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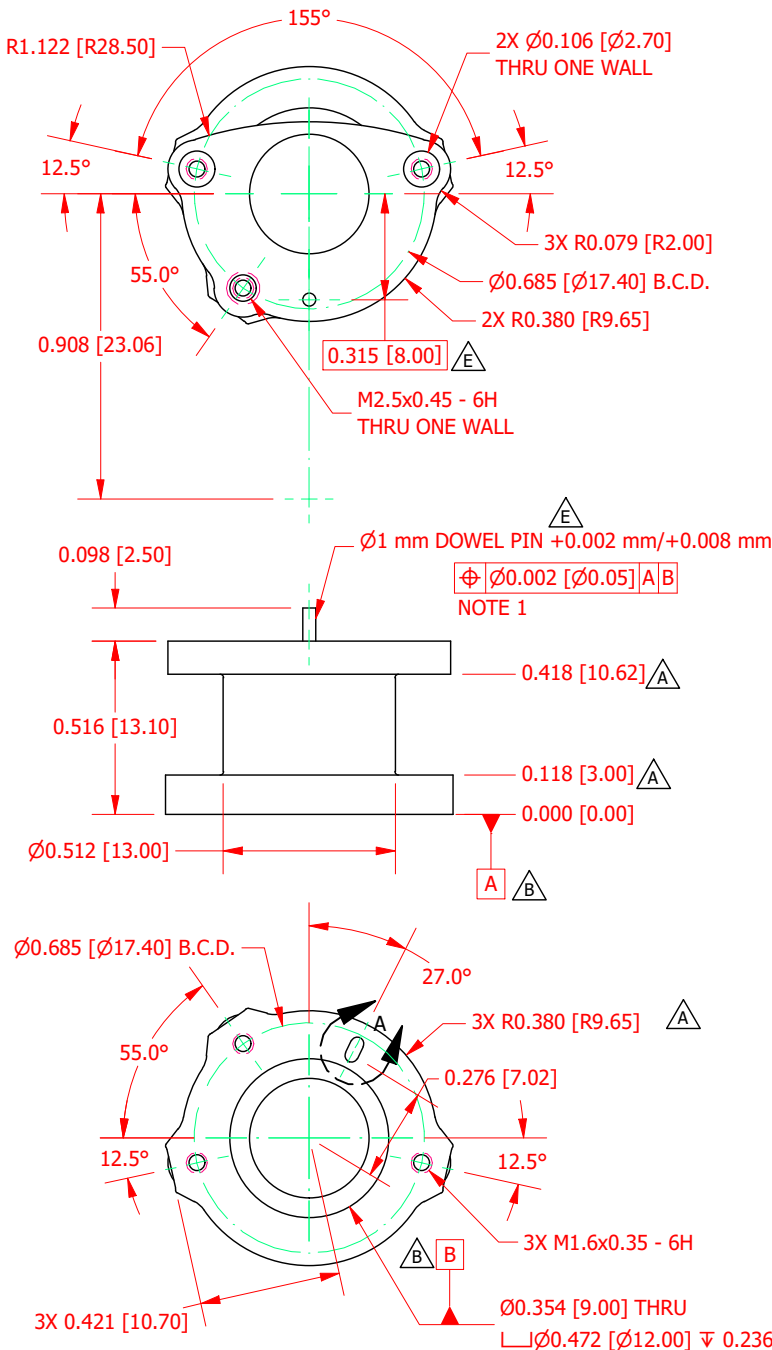
# FUTEK MODEL QTA152

## CUSTOM MICRO REACTION TORQUE SENSOR

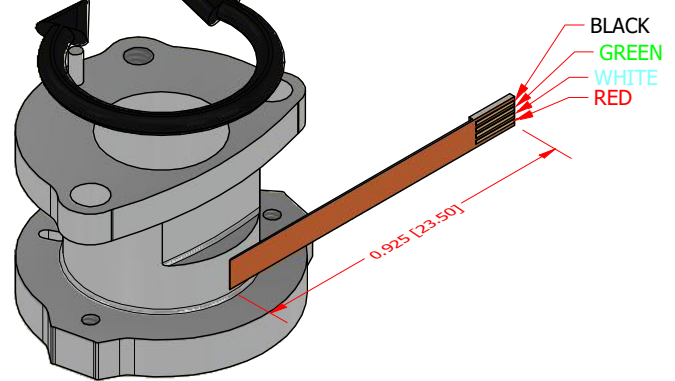
ITEM NUMBER: QSH02036



| INCH [mm]         |              | R.O.= Rated Output |          |
|-------------------|--------------|--------------------|----------|
| WIRING CODE (WC1) |              |                    |          |
| + EXCITATION      | - EXCITATION | + SIGNAL           | - SIGNAL |
| RED               | BLACK        | GREEN              | WHITE    |

