

'An ISO9001:2008 certified system'

CE

BOHMEN

LIMIT SWITCHES

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ZERTIFIKAT ◆ CERTIFICATE ◆ 認証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

TÜV SÜD South Asia

CERTIFICATE

The Certification Body
of TÜV SÜD South Asia Private Limited

certifies that

BOHMEN

Bohmen Industries
114-B, Marudhar Industrial Estate, Goddev Road,
Bhayander (East), Thane – 401 105, Maharashtra, INDIA

has implemented a Quality Management System
in accordance with **ISO 9001:2008**
For Scope of

Design, Manufacture & Supply of
Electromechanical Limit Switches (Switchgears)

The certificate is valid From **2016-03-15** until **2018-09-14**
Subject to successful completion of annual periodic audits
The present status of this Certificate can be obtained on www.tuv-sud.in
Further clarifications regarding the scope of this certificate may be obtained by consulting the certification body

Certificate Registration No. **99 100 14298**

Date of Initial certification : **2013-03-15**

Certification Body
of TÜV SÜD South Asia Private Limited, **Mumbai**
Member of TÜV SÜD Group

TÜV SÜD ISO 9001 NABCB QM011

TS0915

TÜV®

INDEX

Sr. No.	PRODUCT TYPE	PAGE No.
1.	GL SERIES General Purpose	1
2.	PL SERIES Double Insulated	2
3.	ML SERIES Miniature	3 - 4
4.	BL SERIES Medium to Heavy Duty	5 - 6
5.	General Technical Data	7
6.	NEW PRODUCTS	9

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GL SERIES

LIMIT SWITCHES

 LSO / LSOS	 LSOPP / LSOSPP	 3LS SERIES	 3LSPP SERIES	 4LSPP SERIES
 LSP / LSPS	 LSR / LSRS	 LSAR / LSARS	 LSPO / LSPSO	 GP11X
 LSPRO / LSPRSO	 LSRO / LSRSO	 LSARO / LSARSO	 MXP SERIES	 MXPR SERIES
 MXRL SERIES	 MXARL SERIES	 SRL	 SRL - M	 2LS1

GL SERIES

1. General purpose range for use across various machines & equipments.
2. Flame retardant polymer contact blocks available in 1NO; 2NO; 1NC; 2NC; 1NO+1NC; 2NO+1NC; 1NO+2NC; 2NO+2NC contacts with slow & quick action.
3. Modular contact blocks for ease of maintenance / replacement.
4. Silver alloy contacting points offer long electrical life.
5. Versatile set of actuators.
6. Pressure diecast metal enclosures offer from IP43 upto IP67 grade protection.
7. Nitrile rubber sealants for long lasting performance.

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PL SERIES

LIMIT SWITCHES



30LS00P



30LS00P (L)



30LS022AR



30LS0TPR



50LS010



40LS050RA / 40LS150RA



50LS01022AR



40LS0TPR



40LS050R



56LSP / 56LSPS



56LSAR / 56LSARS



56LS022R / 56LS022RS



50LS010PR

PL SERIES

1. An international range of fully insulated switches.
2. Available in slow & quick action in 1NO+1NC contact combinations.
3. Versatile set of actuators for different installations.
4. Oil, Dust & Water tight moulded enclosures constructed of reinforced thermoplastic material with flame-retardant properties.
5. Silver alloy contacting points provide long electrical life.
6. IP65 grade protection.

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ML SERIES

LIMIT SWITCHES

 MLB / MLBS	 MLBX / MLBXS	 MLRL / MLRLS	 MLR / MLRS
 MLSLRL / MLSLRLS	 MLARL / MLARLS	 MLARL22R / MLARLS22R	 MLSPR
 MLRTRL / MLRTRLS	 MLCW	 MLRL22R / MLRLS22R	 MLNE / MLSE

ML SERIES

1. A miniature size range for use in SPMs & equipments.
2. Available in slow & quick action in 1NO+1NC contact combinations.
3. Versatile set of actuators.
4. Pressure diecast metal enclosures offer IP65 grade protection.
5. Silver alloy contacting points provide long electrical life.
6. Nitrile rubber sealants for long lasting performance.

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COMPLIANCE DOCUMENT

South Asia

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This Compliance Document is issued to:

M/s. Bohmen Industries
114B, Marudhar Industrial Estate,
Goddev Road, Bhayander (East),
Thane 401105, Maharashtra – INDIA

FOR

Product family : Limit switch ML series

Model No : MLSPR

Test Standards : IEC 60947-5-1: 2003 (3rd Edition) + A1:2009

Test Report No : BLR/ENE/15/72136-01

This is to confirm that a sample product was tested to the safety test requirements of Low voltage directive (2006/95/EC).

CE After implementation of the requirements as per test report no. BLR/ENE/15/72136-01 issued to the manufacturer, preparation of the necessary technical documentation and signing of the declaration of conformity, CE marking can be affixed on the product and indicated product family in Annexure .Other relevant directives have to be observed.

The document holder is responsible for the consistent manufacturing of the product in compliance with the test sample submitted to us.

