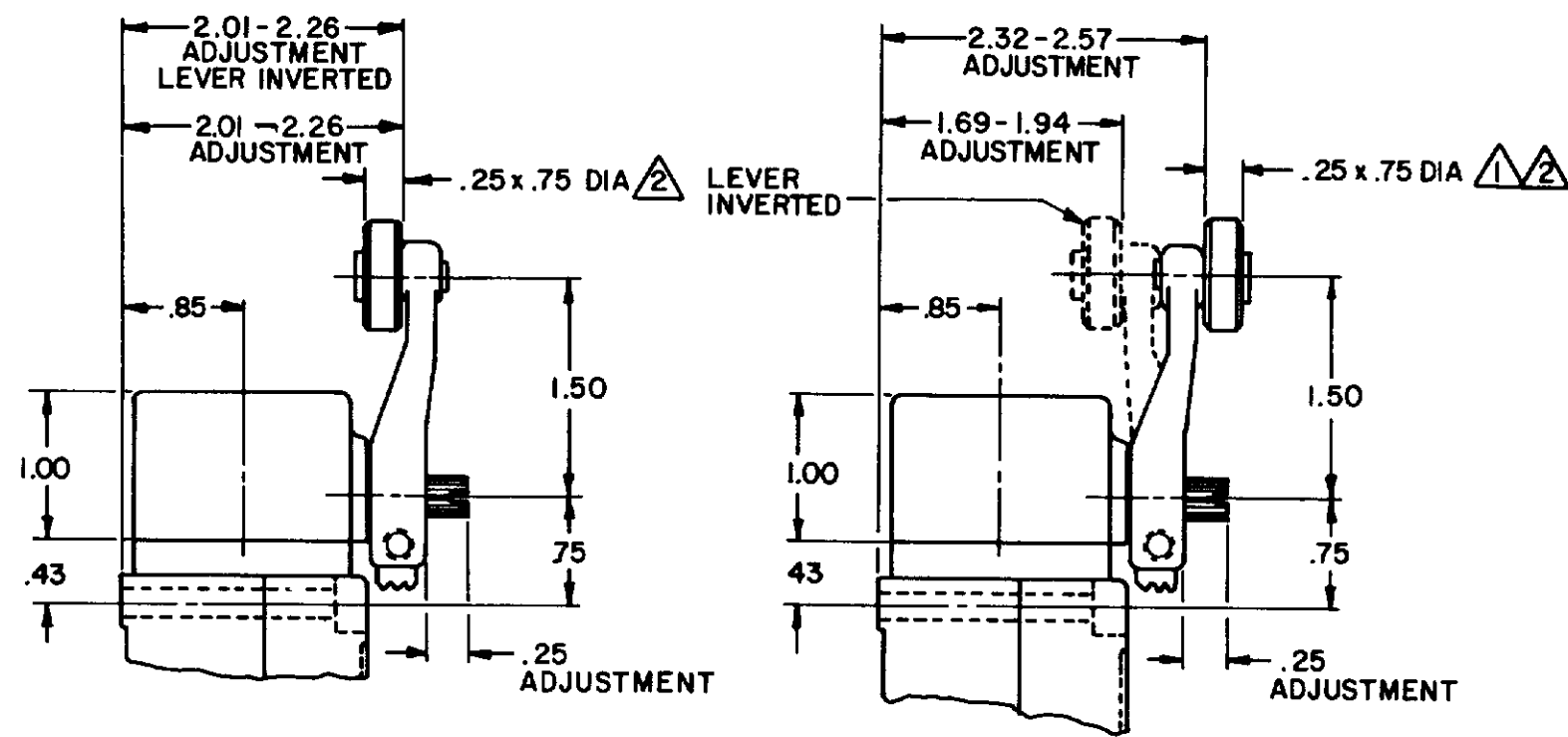
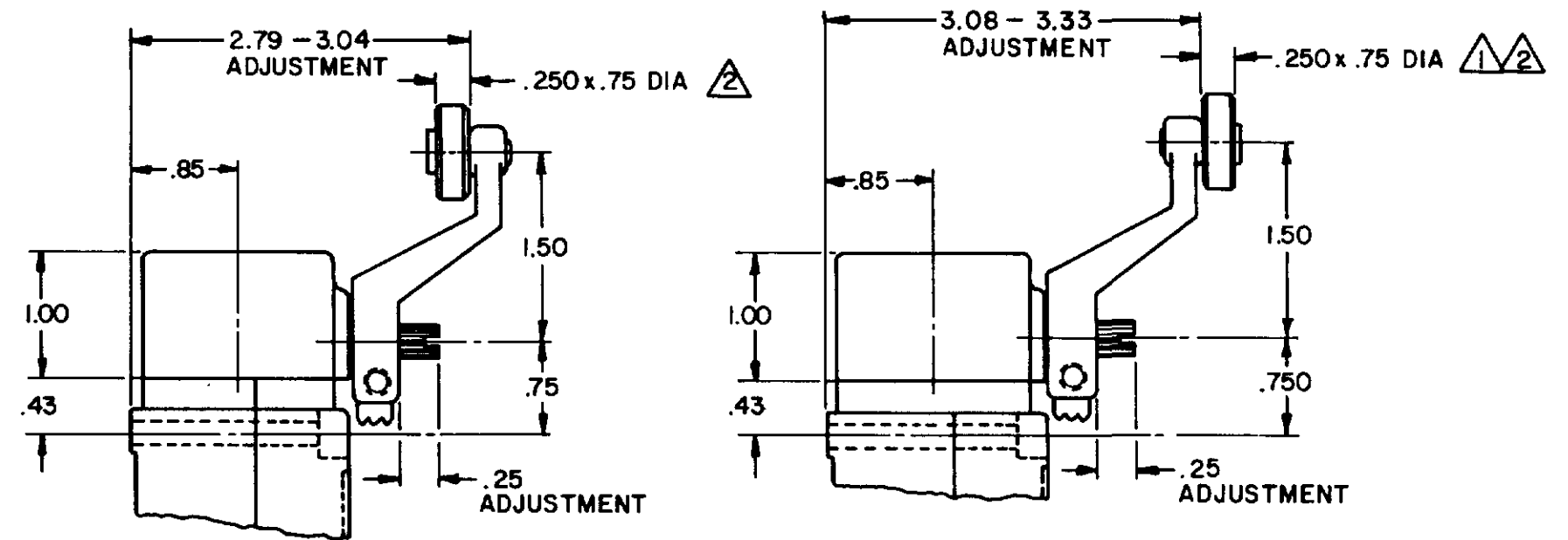




