



easyE-line

Linear in-line actuators

A/S Sindby & Co.

A/S H. Sindby & Co. er et solidt og velkonsolideret import- og handelsfirma, der har industrien og autobranchen som de to største kundegrupper.

I de knap 100 år er en videnbank bygget op omkring indkøb og udvikling af kvalitetsprodukter primært til industrien.

Sund fornuft og kvalitet er nøgleordene for al handling i virksomheden. Vi har været i konstant udvikling siden starten og har skabt en virksomhed, der er rustet til de stigende udfordringer og muligheder i industriens utallige niches.

Adm. direktør Keld Hansen er manden bag Sindby i dag. I 2007 overtog BIBUS AG virksomheden efter den tidligere ejer og Sindby-familien, der siden 1918 har drevet firmaet over tre generationer. Virksomheden har løbende udviklet sig med kundeklientellet.

Idégrundlaget har lige siden starten altid været at have øje for alt det nye, der har almen interesse, således at virkefeltet bestandigt vokser - **til glæde for kunderne og dermed for virksomheden.** Idégrundlaget danner den dag i dag rammen for såvel Sindby's som for BIBUS's aktiviteter.

A/S Sindby & Co. is a sound and well-established import business and wholesaler, whose customer base can be found mainly within industry and the automotive sector.

For almost 100 years we have been adding to the amount of expertise and knowledge built up around purchase and development of quality products, primarily for industry.

Common sense and quality are the keywords in every aspect of running our business.

From the outset we have continuously been developing and changing into a company that is ready to cope with new challenges and take on new opportunities presented by countless niches within industry.

Managing Director Keld Hansen is the man behind Sindby today. In 2007 BIBUS AG took over the business from the Sindby family, who had been running the business for more than three generations. The business has continuously developed alongside its customer base.

The aim has always been to spot new products, which could be added to the range of goods on offer – for the benefit of customers and our business. This aim is still at the heart of everything we do at Sindby as well as BIBUS.



Keld Asp Hansen

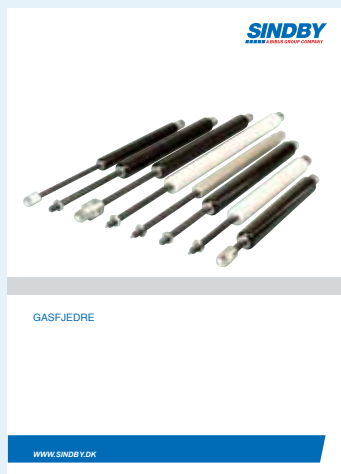
Adm. direktør
Managing Director

Kataloger Catalogs

Se mere af vores produktprogram i følgende kataloger.
[Find more of our products in the following catalogs.](#)



Gummiprofiler
Rubber profiles



Gasfjedre
Gas springs



Hardware
Hardware



Pumper
Pumps

A/S H. Sindby & Co.

Edisonvej 11 Tlf.: +45 75 88 21 22
DK-7100 Vejle Fax: +45 75 88 21 21
E-mail: sindby@sindby.dk Web: www.sindby.dk

SINDBY
A BIBUS GROUP COMPANY

Gear ratio	C*	D	E	F	G	H
<i>easyE-35</i>		<i>12/24VDC power supply, permanent magnet motor</i>				
Maximum load [N]	120	400	600	900	1600	2200
Speed at maximum load [mm/s]	33	16	12	7,5	4	3
Current at maximum load: 12VDC = 3,6A, 24VDC = 1,8A						
<i>easyE-50</i>		<i>12/24VDC power supply, permanent magnet motor</i>				
Maximum load [N]	500	1750	2200	3100	4500	4500
Speed at maximum load [mm/s]	70	20	17	12	6	4
Current at maximum load: 12VDC = 16A, 24VDC = 8A						
<i>easyE-60</i>		<i>24VDC power supply, permanent magnet motor</i>				
Maximum load [N]		1900	4300	6600	8100	10000
Speed at maximum load [mm/s]		31	14	9	6	5
Current at maximum load: 24VDC = 10A						