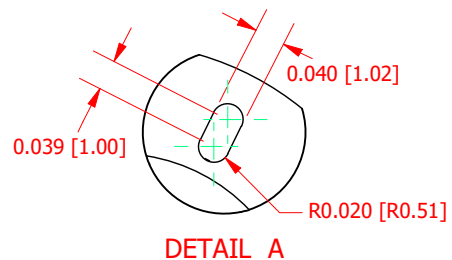


+OUTPUT (CW) -OUTPUT (CCW)



### SPECIFICATIONS:

|                           |                                                             |
|---------------------------|-------------------------------------------------------------|
| RATED OUTPUT              | 0.50 mV/V nom                                               |
| CAPACITY                  | 1 N-m                                                       |
| SAFE OVERLOAD             | 500% of R.O.                                                |
| ZERO BALANCE              | ±3% of R.O.                                                 |
| EXCITATION (VDC OR VAC)   | 10 max                                                      |
| BRIDGE RESISTANCE         | 1000 Ω nom.                                                 |
| NONLINEARITY              | ±0.5% of R.O.                                               |
| HYSTERESIS                | ±0.5% of R.O.                                               |
| NONREPEATABILITY          | ±0.2% of R.O.                                               |
| TEMP. SHIFT ZERO          | ±0.01% of R.O./°F (0.018% of R.O./°C)                       |
| TEMP. SHIFT SPAN          | ±0.04% of Load/°F (0.072% of Load/°C)                       |
| COMPENSATED TEMP.         | 60 to 160°F (16 to 71°C)                                    |
| OPERATING TEMP            | -60 to 200°F (-51 to 93°C)                                  |
| WEIGHT (approx)           | 0.02 lb [9.1 g]                                             |
| MATERIAL                  | ALUMINUM 2024-T4/T351                                       |
| CABLE                     | Flat Flex Circuit 0.925 in, 0.5 mm Pitch, 4 Conductor (FFC) |
| RoHS 2011/65/EU Compliant |                                                             |



### NOTES:

1. FN-5 PRESS FIT 52100 ALLOY STEEL DOWEL PIN, MCMaster-CARR 91595A951 OR EQUIVALENT

CUSTOMER APPROVAL- COMPANY:

CUSTOMER APPROVAL- NAME / DATE:

REVISIONS: (Refer to dwg # revision sheet)

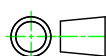
|   |           |   |            |
|---|-----------|---|------------|
| A | 4/4/2019  | E | 10/15/2019 |
| B | 8/8/2019  |   |            |
| C | 8/16/2019 |   |            |
| D | 9/27/2019 |   |            |

## OUTLINE DRAWING

STANDARD NOTES: (Unless Otherwise Specified)

ALL DIMENSIONS ARE IN INCHES  
DRAWING INTERPRETATION DIMS. PER ASME-Y14.5  
REMOVE BURRS AND BREAK SHARP EDGES .005 - .015  
THREADS PER HANDBOOK H-28  
DIMENSIONS ARE SHOWN AFTER PLATING

3rd ANGLE PROJ.



ANGLE:  
± 1/2°

CHAMFER:  
± 5°

TOLERANCE:  
.X ± 0.1"  
.XX ± 0.01"  
.XXX ± 0.005"

# FUTEK

MODEL: **QTA152**

DRAWN BY: J. RUIZ

APPROVED BY: J. PARK

CHECKED BY:

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DWG No.: **F01474-E**

CREATED DATE: 8/23/2018

APPROVED DATE: 10/11/2018

CAGE: 1X8M6 SHEET: 1 OF 1