Lifting column

technology

B-series

B13

B23

Max 10.000 N

Made in Sweden

Description

The B13 and B23 columns have a rectangular design that suits high centric and offset loads very well. With its stiff aluminum tubes and long-life pads, it offers a stable and reliable guiding system that is maintenance free.

- Long lifetime
- Great offset capacity
- Very robust

Features

Push
Build in Hall Sensors
Cable out small tube (SB-A)
Cable out large tube (SB-E, SB-F, SB-S)
Limit switch

Options

Pull
Potentiometer
Cable out large tube (SB-A)
Cable out small tube (SB-E, SB-F, SB-S)
Cable through
Customizable top/bottom plates

Technical data

	SB-AF13 SB-AF23	SB-AM13 SB-AM23	SB-SF13 SB-SF23	SB-AO13 SB-AO23	SB-AE13 SB-AE23	SB-EF13 SB-EF23	SB-SD13 SB-SD23
Force, max push*	1.000 N	1.500 N	1.750 N	2.000 N		2.250 N	
Self-locking force**	2.500 N	2.500 N	1.000 N	2.000 N	2.500 N	1.200 N	1.750 N
Speed @max load	45 mm/s	38 mm/s	21 mm/s	30 mm/s	24 mm/s	32 mm/s	16 mm/s
Stroke, S (longer strokes on request)	50 mm to 700 mm			50 mm to 1.000 mm	50 mm to 800 mm	50 mm to 700 mm	50 mm to 700 mm
Retracted length, R***	SB-AF13: R=S+60mm SB-AF23: R=S+120mm	SB-AM13: R=S+70 mm SB-AM23: R=S+120mm	R =S+120 mm	SB-AO13: R=S+70mm SB-AO23: R=S+120mm	SB-AE13: R=S+60mm SB-AE23: R=S+120mm	R = S + 120 mm	
Duty cycle [%]	10% (1 min ON / 9 min OFF)						
Voltage	24 VDC						
Ambient temp	+10°C to +40°C						
Current @max load	8 A		5,5 A	8 A		10 A	5,5 A
IP Class	IP 30						
Safety factor Static centric load @ max stroke & load*	7	5	4	5	4	3	1,2

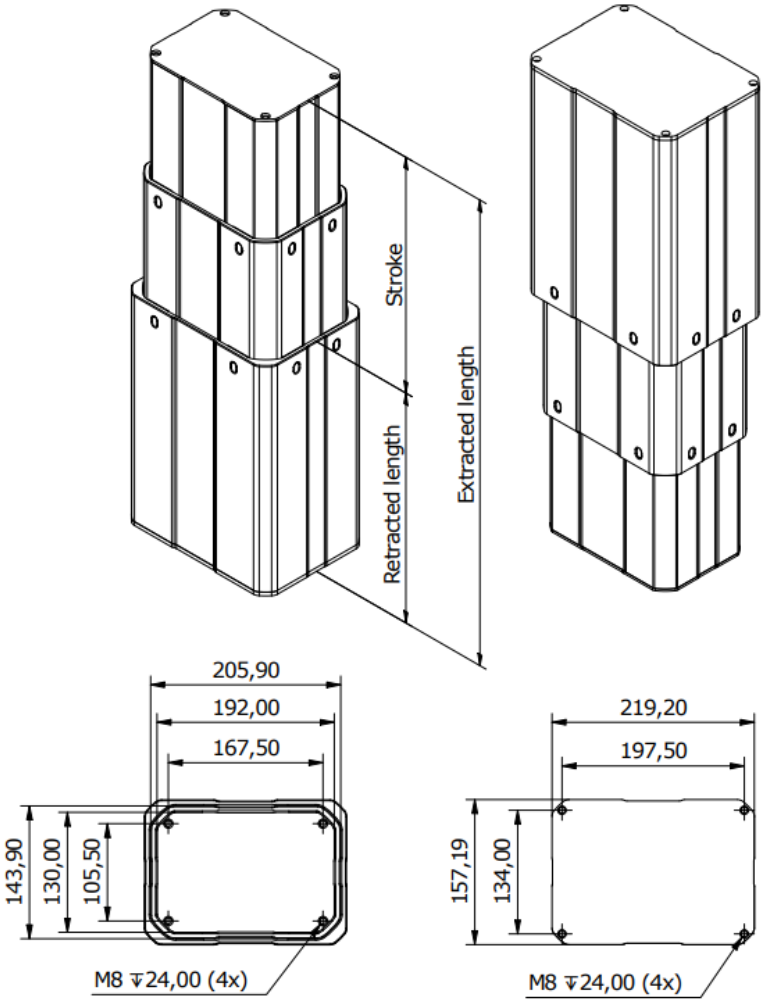
** See diagrams on page 4-5*
*** Only applied when connected by short circuit*
**** Longer retracted length enables more offset load, see diagrams on page 4-5*

