

VBS19

V-BELT DRIVEN LIVE ROLLER CONVEYOR (1.9 in. dia. x 16 ga. rollers) (Minimum Pressure Accumulation)

The VBS19 live roller conveyor is ideal for transporting or accumulating cartons, boxes or totes. Its basic design eliminates complicated adjustments and allows a minimum of 2% back pressure.



- 12 widths
- Minimum pressure accumulation (2% back pressure)
- Fingertip pressure roller adjustments requiring no tools
- Reversible

CONVEYOR WEIGHT (LBS.)												
OVERALL LENGTH	BETWEEN FRAME WIDTH											
	13"	15"	17"	19"	21"	23"	25"	27"	31"	33"	37"	39"
	OVERALL FRAME WIDTH											
	16"	18"	20"	22"	24"	26"	28"	30"	34"	36"	40"	42"
5'	231	238	252	263	277	289	299	314	337	351	375	387
10'	370	384	410	429	455	477	495	522	564	588	633	655
15'	509	530	568	595	633	665	691	730	791	826	891	923
20'	648	676	726	761	811	853	887	938	1,018	1,064	1,149	1,191
25'	787	822	884	927	989	1,041	1,083	1,146	1,245	1,302	1,407	1,459
30'	926	968	1,042	1,093	1,167	1,229	1,279	1,354	1,472	1,546	1,665	1,727
35'	1,065	1,114	1,200	1,259	1,345	1,417	1,475	1,562	1,699	1,778	1,923	1,995
40'	1,204	1,260	1,358	1,425	1,523	1,605	1,671	1,770	1,926	2,016	2,181	2,263
45'	1,343	1,406	1,516	1,591	1,701	1,793	1,867	1,978	2,153	2,254	2,439	2,531
50'	1,482	1,552	1,674	1,757	1,879	1,981	2,063	2,186	2,380	2,492	2,697	2,799
55'	1,621	1,698	1,832	1,923	2,057	2,169	2,259	2,394	2,607	2,731	2,955	3,067
60'	1,760	1,844	1,990	2,089	2,235	2,357	2,455	2,602	2,834	2,969	3,213	3,335
65'	1,899	1,990	2,148	2,255	2,413	2,545	2,651	2,810	3,061	3,207	3,471	3,603
70'	2,038	2,136	2,306	2,421	2,591	2,733	2,847	3,018	3,288	3,445	3,728	3,871
75'	2,177	2,282	2,464	2,587	2,769	2,921	3,043	3,226	3,515	3,683	3,987	4,139
80'	2,316	2,428	2,622	2,753	2,947	3,109	3,239	3,434	3,742	3,921	4,243	4,407
85'	2,455	2,574	2,780	2,919	3,125	3,297	3,435	3,642	3,969	4,158	4,502	4,675
90'	2,594	2,720	2,938	3,085	3,303	3,485	3,631	3,850	4,196	4,396	4,761	4,943
95'	2,733	2,866	3,096	3,251	3,481	3,673	3,827	4,058	4,423	4,634	5,019	5,211
100'	2,872	3,012	3,254	3,417	3,659	3,861	4,023	4,266	4,650	4,872	5,277	5,479

STANDARD SPECIFICATIONS

BED – 6-1/2 in. deep x 1 1/2 in. flange x 12 ga. powder coated steel channel frame with 1.9 in. dia. x 16 ga. galvanized tread rollers spaced every 3 in. and 1.9 in. dia. x 16 ga. galvanized pressure rollers spaced every 6 in. Sections bolt together with butt couplings.

CROSS BRACING – Rods with turnbuckles are fastened to underside of bed to provide squaring adjustment and insure correct product tracking. Supplied on every other section, 30 ft. overall lengths and over.

DRIVE – Mounted underneath near center of conveyor.

DRIVE BELT – Endless B-section V-belt, industrial grade.

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

BEARINGS – Tread and pressure rollers have pre-lubricated ball bearings. Flange and pillow block bearings are sealed and pre-lubricated.

