

LS30P ... LS35P and LS40P ... LS45P Limit Switches

Description of Complete Device

Applications

Easy to use, electromechanical limit switches offer specific qualities:

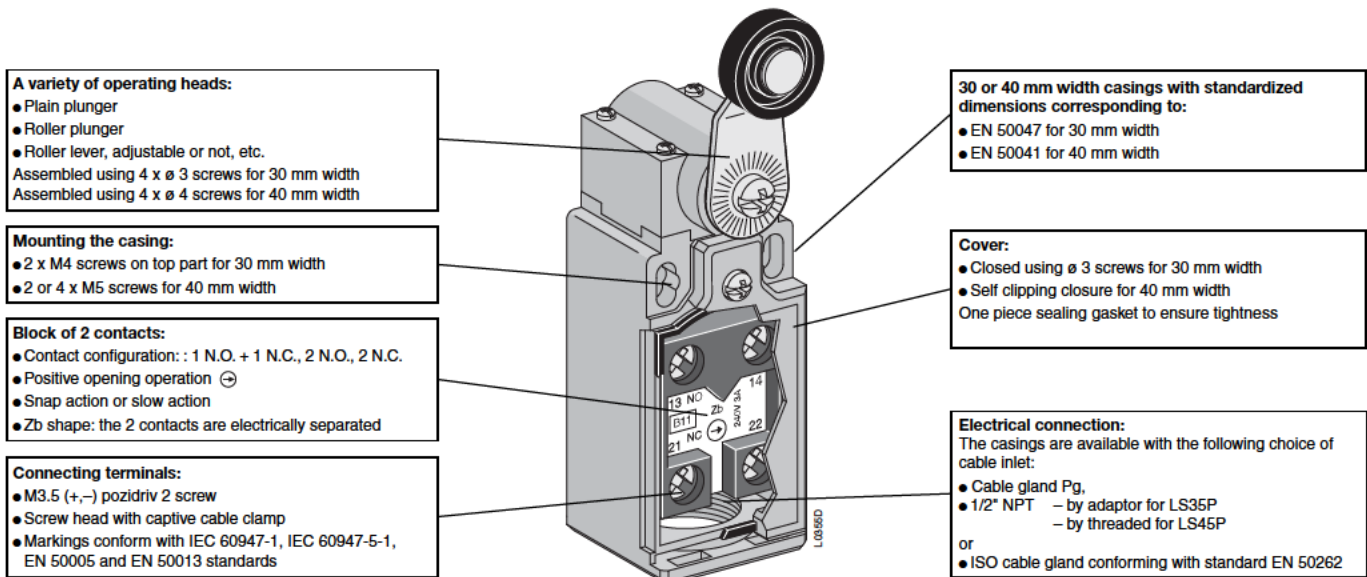
- Visible operation.
- Able to switch strong currents (10 A conventional thermal current).
- Contact blocks with positive opening operation of the "N.C." normally closed contact(s) (symbol ⊖).
- Electrically separated contacts (Zb shape).
- Precise operating points (consistency).
- Immune to electromagnetic disturbances.

They are purpose-built detection devices thanks to these characteristics:

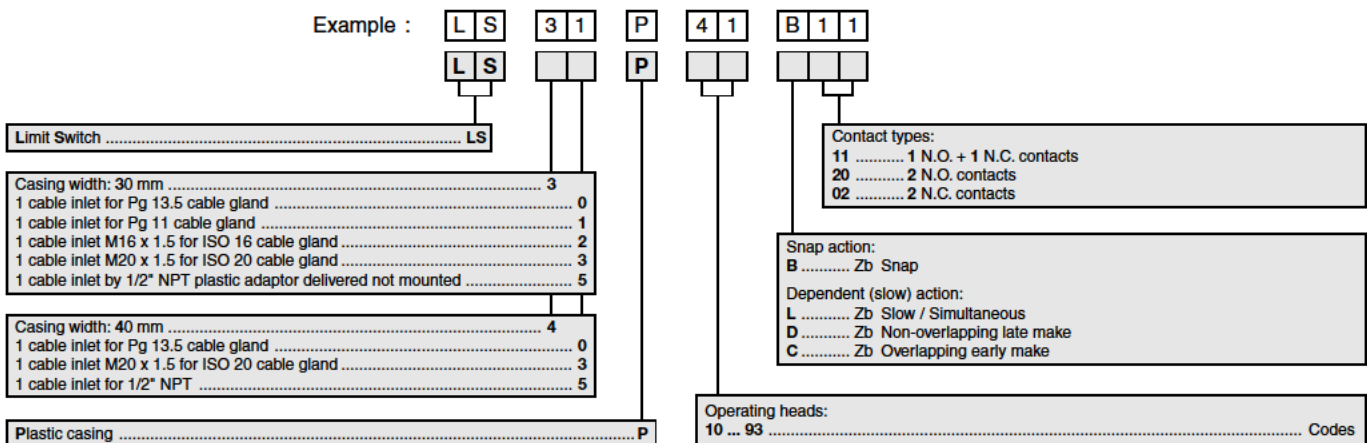
- Presence/absence.
- Positioning and travel limit.
- Objects passing/counting.

Description

Limit switches, which are made of reinforced UL-V0 thermoplastic fibre-glass, offer double insulation \square and an IP65 degree of protection.

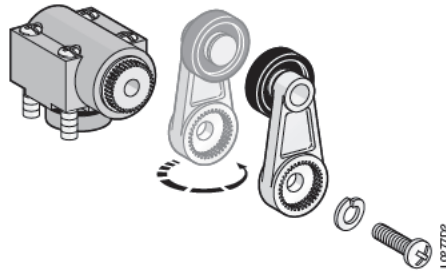


Type

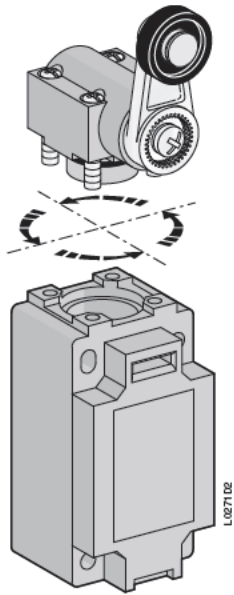


>> Type of Separate Elements	pages 10, 16	>> Operation Diagrams	pages 14, 22
>> Ordering Details for Separate Elements	pages 12, 19	>> Dimensions of Complete Device	pages 15, 23

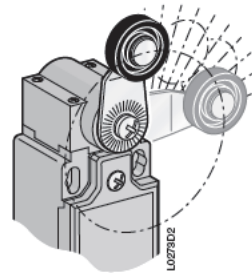
LS30P ... LS35P and LS40P ... LS45P Limit Switches Implementation



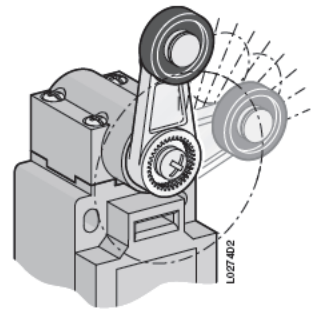
Lever round turning:
LS30P ... LS35P and LS40P ... LS45P



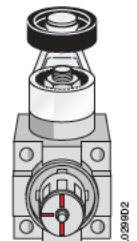
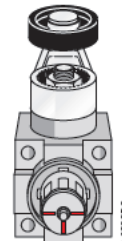
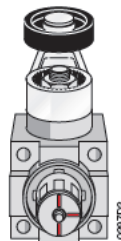
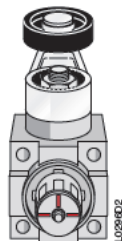
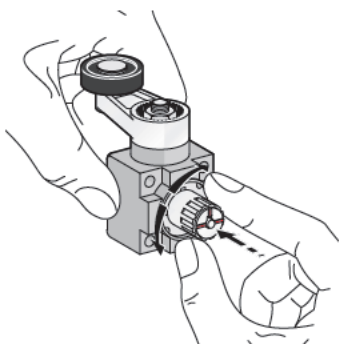
Head orientation:
LS30P ... LS35P and LS40P ... LS45P



