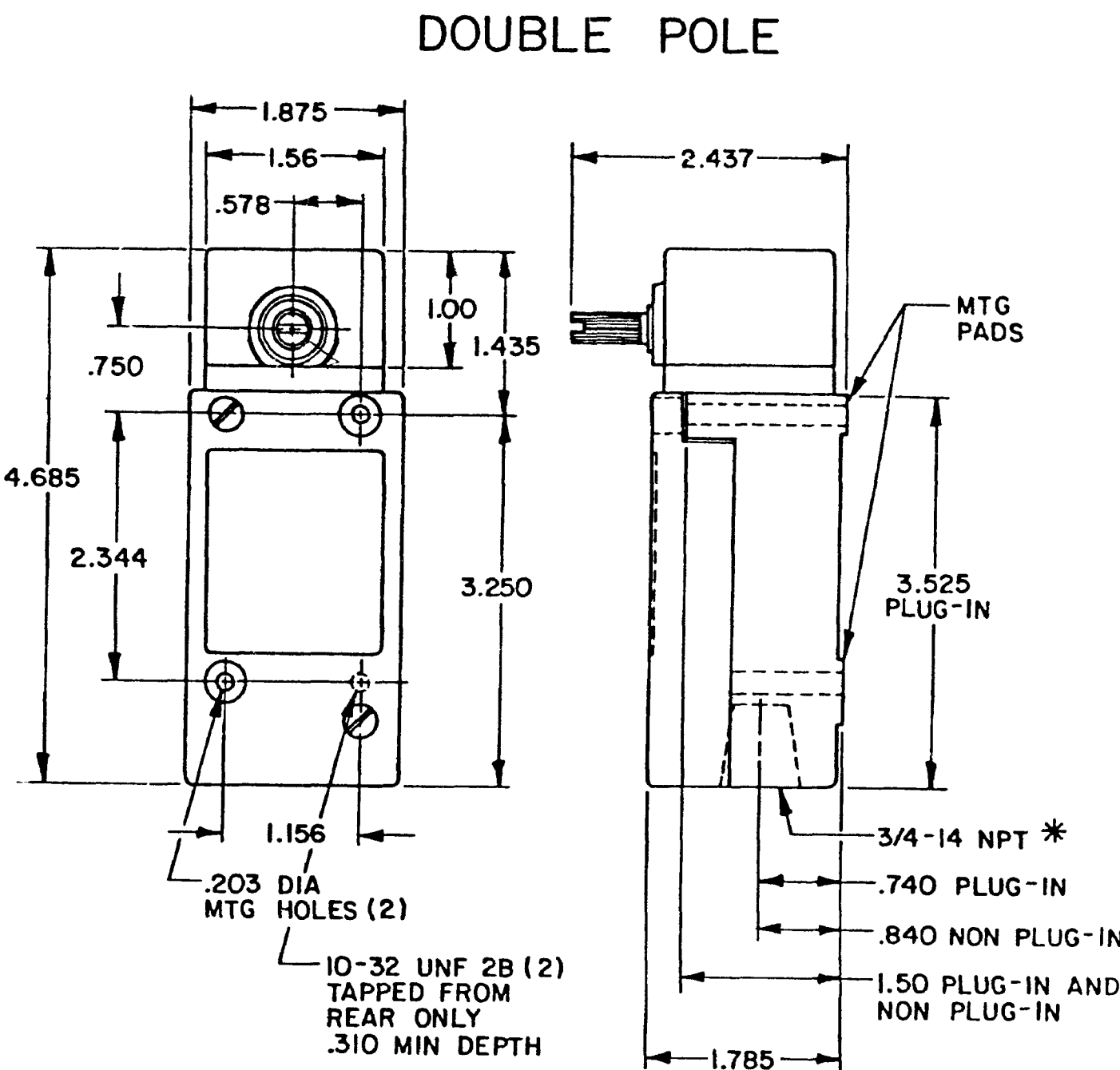


[illegible]

TYPE: LSA2, LSH2, LSM2, LSN2, LSP2, LSR2  
LSA4, LSH4, LSM4, LSN4, LSP4, LSR4

OPERATING DATA-SIDE ROTARY

INITIAL POSITION

P.T.

O.T.

D.T.

R.T.

DIFFERENTIAL TRAVEL

OVERTRAVEL

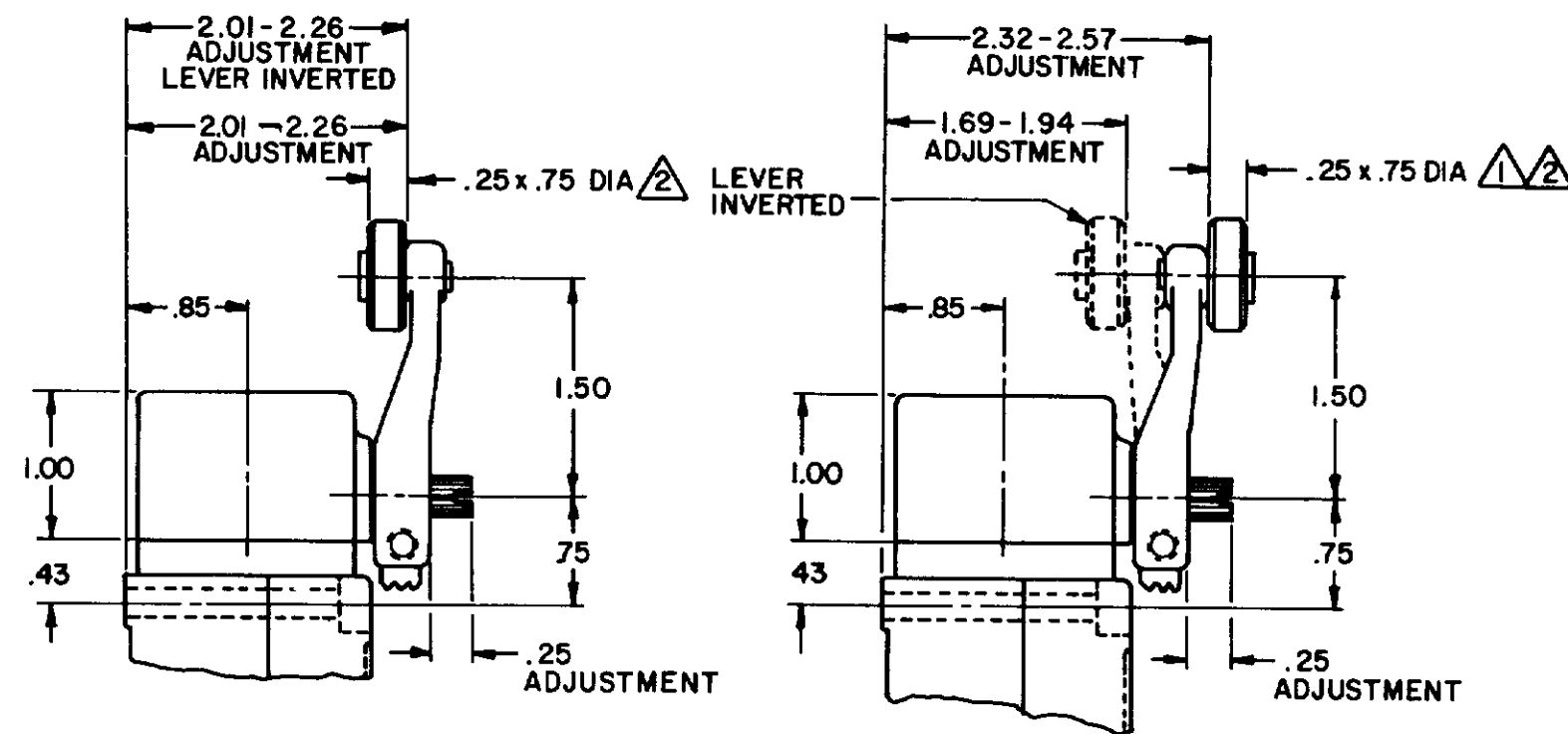
RELEASE TRAVEL

Technical drawing of a rectangular panel with the following dimensions and labels:

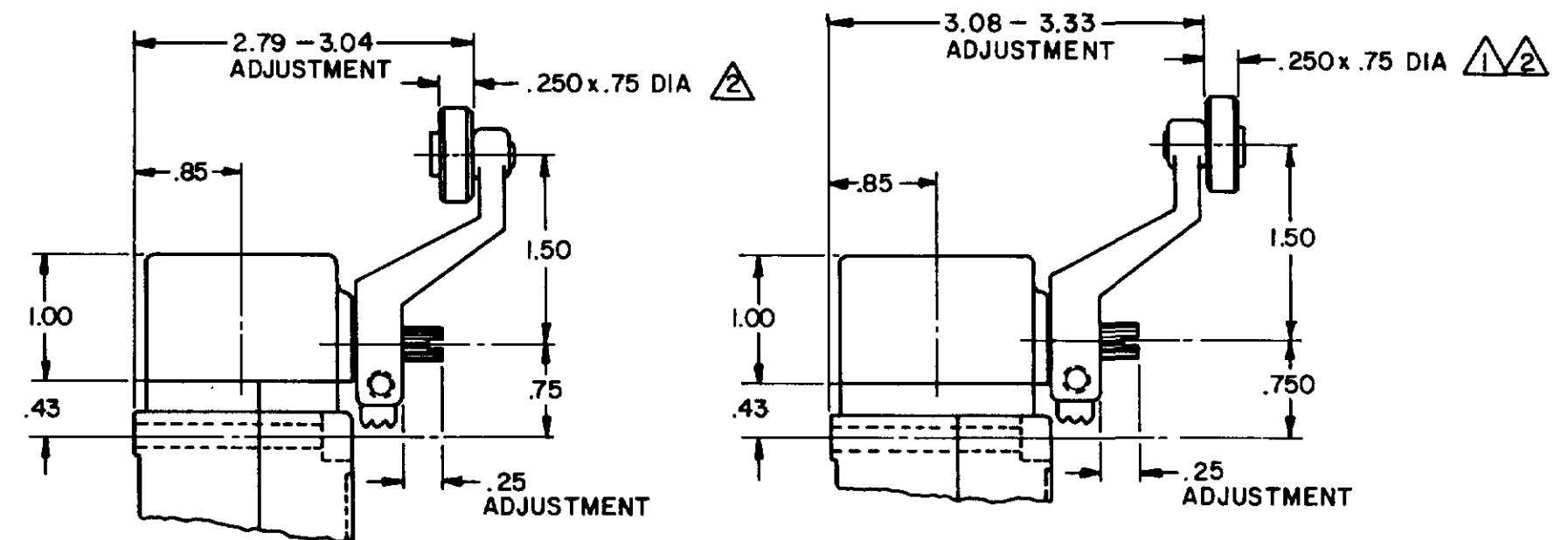
- Overall width: 1.156
- Overall height: 2.344
- Inner rectangular opening height: 2.250
- Labels:
  - SEAL GASKET (pointing to the top edge)
  - .500 DIA HOLE (.625 DIA MAX PANEL HOLE RECOMMENDED) (pointing to a hole in the top edge)
  - NO CONDUIT HOLE (pointing to a hole in the bottom edge)

