

Electric actuator Rod type

ESSED Series

● Motor size: □28, □42, □56

RoHS

Specifications

Descriptions		ESSD					
Actuator type		Rod type					
Motor		Stepping motor					
Encoder type		Incremental type					
Drive system		Slip screw					
Motor size	mm	□28	□42			□56	
Screw lead	mm	6	6	12	24	6	12
Stroke length	mm	50, 100, 150, 200					
Range of operation speed	mm/s	15 to 100	15 to 100	30 to 200	60 to 400	15 to 100	30 to 200
Speed of origin returning	mm/s	15	15	30	60	15	30
Accuracy of repeated positioning	mm	±0.05	±0.05	±0.1	±0.2	±0.05	±0.1
Lost motion	mm	0.4 or less	0.4 or less	0.5 or less	0.6 or less	0.4 or less	0.5 or less
Max. load capacity*1	Vertical kg	1.5	11	5	1	25	15
Maximum press fitting force	N	30 or over	150 or over	70 or over	30 or over	450 or over	250 or over
Setting method		Setting by the teaching pendant					
Control mode	*4	Solenoid valve mode (single type, double 2-position type, double 3-position type)					
		7-point positioning mode					
		Pitch transfer mode					
Indicator light (LED)		Green: Operation (Blinking: Operation in preparation), Red: Alarm					
Number of input points		7 points (photo-coupler insulation)					
Number of output points		7 points (photo-coupler insulation)					
Motor power supply voltage		24 VDC ± 10%					
Instantaneous maximum current on the motor	*3	4 A	3 A			4 A	
Average current on the motor	*2	0.8 A	1.1 A			1.2 A	
Control power supply voltage		24 VDC ± 10%					
Current consumption by controller		200 mA or less (including the case when the teaching pendant is connected)					
Insulation resistance		50 MΩ or higher in 500-VDC megger					
Withstand voltage		No abnormality for 1 minute with 1000 VAC					
Operating ambient temperature °C		0 to 50 (no condensation or freezing)					
Operating ambient humidity %		35 to 85 (no condensation or freezing)					
Storage ambient temperature °C		-20 to 60 (no condensation or freezing)					
Storage ambient humidity %		35 to 85 (no condensation or freezing)					
Atmosphere		No corrosive gas					
Degree of protection		Equivalent to IP40 of IEC standard (with protection covers on LAN ports)					

*1: The maximum load capacity becomes lower for higher speeds. For details, see the table (page 15) and the graph of technical document ②
Vertical Load Capacity and Horizontal Load Capacity.

*2: The average current is the current (reference value) at the maximum speed with the maximum load capacity.

*3: Use a power supply having an enough allowance for the instantaneous maximum current.

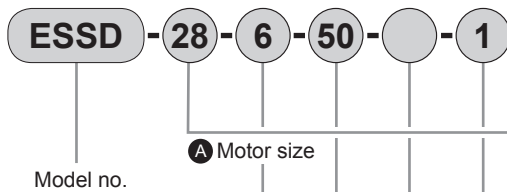
*4: The factory setting is the solenoid valve mode (double 2-position type).

Weight

(kg)

Descriptions	50st	100st	150st	200st
□28	0.8	1.0	1.1	1.2
□42	1.4	1.6	1.8	2.0
□56	2.9	3.3	3.6	3.9

How to order



A Motor size

B Lead

C Stroke length

D Option

E Cable length

Symbol	Description			
A Motor size				
28	□28			
42	□42			
56	□56			
B Lead				
Motor size		28	42	56
6	6 mm	●	●	●
12	12 mm		●	●
24	24 mm		●	
C Stroke length				
50	50 mm			
100	100 mm			
150	150 mm			
200	200 mm			
D Option				
Blank	Female screw			
N	Male screw			
E Cable length				
1	1 m			
3	3 m			

● Teaching pendant

ETP - 2

● Available cylinder switches

SW - T2H

Lead wire axial	Lead wire radial	Contact	Indicator	Lead wire quantity
T2H*	T2V*	Proximity	1 color indicator	2 wire
T3H*	T3V*			3 wire
T2WH*	T2WV*			2 wire
T3WH*	T3WV*		2 color indicator	3 wire
T2YH*	T2YV*			2 wire
T3YH*	T3YV*			3 wire
T2YD*	-			2 wire

