

ZER⁵²⁰CONTACT

CURVE CONVEYOR

Movex[®]
www.movexii.com

EM
ENGINEERING MANUAL

APPLICATION CONSIDERATIONS.

The proper selection and application of Movex® products and components, including the related area of product safety, is the responsibility of the customer. Operating and performance requirements and potential associated issues will vary appreciably depending upon the use and application of such products and components. The scope of the technical and application information included in this publication is necessarily limited. Unusual operating environments and conditions, lubrication requirements, loading supports, and other factors can materially affect the application and operating results of the products and components and the customer should carefully review its requirements. Users of our products should make their own tests to determine the suitability of any product for their particular purposes.

Any technical advice or review furnished by Movex® with respect to the use of products and components is given in good faith and without charge, and Movex® assumes no obligation or liability for the advice given, or results obtained, all such advice and review being given and accepted at customer's risk.

For a copy of our Standard Terms and Conditions of Sale, Disclaimers of Warranty, Limitation of Liability and Remedy, please see our web site www.movexii.com or contact our Customer Service.

These terms and conditions of sale, disclaimers and limitations of liability apply to any person who may buy, acquire, or use any Movex® product referred to herein, including any person who buys from a licensed distributor of these branded products.

The applicable Movex® product catalogs and installation/maintenance bulletins must be used only by qualified individuals familiar with Movex® products; these documents contain important precautions and other information intended to reduce the risk of bodily injury. Refer to these documents before specifying, installing, operating, or servicing equipment.

Incorrect and/or incomplete data could cause the selection of improper components, potentially resulting in bodily injury. Movex® makes no warranties, express or implied, of merchantability or fitness for a particular purpose.

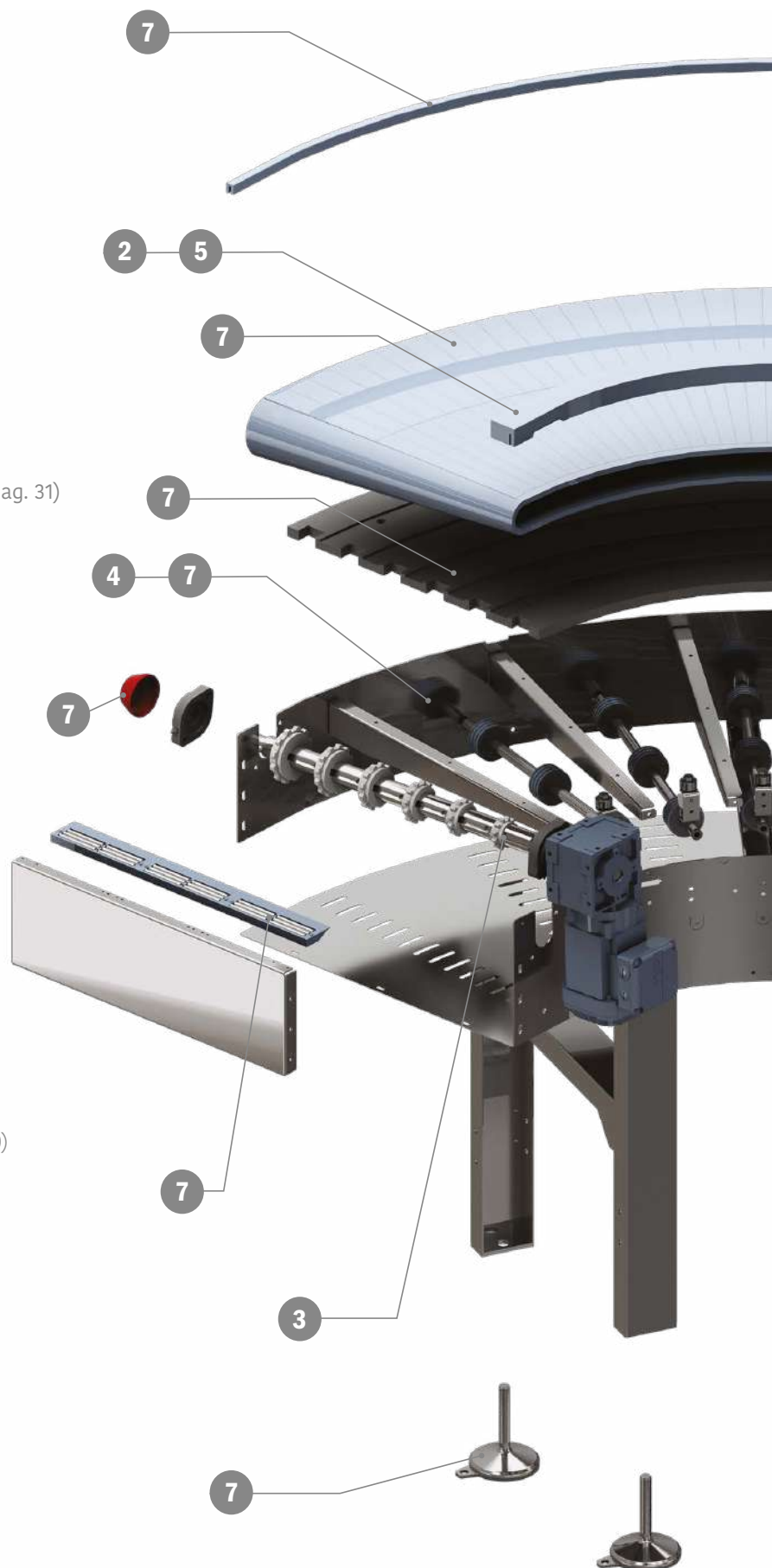
Movex® will not be liable for direct or indirect incidental, consequential, or punitive damages arising from the use or inability to use this any of the information made available, including but not limited to product literature, selection programs, and interchange guides. Movex® reserves the right to correct, modify, update and/or enhance these documents at any time without notice or penalty, including but not limited to pricing, technical data, etc. Most updated documents can always be found on the website. For more technical information, contact our Technical Support.

© Copyright Movex S.p.A. 2022

The contents of this manual are the copyright of the publisher and may not be reproduced (even extracts) unless permission is granted.

Every care has been taken to ensure the accuracy of the information contained in this publication, but no liability can be accepted for any error or omission. **Catalogue N° M999583**

1	Curve conveyor: a. Zero Contact™ (pag. 5) b. Zero Contact™PRO (pag. 7) c. Zero Contact™S (pag. 10)
2	Modular belt: a. Zero Contact™ (pag. 12) b. Zero Contact™PRO (pag. 13)
3	Sprocket position: a. Zero Contact™ (pag. 15) b. Zero Contact™PRO (pag. 17)
4	Frame construction: a. Shaft & bearings position (pag. 30) b. Number of bearings & return rollers (pag. 31)
5	Belt speed calculation & main dimensions: a. Zero Contact™ (pag. 33) b. Zero Contact™PRO (pag. 34) c. Main Dimensions (pag. 35)
6	Zero ATP & Zero ATP PRO: a. Active transfer plate (pag. 37)
7	Recommended components: a. Return rollers (pag. 39) b. Locking collars (pag. 39) c. Flange bearings (pag. 39) d. Extruded profiles (pag. 40) e. Molded transfer modules (pag. 41) f. Machined transfer modules (pag. 43) g. Levelers (pag. 44) h. Machined curve (pag. 45) i. Machined sliding profiles (pag. 47)
8	PPE: a. Personal protective equipment (pag. 50)
9	Maintenance: a. General instructions (pag. 51) b. Do's and Don'ts (pag. 57) c. Troubleshooting (pag. 58)
10	Materials: a. LFA - LFB (pag. 59) b. PA (pag. 60)
11	FAQ: a. Frequently asked question (pag. 61)



1. Introduction

The **Zero Contact™** Curve is a curve conveyor with a plastic modular belt with small pitches which is specifically designed to easily connect with straight conveyors. Short transfers and small inner radius contribute to compact design and integration in line layout.



DESIGN

Innovative, robust and low noise construction conveyor.



RADIUS AND PITCH

Constant inner radius and small pitch.



PRODUCT CARE

Improved product handling, holding original orientation and safe product transfer.



IMPLEMENTATION

Easy implementation in existing layout and easy replacement in existing conveyor lines.

The **Zero Contact™** Curve is available in different widths with a closed-top surface capable of handling a variety of package sizes, types and configurations including delicate products (e.g. applications exiting a shrink wrapper).

Find out the best solution: **Zero Contact™**, **Zero Contact™ PRO** and **Zero Contact™ S**.

Zero Contact benefits | Comparison with traditional solutions



- Simpler installation
- Full product support
- Complete closed sliding surface
- Safer design
- Easier and quicker maintenance
- Suitable for handling instable products

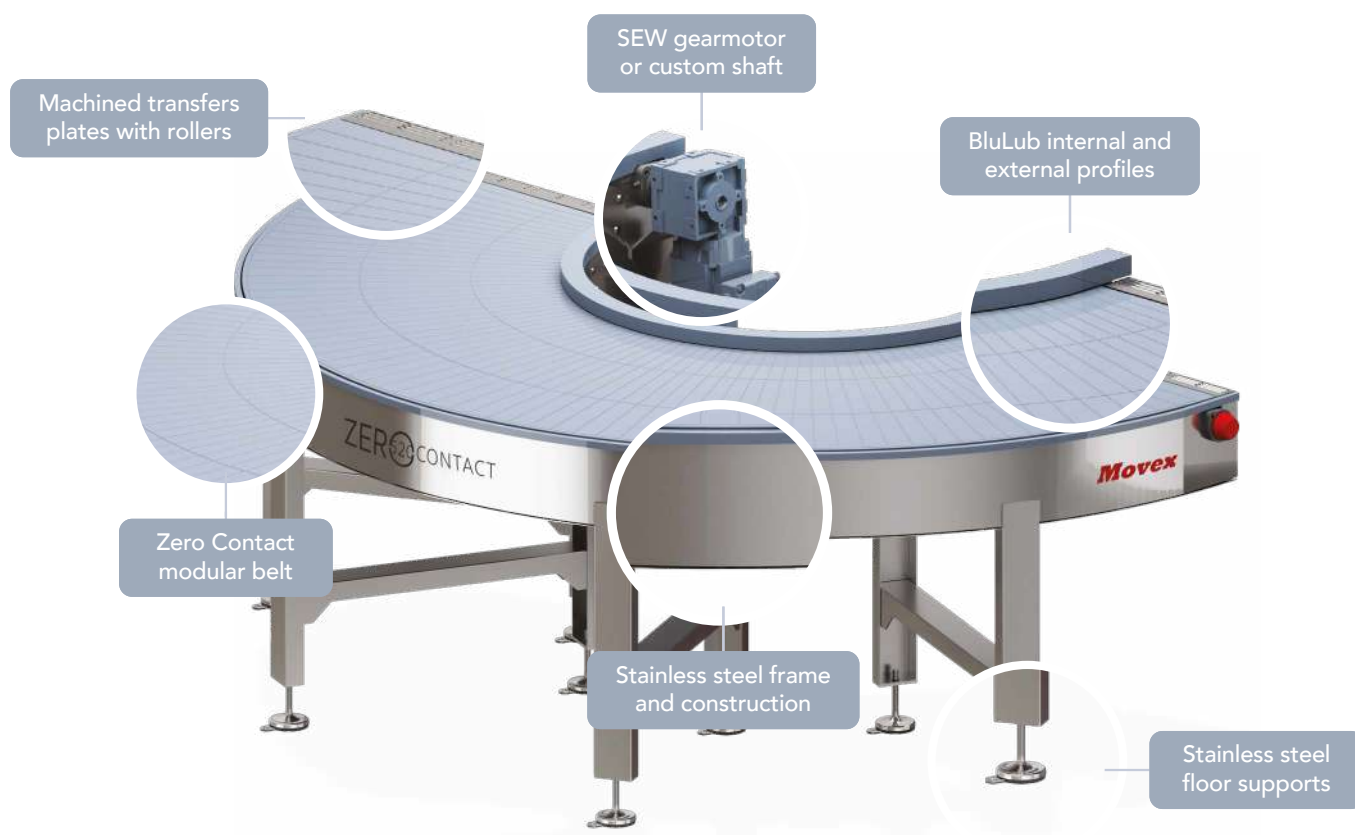


- Higher loads
- Higher speeds
- Easier and quicker maintenance
- Lower cost for curve renewal
- Power drive evenly distributed
- Less downtime

ZERO⁵²⁰CONTACT

CURVE CONVEYOR

Stainless steel frame - Low coefficient of friction - FDA approved



INNER RADIUS 600mm ÷ 2000mm

BELT WIDTH 200mm ÷ 1600mm

MATERIAL OF MODULES Acetal (POM)

COLOR OF MODULES Pigeon Blue (RAL 5014)

PINS PBT White

PIN LOCK Clips

FRAME Stainless steel

TEMPERATURE RANGE

Dry: -40°C ÷ 80°C Wet: -40°C ÷ 65°C
(Dry: -40°F ÷ 176°F Wet: -40°F ÷ 149°F)

MAX. WORKING LOAD

13.500 N/m belt width (924 lb/ft belt width)

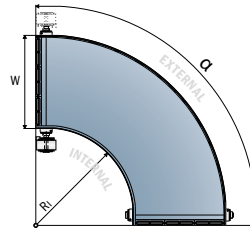
CURVE ANGLE 15° ÷ 360°

OPEN AREA 0%

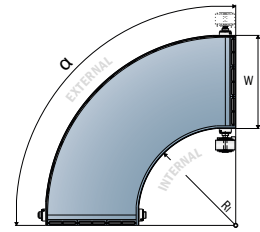
CURVES RANGE

Angle 90°

Left Version **CS**



CD Right Version

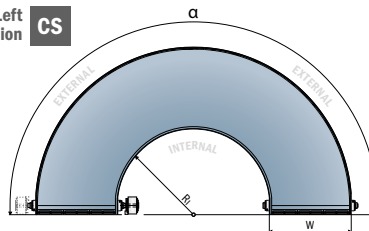


Width	Version	R _i 600mm	R _i 800mm	R _i 1000mm	R _i 1200mm	R _i 1400mm	R _i 1600mm	R _i 1800mm	R _i 2000mm
200mm	RIGHT	W02R06G090-CD	W02R08G090-CD	W02R10G090-CD	W02R12G090-CD	W02R14G090-CD	W02R16G090-CD	W02R18G090-CD	W02R20G090-CD
	LEFT	W02R06G090-CS	W02R08G090-CS	W02R10G090-CS	W02R12G090-CS	W02R14G090-CS	W02R16G090-CS	W02R18G090-CS	W02R20G090-CS
400mm	RIGHT	W04R06G090-CD	W04R08G090-CD	W04R10G090-CD	W04R12G090-CD	W04R14G090-CD	W04R16G090-CD	W04R18G090-CD	-
	LEFT	W04R06G090-CS	W04R08G090-CS	W04R10G090-CS	W04R12G090-CS	W04R14G090-CS	W04R16G090-CS	W04R18G090-CS	-
600mm	RIGHT	W06R06G090-CD	W06R08G090-CD	W06R10G090-CD	W06R12G090-CD	W06R14G090-CD	W06R16G090-CD	-	-
	LEFT	W06R06G090-CS	W06R08G090-CS	W06R10G090-CS	W06R12G090-CS	W06R14G090-CS	W06R16G090-CS	-	-
800mm	RIGHT	W08R06G090-CD	W08R08G090-CD	W08R10G090-CD	W08R12G090-CD	W08R14G090-CD	-	-	-
	LEFT	W08R06G090-CS	W08R08G090-CS	W08R10G090-CS	W08R12G090-CS	W08R14G090-CS	-	-	-
1000mm	RIGHT	W10R06G090-CD	W10R08G090-CD	W10R10G090-CD	W10R12G090-CD	-	-	-	-
	LEFT	W10R06G090-CS	W10R08G090-CS	W10R10G090-CS	W10R12G090-CS	-	-	-	-
1200mm	RIGHT	W12R06G090-CD	W12R08G090-CD	W12R10G090-CD	-	-	-	-	-
	LEFT	W12R06G090-CS	W12R08G090-CS	W12R10G090-CS	-	-	-	-	-
1400mm	RIGHT	W14R06G090-CD	W14R08G090-CD	-	-	-	-	-	-
	LEFT	W14R06G090-CS	W14R08G090-CS	-	-	-	-	-	-
1600mm	RIGHT	W16R06G090-CD	-	-	-	-	These codes mean complete curve, except floor supports and gearmotor, if you need to include them please see the catalogue.		
	LEFT	W16R06G090-CS	-	-	-	-			

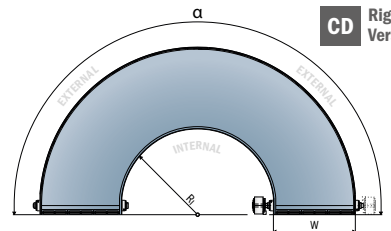
CURVES RANGE

Angle 180°

Left Version **CS**



CD Right Version

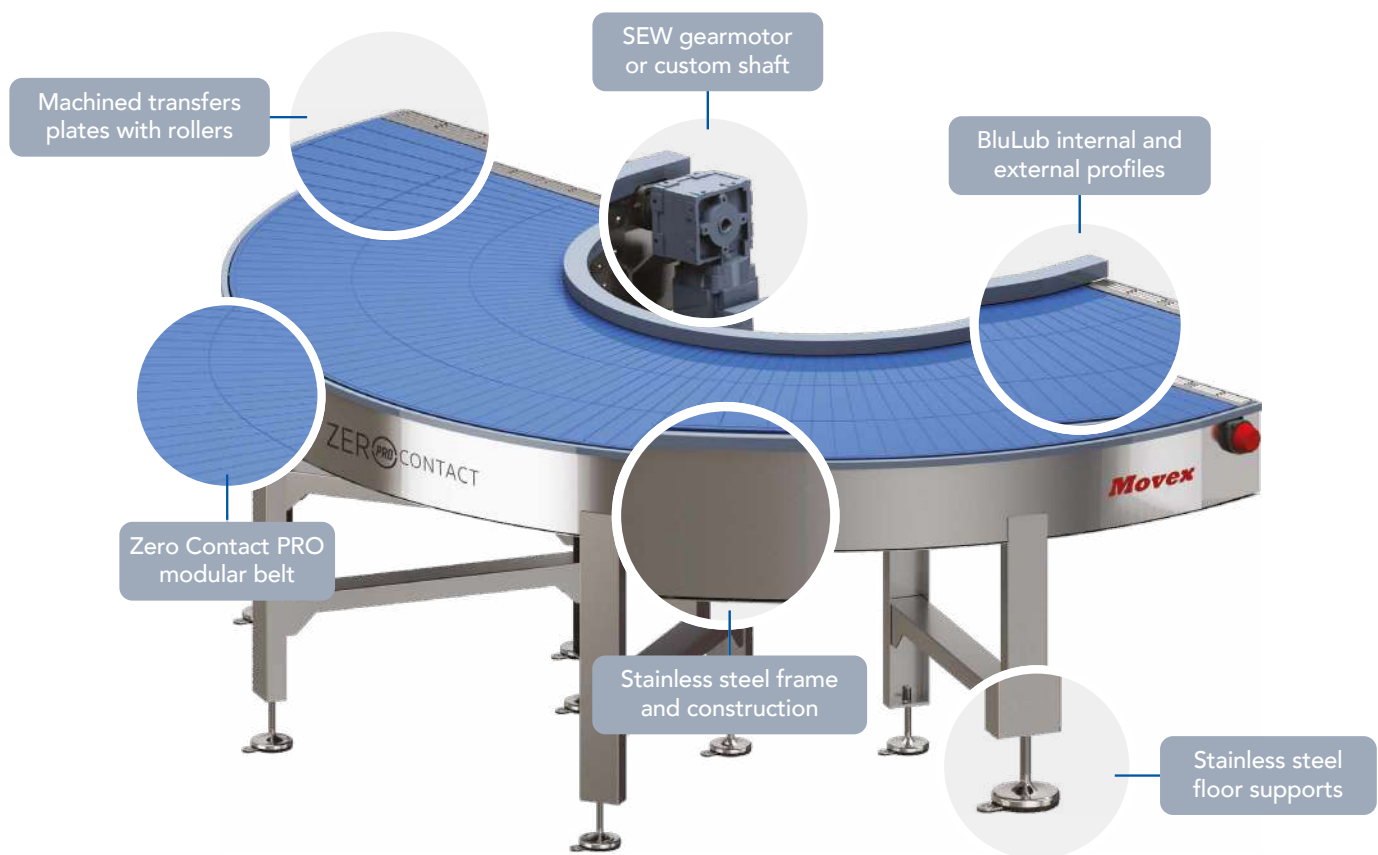


Width	Version	R _i 600mm	R _i 800mm	R _i 1000mm	R _i 1200mm	R _i 1400mm	R _i 1600mm	R _i 1800mm	R _i 2000mm
200mm	RIGHT	W02R06G180-CD	W02R08G180-CD	W02R10G180-CD	W02R12G180-CD	W02R14G180-CD	W02R16G180-CD	W02R18G180-CD	W02R20G180-CD
	LEFT	W02R06G180-CS	W02R08G180-CS	W02R10G180-CS	W02R12G180-CS	W02R14G180-CS	W02R16G180-CS	W02R18G180-CS	W02R20G180-CS
400mm	RIGHT	W04R06G180-CD	W04R08G180-CD	W04R10G180-CD	W04R12G180-CD	W04R14G180-CD	W04R16G180-CD	W04R18G180-CD	-
	LEFT	W04R06G180-CS	W04R08G180-CS	W04R10G180-CS	W04R12G180-CS	W04R14G180-CS	W04R16G180-CS	W04R18G180-CS	-
600mm	RIGHT	W06R06G180-CD	W06R08G180-CD	W06R10G180-CD	W06R12G180-CD	W06R14G180-CD	W06R16G180-CD	-	-
	LEFT	W06R06G180-CS	W06R08G180-CS	W06R10G180-CS	W06R12G180-CS	W06R14G180-CS	W06R16G180-CS	-	-
800mm	RIGHT	W08R06G180-CD	W08R08G180-CD	W08R10G180-CD	W08R12G180-CD	W08R14G180-CD	-	-	-
	LEFT	W08R06G180-CS	W08R08G180-CS	W08R10G180-CS	W08R12G180-CS	W08R14G180-CS	-	-	-
1000mm	RIGHT	W10R06G180-CD	W10R08G180-CD	W10R10G180-CD	W10R12G180-CD	-	-	-	-
	LEFT	W10R06G180-CS	W10R08G180-CS	W10R10G180-CS	W10R12G180-CS	-	-	-	-
1200mm	RIGHT	W12R06G180-CD	W12R08G180-CD	W12R10G180-CD	-	-	-	-	-
	LEFT	W12R06G180-CS	W12R08G180-CS	W12R10G180-CS	-	-	-	-	-
1400mm	RIGHT	W14R06G180-CD	W14R08G180-CD	-	-	-	-	-	-
	LEFT	W14R06G180-CS	W14R08G180-CS	-	-	-	-	-	-
1600mm	RIGHT	W16R06G180-CD	-	-	-	-	These codes mean complete curve, except floor supports and gearmotor, if you need to include them please see the catalogue.		
	LEFT	W16R06G180-CS	-	-	-	-			

ZERO^{PRO}CONTACT

CURVE CONVEYOR

Stainless steel frame - High working load - Abrasion resistant



INNER RADIUS 586mm ÷ 1541mm

BELT WIDTH 249mm ÷ 1034mm

MATERIAL OF MODULES

Polyamide glass fiber reinforced (PA)

COLOR OF MODULES Dark Pigeon Blue (RAL 5017)

PINS Stainless steel

PIN LOCK Stainless steel grub screws

FRAME Stainless steel

TEMPERATURE RANGE

Dry: -30°C ÷ 100°C Wet: n.a.
(Dry: -22°F ÷ 212°F Wet: n.a.)

