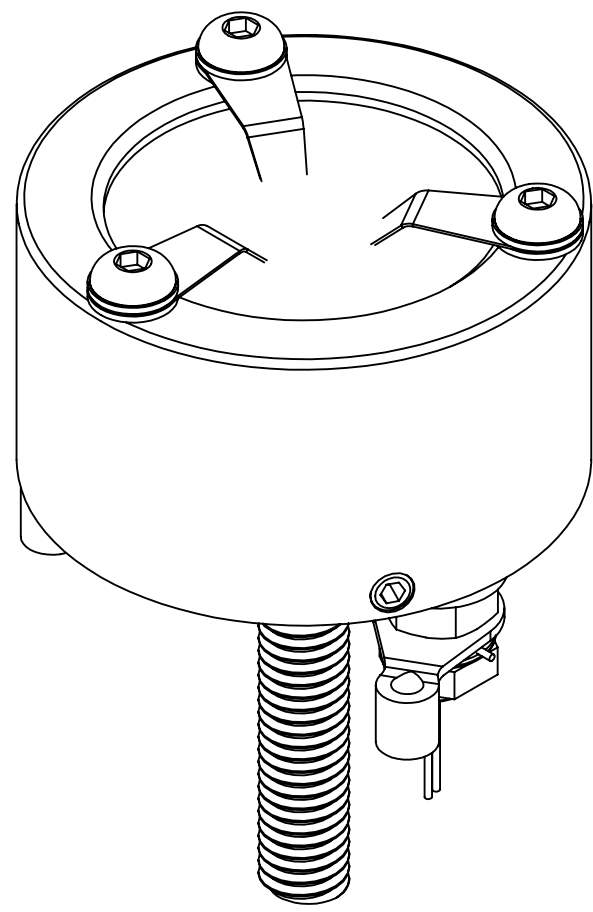
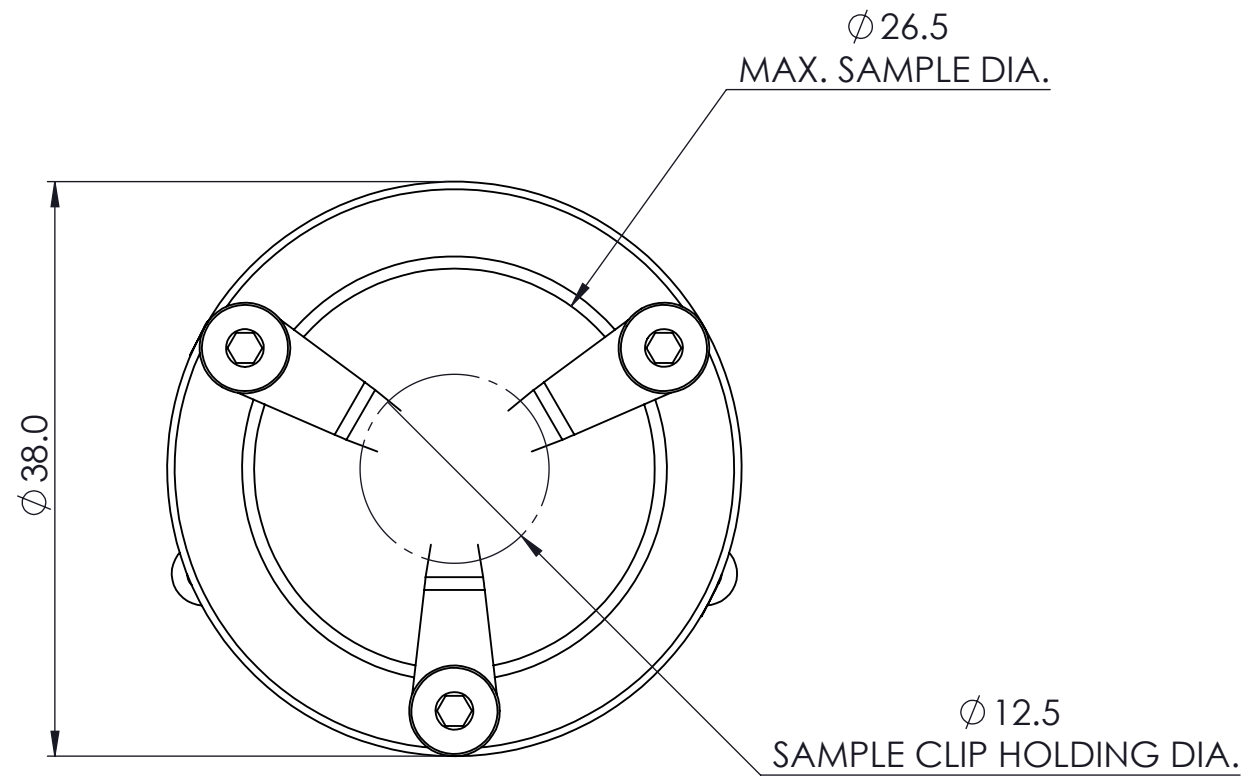
