

# DOWNHOLE HTHP High Pressure/High Temperature Connectors

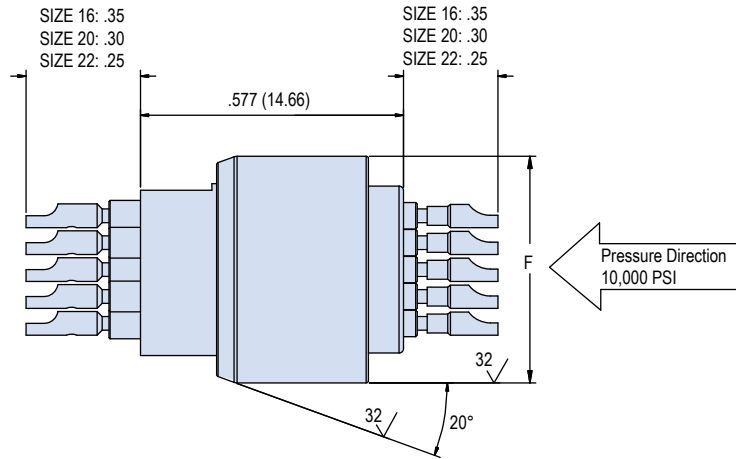
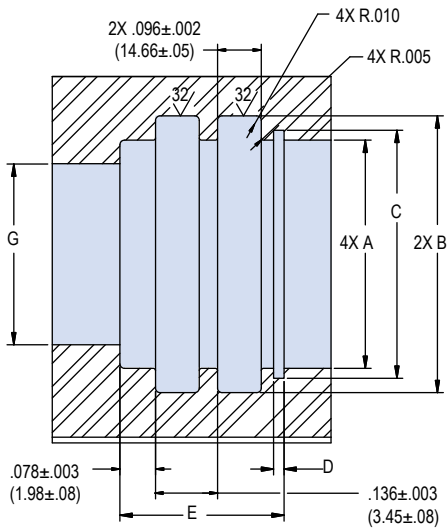


## 707-0015 glass sealed penetrator with solder cup to solder cup contacts

DOWNHOLE: HIGH PRESSURE/HIGH TEMPERATURE



| How To Order                      |                    |      |
|-----------------------------------|--------------------|------|
| Sample Part Number                | 707-0015           | -M37 |
| Series                            | 707-0015           |      |
| Shell Size/<br>Insert Arrangement | See page 20 and 21 |      |



| Dimensions |                               |                             |                                |                                       |                                    |             |                |                |                   |                                  |
|------------|-------------------------------|-----------------------------|--------------------------------|---------------------------------------|------------------------------------|-------------|----------------|----------------|-------------------|----------------------------------|
| Shell Size | Ø A Bore Dia.                 | Ø B Bore O-Ring Groove Dia. | Ø C Retaining Ring Groove Dia. | Ø D Retaining Ring Groove Width       | Ø E Retaining Ring Groove Location | Bore O-ring | Retaining Ring | Insertion Tool | Ø F Feedthru Dia. | G (Clearance Diameter)           |
| G          | .5005 ±.0008<br>(12.71 ±.02)  | .607 ±.001<br>(15.42 ±.03)  | .528 ±.002<br>(13.41 ±.05)     | .023 +.002/- .001<br>(.58 +.05/- .03) | .3600 ±.0025<br>(9.14 ±.06)        | 2-014       | VH-50-S16      | 709-004-G      | .497 (12.62)      | Ø.3865 ±.025<br>(Ø.9.82 ± 0.64)  |
| K          | .6255 ±.0008<br>(15.88 ±.02)  | .732 ±.001<br>(18.59 ±.03)  | .635 ±.002<br>(16.13 ±.05)     | .023 +.002/- .001<br>(.58 +.05/- .03) | .3600 ±.0025<br>(9.14 ±.06)        | 2-016       | VH-62-S16      | 709-004-K      | .622 (15.80)      | Ø.5115 ±.0025<br>(Ø12.99 ± 0.06) |
| M          | .8125 ±.0008<br>(20.64 ±.02)  | .919 ±.001<br>(23.34 ±.03)  | .854 ±.002<br>(21.69 ±.05)     | .027 +.002/- .001<br>(.69 +.05/- .03) | .3640 ±.0025<br>(9.25 ±.06)        | 2-019       | VH-81-S16      | 709-004-M      | .809 (20.55)      | Ø.6985 ±.0025<br>(Ø17.74 ± 0.06) |
| O          | 1.0625 ±.0008<br>(26.99 ±.02) | 1.169 ±.001<br>(29.69 ±.03) | 1.106 ±.002<br>(28.09 ±.05)    | .032 +.002/- .001<br>(.81 +.05/- .03) | .3690 ±.0025<br>(9.37 ±.06)        | 2-023       | VH-106-S16     | 709-004-O      | 1.059<br>(26.90)  | Ø.8865 ±.0025<br>(22.52 ± 0.06)  |
| Q          | 1.3755 ±.0008<br>(34.94 ±.02) | 1.482 ±.001<br>(37.64 ±.03) | 1.419 ±.002<br>(36.04 ±.05)    | .032 +.002/- .001<br>(.81 +.05/- .03) | .3690 ±.0025<br>(9.37 ±.06)        | 2-028       | VH-137-S16     | 709-004-Q      | 1.372<br>(34.85)  | Ø1.11365 ±.0025<br>(2.89 ± 0.06) |

### NOTES

- Environmental ratings:
  - Pressure - open face - 10,000 psi (uni-directional as shown)
  - Pressure tested to 15,000 PSI per ISO 13628-6
  - Dielectric withstand voltage: 1200VAC per EIA-364-20
  - Insulation resistance: 5,000 megohms (test) @ 500Vdc per EIA-364-21
  - Operating temperature: -55°C to +125°C
  - Hermeticity - <math>1 \times 10^{-7}</math> sccHe/sec @ 1 atmosphere differential
- Material
  - Glass seal insert: Inconel® X-750 per AMS 5667
  - O-ring: nitrile - 90 duro