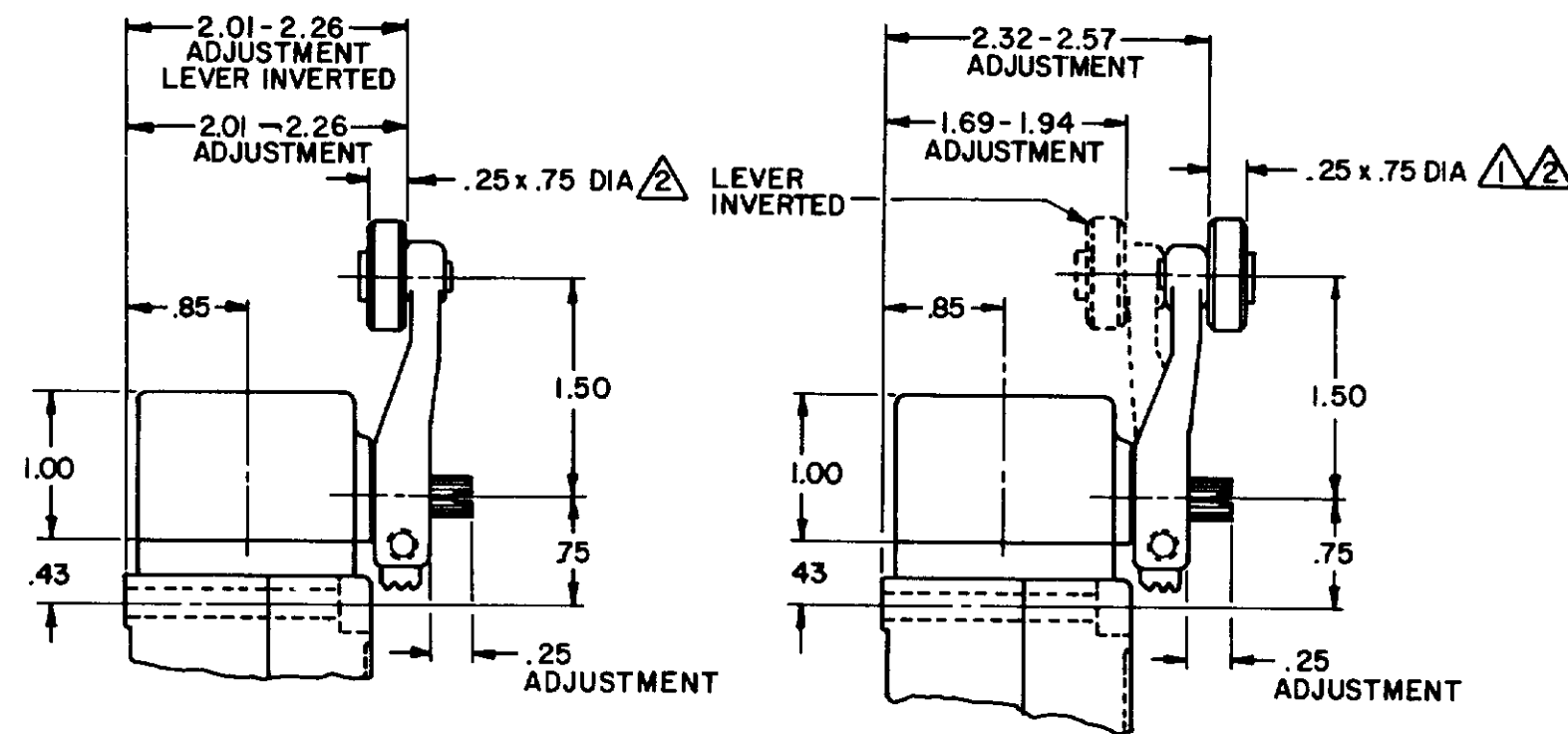
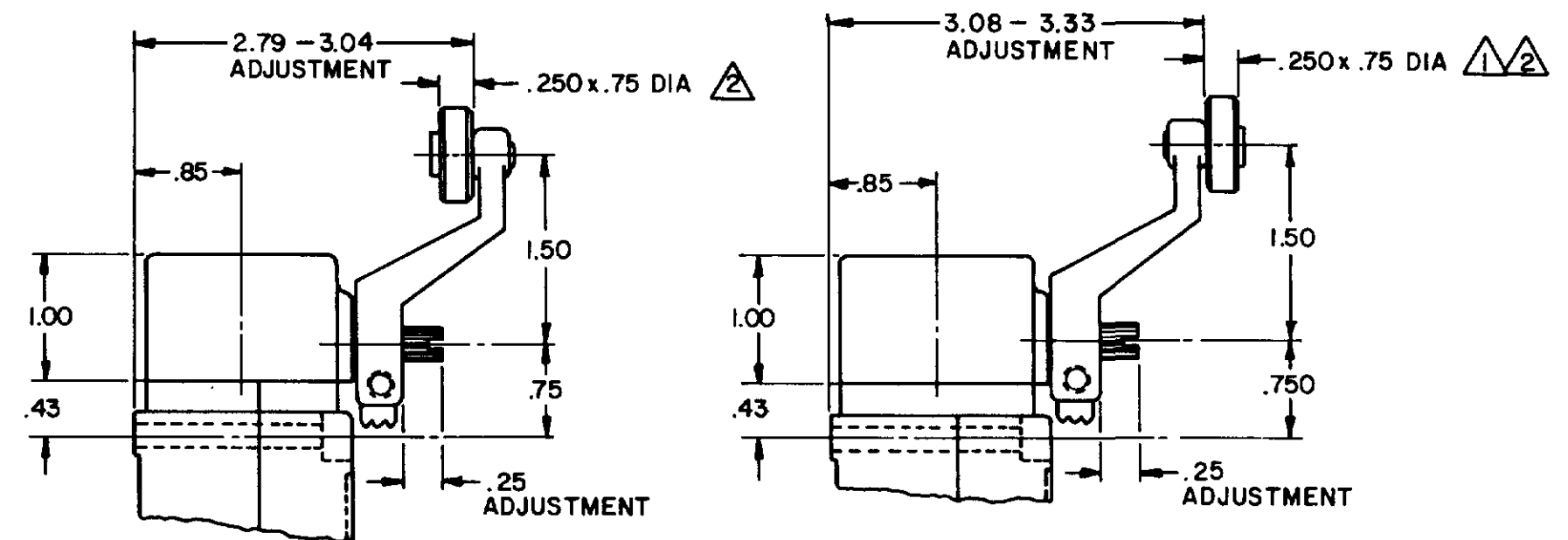


[illegible]

