Powerful cylinder for harsh ambient conditions

- Clevis for universal connections

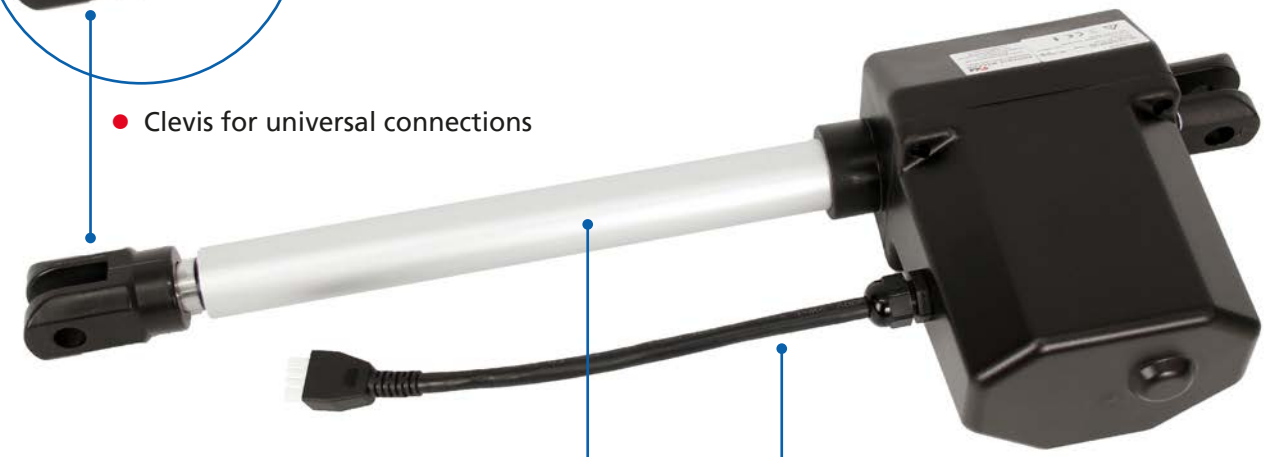
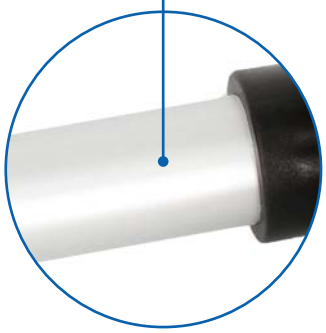


Illustration shows a special application with clevis turned through 90°



- Stainless push rod

- For optimal integration in industry

Highlights / Features:

- Integrated limit switches
- Corrosion-protected: push rod made of stainless steel; housing made of plastic
- Self-locking, even under max. lifting force
- Thermal motor protection
- Fastening via clevises
- Can be installed in any position
- External control

Options:

- Special stroke lengths
- Faster lifting speeds
- Adjustable even in the event of power failure (can be mechanically disengaged)
- Signal contacts
- Potentiometer
- Can also be used wirelessly for mobile movement applications via MultiControl II duo accu

Table of contents

LAMBDA – Technical data

General information / Operating conditions

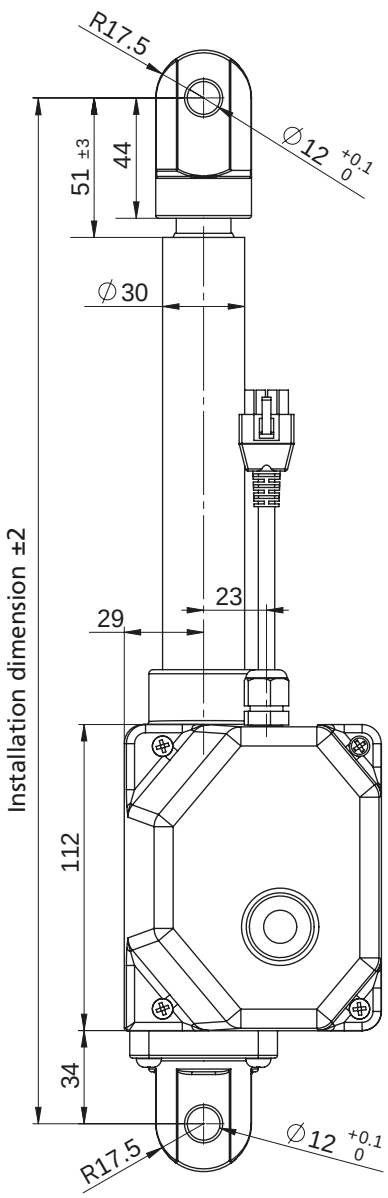
Type	LAMBDA – E-cylinder	Custom
Design	Linear cylinder with integrated DC motor	
Guide	Slide bushing	
Installation position	Any position / without shear forces / suspended with drop protection provided by the customer	
Max. compressive force	6000 N, 4500 N or 2000 N	
Max. tensile force	4000 N or 2000 N	
Self-locking	Yes	
Max. travel speed	Up to 21 mm/s	
Max. travel	600 mm	
Installation dimension	Stroke + 175 mm or stroke + 225 mm	
Voltage	24 V	
Current consumption	7 A	
Protection rating	IP 66	
Ambient temperature	+20°C to +60°C	
Displacement during synchronous operation	0 to 2 mm	
Duty cycle (operating mode S3)	At nominal load, 10% (2 mins operating time, 18 mins rest time)	