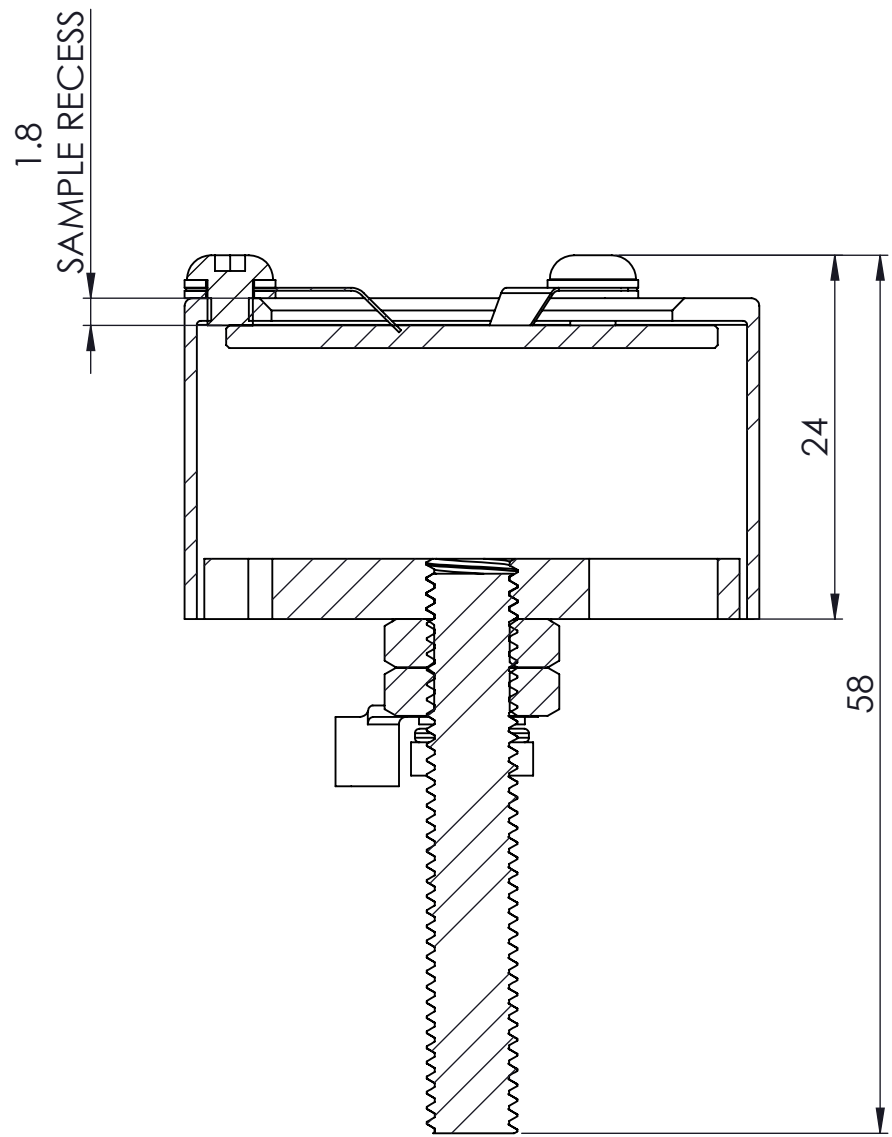
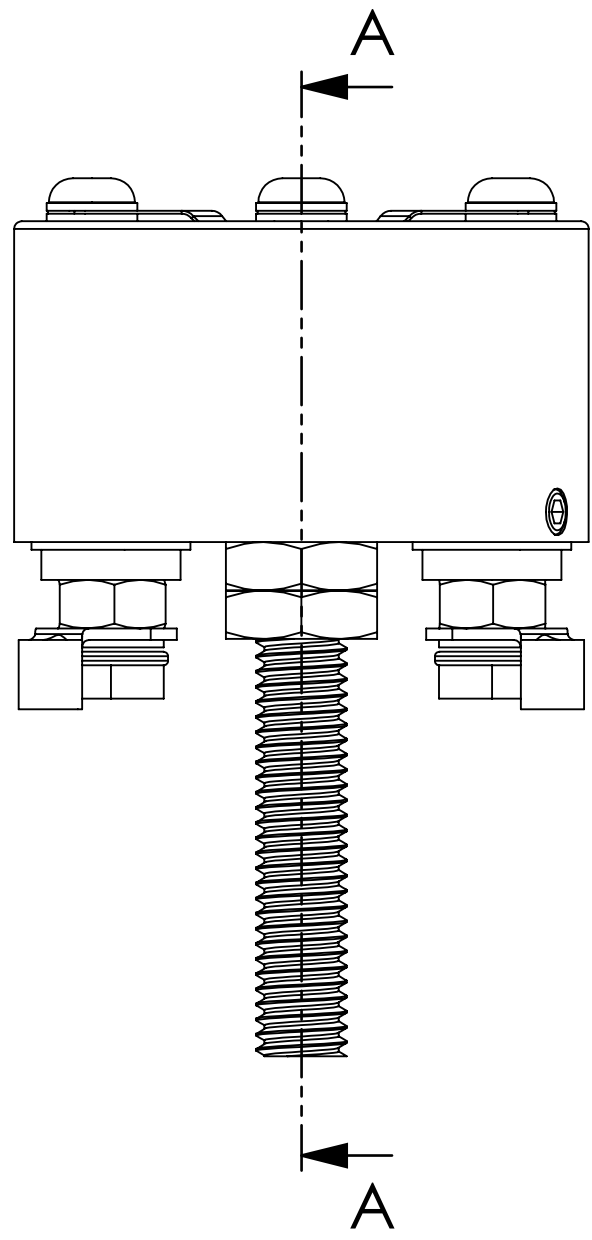




