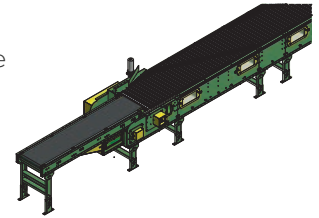


# PROSORT 1121 & 1131

High-Speed Sortation Conveyor (Small Item)

The ProSort 1121 is designed to sort products at a 22-degree angle where higher speeds are required and close divert centers are not so critical. The ProSort 1131 is designed to sort products at a 30-degree angle where close divert centers are required. Products are transported on anodized aluminum slats where at a predetermined location, divert shoes move diagonally across the conveyor to push the product onto a take-away line. The ProSort 1100 family of sorters is designed for high-speed applications where product diverting needs to be both positive and gentle.

- 4 Widths Available
- Right- or Left-Hand Diverts Available
- High Sort Rates
- Sorts Small Fragile Items
- Anodized Aluminum Slats
- Adjustable HS-Type Floor Supports Available



Conveyor shown with optional floor supports.

Gearmotor Wt.	
HP	lbs.
3	198
5	198
7.5	243
10	283
15	454
20	489

Gap Requirements Based on Package Width			
ProSort 1121		ProSort 1131	
Package Width	Minimum Product Gap	Package Width	Minimum Product Gap
Up to 12"	6"	Up to 9"	6"
>12" to 18"	9"	>9" to 12"	9"
>18" to 30"	12"	>12" to 18"	12"
-	-	>18" to 24"	15"
-	-	>24" to 30"	18"

Sorter Conveying Surface Width	Sorter Between Rail Width	Sorter Overall Width	Nominal Sorter Overall Width "OAW"	Induction Bed Width "OAW"	Minimum Spur Width "OAW"	Conveyor Section										
						Drive (not including gearmotor)		Tail (not including induction belt)		Induction Takeup	Divert section w/ 22° divert ProSort 1121		Divert section w/ 30° divert ProSort 1131		Intermediate with no diverter	
						Length	Wt (lbs.)	Length	Wt (lbs.)	Wt (lbs.)	Length	Wt (lbs.)	Length	Wt (lbs.)	Length	Wt (lbs./ ft.)
15"	27-1/4"	30-1/4"	30"	18"	22"	48"	792	30"	586	97	60"	351	49"	300	6" to 120"	61
21"	33-1/4"	36-1/4"	36"	24"	28"		841		632	116	74"	476	59"	385		68
27"	39-1/4"	42-1/4"	42"	30"	34"		892		686	135	89"	609	70"	501		76
33"	45-1/4"	48-1/4"	48"	36"	40"		941		733	155	104"	757	80"	596		83

All weight estimates in catalog are conveyor weights only. Accessories, crating, etc., are not included. Weights listed in conveyor sections include chain, slats and shoes used in the section.

## Standard Specifications - Induction Conveyor

**BELT** – Black, high-grip, longitudinal groove with high-speed lacing. Belt width is 6 in. less than overall width.

**BED** – 12 ga. galvanized slider pan mounted in 6 1/2 in. x 12 ga. painted formed steel channel frame.

**INDUCT DRIVE** – Timing belt driven at same speed as sorter. The drive pulley is incorporated into the sorter tail assembly. Access holes designed into side plate for ease of pulley removal.

**DRIVE PULLEY** – 8 in. dia. with 1 11/16 in. dia. shaft at bearings.

**TAKE-UP PULLEY** – 6 in. dia. with 1 3/16 in. dia. shaft at bearings; machine crowned.

**TAIL PULLEY** – 2 1/4 in. dia. machine crowned and easily removable.

**TAKE-UP** – Take-up in drive provides 16 in. of belt take-up.

**BEARINGS** – Sealed, pre-lubricated, self-aligning ball bearings on drive.

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# PROSORT 1121 & 1131

## Standard Specifications

**INTERMEDIATE** – 17 1/8 in. deep x 1 1/2 in. flange 12 ga. formed steel channel frame; powder-painted with a bolted on aluminum chain support extrusion for a total height of 18 in.

