

Product Information  
04/2015



# Interroll Conveyor Solutions

## **Rollers & 24 Volt DC RollerDrive**

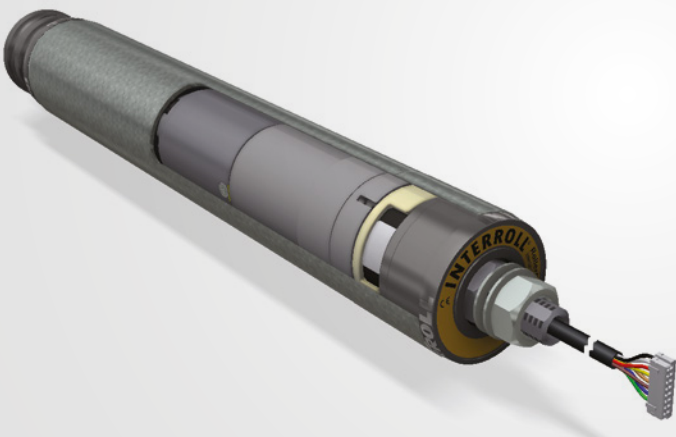


**Interroll Rollers and RollerDrive** are used for moving and sorting products in the smaller size range inside material handling facilities. Deploying dependable **Interroll Rollers and RollerDrive** frees up OEMs and systems integrators to concentrate on other important tasks such as system design, installation and controls, saving time and money.

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Interroll EC100  
24 Volt DC RollerDrive



Product Features

- Wide speed range
- Multiple drive options
- Optional PVC or polyurethane sleeving
- Safe, low voltage

Product Benefits

- Modest total cost of ownership
- Low energy consumption
- Rapid installation
- Maintenance free
- Fast ROI

Technical Data

General technical data, RollerDrive EC100

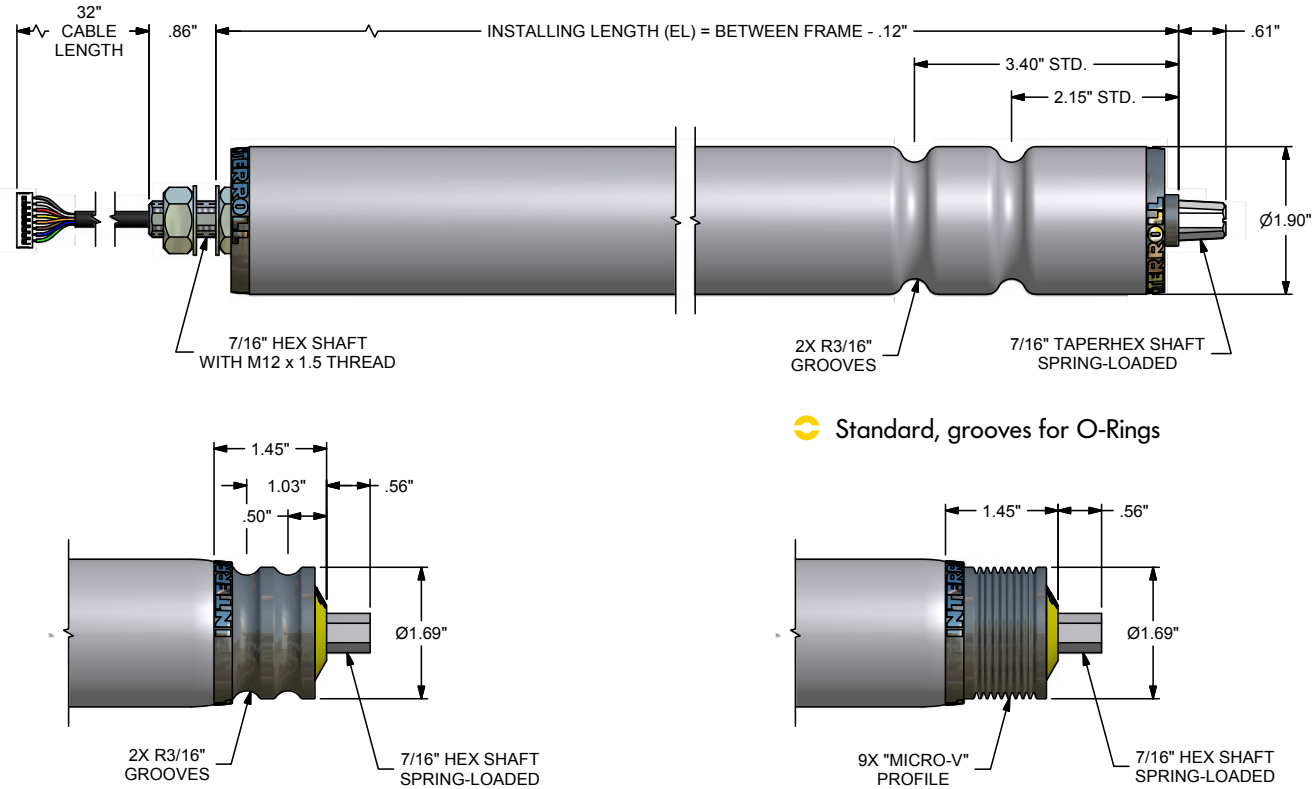
Diameter	1.9"
Nominal voltage	22-28 VDC
No load current	0.6 A
Max. continuous current	1.8 A
Max. start current	4.1 A
Mechanical performance	18 W
Drive efficiency	46%
Noise level	55 dB(A)
Minimum length	8.51"-11.67" (depending on application)

EC100 RollerDrive Performance

Gear Ratio	Speed Range Ft/min	Nominal Torque Inch-lb	Peak Torque Inch-lb
12:1	87-260		12.4
16:1	67-202		15.9
24:1	45-135		24.8
36:1	29-88		33.6
48:1	22-68		44.3
64:1	17-50		54
96:1	11-34		100

The **Interroll RollerDrive EC100** is an economical, high-performance brushless 24 volt DC internally motorized drive roller.

Dimensions



Poly-O bearing housing

Poly-Vee bearing housing

How to order

Please create a reference number with the following configurator.

RD - 8 -  -  -  -  - U -  - EL

MOTOR TYPE  
C = 24V EC100  
H = 24V EC100 W/ BRAKE

GEARBOX / SPEED RANGE  
F = 12:1 RATIO, 86 - 260 fpm  
H = 16:1 RATIO, 67 - 202 fpm  
L = 24:1 RATIO, 45 - 135 fpm  
Q = 36:1 RATIO, 29 - 88 fpm  
V = 48:1 RATIO, 22 - 68 fpm  
X = 64:1 RATIO, 16 - 50 fpm  
Z = 96:1 RATIO, 11 - 34 fpm

FIXED SHAFT  
1 = MALE THREAD M12x1.5, ZP  
2 = MALE THREAD M12x1.5, SS  
5 = NON-THREADED, SS

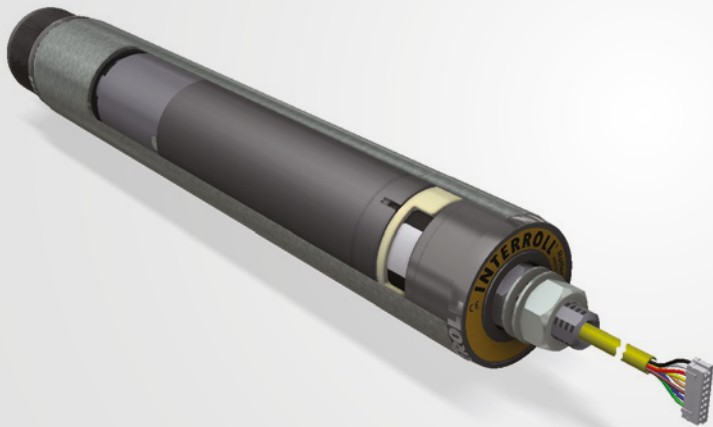
IDLER SHAFT  
SL = 7/16" HEX SPRING-LOADED, ZP  
FF = FEMALE THREAD 5/16"-18, SS  
FT = FEMALE THREAD M8, SS  
PS = POLY-V, 7/16" HEX SPRING-LOADED, SS  
PF = POLY-V, FEMALE THREAD M8, ZP  
RS = POLY-O, 7/16" HEX SPRING-LOADED, SS  
RF = POLY-O, FEMALE THREAD M8, ZP

AVAILABLE STANDARD TUBE GROUPS

TUBE TYPE	GALVANIZED	STAINLESS
STRAIGHT	R01	R04
2 STANDARD GROOVES	P28	P35
VARIABLE GROOVES	R06	R61
PVC SLEEVING (STRAIGHT)	E62	R15
PVC SLEEVING (2 STD GROOVES)	P32	P37
PVC SLEEVING (VARIABLE GROOVES)	P31	-
POLYURETHANE SLEEVING (STRAIGHT)	P44	E65
POLYURETHANE SLEEVING (2 STD GROOVES)	G74	F36
POLYURETHANE SLEEVING (VARIABLE GROOVES)	G75	S75