|                                                                                                                                                                                     |                          |                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------|
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| <b>MICRO SWITCH</b><br>a Honeywell Division<br>FED. MFG. CODE 91929                                                                                                                 | <b>SWITCH - ENCLOSED</b> | CATALOG LISTING<br><b>LSA-LSW SERIES</b> |
|                                                                                                                                                                                     |                          | <b>CHART 1</b>                           |

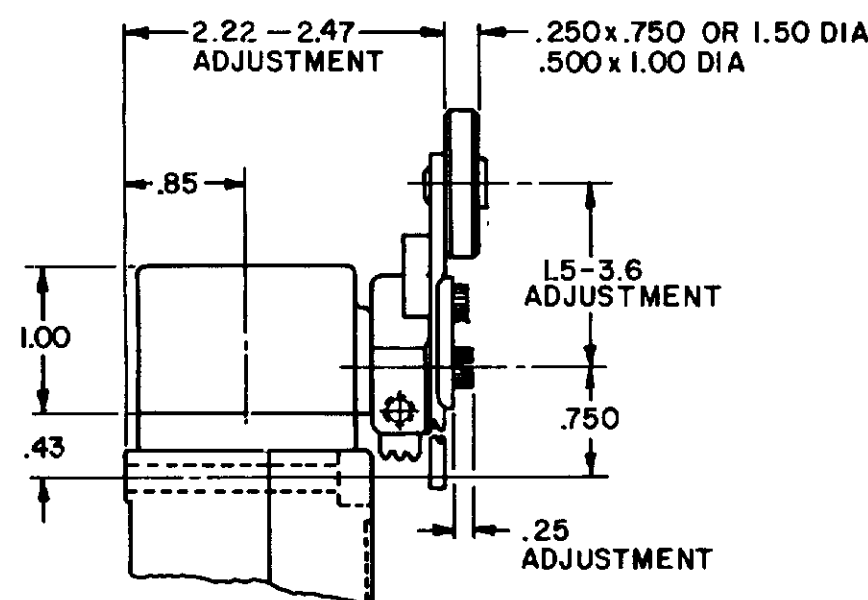
# SIDE ROTARY CAM TRACKING



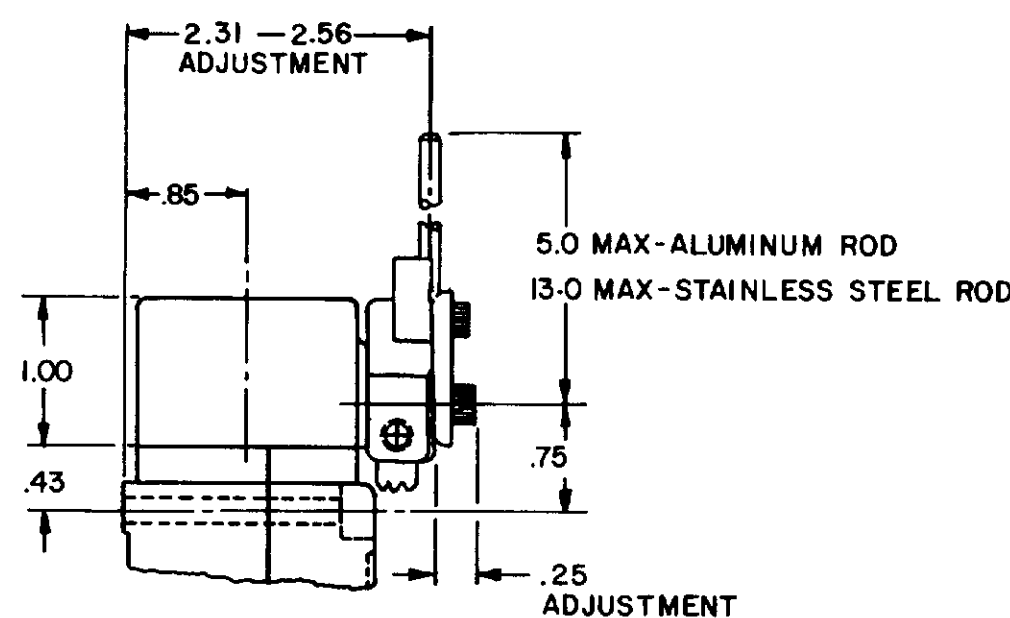
LSZ51 TYPE LEVERS



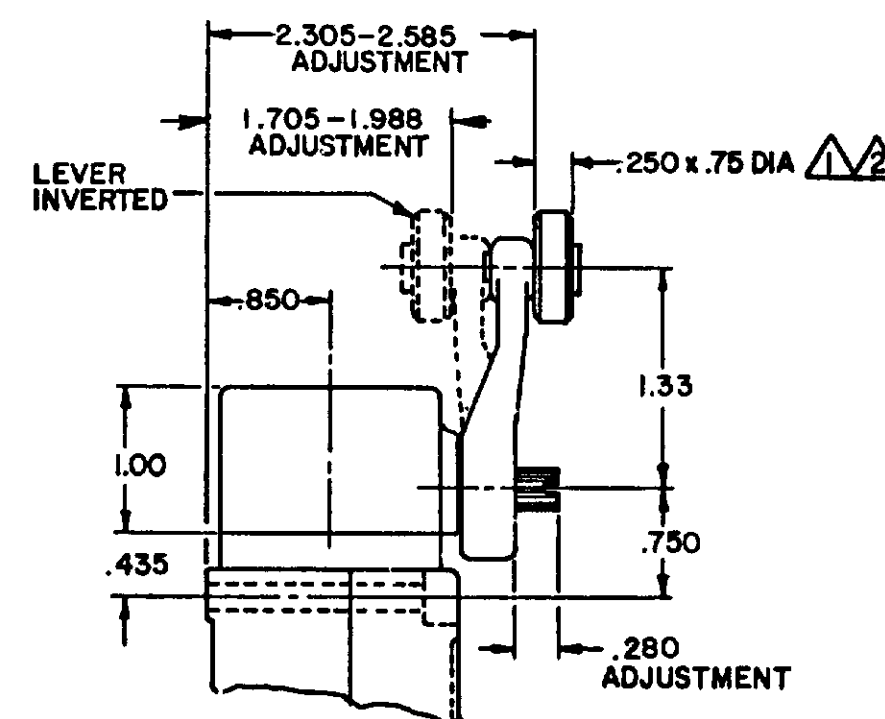
LSZ55 TYPE LEVERS



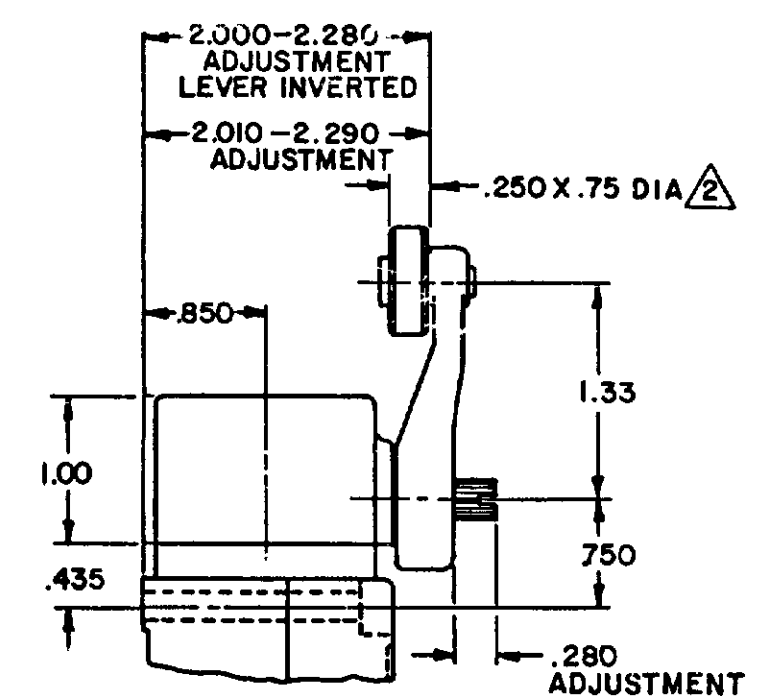
LSZ52 TYPE LEVER



LSZ54 TYPE LEVER



OPEN MOUNTED ROLLER



CLOSED MOUNTED ROLLER

LSZ59 TYPE LEVERS

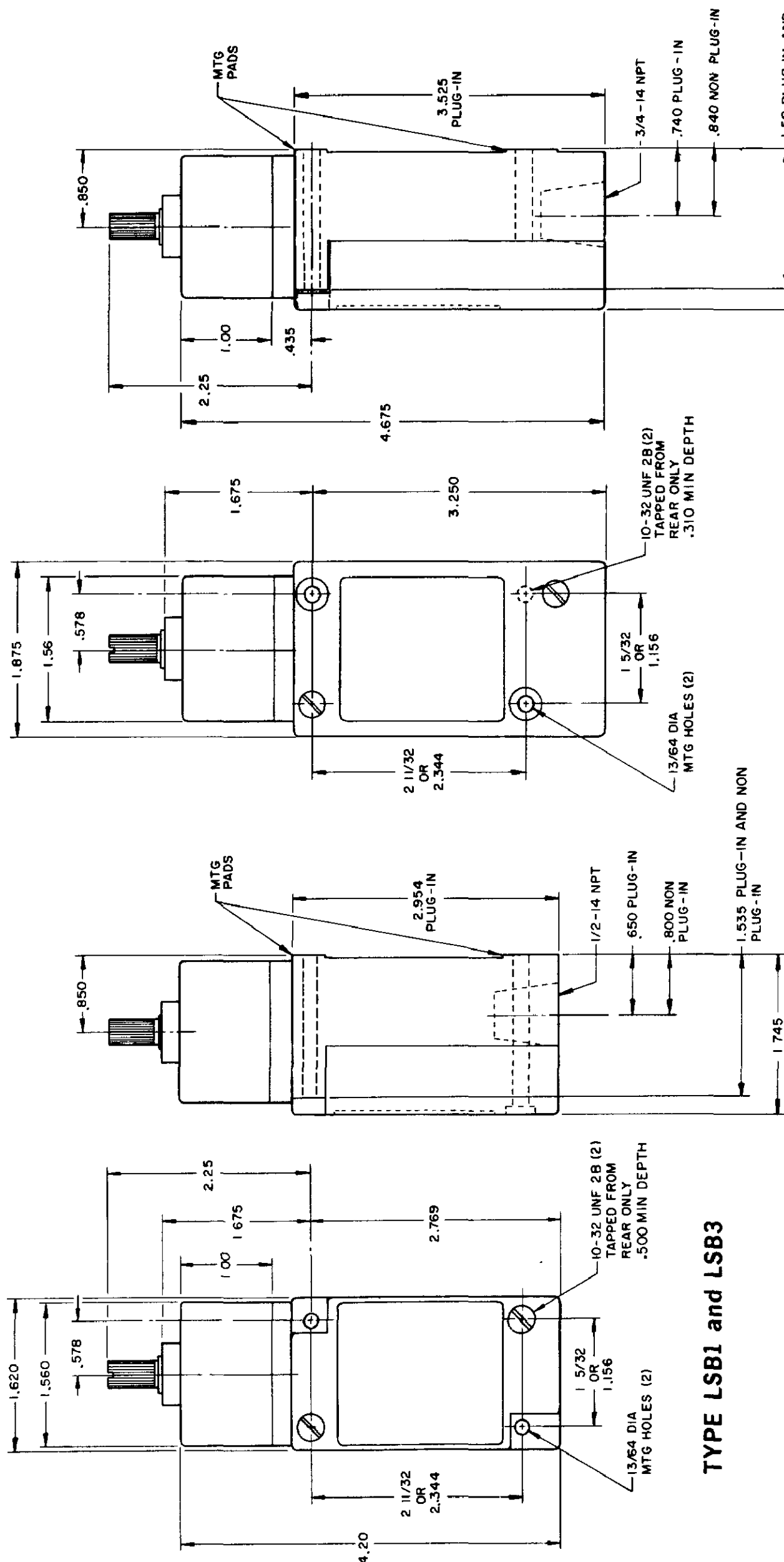
- NOTES
- 1 ALSO AVAILABLE IN Ø.250 X 1.500 NYLON, BUT LEVER CANNOT BE INVERTED
  - 2 FOR ADDITIONAL ROLLER WIDTHS AND/OR DIAMETERS REFER TO "M" DRAWING
  - 3 - FOR ADDITIONAL TYPES OF ROLLERS AND LEVERS REFER TO LSZ CHART 1 "M" DRAWING



TOP ROTARY

SINGLE POLE

DOUBLE POLE



TYPE LSB1 and LSB3

TYPE LSB2 and LSB4  
LSB6 and LSB7 have 1/2 - 14 NPT  
CONDUIT HOLE

