

Honeywell Sensing and Control

LSU1A



Order Lever Separately

Actual product appearance may vary.

Features

- Wide variety of operating heads
- Field adjustable operating modes, for reduced inventory
- Convenience of on-the-spot adjustment instructions
- Complete choice of circuitry and electrical rating options
- Plug-in and non plug-in versions have identical operating characteristics and are dimensionally interchangeable
- Manifold (rear-wire) version
- Explosion-proof versions
- Low temperature versions to -40°C (-40°F)
- Captive head and body screws
- Designed to withstand seismic shock
- Stainless steel (NEMA 4X) versions
- Pre-leaded cable or pre-wired connector types
- Epoxy filled wash down (NEMA 6P) types
- Completely fluorocarbon (FC) sealed versions

Description

Series HDLS Plug-in: Side Rotary; 1NC 1NO SPDT Snap Action; 0.5 in - 14NPT conduit

Potential Applications

- Machine Tools
- Material Handling
- Packaging
- Presses
- Pulp and Paper
- Welding
- PLC Interface

Sensing and Control offers the world's most advanced line of MICRO SWITCH™ heavy-duty limit switches. These switches include boss-and-socket head design for secure head-to-body retention, unique all-metal drive train for consistent operating characteristics even at high temperature (lasts longer without the need for frequent adjustment than drive trains with plastic parts,) self-lifting pressure plate terminals save wiring time, easily identified grounding terminal (inside) for compliance with OSHA and other regulatory agency standards, one piece flat gasket (seals better than gaskets that go around curves and corners, does not contact terminal pins to reduce chances of fluid migration,) front mounting and interchangeability of single- and double-pole switches, plug-in and non plug-in with one another and with other switch brands, tracking interchangeability of actuator levers for single- and double-pole switches, plug-in and non plug-in, twin shaft seals for an extra measure of protection, inner FC O-ring seal, outer Buna-N seal (all FC available,) FC shaft and diaphragm seals on side rotary switches, rugged corrosion-resistant zinc head and body are phosphate treated and epoxy finished, exclusive teller tab assures proper torque (when it cannot be moved the lever is tight enough to prevent slippage) and domestic and international conduit taps.

| Product Specifications | |
|--------------------------------|---|
| Availability | Global |
| Operating Force (O.F.) | 0,45 N m max. [4 in lb max.] |
| Pretravel (P.T.) | 5° max. |
| Overtravel (O.T.) | 70° min. |
| Differential Travel (D.T.) | 3° max. |
| Product Type | MICRO SWITCH™ Heavy-Duty Limit Switches |
| Actuator | Side Rotary |
| Lever Style | Lever Not Included - Reference Lever Required Accessory |
| Circuitry | 1NC 1NO Single-Pole Double- Throw, Snap-Action, Double-Break |
| Ampere Rating | 10 A (Thermal) |
| Supply Voltage | 600 Vac and 250 Vdc max. |
| Housing Material | Zinc Die-Cast |
| Termination Type | 0.5 in - 14NPT conduit |
| Housing Type | HDLS Plug-in |
| Series Name | HDLS |
| Sealing | NEMA 1, 3, 4, 4X, 6, 6P, 12, 13 |
| Approvals | UL listed, CSA Certified, CE Certified, CCC Certified |
| CSA File # | LR57326/Master Contract 152457 |
| UL File # | E37138 |
| Operating Temperature Range | -12 °C to 121 °C [10 °F to 250 °F] |
| Comment | 5° Pretravel |
| Agency Approvals and Standards | EN60947-1, EN60947-5-1 |
| UNSPSC Code | 302119 |
| UNSPSC Commodity | 302119 Switches and controls and relays |
| Sealed | Industrial |

