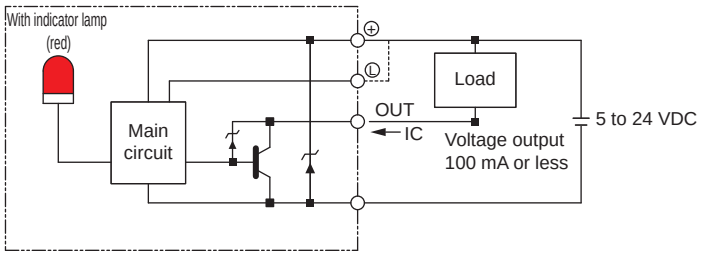
Origin sensor, limit sensor

	Manufacturer	Model
External mounted sensor	OMRON Corporation	EE-SX672
Internal mounted sensor	OMRON Corporation	EE-SX674

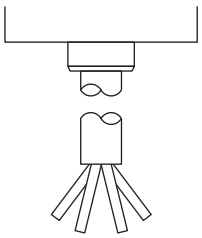
Performance

Item	Specifications
Hysteresis	0.025 mm or less
Light source (peak emission wavelength)	GaAs infrared LED (940 nm)
Indicator lamp	ON when receiving light (red)
Power supply voltage	5 to 24 VDC ±10% ripple (P-P) 10% or less
Current consumption	35 mA or less (NPN)
Control output	NPN: NPN open collector output 5 to 24 VDC 100 mA or less OFF state current 0.5 mA or less Residual voltage 0.8 V or less (at load current 100 mA) Residual voltage 0.4 V or less (at load current 40 mA)
Operating ambient illumination	Light-receiving surface luminance Fluorescent light: 1,000 lx or less
Ambient temperature range	When operating: -25 to +55°C When stored: -30 to +80°C (no condensation or freezing)
Ambient humidity range	When operating: 5 to 85% RH When stored: 5 to 95% RH (no condensation or freezing)
Degree of protection	IP50 IEC 60529 Standards
Cord length	2 m (Connector with cord [EE-1006 2M])

Output circuit



Wiring diagram



Terminal layout

Brown	5 to 24 VDC
Pink	L
Blue	0 V
Black	OUTPUT

Sensor dog dimensions

	Motor mounting direction
Body size	E/D/R/L
ECS-05	Fig. 1
ECS-06	Fig. 2

Fig. 1

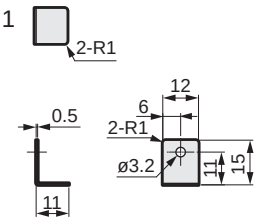
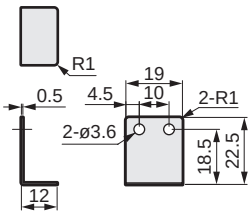


Fig. 2



Body size	E/D	Motor mounting direction			
		R		L	
		Grease nipple None	Grease nipple Yes	Grease nipple None	Grease nipple Yes
ECS-10	Fig. 3	Fig. 3		Fig. 3	
ECS-12	Fig. 3	Fig. 3	Fig. 4	Fig. 3	Fig. 5

Body size	E/D	Motor mounting direction			
		R		L	
		Grease nipple None	Grease nipple Yes	Grease nipple None	Grease nipple Yes
ECS-14	Fig. 6	Fig. 6	Fig. 7	Fig. 6	Fig. 7

Fig. 3

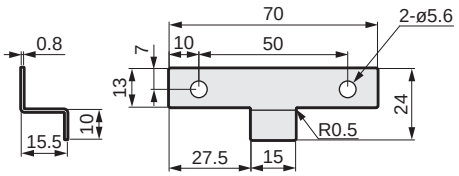


Fig. 4

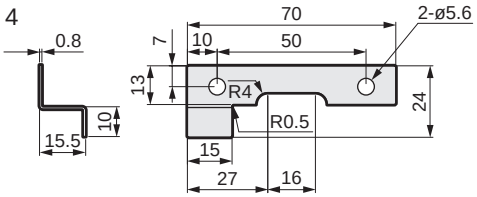


Fig. 5

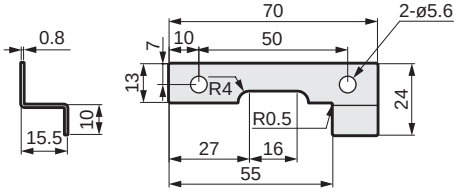


Fig. 6

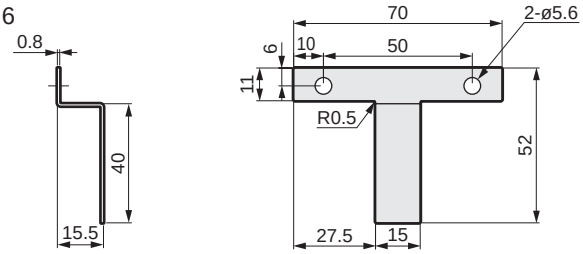
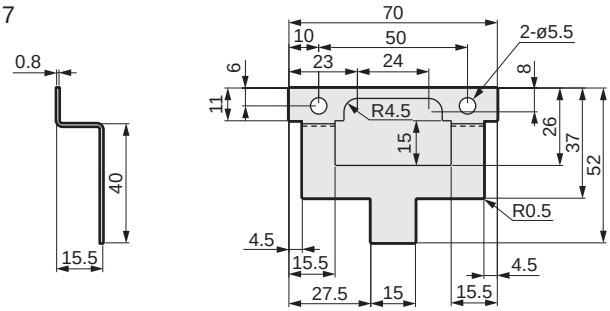


Fig. 7



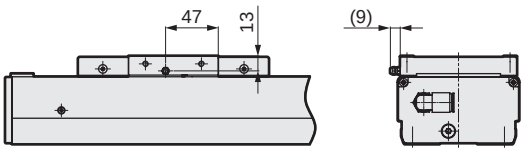
Discontinued some variations

Sales of ECS-05 to ECS-12 will be terminated.

