

# Electric Powerdrive

Catalogue  
2015-11-01

EN

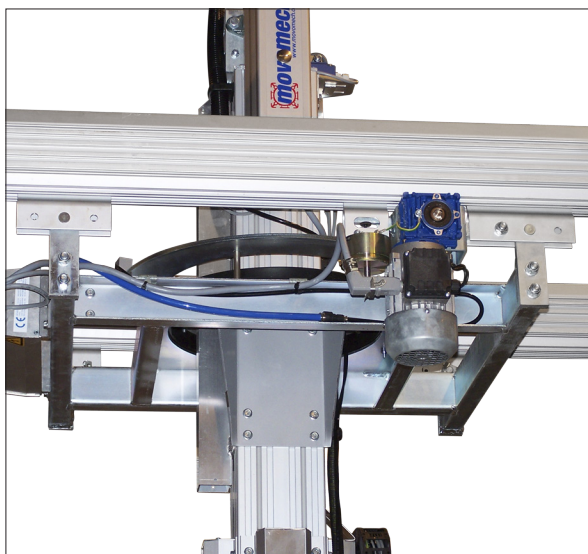


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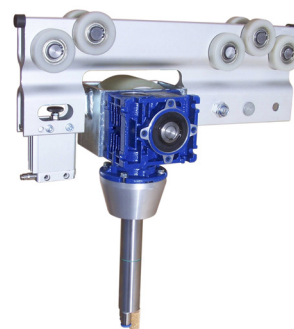
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**To order electric drive unit Powerdrive, please consult Movomech.**

**Electric drive unit Powerdrive is designed exclusively for Mechrail rail system.**



Electric



Pneumatic

#### INFORMATION

There is also a pneumatic version of Powerdrive.  
For more information, contact Movomech.

Although the greatest care was taken regarding the information in this publication, we assume no responsibility for any errors. We reserve the right to make changes.

ILLUSTRATIONS – The illustrations in the publication represent the described products, but the delivered goods may differ in some respects from the illustrations.

SPECIFICATIONS – The right is reserved to make changes in design and dimensions compared with the information in the publication in order not to prevent development of designs, material and manufacturing methods.

The customer is reminded that in the purchase of Movomech's products for application on the job or elsewhere, there is supplementary, current information that could not be included in the publication in terms of recommendations on each product's suitability regarding different combinations of Movomech's comprehensive product line.

All relevant information must be provided to the persons who are responsible for the application of the product.

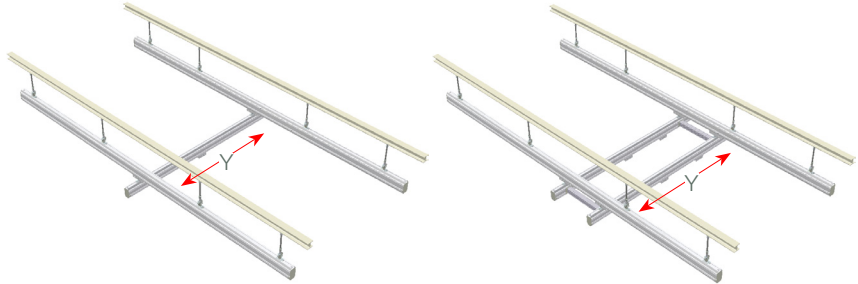
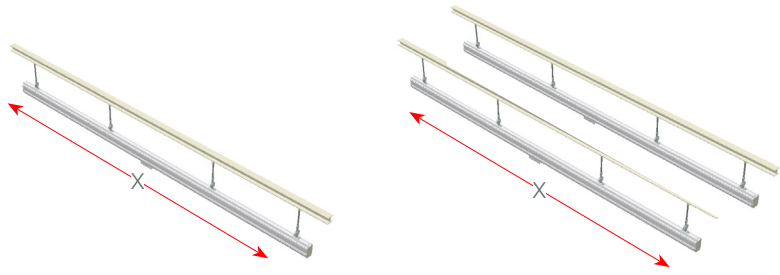


