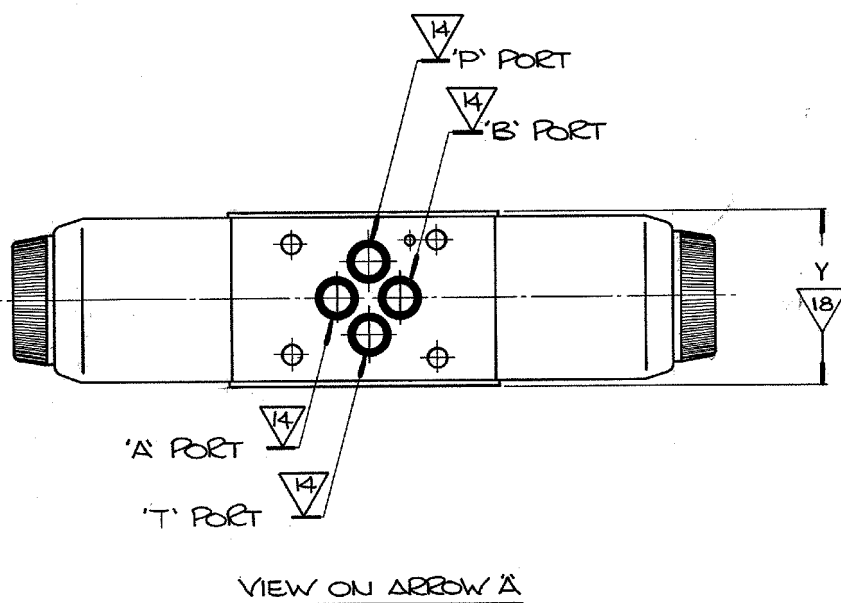
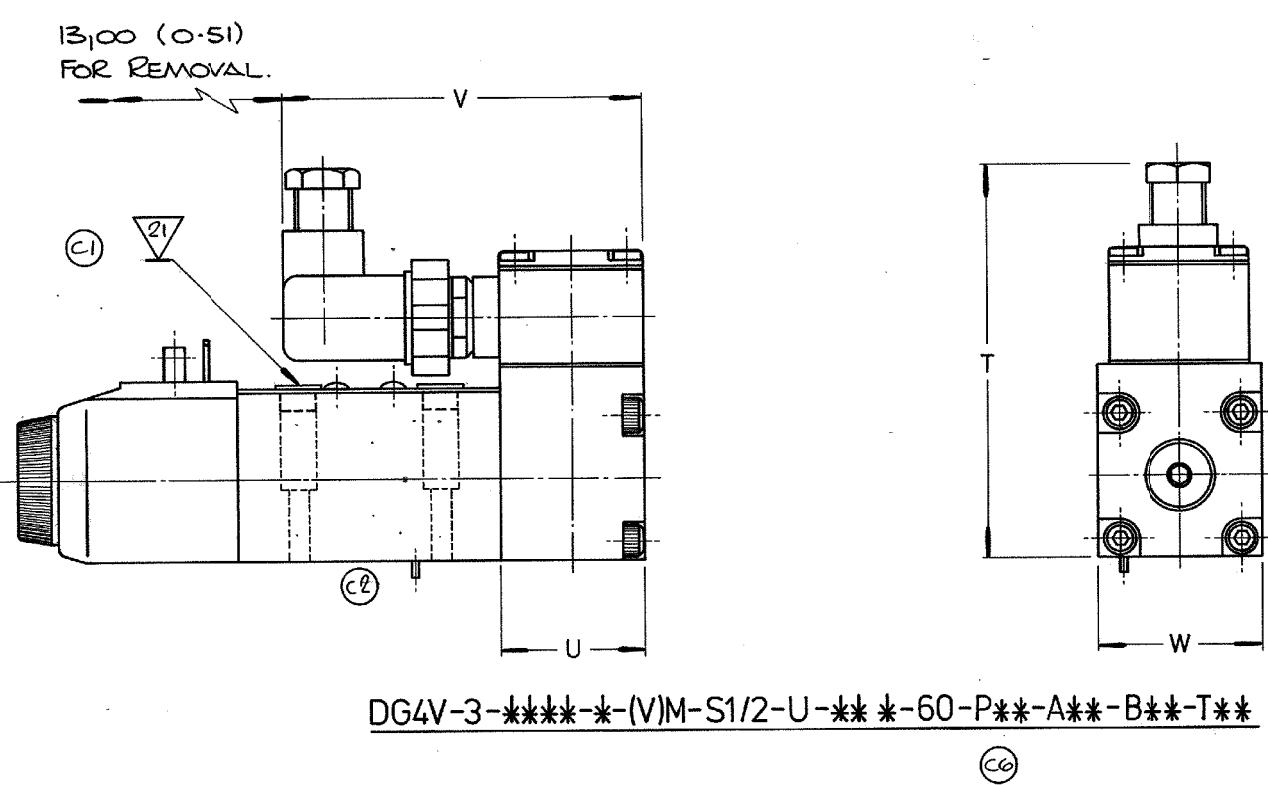
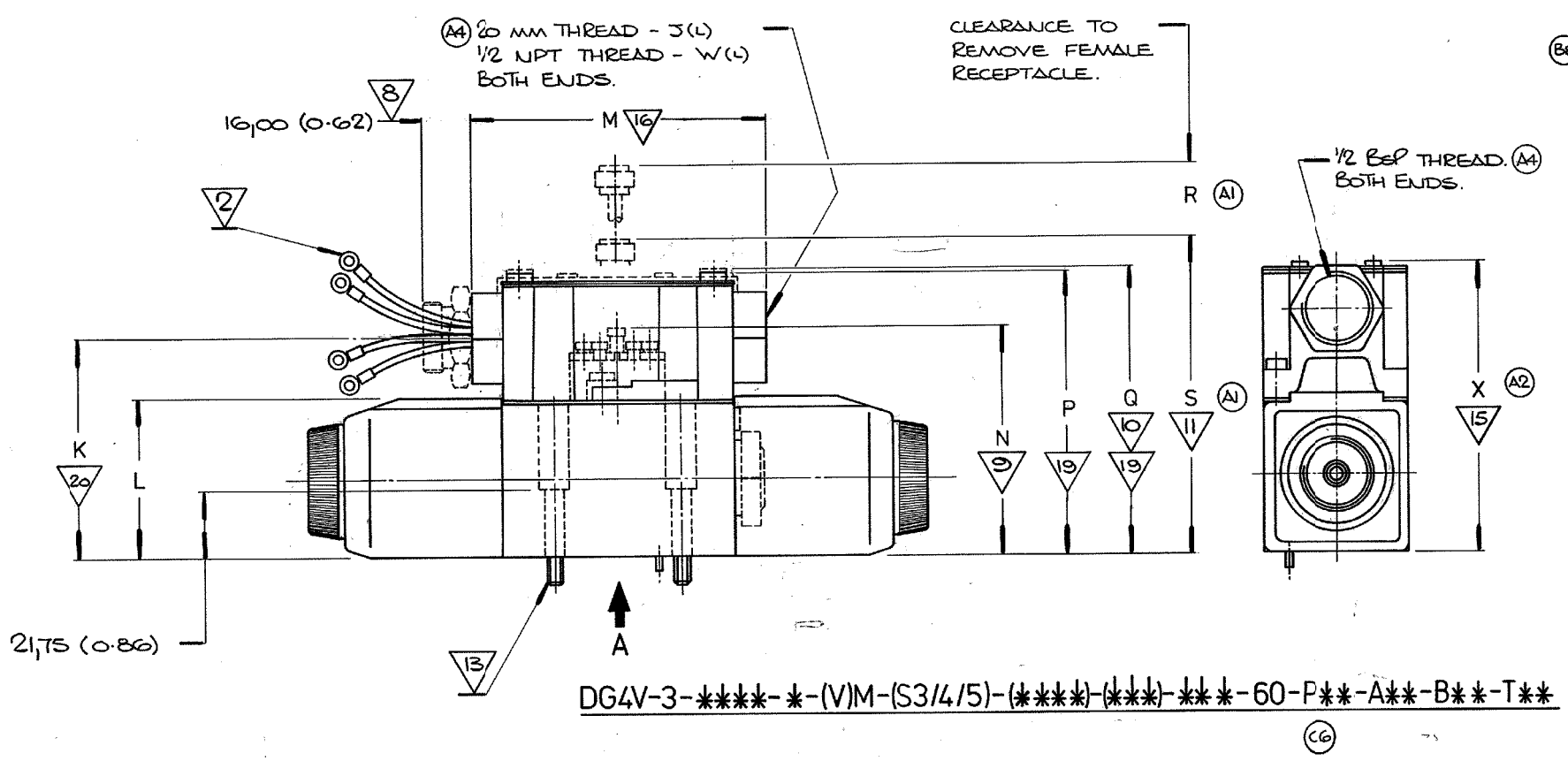
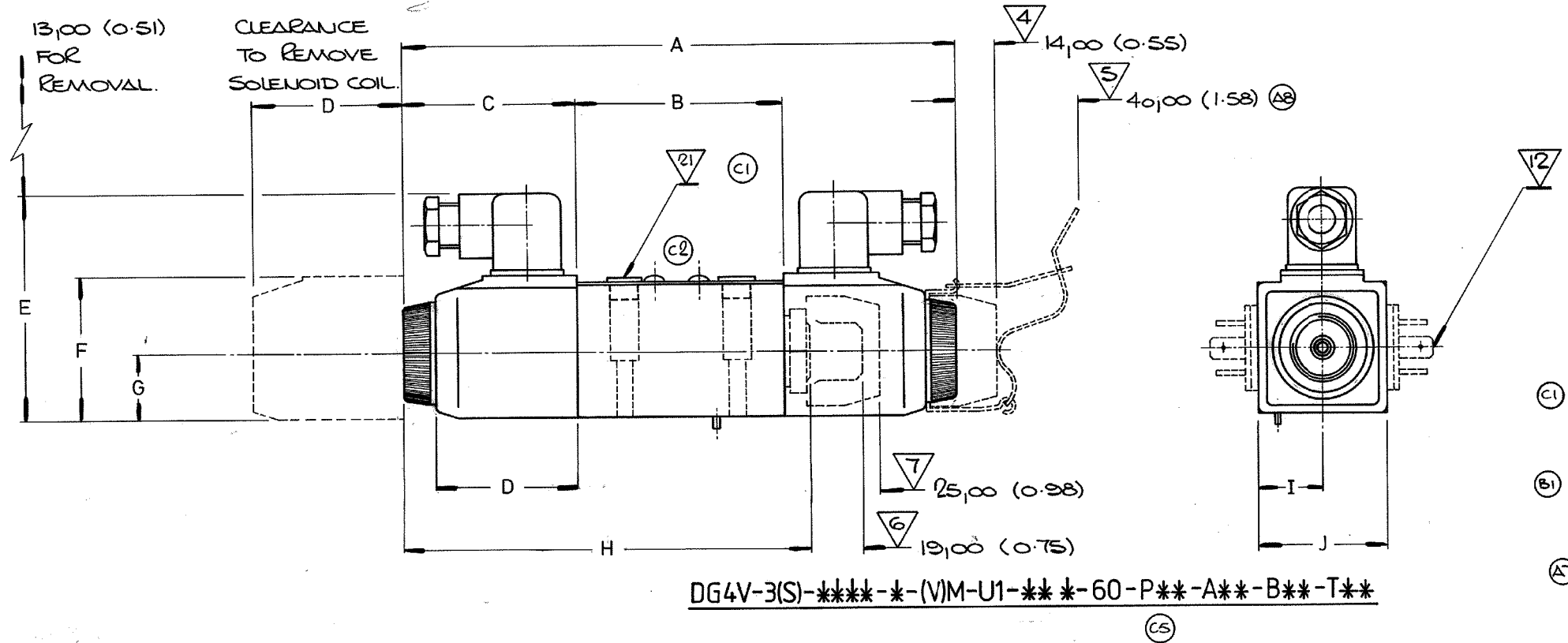
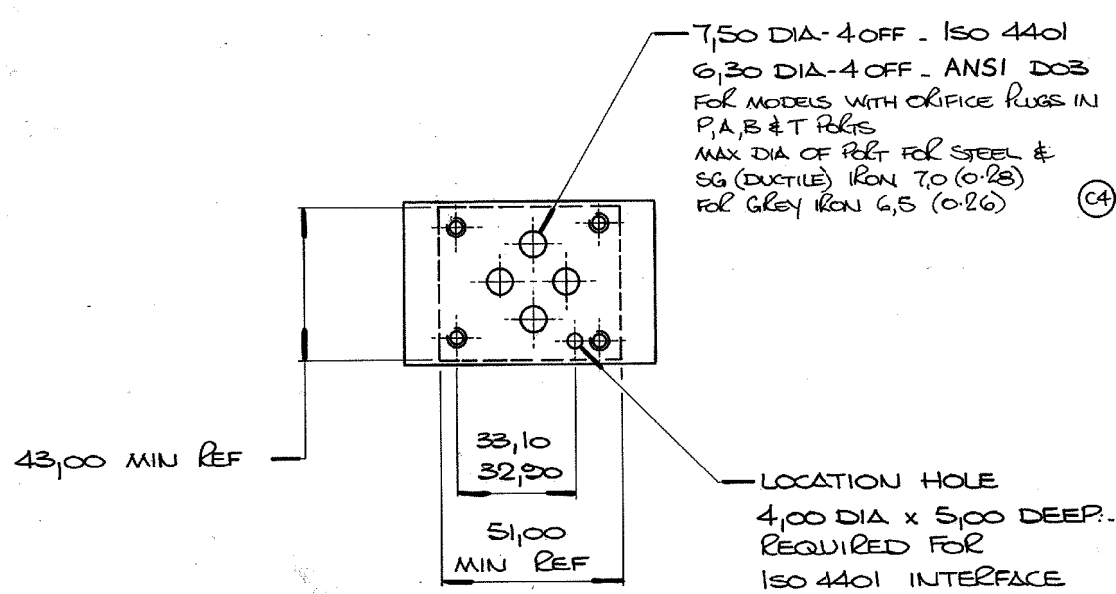