NOTATION  
EL = INSTALLING LENGTH  
ZP = ZINC PLATED  
SS = STAINLESS

Interroll EC110  
24 Volt DC RollerDrive



Product Features

- Wide speed range
- Multiple drive options
- Optional PVC or polyurethane sleeving
- Safe, low voltage

Product Benefits

- Modest total cost of ownership
- Low energy consumption
- Rapid installation
- Maintenance free
- Fast ROI

Technical Data

General technical data, RollerDrive EC110

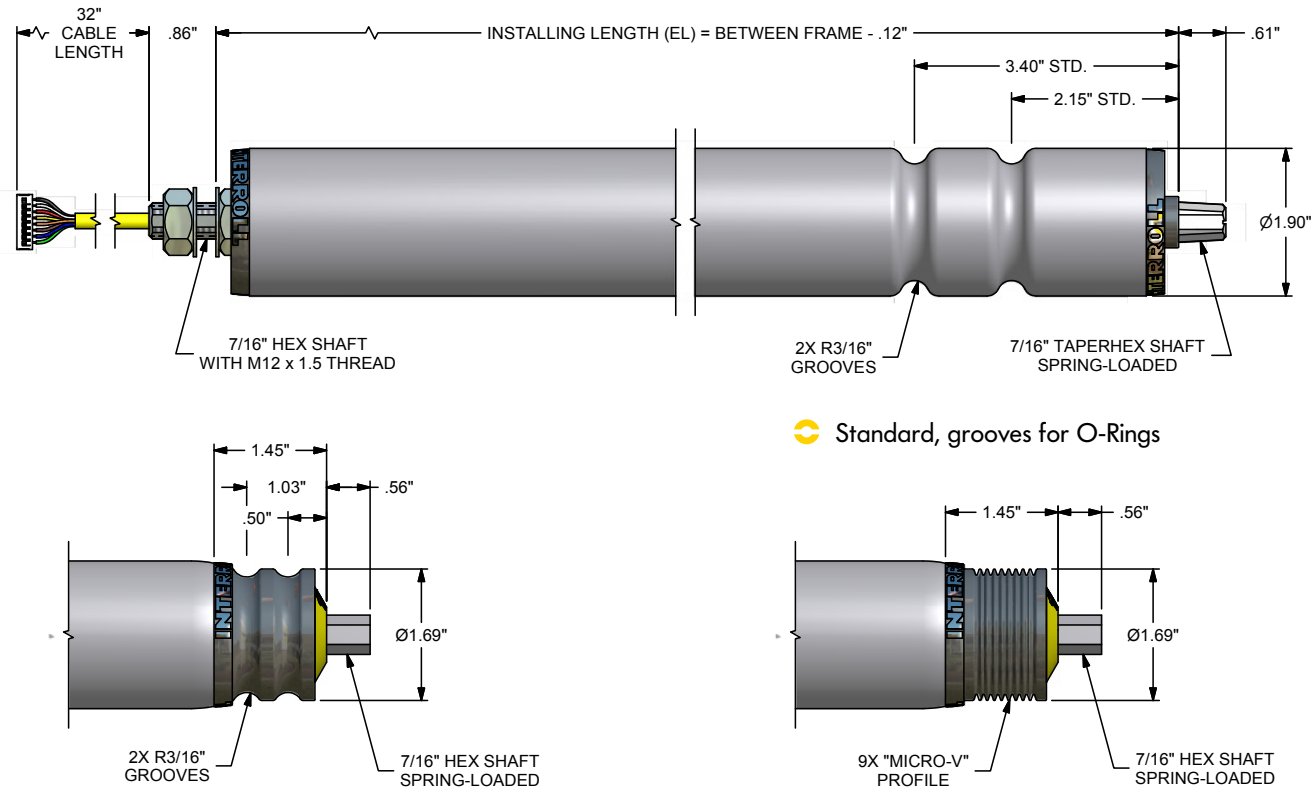
Diameter	1.9"
Nominal voltage	22-28 VDC
No load current	0.6 A
Max. continuous current	2.5 A
Max. start current	4.1 A
Mechanical performance	31 W
Drive efficiency	52%
Noise level	55 dB(A)
Minimum length	10.60"-14.24" (depending on application)

EC110 RollerDrive Performance

Gear Ratio	Speed Range Ft/min	Nominal Torque Inch-lb	Peak Torque Inch-lb
9:1	70-211	6.6	23.0
12:1	52-158	8.9	31.0
16:1	39-119	13.3	37.0
24:1	26-79	19.5	51.0
36:1	17-53	25.7	81.0
48:1	13-40	30.1	102.0
64:1	10-30	37.6	117.0

The **Interroll RollerDrive EC110** is an economical, high-performance brushless 24 volt DC internally motorized drive roller.

Dimensions



Poly-O bearing housing

Poly-Vee bearing housing

How to order

Please create a reference number with the following configurator.

RD - 8 -  -  -  -  - U -  - EL

MOTOR TYPE  
E = 24V EC100

GEARBOX / SPEED RANGE  
D = 9:1 RATIO, 70 - 211 fpm  
F = 12:1 RATIO, 52 - 158 fpm  
H = 16:1 RATIO, 39 - 119 fpm  
L = 24:1 RATIO, 26 - 79 fpm  
Q = 36:1 RATIO, 17 - 53 fpm  
V = 48:1 RATIO, 13 - 40 fpm  
X = 64:1 RATIO, 10 - 30 fpm

FIXED SHAFT  
1 = MALE THREAD M12x1.5, ZP  
2 = MALE THREAD M12x1.5, SS  
5 = NON-THREADED, SS

AVAILABLE STANDARD TUBE GROUPS

IDLER SHAFT  
SL = 7/16" HEX SPRING-LOADED, ZP  
FF = FEMALE THREAD 5/16"-18, SS  
FT = FEMALE THREAD M8, SS  
PS = POLY-V, 7/16" HEX SPRING-LOADED, SS  
PF = POLY-V, FEMALE THREAD M8, ZP  
RS = POLY-O, 7/16" HEX SPRING-LOADED, SS  
RF = POLY-O, FEMALE THREAD M8, ZP

TUBE TYPE

STRAIGHT  
2 STANDARD GROOVES  
VARIABLE GROOVES  
PVC SLEEVEING (STRAIGHT)  
PVC SLEEVEING (2 STD GROOVES)  
PVC SLEEVEING (VARIABLE GROOVES)  
POLYURETHANE SLEEVEING (STRAIGHT)  
POLYURETHANE SLEEVEING (2 STD GROOVES)  
POLYURETHANE SLEEVEING (VARIABLE GROOVES)

GALVANIZED

R01  
P28  
R06  
E62  
P32  
P31  
P44  
G74  
G75

STAINLESS

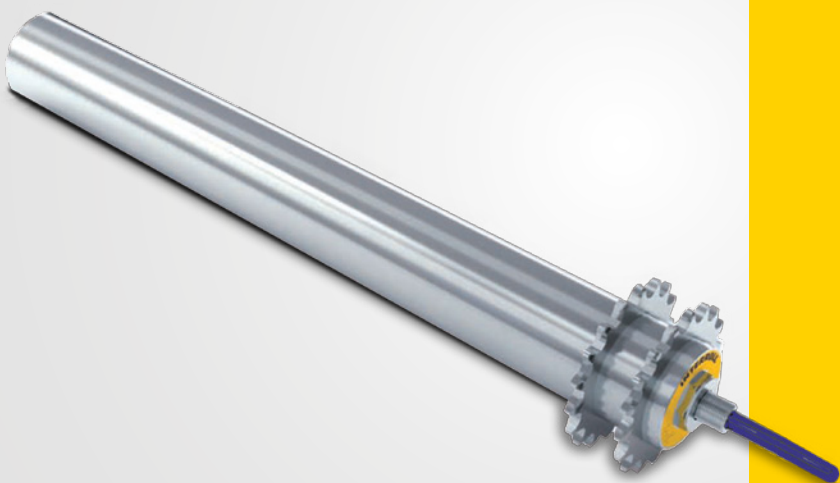
R04  
P35  
R61  
R15  
P37  
-  
E65  
F36  
S75

NOTATION  
EL = INSTALLING LENGTH  
ZP = ZINC PLATED  
SS = STAINLESS STEEL

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Interroll EC110 / EC120  
24 Volt DC RollerDrive



Product Features

- Heavy capacity for loads up to 2500 lb.
- Various sprocket options
- Safe low voltage

Product Benefits

- Modest total cost of ownership
- Low energy consumption
- Rapid installation
- Maintenance free
- Fast ROI

