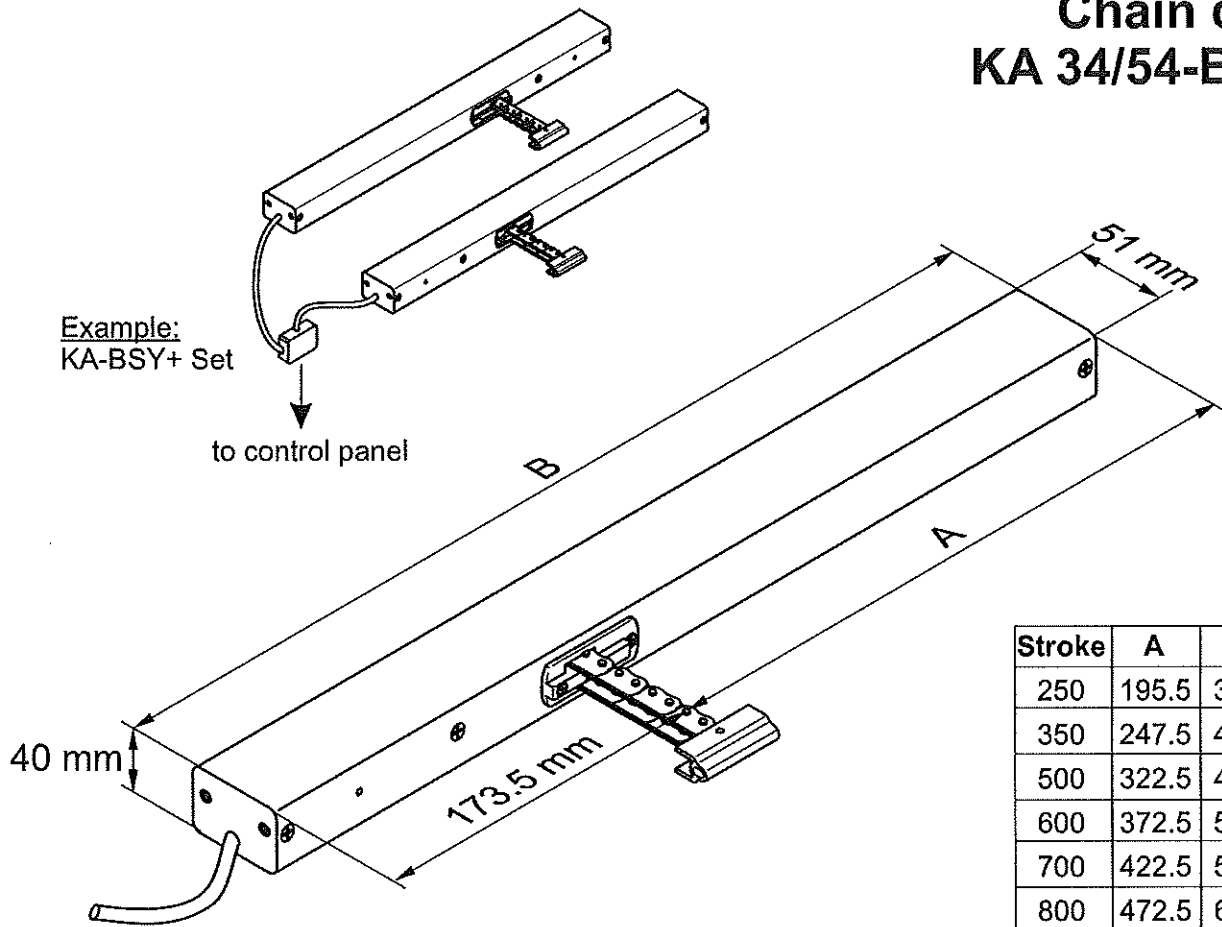


Technische Änderungen vorbehalten. /
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© 2008 D+H Mechatronic AG, Ammersbek
Alle Maße in Millimeter. / All sizes in millimetre.



Stroke	A	B
250	195.5	369
350	247.5	421
500	322.5	496
600	372.5	546
700	422.5	596
800	472.5	646
900	526.5	700
1000	576.5	750
1100	628.5	802
1200	678.5	852
1300	728.5	902

S. E. S.
P.O. BOX 9714
MALAHIDE, Co. DUBLIN, IRELAND
Phone 01 8453341 Fax 01 8453679
Mobile 0872 613223
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Performance feature

- applicable for daily ventilation and for SHEV according to DIN EN 12101-2
- SHEV-high speed function (fast-running feature in OPEN-direction)
- chain drives are equipped with micro-processor controlled motor- and synchroelectronics BSY + for a precise synchronous run
- drive functions and features were individually programmable (via software SW-BSY +)
- integrated 3 staged clamping protective system
 - passive clamping protection, because of reduced running speed, while closing
 - active clamping protection with emergency shutdown and reverse function while closing, if drives tensile load is bigger than 150N in Closing Range II
 - connection of an additional closing edge, clamping protection system on the drive is possible (Option -SKS)
- Power supply and BSY+ signal can be looped through: with KA 34-BSY+ for max. 3 drives, with KA 54-BSY+ for max. 2 drives.
- power supply is possible from both sides
- locking relief after closing
- up to 8 drives on one window are possible.

