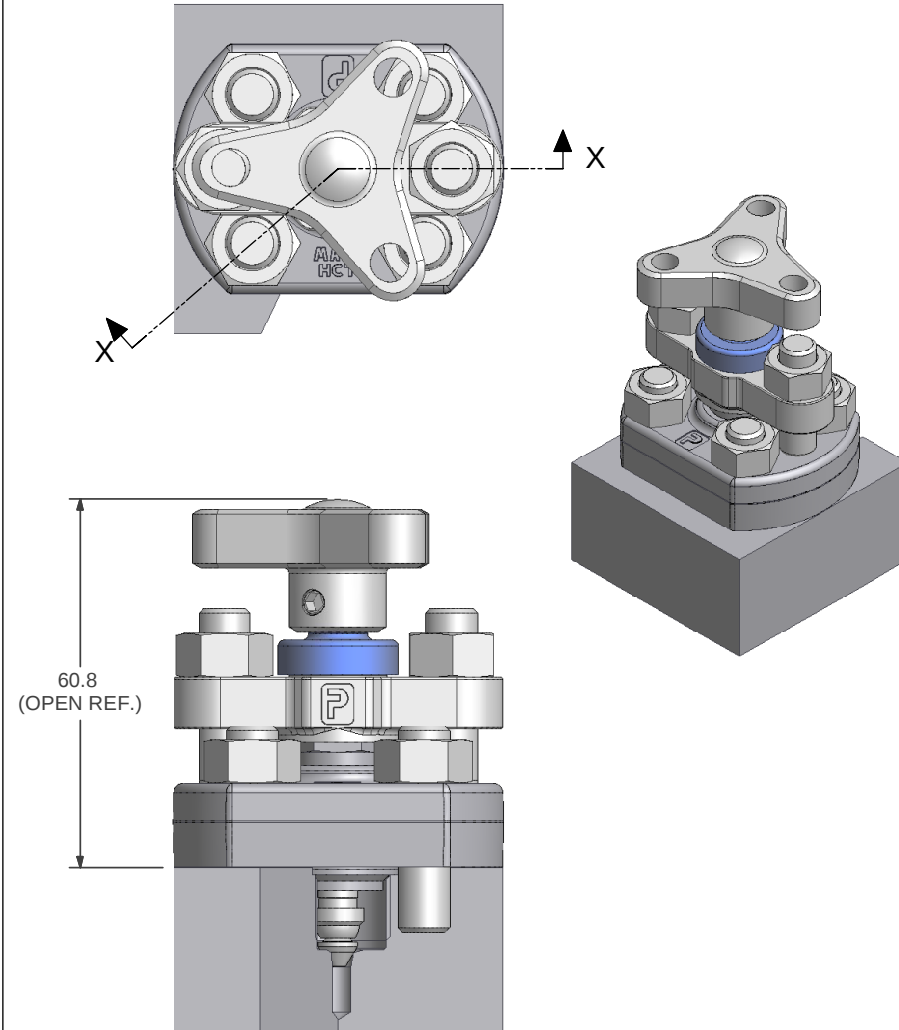
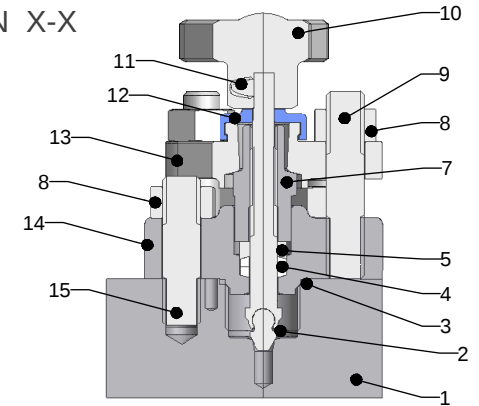