# 1 System

#

740462 Single

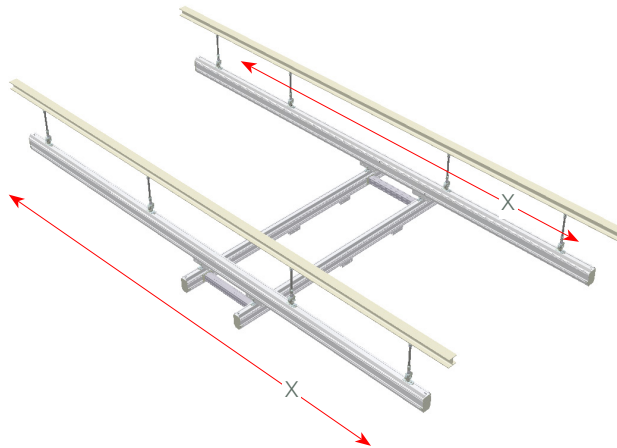
- Single traversing in X (track length LB)
- Control cabinet on end of track
- With or without feed cable to lifting unit (slave configuration)
- Single traversing in Y (crane length LT)
- Control cabinet on end of crane
- With or without feed cable to lifting unit (slave configuration)



#

740463 Double

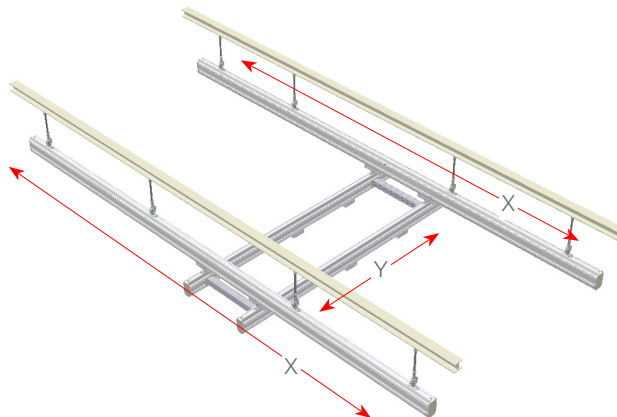
- Double traversing in X (track length LB)
- Control cabinet on end of crane
- With or without feed cable to lifting unit (slave configuration)



#

740464 Triple

- Double traversing in X (track length LB)
- Single traversing in Y (crane length LT)
- Control cabinet on end of crane
- With or without feed cable to lifting unit (slave configuration)



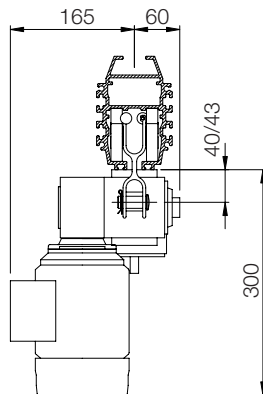
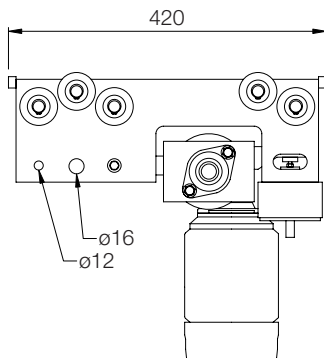
## 2 Base models

Traversing speed	m/min	40
Acceleration	m/min <sup>2</sup>	1200
Deceleration	m/min <sup>2</sup>	2400
Noise level	dB (A)	<70
Tare weight	kg	<17
Motor output	kW	0,18
Voltage	V	*
Fuse	AT	10
Enclosure class	IP	54
Pulling force	N	300