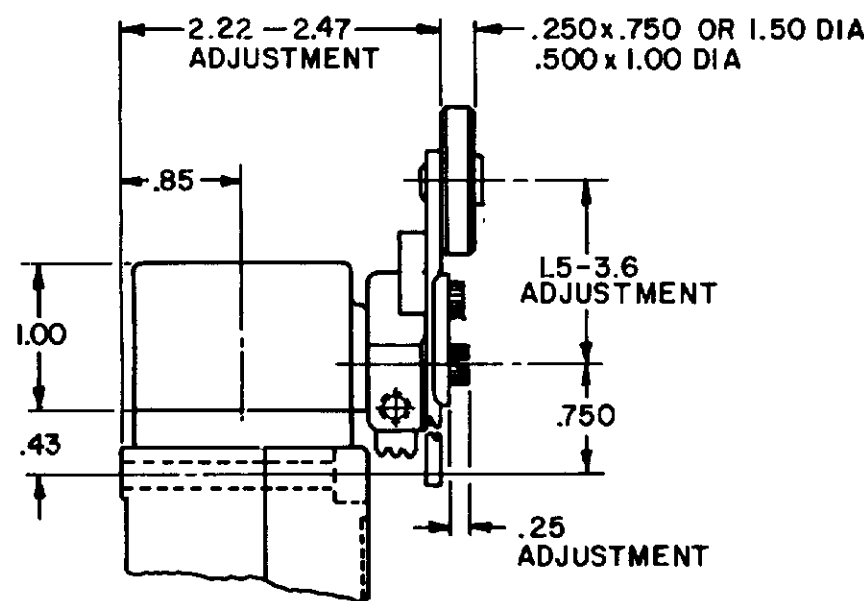
SIDE ROTARY CAM TRACKING



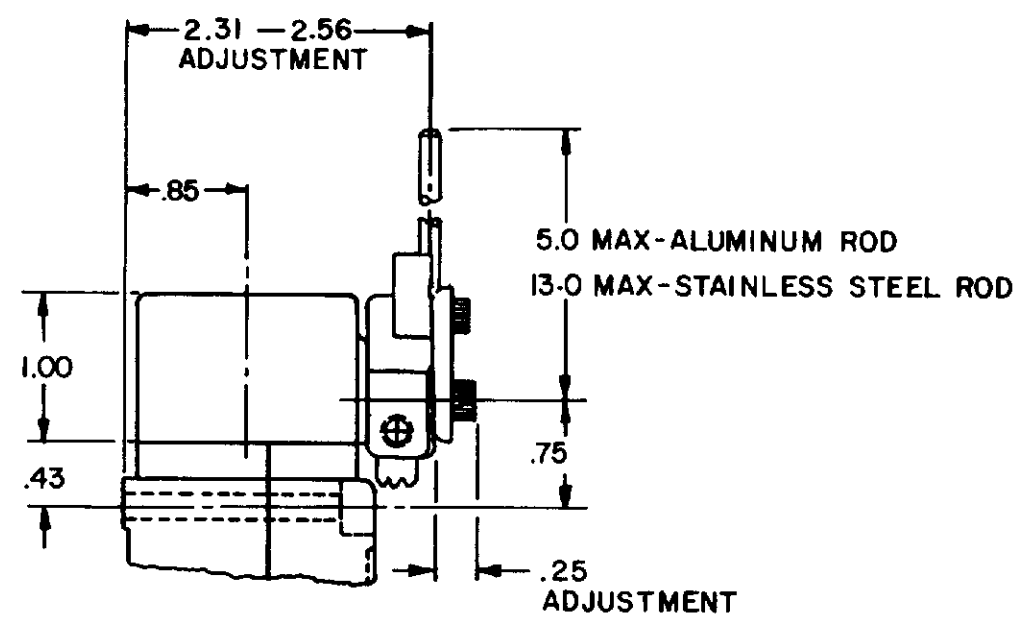
LSZ51 TYPE LEVERS



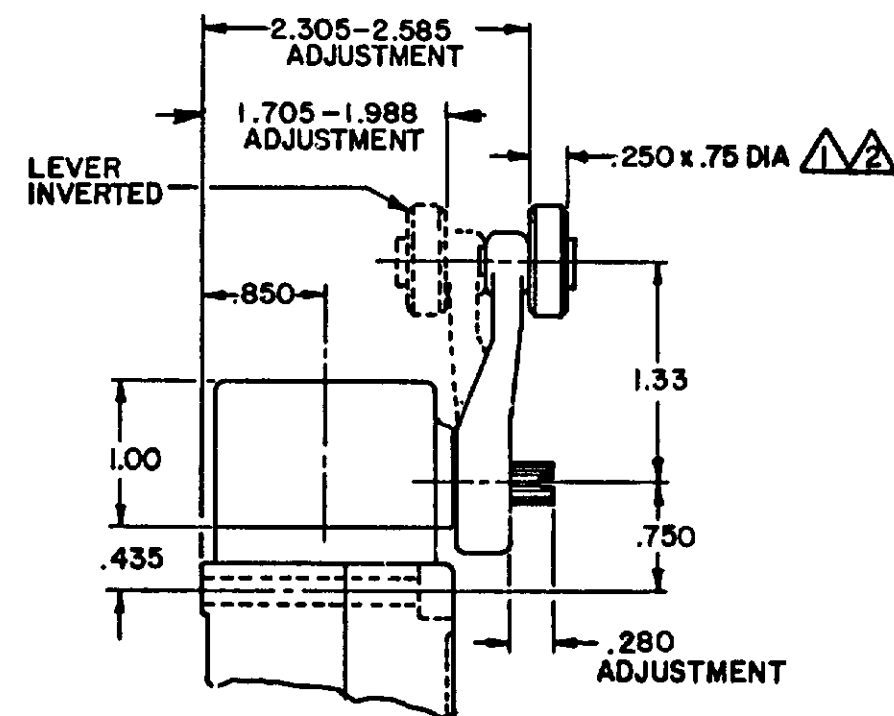
LSZ55 TYPE LEVERS



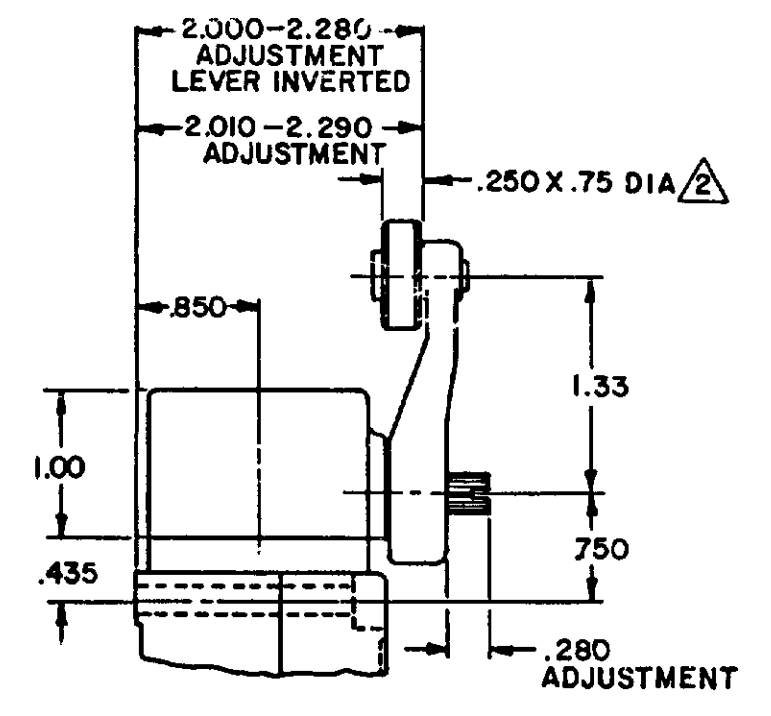
LSZ52 TYPE LEVER



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  
 ISSUE 12  
 PSR 10JUL07 RELEASE NO. CO-78498 REPLACES LSA-LSW SERIES  
 CHECK 11AUG04  
 REVISIONS  
 L 0031956  
 BS 10JUL07  
 B 201004  
 C SL 10AUG00  
 C 201748  
 C SL 17NOV00  
 D 202198  
 C SL 23JAN01  
 E 204871  
 C SL FEB 02  
 F 206581  
 GLH 14OCT02  
 G 206763  
 C SL 31OCT02  
 H 207179  
 GLH 14JAN03  
 J 207474  
 SLH 18FEB03  
 K 0006871  
 RR 11AUG04  
 DRAWN MAM 15 JUN 94  
 CHECK JAF 11 JUL 94

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SWITCH - ENCLOSED

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

PAGE 2 OF 10

THIRD ANGLE PROJECTION	
SCALE NONE	
DO NOT SCALE PRINT	
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE	
ONE PLACE ( )	±.030
TWO PLACES (00)	±.015
THREE PLACES (0.000)	±.005
ANGLES	±
WEIGHT	