CONVEYING SPEED – Constant 65 FPM

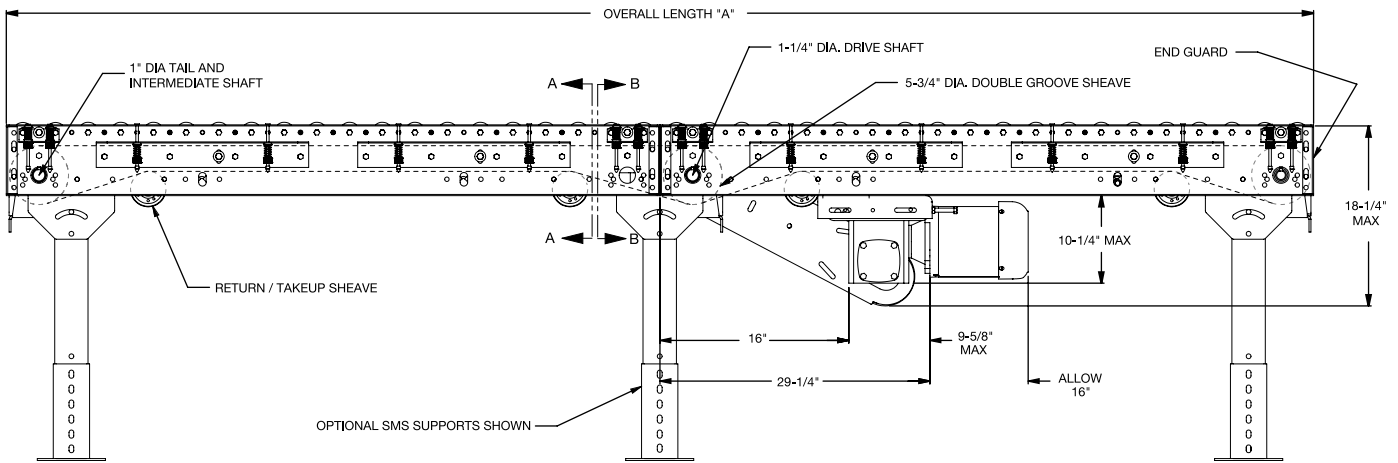
SPEED REDUCTION – Sealed worm gear C-Faced speed reducer with No. 50 roller chain to drive shaft.

MOTOR – 1/2 HP –230/460 3 Phase - 60 Hz totally enclosed fan cooled, energy efficient.

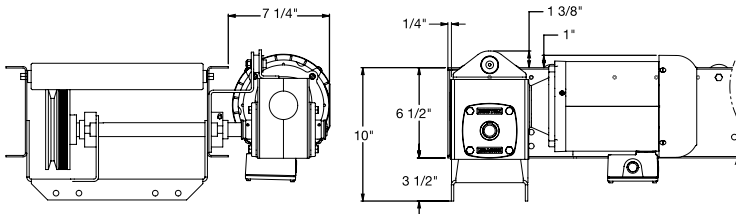
CAPACITY – Maximum load per linear foot of conveyor 150 lbs. NOT TO EXCEED capacity in chart.

		LOAD CAPACITY (LBS.)				
FPM	HP	BETWEEN FRAME WIDTH	OVERALL LENGTH			
			10'	25'	50'	100'
35	1/2	13"-23"	1,500*	3,150	2,700	2,200
		25"-39"	1,500*	2,850	2,500	1,250
	1	13"-23"	1,500*	3,750*	4,500	4,500
		25"-39"	1,500*	3,750*	3,900	2,600
65	1/2	13"-23"	1,500*	1,400	1,050	200
		25"-39"	1,500*	1,200	550	NA
	1	13"-23"	1,500*	3,700	3,300	2,100
		25"-39"	1,500*	3,500	2,850	1,500
	2	13"-23"	1,500*	3,750*	4,500	3,750
		25"-39"	1,500*	3,750*	3,950	2,650
100	1/2	13"-23"	850	600	200	NA
		25"-39"	750	350	NA	NA
	1	13"-23"	1,500*	1,650	1,200	400
		25"-39"	1,500*	1,400	700	NA
	2	13"-23"	1,500*	3,700	3,300	2,500
		25"-39"	1,500*	3,500	2,800	1,500