MAX. WORKING LOAD

19.000 N/m belt width (1.300 lb/ft belt width)

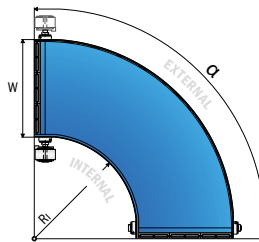
CURVE ANGLE 15° ÷ 360°

OPEN AREA 0%

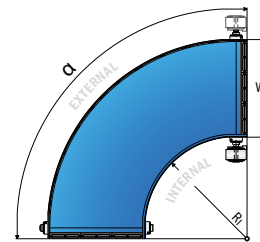
CURVES RANGE

Angle 90°

Left Version **CS**



CD Right Version

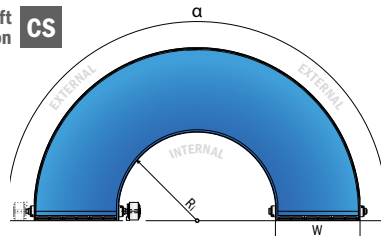


Width	Version	R _i 586mm	R _i 756mm	R _i 1011mm	R _i 1031mm	R _i 1116mm	R _i 1201mm	R _i 1286mm	R _i 1456mm	R _i 1541mm
249mm	RIGHT	-	-	-	W91R94G090-CD	-	-	W91R97G090-CD	-	-
	LEFT	-	-	-	W91R94G090-CS	-	-	W91R97G090-CS	-	-
269mm	RIGHT	-	W92R92G090-CD	W92R93G090-CD	-	-	-	-	-	-
	LEFT	-	W92R92G090-CS	W92R93G090-CS	-	-	-	-	-	-
419mm	RIGHT	-	-	-	W93R94G090-CD	-	W93R96G090-CD	-	W93R98G090-CD	-
	LEFT	-	-	-	W93R94G090-CS	-	W93R96G090-CS	-	W93R98G090-CS	-
439mm	RIGHT	W94R91G090-CD	W94R92G090-CD	W94R93G090-CD	-	-	-	-	-	-
	LEFT	W94R91G090-CS	W94R92G090-CS	W94R93G090-CS	-	-	-	-	-	-
504mm	RIGHT	-	-	-	-	W95R95G090-CD	-	W95R97G090-CD	-	W95R99G090-CD
	LEFT	-	-	-	-	W95R95G090-CS	-	W95R97G090-CS	-	W95R99G090-CS
524mm	RIGHT	W96R91G090-CD	W96R92G090-CD	W96R93G090-CD	-	-	-	-	-	-
	LEFT	W96R91G090-CS	W96R92G090-CS	W96R93G090-CS	-	-	-	-	-	-
864mm	RIGHT	W97R91G090-CD	W97R92G090-CD	W97R93G090-CD	-	-	-	These codes mean complete curve, except floor supports and gearmotor, if you need to include them please see the catalogue.		
	LEFT	W97R91G090-CS	W97R92G090-CS	W97R93G090-CS	-	-	-			
1034mm	RIGHT	W98R91G090-CD	W98R92G090-CD	W98R93G090-CD	-	-	-			
	LEFT	W98R91G090-CS	W98R92G090-CS	W98R93G090-CS	-	-	-			

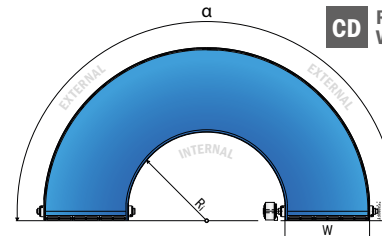
CURVES RANGE

Angle 180°

Left Version **CS**



CD Right Version

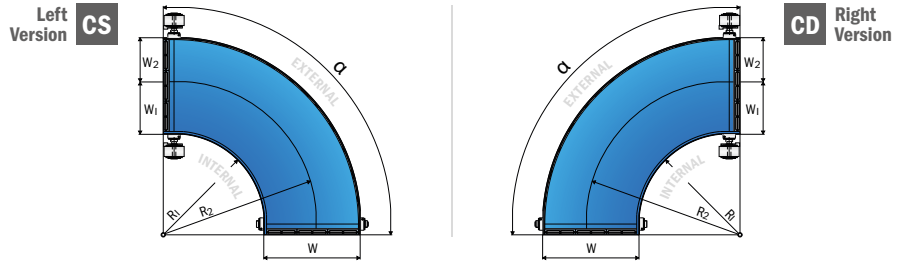


Width	Version	R _i 586mm	R _i 756mm	R _i 1011mm	R _i 1031mm	R _i 1116mm	R _i 1201mm	R _i 1286mm	R _i 1456mm	R _i 1541mm
249mm	RIGHT	-	-	-	W91R94G180-CD	-	-	W91R97G180-CD	-	-
	LEFT	-	-	-	W91R94G180-CS	-	-	W91R97G180-CS	-	-
269mm	RIGHT	-	W92R92G180-CD	W92R93G180-CD	-	-	-	-	-	-
	LEFT	-	W92R92G180-CS	W92R93G180-CS	-	-	-	-	-	-
419mm	RIGHT	-	-	-	W93R94G180-CD	-	W93R96G180-CD	-	W93R98G180-CD	-
	LEFT	-	-	-	W93R94G180-CS	-	W93R96G180-CS	-	W93R98G180-CS	-
439mm	RIGHT	W94R91G180-CD	W94R92G180-CD	W94R93G180-CD	-	-	-	-	-	-
	LEFT	W94R91G180-CS	W94R92G180-CS	W94R93G180-CS	-	-	-	-	-	-
504mm	RIGHT	-	-	-	-	W95R95G180-CD	-	W95R97G180-CD	-	W95R99G180-CD
	LEFT	-	-	-	-	W95R95G180-CS	-	W95R97G180-CS	-	W95R99G180-CS
524mm	RIGHT	W96R91G180-CD	W96R92G180-CD	W96R93G180-CD	-	-	-	-	-	-
	LEFT	W96R91G180-CS	W96R92G180-CS	W96R93G180-CS	-	-	-	-	-	-
864mm	RIGHT	W97R91G180-CD	W97R92G180-CD	W97R93G180-CD	-	-	-	These codes mean complete curve, except floor supports and gearmotor, if you need to include them please see the catalogue.		
	LEFT	W97R91G180-CS	W97R92G180-CS	W97R93G180-CS	-	-	-			
1034mm	RIGHT	W98R91G180-CD	W98R92G180-CD	W98R93G180-CD	-	-	-			
	LEFT	W98R91G180-CS	W98R92G180-CS	W98R93G180-CS	-	-	-			

1. Curve conveyor | Zero Contact PRO - 2 tracks version

CURVES RANGE

Angle 90°
Double-Shaft



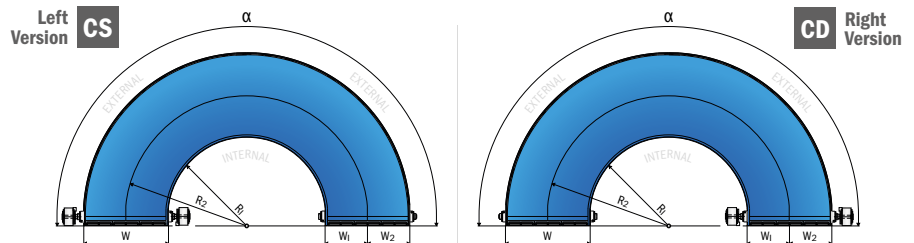
Width	Version	R _i 586mm	R _i 756mm	R _i 1011mm
524mm	RIGHT	-	W96R92G090-CD2	W96R93G090-CD2
	LEFT	-	W96R92G090-CS2	W96R93G090-CS2
864mm	RIGHT	W97R91G090-CD2	W97R92G090-CD2	W97R93G090-CD2
	LEFT	W97R91G090-CS2	W97R92G090-CS2	W97R93G090-CS2
1034mm	RIGHT	W98R91G090-CD2	W98R92G090-CD2	W98R93G090-CD2
	LEFT	W98R91G090-CS2	W98R92G090-CS2	W98R93G090-CS2

CODE	R1 - mm	W1 - mm	R2 - mm	W2 - mm	WTot - mm
W96R92G090-CD2 (CS2)	756	269	1031	249	524
W96R93G090-CD2 (CS2)	1011	269	1286	249	524
W97R91G090-CD2 (CS2)	586	439	1031	419	864
W97R92G090-CD2 (CS2)	756	439	1201	419	864
W97R93G090-CD2 (CS2)	1011	439	1456	419	864
W98R91G090-CD2 (CS2)	586	524	1116	504	1034
W98R92G090-CD2 (CS2)	756	524	1286	504	1034
W98R93G090-CD2 (CS2)	1011	524	1541	504	1034

The gap between the two belts is always 6mm.

CURVES RANGE

Angle 180°
Double-Shaft



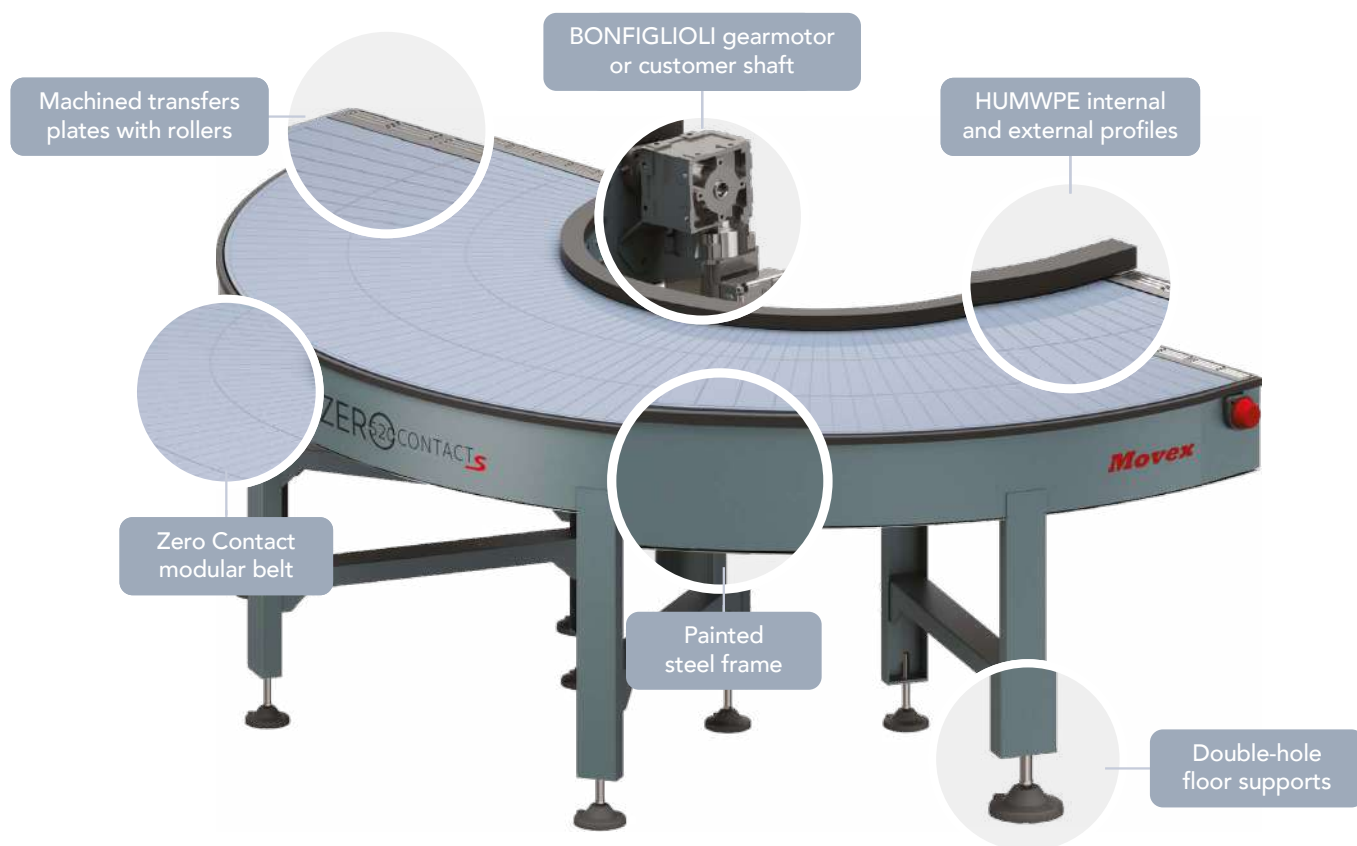
Width	Version	R _i 586mm	R _i 756mm	R _i 1011mm
524mm	RIGHT	-	W96R92G180-CD2	W96R93G180-CD2
	LEFT	-	W96R92G180-CS2	W96R93G180-CS2
864mm	RIGHT	W97R91G180-CD2	W97R92G180-CD2	W97R93G180-CD2
	LEFT	W97R91G180-CS2	W97R92G180-CS2	W97R93G180-CS2
1034mm	RIGHT	W98R91G180-CD2	W98R92G180-CD2	W98R93G180-CD2
	LEFT	W98R91G180-CS2	W98R92G180-CS2	W98R93G180-CS2

CODE	R1 - mm	W1 - mm	R2 - mm	W2 - mm	WTot - mm
W96R92G090-CD2 (CS2)	756	269	1031	249	524
W96R93G090-CD2 (CS2)	1011	269	1286	249	524
W97R91G090-CD2 (CS2)	586	439	1031	419	864
W97R92G090-CD2 (CS2)	756	439	1201	419	864
W97R93G090-CD2 (CS2)	1011	439	1456	419	864
W98R91G090-CD2 (CS2)	586	524	1116	504	1034
W98R92G090-CD2 (CS2)	756	524	1286	504	1034
W98R93G090-CD2 (CS2)	1011	524	1541	504	1034

ZERO⁵²⁰CONTACT^S

CURVE CONVEYOR

Painted steel frame - High speed - Low noise



INNER RADIUS 600mm ÷ 2000mm

BELT WIDTH 200mm ÷ 1600mm

MATERIAL OF MODULES Acetal (POM)

COLOR OF MODULES Pigeon Blue (RAL 5014)

PINS PBT White

PIN LOCK Clips

FRAME Painted steel RAL 7031 or custom

TEMPERATURE RANGE

Dry: -40°C÷80°C Wet: n.a.

(Dry:-40°F ÷ 176°F Wet: n.a.)

MAX. WORKING LOAD

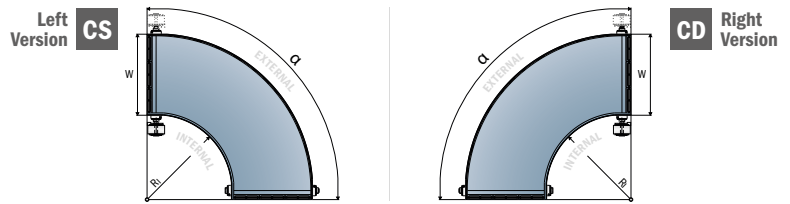
13.500N/m belt width (924 lb/ft belt width)

CURVE ANGLE 15° ÷ 360°

OPEN AREA 0%

CURVES RANGE

Angle 90°

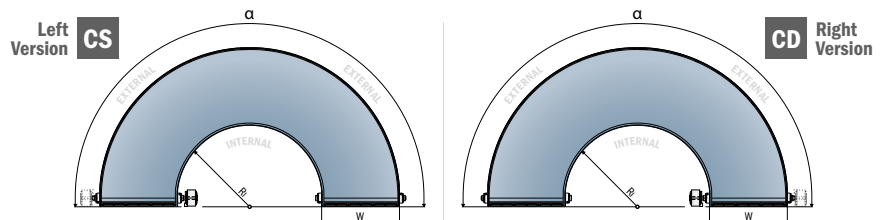


Width	Version	R _i 600mm	R _i 800mm	R _i 1000mm	R _i 1200mm	R _i 1400mm	R _i 1600mm	R _i 1800mm	R _i 2000mm
200mm	RIGHT	W02R06G090-CDS	W02R08G090-CDS	W02R10G090-CDS	W02R12G090-CDS	W02R14G090-CDS	W02R16G090-CDS	W02R18G090-CDS	W02R20G090-CDS
	LEFT	W02R06G090-CSS	W02R08G090-CSS	W02R10G090-CSS	W02R12G090-CSS	W02R14G090-CSS	W02R16G090-CSS	W02R18G090-CSS	W02R20G090-CSS
400mm	RIGHT	W04R06G090-CDS	W04R08G090-CDS	W04R10G090-CDS	W04R12G090-CDS	W04R14G090-CDS	W04R16G090-CDS	W04R18G090-CDS	-
	LEFT	W04R06G090-CSS	W04R08G090-CSS	W04R10G090-CSS	W04R12G090-CSS	W04R14G090-CSS	W04R16G090-CSS	W04R18G090-CSS	-
600mm	RIGHT	W06R06G090-CDS	W06R08G090-CDS	W06R10G090-CDS	W06R12G090-CDS	W06R14G090-CDS	W06R16G090-CDS	-	-
	LEFT	W06R06G090-CSS	W06R08G090-CSS	W06R10G090-CSS	W06R12G090-CSS	W06R14G090-CSS	W06R16G090-CSS	-	-
800mm	RIGHT	W08R06G090-CDS	W08R08G090-CDS	W08R10G090-CDS	W08R12G090-CDS	W08R14G090-CDS	-	-	-
	LEFT	W08R06G090-CSS	W08R08G090-CSS	W08R10G090-CSS	W08R12G090-CSS	W08R14G090-CSS	-	-	-
1000mm	RIGHT	W10R06G090-CDS	W10R08G090-CDS	W10R10G090-CDS	W10R12G090-CDS	-	-	-	-
	LEFT	W10R06G090-CSS	W10R08G090-CSS	W10R10G090-CSS	W10R12G090-CSS	-	-	-	-
1200mm	RIGHT	W12R06G090-CDS	W12R08G090-CDS	W12R10G090-CDS	-	-	-	-	-
	LEFT	W12R06G090-CSS	W12R08G090-CSS	W12R10G090-CSS	-	-	-	-	-
1400mm	RIGHT	W14R06G090-CDS	W14R08G090-CDS	-	-	-	-	-	-
	LEFT	W14R06G090-CSS	W14R08G090-CSS	-	-	-	-	-	-
1600mm	RIGHT	W16R06G090-CDS	-	-	-	-	-	-	-
	LEFT	W16R06G090-CSS	-	-	-	-	-	-	-

These codes mean complete curve, except floor supports and gearmotor, if you need to include them please see the catalogue.

CURVES RANGE

Angle 180°



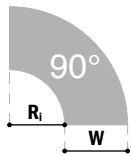
Width	Version	R _i 600mm	R _i 800mm	R _i 1000mm	R _i 1200mm	R _i 1400mm	R _i 1600mm	R _i 1800mm	R _i 2000mm
200mm	RIGHT	W02R06G180-CDS	W02R08G180-CDS	W02R10G180-CDS	W02R12G180-CDS	W02R14G180-CDS	W02R16G180-CDS	W02R18G180-CDS	W02R20G180-CDS
	LEFT	W02R06G180-CSS	W02R08G180-CSS	W02R10G180-CSS	W02R12G180-CSS	W02R14G180-CSS	W02R16G180-CSS	W02R18G180-CSS	W02R20G180-CSS
400mm	RIGHT	W04R06G180-CDS	W04R08G180-CDS	W04R10G180-CDS	W04R12G180-CDS	W04R14G180-CDS	W04R16G180-CDS	W04R18G180-CDS	-
	LEFT	W04R06G180-CSS	W04R08G180-CSS	W04R10G180-CSS	W04R12G180-CSS	W04R14G180-CSS	W04R16G180-CSS	W04R18G180-CSS	-
600mm	RIGHT	W06R06G180-CDS	W06R08G180-CDS	W06R10G180-CDS	W06R12G180-CDS	W06R14G180-CDS	W06R16G180-CDS	-	-
	LEFT	W06R06G180-CSS	W06R08G180-CSS	W06R10G180-CSS	W06R12G180-CSS	W06R14G180-CSS	W06R16G180-CSS	-	-
800mm	RIGHT	W08R06G180-CDS	W08R08G180-CDS	W08R10G180-CDS	W08R12G180-CDS	W08R14G180-CDS	-	-	-
	LEFT	W08R06G180-CSS	W08R08G180-CSS	W08R10G180-CSS	W08R12G180-CSS	W08R14G180-CSS	-	-	-
1000mm	RIGHT	W10R06G180-CDS	W10R08G180-CDS	W10R10G180-CDS	W10R12G180-CDS	-	-	-	-
	LEFT	W10R06G180-CSS	W10R08G180-CSS	W10R10G180-CSS	W10R12G180-CSS	-	-	-	-
1200mm	RIGHT	W12R06G180-CDS	W12R08G180-CDS	W12R10G180-CDS	-	-	-	-	-
	LEFT	W12R06G180-CSS	W12R08G180-CSS	W12R10G180-CSS	-	-	-	-	-
1400mm	RIGHT	W14R06G180-CDS	W14R08G180-CDS	-	-	-	-	-	-
	LEFT	W14R06G180-CSS	W14R08G180-CSS	-	-	-	-	-	-
1600mm	RIGHT	W16R06G180-CDS	-	-	-	-	-	-	-
	LEFT	W16R06G180-CSS	-	-	-	-	-	-	-

These codes mean complete curve, except floor supports and gearmotor, if you need to include them please see the catalogue.

