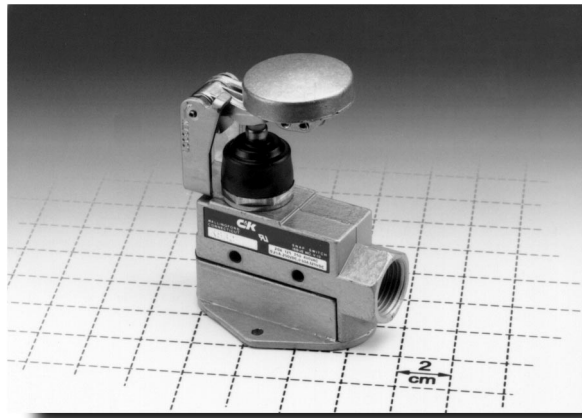


# KS Series Metal-cased Precision Snap-acting Switches

DATEX INSTRUMENTS INC.



## Features/Benefits

- Heavy duty 20 AMP switch
- Sturdy die-cast aluminum housing
- Wide variety of actuator styles
- Conforms to NEMA standards

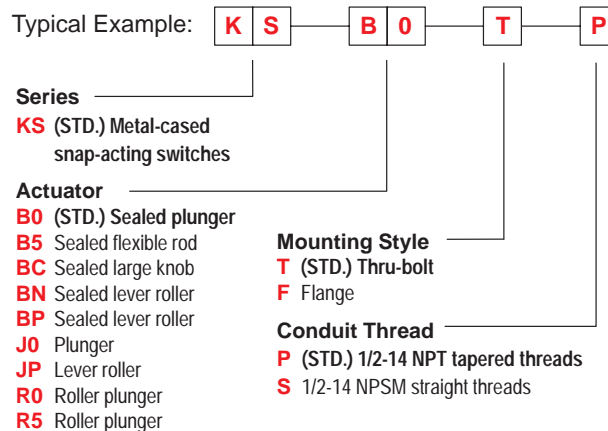


## Typical Applications

- Industrial machinery
- Agriculture equipment
- Machine tool equipment

## Build-A-Switch

Our easy Build-A-Switch concept allows you to mix and match options to create the switch you need. Below is a complete listing of options shown in catalog. To order, simply select desired option from each category and place in the appropriate box. A switch with standard options is shown on page G-63. Available options are shown and described on pages G-63 thru G-67. For additional options not shown in catalog, consult Customer Service Center. Kits that include basic switches and any applicable actuator hardware when necessary, are available for all switches in this series; see replacement kit part number noted in actuator section.



Snap-acting



# KS Series Metal-cased Precision Snap-acting Switches

## Specifications

SWITCH RATING: 20 AMPS @ 125, 250 & 480 V AC; 0.5 AMP @ 125 V DC; 0.25 AMP @ 250 V DC. (Note: The following horsepower ratings can be furnished in addition to other ratings, consult Customer Service Center.) 1/2 HP @ 125 V AC; 1 HP @ 250 V AC; 3/4 HP @ 125 V AC; 1-1/2 HP @ 250 V AC.

ELECTRICAL LIFE: 150,000 cycles at 20 AMPS @ 250 V AC. consult Customer Service Center for typical life at other ratings.

INSULATION RESISTANCE: 1,000 megohms min.

DIELECTRIC STRENGTH: 1,500 V RMS min. @ sea level.

OPERATING TEMPERATURE: -25° F to 185° F (-32° C to 85° C).

## Materials

HOUSING: Cast Aluminum.

BOOT: Nitrile (Buna N).

