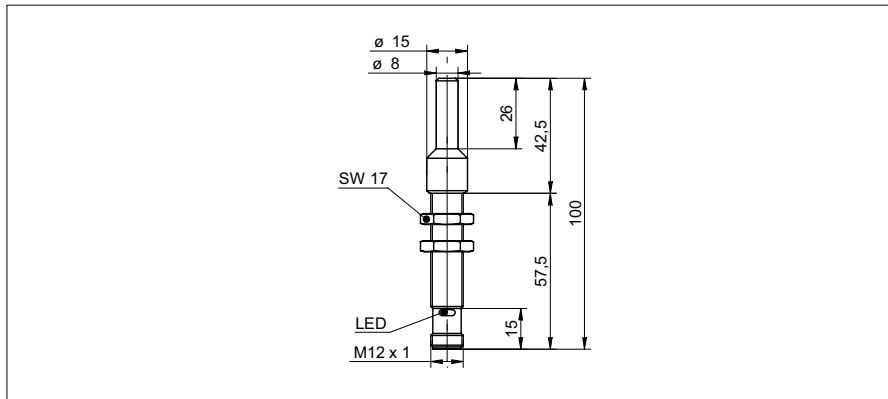


Ultrasonic proximity sensors UNAM 12 (with beam columnator, Highspeed)

sample drawing



general data

special type	Highspeed
scanning range sd	0 ... 40 mm
scanning range far limit Sde	0 ... 40 mm
hysteresis typ.	4 % Sde
repeat accuracy	< 0,5 mm
temperature drift	< 0,18 % Sde/K
response time ton	< 1,3 ms
release time toff	< 1,3 ms
switching frequency	< 225 Hz
sonic frequency	380 kHz
adjustment	external Teach-in
alignment aid	target indication flashing
output indicator	LED green

sample picture



electrical data

voltage supply range +Vs	12 ... 30 VDC
current consumption max. (no load)	35 mA
output current	< 200 mA
voltage drop Vd	< 2 VDC
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	100 mm
connection types	connector M12

ambient conditions

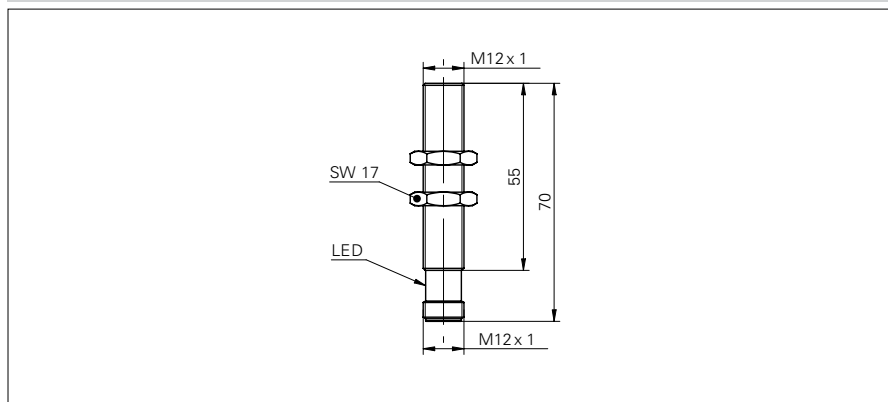
operating temperature	-10 ... +60 °C
protection class	IP 67

Ultrasonic proximity sensors UNAM 12 (with beam columnator, Highspeed)

order reference	output circuit
UNAM 12N8910/S140D	NPN make function (NO) / break function (NC)
UNAM 12P8910/S140D	PNP make function (NO) / break function (NC)

Ultrasonic proximity sensors

sample drawing



general data

scanning range sd	40 ... 400 mm
scanning range far limit Sde	60 ... 400 mm
hysteresis typ.	4 % Sde
repeat accuracy	< 0,5 mm
temperature drift	< 0,18 % Sde/K
response time ton	< 25 ms
release time toff	< 25 ms
sonic frequency	290 kHz
adjustment	external Teach-in
alignment aid	target indication flashing
output indicator	LED green

electrical data

voltage supply range +Vs	12 ... 30 VDC
current consumption max. (no load)	35 mA
output current	< 200 mA
voltage drop Vd	< 2 VDC
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	70 mm
connection types	connector M12

ambient conditions

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

sample picture

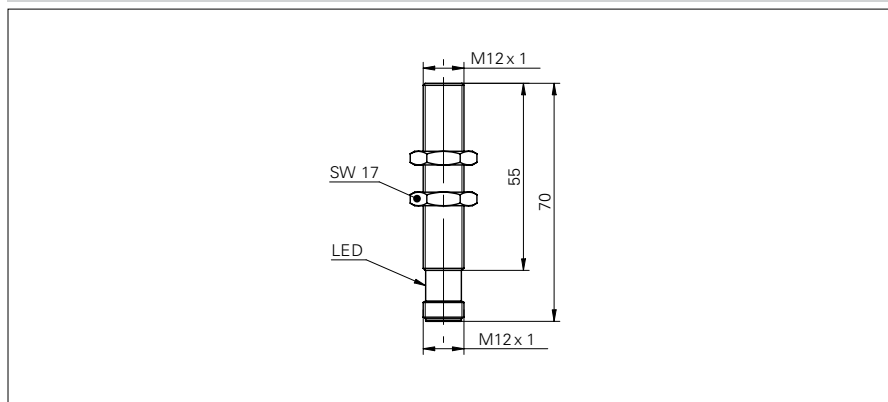


Ultrasonic proximity sensors

order reference	output circuit
UNAM 12N1912/S14	NPN make function (NO)
UNAM 12N3912/S14	NPN break function (NC)
UNAM 12P1912/S14	PNP make function (NO)
UNAM 12P3912/S14	PNP break function (NC)

