



Sd = 250 mm

- Teach-in or potentiometer
- 0 ... 10 V / 4 ... 20 mA
- signals of Teach-in version invertible

general data

scanning range sd	30 ... 250 mm
scanning range far limit Sde	30 ... 250 mm
repeat accuracy	< 0,5 mm
resolution	< 0,3 mm
sonic frequency	300 kHz
response time ton	< 50 ms
release time toff	< 50 ms
alignment aid	target indication flashing
temperature drift	< 2 % of distance to target So

potentiometer

light indicator LED green

Teach-in

scanning range close limit Sdc 30 ... 250 mm

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

current output

current consumption max. (no load) 55 mA

load resistance +Vs max. < 1100 Ohm

load resistance +Vs min. < 400 Ohm

mechanical data

type rectangular

housing material polyester / die-cast zinc

width / diameter 30 mm

height / length 65 mm

depth 31 mm

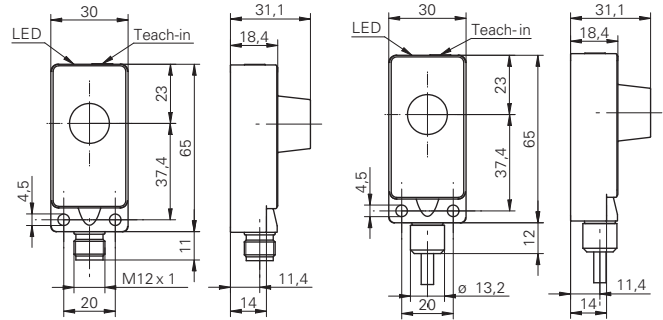
ambient conditions

operating temperature -10 ... +60 °C

protection class IP 67

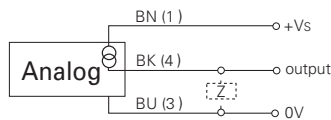


dimension drawings

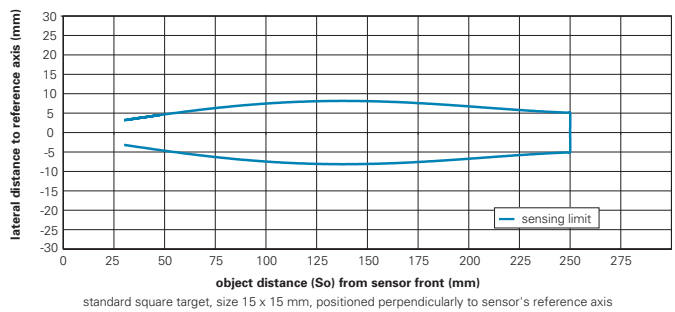


Teach-in = Teach-in or potentiometer

connection diagram



typical sonic cone profile



connectors and mating connectors

ESG 34SH0200 Connector M12, 3 pin, straight, 2 m

ESW 33SH0200 Connector M12, 3 pin, angular, 2 m

additional cable connectors and field wireable connectors: see accessories

Accessories

10152386 Sensofix series 30

10163979 Converter 3-point (M12)

for details: see accessories section

order reference	adjustment	output circuit	output signal	connection types
UNDK 30I6113	Teach-in	current output	4 ... 20 mA / 20 ... 4 mA	cable, 2 m
UNDK 30I6113/S14	Teach-in	current output	4 ... 20 mA / 20 ... 4 mA	connector M12
UNDK 30U6113	Teach-in	voltage output	0 ... 10 V / 10 ... 0 V	cable, 2 m
UNDK 30U6113/S14	Teach-in	voltage output	0 ... 10 V / 10 ... 0 V	connector M12
UNDK 30U9113	potentiometer	voltage output	0 ... 10 VDC	cable, 2 m
UNDK 30U9113/S14	potentiometer	voltage output	0 ... 10 VDC	connector M12

UNDK 30 Sd = 250 mm Ultrasonic distance measuring sensors



Sd = 400 mm

- Teach-in or potentiometer
- 0 ... 10 V / 4 ... 20 mA
- signals of Teach-in version invertible

general data

scanning range sd	60 ... 400 mm
scanning range far limit Sde	60 ... 400 mm
repeat accuracy	< 0,5 mm
resolution	< 0,3 mm
sonic frequency	400 kHz
response time ton	< 60 ms
release time toff	< 60 ms
alignment aid	target indication flashing
temperature drift	< 2 % of distance to target So

potentiometer

light indicator	LED green
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Teach-in

scanning range close limit Sdc	60 ... 400 mm
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
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current output

current consumption max. (no load)	55 mA
load resistance +Vs max.	< 1100 Ohm
load resistance +Vs min.	< 400 Ohm

