

Ref : JAI / GC / 2026

Date : 16.01.2026



Dear Sir,

At the outset, we thank you all for patronizing our products. As you are aware, our **JAIBALAJI** products are the **ONLY PRODUCTS** available in India with   &  Markings and **IP-67** Protection. We are also an **ISO 9001 : 2015** Certified company offering **QUALITY PLUS** Products at **MOST COMPETITIVE PRICE**. **JAIBALAJI** Products are manufactured making use of **UL Listed V2 Flame Retardant Grade 960°** Glow Wire Tested Anti corrosive Anti-Acid unbreakable **Engineering Plastic** and are fully insulated. Our wide range of products are **Illuminated Push Buttons, Pilot lights, Push Button Stations (Plastic & Metal) LED Electronic Module Indicating lights (16.5 mm & 22.5 mm dia) Electronic signal Tower lights (LED & BULB) Electronic Proximity Sensors (Photo Sensors, Diffuse, Thro' Beam, Colour mark, Inductive & Capacitive) Electronic Timer Din Rail (Analog & Digital) Electronic Digital Counter / Timer, Digital Meters AC / DC Voltmeter, Ammeter, Digital Panel Meters, Frequency Meters, Variety of Limit Switches, like BC-9, BC-9T, JW Micro Adjustable, CEE EM 45, Precision, Miniature Snap Action, Mini Limit Switches, Heavy Duty Limit Switches JB - 2700, Extra Heavy Duty JC-1125 Limit Switches, Explosion Proof EPHA Limit Switches, Foot Switches, Engineering Plastic Industrial Plug & Sockets, and Connectors Cam Operated Rotary Switches, variety of different sizes of Junction Boxes (Engineering Plastic & Metal) and Telescopic Brushes, Pullcord, Beltway, Zero speed switch & Rocker switch. Distribution Boxes, Pendent Pushbutton stations, CEE EM 45 Mini Limit Switch, Bus bar Indicator & Reed Magnetic Switch**

DEALERS ENQUIRIES ARE SOLICITED

This supersedes all previous Price Lists, Prices are subject to change without prior notice, Prices at the time of supply will be applicable.

Your continued patronage and kind co-operation will be very much appreciated.

Thanking you and assuring you of our best services always.

Yours faithfully,

for 
CONTROL GEARS PVT. LTD



CHANAKYACHANDRAMOHAN

Encl : as above.

New No. 107, Sidco Industrial Estate

Post Box No. 27, Ambattur,

Chennai - 600 098. India

Phone : 0091 - 44 - 2625 1279

0091 - 44 - 2625 4469

0091 - 44 - 2625 4470

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Fax : 0091 - 44 - 2625 5038

E-mail : dchandramohan@jaibalaji.firm.in

WEBSITE : www.jaibalaji.firm.in

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CERTIFICATE

The Certification Body
of TÜV SÜD South Asia Private Limited
certifies that



Jaibalaji Control Gears Pvt. Ltd
No. 107, Sidco Industrial Estate, Ambattur, Chennai, - 600098, India

has implemented Quality Management System
in accordance with **ISO 9001:2015**
for the scope of

**Design, Manufacture and Supply of
Electromechanical, Electronic Controlling, Signalling Devices and
Switchgears for Engineering and Industrial Automation**

The certificate is valid from **2024-03-22** until **2027-03-21**

Subject to successful completion of annual periodic audits

The present status of this certificate can be obtained through TUV SUD website by scanning below QR code and by entering the certificate number (without spaces) on web page. Further clarifications regarding the status & scope of this certificate may be obtained by consulting the certification body at info.in@tuvsud.com

Certificate Registration No. **99 100 02459**

Date of Initial certification: **2008-05-28**

Issue Date: **2024-03-19** Rev. 00



Rahul Kale
Head of Certification Body
of TÜV SÜD South Asia Private Limited,
Mumbai
Member of TÜV SÜD Group





இந்திய தர நிர்ணய அமைவனம்

भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

தென் மண்டல அலுவலகம்

: पोस्ट बॉक्स नं. 8290

: सी. आई. टी. कैम्पस, चौथा क्रॉस रोड,

तरावणी, चेन्नै - 600 113.

Southern Regional Office : Post Box No. 8290

CIT Campus, IV Cross Road,

Taramani, Chennai - 600 113.

ANNEXURE TO ENDORSEMENT NO.16 DATED

20030206

1) LIMIT SWITCHES

RATED OPERATIONAL VOLTAGE	: 415V
RATED THERMAL CURRENT	: 10A
OPERATIONAL CURRENT	: 1.5A(AC)
RATED IMPULSE VOLTAGE	: 1.5KV AC
INSULATION VOLTAGE	: 600V
POLLUTION DEGREE	: '2'
IP CODE	: IP 67
UTILISATION CATEGORY	: AC 15/DC 13
CONDITIONAL SHORT CIRCUIT CURRENT	: 100A
DESIGNATION	: A600/R300
CONTACT ELEMENT	: TYPE : ZA
MECHANICAL DUTY CLASS	: 3
FREQUENCY OF OPERATIONAL CYCLES FOR ELECTRICAL DURABILITY	: 300/HOUR

2) ROTARY SWITCHES:

UTILISATION CATEGORY	: AC15
RATED INSULATION VOLTAGE	: 600V AC
RATED IMPULSE VOLTAGE	: 1.5KV AC
RATED OPERATIONAL VOLTAGE	: 415V AC,
RATED FREQUENCY	: 50Hz
CORRESPONDING OPERATIONAL CURRENT	: 1.8A, 2A, 4A, 6A, 8A, 10A
CORRESPONDING THERMAL CURRENT	: 7.5A, 12.5A, 20A, 32A, 40A, 80A
POLLUTION DEGREE/CASE	: 3/CASE A
CLASS OF MECHANICAL DURABILITY	: 3
MATERIAL GROUP	: III a

3) PUSH BUTTON SWITCH

UTILISATION CATEGORY	: AC15
RATED INSULATION VOLTAGE	: 600V
RATED IMPULSE VOLTAGE	: 1.5KV AC
RATED OPERATIONAL VOLTAGE	: 415V AC, 50Hz
RATED OPERATIONAL CURRENT	: 1.8A
RATED THERMAL CURRENT	: 10A
POLLUTION DEGREE/CASE	: 3/CASE A
CLASS OF MECHANICAL DURABILITY	: 3
DESIGNATION	: A600/R300

DIRECTOR & HEAD (MARKS II)
BIS, CHENNAI



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ANNEXURE TO ENDORSEMENT NO. 16 DATED 20030266

4) AC INDICATOR LIGHTS (BULB)

Rated operational voltage	24, 48, 110, 230 V AC
Rated voltage of light	24, 48, 110, 230 V AC
Rated voltage of lamp	24, 48, 130, 130 V AC
Rated power	2.0, 2.0, 2.6, 2.6 Watts Max
Rated thermal power for mounting on metal plate	2.6, 2.6, 2.6, 2.6 Watts Max
Rated thermal power for mounting on enclosure	2.6, 2.6, 2.6, 2.6 Watts Max
Colour	Yellow, red, amber, blue, green, black, white, clear (for type and designation and colour, please see the catalogue enclosed)
Fixing hole diameter	22.5 mm, 22.5 mm, 22.5 mm, 22.5 mm
Means of connection	Single pin type small miniature with baynet cap holder
Nature of current applied and its frequency	AC 50 cycles
Type of lamp socket	Small miniature baynet cap holder with Nylon 66 (Grade 30) protective cover

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ANNEXURE TO ENDORSEMENT NO.16 DATED 20030206

5) DC INDICATOR LIGHTS (BULB)

Rated operational voltage	24, 48, 110, 230 V DC
Rated voltage of light	24, 48, 110, 230 V DC
Rated voltage of lamp	24, 48, 130, 130 V DC
Rated power	2.2, 2.6, 2.6 Watts Max
Rated thermal power for mounting on metal plate	2.2, 2.6, 2.6 Watts Max
Rated thermal power for mounting on enclosure	2.2, 2.6, 2.6 Watts Max
Colour	Yellow, red, amber, blue, green, black, white, clear (for type and designation and colour, please see the catalogue enclosed)
Fixing hole diameter	22.5 mm, 22.5 mm, 22.5 mm, 22.5 mm
Means of connection	Single pin type holder small miniature with baynet cap holder
Nature of current applied and its frequency	DC
Type of lamp socket	Small miniature baynet cap holder with Nylon 66 (Grade 30) protective cover

DIRECTOR & HEAD (MARKS II)
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तरामणी, चेन्नै - 600 113.

Southern Regional Office : Post Box No. 8290

CIT Campus, IV Cross Road,

Taramani, Chennai - 600 113.

ANNEXURE TO ENDORSEMENT NO.16 DATED 2003.02.06

6) AC INDICATOR LIGHTS (LED - LIGHT EMITTING DIODE)

Rated operational voltage	12, 24, 48, 110, 230 V AC
Rated voltage of light	12, 24, 48, 110, 230 V AC
Rated voltage of LED	2.2, 2.2, 2.2, 2.2 V AC Max
Rated current/power	25 mA/300 mW
Rated thermal power for mounting on metal plate	25 mA/300 mW
Rated thermal power for mounting on enclosure	25 mA/300 mW
Colour	Yellow, red, amber, blue, green, black, white, clear (for type and designation and colour, please see the catalogue enclosed)
Fixing hole diameter	22.5 mm, 22.5 mm, 22.5 mm, 22.5 mm
Means of connection	Solder connection
Nature of current applied and its frequency	AC 50 cycles
Type of lamp socket	Nylon 66 (Grade GF 30) protective cover

DIRECTOR & HEAD (MARKS II)
BIS, CHENNAI

PAGE 4 OF 6



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तरामणी, चेन्नै - 600 113.

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ANNEXURE TO ENDORSEMENT NO.16 DATED 2003.2006

7) DC INDICATOR LIGHTS (LED - LIGHT EMITTING DIODE)

Rated operational voltage	12, 24, 48, 110, 230 V DC
Rated voltage of light	12, 24, 48, 110, 230 V DC
Rated voltage of lamp	2.2, 2.2, 2.2, 2.2 V DC Max
Rated current/power	25 mA/300 mW
Rated thermal power for mounting on metal plate	25 mA/300 mW
Rated thermal power for mounting on enclosure	25 mA/300 mW
Colour	Yellow, red, amber, blue, green, black, white, clear (for type and designation and colour, please see the catalogue enclosed)
Fixing hole diameter	22.5 mm, 22.5 mm, 22.5 mm, 22.5 mm
Means of connection	Solder connection
Nature of current applied and its frequency	DC
Type of lamp socket	Nylon 66 (Grade GF 30) protective cover

DIRECTOR & HEAD (MARKS II)
BIS, CHENNAI

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भारतीय मानक ब्यूरो
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दक्षिणी क्षेत्रीय कार्यालय

Southern Regional Office : Post Box No. 8290

: पोस्ट बॉक्स नं. 8290

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तरामणी, चेन्नै - 600 113.

CIT Campus, IV Cross Road,
Taramani, Chennai - 600 113.

ANNEXURE TO ENDORSEMENT NO.16 DATED 20030266

8) MINIATURE LIMIT SWITCH

Rated operational voltage	: 240 V AC, 50 Hz
Rated operational current	: 3 A
Rated thermal current	: 10 Amp
Utilization category	: AC 15
Rated insulation voltage	: 600 V AC
Pollution degree	: 2
Rated conditional short circuit current	: 1000 A
Number of poles	: Single

DIRECTOR & HEAD (MARKS II)
BIS, CHENNAI

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CERTIFICATION RECORD

The company named below has been authorized by CSA to represent the products listed in this record as "CSA Certified" and to affix the CSA Mark to these products according to the terms and conditions of the CSA Service Agreement and applicable CSA program requirements (including additional Markings).

File No: 114811 0 000

Class No: 3211 87 INDUSTRIAL CONTROL EQUIPMENT Miscellaneous Apparatus
- Certified to US Standards

SUBMITTOR

4576887 M/s Jai Balaji & Co.
89, Sidco Industrial Estate
P.O. No. 27
Ambattur
Chennai, 600098
India

FACTORY

4576887 M/s Jai Balaji & Co.
89, Sidco Industrial Estate
P.O. No. 27
Ambattur
Chennai, 600098
India

November 18, 2002 (Replaces: September 22, 1999)

- Rotary Switches, JRS-XX Series, Model Numbers and ratings are as follows:

Model No	Voltage	Current
JRS 9	400 V	6 A
JRS 18	400 V	10 A
JRS 27	400 V	16 A
JRS 45	400 V	25 A
JRS 63	400 V	32 A
JRS 81	400 V	40 A
JRS 90	400 V	63 A

- Limit Switches, JLS Series, JW Series, CEE EM 45 Series, the electrical ratings / mechanism / contacts are same for all the models and are as follows:

Model No	Contact Designation
JLS XXX	B300 / P600
JW XX	B300 / P600
CEE EM 45-XX	B300 / P600
JC XXXX	B300 / P600
JB XXXX	B300 / P600

Note: The suffixes -XXX indicate Model Numbers with different lever heads.

- Proximity Switches JB Series details are given below:

Model No	Type	DC Volts	DC Amps	AC Volts	AC Amp
JB 8 PILM	3 Wire DC	30 V DC	200 mA	--	--
JB 12 PIFM	3 Wire DC	30 V DC	200 mA	--	--
JB 18 PILM	3 Wire DC	30 V DC	200 mA	--	--
JB 30 PILM	3 Wire DC	30 V DC	200 mA	--	--
JB 36 AILM	2 Wire DC	--	--	230 V	300 mA
JB 50 PILM	2 Wire DC	30 V DC	200 mA	--	--

- Contact Switch Element for Push Buttons, Model Nos and Rating are as follows:

Model No	Contact Type	Designation	AC Rating	DC Rating
			Voltage/Current	Voltage/Current
JB1	N O	B300/P600	400 V/10 A	600 V/5 A
JB2	N C	B300/P600	400 V/10 A	600 V/5 A

● Pilot Lights

Model	Rated Voltage	Max Current mA
ML, PL	12 V, 24V, 48 V, 110 V ac/dc, 230 V ac and 220 V dc	25 mA
MB	12 V ac/dc	180 mA
	24 V ac/dc	80 mA
	48 V ac/dc	40 mA
	110 V ac/dc, 230 V ac and 220 V dc	25 mA

Note: These devices are certified as components only for use in other certified equipment where the suitability of the combination is determined by CSA International.

MINIATURE SNAP ACTION SWITCH WITH MARKS CATALOGUE CUM PRICE LIST

Features:

Centrally located common terminal. Wiping contact snap action, Standard temperature rating - 40 to 85 degree Celcius.

Actuators:

Button, Straight lever short, medium and long Roller lever, Short and roller lever Medium and Simulated Roller.

Characteristics:

Electrical: 50 mA to 25 Amps

Circuitry: SPDT, SPST, NO/NC

Operating Force: 25 to 280 gms

Typical Applications:

- Refrigerator
- Pressure Switch
- Electro Mechanical Timer
- Washing machine
- Electric Rice Cooker
- Vending Machine
- Food Processor
- Electronic Voting Machine
- Microwave Oven
- Servo Stabiliser
- Elevator
- Mixer Grinder
- Floor Cleaning Machine
- Center Lock in Automobiles
- Trivector Meter
- Bag Sealing Machine
- Door Opening Closing
- On Line Starter
- Telephones

GENERAL CHARACTERISTICS

Product	Miniature Snap action Switch
Reference Standards	IEC 947-5-1 / EN 60947-5-1 / UL 508 / CSA / 22.2 / IS 13947-5-1
Approvals	Bureau of Indian Standards, CE
Protection class	IP44
Temperature storage	Minus 40 Degree Celsius to plus 70 degree Celsius
Temperature working	Minus 25 Degree Celsius to plus 70 degree Celsius
Mechanical Life	Three million operations
Frequency of operation	2500 operation per hour

RECOGNITION OF
Quality Plus

ELEMENT CHARACTERISTICS

Thermal Current	10 Amps
Insulation Voltage	600 VAC
Dielectric strength	2500 Volts per Minute
Insulation resistance	2 Meg. Ohms.
Contact Resistance	Less than 25 Milli Ohms
Short circuit protection	10 Amps High Rupturing Capacity Fuse
Rated Impulse Voltage	1500 Volts
Utilisation category	AC 15, DC 13
Contact type	Type 'C'

RATINGS: AC RATING INDUCTIVE - NEMA A 600

Voltage	Make		Break	
	A	VA	A	VA
120	60	7200	6	720
240	30	7200	3	720
480	15	7200	1.5	720
600	12	7200	1.2	720

RATINGS: DC RATING INDUCTIVE - NEMA P 600

Voltage	Make		Break	
	A	VA	A	VA
125	1.1	138	1.1	138
250	0.55	138	0.55	138
600	0.2	138	0.2	138

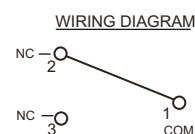
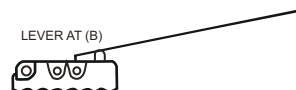
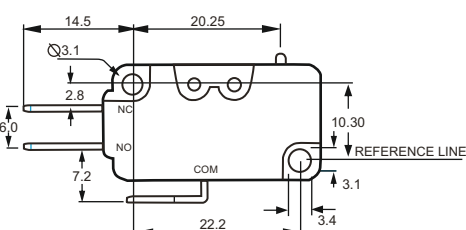
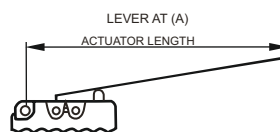
JALBALAJI

IS/IEC:60947

 Pt-5 / Sec-1



MARKS



	Model No.	OPERATING FORCE				ACT LENGTH (mm) TOL. + 0.6	MRP Rs.		Model No.	OPERATING FORCE				ACT LENGTH (mm) TOL. + 0.6	MRP Rs.
		0.1A	3A	5A	10A					0.1A	3A	5A	10A		
	JMS/B/S	15	15	45	75		90.00		JMS/ISL/S-B	3	3	8	17	70.5	117.00
	JMS/B/H	75	75	170	285		99.00		JMS/ISL/H-B	12	12	28	65	70.5	135.00
	JMS/IPL/S-A	4	4	10	20	70.0	108.00		JMS/ISM/S-A	10	10	30	45	31.5	108.00
	JMS/IPL/H-A	20	20	40	70	70.0	117.00		JMS/ISM/H-A	38	38	94	150	31.5	117.00
	JMS/IPL/S-B	2	2	6	15	74.5	108.00		JMS/ISM/S-B	7	7	17	28	36.0	117.00
	JMS/IPL/H-B	10	10	25	60	74.5	117.00		JMS/ISM/H-B	22	22	58	95	36.0	135.00
	JMS/IPM/S-A	8	8	25	40	35.5	108.00		JMS/IRM/S-A	8	8	25	40	34.0	144.00
	JMS/IPM/H-A	35	35	90	145	35.5	108.00		JMS/IRM/H-A	35	35	90	145	34.0	153.00
	JMS/IPM/S-B	5	5	15	25	40.0	108.00		JMS/IRM/S-B	5	5	15	25	38.5	144.00
	JMS/IPM/H-B	20	20	55	90	40.0	108.00		JMS/IRM/H-B	25	25	55	90	38.5	153.00
	JMS/IPS/S-A	15	15	45	75	22.0	99.00		JMS/IRS/S-A	15	15	45	75	22.0	144.00
	JMS/IPS/H-A	75	75	170	285	22.0	108.00		JMS/IRS/H-A	75	75	170	285	22.0	153.00
	JMS/ISL/S-A	5	5	12	22	66.0	117.00		JMS/IRS/S-B	12	12	35	60	26.5	144.00
	JMS/ISL/H-A	22	22	45	75	66.0	135.00		JMS/IRS/H-B	60	60	135	235	26.5	153.00

PRECISION LIMIT SWITCHES

CATALOGUE CUM PRICE LIST

IS/IEC:60947

WITH **MARKS**

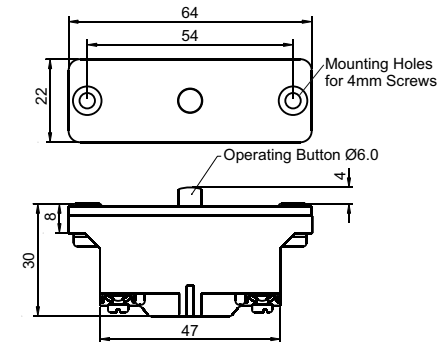
PT-5 / Sec-1 C US

JAI BALAJI Precision Limit Switches are designed for industrial duty applications. They are small in size, reliable in operation, have exceptionally long life and are accurate. The wide variety of switch operating mechanisms coupled with the choice of either single pole 1NO+1NC or double pole 2NO+2NC changeover contacts permit easy selection and application for many needs.

Electrical and Mechanical Rating

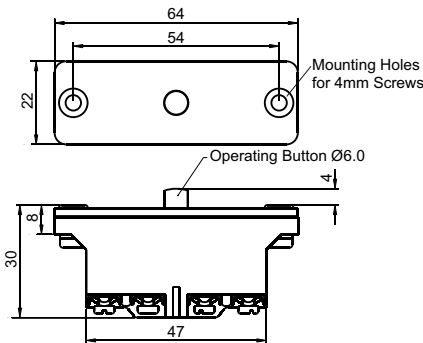
Utilisation Category	: AC 15 and DC 13 as per IEC 947-5-1 and IS/IEC :60947/Pt5/Sec-1	Contact Combination	Single pole 1 NO + 1 NC changeover contacts
Thermal current (I th)	: 15A	Frequency of operation	Double pole 2 NO + 2 NC changeover contacts
Insulation Voltage (UI)	: 600 V AC	Mechanical and Electrical life	2500 operations per hour (max)
		Operating force	20x10 ⁶ operations without operator
		Terminal capacity	10x10 ⁶ operations with operator
			3.50 Kg
			2.5mm ² solid or stranded conductors

**Precision Basic Limit Switch
1 NO + 1 NC Contacts**



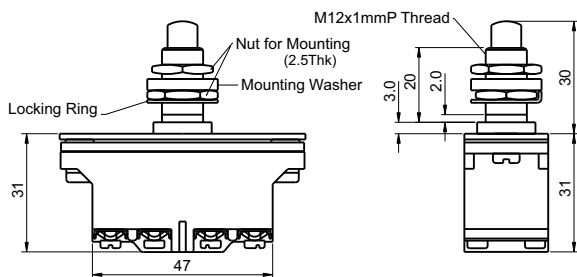
Model	Contacts	M.R.P.Rs
JO1	1NO+1NC	495

**Precision Basic Limit Switch
2 NO + 2 NC Contacts**



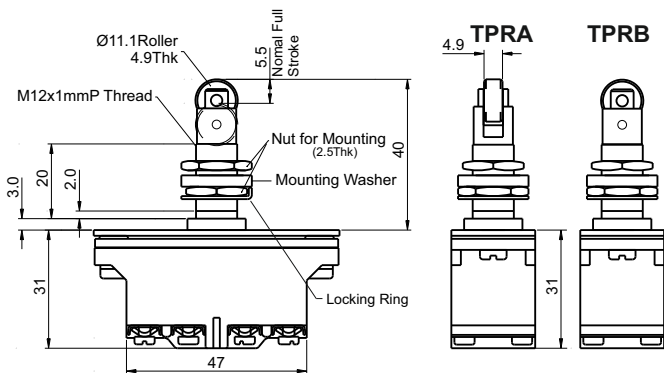
Model	Contacts	M.R.P.Rs
JO2	2NO+2NC	594

**Precision Limit Switch
with Top Push Button**



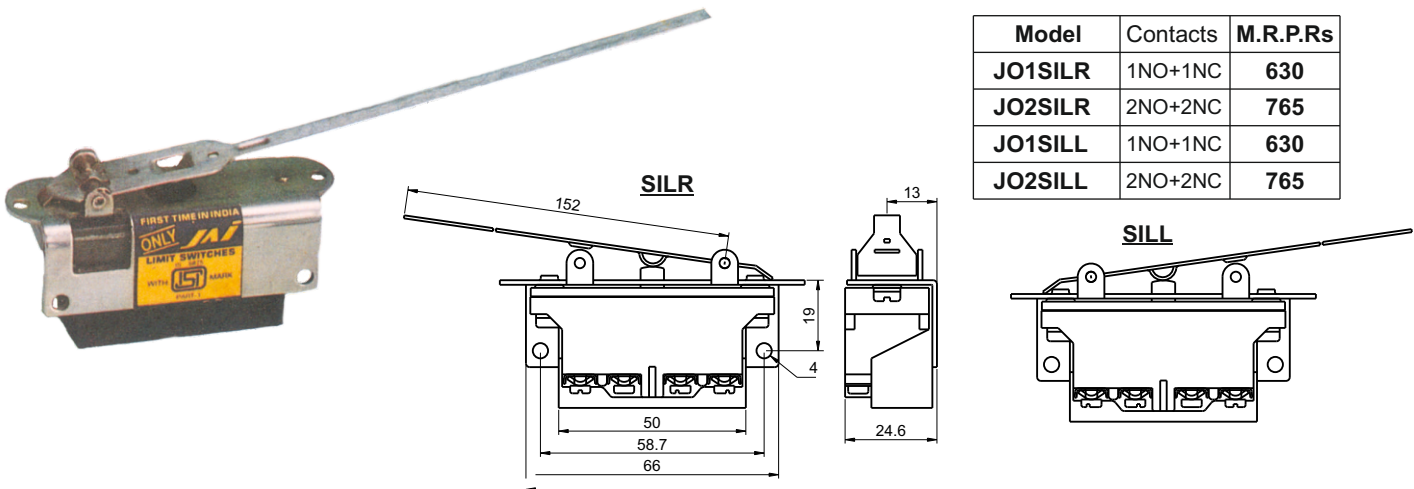
Model	Contacts	M.R.P.Rs
JO1TPB	1NO+1NC	630
JO2TPB	2NO+2NC	765

**Precision Limit Switch
with Top Push Roller**



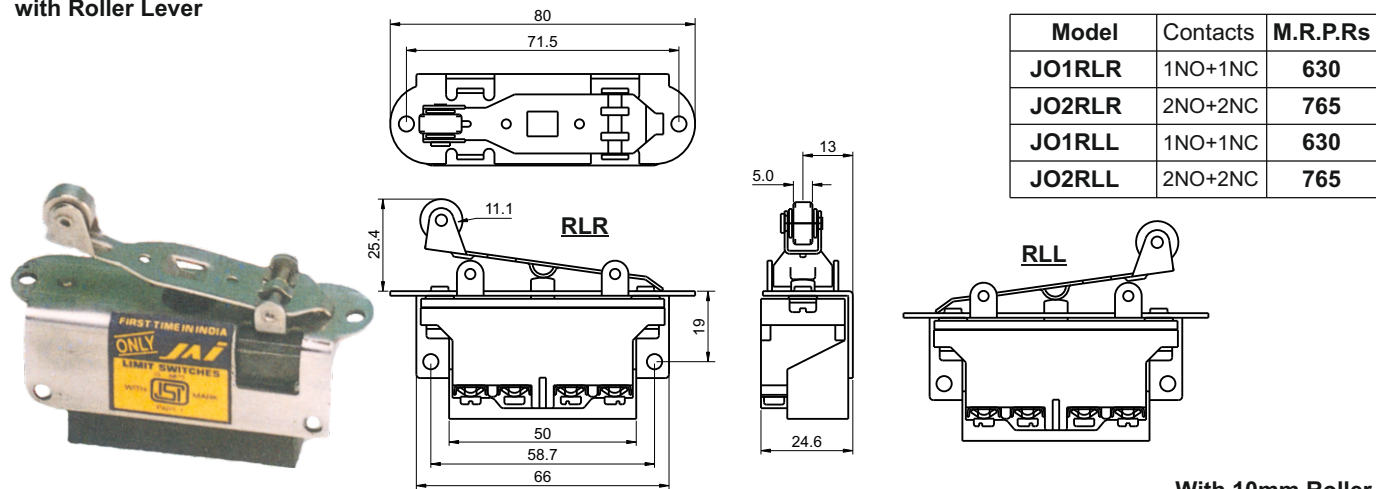
Model	Contacts	M.R.P.Rs
JO1TPRA	1NO+1NC	630
JO2TPRA	2NO+2NC	765
JO1TPRB	1NO+1NC	630
JO2TPRB	2NO+2NC	765

**Precision Limit Switch
with 6 inch(150mm) long Lever**



Model	Contacts	M.R.P.Rs
JO1SILR	1NO+1NC	630
JO2SILR	2NO+2NC	765
JO1SILL	1NO+1NC	630
JO2SILL	2NO+2NC	765

**Precision Limit Switch
with Roller Lever**



Model	Contacts	M.R.P.Rs
JO1RLR	1NO+1NC	630
JO2RLR	2NO+2NC	765
JO1RLL	1NO+1NC	630
JO2RLL	2NO+2NC	765

With 10mm Roller

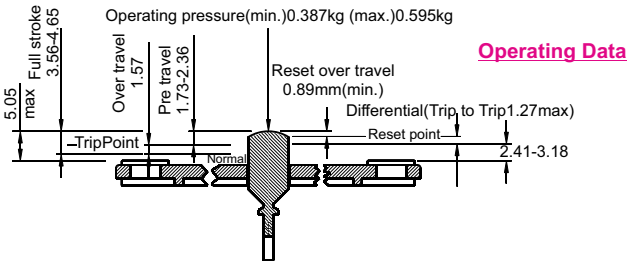
Model	Contacts	M.R.P.Rs
JO1RLR	1NO+1NC	666
JO2RLR	2NO+2NC	810
JO1RLL	1NO+1NC	666
JO2RLL	2NO+2NC	810

Also Available
Precision Limit Switch Lever Type with 10mm Roller

Operational current and voltage

AC 15 rating	Single pole (1 NO + 1 NC changeover contacts)		Double pole (2 NO + 2 NC changeover contacts)	
110V	4.0A		3.0A	
240V	2.0A		1.5A	
440V	1.0A		0.8A	
600V	0.8A		0.6A	
DC 13 rating	Single throw	Double throw	Single throw	Double throw
115V	2.0A	0.5A	1.0A	0.2A
230V	0.5A	0.2A	0.3A	0.1A
600V	0.1A	0.02A	0.1A	

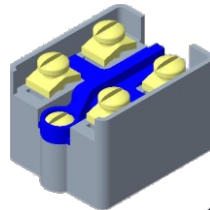
The Above Types of Switches are also available with **Gold Plated Contacts** (At extra cost)



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BC-9 MINI LIMIT SWITCHES

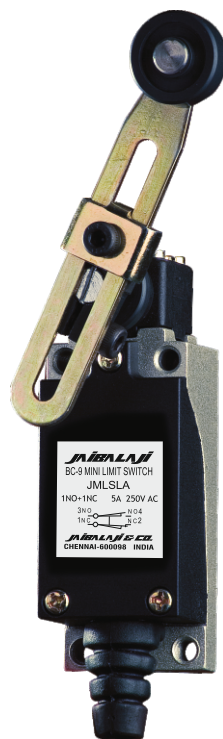
CATALOGUE AND PRICE LIST



BASIC SWITCH
BC9M 'E'
MRP. Rs.378



JMLS JWA
M.R.P. Rs.720



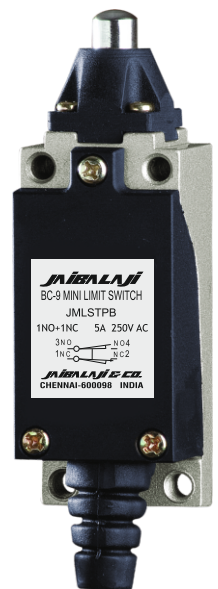
JMLS LA
M.R.P. Rs.720



JMLS TAR
M.R.P. Rs.720



JMLS TNR
M.R.P. Rs.720



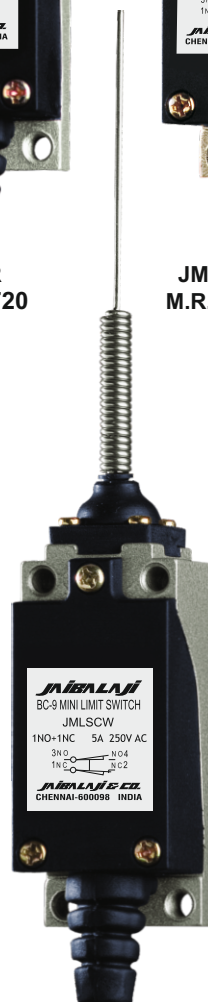
JMLS TPB
M.R.P. Rs.720



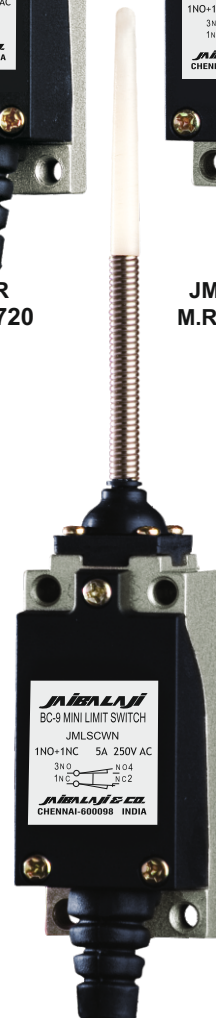
JMLS L-1
M.R.P. Rs.720



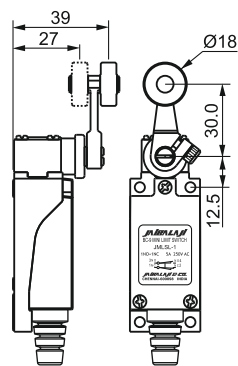
JMLS TPR
M.R.P. Rs.720



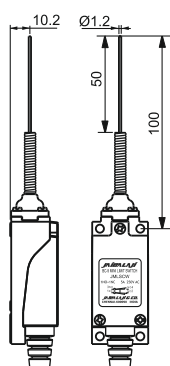
JMLS CW
M.R.P. Rs.720



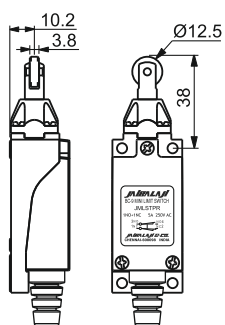
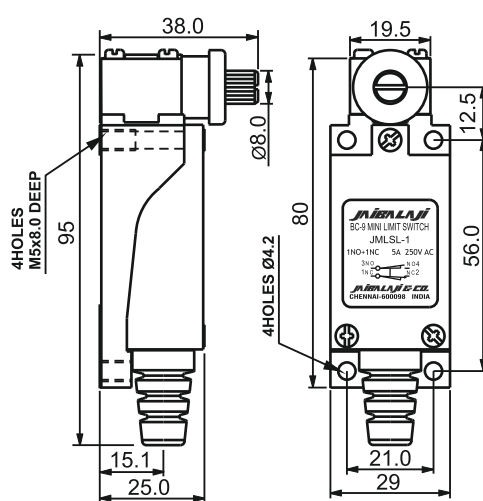
JMLS CWN
M.R.P. Rs.720



