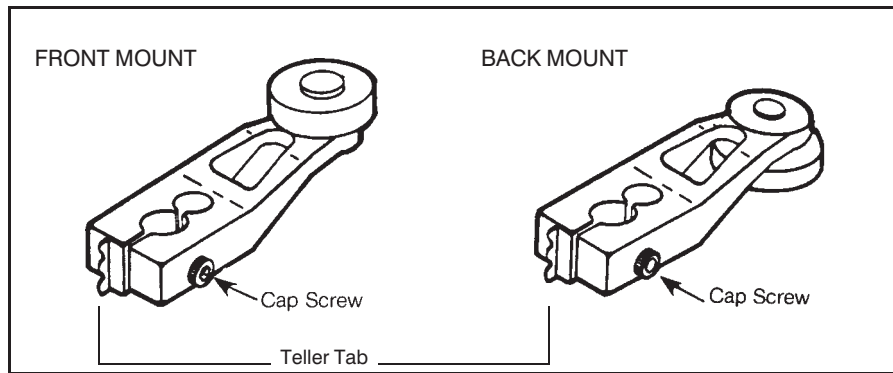


Levers for Rotary Actuated Switches

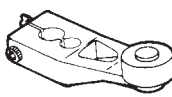
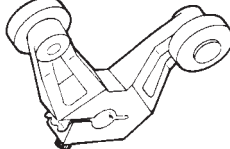

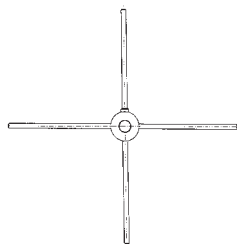
Rollers may be mounted on the front or back side of the lever. (See below).



Levers shown in the order guides are furnished with cap screws which accommodate a 5/64-inch allen wrench.

Teller tab assures proper torque. When it cannot be moved, the lever is tight enough to prevent slippage.

ORDER GUIDE

| Type | Radius (in.) | Roller Mounted On This Side Of Lever | | | Material | Catalog Listings |
|---|--------------|--------------------------------------|-----------|--------------|--------------------------------|------------------|
| | | Dia. in. | Width in. | | | |
| LSZ51 Series Std. Roller Lever  | 1.5 | Front | .75 | .25 | Nylon | LSZ51A |
| | 1.5 | Front | .75 | .25 | Steel | LSZ51B |
| | 1.5 | Back | .75 | .25 | Nylon | LSZ51C |
| | 1.5 | Back | .75 | .25 | Steel | LSZ51D |
| | 1.5 | Front | 1.0 | .50 | Nylon | LSZ51F |
| | 1.5 | Front | 1.5 | .25 | Nylon | LSZ51G |
| | 1.5 | Back | 1.0 | .50 | Nylon | LSZ51J |
| | 1.5 | Back | .75 | .25 | Ball Bearing | LSZ51L |
| | 1.5 | Back | .75 | 1.30 | Nylon | LSZ51M |
| | 1.5 | Back | .75 | .375 | Stainless | LSZ51T |
| | 1.5 | Front | .75 | .50 | Nylon | LSZ51P |
| | 1.5 | Front | 1.59 | .25 | Nylon | LSZ51R |
| | 1.5 | — | — | — | Less Roller | LSZ51 |
| LSZ53 Series Yoke  Back view of LSZ53E | 1.5 | Front-Back | .75 | .25 | Nylon | LSZ53A |
| | 1.5 | Front-Back | .75 | .25 | Steel | LSZ53B |
| | 1.5 | Front-Front | .75 | .25 | Steel | LSZ53D |
| | 1.5 | Back-Front | .75 | .25 | Nylon | LSZ53E |
| | 1.5 | Back-Back | .75 | .25 | Nylon | LSZ53S |
| | 1.5 | Back-Back | .75 | .25 | Steel | LSZ53P |
| | 1.5 | Back-Front | .75 | .25 | Steel | LSZ53U |
| | 1.5 | Back-Front | .75 | 1.25 | Nylon | LSZ53M |
| 1.5 | — | — | — | Less Rollers | LSZ53 | |
| LSZ55 Series Offset  | 1.5 | — | — | — | Less Roller | LSZ55 |
| | 1.5 | Back | .75 | .25 | Nylon | LSZ55A |
| | 1.5 | Back | .75 | .25 | Steel | LSZ55B |
| | 1.5 | Front | .75 | .25 | Nylon | LSZ55C |
| | 1.5 | Front | .75 | .25 | Steel | LSZ55D |
| | 1.5 | Front | .75 | .50 | Nylon | LSZ55E |
| | 1.5 | Front | 1.5 | .25 | Nylon | LSZ55K |
| 1.5 | Front | 1.0 | .50 | Nylon | LSZ55F | |
| LSZ69 Series*  | — | — | 6.0 | — | Stainless (spokes replaceable) | LSZ69CA |

*For use with LSQ300 Series. Hub is aluminum. See page A59 for dimensions.

