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MAGNETIC CONVEYORS

Magnetic conveyors are created by placing permanent ceramic magnets in the bed of a standard conveyor.

- Holds ferrous parts fast to the belt.
- Ideal for elevation changes or part holding.
- Can be used in upside down applications.
- Strength and size of magnetic field is designed per application.

2200 Series Conveyor Specifications

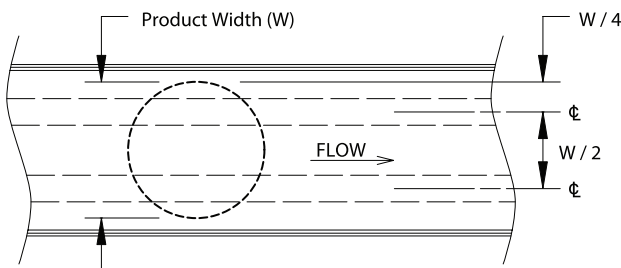
- Aluminum Extruded Frame with T-slot Construction
- Sealed Ball Bearings
- V-Guided and Non-V-Guided Compatible
- Rack and Pinion Belt Tensioning
- End and Center Drive Compatible
- Conveyor Widths: 3.75" to 24" wide
- Conveyor Lengths:
 - End Drive = 2' to 18' long
 - Center Drive = 2' to 24' long
- Speed Capacity: 264 ft/min

See *Product Engineering Manual* or www.dorner.com for details.



Magnet Specifications:

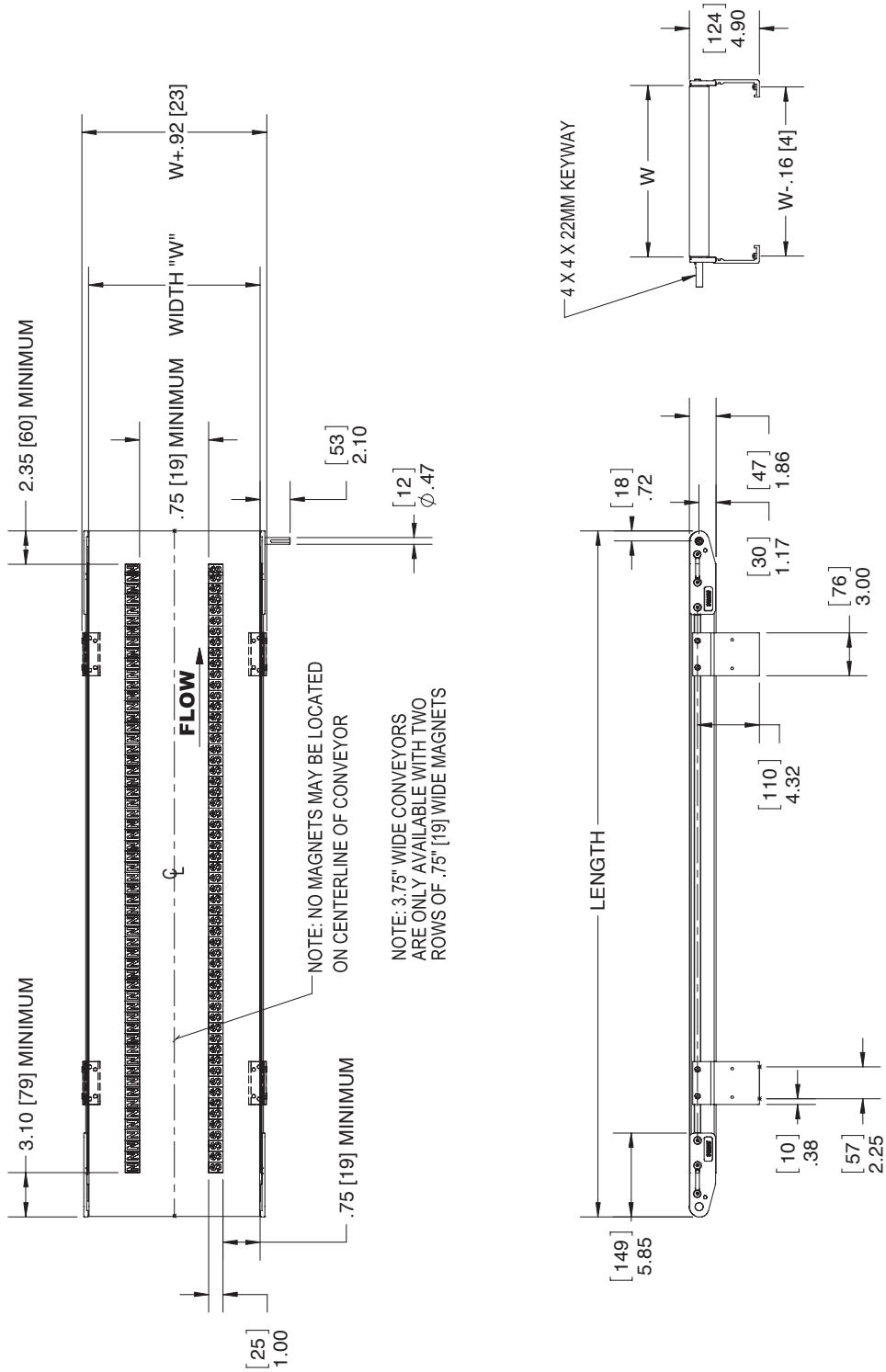
- Permanent ceramic magnets
- Width = 1" wide (0.75" wide for 3.75" wide conveyors)
- Strengths: standard and strong
(note: strong magnets are generally only used in centering or inverted applications)
- Rows: Generally 2 rows of magnets are used. One row oriented as north, the other as south. Multiple rows can be used for larger product or additional magnetic strength.
- Row Spacing: Generally spaced at 1/2 of the width of the product.



