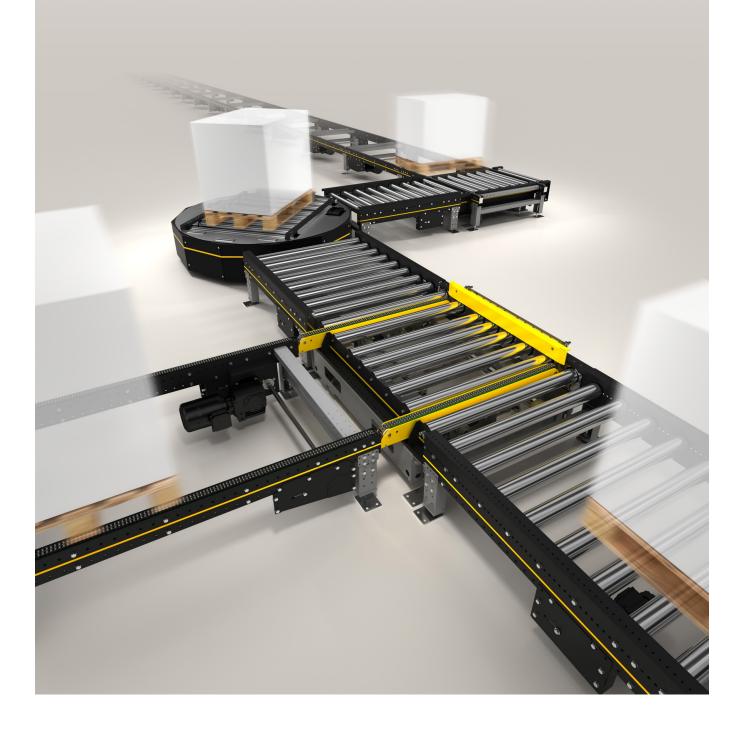


CATALOG PALLET CONVEYOR MODULES



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Symbols

Gear motor
Pallet Drive or RollerDrive
Roller-to-roller chain drive
Tangential chain drive

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THE INTERROLL GROUP

The Interroll Group is a globally leading supplier of high-quality key products and services for internal logistics. The company, which is listed on the stock exchange and has its headquarters in Switzerland, employs some 2400 people (in 2023) in 35 companies (in 2023) around the globe.

The solutions for our customers' daily logistical challenges are based on Interroll key products that are built on a worldwide common platform.



THE INTERROLL GROUP



Pallet & Carton Flow

Interroll Pallet Flow and Carton Flow are the first choice when it comes to rapid turnarounds and optimizing the storage and commissioning process.

Thanks to its efficiency and robustness, Pallet Flow ensures long-term availability and more flexibility for peaks in orders. The compact design reduces space requirements by up to 50 percent compared to conventional solutions. The integrated TimePlus Separator as well as the Magnetic Speed Controller increase the safety of the work environment and significantly reduce the risk of damages to goods.

The Interroll Carton Flow solutions are efficient as well as ergonomic, and were developed to improve the commissioning output.



Drives and Controls

Interroll is a leading manufacturer in the segment of DC motor rollers and drum motors.

Interroll RollerDrive and their controls are used in automated conveyor technology. Energy-efficient DC drives are installed in decentralized conveyor systems and, as a result, optimize energy demand and material handling. The bus interface enables integrating the zero pressure accumulation conveyor technology into Industry 4.0 systems.

Interroll Drum Motors are designed for use in belt conveyors and conveyor systems. These robust, high-quality belt drives enable the construction of maintenance-free, energy-efficient conveyor belt systems for the majority of industrial applications as well as for food processing, baggage handling and supermarket checkouts.



Conveyor Rollers

Interroll is the worldwide leading provider of conveyor rollers that can be found in a multitude of applications in internal logistics. For the roller production, we merge quality, flexibility and speed. More than 13 million rollers in 60,000 variants leave our plants worldwide every year. Our production is always order-driven, even for the smallest order quantities and, if desired, even with a delivery time of 24 hours. Proven.



Conveyors & Sorters

The Modular Conveyor Platform (MCP) from Interroll offers maximum flexibility: A wide spectrum of modules, consisting of roller conveyors, belt conveyors and key products such as diverters, high-performance deflection stations and spiral lifts, covers all material handling requirements. The Interroll Crossbelt Sorters were developed precisely for fast and accurate sorting of goods of all types from 50 g to 50 kg. More than 500 Interroll sorters are used every day by the largest CEP players and E-commerce enterprises worldwide.

The High Performance Conveyor Platform (HPP) now makes the advantages of a flexible modular system of conveyor modules available to system integrators and end users in the courier, express and parcel services industry as well. This is our perfect answer to applications requiring high throughput, reliability and robustness.

The Modular Pallet Conveyor Platform (MPP) offers roller and chain conveyors as well as special conveyors such as diverters and turntables to create a fully integrated, robust, space-saving and energy-saving solution for high throughput handling of pallets.

With the Special Hygienic Conveyor (SHC), Interroll offers a proven modular platform specifically for packaged food applications – an easy to integrate platform made of stainless steel that takes into account fundamental required hygiene standards.

The Light Conveyor Platform (LCP) stands for quickly available and flexible predefined modules. It is primarily used in the production and manufacturing industry as well as in the area of assembly and automation.

In addition, we now offer the LCP AMR Top module as a seamless extension for autonomous mobile robots. This solution is frequently used for automating tasks of a repetitive nature that still require flexibility or with the goal of avoiding heavy work for humans. This platform family was primarily designed for manufacturing and assembly applications.

PLATFORM FOR PALLET CONVEYOR MODULES

Reliable and efficient handling of pallets plays an important role in the material handling. High-capacity storage that uses the least amount of space is not the only aim here. It is just as important to minimize the transportation times between goods receipt and goods issue or storage, or between production and picking areas in companies, and automate them for high efficiency – while at the same time benefiting from streamlined planning processes, a low installation workload and flexible design options. The Modular Pallet Conveyor Platform MPP is a versatile solution for handling pallets. Combined with the company's tried-and-tested flow storage solution, Interroll's new pallet conveyor platform provides the ideal basis for creating comprehensive storage and conveyor solutions for all kinds of applications.



PLATFORM FOR PALLET CONVEYOR MODULES

Flexibility and robustness make the difference



Customized applications

The modules can transport pallets with a weight of up to 1500 kilogram at a maximum speed of 0.5 meters per second. The temperature range is from +5 to +45 degrees Celsius (deep freeze area on request). Depending on the control system used, it is possible to design the system for different weights, run it at variable speeds or integrate positioning functions.



Minimal installation effort

The modules are perfectly matched and each delivered fully pre-assembled, minimizing installation time. An additional advantage of the modular structure is that later changes and enhancements to the material handling or system are easy and cost-efficient.



Space-saving design

A conveyor solution that combines various modules is generally installed at a height of 350 millimeters, making it very easy to insert and remove the pallets using a forklift truck. Lower assembly heights are also possible for a simple conveyor line.

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Simple planning, flexible design

Designing and creating the fully modular system is straightforward and user-friendly with the popular Interroll Layouter tool. The MPP encompasses chain or roller conveyors as well as additional modules such as 90-degree turning units and turntables. Special modules for specific functions are also available on request.



