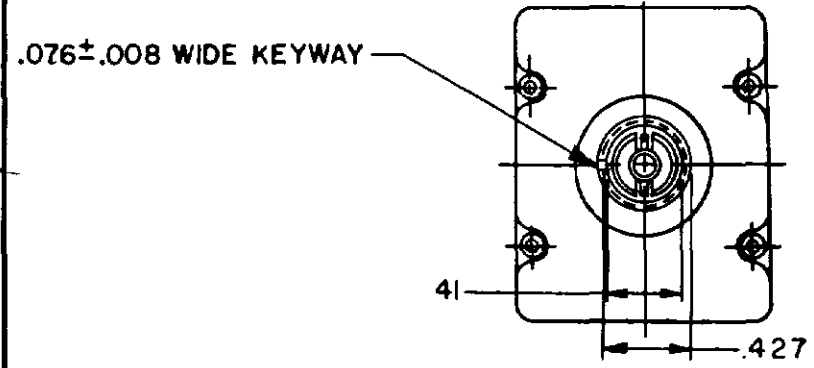


**MICRO SWITCH**  
FREEPORT ILLINOIS U.S.A.  
A DIVISION OF HONEYWELL  
FED MFG CODE 91929

**SWITCH-TOGGLE**

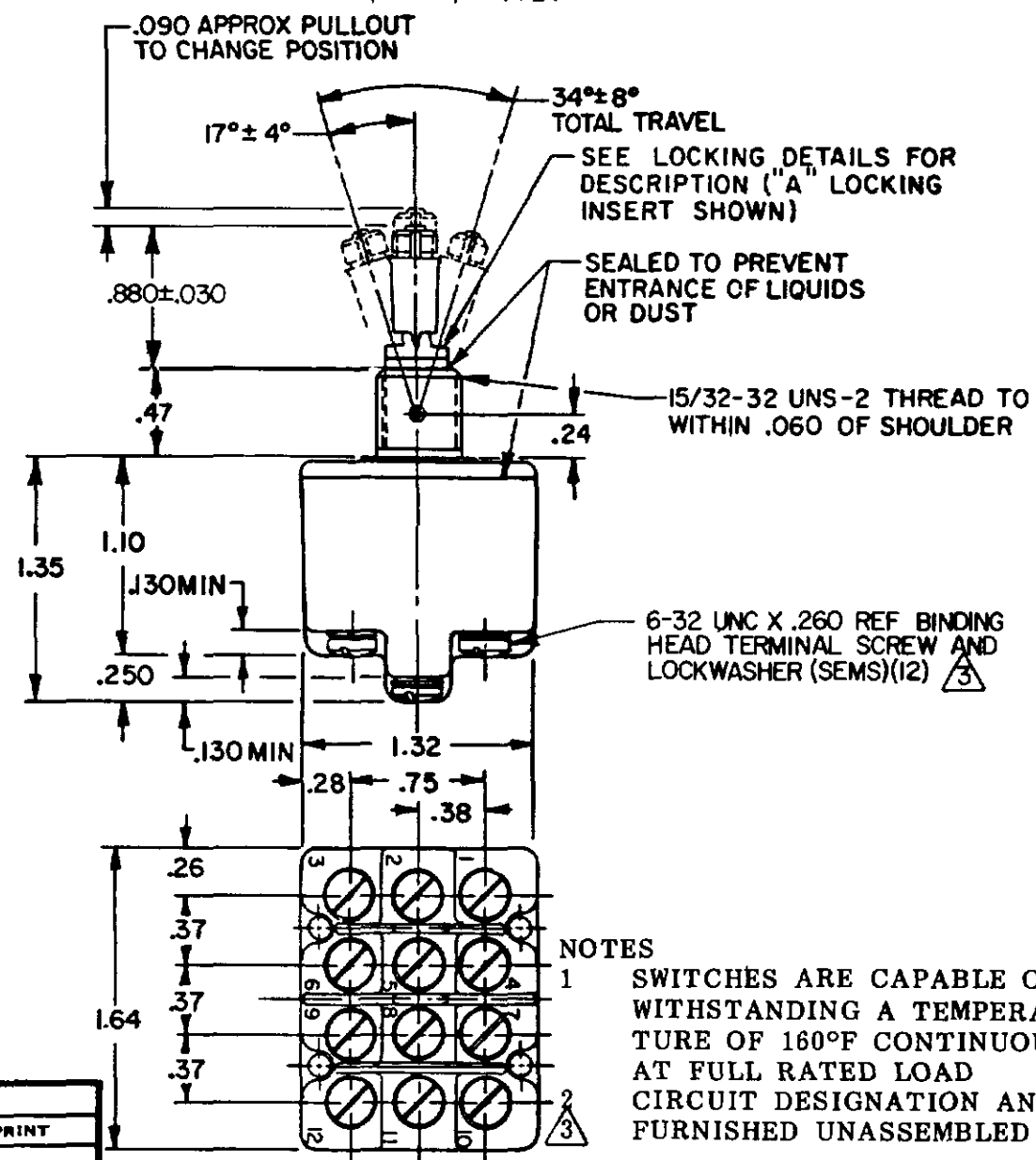
CATALOG LISTING  
**4TL149**  
**SERIES CHART 1**

THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF MICRO SWITCH, A DIVISION OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF MICRO SWITCH.



L191 15A 125, 250, 277 VAC  
1/2HP 125 VAC  
1HP 250, 277 VAC  
5A 125 VAC "L"

L192 10A 125, 250, 277 VAC  
1/4HP 125 VAC,  
1/2HP 250, 277 VAC  
3A 125 VAC "L"

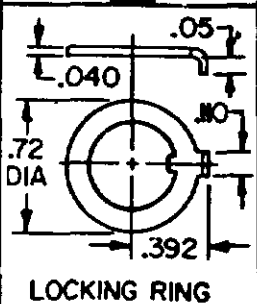
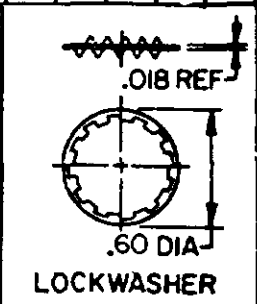


NOTES  
1 SWITCHES ARE CAPABLE OF WITHSTANDING A TEMPERATURE OF 160°F CONTINUOUSLY AT FULL RATED LOAD  
CIRCUIT DESIGNATION AND MICRO SWITCH CATALOG LISTING, MARKED ON SIDE OF SWITCH FURNISHED UNASSEMBLED

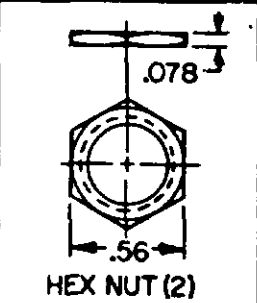
FOR TERMINAL COVER SEE MICRO SWITCH CATALOG LISTING 5PA9  
KEYWAY SHOWN ON LEFT SIDE  
SUFFIX LETTER MUST BE ADDED FOR DESIRED TYPE TOGGLE LOCKING. SEE CHART FOR AVAILABLE LOCKING COMBINATIONS  
CIRCUIT DIAGRAMS APPLY ONLY TO "ON" AND "MOM ON" POSITIONS

