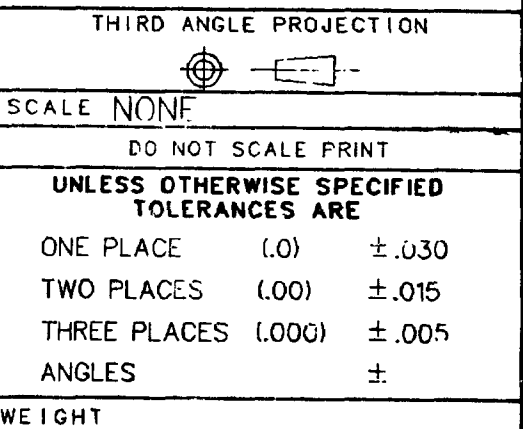
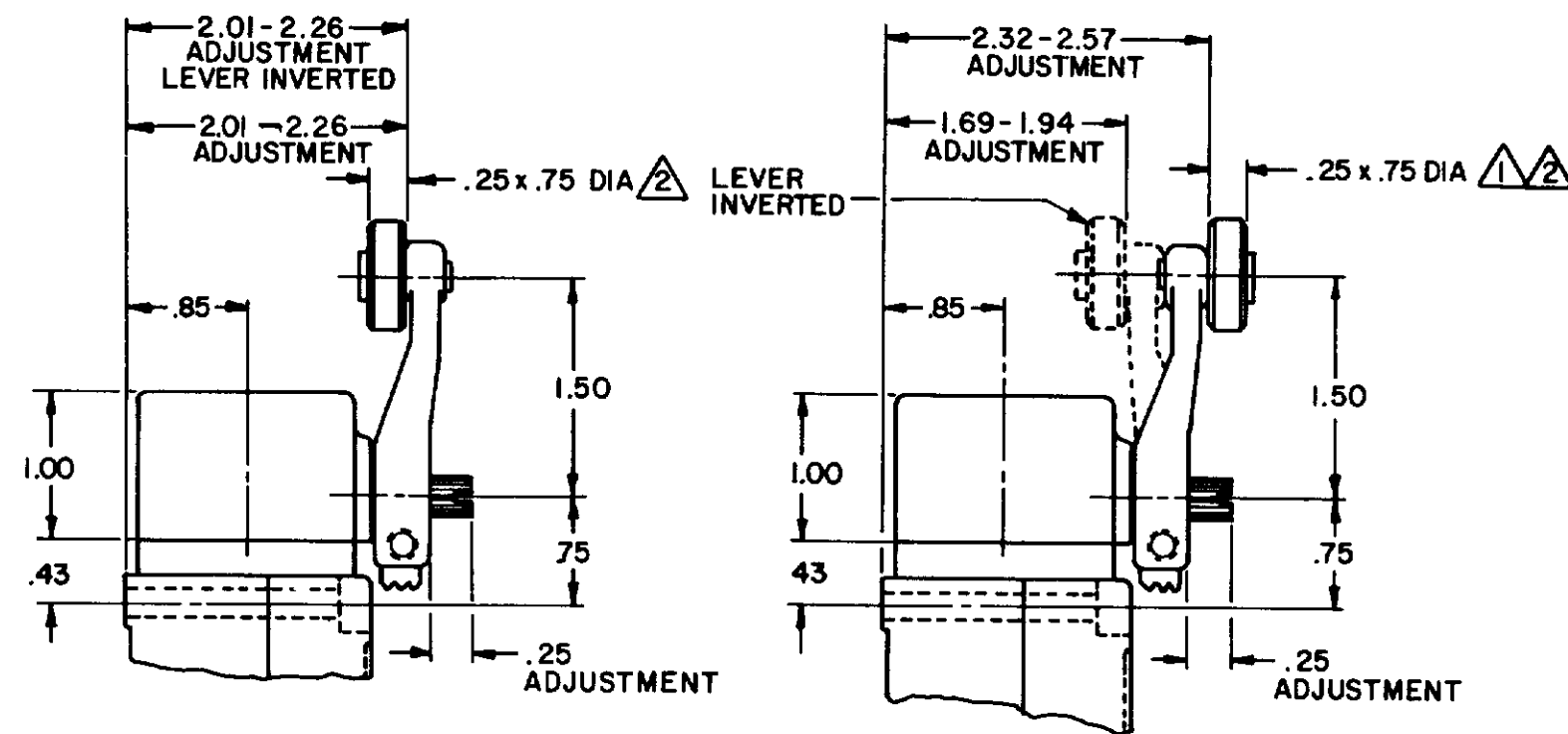
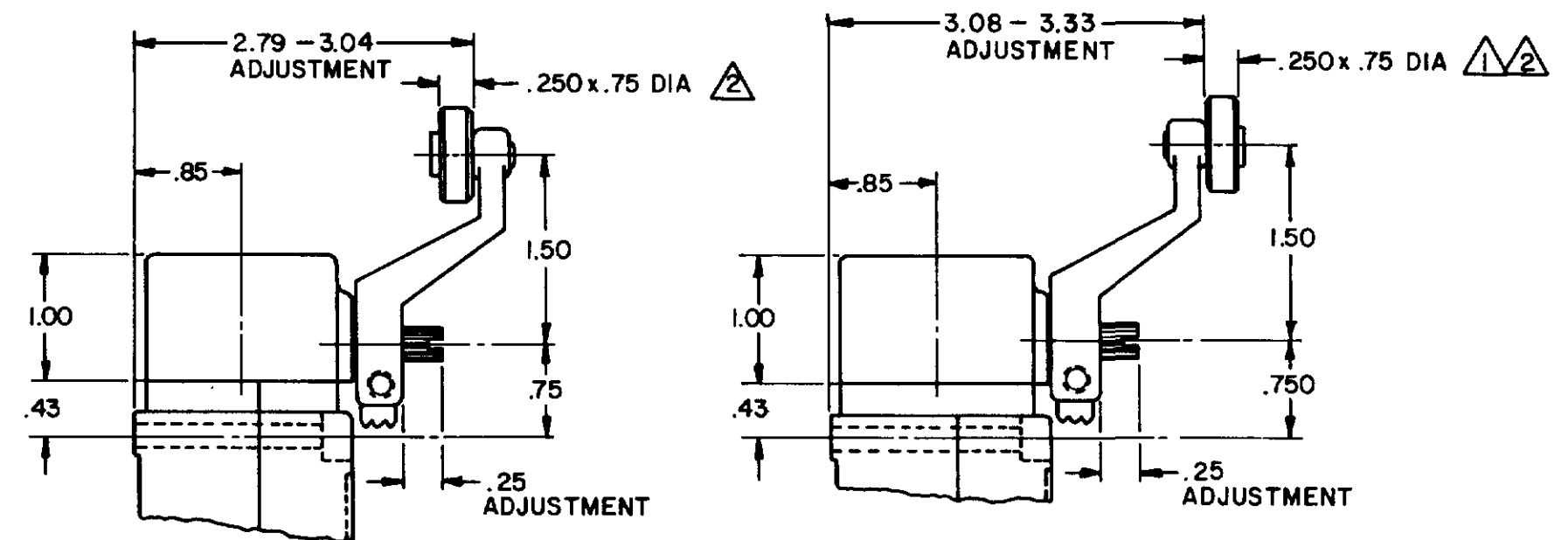


[illegible]