PRODUCT OVERVIEW

Task



Infeed conveyor **PM 9740** | page 10

Straight conveyors



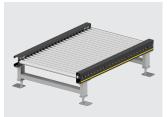
Roller conveyor **PM 9700** | page 14



Roller conveyor **PM 9710** | page 18



Roller conveyor **PM 9711 FLAT** | page 22



Roller conveyor **PM 9712** | page 26



GMA Roller conveyor **PM 9715** | page 30

Transfers



Chain transfer **PM 9730** | page 42

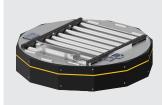


Chain conveyor
PM 9720 | page 34

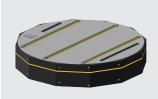


Roller transfer **PM 9732** | page 54

Turntables



Turntable with roller conveyor **PM 9735** | page 58



Turntable with chain conveyor **PM 9737** | page 62

PRODUCT OVERVIEW

Transfer car



Transfer car PM 9750 | page 66

Accessories



Impact protection



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Running boards

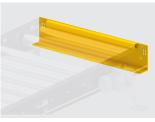


Runnerboard/clearance/ nail check



Photo cell and sensor holder

Contour check





End stop



Driven torque transmissions



Chain conveyor side guide







Product description

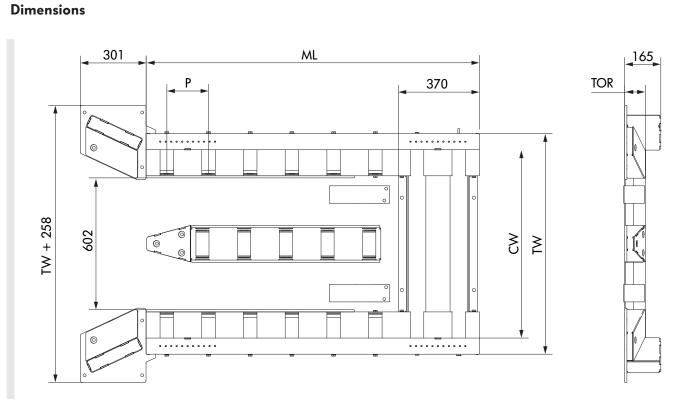
The infeed roller conveyor is suited for horizontal infeed and delivery of full and empty pallets. For each storage slot, the infeed roller conveyor can transport a load capacity of 1200 kg. The infeed or delivery of pallets can be handled by hand pallet trucks or electric pallet trucks.

The drive of the rollers is handled by Interroll's space-saving Pallet Drive. This omits laterally attached motors, individual tracks can be arranged in more space-saving ways, and it increases operational safety.



Technical data

General technical data	
Max. load capacity	1200 kg
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request
Rollers	
Roller type	Interroll series 3950
Roller diameter	80 mm
Wall thickness of rollers	3 mm
Material	Steel, zinc-plated
Profile	
Dimensions	124 x 74 x 4 mm
Color	Powder coated, in RAL 9005 (main color) and RAL 1023 (accent color)
Material	Steel



95 mm
1524 mm
860, 1060, 1295 mm
1008, 1208, 1443 mm
190.5 mm

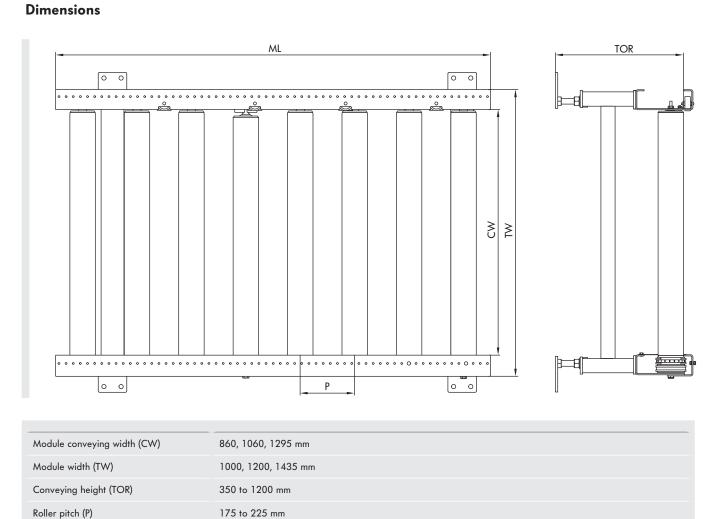
Product description

The non-driven roller conveyor is suited for horizontal transport of full and empty pallets. At the same time, the rigid frame profile serves as side guide. Floor irregularities can easily be compensated with adjustable supports.



Technical data

General technical data	
Max. load capacity	1250 kg/m
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request
Rollers	
Roller type	Interroll Series 1450
Roller diameter	89 mm
Wall thickness of rollers	3 mm
Material	Steel, zinc-plated
Profile	
Mounting hole pitch	25 mm
Dimensions	200 x 70 x 4 mm
Color	Powder coated, in RAL 9005 (main color) and RAL 1023 (accent color)
Material	Steel



300 to 2975 mm

Module length (ML)



Product description

The roller conveyor is suited for horizontal transport of full and empty pallets. The rollers can be relocated quickly due to the tangential drive principle and frame design. The chain tensioning station on the outside allows for easy re-tensioning of the precision roller chain.

At the same time, the rigid frame profile serves as side guide. The drive can be installed on the right side or optionally on the left in the direction of travel. Floor irregularities can easily be compensated with adjustable supports.

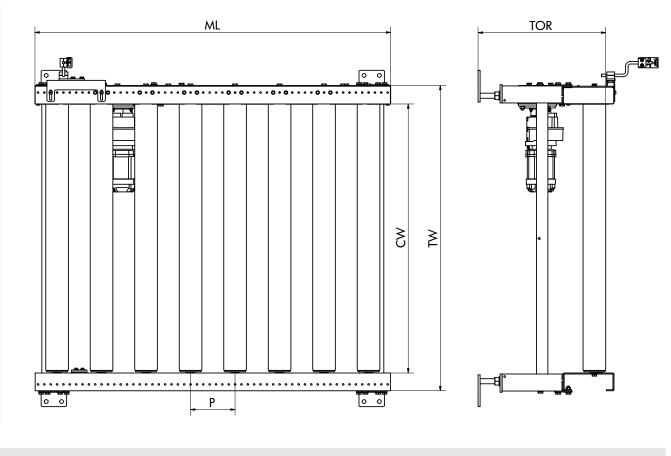


Technical data

General technical data	
Max. load capacity	1250 kg/m or 3000 kg per drive
Conveyor speed	0.1 to 0.5 m/s
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request
Incline/decline	Up to max. 4% (for certain motor variants only)
Drive	
Rated voltage	400 V
Motor type	Gear motor
Power	0.09 to 0.75 kW
Roller chain	5/8" x 3/8"
Roller	
Roller type	Interroll Series 3950
Roller diameter	89 mm
Sprocket	Z18
Wall thickness of rollers	3 mm
Material	Steel, zinc-plated
Profile	
Mounting hole pitch	25 mm
Dimensions	200 x 70 x 4 mm
Color	Powder coated, in RAL 9005 (main color) and RAL 1023 (accent color)
Material	Steel



Dimensions



Module conveying width (CW)	860, 1060, 1295 mm
Module width (TW)	1000, 1200, 1435 mm
Conveying height (TOR)	350 to 1200 mm
Roller pitch (P)	175 to 225 mm
Module length (ML)	850 to 5750 mm



Product description

The roller conveyor is suited for horizontal transport of full and empty pallets. Tensioning of the chains is not required because of the chain transmission from roller to roller. At the same time, the rigid frame profile serves as side guide. Floor irregularities can easily be compensated with adjustable supports.

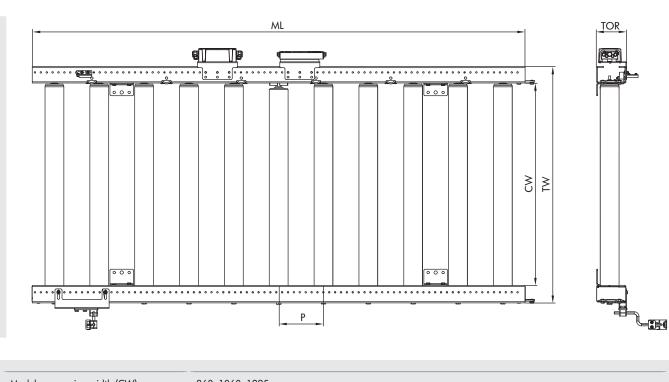
The use of the Interroll Pallet Drive allows a compact design. Since the drive is installed in the roller and therefore located within the side profiles, the individual modules can be installed very close to each other. Together with MultiControl and Pallet Control, it is very easy to implement a zero-pressure accumulation conveyor.