ISSUE 12 PSR 10JUL07 RELEASE NO CO-78498 REPLACES LSA-LSW SERIES

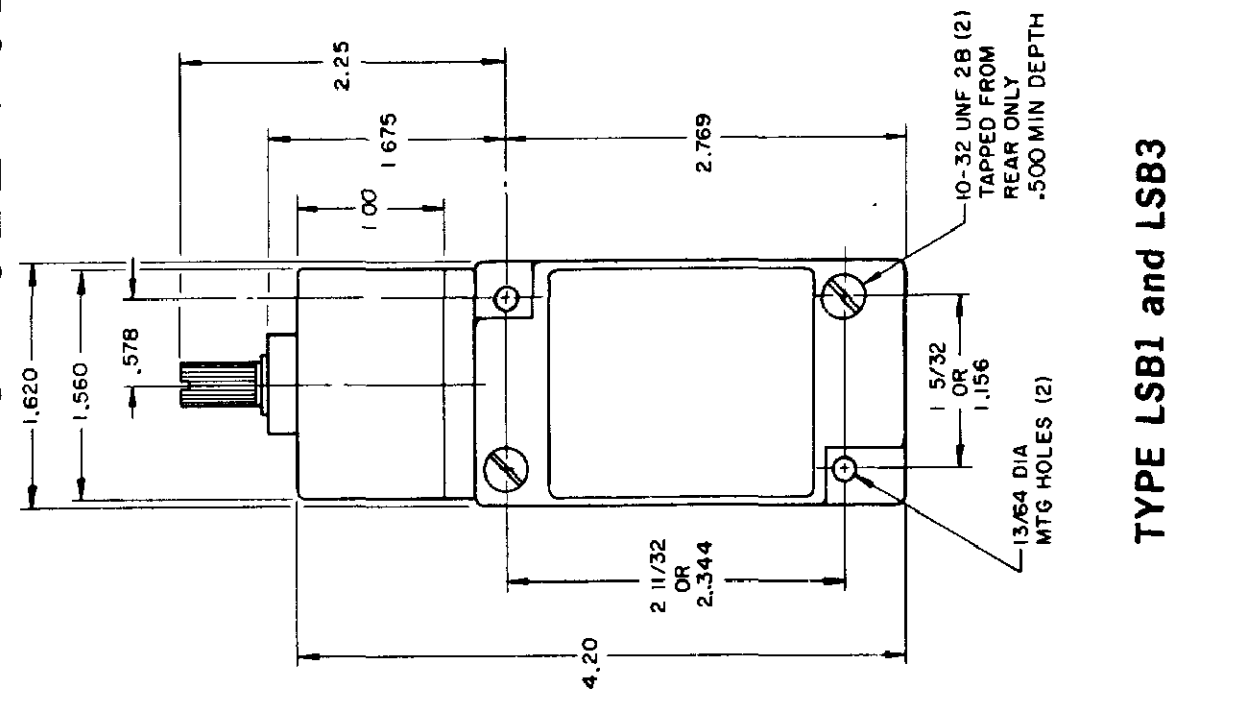
REV. S I O N S  
 L 0031958  
 1 JUL 07  
 B 201004  
 10 AUG 00  
 C 201748  
 17 NOV 00  
 D 202198  
 23 JAN 01  
 E 204871  
 6 FEB 02  
 F 206581  
 14 OCT 02  
 G 206763  
 31 OCT 02  
 H 207179  
 14 JAN 03  
 J 207474  
 18 FEB 03  
 K 0006871

MAM 15 JUN 94 CHECK JAF  
 1 JUL 94 CHECK AK  
 11AUG04 CHECK

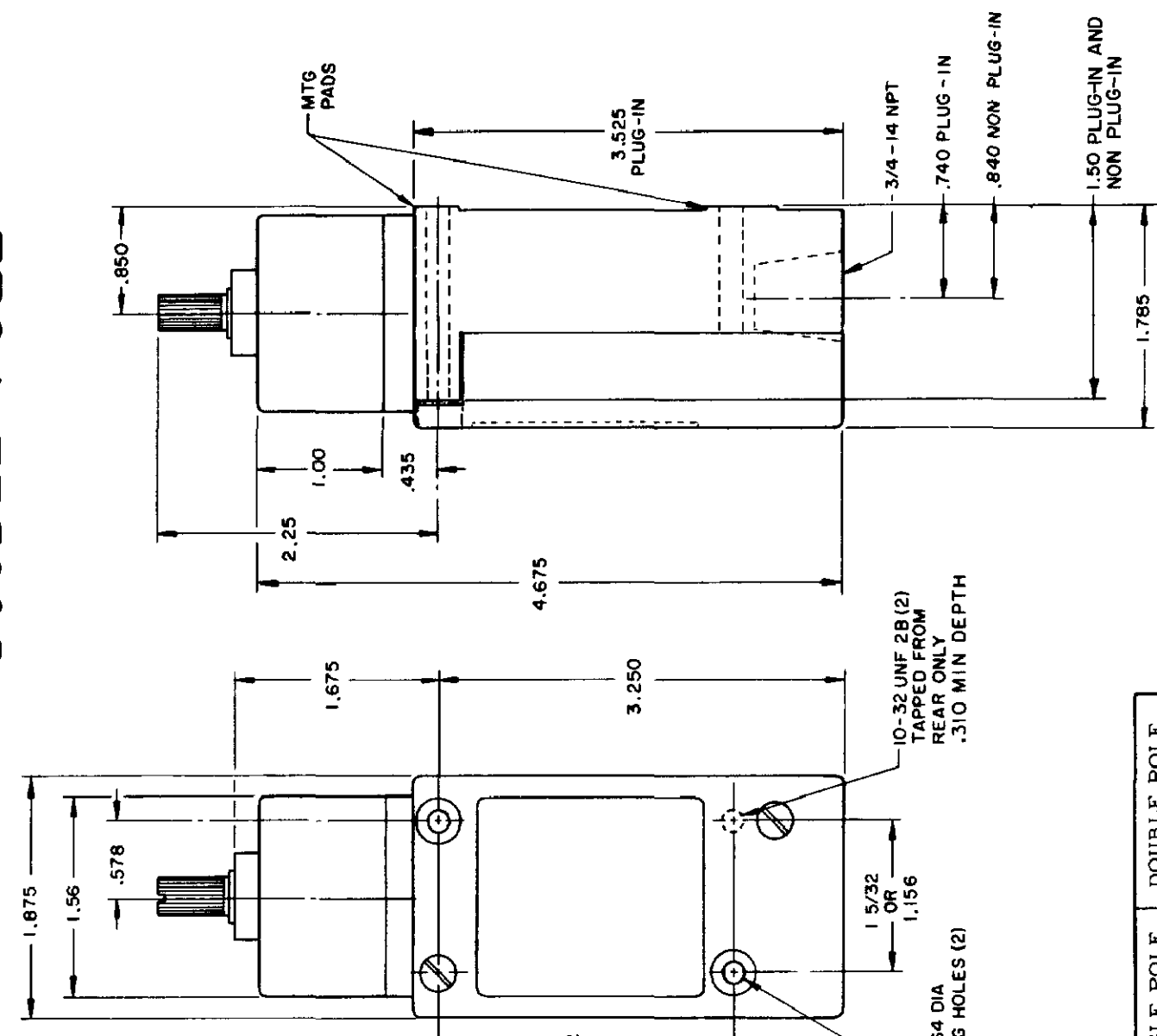
**TOP ROTARY**

**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			
	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	7.5
600	12	1.2	6	6

