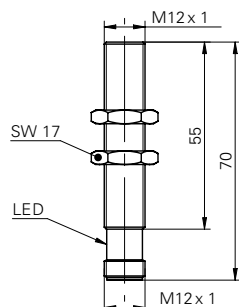


Ultrasonic distance measuring sensors

UNAM 12 (Sde = 200 mm)

sample drawing



general data

scanning range sd	20 ... 200 mm
scanning range close limit Sdc	20 ... 200 mm
scanning range far limit Sde	20 ... 200 mm
repeat accuracy	< 0,5 mm
resolution	< 0,3 mm
response time ton	< 30 ms
release time toff	< 30 ms
temperature drift	< 2 % of distance to target So
sonic frequency	380 kHz
adjustment	external Teach-in
alignment aid	target indication flashing
light indicator	yellow LED / red LED

electrical data

voltage supply range +Vs	15 ... 30 VDC
output current	< 20 mA
residual ripple	< 10 % Vs
short circuit protection	yes
reverse polarity protection	yes

voltage output

current consumption max. (no load)	35 mA
output signal	0 ... 10 V / 10 ... 0 V

current output

current consumption max. (no load)	45 mA
output signal	0 ... 10 mA / 10 ... 0 mA
load resistance +Vs max.	< 1100 Ohm
load resistance +Vs min.	< 400 Ohm

mechanical data

type	cylindrical threaded
housing material	brass nickel plated
width / diameter	12 mm
height / length	70 mm
connection types	connector M12

sample picture





Ultrasonic distance measuring sensors

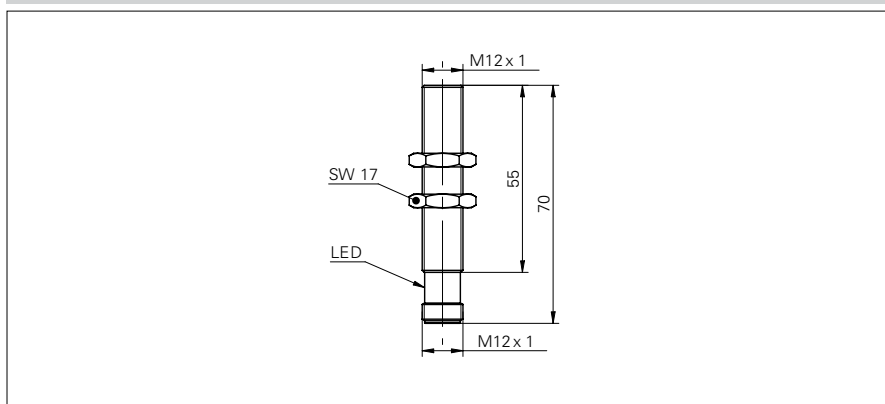
UNAM 12 (Sde = 200 mm)**ambient conditions**

operating temperature	-10 ... +60 °C
protection class	IP 67

order reference**UNAM 12I9914/S14**
UNAM 12U9914/S14**output circuit**current output
voltage output

Ultrasonic distance measuring sensors

sample drawing



general data

scanning range sd	60 ... 400 mm
scanning range close limit Sdc	60 ... 400 mm
scanning range far limit Sde	60 ... 400 mm
repeat accuracy	< 0,5 mm
resolution	< 0,3 mm
response time ton	< 60 ms
release time toff	< 60 ms
temperature drift	< 2 % of distance to target So
sonic frequency	290 kHz
adjustment	external Teach-in
alignment aid	target indication flashing
light indicator	yellow LED / red LED

electrical data

voltage supply range +Vs	15 ... 30 VDC
output current	< 20 mA
residual ripple	< 10 % Vs
short circuit protection	yes
reverse polarity protection	yes

voltage output

current consumption max. (no load)	35 mA
output signal	0 ... 10 V / 10 ... 0 V

current output

current consumption max. (no load)	45 mA
output signal	0 ... 10 mA / 10 ... 0 mA
load resistance +Vs max.	< 1100 Ohm
load resistance +Vs min.	< 400 Ohm

mechanical data

type	cylindrical threaded
housing material	brass nickel plated
width / diameter	12 mm
height / length	70 mm
connection types	connector M12

sample picture



Ultrasonic distance measuring sensors**ambient conditions**

operating temperature	-10 ... +60 °C
protection class	IP 67

order reference

UNAM 12I9912/S14
UNAM 12U9912/S14

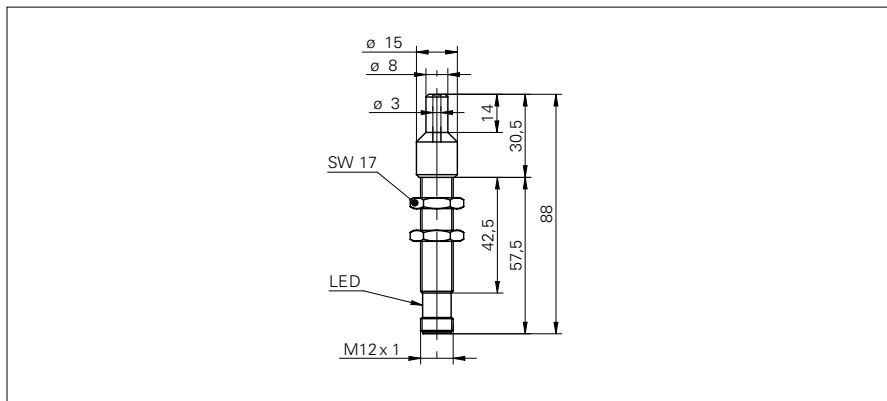
output circuit

current output
voltage output

Ultrasonic distance measuring sensors

UNAM 12U9914/S14D

dimension drawing



general data

scanning range sd	2 ... 82 mm
scanning range close limit Sdc	2 ... 82 mm
scanning range far limit Sde	2 ... 82 mm
repeat accuracy	< 0,5 mm
resolution	< 0,3 mm
response time ton	< 30 ms
release time toff	< 30 ms
temperature drift	< 2 % of distance to target So
sonic frequency	380 kHz
adjustment	external Teach-in
alignment aid	target indication flashing
light indicator	yellow LED / red LED

electrical data

voltage supply range +Vs	15 ... 30 VDC
current consumption max. (no load)	35 mA
output circuit	voltage output
output signal	0 ... 10 V / 10 ... 0 V
output current	< 20 mA
residual ripple	< 10 % Vs
short circuit protection	yes
reverse polarity protection	yes

mechanical data

type	cylindrical threaded
housing material	brass nickel plated
width / diameter	12 mm
height / length	88 mm
connection types	connector M12

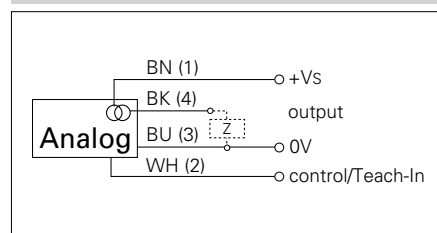
ambient conditions

operating temperature	-10 ... +60 °C
protection class	IP 67

photo



connection diagram



- Analog voltage output 0 - 10 V