

Series SM4 M3



SM4S600M3NC
Code: 0092



SM4S700M3C4
Code: 0177



SM4S900M3C4
Code: 0095



with C4 clamp

Ordering information - coding explanation

SM4	S900	M3	NC
Series prefix	S - Stroke length	Motor type	Clamp type
SM4	S200 - 200 mm S300 - 300 mm S450 - 450 mm S600 - 600 mm S700 - 700 mm S800 - 800 mm S900 - 900 mm	M3 - brush DC motor M3B - brush less DC motor	NC - no clamp C4 - clamp U8 - clamp

Model	EAN	Stroke	A	B	Clamp type
SM4S200M3C4	0101	200 mm	684	763,6	C4
SM4S300M3NC	0093	300 mm	784	863,6	no clamp
SM4S450M3C4	0085	450 mm	934	1013,6	C4
SM4S500M3NC	0075	500 mm	984	1063,6	no clamp
SM4S600M3NC	0092	600 mm	1084	1163,6	no clamp
SM4S600M3C4	0178	600 mm	1084	1163,6	C4
SM4S700M3NC	0181	700 mm	1184	1263,6	no clamp
SM4S700M3C4	0177	700 mm	1184	1263,6	C4
SM4S900M3NC	0094	900 mm	1384	1463,6	no clamp
SM4S900M3C4	0095	900 mm	1384	1463,6	C4

Mechanical Capabilities

Construction material of linear motor	Stainless steel tubes and spindle and high carbon steel
Spindle type and material	ACME stainless spindle
Stroke length**	SM4S600M3NC 600 mm SM4S700M3NC 700 mm SM4S900M3C4 900 mm
Max. static load	1500 kgf
Dynamic load capacity	800 kgf
Rod end type	Spherical bearing with hole dia. 12 mm with pivot angle of 13°
Speed at no load	2,33 mm/s
Resolution	188 pulses/mm
Backlash	max. 0,15 mm

Electrical Data

Motor power supply	24VDC +/- 15% 4A (5A current capability) (In rush 300% on max. current or softstart)*
Power consumption in operation	Rated 36W, max. 100W at 20% duty cycle
Power supply connection	1 piece of 2 Wire Cable with an Internal Cu Conductor of 1,5 mm ² (not included in kit)

Environmental Data

Operating temperature	-25°C to +85°C (optionally with arctic grease for temperatures from -40°C up to +85°C)
Operation at humidity	0% to 100%, relative humidity
Corrosion Protection, weather and chemical resistance	PLASOX® plasmanitriding with subsequent oxidation

Packaging

Dimensions of a packed product	1 box of 1600 (L) x 80 (W) x 80 (H) mm
Product weight neto	SM4S600M3NC 8,5 kg SM4S700M3NC 8,5 kg SM4S900M3C4 8,5 kg

Quality Certificates

International Protection Rating (IEC 60529)	IP63
Electromagnetic Compatibility (EMC Directive 89/336/EEC)	Yes
Low Voltage Equipment Directive (EEC Council Directive 73/23/EEC)	Yes

Optional Properties

Guarantee time	2 years as standard, 5 years for +20% *** 10 years for +35% ***
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* NOTE: Lifetime of the brush in the motor is 30% shorter if motors don't have soft start and stop.

** NOTE: Other dimensions optionally

*** NOTE: For additional payment

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Solar linear motor - actuator - Mechanical Drawing