| LETTER | SOLENOID DIMENSIONS |               |
|--------|---------------------|---------------|
|        | A.C.                | D.C.          |
| A      | 200,00 (7.87)       | 220,00 (8.66) |
| B      | 74,00 (2.91)        | 74,00 (2.91)  |
| C      | 63,00 (2.48)        | 73,00 (2.87)  |
| E      | 87,00 (3.42)        | 87,00 (3.42)  |
| F      | 53,00 (2.08)        | 53,00 (2.08)  |
| G      | 25,00 (0.98)        | 25,00 (0.98)  |
| H      | 146,00 (5.75)       | 156,00 (6.14) |
| I      | 24,00 (0.94)        | 24,00 (0.94)  |
| J      | 48,00 (1.88)        | 48,00 (1.88)  |
| K      | 68,75 (2.71)        | 68,75 (2.71)  |
| L      | 51,00 (2.00)        | 51,00 (2.00)  |
| M      | SEE NOTE 16         |               |
| N      | 72,00 (2.83)        | 72,00 (2.83)  |
| P      | 91,00 (3.57)        | 91,00 (3.57)  |
| Q      | 94,00 (3.67)        | 94,00 (3.67)  |
| R      | 24,00 (0.94)        | 24,00 (0.94)  |
| S      | 99,00 (3.89)        | 99,00 (3.89)  |
| T      | 111,00 (4.37)       | 111,00 (4.37) |
| U      | 40,00 (1.57)        | 40,00 (1.57)  |
| V      | 104,00 (4.09)       | 104,00 (4.09) |
| W      | 48,00 (1.88)        | 48,00 (1.88)  |
| X      | 92,00 (3.62)        | 92,00 (3.62)  |
| Y      | 50,00 (2.00)        | 50,00 (2.00)  |
| Z      | 240,00 (9.5)        | 250,00 (9.8)  |