|                         | SINGLE POLE | DOUBLE POLE |
|-------------------------|-------------|-------------|
| PRETRAVEL MAX           | 25°         | 25°         |
| OVERTRAVEL MIN          | 110°        | 110°        |
| DIFFERENTIAL TRAVEL MAX | 10°         | 12°         |
| OPERATING TORQUE MAX    | 2 5 IN. LBS | 2 5 IN. LBS |
| TOTAL TRAVEL (REF)      | 135°        | 135°        |

ELECTRICAL RATINGS

| A.C. VOLTAGE | AMPS AT 35 POWER FACTOR |       |             |       |
|--------------|-------------------------|-------|-------------|-------|
|              | SINGLF POLE             |       | DOUBLE POLE |       |
|              | MAKE                    | BREAK | MAKE        | BREAK |
| 120          | 60                      | 6     | 30          | 3     |
| 240          | 30                      | 3     | 15          | 1.5   |
| 480          | 15                      | 1.5   | 7.5         | 75    |
| 600          | 12                      | 1.2   | 6           | 6     |

| D. C. VOLTAGE | MAKE & BREAK<br>INDUCTIVE |      | RESISTIVE |
|---------------|---------------------------|------|-----------|
|               |                           |      |           |
| 120           | 0.25                      | 0.80 |           |
| 240           | 0.15                      | 0.40 |           |

ELECTRONIC DUTY BASIC SWITCH  
10 AMP CONT

| VOLTAGE        |  | 30 WATT |
|----------------|--|---------|
| 5 AC OR DC MIN |  |         |
| 600 AC         |  |         |
| 240 DC         |  |         |

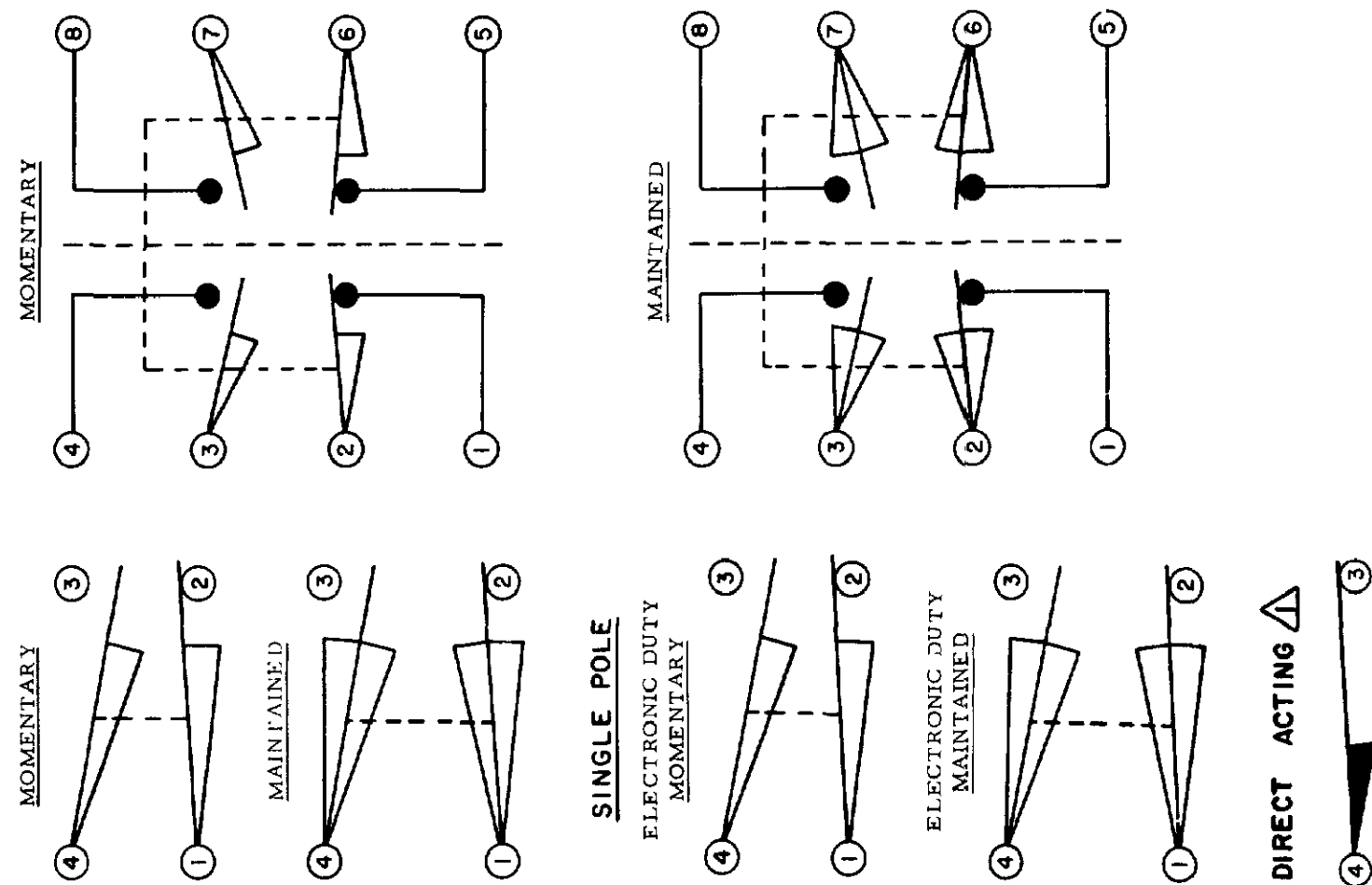
DIRECT ACTING (ALSO RATED AT A.C. 10  
AMP CONT.)

