

ROLLERS

SERIES 1700 HEAVY

Universal conveyor roller



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Application area

Driven unit handling conveying and particularly driven conveyor systems, transport of medium-heavy to heavy materials, e.g. cardboards, containers, barrels, pallets or rims. Suitable for implementing gravity or gravity roller conveyors. Also usable for mechanical engineering applications. The version with steel tube and dimension 60 x 3 mm can also be used as belt idler.

Highest reliability

This roller series has been proven millions of times. The roller offers a very high degree of functional dependability.

Low-noise

The use of precision ball bearings, Technopolymer bearing housings and seals result in very quiet running.

Lateral loading

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

Robust construction

To obtain an axial fixing of bearing housing, ball bearing and seal against escaping, the bearing housing is not only pressed into the tube, but also flanged.



Technical data

General technical data	
Platform	1700
Max. load capacity	3000 N
Max. conveyor speed	2 m/s
Temperature range	-28 to +40 °C
Material	
Tube	Zinc-plated steel, stainless steel
Shaft	Uncoated steel, zinc-plated steel, stainless steel
Bearing housing	Polyamide, RAL9005 (jet black)
Seal	Polyamide, RAL1021 (rape yellow)
Bearing version	Precision steel and stainless steel ball bearing 6003 2RZ, bearing play C3, greased

Design versions

Tube sleeves	PVC sleeve (page 31) PU sleeve (page 33) Lagging (page 34)
Anti-static version	($10^6 \Omega$) Standard design for rollers with grooves or tube sleeves
Special tube surface treatment	Carbonitriding (only for tube with $\varnothing 50 \times 1.5$ mm)
Shafts	The following are available in addition to the variants listed in the load capacity tables: <ul style="list-style-type: none"> • With variable length • Different design of both shaft ends
Tube	The following are available in addition to the variants listed in the load capacity tables: <ul style="list-style-type: none"> • With flanges welded on • Seamless version for tube with $\varnothing 60 \times 3$ mm, noise-optimized for use as idler pulley • With grooves, e.g. for guiding round belts (does not apply to tube with $\varnothing 60 \times 3$ mm)
Noise reduction	For tube with $\varnothing 50$ mm

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Load capacities of series 1700 heavy

The following load capacity table refers to a temperature range from -5 to $+40$ °C and to a tube without grooves. The maximum static load at -28 °C to -6 °C measures 600 N.

Valid for the following shaft designs: female thread or male thread.

Bearing: 6003 2RZ.

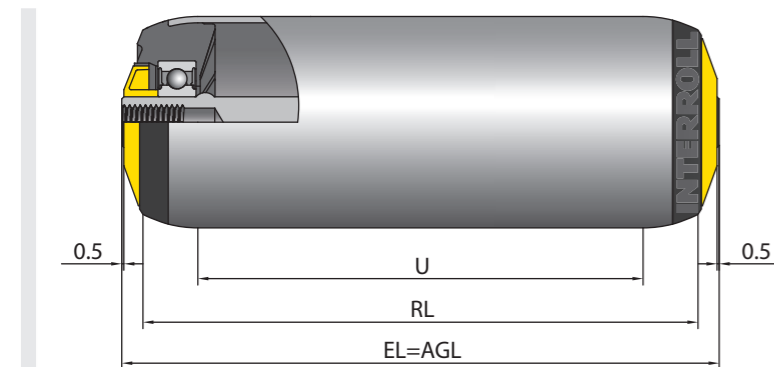
Tube material	Ø Tube/thickness [mm]	Ø Shaft [mm]	Maximum static load [N] for installation length [mm]							
			200	300	400	600	800	1000	1300	1600
Zinc-plated steel, stainless steel	50 x 1.5	17	3000	3000	3000	3000	1760	1120	655	430
	51 x 2.0	17	3000	3000	3000	3000	2420	1540	905	595
	60 x 3.0, standard/seamless	17	3000	3000	3000	3000	3000	3000	2135	1405

Dimensions

The dimensions of the conveyor roller depend on the shaft version. A sufficient axial play is already taken into account, so that only the actual lane width between side profiles is required for ordering. Ordering dimensions for tube sleeves, e.g. PVC sleeves, see page 31, and for flanges see page 36.

- 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

Female threaded shaft



Ø Tube [mm]	Ø Shaft [mm]	EL [mm]	AGL [mm]	U [mm]
50 x 1.5; 60 x 3	17	RL + 10	RL + 10	RL - 26
51 x 2	17	RL + 10	RL + 10	RL - 28