D.C. VOLTAGE	MAKE & BREAK	
	INDUCTIVE	RESISTIVE
120	0.25	0.80
240	0.15	0.40

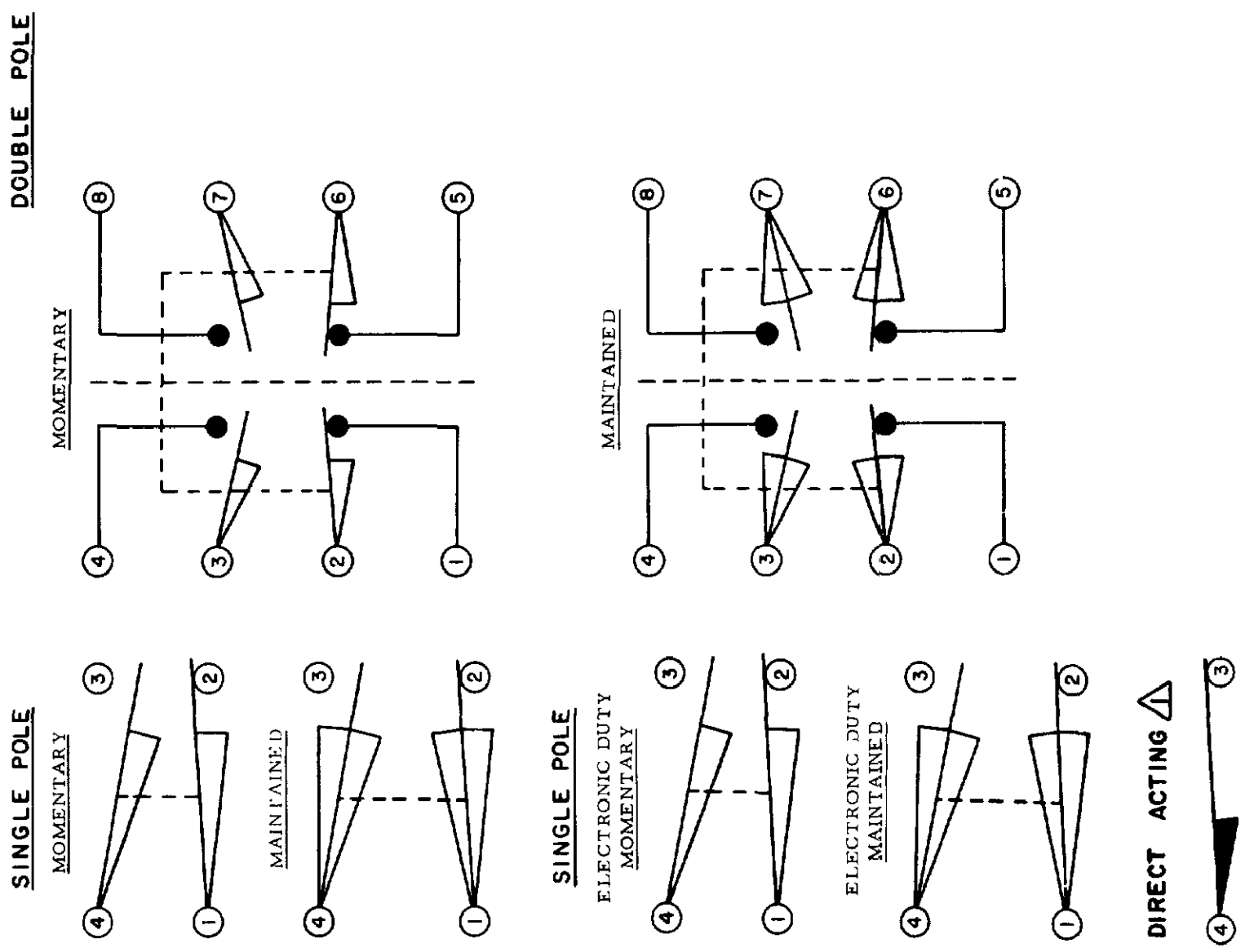
ELECTRONIC DUTY BASIC SWITCH  
 10 AMP CONT.

VOLTAGE	MAKE AND BREAK AMPS
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)