Free position adjustment
10 in 10° of lever:
LS30P ... LS35P



Free position adjustment
9 in 9° of lever:
LS40P ... LS45P



LS40P ... LSP45P Operating mode selection only

LS30P ... LS35P Limit Switches

Double Insulation - Plastic Casing IP65 - 30 mm Width

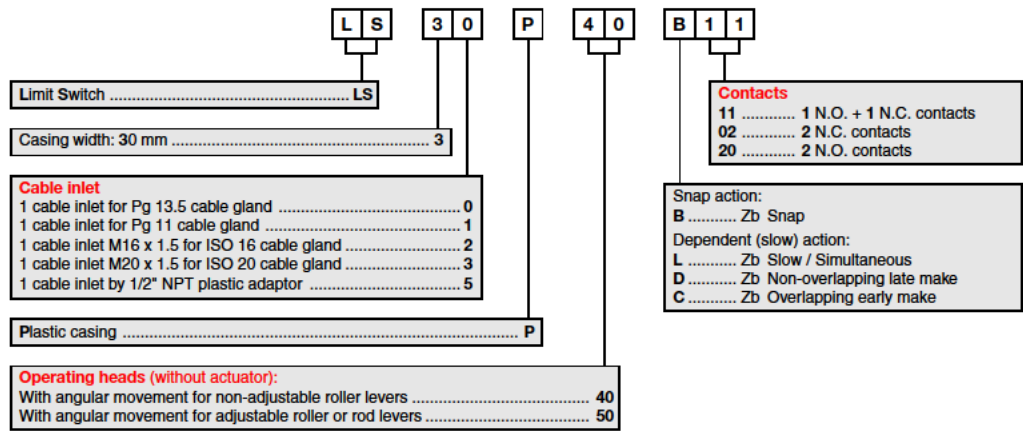
Type of Separate Elements

Casings with Contact Block and Angular Motion Head (without actuator)



LS30P40B11

58301962

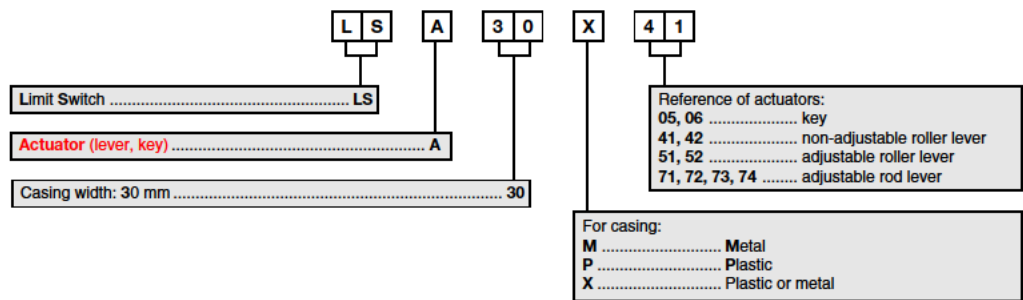


Separate Actuators (lever, key)



LSA30X41

58302051

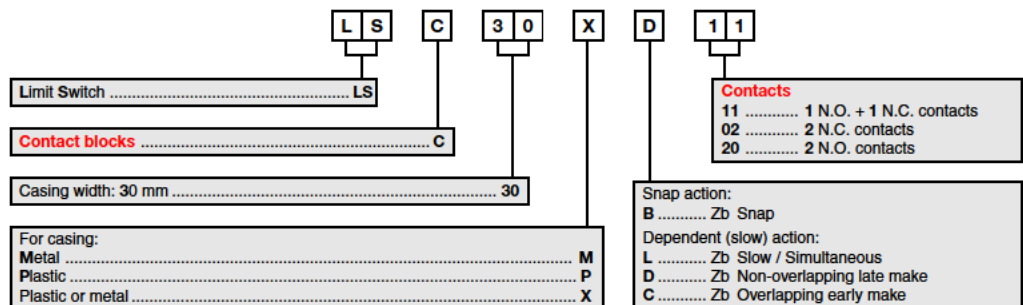


Separate Contact Blocks



LSC30XD11

58302153

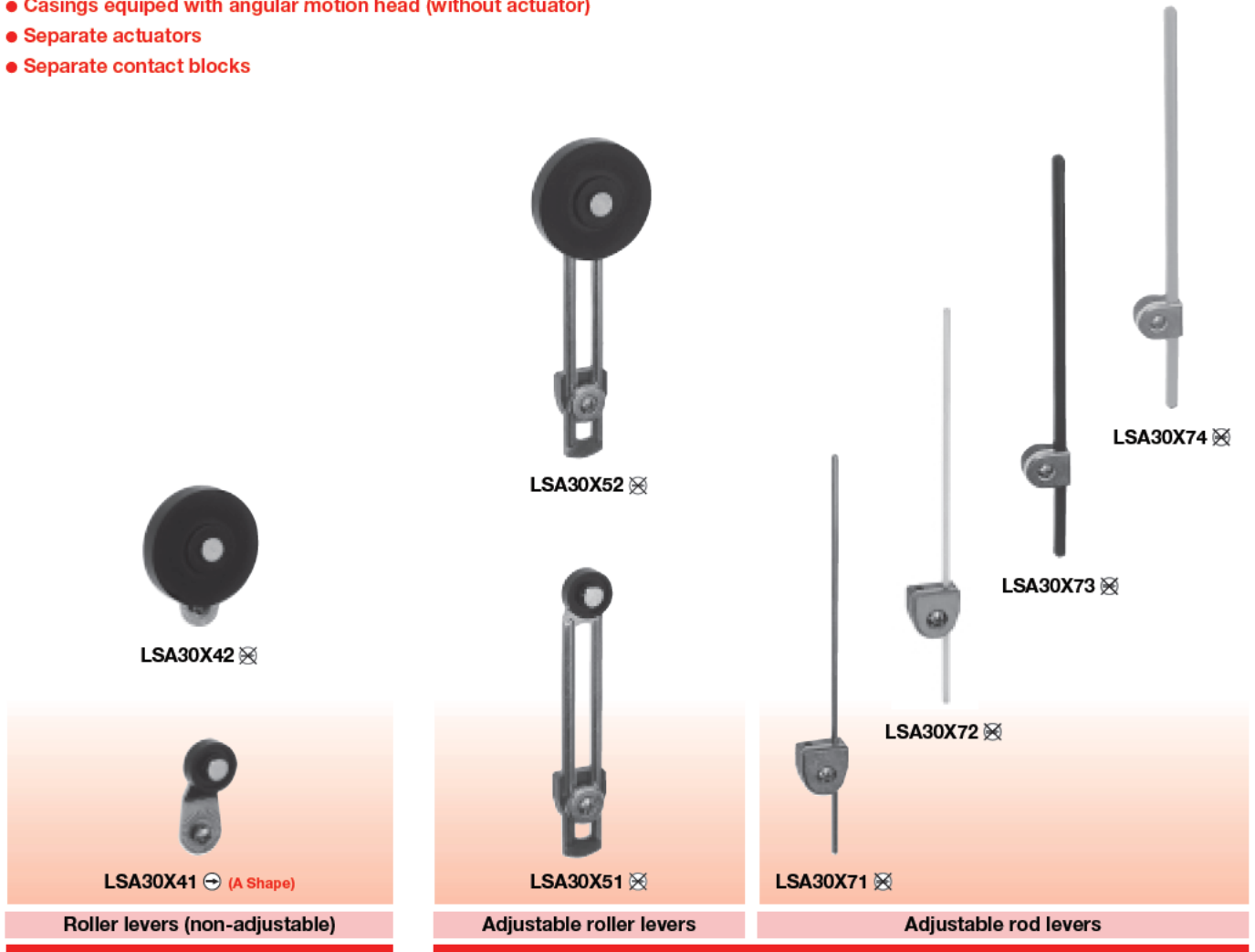


LS30P ... LS35P Limit Switches

Double Insulation - Plastic Casing IP65 - 30 mm Width

Synoptic of Separate Elements

- Casings equipped with angular motion head (without actuator)
- Separate actuators
- Separate contact blocks



LS30P40 ... LS35P40 casings equipped with angular motion head for roller levers (non-adjustable)

- ⊕ LS30P40B11, LS30P40D11, LS30P40C11, LS30P40L02, LS30P40B02
- ⊕ LS31P40B11, LS31P40D11, LS31P40C11, LS31P40L02, LS31P40B02
- ⊕ LS32P40B11, LS32P40D11, LS32P40C11, LS32P40L02, LS32P40B02
- ⊕ LS33P40B11, LS33P40D11, LS33P40C11, LS33P40L02, LS33P40B02
- ⊕ LS35P40B11, LS35P40D11, LS35P40C11, LS35P40L02, LS35P40B02

- ⊗ LS30P40L20, LS31P40L20, LS32P40L20, LS33P40L20, LS35P40L20



LS30P50 ... LS35P50 casings equipped with angular motion head for adjustable roller or rod levers

- ⊗ LS30P50B11, LS30P50D11, LS30P50C11, LS30P50L02, LS30P50L20, LS30P50B02
- ⊗ LS31P50B11, LS31P50D11, LS31P50C11, LS31P50L02, LS31P50L20, LS31P50B02
- ⊗ LS32P50B11, LS32P50D11, LS32P50C11, LS32P50L02, LS32P50L20, LS32P50B02
- ⊗ LS33P50B11, LS33P50D11, LS33P50C11, LS33P50L02, LS33P50L20, LS33P50B02
- ⊗ LS35P50B11, LS35P50D11, LS35P50C11, LS35P50L02, LS35P50L20, LS35P50B02



Contact blocks

- ⊕ LSC30XB11, LSC30XD11, LSC30XC11, LSC30XL02, LSC30XB02
- ⊗ LSC30XL20

⊕ : Suitable for positive opening operation (IEC 60947-5-1 and EN 50041).