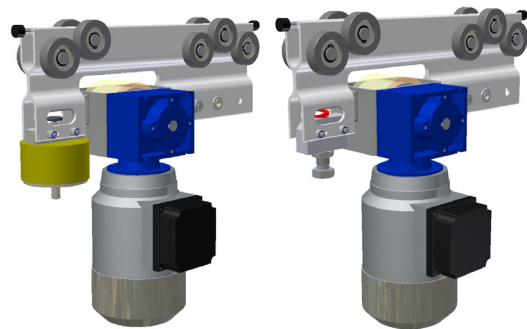
*	
Single	1*230, N, PE (±15) 50/60 Hz
Single + Slave	3*400, N, PE (±15) 50/60 Hz
Double	1*230, N, PE (±15) 50/60 Hz
Double + Slave	3*400, N, PE (±15) 50/60 Hz
Triple	3*400, N, PE (±15) 50/60 Hz

### AHB1.1-2

#		Max load
730814*	Solenoid	250
734669	Spring	250
742252	Cylinder	250



\* Specify when ordering:  
AHB1.1 or AHB2

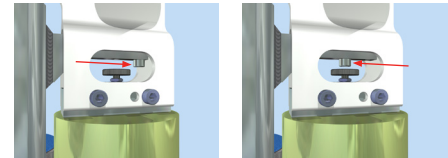


730814

734669

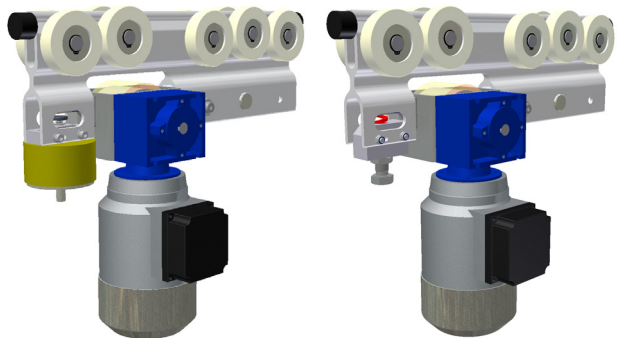
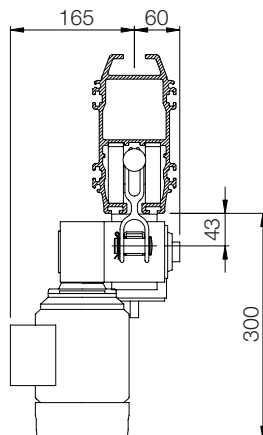
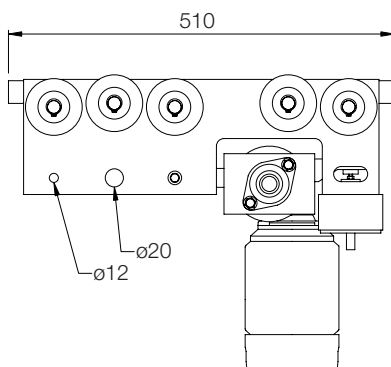
AHB1.1

AHB2



### AHB3

#		Max load
731630	Solenoid	500
734671	Spring	500



731630

734671

#### INFORMATION

**SOLENOID** The driving wheel is released when the control unit is unaffected, this gives the operator the chans to move the load manually. Constant fit-up is possible.

**SPRING** The driving wheel is in constant fit-up position, this gives *no* posibility for the operator to move the load manually.

# 3 Configuration

When ordering Powerdrive, the following variables must be specified:

- direction: X, Y or X/Y
- track length LB: \_\_\_\_\_ m
- crane length LT: \_\_\_\_\_ m
- control cable length ML: \_\_\_\_\_ m
- power to lifting unit: YES or NO
- media: cable trolleys or cable chain

Below is an overview of the cables supplied with Powerdrive in a new installation. When installing Powerdrive in an existing installation, contact Movomech.

## Media

When ordering, specify whether the system will be mounted with cable trolleys or with cable chain.

## Motor cable

Cable between the control cabinet and the drive unit(s).

## Connection cable

Cable between the control cabinet and a joint at the lifting unit's suspension.

