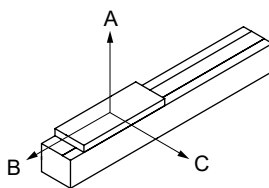


Allowable overhang length (ETS Series)

[When installed horizontally]



[Allowable overhang length]

● ETS-05

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	2	5	750	45	105
			10	350	20	47
			4	480	45	105
		5	7	300	25	55
			3	300	55	110
			5	180	30	65

● ETS-06 *1

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	2	10	400	65	150
			30	150	15	40
			10	520	50	110
		5	30	130	10	25
			3	800	145	330
			8	280	50	120
		10	15	140	23	55

● ETS-10 *2

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	30	560	50	50
			50	310	27	27
			15	440	90	90
		10	25	250	50	50
			30	200	40	40
			5	950	270	230
		16	10	480	130	110
			22	200	55	45
			5	750	250	200
		20	10	370	120	95
			15	240	80	60

● ETS-12 *3

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	30	900	70	80
			50	420	30	40
			15	900	150	160
		10	25	490	80	85
			30	400	60	70
			5	1700	430	450
		16	10	800	200	220
			22	330	80	85
			5	1200	420	400
		20	10	580	200	190
			15	370	120	120

● ETS-13 *4

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	40	800	65	230
			55	560	45	160
			70	430	34	120
		10	25	600	100	280
			35	420	70	195
			47	300	50	145
		16	10	900	230	520
			20	440	115	250
			30	280	75	170
		20	5	1200	430	850
			15	400	140	270
			24	250	85	160

*When suspending from above, use 1/3 of the static allowable moment, dynamic allowable load, dynamic allowable moment, and overhang length.
Use overhang length up to the center of gravity of the load within A, B and C directions.

*1: The numbers are the same for ETS-06 50 W.

*2: The numbers are the same for ETS-10 200 W.

*3: The numbers are the same for ETS-12 200 W and ETS-13 100 W.

*4: The numbers are the same for ETS-13 400 W.

● ETS-14 200W

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	60	2300	250	240
			80	1600	180	170
			95	1150	145	140
		10	30	2000	500	450
			50	1400	280	250
			75	1000	170	160
		16	10	2200	1200	1000
			20	1600	600	500
			44	800	260	220
		20	10	2300	1200	1000
			20	1400	600	500
			35	1000	330	290

● ETS-14 400W

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	60	2300	250	240
			80	1600	180	170
			110	1150	120	115
		10	30	2000	500	450
			50	1400	280	250
			88	700	140	125
		16	10	2200	1200	1000
			20	1600	600	500
			48	900	260	220
		20	10	2300	1200	1000
			20	1400	600	500
			40	850	280	230

● ETS-17 400W

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	60	2950	400	475
			100	2000	220	265
			110	1850	200	240
		10	60	1600	350	400
			75	1350	270	320
			90	1050	220	230
		20	30	1850	650	650
			50	1100	380	380
			75	700	240	240
		40	10	1700	1150	900
			20	850	550	430
			35	450	300	240

● ETS-17 750W

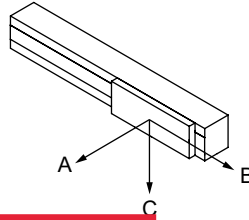
Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	60	3300	410	470
			100	2000	230	260
			120	1700	180	210
		10	60	2300	400	440
			75	1850	310	350
			95	1450	230	270
		20	30	2000	650	620
			50	1150	370	370
			83	650	210	210
		40	10	1650	1150	850
			20	530	350	270
			50	300	190	150

● ETS-22

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	60	3600	650	650
			100	2800	350	340
			150	2300	260	230
		10	60	2850	960	810
			100	2000	570	460
			150	1450	340	310
		25	50	2000	850	610
			80	1200	500	360
			120	770	300	220
		40	10	4200	2850	1850
			30	1400	900	600
			60	650	420	270

Allowable overhang length (ETS Series)

[When wall-mounted]



[Allowable overhang length]

● ETS-05

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	2	5	105	45	750
			10	47	20	350
			4	100	45	450
		5	7	55	23	240
			3	110	55	400
			5	60	30	230

● ETS-06 *1

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	2	15	110	42	400
			30	45	15	180
			5	240	95	1150
		5	10	115	50	540
			30	25	10	140
			3	320	150	700
		10	8	110	50	250
			15	50	25	120

● ETS-10 *2

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	10	160	160	1400
			20	75	75	650
			30	45	45	400
			10	130	140	690
		10	20	60	65	330
			30	40	40	210
			5	230	250	750
			10	110	120	370
		16	22	45	50	160
			5	220	250	650
			10	105	120	320
			15	65	75	210
		20				

