

DryLin® Linear Slide Table - ZLW 0630 Belt Drive

ZLW-0630-LCB: (Formerly ZLW-0630-B "basic") Low cost basic version uses a glass-reinforced neoprene belt and is meant for lower load and speed applications than version S

ZLW-0630-S: Standard table with steel-reinforced polyurethane belt, enhanced pulley system and other components for higher speed and load applications than version LC

Special properties

- Compact size
- Speeds up to 6.5 ft/s
- Maintenance-free
- For strokes up to 1000 mm
- Available in both LC and S versions



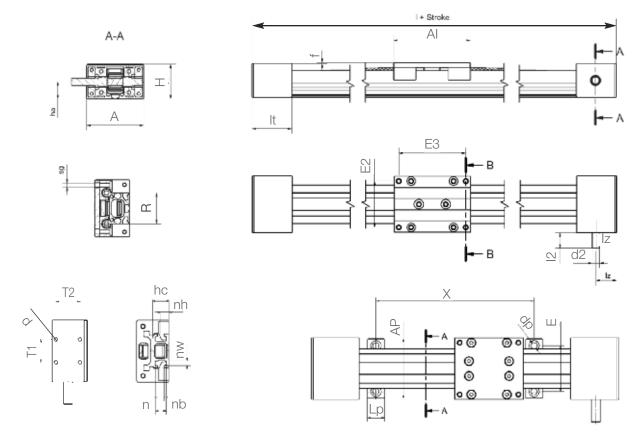
Couplings available

Technical Data

| | Weight without stroke | Weight 100 mm stroke (kg) | Max. stroke length* (mm) | Linear travel per shaft revolution (mm/U) | Gear- teeth | Toothe -material | ed belt- -width (mm) | -tension N | Max. radial stress N | Belt Pulley | Max. Speed at 60% operation (m/s) | Linear positioning tolerance |
|----------|-----------------------|------------------------------------|-----------------------------------|---|----------------|---------------------|----------------------------|---------------|----------------------------|----------------|--|------------------------------------|
| ZLW-0630 | | | | | | | | | | | | |
| LCB | 0.43 | 0.08 | 1.000 | 54 | AT 5 | Neoprene with GF | 9 | 75 | 100 | ball bearing | 2.5 | ±0.35 |
| Standard | 0.43 | 0.08 | 1.000 | 54 | MTD3 | PU + steel cord | 9 | 100 | 150 | ball bearing | 2 | ±0.30 |

^{*} Larger stroke lengths upon request.

^{**} These values were measured with maximum load in horizontal orientation



Dimensions (mm) for LCB and S versions

| Part No. | A -0.3 | AI | Н | E2 ±0.15 | 1 | hc | E3 ±0.15 | R ±0.15 | f | lt ±0.3 | sg | ha | lz | 12 | d2 |
|-------------|-----------|--------|------|-------------|-----|------|-------------|------------|-----|------------|-------|-------|-----|----|-------|
| ZLW-0630-02 | 54 | 60 | 31 | 45 | 144 | 13.5 | 51 | 30 | 3 | 42 | M4 | 14 | 22 | 20 | *8/10 |
| | | | | | | | | | | | | | | | |
| Part No. | | X | E | AP | LP | dp | n | nb | nw | nh | T1 | T2 | d | | |
| | | | ±0.2 | -1 | | | | | | | ±0.25 | ±0.25 | | | |
| ZLW-0630-02 | va | riable | 40 | 52 | 15 | 5.5 | 5.2 | 9.5 | 4.3 | 7 | 20 | 21 | 3.2 | | |

^{* &#}x27;LCB' version has a 6mm square output shaft with 10mm OD plastic adapter. Stainless adapter optional (ZTY-104027)

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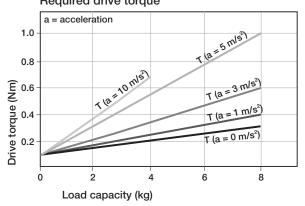




