# LFA Precision Conveyor

## Fast Linear Transfer System

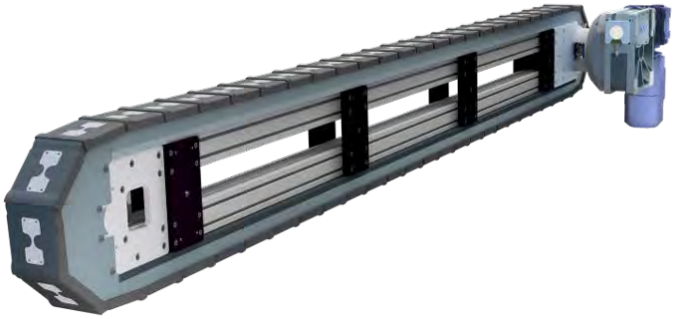
MOTION
INDEX DRIVES

## Precision Link Conveyor LFA – Design and mode of operation

The main component is a continuous chain manufactured from highly precise aluminum links. Per link four cam followers for the vertical guidance roll by a hardened and fine-milled guide rail. Two ball bearings provide at a hard bar for the horizontal adjustment. The links are connected by bolts and needle bearings.

The main frame is made from aluminum profile and steel plates. The conveyor can be mounted at the aluminum profile or at the steel plates. Additional external stations can also be fixed there.

The chain is moved by a hardened step wheel, driven by a standard indexer or any other custom specified drive. At the other end a hard 180° cam guides the chain. This cam is preloaded, so there is no backlash at the links. The linear stroke of the chain depends on the diameter of the step wheel. One cycle of the indexer means a Advantages for design engineers and linear stroke of one, two or three links.



### Special Machine Builders

- Vertical assembly - saves room. The empty carriers travel through the bottom of the machine
- Horizontal assembly - in an oval formation. Both sides of the machine can be used for assembly
- The free drive shaft of the indexer can be used for a synchronously rotating parallel shaft to drive other units
- The aluminum profile system can be used to mount other external stations fast and easily

### Allowance for Individual Customer Requirements

- Custom specified drives are available
- Optional overload protection
- Dwell- and index angle can be customized in a large range
- Non standard links and linear strokes are possible
- The chain can be designed in metric or english
- Customized color without additional cost
- Stainless steel, nickel plating or other special
- surfaces are available

### Technical Benefits for Users

- High reliability and long lifetime
- Robust method of construction
- Proven to last many years
- Needle or ball bearings rolling in oil bath or on clean, dry and hard surfaces
- Low maintenance (only once a year check and adjust the pre-loading of the chain)
- Wear-free by using TIC (Motion Index Drives Indexing Controller)

The sky is the limit for the Motion Index Drives product line. Flexible, made-to-order custom designs which are not featured in the product catalog have long been embedded in our corporate philosophy.

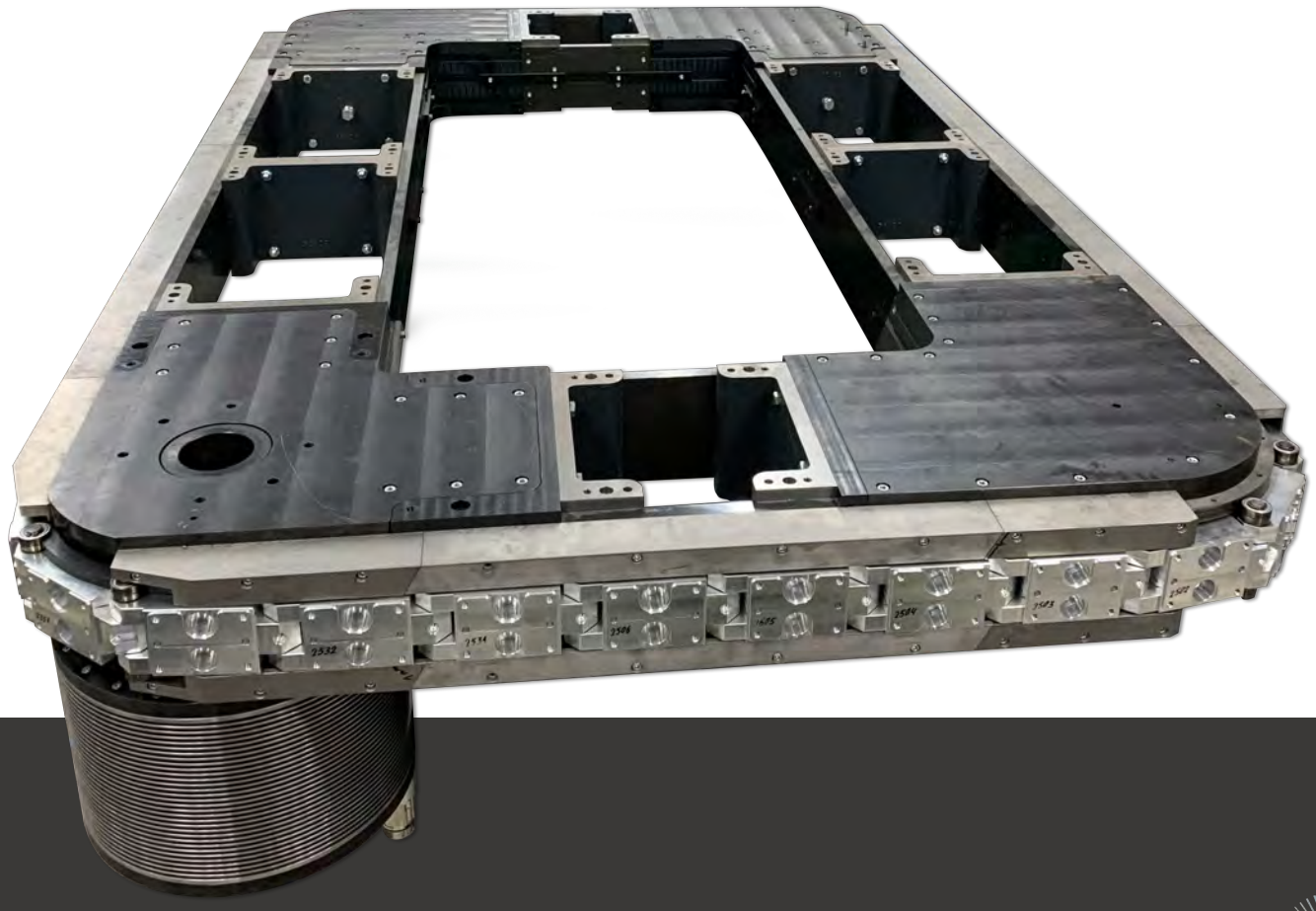
Our drives meet the highest standards regarding quality and precision. Our cams are manufactured in a different manner with regards to our competition, therefore it is often possible to use smaller rotary table sizes supplied by Motion Index Drives instead of larger ones supplied by our competitors.