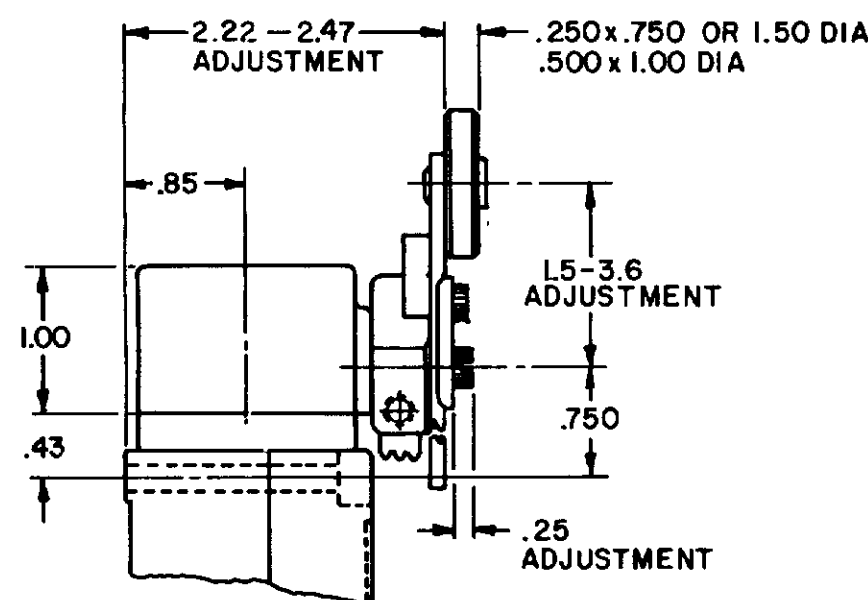
# SIDE ROTARY CAM TRACKING



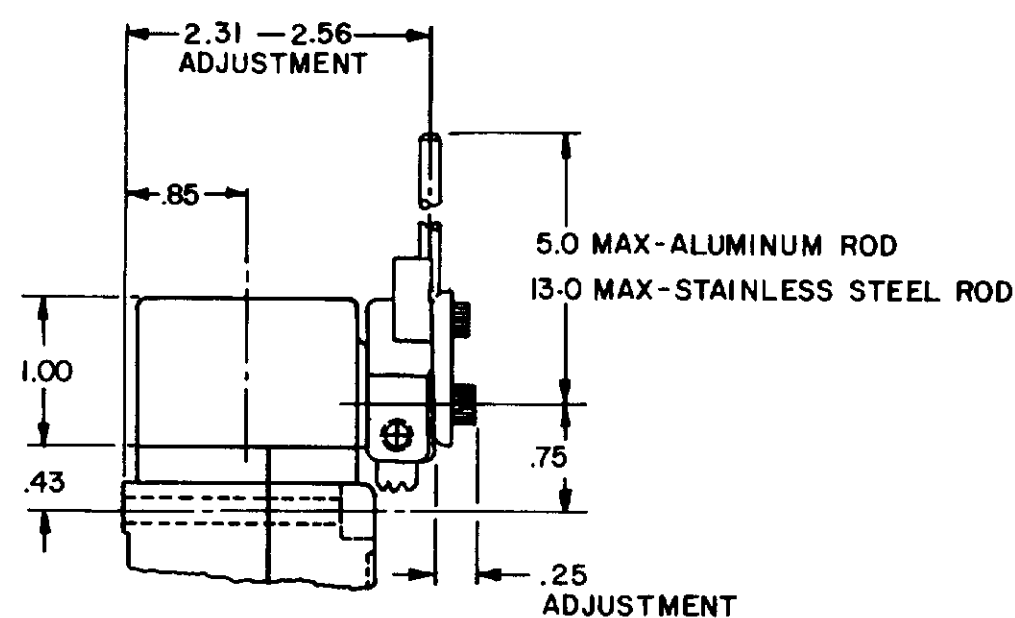
LSZ51 TYPE LEVERS



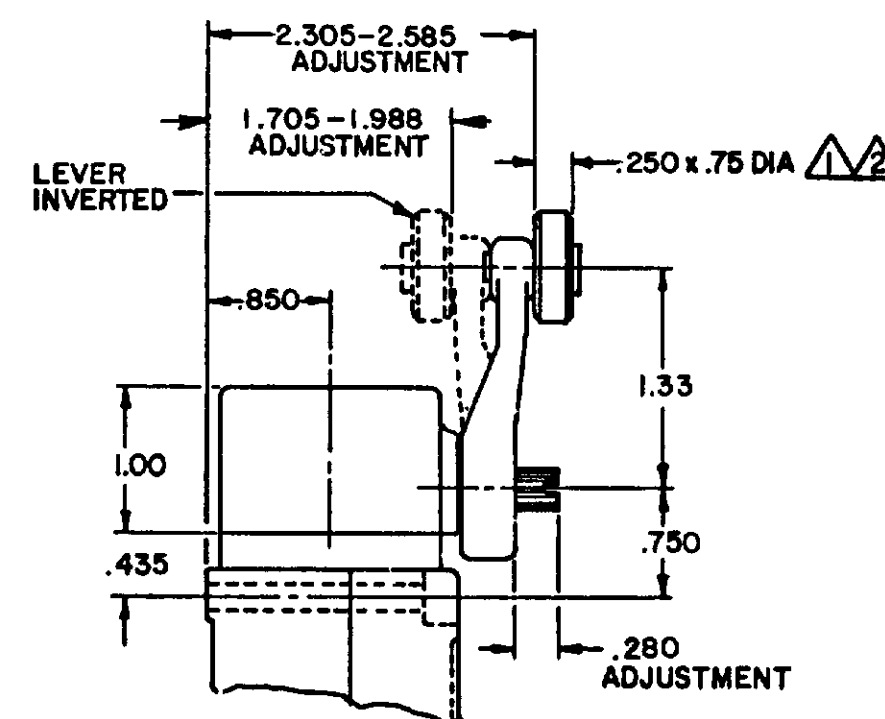
LSZ55 TYPE LEVERS



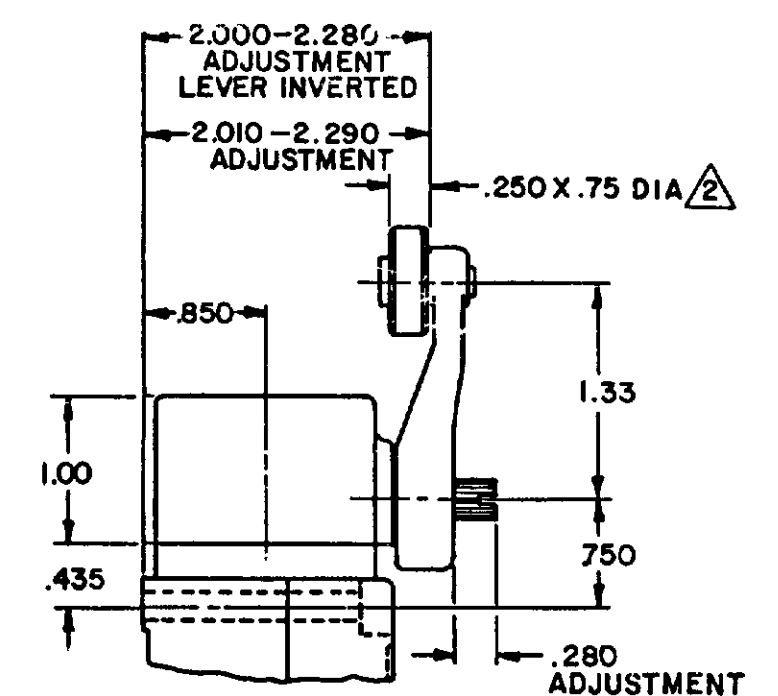
LSZ52 TYPE LEVER



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

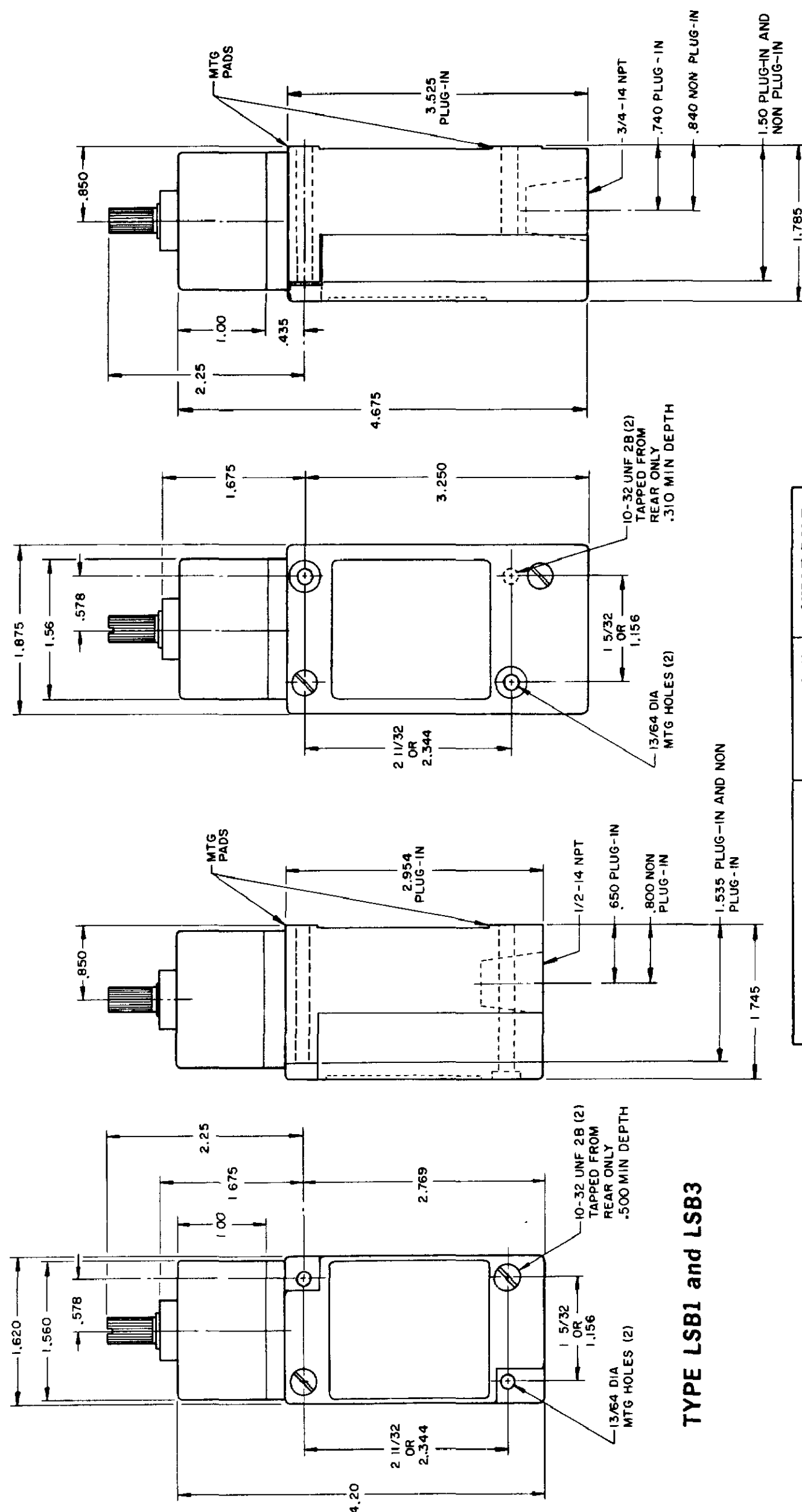
| REV | DATE    | BY   | CHK | DESCRIPTION |
|-----|---------|------|-----|-------------|
| 1   | 0031956 |      |     |             |
| 2   | 10JUL07 | BS   |     |             |
| 3   | 201004  | B    |     |             |
| 4   | 10AUG00 | C SL |     |             |
| 5   | 201748  | C    |     |             |
| 6   | 17NOV00 | C SL |     |             |
| 7   | 202198  | D    |     |             |
| 8   | 28JAN01 | E    |     |             |
| 9   | 204871  | F    |     |             |
| 10  | 206581  | F    |     |             |
| 11  | 14OCT02 | G    |     |             |
| 12  | 206763  | G    |     |             |
| 13  | 31OCT02 | H    |     |             |
| 14  | 207178  | H    |     |             |
