Latch key safety limit switches

Description

Safety limit switches with small latch (key), made of fibre-glass reinforced UL-V0 thermoplastic material, offer double insulation and a degree of protection IP65. They are equipped with 1 N.C. + 1 N.O. or 2 N.C. contact blocks with dependent action and positive opening operation of the "N.C." contact(s).

Applications

Easy to use, the limit switches with small latch (key) offer specific qualities:

- Visible operation.
- Capability for strong current switching (conventional thermal current 10 A).
- Opening guaranteed of the "N.C." contact(s) when the small latch is withdrawn from the limit switch.
- Contact blocks with dependent action and positive opening operation of the "N.C." normally closed contact(s) (symbol ⊖).
- Electrically separated contacts (Zb shape).
- Precision on operation positions (consistency).
- Immunity to electromagnetic disturbances.

These specific features make the limit switches ideal for monitoring and protection of industrial machines without inertia in which downtime is less than access time to the dangerous area. Use on sliding or pivoting protectors (covers, cases, doors, grids, etc.).

- They contribute to protection of operators working on dangerous machines, by opening the control circuit. Withdrawal of the small latch (key) by opening the mobile protector causes immediate stopping of the machine drive.
- Associated with other standard limit switches and safety switching devices, they produce automatic control circuits meeting standard EN 954-1.
- They comply with the requirements of European Directives (Low Voltage, Machines and Electromagnetic Compatibility) and are conform to European and international standards.

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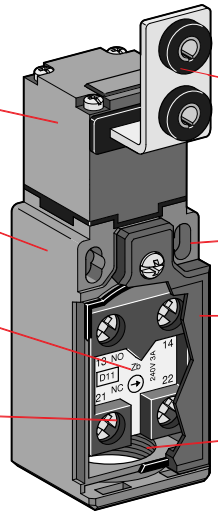
2 operating head options:
- Adjustable every 90° (4 x ø 3 screws with (+,-) pozidriv 1 head)
- Pivoting from 0° to 360° (1 x M3 screw with Phillips head No. 1)

Casing
- 30 mm wide with standardised dimensions corresponding to EN 50047

Blocks of 2 contacts
- Contact configuration: 1 N.O. + 1 N.C. or 2 N.C.
- Positive opening operation ⊖
- Contact dependent action
- Zb shape: the 2 contacts are electrically separated

Connecting terminals
- M3.5 screw with (+,-) posidriv 2 head
- Screw heads with captive cable clamps
- Marking conform to IEC 60947-1, IEC 60947-5-1, EN 50005 and EN 50013 standards



7 small latch (key) options to be ordered separately:
- Right angle key (13 or 22 mm fixing)
- Straight key (13 or 22 mm fixing)
- Straight key or right angle key with shock absorber
- Adjustable right angle key

Casing fixing
- 2 x M4 screws in the top part

Cover
- Closure by 1 x ø 3 screw with (+,-) pozidriv 1 head
  Gasket made in one part to prevent tightness breaks

Electrical connection in various options:
- 1 x Pg 13.5 cable gland for LS30P
- 1 x Pg 11 cable gland for LS31P
- 1 x 1/2" NPT adaptor delivered not mounted for LS35P

Catalog number explanation

Example : **LS 35 P 80 D11 – S**

Limit Switch ..... LS

Casing width: 30 mm 3

Cable inlet:
1 cable inlet for Pg 13.5 cable gland 0
1 cable inlet for Pg 11 cable gland 1
1 x 1/2" NPT (adaptor) cable inlet 5

Plastic casing ..... P

Operating heads:
Adjustable every 90° 80
Continuously pivoting from 0° to 360° 81

Snap action:
B ..... Zb Snap

Dependent (slow) action:
L ..... Zb Slow / Simultaneous
D ..... Zb Non-overlapping late make
C ..... Zb Overlapping early make

Contact types:
11 ..... 1 N.O. + 1 N.C. contacts
02 ..... 2 N.C. contacts

S ..... Safety device