



Limit-less Solutions...

**COMPACT
INDUSTRIAL
ECONOMICAL
RELIABLE**

Limit-less Solutions...

The Complete LS Series of Limit Switches from ABB is wide enough to cover all areas of mechanical sensing applications and solutions.

COMPACT:

Miniature Switches – LS2.. Series..... 4

- Metal casings, NEMA 4, 4X, 6, IP67
- Plastic casings, NEMA 1, Double insulation
- 30mm & 35mm widths
- Compact design for tight mounting spaces
- Prewired with desired length of cable (1m, 2m, 3m, 5m, 10m)
- 16 operating heads available
- Fully assembled, quick-connect and go

INDUSTRIAL:

Metal Casing – LS..M.. Series..... 6

- NEMA 4X, IP66
- 30mm, 40mm, & 60mm widths
- Zinc body, epoxy-sealed
- 26 standard operating heads
- Fully assembled; individual components available

ECONOMICAL:

Thermoplastic Casing – LS..P.. Series 8

- NEMA 4, IP65
- 30mm, 40mm, & 60mm widths
- Fiberglass reinforced UL-VO thermoplastic body
- Double insulation
- 28 standard operating heads
- Fully assembled; individual components available

RELIABLE:

Safety Switches – LS..-S, LS..-R, & LS..-SCR Series..... 10

- NEMA 4
- 30mm, 40mm, & 60mm widths
- Keyed, cable-pull, & rotating axis/lever switches
- Safety orange casing of either thermoplastic or zinc
- Latch with manual reset available (LS..-SCR)
- Fully assembled; individual components available

Limit-less Solutions... COMPACT

30 mm width

Metal Casing NEMA 4, 4X, 6, IP67

Plastic Casing NEMA 1, IP67 – Double insulation

LS2 ... **B11 - U01**

- M** = Metal casing
- P** = Plastic casing
- 0** = Cable output left / right ^①
- 1** = Cable output bottom



Type	LS2..M11, LS2..P11	LS2..M12, LS2..P12	LS2..M13, LS2..P13	LS2..M14, LS2..P14
Actuator	Brass plain plunger	Steel roller plunger	Plastic roller plunger	Cross steel roller plunger
Action type				
CENELEC Conformity / Positive opening operation	N/A	N/A	N/A	N/A



LS2..M41, LS2..P41	LS2..M42, LS2..P42	LS2..M45, LS2..P45	LS2..M46, LS2..P46	LS2..M51, LS2..P51	LS2..M54, LS2..P54
ø14 plastic roller lever	ø14 steel roller lever	ø18 plastic roller with bent lever	ø18 steel roller with bent lever	Adjustable ø18 plastic roller lever	Adjustable ø18 steel roller lever
N/A	N/A	N/A	N/A	N/A	N/A

35 mm width

Metal Casing NEMA 4, 4X, 6, IP67

Plastic Casing NEMA 1, IP67 – Double insulation

LS2 ... **B11 - U01**

- M** = Metal casing
- P** = Plastic casing
- 5** = Cable output left / right ^①
- 6** = Cable output bottom

































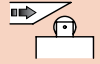





Type	LS2..M11, LS2..P11	LS2..M12, LS2..P12	LS2..M14, LS2..P14	LS2..M21, LS2..P21
Actuator	Brass plain plunger	Steel roller plunger	Cross steel roller plunger	Brass plain plunger with fixing nuts
Action type				
CENELEC Conformity / Positive opening operation	N/A	N/A	N/A	N/A

^① Standard cable length 1m. Other lengths available.

