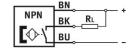
## Proximity sensor SMTO-1-NS-K-LED-24-C

**FESTO** 

Part number: 151684





## **Data sheet**

En 60947-5-2  Lertification RCM compliance mark  LE marking (see declaration of conformity) As per EU BMC directive Assurd variable As	Feature	Value
Extification RCM compliance mark  Externating (see declaration of conformity)  As per EU EMC directive Assured variable  Measuring principle Assured variable Assured va	Design	Block design
As per EU EMC directive As per EU EMC directive As per EU RoMS directive As per EU RoMS directive  To UK instructions for EMC To UK RoMS instructions  Note on materials RoMS-compliant Measured variable Measuring principle Measuring principle Measuring principle Momenture Repetition accuracy O.2 mm NPN Switching output NPN Switching element function N/O contact Hysteresis O.1 mm1.5 mm On time 1 ms Switch-off time 1 ms Switching frequency 1 kHz Max. switching frequency 1 kHz Max. switching capacity DC 6 W Solotage drop 3 V Molactive protective circuit Residual current O.01 mA Short-circuit protection Pulsed Deveload protection Available DC operating voltage range Residual ripple Residual current OC operating voltage range Residual connection 1, connection type Celectrical connection 1, connection type Celectrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires  3 BAS PEEU EMC directive As per EU RMC directive As per EU RMC directive And As per EU RMC directive And Instructions of the Council of the C	Based on norm	EN 60947-5-2
As per EU RoHS directive  TO UK instructions for EMC TO UK RoHS instructions  Note on materials Reasured variable Position  Measuring principle NPN NPN NPN NPN NPN NPN NPN NPN NPN NP	Certification	RCM compliance mark
To UK ROHS instructions  Note on materials RoHS-compliant Measured variable Measuring principle Ambient temperature -25 °C70 °C Repetition accuracy 0.2 mm NPN Switching output NPN Switching element function N/O contact	CE marking (see declaration of conformity)	
Measured variable Measuring principle Measuring principle Ambient temperature -25 °C70 °C Repetition accuracy 0.2 mm NPN NPN Switching output NPN N/O contact Hysteresis 0.1 mm1.5 mm Ins On time 1 ms Switch-off time 1 ms Max. switching frequency 1 kHz Max. output current 200 mA Max. switching capacity DC 6 W Voltage drop 3 V Nolutive protective circuit Adapted to MZ, MY and ME coils Residual current 0.01 mA Short-circuit protection Pulsed Decrease ange 1 0 V30 V Residual ripple Reverse polarity protection For all electrical connection 1, connection type Electrical connection 1, number of pins/wires 3 Services  Open and Max. Switching capacity DC Apple and ME coils Cable Electrical connection 1, number of pins/wires 3	UKCA marking (see declaration of conformity)	
Measuring principle Ambient temperature -25 °C70 °C Repetition accuracy 0.2 mm NPN Switching output NPN Switching element function N/O contact dysteresis 0.1 mm1.5 mm On time 1 ms Switch-off time 1 ms Max. switching frequency Max. switching capacity DC Offitage drop Max. switching capacity DC Offitage drop Max. switching capacity DC Offitage drop Max. switching trequency 1 kHz Residual current Adapted to MZ, MY and ME coils Residual current O.0.1 mA Short-circuit protection Pulsed Overload protection Available OC operating voltage range 10 V30 V Residual ripple 10 % Reverse polarity protection for all electrical connection 1, connection type Cable Electrical connection 1, number of pins/wires 3	Note on materials	RoHS-compliant
Ambient temperature  -25 °C70 °C  Repetition accuracy  0.2 mm  NPN  Switching output  NPN  Switching element function  N/O contact  dysteresis  0.1 mm1.5 mm  On time  1 ms  Switch-off time  1 ms  Max. switching frequency  1 kHz  Max. output current  200 mA  Max. switching capacity DC  6 W  Voltage drop  3 V  Inductive protective circuit  Adapted to MZ, MY and ME coils  Residual current  O.01 mA  Short-circuit protection  Pulsed  Overload protection  Overload protection  Available  Oc operating voltage range  10 V30 V  Residual ripple  Reverse polarity protection  for all electrical connection 1, connection type  Electrical connection 1, connection technology  Open end  Electrical connection 1, number of pins/wires  3	Measured variable	Position
