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.
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

<table>
<thead>
<tr>
<th>Diameter</th>
<th>1.9&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage</td>
<td>22.2-26 VDC</td>
</tr>
<tr>
<td>No load current</td>
<td>0.8 A</td>
</tr>
<tr>
<td>Max. continuous current</td>
<td>1.8 A</td>
</tr>
<tr>
<td>Max. start current</td>
<td>4.1 A</td>
</tr>
<tr>
<td>Mechanical performance</td>
<td>18 Nm</td>
</tr>
<tr>
<td>Drive efficiency</td>
<td>60%</td>
</tr>
<tr>
<td>Noise level</td>
<td>25 dBA</td>
</tr>
<tr>
<td>Minimum length</td>
<td>8.51&quot;-11.67&quot; (depending on application)</td>
</tr>
</tbody>
</table>

EC100 RollerDrive Performance

<table>
<thead>
<tr>
<th>Gear Ratio</th>
<th>12:1</th>
<th>16:1</th>
<th>24:1</th>
<th>36:1</th>
<th>48:1</th>
<th>64:1</th>
<th>96:1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed Range (Fpm)</td>
<td>87-269</td>
<td>67-202</td>
<td>45-135</td>
<td>29-88</td>
<td>22-68</td>
<td>17-50</td>
<td>11-34</td>
</tr>
<tr>
<td>Nominal Torque (Inch-lb)</td>
<td>12.4</td>
<td>15.9</td>
<td>24.8</td>
<td>33.6</td>
<td>44.3</td>
<td>54</td>
<td>100</td>
</tr>
<tr>
<td>Peak Torque (Inch-lb)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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

Dimensions

- **3.40" STD.**
- **2.15" STD.**

How to order

Please create a reference number with the following configurator.

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

<table>
<thead>
<tr>
<th>MOTOR TYPE</th>
<th>C = 24V EC100</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEARBOX / SPEED RANGE</td>
<td>F = 12:1 RATIO, 86 - 260 Fpm</td>
</tr>
<tr>
<td>RUBBER SHAFT</td>
<td>T = MALE THREAD M 12x1.5, ZP</td>
</tr>
<tr>
<td>IDLER SHAFT</td>
<td>S = 7/16&quot; HEX SPINDLE LOADED, ZP</td>
</tr>
<tr>
<td>AVAILABLE STANDARD TUBE GROUPS</td>
<td></td>
</tr>
<tr>
<td>TUBE TYPE</td>
<td>GALVANIZED</td>
</tr>
<tr>
<td>STRAIGHT</td>
<td>R01</td>
</tr>
<tr>
<td>3 STANDARD GROOVES</td>
<td>P28</td>
</tr>
<tr>
<td>VARIABLE GROOVES</td>
<td>R06</td>
</tr>
<tr>
<td>PVC SLEEVEING (STRAIGHT)</td>
<td>P32</td>
</tr>
<tr>
<td>PVC SLEEVEING (3 STD GROOVES)</td>
<td>P31</td>
</tr>
<tr>
<td>PVC SLEEVEING (VARIABLE GROOVES)</td>
<td>F44</td>
</tr>
</tbody>
</table>

NOTATION

- **EL** = INSTALLING LENGTH
- **ZP** = ZINC PLATED
- **SS** = STAINLESS STEEL

© 2015 Interroll
The Interroll RollerDrive EC110 is an economical, high-performance brushless 24 volt DC internally motorized drive roller.

How to order

Please create a reference number with the following configurator.

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

**Product Features**
- Wide speed range
- Multiple drive options
- Optional PVC or polyurethane slewing
- Safe, low voltage

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

**Technical Data**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>1.9&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage</td>
<td>24-28 VDC</td>
</tr>
<tr>
<td>No load current</td>
<td>0.6 A</td>
</tr>
<tr>
<td>Max. continuous current</td>
<td>2.5 A</td>
</tr>
<tr>
<td>Max. start current</td>
<td>4.1 A</td>
</tr>
<tr>
<td>Mechanical performance</td>
<td>31 W</td>
</tr>
<tr>
<td>Drive efficiency</td>
<td>52%</td>
</tr>
<tr>
<td>Noise level</td>
<td>55 dBA</td>
</tr>
<tr>
<td>Minimum length</td>
<td>10.67'-14.24&quot; (depending on application)</td>
</tr>
</tbody>
</table>

