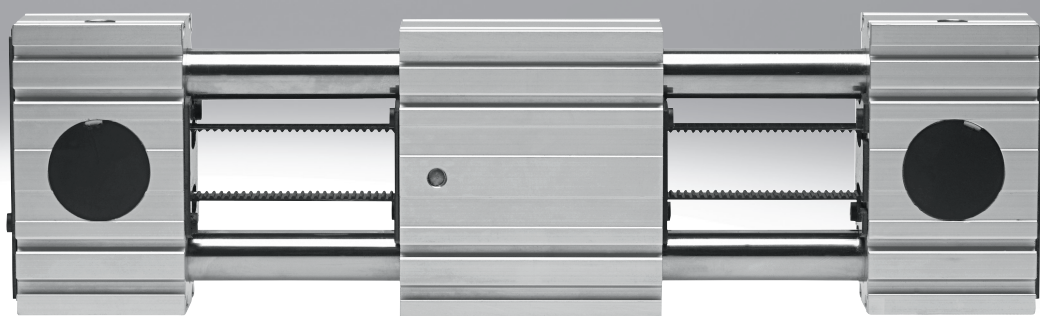


Toothed belt axes ELGR

FESTO

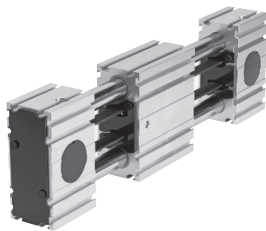


Key features

At a glance		
General	Characteristics	Application areas
• Optimum price/performance ratio • Ready-to-install unit for quick and easy installation • High reliability thanks to tested service life of 5000 km • Complete module for a simple and space-saving solution for end-position sensing	• Plain-bearing guide – For small loads – Restricted operating behaviour with torque load – Guide not backlash-free • Recirculating ball bearing guide – For medium loads – Very good operating behaviour with torque load – Backlash-free guide (preloaded guide elements)	• Pick & place with payloads of up to 15 kg • Positioning and handling with low process forces • Actuation of guard doors in processing machines

Modular axis system with open motor interface → page 4

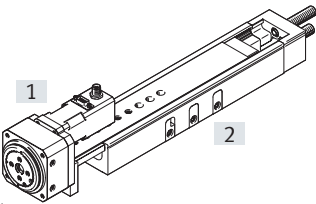
- Variable strokes
- Two guide variants
- Axial kits for servo and stepper motors
- The motor position can be freely selected on 4 sides and can be changed at any time.



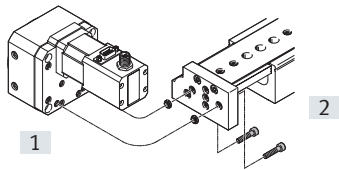
Key features

Possible combinations within the Optimised Motion Series (OMS)

Rotary drive ERMO on mini slide DGSL

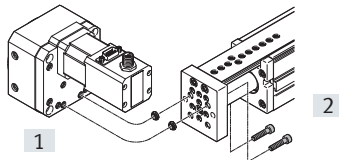
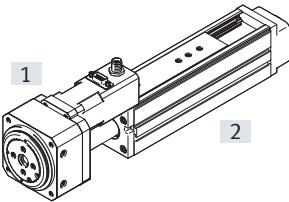


When combining ERMO-12 with DGSL-12, the proximity switch SIEN cannot be used as a reference switch for ERMO.



Size		Accessories	
[1] ERMO	[2] DGSL	Centring sleeve	Screw
12	12	ZBH-7 (x2)	M4x18 (x2)
25	20	ZBH-9-7 (x2)	M5x22 (x2)
25	25	ZBH-9-7 (x2)	M5x22 (x2)

Rotary drive ERMO on mini slide EGSL



Size		Accessories	
[1] ERMO	[2] EGSL	Centring sleeve	Screw
12	35	ZBH-7 (x2)	M4x12 (x2)
16	45	ZBH-7 (x2)	M5x12 (x2)
25	55	ZBH-7 (x2)	M5x14 (x2)
32	55	ZBH-7 (x2)	M5x14 (x2)

Type codes

001	Series	
ELGR	Linear axis	

002	Drive system	
TB	Toothed belt	

003	Guide	
	Recirculating ball bearing guide	
GF	Plain bearing	

004	Size	
35	35	
45	45	
55	55	

005	Stroke [mm]	
100	100	
200	200	
300	300	
400	400	
500	500	
600	600	
800	800	
1000	1000	
1200	1200	
1500	1500	
...	100 ... 1500	

