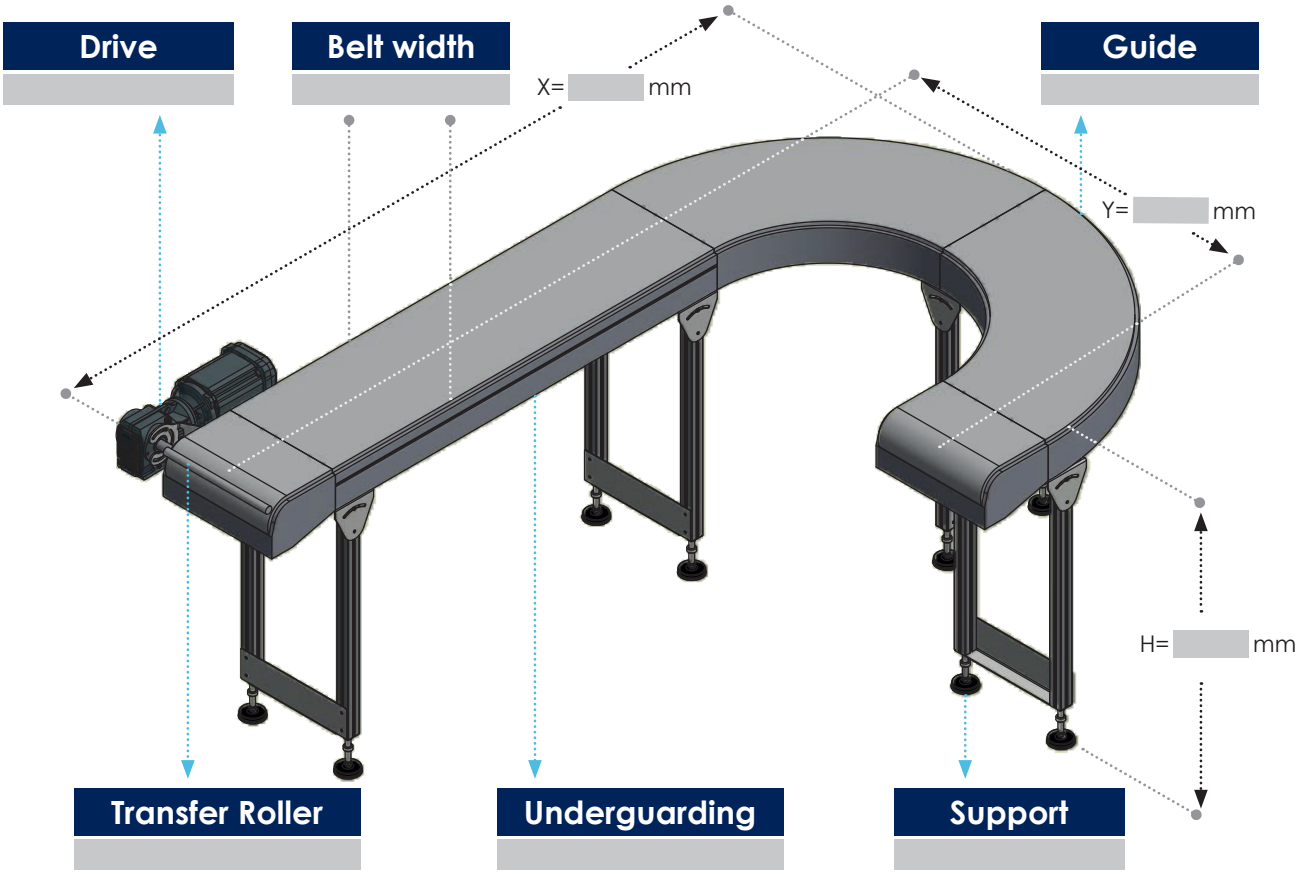


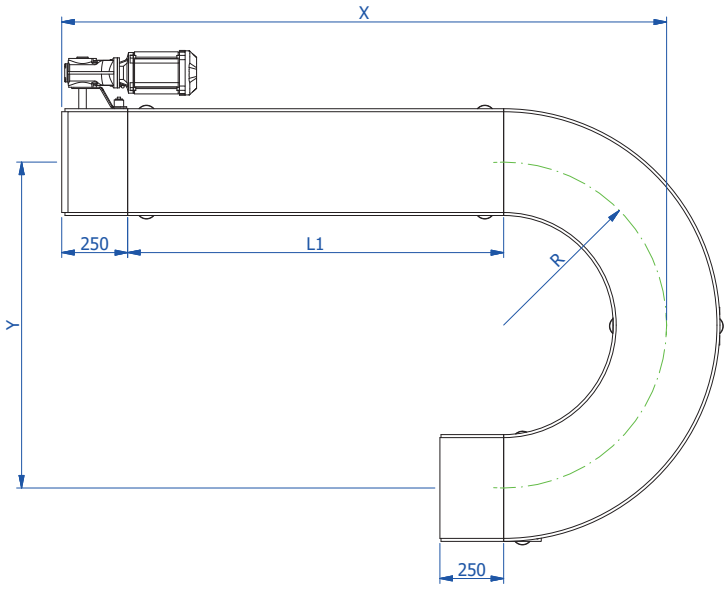


	General	AFa300	AFa400	AFa600
Belt width B		300	400	600
Central radius R		650	650	800
Frame width		326	426	626
Length Y1 / Y2		900=Y or 1150<Y<3000	900=Y or 1150<Y<3000	1050=Y or 1300<Y<3000
Length X		1300=X or 1550<X<3000	1300=X or 1550<X<3000	1600=X or 1850<X<3000
L1 & L2 & L3	0 ^ ≥ 250			
h, top of belt	350 < h < 1500			