**EC110 RollerDrive Performance**

<table>
<thead>
<tr>
<th>Gear Ratio</th>
<th>Speed Range</th>
<th>Nominal Torque (in-lb)</th>
<th>Peak Torque (in-lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:1</td>
<td>70-211</td>
<td>6.6</td>
<td>23.0</td>
</tr>
<tr>
<td>12:1</td>
<td>95-150</td>
<td>8.9</td>
<td>31.0</td>
</tr>
<tr>
<td>16:1</td>
<td>109-119</td>
<td>13.3</td>
<td>37.0</td>
</tr>
<tr>
<td>24:1</td>
<td>26-79</td>
<td>19.5</td>
<td>51.0</td>
</tr>
<tr>
<td>36:1</td>
<td>17-53</td>
<td>25.7</td>
<td>81.0</td>
</tr>
<tr>
<td>48:1</td>
<td>13-40</td>
<td>30.1</td>
<td>102.0</td>
</tr>
<tr>
<td>64:1</td>
<td>10-30</td>
<td>37.6</td>
<td>117.0</td>
</tr>
</tbody>
</table>

**Dimensions**

<table>
<thead>
<tr>
<th>INSTALLING LENGTH (EL)</th>
<th>BETWEEN FRAME</th>
<th>1/2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>2K</td>
<td>32&quot; CABLE LENGTH</td>
<td>80&quot;</td>
</tr>
<tr>
<td>7/16&quot; TAPER HEX SHAFT SPRING-LOADED</td>
<td>1.18&quot;</td>
<td></td>
</tr>
<tr>
<td>7/16&quot; HEX SHAFT WITH M12 x 1.5 THREAD</td>
<td>1.45&quot;</td>
<td></td>
</tr>
<tr>
<td>ZINC PLATED</td>
<td>1.02&quot;</td>
<td></td>
</tr>
<tr>
<td>STAINLESS STEEL</td>
<td>0.50&quot;</td>
<td></td>
</tr>
<tr>
<td>GALVANIZED STAINLESS</td>
<td>1.03&quot;</td>
<td></td>
</tr>
</tbody>
</table>

**Fixed shaft**
- 1 = MAKE THREAD M (2x1.5, ZP)
- 2 = MAKE THREAD M (2x1.5, SS)
- S = NON-THREADED, SS

**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 - 42 fpm
- X = 64:1 RATIO, 10 - 30 fpm

**Idler shaft**
- SS = 7/16" HEX SPRING-LOADED, ZP
- SS = POLY-V 7/16" HEX SPRING-LOADED, SS
- RP = POLY-O 7/16" HEX SPRING-LOADED, SS
- RP = POLY-O 7/16" HEX SPRING-LOADED, SS

**Available standard tube groups**

- STRAIGHT
- VARIABLE GROOVES
- PVC SLEEVING (2 STD GROOVES)
- PVC SLEEVING (2 STD GROOVES)
- PVC SLEEVING (VARIVALE GROOVES)
- PVC SLEEVING (VARIVALE GROOVES)
- PVC SLEEVING (VARIVALE GROOVES)
- PVC SLEEVING (VARIVALE GROOVES)

**Examples**
- RD - 8 - - - - - - - - - U - - - EL
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.

How to order
Please create a reference number with the following configurator.

8 - [ ] - [ ] - A - 1 - [ ] - EL

How to order
Please create a reference number with the following configurator.
### 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

### General technical data, DriveControl Card

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated voltage</td>
<td>24V DC</td>
</tr>
<tr>
<td>Voltage range</td>
<td>22-26 VDC</td>
</tr>
<tr>
<td>Permissible voltage undulation</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Max. continuous current</td>
<td>EC100: 1.8A</td>
</tr>
<tr>
<td></td>
<td>EC110: 2.4A</td>
</tr>
<tr>
<td></td>
<td>EC120: 2.5A</td>
</tr>
<tr>
<td>Max. start-up current</td>
<td>EC100: 4.1A</td>
</tr>
<tr>
<td></td>
<td>EC110: 4.1A</td>
</tr>
<tr>
<td></td>
<td>EC120: 5.1A</td>
</tr>
<tr>
<td>Fuse</td>
<td>5A Slow Blow</td>
</tr>
</tbody>
</table>

### Ambient Conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient temperature in operation</td>
<td>32° - 104° F</td>
</tr>
<tr>
<td>Ambient temperature during transport &amp; storage</td>
<td>-4° - 167° F</td>
</tr>
<tr>
<td>Max. air humidity</td>
<td>90% non-condensing</td>
</tr>
</tbody>
</table>

### Technical Data

#### Dimensions

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

#### DriveControl configuration

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

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

Typical ZPA conveyor configuration

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.

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.

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

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.

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 using 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.

