





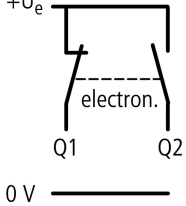


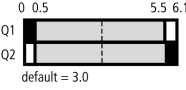
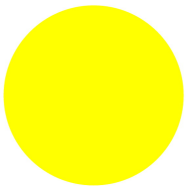
CB electr.adjustable,1M+1B

Part no. LSE-11

Article no. 266121

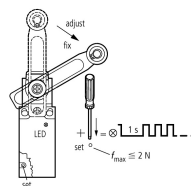
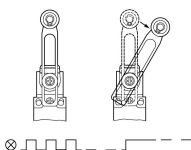


Delivery programme

Basic function		Position switches Safety position switches
Part group reference (e.g. DIL)		LSE
Range		Operating point electronically adjustable
Protection type		IP66, IP67
Features		Basic device, expandable Visual status indication comparable with positive opening function partly short-circuit proof Restart after reset
Approval		
Auxiliary contacts:  = safety function, by positive opening to IEC/EN 60947-5-1		
N/O = Normally open		1 N/O
N/C = Normally closed		1 N/C
Contact sequence		+U _e  0 V
Contact travel:  = Contact closed  = Contact open		
Contact diagram		 default = 3.0
Colour of enclosure cover		
Housing		Insulated material

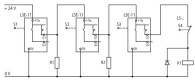
Notes

LSE-11 and LSE-02: Individual operating point adjustment:



Circuit example for series connection:

LSE-11 and LSE-02 can be used in safety circuits



S1 lies at 24 V DC

S2, S3 each switch with a delay of 0.7 s

R1, R2 e.g. series element M22-XLED60 (2820 Ω/0.5 W)

Approbatoren

Product Standards
UL File No.
UL CCN
CSA File No.
CSA Class No.
NA Certification
Degree of Protection

IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14; CE marking
E29184
NKCR
12528
3211-03
UL Listed, CSA certified
IEC: IP66, 67, UL/CSA Type 3R, 4X (indoor use only), 12, 13

General

Standards			IEC/EN 60947 EN 61000-4
Climatic proofing			Damp heat, constant, to IEC 60068-2-78; damp heat, cyclical, to IEC 60068-2-30
Ambient temperature		°C	- 25 - + 70
Mounting position			As required
Protection type			IP66, IP67
Terminal capacity of screw terminal and Cage Clamp		mm ²	
Solid		mm ²	1 x (0.5 - 2.5)
Flexible with ferrules to DIN 46228		mm ²	1 x (0.5 - 1.5)

Power supply

Rated voltage	U_e	V DC	12 - 30
Rated operational current	I_e	A	
12 V	I_e	A	0.015
24 V	I_e	mA	18
30 V	I_e	A	0.019

Contacts/switching capacity

Overvoltage category/pollution degree			III/3
Rated operational current	I_e	A	
DC-13			
24 V	I_e	A	0.2
Repetition accuracy		mm	0.02

Mechanical variables

Lifespan		S	
Snap-action contact	Operations	$\times 10^6$	3 (electronic)
Contact temperature of roller head		°C	≈ 100
Mechanical shock resistance (half-sinusoidal shock, 20 ms)			
Basic unit		g	30
Operating frequency	Operations/h		≈ 3000
Switching point			0.5 - 5.5 mm, freely adjustable
Hysteresis		mm	0.4
Contact sequence (contact closed open Z_w = positive opening clearance)		mm	0.04

Actuation

Mechanical			
Actuating force at beginning/end of stroke			
Basic units		N	3.5/8.0
LS(M)-XP		N	1.0/8.0
LS(M)-XL		N	1.0/8.0
LS(M)-XLA		N	1.0/8.0
Actuating torque of rotary drives		Nm	0.2