2. Modular Belt | Zero Contact



For more information look page 59

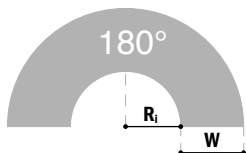


ZER⁵²⁰CONTACT

Side Flex Modular Belt Zero Contact 90° | Length of the belt 150 Modules

Belt Width	R _i 600mm	R _i 800mm	R _i 1000mm	R _i 1200mm	R _i 1400mm	R _i 1600mm	R _i 1800mm	R _i 2000mm	Material
200mm	5451010201A	5451010202A	5451010203A	5451010204A	5451010205A	5451010206A	5451010207A	5451010208A	LFA
400mm	5451010401A	5451010402A	5451010403A	5451010404A	5451010405A	5451010406A	5451010407A	-	
600mm	5451010601A	5451010602A	5451010603A	5451010604A	5451010605A	5451010606A	-	-	
800mm	5451010801A	5451010802A	5451010803A	5451010804A	5451010805A	-	-	-	
1000mm	5451011001A	5451011002A	5451011003A	5451011004A	-	-	-	-	
1200mm	5451011201A	5451011202A	5451011203A	-	-	-	-	-	
1400mm	5451011401A	5451011402A	-	-	-	-	-	-	
1600mm	5451011601A	-	-	-	-	-	-	-	

Belt Width	R _i 600mm	R _i 800mm	R _i 1000mm	R _i 1200mm	R _i 1400mm	R _i 1600mm	R _i 1800mm	R _i 2000mm	Material
200mm	5451230201A	5451230202A	5451230203A	5451230204A	5451230205A	5451230206A	5451230207A	5451230208A	LFB
400mm	5451230401A	5451230402A	5451230403A	5451230404A	5451230405A	5451230406A	5451230407A	-	
600mm	5451230601A	5451230602A	5451230603A	5451230604A	5451230605A	5451230606A	-	-	
800mm	5451230801A	5451230802A	5451230803A	5451230804A	5451230805A	-	-	-	
1000mm	5451231001A	5451231002A	5451231003A	5451231004A	-	-	-	-	
1200mm	5451231201A	5451231202A	5451231203A	-	-	-	-	-	
1400mm	5451231401A	5451231402A	-	-	-	-	-	-	
1600mm	5451231601A	-	-	-	-	-	-	-	



ZER⁵²⁰CONTACT

Side Flex Modular Belt Zero Contact 180° | Length of the belt 285 Modules

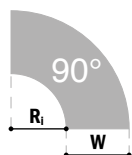
Belt Width	R _i 600mm	R _i 800mm	R _i 1000mm	R _i 1200mm	R _i 1400mm	R _i 1600mm	R _i 1800mm	R _i 2000mm	Material
200mm	5452010201A	5452010202A	5452010203A	5452010204A	5452010205A	5452010206A	5452010207A	5452010208A	LFA
400mm	5452010401A	5452010402A	5452010403A	5452010404A	5452010405A	5452010406A	5452010407A	-	
600mm	5452010601A	5452010602A	5452010603A	5452010604A	5452010605A	5452010606A	-	-	
800mm	5452010801A	5452010802A	5452010803A	5452010804A	5452010805A	-	-	-	
1000mm	5452011001A	5452011002A	5452011003A	5452011004A	-	-	-	-	
1200mm	5452011201A	5452011202A	5452011203A	-	-	-	-	-	
1400mm	5452011401A	5452011402A	-	-	-	-	-	-	
1600mm	5452011601A	-	-	-	-	-	-	-	

Belt Width	R _i 600mm	R _i 800mm	R _i 1000mm	R _i 1200mm	R _i 1400mm	R _i 1600mm	R _i 1800mm	R _i 2000mm	Material
200mm	5452230201A	5452230202A	5452230203A	5452230204A	5452230205A	5452230206A	5452230207A	5452230208A	LFB
400mm	5452230401A	5452230402A	5452230403A	5452230404A	5452230405A	5452230406A	5452230407A	-	
600mm	5452230601A	5452230602A	5452230603A	5452230604A	5452230605A	5452230606A	-	-	
800mm	5452230801A	5452230802A	5452230803A	5452230804A	5452230805A	-	-	-	
1000mm	5452231001A	5452231002A	5452231003A	5452231004A	-	-	-	-	
1200mm	5452231201A	5452231202A	5452231203A	-	-	-	-	-	
1400mm	5452231401A	5452231402A	-	-	-	-	-	-	
1600mm	5452231601A	-	-	-	-	-	-	-	

2. Modular Belt | Zero Contact PRO

PA - Glass fiber reinforced

For more information look page 60



ZERO^{PRO}CONTACT

Side Flex Modular Belt Zero Contact PRO 90° | Without bearings | Length of the belt 200 modules

Order code	R _i - mm	W - mm
5461280439A-M	586	439
5461280524A-M	586	524
5461280864A-M	586	864
5461281034A-M	586	1034
5462280269A-M	756	269
5462280439A-M	756	439
5462280524A-M	756	524
5462280864A-M	756	864

Order code	R _i - mm	W - mm
5462281034A-M	756	1034
5463280269A-M	1011	269
5463280439A-M	1011	439
5463280524A-M	1011	524
5463280864A-M	1011	864
5463281034A-M	1011	1034
5465280249A-M	1031	249
5464280419A-M	1031	419

Order code	R _i - mm	W - mm
5464280504A-M	1116	504
5465280419A-M	1201	419
5466280249A-M	1286	249
5465280504A-M	1286	504
5466280419A-M	1456	419
5466280504A-M	1541	504

Side Flex Modular Belt Zero Contact PRO 90° | With bearings | Length of the belt 200 modules

Order code	R _i - mm	W - mm
5462280249A-M	1031	249
5461280419A-M	1031	419
5461280504A-M	1116	504
5462280419A-M	1201	419

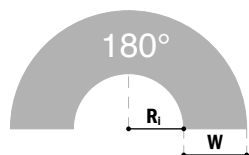
Order code	R _i - mm	W - mm
5463280249A-M	1286	249
5462280504A-M	1286	504
5463280419A-M	1456	419
5463280504A-M	1541	504



Side Flex Modular Belt Zero Contact PRO 90° | Two track combinations | Length of the belts 200 modules

Track 1 - Order code	R _i - mm	W - mm		Track 2 - Order code	R _i - mm	W - mm		Total width
5462280269A-M	756	269	+	5462280249A-M	1031	249	=	524
5463280269A-M	1011	269	+	5463280249A-M	1286	249	=	524
5461280439A-M	586	439	+	5461280419A-M	1031	419	=	864
5462280439A-M	756	439	+	5462280419A-M	1201	419	=	864
5463280439A-M	1011	439	+	5463280419A-M	1456	419	=	864
5461280524A-M	586	524	+	5461280504A-M	1116	504	=	1034
5462280524A-M	756	524	+	5462280504A-M	1286	504	=	1034
5463280524A-M	1011	524	+	5463280504A-M	1541	504	=	1034

The gap between the belts is 6 mm. | Track 1 belt is supplied without bearings. | Track 2 belt is supplied with bearings.



ZEROCONTACT

Side Flex Modular Belt Zero Contact PRO 180° | Without bearings | Length of the belt 380 modules

Order code	R _i - mm	W - mm
5461280439B-M	586	439
5461280524B-M	586	524
5461280864B-M	586	864
5461281034B-M	586	1034
5462280269B-M	756	269
5462280439B-M	756	439
5462280524B-M	756	524
5462280864B-M	756	864

Order code	R _i - mm	W - mm
5462281034B-M	756	1034
5463280269B-M	1011	269
5463280439B-M	1011	439
5463280524B-M	1011	524
5463280864B-M	1011	864
5463281034B-M	1011	1034
5465280249B-M	1031	249
5464280419B-M	1031	419

Order code	R _i - mm	W - mm
5464280504B-M	1116	504
5465280419B-M	1201	419
5466280249B-M	1286	249
5465280504B-M	1286	504
5466280419B-M	1456	419
5466280504B-M	1541	504

Side Flex Modular Belt Zero Contact PRO 180° | With bearings | Length of the belt 380 modules

Order code	R _i - mm	W - mm
5462280249B-M	1031	249
5461280419B-M	1031	419
5461280504B-M	1116	504
5462280419B-M	1201	419

Order code	R _i - mm	W - mm
5463280249B-M	1286	249
5462280504B-M	1286	504
5463280419B-M	1456	419
5463280504B-M	1541	504



Side Flex Modular Belt Zero Contact PRO 180° | Two track combinations | Length of the belts 380 modules

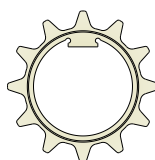
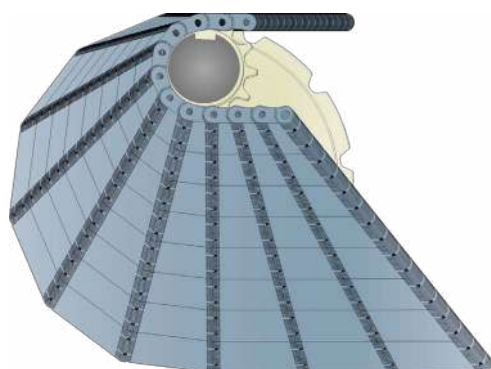
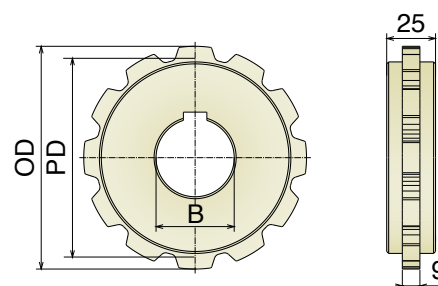
Track 1 - Order code	R _i - mm	W - mm		Track 2 - Order code	R _i - mm	W - mm		Total width
5462280269B-M	756	269	+	5462280249B-M	1031	249	=	524
5463280269B-M	1011	269	+	5463280249B-M	1286	249	=	524
5461280439B-M	586	439	+	5461280419B-M	1031	419	=	864
5462280439B-M	756	439	+	5462280419B-M	1201	419	=	864
5463280439B-M	1011	439	+	5463280419B-M	1456	419	=	864
5461280524B-M	586	524	+	5461280504B-M	1116	504	=	1034
5462280524B-M	756	524	+	5462280504B-M	1286	504	=	1034
5463280524B-M	1011	524	+	5463280504B-M	1541	504	=	1034

The gap between the belts is 6 mm. | Track 1 belt is supplied without bearings. | Track 2 belt is supplied with bearings.

3. Sprocket position | Zero Contact

ZERO⁵²⁰CONTACT

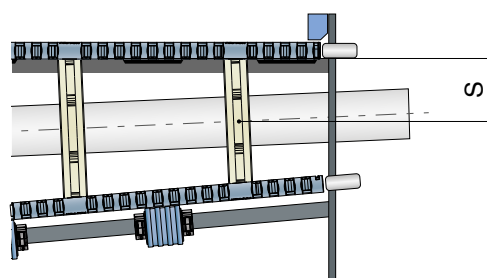
 **Material:** Polyamide



***Smallest sprocket with integrated key valid only for code 162401**

NOTE: in order to install the smallest sprockets a shaft key way continued to the end of the shaft is required.

Ref. n°	Part	Article-Nr.	Z-	Bore mm	R mm	PD mm	OD mm	S mm
650	1624	162401	*12	40	650	58	61	25,6
750	1624	162402			750	66	69	29,9
850	1624	162403			850	76	79	34,2
950	1624	162404			950	84	86	38,5
1050	1624	162405			1050	94	97	42,8
1150	1624	162406			1150	102	104	47,1
1250	1624	162407			1250	112	114	51,4
1350	1624	162408			1350	119	122	55,7
1450	1624	162409			1450	130	132	60
1550	1624	162410			1550	137	140	64,3
1650	1624	162411			1650	145	148	68,6
1750	1624	162412			1750	154	157	72,9
1850	1624	162413			1850	163	166	77,2
1950	1624	162414			1950	171	174	81,5
2050	1624	162415			2050	180	183	85,8
2150	1624	162416			2150	189	192	90,1

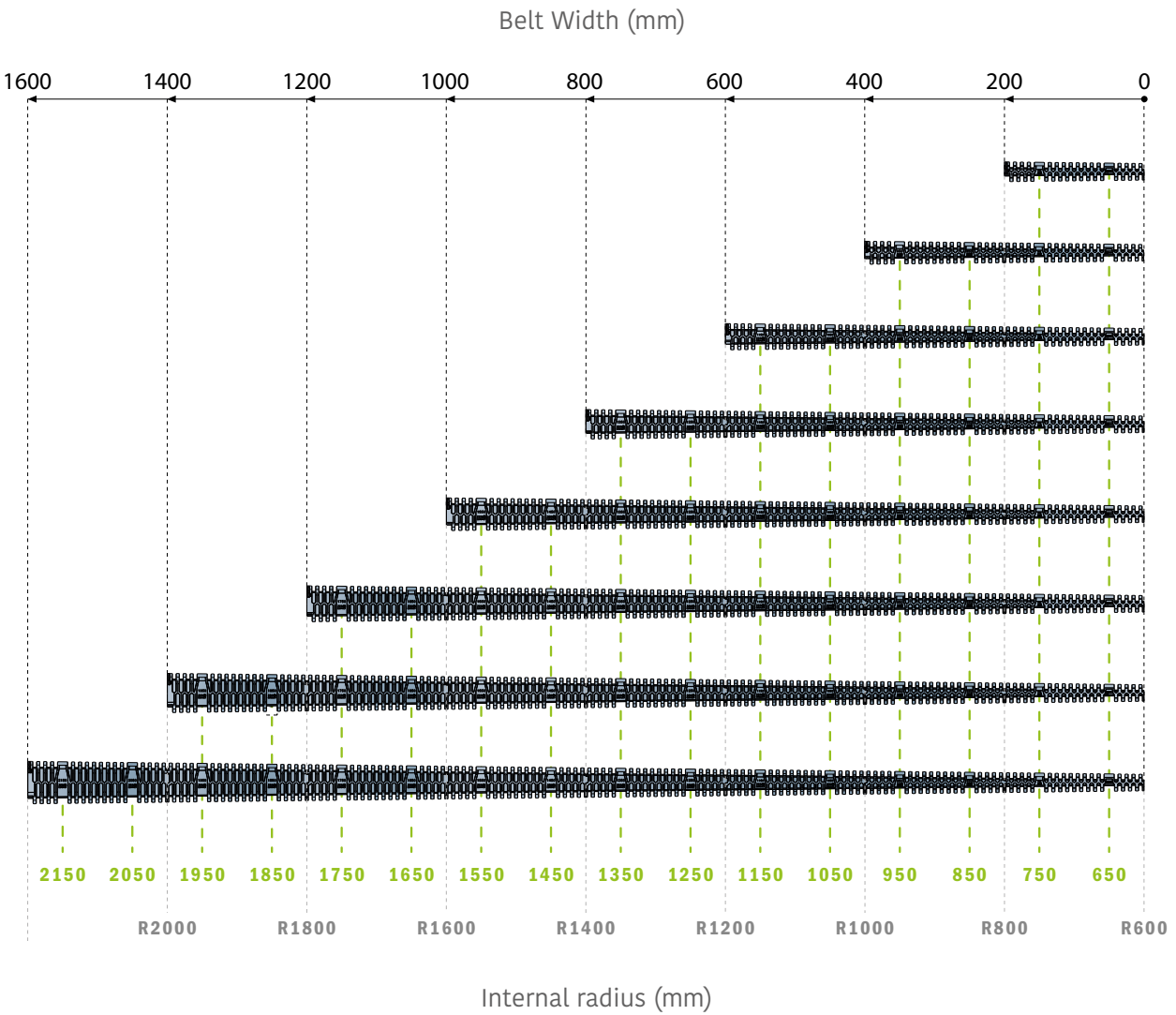
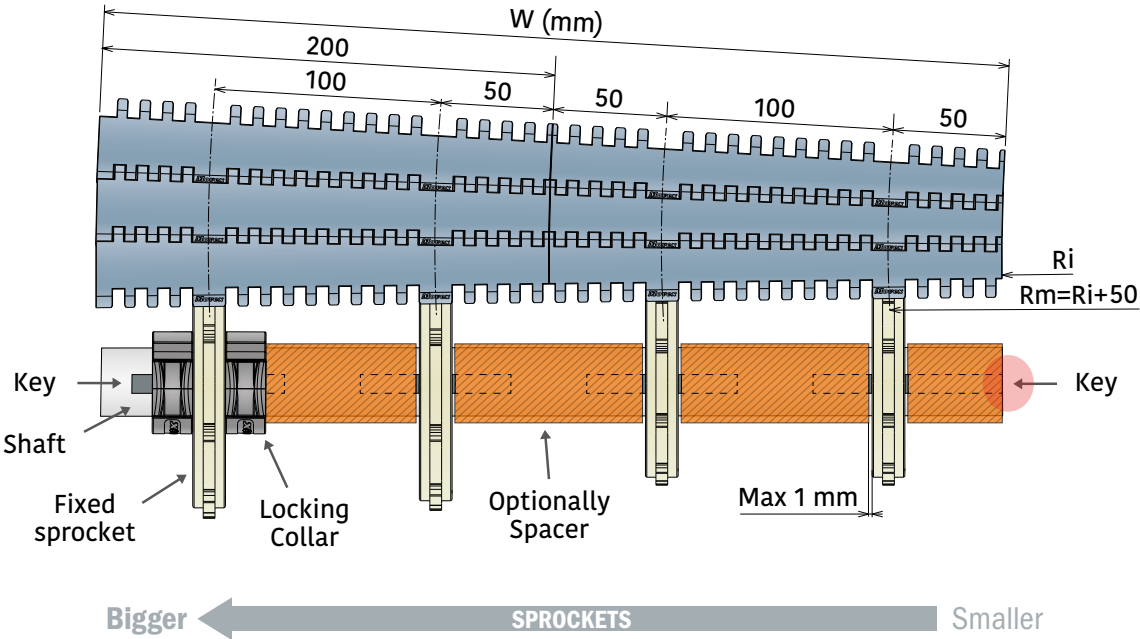


Ref.n° match with the molded number underneath the belt, corresponding to the radius of the belt.

Easy identification while assembling.



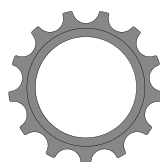
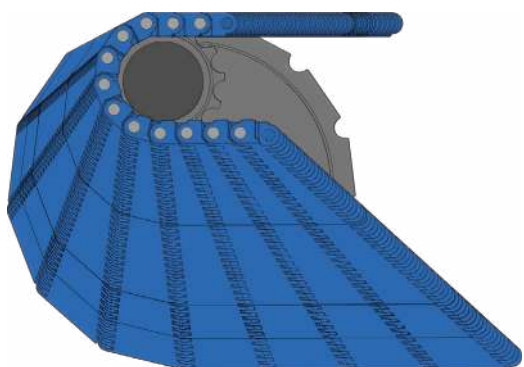
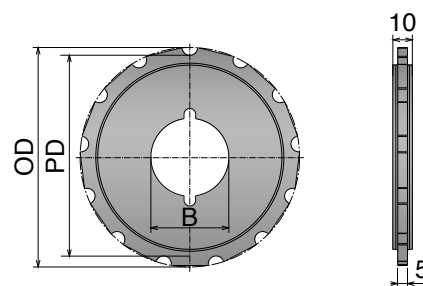
3. Sprocket position | Zero Contact



3. Sprocket position | Zero Contact PRO

ZERO CONTACT

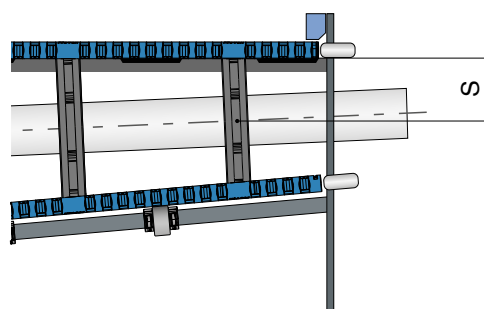
 **Material:** Polyamide



***Smallest sprocket without key only for code 163301**

NOTE: The keyway for the first sprocket is not required.

Ref. n°	Part	Article-Nr.	Z-	Bore mm	R mm	PD mm	OD mm	S mm
1	1633	163301	*13	30	641,8	45,6	45,9	20,3
2	1633	163302			726,9	51,7	52	23,3
3	1633	163303		40	812,6	57,8	58	26,4
4	1633	163304			897,7	63,8	64,1	29,4
5	1633	163305			983,3	69,9	70,2	32,5
6	1633	163306			1051,8	74,8	76,2	34,9
7	1633	163307			1136,9	80,9	82,3	37,9
8	1633	163308			1222,5	86,9	88,3	41
9	1633	163309			1307,7	93	94,4	44
10	1633	163310			1393,3	99,1	100,5	47
11	1633	163311			1495,3	106,3	106,6	50,7
12	1633	163312			1580,5	114	112,6	53,7
13	1633	163313			1666,1	118,5	118,7	56,8
14	1633	163314			1751,2	124,5	124,7	59,8
15	1633	163315			1837	130,6	130,8	62,8
16	1633	163316			1922,1	136,7	136,9	65,8
17	1633	163317			2007,7	142,8	142,9	68,9



Ref.n° match with the molded number underneath the belt.
Easy identification while assembling.

