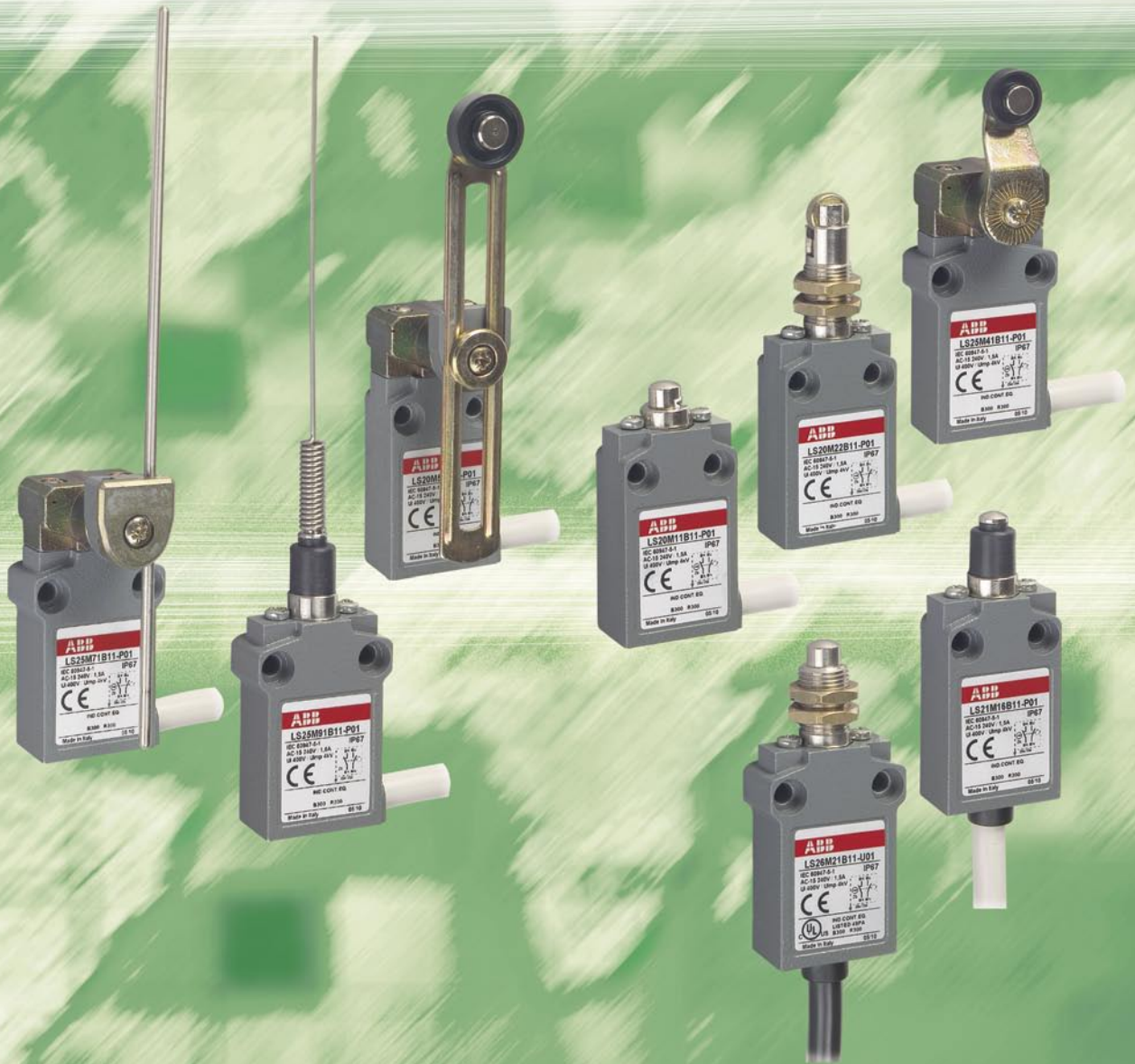


LS 20 Series Pre-Wired Limit Switches





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LS Series Pre-Wired

30 mm width

Metal Casing IP67

Plastic Casing IP67 – Double insulation

LS2 ...

M = Metal casing
P = Plastic casing

0 = Cable output left / right
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	-	-	-	-



LS2..M41, LS2..P41	LS2..M42, LS2..P42	LS2..M45, LS2..P45	LS2..M46, LS2..P46	LS2..M51, LS2..P51	LS2..54, 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
-	-	-	-	-	-

35 mm width

Metal Casing IP67

Plastic Casing IP67 – Double insulation

LS2 ...

M = Metal casing
P = Plastic casing





































5 = Cable output left / right
6 = Cable output bottom



As the range is very large, the products shown there are the most common. The full range can be found on page

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	-	-	-	-

Limit Switches - 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
					
-	-	-	-	-	-
					
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 $\varnothing 3$ steel rod lever	Adjustable $\varnothing 3$ fibre-glass rod lever	Adjustable $\varnothing 6$ polyamide rod lever	Adjustable $\sphericalangle 3$ steel rod lever	Spring rod	Flexible rod with insulated end
					
-	-	-	-	-	-
					
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	$\varnothing 14$ Plastic roller lever	Adjustable $\varnothing 18$ plastic roller lever	Adjustable $\varnothing 3$ steel rod lever	Spring rod
					
-	-	-	-	-	-

LS20M ... LS26M Limit Switches

Metal Casing IP67

Applications

Easy to use, electromechanical limit switches offer specific qualities:

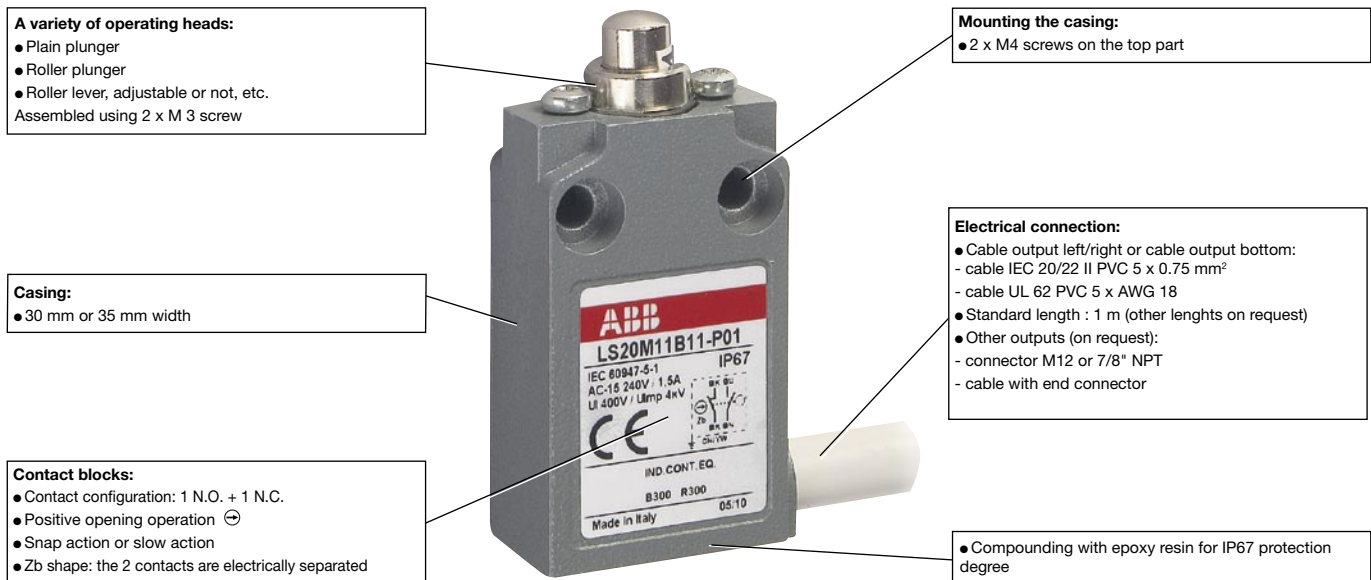
- Visible operation.
- Able to switch strong currents (5 A conventional thermal current).
- Electrically separated contacts (Zb shape).
- Precise operating points (consistency).
- Immune to electromagnetic disturbances.

They are exceptional detection devices thanks to these characteristics:

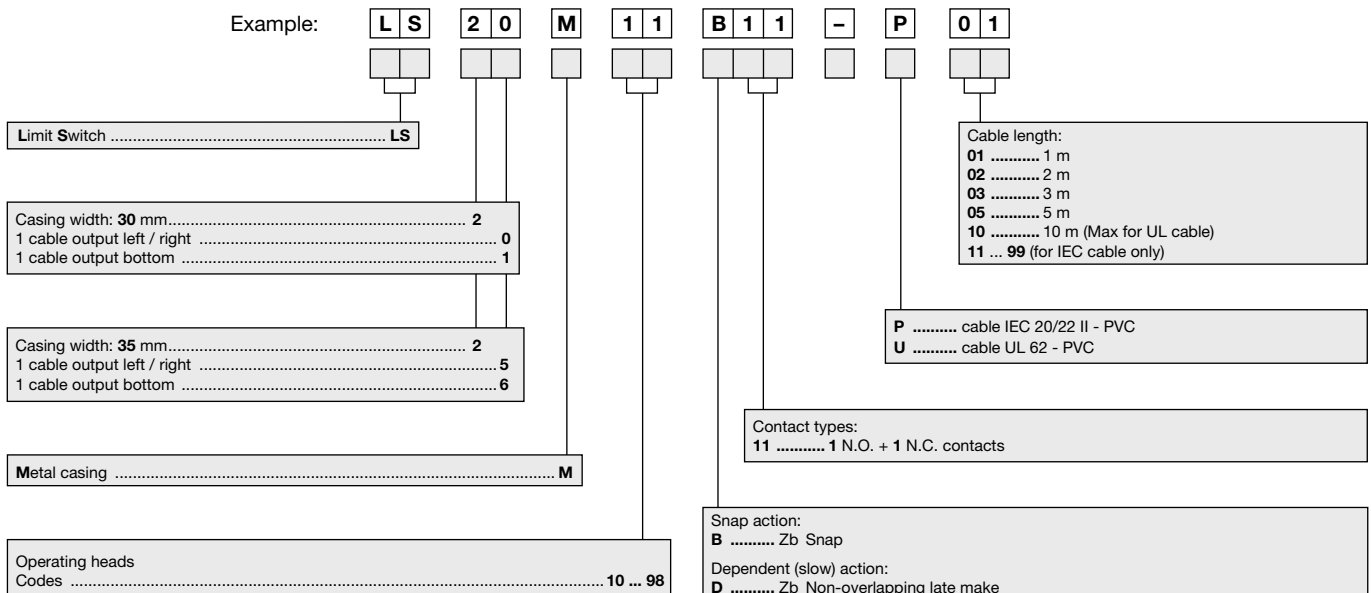
- Presence/absence.
- Positioning and travel limit.
- Objects passing/counting.

Description

These limit switches, made of zinc alloy (zamack), sealed with epoxy resin at the base on the body, offer a degree of protection IP67. The casings come in 2 dimensions: LS20, ... LS21, 30 mm width
LS25, ... LS26, 35 mm width



Type



LS20P ... LS26P Limit Switches

Double insulation - Plastic Casing IP67

Applications

Easy to use, electromechanical limit switches offer specific qualities:

- Visible operation.
- Able to switch strong currents (5 A conventional thermal current).
- Electrically separated contacts (Zb shape).
- Precise operating points (consistency).
- Immune to electromagnetic disturbances.

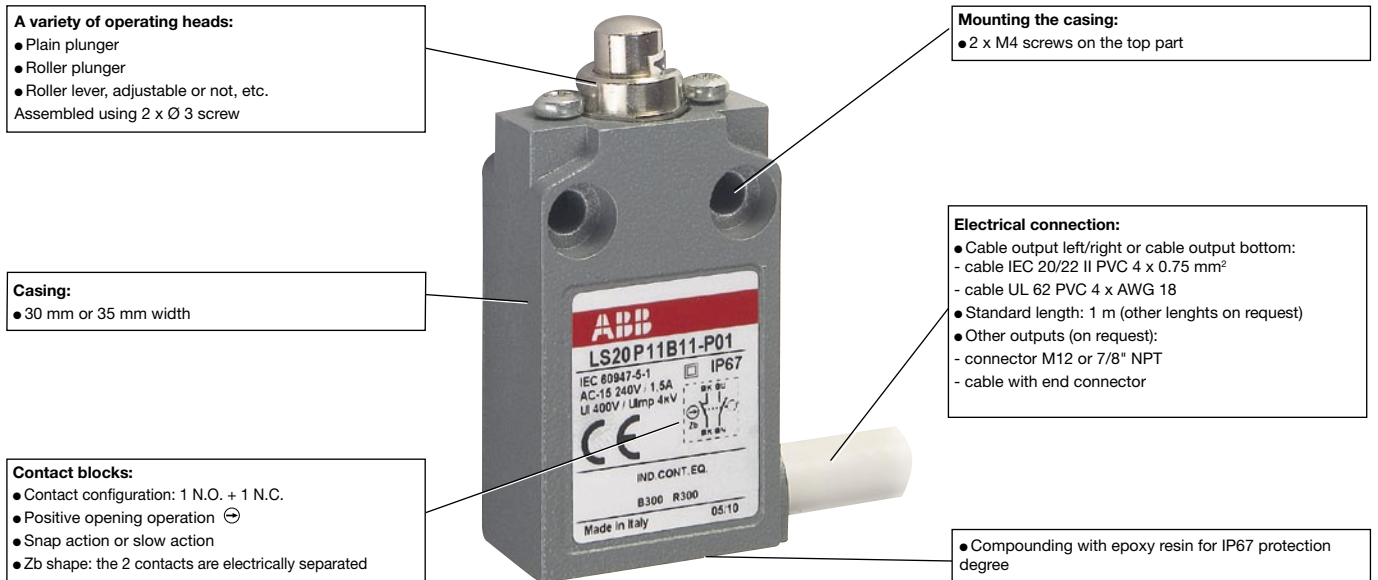
They are exceptional detection devices thanks to these characteristics:

- Presence/absence.
- Positioning and travel limit.
- Objects passing/counting.

Description

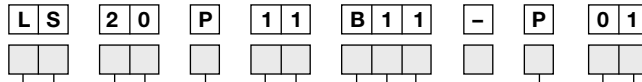
These limit switches, made of fibre-glass reinforced UL-VO thermoplastic material, sealed with epoxy resin at the base on the body, offer double insulation □ and a degree of protection IP67.

The casings come in 2 dimensions: LS20, ... LS21, 30 mm width
LS25, ... LS26, 35 mm width



Type

Example:



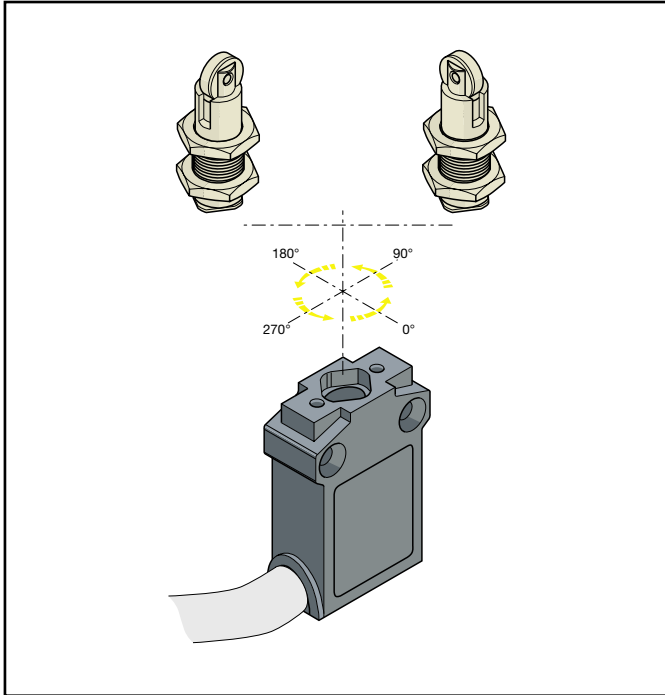
Limit Switch	LS										
Casing width: 30 mm.....	2										
1 cable output left / right	0										
1 cable output bottom	1										
Casing width: 35 mm.....	2										
1 cable output left / right	5										
1 cable output bottom	6										
Plastic casing	P										
Operating heads Codes	10 ... 98										
Cable length:	01	1 m									
	02	2 m									
	03	3 m									
	05	5 m									
	10	10 m (Max for UL cable)									
	11 ... 99	(for IEC cable only)									
P	cable IEC 20/22 II - PVC										
U	cable UL 62 - PVC										
Contact types:	11	1 N.O. + 1 N.C. contacts									
Snap action:	B	Zb Snap									
Dependent (slow) action:	D	Zb Non-overlapping late make									