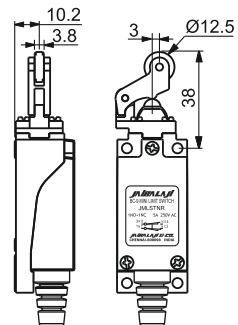
JMLSLS-1



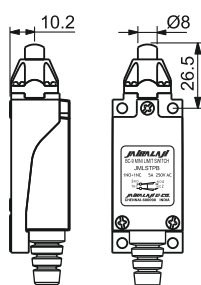
JMLSCW



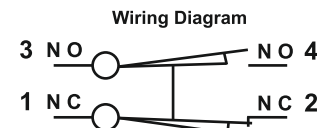
JMLSTPR



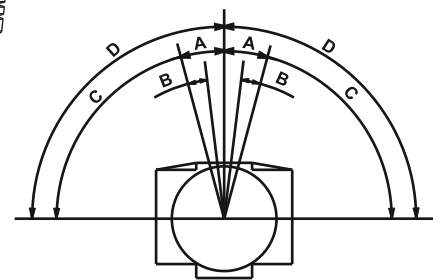
JMLSTNR



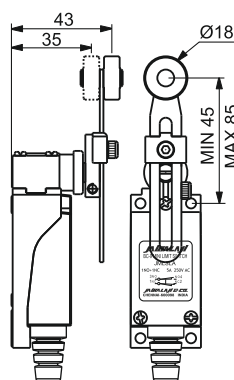
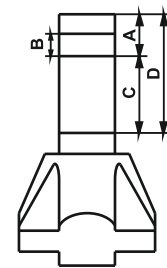
JMLSTPB



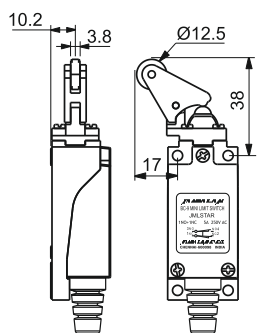
Angular Motion



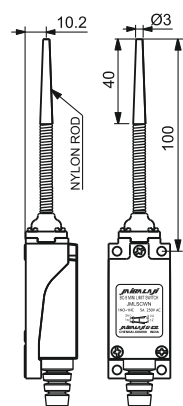
Linear Motion



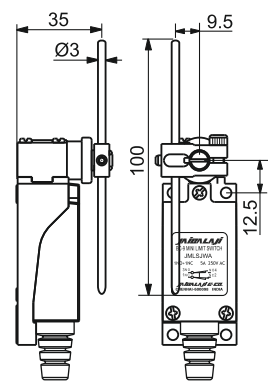
JMLSLA



JMLSTAR



JMLSCWN



JMLSJWA

MODEL	JMLSLS-1 JMLSLA JMLSJWA (max)	JMLSTPR JMLSTPB (mm) (max)	JMLSCW JMLSCWN (mm) (max)	JMLSTNR JMLSTAR (mm) (max)
A -Travel to Trip	15°	1.5	30	2.0
B -Travel to Reset from Trip Point	8°	0.8	-	-
C -Over Travel	75°	4.0	20	3.5
D -Total Travel	90°	5.5	50	5.5
Operating Force	600gms At30 Radius	900gms	90gms	900gms

PRODUCT SPECIFICATIONS

Utilization Category: AC15and DC13 as per IEC-60947-5 & IS: 13947-5-1
 Rated Insulation Voltage : 250V AC
 Rated Thermal Current Ith : 5A
 Contact Ratings : AC15 RATING 250V, 50Hz, 2.0A, DC13 RATING 125V, 0.1A
 Mechanical Life Span : 10 x 10⁶ Operations
 Enclosure Category : IP-64
 Max. Operation Speed : 120 cycles/minute
 Tightening Torque of Terminal Screw : 0.8 Nm(Max.)
 Applicable wire : Conductor size: 0.75 - 1.25 mm²
 Outer Dia of cable: 6-9 mm



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Limit Switches

TYPE CEE EM 45 SERIES**IP 67****CATALOGUE CUM PRICE LIST****PUSH ROD****ANGULAR ROLLER****NORMAL ROLLER****GENERAL**

JAIBALAJI manufactures a wide range of Limit switches tested to rigid quality standards. Jaibalaji switches are ISI marked as per IS/IEC:60947-Pt5/Sec-1

JAIBALAJI Limit switches with wide range and high quality are used for import substitution. The range includes:

- STANDARD OIL TIGHT TYPE BC-9
- MICRO ADJUSTABLE TYPE JW
- PRECISION TYPE JO
- HEAVY DUTY JB 2700
- EXTRA HEAVY DUTY TYPE JC - 1125
- GENERAL PURPOSE TYPE CEE EM 45

SPECIAL FEATURES

- Completely oil & water tight and dust and damp proof.
- Ample wiring space for easy termination.
- Flame retardant thermoplastic barriers between terminals to prevent short circuit.
- Serrated terminal to give firm grip to straight wire.

TECHNICAL DATA:

Electrical Contact rating	:	1NO+1NC 2NO + 2NC			
Continuous Current (I _{th2})	:	10A			
Rated Voltage A.C.	:	500V			
D.C.	:	600V			
Permissible ambient temperature	:	-40°C to +85°C			
Mechanical Life	:	15 million Switching cycles.			
Contact Life A. C.	Breaking Current -A				
	1	3	6	10	
	15	5	2.5	1	
	(11)	(4)	(1.8)	(0.7)	

Frequency of operation	: 6000 cycles/hour
------------------------	--------------------

Making and breaking capacity
and operational current -
40 - 60 Hz, p.f. 0.3 to 1

AC 15 duty

Voltage V	Rated Operating current (Ie) A	Rated making capacity A	Rated breaking capacity A
24	6(3)	90(30)	60(30)
125	6(3)	90(30)	60(30)
220	6(3)	90(30)	60(30)
380	6(3)	90(30)	60(30)
415	4(3)	90(30)	60(30)
500	4(3)	90(30)	60(30)

Breaking Capacity - D.C.

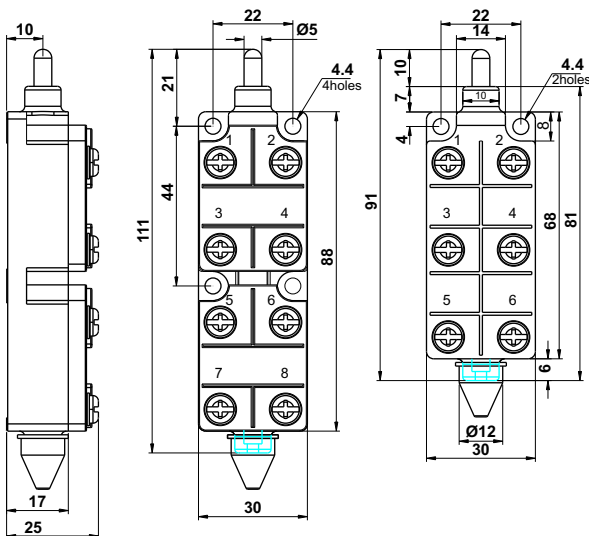
Voltage V	Resistive load(DC1) A	Inductive load(DC11) A
24	10 (7)	10 (7)
110	2.2(1.5)	1.3(0.91)
220	0.9(0.62)	0.4(0.28)
440	0.4(0.28)	0.2(0.14)
600	0.3(0.21)	0.14(0.1)

Electrical Contact rating
2NO + 2 NC

AC 15 rating	Double pole : 2 No + 2NC Changeover contacts	
110V	3.0A	
240V	1.5A	
440V	0.5A	
600V	0.6A	
DC 13 rating	Single Throw	Double throw
115V	1.0A	0.2A
230V	0.3A	0.1A
400V	0.1A	

NEW BASIC SWITCHES

WITH SLOW MAKE AND BREAK CONTACTS



S.No.	Model	Contacts	M.R.P Rs.
1	CEE EM 45 - 108	-	450
2	CEE EM 45 - 117	-	450
3	CEE EM 45 - 126	-	450
4	CEE EM 45 - 108 PCE	2NC OR 2NO	495
5	CEE EM 45 - 117 PCE	2NC + 1NO	495
6	CEE EM 45 - 126 PCE	2NO + 1NC	495

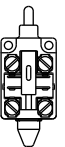
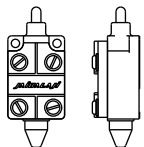
Flexibility of replacing complete contact block without changing the operating characteristic

The twin break silver contacts provide quick make and break action with high contact pressure

Completely protected against cutting lubricant and fine dust penetration by using special 'O' rings and gaskets

Available in 2NO + 2NC configuration in the same as 1NO + 1NC version, thus reducing additional limit switches and control relays

SELECTION TABLE

Execution	Design	Contacts		Type	MRP Rs.		Enclosure according to IS/IEC: 60947
		Arrangement	No. of contacts		1NO+1NC	2NO+2NC	
 open 	With Push-rod	Normal		45-9 E	252		IP 00
		Snap Action	1NO + 1NC	45-18 E	279		
		Extended Stroke	1NO + 1NC	45-27E	252		
		Overlapping	1NO + 1NC	45-36E	279		
	With Push-rod and plastic protective cover	Normal	1NO + 1NC	45-9 PCE	279		IP 40
		Snap Action	1NO + 1NC	45-18PCE	297		
		Extended Stroke	1NO + 1NC	45-27PCE	279		
		Overlapping	1NO + 1NC	45-36PCE	297		
  	With Push-rod	Normal	1NO + 1NC	45-9	711		IP 67
		Snap Action	1NO + 1NC	45-18	729	1737	
		Extended Stroke	1NO + 1NC	45-27	711		
		Overlapping	1NO + 1NC	45-36	729		
	With Normal Roller Lever	Normal	1NO + 1NC	45-45	711		IP 67
		Snap Action	1NO + 1NC	45-54	729	1737	
		Extended Stroke	1NO + 1NC	45-63	711		
		Overlapping	1NO + 1NC	45-72	729		
	With Angular Roller Lever	Normal	1NO + 1NC	45-81	711		IP 67
		Snap Action	1NO + 1NC	45-90	729	1737	
		Extended Stroke	1NO + 1NC	45-99	711		
		Overlapping	1NO + 1NC	45-09	729		
	With Roller Lever	Snap Action	1NO + 1NC	45-54 LA	1611	2826	IP 67
		Snap Action	1NO + 1NC	45-54 L1	1611	2826	
	With Angular/Normal Roller Lever	Normal	1NO + 1NC	45-45PGS A/N	711		
		Snap Action	1NO + 1NC	45-54PGS A/N	729	1737	

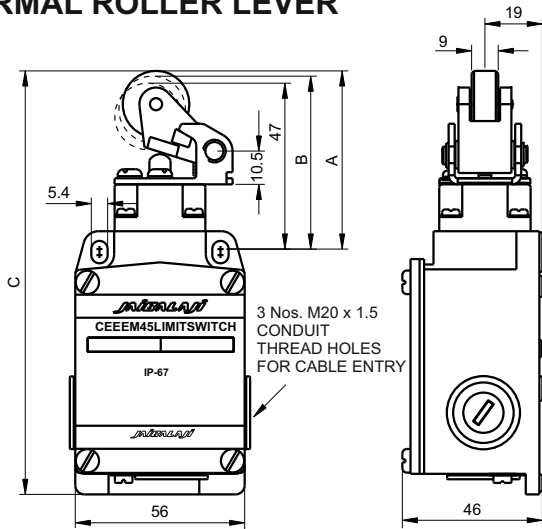
The Above Types of Switches are also available with **Gold Plated Contacts** (At extra cost)

The Above Types of Switches are also available for **High Temperature (150°C)** (At extra cost)

and with **LED Indicator** (At extra cost)

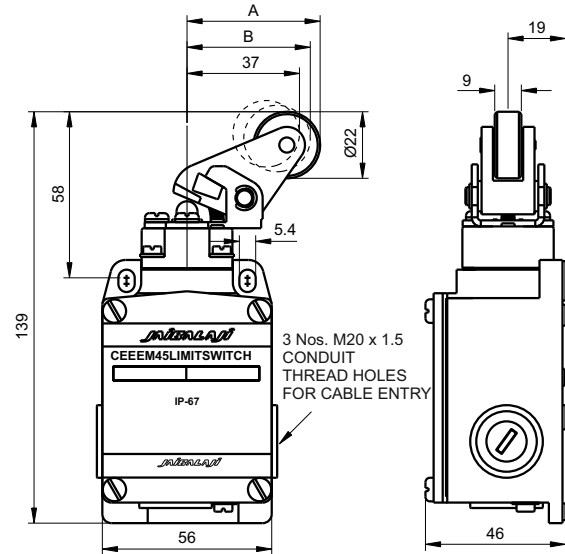
DO NOT SCALE/DIMENSIONS ARE IN MM

IN OIL TIGHT DIE CAST ALUMINIUM HOUSING
NORMAL ROLLER LEVER



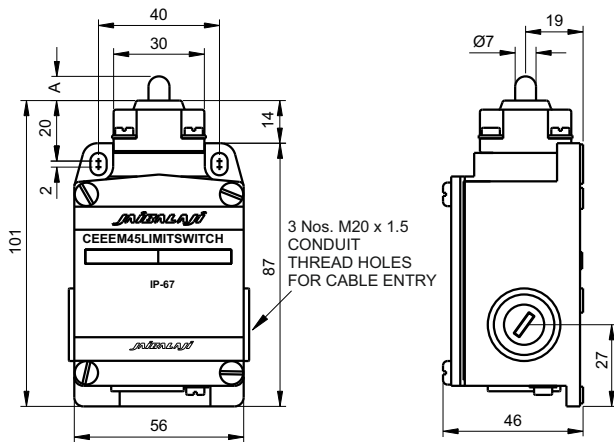
TYPE	A	B	C
45-45	56	55	137
45-54	56	53	137
45-63	58	57	137
45-72	56	56	137

ANGULAR ROLLER LEVER



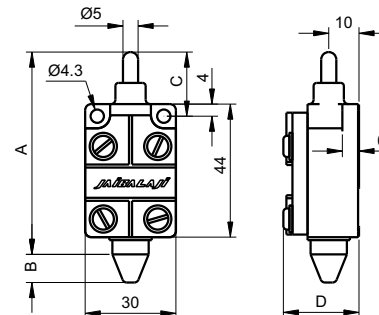
TYPE	A	B
45-81	44	43
45-90	44	41
45-99	45	45
45-09	44	43

PUSH ROD ACTUATOR



TYPE	A
45-9	6
45-18	4
45-27	8
45-36	6

OPEN EXECUTION



TYPE	A	B	C	D
45-9E	67	7	21	25
45-9PCE	67	7	21	30
45-18E	65	2	19	25
45-18PCE	65	2	19	30
45-27E	67	9	21	25
45-27PCE	67	9	21	30
45-36E	67	7	21	25
45-36PCE	67	7	21	30

Manufactured by :

JAIBALAJI
CONTROL GEARS PVT. LTD

POST BOX NO. 27

89, (NEW NO:107), SIDCO INDUSTRIAL ESTATE
AMBATTUR, CHENNAI - 600 098.

PHONE : 26251279, 26257859, 26254469

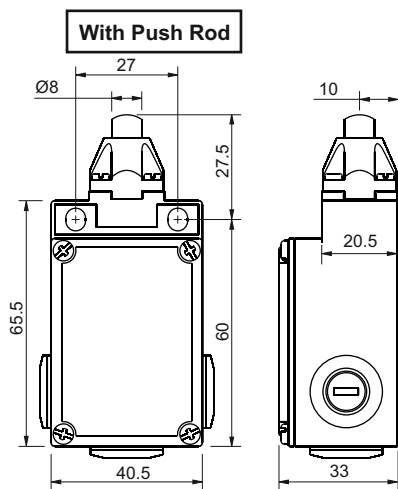
FAX : 044-26255038.

E-MAIL : dchandramohan@jaibalaji.firm.in

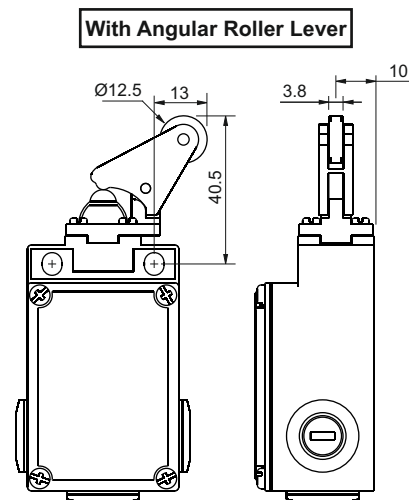
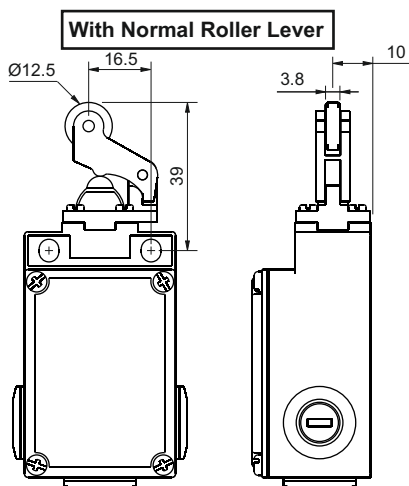
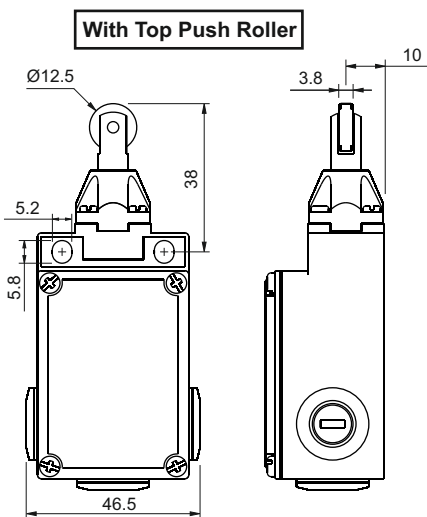


CEE EM 45 MINI LIMIT SWITCH

CATALOGUE CUM PRICE LIST



Utilization category	: AC15 and Dc13 as per IEC-60947-5 and IS:13947-5-1
Rated Insulation Voltage	: 250 V AC
Rated Thermal Current Ith	: 5A
Contact Ratings	: AC 15 Rating 250V,50Hz,2.0A DC 13 Rating 125V,0.1A
Mechanical life	: 10 x 10 6 operations
Enclosure Category	: IP - 64
Cable Entry	: M16x1.5 P Thread (3 Places)



Head	Contact	Code No.	Plastic Roller MRP Rs.	Metal Roller MRP Rs.
Top Push Rod	Normal Action	AAR VEE 9 - 9		486
	Snap Action	AAR VEE 9 - 18		513
Top Push Roller Plastic	Normal Action	AAR VEE 9 - 27 *	513	549
	Snap Action	AAR VEE 9 - 36 *	531	567
With Normal Roller Lever - Plastic	Normal Action	AAR VEE 9 - 45 *	558	585
	Snap Action	AAR VEE 9 - 54 *	585	621
With Angular Roller Lever - Plastic	Normal Action	AAR VEE 9 - 63 *	558	585
	Snap Action	AAR VEE 9 - 72 *	585	621
Roller Lever	Snap Action	AAR VEE 9 - L1 *	693	729
Roller Lever Adjustable	Snap Action	AAR VEE 9 - LA*	693	729
Cat Whisker	Snap Action	AAR VEE 9 - CW		738
Cat Whisker Nylon	Snap Action	AAR VEE 9 - CWN		738
With Steel Rod	Snap Action	AAR VEE 9 - JWA		738

*Add Suffix M for Metal Roller



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JAIBALAJI

VEE EER 45 - GENERAL PURPOSE LIMIT SWITCH

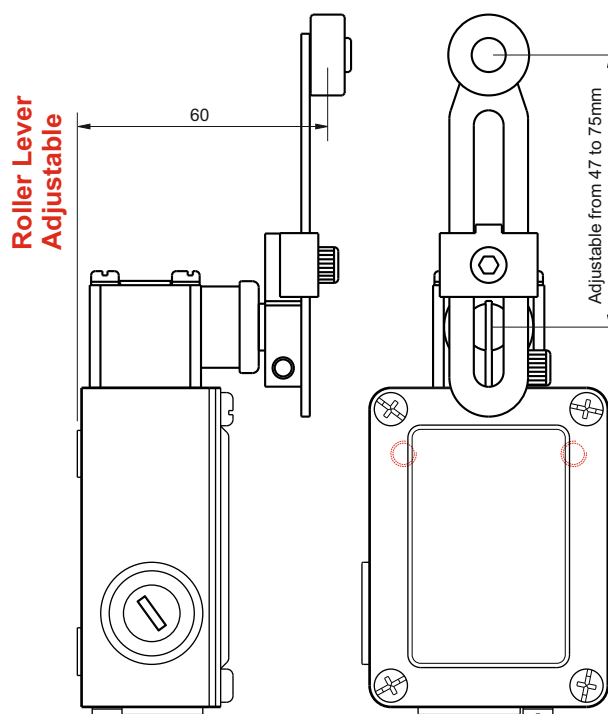
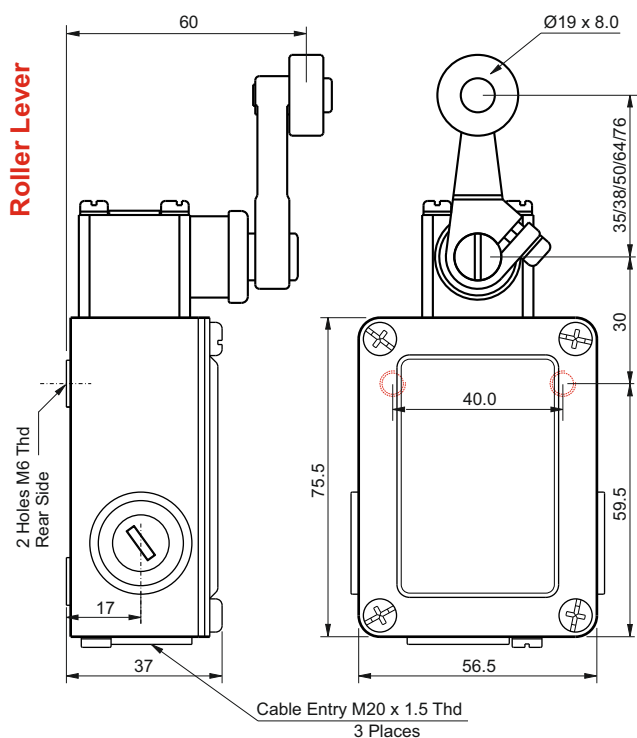


Utilization category
Thermal Current Ith
Insulation Voltage
Contact Combination
Mechanical life
Enclosure
Terminal Capacity

: AC15 and DC13 as per IS / IEC-60947-5
: 10A @ 240V AC / 30V DC
: 600V AC
: 1 NO + 1 NC
: 10 x 10⁶ operations
: Die Cast Aluminium
: 2.5² mm Solid OR Stranded

Model : VEE EER 45 - 9L M.R.P. Rs. 1296
VEE EER 45 - 18L M.R.P. Rs. 1323

Model : VEE EER 45 - 9LA M.R.P. Rs. 1296
VEE EER 45 - 18LA M.R.P. Rs. 1323

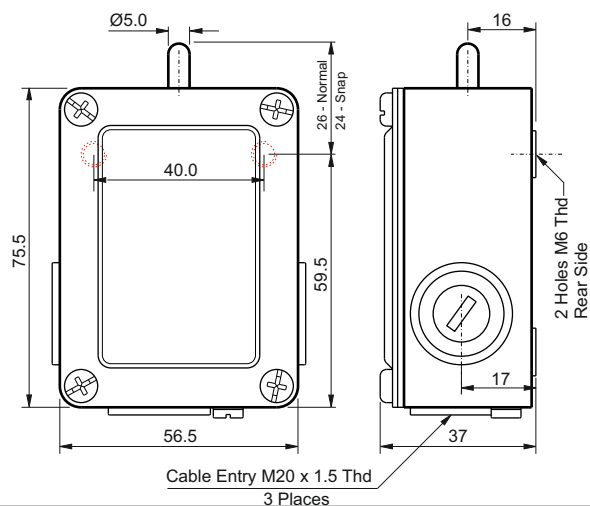


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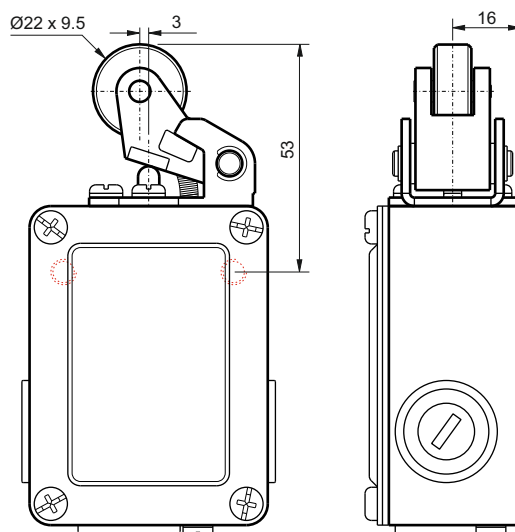
Model : VEE EER 45 - 9TP M.R.P. Rs. 648
VEE EER 45 - 18TP M.R.P. Rs. 684

Top Push Plunger



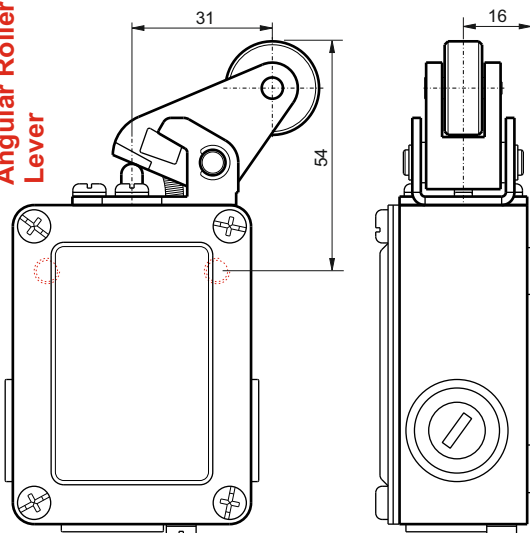
Model : VEE EER 45 - 9NL M.R.P. Rs. 648
VEE EER 45 - 18NL M.R.P. Rs. 684

Normal Roller Lever



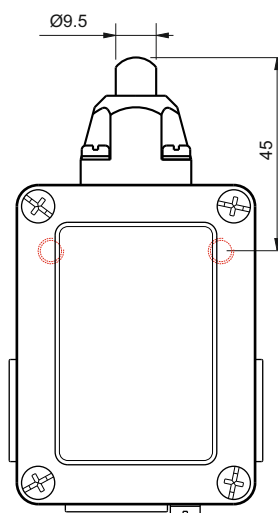
Model : VEE EER 45 - 9AL M.R.P. Rs. 648
VEE EER 45 - 18AL M.R.P. Rs. 684

Angular Roller Lever



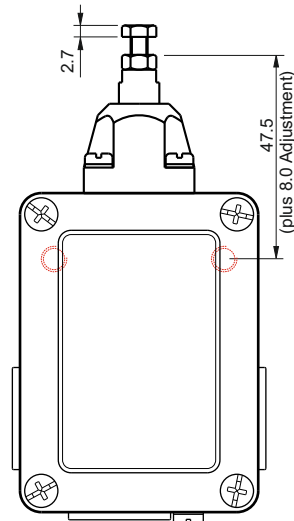
Model:
VEE EER 45 - 9TPB M.R.P. Rs. 648
VEE EER 45 - 18TPB M.R.P. Rs. 684

Top Push Button



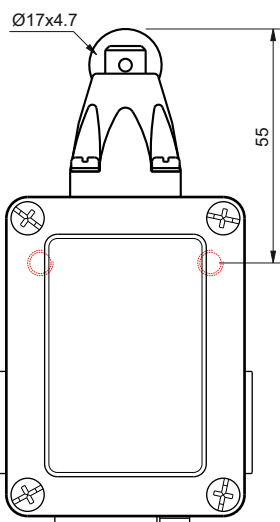
Model:
VEE EER 45 - 9TPBA M.R.P. Rs. 648
VEE EER 45 - 18TPBA M.R.P. Rs. 684

Top Push Button Adjustable



Model:
VEE EER 45 - 9TPR M.R.P. Rs. 648
VEE EER 45 - 18TPR M.R.P. Rs. 684

Top Push Roller



Type	Contact	Model	Trip Travel (Max)	Total Travel
Roller Lever 35/38/50/64/76	Normal Action	VEE EER 45 - 9L	25°	50°
	Snap Action	VEE EER 45 - 18L	20°	50°
Roller Lever Adjustable	Normal Action	VEE EER 45 - 9LA	25°	50°
	Snap Action	VEE EER 45 - 18LA	20°	50°
Top Push Roller	Normal Action	VEE EER 45 - 9TPR	3.0mm	5.5
	Snap Action	VEE EER 45 - 18TPR	2.0mm	5.0
With Normal Roller Lever	Normal Action	VEE EER 45 - 9NL	4.0mm	7.0
	Snap Action	VEE EER 45 - 18NL	2.5mm	7.0
With Angular Roller Lever	Normal Action	VEE EER 45 - 9AL	3.5mm	5.0
	Snap Action	VEE EER 45 - 18AL	3.5mm	5.0
Top Push Button	Normal Action	VEE EER 45 - 9TPB	3.0mm	5.5
	Snap Action	VEE EER 45 - 18TPB	2.0mm	5.0
Top Push Button Adjustable	Normal Action	VEE EER 45 - 9TPBA	3.0mm	5.5
	Snap Action	VEE EER 45 - 18TPBA	2.0mm	5.0
Top Push Plunger	Normal Action	VEE EER 45 - 9TP	4.5mm	8.0
	Snap Action	VEE EER 45 - 18TP	2.0mm	5.0

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 E-mail: dchandramohan@jaibalaji.firm.in Web: jaibalaji.in

DUST AND DAMP PROOF IP 67 WITH

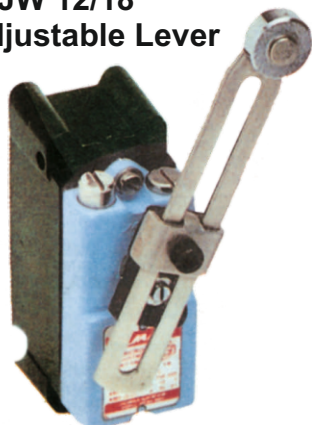
IS/IEC:60947



Pt-5 / Sec-1

CATALOGUE CUM PRICE LIST

**JW 12/18
Adjustable Lever**



**JW 12/18
with 38 Lever**



**JW 12/18
with 76.2 Lever**



**JW 12/18
with Fork Lever**



**JW 32/38
Micro adjustable Roller**



**JW 42/48
Micro adjustable Push rod**



**JW 12/18
with Offset Lever**

CONFORMS TO IS/IEC:60947 Pt5 Sec1
PROTECTION IP 67

LEVER ARM OPERATED

JW - 12 1 NO 1 NC

JW - 18 2 NO 2 NC

MICRO ADJUSTABLE LIMIT SWITCHES

- ★ MICRO TRIP TORQUE ADJUSTMENT
- ★ RESET POSITION ADJUSTMENT
- ★ REVERSE ACTION SETTING ADJUSTMENT
- ★ RAPID SETTING ADJUSTMENTS OF
ROTARY OPERATION LEVER THROUGH
360° AND SCHEME CHANGES WITHOUT
DISMOUNTING
- ★ FOUR POSSIBLE MOUNTING POSITIONS

ROLLER PLUNGER OPERATED

JW - 32 1 N.O 1 N.C.

JW - 38 2 N.O. 2 N.C. AND

PUSH ROD PLUNGER OPERATED

JW - 42 1 N.O 1 N.C.

JW - 48 2 N.O. 2 N.C.

MICRO METER ADJUSTMENT LIMIT SWITCHES

PLUNGER TYPE SWITCHES SHOULD BE USED WHERE A MICROMETER ADJUSTMENT OF THE PLUNGER IS REQUIRED. THESE SWITCHES ARE SUITABLE FOR USE ON MACHINES WHERE SHORT, CONTROLLED CAM MOVEMENTS ARE PRESENT. OPERATION MUST BE IN LINE WITH PLUNGER AXIS OR CAN BE PERPENDICULAR TO THE PLUNGER AXIS ON THE ROLLER PLUNGER TYPES.

LEVER ARM OPERATED

APPROXIMATE DIMENSIONS NOT FOR CONSTRUCTION (Dimensions in mm)

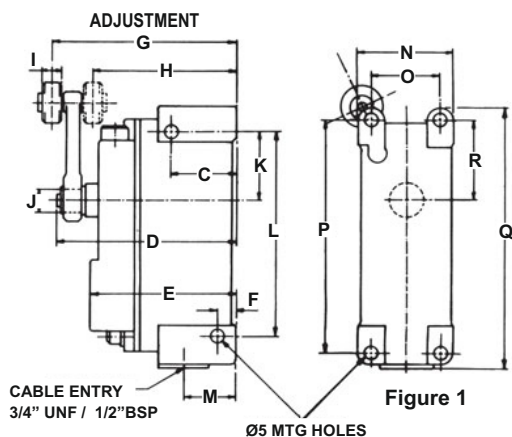


Figure 1

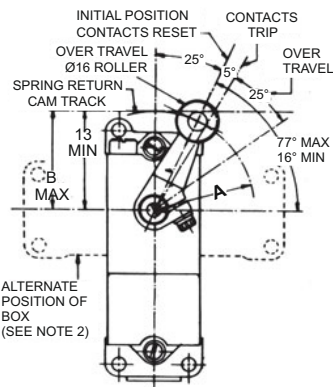


Figure 2

Figure 1 and 2 JW-12, JW-18

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Length of Arm 5 mm	Arm Length Plus 5 mm	24	68	56	5	68 - 70	56 - 58	8	11	23	78	19	37	27	89	98	29

OPERATING TORQUE 3.16 Kg Cm Repeat Accuracy + 0.025 with 35 mm arm.

NOTE 1: For reverse operation place arm and roller in similar position to left of centre line and reverse position of return spring.

NOTE 2: If roller is used in dotted position (side view) it will not pass over cover, and unit must be mounted accordingly.

