

975 Cottonwood Ave., PO Box 20, Hartland, Wisconsin 53029-0020, USA | [www.dorner.com](http://www.dorner.com) | [info@dorner.com](mailto:info@dorner.com)

### 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

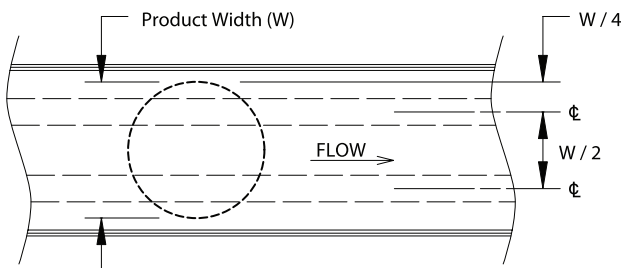
- Aluminum Extruded Frame with T-slot Construction
- Sealed Ball Bearings
- V-Guided and Non-V-Guided Compatible
- Rack and Pinion Belt Tensioning
- End and Center Drive Compatible
- Conveyor Widths: 3.75" to 24" wide
- Conveyor Lengths:
  - End Drive = 2' to 18' long
  - Center Drive = 2' to 24' long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

See *Product Engineering Manual* or [www.dorner.com](http://www.dorner.com) for details.



### Magnet Specifications:

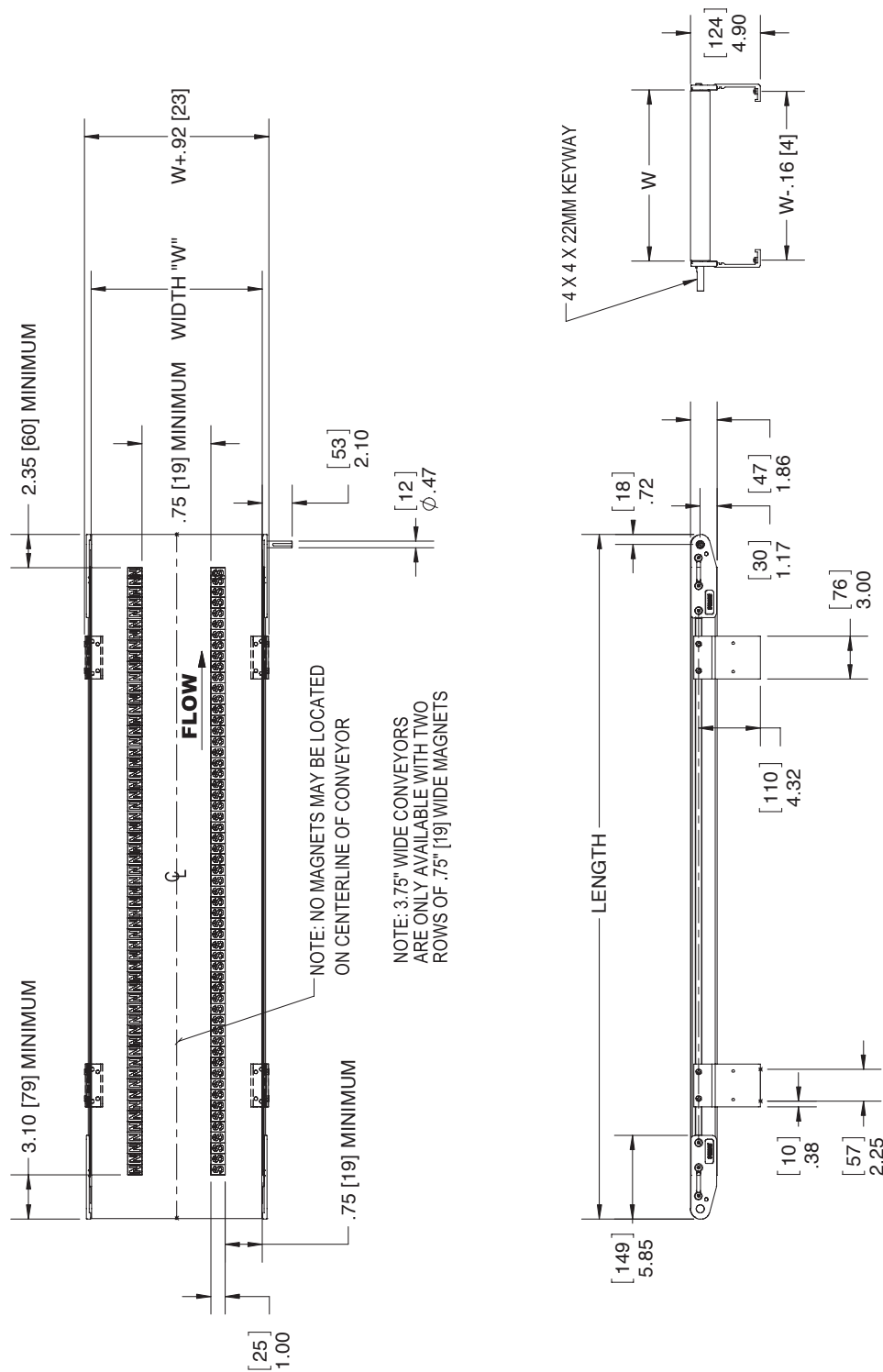
- Permanent ceramic magnets
- Width = 1" wide (0.75" wide for 3.75" wide conveyors)
- Strengths: standard and strong  
(note: strong magnets are generally only used in centering or inverted applications)
- Rows: Generally 2 rows of magnets are used. One row oriented as north, the other as south. Multiple 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):





