

Model 190-ABEZ Live Roller Conveyor (Zero Pressure Accumulating Type)

The Model 190-ABEZ is a horizontal live roller conveyor, designed for applications that require accumulation of products without a build-up of line pressure. Singulation feature allows products to be easily removed from any location on conveyor.



1 Week Availability on 18" & 24" OAW



Conveyor shown with optional floor supports

- ★ EZLogic® Accumulation System
- ★ 4 Brake Rollers in Each Zone
- ★ Product Singulation
- ★ Pop-out Tread Rollers
- ★ Adjustable MS-Type Floor Supports Available

SIZE TO ORDER	Bed Overall Length "A"	Bed Length "L"	Between Rail Width	15"	17"	19"	21"	23"	25"	27"	31"	33"	37"	39"
			Overall Frame Width	18"	20"	22"	24"	26"	28"	30"	34"	36"	40"	42"
12'	10'		WEIGHTS (Lbs.) Based on 3" Roller Centers	496	529	562	593	636	667	699	769	811	865	898
18'	16'			653	698	741	784	839	881	924	995	1062	1148	1193
22'	20'			803	860	915	968	1035	1088	1142	1262	1316	1424	1481
28'	26'			960	1035	1095	1159	1238	1302	1367	1512	1577	1707	1776
32'	30'			1110	1191	1268	1343	1434	1509	1585	1755	1831	1983	2064
38'	36'			1267	1360	1448	1534	1637	1723	1810	2005	2092	2266	2359
42'	40'			1417	1522	1621	1718	1833	1929	2028	2248	2346	2542	2647
48'	46'			1574	1691	1801	1909	2036	2144	2253	2498	2607	2825	2942
52'	50'			1724	1853	1974	2093	2232	2351	2471	2741	2861	3101	3230
58'	56'			1881	2022	2154	2284	2435	2565	2696	2991	3122	3384	3525
62'	60'			2031	2184	2327	2468	2631	2772	2914	3234	3276	3660	3813
68'	66'			2188	2353	2507	2659	2834	2986	3139	3484	3637	3943	4108
72'	70'			2338	2515	2680	2843	3030	3193	3357	3727	3891	4219	4396
78'	76'			2495	2684	2860	3034	3233	3407	3582	3977	4152	4502	4691
82'	80'			2645	2846	3033	3218	3429	3614	3800	4220	4406	4778	4979
88'	86'			2802	3015	3213	3409	3632	3828	4025	4470	4667	5061	5274
92'	90'		2952	3177	3386	3593	3828	4035	4243	4713	4921	5337	5562	
98'	96'		3109	3346	3566	3784	4031	4249	4468	4963	5182	5620	5857	
102'	100'		3259	3508	3739	3968	4227	4456	4686	5206	5436	5896	6145	

HOW IT WORKS

The conveyor is divided into accumulation zones. Each zone extracts power from a flat drive belt that runs the entire length of the conveyor. The drive belt is pneumatically lowered away from the tread rollers, causing product in that zone to stop. Hytrol's EZLogic® Accumulation Modules sense product presence and control the accumulation and release of product from the zones.



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

NOTE: Bed sections available in the following multiples:

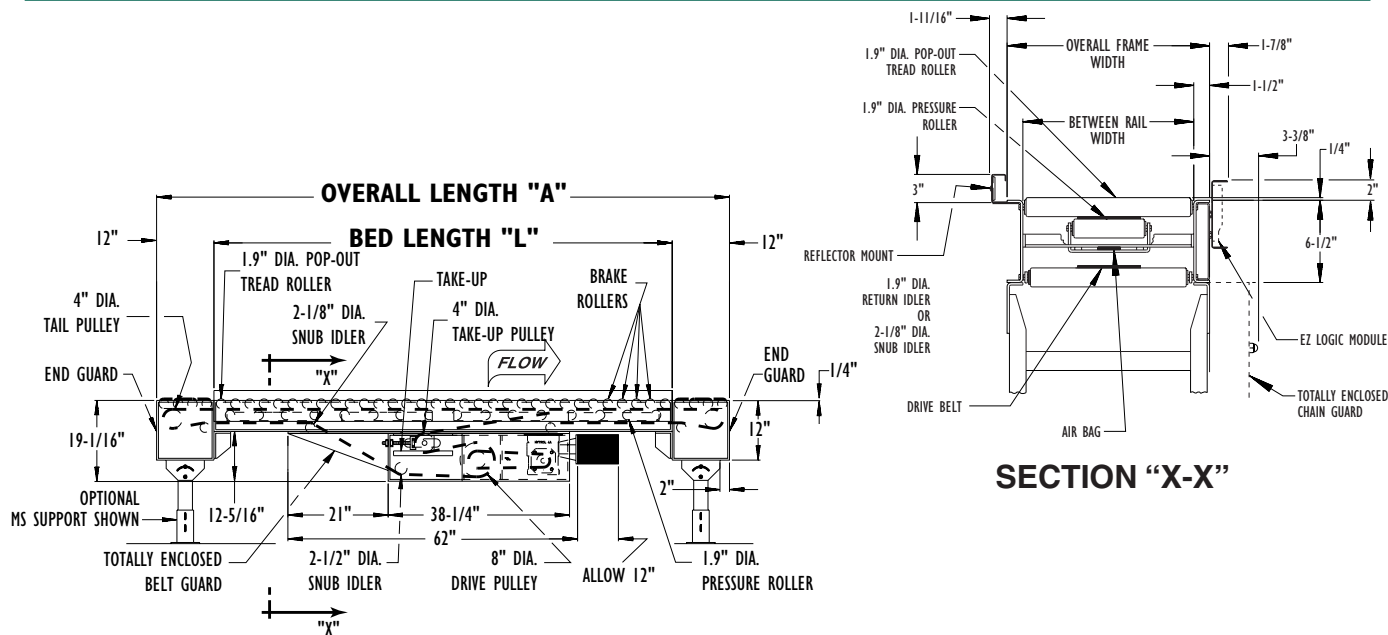
12" Zones-4', 5', 6', 7', 8', 9' & 10' 30" Zones-5', 7 1/2' & 10'

18" Zones-4 1/2', 6', 7 1/2' & 9' 36" Zones-6' & 9'

*24" Zones-4', 6', 8' & 10'

*Overall lengths in chart are for standard 24" zones. Other zones optional.

ACCUMULATION - ZERO PRESSURE



Standard Specifications

BELT—6 in. Ultimate 140 SD (Nitrile, impregnated with a thin polyurethane top). Clipper unibar lacing.

BED—Roller bed with 1.9 in. dia. roller x 16 ga. galvanized tube spaced every 3 in. Mounted in 6-1/2 in. x 12 ga. powder painted formed steel channel frame bolted together with butt coupling.

CROSS BRACING—Rods with turnbuckle are fastened to underside of bed to provide proper alignment of bed rollers and insure correct product tracking. Supplied on every other section 30 ft. bed lengths and over.

CENTER DRIVE—Can be placed in any section of conveyor 5 ft. or longer.

DRIVE PULLEY—8 in. dia. with 1-3/16 in. dia. shaft at bearings, machine crowned.

TAIL PULLEY—4 in. dia. with 1 in. dia. shaft at bearings, machine crowned.

TAKE-UP PULLEY—4 in. dia. with 1 in. dia. at shaft bearings, machine crowned.

SNUB IDLER—Adjustable 2-1/2 in. dia. pre-lubricated ball bearings.

RETURN IDLER—Adjustable 1.9 in. dia. pre-lubricated ball bearings.

TAKE-UP—Take-ups in center drive. Provides 16 in. of belt take-up.

BEARINGS—Sealed, pre-lubricated, self-aligning, ball bearings on drive and tail pulleys. Pre-lubricated ball bearings in tread and pressure rollers.

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 the EZLogic® Accumulation Module to any dry contact type switching device. The 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.

Built-in enhanced "Slug Mode" features allow product to be transported on the conveyor **without separation**, even when the conveyor is in accumulation mode! Product may be slug released from the conveyor with the same ease as singulation release. Jams on the conveyor automatically activate accumulation even during slug release, preventing product pile-up.

Sleep Mode stops tread rollers from turning when no product is present, reducing noise and extending roller bearing life.

ACCUMULATION ZONES—24 in. long air controlled. Includes 4 brake rollers to stop package. (See **Note** opposite page). Power supply must be located in the center - maximum 50 zones per power supply.

EZLogic® ACCUMULATION MODULE—Located in each zone. (Retroreflective). UL and CSA approved.

AIR REQUIREMENTS—Recommended working pressure 40 P.S.I. Free air consumption at 40 P.S.I.—.0062 cu. ft. per sensor actuation.

FILTER, REGULATOR—One filter/regulator is supplied for the main air supply line. (3/8 inch NPT port). An additional filter/regulator kit (B-12707) is recommended in applications where it is necessary to frequently slug more than 25 zones and the zone response time is critical. Main air from compressor should be supplied to each filter/regulator.

