

SECTION A-A

100

48

SECTION B-B

158

26.2

HOLE Ø 22 THRU TO CAVITY

NOTES

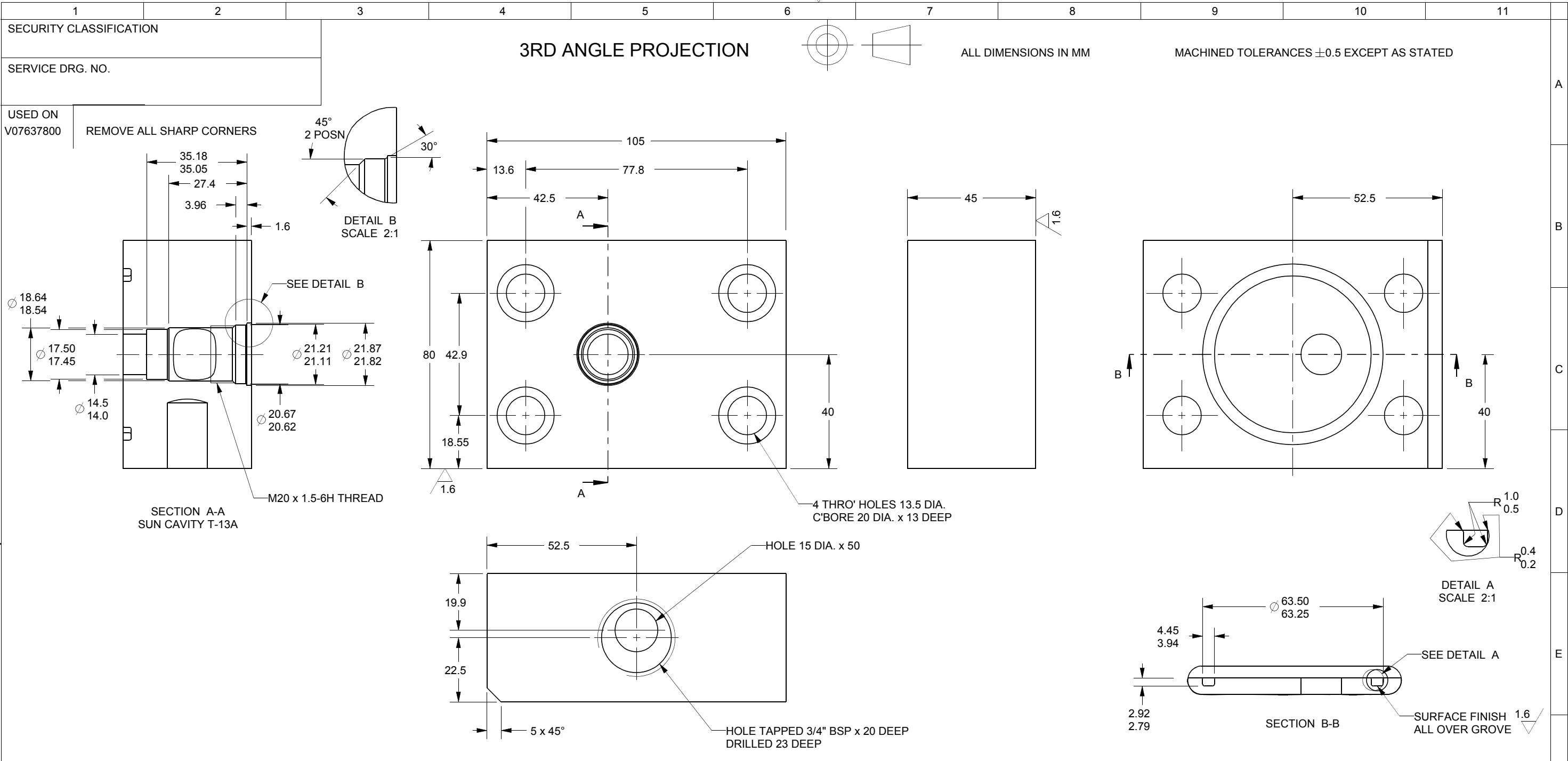
ALL DRILL DEPTHS REFER TO CUTTING EDGE

CAVITY - DRILL MUST ROTATE ON WITHDRAWAL TO PREVENT DRILL RETURN MARKS. THIS CAN CAUSE LEAK PATHS AROUND VALVES.

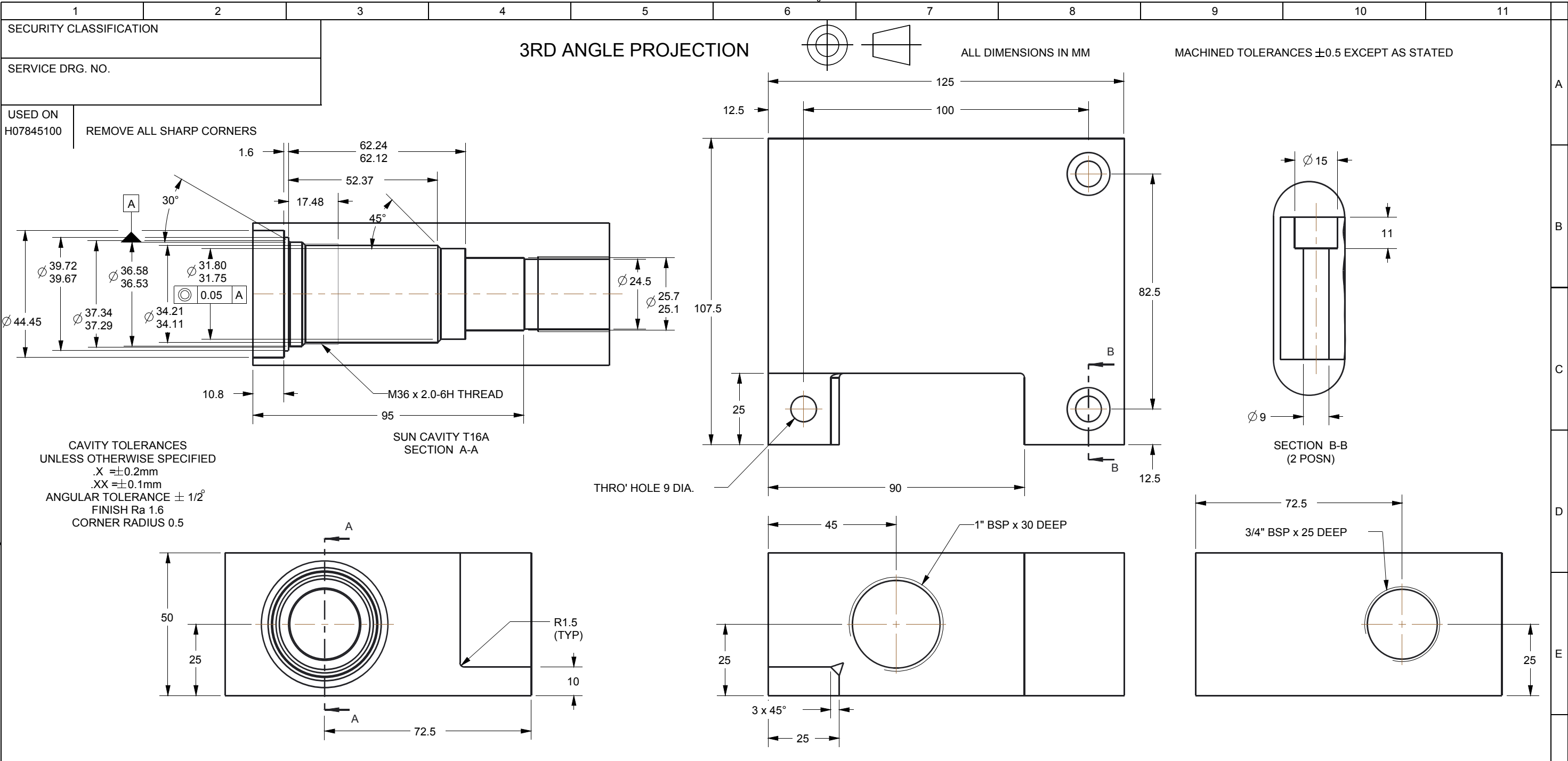
CLEANING PROCESS TO MTSP26 - GRADE B.

INSPECTION PROCESS TO MTSP26.

[illegible][illegible]

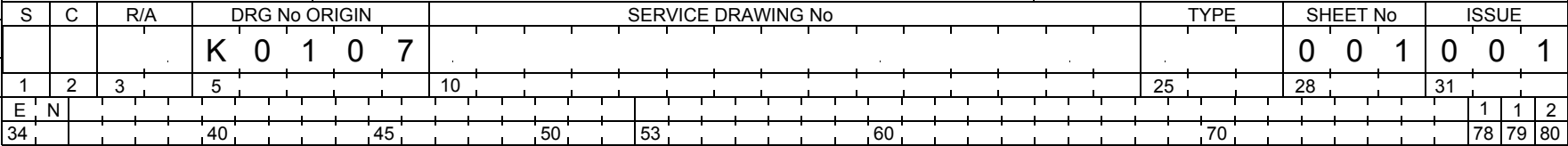


| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|------------------------------|------|-----------|---------|----|-----------|-----------|--|--|--|---|------|---|--|--|--|--|-------------------|--|--|-------------------|--|--------------|--|--|--|--|----------------|--|--|--|--|---|--|--|--|--|--|--|--|-------------------|--|-----------------------|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | F | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | 5 x 45° CHAMFER ADDED TO GRID REF 4F. WIDTH WAS 105. | | | | | | | | | | 2 | | | | | | | | | | 08-Jan-15 | | | | | | | | | | SDB | | | | | | | | | | | | | | | | | | | | SC | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | 21-Nov-14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div>IF IN DOUBT ASK</div> <table><tr><td>DRAWN BY</td><td>SDB</td><td>21-Nov-14</td></tr><tr><td>CHECKED</td><td>JC</td><td>24-Nov-14</td></tr><tr><td>CERTIFIED</td><td></td><td></td></tr><tr><td></td><td>NAME</td><td>DATE</td></tr></table> <div>THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.</div> | | | DRAWN BY | SDB | 21-Nov-14 | CHECKED | JC | 24-Nov-14 | CERTIFIED | | | | NAME | DATE | MATERIAL STAINLESS STEEL (REFER PARTS LIST) | | | | | | | | | | SCALE 1:1 | | | | | | | | | | TITLE <div>CHECK MANIFOLD DETAIL</div> | | | | | | | | | | RESPONSIBLE AUTHORITY | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | DRAWN BY | SDB | 21-Nov-14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | CHECKED | JC | 24-Nov-14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | CERTIFIED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | NAME | DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | HEAT TREATMENT N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | SURFACE HARDNESS N/A | | | | | | | | | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | | | | | | | | | NSN CONTRACTOR | | | | | | | | | | SECURITY CLASSIFICATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | MATERIAL TEST N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | PROTECTIVE FINISH N/A | | | | | | | | | | SURFACE TEXTURE IN MICROMETRES 3.2√ EXCEPT AS STATED | | | | | | | | | | K 0 1 0 7 | | | | | | | | | | CONTRACTORS PART NO. <div>V07637900</div> | | | | | | | | | | SHEET NO 01 OF 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | HYDRAULIC TEST PROCEDURE N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CLEANLINESS SPECIFICATION MTSP26 | | | | | | | | | | S C R/A DRG No ORIGIN SERVICE DRAWING No TYPE SHEET No ISSUE | | | | | | | | | | 0 0 1 0 0 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PATTERN No N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ESTIMATED MASS 2.6 Kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | 1 2 3 5 10 | | | | | | | | | | 25 28 31 | | | | | | | | | | 1 1 2 78 79 80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | E N 34 | | | | | | | | | | 40 45 50 53 60 70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



| IF IN DOUBT ASK | | |
|--|------|-----------|
| DRAWN BY | SDB | 15-Mar-16 |
| CHECKED | SC | 18-Mar-16 |
| CERTIFIED | | |
| | NAME | DATE |
| THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD. | | |

| | | | | | | | | | | |
|--|--|--|---|---|----------------------|---|--------------------------------|----------|-------|---|
| MATERIAL ST. STEEL (REFER PARTS LIST) | | | SCALE 1:1 | | TITLE MANIFOLD BLOCK | | RESPONSIBLE AUTHORITY | | | |
| HEAT TREATMENT N/A | | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | NSN | | SECURITY CLASSIFICATION | | | |
| SURFACE HARDNESS N/A | | | SURFACE TEXTURE IN MICROMETRES 1.6 EXCEPT AS STATED | | CONTRACTOR | | CONTRACTORS PART NO. V07845200 | | | |
| MATERIAL TEST N/A | | | DRG No | | SERVICE DRAWING No | | SHEET NO 01 OF 01 | | | |
| PROTECTIVE FINISH N/A | | | ORIGIN | | | | SHEET NO OF | | | |
| HYDRAULIC TEST PROCEDURE N/A | | | S | C | R/A | | TYPE | SHEET No | ISSUE | |
| CLEANLINESS SPECIFICATION MTSP26 | | | 1 | 2 | 3 | 5 | | 0 | 0 | 1 |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | | | | | | | |
| PATTERN No N/A | | | | | | | | | | |
| ESTIMATED MASS 3.4 Kg | | | | | | | | | | |



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11

SECURITY CLASSIFICATION

SERVICE DRG. NO.

3RD ANGLE PROJECTION

ALL DIMENSIONS IN MM

MACHINED TOLERANCES ±0.5 EXCEPT AS STATED

REMOVE ALL SHARP CORNERS

USED ON
V07524100

| HOLE REF | X CO-ORD | Y CO-ORD | DRILL DIA. | DRILL DEPTH | THREAD DIA. | THREAD DEPTH | BREAKS INTO | REMARKS |
|-----------|-----------------|-----------------|------------------|-------------|------------------|--------------|-------------|-----------------|
| A1 - A12 | SEE DETAIL '2A' | SEE DETAIL '2A' | TO SUIT M6 | 15 | M6 x 1.0p (6H) | 12 | -- | FIXING HOLE |
| A13 | 23.5 | 205 | ∅ 6 | 35 | -- | -- | B3 | -- |
| A14 | 23.5 | 240 | ∅ 6 | 85 | -- | -- | B1 | -- |
| A15 | 422.5 | 235 | ∅ 6 | 88 | -- | -- | E21 | -- |
| A16 | 422.5 | 270 | ∅ 6 | 25 | -- | -- | C8 | -- |
| A17 - A34 | SEE DETAIL '2B' | SEE DETAIL '2B' | TO SUIT M8 | 20 | M8 x 1.25p (6H) | 16 | -- | FIXING HOLE |
| A35 - A38 | SEE DETAIL '2E' | SEE DETAIL '2E' | TO SUIT M10 | 23 | M10 x 1.5p (6H) | 20 | -- | FIXING HOLE |
| A39 - A42 | SEE DETAIL '2F' | SEE DETAIL '2F' | TO SUIT M10 | 19 | M10 x 1.5p (6H) | 17 | -- | FIXING HOLE |
| A44 - A55 | SEE DETAIL '2C' | SEE DETAIL '2C' | TO SUIT M12 | 24 | M12 x 1.75p (6H) | 20 | -- | FIXING HOLE |
| A56 | 32.5 | 80.5 | ∅ 15 | THRO' | -- | -- | D28, F1 | -- |
| A57 | 32.5 | 138.5 | ∅ 15 | 50 | -- | -- | B6 | -- |
| A58 | 227.5 | 183.5 | ∅ 16 | 50 | -- | -- | F12 | -- |
| A59 | 227.5 | 241.5 | ∅ 16 | 55 | -- | -- | E22 | -- |
| A60 | 317.5 | 183.5 | ∅ 16 | 50 | -- | -- | F13 | -- |
| A61 | 317.5 | 241.5 | ∅ 16 | 55 | -- | -- | E24 | -- |
| A62 - A65 | SEE DETAIL '2D' | SEE DETAIL '2D' | TO SUIT M20 | 35 | M20 x 2.5p (6H) | 25 | -- | FIXING HOLE |
| A66 | 472.5 | 70 | ∅ 25 | 45 | -- | -- | F11 | 1" SAE PORT |
| A67 | 122.5 | 192 | ∅ 32 | 55 | -- | -- | F9 | -- |
| A68 | 122.5 | 244 | ∅ 32 | 40 | -- | -- | E43 | -- |
| A69 | 410 | 70 | ∅ 32 | 50 | -- | -- | D25, F10 | 1,1/4" SAE PORT |
| A70 | 225 | 70 | ∅ 38 | 50 | -- | -- | F12, F14 | 1,1/2" SAE PORT |
| A71 | 325 | 70 | ∅ 38 | 50 | -- | -- | F13, F15 | 1,1/2" SAE PORT |
| A72 | 402 | 160 | ∅ 38 | 70 | -- | -- | C20 | 1,1/2" SAE PORT |
| A73 | 409.5 | 289 | TO SUIT 1/8" BSP | 38 | 1/8" - 28 BSP | 10 | C7, E37 | -- |
| A74 | 43 | 285 | TO SUIT 1/4" BSP | 40 | 1/4" - 19 BSP | 12 | E15, E35 | -- |

DETAIL VIEW '2A'

2 PLACES

SCALE 1:1

DETAIL VIEW '2B'

3 PLACES

SCALE 1:1

DETAIL VIEW '2C'

TYPICAL IN 3 PLACES

NOTE TAPPED HOLES ROUND PORT A72 ARE ROTATED 90° POSITIONALLY

REFER MAIN VIEW ON FACE 'A'

SCALE 1:1

DETAIL VIEW '2D'

SCALE 1:1

DETAIL VIEW '2E'

SCALE 1:1

DETAIL VIEW '2F'

SCALE 1:1

FACE A

225

100

85

62.5

120

5 REF

20

ENGRAVE AS SHOWN (1mm) DEEP

SEE DETAIL VIEW '2A'

SEE DETAIL VIEW '2D'

SEE DETAIL VIEW '2B'

SEE DETAIL VIEW '2C'

SEE DETAIL VIEW '2E'

SEE DETAIL VIEW '2F'

IF IN DOUBT ASK

DRAWN BY

RW

03-Feb-14

CHECKED

CMcM

28-Mar-14

CERTIFIED

NAME

DATE

THIS DRAWING HAS BEEN PRODUCED USING 3d CAD.

NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.

MATERIAL

STEEL (REFER PARTS LIST)

HEAT TREATMENT

N/A

SURFACE HARDNESS

N/A

MATERIAL TEST

N/A

PROTECTIVE FINISH

N/A

HYDRAULIC TEST PROCEDURE

N/A

CLEANLINESS SPECIFICATION

MTSP26

QUALITY ASSURANCE GRADE

BS EN ISO 9001

PATTERN No

N/A

ESTIMATED MASS

139.9 Kg

SCALE

3:4

ALL THREADS TO CONFORM WITH BS SPECIFICATIONS

SURFACE TEXTURE IN MICROMETRES

1.6 / EXCEPT AS STATED

TITLE

MANIFOLD BLOCK, BOW

NSN

K 0 1 0 7

CONTRACTOR

K 0 1 0 7

RESponsible Authority

SECURITY CLASSIFICATION

CONTRACTORS PART NO.

V07543700

SHEET NO

02

OF

08

SERVICE DRG. NO.

SHEET NO

OF

REFER SHEET 08.

5

15-Oct-14

SDB

GD

REFER SHEET 08.

4

11-Sep-14

JC

SDB

REFER SHEET 08.

3

02-Jul-14

JC

SDB

NOTES ADDED AND NAME CHANGED

2

01-Apr-14

RW

SDB

1

03-Feb-14

CHANGE

ISSUE

DATE

MOD

CHECKED

S

C

R/A

DRG No

ORIGIN

SERVICE DRAWING No

TYPE

SHEET No

ISSUE

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2

3

5

10

25

28

31

1

1

1

E

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45

50

53


60

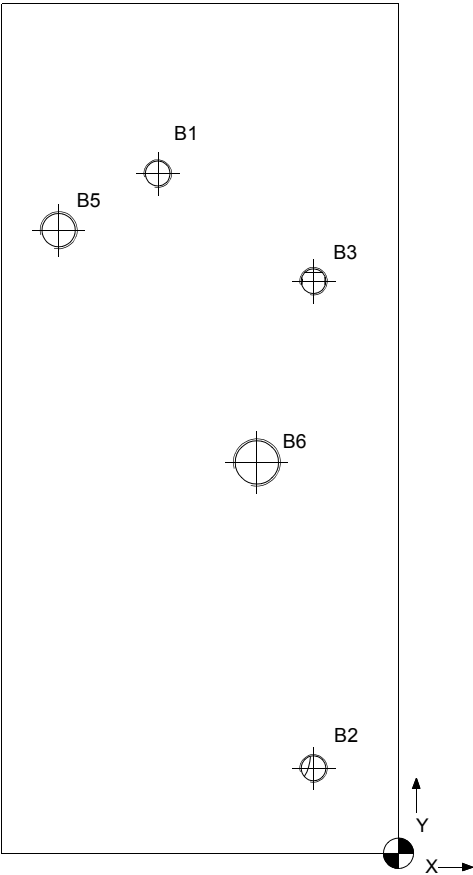
70

78

79

80

| | | | | | | | | | | | |
|-------------------------|---|--|---|---|---|---|---|---|----|----|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| SECURITY CLASSIFICATION | | <div> <div>3RD ANGLE PROJECTION</div> <div>  </div> <div>ALL DIMENSIONS IN MM</div> <div>MACHINED TOLERANCES ± 0.5 EXCEPT AS STATED</div> <div>REMOVE ALL SHARP CORNERS</div> </div> | | | | | | | | | |
| SERVICE DRG. NO. | | | | | | | | | | | |
| USED ON V07524100 | | | | | | | | | | | |

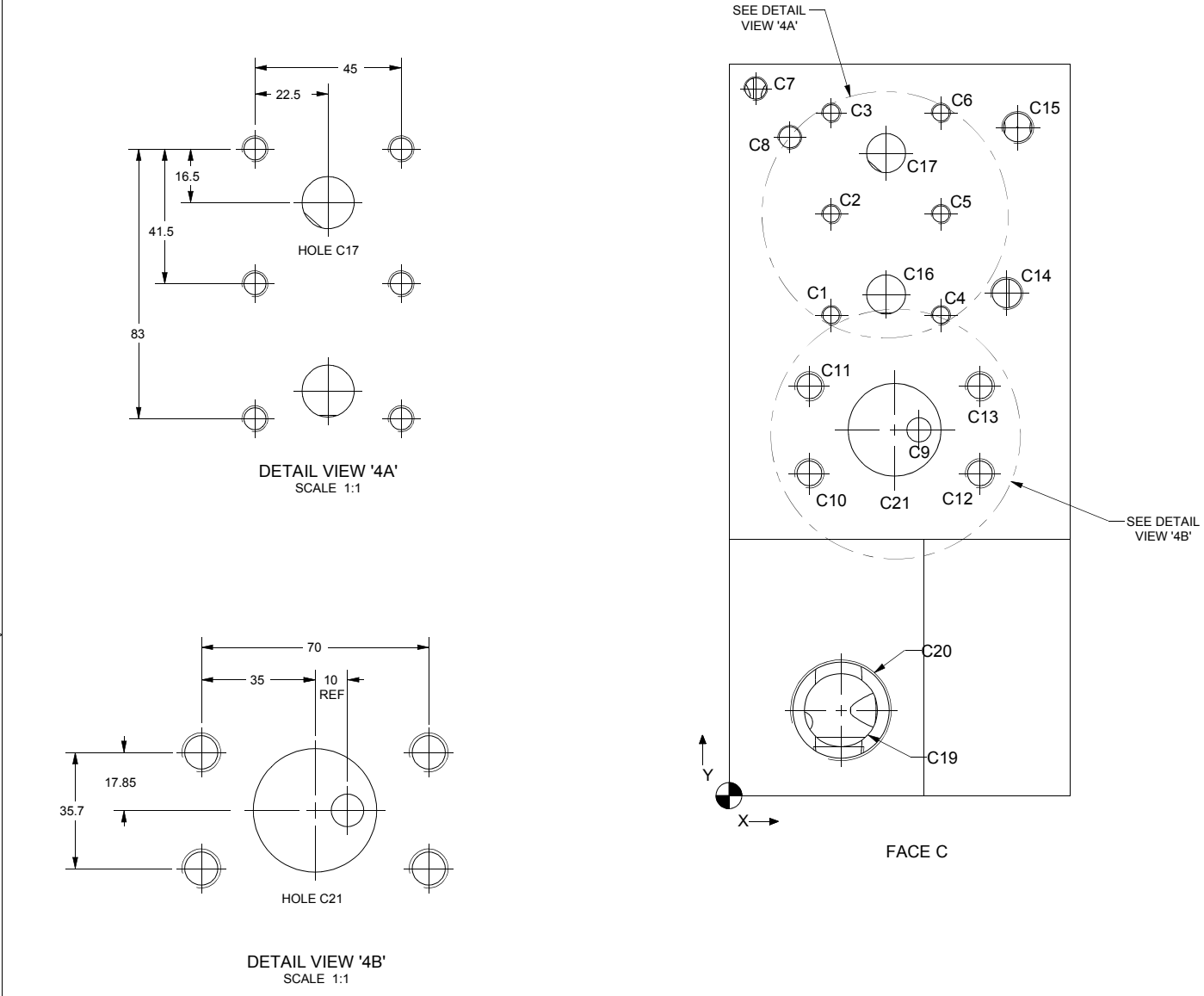


| HOLE REF | X CO-ORD | Y CO-ORD | DRILL DIA. | DRILL DEPTH | THREAD DIA. | THREAD DEPTH | BREAKS INTO | REMARKS |
|----------|----------|----------|------------------|-------------|---------------|--------------|-------------|---------|
| B1 | -85 | 240 | TO SUIT 1/8" BSP | 53 | 1/8" - 28 BSP | 10 | A14, E16 | -- |
| B2 | -30 | 30 | TO SUIT 1/8" BSP | 110 | 1/8" - 28 BSP | 10 | F2, F17 | -- |
| B3 | -30 | 202 | TO SUIT 1/8" BSP | 50 | 1/8" - 28 BSP | 10 | A13, F2 | -- |
| B5 | -120 | 220 | TO SUIT 1/4" BSP | 185 | 1/4" - 19 BSP | 12 | D32, E39 | -- |
| B6 | -50 | 138 | TO SUIT 3/8" BSP | 60 | 3/8" - 19 BSP | 15 | A57, E36 | -- |

| IF IN DOUBT ASK | | |
|---|------|-----------|
| DRAWN BY | RW | 03-Feb-14 |
| CHECKED | CMcM | 28-Mar-14 |
| CERTIFIED | | |
| | NAME | DATE |
| <p>THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.</p> | | |