Technical data

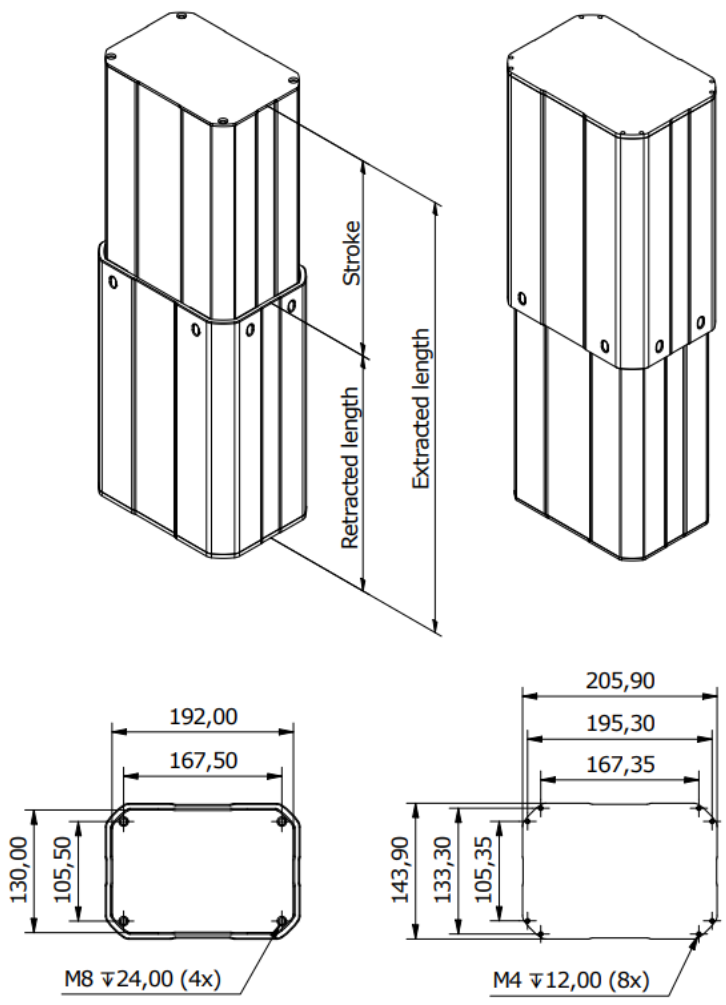
	SB-ED13 SB-ED23	SB-AB13 SB-AB23	SB-SE13 SB-SE23	SB-EE13 SB-EE23	SB-AP13 SB-AP23	SB-AN13 SB-AN23	SB-FE13 SB-FE23	SB-EA13 SB-EA23
Force, max push*	2.750 N	2.800 N	3.000 N	3.500 N	4.000 N	5.000 N	6.000 N	10.000 N
Self-locking force**	1.500 N	3.000 N	2.750 N	1.500 N	5.000 N	6.000 N	6.000 N	10.000 N
Speed @max load	24 mm/s	12 mm/s	10 mm/s	16 mm/s	15 mm/s	12 mm/s	8 mm/s	6 mm/s
Stroke, S (longer strokes on request)	50 mm to 500 mm	50 mm to 800 mm	50 mm to 700 mm		50 mm to 1.000 mm	50 mm to 700 mm		50 mm to 500 mm
Retracted length, R***	R = S + 120 mm	SB-AB13: R=S+60mm SB-AB23: R=S+120mm	R = S + 120 mm		SB-AP13 / SB-AN13: R=S+70 mm SB-AP23 / SB-AN23: R=S+120 mm		R = S + 120 mm	
Duty cycle [%]	1 min / 9 min							
Voltage	24 VDC							
Ambient temp	+10°C to +40°C							
Current @max load	10 A	8 A	5,5 A	10 A	8 A		10 A	15 A
IP Class	IP 30							
Safety factor Static centric load @ max stroke & load*	1,8	2,5	3,5	3	2,5	1,8	1,5	1,8

** See diagrams on page 4-5*
*** Only applied when connected by short circuit*
**** Longer retracted length enables more offset load, see diagrams on page 4-5*

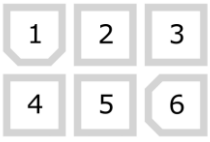
Technical drawing B13



Technical drawing B23



Pin layout (SB-A / SB-E / SB-F)



