## MODEL"190MRA"



Medium Duty Motorized Roller Photo Eye Controlled Accumulating Conveyor

- Energy efficient technology
- Zero pressure accumulation
- Photo eye controlled
- 24VDC Brushless motorized rollers
- Quiet operation
- Easy installation and wiring
- Low profile design
- Simple maintenance



#### **STANDARD SPECIFICATIONS**

**Beds** - 15", 21", 27", 33", and 39" wide between rails, 7" deep x  $1^{1/2}$ " x 12 ga. painted, formed steel channel frame, bolted together with splice plates and floor supports.

**Rollers** - 1.9" dia. x 16 ga. galvanized steel rollers with 7/<sub>16</sub>" hex axle and ABEC-1 bearings. Double grooved rollers spaced on 3", 4" or 6" centers are slave driven by urethane "O" rings from motor rollers. Rollers are set low in conveyor frame to provide guard rails both sides.

**Motor Rollers** - Motor rollers are 24VDC, brushless type for long life and high output. Each motor roller has the capability to provide accumulation, dynamic braking, slug unload, reverse and run at variable speeds as standard. Motor roller only runs when necessary and remains in sleep mode at all other times. A driver card for each motorized roller is included, but is application specific.

Sensors - Retro-reflective photo eye mounted to side of conveyor frame to detect product presence. Photo eyes operate on 24VDC.

**Accumulation Zones** - Standard zones are 18,"24,"30" or 36" long. Zone length must be equally divisible by roller centers.

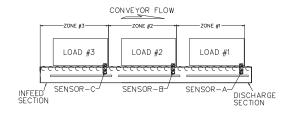
**Power** - A "power supply" is required to convert 120VAC to 24VDC to power the motorized rollers - power supply sold separately.

**Capacity** - Motor rollers can handle product weights up to 120 lbs. depending on product type and conveyor speed.

**Floor Supports** - 30" to 44" adjustable from floor to top of roller. One support provided for each end of conveyor and at each bed joint. Other elevations are available.

**Conveyor Speed** - Standard conveyor speed range is 25 to 200 FPM. Other speeds are available.

Side Covers - Easy on-off, tinted plastic side cover to protect wiring - no tools required to remove or install.



### **OPTIONAL EQUIPMENT**

Curves - 30, 45, 60 and 90 degree curves available.

**Diffused Photo Eyes** - To be used when retro-reflective photo eyes can't be used due to product interference.

**Right Angle Transfer** - 90 degree right angle tranfer, driven by motor rollers provide economical means for transferring product off or onto main conveyor line.

**Electrical Controls** - Complete electrical control system is available to control all functions of the motor rollers capabilities.

Poly-V or Chain Driven - Designed for heavier loads.

### **OPERATIONAL SEQUENCE**

- 1) Model "190MRA" is loaded at the infeed end of conveyor. The first load travels the entire length of the conveyor to Zone #1. If the driver card in Zone #1 has been set to accumulate, the product will stop in Zone #1.
- 2) The second load travels the length of the conveyor until it reaches Zone #2. If Zone #1 is occupied, the second load will stop in Zone #2. Load #3 will stop in Zone #3 and continue to accumulate at "zero pressure" until fully loaded.
- 3) To unload, an external signal to the driver card in Zone #1 will release the accumulation feature and allow the product in Zone #1 to leave the conveyor. The load in Zone #2 will not advance into Zone #1 until the load in Zone #1 has completely cleared Zone #1's photoelectric sensor; the third load will not advance into Zone #2 until the second load clears the photoelectric sensor in Zone #2.

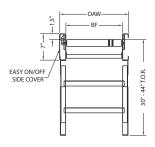
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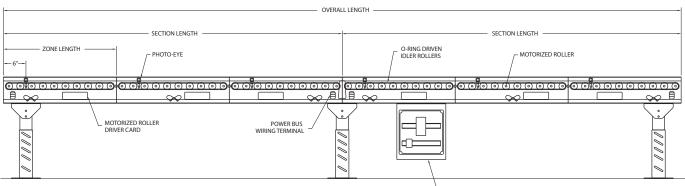
| Overall | Between Frames                          | 15"  | 21"  | 27"  | 33"  | 39"  |
|---------|---|------|------|------|------|------|
| Length  | Overall Frame Width                     | 18"  | 24"  | 30"  | 36"  | 42"  |
| 5'      | Weight<br>(Ibs.)<br>Weights<br>Based on | 208  | 242  | 274  | 306  | 339  |
| 10'     |   | 336  | 398  | 457  | 514  | 573  |
| 15'     |   | 463  | 553  | 638  | 722  | 807  |
| 20'     |   | 591  | 709  | 820  | 930  | 1042 |
| 25'     |   | 719  | 865  | 1002 | 1138 | 1275 |
| 30'     |   | 846  | 1020 | 1184 | 1347 | 1509 |
| 35'     |   | 974  | 1176 | 1365 | 1554 | 1744 |
| 40'     |   | 1101 | 1332 | 1548 | 1762 | 1978 |
| 45'     |   | 1229 | 1487 | 1729 | 1971 | 2212 |
| 50'     |   | 1357 | 1642 | 1911 | 2178 | 2447 |
| 55'     |   | 1484 | 1799 | 2093 | 2386 | 2681 |
| 60'     |   | 1612 | 1954 | 2275 | 2595 | 2916 |
| 65'     | 3" Roller                               | 1740 | 2109 | 2456 | 2803 | 3150 |
| 70'     | Centers                                 | 1867 | 2265 | 2638 | 3010 | 3384 |
| 75'     |   | 1995 | 2421 | 2820 | 3219 | 3619 |
| 80'     |   | 2122 | 2376 | 3002 | 3427 | 3853 |
| 85'     |   | 2251 | 2731 | 3183 | 3635 | 4086 |
| 90'     |   | 2378 | 2888 | 3366 | 3843 | 4321 |
| 95'     |   | 2505 | 3043 | 3548 | 4052 | 4555 |
| 100'    |   | 2633 | 3198 | 3729 | 4259 | 4790 |

### Load Capacity Chart

| ~60 FPM (66 FPM) |            |  |  |  |  |
|------------------|------------|--|--|--|--|
| ZONE LENGTH      | TOTAL LOAD |  |  |  |  |
| 18″              | 120 lbs.   |  |  |  |  |
| 24″              | 100 lbs.   |  |  |  |  |
| 30″              | 80 lbs.    |  |  |  |  |
| 36″              | 60 lbs.    |  |  |  |  |



FLOW



- OPTIONAL POWER SUPPLY