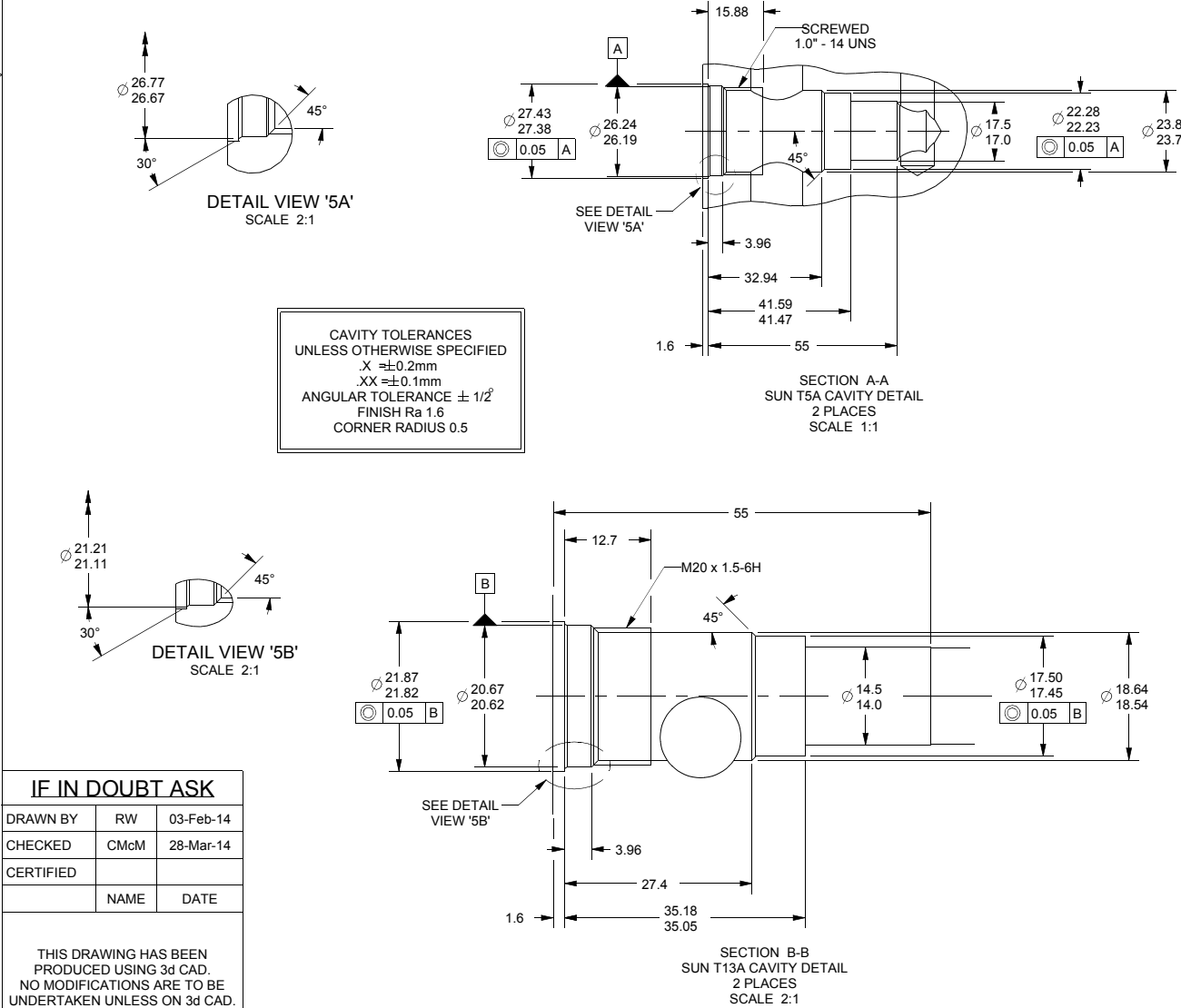
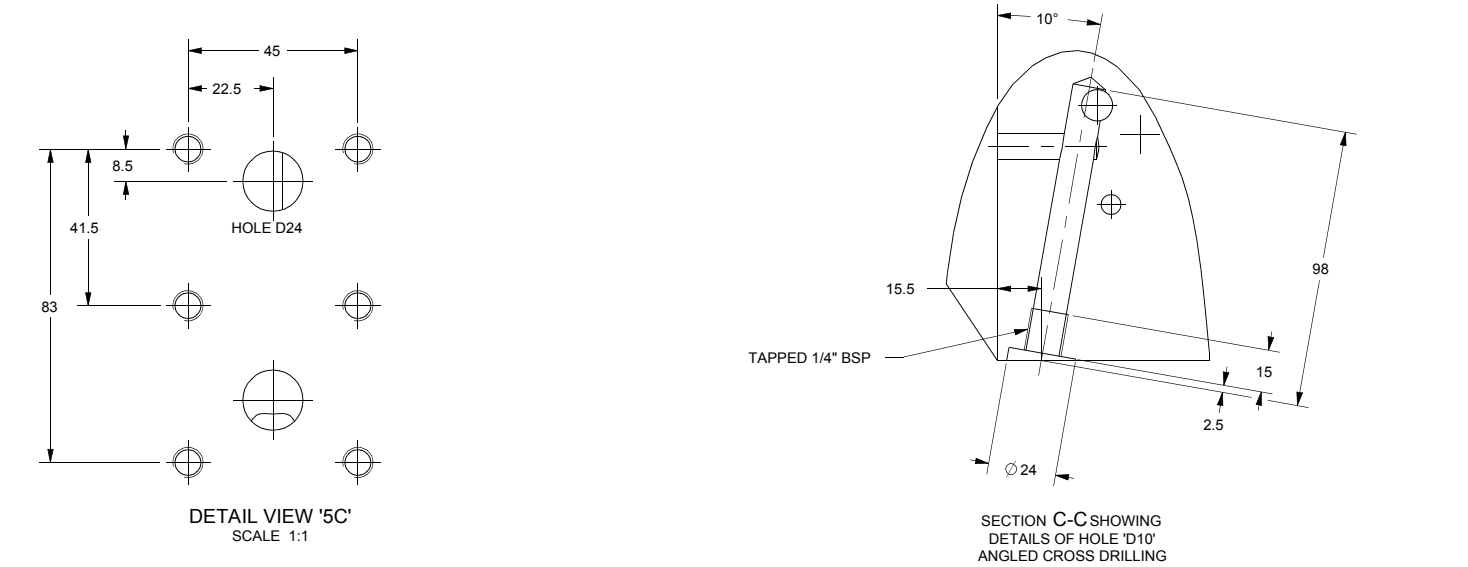
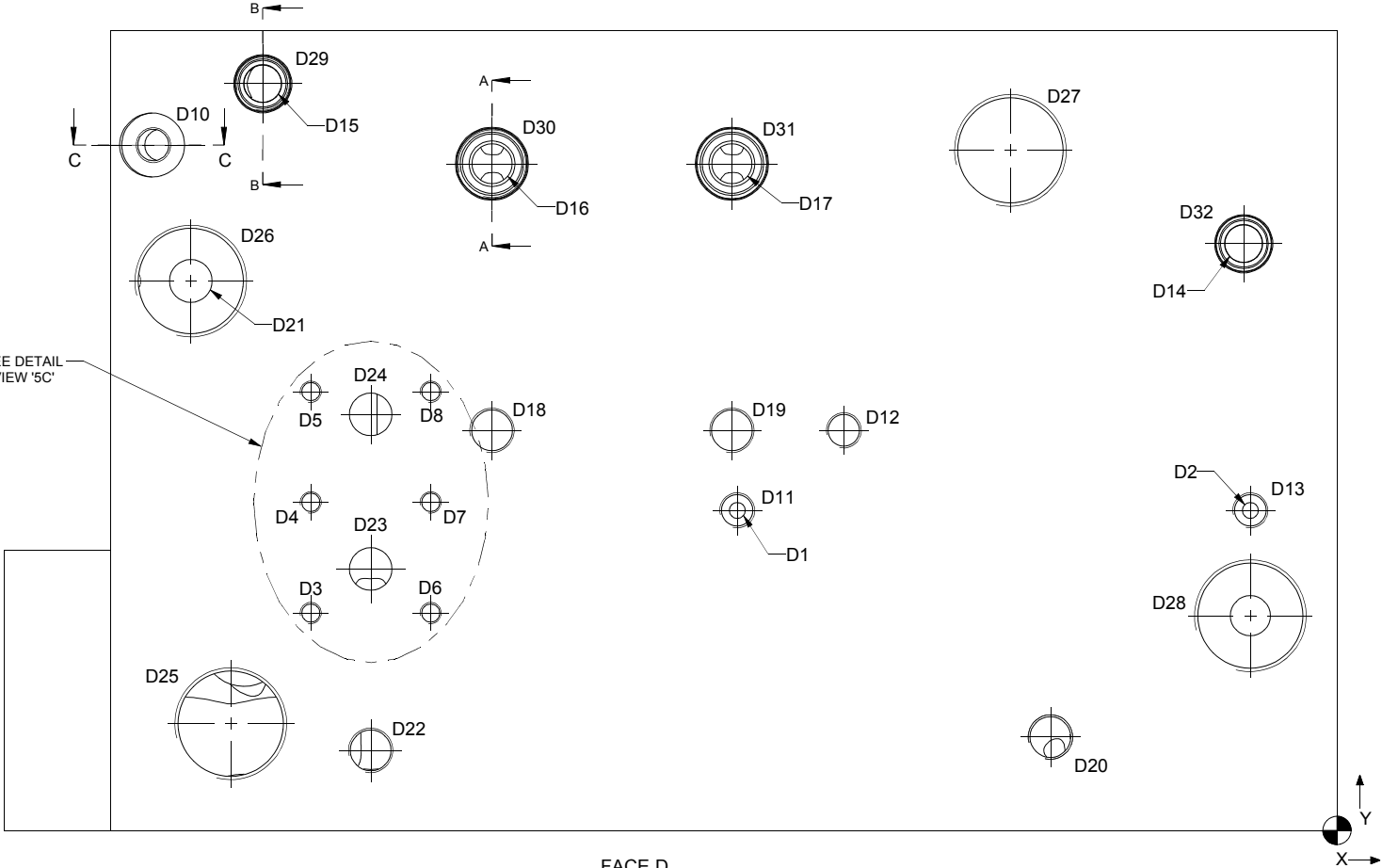
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|--|--|--|--|--|--|--|--|--|--|------------------------------|-------|-----------|-----|---------|---|
| | | | | | | | | | | REFER SHEET 08. | 5 | 15-Oct-14 | SDB | GD | G |
| | | | | | | | | | | REFER SHEET 08. | 4 | 11-Sep-14 | JC | SDB | |
| | | | | | | | | | | REFER SHEET 08. | 3 | 02-Jul-14 | JC | SDB | |
| | | | | | | | | | | NOTES ADDED AND NAME CHANGED | 2 | 01-Apr-14 | RW | SDB | |
| | | | | | | | | | | | 1 | 03-Feb-14 | | | |
| | | | | | | | | | | CHANGE | ISSUE | DATE | MOD | CHECKED | |

| | | | | | | | | | | | | | | | | | | | | |
|--|---|---|-----|---|--|--|--|--|--------------------|--|--|--|--|-------------------------|--|----------|--|-------|--|-----|
| MATERIAL STEEL (REFER PARTS LIST) | SCALE 3:4 | | | TITLE MANIFOLD BLOCK, BOW | | | | | | | | | | RESPONSIBLE AUTHORITY | | | | | | |
| HEAT TREATMENT N/A | | | | | | | | | | | | | | SECURITY CLASSIFICATION | | | | | | |
| SURFACE HARDNESS N/A | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | | NSN CONTRACTOR K'0'1'0'7 | | | | | | | | | | CONTRACTORS PART NO. | | | | SHEET | | |
| MATERIAL TEST N/A | | | | | | | | | | | | | | NO 03 | | | | | | |
| PROTECTIVE FINISH N/A | SURFACE TEXTURE IN MICROMETRES 1.6/√ EXCEPT AS STATED | | | | | | | | | | | | | V07543700 | | | | OF 08 | | |
| HYDRAULIC TEST PROCEDURE N/A | | | | | | | | | | | | | | NO 08 | | | | | | |
| CLEANLINESS SPECIFICATION MTPS26 | | | | | | | | | | | | | | SERVICE DRG. NO. | | | | SHEET | | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | | | | | | | | | | | NO 08 | | | | | | |
| PATTERN No N/A | S | C | R/A | DRG No ORIGIN | | | | | SERVICE DRAWING No | | | | | TYPE | | SHEET No | | ISSUE | | |
| ESTIMATED MASS 139.9 Kg | 1 | 2 | 3 | K 0 1 0 7 | | | | | 10 | | | | | 25 | | 0 0 3 | | 0 0 5 | | A 1 |



| NOTE FIXING HOLE DRILL DEPTHS SHOULD NOT BE EXCEEDED. | | | | | | | | |
|---|-----------------|-----------------|--------------------|-------------|------------------|--------------|---------------------------------------|-------------|
| HOLE REF | X CO-ORD | Y CO-ORD | DRILL DIA. | DRILL DEPTH | THREAD DIA. | THREAD DEPTH | BREAKS INTO | REMARKS |
| C1 - C6 | SEE DETAIL '4A' | SEE DETAIL '4A' | TO SUIT M8 | 18 | M8 x 1.25p (6H) | 15 | -- | FIXING HOLE |
| C7 | 11 | 290 | TO SUIT 1/8" BSP | 54 | 1/8" - 28 BSP | 10 | A73, E20 | -- |
| C8 | 25 | 270 | TO SUIT 1/8" BSP | 95 | 1/8" - 28 BSP | 10 | A16, F7 | -- |
| C9 | 78 | 150 | Ø 10 | 285 | -- | -- | D12, D18, D19 | -- |
| C10 - C13 | SEE DETAIL '4B' | SEE DETAIL '4B' | TO SUIT M12 | 24 | M12 x 1.75p (6H) | 20 | -- | FIXING HOLE |
| C14 | 114 | 206 | TO SUIT 1/4" BSP | 15 | 1/4" - 19 BSP | 12 | D26 | -- |
| C15 | 118.5 | 274 | TO SUIT 1/4" BSP | 100 | 1/4" - 19 BSP | 15 | D29, E40 | -- |
| C16 | 64.5 | 205.5 | Ø 16 | 30 | -- | -- | D21 | -- |
| C17 | 64.5 | 263.5 | Ø 16 | 35 | -- | -- | D10 | -- |
| C19 | 46 | 35 | Ø 30 | 360 | -- | -- | D22, D25, F7, F10, F11, F14, F15, F17 | |
| C20 | 46 | 35 | TO SUIT 1,1/4" BSP | 30 | 1,1/4" - 11 BSP | 27 | F11 | |
| C21 | 68 | 150 | Ø 38 | 100 | -- | -- | A72, C9, D24 | |

| HOLE REF | X CO-ORD | Y CO-ORD | DRILL DIA. | DRILL DEPTH | THREAD DIA. | THREAD DEPTH | BREAKS INTO | REMARKS |
|----------|-----------------|-----------------|---|---------------------|-----------------|--------------|--------------|-------------------|
| D1 | -225 | 120 | Ø 6 | 85 | -- | -- | F12 | CO-AXIAL: D11 |
| D2 | -32.5 | 120 | Ø 6 | 63 | -- | -- | F1 | CO-AXIAL: D13 |
| D3 - D8 | SEE DETAIL '5C' | SEE DETAIL '5C' | TO SUIT M8 | 20 | M8 x 1.25p (6H) | 16 | -- | FIXING HOLES |
| D10 | SEE SECT 'C-C' | 257 | TO SUIT 1/4" BSP | REFER SECTION 'C-C' | | | C17, E38 | -- |
| D11 | -225 | 120 | TO SUIT 1/4" BSP | 15 | 1/4" - 19 BSP | 12 | D1 | CO-AXIAL: D1 |
| D12 | -185 | 150 | TO SUIT 1/4" BSP | 67 | 1/4" - 19 BSP | 12 | C9, E39 | -- |
| D13 | -32.5 | 120 | TO SUIT 1/4" BSP | 15 | 1/4" - 19 BSP | 12 | D2 | CO-AXIAL: D2 |
| D14 | -35 | 220 | Ø 14 | 110 | -- | -- | D9, E35 | CO-AXIAL: D9, D32 |
| D15 | -403 | 280 | Ø 14 | 105 | -- | -- | E37 | CO-AXIAL: D29 |
| D16 | -317 | 250 | Ø 15 | 65 | -- | -- | E25 | CO-AXIAL: D30 |
| D17 | -227 | 250 | Ø 15 | 65 | -- | -- | E23 | CO-AXIAL: D31 |
| D18 | -317 | 150 | TO SUIT 3/8" BSP | 67 | 3/8" - 19 BSP | 15 | C9, E42 | -- |
| D19 | -227 | 150 | TO SUIT 3/8" BSP | 67 | 3/8" - 19 BSP | 15 | C9, E41 | -- |
| D20 | -107.5 | 35 | TO SUIT 3/8" BSP | 90 | 3/8" - 19 BSP | 15 | F16, F17 | -- |
| D21 | -430 | 206 | Ø 16 | 85 | -- | -- | C16 | CO-AXIAL: D26 |
| D22 | -362.5 | 30 | TO SUIT 3/8" BSP | 85 | 3/8" - 19 BSP | 15 | C18, F8 | -- |
| D23 | -362.5 | 98 | Ø 16 | 35 | -- | -- | F8 | -- |
| D24 | -362.5 | 156 | Ø 16 | 70 | -- | -- | C9, C20, E40 | -- |
| D25 | -415 | 40 | TO SUIT 1,1/4" BSP | 95 | 1,1/4" - 11 BSP | 25 | C18, F11 | -- |
| D26 | -430 | 206 | TO SUIT 1,1/4" BSP | 32 | 1,1/4" - 11 BSP | 25 | C14, D21 | CO-AXIAL: D21 |
| D27 | -122.5 | 255 | TO SUIT 1,1/4" BSP | 60 | 1,1/4" - 11 BSP | 25 | E44 | -- |
| D28 | -32.5 | 80.5 | TO SUIT 1,1/4" BSP | 30 | 1,1/4" - 11 BSP | 25 | A56 | -- |
| D29 | -403 | 280 | SUN CAVITY : T-13A, REFER SECTION 'B-B' | | | | C15, D15 | CO-AXIAL: D15 |
| D30 | -317 | 250 | SUN CAVITY : T-5A, REFER SECTION 'A-A' | | | | D16, E42 | CO-AXIAL: D16 |
| D31 | -227 | 250 | SUN CAVITY : T-5A, REFER SECTION 'A-A' | | | | D17, E41 | CO-AXIAL: D17 |
| D32 | -35 | 220 | SUN CAVITY : T-13A, REFER SECTION 'B-B' | | | | B5, D14 | CO-AXIAL: D9, D14 |



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| REFER SHEET 08. | | | | 5 | 15-Oct-14 | SDB | GD |
| REFER SHEET 08. | | | | 4 | 11-Sep-14 | JC | SDB |
| REFER SHEET 08. | | | | 3 | 02-Jul-14 | JC | SDB |
| NOTES ADDED AND NAME CHANGED | | | | 2 | 01-Apr-14 | RW | SDB |
| | | | | 1 | 03-Feb-14 | | |
| CHANGE | | | | ISSUE | DATE | MOD | CHECKED |
| MATERIAL STEEL (REFER PARTS LIST) | | | | SCALE 3:4 | | | |
| HEAT TREATMENT N/A | | | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | | |
| SURFACE HARDNESS N/A | | | | SURFACE TEXTURE IN MICROMETRES 1.6/ EXCEPT AS STATED | | | |
| MATERIAL TEST N/A | | | | TITLE MANIFOLD BLOCK, BOW | | | |
| PROTECTIVE FINISH N/A | | | | NSN CONTRACTOR K 0 1 0 7 | | | |
| HYDRAULIC TEST PROCEDURE N/A | | | | RESPONSIBLE AUTHORITY | | | |
| CLEANLINESS SPECIFICATION MTSP26 | | | | SECURITY CLASSIFICATION | | | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | CONTRACTORS PART NO. V07543700 | | | |
| PATTERN No N/A | | | | SHEET NO 05 OF 08 | | | |
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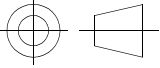
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SECURITY CLASSIFICATION

SERVICE DRG. NO.

USED ON
V07524100

3RD ANGLE PROJECTION



ALL DIMENSIONS IN MM

MACHINED TOLERANCES ±0.5 EXCEPT AS STATED

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CHANGE RECORD SHEET

| ISSUE | CHANGE | DATE | MOD | CHKD |
|-------|--|-----------|-----|------|
| 03 | <u>SHEET 02</u> HOLE A15 'X' CO-ORDINATE WAS 418.5mm NOW CHANGED TO 422.5mm. HOLE A16 'X' CO-ORDINATE WAS 418.5mm NOW CHANGED TO 422.5mm. HOLES A44 - A55 INCLUSIVE, DRILL DEPTH WAS 30mm NOW CHANGED TO 24mm DEEP. HOLES A44 - A55 INCLUSIVE, THREAD DEPTH WAS 25mm NOW CHANGED TO 20mm DEEP. HOLE A60 DRILL DEPTH WAS 43mm NOW CHANGED TO 50mm DEEP. HOLE A66 DRILL DEPTH WAS 43mm NOW CHANGED TO 45mm DEEP. HOLE A69 DRILL DEPTH WAS 43mm NOW CHANGED TO 50mm DEEP. HOLE A70 DRILLING WAS 40mm DIA. x 40mm DEEP NOW CHANGED TO 38mm DIA. x 50mm DEEP. HOLE A71 DRILLING WAS 40mm DIA. x 40mm DEEP NOW CHANGED TO 38mm DIA. x 50mm DEEP. HOLE A72 'X' CO-ORDINATE WAS 400mm NOW CHANGED TO 402mm. HOLE A72 DRILLING WAS 40mm DIA. x 60mm DEEP NOW CHANGED TO 38mm DIA. x 70mm DEEP. HOLE A73 DRILL DEPTH WAS 58mm NOW CHANGED TO 60mm DEEP. | 02-Jul-14 | JC | SDB |
| | <u>SHEET 03</u> HOLE B1 DRILL DEPTH WAS 45mm NOW CHANGED TO 53mm DEEP. | | | |
| | <u>SHEET 04</u> HOLES C1 - C6 INCLUSIVE, DRILL DEPTH WAS 20mm NOW CHANGED TO 18mm DEEP. HOLES C1 - C6 INCLUSIVE, THREAD DEPTH WAS 16mm NOW CHANGED TO 15mm DEEP. HOLE C7 'X' CO-ORDINATE WAS 15mm NOW CHANGED TO 11mm. HOLE C7 DRILL DEPTH WAS 38mm NOW CHANGED TO 55mm DEEP. HOLE C8 DRILL DEPTH WAS 85mm NOW CHANGED TO 95mm DEEP. HOLE C9 'X' CO-ORDINATE WAS 68mm NOW CHANGED TO 78mm. HOLE C9 DRILL DEPTH WAS 280mm NOW CHANGED TO 285mm DEEP. HOLES C10 - C13 INCLUSIVE DRILL DEPTH WAS 25mm NOW CHANGED TO 24mm DEEP. HOLES C10 - C13 INCLUSIVE THREAD DEPTH WAS 22mm NOW CHANGED TO 20mm DEEP. HOLE C14 'X' CO-ORDINATE WAS 112mm NOW CHANGED TO 114mm. HOLE C14 DRILL DEPTH WAS 20mm NOW CHANGED TO 15mm DEEP. HOLE C14 THREAD DEPTH WAS 10mm NOW CHANGED TO 12mm DEEP. HOLE C15 'Y' CO-ORDINATE WAS 270mm NOW CHANGED TO 274mm. HOLE C15 DRILL DEPTH WAS 92mm NOW CHANGED TO 100mm DEEP. HOLE C16 DRILL DEPTH WAS 25mm NOW CHANGED TO 30mm DEEP. HOLE C17 DRILL DEPTH WAS 25mm NOW CHANGED TO 35mm DEEP. HOLE C18 DRILL DIA. WAS 30mm NOW CHANGED TO 22mm DIA. HOLE C19 WAS 1,1/4" BSP x 30 DEEP HOLE NOW CHANGED TO 30mm DIA. x 350mm DEEP HOLE. HOLE C20 WAS 40mm DIA. x 100 DEEP HOLE NOW CHANGED TO 1,1/4" BSP x 30mm DEEP HOLE. HOLE C21 38mm DIA. x 100mm DEEP HOLE ADDED. (NOTE NEW HOLE C21 WAS ORIGINALLY DESIGNATED AS HOLE C20 AND NEW HOLE C20 WAS ORIGINALLY DESIGNATED AS HOLE C19) | | | |
| | <u>SHEET 05</u> HOLE D10 DETAILS REMOVED FROM TABLE, HOLE CHANGED TO AN ANGLED PORT HOLE. SECTION 'C-C' ADDED TO SHOW DETAILS OF MODIFIED HOLE (REFER SHEET 05 ZONE E10). HOLE D12 DRILL DEPTH WAS 70mm NOW CHANGED TO 67mm DEEP. HOLE D15 'X' CO-ORDINATE WAS -400mm NOW CHANGED TO -403mm. HOLE D18 DRILL DEPTH WAS 70mm NOW CHANGED TO 67mm DEEP. HOLE D19 DRILL DEPTH WAS 70mm NOW CHANGED TO 67mm DEEP. HOLE D21 'X' CO-ORDINATE WAS -425mm NOW CHANGED TO -430mm. HOLE D22 WAS 16mm DIA. x 85mm DEEP NOW CHANGED TO 3/8" BSP x 15mm THREAD DEPTH, DRILLED 85mm DEEP HOLE. HOLE D24 DRILL DEPTH WAS 60mm NOW CHANGED TO 70mm DEEP. HOLE D25 'Y' CO-ORDINATE WAS 30mm NOW CHANGED TO 45mm. HOLE D25 DRILL DEPTH WAS 90mm NOW CHANGED TO 95mm DEEP. HOLE D26 'X' CO-ORDINATE WAS -425mm NOW CHANGED TO -430mm. HOLE D26 DRILL DEPTH WAS 30mm NOW CHANGED TO 32mm DEEP. HOLE D29 'X' CO-ORDINATE WAS -400mm NOW CHANGED TO -403mm. | | | |
| | <u>SHEET 05</u> HOLES E1 - E8 INCLUSIVE DRILL DEPTH WAS 15mm NOW CHANGED TO 12mm DEEP. HOLES E1 - E8 INCLUSIVE THREAD DEPTH WAS 12mm NOW CHANGED TO 10mm DEEP. HOLE E16 DRILL DEPTH WAS 55mm NOW CHANGED TO 50mm DEEP. HOLE E20 DRILL DEPTH WAS 10mm NOW CHANGED TO 15mm DEEP. HOLE E21 DRILL DEPTH WAS 65mm NOW CHANGED TO 68mm DEEP. HOLE E22 DRILL DEPTH WAS 65mm NOW CHANGED TO 60mm DEEP. HOLE E37 DRILL DEPTH WAS 130mm NOW CHANGED TO 135mm DEEP. HOLE E38 DRILL DEPTH WAS 40mm NOW CHANGED TO 50mm DEEP HOLE E39 DRILL DEPTH WAS 145mm NOW CHANGED TO 148mm DEEP. HOLE E40 DRILL DEPTH WAS 155mm NOW CHANGED TO 145mm DEEP. HOLE E41 DRILL DEPTH WAS 145mm NOW CHANGED TO 148mm DEEP. HOLE E42 DRILL DEPTH WAS 145mm NOW CHANGED TO 148mm DEEP. | | | |

| ISSUE | CHANGE | DATE | MOD | CHKD |
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| 03 CONT | <u>SHEET 07</u> HOLES F3 - F6 INCLUSIVE, THREAD DEPTH WAS 24.5mm NOW CHANGED TO 25mm DEEP. HOLE F7 DRILL DEPTH WAS 270mm NOW CHANGED TO 275mm DEEP. HOLE F8 DRILL DEPTH WAS 90mm NOW CHANGED TO 98mm DEEP. | 02-Jul-14 | JC | SDB |
| | SHEET 08 CHANGE RECORD SHEET ADDED. | | | |
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| 04 | <u>SHEET 02</u> HOLE A13 RE-POSITIONED WAS DRILLED 30mm DEEP NOW DRILLED 35mm DEEP. HOLE A14 RE-POSITIONED. HOLES A39-A42 DRILL DEPTH WAS 20mm NOW DRILLED 19mm DEEP. HOLE A73 RE-POSITIONED HOLE A74 ADDED. <u>SHEET 03</u> HOLES B1, B2, B3 AND B5 RE-POSITIONED, HOLE B4 DELETED. <u>SHEET 04</u> HOLE C18 DELETED. HOLE C19 RE-POSITIONED WAS DRILLED 350mm DEEP NOW DRILLED 360mm DEEP. HOLE C20 RE-POSITIONED THREAD DEPTH WAS 25mm DEEP NOW 27mm DEEP. <u>SHEET 05</u> HOLE D1 WAS DRILLED 80mm DEEP NOW DRILLED 85mm DEEP. HOLE D9 DELETED. HOLE D12 RE-POSITIONED. HOLE D14 RE-POSITIONED WAS DRILLED 85mm DEEP NOW DRILLED 110mm DEEP. HOLE D15 WAS DRILLED 85mm DEEP NOW DRILLED 105mm DEEP. HOLE D20 RE-POSITIONED WAS DRILLED 116mm DEEP NOW DRILLED 90mm DEEP. HOLE D27 RE-POSITIONED WAS DRILLED 70mm DEEP NOW DRILLED 60mm DEEP. HOLE D32 RE-POSITIONED. <u>SHEET 06</u> HOLES E9-E14 INCLUSIVE WERE TAPPED M8 x 1.25px 16mm DEEP NOW TAPPED M10 x 1.5p x 23mm DEEP. HOLE E16 WAS DRILLED 50mm DEEP NOW DRILLED 60mm DEEP. HOLE E35 RE-POSITIONED WAS DRILLED 30mm DEEP NOW DRILLED 85mm DEEP. HOLE E37 RE-POSITIONED WAS DRILLED 135mm DEEP NOW DRILLED 25mm DEEP. HOLE E39 RE-POSITIONED. HOLE E43 RE-POSITIONED WAS DRILLED 16mm DIA. x 50mm DEEP NOW DRILLED 23.5mm DIA. x 65mm DEEP. HOLE E44 RE-POSITIONED WAS DRILLED 16mm DIA. x 250mm DEEP NOW DRILLED 23.5mm DIA. x 45mm DEEP. <u>SHEET 07</u> HOLE F2 WAS DRILLED 220mm DEEP NOW DRILLED 205mm DEEP. HOLE F9 RE-POSITIONED WAS DRILLED 16mm DIA. x 185mm DEEP NOW 25mm DIA. x 270mm DEEP. HOLE F9 WAS CO-AXIAL WITH HOLE F17 NOW CO-AXIAL WITH HOLE F16. HOLE F16 RE-POSITIONED WAS SUN CAVITY T-5A NOW SUN CAVITY T-16A HOLE F16 WAS CO-AXIAL WITH HOLE E44 NOW CO-AXIAL WITH HOLE F9. HOLE F17 RE-POSITIONED WAS SUN CAVITY T-5A NOW SUN CAVITY T-18A HOLE F17 WAS CO-AXIAL WITH HOLE F9. | 11-Sep-14 | JC | SDB |
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| MATERIAL | STEEL (REFER PARTS LIST) |
| HEAT TREATMENT | N/A |
| SURFACE HARDNESS | N/A |
| MATERIAL TEST | N/A |
| PROTECTIVE FINISH | N/A |
| HYDRAULIC TEST PROCEDURE | N/A |
| CLEANLINESS SPECIFICATION | MTSP26 |
| QUALITY ASSURANCE GRADE | BS EN ISO 9001 |
| PATTERN No | N/A |
| ESTIMATED MASS | 139.910 Kg |

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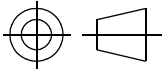
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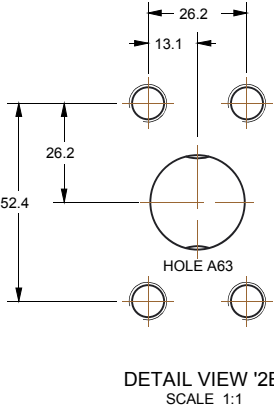
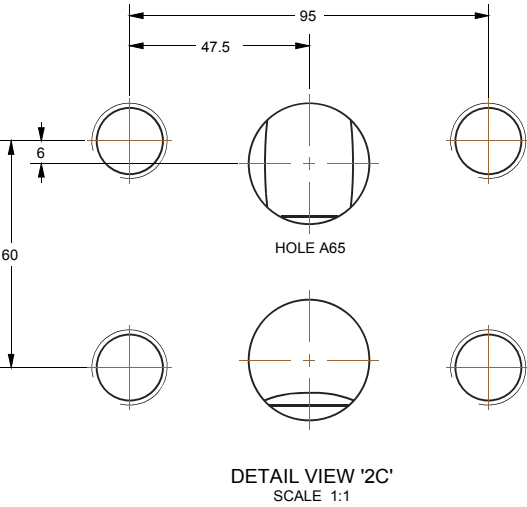
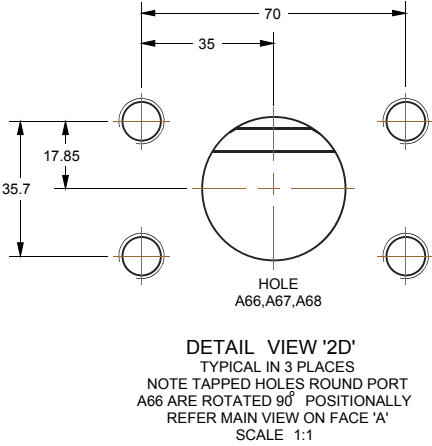
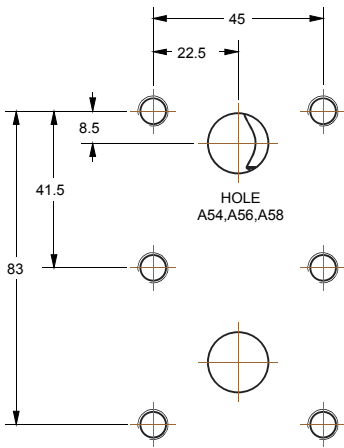
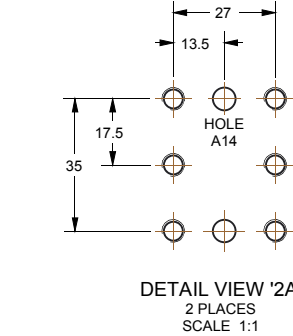
ALL DIMENSIONS IN MM

MACHINED TOLERANCES ±0.5 EXCEPT AS STATED

USED ON
V07524200

NOTE FIXING HOLE DRILL DEPTHS SHOULD NOT BE EXCEEDED.