Our extensive design expertise enables us to meet customer requirements down to the last detail. We can combine the advantages of different forms of drives to create new value-added solutions which fit the bill completely. This is the added value which we have been offering to our customers in different sectors for many years.

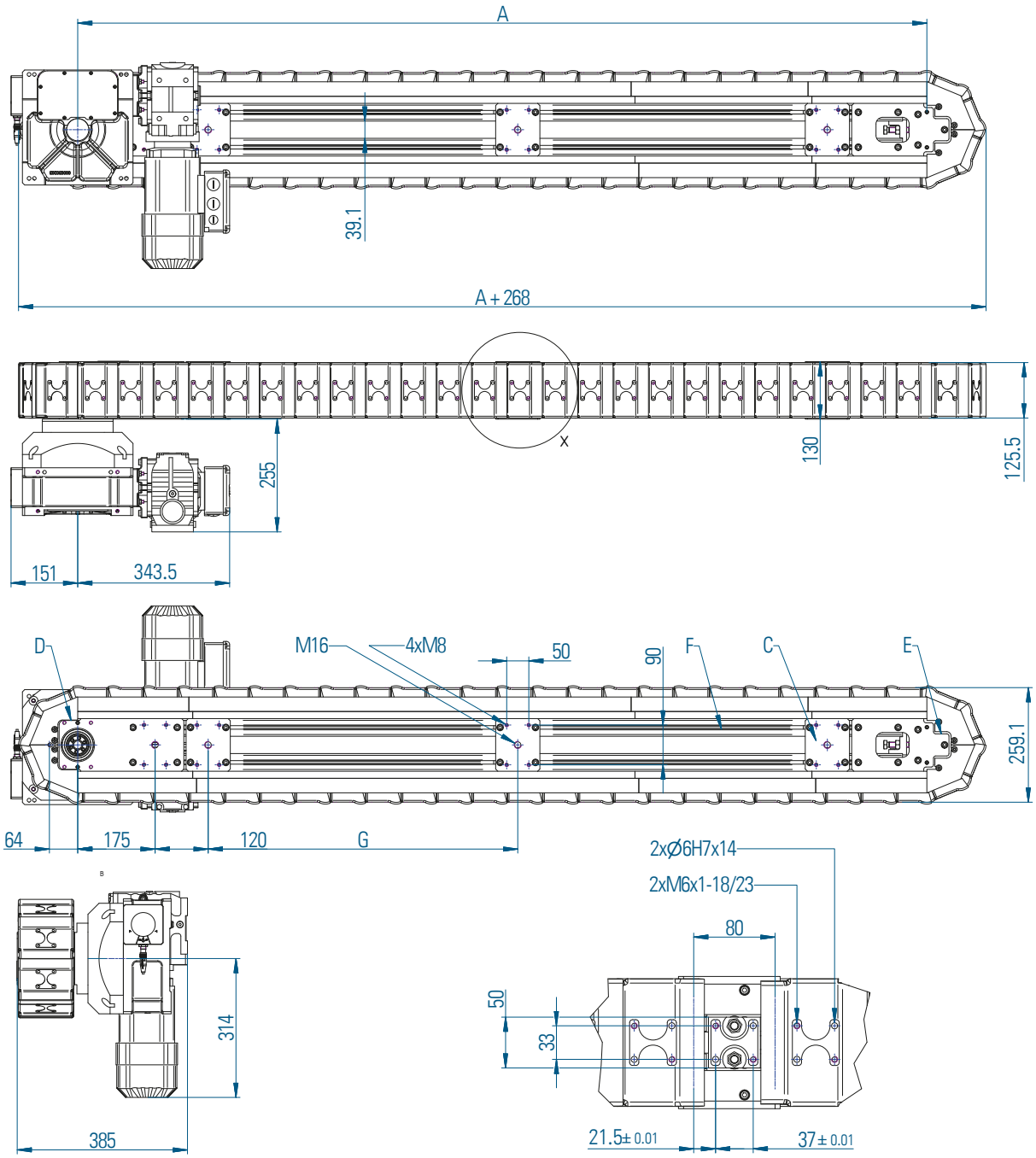
## Main fields

Assembly Industry, Medical Technology, Cosmetics, Electronic Industry

- Fast assembly of small parts - up to 150 cycles per minute
- Transportation and manufacturing of wires or similar parts
- Mechanical and optical investigations
- Welding, Tumbling, Riveting, Bending, Marking, Filling ...



