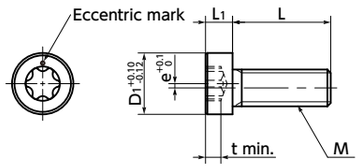
SLEC-A Clamping Screws with Eccentric Head

WEB Selection Tool　WEB CAD Download

SLEC-A-EL



- When the screw is tightened, the workpiece is strongly clamped by the head, which is decentered from the shaft center of the screw. The wedge effect creates a large clamping force with low tightening torque.
- The hexalobular*1 shape can withstand high tightening torque. ➡ P.xxxx
- Use a dedicated wrench **SKX** for mounting and removing.
- Use the **SKX-N** hexalobular wrench for extremely limited access spaces for mounting and removing in tight spaces.
- Suitable for fixing linear guideway rails. As the decentered head presses the linear guideway rail against the installation reference surface, precision can be easily achieved when mounting. Also, mounting accuracy is maintained by suppressing warping and misalignment caused by long-term use.
- **SLEC-A-EL** is an electroless nickel plating type. For applications that require corrosion resistance.

*1 : The hexalobular shape is prescribed by JIS B 1015: 2008(ISO 10664: 2005)"Hexalobular internal driving feature for bolts and screws".

● Material/Finish

RoHS2 Compliant

	SLEC-A	SLEC-A-EL
Main Body	SCM435 Ferrosoferric Oxide Coating	SCM435 Electroless Nickel Plating
Strength Class	10.9	10.9

● Related Products

Also, Clamping Screw with Eccentric Head, which has a guide section below the head, is available. **SLEC-B** Ferrosoferric oxide film. ➡ P.xxxx **SLEC-B-EL** Electroless nickel plating. ➡ P.xxxx

SKX Hexalobular Wrench ➡ P.xxxx

SKX-N Hexalobular Wrench for Extremely Limited Access Spaces ➡ P.xxxx

● Application

Fixing linear guideway rails / Workpieces / Jigs

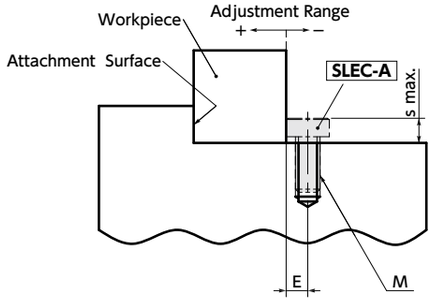
Unit : mm

SLEC-A Ferrosoferric oxide film	SLEC-A-EL Electroless nickel plating	Common dimensions										Qty per pack
Part Number 1	Part Number 1	M (Coarse) Nominal of Thread	Pitch	L	D1	L1	e	Applicable wrench	Hexalobular Socket No.	t	Mass (g)	
SLEC-M3-A	**SLEC-M3-A-EL**	M3	0.5	6	6.8	2.5	0.4	SKX-10	10	1	0.7	1
SLEC-M4-A	**SLEC-M4-A-EL**	M4	0.7	8	7	3	0.4	SKX-15	15	1.2	1.6	1
SLEC-M5-A	**SLEC-M5-A-EL**	M5	0.8	10	8.5	4	0.4	SKX-20	20	1.5	2.6	1
SLEC-M6-A	**SLEC-M6-A-EL**	M6	1	12	10	4	0.5	SKX-25	25	2	5.1	1
SLEC-M8-A	**SLEC-M8-A-EL**	M8	1.25	16	13	5	0.8	SKX-30	30	2.5	11	1
SLEC-M10-A	**SLEC-M10-A-EL**	M10	1.5	20	16	7	1	SKX-40	40	3	22	1
SLEC-M12-A	**SLEC-M12-A-EL**	M12	1.75	24	18	8	1	SKX-45	45	3.5	32	1

● Installation Dimensions

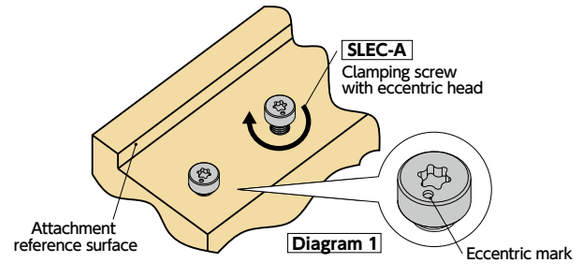
Unit : mm

Part Number	Part Number	E	M	Adjustment Range min. / max.	s max.
SLEC-M3-A	**SLEC-M3-A-EL**	$3.1^{+0.3}_{0}$	M3	−0.1 / 0.7	3.3
SLEC-M4-A	**SLEC-M4-A-EL**	$3.15^{+0.3}_{0}$	M4	−0.05 / 0.75	4.1
SLEC-M5-A	**SLEC-M5-A-EL**	$3.9^{+0.3}_{0}$	M5	−0.05 / 0.75	5.3
SLEC-M6-A	**SLEC-M6-A-EL**	$4.65^{+0.3}_{0}$	M6	−0.15 / 0.85	5.5
SLEC-M8-A	**SLEC-M8-A-EL**	$6.05^{+0.5}_{0}$	M8	−0.35 / 1.25	7
SLEC-M10-A	**SLEC-M10-A-EL**	$7.5^{+0.5}_{0}$	M10	−0.5 / 1.5	9.5
SLEC-M12-A	**SLEC-M12-A-EL**	$8.5^{+0.5}_{0}$	M12	−0.5 / 1.5	10.9

