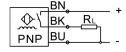
## Proximity sensor SIEF-M18NB-PS-K-L

**FESTO** 

Part number: 538316





## **Data sheet**

Design Round En Koop47-5-2 En Koop47-5	Feature	Value
En 60947-5-2  Symbol 0991702  RCM compliance mark clut us - listed (OL)  CE marking (see declaration of conformity)  As per EU EMC directive  Note on materials  Free of copper and PTFE  Measuring principle Rated operating distance  Reduction factors  Assured operating distance  Reduction factors  Aluminum = 1.0  Brass = 1.0  Stainless steel \$1 18/8 = 1.0  Copper = 1.0  Brass = 1.0  Steel \$3 7 = 1.0  Brass = 1.0  Steel \$3 7 = 1.0  Ambient temperature  Repetition accuracy  O.24 mm  Switching output  PNP  Switching element function  N/O contact  Hysteresis  O.36 mm 1.8 mm  Max. switching frequency DC  2000 Hz  Max. output current  200 mA  Awax. output current  200 mA  Voltage drop  \$1.8 V  Short-Cruit protection  Pulsed  die current  electrical connection  Reverse polarity protection  for all electrical connections  Cable  Cable length  Material of cable sheath  TPE-U(PUR)  Institution surface in the side in the sid	Type code	SIEF
Symbol 00991702 Certification Certification RCM compliance mark cult us - Listed (OL) CE marking (see declaration of conformity) Note on materials Free of copper and PTFE Measuring principle Inductive Rated operating distance 12 mm Assured operating distance Reduction factors Reduction factors Reduction factors Reduction factors Reduction factors Repetition accuracy Repetition accuracy Respectition accuracy Respectition accuracy Respectition factors Respectition factors Respectition accuracy Respectition factors Repetition accuracy Respectition factors Repetition accuracy Respectition function Respectition Respective Re	Design	Round
Lertification RCM compliance mark c.U. us - Listed (OL)  CE marking (see declaration of conformity)  As per EU EMC directive  Note on materials  Free of copper and PTFE  Measuring principle Inductive  Rated operating distance 12 mm  Assured operating distance 9.72 mm  Aluminum = 1.0  Stainless steel St 18/8 = 1.0  Copper = 1.0  Brass = 1.0  Steel St 37 = 1.0	Conforms to standard	EN 60947-5-2
c UL us - Listed (OL)  Emarking (see declaration of conformity)  As per EU EMC directive  Note on materials  Measuring principle  Rated operating distance  Assured operating distance  Reduction factors  Aluminum = 1.0 Stainless steel St 18/8 = 1.0 Copper = 1.0 Brass = 1.0 Steel St 37 = 1.0 Steel St 37 = 1.0  Ambient temperature  -30 °C 85 °C  Repetition accuracy  0.24 mm  Switching output  PNP  Switching output  PNP  Switching lement function  Max. switching frequency DC  2000 Hz  Max. output current  200 mA  Woltage drop  Short-circuit protection  DC operating voltage range  Residual ripple  did current  Reverse polarity protection  Electrical connection  Sale length  Material of cable sheath  Insulating sheath material  PVC  Size  M18  Kith lock nut  With lock nut	Symbol	00991702
Note on materials  Measuring principle  Measuring principle  Ansured operating distance  Assured operating distance  Aluminum = 1.0 Stainless steel St 18/8 = 1.0 Copper = 1.0 Brass = 1.0 Steel St 37 = 1.0  Ambient temperature  Repetition accuracy  O.24 mm  Switching output  PNP  Switching element function Hysteresis O.36 mm 1.8 mm  Max. output current Voltage drop Short-circuit protection DC operating voltage range DC operating voltage range  Reseverse polarity protection File current  Side current  10 %  dide current  10 %  dide current  2.5 m  Material of cable sheath TPE-U(PUR) Insulating sheath material Free of copper and PTFE  Inductive Inductive Inductive Inductive Inductive Inductive Inductive Inductive Inductive Induction Inductive Inductive Inductive Induction Inductive Inductive Induction Inductive In	Certification	
Measuring principle Rated operating distance Reduction factors Red	CE marking (see declaration of conformity)	As per EU EMC directive