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Content

Safety notes, Extent of supply, Pressure load diagram, Guarantee.....	2
Technical data, Running speed and forces.....	3
Pin assignment, Mounting informations.....	4
Functional description of the synchronal control, Soft-Close-Function, Trouble shooting.....	5
Null balance.....	6
Connection diagrams.....	7-8

Safety notes

Observe enclosed red safety slip!

Mounting of the drive should be carried out by a D+H distributor who is qualified and experienced and regularly attends in-house training.

Observe maximum pressure load of the chain (see diagram page 2)!

Suitable only for inside mounting. Always use rain detectors in case of danger of rain (e.g. at domelights or roof windows).



Danger of violent pressure at hand-accessible area.

VDE 0833 for hazard indication systems, VDE 0100 for electric systems, and DIN18232 for smoke vent systems have to be observed as well as regulations of the local fire-brigade.

Extent of supply

Drive unit(s) with 2.5 m silicone cable and mounting template. Dependent on the type of window, different bracket sets are available. Please order the bracket sets separately!

Guarantee

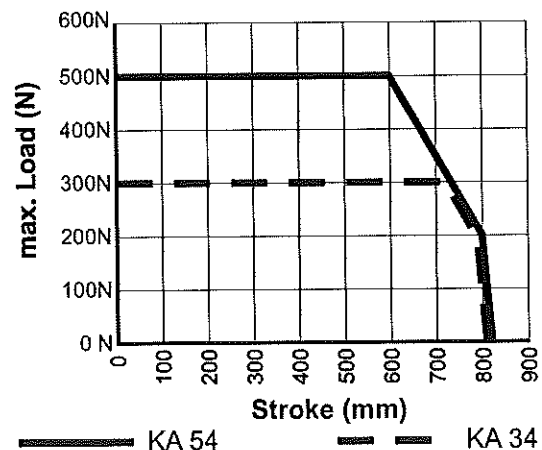
You will get **2 years guarantee** for all D+H products from date of verified handing over of the system up to maximal 3 years after date of delivery, when mounting and starting has been carried out by an **authorized D+H-distributor**. D+H guarantee is expired, with connection of D+H components with external systems or with mixing of D+H products with parts of other manufacturers.

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Pressure load diagram

Observe strictly maximum pressure load of the toothed rack in order to ensure safe and reliable performance of the chain drive!

Note: Maximum pressure load of the chain is not automatically identical with maximum force of pressure of the drive!



