# ** COMPLETE THIS FORM TO INITIATE SUPPLIER SCOUTING **

# MEPNN Supplier Scouting Opportunity Synopsis

*(To view in larger text, press Ctrl + Simultaneously)*

| | |
|---|---|
| The submitting entity agrees to notify NIST MEP of the status of actions taken as a result of this scouting instance within 30 days after receiving a results report. | I agree |
| Number of days to be posted if other than 30 | 120 |
| Item to be Scouted | Extruded Copper for Box Connector |
| Please describe the item application/the end use of the item | Copper extrusions of specified cross section to be machined into box connectors for electrical switches |
| Supplier Customer/Product NAICS Code, if known | |

## TECHNICAL INFORMATION

### 1. Supplier Information

| | |
|---|---|
| 1a. Type of supplier being sought | Other |
| If other, please specify type of supplier | all of the above |
| 1b. Reason for scouting submission | Other |
| If other, please specify reason | 2nd Supplier, Re-shore<br>Asia supplier not reliable, long lead time, heavy air freight cost |

### 2. Summary of Technical Specifications and Performance Requirements

| | |
|---|---|
| 2a. Describe the manufacturing process | Copper Extrusion: Rectangular Hollow (Symmetrical) |
| 2b. Provide dimensions, size, tolerances, and performance specifications for the item | Outside Rectangle .737 x .466/.455 with .015+/-.010 corner radii. Symetrical Inside rectangle .462/.432 x .326/.323 with inside corner radii .010 +/-.005. The extrusion overall length is 10 foot. Note: Wall dimensions .149/.145 (2 times) and .070/.066 (2 times) |
| 2c. List required materials needed to make the product, including materials of product components | Material: 120 Copper Alloy, 1/4 Hard. Hardness Rockwell B20-B54<br><br>Note: Company may consider 110 Copper Alloy 1/2 hard or 3/4 hard |
| 2d. Are there applicable certification requirements? | Yes |
| If yes, please explain applicable certification requirements | Material Certifications required(Physical and Chemical) |
| 2e. Are there applicable regulations? | Yes |
| If yes, please explain applicable regulations | Material Certification is important for our UL requirements |
| 2f. Are there any other standards, requirements, etc.? | No |
| If yes, please explain other standards, requirements, etc. | |
| 2g. Additional Comments | The extrusion straightness is important to our manufacturing process since we bar feed in a CNC Turning center.<br><br>Bow or twist is not acceptable |

## BUSINESS INFORMATION

### 3. Volume and Pricing

| | |
|---|---|
| 3a. Estimated potential business volume (i.e. # Units per day/month/year) | 20000 and up to 40000 feet per year (2000 extrusions 10 foot long and up to 4000 extrusions 10 foot long per year). or Monthly shipments 2000 feet/ month and up to 4000 feet / month |
| 3b. Estimated target price/unit cost information (flexible and negotiable not accepted) | $110.00 per 10 foot extrusion. This is our current price |

**4. Delivery Requirements**

| | |
|---|---|
| 4a. When is it needed by? (immediate, 30 days, 6 months, etc.) | 6 months |
| 4b. Describe packaging requirements (i.e. individually/group packaging) | Group Packing, 250 extrusions per wooden Box on a Skid |
| 4c. Where will this item be shipped? | Bristol, PA |