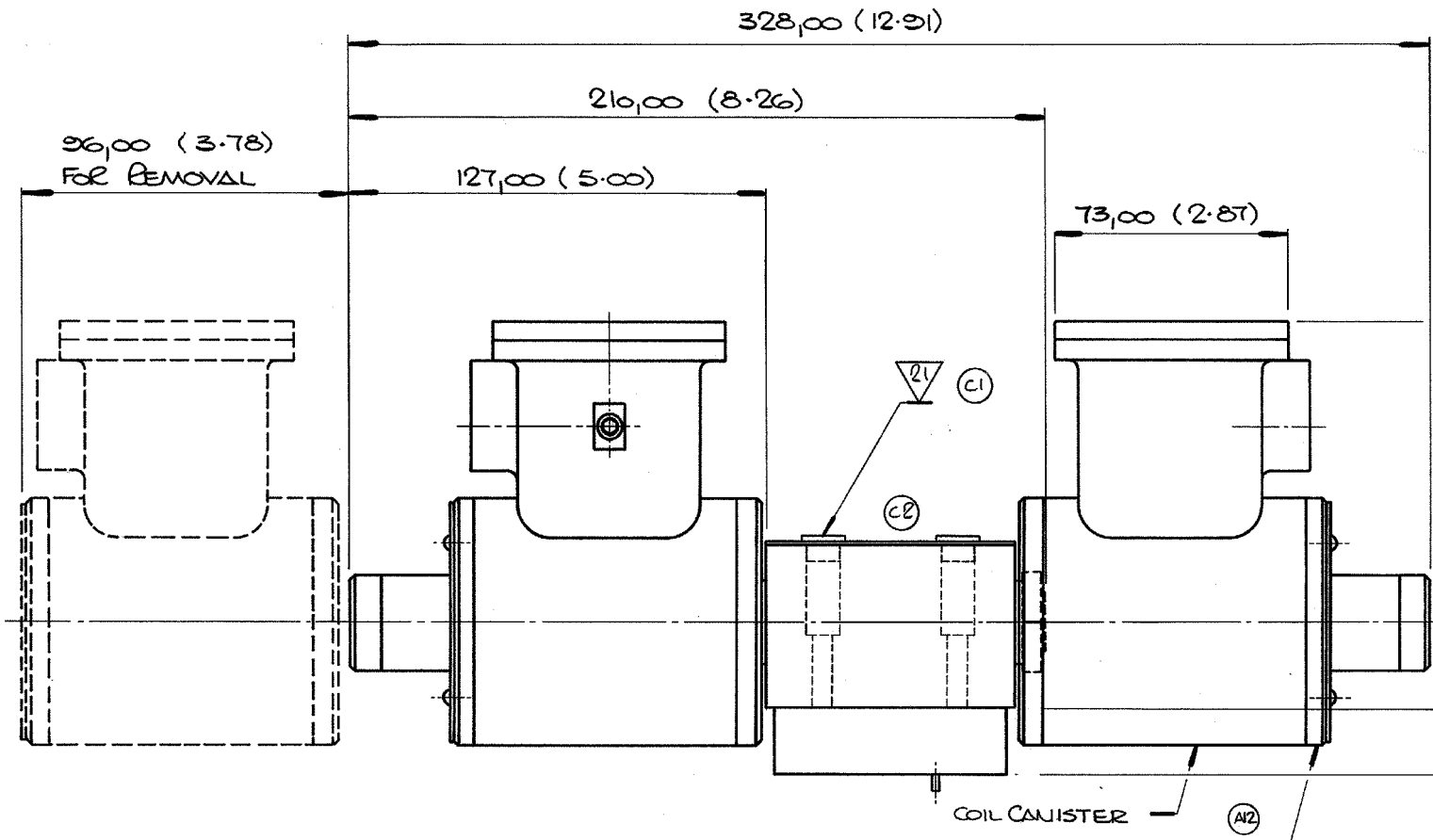
**MOUNTING FACE**  
MOUNTING FACE TO CONFORM TO ISO 4401-AB-03-4-B OR ANSI / B93.7M - D03. WITH THE FOLLOWING VARIATIONS.



