

CATEGORY SELECTION GUIDE

Miniature Slide Electric Cylinder Category Selection Guide

Miniature slide electric cylinders convert motor rotation into linear motion through a screw transmission, with the slide directly carrying the workpiece or end tooling for precise push, pull, transfer and positioning in confined spaces. The principal SKU differences are stroke, installation envelope, thrust, speed, load and positioning repeatability.

CATEGORY SELECTION GUIDE

CATEGORY	CURRENT CATALOG	REVISION / ISSUE
Miniature Slide Electric Cylinders	1 Product Platforms / 3 SKUs	R01 2026-09-04

CONTENTS

01	Category Scope and Objective
02	Product Principle and Typical Applications
03	Selection Inputs
04	Product Platform Catalog
05	Product Platform and SKU Selection Path
06	Selection Parameters and SKU Refinement
07	Integration Checklist
08	Engineering Use and Verification Notice

01 | Category Scope and Objective

Item	Current category
Product catalog	1 Product Platform / 3 SKUs
Suitable use	Compact linear push, pull and positioning mechanisms where stroke, thrust, speed, load and installation space must be considered together.

02 | Product Principle and Typical Applications

Product overview

Slide electric cylinders convert motor rotation into linear motion through a lead screw; the slide carries the workpiece or tooling for precise push, pull and positioning in confined spaces.

Typical applications

Compact positioning and transfer

Use stroke, speed and repeatability to shortlist candidates, then check the installation envelope.

Vertical or horizontal push/pull

Check the specific SKU against mounting orientation, vertical/horizontal load and allowable moments.

03 | Selection Inputs

Prepare before selection

- Record required stroke, thrust, speed and cycle time.
- Confirm mounting orientation, vertical/horizontal load and moments.
- Confirm lead-screw pitch, repeatability and body variant.
- Confirm installation space, supply, current and operating environment.

04 | Product Platform Catalog



Miniature Slide Electric Cylinder Product Platform 01

This Product Platform contains 3 SKUs with different body variants, strokes, lead-screw pitches, thrust and speed combinations. Start with stroke and load, then confirm speed, repeatability and interface conditions.

3 SKUs

05 | Product Platform and SKU Selection Path

- Confirm platform integration from installation envelope, stroke and mounting orientation.
- Build the SKU shortlist from thrust, speed and vertical/horizontal load.
- Check motion performance using lead-screw pitch, repeatability and allowable moments.

04 Finally confirm electrical conditions, environment and the exact SKU parameter combination.

Selection note

This category has one Product Platform; engineering differences are mainly at SKU level. Use the platform for orientation, then return to SKU parameters for load and performance confirmation.

06 | Selection Parameters and SKU Refinement

Product Platform parameter span

Product Platform	SKUs	Frame Size	Body Variant	Stroke	Lead Screw Pitch	Rated Thrust	Maximum Linear Speed	Maximum Vertical Load	Maximum Horizontal Load	Position Repeatability
Miniature Slide Electric Cylinder Product Platform 01	3	3 / 4	Standard body / Wide body	30 mm, 50 mm / 75 mm, 150 mm	1 mm; 2 mm; 4 mm; 6 mm / 5 mm; 10 mm	1 mm: 200 N; 2 mm: 100 N; 4 mm: 50 N; 6 mm: 30 N / 5 mm: 170 N; 10 mm: 85 N	1 mm: 50 mm/s; 2 mm: 100 mm/s; 4 mm: 200 mm/s; 6 mm: 300 mm/s / 5 mm: 165 mm/s; 10 mm: 330 mm/s	1 mm: 2 kg; 2 mm: 1.5 kg; 4 mm: 0.75 kg; 6 mm: 0.5 kg / 5 mm: 6 kg; 10 mm: 3 kg	1 mm: 8 kg; 2 mm: 6 kg; 4 mm: 3 kg; 6 mm: 2 kg / 5 mm: 15 kg; 10 mm: 15 kg	±0.01 mm / ±0.02 mm

SKU shortlist matrix

SKU	Frame Size	Body Variant	Stroke	Lead Screw Pitch	Rated Thrust	Maximum Linear Speed	Maximum Vertical Load	Maximum Horizontal Load	Position Repeatability
ES-EC-S01-M0 01	3	Standard body	30 mm, 50 mm	1 mm; 2 mm; 4 mm; 6 mm	1 mm: 200 N; 2 mm: 100 N; 4 mm: 50 N; 6 mm: 30 N	1 mm: 50 mm/s; 2 mm: 100 mm/s; 4 mm: 200 mm/s; 6 mm: 300 mm/s	1 mm: 2 kg; 2 mm: 1.5 kg; 4 mm: 0.75 kg; 6 mm: 0.5 kg	1 mm: 8 kg; 2 mm: 6 kg; 4 mm: 3 kg; 6 mm: 2 kg	±0.01 mm
ES-EC-S01-M0 02	3	Wide body	30 mm, 50 mm	1 mm; 2 mm; 4 mm; 6 mm	1 mm: 200 N; 2 mm: 100 N; 4 mm: 50 N; 6 mm: 30 N	1 mm: 50 mm/s; 2 mm: 100 mm/s; 4 mm: 200 mm/s; 6 mm: 300 mm/s	1 mm: 2 kg; 2 mm: 1.5 kg; 4 mm: 0.75 kg; 6 mm: 0.5 kg	1 mm: 8 kg; 2 mm: 6 kg; 4 mm: 3 kg; 6 mm: 2 kg	±0.01 mm
ES-EC-S01-M0 03	4	Standard body	75 mm, 150 mm	5 mm; 10 mm	5 mm: 170 N; 10 mm: 85 N	5 mm: 165 mm/s; 10 mm: 330 mm/s	5 mm: 6 kg; 10 mm: 3 kg	5 mm: 15 kg; 10 mm: 15 kg	±0.02 mm

07 | Integration Checklist

Design inputs

- 01** Check stroke endpoints, mounting pattern, slide orientation and external guidance.
- 02** Check thrust, speed, vertical/horizontal load and allowable moments.
- 03** Check rated/peak current, controller interface and operating environment.

08 | Engineering Use and Verification Notice

Engineering verification

- 01** Before design freeze, verify mechanical, electrical, motion and controlled engineering documents for the specific SKU.
- 02** Do not infer missing life, stiffness or compatibility data from an SKU code or a single thrust value.
- 03** Use the Datasheet and Dimensional & Integration Guide as the primary engineering verification documents.

**Responsibility boundary**

This guide organizes candidate scope. Final selection, interface confirmation and system responsibility remain subject to controlled engineering documents for the specific SKU and project verification.