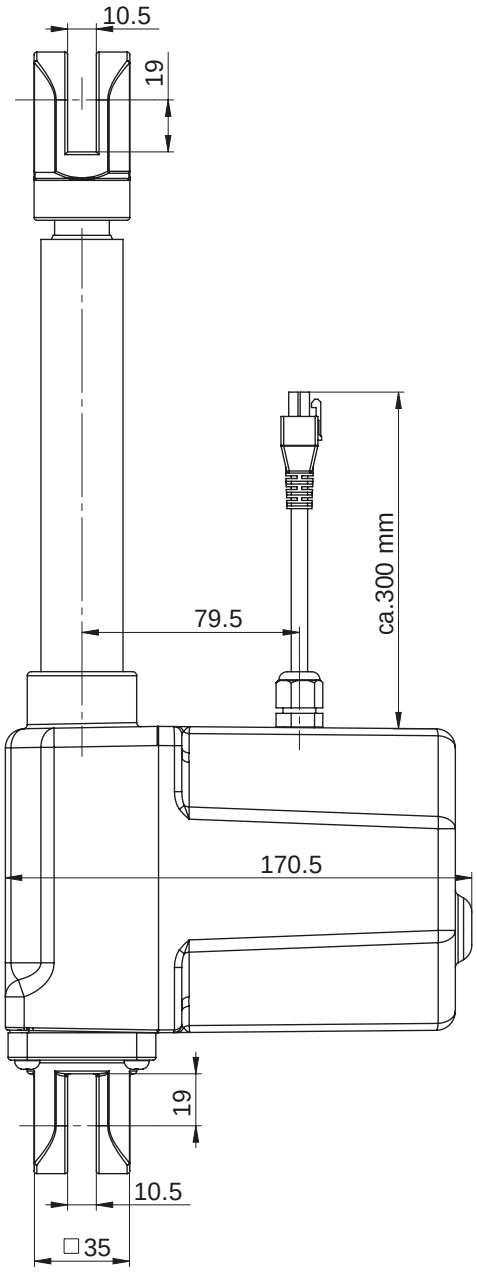
Note:
RK Rose+Krieger GmbH cylinders are only designed for centric loads.

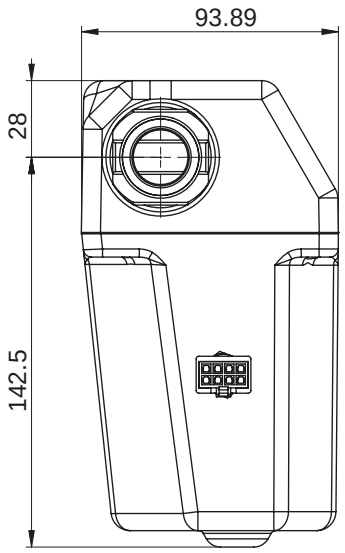
Drive	Compressive force [N]	Travel speed [mm/s]	Number of assigned motor channels			
			1	2	3	4
LAMBDA – E-cylinder	2000	21 mm/s	✓	–	–	–
LAMBDA – E-cylinder	4500	8 mm/s	✓	–	–	–
LAMBDA – E-cylinder	6000	5 mm/s	✓	–	–	–

Note:
The performance level of the drive means that two motor channels of the MultiControl II synchronous controls are required per drive. A suitable Y cable is included with the control and does not have to be purchased separately.

MultiControl II duo	MultiControl II quadro
	


R17.5
Ø12 +0.1 0
51 ±3
44
Ø30
Installation dimension ±2
29
23
112
34
R17.5
Ø12 +0.1 0