| D. C. VOLTAGE | MAKE AND BREAK AMPS |  | RESISTIVE |
|---------------|---------------------|--|-----------|
|               | INDUCTIVE           |  |           |
| 30            | 4.2                 |  | 4.2       |
| 120           | 1.1                 |  | 1.1       |
| 240           | .55                 |  | .55       |

WIRING BASIC SWITCH  
(SAME POLARITY MUST BE OBSERVED FOR EACH POLE)

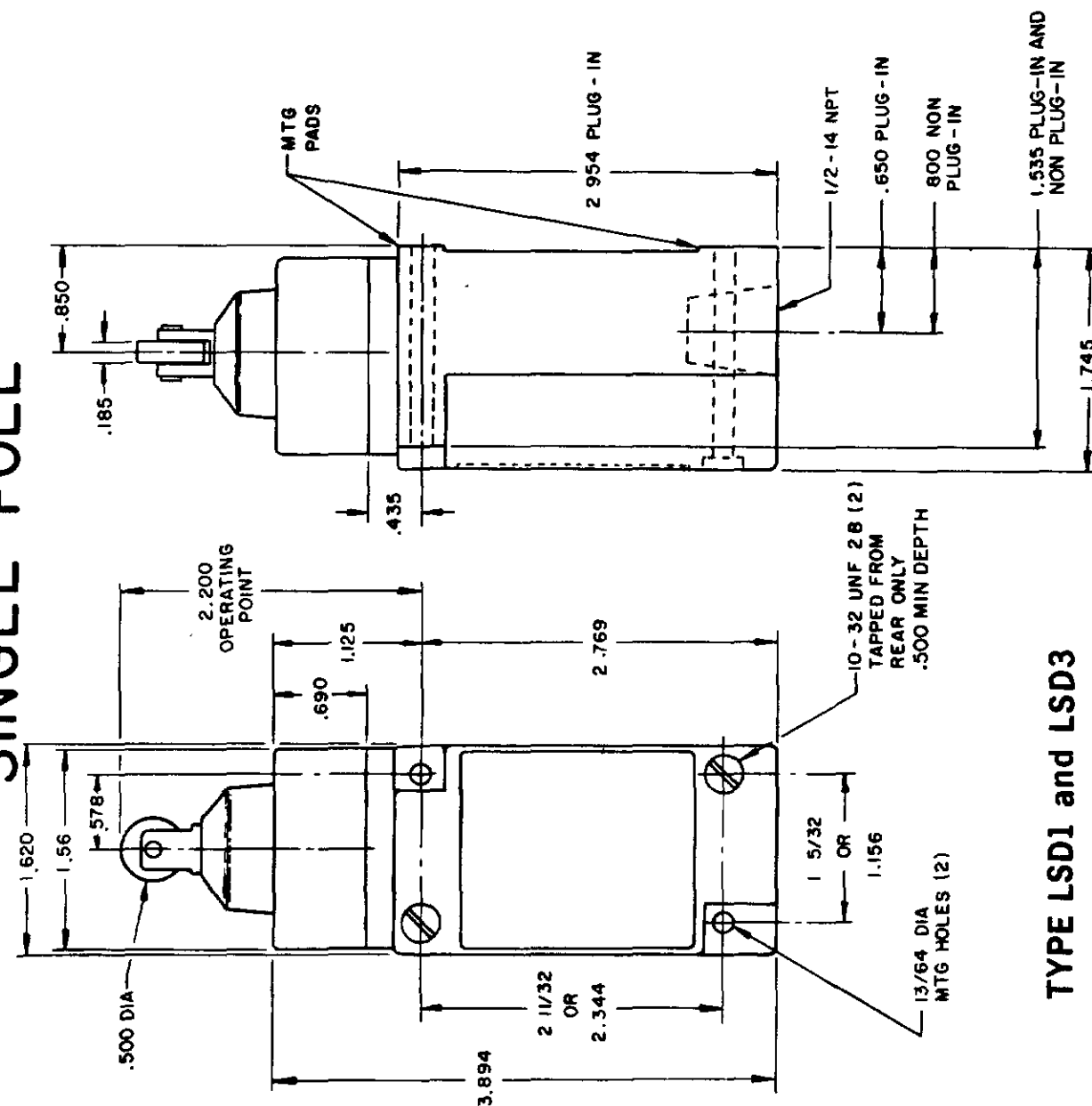
DOUBLE POLE

SINGLE POLE



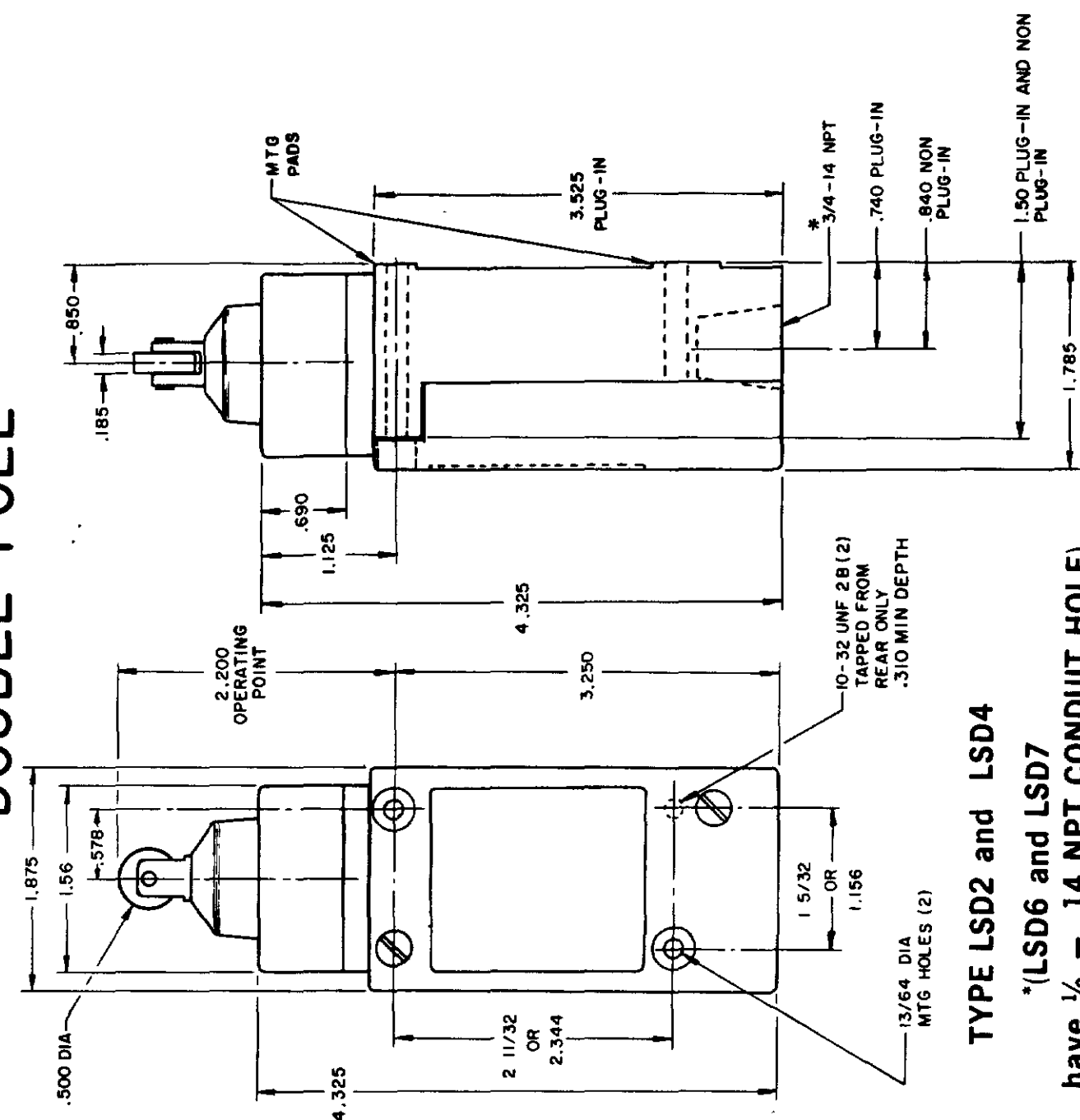
NOTES  
Δ DIFFERENTIAL TRAVEL ON ALL OPERATING  