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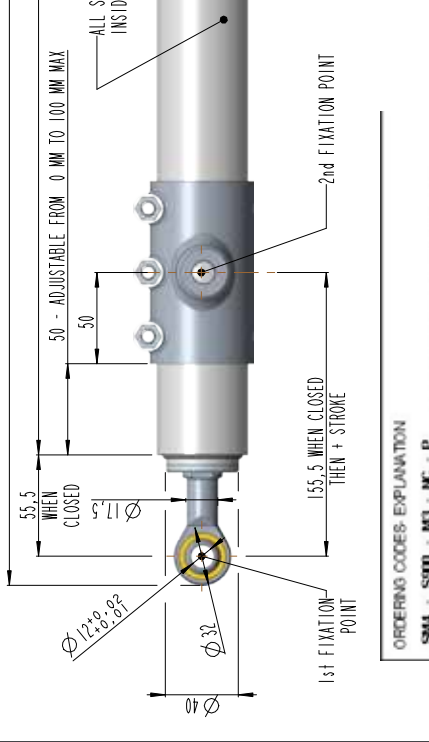
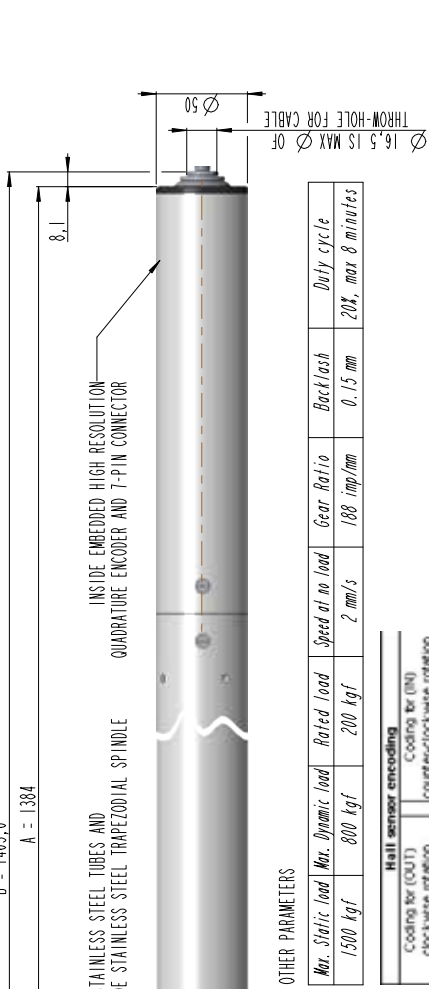
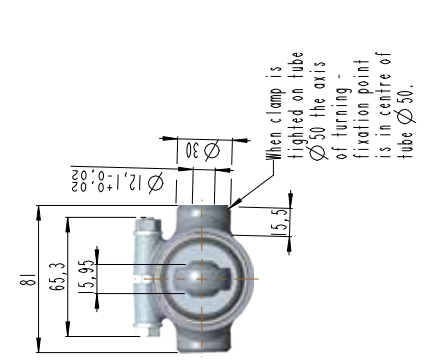
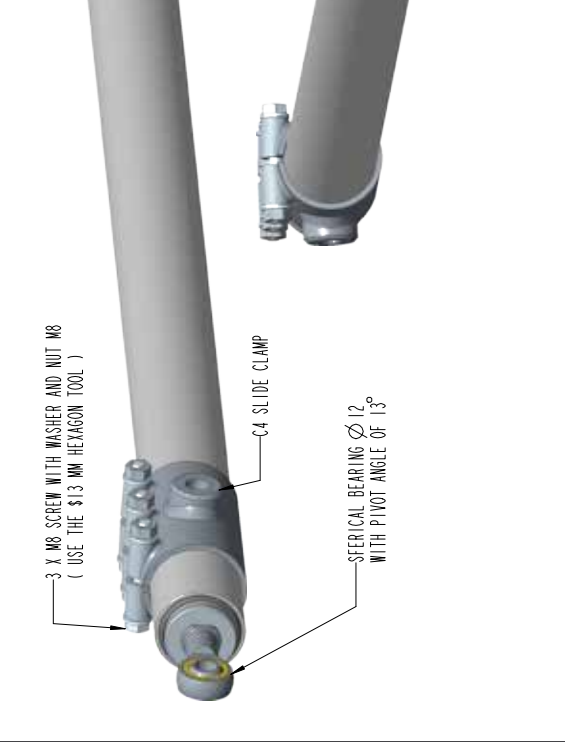
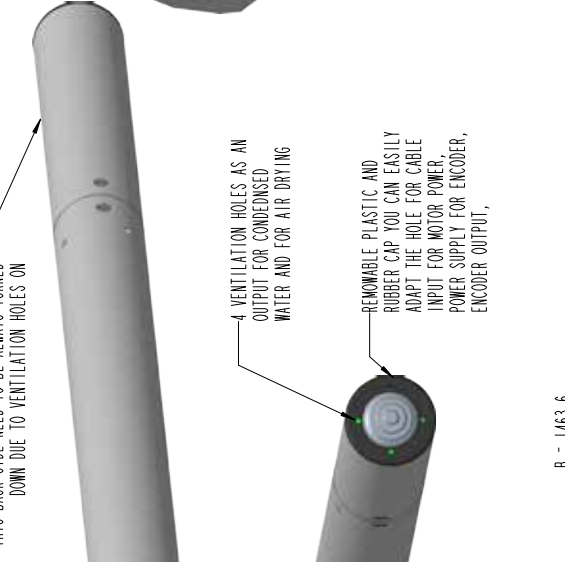
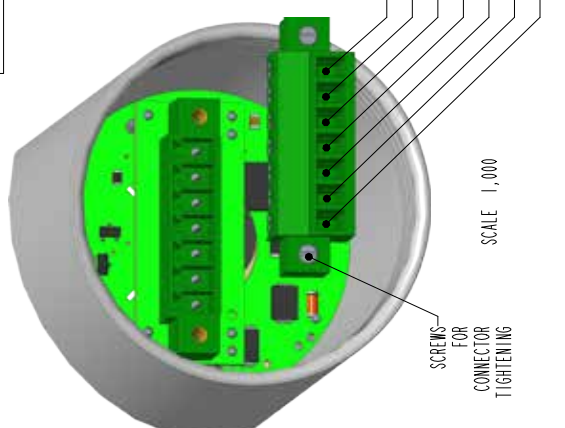
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 No. of changes on drawing: Date: [Checked & approved by:]

