

# BR100C



## HORIZONTAL BELT CONVEYOR (Roller Bed)



The BR100C belt conveyor is ideal for moving heavier loads. The roller bed design reduces belt friction which increase it's load capacity. It can be used in many types of material handling applications such as assembly operations, packaging, and inspection or for simply transporting product from point A to B.

- 15 belt widths
- Center drive and take-up
- Ideal for heavier loads
- Readily bolts up to other roller bed conveyors

		CONVEYOR WEIGHT (LBS.)														
OVERALL LENGTH	BED LENGTH	BELT WIDTH														
		10"	12"	14"	16"	18"	20"	22"	24"	28"	30"	34"	36"	42"	48"	54"
		BETWEEN FRAME WIDTH														
		13"	15"	17"	19"	21"	23"	25"	27"	33"	37"	39"	45"	51"	57"	
		OVERALL FRAME WIDTH														
16"	18"	20"	22"	24"	26"	28"	30"	34"	36"	40"	42"	48"	54"	60"		
		4 IN. DIA. TAIL PULLEYS							6 IN. DIA. TAIL PULLEYS							
12'	10'	518	562	600	638	682	725	778	832	891	935	1005	1048	1,160	1,274	1,390
17'	15'	602	654	697	740	791	841	907	973	1,042	1,094	1,172	1,223	1,351	1,481	1,615
22'	20'	683	742	789	837	895	953	1,032	1,110	1,188	1,247	1,335	1,393	1,538	1,684	1,834
27'	25'	765	831	882	934	999	1,064	1,154	1,245	1,331	1,397	1,494	1,559	1,719	1,881	2,046
32'	30'	845	918	975	1,031	1,103	1,175	1,279	1,382	1,477	1,551	1,657	1,729	1,905	2,084	2,266
37'	35'	927	1,007	1,068	1,128	1,207	1,286	1,402	1,517	1,621	1,701	1,815	1,894	2,086	2,280	2,478
42'	40'	1,007	1,095	1,160	1,225	1,311	1,398	1,526	1,654	1,767	1,855	1,978	2,064	2,273	2,484	2,697
47'	45'	1,089	1,183	1,253	1,323	1,416	1,509	1,649	1,789	1,910	2,005	2,137	2,230	2,454	2,681	2,910
52'	50'	1,169	1,271	1,345	1,419	1,520	1,620	1,773	1,926	2,057	2,158	2,300	2,400	2,641	2,884	3,129
57'	55'	1,251	1,360	1,438	1,517	1,624	1,731	1,896	2,061	2,200	2,309	2,459	2,566	2,822	3,080	3,341
62'	60'	1,332	1,447	1,530	1,614	1,728	1,842	2,020	2,197	2,346	2,462	2,621	2,736	3,009	3,283	3,561
67'	65'	1,413	1,536	1,624	1,711	1,832	1,954	2,143	2,332	2,490	2,612	2,780	2,902	3,190	3,480	3,773
72'	70'	1,494	1,624	1,716	1,808	1,936	2,065	2,267	2,469	2,636	2,766	2,943	3,072	3,376	3,683	3,993
77'	75'	1,576	1,712	1,809	1,905	2,041	2,176	2,390	2,604	2,779	2,916	3,102	3,238	3,558	3,880	4,205
82'	80'	1,656	1,800	1,901	2,002	2,144	2,288	2,514	2,741	2,925	3,070	3,265	3,408	3,744	4,082	4,424
87'	85'	1,738	1,889	1,994	2,099	2,248	2,399	2,637	2,876	3,059	3,220	3,424	3,573	3,925	4,279	4,636
92'	90'	1,818	1,976	2,086	2,196	2,353	2,510	2,762	3,013	3,215	3,373	3,586	3,743	4,112	4,483	4,856
97'	95'	1,900	2,065	2,179	2,294	2,457	2,621	2,885	3,148	3,359	3,524	3,745	3,909	4,293	4,979	5,068
102'	100'	1,980	2,153	2,272	2,390	2,561	2,732	3,008	3,285	3,505	3,677	3,908	4,079	4,480	4,882	5,288

## STANDARD SPECIFICATIONS

**BELT** – Black Trackmate 120 EMB

**BED** – 6-1/2 in. deep x 1 1/2 in. flange x 12 ga. powder coated steel channel frame with 1.9 dia. roller x 16 ga. tube spaced every 6 in. Standard 5 ft. and 10 ft. bolt-together sections with splice plates.