## Control cable

Cable between a joint at the lifting unit's suspension and the control unit. The control cable length ML is estimated as the cable length from a connection point the lifting unit's suspension to the control unit. ML can vary depending on a variety of factors, for example:

- suspension width (cross unit)
- lifting stroke SL
- build height of lifting unit BH
- handle bar design - height and outreach
- mounting of the control handle - fixed or mobile



For the estimation of the control cable length ML, see example on the following page.

## Control cable emergency stop

When a control unit with separate emergency stop is selected, an extra cable for power supply is included for the emergency stop. The type and length of cable depend on if the system will also provide power supply (p.s.) to a lifting unit or not.

## Power cable lifting unit

Power cable between control cabinet and lifting unit.

See catalogue Mechrail.   
See catalogue Mechlift E / Mechstack Pro. 

System	Media	Motor cable			Connection cable	Control cable	Control cable emergency stop without p.s.	Control cable emergency stop with p.s.	Power cable lifting unit	Control cable lifting unit		Power cable
		K1.1	K1.2	K1.3						K4	K5	
740462	Single X											
	Cable trolleys	1,5 * LB			1,5 * LB	ML	ML	2	1,5 * LB	ML	-	
	Cable chain	LB + 2,5			LB + 2,5	ML	ML	2	LB + 2,5	ML	-	
740462	Single Y											
	Cable trolleys	1,5 * LT			1,5 * LT	ML	ML	2	1,5 * LT	ML	730652 1,5 * LB	
	Cable chain	LT + 2,5			LT + 2,5	ML	ML	2	LT + 2,5	ML	731513 LB + 2,5	
740463	Double X											
	Cable trolleys	2,5	LT + 2		1,5 * LT	ML	ML	2	1,5 * LT	ML	730652 1,5 * LB	
	Cable chain	2,5	LT + 2		LT + 2,5	ML	ML	2	LT + 2,5	ML	731513 LB + 2,5	
740464	Triple 2X/1Y											
	Cable trolleys	2,5	LT + 2	1,5 * LT	1,5 * LT	ML	ML	2	1,5 * LT	ML	730652 1,5 * LB	
	Cable chain	2,5	LT + 2	LT + 2,5	LT + 2,5	ML	ML	2	LT + 2,5	ML	731513 LB + 2,5	

Dimensions are given in meter.

Cable diameter <16 mm

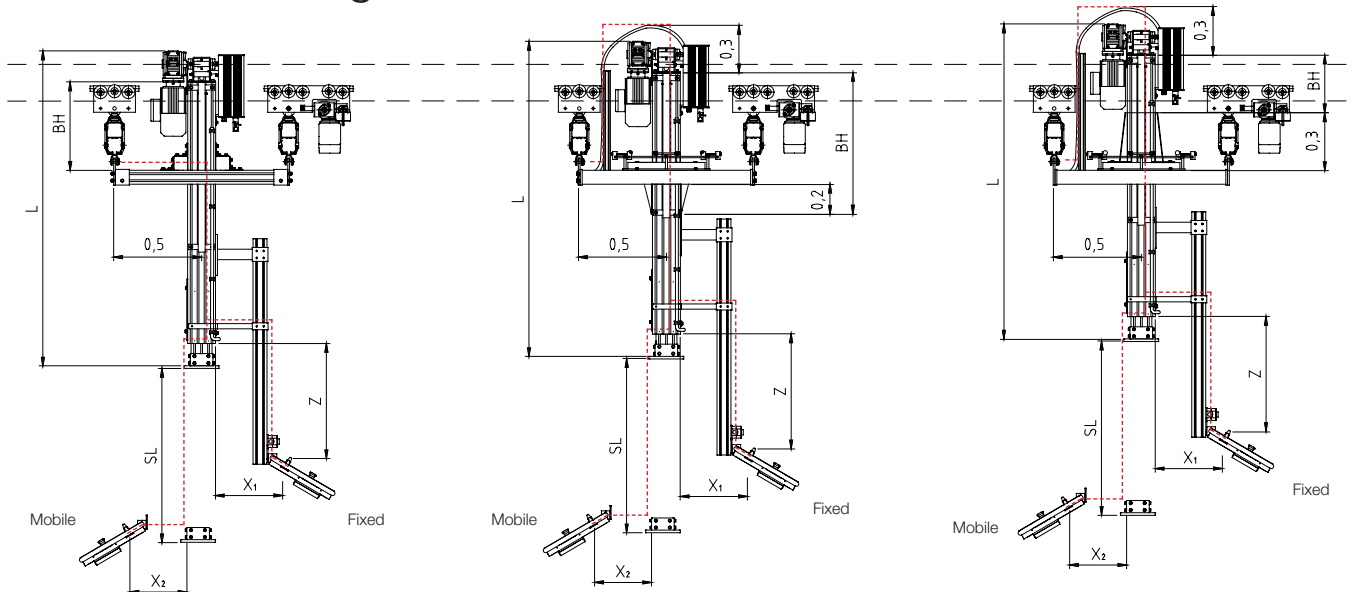
Feeding for lifting unit: 230 VAC, N, PE

