Minebea

PG20L-K20 Series

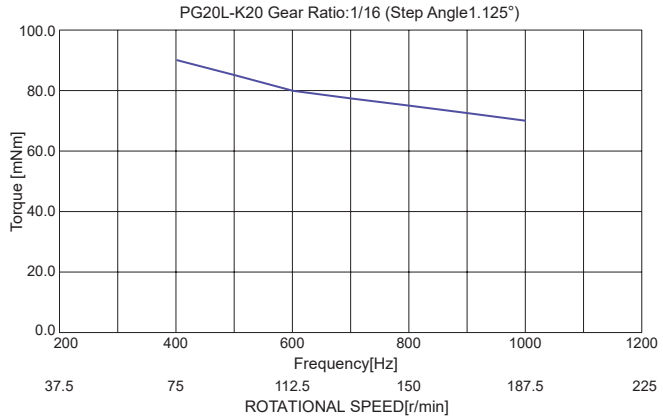
PM Stepping Motor with GearBox
PM 永磁型步进电机 带齿轮箱型



■ 参考特性　Reference Characteristics

驱动电压 Drive Voltage	12［V］
电流/相 Carrent/Phase	400［mA］(Peak)
励磁方式 Drive Method	2 － 2相 2 － 2 phase
驱动方式 Drive Ciruit	双极性恒流驱动 BIPOLAR CHOPPER
线圈电阻/相 Resistance/Phase	7［Ω］
驱动芯片 Driver IC	LB1847
绝缘电阻 Insulation Resistance	100 M［Ω］Min. at DC500［V］
绝缘耐压 Dielectric Strength	AC 500［V］1［min］
绝缘等级 Class of Insulation	E级（导线除外　Except lead wire）
温度上升 Temparature Rise	65［℃］MAX
工作环境温度 Ambient Temperature Range	－10［℃］～＋50［℃］
径向游隙 Radial Play	0.03［mm］* 距法兰端面6［mm］ 6［mm］from flange
轴向游隙 Axial Play	0.25［mm］

■ 扭矩特性　Torque Characteristics



■ 用途　Application

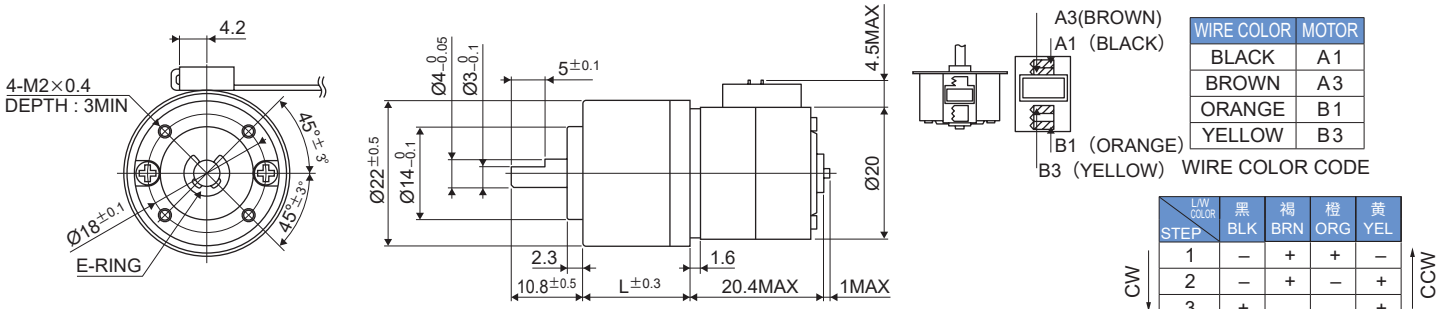
光学设备：投影仪、监控摄像头
Optical Equipment：Projector/Security Camera

医疗器械：血液分析装置、管泵
Medical Equipment：Blood Analyzer/Tube Pump

工业机械：流量控制阀、天线调节器
Industrial Equipment：Flow Control Valves/Antenna Adjustment Device

电动工具：电钻、电动螺丝刀
Power Tools：Drills/Drivers

■ 外观图　Outline



WIRE COLOR	MOTOR
BLACK	A1
BROWN	A3
ORANGE	B1
YELLOW	B3

WIRE COLOR CODE

LW COLOR / STEP	黑 BLK	褐 BRN	橙 ORG	黄 YEL
1	–	+	+	–
2	–	+	–	+
3	+	–	–	+
4	+	–	+	–

CW　CCW

SWITCHING SEQUENCE
(VIEWD FROM MOUNTING SURFACE)

■ 产品系列　Lineup

型号 Model	步距角 Step Angle [deg]	减速比 Gear Ratio [1 : X]	推荐额定扭矩 Rated Torque [mNm (gf cm)]	推荐瞬间最大扭矩 Maximum Instantaneous Torque [mNm (gf cm)]	齿轮头长度 L Gearhead length L [mm]
PG20L-K20-0004	4.500	1 : 4	49 (500)	73.5 (750)	13.1
PG20L-K20-0016	1.125	1 : 16	73.5 (750)	110.3 (1125)	16.2
PG20L-K20-0024	0.750	1 : 24			
PG20L-K20-0064	0.281	1 : 64	98 (1000)	147 (1500)	19.3
PG20L-K20-0096	0.187	1 : 96			
PG20L-K20-0144	0.125	1 : 144			

Copyright MinebeaMitsumi Inc.