# LFA080




## Dimensions

The dimensions shown here are the standard dimensions. Dimension „A“ depends on the number of links. Motion Index Drives LFA Conveyors can either be mounted on the extruded aluminum „F“ or on the steel plates „C“. The links and the steel plates can be machined to your specifications.

The dimensions marked with * depend on the size of the used drive. The conveyor can be delivered without drive or the drive can be a servo. Special dust covers or rubber lips between the links are available.

⚠ Caution! Allow spaces on side of the index wheel for adjusting the pre-load!

A = Distance between U-Turns
D = Index wheel
E = The 180° cam
F = Aluminum Profile System 8-80x120

# LFA080

## Load Table

| s [mm] | t [s] | $n_L$= 12 ; $n_T$= 32 A= 960mm | | | | $n_L$= 18 ; $n_T$= 44 A= 1440mm | | | | $n_L$= 24 ; $n_T$= 56 A= 1920mm | | | | $n_L$= 30 ; $n_T$= 68 A= 2400mm | | | | $n_L$= 36 ; $n_T$= 80 A= 2880mm | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | |
| | | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 |
| 80[1] | t= | 0.16 | 0.19 | 0.22 | 0.25 | 0.18 | 0.22 | 0.26 | 0.29 | 0.21 | 0.25 | 0.3 | 0.23 | 0.23 | 0.28 | 0.33 | 0.37 | 0.25 | 0.30 | 0.35 | 0.4 |
| 160[2] | t= | 0.24 | 0.29 | 0.34 | 0.38 | 0.28 | 0.34 | 0.40 | 0.45 | 0.31 | 0.39 | 0.45 | 0.35 | 0.35 | 0.43 | 0.50 | 0.56 | 0.38 | 0.46 | 0.54 | 0.61 |
| 240[3] | t= | 0.32 | 0.40 | 0.46 | 0.52 | 0.38 | 0.47 | 0.54 | 0.61 | 0.43 | 0.53 | 0.61 | 0.47 | 0.47 | 0.58 | 0.68 | 0.76 | 0.51 | 0.63 | 0.74 | 0.83 |
| 320[4] | t= | 0.40 | 0.48 | 0.52 | 0.6 | 0.48 | 0.59 | 0.70 | 0.76 | 0.54 | 0.64 | 0.75 | 0.81 | 0.59 | 0.73 | 0.86 | 0.96 | 0.64 | 0.80 | 0.94 | 1.04 |

| s [mm] | t [s] | $n_L$= 42 ; $n_T$= 92 A= 3360mm | | | | $n_L$= 48 ; $n_T$= 104 A= 3840mm | | | | $n_L$= 54 ; $n_T$= 116 A= 4320mm | | | | $n_L$= 60 ; $n_T$= 128 A=4800mm | | | | $n_L$= 66 ; $n_T$= 140 A=5280mm | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | |
| | | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 |
| 80[1] | t= | 0.27 | 0.33 | 0.38 | 0.43 | 0.28 | 0.35 | 0.41 | 0.46 | 0.60 | 0.37 | 0.43 | 0.49 | 0.31 | 0.39 | 0.45 | 0.51 | 0.33 | 0.41 | 0.48 | 0.54 |
| 160[2] | t= | 0.40 | 0.50 | 0.58 | 0.66 | 0.43 | 0.53 | 0.62 | 0.70 | 0.45 | 0.56 | 0.66 | 0.74 | 0.48 | 0.59 | 0.69 | 0.78 | 0.50 | 0.62 | 0.73 | 0.82 |
| 240[3] | t= | 0.55 | 0.68 | 0.79 | 0.90 | 0.59 | 0.73 | 0.85 | 0.96 | 0.62 | 0.77 | 0.90 | 1.01 | 0.65 | 0.81 | 0.95 | 1.07 | 0.68 | 0.85 | 0.99 | 1.12 |
| 320[4] | t= | 0.70 | 0.86 | 1.00 | 1.14 | 0.76 | 0.93 | 1.08 | 1.16 | 0.79 | 0.98 | 1.14 | 1.21 | 0.83 | 1.01 | 1.19 | 1.25 | 0.87 | 1.04 | 1.24 | 1.30 |

** Other distances „A“, strokes or stroke times on request

s = Stroke [mm]
t = Stroke Time [s]

$n_L$ = Number of links in line
$n_T$ = Number of links total

m = Weight per link [kg]
A = Distance between U-Turns

[1] The chain moves one link with each index.

[2] The chain moves two links with each index.

[3] The chain moves three links with each index.

[4] The chain moves four links with each index.

## Technical specifications

### Main dimensions

| | |
|---|---|
| Distance** [mm] | |
| Weight at A=2000 [kg] Stroke time** [s] | in steps of 480 300 see Load Table 80, |
| Stroke** [mm] | 160, 240 or 320 right, left |
| Direction | |

### Loadings

per static link

| | |
|---|---|
| Force vertical [N] | 700 |
| Force horizontal [N] | 2600 |
| Tilting moment [Nm] | 80 |
| Pull force at the chain [N] | 3000 |