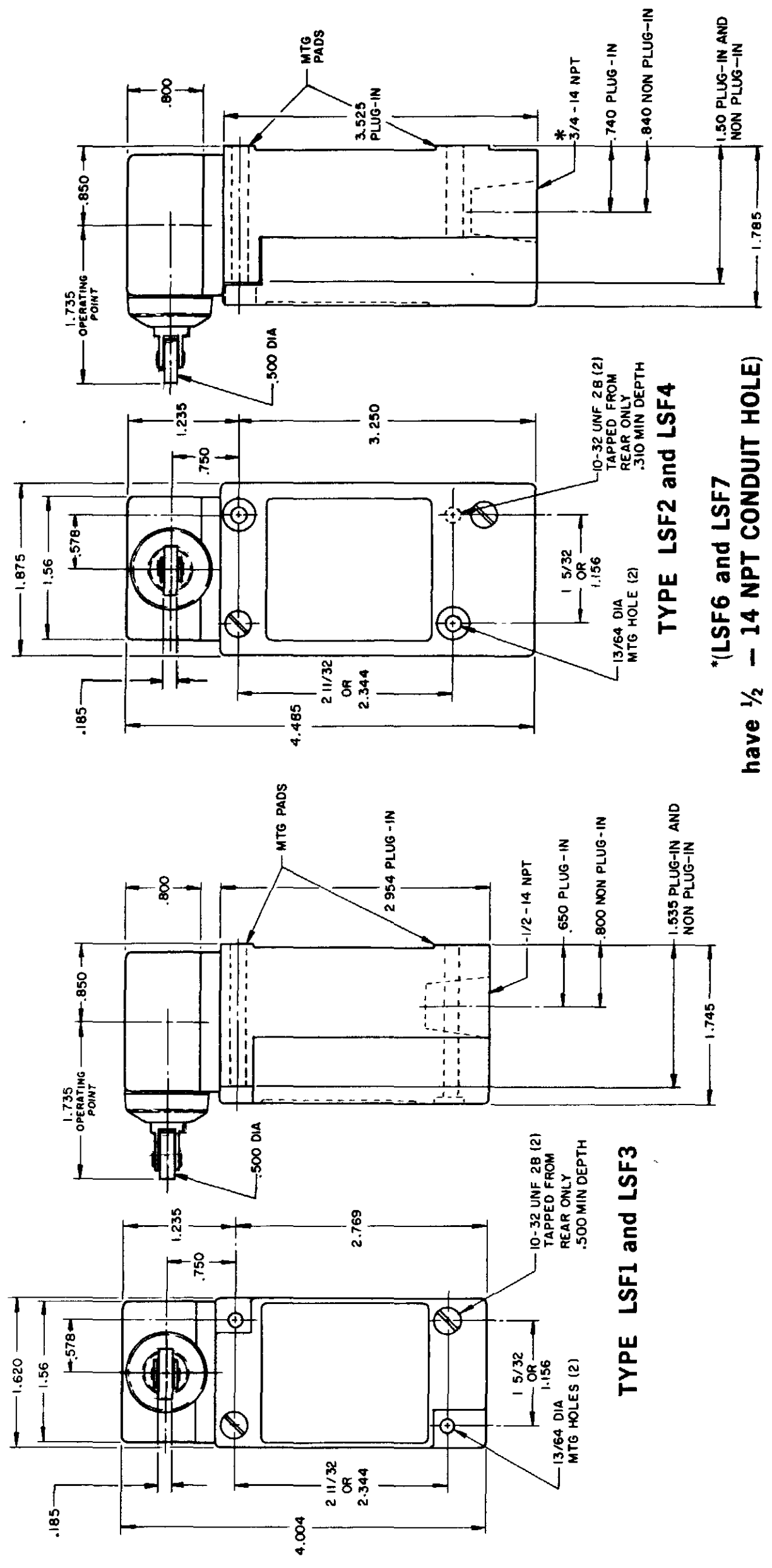


NOTES  
 Δ DIFFERENTIAL TRAVEL ON ALL OPERATING CHARACTERISTICS NOT APPLICABLE

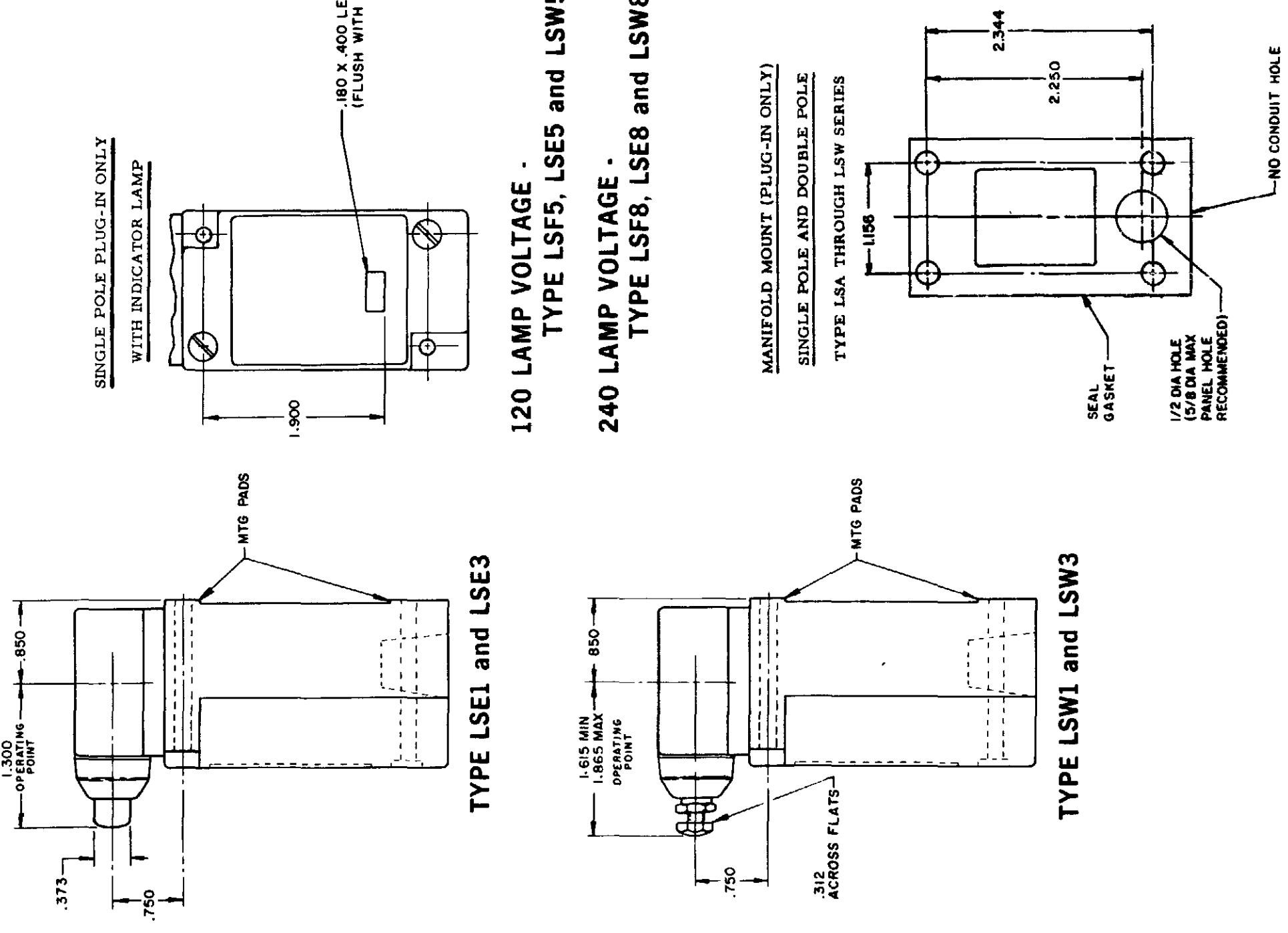


RASTER	15 JUN 94	CHECK	JAF
DRAWN	11 JUL 94	CHECK	AK
MAM	11 AUG 04	CHECK	AK
REV	11 AUG 04	CHECK	AK
1	11 AUG 04	CHECK	AK
2	11 AUG 04	CHECK	AK
3	11 AUG 04	CHECK	AK
4	11 AUG 04	CHECK	AK
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96	11 AUG 04	CHECK	AK
97	11 AUG 04	CHECK	AK
98	11 AUG 04	CHECK	AK
99	11 AUG 04	CHECK	AK
100	11 AUG 04	CHECK	AK

**SIDE PLUNGER TYPE**  
**DOUBLE POLE**  
**SINGLE POLE**

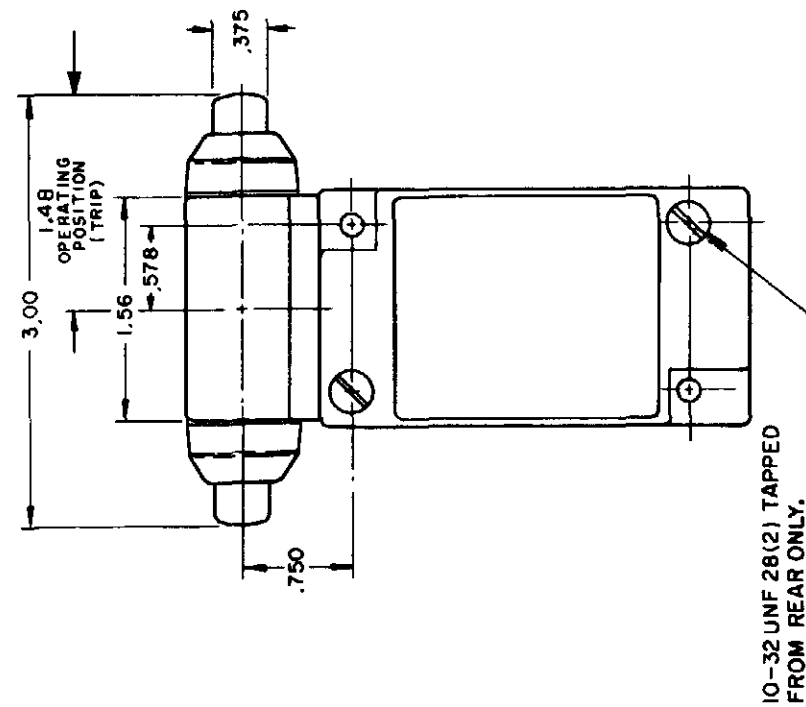


**\*LSF6 and LSF7 have 1/2 - 14 NPT CONDUIT HOLE)**

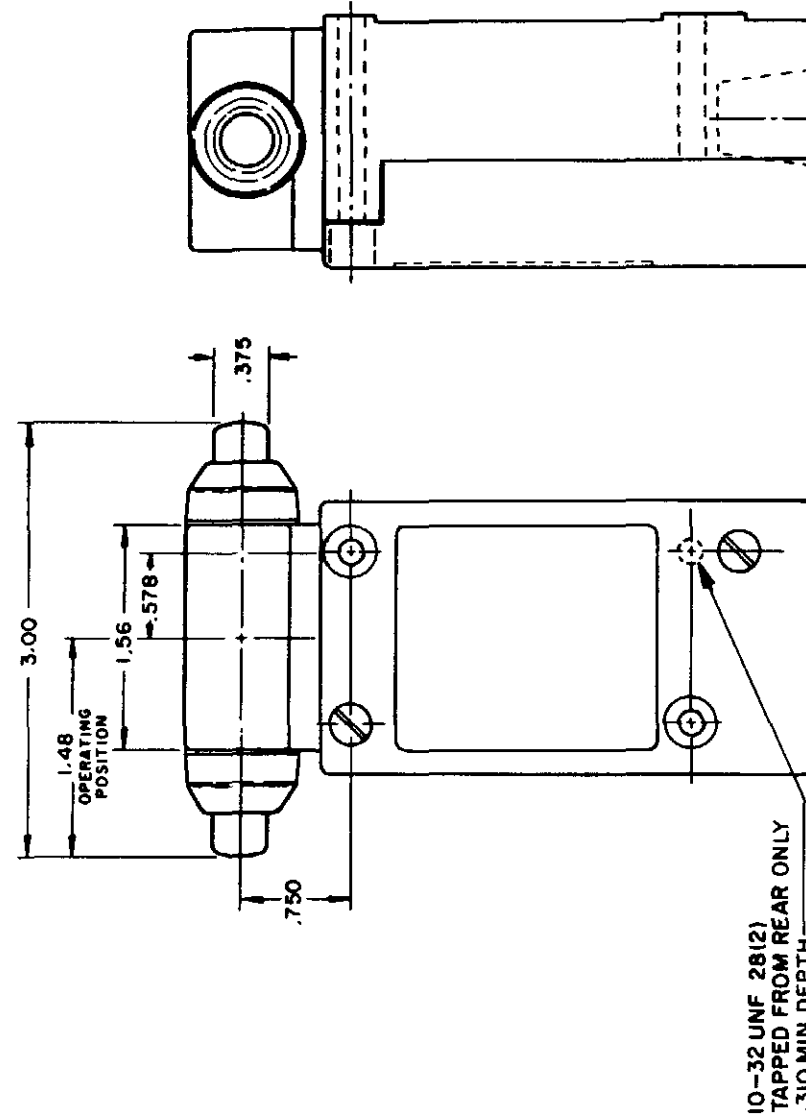


**120 LAMP VOLTAGE - TYPE LSF5, LSE5 and LSW5**

**240 LAMP VOLTAGE - TYPE LSF8, LSE8 and LSW8**



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		
	SINGLE POLE	DOUBLE POLE	SINGLE POLE	DOUBLE POLE	SINGLE POLE	DOUBLE POLE	LSC	LSD	LSV
PRETRAVEL (MAX)	.070	.070	.070	.070	.070	.070	1ST STEP .070		
DIFFERENTIAL TRAVEL (MAX)	.015	.020	.015	.020	.015	.020	2ND STEP .016 MIN ADD'L		
OVERTRAVEL (MIN)	.190	.190	.190	.190	.190	.190	.015 EACH STEP		
OPERATING FORCE (MAX)	4 LBS	4 LBS	4 LBS	4 LBS	4 LBS	4 LBS	.170		
OPERATING POINT	1.805 ± .030	2.200 ± .040	2.085 MIN	2.335 MAX	2.085 MIN	2.335 MAX	1ST STEP		
FULL OVERTRAVEL FORCE (MAX)	7 LBS	7 LBS	7 LBS	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