Warning! The positive opening operation of limit switch is only guaranteed if the elements noted with ⊕ are fitted.

LS30P ... LS35P Limit Switches

Double Insulation - Plastic Casing IP65 - 30 mm Width Separate Elements

⊖ "N.C." contact with positive opening operation or element (subassembly, head, lever) suitable for positive opening operation.

Warning! The positive opening operation of limit switch is only guaranteed if the elements noted with ⊖ are fitted.

- LS30P with 1 cable inlet for Pg 13.5 cable gland.
- LS31P with 1 cable inlet for Pg 11 cable gland.
- LS32P with 1 cable inlet M16 x 1.5 for ISO 16 cable gland.
- LS33P with 1 cable inlet M20 x 1.5 for ISO 20 cable gland.
- LS35P with 1 cable inlet by 1/2" NPT plastic adaptor.

Ordering Details

Contact blocks	Positive opening operation	Actuation speed max. m/s	Type	Order code	Unit weight kg					
						⊖				
B11	D11	C11	L02	L20	B02	⊖				Packing 1 piece



LS30P40B11

Casings with angular motion head for non-adjustable roller levers, delivered without actuator

1						⊖	1.5	LS30P40B11	1SBV 01 0240 R1211	0.085
	1					⊖	1.5	LS30P40D11	1SBV 01 0240 R1411	0.085
		1				⊖	1.5	LS30P40C11	1SBV 01 0240 R1511	0.085
			1			⊖	1.5	LS30P40L02	1SBV 01 0240 R1302	0.085
				1		⊗	1.5	LS30P40L20	1SBV 01 0240 R1320	0.085
					1	⊖	1.5	LS30P40B02	1SBV 01 0240 R1202	0.085
1						⊖	1.5	LS31P40B11	1SBV 01 0140 R1211	0.085
	1					⊖	1.5	LS31P40D11	1SBV 01 0140 R1411	0.085
		1				⊖	1.5	LS31P40C11	1SBV 01 0140 R1511	0.085
			1			⊖	1.5	LS31P40L02	1SBV 01 0140 R1302	0.085
				1		⊗	1.5	LS31P40L20	1SBV 01 0140 R1320	0.085
					1	⊖	1.5	LS31P40B02	1SBV 01 0140 R1202	0.085
1						⊖	1.5	LS32P40B11	1SBV 01 0340 R1211	0.085
	1					⊖	1.5	LS32P40D11	1SBV 01 0340 R1411	0.085
		1				⊖	1.5	LS32P40C11	1SBV 01 0340 R1511	0.085
			1			⊖	1.5	LS32P40L02	1SBV 01 0340 R1302	0.085
				1		⊗	1.5	LS32P40L20	1SBV 01 0340 R1320	0.085
					1	⊖	1.5	LS32P40B02	1SBV 01 0340 R1202	0.085
1						⊖	1.5	LS33P40B11	1SBV 01 2240 R1211	0.085
	1					⊖	1.5	LS33P40D11	1SBV 01 2240 R1411	0.085
		1				⊖	1.5	LS33P40C11	1SBV 01 2240 R1511	0.085
			1			⊖	1.5	LS33P40L02	1SBV 01 2240 R1302	0.085
				1		⊗	1.5	LS33P40L20	1SBV 01 2240 R1320	0.085
					1	⊖	1.5	LS33P40B02	1SBV 01 2240 R1202	0.085
1						⊖	1.5	LS35P40B11	1SBV 01 2140 R1211	0.092
	1					⊖	1.5	LS35P40D11	1SBV 01 2140 R1411	0.092
		1				⊖	1.5	LS35P40C11	1SBV 01 2140 R1511	0.092
			1			⊖	1.5	LS35P40L02	1SBV 01 2140 R1302	0.092
				1		⊗	1.5	LS35P40L20	1SBV 01 2140 R1320	0.092
					1	⊖	1.5	LS35P40B02	1SBV 01 2140 R1202	0.092

Casings with angular motion head for adjustable rod or roller levers, delivered without actuator

1						⊗	1.5	LS30P50B11	1SBV 01 0250 R1211	0.085
	1					⊗	1.5	LS30P50D11	1SBV 01 0250 R1411	0.085
		1				⊗	1.5	LS30P50C11	1SBV 01 0250 R1511	0.085
			1			⊗	1.5	LS30P50L02	1SBV 01 0250 R1302	0.085
				1		⊗	1.5	LS30P50L20	1SBV 01 0250 R1320	0.085
					1	⊗	1.5	LS30P50B02	1SBV 01 0250 R1202	0.085
1						⊗	1.5	LS31P50B11	1SBV 01 0150 R1211	0.085
	1					⊗	1.5	LS31P50D11	1SBV 01 0150 R1411	0.085
		1				⊗	1.5	LS31P50C11	1SBV 01 0150 R1511	0.085
			1			⊗	1.5	LS31P50L02	1SBV 01 0150 R1302	0.085
				1		⊗	1.5	LS31P50L20	1SBV 01 0150 R1320	0.085
					1	⊗	1.5	LS31P50B02	1SBV 01 0150 R1202	0.085
1						⊗	1.5	LS32P50B11	1SBV 01 0350 R1211	0.085
	1					⊗	1.5	LS32P50D11	1SBV 01 0350 R1411	0.085
		1				⊗	1.5	LS32P50C11	1SBV 01 0350 R1511	0.085
			1			⊗	1.5	LS32P50L02	1SBV 01 0350 R1302	0.085
				1		⊗	1.5	LS32P50L20	1SBV 01 0350 R1320	0.085
					1	⊗	1.5	LS32P50B02	1SBV 01 0350 R1202	0.085

LS30P ... LS35P Limit Switches

Double Insulation - Plastic Casing IP65 - 30 mm Width
Separate Elements

⊖ "N.C." contact with positive opening operation or element (subassembly, head, lever) suitable for positive opening operation.
Warning! The positive opening operation of limit switch is only guaranteed if the elements noted with ⊖ are fitted.



LS30P50B11



LSA30X41



LSA30X42



LSA30X51



LSA30X71



LSA30P05



LSA30P06



LSC30XD11



LSR1305

Ordering Details

Contact blocks						Positive opening operation	Actuation speed max. m/s	Type	Order code	Unit weight kg	Packing 1 piece
B11	D11	C11	L02	L20	B02						

Casings with angular motion head for adjustable rod or roller levers, delivered without actuator

1						⊖	1.5	LS33P50B11	1SBV 01 2250 R1211	0.085
1						⊖	1.5	LS33P50D11	1SBV 01 2250 R1411	0.085
	1					⊖	1.5	LS33P50C11	1SBV 01 2250 R1511	0.085
		1				⊖	1.5	LS33P50L02	1SBV 01 2250 R1302	0.085
			1			⊖	1.5	LS33P50L20	1SBV 01 2250 R1320	0.085
				1		⊖	1.5	LS33P50B02	1SBV 01 2250 R1202	0.085
1						⊖	1.5	LS35P50B11	1SBV 01 2150 R1211	0.092
1						⊖	1.5	LS35P50D11	1SBV 01 2150 R1411	0.092
	1					⊖	1.5	LS35P50C11	1SBV 01 2150 R1511	0.092
		1				⊖	1.5	LS35P50L02	1SBV 01 2150 R1302	0.092
			1			⊖	1.5	LS35P50L20	1SBV 01 2150 R1320	0.092
				1		⊖	1.5	LS35P50B02	1SBV 01 2150 R1202	0.092