### Standard Drive

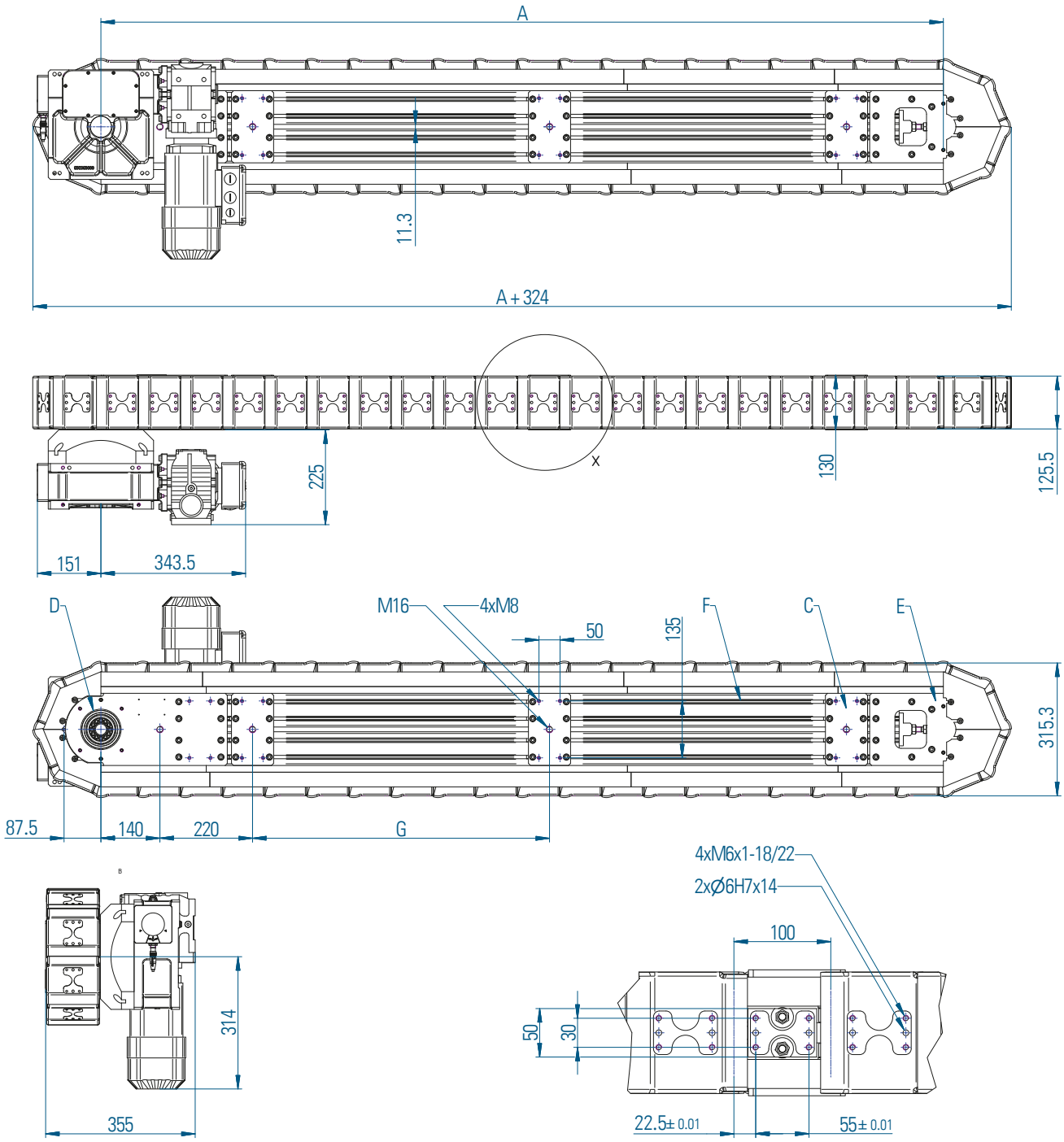
RT160 with 81, 42, 8/33 or 2 Indexes

### Precision

| | |
|---|---|
| in feed direction* at the drive [mm] | ±0.04 |
| opposite the drive [mm] | ±0.07 |
| Transverse to feed direction [mm] | ±0.05 |
| vertical runout [mm] | ±0.03 |

* for the first and the last link in line we can not guarantee this precision.

# LFA100




## Dimensions

The dimensions shown here are the standard dimensions. Dimension „A“ depends on the number of links. Motion Index Drives LFA Conveyors can either be mounted on the extruded aluminum „F“ or on the steel plates „C“. The links and the steel plates can be machined to your specifications.

The dimensions marked with * depend on the size of the used drive. The conveyor can be delivered without drive or the drive can be a servo. Special dust covers or rubber lips between the links are available.

⚠ Caution! Allow spaces on side of the index wheel for adjusting the pre-load!

A = Distance between U-Turns
D = Index wheel
E = The 180° cam
F = Aluminum Profile System 2x 8-80x80

# LFA100

## Load Table

| s [mm] | t [s] | $n_L$= 10 ; $n_T$= 28 A= 1000mm | | | | $n_L$= 15 ; $n_T$= 38 A= 1500mm | | | | $n_L$= 20 ; $n_T$= 48 A= 2000mm | | | | $n_L$= 25 ; $n_T$= 58 A= 2500mm | | | | $n_L$= 30 ; $n_T$= 68 A= 3000mm | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | |
| | | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 |
| 100[1] | t= | 0.16 | 0.19 | 0.22 | 0.24 | 0.18 | 0.22 | 0.26 | 0.29 | 0.21 | 0.25 | 0.29 | 0.32 | 0.23 | 0.28 | 0.32 | 0.36 | 0.25 | 0.30 | 0.34 | 0.39 |
| 200[2] | t= | 0.24 | 0.29 | 0.33 | 0.37 | 0.28 | 0.34 | 0.39 | 0.44 | 0.31 | 0.38 | 0.44 | 0.49 | 0.35 | 0.42 | 0.48 | 0.54 | 0.38 | 0.46 | 0.52 | 0.59 |
| 300[3] | t= | 0.33 | 0.40 | 0.46 | 0.51 | 0.38 | 0.46 | 0.53 | 0.60 | 0.43 | 0.52 | 0.60 | 0.67 | 0.47 | 0.57 | 0.66 | 0.74 | 0.51 | 0.62 | 0.72 | 0.80 |
| 400[4] | t= | 0.40 | 0.51 | 0.59 | 0.65 | 0.45 | 0.57 | 0.68 | 0.74 | 0.50 | 0.63 | 0.75 | 0.81 | 0.55 | 068 | 0.81 | 0.89 | 0.60 | 0.73 | 0.87 | 0.95 |