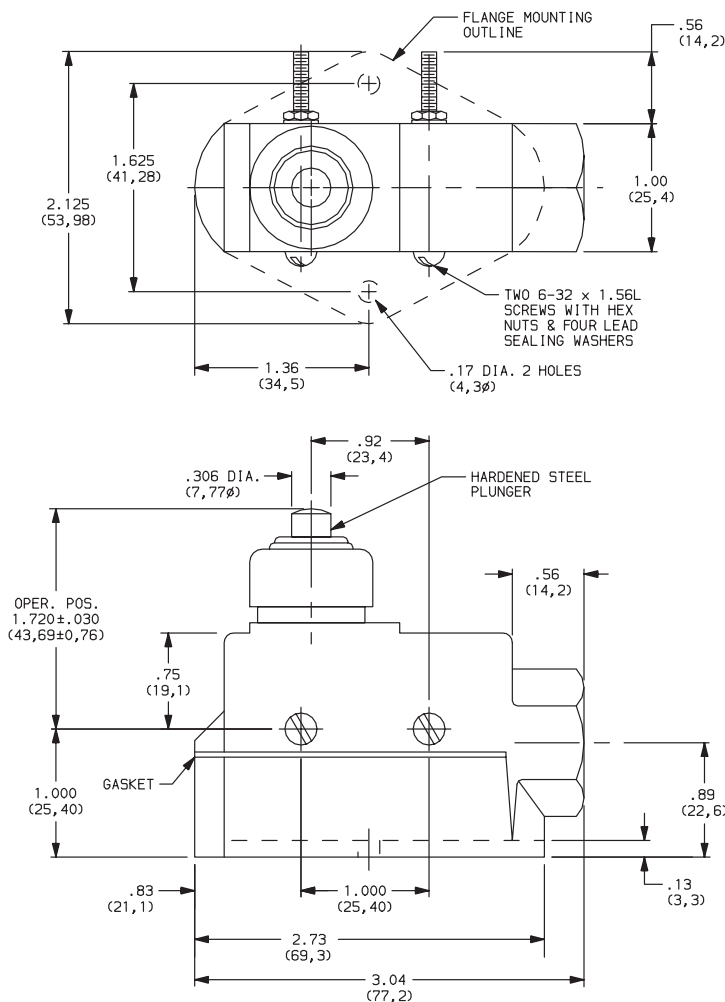
HOUSING INSULATOR: Varnished glass cloth.

BASIC SWITCH: HB Series.

TERMINALS: Screw type.

**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

## SWITCH WITH STANDARD OPTIONS



KSB0TP

PART NUMBER	MAXIMUM OPERATING FORCE (LBS/KG)	MINIMUM OVERTRAVEL
<b>KSB0TP</b>	24 680	.22 (5,6)