All dimensions in mm

PDC Hockeystick

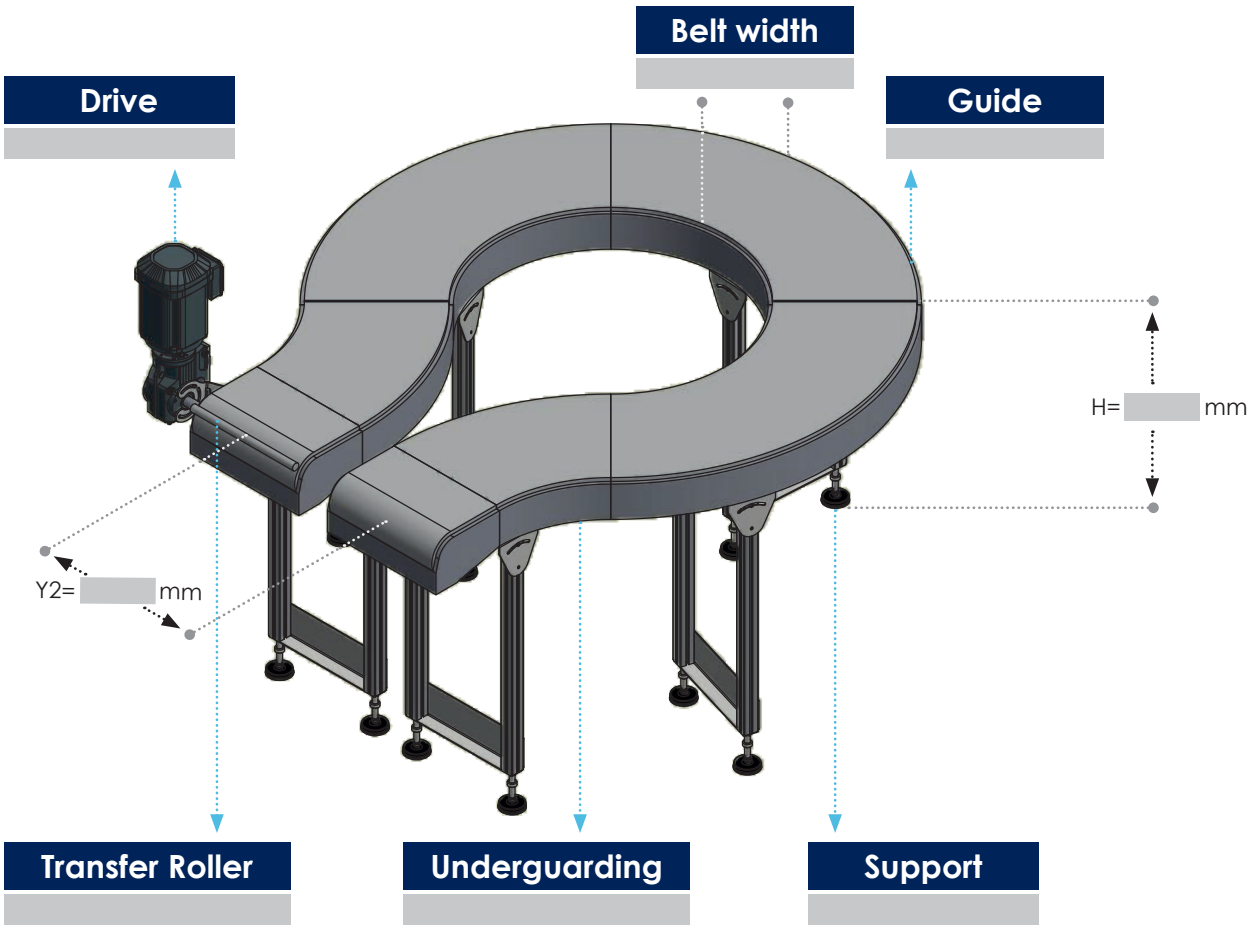


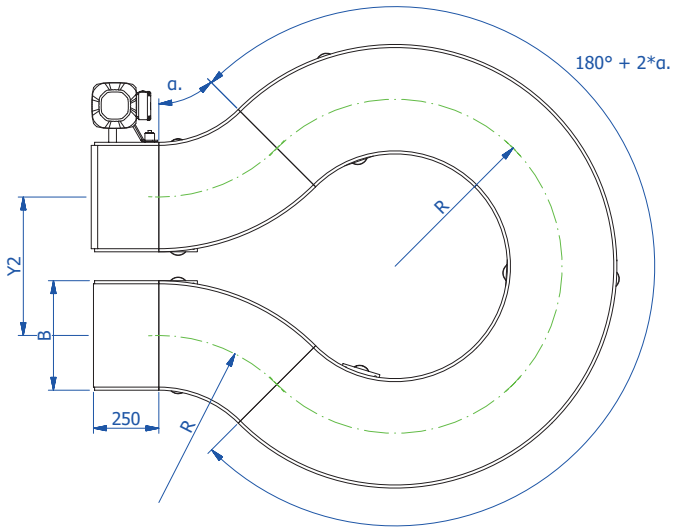


	General	AFa300	AFa400	AFa600
Belt width B		300	400	600
Central radius R		650	650	800
Frame width		326	426	626
Length Y		1300	1300	1600
Length X		900=X or 1150<X<3000	900=X or 1150<X<3000	1050=X or 1300<X<3000
L1	0 ^ ≥ 250			
h, top of belt	350 < h < 1500			

