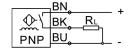
Proximity sensor SIEN-M12B-PS-K-L-PA

FESTO

Part number: 538323





Data sheet

Round Conform to standard EN 60947-5-2 Symbol 00991702 Certification RCM compliance mark cUL us - Listed (OL) Extending (see declaration of conformity) As per EU EMC directive Rote on materials Measuring principle Inductive Rated operating distance Reduction factors Repetition accuracy Repetition accuracy Repetition accuracy Repetition accuracy Repetition accuracy Respective for the reduction Repetition accuracy	Feature	Value
En 60947-5-2 conforms to standard En 60947-5-2 conforms to standard En 60947-5-2 conforms to standard RCM compliance mark cut us—slisted (OL) Et marking (see declaration of conformity) As per EU EMC directive Note on materials Free of copper and PTFE Measuring principle Inductive Rated operating distance 2 mm Assured operating distance 2 mm Aluminum = 0.35 - 0.5 Stainless steel St 18/8 = 0.6 - 1.0 Copper = 0.25 - 0.45 Brass = 0.35 - 0.5 Steel St 37 = 1.0 Auminum = 0.38 - 0.5 Aluminum = 0.3	Type code	SIEN
Symbol 00991702 Certification Compliance mark cult us - Listed (OL) Examing (see declaration of conformity) As per EU EMC directive Note on materials Free of copper and PTFE Neasuring principle Inductive Rated operating distance 2 mm Sesured operating distance Reduction factors Aluminum = 0.35 - 0.5 Stainless steel St 18/8 = 0.6 - 1.0 Copper = 0.25 - 0.45 Brass = 0.35 - 0.5 Steel St 37 = 1.0 Switching output PNP Switching element function N/O contact Max. switching frequency DC 2000 Hz Max. output current 200 mA Polage drop \$1.8 V Reduction for all electrical connection Gralle lectrical connection Cable Reserved Cable length PVC Salance Steel St 18 mA Reverse polarity protection PVC Cable length PVC Size In M12 With lock nut With lock nut With lock nut	Design	Round
Lertification RCM compliance mark c UL us - Listed (OL) EE marking (see declaration of conformity) As per EU EMC directive Note on materials Free of copper and PTFE Measuring principle Inductive Lated operating distance 2 mm 1.62 mm Reduction factors Aluminum = 0.35 - 0.5 Stainless steel St 18/8 = 0.6 - 1.0 Copper = 0.25 - 0.45 Brass = 0.35 - 0.5 Steel St 37 = 1.0 Ambient temperature 2.5 °C 70 °C Repetition accuracy O.04 mm Switching output PNP Switching element function Max. switching frequency DC Aux. switching frequency DC Aux. output current 200 mA Poltage drop \$1.8 V Pulsed DC operating voltage range 10 V 30 V Residual ripple die current \$2.5 m A Reverse polarity protection For all electrical connection 3 -wire Cable Later and Connection 3 -wire Cable Later and Connection 3 -wire Cable Later and Connection 4.5 m M12 With lock nut With lock nut With lock nut	Conforms to standard	EN 60947-5-2
C UL us - Listed (OL) Et marking (see declaration of conformity) As per EU EMC directive Note on materials Measuring principle Rated operating distance Reduction factors Aluminum = 0.35 - 0.5 Stainless steel St 18/8 = 0.6 - 1.0 Copper = 0.25 - 0.45 Brass = 0.35 - 0.5 Stainless steel St 18/8 = 0.6 - 1.0 Copper = 0.25 - 0.45 Brass = 0.35 - 0.5 Stainless steel St 18/8 = 0.6 - 1.0 Copper = 0.25 - 0.45 Brass = 0.35 - 0.5 Stainless steel St 18/8 = 0.6 - 1.0 Copper = 0.25 - 0.45 Brass = 0.35 - 0.5 Steel St 37 = 1.0 Aumbient temperature 25 °C 70 °C Repetition accuracy 0.04 mm Switching output PNP Switching output N/O contact Aysteresis 0.06 mm 0.3 mm Max. switching frequency DC 2000 Hz Max. output current 200 mA Moltage drop 4.1.8 V Short-circuit protection Pulsed DC operating voltage range 10 V 30 V Residual ripple dle current steevers polarity protection Generating voltage range 10 W Reverse polarity protection Grall electrical connections Celetrical connection 3-wire Cable Cable Label eight Auterial of cable sheath PVC mounting With lock nut	Symbol	00991702
Free of copper and PTFE Measuring principle Inductive 2 mm Assured operating distance 1.62 mm Reduction factors Aluminum = 0.35 - 0.5 Stainless steel St 18/8 = 0.6 - 1.0 Copper = 0.25 - 0.45 Brass = 0.35 - 0.5 Steel St 37 = 1.0 Ambient temperature Repetition accuracy O.04 mm PNP Switching output PNP Switching element function N/O contact Hysteresis O.06 mm 0.3 mm Aux. switching frequency DC Wax. switching frequency DC John Share of the substitution of the sub	Certification	
