

Three fingers type

YRG-2004T

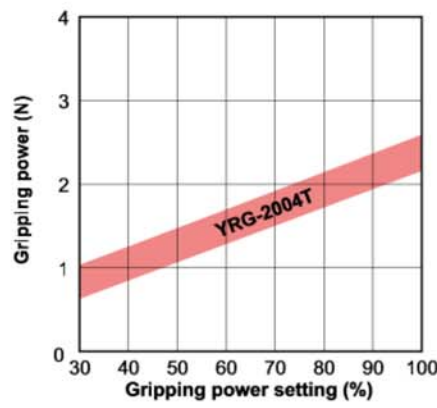


Basic specifications

Model name		YRG-2004T
Holding power	Max. continuous rating (N)	2.5
	Min. setting (% (N))	30 (0.75)
	Resolution (% (N))	1 (0.025)
Open/close stroke (mm)		3.5
Speed	Max. rating (mm/sec)	100
	Min. setting (% (mm/sec))	20 (20)
	Resolution (% (mm/sec))	1 (1)
	Holding speed (Max.) (%)	50
Repetitive positioning accuracy (mm)		+/-0.03
Guide mechanism		Linear guide
Max. holding weight ^{Note 1} (kg)		0.02
Weight (g)		90

• Holding power control : 30 to 100% (1% steps) • Speed control : 20 to 100% (1% steps)
 • Acceleration control : 1 to 100% (1% steps) • Multipoint position control : 10,000 max.
 Note. Design the finger as short and lightweight as possible.
 Note. Set the parameters and holding power (%) of the holding movement command so that any excessive shock is not applied to the finger during operation.
 Note. When installing or uninstalling the finger, tighten the bolts while the finger is being held securely so that any excessive force or shock is not applied to the guide block.
 Note. Workpiece weight that is able to be held may greatly vary depending on the material, shape, and/or holding surface conditions of the finger.
 Note 1. Design the weight of a workpiece to be held so that it is approximately 1/10 to 1/20 of the holding power.
 (Consider further allowance when moving and swinging the gripper that keeps holding a workpiece.)

Gripping power vs. gripping power setting (%)



• Graph shows a general guide to gripping power versus gripping power setting (%). Variations will appear in the actual gripping power.

Allowable load and load moment

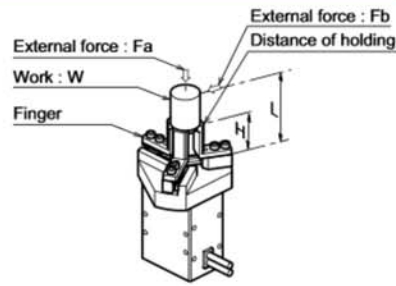
		YRG-2004T	
Finger	Allowable load	N	6
	Allowable pitching moment	N·m	0.02
	Max. weight (1 pair)	g	10
	Max. holding position	L mm	15

• When the external forces F_a and F_b are applied to a portion the distance (L) apart from the finger installation surface, the load (F) and moment (M) are calculated from the formulas shown below.

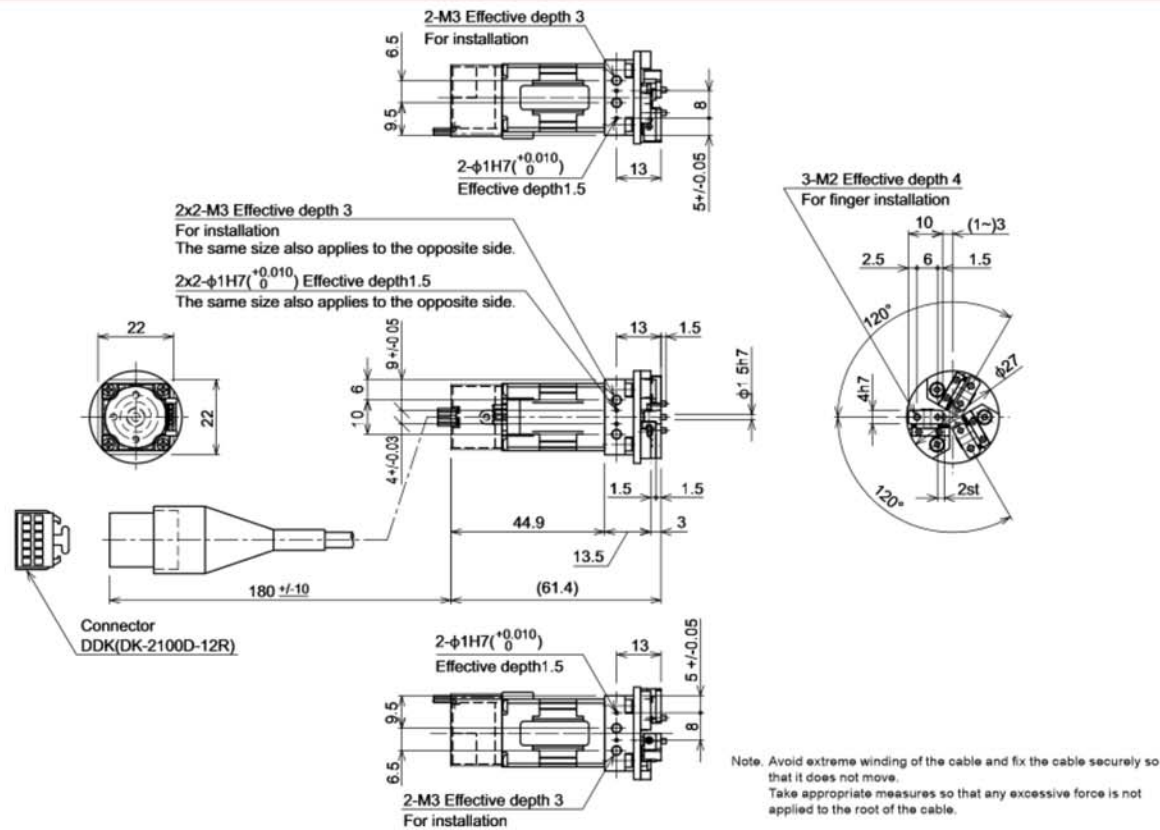
$F = F_a + W \times g$
 $M = F_b \times L$

F_a : External force [N]
 F_b : External force [N]
 W : Workpiece weight [Kg]
 g : Gravity acceleration [m/s²]
 L : Distance of holding point [m]

F : Load [N]
 M : Moment [N·m]
 L : Distance of point of external force application [m]



YRG-2004T



APPLICATION
 TRANSERVO
 FLIP-X
 PHASER
 XY-X
 YK-XG
 VP-X
 CLEAN
 CONTROLLER
 INFORMATION
 Robot positioner
 Pulse string driver
 Robot controller
 VV
 Electric gripper
 Option