Limit/Enclosed

Levers for Rotary Actuated Switches

METRIC CONVERSION

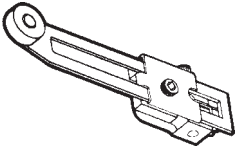
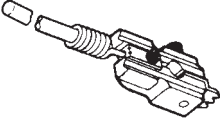
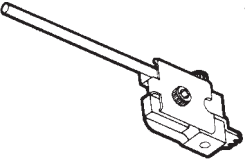

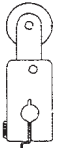
| | | |
|----------|---|---------|
| .25 in. | = | 6,35 mm |
| .5 in. | = | 12,7 mm |
| .625 in. | = | 15,9 mm |
| .75 in. | = | 19,1 mm |
| 1.0 in. | = | 25,4 mm |
| 1.5 in. | = | 38,1 mm |
| 2.0 in. | = | 50,8 mm |
| 2.5 in. | = | 63,5 mm |
| 3.0 in. | = | 76,2 mm |
| 4.8 in. | = | 122 mm |
| 5.0 in. | = | 127 mm |
| 6.0 in. | = | 152 mm |
| 12.0 in. | = | 305 mm |

LOW TORQUE APPLICATION CONSIDERATION

When heavier levers (such as LSZ52 series and LSZ54 series, below), are used with low torque LSH, LSR, LSS and LST switches, it is desirable to mount the switch with the lever down. In this way, gravity will assist in restoring levers to the free position.

Conversely, when these switches are mounted with the lever upright, gravity tends to work to prevent lever return after switching actuation. By counterbalancing the lever or adding an auxiliary extension spring, this problem may be overcome. Contact the 800 number for application assistance.

ORDER GUIDE

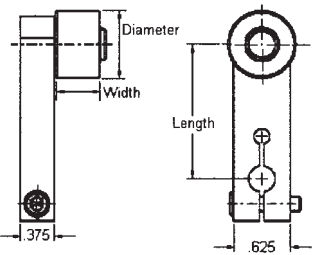
| Type | Radius (in.) | Roller Mounted On This Side Of Lever | Dia. in. | Width in. | Material | Catalog Listings | |
|---|------------------------------|--|----------|-----------|----------------------------------|--------------------------|--|
|  | 1.5-3.5 | Back | .75 | .25 | Nylon | LSZ52A | |
| | 1.5-3.5 | Back | .75 | .25 | Steel | LSZ52B | |
| | 1.5-3.5 | Front | .75 | .25 | Nylon | LSZ52C | |
| | 1.5-3.5 | Front | .75 | .25 | Steel | LSZ52D | |
| | 1.5-3.5 | Front | .75 | 1.30 | Nylon | LSZ52E | |
| | 1.5-3.5 | Front | 1.0 | .5 | Nylon | LSZ52J | |
| | 1.5-3.5 | Front | 1.5 | .25 | Nylon | LSZ52K | |
| | 1.5-3.5 | Front | .75 | .25 | Ball Bearing | LSZ52L | |
| | 1.5-3.5 | Front | 2.0 | .25 | Nylon | LSZ52M | |
| | 1.5-3.5 | Front | .75 | .5 | Nylon Less Roller Hub Only | LSZ52N LSZ52 LSZ54 | |
|  | 12.0 | — | .25 | — | Delrin Rod w/Spring | LSZ68 | |
| | 16.0 | — | .25 | — | Delrin Rod w/Spring | LSZ617 | |
|  | 5.5 | — | — | — | Aluminum | LSZ54M | |
| | 13.0 | — | — | — | Stainless Steel | LSZ54N | |
| | 20.0 | — | — | — | Delrin Rod | LSZ54P | |
| | 12.0 | — | — | — | Spring Wire | LSZ54R | |
| | 4.8 | — | — | — | Flexible Cable Hub Only | LSZ54V* LSZ54 | |
|  | 6" Flexible Loop/Cap Screw | | | | Nylatron | LSZ61 | |
| | 9.5" Flexible Loop/Cap Screw | | | | Hub Only | LSZ618 LSZ54 | |
| | | (measured from center line of shaft hole to tip of actuator) | | | | | |
|  | | Front | .75 | .25 | Nylon | LSZ60A | |
| | | Front | .75 | .25 | Steel | LSZ60B | |

See page A60 for dimensions

*Hub not available separately.