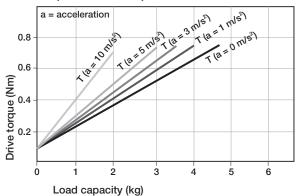
DryLin® Linear Slide Tables

PDF: www.igus.com/drylin-pdfs CAD: www.igus.com/drylin-CAD RoHS info: www.igus.com/RoHS

Horizontal orientation ZLW-0630-02-LCB Required drive torque*



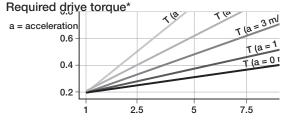
Vertical orientation ZLW-0630-02-LCB Required drive torque*



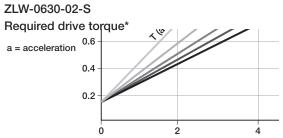
Horizontal orientation

ZLW-0630-02-S

Drive torque (Nm)



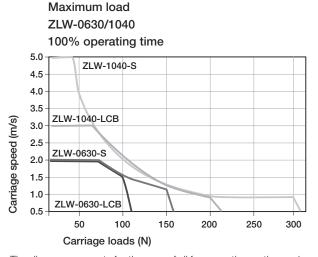
Vertical orientation



Load capacity (kg)

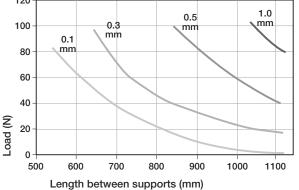
Load capacity (kg)

Drive torque (Nm)



Rail deflection between supports
Versions LCB and S

For unsupported applications



Sag permissible up to maximum 2 mm.

The diagram accounts for the sum of all forces active on the carriage.

^{*} Assumption: The moving mass is located in a circumscribed circle with a max. R = 100 mm to the middle of the guiding rail, max. permissible torque version 01: 1.3 Nm, a = 0 m/s²; version 02: 2.4 Nm, a = 0 m/s²; constant drive without nominal value acceleration



DryLin[®] Linear Slide Table - ZLW 1040 Belt Drive



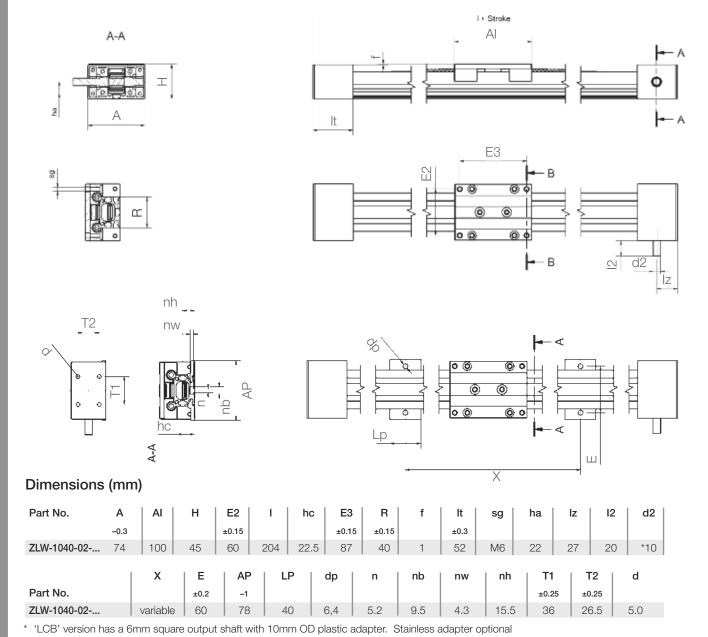
ZLW-1040-LCB: (Formerly ZLW-1040-B "basic") Cost-effective version uses a glass-reinforced neoprene belt and is meant for lower load and speed applications than version S

ZLW-1040-S: Standard table with steel-reinforced polyurethane belt, enhanced pulley system and other components for higher speed and load applications than version LC