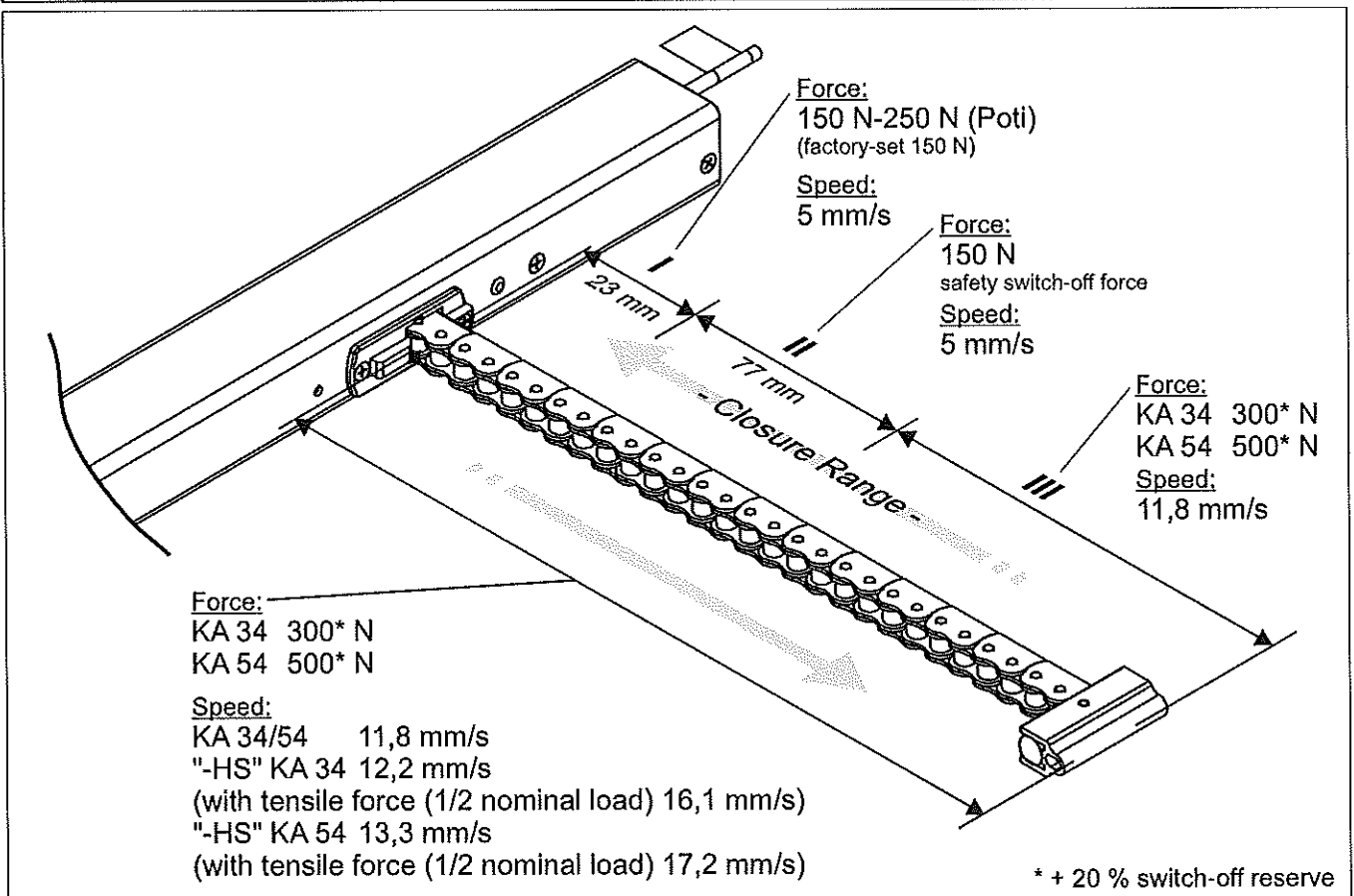
Technical data

	KA34-BSY+	KA54-BSY+
Power supply	24 VDC, ±15%, 1,0A	24 VDC, ±15%, 1,4A
nominal locking force	1000 N	
rating life	>10 000 double strokes	
operating factor	70 % (with cycle time 10 minutes)	
housing	anodized aluminium	
protective system	IP 32 (only in connection with covering stoppers delivered with bracket sets)	
temperature range	5 (-5 ... +75°C)	
fire stability	30 min / 300°C	
connection	2,5 m silicone cable	
stroke length	see type plate	
<u>Delivery status</u>		
closing edge protective system	activated* (factory-set: 3 stroke repetitions)	
locking relief	activated*	
SHE high-speed OPEN	activated*	

* programmable with software SW-BSY+

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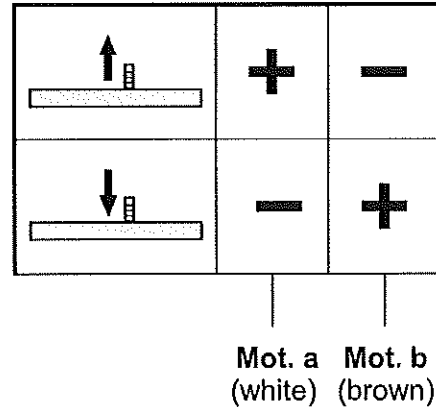
Running speed and forces