Actuators for LS30P40 ... LS35P40 (delivered with M3.5 screw)

To be actuated by 30° cam

∅ 18 mm polyamide roller lever (1)	⊖	-	LSA30X41	1SBV 04 8641 R1000	0.012
∅ 45 mm rubber roller lever (1)	⊖	-	LSA30X42	1SBV 04 8642 R1000	0.026

Actuators for LS30P50 ... LS35P50 (delivered with M3.5 screw and adaptation parts)

To be actuated by 30° cam

Adjustable ∅ 18 mm polyamide roller lever (1)	⊖	-	LSA30X51	1SBV 04 8651 R1000	0.022
Adjustable ∅ 45 mm rubber roller lever (1)	⊖	-	LSA30X52	1SBV 04 8652 R1000	0.035

To be actuated by fully directional translation movement

Adjustable ∅ 3 mm inox rod lever 170 mm length (1)	⊖	-	LSA30X71	1SBV 04 8671 R1000	0.021
Adjustable ∅ 3 mm fibre-glass rod lever, 170 mm length (1)	⊖	-	LSA30X72	1SBV 04 8672 R1000	0.015
Adjustable ∅ 6 mm polyamide rod lever, 195 mm length (1)	⊖	-	LSA30X73	1SBV 04 8673 R1000	0.018
Adjustable ∅ 6 mm fibre-glass rod lever, 195 mm length (1)	⊖	-	LSA30X74	1SBV 04 8674 R1000	0.022

Right angle key for LS30P15 ... LS35P15

Right angle key (fixing 13 mm)	⊖	-	LSA30P05	1SBV 04 8605 R1000	0.013
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Straight key for LS30P16 ... LS35P16

Straight key (fixing 13 mm)	⊖	-	LSA30P06	1SBV 04 8606 R1000	0.013
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Separate contact blocks

1 N.C. + 1 N.O. 2-pole snap action	⊖	-	LSC30XB11	1SBV 04 9500 R1211	0.025
1 N.C. + 1 N.O. 2-pole non-overlapping slow action	⊖	-	LSC30XD11	1SBV 04 9500 R1411	0.025
1 N.O. + 1 N.C. 2-pole overlapping slow action	⊖	-	LSC30XC11	1SBV 04 9500 R1511	0.025
2 N.C. 2-pole simultaneous slow action	⊖	-	LSC30XL02	1SBV 04 9500 R1302	0.025
2 N.O. 2-pole simultaneous slow action	⊖	-	LSC30XL20	1SBV 04 9500 R1320	0.025
2 N.C. 2-pole snap action	⊖	-	LSC30XB02	1SBV 04 9500 R1202	0.025

1/2" NPT plastic adaptors

1 piece	-	-	LSR1305	1SBV 04 7500 R1305	0.007
10 pieces	-	-	LSR1305	1SBV 04 7500 T1305	0.070
50 pieces	-	-	LSR1305	1SBV 04 7500 W1305	0.350

(1) Free position adjustment of lever 10° by 10° over 360°.

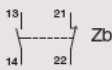

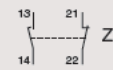
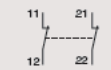
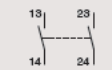
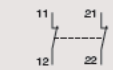
>> Synoptic of Separate Elements page 11

>> Implementation page 9

LS30P ... LS35P Limit Switches


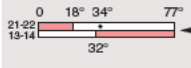



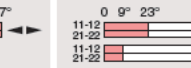
Double Insulation - Plastic Casing IP65 - 30 mm Width

Operation Diagrams (Body and Attached Head)

Contact blocks					
Snap action	Non-overlapping slow action	Overlapping slow action	Simultaneous slow action	Simultaneous slow action	Snap action
B11 	D11 	C11 	L02 	L20 	B02 
⊕	⊕	⊕	⊕	⊗	⊕


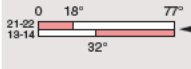
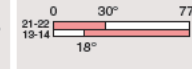


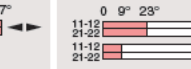
Casings with angular motion head for non-adjustable roller levers, delivered without actuator
 The casings with contact block marked with ⊕ give positive opening.

LS30P40B11	LS30P40D11	LS30P40C11	LS30P40L02	LS30P40L20	LS30P40B02
LS31P40B11	LS31P40D11	LS31P40C11	LS31P40L02	LS31P40L20	LS31P40B02
LS32P40B11	LS32P40D11	LS32P40C11	LS32P40L02	LS32P40L20	LS32P40B02
LS33P40B11	LS33P40D11	LS33P40C11	LS33P40L02	LS33P40L20	LS33P40B02
LS35P40B11	LS35P40D11	LS35P40C11	LS35P40L02	LS35P40L20	LS35P40B02

					
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Casings with angular motion head for adjustable rod or roller levers, delivered without actuator
 These casings with contact block do not give positive opening. ⊗

LS30P50B11	LS30P50D11	LS30P50C11	LS30P50L02	LS30P50L20	LS30P50B02
LS31P50B11	LS31P50D11	LS31P50C11	LS31P50L02	LS31P50L20	LS31P50B02
LS32P50B11	LS32P50D11	LS32P50C11	LS32P50L02	LS32P50L20	LS32P50B02
LS33P50B11	LS33P50D11	LS33P50C11	LS33P50L02	LS33P50L20	LS33P50B02
LS35P50B11	LS35P50D11	LS35P50C11	LS35P50L02	LS35P50L20	LS35P50B02

					
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Note: Contacts position

 21/22 Contact closed
 19-14 Contact open

Positive opening position

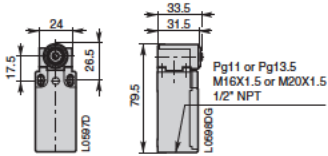
Warning! The positive opening operation of limit switch is only guaranteed if the elements noted with ⊕ are fitted.

LS30P ... LS35P Limit Switches

Double Insulation - Plastic Casing IP65 - 30 mm Width

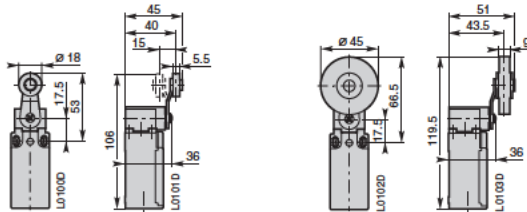
Dimensions (in mm) - Complete Device

Casings with angular motion head for non-adjustable roller levers



LS30P40 ... LS35P40

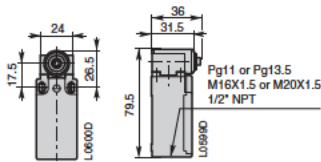
Casings equipped with head + actuator LSA30X...



LSA30X41

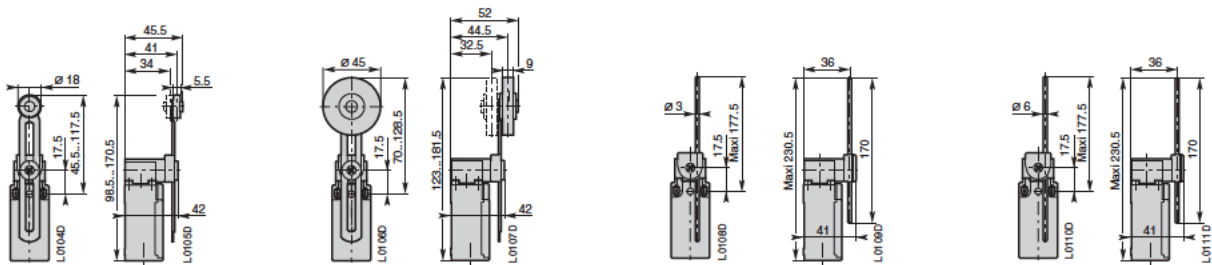
LSA30X42

Casings with angular motion head for adjustable rod or roller levers



LS30P50 ... LS35P50

Casings equipped with head + actuator LSA30X...



LSA30X51

LSA30X52

LSA30X71, LSA30X72

LSA30X73, LSA30X74

Note: The reference LSA30X... under each picture, corresponds to the actuator only. The pictures show the complete device.

