

HONEYWELL
PART NUMBER

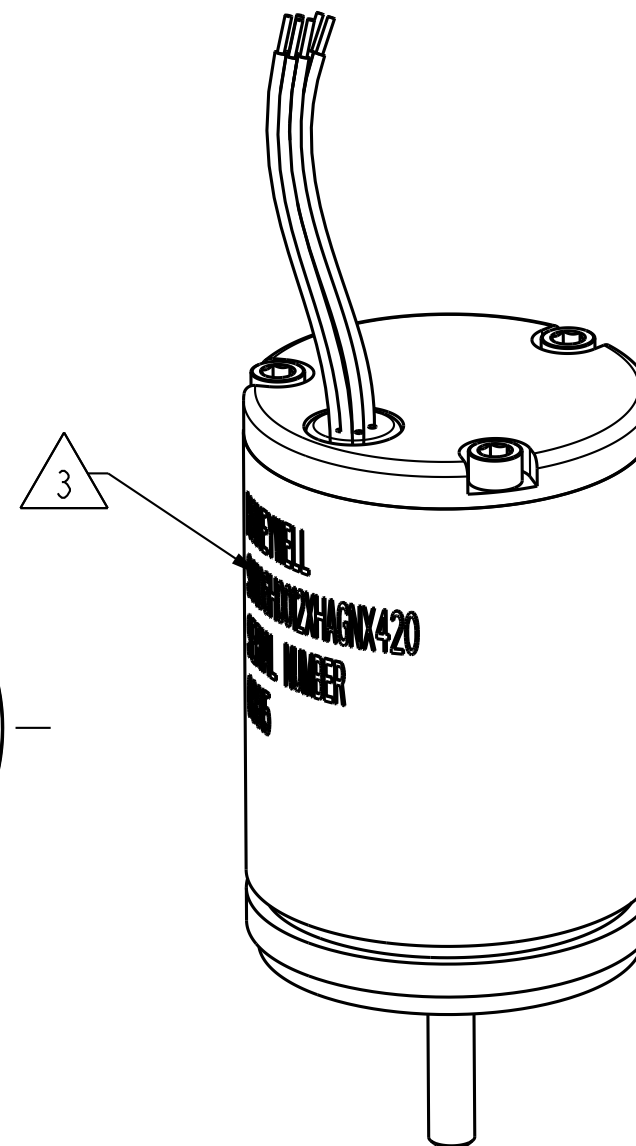
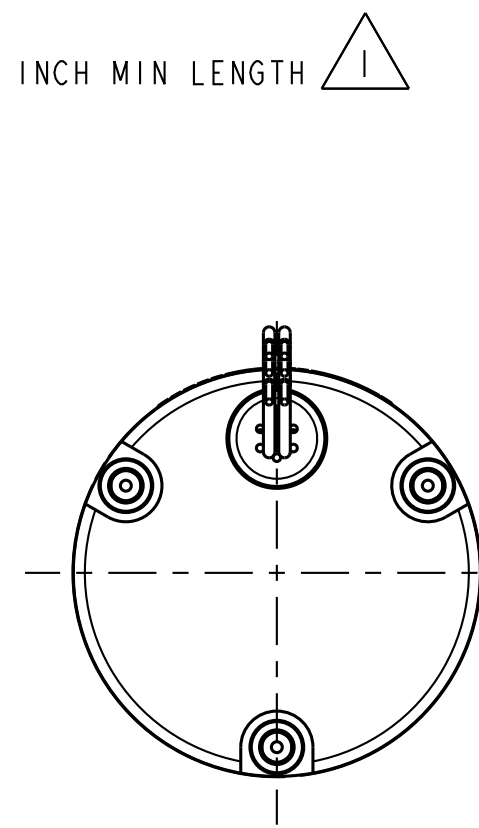