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Interroll RollerDrive 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

<table>
<thead>
<tr>
<th>Gear Ratio</th>
<th>Min (rpm)</th>
<th>Max (rpm)</th>
<th>Normal Torque (in-lb)</th>
<th>Starting Torque (in-lb)</th>
<th>Holding Torque (in-lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:1</td>
<td>3.98</td>
<td>17.17</td>
<td>3.74</td>
<td>2.51</td>
<td>4.25</td>
</tr>
<tr>
<td>12:1</td>
<td>5.40</td>
<td>13.25</td>
<td>5.89</td>
<td>4.25</td>
<td>7.68</td>
</tr>
<tr>
<td>16:1</td>
<td>7.17</td>
<td>17.26</td>
<td>7.86</td>
<td>5.66</td>
<td>9.12</td>
</tr>
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<td>20:1</td>
<td>8.94</td>
<td>21.97</td>
<td>10.44</td>
<td>7.68</td>
<td>11.51</td>
</tr>
<tr>
<td>24:1</td>
<td>12.71</td>
<td>25.84</td>
<td>13.09</td>
<td>8.50</td>
<td>13.09</td>
</tr>
<tr>
<td>32:1</td>
<td>16.11</td>
<td>38.76</td>
<td>17.74</td>
<td>12.74</td>
<td>17.74</td>
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<td>48:1</td>
<td>21.42</td>
<td>51.77</td>
<td>24.18</td>
<td>16.99</td>
<td>24.18</td>
</tr>
<tr>
<td>64:1</td>
<td>28.58</td>
<td>69.82</td>
<td>28.85</td>
<td>22.65</td>
<td>28.85</td>
</tr>
<tr>
<td>96:1</td>
<td>32.82</td>
<td>103.45</td>
<td>33.98</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dimensions

- Installing Length (EL) = Between Frame - 0.12" to 0.61"
- Cable Length

EC310 RollerDrive Performance Overall Specifications

- Product Features
- Product Benefits

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

How to order

Please create a reference number with the following configurator.

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

<table>
<thead>
<tr>
<th>MOTOR TYPE</th>
<th>F = 24V EC310</th>
</tr>
</thead>
</table>

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
- Z = 96:1 RATIO 2 - 32 fpm

<table>
<thead>
<tr>
<th>STANDARD TUBE GROUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRAIGHT</td>
</tr>
<tr>
<td>2 STANDARD GROOVES</td>
</tr>
<tr>
<td>VARIABLE GROOVES</td>
</tr>
<tr>
<td>PVC SLEEVING (STRAIGHT)</td>
</tr>
<tr>
<td>PVC SLEEVING (2 STD GROOVES)</td>
</tr>
<tr>
<td>PVC SLEEVING (VARIABLE GROOVES)</td>
</tr>
<tr>
<td>1/8 THICK POLYURETHANE SLEEVING (STRAIGHT)</td>
</tr>
<tr>
<td>1/8 POLYURETHANE SLEEVING (STANDARD)</td>
</tr>
<tr>
<td>1/8 POLYURETHANE SLEEVING (VARIABLE GROOVES)</td>
</tr>
<tr>
<td>STRAIGHT (FOR POLY-COPOLY V ONES)</td>
</tr>
<tr>
<td>PVC SLEEVING STRAIGHT (FOR POLY-COPOLY V ONES)</td>
</tr>
<tr>
<td>PVC SLEEVING (STRAIGHT) (FOR POLY-COPOLY V ONES)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AVAILABLE STANDARDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GALVANIZED STAINLESS</td>
</tr>
</tbody>
</table>

Note: EL = INSTALLING LENGTH
ZP = ZINC PLATED
SS = STAINLESS STEEL

Available configurations:

- Standard, grooves for O-Rings
- Poly-O bearing housing
- Poly-Vee bearing housing
- Poly-O bearing housing
- Poly-Vee bearing housing

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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 EtherCAT.