**TAIL BED** – 18 in. deep x 1 1/2 in. channel 7 ga. formed steel channel flange; powder-painted.

**DRIVE SECTION** – 30 or 42 in. deep x 4 ga. formed steel channel frame; powder-painted. 42 in. deep drive is needed when length exceeds 210 ft.

**CARRYING CHAIN** – Dual strands of No. 60 pre-lubricated o-ring roller chain with precision bearings and extended pins.

**CHAIN LUBRICATOR** – Installed at infeed end to lubricate carrying chains. Gravity feed with 24VDC on/off switch. Flow control valves to control the amount of oil allowed to flow to each of the brush applicators.

**SLATS** – Anodized aluminum slats supported at each end by bushings and extended chain pins on 1 1/2 in. centers. Slats overlap each other for better product support and to prevent debris from falling into sorter.

**DIVERT SHOES** – Low friction molded base with pusher face. Steel guide pin for switching and ball bearing cam follower for diverting. Located on 3 in. centers.

**SWITCH ASSEMBLY** – Pneumatic or electric operated high speed switch assembly mounted with rubber isolators for quietness. Easily removable for maintenance.

**SMART PROXIMITY SWITCHES** – 24VDC inductive proximity switch. One at each divert. Requires maintained electrical signal for duration of each divert.

**SAFETY SWITCHES** – Switches located at infeed and discharge ends to detect stray divert shoes or internal jams. Additional switch supplied at 30 ft. intervals. Interrupts power to drive motor when these conditions are detected.

**DRIVE** – Shaft mounted gear motor. Mounted at discharge end on the opposite side from the diverts. 230/460V, 3Ph., 60Hz. Horsepower based on speed and length requirements.

**VARIABLE SPEED CONTROLLER** – Provides smooth acceleration of drive motor and speed variations if necessary.

**CONVEYING SPEED** – Determined by application requirements. Up to 450 FPM on ProSort 1121. Up to 350 FPM on ProSort 1131.

**PACKAGE SIZE** – Minimum 4 1/2 in. long.

**CAPACITY** – Maximum load: 25 lbs. per ft. Maximum product weight is 50 lbs.

**INDUCTION CONVEYOR** – Belt conveyor that is timing belt driven from sorter at same speed as sorter.

**FLOOR SUPPORTS** – Not supplied as standard. See optional equipment.

## PNEUMATIC SWITCH SORTER COMPONENTS:

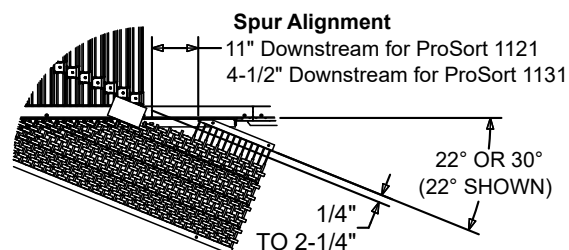
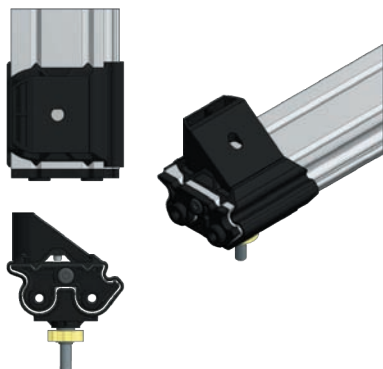
**AIR REQUIREMENTS** – Free air consumption at 60 PSI equals .002 cu. ft. per divert.