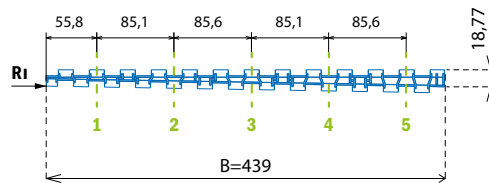


3. Sprocket position | Zero Contact PRO - 1 Track version

LEGEND: Sprockets alignment - - - - - | Sprockets reference Number Pag 17

Width 439

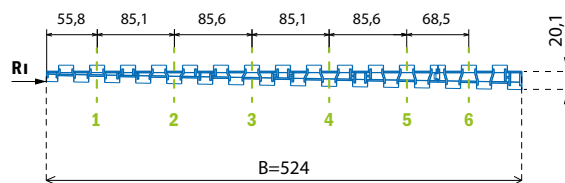
R586



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5461280439A-M	1	439	586	200	8
180°	5461280439B-M	1	439	586	385	15

Width 524

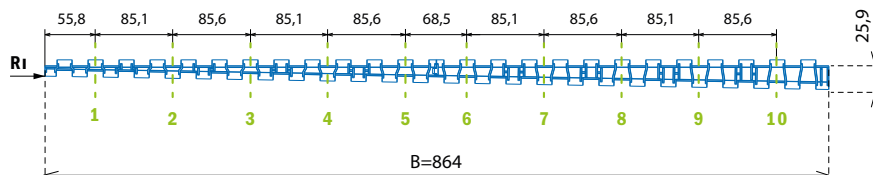
R586



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5461280524A-M	1	524	586	200	9
180°	5461280524B-M	1	524	586	385	17

Width 864

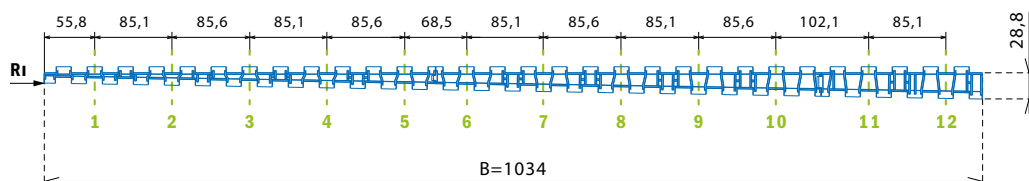
R586



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5461280864A-M	1	864	586	200	16
180°	5461280864B-M	1	864	586	385	30

Width 1034

R586



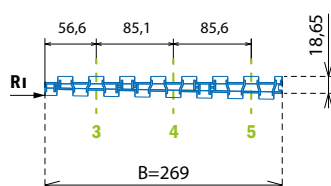
Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5461281034A-M	1	1034	586	200	18
180°	5461281034B-M	1	1034	586	385	34

3. Sprocket position | Zero Contact PRO - 1 Track version

LEGEND: Sprockets alignment  | Sprockets reference Number Pag 17

Width 269

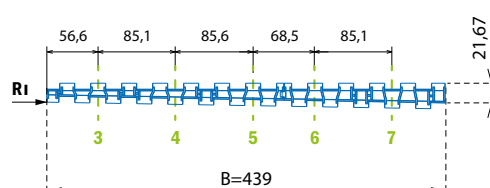
R756



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462280269A-M	1	269	756	200	5
180°	5462280269B-M	1	269	756	385	9

Width 439

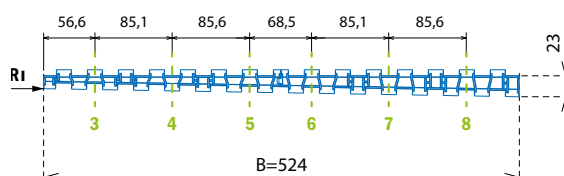
R756



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462280439A-M	1	439	756	200	9
180°	5462280439B-M	1	439	756	385	17

Width 524

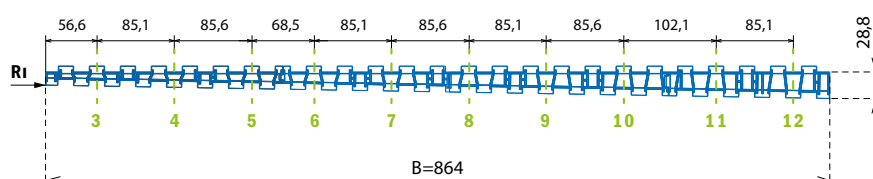
R756



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462280524A-M	1	524	756	200	10
180°	5462280524B-M	1	524	756	385	18

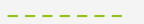
Width 864

R756



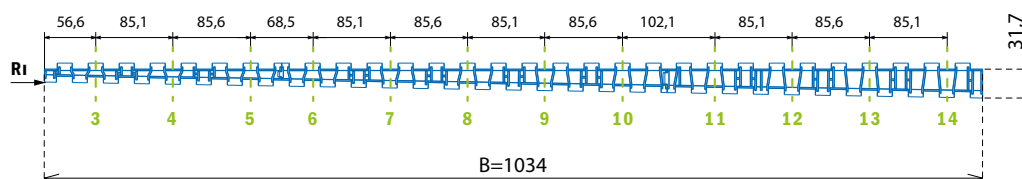
Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462280864A-M	1	864	756	200	18
180°	5462280864B-M	1	864	756	385	34

3. Sprocket position | Zero Contact PRO - 1 Track version

LEGEND: Sprockets alignment  | Sprockets reference Number Pag 17

Width 1034

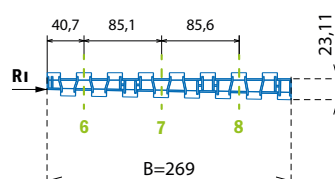
R756



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462281034A-M	1	1034	756	200	22
180°	5462281034B-M	1	1034	756	385	42

Width 269

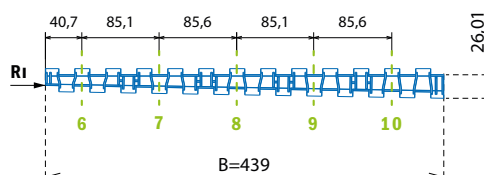
R1011



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463280269A-M	1	269	1011	200	6
180°	5463280269B-M	1	269	1011	385	11

Width 439

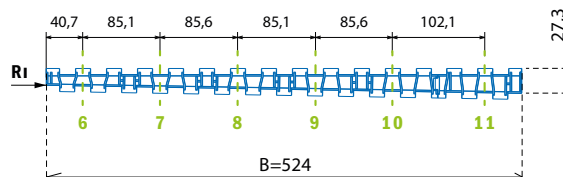
R1011



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463280439A-M	1	439	1011	200	10
180°	5463280439B-M	1	439	1011	385	18

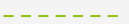
Width 524

R1011



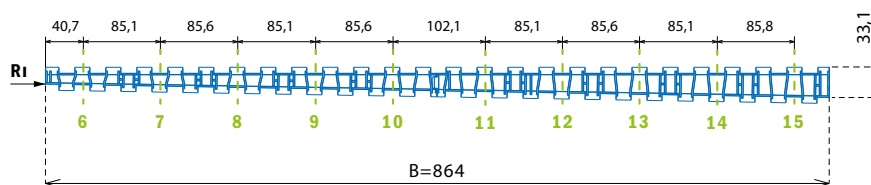
Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463280524A-M	1	524	1011	200	11
180°	5463280524B-M	1	524	1011	385	20

3. Sprocket position | Zero Contact PRO - 1 Track version

LEGEND: Sprockets alignment  | Sprockets reference Number Pag 17

Width 864

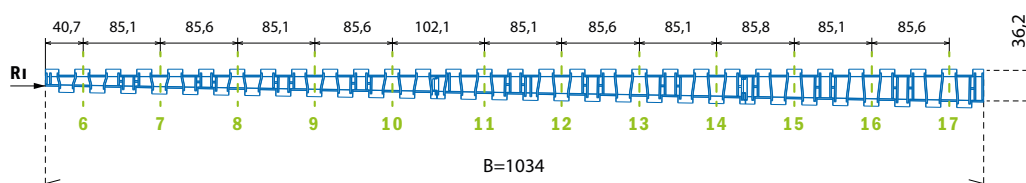
R1011



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463280864A-M	1	864	1011	200	20
180°	5463280864B-M	1	864	1011	385	38

Width 1034

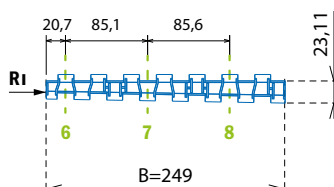
R1011



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463281034A-M	1	1034	1011	200	24
180°	5463281034B-M	1	1034	1011	385	46

Width 249

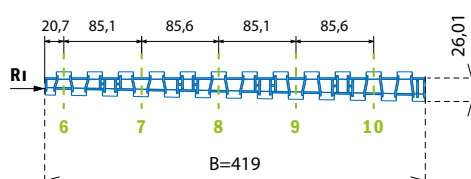
R1031



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5465280249A-M	1	249	1031	200	6
180°	5465280249B-M	1	249	1031	385	11

Width 419

R1031



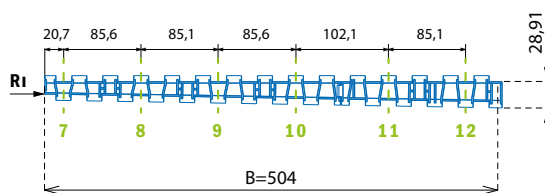
Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5464280419A-M	1	419	1031	200	10
180°	5464280419B-M	1	419	1031	385	18

3. Sprocket position | Zero Contact PRO - 1 Track version

LEGEND: Sprockets alignment - - - - - | Sprockets reference Number Pag 17

Width 504

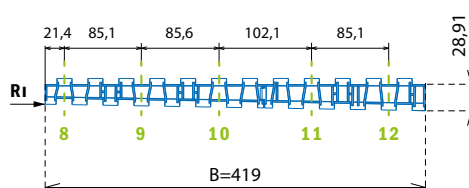
R1116



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	R _i Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5464280504A-M	1	504	1116	200	10
180°	5464280504B-M	1	504	1116	385	19

Width 419

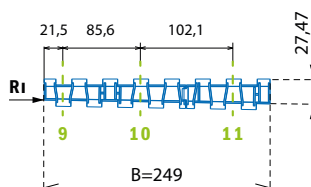
R1201



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	R _i Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5465280419A-M	1	419	1201	200	12
180°	5465280419B-M	1	419	1201	385	22

Width 249

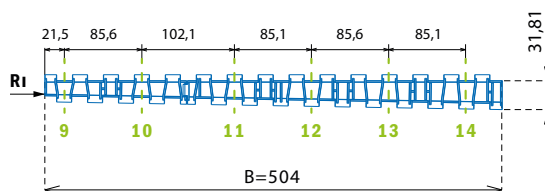
R1286



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	R _i Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5466280249A-M	1	249	1286	200	8
180°	5466280249B-M	1	249	1286	385	15

Width 504

R1286



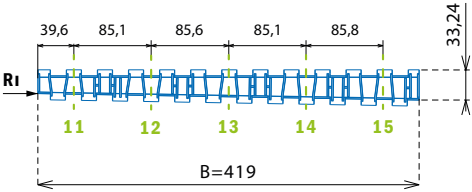
Version	Order code	Track	B Belt width (Tolerance+/-3mm)	R _i Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5465280504A-M	1	504	1286	200	13
180°	5465280504B-M	1	504	1286	385	24

3. Sprocket position | Zero Contact PRO - 1 Track version

LEGEND: Sprockets alignment - - - - - | Sprockets reference Number Pag 17

Width 419

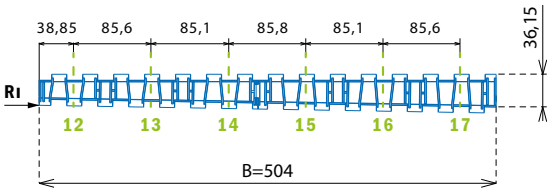
R1456



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5466280419A-M	1	419	1456	200	14
180°	5466280419B-M	1	419	1456	385	26

Width 504

R1541



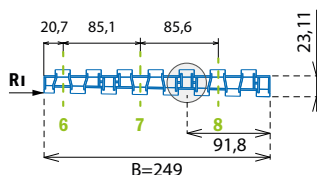
Version	Order code	Track	B Belt width (Tolerance+/-3mm)	Ri Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5466280504A-M	1	504	1541	200	17
180°	5466280504A-M	1	504	1541	385	31

3. Sprocket position | Zero Contact PRO - 1 Track version with Bearings

LEGEND: Sprockets alignment - - - - - | Sprockets reference Number Pag 17

Width 249

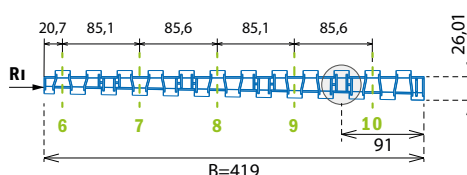
R1031



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	R _i Belt radius (=R _i +B _i +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462280249A-M	1	249	1031	200	6
180°	5462280249B-M	1	249	1031	385	11

Width 419

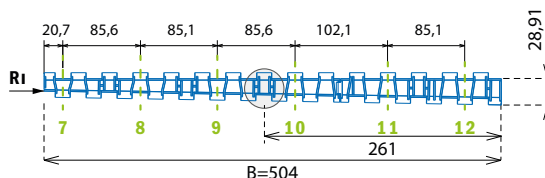
R1031



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	R _i Belt radius (=R _i +B _i +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5461280419A-M	1	419	1031	200	9
180°	5461280419B-M	1	419	1031	385	17

Width 504

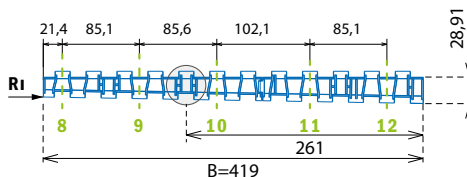
R1116



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	R _i Belt radius (=R _i +B _i +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5461280504A-M	1	504	1116	200	10
180°	5461280504B-M	1	504	1116	385	18

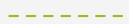
Width 419

R1201



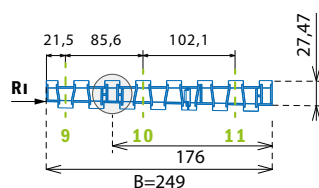
Version	Order code	Track	B Belt width (Tolerance+/-3mm)	R _i Belt radius (=R _i +B _i +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462280419A-M	1	419	1201	200	10
180°	5462280419B-M	1	419	1201	385	18

3. Sprocket position | Zero Contact PRO - 1 Track version with Bearings

LEGEND: Sprockets alignment  | Sprockets reference Number Pag 17

Width 249

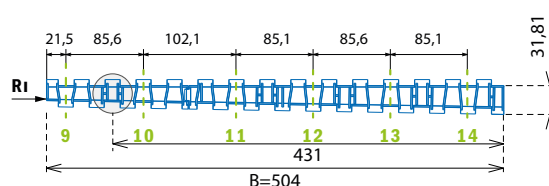
R1286



Version	Order code	Track	B ₀ Belt width (Tolerance+/-3mm)	R ₀ Belt radius (=R ₁ +B ₁ +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463280249A-M	1	249	1286	200	7
180°	5463280249B-M	1	249	1286	385	13

Width 504

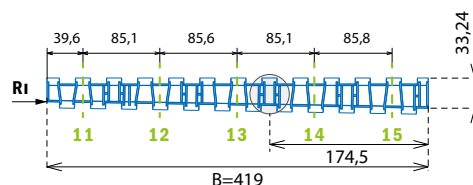
R1286



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	R ₁ Belt radius (=R ₁ +B ₁ +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462280504A-M	1	504	1286	200	11
180°	5462280504B-M	1	504	1286	385	20

Width 419

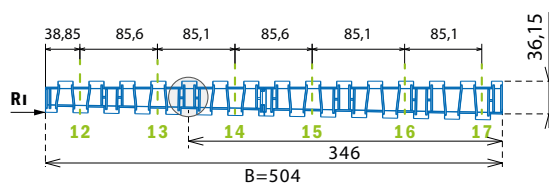
R1456



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	R ₁ Belt radius (=R ₁ +B ₁ +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463280419A-M	1	419	1456	200	11
180°	5463280419B-M	1	419	1456	385	20

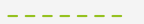
Width 504

R1541



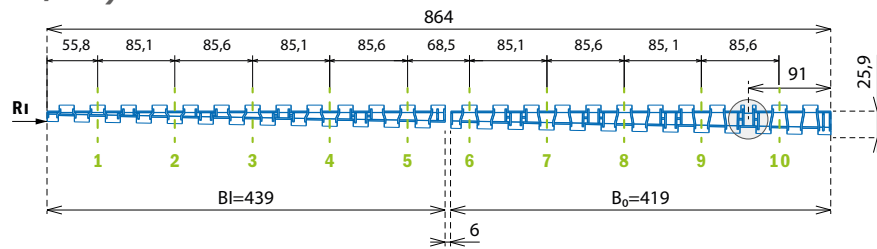
Version	Order code	Track	B Belt width (Tolerance+/-3mm)	R ₁ Belt radius (=R ₁ +B ₁ +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463280504A-M	1	504	1541	200	12
180°	5463280504A-M	1	504	1541	385	22

3. Sprocket position | Zero Contact PRO - 2 Track version

LEGEND: Sprockets alignment  | Sprockets reference Number Pag 17

Width 864 (439/419)

R586



inner belt - without bearing - on bottom side

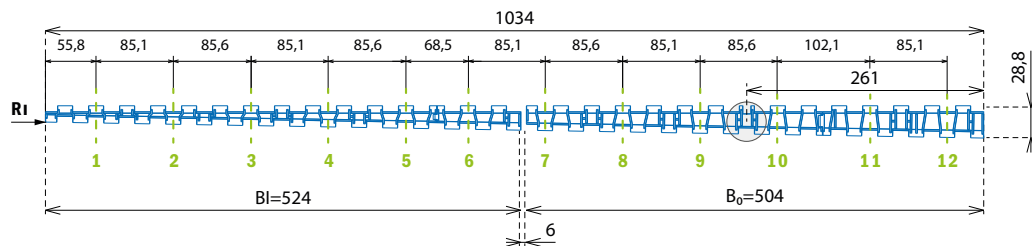
Version	Order code	Track	B _I Belt width (Tolerance+/-3mm)	R _I Belt radius (Rkury-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5461280439A-M	1	439	586	200	8
180°	5461280439B-M	1	439	586	385	15

outer belt - with bearing - on bottom side

Version	Order code	Track	B _O Belt width (Tolerance+/-3mm)	R _O Belt radius (=R _I +B _I +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5461280419A-M	1	419	1031	200	9
180°	5461280419B-M	1	419	1031	385	17

Width 1034 (524/504)

R586



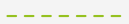
inner belt - without bearing - on bottom side

Version	Order code	Track	B _I Belt width (Tolerance+/-3mm)	R _I Belt radius (Rkury-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5461280524A-M	1	524	586	200	9
180°	5461280524B-M	1	524	586	385	17

outer belt - with bearing - on bottom side

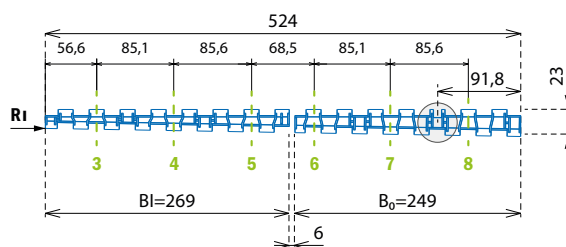
Version	Order code	Track	B _O Belt width (Tolerance+/-3mm)	R _O Belt radius (=R _I +B _I +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5461280504A-M	1	504	1116	200	10
180°	5461280504B-M	1	504	1116	385	18

3. Sprocket position | Zero Contact PRO - 2 Track version

LEGEND: Sprockets alignment  | Sprockets reference Number Pag 17

Width 524 (269/249)

R756



inner belt - without bearing - on bottom side

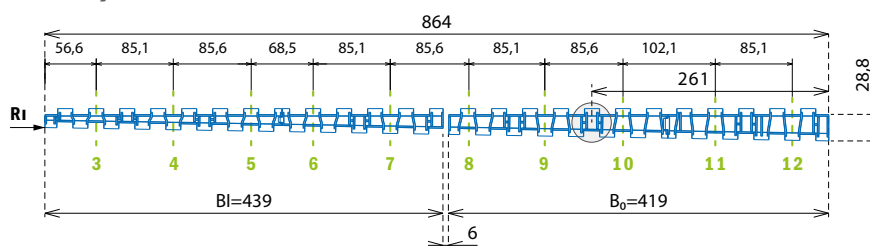
Version	Order code	Track	B ₁ Belt width (Tolerance+/-3mm)	R ₁ Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462280269A-M	1	269	756	200	5
180°	5462280269B-M	1	269	756	385	9

outer belt - with bearing - on bottom side

Version	Order code	Track	B ₀ Belt width (Tolerance+/-3mm)	R ₀ Belt radius (=R ₁ +B ₁ +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462280249A-M	1	249	1031	200	6
180°	5462280249B-M	1	249	1031	385	11

Width 864 (439/419)

R756



inner belt - without bearing - on bottom side

Version	Order code	Track	B ₁ Belt width (Tolerance+/-3mm)	R ₁ Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462280439A-M	1	439	756	200	9
180°	5462280439B-M	1	439	756	385	17

outer belt - with bearing - on bottom side

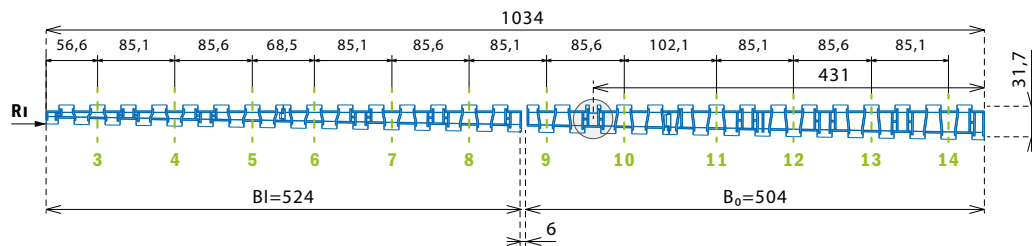
Version	Order code	Track	B ₀ Belt width (Tolerance+/-3mm)	R ₀ Belt radius (=R ₁ +B ₁ +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462280419A-M	1	419	1201	200	10
180°	5462280419B-M	1	419	1201	385	18

3. Sprocket position | Zero Contact PRO - 2 Track version

LEGEND: Sprockets alignment - - - - - | Sprockets reference Number Pag 17

Width 1034 (524/504)

R756



inner belt - without bearing - on bottom side

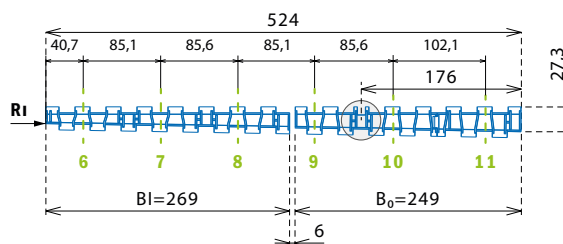
Version	Order code	Track	B _I Belt width (Tolerance+/-3mm)	R _I Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462280524A-M	1	524	756	200	10
180°	5462280524B-M	1	524	756	385	18

outer belt - with bearing - on bottom side

Version	Order code	Track	B ₀ Belt width (Tolerance+/-3mm)	R ₀ Belt radius (=R _I +B _I +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5462280504A-M	1	504	1286	200	11
180°	5462280504B-M	1	504	1286	385	20

Width 524 (269/249)

R1011



inner belt - without bearing - on bottom side

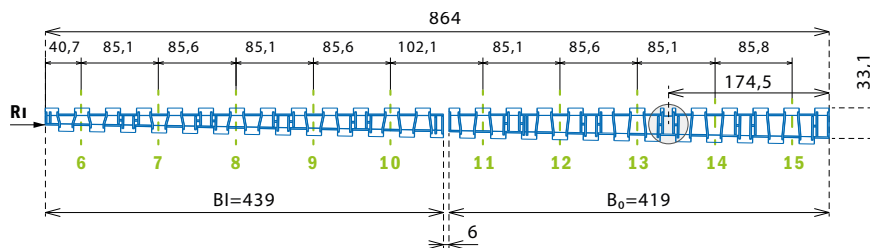
Version	Order code	Track	B _I Belt width (Tolerance+/-3mm)	R _I Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463280269A-M	1	269	1011	200	6
180°	5463280269B-M	1	269	1011	385	11

outer belt - with bearing - on bottom side

Version	Order code	Track	B ₀ Belt width (Tolerance+/-3mm)	R ₀ Belt radius (=R _I +B _I +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463280249A-M	1	249	1286	200	7
180°	5463280249B-M	1	249	1286	385	13

LEGEND: Sprockets alignment - - - - - | Sprockets reference Number Pag 17

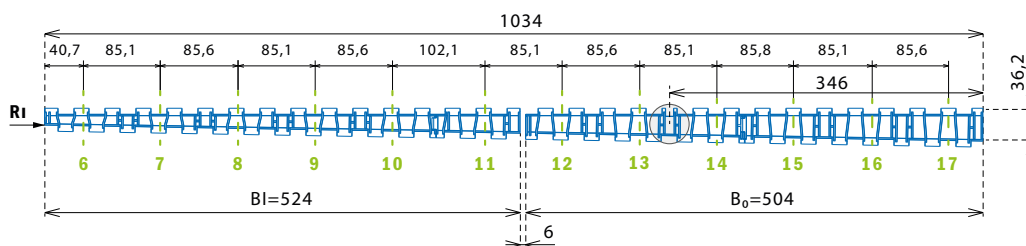
R1011



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	R Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463280439A-M	1	439	1011	200	10
180°	5463280439B-M	1	439	1011	385	18

Version	Order code	Track	B₀ Belt width (Tolerance+/-3mm)	R₀ Belt radius (=R _i +B _i +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463280419A-M	1	419	1456	200	11
180°	5463280419B-M	1	419	1456	385	20

R1011



Version	Order code	Track	B Belt width (Tolerance+/-3mm)	R Belt radius (Rkurv-14mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463280524A-M	1	524	1011	200	11
180°	5463280524A-M	1	524	1011	385	20

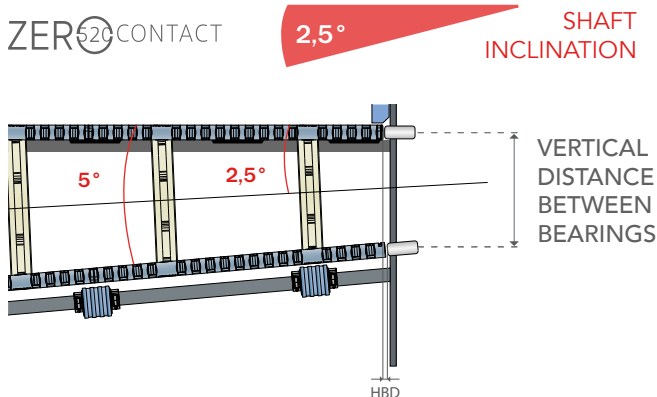
Version	Order code	Track	B₀ Belt width (Tolerance+/-3mm)	R₀ Belt radius (=R _i +B _i +6mm)	Number of modules for assembled belt	Weight in Kg (unit)
90°	5463280504A-M	1	504	1541	200	12
180°	5463280504A-M	1	504	1541	385	22

4. Frame construction

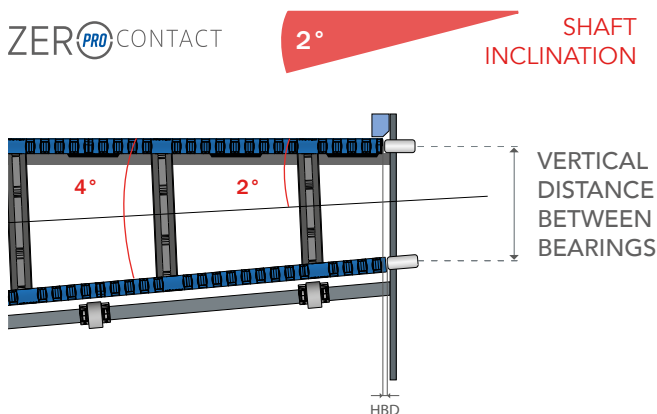
Inclination of shaft and bearings are very important for the correct functionality of the Zero Contact and Zero Contact PRO.