Prewired Miniature Limit Switches

Metal & Plastic

LS2 Series - NEMA 1,4, 4X, IP67

					
LS2..M15, LS2..P15	LS2..M21, LS2..P21	LS2..M22, LS2..P22	LS2..M23, LS2..P23	LS2..M24, LS2..P24	LS2..M25, LS2..P25
Cross plastic roller plunger	Brass plain plunger with fixing nuts	Steel roller plunger with fixing nuts	Plastic roller plunger with fixing nuts	Cross roller plunger with fixing nuts	Cross plastic roller plunger with fixing nuts
					
N/A	N/A	N/A	N/A	N/A	N/A
					
LS2..M71, LS2..P71	LS2..M72, LS2..P72	LS2..M73, LS2..P73	LS2..M78, LS2..P78	LS2..M91, LS2..P91	LS2..M92, LS2..P92
Adjustable ø3 steel rod lever	Adjustable ø3 fibre-glass rod lever	Adjustable ø6 polyamide rod lever	Adjustable ø3 steel rod lever	Spring rod	Flexible rod w/ insulated end
					
N/A	N/A	N/A	N/A	N/A	N/A
					
LS2..M22, LS2..P22	LS2..M24, LS2..P24	LS2..M41, LS2..P41	LS2..M51, LS2..P51	LS2..M71, LS2..P71	LS2..M91, LS2..P91
Steel roller plunger with fixing nuts	Cross steel roller lever with fixing nuts	ø14 Plastic roller lever	Adjustable ø18 plastic roller lever	Adjustable ø3 steel rod lever	Spring rod
					
N/A	N/A	N/A	N/A	N/A	N/A

Limit-less Solutions... INDUSTRIAL

Metal Casing NEMA 4X, IP66

30 mm LS 3 □ M..B11^①

60 mm LS 7 □ M..B11^①

Width

Electrical Connection
 0 = Pg 13.5
 1 = Pg 11
 5 = 1/2" NPT



Type	LS..M11	LS..M12, LS..M13	LS..M14	LS..M31
Actuator	Plain plunger	Roller plunger	Plain plunger	Roller lever
Action type				
CENELEC Conformity / Positive opening operation	EN 50047	EN 50047	EN 50047	EN 50047



LS..M51, LS..M53	LS..M52	LS..M55	LS..M61	LS..M62	LS..M71, LS..M72
Adjustable roller lever	Adjustable roller lever	Adjustable roller lever	Flexible lever	Flexible lever	Adjustable rod lever
N/A	N/A	N/A	N/A	N/A	N/A

Metal Casing NEMA 4X, IP66

40 mm LS 4 □ M..B11^①

Width

Electrical Connection
 0 = Pg 13.5
 5 = 1/2" NPT



Type	LS..M11	LS..M13	LS..M21	LS..M22	LS..M31
Actuator	Plain plunger	Roller plunger	Plain plunger	Roller plunger	Roller lever
Action type					
CENELEC Conformity / Positive opening operation	EN 50041	EN 50041	EN 50041	EN 50041	N/A

① B11 = 1NO + 1NC Snap action contacts. For other contact configurations available, consult ABB.

Metal Casing Limit Switches

LS..M.. Series - NEMA 4X, IP66



LS..M32

LS..M35

LS..M38

LS..M41, LS..M43

LS..M42

LS..M45, LS..M46

Roller lever

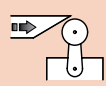
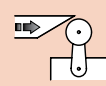
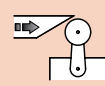
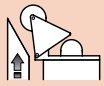
Roller lever

Roller lever

Roller lever

Roller lever

Roller lever



N/A

EN 50047

N/A

EN 50047

N/A

N/A



LS..M73

LS..M74

LS..M78

LS..M91

LS..M92

LS..M98B11-A

Adjustable rod lever

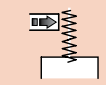
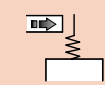
Adjustable rod lever

Adjustable rod lever

Flexible rod

Flexible rod

Pull action



N/A

N/A

N/A

N/A

N/A

N/A



LS..M41

LS..M51

LS..M54

LS..M61

LS..M72

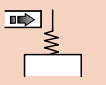
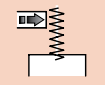
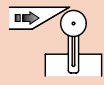
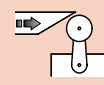
LS..M91