Technical Data

General technical data, RollerDrive EC110 / EC120

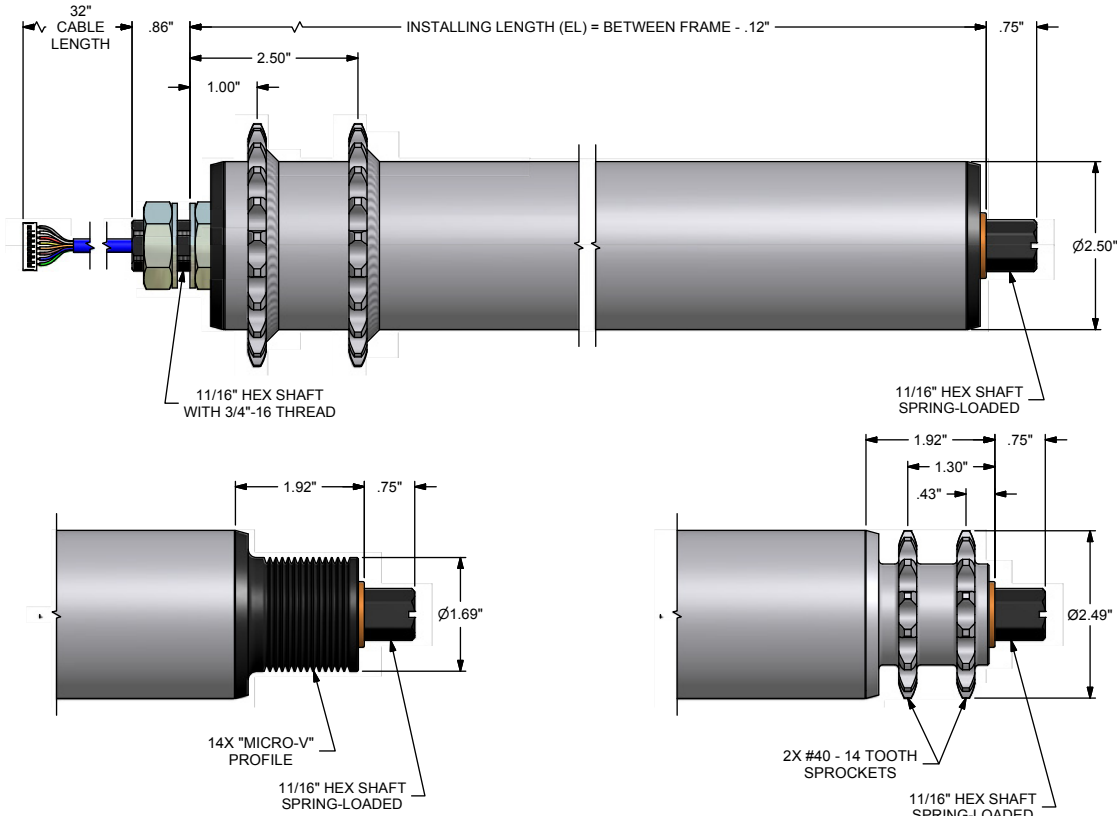
Diameter	2.5"
Nominal voltage	22-28 VDC
No load current	0.6 A
Max. continuous current	2.5 A
Max. start current	5.1 A
Mechanical performance	34 W
Drive efficiency	52%
Noise level	55 dB(A)
Minimum length	8.56"-12.73" (depending on application)

2.5" RollerDrive Performance

Gear Ratio	Speed Range Ft/min	Nominal Torque Inch-lb	Peak Torque Inch-lb
12:1 (EC110)	69-207	8.8	31.0
16:1 (EC110)	51-154	13.0	37.0
24:1 (EC110)	34-103	19.5	51.0
36:1 (EC110)	23-69	26.5	81.0
48:1 (EC110)	17-51	30.0	102.0
36:1 (EC120)	17-52	31.0	114.0
48:1 (EC120)	13-39	48.0	149.0
64:1 (EC120)	10-29	63.0	180.0
96:1 (EC120)	7-20	89.0	265.0

The **Interroll 2.5" RollerDrive EC110/EC120** is a high carrying capacity, brushless, 24 volt DC internally motorized drive roller for high torque, low speed applications.

Dimensions



Low-Profile Poly-V (for EC120 only)

Low-Profile Sprocket (for EC120 only)

How to order

Please create a reference number with the following configurator.

8-----A-1--EL

MOTOR TYPE

F = 24V EC110

G = 24V EC120

FIXED SHAFT

1 = C/S THREADED SHAFT .083" WALL (USED ONLY FOR THE EC110)

2 = C/S THREADED SHAFT, .120" WALL (USED ONLY FOR THE EC120)

GEAR BOX/SPEED RANGE

EC110

1 = 12:1 RATIO, 69 - 207 fpm

2 = 16:1 RATIO, 51 - 154 fpm

3 = 24:1 RATIO, 34 - 103 fpm

4 = 36:1 RATIO, 23 - 69 fpm

5 = 48:1 RATIO, 17 - 51 fpm

EC120

4 = 36:1 RATIO, 17 - 52 fpm

5 = 48:1 RATIO, 13 - 39 fpm

6 = 64:1 RATIO, 10 - 29 fpm

7 = 96:1 RATIO, 7 - 20 fpm

AVAILABLE STANDARD TUBE GROUPS

TUBE TYPE

STRAIGHT

STRAIGHT, POLYURETHANE SLEEVING, .083" WALL

(2) #40-21 TOOTH SPROCKETS ON MOTOR END, .083" WALL

(2) #40-21 TOOTH SPROCKETS ON IDLER END, .083" WALL

(2) #50-18 TOOTH SPROCKETS ON MOTOR END, .083" WALL

(2) #50-18 TOOTH SPROCKETS ON IDLER END, .083" WALL

(2) #60-15 TOOTH SPROCKETS ON MOTOR END, .083" WALL

(2) #60-15 TOOTH SPROCKETS ON IDLER END, .083" WALL

STRAIGHT, .120" WALL

STRAIGHT, POLYURETHANE SLEEVING, .120" WALL

(2) #40-21 TOOTH SPROCKETS ON MOTOR END, .120" WALL

(2) #40-21 TOOTH SPROCKETS ON IDLER END, .120" WALL

(2) #50-18 TOOTH SPROCKETS ON MOTOR END, .120" WALL

(2) #50-18 TOOTH SPROCKETS ON IDLER END, .120" WALL

(2) #60-15 TOOTH SPROCKETS ON MOTOR END, .120" WALL

(2) #60-15 TOOTH SPROCKETS ON IDLER END, .120" WALL

IDLER SHAFT

1 = C/S 11/16" HEX SPRING-LOADED .083 WALL

2 = C/S 11/16" HEX SPRING-LOADED .120 WALL

3 = LOW-PRO POLY-V 11/16" HEX SPRING .120 WALL

4 = LOW-PRO SPROCKET 11/16" HEX SPRING .120 WALL

NOTATION

C/S = CARBON STEEL

EL = INSTALLING LENGTH

	C/S, GALV.	C/S, MILL	C/S, ZINC
G60	-	-	-
G71	-	-	-
-	-	C20	L20
-	-	C21	L21
-	-	C22	L22
-	-	C23	L23
-	-	C24	L24
-	-	C25	L25
G55	-	C50	-
G7A	-	-	-
-	-	C2K	L2K
-	-	C2A	L2A
-	-	C2B	L2B
-	-	C2C	L2C
-	-	C2D	L2D
-	-	C2E	L2E



# Interroll DriveControl Card



### Product Features

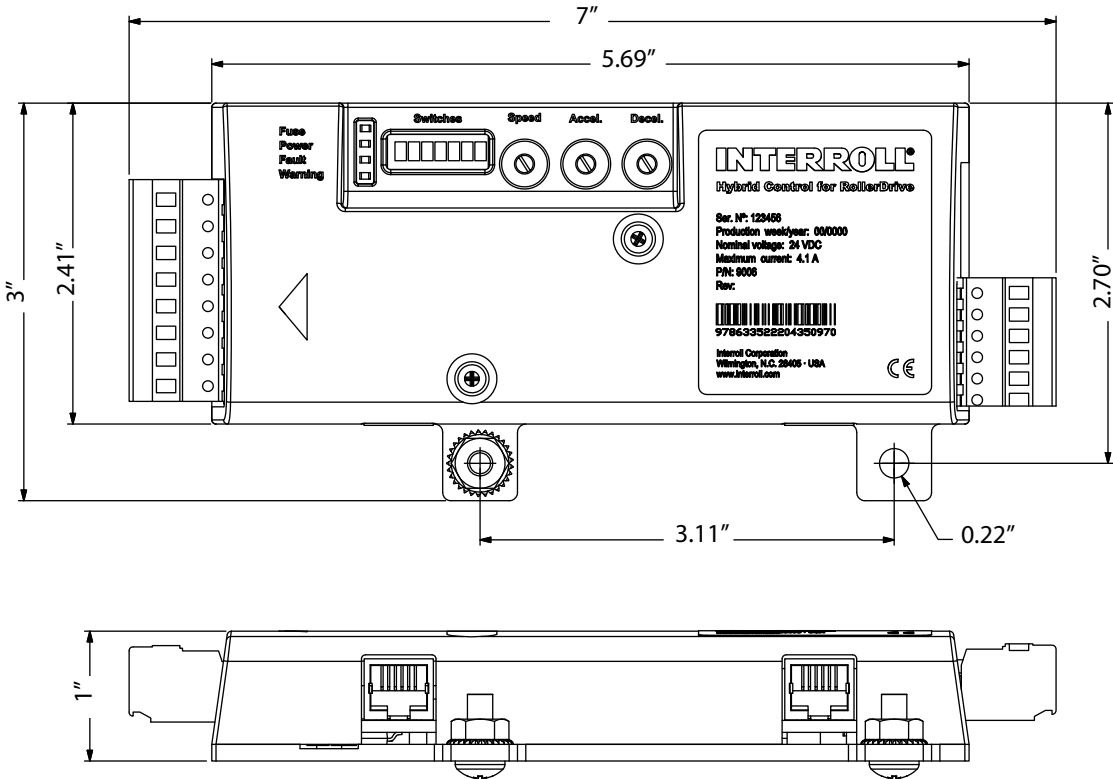
- One card controls EC100, EC110 and EC120 RollerDrive
- Standalone ZPA control, operates in both standard and enhanced singulation
- On-board adjustable speed, acceleration and deceleration
- Interfacing I/O provided for controlling speed, starting, stopping, sensor monitoring and operational status
- Drop-in replacement for Interroll P/N 8996A, 8916, 8916A, 9000 and 9004 DriveControls