SIDE ROTARY

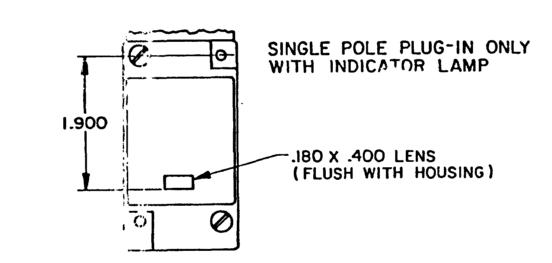
SINGLE POLE 1.875 1.56 1.620 2.437 1.56-.573 MTG 1.00 ♦ 1.435 .750 _____. 4.204 2.344 2.344 2.954 2.769 PLUG-IN 1.156 -1/2-14 NPT .203 DIA -.203 DIA -10-32 UNF 2B (2) TAPPED FROM -.650 PLUG-IN MTG HOLES (2)-MTG HOLES (2) REAR ONLY .500 MIN DEPTH -1.535 PLUG-IN AND NON PLUG-IN **──**1.745**─►**

- MTG PADS ------3.250 PLUG-IN -3/4-14 NPT * .740 PLUG-IN .840 NON PLUG-IN LO-32 UNF 2B (2) TAPPED FROM -1.50 PLUG-IN AND NON PLUG-IN REAR ONLY .310 MIN DEPTH **I**-1.785 ---

DOUBLE POLE

2.437---

TYPE: LSA1, LSH1, LSN1, LSP1, LSR1 LSA3, LSH3, LSN3, LSP3, LSR3 LSS1, LST1



OPERATING DATA
SIDE ROTARY-GRAVITY RETURN

INITIAL REF POSITION

-4° (APPROX)

---OPERATE POINT 🗥

SWITCH OPERATED

-OPERATE POINT 🗘

- COUNTER - CLOCKWISE OPERATION

.120 LAMP VOLTAGE -TYPE LSA5, LSH5, LSN5, LSP5, LSR5 240 LAMP VOLTAGE -TYPE LSAR, LSHB, LSNB, LSPB, LSRB

3° MAX D.T.

4° (APPROX)-

RELEASE FONT /

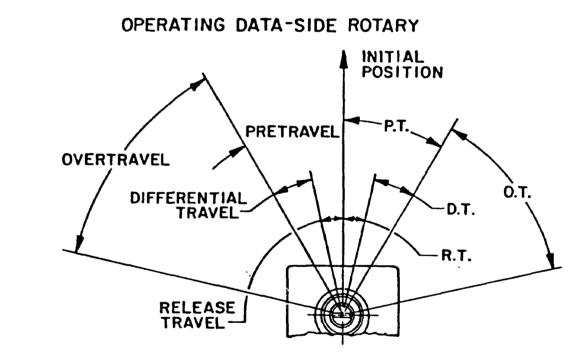
SWITCH RELEASED

RELEASE POINT

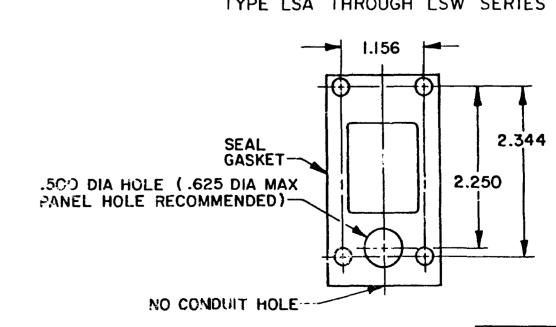
CLOCKWISE-GRERATION

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

> *(LSA6, LSH6, LSM6, LSN6, LSP6, LSR6 LSA7, LSH7, LSM7, LSN7, LSP7, LSR7 HAVE 1/2-14 NPT CONDUIT HOLE)



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



SCALE NONE UNLESS OTHERWISE SPECIFIED TOLERANCES ARE PAGE 1 OF 10 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

MICRO SWITCH a Honeywell Division SWITCH - ENCLOSED LSA-LSW SERIES FED. MFG. CODE 91929