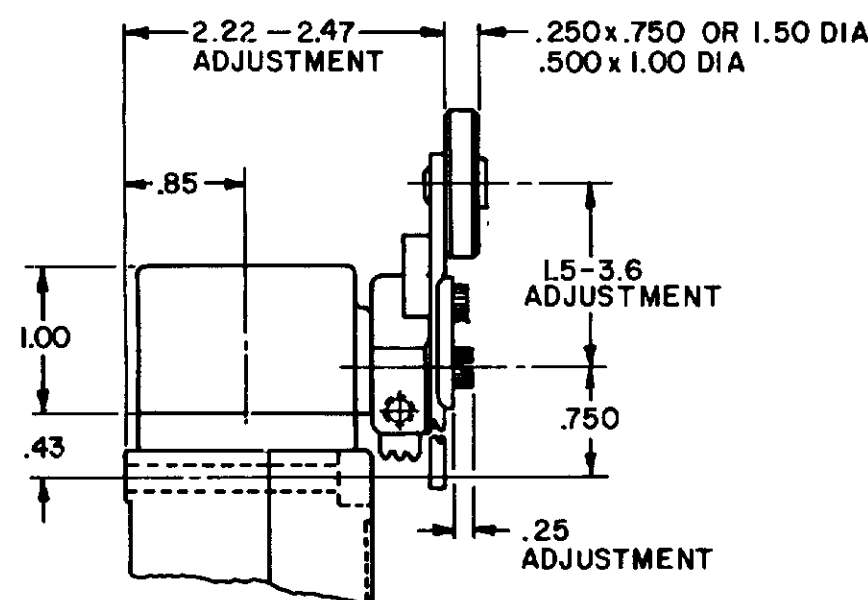
# SIDE ROTARY CAM TRACKING



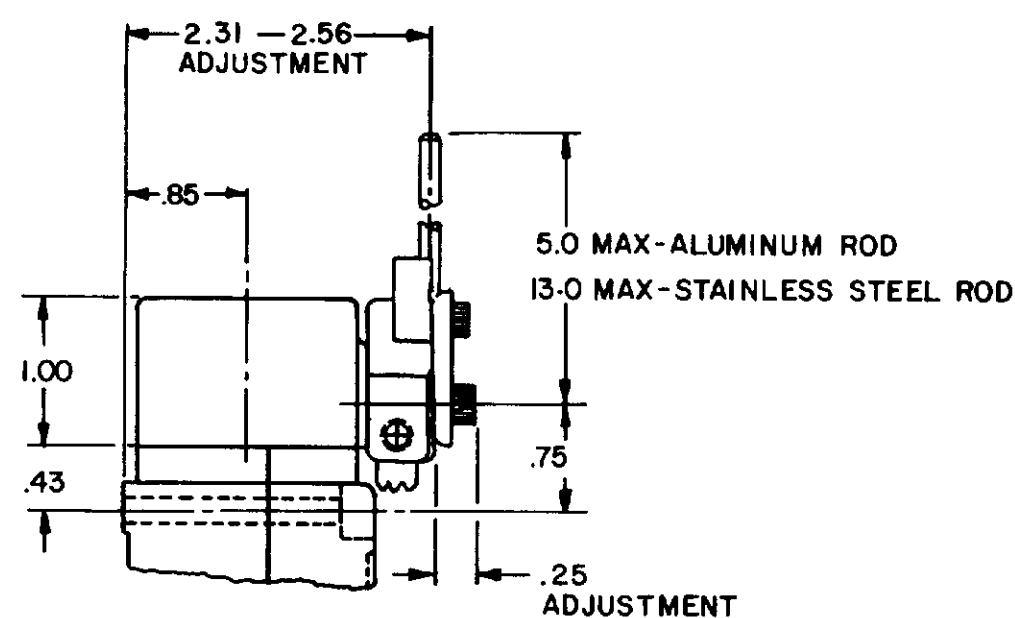
LSZ51 TYPE LEVERS



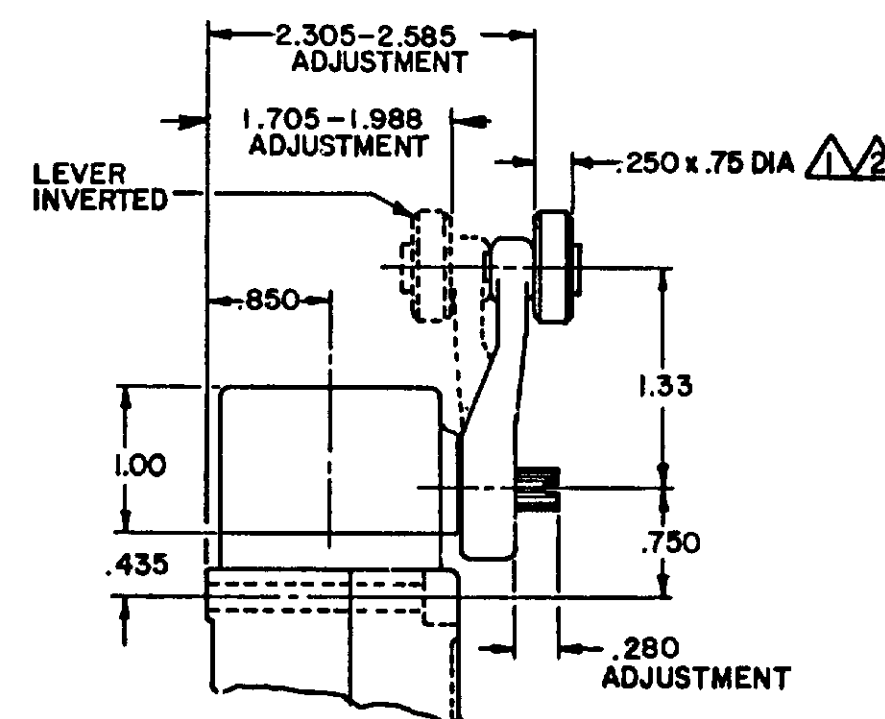
LSZ55 TYPE LEVERS



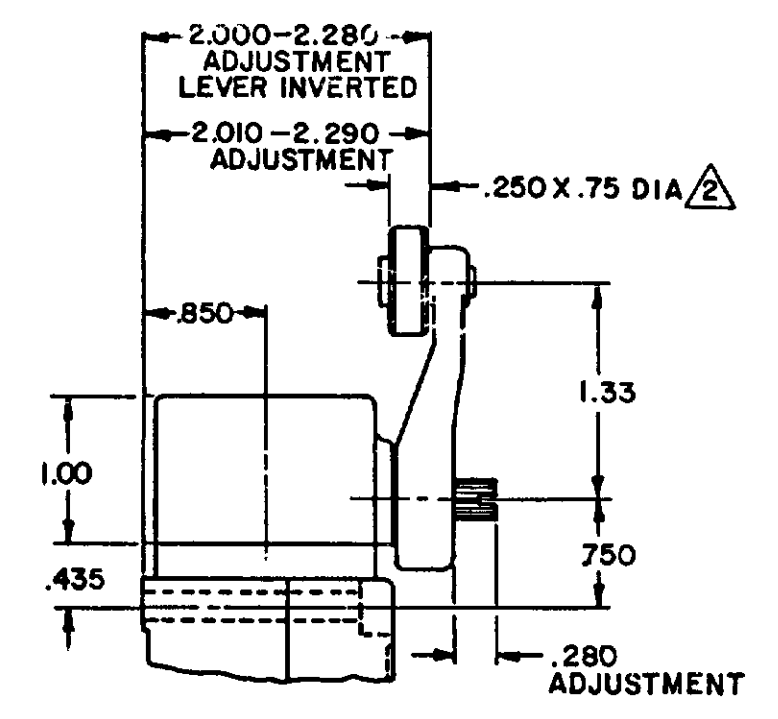
LSZ52 TYPE LEVER



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

CATALOG LISTING  
LSA-LSW SERIES CHART 1  
PAGE 2 OF 10  
REPLACES LSA-LSW SERIES  
10JUL07 RELEASE NO. CO-78498  
PSR  
CHECK  
11AUG04  
AK  
11JUL94  
JAF  
15JUN94  
MAM  
DRAWN  
MASTER