>> Description of Complete Device page 8 >> Implementation page 9

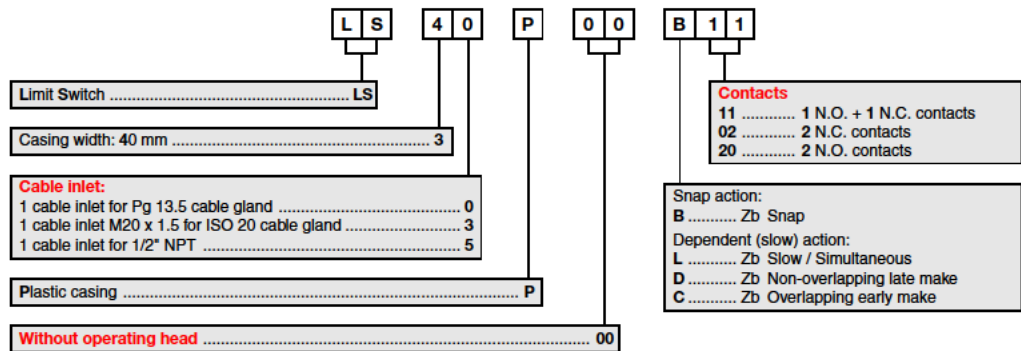
LS40P ... LS45P Limit Switches

Double Insulation - Plastic Casing IP65 - 40 mm Width
Type of Separate Elements

Bodies with Contact Block for Rectilinear or Angular Motion Heads



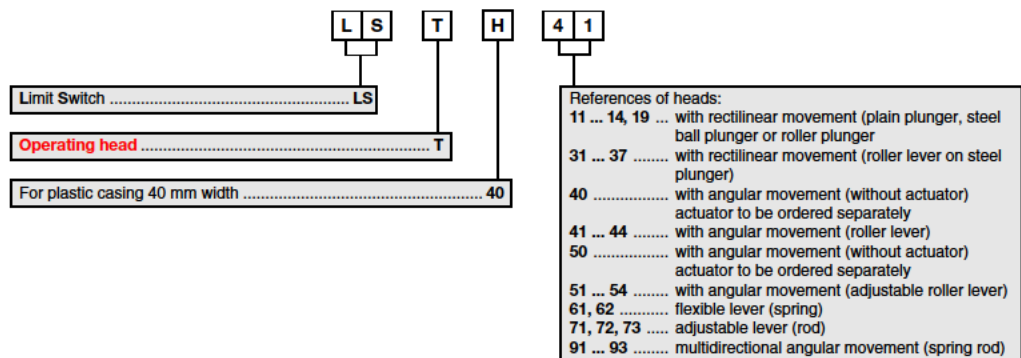
LS40P00B11



Operating Heads



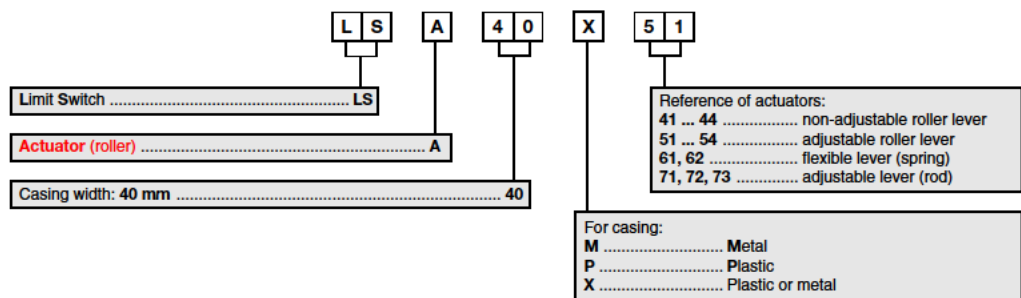
LSTH41



Separate Actuators (Roller Lever, Adjustable Roller or Rod Levers, etc.)



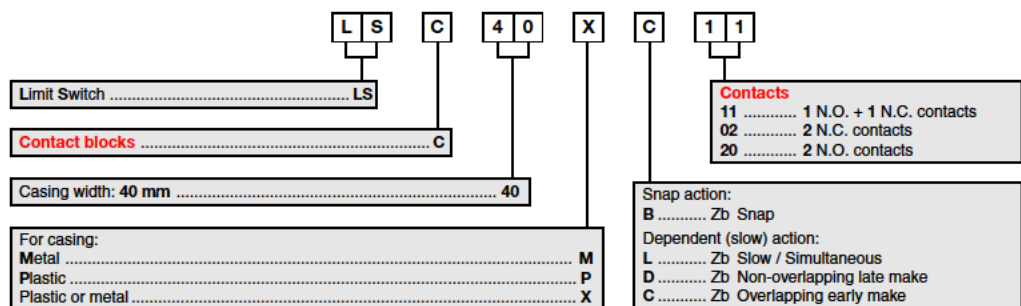
LSA40X51



Separate Contact Blocks



LSC40XC11

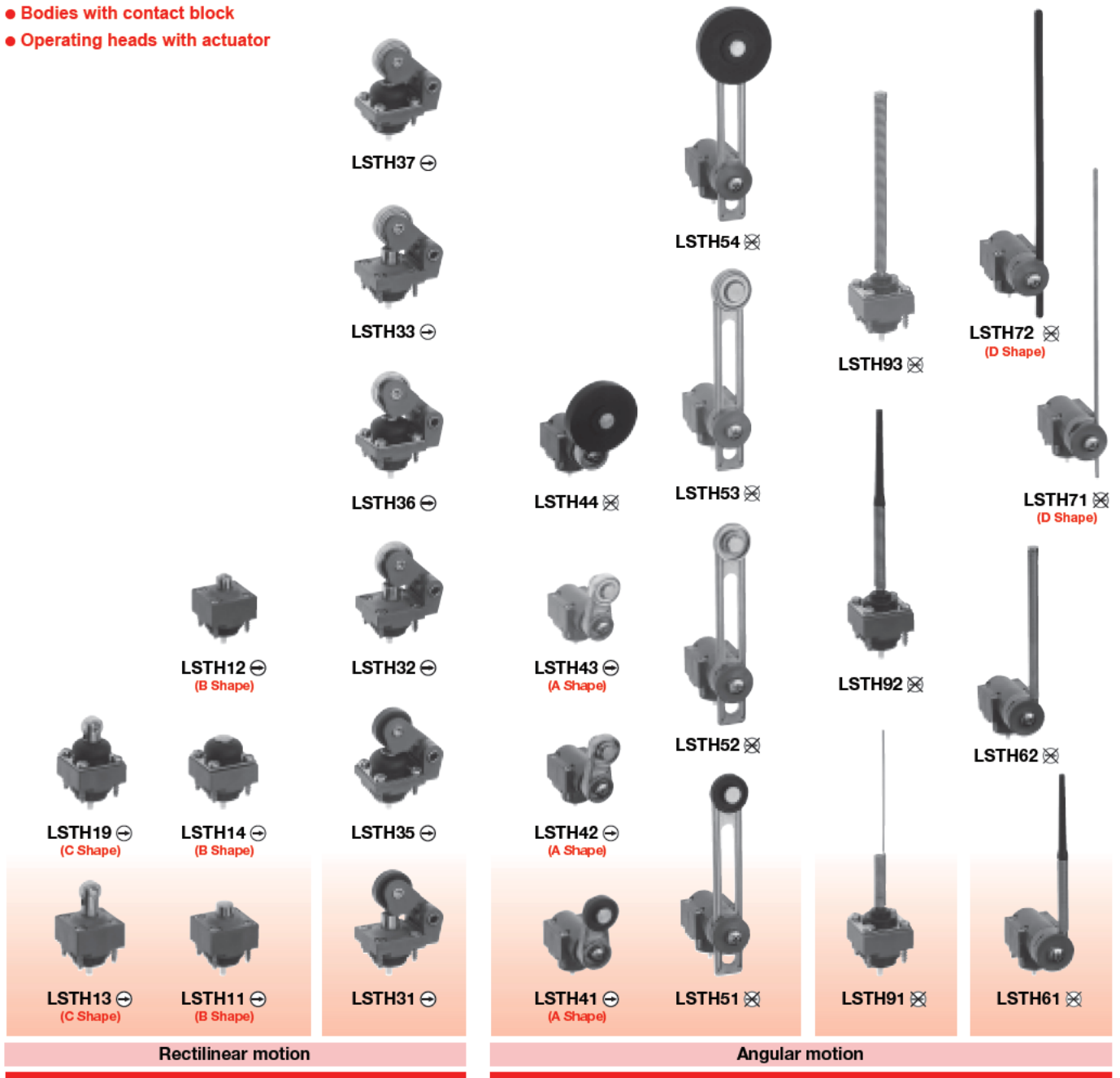


>> Implementation page 9 >> Operation Diagrams page 22
>> Ordering Details for Separate Elements page 19 >> Dimensions of Complete Device page 23

LS40P ... LS45P Limit Switches

Double Insulation - Plastic Casing IP65 - 40 mm Width
Synoptic of Separate Elements

- Bodies with contact block
- Operating heads with actuator



LS40P... rectilinear motion heads

- To be actuated from end.
With plunger (plain or with ball): LSTH11, LSTH12 and LSTH14.
- To be actuated by 30° cam translation.
With roller plunger: LSTH13, LSTH19.
- To be actuated unidirectionally by 30° cam translation.
With roller lever on steel plunger: LSTH31 ... LSTH37.