## INFORMATION

Note that the power cable to the Powerdrive is not included, this can be ordered in Mechrail range.

Control cables to electric Mechlift and Mechstack Pro are ordered through the respective product catalogues.

# Control cable length ML



2015-11-01: NOTE! Calculation of the operating length ML is being updated, please contact Movomech before ordering.

## Example 1

Mechlift without rotation, fixed cross unit

ML (m) with fixed handle:  
 $0,5 + (L - BH) + Z + X_1$

→  $L - BH + Z + X_1 + 0,5$

ML (m) with mobile handle:  
 $0,5 + (L - BH) + SL + X_2$

→  $L - BH + SL + X_2 + 0,5$

## Example 2

Mechlift with top rotation, bracket upwards

ML (m) with fixed handle:  
 $0,5 + (BH - 0,2) + 0,3 \cdot 2 + L + Z + X_1$

→  $L + BH + Z + X_1 + 0,9$

ML (m) with mobile handle:  
 $0,5 + (BH - 0,2) + 0,3 \cdot 2 + L + SL + X_2$

→  $L + BH + SL + X_2 + 0,9$

## Example 3

Mechlift with top rotation, bracket downwards

ML (m) with fixed handle:  
 $0,5 + (BH + 0,3) + 0,3 \cdot 2 + L + Z + X_1$

→  $L + BH + Z + X_1 + 1,4$

ML (m) with mobile handle:  
 $0,5 + (BH + 0,3) + 0,3 \cdot 2 + L + SL + X_2$

→  $L + BH + SL + X_2 + 1,4$

The examples above provides a simple estimate of ML, the length of the control cable.

Round the value up, at least to the nearest meter. Add additional length if the build height BH is not final and may affect ML.

For Mechstack Pro, contact Movomech.

## 4 Control units

### SYSTEM Single / Double

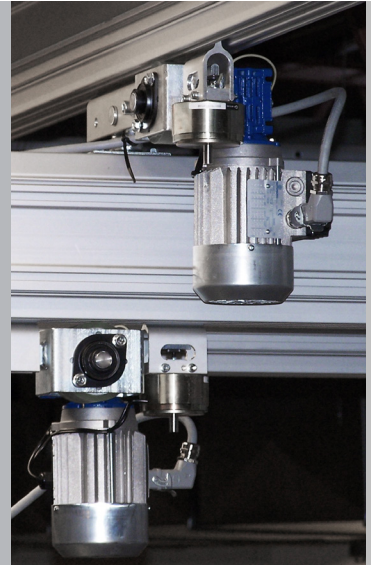


### SYSTEM Triple



#### INFORMATION

- Control unit located on manipulator (emergency stop via manipulator). For configuration with slave.



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