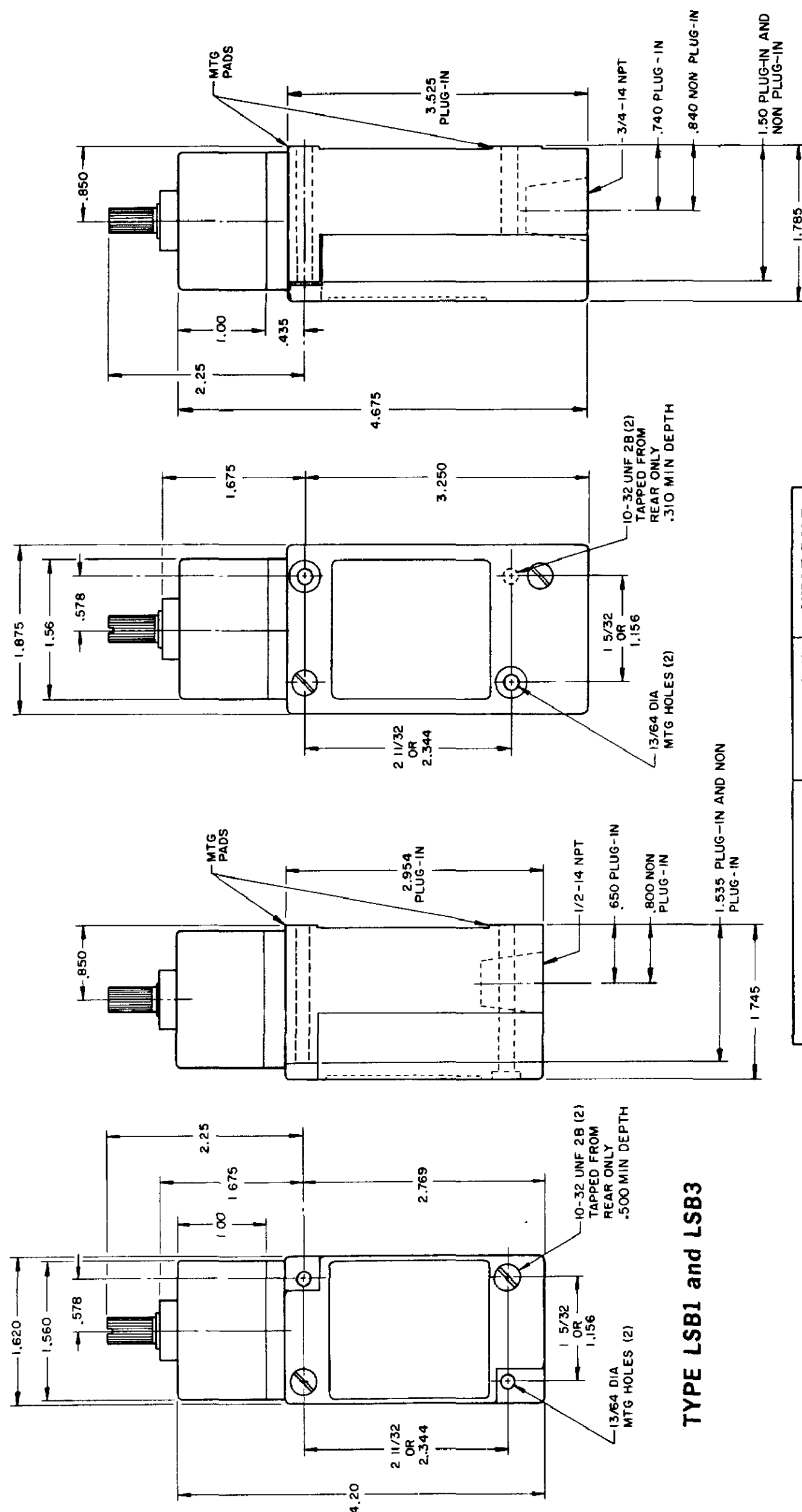
| REV | DATE    | BY | CHK | DESCRIPTION |
|-----|---------|----|-----|-------------|
| 1   | 0031956 |    |     |             |
| 2   | 10JUL07 | BS |     |             |
| 3   | 201004  | B  |     |             |
| 4   | 10AUG00 | C  |     |             |
| 5   | 201748  | C  |     |             |
| 6   | 17NOV00 | C  |     |             |
| 7   | 202198  | D  |     |             |
| 8   | 202198  | D  |     |             |
| 9   | 204871  | E  |     |             |
| 10  | 206581  | F  |     |             |
| 11  | 206763  | G  |     |             |
| 12  | 207178  | H  |     |             |
| 13  | 207474  | J  |     |             |
| 14  | 207474  | J  |     |             |
| 15  | 207474  | J  |     |             |
| 16  | 207474  | J  |     |             |
| 17  | 207474  | J  |     |             |
| 18  | 207474  | J  |     |             |
| 19  | 207474  | J  |     |             |
| 20  | 207474  | J  |     |             |

| THIRD ANGLE PROJECTION                    |        |       |  |
|-------------------------------------------|--------|-------|--|
| SCALE NONE                                |        |       |  |
| DO NOT SCALE PRINT                        |        |       |  |
| UNLESS OTHERWISE SPECIFIED TOLERANCES ARE |        |       |  |
| ONE PLACE                                 | (0)    | ±.030 |  |
| TWO PLACES                                | (.00)  | ±.015 |  |
| THREE PLACES                              | (.000) | ±.005 |  |
| ANGLES                                    |        | ±     |  |
| WEIGHT                                    |        |       |  |

# TOP ROTARY

# SINGLE POLE

# DOUBLE POLE



### TYPE LSB1 and LSB3

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

|                         |                    |                    |
|-------------------------|--------------------|--------------------|
| PRETRAVEL MAX           | SINGLE POLE<br>25° | DOUBLE POLE<br>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

| 10 AMP CONT. | A.C. VOLTAGE | AMPS AT 35 POWER FACTOR |       |             |       |  |  |
|--------------|--------------|-------------------------|-------|-------------|-------|--|--|
|              |              | SINGL 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

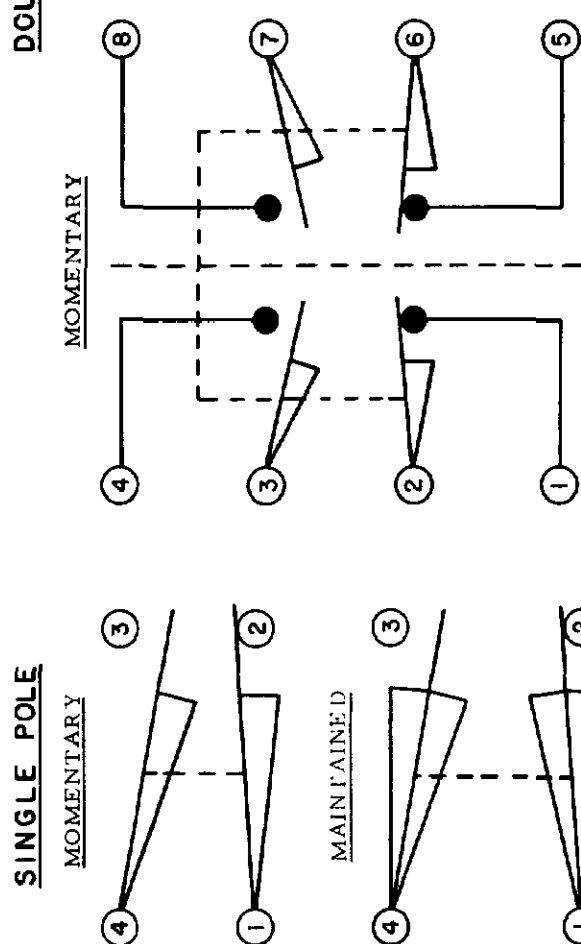
|                |            |
|----------------|------------|
| VOLTAGE        |            |
| 5 AC OR DC MIN | 01 AMP MIN |
| 600 AC         | 720 VA     |
| 240 DC         | 30 WATT    |

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

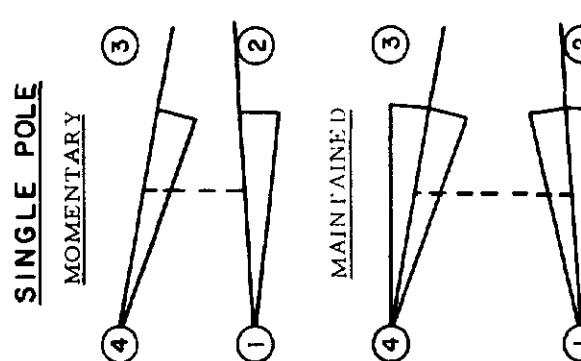
| D. C. VOLTAGE | MAKE AND BREAK AMPS |           |
|---------------|---------------------|-----------|
|               | INDUCTIVE           | RESISTIVE |
| 30            | 4.2                 | 4.2       |
| 120           | 1.1                 | 1.1       |
| 240           | .55                 | .55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

