# THE RANGE

Limit Switches with wide range and high quality are used for import substitution. The range includes.

Standard oil tight type BC-9 'T' Micro adjustable type JW J 0 Precision type JB 2700 Heavy duty type Extra heavy duty type JC 1125

## SELECTION CHART

Description	Туре	Ordering Code
Roller Lever	38mm length 76mm length 50mm length 64mm length 50mm length	JLSL 1* JLSL 2* JLSL 3 JLSL 4 JLSL 0
Adjustable Roller Lever	32 to 82.5mm	JLSLA*
Fork Lever	Roller in line with offset roller	JLSF* JLSFLO*
Top Push	Roller type Button type	JLSTPR JLSTPBA
Side Push	Roller type Button type	JLSSPR JLSSPBA
Cat Whisker	Nylon rod Steel rod	JLSCW JLSJW*

<sup>\*</sup>Also available with maintained contact. Add mts as sufix to code while ordering

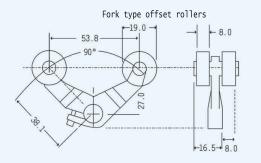
# SPARES & ACCESSORIES

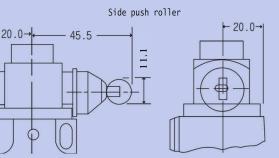
Description	Code Ordering
38mm level with I8mm dia x 8mm wide metal roller	BC9L1
76.2mm level with19mm dia x 8mm wide metal roller	BC9L2
Adjustable type lever assembly	BC9LA
Fork Type lever with rollers in line	BC9LF
Fork Type lever with rollers off-set	BC9LF0
Operating head for lever type limit switch	BC9HL
Operating head for top plunger type limit switch(B - Button, R - Roller)	BC9HTP-B-R
Operating head for side plunger type limit switch(B - Button, R - Roller)	BC9HSP-B-R

Oil tight conduit entry to the limit switch for 3/4" dia 16 TPI BS threads BCCE.

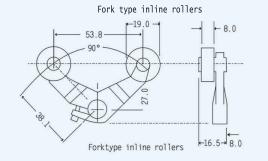
# Side push button adjustable **←** 20.0**→**

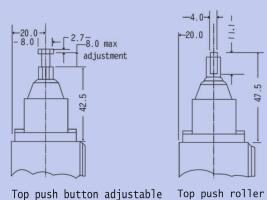
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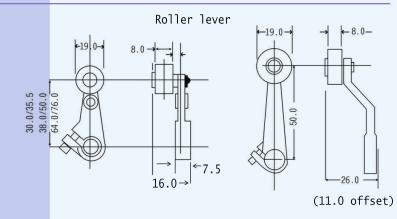


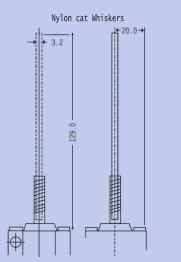


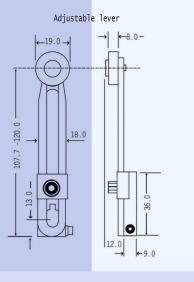
**←** 20.0→

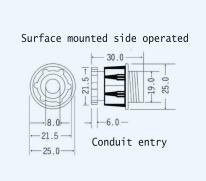












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manufactures a wide range of \_\_\_\_\_\_ Limit Switches tested to rigid quality standards. Jn BC9 series Limit Switches comply with IS 13947/pt-5/sec-1 of 2004 & IEC 947-5-1 and carry the unique mark. MI Limit Switches are certified by International Canada and U.S. They also conform to European standard ( €.

#### FEATURES

#### **BC9 Oil Tight Limit Switches**

- Completely oil & water tight and dust & damp proof
- Ample wiring space for easy termination
- Flame retardant thermo-plastic barriers between terminals to prevent short-circuit
- Serrated terminals to give firm grip to straighten wire
- Flexibility of replacing complete contact blocks without changing the operating characteristic
- The S.P.D.T twin-break silver contacts provide quick make-and-break action with high contact pressure
- The brass forged lever with steel roller and all stainless steel parts provide high rigidity and corrosion resistance.

#### MODELS

#### **JM** BC9 Oil Tight Limit Switches

BC 9 JLS type limit switches are available with a variety of operating heads to meet diverse applications



#### **Top Push Operating Head**

BC9 Top Pluger limit switches are available in three designs. One has an adjustable top push button which has a hex, bolt and lock nut, the length of which can be adjusted upto 8mm (Adjustment is accomplished by locking the 8mm spanner in the spindle and then by turning the threaded4mm Hex. Head operating plunger and securing it with a lock nut).

