

## 190-E24EZ

### 24VDC Roller Accumulating Curve Conveyor

The model 190-E24EZ Accumulating Conveyor uses a series of 24VDC motors to drive the tread rollers, eliminating the need for drive belts, chains, or line shafts. Quiet operation, zero-pressure accumulation, and ease of maintenance and installation are just some of the advantages.

- EZLogic® Accumulation System
- All-Electric Operation
- Adjustable MS-Type Floor Supports Available



Conveyor shown with optional floor supports and optional EZLogic® cover.

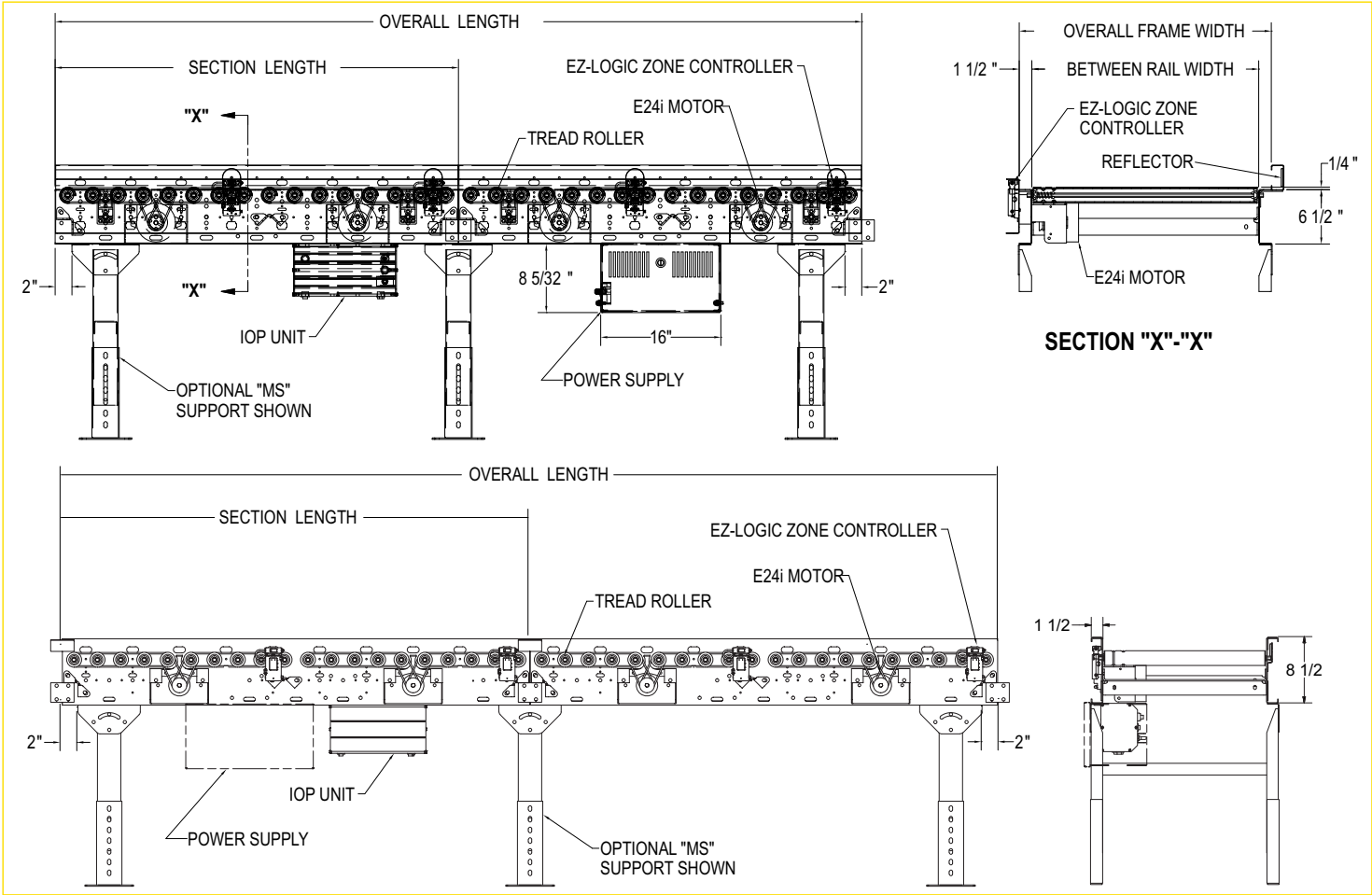
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| Section Length | Between Rail Width  | 9" 11" 13" 15" 17" 19" 21" 23" 25" 27" 31" 33" 37" 39"  |
|----------------|---------------------|---|
|                | Overall Frame Width | 12" 14" 16" 18" 20" 22" 24" 26" 28" 30" 34" 36" 40" 42" |
| 10' 0"         | Weights (lbs.)      | 320 335 350 365 375 390 405 415 430 445 470 485 510 525 |
| Per Foot       | Weights (lbs.)      | 20 21 23 24 26 27 28 30 31 32 35 36 39 41               |