- For Zero Contact™, shaft inclination 2,5°, internal bearings and return rollers support 5°.
- For Zero Contact™ PRO, shaft inclination 2°, internal bearings and return bearings 4°.

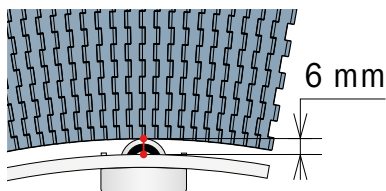
Different dimensions than the below ones will cause a wrong functionality or excessive wear on sprockets and strips as well as of the belt itself.



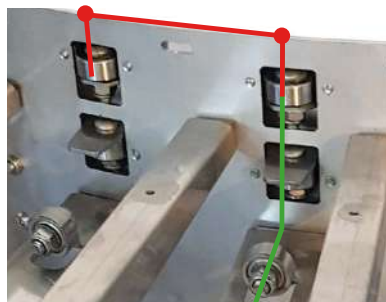
Inside Belt radius	Vertical distance	HBD horizontal belt displacement
mm	mm	mm
600	52,5	4,6
800	70,0	6,2
1000	87,5	7,7
1200	105,0	9,2
1400	122,5	10,7
1600	140,0	12,2
1800	157,5	13,7
2000	175,0	15,2



Inside Belt radius	Vertical distance	HBD horizontal belt displacement
mm	mm	mm
586	55,0	3,5
756	67,0	3,6
1011	85,0	3,7
1031	87,5	3,7
1116	92,5	3,75
1201	98,0	3,78
1286	105,0	3,8
1456	117,0	3,85
1541	123,0	4



- The inner edge of the belt should never touch the frame. Ensure a minimum gap of 6 mm.



- Max distance between the bearings 200 mm. Five bearings for 90°curve are recommended.
- Belt return rollers/bearings have to be installed at the same position as inside rail bearings.
- Recommendation for the bearings (inside and return support):
 - 12 mm double row 5201-2RS bearing
 - 12 x 18 SST shoulder bolt.

4. Frame construction | Zero Contact

ZERO CONTACT⁵²⁰ CURVE CONVEYOR

Zero Contact™ conveyor can run at high speed and load thanks to the bearings installed at the inside of the curve.

Internal Radius	Width	External radius	N° of internal bearings - 90°	N° of internal bearings - 180°	N° return rollers - 90°	N° return rollers - 180°
mm	mm	mm	mm	mm	mm	mm
600	200	800	5	11	14	30
600	400	1000	5	11	14	30
600	600	1200	5	11	21	45
600	800	1400	5	11	28	60
600	1000	1600	5	11	35	75
600	1200	1800	5	11	42	90
600	1400	2000	5	11	49	105
600	1600	2200	5	11	56	120
800	200	1000	6	13	14	30
800	400	1200	6	13	14	30
800	600	1400	6	13	21	45
800	800	1600	6	13	28	60
800	1000	1800	6	13	35	75
800	1200	2000	6	13	42	90
800	1400	2200	6	13	49	105
1000	200	1200	8	17	14	30
1000	400	1400	8	17	14	30
1000	600	1600	8	17	21	45
1000	800	1800	8	17	28	60
1000	1000	2000	8	17	35	75
1000	1200	2200	8	17	42	90
1200	200	1400	10	21	14	30
1200	400	1600	10	21	14	30
1200	600	1800	10	21	21	45
1200	800	2000	10	21	28	60
1200	1000	2200	10	21	35	75
1400	200	1600	10	21	14	30
1400	400	1800	10	21	14	30
1400	600	2000	10	21	21	45
1400	800	2200	10	21	28	60
1600	200	1800	12	25	14	30
1600	400	2000	12	25	14	30
1600	600	2200	12	25	21	45
1800	200	2000	12	25	14	30
1800	400	2200	12	25	14	30
2000	200	2200	14	29	14	30



It is recommended to install bearings with following guidelines:

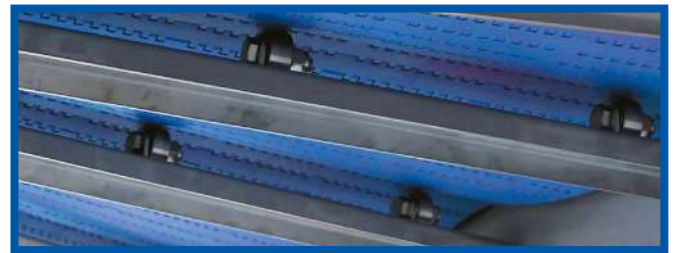
Max distance between the bearings 200 mm. Minimum 5 bearings for 90°curve.

Type: 12 mm double row 5201-2RS | bearing - 12 x 18 SST shoulder bolt 11.

ZERO CONTACT^{PRO} CURVE CONVEYOR

Zero Contact™ PRO conveyor can run at high speed and load thanks to the bearings installed at the inside of the curve.

Internal Radius	Width	External radius	N° of internal bearings - 90°	N° of internal bearings - 180°	N° return bearings - 90°	N° return bearings - 180°
mm	mm	mm	mm	mm	mm	mm
586	439	1025	5	11	21	45
586	524	1110	5	11	21	45
586	864	1450	5	11	21	45
586	1034	1620	5	11	21	45
756	269	1025	6	13	21	45
756	439	1195	6	13	21	45
756	524	1280	6	13	21	45
756	864	1620	6	13	21	45
756	1034	1790	6	13	21	45
1100	269	1280	8	17	24	51
1100	439	1450	8	17	24	51
1100	524	1535	8	17	24	51
1100	864	1875	8	17	24	51
1100	1034	2045	8	17	24	51
1031	249	1280	8	17	24	51
1031	419	1450	8	17	24	51
1116	504	1620	8	17	24	51
1201	419	1620	10	21	30	63
1286	249	1535	10	21	30	63
1286	504	1790	10	21	30	63
1456	419	1875	12	21	30	63
1541	504	2045	12	21	30	63



It is recommended to install bearings with following guidelines:

Max distance between the bearings 200 mm. Minimum 5 bearings for 90° curve.

Type: 12 mm double row 5201-2RS | bearing - 12 x 18 SST shoulder bolt 11.

5. Belt speed calculation & main dimensions | Zero Contact

Speed calculation example:

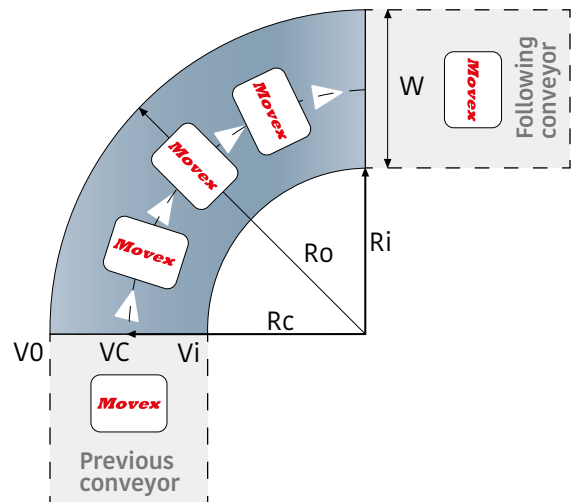
Belt Ri = 800mm Width= 600mm

Line speed= 25 m/min = centre line speed Vc

Read from table= Vi:-27% Vo:+27%

Vi = Vc -27% = 25m/min * (1-0,27) = 18,25 m/min

Vo = Vc +27% = 25m/min * (1+0,27) = 31,75 m/min

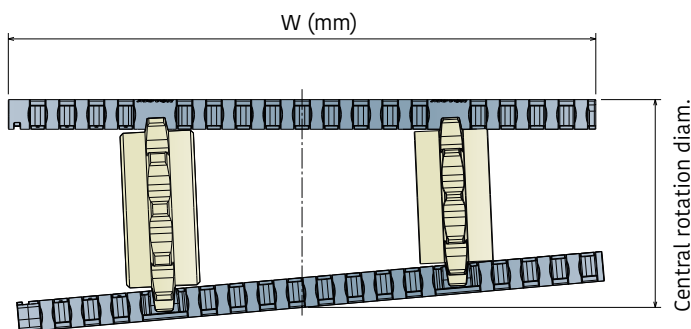


$R_o = R_i + W$ | V_c = line speed | R_c = centre line radius = $R_i + W/2$

Vi = peripheral velocity at inner belt edge/radius = $V_c * R_i / R_c$

Vo = peripheral velocity at outer belt edge/radius = $V_c * R_o / R_c$

Ri	R _i 600 mm		R _i 800 mm		R _i 1000 mm		R _i 1200 mm		R _i 1400 mm		R _i 1600 mm		R _i 1800 mm		R _i 2000 mm	
Belt Width	Vi	Vo	Vi	Vo	Vi	Vo	Vi	Vo	Vi	Vo	Vi	Vo	Vi	Vo	Vi	Vo
200 mm	-14%	+14%	-11%	+11%	-9%	+9%	-8%	+8%	-7%	+7%	-6%	+6%	-5%	+5%	-5%	+5%
400 mm	-25%	+25%	-20%	+20%	-17%	+17%	-14%	+14%	-13%	+13%	-11%	+11%	-10%	+10%	-	-
600 mm	-33%	+33%	-27%	+27%	-23%	+23%	-20%	+20%	-18%	+18%	-16%	+16%	-	-	-	-
800 mm	-40%	+40%	-33%	+33%	-29%	+29%	-25%	+25%	-22%	+22%	-	-	-	-	-	-
1000 mm	-45%	+45%	-38%	+38%	-33%	+33%	-29%	+29%	-	-	-	-	-	-	-	-
1200 mm	-50%	+50%	-43%	+43%	-38%	+38%	-	-	-	-	-	-	-	-	-	-
1400 mm	-54%	+54%	-47%	+47%	-	-	-	-	-	-	-	-	-	-	-	-
1600 mm	-57%	+57%	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Central rotation diameters can be used to calculate the required gearmotor.

Belt Width	R _i 600 mm	R _i 800 mm	R _i 1000 mm	R _i 1200 mm	R _i 1400 mm	R _i 1600 mm	R _i 1800 mm	R _i 2000 mm
200 mm	79,3	96,8	114,2	131,6	149,1	166,5	183,9	192,6
400 mm	88,0	105,5	122,9	140,3	157,8	175,2	192,6	-
600 mm	96,8	114,2	131,6	149,1	166,5	183,9	-	-
800 mm	105,5	122,9	140,3	157,8	175,2	-	-	-
1000 mm	114,2	131,6	149,1	166,5	-	-	-	-
1200 mm	122,9	140,3	157,8	-	-	-	-	-
1400 mm	131,6	149,1	-	-	-	-	-	-
1600 mm	140,3	-	-	-	-	-	-	-



Movex S.p.A recommends using frequency-controlled motor technology for smooth start and stop.

5. Belt speed calculation & main dimensions | Zero Contact PRO

Speed Calculation example:

Belt, Ri= 756mm Width= 439mm

Line speed= 25 m/min = centre line speed Vc

Read from table= Vi:-23% Vo:+23%

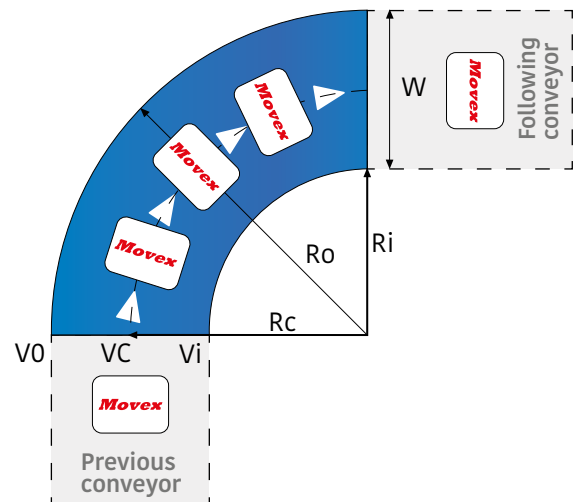
Vi = Vc -23% = 25m/min * (1-0,23) = 19,25 m/min

Vo = Vc +23% = 25m/min * (1+0,23) = 30,75 m/min

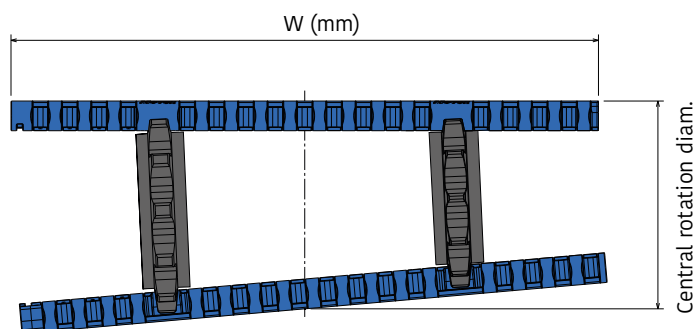
$Ro = Ri + W$ | Vc = line speed | Rc = centre line radius = $Ri + W/2$

Vi = peripheral velocity at inner belt edge/radius = $Vc * Ri/Rc$

Vo = peripheral velocity at outer belt edge/radius = $Vc * Ro/Rc$



RI	R _i 586 mm		R _i 756 mm		R _i 1011 mm		R _i 1131 mm		R _i 1116 mm		R _i 1201 mm		R _i 1286 mm		R _i 1456 mm		R _i 1541 mm	
Belt Width	Vi	Vo	Vi	Vo	Vi	Vo	Vi	Vo	Vi	Vo	Vi	Vo	Vi	Vo	Vi	Vo	Vi	Vo
249 mm	-	-	-	-	-	-	-11%	+11%	-	-	-	-	-9%	+9%	-	-	-	-
269 mm	-	-	-15%	+15%	-12%	+12%	-	-	-	-	-	-	-	-	-	-	-	-
419 mm	-	-	-	-	-	-	-17%	+17%	-	-	-15%	+15%	-	-	-13%	+13%	-	-
439 mm	-27%	+27%	-23%	+23%	-18%	+18%	-	-	-	-	-	-	-	-	-	-	-	-
504 mm	-	-	-	-	-	-	-	-	-18%	+18%	-	-	-16%	+16%	-	-	-14%	+14%
524 mm	-31%	+31%	-26%	+26%	-21%	+21%	-	-	-	-	-	-	-	-	-	-	-	-
864 mm	-42%	+42%	-36%	+36%	-30%	+30%	-	-	-	-	-	-	-	-	-	-	-	-
1034 mm	-47%	+47%	-41%	+41%	-34%	+34%	-	-	-	-	-	-	-	-	-	-	-	-



Central rotation diameters can be used to calculate the required gearmotor.

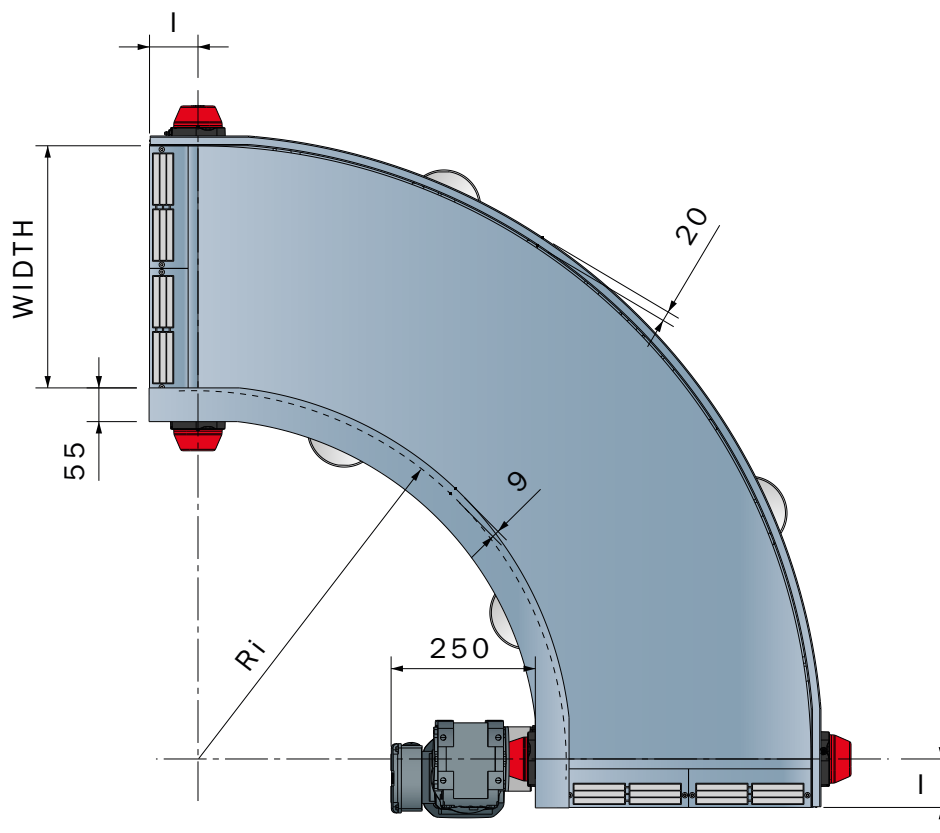
Belt Width	R _i 586mm	R _i 756mm	R _i 1011mm	R _i 1031mm	R _i 1116mm	R _i 1201mm	R _i 1286mm	R _i 1456mm	R _i 1541mm
249mm	-	-	-	88,9	-	-	107,1	-	-
269mm	-	70,0	88,2	-	-	-	-	-	-
419mm	-	-	-	95,0	-	107,1	-	125,4	-
439mm	63,9	76,1	94,3	-	-	-	-	-	-
504mm	-	-	-	-	104,1	-	116,2	-	134,5
524mm	66,9	79,1	97,3	-	-	-	-	-	-
864mm	79,1	91,2	109,5	-	-	-	-	-	-
1034mm	85,2	97,3	115,5	-	-	-	-	-	-



Movex S.p.A recommends using frequency-controlled motor technology for smooth start and stop.

CURVE CONVEYOR

Main Dimensions



I - Infeed length

3 rollers	4 rollers
80mm	110mm

Length scheme for infeed/outfeed (Zero Contact and Zero Contact S)

Width	R _i 600mm	R _i 800mm	R _i 1000mm	R _i 1200mm	R _i 1400mm	R _i 1600mm	R _i 1800mm	R _i 2000mm
200mm	3 rollers	3 rollers	3 rollers	3 rollers	4 rollers	4 rollers	4 rollers	4 rollers
400mm	3 rollers	3 rollers	3 rollers	3 rollers	4 rollers	4 rollers	4 rollers	-
600mm	3 rollers	3 rollers	3 rollers	4 rollers	4 rollers	4 rollers	-	-
800mm	3 rollers	3 rollers	4 rollers	4 rollers	4 rollers	-	-	-
1000mm	3 rollers	4 rollers	4 rollers	4 rollers	-	-	-	-
1200mm	3 rollers	4 rollers	4 rollers	-	-	-	-	-
1400mm	4 rollers	4 rollers	-	-	-	-	-	-
1600mm	4 rollers	-	-	-	-	-	-	-

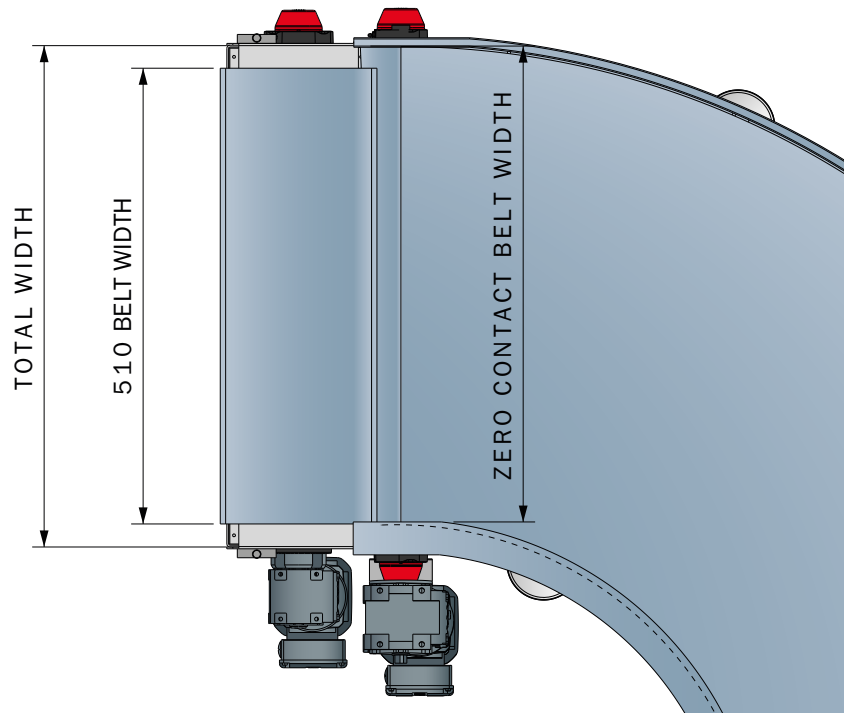
Length scheme for infeed/outfeed (Zero Contact PRO)

Width	R _i 586mm	R _i 756mm	R _i 1011mm	R _i 1031mm	R _i 1116mm	R _i 1201mm	R _i 1286mm	R _i 1456mm	R _i 1541mm
249mm	-	-	3 rollers		-	-	4 rollers	4 rollers	-
269mm	-	3 rollers	3 rollers	-	-	-	-	-	-
419mm	-	-	4 rollers		-	4 rollers	-	4 rollers	-
439mm	3 rollers	3 rollers	4 rollers	-	-	-	-	-	-
504mm	-	-	-	-	4 rollers	-	4 rollers	-	4 rollers
524mm	4 rollers	4 rollers	4 rollers	-	-	-	-	-	-
864mm	4 rollers	4 rollers	4 rollers	-	-	-	-	-	-
1034mm	4 rollers	4 rollers	4 rollers	-	-	-	-	-	-

If you need technical drawings (pdf, dwg 2D and step 3D) please ask your sales representative.