*only 24V DC power supply

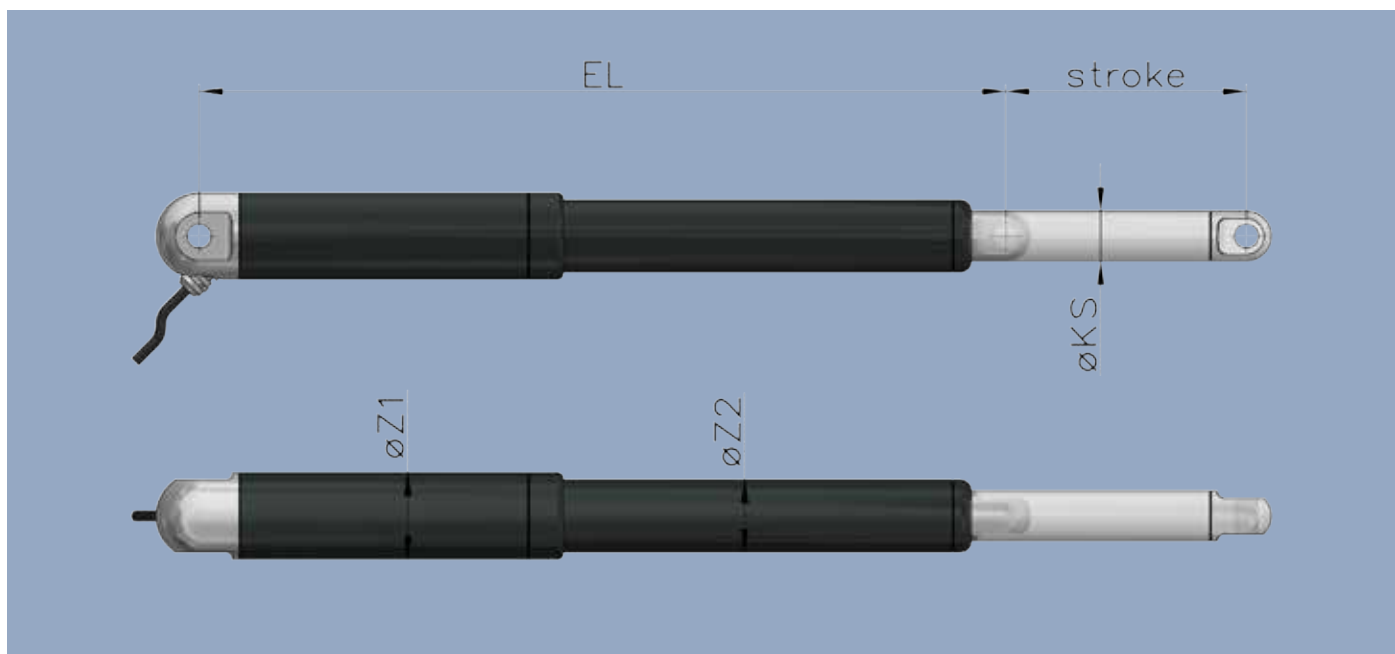
Features:

- Stroke length: 50, 100, 150, 200, 250, 300, 350, 400, 500 and 750mm
- Cable: easyE-35: 1m, 2X0.65mm² (AWG19), Ø = 4.8mm, black, Molex Mini-Fit Jr. 6 pin
easyE-50: 1m, 2X1.3mm² (AWG16), Ø=6.4mm, black, Molex Mini-Fit Jr. 6 pin
easyE-60: 1m, 2X1.3mm² (AWG16), Ø=6.4mm, black, Molex Mini-Fit Jr. 6 pin
- Bending radius: 6x cable diameter
- Materials: Motor and actuator tube are powder coated steel or stainless steel
Piston rod is aluminum (easyE-35) or stainless steel (easyE-50 and easyE-60)
Front and rear brackets are PA or Aluminium
- Protection class: IP66 (standard), IP68, IP69K, ATEX
- Max. static load/
Self locking force easyE-35: PA brackets: 2000N Alu/AISI: 5400N
easyE-50: PA brackets: 4700N Alu/AISI: 16800N
easyE-60: Alu/AISI: 16800N
Depending on stroke length for push-applications
- Temperature: -5°C to +70°C
- Duty cycle: Max. 10% or 2 minutes in use followed by 18 minutes rest

