



Product Overview

Product Models

eLINE Compact Modules with integrated compact drive

are inexpensive, fast-delivery, ready-to-install linear motion systems with compact dimensions.

Available in two drive versions:

- eCKK: eLINE Compact Modules with ball rail system and ball screw drive
- eCKR: eLINE Compact Modules with ball rail system and toothed belt drive, motor attachment on either side

Further characteristics:

- Pre-installed compact drive
- Short or long carriages
- Connection plate as an accessory
- Fixed length increments
- Pre-assembled cable set
- Easy start-up
- Performance charts for instant identification of positioning time

Version 1a:

with positioning data set control

- Stepping motor with power output section and positioning control
- Can also be used without higher-level PLC (stand-alone). Automatic sequential data set processing.

Version 1b:

with Profibus interface

- Stepping motor with power output section and Profibus interface
- With pre-configured parameter sets

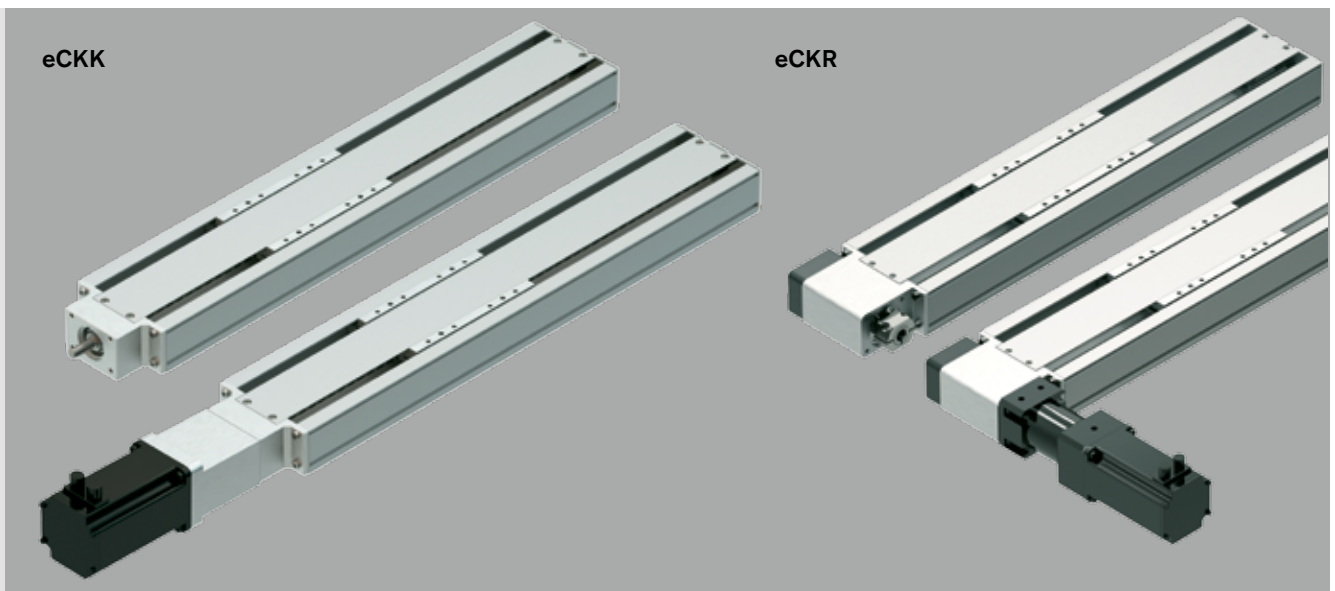


Version 2:

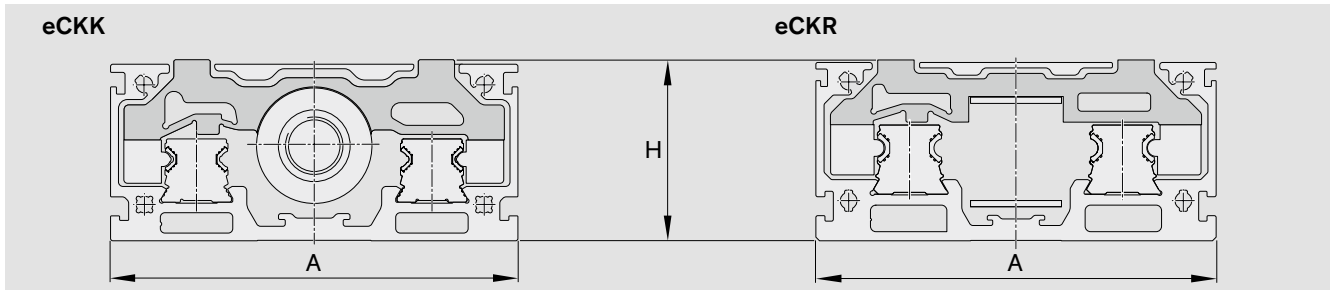
freely configurable

The advantages:

- Product design with a variety of options allows multiple configurations
- Freely selectable lengths/strokes
- Short or long carriages, with or without connection plate
- Adaptors for servo motors and stepping motors
- Freely selectable motor attachment options: motor mount and coupling, belt side drive, or gear reducer
- Variable switch mounting system and large choice of attachments



Version 1a / Version 1b / Version 2



The frame size relates to the width of frame.

Size	Frame size (mm)	
	A	H
eCKK / eCKR 90	90	40
eCKK / eCKR 110	110	50

Product Overview

Version 1a (with positioning data set control)

eLINE Compact Modules are economical, ready-to-install linear motion systems characterized by their compact design, good price/performance ratio and fast delivery.

The benefits:

- Pre-assembled compact drive with stepping motor with power output section and positioning control)
- Can also be used without higher-level PLC (stand-alone). Automatic sequential data set processing)
- Identical frame and connection dimensions as the current Compact Module series
- Ready-made parameter files make start-up very easy (downloads available on website "www.boschrexroth.com/eline_compactmodule")
- Easy to control by selecting motion tasks via digital inputs, or jog mode
- Manual movement (jog mode) via digital inputs
- "Teach" function makes it easy to enter target positions
- Two integrated zero-clearance eLINE ball rail systems provide optimized travel performance
- High travel speed with high precision and smooth operation over long lengths
- With reference switch, switch activation without switching cam
- Long-term zero-maintenance operation

eLINE Compact Modules eCKK

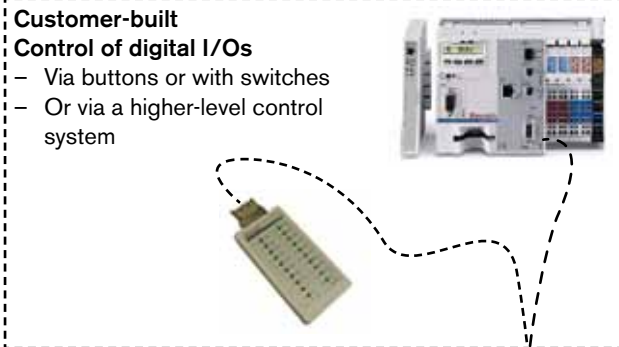
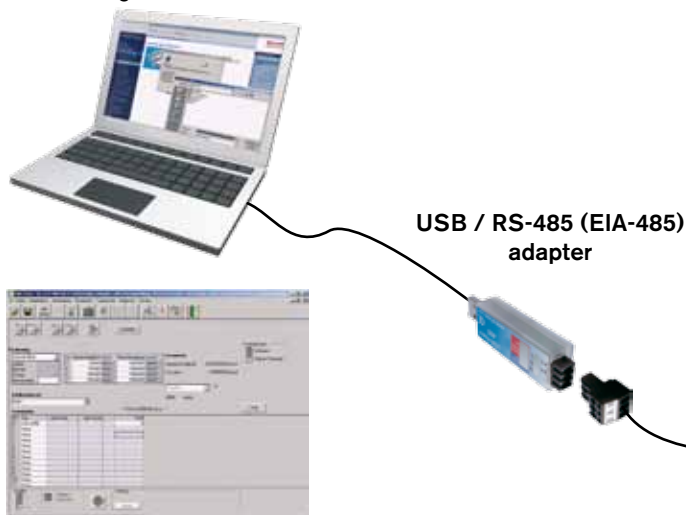
- with integrated compact drive
- with ball screw drive
- with eLINE ball rail systems

eLINE Compact Modules eCKR

- with integrated compact drive
- with toothed belt drive
- with eLINE ball rail systems

Parameter set

- Available as download from Bosch Rexroth website
- Matching set for each axis version



Operating software

- For simple and intuitive programming of integrated positioning control
- For program administration
- Communication through USB interface
- Also available as a website download



Version 1b (with Profibus interface)



eLINE Compact Modules are economical, ready-to-install linear motion systems characterized by their compact design, good price/performance ratio and fast delivery.