Technical data

General technical data	
Max. load capacity	1000 kg/m or 1200 kg per drive
Conveyor speed	0.22 m/s
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request
Drive	
Rated voltage	400 V
Motor type	Pallet Drive
Power	0.07 kW
Roller chain	5/8" x 3/8"
Rollers	
Roller type	Interroll Series 3950
Roller diameter	80 mm (min TOR 95 mm)
Sprocket	Z18
Wall thickness of rollers	3 mm
Material	Steel, zinc-plated
Profile	
Mounting hole pitch	31.75 mm
Dimensions	200 x 70 (74) x 4 mm
Color	Powder coated, in RAL 9005 (main color) and RAL 1023 (accent color)
Material	Steel

Dimensions



Module conveying width (CW)	860, 1060, 1295 mm
Module width (TW)	1000, 1200, 1435 mm
Conveying height (TOR)	95 or 350 to 1200 mm
Roller pitch (P)	190.5 and 222.25 mm
Module length (ML)	300 to 2980 mm (depending on pitch)

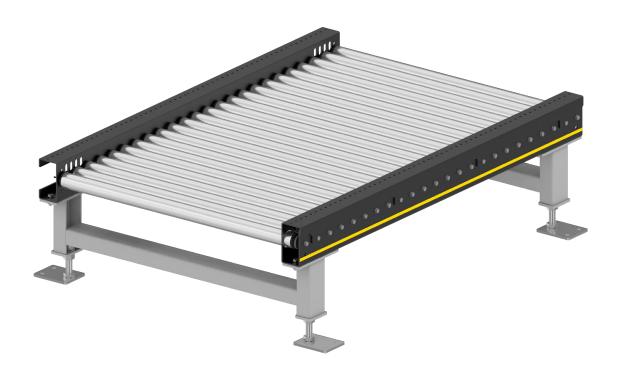


Product description

The roller conveyor is suited for horizontal transport of full and empty pallets. The drive is implemented using a 24-V or 48-V RollerDrive that is connected to a fixed number of idlers via PolyVee belts. Since the drive is installed in the roller and therefore located within the side profiles, the individual modules can be installed very close to each other. This allows for a very compact design.

At the same time, the rigid frame profile serves as side guide. Floor irregularities can easily be compensated with adjustable supports.

Together with MultiControl, it is very easy to implement a zero-pressure accumulation conveyor.

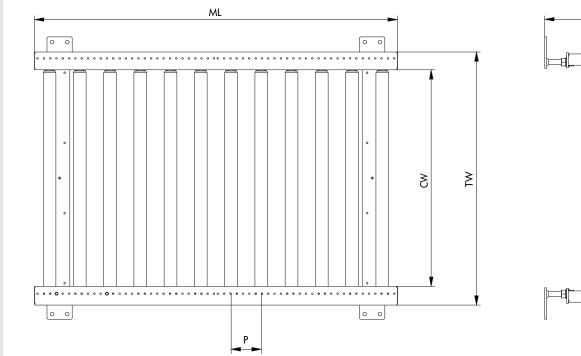


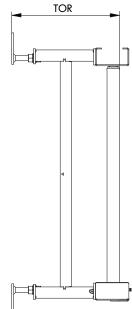
Technical data

General technical data	
Max. load capacity	415 kg/m or 500 kg per drive
Conveyor speed	0.2 or 0.28 m/s
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request
Drive	
Rated voltage	24/48 V
Motor type	RollerDrive EC5000
Power	0.05 kW
Torque transmission medium	PolyVee belt
Rollers	
Roller type	Interroll Series 3500
Roller diameter	60 mm
Wall thickness of rollers	2 mm
Material	Steel, zinc-plated
Profile	
Mounting hole pitch	30 mm
Dimensions	132 x 70 x 4 mm
Color	Powder coated, in RAL 9005 (main color) and RAL 1023 (accent color)
Material	Steel



Dimensions





Module conveying width (CW)	860, 1060, 1295 mm
Module width (TW)	1000, 1200, 1435 mm
Conveying height (TOR)	95 or 350 to 1200 mm
Roller pitch (P)	90 to 120 mm
Module length (ML)	360 to 2970 mm



Product description

The roller conveyor is particularly suited for GMA pallets, but also for other pallet types for horizontal transport of full and empty pallets.

The chain tensioning station on the outside allows for easy re-tensioning of the precision roller chain. The drive can be installed on the right or left side in the direction of travel (DOT). Floor irregularities can easily be compensated with adjustable supports.



Technical data

General technical data	
Max. load capacity	1250 kg/m or 3000 kg per drive
Conveyor speed	0.1 to 0.5 m/s
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request
Incline/decline	Up to max. 4 % (for certain motor variants only)
Drive	
Rated voltage	400 V
Motor type	Gear motor
Power	0.12 to 0.75 kW
Roller chain	5/8" x 3/8"
Rollers	
Roller type	Interroll Series 3500
Roller diameter	60 mm
Sprocket	Z13
Material	Steel, zinc-plated
Wall thickness of rollers	3 mm
Profile	
Dimensions	200 x 70 x 4 mm
Color	Powder coated, in RAL 9005 (main color) and RAL 1023 (accent color)
Material	Steel

Dimensions

TOR ML 0 0 **B**=€ 0. ≥ ≥ **e** # T, **⊫**∎[. . . . 0 0 0 0 Р

Module conveying width (CW)	860, 1060, 1295 mm
Module width (TW)	1000, 1200, 1435 mm
Conveying height (TOR)	180 or 350 to 1200 mm
Roller pitch (P)	76 mm
Module length (ML)	926 to 2978 mm

CHAIN CONVEYOR PM 9720



Product description

The chain conveyors are suited for horizontal transport of full and empty pallets. For each chain run, a duplex precision roller chain with straight links is used as a transport chain. The transport chain is guided in a plastic chain guide. The integrated tensioning station with 180° wrap allows for easy re-tensioning of the chain.

The drive station is arranged between the runs. Floor irregularities can easily be compensated with adjustable supports.

The module is available with two or three chain runs. If bagged materials or bulk cargo, poor pallet quality or weights of more than 1000 kg are being handled, we recommend using a chain conveyor with three chain runs.



CHAIN CONVEYOR PM 9720

Technical data

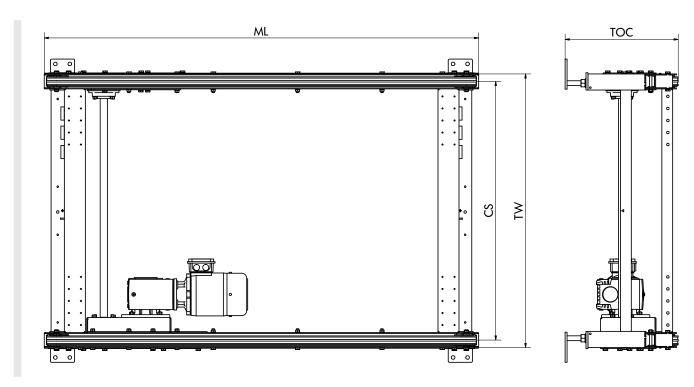
General technical data	
Max. load capacity	1875 kg/m or 3000 kg per drive
Conveyor speed	0.1 to 0.5 m/s
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request
Incline/decline	Up to max. 4% (for certain motor variants only)
Number of chains	2 or 3
Drive	
Rated voltage	400 V
Motor type	Gear motor
Power	0.37 to 3.0 kW
Roller chain	5/8" x 3/8" duplex with straight bracket joints
Profile	
Dimensions	127 x 62 x 4 mm
Color	Powder coated, in RAL 9005 (main color) and RAL 1023 (accent color)
Material	Steel

Pallet conveyors

CHAIN CONVEYOR PM 9720



Dimensions



Module width (TW)	1012, 1137 mm
Chain spacing (CS)	950, 1075 mm
Conveying height (TOC)	350 to 1200 mm
Module length (ML)	1000 to 5600 mm

CHAIN CONVEYOR PM 9720

Single transfer with 24/48-V roller drive



Product description

The chain transfer is used for 90° change of direction for horizontal transport of full and empty pallets. For each chain run, a duplex precision roller chain with straight links is used as a transport chain.