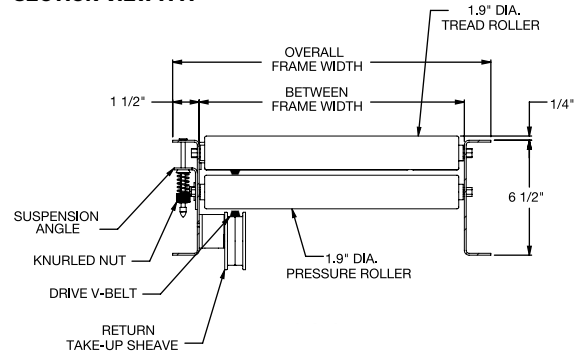
*Limited by conveyor capacity



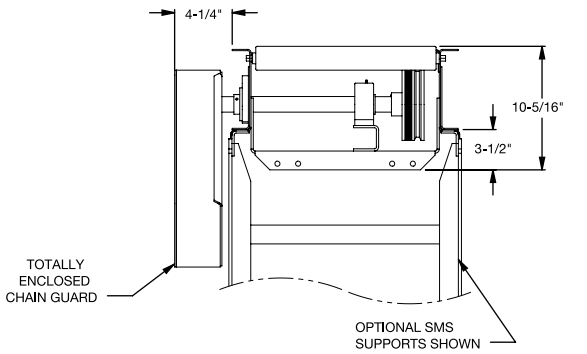
SHAFT MOUNTED DRIVE



SECTION VIEW A-A



SECTION VIEW B-B



OPTIONAL EQUIPMENT

FLOOR SUPPORTS – SMS Type floor supports are available in a wide range of adjustments. Specify top of roller elevation. One support is required at every bed joint and at ends of conveyor. Holes in feet are provided for lagging to floor. Knee braces supplied on SMS-7 support and above.

CONVEYING SPEED – Other constant and variable speeds. Note: Capacity and accumulation feature affected with speed change.

- Underhung and side mounted drives: 25 – 120 FPM in any increment
- Shaft mounted drive: 25, 30, 45, 50, 65, 85 and 105 FPM nominal
- Consult factory for speeds not listed

MOTORS – Inverter duty, premium energy efficient, single phase, brake motor and other characteristics. 2 HP maximum.

SHAFT MOUNTED DRIVE – Drive unit mounted on extended drive shaft. Mounting bracket and torque arm allow for multiple mounting positions. Minimum elevation:

- Standard sheave retainer: 10 1/4 in. TOR
- Low elevation sheave retainer: 8 3/4 in. TOR

SIDE MOUNTED DRIVE – Motor reducer unit mounted to side of conveyor. Minimum elevation:

- Standard sheave retainer: 10 1/4 in. TOR
- Low elevation sheave retainer: 9 1/2 in. TOR

ROLLER CENTERS – Tread rollers spaced on 2 in. or 4 in. centers. (Not available in 7 ft. 6 in. bed)

PACKAGE STOPS – Fixed angle, roller or blade type stops available.

GUIDE RAILS – Adjustable channel guide rails, fixed angle and channel guide rails. Note: If product comes in contact with guide rails, product flow will be affected.

OTHER ACCESSORIES – Poly-tier supports, ceiling hangars. See accessory section.

ELECTRICAL CONTROLS – One direction manual start switch, reversing drum switch, non-reversing and reversible IEC starters, push button stations, AC variable frequency drive.

HOW IT WORKS:

The VBS19 is a minimum pressure conveyor meaning that product can be accumulated with a minimal amount of back pressure and horsepower (see photo). Tread rollers in contact with the product, are driven from underneath by the top surface of an endless V-belt running the length of each conveyor section. Pressure rollers located under the belt push upward providing friction between the V-belt and the tread rollers. These pressure rollers are mounted in spring tensioned carriers that are easily adjusted with knurled finger nuts. Spring tension can be adjusted to achieve a back pressure equal to 2% of the accumulated live load.