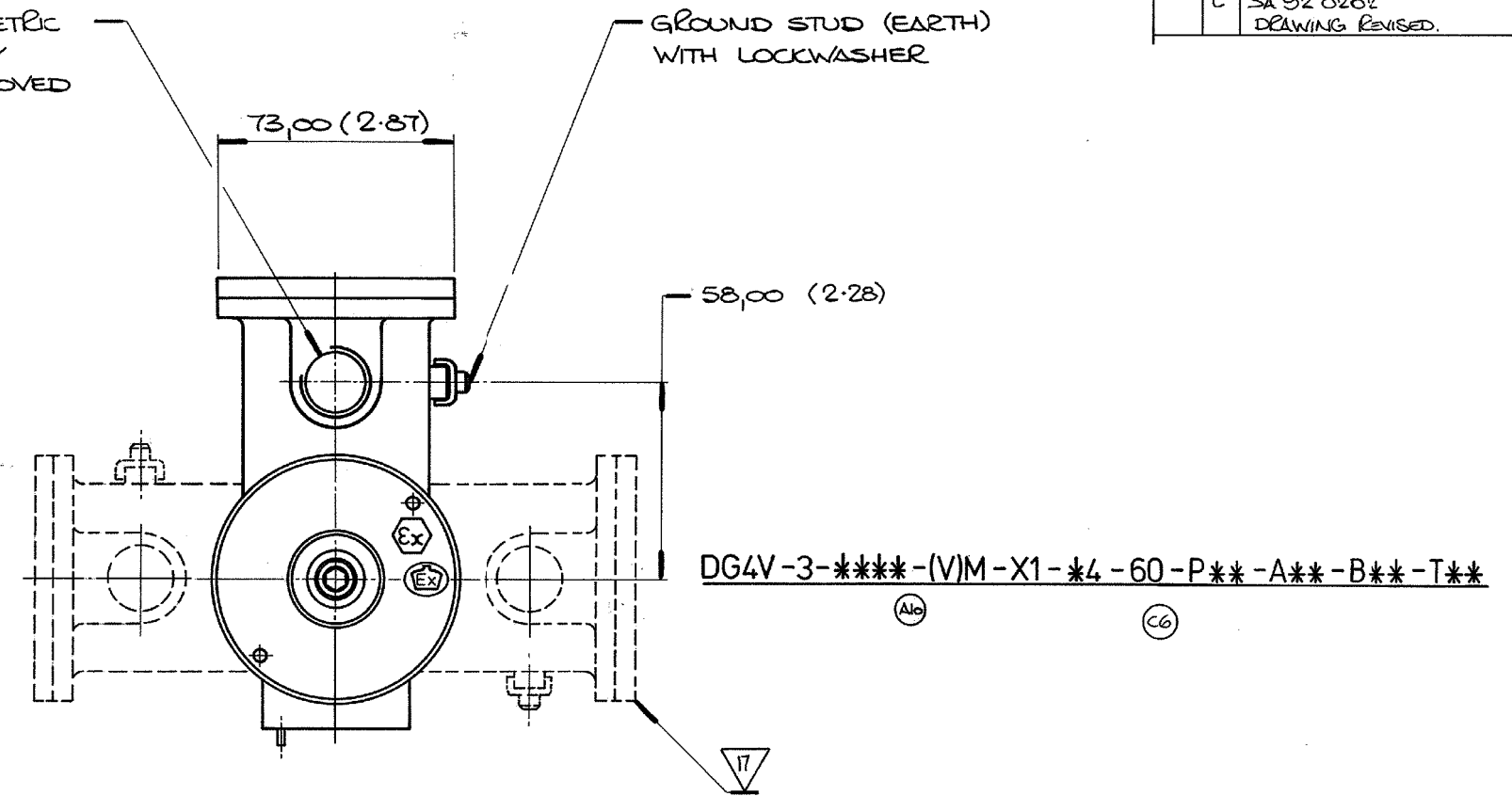
- (C1) (Z1) INSERT 4 OFF PLUGS INTO MOUNTING BOLT HOLES AFTER INSTALLATION OF VALVE.
  - (Z2) ADD 1,25 (0.05) FOR FPB BUILDS.
  - (B1) (Z3) ADD 3,00 (0.12) FOR FPB BUILDS.
  - (Z4) THIS WIDTH (5000) FOR FJL/FWL BUILDS ONLY.
  - (AT) (Z5) ALTERNATIVE COIL CANISTER POSITIONS - BY:-  
1) SLACKENING CAP HEAD SCREW ON X1 BUILDS OR LOCKNUT ON X2/X3 BUILDS.  
2) UNSCREWING CANISTER END FLANGE BY 1/2 TURN.  
3) ROTATING COIL CANISTER TO REQUIRED POSITION.  
4) RE-TIGHTENING CANISTER END FLANGE TO 3.0-5.0 NM.  
5) RE-TIGHTENING LOCKNUT OR CAPHEAD SCREW TO 8.0-11.0 NM.
  - (B8) (Z6) LENGTH 93,00 (3.66) FOR J&W CONDUIT BOXES (NOT FPB)  
LENGTH 89,00 (3.50) FOR FPB J&W CONDUIT BOXES  
LENGTH 104,00 (4.09) FOR ALL PLUG IN CONDUIT BOXES.
  - (Z7) THIS HEIGHT FOR PLUG-IN P, PL, PTL, POL AND P12 BUILDS ONLY.
  - (B9) (Z8) USE SEAL KIT 858995 FOR ALL STANDARD ISO 4401 MODELS.  
USE SEAL KIT 858996 FOR ALL FLYING LEAD MODELS.  
USE SEAL KIT 859049 FOR ALL S\* AND X\* MODELS.  
USE SEAL KIT 869867 FOR ALL P\*\*L PLUG-IN COIL MODELS.
  - (C11) (Z9) FOR ALL MODELS MOUNTED ON ISO 4401 INTERFACE USE BK 616452M EXCEPT X1, X2 & X3 MODELS USE BK 466835M.  
FOR ALL MODELS MOUNTED ON OBSOLETE ANSI-D01 INTERFACE USE BK 59071G EXCEPT X1, X2 & X3 MODELS USE BK 255698.  
TORQUE ALL BOLT KITS TO 7.0-9.0 NM (62-79 LBF/IN).
  - (Z10) ALTERNATIVE PLUG POSITIONS - BY SLACKENING KNUBBED NUT, TURNING COIL & RE-TIGHTENING NUT TO 1.5-2.0 NM.
  - (Z11) THIS HEIGHT (99,00) FOR 'PB' BUILDS ONLY.
  - (Z12) THIS HEIGHT (94,00) OPTIONAL FOR ALL ELECTRICAL OPTIONS WITH LIGHTS. (NOT AVAILABLE WITH 'PA' OPTION).
  - (Z13) THIS HEIGHT (72,00) FOR 'PA' BUILDS ONLY.
  - (Z14) ADDITIONAL LENGTH (16,00) TO BE ADDED TO CONDUIT BOX LENGTH M WHEN 'PA3' OR 'PA5' BUILD REQUIRED.
  - (Z15) ADDITIONAL LENGTH (25,00) TO BE ADDED TO SINGLE SOLENOID LENGTHS WHEN 'H2' BUILD REQUIRED.
  - (Z16) ADDITIONAL LENGTH (19,00) TO BE ADDED TO SINGLE SOLENOID LENGTHS WHEN 'P' BUILD REQUIRED.
  - (Z17) ADDITIONAL LENGTH (45,00) TO BE ADDED PER LOCKING DEVICE TO SOLENOID LENGTH C WHEN 'Y' BUILD REQUIRED.
  - (Z18) ADDITIONAL LENGTH (14,00) TO BE ADDED PER COVER TO SOLENOID LENGTH C WHEN 'H' BUILD REQUIRED.
  - (Z19) M3 THREAD x 12,00 DEEP MIN. (4 PLACES) FOR MOUNTING VALVE ON ISO 4401 INTERFACE. \*10-24 UNC 2B THREAD x 0.47 DEEP MIN FOR MOUNTING ON INTERFACE TO OBSOLETE ANSI-D01.
  - (Z20) LEAD WIRES, TWO FOR EACH SOLENOID, APPROX 153,0 MM (6.00) LONG. M3 SIZE TERMINALS ARE PROVIDED FOR CUSTOMER CONNECTION.
1. DIMENSIONS IN MILLIMETRES AND INCHES IN BRACKETS.