P.T.F.E. PACKING : 260°C (500°F) MAX.  
GRAPHITE GLAND (GG) : 538°C (1000°F) MAX

SECTION X-X



| ITEM NO. | DESCRIPTION            | MATERIAL             |                      |                      |                      |                          |                      |                      |                          |                      |                      |
|----------|------------------------|----------------------|----------------------|----------------------|----------------------|--------------------------|----------------------|----------------------|--------------------------|----------------------|----------------------|
|          |                        | ST.ST.               | CARBON STEEL         | LOW TEMP CS A350 LF2 | MONEL                | DUPLEX                   | HASTELLOY            | TITANIUM             | 6MO                      | INCOLOY              | INCONEL              |
| 1        | BODY                   | A182-F316            | A105                 | A350 LF2             | MONEL M400           | DUPLEX UNS 31803         | HASTELLOY C-276      | TITANIUM GR-2        | 6MO                      | INCOLOY 825          | INCONEL 625          |
| 2        | TIP                    | 17-4PH ST.ST.        | 17-4PH ST.ST.        | 17-4PH ST.ST.        | MONEL K500           | DUPLEX UNS S.32750/32760 | HASTELLOY B2         | TITANIUM GR-5        | DUPLEX UNS S.32750/32760 | INCONEL 625          | INCONEL 718          |
| 3        | JOINT SEAL             | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 | MONEL M400           | 6MO                      | HASTELLOY C-276      | TITANIUM GR-2        | 6MO                      | INCOLOY 825          | INCONEL 625          |
| 4        | PACKING                | P.T.F.E. / GRAPHITE  | P.T.F.E. / GRAPHITE  | P.T.F.E. / GRAPHITE  | P.T.F.E. / GRAPHITE  | P.T.F.E. / GRAPHITE      | P.T.F.E. / GRAPHITE  | P.T.F.E. / GRAPHITE  | P.T.F.E. / GRAPHITE      | P.T.F.E. / GRAPHITE  | P.T.F.E. / GRAPHITE  |
| 5        | THRUST BUSH            | 316 ST.ST.           | 316 ST.ST.           | 316 ST.ST.           | 316 ST.ST.           | 316 ST.ST.               | 316 ST.ST.           | 316 ST.ST.           | 316 ST.ST.               | 316 ST.ST.           | 316 ST.ST.           |
| 6        | STEM                   | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 | MONEL M400           | DUPLEX UNS 31803         | HASTELLOY C-276      | TITANIUM GR-5        | 6MO                      | INCOLOY 825          | INCONEL 625          |
| 7        | GLAND ADJUSTER         | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479     | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479     | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 |
| 8        | NUT                    | A194M-8M             | A194M-2H             | A194M-2H             | A194M-8M             | A194M-8M                 | A194M-8M             | A194M-8M             | A194M-8M                 | A194M-8M             | A194M-8M             |
| 9        | BONNET-BRIDGE STUDDING | A193M-B8M            | A193M-B7             | A193M-B7             | A193M-B8M            | A193M-B8M                | A193M-B8M            | A193M-B8M            | A193M-B8M                | A193M-B8M            | A193M-B8M            |
| 10       | HANDLE                 | 316 ST.ST.           | 316 ST.ST.           | 316 ST.ST.           | 316 ST.ST.           | 316 ST.ST.               | 316 ST.ST.           | 316 ST.ST.           | 316 ST.ST.               | 316 ST.ST.           | 316 ST.ST.           |
| 11       | GRUB SCREW             | A4-80 ST.ST.         | A4-80 ST.ST.         | A4-80 ST.ST.         | A4-80 ST.ST.         | A4-80 ST.ST.             | A4-80 ST.ST.         | A4-80 ST.ST.         | A4-80 ST.ST.             | A4-80 ST.ST.         | A4-80 ST.ST.         |
| 12       | DUST CAP               | LDPE - COLOURED      | LDPE - COLOURED      | LDPE - COLOURED      | LDPE - COLOURED      | LDPE - COLOURED          | LDPE - COLOURED      | LDPE - COLOURED      | LDPE - COLOURED          | LDPE - COLOURED      | LDPE - COLOURED      |
| 13       | BRIDGE                 | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479     | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479     | 316 ST.ST. ASTM A479 | 316 ST.ST. ASTM A479 |
| 14       | BONNET                 | A182-F316            | A105                 | A350 LF2             | MONEL M400           | DUPLEX UNS 31803         | HASTELLOY C-276      | TITANIUM GR-2        | 6MO                      | INCOLOY 825          | INCONEL 625          |
| 15       | BODY-BONNET STUDDING   | A193M-B8M            | A193M-B7             | A193M-B7             | A193M-B8M            | A193M-B8M                | A193M-B8M            | A193M-B8M            | A193M-B8M                | A193M-B8M            | A193M-B8M            |

| MAXIMUM WORKING PRESSURE, PSI (TEMPERATURE RANGE -29 to 38°C [-20 to 100°F]) |       |       |       |      |       |       |      |       |       |       |       |
|------------------------------------------------------------------------------|-------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|
| CLASS 2500 - STD.                                                            | 6000  | 6170  | 6170  | 5000 | 6250  | 6250  | 3950 | 6250  | 6250  | 6250  | 6250  |
| HIGH PRESSURE 10,000 PSI CWP*                                                | 10000 | 10250 | 10250 | 9000 | 10400 | 10400 | 6650 | 10400 | 10400 | 10400 | 10400 |