006	Stroke reserve [mm]	
...	0 ... 999	

007	Slide design	
	Standard	
L	Slide, long	

008	Additional slide	
	None	
ZL	1 slide left	
ZR	1 slide right	
ZB	Additional slide 1x left, 1x right	

009	Motor type	
	Without motor	
ST	Stepper motor ST	

010	Measuring unit	
	None	
E	Encoder	

011	Brake	
	None	
B	With brake	

012	Cable outlet direction	
	None	
AD	Bottom	
AL	Left	
AR	Right	
AT	Top	

013	Motor position	
	Standard	
FR	Front right	
FL	Front left	
RR	Rear right	
RL	Rear left	

014	Proximity sensor, inductive, slot 8, PNP, N/C contact, cable 7.5 m [units]	
...	1 ... 6	

015	Proximity sensor, inductive, slot 8, PNP, N/O contact, cable 7.5 m [units]	
...	1 ... 6	

016	Mounting slot cover, 2x, 500 mm [units]	
...	1 ... 50	

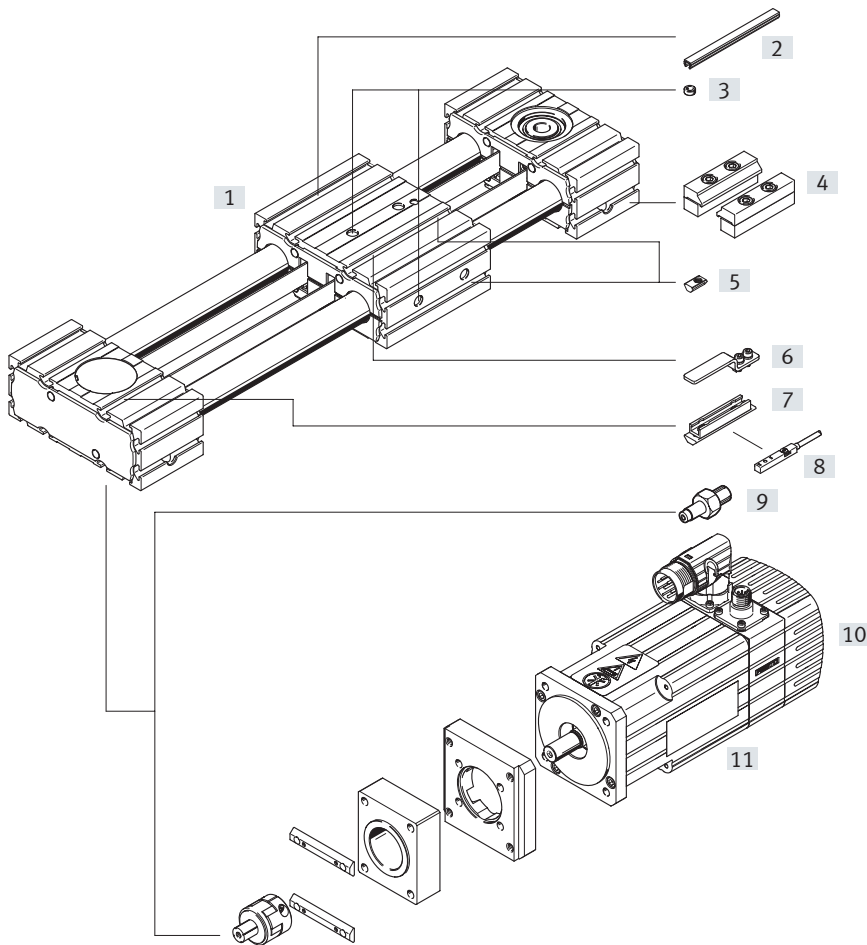
017	Slot nut for mounting slot [units]	
...	1 ... 99	

018	Drive shaft [units]	
...	1 ... 4	

019	Profile mounting	
...	1 ... 2	

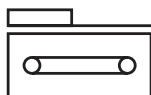
020	Operating instructions	
	With operating instructions	
DN	Without operating instructions	

Peripherals overview



Accessories			
	Type/order code	Description	→ Page/Internet
[1]	Toothed belt axis ELGR	Electric drive	6
[2]	Slot cover NC	For protection against contamination	18
[3]	Centring sleeve ZBH	- For centring loads and attachments on the slide 2 centring sleeves included in the scope of delivery for the axis	18
[4]	Profile mounting MA	For mounting the axis on the bearing cap	16
[5]	Slot nut NM	For mounting attachments	18
[6]	Switch lug SA, SB	For sensing the slide position	17
[7]	Sensor bracket SA, SB	Adapter for mounting the inductive proximity sensors on the axis	17
[8]	Proximity switch, T-slot SA, SB	- Inductive proximity switch, for T-slot 1 switch lug and 1 sensor bracket are included in the scope of delivery with the order code SA, SB	19
[9]	Drive shaft adapter EA	- Can be used as an alternative interface, as required - No drive shaft adapter is required for the axis/motor combinations → page 16	18
[10]	Motor EMMT	Motors specially matched to the axis, with or without brake	emmt
[11]	Axial kit EAMM	For axial motor mounting (comprising coupling, coupling housing and motor flange)	eammm-a
–	Connecting cable NEBA	For proximity switch (order code SA and SB)	19

Datasheet



-  - Size

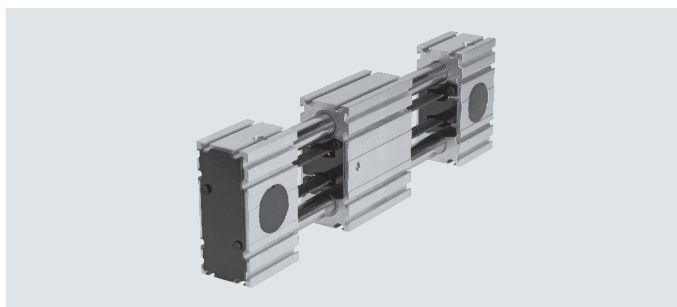
35 ... 55

-  - Stroke length

50 ... 1500 mm

-  - www.festo.com

-  - Repair service



General technical data

Size		35	45	55
Design		Electromechanical linear axis with toothed belt		
Guide		Recirculating ball bearing guide		
		Plain-bearing guide		
Mounting position		Any		
Working stroke	[mm]	50 ... 800	50 ... 1000	50 ... 1500
Max. feed force F_x	[N]	50	100	350
Max. no-load torque	[Nm]	0.1	0.2	0.4
Max. driving torque	[Nm]	0.46	1.24	5
Max. no-load resistance to shifting	[N]	10.8	16.1	27.9
Max. speed				
Recirculating ball bearing guide	[m/s]	3		
Plain-bearing guide	[m/s]	1		
Max. acceleration ¹⁾	[m/s ²]	50		
Repetition accuracy	[mm]	±0.1		

1) The max. acceleration is dependent on the payload, the driving torque and the max. feed force → page 9

Operating and environmental conditions

Ambient temperature		
Recirculating ball bearing guide	[°C]	-10 ... +50
Plain-bearing guide	[°C]	0 ... +40
Degree of protection		IP20
Duty cycle	[%]	100

Weight [kg]

Size	35	45	55
Recirculating ball bearing guide			
Basic weight with 0 mm stroke ¹⁾			
Standard slide	1.5	3.2	5.4
Long slide	1.9	4.3	7.4
Additional weight per 1000 mm stroke	2.5	5.0	7.8
Moving mass	0.5	1.1	1.9
Slide			
Standard slide	0.5	1.0	1.8
Long slide	0.8	1.7	3.0
Additional slide	0.4	0.9	1.7

1) Including slide

Datasheet

Weight [kg]			
Size	35	45	55
Plain-bearing guide			
Basic weight with 0 mm stroke ¹⁾			
Standard slide	1.4	3.1	5.1
Long slide	1.9	4.3	7.3
Additional weight per 1000 mm stroke	2.5	5.0	7.8
Moving mass	0.4	0.9	1.5
Slide			
Standard slide	0.4	0.9	1.5
Long slide	0.7	1.6	2.8
Additional slide	0.3	0.7	1.3

1) Including slide

Toothed belt			
Size	35	45	55
Pitch [mm]	2	3	3
Width [mm]	10	15	19.3
Effective diameter [mm]	18.46	24.83	28.65
Feed constant [mm/rev]	58	78	90