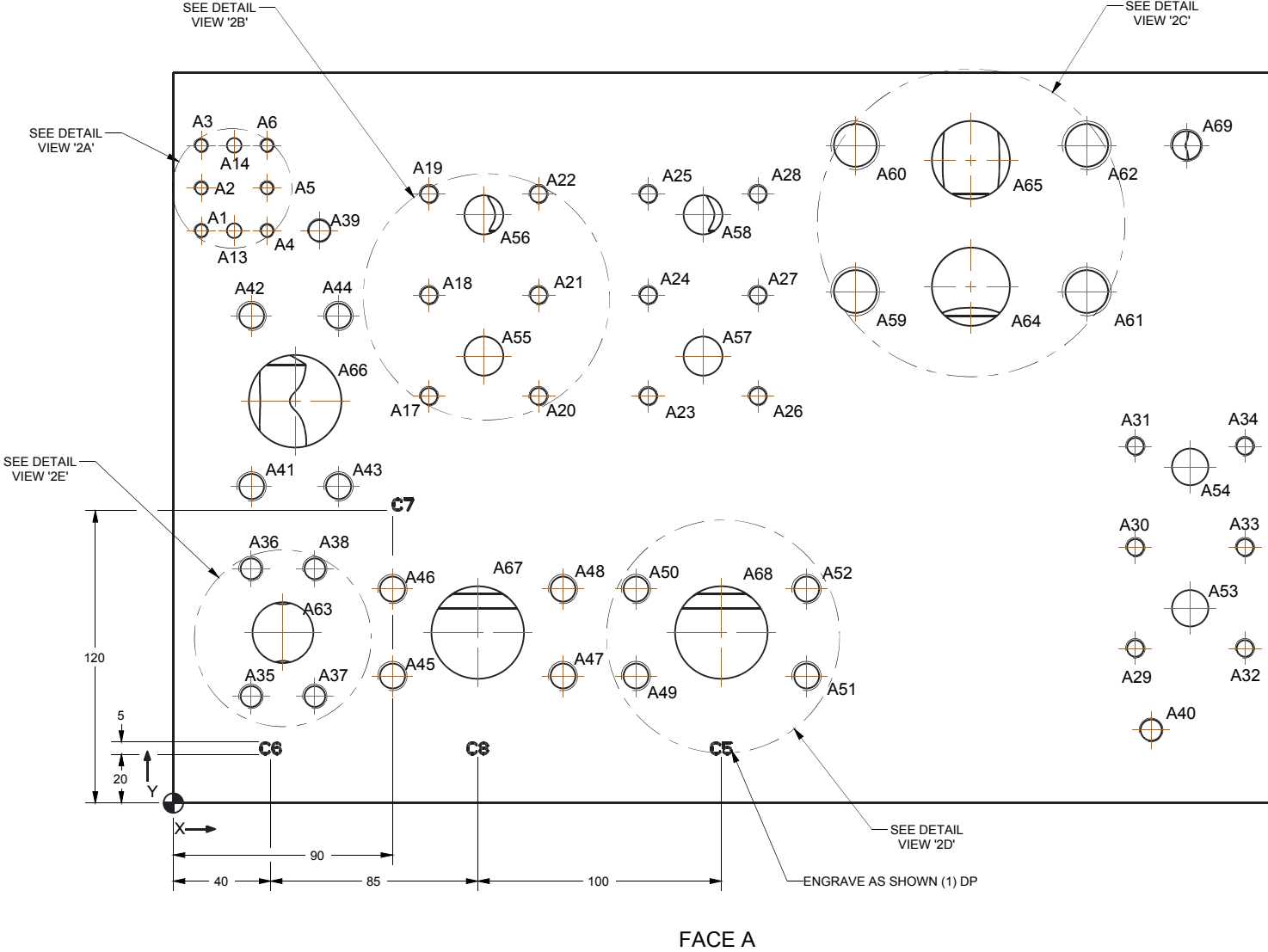
| HOLE REF | X CO-ORD | Y CO-ORD | DRILL DIA. | DRILL DEPTH | THREAD DIA. | THREAD DEPTH | BREAKS INTO | REMARKS |
|-----------|-----------------|-----------------|------------------|-------------|------------------|--------------|-------------|-----------------|
| A1 - A6 | SEE DETAIL '2A' | SEE DETAIL '2A' | TO SUIT M6 | 15 | M6 x 1.0p (6H) | 12 | -- | FIXING HOLE |
| A13 | 25 | 235 | Ø 6 | 25 | -- | -- | B7 | -- |
| A14 | 25 | 270 | Ø 6 | 25 | -- | -- | B8 | -- |
| A17 - A34 | SEE DETAIL '2B' | SEE DETAIL '2B' | TO SUIT M8 | 20 | M8 x 1.25p (6H) | 16 | -- | FIXING HOLE |
| A35 - A38 | SEE DETAIL '2E' | SEE DETAIL '2E' | TO SUIT M10 | 20 | M10 x 1.5p (6H) | 18 | -- | FIXING HOLE |
| A39 | 60 | 235 | TO SUIT 1/8" BSP | 90 | 1/8" - 28 BSP | 10 | B7, E16 | -- |
| A40 | 401.5 | 30 | TO SUIT 1/8" BSP | 50 | 1/8" - 28 BSP | 10 | C2, F1 | -- |
| A41 - A52 | SEE DETAIL '2D' | SEE DETAIL '2D' | TO SUIT M12 | 22 | M12 x 1.75p (6H) | 20 | -- | FIXING HOLE |
| A53 | 417.5 | 80 | Ø 15 | 140 | -- | -- | D22, F2 | -- |
| A54 | 417.5 | 138 | Ø 15 | 50 | -- | -- | C5 | -- |
| A55 | 127.5 | 183.5 | Ø 16 | 55 | -- | -- | F12 | -- |
| A56 | 127.5 | 241.5 | Ø 16 | 55 | -- | -- | E21 | -- |
| A57 | 217.5 | 183.5 | Ø 16 | 55 | -- | -- | F13 | -- |
| A58 | 217.5 | 241.5 | Ø 16 | 55 | -- | -- | E23 | -- |
| A59 - A62 | SEE DETAIL '2C' | SEE DETAIL '2C' | TO SUIT M20 | 35 | M20 x 2.5p (6H) | 25 | -- | FIXING HOLE |
| A63 | 45 | 70 | Ø 25 | 45 | -- | -- | F11 | 1" SAE PORT |
| A64 | 327.5 | 212 | Ø 32 | 50 | -- | -- | F10 | -- |
| A65 | 327.5 | 264 | Ø 32 | 20 | -- | -- | E42 | -- |
| A66 | 50 | 165 | Ø 38 | 35 | -- | -- | F11 | 1,1/2" SAE PORT |
| A67 | 125 | 70 | Ø 38 | 45 | -- | -- | F14 | 1,1/2" SAE PORT |
| A68 | 225 | 70 | Ø 38 | 45 | -- | -- | F15 | 1,1/2" SAE PORT |
| A69 | 416 | 270 | TO SUIT 1/4" BSP | 40 | 1/4" - 19 BSP | 12 | E20, E36 | -- |



IF IN DOUBT ASK

| | | |
|-----------|------|-----------|
| DRAWN BY | RW | 14-Feb-14 |
| CHECKED | CMcM | 28-Mar-14 |
| CERTIFIED | | |
| | NAME | DATE |

THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.



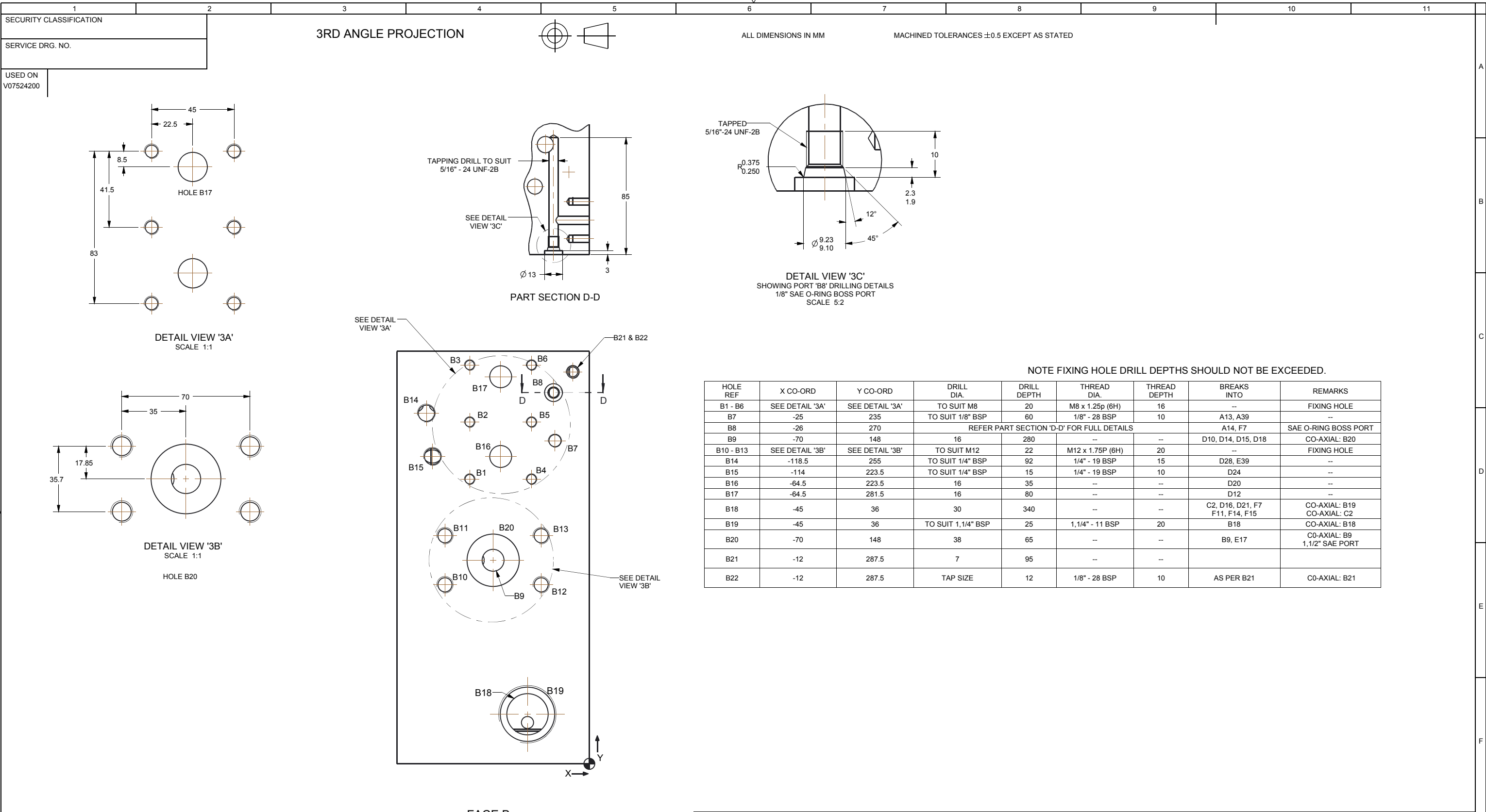
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|--|--|---|--|-----------------------------|--|--------------------------------|--|
| MATERIAL STEEL (REFER PARTS LIST) | | SCALE 3:4 | | TITLE MANIFOLD BLOCK, STERN | | RESPONSIBLE AUTHORITY | |
| HEAT TREATMENT N/A | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | NSN K 0 1 0 7 | | SECURITY CLASSIFICATION | |
| SURFACE HARDNESS N/A | | SURFACE TEXTURE IN MICROMETRES 1.6 EXCEPT AS STATED | | CONTRACTOR | | CONTRACTORS PART NO. V07545500 | |
| MATERIAL TEST N/A | | S | | C | | R/A | |
| PROTECTIVE FINISH N/A | | DRG No | | ORIGIN | | SERVICE DRAWING No | |
| HYDRAULIC TEST PROCEDURE N/A | | 1 | | 2 | | 3 | |
| CLEANLINESS SPECIFICATION MTSP26 | | K | | 0 | | 1 | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | 5 | | 10 | | 25 | |
| PATTERN No N/A | | 34 | | E | | N | |
| ESTIMATED MASS 131 Kg | | 34 | | 40 | | 45 | |

| | | | |
|---------|-----------|------|-----|
| 5 | 29-Jan-15 | SDB | JC |
| 4 | 10-Sep-14 | JC | SDB |
| 3 | 08-Jul-14 | JC | SDB |
| 2 | 01-Apr-14 | RW | SDB |
| 1 | 14-Feb-14 | | |
| CHANGE | ISSUE | DATE | MOD |
| CHECKED | | | |

| | | |
|------|----------|-------|
| TYPE | SHEET No | ISSUE |
| | 0 0 2 | 0 0 5 |

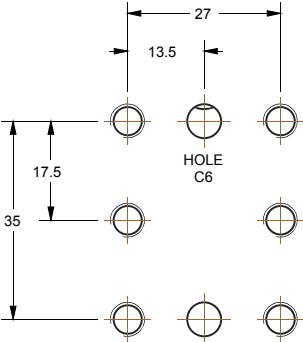
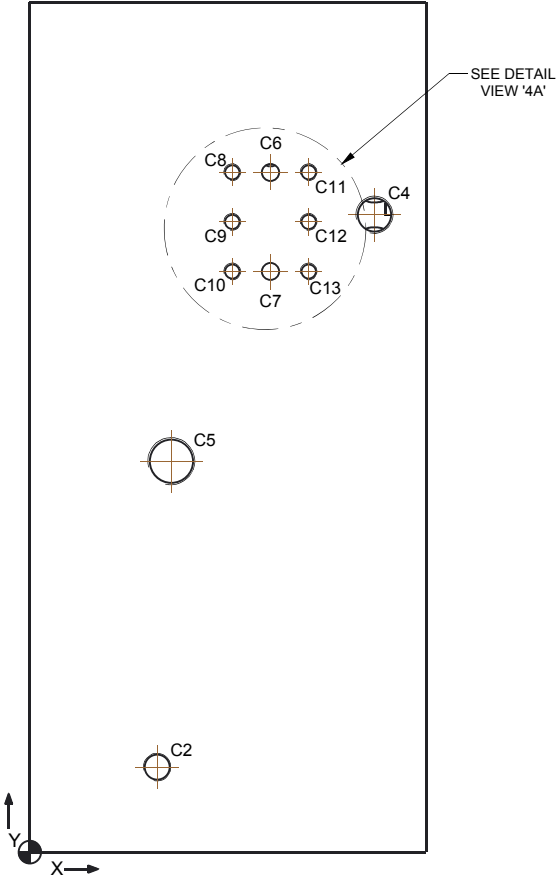
1 1 1

78 79 80



NOTE FIXING HOLE DRILL DEPTHS SHOULD NOT BE EXCEEDED.

| HOLE REF | X CO-ORD | Y CO-ORD | DRILL DIA. | DRILL DEPTH | THREAD DIA. | THREAD DEPTH | BREAKS INTO | REMARKS |
|----------|-----------------|-----------------|------------------|-------------|----------------|--------------|-------------|---------------|
| C2 | 45 | 30 | TO SUIT 1/8" BSP | 110 | 1/8" - 28 BSP | 10 | A40, B18 | C0-AXIAL: B18 |
| C4 | 121.7 | 225 | TO SUIT 1/4" BSP | 180 | 1/4" - 19 BSP | 15 | D25, E39 | -- |
| C5 | 50 | 138 | TO SUIT 3/8" BSP | 42 | 3/8" - 19 BSP | 15 | A54, E37 | -- |
| C6 | 85 | 240 | Ø 6 | 31 | -- | -- | E9 | -- |
| C7 | 85 | 205 | Ø 6 | 50 | -- | -- | D29 | -- |
| C8 - C13 | SEE DETAIL '4A' | SEE DETAIL '4A' | TO SUIT M6 | 15 | M6 x 1.0p (6H) | 12 | -- | FIXING HOLE |



DETAIL VIEW '4A'
SCALE 3:2

FACE C

IF IN DOUBT ASK

| | | |
|-----------|------|-----------|
| DRAWN BY | RW | 14-Feb-14 |
| CHECKED | CMcM | 28-Mar-14 |
| CERTIFIED | | |
| | NAME | DATE |

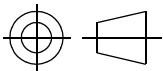
THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.

| | | | | | | | | |
|--|--|--|--|------------------------------|-------|-----------|-----|---------|
| | | | | REFER SHEET 08. | 5 | 29-Jan-15 | SDB | JC |
| | | | | REFER SHEET 08. | 4 | 10-Sep-14 | JC | SDB |
| | | | | REFER SHEET 08. | 3 | 08-Jul-14 | JC | SDB |
| | | | | NOTES ADDED AND NAME CHANGED | 2 | 01-Apr-14 | RW | SDB |
| | | | | | 1 | 14-Feb-14 | | |
| | | | | CHANGE | ISSUE | DATE | MOD | CHECKED |

| | | | | | | | | |
|--|--|------------------------------------|-------------------------|---------------|----------------------------|------|----------|-------|
| MATERIAL STEEL (REFER PARTS LIST) | SCALE 3:4 | TITLE MANIFOLD BLOCK, STERN | RESPONSIBLE AUTHORITY | | | | | |
| HEAT TREATMENT N/A | | | SECURITY CLASSIFICATION | | | | | |
| SURFACE HARDNESS N/A | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | NSN CONTRACTOR K 0 1 0 7 | CONTRACTORS PART NO. | | SHEET NO 04 OF 08 | | | |
| MATERIAL TEST N/A | | | V07545500 | | | | | |
| PROTECTIVE FINISH N/A | SURFACE TEXTURE IN MICROMETRES 1.6 / EXCEPT AS STATED | | SERVICE DRG. NO. | | SHEET NO OF | | | |
| HYDRAULIC TEST PROCEDURE N/A | | | | | | | | |
| CLEANLINESS SPECIFICATION MTSP26 | S | C | R/A | DRG No ORIGIN | SERVICE DRAWING No | TYPE | SHEET No | ISSUE |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | K 0 1 0 7 | | | 0 0 4 | 0 0 5 |
| PATTERN No N/A | 1 | 2 | 3 | 5 | 10 | 25 | 28 | 31 |
| ESTIMATED MASS 131 Kg | E N | | | | 1 1 1 | | | |
| | 34 | | | | 40 45 50 53 60 70 78 79 80 | | | |

1

3RD ANGLE PROJECTION

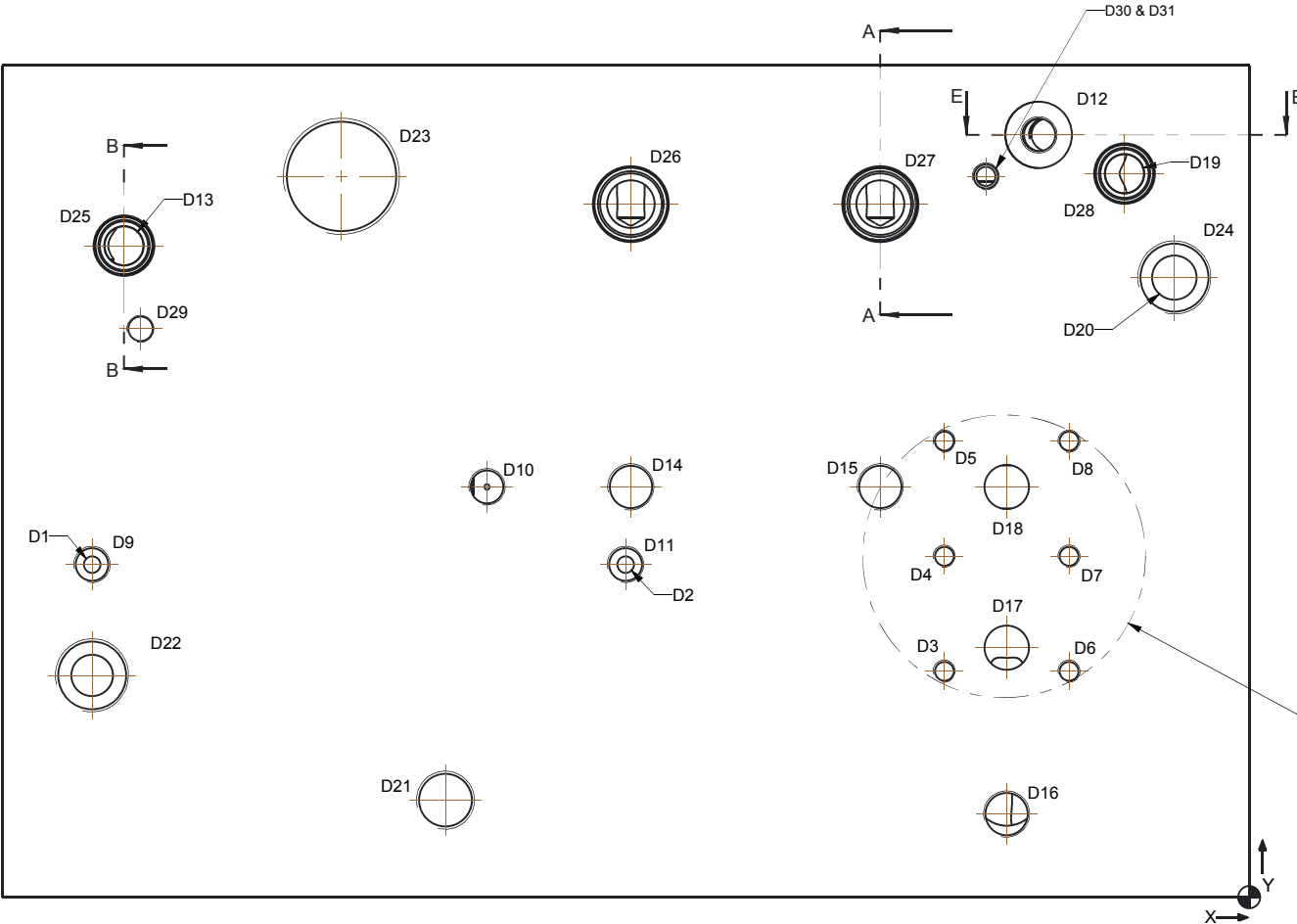


ALL DIMENSIONS IN MM

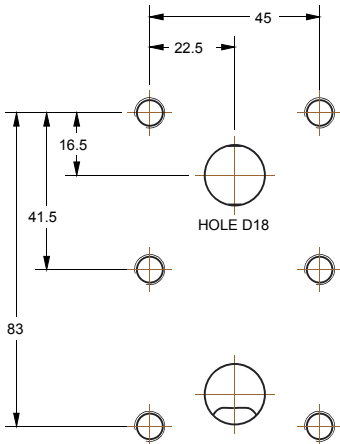
MACHINED TOLERANCES ±0.5 EXCEPT AS STATED

NOTE FIXING HOLE DRILL DEPTHS SHOULD NOT BE EXCEEDED.

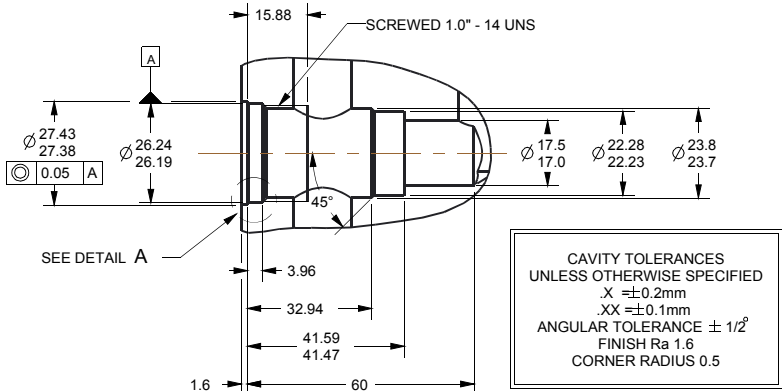
| HOLE REF | X CO-ORD | Y CO-ORD | DRILL DIA. | DRILL DEPTH | THREAD DIA. | THREAD DEPTH | BREAKS INTO | REMARKS |
|----------|-------------------|-----------------|--|--------------------------------------|------------------|--------------|---------------|---------------|
| D1 | -417.5 | 120 | Ø 6 | 75 | -- | -- | F2 | CO-AXIAL: D9 |
| D2 | -225 | 120 | Ø 6 | 90 | -- | -- | F13 | CO-AXIAL: D11 |
| D3 - D8 | SEE DETAIL '5A' | SEE DETAIL '5A' | TO SUIT M8 | 20 | M8 x 1.25p (6H) | 16 | -- | FIXING HOLE |
| D9 | -417.5 | 120 | TO SUIT 1/4" BSP | 15 | 1/4" - 19 BSP | 12 | D1 | CO-AXIAL: D1 |
| D10 | -275 | 148 | TO SUIT 1/4" BSP | 75 | 1/4" - 19 BSP | 12 | B9, E39 | -- |
| D11 | -225 | 120 | TO SUIT 1/4" BSP | 15 | 1/4" - 19 BSP | 12 | D2 | CO-AXIAL: D2 |
| D12 | SEE SECTION 'E-E' | 275 | TO SUIT 1/4" BSP | REFER SECTION 'E-E' FOR FULL DETAILS | | | B17, E35 | ANGLED PORT |
| D13 | -406 | 235 | Ø 14 | 105 | -- | -- | C3, E36 | CO-AXIAL: D25 |
| D14 | -223.1 | 148 | TO SUIT 3/8" BSP | 68 | 3/8" - 19 BSP | 15 | B9, E41 | -- |
| D15 | -133.1 | 148 | TO SUIT 3/8" BSP | 68 | 3/8" - 19 BSP | 15 | B9, E40 | -- |
| D16 | -87.5 | 30 | TO SUIT 3/8" BSP | 82 | 3/8" - 19 BSP | 15 | B18, F8 | -- |
| D17 | -87.5 | 90 | Ø 16 | 35 | -- | -- | F8 | -- |
| D18 | -87.5 | 148 | Ø 16 | 68 | -- | -- | B9, E38 | -- |
| D19 | -45 | 261 | Ø 14 | 102 | -- | -- | E34 | CO-AXIAL: D28 |
| D20 | -27 | 223.5 | Ø 16 | 75 | -- | -- | B16 | CO-AXIAL: D24 |
| D21 | -290 | 35 | TO SUIT 1/2" BSP | 90 | 1/2" - 14 BSP | 15 | B18, F16, F17 | -- |
| D22 | -417.5 | 80 | TO SUIT 3/4" BSP | 30 | 3/4" - 14 BSP | 25 | A53 | CO-AXIAL: A53 |
| D23 | -327.5 | 260 | TO SUIT 1, 1/4" BSP | 70 | 1, 1/4" - 11 BSP | 25 | F9 | -- |
| D24 | -27 | 223.5 | TO SUIT 3/4" BSP | 32 | 3/4" - 14 BSP | 25 | B15, D20 | CO-AXIAL: D20 |
| D25 | -406 | 235 | SUN CAVITY: T-13A, REFER SECTION 'B-B' FOR FULL DETAILS. | | | | C4, D13 | CO-AXIAL: D13 |
| D26 | -223.1 | 250 | SUN CAVITY: T-5A, REFER SECTION 'A-A' FOR FULL DETAILS. | | | | E24, E41 | -- |
| D27 | -133.1 | 250 | SUN CAVITY: T-5A, REFER SECTION 'A-A' FOR FULL DETAILS. | | | | E22, E40 | -- |
| D28 | -45 | 261 | SUN CAVITY: T-13A, REFER SECTION 'B-B' FOR FULL DETAILS. | | | | B14, D19 | CO-AXIAL: D19 |
| D29 | -400 | 205 | TO SUIT 1/8" BSP | 110 | 1/8" - 28 BSP | 11 | C7, F1 | -- |
| D30 | -95 | 260 | Ø 7 | 130 | -- | -- | E16, E38 | -- |
| D31 | -95 | 260 | TO SUIT 1/8" BSP | 12 | 1/8" - 28 BSP | 10 | E16, E38 | CO-AXIAL: D30 |



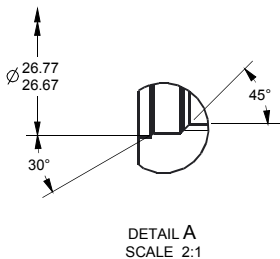
FACE D



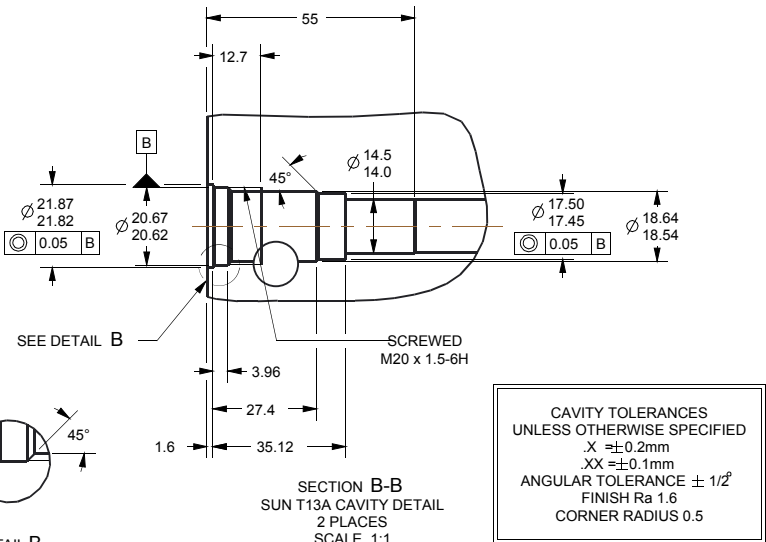
DETAIL VIEW '5A'
SCALE 1:1



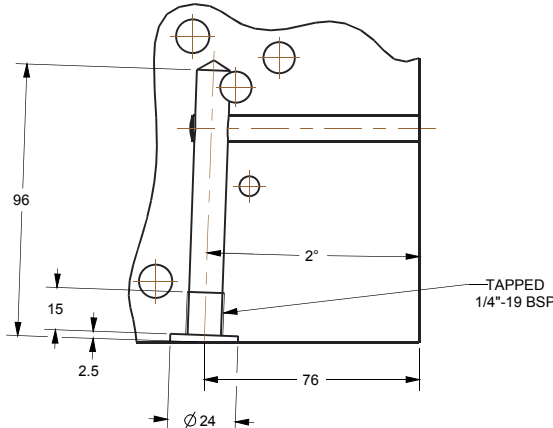
PART SECTION A-A
SUN T5A CAVITY DETAIL
2 PLACES
SCALE 1:1