SPEED REDUCTION—Sealed worm gear C-Face speed reducer. No. 50 roller chain to drive shaft.

MOTOR—1/2 HP—230/460V—3 Ph. 60 Hz. Totally Enclosed C-Face.

POWER SUPPLY—27 VDC, 4 amp Power Supply located near center of conveyor. Maximum of 50 zones per power supply (25 each side of power supply). Requires 120 VAC input.

CONVEYING SPEED—Constant 65 FPM.

CAPACITY—Maximum load per linear foot of conveyor 150 lbs. Total load NOT TO EXCEED capacity in charts.

FLOOR SUPPORTS—Now supplied as optional equipment.

LOAD CAPACITY CHART (Accumulated) @ 65 FPM						
HP	OVERALL FRAME WIDTH		OVERALL FRAME WIDTH		OVERALL FRAME WIDTH	
	18" TO 22"		24" TO 30"		34" TO 42"	
	TOTAL LOAD (LBS.)		TOTAL LOAD (LBS.)		TOTAL LOAD (LBS.)	
	UP TO 52'	UP TO 102'	UP TO 52'	UP TO 102'	UP TO 52'	UP TO 102'
1/2	2200	400	1200	—	—	—
3/4	4400	2600	3400	*1000	2200	—
1	6600	4800	5600	*3200	4400	—
1 1/2	*7800	9200	*7800	7600	*7800	3800
2	*7800	12000	*7800	10400	*7800	6600

*Limited to 150 lbs. per foot

LOAD CAPACITY CHART (Live) @ 65 FPM						
HP	OVERALL FRAME WIDTH		OVERALL FRAME WIDTH		OVERALL FRAME WIDTH	
	18" TO 22"		24" TO 30"		34" TO 42"	
	TOTAL LOAD (LBS.)		TOTAL LOAD (LBS.)		TOTAL LOAD (LBS.)	
	UP TO 52'	UP TO 102'	UP TO 52'	UP TO 102'	UP TO 52'	UP TO 102'
1/2	1100	200	600	—	—	—
3/4	2200	1300	1700	500	1100	—
1	3300	2400	2800	1600	2200	—
1 1/2	5600	4600	5000	3800	4400	1900
2	7000	6000	6400	5200	5800	3300

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.

CONVEYING SPEED—Other constant and variable speeds. FPM. V-belt drive supplied under 20 FPM. **NOTE: Capacity and accumulation feature affected with speed change.**

ACCUMULATION ZONES—12 in., 18 in., 30 in., & 36 in. long available. Frame lengths change with zone. (See **NOTE** opposite page.)

Note: 51 or more zones will require additional power supply and isolation cable.

HIGH PERFORMANCE UNDERSIDE CENTER DRIVE—Used on units over 100 ft long (used with 2 HP, 3 HP or 5 HP motor and reducers).

SIDE MOUNTED LOW ELEVATION CENTER DRIVE—Motor reducer unit mounted to side of conveyor. Minimum low elevation 15-1/4 in.

SIDE MOUNTED END DRIVE—Minimum elevation 12-1/2 in. (underside take-up required) adds 3 in. to OAL.

PRESSURE SWITCH—Installed in air line after regulator unit. Kills conveyor drive when air pressure drops below minimum working requirements. Requires restart controller (not supplied).

V-BELT DRIVE—V-Belt supplied between motor and reducer.

O-RING DRIVE CHAIN—With sealed in lubricant (Recommended for applications that do not permit regular lubrication).

GUARD RAILS—Continuous adjustable channel. See Accessory section. **NOTE: If product comes into contact with Guard Rails, product flow will be affected.** Fixed channel overlapping-one direction.

PACKAGE STOPS—Angle and raised roller end stops.

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

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

MOTORS—Energy efficient, single phase, other characteristics. 2 HP maximum.

ELECTRICAL CONTROLS—Non-reversing magnetic starters and push-button stations. AC variable frequency drive.

EZ-Logic :

- **Diffuse type module** - 30" maximum range to 90% reflectance without obstruction. Range is adjustable through push button programming.
- **Zone stop connector cable** - Attaches to any zone module. It requires a "dry contact" type input signal. Closed for zone stop.
- **Slug mode control cable** - Attaches to discharge module micro connector. Requires "dry contact" type input signal. Closed for slug mode, open for singulate. Required only if user wishes to alternate between singulation mode and slug mode.
- **Power supply isolation cable** - Used when joining conveyors with separate power supplies.
- **Accumulation module with photo eye output** - Used to supply "dry contact" photo eye output or to accept a voltage type zone stop input.