mechanical data

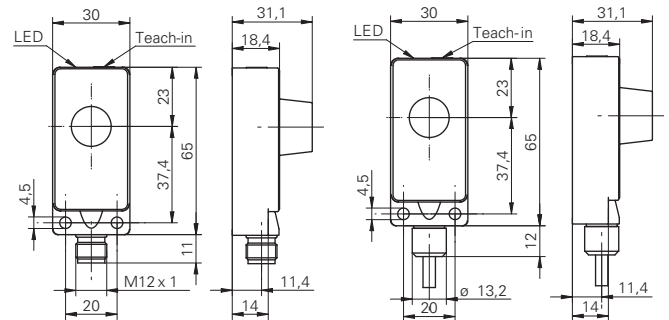
type	rectangular
housing material	polyester / die-cast zinc
width / diameter	30 mm
height / length	65 mm
depth	31 mm

ambient conditions

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

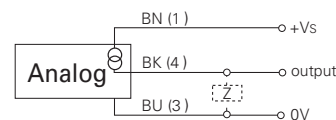


dimension drawings

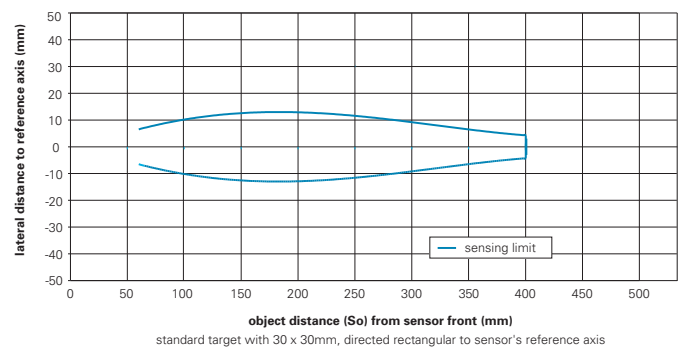


Teach-in = Teach-in or potentiometer

connection diagram



typical sonic cone profile



connectors and mating connectors

ESG 34SH0200	Connector M12, 3 pin, straight, 2 m
ESW 33SH0200	Connector M12, 3 pin, angular, 2 m

additional cable connectors and field wireable connectors: see accessories

Accessories

10152386	Sensofix series 30
10163979	Converter 3-point (M12)

for details: see accessories section

order reference	adjustment	output circuit	output signal	connection types
UNDK 30I6112	Teach-in	current output	4 ... 20 mA / 20 ... 4 mA	cable, 2 m
UNDK 30I6112/S14	Teach-in	current output	4 ... 20 mA / 20 ... 4 mA	connector M12
UNDK 30U6112	Teach-in	voltage output	0 ... 10 V / 10 ... 0 V	cable, 2 m
UNDK 30U6112/S14	Teach-in	voltage output	0 ... 10 V / 10 ... 0 V	connector M12
UNDK 30U9112	potentiometer	voltage output	0 ... 10 VDC	cable, 2 m
UNDK 30U9112/S14	potentiometer	voltage output	0 ... 10 VDC	connector M12



Sd = 1000 mm

- Teach-in or potentiometer
- 0 ... 10 V / 4 ... 20 mA
- signals of Teach-in version invertible

general data

scanning range sd	100 ... 1000 mm
scanning range far limit Sde	100 ... 1000 mm
repeat accuracy	< 0,5 mm
resolution	< 0,3 mm
sonic frequency	240 kHz
response time ton	< 80 ms
release time toff	< 80 ms
alignment aid	target indication flashing
temperature drift	< 2 % of distance to target So

potentiometer

light indicator	LED green
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Teach-in

scanning range close limit Sdc	100 ... 1000 mm
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
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current output

current consumption max. (no load)	55 mA
load resistance +Vs max.	< 1100 Ohm
load resistance +Vs min.	< 400 Ohm

mechanical data

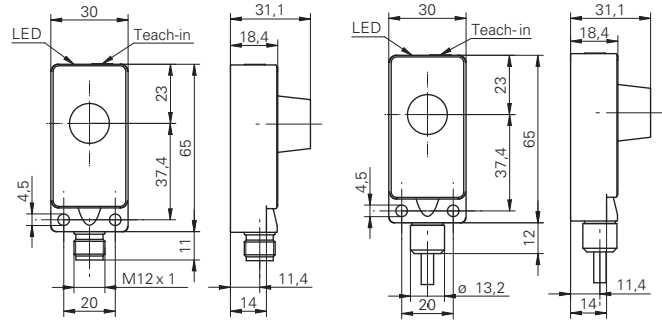
type	rectangular
housing material	polyester / die-cast zinc
width / diameter	30 mm
height / length	65 mm
depth	31 mm

