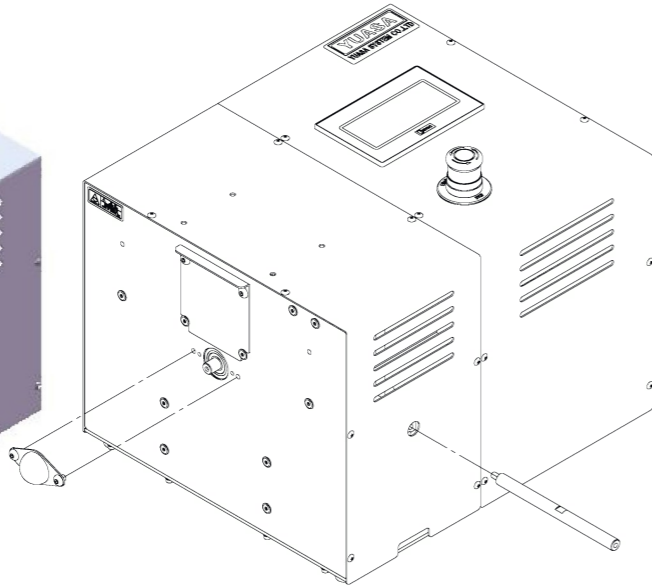


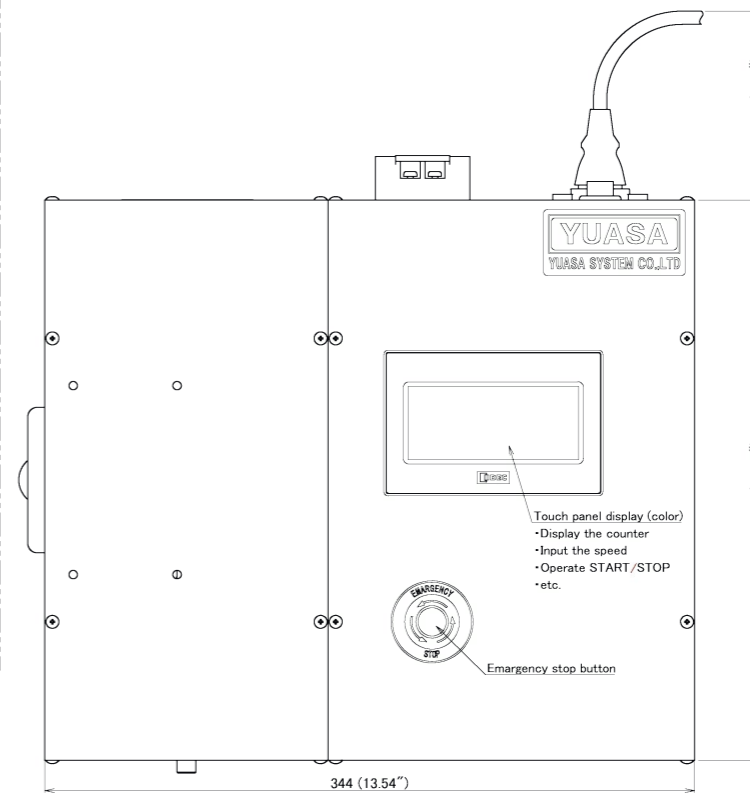
Rotary Reciprocation Mode



Remove (or attach) the shaft-cover and the linear shaft



