

SERIES EC5000

ø 60 mm, cylindrical, IP54, for 0 to 40 °C



24V

48V

20W

35W

50W

AI

BI

Application area

Drive for unit handling conveyor systems, such as transporting cardboard cartons, containers, platens, (truck) tires or lightweight pallets at normal ambient temperature. Suitable for straight conveyors, small belt conveyors and especially zero-pressure accumulation conveyors. Also usable in aligning conveyor segments or transfers or other "conveyor system branches".

Compact design

The motor integrated in the tube allows a very compact design of the conveyor system.

Very energy-efficient

The brushless drive features energy recovery when braking. The conveyor system can operate without pneumatics or conventional drives, which must be operated continually.

Flexible possible applications

RollerDrive is available in many variations, allowing it to be used in all types of different conveyor systems. For the user, this translates into a single interface instead of many. Nine gear ratios allow selecting the perfect pairing between speed and torque. The electronic holding brake (Zero-Motion-Hold) holds materials in position, even on gravity conveyors.

Low-noise

The use of decoupling elements achieves particularly low-noise running.

Maintenance-free and installation-friendly

The drive with internal commutation electronics does not require any maintenance. It features an overload protection that prevents damages due to overtemperature or blockage. It is connected securely without complex screw connection by using a motor cable with 5-pin snap-in plug.



SERIES EC5000

ø 60 mm, cylindrical, IP54, for 0 to 40 °C

Technical data

Rated voltage	24 V	48 V
Power	50 W	50 W
Rated current	3.4 A	1.7 A
Starting current	7.5 A	3.8 A
Max. noise emission (mounted)	55 dB(A), application-dependent	
Length of motor cable	500 mm	
Max. reference length	1500 mm	
Ambient temperature in operation	0 to 40 °C	
Max. load capacity per RollerDrive with drive head (PolyVee)	550 N	
Motor shaft	Stainless steel, 11 mm HEX, thread M12 x 1	
Anti-static version	Yes (< 10 ⁶ Ω)	
Tube wall thickness	2 mm	
Tube material	Zinc-plated steel, stainless steel	
Tube sleeving	PVC sleeve 2 mm Lagging 2 mm	

Design versions

50 W

Gear ratio	Max. conveying speed [m/s]	Min. conveying speed [m/s]	Rated torque [Nm]	Acceleration torque [Nm]	Continuous blocking torque [Nm]
9:1	2.41	0.12	0.63	1.58	1.58
13:1	1.67	0.09	0.91	2.29	2.29
18:1	1.20	0.06	1.27	3.17	3.17
21:1	1.03	0.05	1.48	3.7	3.7
30:1	0.72	0.03	2.13	5.34	5.34
42:1	0.52	0.03	2.96	7.4	7.4
49:1	0.44	0.03	3.45	8.63	8.63
78:1	0.28	0.01	5.07	13	13
108:1	0.20	0.01	7.07	13	13

Before the run-in, the values may differ up to ±20 %. After a run-in phase, the values vary only in the range of ±10 % for 95 % of all RollerDrive used.

SERIES EC5000

ø 60 mm, cylindrical, IP54, for 0 to 40 °C



24V

48V

20W

35W

50W

AI

BI

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.

RL = Reference length/ordering length

EL = Installation length, inside diameter between side profiles

PolyVee drive head

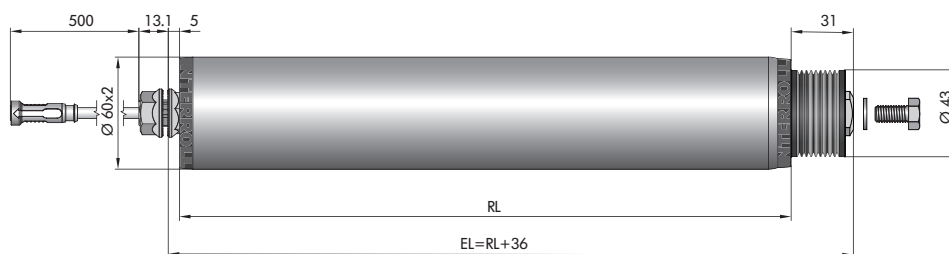


Fig.: With female thread