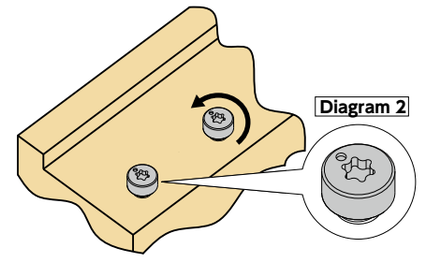


1 Individual Sales ➡ P.xxxx	Cleanroom Wash & Packaging ➡ P.xxxx	Screw Length Adjustment ➡ P.xxxx	Vibration Resistant ➡ P.xxxx	Modification process for captive use ➡ P.xxxx
1 unit in 1 bag	Please feel free to contact us	Not Available	Not Available	Not Available

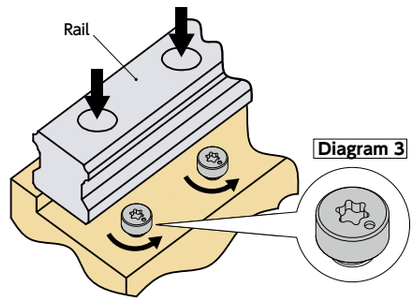
● Installation Method



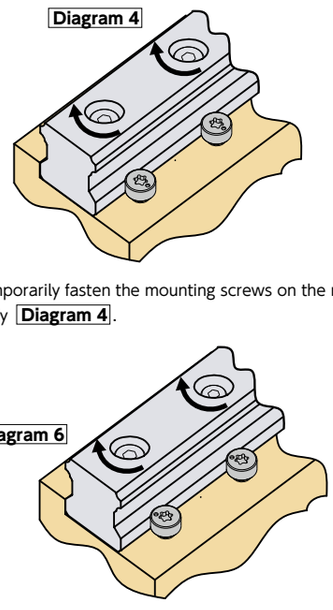
❶ Screw the clamping screws with eccentric head into the screw holes until the head bearing surface lightly touches the surface **Diagram 1**. At this time, the positions of the eccentric marks do not have to be aligned.



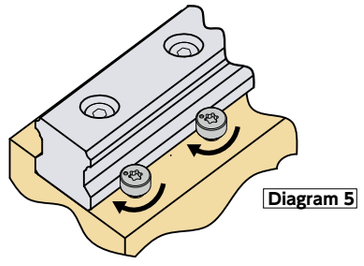
❷ Loosen the clamping screws with eccentric head so that the eccentric marks reach the position in **Diagram 2**.



❸ Further loosen until the eccentric marks reach the position in **Diagram 3**, and insert the rail you wish to attach between the clamping screws with eccentric head and the attachment reference surface.



❹ Temporarily fasten the mounting screws on the rail main body **Diagram 4**.

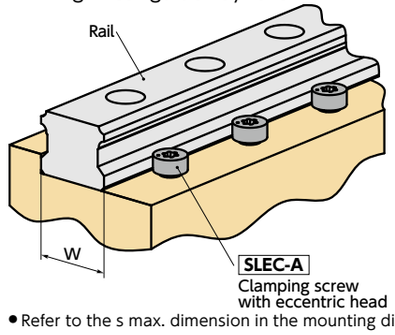


❺ Tighten the clamping screws with eccentric head so that the rail touches the attachment reference surface closely **Diagram 5**.

❻ Fully tighten the mounting screws on the rail main body **Diagram 6**.

● Usage example

Fixing linear guideway rails.



- Refer to the s max. dimension in the mounting dimensions; if the clamping screw with eccentric head may interfere with the carriage, etc., avoid interference by lowering its mounting surface.
- When using in a rail, press at the position of the rail body's mounting screws.

● Recommended size of linear guideway rail

Unit : mm

Nominal of Rail	Rail Width W	Applicable Clamping Screws with Eccentric Head	
#9	9	**SLEC-M3-A**	**SLEC-M4-A**
#12	12	**SLEC-M3-A**	**SLEC-M4-A**
#15	15	**SLEC-M3-A**	**SLEC-M4-A**
#20	20	**SLEC-M4-A**	**SLEC-M5-A**
#25	23	**SLEC-M5-A**	**SLEC-M6-A**
#30	28	**SLEC-M6-A**	**SLEC-M8-A**
#35	34	**SLEC-M8-A**	**SLEC-M10-A**
#45	45	**SLEC-M10-A**	**SLEC-M12-A**
#55	53	**SLEC-M12-A**	

● Part number specification

SLEC-M6-A-EL

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