### Product Benefits

- Constant speed up to nominal load
- Eliminates the need for external controls in most cases
- Saves costs via rapid installation and easy configuration

The Interroll DriveControl card operates Interroll RollerDrive models EC100, EC110, and EC120.

### Dimensions



### Technical Data

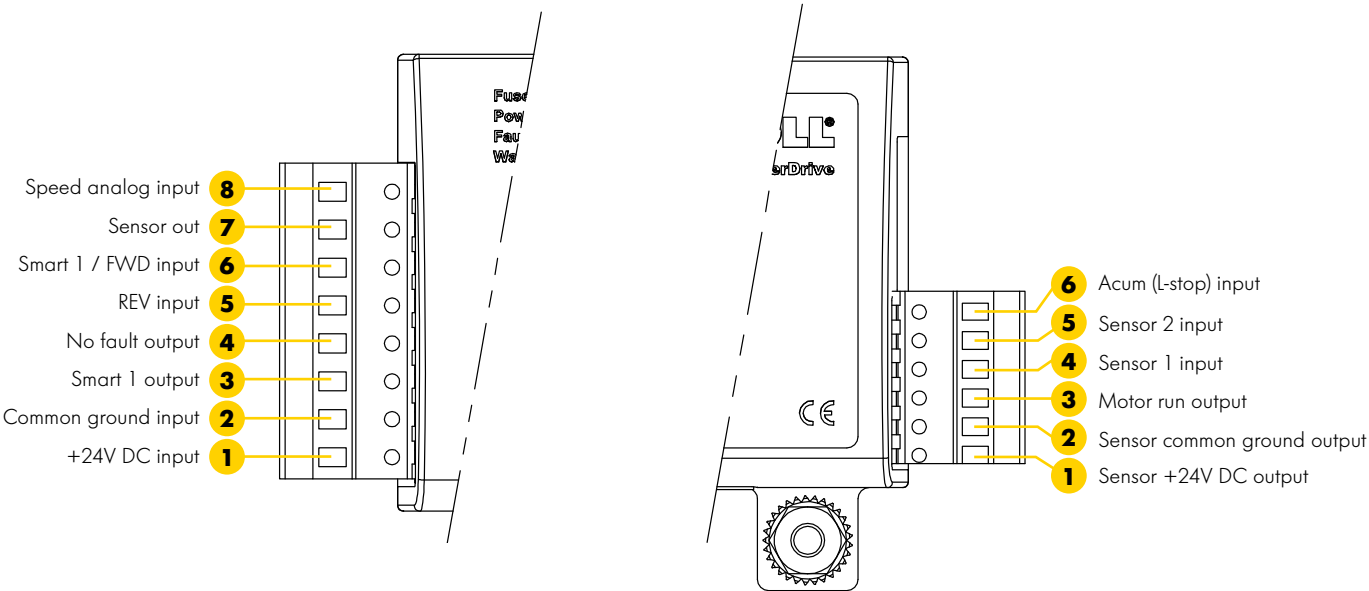
#### General technical data, DriveControl Card

Rated voltage	24V DC
Voltage range	22-26 VDC
Permissible voltage undulation	<5%
Max. continuous current	EC100: 1.8A EC110: 2.4A EC120: 2.5A
Max. start-up current	EC100: 4.1A EC110: 4.1A EC120: 5.1A
Fuse	5A Slow Blow

#### Ambient Conditions

Ambient temperature in operation	32° - 104° F
Ambient temperature during transport & storage	-4° - 167° F
Max. air humidity	90% non-condensing

### DriveControl configuration



For additional information, or to download the Interroll DriveControl card manual, please visit [www.interroll.us](http://www.interroll.us)

# DriveControl Typical Applications

## ZPA TECHNOLOGY

The DriveControl module provides zero pressure accumulation and other functionalities to a conveyor system. Each DriveControl card operates a RollerDrive unit, which in turn drives idler rollers using O-rings, Poly-Vee serpentine belts, chain and sprockets or a full width conveying belt. The DriveControl, RollerDrive, and idler rollers, with associated sensors and switches, are assembled into a short conveyor section known as a zone.

## ZERO PRESSURE ACCUMULATION

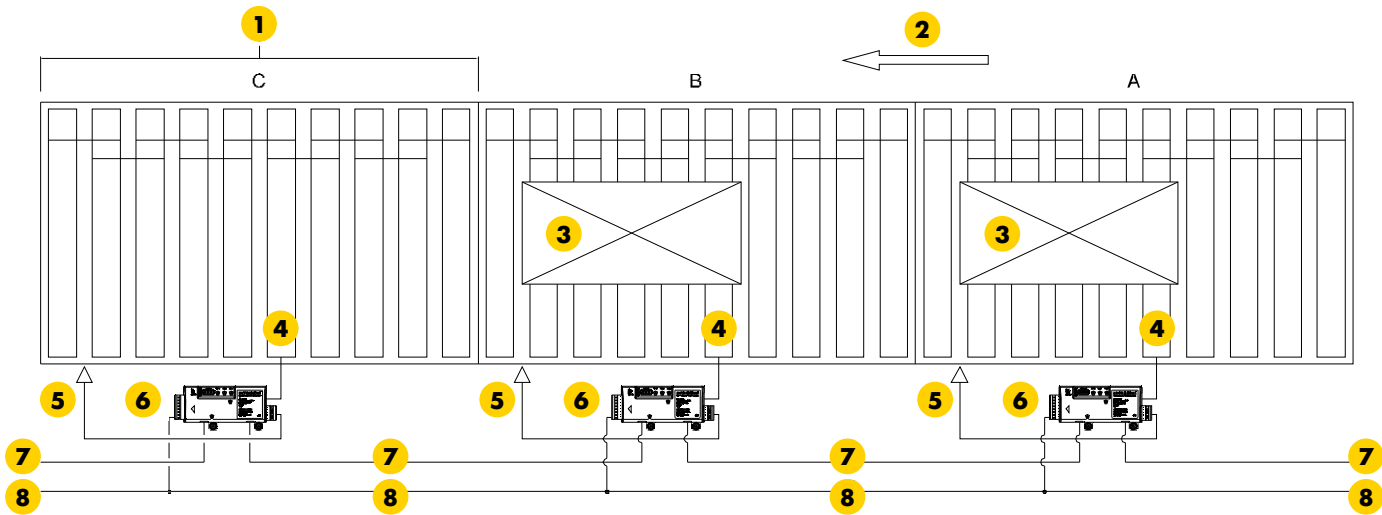
Zero pressure accumulation occurs as zones hold packages until the next downstream zone clears its sensor. When accumulation occurs, a low signal is passed upstream until each consecutive zone is occupied. Packages never touch each other, and no line pressure occurs.

## OTHER APPLICATION

Interroll RollerDrives and DriveControl cards may be used in a variety of applications. While possible applications are almost limitless, some include:

- 90° transfers
- CDLR conveyor
- Machinery
- Packaging equipment

### Principle of zones



### Typical ZPA conveyor configuration

- |                       |                                    |
|-----------------------|------------------------------------|
| 1 Zone                | 5 Photoeye                         |
| 2 Direction of travel | 6 DriveControl Card                |
| 3 Load                | 7 Peer-to-peer communication cable |
| 4 RollerDrive         | 8 +24V DC/GND                      |

# RollerDrive Options & Accessories

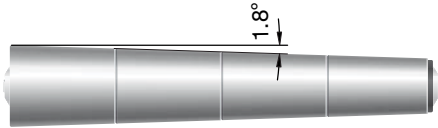
## ROLLER SLEEVES

RollerDrives and idler roller tubes can be fitted with PVC or Polyurethane sleeves. Sleeves increase the RollerDrive's surface friction, allowing them to be used in incline or decline applications. Sleeves also reduce noise and provide a softer surface to help protect sensitive goods being conveyed.