LS20 ... LS26 Limit Switches

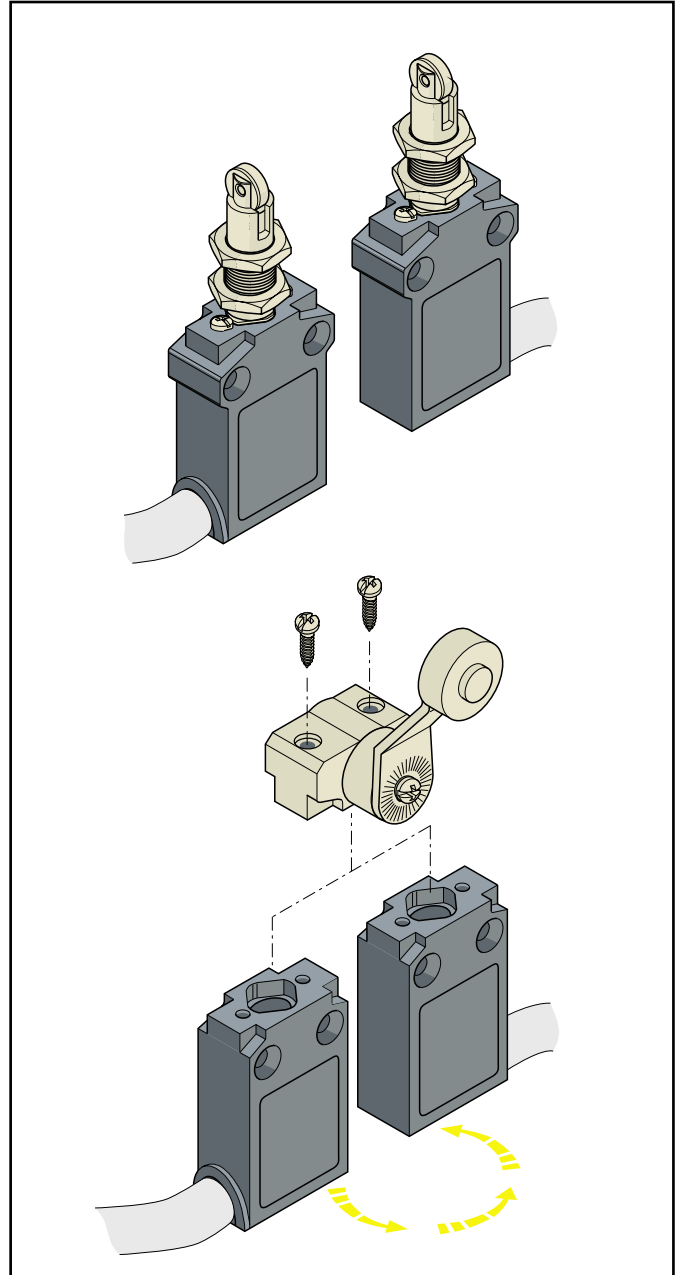
Plastic or Metal Casings IP 67

Implementation

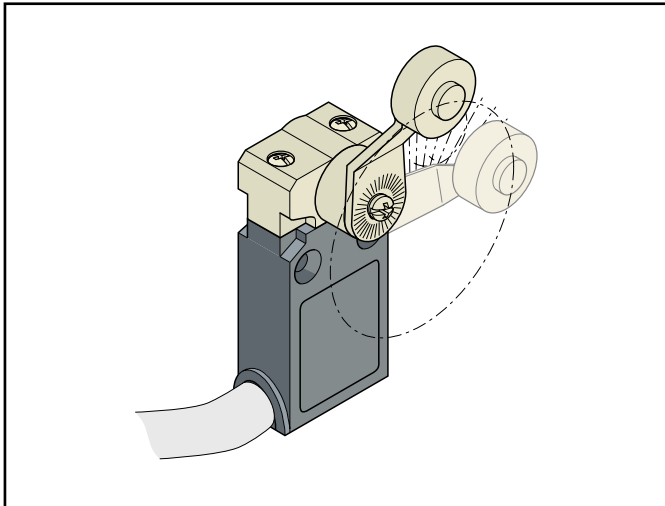
● Head orientation



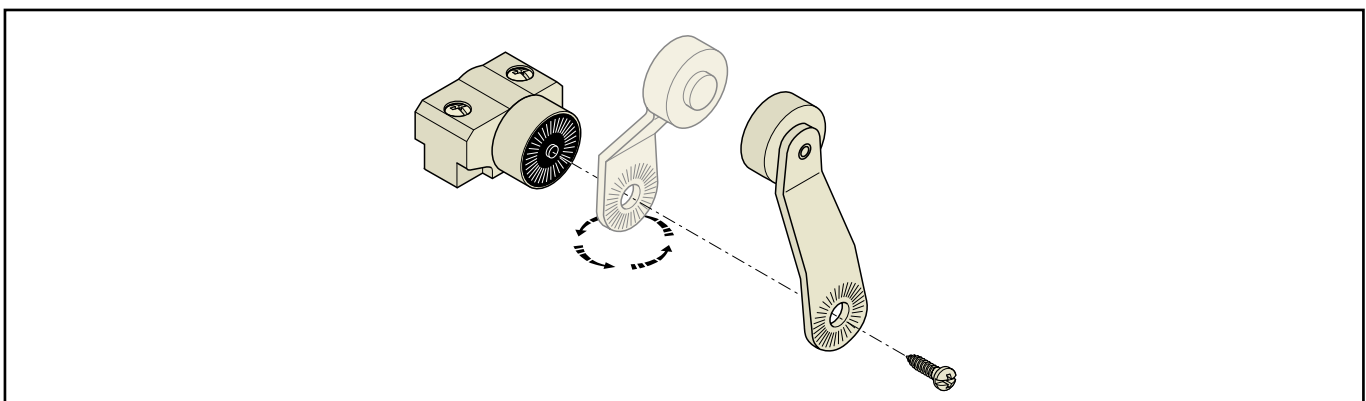
● Body round turning



● Free position adjustment 10° in 10° of the lever



● Lever round turning



LS2..M.. Limit Switches

Metal Casing IP 67 - 30 mm and 35 mm Width



LS20M : 1 cable output left / right	0	5	5
LS21M : 1 cable output bottom	1	5	6
LS25M : 1 cable output left / right	5	6	3
LS26M : 1 cable output bottom	6	6	4

Ordering Details

Contact blocks	Type	Order code	Weight kg (1)(2)	Pack ^{ing} 1 piece
 B11	state cable output code	state cable output code		
 D11				

Brass plain plunger (nickel plated)

1	-	LS2 □ M11B11-P □ □	1SBV01 □ □ 11R20 □ □	0.175
1	-	LS2 □ M11B11-U □ □	1SBV01 □ □ 11R26 □ □	0.175
-	1	LS2 □ M11D11-P □ □	1SBV01 □ □ 11R21 □ □	0.175
-	1	LS2 □ M11D11-U □ □	1SBV01 □ □ 11R27 □ □	0.175

Steel roller plunger (zinc plated)

1	-	LS2 □ M12B11-P □ □	1SBV01 □ □ 12R20 □ □	0.180
1	-	LS2 □ M12B11-U □ □	1SBV01 □ □ 12R26 □ □	0.180
-	1	LS2 □ M12D11-P □ □	1SBV01 □ □ 12R21 □ □	0.180
-	1	LS2 □ M12D11-U □ □	1SBV01 □ □ 12R27 □ □	0.180

Plastic (polyacetal) roller plunger

1	-	LS2 □ M13B11-P □ □	1SBV01 □ □ 13R20 □ □	0.180
1	-	LS2 □ M13B11-U □ □	1SBV01 □ □ 13R26 □ □	0.180
-	1	LS2 □ M13D11-P □ □	1SBV01 □ □ 13R21 □ □	0.180
-	1	LS2 □ M13D11-U □ □	1SBV01 □ □ 13R27 □ □	0.180

Cross steel roller plunger (zinc plated)

1	-	LS2 □ M14B11-P □ □	1SBV01 □ □ 14R20 □ □	0.180
1	-	LS2 □ M14B11-U □ □	1SBV01 □ □ 14R26 □ □	0.180
-	1	LS2 □ M14D11-P □ □	1SBV01 □ □ 14R21 □ □	0.180
-	1	LS2 □ M14D11-U □ □	1SBV01 □ □ 14R27 □ □	0.180

Cross plastic (polyacetal) roller plunger

1	-	LS2 □ M15B11-P □ □	1SBV01 □ □ 15R20 □ □	0.180
1	-	LS2 □ M15B11-U □ □	1SBV01 □ □ 15R26 □ □	0.180
-	1	LS2 □ M15D11-P □ □	1SBV01 □ □ 15R21 □ □	0.180
-	1	LS2 □ M15D11-U □ □	1SBV01 □ □ 15R27 □ □	0.180

Brass plain plunger (nickel plated) with dust protection

1	-	LS2 □ M16B11-P □ □	1SBV01 □ □ 16R20 □ □	0.175
1	-	LS2 □ M16B11-U □ □	1SBV01 □ □ 16R26 □ □	0.175
-	1	LS2 □ M16D11-P □ □	1SBV01 □ □ 16R21 □ □	0.175
-	1	LS2 □ M16D11-U □ □	1SBV01 □ □ 16R27 □ □	0.175

Brass plain plunger (nickel plated) with fixing nuts

1	-	LS2 □ M21B11-P □ □	1SBV01 □ □ 21R20 □ □	0.190
1	-	LS2 □ M21B11-U □ □	1SBV01 □ □ 21R26 □ □	0.190
-	1	LS2 □ M21D11-P □ □	1SBV01 □ □ 21R21 □ □	0.190
-	1	LS2 □ M21D11-U □ □	1SBV01 □ □ 21R27 □ □	0.190

(1) For LS25 & LS26 (add extra 0.005 kg)
 (2) With 1 m of cable (add 0.1 kg by extra meter length).

Length cable code

Cable length	Code	Code
	□ □	□ □
1 m	0 1	0 1
2 m	0 2	0 2
5 m	0 5	0 5
10 m	1 0	1 0

Other length on request.

Note : -P □ □ = cable IEC 20/22 II PVC, -U □ □ = cable UL 62 PVC maxi. 10 m

LS2..M.. Limit Switches

Metal Casing IP 67 - 30 mm and 35 mm Width



LS20M : 1 cable output left / right 0 5 5
 LS21M : 1 cable output bottom 1 5 6
 LS25M : 1 cable output left / right 5 6 3
 LS26M : 1 cable output bottom 6 6 4

Ordering Details

Contact blocks	Type	Order code	Weight kg (1)(2)	Pack ^{ing} 1 piece
 B11	 D11	see table below state cable output code <input type="checkbox"/> <input type="checkbox"/>	see table below state cable output code <input type="checkbox"/> <input type="checkbox"/>	

Steel roller plunger (zinc plated) with fixing nuts

1	-	LS2 <input type="checkbox"/> M22B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 22R20 <input type="checkbox"/> <input type="checkbox"/>	0.195
1	-	LS2 <input type="checkbox"/> M22B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 22R26 <input type="checkbox"/> <input type="checkbox"/>	0.195
-	1	LS2 <input type="checkbox"/> M22D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 22R21 <input type="checkbox"/> <input type="checkbox"/>	0.195
-	1	LS2 <input type="checkbox"/> M22D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 22R27 <input type="checkbox"/> <input type="checkbox"/>	0.195

Plastic (polyacetal) roller plunger with fixing nuts

1	-	LS2 <input type="checkbox"/> M23B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 23R20 <input type="checkbox"/> <input type="checkbox"/>	0.195
1	-	LS2 <input type="checkbox"/> M23B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 23R26 <input type="checkbox"/> <input type="checkbox"/>	0.195
-	1	LS2 <input type="checkbox"/> M23D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 23R21 <input type="checkbox"/> <input type="checkbox"/>	0.195
-	1	LS2 <input type="checkbox"/> M23D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 23R27 <input type="checkbox"/> <input type="checkbox"/>	0.195

Cross steel roller plunger (zinc plated) with fixing nuts

1	-	LS2 <input type="checkbox"/> M24B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 24R20 <input type="checkbox"/> <input type="checkbox"/>	0.195
1	-	LS2 <input type="checkbox"/> M24B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 24R26 <input type="checkbox"/> <input type="checkbox"/>	0.195
-	1	LS2 <input type="checkbox"/> M24D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 24R21 <input type="checkbox"/> <input type="checkbox"/>	0.195
-	1	LS2 <input type="checkbox"/> M24D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 24R27 <input type="checkbox"/> <input type="checkbox"/>	0.195

Cross plastic (polyacetal) roller plunger with fixing nuts

1	-	LS2 <input type="checkbox"/> M25B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 25R20 <input type="checkbox"/> <input type="checkbox"/>	0.195
1	-	LS2 <input type="checkbox"/> M25B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 25R26 <input type="checkbox"/> <input type="checkbox"/>	0.195
-	1	LS2 <input type="checkbox"/> M25D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 25R21 <input type="checkbox"/> <input type="checkbox"/>	0.195
-	1	LS2 <input type="checkbox"/> M25D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 25R27 <input type="checkbox"/> <input type="checkbox"/>	0.195

Ø 14 plastic (polyacetal) roller lever

1	-	LS2 <input type="checkbox"/> M41B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 41R20 <input type="checkbox"/> <input type="checkbox"/>	0.225
1	-	LS2 <input type="checkbox"/> M41B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 41R26 <input type="checkbox"/> <input type="checkbox"/>	0.225
-	1	LS2 <input type="checkbox"/> M41D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 41R21 <input type="checkbox"/> <input type="checkbox"/>	0.225
-	1	LS2 <input type="checkbox"/> M41D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 41R27 <input type="checkbox"/> <input type="checkbox"/>	0.225

Ø 14 steel roller lever (zinc plated)

1	-	LS2 <input type="checkbox"/> M42B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 42R20 <input type="checkbox"/> <input type="checkbox"/>	0.225
1	-	LS2 <input type="checkbox"/> M42B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 42R26 <input type="checkbox"/> <input type="checkbox"/>	0.225
-	1	LS2 <input type="checkbox"/> M42D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 42R21 <input type="checkbox"/> <input type="checkbox"/>	0.225
-	1	LS2 <input type="checkbox"/> M42D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 42R27 <input type="checkbox"/> <input type="checkbox"/>	0.225

Ø 14 ball bearing roller lever

1	-	LS2 <input type="checkbox"/> M43B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 43R20 <input type="checkbox"/> <input type="checkbox"/>	0.225
1	-	LS2 <input type="checkbox"/> M43B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 43R26 <input type="checkbox"/> <input type="checkbox"/>	0.225
-	1	LS2 <input type="checkbox"/> M43D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 43R21 <input type="checkbox"/> <input type="checkbox"/>	0.225
-	1	LS2 <input type="checkbox"/> M43D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 43R27 <input type="checkbox"/> <input type="checkbox"/>	0.225

(1) For LS25 & LS26 (add extra 0.005 kg)
 (2) With 1 m of cable (add 0.1 kg by extra meter length).

Length cable code

Cable length	Code	Code
	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
1 m	0 1	0 1
2 m	0 2	0 2
5 m	0 5	0 5
10 m	1 0	1 0

Other length on request.

Note : -P = cable IEC 20/22 II PVC, -U = cable UL 62 PVC maxi. 10 m

LS2..M.. Limit Switches

Metal Casing IP 67 - 30 mm and 35 mm Width



LS20M : 1 cable output left / right	0	5	5
LS21M : 1 cable output bottom	1	5	6
LS25M : 1 cable output left / right	5	6	3
LS26M : 1 cable output bottom	6	6	4

Ordering Details

Contact blocks	Type	Order code	Weight kg (1)(2)	Pack ^{ing} 1 piece
 B11	 D11	state cable output code <input type="checkbox"/> <input type="checkbox"/>	state cable output code <input type="checkbox"/> <input type="checkbox"/>	

Ø 18 plastic (polyacetal) roller with bent lever

1	-	LS2 <input type="checkbox"/> M45B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 45R20 <input type="checkbox"/> <input type="checkbox"/>	0.230
1	-	LS2 <input type="checkbox"/> M45B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 45R26 <input type="checkbox"/> <input type="checkbox"/>	0.230
-	1	LS2 <input type="checkbox"/> M45D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 45R21 <input type="checkbox"/> <input type="checkbox"/>	0.230
-	1	LS2 <input type="checkbox"/> M45D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 45R27 <input type="checkbox"/> <input type="checkbox"/>	0.230

Ø 18 steel roller (zinc plated) with bent lever

1	-	LS2 <input type="checkbox"/> M46B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 46R20 <input type="checkbox"/> <input type="checkbox"/>	0.230
1	-	LS2 <input type="checkbox"/> M46B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 46R26 <input type="checkbox"/> <input type="checkbox"/>	0.230
-	1	LS2 <input type="checkbox"/> M46D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 46R21 <input type="checkbox"/> <input type="checkbox"/>	0.230
-	1	LS2 <input type="checkbox"/> M46D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 46R27 <input type="checkbox"/> <input type="checkbox"/>	0.230

Ø 19 ball bearing roller with bent lever

1	-	LS2 <input type="checkbox"/> M47B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 47R20 <input type="checkbox"/> <input type="checkbox"/>	0.230
1	-	LS2 <input type="checkbox"/> M47B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 47R26 <input type="checkbox"/> <input type="checkbox"/>	0.230
-	1	LS2 <input type="checkbox"/> M47D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 47R21 <input type="checkbox"/> <input type="checkbox"/>	0.230
-	1	LS2 <input type="checkbox"/> M47D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 47R27 <input type="checkbox"/> <input type="checkbox"/>	0.230

Adjustable Ø 18 plastic (polyacetal) roller lever

1	-	LS2 <input type="checkbox"/> M51B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 51R20 <input type="checkbox"/> <input type="checkbox"/>	0.240
1	-	LS2 <input type="checkbox"/> M51B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 51R26 <input type="checkbox"/> <input type="checkbox"/>	0.240
-	1	LS2 <input type="checkbox"/> M51D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 51R21 <input type="checkbox"/> <input type="checkbox"/>	0.240
-	1	LS2 <input type="checkbox"/> M51D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 51R27 <input type="checkbox"/> <input type="checkbox"/>	0.240

Adjustable Ø 19 ball bearing roller lever

1	-	LS2 <input type="checkbox"/> M53B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 53R20 <input type="checkbox"/> <input type="checkbox"/>	0.240
1	-	LS2 <input type="checkbox"/> M53B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 53R26 <input type="checkbox"/> <input type="checkbox"/>	0.240
-	1	LS2 <input type="checkbox"/> M53D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 53R21 <input type="checkbox"/> <input type="checkbox"/>	0.240
-	1	LS2 <input type="checkbox"/> M53D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 53R27 <input type="checkbox"/> <input type="checkbox"/>	0.240

Adjustable Ø 18 steel roller lever (zinc plated)

1	-	LS2 <input type="checkbox"/> M54B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 54R20 <input type="checkbox"/> <input type="checkbox"/>	0.240
1	-	LS2 <input type="checkbox"/> M54B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 54R26 <input type="checkbox"/> <input type="checkbox"/>	0.240
-	1	LS2 <input type="checkbox"/> M54D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 54R21 <input type="checkbox"/> <input type="checkbox"/>	0.240
-	1	LS2 <input type="checkbox"/> M54D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 54R27 <input type="checkbox"/> <input type="checkbox"/>	0.240

Adjustable Ø 3 stainless steel rod lever

1	-	LS2 <input type="checkbox"/> M71B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 71R20 <input type="checkbox"/> <input type="checkbox"/>	0.235
1	-	LS2 <input type="checkbox"/> M71B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 71R26 <input type="checkbox"/> <input type="checkbox"/>	0.235
-	1	LS2 <input type="checkbox"/> M71D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 71R21 <input type="checkbox"/> <input type="checkbox"/>	0.235
-	1	LS2 <input type="checkbox"/> M71D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 71R27 <input type="checkbox"/> <input type="checkbox"/>	0.235

(1) For LS25 & LS26 (add extra 0.005 kg)
 (2) With 1 m of cable (add 0.1 kg by extra meter length).

Length cable code

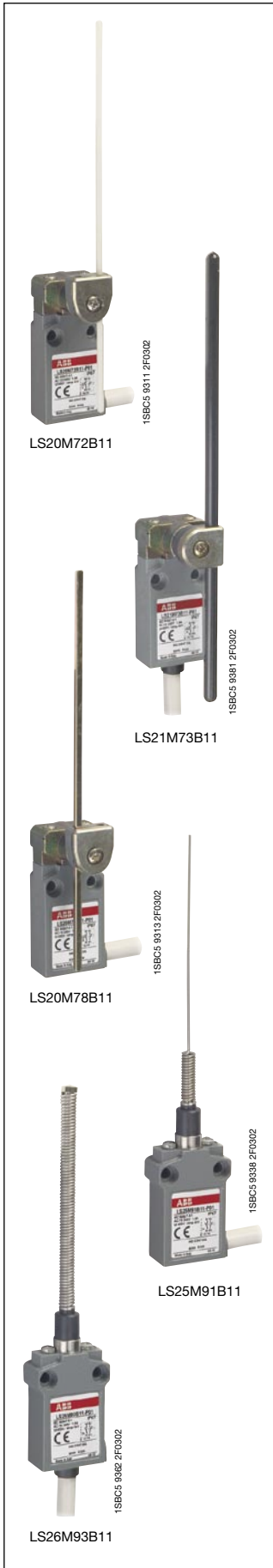
Cable length	Code	Code
1 m	0 1	0 1
2 m	0 2	0 2
5 m	0 5	0 5
10 m	1 0	1 0

Other length on request.

