ROLLERS SERIES 3500 HEAVY

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Fixed drive conveyor roller





Application area

Particularly suited for driven transport of heavy materials that require a small roller pitch, such as pallets and steel containers.

Very robust design

Welded steel sprockets and steel tube with a dimension of 60 x 3 mm enable reaching a high mechanical stability of the conveyor roller. To achieve a high axial load capacity, the bearing housing opposite of the drive side is not only pressed into the tube, but also flanged.

High load capacity

A stable, continuous female threaded shaft with Ø 17 mm ensures a high degree of reinforcement of the conveyor. Reinforced precision ball bearings of type 6003 are used. A corresponding small roller pitch is possible for the transport of very heavy goods.

High corrosion protection

After the welding process, the components consisting of tube, sprockets and flanges are individually zinc-plated, thereby achieving a high corrosion protection.

Lateral loading

The tube ends opposite the drive side are rounded, thereby allowing materials to be easily moved on from the side. Axial forces are removed through ball bearings and seals.



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Fixed drive conveyor roller

Technical data

General technical data	
Platform	1700
Max. load capacity	3000 N
Max. conveyor speed	0.5 m/s
Anti-static version	Yes (via sprocket head)
Temperature range	−5 to +40 °C
Material	
Tube	Zinc-plated steel, stainless steel
Shaft	Uncoated steel, zinc-plated steel, stainless steel
Bearing housing	Polyamide, RAL9005 (jet black)
Drive head	Uncoated steel, zinc-plated steel, stainless steel
Seal	Polyamide on drive side in RAL1021 (rape yellow)
Bearing version	Precision steel ball bearing 6003 2RZ, precision stainless steel ball bearing 6003 2RZ, bearing play each C3, greased

Design versions

Tube sleeves	PVC sleeve (page 22)			
	PU sleeve (page 24)			
	Lagging (page 25)			
Anti-static version	$(<10^6~\Omega)$ Standard design for rollers with grooves or tube sleeves			
Tube	The following are available in addition to the variants listed in the load capacity tables: • With flanges welded on			

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The load capacity table refers to a temperature range of +5 to +40 °C. Valid for the following shaft designs: female thread or male thread.

Bearing: 6003 2RZ.

Tube material	Ø Tube/ thickness [mm]	Drive element	Ø Shaft [mm]	Maximum static load [N] for installation length [mm]					
				200	900	1000	1100	1300	1500
Steel	60 x 3	Welded steel sprocket head 1/2", T14	17	3000	3000	3000	3000	2135	1600
		Welded steel sprocket head 5/8", T13		3000	3000	3000	3000	2135	1600
		Welded steel double sprocket head 1/2", T14		3000	3000	3000	3000	2135	1600
		Welded steel double sprocket head 5/8", T13		3000	3000	3000	3000	2135	1600

T = Number of teeth

Dimensions

A sufficient axial play is already taken into account, so that the actual lane width between side profiles is required. The dimensions of the conveyor roller depend on the shaft version and the drive element.

Ordering dimensions for tube sleeves, e.g. PVC sleeves, see page 23, and for flanges see page 27.

RL = Reference length/ordering length

EL = Installation length, inside diameter between side profiles

AGL = Total length of shaft

U = Usable tube length: Length without bearing housing and for flanged metal tube without length of flanging

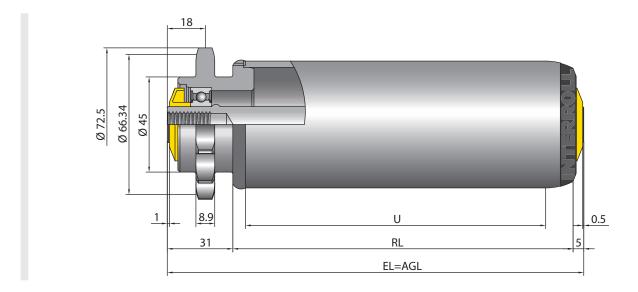
Ø Tube [mm]	Tube material	Ø Shaft [mm]	Drive element	EL [mm]	AGL [mm]	U [mm]
60 x 3	Steel	17	Welded steel sprocket head 1/2", T14	RL + 40	RL + 40	RL - 23
			Welded steel sprocket head 5/8", T13	RL + 36	RL + 36	
			Welded steel double sprocket head 1/2", T14	RL + 62	RL + 62	
			Welded steel double sprocket head 5/8", T13			

= Number of teeth

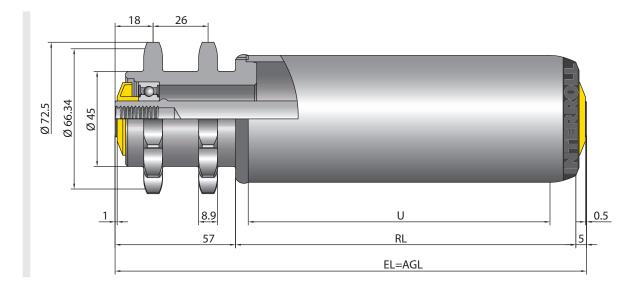
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Fixed drive conveyor roller

Welded 5/8" steel sprocket head with 13 teeth



Welded 5/8" steel double sprocket head with 13 teeth



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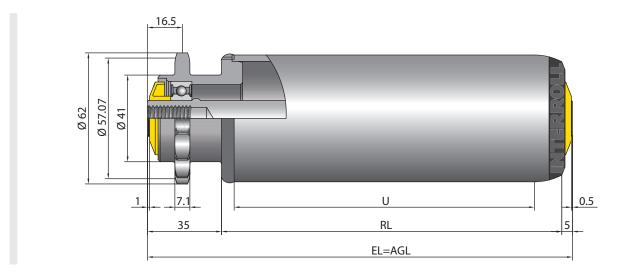
Fixed drive conveyor roller



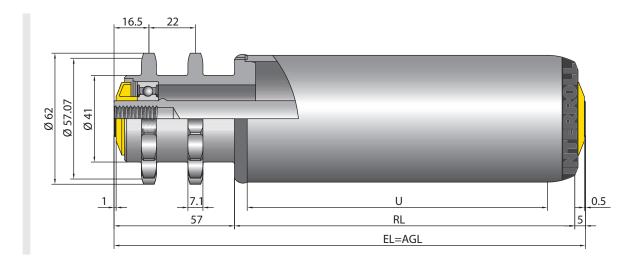


Welded 1/2" steel sprocket head with 14 teeth





Welded 1/2" steel double sprocket head with 14 teeth



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