| 15  | 14JAN03 | J    |     |             |
| 16  | 207474  | J    |     |             |
| 17  | 18FEB03 | K    |     |             |
| 18  | 0006871 | K    |     |             |

| 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 |       | BREAK |       |
|              |              | MAKE                    | BREAK | 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

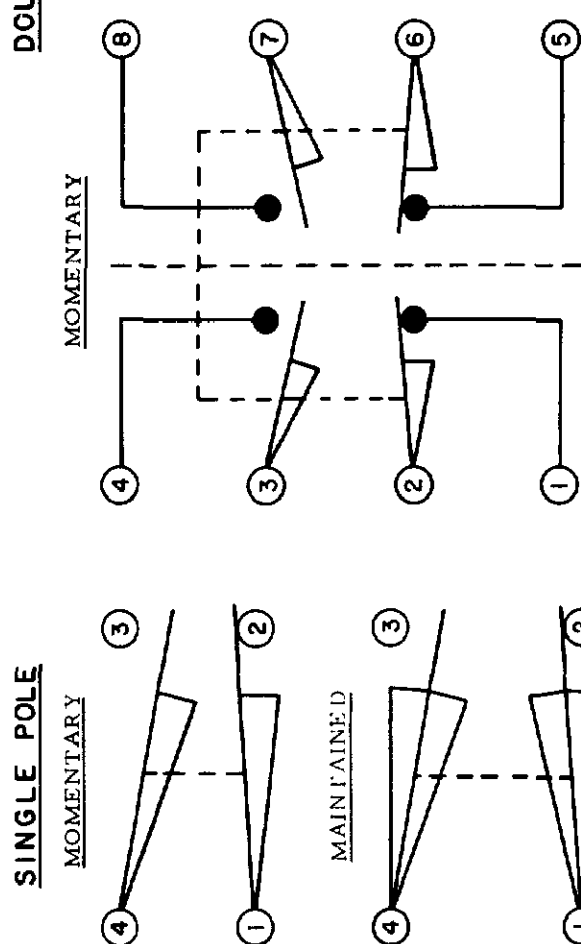
|                |            |
|----------------|------------|
| VOLTAGE        |            |
| 5 AC OR DC MIN | 01 AMP MIN |
| 600 AC         | 720 VA     |
| 240 DC         | 30 WATT    |

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

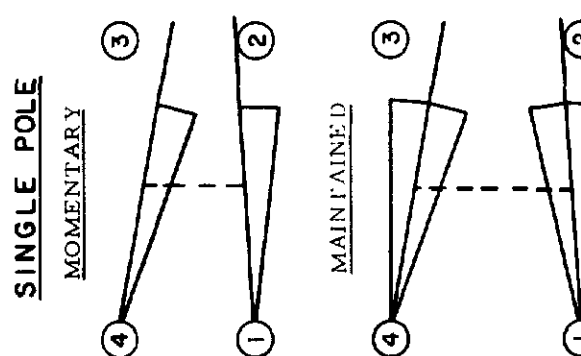
| D. C. VOLTAGE | MAKE AND BREAK AMPS |           |
|---------------|---------------------|-----------|
|               | INDUCTIVE           | RESISTIVE |
| 30            | 4.2                 | 4.2       |
| 120           | 1.1                 | 1.1       |
| 240           | .55                 | .55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

