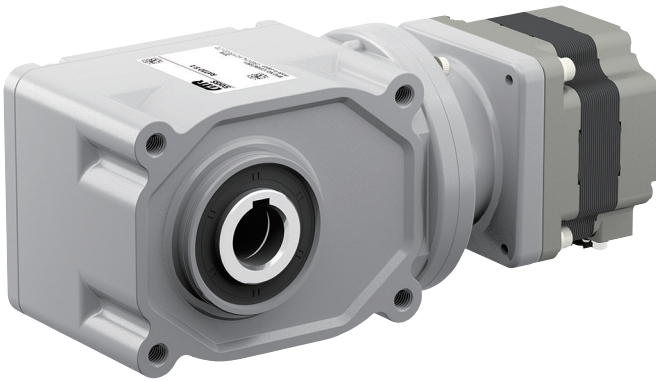


Right-Angle Hollow Shaft Hypoid JH Gear 200 W (1/4 HP), 300 W (2/5 HP), 400 W (1/2 HP)



Specifications



Product Name	Motor Driver	BLM5200HPK-5 ■ H □ C		BLM5300HPK-5 ■ H □ S	BLM5400HPK-5 ■ H □ C	
		BMUD200-A	BMUD200-C	BMUD300-C	BMUD400-S	
Rated Output Power (Continuous)	W (HP)	200 (1/4)		300 (2/5)	400 (1/2)	
Power	Rated Voltage	VAC	Single-Phase 100-120	Single-Phase 200-240 / Three-Phase 200-240	Single-Phase 200-240 / Three-Phase 200-240	Three-Phase 200-240
	Permissible Voltage Range		-15 ~ +10%		-15 ~ +10%	-15 ~ +10%
Supply	Frequency	Hz	50 / 60		50 / 60	50 / 60
Input	Permissible Frequency Range		±5%		±5%	±5%
	Rated Input Current	A	4.6	Single-Phase: 2.7/Three-Phase: 1.5	Single-Phase: 3.4/Three-Phase: 2.1	2.8
	Maximum Input Current	A	9.3	Single-Phase: 4.9/Three-Phase: 3.4	Single-Phase: 7.8/Three-Phase: 4.7	5.1
Rated Speed	r/min	3000				
Speed Control Range		80 ~ 3600 r/min (Speed ratio 45:1)				
Speed Regulation	Load	Max. ±0.2%: Conditions 0 ~ rated torque, rated speed, rated voltage, normal temperature				
	Voltage	Max. ±0.2%: Conditions Rated voltage -15 ~ +10%, rated speed, no load, normal temperature				
	Temperature	Max. ±0.2%: Conditions Operating ambient temperature 0 ~ +40°C (+32 ~ +104°F), rated speed, no load, rated voltage				

● The values correspond to each specification and characteristics of a stand-alone motor.

Gear Ratio		5	10	15	20	30	50	100	200		
(Actual Gear Ratio)		(5)	(10)	(15)	(20)	(30)	(50)	(98.95)	(200)		
Gearhead Size Code		X						Y			
Rotation Direction *1		Same direction as the motor						Opposite direction to the motor			
Output Shaft Speed		80 r/min	16	8	5.3	4	2.7	1.6	0.8	0.4	
[r/min] *2		3600 r/min	720	360	240	180	120	72	36	18	
Permissible Torque [N·m (lb·in)]	200 W (1/4 HP)	At 80 - 3000 r/min	2.1 (18.5)	4.1 (36)	6.2 (54)	8.3 (73)	13.4 (118)	22.3 (197)	41.0 (360)	82.8 (730)	
		At 3600 r/min	1.3 (11.5)	2.6 (23)	4.0 (35)	5.3 (46)	9.4 (83)	15.6 (138)	28.5 (250)	57.6 (500)	
	300 W (2/5 HP)	At 80 - 1500 r/min	3.3 (29)	6.7 (59)	10.0 (88)	13.4 (118)	21.5 (190)	35.8 (310)	66.2 (580)	134 (1180)	
		At 3000 r/min	3.3 (29)	6.7 (59)	10.0 (88)	13.4 (118)	21.5 (190)	35.8 (310)	66.2 (580)	128 (1130)	
	400 W (1/2 HP)	At 80 - 1500 r/min	4.8 (42)	9.5 (84)	14.3 (126)	19.1 (169)	30.5 (260)	50.8 (440)	88.0 (770)	178 (1570)	
		At 3000 r/min	3.8 (33)	7.7 (68)	11.9 (105)	16.1 (142)	23.1 (200)	38.5 (340)	73.5 (650)	128 (1130)	
	Permissible Radial Load [N (lb.)] *3	20 mm (0.79 in.) from Installation Surface	At 80 - 1500 r/min	1346 (300)	1663 (370)	1882 (420)	2035 (450)	2309 (510)	2681 (600)	3436 (770)	
			At 3000 r/min	942 (210)	1164 (260)	1317 (290)	1425 (320)	1616 (360)	1877 (420)	2405 (540)	
			At 3600 r/min	673 (151)	832 (187)	941 (210)	1018 (220)	1155 (250)	1341 (300)	1718 (380)	
	Permissible Axial Load [N (lb.)]		At 80 - 1500 r/min	307 (69)	380 (85)	429 (96)	466 (104)	527 (118)	613 (137)	785 (176)	
			At 3000 r/min	215 (48)	266 (59)	300 (67)	326 (73)	369 (83)	429 (96)	550 (123)	
			At 3600 r/min	154 (34)	190 (42)	215 (48)	233 (52)	264 (59)	307 (69)	393 (88)	
Permissible Inertia J [× 10 ⁻⁴ kg·m ² (oz·in ²)]		At 80 - 1500 r/min	250 (1370)	1000 (5500)	2250 (12300)	4000 (22000)	9000 (49000)	25000 (137000)	100000 (550000)	400000 (2200000)	
		At 3000 r/min	90 (490)	360 (1970)	810 (4400)	1440 (7900)	3240 (17700)	9000 (49000)	36000 (197000)	144000 (790000)	
		At 3600 r/min	50.6 (280)	203 (1110)	456 (2500)	810 (4400)	1823 (10000)	5063 (28000)	20250 (111000)	81000 (440000)	
	When Instantaneous Stop or Bi-Directional Operation is performed *4	At 80 - 1500 r/min	83.3 (460)	333 (1820)	750 (4100)	1333 (7300)	3000 (16400)	8333 (46000)	33333 (182000)	133333 (730000)	
		At 3000 r/min	30 (164)	120 (660)	270 (1480)	480 (2600)	1080 (5900)	3000 (16400)	12000 (66000)	48000 (260000)	
		At 3600 r/min	16.9 (92)	67.5 (370)	152 (830)	270 (1480)	608 (3300)	1688 (9200)	6750 (37000)	27000 (148000)	

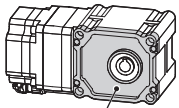
*1 The rotation direction is as seen from the gear flange surface (drawing on the right).

*2 The output shaft speed is calculated by dividing the speed by the gear ratio.

*3 The radial load at each distance can be calculated with a formula. → Page ◆◆◆

*4 It is also applicable when digitally setting the deceleration time to below 0.1 seconds.

◆◆ Gear Flange Position



Gear Flange

◆◆ Load Position