

Sd = 70 mm

- with beam columnator for measurement in very small containers
- external Teach-in

general data

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

electrical data

voltage supply range +Vs	12 ... 30 VDC
current consumption max.	35 mA
output circuit	PNP make function (NO)
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
housing material	brass nickel plated
width / diameter	12 mm
height / length	70 mm
connection types	connector M12

ambient conditions

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

accessories

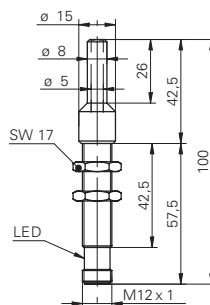
connectors	ES 14, ESW 33A, ESG 34A
Teach-in-adapter	Nr. 141584

order reference

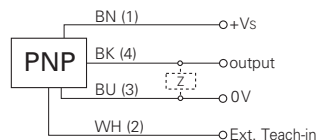
UNAM 12P1914/S14D



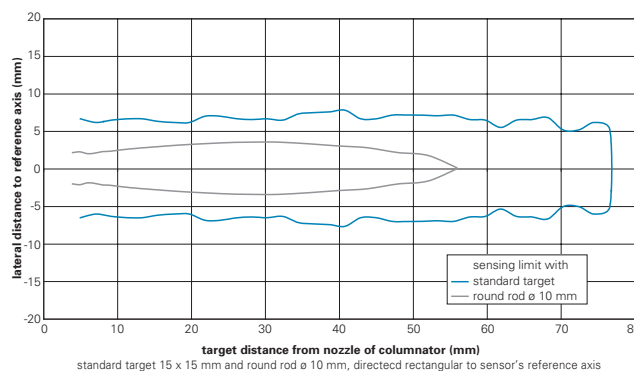
dimension drawing



connection diagram



typical sonic cone profile



UNAM 12 Sd = 70 mm

Ultrasonic proximity sensors



Sd = 200 mm

- external Teach-in
- Teach-in adapter
- small sonic beam angle



UNAM 12 Sd = 200 mm

Ultrasonic proximity sensors

general data

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

electrical data

voltage supply range +Vs	12 ... 30 VDC
current consumption max.	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
housing material	brass nickel plated
width / diameter	12 mm
height / length	70 mm
connection types	connector M12

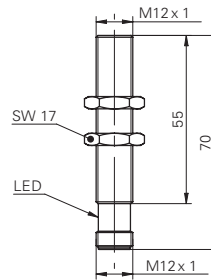
ambient conditions

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

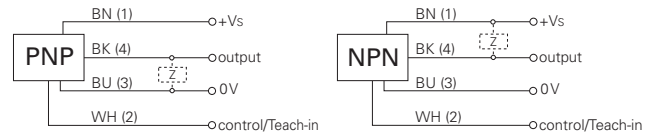
accessories

connectors	ES 14, ESW 33A, ESG 34A
Teach-in-adapter	Nr. 141584

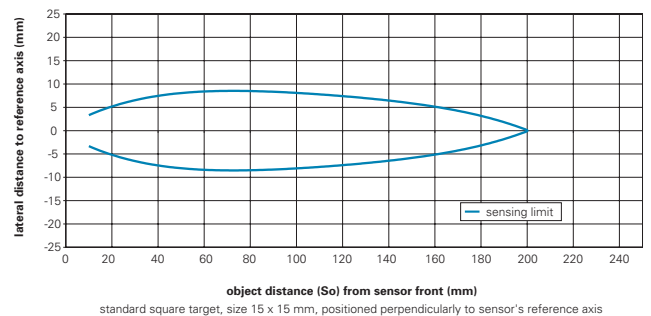
dimension drawing



connection diagrams

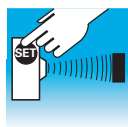


typical sonic cone profile



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)



Sd = 70 mm

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general data

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

electrical data

voltage supply range +Vs	12 ... 30 VDC
current consumption max.	35 mA
output circuit	PNP make function (NO)
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
housing material	brass nickel plated
width / diameter	12 mm
height / length	70 mm
connection types	connector M12

ambient conditions

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

accessories

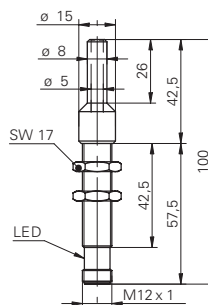
connectors	ES 14, ESW 33A, ESG 34A
Teach-in-adapter	Nr. 141584

order reference

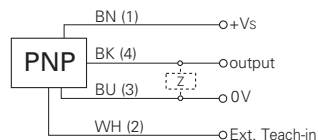
UNAM 12P1914/S14D



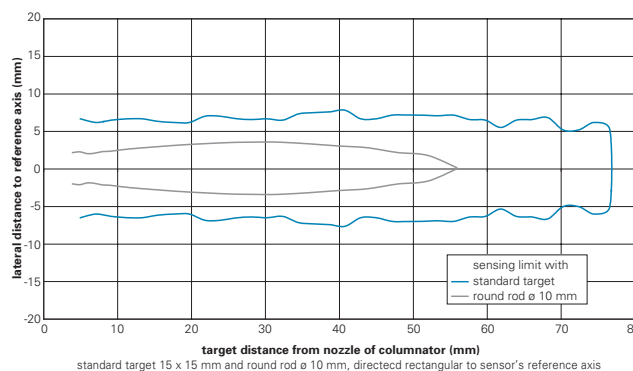
dimension drawing



connection diagram

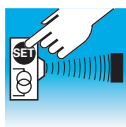


typical sonic cone profile



UNAM 12 Sd = 70 mm

Ultrasonic proximity sensors



Sd = 82 mm

- external Teach-in
- with beam columnator for measurement in very small containers



general data

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

electrical data

voltage supply range +Vs	15 ... 30 VDC
current consumption max.	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
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