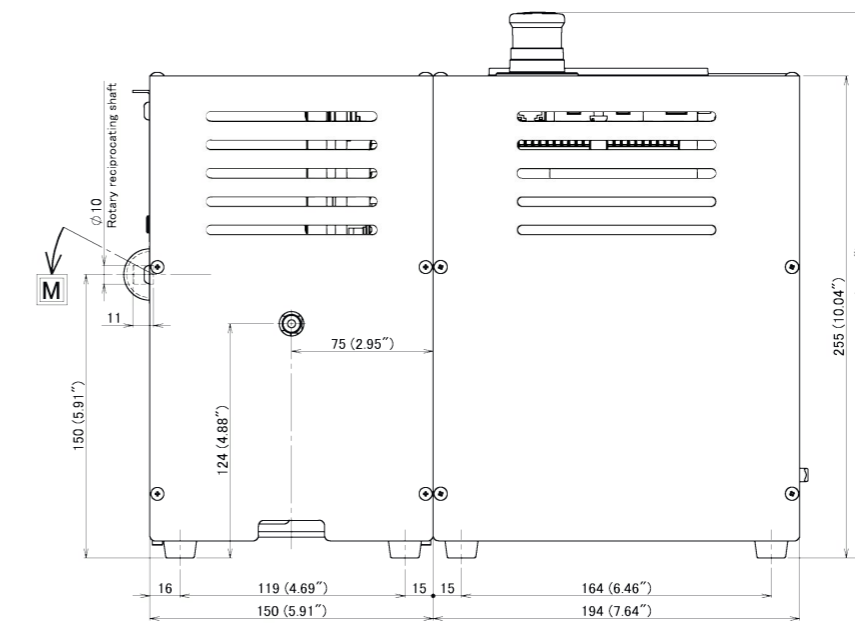
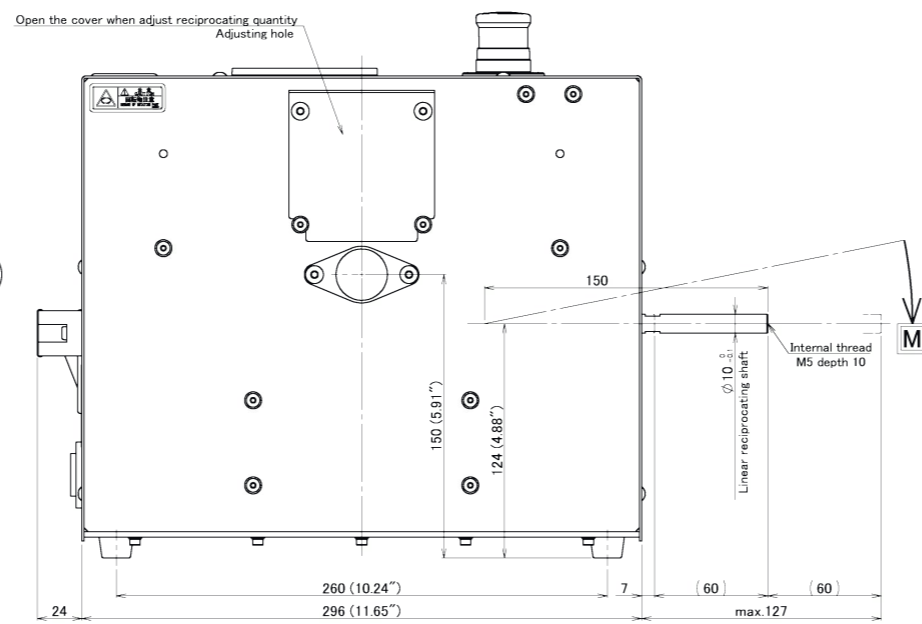
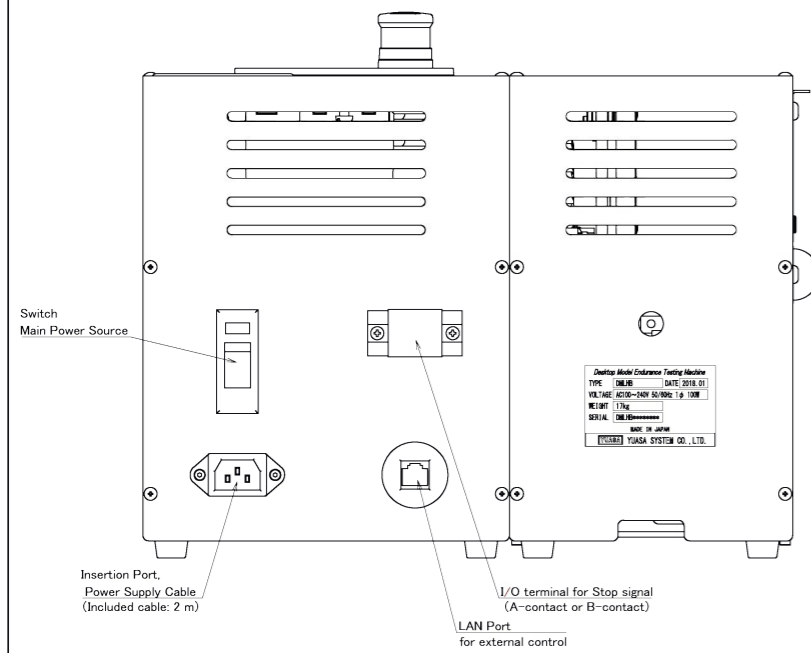
Linear Reciprocation Mode



