



**Application area**

Drive for unit handling conveyor systems, such as transporting cardboards, containers, barrels, workpiece carriers or tires. Suitable for sectional conveyors, roller curves, small belt conveyors and especially zero-pressure accumulation roller conveyors.

**Compact design**

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

**Very energy-efficient**

The brushless motor features an energy recovery in braking.

**Flexible possible applications**

The drive can be used in straight sections and curves and ensures a constant conveying speed. Depending on the application area, PolyVee, round or toothed belts can be used for the transmission of force. Overall, nine gear stages are available. The electronic holding brake (Zero Motion Hold) holds materials in position, even on gravity conveyors, so that the RollerDrive can also be used as a drive in these applications.

**Low-noise**

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

**Maintenance-free and installation-friendly**

The brushless motor 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.



**Technical data**

General technical data	
Mechanical power	32 W (at ambient temperature of 20 °C)
Max. noise emission (mounted)	55 dB(A), application-dependent
Possible static load capacity	350 N – for design with drive head (for PolyVee, round or toothed belt) 1100 N – for design without drive head
Motor shaft	11 mm HEX, thread M12 x 1
Length of motor cable	0.48 m
Electrical data	
Rated voltage	24 V DC
Rated current	Approx. 2 A
Starting current	Approx. 4 A
Protection rate	IP54
Anti-static version	Yes (< 10 <sup>-6</sup> Ω)
Dimensions	
Tube diameter/wall thickness	50 x 1.5 mm; 51 x 2 mm
Max. reference length	1500 mm
Ambient conditions	
Ambient temperature in operation	0 to +40 °C
Ambient temperature during transport and storage	-30 to +75 °C
Material	
Tube	Stainless steel, zinc-plated steel, chrome-plated steel, aluminum
Motor shaft	Stainless steel
Tube sleeving	PVC sleeve 2 mm, 5 mm PU sleeve 2 mm Lagging 2 to 5 mm Tapered elements

HEX = hexagon

The actual current flow depends on the application conditions, such as material weight, number of connected conveyor rollers, etc.

Depending on the design of the RollerDrive, an accessory, e.g. a ribbed nut for fastening on the cable side, is supplied. A delivery without accessory is possible on request.



**Design versions**

Gear ratio	Max. conveyor speed [m/s]	Rated torque [Nm]	Startup torque [Nm]	Zero motion hold [Nm]
9 : 1	1.75	0.45	1.10	0.36
12 : 1	1.31	0.61	1.46	0.48
16 : 1	0.98	0.81	1.95	0.64
20 : 1	0.79	1.01	2.44	0.80
24 : 1	0.65	1.21	2.92	0.96
36 : 1	0.44	1.82	4.38	1.44
48 : 1	0.33	2.42	5.85	1.92
64 : 1	0.25	3.23	7.80	2.56
96 : 1	0.16	4.84	11.69	3.84

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.

**Dimensions**

The minimum reference length depends on the gear box variant, the grooves in the tube and the drive or the bearing assembly. A sufficient axial play is already taken into account, so that the actual lane width between side profiles is required. When using the tapered hexagon spring shaft, it must be ensured that the design of the axial play is not too high. If the RollerDrive selected is too short, the shaft may have play in the hexagon hole. A hexagon hole with a size of at least 11.2 mm is recommended. If the RollerDrive is installed obliquely, the hole must be designed larger accordingly.

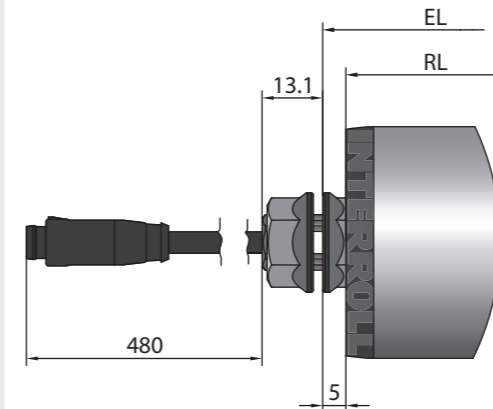
Ordering dimensions for tube sleeves starting at page 31

