30° Roller Transfer Conveyor

The model ProSort MRT is a sorter for mediumsized items. Product is transported on multiple narrow belts. Diverter wheels pop up between the belts to transfer items at 30-degree angles to the sorter.

• 30-Deg • Left- o Transfer • High So • Close T

- 30-Degree Angle Transfer
- Left- or Right-Handed Transfer
- High Sort Rates
- Close Transfer Locations
- Flexible Sort Locations
- HyPower Distributed Cabling System



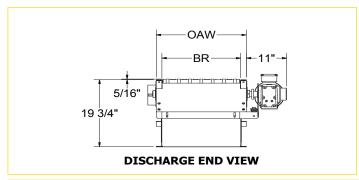
Tail and
Intermediate
Section Length

Section Length
24"
27"
30"
33"
36"
39"
42"
45"
48"
51"
54"
57"
60"
66"
72"
78"
84"
90"
96"
102"
108"

114"120"

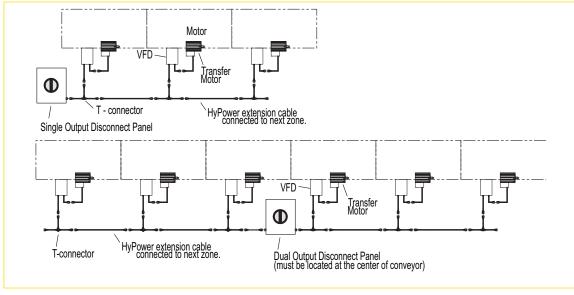
Conveyor Weights				
Overall Width "OAW"	Drive Weight (lbs.)	Roller Transfer Weight (lbs.)	Conveyor Weight lbs. Per Foot	
18"	185	112	13.6	
21"	195	129	14.9	
24"	205	146	16.1	
27"	215	163	17.3	
30"	225	180	18.5	

Total Weight = Drive Weight + Roller Transfer Weight + (Conveyor Weight Per Foot x OAL)



Between Rail "BR"	Overall Width "OAW"	Number of Belts
15"	18"	4
18"	21"	5
21"	24"	6
24"	27"	7
27"	30"	8

Maximum Live Conveyor Load Maximum Overall Number Conveyor Width of Load "OAW" Belts (lbs.) 18" 4 1200 21" 5 1500 24" 6 1800 27" 7 2100 30" 8 2400



Standard Specifications

BELT – APH 150 HTS x 15/16 in. wide with alligator 125 staple lacing.

BED – UHMW wear strip spaced every 3 in., Mounted in 6 1/2 in. x 1 1/2 in. x 12 ga. powder-painted formed steel channel frame, bolted together with butt coupling.

END DRIVE PULLEY – 8 in. dia. with 1 7/16 in. dia. shaft at bearings, fully lagged.

SNUB PULLEY – 4 in. dia. pulley with 1 in. dia. shaft at bearings. Drilled and tapped both ends for encoder.

INFEED IDLER PULLEY – 4 in. dia. x 1 1/2 in. wide crowned sheave with precision bearings.

PNEUMATIC TAKE-UP – Take-up provides 14 in. of individual belt take-up. 25 PSI max on filter regulator. Need one pneumatic take-up for every 75 ft. of conveyor length.

AIR FILTER/REGULATOR – Supplied for main air line.

RETURN ROLLERS – 1.9 in. dia. galvanized tube with ABEC bearings and cardboard tube inserts.

BEARINGS – Sealed, pre-lubricated, self-aligning ball bearings with eccentric lock collars. Pre-lubricated ball bearings in return rollers.

DRIVE – Shaft mounted gearmotor, 230/460/575V, 3 Ph. 60 Hz. energy efficient, with an AC variable frequency controller.

BELT SPEED – Determined by application requirements including rate required, package size, and weight.

TRACKING ENCODER – Provided on snub pulley in drive section. Contact factory for encoder specification.

CAPACITY – Maximum unit package weight is 75 lbs. Maximum distributed load determined by number of belts under product (see chart). 150 ft. maximum length. NOT TO EXCEED capacity in chart.

FLOOR SUPPORTS – Supplied as optional equipment.

Standard Specifications - 30° Diverter Wheel Transfer

CAPACITY - Maximum unit package weight of 75 lbs.

PACKAGE SIZE - Minimum of 8 in. long x 6 in. wide

TRANSFER MECHANISM – Series of 1 3/4 in. dia. precision bearing diverter wheels with. Driven by 1 in. wide flexproof endless polyester belt.