The advantages:

- Pre-assembled compact drive with stepping motor with power output section and Profibus interface
- Identical frame and connection dimensions as the current Compact Module series
- With pre-configured parameter sets (downloads available on website "www.boschrexroth.com/eline_compactmodule")
- Sample function blocks available for IndraLogic or Siemens S7 controllers
- Two integrated zero-clearance eLINE ball rail systems provide optimized travel performance.
- High travel speed with high precision and smooth operation over long travel ranges
- With reference switch, switch activation without switching cam
- Long-term zero-maintenance operation
- PLCopen-compliant function blocks available



eLINE Compact Modules eCKK

- with integrated compact drive
- with ball screw drive
- with eLINE ball rail systems

eLINE Compact Modules eCKR

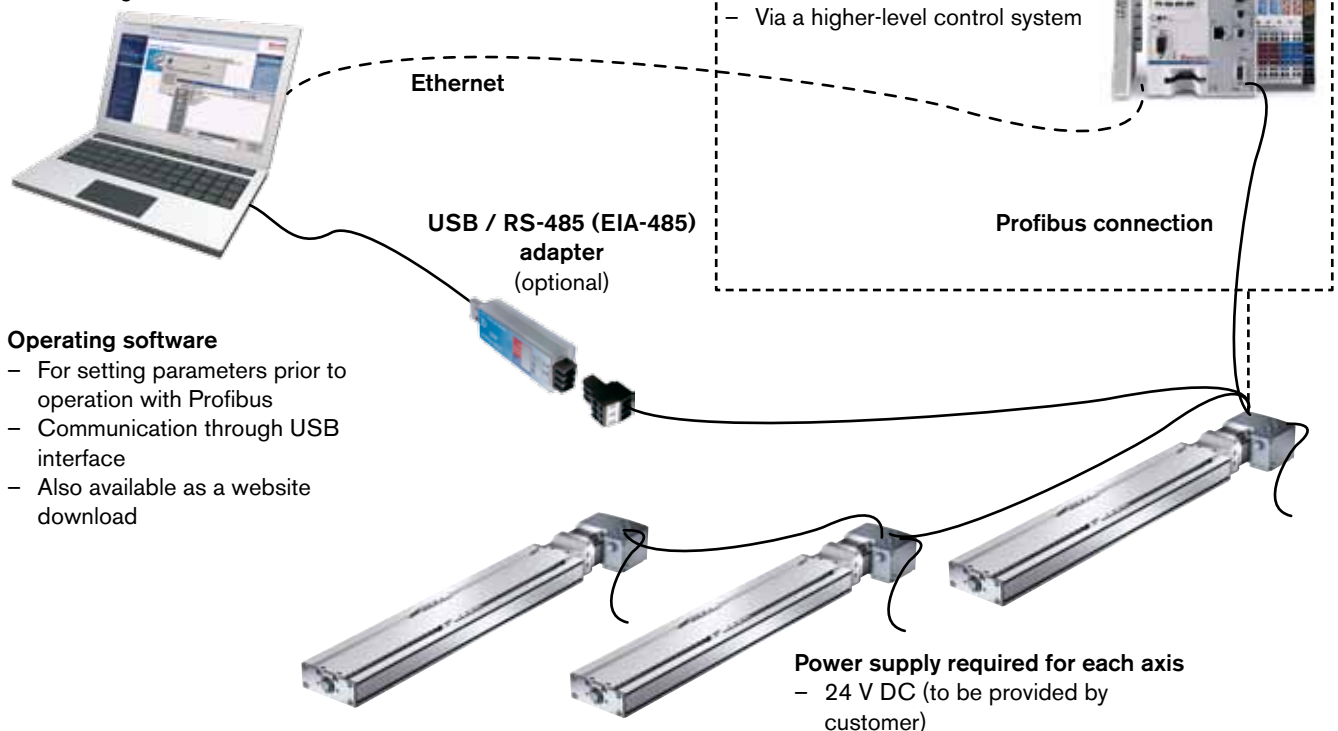
- with integrated compact drive
- with toothed belt drive
- with eLINE ball rail systems

Parameter set

- Available as download from Bosch Rexroth website
- Matching set for each axis version

Customer-built Profibus controls

- Via a higher-level control system



Operating software

- For setting parameters prior to operation with Profibus
- Communication through USB interface
- Also available as a website download

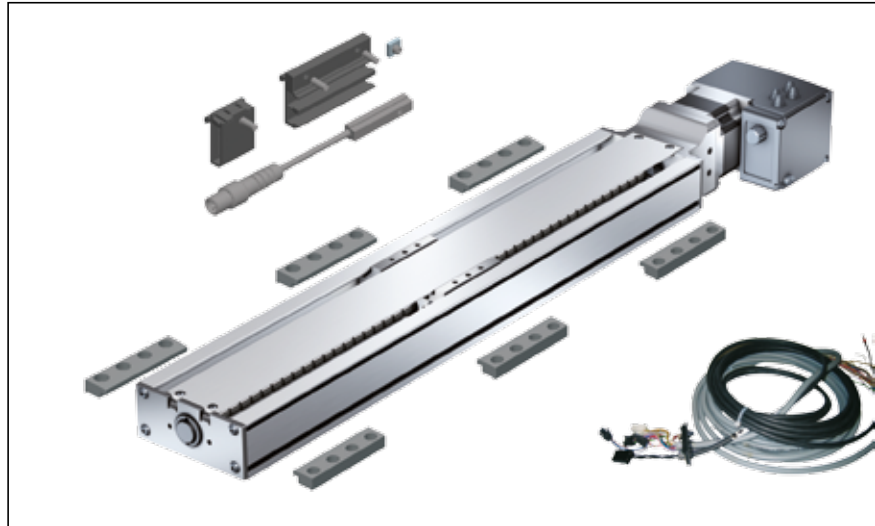
eLINE Compact Modules with Integrated Compact Drive

Easy Start-Up

Ready-to-run in just three steps

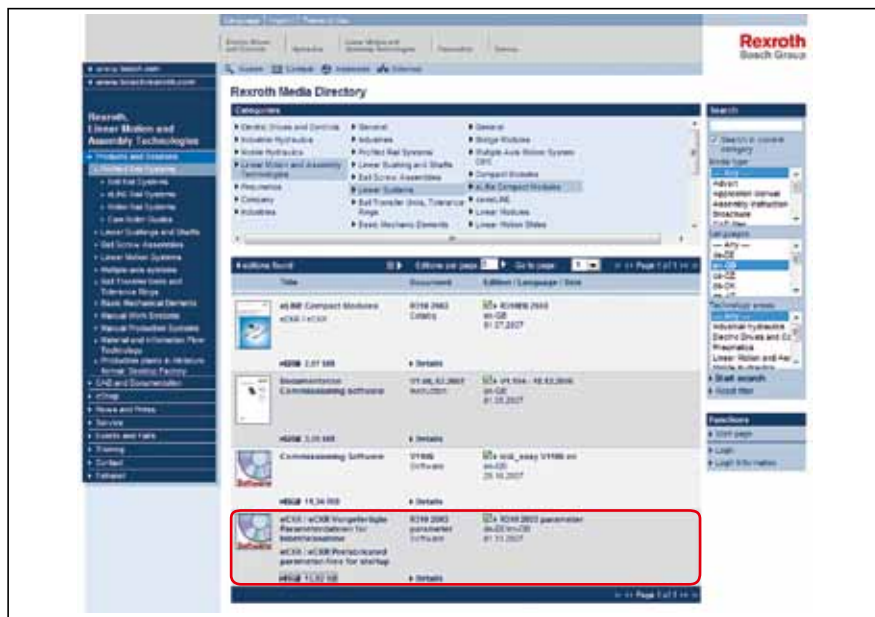
1. Connecting the mechanics and electrics (Version 1a and 1b)

Fasten the eLINE Compact Module to the mounting base with clamping fixtures (accessories).
Connect the cable set (accessory) and reference switch (provided) to the matching sockets in the box on the drive. The pre-assembled cables have mechanically coded connectors to avoid confusion and polarity reversal. Wire up the free cable ends to the customer-built electrical system and connect to the 24 V DC power supply.



2. Setting the drive parameters (Version 1a, Version 1b with pre-configured parameters)

Download the ready-made parameter files from the Bosch Rexroth website. These files contain pre-compiled and tested parameter sets for each type and size of eLINE Compact Module, which considerably simplifies the set-up procedure. The parameter sets are transmitted via the RS-485 (EIA-485) interface on the drive. A USB adapter is available for communication with the PC (see Accessories).



