

ROLLERS

SERIES 1500/1520

Slide bearing conveyor roller



Application area

Non-driven container conveyor systems where the roller is generally used for conveying packaged or unpackaged food products. Since high levels of cleanliness requirements are met, the roller can be used in moist areas and a wet cleaning can be performed.

Long service life

Smooth-running, wear-resistant slide bearings, which do not allow any grease to be washed out, are installed in series 1500. In addition, the use of shaft pins made of stainless steel ensures a high corrosion resistance. Pressed-in bearing housings prevent foreign bodies from penetrating into the inside of the roller.

Easy cleaning

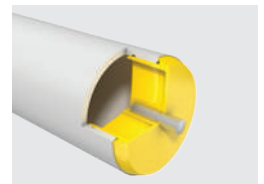
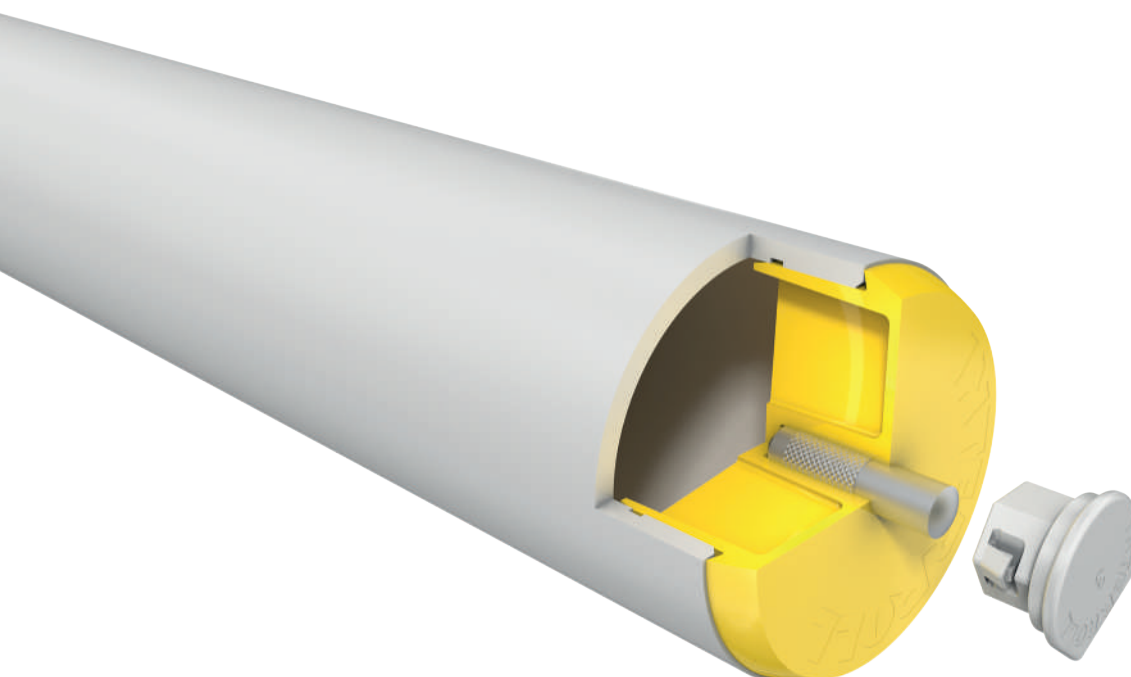
Contaminations can be removed with commercial cleaning agents. For particular thorough cleaning, the roller can easily be removed and reinstalled.

Simple installation

Slide bearing bushings allow engaging in a side profile with a maximum wall thickness of 2.5 mm and hexagon holes (does not apply to series 1520).

Robust construction

For axial fixation of the bearing housing, the bearing assemblies for PVC tubes are secured with an internal press-in edge in addition to the press fit.





ROLLERS

SERIES 1500/1520

Slide bearing conveyor roller

Technical data

General technical data		
Platform	1500	1520
Max. load capacity	120 N	1100 N
Max. conveyor speed	0.8 m/s	0.8 m/s
Anti-static version	No	No
Temperature range	-5 to +40 °C -28 to +40 °C (for steel tubes) PVC tube: With increased ambient temperature (from +30 °C) and high continuous static load over hours, a permanent deformation of the rollers cannot be ruled out.	-5 to +40 °C -28 to +40 °C (for steel tubes)
Shaft release	Shaft pin, Ø 6 mm, stainless steel	Shaft pin, Ø 12 mm, stainless steel, M8 female thread
Fastening holes	Hexagon, 11 mm, +0.3/-0.8 mm	Round hole for M8 screw
Material		
Tube	Zinc-plated steel, stainless steel, aluminum PVC: RAL7030 (stone gray) RAL5015 (sky blue) for Ø 50 mm	Stainless steel PVC: RAL7030 (stone gray) RAL5015 (sky blue) for Ø 50 mm
Shaft, permanently connected to bearing housing	Yes, stainless steel	
Bearing housing	Polypropylene, RAL1023 (traffic yellow)	Polyoxymethylene, RAL9005 (jet black)
Slide bearing bushing	Polymethylene, RAL7030 (stone gray)	
Bearing version	Slide bearing	Slide bearing

Design versions

Tube sleeves	PVC sleeve (page 23) PU sleeve (page 25) Lagging (page 26)
Special tube surface treatment	Carbonitriding
Series 1500	Roller with and without slide bearing bushing
Noise reduction	For tube with Ø 50 mm

ROLLERS

SERIES 1500/1520

Slide bearing conveyor roller



Load capacities of series 1500 with fixed shaft

The load capacity table refers to a temperature range from -5 to $+20$ °C for PVC tubes and to a temperature range from -28 to $+40$ °C for steel tubes.