Gear Ratio	PVC Sleeve	Polyurethane Sleeve
Color	Gray	Orange
Wall thickness (in)	0.08"	.125"
Outer diameter on Roller (in)	2.06"	2.15"
Hardness	63 shore	80 shore

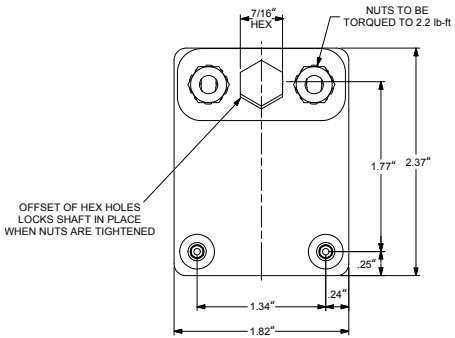
## CURVE SLEEVES

Interroll tapered rollers are constructed by pressing tapered sleeves onto an ordinary RollerDrive or idler roller. Mounting holes must be located lower in the outer radius frame to compensate for the 1.8° pitch of the sleeves.

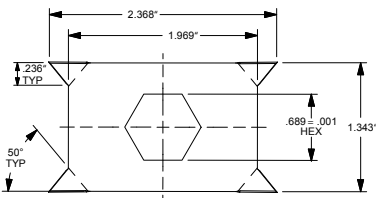


## ANTI-SPIN BRACKET

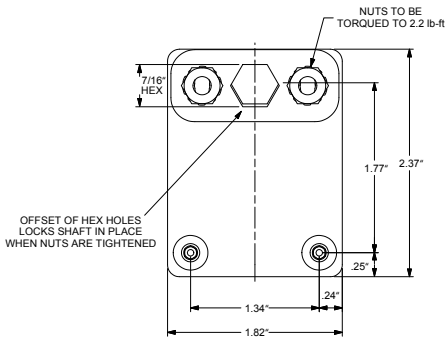
When you use a non-threaded hex shaft, an anti-spin bracket is necessary. This prevents the RollerDrive from rotating in the conveyor frame. Anti-spin brackets are available in point-up and flat-up versions.



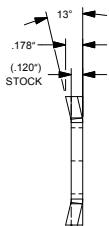
EC100/EC110 point up version dimensions



EC120 flat up versions dimensions



EC100/EC110 flat up version dimensions



The EC120 anti-spin bracket is available flat or points up.

Interroll EC310  
24 Volt DC RollerDrive



Product Features

- Safe, low voltage
- Fast and easy to install
- Flexible design
- Wide speed range
- Maintenance free

Product Benefits

- Up to 30% energy savings
- Fast ROI
- Several configurations possible
- Wide range of applications
- Low running costs

Technical Data

General technical data, RollerDrive EC310

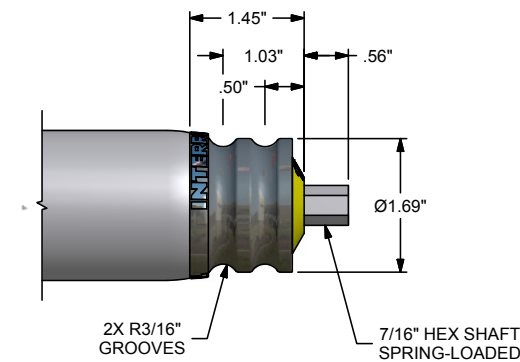
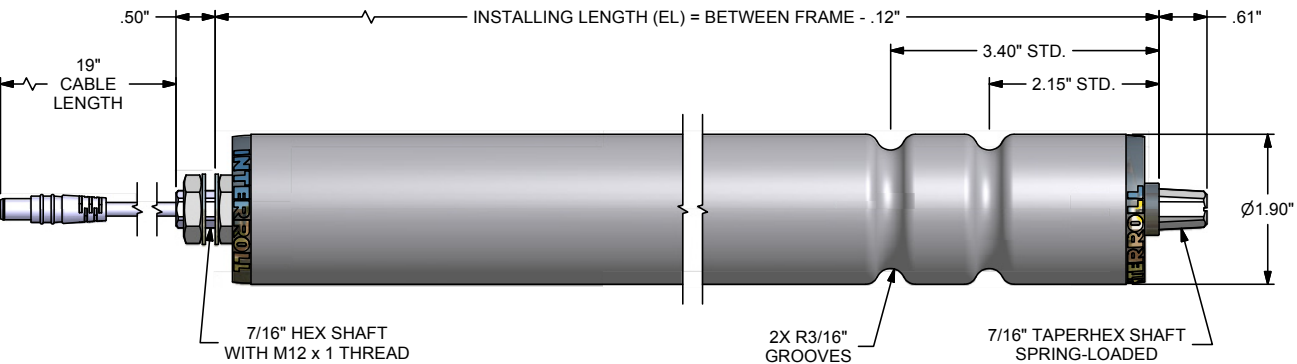
Diameter	1.9"
Nominal voltage	22-26 VDC
No load current	0.4 A
Rated current	2.0 A
Maximum peak current	5.0 A
Rated power	32 W
Noise level	55 dB(A)
Minimum length	9.76"-12.90"

EC310 RollerDrive Performance Overall Specifications

Gear Ratio	Min (fpm)	Max (fpm)	Normal Torque (in-lb)	Starting Torque (in-lb)	Holding Torque (in-lb)
9:1	17	344	3.98	9.74	3.19
12:1	13	258	5.40	12.92	4.25
16:1	10	193	7.17	17.26	5.66
20:1	8	155	8.94	21.59	7.08
24:1	6	129	10.71	25.84	8.50
36:1	4	86	16.11	38.76	12.74
48:1	3	64	21.42	51.77	16.99
64:1	2	48	28.58	69.03	22.65
96:1	2	32	42.83	103.45	33.98

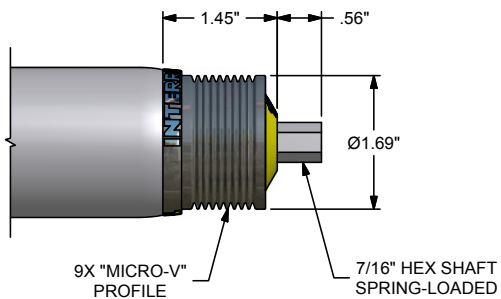
The **Interroll RollerDrive EC310** is a high-performance, brushless 24 volt DC internally motorized roller.

Dimensions



Poly-O bearing housing

Standard, grooves for O-Rings



Poly-Vee bearing housing

How to order

Please create a reference number with the following configurator.

RD - 8 -  -  -  -  - U -  - EL

MOTOR TYPE  
9 = 24V EC310

FIXED SHAFT  
K = MALE THREAD, M12x1, SS

GEARBOX / SPEED RANGE  
D = 9:1 RATIO, 17 - 344 fpm  
F = 12:1 RATIO, 13 - 258 fpm  
H = 16:1 RATIO, 10 - 193 fpm  
K = 20:1 RATIO, 8 - 155 fpm  
L = 24:1 RATIO, 6 - 129 fpm  
Q = 36:1 RATIO, 4 - 86 fpm  
V = 48:1 RATIO, 3 - 64 fpm  
X = 64:1 RATIO, 2 - 48 fpm  
Z = 96:1 RATIO, 2 - 32 fpm

AVAILABLE STANDARD TUBE GROUPS  
TUBE TYPE  
STRAIGHT  
2 STANDARD GROOVES  
VARIABLE GROOVES  
PVC SLEEVING (STRAIGHT)  
PVC SLEEVING (2 STD GROOVES)  
PVC SLEEVING (VARIABLE GROOVES)  
1/8" THICK POLYURETHANE SLEEVING (STRAIGHT)  
1/8" POLYURETHANE SLEEVING (2 STD GROOVES)  
1/8" POLYURETHANE SLEEVING (VARIABLE GROOVES)  
STRAIGHT (FOR POLY-O/POLY-V ONLY)  
PVC SLEEVING STRAIGHT (FOR POLY-O/POLY-V ONLY)  
1/8" THICK POLYURETHANE SLEEVING STRAIGHT (FOR POLY-O/POLY-V ONLY)

IDLER SHAFT  
SL = 7/16" HEX SPRING-LOADED, ZP  
FF = FEMALE THREAD 5/16"-18, SS  
FT = FEMALE THREAD M8, SS  
PS = POLY-V, 7/16" HEX SPRING-LOADED, SS  
PF = POLY-V, FEMALE THREAD M8, ZP  
RS = POLY-O, 7/16" HEX SPRING-LOADED, SS  
RF = POLY-O, FEMALE THREAD M8, ZP

GALVANIZED	STAINLESS
R01	R04
P28	P35
R06	R61
E62	R15
P32	P37
P31	-
P44	E65
G74	F36
G75	S75
G88	S06
G93	-
G83	S07

NOTATION  
EL = INSTALLING LENGTH  
ZP = ZINC PLATED  
SS = STAINLESS STEEL



# **ConveyorControl** **Control Cards for EC310 RollerDrive**



## **DriveControl 20 / 54**

The DriveControl 20 / 54 is the all-purpose interface for the RollerDrive EC310. Fifteen different speeds, as well as the direction of rotation, can be set using DIP switches.