Measuring principle Rated operating distance Rated operating distance Reduction factors Repetition accuracy Repetition acc	CE marking (see declaration of conformity)	As per EU EMC directive
Assured operating distance Assured operating distance Assured operating distance 1.62 mm Aluminum = 0.35 - 0.5 Stainless steel St 18/8 = 0.6 - 1.0 Copper = 0.25 - 0.45 Brass = 0.35 - 0.5 Steel St 37 = 1.0 Ambient temperature -25 °C 70 °C Repetition accuracy 0.04 mm PNP Switching output N/O contact dysteresis 0.06 mm 0.3 mm Ass. switching frequency DC Ass. switching frequency DC Ass. output current 200 mA Foliage drop \$1.8 V Short-circuit protection Pulsed DC operating voltage range 10 V 30 V Residual ripple 10 % Reverse polarity protection for all electrical connections allectrical connection 3-wire Cable length Material of cable sheath PVC Insulating sheath material PVC Size M12 With lock nut	Note on materials	Free of copper and PTFE
Aluminum = 0.35 - 0.5 Stainless steel \$1 18/8 = 0.6 - 1.0 Copper = 0.25 - 0.45 Brass = 0.35 - 0.5 Steel \$1 37 = 1.0 Ambient temperature -25 ° C 70 ° C Repetition accuracy 0.04 mm PNP Switching output PNP Switching element function N/O contact Hysteresis 0.06 mm 0.3 mm Max. switching frequency DC 2000 Hz Max. output current 200 mA Follotage drop \$1.8 V Short-circuit protection Pulsed DC operating voltage range 10 V 30 V Residual ripple dle current \$25 m A Reverse polarity protection for all electrical connections 3-wire Cable Cable Lable length Material of cable sheath PVC Size M12 With lock nut With lock nut	Measuring principle	Inductive
Aluminum = 0.35 - 0.5 Stainless steel St 18/8 = 0.6 - 1.0 Copper = 0.25 - 0.45 Brass = 0.35 - 0.5 Steel St 37 = 1.0 Ambient temperature -25 °C 70 °C Repetition accuracy 0.04 mm Rewitching output PNP Switching element function N/O contact Hysteresis 0.06 mm 0.3 mm Amax. switching frequency DC 200 Hz Max. output current 200 mA Foliage drop \$1.8 V Short-circuit protection Pulsed DC operating voltage range 10 V 30 V Residual ripple dle current \$15 mA Reverse polarity protection \$3 wire Cable Lieletrical connection \$3 wire Cable Lieletrical connection Amax. output current \$25 m Material of cable sheath PVC Max. output M12 With lock nut	Rated operating distance	2 mm
Stainless steel St 18/8 = 0.6 - 1.0 Copper = 0.25 - 0.45 Brass = 0.35 - 0.5 Steel St 37 = 1.0 Ambient temperature 25 °C 70 °C Repetition accuracy 0.04 mm PNP Switching output PNP Wax. switching element function Max. switching frequency DC 2000 Hz Wax. switching frequency DC 2000 Hz Wax. output current 2000 MA Short-circuit protection Pulsed Coperating voltage range 10 V 30 V Residual ripple 10 % Reverse polarity protection For all electrical connections Clectrical connection Short-circuit connection Cable length Active Cable Cable sheath PVC Max. suitching steel St 18/8 = 0.6 - 1.0 Coperating voltage range 10 V 30 V Reverse polarity protection PVC Max. Switching frequency DC White Cable sheath PVC White Cable sheath PVC With lock nut With lock nut With lock nut	Assured operating distance	1.62 mm
Repetition accuracy O.04 mm PNP Switching output PNP Switching element function N/O contact Nysteresis O.06 mm 0.3 mm Max. switching frequency DC Max. output current Oltage drop Short-circuit protection Pulsed OC operating voltage range 10 V 30 V Residual ripple 10 % Reverse polarity protection For all electrical connections Electrical connection Salvire Cable Cable length Material of cable sheath PVC Insulating sheath material Fype of mounting With lock nut O.04 mm N/O contact N/O co	Reduction factors	Stainless steel St 18/8 = 0.6 - 1.0 Copper = 0.25 - 0.45 Brass = 0.35 - 0.5