ELECTRICAL VALUES:
 - MOTOR 24VDC, RATED CURRENT 1.5A, MAX CURRENT: 4A
 - STARTING / AT STALL CURRENT: 3-4 x MAX CURRENT
 - DUTY CYCLE: 20% MAX 8 MINUTES OF OPERATING
 - HALL VCC POWER SUPPLY 6-24VDC
 - HALL OUTPUT SINK MAX 24VDC/100ma OPEN COLLECTOR TYPE
 - END SWITCH MAX CURRENT 500ma

ATTENTION: THE ENDSWITCH DOES NOT DISCONNECT THE POWER TO MOTOR BUT GIVE ONLY SIGNAL STOP TO ELECTRONIC THAT END OR REFERENCE

CABLE CONNECTION PINOUT DIAGRAM

1. SIGNAL ENDSWITCH (STOP)
2. SIGNAL OUT HALL PHASE 2 (B)
3. MOTOR PLUS (MOVING IN)
4. HALL VCC 6-24VDC
5. MOTOR MINUS (MOVING IN)
6. SIGNAL OUT HALL PHASE 1 (A)
7. HALL GND



OTHER PARAMETERS

Max. Static load	Max. Dynamic load	Rated load	Speed at no load	Gear Ratio	Backlash	Duty cycle
1500 kgf	800 kgf	200 kgf	2 mm/s	188 rpm/mm	0.15 mm	20%, max 8 minutes

Hall sensor encoding

Coding for (OUT) clockwise relation	Phase			
	A	B	A	B
1	0	0	1	1
2	0	1	2	1
3	1	1	3	0
4	1	0	4	0

ORDERING CODES - EXPLANATION

SM4 - S000 - M3 - NC - P

- SM4 - MOTOR TYPE
- S000 - CLAMP TYPE (C3-C4 OR NO CLAMP - NC)
- M3 - MOTOR TYPE M2
- NC - STROKE LENGTH 500 MM
- P - MODEL OF LINEAR MOTOR SM4

Operating temperature -25°C to +85°C (optionally with artic grease for temperatures from -40°C up to +85°C)

Specifications are subject to change without notice !

0095	/	Assembly	D50x1467	M7	ISO 2768 M	Operating temperature -25°C to +85°C
Position:	Quantity:	Material:	Size:	Open tolerances, Treatment & Remarks:		
Bolka B.	Bolka J.	Bolka B.	383106390095	0.250	9633,003 g	
Drawn by:	Checked by:	Approved by:	EAN code / standard:	Scale:	Mass:	

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Sat Control d.o.o. Pozenik 10, SI-4207 CERKLE - SLOVENIA - EU

File: SMA_S900_M3_C4 / SMA_S900_M3_C4

Description: Solar linear actuator - motor SM4S900M3C4 W C4 clamp

SOLAR LINEAR ACTUATORS - MOTORS FAMILY TABLE

MODEL	EAN	STROKE	A	B	CLAMP TYPE
SM4S900M3C	0094	900 mm	1384	1463,6	NO CLAMP
SM4S900M3C4	0095	900 mm	1384	1463,6	C4
SM4S600M3C4	0178	600 mm	1084	1163,6	C4
SM4S450M3C4	0085	450 mm	934	1013,6	C4
SM4S300M3C4	0053	300 mm	784	863,6	C4
SM4S200M3C4	0101	200 mm	684	763,6	C4

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