Please Note:

- Power supply without over-current protection can cause serious damage to the actuator at mechanical end-stop or when actuator is overloaded in another way
- Effective stroke is reduced by up to 3mm
- Radial forces might have an adverse affect on the performance or lead to damage of the actuator
- Keep piston tube clean
- Longer cable lengths may cause voltage drop which affects the performance of the actuator
- For medical applications maximum ambient temperature is 48°C
- Function of the actuator is subject to the settings of the control box
- The dust and water sealing of IP68/IP69K actuators might affect their performance
- All specifications are for 25 °C ambient – low temperature might affect performance

Please note the important advices at www.bansbach.de/easyE-line

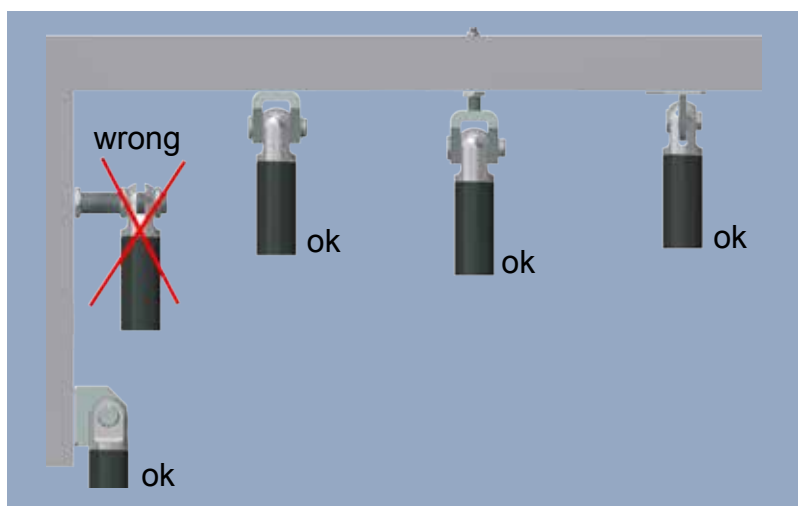


	EL	ØZ1	ØZ2	ØKS	Clevis rear	Hall	UL/ EN60.601	IP68/ IP69K
easyE-35								
Gear ratio: C, D, E, F	stroke+160*	35	20	20	+10	+10	+10	+11
Gear ratio: G, H	stroke+170*							
easyE-50								
Gear ratio: C, D, E, F	stroke+240	50	40	30	-	+15	+15	+14
Gear ratio: G, H	stroke+255							
easyE-60								
Gear ratio: all ratios	stroke+358	60	50	35	-	+15	+15	+25

If stroke >500mm: stroke+167, if stroke >700mm: stroke+212

Recommended mounting methods:

- Do not clamp actuators on tubing
- Always keep both brackets mounted in the same orientation and ensure to flush mount actuator
- Brackets must always be able to rotate on axels in mountings



Choose your actuator:

1. Model:

- ☐ easyE-35
- ☐ easyE-50
- ☐ easyE-60

2. Stroke length:

- ☐ 50, 100, 150, 200, 250, 300, 350, 400, 500 and 750mm (others on request)

3. Gear ratio:

- ☐ C, D, E, F, G, H (speed and load see table)

4. Voltage:

- ☐ 12V DC (only easyE-35 and easyE-50)
- ☐ 24V DC
- ☐ 24V EN/UL 60.601

5. Temperature:

- ☐ standard (-5°C - +70°C)
- ☐ low (-40°C - +70°C)
- ☐ high (-5°C - +90°C)