Note : -P = cable IEC 20/22 II PVC, -U = cable UL 62 PVC maxi. 10 m

LS2..M.. Limit Switches

Metal Casing IP 67 - 30 mm and 35 mm Width



LS20M : 1 cable output left / right	0	5	5
LS21M : 1 cable output bottom	1	5	6
LS25M : 1 cable output left / right	5	6	3
LS26M : 1 cable output bottom	6	6	4

Ordering Details

Contact blocks	Type	Order code	Weight kg (1)(2)	Pack ^{ing}
 B11	state cable output code <input type="checkbox"/>	state cable output code <input type="checkbox"/> <input type="checkbox"/>		1 piece
 D11	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		

Adjustable Ø 3 fibre-glass rod lever

1	-	LS2 <input type="checkbox"/> M72B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 72R20 <input type="checkbox"/> <input type="checkbox"/>	0.235
1	-	LS2 <input type="checkbox"/> M72B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 72R26 <input type="checkbox"/> <input type="checkbox"/>	0.235
-	1	LS2 <input type="checkbox"/> M72D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 72R21 <input type="checkbox"/> <input type="checkbox"/>	0.235
-	1	LS2 <input type="checkbox"/> M72D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 72R27 <input type="checkbox"/> <input type="checkbox"/>	0.235

Adjustable Ø 6 polyamide rod lever

1	-	LS2 <input type="checkbox"/> M73B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 73R20 <input type="checkbox"/> <input type="checkbox"/>	0.250
1	-	LS2 <input type="checkbox"/> M73B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 73R26 <input type="checkbox"/> <input type="checkbox"/>	0.250
-	1	LS2 <input type="checkbox"/> M73D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 73R21 <input type="checkbox"/> <input type="checkbox"/>	0.250
-	1	LS2 <input type="checkbox"/> M73D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 73R27 <input type="checkbox"/> <input type="checkbox"/>	0.250

Adjustable Ø 6 fibre-glass rod lever

1	-	LS2 <input type="checkbox"/> M74B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 74R20 <input type="checkbox"/> <input type="checkbox"/>	0.250
1	-	LS2 <input type="checkbox"/> M74B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 74R26 <input type="checkbox"/> <input type="checkbox"/>	0.250
-	1	LS2 <input type="checkbox"/> M74D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 74R21 <input type="checkbox"/> <input type="checkbox"/>	0.250
-	1	LS2 <input type="checkbox"/> M74D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 74R27 <input type="checkbox"/> <input type="checkbox"/>	0.250

Adjustable 3 square steel rod lever (zinc plated)

1	-	LS2 <input type="checkbox"/> M78B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 78R20 <input type="checkbox"/> <input type="checkbox"/>	0.235
1	-	LS2 <input type="checkbox"/> M78B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 78R26 <input type="checkbox"/> <input type="checkbox"/>	0.235
-	1	LS2 <input type="checkbox"/> M78D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 78R21 <input type="checkbox"/> <input type="checkbox"/>	0.235
-	1	LS2 <input type="checkbox"/> M78D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 78R27 <input type="checkbox"/> <input type="checkbox"/>	0.235

Spring rod

1	-	LS2 <input type="checkbox"/> M91B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 91R20 <input type="checkbox"/> <input type="checkbox"/>	0.240
1	-	LS2 <input type="checkbox"/> M91B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 91R26 <input type="checkbox"/> <input type="checkbox"/>	0.240
-	1	LS2 <input type="checkbox"/> M91D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 91R21 <input type="checkbox"/> <input type="checkbox"/>	0.240
-	1	LS2 <input type="checkbox"/> M91D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 91R27 <input type="checkbox"/> <input type="checkbox"/>	0.240

Flexible rod with insulated end

1	-	LS2 <input type="checkbox"/> M92B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 92R20 <input type="checkbox"/> <input type="checkbox"/>	0.245
1	-	LS2 <input type="checkbox"/> M92B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 92R26 <input type="checkbox"/> <input type="checkbox"/>	0.245
-	1	LS2 <input type="checkbox"/> M92D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 92R21 <input type="checkbox"/> <input type="checkbox"/>	0.245
-	1	LS2 <input type="checkbox"/> M92D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 92R27 <input type="checkbox"/> <input type="checkbox"/>	0.245

Coil spring rod

1	-	LS2 <input type="checkbox"/> M93B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 93R20 <input type="checkbox"/> <input type="checkbox"/>	0.250
1	-	LS2 <input type="checkbox"/> M93B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 93R26 <input type="checkbox"/> <input type="checkbox"/>	0.250
-	1	LS2 <input type="checkbox"/> M93D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 93R21 <input type="checkbox"/> <input type="checkbox"/>	0.250
-	1	LS2 <input type="checkbox"/> M93D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 93R27 <input type="checkbox"/> <input type="checkbox"/>	0.250

(1) For LS25 & LS26 (add extra 0.005 kg)

(2) With 1 m of cable (add 0.1 kg by extra meter length).

Length cable code

Cable length	Code	Code
	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
1 m	0 1	0 1
2 m	0 2	0 2
5 m	0 5	0 5
10 m	1 0	1 0

Other length on request.

Note : -P = cable IEC 20/22 II PVC, -U = cable UL 62 PVC maxi. 10 m

LS2..P.. Limit Switches

Double insulation - Plastic Casing IP 67
30 mm and 35 mm Width



LS20P : 1 cable output left / right 0 5 9
 LS21P : 1 cable output bottom 1 6 0
 LS25P : 1 cable output left / right 5 6 7
 LS26P : 1 cable output bottom 6 6 8

Ordering Details

Contact blocks	Type	Order code	Weight kg (1)(2)
 B11	 D11	see table below state cable output code see table below state cable output code	Pack ^{ing} 1 piece

Brass plain plunger (nickel plated)

1	-	LS2 □ P11B11-P □ □	1SBV01 □ □ 11R32 □ □	0.125
1	-	LS2 □ P11B11-U □ □	1SBV01 □ □ 11R38 □ □	0.125
-	1	LS2 □ P11D11-P □ □	1SBV01 □ □ 11R33 □ □	0.125
-	1	LS2 □ P11D11-U □ □	1SBV01 □ □ 11R39 □ □	0.125

Steel roller plunger (zinc plated)

1	-	LS2 □ P12B11-P □ □	1SBV01 □ □ 12R32 □ □	0.130
1	-	LS2 □ P12B11-U □ □	1SBV01 □ □ 12R38 □ □	0.130
-	1	LS2 □ P12D11-P □ □	1SBV01 □ □ 12R33 □ □	0.130
-	1	LS2 □ P12D11-U □ □	1SBV01 □ □ 12R39 □ □	0.130

Plastic (polyacetal) roller plunger

1	-	LS2 □ P13B11-P □ □	1SBV01 □ □ 13R32 □ □	0.130
1	-	LS2 □ P13B11-U □ □	1SBV01 □ □ 13R38 □ □	0.130
-	1	LS2 □ P13D11-P □ □	1SBV01 □ □ 13R33 □ □	0.130
-	1	LS2 □ P13D11-U □ □	1SBV01 □ □ 13R39 □ □	0.130

Cross steel roller plunger (zinc plated)

1	-	LS2 □ P14B11-P □ □	1SBV01 □ □ 14R32 □ □	0.130
1	-	LS2 □ P14B11-U □ □	1SBV01 □ □ 14R38 □ □	0.130
-	1	LS2 □ P14D11-P □ □	1SBV01 □ □ 14R33 □ □	0.130
-	1	LS2 □ P14D11-U □ □	1SBV01 □ □ 14R39 □ □	0.130

Cross plastic (polyacetal) roller plunger

1	-	LS2 □ P15B11-P □ □	1SBV01 □ □ 15R32 □ □	0.130
1	-	LS2 □ P15B11-U □ □	1SBV01 □ □ 15R38 □ □	0.130
-	1	LS2 □ P15D11-P □ □	1SBV01 □ □ 15R33 □ □	0.130
-	1	LS2 □ P15D11-U □ □	1SBV01 □ □ 15R39 □ □	0.130

Brass plunger (nickel plated) with dust protection

1	-	LS2 □ P16B11-P □ □	1SBV01 □ □ 16R32 □ □	0.125
1	-	LS2 □ P16B11-U □ □	1SBV01 □ □ 16R38 □ □	0.125
-	1	LS2 □ P16D11-P □ □	1SBV01 □ □ 16R33 □ □	0.125
-	1	LS2 □ P16D11-U □ □	1SBV01 □ □ 16R39 □ □	0.125

Brass plain plunger (nickel plated) with fixing nuts

1	-	LS2 □ P21B11-P □ □	1SBV01 □ □ 21R32 □ □	0.140
1	-	LS2 □ P21B11-U □ □	1SBV01 □ □ 21R38 □ □	0.140
-	1	LS2 □ P21D11-P □ □	1SBV01 □ □ 21R33 □ □	0.140
-	1	LS2 □ P21D11-U □ □	1SBV01 □ □ 21R39 □ □	0.140

(1) With LS25 & LS26 (add extra 0.005 kg)

(2) With 1 m of cable (add 0.07 kg by extra meter length).

Length cable code

Cable length	Code	Code
	□ □	□ □
1 m	0 1	0 1
2 m	0 2	0 2
5 m	0 5	0 5
10 m	1 0	1 0

Other length on request.

Note : -P □ □ = cable IEC 20/22 II PVC, -U □ □ = cable UL 62 PVC maxi. 10 m

LS2..P.. Limit Switches

Double insulation - Plastic Casing IP 67
30 mm and 35 mm Width



LS20P : 1 cable output left / right	0	5	9
LS21P : 1 cable output bottom	1	6	0
LS25P : 1 cable output left / right	5	6	7
LS26P : 1 cable output bottom	6	6	8

Ordering Details

Contact blocks	Type	Order code	Weight kg (1)(2)	Pack ^{ing}
 B11	state cable output code <input type="checkbox"/>	state cable output code <input type="checkbox"/>		1 piece
 D11	<input type="checkbox"/>	<input type="checkbox"/>		

Steel roller plunger (zinc plated) with fixing nuts

1	-	LS2 <input type="checkbox"/> P22B11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 22R32 <input type="checkbox"/>	0.145
1	-	LS2 <input type="checkbox"/> P22B11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 22R38 <input type="checkbox"/>	0.145
-	1	LS2 <input type="checkbox"/> P22D11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 22R33 <input type="checkbox"/>	0.145
-	1	LS2 <input type="checkbox"/> P22D11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 22R39 <input type="checkbox"/>	0.145

Plastic (polyacetal) roller plunger with fixing nuts

1	-	LS2 <input type="checkbox"/> P23B11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 23R32 <input type="checkbox"/>	0.145
1	-	LS2 <input type="checkbox"/> P23B11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 23R38 <input type="checkbox"/>	0.145
-	1	LS2 <input type="checkbox"/> P23D11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 23R33 <input type="checkbox"/>	0.145
-	1	LS2 <input type="checkbox"/> P23D11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 23R39 <input type="checkbox"/>	0.145

Cross steel roller plunger (zinc plated) with fixing nuts

1	-	LS2 <input type="checkbox"/> P24B11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 24R32 <input type="checkbox"/>	0.145
1	-	LS2 <input type="checkbox"/> P24B11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 24R38 <input type="checkbox"/>	0.145
-	1	LS2 <input type="checkbox"/> P24D11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 24R33 <input type="checkbox"/>	0.145
-	1	LS2 <input type="checkbox"/> P24D11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 24R39 <input type="checkbox"/>	0.145

Cross plastic (polyacetal) roller plunger with fixing nuts

1	-	LS2 <input type="checkbox"/> P25B11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 25R32 <input type="checkbox"/>	0.145
1	-	LS2 <input type="checkbox"/> P25B11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 25R38 <input type="checkbox"/>	0.145
-	1	LS2 <input type="checkbox"/> P25D11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 25R33 <input type="checkbox"/>	0.145
-	1	LS2 <input type="checkbox"/> P25D11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 25R39 <input type="checkbox"/>	0.145

Ø 14 plastic (polyacetal) roller lever

1	-	LS2 <input type="checkbox"/> P41B11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 41R32 <input type="checkbox"/>	0.175
1	-	LS2 <input type="checkbox"/> P41B11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 41R38 <input type="checkbox"/>	0.175
-	1	LS2 <input type="checkbox"/> P41D11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 41R33 <input type="checkbox"/>	0.175
-	1	LS2 <input type="checkbox"/> P41D11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 41R39 <input type="checkbox"/>	0.175

Ø 14 steel roller lever (zinc plated)

1	-	LS2 <input type="checkbox"/> P42B11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 42R32 <input type="checkbox"/>	0.175
1	-	LS2 <input type="checkbox"/> P42B11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 42R38 <input type="checkbox"/>	0.175
-	1	LS2 <input type="checkbox"/> P42D11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 42R33 <input type="checkbox"/>	0.175
-	1	LS2 <input type="checkbox"/> P42D11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 42R39 <input type="checkbox"/>	0.175

Ø 14 ball bearing roller lever

1	-	LS2 <input type="checkbox"/> P43B11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 43R32 <input type="checkbox"/>	0.175
1	-	LS2 <input type="checkbox"/> P43B11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 43R38 <input type="checkbox"/>	0.175
-	1	LS2 <input type="checkbox"/> P43D11-P <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 43R33 <input type="checkbox"/>	0.175
-	1	LS2 <input type="checkbox"/> P43D11-U <input type="checkbox"/>	1SBV01 <input type="checkbox"/> 43R39 <input type="checkbox"/>	0.175

(1) For LS25 & LS26 (add extra 0.005 kg)
(2) With 1 m of cable (add 0.07 kg by extra meter length).

Length cable code

Cable length	Code	Code
1 m	0 1	0 1
2 m	0 2	0 2
5 m	0 5	0 5
10 m	1 0	1 0

Other length on request.

Note : -P = cable IEC 20/22 II PVC, -U = cable UL 62 PVC maxi. 10 m

LS2..P.. Limit Switches

Double insulation - Plastic Casing IP 67
30 mm and 35 mm Width



LS20P : 1 cable output left / right	0	5	9
LS21P : 1 cable output bottom	1	6	0
LS25P : 1 cable output left / right	5	6	7
LS26P : 1 cable output bottom	6	6	8

Ordering Details

Contact blocks	Type	Order code	Weight kg (1)(2)	Pack ^{ing} 1 piece
 B11	 D11	state cable output code <input type="checkbox"/> <input type="checkbox"/>	state cable output code <input type="checkbox"/> <input type="checkbox"/>	

Ø 18 plastic (polyacetal) roller with bent lever

1	-	LS2 <input type="checkbox"/> P45B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 45R32 <input type="checkbox"/> <input type="checkbox"/>	0.180
1	-	LS2 <input type="checkbox"/> P45B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 45R38 <input type="checkbox"/> <input type="checkbox"/>	0.180
-	1	LS2 <input type="checkbox"/> P45D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 45R33 <input type="checkbox"/> <input type="checkbox"/>	0.180
-	1	LS2 <input type="checkbox"/> P45D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 45R39 <input type="checkbox"/> <input type="checkbox"/>	0.180

Ø 18 metal roller (zinc plated) with bent lever

1	-	LS2 <input type="checkbox"/> P46B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 46R32 <input type="checkbox"/> <input type="checkbox"/>	0.180
1	-	LS2 <input type="checkbox"/> P46B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 46R38 <input type="checkbox"/> <input type="checkbox"/>	0.180
-	1	LS2 <input type="checkbox"/> P46D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 46R33 <input type="checkbox"/> <input type="checkbox"/>	0.180
-	1	LS2 <input type="checkbox"/> P46D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 46R39 <input type="checkbox"/> <input type="checkbox"/>	0.180

Ø 19 ball bearing roller with bent lever

1	-	LS2 <input type="checkbox"/> P47B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 47R32 <input type="checkbox"/> <input type="checkbox"/>	0.180
1	-	LS2 <input type="checkbox"/> P47B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 47R38 <input type="checkbox"/> <input type="checkbox"/>	0.180
-	1	LS2 <input type="checkbox"/> P47D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 47R33 <input type="checkbox"/> <input type="checkbox"/>	0.180
-	1	LS2 <input type="checkbox"/> P47D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 47R39 <input type="checkbox"/> <input type="checkbox"/>	0.180

Adjustable Ø 18 plastic (polyacetal) roller lever

1	-	LS2 <input type="checkbox"/> P51B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 51R32 <input type="checkbox"/> <input type="checkbox"/>	0.190
1	-	LS2 <input type="checkbox"/> P51B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 51R38 <input type="checkbox"/> <input type="checkbox"/>	0.190
-	1	LS2 <input type="checkbox"/> P51D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 51R33 <input type="checkbox"/> <input type="checkbox"/>	0.190
-	1	LS2 <input type="checkbox"/> P51D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 51R39 <input type="checkbox"/> <input type="checkbox"/>	0.190

Adjustable Ø 19 ball bearing roller lever

1	-	LS2 <input type="checkbox"/> P53B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 53R32 <input type="checkbox"/> <input type="checkbox"/>	0.190
1	-	LS2 <input type="checkbox"/> P53B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 53R38 <input type="checkbox"/> <input type="checkbox"/>	0.190
-	1	LS2 <input type="checkbox"/> P53D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 53R33 <input type="checkbox"/> <input type="checkbox"/>	0.190
-	1	LS2 <input type="checkbox"/> P53D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 53R39 <input type="checkbox"/> <input type="checkbox"/>	0.190

Adjustable Ø 18 steel roller lever (zinc plated)

1	-	LS2 <input type="checkbox"/> P54B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 54R32 <input type="checkbox"/> <input type="checkbox"/>	0.190
1	-	LS2 <input type="checkbox"/> P54B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 54R38 <input type="checkbox"/> <input type="checkbox"/>	0.190
-	1	LS2 <input type="checkbox"/> P54D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 54R33 <input type="checkbox"/> <input type="checkbox"/>	0.190
-	1	LS2 <input type="checkbox"/> P54D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 54R39 <input type="checkbox"/> <input type="checkbox"/>	0.190

Adjustable Ø 3 stainless steel rod lever

1	-	LS2 <input type="checkbox"/> P71B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 71R32 <input type="checkbox"/> <input type="checkbox"/>	0.185
1	-	LS2 <input type="checkbox"/> P71B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 71R38 <input type="checkbox"/> <input type="checkbox"/>	0.185
-	1	LS2 <input type="checkbox"/> P71D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 71R33 <input type="checkbox"/> <input type="checkbox"/>	0.185
-	1	LS2 <input type="checkbox"/> P71D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 71R39 <input type="checkbox"/> <input type="checkbox"/>	0.185

(1) For LS25 & LS26 (add extra 0.005 kg)
(2) With 1 m of cable (add 0.07 kg by extra meter length).