ISO. VIEW



SECTION A-A

- NOTES
- 1 - TUNGSTEEN - RHENIUM ELEMENT
  - 2 - TYPE K THERMOCOUPLE, 0.5M LONG WITH FIBREGLASS INSULATION
  - 3 - M6 MOUNTING STUD.
  - 4 - 3 X SAMPLE CLIPS.
  - 5 - CERAMIC SAMPLE PLATE.
  - 6 - 0.5M CERAMIC INSULATED POWER CABLES.

|  |  | TOLERANCES (EXCEPT AS NOTED): |             |           |            |
|--|--|-------------------------------|-------------|-----------|------------|
|  |  | ANGULAR: ± 30'                |             |           |            |
|  |  | DIM                           | UNDER 250mm | 250-500mm | 500-1500mm |
|  |  | ABOVE 1500                    |             |           |            |
|  |  | X =                           | ±0.5mm      | ±1.0mm    | ±1.5mm     |
|  |  | X.X =                         | ±0.2mm      | ±0.5mm    | ±0.75mm    |
|  |  | X.XX =                        | ±0.1mm      | ±0.2mm    | ±0.4mm     |

HEATER SPECIFICATION

HEATER/STAGE DETAILS

|                        |                     |
|------------------------|---------------------|
| HEATER TYPE:           | ROUND BUTTON HEATER |
| TOP PLATE TEMPERATURE: | 1000°C MAX.         |
| ENVIRONMENT:           | HV + UHV + INERT    |
| ELEMENT:               | TUNGSTEN - RHENIUM  |
| THERMOCOUPLE:          |                     |
| UNIFORMITY:            | N/A                 |
| SUBSTRATE:             | N/A                 |
| LEAK RATE:             | N/A                 |

ELECTRICAL

|                            |                               |
|----------------------------|-------------------------------|
| HEATER COLD RESISTANCE:    | 0.8Ω +/-0.2                   |
| RAMP RATE:                 | 140°C/min                     |
| POWER REQUIREMENTS:        | 12V & 8A DC @1000°c           |
| CABLE LENGTH & INSULATION: | 0.5 MTR, FIBREGLASS INSULATED |

COOLING

|                |     |
|----------------|-----|
| WATER COOLING: | N/A |
| GAS COOLING:   | N/A |

EXTRAS

|                                     |     |
|-------------------------------------|-----|
| ROTATION SPEED:                     | N/A |
| BIAS TYPE & POWER:                  | N/A |
| TRAVEL DISTANCE:                    |     |
| ADDITIONAL EXTERNAL HEAT SHIELDING: | N/A |

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|                                                        |           |             |             |
|--------------------------------------------------------|-----------|-------------|-------------|
| SCALE: 2:1                                             | DRAWN: A1 | CHECKED: BS | PAGE 1 OF 1 |
| DATE: 13 Apr 23                                        |           |             |             |
| TITLE: 1" BH 1000°C HV HEATER ASSEMBLY - Tu-Re Element |           |             |             |
| DWG NO: VB-1-1000-TU-HV                                |           |             | REVISION: 0 |