Touch panel display (color)
 • Display the counter
 • Input the speed
 • Operate START/STOP
 • etc.



Emergency stop button



	ROTARY RECIPROCATION MODE	LINEAR RECIPROCATION MODE
ELECTRICAL POWER	AC100-240V (50/60 Hz) 100VA	
MOTOR UNIT	DC brushless motor [DC24V, 3.5A(maximum), 30W, Gear box 1/20]	
RECIPROCATING SPEED	10~120 rec/min	
RECIPROCATING ANGLE/DISTANCE	0~±270 deg.	0~±120 mm
PERMISSIBLE TORQUE/OUTPUT	Refer to the chart on the margin. (max. 1.0 N·m)	1800/st. (max. 400 N)
PERMISSIBLE MOMENT OF INERTIA	Refer to formulas on the margin.	—
OUTPUT SHAFT STATIC RATED MOMENT	1.5 N·m *Refer to the drawing "[M]".	1.3 N·m *Refer to the drawing "[M]".
COUNTER	8-digits display (Can set the target number)	
INSTALLATION ENVIRONMENT	Temp. : +5~+40°C (41~104°F) Humi. : 15~85%rh (No condensation)	
SAFETY INTERLOCK	Safety cover for the testing jig: Covered or Not	
NOTE	*Included tools: Spanner(8x10 mm), T-shaped hex wrench(3 mm), Locking latch *Should limit the reciprocating speed and angle (or distance) to protect equipment when it drives the heavy jigs or the hard samples.	
材質 MATERIAL	第3角法 THIRD ANGLE PROJECTION	尺 度 SCALE
質量 MASS	about 16.5 kg	1:2
表面処理 SURFACE PROCESSING	作成日付 DATE	名 稱
熱処理 HEAT TREATMENT	承認 APPROVED	DMLHB Desktop Model Endurance Testing Machine
	検 図 CHECKED	図 番 DWG. No.
	設 計 DESIGNED	ET000003S001-0

Permissible moment of inertia-I max.
 *Confirm permissible moment of inertia with formulas below.
 *Make sure that moment of inertia (add up jigs and samples) is less than permissible moment of inertia in the testing condition.
 $I_{max} [kg \cdot m^2] = 215000 \div \text{Rec. Speed}[\text{rec}/\text{min}]^2 \div \text{Rec. Angle}[\text{deg.}]$
 ex. Moment of inertia : 0.003 kg·m²
 Reciprocating speed : PENDING rec/min
 Reciprocating angle : ±90 deg.
 Moment of inertia < Permissible moment of inertia
 $0.003 < 215000 \div v^2 \div 90^2$
 $v < 94.06 \text{ rec}/\text{min}$

Max. Load and Acceleration of the output shaft (in both of moving ends)
 *Confirm the proportion of output with formulas below.
 *Make sure that consider hardness of sample, movement resistance and etc. besides acceleration.)
 • Reciprocating speed : v [rec/min]
 • Reciprocating distance : $\pm L$ [deg.]
 • Mass of object that move : m [kg]
 $\text{max. Acceleration } (\alpha_{max.}) = L \times v^2 \times 1.1 \times 10^{-5} [\text{m}/\text{s}^2]$
 $\text{max. Load} = \alpha_{max.} \times m [\text{N}] < 400 [\text{N}]$