LS40P... angular motion heads

- To be actuated by 30° cam translation.
With roller lever: LSTH41 ... LSTH54.
- To be actuated by fully directional translation movement.
With rod or spring lever: LSTH61 ... LSTH72.
- To be actuated multidirectionally.
With spring rod: LSTH91 ... LSTH93.



Bodies with contact block

- ⊖ LS40P00B11, LS40P00D11, LS40P00C11, LS40P00L02, LS40P00B02
- ⊖ LS43P00B11, LS43P00D11, LS43P00C11, LS43P00L02, LS43P00B02
- ⊖ LS45P00B11, LS45P00D11, LS45P00C11, LS45P00L02, LS45P00B02
- ⊗ LS40P00L20, LS43P00L20, LS45P00L20

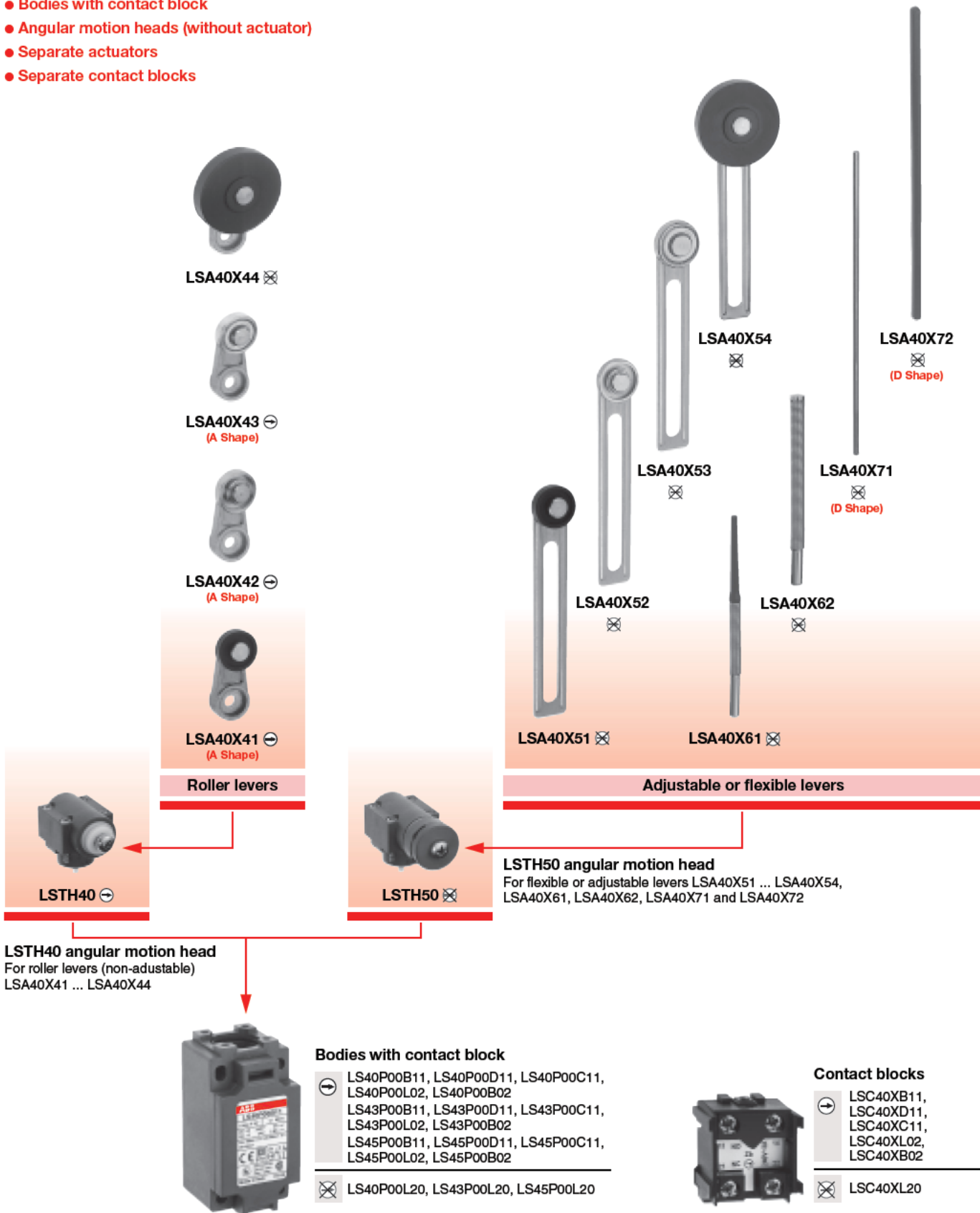
⊖ : Suitable for positive opening operation (IEC 60947-5-1 and EN 50041).
Warning! The positive opening operation of limit switch is only guaranteed if the elements noted with ⊖ are fitted.

LS40P ... LS45P Limit Switches

Double Insulation - Plastic Casing IP65 - 40 mm Width

Synoptic of Separate Elements (continued)

- Bodies with contact block
- Angular motion heads (without actuator)
- Separate actuators
- Separate contact blocks



⊕ : Suitable for positive opening operation (IEC 60947-5-1 and EN 50041)

Warning! The positive opening operation of limit switch is only guaranteed if the elements noted with ⊕ are fitted.

>> Panorama of Complete Device page 2

>> Ordering Details for Separate Elements page 19

LS40P ... LS45P Limit Switches

Double Insulation - Plastic Casing IP65 - 40 mm Width Separate Elements

⊖ "N.C." contact with positive opening operation or element (subassembly, head, lever) suitable for positive opening operation.

Warning! The positive opening operation of limit switch is only guaranteed if the elements noted with ⊖ are fitted.



LS40P00B11



LSTH11



LSTH19



LSTH31



LSTH37

LS40P with 1 cable inlet for Pg 13.5 cable gland.

LS43P with 1 cable inlet M20 x 1.5 for ISO 20 cable gland.

LS45P with 1 cable inlet for 1/2" NPT.

Ordering Details

Contact blocks						Positive opening operation	Actuation speed max. m/s	Type	Order code	Unit weight kg	Packing 1 piece
B11	D11	C11	L02	L20	B02						

Bodies with contact block for rectilinear or angular motion heads

1	1	1	1	1	1	⊖	–	Type	Order code	Unit weight kg
	1					⊖	–	LS40P00B11	1SBV 01 0500 R1211	0.108
		1				⊖	–	LS40P00D11	1SBV 01 0500 R1411	0.108
			1			⊖	–	LS40P00C11	1SBV 01 0500 R1511	0.108
				1		⊖	–	LS40P00L02	1SBV 01 0500 R1302	0.108
					1	⊖	–	LS40P00L20	1SBV 01 0500 R1320	0.108
						⊖	–	LS40P00B02	1SBV 01 0500 R1202	0.108
1						⊖	–	LS43P00B11	1SBV 01 0700 R1211	0.108
	1					⊖	–	LS43P00D11	1SBV 01 0700 R1411	0.108
		1				⊖	–	LS43P00C11	1SBV 01 0700 R1511	0.108
			1			⊖	–	LS43P00L02	1SBV 01 0700 R1302	0.108
				1		⊖	–	LS43P00L20	1SBV 01 0700 R1320	0.108
					1	⊖	–	LS43P00B02	1SBV 01 0700 R1202	0.108
1						⊖	–	LS45P00B11	1SBV 01 2400 R1211	0.108
	1					⊖	–	LS45P00D11	1SBV 01 2400 R1411	0.108
		1				⊖	–	LS45P00C11	1SBV 01 2400 R1511	0.108
			1			⊖	–	LS45P00L02	1SBV 01 2400 R1302	0.108
				1		⊖	–	LS45P00L20	1SBV 01 2400 R1320	0.108
					1	⊖	–	LS45P00B02	1SBV 01 2400 R1202	0.108