Length cable code

Cable length	Code	Code
	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
1 m	0 1	0 1
2 m	0 2	0 2
5 m	0 5	0 5
10 m	1 0	1 0

Other length on request.

Note : -P = cable IEC 20/22 II PVC, -U = cable UL 62 PVC maxi. 10 m

LS2..P.. Limit Switches

Double insulation - Plastic Casing IP 67
30 mm and 35 mm Width



LS20P : 1 cable output left / right 0 5 9
 LS21P : 1 cable output bottom 1 6 0
 LS25P : 1 cable output left / right 5 6 7
 LS26P : 1 cable output bottom 6 6 8

Ordering Details

Contact blocks	Type	Order code	Weight kg (1)(2)	Pack ^{ing} 1 piece
 B11	 D11	state cable output code <input type="checkbox"/>	state cable output code <input type="checkbox"/>	state cable output code <input type="checkbox"/>

Adjustable Ø 3 fibre-glass rod lever

1	-	LS2 <input type="checkbox"/> P72B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 72R32 <input type="checkbox"/> <input type="checkbox"/>	0.185
1	-	LS2 <input type="checkbox"/> P72B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 72R38 <input type="checkbox"/> <input type="checkbox"/>	0.185
-	1	LS2 <input type="checkbox"/> P72D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 72R33 <input type="checkbox"/> <input type="checkbox"/>	0.185
-	1	LS2 <input type="checkbox"/> P72D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 72R39 <input type="checkbox"/> <input type="checkbox"/>	0.185

Adjustable Ø 6 polyamide rod lever

1	-	LS2 <input type="checkbox"/> P73B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 73R32 <input type="checkbox"/> <input type="checkbox"/>	0.200
1	-	LS2 <input type="checkbox"/> P73B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 73R38 <input type="checkbox"/> <input type="checkbox"/>	0.200
-	1	LS2 <input type="checkbox"/> P73D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 73R33 <input type="checkbox"/> <input type="checkbox"/>	0.200
-	1	LS2 <input type="checkbox"/> P73D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 73R39 <input type="checkbox"/> <input type="checkbox"/>	0.200

Adjustable Ø 6 fibre-glass rod lever

1	-	LS2 <input type="checkbox"/> P74B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 74R32 <input type="checkbox"/> <input type="checkbox"/>	0.200
1	-	LS2 <input type="checkbox"/> P74B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 74R38 <input type="checkbox"/> <input type="checkbox"/>	0.200
-	1	LS2 <input type="checkbox"/> P74D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 74R33 <input type="checkbox"/> <input type="checkbox"/>	0.200
-	1	LS2 <input type="checkbox"/> P74D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 74R39 <input type="checkbox"/> <input type="checkbox"/>	0.200

Adjustable 3 square steel rod lever (zinc plated)

1	-	LS2 <input type="checkbox"/> P78B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 78R32 <input type="checkbox"/> <input type="checkbox"/>	0.185
1	-	LS2 <input type="checkbox"/> P78B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 78R38 <input type="checkbox"/> <input type="checkbox"/>	0.185
-	1	LS2 <input type="checkbox"/> P78D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 78R33 <input type="checkbox"/> <input type="checkbox"/>	0.185
-	1	LS2 <input type="checkbox"/> P78D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 78R39 <input type="checkbox"/> <input type="checkbox"/>	0.185

Spring rod

1	-	LS2 <input type="checkbox"/> P91B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 91R32 <input type="checkbox"/> <input type="checkbox"/>	0.190
1	-	LS2 <input type="checkbox"/> P91B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 91R38 <input type="checkbox"/> <input type="checkbox"/>	0.190
-	1	LS2 <input type="checkbox"/> P91D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 91R33 <input type="checkbox"/> <input type="checkbox"/>	0.190
-	1	LS2 <input type="checkbox"/> P91D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 91R39 <input type="checkbox"/> <input type="checkbox"/>	0.190

Flexible rod with insulated end

1	-	LS2 <input type="checkbox"/> P92B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 92R32 <input type="checkbox"/> <input type="checkbox"/>	0.195
1	-	LS2 <input type="checkbox"/> P92B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 92R38 <input type="checkbox"/> <input type="checkbox"/>	0.195
-	1	LS2 <input type="checkbox"/> P92D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 92R33 <input type="checkbox"/> <input type="checkbox"/>	0.195
-	1	LS2 <input type="checkbox"/> P92D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 92R39 <input type="checkbox"/> <input type="checkbox"/>	0.195

Coil spring rod

1	-	LS2 <input type="checkbox"/> P93B11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 93R32 <input type="checkbox"/> <input type="checkbox"/>	0.200
1	-	LS2 <input type="checkbox"/> P93B11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 93R38 <input type="checkbox"/> <input type="checkbox"/>	0.200
-	1	LS2 <input type="checkbox"/> P93D11-P <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 93R33 <input type="checkbox"/> <input type="checkbox"/>	0.200
-	1	LS2 <input type="checkbox"/> P93D11-U <input type="checkbox"/> <input type="checkbox"/>	1SBV01 <input type="checkbox"/> <input type="checkbox"/> 93R39 <input type="checkbox"/> <input type="checkbox"/>	0.200

(1) For LS25 & LS26 (add extra 0.005 kg)
 (2) With 1 m of cable (add 0.07 kg by extra meter length).

Length cable code

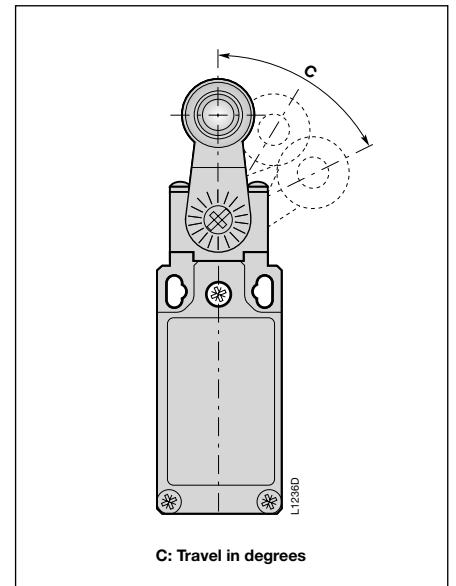
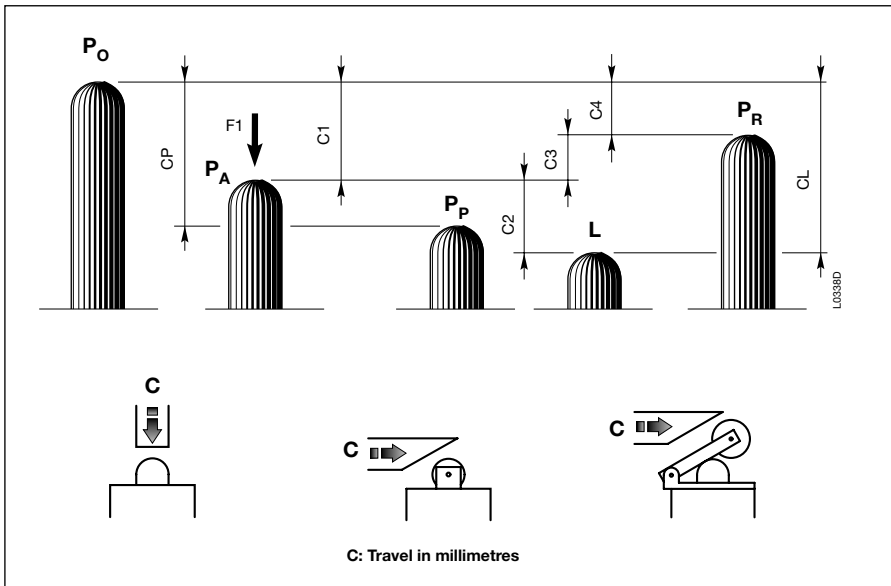
Cable length	Code	Code
1 m	0 1	0 1
2 m	0 2	0 2
5 m	0 5	0 5
10 m	1 0	1 0

Other length on request.

Note : -P = cable IEC 20/22 II PVC, -U = cable UL 62 PVC maxi. 10 m

Limit Switches Plastic or Metal Casing

Travel and Operation Diagrams



P_O Free position:
position of the switch actuator when no external force is exerted on it.

P_A Operating position:
position of the switch actuator, under the effect of force **F1**, when the contacts leave their initial free position.

P_P Positive opening position:
position of the switch actuator from which positive opening is ensured.

L Max. travel position:
maximum acceptable travel position of the switch actuator under the effect of a force **F1**.

P_R Release position:
position of the switch actuator when the contacts return to their initial free position.

C₁ Pre-travel (average travel):
distance between the free position **P_O** and the operating position **P_A**.

C_P Positive opening travel:
minimum travel of the switch actuator, from the free position, to ensure positive opening operation of the normally closed contact (N.C.).

C₂ Over-travel (average travel):
distance between the operating position **P_A** and the max. travel position **L**.

C_L Max. travel (maximum travel):
distance between the free position **P_O** and the max. travel position **L**.

C₃ Differential travel (C1-C4) (average travel):
travel difference of the switch actuator between the operating position **P_A** and the release position **P_R**.

C₄ Release travel (average travel):
distance between the release position **P_R** and the free position **P_O**.

Diagram for snap action contacts:

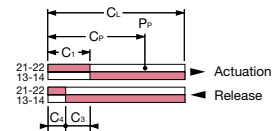
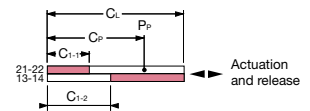


Diagram for non-overlapping slow action contacts:



Contacts position

21-22 Contact closed
 21-22 Contact open
 ↑
 Contacts identification (example)

Note: for slow action contacts, **C₃ = 0**, **C₁₋₁** = pre-travel of contact 21-22, **C₁₋₂** = pre-travel of contact 13-14.

Examples:

LS20M13B11
(snap action contacts)

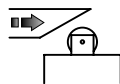
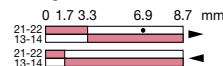


Diagram in millimetres/cam travel



LS20M41B11
(snap action contacts)

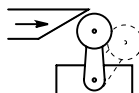
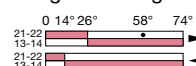


Diagram in degrees/lever rotation



LS20M11D11
(non-overlapping slow action contacts)

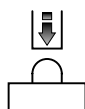
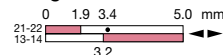


Diagram in millimetres/plunger travel



LS20 ... LS26 Limit Switches

Plastic and Metal Casings - 30 mm and 35 mm Width Technical Data

General Technical Data

	Plastic Casing	Metal Casing
Standards	IEC 60947-1, IEC 60947-5-1, EN 60947-1, EN 60947-5-1, UL 508 and CSA C22-2 n° 14	
Certifications - Approvals	UL - CSA (only for UL62-1581 cable)	
Air temperature near the device		
- during operation	°C - 25 ... + 70	- 25 ... + 70
- for storage	°C - 40 ... + 70	- 40 ... + 70
Climatic withstand	According to IEC 68-2-3 and salty mist according to IEC 68-2-11	
Mounting positions	All positions are authorized	
Shock withstand (according to IEC 68-2-27 and EN 60068-2-27)	25g* (1/2 sinusoidal shock for 11 ms) no change in contact position	
Resistance to vibrations (acc. to IEC 68-2-6 and EN 60068-2-6)	25g** (10 ... 500 Hz) no change in position of contacts greater than 100 µs	
Protection against electrical shocks (acc. to IEC 536)	Class II	Class I
Degree of protection (according to IEC 529 and EN 60529)	IP67	
Degree of protection (according to UL 50 and NEMA)	Type 1 Enclosure (indoor use)	Type 4 - 4x - 6 Enclosure (Outdoor use)
Consistency (measured over 1 million operations)	0.1 mm (upon closing point)	

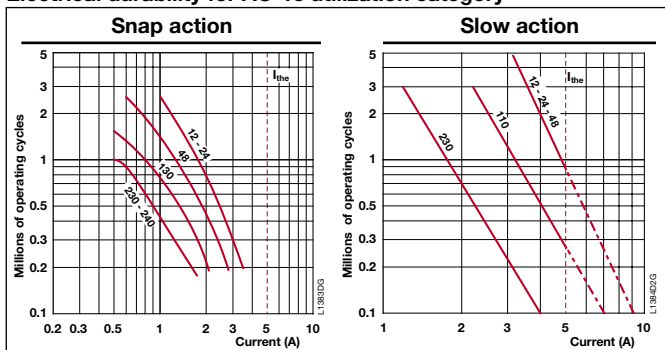
Electrical Data

Rated insulation voltage U_i		V	400 (degree of pollution 3)
- according to IEC 60947-1 and EN 60947-1		V	300
- according to UL 508, CSA C22-2 n° 14			
Rated impulse withstand voltage U_{imp}		kV	4
(according to IEC 60947-1 and EN 60947-1)			
Conventional enclosed thermal current I_{the}		A	5
(according to IEC 60947-5-1 and EN 60947-5-1) $\theta \leq 40^\circ\text{C}$			
Short-circuit protection gG type fuses		A	6
Rated operational current			
I_e / AC-15 - acc. to IEC 60947-5-1	24 V - 50/60 Hz	A	5.0
	120 V - 50/60 Hz	A	3.0
	240 V - 50/60 Hz	A	1.5
- acc. to UL 508, CSA C22 n° 14			B 300
I_e / DC-13 - acc. to IEC 60947-5-1	24 V - d.c.	A	1.1
	125 V - d.c.	A	0.22
	250 V - d.c.	A	0.1
- acc. to UL 508, CSA C22 n° 14			R 300
Positivity	Contacts with positive opening operation as per IEC 60947-5-1 chapter 3 and EN 60947-5-1		
Resistance between contacts		mΩ	25
Pre-wired connection		mm ² / AWG	4 x 0.75 mm ² / 4 x AWG 18 5 x 0.75 mm ² / 5 x AWG 18
Type of cable			
- UL 62-1581 (PVC)	Black - Ø ext. 7.20 ± 0.2		Black - Ø ext. 8.20 ± 0.2
- IEC 20/22 II (PVC) (no flame propagation)	Black - Ø ext. 7.20 ± 0.2		Grey - Ø ext. 8.20 ± 0.2
Terminal marking	According to EN 50013		
Mechanical durability	10 Millions of operations		
Electrical durability (according to IEC 60947-5-1 appendice C)	Utilization categories AC-15 and DC-13 (See curves and values below)		
- max. switching frequency		Cycles/h	3600
- load factor			0.5

* Shock: 25g for LS20P/M..., ... LS26P/M... with D11 contact block
5g for LS20P/M..., ... LS26P/M... with B11 contact block

** Vibrations: except for LS20P/M93 ... LS26P/M93 : 15 g

Electrical durability for AC-15 utilization category



Electrical durability for DC-13 utilization category

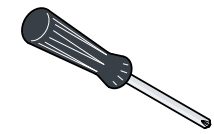
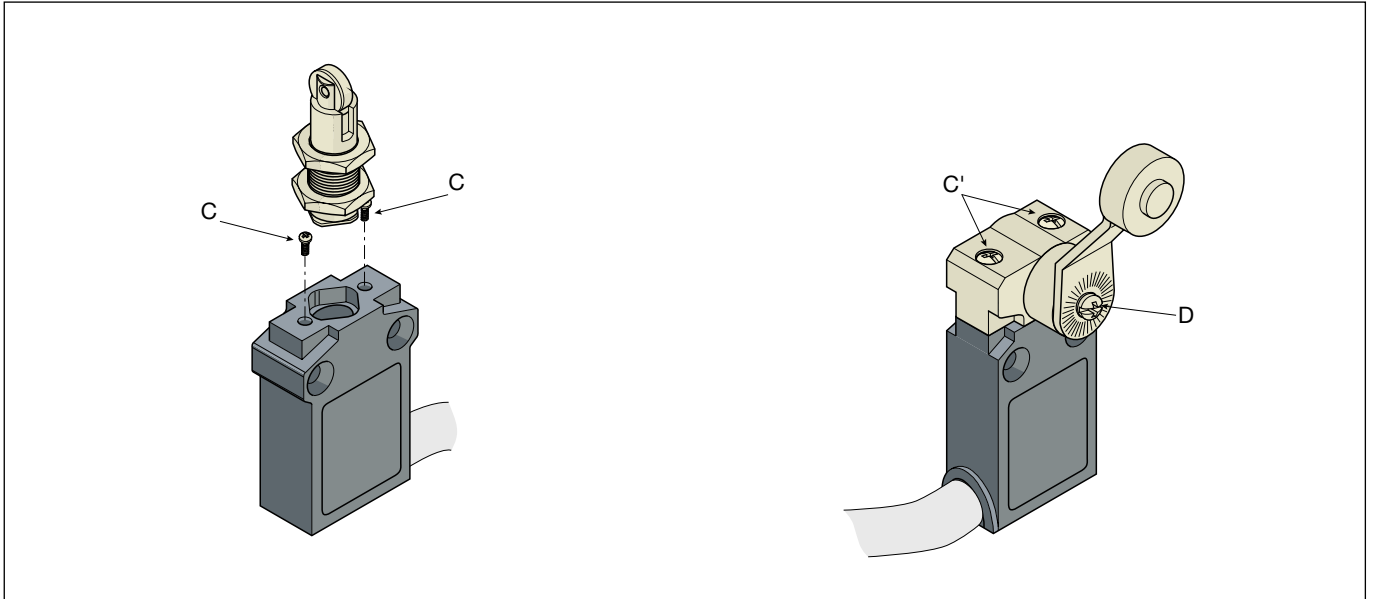
	Snap action	Slow action
Power breaking for a durability of 5 million operating cycles		
Voltage 24 V	5.7 W	7.2 W
Voltage 48 V	4.1 W	5.4 W
Voltage 110 V	2.2 W	3.6 W

LS20 ... LS26 Limit Switches

Plastic and Metal Casings - 30 mm and 35 mm Width

Main Technical Data (continued)