CHARACTERISTICS NOT APPLICABLE

# SINGLE POLE



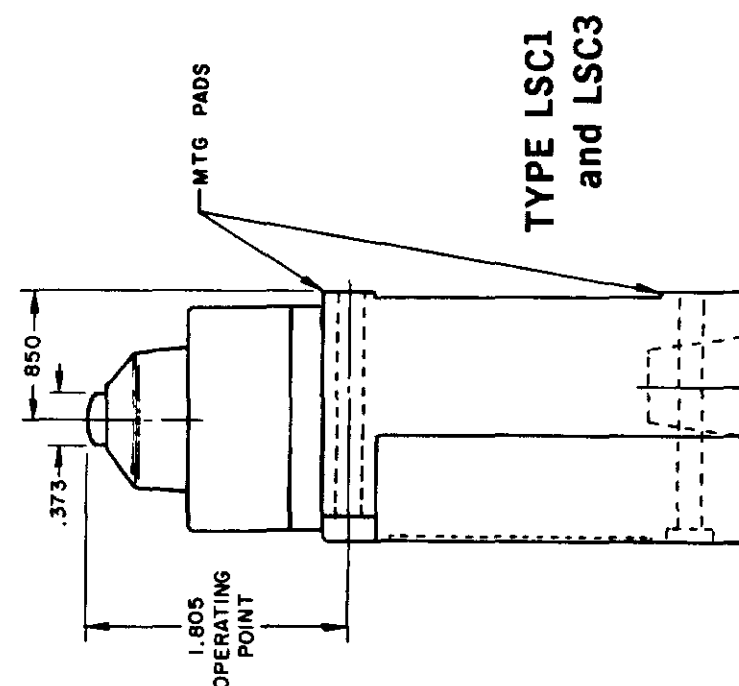
### TYPE LSD1 and LSD3

# DOUBLE POLE

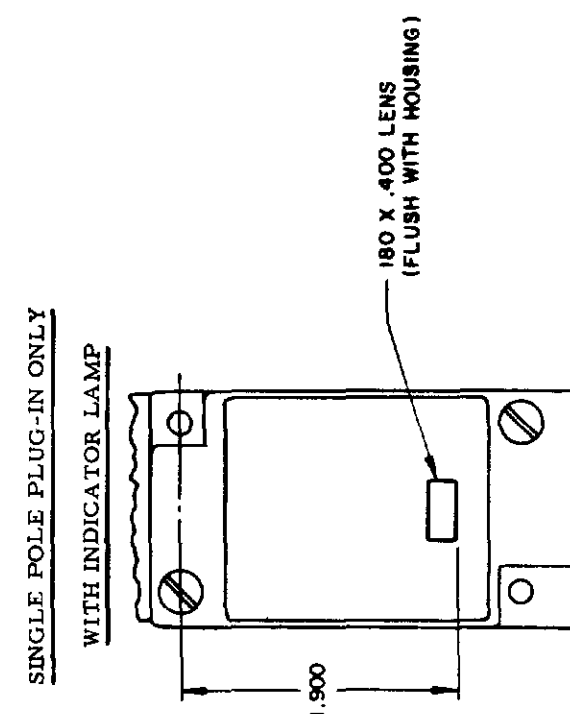


#### TYPE LSD2 and LSD4

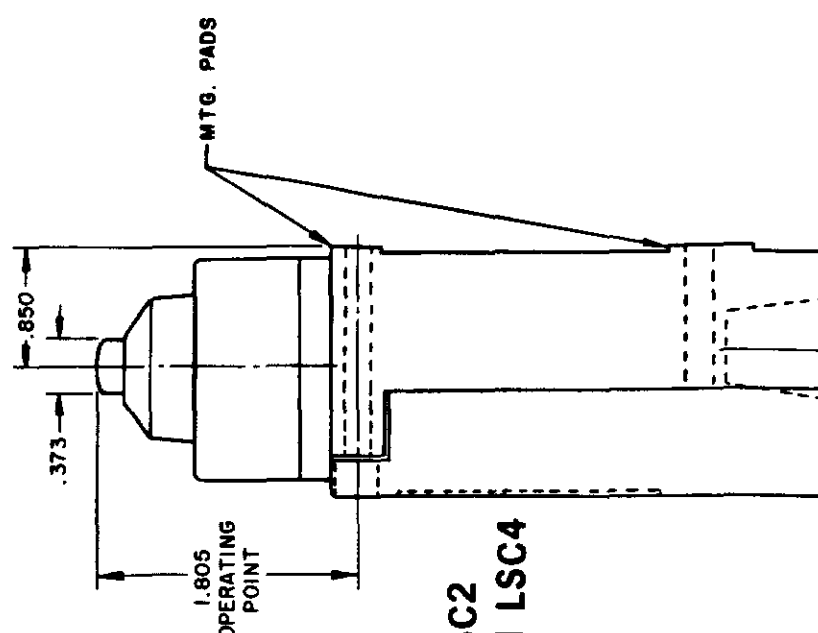
\*(LSD6 and LSD7 have 1/2 - 14 NPT CON



### TYPE LSC1 and LSC3

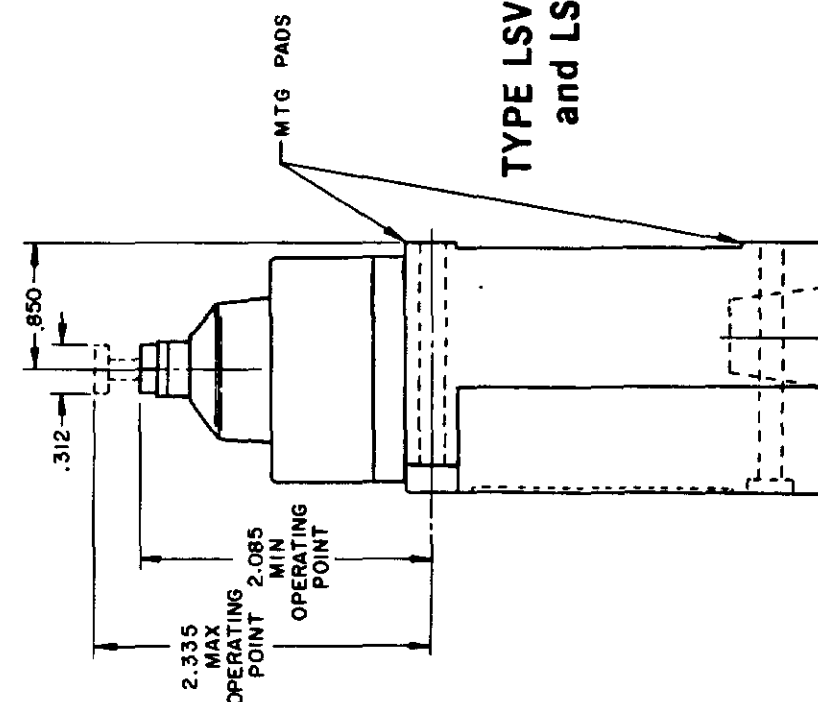


**TYPE LSC2  
and LSC4**

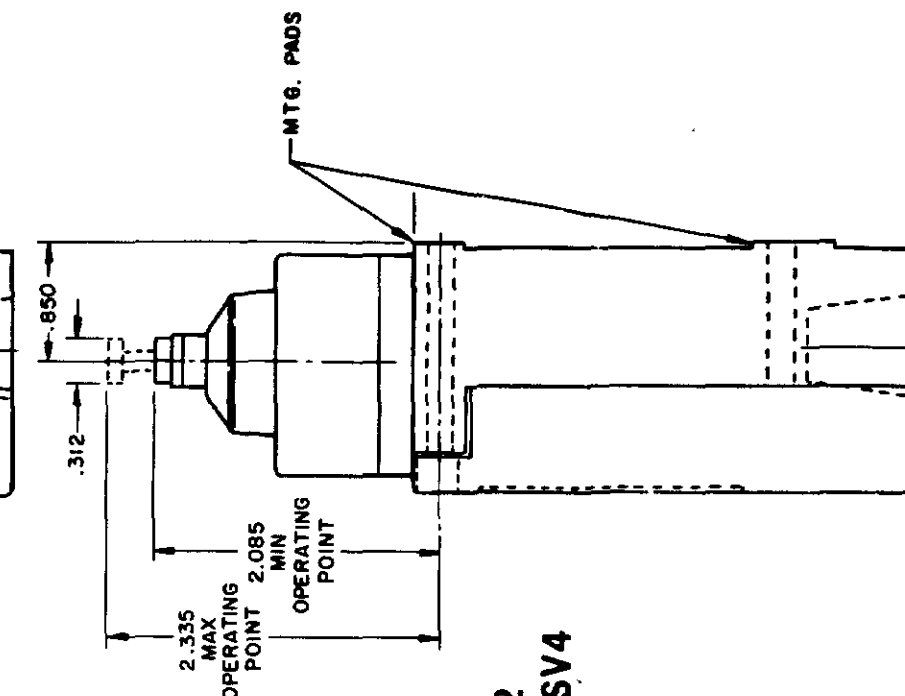


**120 LAMP VOLTAGE -  
TYPE LSC5, LSD5 or LSV5**

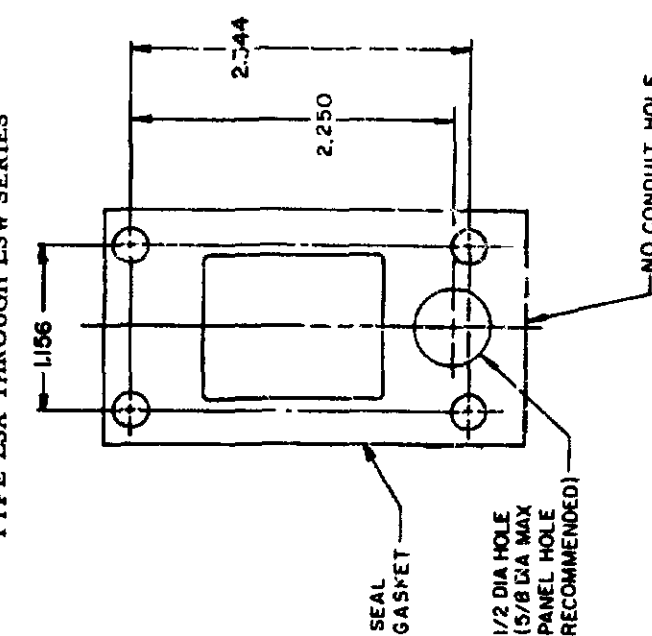
**240 LAMP VOLTAGE .  
TYPE LSC8, LSD8 or LSV8**



