

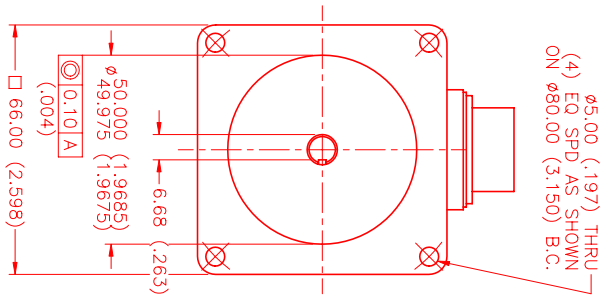
**MOTOR DATA @ 110 VAC (SINE)**

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	.22
KILOWATTS	KW	.16
MAX. OPERATING SPEED	N. MAX RPM	5000
SPEED @ RATED TORQUE	N RATED RPM	4000
* CONTINUOUS RATED TORQUE @ 4000 RPM	IN-LBS[Nm]	3.4[.38]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	5.0[.56]
CONTINUOUS LINE CURRENT	AMPS[RMS/φ]	1.8
PEAK TORQUE	IN-LBS[Nm]	15.1[1.7]
PEAK CURRENT	AMPS[RMS/φ]	5.4
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	155,670
TORQUE SENSITIVITY	Kt [N-LBS/AMPS/φ][Nm/AMP/RMS/φ]	2.8[0.32]
BACK EMF (LINE TO LINE)	Vrms/Krpm	17.8
D.C. RESISTANCE (P-P)	OHMS	8.4
INDUCTANCE (P-P)	MILLIHENRIES	11.6
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ][Kg-M <sup>2</sup> ]	.000097[.0000109]
STATIC FRICTION	Tf [IN-LBS][Nm]	.5[.06]

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 10" X 10" X 1/4" ALUMINUM HEATSINK. THERMOSTAT IN STATOR WINDINGS WILL OPEN IF WINDING TEMPERATURE EXCEEDS 155°C. THIS ALLOWS FOR AN APPROXIMATE +10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS.

**MECHANICAL NOTES:**

1. AXIAL PLAY: 15 LBS MAX
2. RADIAL PLAY: 20 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 2.8 LBS. [ 1.3 kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

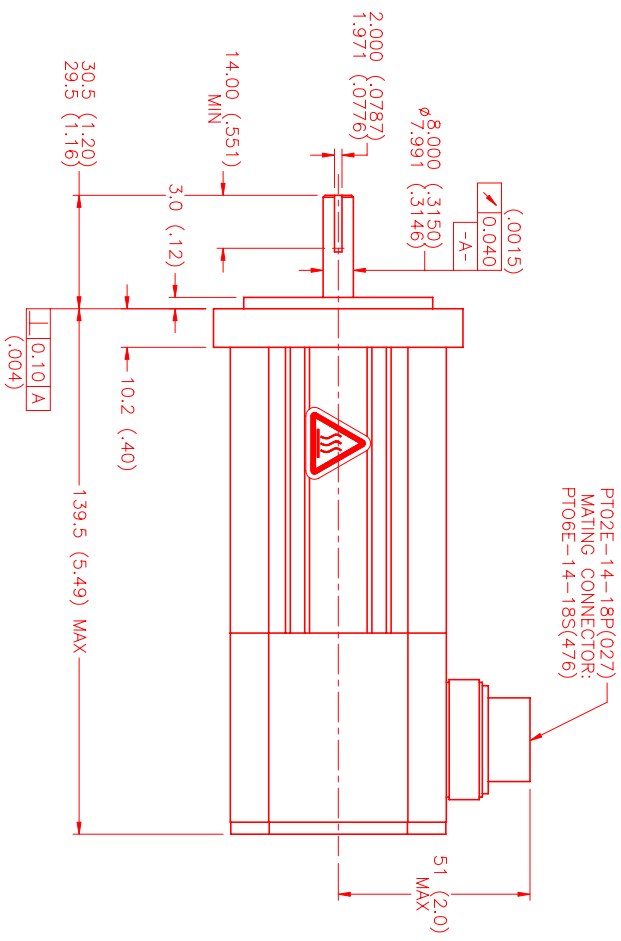


(4) EQ. SPD. AS SHOWN ON Ø80.00 (3.150) B.C.

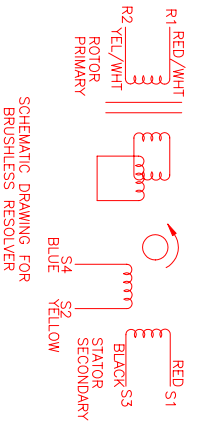
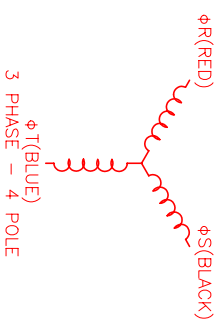
**CONNECTION CHART**  
MOTOR/THERM/RESOLVER CONNECTOR:  
PT02E-14-18P(027)  
(270-00024)

MTR/ THERM/ RES	WIRE FUNCTION	WIRE COLOR	LEADS
PTN	RES	RED	-
A	ΦR	BLACK	-
B	ΦS	BLUE	-
C	ΦT	GRN/YEL	-
D	PE GND	BLACK	-
N	THERM	BLACK	-
H	SIN	YELLOW	-
G	COS GND	BLACK	-
S	COS	RED	-
F	SIN GND	BLUE	-
R	REF GND	YEL/WHI	-
E	REF	RED/WHI	-
J	RES. SHLD	GRN/YEL	-
K	-	-	-
L	-	-	-
M	-	-	-
P	-	-	-
T	-	-	-

WIRE FUNCTION	WIRE COLOR
ΦR	RED
ΦS	BLUE
ΦT	GRN/YEL
PE GND	BLACK
THERM	BLACK
SIN	YELLOW
COS GND	BLACK
COS	RED
SIN GND	BLUE
REF GND	YEL/WHI
REF	RED/WHI
RES. SHLD	GRN/YEL
-	-
-	-
-	-
-	-
-	-



PT02E-14-18P(027)  
MATING CONNECTOR:  
PT06E-14-18S(476)



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		3/15/01	MVS

NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL ANGLES			
DECIMAL ANGLES			
DECIMAL ANGLES			
DATE: 3/15/01			
DESIGNED BY: MVS			
CHECKED BY:			
APPROVED BY:			
DRAWING NUMBER: MPM662ASF7G1N		SCALE: 1:1	

**MTS**  
Automation Division