3a. Programming of travel commands in the compact drive (Version 1a)

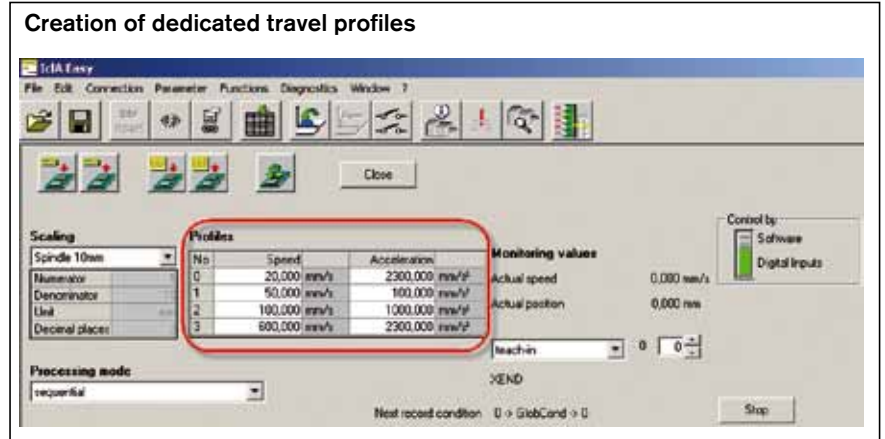
Download the IclA Easy start-up software from the Bosch Rexroth website. The IclA Easy allows convenient programming and editing of four different travel profiles and up to sixteen positioning data sets. Relative and absolute references can be freely combined.

The travel commands are transmitted to the drive via the RS-485 (EIA-485) interface. Up to 16 positions can be permanently stored in the drive (EPROM). Selection of the programmed positioning data sets can be performed directly (via digital I/Os) or sequentially (sequential data set processing). The target positions for the travel commands can be entered directly or registered and stored using the teach-in mode.

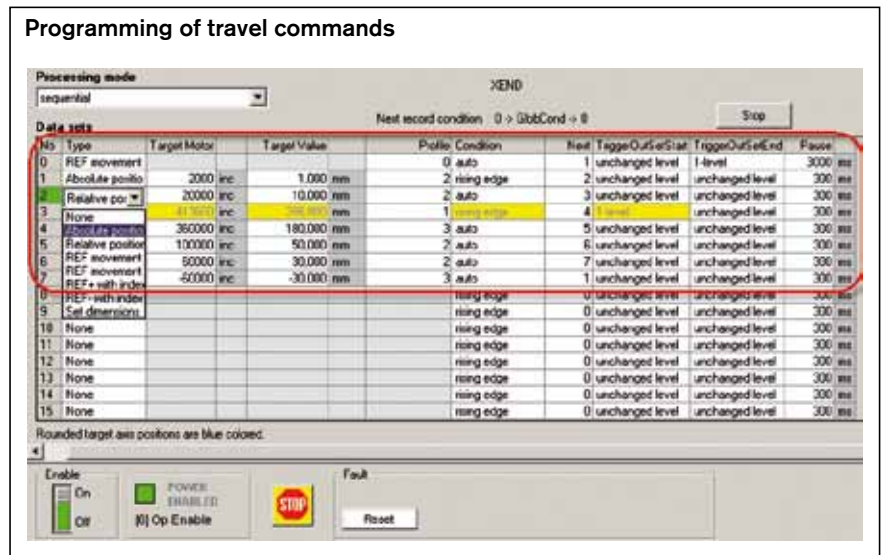
The programmed travel commands can be invoked via the IclA Easy software or via the hard-wired I/Os (using a hand-held operator control unit or a higher-level control system). eLINE Compact Modules can also be traversed manually in jog mode (even before initial start-up).

The IclA Easy software allows saving and retrieval of the compiled positioning programs, for easy creation and maintenance of a program library.

Creation of dedicated travel profiles



Programming of travel commands



3b. Programming of travel commands via Profibus interface (Version 1b)

Function blocks available for IndraLogic or Siemens S7 controllers (downloads on the web at www.boschrexroth.com/eline_compactmodule)



eLINE Compact Modules eCKK with Integrated Compact Drive

Technical Data

- All mechanical and electronic components from a single source
- Stepping motor with up to 16 parameterizable motion tasks
- Start-up requires minimal effort
- Wide variety of lengths and strokes available
- With eLINE ball screw drive

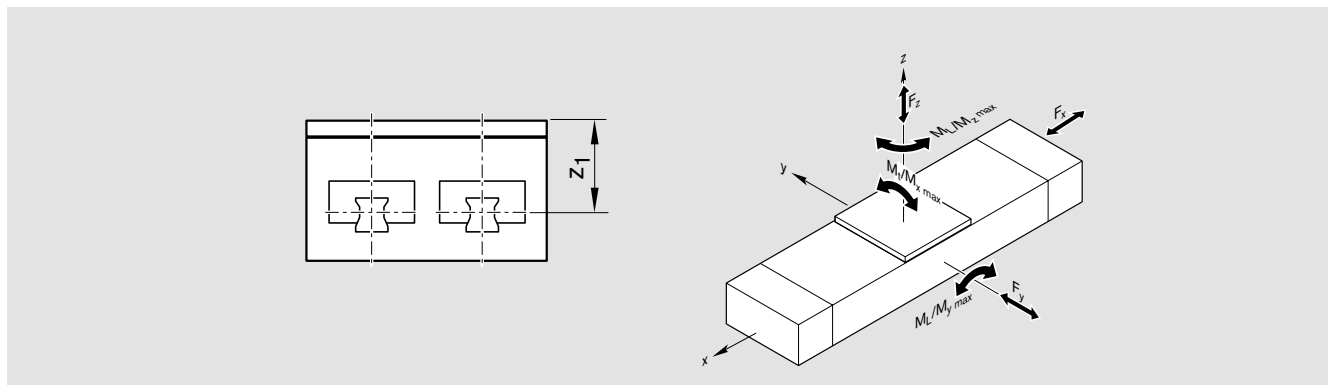


Size	Carriage length (mm) L_{ca}	Ball screw (mm) $d_0 \times P$	Dynamic load capacity C (N)			Dynamic load moments (Nm)		Mass of linear system m_s (kg) without connection plate	
			Guide-way	Ball screw	Fixed bearing	Torsional load moment M_t	Longitudinal load moment M_L	Motor without brake	Motor with brake
eCKK 90	60	12 x 10	5000	1500	2550	166	29	0.00408 · L + 2.34	0.00408 · L + 3.34
	125		8100						
eCKK 110	82	16 x 10	11000	5800	3000	420	89	0.00674 · L + 4.01	0.00674 · L + 5.86
	165		17800						

Elasticity modulus $E = 70,000 \text{ N/mm}^2$

Size	Carriage length (mm) L_{ca}	Maximum permissible forces (N)			Maximum permissible moments (Nm)		Planar moment of inertia (cm ⁴)		Moved mass of system (kg) m_{ca}	Maximum payload (kg) $m_{ex \text{ max}}$	Repeatability (mm)	Dimensions (mm) z_1
		$F_{x \text{ max}}$	$F_{y \text{ max}}$ $F_{z \text{ max}}$	$M_{x \text{ max}}$	$M_{y \text{ max}}$ $M_{z \text{ max}}$	I_y	I_z					
eCKK 90	60	200	250	16.6	2.9 ¹⁾	12	97	0.15	15	± 0.05	22.0	
	125											405
eCKK 110	82	400	550	42.0	8.9 ¹⁾	31	238	0.27	30	± 0.05	24.5	
	165											890

1) Δ Consider the moment load capacity!



Note on dynamic load capacities and moments (see table)

