

# BZIE24EZ

## 24VDC Incline Belt-Over Roller Accumulating Conveyor

The model BZIE24EZ accumulating conveyor uses a series of 24VDC motors to drive full width belt-over roller zones. Quiet operation, zero-pressure accumulation with a roller bed design are some of the advantages. It can be equipped with a nose-over transition section at the infeed end to ensure a smooth transition from the horizontal to incline plane.

- EZLogic® Accumulation System
- All-Electric Operation
- Adjustable MS-Type Floor Supports Available
- Direct Drive Roller
- Pop-Out Roller



Conveyor shown with optional floor supports.



### Power Supply Chart

Standard Motor with Card (033.090023)

	Number of Drives	Amps	Voltage
EB-000003	1-5	20	115VAC
EB-000004	1-10	40	115VAC
EB-000005	1-5	20	460VAC
EB-000006	1-10	40	460VAC
EB-000007	1	5	115VAC
EB-000007	1	5	460VAC

125 WATT Motor with Card (033.090023)

	Number of Drives	Amps	Voltage
EB-000003	1-4	20	115VAC
EB-000004	1-8	40	115VAC
EB-000005	1-4	20	460VAC
EB-000006	1-8	40	460VAC
EB-000007	1	5	115VAC
EB-000007	1	5	460VAC

Section Length	Between Rail Width	15"	21"	27"	33"
	Belt Width	14"	20"	26"	32"
	Overall Frame Width	19 1/4"	25 1/4"	31 1/4"	37 1/4"
16' 0"	Weights (lbs.)	500	545	580	623
Per Foot	Weights (lbs.)	27	31	35	40

Bed Sections available in the following multiples:

**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'

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## Standard Specifications

**BED** – Roller bed with 12 ga. painted bolt-in pans. Mounted in 8 1/2 in x 12 ga. powder-painted formed steel channel frame, bolted together with splice plates.

**DRIVE ROLLER** – 1.9 in dia. fully lagged, trapezoidal crown.

**CLUTCH ROLLER** – 1.9 in dia. one directional roller included in incline zones.

**BELT** – PVC, endless splice.

**MOTOR** – 24VDC, 100W motor. One in each zone of conveyor mounted on outside coupled directly to a lagged drive roller.