Levers for Rotary Actuated Switches

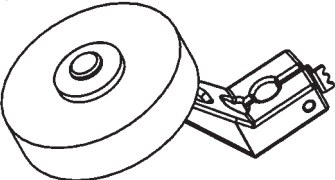
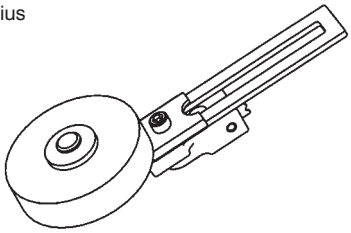
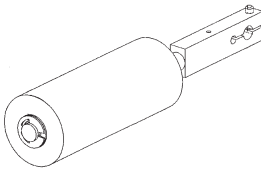
FIXED LENGTH LEVERS ORDER GUIDE

| Fixed Length Levers LSZ65 Series | Lever Length (in.) | Lever Listing | For a complete listing add your choice of roller suffix | | | | |
|--|-----------------------|------------------|---|--|--------------|----------|--|
| | | | Roller Suffix | Dia. in. | Width in. | Material | |
|  | .88 | LSZ65A | A | .75 | .25 | Nylon | |
| | 1.38 | LSZ65B | | .75 | .25 | Steel | |
| | 1.25 | LSZ65L | C | .75 | .50 | Nylon | |
| | 1.50 | LSZ65C | | | | | |
| | 1.75 | LSZ65D | | | | | |
| | 2.00 | LSZ65E | | | | | |
| | 2.50 | LSZ65F | | | | | |
| | 3.00 | LSZ65G | | | | | |
| | 4.00 | LSZ65H | D | .75 | 1.30 | Nylon | |
| | 5.00 | LSZ65J | | | | | |
| | 6.00 | LSZ65K | | | | | |
| | | | | Example: LSZ65AB is a .88" long lever with a steel .75" diameter, .25" wide roller. | | | |

RUBBER ROLLER LEVERS

Ideal for elevator or conveyor applications requiring quiet operation or protection of delicate surfaces.

ORDER GUIDE

| Type | Radius (in.) | Roller Mounted On This Side Of Lever | Dia. in. | Width in. | Material | Catalog Listing |
|--|--------------------------|---|-------------|--------------|------------------|--------------------|
| | | | | | | |
| LSZ55 Series Offset  | 1.5 1.5 | Front Front | 1.6 2.0 | .50 .50 | Rubber Rubber | LSZ55W LSZ55Y |
| LSZ52 Series Adjustable Radius  | 1.5 to 3.5 1.5 to 3.5 | Front Front | 1.6 2.0 | .50 .50 | Rubber Rubber | LSZ52W LSZ52Y |
| LSZ67 Series Conveyor Roller  | — | — | 1.5 | 3.8 | Plastic | LSZ67AA |

Limit/Enclosed

Plunger Actuated Switches

ASSEMBLED CONDITIONS

Catalog listings in order guide below are factory assembled with:

- Side plungers facing front (label side) of switch. Rollers on side plungers are in horizontal position.

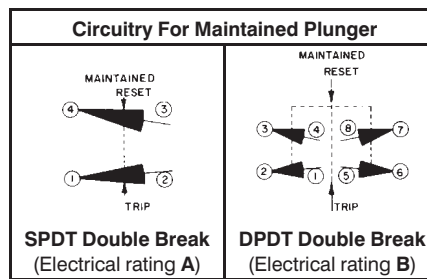
- Roller on top plungers are parallel to mounting surface.
- Lights on indicator versions are wired to N.O. circuit.

Refer to facing page to specify modifications to these assembled conditions.

For low temperature, high temperature or preleaded versions see page A42.

ORDER GUIDE

Momentary action, except for maintained contact LSG version. UL listed, CSA certified.