ACTIVE TRANSFER PLATE

Main Dimensions



The Zero Contact™ curve, together with the Active Transfer Plate, reduces gap for a perfect and smooth product transfer.

Zero Contact Belt Width	510 Belt Width	Total width	Zero Contact PRO Belt Width	510 Belt Width	Total width
200 mm	228,6 mm	245 mm	249 mm	228,6 mm	294 mm
400 mm	381 mm	445 mm	269 mm	228,6 mm	314 mm
600 mm	609,6 mm	645 mm	419 mm	381 mm	464 mm
800 mm	838,2 mm	845 mm	439 mm	457,2 mm	484 mm
1000 mm	990,6 mm	1045 mm	504 mm	533,4 mm	549 mm
1200 mm	1219,2 mm	1245 mm	524 mm	533,4 mm	569 mm
1400 mm	1447,8 mm	1455 mm	864 mm	838,2 mm	909 mm
1600 mm	1600,2 mm	1645 mm	1034 mm	990,6 mm	1079 mm

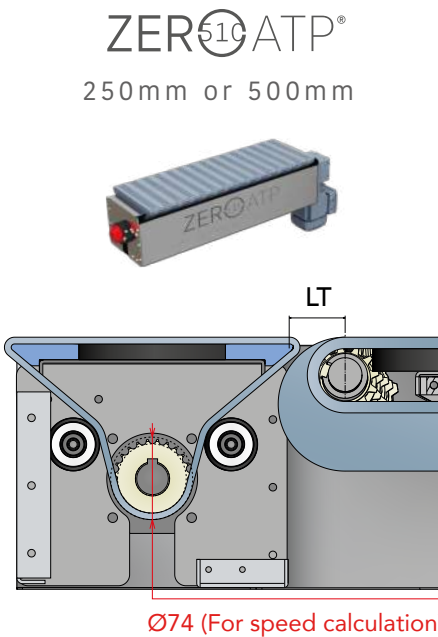
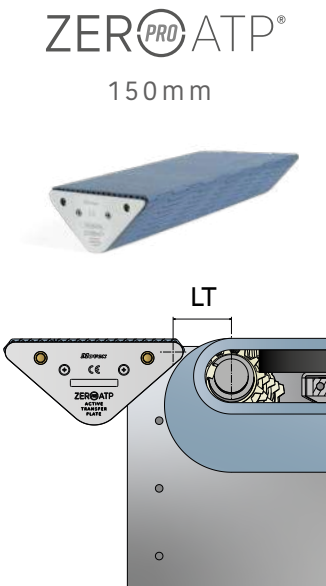
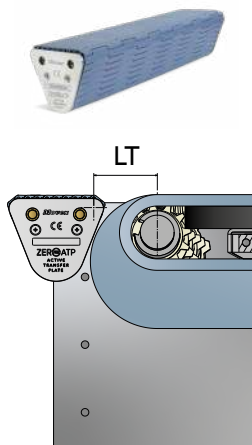
If you need technical drawings (pdf, dwg 2D and step 3D) please ask your sales representative.

6. Zero ATP & Zero ATP PRO

The **Zero ATP®** and the **Zero ATP®PRO** are the perfect solution for small and light products, which can hardly get transfered on the standard units. With the Active Transfer Plate Movex helps reducing downtimes and improving efficiency.

Zero ATP® is available with 250mm or 500mm length, **Zero ATP®PRO** is the smallest Active Transfer Plate in the world available with 80mm or 150mm length.

ZERO^{PRO}ATP®
80 mm



External radius	LT
800 mm	53 mm
1000 mm	56 mm
1200 mm	59 mm
1400 mm	62 mm
1600 mm	65 mm
1800 mm	68 mm
2000 mm	71 mm
2200 mm	74 mm

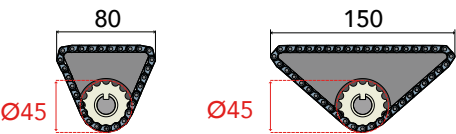
Optional: transmission (B version)

External radius	LT
800 mm	42 mm
1000 mm	45 mm
1200 mm	48 mm
1400 mm	51 mm
1600 mm	54 mm
1800 mm	57 mm
2000 mm	60 mm
2200 mm	63 mm

Optional: transmission (B version)

External radius	LT
800 mm	42 mm
1000 mm	45 mm
1200 mm	48 mm
1400 mm	51 mm
1600 mm	54 mm
1800 mm	57 mm
2000 mm	60 mm
2200 mm	63 mm

Optional: gearmotor, transmission



A - version with mini motor
B - version with keyed shaft

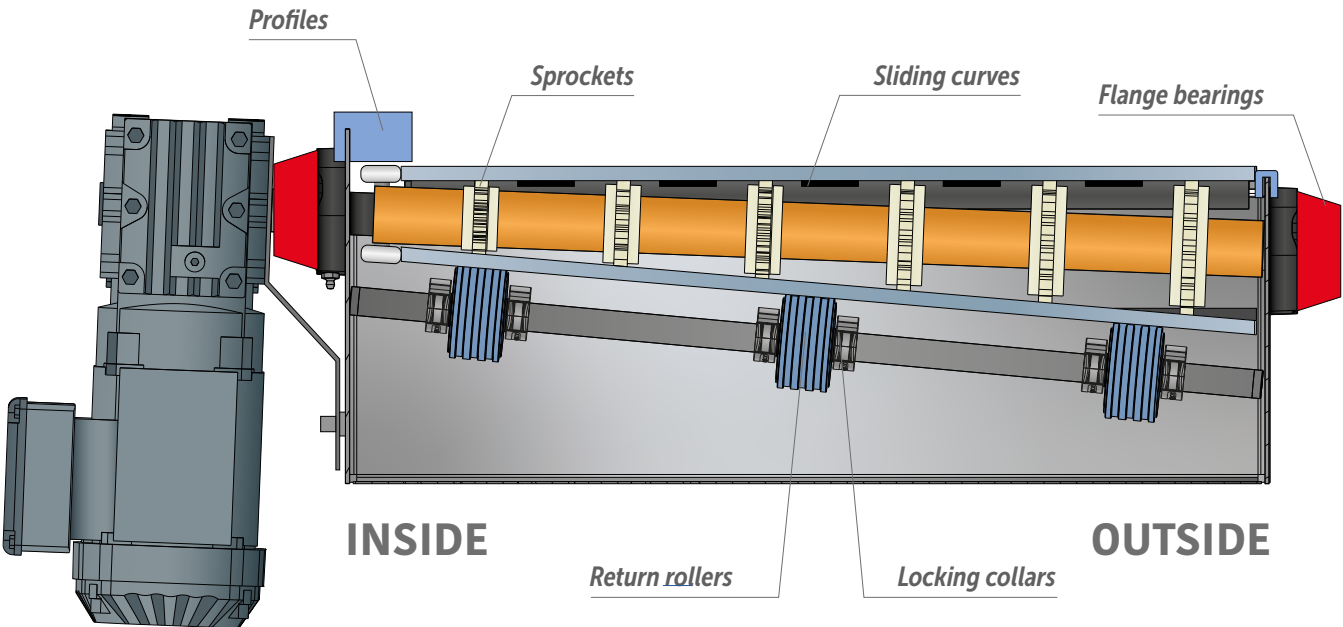
Series	*Material	Width	Version
5336	*	0006	A or B
5336	*	0009	A or B
5336	*	0012	A or B
5336	*	0015	A or B
5336	*	0018	A or B
5336	*	0021	A or B
5336	*	0024	A or B

Series	*Material	Width	Version
5338	*	0006	A or B
5338	*	0009	A or B
5338	*	0012	A or B
5338	*	0015	A or B
5338	*	0018	A or B
5338	*	0021	A or B
5338	*	0024	A or B

More information can be found on Movex general catalogue. Visit our website at www.movexii.com or ask your sales representative.

7. Recommended components

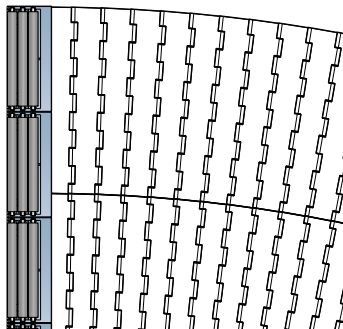
Movex Zero Contact fixed radius curved conveyors can be created with our modular belts and the following components. All related details can be found in the Movex product catalog, on the website www.movexii.com or by asking your sales representative.



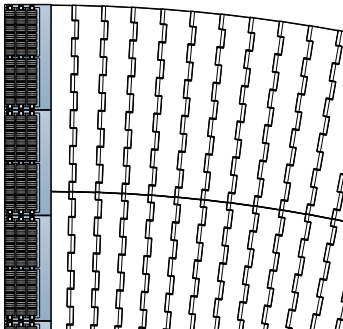
<i>Return rollers</i>	<i>Locking collars</i>	<i>Flange bearings</i>	<i>Profiles</i>	<i>Leveling feet</i>	<i>Sliding curves</i>
PART 220 pag.39	PART 215 pag.39	PART 826 pag.39 PART 827 pag.39	PART 1008 pag.40 PART 700 pag.40 PART 153 pag.40	PART 901317 pag.44 PART 94401H pag.44	Zero Contact pag.47 Zero ContactPRO pag.48

Transfer modules

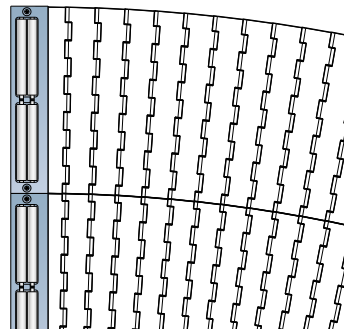
Part 369 pag.41



Part 371 pag.42

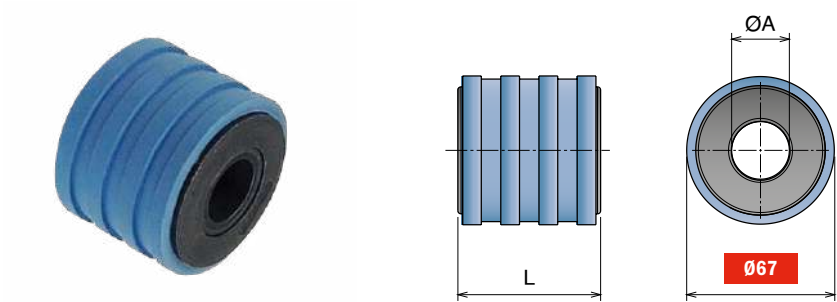


Part 342 pag.43



7. Recommended components

Return rollers with rubber D=67 mm



Part	Article-Nr.	L	ØA
220	20451	41	16
220	20452	41	18
220	20453	41	20

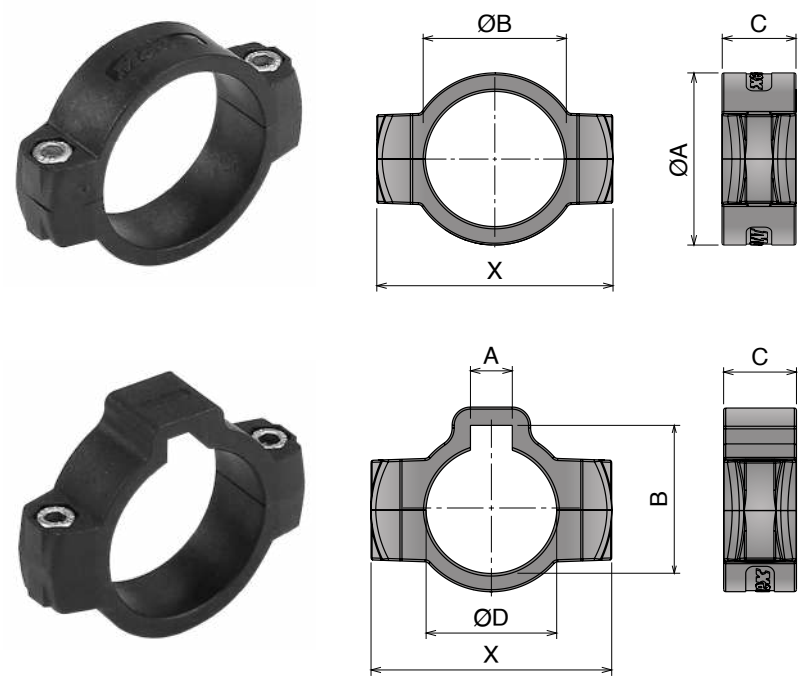
Material:

Polyethylene (PE)

Rubber: TPR

Watertight

Locking collars - max recommended tightening torque: 0,3 mt



Part	Article-Nr.	ØA	ØB	C	X
215	21509	24	16	12	37
215	21503	26	18	14	40
215	21504	28	20	14	40

Material:

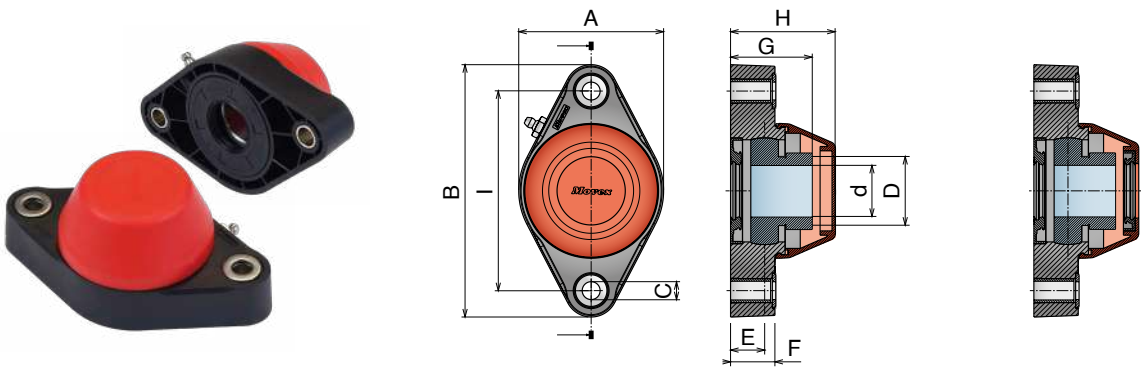
Clamps: Polyamide

Screws and nuts: Stainless steel

Split collar with keyway

Part	Article-Nr.	A	B	C	X
221	22104	12	43,3	18	64

Flange bearings



Part	Art-close	Series	d	I	A	B	C	D	E	F	G
826	82622	UCFL 206/90	30	90	85	116	10,2	44,5	14,5	20	42,2

Part	Art-close	Series	d	I	A	B	C	D	E	F	G
827	82722	UCFL 206/90	30	90	85	116	10,2	44,5	14,5	20	42,2

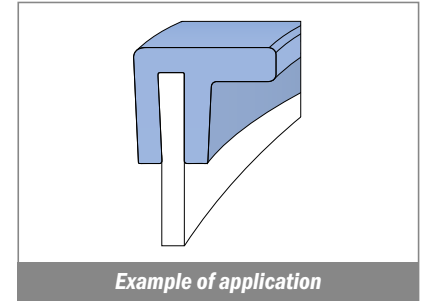
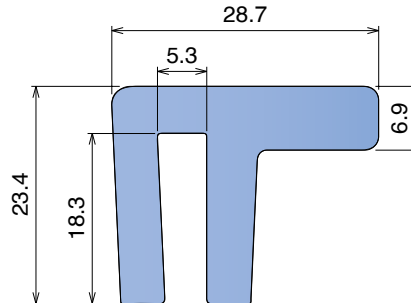
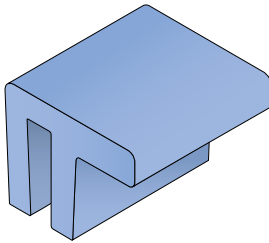
7. Recommended components

BluLub® new material with reduced coefficient of friction and higher wear resistance. BluLub complies with the code of Federal Regulations of FDA.

Linear expansion coefficient: $1.1 \times 10^{-4} \text{ } ^\circ\text{F}^{-1}$ ($2 \times 10^{-5} \text{ } ^\circ\text{C}^{-1}$)
Operating temperature: -40 to 176°F (-40 to +80°C)

Below suggested wear strips to be used for respectively external side, internal side and belt support.

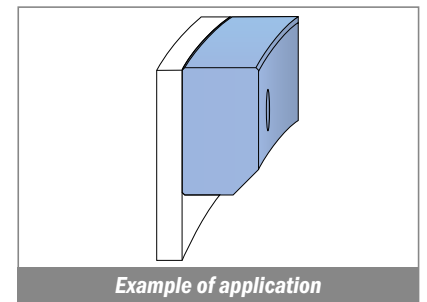
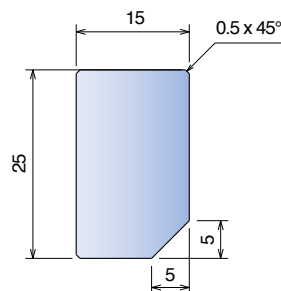
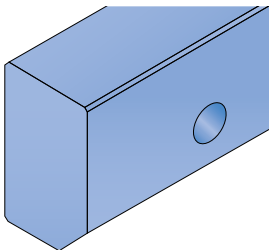
Bar cap 5mm



Part	Article-Nr.	L	Availability
1008	100803BC	6 m	On request

Machined internal profiles can be found on pages 45 and 46.

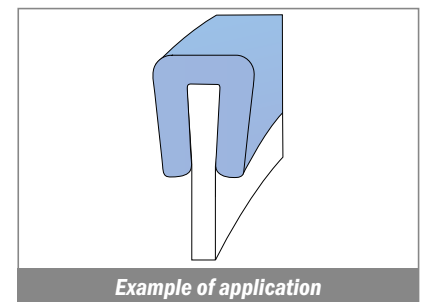
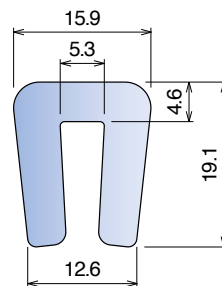
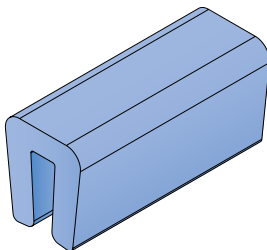
Machined flat wear strip



Part	Article-Nr.	L	Availability
700	700100G0	3 m	On request

Machined internal profiles can be found on pages 45 and 46.

Bar cap 5 mm



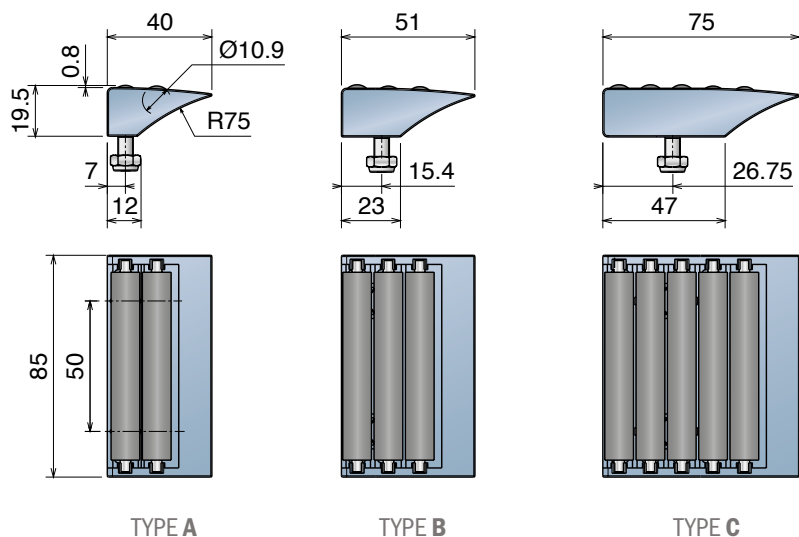
Part	Article-Nr.	L	Availability
153	15300C	3 m	On request

More profiles can be found on Movex general catalogue. Visit our website at www.movexii.com or ask your sales representative.