|  |  |  |                 |   |
|--|--|--|-----------------|---|
| G.T. CODE NO: 005  |  | MODEL DG4V-3(S)-*****(L)-** *-60-P**-A**-B**-T** |                 | REL SA  |
| THIRD ANGLE PROJECTION   |  | REF: SOT301                                      | DATE: 20 SEP 88 | VICKERS SYSTEMS LTD.<br>P.O. BOX 4, NEW LANE, HAVANT, HANTS, PO9 2NB, ENGLAND<br>A JEBBY-OWENS-FORD COMPANY |
| MATERIAL   |  | DR: D. E. W.                                     | CHK: K.W.E.     |   |
| UNLESS OTHERWISE SPECIFIED INTERPRET PER IS 1-9-1 ANGULAR DIMENSIONS ± 2 SURFACE FINISHNESS 3.2 μm (125.1) TOLERANCES ON DIMENSIONALS  |  | TITLE: INSTALLATION DRAWING                      |                 |   |
| 1 PLACE 2 PLACE 3 PLACE  |  | HEAT TREATMENT                                   |                 | DIRECTIONAL CONTROL VALVE.  |
| HEAT TREATMENT   |  | COATING/PLATING                                  |                 | SIZE: A0  |
| REMOVE BURRS   |  | RELEASE  |                 | SCALE: 1:1  |
| BREAK EDGES 0.25 mm (0.010 in.) MAX.   |  | PROD: C. W. J.                                   |                 | W.T. SHEET 1 OF 3   |
| ALL TECHNICAL DATA ENCLOSED HEREIN IS THE PROPERTY OF VICKERS, INCORPORATED AND SHALL NOT BE REPRODUCED BY OTHERS FOR MANUFACTURE, PROCUREMENT, OR DISCLOSURE WITHOUT THE WRITTEN PERMISSION OF THE OWNER. |  | ENG: K.W.E.                                      |                 | ACT. CALC.  |