All dimensions in mm

PDC Horseshoe



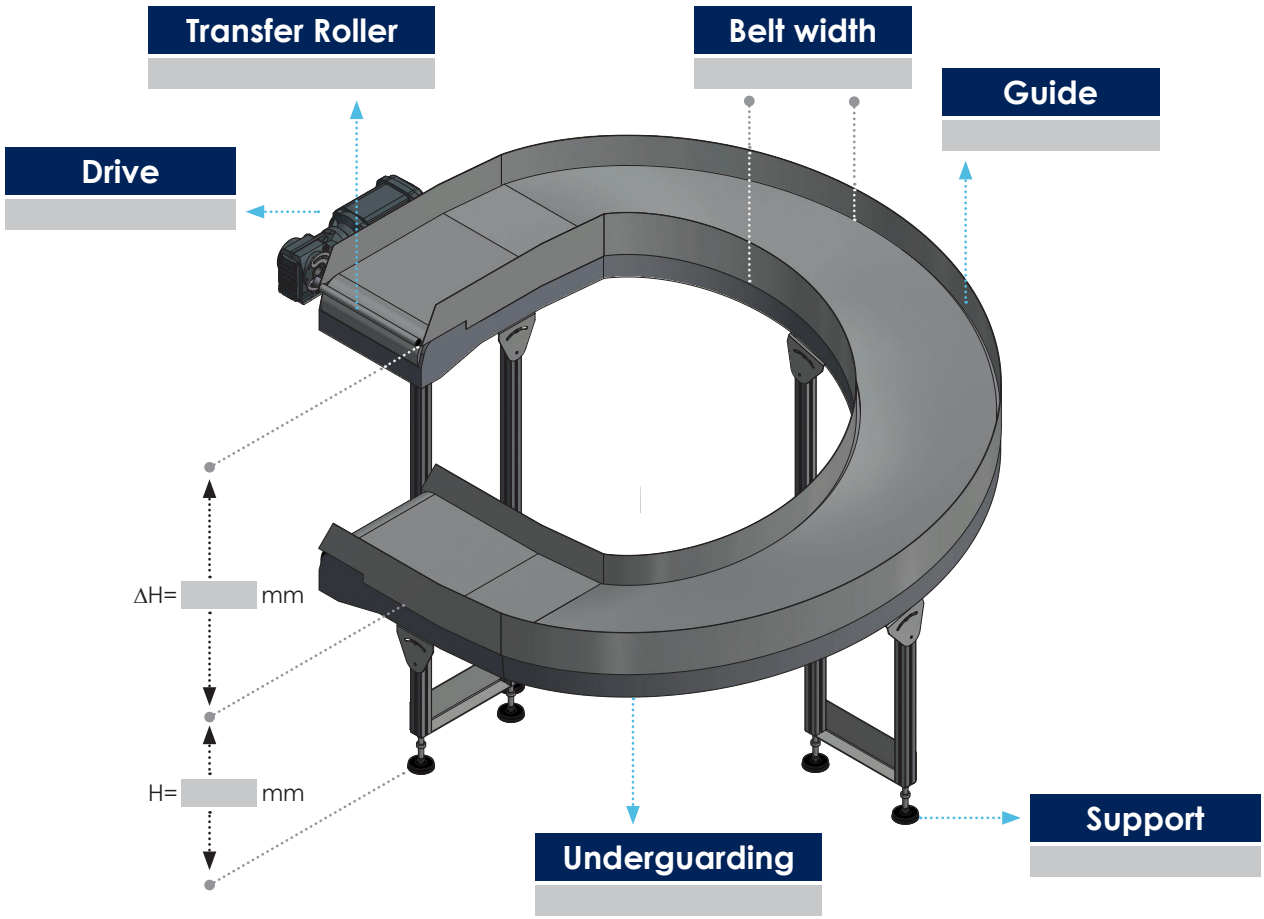


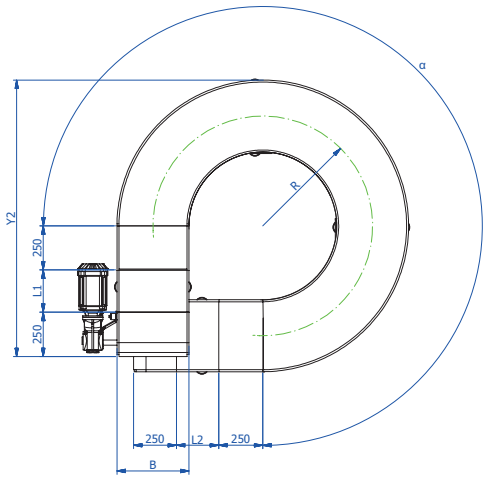
	General	AFa300	AFa400	AFa600
Belt width B		300	400	600
Central radius R		650	650	800
Frame width		326	426	626
Y2		330 < Y2 < 1300*	430 < Y2 < 1300*	630 < Y2 < 1600*
h, top of belt	350 < h < 1500			
Angle a	a follows Y2			

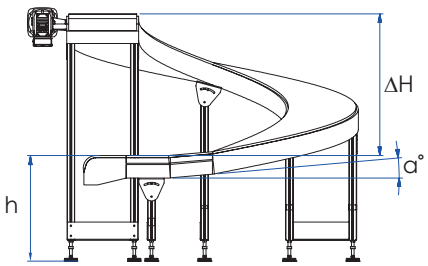
**) in case Y2=2*R the shape is actually a U-Shape*