● ETS-12 *3

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	10	330	270	2200
			20	145	120	1000
			30	90	70	600
			10	260	240	850
		10	20	115	110	520
			30	70	60	300
			5	450	450	1300
			10	210	210	600
		16	22	80	80	240
			5	410	410	1200
			10	190	195	600
			15	120	120	390
		20				

● ETS-13 *4

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	40	240	70	850
			55	170	50	600
			70	125	35	450
			25	300	100	620
		10	35	210	70	420
			47	150	50	300
			10	530	230	900
			20	250	110	430
		16	30	170	70	280
			5	900	450	1300
			15	290	150	420
			24	170	90	260
		20				

*When suspending from above, use 1/3 of the static allowable moment, dynamic allowable load, dynamic allowable moment, and overhang length. Use overhang length up to the center of gravity of the load within A, B and C directions.

*1: The numbers are the same for ETS-06 50 W.

*2: The numbers are the same for ETS-10 200 W.

*3: The numbers are the same for ETS-12 200 W and ETS-13 100 W.

*4: The numbers are the same for ETS-13 400 W.

● ETS-14 200W

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	60	240	250	1600
			80	170	180	1200
			95	140	145	1050
			30	420	460	1500
		10	50	240	250	1000
			75	150	160	700
			10	1050	1200	2650
			20	500	620	1450
		16	44	230	270	800
			10	1000	1200	1900
			20	500	600	1000
			35	270	300	600

● ETS-14 400W

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	60	240	250	1600
			80	170	180	1200
			110	115	120	1050
			30	420	460	1500
		10	50	240	250	1000
			88	120	130	700
			10	1050	1200	2650
			20	500	620	1450
		16	48	200	230	800
			10	1000	1200	1900
			20	500	600	1000
			40	230	290	600
		20				

● ETS-17 400W

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	60	500	420	2450
			100	280	240	1600
			110	250	215	1400
			60	420	380	1950
		10	75	330	300	1500
			90	270	240	1200
			30	650	650	1600
			50	375	380	900
		20	75	245	240	600
			10	900	1100	1750
			20	450	550	850
			35	240	300	470
		40				

● ETS-17 750W

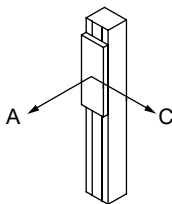
Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	60	500	430	2700
			100	280	240	1650
			120	230	200	1350
			60	420	380	2300
		10	75	330	300	1800
			95	250	230	1400
			30	640	650	1700
			50	370	380	1000
		20	83	210	210	560
			10	900	1150	1700
			20	280	350	550
			50	160	195	310
		40				

● ETS-22

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm		
				A	B	C
Straight / side/bottom	0.2	5	60	940	1100	3850
			100	540	620	2450
			150	340	400	2150
			60	800	980	3700
		10	100	460	540	2200
			150	280	350	1450
			50	600	790	1950
			80	360	480	1200
		25	120	220	290	750
			10	1950	2900	3500
			30	620	950	1400
			60	290	430	650
		40				

Allowable overhang length (ETS Series)

[When installed vertically]



[Allowable overhang length]

● ETS-05

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm
Straight / side/bottom	0.2	2	3	80
			7	35
		5	3	65
			10	120

● ETS-06 *1

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm
Straight / side/bottom	0.2	2	5	160
			15	53
		5	2	300
			4	150
		10	6	60
			1	410
		20	2	205
			5	82

● ETS-10 *2

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm
Straight / side/bottom	0.2	5	5	310
			10	155
			12	130
		10	4	360
			6	240
			8	180
		16	1	1050
			2	525
			5	210
		20	1	850
			2	425
			3	283

● ETS-12 *3

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm
Straight / side/bottom	0.2	5	5	600
			10	300
			12	250
		10	4	650
			6	430
			8	320
		16	1	1050
			2	525
			5	210
		20	3	650
				700

● ETS-13 *4

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm
Straight / side/bottom	0.2	5	5	600
			10	300
			12	250
		10	4	650
			6	430
			8	320
		16	1	1350
			2	900
			6	350
		20	1	1050
			2	900
			4	550

*When suspending from above, use 1/3 of the static allowable moment, dynamic allowable load, dynamic allowable moment, and overhang length. Use overhang length up to the center of gravity of the load within A, B and C directions.

*1: The numbers are the same for ETS-06 50 W.

*2: The numbers are the same for ETS-10 200 W.

*3: The numbers are the same for ETS-12 200 W and ETS-13 100 W.