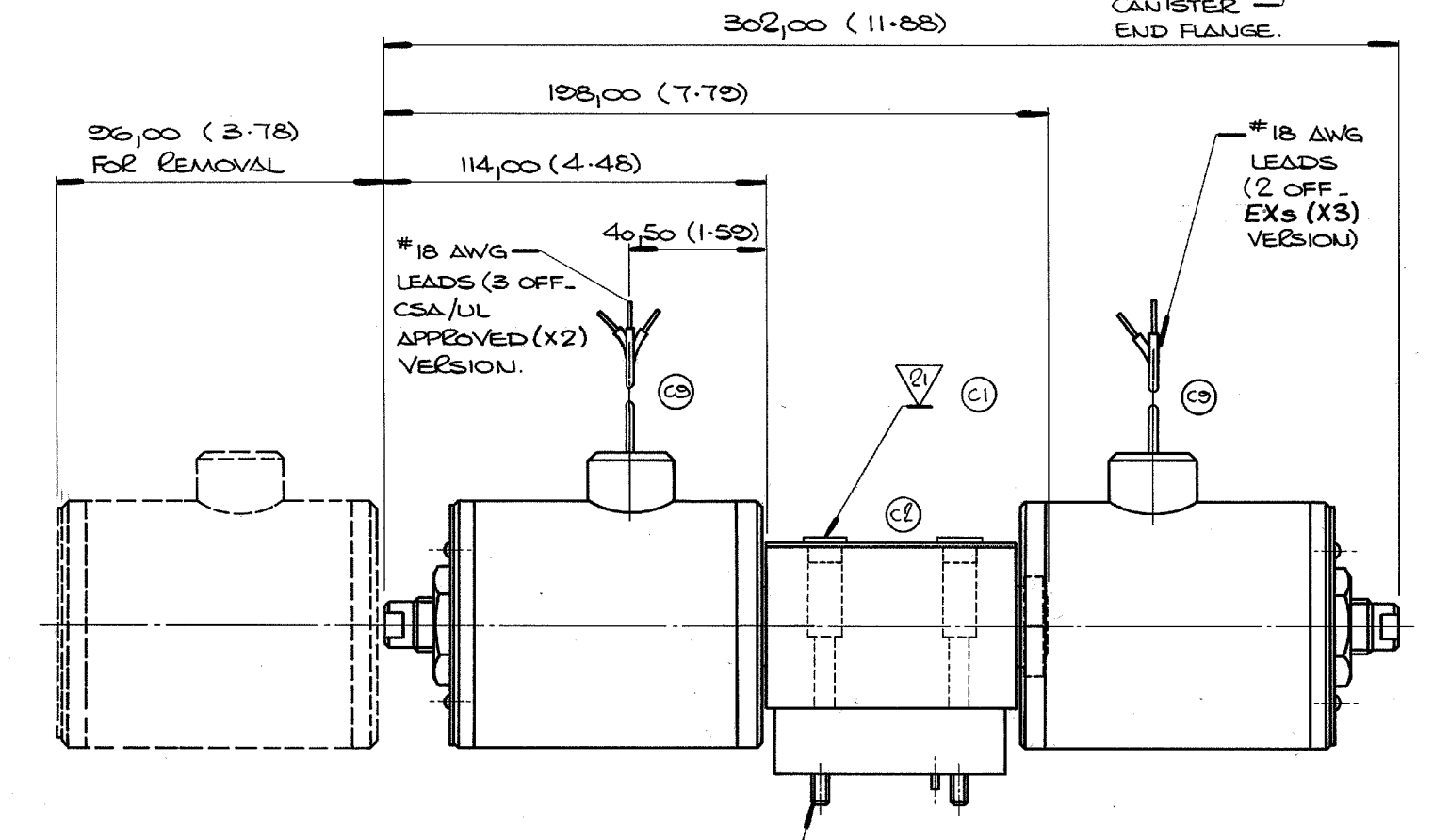
| REVISIONS |     |  |           |          |
|-----------|-----|--|-----------|----------|
| ZONE      | REV | DESCRIPTION  | DATE      | APPROVED |
| A         | 1   | ECN 5A280303   | 21 NOV 88 |          |
|           |     | 1) 1) SEE SHEET 1.   |           | K.W.E.   |
|           |     | 10) MODEL CODES REVISED                                    |           |          |
|           |     | 11) PICTORIAL CHANGE - GAP ADDED BETWEEN COILS AND BODIES. |           |          |
|           |     | 12) COIL CANISTER AND CANISTER END FLANGE ADDED            |           |          |
| B         | 2   | 5A280303 SEE SHEET 1                                       | 30 APR 89 | K.W.E.   |
| C         | 3   | 5A280303 DRAWING REVISED.                                  | 11 APR 92 | P.D.     |