6. Cable length:

- ☐ 1m - 9m (others on request)

7. Connector:

- ☐ no connector
- ☐ Molex minifit

8. Material:

- ☐ Standard steel
- ☐ AISI 316

9. Protection class:

- ☐ IP66 (standard)
- ☐ IP68
- ☐ IP69K
- ☐ ATEX zone 22, group II 3D compliant

9. Certification (only easyE-35 and easyE-50):

- ☐ EN/UL/CSA 60.601 (only 24 V DC)

10. Hall sensor:

- ☐ no (standard)
- ☐ yes (cable will change)

11. Low noise:

- ☐ no (standard)
- ☐ yes (no stainless steel)

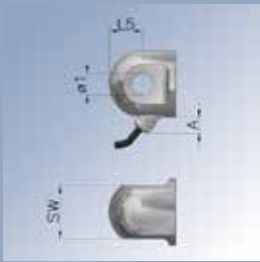
12. Color:

- ☐ Black (standard)
Available in all RAL colors

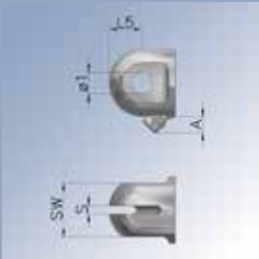
13. Connecting parts



Connecting parts „motor side“:

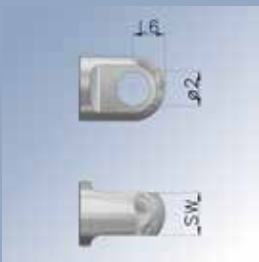
	Code	Ø1	L5	SW	A	Material	Max static load
	<i>easyE-35</i>						
	A1M	10	17,5	28	6	Alu	5400 N
	B1M	10	17,5	28	-	Polyamid (PA)	2000 N
	C1M	10	17,5	28	6	stainless steel	5400 N
	<i>easyE-50</i>						
	A2M	16	25	40	12,3	Alu	16800 N
	B2M	16	25	40	-	Polyamid (PA)	4700 N
	C2M	16	25	40	12,3	stainless steel	16800 N
	<i>easyE-60</i>						
	A3M	16	30	50	12,3	Alu	16800 N
	C3M	16	30	50	12,3	stainless steel	16800 N

<i>with spherical bearings</i>							
	Code	Ø1	L5	SW	A	Material	Max static load
	<i>easyE-35</i>						
	E1M	8	17,5	28	-	Alu	5400 N
	<i>easyE-50</i>						
	E2M	12	25	40	-	Alu	11000 N

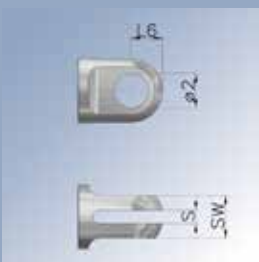
	Code	Ø1	L5	SW	A	S	Material	Max static load
	<i>easyE-35</i>							
	F1M	10	17,5	28	6	6,2	Alu	5400 N
	G1M	10	17,5	28	-	4,2	Polyamid (PA)	2000 N
	H1M	10	17,5	28	6	6,2	stainless steel	5400 N
	<i>easyE-50</i>							
	F2M	16	25	40	12,3	6,2	Alu	16800 N
	G2M	16	25	40	-	6,2	Polyamid (PA)	4700 N
	H2M	16	25	40	12,3	6,2	stainless steel	16800 N

PA-connecting parts are not available for gear ratio G and H

Connecting parts „piston rod side“:

	Code	Ø2	L6	SW	Material	Max static load
	<i>easyE-35</i>					
	A1K	10	10	13	Alu	5400 N
	B1K	10	10	13	Polyamid (PA)	2000 N
	C1K	10	10	13	stainless steel	5400 N
	<i>easyE-50</i>					
	A2K	16	15	20	Alu	16800 N
	B2K	16	15	20	Polyamid (PA)	4700 N
	C2K	16	15	20	stainless steel	16800 N
	<i>easyE-60</i>					
	A3K	16	17,5	25	Alu	16800 N
	C3K	16	17,5	25	stainless steel	16800 N