Ultrasonic proximity sensors

sample drawing



general data

scanning range sd	10 ... 200 mm
scanning range far limit Sde	30 ... 200 mm
hysteresis typ.	4 % Sde
repeat accuracy	< 0,5 mm
temperature drift	< 0,18 % Sde/K
response time ton	< 10 ms
release time toff	< 10 ms
sonic frequency	380 kHz
adjustment	external Teach-in
alignment aid	target indication flashing
output indicator	LED green

electrical data

voltage supply range +Vs	12 ... 30 VDC
current consumption max. (no load)	35 mA
output current	< 200 mA
voltage drop Vd	< 2 VDC
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	70 mm
connection types	connector M12

ambient conditions

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

sample picture

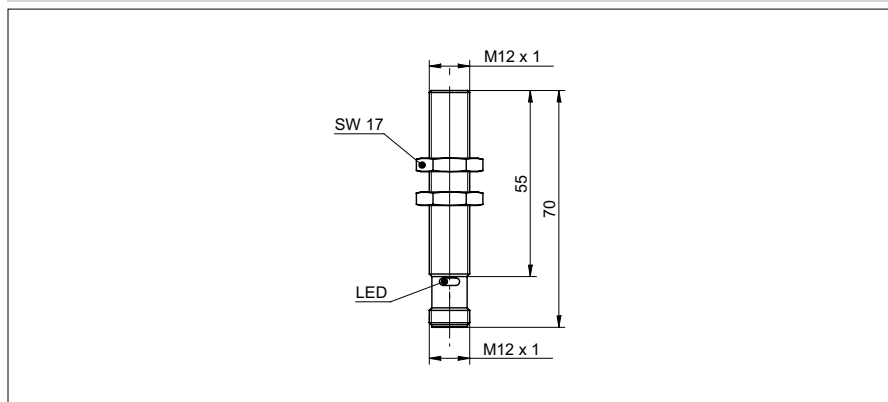


Ultrasonic proximity sensors

order reference	output circuit
UNAM 12N1914/S14	NPN make function (NO)
UNAM 12N3914/S14	NPN break function (NC)
UNAM 12P1914/S14	PNP make function (NO)
UNAM 12P3914/S14	PNP break function (NC)

Ultrasonic proximity sensors

sample drawing



general data

special type	Highspeed
scanning range sd	10 ... 70 mm
scanning range far limit Sde	30 ... 70 mm
hysteresis typ.	4 % Sde
repeat accuracy	< 0,5 mm
temperature drift	< 0,18 % Sde/K
response time ton	< 1,3 ms
release time toff	< 1,3 ms
switching frequency	< 225 Hz
sonic frequency	380 kHz
adjustment	external Teach-in
alignment aid	target indication flashing
output indicator	LED green

electrical data

voltage supply range +Vs	12 ... 30 VDC
current consumption max. (no load)	35 mA
output current	< 200 mA
voltage drop Vd	< 2 VDC
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	70 mm
connection types	connector M12

ambient conditions

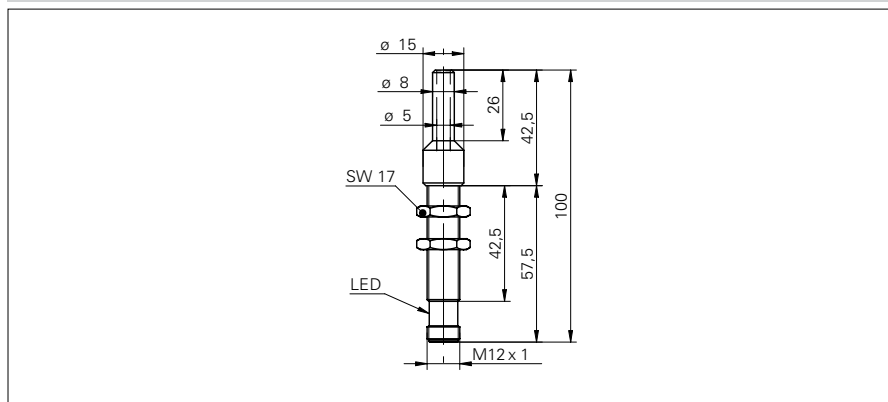
operating temperature	-10 ... +60 °C
protection class	IP 67

sample picture



Ultrasonic proximity sensors

order reference	output circuit
UNAM 12N8910/S140	NPN make function (NO) / break function (NC)
UNAM 12P8910/S140	PNP make function (NO) / break function (NC)

Ultrasonic proximity sensors
sample drawing

general data

scanning range sd	5 ... 70 mm
scanning range far limit Sde	5 ... 70 mm
hysteresis typ.	4 % Sde
repeat accuracy	< 0,5 mm
temperature drift	< 0,18 % Sde/K
response time ton	< 10 ms
release time toff	< 10 ms
sonic frequency	380 kHz
adjustment	external Teach-in
alignment aid	target indication flashing
output indicator	LED green

electrical data

voltage supply range +Vs	12 ... 30 VDC
current consumption max. (no load)	35 mA
output current	< 200 mA
voltage drop Vd	< 2 VDC
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	100 mm
connection types	connector M12

ambient conditions

operating temperature	0 ... +60 °C
protection class	IP 67

order reference

UNAM 12N1914/S14D	NPN make function (NO)
UNAM 12P1914/S14D	PNP make function (NO)

output circuit
sample picture