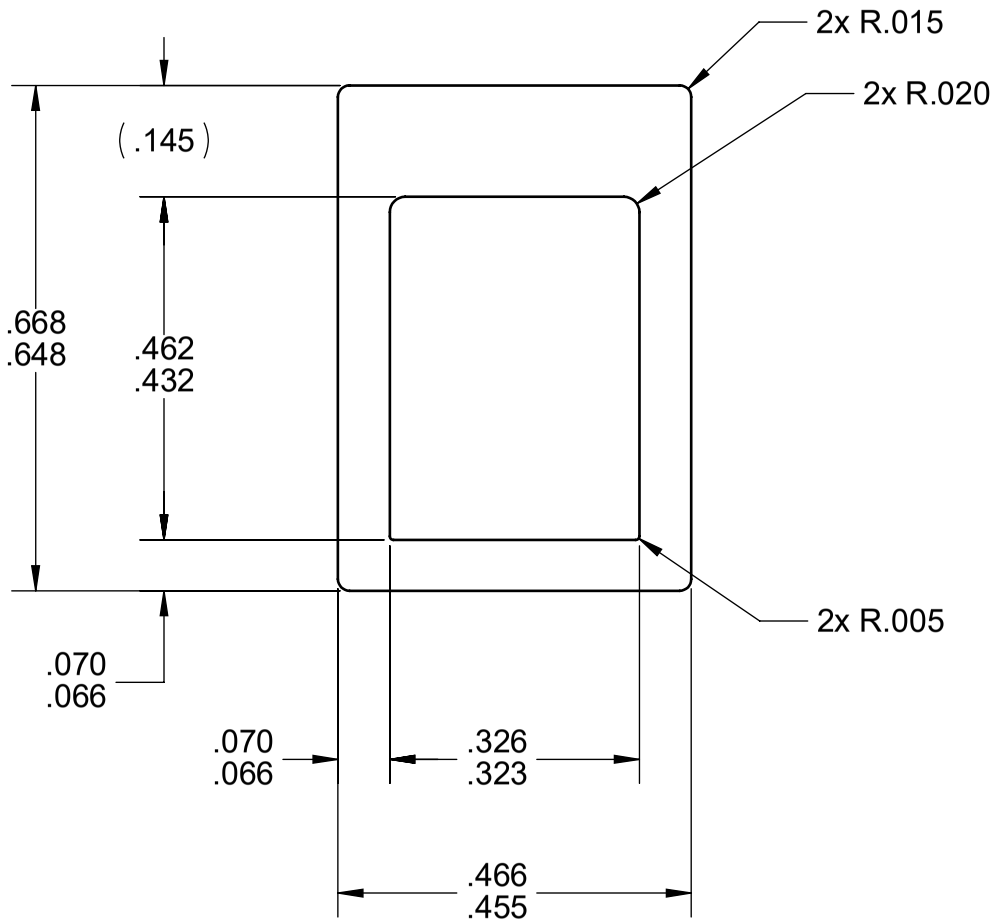
**5. Additional Comments**

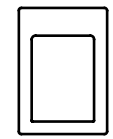
| | |
|---|---|
| 5a. Is there other information you would like to include? | |

**6. Requesting Scout**

| | |
|---|---|
| 6a. Scout Name | Teri Grumbrecht |
| 6b. Center Name | DVIRC |
| If an organization other than a Center, please enter | |
| 6c. Scout Email | tgrumbrecht@dvirc.org |
| Supplier Scouting Number (NIST MEP use only) | 2023-016 |
| Attachments | 700-0112 revA Extrusion, Box Connector.PDF |

| REV | ECN | DESCRIPTION | DATE | APPR. |
|---|---|---|---|---|
| 2 | | Release For Quote | 4/8/2022 | SFS |