Mass moment of inertia			
Size	35	45	55
J_0			
Standard slide [kg mm ²]	40.26	155.13	360.48
Long slide [kg mm ²]	66.50	271.52	638.74
J_H per metre stroke [kg mm ² /m]	0.26	1.06	1.88
J_L per kg payload [kg mm ² /Kg]	85.19	154.13	205.21
J_W Additional slide [kg mm ²]	36.75	136.55	301.92

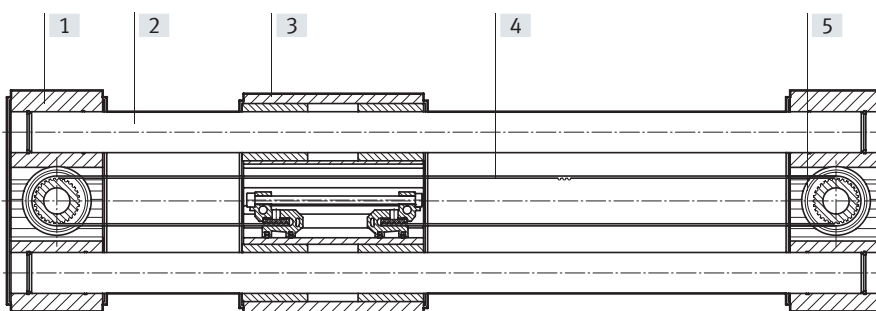
The mass moment of inertia J_A of the entire axis is calculated as follows:

$$J_A = J_0 + K \times J_W + J_H \times \text{working stroke [m]} + J_L \times m_{\text{payload [kg]}}$$

K = Number of additional slides

Materials

Sectional view



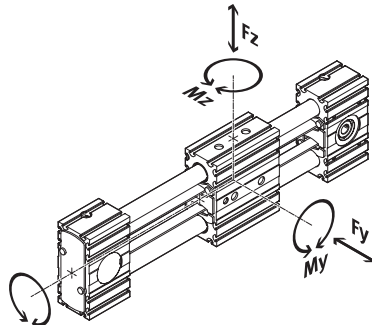
Axis	
[1] Bearing cap, profile	Anodised wrought aluminium alloy
[2] Guide rods	Tempered steel, hardened and hard chrome plated
[3] Slide, profile	Anodised wrought aluminium alloy
[4] Toothed belt	Polychloroprene or NBR with glass cord and nylon coating
[5] Belt	High-alloy stainless steel
Note on materials	RoHS-compliant
	Contains paint-wetting impairment substances

Datasheet

Characteristic load values

The indicated forces and torques refer to the centre of the guide.
The point of application of force is the point where the centre of the guide and the longitudinal centre of the slide intersect.

These values must not be exceeded during dynamic operation. Special attention must be paid to the deceleration phase.



If the axis is subjected to several of the indicated forces and torques at the same time, the following equation must be satisfied in addition to the indicated maximum loads:

Calculating the load comparison factor:

$$f_v = \frac{|F_{y1}|}{F_{y2}} + \frac{|F_{z1}|}{F_{z2}} + \frac{|M_{x1}|}{M_{x2}} + \frac{|M_{y1}|}{M_{y2}} + \frac{|M_{z1}|}{M_{z2}} \leq 1$$

F_1/M_1 = dynamic value

F_2/M_2 = maximum value

Permissible forces and torques for a service life of 5000 km

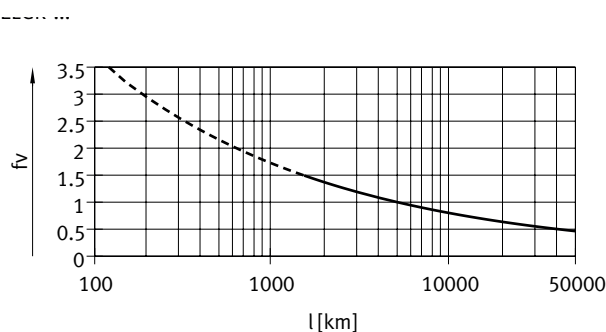
Guide		Plain-bearing guide			Recirculating ball bearing guide		
Size		35	45	55	35	45	55
$F_{y_{max}}, F_{z_{max}}$	[N]	50	100	300	50	100	300
Standard slide							
$M_{x_{max}}$	[Nm]	1	2.5	5	2.5	5	15
$M_{y_{max}}$	[Nm]	4	8	16	8	16	48
$M_{z_{max}}$	[Nm]	4	8	16	8	16	48
Long slide							
$M_{x_{max}}$	[Nm]	1	2.5	5	2.5	5	15
$M_{y_{max}}$	[Nm]	10	20	40	20	40	124
$M_{z_{max}}$	[Nm]	10	20	40	20	40	124

Service life

The service life of the guide depends on the load. To provide a rough indication of the service life of the guide, the graph below plots the load comparison factor f_v as a characteristic in relation to the service life.

These values are only theoretical. You must consult your local contact person at Festo for load comparison factors f_v greater than 1.5.

Load comparison factor f_v as a function of service life



Example:

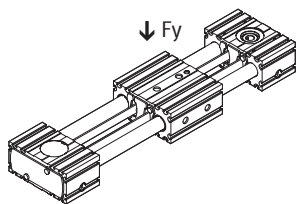
A user wants to move an X kg load. Using the above formula gives a value of 1.5 for the load comparison factor f_v . According to the graph, the guide would have a service life of approx. 1500 km. Reducing the acceleration reduces the M_z and M_y values. A load comparison factor of 1 now gives a service life of 5000 km.

Note

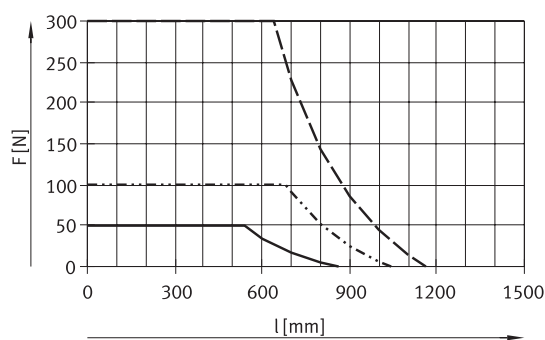
Engineering software
Electric Motion Sizing
www.festo.com/x/electric-motion-sizing

Datasheet

Max. load with flat mounting position



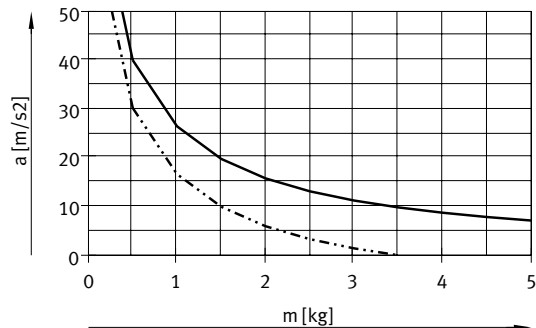
The characteristic curves in the graph correspond to the max. recommended deflection of 0.5 mm.
In this case, the axis can no longer support the maximum load past a certain stroke length.