SERIES

**KS** (STD.) METAL-CASED SNAP-ACTING SWITCHES

Snap-acting

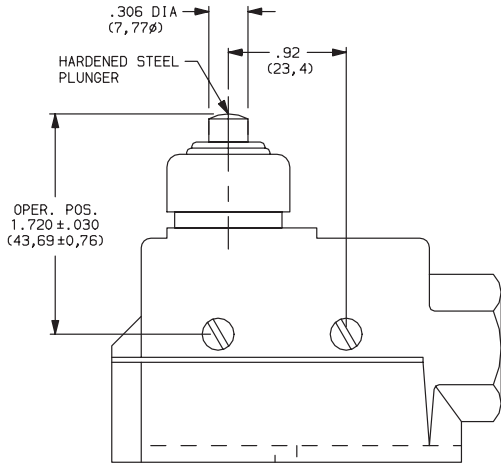
G



# KS Series Metal-cased Precision Snap-acting Switches

## ACTUATOR

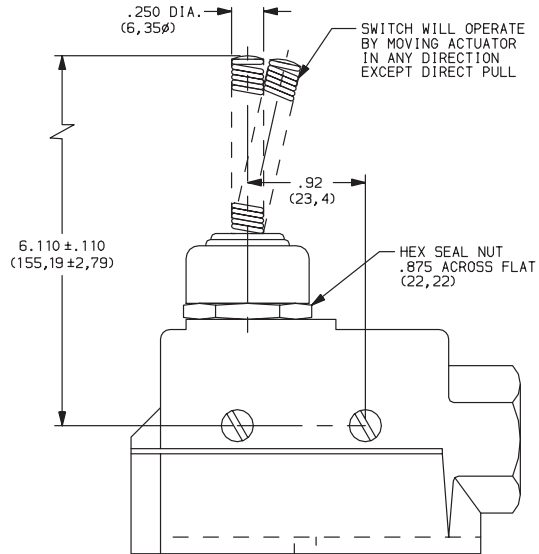
### B0 (STD.) SEALED PLUNGER



**NOTE:** Sealed plunger for long overtravel applications. Switch is protected against dirt and splashed liquids.

Replacement Kit No. RP-1

### B5 SEALED FLEXIBLE ROD



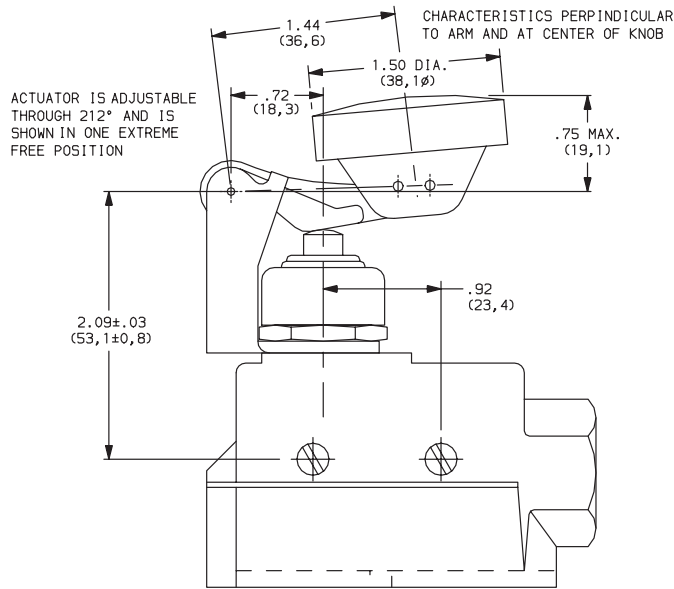
#### OPERATING CHARACTERISTICS

Switch will operate under direct pressure on the end of the rod or by 15° maximum lateral movement. Operating force can be applied at any point on the actuator. Rod will bend 90° in any direction.

**NOTE:** Semi-rigid rod actuator allows lateral application of operating force from any direction.

Replacement Kit No. RP-6

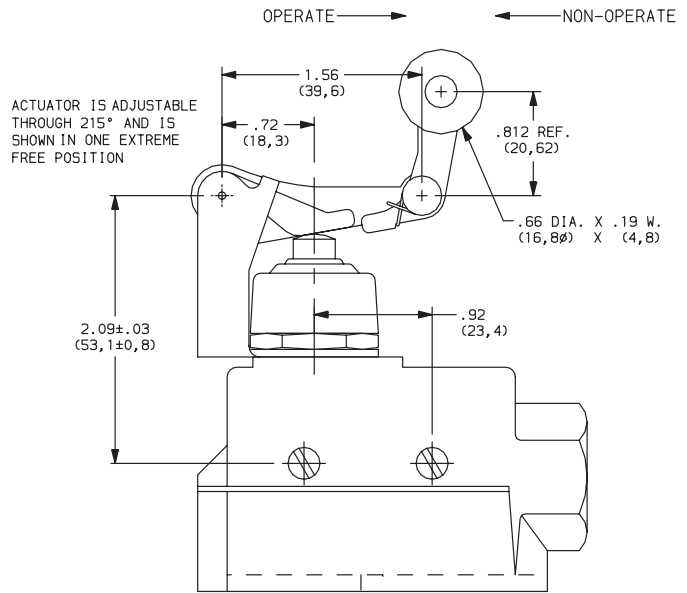
### BC SEALED LARGE SMOOTH KNOB



**NOTE:** Large smooth knob for hand or knee operation; lever is adjustable vertically and can be rotated horizontally; sealed plunger and sturdy die-cast actuator parts for reliability under severe service.

Replacement Kit RP-2

### BN SEALED ONE-WAY LEVER ROLLER



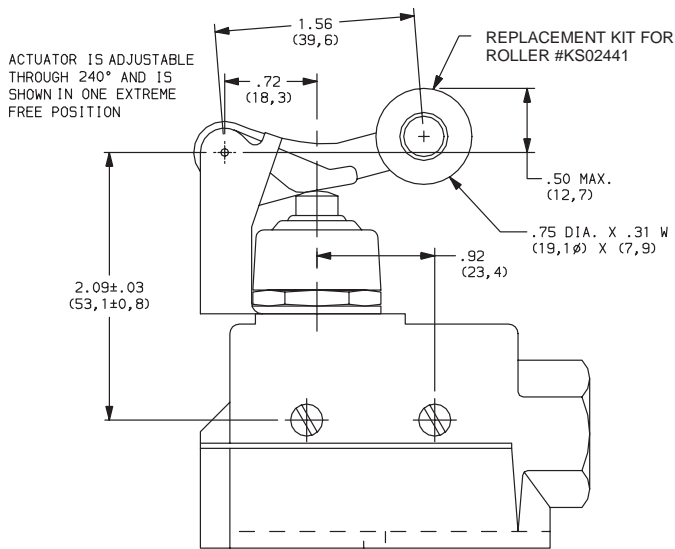
**NOTE:** Spring loaded roller arm permits "non-operate" return stroke of sliding cam. Lever is adjustable vertically and can be rotated horizontally.