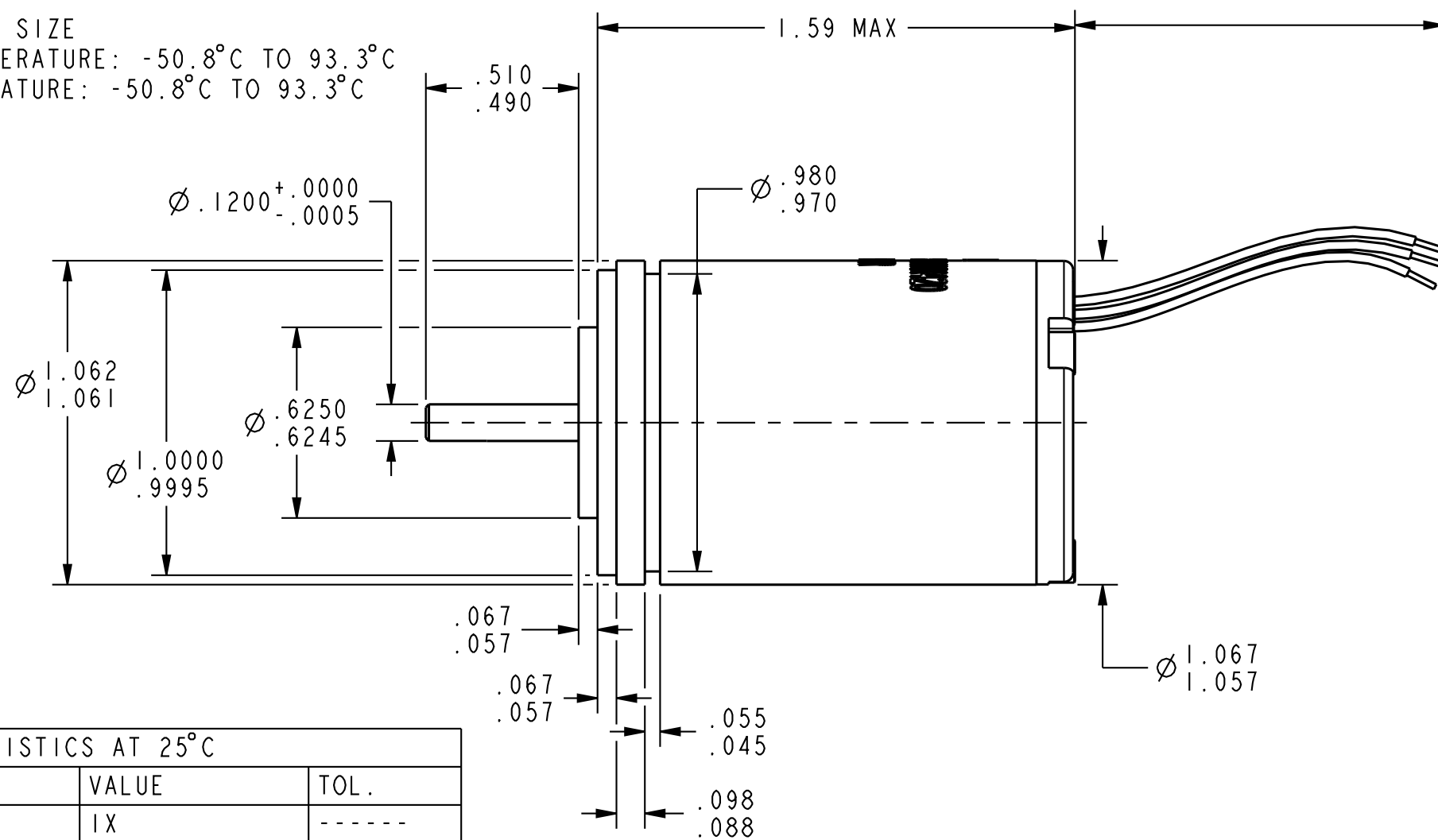
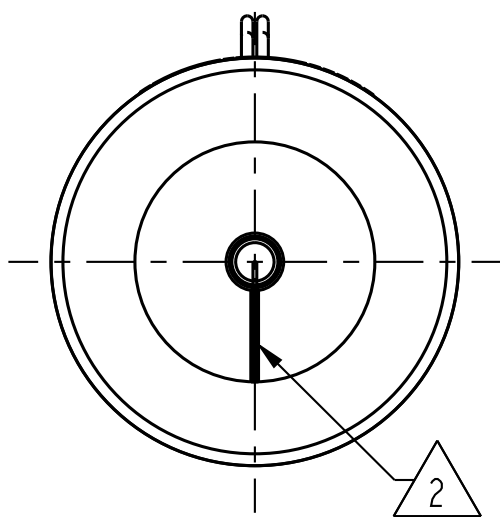
S0106H0012XHAGNX420