ROLLER PLUNGER & PUSH ROD PLUNGER OPERATED

APPROXIMATE DIMENSIONS NOT FOR CONSTRUCTION (Dimensions in mm)

SH ROD PLUNGER TYPE-

arm must actuate push rod
line with rod axis. Care
must be taken to avoid
ceeding the overtravel

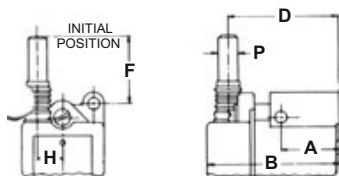


Figure 1 Type JW-42, JW-48

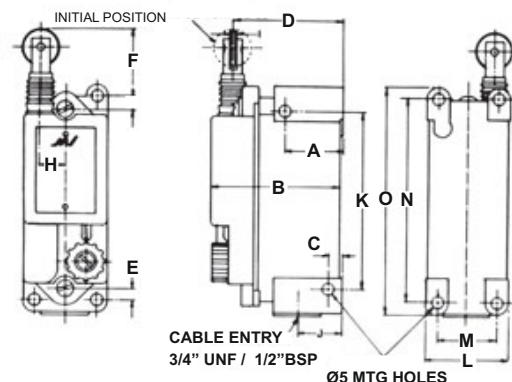
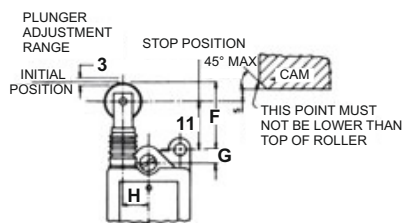
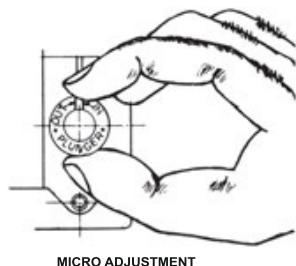
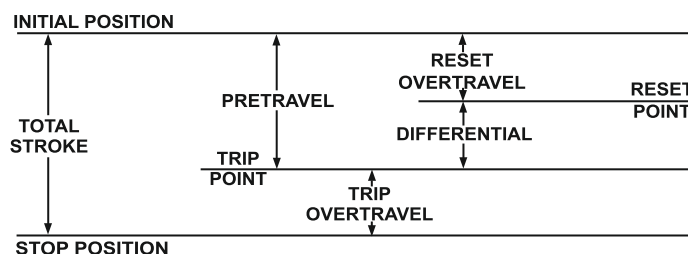


Figure 2 Type JW-32, JW-38



MICRO ADJUSTMENT

Pretravel 2mm
Differential 1mm
Total stroke 6mm
Operating force 1.4kg.
Reset force 0.5kg.
Reset overtravel 1mm
Trip overtravel 4mm
Repeat accuracy + 0.30
Plus or minus 1.6 mm depending
upon setting of plunger
adjustment.



Figures 1 & 2 types JW-32, JW-38, JW-42, JW-48

Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
JW-32, JW-38 JW-42, JW-48	24	56	5	46	5	28	6	10	3	19	78	37	27	89	98	8

Non Plug-in Small Precision Limit Switches are designed specifically for use on modern machine tools, to control starting, stopping or reversing of electrical motors including safety and signalling light, lifting gear, hoists, conveyors, etc.

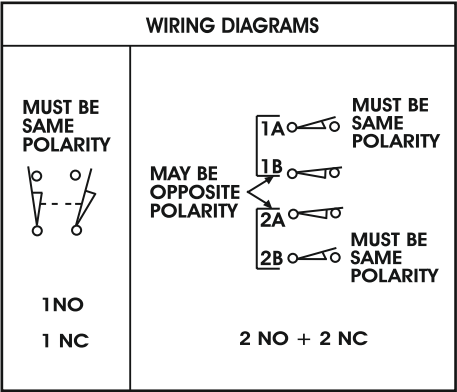
The two pole limit switches are identical in appearance and size to the popular single pole version. Two pole limit switches are desirable in many installations and can reduce the number of limit switches and control relays used.

Protected against oil, cutting lubricants and fine dust penetration by using compressed rubber rings, special gaskets, pressure die cast zinc top and aluminium bottom cover.

All the parts are anti-corrosive material and paints.

Spring return, Snap action, Quick make and Quick break contacts.

Operational current and voltage				
AC 15 rating	Single pole 1 NO + 1 NC Changeover contacts		Double pole 2 NO + 2 NC Changeover contacts	
110 V	4 A		3.0 A	
240 V	2 A		1.5 A	
440 V	1 A		0.8 A	
600 V	0.8 A		0.6 A	
DC 13 rating	Single throw	Double throw	Single throw	Double throw
115 V	2.0 A	0.5 A	1.0 A	0.2 A
230 V	0.5 A	0.2 A	0.3 A	0.1 A
600 V	0.1 A	0.02 A	0.1 A	-



1 N.O.1 N.C. contacts are Single Pole, Double Throw one circuit normally open and one circuit normally closed. These circuits are electrically separate, but cannot be used on opposite polarities.

2 N.O. 2 N.C. contacts: Each pole is electrically separate from the other and can be used on opposite polarities. The contacts of each pole, double throw-these circuits are electrically separate, but cannot be used on opposite polarities

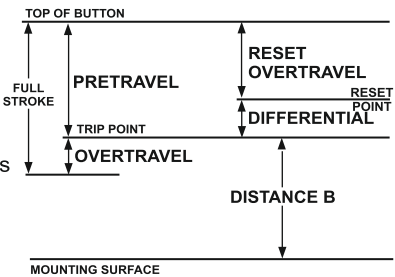
APPROXIMATE DIMENSIONS NOT FOR CONSTRUCTION (Dimensions in mm.)
Operating Data for types JO1 and JO2

TECHNICAL DATA:

Thermal rating	10A
Operating temperature	- 20° to + 70° C
Storage temperature	- 40° to + 70° C
Transfer time	5 to 6 ms.
Bounce time	5 ms.
Repeat Accuracy	± 1/100th
Mechanical Life	20 million operations
Tips	Nickel Silver Solid

TERMINAL CAPACITY:

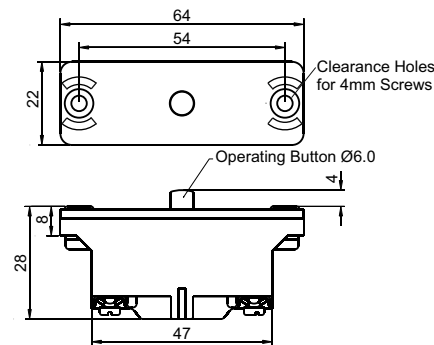
Flexible	2 x 1.5 mm ² max.
Solid	1 x 2.5 mm ² max.



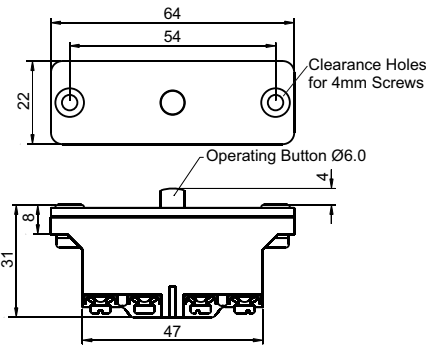
	Type JO1	Type JO2
Pretravel	1.5-1.9	1.5-1.9
Full Stroke	2.6-3.2	2.6-3.2
Differential	0.8-1.2	0.6-1.2
Reset Overtravel	0.4-1.0	0.4-1.2
Distance 'B' From top of button to mounting surface at trip point	2.4-2.0	2.4-2.0
Operating force	0.3-0.4 kg.	0.2-0.4 kg.

SNAP SWITCH DIMENSIONS

APPROXIMATE DIMENSIONS NOT FOR CONSTRUCTION

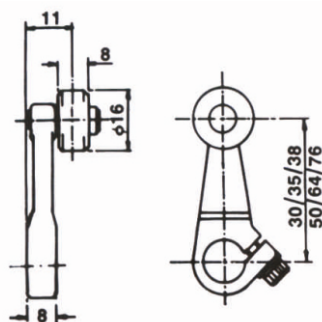


JO 1

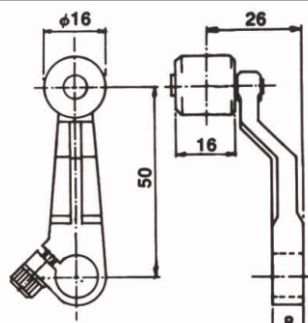


JO 2

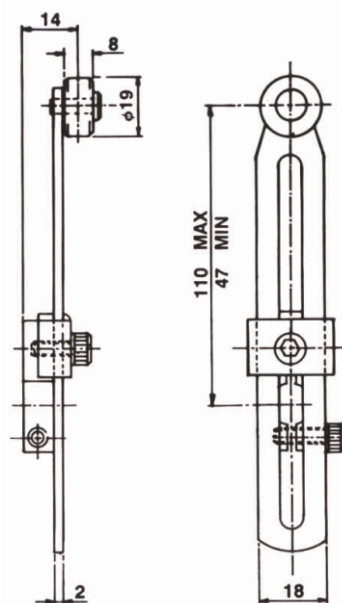
(Dimensions in mm)



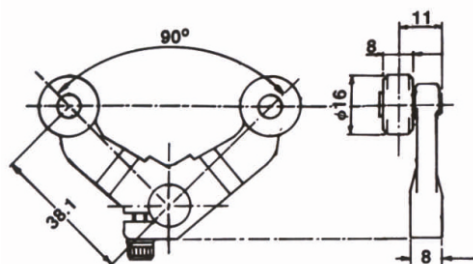
ROLLER LEVER



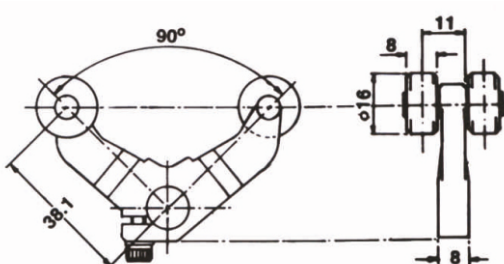
OFFSET LEVER



ADJUSTABLE LEVER



FORK TYPE INLINE ROLLERS



FORK TYPE OFF SET ROLLERS

S.No.	Type	Contacts	Ordering Code	MRP Rs.
1	JW 12 Without lever	1 NO + 1 NC	JW 12	1647
2	JW 12 With 35 mm long lever	1 NO + 1 NC	JW 12	1818
3	JW 12 With 38 mm long lever	1 NO + 1 NC	JW 12	1854
4	JW 12 With 50 mm long lever	1 NO + 1 NC	JW 12	1881
5	JW 12 With 64 mm long lever	1 NO + 1 NC	JW 12	1917
6	JW 12 With 76.2 mm long lever	1 NO + 1 NC	JW 12	1962
7	JW 12 With Adjustable lever	1 NO + 1 NC	JW 12	1980
8	JW 12 With 2" Offset lever	1 NO + 1 NC	JW 12	2034
9	JW 18 Without lever	2 NO + 2 NC	JW 18	1935
10	JW 18 With 35 mm long lever	2 NO + 2 NC	JW 18	2124
11	JW 18 With 38 mm long lever	2 NO + 2 NC	JW 18	2151
12	JW 18 With 50 mm long lever	2 NO + 2 NC	JW 18	2187
13	JW 18 With 64 mm long lever	2 NO + 2 NC	JW 18	2214
14	JW 18 With 76.2 mm long lever	2 NO + 2 NC	JW 18	2268
15	JW 18 With Adjustable lever	2 NO + 2 NC	JW 18	2286
16	JW 18 With 2" Offset lever	2 NO + 2 NC	JW 18	2322
17	Push Rod Button	1 NO + 1 NC	JW 22	1575
18	Push Rod Button	2 NO + 2 NC	JW 28	1881
19	Micro Adjustable Roller Plunger	1 NO + 1 NC	JW 32	1737
20	Micro Adjustable Roller Plunger	2 NO + 2 NC	JW 38	2043
21	Micro Adjustable Push Rod Plunger	1 NO + 1 NC	JW 42	1710
22	Micro Adjustable Push Rod Plunger	2 NO + 2 NC	JW 48	2025

The Above Types of Switches are also available with **Gold Plated Contacts** (At extra cost)

The Above Types of Switches are also available for **High Temperature (150°C)** (At extra cost) and with **LED Indicator** (At extra cost)

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BC 9

OIL TIGHT LIMIT SWITCHES

IP 67

WITH     MARKS

CATALOGUE CUM PRICE LIST



RECOGNITION OF
Quality Plus

PRICE LIST

Description	Type	Ordering Code	1 NO + 1 NC MRP Rs.	2 NO + 2 NC MRP Rs.
Roller Lever	38mm length	JLSL 1	1800	2853
	76mm length	JLSL 2	1800	2853
	50mm length	JLSL 3	1800	2853
	64mm length	JLSL 4	1800	2853
	50mm Offset	JLSL 0	1863	3033
Adjustable Roller Lever	32 to 82.5mm	JLSL A	1800	2853
Fork Lever	Roller in line	JLSF	1926	3096
	with offset roller	JLSFLO	1962	3132
Top Push	Roller type	JLSTPR	1800	2853
	Button type	JLSTPBA	1800	2853
Side Push	Roller type	JLSSPR	1926	3096
	Button type	JLSSPBA	1926	3096
Cat Whisker	Nylon rod	JLSCW	1800	2853
	Steel rod	JLSJW	1800	2853
Pull cord	Pull cord	JLSPC	2853	3870
Belt sway	Belt sway	JLSBS	2853	3870
Top push Normal Roller	Top push Normal Roller	JLSTNR	1800	2853
General Purpose	Angular Roller Lever	JLSGS	1566	2736
	Ang Metal Roller Lever	JLSGS	1638	2817

Ordering Code for Maintained Contact Models

Description	Type	Ordering Code	1 NO + 1 NC MRP Rs.	2 NO + 2 NC MRP Rs.
Roller Lever	38mm length	JLSL-1(M)	1980	3150
	76mm length	JLSL-2(M)	1980	3150
	50mm length	JLSL-O(M)	2052	3222
Adjustable Roller Lever	32 to 82.5mm	JLSLA(M)	1980	3150
Fork Lever	Roller in line	JLSLF(M)	2160	3330
	with offset roller	JLSLFLO(M)	2160	3330
Cat Whisker	Steel rod	JLSJW(M)	1980	3150

The Above Types of Switches are also available with **Gold Plated Contacts** (At extra cost)

The Above Types of Switches are also available for **High Temperature (150°C)** (At extra cost)
and with **LED Indicator** (At extra cost)

Accessory:

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

JALBALAJI manufactures a wide range of **JALBALAJI** Limit Switches tested to rigid quality standards. **JALBALAJI** BC 9 series Limit Switches comply with IS 13947/pt-5/sec-1 of 2004 & IEC 947-5-1 and carry the unique  mark. **JALBALAJI** Limit Switches are certified by  International Canada and U.S. They also conform to European standard 

FEATURES

JALBALAJI 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.

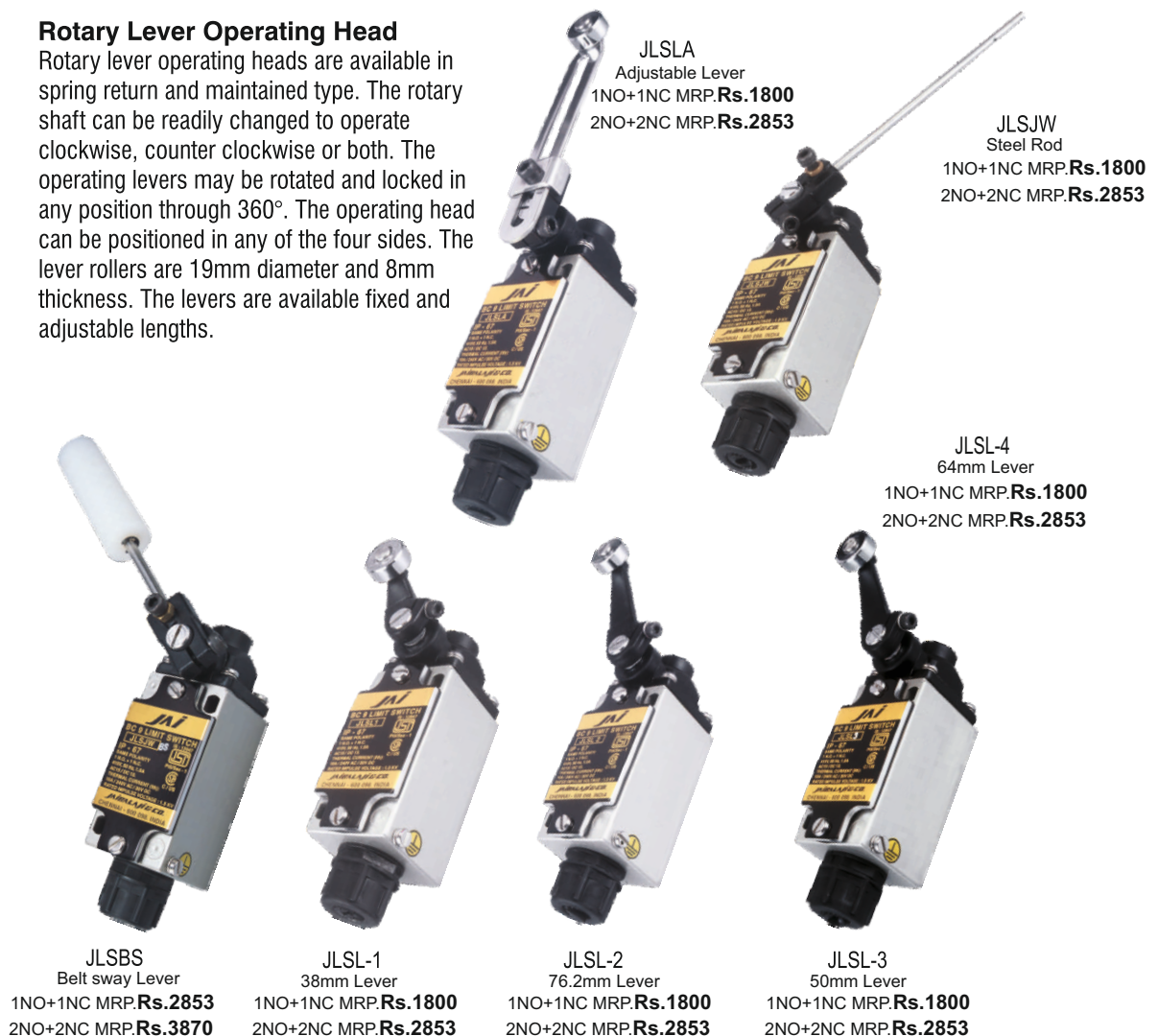
MODELS

JALBALAJI BC9 Oil Tight Limit Switches

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

Rotary Lever Operating Head

Rotary lever operating heads are available in spring return and maintained type. The rotary shaft can be readily changed to operate clockwise, counter clockwise or both. The operating levers may be rotated and locked in any position through 360°. The operating head can be positioned in any of the four sides. The lever rollers are 19mm diameter and 8mm thickness. The levers are available fixed and adjustable lengths.



Top Push Operating Head

BC9 Top Plunger 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 threaded 4mm 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.



JLSTPBA
1NO+1NC MRP.**Rs.1800**
2NO+2NC MRP.**Rs.2853**



JLSTPR
1NO+1NC MRP.**Rs.1800**
2NO+2NC MRP.**Rs.2853**



JLSTNR
1NO+1NC MRP.**Rs.1800**
2NO+2NC MRP.**Rs.2853**

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 vice versa by unscrewing the plunger cap nut and it is ready to operate as per the choice



JLSSPBA
1NO+1NC MRP.**Rs.1926**
2NO+2NC MRP.**Rs.3096**



JLSSPR
1NO+1NC MRP.**Rs.1926**
2NO+2NC MRP.**Rs.3096**



JLSCW
1NO+1NC MRP.**Rs.1800**
2NO+2NC MRP.**Rs.2853**



JLSPC
1NO+1NC MRP.**Rs.2853**
2NO+2NC MRP.**Rs.3870**

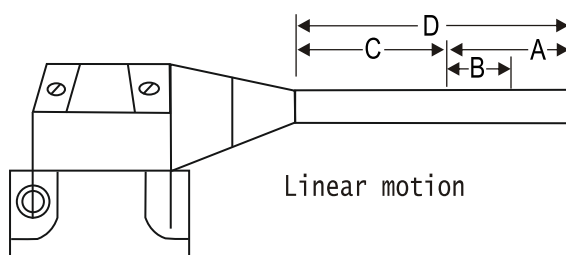
Cat Whisker Operating Head

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.

Fork Lever Operating Head :

Each of the two arms of length 38mm has a roller of 19mm diameter and 8mm thickness either in line or offset. Available in spring return or maintained type.

Diagram for Operating Data



JLSF
Fork Roller Lever
1NO+1NC MRP.**Rs.1926**
2NO+2NC MRP.**Rs.3096**



JLSPC WR
1NO+1NC MRP.**Rs.2934**
2NO+2NC MRP.**Rs.4104**

ELECTRICAL & MECHANICAL RATINGS

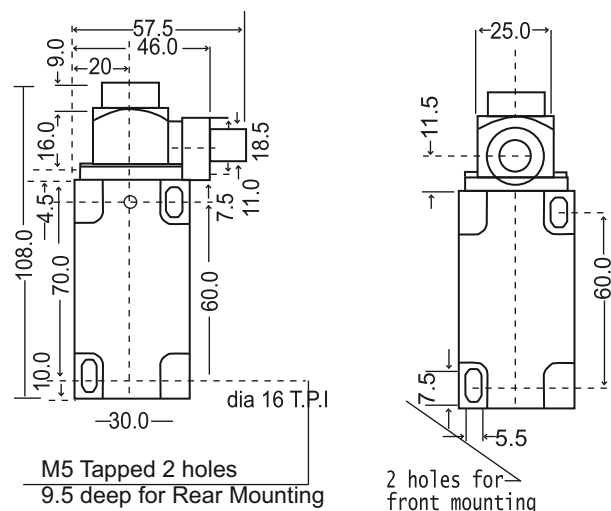
Utilisation Category	AC 15 and DC 13 as per IS/IEC 60947
Thermal Current (1th)	10A
Insulation Voltage (Ui)	600 V AC
ISI Licence No.	CM/L-2015427

Operating Current and Voltage

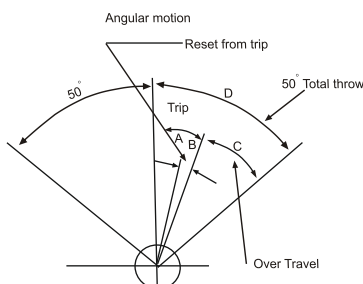
AC 15 rating	6A at 110V; 3A at 220V; 1.5A at 400V; 1.2A at 550V
DC 13 rating	0.2A at 110V; 0.1A at 220V,
Contact combination	1 NO + 1 NC SPDT switch change-over contact
Frequency of operation	2500 operations per hour
Mechanical life	20 x 10 ⁶ operations
Enclosure category	Die cast enclosure to IP-67 as per IS 13947 / Pt5 / Sec1 of 2004
Terminal capacity	2.5mm solid or stranded

Weights

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

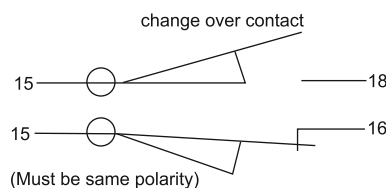


Accessory



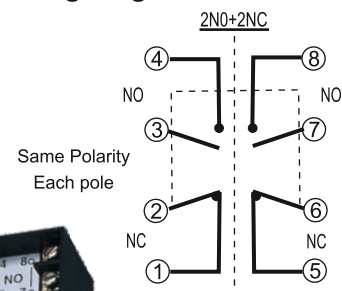
- A Travel to trip
- B Travel to reset from trip point
- C Over travel
- D Total travel

Wiring Diagram: 1NO + 1NC



Basic Switch **BC9E**
1NO+1NC MRP.**Rs.864**

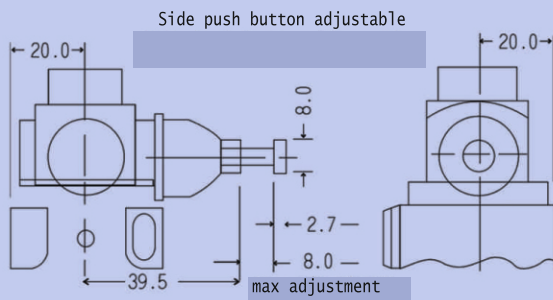
Wiring Diagram: 2NO + 2NC



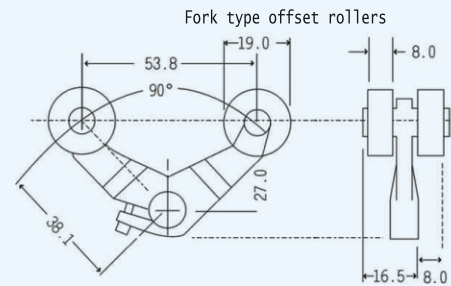
Basic Switch **BC9E**
2NO+2NC MRP.**Rs.1224**

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	10°	50°+	1.3+	2.0+	20°+
Travel to reset from trip point B	6°	50°+	1.1	1.7	18°+
Over travel C	40°	40°*	5.5	5.1	50°*
Total travel D	50°	90°+	6.8	7.0	250°*
Force to trip (max) kg	1.0	0.5	2.0	2.0	0.285
Force to be applied at a radius of (mm)	28	38	-	-	25.5

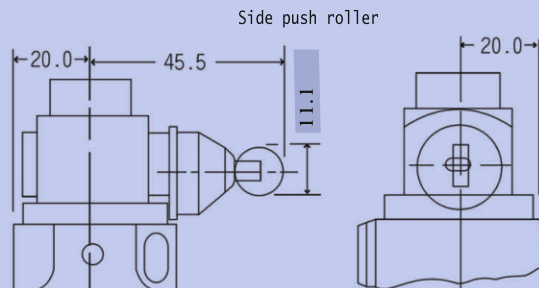
+ Maximum * Minimum



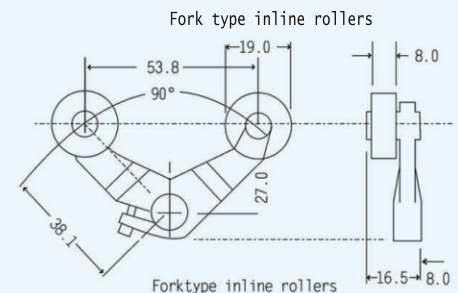
Side push button adjustable



Fork type offset rollers

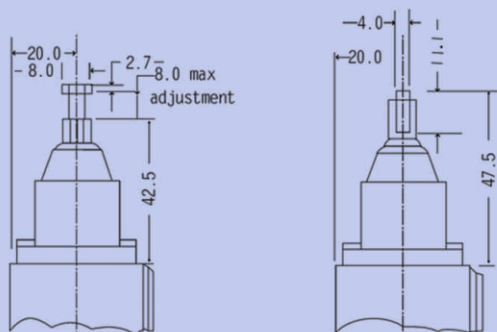


Side push roller



Fork type inline rollers

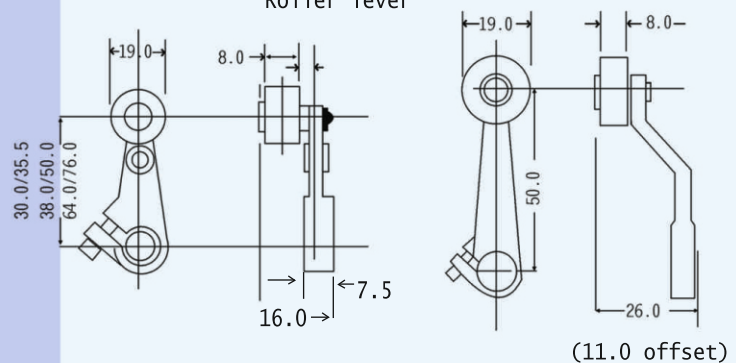
Forktype inline rollers



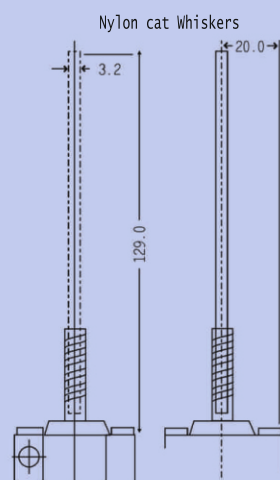
Top push button adjustable

Top push roller

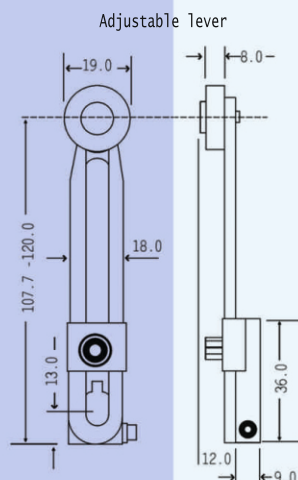
Roller lever



(11.0 offset)

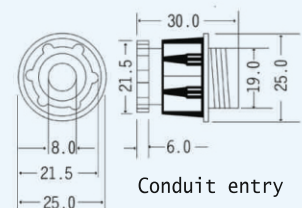


Nylon cat Whiskers



Adjustable lever

Surface mounted side operated



Conduit entry

Manufactured by:

JAIBALAJI
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JALAJI

BC 9 'T'

OIL TIGHT LIMIT SWITCHES

IP 67

WITH IS/IEC:60947
   MARKS
Pt-5 / Sec-1 C US
CATALOGUE CUM PRICE LIST



RECOGNITION OF
Quality Plus

PRICE LIST

Description	Type	Ordering Code	1 NO + 1 NC MRP Rs.
Roller Lever	38mm length	BC9 T JLSL - 1	1512
	76mm length	BC9 T JLSL - 2	1512
	50mm length	BC9 T JLSL - 3	1512
	64mm length	BC9 T JLSL - 4	1512
	50mm Offset	BC9 T JLSL - O	1566
Adjustable Lever	32 to 82.5 mm	BC9 T JLSL - A	1512
Fork Lever	Roller inline	BC9 T JLSF	1710
	with Offset roller	BC9 T JLSFLO	1773
OffsetLever	with 50mm AI roller	BC9 T JLSFLO	1890
Top Push	Roller Type	BC9 T JLSTPR	1512
	Button Type	BC9 T JLSTPB	1512
	Button Adjustable	BC9 T JLSTPBA	1512
Side Push	Roller Type	BC9 T JLSSPR	1620
	Button Adjustable	BC9 T JLSSPBA	1620
Cat Whisker	Nylon Rod	BC9 T JLSNCW	1512
	SS Spring	BC9 T JLSSCW	1539
Side operating	Steel rod	BC9 T JLSJW	1512
	Steel rod Adjustable	BC9 T JLSJWA	1512
	Steel rod 'U' Type	BC9 T JLSUW	1512

The Above Types of Switches are also available with **Gold Plated Contacts** (At extra cost)

The Above Types of Switches are also available with **LED Indicator** (At extra cost)

Ordering code for **Maintained contact models**

Description	Type	Ordering Code	1 NO + 1 NC MRP Rs.
Roller Lever	38mm length	BC9 T JLSL - 1(M)	1683
	76mm length	BC9 T JLSL - 2(M)	1683
Adjustable Lever	32 to 82.5 mm	BC9 T JLSL - A(M)	1683
Fork Lever	Roller inline	BC9 T JLSLF(M)	1863
	with Offset roller	BC9 T JLSFLO(M)	1826
Side operating	Steel rod	BC9 T JLSJW(M)	1683
	Steel rod 'U' Type	BC9 T JLSUW(M)	1683

JALIBALJI BC9 'T' OIL TIGHT LIMIT SWITCHES

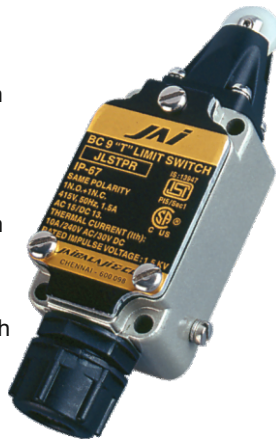
JAIBALAJI BC 9'T' Top Push Operating Heads

BC-9'T' Top Plunger 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 threaded 4mm Hex. Head operating plunger and securing it with a lock nut).

The second type has a solid button of 9.5mm without any adjustment.

The third type has a nylon roller of 17mm diameter and 4.7 mm thickness. The top push operating heads are easier to apply because the operating direction and repeat accuracy is less critical.

JLSTPR
Top Push Roller
1NO+1NC MRP.**Rs.1512**



JLSTPB
Top Push Button
1NO+1NC MRP.**Rs.1512**



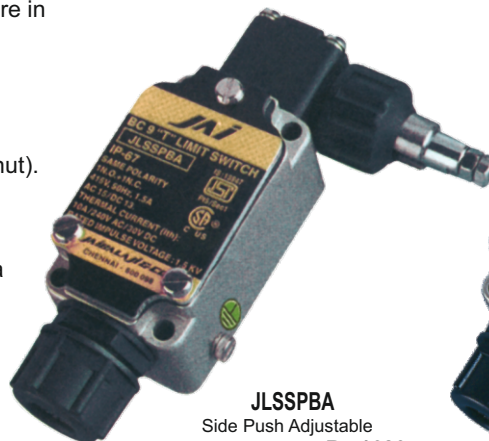
JLSTPBA
Top Push Adjustable
1NO+1NC MRP.**Rs.1512**



JAIBALAJI BC 9'T' Side Push Operating Head

Jaibalaji BC 9'T' 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 plungers and securing it with a lock nut).

The second type has Nylon Roller of 17mm diameter and 4.7mm thickness. In our BC 9'T' Side Plunger Roller type Limit Switch there is a provision to change positioning of the Roller Plunger from horizontal to vertical position and vice versa by unscrewing the plunger cap nut and it is ready to operate as per the choice.



JLSSPBA
Side Push Adjustable
1NO+1NC MRP.**Rs.1620**



JLSSPR
Side Push Roller
1NO+1NC MRP.**Rs.1620**

JAIBALAJI BC 9'T' Cat Whisker Operating Head

BC 9'T' Cat Whisker Limit Switches are available in two designs with 137mm long operating lever. One type consists of 3.2 dia Nylon Rod fixed with stainless steel tension spring from the bottom. The second type consists of 6.2 dia stainless steel tension spring. Both these types can be operated in any direction from the centre.

