

BS100B

HORIZONTAL BELT CONVEYOR (Slider Bed)

The BS100B belt conveyor is ideal for transporting packages of various shapes and sizes. It can be used in many types of material handling applications such as assembly operations, sorting, packaging, and inspection or for simply transporting product from point A to B.

- Smooth, slim design
- Coped ends
- 10 belt widths
- Multiple belt options



OVERALL LENGTH	BED LENGTH	OVERALL LENGTH WITH CENTER DRIVE	CONVEYOR WEIGHT (LBS.)									
			BELT WIDTH									
			6"	8"	10"	12"	14"	16"	18"	20"	24"	30"
			BED WIDTH									
			10"	12"	14"	16"	18"	20"	22"	24"	28"	34"
6'	5'	6'	220	236	252	268	284	300	316	332	363	403
11'	10'	11'	265	285	305	325	345	365	385	405	445	501
16'	15'	16'	300	324	348	372	395	419	443	467	514	588
21'	20'	21'	345	373	401	429	456	484	512	540	596	686
26'	25'	26'	380	412	444	476	506	538	570	602	665	773
31'	30'	31'	425	461	497	533	567	603	639	675	747	871
36'	35'	36'	463	502	541	580	619	658	697	736	816	958
41'	40'	41'	508	551	594	637	680	723	766	809	898	1,056
46'	45'	46'	543	590	637	684	730	777	824	871	967	1,143
51'	50'	51'	588	639	690	741	791	842	893	944	1,049	1,241
56-11"	55'	56'	686	745	804	863	920	979	1,038	1,097	1,216	1,434
61-11"	60'	61'	731	794	857	920	981	1,044	1,107	1,170	1,298	1,532
66-11"	65'	66'	769	835	901	967	1,033	1,099	1,165	1,231	1,367	1,619
71-11"	70'	71'	814	884	954	1,024	1,094	1,164	1,234	1,304	1,449	1,717
76-11"	75'	76'	849	923	997	1,071	1,144	1,218	1,292	1,366	1,518	1,804
81-11"	80'	81'	894	972	1,050	1,128	1,205	1,283	1,361	1,439	1,600	1,902
86-11"	85'	86'	929	1,011	1,093	1,175	1,255	1,337	1,419	1,501	1,669	1,989
91-11"	90'	91'	974	1,060	1,146	1,232	1,316	1,402	1,488	1,574	1,751	2,087
96-11"	95'	96'	1,012	1,101	1,190	1,279	1,368	1,457	1,546	1,635	1,820	2,174
101-11"	100'	101'	1,057	1,150	1,243	1,336	1,429	1,522	1,615	1,708	1,902	2,272

Note: A short belt segment laced on both ends, commonly called a "Dutchman", is provided on conveyors 35 ft. to 70 ft. This allows for future belt stretch with a standard end take-up. An underside take-up or center drive with take-up is recommended for conveyors over 70 ft. long.

STANDARD SPECIFICATIONS

BELT - Black Trackmate 120 EMB

BED - 4 in. deep x 12 ga. powder coated steel slider bed. Standard 5 ft. and 10 ft. long bolt-together sections with splice plates.

END DRIVE - Located on discharge end of conveyor. Chain guard is on left-hand side when standing at infeed looking toward discharge.

DRIVE PULLEY - 4 in. dia. with 1 in. dia. shaft at bearings or 8 in. dia. with 1 7/16 in. dia. shaft at bearings. Machined, crowned and fully lagged.

TAIL PULLEY - 4 in. dia. with 1 in. dia. shaft at bearings. Machined crown.

SNUB ROLLERS - Adjustable 2 1/2 in. dia. rollers. Grease packed ball bearings. Includes guard.

RETURN ROLLERS - Adjustable 1.9 in. dia. rollers. Grease packed ball bearings.