Roller lever

Adjustable roller levers

Adjustable flexible and rigid rod levers

Flexible rod



EN 50041

N/A

N/A

N/A

EN 50041

N/A

Limit-less Solutions... ECONOMICAL

Plastic Casing NEMA 4, IP65 - Double Insulation □

30 mm LS 3 □ P..B11 ①
60 mm LS 7 □ P..B11 ①
Width

Electrical Connection
 0 = Pg 13.5
 1 = Pg 11
 5 = 1/2" NPT



Type	LS..P10, LS..P11	LS..P12, LS..P13	LS..P14	LS..P31
Actuator	Plain plunger	Roller plunger	Plain plunger	Roller lever
Action type				
CENELEC Conformity / Positive opening operation	EN 50047 ↻	EN 50047 ↻	EN 50047 ↻	EN 50047 ↻



LS..P51, LS..P53	LS..P52	LS..P55	LS..P61	LS..P62	LS..P71, LS..P72
Adjustable roller lever	Adjustable roller lever	Adjustable roller lever	Flexible lever	Flexible lever	Adjustable rod lever
N/A ↻	N/A ↻	N/A ↻	N/A ⊗	N/A ⊗	N/A ↻

Plastic Casing NEMA 4, IP65 Double Insulation □

40 mm LS 4 □ P..B11 ①
Width

Electrical Connection
 0 = Pg 13.5
 5 = 1/2" NPT







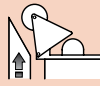























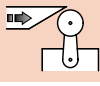







Type	LS..P11	LS..P13	LS..P31	LS..P41
Actuator	Plain plunger	Roller plunger	Roller lever	Roller Lever
Action type				
CENELEC Conformity / Positive opening operation	EN 50041 ↻	EN 50041 ↻	N/A ↻	EN 50041 ↻

① B11 = 1NO + 1NC Snap action contacts. For other contact configurations available, consult ABB.

Plastic Casing Limit Switches

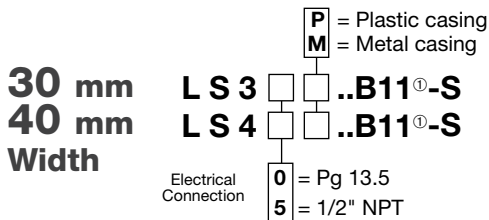
LS..P.. Series - NEMA 4, IP65

					
LS..P32	LS..P35	LS..P38	LS..P41, LS..P43	LS..P42	LS..P45, LS..P46
Roller lever	Roller lever	Roller lever	Roller lever	Roller lever	Roller lever
					
N/A	EN 50047	N/A	EN 50047	N/A	N/A
					
LS..P73	LS..P74	LS..P78	LS..P91	LS..P92	LS..P98B11-A
Adjustable rod lever	Adjustable rod lever	Adjustable rod lever	Flexible rod	Flexible rod	Pull action
					
N/A	N/A	N/A	N/A	N/A	N/A
					
LS..P44	LS..P51	LS..P54	LS..P61	LS..P72	LS..P91
Roller lever	Adjustable roller levers		Adjustable flexible and rigid rod levers		Flexible rod
					
N/A	N/A	N/A	N/A	EN 50041	N/A

Limit-less Solutions... RELIABLE

Key Safety Limit Switches

(Key ordered separately)



Limit Switches	LS3..P80..-S	LS3..M80..-S	LS3..P81..-S	LS3..M81..-S	LS4..P80..-S	LS4..M80..-S
Operating head options:	Adjustable head		Pivoting head		Adjustable head	
Action type: Translation with small latch (key)						
Positive opening operation						

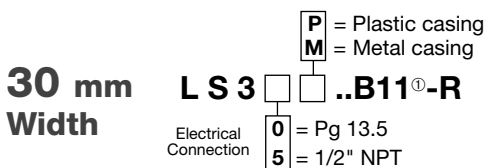
Keys

(required for Key Safety Limit Switches)