| s [mm] | t [s] | $n_L$= 35 ; $n_T$= 78 A= 3500mm | | | | $n_L$= 40 ; $n_T$= 88 A= 4000mm | | | | $n_L$= 45 ; $n_T$= 98 A= 4500mm | | | | $n_L$= 50 ; $n_T$= 108 A=5000mm | | | | $n_L$= 55 ; $n_T$= 118 A=5500mm | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | |
| | | 0.5 | 1 | 1.5 | 2 | 0,5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 |
| 100[1] | t= | 0.26 | 0.32 | 0.37 | 0.41 | 0.28 | 0.34 | 0.39 | 0.44 | 0.30 | 0.36 | 0.42 | 0.47 | 0.31 | 0.38 | 0.44 | 0.49 | 0.33 | 0.40 | 0.46 | 0.52 |
| 200[2] | t= | 0.40 | 0.49 | 0.56 | 0.63 | 0.43 | 0.52 | 0.60 | 0.67 | 0.45 | 0.55 | 0.63 | 0.71 | 0.47 | 0.58 | 0.67 | 0.75 | 0.50 | 0.60 | 0.70 | 0.79 |
| 300[3] | t= | 0.55 | 0.67 | 0.77 | 0.86 | 0.58 | 0.71 | 0.82 | 0.92 | 0.62 | 0.75 | 0.87 | 0.97 | 0.65 | 0.79 | 0.91 | 1.02 | 0.68 | 0.83 | 0.96 | 1.07 |
| 400[4] | t= | 0.65 | 0.78 | 0.92 | 1.02 | 0.68 | 0.82 | 0.97 | 1.08 | 0.72 | 0.86 | 1.02 | 1.14 | 0.75 | 0.90 | 1.06 | 1.19 | 0.79 | 0.95 | 1.12 | 1.25 |

** Other distances „A“, strokes or stroke times on request

s = Stroke [mm]
t = Stroke Time [s]
$\alpha$ = Switching angle on the drive [°]

$n_L$ = Number of links in line
$n_T$ = Number of links total

m = Weight per link [kg]
A = Distance between U-Turns

[1] The chain moves one link with each index.

[2] The chain moves two links with each index.

[3] The chain moves three links with each index.

[4] The chain moves four links with each index.

## Technical specifications

### Main dimensions

| | |
|---|---|
| Distance** [mm] | in steps of 500 |
| Weight at A=2000 [kg] | 350 |
| Stroke time** [s] | see Load Table |
| Stroke** [mm] | 100, 200, 300 or 400 |
| Direction | right, left |

### Loadings

per static link

| | |
|---|---|
| Force vertical [N] | 700 |
| Force horizontal [N] | 2600 |
| Tilting moment [Nm] Pull | 80 |
| force at the chain [N] | 3000 |