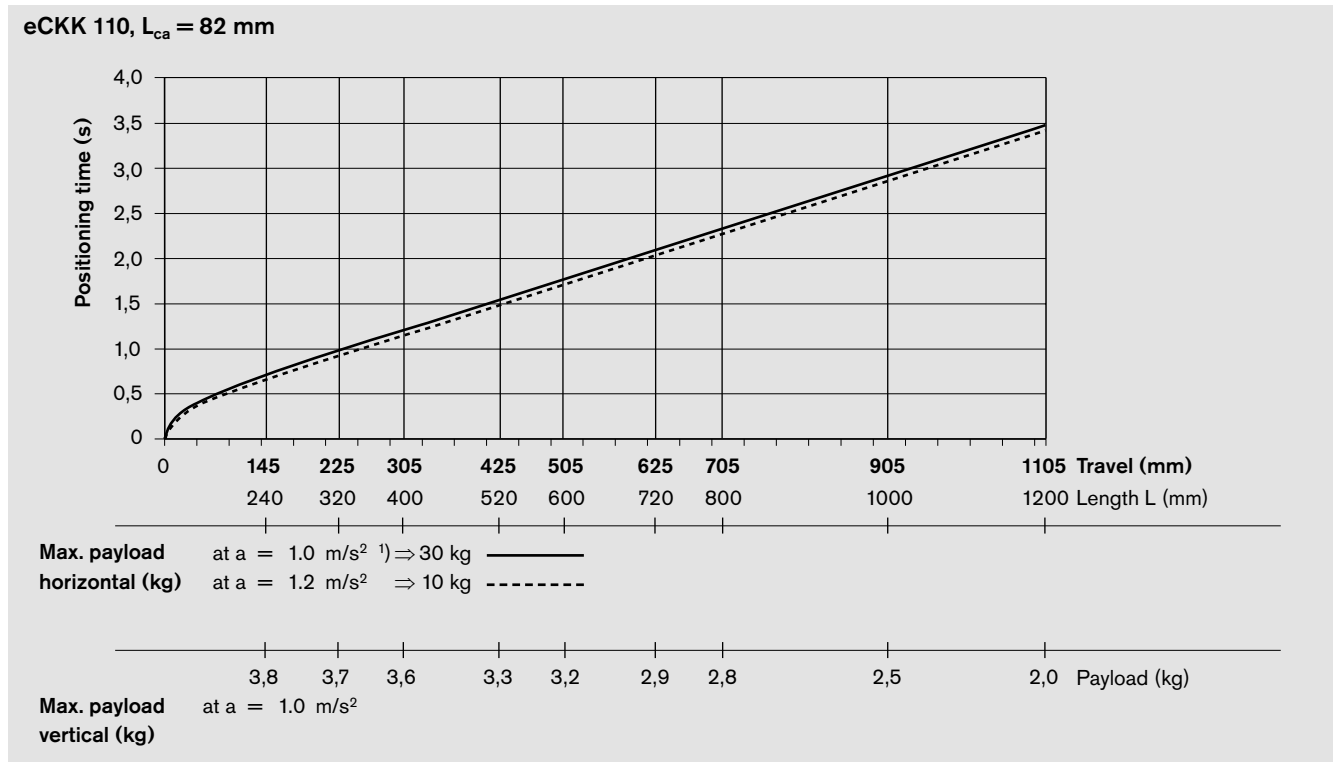
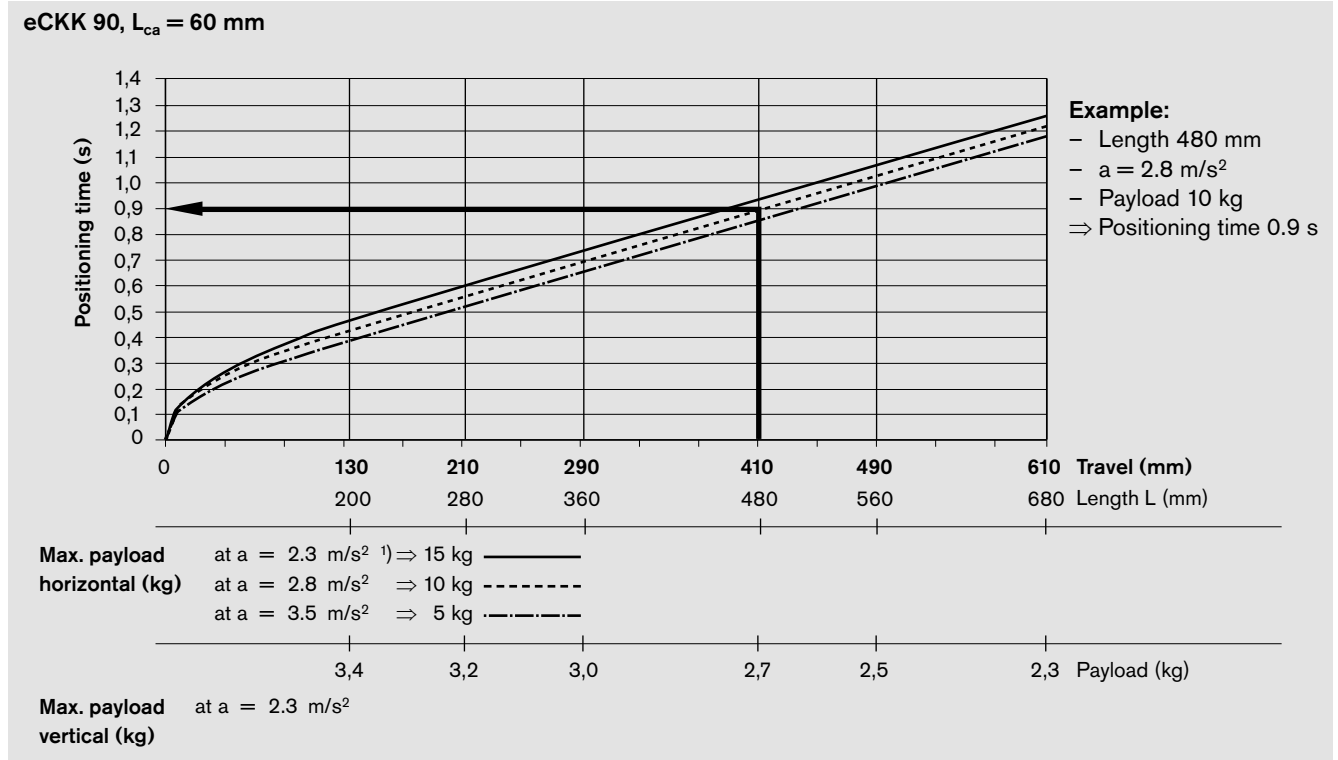
Determination of the dynamic load capacities and moments is based on a travel life of 100,000 m. Often only 50,000 m are actually stipulated. For comparison: Multiply values **C**, **M_t** and **M_L** from the table by 1.26.



Performance Charts

⚠ Values apply to moved short carriage only

Positioning time as a function of travel distance and length



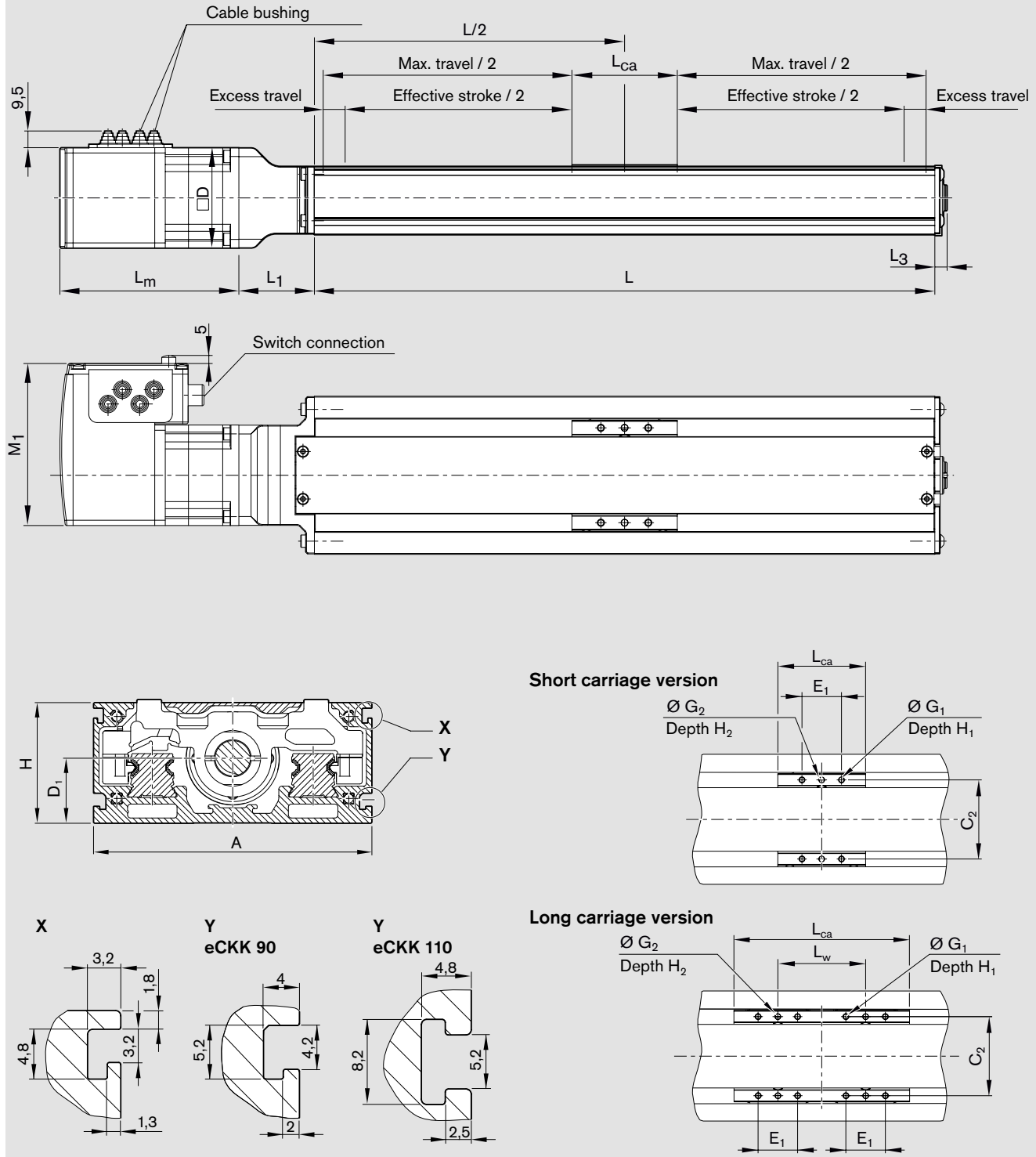
1) Corresponds to the default settings in the parameter files from "www.boschrexroth.com/eline_compactmodule"



eLINE Compact Modules eCKK with Integrated Compact Drive

Dimensions

All dimensions in mm. Diagrams to different scales.