Repetition accuracy  O. 2 mm  Switching output  NPN  Switching element function  N/O contact  O.1 mm1.5 mm  On time  1 ms  Switch-off time  1 ms  Max. switching frequency  1 kHz  Max. output current  200 mA  Max. switching capacity DC  Oltage drop  3 V  Inductive protective circuit  Residual current  O.0.1 mA  Short-circuit protection  Pulsed  Overload protection  Available  OC operating voltage range  10 V30 V  Residual ripple  Reverse polarity protection  for all electrical connection 1, connection type  Electrical connection 1, number of pins/wires  3 V  Open end  Electrical connection 1, number of pins/wires  3 S  Open end  Electrical connection 1, number of pins/wires  3 S  Open end  Electrical connection 1, number of pins/wires  3 S  Open end  Electrical connection 1, number of pins/wires  3 S  Open end  Electrical connection 1, number of pins/wires  3 S  Open end  Description  Open end  Electrical connection 1, number of pins/wires  3 S  Open end  Description  Open end  Description  Open end  Electrical connection 1, number of pins/wires  Available  Open end  Electrical connection 1, number of pins/wires  Available  Open end  Electrical connection 1, number of pins/wires	Measuring principle	Magneto-inductive
Switching output  NPN  Switching element function  N/O contact  1 ms  On time  1 ms  Switch-off time  1 ms  Max. switching frequency  1 kHz  Max. output current  200 mA  Max. switching capacity DC  Voltage drop  3 V  Inductive protective circuit  Adapted to MZ, MY and ME coils  Residual current  0.01 mA  Short-circuit protection  Pulsed  Overload protection  Available  OC operating voltage range  10 V30 V  Residual ripple  Reverse polarity protection  for all electrical connections  Electrical connection 1, connection type  Electrical connection 1, connection technology  Den end  Electrical connection 1, number of pins/wires  3	Ambient temperature	-25 °C70 °C
Switching element function  N/O contact  dysteresis  0.1 mm1.5 mm  1 ms  Switch-off time  1 ms  Max. switching frequency  1 kHz  Max. output current  200 mA  Max. switching capacity DC  6 W  Voltage drop  1 dapted to MZ, MY and ME coils  Residual current  0.01 mA  Short-circuit protection  Pulsed  Overload protection  Available  OC operating voltage range  10 V30 V  Residual ripple  10 %  Reverse polarity protection  for all electrical connections  Electrical connection 1, connection technology  Deen end  Electrical connection 1, number of pins/wires  3 Masses  On the masses  1 ms  1 MZ  1 ms	Repetition accuracy	0.2 mm
Aysteresis  O.1 mm1.5 mm  I ms  Switch-off time  1 ms  Max. switching frequency  Max. switching frequency  Max. output current  200 mA  Max. switching capacity DC  6 W  Voltage drop  3 V  Inductive protective circuit  Adapted to MZ, MY and ME coils  Residual current  O.01 mA  Short-circuit protection  Pulsed  Overload protection  Available  OC operating voltage range  10 V30 V  Residual ripple  10 %  Reverse polarity protection  for all electrical connections  Electrical connection 1, connection type  Electrical connection 1, connection technology  Open end  Electrical connection 1, number of pins/wires  3	Switching output	NPN
To ntime  Ins  Downtown fitting  Ins  Ins  Max. switching frequency  Max. output current  200 mA  Max. switching capacity DC  for W  Moutive protective circuit  Adapted to MZ, MY and ME coils  Residual current  Out mA  Short-circuit protection  Pulsed  Doverload protection  Pulsed  Doverload protection  Available  Do operating voltage range  In V30 V  Residual ripple  Reverse polarity protection  Reverse polarity protection  Cable  Cable  Cachle  Cetrical connection 1, connection technology  Dopen end  Ceterrical connection 1, number of pins/wires  3	Switching element function	N/O contact
Switch-off time 1 ms  Max. switching frequency 1 kHz  Max. output current 200 mA  Max. switching capacity DC 6 W  /oltage drop 3 V  nductive protective circuit Adapted to MZ, MY and ME coils  Residual current 0.01 mA  Short-circuit protection Pulsed  Overload protection Available  OC operating voltage range 10 V30 V  Residual ripple 10 %  Reverse polarity protection for all electrical connections  Electrical connection 1, connection type Cable  Electrical connection 1, connection technology Open end  Electrical connection 1, number of pins/wires 3	Hysteresis	0.1 mm1.5 mm
Max. switching frequency  Max. output current  200 mA  Max. switching capacity DC  6 W  /oltage drop  3 V  nductive protective circuit  Adapted to MZ, MY and ME coils  Residual current  0.01 mA  Short-circuit protection  Pulsed  Overload protection  Available  OC operating voltage range  10 V30 V  Residual ripple  10 %  Reverse polarity protection  for all electrical connection 1, connection type  Electrical connection 1, connection technology  Open end  Electrical connection 1, number of pins/wires  3	On time	1 ms
Max. output current  Max. switching capacity DC  Max. switching capacity Max. switching as V  Max. switching capacity	Switch-off time	1 ms