AIR CYLINDER – Two 40mm bore x 2 in. stroke cylinders.

AIR REQUIREMENTS – Working pressure 60 PSI. Free air consumption at 60 PSI, .053 cu. ft. per cycle.

HYPOWER DISTRIBUTED CABLING SYSTEM – Supplies distributed power to transfer motors (see diagram). Electrical Code: All motor controls and wiring shall conform to the National Electrical Code (Article 670 or other applicable articles) as published by the National Fire Protection Association and as approved by the American Standards Institute, Inc. Subject to local code and local customer acceptance.

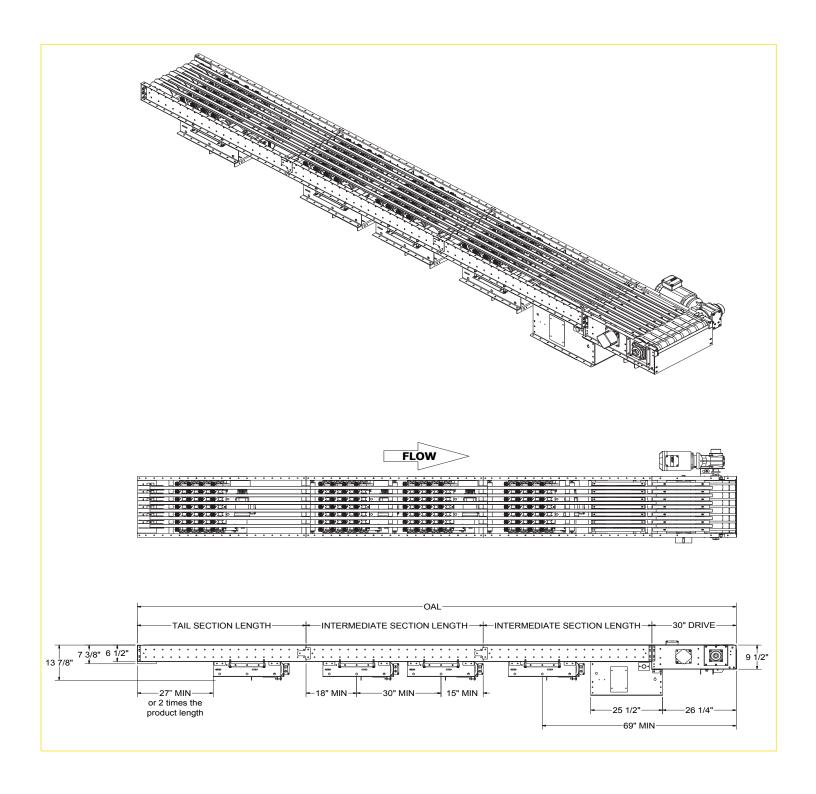
AIR VALVE – 24VDC single solenoid 4-way air valve.

MOTOR – 1/2 HP, 230/460 V, 3 Ph. 60 Hz. Flange Mount Gearmotor.

AC DRIVE – 1/2 HP, AC variable frequency controller.

TRANSFER SPEED – 275 FPM @ 60 Hz.; 367 FPM @ 80 Hz.





Optional Equipment

FLOOR SUPPORTS – MS Type floor supports are available with a wide range of adjustment. Specify top of belt elevation. One support required at every bed joint and ends of conveyor. Holes are in feet for lagging to floor. Knee braces supplied with MS-7 supports and above.

GUARD RAILS – Continuous adjustable channel, fixed channel or type A and B angle. Note: If product comes in contact with guard rails, products may not transfer.

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

MOTOR – Single phase and other characteristics are available. For conveyor unit only.

PROLOGIX® CONTROL PACKAGE – Provides complete controls for proper sorter operation. Contact factory for details.

PLUG-N-GO WIRING – Available with ProLogix® Control Package.

Spur			
Centers			
Chart			
OAW	Min		
	Ctrs		
18"	42"		
21"	48"		
24"	54"		
27"	60"		
30"	66"		

Disconnect Panel	230V 3 Ph. 60 Hz.	460V 3 Ph. 60 Hz.
Single Output	1-3 Transfers	1-6 Transfers
Dual Output	4-6 Transfers	7-12 Transfers

Note: Sorters over 50 ft. long require a dual output disconnect panel.