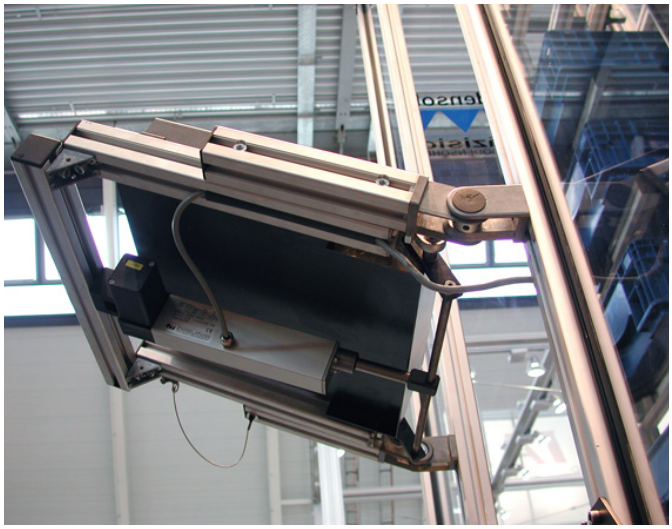

10.5
19
ca.300 mm
79.5
170.5
19
10.5
□35


93.89
28
142.5

LAMBDA – Technical data

Powerful cylinder

The Lambda electric cylinder has an IP 66 protection rating, making it suitable both for industrial applications and for use in harsher environments. It is designed for operation with lifting forces of up to 6000 N (with 400 mm stroke) and a total travel of 600 mm.

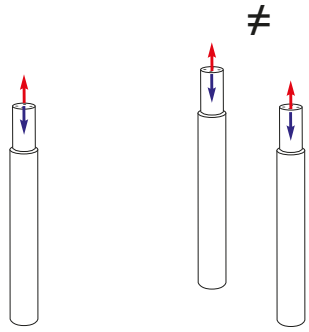


Special features:

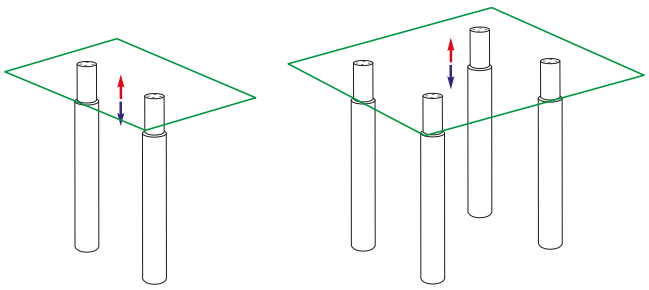
- Wide functionality
- High power density
- Elegant design

Ideal areas of application:

- Precision industrial applications with compact design which require a high power density



1-2 LAMBDA electric cylinder in single operation



2-8 LAMBDA electric cylinder in synchronous operation

Single operation

The MultiControl II duo in combination with a Y-cable enables actuation of a Lambda electric cylinder.

Synchronlauf

For synchronous operation of two or more drives, a BUS connection is established between the controls. In conjunction with the integrated sensors, the control (see page 154) ensures synchronisation. This facilitates constant adjustment of the level of all lifting drives in both directions of travel, even with different loads. The accuracy of synchronous operation (tolerance) depends on the lifting speed, and is: 0–1.5 mm for the 8 mm/s version and 0-3 mm for the 20 mm/s version.
A memory function is also available.

Version for customer-provided control unit with plug connector

Code no.	Type	Max. compressive force [N]	Max. tensile force [N]	Max. lifting speed [mm/s]
LAMBDA mono, plug connector – customer-provided control				
QKK05BC010_ _ _	LMB	6000	4000	5
QKK08BB010_ _ _	LMB	4500	4000	8
QKK21BA010_ _ _	LMB	2000	2000	21

e.g. stroke [mm] = 200

Stroke *[mm]	Installation dimension [mm]	Weight [kg]	
100	275	2.3	
150	325	2.5	
200	375	2.7	
250	425	2.9	
300	475	3.1	
400	625	3.5	
500	725	3.9	Not for 6000 N
600	825	4.3	

*Tolerance: +0.5mm / –2.5mm

Version for MultiControl II external synchronous control

Code no.	Type	Max. compressive force [N]	Max. tensile force [N]	Max. lifting speed [mm/s]
LAMBDA synchro, fixed cable end – MultiControl II				
QKK05BCIC0_ _ _	LBMH	6000	4000	5
QKK08BBIC0_ _ _	LBMH	4500	4000	8
QKK21BAIC0_ _ _	LBMH	2000	2000	21

e.g. stroke [mm] = 6 0 0

Cable for connecting Lambda and Lambda Colonne to MultiControl II duo

Code no.		Interface	Fig.
QZD070749	Extension cable for drives to MulltiControl II – 3 m straight	Motor connector	1

System components

Code no.		
Control		
QST81H12AA000	MultiControl II duo – Basic	LAMBDA Colonne
QST81H12AA022	MultiControl II duo – Premium	
Hand switch		
QZB11G07AV041	Hand switch with 6 function keys and display – 1 m spiral cable	
QZB11G07AB041	Hand switch with 2 function keys – 1 m spiral cable	
QZD000074	Hand switch drawer for hand switches with 6 and 2 function keys	
IEC connector		
QZD070618	IEC cable (European version, earthed plug)	

Note: More accessories (hand switches, connecting cables etc.) can be found in the chapter "Controls and Accessories", starting on page 172. The Lambda drives require a Y cable, which is included in the controls.