

Screw type "T" style

# YRG-2020FT/2840FT



## Basic specifications

Model name	YRG-2020FT	YRG-2840FT	
Model number	KCF-M2014-A0	KCF-M2014-B0	
Holding power	Max. continuous rating (N)	50	150
	Min. setting (% (N))	30 (15)	30 (45)
	Resolution (% (N))	1 (0.5)	1 (1.5)
Open/close stroke (mm)		19	38
Speed	Max. rating (mm/sec)	50	50
	Min. setting (% (mm/sec))	20 (10)	20 (10)
	Resolution (% (mm/sec))	1 (0.5)	1 (0.5)
	Holding speed (Max.) (%)	50	50
Repetitive positioning accuracy (mm)	+/-0.01	+/-0.01	
Guide mechanism	Linear guide		
Max. holding weight <sup>Note 1</sup> (kg)	0.5	1.5	
Weight (g)	420	890	

- 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.

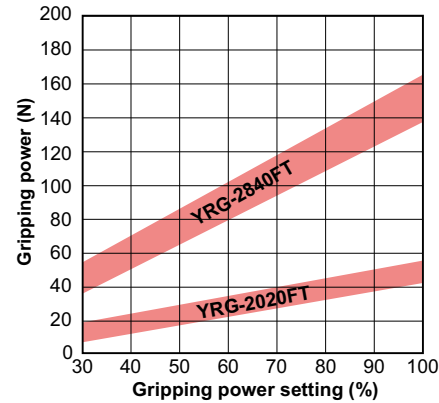
Note 1. Design the weight of a workpiece to be held so that it is approximately 1/10 to 1/20 of the holding power. (Consider further allowance when moving and swinging the gripper that keeps holding a workpiece.)

## Allowable load and load moment

Guide	Allowable load	YRG-2020FT		YRG-2840FT	
		F	N		
	Allowable load		1000	1300	
	Allowable pitching moment	Mp	N·m	3.5	5
	Allowable yawing moment	My	N·m	4.2	6
	Allowable rolling moment	Mr	N·m	7.3	12.7
Finger	Max. weight (1 pair)		g	40	80
	Max. holding position	L	mm	30	30
	Max. overhang	H	mm	20	20

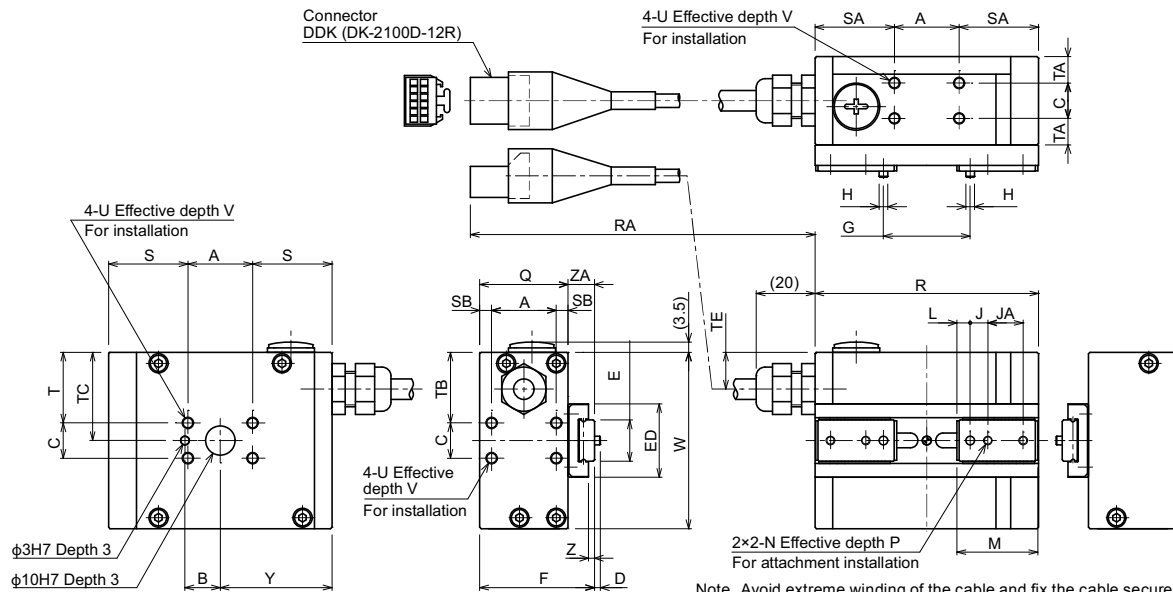
- Mount the finger so that the allowable load and load moment of the guide do not exceed the values stated in the table above.
- Make the adjustment so that the finger weight, holding length (L) from the installation surface to the holding point, and overhang (H) do not exceed the values stated in the table above.
- Please contact your YAMAHA sales dealer for further information on combination of L and H.

## 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.

## YRG-2020FT/2840FT



Note. Avoid extreme winding of the cable and fix the cable securely so that it does not move.  
 Take appropriate measures so that any excessive force is not applied to the root of the cable.

	A	B	C	D	E	ED	F	G	H	J	JA	K	L	M	N	P		
YRG-2020FT	22	12	12	2	14 <sub>0 -0.05</sub>	25	39	10.5 to 29.5	φ3 <sub>0 -0.01</sub>	6	12	12	4.5	27.5	M3	5		
YRG-2840FT	30	15	16	2	18 <sub>0 -0.05</sub>	30	52	13 to 51	φ4 <sub>0 -0.012</sub>	8	14	14	5.5	34.5	M4	7.5		
	Q	R	RA	S	SA	SB	T	TA	TB	TC	TD	TE	U	V	W	Y	Z	ZA
YRG-2020FT	30	76	175+/-10	27	27	4	24	9	24	30	12.5	12.5	M4	6	60	38	2	9
YRG-2840FT	40	110	135+/-10	40	40	5	28	12	28	36	14	14	M5	7.5	72	55	3	12

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