NOTES:

- 1 - ELECTRICAL INTERFACE - MIL-W-16878/6 TYPE; ET-30-7 LEAD WIRES.
- 2 - ELECTRICAL ZERO MARK ON HOUSING IS ALIGNED WITH THE SCRIBE ON THE SHAFT WITHIN $\pm 5^\circ$ WHEN THE RESOLVER IS AT ELECTRICAL ZERO.
- 3 - MARKING INFORMATION:
- HONEYWELL
- S0106H0012XHAGNX420
- SERIAL NUMBER
- DATE CODE
- 08815
- .08" MIN FONT SIZE
- 4 - OPERATING TEMPERATURE: -50.8°C TO 93.3°C
STORAGE TEMPERATURE: -50.8°C TO 93.3°C

OBSOLETE

| REV | DOCUMENT | CHANGED BY | CHECK |
|-----|----------|-------------|-------|
| D | 0089279 | PMH 21MAY12 | RS |

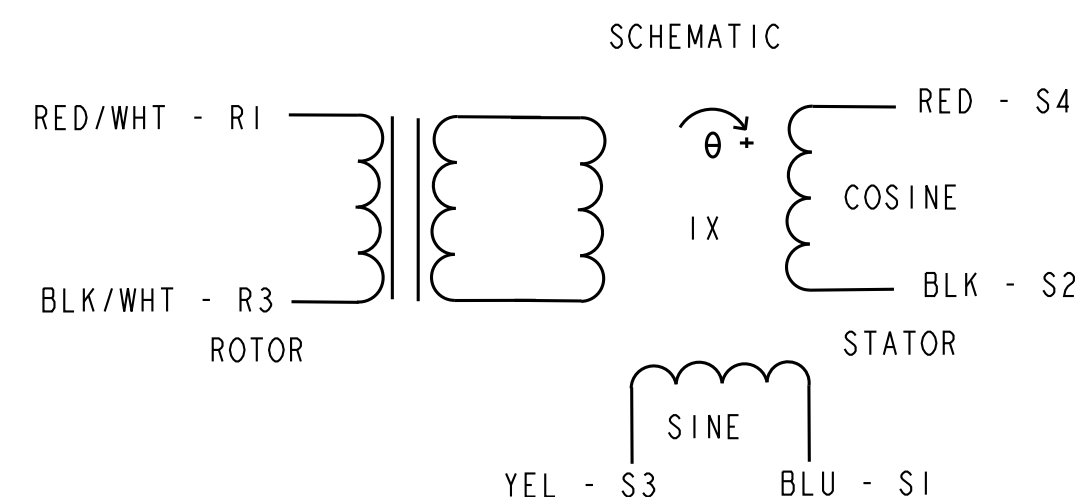


| ELECTRICAL CHARACTERISTICS AT 25°C | | | |
|---------------------------------------|-------------|-----------|------------|
| CHARACTERISTIC | UNIT | VALUE | TOL. |
| SPEED | ----- | 1X | ----- |
| ACCURACY | ARC MIN | ± 7 | ----- |
| ANGULAR RANGE OF ACCURACY | DEGREES | 360 | ----- |
| FREQUENCY | HERTZ | 5000 | $\pm 5\%$ |
| EXCITATION VOLTAGE | VOLTS RMS | 7 | $\pm 10\%$ |
| TRANSFORMER | ----- | YES | ----- |
| TRANSFORMATION RATIO ** | ----- | 0.45 | $\pm 10\%$ |
| RESOLVER PRIMARY | ----- | ROTOR | ----- |
| INPUT POWER | WATTS | 0.15 | MAX |
| INPUT CURRENT | mA | 40 | MAX |
| PHASE SHIFT ** | DEGREES | 30 | MAX |
| NULL VOLTAGE | mV | 20 | MAX |
| IMPEDANCES | ----- | ----- | ----- |
| | ZRO OHMS | $80+j230$ | $\pm 25\%$ |
| | ZSO OHMS | $65+j130$ | $\pm 25\%$ |
| | ZSS OHMS | $65+j80$ | $\pm 25\%$ |
| D.C. RESISTANCE | ----- | ----- | ----- |
| | INPUT OHMS | 26 | $\pm 10\%$ |
| | OUTPUT OHMS | 38 | $\pm 10\%$ |
| HI-POT 100 VAC | mA | 1 | MAX |
| INSULATION RESISTANCE (IR) 100 VDC | MEG-OHMS | 50 | MIN |
| EZ MARK ALIGNMENT | DEGREES | ± 5 | ----- |