Pin assignment

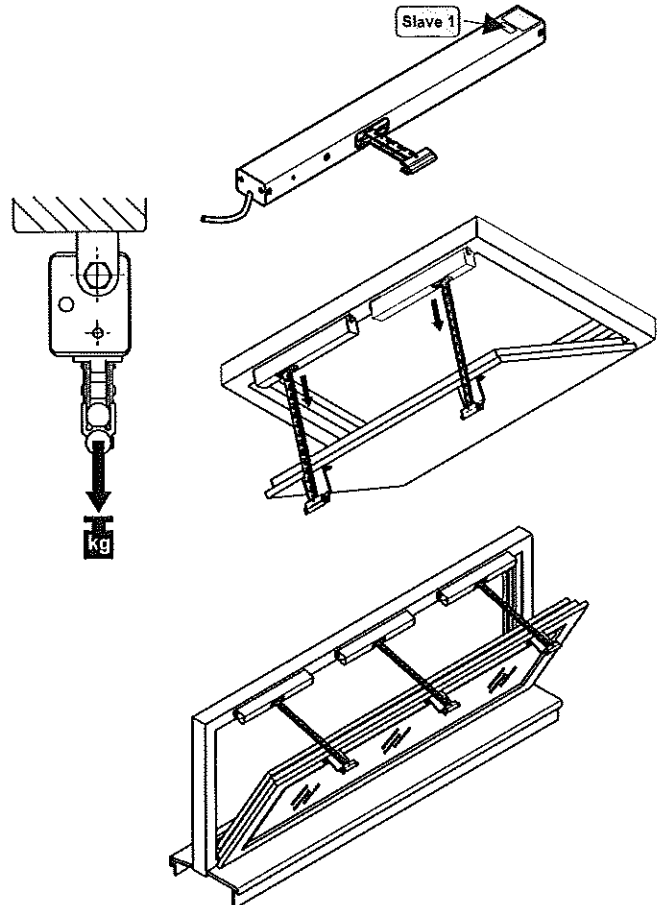
Standard	*Option -B/-R/-V	*Option -SGL/-SKS/-SA/-SZ
white (Mot. a)	white	white
brown (Mot. b)	brown	brown
orange (-HS)	orange	orange
yellow (Data A)	yellow	yellow
green (Data B)	green	green
	grey	grey
		pink

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Mounting informations

- the drive will be full configured by factory. The drives must be reconfigured in case of alterations (e.g. removing of drives from existing set or integrating a new drive) with SW-BSY+.
- operate drive with protective low voltage only!
Wrong distribution voltage can result in destruction of the drive!
Observe table for cable lengths and cross-sections (see instruction for control panel)!
- at vertical active pulling application (e.g. for a skylight) the forces must be rearranged by software SW-BSY+
- mounting example: All the drives should be mounted as mechanical stressfree as possible.
With that, more even load distribution is ensured on all the drives.



Functional description of the synchronal control

A synchron-group (KA-BSY) can be count up to 8 drives, which communicate by a bus. Each drive has it's own adress. This adress is configurable with SW-BSY+.

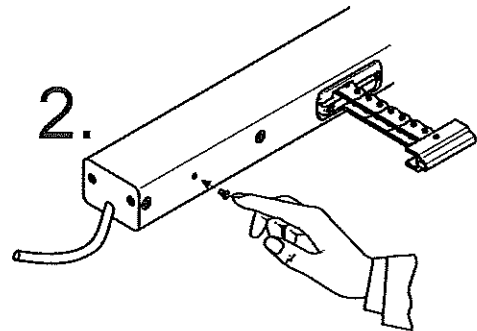
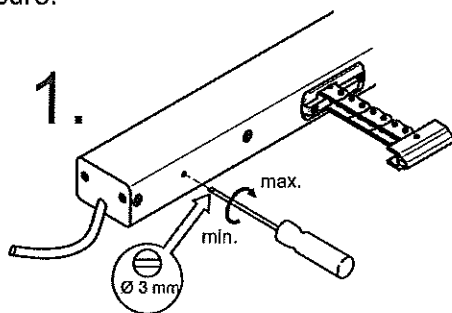
The last drive of a synchron-group is the master, which controls the other drives, the slaves. Different forces between the drives of a group will be balanced with intelligent force- and position control. In case of malfunction respective cutoff of a drive, all drives will shut down from the master-drive.

Locking force (Soft Close Function)

at Closure Range I

If factory-set locking pressure of ca. 150 N is not sufficient, it can be infinitely increased up to ca. 250 N.

1. Pull out covering stopper. Stick in screw driver and turn it to the right in order to increase locking pressure.
2. Put covering stopper in again after adjustment.



Trouble shooting

If the drives in a synchron group, in spite of correct wiring, according to connection diagrams, and correct power supply from a D+H SHE- or ventilation control panel, were without function, please check following articles:

Visual inspection. In a synchron-group is only one master-drive allowed.

The master has, according to common drives, the last address.

The adress is sticked on the drive. Slave drives are numbered downwards.

Example: In a group, composed of 3 drives, there is a master 3, a slave 2 and a slave 1.
Attention: This only applies by factory set. As soon as the drives were reprogramized with SW-BSY+ the factory set addressing could not apply any longer.

Wiring:

Is the group wired correctly?
Therefore look connection diagrams.

Control of addresses:

Maybe the addresses were re-distributed.
The addresses should be checked with SW-BSY+.

Null balance:

It should be null balanced.
See page 6.

Call D+H Service!

Drives must be configured.
Software SW-BSY+ is required.

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