Note: Bed Sections available in the following multiples:

- 12" Zones**  
2', 3', 5', 6', 7', 8', and 9'
- 18" Zones**  
3', 4 1/2', 6', 7 1/2', and 9'
- 24" Zones**  
2', 4', 6', 8', and 10'
- 30" Zones**  
2 1/2', 5', 7 1/2', and 10'
- 36" Zones**  
3', 6', and 9'



190-E24EZ

190-E24EZC (CURVE CONVEYOR)

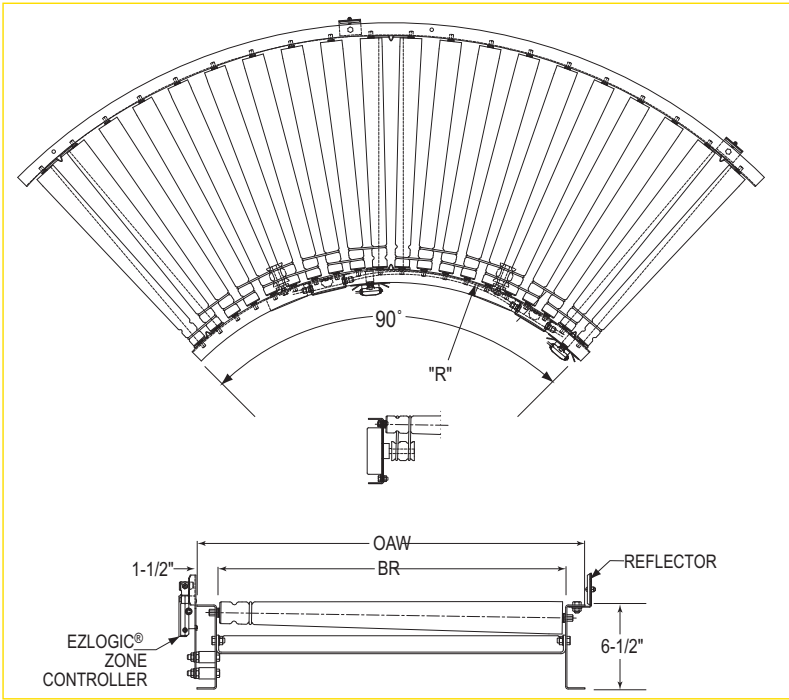
- EZLogic® Accumulation System
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| Between Rail Width | Overall Frame Width | "R"     | Number of Rollers | 90° and 60° Weights (lbs.) | 45° and 30° Weights (lbs.) |
|--------------------|---------------------|---------|-------------------|----------------------------|----------------------------|
| 9"                 | 12"                 | 24"     | 16                | 128                        | 70                         |
| 11"                | 14"                 |         |                   | 158                        | 87                         |
| 13"                | 16"                 |         |                   | 189                        | 104                        |
| 15"                | 18"                 |         |                   | 220                        | 121                        |
| 17"                | 20"                 |         |                   | 251                        | 138                        |
| 19"                | 22"                 |         |                   | 282                        | 155                        |
| 21"                | 24"                 | 32 1/2" | 20                | 313                        | 172                        |
| 23"                | 26"                 |         |                   | 343                        | 189                        |
| 25"                | 28"                 |         |                   | 374                        | 206                        |
| 27"                | 30"                 |         |                   | 405                        | 223                        |
| 31"                | 34"                 |         |                   | 467                        | 257                        |
| 33"                | 36"                 |         |                   | 498                        | 274                        |
| 37"                | 40"                 | 48"     | 30                | 559                        | 308                        |
| 39"                | 42"                 |         |                   | 590                        | 325                        |

9 in. BR has an outside mounted motor and uses Hytrol's 3.0 card. All weights in catalog are conveyor weights only. Accessories, crating, etc., are not included.