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

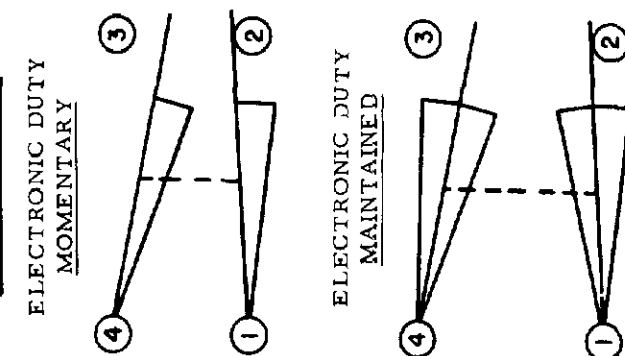
**DOUBLE POLE**



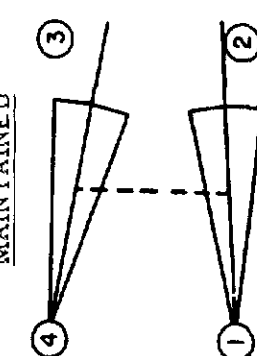
### SINGLE POLE



**SINGLE POLE**



## ELECTRONIC DUTY

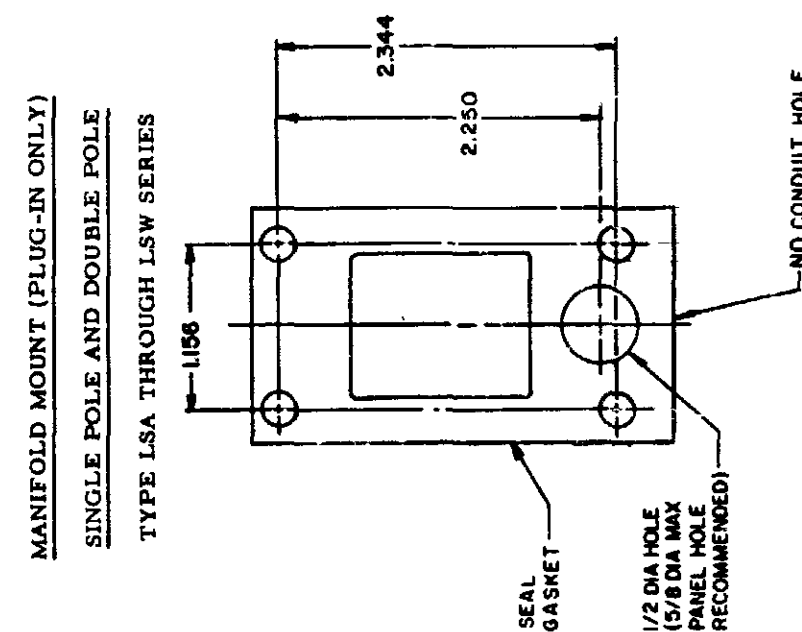
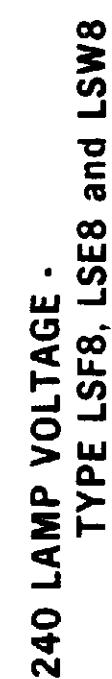
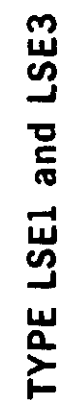


**DIRECT ACTING** 





SINGLE POLE DOUBLE POLE



FED MFG CODE 91929

CATALOG LISTING

**LSA-LSW SERIES**

**CHART 1**

SCALE NONE

DO NOT SCALE PRINT



### TYPE LSG1 and LSG3

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

OPERATING POINT GIVEN  
IN RELATION TO TOP  
MOUNTING HOLE

SIDE PLUNGER TYPES

PAGE 6 OF 10

SWITCH - ENCLOSED

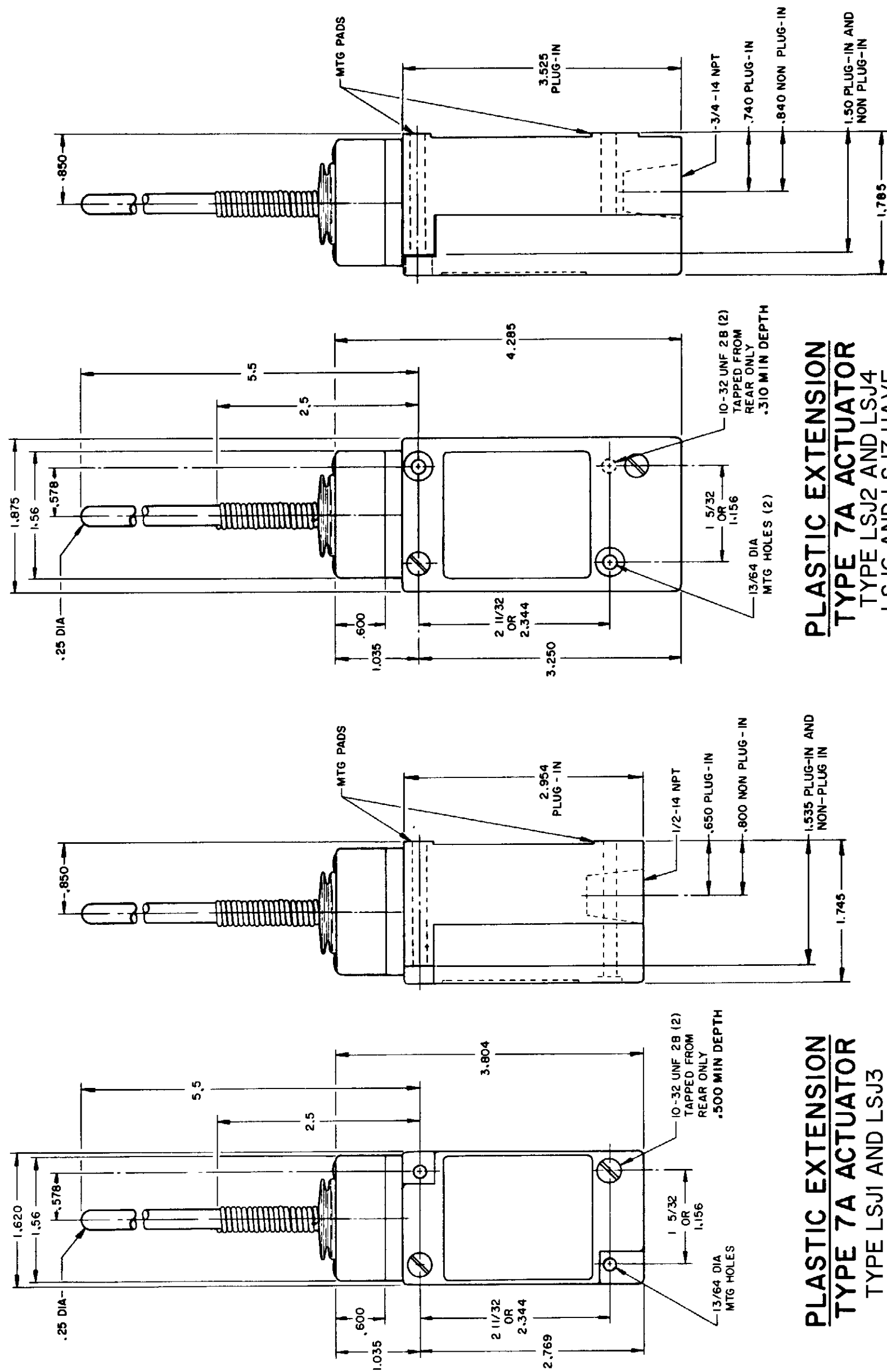
|                 |
|-----------------|
| CATALOG LISTING |
| LSA-LSW SERIES  |
| CHART 1         |

|                    |        |      |     |
|--------------------|--------|------|-----|
| SCALE              |        | NONE |     |
| DO NOT SCALE PRINT |        |      |     |
| UNLESS             |        |      |     |
| DIMENSIONS ARE IN  |        |      |     |
| TOLERANCES         |        |      |     |
| ONE PLACE          | (0)    | +    | 01  |
| TWO PLACE          | (.00)  | +    | 00  |
| THREE PLACE        | (.000) | +    | 000 |
| ANGLES             |        | +    |     |
| WEIGHT             |        |      |     |