Circuits on any one pole must be the same polarity.

| Catalog listings in this chart are complete switches. | | | Catalog Listings | | | | | | |
|---|-----------------------|--|------------------|--------|------------|---------------|--------|------------|------------------------------------|
| | | | Top Plungers | | | Side Plungers | | | |
| Circuitry | Elec. Rating Page A34 | Body** Style | Plain | Roller | Adjustable | Plain | Roller | Adjustable | Maintained (Circuitry Shown Above) |
| Silver contacts | A | Plug-in 1/2" Conduit | LSC1A | LSD1A | LSV1A | LSE1A | LSF1A | LSW1A | LSG1A |
| Gold cross pt. | C | Plug-in 1/2" Conduit | LSC1J | LSD1J | LSV1J | LSE1J | LSF1J | LSW1J | — |
| Gold plated | C | | — | LSD1E | — | — | LSF1E | LSW1E | — |
| SPDT Double Break | A* | 120 V. Ind. Lite Plug-in 1/2" Conduit* | LSC5A | LSD5A | LSV5A | LSE5A | LSF5A | LSW5A | LSG5A |
| | A* | 240 V. Ind. Lite Plug-in 1/2" Conduit* | LSC8A | LSD8A | LSV8A | LSE8A | LSF8A | LSW8A | LSG8A |
| | A | Non plug-in 1/2" Conduit | LSC3K | LSD3K | LSV3K | LSE3K | LSF3K | LSW3K | LSG3K |
| DPDT Double Break | B | Plug-in 3/4" Conduit | LSC2B | LSD2B | LSV2B | LSE2B | LSF2B | LSW2B | LSG2B |
| | B | 120 V Ind. Lite Plug-in 3/4" Conduit | LSC2R | LSD2R | LSV2R | LSE2R | LSF2R | LSW2R | LSG2R |
| | B | Plug-in 1/2" Conduit | LSC6B | LSD6B | LSV6B | LSE6B | LSF6B | LSW6B | LSG6B |
| | B | Non plug-in 3/4" Conduit | LSC4L | LSD4L | LSV4L | LSE4L | LSF4L | LSW4L | LSG4L |
| | B | Non plug-in 1/2" Conduit | LSC7L | LSD7L | LSV7L | LSE7L | LSF7L | LSW7L | LSG7L |
| SPNC Direct Acting | D | Non plug-in 1/2" Conduit | — | — | — | LSE3N | LSF3N | LSW3N | LSG3N |

*Use at voltage indicated for light. Upper operating temperature limit for lighted units is 200°F. Wired to N.O. circuit. ** Plug-in listings include base receptacle.

OPERATING CHARACTERISTICS

| | | | | | | | |
|-----------------------------------|------------------------------|-----------------------------|--------------------------------|-----------------------------|------------------------------|--------------------------------|-----------------------------|
| mm Pretravel (in. max.) | 1,78 .070 | 1,78 .070 | 1,78 .070 | 2,54 .100 | 2,54 .100 | 2,54 .100 | 4,32 .170 |
| Differential mm Travel (in. max.) | SPDT | 0,38 .015 | 0,38 .015 | 0,38 .015 | 0,64 .025 | 0,64 .025 | 2,29 .090 |
| | DPDT | 0,51 .020 | 0,51 .020 | 0,51 .020 | 0,89 .035 | 0,89 .035 | 2,29 .090 |
| mm Overtravel (in. min.) | 4,83 .190 | 4,83 .190 | 4,83 .190 | 4,83 .190 | 4,83 .190 | 4,83 .190 | 2,0 .080 |
| Newton Operating Force (lb. max.) | 17,8 4 | 17,8 4 | 17,8 4 | 26,7 6 | 26,7 6 | 26,7 6 | 44,5 10 |
| Operating Point mm (in.) | 45,8 ± 0,76 1.805 ± .030 | 55,9 ± 1,02 2.200 ± .040 | 53,0 to 59,3 2.085 to 2.335 | 33,0 ± 0,76 1.300 ± .030 | 44,1 ± 1,02 1.735 ± .040 | 41,0 to 47,4 1.615 to 1.865 | 37,6 ± 0,76 1.480 ± .030 |
| Operating Temperature Range | 10°F to 200°F -12 to 93°C | | 10°F to 200°F -12 to 93°C | | 10°F to 200°F -12 to 93°C | | 30°F to 200°F -1 to 93°C |