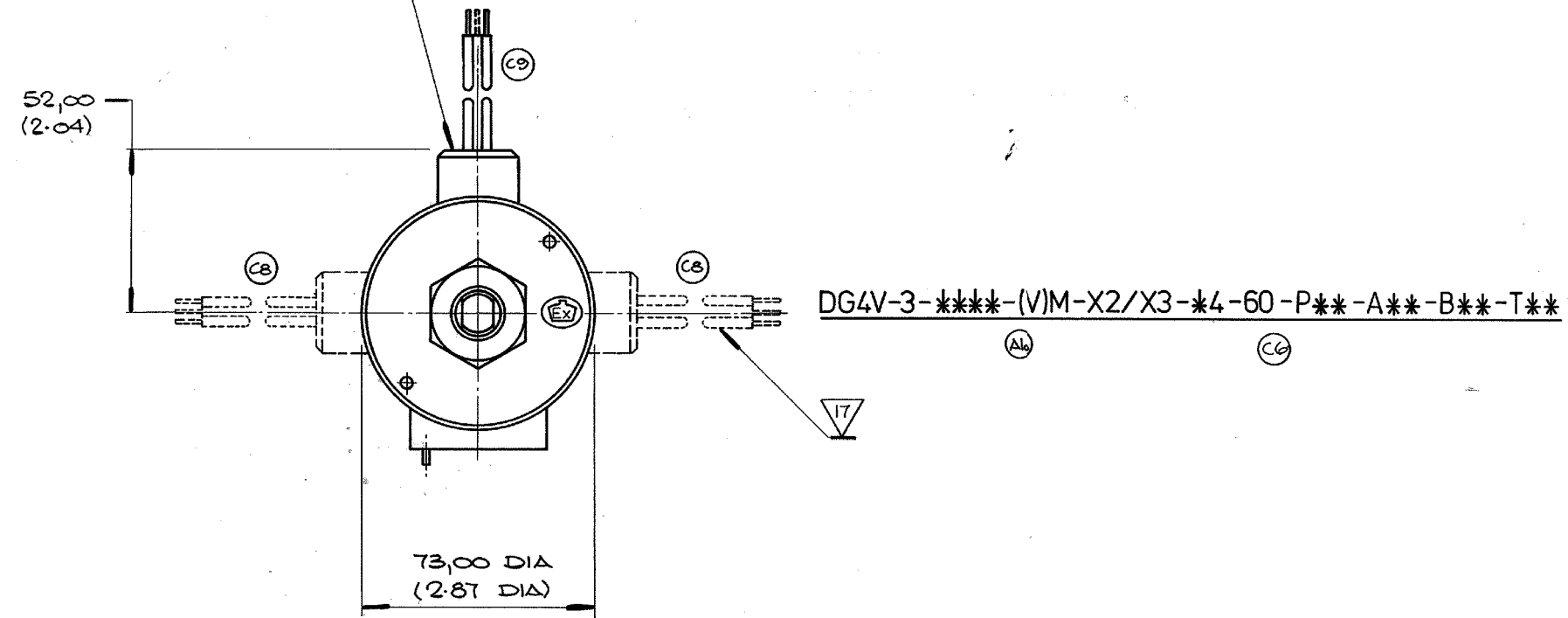
M20x1,5 GH METRIC THREAD FOR ANY BASEEFA APPROVED CABLE GLAND.



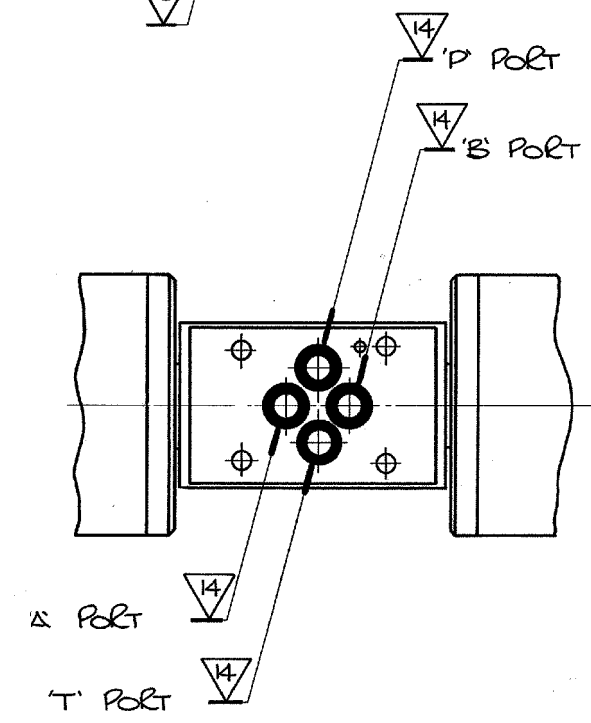
DG4V-3-\*\*\*\*-(VM)-X1-#4-60-P\*\*-A\*\*-B\*\*-T\*\*



CONDUIT FITTING M20 x 1,5 (X3 VERSION) 1/2" NPT (X2 VERSION)