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

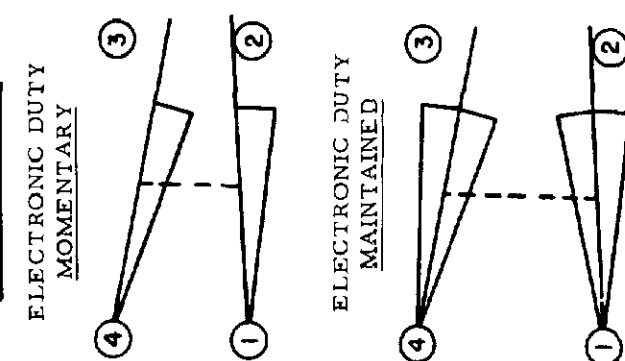
DOUBLE POLE



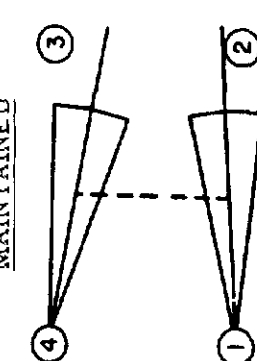
**SINGLE POLE**



**SINGLE POLE**



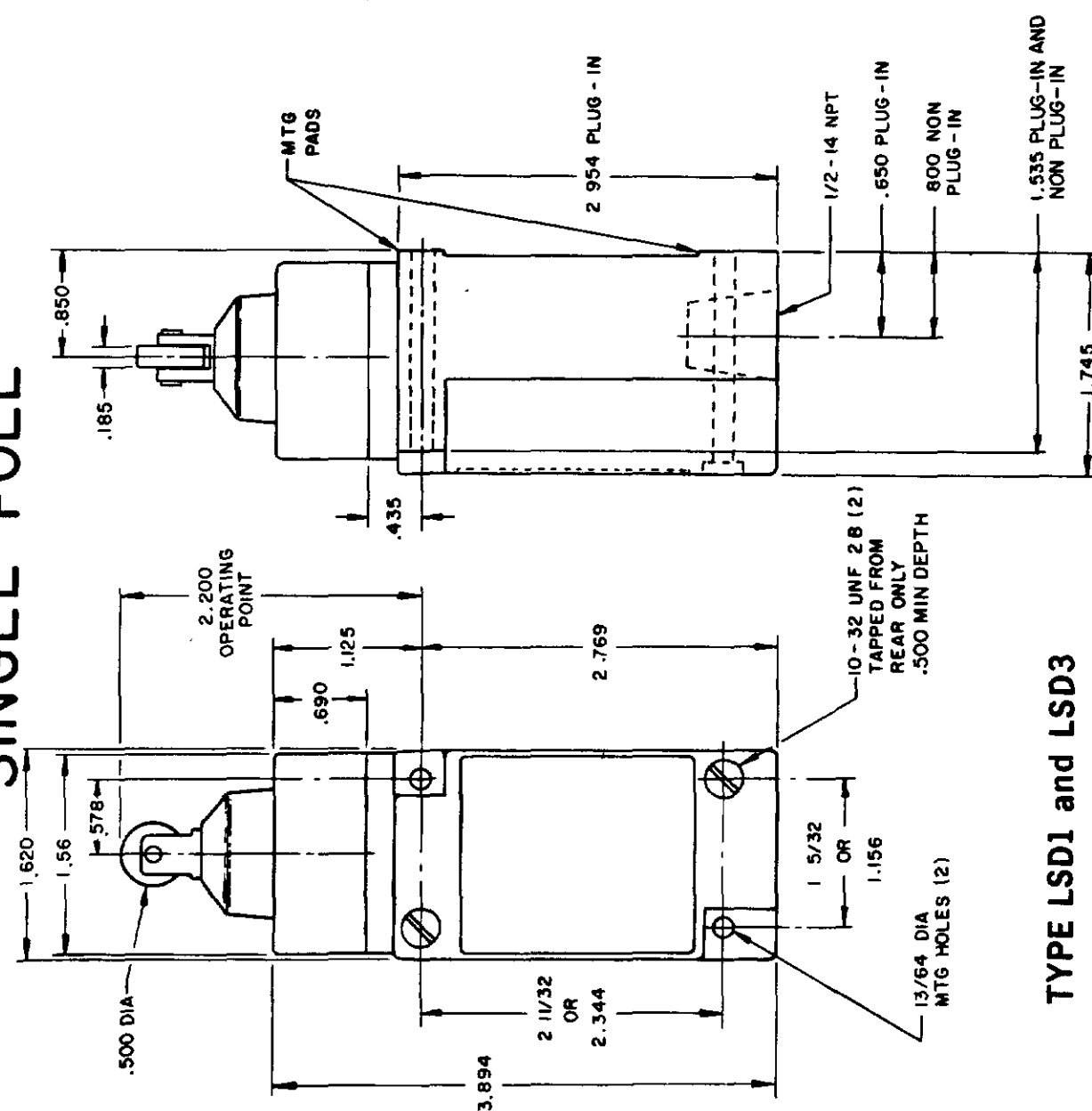
## ELECTRONIC DUTY



**DIRECT ACTING** 

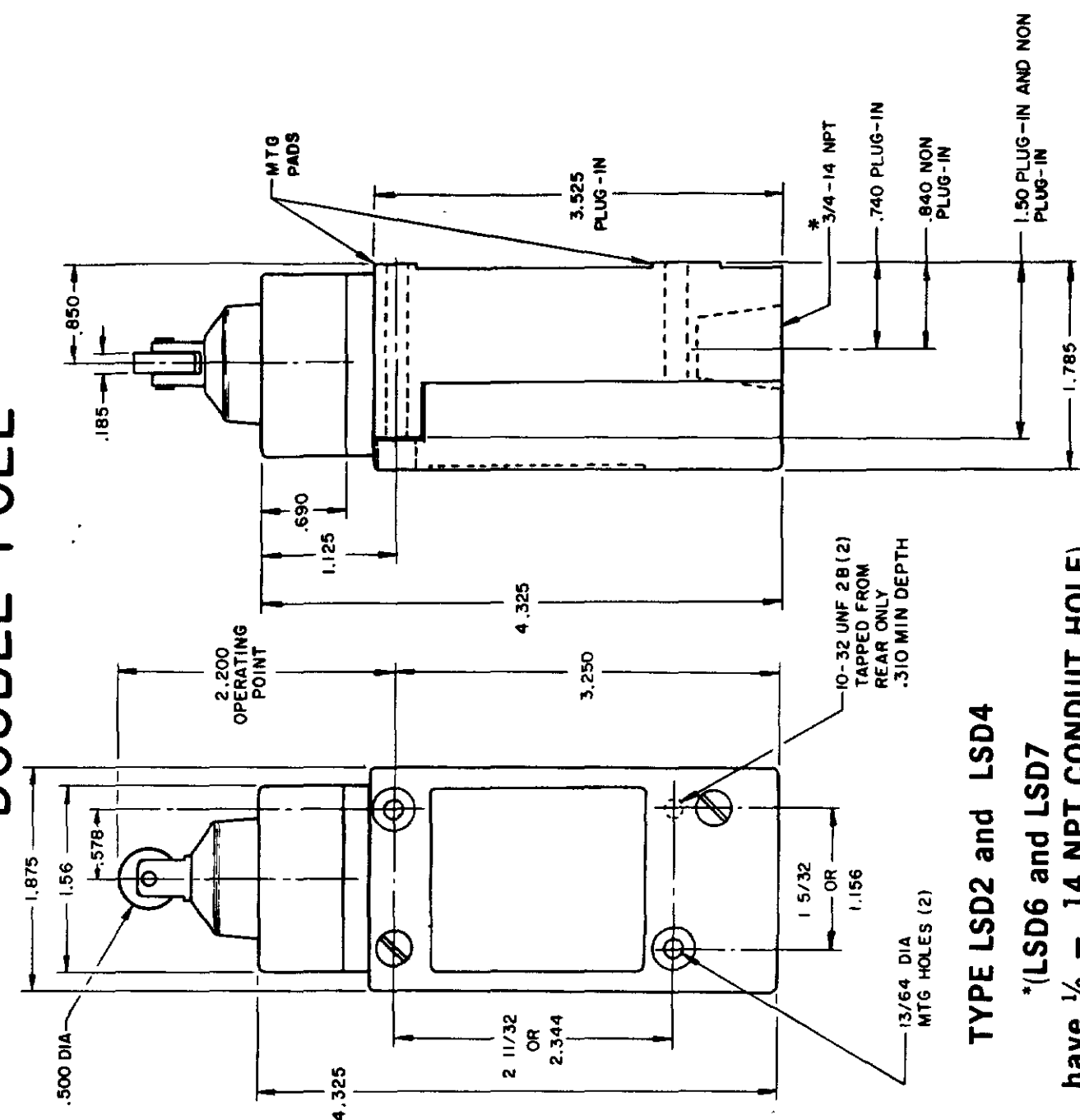


