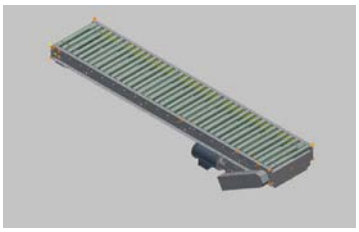
190-ACC

Minimum-Pressure Roller Conveyor

The simplest method ever devised for accumulating cartons, boxes, etc. Basic design eliminates complicated adjustments and allows a minimum 2 percent back-pressure.

- 2 Percent Minimum Back-Pressure
- Finger Tip Snub Roller Adjustment, No Tools Needed
- Reversible
- Adjustable MS-Type Floor Support Available



Conveyor shown in Standard Gray.

Size To Order Overall Length "A"	Between Rail Width Overall Frame Width	15" 18"	21" 24"	27" 30"	33" 36"	39" 42"
5'	Weights (lbs.) Based on 3" Roller Centers	238	277	314	350	387
10'		384	455	522	588	655
15'		530	633	730	826	923
20'		676	811	938	1064	1191
25'		822	989	1146	1302	1459
30'		968	1167	1354	1540	1727
35'		1114	1345	1562	1778	1995
40'		1260	1523	1770	2016	2263
45'		1406	1701	1978	2254	2531
50'		1552	1879	2186	2492	2799
55'		1698	2057	2394	2730	3067
60'		1844	2235	2602	2968	3335
65'		1990	2413	2810	3206	3603
70'		2136	2591	3018	3444	3871
75'		2282	2769	3226	3682	4139
80'		2428	2947	3434	3920	4407
85'		2574	3125	3642	4158	4675
90'		2720	3303	3850	4396	4943
95'		2886	3481	4058	4634	5211
100'		3012	3659	4266	4872	5479

All weights in catalog are conveyor weights only. Accessories, crating, etc., are not included.
Note: 16 in., 20 in., 22 in., 26 in., 28 in., 34 in., 36 in., 40 in., and 42 in. Overall Frame Widths. Intermediate bed sections are available in multiples of 4 ft., 5 ft., 6 ft., 7 1/2 ft., 8 ft., and 10 ft. lengths only.

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How It Works

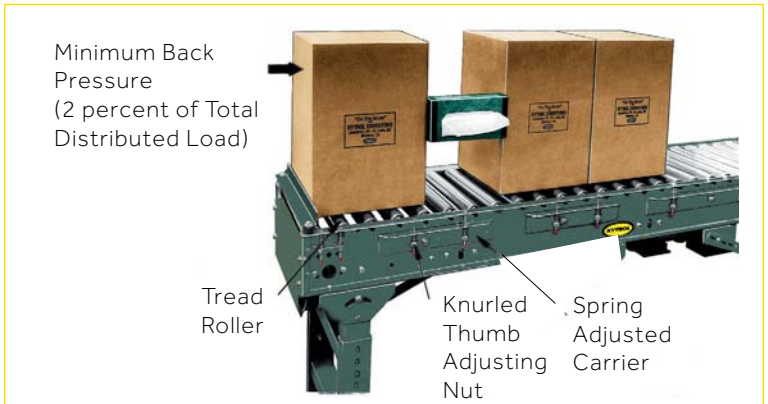
The driving of the tread rollers on the Hytrol minimum pressure conveyor is accomplished with the top surface of a standard section endless flat belt. The strength and wear qualities of the tread rollers and this belt have been thoroughly tested for continuous duty.

To maintain the driving of the tread roller, the pressure roller is mounted in spring adjusted carriers (see photo) which sense the required driving friction regardless of the length of accumulated load. This pressure can be maintained constantly to give a 2 percent minimum back pressure in either a forward or reverse direction.

In the event of extreme changes in unit load (weight of box or package), convenient knurled thumb adjusting nuts can be turned to accept this heavier load.

This method eliminates the need for selecting proper tension spring holes in trigger mechanisms or jogging cleats on driving belt and eccentric (off center) tread rollers.

By maintaining a constant minimum pressure on the tread rollers, long loads may be conveyed, accumulated or stopped on the conveyor at any point using very little motor horsepower and giving practically no pressure between boxes or packages.



Conveyor shown with optional floor supports.

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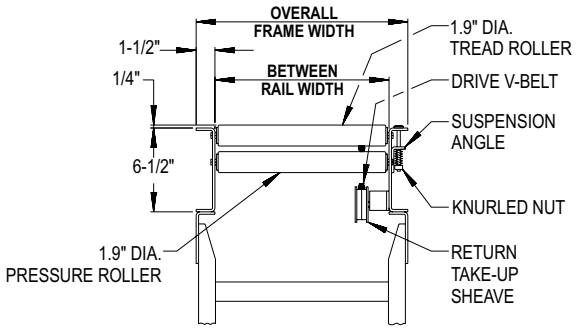
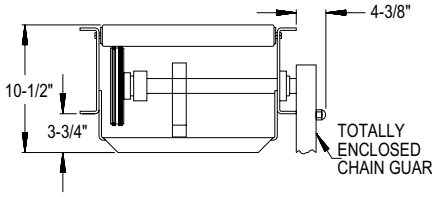
Load Capacity Chart @ 65 FPM			
HP	Overall Frame Widths 18" Total Load (lbs.) Up to 100'	Overall Frame Widths 24" to 30" Total Load (lbs.) Up to 100'	Overall Frame Widths 36" to 42" Total Load (lbs.) Up to 100'
1/2	1000	800	500
1	2400	2200	2000
2	3500	3000	2600