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

**MICRO SWITCH**  
Honeywell Division

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SWITCH - ENCLOSED

|                |
|----------------|
| LSA-LSW SERIES |
| CHART 1        |

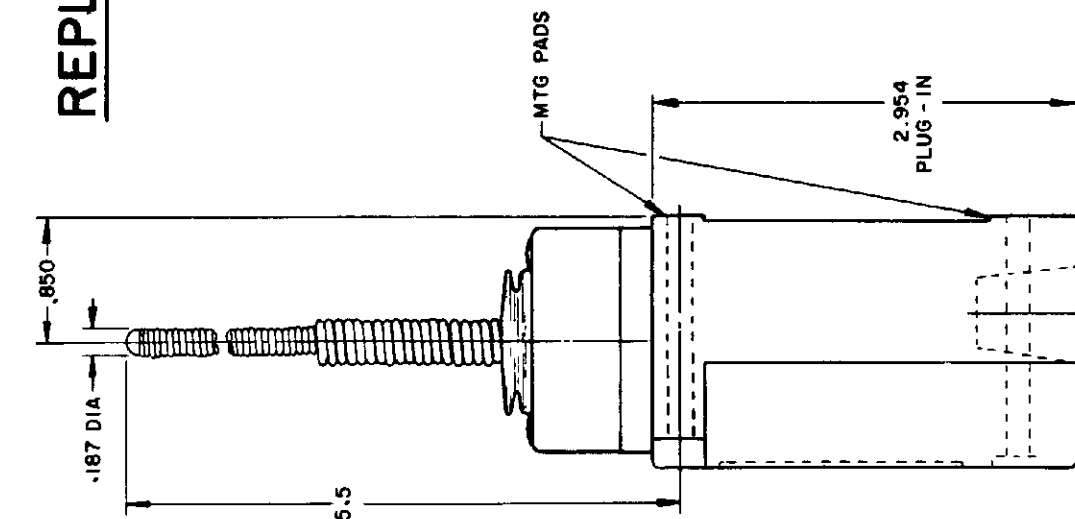
## CATALOG LISTING

PAGE 7 OF 10

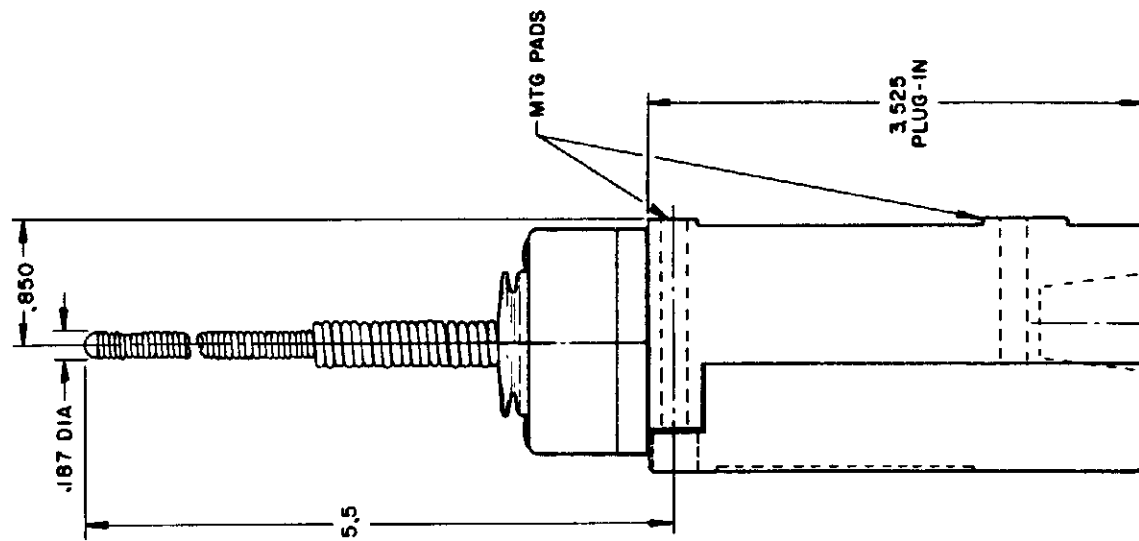
SCALE NONE

DO NOT SCALE PRINT

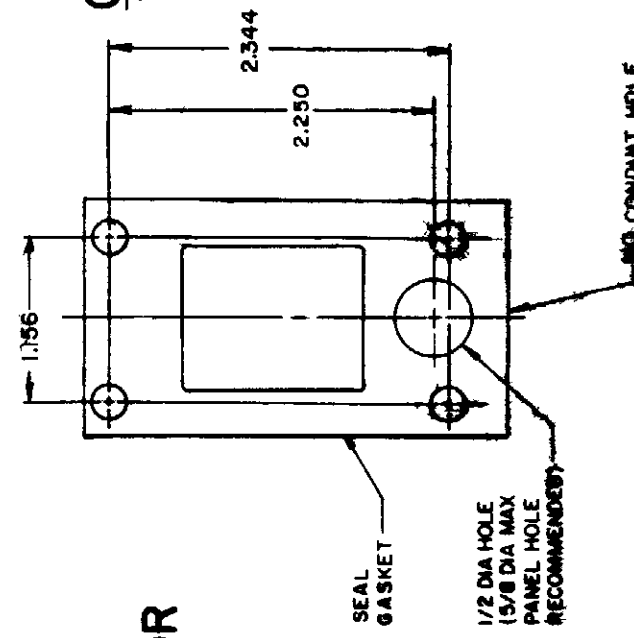
**REPLACEMENT ACTUATOR**  
**LSZ-4009**



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



### CABLE EXTENSION TYPE 7N ACTUATOR

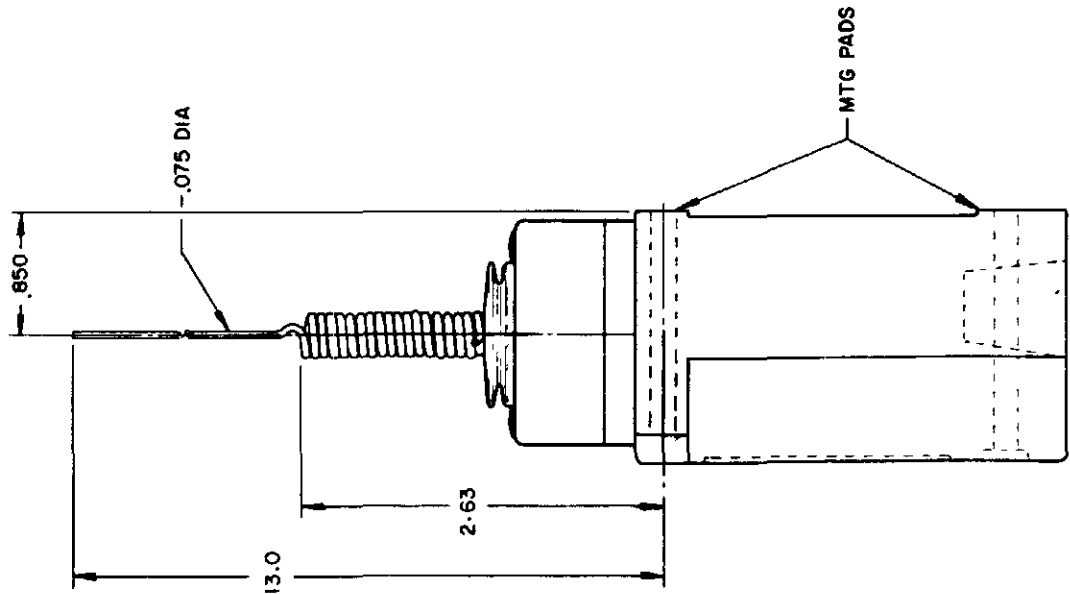


**REPLACEMENT ACTUATOR**  
**LSZ-40II**

1120 LAMP VOLTAGE TYPE LSJ5  
2240 LAMP VOLTAGE TYPE LSJ8  
24 LED VOLTAGE TYPE LSJ9

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

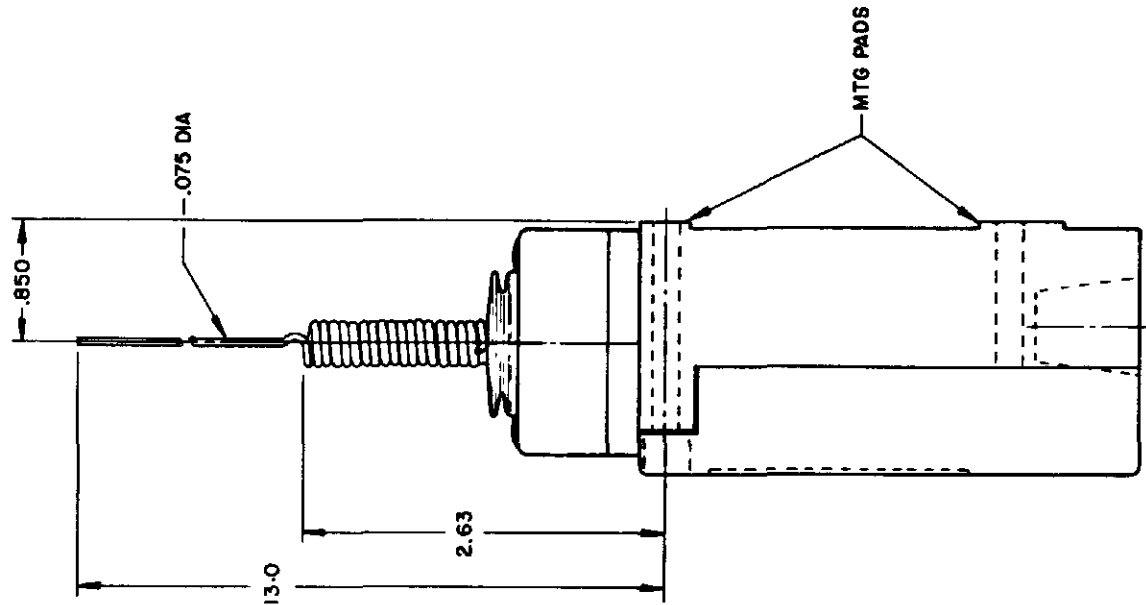
180 X 400 LENS  
(FLUSH WITH  
HOUSING)



WIRE EXTENSION TYPE 7M ACTUATOR

TYPE LSJ1 and LSJ3

