

ROLLERS

SERIES 1700 LIGHT

Universal conveyor roller



Application area

Internal transport of small materials as well as use for assembly machines or packaging machines. Suitable for implementing gravity roller conveyors.

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.

Small roller pitches

Small roller pitches can be implemented by using rollers with a diameter of 20 or 30 mm.

Robust construction

To achieve a high axial load capacity, particularly of bearing housings, ball bearings and seal, the bearing housing is not only pressed into the tube for the versions with metal tube, but also flanged. The bearing assemblies of the PVC tubes with a diameter of 30 mm are secured not only with a press fit, but also with an internal press-in edge.



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Technical data

General technical data	
Platform	1700
Max. load capacity	150 N
Max. conveyor speed	1.5 m/s
Temperature range	-28 to +40 °C 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.
Material	
Tube	Zinc-plated steel, stainless steel, aluminum PVC: RAL7030 (stone gray) RAL7024 (dark gray) for tube with Ø 20 mm
Shaft	Uncoated steel, zinc-plated steel, stainless steel
Bearing housing	Polyamide, RAL9005 (jet black)
Seal	Polypropylene, RAL1021 (rape yellow) for tube with Ø 20 mm Polyamide, RAL1021 (rape yellow) for tube with Ø 30 mm
Bearing version	Sealed precision ball bearing, steel 689 2Z, bearing play C0

Design versions

Tube sleeves	PVC sleeve for rollers with zinc-plated tubes or stainless steel tubes (page 31)
Anti-static version	($10^6 \Omega$) Standard design for rollers with grooves or tube sleeves, cannot be used for PVC tube
Special tube surface treatment	Carbonitriding
Lubrication options for ball bearing	Greased for an ambient temperature from -28 to +40 °C (standard)
Shafts	The following are available in addition to the variants listed in the load capacity tables: <ul style="list-style-type: none"> • With spring on both sides • With variable length • Different design of both shaft ends

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Load capacities of series 1700 light with screw-connected installation

The load capacity table refers to a temperature range of +5 to +40 °C.
The maximum static load at -28 °C to -6 °C measures 40 N.

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

Bearing: 689 2Z.

Tube material	Ø Tube / thickness [mm]	Ø Shaft [mm]	Maximum static load [N] for installation length [mm]					
			100	200	300	400	500	600
PVC	20 x 1.5	8	80	19	-	-	-	-
	30 x 1.8	8	150	80	35	20	-	-
Aluminum	20 x 1.5	8	150	150	150	129	82	57
Steel	20 x 1.5; 30 x 1.2	8	150	150	150	150	150	150

Load capacities of series 1700 light with loose installation

The load capacity table refers to a temperature range of +5 to +40 °C.
The maximum static load at -28 °C to -6 °C measures 40 N.

Valid for the following shaft designs: spring-loaded shaft, fixed shaft or flatted shaft.

Bearing: 689 2Z.

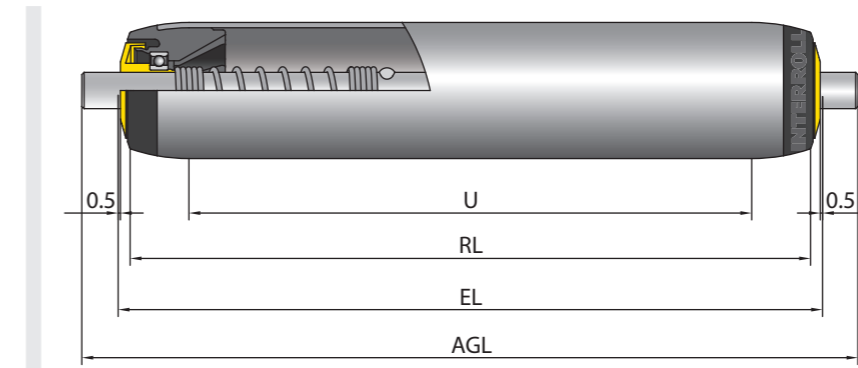
Tube material	Ø Tube / thickness [mm]	Ø Shaft [mm]	Maximum static load [N] for installation length [mm]					
			100	200	300	400	500	600
PVC	20 x 1.5	6, 8	80	19	-	-	-	-
	30 x 1.8	6, 8	150	80	35	20	12	-
Aluminum	20 x 1.5	6	150	150	150	129	82	57
Steel	20 x 1.5; 30 x 1.2	6, 8	150	150	150	150	150	150

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.

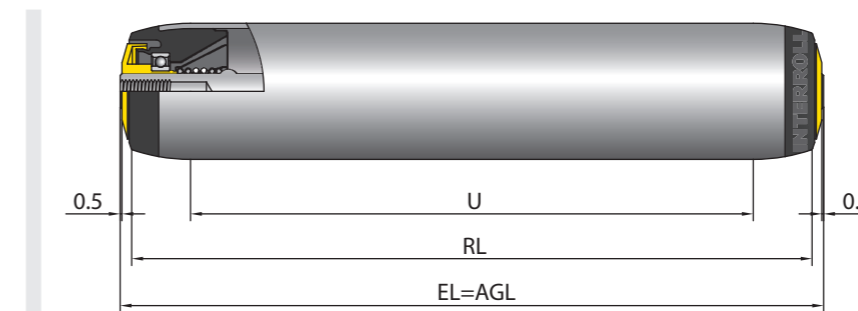
- RL = Reference length / ordering length
- EL = Installation length, inside diameter between side profiles
- AGL = Total length of shaft
- U = Usable tube length: Length without bearing housing and for flanged metal tube without length of flanging

Spring-loaded shaft



Ø Tube [mm]	Tube material	Ø Shaft [mm]	EL [mm]	AGL [mm]	U [mm]
20 x 1.5	Aluminum/PVC/Steel	6	RL + 5	RL + 15	RL - 16
		8		RL + 21	
30 x 1.2	Steel	6	RL + 5	RL + 15	RL - 26
		8		RL + 21	
30 x 1.8	PVC	6	RL + 5	RL + 15	RL - 12
		8		RL + 21	

Female threaded shaft



Ø Tube [mm]	Tube material	Ø Shaft [mm]	EL [mm]	AGL [mm]	U [mm]
20 x 1.5	Aluminum/PVC/Steel	8	RL + 5	RL + 5	RL - 16
30 x 1.2	Steel	8	RL + 5	RL + 5	RL - 26
30 x 1.8	PVC	8	RL + 5	RL + 5	RL - 12