### Standard Drive

RT160 with 81, 42, 8/33 or 2 Indexes

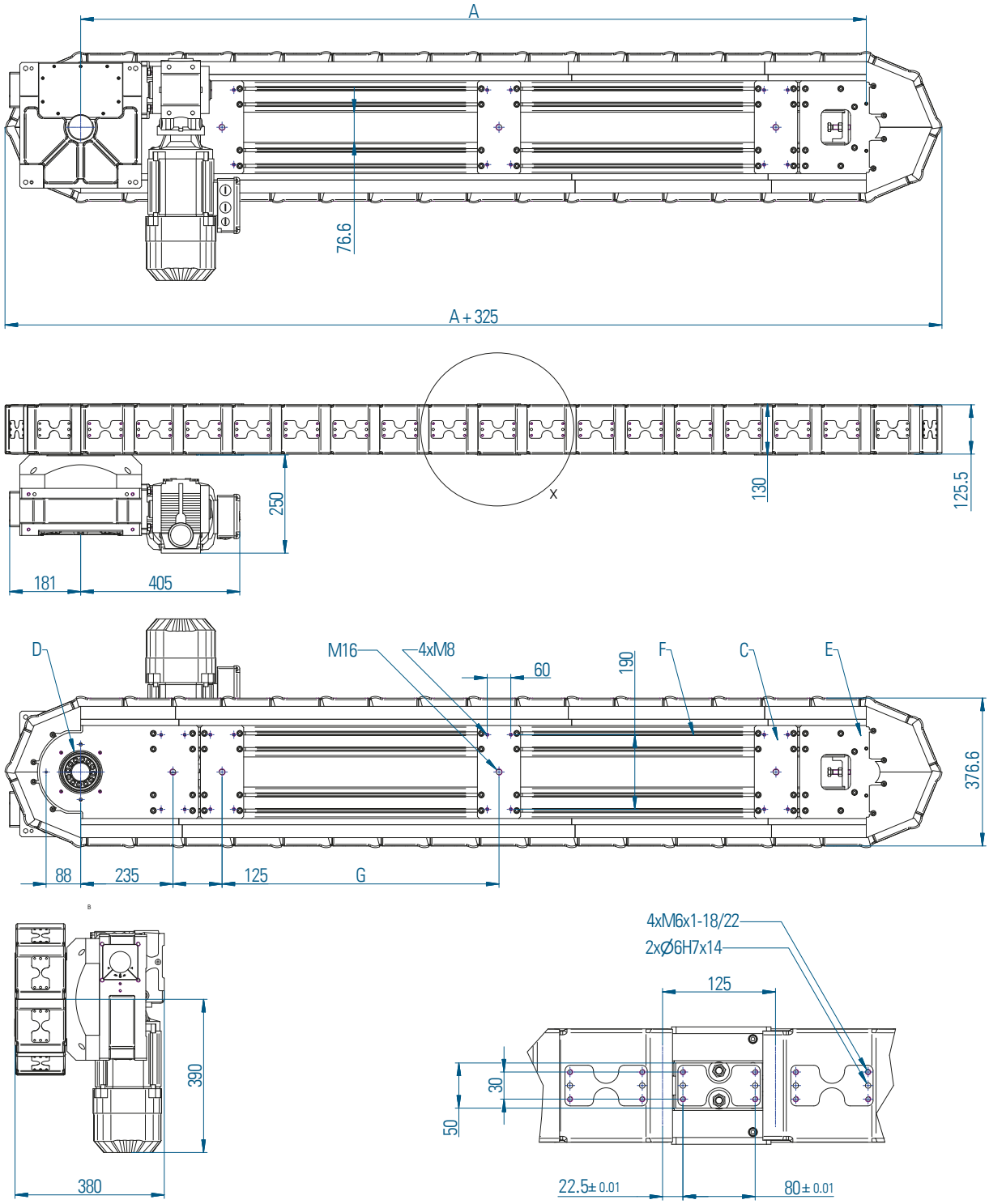
### Precision

in feed direction*

| | |
|---|---|
| at the drive [mm] | ±0.04 |
| opposite the drive [mm] | ±0.07 |
| Transverse to feed direction [mm] | ±0.05 |
| vertical runout [mm] | ±0.03 |

* for the first and the last link in line we can not guarantee this precision.

# LFA125




## Dimensions

The dimensions shown here are the standard dimensions. Dimension „A“ depends on the number of links. Motion index Drives LFA Conveyors can either be mounted on the extruded aluminum „F“ or on the steel plates „C“. The links and the steel plates can be machined to your specifications. The dimensions marked with * depend on the size of the used drive. The conveyor can be delivered without drive or the drive can be a servo. Special dust covers or rubber lips between the links are available.

⚠ Caution! Allow spaces on side of the index wheel for adjusting the pre-load!

A = Distance between U-Turns
D = Index wheel
E = The 180° cam
F = Aluminum Profile System 8-80x120

# LFA125

## Load Table

| s [mm] | t [s] | $n_L$= 8 ; $n_T$= 24 A= 1000mm | | | | $n_L$= 12 ; $n_T$= 32 A= 1500mm | | | | $n_L$= 16 ; $n_T$= 40 A= 2000mm | | | | $n_L$= 20 ; $n_T$= 48 A= 2500mm | | | | $n_L$= 24 ; $n_T$= 56 A= 3000mm | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | |
| | | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 |
| 125[1] | t= | 0.17 | 0.20 | 0.23 | 0.25 | 0.19 | 0.23 | 0.26 | 0.29 | 0.22 | 0.26 | 0.29 | 0.32 | 0.24 | 0.28 | 0.32 | 0.36 | 0.26 | 0.30 | 0.35 | 0.39 |
| 250[2] | t= | 0.25 | 0.30 | 0.34 | 0.38 | 0.29 | 0.35 | 0.40 | 0.44 | 0.33 | 0.39 | 0.45 | 0.49 | 0.36 | 0.43 | 0.49 | 0.54 | 0.39 | 0.46 | 0.53 | 0.59 |
| 375[3] | t= | 0.35 | 0.41 | 0.47 | 0.52 | 0.40 | 0.48 | 0.54 | 0.60 | 0.45 | 0.53 | 0.61 | 0.68 | 0.49 | 0.59 | 0.67 | 0.74 | 0.53 | 0.63 | 0.72 | 0.80 |
| 500[4] | t= | 0.45 | 0.52 | 0.59 | 0.66 | 0.50 | 0.59 | 0.66 | 0.74 | 0.55 | 0.71 | 0.75 | 0.82 | 0.60 | 0.77 | 0.82 | 0.87 | 0.64 | 0.81 | 0.87 | 0.93 |

| s [mm] | t [s] | $n_L$= 28 ; $n_T$= 64 A= 3500mm | | | | $n_L$= 32 ; $n_T$= 72 A= 4000mm | | | | $n_L$= 36 ; $n_T$= 80 A= 4500mm | | | | $n_L$= 40 ; $n_T$= 88 A=5000mm | | | | $n_L$= 44 ; $n_T$= 96 A=5500mm | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | |
| | | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 |
| 125[1] | t= | 0.27 | 0.33 | 0.37 | 0.41 | 0.29 | 0.35 | 0.40 | 0.44 | 0.31 | 0.37 | 0.42 | 0.46 | 0.32 | 0.38 | 0.44 | 0.49 | 0.34 | 0.40 | 0.46 | 0.51 |
| 250[2] | t= | 0.42 | 0.50 | 0.57 | 0.63 | 0.44 | 0.53 | 0.60 | 0.67 | 0.47 | 0.56 | 0.64 | 0.71 | 0.49 | 0.58 | 0.67 | 0.74 | 0.51 | 0.61 | 0.70 | 0.78 |
| 375[3] | t= | 0.57 | 0.68 | 0.77 | 0.86 | 0.60 | 0.72 | 0.82 | 0.92 | 0.64 | 0.76 | 0.87 | 0.97 | 0.67 | 0.80 | 0.91 | 1.02 | 0.70 | 0.83 | 0.95 | 1.06 |
| 500[4] | t= | 0.69 | 0.86 | 0.93 | 1.00 | 0.72 | 0.91 | 0.98 | 1.06 | 0.76 | 0.95 | 1.04 | 1.11 | 0.80 | 1.00 | 1.09 | 1.15 | 0.84 | 1.03 | 1.13 | 1.19 |

** Other distances „A“, strokes or stroke times on request

s = Stroke [mm]
t = Stroke Time [s]
$\alpha$ = Switching angle on the drive [°]

$n_L$ = Number of links in line
$n_T$ = Number of links total

m = Weight per link [kg]
A = Distance between U-Turns

[1] The chain moves one link with each index.