REPLACEMENT ACTUATOR - LSZ 4010

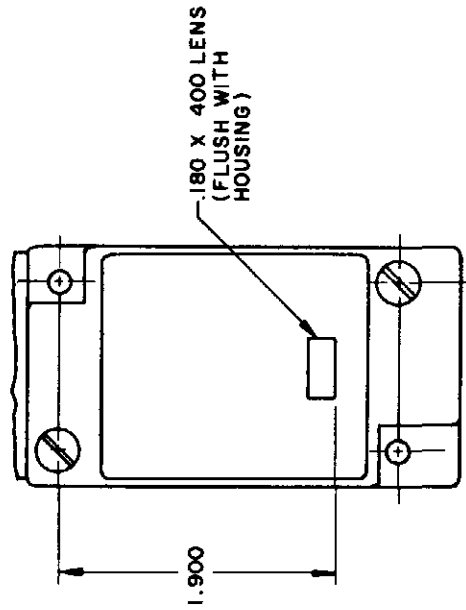


WIRE EXTENSION TYPE 7M ACTUATOR

TYPE LSJ2 and LSJ4

LSJ6 and LSJ7 have 1/2 - 14 NPT CONDUIT HOLE

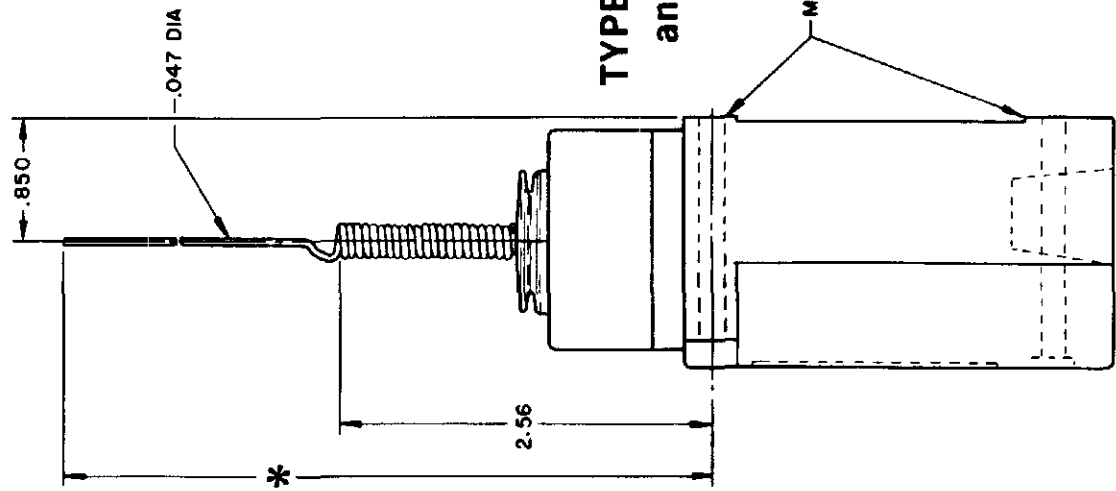
SINGLE POLE PLUG-IN ONLY  
WITH INDICATOR LAMP



120 LAMP VOLTAGE TYPE LSJ5  
240 LAMP VOLTAGE TYPE LSJ8

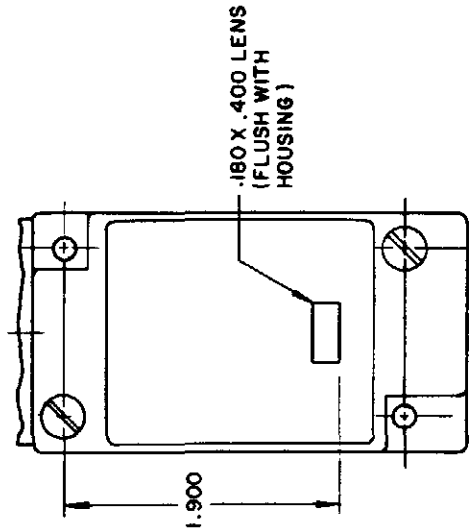
## CAT WHISKER

SINGLE POLE



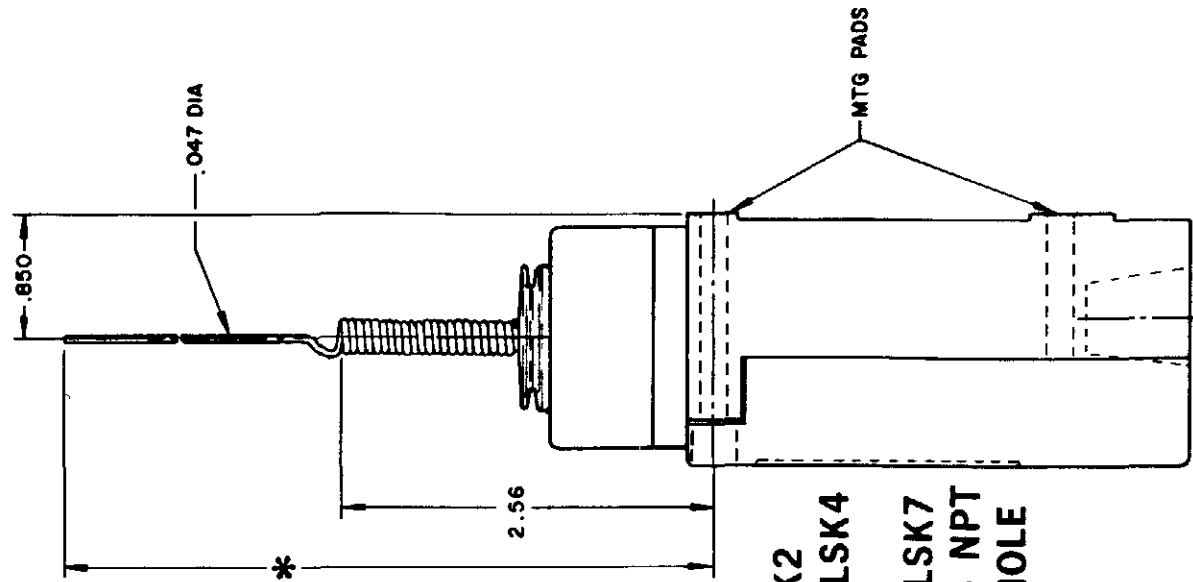
TYPE LSK1  
and LSK3

SINGLE POLE PLUG-IN ONLY  
WITH INDICATOR LAMP



120 LAMP VOLTAGE  
TYPE LSK5 - CAT WHISKER TYPE LSB5 - TOP ROTARY  
240 LAMP VOLTAGE  
TYPE LSK8 - CAT WHISKER TYPE LSB8 - TOP ROTARY

DOUBLE POLE



TYPE LSK2  
and LSK4  
LSK6 and LSK7  
have 1/2 - 14 NPT  
CONDUIT HOLE

\*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

WIRE EXTENSION

\*TYPE 8A ACTUATOR 5.5 IN.  
TYPE 8B ACTUATOR 7.5 IN.  
TYPE 8C ACTUATOR 5.5 IN.  
TYPE 8D ROD ACTUATOR 5.5 IN.