<i>with spherical bearings</i>						
	Code	Ø2	L6	SW	Material	Max static load
	<i>easyE-35</i>					
	E1K	8	12	18	Alu	5400 N
	<i>easyE-50</i>					
	E2K	12	15	20	Alu	11000 N

	Code	Ø2	L6	SW	S	Material	Max static load
	<i>easyE-35</i>						
	F1K	10	10	15	6,2	Alu	5400 N
	G1K	10	10	13	4,2	Polyamid (PA)	2000 N
	H1K	10	10	15	6,2	stainless steel	5400 N
	<i>easyE-50</i>						
	F2K	16	15	20	6,2	Alu	16800 N
	G2K	16	15	20	6,2	Polyamid (PA)	4700 N
	H2K	16	15	20	6,2	stainless steel	16800 N

PA-connecting parts are not available for gear ratio G and H

Controllers:

EEL-S1

For 1-3 actuators



FEATURES:

- Plug and play solution
- Handset or external switches
- for easyE-35 and easyE-50

TECHNICAL DETAILS:

- Supply: 230 V

EEL-S2-1

For 1 actuator



FEATURES:

- Adjustable start and stop ramp
- Adjustable current limit
- Continuous-mode, impulse-mode
- Easy interfacing to PLC etc.
- DIN-rail fittable
- Hall sensors not supported

TECHNICAL DETAILS:

- Supply: 12 or 24 VDC
- Over voltage protection: 40 V
- Idle current: Approx. 15 mA
- Driving current: 10 A continuous, 16 A with duty cycle 50%, Max 16 A on duty 2 min

EEL-S2-2

For 1 actuator



FEATURES:

- Precise position control from analog voltage input
- Adjustable start and stop ramp
- Settable current limit
- High momentary load capacity
- DIN-rail base fittable
- "Position reached" - signal
- Hall sensors necessary

TECHNICAL DETAILS:

- Supply voltage: 12 or 24 VDC
- Actuator current continuous max: 15A
- Current limit adj.: 0.1-20A
- Overheat limit: 100°C
- Hall input freq.: Max 1kHz
- Input control logic (pos.): High=4-30V, Low=0-1V or open

EEL-S2-3

For 2 actuators



FEATURES:

- Synchronized operation of 2 actuators
- Current and temperature protection
- Settable drive speed
- Adjustable start- and stop ramp
- Easy setting with serial interface
- Autobalance feature
- Hall sensors necessary

TECHNICAL DETAILS:

- Supply Voltage: 12 or 24 VDC
- Quiescent current: 15mA
- Motor current: 2x10A cont. 2x20A, 25% duty
- Current limit: 1-20A
- Pulse input freq. max.: 1kHz
- Pulse inputs pull- up/down: 10kO
- Control inputs: 0-1V=OFF; 4-30V=ON

EEL-S3

EEL-S4

For 1-4 actuators



FEATURES:

- Battery powered for mobile use
- 24VDC NiMH or Li-Ion battery
- Customized colors and foil design
- Wired handset

EEL-S3:

- 1 actuator
- up- and down function

EEL-S4:

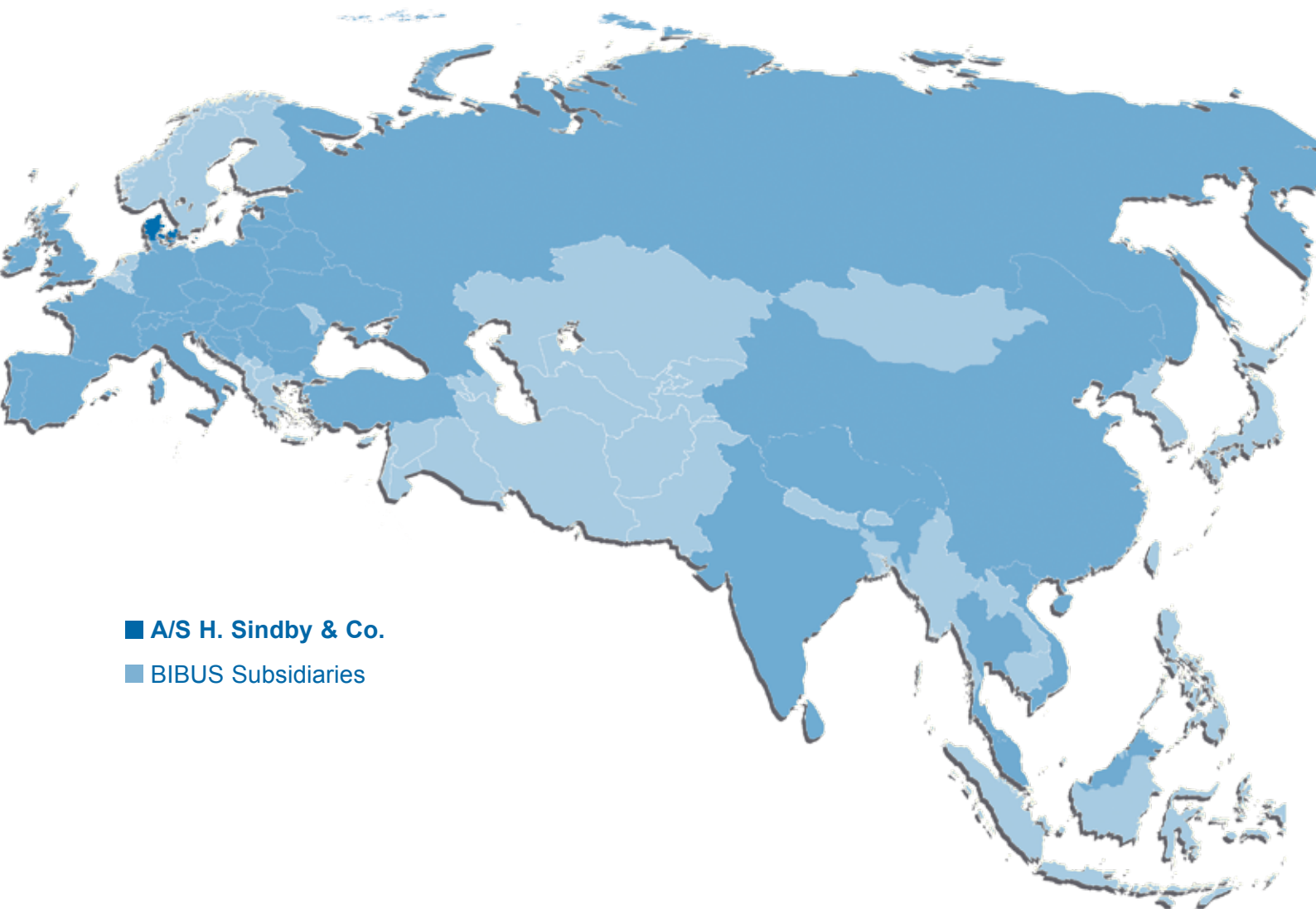
- Adjustable current limit in and out
- Adjustable calibration speed and current
- Adjustable virtual min/max-position
- Individual or synchronous operation for drive 1-4 actuators

TECHNICAL DETAILS:

- Supply: 24VDC NiMH or Li-Ion battery
- Idle current: < 5mA
- Current limit: 8A/ch max. total 12A
- Ramps 0-3 sec
- Connector type Molex Mini-Fit 6 pin

ENGINEERING
LOGISTICS
SERVICE

SINDBY
A BIBUS GROUP COMPANY



■ **A/S H. Sindby & Co.**
■ BIBUS Subsidiaries

A/S H. Sindby & Co.
Edisonvej 11
DK-7100 Vejle
Tel. +45 75 88 21 22
Fax +45 75 88 21 21
sindby@sindby.dk