



PM20L-020-HHC3

Model Specifications

Model:	PM20L-020-HHC3
Shaft Length:	8mm
Wire Length:	300mm fly lead (no connector)
Wire Holder:	90 deg. Left
Front Plate:	FPH
Electrical:	24V, 400mA
	Bipolar Constant Current
	13 ohms, MS70A

The diagram shows a 3-phase motor terminal box with three input terminals. A wiring diagram is overlaid on the terminal box, showing the internal connections. The wiring diagram includes a star (Y) connection for the motor windings. The input wires are labeled: BROWN, BLACK, and ORANGE. The output wires are labeled: ORANGE, YELLOW, and BROWN. A table titled 'WIRE COLOR MOTOR' provides the color code for the motor windings.

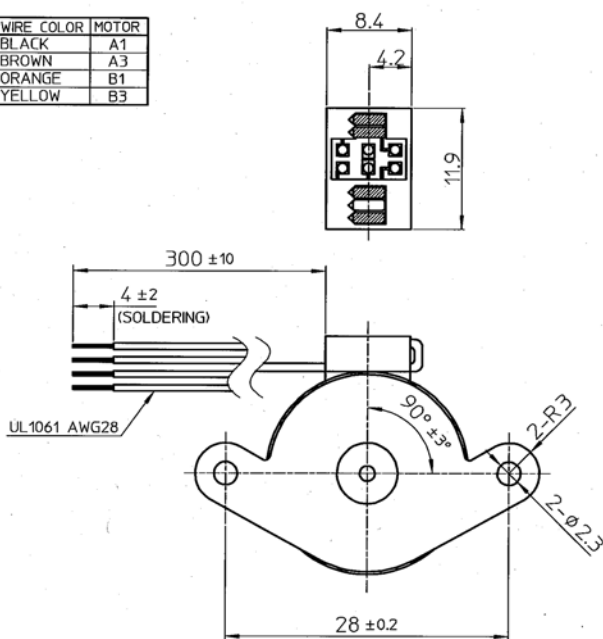
WIRE COLOR	MOTOR
BLACK	A1
BROWN	A3
ORANGE	B1
YELLOW	B3

WIRE COLOR CODE

WIRE COLOR	MOTOR
BLACK	A1
BROWN	A3
ORANGE	B1
YELLOW	B3

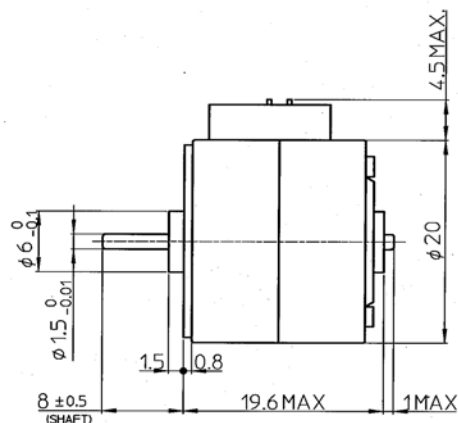
	COLOR	BLACK	BROWN	ORANGE	YELLOW
STEP					
1		-	+	+	-
2		-	+	-	+
3		+	-	-	+
4		+	-	+	-

SWITCHING SEQUENCE
(VIEWED FROM MOUNTING SURFACE)



NMB-MAT PM20L-020-HHC3
JAPAN H9804
<JAPAN>

NMB-MAT PM20L-020-HHC3
THAILAND TA9804
<THAILAND>



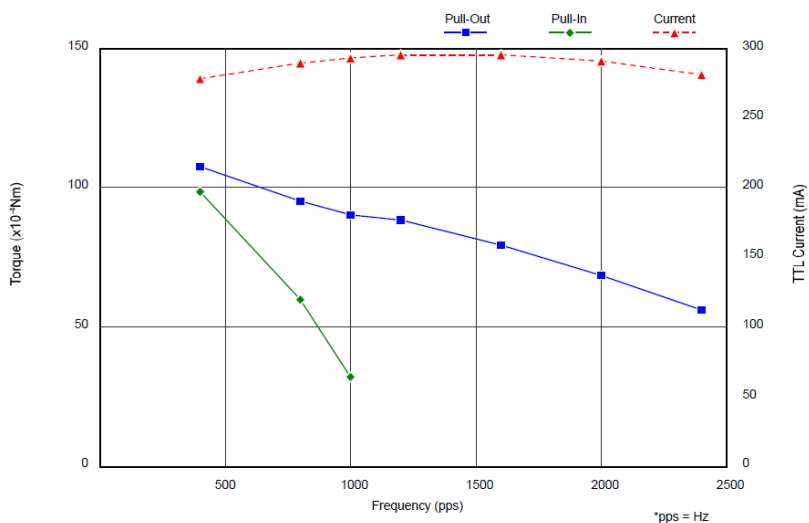
Standard PM Step Motors

PM20L-020-HHC3

DYNAMIC TORQUE CHARACTERISTICS (No. 62888)

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

Model : PM20L-020-HHC3
 Drive Mode : BIPOLAR CHOPPER
 Drive Voltage : 24.0 V
 Method : 2-2P
 Drive IC : UDN2916B-V
 Surge/Current : / 400 mA / Phase (Peak)
 Coil Resistance : 13.0 Ω
 Magnet Material : MS70A
 Stator Material : SUY/SPC(Ni)



(TTL Current = Over all current drawn by the driver)

Frequency (pps)	400	800	1000	1200	1600	2000	2400
■ Pull-Out ($\times 10^{-4}$ Nm)	107.5	95.1	90.2	88.5	79.2	68.5	55.9
◆ Pull-In ($\times 10^{-4}$ Nm)	98.3	59.8	32.0				
▲ Current (mA)	278	289	293	295	295	291	281

Minebea Motor Manufacturing Corporation