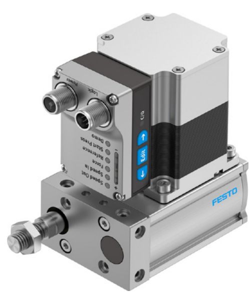
Simplified Motion Series (SMS) cheat sheet

SMS Axes

- Electric alternatives for simple movements
- Movement between 2 end positions
- Flexible intermediate position (with IO-Link)
- Pressing/clamping applications possible
- Digital I/O for simple control and feedback
- IO-Link control for added value functionality

IO-Link

EPCE Electric cylinder unit (short stroke)

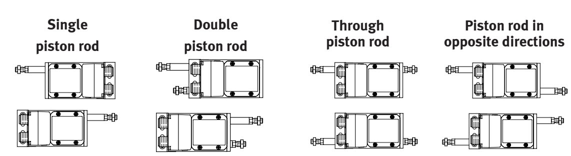


Compact and versatile, short-stroke electric cylinder unit for sorting, separating, labelling and more

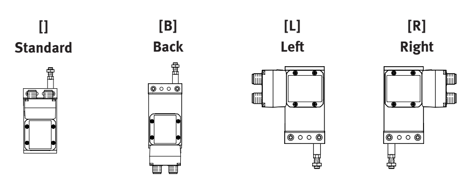
Size (width) [mm]	45	60
Stroke length [mm]	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 80
Max Payload Hor [kg]	5	10
Max Payload Ver [kg]	2.5	5
Max Feed Force [N]	85	150
Max Speed [mm/s]	440	600
Acceleration [m/s²]	9	9
Min Travel Time [ms]	150	150

Mechanical options

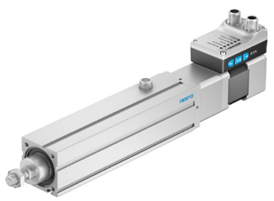
Piston rod options

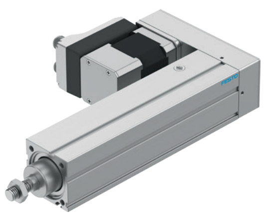


Cable outlet direction (4 x 90°)



EPCS Electric cylinder unit (long stroke)



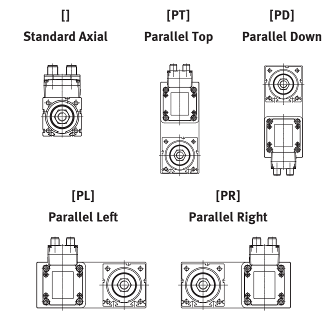


High feed force electric cylinders for pressing/clamping and positioning tasks

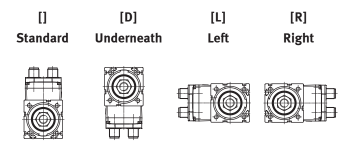
Size (width) [mm]	32		45		60	
Stroke length [mm]	25, 50, 75, 100, 125, 150, 175, 200		25, 50, 75, 100, 125, 150, 175, 200, 250, 300		25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 400, 500	
Spindle Pitch [mm]	3	8	3	10	5	12
Max Payload Hor [kg]	24	24	60	40	120	56
Max Payload Ver [kg]	12	9	23	13	46	18
Max Feed Force [N]	150	150	450	250	900	375
Axial motor mount						
Max Speed [mm/s]	79	210	74	230	90	220
Acceleration [m/s²]	1.5	5	1.5	5	1.5	5
Parallel motor mount						
Max Speed [mm/s]	75	200	70	220	90	210
Acceleration [m/s²]	0.5	1.5	0.5	1.5	0.5	1.5

Mechanical options

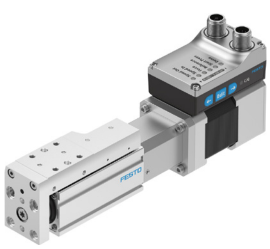
Motor Mount (Axial / Parallel)

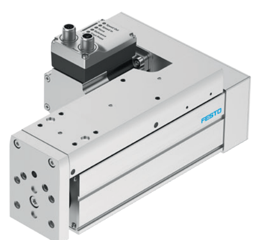


Cable outlet direction (4 x 90°)



EGSS Mini slide unit



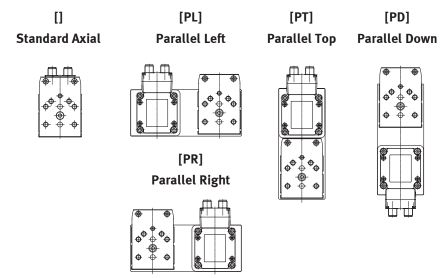


Compact mini slide unit for smooth, precise movements

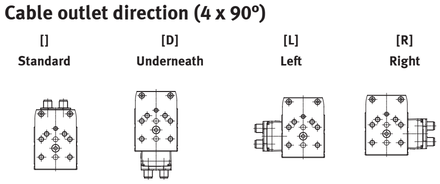
Size (width) [mm]	32	45	60
Stroke length [mm]	25, 50, 75, 100	25, 50, 75, 100, 125, 150	50, 75, 100, 125, 150, 175, 200
Spindle Pitch [mm]	8	10	12
Max Payload Hor [kg]	2	6	10
Max Payload Ver [kg]	2	6	10
Max Feed Force [N]	60	120	250
Axial motor mount			
Max Speed [mm/s]	190	250	240
Acceleration [m/s²]	5	5	5
Parallel motor mount			
Max Speed [mm/s]	190	235	205
Acceleration [m/s²]	3	3	3