Valid for the following shaft designs: fixed shaft.

Bearing: slide bearing.

Tube material	Ø Tube/thickness [mm]	Ø Shaft [mm]	Maximum static load [N] for installation length [mm]							
			100	200	300	400	500	600	700	800
PVC	30 x 1.8	6	50	50	35	20	12	–	–	–
	50 x 2.8	6	120	120	120	120	95	65	48	35
Steel	30 x 1.2	6	50	50	50	50	50	50	50	50
	50 x 1.5	6	120	120	120	120	120	120	120	120

Load capacities of series 1520 with shaft pin

The load capacity table refers to a temperature range from -5 to $+20$ °C for PVC tubes and to a temperature range from -28 to $+40$ °C for steel tubes.

Valid for the following shaft designs: Shaft pin with female thread.

Bearing: slide bearing.

Tube material	Ø Tube/thickness [mm]	Ø Shaft pin [mm]	Maximum static load [N] for installation length [mm]							
			200	300	400	600	800	1000	1300	1600
PVC	50 x 2.8	12	500	250	150	65	36	–	–	–
Steel	50 x 1.5	12	1100	1100	1100	1100	1100	1100	650	400

Removal of a roller of series 1500

A roller of series 1500 can easily be installed in hexagon holes using the supplied slide bearing bushings. If the roller must be removed again, e.g. for cleaning, it is just as easy. Interroll recommends a 12-mm open-end wrench for the removal. The open-end wrench must be placed between the inside of the side profile and the bearing housing of the roller. It must be placed on the hexagon so that the two bracket joints of the slide bearing bushing no longer project. The bracket joints prevent the slide bearing bushings from inadvertently dropping out of the side profile. If the bracket joints are placed by the open-end wrench, the slide bearing bushing can easily be pulled out to the outside.



ROLLERS

SERIES 1500/1520

Slide bearing conveyor roller

Dimensions of series 1500

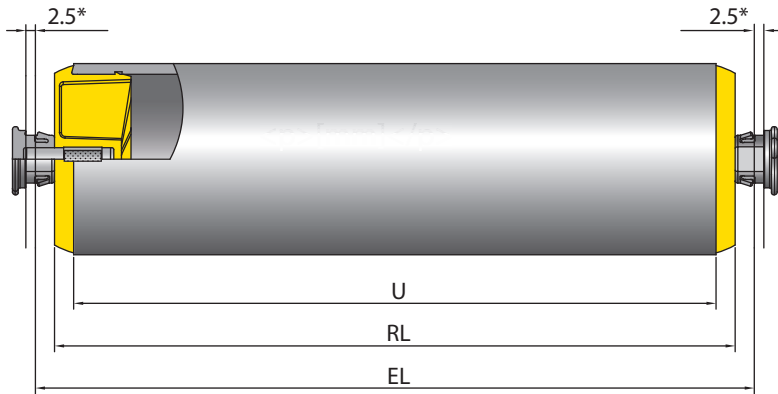
A sufficient axial play is already taken into account, so that the actual lane width between side profiles is required. Ordering dimensions for tube sleeves, e.g. PVC sleeves, see page 24.

- RL = Reference length/ordering length
- EL = Installation length, inside diameter between side profiles
- U = Usable tube length, length without bearing housing and for flanged metal tube without length of flanging

Ø Tube [mm]	Tube material	Ø Shaft [mm]	EL [mm]	U [mm]
30 x 1.2	Steel	6 Stub/11 HEX Clip	RL + 10	RL - 20
30 x 1.8	PVC	6 Stub/11 HEX Clip	RL + 10	RL - 10
50 x 1.5	Steel	6 Stub/11 HEX Clip	RL + 10	RL - 22
50 x 2.8	PVC	6 Stub/11 HEX Clip	RL + 10	RL - 10

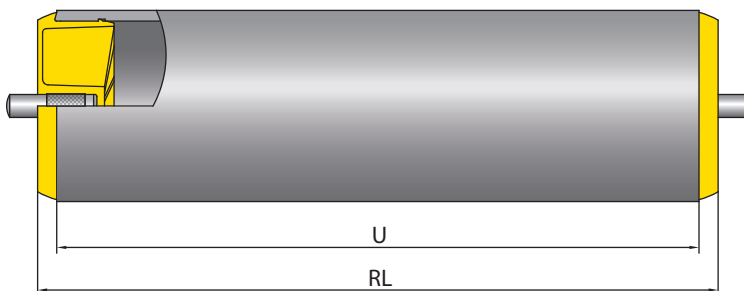
- Stub = Shaft pin
- HEX = Hexagon

PVC tube with slide bearing bushing



* Maximum profile width

PVC tube without slide bearing bushing



ROLLERS

SERIES 1500/1520

Slide bearing conveyor roller



Dimensions of series 1520

A sufficient axial play is already taken into account, so that the actual lane width between side profiles is required. Ordering dimensions for tube sleeves, e.g. PVC sleeves, see page 24.

- RL = Reference length/ordering length
- EL = Installation length, inside diameter between side profiles
- U = Usable tube length, length without bearing housing and for flanged metal tube without length of flanging

Steel tube and female threaded shaft pin

Ø Tube [mm]	Tube material	Ø Shaft [mm]	EL [mm]	U [mm]
50 x 1.5	Steel	Shaft pin, M8 female thread	RL + 20	RL - 10
50 x 2.8	PVC	Shaft pin, M8 female thread	RL + 20	RL - 10