JLSNCW
Nylon Rod
1NO+1NC MRP.**Rs.1512**



JLSSCW
S S Spring
1NO+1NC MRP.**Rs.1539**



JALBALAJI manufactures a wide range of limit switches tested to rigid quality standards. **JALBALAJI** BC9'T' series Limit switches comply with IS/IEC 60947/pt-5/sec-1 and carry the unique  mark. **JALBALAJI** Limit switches are certified by  International Canada and US. They also conform to European standard CE

JALBALAJI BC 9'T' Series Oil Tight Limit Switches Features

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 characteristics.
The S.P.D.T twin-break silver contact provides quick make- and- break action with high contact pressure.
The brass-forged lever with nylon roller & all stainless steel parts provides high rigidity and corrosion resistance.

JALBALAJI BC 9'T' Oil Tight Switches Models

BC 9'T' JLS type limit switches are available with a variety of operating heads to meet diverse applications.

JALBALAJI BC 9'T' Rotary Lever Operating Head

Rotary Lever Operating Heads are available in spring return and maintained type. The rotary shaft can be readily changed to operate clockwise, counter clockwise or both. The operating levers may be rotated and locked in any position through 360 .The operating head can be positioned in any of the four sides. The lever rollers are 19mm diameter and 16mm thickness. The levers are available in fixed and adjustable lengths.

JLSJW
Steel Rod
1NO+1NC MRP.**Rs.1512**

JLSUW
1NO+1NC MRP.**Rs.1512**

JLSL-0
Offset Lever
1NO+1NC MRP.**Rs.1566**

JLSL-2
76.2mm Lever
1NO+1NC MRP.**Rs.1512**

JLSL-1
38mm Lever
1NO+1NC MRP.**Rs.1512**

JLSL-A
Adjustable Lever
1NO+1NC MRP.**Rs.1512**

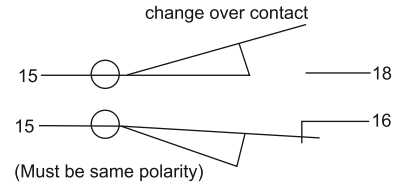
OPERATING CURRENT AND VOLTAGE

AC 15 rating	: 6A at 110 V; 3A at 220V; 1.5A at 400V; 1.2A at 550V
DC 13 rating	: 0.2A at 110V; 0.1A at 220V
Contact combination	: 1 NO + 1 NC SPDT switch change-over contact
Frequency of operation	: 2500 operations per hour
Mechanical life	: 20 X 10 operations
Enclosure Category	: Die cast enclosure to IP-67 as per IS 2147-1962
Terminal Capacity	: 2.5mm ² Solid or stranded

ELECTRICAL & MECHANICAL RATINGS

Utilisation Category	: AC 15 and DC 13 as per IS/IEC 60947 Pt-5/Sec-1
Thermal Current (1th)	: 10A
Insulation Voltage (Ui)	: 600 V AC
ISI Licence No.	: CM/L-2015427

WIRING DIAGRAM



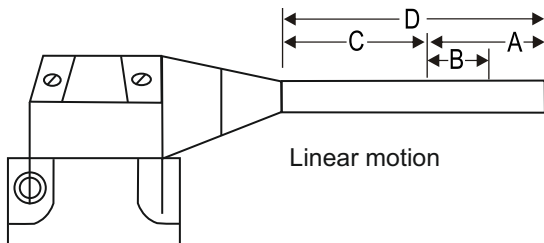
JAIBALAJI BC9'T' Fork Lever Operating Head

Each of the two arms of length 38mm has a roller of 19mm diameter and 16mm thickness either in line or offset. Limit Switches all lever type are available in spring return or maintained type.

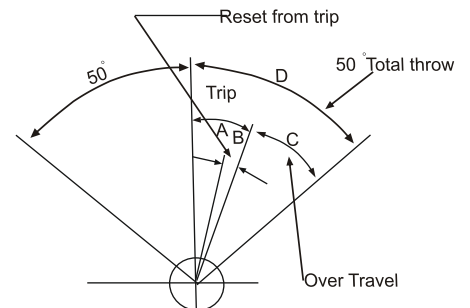


JLSF
Fork type Roller in line
1NO+1NC MRP.**Rs.1701**

Diagram for Operating Data



Angular motion

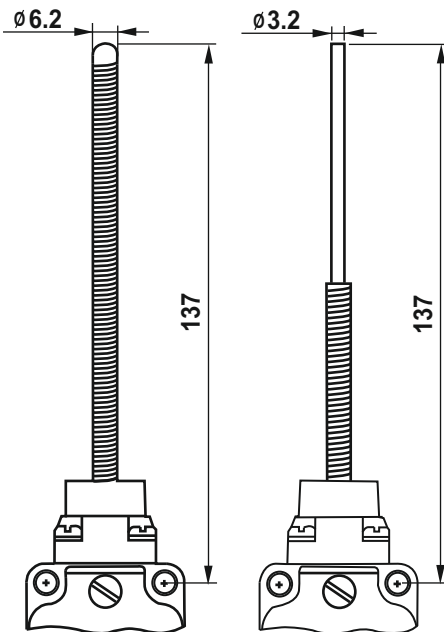
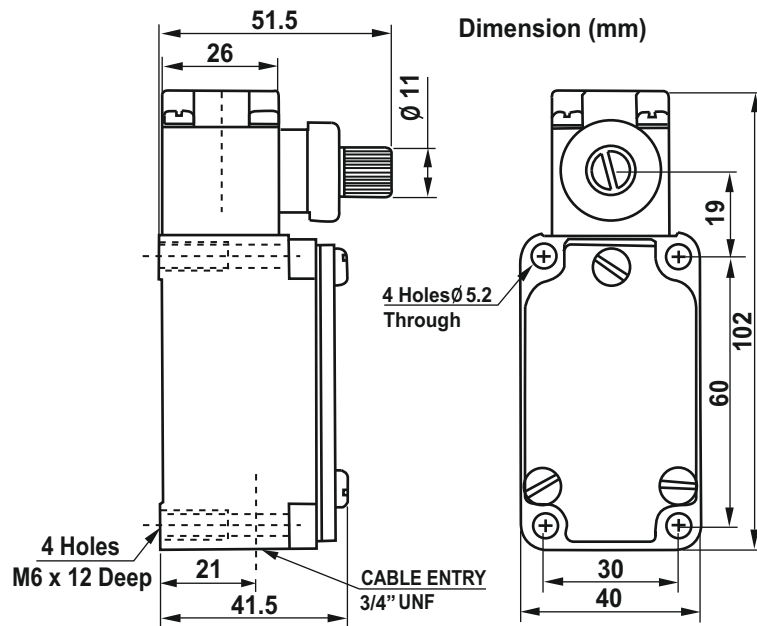


- A Travel to trip
- B Travel to reset from trip point
- C Over travel
- D Total travel

BC-9'T' Types	JLSL 1 JLSL 2 JLSL A JLSJ W JLSUW JLSL F JLSL O mm	JLSL 1M JLSL 2M JLSL AM JLSJWM JLSUWM JLSLFM JLSLFOM mm	JLSTPR JLSTPBA JLSTPB mm	JLSSPR JLSSPBA mm	JLSNCW JLSSCW JLSCW mm
Travel to trip A	10°	50° +	1.3+	2.0+	20° +
Travel to rest from trip point B	6°	50° +	1.1	1.7	19° +
Over travel C	40°	40° *	5.5	5.1	5° *
Total travel D	50°	90° +	6.8	7.0	25° *
Force to trip (max) Kg	1.0	0.5	2.0	2.0	0.285
Force to be applied at a radius of (mm)	28	38	-	-	25.5

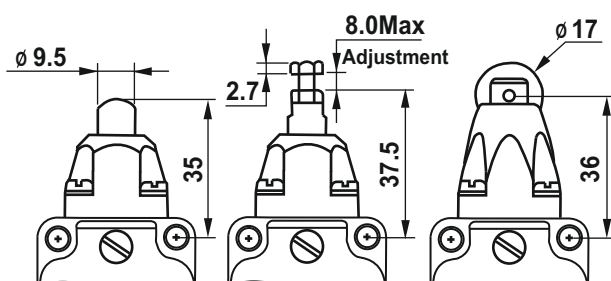
+ Maximum * Minimum

DIMENSIONS (MM)



JLSCW

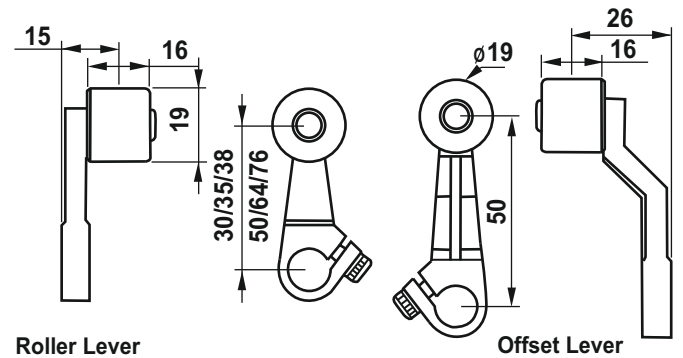
JLSCW (N)



JLSTPB

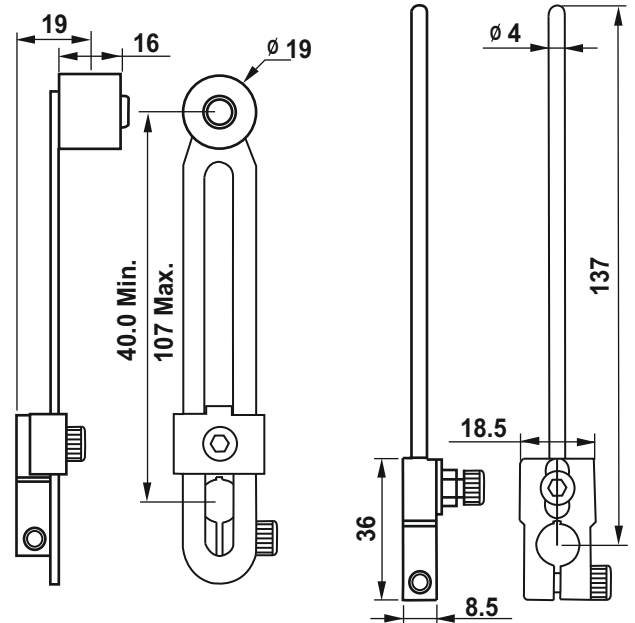
JLSTPBA

JLSTPR



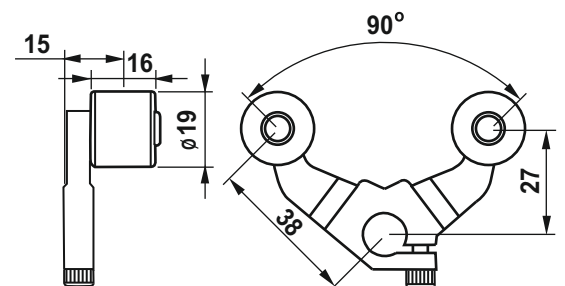
Roller Lever

Offset Lever

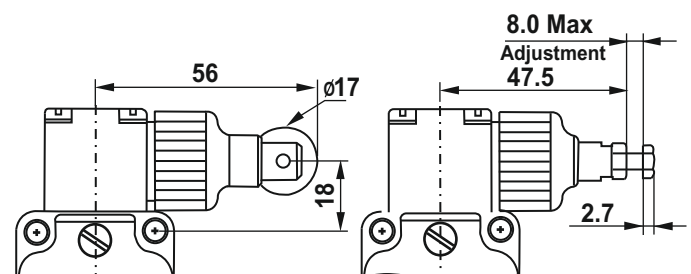


Adjustable Lever

Antenna Type Lever



Fork Type Lever



JLSSPR

JLSSPBA

JAIBALAJI
CONTROL GEARS PVT. LTD

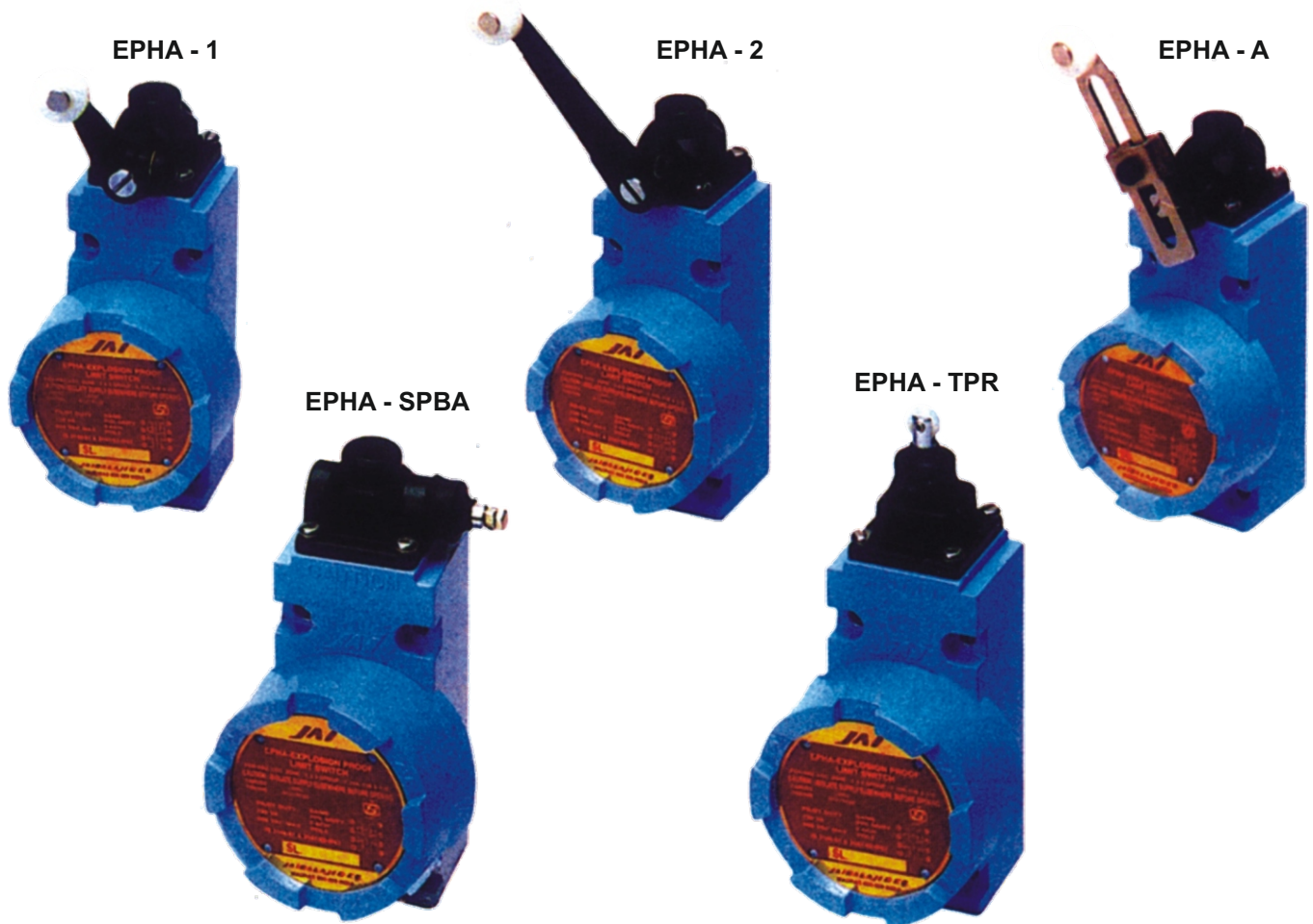
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JAIBALAJI EPHA LIMIT SWITCHES

WITH **CIMFR** APPROVED FLAME PROOF ENCLOSURE AS PER
CATALOGUE CUM PRICE LIST

IS/IEC 60079-1

CM/L-3348459



JAIBALAJI offers the EPHA Limit Switches in a Flame Proof Enclosure suitable for use in hazardous atmosphere. The EPHA Type is available in 1NO + 1NC & 2NO + 2NC output

JAIEPHA Limit Switches are for use either indoor or outdoor in hazardous atmospheres, as they are completely sealed Flameproof device

Mounting holes are provided for front or rear mounting, making the switch interchangeable with other Flameproof Switches.

Various types of heads to suit in any type of cam and application.

Flameproof Enclosure confirms to
IS/IEC : 60079-1
Zone 1 & 2 Group IIA , IIB , & IIC

Test Report No.KLPL / EX / R / 17-001 25.4.2017
CCE No. : A/P / HQ / TN / 104 / 5554 (P407854) For IIA & IIB
CIMFR / TC / P / H 13 Dt.18.4.2016

Test Report No.KLPL / EX R / JCPL-17/002 25.4.2017
CCE No. : A/P / HQ / TN / 104 / 5554 (P407854) For IIC
CIMFR / TC / P / H 16 Dt.19.4.2016

- * Non Sparking Actuators
- * Six Types of Operating Heads
- * Rotatable Operating Heads
- * Operates up to 121° C
- * Ample Wiring Space
- * Multiple Contacts
- * Compact Machine Tool Type
- * Flexibility of Motion

GENERAL INFORMATION

JAIEPHA switches feature the smallest housing available in India for use in hazardous locations. Flame paths within the housing cool exploding gases below the kindling temperature before they reach to explosive gases surrounding the housing.

SEALS

Application proven heavy duty limit switch head seals are retained to seal the top of the JAIEPHA. The circular cover on the front is easily unscrewed to expose the switching elements for wiring or replacement. A screw driver or bar used on the wrenching lugs extending from the front of the cover allows easy removal or tightening. An 'O' ring seal is located between the housing and cover, flame paths are provided by the cover housing threads and an extended plunger between the switch cavity and head.

INTERCHANGEABILITY

JAIEPHA Flameproof limit switches are interchangeable with any standard heavy duty limit switch with a adapter plate. JAIEPHA has a recessed back into which the adapter plate fits and mounts using two screws.

JAIEPHA MODELS

JAIEPHA type limit switches are available with a variety of operating heads to meet diverse applications.

PRICE LIST

DESCRIPTION	TYPE	ORDERING CODE	GROUP IIA & IIB		GROUP IIA,IIB & IIC	
			1NO+1NC	2NO+2NC	1NO+1NC	2NO+2NC
			MRP Rs.	MRP Rs.	MRP Rs.	MRP Rs.
Roller Lever	38 mm length	EPHA - 1*	4473	5760	7020	7830
	76 mm length	EPHA - 2*	4473	5760	7020	7830
	50 mm length	EPHA - 3*	4473	5760	7020	7830
	64 mm length	EPHA - 4*	4473	5760	7020	7830
	50 mm (Offset)	EPHA - O*	4473	5760	7020	7830
Adjustable Roller Lever	47 to 75 mm	EPHA - A*	4473	5760	7020	7830
Antenna Type Lever	134 mm length	EPHA - JW*	4473	5760	7020	7830
Fork Lever	Roller in line	EPHA - F*	4473	5760	7020	7830
	With Offset Roller	EPHA - FO*	4473	5760	7020	7830
Top Push	Roller type	EPHA - TPR	4473	5760	7020	7830
	Button type	EPHA - TPBA	4473	5760	7020	7830
Side Push	Roller type	EPHA - SPR	4473	5760	7020	7830
	Button type	EPHA - SPBA	4473	5760	7020	7830
*Maintained Contact for Lever Type Only (Add M as suffix to code while ordering)			4650	5913	7218	8028

ROTARY LEVER OPERATING HEADS

They are available in spring return and maintained type. The rotary shaft can be readily changed to operate clockwise, counter clockwise or both. The operating levers may be rotated and locked in any position through 360°. The operating head can be positioned in any of the four sides. The lever rollers are 19mm diameter and 8mm width. The levers are available in fixed and adjustable lengths.

FORK LEVER OPERATING HEADS

Each of the two arms of the length 38mm has a roller either inline or offset. Available in spring return or maintained type.

TOP PUSH OPERATING HEADS

They are available in two designs. One has an adjustable push button, the length of which can be adjusted up to 8 mm. (Adjustment is accomplished by turning the threaded hexagon head of operating plunger and securing it with a lock nut). The second type has a roller 11.1 mm dia. The top push roller is easier to apply because the direction of operating and repeat accuracy is less critical.

SIDE PUSH OPERATING HEADS

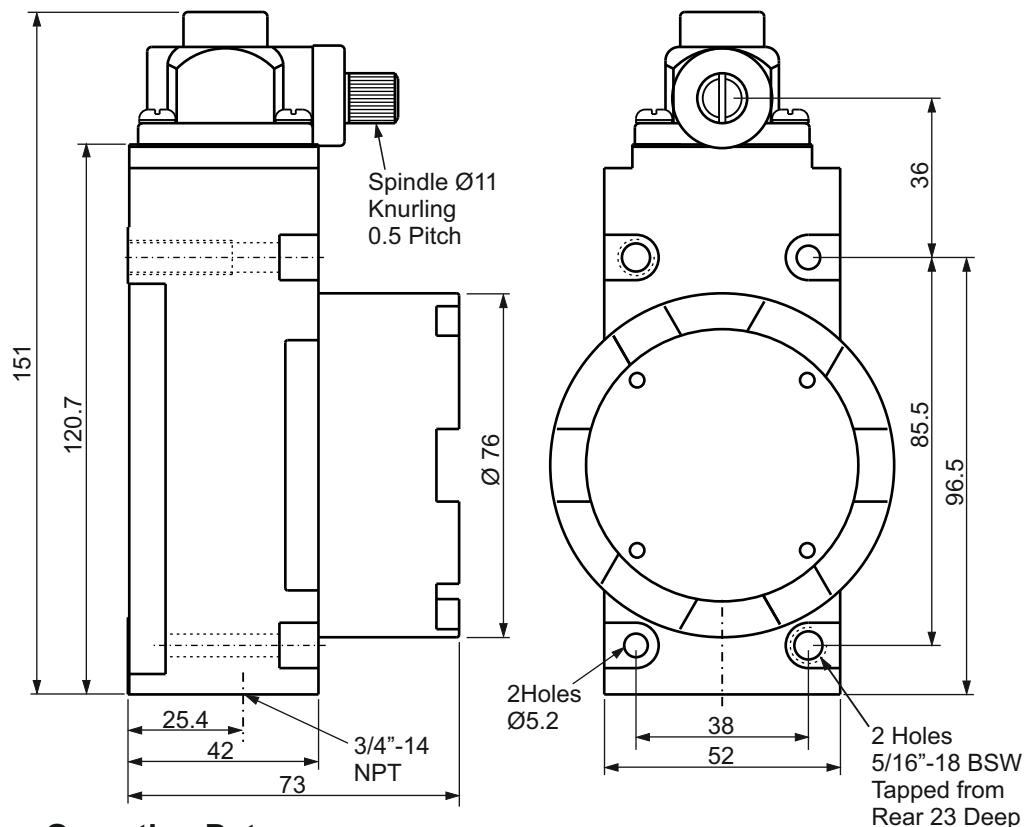
These heads are also available with an adjustable push button alternatively a roller of 11.1 mm dia. These are designed for small space and lower travel application where the actuator travel is perpendicular to the switch.

CABLE ENTRY

Cable entry available either in 1/2" NPT or 3/4" NPT or 1/2"BSPT

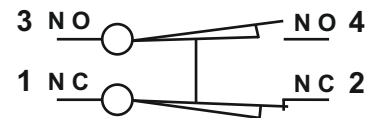
Dimensions (mm)

Lever Type Limit Switch



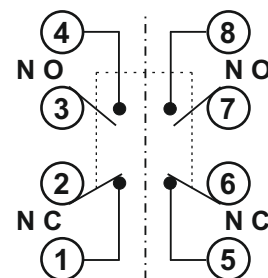
Wiring Diagram

1 NO + 1 NC



Wiring Diagram

2 NO + 2 NC



Operating Data

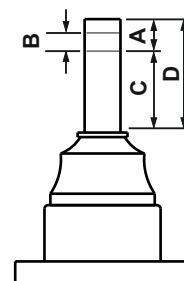
MODELS	EPHA 1 EPHA 2 EPHA 3 EPHA 4 EPHA O EPHA F EPHA FO EPHA A EPHA JW	EPHA 1M EPHA 2M EPHA 3M EPHA 4M EPHA OM EPHA FM EPHA FOM EPHA AM EPHA JWM	EPHA TPR EPHA TPBA (mm)	EPHA SPR EPHA SPBA (mm)
Travel to Trip A	10°	50°+	1.3+	2.0+
Travel to reset from trip point B	6°	50°+	1.1	1.7
Over travel C	60°	40°*	5.7	5.0
Total travel D	70°	90°+	7.0	7.0
Force to trip (max) kg	-	-	2.0	2.0
Operating Torque (max) kgfm	0.046	0.02	-	-

Characteristics

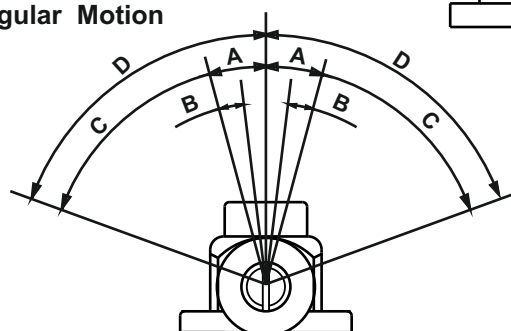
+ Maximum * Minimum

Contact Material	: Silver
Electrical Data (Maximum available)	: 10A - 120, 240, 480 or 600 V AC
Performance	: As per IS/IEC 60079 -1
Temperature Range	: -12° C to 121° C
Sealing	: IS: 12063 -1987
Housing Material	: Aluminium
Frequency of Operation	: 2500 operations per hour
Mechanical Life	: 10 X 10 ⁶ operations
Terminal capacity	: 1.5 Sq. mm
Weight	: 700 gms approx.

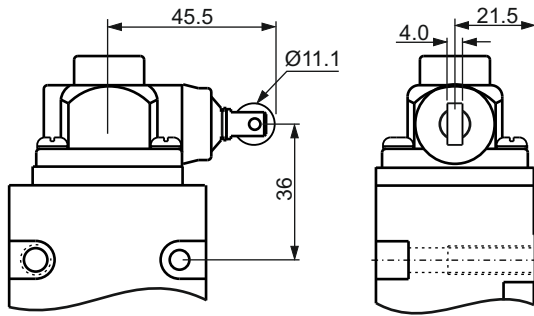
Linear Motion



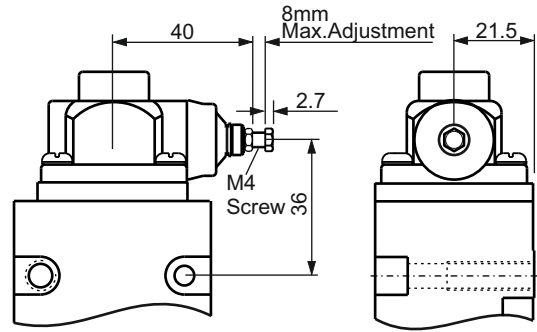
Angular Motion



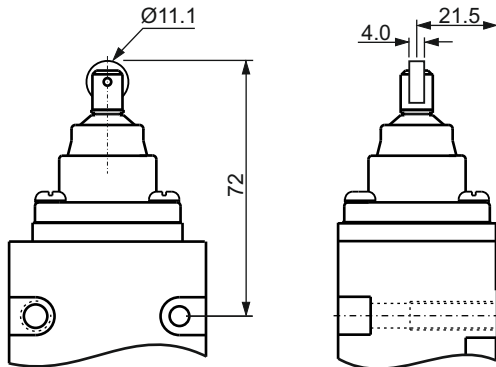
Side Push Roller



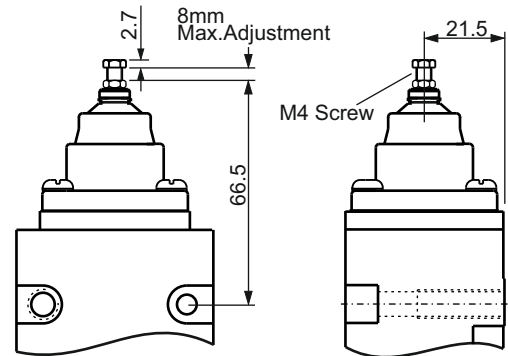
Side Push Button Adjustable



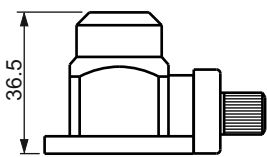
Top Push Roller



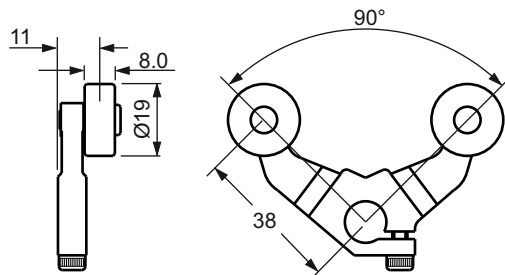
Top Push Button Adjustable



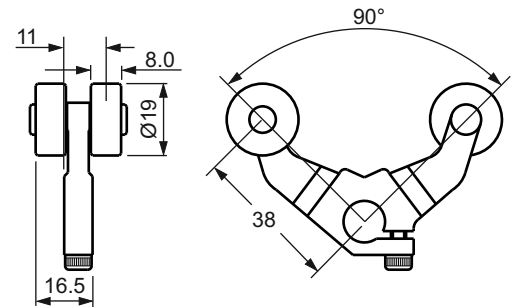
Head for Maintained Contact



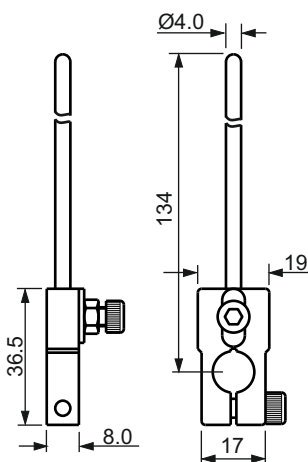
Fork Type Inline Rollers



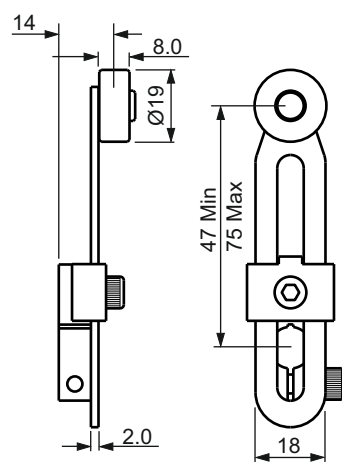
Fork Type Offset Rollers



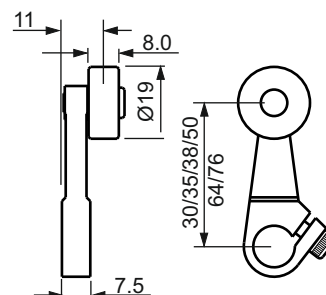
Antenna Type Lever



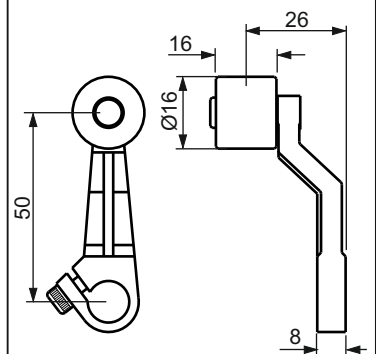
Adjustable Lever



Roller Lever



Offset Lever



Manufactured by:

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CONTROL GEARS PVT. LTD

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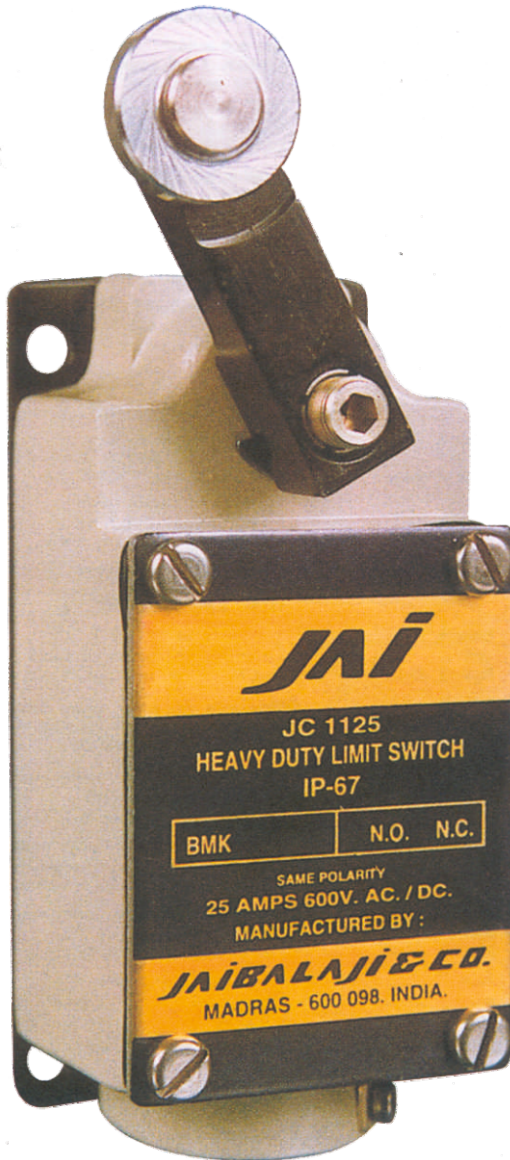
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LIMIT SWITCHES WITH  MARKS

CATALOGUE CUM PRICE LIST



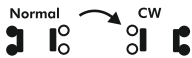
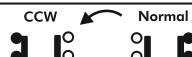
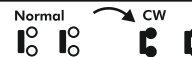
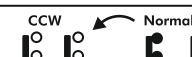
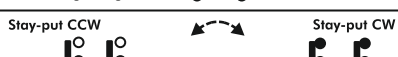
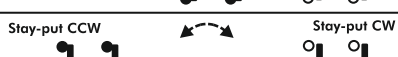
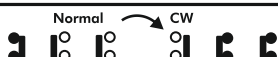
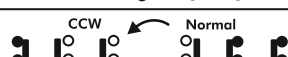
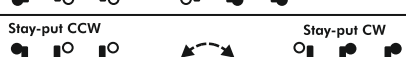
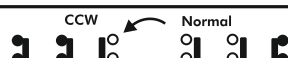
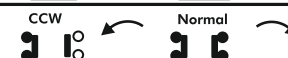
JC - 1125 HEAVY DUTY LIMIT SWITCHES

CONFORMS TO IS/IEC:60947 Pt.5 Sec 1

- **TWENTY-FIVE CIRCUIT OPTIONS**
- **25 A 600 V A.C. OR D.C.**
- **70° OVERTRAVEL IN BOTH DIRECTIONS**
- **IP 67 PROTECTION**
- **OPERATES UP TO 107° C**
- **IDEAL FOR APPLICATION REQUIRING EXTRA HEAVY INDUSTRIAL DUTY CONTACT RATINGS**
- **HIGHER OPERATING AND RESET FORCES**
- **RUGGED MECHANICAL CONSTRUCTION**
- **WILL WITHSTAND HOT FALLING SAND UPTO 300° F**
- **FOR ROUGH FOUNDRY APPLICATIONS AND HEAVY MACHINE TOOL, CONVEYOR, MILLS, FOUNDRIES, HEAVY BOILERS.**
- **ACTUATION MODE CONVERSION FACILITY FOR LEFT-HEND, RIGHT-HAND OR MAINTAINED CONTACT ACTION. PLUS A COMPREHENSIVE SELECTION OF OPERATING LEVERS.**

Model JC-1125 Heavy Industrial duty Limit switch **providing twenty five switching arrangements** from eleven standard types. Actuation mode conversion facility for left-hand, right-hand or maintained contact action. **Rating up to 25A lth 600V AC or DC** plus a comprehensive selection of operating levers.