### Profiles:

- All 2200 Series profiles are applicable.
- *See Product Engineering Manual or [www.dorner.com](http://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](http://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](http://www.dorner.com) for details.*

### Support Stands:

- All 2200 Series Support Stands are applicable.
- *See Product Engineering Manual or [www.dorner.com](http://www.dorner.com) for details.*

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

### The Basics

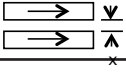
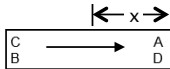
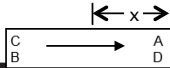
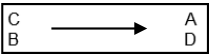
	Conveyor 1	Conveyor 2	Conveyor 3
Belt Widths			
Conveyor Lengths			
Drive Position (side, bottom, top, center)			
Drive Location (C & B reduce load capacity 66%)			
Belt Requirements (Flat or Cleated) (if unsure, describe application)			
Cleat Height (if needed) (see catalog for types)			
Cleat Spacing (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

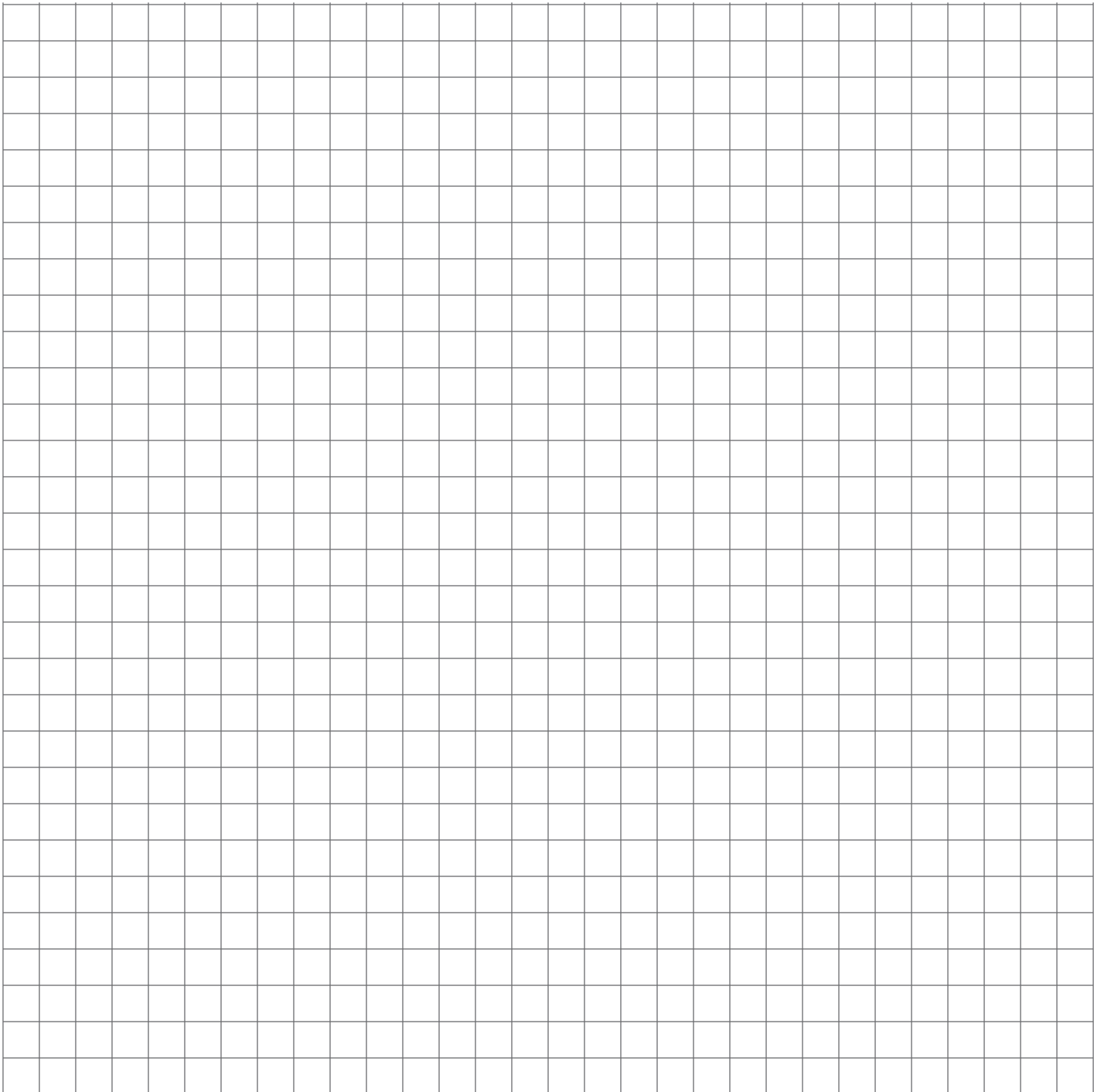
Product Description (shape, material, unique features, sharp edges, fragile, etc)			
Product Dimensions & orientation on the belt			
Part Temperature			
Part Weight			

### 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			
<b>Common modifications and additional information needed.</b>			
<b>Magnetic &amp; Vacuum Conveyors</b>			
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?			
<b>Common Drive Conveyors</b>			
Size of free & clear gaps required between conveyors 			
Quantity of conveyors to be common driven			
<b>Backlit Conveyors</b>			
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) 			
<b>Additional Output Shaft</b>			
Position on conveyor (A, B, C, D) 			
Required shaft dimensions			
How is shaft to be used?			
<b>Guiding</b>			
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) ?			
<b>Metal Free Zone Conveyors</b>			
Length of zone			
Why is zone needed (metal detection, X-Ray, etc)			
<b>Complex Projects</b>			
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			

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




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