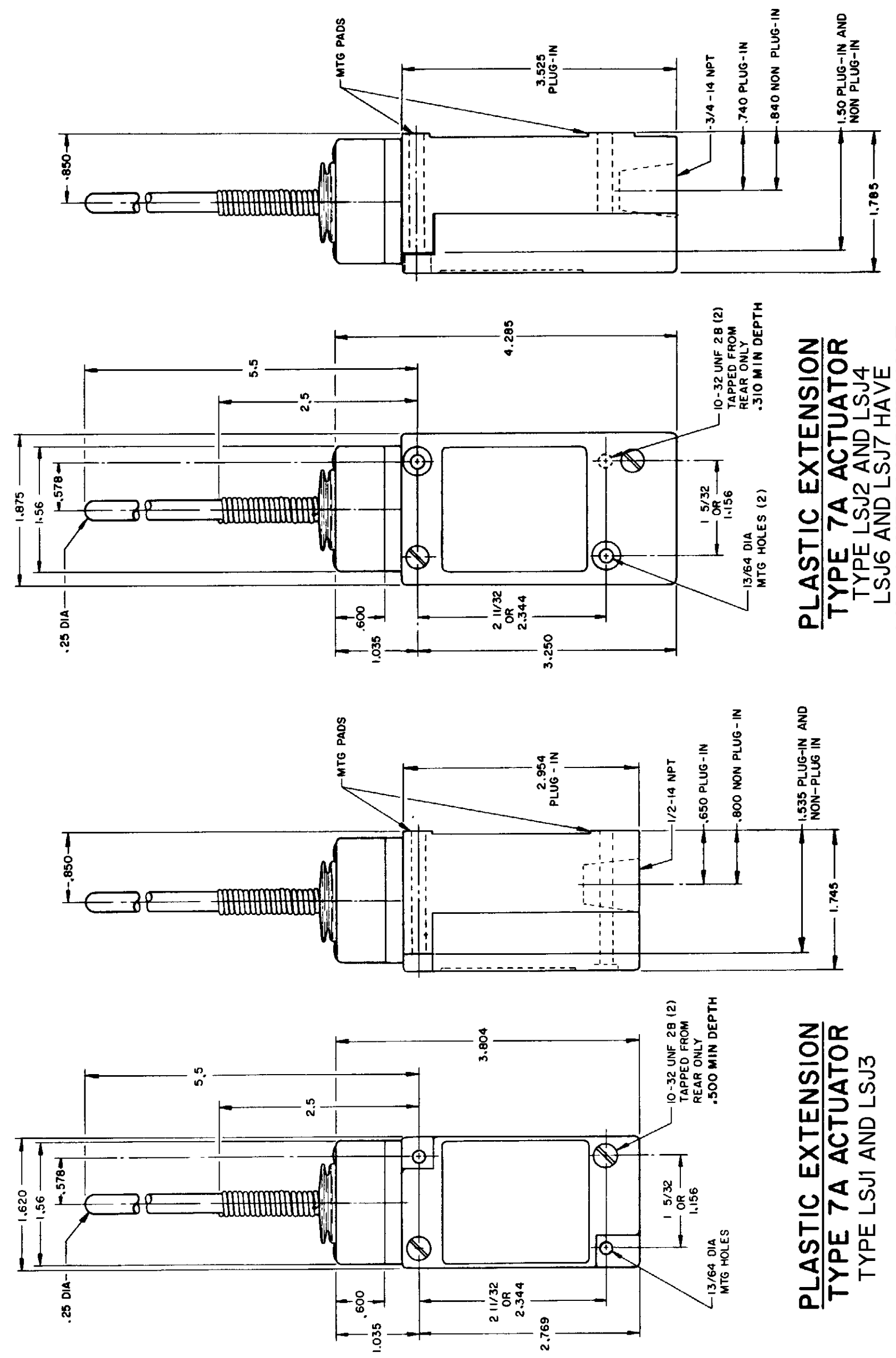
CHARACTERISTICS	LSE PLUNGER		LSF ROLLER PLUNGER		LSW ADJ PLUNGER		SEQUENCE BASIC		
	SINGLE POLE	DOUBLE POLE	SINGLE POLE	DOUBLE POLE	SINGLE POLE	DOUBLE POLE	LSE	LSF	LSW
PRETRAVEL (MAX)	.100	.100	.100	.100	.170	.170	1ST STEP .100		
DIFFERENTIAL TRAVEL (MAX)	.045	.045	.045	.045	.090	.090	2ND STEP .020 MIN ADD'L		
OVERTRAVEL (MIN)	.190	.190	.190	.190	.080	.080	.025 EACH STEP		
OPERATING FORCE (MAX)	6 LBS	6 LBS	6 LBS	6 LBS	10 LBS	10 LBS	.170		
OPERATING POINT	1.300 ± .030	1.735 ± .040	ADJUSTABLE FROM	ADJUSTABLE FROM	1.480 ± .030	1.480 ± .030	1ST STEP		
FULL OVERTRAVEL FORCE (MAX)	6 LBS	6 LBS	6 LBS	6 LBS	6 LBS	6 LBS	1.310±.030	1.745±.040	1.625 MIN / 1.875 MAX

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 SWITCH - ENCLOSED  
 LSA-LSW SERIES CHART 1  
 CATALOG LISTING  
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 TOLERANCES ARE: ONE PLACE (.0) TWO PLACE (.00) THREE PLACE (.000) ANGLES .015 .030 WEIGHT