DETAIL A
SCALE 2:1



DETAIL B
SCALE 2:1



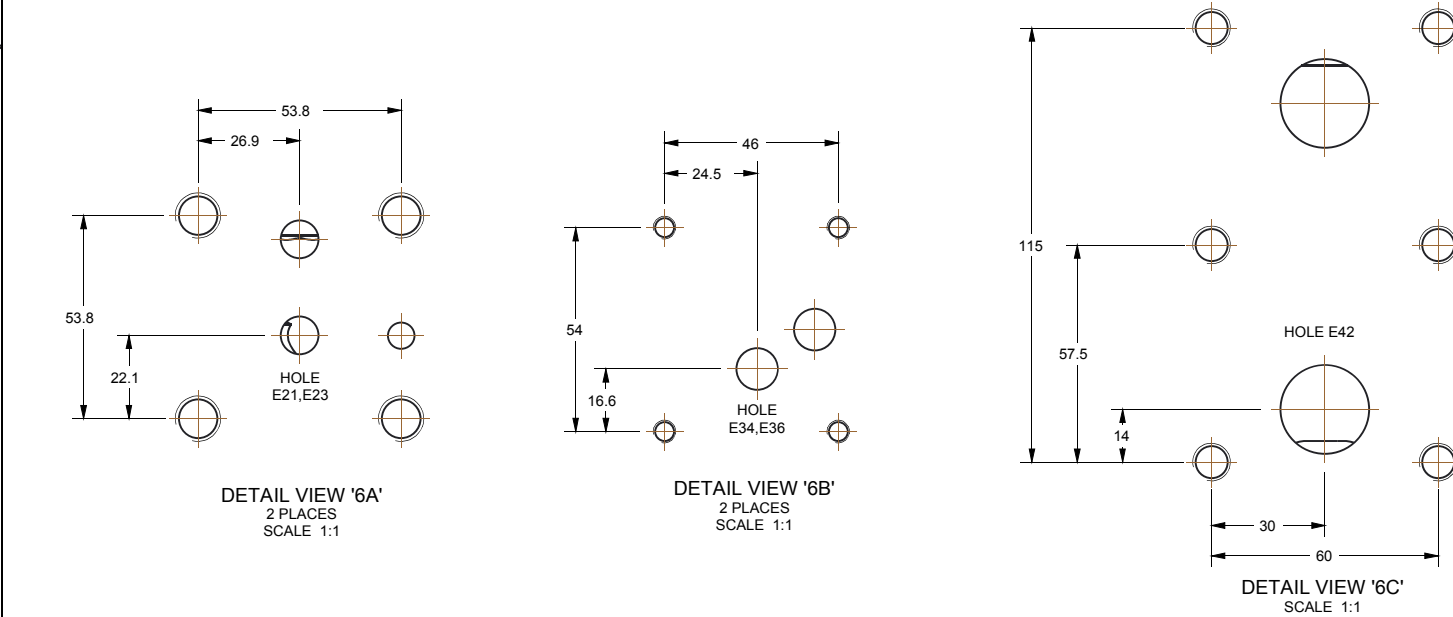
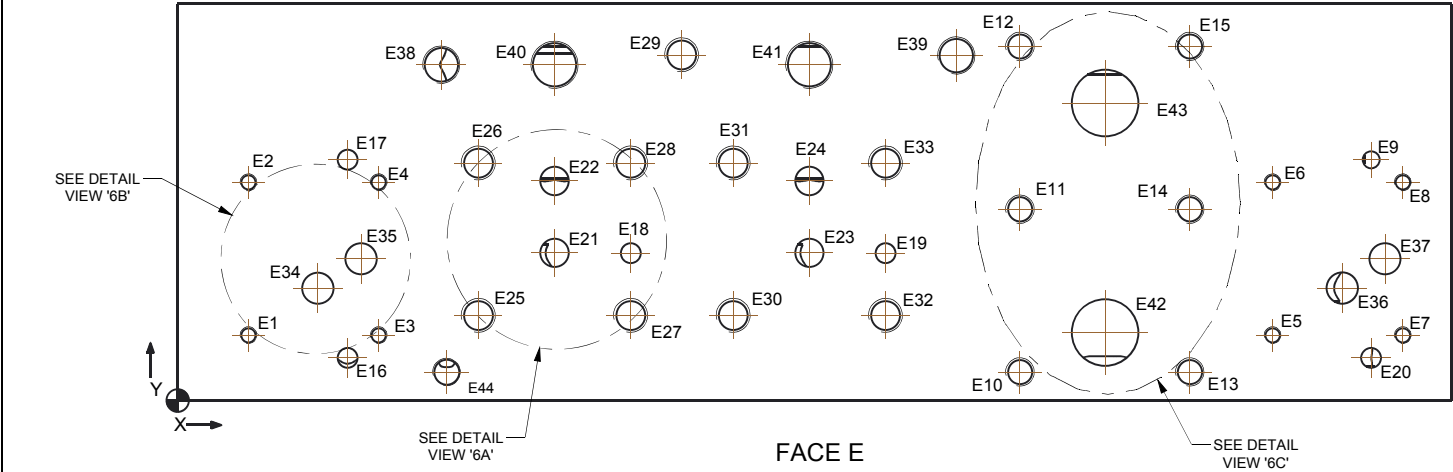
SECTION E-E SHOWING
ANGLED PORT REF 'D12'

IF IN DOUBT ASK

| | | |
|-----------|------|-----------|
| DRAWN BY | RW | 14-Feb-14 |
| CHECKED | CMcM | 28-Mar-14 |
| CERTIFIED | | |
| | NAME | DATE |

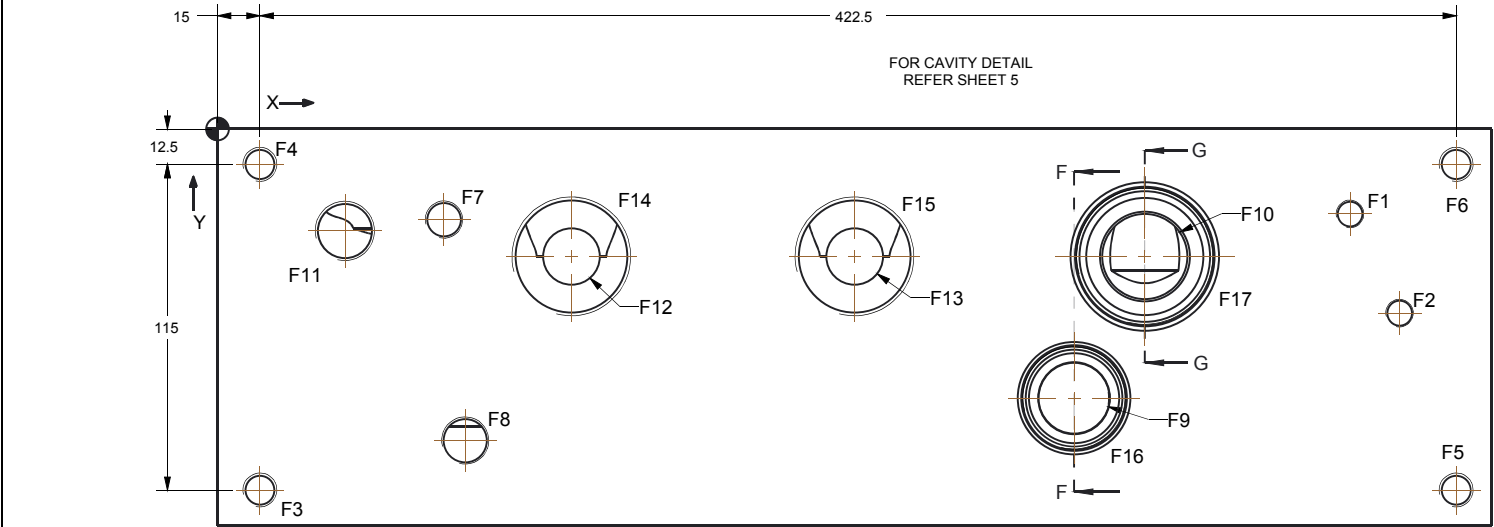
THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.

| | | | | | | | |
|-----------------------------------|--|---|--|-----------------------------|--|--------------------------------|--|
| MATERIAL STEEL (REFER PARTS LIST) | | SCALE 3:4 | | TITLE MANIFOLD BLOCK, STERN | | RESPONSIBLE AUTHORITY | |
| HEAT TREATMENT N/A | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | NSN | | SECURITY CLASSIFICATION | |
| SURFACE HARDNESS N/A | | SURFACE TEXTURE IN MICROMETRES 1.6 EXCEPT AS STATED | | CONTRACTOR K.0.1.0.7 | | CONTRACTORS PART NO. V07545500 | |
| MATERIAL TEST N/A | | HYDRAULIC TEST PROCEDURE N/A | | SERVICE DRAWING No | | SHEET NO 05 OF 08 | |
| CLEANLINESS SPECIFICATION MTSP26 | | QUALITY ASSURANCE GRADE BS EN ISO 9001 | | TYPE | | SHEET NO OF | |
| PATTERN No N/A | | ESTIMATED MASS 131 Kg | | SHEET No 005005 | | ISSUE | |
| | | | | 34 | | 78 79 80 | |

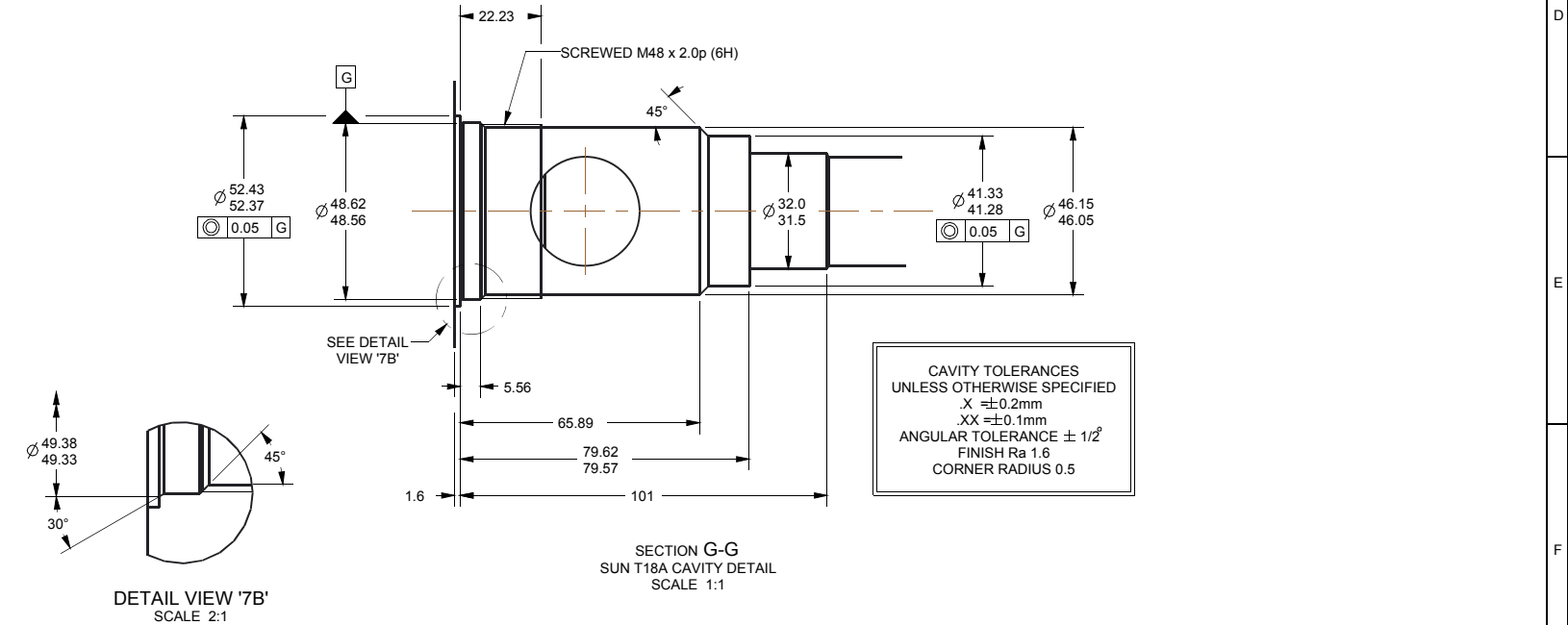
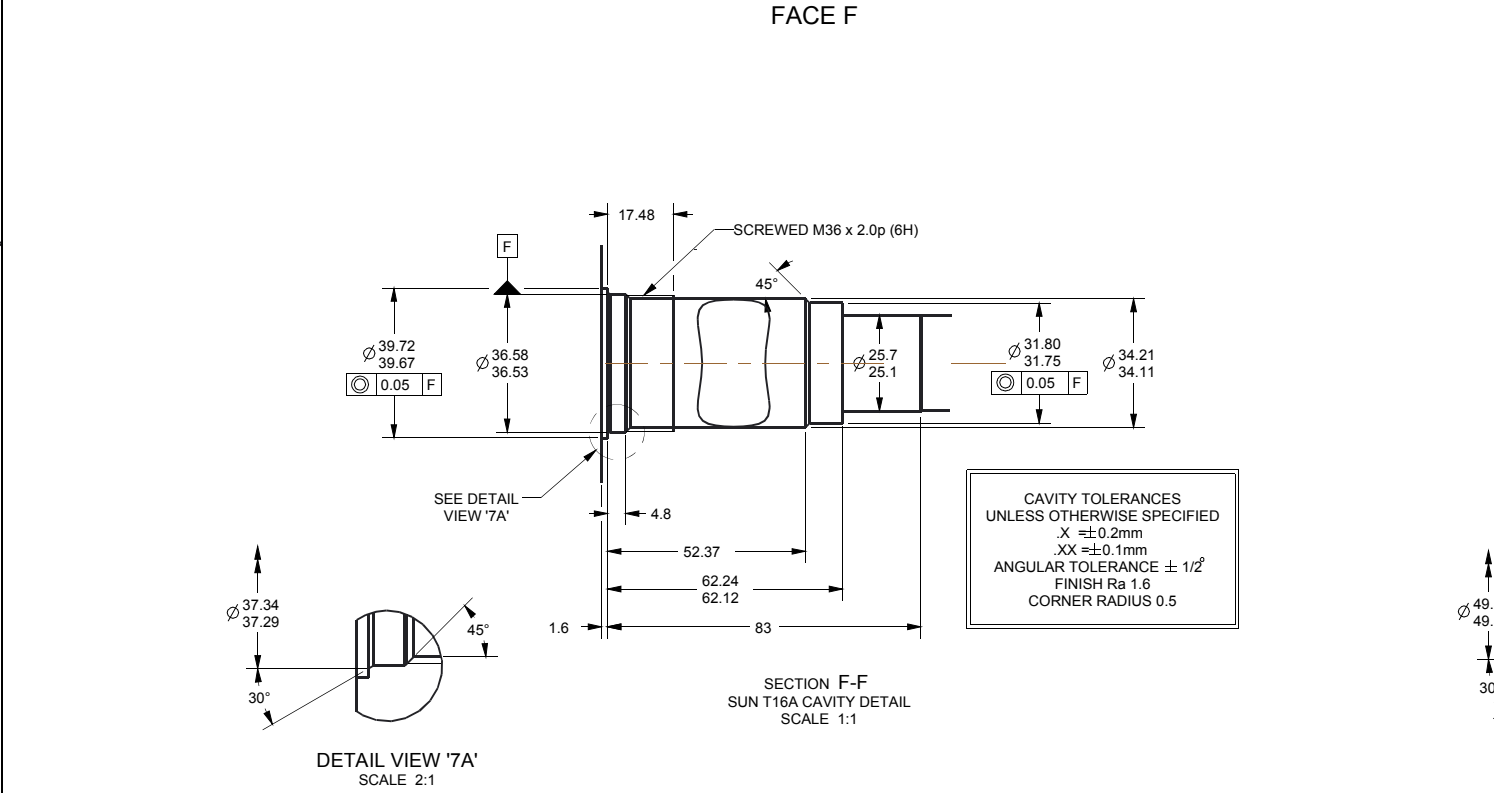


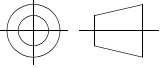
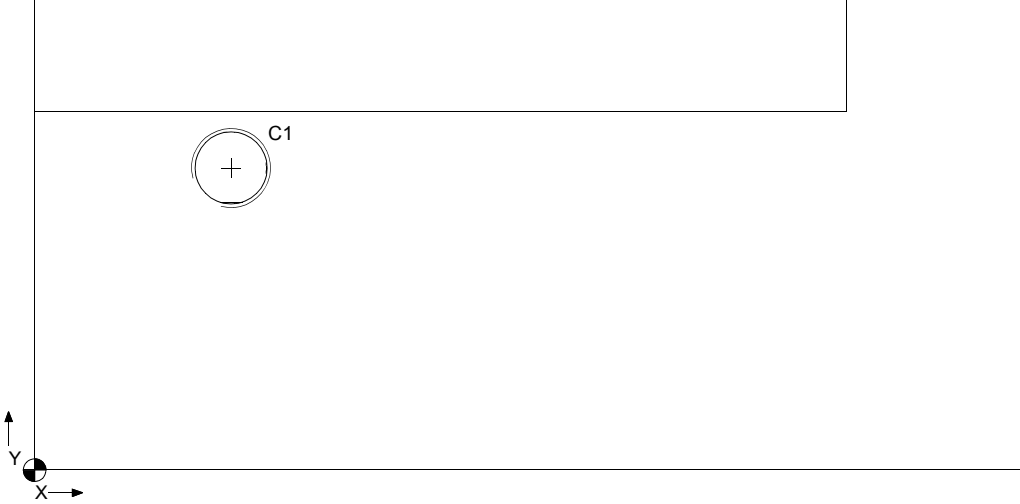
NOTE FIXING HOLE DRILL DEPTHS SHOULD NOT BE EXCEEDED.

| HOLE REF | X CO-ORD | Y CO-ORD | DRILL DIA. | DRILL DEPTH | THREAD DIA. | THREAD DEPTH | BREAKS INTO | REMARKS |
|-----------|-----------------|-----------------|------------------|-------------|------------------|--------------|-------------|--------------|
| E1 - E8 | SEE DETAIL '6B' | SEE DETAIL '6B' | TO SUIT M6 | 14 | M6 x 1.0p (6H) | 12 | -- | FIXING HOLE |
| E9 | 421.5 | 85 | Ø 6 | 60 | -- | -- | C3 | -- |
| E10 - E15 | SEE DETAIL '6C' | SEE DETAIL '6C' | TO SUIT M10 | 25 | M10 x 1.5P (6H) | 23 | -- | FIXING HOLE |
| E16 | 60 | 15 | Ø 7 | 17.5 | -- | -- | A39 | -- |
| E17 | 60 | 85 | Ø 7 | 65 | -- | -- | B20 | -- |
| E18 | 160 | 52 | Ø 7 | 8 | -- | -- | -- | DOWEL HOLE |
| E19 | 250 | 52 | Ø 7 | 8 | -- | -- | -- | DOWEL HOLE |
| E20 | 421.5 | 15 | Ø 7 | 30 | -- | -- | A16 | -- |
| E21 | 133.1 | 52.1 | Ø 10 | 65 | -- | -- | A56 | -- |
| E22 | 133.1 | 77.5 | Ø 10 | 55 | -- | -- | D27 | -- |
| E23 | 223.1 | 52.1 | Ø 10 | 65 | -- | -- | A58 | -- |
| E24 | 223.1 | 77.5 | Ø 10 | 55 | -- | -- | D26 | -- |
| E25 - E28 | SEE DETAIL '6A' | SEE DETAIL '6A' | TO SUIT M12 | 25 | M12 x 1.75p (6H) | 20 | -- | FIXING HOLE |
| E29 | 178 | 122 | TO SUIT M12 | 25 | M12 x 1.75p (6H) | 20 | -- | LIFTING HOLE |
| E30 - E33 | SEE DETAIL '6A' | SEE DETAIL '6A' | TO SUIT M12 | 25 | M12 x 1.75p (6H) | 20 | -- | FIXING HOLE |
| E34 | 49.5 | 39.6 | Ø 11 | 48 | -- | -- | D19 | -- |
| E35 | 64.8 | 50 | Ø 11 | 32 | -- | -- | D12 | -- |
| E36 | 411.3 | 39.7 | Ø 11 | 70 | -- | -- | D13 | -- |
| E37 | 426.4 | 50 | Ø 11 | 165 | -- | -- | C5 | -- |
| E38 | 93.1 | 118.5 | TO SUIT 1/4" BSP | 155 | 1/4" - 19 BSP | 15 | B14, D18 | -- |
| E39 | 275 | 121.7 | TO SUIT 1/4" BSP | 152 | 1/4" - 19 BSP | 15 | C4, D10 | -- |
| E40 | 133.1 | 118.5 | TO SUIT 3/8" BSP | 152 | 3/8" - 19 BSP | 15 | D15, D27 | -- |
| E41 | 223.1 | 118.5 | TO SUIT 3/8" BSP | 152 | 3/8" - 19 BSP | 15 | D14, D26 | -- |
| E42 | 327.5 | 24 | Ø 23.5 | 50 | -- | -- | A65 | -- |
| E43 | 327.5 | 105 | Ø 23.5 | 30 | -- | -- | D23 | -- |
| E44 | 95 | 10 | TO SUIT 1/8" BSP | 42 | 1/8" - 28 BSP | 10 | B21, D30 | -- |



| NOTE FIXING HOLE DRILL DEPTHS SHOULD NOT BE EXCEEDED. | | | | | | | | |
|---|------------------------------|----------|---|-------------|------------------|--------------|---------------|---------------|
| HOLE REF | X CO-ORD | Y CO-ORD | DRILL DIA. | DRILL DEPTH | THREAD DIA. | THREAD DEPTH | BREAKS INTO | REMARKS |
| F1 | 400 | -30 | TO SUIT 1/8" BSP | 210 | 1/8" - 28 BSP | 10 | A40, C1 | -- |
| F2 | 417.5 | -65 | TO SUIT 1/8" BSP | 123 | 1/8" - 28 BSP | 10 | A53, D1 | -- |
| F3 - F6 | SEE DRAWING VIEW ON FACE 'F' | | TO SUIT M12 | 30 | M12 x 1.75p (6H) | 25 | -- | FIXING HOLE |
| F7 | 80 | -32 | TO SUIT 1/4" BSP | 275 | 1/4" - 19 BSP | 20 | B8, B18 | -- |
| F8 | 87.5 | -110 | TO SUIT 3/8" BSP | 90 | 3/8" - 19 BSP | 15 | D16, D17 | -- |
| F9 | 302.5 | -95 | Ø 25 | 275 | -- | -- | D23 | CO-AXIAL: F16 |
| F10 | 327.5 | -45 | Ø 30 | 200 | -- | -- | A64 | CO-AXIAL: F17 |
| F11 | 45 | -36 | TO SUIT 1/2" BSP | 180 | 1/2" - 14 BSP | 20 | A63, A66, B18 | -- |
| F12 | 125 | -45 | Ø 20 | 192 | -- | -- | A55 | CO-AXIAL: F14 |
| F13 | 225 | -45 | Ø 20 | 192 | -- | -- | A57 | CO-AXIAL: F15 |
| F14 | 125 | -45 | TO SUIT 1,1/4" BSP | 80 | 1,1/4" - 11 BSP | 25 | A67, B18, F12 | CO-AXIAL: F12 |
| F15 | 225 | -45 | TO SUIT 1,1/4" BSP | 80 | 1,1/4" - 11 BSP | 25 | A68, B18, F13 | CO-AXIAL: F13 |
| F16 | 302.5 | -95 | SUN CAVITY : T-16A, REFER SECTION 'F-F' | | | | D21, F9 | CO-AXIAL: F9 |
| F17 | 327.5 | -45 | SUN CAVITY : T-18A, REFER SECTION 'G-G' | | | | B18, C2, F10 | CO-AXIAL: F10 |



| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|------|--|---------|------|-----------|-----------|----------------|----|--------|------|-------|-----------------------------------|-----|---------|--------------|----|--|----|---|--|--|--|--|--|--|--|--|--|--|--|-------------|--|---|-----------|-----|----|-------------|--|---|-----------|-----|----|-------------|--|---|-----------|-----|----|--|--|---|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|--|-------|------|-----|---------|---|--|
| 1 | | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 10 | | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SECURITY CLASSIFICATION | | | <div>3RD ANGLE PROJECTION</div> <div></div> <div>ALL DIMENSIONS IN MM</div> <div>MACHINED TOLERANCES ±0.5 EXCEPT AS STATED</div> | | | | | | | | | | | | | | | | | | | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SERVICE DRG. NO. | | | | | | | | | | | | | | | | | | | | | | B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| USED ON V07524400 | | | | | | | | | | | | | | | | | | | | | | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | <div></div> <div>FACE C</div> | | | | | | | | | | | | | | | | | | | E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | <table><tr><td colspan="12" rowspan="4"></td><td colspan="2">SEE SHEET 7</td><td>4</td><td>21-Jan-15</td><td>MES</td><td>AH</td></tr><tr><td colspan="2">SEE SHEET 3</td><td>3</td><td>27-Nov-14</td><td>MES</td><td>AH</td></tr><tr><td colspan="2">SEE SHEET 1</td><td>2</td><td>10-May-14</td><td>SDB</td><td>RW</td></tr><tr><td colspan="2"></td><td>1</td><td>07-Feb-14</td><td></td><td></td></tr><tr><td colspan="12"></td><td colspan="2">CHANGE</td><td>ISSUE</td><td>DATE</td><td>MOD</td><td>CHECKED</td></tr></table> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SEE SHEET 7 | | 4 | 21-Jan-15 | MES | AH | SEE SHEET 3 | | 3 | 27-Nov-14 | MES | AH | SEE SHEET 1 | | 2 | 10-May-14 | SDB | RW | | | 1 | 07-Feb-14 | | | | | | | | | | | | | | | CHANGE | | ISSUE | DATE | MOD | CHECKED | G | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SEE SHEET 7 | | 4 | 21-Jan-15 | MES | AH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SEE SHEET 3 | | 3 | 27-Nov-14 | MES | AH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SEE SHEET 1 | | 2 | 10-May-14 | SDB | RW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | 1 | 07-Feb-14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | CHANGE | | ISSUE | DATE | MOD | CHECKED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div>IF IN DOUBT ASK</div> <table><tr><td>DRAWN BY</td><td>RW</td><td>07-Feb-14</td></tr><tr><td>CHECKED</td><td>CMcM</td><td>28-Mar-14</td></tr><tr><td>CERTIFIED</td><td></td><td></td></tr><tr><td></td><td>NAME</td><td>DATE</td></tr></table> <div>THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.</div> | | | DRAWN BY | RW | 07-Feb-14 | CHECKED | CMcM | 28-Mar-14 | CERTIFIED | | | | NAME | DATE | MATERIAL STEEL (REFER PARTS LIST) | | | SCALE 1:1 | | TITLE DISTRIBUTION MANIFOLD BLOCK NSN CONTRACTORK0107 | | | | | RESPONSIBLE AUTHORITY SECURITY CLASSIFICATION CONTRACTORS PART NO. SHEET NO 04 OF 07 SERVICE DRG. NO. SHEET NO OF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | DRAWN BY | RW | 07-Feb-14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | CHECKED | CMcM | 28-Mar-14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | CERTIFIED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | NAME | DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HEAT TREATMENT N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SURFACE HARDNESS N/A | | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | SURFACE TEXTURE IN MICROMETRES 1.6 / EXCEPT AS STATED | | | | | TYPE 004004 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MATERIAL TEST N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PROTECTIVE FINISH N/A | | | S C R/A DRG No ORIGIN K0107 SERVICE DRAWING No TYPE 004004 SHEET No ISSUE | | | | | A 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HYDRAULIC TEST PROCEDURE N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CLEANLINESS SPECIFICATION MTSP26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PATTERN No N/A | | | 1 | | 2 | 3 | 5 | 10 | 25 | 28 | 31 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ESTIMATED MASS 51 Kg | | | E | | N | 34 | 40 | 45 | 50 | 53 | 60 | 70 | 78 | 79 | 80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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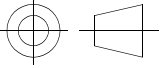
11

SECURITY CLASSIFICATION

SERVICE DRG. NO.