Size	Dimensions (mm)											L _{ca}		L _m	L _w	L ₁	L ₃	M ₁
	A ¹⁾	H	C ₂	D ₁	□D	E ₁	∅G ₁	∅G ₂ H7	H ₁	H ₂	Short carr.	Long carr.						
eCKK 90	90	40	54	21.0	58	27	M4	4	7	6	60	125	116	162 ²⁾	65	43	7	93
eCKK 110	110	50	66	25.5	85	30	M5	5	8	7	82	165	141	188 ²⁾	85	53	7	120

1) Frame size 2) with brake carr. = carriage



Ordering Data

Length L (mm)	Maximum travel (mm)		Motor	Part numbers for compact drives R0361 xxx xx (xxx xx from table) with positioning data set control (Version 1a)		with Profibus interface (Version 1b)	
	Short carr.	Long carr.		Short carr.	Long carr.	Short carr.	Long carr.
eCKK 90							
200	130		w/o br.	... 360 10	–	... 361 10	–
			w/ br.	... 360 11	–	... 361 11	–
280	210	145	w/o br.	... 360 14	... 364 14	... 361 14	... 365 14
			w/ br.	... 360 15	... 364 15	... 361 15	... 365 15
360	290	225	w/o br.	... 360 18	... 364 18	... 361 18	... 365 18
			w/ br.	... 360 19	... 364 19	... 361 19	... 365 19
480	410	345	w/o br.	... 360 24	... 364 24	... 361 24	... 365 24
			w/ br.	... 360 25	... 364 25	... 361 25	... 365 25
560	490	425	w/o br.	... 360 28	... 364 28	... 361 28	... 365 28
			w/ br.	... 360 29	... 364 29	... 361 29	... 365 29
680	610	545	w/o br.	... 360 34	... 364 34	... 361 34	... 365 34
			w/ br.	... 360 35	... 364 35	... 361 35	... 365 35
eCKK 110							
240	145		w/o br.	... 460 12	–	... 461 12	–
			w/ br.	... 460 13	–	... 461 13	–
320	225	140	w/o br.	... 460 16	... 464 16	... 461 16	... 465 16
			w/ br.	... 460 17	... 464 17	... 461 17	... 465 17
400	305	220	w/o br.	... 460 20	... 464 20	... 461 20	... 465 20
			w/ br.	... 460 21	... 464 21	... 461 21	... 465 21
520	425	340	w/o br.	... 460 26	... 464 26	... 461 26	... 465 26
			w/ br.	... 460 27	... 464 27	... 461 27	... 465 27
600	505	420	w/o br.	... 460 30	... 464 30	... 461 30	... 465 30
			w/ br.	... 460 31	... 464 31	... 461 31	... 465 31
720	625	540	w/o br.	... 460 36	... 464 36	... 461 36	... 465 36
			w/ br.	... 460 37	... 464 37	... 461 37	... 465 37
800	705	620	w/o br.	... 460 40	... 464 40	... 461 40	... 465 40
			w/ br.	... 460 41	... 464 41	... 461 41	... 465 41
1000	905	820	w/o br.	... 460 50	... 464 50	... 461 50	... 465 50
			w/ br.	... 460 51	... 464 51	... 461 51	... 465 51
1200	1105	1020	w/o br.	... 460 60	... 464 60	... 461 60	... 465 60
			w/ br.	... 460 61	... 464 61	... 461 61	... 465 61

Intermediate lengths available on request.

w/o br. = without brake; w/ br.) = with brake

Ordering example:

eLINE Compact Module eCKK 90. length 680 mm, with positioning data set control (Version 1a), long carriage (carr.), motor with brake (w/ br.), ➡ part number R0361 364 35

eLINE Compact Modules eCKR with Integrated Compact Drive

Technical Data

- All mechanical and electronic components from a single source
- Stepping motor with up to 16 parameterizable motion tasks
- Start-up requires minimal effort
- Wide variety of lengths and strokes available
- With toothed belt 25HTD3

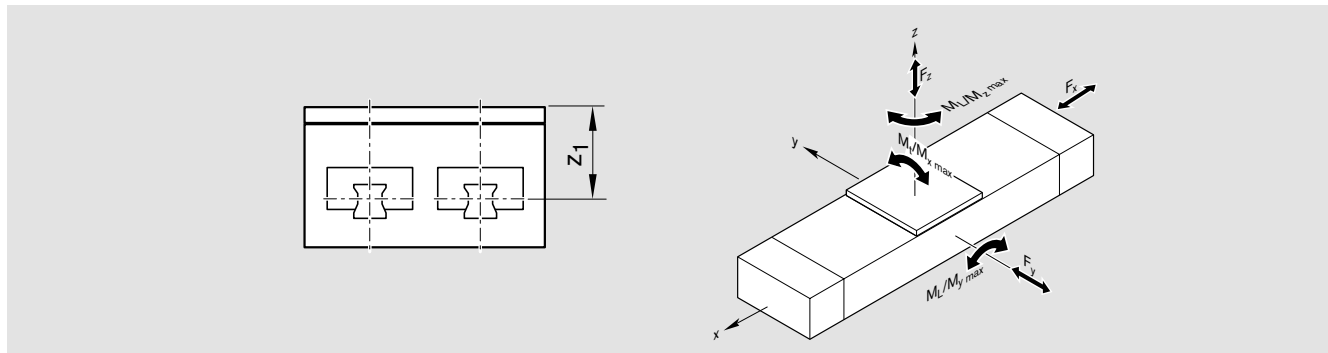


Size	Carriage length (mm) L_{ca}	Dynamic load capacity (N) Guideway C	Dynamic load moments (Nm)		Mass of linear system m_s without connection plate (kg)	
			Torsional load moment M_t	Longitudinal load moment M_L	Motor without brake	Motor with brake
eCKR 90	90	5000	166	29	$0.003462 \cdot L + 3.74$	$0.003462 \cdot L + 5.54$
	125	8100	270	200		
eCKR 110	100	11000	420	89	$0.005628 \cdot L + 6.42$	$0.005628 \cdot L + 8.22$
	165	17800	682	700		

Elasticity modulus $E = 70,000 \text{ N/mm}^2$

Size	Carriage length (mm) L_{ca}	Maximum permissible forces (N)		Maximum permissible moments (Nm)		Planar moment of inertia (cm ⁴)		Moved mass of system (kg) m_{ca}	Maximum payload (kg) $m_{ex \max}$	Repeatability (mm)	Dimensions (mm) z_1
		$F_{y \max}$	$F_{z \max}$	$M_{x \max}$	$M_{y \max}, M_{z \max}$	I_y	I_z				
eCKR 90	90		250	16.6	$2.9^{1)}$	12	97	0.19	15	± 0.2	22.0
	125		405	27.0	20.0			0.28	30		
eCKR 110	100		550	42.0	$8.9^{1)}$	31	238	0.31	30	± 0.2	24.5
	165		890	68.2	70.0			0.56	60		

1) Δ Consider the moment load capability!



Note on dynamic load capacities and moments (see table)

Determination of the dynamic load capacities and moments is based on a travel life of 100,000 m. Often only 50,000 m are actually stipulated. For comparison: Multiply values **C**, **M_t** and **M_L** from the table by 1.26.