Max. switching capacity DC  /oltage drop  3 V  nductive protective circuit  Adapted to MZ, MY and ME coils  Residual current  0.01 mA  Short-circuit protection  Pulsed  Overload protection  Available  OC operating voltage range  10 V30 V  Residual ripple  10 %  Reverse polarity protection  for all electrical connections  Electrical connection 1, connection technology  Clectrical connection 1, number of pins/wires  3 W  Adapted to MZ, MY and ME coils  Adapted to MZ, MY and ME coils  10.01 mA  Adapted to MZ, MY and ME coils  Adapted to MZ, MY and ME coils  Adapted to MZ, MY and ME coils  10.01 mA  Fulsed  Octage  Coperating voltage  Coperating voltage range  10 V30 V  Residual ripple  10 %  Coperating voltage range  10 V30 V  Residual ripple  10 %  Open end  Clectrical connection 1, connection technology  Open end  Clectrical connection 1, number of pins/wires  3	Max. switching frequency	1 kHz
Adapted to MZ, MY and ME coils Residual current O.01 mA Short-circuit protection Pulsed Overload protection Available OC operating voltage range 10 V30 V Residual ripple Reverse polarity protection for all electrical connection 1, connection type Electrical connection 1, connection technology Denote the many state of pins/wires  3 V Adapted to MZ, MY and ME coils Ada	Max. output current	200 mA
nductive protective circuit  Adapted to MZ, MY and ME coils  Residual current  0.01 mA  Short-circuit protection  Pulsed  Overload protection  Available  OC operating voltage range  10 V30 V  Residual ripple  10 %  Reverse polarity protection  for all electrical connections  Electrical connection 1, connection type  Electrical connection 1, connection technology  Open end  Electrical connection 1, number of pins/wires  3	Max. switching capacity DC	6 W
Residual current  O.01 mA  Short-circuit protection  Pulsed  Overload protection  Available  OC operating voltage range  10 V30 V  Residual ripple  10 %  Reverse polarity protection  for all electrical connections  Electrical connection 1, connection type  Electrical connection 1, connection technology  Open end  Electrical connection 1, number of pins/wires  3	Voltage drop	3 V
Short-circuit protection Pulsed Overload protection Available OC operating voltage range 10 V30 V Residual ripple 10 % Reverse polarity protection For all electrical connections Electrical connection 1, connection type Cable Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	Inductive protective circuit	Adapted to MZ, MY and ME coils
Overload protection  Available  OC operating voltage range  10 V30 V  Residual ripple  10 %  Reverse polarity protection  For all electrical connections  Electrical connection 1, connection type  Cable  Electrical connection 1, connection technology  Open end  Electrical connection 1, number of pins/wires  3	Residual current	0.01 mA
DC operating voltage range  10 V30 V  Residual ripple  10 %  Reverse polarity protection  For all electrical connections  Cable  Cable  Clectrical connection 1, connection technology  Open end  Clectrical connection 1, number of pins/wires  3	Short-circuit protection	Pulsed
Residual ripple 10 % Reverse polarity protection for all electrical connections Electrical connection 1, connection type Cable Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	Overload protection	Available
Reverse polarity protection for all electrical connections  Electrical connection 1, connection type Cable  Electrical connection 1, connection technology Open end  Electrical connection 1, number of pins/wires 3	DC operating voltage range	10 V30 V
Electrical connection 1, connection type  Electrical connection 1, connection technology  Open end  Electrical connection 1, number of pins/wires  3	Residual ripple	10 %
Electrical connection 1, connection technology Open end Electrical connection 1, number of pins/wires 3	Reverse polarity protection	for all electrical connections
Electrical connection 1, number of pins/wires 3	Electrical connection 1, connection type	Cable
·	Electrical connection 1, connection technology	Open end
Connection outlet orientation Longitudinal	Electrical connection 1, number of pins/wires	3
	Connection outlet orientation	Longitudinal

Feature	Value
Cable length	2.5 m
Cable characteristic	Standard
Color cable sheath	Gray
Material of cable sheath	PVC
Insulating sheath material	PVC
Wire ends	Cable end sleeve
Type of mounting	With accessories
Mounting position	Any
Product weight	85 g
Housing colour	Black
Housing material	PET Die-cast zinc
Switching status indication	LED yellow
Ambient temperature with flexible cable installation	-5 °C70 °C
Degree of protection	IP67
LABS (PWIS) conformity	VDMA24364-B2-L