The Model ProSort SC series of sorters are belt driven sortation conveyors. The belt concept provides a reliable method of tracking packages to the divert stations. Take-away spurs may be skatewheel-type or powered-type slaved from the main sorter.

- 4 Belt Widths
- Right Hand, Left Hand or Two-Sided Diverts Available
- Adjustable MS-Type Floor Supports Available

**ProSort SC1 & SC2**

**Horizontal Belt Sortation Conveyor**

<table>
<thead>
<tr>
<th>Overall Width &quot;OAW&quot;</th>
<th>Between Rail Width &quot;BR&quot;</th>
<th>Belt Width</th>
<th>Minimum Divert Centers</th>
<th>Slaved Spur Length</th>
<th>Base Weight</th>
<th>Conveyor Weight Per Foot</th>
<th>Diverter Weight</th>
<th>Slaved Spur Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>18&quot;</td>
<td>15&quot;</td>
<td>12&quot;</td>
<td>42&quot;</td>
<td>57&quot;</td>
<td>480</td>
<td>21</td>
<td>300</td>
<td>115</td>
</tr>
<tr>
<td>24&quot;</td>
<td>21&quot;</td>
<td>18&quot;</td>
<td>54&quot;</td>
<td>57&quot;</td>
<td>570</td>
<td>23</td>
<td>365</td>
<td>130</td>
</tr>
<tr>
<td>30&quot;</td>
<td>27&quot;</td>
<td>24&quot;</td>
<td>66&quot;</td>
<td>57&quot;</td>
<td>660</td>
<td>26</td>
<td>430</td>
<td>140</td>
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<tr>
<td>36&quot;</td>
<td>33&quot;</td>
<td>30&quot;</td>
<td>78&quot;</td>
<td>69&quot;</td>
<td>750</td>
<td>29</td>
<td>495</td>
<td>175</td>
</tr>
</tbody>
</table>

**NOTE:** To calculate conveyor weight use the following formula:

Total Weight = Base weight + gearmotor weight + (Conveyor weight per foot X Overall Length) + (Diverter weight X Number of diverters) + (Slaved spur weight X Number of slaved spurs)

**Gearmotor Wt.**

<table>
<thead>
<tr>
<th>HP</th>
<th>LBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>126</td>
</tr>
<tr>
<td>7.5</td>
<td>152</td>
</tr>
<tr>
<td>10</td>
<td>192</td>
</tr>
</tbody>
</table>

**Conveyor shown with optional floor supports**

**Shaft-Mounted Gear Motor**

**Slaved Spur Length**

**Single-Sided Diverter**

**Positioning Diverter**

(For Two-Sided Sorters)

**8-3/16’ FROM OF DIVERTER TO INSIDE CORNER OF SPUR CHANNEL**

**Two-Sided Diverter**

**6” Discharge Tail Pulley**

**Min. 8’-6” (Heavy Duty Standard Drive)**

**Min. 10’-0” (High Performance Drive)**

**19-1/4” Top of Belt**

**2-1/2” Snub Idler**

**Optional MS Type Support Shown**

**Flow**

**Min. Diverter Centers**

**24” Min. to Infeed of Section**

**17-1/2” Top of Belt**

**2-1/2” Snub Idler**

**17-1/2” Infeed Tail Pulley**

**OAW**

**BR**

**BELT WIDTH**

**6-1/2” 6-7/8” 10-1/4”**

**RETURN IDLER IN SUPPORT SPACER CHANNELS**

**USE WHEN DISTANCE BETWEEN DIVERTS EXCEEDS 10 FT.**
HYTROL CONVEYOR COMPANY, INC.

PROSORT SC1 & SC2

BELT—Ultimate 140 BBS-Nitrile.

BED—Roller bed with 1.9 in. dia.x 16 ga. galvanized rollers with ABEC-1 bearings spaced every 6 in. Mounted in 6 1/2 in.x 12 ga. powder painted formed steel channel frame bolted together with splice plates.

DRIVE PULLEY—8 in. dia. with 1 3/4 in. dia. shaft at bearings, machine crowned and fully lagged.


DISCHARGE TAIL PULLEY—6 in. dia. with 1 3/8 in. dia. shaft at bearings, machine crowned.