# 190-E24EZ

## Standard Specifications

**BED (E24EZ)** – Roller bed with 1.9 in. dia. roller x 16 ga. galvanized tube bearings spaced every 3 in. Mounted in 6 1/2 in x 12 ga. powder-painted formed steel channel frame, bolted together with splice plates.

**BED (E24EZX)** – Roller bed with 2 1/2 in. dia tapered to 1 11/16 in. dia. x 14 ga. galvanized. Mounted in 6 1/2 x 12 ga. powder-painted formed steel channel frame.

**MOTOR** – 24VDC motor with integrated motor control card. One in each zone of conveyor mounted on inside of BR.

**SLAVE O-RINGS** – 3/16 in. dia. polyurethane o-rings slave-drive zone tread rollers from motor.

**ACCUMULATION ZONES** – 18 in., 24 in., 30 in., and 36 in. zones available.

**SET LOW CHANNEL** – Added additional flanges to make the installation and removal of the optional cover simple.

**EZLOGIC® ZONE CONTROLLER** – Located in each zone (retro-reflective). NEMA 1, 2, IP 62. UL Approved.

**CROSS BRACKING** – Rods with turnbuckles are fastened to underside of bed to provide proper alignment of bed rollers and ensure correct product tracking. Supplied to section adjoining drive and every other section, 20 ft. bed lengths and over. Supplied on bed lengths 9 ft. and over.

**POWER SUPPLY (FOR MOTORS)** – 40 Amp DC power supply, 24 volt fixed output. Maximum of 40 zones per power supply. 120VAC, 24 Amp input. Mounted near center of conveyor.

**IOP** – Provides 27VDC, 100 watt power for EZLogic® accumulation system; contains slots for 4 input/output boards. Operates up to 50 zones with maximum of 25 on either side of IOP. Requires 120VAC or 230VAC single phase input.

**CONVEYING SPEED** – 25 to 125 FPM, set on integrated motor control card.

**CAPACITY** – Maximum load: 37 lbs. per foot, 75 lbs. per zone.

**FLOOR SUPPORTS** – Supplied as optional equipment.

# 190-E24EZ

## EZLOGIC® ACCUMULATION SYSTEM

Hytrol's EZLogic®, or Electronic Zero-Pressure Logic Accumulation System, combines the sensing accuracy of photo-electronics with discrete electronic logic control without the use of a PLC or pneumatic logic components. The EZLogic® Accumulation System provides many features including:

### Zero-Pressure Accumulation of Product

Zone Stop function is built in. Any zone may be transformed into a workstation by connecting a dry contact switching device to the auxiliary port of the EZLogic® Zone Controller. This feature is always used at the discharge end of the conveyor line, and may be used at any other location where a zone stop is required.

### Selectable Modes of Operation

**Singulation Mode** – Product separates while traveling down the conveyor and when it is released from the conveyor, creating a zone-length gap between products.

**Enhanced Slug Mode w/ Jam Protection** – Product does not separate when traveling down the conveyor or when it is released from the conveyor. This allows higher product throughput at any given conveyor speed. Product will not separate on the conveyor even when accumulation has been activated at the discharge end.

**Cascaded Slug Release** – Rather than releasing all zones simultaneously, this function introduces a momentary delay in the release of each zone, from discharge upstream.

**Dynamic Zone Allocation** – Automatically adjusts the conveyor's zone length to accommodate the length of the product being conveyed. Improves conveyor efficiency and system flexibility.

## Optional Equipment

**FLOOR SUPPORTS** – MS Type floor supports are available with a wide range of adjustment. Specify top of belt or roller elevation. One support required at every bed joint and ends of conveyor. Holes in feet for lagging to floor. Knee braces recommended above MS-6 support.