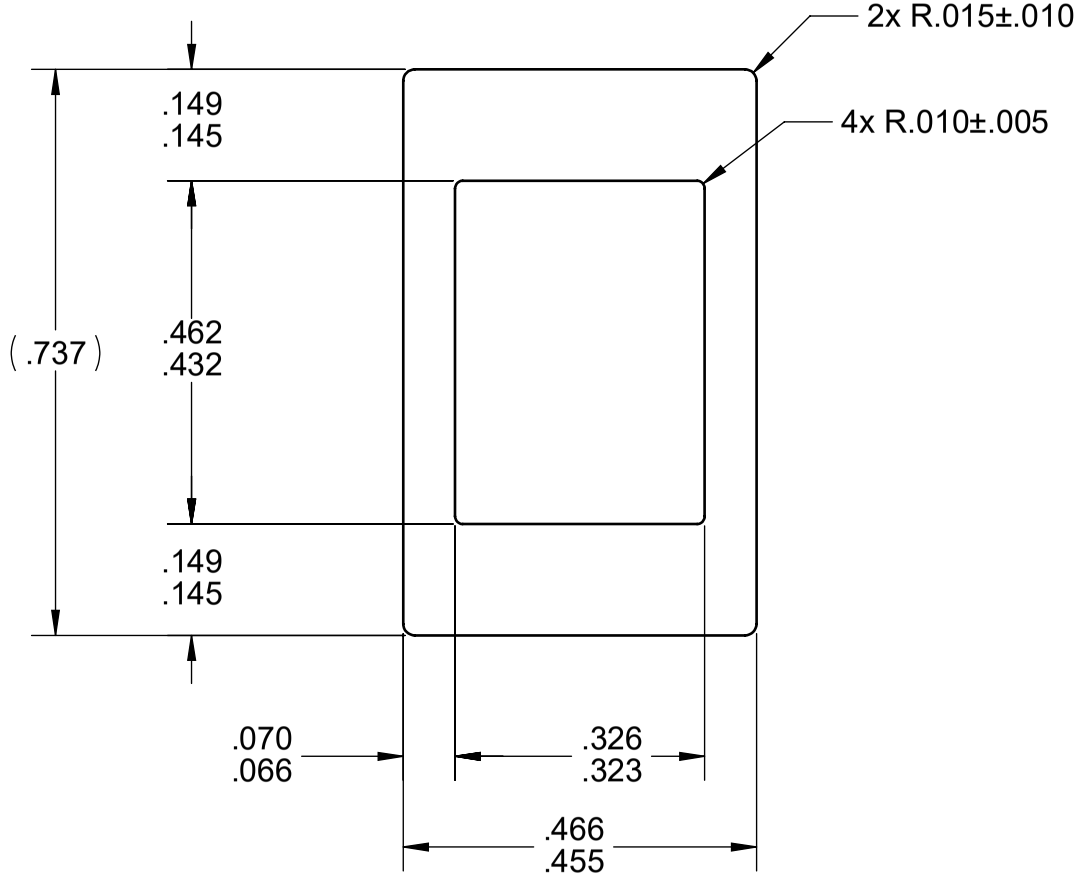
Full Scale

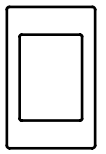
**NOTES:**

1. MATERIAL: 120 Copper Alloy, 1/4 Hard. Hardness Rockwell B20-B54
2. Purchased In 120 inch lengths, ±0.5 inch
3. Material Certs are required with each delivery.
4. FINISH: None

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FOR INTERNAL USE ONLY | | GEOMETRIC TOLERANCE UNLESS OTHERWISE SPECIFIED | | | | DIMENSION TOLERANCE (UNLESS OTHERWISE SPECIFIED) | | CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE. THE INFORMATION ON THIS DRAWING IS CONFIDENTIAL. UNAUTHORIZED USE IS PROHIBITED. | | TITLE: Extrusion, Box Connector | |
| | | FORM | | MACHINED | OTHER | | | | | | |
| MANUFACTURE QTY | | | | .001"/1", TIR | 1/16"/FT, TIR | FRACTION | ± 1/32 | JOB #: 8012 | | | |
| | | | | .002"/1", TIR | 1/8"/FT, TIR | 0.00 | ± 0.015 | DRAWN: SFS | DATE: 4/6/2022 | | |
| | | 1/2 SUM OF DIAMETRAL TOLS., TIR | | | | | | | | | |
| JOB # IF DIFFERENT FROM TITLE BLOCK | | SURFACE FINISH UNLESS SPECIFIED: 250 FOR FRACTIONAL DIM. 125 FOR 0.00 DIM. 63 FOR 0.000 DIM. | | | | 0.000 | ± 0.005 | CHECKED: - | DATE: - | SEE NOTES FOR MATERIAL AND FINISH | DWG. NO.: 700-0112 |
| | | | | | | 0.0000 | ± 0.0005 | USED ON DWG NO: - | | SIZE: A | SCALE: 4:1 SHEET: 1 OF 1 REV: 2 |

| REV | ECN | DESCRIPTION | DATE | APPR. |
|---|---|---|---|---|
| A | | Release for Production | 5/9/2022 | SFS |



Full Scale

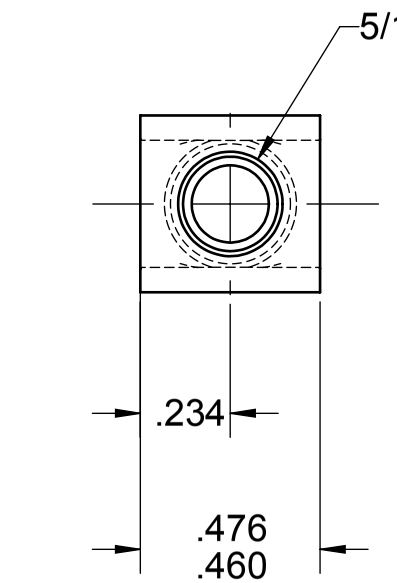
**NOTES:**

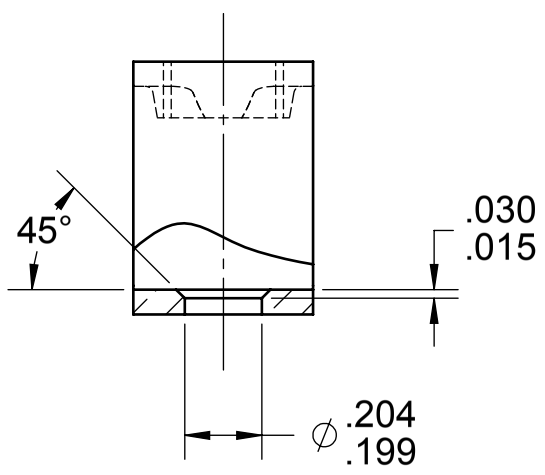
1. MATERIAL: 120 Copper Alloy, 1/4 Hard. Hardness Rockwell B20-B54
2. Approx Weight .75 pounds per foot
3. Purchased In 120 inch lengths, ±0.5 inch
4. Material Certs are required with each delivery.
5. FINISH: None