## TYPE LSV1 and LSV3



**TYPE LSV2  
and LSV4**



PAGE 4 OF 10

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SWITCH - ENCLOSED

CATALOG LISTING

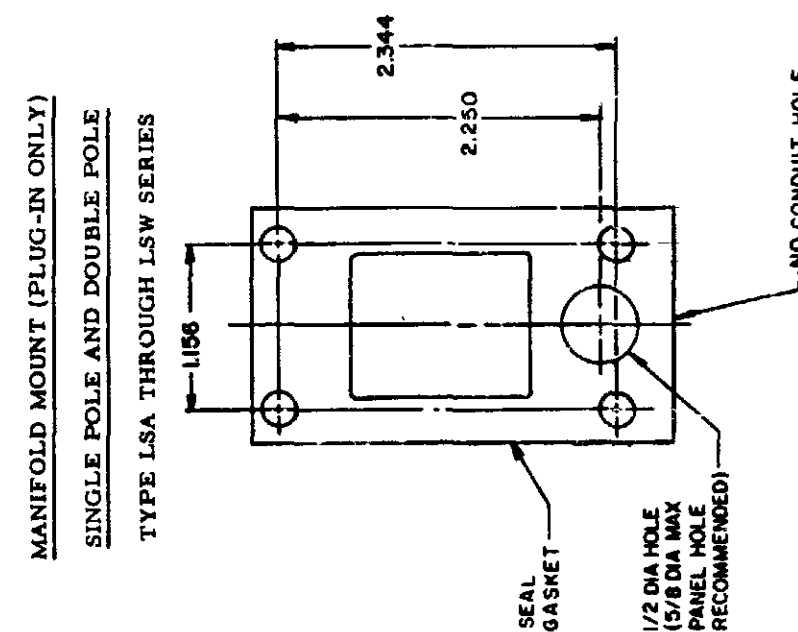
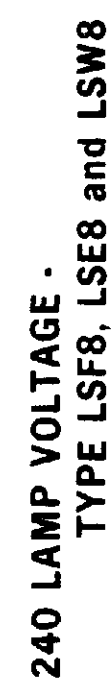
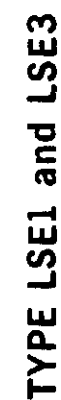
**LSA-LSW SERIES**

**CHART 1**

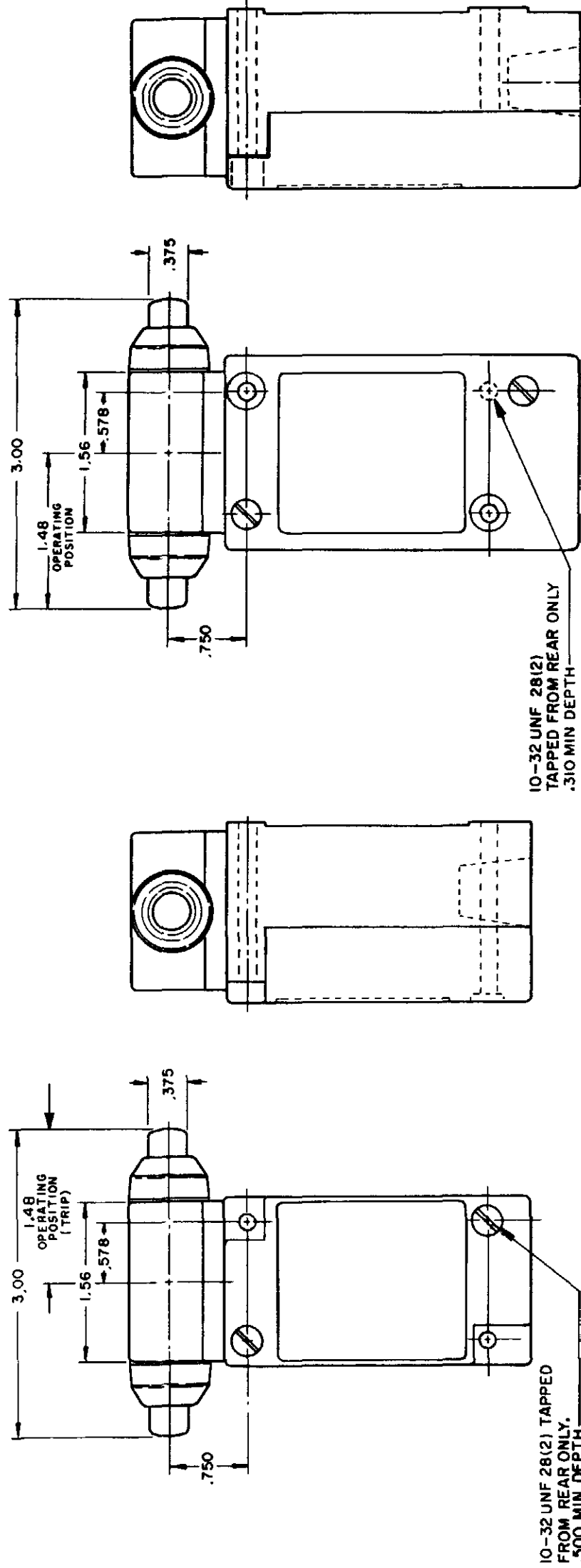
SCALE NONE

NO-NOT-SCALE-PRINT

SINGLE POLE DOUBLE POLE







TYPE LSG1 and LSG3

TYPE LSG2 and LSG4

INITIAL POSITION —  
(FREE POSITION) } PRETRAVEL  
OPERATING POINT } DIFFERENTIAL TRAVEL  
FULL TRAVEL — } OVERTRAVEL

TOP PLUNGER TYPES

OPERATING POINT GIVEN  
IN RELATION TO TOP  
MOUNTING HOLE

| CHARACTERISTICS             | LSC PLUNGER                  | LSD ROLLER PLUNGER           | LSV ADJ PLUNGER              | SEQUENCE BASIC                              |     |     |
|-----------------------------|------------------------------|------------------------------|------------------------------|---------------------------------------------|-----|-----|
|                             |                              |                              |                              | LSC                                         | LSD | LSV |
| PRETRAVEL (MAX)             | .070                         | .070                         | .070                         | 1ST STEP .070                               |     |     |
| DIFFERENTIAL TRAVEL (MAX)   | SINGLE POLE DOUBLE POLE .015 | SINGLE POLE DOUBLE POLE .020 | SINGLE POLE DOUBLE POLE .015 | 2ND STEP .016 MIN ADD'L                     |     |     |
| OVERTRAVEL (MIN)            | .190                         | .190                         | .190                         | .015 EACH STEP                              |     |     |
| OPERATING FORCE (MAX)       | 4 LBS                        | 4 LBS                        | 4 LBS                        | .170                                        |     |     |
| OPERATING POINT             | 1.805 ± .030                 | 2.200 ± .040                 | 2.085 MIN                    | 1ST STEP                                    |     |     |
| FULL OVERTRAVEL FORCE (MAX) | 7 LBS                        | 7 LBS                        | 7 LBS                        | 1.815±.030 2.210±.040 2.095 MIN / 2.345 MAX |     |     |

SIDE PLUNGER TYPES

OPERATING POINT GIVEN IN  
RELATION TO CENTER OF HEAD

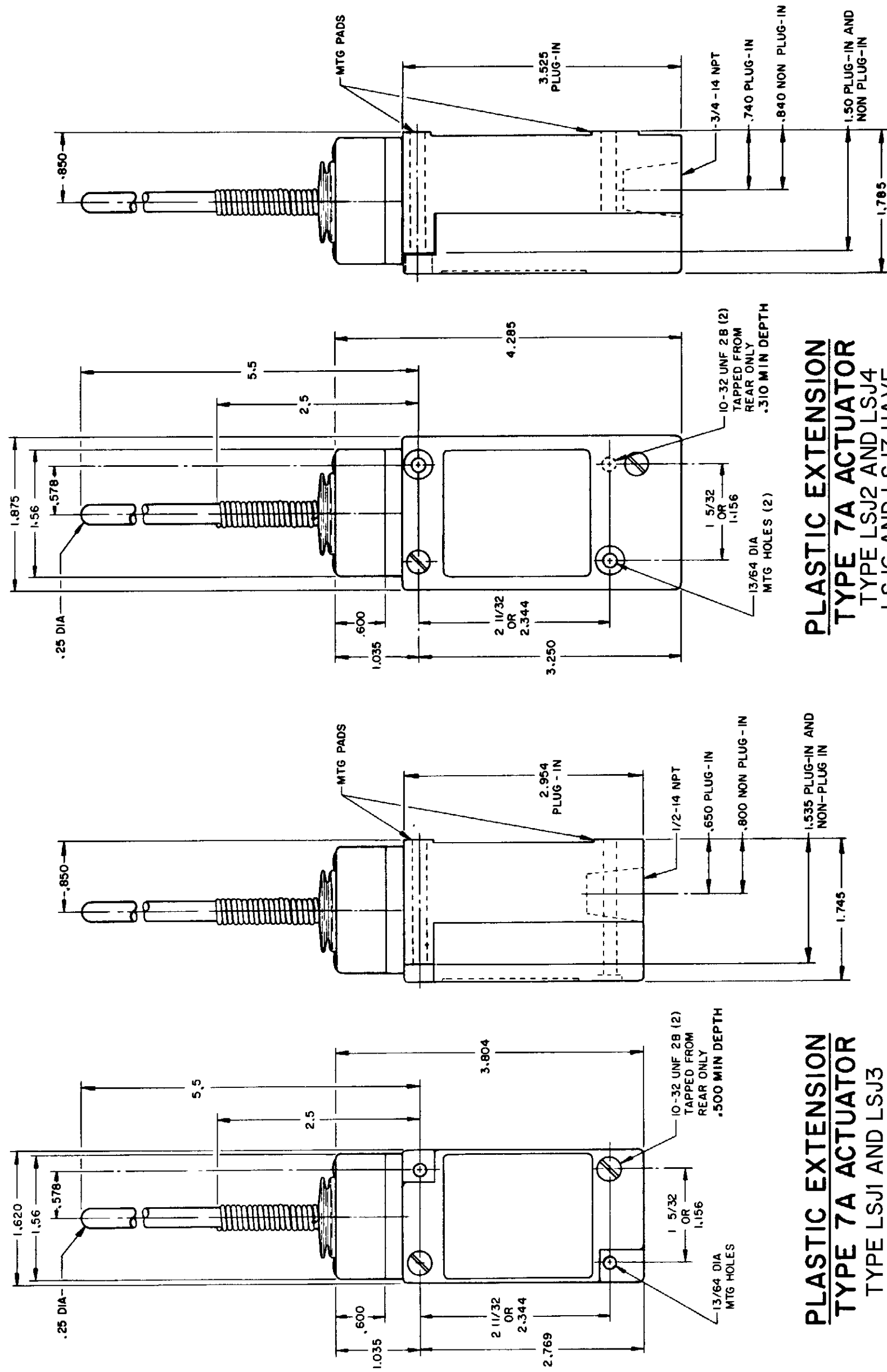
| CHARACTERISTICS             | LSE PLUNGER  | LSF ROLLER PLUNGER | LSW ADJ PLUNGER                     | SEQUENCE BASIC                              |     |     |
|-----------------------------|--------------|--------------------|-------------------------------------|---------------------------------------------|-----|-----|
|                             |              |                    |                                     | LSE                                         | LSF | LSW |
| PRETRAVEL (MAX)             | .100         | .100               | .170                                | 1ST STEP .100                               |     |     |
| DIFFERENTIAL TRAVEL (MAX)   | .045         | .045               | .090                                | 2ND STEP .020 MIN ADD'L                     |     |     |
| OVERTRAVEL (MIN)            | .190         | .190               | .080                                | .025 EACH STEP                              |     |     |
| OPERATING FORCE (MAX)       | 6 LBS        | 6 LBS              | 10 LBS                              | .170                                        |     |     |
| OPERATING POINT             | 1.300 ± .030 | 1.735 ± .040       | ADJUSTABLE FROM 1.615 MIN 1.865 MAX | 1ST STEP                                    |     |     |
| FULL OVERTRAVEL FORCE (MAX) | 6 LBS        | 6 LBS              | 10 LBS                              | 1.310±.030 1.745±.040 1.625 MIN / 1.875 MAX |     |     |