**POWER SUPPLY (FOR MOTORS)** – 120 to 240V, Single Phase, 20 and 40 Amp available. 120 volt at 4.56 Amps.

**POWER SUPPLY (FOR MOTORS)** 460 volt, 3 Ph., 20 and 40 Amp available.

**MOTOR AND SEPARATE CONTROL CARD** – Available with 3 Amp settings.

**POLY-TIER SUPPORTS** – 36 in. to 120 in. support heights in 6 in. increments. Knee braces required.

**CEILING HANGER** – 5/8 in. dia. x 8 ft. long unplated steel rods fully threaded. Other lengths and galvanized rods available.

**HIGH-SPEED DRIVE SPOOL** – Provides a speed range of 50 to 200 FPM.

**EZLOGIC®** – See EZLogic® Components Page.

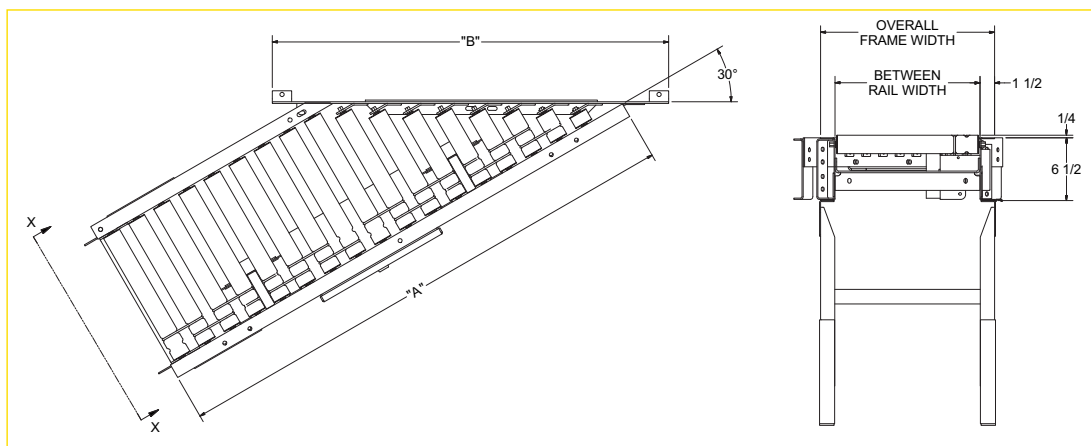
## 190-E24EZSS

24VDC 30° Live Roller Accumulating Straight Spur Conveyor

The model 190-E24 24VDC Live Roller Conveyor uses a series of 24VDC motors to drive the tread rollers, eliminating the need for drive belts, chains, or line shafts. Quiet operation and ease of maintenance and installation are just some of the advantages.

- EZLogic® Accumulation System
- All-Electric Operation (Power Supply Optional)
- Adjustable MS-Type Floor Supports Available

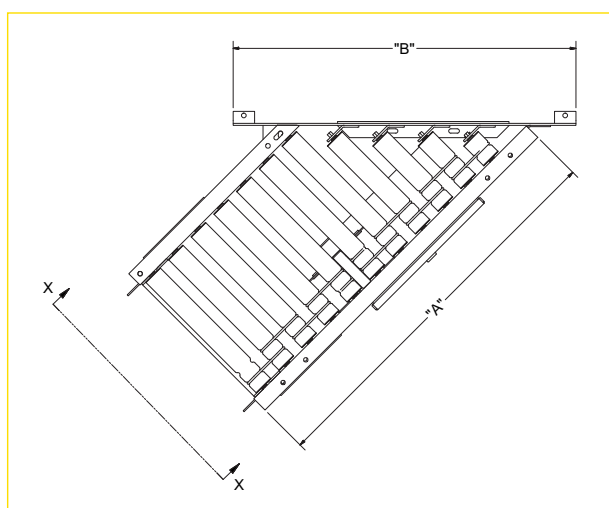
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## 190-E24EZSS

24VDC 45° Live Roller Accumulating Straight Spur Conveyor

- EZLogic® Accumulation System
- All-Electric Operation
- Adjustable MS-Type Floor Supports Available



## 190-E24EZSS

## Standard Specifications

**BED** – Roller bed with 1.9 in dia. roller x 16 ga. galvanized tube. Mounted in 6 1/2 in. 12 ga. powder-painted formed steel channel frame.