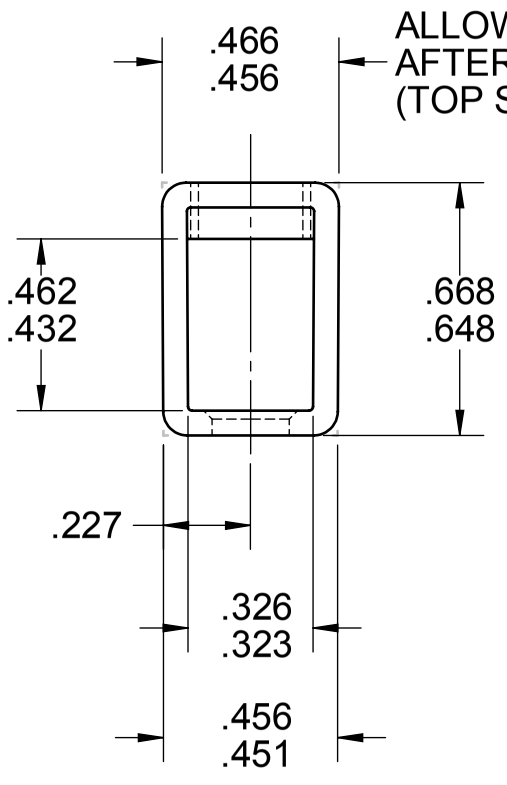
| | | GEOMETRIC TOLERANCE UNLESS OTHERWISE SPECIFIED | | | | DIMENSION TOLERANCE (UNLESS OTHERWISE SPECIFIED) | | CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE. THE INFORMATION ON THIS DRAWING IS CONFIDENTIAL. UNAUTHORIZED USE IS PROHIBITED. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FOR INTERNAL USE ONLY | | FORM | | MACHINED | OTHER | | | | | | |
| MANUFACTURE QTY | | ▱ — ⌒ ⌓ | | .001"/1", TIR | 1/16"/FT, TIR | FRACTION | ± 1/32 | JOB #: 8012 | | TITLE: Extrusion, Box Connector | |
| | | ∠ ⌭ // ⊥ | | .002"/1", TIR | 1/8"/FT, TIR | | | | | | |
| | | ◎ 1/2 SUM OF DIAMETRAL TOLS., TIR | | | | 0.00 | ± 0.015 | DRAWN: SFS | DATE: 4/6/2022 | | |
| JOB # IF DIFFERENT FROM TITLE BLOCK | | SURFACE FINISH UNLESS SPECIFIED: | 250 FOR FRACTIONAL DIM. 125 FOR 0.00 DIM. 63 FOR 0.000 DIM. | | | 0.000 | ± 0.005 | CHECKED: - | DATE: - | SEE NOTES FOR MATERIAL AND FINISH | DWG. NO.: 700-0112 |
| | | | | | | 0.0000 | ± 0.0005 | USED ON DWG NO: - | | SIZE: A SCALE: 4:1 SHEET: 1 OF 1 | REV: A |

| REV | DESCRIPTION | DATE | APPR. |
|---|---|---|---|
| C | Redraw in Solidworks; Add Chart with Unplated and Nickle plated options; Material was Copper Code No. B.O.S. | 5/11/2012 | SFS |

| PART NO | DESCRIPTION | FINISH |
|---|---|---|
| 11388-01 | BOX CONNECTOR, TIN PLATED | BRIGHT TIN PLATE .0001/.0002 THK |
| 11388-01U | BOX CONNECTOR, UN-PLATED | NONE |
| 11388-01N | BOX CONNECTOR, NICKLE PLATED | NICKLE PLATE .0001/.0002 THK |




NOTES:

1. SURFACE FINISH TO BE 63 UNLESS OTHERWISE SPECIFIED.
2. BREAK ALL CORNERS AND SHARP EDGES UNLESS OTHERWISE SPECIFIED.
3. MATERIAL: 120 COPPER, 1/4 HARD. HARDNESS: ROCKWELL B20-B54
4. FINISH: SEE CHART
5. REFERENCE: ILSCO D8391

| GEOMETRIC TOLERANCE UNLESS OTHERWISE SPECIFIED | | |
|---|---|---|
| FORM | MACHINED | OTHER |
| | .001"/1", TIR | 1/16"/FT, TIR |
| | .002"/1", TIR | 1/8"/FT, TIR |
| 1/2 SUM OF DIAMETRAL TOLS., TIR | | |
| SURFACE FINISH UNLESS SPECIFIED: | 250 FOR FRACTIONAL DIM. 125 FOR 0.00 DIM. 63 FOR 0.000 DIM. | |

| DIMENSION TOLERANCE (UNLESS OTHERWISE SPECIFIED) | |
|---|---|
| FRACTION | ± 1/32 |
| 0.00 | ± 0.015 |
| 0.000 | ± 0.005 |
| 0.0000 | ± 0.0005 |

CAD GENERATED DRAWING.
DO NOT MANUALLY UPDATE.

THE INFORMATION ON THIS DRAWING IS CONFIDENTIAL.
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CUSTOMER: 801251

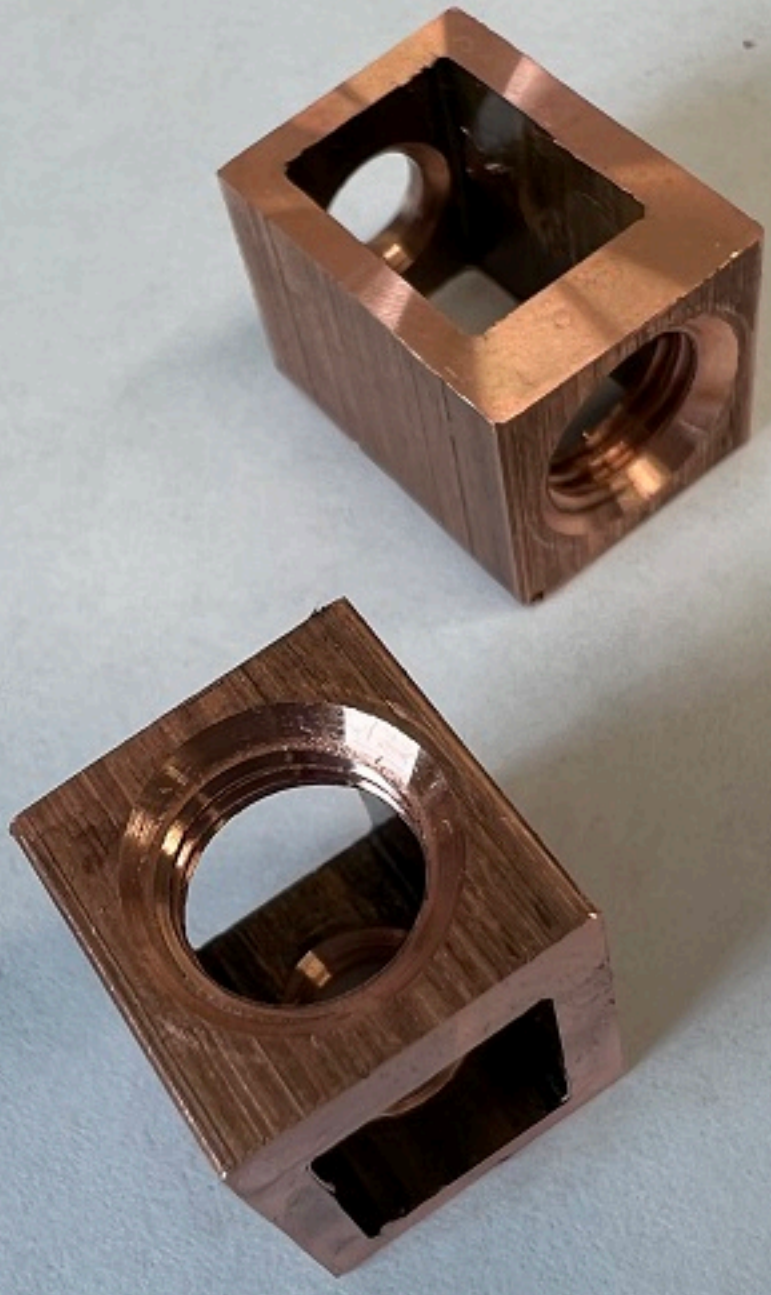
DRAWN: SFS DATE: 5/11/2012

CHECKED: - DATE: -

USED ON DWG NO: -

TITLE: BOX CONNECTOR, METER TEST SWITCH

SEE NOTES FOR MATERIAL AND FINISH

DWG. NO.: 11388-01

SIZE: B SCALE: 2:1 SHEET: 1 OF 1 REV: C