Optically decoupled digital I/O's act as the interface to a higher-order controller. This enables, for instance, the direction of rotation of the 7 different speeds to be set from a PLC.

The braking energy of the RollerDrive is fed back into the 24 V grid. The voltage fed back from the RollerDrive EC310 is limited at 30 V by means of the integral brake chopper (voltage-dependently switched load resistance).

DriveControl 20 has an IP rating of 20. DriveControl 54 has an IP rating of 54.



## **ComControl**

This is used for single zone control of the conveyor system. It has three inputs and outputs.

Two outputs are supplied with voltage from the system and 0.5 amps can be applied, the remaining output is a relay contact. Terminals are integrated within an IP54 rated enclosure.

Input and output functions can be created freely in the configurator.

## **GatewayControl**

GatewayControl is used to connect ConveyorControl to higher-level controls in the system architecture and to integrate it into the network of an existing system.

Three types of GatewayControl exist depending on the type of bus available – Profibus, Profinet, or Ethernet/IP.

## **SegmentControl**

SegmentControl utilizes two sensors and RollerDrive. The SegmentControl can then control two zones of a conveyor system. Parameters for the switching logic of the sensors can be created easily in the Configurator.

The addressing of the SegmentControl and other modules is done by a magnetic contact, thus no further operating elements are needed. Three LEDs immediately display different statuses.

## **CentralControl**

This is a USB interface that is used for uploading and mapping settings for a conveyor with a PC and the Configurator.

This control is not used for zone control and is used for monitoring data communication between modules.







- Polypropylene bearing housing and raceway with stainless steel balls (type 302)
- Bearing housing has double labyrinth seals to prevent entry of contaminants
- Maximum recommended speed 15 FPM

- Gravity conveyor
- Idler roller

**NOTATION**  
**CS= CARBON STEEL**  
**S/S = STAINLESS STEEL**  
**ED&T= END DRILLED & TAP**  
**RL= ROLLER LENGTH**  
**OAL = OVERALL LENGTH**  
**BF= BETWEEN FRAMES**  
**B = SHAFT EXTENSION**

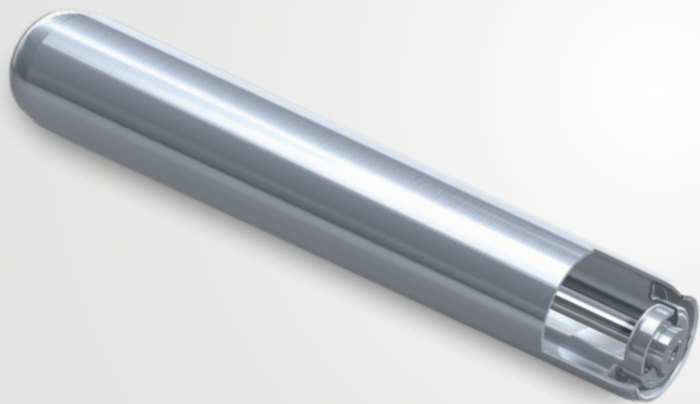
Technical data			General technical data, 1100 Series Roller												
NOTATION CS= CARBON STEEL S/S = STAINLESS STEEL ED&T= END DRILLED & TAP RL= ROLLER LENGTH OAL= OVERALL LENGTH BF= BETWEEN FRAMES B = SHAFT EXTENSION															
Tube diameter (D)	Tube material	Wall thickness	Shaft options	B	N/A	.56"	.75"	.56"	.75"	.56"	.75"	.56"	.56"	.56"	.06"
0.62"	Polished S/S	.035"		●	●	●									
0.75"	Polished S/S	.035"		●			●	●							
	Anodized aluminium	.035"		●			●	●							
0.78"	Gray PVC	.060"		●			●	●							
1.12"	Anodized aluminium	.050"		●	●	●	●	●	●	●	●	●			
1.18"	Gray PVC	.070"		●	●	●	●	●	●	●	●	●			
1.9"	Mill finished aluminium	0.065"		●						●	●	●	●	●	●
	Galvanized C/S	0.065"		●						●	●	●	●	●	●
	Polished S/S	0.065"		●						●	●	●	●	●	●
	Gray PVC	0.11"		●						●	●	●	●	●	●

Technical drawing of a roller assembly. The drawing shows a side view of the roller with a shaft passing through it. The shaft has a diameter labeled "Shaft Diameter". The roller has an outer diameter labeled "D". The length of the roller is labeled "RL". The total length of the assembly, including the shaft, is labeled "OAL". The distance from the center of the roller to the end of the shaft is labeled "B". The roller has a yellow band with the text "INTERROLL" and "100" on it.



# Interroll Rollers

## 1200 Series Roller



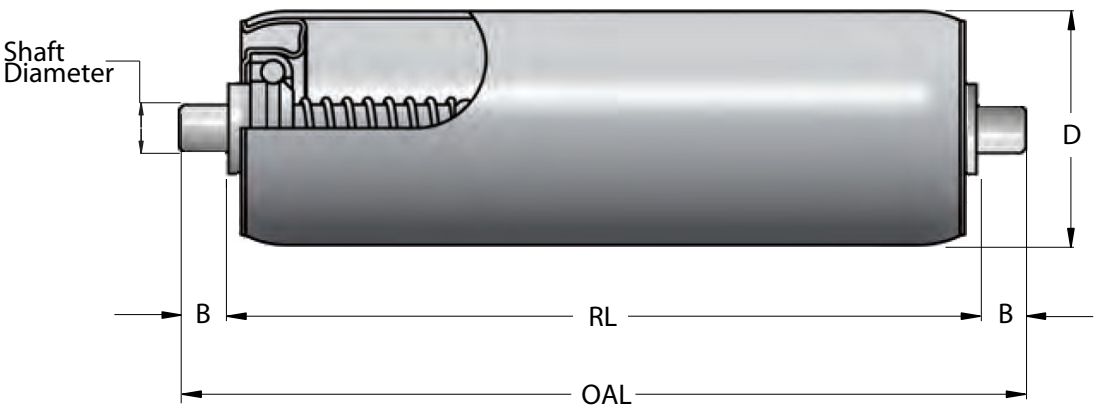
### Bearings

- Commercial carbon steel balls and raceway with zinc plated housing
- Maximum recommended speed 150 FPM

### Applications

- Gravity conveyor
- Low speed powered applications

## Dimensions



### Optional Features

- PVC or polyurethane sleeving for 1.9" OD
- 1/8" radius O-ring grooves for 1.38" OD
- 3/16" radius O-ring grooves for C/S and S/S 1.9" OD
- Sprockets welded to C/S tube for 1.9" and 2.5" OD

Typically BF = RL + 0.12"

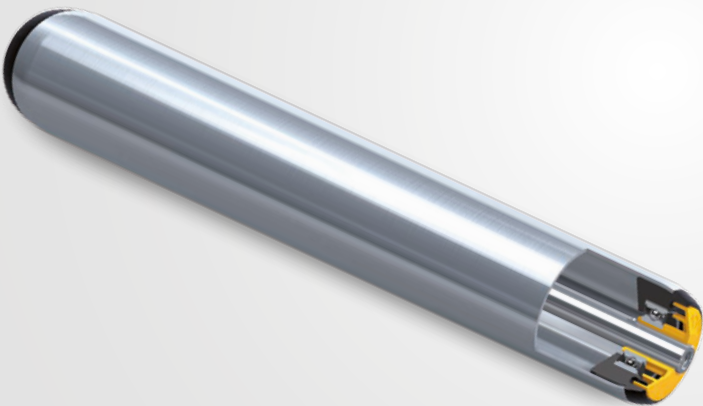
## Technical data

General technical data, 1200 Series Roller

NOTATION  
CS= CARBON STEEL  
OAL = OVERALL LENGTH  
RL= ROLLER LENGTH  
B = SHAFT EXTENSION  
BF= BETWEEN FRAMES  
ED&T= END DRILLED & TAP

Tube diameter (D)	Tube material	Wall thickness	Shaft options	B
				N/A
0.75"	Anodized aluminium	.035"	No shaft	
1"	Anodized aluminium	.049"	1/4" round C/S or S/S spring loaded	
1"	Galvanized C/S	.049"	1/4" round C/S or S/S threaded 1/4-20	
1.38"	Galvanized C/S	.049"	5/16" hex C/S or S/S spring loaded	
1.9"	Mill finished aluminium	.065"	7/16" hex C/S or S/S spring loaded	
1.9"	Galvanized C/S	.065"	7/16" hex C/S end drilled and tapped 5/16-18 x 5/8 deep (removable)	
1.9"	Galvanized C/S	0.109"	11/16" hex C/S spring loaded (optional dual spring loaded)	
2.5"	Mill finished C/S	0.120"		
2.5"	Galvanized C/S	0.120"		