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.
# Interroll Rollers
## 1100 Series Roller

### Technical Data

#### General Technical Data, 1100 Series Roller

<table>
<thead>
<tr>
<th>Tube Diameter (D)</th>
<th>Tube Material</th>
<th>Wall Thickness</th>
<th>Shaft Options</th>
<th>Bearing Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1/16&quot;</td>
<td>Polished CS</td>
<td>0.065&quot;</td>
<td>3/8&quot; hex CS or SS spring loaded</td>
<td>Stainless Steel balls (type 302)</td>
</tr>
<tr>
<td>1.1/16&quot;</td>
<td>Polished SS</td>
<td>0.065&quot;</td>
<td>3/8&quot; hex CS or SS spring loaded</td>
<td>Stainless Steel balls (type 302)</td>
</tr>
<tr>
<td>1.25&quot;</td>
<td>Anodized aluminum</td>
<td>0.065&quot;</td>
<td>3/8&quot; hex CS or SS spring loaded</td>
<td>Stainless Steel balls (type 302)</td>
</tr>
<tr>
<td>1.1/16&quot;</td>
<td>Anodized aluminum</td>
<td>0.065&quot;</td>
<td>3/8&quot; hex CS or SS spring loaded</td>
<td>Stainless Steel balls (type 302)</td>
</tr>
<tr>
<td>1.18&quot;</td>
<td>Dark PVC</td>
<td>0.070&quot;</td>
<td>3/8&quot; hex CS or SS spring loaded</td>
<td>Stainless Steel balls (type 302)</td>
</tr>
<tr>
<td>1.18&quot;</td>
<td>Mill Finish Aluminum</td>
<td>0.065&quot;</td>
<td>3/8&quot; hex CS or SS spring loaded</td>
<td>Stainless Steel balls (type 302)</td>
</tr>
</tbody>
</table>

- **B**: Shaft Extension
- **RL**: Roller Length
- **OAL**: Overall Length
- **BF**: Between Frames

### Bearings
- 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

### Applications
- Gravity conveyor
- Idler roller

### Dimensions

- Typically BF = RL + 0.12"
Interroll Rollers
1200 Series Roller

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

Applications
• Gravity conveyors
• Low speed powered applications

Technical data

<table>
<thead>
<tr>
<th>Tube diameter (D)</th>
<th>Tube material</th>
<th>Wall thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.75&quot;</td>
<td>Anodized aluminum</td>
<td>0.135&quot;</td>
</tr>
<tr>
<td>1&quot;</td>
<td>Anodized aluminum</td>
<td>0.149&quot;</td>
</tr>
<tr>
<td>1.562&quot; (3/4&quot;)</td>
<td>Galvanized CS</td>
<td>0.149&quot;</td>
</tr>
<tr>
<td>1.9&quot;</td>
<td>Mill finished aluminum</td>
<td>0.165&quot;</td>
</tr>
<tr>
<td>1.0&quot;</td>
<td>Galvanized CS</td>
<td>0.165&quot;</td>
</tr>
<tr>
<td>1.0&quot;</td>
<td>Galvanized C/S</td>
<td>0.109&quot;</td>
</tr>
<tr>
<td>1.5&quot;</td>
<td>Mill finished C/S</td>
<td>0.120&quot;</td>
</tr>
<tr>
<td>1.5&quot;</td>
<td>Galvanized C/S</td>
<td>0.120&quot;</td>
</tr>
</tbody>
</table>

Shaft options
• No shaft N/A
• 1/4" round CS or S/S spring loaded .56"
• 1/4" round CS or S/S threaded 1/4-20 .75"
• 5/16" hex CS or S/S spring loaded .56"
• 7/16" hex CS or S/S spring loaded 5/16-18 x 5/8 deep (removable)
• 11/16" hex CS spring loaded optional end drilled spigot haunch

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

Dimensions

Typically BF = RL + 0.12"

NOTATION
CS = CARBON STEEL
OAL = OVERALL LENGTH
RL = ROLLER LENGTH
B = SHAFT EXTENSION
BF = BETWEEN FRAMES
ED&T = END DRILLED & TAP
Interroll Rollers
1700 Series Roller

Bearing
• 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

Technical data
General technical data, 1700 Series Roller

<table>
<thead>
<tr>
<th>Shaft Options</th>
<th>Wall Thickness</th>
<th>Shaft Diameter</th>
<th>Tube</th>
<th>Tube material</th>
</tr>
</thead>
<tbody>
<tr>
<td>No shaft</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Galvanized C/S</td>
</tr>
<tr>
<td>7/16” hex C/S</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Galvanized C/S</td>
</tr>
<tr>
<td>1/2” round C/S</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Galvanized C/S</td>
</tr>
<tr>
<td>1.9” radius</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Galvanized C/S</td>
</tr>
<tr>
<td>1/8” radius</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Galvanized C/S</td>
</tr>
<tr>
<td>3/16” radius</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Galvanized C/S</td>
</tr>
<tr>
<td>1/2” round C/S</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Galvanized C/S</td>
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<tr>
<td>1/2” round C/S</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Galvanized C/S</td>
</tr>
<tr>
<td>1.38” diameter</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Galvanized C/S</td>
</tr>
<tr>
<td>1.9” shaft extension</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Galvanized C/S</td>
</tr>
<tr>
<td>1/2” round C/S</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Mill finished C/S</td>
</tr>
<tr>
<td>1/2” round C/S</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Mill finished C/S</td>
</tr>
<tr>
<td>1.9” shaft extension</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Mill finished C/S</td>
</tr>
<tr>
<td>Gallons for 1.9”</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Mill finished C/S</td>
</tr>
<tr>
<td>1.38” diameter</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1.9” shaft extension</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Mill finished C/S</td>
</tr>
<tr>
<td>Gallons for 1.9”</td>
<td></td>
<td></td>
<td>1.9&quot;</td>
<td>Mill finished C/S</td>
</tr>
</tbody>
</table>

