

## 諸特性表 CHARACTERISTICS OF GEARED MOTOR

P 3/4

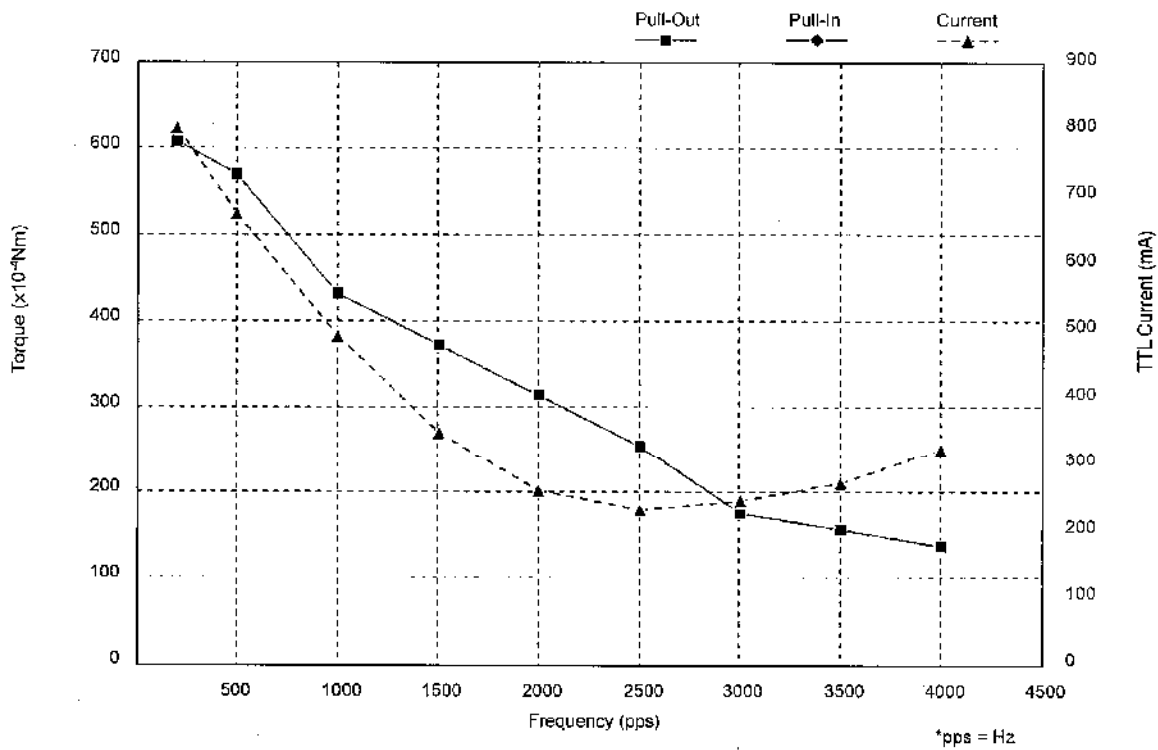
ITEM		SPECIFICATION	CONDITION
駆動電圧	DRIVE VOLTAGE	DC 5.0 V	TERMINAL VOLT.
駆動電流	DRIVE CURRENT	mA	
駆動方式	DRIVE MODE	V CONSTANT	
	PHASE ON METHOD	2 - 2	
	DRIVE CIRCUIT	SEE NOTE 5	
ステップ角度	STEP ANGLE	0.36 °	2-2 PHASE ON
減速比	GEAR RATIO	1/50	
プルアウトトルク	PULL OUT TORQUE	(1) 500 PPS	44.1 mNm MIN { 0.45 kgcm MIN }
		(2) PPS	0.0 mNm MIN { kgcm MIN }
		(3) PPS	0.0 mNm MIN { kgcm MIN }
プルイントルク	PULL IN TORQUE	(1) PPS	0.0 mNm MIN { kgcm MIN }
		(2) PPS	0.0 mNm MIN { kgcm MIN }
デクラッチ	DECLUTCH	0.0 mNm MIN { kgcm MIN }	WITHOUT CLUTCH
最大自起動周波数	MAX. NO LOAD RESPONSE	1100 pps MIN	
最大応答周波数	MAX. SLEW SPEED	1,500 pps MIN	
巻線抵抗値	WINDING RESISTANCE	10 x (1 ± 10 %) Ω	
巻線方式	WINDING MODE	UNIFILAR	
コイルインダクタンス	WINDING INDUCTANCE	3 mH REF.	1kHz, Voltage(rms)=1V
絶縁抵抗値	INSULATION RESISTANCE	100 MΩ MIN	DC 500V
絶縁耐圧	DIELECTRIC STRENGTH	AC 500 V 1 min.	3mA Max.
温度上昇	TEMPERATURE RISE	K MAX	
絶縁種	CLASS OF INSULATION	CLASS E	EXCEPT WIRE
ロータイナーシャ	ROTOR INERTIA	0.043 g·cm <sup>2</sup> REF	
動作温度範囲	OPERATING TEMP.	0 °C to 50 °C	
保存温度範囲	STORAGE TEMP.	-30 °C to 80 °C	
動作湿度範囲	OPERATING HUM.	20 % RH to 90 % RH	
作動音	SOUND LEVEL	dB	
振動	VIBRATION	- m/Sec <sup>2</sup>	
衝撃	SHOCK	- m/Sec <sup>2</sup>	
寿命時間	LIFE	3,000 h MIN.	NOTE 4
トルクカーブ	TORQUE CURVE	SEE ATTACHED SHEET	NO.78277

