Compact single cam type

YRG-2005SS

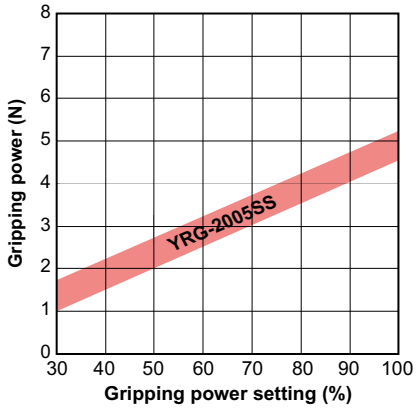
Basic specifications

Model name		YRG-2005SS
Holding power	Max. continuous rating (N)	5
	Min. setting (% (N))	30 (1.5)
	Resolution (% (N))	1 (0.05)
Open/close stroke (mm)		3.2
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)		+/-0.02
Guide mechanism		Linear guide
Max. holding weight Note 1 (kg)		0.05
Weight (g)		90

• Hoding 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.)

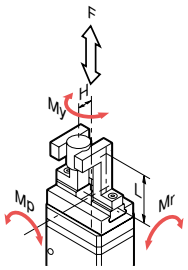
Gripping power vs. gripping power setting (%)



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

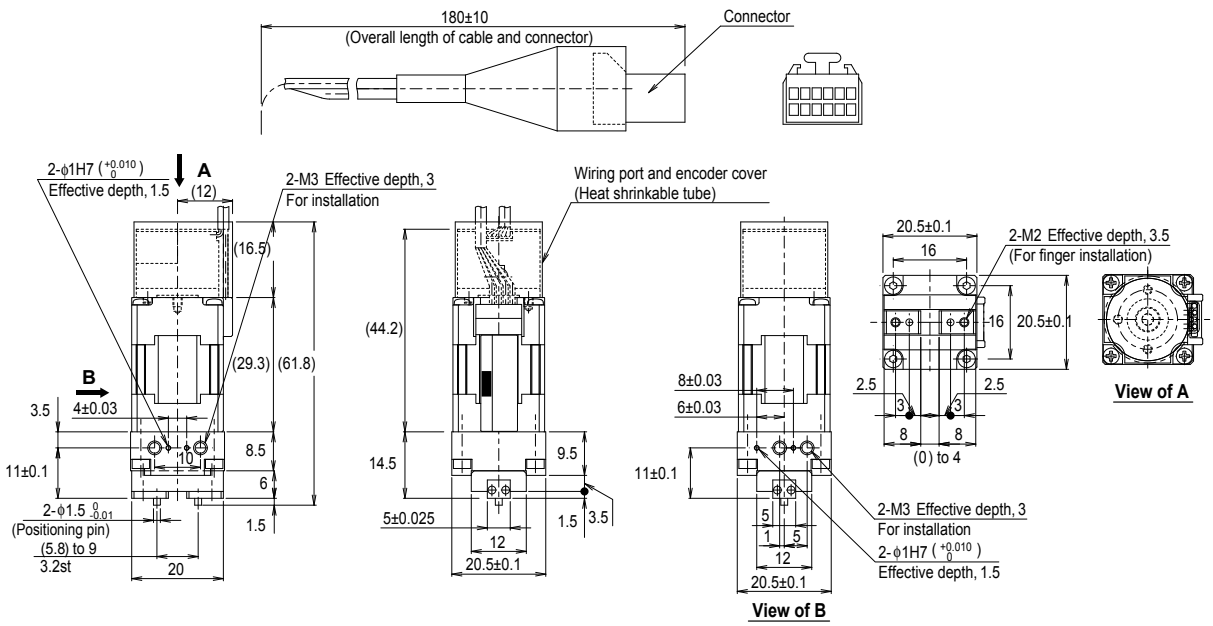
Allowable load and load moment

				YRG-2005SS
Guide	Allowable load	F	N	12
	Allowable pitching moment	Mp	N•m	0.04
	Allowable yawing moment	My	N•m	0.04
	Allowable rolling moment	Mr	N•m	0.08
Finger	Max. weight (1 pair)		g	10
	Max. holding position	L	mm	20
	Max. overhang	H	mm	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.

YRG-2005SS



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.