Switching output Switching element function My Contact Mysteresis 0.06 mm 0.3 mm 2000 Hz Max. switching frequency DC Max. output current 200 mA Voltage drop Short-circuit protection Pulsed OC operating voltage range 10 V 30 V Residual ripple 10 % Reverse polarity protection For all electrical connections Celectrical connection 3-wire Cable Cable length Active cable sheath PVC Insulating sheath material PVC With lock nut With lock nut	Ambient temperature	-25 °C 70 °C
Switching element function All your contact All ysteresis 0.06 mm 0.3 mm 2000 Hz 2000 Hz 2000 mA 2000 mA 2018 gd op 21.8 V 200 erating voltage range 10 V 30 V 200 erating voltage range 10 % 2018 decurrent 205 mA 205 erating voltage range 206 in all electrical connections 207 electrical connection 208 electrical connection 209 mA 21.8 V 2200 mA 21.8 V 2200 mA 2200	Repetition accuracy	0.04 mm
Avx. switching frequency DC Avx. output current A	Switching output	PNP
Max. switching frequency DC Max. output current 200 mA All Voltage drop \$1.8 V Short-circuit protection Pulsed DC operating voltage range 10 V 30 V Residual ripple dle current \$15 mA Reverse polarity protection For all electrical connections Electrical connection 3-wire Cable Cable length Alterial of cable sheath PVC Insulating sheath material PVC M12 Type of mounting With lock nut	Switching element function	N/O contact
Max. output current 200 mA √oltage drop ≤1.8 V Short-circuit protection Pulsed C operating voltage range 10 V 30 V Residual ripple 10 % dle current ≤15 mA Reverse polarity protection for all electrical connections Electrical connection 3-wire Cable Cable length Atterial of cable sheath PVC Insulating sheath material PVC Size M12 With lock nut	Hysteresis	0.06 mm 0.3 mm
A A A A A A A A A A	Max. switching frequency DC	2000 Hz
Short-circuit protection Pulsed 10 V 30 V Residual ripple 10 % dle current storm Reverse polarity protection For all electrical connections Flectrical connection Flectrical connection For all electrical connections Flectrical connection For all electrical connections Flectrical connection Full electrical connections	Max. output current	200 mA
DC operating voltage range 10 V 30 V Residual ripple 10 % dle current \$15 mA Reverse polarity protection for all electrical connections Electrical connection 3-wire Cable Cable Cable Cable Atterial of cable sheath PVC Insulating sheath material PVC Size M12 With lock nut	Voltage drop	≤1.8 V
Residual ripple dle current <15 mA Reverse polarity protection for all electrical connections 3-wire Cable Cable length Atterial of cable sheath PVC Insulating sheath material Fyce of mounting With lock nut 10 % 10 % 10 % 10 m 11 m 12 m 13 m 14 m 15 m 16 m 17 m 18 m 18 m 19 m 19 m 10 m	Short-circuit protection	Pulsed
Severse polarity protection For all electrical connections	DC operating voltage range	10 V 30 V
Reverse polarity protection for all electrical connections 3-wire Cable Cable length 2.5 m Material of cable sheath PVC Insulating sheath material PVC Size M12 Type of mounting With lock nut	Residual ripple	10 %
Selectrical connection 3-wire Cable Cable Cable length 2.5 m Material of cable sheath PVC Insulating sheath material PVC M12 Type of mounting With lock nut	Idle current	≤15 mA
Cable Cable length Cable length Material of cable sheath PVC Insulating sheath material PVC Size M12 Type of mounting With lock nut	Reverse polarity protection	for all electrical connections
Material of cable sheath PVC Insulating sheath material PVC Size M12 Type of mounting With lock nut	Electrical connection	
PVC Size M12 Type of mounting With lock nut	Cable length	2.5 m
Size M12 Type of mounting With lock nut	Material of cable sheath	PVC
Type of mounting With lock nut	Insulating sheath material	PVC
	Size	M12
Tightening torque 1 Nm	Type of mounting	With lock nut
	Tightening torque	1 Nm

Feature	Value
Mounting type	Flush
Product weight	113 g
Housing material	PA-reinforced
Switching status indication	LED yellow
Ambient temperature with flexible cable installation	0 °C 70 °C
Degree of protection	IP65 IP67
Corrosion resistance class (CRC)	4 - Particularly high corrosion stress
Selection of additional sensor information	With standard switching distance
Electrical output	PNP
Selection of sensor version	Polyamide housing