| ABSOLUTE RATINGS | |
|-----------------------------|---|
| EXCITATION VOLTAGE RANGES | 2 V TO 15 V |
| EXCITATION FREQUENCY RANGES | 800 Hz TO 5000 Hz |
| STORAGE TEMP RANGE | -50.8°C TO 93.3°C |
| MINIMUM LOAD | 30 k Ω |

| REFERENCE ONLY - ELECTRICAL CHARACTERISTICS OVER A RANGE OF 2 TO 15 VOLTS AND 2000 TO 5000 HERTZ AT 25°C | | | |
|--|---|--------------|------------|
| CHARACTERISTIC | UNIT | VALUE | TOL. |
| ACCURACY | ARC MIN | ± 7 | ----- |
| FREQUENCY RANGE | HERTZ | 2000 TO 5000 | $\pm 5\%$ |
| EXCITATION VOLTAGE RANGE | VOLTS RMS | 2 TO 15 | $\pm 10\%$ |
| TRANSFORMATION RATIO ** | ----- | 0.45 | $\pm 15\%$ |
| INPUT POWER | WATTS | 1.5 | MAX |
| INPUT CURRENT | mA | 170 | MAX |
| PHASE SHIFT ** | DEGREES | 45 | MAX |
| NULL VOLTAGE | mV | 35 | MAX |
| IMPEDANCES | IMPEDANCES VARY OVER A RANGE OF FREQUENCIES AND VOLTAGES. | | |

** MEASURED WITH SECONDARY LOAD IMPEDANCE OF 30 k Ω



PHASE EQUATIONS:
 $E(S3-S1) = K \cdot E(R1-R3) \sin \theta$
 $E(S4-S2) = K \cdot E(R1-R3) \cos \theta$

POSITIVE DIRECTION OF ROTATION CW
VIEWED FROM SHAFT END

| MECHANICAL CHARACTERISTICS AT 25°C | | | |
|------------------------------------|------------|--------|---------|
| CHARACTERISTIC | UNIT | VALUE | TOL. |
| FRICITION TORQUE | OUNCE-INCH | 0.5 | MAX |
| SHAFT RUNOUT | INCH | 0.0015 | TIR MAX |
| SHAFT RADIAL PLAY (4 OZ LOAD) | INCH | 0.0006 | MAX |
| SHAFT END PLAY (8 OZ LOAD) | INCH | 0.0005 | MAX |
| WEIGHT | OUNCE | 5 | MAX |

| | | | |
|-----------------------------|--|----|---------|
| DESIGN UNITS: INCH | DRAWN | KV | 09AUG10 |
| TOLERANCES UNLESS NOTED: | CHECK | - | - |
| NO PLACES .x \pm .400 | THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE PERMISSION OF HONEYWELL. | | |
| ONE PLACE .x \pm .03 | INTERPRET PER ASME Y14.5M-1994 OTHER HONEYWELL ENGINEERING STANDARDS MAY APPLY | | |
| TWO PLACE .xx \pm .015 | THIRD ANGLE PROJECTION | | |
| THREE PLACE .xxx \pm .005 | Pro/ENGINEER 3D | | |
| ANGLES x \pm 3' | SCALE 2:1 | | |

| | | | |
|--|--------------|-----------|---------------------|
| <p>Honeywell</p> <p>TITLE 1 INCH PLATFORM, 1X FULLY HOUSED RESOLVER (TR 0.45)</p> | | | |
| SIZE | TYPE | CAGE CODE | DRAWING NAME |
| C | I | 08815 | S0106H0012XHAGNX420 |
| REV | SHEET 1 OF 1 | | |