Tightening Torques



	Metal Casing				Double Insulation - Plastic Casing			
	C and C'		D		C and C'		D	
	Assembling the operating head		Assembling or adjusting - Rod lever - Roller lever		Assembling the operating head		Assembling or adjusting - Rod lever - Roller lever	
Screws	C = M3 +, C' = M3 ± pozidriv 1		M3.5 ± pozidriv 2		C = Ø3 + C' = Ø3 ± pozidriv 1		M3.5 ± pozidriv 2	
Tightening torque	Recommended N.m / lb.in	Max. N.m / lb.in	Recommended N.m / lb.in	Max. N.m / lb.in	Recommended N.m / lb.in	Max. N.m / lb.in	Recommended N.m / lb.in	Max. N.m / lb.in
Limit switches								
LS20..11 ... LS20..25	0.5 / 4.3	0.8 / 7	-	-	0.5 / 4.3	0.8 / 7	--	-
LS20..41 ... LS20..78	0.5 / 4.3	0.8 / 7	0.5 / 4.3	0.8 / 7	0.5 / 4.3	0.8 / 7	0.5 / 4.3	0.8 / 7
LS20..91 ... LS20..93	0.5 / 4.3	0.8 / 7	-	-	0.5 / 4.3	0.8 / 7	-	-
LS21..11 ... LS21..25	0.5 / 4.3	0.8 / 7	-	-	0.5 / 4.3	0.8 / 7	-	-
LS21..41 ... LS21..78	0.5 / 4.3	0.8 / 7	0.5 / 4.3	0.8 / 7	0.5 / 4.3	0.8 / 7	0.5 / 4.3	0.8 / 7
LS21..91 ... LS21..93	0.5 / 4.3	0.8 / 7	-	-	0.5 / 4.3	0.8 / 7	-	-
LS25..11 ... LS25..25	0.5 / 4.3	0.8 / 7	-	-	0.5 / 4.3	0.8 / 7	-	-
LS25..41 ... LS25..78	0.5 / 4.3	0.8 / 7	0.5 / 4.3	0.8 / 7	0.5 / 4.3	0.8 / 7	0.5 / 4.3	0.8 / 7
LS25..91 ... LS25..93	0.5 / 4.3	0.8 / 7	-	-	0.5 / 4.3	0.8 / 7	-	-
LS26..11 ... LS26..25	0.5 / 4.3	0.8 / 7	-	-	0.5 / 4.3	0.8 / 7	-	-
LS26..41 ... LS26..78	0.5 / 4.3	0.8 / 7	0.5 / 4.3	0.8 / 7	0.5 / 4.3	0.8 / 7	0.5 / 4.3	0.8 / 7
LS26..91 ... LS26..93	0.5 / 4.3	0.8 / 7	-	-	0.5 / 4.3	0.8 / 7	-	-

Connecting data of contact blocks

Connecting capacity

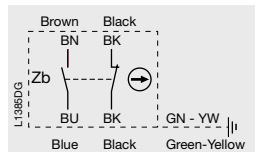
Metal Casing: 5 x 0.75 mm² / 5 x AWG 18

- UL 62 PVC cable
 - IEC 20/22 II PVC cable
- } External Ø cable = 8.2 mm

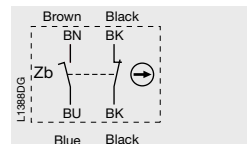
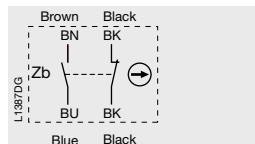
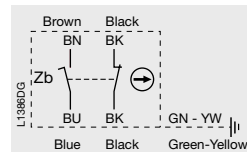
Plastic Casing: 4 x 0.75 mm² / 4 x AWG 18

- UL 62 PVC cable
 - IEC 20/22 II PVC cable
- } External Ø cable = 7.2 mm

Snap action contacts



Non-overlapping Slow action contacts

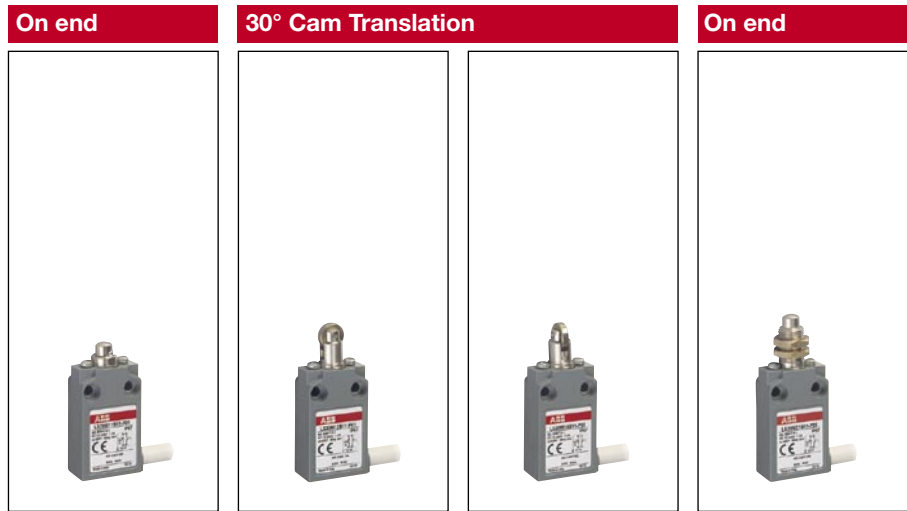


LS2..M.. Limit Switches

Metal Casing IP67 - 30 mm Width
Pre-Wired

Movement to be detected:

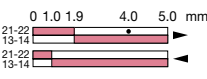
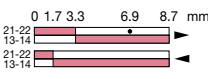
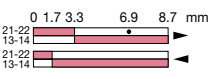
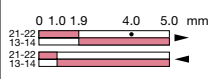
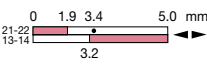
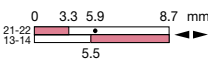
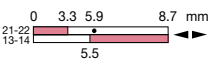
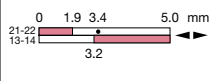
Cable: 5 x 0.75 mm² / 5 x AWG 18
Length: 1 m
(Other lengths see ordering details)



Actuator

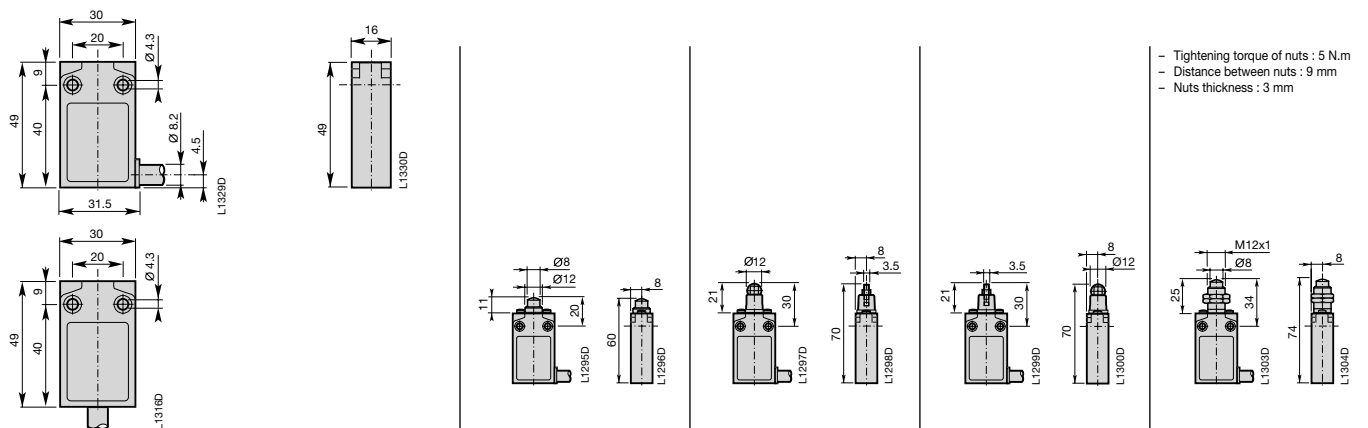
	Plain plunger	Roller plunger	Cross roller plunger	Steel plain plunger with fixing nuts
⊕ (N.C. contact with positive opening operation)	⊕	⊖	⊕	⊖
Maximum actuation speed	0.5 m/s	0.1 m/s	0.1 m/s	0.5 m/s
Min. force / torque: - actuation	15 N	10 N	10 N	15 N
- positive opening operation	30 N	30 N	30 N	30 N

Additional Technical Data

Cable output left / right code.....	0			
Cable output bottom code.....	1			
IEC 20/22 II PVC cable code	P			
UL 62 PVC cable code.....	U			
Type to be completed with head code <input type="checkbox"/>	Metal plunger <input type="checkbox"/> 1 Metal plunger <input type="checkbox"/> 6 (with dust protection cup)	Metal roller <input type="checkbox"/> 2 Plastic roller <input type="checkbox"/> 3 -	Metal roller <input type="checkbox"/> 4 Plastic roller <input type="checkbox"/> 5 -	- - -
Snap action contacts	Type LS2 <input type="checkbox"/> M1 <input type="checkbox"/> B11- <input type="checkbox"/> 01	Type LS2 <input type="checkbox"/> M1 <input type="checkbox"/> B11- <input type="checkbox"/> 01	Type LS2 <input type="checkbox"/> M1 <input type="checkbox"/> B11- <input type="checkbox"/> 01	Type LS2 <input type="checkbox"/> M21 B11- <input type="checkbox"/> 01
13 _{BN} 21 _{BK} 14 _{BU} 22 _{BK} Zb	Operation diagram 	Operation diagram 	Operation diagram 	Operation diagram 
Non-overlapping Slow action contacts	Type LS2 <input type="checkbox"/> M1 <input type="checkbox"/> D11- <input type="checkbox"/> 01	Type LS2 <input type="checkbox"/> M1 <input type="checkbox"/> D11- <input type="checkbox"/> 01	Type LS2 <input type="checkbox"/> M1 <input type="checkbox"/> D11- <input type="checkbox"/> 01	Type LS2 <input type="checkbox"/> M21 D11- <input type="checkbox"/> 01
13 _{BN} 21 _{BK} 14 _{BU} 22 _{BK} Zb	Operation diagram 	Operation diagram 	Operation diagram 	Operation diagram 
Weight (packing per unit)	kg 0.175	kg 0.180	kg 0.180	kg 0.190

 Closed contact /  Open contact

Dimensions (mm)







LS2..M.. Limit Switches

Metal Casing IP67 - 30 mm Width
Pre-Wired



30° Cam Translation Movement

Fully Direction. Trans.

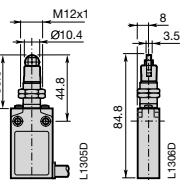
					
Roller plunger with fixing nuts	Cross roller plunger with fixing nuts	ø14 roller lever	ø18 roller with bent lever	Adjustable ø18 roller lever	Adjustable ø3 rod lever
0.1 m/s 10 N 30 N	0.1 m/s 10 N 30 N	1.5 m/s 0.08 N.m 0.28 N.m	1.5 m/s 0.08 N.m 0.28 N.m	1.5 m/s 0.08 N.m 0.28 N.m	1.5 m/s 0.08 N.m 0.28 N.m

Cable output left / right code 0
 Cable output bottom code 1
 IEC 20/22 II PVC cable code P
 UL 62 PVC cable code U

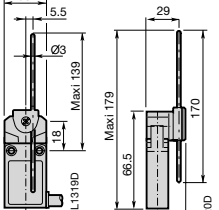
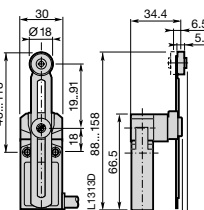
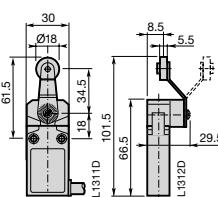
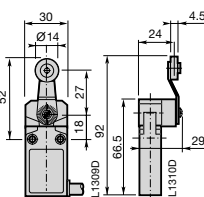
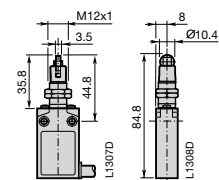
Metal roller 2 Plastic roller 3	Metal roller 4 Plastic roller 5	Metal roller 2 Plastic roller 1 Ball bearing 3	Metal roller 6 Plastic roller 5 Ball bearing 7 ø19 roller	Metal roller 4 Plastic roller 1 Ball bearing 3 ø19 roller	Metal rod 1 Fibre-glass 2 Square rod 8 metal
LS2 □ M2 □ B11- □ 01	LS2 □ M2 □ B11- □ 01	LS2 □ M4 □ B11- □ 01	LS2 □ M4 □ B11- □ 01	LS2 □ M5 □ B11- □ 01	LS2 □ M7 □ B11- □ 01
0 1.7 3.3 6.9 8.7 mm 21-22 13-14	0 1.7 3.3 6.9 8.7 mm 21-22 13-14	0 14° 26° 58° 74° 21-22 13-14	0 14° 26° 58° 74° 21-22 13-14	0 14° 26° 58° 74° 21-22 13-14	0 14° 26° 58° 74° 21-22 13-14
LS2 □ M2 □ D11- □ 01	LS2 □ M2 □ D11- □ 01	LS2 □ M4 □ D11- □ 01	LS2 □ M4 □ D11- □ 01	LS2 □ M5 □ D11- □ 01	LS2 □ M7 □ D11- □ 01
0 3.3 5.9 8.7 mm 21-22 13-14	0 3.3 5.9 8.7 mm 21-22 13-14	0 27° 49° 74° 21-22 13-14	0 27° 49° 74° 21-22 13-14	0 27° 49° 74° 21-22 13-14	0 27° 49° 74° 21-22 13-14
0.195	0.195	0.225	0.230	0.240	0.235

 Closed contact /  Open contact

- Tightening torque of nuts : 5 N.m
 - Distance between nuts : 9 mm
 - Nuts thickness : 3 mm



- Tightening torque of nuts : 5 N.m
 - Distance between nuts : 9 mm
 - Nuts thickness : 3 mm



LS2..M.. Limit Switches

Metal Casing IP67 - 30 mm Width
Pre-Wired

Movement to be detected:

Cable: 5 x 0.75 mm² / 5 x AWG 18
Length: 1 m
(Other lengths see ordering details)

Fully Direction. Trans.

Multidirectional



Actuator

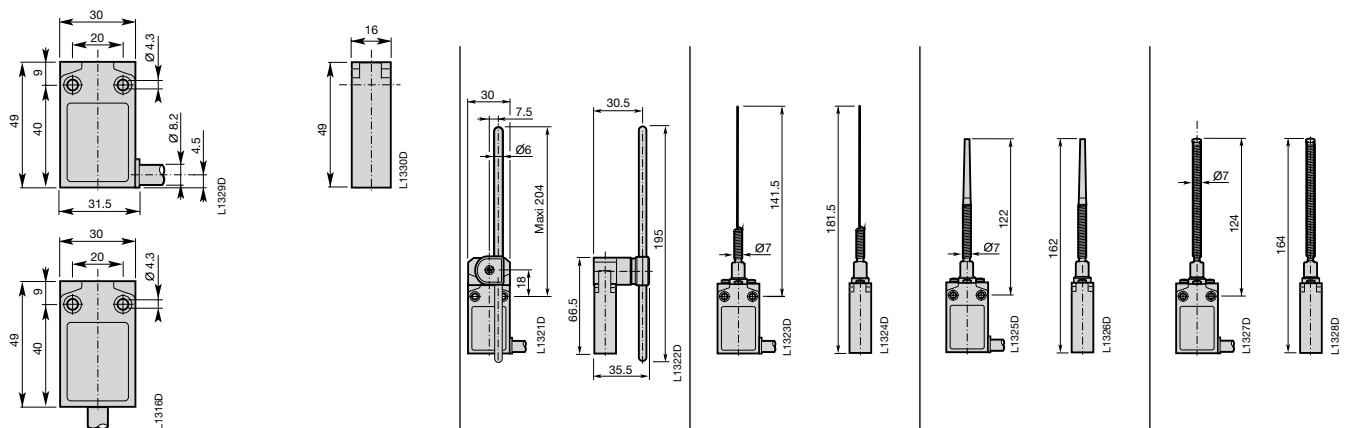
	Adjustable ø6 rod lever	Spring rod	Flexible rod with insulated end	Coil spring rod
⊕ (N.C. contact with positive opening operation)	⊕	-	-	-
Maximum actuation speed	1.5 m/s	1.0 m/s	1.0 m/s	1.0 m/s
Min. force / torque: - actuation	0.08 N.m	0.10 N.m	0.10 N.m	0.10 N.m
- positive opening operation	0.28 N.m	-	-	-

Additional Technical Data

Cable output left / right code		0			
Cable output bottom code		1			
IEC 20/22 II PVC cable code		P			
UL 62 PVC cable code		U			
Type to be completed with head code <input type="checkbox"/>		Plastic rod <input type="checkbox"/> 3	-	-	-
		Fibre-glass <input type="checkbox"/> 4	-	-	-
		-	-	-	-
		-	-	-	-
Snap action contacts		LS2 □ M7 □ B11- □ 01	LS2 □ M91 B11- □ 01	LS2 □ M92 B11- □ 01	LS2 □ M93 B11- □ 01
Non-overlapping Slow action contacts		LS2 □ M7 □ D11- □ 01	-	-	-
			-	-	-
Weight (packing per unit)		kg	0.250	0.240	0.245
					0.250

█ Closed contact / □ Open contact

Dimensions (mm)

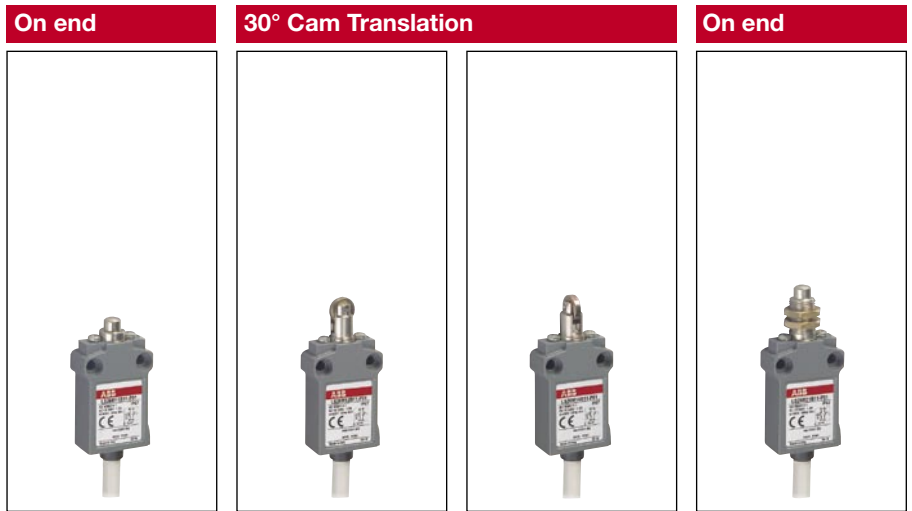


LS2..M.. Limit Switches

Metal Casing IP67 - 35 mm Width
Pre-Wired

Movement to be detected:

Cable: 5 x 0.75 mm² / 5 x AWG 18
Length: 1 m
(Other lengths see ordering details)