# SINGLE POLE



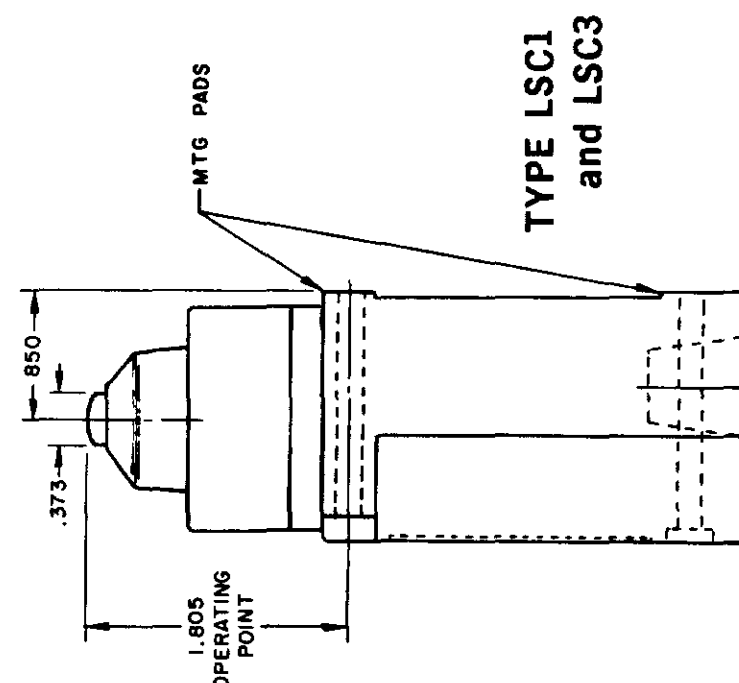
### TYPE LSD1 and LSD3

# DOUBLE POLE

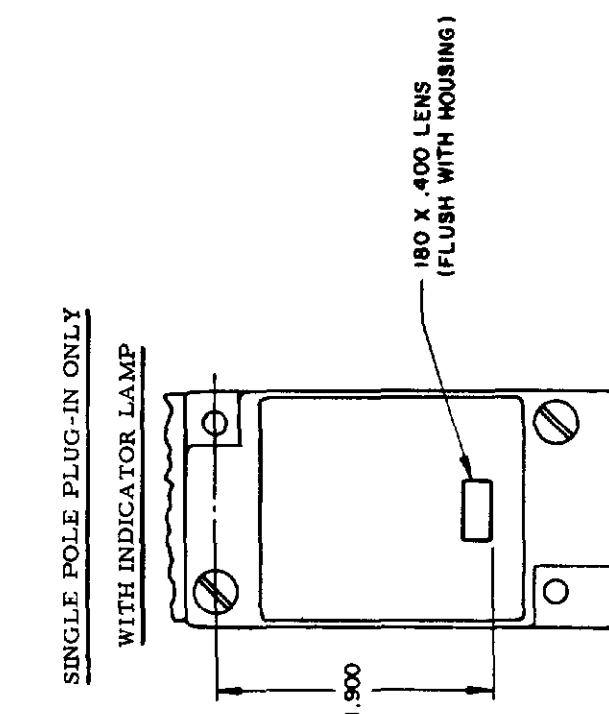


#### TYPE LSD2 and LSD4

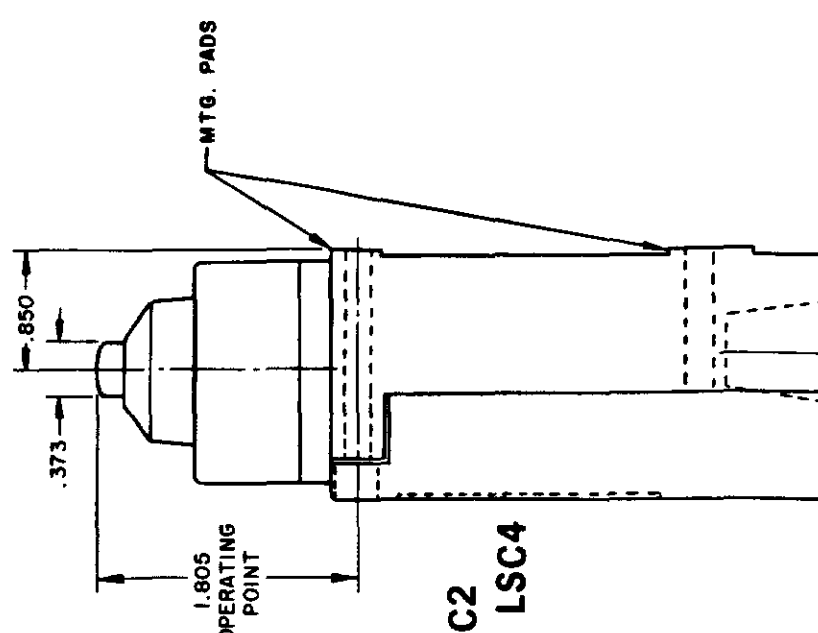
**\*(LSD6 and LSD7  
have 1/2 - 14 NPT CONDUIT HOLE)**