Rectilinear motion heads with actuator

To be actuated from end

Steel plain plunger (zinc-plated)	⊖	0.5	LSTH11	1SBV 04 9111 R1000	0.042
Steel plain plunger (zinc-plated) and dust protection cup	⊖	0.5	LSTH14	1SBV 04 9114 R1000	0.043
Steel ball plunger	⊖	0.5	LSTH12	1SBV 04 9112 R1000	0.042

To be actuated by 30° cam

Steel roller plunger (zinc-plated)	⊖	0.5	LSTH13	1SBV 04 9113 R1000	0.048
Steel roller plunger (zinc-plated) and dust protection cup	⊖ <td>0.5 <td>LSTH19 <td>1SBV 04 9119 R1000</td> <td>0.048</td> </td></td>	0.5 <td>LSTH19 <td>1SBV 04 9119 R1000</td> <td>0.048</td> </td>	LSTH19 <td>1SBV 04 9119 R1000</td> <td>0.048</td>	1SBV 04 9119 R1000	0.048

To be actuated unidirectionally by 30° cam

∅ 22 mm polyamide roller lever on steel plunger (zinc-plated)	⊖	1.5	LSTH31	1SBV 04 9131 R1000	0.046
∅ 22 mm polyamide roller lever on steel plunger (zinc-plated) and dust protection cup	⊖ <th>1.5</th> <td>LSTH35</td> <td>1SBV 04 9135 R1000</td> <td>0.049</td>	1.5	LSTH35	1SBV 04 9135 R1000	0.049
∅ 22 mm stainless steel roller lever on steel plunger (zinc-plated)	⊖	1.5	LSTH32	1SBV 04 9132 R1000	0.055
∅ 22 mm stainless steel roller lever on steel plunger (zinc-plated) and dust protection cup	⊖	1.5	LSTH36	1SBV 04 9136 R1000	0.058
∅ 22 mm steel ball-bearing roller lever on steel plunger (zinc-plated)	⊖	1.5	LSTH33	1SBV 04 9133 R1000	0.057
∅ 22 mm steel ball-bearing roller lever on steel plunger (zinc-plated) and dust protection cup	⊖	1.5	LSTH37	1SBV 04 9137 R1000	0.060

LS40P ... LS45P Limit Switches

Double Insulation - Plastic Casing IP65 - 40 mm Width

Separate Elements

⊖ "N.C." contact with positive opening operation or element (subassembly, head, lever) suitable for positive opening operation.

Warning! The positive opening operation of limit switch is only guaranteed if the elements noted with ⊖ are fitted.



LSTH41



LSTH51



LSTH92



LSTH40



LSA40X41



LSA40X43

LS40P with 1 cable inlet for Pg 13.5 cable gland.
 LS43P with 1 cable inlet M20 x 1.5 for ISO 20 cable gland.
 LS45P with 1 cable inlet for 1/2" NPT.

Ordering Details

Contact blocks	Positive opening operation	Actuation speed max. m/s	Type	Order code	Unit weight kg	Packing 1 piece
B11						
D11						
C11						
L02						
L20						
B02						

Angular motion heads with actuator

To be actuated by 30° cam

∅ 22 mm polyamide roller lever (1)	⊖	1.5	LSTH41	1SBV 04 9141 R1000	0.082
∅ 22 mm stainless steel roller lever (1)	⊖	1.5	LSTH42	1SBV 04 9142 R1000	0.091
∅ 22 mm steel ball-bearing roller lever (1)	⊖	1.5	LSTH43	1SBV 04 9143 R1000	0.093
∅ 45 mm rubber roller lever (1)	⊗	1.5	LSTH44	1SBV 04 9144 R1000	0.098
Adjustable ∅ 22 mm polyamide roller lever (1)	⊗	1.5	LSTH51	1SBV 04 9151 R1000	0.088
Adjustable ∅ 22 mm stainless steel roller lever (1)	⊗	1.5	LSTH52	1SBV 04 9152 R1000	0.098
Adjustable ∅ 22 mm steel ball-bearing roller lever (1)	⊗	1.5	LSTH53	1SBV 04 9153 R1000	0.100
Adjustable ∅ 45 mm rubber roller lever (1)	⊗	1.5	LSTH54	1SBV 04 9154 R1000	0.105

To be actuated by fully directional translation movement

Stainless steel flexible lever with insulated end (1)	⊗	1	LSTH61	1SBV 04 9161 R1000	0.083
Stainless steel coil spring lever (1)	⊗	1	LSTH62	1SBV 04 9162 R1000	0.089
Adjustable ∅ 3 mm stainless steel rod lever, 195 mm length (1)	⊗	1	LSTH71	1SBV 04 9171 R1000	0.087
Adjustable ∅ 6 mm polyamide rod lever, 195 mm length (1)	⊗	1	LSTH72	1SBV 04 9172 R1000	0.083
Adjustable ∅ 6 mm fibre-glass rod lever, 195 mm length (1)	⊗	1	LSTH73	1SBV 04 9173 R1000	0.087

Multidirectional angular motion heads (to be actuated by fully directional translation movement)

Stainless steel spring rod	⊗	1	LSTH91	1SBV 04 9191 R1000	0.046
Stainless steel flexible rod with insulated end	⊗	1	LSTH92	1SBV 04 9192 R1000	0.049
Stainless steel coil spring rod	⊗	1	LSTH93	1SBV 04 9193 R1000	0.055

Angular motion head without actuator, for non-adjustable roller levers (delivered with M5 screw and washer)

	⊖	1.5	LSTH40	1SBV 04 9140 R1000	0.050
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Actuators for angular motion head LSTH40

∅ 22 mm polyamide roller lever (1)	⊖	–	LSA40X41	1SBV 04 8841 R1000	0.032
∅ 22 mm stainless steel roller lever (1)	⊖	–	LSA40X42	1SBV 04 8842 R1000	0.042
∅ 22 mm steel ball-bearing roller lever (1)	⊖	–	LSA40X43	1SBV 04 8843 R1000	0.044
∅ 45 mm rubber roller lever (1)	⊗	–	LSA40X44	1SBV 04 8844 R1000	0.050

(1) Free position adjustment of lever 9° by 9° over 360°.

>> Synoptic of Separate Elements page 17

>> Implementation page 9

LS40P ... LS45P Limit Switches

Double Insulation - Plastic Casing IP65 - 40 mm Width
Separate Elements

⊖ "N.C." contact with positive opening operation or element (subassembly, head, lever) suitable for positive opening operation.

Warning! The positive opening operation of limit switch is only guaranteed if the elements noted with ⊖ are fitted.



LSTH50



LSA40X72



LSA40X51



LSC40XB11

LS40P with 1 cable inlet for Pg 13.5 cable gland.
 LS43P with 1 cable inlet M20 x 1.5 for ISO 20 cable gland.
 LS45P with 1 cable inlet for 1/2" NPT.