Suresh Somou
Strategic Business Head-PRODUCT SERVICE – ENE

Ref No.	Date of Original Issue	Date of revision:
CD/ 72136	25th September 2015	

Note: Products entering the European Union are subject to the requirements set forth in the European Directives. It is the responsibility of the person placing the product on the European market to ensure compliance with applicable Directives. The requirements of directives and standards change from time to time and it is the responsibility of the manufacturer to ensure compliance. Our services are intended to provide you with the data needed to determine compliance, but the person placing the product on the European market still has the responsibility to ensure each product complies with the applicable Directives. The product liability rests with the manufacturer or his representative in accordance with Council Directive 85/374/EEC.

This document applies only to the particular sample provided for testing and CE certification and does not permit the use of a TÜV PRODUCT SERVICE certification mark. It becomes ineffective in the event of changes relating to products, applicable standards and the Directives.

TUV SUD SOUTH ASIA PVT. LTD.
2nd Floor, Kushal Garden Arcade, 1A,. 2nd Phase, Peenya Industrial Area,
Bangalore-560058

Board : 080- 33034800

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Annexure 1

Model covers for ML series	Similarities	Difference	Plunger used
MLBS	HOUSING / CONTACT BLOCK	ACTUATOR / IP65	SS PIN
MLRS	HOUSING / CONTACT BLOCK	ACTUATOR / IP43	SS ROLLER ON BRASS PLUNGER
MLRLS	HOUSING / CONTACT BLOCK	ACTUATOR / IP65	SS ROLLER ON LEVER
MLSPR	HOUSING / CONTACT BLOCK	ACTUATOR / IP65	SPRING ROD
MLCW	HOUSING / CONTACT BLOCK	ACTUATOR / IP65	CAT WHISKER
MLBS-X	HOUSING / CONTACT BLOCK	ACTUATOR / IP65	EXTENDED SS PIN
MLSRLS	HOUSING / CONTACT BLOCK	ACTUATOR / IP65	ROLLER ON SLIPPING LEVER
MLARLS	HOUSING / CONTACT BLOCK	ACTUATOR / IP65	SS ROLLER ON ANGULAR LEVER
MLSE / MLNE	NO HOUSING / ONLY CONTACT BLOCK	IP00	INTERNAL MECHANISM
MLSEPR	NO HOUSING / ONLY CONTACT BLOCK	IP00	BRASS PLUNGER

PAN No.: AABCT0716G
TAN No.: MUMT09385F
Service Tax Code No.: AABCT0716GSD004
CST No. : 27150828488C

Registered Office:
TÜV SÜD South Asia Pvt. Ltd.
TÜV SÜD House,
Off Saki Vihar Road,
Saki Naka, Andheri (East),
Mumbai – 400072, India.

Corporate Office:
TÜV SÜD South Asia Pvt. Ltd.
Solitaire, 4th Floor,
ITI Road, Aundh,
Pune – 411007, India.

Email: info@tuv-sud.in
www.tuv-sud.in

BL SERIES



BL100PB / BL400PB



BL100PBA / BL400PBA



BL100R / BL400R



BL200PBA / BL400PBA



BL200R / BL400SR



BL300L1 / BL600L1



BL300L2 / BL600L2



BL300LA / BL600LA



BL300BS / BL600BS



BL500NR-SR / BL800NR-SR



BLSPR / BL800SPR



BLCW / BL800CW



BL300LA50R / BL600LA50R



BL10SE (1NO + 1NC)



BL20SE (2NO + 2NC)

BL SERIES

1. A medium duty range for use across industries.
2. Available in quick action in 1NO+1NC SPDT & 2NO+2NC DPDT contact combinations.
3. Versatile set of actuators for different installations.
4. Oil, Dust & Water tight diecast enclosure provide long & reliable lifespan.
5. Silver alloy contacting points provide long electrical life.
6. Nitrile rubber sealants for long lasting performance.

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COMPLIANCE DOCUMENT

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This Compliance Document is issued to:

M/s. Bohmen Industries
114B, Marudhar Industrial Estate,
Goddev Road, Bhayander (East),
Thane 401105, Maharashtra – INDIA

FOR

Product family : Limit switch BL series

Model No : BI/BL300LA

Test Standards : IEC 60947-5-1: 2003 (3rd Edition) + A1:2009

Test Report No : BLR/ENE/15/44734–01

This is to confirm that a product sample was tested to the safety test requirements of Low voltage directive (2006/95/EC).

CE After implementation of the requirements as per test report no. BLR/ENE/15/44734–01 issued to the manufacturer, preparation of the necessary technical documentation and signing of the declaration of conformity, CE marking can be affixed on the product and indicated product family in Annexure. Other relevant directives have to be observed.

The document holder is responsible for the consistent manufacturing of the product in compliance with the test sample submitted to us.