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**MICRO SWITCH**  
a Honeywell Division  
FED MFG CODE 91929

SWITCH - ENCLOSED

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

PAGE 8 OF 10

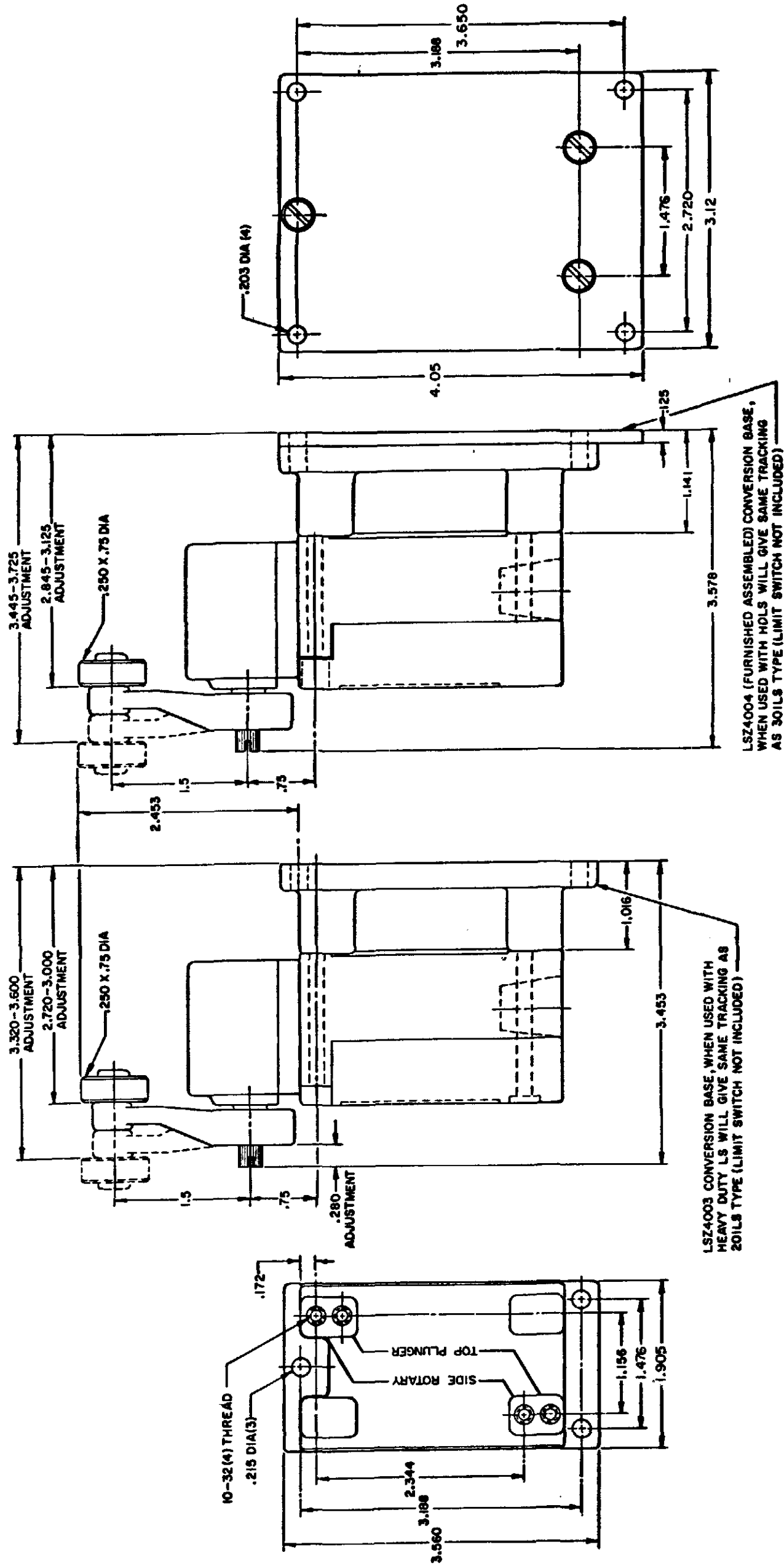
SCALE NONE  
DO NOT SCALE PRINT

| PRETRAVEL (APPROX) IN. RADIUS | CAT. WHISKER |            | WOBBLE STICK |      |
|-------------------------------|--------------|------------|--------------|------|
|                               | 5/16" COIL   | 5/16" WIRE | 7/16" ROD    | WIRE |
|                               | 2            | 2          | 1.0          | 1.5  |
| OPERATING FORCE-OZ (MAX)      | 7.0          | 5.0        | 3.0          | 7.0  |
|                               |              |            | 10.0         | 5.0  |

# CONVERSION BASES

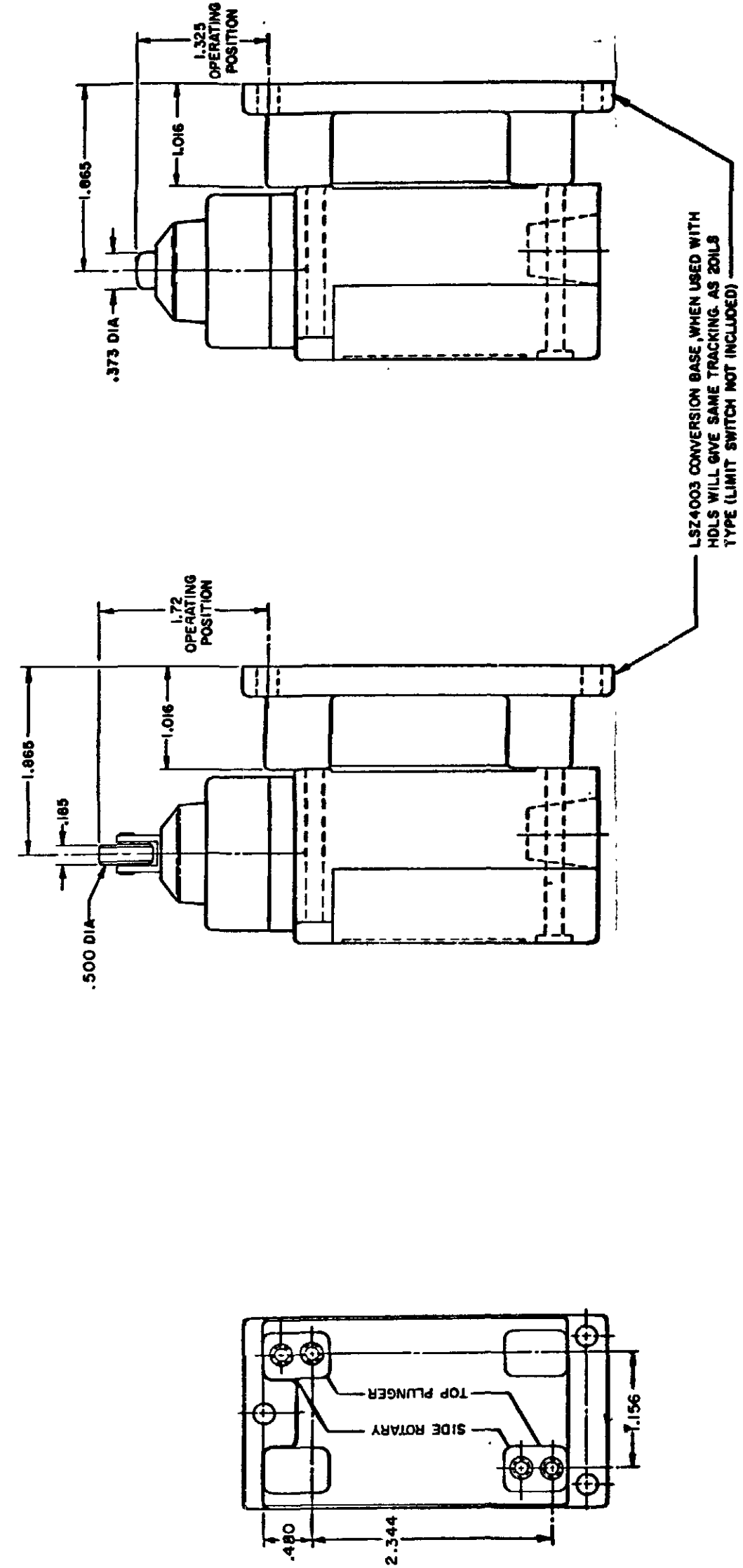
**SINGLE POLE  
(SIDE ROTARY)  
LSZ 4003**