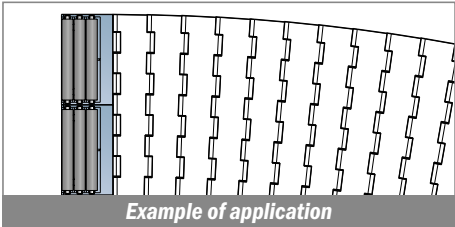
7. Recommended components

Material :
Module: acetal resin
Pins, screws and nuts: Stainless steel
Rollers: acetal resin or stainless steel

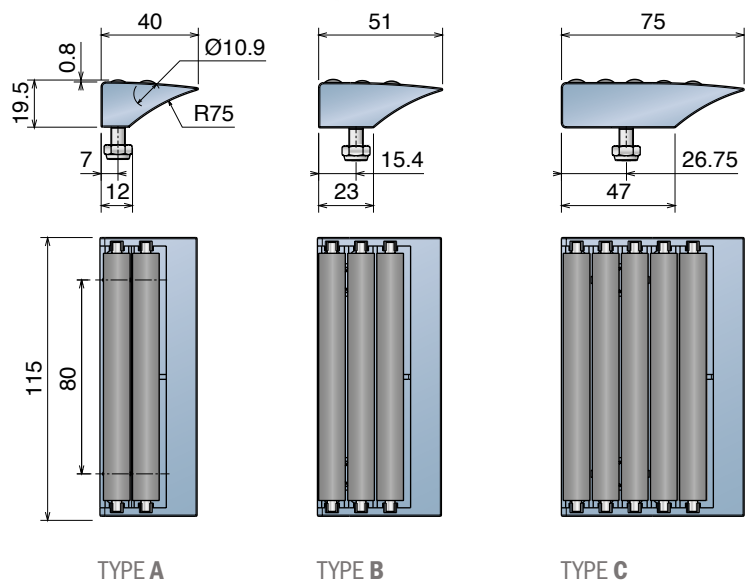
Transfer modules L=85mm



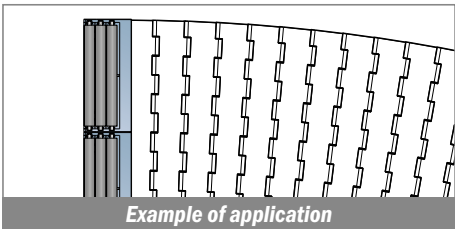
Part	Article-Nr.	Type	Roller material
368	36801	A	Acetal resin
368	36802	B	Acetal resin
368	36803	C	Acetal resin
368	36801PFX	A	PFX
368	36802PFX	B	PFX
368	36803PFX	C	PFX
368	36801SS	A	Stainless steel
368	36802SS	B	Stainless steel
368	36803SS	C	Stainless steel



Transfer modules L=115mm



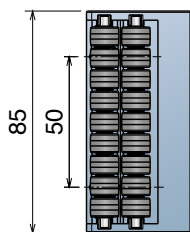
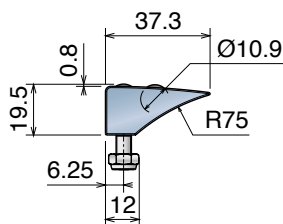
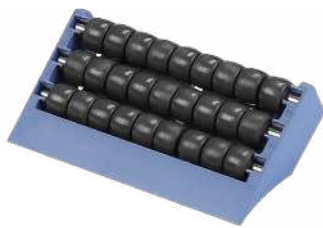
Part	Article-Nr.	Type	Roller material
369	36901	A	Acetal resin
369	36902	B	Acetal resin
369	36903	C	Acetal resin
369	36901PFX	A	PFX
369	36902PFX	B	PFX
369	36903PFX	C	PFX
369	36901SS	A	Stainless steel
369	36902SS	B	Stainless steel
369	36903SS	C	Stainless steel



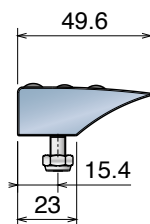
7. Recommended components

Material :
Module: acetal resin
Pins, screws and nuts: Stainless steel
Rollers: acetal resin or stainless steel

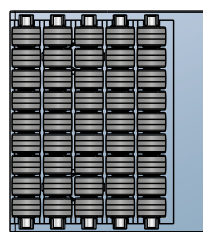
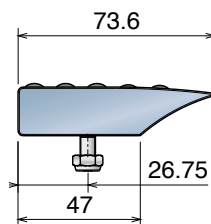
Transfer modules L=85mm



TYPE A

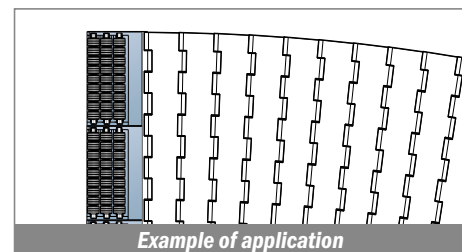


TYPE B

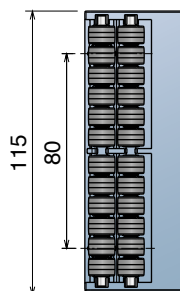
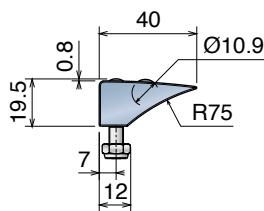


TYPE C

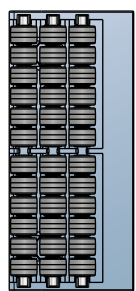
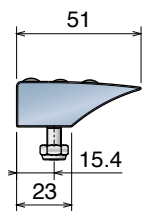
Part	Article-Nr.	Type	Roller material
370	37001	A	Acetal resin
370	37002	B	Acetal resin
370	37003	C	Acetal resin
370	37001PFX	A	PFX
370	37002PFX	B	PFX
370	37003PFX	C	PFX



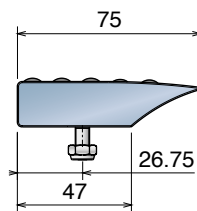
Transfer modules L=115mm



TYPE A

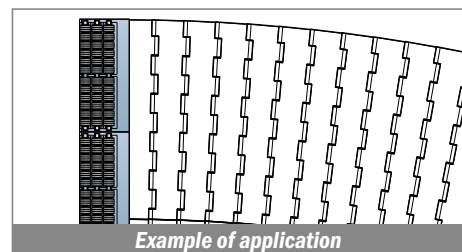


TYPE B



TYPE C

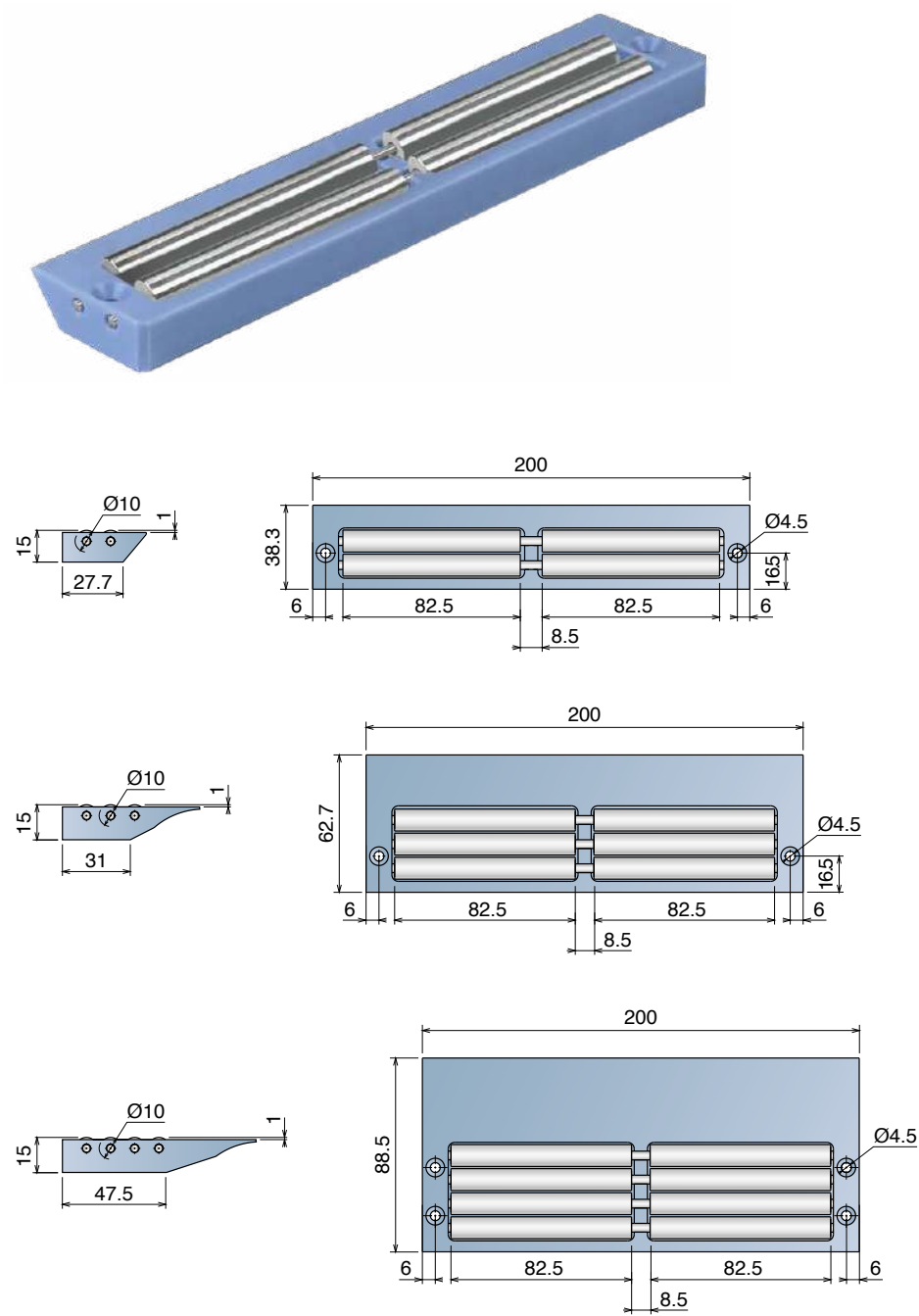
Part	Article-Nr.	Type	Roller material
371	37101	A	Acetal resin
371	37102	B	Acetal resin
371	37103	C	Acetal resin
371	37101PFX	A	PFX
371	37102PFX	B	PFX
371	37103PFX	C	PFX



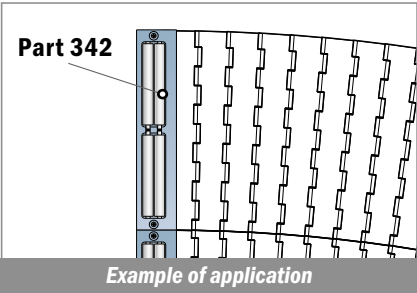
7. Recommended components

 **Material:**
Module: **BluLub®**
Pin: Stainless steel
Rollers: Stainless steel

Machined transfer modules



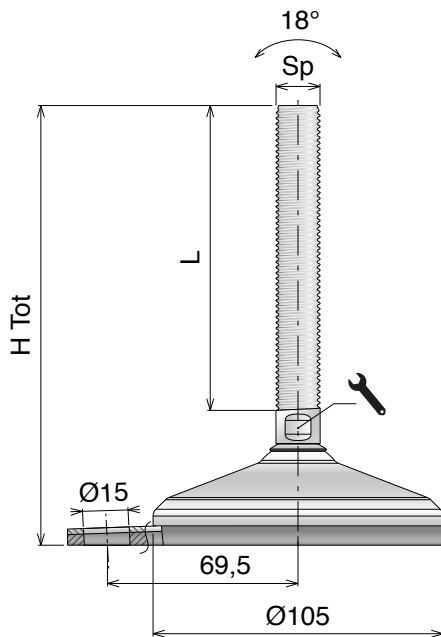
Part	Article-Nr.	Rollers
342	34201	2
342	34201N	3
342	34201NL	4



7. Recommended components

Material:
SS: Stainless steel
FeZn: Zinc plated steel

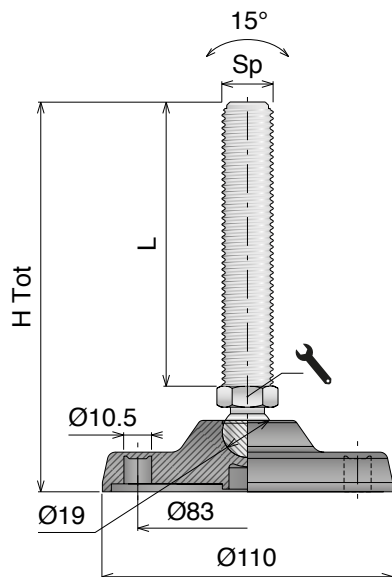
Levelers



Ø105
 DIAMETER (mm)

x1
 FIXING POINT

Article-Nr.	Sp	H Tot (mm)	L (mm)	(mm)	Load (N)
901317	M20	240	192,3	17	25.000



Ø110
 DIAMETER (mm)

x2
 FIXING POINT

Article-Nr.	Article-Nr.	Sp	H Tot (mm)	L (mm)	(mm)	Load (N)
SS	FeZn					
94401H	94401ZH	M20	155	115	20	15.000

More levelers can be found on Movex general catalogue. Visit our website at www.movexii.com or ask your sales representative.

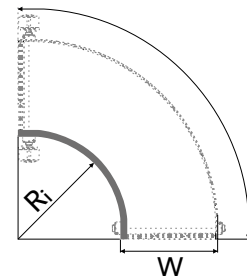
7. Recommended components | Zero Contact

Material:
Polyethylene
UHMW-PE

ZEROCONTACT Machined internal profile 90°

Belt Width	200 mm	400 mm	600 mm	800 mm
Ri 600mm	700100G0-S-600-90	700100G0-S-600-90	700100G0-S-600-90	700100G0-S-600-90
Ri 800mm	700100G0-S-800-90	700100G0-S-800-90	700100G0-S-800-90	700100G0-S-800-90
Ri 1000mm	700100G0-S-800-90	700100G0-S-1000-90	700100G0-S-1000-90	700100G0-S-1000-90L
Ri 1200mm	700100G0-S-1200-90	700100G0-S-1200-90	700100G0-S-1200-90L	700100G0-S-1200-90L
Ri 1400mm	700100G0-S-1400-90	700100G0-S-1400-90	700100G0-S-1400-90	700100G0-S-1400-90
Ri 1600mm	700100G0-S-1600-90	700100G0-S-1600-90	700100G0-S-1600-90	-
Ri1800mm	700100G0-S-1800-90	700100G0-S-1800-90	-	-
Ri 2000mm	700100G0-S-2000-90	-	-	-

Belt Width	1000 mm	1200 mm	1400 mm	1600 mm
Ri 600mm	700100G0-S-600-90	700100G0-S-600-90L	700100G0-S-600-90L	700100G0-S-600-90L
Ri 800mm	700100G0-S-800-90L	700100G0-S-800-90L	700100G0-S-800-90L	-
Ri 1000mm	700100G0-S-1000-90L	700100G0-S-1000-90L	-	-
Ri 1200mm	700100G0-S-1200-90L	-	-	-
Ri 1400mm	-	-	-	-
Ri 1600mm	-	-	-	-
Ri1800mm	-	-	-	-
Ri 2000mm	-	-	-	-

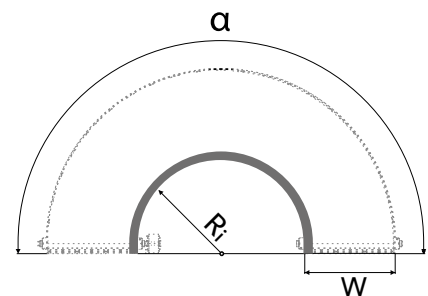


Machined internal profile available,
on request, also in **BluLub®**

ZEROCONTACT Machined internal profile 90°

Belt Width	200 mm	400 mm	600 mm	800 mm
Ri 600mm	700100G0-S-600-180	700100G0-S-600-180	700100G0-S-600-180	700100G0-S-600-180
Ri 800mm	700100G0-S-800-180	700100G0-S-800-180	700100G0-S-800-180	700100G0-S-800-180
Ri 1000mm	700100G0-S-1000-180	700100G0-S-1000-180	700100G0-S-1000-180	700100G0-S-1000-180L
Ri 1200mm	700100G0-S-1200-180	700100G0-S-1200-180	700100G0-S-1200-180L	700100G0-S-1200-180L
Ri 1400mm	700100G0-S-1400-180	700100G0-S-1400-180	700100G0-S-1400-180	700100G0-S-1400-180
Ri 1600mm	700100G0-S-1600-180	700100G0-S-1600-180	700100G0-S-1600-180	-
Ri1800mm	700100G0-S-1800-180	700100G0-S-1800-180	-	-
Ri 2000mm	700100G0-S-2000-180	-	-	-

Belt Width	1000 mm	1200 mm	1400 mm	1600 mm
Ri. 600mm	700100G0-S-600-180	700100G0-S-600-180L	700100G0-S-600-180L	700100G0-S-600-180L
Ri. 800mm	700100G0-S-800-180L	700100G0-S-800-180L	700100G0-S-800-180L	-
Ri. 1000mm	700100G0-S-1000-180L	700100G0-S-1000-180L	-	-
Ri. 1200mm	700100G0-S-1200-180L	-	-	-
Ri. 1400mm	-	-	-	-
Ri. 1600mm	-	-	-	-
Ri.1800mm	-	-	-	-
Ri. 2000mm	-	-	-	-

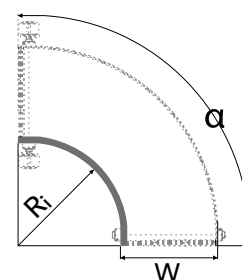


Machined internal profile available,
on request, also in **BluLub®**

ZEROPROCONTACT Machined internal profile 90°

Belt Width	W 249 mm	269 mm	419 mm	439 mm
Ri. 586mm	-	-	-	700100G0-S-586-90
Ri. 756mm	-	700100G0-S-756-90	-	700100G0-S-756-90
Ri. 1011mm	-	700100G0-S-1011-90	-	700100G0-S-1011-90L
Ri. 1031mm	700100G0-S-1031-90	-	700100G0-S-1031-90L	-
Ri. 1116mm	-	-	-	-
Ri. 1201mm	-	-	700100G0-S-1201-90	-
Ri. 1286mm	700100G0-S-1286-90	-	-	-
Ri. 1456mm	-	-	700100G0-S-1456-90	-
Ri. 1541mm	-	-	-	-

Belt Width	504mm	524 mm	864 mm	1034 mm
Ri. 586mm	-	700100G0-S-586-90L	700100G0-S-586-90L	700100G0-S-586-90L
Ri. 756mm	-	700100G0-S-756-90L	700100G0-S-756-90L	700100G0-S-756-90L
Ri. 1011mm	-	700100G0-S-1011-90L	700100G0-S-1011-90L	700100G0-S-1011-90L
Ri. 1031mm	-	-	-	-
Ri. 1116mm	700100G0-S-1116-90	-	-	-
Ri. 1201mm	-	-	-	-
Ri. 1286mm	700100G0-S-1286-90	-	-	-
Ri. 1456mm	-	-	-	-
Ri. 1541mm	700100G0-S-1541-90	-	-	-

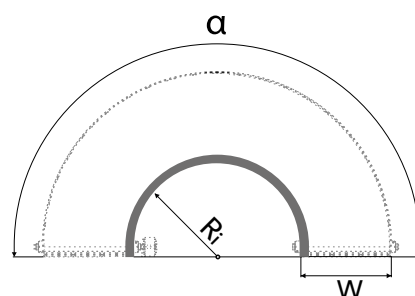


Machined internal profile available, on request, also in **BluLub®**

ZEROPROCONTACT Machined internal profile 180°

Belt Width	249 mm	269 mm	419 mm	439 mm
Ri. 586mm	-	-	-	700100G0-S-586-180
Ri. 756mm	-	700100G0-S-756-180	-	700100G0-S-756-180
Ri. 1011mm	-	700100G0-S-1011-180	-	700100G0-S-1011-180L
Ri. 1031mm	700100G0-S-586-180	-	700100G0-S-1031-180L	-
Ri. 1116mm	-	-	-	-
Ri. 1201mm	-	-	700100G0-S-1201-180	-
Ri. 1286mm	700100G0-S-1286-180	-	-	-
Ri. 1456mm	-	-	700100G0-S-1456-180	-
Ri. 1541mm	-	-	-	-

Belt Width	504mm	524 mm	864 mm	1034 mm
Ri. 586mm	-	700100G0-S-586-180L	700100G0-S-586-180L	700100G0-S-586-180L
Ri. 756mm	-	700100G0-S-756-180L	700100G0-S-756-180L	700100G0-S-756-180L
Ri. 1011mm	-	700100G0-S-1011-180L	700100G0-S-1011-180L	700100G0-S-1011-180L
Ri. 1031mm	-	-	-	-
Ri. 1116mm	700100G0-S-1116-180	-	-	-
Ri. 1201mm	-	-	-	-
Ri. 1286mm	700100G0-S-1286-180	-	-	-
Ri. 1456mm	-	-	-	-
Ri. 1541mm	700100G0-S-1541-180	-	-	-

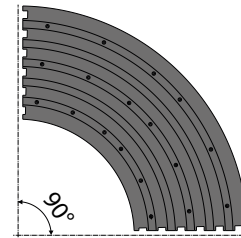


Machined internal profile available, on request, also in **BluLub®**

ZEROCONTACT Sliding machined profiles 90°

Belt Width	200 mm	400 mm	600 mm	800 mm
Ri 600mm	W02R06G090G1	W04R06G090G1	W06R06G090G1	W08R06G090G1
Ri 800mm	W02R08G090G1	W04R08G090G1	W06R08G090G1	W08R08G090G1
Ri 1000mm	W02R10G090G1	W04R10G090G1	W06R10G090G1	W08R10G090G1
Ri 1200mm	W02R12G090G1	W04R12G090G1	W06R12G090G1	W08R12G090G1
Ri 1400mm	W02R14G090G1	W04R14G090G1	W06R14G090G1	W08R14G090G1
Ri 1600mm	W02R16G090G1	W04R16G090G1	W06R16G090G1	-
Ri1800mm	W02R18G090G1	W04R18G090G1	-	-
Ri 2000mm	W02R20G090G1	-	-	-

Belt Width	1000 mm	1200 mm	1400 mm	1600 mm
Ri 600mm	W10R06G090G1	W12R06G090G1	W14R06G090G1	W16R06G090G1
Ri 800mm	W10R08G090G1	W12R08G090G1	W14R08G090G1	-
Ri 1000mm	W10R10G090G1	W12R10G090G1	-	-
Ri 1200mm	W10R12G090G1	-	-	-
Ri 1400mm	-	-	-	-
Ri 1600mm	-	-	-	-
Ri1800mm	-	-	-	-
Ri 2000mm	-	-	-	-

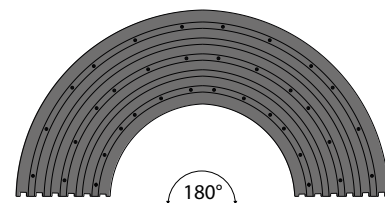


Machined curves available,
on request, also in **BluLub®**

ZEROCONTACT Sliding machined profiles 180°

Belt Width	200 mm	400 mm	600 mm	800 mm
Ri 600mm	W02R06G180G1	W02R08G180G1	W02R10G180G1	W02R12G180G1
Ri 800mm	W04R06G180G1	W04R08G180G1	W04R10G180G1	W04R12G180G1
Ri 1000mm	W06R06G180G1	W06R08G180G1	W06R10G180G1	W06R12G180G1
Ri 1200mm	W08R06G180G1	W08R08G180G1	W08R10G180G1	W08R12G180G1
Ri 1400mm	W10R06G180G1	W10R08G180G1	W10R10G180G1	W10R12G180G1
Ri 1600mm	W12R06G180G1	W12R08G180G1	W12R10G180G1	-
Ri1800mm	W14R06G180G1	W14R08G180G1	-	-
Ri 2000mm	W16R06G180G1	-	-	-