**AIR VALVE** – High Speed 24VDC single solenoid 4-way air valve at each divert station.

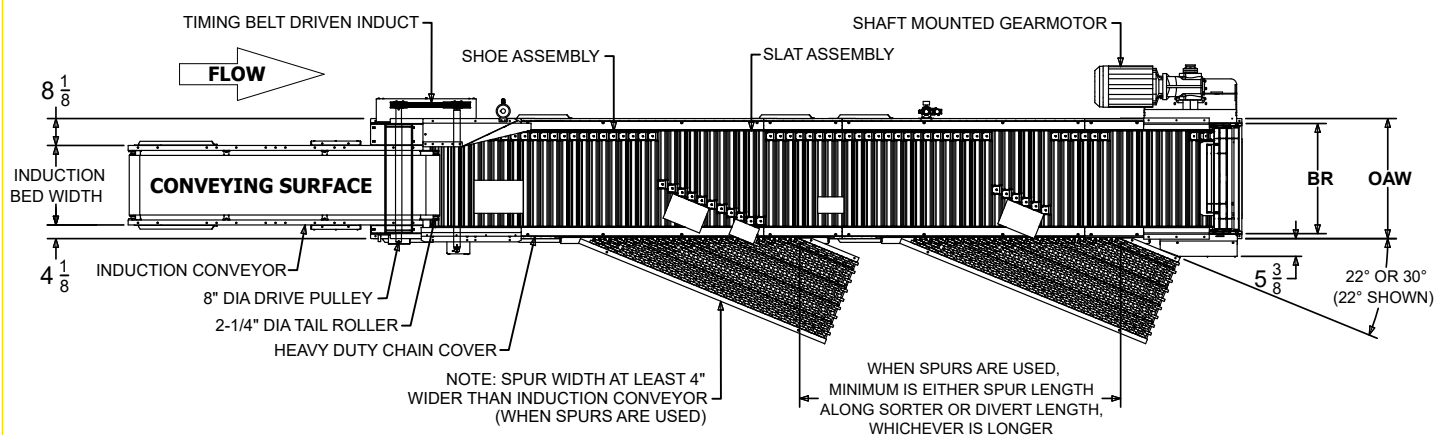
**AIR FILTER/REGULATOR** – Supplied for main air supply line. 1/2 in. NPT ports. Requires working pressure of 60 PSI.

**AIR PRESSURE SWITCH** – Install in main air line near the last divert switch. Used to detect low air pressure and turn off drive.

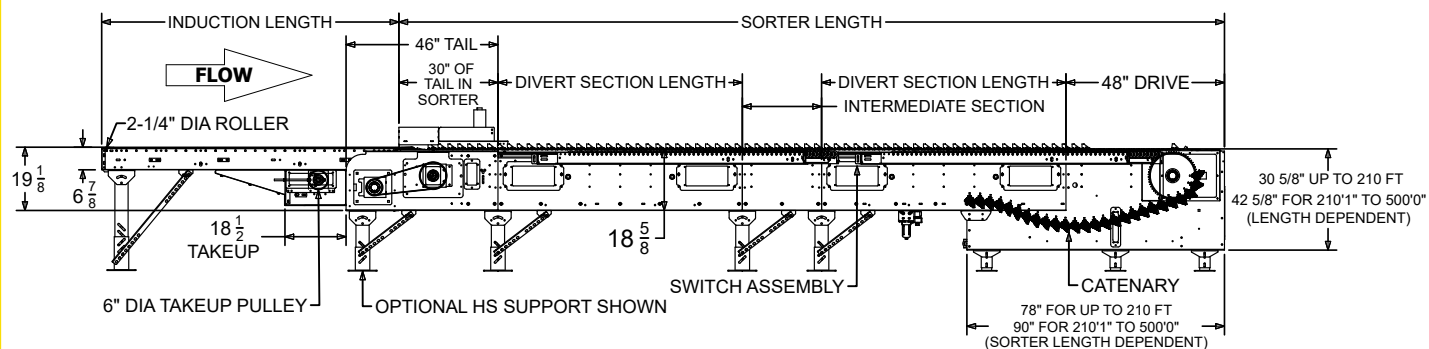
# PROSORT 1121 & 1131



SPUR DETAIL VIEW  
(SOME DETAILS REMOVED FOR CLARITY)



Note: Spur location is measured beyond the end of the section on both the 22-degree and the 30-degree diverters.



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# PROSORT 1121 & 1131

## Optional Equipment

**FLOOR SUPPORTS** – HS Type floor supports are available with a wide range of adjustment. Specify top of slat elevation. One support required at every bed joint and ends of conveyor. Holes in feet for lagging to floor. Knee braces recommended above HS-6 support. Vibration pads between channel and supports.

**TAKE-AWAY LINES** – Gravity spurs are available. Consult factory for recommendation of type and configuration.

**GUARD RAILS** – Solid side guards on switch side only.

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