Rated operating distance  Assured operating distance  Assured operating distance  Reduction factors  Aluminum = 1.0 Stainless steel St 18/8 = 1.0 Copper = 1.0 Brass = 1.0 Steel St 37 = 1.0  Ambient temperature  -30 °C 85 °C  Repetition accuracy  0.24 mm  PNP  Switching output  N/O contact  Hysteresis  0.36 mm 1.8 mm  Max. switching frequency DC  Max. output current  200 mA  Voltage drop  \$1.8 V  Short-circuit protection  Pulsed  DC operating voltage range  10 V 30 V  Residual ripple  10 %  didle current  \$215 mA  Reverse polarity protection  Electrical connection  3-wire Cable  Cable length  Material of cable sheath  Insulating sheath material  PVC  Size  M18  Type of mounting  With lock nut	Note on materials	Free of copper and PTFE
Assured operating distance  Reduction factors  Reduction factors  Aluminum = 1.0 Stainless steel St 18/8 = 1.0 Copper = 1.0 Brass = 1.0 Steel St 37 = 1.0  Ambient temperature  -30 °C 85 °C  Repetition accuracy  0.24 mm  PNP  Switching output  PNP  Switching element function  N/O contact Hysteresis  0.36 mm 1.8 mm  Max. switching frequency DC  2000 Hz  Max. output current  200 mA  Voltage drop  Stort-circuit protection  Pulsed  DC operating voltage range  10 V 30 V  Residual ripple  dide current  s15 mA  Reverse polarity protection  For all electrical connections  Electrical connection  3-wire Cable  Cable length  Material of cable sheath  TPE-U(PUR)  Insulating sheath material  FVC  Size  M18  With lock nut	Measuring principle	Inductive
Reduction factors  Aluminum = 1.0 Stainless steel St 18/8 = 1.0 Copper = 1.0 Brass = 1.0 Steel St 37 = 1.0  Ambient temperature  Repetition accuracy  0.24 mm  Switching output  PNP  Switching element function  N/O contact  Hysteresis  0.36 mm 1.8 mm  Max. switching frequency DC  200 Hz  Max. output current  200 mA  Voltage drop  \$1.8 V  Short-circuit protection  Pulsed  DC operating voltage range  10 V 30 V  Residual ripple  10 %  Reverse polarity protection  \$15 mA  Reverse polarity protection  \$3 -wire Cable  Cable length  Assire Cable  Cable length  TPE-U(PUR)  Insulating sheath material  PVC  Size  M18  Type of mounting  With lock nut	Rated operating distance	12 mm
Stainless steel St 18/8 = 1.0 Copper = 1.0 Brass = 1.0 Steel St 37 = 1.0  Ambient temperature 30 °C 85 °C Repetition accuracy 0.24 mm  Switching output PNP Switching element function N/O contact Hysteresis 0.36 mm 1.8 mm  Max. switching frequency DC 2000 Hz  Max. output current 2000 mA  Voltage drop \$1.8 V Short-circuit protection Pulsed DC operating voltage range 10 V 30 V  Residual ripple 10 % Idle current \$15 mA Reverse polarity protection For all electrical connections Electrical connection  Sawire Cable Cable length Assignment	Assured operating distance	9.72 mm
Repetition accuracy  O.24 mm  Switching output  PNP  Switching element function  N/O contact  Hysteresis  O.36 mm 1.8 mm  Max. switching frequency DC  Max. output current  Voltage drop  Short-circuit protection  Pulsed  DC operating voltage range  10 V 30 V  Residual ripple  In %  Idle current  Reverse polarity protection  Flectrical connection  Selectrical connection  Solution  Cable length  Material of cable sheath  TPE-U(PUR)  Insulating sheath material  Flyce of mounting  With lock nut	Reduction factors	Stainless steel St 18/8 = 1.0 Copper = 1.0 Brass = 1.0
Switching output  Switching element function  N/O contact  Hysteresis  0.36 mm 1.8 mm  2000 Hz  Max. switching frequency DC  Max. output current  200 mA  Voltage drop  \$1.8 V  Short-circuit protection  Pulsed  DC operating voltage range  10 V 30 V  Residual ripple  10 %  dle current  \$15 mA  Reverse polarity protection  Electrical connection  3-wire Cable  Cable length  2.5 m  Material of cable sheath  TPE-U(PUR)  Insulating sheath material  PVC  Size  M18  Type of mounting  With lock nut	Ambient temperature	-30 ℃ 85 ℃
Switching element function  N/O contact  Hysteresis  0.36 mm 1.8 mm  2000 Hz  Max. switching frequency DC  2000 mA  Voltage 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  Electrical connection  3-wire Cable  Cable length  2.5 m  Material of cable sheath  TPE-U(PUR)  Insulating sheath material  PVC  Size  M18  Type of mounting  With lock nut	Repetition accuracy	0.24 mm