The transport chains are guided in plastic chain guides. Compact transfer to the subsequent conveyor is possible to a low deflection radius of only 43 mm. The integrated tensioning station with 180° wrap allows for easy re-tensioning of the chain.

The drive station of the transport chains is positioned between the runs under the track. The parallel lift occurs electrically and is supported with maintenance-free ball bearings. Floor irregularities can easily be compensated with adjustable supports.

The module is available with two chain runs.



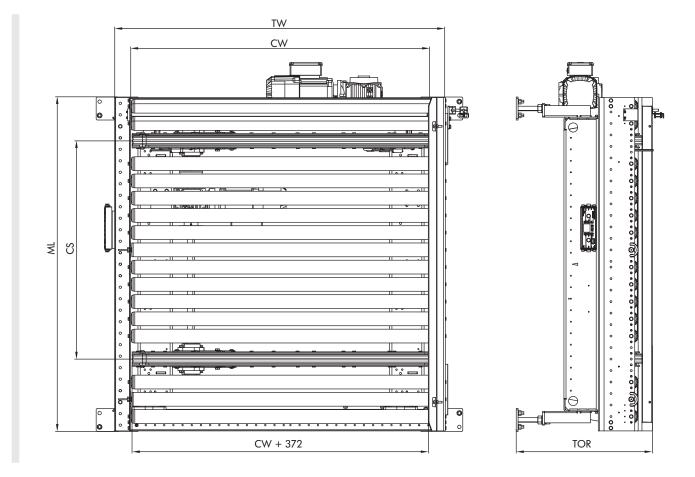
Single transfer with 24/48-V roller drive

General technical data				
Max. load capacity	500 kg			
Conveyor speed	Rollers: 0.2/0.28 m/s; chains: 0.1 to 0.5 m/s			
Max. stroke height	30 mm			
Stop positions	2			
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request			
Incline/decline	Not suitable			
Number of chains	2			
Chain conveyor drive				
Rated voltage	400 V			
Motor type	Gear motor			
Power	0.37 to 1.5 kW			
Roller chain	5/8" x 3/8" duplex with straight links			
Roller conveyor drive				
Rated voltage	24/48 V			
Motor type	Gear motor			
Power	0.05 kW			
Roller chain	5/8" x 3/8"			
Lift drive				
Rated voltage	400 V			
Motor type	Gear motor			
Power	0.37 to 0.55 kW			
Rollers				
Roller type	Interroll series 3500			
Roller diameter	60 mm			
Wall thickness of rollers	2 mm			
Material	Steel, zinc-plated			

Single transfer with 24/48-V roller drive







Module conveying width (CW)	860, 1060, 1295 mm		
Module width (TW)	Variable		
Chain spacing (CS)	940, 1065 mm		
Conveying height (TOR)	350 to 1200 mm		
Module length (ML)	1450 mm		

Single transfer with 24/48-V roller drive

Single transfer with 400-V drive



Product description

The chain transfer is used for 90° change of direction for horizontal transport of full and empty pallets. For each chain run, a duplex precision roller chain with straight links is used as a transport chain.

The transport chains are guided in plastic chain guides. Compact transfer to the subsequent conveyor is possible to a low deflection radius of only 43 mm. The integrated tensioning station with 180° wrap allows for easy re-tensioning of the chain.

The drive station of the transport chains is positioned between the runs under the track. The parallel lift occurs electrically and is supported with maintenance-free ball bearings. Floor irregularities can easily be compensated with adjustable supports.

The module is available with two or three chain runs. If bagged materials or bulk cargo, poor pallet quality or weights of more than 1000 kg are being handled, we recommend using a chain conveyor with three chain runs.

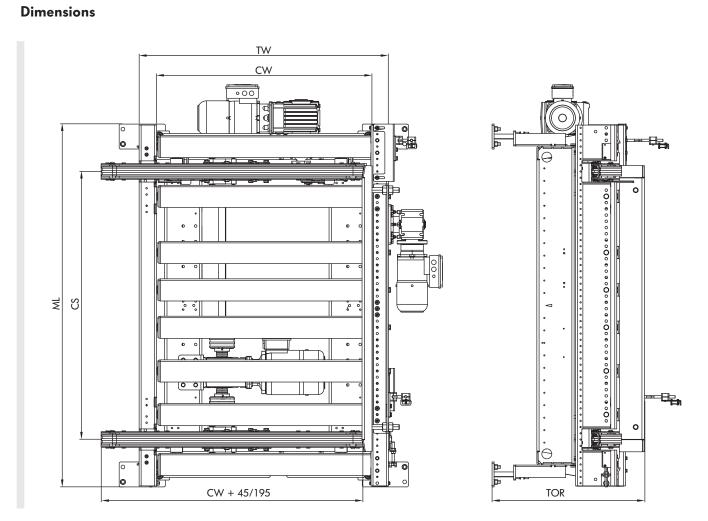


CHAIN TRANSFER PM 9730 Single transfer with 400-V drive

General technical data					
Max. load capacity	1500 kg				
Conveyor speed	0.1 to 0.5 m/s				
Max. stroke height	30 mm				
Stop positions	2				
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request				
Incline/decline	Not suitable				
Number of chains	2 or 3				
Chain conveyor drive					
Rated voltage	400 V				
Motor type	Gear motor				
Power	0.37 to 1.5 kW				
Roller chain	5/8" x 3/8" duplex with straight bracket joints				
Roller conveyor drive					
Rated voltage	400 V				
Motor type	Gear motor				
Power	0.12 to 0.55 kW				
Roller chain	5/8" x 3/8"				
Lift drive					
Rated voltage	400 V				
Motor type	Gear motor				
Power	0.55 kW				
Rollers					
Roller type	Interroll Series 3950				
Roller diameter	89 mm				
Wall thickness of rollers	3 mm				
Material	Steel, zinc-plated				

Single transfer with 400-V drive





Module conveying width (CW)	860, 1060, 1295 mm
Module width (TW)	1000, 1200, 1435 mm
Chain spacing (CS)	950, 1075 mm
Conveying height (TOR)	350 to 1200 mm
Module length (ML)	1450 mm (CS = 1075 mm) 1550 mm (CS = 950 mm)

Single transfer with 400-V drive

Double transfer with 24/48-V roller drive



Product description

The chain transfer is used for parallel ejection for horizontal transport of full and empty pallets. For each chain run, a duplex precision roller chain with straight links is used as a transport chain.

The transport chains are guided in plastic chain guides. The integrated tensioning station with 180° wrap allows for easy re-tensioning of the chain.

The drive station of the transport chains is positioned between the runs under the track. The parallel lift occurs electrically and is supported with maintenance-free ball bearings. Floor irregularities can easily be compensated with adjustable supports.

The module is available with two chain runs.

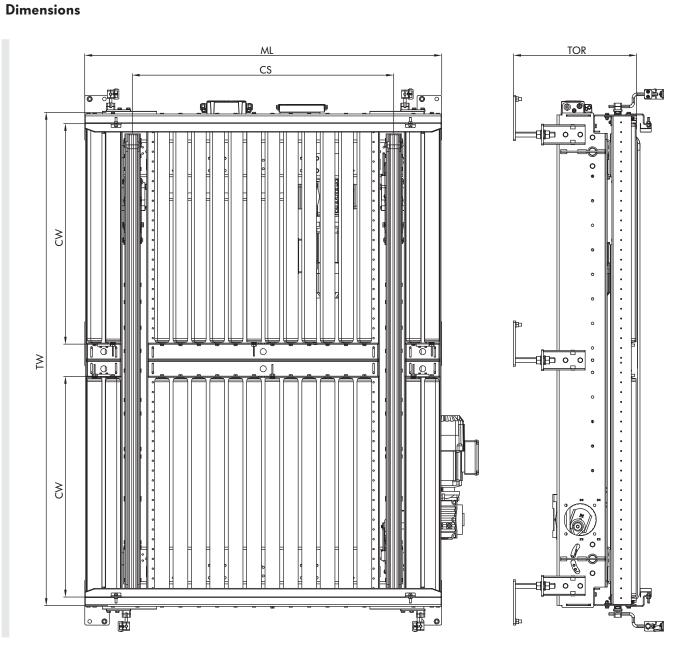


Double transfer with 24/48-V roller drive

General technical data				
Max. load capacity	500 kg			
Conveyor speed	0.1 to 0.5 m/s			
Max. stroke height	30 mm			
Stop positions	2			
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request			
Incline/decline	Not suitable			
Number of chains	2			
Chain conveyor drive				
Rated voltage	400 V			
Motor type	Gear motor			
Power	0.37 to 1.5 kW			
Roller chain	5/8" x 3/8" duplex with straight links			
Roller conveyor drive				
Rated voltage	24/48 V			
Motor type	Interroll RollerDrive EC 5000			
Power	0.05 kW			
Roller chain	5/8" x 3/8"			
Lift drive				
Rated voltage	400 V			
Motor type	Gear motor			
Power	0.37 to 0.55 kW			
Rollers				
Roller type	Interroll series 3500			
Roller diameter	60 mm			
Wall thickness of rollers	2 mm			
Material	Steel, zinc-plated			

