



Series SM4 M2



SM4S510M2NC
Code: 0077



SM4S510M2C4
Code: 0175



SM4S510M2U8
Code: 0078

U8 clamp



C4 clamp



Ordering information - coding explanation

SM4	S510	M2	NC
Series prefix	S - Stroke lenght	Motor type	Clamp type
SM4	S200 - 200 mm S300 - 300 mm S450 - 450 mm S510 - 510 mm	M2 - brush DC motor M2B - brush less DC motor	NC - no clamp C4 - clamp U8 - clamp

Model	EAN	Stroke	A closed	A open	Clamp type
SM4S200M2U8	0069	200 mm	48.5	348.5	U8
SM4S300M2U8	0068	300 mm	48.5	348.5	U8
SM4S400M2NC	0172	400 mm			no clamp
SM4S510M2NC	0077	510 mm			no clamp

Mechanical Capabilities	
Construction material of linear motor	Stainless steel tubes and spindle and high carbon steel
Spindle type and material	ACME stainless spindle
Stroke lenght	SM4S300M2U8 300 mm SM4S400M2NC 400 mm SM4S510M2NC 510 mm
Max. static load	340 kgf
Dynamic load capacity	220 kgf
Rod end type	Rod end type Rodend with groove 12 mm and hole dia. 10 mm
Speed at no load	1,5 mm/s at no load
Resolution	265,33 pulses/mm
Backlash	max 0,15 mm optionally possible less
Electrical Data	
Motor power supply	24VDC +/- 15% 2A (2,5A current capability) (In rush 300% on Max. current or softstart)*
Power consumption in operation	Rated 36W at 20% duty cycle
Electrical connections	Typical 2x1 mm ² + 5x0.22 mm ² (Hole size on connector 1.5 mm ²)
Environmental Data	
Operating temperature	-25°C to +70°C (optionally with artic grease for teperatures from -40°C up to +70°C)
Operation at humidity	0% to 100%, relative humidity
Corrosion, weather and chemical resistance	
Corrosion Protection	PLASOX® plasmanitriding with subsequent oxidation, corrosion resistant material Zn/Ni/ Ni 10 umm, rest stainless steel
Packaging	
Dimensions of a packed product	1box of 1000(L) x 80(W) x 60(H) mm
Product weight (neto)	SM4S300M2U8 3.5 kg SM4S400M2NC 4.5 kg SM4S510M2NC 4.94 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	
Heliostat usage	Yes
CPV usage (concentrated PV usage)	Yes, all types including round parabolic
Guarantee time	2 years as standard, 5 years for +20% *** 10 years for +35% ***

* NOTE: Lifetime of the brush in the motor is 30% shorter if motors don't have soft start and stop

*** NOTE: For additional payment

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Solar linear motor - actuator - Mechanical Drawing

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

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ELECTRICAL VALUES:

- MOTOR 24VDC - RATED CURRENT 1A
- STARTING CURRENT CAN BE 3 X RATED CURRENT
- HALL VCC POWER SUPPLY 6-24VDC
- HALL OUTPUT SINK MAX 24VDC/100mA OPEN COLLECTOR TYPE
- END SWITCH MAX CURRENT 500mA
- USE FUSE 2A SLOW
- GEAR RATIO: 682.667 IMPULSES PER MM
- MAX RANGE: 354.987 PULSES
- ATTENTION: THE END-SWITCH 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 B
3. MOTOR PLUS (MOVING IN)
4. HALL VCC 6-24VDC
5. MOTOR MINUS (MOVING IN)
6. SIGNAL OUT HALL PHASE A
7. HALL GND

SCREWS FOR CONNECTOR TIGHTENING

REMOVABLE PLASTIC AND RUBBER CAP YOU CAN EASILY ADAPT THE HOLE FOR CABLE INPUT FOR MOTOR POWER, POWER SUPPLY FOR ENCODER, ENCODER OUTPUT,

SCALE 1,000

NO SLIDE CLAMP

THIS BACK SIDE NEED TO BE ALWAYS TURNED DOWN DUE TO VENTILATION HOLES ON

8 VENTILATION HOLES AS A OUTPUT FOR CONDENSED WATER AND FOR AIR DRYING (DRAINAGE)

18,5=starting distance

866.6=B

347

8.3 (S) 4 (A) OF THROWN HOLE FOR CABLE

INSIDE EMBEDDED HIGH RESOLUTION QUADRATURE ENCODER AND 7-PIN CONNECTOR

ORDERING CODES: EXPLANATION

SM4 - S200 - M2 - C3 - P
 POSITIONER EMBEDDED PAVES, PICO CLAMP TYPE: C3-C4-LB OR NO CLAMP - NC
 STROKE LENGTH: 520MM
 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)

CE

Note ***: When your own clamp. In case the axis of the second fixation or turning axis is not crossing the axial axis (center of the tube $\varnothing 50$) of the linear motor the axial load capacity is falling down. Consult the producer how to make clamp with turning axis.!

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