USED ON
V07524400

3RD ANGLE PROJECTION

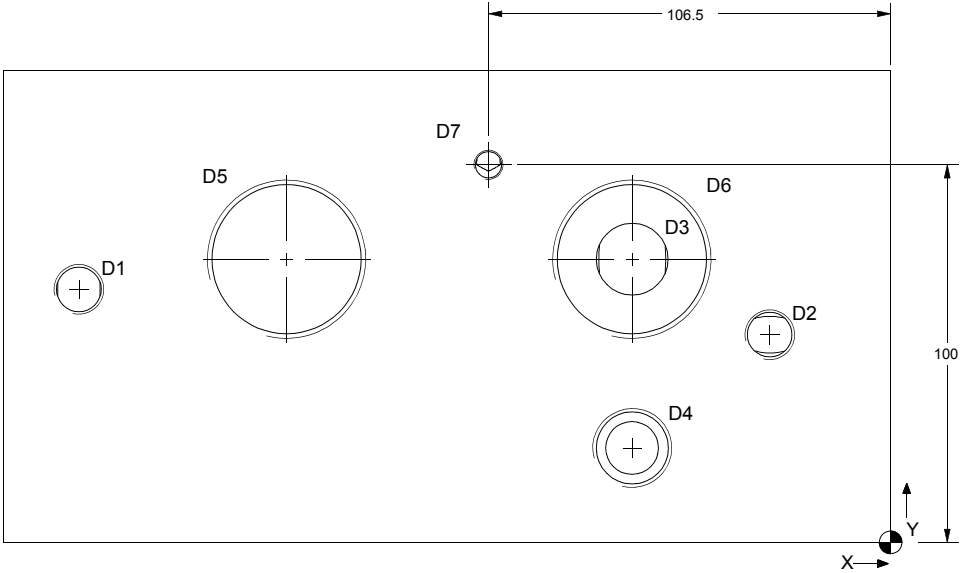


ALL DIMENSIONS IN MM

MACHINED TOLERANCES ±0.5 EXCEPT AS STATED

A

| HOLE REF. | X | Y | DRILL DIA. | DRILL DEPTH | HOLE SIZE | THREAD DEPTH | BREAKS INTO | REMARKS |
|-----------|--------|------|------------|-------------|--------------|--------------|-------------|---------|
| D1 | -215.0 | 67.0 | 11.8 | 132.0 | 1/4-19 BSP | 20.0 | E19 | |
| D2 | -32.0 | 55.0 | 11.8 | 130.0 | 1/4-19 BSP | 20.0 | B2,B8 | |
| D3 | -68.4 | 75.0 | 19.0 | 64.0 | | | E22 | |
| D4 | -68.4 | 25.0 | 19.1 | 195.0 | 1/2-14 BSP | 20.0 | A13,E21,B6 | |
| D5 | -160.0 | 75.0 | 39.5 | 45.0 | 1-1/4-11 BSP | 35.0 | F8 | |
| D6 | -68.5 | 75.0 | 39.5 | 45.0 | 1-1/4-11 BSP | 35.0 | D3,E22 | |
| D7 | | | Ø 7 | 210 | 1/4 BSP | 15 | E27, E29 | |



FACE D

IF IN DOUBT ASK

| | | |
|-----------|------|-----------|
| DRAWN BY | RW | 07-Feb-14 |
| CHECKED | CMcM | 28-Mar-14 |
| CERTIFIED | | |
| | NAME | DATE |

THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.

| | | | | | | | | |
|--|--|--|---------------------|--|-------|-----------|-----|---------|
| | | | SEE SHEET 7 | | 4 | 21-Jan-15 | MES | AH |
| | | | SEE SHEET 3 | | 3 | 27-Nov-14 | MES | AH |
| | | | D5 MOVED. D7 ADDED. | | 2 | 10-May-14 | SDB | RW |
| | | | | | 1 | 07-Feb-14 | | |
| | | | CHANGE | | ISSUE | DATE | MOD | CHECKED |

| | | | | | | | |
|--|--|--|--|-----------------------------------|--|--|--|
| MATERIAL STEEL (REFER PARTS LIST) | | SCALE 1:1 | | TITLE DISTRIBUTION MANIFOLD BLOCK | | RESPONSIBLE AUTHORITY | |
| HEAT TREATMENT N/A | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | NSN | | SECURITY CLASSIFICATION | |
| SURFACE HARDNESS N/A | | SURFACE TEXTURE IN MICROMETRES 1.6/ EXCEPT AS STATED | | CONTRACTOR K 0 1 0 7 | | CONTRACTORS PART NO. SHEET NO 05 OF 07 | |
| PROTECTIVE FINISH N/A | | | | | | V07545400 | |
| HYDRAULIC TEST PROCEDURE N/A | | | | | | SHEET NO OF | |
| CLEANLINESS SPECIFICATION MTSP26 | | | | | | SERVICE DRG. NO. | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | | | | |
| PATTERN No N/A | | | | | | | |
| ESTIMATED MASS 51 Kg | | | | | | | |

| | | | | | | | | | | |
|-----|---|-----|---------------|--------------------|--|--|--|------|----------|----------|
| S | C | R/A | DRG No ORIGIN | SERVICE DRAWING No | | | | TYPE | SHEET No | ISSUE |
| | | | K 0 1 0 7 | | | | | | 0 0 5 | 0 0 4 |
| 1 | 2 | 3 | 5 | 10 | | | | 25 | 28 | 31 |
| E N | | | 34 | 40 45 50 53 60 | | | | 70 | | 78 79 80 |

A 1

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11

SECURITY CLASSIFICATION

SERVICE DRG. NO.

USED ON
H07527200

3RD ANGLE PROJECTION

ALL DIMENSIONS IN MM

MACHINED TOLERANCES ±0.5 EXCEPT AS STATED

120

20

100

10

100

M10x1.5 TAP T 15.0 DRILL Ø 8.5 T 20.0 -4 HOLES

77.8

38.9

21.45

42.9

60

60

1.6

1.6

40

40

HOLE Ø 50.0 T 112.0

80

60

40

140

40

3/4-14" BSP - P TAP T 20.0 DRILL Ø 24.5 T 50.0
4 PLACES

1.6

100

20

10

100

M10x1.5 TAP T 15.0 DRILL Ø 8.5 T 20.0 -4 HOLES

112

SECTION A-A

GENERAL VIEW

IF IN DOUBT ASK

| | | |
|-----------|------|-----------|
| DRAWN BY | IQ | 17-Apr-14 |
| CHECKED | | |
| CERTIFIED | | |
| | NAME | DATE |

THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.

| | | | |
|---------------------------|--|----------------|--|
| MATERIAL | | STEEL S355J2+N | |
| HEAT TREATMENT | | N/A | |
| SURFACE HARDNESS | | N/A | |
| MATERIAL TEST | | N/A | |
| PROTECTIVE FINISH | | N/A | |
| HYDRAULIC TEST PROCEDURE | | N/A | |
| CLEANLINESS SPECIFICATION | | MTSP26 | |
| QUALITY ASSURANCE GRADE | | BS EN ISO 9001 | |
| PATTERN No | | N/A | |
| ESTIMATED MASS | | 8 Kg | |

SCALE
1:2

ALL THREADS TO CONFORM WITH BS SPECIFICATIONS

SURFACE TEXTURE IN MICROMETRES
3.2 / EXCEPT AS STATED

TITLE
MANIFOLD BLOCK

NSN
CONTRACTOR

CHANGE

RESPONSIBLE AUTHORITY

SECURITY CLASSIFICATION

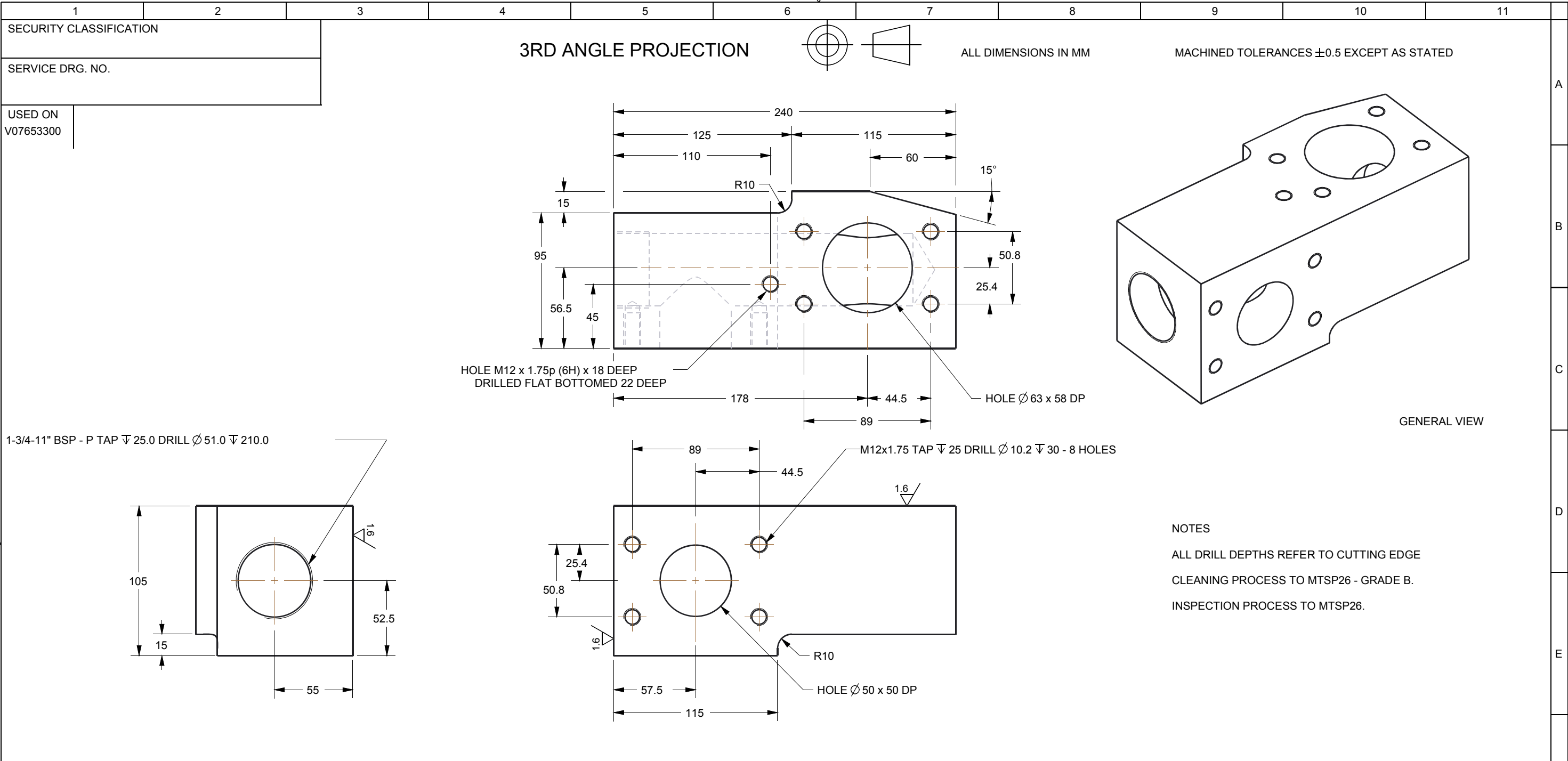
CONTRACTORS PART NO.
V07556700

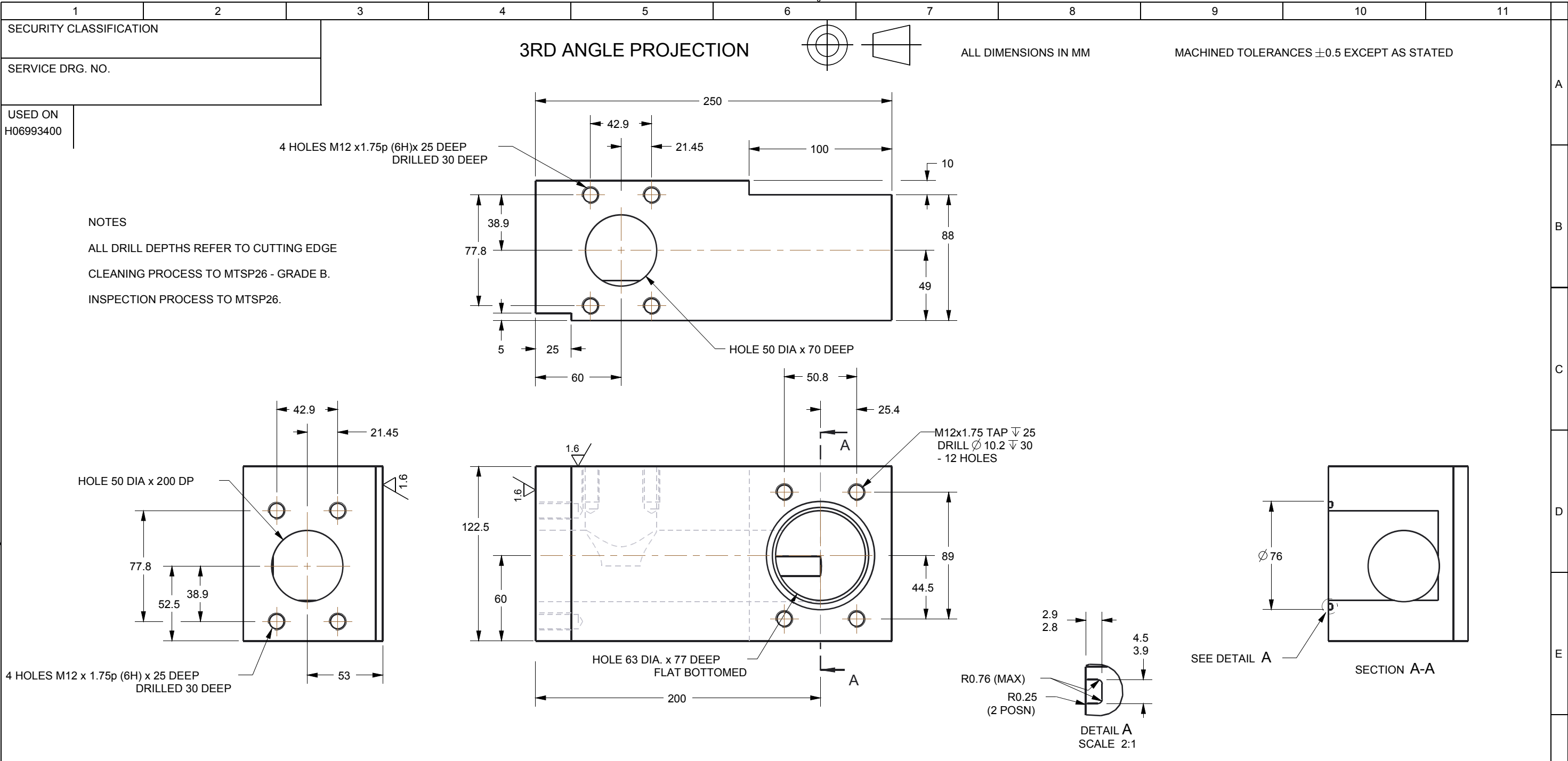
SHEET NO OF
1

SHEET NO OF
1

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|
| 1 | | | | 2 | | | | 3 | | | | 4 | | | | 5 | | | | 6 | | | | 7 | | | | 8 | | | | 9 | | | | 10 | | | | 11 | | | |
| 34 | | | | 40 | | | | 45 | | | | 50 | | | | 53 | | | | 60 | | | | 70 | | | | 78 | | | | 79 | | | | 80 | | | | | | | |

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| | | | DRAWN BY | RW | 24-Jul-14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | CHECKED | SDB | 30-Jul-14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| HOLE REF | DRILL DIA. | DRILL DEPTH | THREAD DIA. | THREAD DEPTH | C'BORE DIA. | C'BORE DEPTH | BREAKS INTO | REMARKS |
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| A1 | Ø 8.8 | THRO' | - | - | - | - | - | |
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| A4 | Ø 8.8 | THRO' | - | - | Ø 14 | 37 | - | C'BORE DEPTH FROM FACE A |
| | | | | | | | | |
| B1 | Ø 6.8 | 20 | M8 x 1.25p (6H) | 16 | - | - | - | FASTENERS |
| B2 | Ø 6.8 | 20 | M8 x 1.25p (6H) | 16 | - | - | - | FASTENERS |
| B3 | Ø 6.8 | 20 | M8 x 1.25p (6H) | 16 | - | - | - | FASTENERS |
| B4 | Ø 6.8 | 20 | M8 x 1.25p (6H) | 16 | - | - | - | FASTENERS |
| B5 | Ø 5 | 40 | - | - | - | - | E1 | |
| B6 | Ø 5 | 35 | - | - | - | - | F1 | |
| | | | | | | | | |
| D1* | Ø 18 ^{+0.13} ₀ | 2 | - | - | - | - | - | *FLAT BOTTOM - REFER TO SECTION D1 |
| D2* | Ø 18 ^{+0.13} ₀ | 2 | - | - | - | - | - | *FLAT BOTTOM - REFER TO SECTION D1 |
| D3 | Ø 5 | 30 | - | - | - | - | E1 | |
| D4 | Ø 5 | 24 | - | - | - | - | F1 | |
| | | | | | | | | |
| E1 | Ø 8.8 | 35 | 1/8" - 28 BSP | 10 | - | - | B5, D3 | |
| | | | | | | | | |
| F1 | Ø 8.8 | 35 | 1/8" - 28 BSP | 10 | - | - | B6, D4 | |
| | | | | | | | | |

IF IN DOUBT ASK

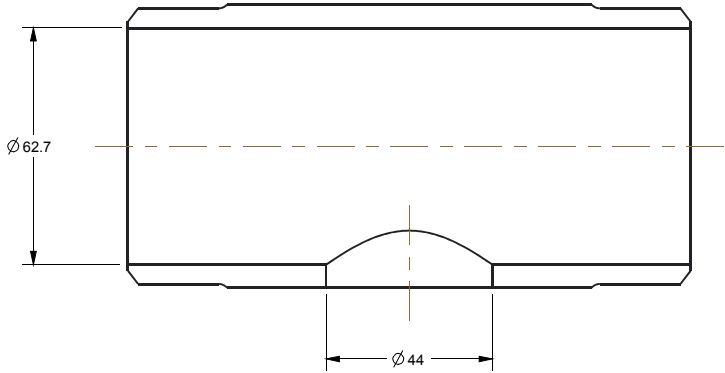
| | | |
|-----------|------|-----------|
| DRAWN BY | SC | 25-Feb-15 |
| CHECKED | JC | 25-Feb-15 |
| CERTIFIED | | |
| | NAME | DATE |

THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.

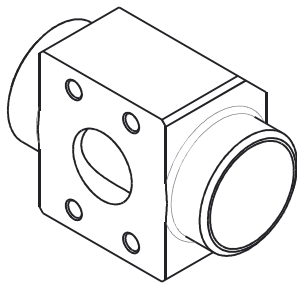
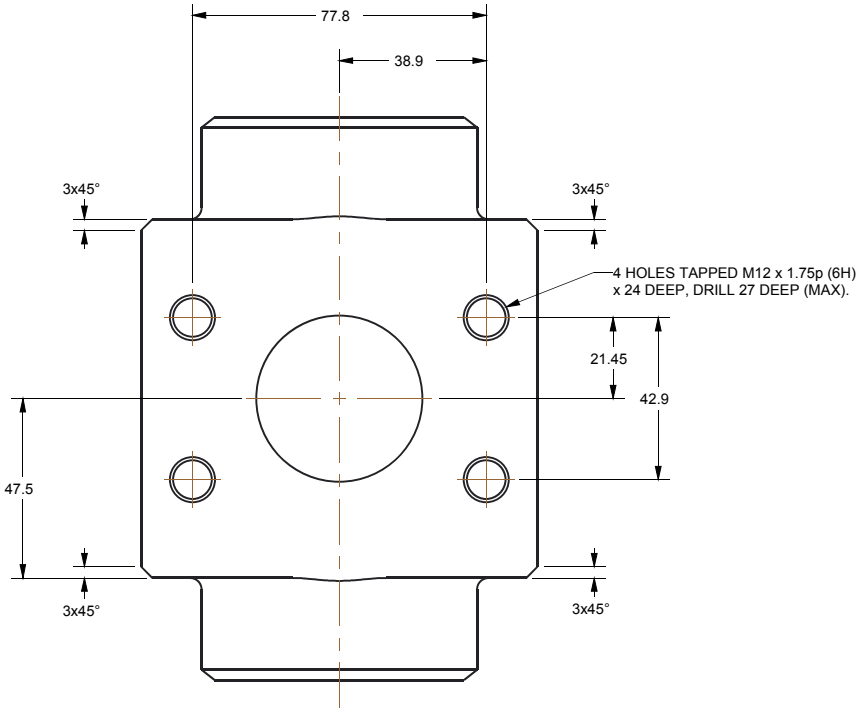
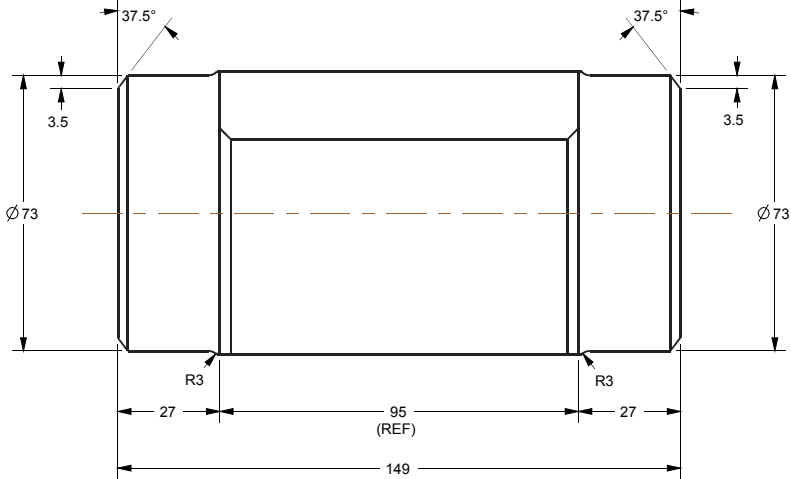
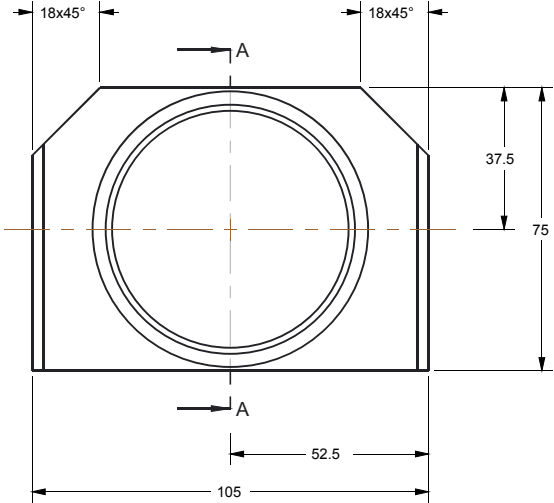
| | | | | | | | | | | | |
|--|--|--|--|---|--|---------------------|--|--|--|---------------|--|
| MATERIAL ST. STEEL (REFER PARTS LIST) | | | | SCALE 1:1 | | TITLE ADAPTER BLOCK | | RESPONSIBLE AUTHORITY | | | |
| HEAT TREATMENT N/A | | | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | NSN | | SECURITY CLASSIFICATION | | | |
| SURFACE HARDNESS N/A | | | | SURFACE TEXTURE IN MICROMETRES 1.6/EXCEPT AS STATED | | CONTRACTOR | | CONTRACTORS PART NO. SHEET NO 01 OF 01 | | | |
| MATERIAL TEST N/A | | | | | | K 0 1 0 7 | | H07704800 | | | |
| PROTECTIVE FINISH N/A | | | | | | | | SERVICE DRG. NO. SHEET NO OF | | | |
| HYDRAULIC TEST PROCEDURE N/A | | | | S | | C | | R/A | | DRG No ORIGIN | |
| CLEANLINESS SPECIFICATION MTSP26 | | | | 1 | | 2 | | 3 | | 5 | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | 10 | | 25 | | 28 | | 31 | |
| PATTERN No N/A | | | | E | | N | | 1 | | 1 | |
| ESTIMATED MASS 1.5 Kg | | | | 34 | | 40 | | 45 | | 50 | |
| | | | | 53 | | 60 | | 70 | | 78 | |
| | | | | | | | | | | 79 | |
| | | | | | | | | | | 80 | |

| | | | | | | | |
|---|--|--|--|-------|-----------|-----|---------|
| POS'N OF FACE A & D HOLES CHANGED. C'BORE REMOVED FROM HOLES A1 & A2. DIA OF B5, B6, D3 & D4 WAS 6mm. | | | | 2 | 27-Feb-15 | SC | SDB |
| CHANGE | | | | 1 | 25-Feb-15 | | |
| | | | | ISSUE | DATE | MOD | CHECKED |

| | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|--|--|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|----|--|----|--|
| 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 10 | | 11 | |
| SECURITY CLASSIFICATION | | <div>3RD ANGLE PROJECTION</div> <div></div> <div>ALL DIMENSIONS IN MM</div> <div>MACHINED TOLERANCES ±0.5 EXCEPT AS STATED</div> | | | | | | | | | | | | | | | | | | | |
| SERVICE DRG. NO. | | | | | | | | | | | | | | | | | | | | | |
| USED ON H07564900 | | | | | | | | | | | | | | | | | | | | | |




SECTION A-A

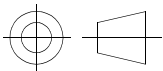


ISOMETRIC VIEW SHOWN
FOR CLARITY ONLY
SCALE 1:2

| | | |
|--|------|-----------|
| IF IN DOUBT ASK | | |
| DRAWN BY | JC | 17-Jul-14 |
| CHECKED | SDB | 23-Jul-14 |
| CERTIFIED | | |
| | NAME | DATE |
| THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD. | | |

| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|----------------------|-----------|-----|---------|--------------------------------|--|
| | | | | | | | | | | CHANGE | | 1 | 17-Jul-14 | | | | |
| | | | | | | | | | | CHANGE | | ISSUE | DATE | MOD | CHECKED | | |
| MATERIAL ST. STEEL (REFER PARTS LIST) | | | | | | | | | | SCALE 1:1 | | TITLE TEE MANIFOLD | | | | RESPONSIBLE AUTHORITY | |
| HEAT TREATMENT N/A | | | | | | | | | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | NSN | | | | SECURITY CLASSIFICATION | |
| SURFACE HARDNESS N/A | | | | | | | | | | SURFACE TEXTURE IN MICROMETRES 3.2/ EXCEPT AS STATED | | CONTRACTOR K.0.1.0.7 | | | | CONTRACTORS PART NO. H07588000 | |
| MATERIAL TEST N/A | | | | | | | | | | | | | | | | SHEET NO 01 | |
| PROTECTIVE FINISH N/A | | | | | | | | | | | | | | | | OF 01 | |
| HYDRAULIC TEST PROCEDURE N/A | | | | | | | | | | | | | | | | SHEET NO OF | |
| CLEANLINESS SPECIFICATION MTSP26 | | | | | | | | | | | | | | | | SERVICE DRG. NO. | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | | | | | | | | | | | | | 1 1 1 | |
| PATTERN No N/A | | | | | | | | | | | | | | | | 78 79 80 | |
| ESTIMATED MASS 3.638 Kg | | | | | | | | | | | | | | | | A 1 | |

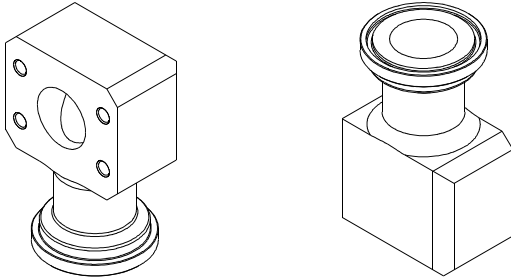
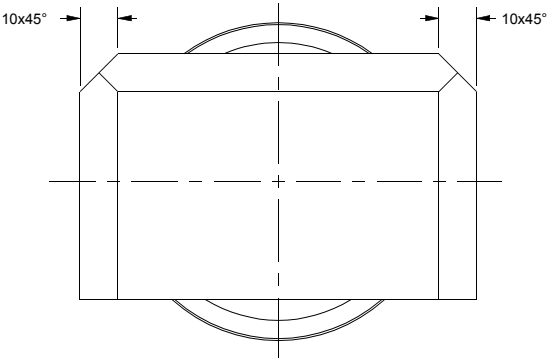
| | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| SECURITY CLASSIFICATION | | <div style="text-align: center;"> <h3>3RD ANGLE PROJECTION</h3>  <p>ALL DIMENSIONS IN MM MACHINED TOLERANCES ±0.5 EXCEPT AS STATED REMOVE ALL SHARP CORNERS</p> </div> | | | | | | | | |
| SERVICE DRG. NO. | | | | | | | | | | |
| USED ON H07525000 | | | | | | | | | | |



ALL DIMENSIONS IN MM

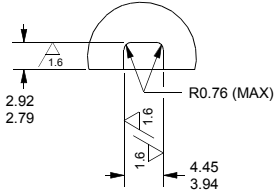
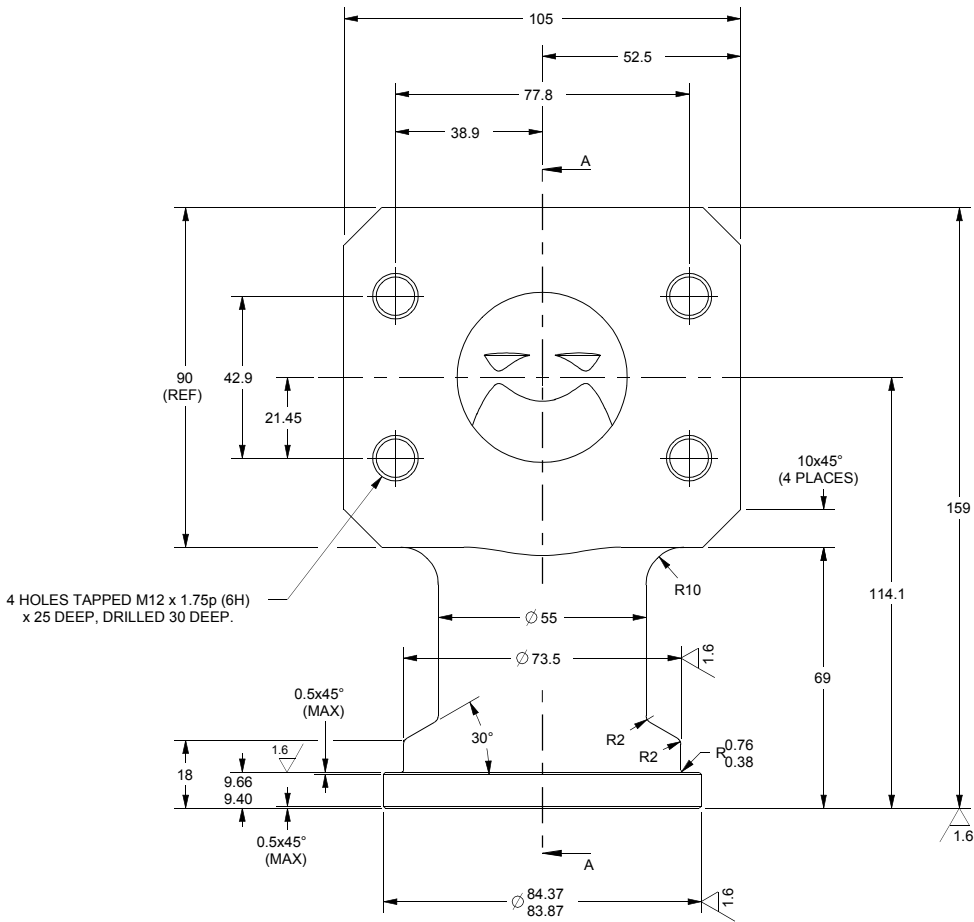
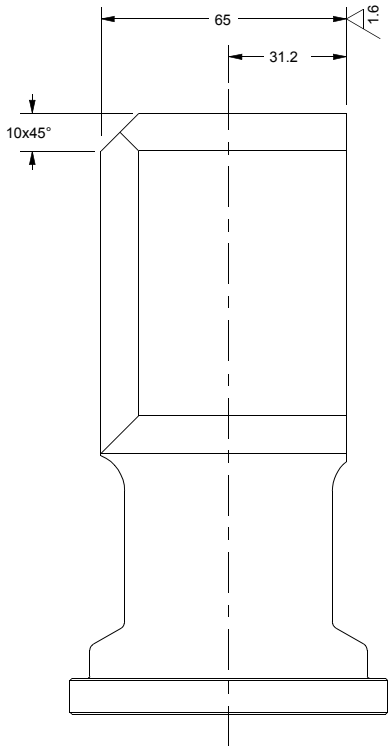
MACHINED TOLERANCES ± 0.5 EXCEPT AS STATED