Double transfer with 24/48-V roller drive





Module conveying width (CW)	860, 1060, 1295 mm
Module width (TW)	Variable, max. 2880 mm
Chain spacing (CS)	940, 1065 mm
Conveying height (TOR)	350 to 1200 mm
Module length (ML)	1450 mm (CS = 1065 mm) 1550 mm (CS = 940 mm)

Double transfer with 24/48-V roller drive

Double transfer with 400-V drive



Product description

The chain transfer is used for parallel ejection for horizontal transport of full and empty pallets. For each chain run, a duplex precision roller chain with straight links is used as a transport chain.

The transport chains are guided in plastic chain guides. Compact transfer to the subsequent conveyor is possible to a low deflection radius of only 43 mm. The integrated tensioning station with 180° wrap allows for easy re-tensioning of the chain.

The drive station of the transport chains is positioned between the runs under the track. The parallel lift occurs electrically and is supported with maintenance-free ball bearings. Floor irregularities can easily be compensated with adjustable supports.

The module is available with two or three chain runs. If bagged materials or bulk cargo, poor pallet quality or weights of more than 1000 kg are being handled, we recommend using a chain conveyor with three chain runs.



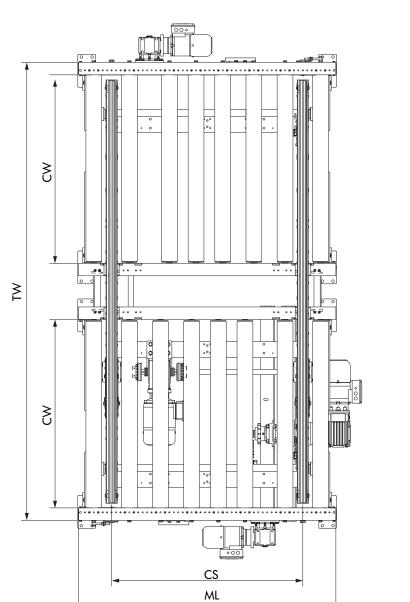
CHAIN TRANSFER PM 9730 Double transfer with 400-V drive

General technical data				
Max. load capacity	1500 kg			
Conveyor speed	0.1 to 0.5 m/s			
Max. stroke height	30 mm			
Stop positions	2			
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request			
Incline/decline	Not suitable			
Number of chains	2 or 3			
Chain conveyor drive				
Rated voltage	400 V			
Motor type	Gear motor			
Power	0.37 to 1.5 kW			
Roller chain	5/8" x 3/8" duplex with straight bracket joints			
Roller conveyor drive				
Rated voltage	400 V			
Motor type	Gear motor			
Power	0.12 to 0.55 kW			
Roller chain	5/8" x 3/8"			
Lift drive				
Rated voltage	400 V			
Motor type	Gear motor			
Power	0.55 kW			
Rollers				
Roller type	Interroll Series 3950			
Roller diameter	89 mm			
Wall thickness of rollers	3 mm			
Material	Steel, zinc-plated			

Double transfer with 400-V drive



Dimensions



TOR	

	8/0 10/0 1005
Module conveying width (CW)	860, 1060, 1295 mm
Module width (TW)	Variable, max. 2880 mm
Chain spacing (CS)	950, 1075 mm
Conveying height (TOR)	350 to 1200 mm
Module length (ML)	1450 mm (CS = 1075 mm) 1550 mm (CS = 950 mm)
	1450 mm (CS = 1075 mm)

Double transfer with 400-V drive



Product description

The roller transfer is used for 90° change of direction for horizontal transport of full and empty pallets. The roller conveyor drive is available installed on the side to the right or left of the track in the direction of travel (DOT). The force is transmitted via $5/8" \times 3/8"$ precision roller chain.

A steel profile frame serves as lifting frame for eccentric lifting cams on ball bearings. The parallel lift occurs electrically and is supported with maintenance-free ball bearings. Floor irregularities can easily be compensated with adjustable supports.



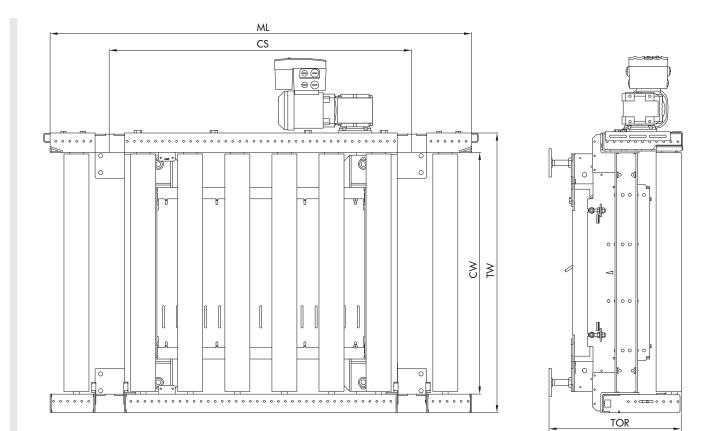
ROLLER TRANSFER PM 9732

General technical data				
Max. load capacity	1500 kg			
Conveyor speed	0.1 to 0.5 m/s			
Max. stroke height	60 mm			
Stop positions	3			
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request			
Incline/decline	Not suitable			
Number of recesses for chain strands	2 (CS = 950 mm); 2 or 3 (CS = 1075 mm)			
Roller conveyor drive				
Rated voltage	400 V			
Motor type	Gear motor			
Power	0.37 kW			
Roller chain	5/8" x 3/8"			
Lift drive				
Rated voltage	400 V			
Motor type	Gear motor			
Power	0.37 to 0.55 kW			
Roller chain	3/4" x 7/16"			
Rollers				
Roller type	Interroll Series 3950			
Wall thickness of rollers	3 mm			
Roller diameter	89 mm			
Material	Steel, zinc-plated			
Profile				
Dimensions	283 x 65 (69) x 4 mm			
Color	Powder coated, in RAL 9005 (main color) and RAL 1023 (accent color)			
Material	Steel			

ROLLER TRANSFER PM 9732



Dimensions



Module conveying width (CW)	860, 1060, 1295 mm
Module width (TW)	1000, 1200, 1435 mm
Chain spacing (CS)	950, 1075 mm
Conveying height (TOR)	500 to 1200 mm
Module length (ML)	1500 mm

ROLLER TRANSFER PM 9732



Product description

The turntable is used for change of direction or for turning full and empty pallets. The rotation can total max. 270°, combinations such as -90° to +180° are possible. The efficient turning motion is realized using a precision roller chain, with drive transmitted from a sprocket connected directly to the motor shaft. The incoming and outgoing positions of the turntable are approached via a sensor in the drive.

The efficient turning motion is managed using a robust ball steering ring. The chain tensioning station of the rollers located on the outside allows easy retensioning of the drive chain. Floor irregularities can easily be compensated with adjustable supports.

The turntable can be configured with or without side cover and is optionally available with a pre-wired terminal box.