WOBBLE STICK

SINGLE POLE

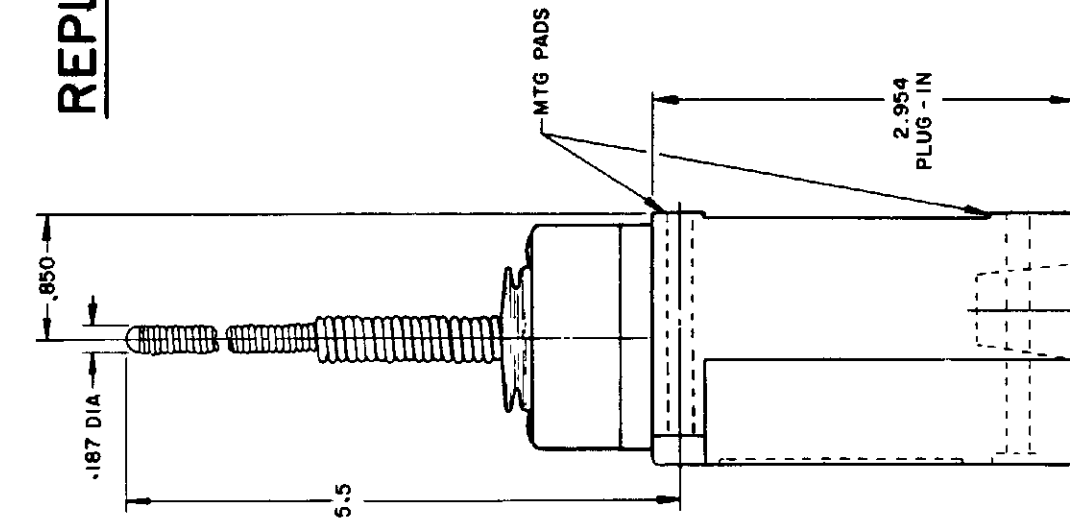
DOUBLE POLE



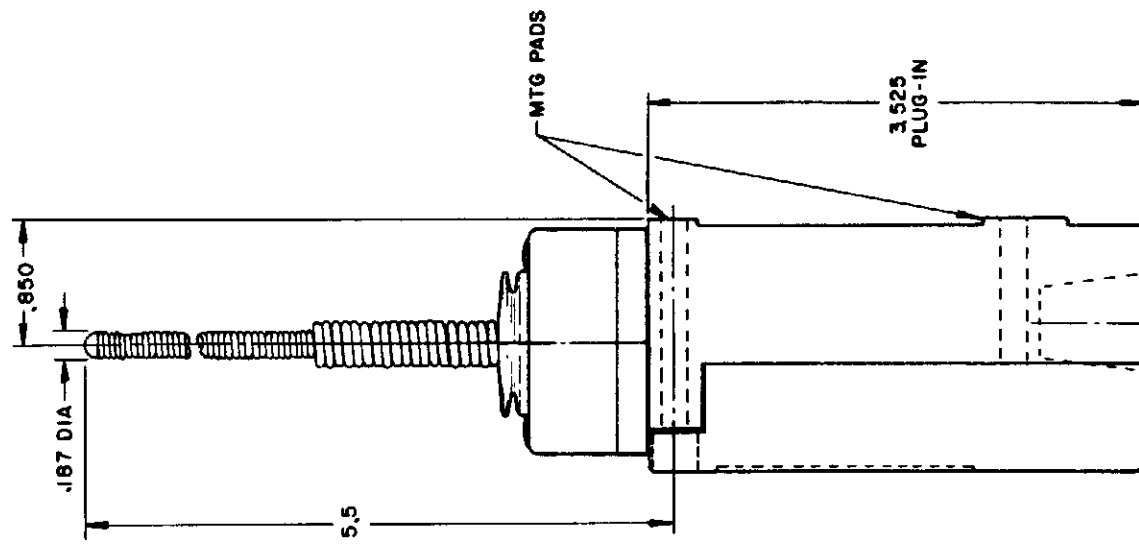
**PLASTIC EXTENSION**  
**TYPE 7A ACTUATOR**  
TYPE LSJ1 AND LSJ3

**PLASTIC EXTENSION**  
**TYPE 7A ACTUATOR**  
TYPE LSJ2 AND LSJ4  
LSJ6 AND LSJ7 HAVE  
1/2 - 14 NPT CONDUIT HOLE

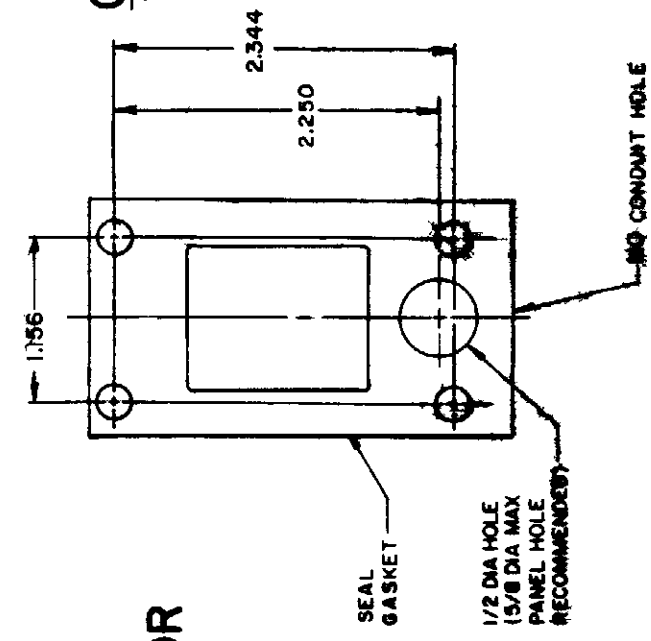
**REPLACEMENT ACTUATOR**  
**LSZ-4009**



**CABLE EXTENSION**  
**TYPE 7N ACTUATOR**



**CABLE EXTENSION**  
**TYPE 7 N ACTUATOR**



**REPLACEMENT ACTUATOR**  
**LSZ-40II**

120 LAMP VOLTAGE TYPE LSJ5  
240 LAMP VOLTAGE TYPE LSJ8  
24 LED VOLTAGE TYPE LSJ9

**SINGLE POLE PLUG-IN ONLY**  
**WITH INDICATOR LAMP**

—180 X 400 LENS  
(FLUSH WITH  
HOUSING)