6 pin 172160-1 Male

Connectors

	Description	Colour
1.	Motor -	Black
2.	Motor +	Blue
3.	Hall sensor +5V,	Red
4.	Hall sensor output 2	Violet
5.	Hall sensor -	Black
6.	Hall sensor output 1	Green

Pin layout (SB-S)

8 pin JS-1149-08 Male

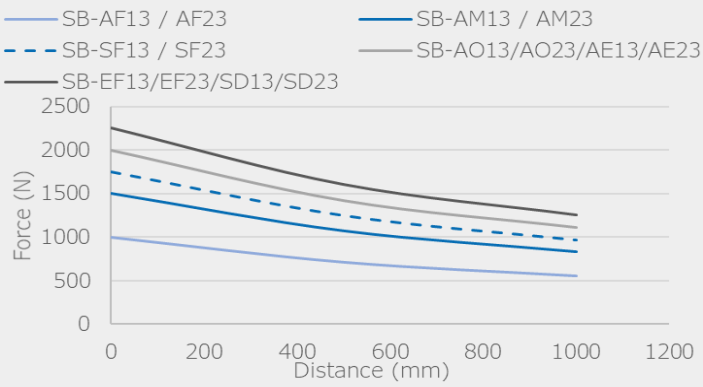
Connectors

	Description	Colour
1.	Hall sensor 1	White
2.	+5V	Red
3.	Limit switch 2 (NC)	-
4.	Motor+	Green (motor: White)
5.	Hall sensor 2	Blue
6.	Limit switch 1 (NC)	-
7.	GND	Black
8.	Motor-	Yellow

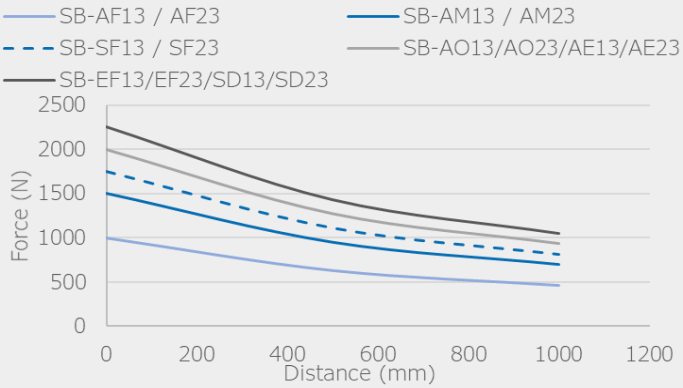
Diagrams (Up to 2 250N)

Offset load

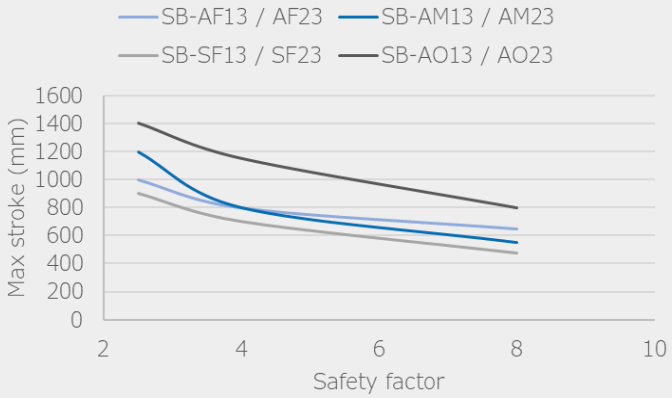
Long retracted length, R = Stroke + 270 mm