Eleven standard switch types can be converted on site to provide for a total of twentyfive contact or circuit arrangements (as shown below).

Ordering reference model	contact arrangement (arrow indicated direction of lever movement)	Standard model conversion required	Operating data (refer to table, above)	Switch description (viewed from the front of switch).	MRP Rs
JC - 1125 BMK 9	(A) 	As supplied	Data A	Snap action, Spring return Contacts: 1 n.c., 1 n.o. CW operation to 1 n.o. 1 n.c.	5040
	(B) 	Revers return spring	Data A	Snap action, Spring return Contacts: 1 n.o., 1 n.c. CCW operation to 1 n.c. 1 n.o.	5040
	(C) 	Remove return spring	Data A and Note 2 above	Stay-put action Contacts: CCW position 1 n.c. 1 n.o. or CW operation to 1 n.o. 1 n.c.	5040
JC - 1125 BMK 18	(A) 	As supplied	Data A	Snap action, Spring return Contacts: 2 n.o. CW operation to 2 n.c.	5292
	(B) 	Revers return spring	Data A	Snap action, Spring return Contacts: 2 n.c. CCW operation to 2 n.o.	5292
	(C) 	Remove return spring	Data A and Note 2 above	Stay-put action Contacts: CCW position 2 n.o. or CW operation to 2 n.c.	5292
JC 1125 BMK 27	(A) 	As supplied	Data A	Snap action, Spring return Contacts 2 n.o. CCW operation to 2 n.c.	5490
	(B) 	Revers return spring	Data A	Snap action, Spring return Contacts 2 n.c. CW operation to 2 n.o.	5490
	(C) 	Remove return spring	Data A and Note 2 above	Stay-put action Contacts: CCW position 2 n.c. or CW position 2 n.o.	5490
JC - 1125 BMK 36	(A) 	As supplied	Data A	Snap action, Spring return Contacts 1 n.c. and 2 n.o. CW operation to 1 n.o., 2 n.c.	5400
	(B) 	Revers return spring	Data A	Snap action, Spring return Contacts 2 n.c. and 1 n.o. CCW operation to 2 n.o., 1 n.c.	5400
	(C) 	Remove return spring	Data A and Note 2 above	Stay-put action Contacts: CCW position 1 n.c. 2 n.o. CW operation to 1 n.o. 2 n.c.	5400
JC 1125 BMK 45	(A) 	As supplied	Data A	Snap action, Spring return Contacts 2 n.o. and 1 n.c. CW operation to 2 n.c., 1 n.o.	5490
	(B) 	Revers return spring	Data A	Snap action, Spring return Contacts 2 n.c. and 1 n.o. CCW operation to 2 n.o., 1 n.c.	5490
	(C) 	Remove return spring	Data A and Note 2 above	Stay-put action Contacts: CCW position 2 n.c. 1 n.o. or CW position to 2 n.o., 1 n.c.	5490
JC 1125 BMK 54	(A) 	As supplied	Data B and Note 2 above	Slow-make and break spring return Contacts : 2 n.o. CW operation to 1 n.o. 1 n.c. or CCW operation to 1 n.o., 1 n.c.	5292
	(B) 	Add two jumper wires	Data B and Note 2 above	Slow-make and break spring return Contacts: 1 n.o. CW or CCW operation to 1 n.c.	5292
JC 1125 BMK 63	(A) 	As supplied	Data B and Note 2 above	Slow-make and break spring return Contacts : 2 n.c. CW operation to 1 n.o. 1 n.c. or CCW operation to 1 n.c., n.o.	5292
	(B) 	Add two jumper wires	Data B and Note 2 above	Slow-make and break spring return Contacts: 1 n.c. CW or CCW operation to 1 n.o.	5292
JC 1125 BMK 72	(A) 	As supplied	Data C and Note 2 above	Snap-action spring return Contacts : 2 n.o. CW operation to 1 n.o. 1 n.c. or CCW operation to 1 n.c., 1 n.o.	5490
	(B) 	Add two jumper wires	Data C and Note 2 above	Snap-action, spring return Contacts: 1 n.o. CW or CCW 1 n.c.	5490
JC 1125 BMK 81	(A) 	As supplied	Data C and Note 2 above	Stay-put action Contacts : 2 n.o. CW operation to 1 n.o. 1 n.c. or CCW operation to 1 n.c., 1 n.o.	5490
	(B) 	Add two jumper wires	Data C and Note 2 above	Stay-put action Contacts: 1 n.o. CW or CCW operation to 1 n.c.	5490
JC 1125 BMK 90	(A) 	As supplied	Data B and Note 2 above	Slow-make and break, spring return Contact : 2 n.o. 1 n.c. CW operation to 1 n.o. 2 n.c. or CCW operation to 1 n.c., 2 n.o.	5490
JC 1125 BMK 99	(A) 	As supplied	Data B and Note 2 above	Slow-make and break, spring return Contact : 1 n.c., 2 n.o. CW operation to 2 n.o. 1 n.c. or CCW operation to 2 n.c., 1 n.o.	5490

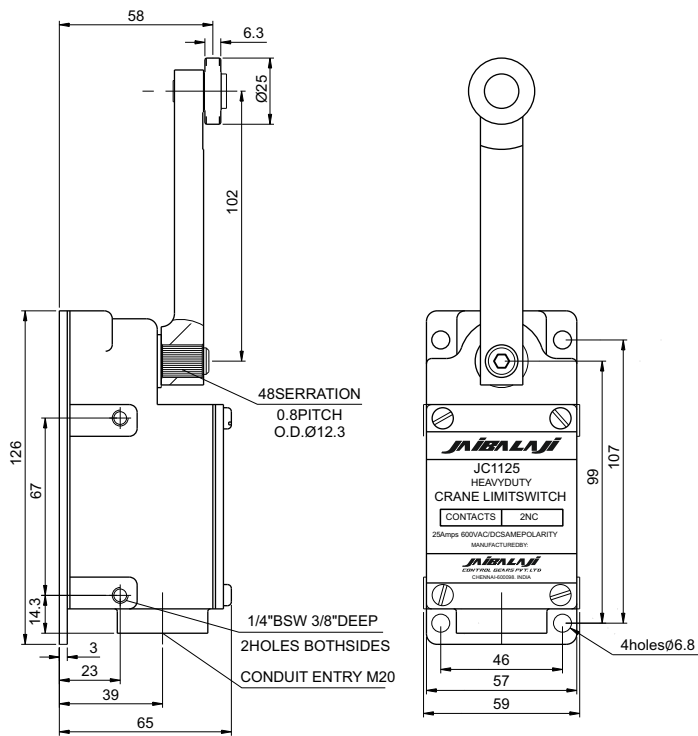
How to order your limit switch

When ordering, quote the following :
Switch order reference. Lever reference.
Back mounting plate style number.

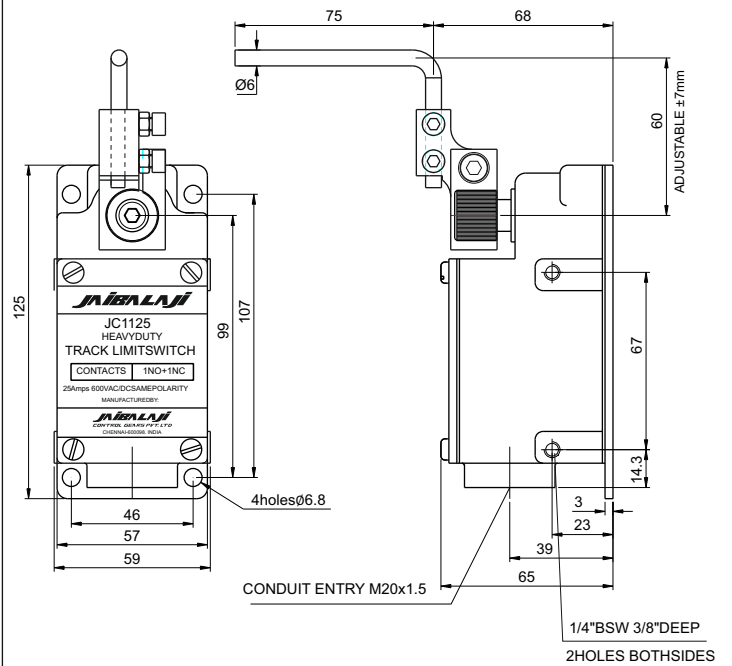
The Above Rates are with
Style 'A' Operating lever

(Other than Style 'A' Operating Lever,
lever cost will be extra)

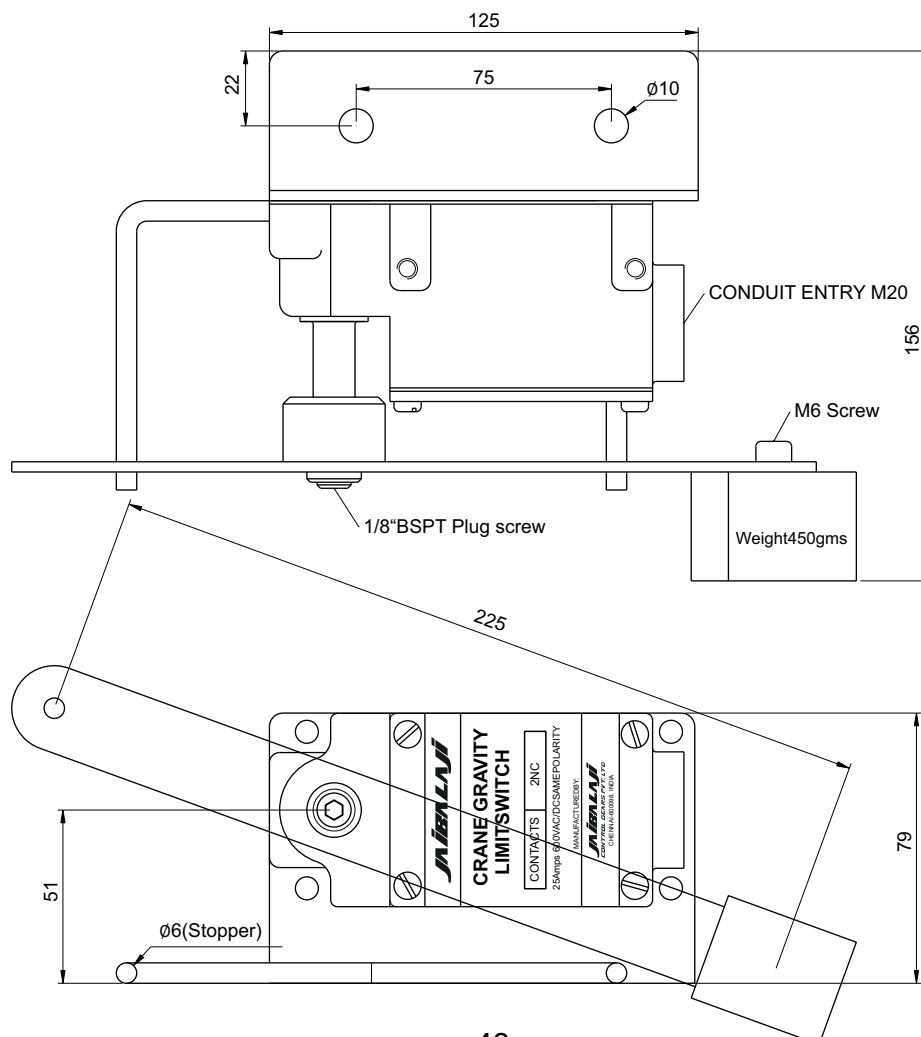
CRANE LIMIT SWITCH



TRACK LIMIT SWITCH



GRAVITY CRANE LIMIT SWITCH



Operating levers

Lever	Length (mm)	MRP Rs.
Style A		
AA	38	1062
AAI 2.5,4 mm roller)	38	1026
AB	76	1161
AC	32	918
AD	45	1062
AH	51	1098
AL	89	1206
AM	102	1233
AO	64	1143



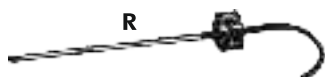
Style F		
FG	64	1629
F1	76	1746



Style LA		
LAA 1	38	1638
LAH 1	51	1746
LAO 1	64	1854



Style R		
R (hub)		1683
R9 (rod)		1683



Style V		
VA		1854



Adjustable Lever
(Adj from 50mm to 160mm) MRP Rs. 2025

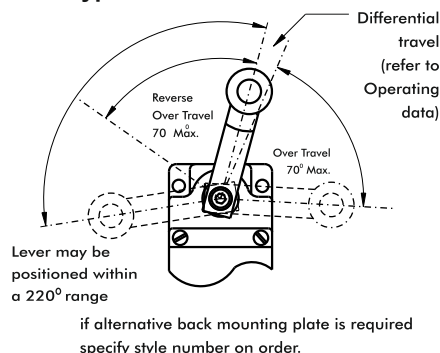
Antenna Lever MRP Rs. 2043

Beltsway Lever MRP Rs. 2061

Knife type Lever MRP Rs. 2097

Fork type Lever MRP Rs. 2151

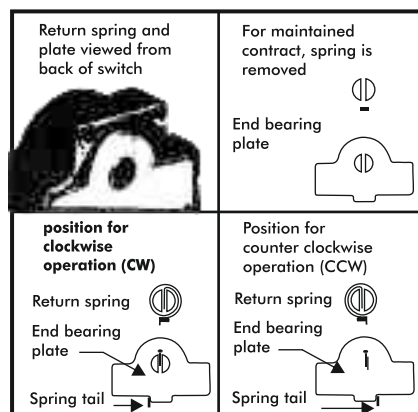
"L" type Lever MRP Rs. 2151



Actuation mode conversion

Conversion is accomplished by reversal of lever return spring located below the back cover and shaft end bearing plate.

For maintained contact the spring is removed always replace bearing plate.



General data

Contact material	silver
Mechanical life	10X10 ⁶
Terminal type	Screw clamp
Cable capacity (mm ²)	1X2.5 mm ²
Ambient temperature range	0°C To 107°C
Minimum storage temperature	-35°C
Maximum relative humidity	90% RH

Contact ratings

Make and break

Break (A)					
Voltage (V)	Inductive a.c.	d.c.	Non-Inductive a.c.	d.c.	make (A) Inductive
115	6	2	30	5	60
250	3	1	15	2	30
440	1.5	0.48	7.5	1	15
600	1.2	0.4	6	0.8	12
Continuous : 25 A 600V a/c. / d.c. (two circuit switches)					
Note : Three circuit Switches rated to 300 V					

Operating data

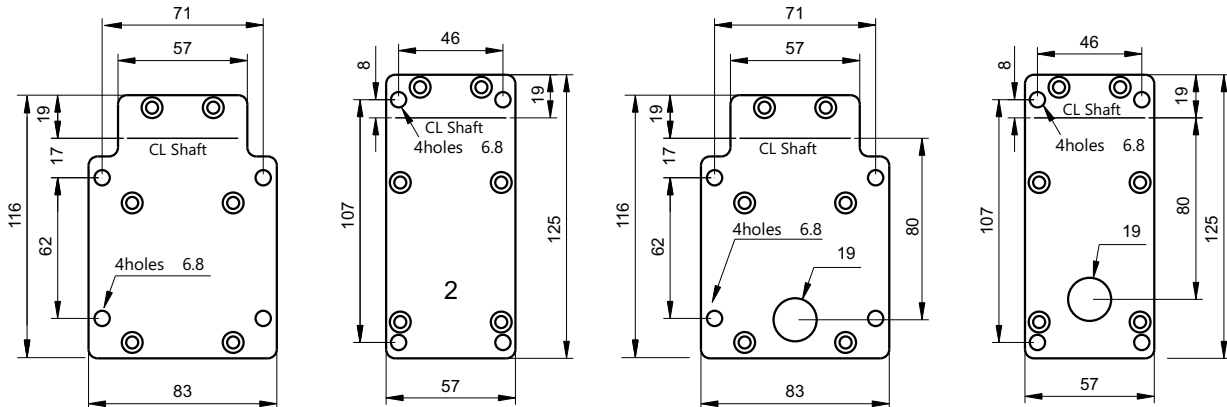
Contact arrangement	A	B	C
Differential travel (deg)	11±2	4max	4max
Total travel both directions (deg)	75	75	75
Recommended operational travel (deg)	20-35	10-25	10-25
Repetitive accuracy each switch (deg)	±0.03	-	±0.03
Actuating torque maximum (kgf m)	0.108	0.068	0.094
With maintained contact (kgf m)	0.032	-	0.032

Note 1 : All order references are for switches with metric threads.

Note 2 : Lever must not be allowed to snap back freely any over-travelled position with this contact arrangement.

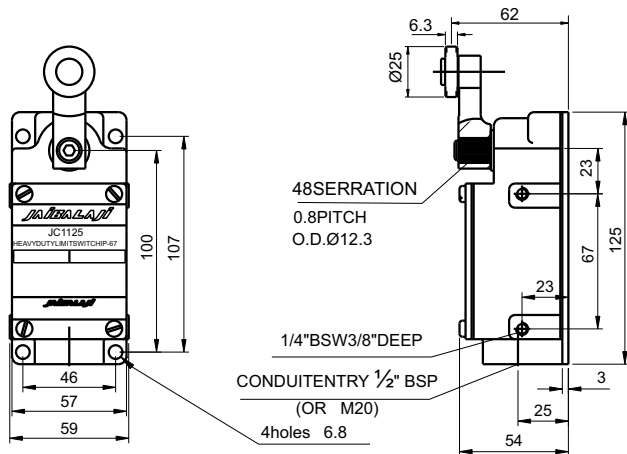
APPROXIMATE DIMENSIONS NOT FOR CONSTRUCTION (DIMENSIONS IN M.M.)

Back mounting plates



Switch

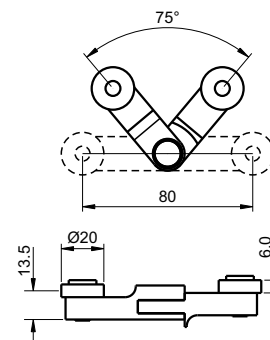
Switch shown fitted with standard style 2 mounting plate



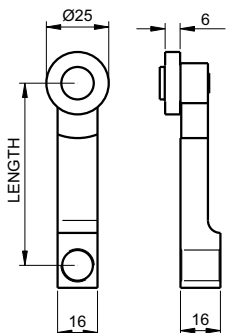
Levers

STYLE V

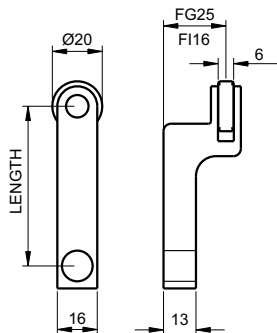
Adjustable from
75° to 180° in
increments
of 7 1/2°



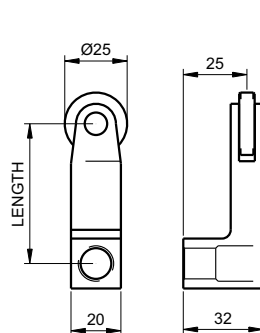
STYLE A



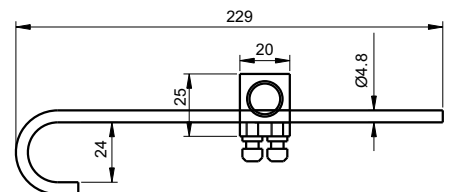
STYLE F



STYLE LA



STYLE R



MANUFACTURED BY :

JAIBALAJI

CONTROL GEARS PVT. LTD

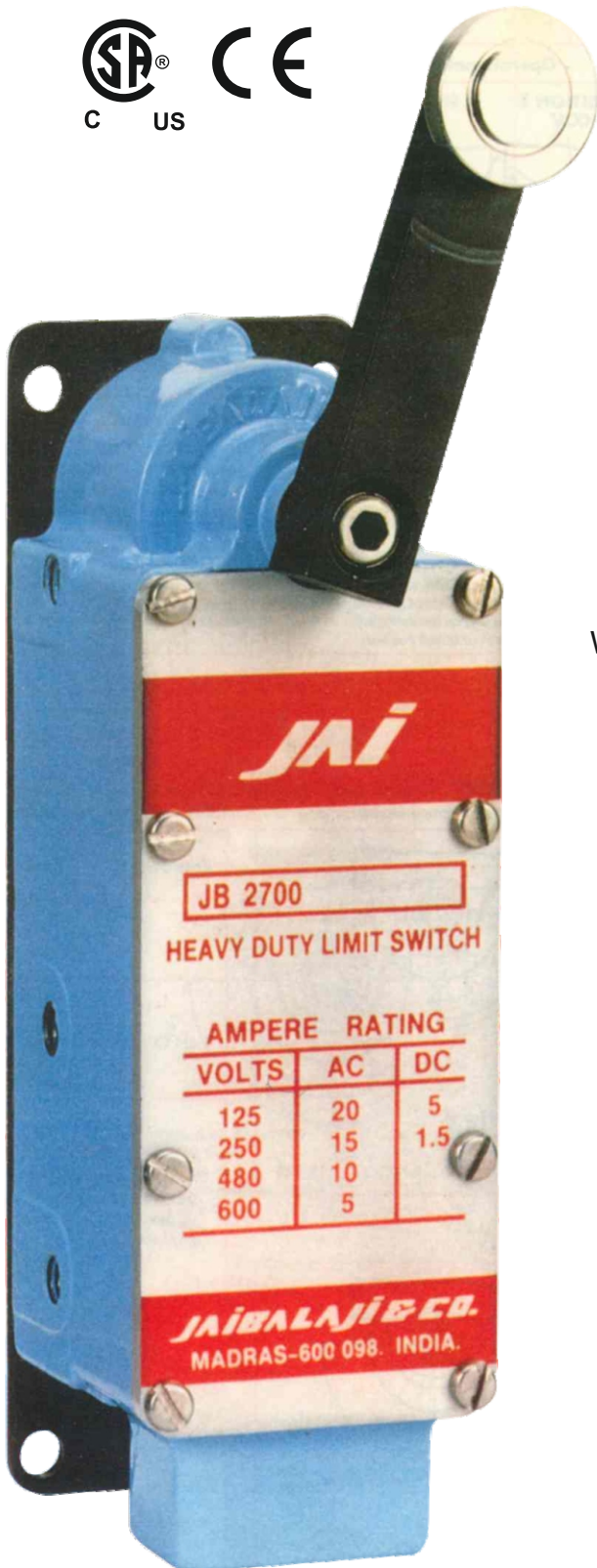
POST BOX NO. 27

89, (NEW NO:107), SIDCO INDUSTRIAL ESTATE
AMBATTUR, CHENNAI - 600 098.

PHONE : 26251279, 26257859, 26254469

FAX : 044-26255038.

E-MAIL : dchandramohan@jaibalaji.firm.in



MANUFACTURED BY :

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JAIBALAJI

JB 2700

HEAVY DUTY LIMIT SWITCHES

CATALOGUE CUM PRICE LIST

With 2NO+2NC Contacts with Style 'A' Operating lever

M.R.P. Rs.9900

(Other than Style A Operating Lever
cost will be extra)

- MULTIPLE CONTACTS - DPDT (2 NO-2 NC),.
- GENEROUS OVERTRAVEL
- HEAVY DUTY CAM OPERATED
- FLEXIBILITY OF MOTION, CW AND CCW
- AMPLE WIRING SPACE

Description

WIDE RANGE OF OPERATION... MODULAR CONSTRUCTION... PRACTICAL FLEXIBILITY

In every aspect these Limit Switches are the "ultimate" of the industry. The scope of Models are tailored to meet today's rugged requirements... there is a model of size and type of meet virtually all demands.

Besides covering all functional requirements this line is designed to meet practically every condition of installation. These Switches provide reliable "machine-life" service and have the stamina to operate under the unusual conditions... at the same time giving millions of consistently fast, accurate contacts.

Here are a few of the outstanding feature built into the switch for maximum performance.

- Generous overtravel and by-pass.
Flexibility of motion, clockwise and counter-clockwise.
- Simplicity and interchangeability of cams.
- Light operating torque.
- Fast contact action.

51 • Form Z contact arrangement

SPECIFICATIONS :

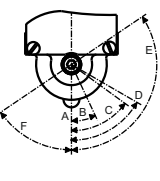
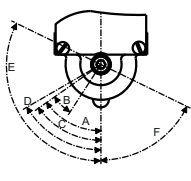
1. Enclosure is water, oil and dust tight.
2. Enclosure meets as per IP-67
3. Contacts made of silver alloy. Contact shifting mechanism is locked in position by the latches until switch lever is actuated.
4. Standard Temperature Range : 20°C to + 110°C
5. Operating lever is adjustable to any required position.
6. Operating lever Angles (travel either clockwise or counter-clockwise) maximum degrees of trip travel, reset travel, as well as total lever travel, are determined by the cam selected.
7. Operating Torques - Trip Torque varies from 6.804 (to) 14.968 KLS depending on switch size and cam selected.

Voltage	For Neutral Position Only	
125V-A.C.	20.0 Amps*	10.0 Amps*
250V-A.C.	15.0 Amps*	7.5 Amps*
480V-A.C.	10.0Amps*	5.0 Amps*
600V-A.C.	5.0 Amps*	2.5 Amps*
125V-D.C.	5.0 Amps*	2.5 Amps*
250V-D.C.	1.5 Amps*	.75 Amps*

* 75-100% Power Factor.

Maintained Switches

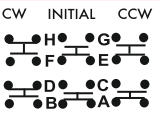
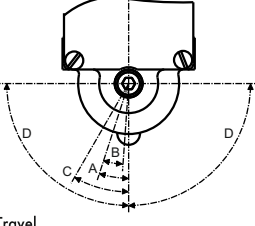
M CAM - MAINTAINED CONTACTS & LEVER POSITION

Operational Data		
	POSITION 1 CCW	POSITION 2 CW
		
	Initial Position	Initial Position
Position	1 (CCW)	2 (CW)
A Trip Travel	25°	55°
B Reset Travel	25°	22°
C Min Travel to Maintain	54°	55°
D Recommended Travel	60°	60°
E Total Travel	124°	116°
F Overall Travel	56°	64°
Torque		(Kilos)
M CAM		
2 N.O.	CW	2.721
2 N.C.	CCW	5.443
To change Switch Operation from Cam Position 1 to Position 2. Operate Switch thru' Angle C. Remove Lever and Reset at Initial Position.		

Standard Switches

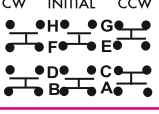
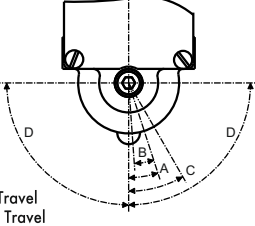
CW OPERATION ONLY (Combination B-1/B-2 Cam)

Contacts transfer when lever is operated CW. Lever can be operated CCW but contacts will not transfer

Contacts	Circuits	Mounting			Operational Data
		Standard	"W"	"L"	
2N.O. 2N.C.		JB2700-1512	JB2700-2124	JB2700-5121	
					A Trip Travel 18° B Reset Travel 14° C Recommended Travel 30° D Total Travel Available 90° Torque (Kilos) 2N.O. - 2N.C. 12.246

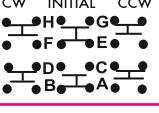
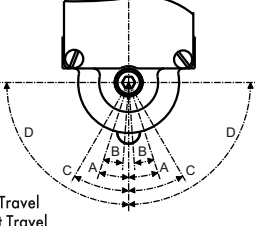
CCW OPERATION ONLY (Combination B-1/B-2 Cam)

Contacts transfer when lever is operated CCW. Lever can be operated CW but contacts will not transfer

2N.O. 2N.C.		JB2700-1044	JB2700-4500	JB2700-5400	
					A Trip Travel 18° B Reset Travel 14° C Recommended Travel 30° D Total Travel Available 90° Torque (Kilos) 2N.O. - 2N.C. 12.246

CW & CCW OPERATION (Combination B-1/B-2 Cam)

Contacts transfer when lever is operated CW or CCW.

2N.O. 2N.C.		JB2700-2502	JB2700-4050	JB2700-5040	
					A Trip Travel 18° B Reset Travel 14° C Recommended Travel 30° D Total Travel Available 90° Torque (Kilos) 2N.O. - 2N.C. 12.246

Maintained Switches

M CAM - MAINTAINED CONTACTS & LEVER POSITION

Lever and contacts are maintained in tripped position. When lever is moved CCW the N.C. contacts open and the N.O. contacts close. Starting at this position rotating the lever CW the N.O. contacts open and the N.C. close.

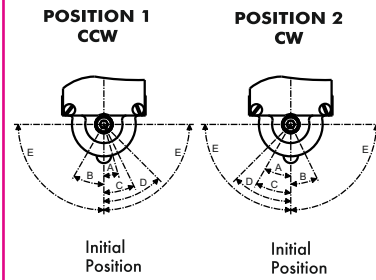
Contacts	Circuits		Mounting		
	Position 1	Position 2	Standard	"W"	"L"
2N.O. 2N.C.	CW INITIAL CCW 	CW INITIAL CCW 	JB2700-1125	JB2700-2115	JB2700-5112

M7 CAM - MAINTAINED CONTACTS - LEVER RETURNED

Contacts are maintained in tripped position, torsion spring will return lever to initial position when released. When lever is moved CCW the N.C. contacts open and the N.O. contacts close. The lever must then be returned to the initial position and be operated in the CW direction to reset the contacts.

Contacts	Circuits		Standard	"W"	"L"
	CW	INITIAL CCW			
2N.O. 2N.C.			JB2700-1125	JB2700-2115	JB2700-5112

Operational Data



Position	1 (CCW)	2 (CW)
A Trip Travel	16°	30°
B Reset Travel	30°	26°
C Min Travel to Maintain	26°	30°
D Recommended Travel	45°	45°
E Total Travel	90°	90°

Torque		(Kilos)
M CAM		
2 N.O.	CW	6.804
2 N.C.	CCW	7.938

To change Switch Operation from Cam Position 1 to Position 2. Operate Switch thru' Angle C. Remove Lever and Reset at Initial Position.

Neutral Position Switches

N CAM - NEUTRAL POSITION - ALL CONTACTS OPEN

As lever is moved CW upper contacts close. As lever is spring returned to starting position upper contacts open. As lever is moved CCW from starting position lower contacts close. As lever is spring returned to starting position lower contacts open.

Contacts	Circuits	Mounting			Operational Data
		Standard	"W"	"L"	
4N.O.	CW INITIAL CCW	JB2700-1008	JB2700-2007	JB2700-4104	
N CAM - NEUTRAL POSITION - ALL CONTACTS CLOSED As lever is moved CW lower contacts open. As lever is spring returned to starting position lower contacts close. As lever is moved CCW from starting position upper contacts open. As lever is spring returned to starting position upper contacts close.					

Direction of Rotation	CW	CW
A Trip Travel	11°	35°
B Reset Travel	9°	13°
C Recommended Travel	45°	45°
D Total Travel	90°	90°
Torque		(Kilos)
N CAM		
4N.O.	CW	6.123
4N.O.	CCW	8.944

N1 - NEUTRAL POSITION - ALL CONTACTS OPEN

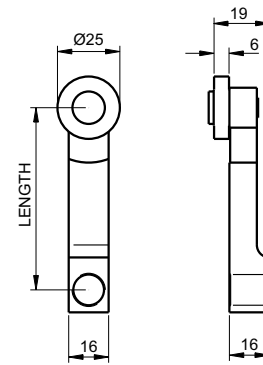
As lever is moved CW lower contacts close. As lever is spring returned to starting position lower contacts open. As lever is moved CCW from starting position upper contacts close. As lever is spring returned to starting position upper contacts open.