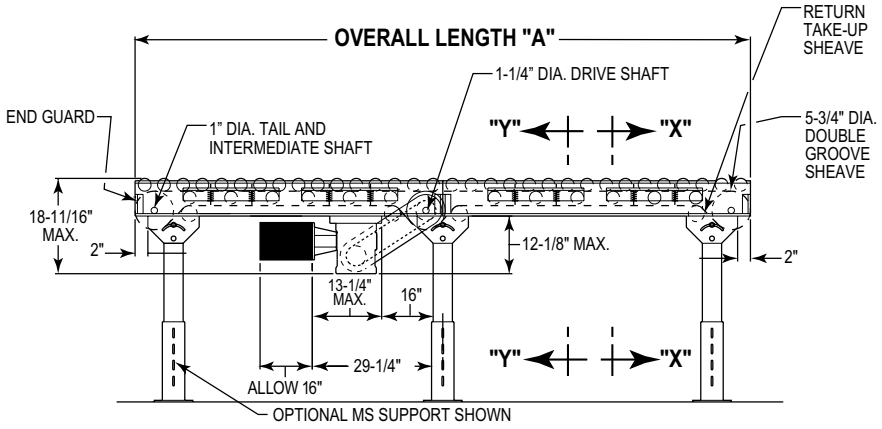
Speed Chart for Shaft-Mounted Drive on 199-ACC		
Speed FPM	Max HP	Motor Frame
26	1/2	56C
32	1	56C
43	1	56C
52	1	56C
64	2	140TC
86	2	140TC
103	2	140TC
129	2	140TC
172	2	140TC
257	2	140TC
343	2	140TC

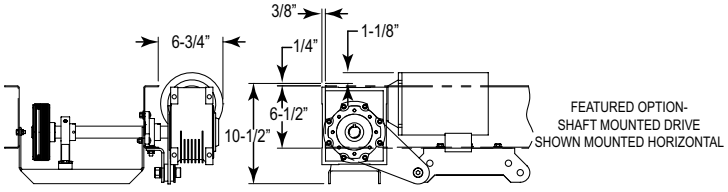


SECTION "X-X"



SECTION "Y-Y"





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Standard Specifications

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

CROSS BRACING – 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.

DRIVE – Mounted underneath, placed near center of conveyor.

DRIVE BELT – Endless B-section aramid core v-belt drives each section of conveyor.

RETURN TAKE-UP SHEAVE – 3 1/4 in. dia. x 1/2 in. bore flat idler has seven position adjustment to maintain proper v-belt tension.

BEARINGS – Tread and pressure rollers have pre-lubricated ball bearings. Flange and pillow block bearings are sealed, pre-lubricated with eccentric lock collar.

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

MOTOR – 1/2 HP, 208/230/460/575V, 3 Ph. 60 Hz. Totally enclosed C-face.

CONVEYING SPEED – Constant 25 to 120 FPM.

CAPACITY – Maximum load per linear foot of conveyor 150 lbs. NOT TO EXCEED capacity in chart.

FLOOR SUPPORTS – Supplied as optional equipment.

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 speeds from 25 to 120 FPM. V-belt drive supplied under 56 FPM (with 1 HP). Note: Capacity and accumulation feature affected with speed change.

SHAFT-MOUNTED DRIVE – Motor reducer unit mounted on extended drive shaft. Can be mounted with standard sheave retainer for 10 1/2 in. elevation (motor horizontal), or can be mounted with low elevation sheave retainer for 8 3/4 in. elevation (motor vertical). Mounting bracket and torque arm allows for multiple mounting positions. See above chart for speeds.

SIDE-MOUNTED DRIVE – Motor reducer unit mounted to side of conveyor. Elevation 10 1/2 in. with standard sheave retainer. 9 3/8 in. elevation at drive, 8 3/4 in. elevation at intermediate when low elevation sheave retainer used.

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).

PACKAGE STOP – Roller-or pin-type stops available.

GUARD RAILS – Adjustable Universal Channel Guard Rail, fixed channel, type A and B angle. See Accessory section. Note: If product comes in contact with guard rails, product flow will be affected. Fixed channel overlapping, one direction. Fixed channel non-overlapping, reversing.

ROLLER CENTERS – Tread rollers spaced every 2 in. and 4 in. NOT AVAILABLE in 7 ft. 6 in. bed.

SPRING BALANCED GATE – See 190-E24G powered or gravity die spring balanced gate.

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 – Energy efficient, single phase, brakemotor, and other characteristics. 2 HP maximum.

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