

138-ACC

Minimum-Pressure Roller Conveyor

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

- 4 Bed Widths
- 2 Percent Minimum Back-Pressure
- Finger Tip Snub Roller Adjustment, No Tools Needed
- Adjustable LS-Type Floor Supports Available



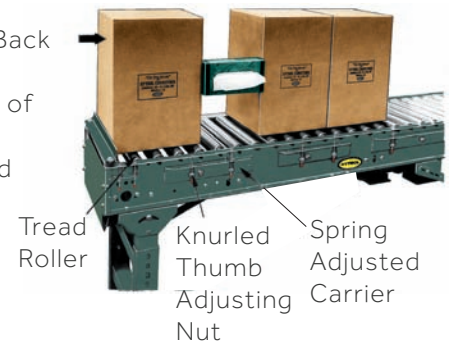
Conveyor shown with optional floor supports.

Size To Order Overall Length "A"	Between Rail Width	10"	13"	16"	22"
	Overall Frame Width	12"	15"	18"	24"
5'		214	231	249	284
10'		337	369	402	466
15'		461	507	555	648
20'		584	645	708	830
25'		708	783	861	1012
30'		831	921	1014	1194
35'		955	1059	1167	1376
40'		1078	1197	1320	1558
45'	Weight (lbs.) Based on 1 1/2" Roller Centers	1202	1335	1473	1740
50'		1325	1473	1626	1922
55'		1449	1611	1779	2104
60'		1572	1749	1932	2286
65'		1696	1887	2085	2468
70'		1819	2025	2238	2650
75'		1943	2163	2391	2832
80'		2066	2301	2544	3014
85'		2190	2439	2697	3196
90'		2313	2577	2850	3378
95'		2437	2715	3003	3560
100'		2560	2863	3156	3742



Conveyor sections are easily coupled together at either end to make up to 100 ft. long units. Drive is usually located near center of conveyor.

Minimum Back Pressure (2 percent of Total Distributed Load)



Conveyor shown with optional floor supports

All weights in catalog are conveyor weights only. Accessories, crating, etc., are not included. Note: 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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Standard Specifications

BED – Roller bed with 1 3/8 in. dia. roller x 18 ga. galvanized tube and 5/16 in. HRS hex shaft spaced every 1 1/2 in. and 1 3/8 in. dia. pressure roller x 18 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 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 adjustments to maintain proper v-belt tension.

Optional Equipment

FLOOR SUPPORTS – LS 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 LS-6 support.

CONVEYING SPEED – Other constant and variable speeds from 25 to 120 FPM. Note: Capacity and accumulation feature affected with speed change.

SIDE MOUNTED DRIVE – Motor reducer unit mounted to side of conveyor. Minimum elevation with standard sheave retainer 10 in. With low elevation sheave retainer 8 in. 9 3/8 in. elevation at drive, 9 7/8 in. elevation with standard sheave return. 8 in. elevation with low elevation sheave return (intermediate only).

V-BELT DRIVE – V-belt supplied between motor and reducer. Minimum overall drive width 14 in.

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

BEARINGS – Sealed, pre-lubricated ball bearings with eccentric lock collar on flange and pillow block bearings. Pre-lubricated ball bearings in tread and pressure rollers.

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 65 FPM.

CAPACITY – Maximum load per linear foot of conveyor 50 lbs. NOT TO EXCEED capacity in chart.

FLOOR SUPPORTS – Supplied as optional equipment.

Load Capacity Chart @ 65 FPM	
HP	Overall Frame Widths – 12" to 24"
	Total Load (lbs.) Up to 100'
1/2	1000
1	1500

PACKAGE STOP – Roller or pin type stops available. Contact factory.

GUARD RAILS – Adjustable Universal Channel Guard Rail, fixed channel or 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 nonoverlapping, reversing.