〔 〕内の従来単位は参考値です。

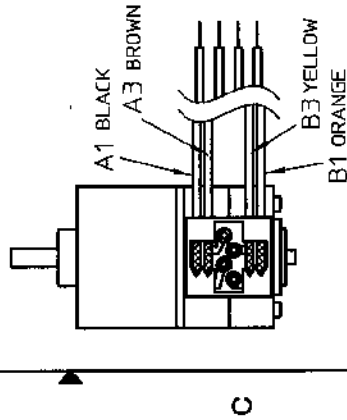
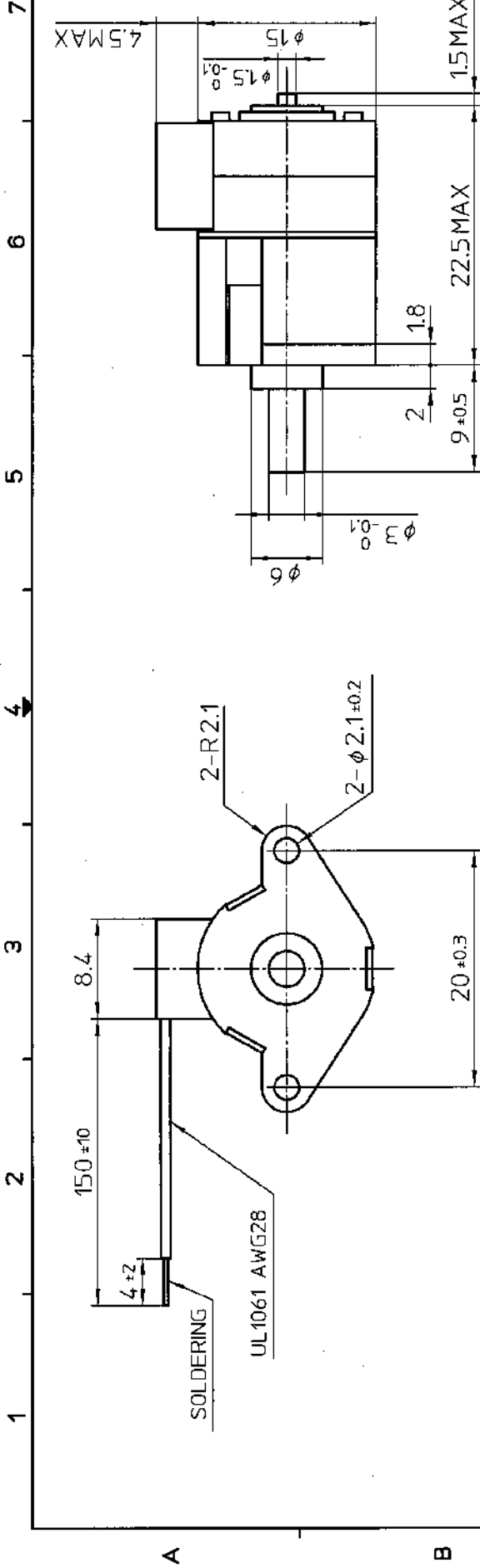
## DYNAMIC TORQUE CHARACTERISTICS (No. 78277)

(ALL VALUES ARE GAINED BY MEASUREMENT AND NOT SPECIFICATIONS VALUES)

Model : PG15S-J20-HHF3  
 Drive Mode : BIPOLAR CONST.VOLT.  
 Drive Voltage : 5.0 V  
 Method : 2-2P  
 Drive IC : SLA8001  
 Surge/Current : /  
 Coil Resistance : 10.0 Ω  
 Magnet Material : MS70A  
 Stator Material : SECC  
 Note : Terminal Voltage, GEAR RATIO 1/50



Frequency (pps)	200	500	1000	1500	2000	2500	3000	3500	4000
■ Pull-Out (x10 <sup>-4</sup> Nm)	608.0	568.8	431.5	372.7	313.8	255.0	176.5	156.9	137.3
◆ Pull-In (x10 <sup>-4</sup> Nm)									
▲ Current (mA)	802	675	491	347	261	230	244	272	324



WIRE COLOR	MOTOR
BLACK	A1
BROWN	A3
ORANGE	B1
YELLOW	B3

WIRE COLOR CODE

MARKING	BLACK	BROWN	ORANGE	YELLOW
1	-	+	+	-
2	-	+	-	+
3	+	-	-	+
4	+	-	+	-

SWITCHING SEQUENCE

(VIEWED FROM MOUNTING SURFACE)

MARKING

PRINT MARK ON STATOR ASSY  
BY INKJET PRINTER  
PG15S-J20-HHF3 TAB319  
THAILAND MINEBEA  
<THAILAND>

**GEAR RATIO : 1 / 50**

General tolerance : ±0.5, ±5°

材料 MATERIAL	表面処理 SURF.ROUGH.	熱処理 HEAT TREAT.	表面処理 FINISH
単位 UNIT	mm	公差 TOL	角度 DEG
尺度 SCALE	2:1	L ≤ 4	±0.1
		4 < L ≤ 16	±0.2
		16 < L ≤ 83	±0.3
		83 < L ≤ 250	±0.5
		250 < L ≤ 1000	±0.8
			±0.5
MinebeaMitsumi Inc.		A.FUKUSHIMA	
承認 APPROVED	H TAKEUCHI	CHECKED	HS AKIYAMA
描画 DRAWN			
承認 APPROVED	承認者 ENGINEER	承認者 APPROVED	
理由 REASON		ECN NO.	
日付 DATE			
番号 MARK			
品名 DESCRIPTION	MECHANICAL CONSTRUCTION		
部品番号(PART NO.)	PG15S-J20-HHF3		
図番(DRAWING NO.)	U06PA-1D142002		
発行日(SHEET)	改訂 REV.		

File Name: \*\*\*\*\*