**SLAVE-DRIVEN** – Spurs are driven from power supply of model 190-E24 conveyor. 45-degree spur has one 24VDC motor with integrated motor control card, 30-degree spur has one 24VDC motor with integrated motor control card on 12 in. to 16 in. OAW, and 2VDC motor with integrated motor control card on 18 in. to 42 in. OAW. Motors mounted on the inside of the B.R.

**SLAVE O-RING** – 3/16 in. dia. polyurethane o-ring from drive spool to tread roller.

**ACCUMULATION ZONES** – 1 per spur with zone controller (retro-reflective).

**BEARINGS** – Pre-lubricated ball bearings in tread rollers.

**SPLICE PLATES** – Standard for connecting to 190-E24.

**CAPACITY** – See Load Capacity Chart.

**FLOOR SUPPORTS** – Supplied as optional equipment.

| Load Capacity Chart |                   |     |
|---------------------|-------------------|-----|
| Overall Length      | 190-E24EZSS       |     |
|                     | Capacity Per Spur |     |
|                     | 45°               | 30° |
| 21"                 | 65                | -   |
| 36"                 | 111               | -   |
| 48"                 | 148               | -   |
| 30"                 | -                 | 92  |
| 54"                 | -                 | 166 |
| 75"                 | -                 | 231 |

| Between Rail Width | Overall Frame Width | "A" |     | "B" |     | Weights (lbs.) |     |
|--------------------|---------------------|-----|-----|-----|-----|----------------|-----|
|                    |                     | 45° | 30° | 45° | 30° | 45°            | 30° |
| 9"                 | 12"                 | 21" | 30" | 23" | 29" | 177            | 224 |
| 11"                | 14"                 | 21" | 30" | 26" | 35" | 182            | 230 |
| 13"                | 16"                 | 21" | 30" | 29" | 38" | 188            | 235 |
| 15"                | 18"                 | 36" | 54" | 32" | 41" | 193            | 241 |
| 17"                | 20"                 | 36" | 54" | 35" | 47" | 198            | 247 |
| 19"                | 22"                 | 36" | 54" | 38" | 50" | 203            | 253 |
| 21"                | 24"                 | 36" | 54" | 41" | 53" | 209            | 258 |
| 23"                | 26"                 | 36" | 54" | 44" | 56" | 214            | 264 |
| 25"                | 28"                 | 36" | 54" | 47" | 62" | 219            | 270 |
| 27"                | 30"                 | 36" | 54" | 50" | 65" | 224            | 276 |
| 31"                | 34"                 | 48" | 75" | 56" | 74" | 235            | 287 |
| 33"                | 36"                 | 48" | 75" | 59" | 77" | 240            | 393 |
| 37"                | 40"                 | 48" | 75" | 65" | 86" | 251            | 304 |
| 39"                | 42"                 | 48" | 75" | 68" | 89" | 256            | 310 |

All weights in catalog are conveyor weights only. Accessories, crating, etc., are not included.

## Optional Equipment

**FLOOR SUPPORTS** – MS Type floor supports are available with a wide range of adjustment. Specify top of belt or roller elevation. One support required at every bed joint and ends of conveyor. Holes in feet for lagging to floor. Knee braces recommended above MS-6 support.

**POWER SUPPLY (FOR MOTORS)** – 40, 20, and 5 Amp available in 115, 230, or 460 volt.

**HIGH SPEED DRIVE SPOOL** – Provides a speed range of 50 to 200 FPM. Capacity affected with speed change.

**DRIVE** – Motors mounted on the inside of the frame channel.

**GUARD RAILS** – Adjustable Universal Channel Guard Rail, fixed channel or type A or B angle. Note: If product comes in contact with guard rails, product flow will be affected.

**POLY-TIER SUPPORTS** – 36 in. to 120 in. support heights in 6 in. increments. Knee braces supplied.

**CEILING HANGER** – 5/8 in. dia. x 8 ft. long unplated rods fully threaded. Other lengths and galvanized rods available.

**MOTOR AND SEPARATE CONTROL CARD** – Available with 3 Amp setting.