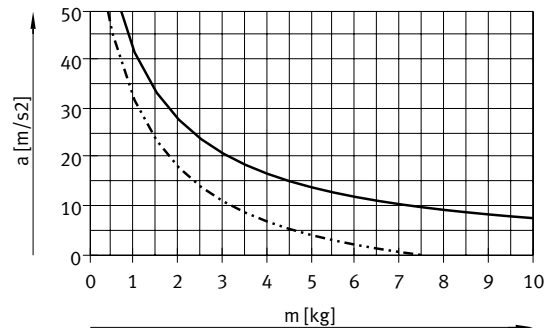
— ELGR-TB-35
 ELGR-TB-45
 - - - ELGR-TB-55

Max. acceleration a as a function of payload m

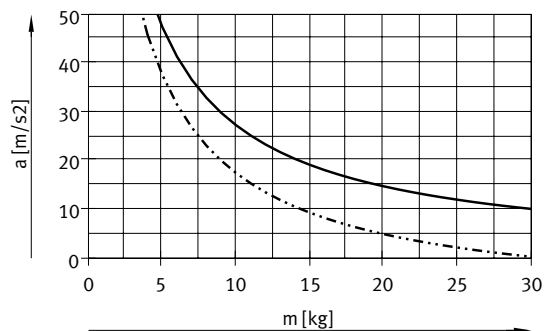
ELGR-35



ELGR-45



ELGR-55

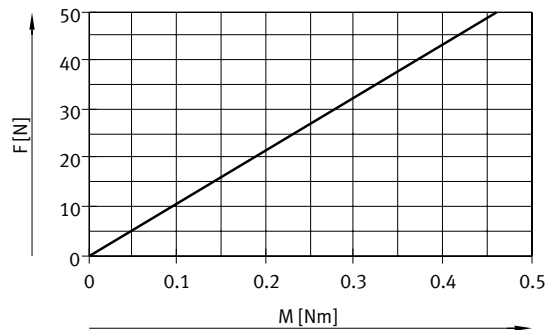


— Horizontal
 Vertical

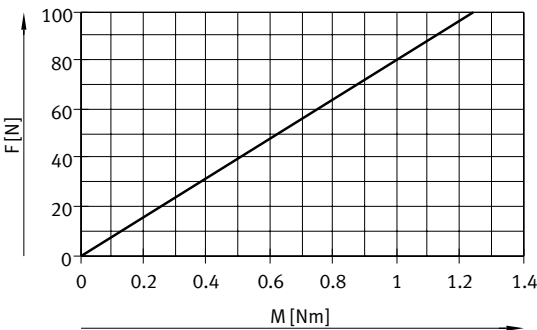
Datasheet

Feed force F_x as a function of input torque M

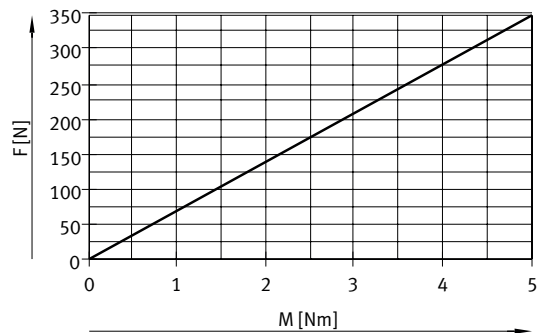
ELGR-35



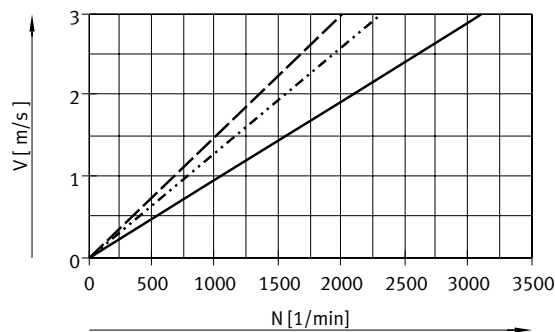
ELGR-45



ELGR-55



Speed v as a function of rotational speed n



— ELGR-TB-35
····· ELGR-TB-45
--- ELGR-TB-55

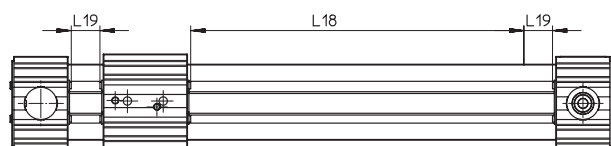
Datasheet

Minimum nominal stroke

For variant with additional slide ELGR-...-ZR/ZL/ZB

Size ELGR-	35 ZR/ZL	ZB	45 ZR/ZL	ZB	55 ZR/ZL	ZB
Min. nominal stroke [mm]	126	202	146	242	166	282

Stroke reserve



L18 = Nominal stroke

L19 = Stroke reserve

- The stroke reserve is a safety distance from the mechanical end position and is not used in normal operation
- The sum of the nominal stroke and 2x stroke reserve must not exceed the maximum permissible working stroke
- The stroke reserve length can be freely selected
- The stroke reserve is defined via the "stroke reserve" characteristic in the modular product system.

Example:

Type ELGR-TB-45-500-20H-...