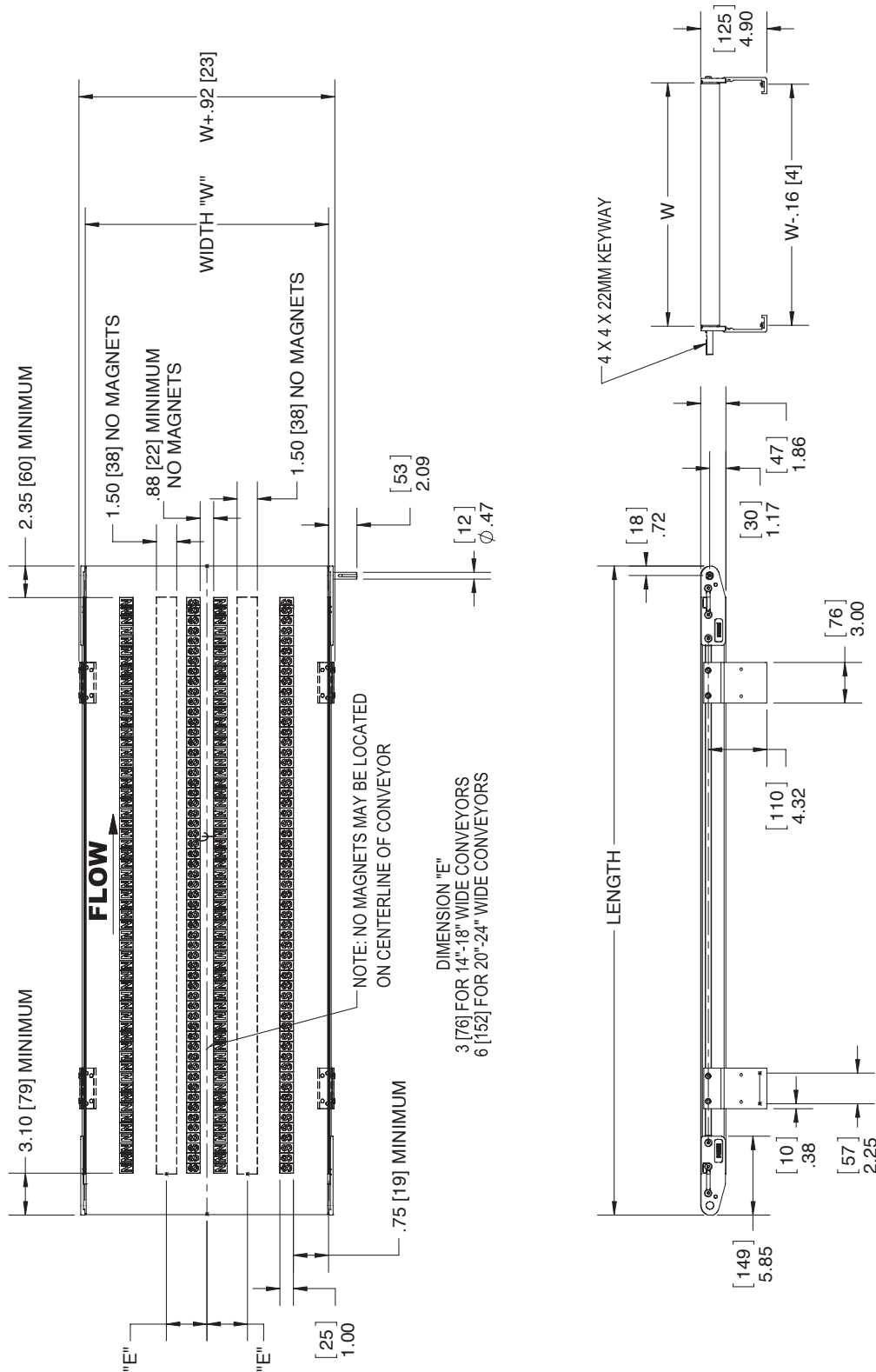
- Decreasing Zones: Decreasing zones allow gradual decreasing of magnet strength for smooth product transfer off the magnet or end of the conveyor. They should be used for the following reasons:
 1. Belt speed is less than 25 ft/min
 2. Product length (in the direction of the flow) is less than 3"
- Decreasing zone length should be 4 times the product length.
- Sample product is recommended to test magnetic strength.