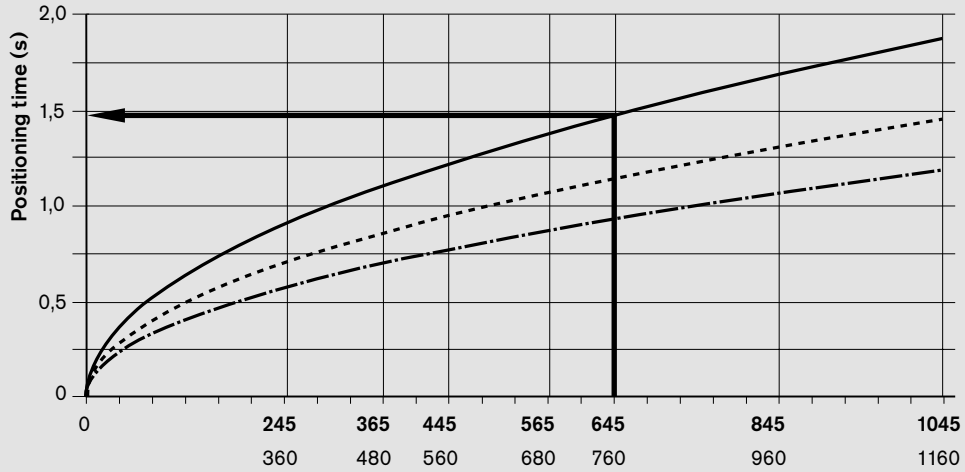


Performance Charts

⚠ Values apply to moved short carriage only

Positioning time as a function of travel distance and length

eCKR 90, $L_{ca} = 90$ mm



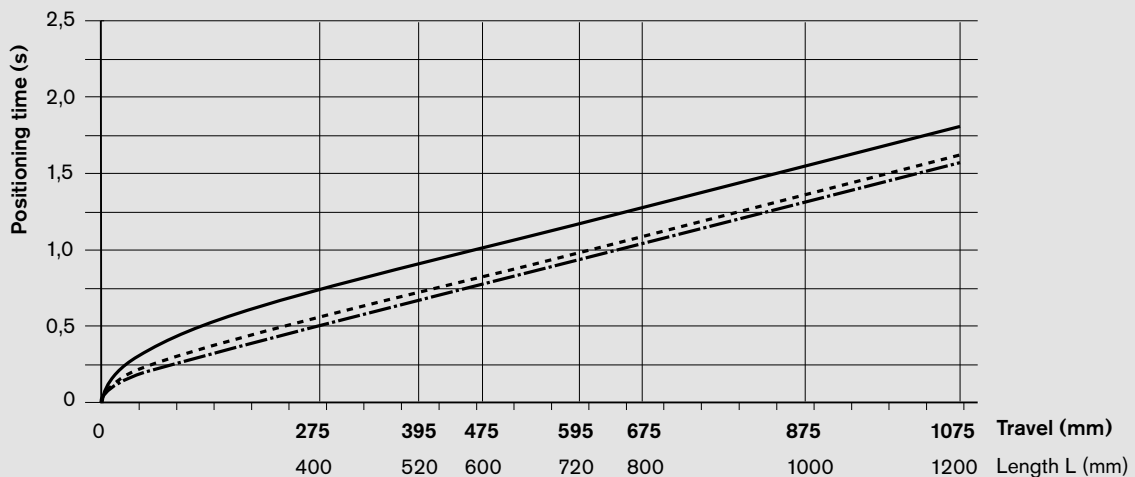
Example:

- Length 760 mm
- $a = 1.2$ m/s²
- Payload 10 kg
- ⇒ Positioning time 1.49 s

Max. payload horizontal (kg)	at $a = 1.2$ m/s ² ⇒	10 kg	—————
	at $a = 2.0$ m/s ² ¹⁾ ⇒	5 kg	- - - - -
	at $a = 3.0$ m/s ² ⇒	2.5 kg	- · - · -

Vertical applications not recommended

eCKR 110, $L_{ca} = 100$ mm



Max. payload horizontal (kg)	at $a = 2.0$ m/s ² ⇒	30 kg	—————
	at $a = 4.0$ m/s ² ¹⁾ ⇒	15 kg	- - - - -
	at $a = 5.5$ m/s ² ⇒	10 kg	- · - · -

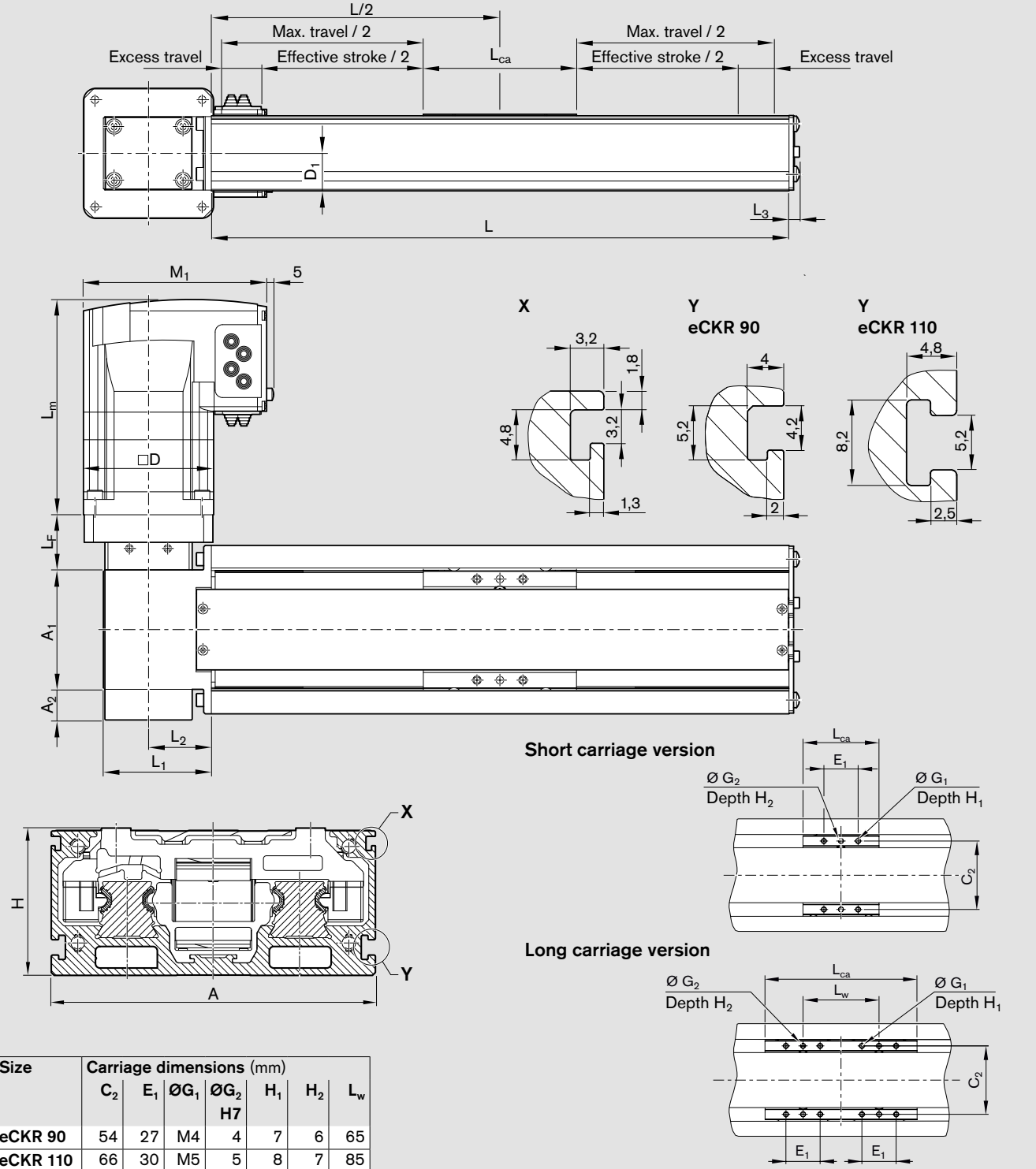
Vertical applications not recommended

1) Corresponds to the default settings in the parameter files from "www.boschrexroth.com/eline_compactmodule"

eLINE Compact Modules eCKR with Integrated Compact Drive

Dimensions

All dimensions in mm. Diagrams to different scales.



Size	Carriage dimensions (mm)						
	C_2	E_1	$\varnothing G_1$	$\varnothing G_2$	H_1	H_2	L_w
eCKR 90	54	27	M4	4	7	6	65
eCKR 110	66	30	M5	5	8	7	85

Size	Dimensions (mm)										Short carr.	Long carr.	L_F	L_m	M_1
	A^1	A_1	A_2	H	D_1	$\square D$	L_1	L_2	L_3	L_{ca}					
eCKR 90	90	60	16	40	19.5	85	65.0	37	6	90	125	34.5	141	188 ²⁾	120
eCKR 110	110	78	21	50	24.5	85	70.5	41	7	100	165	36.0	201	248 ²⁾	120