**TYPE LSC1  
and LSC3**

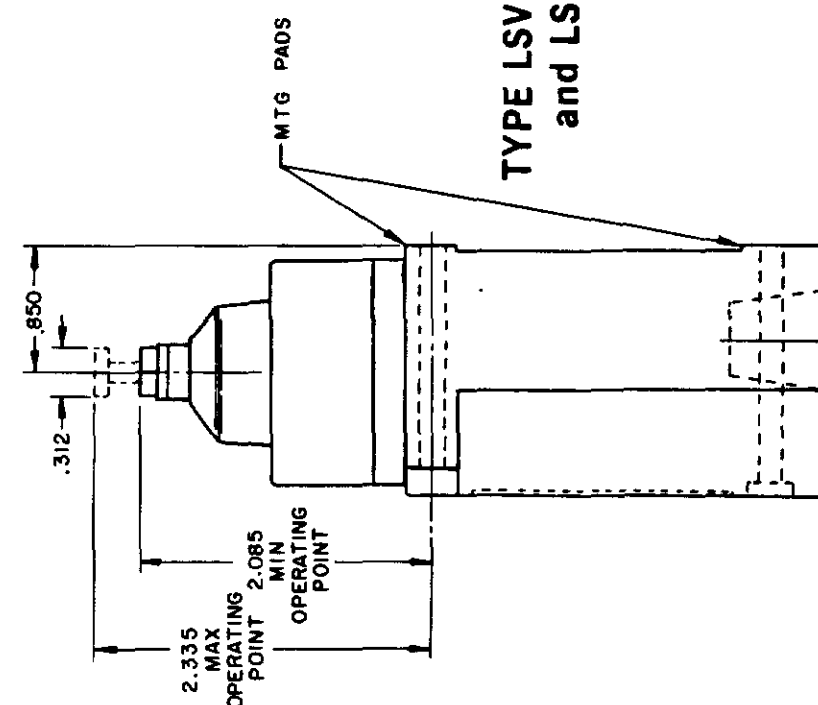


**TYPE LSC2  
and LSC4**

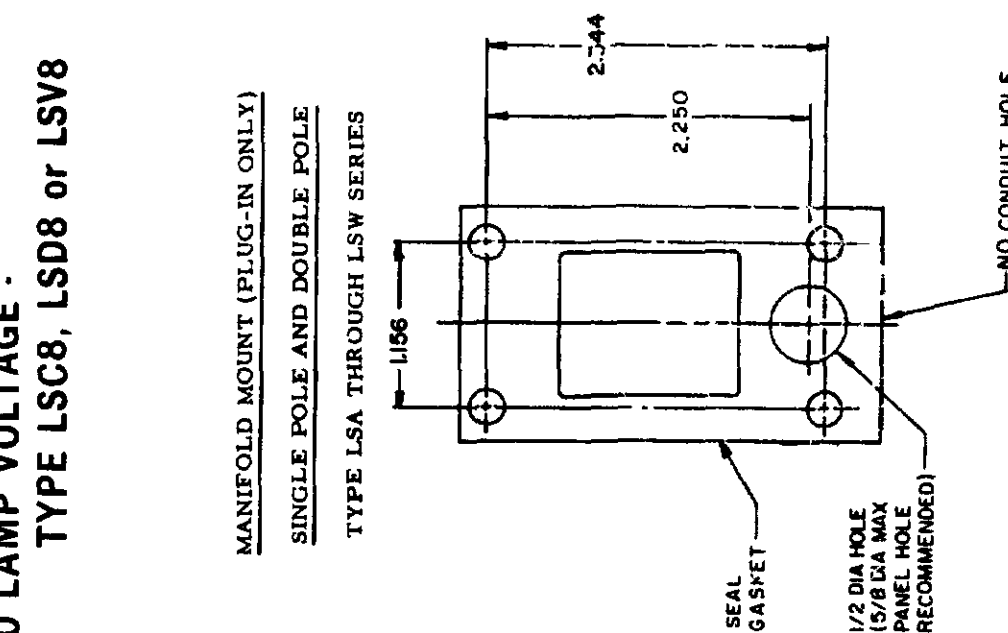


**120 LAMP VOLTAGE .  
TYPE LSC5, LSD5 or LSV5**

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

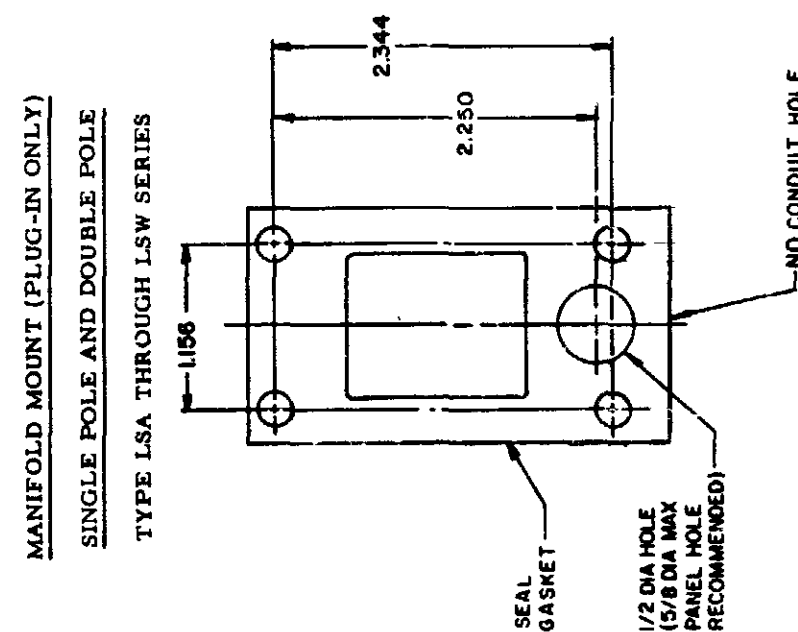
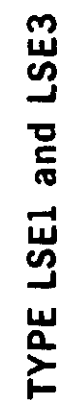


**TYPE LSV1  
and LSV3**



**TYPE LSV2  
and LSV4**

SINGLE POLE DOUBLE POLE

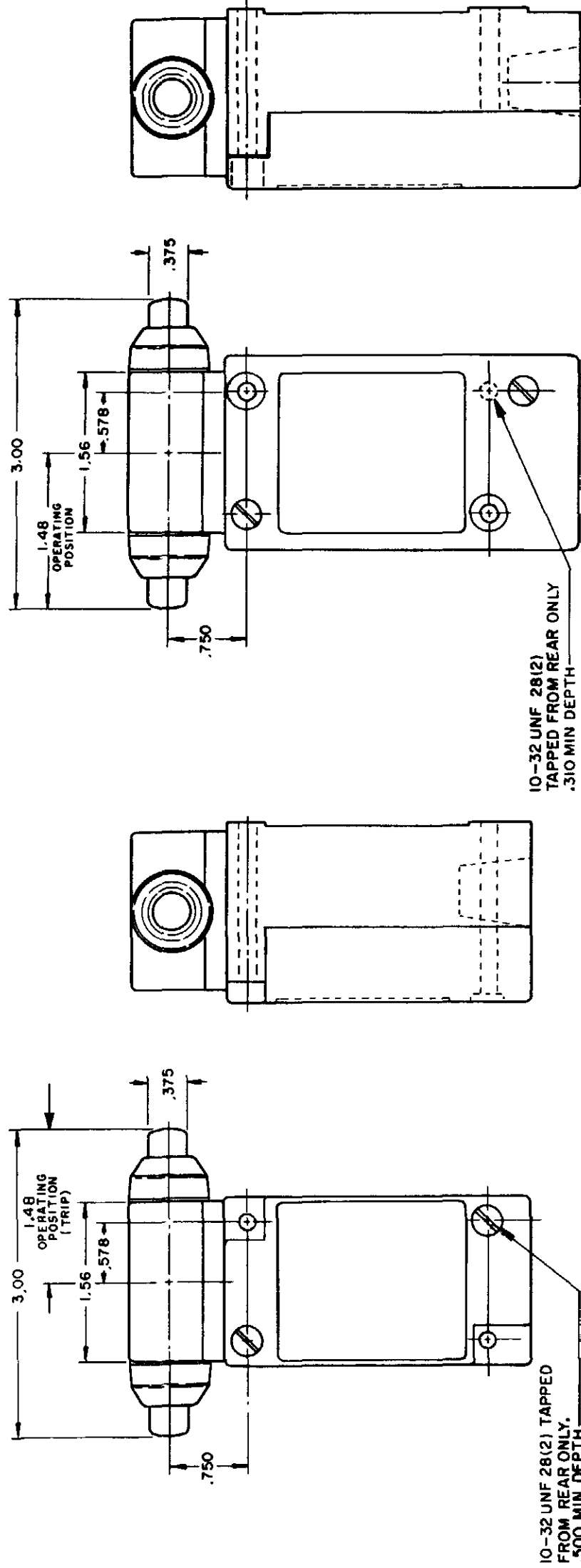


FED MFG CODE 91928

|                       |
|-----------------------|
| CATALOG LISTING       |
| <b>LSA-LSW SERIES</b> |
| <b>CHART 1</b>        |

SCALE NONE

DO NOT SCALE PRINT



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

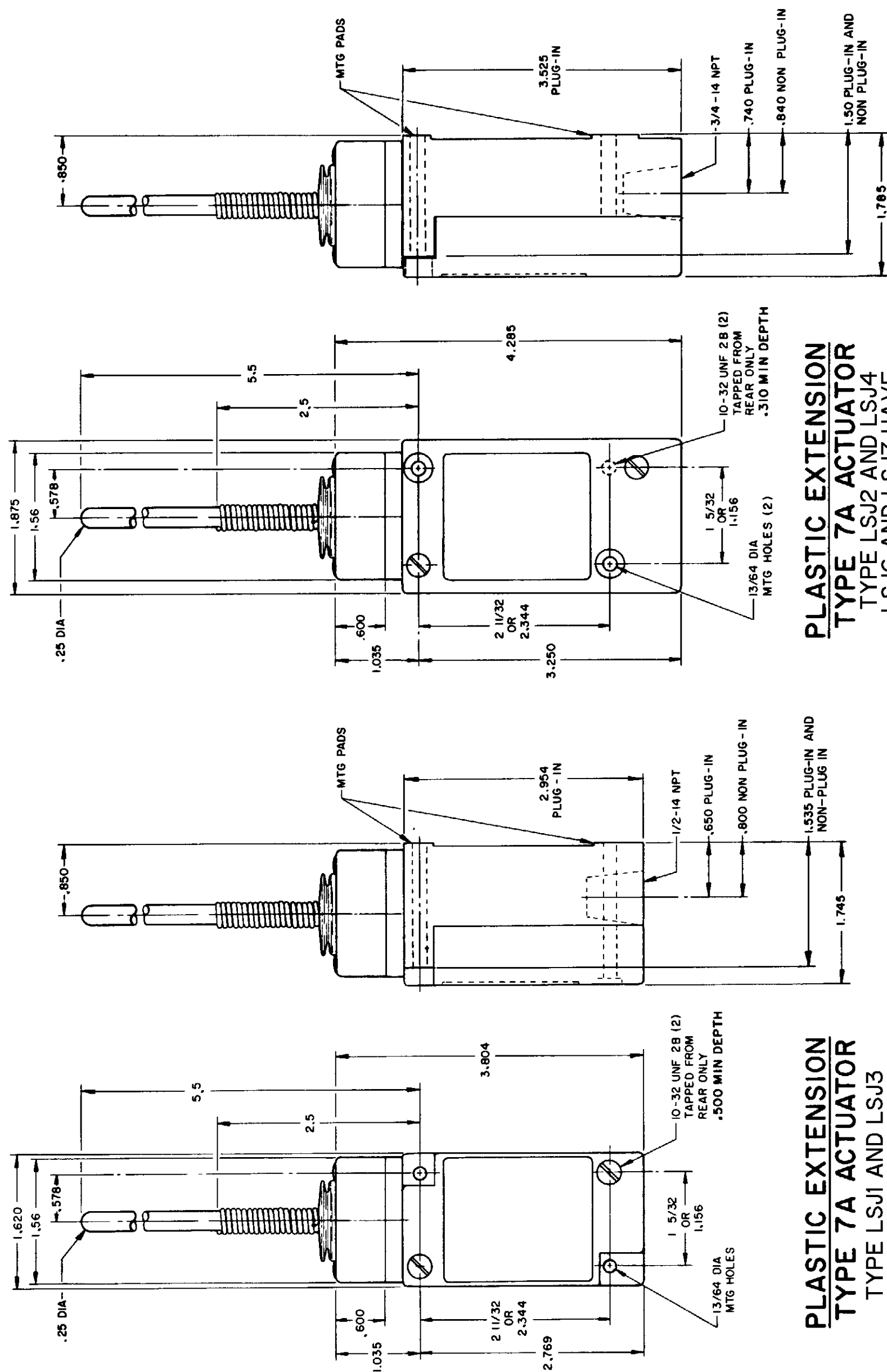
| CHARACTERISTICS             | LSC PLUNGER                          | LSD ROLLER PLUNGER                   | LSV ADJ PLUNGER                      | SEQUENCE BASIC                              |     |     |
|-----------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------------------|-----|-----|
|                             |                                      |                                      |                                      | LSC                                         | LSD | LSV |
| PRETRAVEL (MAX)             | .070                                 | .070                                 | .070                                 | 1ST STEP .070                               |     |     |
| DIFFERENTIAL TRAVEL (MAX)   | SINGLE POLE .015<br>DOUBLE POLE .020 | SINGLE POLE .015<br>DOUBLE POLE .020 | SINGLE POLE .015<br>DOUBLE POLE .020 | 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