Belt Width	1000 mm	1200 mm	1400 mm	1600 mm
Ri. 600mm	W02R14G180G1	W02R16G180G1	W02R18G180G1	W02R20G180G1
Ri. 800mm	W04R14G180G1	W04R16G 180G1	W04R18G180G1	-
Ri. 1000mm	W06R14G180G1	W06R16G180G1	-	-
Ri. 1200mm	W08R14G180G1	-	-	-
Ri. 1400mm	-	-	-	-
Ri. 1600mm	-	-	-	-
Ri.1800mm	-	-	-	-
Ri. 2000mm	-	-	-	-

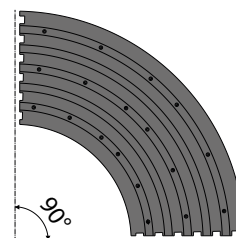


Machined curves available,
on request, also in **BluLub®**

ZEROPROCONTACT Sliding machined curves 90°

Belt Width	249 mm	269 mm	419 mm	439 mm
Ri. 586mm	-	-	-	W94R91G090G1
Ri. 756mm	-	W92R92G090G1	-	W94R92G090G1
Ri. 1011mm	-	W92R93G090G1	-	W94R93G090G1
Ri. 1031mm	W91R94G090G1	-	W93R94G090G1	-
Ri. 1116mm	-	-	-	-
Ri. 1201mm	-	-	W93R96G090G1	-
Ri. 1286mm	W91R97G090G1	-	-	-
Ri. 1456mm	-	-	W93R98G090G1	-
Ri. 1541mm	-	-	-	-

Belt Width	504mm	524 mm	864 mm	1034 mm
Ri. 586mm	-	W96R91G090G1	W97R91G090G1	W98R91G090G1
Ri. 756mm	-	W96R92G090G1	W97R92G090G1	W98R92G090G1
Ri. 1011mm	-	W96R93G090G1	W97R93G090G1	W98R93G090G1
Ri. 1031mm	-	-	-	-
Ri. 1116mm	W95R95G090G1	-	-	-
Ri. 1201mm	-	-	-	-
Ri. 1286mm	W95R97G090G1	-	-	-
Ri. 1456mm	-	-	-	-
Ri. 1541mm	W95R99G090G1	-	-	-

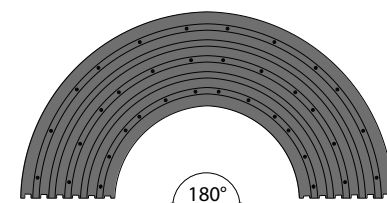


Machined curves available, on request, also in **BluLub®**

ZEROPROCONTACT Sliding machined curves 180°

Belt Width	249 mm	269 mm	419 mm	439 mm
Ri. 586mm	-	-	-	W94R91G180G1
Ri. 756mm	-	W92R92G180G1	-	W94R92G180G1
Ri. 1011mm	-	W92R93G180G1	-	W94R93G180G1
Ri. 1031mm	W91R94G180G1	-	W93R94G180G1	-
Ri. 1116mm	-	-	-	-
Ri. 1201mm	-	-	W93R96G180G1	-
Ri. 1286mm	W91R97G180G1	-	-	-
Ri. 1456mm	-	-	W93R98G180G1	-
Ri. 1541mm	-	-	-	-

Belt Width	504mm	524 mm	864 mm	1034 mm
Ri. 586mm	-	W96R91G180G1	W97R91G180G1	W98R91G180G1
Ri. 756mm	-	W96R92G180G1	W97R92G180G1	W98R92G180G1
Ri. 1011mm	-	W96R93G180G1	W97R93G180G1	W98R93G180G1
Ri. 1031mm	-	-	-	-
Ri. 1116mm	W95R95G180G1	-	-	-
Ri. 1201mm	-	-	-	-
Ri. 1286mm	W95R97G180G1	-	-	-
Ri. 1456mm	-	-	-	-
Ri. 1541mm	W95R99G180G1	-	-	-



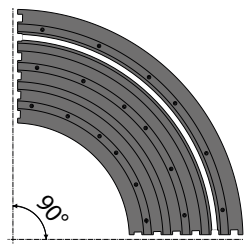
Machined curves available, on request, also in **BluLub®**

ZEROCONTACT

2 tracks sliding machined curves 90°

Belt Width	524 mm	864 mm	1034 mm
Ri 586 mm	-	W97R91G090G2	W98R91G090G2
Ri 756mm	W96R92G090G2	W97R92G090G2	W98R92G090G2
Ri 1011mm	W96R93G090G2	W97R93G090G2	W98R93G090G2

Machined curves available, on request, also in **BluLub®**

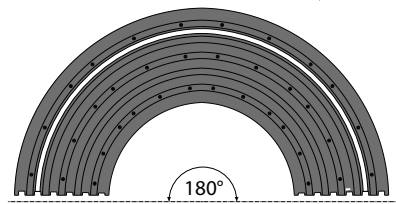


ZEROCONTACT

2 tracks sliding machined curves 180°

Belt Width	524 mm	864 mm	1034 mm
Ri 586 mm	-	W97R91G180G2	W98R91G180G2
Ri 756mm	W96R92G180G2	W97R92G180G2	W98R92G180G2
Ri 1011mm	W96R93G180G2	W97R93G180G2	W98R93G180G2

Machined curves available, on request, also in **BluLub®**



8. Personal protective equipment

Before undertaking any action of maintenance or inspection on the Zero Contact™ conveyor curve, put the gearmotor on safety mode and LOCK it! Before removing or replacing any part of the conveyor, Movex S.p.A. suggests wearing following personal protection equipment.



Safety helmet to ensure head protection.



Safety shoes against the risk of slipping, impact, and falling objects.



Protective gloves against the risk of abrasions, cut ecc...



The use of safety glasses is always advisable.

If chemicals that pose a health risk are used in the machine/installation, the user must take the necessary safety precautions. **The safety rules must be followed.**



Warning!

- During operation, adjustments and maintenance: always wear safety shoes.
- During operation, adjustment or maintenance: you must not be wearing any jewellery.
- Loose fitting clothing is very dangerous; secure or remove them.
- Keep long hair tied up and wear a safety helmet.
- Keep the work floor clean at all times.

9. Maintenance

Center guide profile replacement

Follow these steps:

1. Remove the inside and outside guide profile.
At transfer points, tap the profile upwards using a hammer with plastic head.
2. Transfer unit > remove only the upper bolts, loosen the lower bolts a few turns and turn the transfer unit outwards.
3. Split the modular belt by tapping the connecting pin out of the belt. Use a drift pin. A slot is provided for this purpose in the flanks of the bend. Lay the modular belt open, and pull it out of the bend section.
4. Remove the center guide profiles.
5. Fit in reverse order.

Sprocket replacement

The sprockets can be easily replaced if the complete drive and return shafts are removed.

Note: The gear reduction motor is not removed.

Have a work trolley or similar handy, on which you can place the parts you remove.

Follow these steps:

1. Remove the inside and outside guide profile. At transfer points, tap the profile upwards using a hammer with plastic head.
2. Transfer unit > remove only the upper bolts, loosen the lower bolts a few turns and turn the transfer unit outwards.
3. Split the modular belt by tapping the connecting pin out of the belt. Use a drift pin. A slot is provided for this purpose in the flanks of the bend. Lay the modular belt open, and pull it out of the bend section.
4. Remove the centre guide profiles.
5. Remove the bearing blocks by removing the hex bolt/nut connection
(The gear reduction motor is not removed).
6. Remove the entire shaft from the top. > the inside flank has a slot; the outside flank does not.
7. Replace the sprockets (note the order of sprocket size and position of spacers; mark them if desired)
8. Fit in reverse order.

Wear and damage to the modular belt

For the initial start-up of this conveyor we suggest to run it slowly to allow a complete check of the running belt. You must check the modular belt for tension and wear during the first thirty days that the system is operational.

Wear and damage can occur due to the following (this is not an exhaustive list):

- The accumulation of contaminants.
- Belt tension that is too low or high.

After every 1.000 hours, the belt has to be checked to see if stretching is clearly visible, we recommend to remove one or more rows of modules if necessary.

9. Maintenance

Dismounting the belt:

- Take the conveyor out of production to ensure it cannot be started during fitting time (isolate electrical supply and use lockers).
- To split the belt it is necessary to remove a cross rod. For conveyors with side guides, a slotted hole is provided in both sides of the frame to make this possible. For conveyors without, or with low side guides, you just lift the belt by hand.
- To take away the locking of the rod remove the plastic clip that is fitted on the outside radius. Use the correct size of blade screw driver [1].
- Remove the rod. This can be done by inserting a small blade screw driver inside the rod's hole passing through the slotted hole, on the inside radius [2]. The rod will come out of the belt [3].
- The belt can now be removed from the conveyor frame.



Before proceeding to remove the rod, ensure that the belt ends cannot slip away due to its weight.

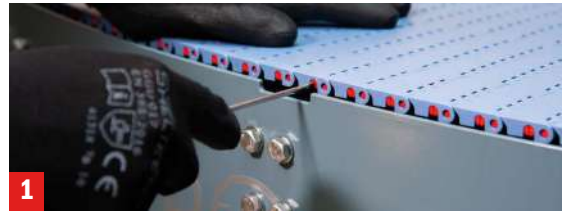
Mounting the belt:

- Lay the belt upside down with the ribs uppermost and slide the belt through the lower part of the frame, to the other end of the conveyor [4].
- Approach one end of the belt to the other in the upper part of the conveyor. Check if the sprockets engage correctly to the belt [5].
- Lay one belt end on the other [6]. If there are modules lying on top of each other, the modules on top should be removed.
- Join the belt ends together by pushing a cross rod in from the outside radius of the belt [7]. Use only original straight rods, bent or deformed rods may affect the performance.
- To block the cross rod inside the belt, with the help of blade screw driver close the external plastic clip. Use the correct size of blade screw driver [8].
- The belt now is correctly mounted.



Before proceeding to insert the rod, ensure that the belt ends cannot slip away due to its weight.

NOTE: When connecting the modular belt, use a new connecting pin.



9. Maintenance

Dismounting the belt:

- Take the conveyor out of production to ensure it cannot be started during fitting time (isolate electrical supply and use lockers).
- To split the belt it is necessary to remove a cross rod. For conveyors with side guides, a slotted hole is provided in both sides of the frame to make this possible. For conveyors without, or with low side guides, you just lift the belt by hand.
- To take away the locking of the rod remove the grub screw that is fitted on the outside radius. Use the correct size of hex key [1].
- Remove the rod. This can be done by inserting a small blade screw driver inside the rod's hole passing through the slotted hole, on the inside radius [2]. The rod will come out of the belt [3].
- The belt can now be removed from the conveyor frame.



Before proceeding to remove the rod, ensure that the belt ends cannot slip away due to its weight.

Mounting the belt:

- In case you are assembling the version with incorporated bearings, be sure they are sliding into the proper groove, if required try to guide the bearings with e.g. a screwdriver in the correct position [4].
- Approach one end of the belt to the other in the upper part of the conveyor. Check if the sprockets engage correctly to the belt. Lay one belt end on the other [6]. If there are modules lying on top of each other, the modules on top should be removed.
- Join the belt ends together by pushing a cross rod in from the outside radius of the belt [6]. Use only original straight rods, bent or deformed rods may affect the performance.
- To block the cross rod inside the belt, with the help of a hex key close the stainless steel grubscrew. Use the correct size hex key [7].
- The belt now is correctly mounted.



Before proceeding to insert the rod, ensure that the belt ends cannot slip away due to its weight.

NOTE: When connecting the modular belt, use a new connecting pin.



9. Maintenance

Maintenance is essential to keep the installation working properly.
The maintenance and inspection schedule provided below can serve as a guideline.

Important! The following list applies to our standard conveyor.
Separate inspection lists may be included for your project.

Description	Frequency			
	Weekly	Monthly	Quarterly	Annually
Mechanical (*)				
General visual inspection	X			
Guide strips (wear & damage)				X
Nose, roller transition, bearing bushes (**)			X	
Modular belt (wear & damage)			X	
Modular belt (tension)		X		
Drive and return roller (bearings)				X
Sprockets (wear & damage)				X
Connections (bolts and nuts)			X	
Bearings (blocks)			X	
Attachment of gear reduction motor			X	
Transfer (adjustment)			X	
Machine safety provisions (**)				
Emergency stop	X			
External wiring	X			
Sensors & photocells (mounting, switching operation, cleanliness)			X	
Cleaning (***)		X		

(*) depending on the number of hours the installation is used for production

(**) if applicable

(***) depending on the degree of contamination and/or use of a conveyor cleaning system If a conveyor cleaning system is installed, consult the supplier's manual for cleaning instructions.

9. Maintenance

Belt

Assure to not have points of obstruction and try to find the cause to avoid the same happening, again. Depending on the application, we recommend checking the belt at least every 2 months or more frequently if required. If the wear of the belt is clearly visible it must be replaced. After every 1.000 hours, the belt has to be checked to see if stretching is clearly visible, we recommend removing one or more rows of modules if necessary.



Bearing units

All bearings units are sealed and lubricated for life. The flange bearings may be supplied with a grease nipple or lubricated for life. Flange bearings with a grease nipple must be lubricated when the bearings do not run freely or replaced when there are signs of wear. If “Long Life” bearings are installed and show visible wear, they have to be replaced. It is recommended to check all bearings for free rotation or any sign of damage or wear together with the belt inspection on a regular basis, every 2 months or depending on operating conditions more frequently.



Cleaning

- Cleanliness is a major factor regarding performance and efficiency of the entire conveyor as well as all components
- For the majority of contaminations, it is sufficient to clean the conveyor with warm water. If that is not enough, use exclusively compatible detergents and rinse thoroughly with clear water
- Take care, using high-pressure-cleaning-devices, not to spray the bearings and the gearmotor. Cleaning solution pressed into these parts can cause damage and even electric short circuits and shocks.
- Re-lubricate those parts which have to be re-lubricated like bearings and other rotating parts.



Find more info in our General Engineering Manual
(e.g. Cleaning & Maintenance, Chemical Compatibility, etc.)

9. General instructions - Catenary & Belt tensioning

Sprockets and wear strip

- When the teeth of the sprockets show wear, they should be replaced.
- Wear strip must be replaced when wear is clearly visible and it is recommended to replace when fitting a new belt.



Gearmotor

- For basic maintenance consult the supplier's manual of the gearmotor or contact our application engineering department.



Zero Contact™ tensioning

The catenary will form between return roller shafts, no specific catenary is necessary. Movex belt is supplied with the correct length to be used. If during the installation phase, the belt results longer than what is required, it can be shortened and tensioned applying a medium manual force, avoiding an excessive catenary. In case of unprecise functionality of the Zero Contact™ modular belt, detectable by unexpected noise on sprockets engagement, the belt needs to be shortened by removing number of rows of modules based on necessity.

Zero ATP™ tensioning

Active transfer plate unit is provided with tensioners:

- 250mm length--1 tensioner
- 500mm length--2 tensioners

In case of unprecise functionality of the belt 510 micropitch series modular belt, detectably unexpected noise on sprockets engagement, the belt needs to be tensioned by simply acting on the tensioners fixed at the both sides of the conveyor.

To act on the tensioners:

- loosen fixing nut
- tighten bolt in the bottom of the tensioner
- tighten the nut again to fix the right position.

9. Do's and don'ts



Assure that the conveyor is properly fixed before starting.



Be sure the conveyor is correctly levelled before starting-up.



Respect the technical specifications.



Do not overload the belt.



Assure proper fitting of all rods before starting the system (especially after first installation & maintenance of the belt).



Do not operate the system when rods are not properly in place.



We suggest starting the belt slowly to check the correct operation and to avoid the stumbling points.



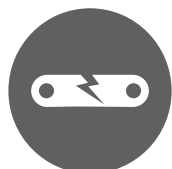
Do not start the conveyor before checking critical point 's of operation.



We suggest to use only warm water for compatible cleaning solutions or cleaning the belt.



Do not use strong chemicals such as chlorides, acids, etc for cleaning the belt.



Pay attention to the conditions of the modular belt.



Do not operate when the belt is damaged.



Keep the conveyor clean to prevent damage.



Do not climb on the conveyor.



Zero contact is the ideal conveyor for the food, and beverage processing industry.



Do not use the conveyor to transport people or animals.



Keep conveyor in temperature range under 60°.



Do not contact with open flame.

9. Troubleshooting

Possible faults and failures of the motor that are not specified in the list below are listed in the enclosed instructions of the motor manufacturer and includes possible causes and solutions there of. For faults concerning the modular belt that are not shown in the table below, please contact our engineering team.

Malfunction	Possible cause	Possible solution
Conveyor does not run.	- No electrical power present - Switch is off	- Check electrical installation - Turn the switch on
Crunching noise.	- Too little lubricant left in drive unit - Modular belt tensioned too tightly - Bearings worn	- Lubricate or replace drive unit - Tension the modular belt less tightly; see the instructions in this manual - Replace the bearings
The product stops at a moving belt or infeed point from another conveyor.	- Product gets stuck (on side guides) - Product gets stuck at transition	- Check the conveyor at snag points - Reduce the size of the transition or install a powered transition
Modular belt does not run against the bearing rollers (upper part) on the inside.	- Belt tension too high along inner radius - Very worn belt	- Re-align the drive shaft with wheels - Replace the belt
Modular belt does not run against the bearing rollers (return part) on the inside.	- Belt tension too high along inner radius - Very worn belt	- Re-align the drive shaft with wheels - Replace the belt
Sprockets do not run in the modular belt.	- Position of the sprockets on the shaft incorrect - Foreign object between belt and sprockets - Worn sprockets	- Adjust sprockets (change distance bushes) - Remove object - Replace sprockets; inspect the belt
High frequency noise under conveyor.	- Lower rollers seized - Foreign object between belt and sprockets.	- Replace the bearing or bearing roller - Remove object

LFA LFB



General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Low friction acetal	POM	-40	176	149	-40	80	65	YES

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,28	0,25	0,25	0,21	0,24	0,20
Water	n.a.	0,20	0,18	0,16	0,18	0,15
W&s & Dry lube	n.a.	0,15	0,14	0,13	0,14	0,12
Oil	n.a.	0,10	n.a.	n.a.	n.a.	n.a.

Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	BluLub®
Dry	0,24	0,20	0,18
Water	0,19	0,16	0,14
W&s & Dry lube	0,15	0,10	0,10
Oil	0,10	0,10	0,10



The belt is compliant to:
EC 1935/2004, Regulation EU 10/2011
FDA 21 CFR 177.2470

Note: Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

PA



General information

Material	Chemical abbreviation	Allowable application temperatures						FDA Approval
		Fahrenheit			Celsius			
		Min	Max		Min	Max		
			Dry	Wet		Dry	Wet	
Polyamid Composite	PA	-40	219	N.R.	-40	104	N.R.	-

Friction Factors Between Material and Product

Lubrication	Product Material					
	Paper & carton	Metal (steel)	Aluminium	Plastics & PET	Glass (returnable)	Glass (new)
Dry	0,24	0,21	0,18	0,15	0,17	0,14
Water	n.a.	0,19	0,17	0,14	0,15	0,14
W&s & Dry lube	n.a.	0,15	0,14	0,12	0,13	0,12
Oil	n.a.	0,10	n.a.	n.a.	n.a.	n.a.

Friction Factors Between Material and Product

Lubrication	Wearstrip Material		
	Stainless steel	UHMW-PE & PA	<i>BluLub®</i>
Dry	0,24	0,19	0,15
Water	0,20	0,13	0,11
W&s & Dry lube	0,17	0,11	0,09
Oil	0,10	0,10	0,10

Note

Material properties and performance of final product are subject to variation according to operating conditions, e.g. environmental conditions, chemicals, cleanliness.

11. FAQ

What is the minimum and the maximum angle feasible?

Zero Contact belts can be used to generated curve conveyors from 15° to 360°. For a conveyor of 360°, there will be anyway one transfer, because is not possible to complete closed loop with a modular belt.

Is it possible to realize a center drive with Zero Contact modular belt?

Yes, Zero Contact and Zero Contact PRO can be used with a center drive, belts are designed to run in both directions.

What is the best way between 90° and 85° to design a conveyor?

There isn't a better way to do that, both have proper characteristics:

85° shaft to shaft will have less footprint, but products may tend to exit skewed, 90° shaft to shaft will have more footprint (straight sections) but products will exit perfectly straight, Zero Contact belts are designed to be able making the curves at any angle.

Is it required to keep the belt down, externally?

No, it's not required. Zero Contact belts work like a straight conveyor, so treat them in the same way.

Can different modular belt angles be ordered?

Yes, every angle can be provided. For more information, please ask your sales representative or send us an email at: info@movexii.com.

How can we understand related sprockets?

Zero Contact module's pockets have molded the same number of the corresponding sprocket, so to be easily identified during installation:

Zero Contact sprockets can be easily identified following the molded internal radius into module's pockets,

Zero Contact PRO sprockets can be easily identified following the molded progressive number into module's pockets, (related numbers in green in the tables can be found at pages 15 and 17).

How many sprockets shall be used?

Based on the width and radius of the belt, dedicated sprockets can be selected into this engineering manual.

2 pieces of each required version must be used (drive and return side). It is mandatory to use only drive sprockets with keyway, that's why return sprockets are not available.

What kind of spacers shall be used?

Standard PVC tubes can be used to space sprockets. It's always recommended to leave 0,5mm clearance between the spacer and the 2 sprockets.

What kind of sliding surface can be used?

We suggest solid plastic sliding curves, UHMW-PE black or BluLub with unique sliding properties, for 3D drawings ask Movex sales representative.

What kind of bearings shall be used?

We suggest using bearings type 5201-2RS bearings. They can be used for the internal side of the belt as well as supporting the return for Zero Contact PRO. Bearings must be mounted at the top and at the bottom side.

Are the bearings at the inside of the curve mandatory?

Movex conveyor curves are always provided with bearings at the inside of the curve. That's the main advantage of Zero Contact modular belts in combination with the fixed radius.

Which are the most critical points while making a curve construction?

All aspects in the engineering manual are important to realize a curve with Zero Contact modular belt.

In particular: shaft angles, return roller angles, number of bearings at the inside, sprocket S dimensions and distance between bearings.

Are spare parts available?

Yes, Movex always provide a maintenance manual with each curve shipped. Moreover, all parts shown in the Movex engineering manual can be quoted, for more information please ask your sales representative or send us an email at info@movexii.com.



movexii.com

ENGINEERING MANUAL

Movex[®]

Movex S.p.A. | Headquarter
Viale Industria, 22
24060 Castelli Calepio (BG)

P +39 035 8359711
F +39 035 4420873

Movex S.p.A. | Logistics Center
Via Repubblica, 25
24060 Castelli Calepio (BG)

info@movexii.com
www.movexii.com

Movex around the world

Movex GmbH
P +49-6204-9375-0

Movex Brasil Ltda
P +55-15-3141-2550

Movex France
P +39-335-8085980

Movex AG India
P +91-120-4159660-62

Movex Russia
P +7 (495) 925-88-56

Movex UK Ltd.
P +44-77-20678442

Movex Nederland
P +31-630-994850

Movex USA Inc.
P +1-919-274-5477

Movex SA de CV
P +52-1-3318458187

Movex CIS Countries
P +380-667507756