1) Frame size 2) with brake carr. = carriage

Ordering Data

Length L (mm)	Maximum travel (mm)		Motor	Part numbers for compact drives R0363 xxx xx (xxx xx from table) with positioning data set control (Version 1a)				with Profibus interface (Version 1b)			
	Short carr.	Long carr.		Motor attachment at right, MA10		Motor attachment at left, MA11		Motor attachment at right, MA10		Motor attachment at left, MA11	
				Short carr.	Long carr.	Short carr.	Long carr.	Short carr.	Long carr.	Short carr.	Long carr.
eCKR 90											
360	245	210	w/o br.	... 360 18	... 364 18	... 362 18	... 366 18	... 361 18	... 365 18	... 363 18	... 367 18
			w/ br.	... 360 19	... 364 19	... 362 19	... 366 19	... 361 19	... 365 19	... 363 19	... 367 19
480	365	330	w/o br.	... 360 24	... 364 24	... 362 24	... 366 24	... 361 24	... 365 24	... 363 24	... 367 24
			w/ br.	... 360 25	... 364 25	... 362 25	... 366 25	... 361 25	... 365 25	... 363 25	... 367 25
560	445	410	w/o br.	... 360 28	... 364 28	... 362 28	... 366 28	... 361 28	... 365 28	... 363 28	... 367 28
			w/ br.	... 360 29	... 364 29	... 362 29	... 366 29	... 361 29	... 365 29	... 363 29	... 367 29
680	565	530	w/o br.	... 360 34	... 364 34	... 362 34	... 366 34	... 361 34	... 365 34	... 363 34	... 367 34
			w/ br.	... 360 35	... 364 35	... 362 35	... 366 35	... 361 35	... 365 35	... 363 35	... 367 35
760	645	610	w/o br.	... 360 38	... 364 38	... 362 38	... 366 38	... 361 38	... 365 38	... 363 38	... 367 38
			w/ br.	... 360 39	... 364 39	... 362 39	... 366 39	... 361 39	... 365 39	... 363 39	... 367 39
960	845	810	w/o br.	... 360 48	... 364 48	... 362 48	... 366 48	... 361 48	... 365 48	... 363 48	... 367 48
			w/ br.	... 360 49	... 364 49	... 362 49	... 366 49	... 361 49	... 365 49	... 363 49	... 367 49
1160	1045	1010	w/o br.	... 360 58	... 364 58	... 362 58	... 366 58	... 361 58	... 365 58	... 363 58	... 367 58
			w/ br.	... 360 59	... 364 59	... 362 59	... 366 59	... 361 59	... 365 59	... 363 59	... 367 59
eCKR 110											
400	275	210	w/o br.	... 460 20	... 464 20	... 462 20	... 466 20	... 461 20	... 465 20	... 463 20	... 467 20
			w/ br.	... 460 21	... 464 21	... 462 21	... 466 21	... 461 21	... 465 21	... 463 21	... 467 21
520	395	330	w/o br.	... 460 26	... 464 26	... 462 26	... 466 26	... 461 26	... 465 26	... 463 26	... 467 26
			w/ br.	... 460 27	... 464 27	... 462 27	... 466 27	... 461 27	... 465 27	... 463 27	... 467 27
600	475	410	w/o br.	... 460 30	... 464 30	... 462 30	... 466 30	... 461 30	... 465 30	... 463 30	... 467 30
			w/ br.	... 460 31	... 464 31	... 462 31	... 466 31	... 461 31	... 465 31	... 463 31	... 467 31
720	595	530	w/o br.	... 460 36	... 464 36	... 462 36	... 466 36	... 461 36	... 465 36	... 463 36	... 467 36
			w/ br.	... 460 37	... 464 37	... 462 37	... 466 37	... 461 37	... 465 37	... 463 37	... 467 37
800	675	610	w/o br.	... 460 40	... 464 40	... 462 40	... 466 40	... 461 40	... 465 40	... 463 40	... 467 40
			w/ br.	... 460 41	... 464 41	... 462 41	... 466 41	... 461 41	... 465 41	... 463 41	... 467 41
1000	875	810	w/o br.	... 460 50	... 464 50	... 462 50	... 466 50	... 461 50	... 465 50	... 463 50	... 467 50
			w/ br.	... 460 51	... 464 51	... 462 51	... 466 51	... 461 51	... 465 51	... 463 51	... 467 51
1200	1075	1010	w/o br.	... 460 60	... 464 60	... 462 60	... 466 60	... 461 60	... 465 60	... 463 60	... 467 60
			w/ br.	... 460 61	... 464 61	... 462 61	... 466 61	... 461 61	... 465 61	... 463 61	... 467 61

Intermediate lengths available on request.

w/o br. = without brake; w/ br.) = with brake

Ordering example:

eLINE Compact Module eCKR 90, length 680 mm, with Profibus interface (Version 1b), motor attachment at right, MA10
 long carriage (carr.), motor with brake (w/ br.), ➔ part number R0363 365 35

eLINE Compact Modules with Integrated Compact Drive

Switch Mounting

⚠ One sensor (provided) is needed as a reference switch when starting up the axis.

Switch activation is direct with this magnetic field sensor (no switching cam required).

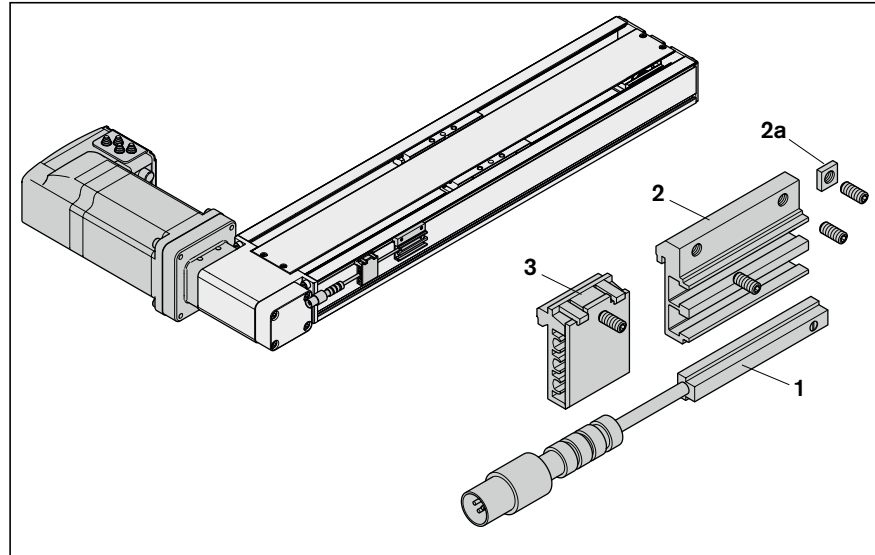
The sensor is to be mounted after the eLINE Compact Module has been fastened to the mounting base.

- The switches are slid into the upper T-slot on the sensor mount and secured with set screws. The square nut serves as a stop for the sensor, so it is not necessary to re-adjust the position when replacing a sensor.
- The plug of the sensor is connected directly to the motor (motor control).

Sensor mounting kit

consisting of:

- 1 Hall sensor
- 2 Sensor mount (material: plastic) incl. set screw (loose) and square nut **2a**
- 3 Cable holder (3 units, material: plastic) incl. set screw (loose)



Type	Part number
Sensor mounting kit with Hall sensor	R0375 300 08

Accessories for positioning data set control (Version 1 a)

Cable set

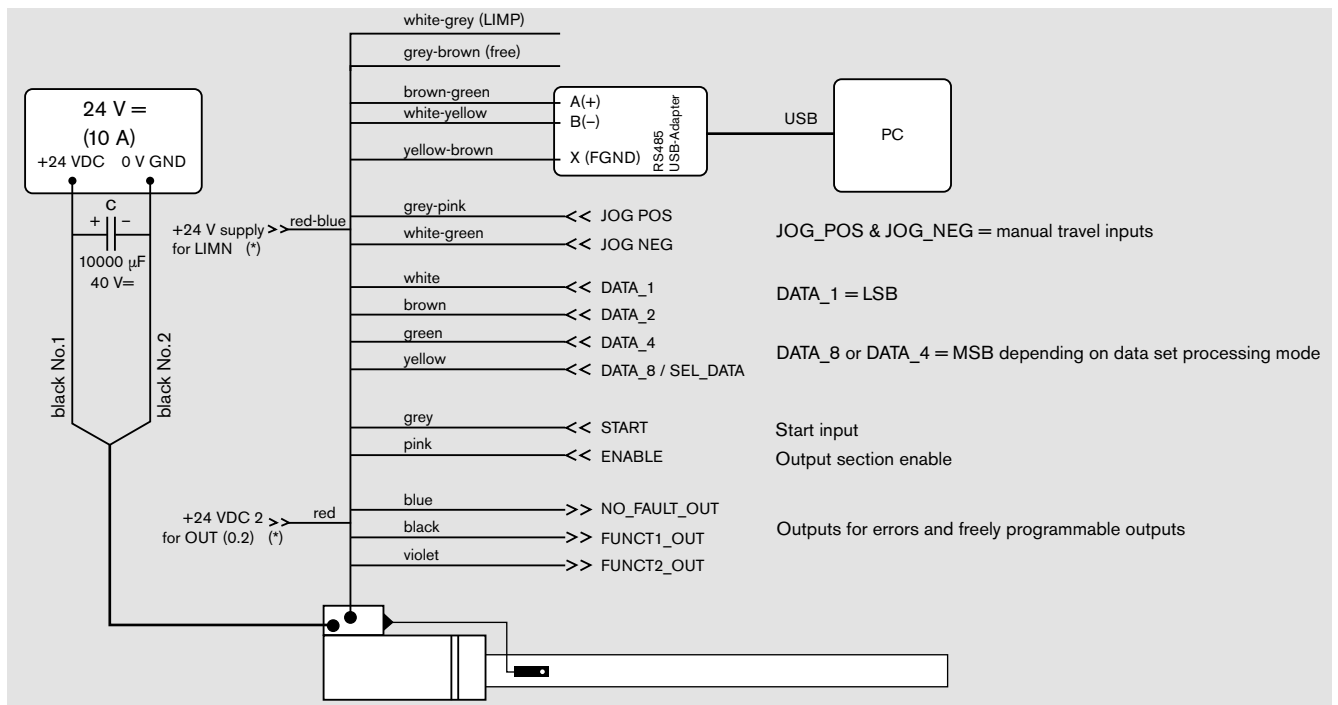
The cable set consists of the cable (black sheath) for the 24V power supply; the signal cable (gray sheath) for digital inputs and outputs; and the RS-485 (EIA-485) interface. The cable set is 5 m long.