**MINICRO SWITCH**  
Honeywell Division  
FED MFG CODE 91929

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SWITCH - ENCLOSED

## LSA-LSW SERIES

### CHART 1

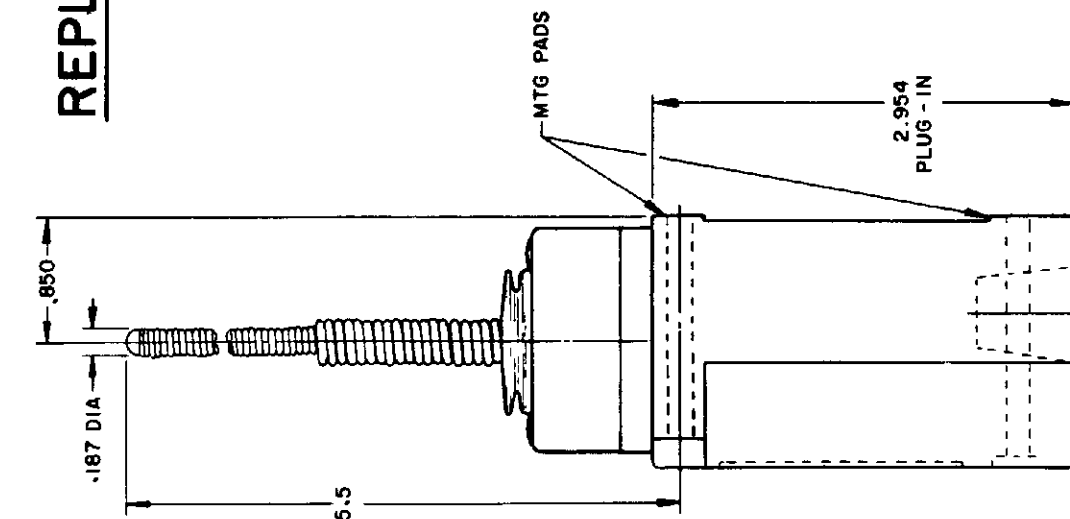
CATALOG LISTING

PAGE 7 OF 10

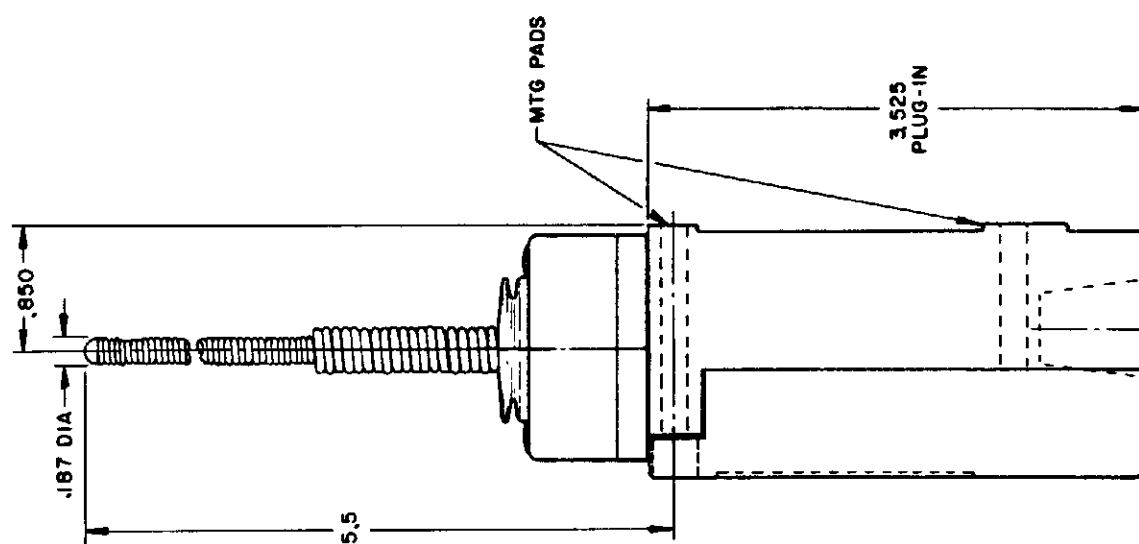
SCALE NONE

DO NOT SCALE PRINT

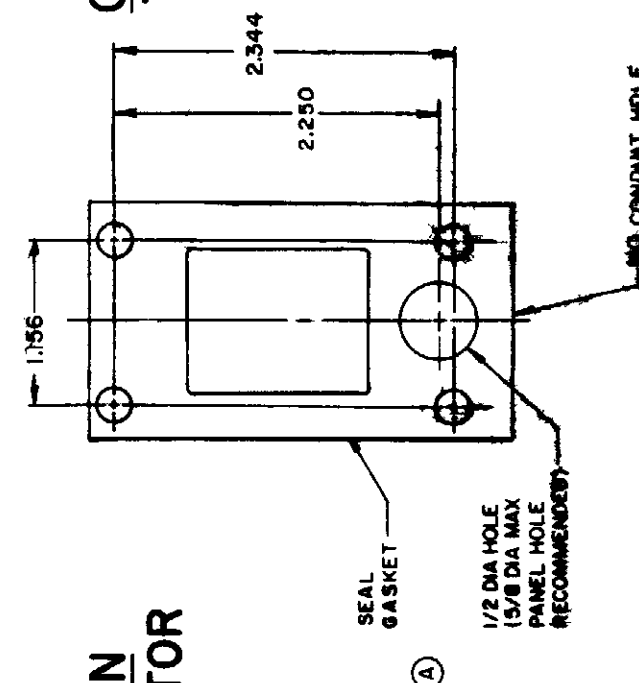
**REPLACEMENT ACTUATOR**  
**LSZ-4009**



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



### CABLE EXTENSION TYPE 7N ACTUATOR

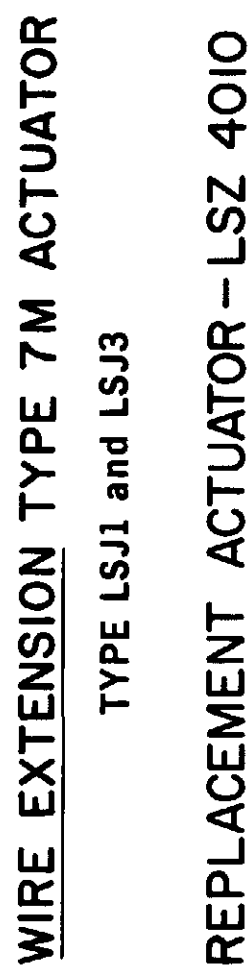


**REPLACEMENT ACTUATOR**  
**LSZ-40II**

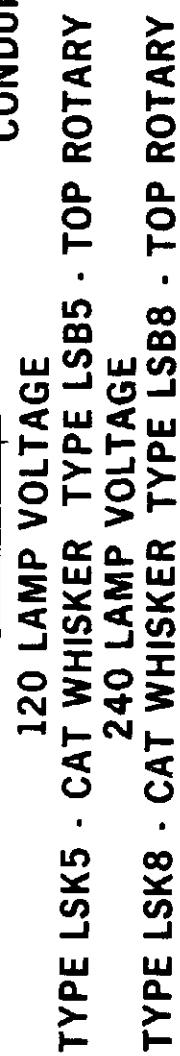
120 LAMP VOLTAGE TYPE LSJ5  
240 LAMP VOLTAGE TYPE LSJ8  
24 LED VOLTAGE TYPE LSJ9

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

.180 X 400 LENS  
(FLUSH WITH  
HOUSING)