Mechanical options

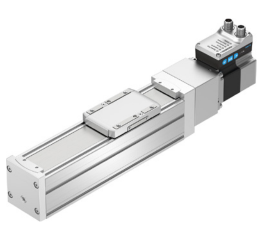
Motor Mount (Axial / Parallel))

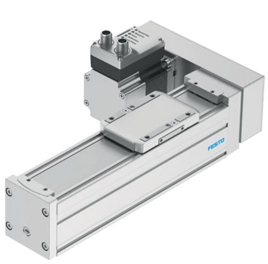


Cable outlet direction (4 x 90°)



ELGS-BS Ball screw axis unit



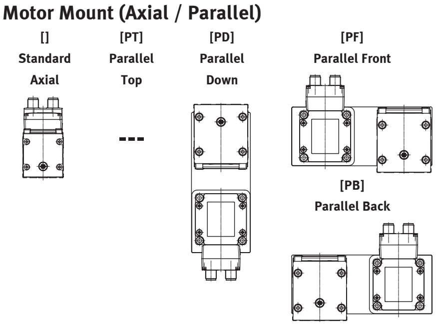


Linear ball screw axis unit with covered guide for smooth, precise movements

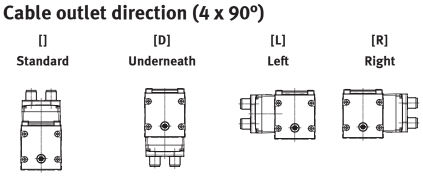
Size (width) [mm]	32	45	60
Stroke length [mm]	100, 200, 300, 400, 500, 600, 700, 800		
Spindle Pitch [mm]	8	10	12
Max Payload Hor [kg]	2	10	20
Max Payload Ver [kg]	2	5	13
Max Feed Force [N]	40	100	200
Axial motor mount			
Max Speed [mm/s]	180	250	250
Acceleration [m/s²]	5	5	5
Parallel motor mount			
Max Speed [mm/s]	180	235	215
Acceleration [m/s²]	3	3	3

Mechanical options

Motor Mount (Axial / Parallel)



Cable outlet direction (4 x 90°)



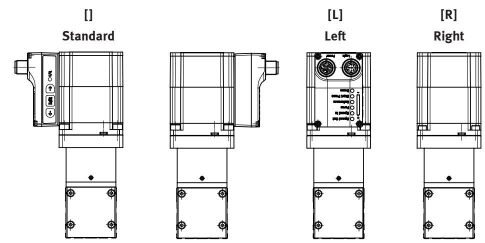
ELGS-TB Toothed belt axis unit

Linear toothed belt axis unit with covered guide for dynamic, long-stroke movements

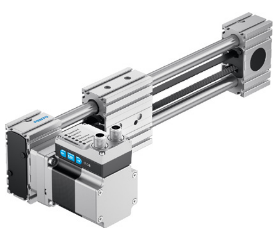
Size (width) [mm]	45	60
Stroke length [mm]	200, 300, 500, 600, 800, 1000, 1200, 1500	200, 300, 500, 600, 800, 1000, 1200, 1500, 1800, 2000
Max Payload Hor [kg]	2.5	4
Max Payload Ver [kg]	---	---
Max Feed Force [N]	75	65
Max Speed [m/s]	1.2	1.3
Acceleration [m/s²]	6	6

Mechanical options

Cable outlet direction (4 x 90°)



ELGE linear toothed belt axes

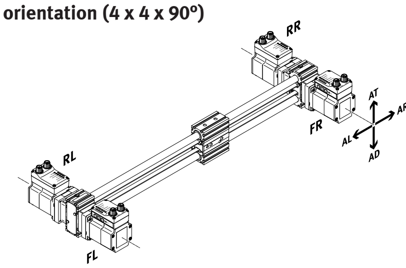


Linear toothed belt axis unit with uncovered guide for economic and dynamic movements

Size (width) [mm]	35
Stroke length [mm]	50...800 (in 50 mm increments)
Max Payload Hor [kg]	2.8
Max Payload Ver [kg]	---
Max Feed Force [N]	50
Max Speed [m/s]	1.2
Acceleration [m/s²]	8.5

Mechanical options

Motor orientation (4 x 4 x 90°)



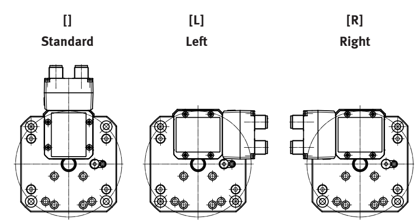
ERMS electric rotary axes

Easy-to-use electric rotary drive unit for 90° or 180° rotations

Size [mm]	25	32
Fixed Angle Stops [°]	0...90 , 0...180	0...90 , 0...180
Max Inertia [kgcm²]	65	164
Max Torque [Nm]	2.7	5.6
Max Speed [rpm]	150	100
Acceleration [rad/s²]	140	140

Mechanical options

Cable outlet direction (3 x 90°)



Simplified Motion Series Solution Finder
Ordering made easy:
Select the correct SMS axis for every task
https://www.festo.com/solutionfinder