ambient conditions

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

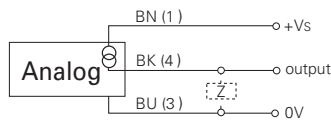


dimension drawings

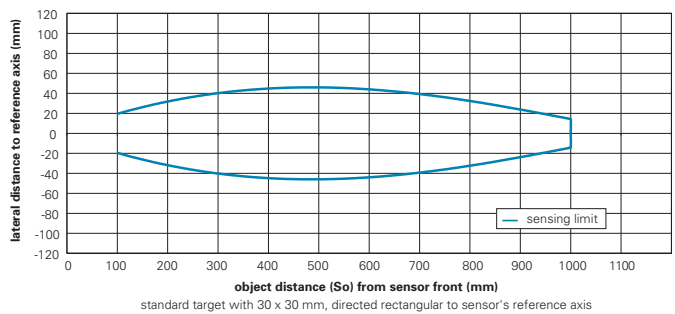


Teach-in = Teach-in or potentiometer

connection diagram



typical sonic cone profile



connectors and mating connectors

ESG 34AH0200	Connector M12, 4 pin, straight, 2 m
ESW 33AH0200	Connector M12, 4 pin, angular, 2 m

additional cable connectors and field wireable connectors: see accessories

Accessories

10152386	Sensofix series 30
10163979	Converter 3-point (M12)

for details: see accessories section

order reference	adjustment	output circuit	output signal	connection types
UNDK 30I6103	Teach-in	current output	4 ... 20 mA / 20 ... 4 mA	cable, 2 m
UNDK 30I6103/S14	Teach-in	current output	4 ... 20 mA / 20 ... 4 mA	connector M12
UNDK 30U6103	Teach-in	voltage output	0 ... 10 V / 10 ... 0 V	cable, 2 m
UNDK 30U6103/S14	Teach-in	voltage output	0 ... 10 V / 10 ... 0 V	connector M12
UNDK 30U9103	potentiometer	voltage output	0 ... 10 VDC	cable, 2 m
UNDK 30U9103/S14	potentiometer	voltage output	0 ... 10 VDC	connector M12

UNDK 30 Sd = 1000 mm

Ultrasonic distance measuring sensors



Sd = 2000 mm

- Teach-in
- 0 ... 10 V / 4 ... 20 mA
- output signals invertible

general data

scanning range sd	200 ... 2000 mm
scanning range close limit Sdc	200 ... 2000 mm
scanning range far limit Sde	200 ... 2000 mm
repeat accuracy	< 1 mm
resolution	< 0,5 mm
adjustment	Teach-in
sonic frequency	200 kHz
response time ton	< 150 ms
release time toff	< 150 ms
alignment aid	target indication 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. (no load)	35 mA
output signal	0 ... 10 V / 10 ... 0 V

current output

current consumption max. (no load)	55 mA
output signal	4 ... 20 mA / 20 ... 4 mA
load resistance +Vs max.	< 1100 Ohm
load resistance +Vs min.	< 400 Ohm

mechanical data

type	rectangular
housing material	polyester / die-cast zinc
width / diameter	30 mm
height / length	65 mm
depth	31 mm

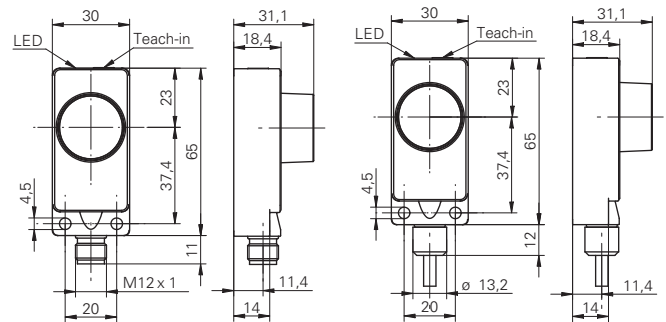
ambient conditions

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

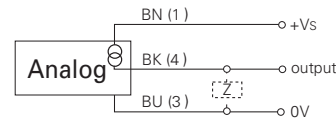
order reference	output circuit	connection types
UNDK 30I6104/S14	current output	connector M12
UNDK 30U6104	voltage output	cable, 2 m
UNDK 30U6104/S14	voltage output	connector M12



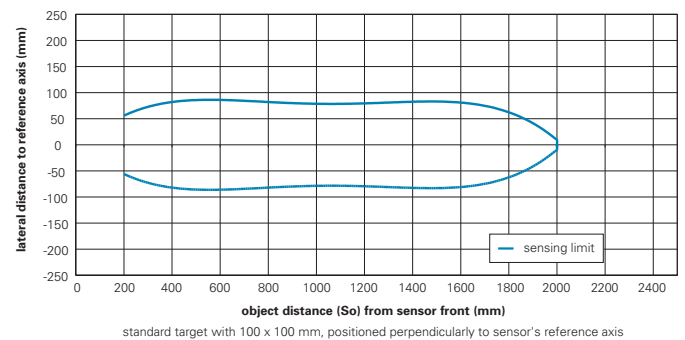
dimension drawings



connection diagram



typical sonic cone profile



connectors and mating connectors

ESG 34AH0200 Connector M12, 4 pin, straight, 2 m

ESW 33AH0200 Connector M12, 4 pin, angular, 2 m

additional cable connectors and field wireable connectors: see accessories

Accessories

10152386 Sensofix series 30

10163979 Converter 3-point (M12)

for details: see accessories section