

DRAWING NUMBER  
**D43674**

USED ON  
QE11670  
APITECH

L 66296  
VAR 43674

SUB-MASTER  
FROM:-

©  
DESIGN  
COPYRIGHT  
RESERVED

SIZE  
**A2**

THIRD ANGLE  
PROJECTION  
TO B.S.308

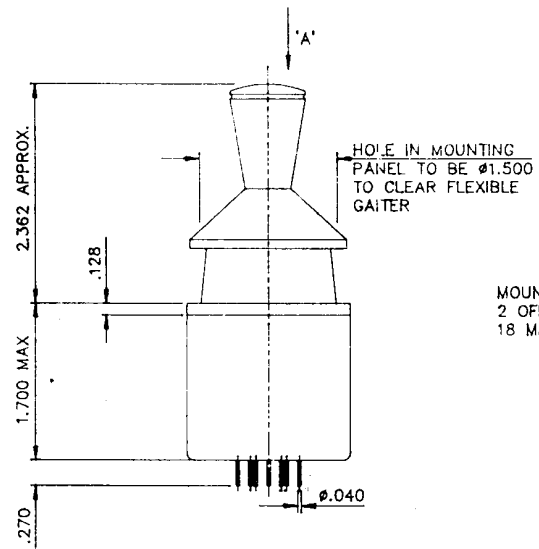
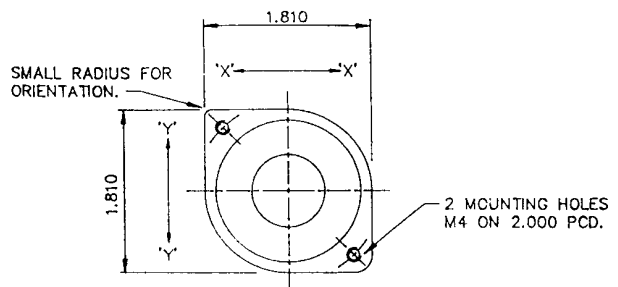
**Data Sheet**

D.O. REFS.

APPROVED  
A.C.

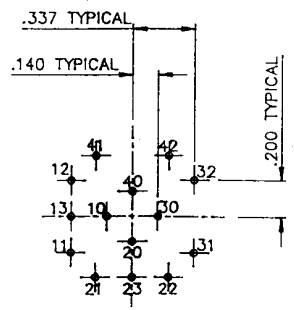
CHECKED  
A.C.

DRAWN  
CHRST



MOUNTING SCREWS ARE SUPPLIED  
2 OFF M4 SOCKET CAP SCREWS  
18 MM LONG

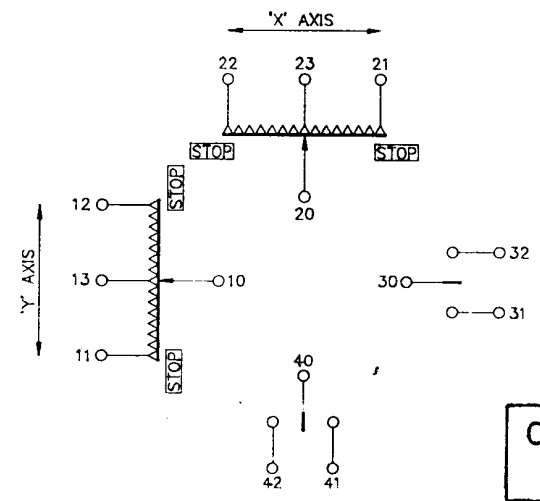
DIAGRAM SHOWING TERMINAL  
POSITIONS VIEWED ON BASE  
OF JOYSTICK (SCALE 2:1)



**SPECIFICATION DATA (BOTH AXIS)**

- RESISTANCE ±15% \_\_\_\_\_ 2.5K OHMS
- CENTRE TAP POSITION \_\_\_\_\_ 50% APPLIED VOLTS ±3%
- MECHANGLE ANGLE \_\_\_\_\_ 32° ±2° CONICAL ROTATION
- ELECTRICAL ANGLE \_\_\_\_\_ 36° ± 2°
- WINDING RESOLUTION \_\_\_\_\_ <0.1% OF FULL SCALE AT ANY SETTING
- ACTUATION FORCE \_\_\_\_\_ 300 gm FULL SCALE DEFLECTION WITH APPROX DOUBLE FORCE IF OFF AXIS MEASURED ON END OF OPERATING ROD
- CENTRING \_\_\_\_\_ LEVER SELF CENTRES SUCH THAT VOLTAGE BETWEEN WIPER AND CENTRE TAP IS LESS THAN 5% APPLIED VOLTS
- OPERATING VOLTAGE \_\_\_\_\_ 5Vd.c. TO 24Vd.c.
- DIRECTIONAL SWITCHES \_\_\_\_\_ SEE BELOW
- SWITCH ACTUATION \_\_\_\_\_ <5% OF FULL ELECTRICAL TRAVEL FROM CENTRE (OPEN AT CENTRE)
- SWITCH CONTACT RATING \_\_\_\_\_ 50 mA MAX.
- INSULATION RESISTANCE \_\_\_\_\_ >50M OHMS AT 50Vd.c
- CYCLE LIFE \_\_\_\_\_ 10 x 10<sup>6</sup> FULL SCALE DEFLECTIONS WITHOUT SIGNIFICANT MECHANICAL DEGRADATION AND WITH NO CHANGE IN RESISTANCE RATIO VS DEFLECTION
- OPERATING TEMPERATURE \_\_\_\_\_ -40°C TO +70°C
- STORAGE TEMPERATURE \_\_\_\_\_ -55°C TO +125°C
- WASH DOWN \_\_\_\_\_ ABOVE MOUNTING SURFACE:- 3450KPA ● 10cm FOR 5 MINUTES WITH 60°C WATER (IP65-DIN40050)
- ELEMENT NON LINEARITY \_\_\_\_\_ <1% OF FULL SCALE
- SURVIVAL VOLTAGE \_\_\_\_\_ 36 V. D.C. (ONE TIME APPLICATION ONLY)
- GATE \_\_\_\_\_ CIRCULAR

SCHEMATIC DIAGRAM VIEWED ON ARROW 'A'  
(VIEWED BY OPERATOR)  
WITH OPERATING LEVER IN NEUTRAL POSITION



**CUSTOMERS  
COPY**

**Penny+Giles** POSITION SENSORS LIMITED,  
Christchurch,  
Dorset, U.K.

ISSUE	A	B	C	3	4
DATE	28/2/91	13.3.91	8.5.91	12.6.91	8.7.91
CHANGE	REV ONE	N/D	N/D	REV ONE	REV ONE
TOLERANCES	±.010		DIMS:	SCALE:	
			INCHES	1:1	

MATERIAL:—	FINISH:—	TITLE:— JOYSTICK CONTROLLER	DRAWING NUMBER <b>D43674</b>
		HJS2/SC/SW2	