*4: The numbers are the same for ETS-13 400 W.

● ETS-14 200W

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm
Straight / side/bottom	0.2	5	20	755
			25	605
			27	560
		10	10	1350
			15	900
			18	750
		16	2	2400
			4	1700

● ETS-14 400W

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm
Straight / side/bottom	0.2	5	20	755
			25	605
			33	455
		10	10	1350
			15	900
			22	650
		16	2	2400
			4	1700
			10	1000
		20	4	1800
			6	1200
			8	900

● ETS-17 400W

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm
Straight / side/bottom	0.2	5	20	1400
			30	950
			40	700
		10	15	1700
			25	1000
			30	850
		20	5	2000
			10	1800
			14	1400
		40	7	650

● ETS-17 750W

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm
Straight / side/bottom	0.2	5	20	1500
			30	1000
			50	600
		10	15	1700
			25	1000
			40	620
		20	5	2200
			10	1900
			25	730
		40	10	700

● ETS-22

Motor mounted	Acceleration/deceleration time sec	Screw lead	Weight kg	Overhang mm
Straight / side/bottom	0.2	5	30	2400
			50	1450
			55	1050
		10	20	3000
			30	2000
			45	1350
		25	15	2600
			20	1950
			25	1550
		40	5	2600
			10	1950

Discontinued some variations
Sales of ETS-05 to ETS-12 discontinued.

MEMO

Servo motor compatible							Stepper motor compatible				Safety precautions
EBS	EBR	ETS	ETS Multi-Axis	ECS	ETV	ECV	EKS	EBS	EBR	ETS	ECS

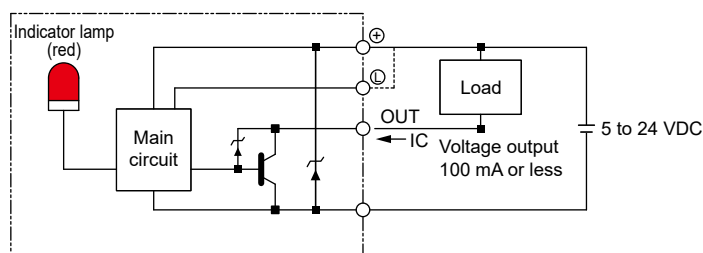
Origin sensor, limit sensor

Manufacturer	Model	Quantity
OMRON Corporation	EE-SX672	3

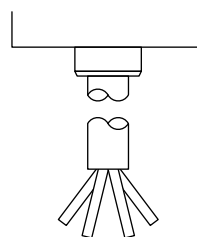
Performance

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 $\pm 10\%$ 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		Motor mounting direction					
Body size	E/D/R/L	Body size	E/D/B	R		L	
				Grease nipple None	Grease nipple Yes	Grease nipple None	Grease nipple Yes
ETS-05	Fig. 1	ETS-10	Fig. 3	Fig. 3		Fig. 3	
ETS-06	Fig. 2	ETS-12	Fig. 3	Fig. 3	Fig. 4	Fig. 3	Fig. 4

Fig. 1

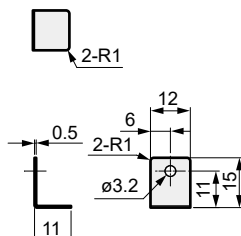


Fig. 2

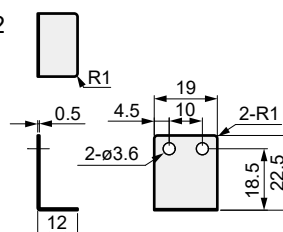


Fig. 3

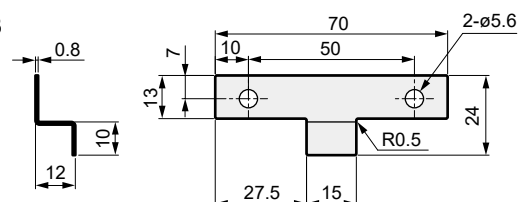
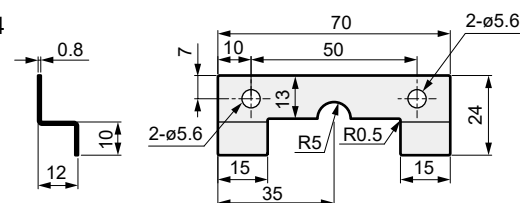


Fig. 4



Motor mounting direction		Motor mounting direction			
Body size	E/D/B	R		L	
		Grease nipple None	Grease nipple Yes	Grease nipple None	Grease nipple Yes
ETS-13	Fig. 5	Fig. 5	Fig. 6	Fig. 5	Fig. 6
ETS-14	Fig. 5	Fig. 5	Fig. 7	Fig. 5	Fig. 8
ETS-17	Fig. 5	Fig. 5	Fig. 7	Fig. 5	Fig. 8
ETS-22	Fig. 9	Fig. 9	Fig. 10	Fig. 9	Fig. 10