4N.C.	CW INITIAL CCW	JB2700-2205	JB2700-4005	JB2700-5004	 Direction of Rotation CW CW A Trip Travel 31° 31° B Reset Travel 22° 12° C Recommended Travel 45° 45° D Total Travel 90° 90° Torque (Kilos) N1 CAM 4N.O. CW 7.938 4N.O. CCW 9.298 N1 CAM 4N.C. CW 7.938 4N.C. CCW 9.298	
N1 CAM - NEUTRAL POSITION - ALL CONTACTS CLOSED As lever is moved CW upper contacts open. As lever is spring returned to starting position upper contacts close. As lever is moved CCW from starting position lower contacts open. As lever is spring returned to starting position lower contacts close.						
4N.C.	CW INITIAL CCW	JB2700-3600	JB2700-4221	JB2700-5022		

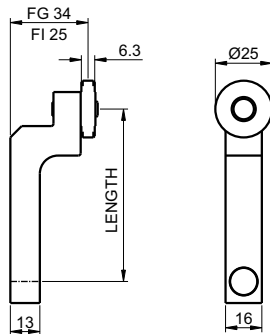
Operating levers

Lever	Length (mm)	MRP Rs.
Style A (Steel roller)		
AA	38	1062
AA (25,4 mm roller)	38	1026
AB	76	1161
AC	32	918
AD	45	1062
AH	51	1098
AL	89	1206
AM	102	1233
AO	64	1143

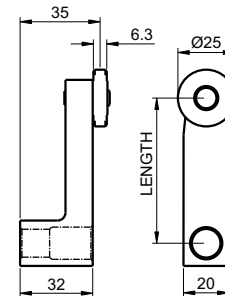
STYLE A



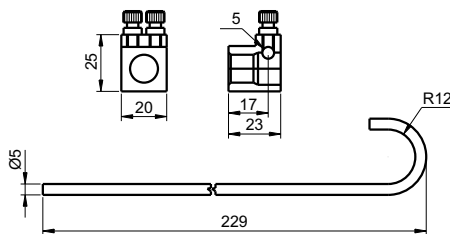
Style F (Steel roller)		MRP Rs.
FG	64	1629
FI	76	1746



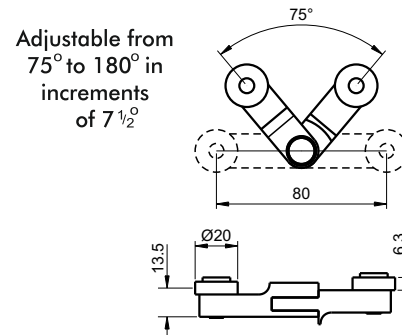
Style LA		MRP Rs.
LAA1	38	1638
LAH 1	51	1746
LAO 1	64	1854



Style R	MRP Rs.
R (hub)	1683
R9 (rod)	1683

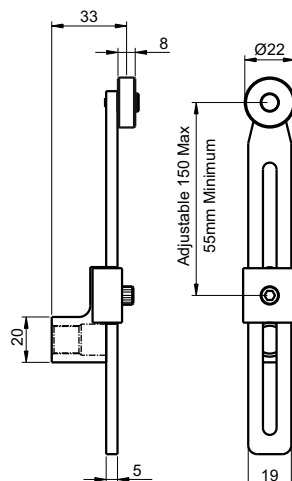


Style V		MRP Rs.
VA	38	1854



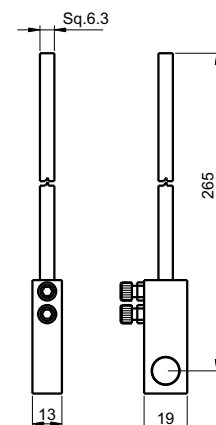
Adjustable lever

MRP Rs. 2025



Antenna type lever

MRP Rs. 2043



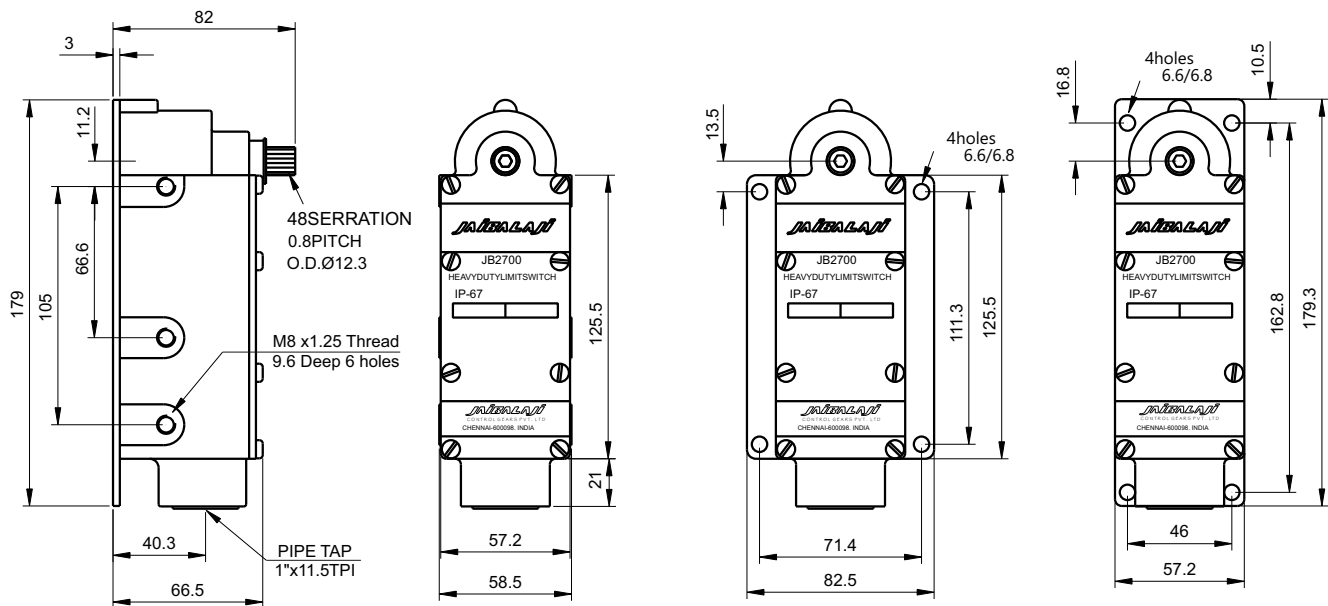
Basic design permits mounting from either side or back. Style L or W mounting plates, for back mounting, available at no extra cost.

Dimensions

Standard Mounting

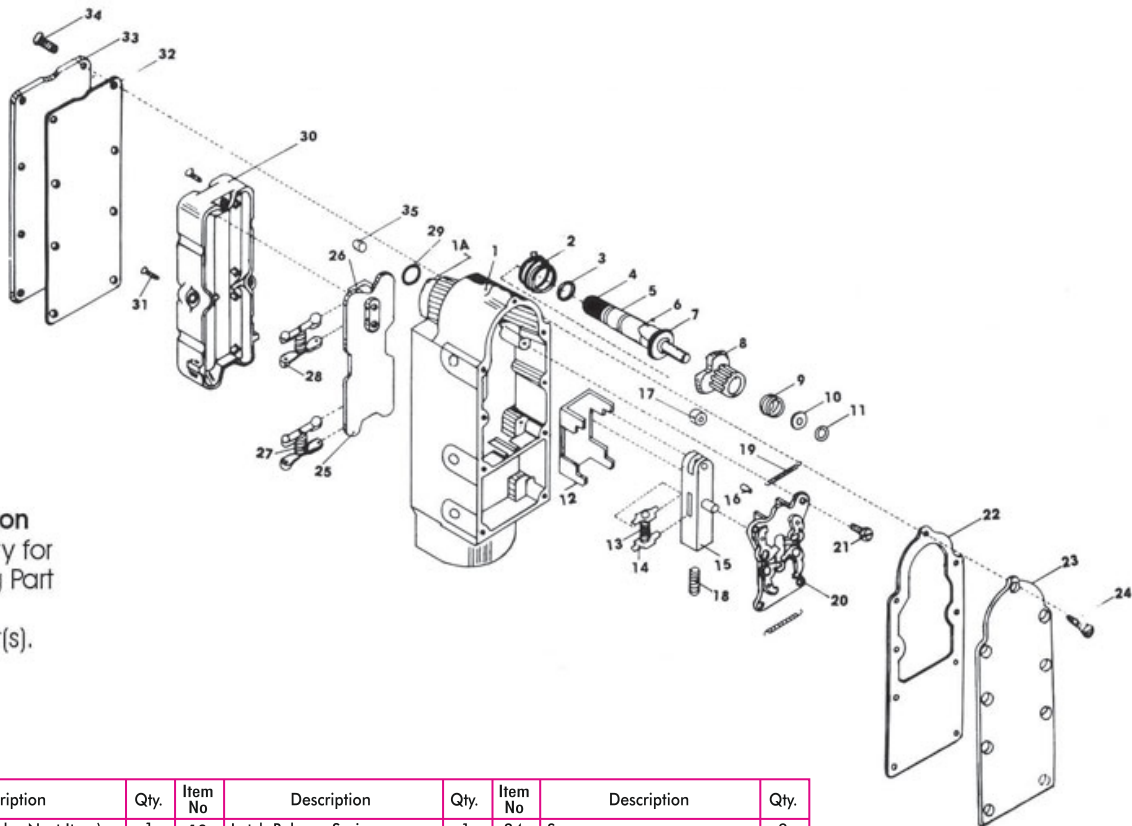
Wide Mounting

Long Mounting



Parts Description

Consult Factory for corresponding Part Number and appropriate kit(s).



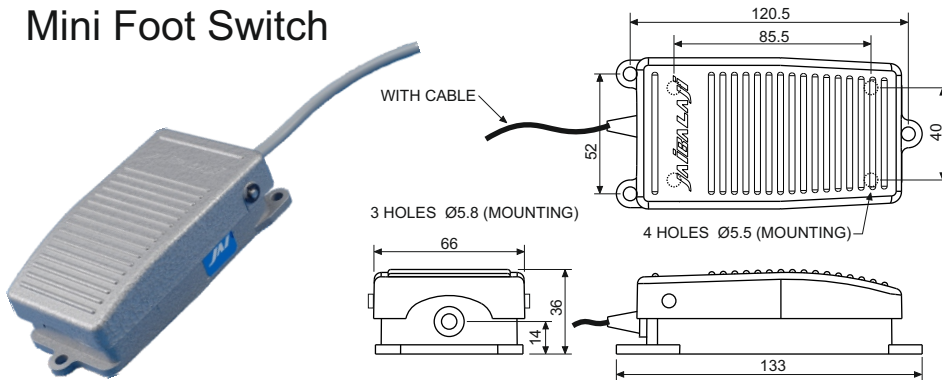
Item No	Description	Qty.	Item No	Description	Qty.	Item No	Description	Qty.
1	Housing (Includes Next Item)	1	13	Latch Release Spring	1	24	Screw	9
1A	Bushing	1	14	Spring Stop	2	25	Contact Carrier Assembly (Includes Next 3 items)	1
2	Torsion Spring	1	15	Slide	1	26	Contact Carrier	1
3	"O" Ring	1	16	Pin	1	27	Contact Spring	2
4	Lever Assembly (includes Next 3 items)	1	17	Roller	1	28	Contact	4
5	Lever Shaft	1	18	Return Spring	1	29	Tru-Arc Ring	1
6	Roll Pin	1	19	Latch Return Spring	2	30	Contact Block	1
7	Cam Hub	1	20	Latch Plate	1	31	Screw	3
8	Cam	1	21	Screw	4	32	Top Cover Gasket	1
9	Cam Spring	1	22	Bottom Cover Gasket	1	33	Top Cover	1
10	Retaining Washer	1	23	Bottom Cover (Std. Only)	1	34	Screw	8
11	Tru-Arc-Ring	1		Bottom Cover (Style W Only)	1	35	Pipe Plug	1
12	Shuttle	1		Bottom Cover (Style L Only)	1			

JAIBALAJI

FOOT SWITCHES

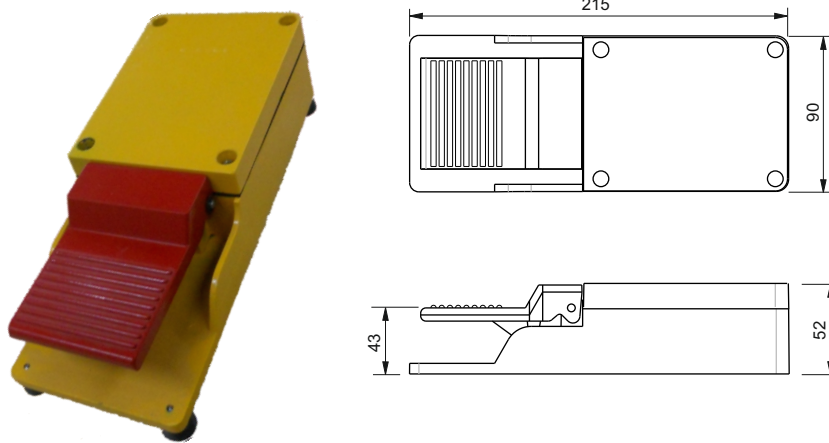
CATALOGUE CUM PRICE LIST

Mini Foot Switch



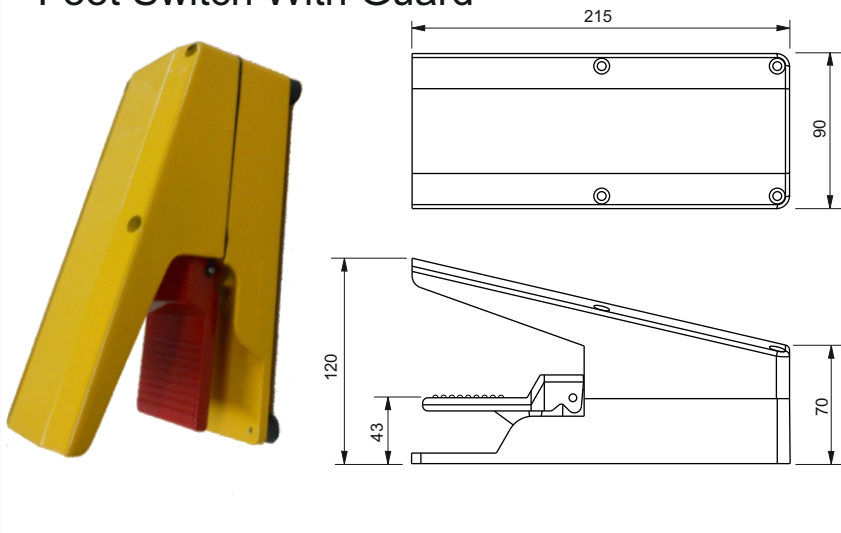
Model No.	Contacts	M.R.P.Rs
JBMS-09	1NO+1NC	756
JBMS-18	2NO+2NC	1215

Foot Switch Without Guard



Model No.	Contacts	M.R.P.Rs
JBMS-27	1NO+1NC	2448
JBMS-36	2NO+2NC	3150

Foot Switch With Guard



Model No.	Contacts	M.R.P.Rs
JBMSG-27	1NO+1NC	2655
JBMSG-36	2NO+2NC	3366

Electrical and Mechanical Rating

Utilisation Category : AC 15 and DC 13 as per IS/IEC:60947 - 5 - 1

Thermal current (I_{th}) : 15A

Insulation Voltage (UI) : 600 VAC

Enclosure material : Cast Aluminium

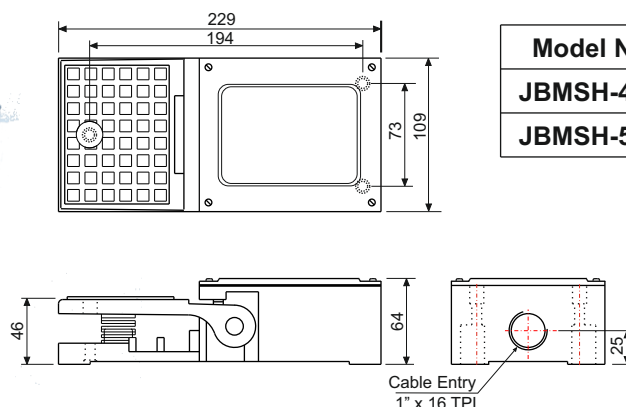
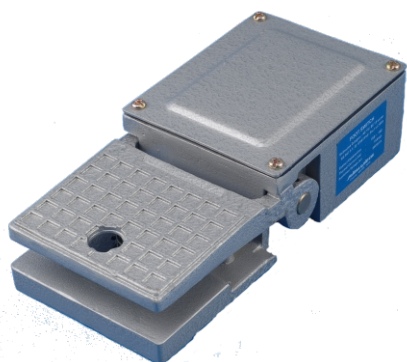
RATINGS: AC RATING INDUCTIVE-NEMA A 600

Voltage	Make		Break	
	A	VA	A	VA
120	60	7200	6	720
240	30	7200	3	720
480	15	7200	1.5	720
500	12	7200	1.2	720

RATINGS: DC RATING INDUCTIVE-NEMA P 600

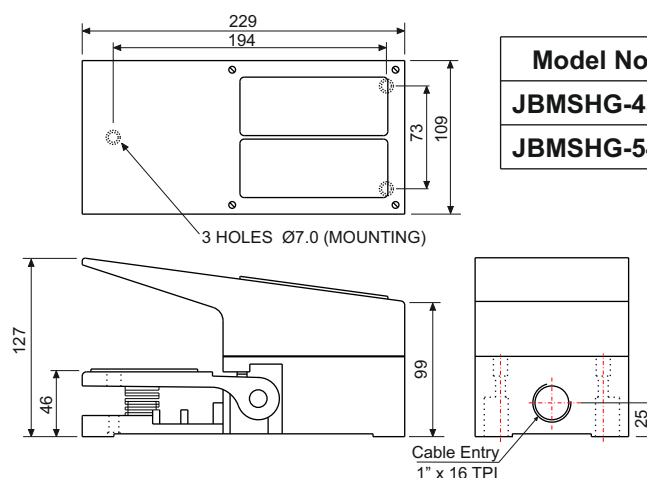
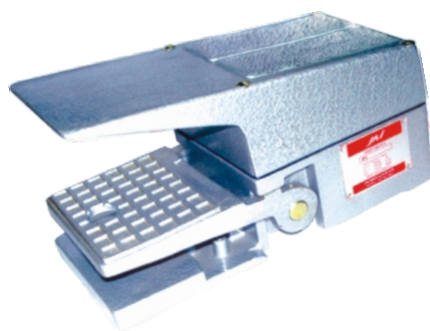
Voltage	Make		Break	
	A	VA	A	VA
125	1.1	138	1.1	138
250	0.55	138	0.55	138
600	0.2	138	0.2	138

Heavy Duty Foot Switch (Without Guard)



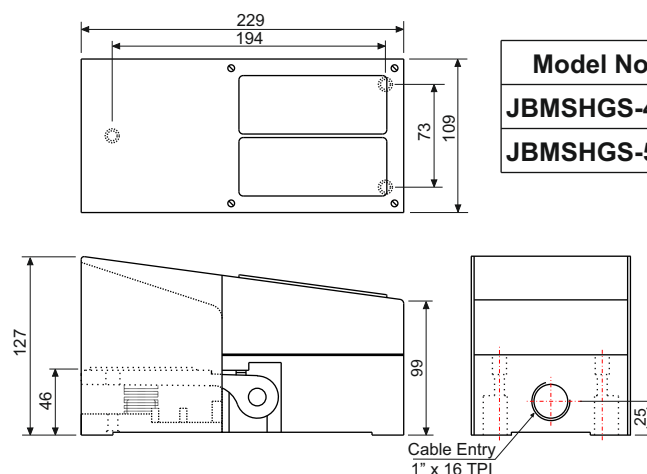
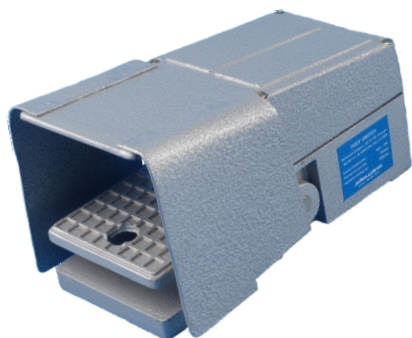
Model No.	Contacts	M.R.P.Rs
JBMSH-45	1NO+1NC	4095
JBMSH-54	2NO+2NC	4410

Heavy Duty Foot Switch (With Guard)



Model No.	Contacts	M.R.P.Rs
JBMSHG-45	1NO+1NC	4896
JBMSHG-54	2NO+2NC	5229

Heavy Duty Foot Switch (With Shield)



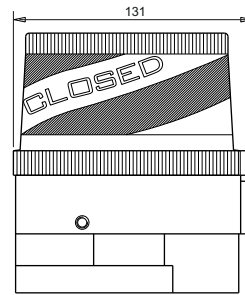
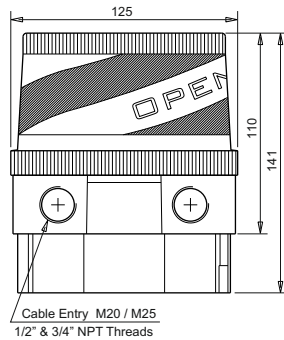
Model No.	Contacts	M.R.P.Rs
JBMSHGS-45	1NO+1NC	5292
JBMSHGS-54	2NO+2NC	5634

JAIBALAJI
CONTROL GEARS PVT. LTD

Post Box No. 27, 89 (New No. 107),SIDCO Industrial Estate,Ambattur, Chennai -600 098. India
Phone: +91 44 26251279 / 26257859 / 26254470 Fax: +91 44 26255038.
E-mail: dchandramohan@jaibalaji.firm.in Web: jaibalaji.in

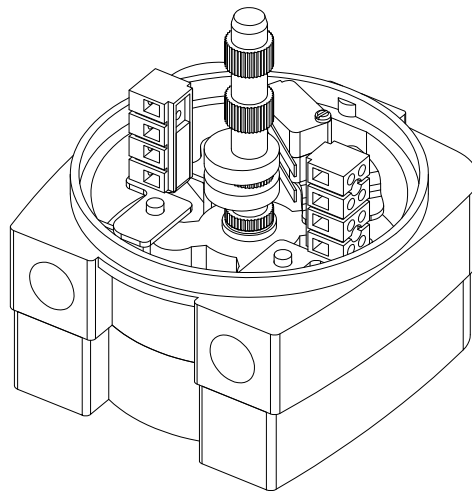
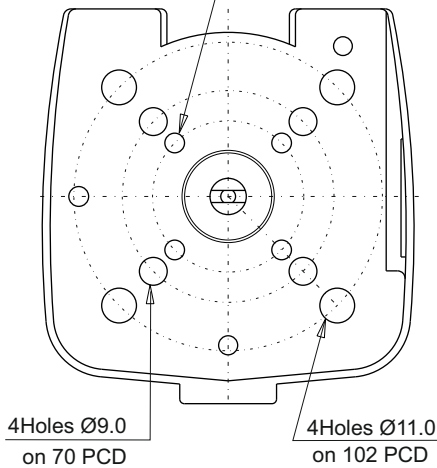


VALVE POSITION MONITOR CATALOGUE CUM PRICE LIST

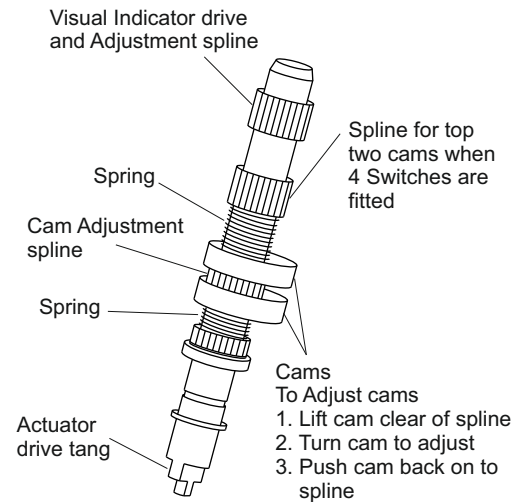


Mounting Bracket

4Holes Ø6.5
on 50 PCD



Shaft Details



Specification

Housing Material : Nylon (Glass filled)
Indicator Material : Polycarbonate
Protection : IP 67
Terminal points : 8 Points
Temperature Range : -40°C to 100°C
Visual Indicator : 0° to 90°
Conduit Entry : 2 Entries
Basic Switch : 2 Miniature Switches

Optional

Terminal points : 16 Points
Conduit Entry : 3 Entries
Basic Switch : 1 to 4 Miniature Switches or Proximity Sensors

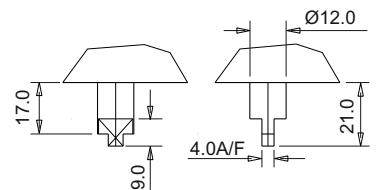
Miniature Switches

Ratings: AC RATING INDUCTIVE - A600

Voltage	Make		Break	
	A	VA	A	VA
120	60	7200	6	720
240	30	7200	3	720
480	15	7200	1.5	720
600	12	7200	1.2	720

Ratings: DC RATING INDUCTIVE - P600

Voltage	Make		Break	
	A	VA	A	VA
125	1.1	138	1.1	138
250	0.55	138	0.55	138
600	0.2	138	0.2	138



Miniature Switch



Model No.	Description	M.R.P.Rs
JBVPM-54	JMS / IPM / H - A Miniature Snap action Switch - 1No.	4410
JBVPM-63	JMS / IPM / H - A Miniature Snap action Switch - 2Nos.	4518
JBVPM-72	JMS / IPM / H - A Miniature Snap action Switch - 3Nos.	4779
JBVPM-81	JMS / IPM / H - A Miniature Snap action Switch - 4Nos.	5049

Manufactured by:



Post Box No. 27, 89 (New No. 107), SIDCO Industrial Estate, Ambattur, Chennai -600 098, India
Phone: 26251279 / 26257859 / 26254470 Fax: 0095844-26255038. E-mail: dchandramohan@jaibalaji.firm.in

DEALERS ENQUIRIES SOLICITED

Ref : JAI / GC / 2026

Date : 16.01.2026



Dear Sir,

At the outset, we thank you all for patronizing our products. As you are aware, our **JAIBALAJI** products are the **ONLY PRODUCTS** available in India with   &  Markings and **IP-67** Protection. We are also an **ISO 9001 : 2015** Certified company offering **QUALITY PLUS** Products at **MOST COMPETITIVE PRICE**. **JAIBALAJI** Products are manufactured making use of **UL Listed V2 Flame Retardant Grade 960°** Glow Wire Tested Anti corrosive Anti-Acid unbreakable **Engineering Plastic** and are fully insulated. Our wide range of products are **Illuminated Push Buttons, Pilot lights, Push Button Stations (Plastic & Metal) LED Electronic Module Indicating lights (16.5 mm & 22.5 mm dia) Electronic signal Tower lights (LED & BULB) Electronic Proximity Sensors (Photo Sensors, Diffuse, Thro' Beam, Colour mark, Inductive & Capacitive) Electronic Timer Din Rail (Analog & Digital) Electronic Digital Counter / Timer, Digital Meters AC / DC Voltmeter, Ammeter, Digital Panel Meters, Frequency Meters, Variety of Limit Switches, like BC-9, BC-9T, JW Micro Adjustable, CEE EM 45, Precision, Miniature Snap Action, Mini Limit Switches, Heavy Duty Limit Switches JB - 2700, Extra Heavy Duty JC-1125 Limit Switches, Explosion Proof EPHA Limit Switches, Foot Switches, Engineering Plastic Industrial Plug & Sockets, and Connectors Cam Operated Rotary Switches, variety of different sizes of Junction Boxes (Engineering Plastic & Metal) and Telescopic Brushes, Pullcord, Beltsway, Zero speed switch & Rocker switch. Distribution Boxes, Pendent Pushbutton stations, CEE EM 45 Mini Limit Switch, Bus bar Indicator & Reed Magnetic Switch**

DEALERS ENQUIRIES ARE SOLICITED

This supersedes all previous Price Lists, Prices are subject to change without prior notice, Prices at the time of supply will be applicable.

Your continued patronage and kind co-operation will be very much appreciated.

Thanking you and assuring you of our best services always.

Yours faithfully,

for 
CONTROL GEARS PVT. LTD



CHANAKYACHANDRAMOHAN

Encl : as above.

New No. 107, Sidco Industrial Estate

Post Box No. 27, Ambattur,

Chennai - 600 098. India

Phone : 0091 - 44 - 2625 1279

0091 - 44 - 2625 4469

0091 - 44 - 2625 4470

0091 - 44 - 2625 7174

0091 - 44 - 2625 7859

Fax : 0091 - 44 - 2625 5038

E-mail : dchandramohan@jaibalaji.firm.in

WEBSITE : www.jaibalaji.firm.in

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13	AC Volt meter AC Ammeter	29
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16	DC Ammeter	32
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CERTIFICATE

The Certification Body
of TÜV SÜD South Asia Private Limited
certifies that



Jaibalaji Control Gears Pvt. Ltd
No. 107, Sidco Industrial Estate, Ambattur, Chennai, - 600098, India

has implemented Quality Management System
in accordance with **ISO 9001:2015**
for the scope of

**Design, Manufacture and Supply of
Electromechanical, Electronic Controlling, Signalling Devices and
Switchgears for Engineering and Industrial Automation**

The certificate is valid from **2024-03-22** until **2027-03-21**

Subject to successful completion of annual periodic audits

The present status of this certificate can be obtained through TÜV SÜD website by scanning below QR code and by entering the certificate number (without spaces) on web page. Further clarifications regarding the status & scope of this certificate may be obtained by consulting the certification body at info.in@tuvsud.com

Certificate Registration No. **99 100 02459**

Date of Initial certification: **2008-05-28**

Issue Date: **2024-03-19** Rev. 00



Rahul Kale
Head of Certification Body
of TÜV SÜD South Asia Private Limited,
Mumbai
Member of TÜV SÜD Group





இந்திய தர நிர்ணய அமைவனம்

भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

தென் மண்டல அலுவலகம்

: पोस्ट बॉक्स नं. 8290

: सी. आई. टी. कैम्पस, चौथा क्रॉस रोड,

तरावणी, चेन्नै - 600 113.

Southern Regional Office : Post Box No. 8290

CIT Campus, IV Cross Road,

Taramani, Chennai - 600 113.

ANNEXURE TO ENDORSEMENT NO.16 DATED

20030206

1) LIMIT SWITCHES

RATED OPERATIONAL VOLTAGE	: 415V
RATED THERMAL CURRENT	: 10A
OPERATIONAL CURRENT	: 1.5A(AC)
RATED IMPULSE VOLTAGE	: 1.5KV AC
INSULATION VOLTAGE	: 600V
POLLUTION DEGREE	: '2'
IP CODE	: IP 67
UTILISATION CATEGORY	: AC 15/DC 13
CONDITIONAL SHORT CIRCUIT CURRENT	: 100A
DESIGNATION	: A600/R300
CONTACT ELEMENT	: TYPE : ZA
MECHANICAL DUTY CLASS	: 3
FREQUENCY OF OPERATIONAL CYCLES FOR ELECTRICAL DURABILITY	: 300/HOUR

2) ROTARY SWITCHES:

UTILISATION CATEGORY	: AC15
RATED INSULATION VOLTAGE	: 600V AC
RATED IMPULSE VOLTAGE	: 1.5KV AC
RATED OPERATIONAL VOLTAGE	: 415V AC,
RATED FREQUENCY	: 50Hz
CORRESPONDING OPERATIONAL CURRENT	: 1.8A, 2A, 4A, 6A, 8A, 10A
CORRESPONDING THERMAL CURRENT	: 7.5A, 12.5A, 20A, 32A, 40A, 80A
POLLUTION DEGREE/CASE	: 3/CASE A
CLASS OF MECHANICAL DURABILITY	: 3
MATERIAL GROUP	: III a

3) PUSH BUTTON SWITCH

UTILISATION CATEGORY	: AC15
RATED INSULATION VOLTAGE	: 600V
RATED IMPULSE VOLTAGE	: 1.5KV AC
RATED OPERATIONAL VOLTAGE	: 415V AC, 50Hz
RATED OPERATIONAL CURRENT	: 1.8A
RATED THERMAL CURRENT	: 10A
POLLUTION DEGREE/CASE	: 3/CASE A
CLASS OF MECHANICAL DURABILITY	: 3
DESIGNATION	: A600/R300


DIRECTOR & HEAD (MARKS II)
BIS, CHENNAI



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Southern Regional Office : Post Box No. 8290

CIT Campus, IV Cross Road,

Taramani, Chennai - 600 113.

ANNEXURE TO ENDORSEMENT NO. 16 DATED 20030266

4) AC INDICATOR LIGHTS (BULB)

Rated operational voltage	24, 48, 110, 230 V AC
Rated voltage of light	24, 48, 110, 230 V AC
Rated voltage of lamp	24, 48, 130, 130 V AC
Rated power	2.0, 2.0, 2.6, 2.6 Watts Max
Rated thermal power for mounting on metal plate	2.6, 2.6, 2.6, 2.6 Watts Max
Rated thermal power for mounting on enclosure	2.6, 2.6, 2.6, 2.6 Watts Max
Colour	Yellow, red, amber, blue, green, black, white, clear (for type and designation and colour, please see the catalogue enclosed)
Fixing hole diameter	22.5 mm, 22.5 mm, 22.5 mm, 22.5 mm
Means of connection	Single pin type small miniature with baynet cap holder
Nature of current applied and its frequency	AC 50 cycles
Type of lamp socket	Small miniature baynet cap holder with Nylon 66 (Grade 30) protective cover

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PAGE 2 OF 6



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तारामणी, चेन्नै - 600 113.

Southern Regional Office : Post Box No. 8290

CIT Campus, IV Cross Road,

Taramani, Chennai - 600 113.

ANNEXURE TO ENDORSEMENT NO.16 DATED 20.03.2006

5) DC INDICATOR LIGHTS (BULB)

Rated operational voltage	24, 48, 110, 230 V DC
Rated voltage of light	24, 48, 110, 230 V DC
Rated voltage of lamp	24, 48, 130, 130 V DC
Rated power	2.2, 2.6, 2.6 Watts Max
Rated thermal power for mounting on metal plate	2.2, 2.6, 2.6 Watts Max
Rated thermal power for mounting on enclosure	2.2, 2.6, 2.6 Watts Max
Colour	Yellow, red, amber, blue, green, black, white, clear (for type and designation and colour, please see the catalogue enclosed)
Fixing hole diameter	22.5 mm, 22.5 mm, 22.5 mm, 22.5 mm
Means of connection	Single pin type holder small miniature with baynet cap holder
Nature of current applied and its frequency	DC
Type of lamp socket	Small miniature baynet cap holder with Nylon 66 (Grade 30) protective cover

DIRECTOR & HEAD (MARKS II)
BIS, CHENNAI

PAGE 3 OF 6



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तरामणी, चेन्नै - 600 113.

Southern Regional Office : Post Box No. 8290

CIT Campus, IV Cross Road,
Taramani, Chennai - 600 113.

ANNEXURE TO ENDORSEMENT NO.16 DATED 2003.02.06

6) AC INDICATOR LIGHTS (LED - LIGHT EMITTING DIODE)

Rated operational voltage	12, 24, 48, 110, 230 V AC
Rated voltage of light	12, 24, 48, 110, 230 V AC
Rated voltage of LED	2.2, 2.2, 2.2, 2.2 V AC Max
Rated current/power	25 mA/300 mW
Rated thermal power for mounting on metal plate	25 mA/300 mW
Rated thermal power for mounting on enclosure	25 mA/300 mW
Colour	Yellow, red, amber, blue, green, black, white, clear (for type and designation and colour, please see the catalogue enclosed)
Fixing hole diameter	22.5 mm, 22.5 mm, 22.5 mm, 22.5 mm
Means of connection	Solder connection
Nature of current applied and its frequency	AC 50 cycles
Type of lamp socket	Nylon 66 (Grade GF 30) protective cover

DIRECTOR & HEAD (MARKS II)
BIS, CHENNAI



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सी. आई. टी. कैम्पस, चौथा क्रॉस रोड,
तरामणी, चेन्नै - 600 113.

Southern Regional Office : Post Box No. 8290

CIT Campus, IV Cross Road,
Taramani, Chennai - 600 113.

