

## 6. HG-KN SERIES

### 6.3 Standard specifications

#### 6.3.1 Standard specifications list

Item		Servo motor	HG-KN series (low inertia/small capacity)				
			13(B)(J)	23(B)(J)	43(B)(J)	73(B)J	
Power supply capacity		Refer to "Power supply equipment capacity and generated loss of servo amplifiers" in Servo Amplifier Instruction Manual.					
Continuous running duty (Note 1)	Rated output [kW]		0.1	0.2	0.4	0.75	
	Rated torque [N·m]		0.32	0.64	1.3	2.4	
Maximum torque [N·m]			0.95	1.9	3.8	7.2	
Rated speed (Note 1) [r/min]			3000				
Maximum speed [r/min]			5000 (6000) (Note 8)				
Instantaneous permissible speed [r/min]			5750 (6900) (Note 9)				
Power rate at continuous rated torque	Standard [kW/s]		12.9	18.0	43.2	44.5	
	With an electromagnetic brake [kW/s]		12.0	16.4	40.8	41.0	
Rated current [A]			0.8	1.3	2.6	4.8	
Maximum current [A]			2.4	3.9	7.8	14	
Moment of inertia J	Standard [ $\times 10^{-4}$ kg·m <sup>2</sup> ]		0.0783	0.225	0.375	1.28	
	With an electromagnetic brake [ $\times 10^{-4}$ kg·m <sup>2</sup> ]		0.0843	0.247	0.397	1.39	
Recommended load to motor inertia ratio (Note 2)			15 times or less				
Speed/position detector	Combination with MR-JE-_B(F)/MR-JE-_C		17-bit encoder common to absolute position/incremental systems (resolution per servo motor revolution: 131072 pulses/rev)				
	Combination with MR-JE-_A		Incremental 17-bit encoder system (resolution per servo motor revolution: 131072 pulses/rev)				
Oil seal	With		○				
	None		○				
Thermistor			None				
Insulation class			130 (B) (Note 8)				
Structure			Totally enclosed, natural cooling (IP rating: IP65 (Note 3))				
Environment (Note 4)	Ambient temperature	Operation	0 °C to 40 °C (non-freezing)				
		Storage	-15 °C to 70 °C (non-freezing)				
	Ambient humidity	Operation	10 %RH to 80 %RH (non-condensing)				
		Storage	10 %RH to 90 %RH (non-condensing)				
	Ambience			Indoors (no direct sunlight), free from corrosive gas, flammable gas, oil mist, dust, and dirt			
	Altitude			1000 m or less above sea level			
Vibration resistance (Note 5)			X, Y: 49 m/s <sup>2</sup>				
Vibration rank (Note 6)			V10				
Permissible load for the shaft (Note 7)	L [mm]		25	30	40		
	Radial [N]		88	245	392		
	Thrust [N]		59	98	147		
Mass	With oil seal	Standard [kg]	0.57	0.98	1.5	3.0	
		With an electromagnetic brake [kg]	0.77	1.4	1.9	4.0	
	Without oil seal	Standard [kg]	0.54	0.91	1.4		
		With an electromagnetic brake [kg]	0.74	1.3	1.8		