Fig. 5

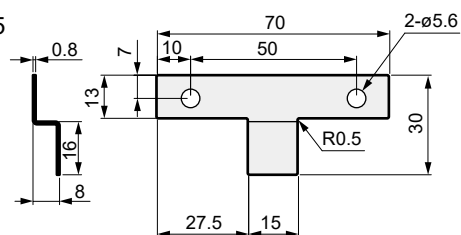


Fig. 6

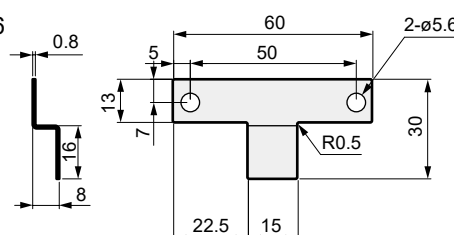


Fig. 7

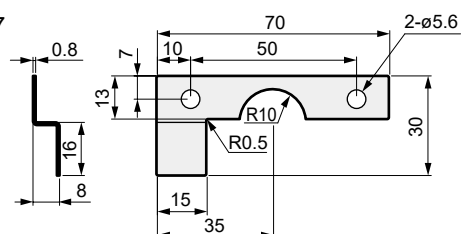


Fig. 8

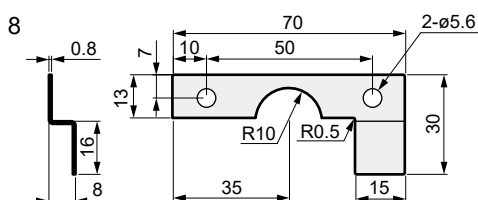


Fig. 9

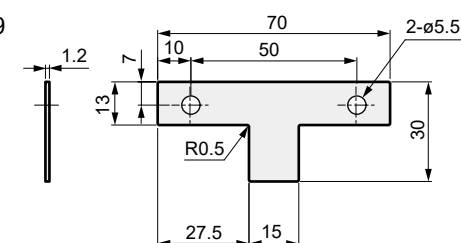
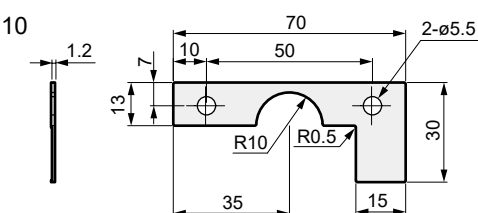


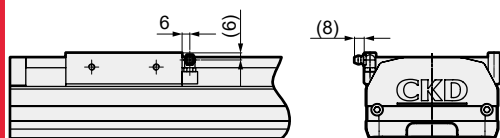
Fig. 10



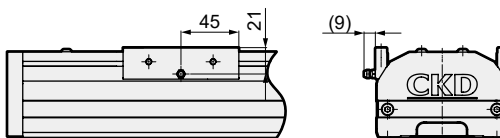
Grease nipple dimensions

*Horizontally symmetrical against the actuator.

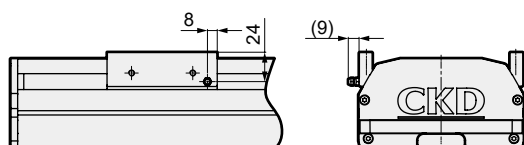
● ETS-10



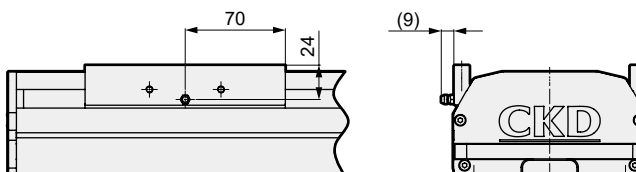
● ETS-12



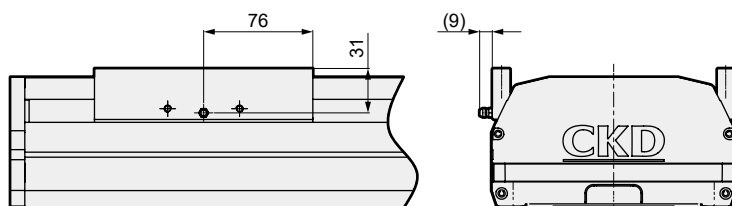
● ETS-13



● ETS-14



● ETS-17



● ETS-22