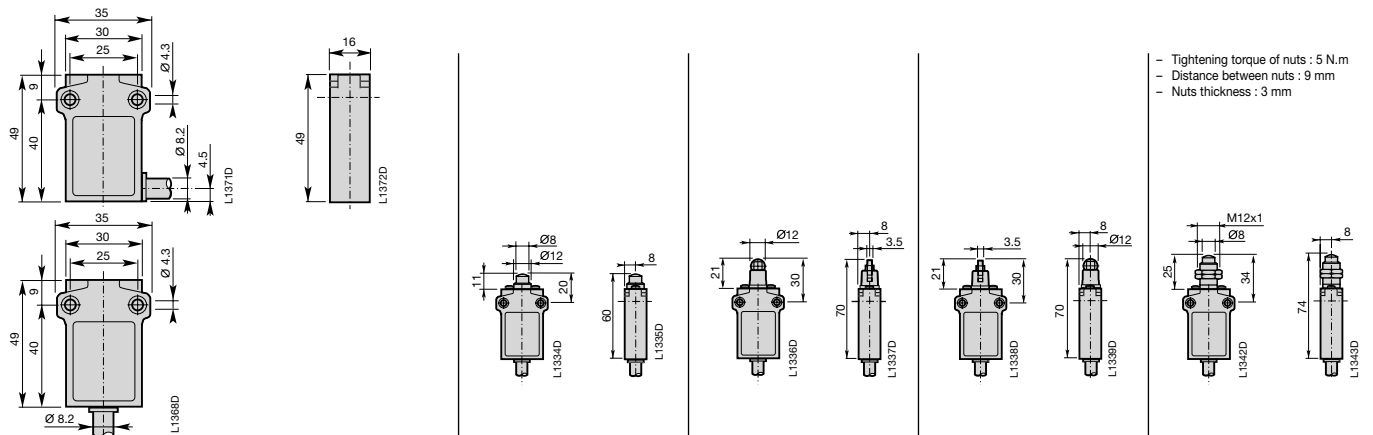
Actuator	Plain plunger	Roller plunger	Cross roller plunger	Steel plain plunger with fixing nuts
↻ (N.C. contact with positive opening operation)	↻	↻	↻	↻
Maximum actuation speed	0.5 m/s	0.1 m/s	0.1 m/s	0.5 m/s
Min. force / torque: - actuation	15 N	10 N	10 N	15 N
- positive opening operation	30 N	30 N	30 N	30 N

Additional Technical Data

Cable output left / right code.....	5				
Cable output bottom code.....	6				
IEC 20/22 II PVC cable code.....	P				
UL 62 PVC cable code.....	U				
Type to be completed with head code <input type="checkbox"/>	Metal plunger <input type="checkbox"/> 1 Metal plunger <input type="checkbox"/> 6 (with dust protection cup)	Metal roller <input type="checkbox"/> 2 Plastic roller <input type="checkbox"/> 3	Metal roller <input type="checkbox"/> 4 Plastic roller <input type="checkbox"/> 5	-	
Snap action contacts 	Type	LS2 <input type="checkbox"/> M1 <input type="checkbox"/> B11- <input type="checkbox"/> 01	LS2 <input type="checkbox"/> M1 <input type="checkbox"/> B11- <input type="checkbox"/> 01	LS2 <input type="checkbox"/> M1 <input type="checkbox"/> B11- <input type="checkbox"/> 01	LS2 <input type="checkbox"/> M21 B11- <input type="checkbox"/> 01
Non-overlapping Slow action contacts 	Type	LS2 <input type="checkbox"/> M1 <input type="checkbox"/> D11- <input type="checkbox"/> 01	LS2 <input type="checkbox"/> M1 <input type="checkbox"/> D11- <input type="checkbox"/> 01	LS2 <input type="checkbox"/> M1 <input type="checkbox"/> D11- <input type="checkbox"/> 01	LS2 <input type="checkbox"/> M21 D11- <input type="checkbox"/> 01
Weight (packing per unit)	kg	0.180	0.185	0.185	0.195

Closed contact / Open contact

Dimensions (mm)



- Tightening torque of nuts : 5 N.m
- Distance between nuts : 9 mm
- Nuts thickness : 3 mm

LS2..M.. Limit Switches

Metal Casing IP67 - 35 mm Width
Pre-Wired

Movement to be detected:

Cable: 5 x 0.75 mm² / 5 x AWG 18
Length: 1 m
(Other lengths see ordering details)

30° Cam Translation



Actuator

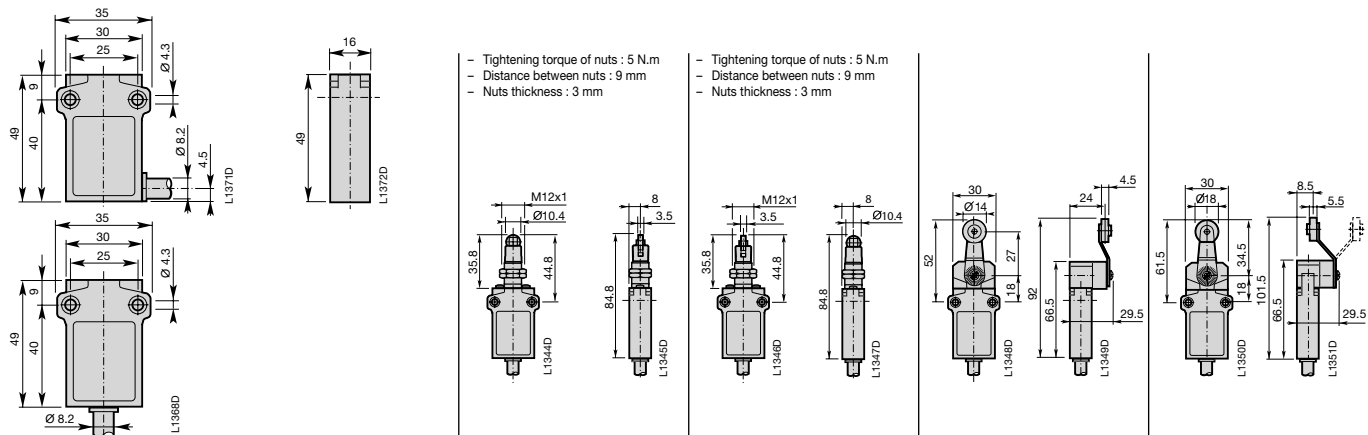
	Roller plunger with fixing nuts	Cross roller plunger with fixing nuts	ø14 roller lever	ø18 roller lever with bent lever
⊕ (N.C. contact with positive opening operation)	⊕	⊖	⊕	⊖
Maximum actuation speed	0.1 m/s	0.1 m/s	1.5 m/s	1.5 m/s
Min. force / torque: - actuation	10 N	10 N	0.08 N.m	0.08 N.m
- positive opening operation	30 N	30 N	0.28 N.m	0.28 N.m

Additional Technical Data

Cable output left / right code.....	5			
Cable output bottom code.....	6			
IEC 20/22 II PVC cable code.....	P			
UL 62 PVC cable code.....	U			
Type to be completed with head code <input type="checkbox"/>	Metal roller <input type="checkbox"/> 2 Plastic roller <input type="checkbox"/> 3	Metal roller <input type="checkbox"/> 4 Plastic roller <input type="checkbox"/> 5	Metal roller <input type="checkbox"/> 2 Plastic roller <input type="checkbox"/> 1 Ball bearing <input type="checkbox"/> 3	Metal roller <input type="checkbox"/> 6 Plastic roller <input type="checkbox"/> 5 Ball bearing <input type="checkbox"/> 7 ø19 roller
Snap action contacts	Type: LS2 □ M2 □ B11- □ 01	Type: LS2 □ M2 □ B11- □ 01	Type: LS2 □ M4 □ B11- □ 01	Type: LS2 □ M4 □ B11- □ 01
Non-overlapping Slow action contacts	Type: LS2 □ M2 □ D11- □ 01	Type: LS2 □ M2 □ D11- □ 01	Type: LS2 □ M4 □ D11- □ 01	Type: LS2 □ M4 □ D11- □ 01
Weight (packing per unit)	kg 0.200	kg 0.200	kg 0.230	kg 0.235










■ Closed contact / □ Open contact

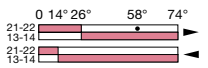
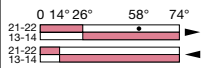
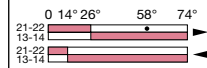
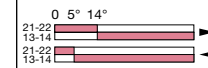
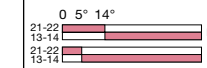
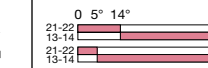
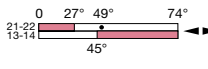
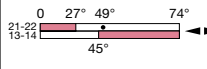
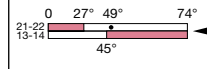
Dimensions (mm)





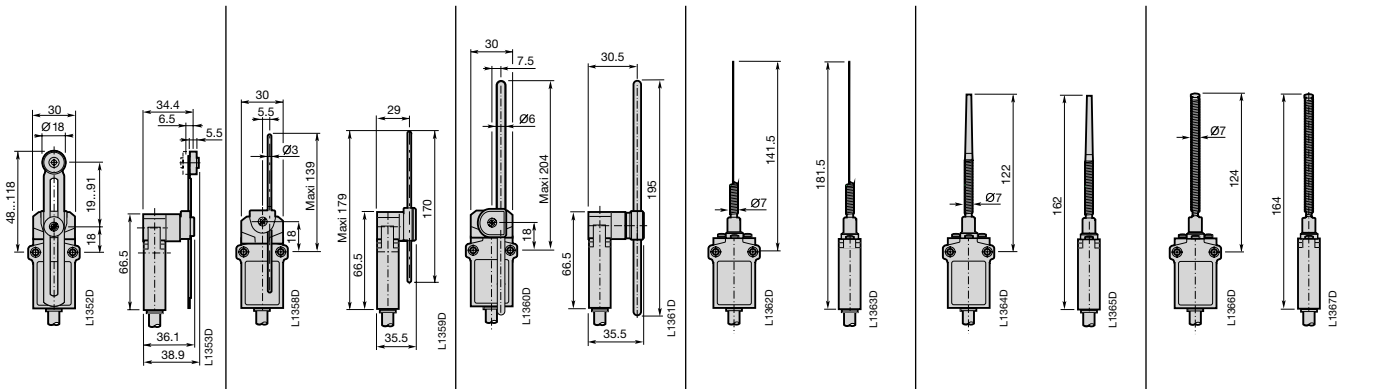
LS2..M.. Limit Switches

Metal Casing IP67 - 35 mm Width
Pre-Wired

30° Cam Transl.	Fully Directional Translation		Multidirectional		
					
Adjustable ø18 roller lever	Adjustable ø3 rod lever	Adjustable ø6 rod lever	Spring rod	Flexible rod with insulated end	Coil spring rod
 1.5 m/s 0.08 N.m 0.28 N.m	 1.5 m/s 0.08 N.m 0.28 N.m	 1.5 m/s 0.08 N.m 0.28 N.m	- 1.0 m/s 0.10 N.m -	- 1.0 m/s 0.10 N.m -	- 1.0 m/s 0.10 N.m -

Cable output left / right code..... [5]					
Cable output bottom code..... [6]					
IEC 20/22 II PVC cable code..... [P]					
UL 62 PVC cable code..... [U]					
Metal roller [4]	Metal rod [1]	Plastic rod [3]	-	-	-
Plastic roller [1]	Fibre-glass [2]	Fibre-glass [4]	-	-	-
Ball bearing [3] ø19 roller	Square rod [8] metal	-	-	-	-
LS2 □ M5 □ B11- □ 01	LS2 □ M7 □ B11- □ 01	LS2 □ M7 □ B11- □ 01	LS2 □ M91 B11- □ 01	LS2 □ M92 B11- □ 01	LS2 □ M93B11- □ 01
					
LS2 □ M5 □ D11- □ 01	LS2 □ M7 □ D11- □ 01	LS2 □ M7 □ D11- □ 01	-	-	-
			-	-	-
0.245	0.240	0.255	0.245	0.250	0.255

 Closed contact /  Open contact

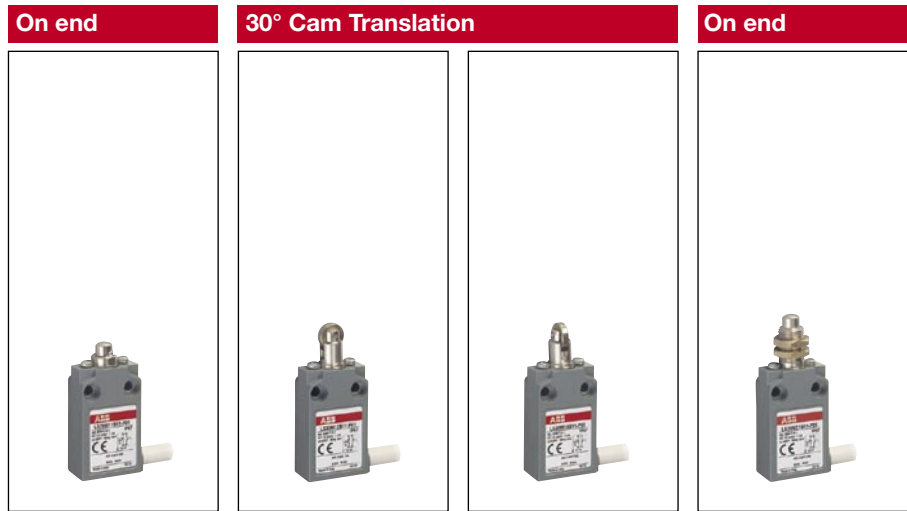


LS2..P.. Limit Switches

Double insulation - Plastic Casing IP67 - 30 mm Width
Pre-Wired

Movement to be detected:

Cable: 4 x 0.75 mm² / 4 x AWG 18
Length: 1 m
(Other lengths see ordering details)



Actuator

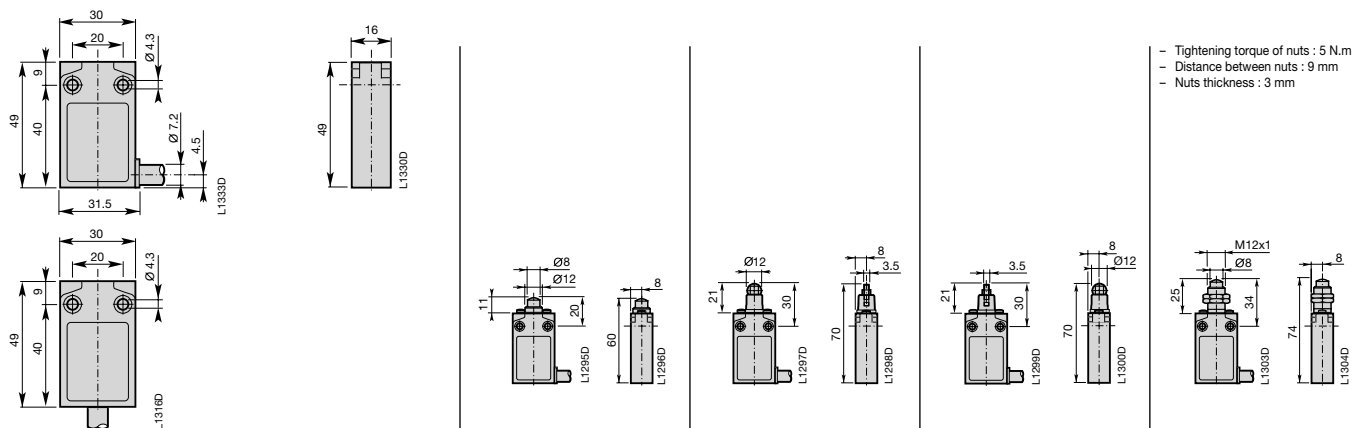
	Plain plunger	Roller plunger	Cross roller plunger	Steel plain plunger with fixing nuts
⊕ (N.C. contact with positive opening operation)	⊕	⊖	⊕	⊖
Maximum actuation speed	0.5 m/s	0.1 m/s	0.1 m/s	0.5 m/s
Min. force / torque: - actuation	15 N	10 N	10 N	15 N
- positive opening operation	30 N	30 N	30 N	30 N

Additional Technical Data

Cable output left / right code.....	0				
Cable output bottom code.....	1				
IEC 20/22 II PVC cable code	P				
UL 62 PVC cable code.....	U				
Type to be completed with head code <input type="checkbox"/>	Metal plunger <input type="checkbox"/> 1 Metal plunger <input type="checkbox"/> 6 (with dust protection cup)	Metal roller <input type="checkbox"/> 2 Plastic roller <input type="checkbox"/> 3 -	Metal roller <input type="checkbox"/> 4 Plastic roller <input type="checkbox"/> 5 -	- -	
Snap action contacts	Type	LS2 <input type="checkbox"/> P1 <input type="checkbox"/> B11- <input type="checkbox"/> 01	LS2 <input type="checkbox"/> P1 <input type="checkbox"/> B11- <input type="checkbox"/> 01	LS2 <input type="checkbox"/> P1 <input type="checkbox"/> B11- <input type="checkbox"/> 01	LS2 <input type="checkbox"/> P21 B11- <input type="checkbox"/> 01
13 _{BN} 21 _{BK} 14 _{BU} 22 _{BK} Zb	Operation diagram				
Non-overlapping Slow action contacts	Type	LS2 <input type="checkbox"/> P1 <input type="checkbox"/> D11- <input type="checkbox"/> 01	LS2 <input type="checkbox"/> P1 <input type="checkbox"/> D11- <input type="checkbox"/> 01	LS2 <input type="checkbox"/> P1 <input type="checkbox"/> D11- <input type="checkbox"/> 01	LS2 <input type="checkbox"/> P21 D11- <input type="checkbox"/> 01
13 _{BN} 21 _{BK} 14 _{BU} 22 _{BK} Zb	Operation diagram				
Weight (packing per unit)	kg	0.125	0.130	0.130	0.140

 Closed contact /  Open contact

Dimensions (mm)



LS2..P.. Limit Switches

Double insulation - Plastic Casing IP67 - 30 mm Width
Pre-Wired

30° Cam Translation Movement

Fully Direction Trans.