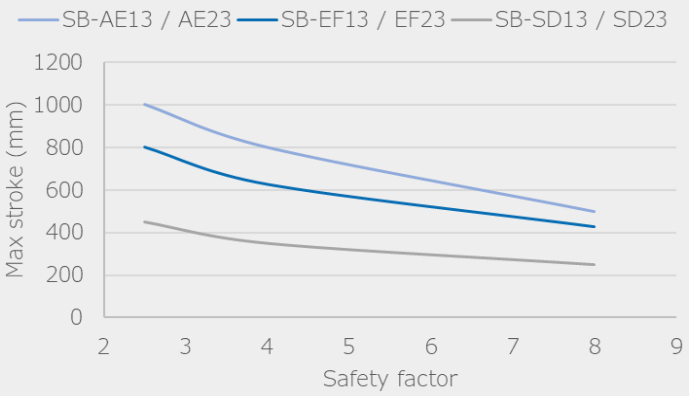


Short retracted length, R = Stroke + 195 mm

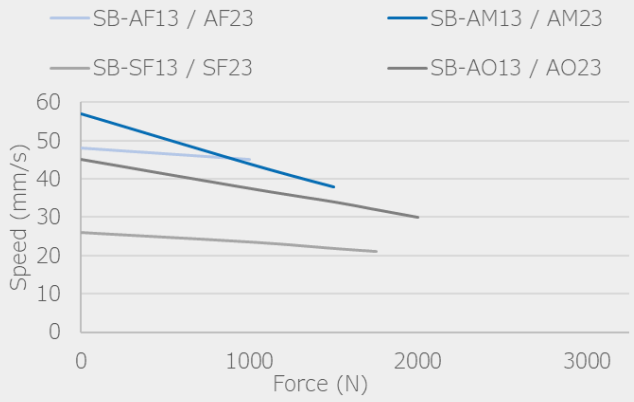


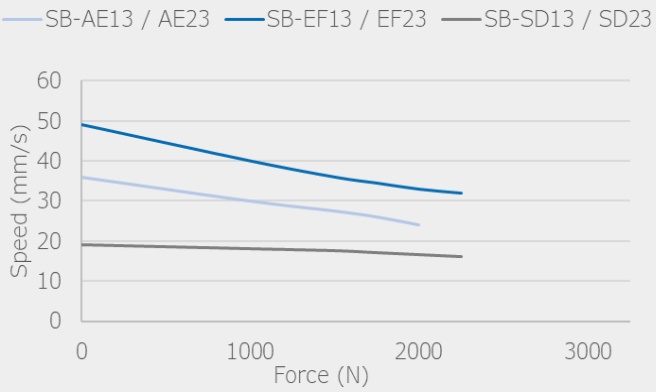
Safety factor





Speed

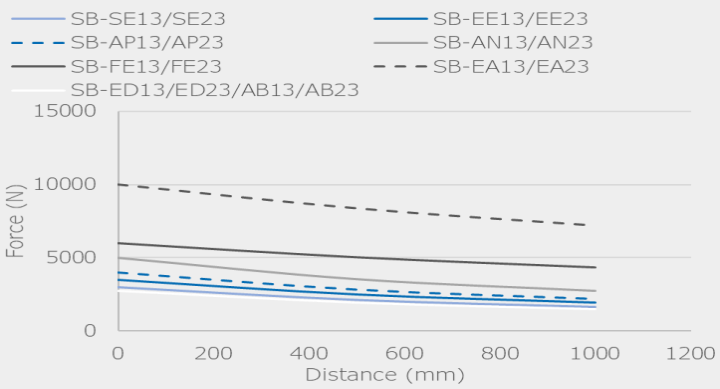




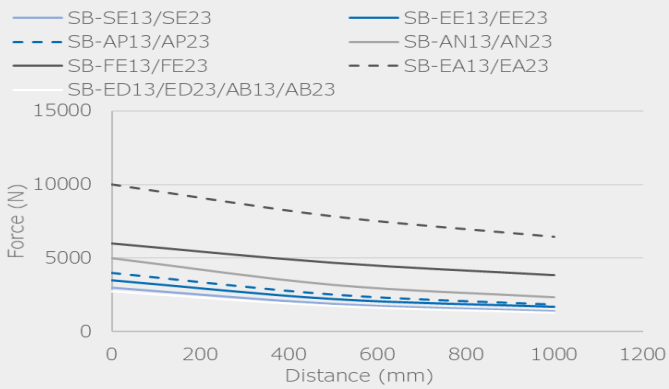
Diagrams (From 2 750N to 10 000N)

Offset load

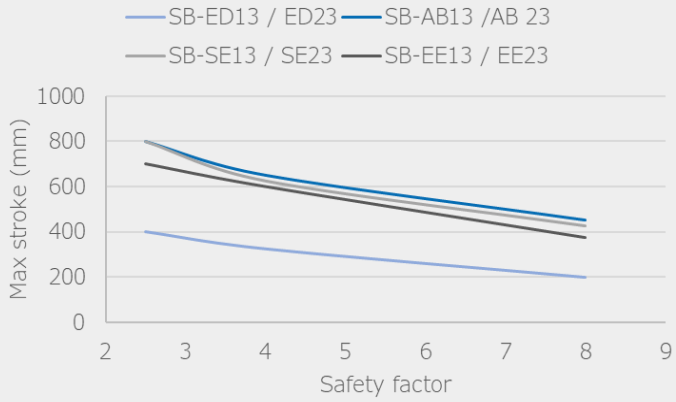
Long retracted length, R = Stroke + 270 mm