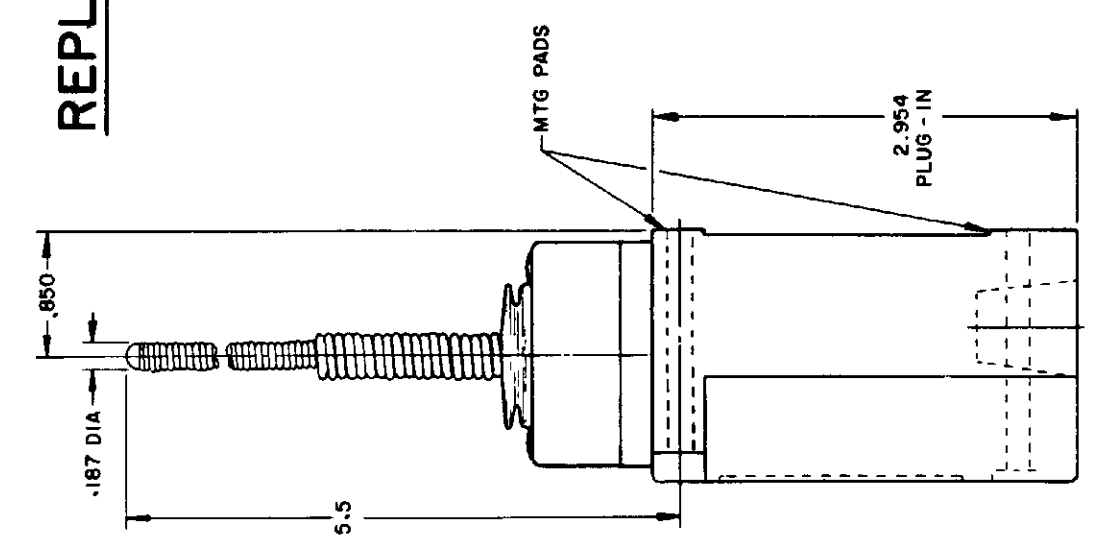
**WOBBLE STICK**

**SINGLE POLE**      **DOUBLE POLE**

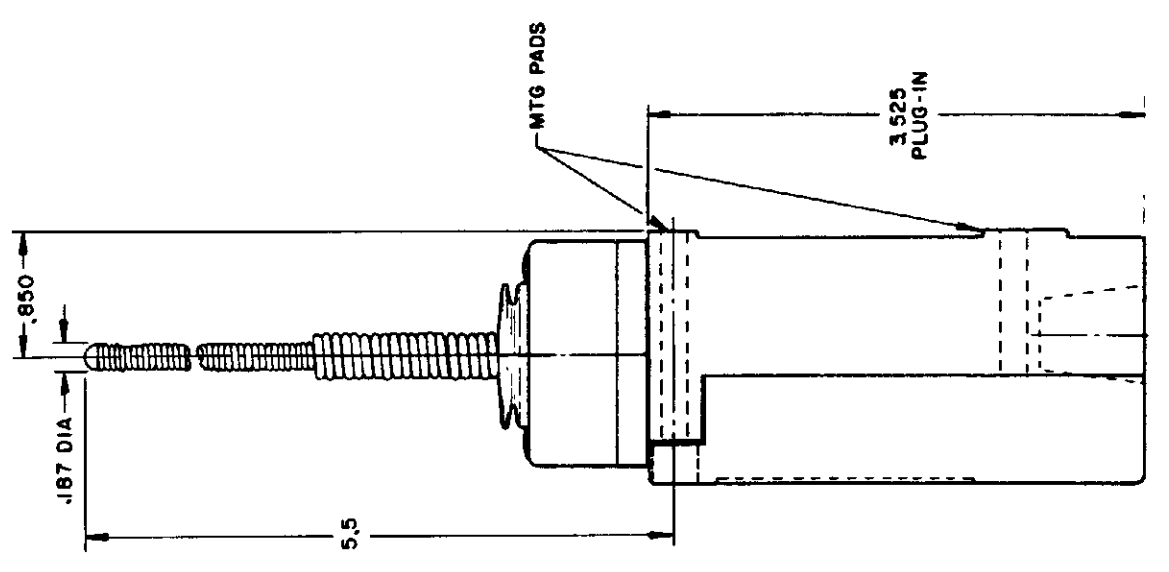


**PLASTIC EXTENSION  
 TYPE 7A ACTUATOR**  
 TYPE LSJ1 AND LSJ3

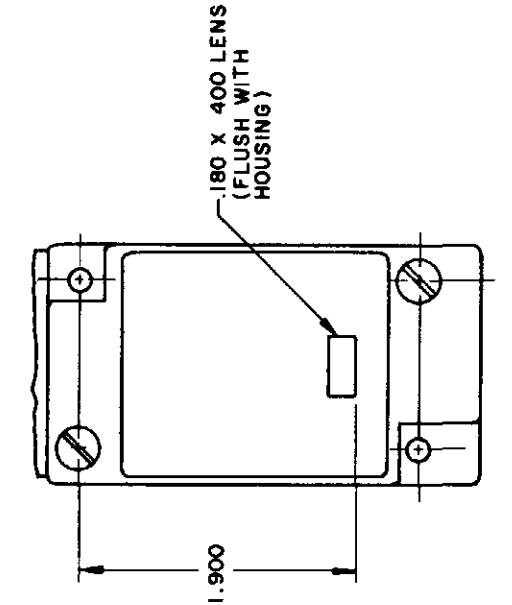
**PLASTIC EXTENSION  
 TYPE 7A ACTUATOR**  
 TYPE LSJ2 AND LSJ4  
 LSJ6 AND LSJ7 HAVE  
 1/2 - 14 NPT CONDUIT HOLE