Roller plunger with fixing nuts	Cross roller plunger with fixing nuts	ø14 roller lever	ø18 roller with bent lever	Adjustable ø18 roller lever	Adjustable ø3 rod lever
 0.1 m/s 10 N 30 N	 0.1 m/s 10 N 30 N	 1.5 m/s 0.08 N.m 0.28 N.m	 1.5 m/s 0.08 N.m 0.28 N.m	 1.5 m/s 0.08 N.m 0.28 N.m	 1.5 m/s 0.08 N.m 0.28 N.m

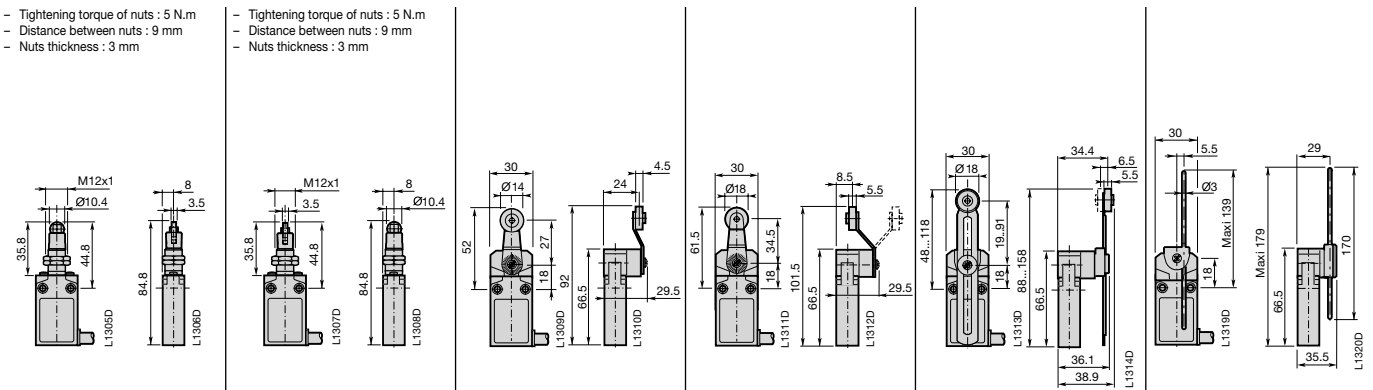
Cable output left / right code 0
 Cable output bottom code 1
 IEC 20/22 II PVC cable code P
 UL 62 PVC cable code U

Metal roller <input type="checkbox"/> 2 Plastic roller <input type="checkbox"/> 3 -	Metal roller <input type="checkbox"/> 4 Plastic roller <input type="checkbox"/> 5 -	Metal roller <input type="checkbox"/> 2 Plastic roller <input type="checkbox"/> 1 Ball bearing <input type="checkbox"/> 3	Metal roller <input type="checkbox"/> 6 Plastic roller <input type="checkbox"/> 5 Ball bearing <input type="checkbox"/> 7 ø19 roller	Metal roller <input type="checkbox"/> 4 Plastic roller <input type="checkbox"/> 1 Ball bearing <input type="checkbox"/> 3 ø19 roller	Metal rod <input type="checkbox"/> 1 Fibre-glass <input type="checkbox"/> 2 Square rod <input type="checkbox"/> 8 metal
LS2 □ P2 □ B11- □ 01	LS2 □ P2 □ B11- □ 01	LS2 □ P4 □ B11- □ 01	LS2 □ P4 □ B11- □ 01	LS2 □ P5 □ B11- □ 01	LS2 □ P7 □ B11- □ 01
 0 1.7 3.3 6.9 8.7 mm 21-22 13-14	 0 1.7 3.3 6.9 8.7 mm 21-22 13-14	 0 14° 26° 58° 74° 21-22 13-14	 0 14° 26° 58° 74° 21-22 13-14	 0 14° 26° 58° 74° 21-22 13-14	 0 14° 26° 58° 74° 21-22 13-14
LS2 □ P2 □ D11- □ 01	LS2 □ P2 □ D11- □ 01	LS2 □ P4 □ D11- □ 01	LS2 □ P4 □ D11- □ 01	LS2 □ P5 □ D11- □ 01	LS2 □ P7 □ D11- □ 01
 0 3.3 5.9 8.7 mm 21-22 13-14 5.5	 0 3.3 5.9 8.7 mm 21-22 13-14 5.5	 0 27° 49° 74° 21-22 13-14 45°	 0 27° 49° 74° 21-22 13-14 45°	 0 27° 49° 74° 21-22 13-14 45°	 0 27° 49° 74° 21-22 13-14 45°
0.145	0.145	0.175	0.180	0.190	0.185

Closed contact / Open contact

- Tightening torque of nuts : 5 N.m
- Distance between nuts : 9 mm
- Nuts thickness : 3 mm

- Tightening torque of nuts : 5 N.m
- Distance between nuts : 9 mm
- Nuts thickness : 3 mm



LS2..P.. Limit Switches

Double insulation - Plastic Casing IP67 - 30 mm Width
Pre-Wired

Movement to be detected:

Cable: 4 x 0.75 mm² / 4 x AWG 18
Length: 1 m
(Other lengths see ordering details)

Fully Direction. Trans. **Multidirectional**



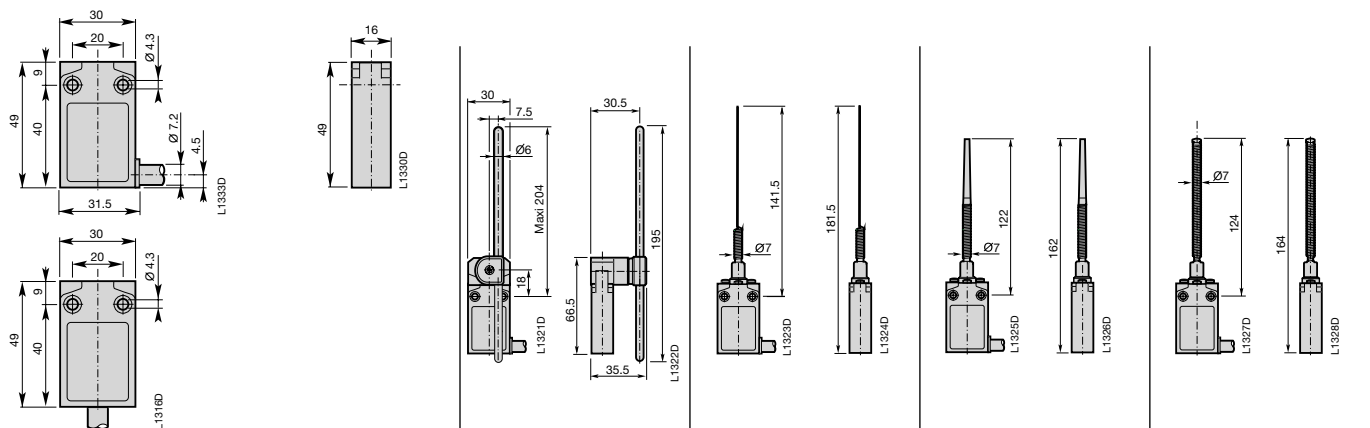
Actuator	Adjustable ø6 rod lever	Spring rod	Flexible rod with insulated end	Coil spring rod
⊕ (N.C. contact with positive opening operation) Maximum actuation speed Min. force / torque: - actuation - positive opening operation	⊕ 1.5 m/s 0.08 N.m 0.28 N.m	- 1.0 m/s 0.10 N.m -	- 1.0 m/s 0.10 N.m -	- 1.0 m/s 0.10 N.m -

Additional Technical Data

Cable output left / right code		0			
Cable output bottom code		1			
IEC 20/22 II PVC cable code		P			
UL 62 PVC cable code		U			
Type to be completed with head code <input type="checkbox"/>		Plastic rod <input type="checkbox"/> 3	-	-	-
		Fibre-glass <input type="checkbox"/> 4	-	-	-
		-	-	-	-
		-	-	-	-
Snap action contacts		LS2 □ P7 □ B11- □ 01	LS2 □ P91 B11- □ 01	LS2 □ P92 B11- □ 01	LS2 □ P93 B11- □ 01
13 _{BN} 21 _{BK} Zb 14 _{BU} 22 _{BK}		0 14° 26° 58° 74° 	0 5° 14° 	0 5° 14° 	0 5° 14°
Non-overlapping Slow action contacts		LS2 □ P7 □ D11- □ 01	-	-	-
13 _{BN} 21 _{BK} Zb 14 _{BU} 22 _{BK}		0 27° 49° 74° 45° 	-	-	-
Weight (packing per unit)		kg 0.200	0.190	0.195	0.200

█ Closed contact / □ Open contact

Dimensions (mm)

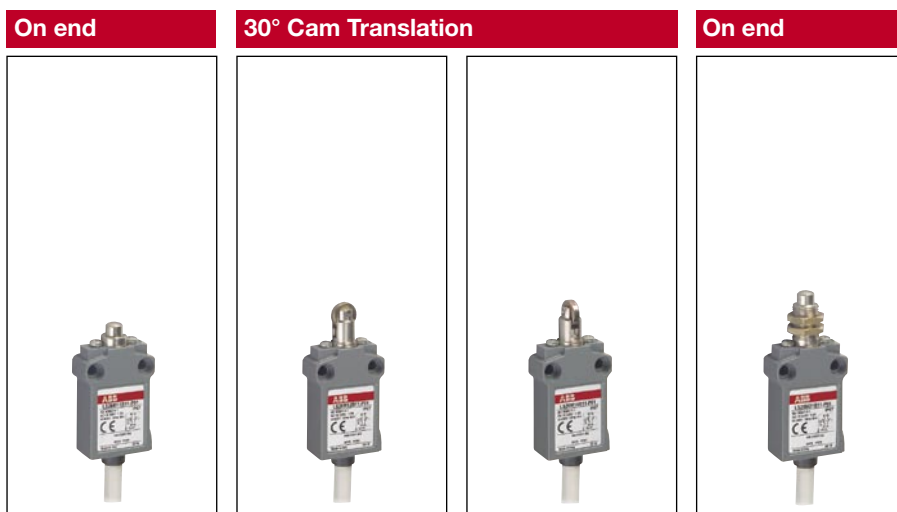


LS2..P.. Limit Switches

Double insulation - Plastic Casing IP67 - 35 mm Width
Pre-Wired

Movement to be detected:

Cable: 4 x 0.75 mm² / 4 x AWG 18
Length: 1 m
(Other lengths see ordering details)



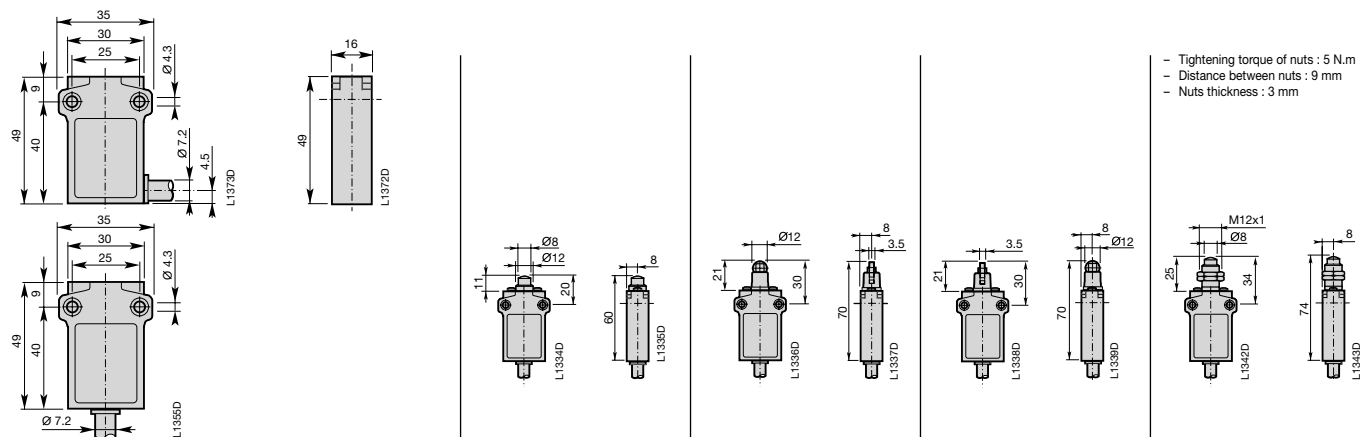
Actuator	Plain plunger	Roller plunger	Cross roller plunger	Steel plain plunger with fixing nuts
↻ (N.C. contact with positive opening operation)	↻	↻	↻	↻
Maximum actuation speed	0.5 m/s	0.1 m/s	0.1 m/s	0.5 m/s
Min. force / torque: - actuation	15 N	10 N	10 N	15 N
- positive opening operation	30 N	30 N	30 N	30 N

Additional Technical Data

Cable output left / right code.....	5			
Cable output bottom code.....	6			
IEC 20/22 II PVC cable code.....	P			
UL 62 PVC cable code.....	U			
Type to be completed with head code <input type="checkbox"/>	Metal plunger <input type="checkbox"/> 1 Metal plunger <input type="checkbox"/> 6 (with dust protection cup)	Metal roller <input type="checkbox"/> 2 Plastic roller <input type="checkbox"/> 3 -	Metal roller <input type="checkbox"/> 4 Plastic roller <input type="checkbox"/> 5 -	- - -
Snap action contacts	Type: LS2 <input type="checkbox"/> P1 <input type="checkbox"/> B11- <input type="checkbox"/> 01	Type: LS2 <input type="checkbox"/> P1 <input type="checkbox"/> B11- <input type="checkbox"/> 01	Type: LS2 <input type="checkbox"/> P1 <input type="checkbox"/> B11- <input type="checkbox"/> 01	Type: LS2 <input type="checkbox"/> P21 B11- <input type="checkbox"/> 01
	Operation diagram: 0 1.0 1.9 4.0 5.0 mm	Operation diagram: 0 1.7 3.3 6.9 8.7 mm	Operation diagram: 0 1.7 3.3 6.9 8.7 mm	Operation diagram: 0 1.0 1.9 4.0 5.0 mm
Non-overlapping Slow action contacts	Type: LS2 <input type="checkbox"/> P1 <input type="checkbox"/> D11- <input type="checkbox"/> 01	Type: LS2 <input type="checkbox"/> P1 <input type="checkbox"/> D11- <input type="checkbox"/> 01	Type: LS2 <input type="checkbox"/> P1 <input type="checkbox"/> D11- <input type="checkbox"/> 01	Type: LS2 <input type="checkbox"/> P21 D11- <input type="checkbox"/> 01
	Operation diagram: 0 1.9 3.4 5.0 mm	Operation diagram: 0 3.3 5.9 8.7 mm	Operation diagram: 0 3.3 5.9 8.7 mm	Operation diagram: 0 1.9 3.4 5.0 mm
Weight (packing per unit)	kg 0.125	kg 0.130	kg 0.130	kg 0.140

Closed contact / Open contact

Dimensions (mm)



- Tightening torque of nuts : 5 N.m
- Distance between nuts : 9 mm
- Nuts thickness : 3 mm

LS2..P.. Limit Switches

Double insulation - Plastic Casing IP67 - 35 mm Width
Pre-Wired

Movement to be detected:

Cable: 4 x 0.75 mm² / 4 x AWG 18
Length: 1 m
(Other lengths see ordering details)

30° Cam Translation



Actuator

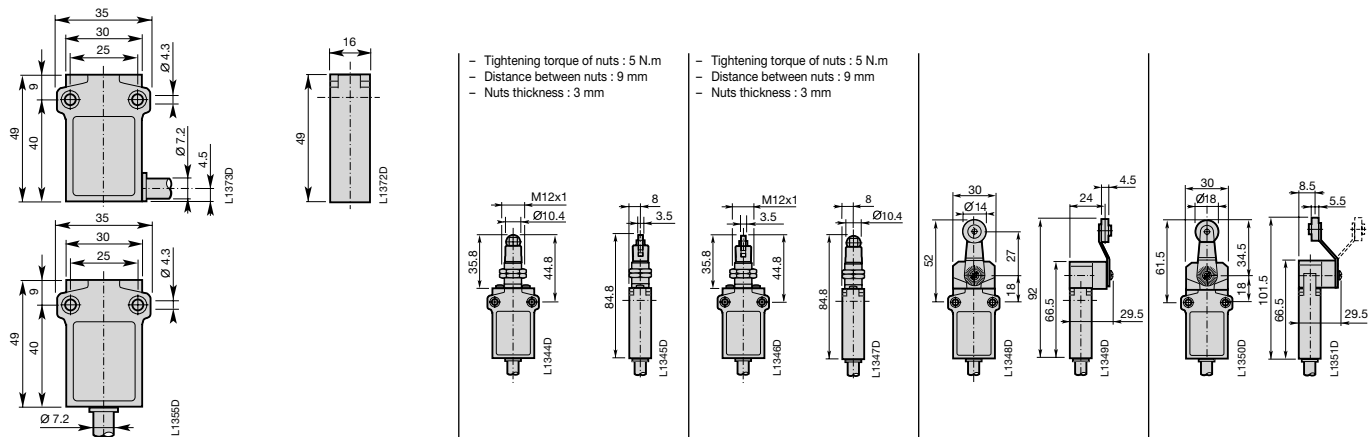
	Roller plunger with fixing nuts	Cross roller plunger with fixing nuts	ø14 roller lever	ø18 roller with bent lever
⊕ (N.C. contact with positive opening operation)	⊕	⊖	⊕	⊖
Maximum actuation speed	0.1 m/s	0.1 m/s	1.5 m/s	1.5 m/s
Min. force / torque: - actuation	10 N	10 N	0.08 N.m	0.08 N.m
- positive opening operation	30 N	30 N	0.28 N.m	0.28 N.m

Additional Technical Data

Cable output left / right code.....	5			
Cable output bottom code.....	6			
IEC 20/22 II PVC cable code	P			
UL 62 PVC cable code.....	U			
Type to be completed with head code <input type="checkbox"/>	Metal roller 2 Plastic roller 3	Metal roller 4 Plastic roller 5	Metal roller 2 Plastic roller 1 Ball bearing 3	Metal roller 6 Plastic roller 5 Ball bearing 7 ø19 roller
Snap action contacts	Type LS2 □ P2 □ B11- □ 01	Type LS2 □ P2 □ B11- □ 01	Type LS2 □ P4 □ B11- □ 01	Type LS2 □ P4 □ B11- □ 01
 13 _{BN} 21 _{BK} 14 _{BU} 22 _{BK}	Operation diagram 0 1.7 3.3 6.9 8.7 mm	Operation diagram 0 1.7 3.3 6.9 8.7 mm	Operation diagram 0 14° 26° 58° 74°	Operation diagram 0 14° 26° 58° 74°
Non-overlapping Slow action contacts	Type LS2 □ P2 □ D11- □ 01	Type LS2 □ P2 □ D11- □ 01	Type LS2 □ P4 □ D11- □ 01	Type LS2 □ P4 □ D11- □ 01
 13 _{BN} 21 _{BK} 14 _{BU} 22 _{BK}	Operation diagram 0 3.3 5.9 8.7 mm 5.5	Operation diagram 0 3.3 5.9 8.7 mm 5.5	Operation diagram 0 27° 49° 74° 45°	Operation diagram 0 27° 49° 74° 45°
Weight (packing per unit)	kg 0.145	kg 0.145	kg 0.175	kg 0.180










■ Closed contact / □ Open contact

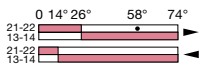
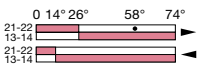
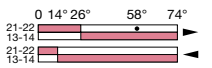
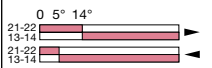

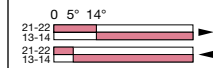
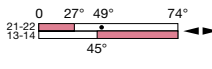
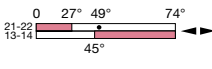
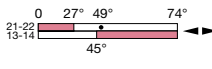
Dimensions (mm)