All dimensions in mm

PDC Helix



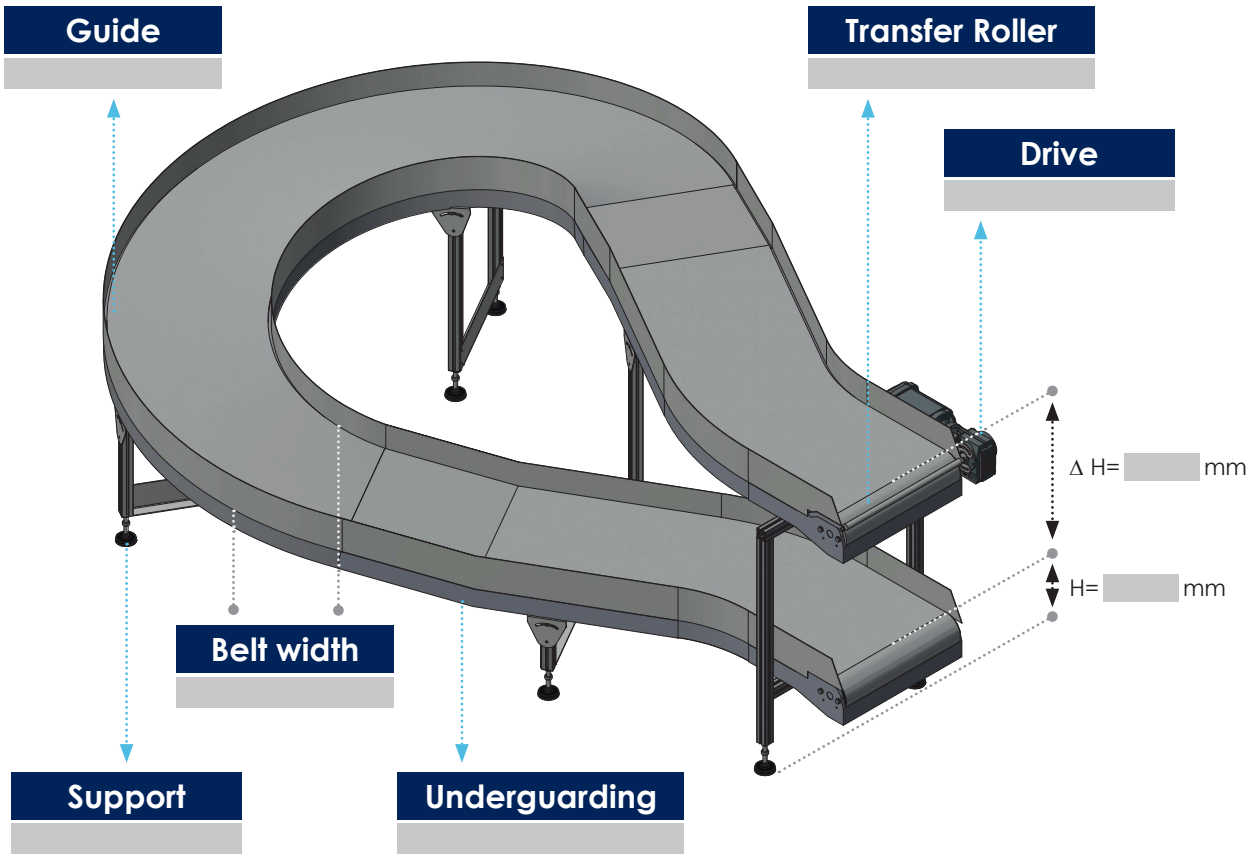


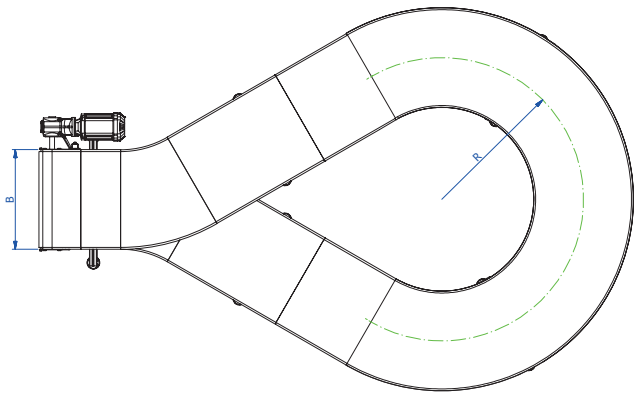


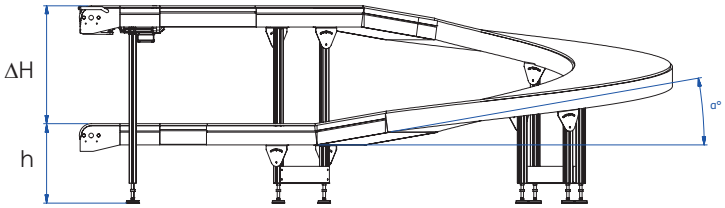
	General	AFa300	AFa400	AFa600
Belt width B		300	400	600
Central radius R		650	650	800
Frame width		326	426	626
Δ H		300 < Δ H < 1000	300 < Δ H < 1000	300 < Δ H < 1300
a (in°)		5° < a < 15°	5° < a < 15°	5° < a < 15°
L1 & L2	0 ^ ≥ 250			
h, top of belt	350 < h < 1500			

All dimensions in mm

PDC Lightbulb







	General	AFa300	AFa400	AFa600
Belt width B		300	400	600
Central radius R		650	650	800
Frame width		326	426	626
ΔH		500 < Δ H < 1000	500 < Δ H < 1000	500 < Δ H < 1100
a (in°)		5° < a < 15°	5° < a < 15°	5° < a < 15°
h, top of belt	350 < h < 1500			

All dimensions in mm