REMOVE ALL SHARP CORNERS

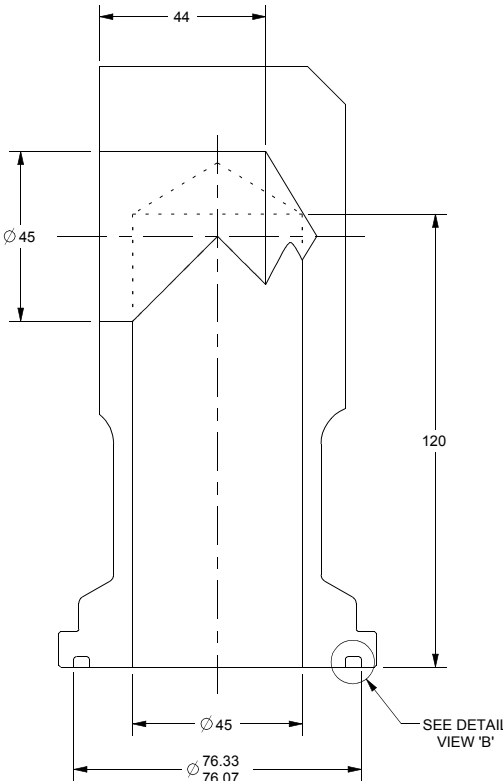


ISOMETRIC VIEWS SHOWN
FOR CLARITY ONLY
SCALE 2:5

SCALE 2:5



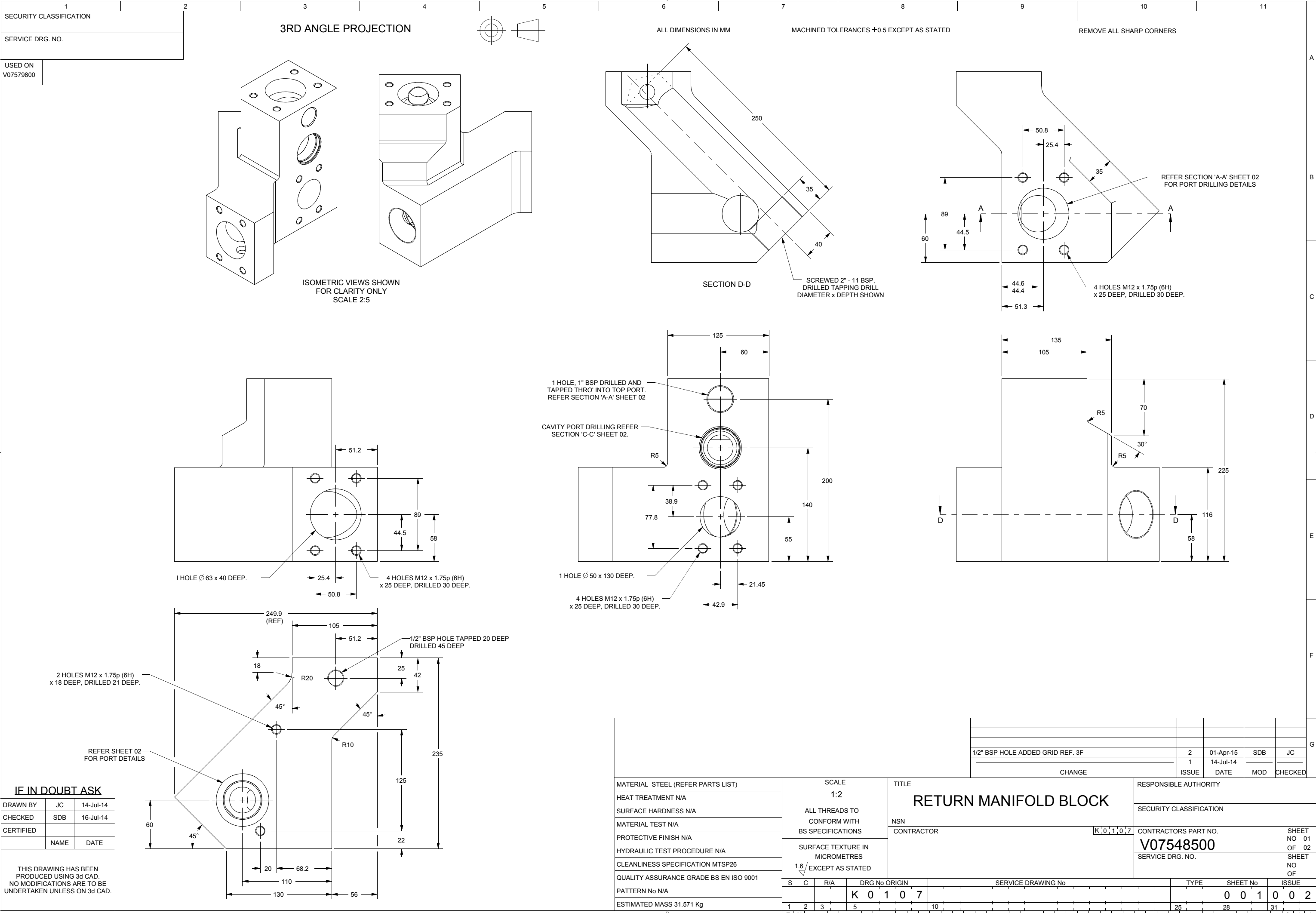
DETAIL VIEW 'E'
SCALE 5:2



| IF IN DOUBT ASK | | |
|---|------|-----------|
| DRAWN BY | JC | 21-Jul-14 |
| CHECKED | SDB | 23-Jul-14 |
| CERTIFIED | | |
| | NAME | DATE |
| <p>THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.</p> | | |

[illegible]

| S | C | R/A | DRG No ORIGIN | SERVICE DRAWING No | TYPE | SHEET No | ISSUE |
|---|---|-----|---------------|--------------------|------|----------|-------|
| | | | K 0 1 0 7 | | | 0 0 1 | 0 0 1 |
| 1 | 2 | 3 | 5 | 10 | 25 | 28 | 31 |



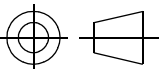
| S | C | R/A | DRG No | ORIGIN | SERVICE | DRAWING No | TYPE | SHEET No | ISSUE |
|---|---|-----|--------|--------|---------|------------|------|----------|---------|
| | | | K 0 | 1 0 7 | | | | 0 0 | 1 0 0 4 |
| 1 | 2 | 3 | 5 | 10 | | | 25 | 28 | 31 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
|---|---|---|---|---|---|---|---|---|----|----|--|

| |
|-------------------------|
| SECURITY CLASSIFICATION |
| SERVICE DRG. NO. |

USED ON
V07657500

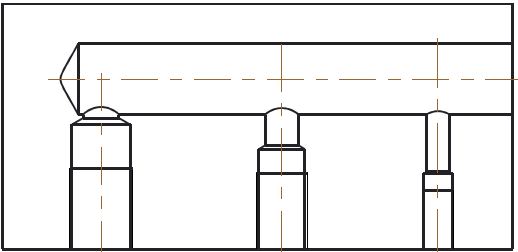
3RD ANGLE PROJECTION



ALL DIMENSIONS IN MM

MACHINED TOLERANCES ± 0.5 EXCEPT AS STATED

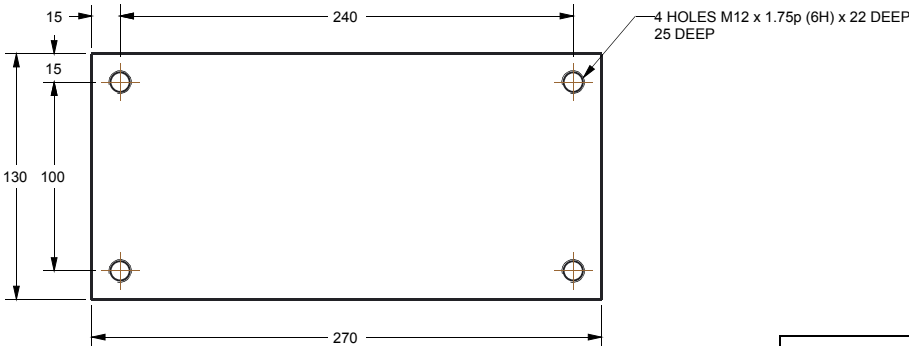
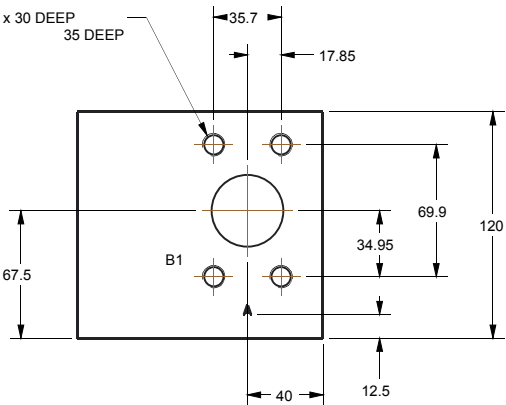
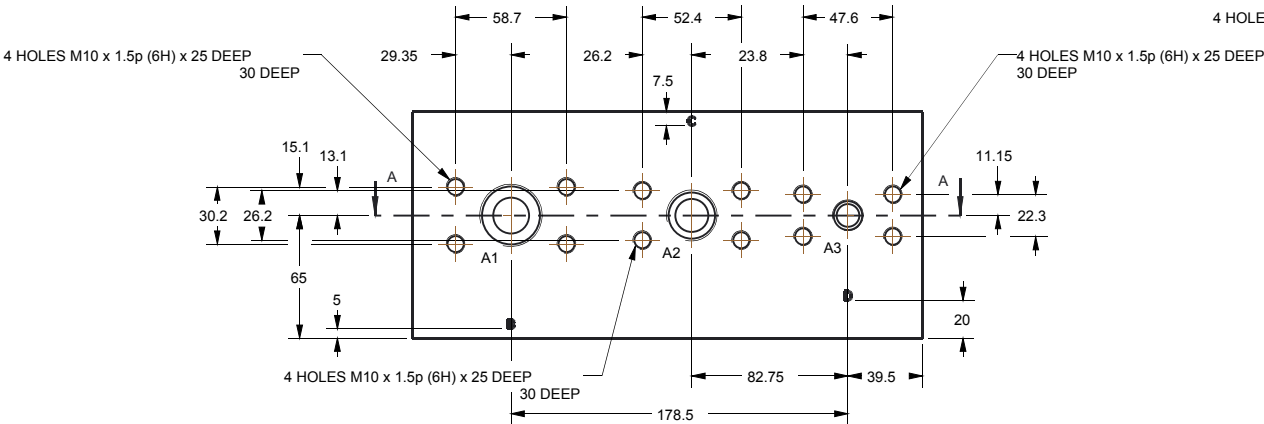
REMOVE ALL SHARP CORNERS



| HOLE REF | N.O. OFF. | DILL DIA. | DILL DEPTH | THREAD DIA. | THREAD DEPTH | C'BORE DIA. | C'BORE DEPTH | C'BORE THREED DIA. | C'BORE THREED DEPTH | BREAKS INTO |
|-------------|--------------|-----------|------------|-------------|--------------|-------------|--------------|--------------------|---------------------|-------------|
| A1 | 1 | 19 | 90 | ----- | ---- | TAP SIZE | 66 | 1" BSP | 43 | B1 |
| A2 | 1 | 17.5 | 90 | ----- | ---- | TAP SIZE | 53 | 3/4" BSP | 40 | B1 |
| A3 | 1 | 12 | 90 | ----- | ---- | TAP SIZE | 40 | 3/8" BSP | 31 | B1 |
| B1 | 1 | 38 | 230 | ----- | ---- | ----- | ----- | ----- | ----- | A1, A2, A3 |

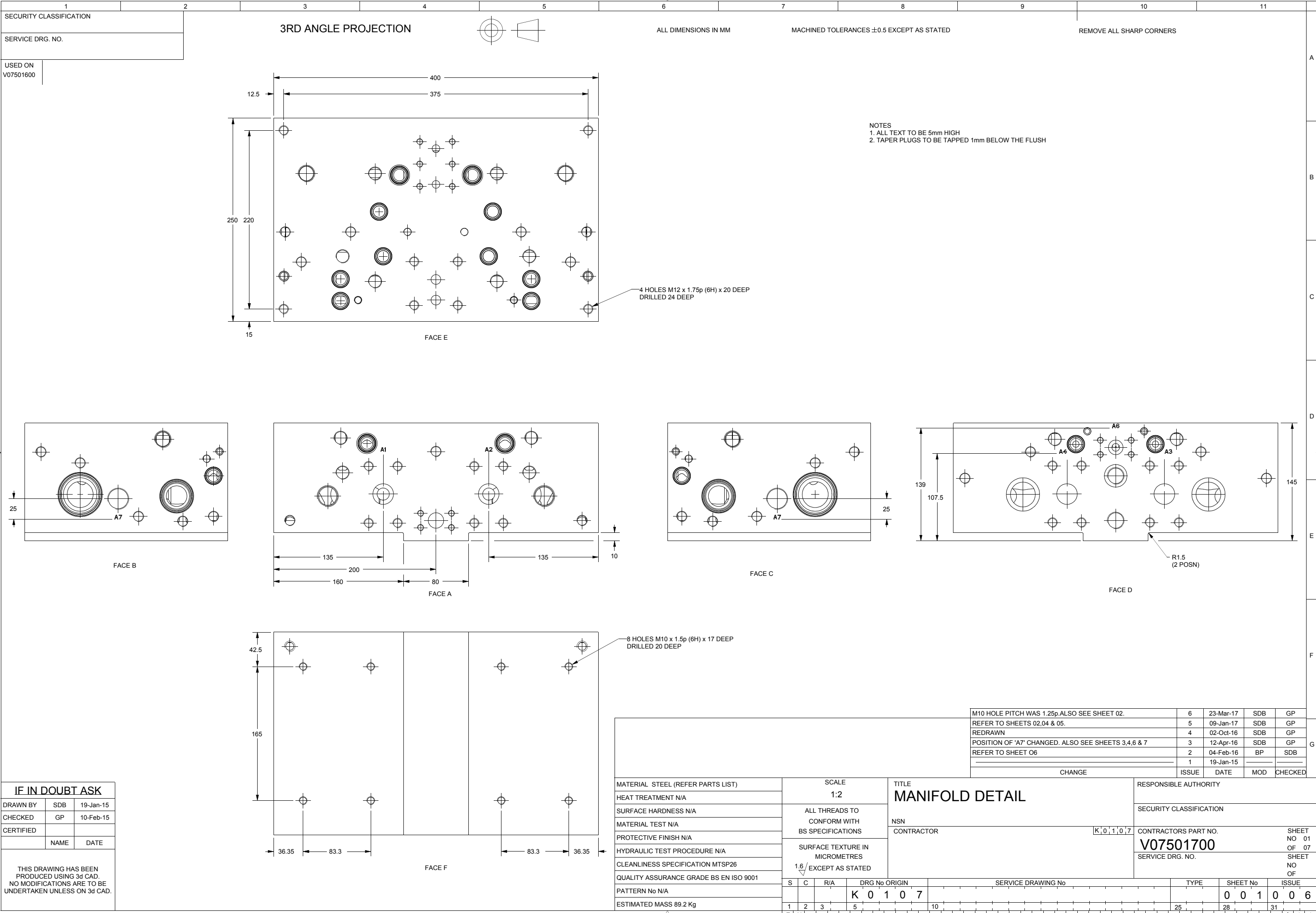
NOTES

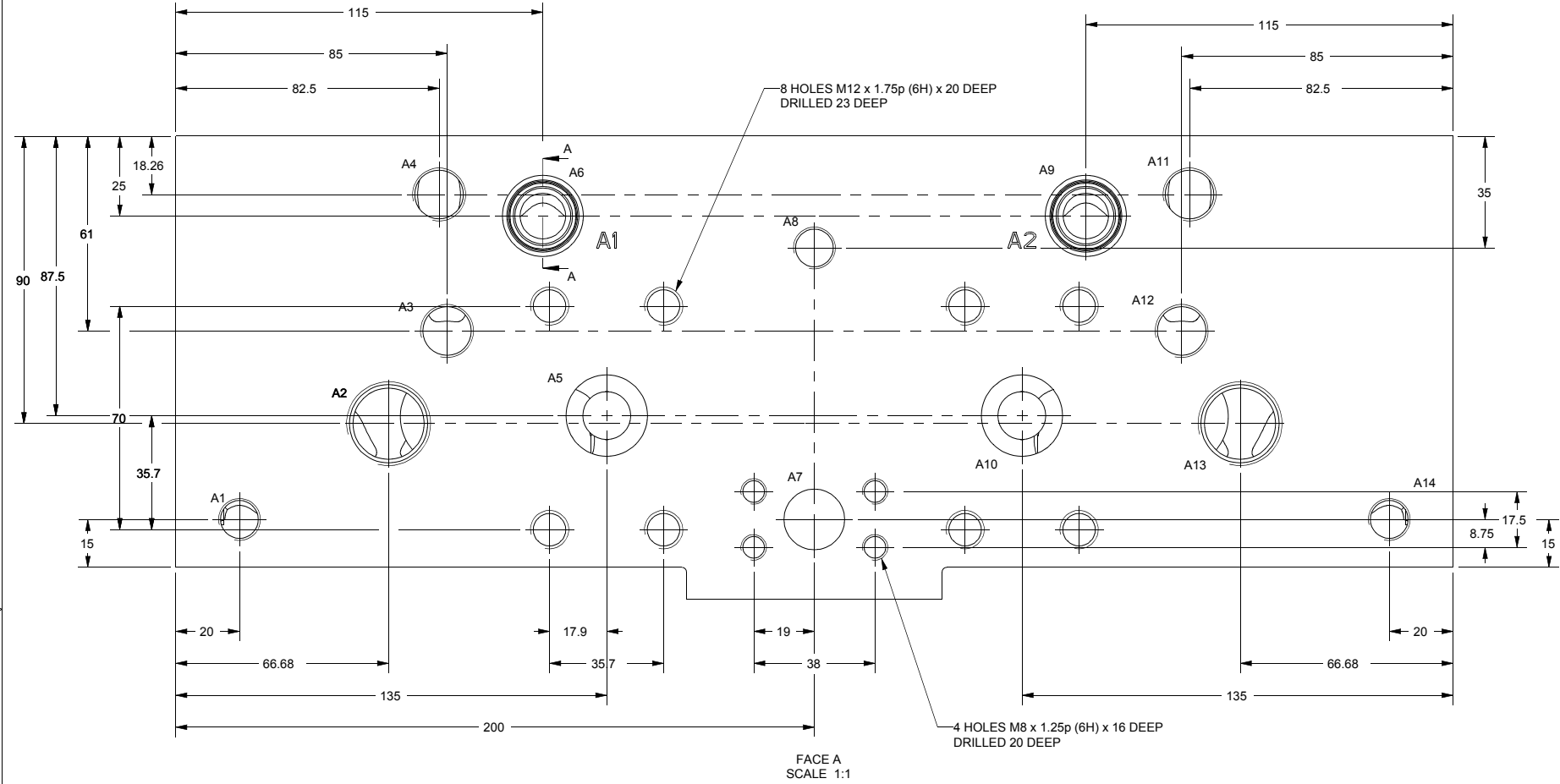
ALL TEXT TO BE 5mm HIGH



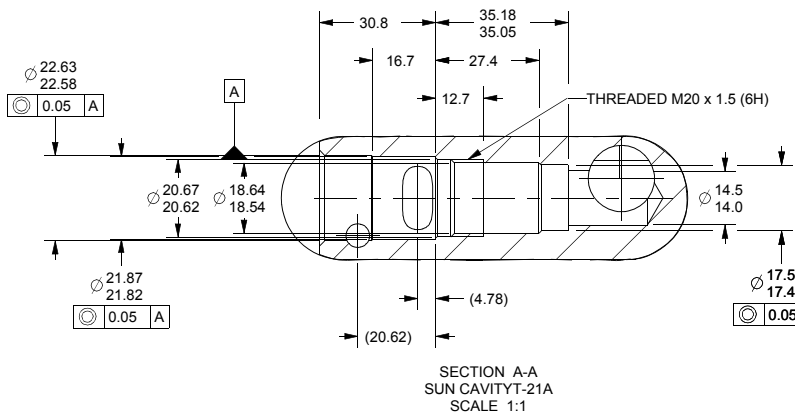
| IF IN DOUBT ASK | | |
|---|------|-----------|
| DRAWN BY | SDB | 14-Jan-15 |
| CHECKED | SC | 16-Jan-15 |
| CERTIFIED | | |
| | NAME | DATE |
| <p>THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.</p> | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|---|---|-----|---------------------------------|--|--|--|---|--|--|--|--|--|-------------------------|--|----------|--|----------|-----------|------|-------|-----|---------|
| | | | | | | | | | | FIXING HOLES FOR PORT 'A3' CORRECTED, 22.3 WAS 23.8 | | | | | | | | | | 5 | 18-Feb-16 | | BP | AH | G |
| | | | | | | | | | | HOLE 'A3' AND FIXING HOLES UPDATED | | | | | | | | | | 4 | 17-Nov-15 | | SDB | SC | |
| | | | | | | | | | | HOLE 'A3' WAS 1/2 BSP. A1 FIXING HOLES WERE M12 | | | | | | | | | | 3 | 23-Sep-15 | | SDB | SC | |
| | | | | | | | | | | DRILL DIAMETERS UPDATED FOR A1, A2 & A3 | | | | | | | | | | 2 | 24-Aug-15 | | SDB | SC | |
| | | | | | | | | | | | | | | | | | | | | 1 | 14-Jan-15 | | | | |
| | | | | | | | | | | CHANGE | | | | | | | | | | ISSUE | | DATE | | MOD | CHECKED |
| MATERIAL STEEL (REFER PARTS LIST) | | | SCALE 1:2 | | | TITLE RUPTURE VALVE MANIFOLD | | | | | | | | | | RESPONSIBLE AUTHORITY | | | | | | | | | |
| HEAT TREATMENT N/A | | | | | | | | | | | | | | | | | | | | | | | | | |
| SURFACE HARDNESS N/A | | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | | NSN | | | | | | | | | | SECURITY CLASSIFICATION | | | | | | | | | |
| MATERIAL TEST N/A | | | | | | | | | | | | | | | | | | | | | | | | | |
| PROTECTIVE FINISH N/A | | | SURFACE TEXTURE IN MICROMETRES 1.6 ✓ EXCEPT AS STATED | | | CONTRACTOR K 0 1 0 7 | | | | | | | | | | CONTRACTORS PART NO. | | | | | | | SHEET | | |
| HYDRAULIC TEST PROCEDURE N/A | | | | | | | | | | | | | | | | V07657600 | | | | | | | NO 01 | | |
| CLEANLINESS SPECIFICATION MTSP26 | | | | | | | | | | | | | | | | SERVICE DRG. NO. | | | | | | | OF 01 | | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | | | | | | | | | | | | | | | | | SHEET | | | | | |
| PATTERN No N/A | | | S | C | R/A | DRG No ORIGIN | | | | SERVICE DRAWING No | | | | | | TYPE | | SHEET No | | ISSUE | OF | | | | |
| ESTIMATED MASS 30.4 Kg | | | 1 | 2 | 3 | K 0 1 0 7 | | | | 10 | | | | | | 25 | | 28 0 0 1 | | 31 0 0 5 | | | | | |





| HOLE REF | NO. OFF | DRILL DIA | DRILL DEPTH | THREAD DIA | THREAD DEPTH | C'BORE DIA | C'BORE DEPTH | C'BORE THREAD DIA | C'BORE THREAD DEPTH | BREAKS INTO |
|----------|---------|-----------|-------------|-----------------------------------|--------------|------------|--------------|-------------------|---------------------|-----------------|
| A1 | 1 | TAP SIZE | 115 | 1/4" BSP | 13 | ---- | ---- | ---- | ---- | B10,B7,B5,C8,F1 |
| A2 | 1 | 22.3 | 145 | ---- | ---- | TAP SIZE | 20 | 3/4" BSP | 17 | B8,B4 |
| A3 | 1 | TAP SIZE | 85 | 3/8" BSP | 13 | ---- | ---- | ---- | ---- | B11,E6,E7 |
| A4 | 1 | TAP SIZE | 45 | 3/8" BSP | 14 | ---- | ---- | ---- | ---- | E5,E6 |
| A5 | 1 | 15 | 90 | ---- | ---- | 25.5 | 70 | ---- | ---- | E10,B8,E12 |
| A6 | 1 | 14.3 | 86.9 | SUN CAVITY T-21A, SEE SECTION A-A | | | | | | B12,E9,E10,B6 |
| A7 | 1 | 19 | 125 | ---- | ---- | ---- | ---- | ---- | ---- | E16,B5,C8,D8 |
| A8 | 1 | TAP SIZE | 25 | 1/4" BSP | 15 | ---- | ---- | ---- | ---- | B12,C1,E16 |
| A9 | 1 | 14.3 | 86.9 | SUN CAVITY : T-21A | | | | | | C1,E26,E25,C7 |
| A10 | 1 | 15 | 90 | ---- | ---- | 25.5 | 70 | ---- | ---- | E25,C5,E23 |
| A11 | 1 | TAP SIZE | 45 | 3/8" BSP | 14 | ---- | ---- | ---- | ---- | E30,E29 |
| A12 | 1 | TAP SIZE | 85 | 3/8" BSP | 13 | ---- | ---- | ---- | ---- | C2,E29,E28 |
| A13 | 1 | 22.3 | 145 | ---- | ---- | TAP SIZE | 20 | 3/4" BSP | 17 | C5,C9 |
| A14 | 1 | TAP SIZE | 115 | 1/4" BSP | 13 | ---- | ---- | ---- | ---- | B5,C3,C6,C8,F2 |



1 2 3 4 5 6 7 8 9 10 11

SECURITY CLASSIFICATION

SERVICE DRG. NO.