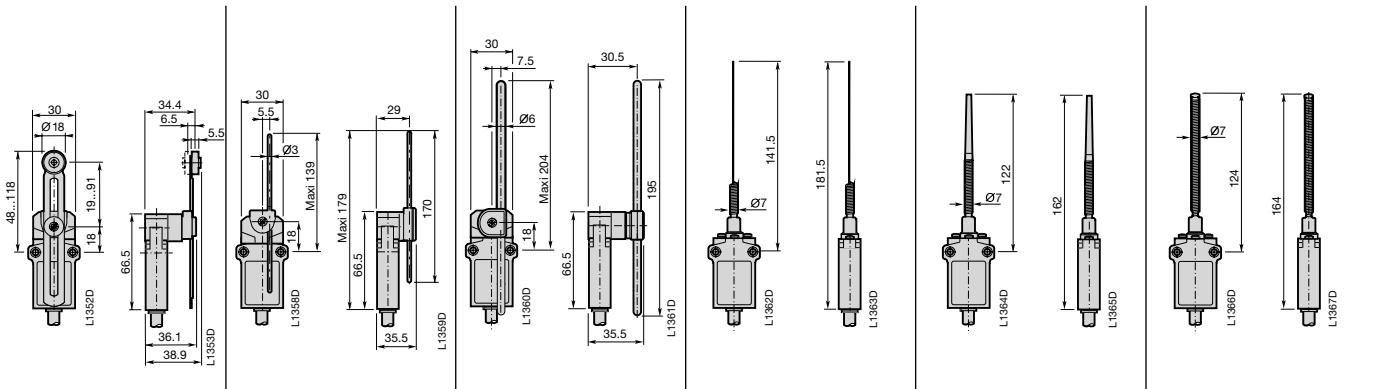
LS2..P.. Limit Switches

Double insulation - Plastic Casing IP67 - 35 mm Width
Pre-Wired

30° Cam Transl.	Fully Directional Translation		Multidirectional		
					
Adjustable ø18 roller lever	Adjustable ø3 rod lever	Adjustable ø6 rod lever	Spring rod	Flexible rod with insulated end	Coil spring rod
 1.5 m/s 0.08 N.m 0.28 N.m	 1.5 m/s 0.08 N.m 0.28 N.m	 1.5 m/s 0.08 N.m 0.28 N.m	1.0 m/s 0.10 N.m -	1.0 m/s 0.10 N.m -	1.0 m/s 0.10 N.m -

Cable output left / right code..... <input type="checkbox"/> 5					
Cable output bottom code..... <input type="checkbox"/> 6					
IEC 20/22 II PVC cable code..... <input type="checkbox"/> P					
UL 62 PVC cable code..... <input type="checkbox"/> U					
Metal roller <input type="checkbox"/> 4	Metal rod <input type="checkbox"/> 1	Plastic rod <input type="checkbox"/> 3	-	-	-
Plastic roller <input type="checkbox"/> 1	Fibre-glass <input type="checkbox"/> 2	Fibre-glass <input type="checkbox"/> 4	-	-	-
Ball bearing <input type="checkbox"/> 3 ø19 roller	Square rod <input type="checkbox"/> 8 metal	-	-	-	-
LS2 □ M5 □ B11- □ 01	LS2 □ M7 □ B11- □ 01	LS2 □ M7 □ B11- □ 01	LS2 □ M91 B11- □ 01	LS2 □ M92 B11- □ 01	LS2 □ M93B11- □ 01
					
LS2 □ M5 □ D11- □ 01	LS2 □ M7 □ D11- □ 01	LS2 □ M7 □ D11- □ 01	-	-	-
			-	-	-
0.190	0.185	0.200	0.190	0.195	0.200

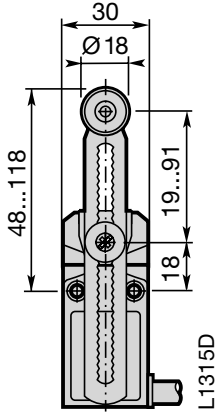
 Closed contact /  Open contact



Specific heads

Plastic or Metal Casing - IP67

Adjustable roller lever by trammel



Other dimensions see: "Additional Technical Data"

- Metal and plastic casings
- Cable output left / right and cable output bottom
- Cable UL 62 PVC or cable IEC 20/22 II PVC
- Contact blocks B11 and D11
- Plastic, metal or ball bearing roller
- Adjustable position step by step 2 mm

P = Plastic Casing
M = Metal Casing

6 = Plastic roller
7 = Ball bearing roller
8 = Metal roller

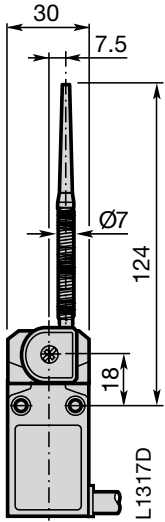
LS2 □ M5 □ B11 - P01	1SBV01 □ □ 5 □ R2001
LS2 □ M5 □ B11 - U01	1SBV01 □ □ 5 □ R2601
LS2 □ M5 □ D11 - P01	1SBV01 □ □ 5 □ R2101
LS2 □ M5 □ D11 - U01	1SBV01 □ □ 5 □ R2701

6 = Plastic roller
7 = Ball bearing roller
8 = Metal roller

5 5 = Cable output Left / Right - Metal Casing 30 mm
5 6 = Cable output Bottom - Metal Casing 30 mm
5 9 = Cable output Left / Right - Plastic Casing 30 mm
6 0 = Cable output Bottom - Plastic Casing 30 mm
6 3 = Cable output Left / Right - Metal Casing 35 mm
6 4 = Cable output Bottom - Metal Casing 35 mm
6 7 = Cable output Left / Right - Plastic Casing 35 mm
6 8 = Cable output Bottom - Plastic Casing 35 mm

Cable output Left / Right - Casing 30 mm = 0
Cable output Bottom - Casing 30 mm = 1
Cable output Left / Right - Casing 35 mm = 5
Cable output Bottom - Casing 35 mm = 6

Spring rod lever



Other dimensions see: "Additional Technical Data"

- Metal and plastic casings
- Cable output left / right and cable output bottom
- Cable UL 62 PVC or cable IEC 20/22 II PVC
- Contact blocks B11 and D11

P = Plastic Casing
M = Metal Casing

1 = Flexible rod with insulated end
2 = Coil spring rod

LS2 □ M6 □ B11 - P01	1SBV01 □ □ 6 □ R2001
LS2 □ M6 □ B11 - U01	1SBV01 □ □ 6 □ R2601
LS2 □ M6 □ D11 - P01	1SBV01 □ □ 6 □ R2101
LS2 □ M6 □ D11 - U01	1SBV01 □ □ 6 □ R2701

1 = Flexible rod with insulated end
2 = Coil spring rod

5 5 = Cable output Left / Right - Metal Casing 30 mm
5 6 = Cable output Bottom - Metal Casing 30 mm
5 9 = Cable output Left / Right - Plastic Casing 30 mm
6 0 = Cable output Bottom - Plastic Casing 30 mm
6 3 = Cable output Left / Right - Metal Casing 35 mm
6 4 = Cable output Bottom - Metal Casing 35 mm
6 7 = Cable output Left / Right - Plastic Casing 35 mm
6 8 = Cable output Bottom - Plastic Casing 35 mm

Cable output Left / Right - Casing 30 mm = 0
Cable output Bottom - Casing 30 mm = 1
Cable output Left / Right - Casing 35 mm = 5
Cable output Bottom - Casing 35 mm = 6

LS Series Limit Switches

Terminology


Double Insulation

Class II materials, according to IEC 536, are designed with double insulation. This measure consists in doubling the functional insulation with an additional layer of insulation so as to eliminate the risk of electric shock and thus not having to protect elsewhere. No conductive part of "double insulated" material should be connected to a protective conductor.

Positive Opening Operation

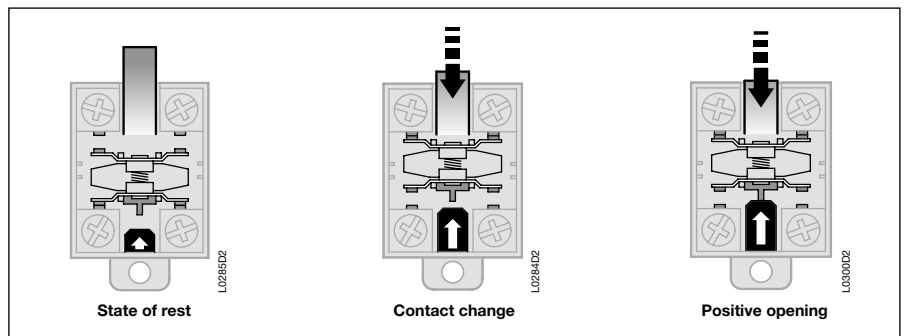
A control switch, with one or more break-contact elements, has a positive opening operation when the switch actuator ensures full contact opening of the break-contact. For the part of travel that separates the contacts, there must be a positive drive, with no resilient member (e.g. springs), between the moving contacts and the point of the actuator to which the actuating force is applied.

Control switches with positive opening operation may be provided with either snap action or slow action contact elements. To use several contacts on the same control switch with positive opening operation, they must be electrically separated from each other, if not, only one may be used.

Every control switch with positive opening operation must be indelibly marked on the outside with the symbol: 

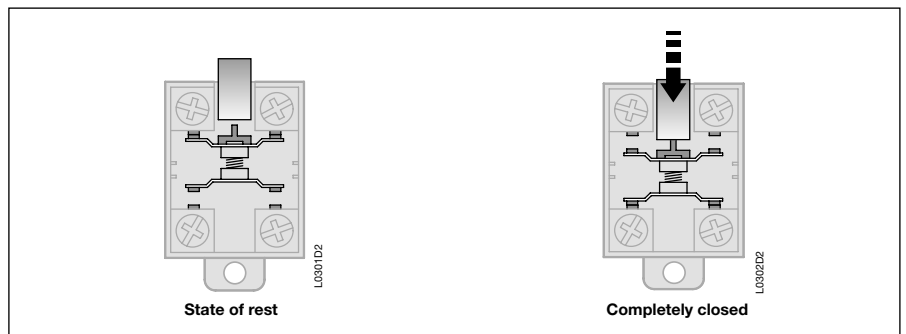
Snap Action

Snap action contacts are characterised by a release position that is distinct from the operating position (differential travel). Snap breaking of moving contacts is independent of the switch actuator's speed and contributes to regular electric performance even for slow switch actuator speeds.



Slow Action

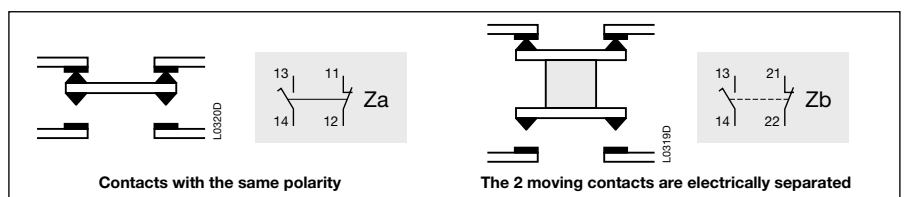
Slow action contacts are characterised by a release position that is the same as the operating position. The switch actuator's speed directly conditions the travel speed of contacts.



Contact shape according to IEC 60947-5-1.

Change-over contact elements with 4 terminals must be indelibly marked **Za** or **Zb**.

See figure opposite for contact representation.



Utilization Category

AC-15: switching of electromagnetic loads of electromagnets using an alternating current (>72 VA).

DC-13: switching of electromagnets using a direct current.

Minimum Actuation Force / Torque

The minimum amount of force/torque that is to be applied to the switch actuator to produce a change in contact position.

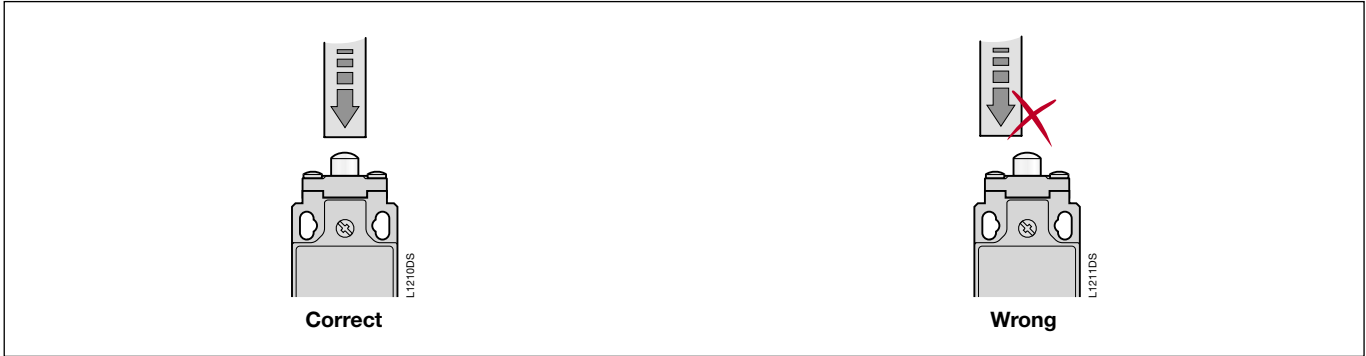
Minimum Force / Torque to achieve Positive Opening Operation

The minimum amount of force/torque that is to be applied to the switch actuator to ensure positive opening operation of the N.C. contact.

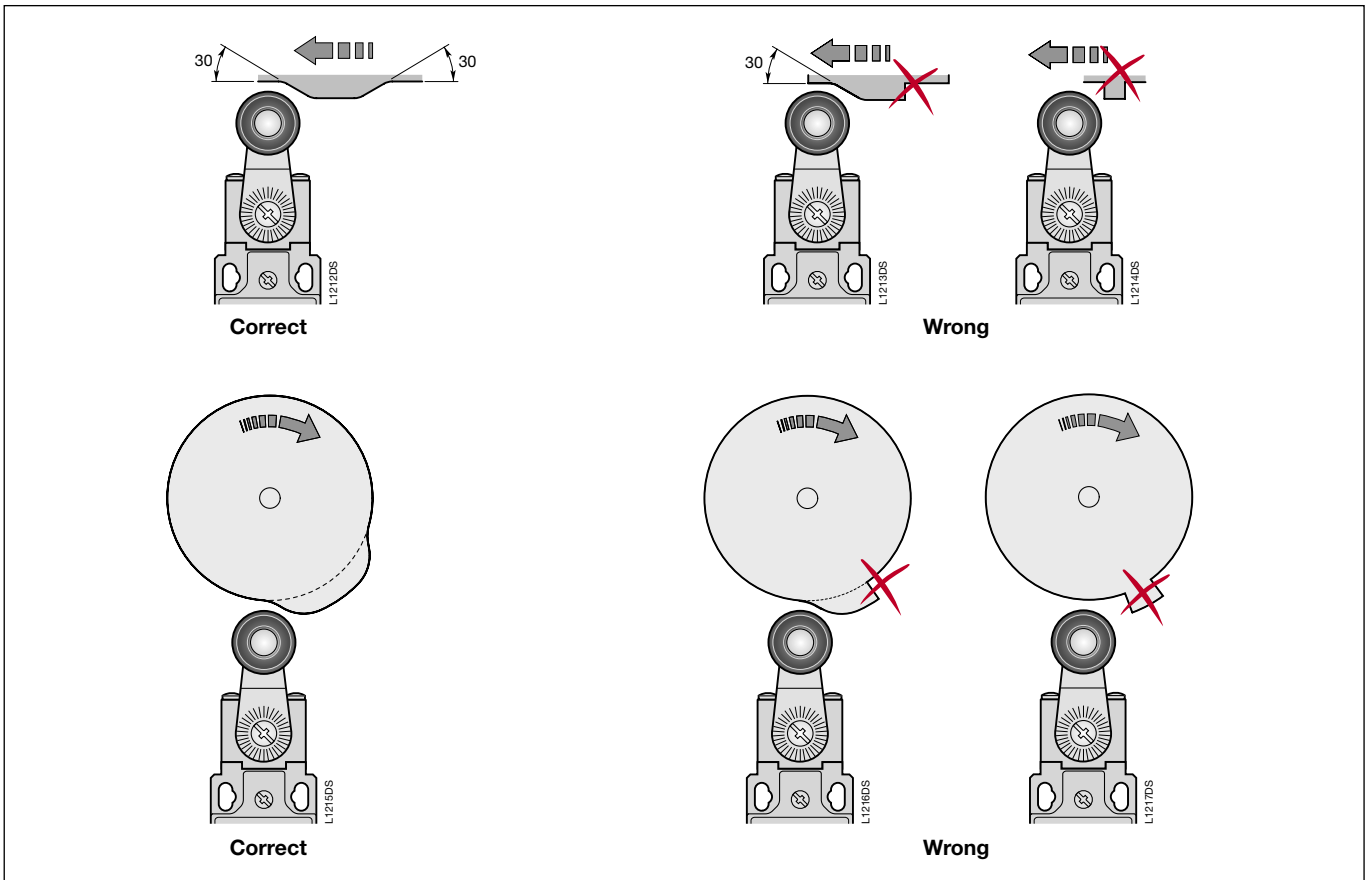
LS Series Limit Switches

Utilization precautions

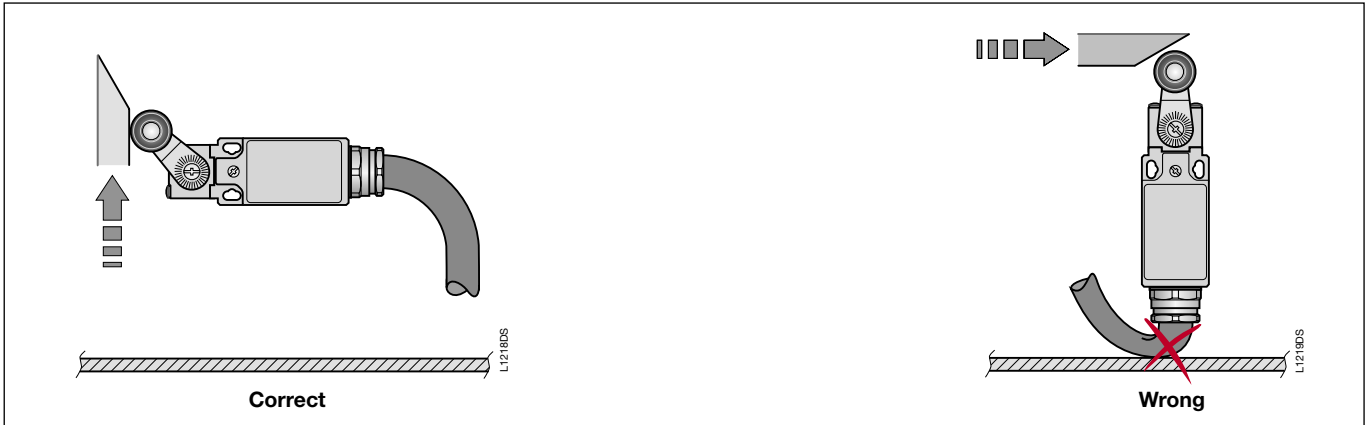
Plain plunger



Roller plunger or roller lever



Curve of connecting cable





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