**MOTOR CONTROL CARD** – Used with each 24VDC Motor utilizing the 4A setting mounted on outside frame.

**ACCUMULATION ZONES** – 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.

**NOSE-OVER SECTION** – A zone length section provides a transition of product from incline to horizontal.

**POWERED FEEDER/TAIL BED** – A horizontal zoned length section driven by a 24VDC motor.

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

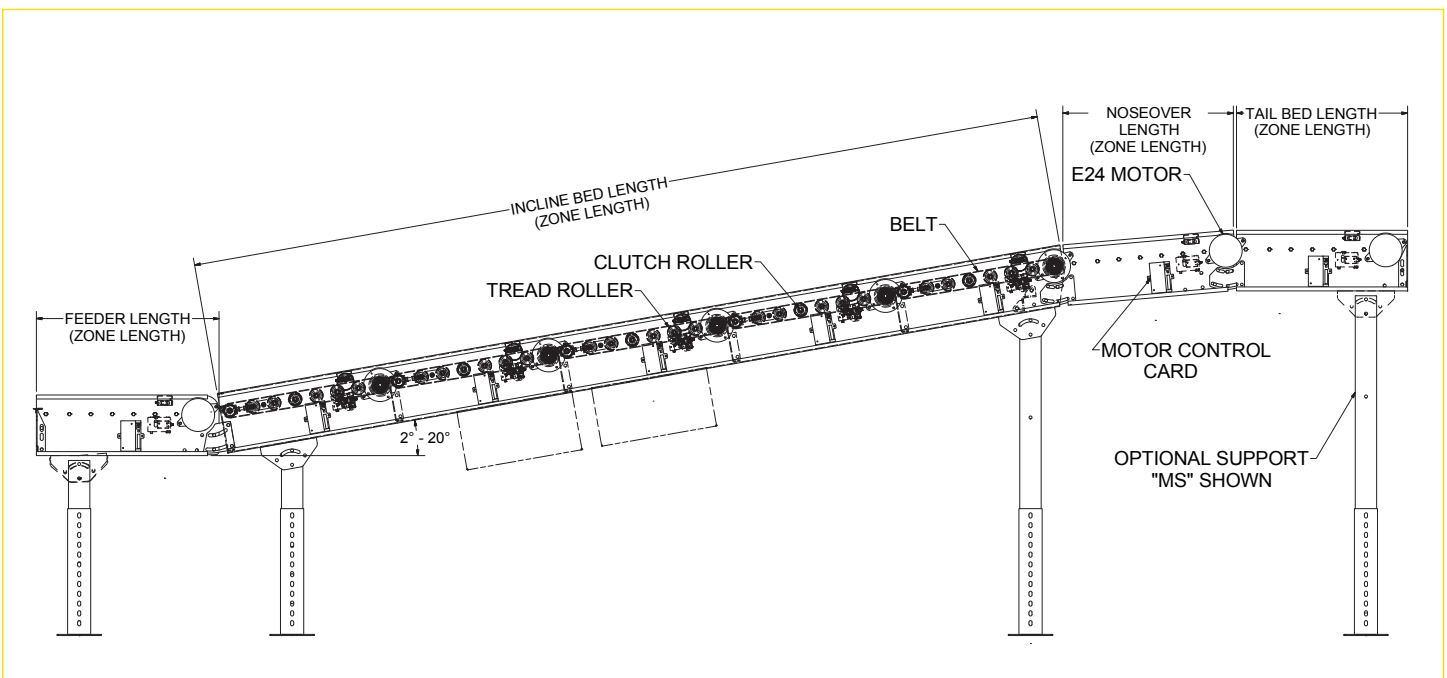
**POWER SUPPLY (FOR MOTORS)** – 40 Amp DC power supply, 24 volt fixed output. Maximum of 10 zones per power supply. 120VAC, 9.12 Amp input. Mounted near center of conveyor.

**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** – 30 lbs. per zone at 65 FPM. See below capacity chart

**CAPACITY** – See below for Capacity Chart.

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



# BZIE24EZ

Speed Chart							
Switches				100W24		125W24	
SW2-1	SW-2	SW-3	SW-4	RPM	033.090023 Standard Card	RPM	033.090023 Standard Card
OFF	OFF	OFF	OFF	280	161	350	201
OFF	OFF	OFF	ON	265	152	331	190
OFF	OFF	ON	OFF	250	144	312	179
OFF	OFF	ON	ON	235	135	293	168
OFF	ON	OFF	OFF	220	126	274	157
OFF	ON	OFF	ON	205	118	255	147
OFF	ON	ON	OFF	190	109	236	136
OFF	ON	ON	ON	175	101	217	125
ON	OFF	OFF	OFF	160	92	198	114
ON	OFF	OFF	ON	145	83	179	103
ON	OFF	ON	OFF	130	75	160	92
ON	OFF	ON	ON	115	66	141	81
ON	ON	OFF	OFF	100	57	122	70
ON	ON	OFF	ON	85	49	103	59
ON	ON	ON	OFF	70	40	84	48
ON	ON	ON	ON	55	32	65	37

Maximum Capacity Chart	
Angle (degrees)	Incline (lbs)
2.5	75
5	75
7.5	63
10	49
12.5	39
15	29
17.5	29
20	24

Contact factory for larger degrees.

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## 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)** – 20 Amp power supply available, 5 zones maximum. 120 volt at 4.56 Amps.

**POWER SUPPLY (FOR MOTORS)** – 460 volt, 3 Ph., 20 and 40 Amp available. Motors mounted on outside of channel.

**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.

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