Interroll Rollers  
1700 Series Roller



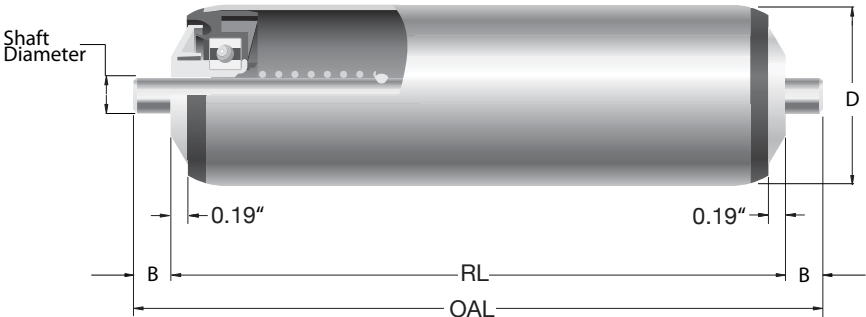
Bearings

- Precision steel standard, optional stainless steel bearings
- Polymer bearing cartridge contains a labyrinth seal to protect against contaminants
- Maximum recommended speed 400 FPM

Applications

- Line shaft conveyor
- Belt driven live roller conveyor
- Motorized roller conveyor

Dimensions



Optional Features

- PVC or polyurethane sleeving for 1.9" OD
- 1/8" radius O-ring grooves for 1.38" OD
- 3/16" radius O-ring grooves for C/S and S/S 1.9" OD
- Polymer tapered sleeves for curve applications 1.9" OD
- Poly-Vee and Poly-O bearing housings for 1.9" OD
- Taper Hex shafts for 7/16" hex punched conveyor frames
- Metric sizes available

Typically BF = RL + 0.12"

Technical data

General technical data, 1700 Series Roller

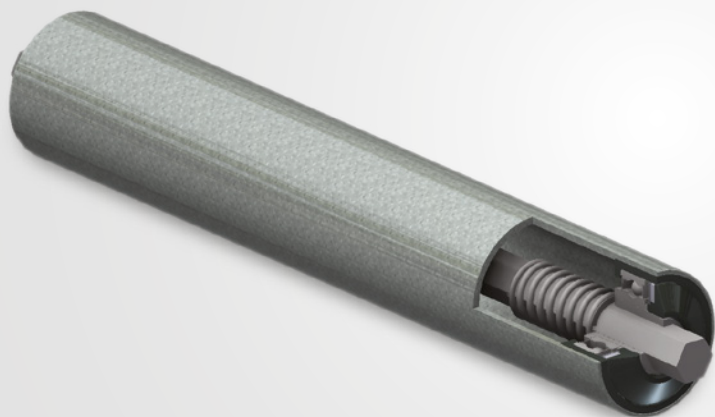
NOTATION  
CS= CARBON STEEL  
S/S = STAINLESS STEEL  
ED&T= END DRILLED & TAP  
RL= ROLLER LENGTH  
OAL = OVERALL LENGTH  
BF= BETWEEN FRAMES  
B = SHAFT EXTENSION

NOTATION CS= CARBON STEEL S/S = STAINLESS STEEL ED&T= END DRILLED & TAP RL= ROLLER LENGTH OAL = OVERALL LENGTH BF= BETWEEN FRAMES B = SHAFT EXTENSION																		
Tube diameter (D)	Tube material	Wall thickness	Shaft Options	B	N/A	.56"	.56"	.56"	.06"	.71"	.06"	.06"	.1"	.1"	.06"	.56"	.06"	
				No shaft	5/16" hex C/S or S/S spring loaded	7/16" hex C/S, aluminum or S/S spring loaded	7/16" hex C/S fixed ends (not spring loaded)	7/16" hex C/S or S/S ED&T 5/16-18 x 5/8" (removable)	Taper hex for 7/16" hex hole in side frame	12mm round C/S ED&T 5/16-18 x 5/8", fixed	12mm round C/S ED&T M8 x 15mm, fixed	1/2" round C/S threaded 1/2-13, removable	1/2" round C/S threaded 1/2-13, fixed	1/2" round C/S or S/S ED&T 5/16-18 x 5/8" deep, fixed	1/2" round C/S or S/S spring loaded	17mm round C/S ED&T 3/8-16 x 3/4" deep, fixed		
1.38"	Galvanized C/S	.049"		●	●						●	●						
1.9"	Polished S/S	.065"		●	●													
	Gray PVC	.110"		●		●	●	●	●	●			●	●	●	●		
	Polyethylene anti-litho	.110"		●		●	●	●	●	●			●	●	●	●		
	Mill finished aluminium	.065"		●		●	●	●	●	●			●	●	●	●		
	Mill finished C/S	.065"		●		●	●	●	●	●			●	●	●	●		
	Galvanized C/S	.065"		●		●	●	●	●	●			●	●	●	●		
2.5"	Galvanized C/S	.083"				●	●	●	●				●	●	●	●		
2.5"	Gray PVC	.125"				●	●	●	●				●	●	●	●		



# Interroll Rollers

## 1800 Series Roller



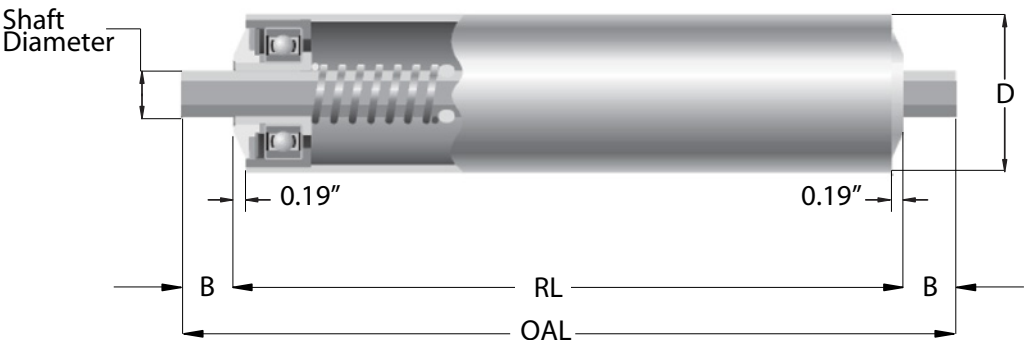
### Bearings

- Precision bearing in a centered metal bearing cartridge manufactured to tight tolerances for excellent concentricity and fit
- An external metal dirt guard shield and polyester felt contact seal provide the bearing with extra protection from contaminants
- Maximum recommended speed 500 FPM, for higher speeds consult Interroll

### Applications

- Belt conveyor take-up and return rollers
- High-speed packaging lines
- Heavy-duty applications requiring high-load capacity
- Transfer machines

## Dimensions



Typically BF = RL + 0.12"

## Technical data

General technical data, 1800 Series Roller

NOTATION  
CS= CARBON STEEL  
OAL = OVERALL LENGTH  
RL= ROLLER LENGTH  
B = SHAFT EXTENSION  
BF= BETWEEN FRAMES  
ED&T= END DRILLED & TAP

Tube diameter (D)	Tube material	Wall thickness	Shaft options	B
2"	Mill finished C/S	.12"	7/16" hex C/S spring loaded	.56"
	Zinc plated C/S	.12"	7/16" hex C/S ED&T 5/16-18 x 5/8" (removable)	.06"
			17mm (.669") dia. C/S ED&T 3/8-16 x 3/4", fixed	.06"
2.5"	Mill finished C/S	.12"	1 1/16" hex C/S spring loaded	.75"
	Galvanized C/S	.12"	1 1/16" hex C/S ED&T 3/8-16 x 3/4", fixed	.06"
			20mm (.787") dia. C/S ED&T 3/8-16 x 3/4", fixed	.06"
3"	Mill finished C/S	.18"	20mm (.787") dia. C/S ED&T 1/2-13 x 3/4", fixed	.06"
			25mm (.984") dia. C/S ED&T 5/16-18 x 3/4", fixed	.06"
3.5"	Mill finished C/S	.18"		

Application Data Sheet

Date

Company name

Contact

Phone

Fax

Email

Address

City

State

Zip

Brief Application Description: (include speed, load, and operating conditions, i.e. wet, oily, washdown, cold, hot, etc)

Basic Information

Between Frame (inches):

Desired Speed (fpm):

Maximum Weight (lbs):

Transported Material Type:

☐ Cardboard

☐ Plastic

☐ Steel

Maximum size (LxWxH inches):

Minimum size (LxWxH inches):

Conveyor Type:

☐ Straight

☐ Curve

☐ Incline

☐ Decline

Roller center to center (inches):

☐ Idlers needed? (Check if yes, blank if no)

Distance required from RollerDrive to Control Card:

Cable Length (inches):

Tube Material

☐ Carbon steel, galvanized

☐ Stainless Steel

Shaft Material

☐ Carbon steel, zinc plated

☐ Stainless steel

Drive Method

☐ Grooved (for 3/16" OD o-rings)

☐ Poly-O grooved hub (for o-rings)

☐ Poly-Vee (for multi-rib belts)