Replacement Kit RP-2

# KS Series Metal-cased Precision Snap-acting Switches

## ACTUATOR

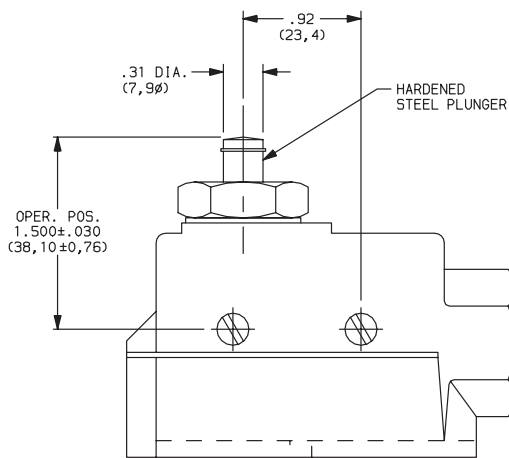
### BP SEALED LEVER ROLLER



**NOTE:** Roller-lever actuator with sealed plunger for slide or cam operation; adjustable vertically and can be rotated horizontally. Sturdy, die-cast actuator parts for reliability under severe service.

**Replacement Kit No. RP-2**

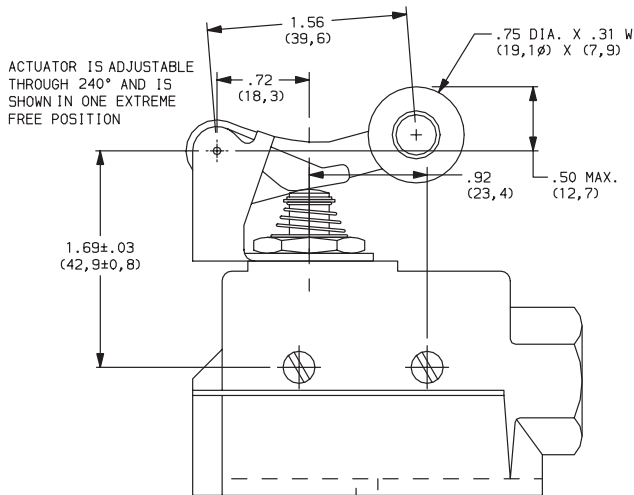
### J0 UNSEALED PLUNGER



**NOTE:** Plain plunger for long overtravel where operating force is applied in line with plunger.

**Replacement Kit No. RP-3**

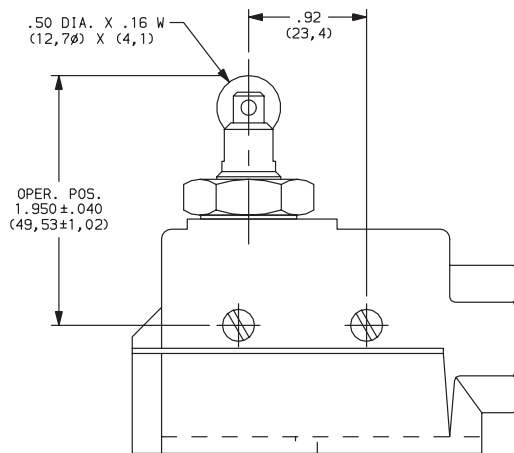
### JP UNSEALED LEVER ROLLER



**NOTE:** Actuator without sealing boot around plunger provides savings in cost and space requirements.

**Replacement Kit No. RP-5**

### R0 UNSEALED ROLLER PLUNGER



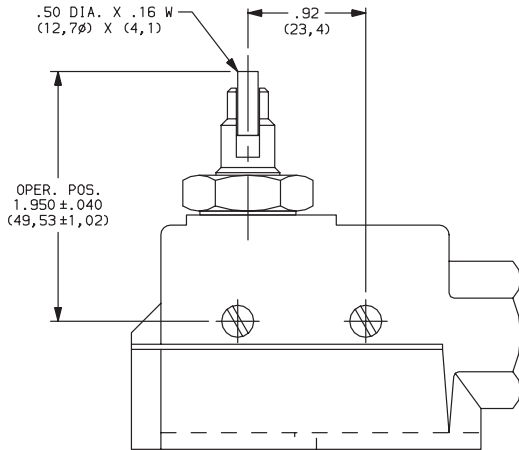
**NOTE:** Roller plunger for use with cams or slides that move in same plane as length of switch.

