

## Single-Phase, 200 VAC

Model SGD7S-		R70A	R90A	1R6A	2R8A	5R5A	120A	
Maximum Applicable Motor Capacity [kW]		0.05	0.1	0.2	0.4	0.75	1.5	
Continuous Output Current [Arms]		0.66	0.91	1.6	2.8	5.5	11.6	
Instantaneous Maximum Output Current [Arms]		2.1	3.2	5.9	9.3	16.9	28	
Main Circuit	Power Supply	200 VAC to 240 VAC, -15% to +10%, 50 Hz/60 Hz						
	Input Current [Arms]*	0.8	1.6	2.4	5.0	8.7	16	
Control	Power Supply	200 VAC to 240 VAC, -15% to +10%, 50 Hz/60 Hz						
	Input Current [Arms]*	0.2	0.2	0.2	0.2	0.2	0.25	
Power Supply Capacity [kVA]*		0.2	0.3	0.6	1.2	1.9	4.0	
Power Loss*	Main Circuit Power Loss [W]	5.0	7.1	12.1	23.7	39.2	71.8	
	Control Circuit Power Loss [W]	12	12	12	12	14	16	
	Built-in Regenerative Resistor Power Loss [W]	-	-	-	-	8	16	
	Total Power Loss [W]	17.0	19.1	24.1	35.7	61.2	103.8	
Regenerative Resistor	Built-In Regenerative Resistor	Resistance [ $\Omega$ ]	-	-	-	-	40	12
		Capacity [W]	-	-	-	-	40	60
	Minimum Allowable External Resistance [ $\Omega$ ]	40	40	40	40	40	12	
Overvoltage Category		III						

\* This is the net value at the rated load.

## ◆ Three-phase, 200 VAC

Model SGD7S-		R70 A	R90 A	1R6 A	2R8 A	3R8 A	5R5 A	7R6 A	120A	180A	200A	330A	
Maximum Applicable Motor Capacity [kW]		0.05	0.1	0.2	0.4	0.5	0.75	1.0	1.5	2.0	3.0	5.0	
Continuous Output Current [Arms]		0.66	0.91	1.6	2.8	3.8	5.5	7.6	11.6	18.5	19.6	32.9	
Instantaneous Maximum Output Current [Arms]		2.1	3.2	5.9	9.3	11	16.9	17	28	42	56	84.0	
Main Circuit	Power Supply	200 VAC to 240 VAC, -15% to +10%, 50 Hz/60 Hz											
	Input Current [Arms]*	0.4	0.8	1.3	2.5	3.0	4.1	5.7	7.3	10	15	25	
Control Power Supply		200 VAC to 240 VAC, -15% to +10%, 50 Hz/60 Hz											
Power Supply Capacity [kVA]*		0.2	0.3	0.5	1.0	1.3	1.6	2.3	3.2	4.0	5.9	7.5	
Power Loss*	Main Circuit Power Loss [W]	5.1	7.3	13.5	24.0	20.1	43.8	53.6	65.8	111.9	113.8	263.7	
	Control Circuit Power Loss [W]	17	17	17	17	17	17	17	22	22	22	27	
	Built-in Regenerative Resistor Power Loss [W]	-	-	-	-	8	8	8	10	16	16	36.0	
	Total Power Loss [W]	22.1	24.3	30.5	41.0	45.1	68.8	78.6	97.8	149.9	151.8	326.7	
Regenerative Resistor	Built-In Regenerative Resistor	Resistance [ $\Omega$ ]	-	-	-	-	40	40	40	20	12	12	8
		Capacity [W]	-	-	-	-	40	40	40	60	60	60	180
	Minimum Allowable External Resistance [ $\Omega$ ]	40	40	40	40	40	40	40	40	20	12	12	8
Overvoltage Category		III											

\* This is the net value at the rated load.