Nominal stroke = 500 mm

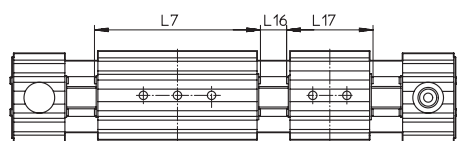
2x stroke reserve = 40 mm

Working stroke = 540 mm

(540 mm = 500 mm + 2x 20 mm)

Working stroke reduction

For standard slide or long slide with additional slide ELGR-...-ZR/ZL/ZB



L7 = Slide length

L16 = Distance between the two slides

L17 = Additional slide length

- For a toothed belt axis with additional slide, the working stroke is reduced by the length of the additional slide and the distance between the two slides
- If the long slide variant L is ordered, the additional slide is not extended

Example:

Type ELGR-TB-35-500-...-ZR

Working stroke = 500 mm

L16 = 10 mm

L7, L17 = 76 mm

Working stroke with

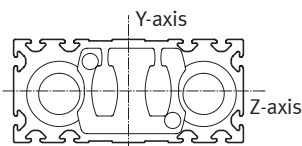
additional slide = 414 mm

(500 mm – 10 mm – 76 mm)

Dimensions – Additional slide

Size	35	45	55
Length L17 [mm]	76	96	116
Distance between the slides L16 [mm]	≥ 0		

2nd moments of area

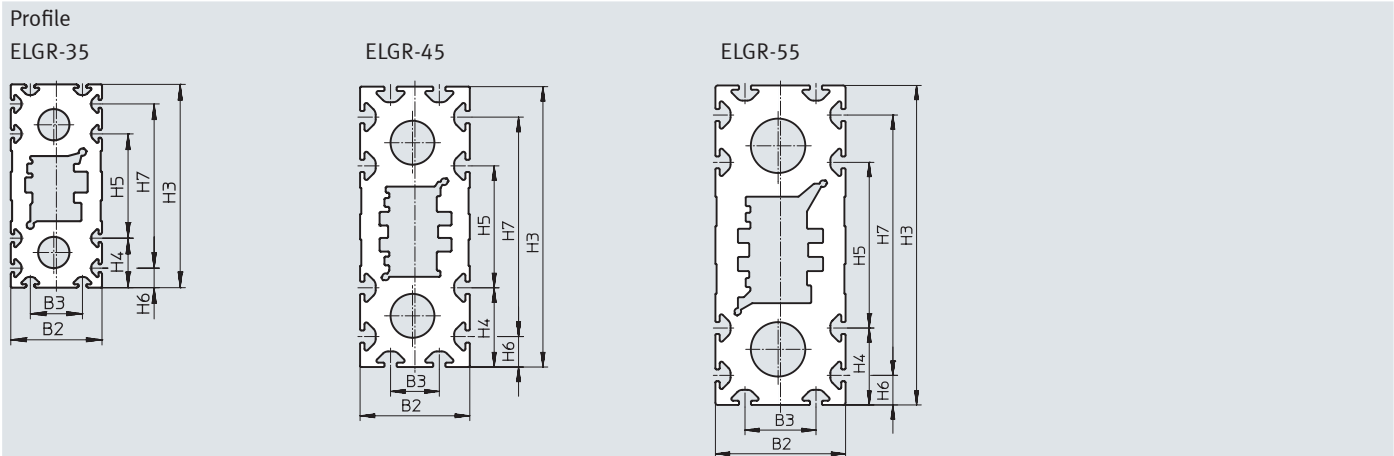
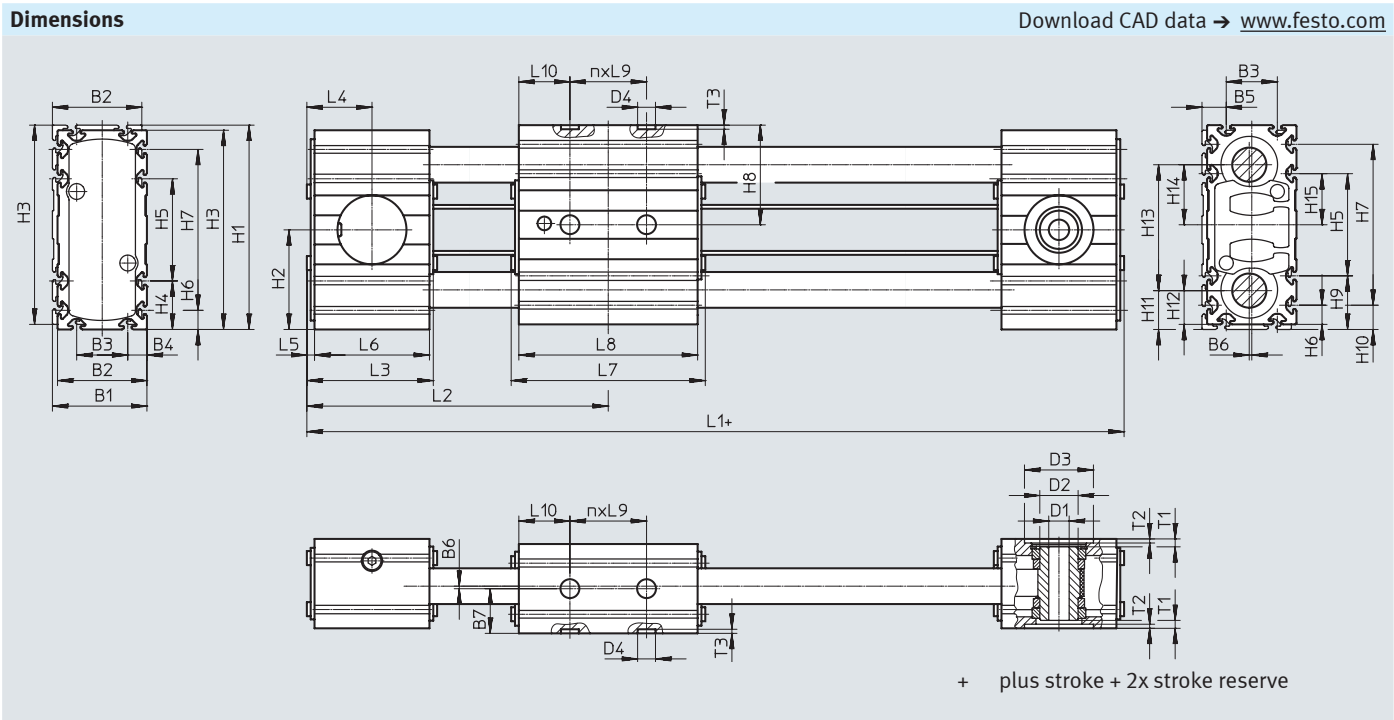


Size	35	45	55
I _y [mm ⁴]	4.19x10 ³	17.95x10 ³	41.18x10 ³
I _z [mm ⁴]	3.77x10 ³	15.71x10 ³	38.35x10 ³

Recommended deflection limits

Compliance with the maximum deflection of 0.5 mm is recommended to ensure the continuing functionality of the axes. Greater deformation can result in increased friction, greater wear and reduced service life.