[2] The chain moves two links with each index.

[3] The chain moves three links with each index.

[4] The chain moves four links with each index.

## Technical specifications

### Main dimensions

| | |
|---|---|
| Distance** [mm] | in steps of 500 |
| Weight at A=2000 [kg] | 400 |
| Stroke time** [s] | see Load Table |
| Stroke** [mm] | 125, 250, 375 or 500 |
| Direction | right, left |

### Loadings

per static link

| | |
|---|---|
| Force vertical [N] | 700 |
| Force horizontal [N] | 2600 |
| Tilting moment [Nm] | 80 |
| Pull force at the chain [N] | 3000 |

### Standard Drive

RT160 with 81, 42, 8/33 or 2 Indexes

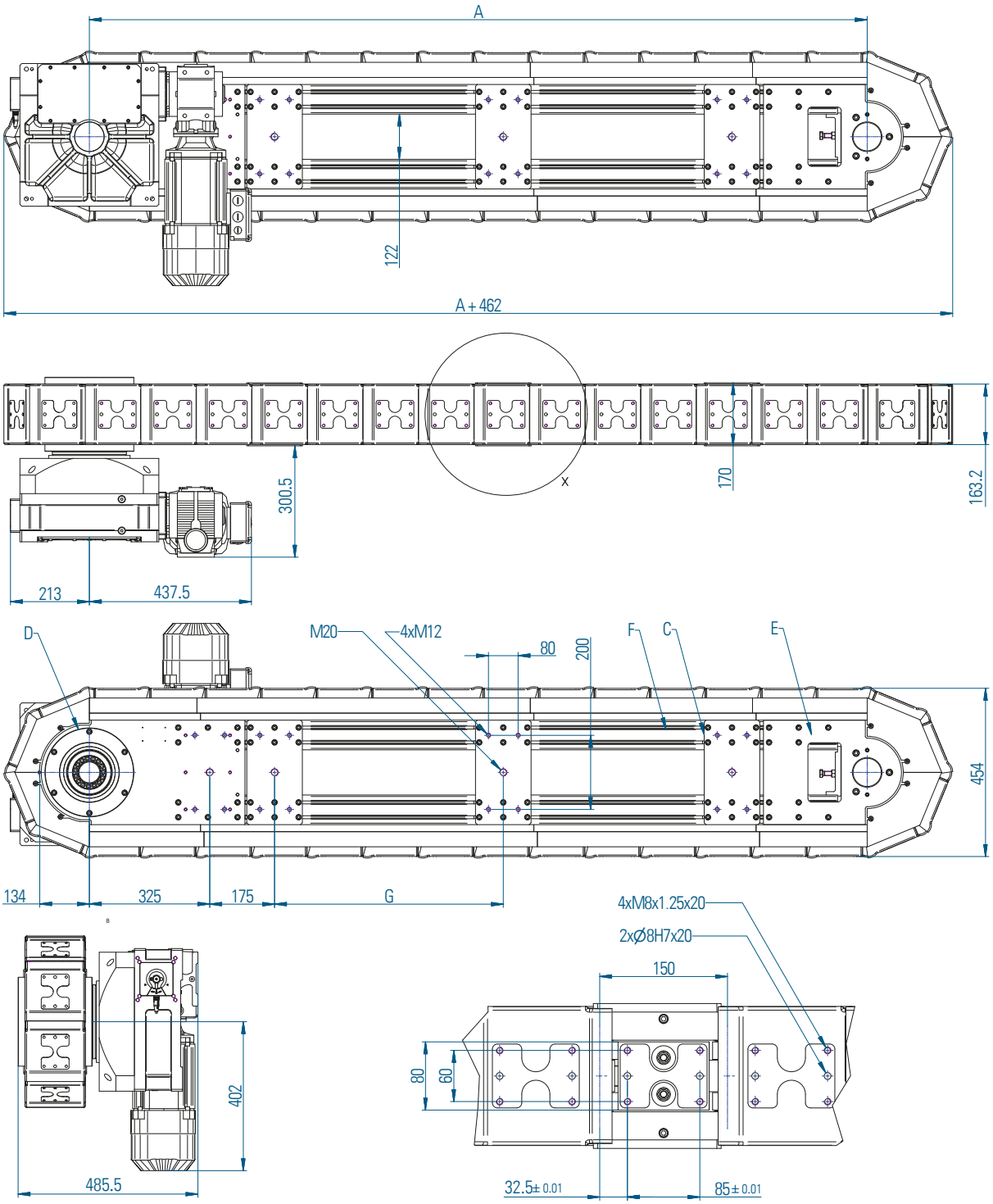
### Precision

in feed direction*

| | |
|---|---|
| at the drive [mm] | ±0.04 |
| opposite the drive [mm] | ±0.07 |
| Transverse to feed direction [mm] | ±0.05 |
| vertical runout [mm] | ±0.03 |

* for the first and the last link in line we can not guarantee this precision.