Keys for LS3 ...Limit Switches	LSA30P03	LSA30P04	LSA30P05	LSA30P06	LSA30P07	LSA30P08	LSA30P09
Keys for LS4 ...Limit Switches			LSA40X05	LSA40X06	LSA40X07	LSA40X08	LSA40X09
Actuator	Right angle key	Straight key	Right angle key	Straight key	Right angle key + shock absorber	Straight key + shock absorber	Adjustable angle key
Mounting Width	22 mm	22 mm	13 mm	13 mm	15 mm	15 mm	40 mm

Latch and Manual Reset Switches



Type	LS3..P11..-R	LS3..M11..-R	LS3..P12..-R	LS3..M12..-R
Actuator	Galvanized steel plain plunger		Galvanized steel roller plunger	
Action type				
Positive opening operation				

① B11 = 1NO + 1NC Snap action contacts. For other contact configurations available, consult ABB.

Safety and Reset Switches

LS..-S, LS..-R, LS..-SCR Series

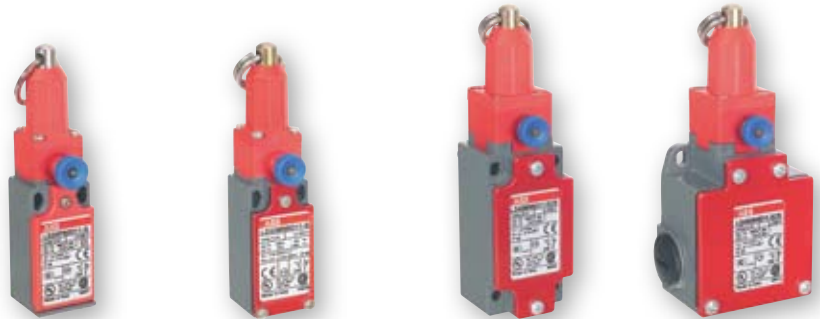
Plastic NEMA 4, IP65 and Metal NEMA 4X, IP66

Pull Cable Safety Limit Switches

30 mm Width **LS 3** P = Plastic casing
M = Metal casing
LS 3 0 = Pg 13.5
5 = 1/2" NPT
..B11[Ⓛ]-SCR

Metal only:
40 mm Width **LS 4** P = Plastic casing
M = Metal casing
LS 4 0 = Pg 13.5
5 = 1/2" NPT
M..B11[Ⓛ]-SCR

60 mm Width **LS 6** P = Plastic casing
M = Metal casing
LS 6 0 = Pg 13.5
5 = 1/2" NPT
M..B11[Ⓛ]-SCR



Limit Switches	LS3..P98..-SCR	LS3..M98..-SCR	LS4..M98..-SCR	LS6..M98..-SCR
Operating head options:	By red cable		By red cable	
Action type: Pulling				
Positive opening operation				

Rotative Axis and Lever Safety Limit Switches

30 mm Width **LS 3** P = Plastic casing
M = Metal casing
LS 3 0 = Pg 13.5
5 = 1/2" NPT
..B11[Ⓛ]-S



Limit Switches	LS3..P75..-S	LS3..M75..-S	LS3..P76..-S	LS3..M76..-S	LS3..P77..-S	LS3..M77..-S
Actuator:	Galvanized steel rotative axis		Stainless steel rotative axis		Galvanized steel lever	
Action type:						
Positive opening operation						



Limit Switches	LS3..P13..-R	LS3..M13..-R	LS3..P31..-R	LS3..M31..-R	LS3..P32..-R	LS3..M32..-R	LS3..P41..-R	LS3..M41..-R
Actuator:	Plastic roller plunger		Plastic roller lever on galvanized steel plunger				Rotary lever with plastic roller	
Action type:								
Positive opening operation								

Ⓛ B11 = 1NO + 1NC Snap action contacts. For other contact configurations available, consult ABB.



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Publication LV122
No. 1SXU 141122B0201
Printed in USA, August, 2008