Hysteresis 0.36 mm 1.8 mm  Max. switching frequency DC 2000 Hz  Max. output current 200 mA  Voltage drop \$1.8 V  Short-circuit protection Pulsed  DC operating voltage range 10 V 30 V  Residual ripple 10 %  Idle current \$15 mA  Reverse polarity protection for all electrical connections  Electrical connection 3-wire Cable  Cable length 2.5 m  Material of cable sheath TPE-U(PUR)  Insulating sheath material PVC  Size M18  Type of mounting With lock nut	Switching output	PNP
Max. switching frequency DC  Max. output current  200 mA  Voltage drop  \$1.8 V  Short-circuit protection  Pulsed  DC operating voltage range  10 V 30 V  Residual ripple  10 %  Idle current  \$15 mA  Reverse polarity protection  For all electrical connections  Electrical connection  \$3-wire Cable  Cable length  2.5 m  Material of cable sheath  TPE-U(PUR)  Insulating sheath material  PVC  Size  M18  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  DC operating voltage range  10 V 30 V  Residual ripple  10 %  GReverse polarity protection  For all electrical connections  Electrical connection  3-wire Cable  Cable length  2.5 m  Material of cable sheath  TPE-U(PUR)  Insulating sheath material  PVC  Size  M18  Type of mounting  With lock nut	Hysteresis	0.36 mm 1.8 mm
Voltage drop  Short-circuit protection  Pulsed  DC operating voltage range  10 V 30 V  Residual ripple  10 %  Idle current  Reverse polarity protection  For all electrical connections  Selectrical connection  3-wire Cable length  2.5 m  Material of cable sheath  TPE-U(PUR)  Insulating sheath material  PVC  M18  Type of mounting  With lock nut	Max. switching frequency DC	2000 Hz
Short-circuit protection  DC operating voltage range  10 V 30 V  Residual ripple  10 %  Idle current  Reverse polarity protection  Full electrical connections  Selectrical connection  3-wire Cable Cable length  2.5 m  Material of cable sheath  TPE-U(PUR)  Insulating sheath material  PVC  M18  Type of mounting  With lock nut	Max. output current	200 mA
DC operating voltage range  10 V 30 V  Residual ripple  10 %  Idle current  Reverse polarity protection  For all electrical connections  Electrical connection  3-wire Cable Cable Cable length  2.5 m  Material of cable sheath  TPE-U(PUR)  Insulating sheath material  PVC  Size  M18  Type of mounting  With lock nut	Voltage drop	≤1.8 V
Residual ripple  Idle current	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  Electrical connection 3-wire Cable  Cable length 2.5 m  Material of cable sheath TPE-U(PUR)  Insulating sheath material PVC  Size M18  Type of mounting With lock nut	Residual ripple	10 %
Electrical connection  3-wire Cable Cable Cable length  2.5 m  Material of cable sheath TPE-U(PUR) Insulating sheath material PVC Size M18 Type of mounting With lock nut	Idle current	≤15 mA
Cable Cable length Cable length  Material of cable sheath Insulating sheath material Fyc Size M18 Type of mounting With lock nut	Reverse polarity protection	for all electrical connections
Material of cable sheath TPE-U(PUR) Insulating sheath material PVC Size M18 Type of mounting With lock nut	Electrical connection	
Insulating sheath material PVC Size M18 Type of mounting With lock nut	Cable length	2.5 m
Size M18 Type of mounting With lock nut	Material of cable sheath	TPE-U(PUR)
Type of mounting With lock nut	Insulating sheath material	PVC
	Size	M18
Tightening torque 25 Nm	Type of mounting	With lock nut
	Tightening torque	25 Nm

Feature	Value
Mounting type	Partially flush
Product weight	141 g
Housing material	Brass PBT Chrome-plated
Switching status indication	LED yellow
Ambient temperature with flexible cable installation	0 °C 80 °C
Degree of protection	IP67
Resistance to interference from magnetic fields	Magnetic direct and alternating fields
Corrosion resistance class (CRC)	2 - Moderate corrosion stress
Selection of additional sensor information	With reduction factor 1 – resistance to magnetic fields
Electrical output	PNP
Selection of sensor version	Standard