Sleeving

☐ Soft PVC, .08" thick, over 1.9" OD tube

☐ Polyurethane, .12" thick, over 1.9" OD tube

☐ Tapered segments, over 1.9" OD tube

Driven Shaft Type

☐ Male threaded .437 hex

☐ Non-threaded .437 hex

Non-driven Shaft Type

☐ .437" spring-loaded hex

☐ Female threaded for 5/16" bolt

☐ Female threaded for M8 bolt

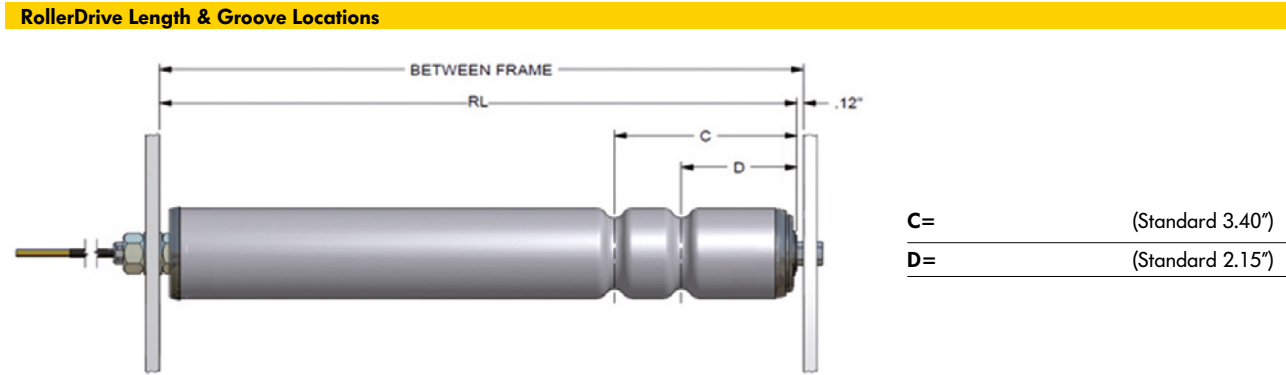
Control Type

☐ Simple on/off or PLC

☐ Zero Pressure Accumulation (ZPA)

☐ Continuous run

☐ Ethernet/IP



Contact factory for minimum C & D dimensions and for minimum distance between grooves

Application Data Sheet

Date

Company name

Contact

Phone

Fax

Email

Address

City

State

Zip

Brief Application Description: (include speed, load, and operating conditions, i.e. wet, oily, washdown, cold, hot, etc)

Basic Information

Between Frame (inches):

Desired Speed (fpm):

Maximum Weight (lbs):

Transported Material Type:

☐ Cardboard

☐ Plastic

☐ Steel

Maximum size (LxWxH inches):

Minimum size (LxWxH inches):

Tube Material

☐ Carbon steel, galvanized

☐ Carbon steel, mill finished

☐ Carbon steel, zinc plated

Tube Wall Thickness

☐ .083" wall

☐ .120" wall

Drive Method

☐ Grooved (for 3/16" OD o-rings)

☐ Sprocket(s), #40, 21 teeth

☐ Sprocket(s), #50, 18 teeth

☐ Sprocket(s), #60, 15 teeth

Sprocket/Groove Locations

☐ Motor End (A and/or B locations)

☐ Non-Driven End (C and/or D locations)

Sleeving

☐ Polyurethane (.12" thick), over 2.5" OD tube

Control Type

☐ Simple on/off or PLC

☐ Zero pressure Accumulation (ZPA)

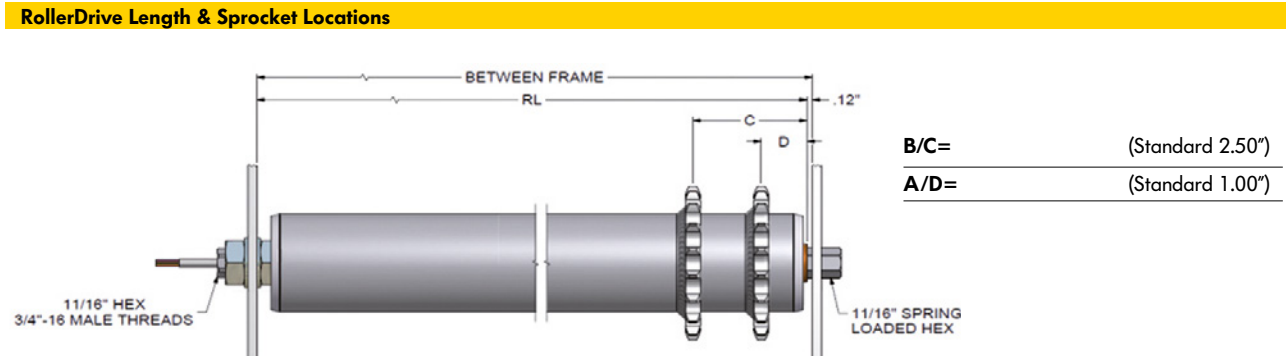
☐ Continuous run

Idlers

☐ Idlers needed?

Pitch

Roller center to roller center distance (inches):



Sprockets can also be in A & B locations. Contact factory for minimum locations and for minimum distance between sprockets.

Date \_\_\_\_\_

Company name \_\_\_\_\_ (Check one): ☐ Enduser ☐ Distributor ☐ Integrator/OEM

Contact \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Brief Application Description: (include speed, load, and operating conditions, i.e. wet, oily, washdown, cold, hot, etc) \_\_\_\_\_

Describe product being conveyed and number of rollers under product: \_\_\_\_\_

Quantity required \_\_\_\_\_

Bearing Type

- ☐ Commercial grade carbon steel
- ☐ Precision steel
- ☐ Precision stainless steel

Tube Material

Diameter \_\_\_\_\_

- ☐ Carbon steel, galvanized
- ☐ Stainless Steel
- ☐ Carbon steel, mill finish
- ☐ PVC
- ☐ Aluminium
- ☐ Other: \_\_\_\_\_

Accessories

Sleeving

- ☐ Soft PVC (.08" thick), over 1.9" OD tube, gray
- ☐ Polyurethane (.12" thick), over 1.9" or 2.5" OD tube, orange
- ☐ Tapered segments over 1.9" OD tube for curves, black

Sprockets\* ☐ Plastic ☐ Steel

Number of sprockets: \_\_\_\_\_

Chain number: \_\_\_\_\_

Number of teeth: \_\_\_\_\_

\*contact factory for assistance selecting sprockets

Shaft Material

- ☐ Carbon steel, mill finish
- ☐ Carbon steel, zinc plated
- ☐ Stainless steel
- ☐ Aluminium
- ☐ Other: \_\_\_\_\_

Shaft Size & Shape

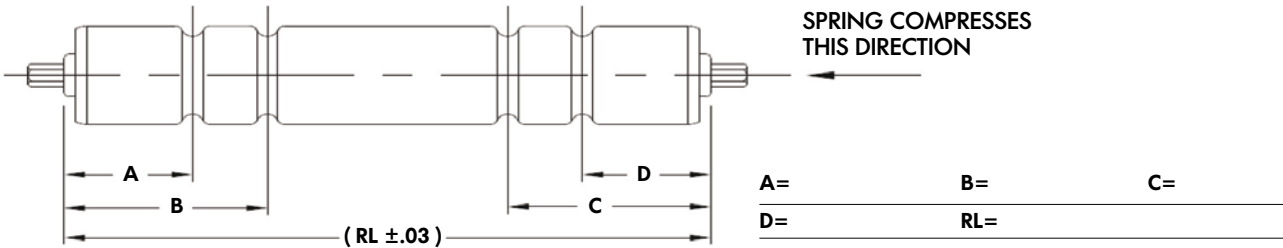
- ☐ .192" round
- ☐ 12 mm round
- ☐ 1/4" round
- ☐ 1/2" round
- ☐ 5/16" round
- ☐ 11/16" hex
- ☐ 5/16" hex
- ☐ 17mm round
- ☐ 3/8" hex
- ☐ 20mm round
- ☐ 7/16" hex
- ☐ 25/32" round

Shaft Configuration

- ☐ Fixed
- ☐ Spring-loaded
- ☐ Male threaded
- ☐ End drilled & tapped
- ☐ No shaft
- ☐ Taperhex Gold
- ☐ Loose
- ☐ Taperhex Black
- ☐ Other

Shaft extentions: L: \_\_\_\_\_ R: \_\_\_\_\_

Roller Length & Groove Locations



Contact factory for minimum A & B dimensions and for minimum distance between grooves



## About Interroll

Established in 1959, Interroll has grown to become the world's leading supplier of key equipment for material handling. Whether you're handling boxes, pallets, parcels or soft goods, no other supplier has such a comprehensive range of solutions on offer.

This is why system integrators, OEMs and operators choose Interroll as a trusted partner for material handling installations, worldwide.

Interroll's global reach ensures quick delivery and superior after-sale service for customers, no matter where they are. By helping increase our customers' efficiency, we boost their competitiveness in today's high-stress marketplace.

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