Max. operating speed with DIN cam			
Basic units for angle of actuation	$\alpha = 0^\circ/30^\circ$	m/s	1/0.5
LS(M)-XRL for angle of actuation	$\alpha = 0^\circ$	m/s	1.5
LS(M)-XRLA for angle of actuation	$\alpha = 30^\circ$, L = 125 mm	m/s	1.5
LS(M)-XRR for	L = 130 mm	m/s	1.5
LS(M)-XL for angle of actuation	$\alpha = 30^\circ/45^\circ$	m/s	1
LS(M)-XLA for angle of actuation	$\alpha = 30^\circ/45^\circ$	m/s	1
LS(M)-XP for angle of actuation	$\alpha = 0^\circ/30^\circ$	m/s	1/1

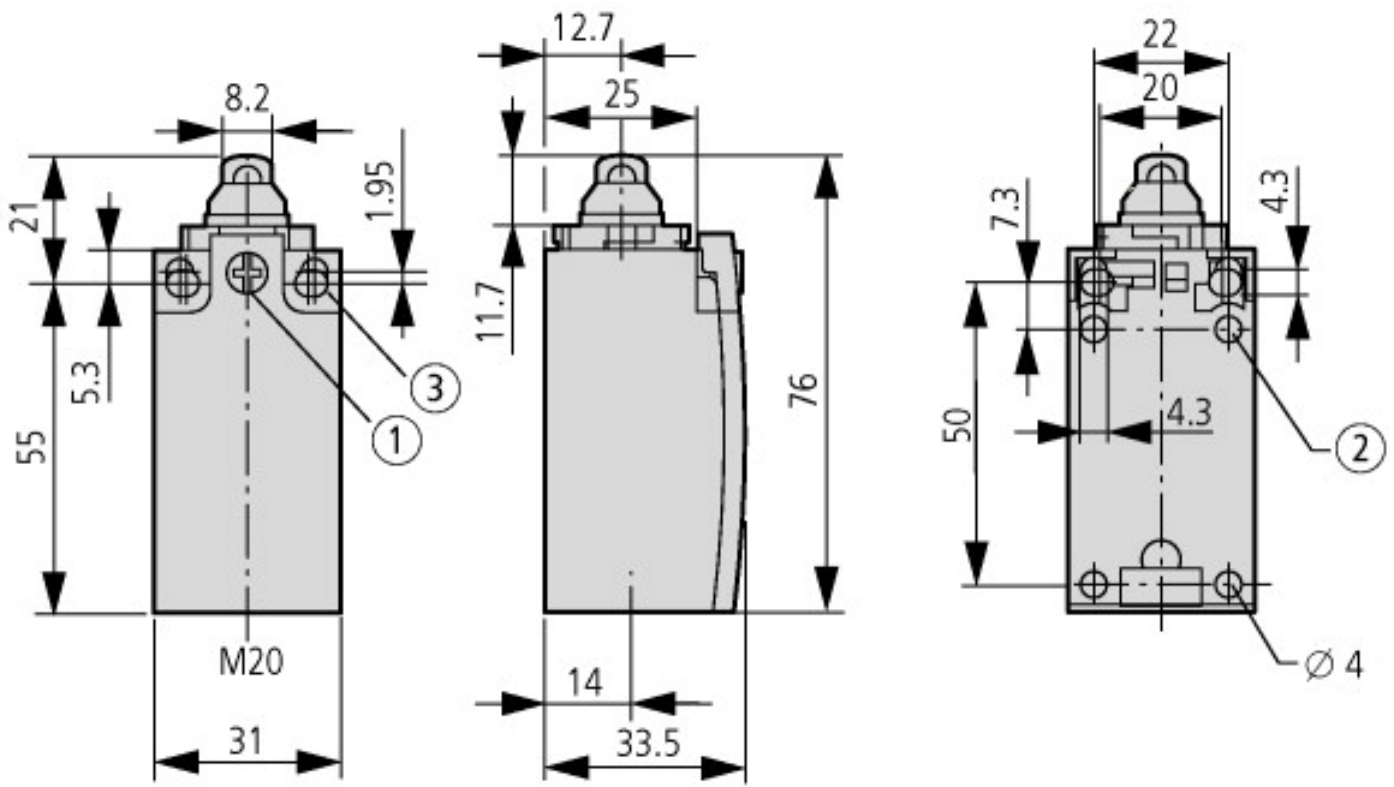
Electromagnetic compatibility (EMC)

Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)		kV	
Air discharge		kV	8
Contact discharge		kV	4
Electromagnetic fields (RFI), to IEC EN 61000-4-2		V/m	10
Burst Impulse (IEC/EN 61000-4-4, Level 3)			
Supply cables		kV	2
Signal lines		kV	2
Power pulses (surge) (IEC/EN 61000-4-5)		kV	0.5
Radiated RFI (IEC/EN 61000-4-6)		V	10

Technische Daten nach ETIM 4.0

Switch function			Standard-action contact
Material housing			Insulated material
Suitable for safety functions			YES
Coating of housing			-
With status indication			YES
Degree of protection (IP)			IP67
Positive opening			YES
Type of control element			Rounded plunger
Width sensor		mm	31
Height of sensor		mm	61
Number of contacts as normally closed contact			1
Number of contacts as normally open contact			1
Number of contacts as change-over contact			0

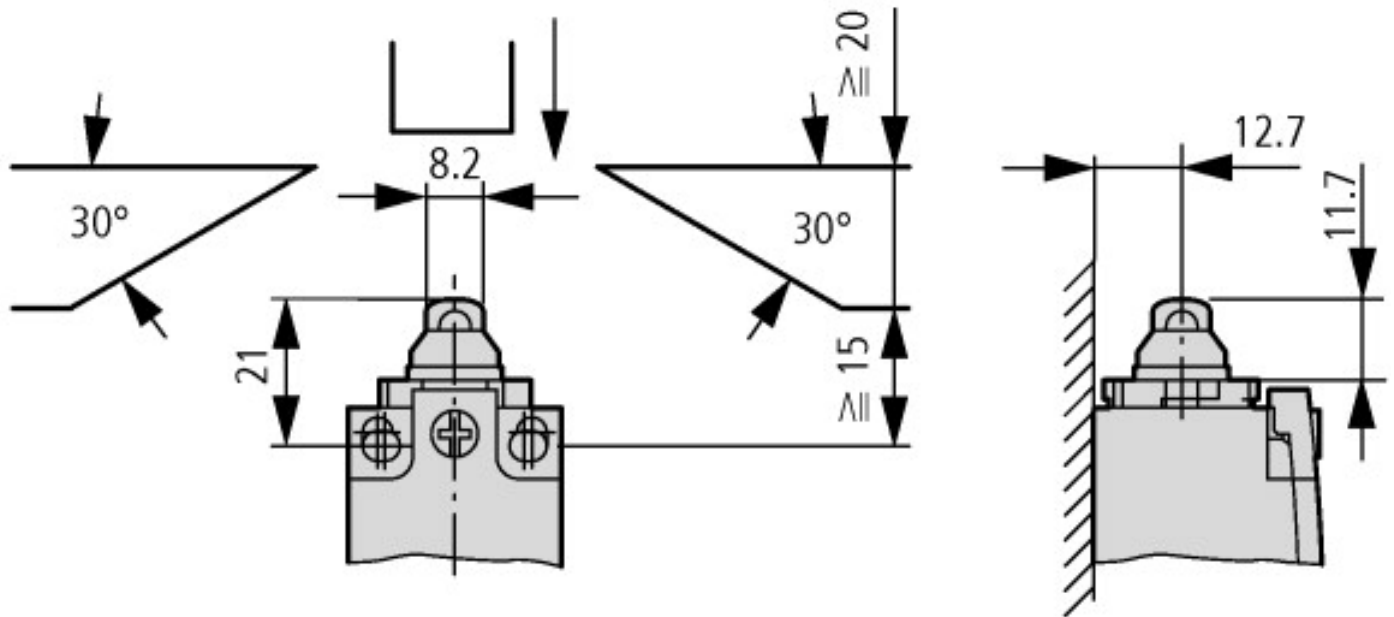
Dimensions



① Tightening torque of cover screws: $0.8 \text{ Nm} \pm 0.2 \text{ Nm}$

② only with LS (insulated version)

③ Fixing screws $2 \times \text{M4} \times 30$
 $M_A = 1.5 \text{ Nm}$



Additional product information (links)

AWA1310-2349 (IL05208001Z) Electronic position switches

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/23491206.pdf