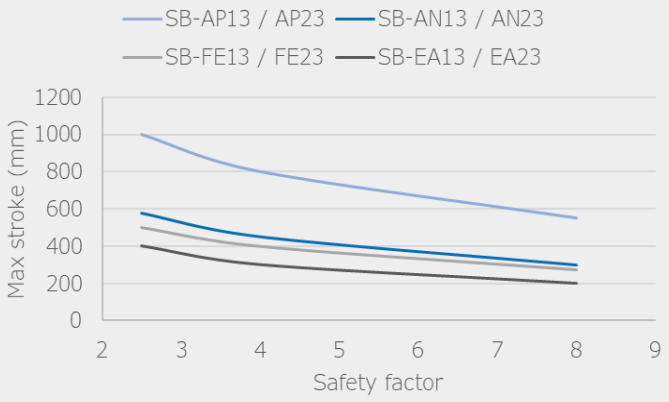


Short retracted length, R = Stroke + 195 mm

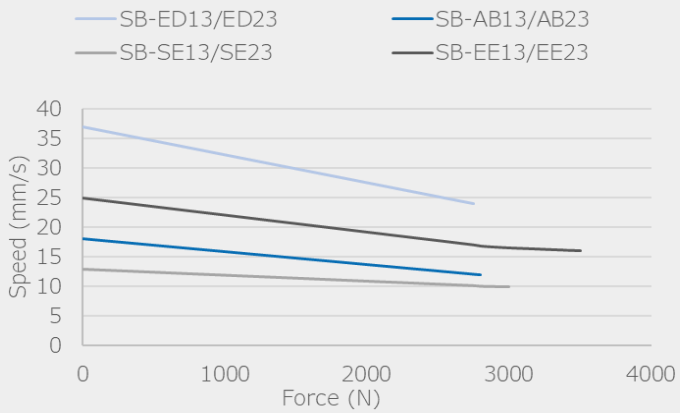


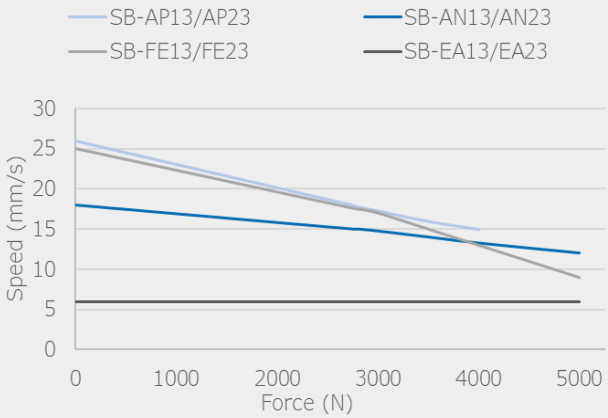
Safety factor



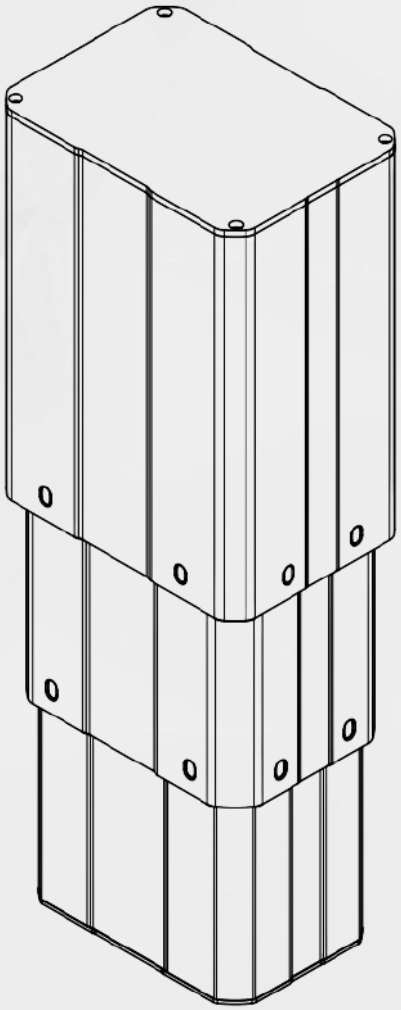


Speed





X2 Technology – The Customizer



Before use of products, see general terms & conditions and operating manuals. Lifetime and suitability are depending on application and must therefore be tested by each user. Specifications subject to change without prior notice. All components in this datasheet are property of X2 Technology and may therefore not be used without permission.

technology

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Made in Sweden