



ANALOG OUTPUT FOR DISTANCE CONTROL



ANALOG OUTPUT

INDUCTIVE SENSORS

KEY ADVANTAGES

- ✓ Longest sensing ranges
- ✓ Best temperature stability
- ✓ Excellent repeat accuracy
- ✓ Resolution in μm range

RANGE OVERVIEW

Housing size

Extra Distance

ANALOG

C8

p. 123

M8

p. 123-124

M12

p. 124-125

M18

p. 125-126

M30

p. 126-127

FAMILY

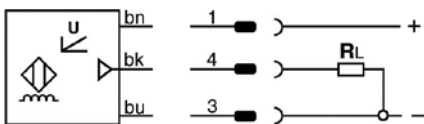
HOUSING SIZE MM

SENSING RANGE MM

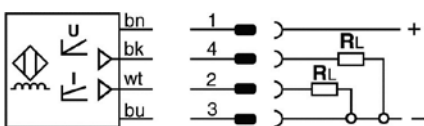
INDUCTIVE

WIRING DIAGRAMS

Analog C8/M8



Analog M12/M18/M30



DATA

Bandwidth (-3 dB)

Output voltage

Housing material

Connection

Degree of protection

Mounting

Supply voltage range

Ambient temperature range

Output current

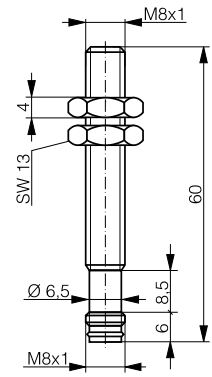
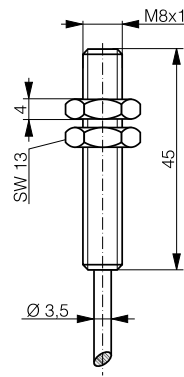
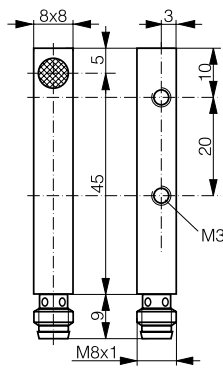
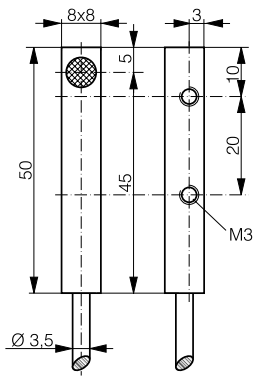
Output 0...10 V

Output 0...5 V

Other types available

ANALOG OUTPUT

EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE
□ 8 x 8	□ 8 x 8	M8	M8
0 ... 4	0 ... 4	0 ... 4	0 ... 4



1,600 Hz (at s = 2 mm)	1,600 Hz (at s = 2 mm)	1,600 Hz (at s = 2 mm)	1,600 Hz (at s = 2 mm)
0 ... 10 V	0 ... 10 V	0 ... 5 V / 0 ... 10 V (-390)	0 ... 10 V
Chrome-plated brass	Chrome-plated brass	Chrome-plated brass	Chrome-plated brass
PUR cable	Connector S8	PUR cable	Connector S8
IP 67	IP 67	IP 67	IP 67
Quasi-embeddable	Quasi-embeddable	Quasi-embeddable	Quasi-embeddable
15 ... 30 VDC	15 ... 30 VDC	10 ... 30 VDC / 15 ... 30 VDC (-390)	15 ... 30 VDC
-25 ... +70°C / -13 ... +158°F	-25 ... +70°C / -13 ... +158°F	-25 ... +70°C / -13 ... +158°F	-25 ... +70°C / -13 ... +158°F
-	-	-	-
DW-AD-509-C8-390	DW-AS-509-C8-390	DW-AD-509-M8-390	DW-AS-509-M8-390
		DW-AD-509-M8	
			On request

Inductive

Photoelectric

Ultrasonic

Capacitive

Safety

RFID

Connectivity

Accessories

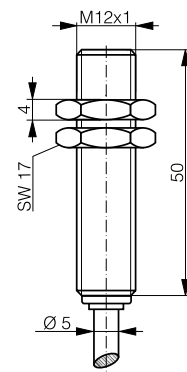
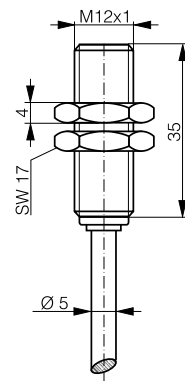
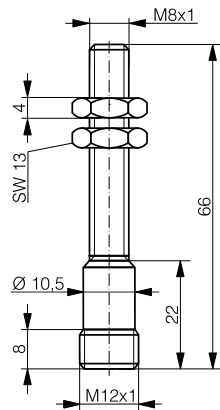
Glossary