## Σ-7 Series Combination

### ● Combination of Rotary Servomotors and SERVOPACKS

Rotary Servomotor Model		Rated Output	Sigma-7 SERVOPACK Model						
			100V/200V	200V		400V			
			SGD7S-□□□□	SGD7W-□□□□	SGD7S-□□□□	SGD7W-□□□□			
SGMMV (Low inertia, ultra-small capacity) 6000 RPM	SGMMV-A1A	10 W	R90A, R90F	1R6A <sup>†</sup> , 2R8A <sup>†</sup>	2R9E	-			
	SGMMV-A2A	20 W							
	SGMMV-A3A	30 W	1R6A, 2R1F						
SGM7J (Medium inertia, high speed) 3000 RPM	SGM7J-A5A	50 W	R70A, R70F	1R6A <sup>†</sup> , 2R8A <sup>†</sup>	-	-			
	SGM7J-01A	100 W	R90A, R90F						
	SGM7J-C2A	150 W	1R6A, 2R1F						
	SGM7J-02□	200 W							
	SGM7J-04□	400 W	2R8A, 2R8F				2R8A, 5R5A <sup>†</sup> , 7R6A <sup>†</sup>	1R9D	2R6D* 2R6D* or 5R4D*
	SGM7J-06A	600 W							
	SGM7J-08□	750 W	5R5A				5R5A, 7R6A	3R5D	2R6D or 5R4D*
	SGM7J-15D	1.5 kW	N/A				N/A	5R4D	5R4D
SGM7A (Low inertia, high speed) 3000 RPM	SGM7A-A5A	50 W	R70A, R70F	1R6A <sup>†</sup> , 2R8A <sup>†</sup>	-	-			
	SGM7A-01A	100 W	R90A, R90R						
	SGM7A-C2A	150 W	1R6A, 2R1F						
	SGM7A-02□	200 W	2R8A, 2R8F				2R8A, 5R5A <sup>†</sup> , 7R6A <sup>†</sup>	1R9D	2R6D* 2R6D* or 5R4D*
	SGM7A-04□	400 W							
	SGM7A-06A	600 W	5R5A				5R5A, 7R6A	3R5D	2R6D or 5R4D*
	SGM7A-08□	750 W							
	SGM7A-10□	1.0 kW	120A					5R4D	5R4D*
	SGM7A-15A	1.5 kW						5R4D	5R4D
	SGM7A-20A	2.0 kW	180A					8R4D	
	SGM7A-25A	2.5 kW						120D	
	SGM7A-30A	3.0 kW	200A					120D	
	SGM7A-40A	4.0 kW	330A					170D	
	SGM7A-50A	5.0 kW						170D	
SGM7A-70A	7.0 kW	550A							
SGM7P (Medium inertia, flat type) 3000 RPM	SGM7P-01A	100 W	R90A, R90F	1R6A <sup>†</sup> , 2R8A <sup>†</sup>	-	-			
	SGM7P-02A	200 W	2R8A, 2R8F	2R8A, 5R5A <sup>†</sup> , 7R6A <sup>†</sup>					
	SGM7P-04A	400 W							
	SGM7P-08A	750 W	5R5A	5R5A, 7R6A					
	SGM7P-15A	1.5 kW	120A						
SGM7G (Medium inertia, large torque) 1500 RPM	SGM7G-03A	300 W		5R5A <sup>†</sup> , 7R6A <sup>†</sup>					
	SGM7G-05A	450 W	3R8A		1R9D	2R6D or 5R4D*			
	SGM7G-09A	850 W	7R6A	7R6A	3R5D	5R4D*			
	SGM7G-13A	1.3 kW	120A		5R4D	5R4D			
	SGM7G-20A	1.8 kW	180A		8R4D				
	SGM7G-30A	2.9 kW <sup>2</sup>	330A		120D				
	SGM7G-44A	4.4 kW			170D				
	SGM7G-55A	5.5 kW	470A		210D				
	SGM7G-75A	7.5 kW	550A		260D				
	SGM7G-1AA	11 kW	590A		280D				
	SGM7G-1EA	15 kW	780A		370D				

## Sigma-7

# Standard Rotary

The world's largest manufacturer of servo motors brings 25 years of design innovation into each Sigma-7 rotary servo. Choose from a wide range of sizes, speeds and torque ratings, then add an amplifier and an MPic controller to create a complete motion automation system.

100/200 V				400 V			
Low Inertia ▼		Medium Inertia ▼		Low Inertia ▼		Medium Inertia ▼	
							
SGMMV	3W-30W	SGM7P	100W-1.5kW	SGM7A	200W-5kW	SGM7J	200W-1.5kW
							
SGM7A	50W-7kW	SGM7J	50W-750W			SGM7G	300W-15kW
							
	SGM7G		300W-15kW			SGMMV	22kW-55kW

Производитель	Yaskawa Electric (Япония)
Серия	Sigma-7 Single-Axis Servopacks (SGD7S)
Модель	SGD7S-R90A10A
Номинальная мощность	100 Вт
Номинальный ток	0.9 А
Напряжение питания	3-фазы 200 VAC (50/60 Hz)
Интерфейс управления	Mechatrolink-II
Частота отклика	До 3.1 kHz
Поддерживаемые функции Safe	SIL 3, STO, SLS, SS1/SS2
Защита корпуса	Drip-proof (IP20)
Температура эксплуатации	0...+55 °C
Функции подавления вибраций	Ripple Compensation, Vibration Suppression
Монтаж	DIN-рейка

- ◆ Three-phase, 200 VAC: SGD7S-2R8A
- Single-phase, 100 VAC: SGD7S-2R1F