Datasheet



Size	B1	B2	B3	B4	B5	B6	B7	D1 ø H7	D2 ø	D3 ø H7	D4 ø H7	H1	H2	H3	H4	H5	H6
35	37	35	20	7.5	9.5	1	17.5	8	15	27	7	80	39	78	19	40	7.5
45	47	45	20	12.5	14.5		22.5	10	20	38		117	57.5	115	32.5	50	12.5
55	57	55	30	12.5	14.5		27.5	16	25	48		137	67.5	135	32.5	70	12.5

Size	H7	H8	H9	H10	H11	H12	H13	H14	H15	L3	L4	L5	L6	L9	T1	T2	T3 +0.1
35	63	39	21	9.5	15.5	13.5	49	23.5	20	51	25.5	3	45	30	3.1	1.6	1.6
45	90	57.5	34.5	14.5	23	21	71	34.5	25	60	30		54	40	3	1.7	
55	110	67.5	34.5	14.5	25.5	23.5	86	42	35	62	31		56	40	4.5	2	

Size ELGR-...	L1		L2		L7		L8		L10		n	
	-L		-L		-L		-L		-L		-L	
35	178	248	89	124	76	146	70	140	20	40	1	2
45	219	309	108	153	96	186	90	180	25	50	1	2
55	243	353	120	175	116	226	110	220	35	70	1	2

Datasheet

Ordering data – Standard design

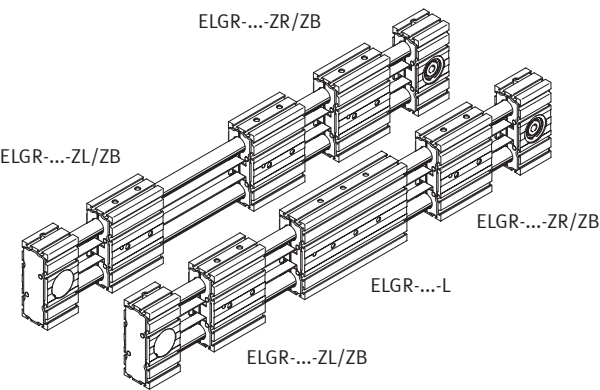
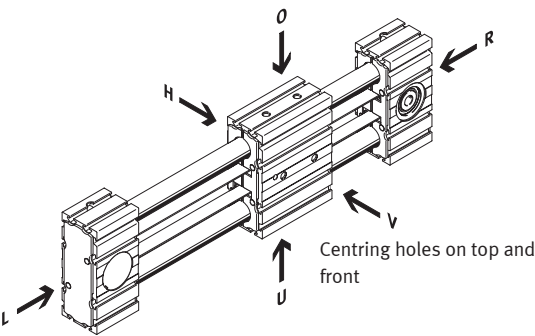
Key features:

- Stroke reserve: 0 mm
- Standard slide

Size	Stroke [mm]	Part no.	Type
35	100	8083770	ELGR-TB-35-100-0H
	200	8083771	ELGR-TB-35-200-0H
	300	8083772	ELGR-TB-35-300-0H
	400	8083773	ELGR-TB-35-400-0H
	500	8083774	ELGR-TB-35-500-0H
	600	8083775	ELGR-TB-35-600-0H
45	100	8083776	ELGR-TB-45-100-0H
	200	8083777	ELGR-TB-45-200-0H
	300	8083778	ELGR-TB-45-300-0H
	400	8083779	ELGR-TB-45-400-0H
	500	8083780	ELGR-TB-45-500-0H
	600	8083781	ELGR-TB-45-600-0H
	800	8083782	ELGR-TB-45-800-0H
	1000	8083783	ELGR-TB-45-1000-0H
55	100	8083784	ELGR-TB-55-100-0H
	200	8083785	ELGR-TB-55-200-0H
	300	8083786	ELGR-TB-55-300-0H
	400	8083787	ELGR-TB-55-400-0H
	500	8083788	ELGR-TB-55-500-0H
	600	8083789	ELGR-TB-55-600-0H
	800	8083790	ELGR-TB-55-800-0H
	1000	8083791	ELGR-TB-55-1000-0H
	1200	8083792	ELGR-TB-55-1200-0H
	1500	8083793	ELGR-TB-55-1500-0H

Ordering data – Modular product system

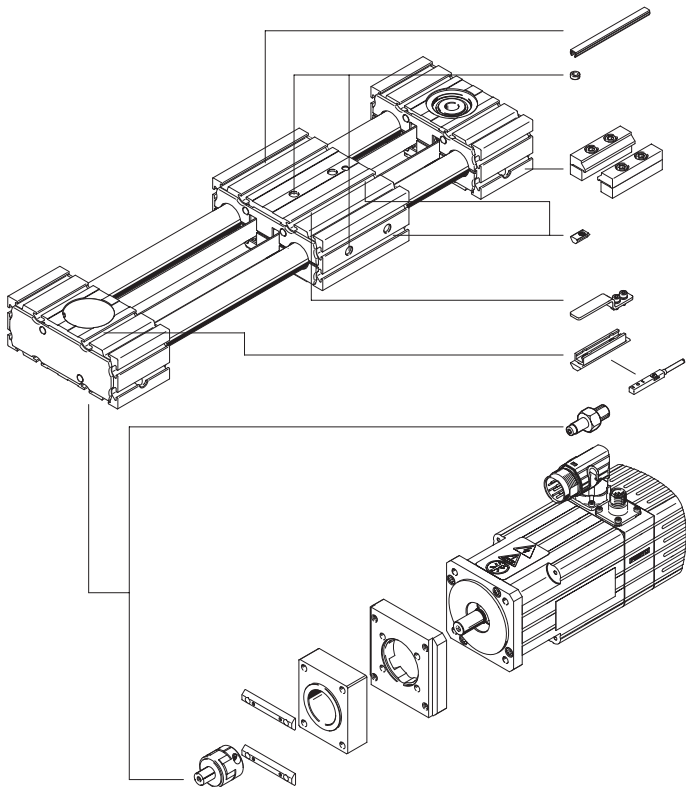
Orientation guide



- O Top
- U Bottom
- R Right
- L Left
- V Front
- H Rear

Minimum order stroke in combination with additional slide ELGR-....-ZR/ZL/ZB							
Size	35		45		55		
ELGR-...	-ZR/ZL	-ZB	-ZR/ZL	-ZB	-ZR/ZL	-ZB	
Min. nominal stroke	[mm]	126	202	146	242	166	282

Accessories



- NC
- Page 18
- MA
- NM
- SA, SB
- NC
- EA
- Servo motor
- Stepper motor
- Axial kit