TAKE-UP - Provides 4 in. of belt take-up at tail pulley

BEARINGS - Sealed, pre-lubricated, self-aligning, ball bearings on drive and tail pulleys

BELT SPEED - Constant 65 FPM

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

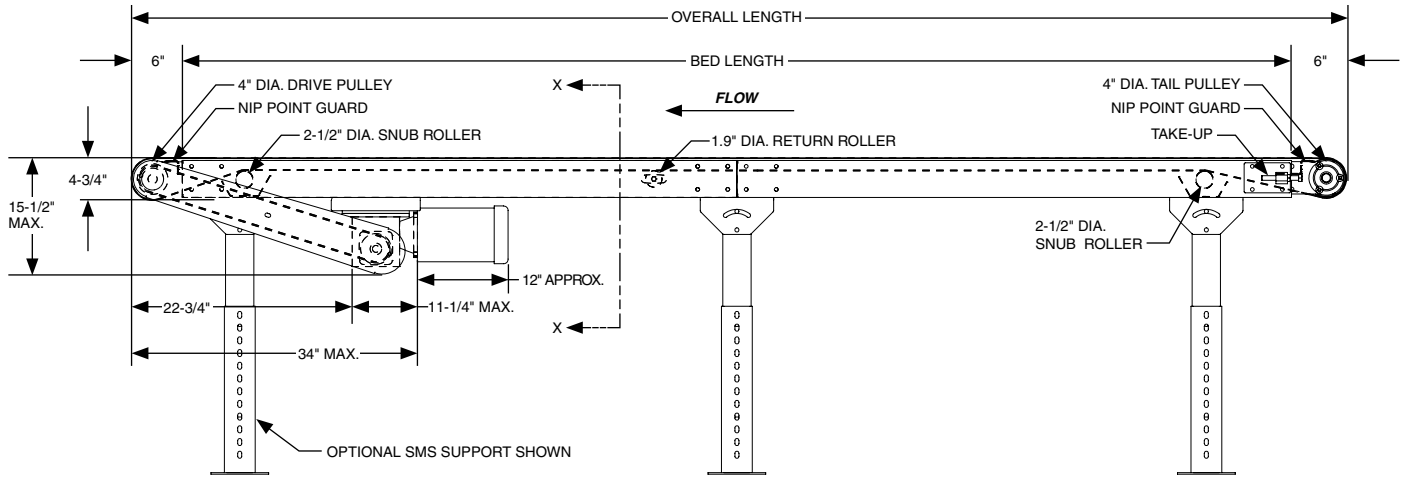
MOTOR - 1/2 HP - 230/460 V - 3 phase - 60 Hz totally enclosed fan cooled, energy efficient

FRAME CAPACITY - Maximum load per linear foot of conveyor is 75 lbs. Not to exceed drive capacity in chart.

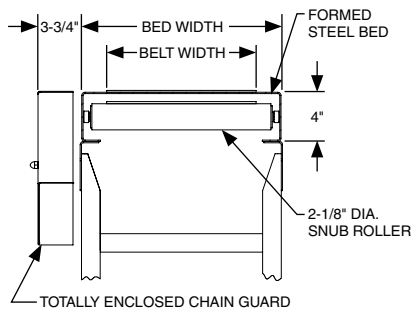
FPM	HP	BELT WIDTH	LOAD CAPACITY (LBS.)						
			HORIZONTAL W/ STANDARD BELT				25° INCLINE W/ ROUGHTOP BELT		
			4" DRIVE PULLEY		8" DRIVE PULLEY		11'	31'	
35	1/2	6"-16"	800	790	770	740	720	330	325
		18"-30"	790	760	720	680	640	325	315
	1	6"-16"	825*†	1,730*	1,710*	1,690	1,660	725*	715*
		18"-30"	825*†	1,690*	1,660*	1,620	1,580	715*	700*
65	1/2	6"-16"	470	450	430	405	390	195	185
		18"-30"	450	420	390	340	300	185	175
	1	6"-16"	825†	1,030	1,010	980	960	435	425
		18"-30"	825†	1000	960	920	880	425	415
2	6"-16"	825*†	2,090*	2,070*	2,050	2,030	875*	870*	
	18"-30"	825*†	2060*	2030*	1,980	1,950	865*	855*	
100	1/2	6"-16"	325	310	290	265	240	135	125
		18"-30"	310	275	245	195	160	130	115
	1	6"-16"	720	705	690	660	640	300	290
		18"-30"	710	675	640	595	555	295	280
2	6"-16"	825†	1,430	1,415	1,390	1,365	600	595	
	18"-30"	825†	1400	1,370	1,320	1,280	595	580	
135	1/2	6"-16"	250	235	215	190	170	105	95
		18"-30"	235	200	170	120	85	95	85
	1	6"-16"	535	520	500	475	455	225	215
		18"-30"	520	485	455	405	370	215	205
2	6"-16"	825†	1,100	1,085	1,055	1,035	465	455	
	18"-30"	825†	1,070	1035	990	950	455	445	

* Requires 8" diameter drive pulley in lieu of 4" diameter. † Limited by conveyor capacity
Note: Capacities shown assume a constant speed and maximum of 6 starts/stops per minute with no more than 30 starts/stops per hour.