# SINGLE POLE



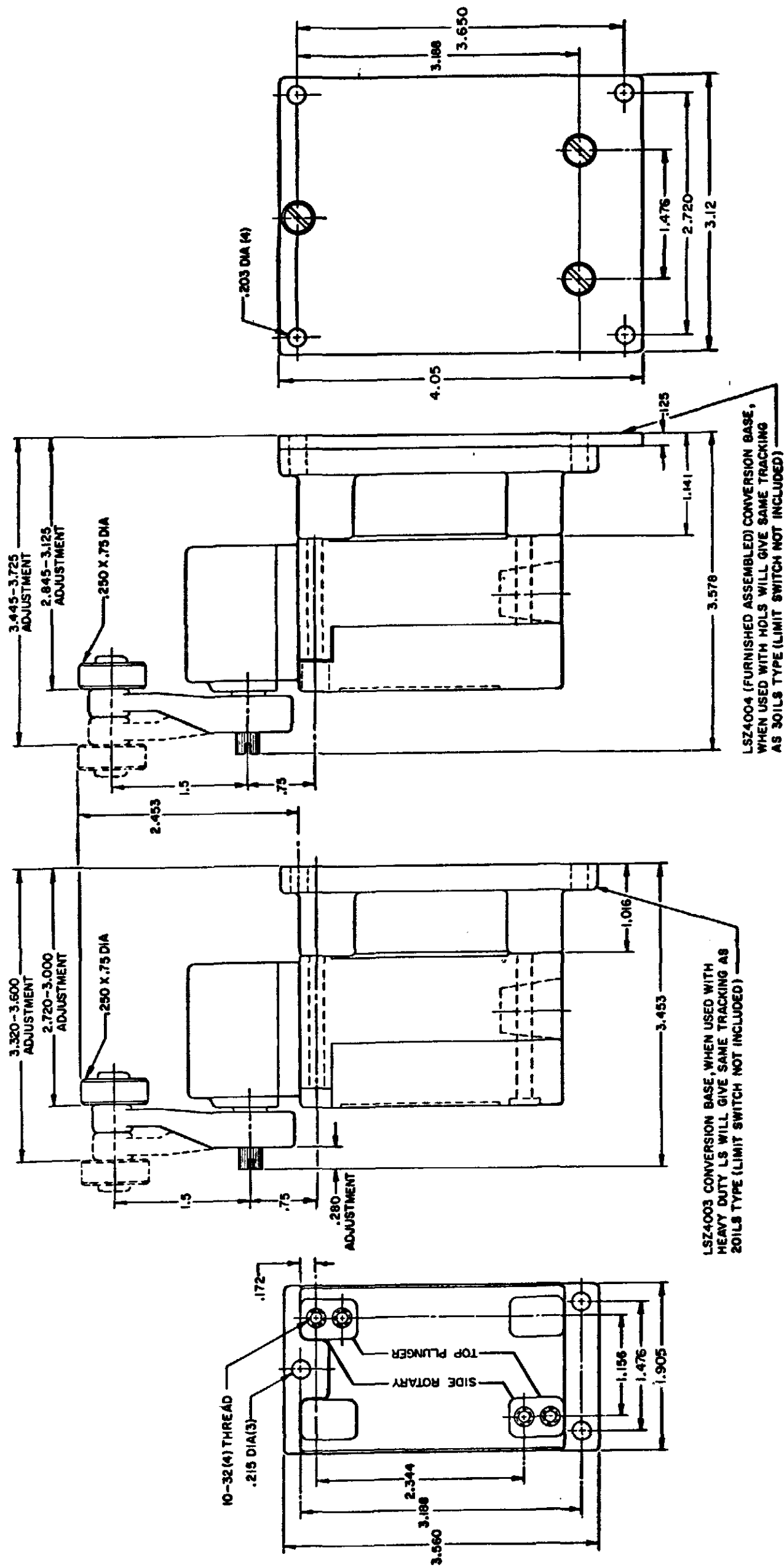
**\*WIRE EXTENSION REPLACEMENT ACTUATOR**  
**TYPE 8A ACTUATOR 5.5 IN.-LSZ 4012**  
**TYPE 8B ACTUATOR 7.5 IN.-LSZ 4013**  
**TYPE 8C COIL ACTUATOR 5.5 IN.-LSZ 4014**  
**ACTUATOR 9.5 IN. - LSZ4036**

|                               | CAT. WHISKER |             |             | WOBBLE STICK |       |      |
|-------------------------------|--------------|-------------|-------------|--------------|-------|------|
|                               | 5 1/2" COIL  | 5 1/2" WIRE | 7 1/2" WIRE | ROD          | 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

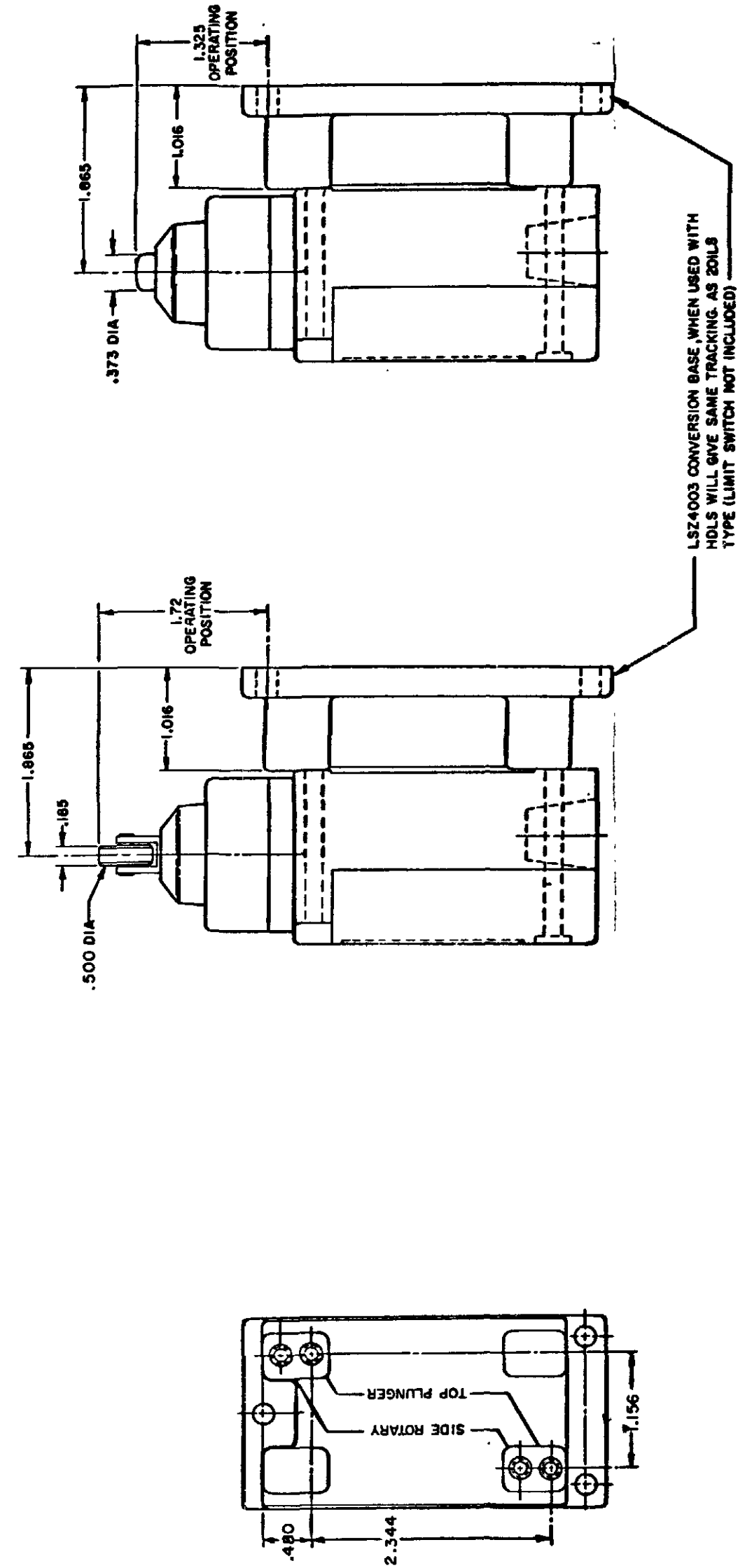
**SINGLE POLE  
(SIDE ROTARY)  
LSZ 4003**

**DOUBLE POLE  
(SIDE ROTARY)  
LSZ4004**



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

# SINGLE POLE TOP PLUNGER LSZ4003



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

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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



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Электрон  
Связь**

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**Электронная почта:** [sales@st-electron.ru](mailto:sales@st-electron.ru)

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Промышленная ул, дом № 19, литера Н,  
помещение 100-Н Офис 331