The plugs are inserted through the side openings in the terminal box and engaged in the plug sockets.

Part number: R1130 695 74

Detailed description available in product manual IclA IDS MIO or at www.boschrexroth.com/eline_compactmodule



(*) +24 V supply for LIMN and +24 V DC for outputs are galvanically separated from the motor supply and can be powered separately.

Power supply: 24 V DC

Important notes:

- Avoid reverse polarity +/- and overvoltage of the DC supply!
- Connect or disconnect DC power supply of the IclA-IDS-MIO only when de-energized (power pack switched off).
- Connect electrolytic capacitor 10000 µF 40 V DC in parallel to the 24 V DC supply to avoid overvoltages during braking.
- Grounding: All GNDs should be connected to the same potential

The axis can be moved manually (even without start-up tool) via the JOG inputs after the 24 V supply voltage has been switched on.

RS-485 (EIA-485) adapter on USB

An adapter is required to connect the motor (RS-485 (EIA-485)) to the PC (USB).

Part number: R1130 896 97

A 1.8-meter USB connection cable and the driver software are included with the delivery.



eLINE Compact Modules with Integrated Compact Drive

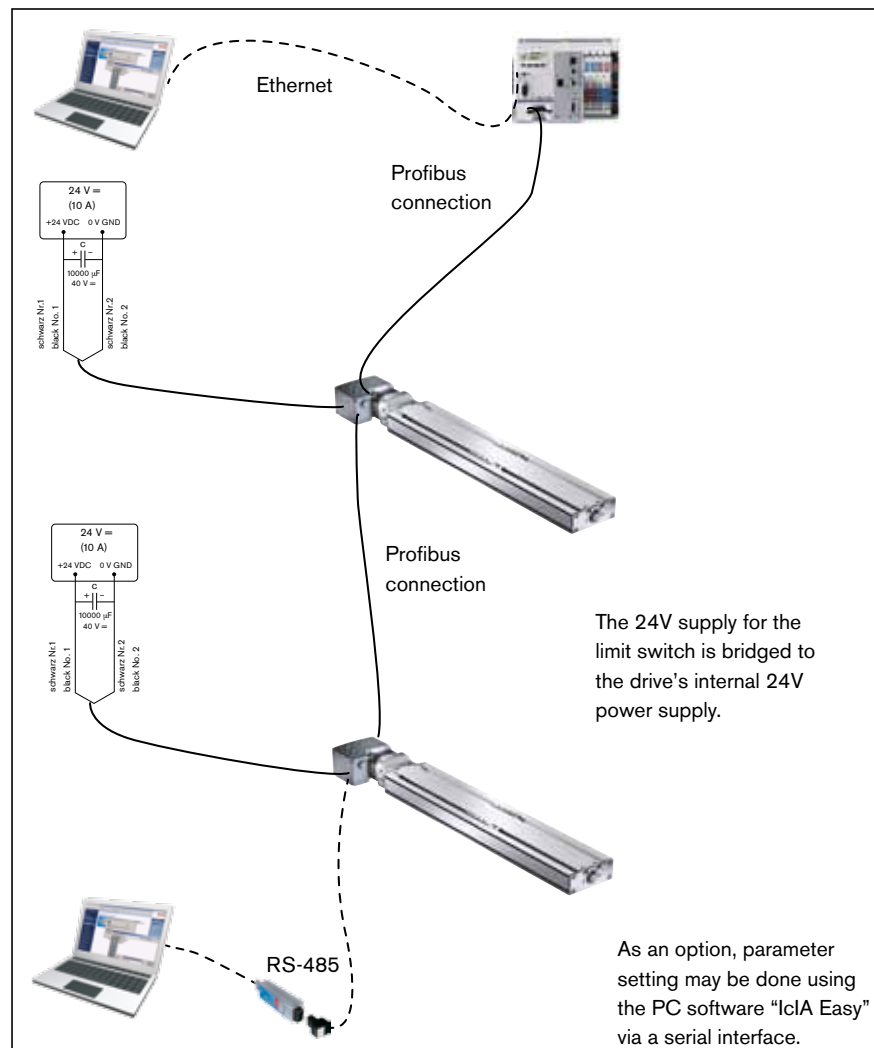
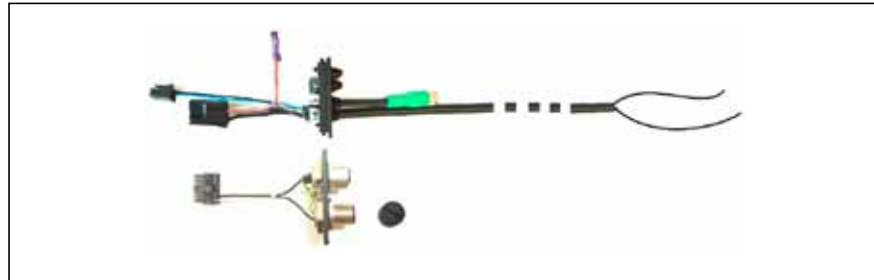
Accessories for Profibus interface (Version 1b)

Power supply cable set

The cable set consists of:

- Cable for 24V DC supply and connection of limit switch LIMN.
- Male and female connectors (M12) for Profibus connection.
- Blind cover for M12 female connector (last bus subscriber)

Length	Part number
5 m	R1130 695 76

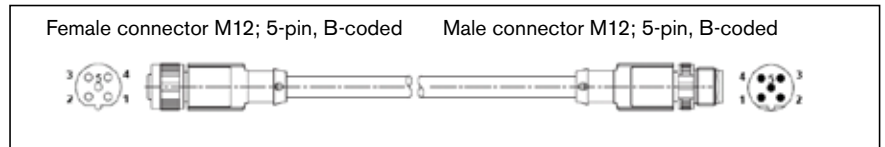


In the version "with Profibus interface," the drive is delivered with pre-set (default) parameters. The parameters for the physical variables are set in units for rotary motion: travel in increments; rotary speed in rpm; acceleration in rpm/s

At the last slave (subscriber), the terminating resistors must be switched on (S2) in order to avoid line interference due to signal reflections.

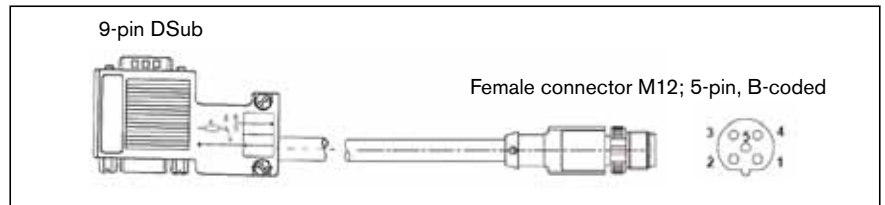
Profibus connection cable
Between two bus subscribers

Length	Part number
1 m	R1 130 695 79
2 m	R1 130 695 80
5 m	R1 130 695 81



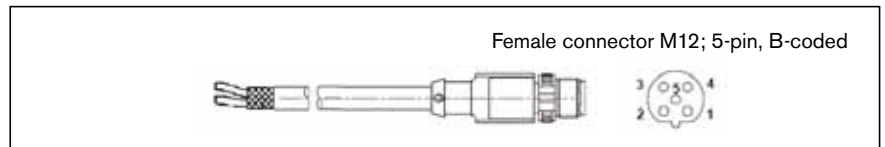
Profibus connection cable
From control system with 9-pin DSub (e.g. IndraControl) to first bus subscriber.

Length	Part number
5 m	R1 130 695 96



Profibus connection cable
To first bus subscriber, with flying leads at one end (for assembly by customer).

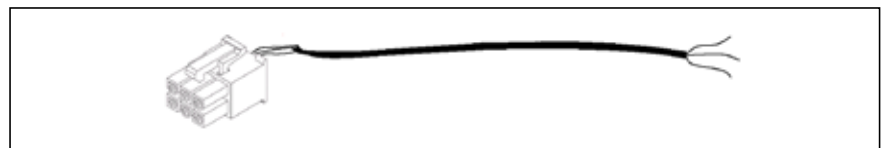
Length	Part number
5 m	R1 130 695 77



Programming cable
Serves to set the drive parameters. (Optional – for use with RS-485 (EIA-485) adapter on USB).

Note:
This programming cable should only be connected to the drive for initial start-up purposes. When using it, the drive housing cover must remain open.

Length	Part number
5 m	R1 130 695 82



USB adapter RS-485 (EIA-485)

For optional drive parameter setting by the customer, an adapter is required.

Part number: R1130 896 97

The adapter is supplied together with a USB connection cable (1.8 m long) and the driver software.

