Linear Guides and Actuators

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LINEAR GUIDES
LINEAR ACTUATORS

SERVO DRIVEN ACTUATORS
LINEAR SYSTEMS

Alusic
Linear Guide
Assembly Examples
800.055 Series
55x55 Linear Guide Assembly Reference Drawing

The drawings here below illustrate the dimensions of the Linear Guide of the Series 800.055 with Alusie 800.040.021 profile structure and hardened steel rails D6.

**RUN OF THE MOVABLE TROLLEY = L-180**

L = aluminum profile length with guide 06

**Detail A for gear motors BRUSHLESS**

**Detail B: Idler head with sliding snoozing system for gear motors BRUSHLESS**

**Detail of movable trolley**

Sliding Trolley
800.040.503
800.010 Series
45x90 Linear Guide Assembly Reference Drawing

The drawings here below illustrate the dimensions of the Linear Guide of the Series 800.010 with Alumnic 45x90 profile structure and hardened steel rails Ø 12.
800.030 Series

45x90 Vertical Linear Guide Assembly Reference Drawing

The drawings below illustrate the dimensions of the Linear Guide of the Series 800.030 with Alumi 45x90 profile structure and hardened steel rails Ø 12.

- **Drive Head**: 800.040.201
- **Idler Head**: 800.040.202
- **Run of the movable trolley** = L - 220
- **Sliding Trolley**: 800.040.410
- **Hollow shaft Ø 19H7**
- **Detail A for gear motors BRUSHLESS**
- **Pin for Gear Motor VF30**: 800.040.015
- **Profile**: 004.328.021
- **Round bar**: 800.040.016
- **Profile 45x90**: 084.101.019

**Drive Head**

**Idler Head**

**Sliding Trolley**

**Hollow shaft Ø 19H7**

**Detail A for gear motors BRUSHLESS**

**Pin for Gear Motor VF30**

**Profile**: 004.328.021

**Round bar**: 800.040.016

**Profile 45x90**: 084.101.019
800.020 Series
90x90 Vertical Linear Guide Assembly Reference Drawing

The drawings here below illustrate the dimensions of the Linear Guide of the Series 800.020 with Aiwa's 90x90 profile structure and hardened steel rails Ø 1/2.

- **Drive Head**: 800.040.301
- **Sliding Trolley**: 800.040.303
- **Idler Head**: 800.040.302

**Diagram Details**

- **Hollow shaft Ø 19H7**
- **Pin for Gear Motor VF30**: 800.040.015
- **Concentric screw**: 084.529.005
- **Profile**: 084.529.031
- **Profile 18x80**: 084.101.006
- **Profile 90x80**: 084.101.024

**Measurements**

- **RUN OF THE MOVABLE TROLLEY**: L = 130  
  - L = aluminium profile length with guides Ø 1/2
Maximum Load Calculations

The table here below shows the maximum weights $F_x$, $F_y$ (N) and $M_z$ (Nm) the movable trolley can move:

<table>
<thead>
<tr>
<th>CODICE CODE</th>
<th>CARICO Fx (N)</th>
<th>CARICO Fy (N)</th>
<th>MOMENTO Mz (Nm)</th>
<th>CARICO Max su cinghia (N) Max BELT LOAD (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>800.055</td>
<td>650</td>
<td>900</td>
<td>30</td>
<td>1.200</td>
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<td>1.700</td>
<td>30</td>
<td>2.000</td>
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<tr>
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<tr>
<td>800.030</td>
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<td>1.700</td>
<td>35</td>
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<tr>
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<td>1.700</td>
<td>30</td>
<td>3.000</td>
</tr>
</tbody>
</table>

The maximum speed of carriage at maximum load is 1 m/s. Load conditions must be evaluate depending on the application.

*To calculate the load of the aluminium profiles consult the catalogue Alusic*
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