

SMOOTH-RUNNING CONVEYOR ROLLER SERIES 1100

The gravity roller with optimised light start-up

Product Description

Customer benefits

- Cost-effective, corrosion-proof gravity roller
  - Use of stainless steel balls
- Gentle lateral pushing of the materials to be conveyed
  - Rounded tube ends
- Protects the bearing from coarse dirt and liquids
  - Integral water-repellent groove
- Resistant to dirt
  - Smooth surfaces

Applications

- In-house conveyor technology
- Only gravity applications

Properties

- Silent, precise smooth-running roller due to special steel ball bearings and tube made of polypropylene.
- Form-fit join of the bearing housing with the tube above a diameter of 30 mm to avoid slipping of the bearing seat.

Associated platform

- Platform 1100

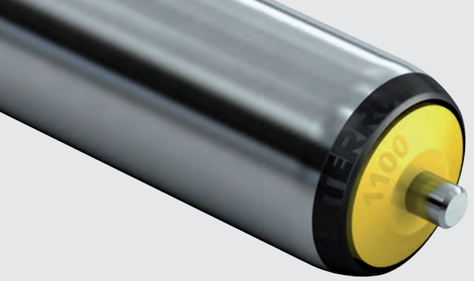
Technical Data

General technical data	
Max. load capacity	350 N
Max. conveyor speed	0.3 m/s
Temperature range	-5 to +40 °C
Materials	
Bearing housing	Polypropylene
Seal	Polypropylene
Ball	Carbon steel or stainless steel 1.4301

Load capacity

The dynamic load and the surface load are the assumptions for the load capacity. The shaft version can be selected at will.

Tube material	Ø Tube mm	Ø Shaft mm	Max. load capacity in N with an installation length of mm											
			100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
PVC	16 x 1.0	5	33	7	3	2	–	–	–	–	–	–	–	–
	20 x 1.5	6	90	20	10	5	–	–	–	–	–	–	–	–
	30 x 1.8	8	120	100	40	20	15	10	–	–	–	–	–	–
	40 x 2.3	8	180	180	130	70	40	30	–	–	–	–	–	–
	50 x 2.8	8/10	350	350	310	165	100	70	–	–	–	–	–	–
Steel	16 x 1.0	5	50	50	50	50	–	–	–	–	–	–	–	–
	20 x 1.5	6	90	90	90	90	90	90	90	–	–	–	–	–
	50 x 1.5	10/12	350	350	350	350	350	350	350	350	350	350	350	350
Aluminium	20 x 1.5	6	90	90	90	90	85	60	43	–	–	–	–	–



SMOOTH-RUNNING CONVEYOR ROLLER SERIES 1100

The gravity roller with optimised light start-up

Standards

Product Selection

Spring-loaded shaft version

Tube		Ball bearing	Shaft			
			Reference number			
Material	Ø mm		Ø 5 mm	Ø 6 mm	Ø 8 mm	Ø 10 mm
PVC	16 x 1.0	Stainless steel	1.1B5.S16.A50			
	20 x 1.5	Standard		1.1AZ.N21.D03		
	20 x 1.5	Stainless steel		1.1AZ.S20.D03		
	30 x 1.8	Standard			1.1DJ.S31.E03	
	30 x 1.8	Stainless steel			1.1DK.S31.G03	
	40 x 2.3	Standard			1.1DL.S40.E03	
	40 x 2.3	Stainless steel			1.1DM.S40.E03	
	50 x 2.8	Standard			1.1EJ.SAA.EAB	1.1EL.SAA.HAC
	50 x 2.8	Stainless steel			1.1EK.SAA.GAB	1.1EM.SAA.KAC
Steel, stainless steel	16 x 1.0	Stainless steel	1.1B5.N10.A50			
	20 x 1.5	Stainless steel		1.1AZ.N21.D03		
	50 x 1.5	Stainless steel				1.1ED.NAA.KAC
Steel, zinc-plated	50 x 1.5	Standard				1.1EC.JAA.HAC
Aluminium, anodised	20 x 1.5	Stainless steel		1.1AZ.A2D.D03		

Female threaded shaft version

Tube		Ball bearing	Shaft
			Reference number
Material	Ø mm		Ø 12 mm (M8 x 15)
Steel, stainless steel	50 x 1.5	Stainless steel	1.1EF.NAA.MAS
Steel, zinc-plated	50 x 1.5	Standard	1.1EE.JAA.LAE

Ordering example

Example of a reference number: 1.1EJ.SAA.EAB - 490

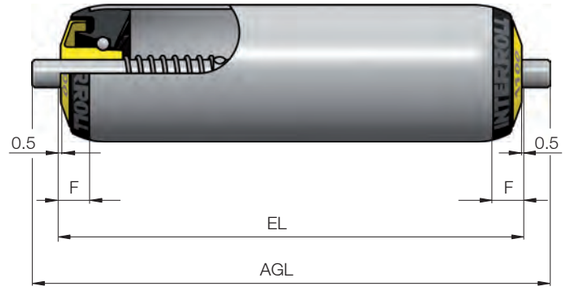
This reference number is for a Conveyor Roller Series 1100, PVC, Ø tube 50 mm, standard ball bearing, Ø shaft 8 mm, spring-loaded shaft and reference length 490 mm. The reference length RL can be found in the table of dimensions for spring-loaded shafts: RL = EL - 10. The axial play of 0.5 mm per side has already been taken into account. The nominal clearance of your conveyor is500 mm, which also corresponds to the installation length EL, i. e. the reference length is: 500 - 10 = 490 mm.

Dimensions

RL	Reference length/Ordering length*
EL	Installation length
AGL	Total length of shaft
F	Length of the bearing assembly, including axial play

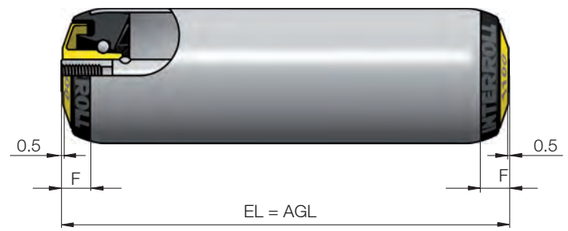
*The reference length/ordering length RL does not have any reference edges on the conveyor roller and can therefore not be shown.

Dimensions for spring-loaded shaft



Ø Shaft mm	Ø Tube mm	RL mm	AGL mm	F mm
5	16	EL - 5	EL + 12	10.5
6	20	EL - 5	EL + 12	10.5
8	30	EL - 5	EL + 16	8.5
8	40	EL - 5	EL + 16	11
8	50	EL - 10	EL + 16	11
10	50	EL - 10	EL + 20	11

Dimensions for female threaded shaft M8 x 15



Ø Shaft mm	Ø Tube mm	RL mm	AGL mm	F mm
12	50	EL - 10	EL	11

Options

We can offer you the following options in addition to our standard products:

- Antistatic version
- Special surface finish for tubes
  - Hardened
  - Brushed stainless steel tubes
- Tube sleeves above Ø 30 mm
  - Flexible PVC sleeve
  - PU sleeve for Ø 50 mm
  - Rubber coating