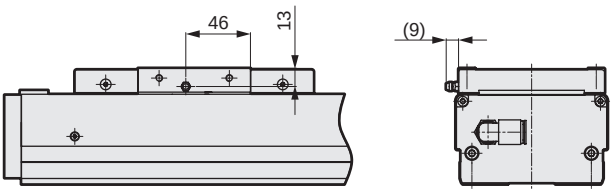
Grease nipple dimensions

*Horizontally symmetrical against the actuator.

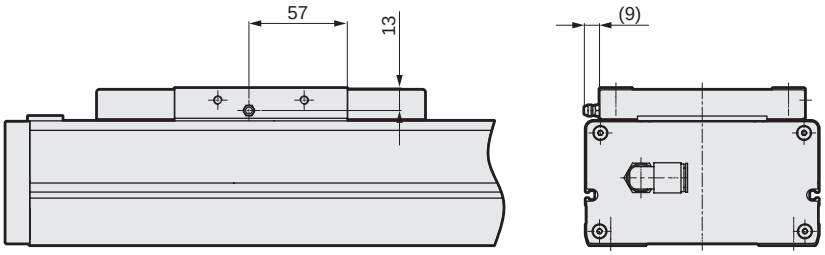
ECS-10



ECS-12



ECS-14



MEMO

Discontinued some variations

Sales of ECS-05 to ECS-12 will be terminated.

List of attachments

Basic

Motor mounting bolt (common motor mounting direction)

Model No.	Mounted motor specification	Motor size	Size	Quantity
ECS-05 ECS-06	A	□42	M3	4
	B		M3	4
ECS-10 ECS-12 ECS-14	A	□56 □60	M4	4
	B		M4	4
	C		M4	4

By motor mounting direction

Model No.	Attachment name	Included quantity
E (external direct mounting)	Coupling (Assembled at shipment)	1
R (right-side mounting) L (left-side mounting) D (bottom mounting)	Timing belt	1
	Pulley	1

When origin/limit sensor is selected *1

Sensor mounting direction	Shipping format	Quantity
Inner sensor	Fixed position assembled at shipment	3 *2
Outer sensor	Included at shipment *3	

*1 Shipping format varies according to whether origin sensor and limit sensor are assembled inside or outside.
*2 When "None" is selected for origin sensor or limit sensor, the other sensor is also "None".
*3 Sensor mounting screws are also included.

Suction port fitting

Model No.	Fitting model No.	Shipping format	Quantity
ECS-05/ECS-06	GWL6-M5	Assembled at shipment	2
ECS-10 to ECS-14	GWL10-8	Included at shipment	1

Discontinued some variations

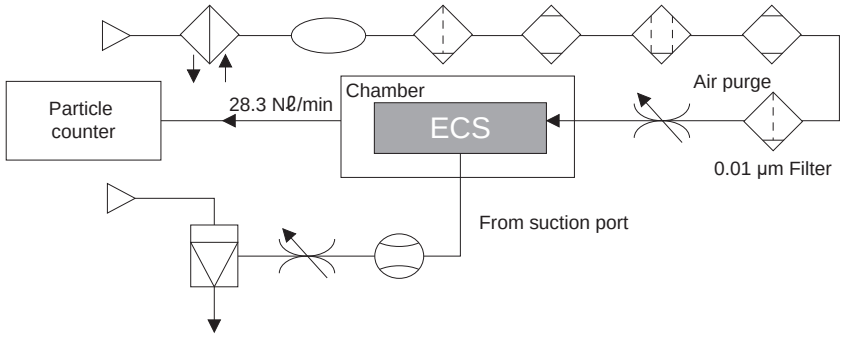
Maintenance parts

● Maintenance parts (external mounted sensor)

Basic price model No. 	Compatibility	Part
ETS-22008-000001	All models	Body
ETS-22008-000006		Cable

Dust generation characteristics Reference data

Test circuit



Measuring method

(1) Set a test sample in the acrylic resin chamber.

(2) Supply clean air at the same flow rate as the particle counter intake rate (28.3 N ℓ /min).

(3) Place the chamber in an ISO class 4 (class 10) clean bench.

(4) Activate the test sample, and measure changes in particle concentration over time during the specified measurement time.

(5) Test sample operating speed

Measuring conditions

Item		Description
Test sample	Model No.	Operating speed 400 mm/sec for ECS-06-10040
		Operating speed 800 mm/sec for ECS-14-20040
	Acceleration/deceleration time	0.3 sec
	Air intake	40.0 N ℓ /min for ECS-06-10040
		60.0 N ℓ /min for ECS-14-20040
Chamber	Internal capacity	28.3 N ℓ
Particle counter	Name	Laser dust monitor
	Min. measurable particle diameter	0.1 μm
	Intake	28.3 N ℓ /min
Setting conditions	Sampling	10 min
	Interval	40 min
	Measurement time	50 h

Dust generation data

The values in the data are measured values under the above conditions, and are not guaranteed.