Ordering data – Modular product system

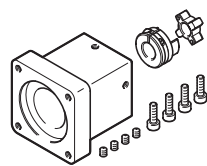
Ordering table		35	45	55	Conditions	Code	Enter code
Module no.		560505	560506	560507			
Design	Linear axis					ELGR	ELGR
Drive system	Toothed belt					-TB	-TB
Guide	Recirculating ball bearing guide						
	Plain-bearing guide					-GF	
Sizes		35	45	55		-...	
Stroke length	[mm]	1 ... 800	1 ... 1000	1 ... 1500	[1]	-...	
Stroke reserve	[mm]	0 ... 999 (0 = no stroke reserve)			[1]	-...H	
Slide design	Standard slide						
	Long slide					-L	
Additional slide	No additional slide						
	1 slide on right				[2]	-ZR	
	1 slide on left				[2]	-ZL	
	1 slide right, 1 slide left				[2]	-ZB	
Accessories	Accessories enclosed separately					+	+
Proximity sensor (SIES), inductive, slot type 8, PNP, N/O contact, cable 7.5 m, incl. switch lug and sensor bracket	1 ... 6					...SA	
Proximity sensor (SIES), inductive, slot type 8, PNP, N/C contact, cable 7.5 m, incl. switch lug and sensor bracket	1 ... 6					...SB	
Mounting slot covering	–	1 ... 50 (1=2pc. 500 mm long)				...NC	
Slot nut for mounting slot	1 ... 99					...NM	
Drive shaft adapter	1 ... 4					...EA	
Profile mounting	1 ... 2					...MA	
Operating instructions	With operating instructions						
	Without operating instructions					+DN	

[1] ... The sum of the stroke length and 2x the stroke reserve must not exceed the maximum stroke length or be less than the minimum stroke length of 50 mm

[2] ZR, ZL, ZB Working stroke reduction → page 11

Accessories

Permitted axis/motor combinations for axial kits



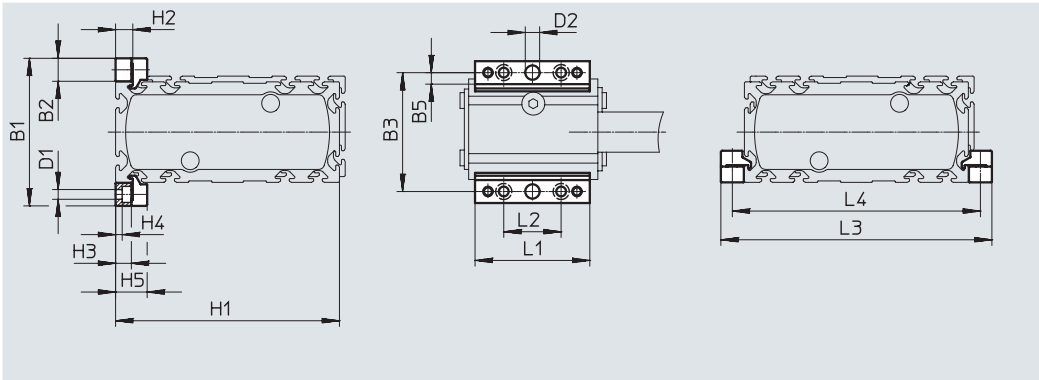
Under the following links you will find all information about:

- Axis/motor combinations
- Permitted third-party motors
- Technical data
- Dimensions

For axial kits → Internet: eamm-a

Profile mounting MUE
(order code MA)

Material:
Anodised aluminium
RoHS-compliant



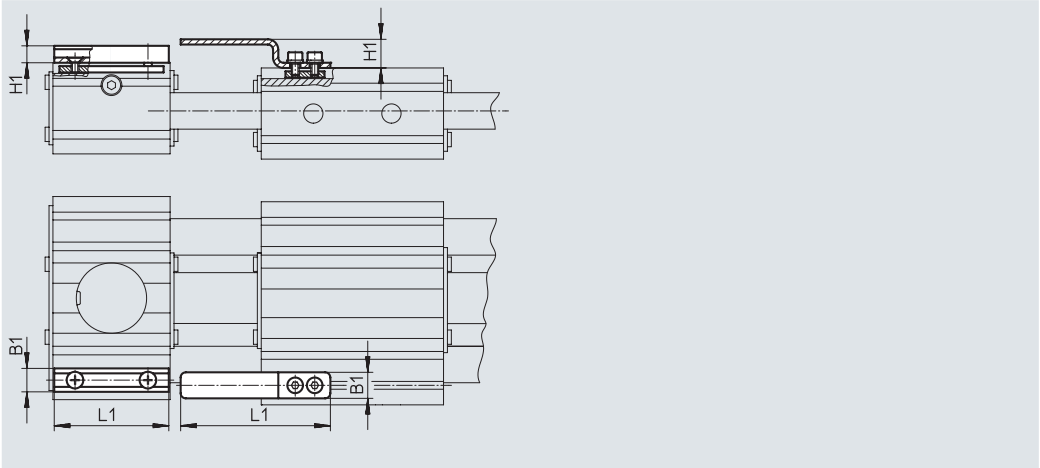
Dimensions and ordering data										
For size	B1	B2	B3	B5	D1 ø	D2 ø H7	H1	H2	H3	H4
35	51	8	43	4	3.4	5	78	6	5.5	2.3
45	69	12	57	4	5.5	5	115	10	9	3.2
55	79	12	67	4	5.5	5	135	10	9	3.2

For size	H5	L1	L2	L3	L4	Weight [g]	Part no.	Type
35	11	40	20	94	86	20	558042	MUE-50
45	17.5	52	40	139	127	32	562238	MUE-45
55	17.5	52	40	159	147	32	562238	MUE-45

Accessories

Sensor bracket EAPM-...-SHS,
Switch lug EAPM-...-SLS
(order code SA/SB)

Material:
Switch lug: Galvanised steel
Sensor bracket: Anodised
wrought aluminium alloy
RoHS-compliant