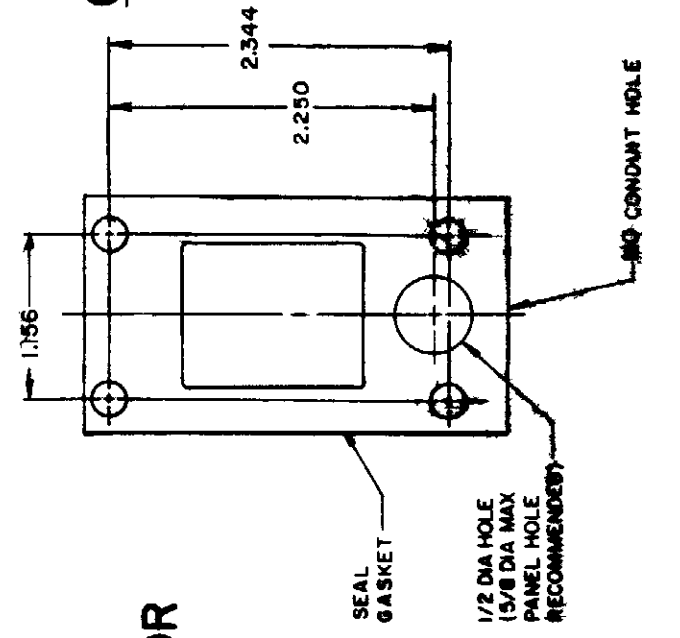
**REPLACEMENT ACTUATOR  
 LSZ-4009**



**REPLACEMENT ACTUATOR  
 LSZ-4000**



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



**CABLE EXTENSION  
 TYPE 7N ACTUATOR**

**CABLE EXTENSION  
 TYPE 7N ACTUATOR**

**MANIFOLD MOUNT (PLUG-IN ONLY)  
 SINGLE POLE AND DOUBLE POLE  
 TYPE LSA THROUGH LSW SERIES**

**REPLACEMENT ACTUATOR  
 LSZ-4011**



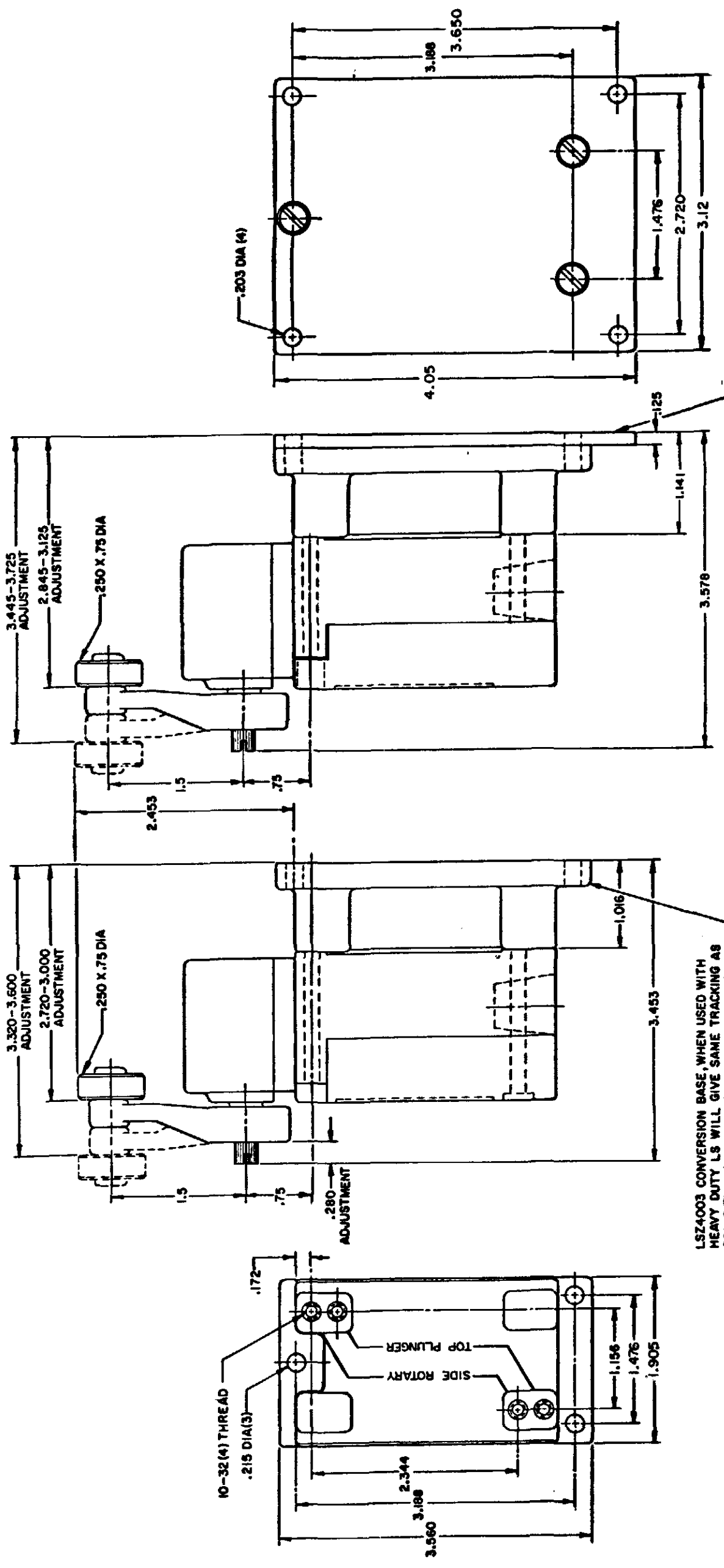


ISSUE	12	PSR	10JUL07	RELEASE NO	CO-78498	REPLACES	LSA-LSW SERIES
CATALOG LISTING	LSA-LSW SERIES CHART 1						
REVISIONS	PAGE 9 OF 10						
L	0031956	BS	10JUL07	11AUG04	AK	11AUG04	check
B	201004	CS	10AUG00	AK	11AUG04	AK	check
C	201748	CS	23JAN01	AK	11AUG04	AK	check
D	202198	CS	23JAN01	AK	11AUG04	AK	check
E	204871	CS	23JAN01	AK	11AUG04	AK	check
F	206581	CS	23JAN01	AK	11AUG04	AK	check
G	206763	CS	23JAN01	AK	11AUG04	AK	check
H	207179	CS	23JAN01	AK	11AUG04	AK	check
J	207474	CS	23JAN01	AK	11AUG04	AK	check
K	0006871	CS	23JAN01	AK	11AUG04	AK	check
RASTER	DRAWN MAM 15 JUN 94 check JAF 11 JUL 94 check						

# CONVERSION BASES

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

**DOUBLE POLE (SIDE ROTARY) LSZ 4004**

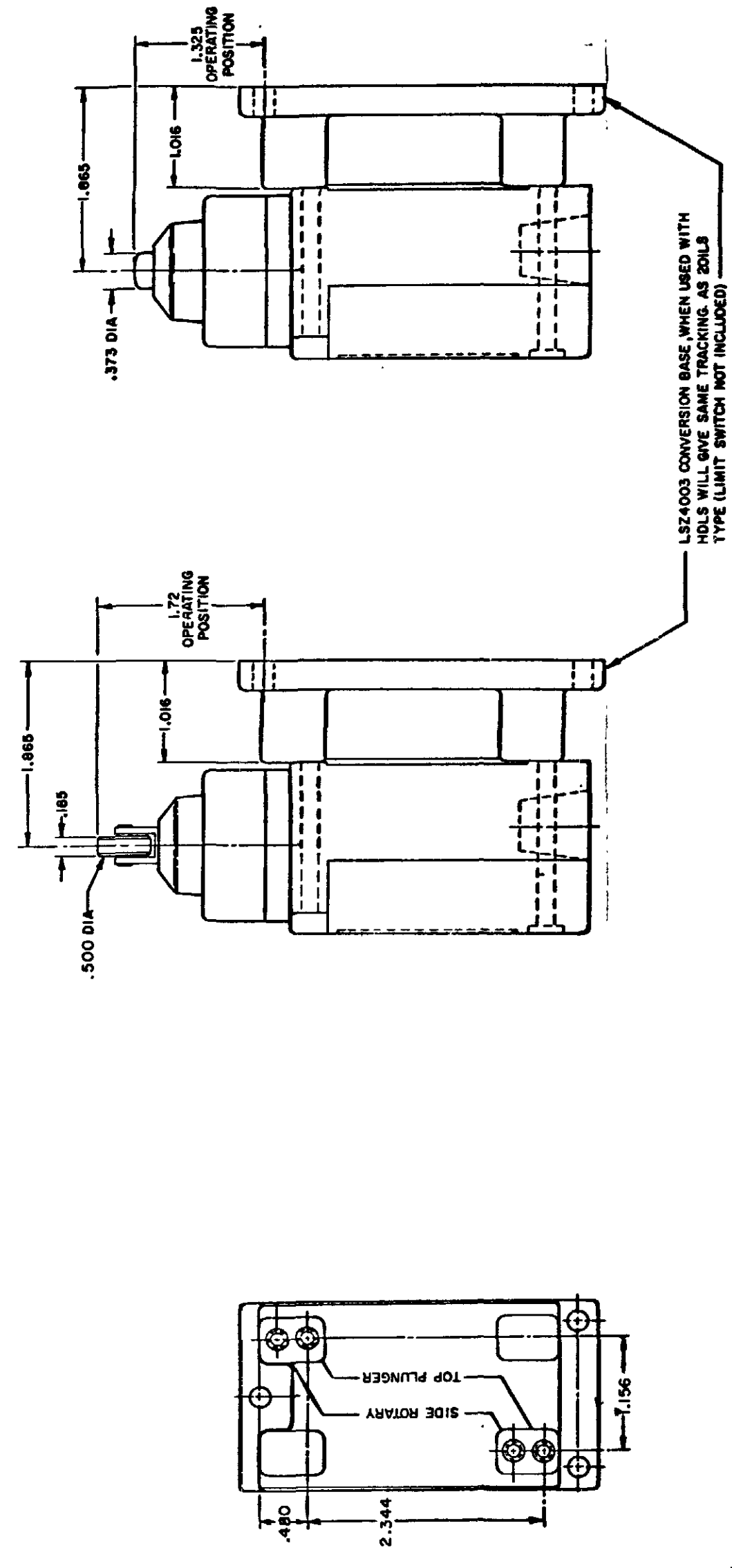


LSZ4004 (FURNISHED ASSEMBLED) CONVERSION BASE, WHEN USED WITH HOLDS WILL GIVE SAME TRACKING AS 301LS TYPE (LIMIT SWITCH NOT INCLUDED)

LSZ4003 CONVERSION BASE WHEN USED WITH HEAVY DUTY LS WILL GIVE SAME TRACKING AS 201LS TYPE (LIMIT SWITCH NOT INCLUDED)

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

# SINGLE POLE TOP PLUNGER LSZ 4003



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

PAGE 9 OF 10

HEAD TYPE	CELLULUBE	DETERGENT	5 STAR	ASTM #1	ASTM #2	ASTM #3	ASTM #4	HOUGHTON SAFE 271	HOUGHTON SAFE 820	HOUGHTON SAFE 1010	HOUGHTON SAFE 1055	MINERAL OIL	PETR. OIL CRUDE	SILICON GR & OIL	SUNSAFE	BEER	STODDARD SOLV.	CHLORINATED SOLVENTS	CITRIC ACID	D-ESTER SYN. LUBRICANTS	OZONE	HYDRAUL	PROGUARD	PETRO. BASE HYDRAULIC OIL	LARD OIL	SILICATE ESTERS
LSA	4	1	1	1	1	2	1	4	1	1	1	1	1	1	1	4	1	2	4	4	4	4	1	1	2	
LSB	4	1	1	1	1	2	1	4	1	1	1	1	1	1	1	4	1	2	4	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	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	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	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	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	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	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

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

CATALOG LISTING  
**M** LSA-LSW SERIES CHART 1  
 PAGE 10 OF 10  
 ISSUE 12  
 PSR 10JUL07  
 RELEASE NO. CO-78498  
 REPLACES LSA-LSW SERIES

REVISIONS	DATE	BY	CHKD
L	0031956	BS	10JUL07
B	201004	CS	10AUG00
C	201748	CS	17NOV00
D	202198	CS	23JAN01
E	204871	GJW	FEB 02
F	206581	GLH	14OCT02
G	206783	CS	31OCT02
H	207179	GLH	14JAN03
J	207474	TSM	18FEB03
K	0006871	KR	11AUG04

RASTER  
 DRAWN  
 MAM 15 JUN 94  
 CHECK 11AUG04

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

FED. MFG. CODE 91929



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.