ONE PLACE (.0) $\pm .030$ TWO PLACES (.00) \pm .015 THREE PLACES (.000) \pm .005 ANGLES CHART WEIGHT

THIRD ANGLE PROJECTION

DO NOT SCALE PRINT

OPERATE AND RELEASE POINTS WILL EXCHANGE LOCATIONS IF SHAFT IS ROTATED 180°

LSH

MOMENTARY

30 40

75°

1.7 IN. LBS

1.7 IN. LBS

LSS

NOT APPLICABLE

NOT APPLICABLE

12°

360°

5 IN-OZ

5 IN-OZ

LOW PRETRAVEL | LOW PRETRAVEL

SINGLE DOUBLE SINGLE DOUPLE

POLE SOLE POLE POLE

MOMENTARY GRAVITY RETURN

AND DIFF. TRAVEL AND LOW TORQUE

LSP

MOMENTARY

4 IN. LBS

4 IN. 1BS

LST

15°

60°

50

75°

12 IN-OZ

12 IN-OZ

LSN

MAINTAINED

650

40°

90°

4 IN. LBS

LSM

CENTER NEUTRAL

DOUBLE POLE

ONLY

18°

10°

4 IN. LBS

4 IN. LBS

LSA

MOMENTARY

15°

INGLE DOUBLE

POLE POLE 7°

750

4 IN. LBS

4 IN. LBS

LSU

LOW PRETRAVEL

5°

SINGLE DOUBLE

POLE POLE 4°

75°

4 IN. LBS

4 IN. LBS

OPERATING

PRETRAVEL(MAX)

OVERTRAVEL(MIN)

DIFFERENTIAL

TRAVEL(MAX)

TOTAL TRAVEL

(REF) OPERATING

TORQUE(MAX)
FULL TRAVEL

TORQUE(MAX)

OPERATING

CHARACTERISTICS

PRETRAVEL(MAX)

OVERTRAVEL(MIN)

DIFFERENTIAL

TRAVEL(MAX)

TG1AN TRAVEL

(REF)

TORQUE(MAX)
FULL TRAVEL

10HQUE(MAX)