USED ON
V07501600

3RD ANGLE PROJECTION

ALL DIMENSIONS IN MM

MACHINED TOLERANCES ±0.5 EXCEPT AS STATED

REMOVE ALL SHARP CORNERS

| HOLE REF | NO. OFF | DRILL DIA. | DRILL DEPTH | THREAD DIA. | THREAD DEPTH | C'BORE DIA. | C'BORE DEPTH | C'BORE THREAD DIA. | C'BORE THREAD DEPTH | BREAKS INTO |
|----------|---------|------------|-------------|-----------------------------------|--------------|-------------|--------------|--------------------|---------------------|--------------------|
| B1 | 1 | TAP SIZE | 160 | 1/4" BSP | 15 | ---- | ---- | ---- | ---- | D15,D12 |
| B2 | 1 | 32 | 130 | SUN CAVITY T-24A, SEE SECTION B-B | | | | | | D17,E3,D16,D13,E14 |
| B3 | 1 | TAP SIZE | 150 | 1/4" BSP | 15 | ---- | ---- | ---- | ---- | E3,E11,E14 |
| B4 | 1 | TAP SIZE | 200 | 3/4" BSP | 20 | ---- | ---- | ---- | ---- | A2,D16,E13 |
| B5 | 1 | TAP SIZE | 200 | 1/4" BSP | 15 | ---- | ---- | ---- | ---- | A1,E2,E8,E15 |
| B6 | 1 | 17.5 | 130 | ---- | ---- | TAP SIZE | 25 | 1/2" BSP | 22 | E4,E7,E12 |
| B7 | 1 | TAP SIZE | 25 | 1/4" BSP | 14 | ---- | ---- | ---- | ---- | E1,A1 |
| B8 | 1 | 25.5 | 130 | SUN CAVITY T-23A, SEE SECTION C-C | | | | | | E1,E4,A2,A5 |
| B9 | 1 | TAP SIZE | 105 | 1/8" BSP | 15 | ---- | ---- | ---- | ---- | E5,E9 |
| B10 | 1 | TAP SIZE | 35 | 1/4" BSP | 15 | ---- | ---- | ---- | ---- | A1,F1 |
| B11 | 1 | 14.25 | 90 | SUN CAVITY T-13A, SEE SECTION D-D | | | | | | F1,A3 |
| B12 | 1 | 6.3 | 200 | ---- | ---- | TAP SIZE | 20 | 1/8" BSP | 15 | A6,A8 |

115

68.13

19.86

49.1

35.5

88

B1

B

B3

B

B2

B

A7

B4

B5

B6

B8

C

B11

D

B9

D

B12

D

110

80

26.02

17.5

10.18

19.86

35

44

65

90

93.25

115

121

FACE B

SCALE 1:1

115

68.13

19.86

49.1

35.5

88

B1

B

B3

B

B2

B

A7

B4

B5

B6

B8

C

B11

D

B9

D

B12

D

110

80

26.02

17.5

10.18

19.86

35

44

65

90

93.25

115

121

FACE B

SCALE 1:1

115

68.13

19.86

49.1

35.5

88

B1

B

B3

B

B2

B

A7

B4

B5

B6

B8

C

B11

D

B9

D

B12

D

110

80

26.02

17.5

10.18

19.86

35

44

65

90

93.25

115

121

FACE B

SCALE 1:1

115

68.13

19.86

49.1

35.5

88

B1

B

B3

B

B2

B

A7

B4

B5

B6

B8

C

B11

D

B9

D

B12

D

110

80

26.02

17.5

10.18

19.86

35

44

65

90

93.25

115

121

FACE B

SCALE 1:1

115

68.13

19.86

49.1

35.5

88

B1

B

B3

B

B2

B

A7

B4

B5

B6

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C

B11

D

B9

D

B12

D

110

80

26.02

17.5

10.18

19.86

35

44

65

90

93.25

115

121

FACE B

SCALE 1:1

115

68.13

19.86

49.1

35.5

88

B1

B

B3

B

B2

B

A7

B4

B5

B6

B8

C

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B9

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110

80

26.02

17.5

10.18

19.86

35

44

65

90

93.25

115

121

FACE B

SCALE 1:1

115

68.13

19.86

49.1

35.5

88

B1

B

B3

B

B2

B

A7

B4

B5

B6

B8

C

B11

D

B9

D

B12

D

110

80

26.02

17.5

10.18

19.86

35

44

65

90

93.25

115

121

FACE B

SCALE 1:1

115

68.13

19.86

49.1

35.5

88

B1

B

B3

B

B2

B

A7

B4

B5

B6

B8

C

B11

D

B9

D

B12

D

110

80

26.02

17.5

10.18

19.86

35

44

65

90

93.25

115

121

FACE B

SCALE 1:1

115

68.13

19.86

49.1

35.5

88

B1

B

B3

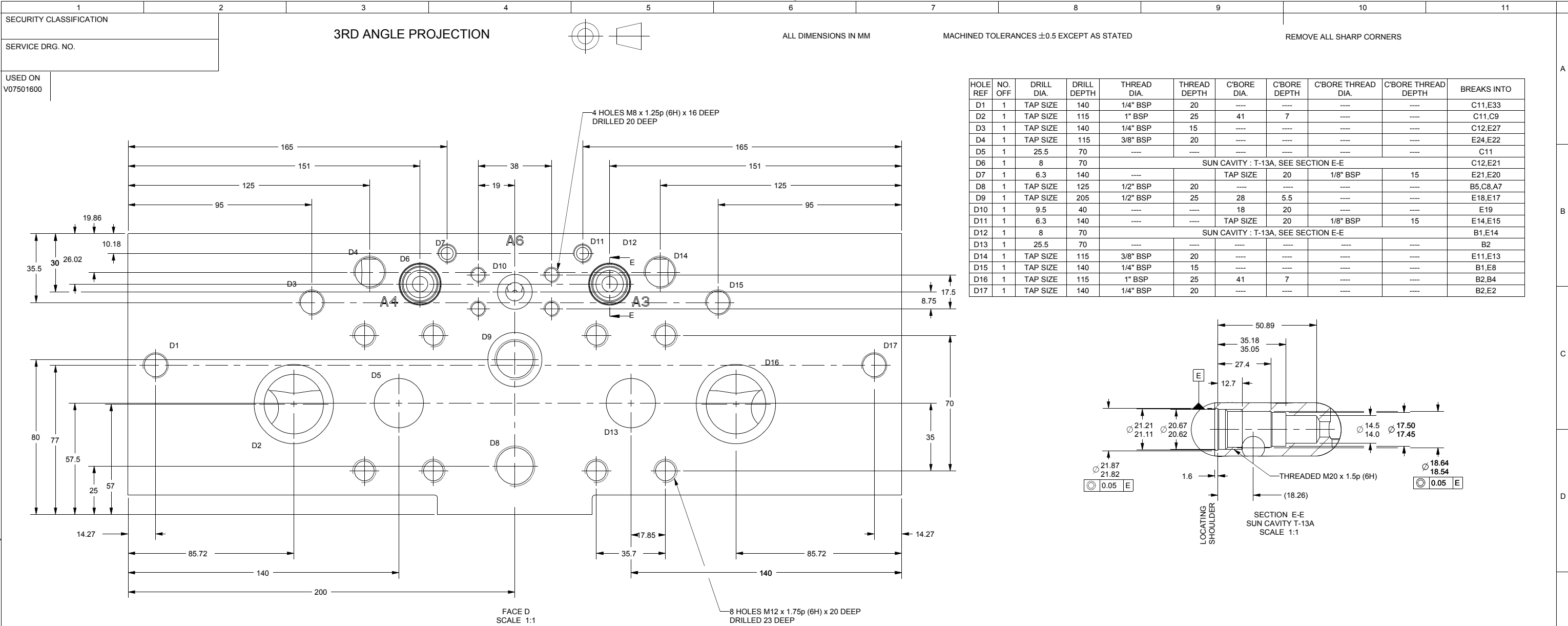
B

B2

B

A7

B



IF IN DOUBT ASK

| | | |
|-----------|------|-----------|
| DRAWN BY | SDB | 19-Jan-15 |
| CHECKED | GP | 10-Feb-15 |
| CERTIFIED | | |
| | NAME | DATE |

THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|---------------------------------|-------------------------|---------------|--------------------|------|----------|-------|----|--|----|--|----|--|----|--|----|--|----|--|----|--|----|--|
| MATERIAL STEEL (REFER PARTS LIST) | | SCALE 1:2 | TITLE MANIFOLD DETAIL | RESPONSIBLE AUTHORITY | | | | | | | | | | | | | | | | | | | | | |
| HEAT TREATMENT N/A | | | | SECURITY CLASSIFICATION | | | | | | | | | | | | | | | | | | | | | |
| SURFACE HARDNESS N/A | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | NSN | CONTRACTORS PART NO. | | | | | | | | | | | | | | | | | | | | | |
| MATERIAL TEST N/A | | | | V07501700 | | | | | | | | | | | | | | | | | | | | | |
| PROTECTIVE FINISH N/A | | SURFACE TEXTURE IN MICROMETRES 1.6/EXCEPT AS STATED | CONTRACTOR | SHEET NO OF | | | | | | | | | | | | | | | | | | | | | |
| HYDRAULIC TEST PROCEDURE N/A | | | | 0 0 5 0 0 6 | | | | | | | | | | | | | | | | | | | | | |
| CLEANLINESS SPECIFICATION MTSP26 | | S | C | R/A | DRG No ORIGIN | SERVICE DRAWING No | TYPE | SHEET No | ISSUE | | | | | | | | | | | | | | | | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | | | | | | | | | | | | | | | | | | | | | | |
| PATTERN No N/A | | 1 | | 2 | | 3 | | 5 | | 10 | | 25 | | 28 | | 31 | | 1 | | 1 | | | | | |
| ESTIMATED MASS 89.2 Kg | | E | | N | | 34 | | 40 | | 45 | | 50 | | 53 | | 60 | | 70 | | 78 | | 79 | | 80 | |

| | | | | |
|------------------------------------|-------|-----------|-----|---------|
| SEE SHEET 01 & 02. | 6 | 23-Mar-17 | SDB | GP |
| BREAKS INTO DETAIL CHANGED FOR D4. | 5 | 09-Jan-17 | SDB | GP |
| REDRAWN | 4 | 03-Oct-16 | SDB | GP |
| REFER TO SHEETS 1,3,4,6 & 7 | 3 | 12-Apr-16 | SDB | GP |
| REFER TO SHEET 06 | 2 | 04-Feb-16 | BP | SDB |
| | 1 | 19-Jan-15 | | |
| CHANGE | ISSUE | DATE | MOD | CHECKED |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|---------------------------------|-------------------------|---------------|--------------------|------|----------|-------|----|--|----|--|----|--|----|--|----|--|----|--|----|--|----|--|
| MATERIAL STEEL (REFER PARTS LIST) | | SCALE 1:2 | TITLE MANIFOLD DETAIL | RESPONSIBLE AUTHORITY | | | | | | | | | | | | | | | | | | | | | |
| HEAT TREATMENT N/A | | | | SECURITY CLASSIFICATION | | | | | | | | | | | | | | | | | | | | | |
| SURFACE HARDNESS N/A | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | NSN | CONTRACTORS PART NO. | | | | | | | | | | | | | | | | | | | | | |
| MATERIAL TEST N/A | | | | V07501700 | | | | | | | | | | | | | | | | | | | | | |
| PROTECTIVE FINISH N/A | | SURFACE TEXTURE IN MICROMETRES 1.6/EXCEPT AS STATED | CONTRACTOR | SHEET NO OF | | | | | | | | | | | | | | | | | | | | | |
| HYDRAULIC TEST PROCEDURE N/A | | | | 0 0 5 0 0 6 | | | | | | | | | | | | | | | | | | | | | |
| CLEANLINESS SPECIFICATION MTSP26 | | S | C | R/A | DRG No ORIGIN | SERVICE DRAWING No | TYPE | SHEET No | ISSUE | | | | | | | | | | | | | | | | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | | | | | | | | | | | | | | | | | | | | | | |
| PATTERN No N/A | | 1 | | 2 | | 3 | | 5 | | 10 | | 25 | | 28 | | 31 | | 1 | | 1 | | | | | |
| ESTIMATED MASS 89.2 Kg | | E | | N | | 34 | | 40 | | 45 | | 50 | | 53 | | 60 | | 70 | | 78 | | 79 | | 80 | |

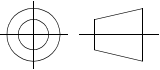
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|---|---|---|---|---|---|---|---|---|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|----|----|

SECURITY CLASSIFICATION

SERVICE DRG. NO.

USED ON
V07501600

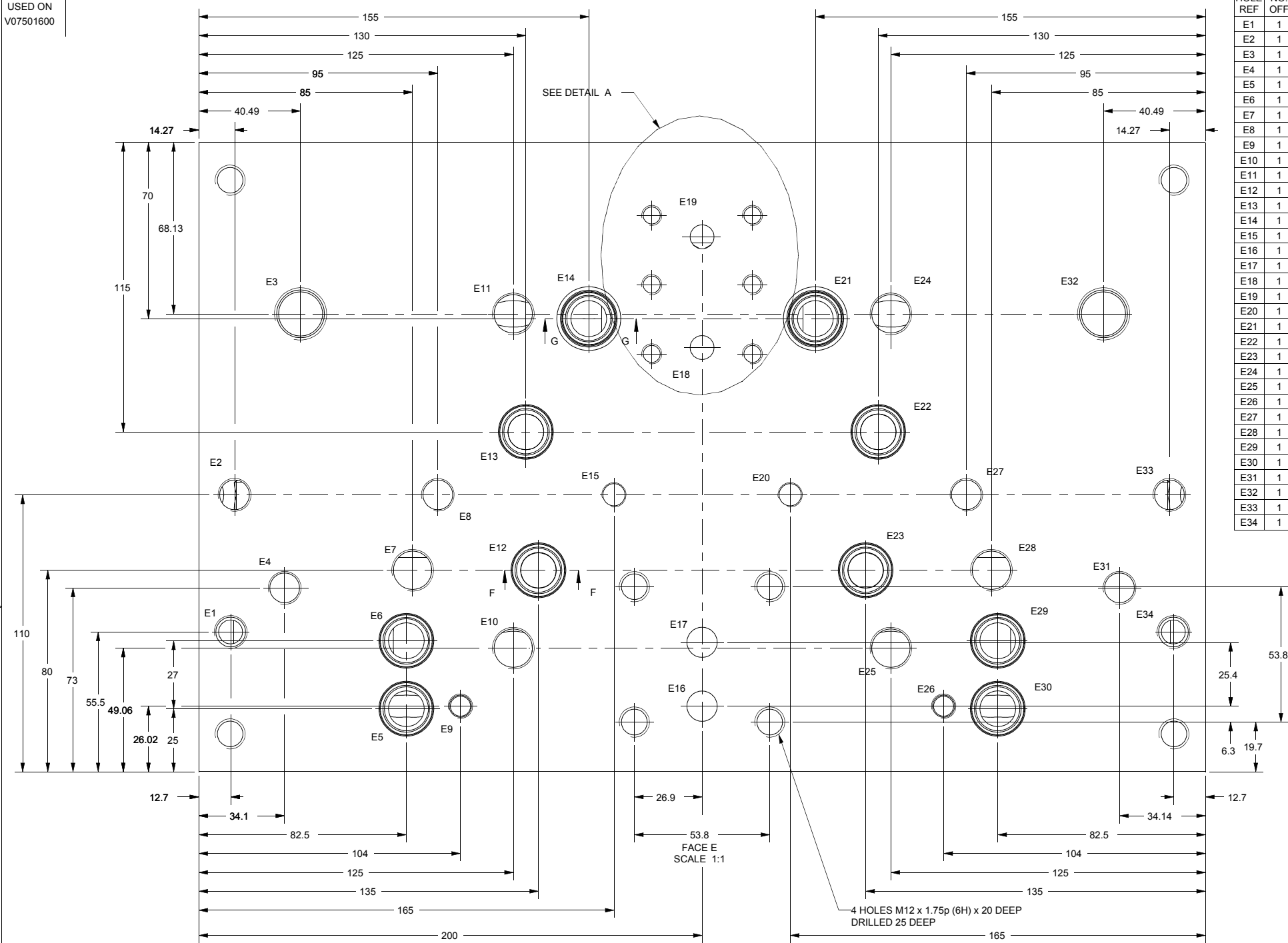
3RD ANGLE PROJECTION



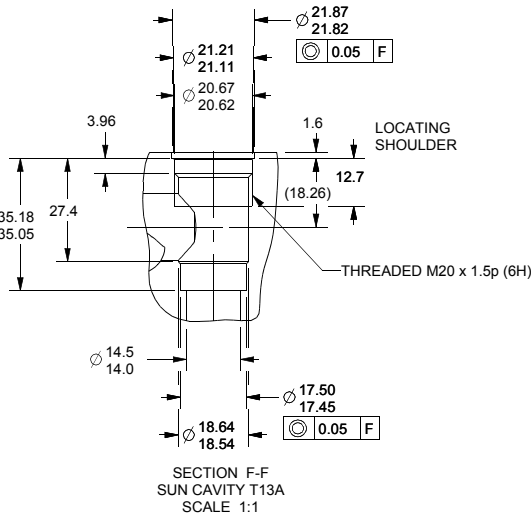
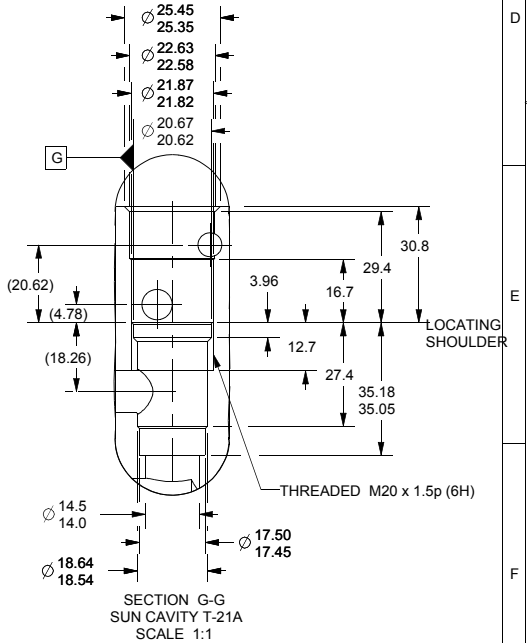
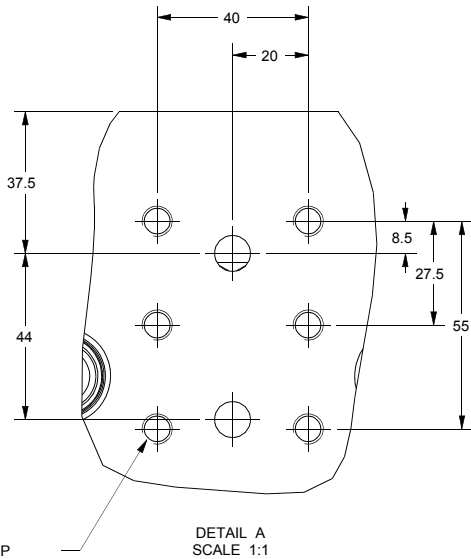
ALL DIMENSIONS IN MM

MACHINED TOLERANCES ± 0.5 EXCEPT AS STATED

REMOVE ALL SHARP CORNERS



| SOLE REF | NO. OFF | DRIILL DIA. | DRIILL DEPTH | THREAD DIA. | THREAD DEPTH | C'BORE DIA. | C'BORE DEPTH | C'BORE THREAD DIA. | C'BORE THREAD DEPTH | BREAKS INTO |
|----------|---------|-------------|--------------|-----------------------------------|--------------|-------------|--------------|--------------------|---------------------|---------------|
| E1 | 1 | 9.5 | 120 | ---- | ---- | TAP SIZE | 20 | 1/4" BSP | 15 | B8,B7,A1 |
| E2 | 1 | TAP SIZE | 120 | 1/4" BSP | 20 | ---- | ---- | ---- | ---- | B5,A1 |
| E3 | 1 | 17.5 | 70 | ---- | ---- | TAP SIZE | 25 | 1/2" BSP | 20 | B3,B2 |
| E4 | 1 | TAP SIZE | 80 | 1/4" BSP | 20 | ---- | ---- | ---- | ---- | B6,B8 |
| E5 | 1 | 14.25 | 42.5 | SUN CAVITY T-13A, SEE SECTION F-F | | | | | | A4,B9 |
| E6 | 1 | 14.25 | 60 | SUN CAVITY T-13A, SEE SECTION F-F | | | | | | A4,A3 |
| E7 | 1 | TAP SIZE | 60 | 3/8" BSP | 15 | ---- | ---- | ---- | ---- | B6,A3 |
| E8 | 1 | TAP SIZE | 115 | 1/4" BSP | 20 | ---- | ---- | ---- | ---- | D15,B5 |
| E9 | 1 | 8 | 50 | ---- | ---- | TAP SIZE | 12 | 1/8" BSP | 10 | A6,B9 |
| E10 | 1 | TAP SIZE | 100 | 3/8" BSP | 14 | ---- | ---- | ---- | ---- | A6,A5 |
| E11 | 1 | TAP SIZE | 45 | 3/8" BSP | 13 | ---- | ---- | ---- | ---- | D14,B3 |
| E12 | 1 | 14 | 100 | SUN CAVITY T-13A, SEE SECTION F-F | | | | | | B6,A5 |
| E13 | 1 | 14.2 | 110 | SUN CAVITY T-13A, SEE SECTION F-F | | | | | | D14,B4 |
| E14 | 1 | 14.25 | 85 | SUN CAVITY T-21A, SEE SECTION G-G | | | | | | D11,D12,B3,B2 |
| E15 | 1 | TAP SIZE | 115 | 1/8" BSP | 15 | ---- | ---- | ---- | ---- | D11,B5 |
| E16 | 1 | 12 | 115 | ---- | ---- | ---- | ---- | ---- | ---- | A8,A7 |
| E17 | 1 | 12 | 80 | ---- | ---- | ---- | ---- | ---- | ---- | D9 |
| E18 | 1 | 9.5 | 75 | ---- | ---- | ---- | ---- | ---- | ---- | D9 |
| E19 | 1 | 9.5 | 30 | ---- | ---- | ---- | ---- | ---- | ---- | D10 |
| E20 | 1 | TAP SIZE | 115 | 1/8" BSP | 15 | ---- | ---- | ---- | ---- | D7,C8 |
| E21 | 1 | 14.25 | 85 | SUN CAVITY T-21A, SEE SECTION G-G | | | | | | D7,D6,C10,C11 |
| E22 | 1 | 14.2 | 110 | SUN CAVITY T-13A, SEE SECTION F-F | | | | | | D4,C9 |
| E23 | 1 | 14 | 100 | SUN CAVITY T-13A, SEE SECTION F-F | | | | | | C7,A10 |
| E24 | 1 | TAP SIZE | 45 | 3/8" BSP | 13 | ---- | ---- | ---- | ---- | D4,C10 |
| E25 | 1 | TAP SIZE | 100 | 3/8" BSP | 14 | ---- | ---- | ---- | ---- | A9,A10 |
| E26 | 1 | 8 | 50 | ---- | ---- | TAP SIZE | 12 | 1/8" BSP | 10 | A9,C4 |
| E27 | 1 | TAP SIZE | 115 | 1/4" BSP | 20 | ---- | ---- | ---- | ---- | D3,C8 |
| E28 | 1 | TAP SIZE | 60 | 3/8" BSP | 15 | ---- | ---- | ---- | ---- | C7,A12 |
| E29 | 1 | 14.25 | 60 | SUN CAVITY T-13A, SEE SECTION F-F | | | | | | A11,A12 |
| E30 | 1 | 14.25 | 42.5 | SUN CAVITY T-13A, SEE SECTION F-F | | | | | | A11,C4 |
| E31 | 1 | TAP SIZE | 80 | 1/4" BSP | 20 | ---- | ---- | ---- | ---- | C7,C5 |
| E32 | 1 | 17.5 | 70 | ---- | ---- | TAP SIZE | 25 | 1/2" BSP | 20 | C10,C11 |
| E33 | 1 | TAP SIZE | 120 | 1/4" BSP | 20 | ---- | ---- | ---- | ---- | D1,C8,A14 |
| E34 | 1 | 9.5 | 120 | ---- | ---- | TAP SIZE | 20 | 1/4" BSP | 15 | C5,C6 |

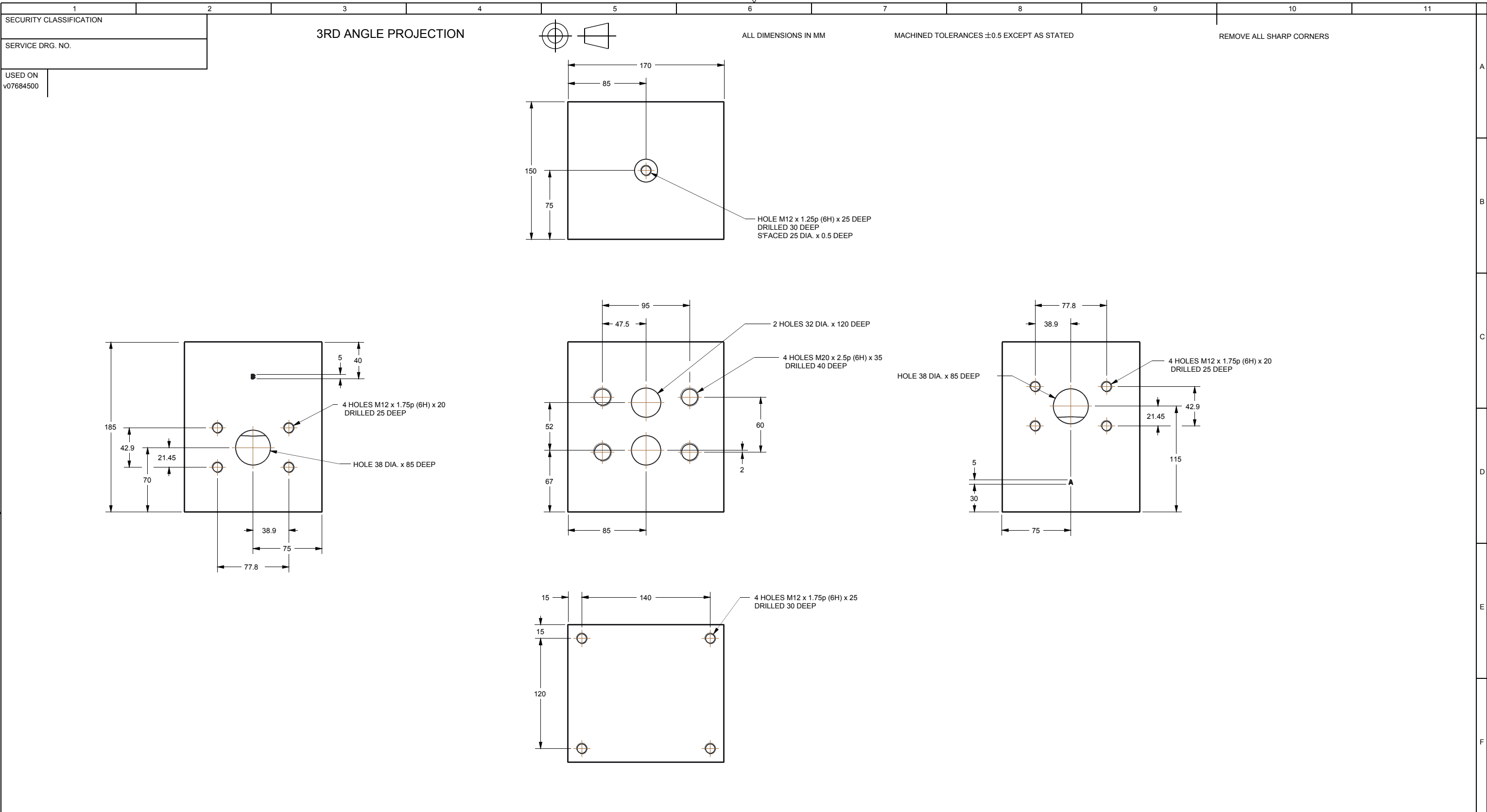


| | | | | | |
|---|-------|-----------|-----|---------|---|
| SEE SHEET 01 & 02. | 6 | 23-Mar-17 | SDB | GP | G |
| REFER TO SHEETS 02,04 & 05. | 5 | 09-Jan-17 | SDB | GP | |
| REDRAWN | 4 | 03-Oct-16 | SDB | GP | |
| DEPTH OF E6 WAS 80 NOW 90. ALSO REFER TO | 3 | 12-Apr-16 | SDB | GP | |
| SHEETS 1,3,4 & 7 | | | | | |
| POSITION OF 6-OFF M8 HOLES AROUND PORTS E11 AND E12 | 2 | 04-Feb-16 | BP | SDB | |
| MODIFIED TO SUIT BALL VALVE SUPPLYING THESE PORTS | | | | | |
| | 1 | 19-Jan-15 | | | |
| CHANGE | ISSUE | DATE | MOD | CHECKED | |

| IF IN DOUBT ASK | | |
|---|------|-----------|
| DRAWN BY | SDB | 19-Jan-15 |
| CHECKED | GP | 10-Feb-15 |
| CERTIFIED | | |
| | NAME | DATE |
| <p>THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.</p> | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---------------|--|--|--------------------|----|--|--|--|--|-------------------------|--|-------------------|--|------|--|----------|--|-------|----|--|--|----|--|--|
| MATERIAL STEEL (REFER PARTS LIST) | SCALE 1:2 | | TITLE MANIFOLD DETAIL | | | | | | | | | | RESPONSIBLE AUTHORITY | | | | | | | | | | | | | | |
| HEAT TREATMENT N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SURFACE HARDNESS N/A | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | NSN CONTRACTOR <div>K'0'1'0'7</div> | | | | | | | | | | SECURITY CLASSIFICATION | | | | | | | | | | | | | | |
| MATERIAL TEST N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PROTECTIVE FINISH N/A | SURFACE TEXTURE IN MICROMETRES <div>1.6√</div> EXCEPT AS STATED | | | | | | | | | | | | CONTRACTORS PART NO. | | SHEET NO 06 | | | | | | | | | | | | |
| HYDRAULIC TEST PROCEDURE N/A | | | | | | | | | | | | | V07501700 | | OF 07 | | | | | | | | | | | | |
| CLEANLINESS SPECIFICATION MTSP26 | | | | | | | | | | | | | SERVICE DRG. NO. | | | | | | | | | | | | | | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | | | | | | | | | | | | SHEET NO OF | | | | | | | | | | | | |
| PATTERN No N/A | S | C | R/A | DRG No ORIGIN | | | SERVICE DRAWING No | | | | | | | | | | TYPE | | SHEET No | | ISSUE | | | | | | |
| ESTIMATED MASS 89.2 Kg | | | | K 0 1 0 7 | | | | | | | | | | | | | | | 0 0 6 | | 0 0 6 | | | | | | |
| | 1 | 2 | 3 | 5 | | | | 10 | | | | | | | | | | | 25 | | | 28 | | | 31 | | |

[illegible]



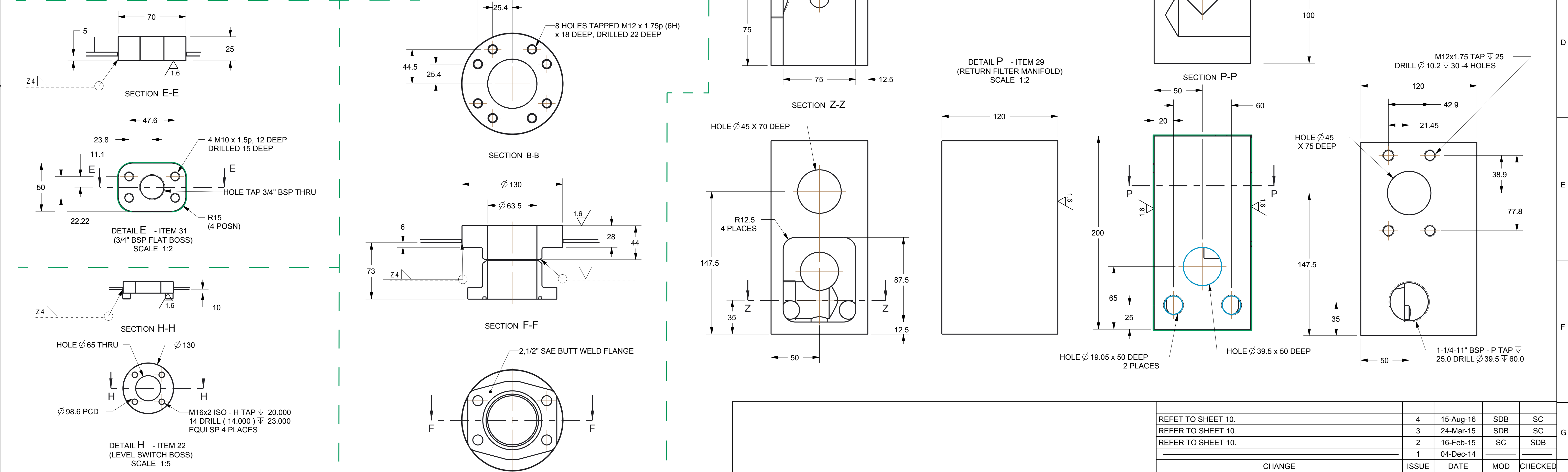
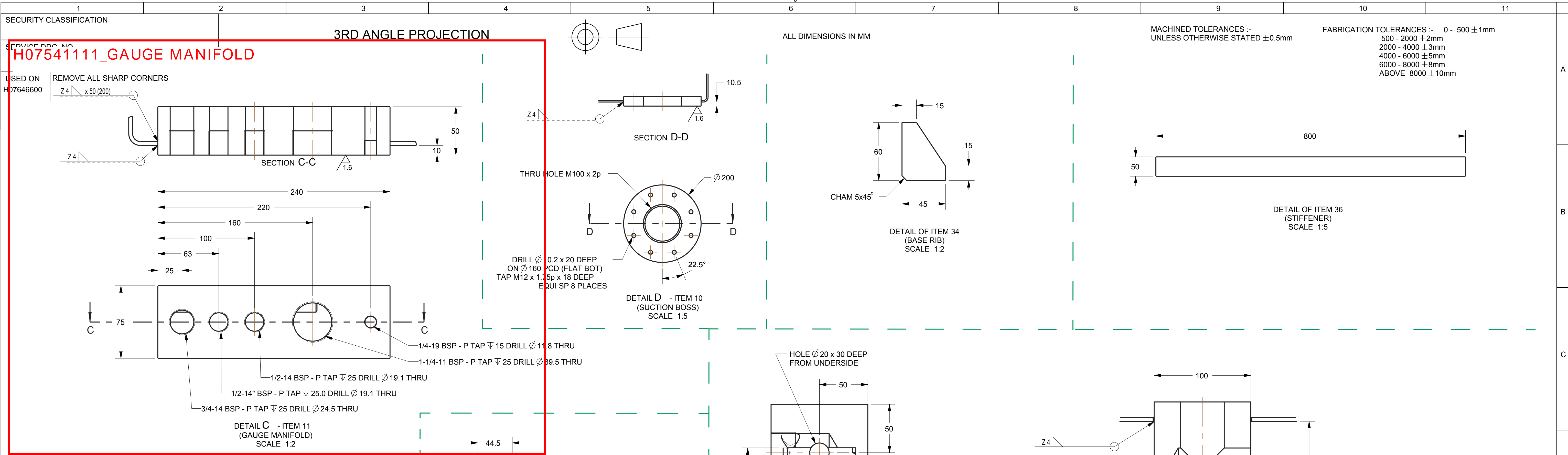
IF IN DOUBT ASK

| | | |
|-----------|------|-----------|
| DRAWN BY | SDB | 04-Nov-15 |
| CHECKED | GP | 05-Nov-15 |
| CERTIFIED | | |
| | NAME | DATE |