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SWITCH - ENCLOSED

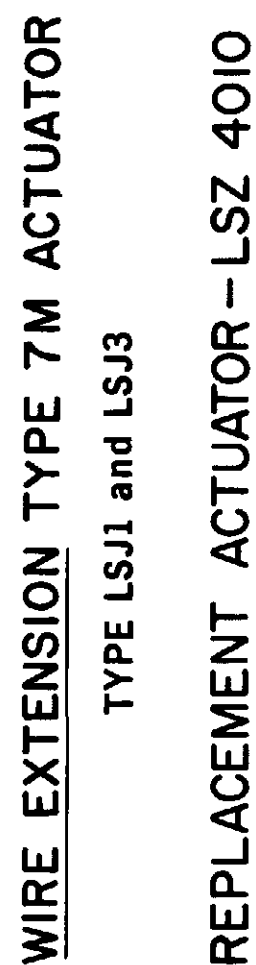
CATALOG LISTING

**LSA-LSW SERIES**

**CHART 1**

PAGE 7 OF 10

SCALE NONE  
DO NOT SCALE PRINT



# SINGLE POLE



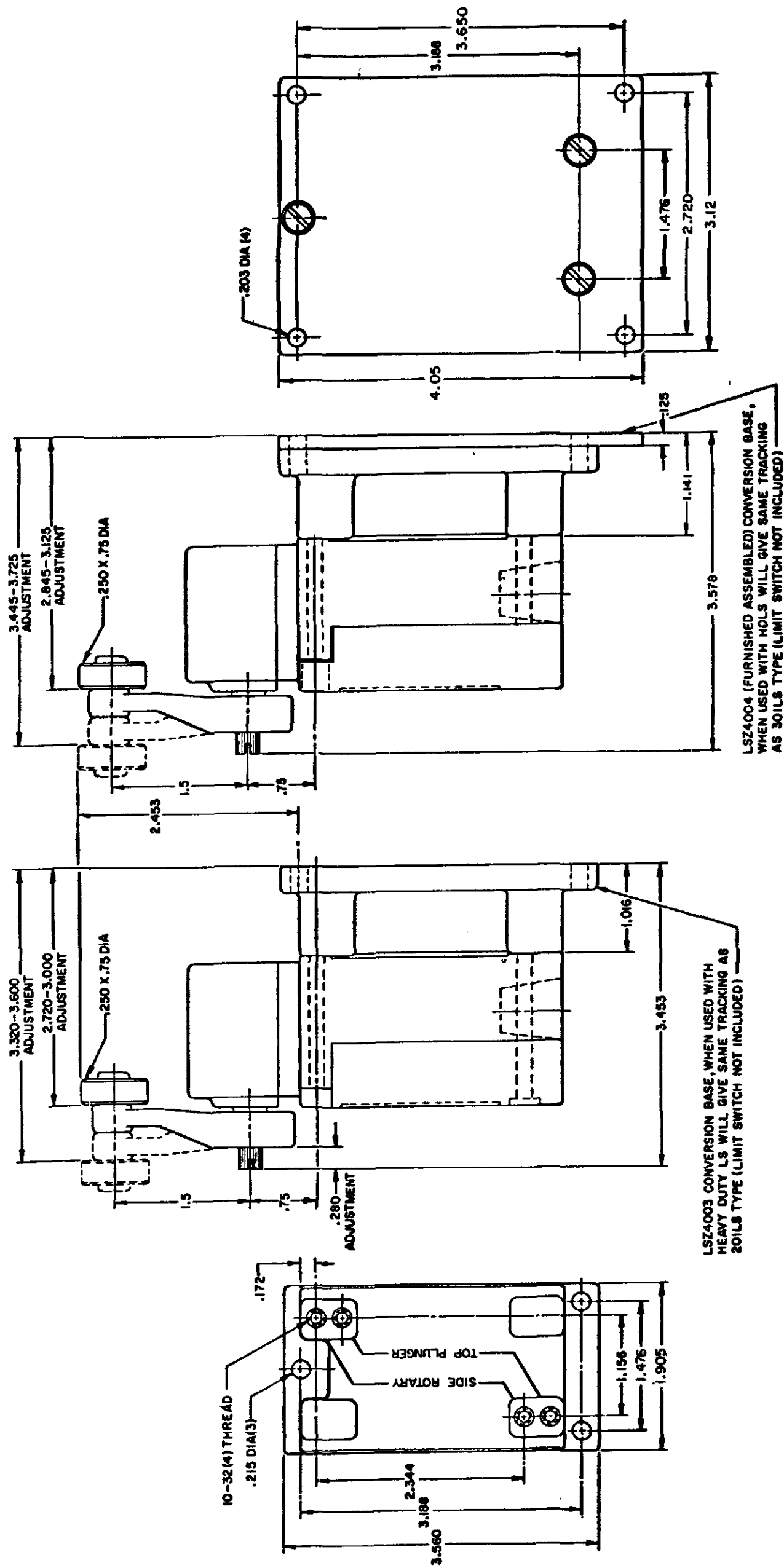
|                               | CAT. WHISKER | WOBBLE STICK |           |      |       |      |  |
|-------------------------------|--------------|--------------|-----------|------|-------|------|--|
|                               | 5 1/2" COIL  | 5 1/2" WIRE  | 1/4" WIRE | RDD. | CABLE | WIRE |  |
| PRETRAVEL (APPROX) IN. RADIUS | 2            | 2            | 4.5       | 1.0  | 1.5   | 4.0  |  |
| OPERATING FORCE-OZ (MAX)      | 7.0          | 5.0          | 3.0       | 10.0 | 7.0   | 5.0  |  |



# CONVERSION BASES

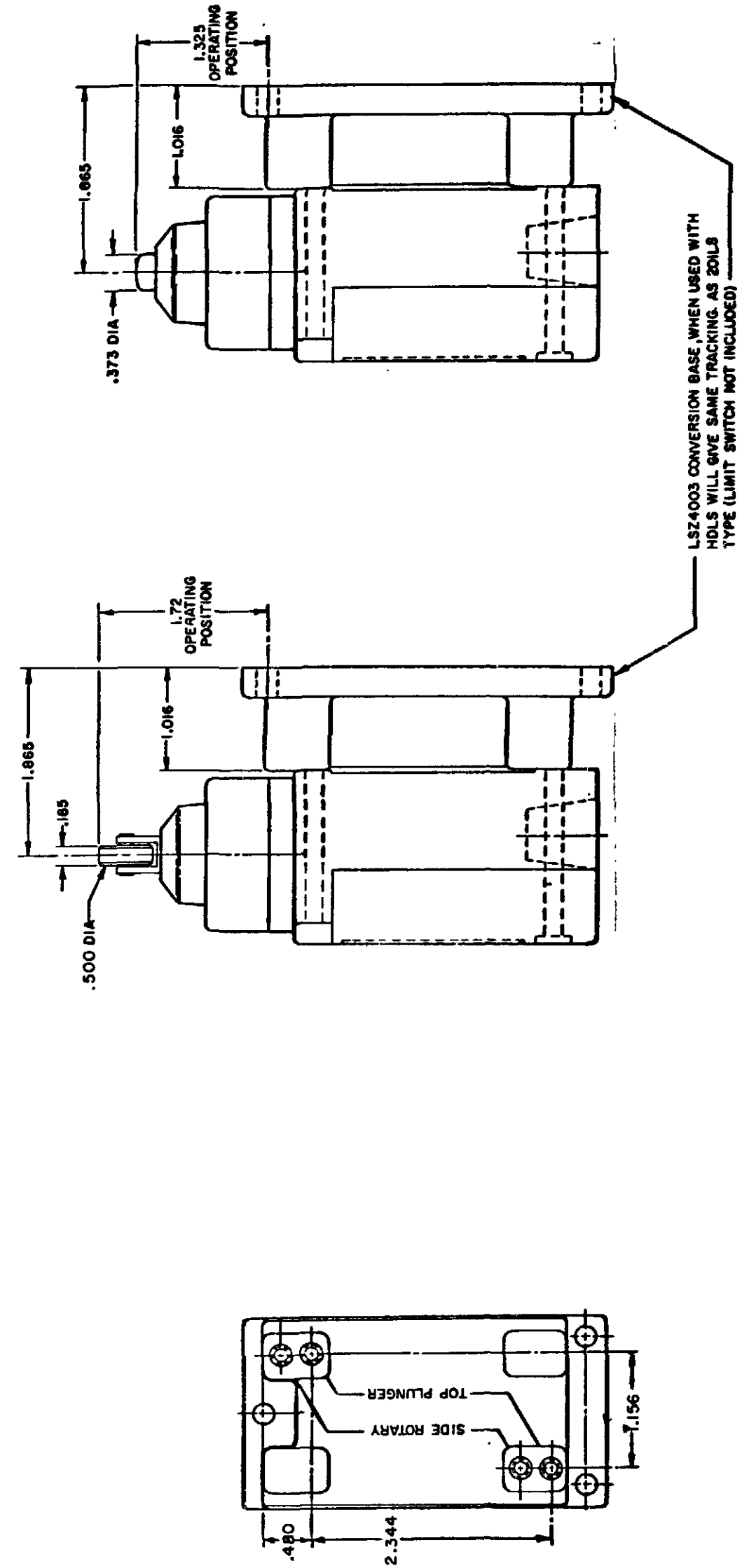
**SINGLE POLE  
(SIDE ROTARY)  
LSZ 4003**

**DOUBLE POLE  
(SIDE ROTARY)  
LSZ4004**



NOTE  
SEE OTHER PAGES OF LSA-LSW  
(M) DRAWING FOR DIMENSION OF LIMITS

# SINGLE POLE TOP PLUNGER



NOTE  
SEE OTHER PAGES OF LSA-LSW  
(M) DRAWING FOR DIMENSION OF  
LIMIT SWITCH

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SWITCH - ENCLOSED

|                 |
|-----------------|
| CATALOG LISTING |
| LSA-LSW SERIES  |
| CHART 1         |

SCALE FULL  
DO NOT SCALE PRINT

CODE: 1 SATISFACTORY 2 FAIR 3 DOUBTFUL 4 UNSATISFACTORY

| TEMPERATURE LIMITATIONS FOR STANDARD DEVICES |           |            |
|----------------------------------------------|-----------|------------|
| TYPES                                        | LOW LIMIT | HIGH LIMIT |
| LSA                                          | +10°F     | +250°F     |
| LSB                                          | +30°F     | +250°F     |
| LSC                                          | +10°F     | +200°F     |
| LSD                                          | +10°F     | +200°F     |
| LSE                                          | +10°F     | +200°F     |
| LSF                                          | +10°F     | +200°F     |
| LSG                                          | +30°F     | +200°F     |
| LSH                                          | +30°F     | +250°F     |
| LSJ                                          | +10°F     | +200°F     |
| LSK                                          | +10°F     | +200°F     |
| LSL                                          | +10°F     | +250°F     |
| LSM                                          | +30°F     | +250°F     |
| LSN                                          | +30°F     | +250°F     |
| LSP                                          | +10°F     | +250°F     |
| LSR                                          | +30°F     | +250°F     |
| LSV                                          | +10°F     | +200°F     |
| LSW                                          | +10°F     | +200°F     |
| LST                                          | +30 F     | +170°F     |
| LSS                                          | +30°F     | +170°F     |

SCALE