SNUB IDLER—Adjustable 2 1/2 in. dia. pre-lubricated ball bearings.

RETURN IDLER—Adjustable 2 1/2 in. dia. pre-lubricated ball bearings.

TAKE-UP PULLEY—6 in. dia. with 1 7/16 in. dia. shaft at bearings, machine crowned.

TAKE-UP—Take-up in center drive provides 15 in. (heavy-duty drive) or 36 in. (high performance drive) of belt take-up.

PNEUMATIC TENSIONER—Provides constant belt tension on high-performance drives. Supplied with regulator for 12-15 P.S.I.

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

DRIVE—Heavy-duty (1-3 diverts and less than 30ft OAL) or high-performance center drive, located at discharge end. Shaft-mounted gearmotor and variable speed controller, 230V or 460V-3Ph. 60HZ. Horsepower based on speed and length requirements.

TRACKING ENCODER—Provided on take-up pulley shaft. Contact factory for encoder specifications.

BELT SPEED—Determined by application requirements. 300 FPM maximum.

CAPACITY—Maximum unit package weight 75 lbs. Maximum distributed load of 4000 lbs. Maximum conveyor length is 150 ft.


FLOOR SUPPORTS—Now supplied as optional equipment.

• STANDARD SPECIFICATIONS

CAPACITY—Maximum unit package weight — 75 lbs.

PACKAGE SIZE—Minimum: 6 in. wide x 9 in. long. NOTE: Small packages must not be top heavy.

DIVERTER MECHANISM—Two banks of twin pivoting 3 1/4 in. dia. wheels with urethane treads driven by 1/4 in. dia. urethane belts. Double sided diverts not available on 18 in. OAW.

AIR CYLINDER—32mm dia. bore x 3/4 in. stroke double acting. Dual cylinder for two-sided diverters.

AIR REQUIREMENTS—Working pressure 30 to 40 P.S.I. depending on width. Free Air Consumption at 40 P.S.I., 0.24 cu. ft. per cycle.

AIR VALVE—24 volt DC single solenoid 4-way air valve, two per single-sided diverter, four per double-sided diverter.

AIR FILTER, REGULATOR—Supplied for main air supply line with 1/2 in. NPT ports. Required working pressure 30 to 40 P.S.I.

DRIVE—Slave driven from main belt conveyor.

POSITIONING DIVERTER—Diverter used at infeed of two-sided sorters to position packages for proper diverting.

• STANDARD SPECIFICATIONS - DIVERTER

BUTT COUPLINGS—Standard for connecting 190 ACC, 190 LRC, 190 ACZ, 190 LR, or gravity conveyors.

MOUNTING BRACKET—Bracket supplied to attach spur to side channels of ProSort SC.

FLOOR SUPPORTS—Now supplied as optional equipment.

• STANDARD SPECIFICATIONS - POWERED SPUR

BED—Roller bed with 1.9 in. dia.x 16 ga. galvanized rollers with ABEC-1 bearings and plastisol coating in spur area spaced every 3 in. Mounted in 6 1/2 in.x 12 ga. powder painted formed steel channel frame.

DRIVE—Slave driven from main sorter conveyor.

CONVEYING SPEED—Matched to main sorter conveyor.

MOUNTING BRACKET—Bracket is supplied to attach spur to side channels of ProSort SC.

BELT SKIRTS—Hide return belt.

UNDERSIDE COVER—Attach to belt skirts to cover belt on underside of sorter.

GUARD RAILS—Adjustable channel and fixed channel types available.

• OPTIONAL EQUIPMENT

GUARD RAILS—Adjustable channel and fixed channel types available.

UNDERSIDE COVER—Attach to belt skirts to cover belt on underside of sorter.

PROSORT LOGIX SC CONTROL PACKAGE—Provides complete controls for proper sorter operation. Contact factory for details.

FLOOR SUPPORTS—MS Type floor supports are available with a wide range of adjustment. Specify top of belt or roller elevation. One support required at every bed joint and ends of conveyor. Holes in feet for lagging to floor. Knee brackets recommended above MS-6 support.

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

PROSORT LOGIX SC CONTROL PACKAGE—Provides complete controls for proper sorter operation.