# LFA150




## Dimensions

The dimensions shown here are the standard dimensions. Dimension „A“ depends on the number of links. Motion Index Drives LFA Conveyors can either be mounted on the extruded aluminum „F“ or on the steel plates „C“. The links and the steel plates can be machined to your specifications. The dimensions marked with * depend on the size of the used drive. The conveyor can be delivered without drive or the drive can be a servo. Special dust covers or rubber lips between the links are available.

⚠ Caution! Allow spaces on side of the index wheel for adjusting the pre-load!

A = Distance between U-Turns
D = Index wheel
E = The 180° cam
F = Aluminum Profile System 8-80x120

# LFA150

## Load Table

| s [mm] | t [s] | $n_L$= 7 ; $n_T$= 22 A= 1050mm | | | | $n_L$= 12 ; $n_T$= 32 A= 1800mm | | | | $n_L$= 16 ; $n_T$= 40 A= 2400mm | | | | $n_L$= 20 ; $n_T$= 48 A= 3000mm | | | | $n_L$= 24 ; $n_T$= 56 A= 3600mm | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | |
| | | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 |
| 150[1)] | t= | 0.28 | 0.30 | 0.32 | 0.34 | 0.30 | 0.33 | 0.35 | 0.38 | 0.32 | 0.35 | 0.38 | 0.41 | 0.34 | 0.37 | 0.40 | 0.44 | 0.35 | 0.39 | 0.43 | 0.46 |
| 300[2)] | t= | 0.39 | 0.42 | 0.46 | 0.48 | 0.42 | 0.46 | 0.50 | 0.53 | 0.45 | 0.49 | 0.54 | 0.57 | 0.48 | 0.53 | 0.57 | 0.62 | 0.50 | 0.56 | 0.61 | 0.65 |
| 450[3)] | t= | 0.52 | 0.56 | 0.60 | 0.64 | 0.56 | 0.61 | 0.66 | 0.70 | 0.59 | 0.65 | 0.71 | 0.76 | 0.63 | 0.69 | 0.75 | 0.81 | 0.66 | 0.73 | 0.80 | 0.86 |
| 600[4)] | t= | 0.66 | 0.70 | 0.74 | 0.80 | 0.70 | 0.75 | 0.80 | 0.86 | 0.73 | 0.79 | 0.85 | 0.92 | 0.77 | 0.83 | 0.89 | 0.97 | 0.80 | 0.87 | 0.94 | 1.02 |

| s [mm] | t [s] | $n_L$= 28 ; $n_T$= 64 A= 4200mm | | | | $n_L$= 32 ; $n_T$= 72 A= 4800mm | | | | $n_L$= 36 ; $n_T$= 80 A= 5400mm | | | | $n_L$= 40 ; $n_T$= 88 A=6000mm | | | | $n_L$= 44 ; $n_T$= 96 A=6600mm | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | | m [kg] | | | |
| | | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 | 0.5 | 1 | 1.5 | 2 |
| 150[1)] | t= | 0.37 | 0.41 | 0.45 | 0.49 | 0.39 | 0.43 | 0.47 | 0.51 | 0.40 | 0.45 | 0.50 | 0.54 | 0.42 | 0.47 | 0.52 | 0.56 | 0.43 | 0.49 | 0.54 | 0.58 |
| 300[2)] | t= | 0.52 | 0.58 | 0.64 | 0.69 | 0.55 | 0.61 | 0.67 | 0.73 | 0.57 | 0.64 | 0.70 | 0.76 | 0.59 | 0.66 | 0.73 | 0.79 | 0.61 | 0.69 | 0.76 | 0.82 |
| 450[3)] | t= | 0.69 | 0.77 | 0.84 | 0.91 | 0.72 | 0.81 | 0.88 | 0.96 | 0.75 | 0.84 | 0.92 | 1.00 | 0.78 | 0.87 | 0.96 | 1.04 | 0.81 | 0.91 | 1.00 | 1.09 |
| 600[4)] | t= | 0.86 | 0.96 | 1.04 | 1.13 | 0.89 | 1.00 | 1.08 | 1.18 | 0.92 | 1.03 | 1.12 | 1.22 | 0.95 | 1.06 | 1.16 | 1.26 | 0.98 | 1.10 | 1.20 | 1.30 |

** Other distances „A“, strokes or stroke times on request

s = Stroke [mm] t = Stroke Time [s]
$\alpha$= Switching angle on the drive [°]

$n_L$ = Number of links in line $n_T$ = Number of links total

m = Weight per link [kg]
A = Distance between U-Turns

1) The chain moves one link with each index.

2) The chain moves two links with each index.

3) The chain moves three links with each index.

4) The chain moves four links with each index.

## Technical specifications

### Main dimensions

| | |
|---|---|
| Distance** [mm] | in steps of 600 |
| Weight at A=2000 [kg] | 800 |
| Stroke time** [s] | see Load Table |
| Stroke** [mm] | 150, 300, 450 or 600 |
| Direction | right, left |

### Loadings

per static link

| | |
|---|---|
| Force vertical [N] | 1250 |
| Force horizontal [N] | 2600 |
| Tilting moment [Nm] | 120 |
| Pull force at the chain [N] | 6000 |

### Standard Drive

RT250 with 121, 62, 43 or 2 Indexes

### Precision

in feed direction*

| | |
|---|---|
| at the drive [mm] | ±0.04 |
| opposite the drive [mm] | ±0.07 |
| Transverse to feed direction [mm] | ±0.05 |
| vertical runout [mm] | ±0.03 |

* for the first and the last link in line we can not guarantee this precision.

MOTION
INDEX DRIVES

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