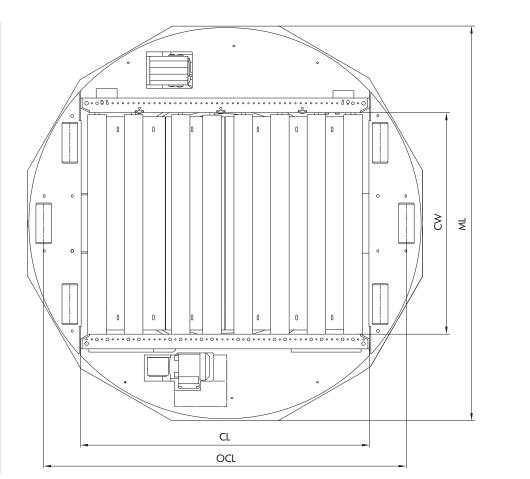


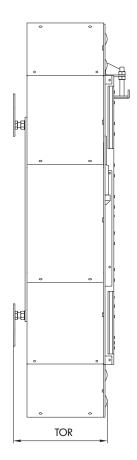
TURNTABLE PM 9735

General technical data	
Max. load capacity	1500 kg
Conveyor speed	0.1 to 0.5 m/s
Rotational speed (V)	90° in 4 s
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request
Incline/decline	Not suitable
Roller conveyor drive	
Rated voltage	400 V
Power	0.12 to 0.55 kW
Roller chain	5/8" x 3/8"
Turntable drive	
Rated voltage	400 V
Motor type	Gear motor
Power	0.25 to 0.37 kW
Roller chain	5/8" x 3/8"
Rollers	
Roller type	Interroll Series 3950
Roller diameter	89 mm
Sprocket	Z18
Wall thickness of rollers	3 mm
Material	Steel, zinc-plated
Profile	
Dimensions	200 x 70 x 4 mm
Color	Powder coated, in RAL 9005 (main color) and RAL 1023 (accent color)
Material	Steel



Dimensions





Module conveying width (CW)	1060 mm
Conveying height (TOR)	350 to 1200 mm
Conveyor length (CL)	1380 mm
Overall conveyor length (OCL)	1735 mm
Module length (ML)	1890 mm

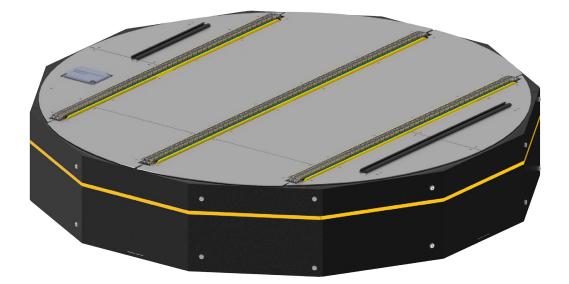
TURNTABLE PM 9735

Product description

The turntable is used for change of direction or for turning full and empty pallets. The rotation can total max. 270°, combinations such as -90° to +180° are possible. The efficient turning motion is realized using a precision roller chain, with drive transmitted from a sprocket connected directly to the motor shaft. The incoming and outgoing positions of the turntable are approached via a sensor in the drive.

The efficient turning motion is managed using a robust ball steering ring. The chain tensioning station of the rollers located on the outside allows easy retensioning of the drive chain. Floor irregularities can easily be compensated with adjustable supports.

The turntable can be configured with or without side cover and is optionally available with a pre-wired terminal box.

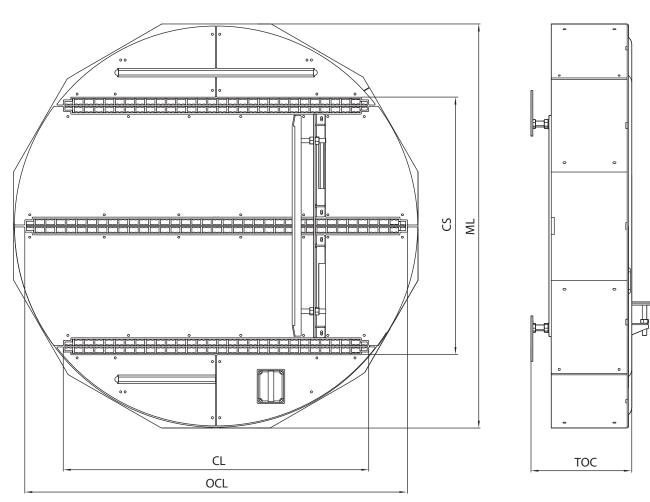


TURNTABLE PM 9737

General technical data	
Max. load capacity	1500 kg
Conveyor speed	0.1 to 0.5 m/s
Rotational speed (V)	90° in 4 s
Ambient temperature	+5 °C to +45 °C (non-condensing), deep freeze applications on request
Incline/decline	Not suitable
Chain conveyor drive	
Rated voltage	400 V
Power	0.37 to 1.5 kW
Roller chain	5/8" x 3/8" duplex with straight bracket joints
Turntable drive	
Rated voltage	400 V
Motor type	Gear motor
Power	0.25 to 0.37 kW
Roller chain	5/8" x 3/8"
Profile	
Dimensions	110 x 63 x 4 mm
Color	Powder coated, in RAL 9005 (main color) and RAL 1023 (accent color)
Material	Steel



Dimensions



Chain spacing (CS)	1075 mm
Conveying height (TOC)	350 to 1200 mm
Conveyor length (CL)	1446 mm
Overall conveyor length (OCL)	1793 mm
Module length (ML)	1890 mm

TURNTABLE PM 9737

Product description

The Interroll Transfer Car is the perfect solution for loading and unloading full or empty pallets at picking stations and pallet storage slots, branch tracks as well as Interroll dynamic flow storage racks. Up to 5 meters per second can be achieved, allowing even large distances to be bridged quickly and reliably, for example in the area of route preparation or the connection between warehouse and production.

The highly dynamic transfer car weighs about 300 kilograms and, thanks to the intelligent drive concept, does not require a movable control cabinet for the electrical connection. The running gear consists of steel profiles screwed together, which are powder-coated.

The energy supply of the transfer car is provided via bus bar. Lateral, adjustable guide rollers ensure an absolute directional stability at higher speeds. Durable and wear-resistant Vulkollan wheels ensure very smooth running and reliable vibration dampening.

The transfer car is particularly designed for the combination with Interroll flow storage systems. The perfectly matched interface ensures a high degree of availability of the system while also providing a high level of safety.

The low build height allows the transfer car to be used in multi-level warehouses with high level density.



ravel path max. 46 m)
ndustry
(non-condensing), cations on request
ed), max. 5 m/s (empty)
i

CONTROLS ALL CONVEYOR MODULES



Product description

A decentral control concept, which is based on proven MultiControl AI and pallet control PC 6000, is available for pallet conveyor modules.

Depending on the drive type, the following control combinations are possible:

- Only 24/48-V RollerDrive EC 5000 drives in pallet conveyor technology control with MultiControl, four drives per control.
- 400-V drives whether Interroll Pallet Drive or gear motors are controlled with the interconnected Pallet Control by the MultiControl. In this case, two Pallet Controls and one MultiControl are used for each for drives.

All straight conveyor modules can be controlled by the MultiControl in automatic mode with or without PLC.

For system layouts without direction decisions, the MultiControl independently controls the conveyor modules.





CONTROLS ALL CONVEYOR MODULES

Pallet Control	MultiControl
3 x 400 V AC 50 Hz; 24 V DC	24 or 48 V DC
380 – 420 V AC 50 Hz; 22 – 26 V DC	24 V DC: 22 to 27.5 V DC 48 V DC: 44 to 51.5 V DC (voltage supply of RollerDrive only)
Max. 3 A @ 400 V AC; max. 2 A @ 24 V DC Max. 10 A @ 400 V AC; max. 2 A @ 24 V DC	Logic supply voltage: MultiControl: max. 0.2 A + connected sensors/ actuators = max. 1.6 A + current of RollerDrive EC5000*
	IP54
-28 °C to +40	°C (-22 °F to +104 °F)
-40 °C to +80	°C (–40 °F to +176 °F)
1 K/min, 3 h, 2 cycles	
93 % at +40 °C (+104 °F), 14 days, non- condensing	
1	000 m**
	3 x 400 V AC 50 Hz; 24 V DC 380 – 420 V AC 50 Hz; 22 – 26 V DC Max. 3 A @ 400 V AC; max. 2 A @ 24 V DC Max. 10 A @ 400 V AC; max. 2 A @ 24 V DC -28 °C to +40 -40 °C to +80 1 K/min, 3 h, 2 cycles 93 % at +40 °C (+104 °F), 14 days, non- condensing

CONTROLS PALLET CONTROL PC 6000

Product description

The intelligent control unit serves as a link between the 400 V AC Pallet Drive and Interroll's proven 24 V MultiControl, which provides the complete logic for zeropressure-accumulation conveyors. However, this solution eliminates the need for centralized PLC cabling and PLC programming.