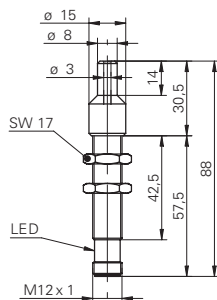
accessories

Teach-in-adapter	Nr. 141584
connectors	ESW 33A, ESG 34A

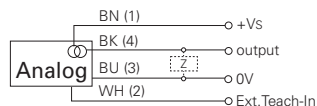
order reference

UNAM 12U9914/S14D

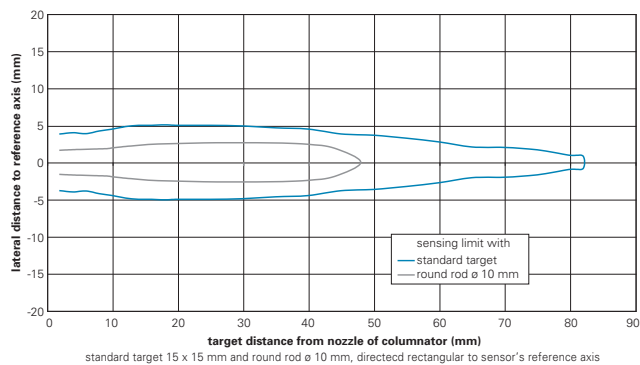
dimension drawing

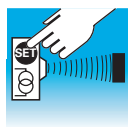


connection diagram



typical sonic cone profile





Sd = 200 mm

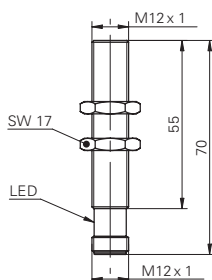
- external Teach-in
- 0 ... 10 V / 0 ... 10 mA invertible
- Teach-in adapter



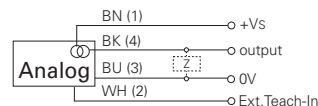
general data	
sensing range sd	20 ... 200 mm
scanning range close limit Sdc	20 ... 200 mm
scanning range far limit Sde	20 ... 200 mm
repeatability	< 0,5 mm
resolution	< 0,3 mm
adjustment	external Teach-in
sonic frequency	380 kHz
response time ton	< 30 ms
release time toff	< 30 ms
alignment aid	target display flashing
light indicator	yellow LED / red LED
temperature drift	< 2% of distance to target So
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.	35 mA
output signal	0 ... 10 V / 10 ... 0 V
current output	
current consumption max.	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
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
accessories	
Teach-in-adapter	Nr. 141584
connectors	ESW 33A, ESG 34A

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

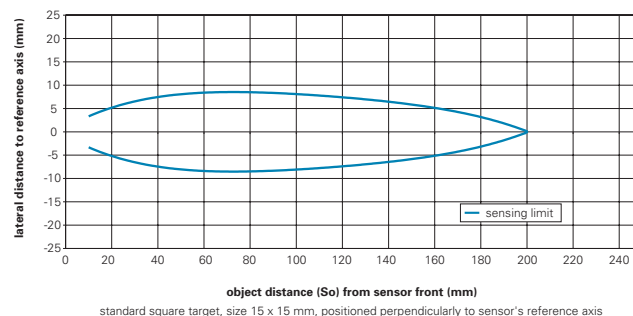
dimension drawing

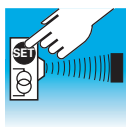


connection diagram



typical sonic cone profile





Sd = 400 mm

- external Teach-in
- 0 ... 10 V / 0 ... 10 mA invertible
- Teach-in adapter



general data

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

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.	35 mA
output signal	0 ... 10 V / 10 ... 0 V

current output

current consumption max.	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
housing material	brass nickel plated
width / diameter	12 mm
height / length	70 mm
connection types	connector M12

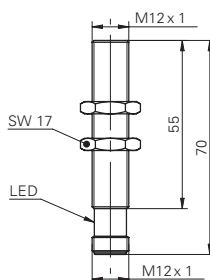
ambient conditions

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

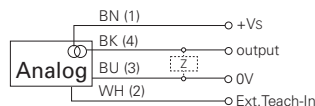
accessories

Teach-in-adapter	Nr. 141584
connectors	ESW 33A, ESG 34A

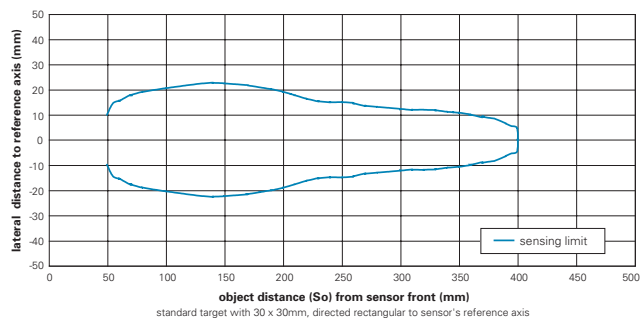
dimension drawing



connection diagram



typical sonic cone profile



order reference output circuit

UNAM 12I9912/S14	current output
UNAM 12U9912/S14	voltage output