**CROSS BRACING** – Rods with turnbuckles are fastened to underside of bed to provide squaring adjustment and ensure correct product tracking. One set of turnbuckles are supplied for every 50 ft. of conveyor.

**CENTER DRIVE** – Can be placed on any section of conveyor length. Minimum elevation – 17 7/8 in. Minimum OAL is 90". Chain guard is on left-hand side when standing at infeed looking toward discharge.

**DRIVE PULLEY** – 8 in dia. with 1 7/16 in. dia. shaft at bearing. Machined, crowned and fully lagged.

**TAIL PULLEY** – 4 in. dia. with 1 in. dia. shaft at bearing or 6 in. dia. with 1 3/16 in. dia. shaft at bearing. 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 16 in. of belt take-up in center drive

**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

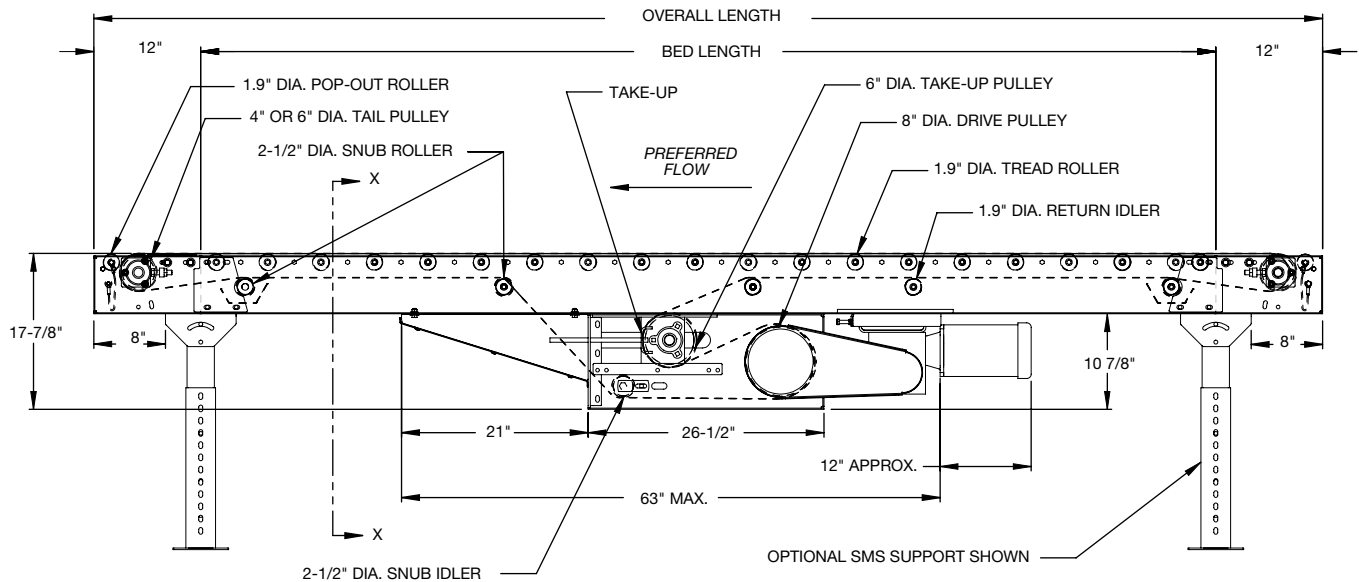
**FRAME CAPACITY** – Maximum load per linear foot of conveyor is 225 lbs. Not to exceed drive capacity in chart.

