ROLLERS
SERIES 3870
Double friction conveyor roller

Application area
Transporting and accumulating unit handling conveyor systems, such as heavy containers, pallets or steel containers. Suitable for implementing buffer sections.

Robust construction
Very robust design specifically for heavy materials. The sprocket disks are welded onto the internal tube.

Weight-dependent
Conveyance as well as accumulation pressure depend on the weight of the materials.

Two-sided friction coupling
It is a double friction roller whose two-side friction couplings are connected with each other by an internal tube. Positioning materials of different widths to the friction side are not required in this case.

Note: Please read the additional important information about the use of the friction roller in the planning section, page 257.

Technical data

General technical data	
Platform	1450
Max. load capacity	2400 N
Max. conveyor speed	0.5 m/s
Anti-static version	No
Temperature range	–5 to +40 °C
Material	
Tube	Zinc-plated steel
Shaft	Uncoated steel, zinc-plated steel, stainless steel
Bearing housing	Polyamide, RAL9005 (jet black)
Sprocket disk	Uncoated steel (the sprocket disk including tube is zinc-plated after welding it on)
Seal	Polyamide, RAL1021 (rape yellow)
Bearing version	Precision steel ball bearing 6204 2RZ, greased

Design versions

Tube sleeves	PVC sleeve (page 31) Lagging (page 34)
Shafts	The following are available in addition to the variants listed in the load capacity tables: • With variable length • Different design of both shaft ends

Load capacities of series 3870

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

Bearing: 6204 2RZ.

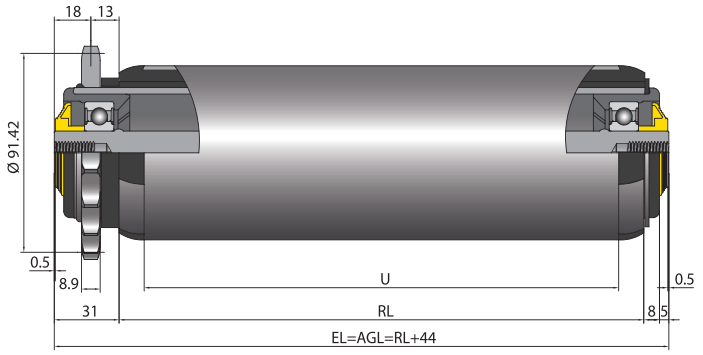
Tube material	Ø Tube / thickness [mm]	Drive element	Ø Shaft [mm]	Maximum static load [N] for installation length [mm]							
				200	600	800	1200	1400	1600	1800	2000
Steel	80 x 2	Welded steel sprocket disk 5/8", T18	20	2400	2400	2400	2400	2090	1380	960	700
		Two welded steel sprocket disks 5/8", T18		2400	2400	2400	2400	2090	1380	960	700

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 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

Ø Tube [mm]	Tube material	Ø Shaft [mm]	Drive element	EL [mm]	AGL [mm]	U [mm]
80 x 2	Steel	20	Welded steel sprocket disk 5/8", T18	RL + 44	RL + 44	RL – 24
			Two welded steel sprocket disks 5/8", T18	RL + 70	RL + 70	

Double friction roller with one sprocket disk 5/8" with 18 teeth