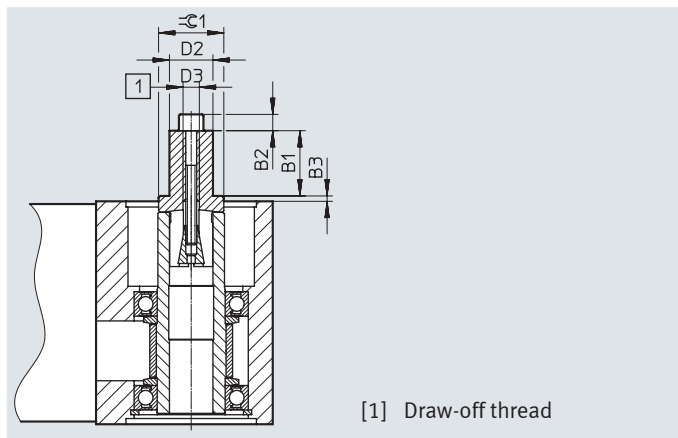
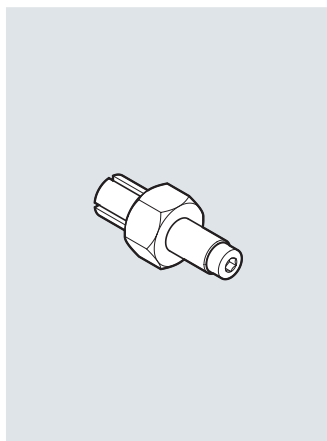


Dimensions and ordering data						
For size	B1	H1	L1	Weight [g]	Part no.	Type
Sensor bracket						
35, 45, 55	9	6.5	44	20	567537	EAPM-L4-SHS
Switch lug						
35, 45, 55	10	11	57.5	15	567538	EAPM-L4-SLS

Accessories

Drive shaft EAMB

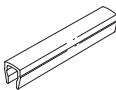
Alternative interface
(order code EA)



Dimensions and ordering data

For size	B1	B2	B3	D2 $\varnothing$	D3	$\varnothing C1$	Weight [g]	Part no.	Type
35	12	3	3.9	8	M4	12	20	558034	EAMB-16-7-8X15-8X10
45	12	4	6	8	M5	15	29	558035	EAMB-18-9-8X16-10X12
55	21	–	1.5	15	M6	21	70	558036	EAMB-24-6-15X21-16X20

Ordering data

	For size	Comment	Order code	Part no.	Type	PU ¹⁾
Slot nut NST						
	35	For mounting slot	NM	558045	ABAN-3-1 M3-4-M-P1	1
	45, 55		–	150914	NST-5-M5	
				8047843	NST-5-M5-10	10
				8047878	NST-5-M5-50	50
Centring sleeve ZBH ²⁾						
	35, 45, 55	For slide	–	8146544	ZBH-7-B	10
Slot cover ABP						
	45, 55	For mounting slot Every 0.5 m	NC	151681	ABP-5	2

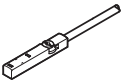
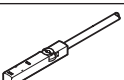
1) Packaging unit

2) 2 centring sleeves included in the scope of delivery for the axis

Accessories

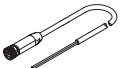
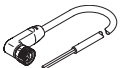
Ordering data – Proximity switches for T-slot, inductive

Datasheets → Internet: sies

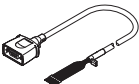
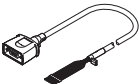
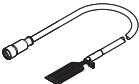
Ordering data	Proximity switches for PNP, NPN, N/C	Switching output	Cable length [m]	Order code	Part no.	Type	
N/O							
	Inserted in the slot from above, flush with the cylinder profile	Cable, 3-core	PNP	7.5	SA	551386	SIES-8M-PS-24V-K-7.5-OE
		Plug M8x1, 3-pin		0.3	–	551387	SIES-8M-PS-24V-K-0.3-M8D
		Cable, 3-core	NPN	7.5	–	551396	SIES-8M-NS-24V-K-7.5-OE
		Plug M8x1, 3-pin		0.3	–	551397	SIES-8M-NS-24V-K-0.3-M8D
N/C							
	Inserted in the slot from above, flush with the cylinder profile	Cable, 3-core	PNP	7.5	SB	551391	SIES-8M-PO-24V-K-7.5-OE
		Plug M8x1, 3-pin		0.3	–	551392	SIES-8M-PO-24V-K-0.3-M8D
		Cable, 3-core	NPN	7.5	–	551401	SIES-8M-NO-24V-K-7.5-OE
		Plug M8x1, 3-pin		0.3	–	551402	SIES-8M-NO-24V-K-0.3-M8D

Ordering data – Connecting cables

Datasheets → Internet: neba

	Electrical connection 1, connection technology	Electrical connection 1, cable outlet	Electrical connection 2, connection technology	Electrical connection 2, number of pins/cores	Cable length [m]	Part no.	Type
	M8x1 A-coded to EN 61076-2-104	Straight	Open end	3	2.5	8078223	NEBA-M8G3-U-2.5-N-LE3
					5.0	8078224	NEBA-M8G3-U-5-N-LE3
	M8x1 A-coded to EN 61076-2-104	Angled	Open end	3	2.5	8078230	NEBA-M8W3-U-2.5-N-LE3
					5.0	8078231	NEBA-M8W3-U-5-N-LE3

Ordering data – Cables¹⁾

	For size	Description	Cable length [m]	Part no.	Type
Motor cable					
	35	Straight plug - Min. bending radius: 62 mm - Suitable for energy chains - Ambient temp.: −40 ... +80 °C	1.5	1450368	NEBM-S1G9-E-1.5-Q5-LE6
			2.5	1450369	NEBM-S1G9-E-2.5-Q5-LE6
			5.0	1450370	NEBM-S1G9-E-5-Q5-LE6
			7.0	1450371	NEBM-S1G9-E-7-Q5-LE6
			10.0	1450372	NEBM-S1G9-E-10-Q5-LE6
	45, 55	Straight plug - Min. bending radius: 80 mm - Suitable for energy chains - Ambient temp.: −40 ... +80 °C	1.5	1450834	NEBM-S1G15-E-1.5-Q7-LE6
			2.5	1450835	NEBM-S1G15-E-2.5-Q7-LE6
			5.0	1450836	NEBM-S1G15-E-5-Q7-LE6
			7.0	1450837	NEBM-S1G15-E-7-Q7-LE6
			10.0	1450838	NEBM-S1G15-E-10-Q7-LE6
Encoder cable					
	35, 45, 55	Straight plug - Min. bending radius: 68 mm - Suitable for energy chains - Ambient temp.: −40 ... +80 °C	1.5	1451586	NEBM-M12G8-E-1.5-LE8
			2.5	1451587	NEBM-M12G8-E-2.5-LE8
			5.0	1451588	NEBM-M12G8-E-5-LE8
			7.0	1451589	NEBM-M12G8-E-7-LE8
			10.0	1451590	NEBM-M12G8-E-10-LE8

1) Other cable lengths on request.