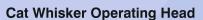


The second type has a steel roller of 11.1 mm diameter and 3.85mm thickness. The top push operating heads are easier to apply because the operating direction and repeat accuracy is less critical.

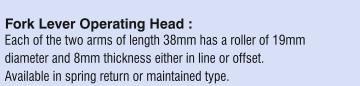
#### Side Push Operating Head

Jai BC 9 Side plunger limit switches are in two different designs. One has adjustable push button which can be adjusted upto 8mm (Adjustment is accomplished by locking the 8mm spanner in the spindle and then by turning the threaded 4mm hex. Head operating plunger and securing it with a lock nut).

The second type has steel roller of 12mm diameter and 3.85mm thickness. In our BC 9 Side plunger roller type limit switches there is a provision to change the positioning of the roller plunger from horizontal to vertical position and vise versa by unscrewing the plunger cap nut and it is ready to operate as per the choice

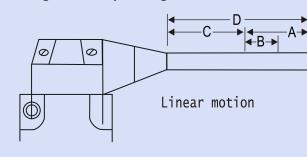


BC 9 Cat whisker limit switches are available in two designs with 137mm long operating lever. One type consists of 3.2 diameter nylon rod fixed with stainless steel tension spring from the bottom. The second type consists of 6.2 diameter stainless steel tension spring. Both these types can be operated in any direction from the centre.



JLSCW

#### **Diagram for Operating Data**











JLSPC

# **ELECTRICAL & MECHANICAL RATINGS**

**Utilisation Category** AC 15 and DC 13 as per IEC 947 - 5 - 1

IS 13947 / Pt 5 Sec 1 of 2004

Thermal Current (1th) 10A

Insulation Voltage (Ui) 600 V AC ISI Licence No. CM/L-2015427

#### **Operating Current and Voltage**

AC 15 rating 6A at 110v;3A at 220V;

1.5A at 400V; 1.2A at 550V 0.2A at 110V; 0.1A at 220V, 1 NO +1 NC SPDT switch

change-over contact Frequency of operation 2500 operations per hour Mechanical life

20 x 10<sup>6</sup> operations Enclosure category Die cast enclosure to IP-67

as per IS 13947 / Pt5 / Sec1 of 2004 Terminal capacity 2.5mm solid or stranded

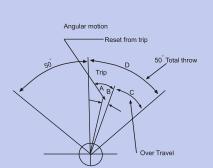
### Weights

DC 13 rating

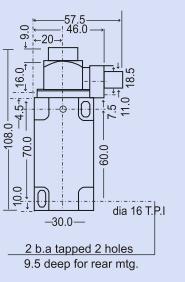
Contact combination

Oil tight limit switches 500 gms approx. General purpose limit switches 400 gms approx.

#### Accessory



- A Travel to trip
- Travel to reset from trip point
- C Over travel
- D Total travel



2 holes for front mounting

		2N0+2	<u>NC</u>	
	<b>4</b> -	<b>-</b>	8	
	NO !		¦ NO	
	3	<b>√</b>	7	
Same Polari	ity	_		
Each pole	- 1	_	_	
	(2) <del>'</del>	<b>1</b>	6	
	NC		NC	
A2 04 80	<b>(1)</b> -	;	<u>(5)</u>	
03 79	•	į		

Wiring Diagram: 2N0 + 2NC



Wiring Diagram: 1N0 + 1NC

BC 9 Types	JLSL 1 JLSL 2 JLSL A JLSJ W JLSL F JLSLF 0	JLSL 1M JLSL 2M JLSL AM JLSJWM JLSLFM JLSLFOM	JLSTPR JLSTPBA mm	JLSSPR JLSSPBA mm	JLSCW
Travel to trip A Travel to reset from trip point B Over travel C Total travel D Force to trip (max) kg	10° 6° 40° 50° 1.0	50°+ 50°+ 40°* 90°+ 0.5	1.3+ 1.1 5.5 6.8 2.0	2.0+ 1.7 5.1 7.0 2.0	20°+ 18°+ 5°* 25°* 0.285
Force to be applied at a radius of (mm)	28	38	-	-	25.5

\* Minimum + Maximum