

MODEL "251ACDA"

Air Operated Sensor Roller Controlled Pallet Accumulator

- **Zero pressure accumulation**
- **Air operated**
- **Heavy duty construction**
- **Chain driven rollers**
- **Zone connections outside frame for easy installation**



STANDARD SPECIFICATIONS

Frame - Heavy duty 7" deep x 4 gauge powder painted formed steel channel with heavy duty cross braces. Frames are bolted together with splice plates and floor supports.

Rollers - 2½" diameter x 11 gauge steel rollers, grease packed and labyrinth sealed bearings, 1½" hex shaft. Rollers are spaced on 4" or 6" centers, set 2¼" low.

Floor Supports - Adjustable 18¾" to 23¾" (HD-4) from floor to top of roller, for each end of conveyor and at each bed joint along with knee braces for each support. Supports on 5 foot centers, changes with zone length.

Drive - Located near center of conveyor length, shaft mount motor and reducer.

Drive Chain - RC 40 chain used for roller-to-roller connections, RC 60 chain drive each zone. Chains are totally enclosed by metal guards.

Accumulation Zones - Standard zones are 60" long with a maximum of 30 zones per single drive. Each zone is driven by an air clutch and controlled by a sensor roller.

Motor - ¾ HP 230/460-3-60 TE motor.

Electrical Controls - 110/1/60 Electric Solenoid and Air switch for discharge zone.

Conveyor Speed - 30 FPM constant roller speed.

Capacity - Minimum unit load - 50 lbs. 4,000 lbs. Maximum unit load. Total conveyor live load not to exceed Load Capacity Chart. For loads less than 50 lbs., consult factory.

Speed Reducer - Heavy duty, sealed worm gear, C-Face.

Bearings - Sealed prelubricated with cast iron housings.

OPTIONAL EQUIPMENT

Accumulation Zones - 4" roller centers - 36", 40", 44", 48", 52", 56" and 72" long. 6" roller centers 36", 42", 48", 54" and 72" long. Frame lengths change with zone lengths.

Tread Rollers - 2⅝" diameter x 7 gauge steel, 1½" hex shaft.

Floor Supports - Higher or lower supports available, adjustable or fixed type.

Conveyor Speed - Constant and variable speeds (Contact Factory).

Limit Switch - to provide signal for customers infeed equipment.

Time Delay - Allows for product to be unloaded from discharge zone of conveyor without movement of next load into discharge zone.

Sensing Devices - Photo cells, limit switches, etc. can be supplied for electrically operated zones in lieu of mechanical sensing devices.

Motor - Single phase, energy efficient, explosion proof, etc. Other HP available.

Electrical Controls - Magnetic starters and push button stations; Manual motor starters with overload protection, others. 24V DC solenoid can be supplied in lieu of 110V AC solenoid in discharge zone.

Optional Loads - Larger capacity clutch is available for 6000 lb. unit loads.

Reversible - can be supplied with reversing feature to allow accumulation in both directions.