Note: Do not attempt to accumulate product on a magnetic conveyor.

Dimensions and Magnetic Layout (3.75" (95 mm) - 12" (305 mm) Wide):



Dimensions and Magnetic Layout (14" (356 mm) - 24" (610 mm) Wide):



Profiles:

- All 2200 Series profiles are applicable.
- *See Product Engineering Manual or www.dorner.com for details.*

Belting:

- Do not use low coefficient of friction belting.
- Finger splice is preferred, plastic and metal clipper splices are acceptable.
- *See Product Engineering Manual or www.dorner.com for details.*

Mounting Packages & Gearmotors:

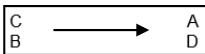
- All 2200 Series mounting packages and gearmotors are applicable.
- *See Product Engineering Manual or www.dorner.com for details.*

Support Stands:

- All 2200 Series Support Stands are applicable.
- *See Product Engineering Manual or www.dorner.com for details.*

| | | | |
|---------------|--|----------------|--|
| Contact Name: | | Project Name: | |
| Company Name: | | DTools Cong #: | |
| Email: | | Phone: | |
| Address: | | | |

The Basics

| | Conveyor 1 | Conveyor 2 | Conveyor 3 |
|---|---|------------|------------|
| Belt Widths | | | |
| Conveyor Lengths | | | |
| Drive Position (side, bottom, top, center) | | | |
| Drive Location (C & B reduce load capacity 66%) |  | | |
| Belt Requirements (Flat or Cleated) (if unsure, describe application) | | | |
| Cleat Height (if needed) (see catalog for types) | | | |
| Cleat Spacing (if needed) | | | |
| Profile / Guiding type (see catalog) | | | |
| Top of Belt Heights from Floor (if stands are required) (Infeed and Outfeed) | | | |
| Belt Speed (fixed/variable) (Feet per Minute) or (Parts per Minute) | | | |
| For Variable Speed: DC or VFD? | | | |
| Input Voltage / Phase / HZ | | | |
| Stands Needed? Casters or Fixed Feet? | | | |
| Curves and LPZ models: attach a sketch with critical dimensions. | | | |
| Maximum load on conveyors | | | |
| Will parts accumulate? (Stop while belt continues to run) | | | |
| Describe how the products are presented to & discharged from conveyor | | | |

The Product

| | | | |
|---|--|--|--|
| Product Description (shape, material, unique features, sharp edges, fragile, etc) | | | |
| Product Dimensions & orientation on the belt | | | |
| Part Temperature | | | |
| Part Weight | | | |

The Environment

| | | | |
|---|--|--|--|
| Room temperature or operating temperature near conveyor, if unusual | | | |
| Describe any chemicals, lubricants, etc. to contact conveyors? | | | |
| Wash down or wipe down? High pressure? (Over 60 psi)? | | | |

| Application Description / Additional Information | | | |
|--|------------|------------|------------|
| | Conveyor 1 | Conveyor 2 | Conveyor 3 |
| Enter any other pertinent information here | | | |
| Common modifications and additional information needed. | | | |
| Magnetic & Vacuum Conveyors | | | |
| How are products presented to the conveyor? | | | |
| How are products to be removed from conveyor? | | | |
| Angle of incline/decline, if any? | | | |
| What function is the conveyor expected to perform? | | | |
| Are product samples available for testing? | | | |
| Specific zone length requirements? | | | |
| What forces must the magnets or vacuum resist? | | | |
| Common Drive Conveyors | | | |
| Size of free & clear gaps required between conveyors | | | |
| Quantity of conveyors to be common driven | | | |
| Backlit Conveyors | | | |
| LED light source type (light color, brightness, etc) | | | |
| Zone length | | | |
| Zone location along conveyor length from tension end | | | |
| Switch plate location (must be within 12" of the light) | | | |
| Additional Output Shaft | | | |
| Position on conveyor (A, B, C, D) | | | |
| Required shaft dimensions | | | |
| How is shaft to be used? | | | |
| Guiding | | | |
| Height from top of belt | | | |
| Required width for product | | | |
| Lane spacing (if any) | | | |
| Material requirements | | | |
| How is guiding to be used (create simple lanes, product positioning, etc) ? | | | |
| Metal Free Zone Conveyors | | | |
| Length of zone | | | |
| Why is zone needed (metal detection, X-Ray, etc) | | | |
| Complex Projects | | | |
| For sophisticated projects, please provide as much of the following information as possible. | | | |
| Layout drawings | | | |
| Process / sequence of operation descriptions | | | |
| Control requirements | | | |
| Machine interface needs | | | |
| Sample products | | | |
| Factory acceptance test requirements | | | |
| Installation requirements | | | |

| | | | |
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