DG4V-3-\*\*\*\*-(VM)-X2/X3-#4-60-P\*\*-A\*\*-B\*\*-T\*\*

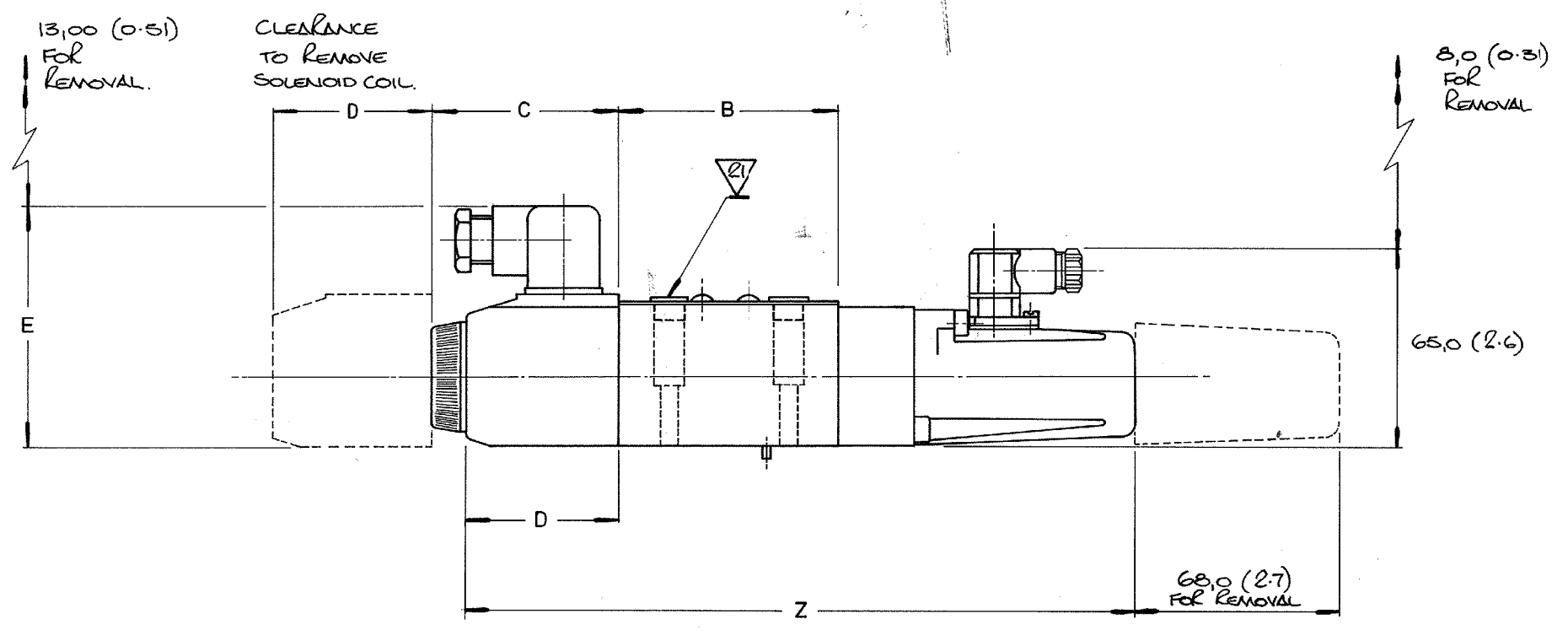


|  |     |                        |                 |  |             |        |             |           |
|--|-----|------------------------|-----------------|--|-------------|--------|-------------|-----------|
| G.T. CODE  | 005 | THIRD ANGLE PROJECTION | MODEL           | DG4V-3(S)-****-(VM)-X1-#4-60-P**-A**-B**-T** | REF.        | 507901 | DATE        | 20 SEP 88 |
| UNLESS OTHERWISE SPECIFIED INTERPRET PER VS 1-3-1 ANGULAR DIMENSIONS ± 2 SURFACE ROUGHNESS 3.2 μm (125, 1) TOLERANCES ON DECIMALS 1 PLACE 2 PLACE 3 PLACE ± 0.1 ± 0.05 ± 0.010 REMOVE BURRS BREAK EDGES 0.25 mm (0.010) MAX. |     |                        | DR.             | D. ELY                                       | CHK.        | K.W.E. | DATE        | 20 SEP 88 |
|  |     |                        | MATERIAL        |  |             |        |             |           |
|  |     |                        | HEAT TREATMENT  |  |             |        |             |           |
|  |     |                        | COATING/PLATING |  |             |        |             |           |
|  |     |                        | RELEASE         |  |             |        |             |           |
|  |     |                        | PROG.           | 23 SEP 88                                    | SIZE        | A0     | FCM No.     |           |
|  |     |                        | ENGR.           |  | DRAWING No. | 508190 | REV.        | C         |
|  |     |                        | APPR.           |  | SCALE       | 1:1    | ACTL. SHEET | 2 OF 3    |

VICKERS SYSTEMS LTD. P.O. BOX 4, NEW LANE, HAVANT, HANTS, PO9 2NB, ENGLAND A TRINOVA COMPANY

INSTALLATION DRAWING DIRECTIONAL CONTROL VALVE

| REVISIONS |      |                               |              |          |
|-----------|------|-------------------------------|--------------|----------|
| ZONE      | REV. | DESCRIPTION                   | DATE         | APPROVED |
|           | C    | SA 020202<br>DRAWING REVISED. | 11<br>APR 02 | P.D.     |



DG4V-3-\*\*\*(L)-Z-(V)M-S6-U1-\*\*\*-60-(P\*\*A\*\*-B\*\*-T\*\*)

(12)

|  |  |                           |  |  |  |  |  |
|--|--|---------------------------|--|--|--|--|--|
| G.T. CODE  |  | THIRD ANGLE PROJECTION    |  | MODEL DG4V-3(S)-***(L)-*-M-(S*)-(****)-(***)-***-60-P**A**-B**-T** |  | BS W S BK SA   |  |
| UNLESS OTHERWISE SPECIFIED<br>INTERPRET PER VS 1-3-3-1<br>ANGULAR DIMENSIONS ± 2<br>SURFACE ROUGHNESS 3.2 µm (125...)<br>TOLERANCES ON DECIMALS<br>1 PLACE 2 PLACE 3 PLACE<br>mm ± 0.1 ± 0.05 ± 0.010<br>INCH ± 0.005 ± 0.002 ± 0.0005<br>REMOVE BURRS<br>BREAK EDGES 0.25 mm (0.010 in.) MAX. |  | REF. 507001 DATE 16/04/02 |  | DR. D.B.Y. CHK. K.W.E. 16/04/02                                    |  | VICKERS SYSTEMS LTD.<br>P.O. BOX 4, NEW LANE, HAVANT, HANTS, PO9 2NB, ENGLAND<br>A TRINGVA COMPANY |  |
| MATERIAL   |  | HEAT TREATMENT            |  | COATING/PLATING  |  | TITLE<br>INSTALLATION DRAWING<br>DIRECTIONAL CONTROL VALVE   |  |
| RELEASE  |  | T.O.                      |  | PROTO.   |  | SIZE A0/E  |  |
| PROG. C. DAWSON 16/04/02   |  | SCALE                     |  | W.T.   |  | DRAWING No. 508100   |  |
| ENGR. APPVL. R.K.V. 16/04/02   |  | ACTL. CALC.               |  | SHEET 3 OF 3   |  | REV. C   |  |