\* - Approximates to ANSI CLASS 4500

|                                                                                                                                                                                                                                                                                                                                                                                                         |            |            |              |                                                                                                                                                        |  |  |  |                                                                                                                                                           |                 |            |                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------|-----------------------------------------------------------------------------------------------------------------|
| FOR MATERIAL AND PROCESS SPECIFICATIONS REFER TO GENRIC PROCESS CONTROL SHEET ESSF 110                                                                                                                                                                                                                                                                                                                  |            |            |              | ALL DIMENSIONS IN MM UNLESS OTHERWISE STATED                                                                                                           |  |  |  | REMOVE ALL SHARP EDGES AND BURRS                                                                                                                          |                 |            | <br>Parker Hannifin plc<br>Instrumentation Products Division<br>Riverside Road<br>Barnstaple,<br>Devon EX31 1NP |
| FOR PART MARKING DETAILS REFER TO PART MARKING SPECIFICATION ESSF 111                                                                                                                                                                                                                                                                                                                                   |            |            |              | DRAWING TITLE :                                                                                                                                        |  |  |  | INCH                                                                                                                                                      | METRIC          | ANGULAR    |                                                                                                                 |
| THIS DRAWING CONTAINS INFORMATION THAT IS CONFIDENTIAL AND PROPRIETARY TO PARKER HANNIFIN PLC. THIS DRAWING IS FURNISHED ON THE UNDERSTANDING THAT THE DRAWING AND THE INFORMATION IT CONTAINS WILL NOT BE COPIED OR DISCLOSED TO OTHERS EXCEPT WITH THE WRITTEN CONSENT OF PARKER HANNIFIN. WILL NOT BE USED TO THE DETRIMENT OF PARKER HANNIFIN AND WILL BE RETURNED UPON REQUEST BY PARKER HANNIFIN. |            |            |              | HBY TYPE OUTSIDE SCREW & YOKE<br>BOLTED BONNET ASSEMBLY<br>GENERAL ASSEMBLY -<br>MATERIAL SPECIFICATION - B.O.M.                                       |  |  |  | (.00") ± .015"                                                                                                                                            | (.01mm ± .3mm   | ±1/2° ±30° |                                                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                         |            |            |              |                                                                                                                                                        |  |  |  | (.000") ± .005"                                                                                                                                           | (.00mm) ± 0.1mm |            |                                                                                                                 |
| ISSUE NO.                                                                                                                                                                                                                                                                                                                                                                                               | 2          | DRAWN BY:  | MAT DAVIS    | CHECKED BY :<br>Approvals using electronic<br>'PDM WORKFLOW' (QSP05/25)<br><br>APPROVED BY:<br>Approvals using electronic<br>'PDM WORKFLOW' (QSP05/25) |  |  |  | GENERAL M/C FINISH 63min CLA/ 1.6mm RA<br>GEOMETRICAL TOL'S TO BS.308 PART 3.<br>ALL THREAD TOLERANCES ARE TO BE IN<br>ACCORDANCE WITH PARKER IPD ESST01. |                 |            |                                                                                                                 |
| E.C.N NUMBER                                                                                                                                                                                                                                                                                                                                                                                            | AB537      | DATE DRAWN | 03/09/2002   |                                                                                                                                                        |  |  |  |                                                                                                                                                           |                 |            |                                                                                                                 |
| DATE                                                                                                                                                                                                                                                                                                                                                                                                    | 16/11/2004 | SCALE      | PROPORTIONAL | DRAWING LOCATED IN PDM SYSTEM                                                                                                                          |  |  |  | DO NOT SCALE IF IN DOUBT ASK                                                                                                                              |                 |            | HBY Material Spec                                                                                               |