Ordering Details

Contact blocks	Positive opening operation	Actuation speed max. m/s	Type	Order code	Unit weight kg	Packing 1 piece
 B11 D11 C11 L02 L20 B02	⊖					

Angular motion head without actuator, for flexible or adjustable levers

(delivered with M5 screw, washer and adaptation parts)

⊖	–	LSTH50	1SBV 04 9150 R1000	0.058
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Actuators for angular motion head LSTH50

Adjustable ø 22 mm polyamide roller lever (1)	⊖	–	LSA40X51	1SBV 04 8851 R1000	0.023
Adjustable ø 22 mm stainless steel roller lever (1)	⊖	–	LSA40X52	1SBV 04 8852 R1000	0.032
Adjustable ø 22 mm steel ball-bearing roller lever (1)	⊖	–	LSA40X53	1SBV 04 8853 R1000	0.034
Adjustable ø 45 mm rubber roller lever (1)	⊖	–	LSA40X54	1SBV 04 8854 R1000	0.039
Stainless steel flexible lever with insulated end (1)	⊖	–	LSA40X61	1SBV 04 8861 R1000	0.017
Stainless steel coil spring lever (1)	⊖	–	LSA40X62	1SBV 04 8862 R1000	0.023
Adjustable ø 3 mm stainless steel rod lever, 195 mm length (1)	⊖	–	LSA40X71	1SBV 04 8871 R1000	0.014
Adjustable ø 6 mm polyamide rod lever, 195 mm length (1)	⊖	–	LSA40X72	1SBV 04 8872 R1000	0.010
Adjustable ø 6 mm fibre-glass rod lever, 195 mm length (1)	⊖	–	LSA40X73	1SBV 04 8873 R1000	0.014

Contact blocks (with adaptor)

1 N.C. + 1 N.O. 2-pole snap action	⊖	–	LSC40XB11	1SBV 04 9600 R1211	0.032
1 N.C. + 1 N.O. 2-pole non-overlapping slow action	⊖	–	LSC40XD11	1SBV 04 9600 R1411	0.032
1 N.O. + 1 N.C. 2-pole overlapping slow action	⊖	–	LSC40XC11	1SBV 04 9600 R1511	0.032
2 N.C. 2-pole simultaneous slow action	⊖	–	LSC40XL02	1SBV 04 9600 R1302	0.032
2 N.O. 2-pole simultaneous slow action	⊖	–	LSC40XL20	1SBV 04 9600 R1320	0.032
2 N.C. 2-pole snap action	⊖	–	LSC40XB02	1SBV 04 9600 R1202	0.032

(1) Free position adjustment of lever 9° by 9° over 360°.

>> Synoptic of Separate Elements page 17

>> Implementation page 9

LS40P ... LS45P Limit Switches

Double Insulation - Plastic Casing IP65 - 40 mm Width

Operation Diagrams (Body and Attached Head)

Contact blocks					
Snap action	Non-overlapping slow action	Overlapping slow action	Simultaneous slow action	Simultaneous slow action	Snap action
B11 	D11 	C11 	L02 	L20 	B02
⊕	⊕	⊕	⊕	⊗	⊕

Bodies with contact block

LS40P00B11	LS40P00D11	LS40P00C11	LS40P00L02	LS40P00L20	LS40P00B02
LS43P00B11	LS43P00D11	LS43P00C11	LS43P00L02	LS43P00L20	LS43P00B02
LS45P00B11	LS45P00D11	LS45P00C11	LS45P00L02	LS45P00L20	LS45P00B02

Rectilinear motion heads LSTH11, LSTH12, LSTH14. ⊕



Rectilinear motion heads LSTH13, LSTH19. ⊕



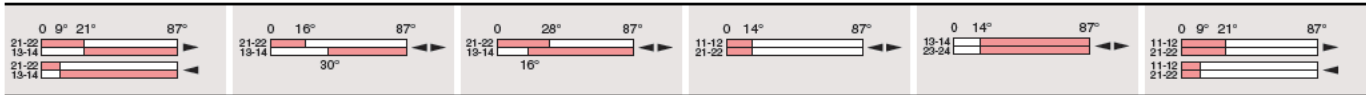
Rectilinear motion heads LSTH31, LSTH32, LSTH33, LSTH35, LSTH36, LSTH37. ⊕



Angular motion heads LSTH40, LSTH41, LSTH42, LSTH43. ⊕



Angular motion heads LSTH44, LSTH50, LSTH51, LSTH52, LSTH53, LSTH54, LSTH61, LSTH62, LSTH71, LSTH72, LSTH73. ⊗



Multidirectional angular motion heads LSTH91, LSTH92, LSTH93. ⊗



Note: Contacts position
█ Contact closed
 Contact open

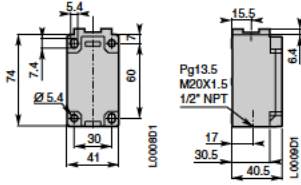
Positive opening position
Warning! The positive opening operation of limit switch is only guaranteed if the elements noted with ⊕ are fitted.

LS40P ... LS45P Limit Switches

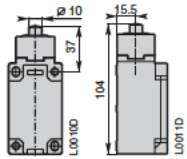
Double Insulation - Plastic Casing IP65 - 40 mm Width

Dimensions (in mm) - Complete Device

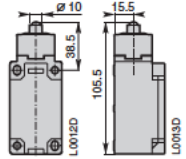
Bodies with contact block LS40P00..., LS43P00... or LS45P00...



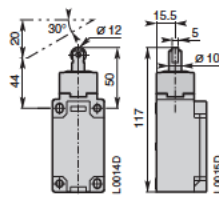
Body and fitted rectilinear motion head LSTH...



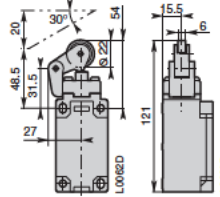
LSTH11, LSTH14



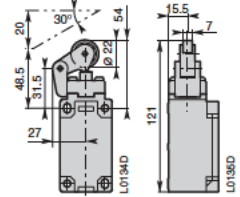
LSTH12



LSTH13, LSTH19

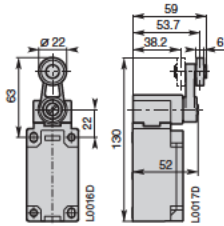


LSTH31, LSTH35,
LSTH32, LSTH36

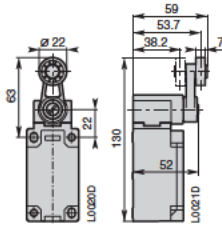


LSTH33, LSTH37

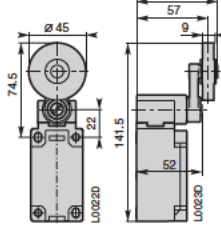
Body and fitted angular motion head LSTH...



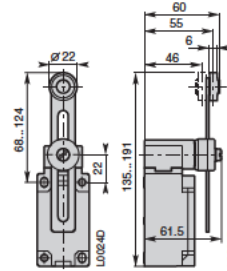
LSTH41, LSTH42



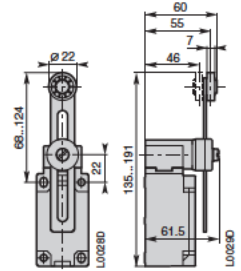
LSTH43



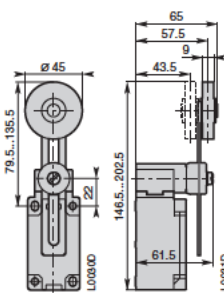
LSTH44



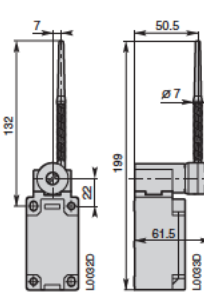
LSTH51, LSTH52



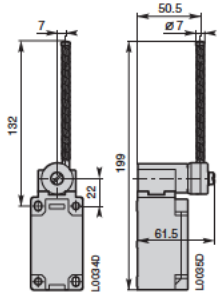
LSTH53



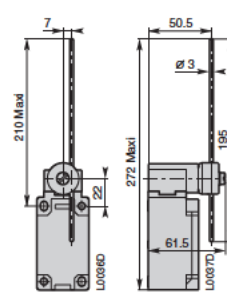
LSTH54



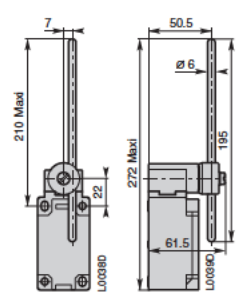
LSTH61



LSTH62

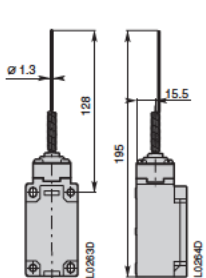


LSTH71

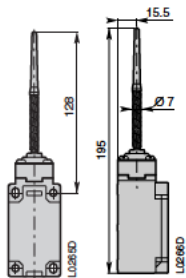


LSTH72, LSTH73

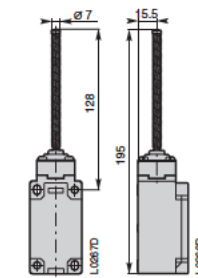
Body and fitted multidirectional angular motion head LSTH...



LSTH91



LSTH92



LSTH93

Note: The reference LSTH... under each picture, corresponds to the head only. The pictures show the complete device.

>> Description of Complete Device page 8

>> Implementation page 9