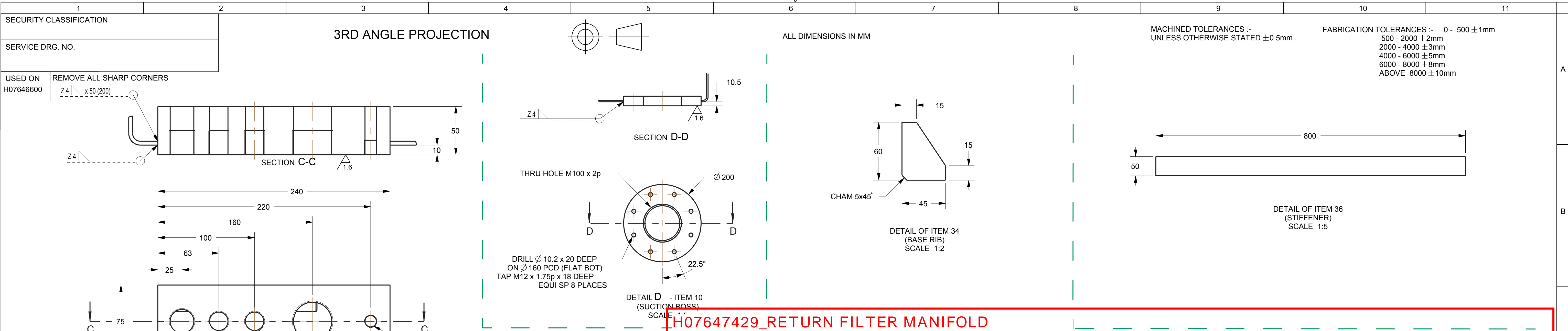
THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.

| | | | | | |
|--|--|--|--------------------------------|-------------------------|--|
| MATERIAL STEEL (REFER PARTS LIST) | | SCALE 1:2 | TITLE MANIFOLD BLOCK | RESPONSIBLE AUTHORITY | |
| HEAT TREATMENT N/A | | | | SECURITY CLASSIFICATION | |
| SURFACE HARDNESS N/A | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | NSN | CONTRACTORS PART NO. | |
| MATERIAL TEST N/A | | | | SHEET NO 01 | |
| PROTECTIVE FINISH N/A | | SURFACE TEXTURE IN MICROMETRES 1.6/EXCEPT AS STATED | CONTRACTOR | SHEET OF 01 | |
| HYDRAULIC TEST PROCEDURE N/A | | | | SHEET NO OF | |
| CLEANLINESS SPECIFICATION MTSP26 | | SERVICE DRAWING No | | TYPE | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | K 0 1 0 7 | | 0 0 1 0 0 1 | |
| PATTERN No N/A | | 1 2 3 5 10 | | 25 28 31 | |
| ESTIMATED MASS 33.4 Kg | | E N 34 40 45 50 53 60 70 78 79 80 | | 1 1 1 | |

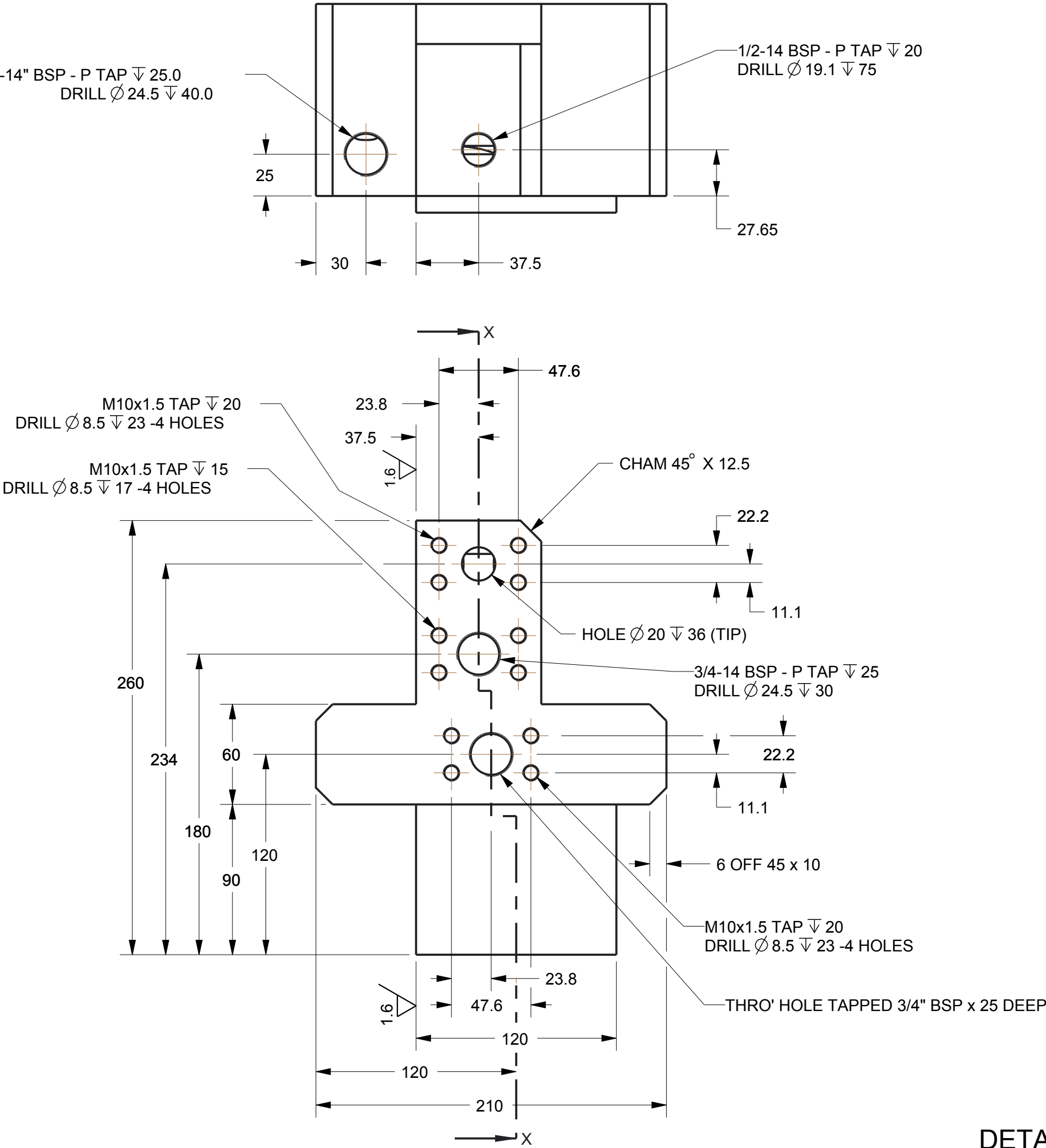
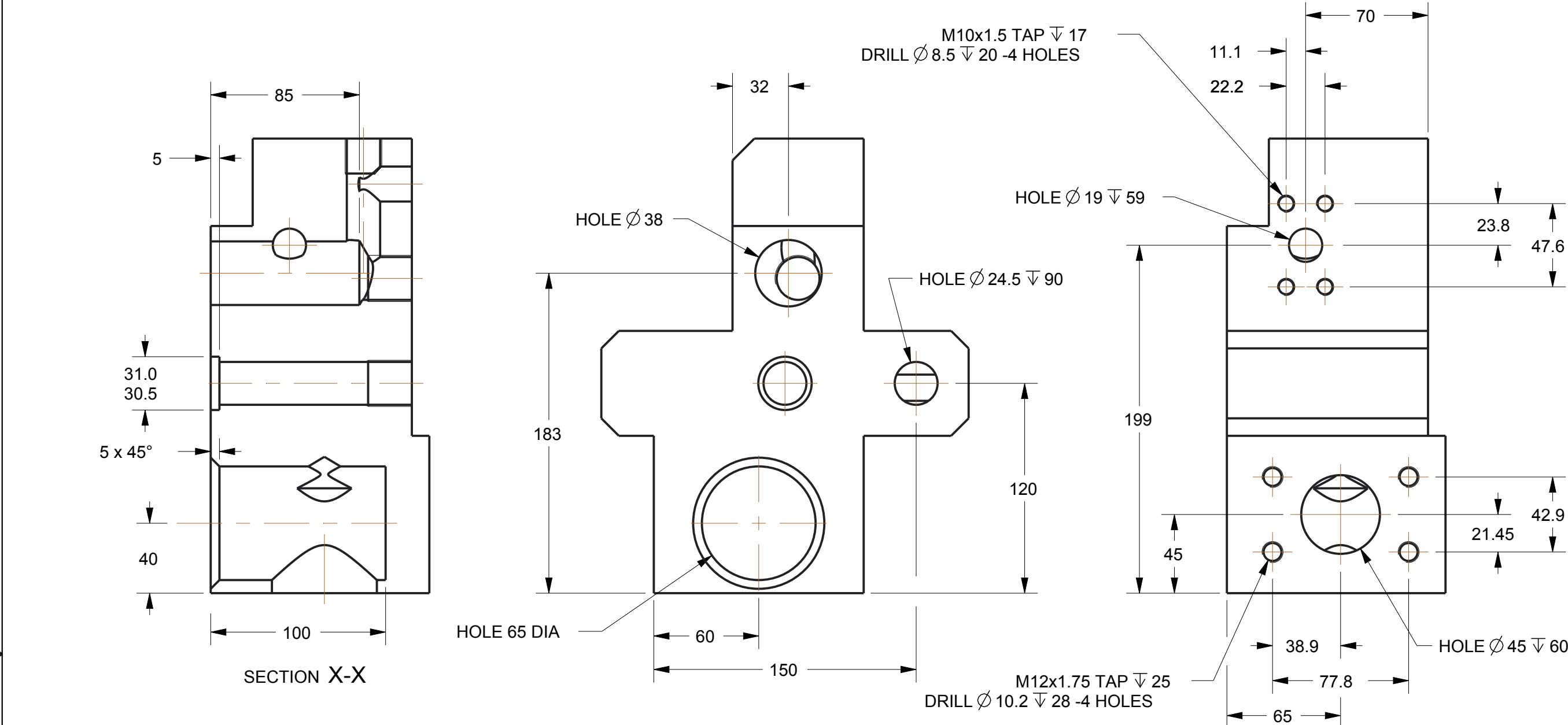
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|--------|------|-----|-----------|--|--|
| CHANGE | | 1 | 04-Nov-15 | | |
| ISSUE | DATE | MOD | CHECKED | | |



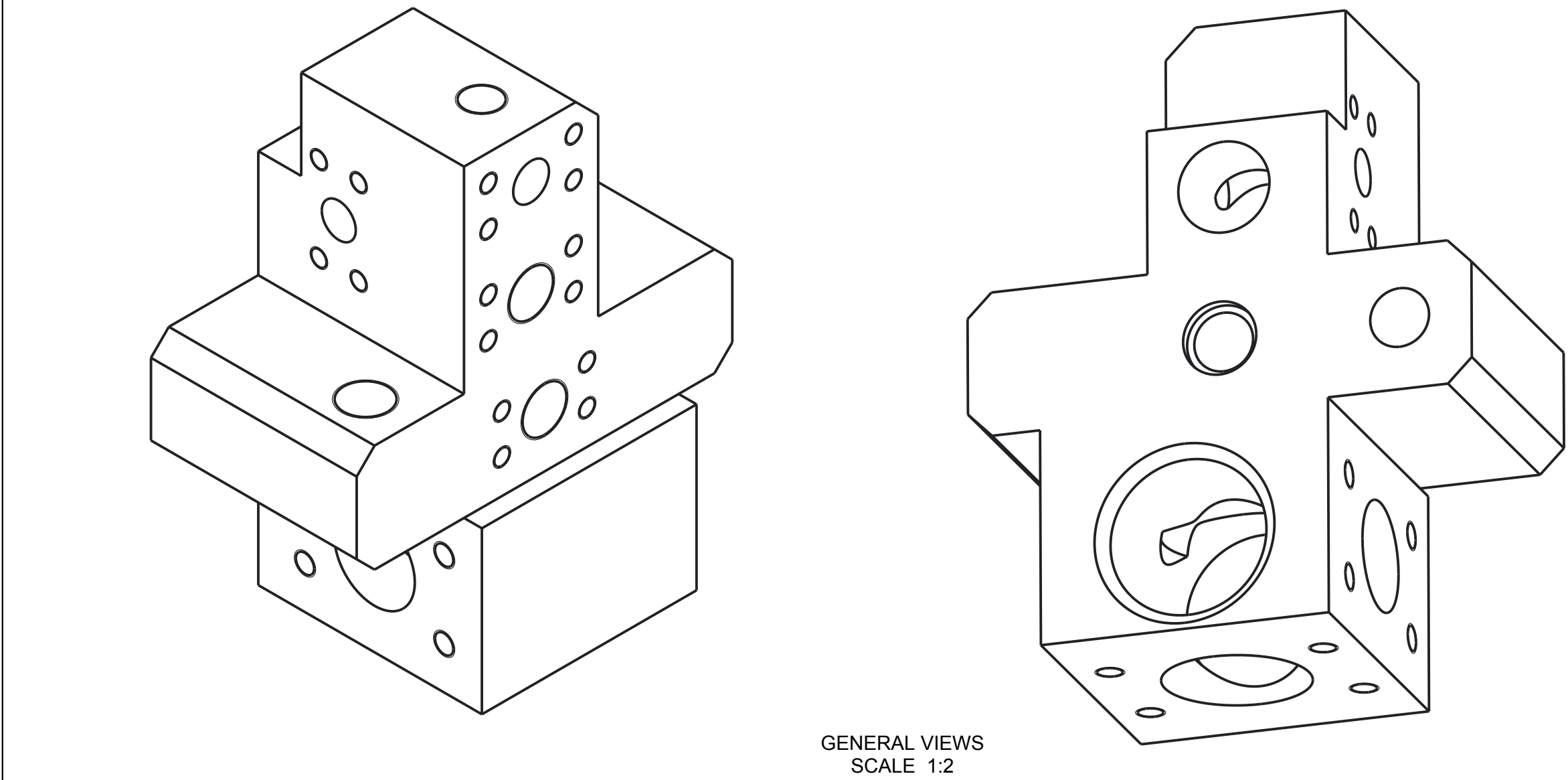
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|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|-----------------------|--|--|--|--|--|--|--|--|--|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| IF IN DOUBT ASK | | | DETAIL F - ITEM 21 AND 33 (2,1/2" SAE FLANGE - 3000 PSI (MODIFIED)) SCALE 2:5 | | | | | | | | | | RESERVOIR FABRICATION | | | | | | | | | | RESPONSIBLE AUTHORITY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DRAWN BY SC 04-Dec-14 | | | NOTES | | | | | | | | | | SCALE 1:10 | | | | | | | | | | TITLE | | | | | | | | | | SECURITY CLASSIFICATION | | | | | | | | | | | | | | | | | | | |
| CHECKED SDB 11-Dec-14 | | | WELD INSPECTION | | | | | | | | | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | | | | | | | | | NSN | | | | | | | | | | CONTRACTORS PART NO. | | | | | | | | | | | | | | | | | | | |
| CERTIFIED | | | 1. VISUAL INSPECTION :- WELDS SHALL MEET THE REQUIREMENTS SPECIFIED IN BSEN ISO 17637:2011. ACCEPTANCE STANDARD IS BSEN ISO 5817:2007 QUALITY LEVEL 'C'. | | | | | | | | | | SURFACE TEXTURE IN MICROMETRES | | | | | | | | | | K 0 1 0 7 | | | | | | | | | | SHEET NO 05 OF 010 | | | | | | | | | | | | | | | | | | | |
| | | | 2. LIQUID PENETRANT :- WELDS TO BE INSPECTED BY THE LIQUID PENETRANT METHOD AS SPECIFIED IN BSEN ISO 3452. ACCEPTANCE STANDARD IS BSEN ISO 23277 QUALITY LEVEL '2X'. | | | | | | | | | | AS SUPP / EXCEPT AS STATED | | | | | | | | | | CONTRACTOR | | | | | | | | | | H07647400 | | | | | | | | | | | | | | | | | | | |
| THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD. | | | | | | | | | | | | | SURFACE HARDNESS N/A | | | | | | | | | | | | | | | | | | | | SERVICE DRG. NO. | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | PROTECTIVE FINISH N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | HYDRAULIC TEST PROCEDURE N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | CLEANLINESS SPECIFICATION MTSP26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | QUALITY ASSURANCE GRADE BS EN ISO 9001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | PATTERN No N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | ESTIMATED MASS 493 Kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



H07647420_ RETURN TANK MANIFOLD




DETAIL OF ITEM 20
SCALE 2:5
(RETURN TANK MANIFOLD)

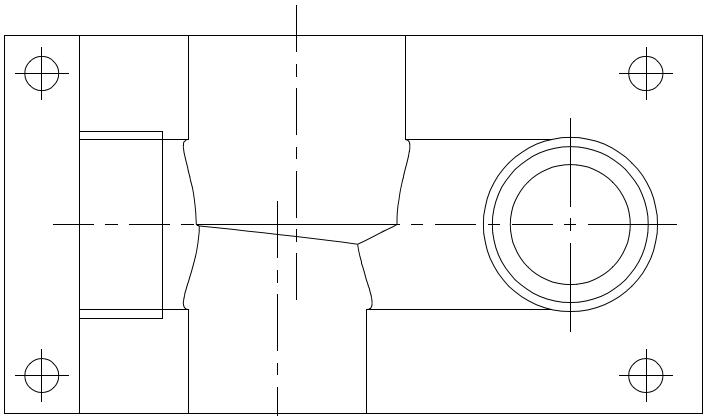
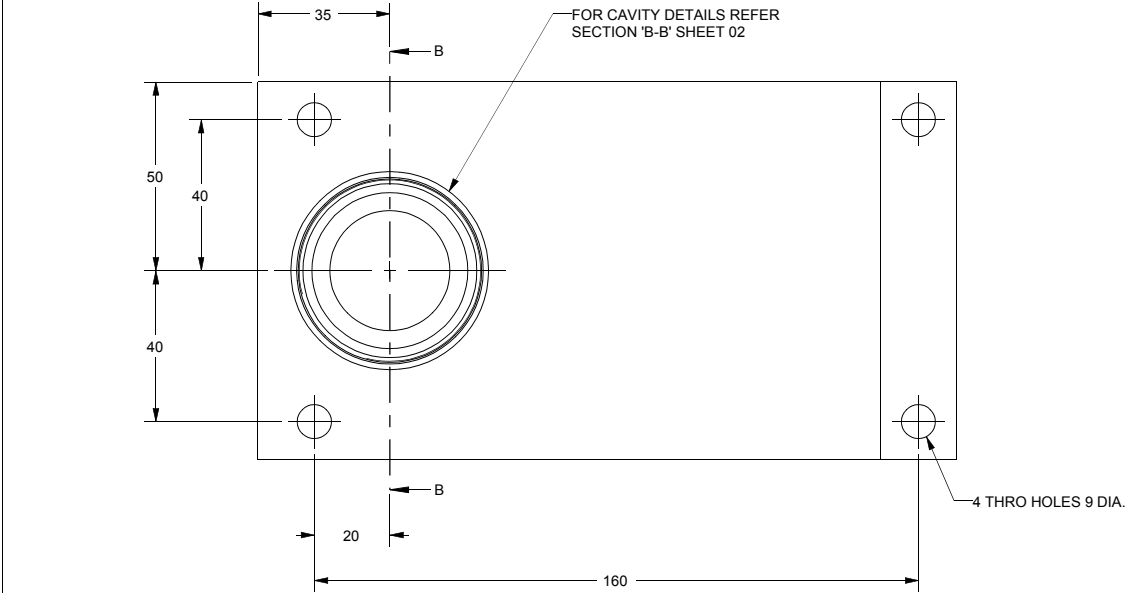


GENERAL VIEWS
SCALE 1:2

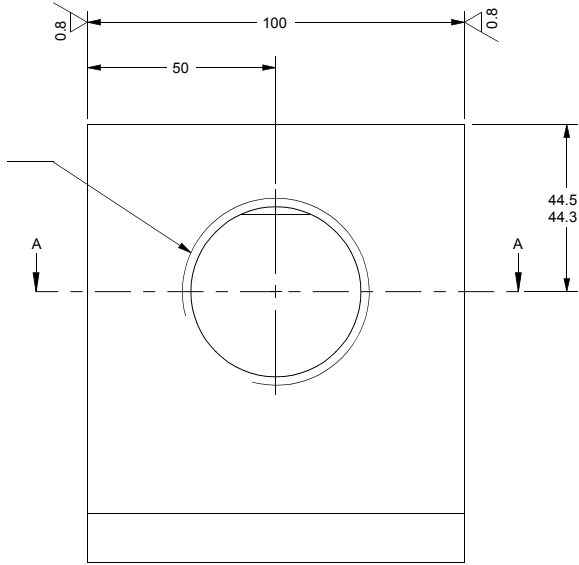
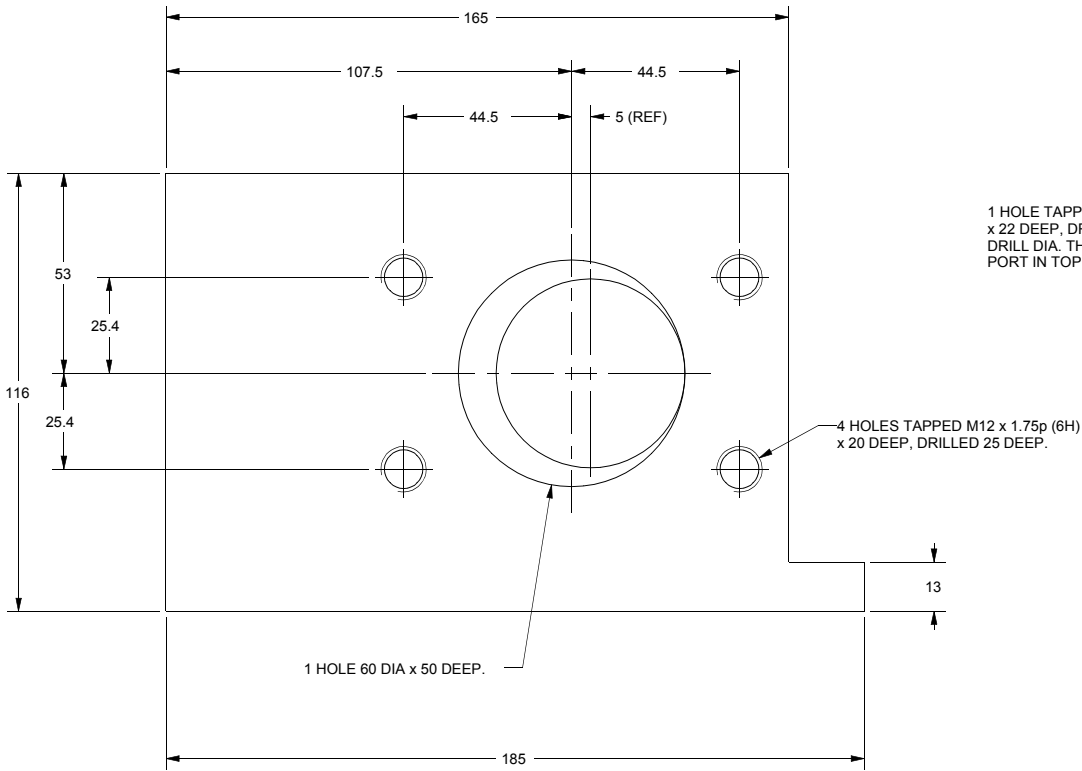
| IF IN DOUBT ASK | | |
|--|------|-----------|
| DRAWN BY | SC | 04-Dec-14 |
| CHECKED | SDB | 11-Dec-14 |
| CERTIFIED | | |
| | NAME | DATE |
| THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD. | | |

| | | | | | | | | | | | | | | | | | |
|--|--|--|---|------------------------------------|---------------|-------|--|-------------------------|----|--------------------|--|--|-----------|----------|---------|---------------------------------------|--|
| | | | | | | | | | | REFER TO SHEET 10. | | 4 | 15-Aug-16 | SDB | SC | G | |
| | | | | | | | | | | REFER TO SHEET 10. | | 3 | 24-Mar-15 | SDB | SC | | |
| | | | | | | | | | | REFER TO SHEET 10. | | 2 | 16-Feb-15 | SC | SDB | | |
| | | | | | | | | | | | | 1 | 04-Dec-14 | | | | |
| | | | | | | | | | | CHANGE | | ISSUE | DATE | MOD | CHECKED | | |
| MATERIAL ST. STEEL (REFER PARTS LIST) | | SCALE 1:10 | | TITLE RESERVOIR FABRICATION | | | | RESPONSIBLE AUTHORITY | | | | | | | | | |
| HEAT TREATMENT N/A | | | | | | | | SECURITY CLASSIFICATION | | | | | | | | | |
| SURFACE HARDNESS N/A | | ALL THREADS TO CONFORM WITH BS SPECIFICATIONS | | | | | | | | | | NSN CONTRACTOR <div>K10107</div> | | | | CONTRACTORS PART NO. H07647400 | |
| MATERIAL TEST N/A | | | | | | | | | | | | | | | | | |
| PROTECTIVE FINISH N/A | | SURFACE TEXTURE IN MICROMETRES AS SUPP/ EXCEPT AS STATED | | | | | | SERVICE DRAWING No | | | | TYPE | | SHEET No | | ISSUE | |
| HYDRAULIC TEST PROCEDURE N/A | | | | 0 0 6 | | 0 0 4 | | | | | | | | | | | |
| CLEANLINESS SPECIFICATION MTSP26 | | | | | | | | | | | | | | | | | |
| QUALITY ASSURANCE GRADE BS EN ISO 9001 | | S | C | R/A | DRG No ORIGIN | | | | | | | | | | | | |
| PATTERN No N/A | | K 0 1 0 7 | | | 10 | | | | 25 | | | | 28 | | 31 | | |
| ESTIMATED MASS 24 Kg | | 1 | 2 | 3 | 5 | | | | | | | | | | | | |

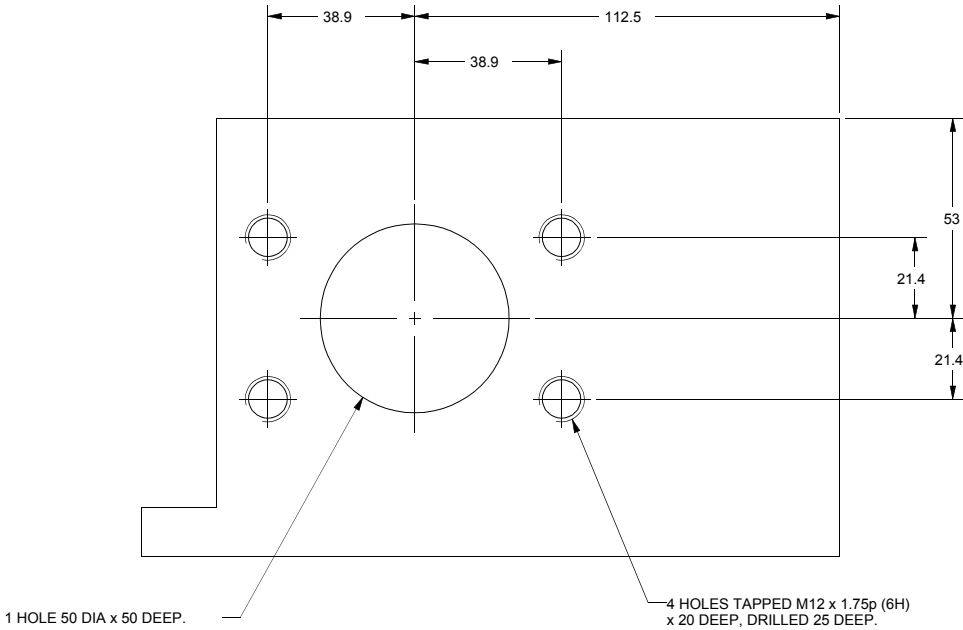
| | | | | | | | | | | | |
|-------------------------|---|--|---|---|---|---|---|---|----|----|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| SECURITY CLASSIFICATION | | <div> <div>3RD ANGLE PROJECTION</div> <div>  </div> <div>ALL DIMENSIONS IN MM</div> <div>MACHINED TOLERANCES ± 0.5 EXCEPT AS STATED</div> <div>REMOVE ALL SHARP CORNERS</div> </div> | | | | | | | | | |
| SERVICE DRG. NO. | | | | | | | | | | | |
| USED ON V07723700 | | | | | | | | | | | |



SECTION A-A SHOWING
INTERNAL PORTING



1 HOLE TAPPED 1, 1/2" BSP
x 22 DEEP, DRILLED TAPPING
DRILL DIA. THRO' INTO CAVITY
PORT IN TOP FACE.



| IF IN DOUBT ASK | | |
|---|------|-----------|
| DRAWN BY | SDB | 03-Apr-15 |
| CHECKED | SC | 06-Apr-15 |
| CERTIFIED | | |
| | NAME | DATE |
| <p>THIS DRAWING HAS BEEN PRODUCED USING 3d CAD. NO MODIFICATIONS ARE TO BE UNDERTAKEN UNLESS ON 3d CAD.</p> | | |

[illegible]

