

EDA60Z

High-precision, high-load servo electric cylinder with customizable stroke EDA60Z

PRODUCT

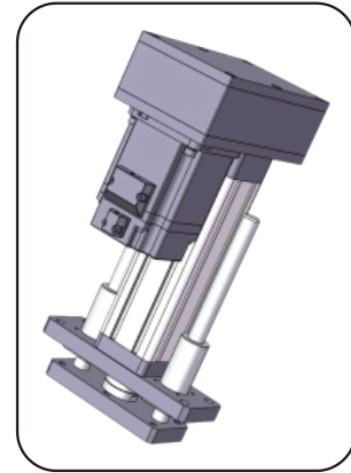
A servo electric cylinder for guided linear motion in a machine or production line.

TECHNICAL SPECIFICATIONS

Limit switch	Magnetic switch
Maximum allowed speed	≤ 500 mm/s
Maximum thrust allowed	≤ 5 kN
Rotation angle of piston rod	± 0.3 deg
Scalable length	≤ 800 mm
internal diameter	$\phi 50$ mm

SELECTION

Choose thrust, stroke, and speed as one duty. A catalog maximum does not mean the other maximums apply at the same time. Confirm screw lead, motor mounting, gear reduction, and the load connection before ordering.



Product illustration

BASIC PARAMETERS

(Note: Thrust, stroke, and speed should be combined with actual usage, and the upper limit values of the three cannot be used together.)

Outer diameter	internal diameter	Maximum thrust allowed	Scalable length	Maximum allowed speed	Maximum allowed speed Rotation angle of piston rod Limit switch	Limit switch
61x61mm	$\phi 50$ mm	≤ 5 kN	≤ 800 mm	≤ 500 mm/s	± 0.3 deg	Magnetic switch

DRIVE AND MOTOR OPTIONS

Lead of ball screw	Synchronous wheel speed ratio (input: output)	Synchronous wheel speed ratio (input: output)	Synchronous wheel speed ratio (input: output)	Motor specifications that can be directly installed	Motor specifications that can be directly installed	Reducers that can be matched	Reducers that can be matched
05mm	1:1	1.5:1	2:1	80A	86B	60A	60A 80A
10mm	1:1	1.5:1	2:1	80A	86B	60A	60A 80A
16mm	1:1	1.5:1	2:1	80A	86B	60A	60A 80A
20mm	1:1	1.5:1	2:1	80A	86B	60A	60A 80A

BALL-SCREW PARAMETERS

(Note: The parameters of the ball screw are applicable to strokes ≤ 300 mm. For strokes greater than 300 mm, please consult our technical personnel.)

Ball screw model	Type	Diameter	Lead of ball screw	Ca (KN)	Coa (KN)	Ball screw rigidity	Ball diameter	Screw shaft	Slenderness ratio	Accuracy Positioning accuracy level	Accuracy Positioning accuracy level
SFNU1605-4	Ball screw	16 mm	05mm	13.5 KN	29.9 KN	32Kg/um	3.175mm	14K5	1:30	C5/+/-0.01	C7/+/-0.02
SFNU1610-3	Ball screw	16 mm	10mm	10.8 KN	23.5 KN	26Kg/um	3.175mm	14K5	1:30	C5/+/-0.01	C7/+/-0.02
SFA1616-1.8	Ball screw	16 mm	16mm	5.4 KN	11.1 KN	14Kg/um	2.778mm	14K5	1:30	C5/+/-0.01	C7/+/-0.02

EDA60Z

Electric Cylinders

BALL-SCREW PARAMETERS (CONTINUED)

Ball screw model	Type	Diameter	Lead of ball screw	Ca (KN)	Coa (KN)	Ball screw rigidity	Ball diameter	Screw shaft	Slenderness ratio	Accuracy Positioning accuracy level	Accuracy Positioning accuracy level
SFA1620-1.8	Ball screw	16 mm	20mm	5.4 KN	11.4 KN	14Kgf/um	2.778mm	14K5	1:30	C5/+/-0.01	C7/+/-0.02

BEARING PARAMETERS

Bearing model	Cr (KN)	Cor (KN)
Deep groove ball 6004-ZZ	9.38 KN	5.03 KN
Thrust ball bearing 51105	19.6 KN	37 KN

TIMING PULLEYS AND BELT

Synchronous wheel speed ratio	Driving gear specifications	Driven gear specifications	Number of active gear teeth	Number of driven wheel teeth	Center distance of synchronous wheel	Synchronous belt circumference	Synchronous belt width
1:1	5M20T34	5M20T30	36	36	85mm	350	20mm
1.5:1	5M20T34	5M20T30	24	36	85mm	320	20mm
2:1	5M20T34	5M20T30	24	48	85mm	355	20mm

DIMENSION CORRESPONDENCE TABLE (MM)

Load connection type	phiA	phiB	phiC	C	D	E	F	H	G	M
External thread	phi50	phi35	-	30	50	3	11	-	33	M20x1.5
Internal thread	phi50	phi35	-	30	20	3	-	-	33	M16
Type I connector	phi50	phi35	phi16	-	95	3	16	32	33	-
Fisheye bearing	phi50	phi35	phi16	-	61	3	21	-	33	-
Y-joint	phi50	phi35	phi16	-	95	3	16	32	32	-