**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

CATALOG LISTING  
M LSA-LSW SERIES CHART 1  
PAGE 10 OF 10  
ISSUE 12  
PSR 10JUL07  
CHECK 11AUG04  
AK 11JUL94  
MAM 15 JUN 94  
DRAWN

REVISIONS  
L 0031956  
BS 10JUL07  
B 201004  
CSL 10 AUG 00  
C 201748  
CSL 17 NOV 00  
D 202198  
CSL 23 JAN 01  
E 204871  
GLW FEB 02  
F 206581  
GCH 14 OCT 02  
G 206783  
CSL 31 OCT 02  
H 207179  
GLH 14 JAN 03  
J 207474  
TSM 18 FEB 03  
K 0006871  
KR 11AUG04

| HEAD TYPE | CELLULOSE                                     | DETERGENT | 5 STAR | ASTM #1 | ASTM #2 | ASTM #3 | ASTM #4 | HOUGHTON SAFE 271 | HOUGHTON SAFE 820 | HOUGHTON SAFE 1010 | MINERAL OIL 1055 | PETROL OIL 1120 | SILICON OIL CRUDE | SUNSAFE | BEER | STODDARD SOLV. | CHLORINATED SOLVENTS | CITRIC ACID | DI-ESTER SYN. LUBRICANTS | OZONE | HYDRAUL | PROGUARD | PETROL BASE HYDRAULIC OIL | LARD OIL | SILICATE ESTERS |
|-----------|-----------------------------------------------|-----------|--------|---------|---------|---------|---------|-------------------|-------------------|--------------------|------------------|-----------------|-------------------|---------|------|----------------|----------------------|-------------|--------------------------|-------|---------|----------|---------------------------|----------|-----------------|
| LSA       | 4                                             | 1         | 1      | 1       | 1       | 2       | 1       | 4                 | 1                 | 1                  | 1                | 1               | 1                 | 1       | 4    | 1              | 2                    | 4           | 4                        | 4     | 1       | 1        | 2                         |          |                 |
| LSB       | 4                                             | 1         | 1      | 1       | 1       | 2       | 1       | 4                 | 1                 | 1                  | 1                | 1               | 1                 | 1       | 4    | 1              | 2                    | 4           | 4                        | 4     | 1       | 1        | 2                         |          |                 |
| LSC       | 4                                             | 2         | 2      | 1       | 2       | 4       | 4       | 2                 | 4                 | 2                  | 2                | 1               | 2                 | 1       | 2    | 4              | 1                    | 4           | 3                        | 4     | 4       | 2        | 2                         | 2        |                 |
| LSD       | 4                                             | 2         | 2      | 1       | 2       | 4       | 4       | 2                 | 4                 | 2                  | 2                | 1               | 2                 | 1       | 2    | 4              | 1                    | 4           | 3                        | 4     | 4       | 2        | 2                         | 2        |                 |
| LSE       | 4                                             | 2         | 2      | 1       | 2       | 4       | 4       | 2                 | 4                 | 2                  | 2                | 1               | 2                 | 1       | 2    | 4              | 1                    | 4           | 3                        | 4     | 4       | 2        | 2                         | 2        |                 |
| LSF       | 4                                             | 2         | 2      | 1       | 2       | 4       | 4       | 2                 | 4                 | 2                  | 2                | 1               | 2                 | 1       | 2    | 4              | 1                    | 4           | 2                        | 4     | 4       | 2        | 2                         | 2        |                 |
| LSG       | 4                                             | 2         | 2      | 1       | 2       | 4       | 4       | 2                 | 4                 | 2                  | 2                | 1               | 2                 | 1       | 2    | 4              | 1                    | 4           | 3                        | 4     | 4       | 2        | 2                         | 2        |                 |
| LSH       | 4                                             | 1         | 1      | 1       | 1       | 2       | 1       | 4                 | 1                 | 1                  | 1                | 1               | 1                 | 1       | 4    | 1              | 2                    | 4           | 4                        | 4     | 1       | 1        | 2                         |          |                 |
| LSJ       | 4                                             | 2         | 2      | 1       | 2       | 4       | 4       | 2                 | 4                 | 2                  | 2                | 1               | 2                 | 1       | 2    | 4              | 1                    | 4           | 3                        | 4     | 4       | 2        | 2                         | 2        |                 |
| LSK       | 4                                             | 2         | 2      | 1       | 2       | 4       | 4       | 2                 | 4                 | 2                  | 2                | 1               | 2                 | 1       | 2    | 4              | 1                    | 4           | 3                        | 4     | 4       | 2        | 2                         | 2        |                 |
| LSL       | 4                                             | 1         | 1      | 1       | 1       | 2       | 1       | 4                 | 1                 | 1                  | 1                | 1               | 1                 | 1       | 4    | 1              | 2                    | 4           | 4                        | 4     | 1       | 1        | 2                         |          |                 |
| LSM       | 4                                             | 1         | 1      | 1       | 1       | 2       | 1       | 4                 | 1                 | 1                  | 1                | 1               | 1                 | 1       | 4    | 1              | 2                    | 4           | 4                        | 4     | 1       | 1        | 2                         |          |                 |
| LSN       | 4                                             | 1         | 1      | 1       | 1       | 2       | 1       | 4                 | 1                 | 1                  | 1                | 1               | 1                 | 1       | 4    | 1              | 2                    | 4           | 4                        | 4     | 1       | 1        | 2                         |          |                 |
| LSP       | 4                                             | 1         | 1      | 1       | 1       | 2       | 1       | 4                 | 1                 | 1                  | 1                | 1               | 1                 | 1       | 4    | 1              | 2                    | 4           | 4                        | 4     | 1       | 1        | 2                         |          |                 |
| LSR       | 4                                             | 1         | 1      | 1       | 1       | 2       | 1       | 4                 | 1                 | 1                  | 1                | 1               | 1                 | 1       | 4    | 1              | 2                    | 4           | 4                        | 4     | 1       | 1        | 2                         |          |                 |
| LSV       | 4                                             | 2         | 2      | 1       | 2       | 4       | 4       | 2                 | 4                 | 2                  | 2                | 1               | 2                 | 1       | 2    | 4              | 1                    | 4           | 3                        | 4     | 4       | 2        | 2                         | 2        |                 |
| LSW       | 4                                             | 2         | 2      | 1       | 2       | 4       | 4       | 2                 | 4                 | 2                  | 2                | 1               | 2                 | 1       | 2    | 4              | 1                    | 4           | 2                        | 4     | 4       | 2        | 2                         | 2        |                 |
| LST       | UNSEALED DEVICE, INTENDED TO MEET NEMA 1 ONLY |           |        |         |         |         |         |                   |                   |                    |                  |                 |                   |         |      |                |                      |             |                          |       |         |          |                           |          |                 |
| LSS       | UNSEALED DEVICE, INTENDED TO MEET NEMA 1 ONLY |           |        |         |         |         |         |                   |                   |                    |                  |                 |                   |         |      |                |                      |             |                          |       |         |          |                           |          |                 |

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     |

## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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