| CATALOG LISTING | AVAILABLE LOCKING COMBINATIONS<br>FOR CONFIGURATION<br>SEE LETTERING<br>DETAILS | KEYWAY SIDE | CENTER | OPPOSITE KEYWAY | MILITARY RATING (AMPS) |          |     |     |           |        |           |        |         |
|-----------------|---------------------------------------------------------------------------------|-------------|--------|-----------------|------------------------|----------|-----|-----|-----------|--------|-----------|--------|---------|
|                 |                                                                                 |             |        |                 | RESISTIVE LOAD         |          |     |     | LAMP LOAD |        | IND. LOAD |        |         |
|                 |                                                                                 |             |        |                 | DC VOLTS               | AC VOLTS |     |     |           |        |           |        |         |
|                 |                                                                                 |             |        |                 | 28                     | 125      | 250 | 125 | 250       | 28 VDC | 125 VAC   | 28 VDC | 125 VAC |
| 4TL-149 - 1     | AB,DE,F,G,H,J,K,L,M,NP                                                          | ON          | OFF    | ON              | 20                     | .75      | .5  | 15  | 6         | 5      | 4         | 12     | 15      |
| 4TL-149 - 2     | D, F, G                                                                         | OFF         | NONE   | ON              |                        |          |     |     |           |        |           |        |         |
| 4TL-149 - 3     | D, F, G                                                                         | ON          | NONE   | ON              |                        |          |     |     |           |        |           |        |         |
| 4TL-149 - 2I    | E, F, K, M                                                                      | NONE        | OFF    | ON              |                        |          |     |     |           |        |           |        |         |
| 4TL-149 - 3I    | E, F, K, M                                                                      | NONE        | ON     | ON              |                        |          |     |     |           |        |           |        |         |
| 4TL-149 - 4     | F                                                                               | MOM OFF     | NONE   | ON              | 18                     | .75      | .5  | 11  | 6         | 4      | 2         | 10     | 8       |
| 4TL-149 - 5     | E, F, K, L, M, N                                                                | MOM ON      | OFF    | ON              |                        |          |     |     |           |        |           |        |         |
| 4TL-149 - 6     | F                                                                               | MOM ON      | NONE   | OFF             |                        |          |     |     |           |        |           |        |         |
| 4TL-149 - 7     | E, L, N                                                                         | MOM ON      | OFF    | MOM ON          |                        |          |     |     |           |        |           |        |         |
| 4TL-149 - 8     | F                                                                               | MOM ON      | NONE   | ON              |                        |          |     |     |           |        |           |        |         |
|                 |                                                                                 |             |        |                 |                        |          |     |     |           |        |           |        |         |
|                 |                                                                                 |             |        |                 |                        |          |     |     |           |        |           |        |         |
| 4TL-149 - 5I    | E                                                                               | NONE        | ON     | MOM ON          |                        |          |     |     |           |        |           |        |         |
| 4TL-149 - 6I    | E                                                                               | MOM ON      | OFF    | NONE            |                        |          |     |     |           |        |           |        |         |

|                                                                  |                                                                |                                                                    |                                                                |                                                     |
|------------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------|
| "A"<br>LOCKED IN THREE POSITIONS                                 | "B"<br>LOCKED IN CENTER AND EXTREME POSITION (KEYWAY SIDE)     | "D"<br>LOCKED OUT OF CENTER POSITION                               | "E"<br>LOCKED IN CENTER POSITION                               | "F"<br>LOCKED IN EXTREME POSITION (OPPOSITE KEYWAY) |
| "G"<br>LOCKED IN EXTREME POSITION (KEYWAY SIDE)                  | "H"<br>LOCKED OUT OF CENTER AND EXTREME POSITION (KEYWAY SIDE) | "J"<br>LOCKED OUT OF CENTER AND EXTREME POSITION (OPPOSITE KEYWAY) | "K"<br>LOCKED IN CENTER AND EXTREME POSITION (OPPOSITE KEYWAY) | "L"<br>LOCKED OUT OF EXTREME POSITION (KEYWAY SIDE) |
| "M"<br>LOCKED OUT OF AND INTO EXTREME POSITION (OPPOSITE KEYWAY) | "N"<br>LOCKED OUT OF EXTREME POSITION (OPPOSITE KEYWAY)        | "P"<br>LOCKED OUT OF AND INTO EXTREME POSITION (KEYWAY SIDE)       |                                                                |                                                     |



| CIRCUIT MADE WITH TOGGLE LEVER IN |        |                 |
|-----------------------------------|--------|-----------------|
| KEYWAY SIDE                       | CENTER | OPPOSITE KEYWAY |
|                                   |        |                 |



SCALE FULL  
DO NOT SCALE PRINT  
UNLESS OTHERWISE NOTED  
DIMENSIONS ARE IN INCHES  
**TOLERANCES ARE:**  
ONE PLACE (.0)  
TWO PLACE (.00)  
THREE PLACE (.000)  
ANGLES  
WEIGHT