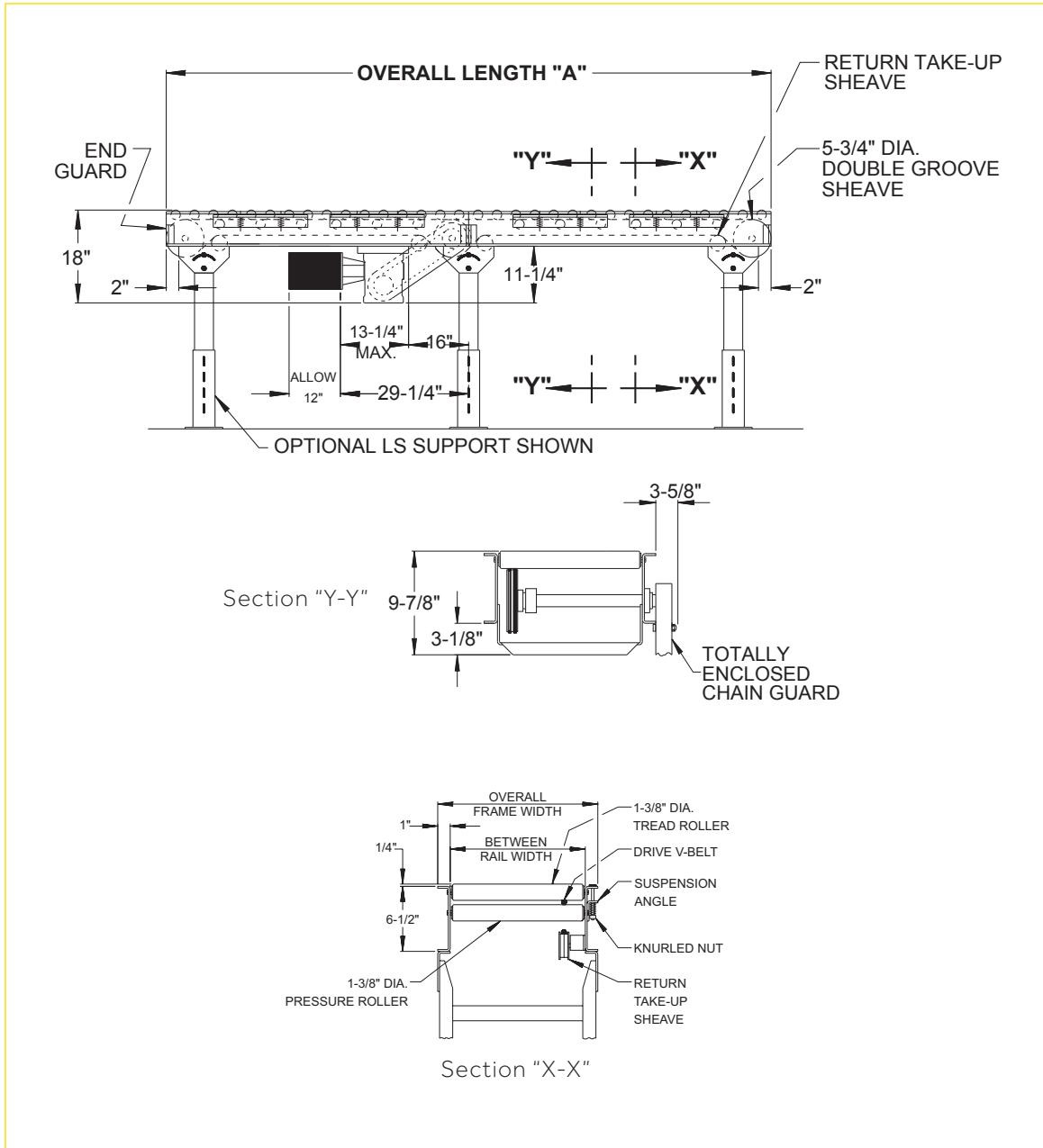
POLY-TIER SUPPORTS – 36 in. to 120 in. support heights in 6 in. increments. Knee braces supplied.

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.

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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 v-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.