Tool for installing the RollerDrive starting at page 242

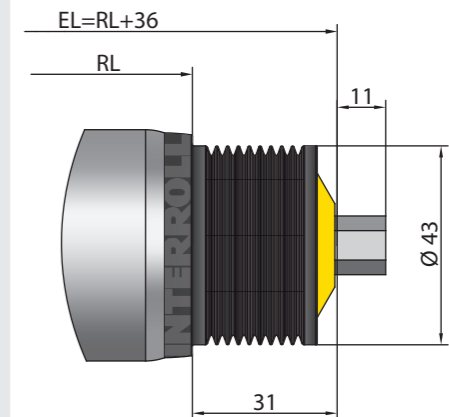
RL = Reference length/ordering length

EL = Installation length, inside diameter between side profiles

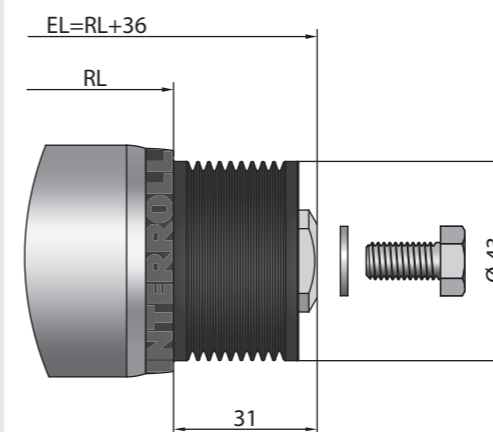
**Design in protection rating IP54**



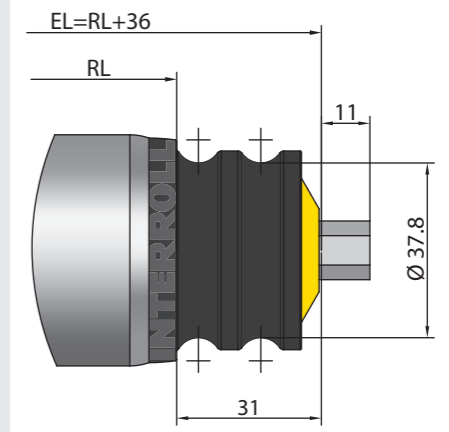
**PolyVee drive head with 11 mm hexagon spring shaft**



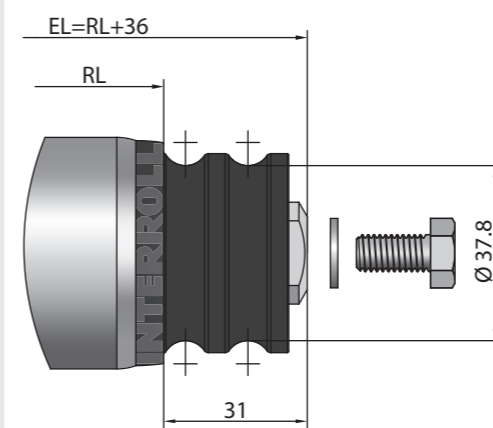
**PolyVee drive head with M8 female thread fastening**



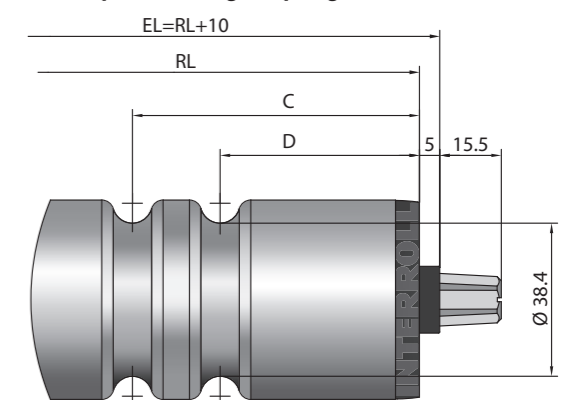
**Round belt drive head with 11 mm hexagon spring shaft**



**Round belt drive head with M8 female thread fastening**



**2 grooves and tapered hexagon spring shaft**

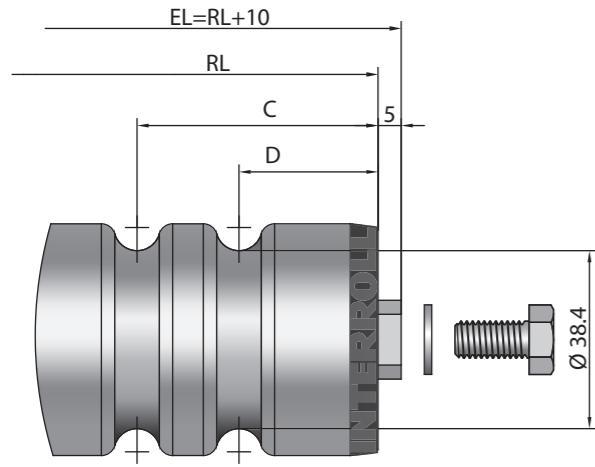


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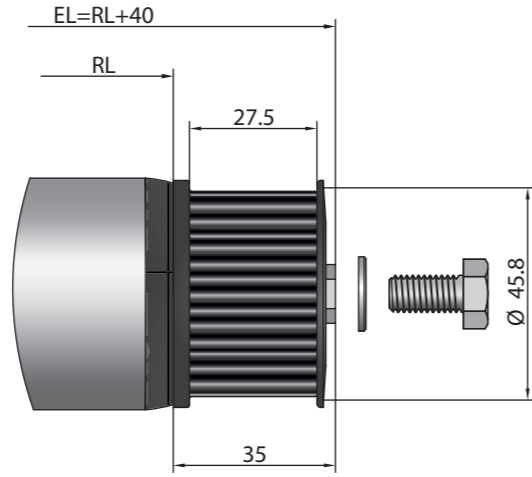
RollerDrive



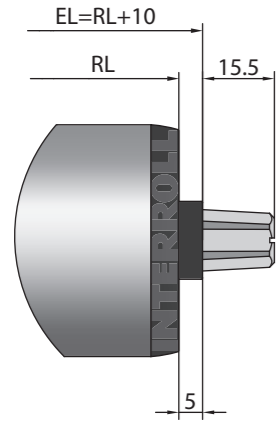
**2 grooves and M8 female thread fastening**



**Toothed belt drive head with M8 female thread fastening**



**Tapered hexagon spring shaft**



**M8 female thread fastening**