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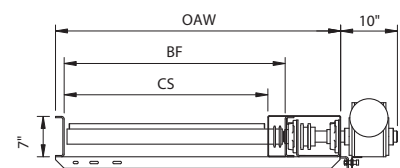
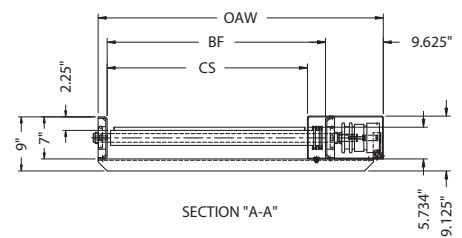
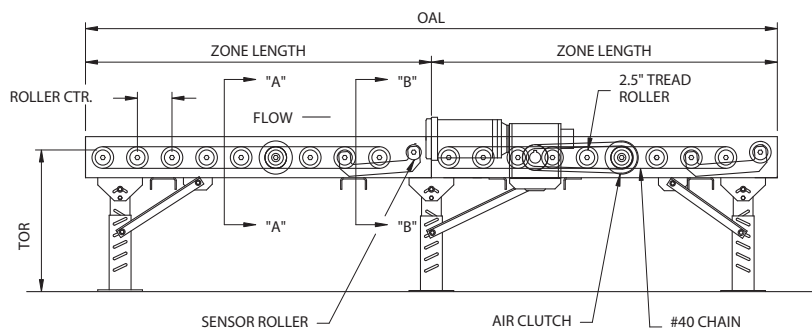
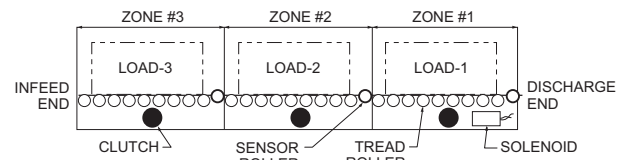
Bed Length	Conveying Surface		34"	40"	46"	52"	58"
	Between Frame Width		37"	43"	49"	55"	61"
	Overall Frame Width		48"	54"	60"	66"	72"
10'	Weight (lbs.) Based On 4" Roller Centers		1137	1227	1317	1407	1497
15'			1632	1767	1902	2037	2172
20'			2127	2307	2487	2667	2847
25'			2622	2847	3072	3297	3522
30'			3117	3387	3657	3927	4197
40'			4107	4467	4827	5187	5547
50'			5097	5547	5997	6447	6897
60'			6087	6627	7167	7707	8247
70'			7077	7707	8337	8967	9597
80'			8067	8787	9507	10227	10947
90'	9057	9867	10677	11487	12297		
100'	10047	10947	11847	12747	13647		

OPERATIONAL SEQUENCE

- When a load is placed on infeed end of conveyor it will continue to travel the length of the conveyor until it reaches the last zone (at discharge end) of the conveyor (Zone #1). At this time the load will depress sensor roller #1 which activates a pneumatic pressure switch to indicate a load is in Zone #1. This pressure switch sends a signal to external controls (not supplied by ACSI). External controls will determine whether or not to accumulate the load. If accumulation is desired a solenoid will be activated to stop the load in Zone #1.
- As soon as sensor roller #1 is depressed, it sends an air signal to Zone #2 indicating Zone #1 is occupied.
- When load #2 depresses sensor roller #2, the clutch/brake in Zone #2 is disengaged allowing load #2 to accumulate. At the same time, an air signal is sent to Zone #3 indicating Zone #2 is occupied. This sequence of events will continue until the conveyor is fully loaded.
- To activate Zone #1 to release load #1, an electrical signal (120VAC) must be sent to the solenoid switch controlling the clutch/brake in Zone #1. THIS EXTERNAL SIGNAL IS NOT SUPPLIED AS PART OF THE CONVEYOR EQUIPMENT.
- When the electrical signal is received by the solenoid switch controlling the clutch/brake in Zone #1, load #1 will be discharged from conveyor.
- As soon as load #1 clears the sensor roller in Zone #1, load #2 will advance into Zone #1 and stop when it depresses sensor roller #1. The 120VAC external signal must again be sent to the solenoid controlling the clutch/brake in Zone #1 to discharge load #2.
- As soon as load #2 clears sensor roller #2, load #3 will advance to Zone #2 and stop on sensor roller #2.
- This sequence continues automatically as long as the loads in Zone #1 are removed, creating an opening for the loads to advance.

Load Capacity Charts

Accumulated			Moving		
Conveyor Speed @ 30 FPM			Conveyor Speed @ 30 FPM		
HP	Total Load (lbs.)		HP	Total Load (lbs.)	
	Up to 50'	Up to 100'		Up to 50'	Up to 100'
3/4	12000	7500	3/4	6000	3750
1	18000	13000	1	9000	6500
1 1/2	30000	25000	1 1/2	15000	12500
2	42000	37000	2	21000	18500



SECTION "B-B"