The integrated soft start function reduces the starting torque, which relieves the load on all mechanical components. This in turn provides optimum pallet acceleration. Pallet overrun after the Pallet Drive has been switched off is also regulated by Pallet Control.

The control offers many functions and supports preventive maintenance. The Pallet Control Configurator, which can be downloaded from the Interroll website, allows to easily change parameters or modify the direction of rotation via the USB connection of the Pallet Control, without having to move and replug cables. Current and power can be monitored and the current status is displayed. In addition, the total operating time of the respective Pallet Drive is displayed, which allows to preventively arrange the necessary maintenance. This reduces maintenance requirements and possible downtimes to a minimum.

A thermal controller contact and continuous analysis of current consumption protect the Pallet Drive against overload. The optional brake in the Pallet Drive is also activated via Pallet Control. Alternatively, Pallet Control can be activated via other 24 V digital inputs or a 0–10 V DC analogue input.



CONTROLS PALLET CONTROL PC 6000

Electrical data	
Rated voltage	3 x 400 V AC 50 Hz; 24 V DC
Voltage range	380 – 420 V AC 50 Hz; 22 – 26 V DC
Current consumption	Max. 3 A @ 400 V AC; max. 2 A @ 24 V DC Max. 10 A @ 400 V AC; max. 2 A @ 24 V DC
Protection rate	IP54
Weight	0.5 kg
Ambient conditions	
Ambient temperature in operation	-28 °C to +40 °C (-22 °F to +104 °F)
Ambient temperature during transport and storage	-40 °C to +80 °C (-40 °F to +176 °F)
Max. temperature change	1 K/min, 3 h, 2 cycles
Max. relative humidity	93 % at +40 °C (+104 °F), 14 days, non-condensing
Max. installation height above sea level	1000 m. Installation in systems at an altitude above 1000 m (3300 ft) is possible in principle. However, this may result in lower performance values.

CONTROLS MULTICONTROL AI



Product description

The MultiControl is a four-zone control. This means that up to four drives and four zone sensors can be connected. The use of Y-cables enables connecting four additional inputs or outputs. The connections can be configured individually.

MultiControl is multi-protocol-capable. PROFINET, EtherNet/IP and EtherCat + ASi can be used via simple switching.

A standard flat cable is used for power supply. They can simply be cut to the desired length and can be connected very quickly using the piercing technology of MultiControl.

The separate voltage supply allows a safe power-off of the RollerDrive while the bus communication and sensors can continue to be used.

Addressing and naming is done over PLC software, a web user interface, or with the Interroll teach-In method. With the Teach-In method, automatic addressing and configuration of all MultiControl is possible. In addition, the sequence of all MultiControls in the conveyor line can be determined. This saves time during the commissioning on site.



CONTROLS MULTICONTROL AI

Functions

- · Easy handling one control card for PROFINET, EtherNet/IP and EtherCat (simple toggling of bus protocols) or ASi
- · Independent power supply for RollerDrive
- · Plug & Play in case of replacements no addressing or configuration required
- · Status display with LEDs for all functions and I/Os
- \cdot Integrated logic for zero-pressure accumulation conveying incl. initialization
- Secure communication with the use of certificates: PROFINET Conformance Class B, EtherNet/IP ODVA Conformance, EtherCat Conformance
- · Configuration via PLC, web browser menu and via teach-In method of:
- Speed, direction of rotation, start and stop ramp of RollerDrive
- Sensor properties
- Timer
- Error handling
- Logic (single/train release)
- UL-listed
- Voltage limitation via brake chopper
- · Variable process images for optimizing the data volumes transferred between MultiControl and PLC
- \cdot Functional ground connection for shield of communication line
- · Polarity reversal protection of voltage supply
- · Short circuit-proof design of voltage supply of inputs and outputs

Possible applications

Use of a PLC	Function of a PLC	Function of MultiControl
No	• None	Implementation of ZPA logic
Yes	Influencing the ZPA logicTracking of conveying goodsError diagnostics	Implementation of ZPA logicImplementation of PLC specifications
Yes	 The PLC must be programmed and controls all connected RollerDrive via this program Tracking of conveying goods and error diagnostics 	 Function as input/output card Transmits the status of all sensors, RollerDrive and, if necessary, error information to the PLC

CONTROLS MULTICONTROL AI

Technical data

Electrical data	
Rated voltage	24 or 48 V DC
Voltage range	24 V DC: 22 to 27.5 V DC 48 V DC: 44 to 51.5 V DC (voltage supply of RollerDrive only)
Current consumption	Logic supply voltage: MultiControl: max. 0.2 A + connected sensors/actuators = max. 1.6 A + current of RollerDrive EC5000*
Fuses	– For logic – For RollerDrive – For sensors and I/Os, can be reset
Protection rate	IP54
Ambient conditions	
Ambient temperature in operation	-30 to 40 °C
Ambient temperature during transport and storage	-40 to 80 °C
Max. installation height above sea level	1000 m**

* The power of EC5000 depends on the application, e.g., conveying good weight, conveying speed, acceleration ramp, and on the EC5000 used (refer to the corresponding chapter).

** The installation in systems at an altitude above 1000 m is possible. However, this can lead to a reduction of the performance values.

APPLICATION NOTES WHAT ARE APPLICATION NOTES USED FOR?

What are application notes used for?

The application notes support you during the planning and dimensioning of conveyor systems, as well as during the selection of Interroll Conveyor Modules.

The application notes offer the following:

- · Basic rules for trouble-free transport
- · Decision-making aids for product selection
- Calculation examples for the dimensioning of the conveyor modules and drive performances

In addition, your Interroll customer representative will be happy to assist you in the selection of conveyor modules, especially if you require specific measures due to special conveying goods or environmental conditions.

You should answer three questions before selecting a conveyor module:

Which tasks should the conveyor technology handle?

- Transporting and/or storing
- · Sorting and/or distributing

What properties does your conveying good have?

- Length, width and height: Minimum and maximum dimensions of the transport materials which are conveyed together on one line
- Weight: Minimum and maximum weight of unit loads; ideally assigned to the dimensions
- Condition of the pallet underside: The bottom determines, e.g., the suitability of roller conveyors

Does the condition of your conveying good or the surroundings require special measures?

- For example, are there extreme temperatures, high humidity or chemical influences?
- · Does electrostatic charging pose a problem?
- · Is the conveying good fragile or problematic in any way?

Working with maximum values

Minimum and maximum performance data are listed at many points in this catalog. These extreme values, e.g., maximum permissible weight and maximum permissible speed, cannot always be combined with each other without restrictions. If you have any doubts, please contact your Interroll customer representative.

Weight classes

In general, Interroll groups conveyor technology by the weight of the conveying good into the following classes:

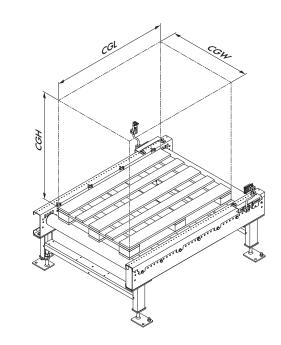
- Up to 50 kg: Light
- Up to 500 kg: Medium
- Up to 1500 kg: Heavy

APPLICATION NOTES CONVEYING GOOD

Conveying good

- The permissible dimensions, weight and conveying speed of the conveying goods may not be exceeded, see "Technical data".
- The load capacity of the pallet must be sufficient for the weight of the conveying goods.
- \cdot The weight must be evenly distributed on the pallet.
- For roller conveyors, more than five conveyor rollers must be located under the conveying goods at all times.
- Dimensions of conveying goods, load stability and how the load is secured determine the conveying speed.
- The conveying goods overhang on the pallet may not exceed 50 mm on any side.
- Only the types of pallets specified for the module may be transported.
- The conveying goods height CGH depends on the center of gravity of the load.