Typically BF = RL + 0.12”
Interroll Rollers

1800 Series Roller

Bearing
• 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

<table>
<thead>
<tr>
<th>Tube diameter</th>
<th>Tube material</th>
<th>Wall thickness</th>
<th>Shaft options</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;1/2&quot;</td>
<td>Mill finished C/S</td>
<td>1/8&quot;</td>
<td>3/8&quot;-16 C/S ED&amp;T, 5/16-18 C/S, removable</td>
<td>•</td>
</tr>
<tr>
<td></td>
<td>Zinc plated C/S</td>
<td>1/8&quot;</td>
<td>3/8&quot;-16 C/S ED&amp;T, 5/16-18 C/S, removable</td>
<td>•</td>
</tr>
</tbody>
</table>
| "3/4"         | Mill finished C/S | 1/8" | 3/8"-16 C/S ED&T, 5/16-18 C/S, removable | •
|               | Galvanized C/S | 1/8" | 3/8"-16 C/S ED&T, 5/16-18 C/S, removable | • |
| "1"           | Mill finished C/S | 1/8" | 1/2-13 C/S ED&T, 5/16-18, 5/16-18 C/S, removable | • |
| "1-1/2"       | Mill finished C/S | 1/8" | 1/2-13 C/S ED&T, 5/16-18, 5/16-18 C/S, removable | • |
| "2"           | Mill finished C/S | 1/8" | 3/4-16 C/S ED&T, 3/4-16, 3/4-16 C/S, removable | • |

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

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1.9” RollerDrive (EC100/EC110/EC310)

Company name
Contact
Phone
Email
Address
City
Brief Application Description: (include speed, load, and operating conditions, i.e. wet, oily, washdown, cold, hot, etc)

Basic Information
Between Frame (inches):
Driven Speed (fps):
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

RollerDrive Length & Groove Locations

Drive Method
- Grooved (for 3/16” OD o-rings)
- Poly-O grooved hub (for o-rings)
- Poly-Vee (for multi-rib belt)

Slewing
- Soft PVC, .08” thick, over 1.9” OD tube
- Polyurethane, .12” thick, over 1.9” OD tube
- Tapered segments, over 1.9” OD tube

Drum 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

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

2.5” RollerDrive

Company name
Contact
Phone
Email
Address
City
Brief Application Description: (include speed, load, and operating conditions, i.e. wet, oily, washdown, cold, hot, etc)

Basic Information
Between Frame (inches):
Driven Speed (fps):
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 roller center distance (inches):
Idlers needed?
Idlers needed?

Tube Material
- Carbon steel, galvanized
- Stainless Steel
Tube Wall Thickness
- .083” wall
- .120” wall

Pitch
- Roller center to roller center distance (inches):

RollerDrive Length & Sprocket Locations

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)

Slewing
- Polyurethane (.12” thick), over 2.5” OD tube

Sprockets can also be in A & B locations. Contact factory for minimum locations and for minimum distance between sprockets.
### Roller Application Data Sheet

**Company name:** [Enter 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.)

### Roller Length & Groove Locations

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

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>RL ±.03</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Spring compresses this direction**

### Quantity required

- **Enduser**
- **Distributor**
- **Integration/OEM**

### Bearing Type

- **Commercial grade carbon steel**
- **Precision steel**
- **Precision stainless steel**

### Tube Material

- **Carbon steel, galvanized**
- **Carbon steel, mill finish**
- **PVC**
- **Aluminium**
- **Other:**

### Tube 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

- **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 & Shapes

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

### Shaft Configuration

- **Fixed**
- **Male threaded**
- **End drilled & tapped**
- **No shaft**
- **Loose**
- **Taper hex Gold**
- **Other**
- **Taper hex Black**

*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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Wilmington, NC 28405
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Fax (910) 799-9626

interroll.us

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