Special properties

- High speed, up to 16.4 ft/s (5 m/s)
- Maintenance-free
- Lightweight
- Cost-effective versus other actuator systems
- Maximum stroke, 2000 mm

| | Weight without stroke (kg) | Weight 100 mm stroke (kg) | max. stroke length* (mm) | Trans- mission (mm/U) | Gear- teeth | Tootho | ed belt- -width (mm) | -tension (N) | max. radial stress (N) | Pulley | max. speed at 60% operation (m/s) | Linear positioning tolerance |
|----------|-------------------------------------|------------------------------------|-----------------------------------|-----------------------------|----------------|------------------|----------------------------|-----------------|------------------------------|--------------|--|------------------------------------|
| ZLW-1040 | | | | | | | | | | | | |
| LCB | 0.9 | 0.14 | 2.000 | 66 | RPP 3M | Neoprene with GF | 15 | 150 | 200 | ball bearing | 3 | ±0.35 |
| Standard | 1.0 | 0.14 | 2.000 | 70 | AT 5 | PU + steel cord | 16 | 200 | 300 | ball bearing | 5 | ±0.2 |



DryLin® Linear Slide Table - ZLW 1040 **Belt Drive**



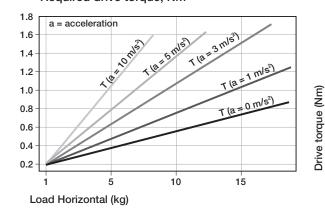


Linear Slide Tables

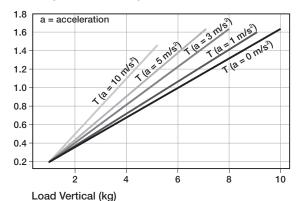
info: www.igus.com/RoHS www.igus.com/drylin-CAD PDF: www.igus.com/drylin-pdfs

CAD: 1

Horizontal orientation ZLW-1040-02-LCB Required drive torque, Nm



Vertical orientation ZLW-1040-02-LCB Required drive torque, Nm



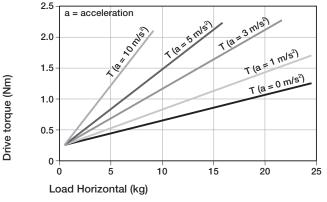
Horizontal orientation

ZLW-1040-02-S

Drive torque (Nm)

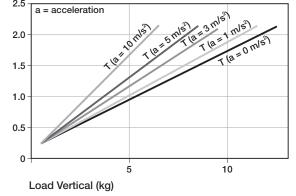
Carriage speed (m/s)

Required drive torque, Nm



Vertical orientation ZLW-1040-02-S



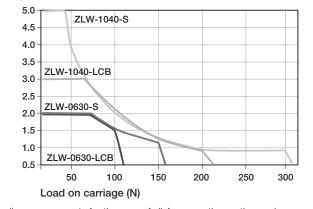


^{*} Assumption: The moving mass is located in a circumscribed circle with a max. R = 100 mm to the middle of the guiding rail, max. permissible torque version 01: 1.3 Nm, a = 0 m/s²; version 02: 2.4 Nm, a = 0 m/s²; constant drive without nominal value acceleration

Load (N)

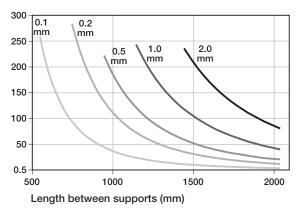
Drive torque (Nm)

Maximum load comparison ZLW-0630 and ZLW-1040 100% operating time



The diagram accounts for the sum of all forces active on the carriage.

For unsupported applications Rail deflection between supports Versions LCB and S



Sag permissible up to maximum 2 mm.