		LOAD CAPACITY (LBS)					
		HORIZONTAL W/ STANDARD BELT					
		8" DRIVE PULLEY					
FPM	HP	BELT WIDTH	12'	32'	52'	77'	102'
35	1/2	10"-18"	2,700*	4,600	4,400	4,200	4,000
		20"-30"	2,700*	4,400	4,100	3,800	3,500
		34"-54"	2,700*	4,000	3,600	3,000	2,400
	1	10"-18"	2,700*	7,200*	10,100	9,900	9,600
		20"-30"	2,700*	7,200*	9,800	9,500	9,100
		34"-54"	2,700*	7,200*	9,200	8,700	8,100
65	1/2	10"-18"	2,700*	2,600	2,400	2,200	2,000
		20"-30"	2,650	2,400	2,100	1,800	1,450
		34"-54"	2,500	2,000	1,600	1,000	450
	1	10"-18"	2,700*	6,050	5,900	5,650	5,450
		20"-30"	2,700*	5,900	5,600	5,250	4,950
		34"-54"	2,700*	5,500	5,050	4,450	3,900
2	10"-18"	2,700*	7,200*	12,300	12,050	11,850	
	20"-30"	2,700*	7,200*	12,000	11,650	11,350	
	34"-54"	2,700*	7,200*	11,450	10,850	10,300	
100	1/2	10"-18"	1,900	1,750	1,550	1,350	1,150
		20"-30"	1,800	1,550	1,300	950	600
		34"-54"	1,650	1,200	750	150	NA
	1	10"-18"	2,700*	4,100	3,950	3,700	3,500
		20"-30"	2,700*	3,950	3,650	3,300	3,000
		34"-54"	2,700*	3,550	3,100	2,500	1,950
2	10"-18"	2,700*	7,200*	8,300	8,050	7,850	
	20"-30"	2,700*	7,200*	8,050	7,650	7,350	
	34"-54"	2,700*	7,200*	7,450	6,850	6,350	
135	1/2	10"-18"	1,450	1,300	1,100	900	650
		20"-30"	1,350	1,100	850	500	150
		34"-54"	1,200	750	300	NA	NA
	1	10"-18"	2,700*	3,000	2,850	2,600	2,400
		20"-30"	2,700*	2,800	2,550	2,200	1,900
		34"-54"	2,700*	2,450	2,000	1,400	850
2	10"-18"	2,700*	6,500	6,300	6,100	5,900	
	20"-30"	2,700*	6,300	6,000	5,700	5,350	
	34"-54"	2,700*	5,950	5,500	4,900	4,350	

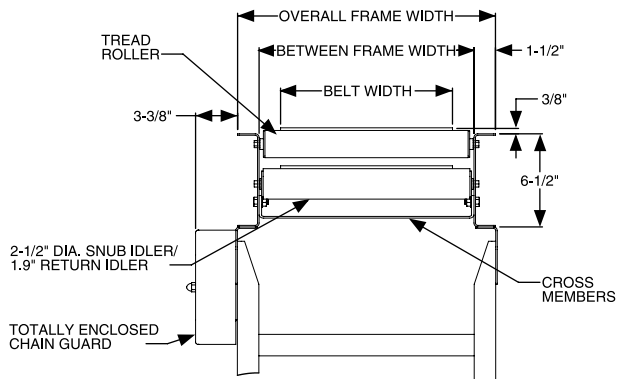
\* Limited by conveyor capacity

Note: Capacities shown assume a constant speed and maximum of 6 starts/stops per minute with no more than 30 starts/stops per hour.

## 8" CENTER DRIVE



### SECTION VIEW X - X



## OPTIONAL EQUIPMENT

**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 533 COS-PVC

**BELT SPEED** – Other constant and variable speeds: 17 – 135 FPM in any increment. Contact factory for speeds not listed above.

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

**SIDE MOUNT CENTER DRIVE / TAKE-UP** – Provides 16 in. of belt take-up. 16 1/2 in. minimum elevation. 60 in. minimum OAL

**END DRIVE** – Requires underside take-up

- 8 in. underhung end drive: 16 in. minimum elevation. 104 in. minimum OAL.
- 8 in. side mount end drive: 13 in. minimum elevation. 96 in. minimum OAL.

**UNDERSIDE TAKE-UP** – Provides 16 in. of belt take-up. Extends down 15 7/8 in. from top of belt.

**ROLLER CENTERS** – Bed rollers spaced on 3 in., 9 in., or 12 in. centers.

**PULLEYS** – 6 in. dia. tail with 1-3/16 in. dia. shaft at bearing in place of 4 in. when not furnished as standard.

**SLAVE KIT** – To slave VBC19 curve from system end of belt conveyor.

**GUIDE RAILS** – Adjustable channel guide rails, fixed angle and channel guide rails.

**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.