Single cam type

YRG-2010S/2815S/4225S

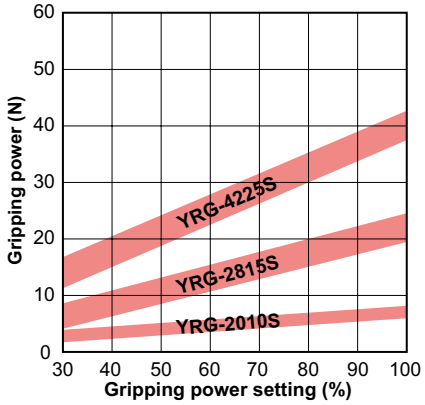
Basic specifications

Model name		YRG-2010S	YRG-2815S	YRG-4225S
Holding power	Max. continuous rating (N)	6	22	40
	Min. setting (% (N))	30 (1.8)	30 (6.6)	30 (12)
	Resolution (% (N))	1 (0.06)	1 (0.22)	1 (0.4)
Open/close stroke (mm)		7.6	14.3	23.5
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)		+/-0.02		
Guide mechanism		Linear guide		
Max. holding weight Note 1 (kg)		0.06	0.22	0.4
Weight (g)		160	300	580

• Hoding 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.)

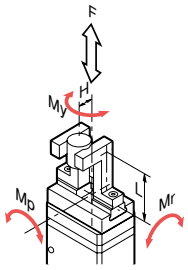
Gripping power vs. gripping power setting (%)



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

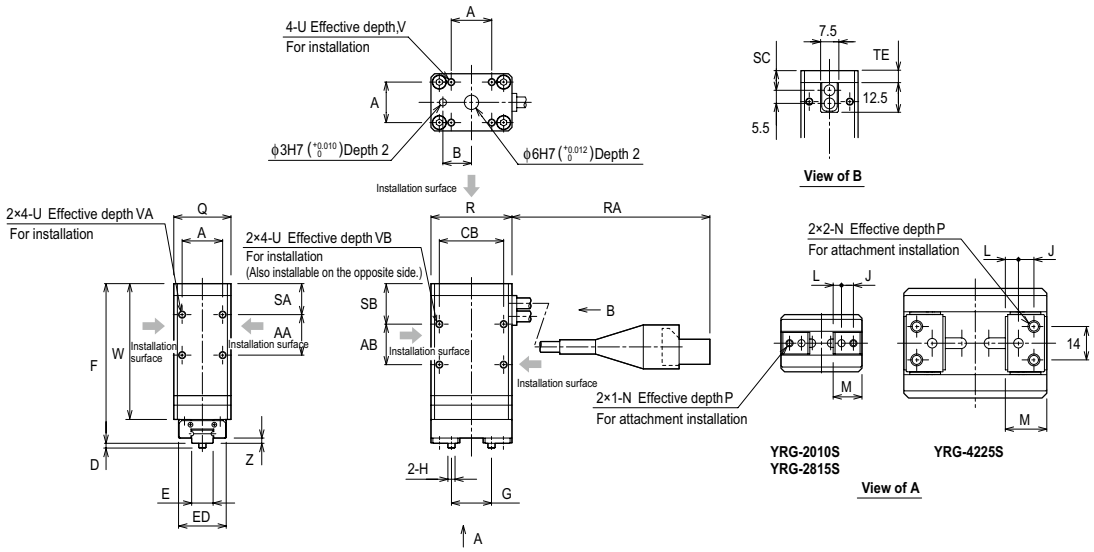
Allowable load and load moment

				YRG-2010S	YRG-2815S	YRG-4225S
Guide	Allowable load	F	N	450	350	600
	Allowable pitching moment	Mp	N•m	0.7	0.5	1.1
	Allowable yawing moment	My	N•m	0.8	0.6	1.3
	Allowable rolling moment	Mr	N•m	2.3	2.8	8.6
Finger	Max. weight (1 pair)		g	15	30	50
	Max. holding position	L	mm	20	20	25
	Max. overhang	H	mm	20	25	30



• 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.

YRG-2010S/2815S/4225S



	A	AA	AB	B	CB	D	E	ED	F	G	H	J	L
YRG-2010S	17	17	17	12	27	2	9 0 -0.05	20	71	8.4 to 16	φ3 0 -0.01	5	3.5
YRG-2815S	24	24	14	15	38	2	14 0 -0.05	25	78	9.6 to 23.9	φ3 0 -0.01	6	4.3
YRG-4225S	36	25	13	20	50	3	24 0 -0.05	40	86	12 to 35.5	φ4 0 -0.012	6.5	5.5

	M	N	P	Q	R	RA	SA	SB	SC	TE	U	V	VA	VB	W	Z
YRG-2010S	12.1	M3	5	24	34	165+/-10	13	17	8.3	5	M3	5	6	6	61	2.2
YRG-2815S	15	M4	5	32	46	140+/-10	16	21	9.3	6	M4	6	8	8	69	2
YRG-4225S	17.4	M5	8	46	60	235+/-10	18	24	10.8	7.5	M5	7.5	8	10	72	3