Height of center of gravity < 1/2 conveying goods height

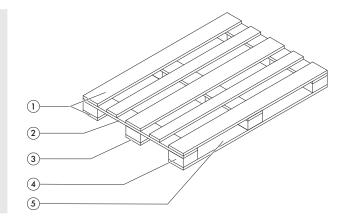


Size of conveying goods = CGH x CGW x CGL

CGH	Conveying goods height
CGW	Conveying goods width
CGL	Conveying goods length

Prerequisites for a safe transport:

- All outside long boards (1) are complete and undamaged.
- All cross boards are complete (2) and undamaged at the corners.
- The lower center board (3) is present and undamaged. There are no breaks along the entire length.
- All corner beams (4) are complete and not broken crosswise.
- All lower boards (5) are complete and dry. No board is broken crosswise.
- All nails are properly hammered in and do not protrude more than 2 mm.
- The bottom runners are free of plastic film.



1	Long boards
2	Cross boards
3	Center board
4	Corner beams
5	Lower boards

Basic principles for trouble-free transport

In order to transport the conveying good flawlessly on a roller conveyor, the following basic principles must be followed:

Roller pitch

The roller pitch must be selected so that at least five conveyor rollers are underneath the conveying good at any given time:



Р	Roller pitch in mm (")
L	Conveying good length in mm (")

Load capacity

The weight of the conveying good must be distributed onto as many conveyor rollers as necessary so that the maximum load capacity of each individual conveyor roller is not exceeded. This may mean that more than five conveyor rollers must support the conveying good.

More information about conveyor rollers is available in Interroll's Conveyor Roller Catalog.

Side profile

Steel profile 200 x 70 x 4 mm

- · Folded steel profile with powder coating
- The top edge of the roller is always deeper than the top edge of the profile
- The side profile serves as side guide
- The profile has a continuous hole pattern in a grid of 25 mm for attaching all the required add-on components

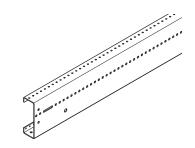


Fig.: Side profile

Profile connectors

The side profiles of the modules are connected form-fit with a profile connector.

Each conveyor module includes 2 profile connectors.



Fig.: Profile connectors

Supports

The supports are made of folded U-profiles $105 \times 67 \times 4$ mm, which are assembled into a rigid frame. The supports can be attached in a grid of 25 mm at any location of the module (recommended support distance max. 1500 mm). A support must always be attached at every track joint, and the maximum distance to the conveyor joint is 150 mm.

Throughput

The throughput T_P of a conveyor system is given in units/hour and depends on the size of the conveying good, the conveying speed and the cycle times of merging and diverting units.

The window size T is required for calculating the throughput. The window size T is the distance from the front edge of a conveying good to the front edge of the following conveying good, irrespective of the actual length of the conveying good or zone length.

For the precise calculation of the power capacity T_p , please contact your Interroll customer representative. T_p for straight paths can roughly be calculated as follows:

$$T_{p} = \frac{3.600 \cdot v}{T}$$

T _P	Throughput in units/hour
v	Conveying speed in m/s (ft/m)
Т	Window size in m (")

With merging and diverting, throughput is additionally influenced by the actual length and weight of the conveying good as well as the transfer cycle. Please contact your Interroll customer consultant for calculations. **Application notes**

APPLICATION NOTES TURNTABLES

Turntables

At the junctions of conveyor systems, pallets can be transferred via turntables from incoming conveyor lines onto tracks with different directions of travel.

Since they approach several positions in the swiveling range of 270°, they can be used as corner deflection, crossing or merger/diverter.

The direction of rotation must be specified by the control of the conveyor systems.

Examples of applications

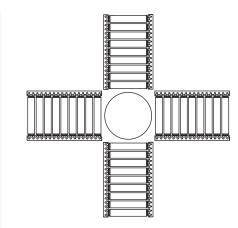


Fig.: Turntable crossing

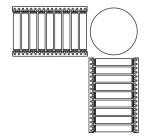


Fig.: Turntable 90° discharge

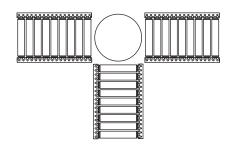


Fig.: Turntable diverter or merger

Transfer

The combination of roller and chain conveyors allows 90° transfers to implement complex intralogistical solutions in extremely tight spaces: They connect conveyor lines at a 90° angle and enable a change of direction of the load carriers.

For right-angle merging and diverting as well as for moving the conveying good between conveyor lines running in parallel, lifting elements are installed in the conveyor systems. The lifting motion is carried out electromechanically via eccentric lifting shafts.

Chain and roller transfers cannot be combined in a closed loop.

Examples of applications

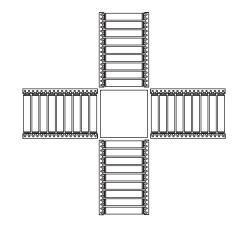


Fig.: Transfer crossing

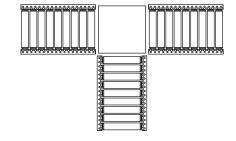


Fig.: Transfer diverter or merger

APPLICATION NOTES INTERROLL LAYOUTER

Interroll Layouter

The Interroll Layouter gives you a menu-driven CAD tool that provides professional support in planning a conveyor system with proven Interroll solutions.

The Interroll Layouter is based on Emulate3D from Rockwell Automation – a widely used and proven program for planning systems. The intuitive tool includes all the modules of Interroll platform solutions, such as MCP, MPP, SHC, Dynamic Storage and Sorter.

The layouts are drawn based on our design guidelines and automatically calculated using application-specific parameters. All parameters are exported to an Excel-based conveyor list which Interroll can use as the basis for creating quotations, quickly and reliably. The layouts can be saved in different common formats, such as .dwg, .dxf, .pdf, .step, .iges and others.

The layouts can be animated using 3D models, thereby providing an option for spatial viewing of their material handling.

For more information, please contact your Interroll contact person.

EXTENSIVE EXPERTISE IN CONVEYORS



The Interroll Competence Center in Mosbach (location Obrigheim, Germany) concentrates on a range of conveyors that are used in container conveying as well as pallet conveying. This includes roller conveyors, such as the Modular Conveyor Platform (MCP) and the Modular Pallet Conveyor Platform (MPP), as well as belt conveyors.

In these product areas, the Interroll Conveyor GmbH within the Interroll Group is responsible for all technical aspects, from the development and application technology up to the production and support of the local Interroll companies. Visit www.interroll.com to find your local contact person.

Contact:

Interroll Conveyor GmbH Paul-Zumbühl-Str. 10 - 30 | 74847 Obrigheim | Germany Tel.: +49 (0)6262 9277-0

LEGAL NOTICES

Contents

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About Interroll

The Interroll Group is a globally leading provider of solutions for material handling. The company was founded in 1959 and has been listed on the SIX Swiss Exchange since 1997.

Interroll supplies system integrators and machine builders with a broad product range of platform-based products and services in the categories "Rollers" (conveyor rollers), "Drives" (motors and drives for conveyor systems), "Conveyors & Sorters" as well as "Pallet Handling" (pallet flow and storage). Solutions from Interroll are used by express and postal services, in e-commerce, in airports and in the areas of food & beverage, fashion, automotive and other industries. The company counts leading brands, such as Amazon, Bosch, Coca-Cola, DHL, Nestlé, Procter & Gamble, Siemens, Walmart, or Zalando, among its users.

From its headquarters in Switzerland, Interroll manages a global network of 35 companies with roughly 2400 employees (average staff in 2023).

interroll.com