HARACTER STICS

LSR

MOMENTARY

LOW LORQUE

15°

SINGLE | DOUBL

POLE POLE

75°

1.7 IN. LBS

1.7 IN. LBS

LSL

SEQUENCE

DOUBLE POLE

ONLY

1ST STEP 15°

2ND STEP 10° ADD'L

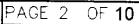
4 IN. LBS

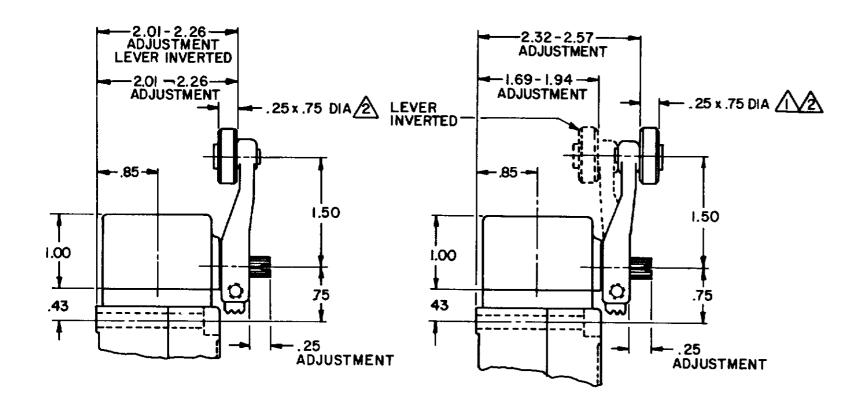
4 IN. LBS

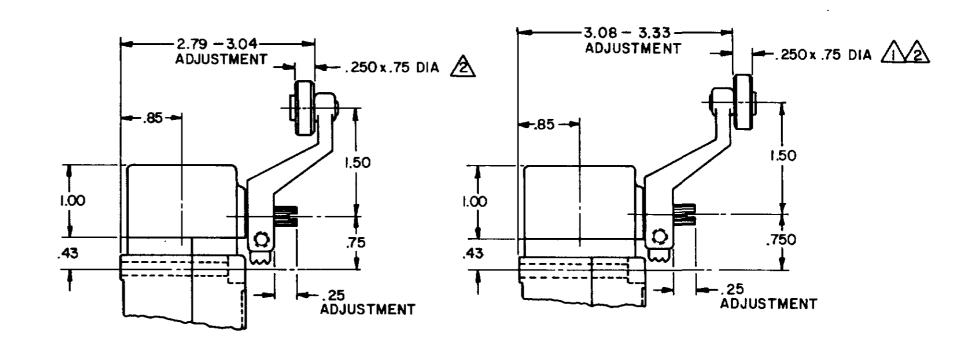
50





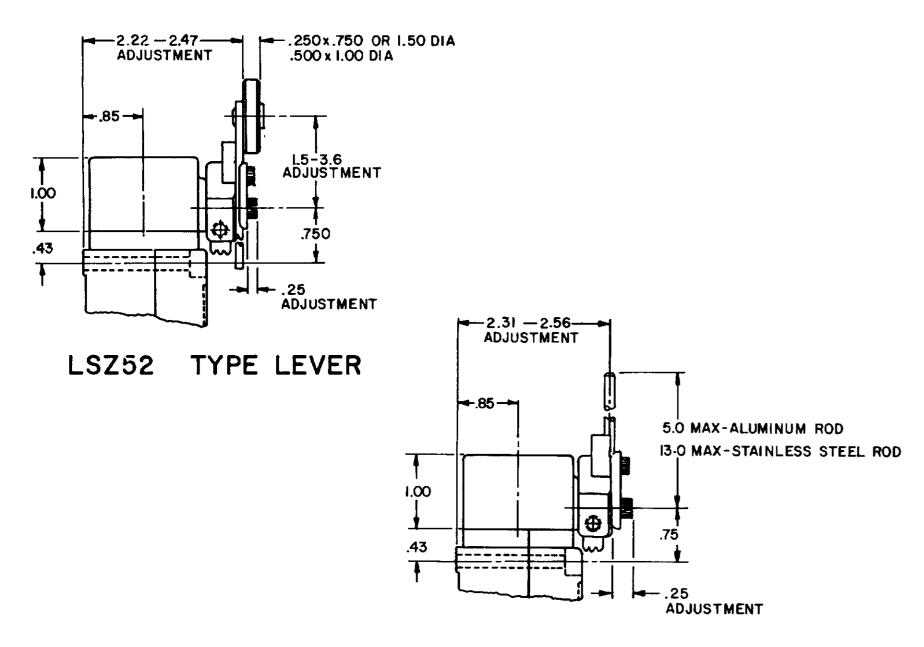


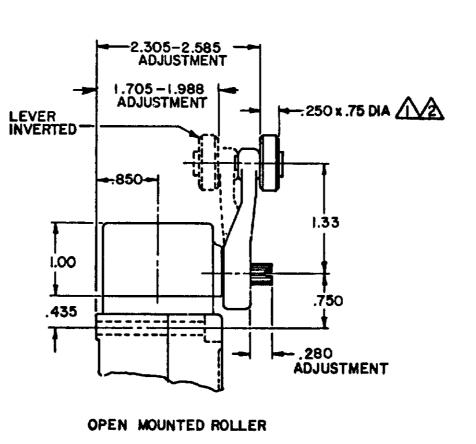


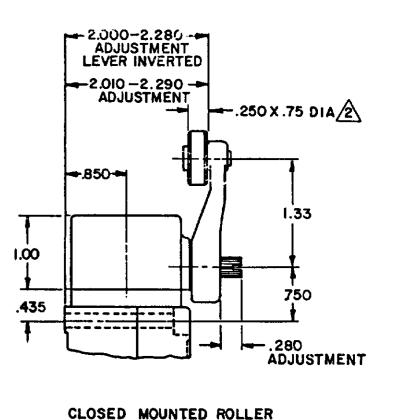


LSZ5I TYPE LEVERS

LSZ55 TYPE LEVERS







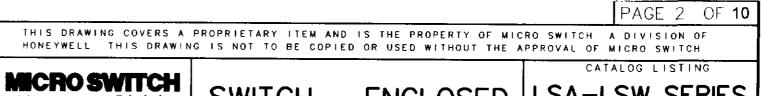
LSZ59 TYPE LEVERS

TYPE LEVER LSZ54

NOTES

- \triangle ALSO AVAILABLE IN Ø.250 X 1.500 NYLON, BUT
- LEVER CANNOT BE INVERTED 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





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

THIRD ANGLE PROJECTION

SWITCH - ENCLOSED LSA-LSW SERIES a Honeywell Division

FED MFG CODE 91929

CHART 1

WEIGHT

C 201748

C S L 23 JAN 01
E 204871
FEB 02
F 206581
140CT02
G 206763
C S L 31 OCT 02
H 207179
14 JAN 03
J 207474
TSM
18FEB03

CHART

SERIES