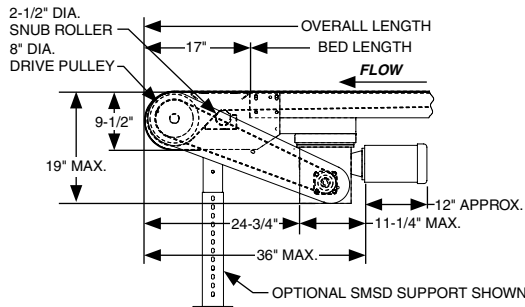
4" END DRIVE



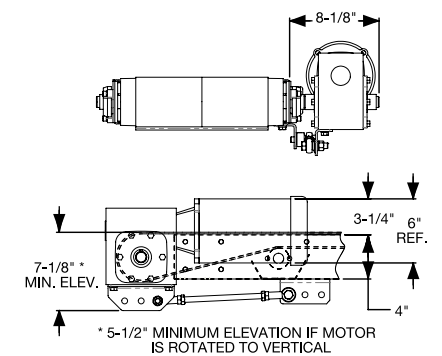
SECTION VIEW X-X



8" END DRIVE



4" SHAFT MOUNTED DRIVE



OPTIONAL EQUIPMENT

LENGTH / WIDTH - Other in-between widths are lengths are available

FLOOR SUPPORTS - SMS floor supports are available in wide range of adjustments. Specify top of belt 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.

BELT - Tan Glidetop, White Polymate 100 RMP – COS, Black Trackmate 120 Roughtop with PVC cover

BELT SPEED - Other constant and variable speeds

- 4 in. dia. drive pulley: 35, 40, 50, 80, 100 and 135 FPM
- 8 in. dia. drive pulley: 17 – 135 FPM in any increment
- Contact factory for speeds not listed above

OTHER PULLEY OPTIONS

- 8 in. dia. drive pulley with 1 7/16 in. dia. shaft at bearings in lieu of 4 in. dia. drive pulley
- 6 in. dia. tail pulley with 1 3/16 in. dia. shaft at bearings in lieu of 4 in. dia. tail pulley
- 1 1/8 in. dia. nose roller assembly in lieu of 4 in. dia. tail pulley. Center drive is required.

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

CENTER DRIVE / TAKE-UP - Provides 16 in. of belt take-up and is suitable for reversing applications

- Standard underhung drive (4 in. dia. drive pulley): 16 in. minimum elevation. 78 in. minimum OAL.
- Standard underhung drive (8 in. dia. drive pulley): 17 in. minimum elevation. 78 in. minimum OAL.
- Side mount drive/low elevation center drive (4 in. or 8 in. dia. drive pulley): 13 1/2 in. minimum elevation. 66 in. minimum OAL.

SHAFT MOUNTED END DRIVE - 4 in. dia. drive pulley only. Drive unit mounted on extended pulley shaft. Mounting bracket and torque arm enable multiple mounting positions. 4 7/8 in. minimum elevation.

OTHER DRIVE VARIATIONS - Side mounted end or center drives

UNDERSIDE TAKE-UP - Provides 16 in. of belt take-up. Extends down 13 1/8 in. from top of belt.

V-GUIDED CONSTRUCTION - When overall length to belt width ratio drops below 2.5:1 but is still greater than 1:1, V-guided belt is required to maintain belt tracking

GRAVITY BRACKETS - Brackets and support bar allows skatewheel or 1 3/8 in. dia. gravity roller conveyor to be supported at end of belt conveyor. Includes 1 in. dia. pop-out transfer roller.

BUTT COUPLINGS - Brackets allow 1.9 in / 2 in. dia. gravity roller conveyor along with other conveyors to be attached to end of belt conveyor. Includes 1 in. dia. pop-out transfer roller. Center drive or underside take-up recommended if butt couplings are to be located at tail end.

GUIDE RAILS - Adjustable channel guide rails, solid side guides

OTHER ACCESSORIES - Floor supports with casters, poly-tier supports, ceiling hangers. 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