DryLin® Linear Slide Table - ZAW

Special properties

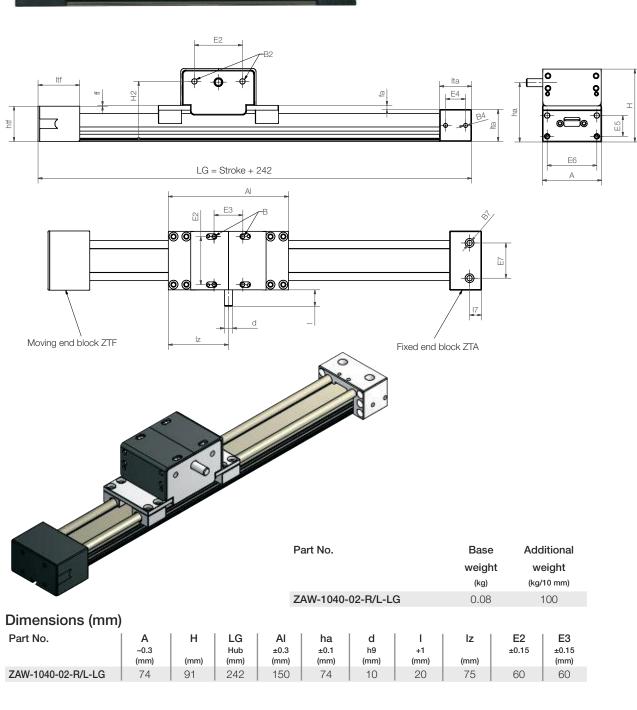
- Low weight
- Maintenance-free
- High rigidity
- Perfect for applications where the rail moves, but the carriage is stationary

E6

(mm)

62





| Part No. | A -0.3 (mm) | H (mm) | LG Hub (mm) | AI ±0.3 (mm) | ha ±0.1 (mm) | d h9 (mm) | +1 (mm) | Iz (mm) | E2 ±0.15 | E3 ±0.15 (mm) |
|--------------------|-------------------|--------|-------------------|--------------------|--------------------|-----------------|------------|------------|-------------|---------------------|
| ZAW-1040-02-R/L-LG | 74 | 91 | 242 | 150 | 74 | 10 | 20 | 75 | 60 | 60 |
| | | | | | | | | | | |
| Part No. | В | B2 | htf | ltf | ff | fa | lta | E4 | B4 | E5 |
| | -0.3 | | Hub (mm) | ±0.3 | ±0.1 | h9 | +1 (mm) | (mm) | ±0.15 | ±0.15 |
| | | | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | | (mm) |

40

25

52

DryLin® Linear Slide Table - ZLW Belt Drive



The DryLin® ZLW belt drive can be fastened in different ways (clamp and slot nuts included in delivery):

The orientation of the drive is optional. Overhead installation is the best option against fouling.

 Clamping offers an easy fastening option for the drive, on aluminum machine profiles and other surfaces.

Part numbers ZLW-0630 = ZTZ-063006 ZLW-1040 = 75.40.

- 2. Slot nuts enable the mounting on 3 sides (1040: left, right, below) or 2 sides (0630: left, right) as well as the fixing of sensors and proximity switches.
- 3. Screw connection: Threaded holes are located at each end block face.

1. Clamp mount



Included in delivery

2. Slot nuts (M5)



Ideal for limit switches Included in delivery

3. Screw connection



4 x M6/M4 (optional)

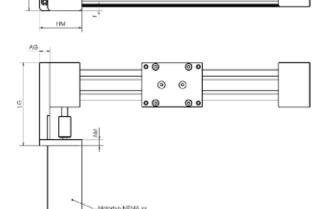
Directions for installation: The end blocks should not be used as a mechanical stop under any circumstances. A minimum spacing of 10 mm should be provided on both sides.

Motor flange



The motor flange can be fastened onto the end block with four screws. Different types of motor flanges are available.





Dimensions in mm

| Part number | | Base | plate | | Motor Flange | | | | |
|------------------|----|-------|-------|----|--------------|------|------|--|--|
| | AG | LG | LK | AM | НМ | LM | f | | |
| MF-0630-NEMA23-S | 12 | 99.5 | 35.5 | 10 | 59 | 56 | 17 | | |
| MF-0630-NEMA23-L | 12 | 110.5 | 46.5 | 10 | 59 | 56 | 17 | | |
| MF-1040-NEMA23-S | 17 | 119 | 35 | 10 | 70.7 | 56.4 | 7 | | |
| MF-1040-NEMA23-L | 17 | 138 | 54 | 10 | 70.7 | 56.4 | 7 | | |
| MF-1040-NEMA34-S | 17 | 119 | 35 | 10 | 85 | 85 | 20.5 | | |
| MF-1040-NEMA34-L | 17 | 138 | 54 | 10 | 85 | 85 | 20.5 | | |