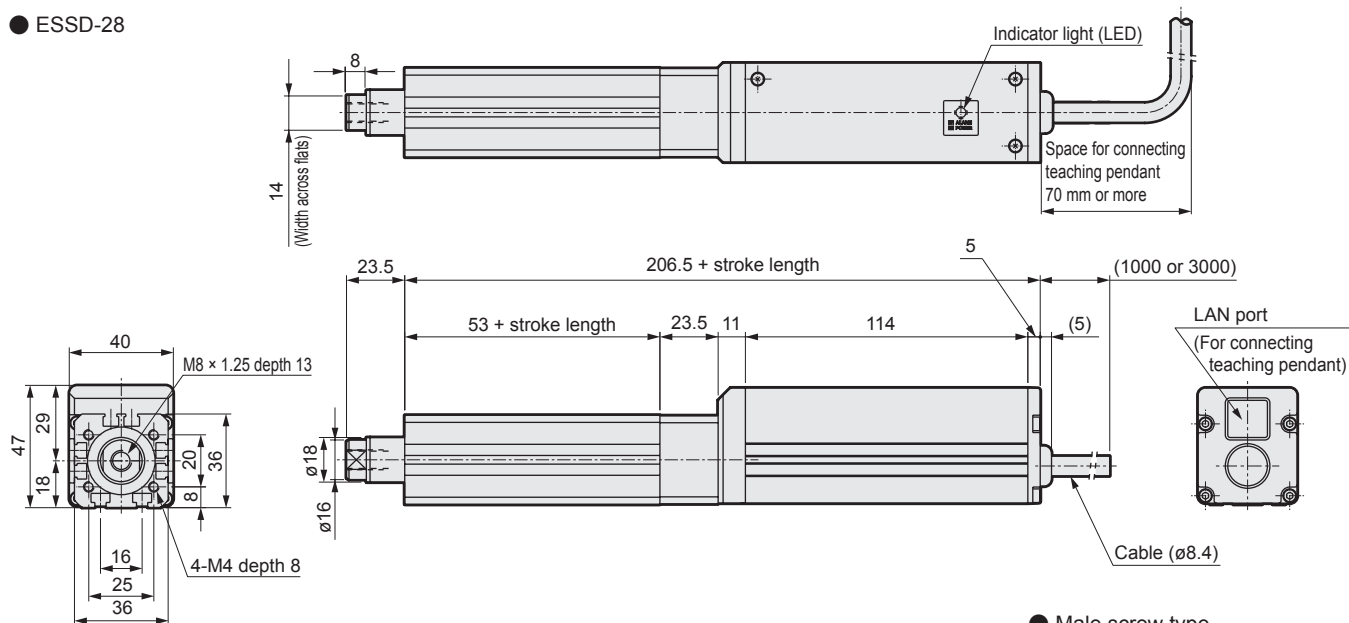
* indicates the lead wire length.

* Lead wire length	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

*For details of cylinder switches, see Pneumatic Cylinder I (catalog No. CB-029S).

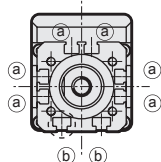
Dimensions

● ESSD-28

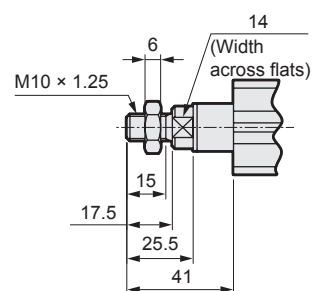
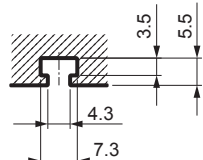


● Male screw type

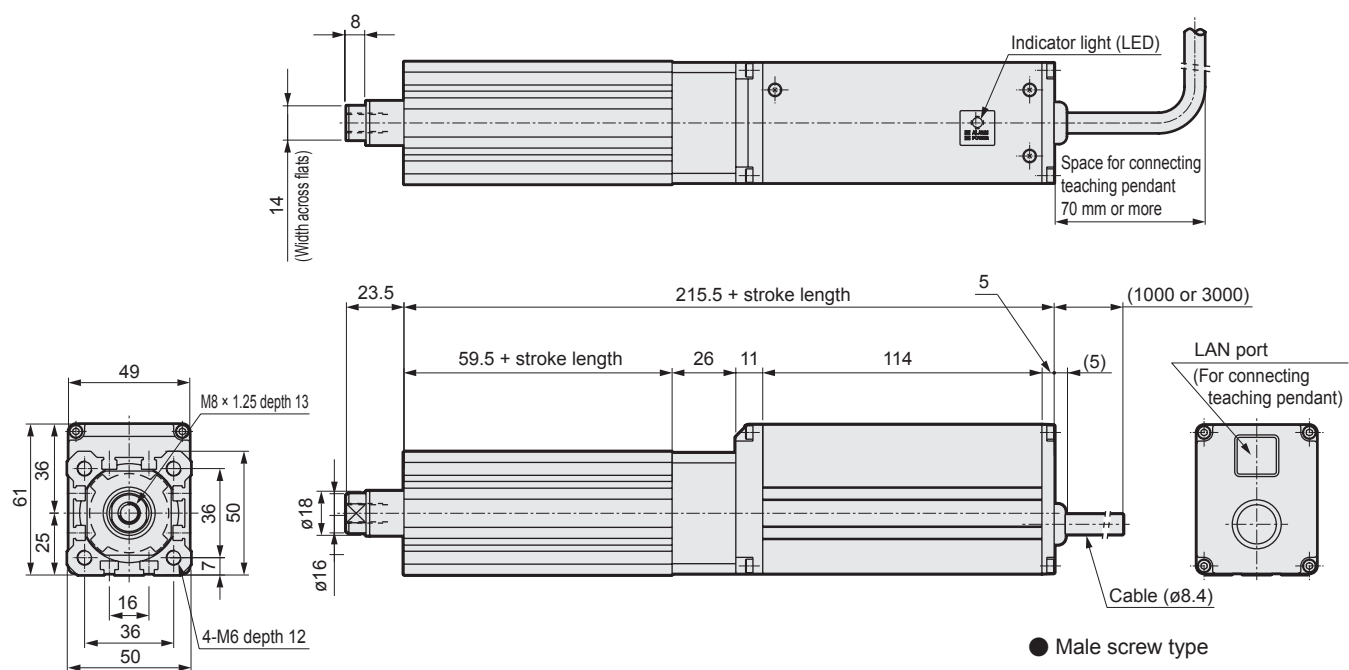
Groove on main unit



- a) Groove: For T-type cylinder switch
- b) Groove: For M4 square nut (See the figure below.)

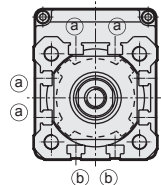


● ESSD-42



● Male screw type

Groove on main unit



- a) Groove: For T-type cylinder switch
- b) Groove: For M4 square nut (See the figure below.)