ANNEXURE TO ENDORSEMENT NO.16 DATED 2003.2.06

7) DC INDICATOR LIGHTS (LED - LIGHT EMITTING DIODE)

Rated operational voltage	12, 24, 48, 110, 230 V DC
Rated voltage of light	12, 24, 48, 110, 230 V DC
Rated voltage of lamp	2.2, 2.2, 2.2, 2.2 V DC Max
Rated current/power	25 mA/300 mW
Rated thermal power for mounting on metal plate	25 mA/300 mW
Rated thermal power for mounting on enclosure	25 mA/300 mW
Colour	Yellow, red, amber, blue, green, black, white, clear (for type and designation and colour, please see the catalogue enclosed)
Fixing hole diameter	22.5 mm, 22.5 mm, 22.5 mm, 22.5 mm
Means of connection	Solder connection
Nature of current applied and its frequency	DC
Type of lamp socket	Nylon 66 (Grade GF 30) protective cover

DIRECTOR & HEAD (MARKS II)
BIS, CHENNAI



இந்திய தர நிர்ணய அமைவனம்
भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS

दक्षिणी क्षेत्रीय कार्यालय

Southern Regional Office :

: पोस्ट बॉक्स नं. 8290

सी. आई. टी. कैम्पस, चौथी क्रॉस रोड,
तरामणी, चेन्नै - 600 113.

CIT Campus, IV Cross Road,
Taramani, Chennai - 600 113.

ANNEXURE TO ENDORSEMENT NO.16 DATED 20030266

8) MINIATURE LIMIT SWITCH

Rated operational voltage	: 240 V AC, 50 Hz
Rated operational current	: 3 A
Rated thermal current	: 10 Amp
Utilization category	: AC 15
Rated insulation voltage	: 600 V AC
Pollution degree	: 2
Rated conditional short circuit current	: 1000 A
Number of poles	: Single


DIRECTOR & HEAD (MARKS II)
BIS, CHENNAI

PAGE 6 OF 6



CERTIFICATION RECORD

The company named below has been authorized by CSA to represent the products listed in this record as "CSA Certified" and to affix the CSA Mark to these products according to the terms and conditions of the CSA Service Agreement and applicable CSA program requirements (including additional Markings).

File No: 114811 0 000

Class No: 3211 87 INDUSTRIAL CONTROL EQUIPMENT Miscellaneous Apparatus
- Certified to US Standards

SUBMITTOR

4576887 M/s Jai Balaji & Co.
89, Sidco Industrial Estate
P.O. No. 27
Ambattur
Chennai, 600098
India

FACTORY

4576887 M/s Jai Balaji & Co.
89, Sidco Industrial Estate
P.O. No. 27
Ambattur
Chennai, 600098
India

November 18, 2002 (Replaces: September 22, 1999)

- Rotary Switches, JRS-XX Series, Model Numbers and ratings are as follows:

Model No	Voltage	Current
JRS 9	400 V	6 A
JRS 18	400 V	10 A
JRS 27	400 V	16 A
JRS 45	400 V	25 A
JRS 63	400 V	32 A
JRS 81	400 V	40 A
JRS 90	400 V	63 A

- Limit Switches, JLS Series, JW Series, CEE EM 45 Series, the electrical ratings / mechanism / contacts are same for all the models and are as follows:

Model No	Contact Designation
JLS XXX	B300 / P600
JW XX	B300 / P600
CEE EM 45-XX	B300 / P600
JC XXXX	B300 / P600
JB XXXX	B300 / P600

Note: The suffixes -XXX indicate Model Numbers with different lever heads.

- Proximity Switches JB Series details are given below:

Model No	Type	DC Volts	DC Amps	AC Volts	AC Amp
JB 8 PILM	3 Wire DC	30 V DC	200 mA	--	--
JB 12 PIFM	3 Wire DC	30 V DC	200 mA	--	--
JB 18 PILM	3 Wire DC	30 V DC	200 mA	--	--
JB 30 PILM	3 Wire DC	30 V DC	200 mA	--	--
JB 36 AILM	2 Wire DC	--	--	230 V	300 mA
JB 50 PILM	2 Wire DC	30 V DC	200 mA	--	--

- Contact Switch Element for Push Buttons, Model Nos and Rating are as follows:

Model No	Contact Type	Designation	AC Rating	DC Rating
			Voltage/Current	Voltage/Current
JB1	N O	B300/P600	400 V/10 A	600 V/5 A
JB2	N C	B300/P600	400 V/10 A	600 V/5 A

● Pilot Lights

Model	Rated Voltage	Max Current mA
ML, PL	12 V, 24V, 48 V, 110 V ac/dc, 230 V ac and 220 V dc	25 mA
MB	12 V ac/dc	180 mA
	24 V ac/dc	80 mA
	48 V ac/dc	40 mA
	110 V ac/dc, 230 V ac and 220 V dc	25 mA

Note: These devices are certified as components only for use in other certified equipment where the suitability of the combination is determined by CSA International.



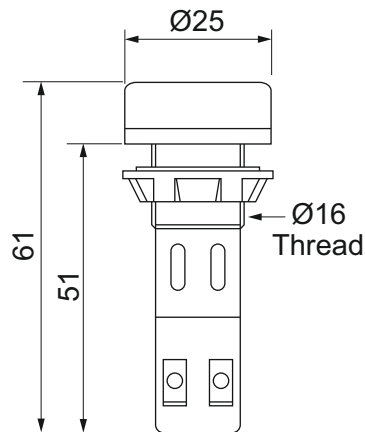
ELECTRONIC ULTRA BRIGHT LED MODULE INDICATING LIGHTS Ø16.5mm and Ø22.5mm

WITH IS/IEC:60947    MARKS
PT-5 / Sec-1 C US

CATALOGUE CUM PRICE LIST

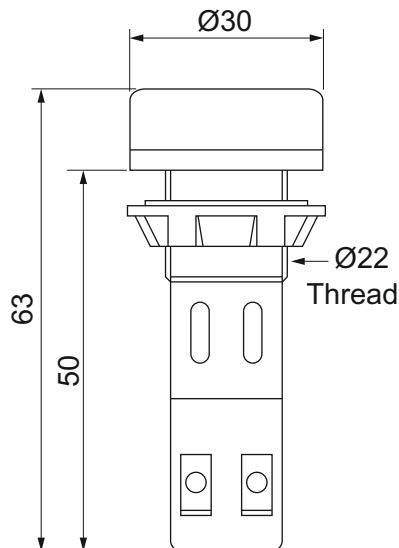
Best Illumination due to maximum LEDs.
80% Energy Saving.
Zero failure probability due to LED technology.
Fits with 16.5 & 22.5 mm standard cutouts.
Suitable for standard voltage ranges.

Non standard voltage ranges
available on request.
Immune to vibration and shock resistance.
Rugged, Long lasting & Economic.
Low voltage glow protection.



16.5 mm Dia

	12/24/48V AC / DC	110V AC	230V AC	110/230V DC
YELLOW	Rs. 153	Rs. 153	Rs. 153	Rs. 153
RED	Rs. 153	Rs. 153	Rs. 153	Rs. 153
AMBER	Rs. 153	Rs. 153	Rs. 153	Rs. 153
BLUE	Rs. 153	Rs. 153	Rs. 153	Rs. 153
GREEN	Rs. 153	Rs. 153	Rs. 153	Rs. 153
WHITE	Rs. 153	Rs. 153	Rs. 153	Rs. 153



22.5 mm Dia

	12/24/48V AC / DC	110V AC	230V AC	110/230V DC
YELLOW	Rs. 171	Rs. 171	Rs. 171	Rs. 171
RED	Rs. 171	Rs. 171	Rs. 171	Rs. 171
AMBER	Rs. 171	Rs. 171	Rs. 171	Rs. 171
BLUE	Rs. 171	Rs. 171	Rs. 171	Rs. 171
GREEN	Rs. 171	Rs. 171	Rs. 171	Rs. 171
WHITE	Rs. 171	Rs. 171	Rs. 171	Rs. 171

All above LED modules with low voltage glow protection add Rs.117/- each extra. LED module Universal voltage 24-240V AC/DC (Yellow, Red, Amber, Blue, Green, White) -Rs.234/- each extra.

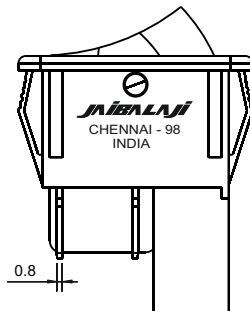
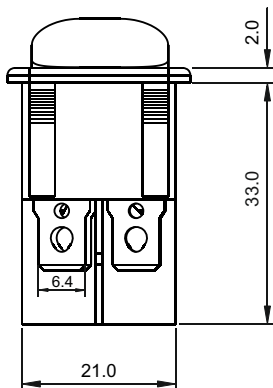
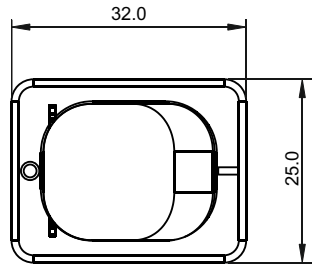
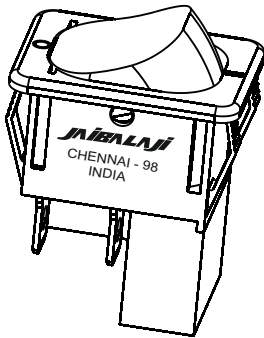
JAIBALAJI
CONTROL GEARS PVT. LTD

Post Box No. 27, 89 (New No. 107), SIDCO Industrial Estate, Ambattur, Chennai -600 098. India
Phone: +91 44 26251279 / 26257859 / 26254470 Fax: +91 44 26255038.
E-mail: dchandramohan@jaibalaji.firm.in Web: jaibalaji.in

JAIBALAJI

ROCKER INDICATOR SWITCH

CATALOGUE CUM PRICE LIST



MATERIALS :

Body	Nylon 6/6 (UL 94V-2)
Rocker	Polycarbonate (UL 94V-2)
Contact surface	Silver
Terminal	Silver Plated Brass
Illuminated rocker	LED

SPECIFICATIONS :

Contact rating	16A, 250V AC resistive 20A, 125V AC motor
Bezel size	32mm x 25mm
Panel cut out	30mm x 22mm
Length behind bezel	33.0mm (including terminals)

GENERAL CHARACTERISTICS :

Operating temperature	-30°C to 50°C
Safety standard approval	UL 1054
Available options	red, amber, orange, green, white and blue
Switch Type	DPST

	230V,110V,48V,24V AC OR DC
YELLOW	MRP Rs. 72
RED	MRP Rs. 72
AMBER	MRP Rs. 72
BLUE	MRP Rs. 72
GREEN	MRP Rs. 72
WHITE	MRP Rs. 72

LIFE EXPECTANCY

Mechanical	30000 Cycles
Electrical	10000 Cycles
Contact resistance	20 mOhm max, initial @ 2-4V DC
Insulation resistance	>10000 mOhm

Illuminated rocker switch is easier to find in the dark. Indicator lights allow users to see the state of the switch.

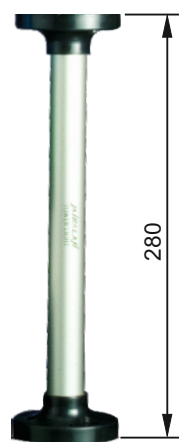
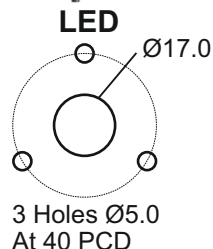
Typical Applications

Cars
Boats
Military goods
Aircrafts
Coffee Maker
Rice Cooker

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JALBALAJI



Red

1Amps Fuse

Supply

Black

SIGNAL TOWER

Red Indication

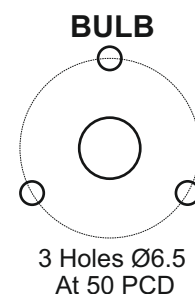
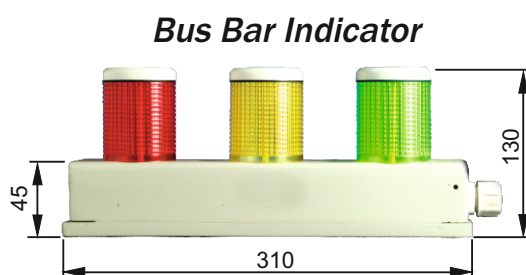
Amber Indication

Green Indication

Brown Buzzer

Yellow Flash

Green Continuous on



Voltage Range - 24V AC/DC 110V AC, 220V AC V

	<u>LED</u>	<u>Bulb</u>
Single	4W	5 / 10W
Double	6W	10 / 20W
Triple	8W	15 / 30W

220V AC V JBTL

Voltage

09 - 24V DC

90 - 110V AC

99 - 220V AC

L - LED

B - Bulb

S - Single

D - Double

T - Triple

F - Four

FI - Five

Ex. JBTL09SL

230V AC with Flash & Buzzer

Sl. No	Type No.	Stack	Standard Color	M.R.P. Each RS.
1.	JBTL 99 SL (FB)	Single	Red	2493
2.	JBTL 99 DL (FB)	Double	Red, Green	3330
3.	JBTL 99 TL (FB)	Triple	Red, Yellow, Green	3888
4.	JBTL 99 FL (FB)	Four	Red, Yellow, Green, (White or Blue)	5112
5.	JBTL 99 FIL (FB)	Five	Red, Yellow, Green, Blue, White	5526

230V AC without Flash with Buzzer

Sl. No	Type No.	Stack	Standard Color	
1.	JBTL 99 SL (B)	Single	Red	2223
2.	JBTL 99 DL (B)	Double	Red, Green	3060
3.	JBTL 99 TL (B)	Triple	Red, Yellow, Green	3735
4.	JBTL 99 FL (B)	Four	Red, Yellow, Green, (White or Blue)	4419
5.	JBTL 99 FIL (B)	Five	Red, Yellow, Green, Blue, White	5463

24V DC with Flash & Buzzer

Sl. No	Type No.	Stack	Standard Color	
1.	JBTL 09 SL (FB)	Single	Red	2187
2.	JBTL 09 DL (FB)	Double	Red, Green	2270
3.	JBTL 09 TL (FB)	Triple	Red, Yellow, Green	3348
4.	JBTL 09 FL (FB)	Four	Red, Yellow, Green, (White or Blue)	4680
5.	JBTL 09 FIL (FB)	Five	Red, Yellow, Green, Blue, White	5373

24V DC without Flash with Buzzer

Sl. No	Type No.	Stack	Standard Color	
1.	JBTL 09 SL (B)	Single	Red	1665
2.	JBTL 09 DL (B)	Double	Red, Green	2511
3.	JBTL 09 TL (B)	Triple	Red, Yellow, Green	3177
4.	JBTL 09 FL (B)	Four	Red, Yellow, Green, (White or Blue)	4266
5.	JBTL 09 FIL (B)	Five	Red, Yellow, Green, Blue, White	5013

110V AC with Flash & Buzzer

Sl. No	Type No.	Stack	Standard Color	
1.	JBTL 90 SL (FB)	Single	Red	3024
2.	JBTL 90 DL (FB)	Double	Red, Green	3708
3.	JBTL 90 TL (FB)	Triple	Red, Yellow, Green	4356
4.	JBTL 90 FL (FB)	Four	Red, Yellow, Green, (White or Blue)	5220
5.	JBTL 90 FIL (FB)	Five	Red, Yellow, Green, Blue, White	5112

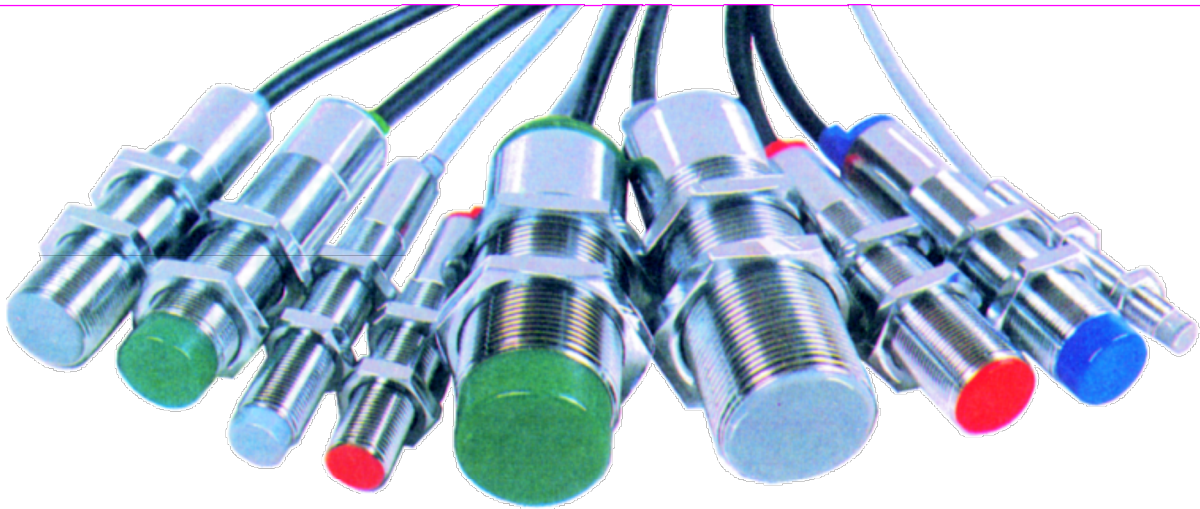
110V AC without Flash with Buzzer

Sl. No	Type No.	Stack	Standard Color	
1.	JBTL 90 SL (B)	Single	Red	2664
2.	JBTL 90 DL (B)	Double	Red, Green	3330
3.	JBTL 90 TL (B)	Triple	Red, Yellow, Green	4023
4.	JBTL 90 FL (B)	Four	Red, Yellow, Green, (White or Blue)	4716
5.	JBTL 90 FIL (B)	Five	Red, Yellow, Green, Blue, White	5526

Sl. No	ELECTRONIC MINI TOWER LIGHT 22.5 MM	M.R.P. Each RS.
1.	LED Indicating with Flash and Buzzer Red Colour	639
2.	LED Indicating with Flash and Buzzer Amber Colour	639
3.	LED Indicating with Flash and Buzzer Yellow Colour	639
4.	LED Indicating with Flash and Buzzer Green Colour	639
5.	LED Indicating with Flash and Buzzer White Colour	639
6.	LED Indicating with Flash and Buzzer Blue Colour	639

INDUCTIVE PROXIMITY SWITCHES

CATALOGUE CUM PRICE LIST



FEATURES:

- * REF : STANDARD IEC 947-5-2
- * REVERSE POLARITY PROTECTION
- * SHORT CIRCUIT PROTECTION
- * OVERLOAD PROTECTION
- * FALSE PULSE DURING
- * POWER ON/OFF PROTECTION

JNIBALAJI India's ONLY manufacturers of ISI
Limit Switches has another range of high quality
Inductive Proximity sensors with SP® CE
C US

INDUCTIVE PROXIMITY SWITCHES

REF : STANDARD : IEC 947-5-2

Inductive Proximity switches are used to identify the presence of metal objects, speed measurements, position sensing, counting etc., without any physical contact with the objects. It enhances the durability of the switch and ensures maintenance free work.

Inductive Proximity switch generates high frequency alternating field at the active face by the oscillator circuit. When any metal object is brought into the field it causes oscillation to stop. Hence the demodulated voltage feeding the trigger disappears.

DC Inductive Proximity Switches:

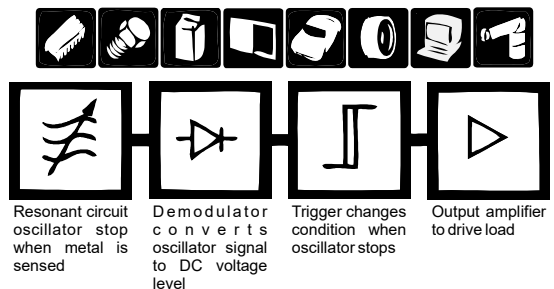
For DC switches the trigger operates rapidly when oscillation stops. This trigger switches the O/P, NPN/PNP transistor to drive an electronic circuit or relay.

AC Inductive Proximity Switches:

For AC switches a thyristor is triggered when oscillation stops. This thyristor is connected in series with a bridge and this series combination is connected to the AC load.

APPLICATIONS:

- AUTOMOBILE INDUSTRIES
- STEEL INDUSTRIES
- PACKAGING INDUSTRIES
- METAL HANDLING EQUIPMENT
- PROCESS AUTOMATION
- CNC / NC MACHINES
- CONVEYOR EQUIPMENT ETC.,



DC SWITCHES SPECIFICATIONS

Reference: STANDARD : IEC 947-5-2

Nominal Voltage	10 - 30 VDC
Voltage Drop	0.8 - 7 V*
Load Current	300 mA *
No Load Current	10 - 20 mA *
Switching Frequency	200 HZ **
Ambient Temperature	-25° C To +60° C
Hysteresis	≤15%
Sensing Distance Tolerance	±10%

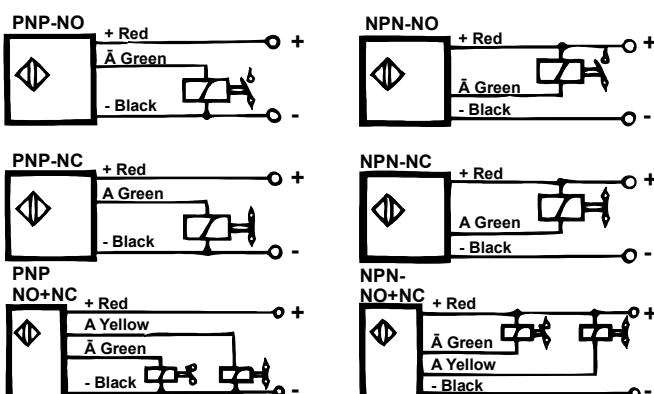
AC SWITCHES SPECIFICATIONS

Reference: STANDARD : IEC 947-5-2

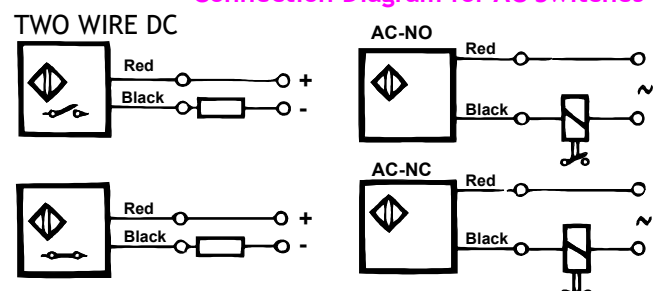
Nominal Voltage	90 - 250 VAC
Voltage Drop	8 V
Load Current	500 mA Max
No Load Current	5 mA
Switching Frequency	15 HZ Max **
Ambient Temperature	-25° C To +60° C
Hysteresis	≤15%
Sensing Distance Tolerance	±10%

- . Specification Varies depending on Switch Type.
- .. Specification Varies depending on Switch Size & Range.

Connection Diagram for DC Switches



Connection Diagram for AC Switches



TECHNICAL SPECIFICATIONS

DIMENSIONS in mm

MODEL	HOUSING	FLUSH / NON-FLUSH	MOUNTING THREAD	L1	L2	L3	NUT	ELECTRICAL TYPE	LED	SENSING DISTANCE Sn	TYPE OF PROTECTION
JB 8	M	F	8X1	35	60		14	PN	-	1	IP 67
JB 8	S	L	8X1	40	65		14	PN	-	1.5	IP 67
JB 12	M	L	12X1	45	65	5	17	PN	✓	4	IP 67
JB 12	M	F	12X1	55	75		17	PN	✓	2	IP 67
JB 12	S	L	12X1	50	70	3	17	PN	✓	4	IP 67
JB 18	S	L	18X1	55	75	7	24	TPNBA	✓	8	IP 67
JB 18	M	L	18X1	50	70	7	24	TPNBA	✓	8	IP 67
JB 18	M	F	18X1	55	75		24	TPNBA	✓	5	IP 67
JB 30	S	L	30X1.5	55	75	12	36	TPNBA	✓	15	IP 67
JB 30	M	L	30X1.5	45	65	12	36	TPNBA	✓	15	IP 67
JB 30	M	F	30X1.5	55	75		36	TPNBA	✓	10	IP 67
JB 36	M	L	36X1.5	45	65	20	44	TPNBA	✓	20	IP 67
JB 36	M	F	36X1.5	45	65		44	TPNBA	✓	15	IP 67
JB 50	M	L	50X1.5	40	60	16	57	TPNBA	✓	25	IP 67
JB 50	M	F	50X1.5	40	60		57	TPNBA	✓	20	IP 67

(NOTE :- STANDARD WIRE LENGTH PROVIDED - 2 MTS ONLY)

M-METAL
S-SYNTHETIC
F-FLUSH
L-NON-FLUSH
P-PNP

N-NPN

PN-THREE WIRE DC
T-TWO WIRE DC

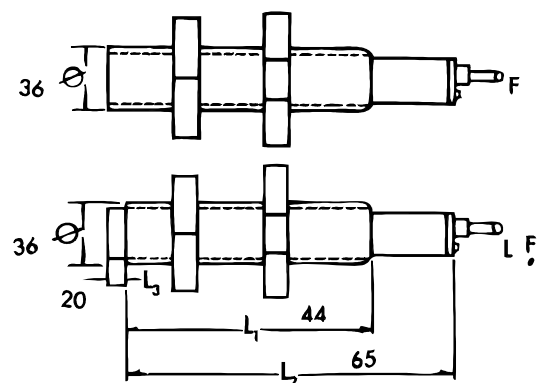
B-FOUR WIRE DC (NO + NC)

A-TWO WIRE AC

P₁ - PNP NO
P₂ - PNP NC
N₁ - NPN NO
N₂ - NPN NC

T₁ - 2 WIRE NO
T₂ - 2 WIRE NC
B₁ - PNP NO + NC
B₂ - NPN NO + NC
A₁ - AC NO
A₂ - AC NC

DIMENSIONS in mm



ORDERING CODE

Model.
Electrical Type T.P.N.B.A
Flush - F/ Non Flush - L
Housing (Metal-M / Synthetic-S)

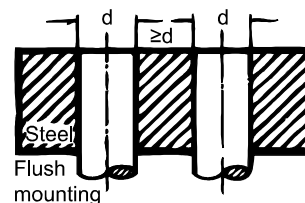
JB ET F/L M/S

Eg.: JB 18 T1 L S
JB 18 T2 FL M

Model denotes the size

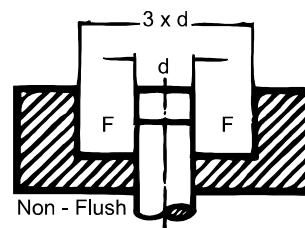
FLUSH MOUNTING IN METAL:

A proximity switch can be flush mounted in metal if it can be surrounded by metal up to the level of the active face, without changing its present characteristics. In order to avoid interference when mounting side by side, a spacing distance, corresponding to the diameter of the switch must be maintained.



NON FLUSH MOUNTING :

A proximity switch can be flush mounted in metal if zone is required for maintaining the characteristic values of the switch. A clear zone of 3x the diameter of the sensing surface should be maintained.



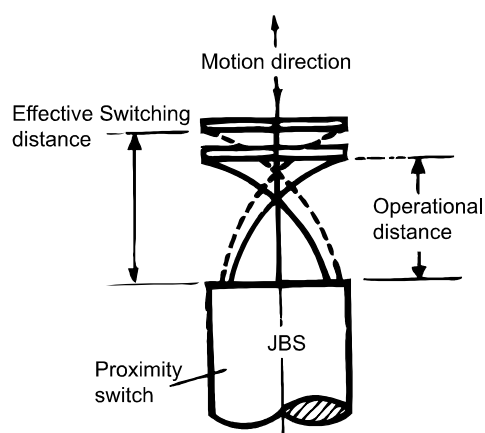
F - Clear zone containing only material that is non-conducting and has no magnetic properties

EFFECTIVE SWITCHING DISTANCE:

It is the switching distance when voltage and temperature can be at any value within the rating of the switch and this will be between 81 & 121% of switching distance.

OPERATIONAL DISTANCE:

It is the distance at which the operation of the proximity switch, under stated temperature and voltage conditions is guaranteed within 0 and 81% of the nominal switching distance.



SOME IMPORTANT CORRECTION FACTORS:

WHEN TARGET MATERIAL IS NOT STEEL

Chrome - nickel	approx. $0.9 \times S_n$
Brass	approx. $0.5 \times S_n$
Aluminium	approx. $0.4 \times S_n$
Copper	approx. $0.4 \times S_n$

PRICE LIST

3 Wire DC - PN Which includes: P1-PNP-NO, P2-PNP-NC & N1-NPN-NO, N2-NPN-NC		4 Wire DC - B B1- PNP- NO + NC & B2 - NPN - NO + NC		2 Wire DC - T T1 - NO & T2 - NC		2 Wire AC - A A1 - NO & A2 - NC	
JAIBALAJI Code	M.R.P. Rs.	JAIBALAJI Code	M.R.P. Rs.	JAIBALAJI Code	M.R.P. Rs.	JAIBALAJI Code	M.R.P. Rs.
JB 8 PN	1224	JB 12 B	1089	JB 18 T	1098	JB 12 A	1224
JB 12 PN	936	JB 18 B	1116	JB 30 T	1395	JB 18 A	1089
JB 18 PN	936	JB 30 B	1386	JB 36 T	1530	JB 30 A	1377
JB 30 PN	1116	JB 36 B	1503	JB 50 T	1683	JB 36 A	1512
JB 36 PN	1215	JB 50 B	1665			JB 50 A	1674
JB 50 PN	1530						

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E-mail: dchandramohan@jaibalaji.firm.in Web: jaibalaji.in



CAPACITIVE PROXIMITY SWITCHES

CATALOGUE CUM PRICE LIST

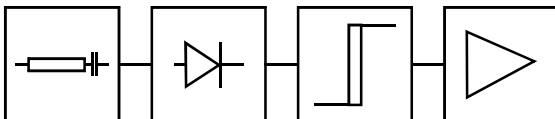


India's ONLY manufacturer of ISI marked Limit Switches has another range of high quality Capacitive Proximity Switches

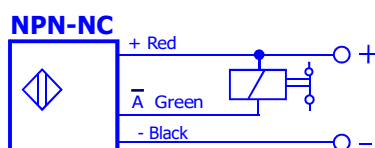
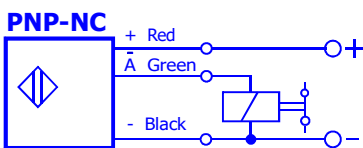
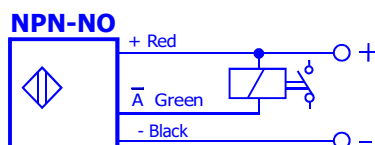
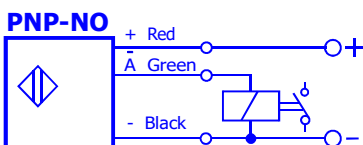
Capacitive Proximity Switches serves as a contactless sensors for positioning, monitoring and detecting all types of material. Capacitive Proximity Switch consists of an Oscillator, a Rectifier and an Amplifier. The capacitance between the sensing surface and mass increases when an object approaches active surface. When the capacitance value exceeds the preset level, oscillator generates AC signals. The Rectifier section converts this AC signal into DC and Amplifier amplifies this signal to drive a relay or a circuit.

APPLICATIONS

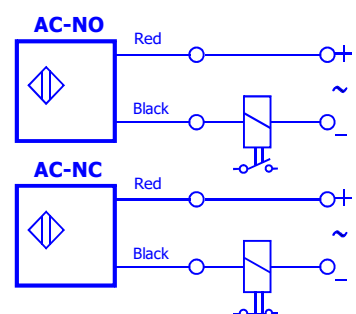
- Packaging Industries
- Chemical Industries
- Automobile Industries
- Wood Working Machinery



Connection Diagram for DC Switches



Connection Diagram for AC Switches





CAPACITIVE PROXIMITY SWITCHES

SPECIFICATIONS

DC Switches		AC Switches	
Supply Voltage	10 - 30 V	Supply Voltage	90 - 250 V
Voltage Drop	≤ 1.5 V	Voltage Drop	≤ 15 V
Load Current	250 mA	Load Current	250 mA
Switching Frequency	200 Hz	Switching Frequency	5 Hz
Hysteresis	$\leq 25\%$	Hysteresis	$\leq 25\%$
Sensing Distance	8 - 15 mm*	Sensing Distance	8 - 15 mm*
Ambient Temperature	0 - 70 °C	Ambient Temperature	0 - 70 °C
Protection	IP 65	Protection	IP 65
Sensitivity Adjustment	Through Potentiometer	Sensitivity Adjustment	Through Potentiometer

* Sensing range depends on materials and surrounding environment

Model	Housing	Size	Type
JBC 18	M/S	M18 X 75	D
JBC 30	M/S	M30 X 75	A,D

D	-	DC	A	-	AC
D ₁	-	PNPNO	A ₁	-	ACNO
D ₂	-	PNPNC	A ₂	-	ACNC
D ₃	-	NPNNO			
D ₄	-	NPNNC			

CORRECTION FACTOR	
Metal	1.0
PVC	0.6
Glass	0.5
Water	1.0
Oil	0.2
Wood	0.2

To achieve the optimum performance each switch has to be adjusted for the working environment. If the object is a conductive material, it needs proper earthing.

REED MAGNETIC SWITCH (CODE: JBRM)

Reed magnetic switch contains a reed switch and a magnet enclosed in a separate housing. When the magnet passes nearby the reed switch it changes the output contact.

PRICE LIST

S.No.	JAIBALAJI Code	M.R.P. Rs.
1	JBCD 18	1683
2	JBCD 30	1863
3	JBCD 36	1917
4	JBCD 50	2016

SPECIFICATION

Enclosure	Aluminium or Plastic
Sensing distance	20mm Max.
Switching frequency	1Hz
Temperature	0 - 100 °C
Output contact	NO or NC
Contact rating	200 mA
Protection	P 67

*Potential free contacts suitable for voltage upto 220V AC



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PHOTO ELECTRONIC SENSORS

JAI BALAJI

PHOTO ELECTRONIC SENSORS

CATALOGUE CUM PRICE LIST



India's ONLY manufacturer of ISI marked Limit Switches has another range of high quality Photo Electronic Sensors

- Long detecting distance
- Stable detection
- External light security
- Accurate sensitivity setting
- Short circuit protection
- Reverse polarity protection
- False pulse during power on / off protection



PHOTO ELECTRONIC SENSORS

APPLICATIONS

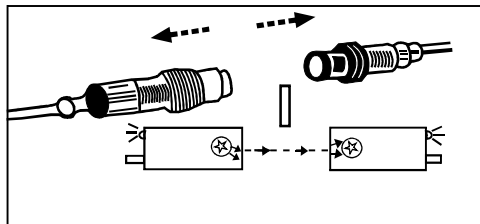
- Door opening devices
- Packaging machines
- Wood working machines
- Machine tools
- Process automation
- Plastic forming machines
- Textile machinery
- Conveyor equipment

Photo Electronic Sensors are used to sense all kinds of objects at higher sensing distance compared to Inductive Proximity Switches and Capacitive Proximity Switches.