**Replacement Kit No. RP-4**

# KS Series Metal-cased Precision Snap-acting Switches

ACTUATOR 

**R5** UNSEALED ROLLER PLUNGER



**NOTE:** Roller plunger for use with cams or slides that move in or at right angle to length of switch.

Replacement Kit No. RP-4

## SWITCH CHARACTERISTICS

OPTION CODE	MAXIMUM BASIC SWITCH OPERATING FORCE (OZ./GRAMS)	MAXIMUM OPERATING FORCE (OZ./GRAMS)	MINIMUM RELEASE FORCE (OZ./GRAMS)	MAXIMUM DIFFERENTIAL TRAVEL	MAXIMUM PRETRAVEL	MINIMUM OVERTRAVEL
B0	13 370	24 680	4 110	.002 (0,05)	.08 (2,0)	.22 (5,6)
BC	18 510	20 567	6 170	.006 (0,15)	.19 (4,8)	.22 (5,6)
BN	18 510	20 567	6 170	.006 (0,15)	.23 (5,8)	.22 (5,6)
BP	18 510	20 567	6 170	.006 (0,15)	.19 (4,8)	.22 (5,6)
J0	13 370	13 370	4 110	.002 (0,05)	.020 (0,51)	.22 (5,6)
JP	18 510	18 510	6 170	.006 (0,15)	.19 (4,8)	.16 (4,1)
R0	13 370	13 370	4 110	.002 (0,05)	.002 (0,15)	.140 (3,56)
R5	13 370	13 370	4 110	.002 (0,05)	.020 (0,51)	.140 (3,56)

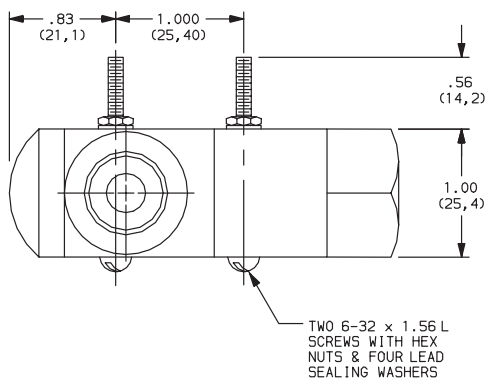
Snap-acting



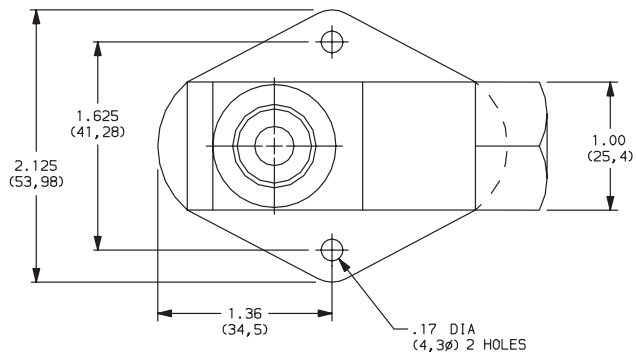
# KS Series Metal-cased Precision Snap-acting Switches

## MOUNTING STYLE

### T (STD.) THRU-BOLT MOUNTING



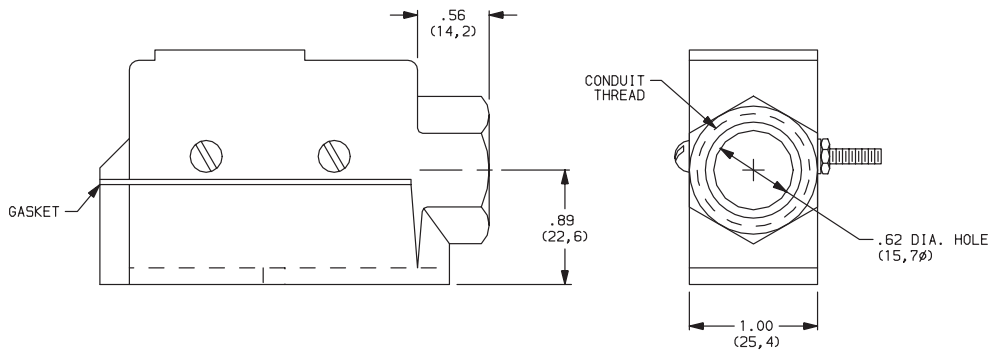
### F FLANGE MOUNTING



## CONDUIT THREAD

### P (STD.) 1/2-14 NPT (5 Full tapered threads.)

### S 1/2-14 NPSM (5 Full straight threads.)



NOTE: 'P' conduit thread option (1/2 - 14 NPT) must be specified if CSA certification is required.

Snap-acting

G