Suresh Somou
Strategic Business Head-PRODUCT SERVICE – ENE

Ref No.	Date of Original Issue	Date of revision:
CD/ 44734	25th September 2015	

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Bangalore-560058

Board : 080- 33034800

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Annexure 1

Model covers for BL series	Similarities	Difference	Plunger used
1) BI/BL300L1,	Enclosure / Contact Block	Actuator / roller	Rotary Lever Small
2) BI/BL300L2	Enclosure / Contact Block	Actuator / roller	Rotary Lever Big
3) BI/BL300LA	Enclosure / Contact Block	Actuator / roller	Rotary Lever Adjustable length
4) BI/BL300LA-50R	Enclosure / Contact Block	Actuator / roller	Rotary Lever Adjustable length with rubber roller
5) BI/BL300BS	Enclosure / Contact Block	Actuator	Rotary Lever with vertical PA6 roller
6) BI/BL500NR	Enclosure / Contact Block	Actuator	Offset rod lever (PA6 or SS)
7) BI/BL100PBA	Enclosure / Contact Block	Actuator	Push plunger adjustable
8) BI/BL100R	Enclosure / Contact Block	Actuator	Roller plunger
9) BI/BL200PBA	Enclosure / Contact Block	Actuator	Side push plunger adjustable
10) BI/BLSPR	Enclosure / Contact Block	Actuator	Spring rod or Catwhisker
11) BI/BL200R	Enclosure / Contact Block	Actuator	Side roller plunger

PAN No.: AABCT0716G
TAN No.: MUMT09385F
Service Tax Code No.: AABCT0716GSD004
CST No. : 27150828488C

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Solitaire, 4th Floor,
ITI Road, Aundh,
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Email: info@tuv-sud.in
www.tuv-sud.in

GENERAL PRODUCT SELECTION GUIDELINES :

(i) Contact Action : Basically there 2 types of switches based on their design and eventual application

(a) **Normal action :** Also known as Slow action, the movement of the actuator leads to a change in the state of Normally Closed (NC) & Normally Open (NO) Contacts. The gap between function of NC & NO contacts is large and the switching point (change in state) is same in both forward as well as reverse travel.

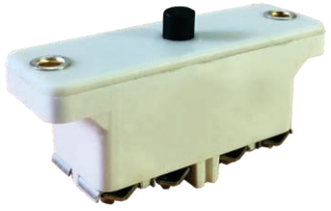
(b) **Snap action :** Also known as Quick action, the movement of actuator causes an instant change in the state of NO & NC contacts. This point of action does not change even if switch is operated at different speeds. However switching point (change in state) is different in reverse and forward travel due to force reversal in the actuator.

(c) **Overlap action :** A slightly different form of Normal action, the actuator design allows NO to close before NC contacts open for a brief interval after which NC opens. It is useful for applications where a function / trigger must occur before switch-off of a on circuit takes place.

(ii) Enclosure Protection (IP) : IP is defined by Bureau of Indian Standards in **IS60947 : Part 5; Sec 1** and characterizes levels of protection for electrical enclosures. The protection can be from fingers, dust or water. The standard classification designation is 'IP' followed by two numbers which designate the level of protection. The first digit of the number designates protection from solid objects and the second digit designates protection from moisture. The levels for the first digit vary from 1 through 6 and the second digit 1 through 8 where a larger number means increased protection. The table below summarizes the various IP designations.

	FIRST DIGIT PROTECTION FROM SOLID OBJECTS	SECOND DIGIT PROTECTION FROM MOISTURE
0	No Protection	No Protection
1	Protection against objects >50mm	Protection against vertically dripping water
2	Protection against objects >12.5mm	Protection against water when tilted +/- 15 deg
3	Protection against objects >2.5mm	Protection against spraying water
4	Protection against objects >1.0mm	Protection against splashing water
5	Dust Protected	Protection against jetting water
6	Dust Tight	Protection against heavy jetting water
7	N/A	Protection against temporary immersion
8	N/A	Protection against continuous immersion

Remarks :-



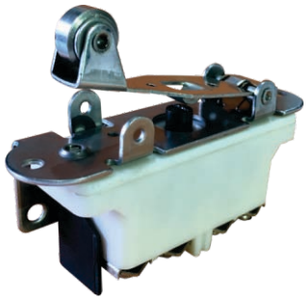
BPS11 / BPS22



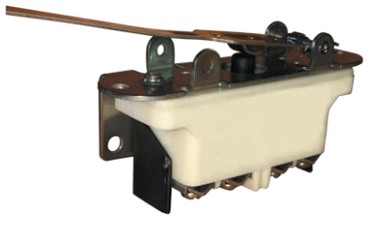
BPS11TPB / BPS22TPB



BPS11TR2 / BPS22TR2



BPS11RL / BPS22RL



BPS11-150L / BPS22-150L



GL20 (2NO) / GL22 (2NO+2NC)



BPRS22



BPRS11



30LS0RTRL

BOHMEN INDUSTRIES
114-B, Marudhar Industrial Estate,
Goddev Road, Bhayander (East),
Thane - 401105, Maharashtra, India.
Phone: +91 22 28183279 / 28193279
Email: bohmenindia@gmail.com

Visit us on: **www.bohmenindustries.co.in**