Photo Electronic Sensor consists of an Emitter, a Receiver and an Amplifier. Pulsed Infra-Red light beam is generated by the Emitter. This effective beam is reflected either by an object or by a reflector (depending on the type of sensor) and it returns to the receiver. The receiver converts the reflected incoming light signal into electrical signal, and the built-in amplifier amplifies the electric signal. The amplified signal drives output transistor (either NPN OR PNP) which in turn drives an Electronic circuit or a relay. Either of the following three types of Photo Electronic Sensors can be used to sense an object based on their sizes and colours.

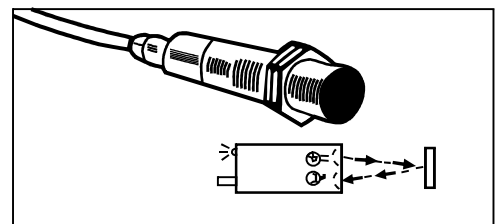
Thru Beam Type:

Emitter and Receiver are enclosed in different housing. The beam from the Emitter directly reaches the Receiver. Any interruption in the beam results in switching action.



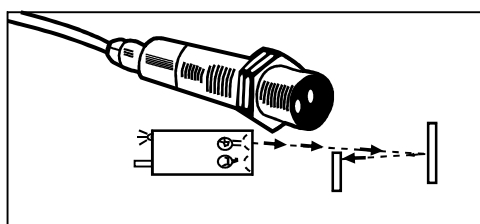
Diffuse Reflective Type:

Both Emitter and Receiver are enclosed in a single housing. Infra-red light beam from emitter is reflected by an object. This reflected beam causes a change in receiver and produces an output signal.



Retro Reflective Type:

Emitter and Receiver are enclosed in a single housing and are aligned with a reflector. A continuous beam of light from the reflector reaches the receiver. Any interruption in the beam will result in an output signal from the receiver.



P H O T O ELECTRONIC S E N S O R S

ELECTRICAL DATA

Specifications	DC Switches	AC Switches
Supply Voltage	10- 30 V	90 - 230 V
Voltage Drop	≤ 2.5 V	≤ 8 V
Load Current	200 mA	200 mA
Switching Frequency	25 Hz	5 Hz
Hysteresis	$\leq 5\%$	$\leq 15\%$
Ambient Temperature	0 ⁰ C to 50 ⁰ C	0 ⁰ C to 50 ⁰ C

AC Switches are available in JBT 30 only.

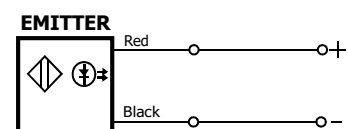
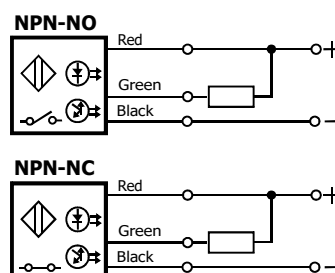
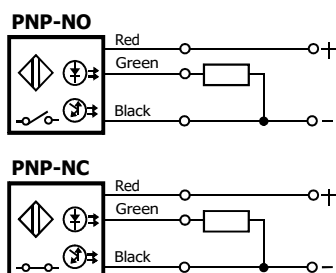
TECHNICAL DATA

Model	Housing	Size	Range		LED	Sensitivity Adjustment	Protection
JBD 18	M/S	M18 x 75	100mm	DF	✓	✓	IP 67
JBD 30	M/S	M30 x 75	300mm	DF	✓	✓	IP 67
JBR 18	M/S	M18 x 75	400mm	DF	✓	✓	IP 67
JBR 30	M/S	M30 x 75	1000mm	DF	✓	✓	IP 67
JBT 18	M/S	M18 x 75	5000mm	DF	✓	✓	IP 67
JBT 30	M/S	M30 x 75	10000mm	ADF	✓	✓	IP 67

(Note: Standard wire length provided - 2 mts only)

- D - Three wire DC
- D₁ - PNP-NO
- D₂ - PNP-NC
- D₃ - NPN-NO
- D₄ - NPN-NC
- F - Four wire DC
- F₁ - PNP NO+NC
- F₂ - NPN NO+NC
- A - Two wire AC
- A₁ - AC-NO
- A₂ - AC-NC

Connection Diagram



Dimensions in mm

P H O T O ELECTRONIC S E N S O R S

Correction Factor:

White Paper	1
Metal glossy	1.1 to 1.6
Al. Black anodised	1.1 to 1.6
PVC	0.5
Wood	0.4
White Cotton Cloth	0.6

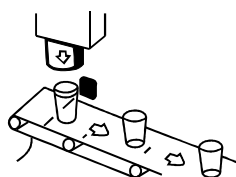
Applications:

Colour Mark Sensor:

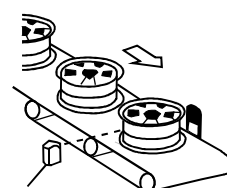
These sensors are mainly used to differentiate Light and Dark colours. Emitter and Receiver are enclosed in a single housing. The transmitted light beam is reflected by the light colour and it returns to the receiver. When the dark colour mark enters into this light beam, the receiver senses the changes in colour by reflection.

Colour Mark Sensor Code:

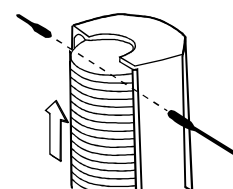
JBE 18 PNP/NPN NO/NC



DETECTION OF
DOUBLE-FED PLASTIC CUPS



DETECTION OF
AUTOMOBILE WHEEL PASSAGE



WAFER RACK POSITIONING

- Photo Electronic Fork Sensors are also available.

PRICE LIST

DIFFUSE TYPE (JBD)			RETRO REFLECTIVE (JBR)		
JAIBALAJI Code	RANGE	M.R.P. Rs.	JAIBALAJI Code	RANGE	M.R.P. Rs.
JBD 18	100 mm	2313	JBR 18	400 mm	2448
JBD 30	300 mm	2448	JBR 30	1000 mm	2547
THRO' BEAM (JBT)			COLOUR MARK SENSOR (JBE)		
JAIBALAJI Code	RANGE	M.R.P. Rs.	JAIBALAJI Code	RANGE	M.R.P. Rs.
JBT 18	5000 mm	2448	JBE 18	8-10 mm	2313
JBT 30	10000 mm	2547	JBE 30	12-15 mm	2448

Mains operated Power supply with single change over contact (6A) - Rs. 1458 Each

Standard wire length provided - 2Mtrs. only. Rs. 153/- Each per meter will be charged for extra cables.

Connector Type Rs. 1017/- extra

JAIBALAJI
CONTROL GEARS PVT. LTD

Post Box No. 27, 89 (New No. 107), SIDCO Industrial Estate, Ambattur, Chennai -600 098. India

Phone: +91 44 26251279 / 26257859 / 26254470 Fax: +91 44 26255038.

E-mail: dchandramohan@jaibalaji.firm.in Web: jaibalaji.in

ANALOG TIMER :

MODEL	TIME RANGES	MODES	SUPPLY VOLTAGE	RELAY CONTACT	M.R.P. EACH. RS.
SVM 330	3/30 SEC/MIN	ON DELAY INTERVAL EQUAL CYCLIC ON FIRST EQUAL CYCLIC OFF FIRST ALL MODES ARE USER SELECTABLE	230V AC*	1 C/O**	Rs. 873.00
SVM 660	6/60 SEC/MIN				
SVH 330	3/30 MIN/HOUR				
SVH 660	6/60 MIN/HOUR				
AVM 330	3/30 SEC/MIN	ALL MODES ARE USER SELECTABLE	24-240V AC/DC	1 C/O	Rs.1116.00
AVM 660	6/60 SEC/MIN				
AVH 330	3/30 MIN/HOUR				
AVH 660	6/60 MIN/HOUR				
UEC 660	6/60 SEC/MIN/HOUR	UNEQUAL CYCLIC ON FIRST UNEQUAL CYCLIC OFF FIRST	230V AC*	1 C/O**	Rs.909.00
FR 009	ON TIME 6/60 SEC/MIN PAUSE TIME 6/60 SEC	FORWARD / REVERSE	230V AC*	1 C/O	Rs.1035.00
RC 660	RUN TIME 6/60 SEC/MIN TRANSFER TIME 40/100 ms	STAR DELTA	230V AC*	1 C/O	Rs.1035.00

* Other voltage ranges are also available as per customer requirement.

** For 2 No + 2 NC add Rs. 135/- extra

DIGITAL TIMER - DIN RAIL :

MODEL	TIME RANGES	MODES	SUPPLY VOLTAGE	RELAY CONTACT	M.R.P. EACH. RS.
DC - 99	0.1 SEC to 99 HRS	ON DELAY	24-240V AC/DC	1 C/O	Rs.1278.00
		INTERVAL			
		EQUAL CYCLIC ON FIRST		2 C/O	Rs.1449.00
		EQUAL CYCLIC OFF FIRST			
		ALL MODES ARE USER SELECTABLE			

	MODEL	TIME RANGES	MODES	SUPPLY VOLTAGE	RELAY CONTACT	M.R.P. EACH.
1.	DC-99S	Star: 0.1 sec-99 min Pause Time : 40-99 msec.	Star - Delta	24V-265V, AC / DC	2 NO, 2A @250V AC	Rs.1278.00
2.	DC-99F	F/R : 0.1 sec-99 min Pause : 01sec - 99-min.	Forward / Reverse	24V-265V, AC / DC	2NO, 2A @250V AC	Rs.1278.00
3.	CV-9	999999 COUNTS	Normal Count	85V-265V AC / DC	No Relay Output	Rs.3141.00
4.	4896-I	0.001-9999 sec/min/hr	Interval	85V-265V AC/DC	1C/O, 5A @250V AC	Rs.3663.00
5.	4896-H	0.999999.9 hr	Hr.meter (No Reset)	85V-265V AC/DC	No Relay	Rs.3663.00
6.	4896-TC	0.001 sec -9999 hr & 0-9999 Counts	Timer: ON, IN, OFF, Cyclic / Counter: (N-Mode) Counter with Timer	85V-265V AC/DC	2C/O, 5A @250V AC	Rs.3798.00
7.	4896-T	0.001 sec - 9999 hr	ON, IN, OFF, F, CYCLIC	85V-265V AC/DC	2C/O, 5A @250V AC	Rs.3798.00
8.	4896-C	0.001 - 9999 Counts	N, F, C, K, Type Counting	85V - 265V AC /DC	2C/O, 5A @250V AC	Rs.3798.00
9.	4896-TT	0.9999999 Counts	N, F, C, K, Type Counting	85V - 265V AC /DC	2C/O, 5A @250V AC	Rs.3798.00

1Ø AC VOLTMETER

MODEL	TYPE NO.	INPUT RANGE	DISPLAY READING	ACCURACY	M.R.P. PRICE
AV101		0-200 MV	0-199.9 MV	CLASS 0.5	Rs.-1161.00/- Each
AV102		0-2V	0-1.999 V		
AV103		0-20V	0-19.99 V		
AV104		63.5(51.0-76.0)V	51.0-76.0V		
AV105		110(80-130)V	80.0-110.0V		
AV106		240(0-300)V	0-300V		
AV107		415(0-500)V	0-500 V		
AV108		1000(50-1000)V	50-1000V		

PT INPUT-110V(80-130V)

AV1 PT (Field settable)	1	1.1kv/110V 11kv/110V 110kv/110V	0.80-1.30kv 8.0-13.0kv 80-130kv	CLASS 1.0	Rs. 1161.00 /- Each
	2	2.2kv/110V 22kv/110V 220kv/110V	1.60-2.60kv 16.0-26.0kv 160-260kv		
	3	3.3kv/110V 33kv/110V	2.40-3.90kv 24.0-39.0kv		
	4	6.6kv/110V 66kv/110V	4.80-7.80kv 48.0-78.0kv		

3Ø AC VOLTMETER
**AUX SUPPLY : 240V AC (170-265)
(OR) 110V AC(85-130V)**
WITH AUTO / MANUAL SELECTION

AV301		415V(330-470V) (3Ø-3 WIRE SYSTEM)	330-470V	CLASS 1.0	Rs.1899.00/- Each
AV302		240V(170-270V) (3Ø-4 WIRE SYSTEM)	170-270		

PT INPUT-110V (80-130V)

AV3PT (Field settable)	1	1.1kv/110V 11kv/110V 110kv/110V	0.80-1.30kv 8.0-13.0kv 80-130kv	CLASS 1.0	Rs.1899.00/- Each
	2	2.2kv/110V 22kv/110V 220kv/110V	1.60-2.60kv 16.0-26.0kv 160-260kv		
	3	3.3kv/110V 33kv/110V	2.40-3.90kv 24.0-39.0kv		
	4	6.6kv/110V 66kv/110V	4.80-7.80kv 48.0-78.0kv		

AC AMMETER

AA101		0-200 mA	0-200 mA	CLASS 0.5	Rs.1161.00 /- Each
AA102		0-2mA	0-2.00mA		
AA103		0-20mA	0-20.0mA		
AA104		0-200mA	0-200mA		
AA100		0-2A	0-2.00A		
AA105		0-30A	0-30.0A		

JAIBALAJI ELECTRONIC DIGITAL METERS

CT INPUT - 1A (0.05-1.2 A)

MODEL	TYPE NO.	INPUT RANGE	DISPLAY READING	ACCURACY	M.R.P. PRICE
AA1CT AA3CT (Field settable)	25	10A / 1A 100A / 1A	0.5-12.0A 5-120A	CLASS 1.0	AA1CT=Rs.1818/- Each AA3CT=Rs.1998 /- Each
	26	12A / 1A 120A / 1A	0.6-14.4A 6-144A		
	27	15A / 1A 150A / 1A	0.7-18.0A 7-180A		
	28	16A / 1A 160A / 1A	0.8-19.2A 8-192A		
	29	20A / 1A 200A / 1A	1.0-24.0A 10-240A		
	30	25A / 1A 250A / 1A	1.2-30.0A 12-300A		
	31	30A / 1A 300A / 1A	1.5-36.0A 15-360A		
	32	40A / 1A 400A / 1A	2.0-48.0A 20-480A		
	33	50A / 1A 500A / 1A	2.5-60.0A 25-600A		
	34	60A / 1A 600A / 1A	3.0-72.0A 30-720A		
	35	70A / 1A 700A / 1A	3.5-84.0A 35-840A		
	36	80A / 1A 800A / 1A	4.0-96.0A 40-960A		

CT INPUT -1A (0.05-1.2 A)

AA1CT & AA3CT	37	1.0 KA / 1A	0.5-12.0 KA	CLASS 1.0	AA1CT=Rs.1818/- Each AA3CT=Rs.1998/- Each
	38	1.2 KA / 1A	0.6-14.4 KA		
	39	1.5 KA / 1A	0.7-18.0 KA		
	40	1.6 KA / 1A	0.8-19.2 KA		
	41	2.0 KA / 1A	1.0-24.0 KA		
	42	2.5 KA / 1A	1.2-30.0 KA		
	43	3.0 KA / 1A	1.5-36.0 KA		
	44	4.0 KA / 1A	2.0-48.0 KA		
	45	5.0 KA / 1A	2.5-60.0 KA		
	46	6.0 KA / 1A	3.0-72.0 KA		
	47	7.0 KA / 1A	3.5-84.0 KA		
	48	8.0 KA / 1A	4.0-96.0 KA		

Note : AA1CT - 1Ø - Ammeter / AA3CT - 3Ø - Ammeter



JAIBALAJI ELECTRONIC DIGITAL METERS

FREQUENCY METER

AUX SUPPLY : 85V - 265V AC / DC

VRF 100		40-500V AC	20.0 - 99.9 Hz	CLASS 0.5	Rs.1179.00/- Each
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DIGITAL PANEL METER

AUX SUPPLY : 230V AC (or) 110 AC

MODEL	TYPE NO.	INPUT RANGE	DISPLAY READING	ACCURACY	M.R.P. PRICE
MW 103	1	0-300 mV	0-300mw	CLASS 0.5	Rs.-1161.00/- Each
MW 103	2	0-10V DC	0-600	CLASS 1.0	Rs.-1161.00/- Each

DC VOLTMETER

**AUX SUPPLY : 230V AC (or) 110 AC
(or) 85-265V AC (or) DC**

MODEL	TYPE NO.	INPUT RANGE	DISPLAY READING	ACCURACY	M.R.P. PRICE
DV101		0 to ± 2 mV DC	0 to ± 19.99	CLASS 0.5	Rs.-1161.00/- Each
DV102		0 to ± 200 mV DC	0 to ± 199.9		
DV103		0 to ± 2 V DC	0 to ± 1.999	CLASS 1.0	Rs.-1161.00/- Each
DV104		0 to ± 20 V DC	0 to ± 19.99		
DV105		0 to ± 200 V DC	0 to ± 199.9		
DV106		0 to ± 500 V DC	0 to $\pm 500v$		
DV107		0 to ± 1000 V DC	0 to $\pm 1000v$		

DC AMMETER

MODEL	TYPE NO.	INPUT RANGE	DISPLAY READING	ACCURACY	M.R.P. PRICE
DA101		0 to ± 20 mA DC	0 to ± 20.0 mA	CLASS 0.5	Rs.-1161.00/- Each
DA102		0 to ± 2 mA DC	0 to ± 1.999 mA		
DA103		0 to ± 20 mA DC	0 to ± 19.99 mA		
DA104		0 to ± 200 mA DC	0 to ± 200 mA		
Dv105		0 to ± 2 A DC	0 to ± 1.999 A		
DA106		0 to ± 10 A DC	0 to ± 10.0 A		



**ELECTRONIC DIGITAL METERS**AUX SUPPLY : 240V AC (170-265) (or) 110V AC
(or) 85-265V AC (or) DC**DC AMMETER-SHUNT INPUT (75mV)**

MODEL	TYPE NO.	SHUNT INPUT 75mV (5-90mV)	DISPLAY READING	ACCURACY	M.R.P. PRICE
DAST	1	a. 5A / 75 mV b. 50A / 75 mV c. 500A / 75 mV	a. 0.33 - 5.33A b. 3.3 - 53.3A c. 33 - 533A	CLASS 1.0	Rs.-1161.00/- Each
	2.	a. 10A / 75 mV b. 100A / 75 mV	a. 0.6 - 10.6A b. 6 - 106A		
	3.	a. 15A / 75 mV b. 150A / 75 mV	a. 1.0 - 16.0A b. 10 - 160A		
	4.	a. 20A / 75 mV b. 200A / 75 mV	a. 1.2 - 21.2A b. 12 - 212A		
	5.	a. 25A / 75 mV b. 250A / 75 mV	a. 1.6 - 26.6A b. 16 - 266A		
	6.	a. 30A / 75 mV b. 300A / 75 mV	a. 2.0 - 32.0A b. 20 - 320A		
	7.	a. 40A / 75 mV b. 400A / 75 mV	a. 2.6 - 48.0A b. 26.6 - 480A		
	8.	a. 60A / 75 mV b. 600A / 75 mV	a. 4.0 - 64.0A b. 40 - 640A		
	9.	a. 75A / 75 mV b. 750A / 75 mV	a. 5.0 - 80.0A b. 50 - 800A		

DC AMMETER - SHUNT INPUT = 60mV (4-75mV)

MODEL	TYPE NO.	INPUT RANGE	DISPLAY READING	ACCURACY	M.R.P. PRICE
DAST	10	a. 5A / 60 mV b. 50A / 60 mV c. 500A / 60 mV	a. 0.33 - 6.25A b. 3.3 - 62.5A c. 33 - 625A	CLASS 1.0	Rs.-1161.00/- Each
	11.	a. 10A / 60 mV b. 100A / 60 mV	a. 0.6 - 12.5A b. 6 - 125A		
	12.	a. 15A / 60 mV b. 150A / 60 mV	a. 1.0 - 18.7A b. 10 - 187A		
	13.	a. 20A / 60mV b. 200A / 60 mV	a. 1.3 - 25.0A b. 13 - 250A		
	14.	a. 25A / 60 mV b. 250A / 60 mV	a. 1.6 - 31.2A b. 16 - 312A		
	15.	a. 30A / 60mV b. 300A / 60 mV	a. 2.0 - 37.5A b. 20 - 375A		
	16.	a. 40A / 60mV b. 400A / 60 mV	a. 2.6 - 50.0A b. 26.6 - 500A		
	17.	a. 60A / 60 mV b. 600A / 60 mV	a. 4.0 - 75.0A b. 40 - 750A		
	18.	a. 75A / 60 mV b. 750A / 60 mV	a. 5.0 - 93.7A b. 50 - 937A		

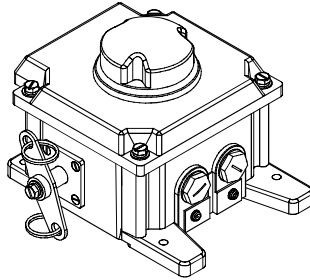
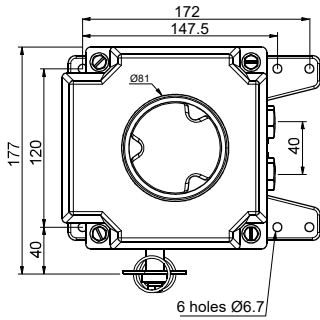
NOTE :CLASS1.0 :+(0.5%FSD+0.5% OF READING CLASS 0.5 : +(0.25 FSD + 0.25% OF READING

BOX SIZE : 96 x 48 x 125 mm CUTOUT SIZE : 90 x 45 mm

ELECTRONIC BUS BAR INDICATOR
RED, YELLOW, BLUE OR GREEN, AMBER, WHITE (ANY THREE
COLOURS)**M.R.P.**
2700/-
Each

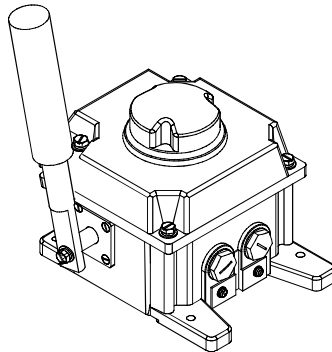
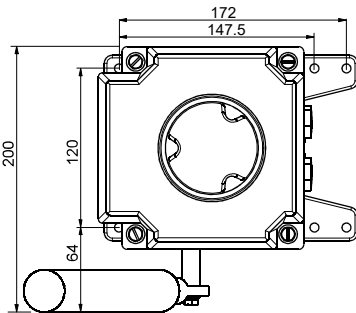
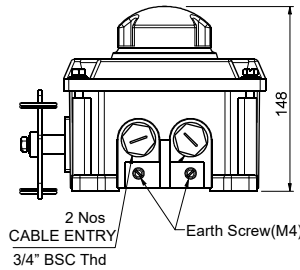
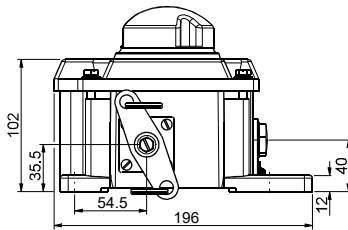


PULL CORD & BELT SWAY SWITCHES AND HEAVY DUTY LIMIT SWITCH WITH INDICATOR CATALOGUE CUM PRICE LIST



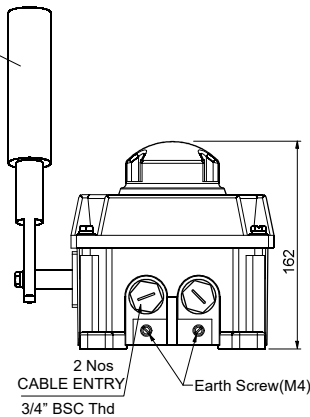
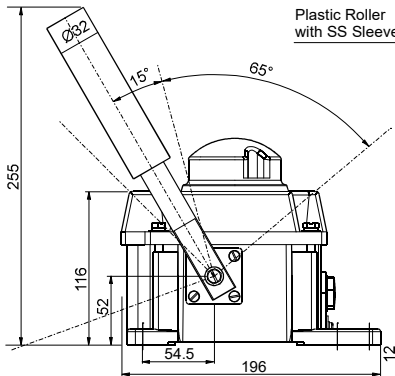
PULL CORD SWITCH

MODEL	DESCRIPTION	M.R.P. Rs.
JBRRV-9	Heavy Duty Pull cord switch with Indicator (1NO+1NC) Normal Action	3627
JBRRV-9 P	Heavy Duty Pull cord switch without Indicator (1NO+1NC) Normal Action	3555
JBRRV-18	Heavy Duty Pull cord switch with Indicator (1NO+1NC) Snap Action	3915
JBRRV-18 P	Heavy Duty Pull cord switch without Indicator (1NO+1NC) Snap Action	3843
JBRRV-27	Heavy Duty Pull cord switch with Indicator (2NO+2NC) Snap Action	4383
JBRRV-27 P	Heavy Duty Pull cord switch without Indicator (2NO+2NC) Snap Action	4320

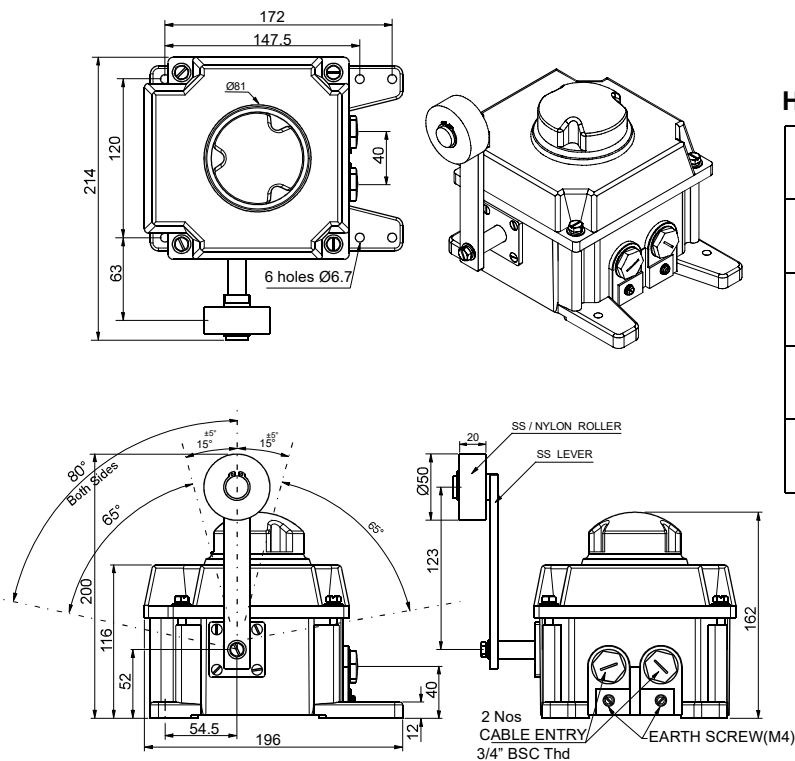


BELT SWAY SWITCH

MODEL	DESCRIPTION	M.R.P. Rs.
JBSMV-9	Heavy Duty Belt sway switch with Indicator (1NO+1NC) Snap Action	4077
JBSMV-9 P	Heavy Duty Belt sway switch without Indicator (1NO+1NC) Snap Action	4023
JBSMV-18	Heavy Duty Belt sway switch with Indicator (2NO+2NC) Snap Action	4716
JBSMV-18 P	Heavy Duty Belt sway switch without Indicator (2NO+2NC) Snap Action	4626

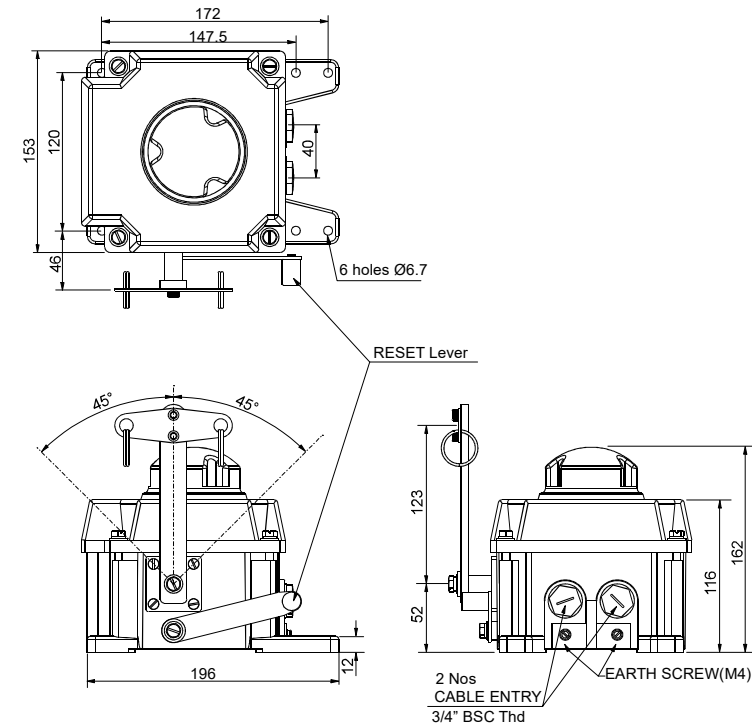


Post Box No. 27, 89 (New No. 107),SIDCO Industrial Estate,Ambattur, Chennai -600 098. India
Phone: +91 44 26251279 / 26257859 / 26254470 Fax: +91 44 26255038.
E-mail: dchandramohan@jaibalaji.firm.in Web: jaibalaji.in



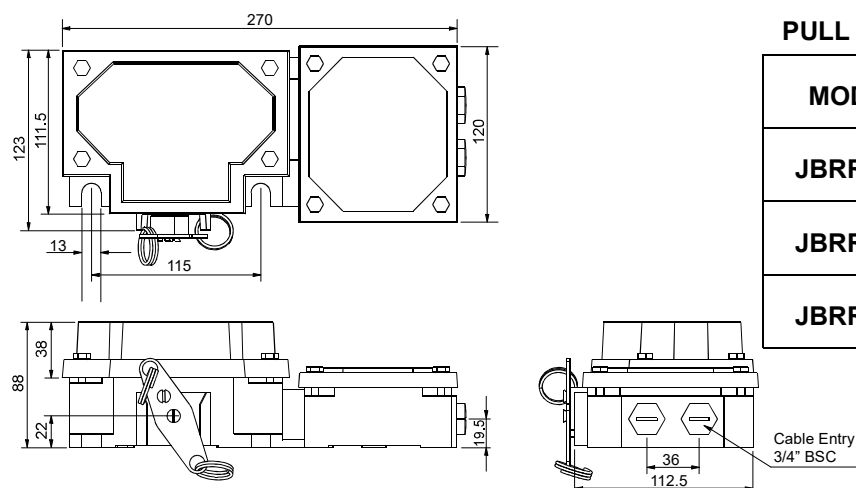
HEAVY DUTY LIMIT SWITCH

MODEL	DESCRIPTION	M.R.P. Rs.
JBSMV-36	Heavy Duty Limit switch with Indicator (1NO+1NC) Snap Action	3618
JBSMV-36 P	Heavy Duty Limit switch without Indicator (1NO+1NC) Snap Action	3555
JBSMV-45	Heavy Duty Limit switch with Indicator (2NO+2NC) Snap Action	4293
JBSMV-45 P	Heavy Duty Limit switch without Indicator (2NO+2NC) Snap Action	4248



HEAVY DUTY LIMIT SWITCH (MANUAL RESET)

MODEL	DESCRIPTION	M.R.P. Rs.
JBSMV-72	Heavy Duty Limit switch Manual Reset with Indicator (2NO+2NC) Snap Action	5598
JBSMV-90	Heavy Duty Limit switch Manual Reset with Indicator (1NO+1NC) Snap Action	5274



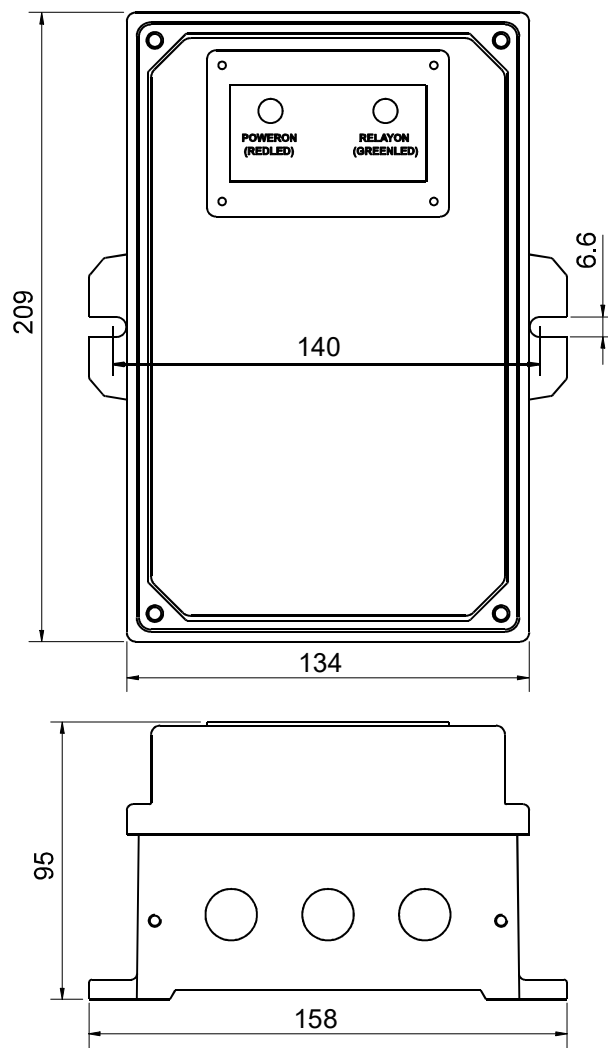
PULL CORD SWITCH WITH TERMINAL BOX

MODEL	DESCRIPTION	M.R.P. Rs.
JBRRV-9TB	Heavy Duty Pull cord switch with Terminal Box (1NO+1NC) Normal Action	4122
JBRRV-18TB	Heavy Duty Pull cord switch with Terminal Box (1NO+1NC) Snap Action	4320
JBRRV-27TB	Heavy Duty Pull cord switch with Terminal Box (2NO+2NC) Snap Action	4626

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ZERO SPEED SWITCH

CATALOGUE CUM PRICE LIST



Model	RPM RANGE	MRP Rs..
Model: JBZSS 10	1-10RPM	5454
Model: JBZSS 50	5-50RPM	5454
Model: JBZSS 100	10-100RPM	5454
Model: JBZSS 500	50-500RPM	5454
Model: JBZSS 1000	100-1000RPM	5454
Model: JBZSS 5000	500-5000RPM	5454

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