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ANALOG OUTPUT

INDUCTIVE

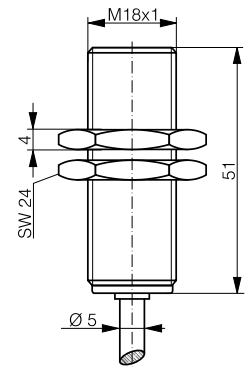
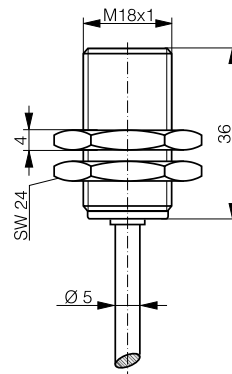
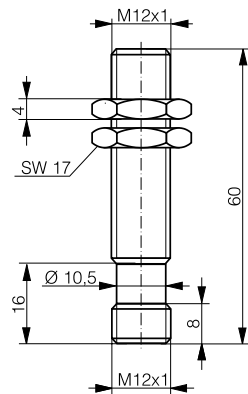
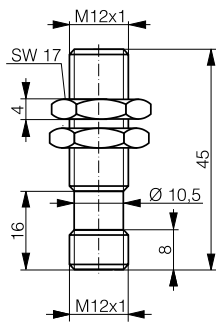
FAMILY	EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE
HOUSING SIZE	M8	M12	M12
SENSING RANGE MM	0 ... 4	0 ... 6	0 ... 6



DATA			
Bandwidth (-3 dB)	1,600 Hz (at s = 2 mm)	1,000 Hz (at s = 3 mm)	1,000 Hz (at s = 3 mm)
Output voltage	0 ... 10 V	0 ... 5 V / 0 ... 10 V (-390)	0 ... 5 V / 0 ... 10 V (-390)
Housing material	Chrome-plated brass	Chrome-plated brass	Chrome-plated brass
Connection	Connector S12	PUR cable	PUR cable
Degree of protection	IP 67	IP 67	IP 67
Mounting	Quasi-embeddable	Quasi-embeddable	Quasi-embeddable
Supply voltage range	15 ... 30 VDC	10 ... 30 / 15 ... 30 VDC (-320)	10 ... 30 / 15 ... 30 VDC (-390)
Ambient temperature range	-25 ... +70°C / -13 ... +158°F	-25 ... +70°C / -13 ... +158°F	-25 ... +70°C / -13 ... +158°F
Output current	-	1 ... 5 mA (-120 only)	1 ... 5 mA / 4 ... 20 mA (-390)
Outputs 0...5 V / 1...5 mA		DW-AD-509-M12-120	DW-AD-509-M12
Output 0...10 V	DW-AS-509-M8-393	DW-AD-509-M12-320	
Outputs 0...10 V / 4...20 mA			DW-AD-509-M12-390
Other types available	On request		

ANALOG OUTPUT

EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE	Inductive
M12	M12	M18	M18	
0 ... 6	0 ... 6	0 ... 10	0 ... 10	



Photoelectric

Ultrasonic

Capacitive

Safety

RFID

Connectivity

Accessories

Glossary

Index

1,000 Hz (at s = 3 mm)	1,000 Hz (at s = 3 mm)	500 Hz (at s = 5 mm)	500 Hz (at s = 5 mm)
0 ... 5 V / 0 ... 10 V (-320)	0 ... 5 V / 0 ... 10 V (-390)	0 ... 5 V / 0 ... 10 V (-320)	0 ... 5 V / 0 ... 10 V (-390)
Chrome-plated brass	Chrome-plated brass	Chrome-plated brass	Chrome-plated brass
Connector S12	Connector S12	PUR cable	PUR cable
IP 67	IP 67	IP 67	IP 67
Quasi-embeddable	Quasi-embeddable	Quasi-embeddable	Quasi-embeddable
10 ... 30 / 15 ... 30 VDC (-320)	10 ... 30 / 15 ... 30 VDC (-390)	10 ... 30 / 15 ... 30 VDC (-320)	10 ... 30 / 15 ... 30 VDC (-390)
-25 ... +70°C / -13 ... +158°F	-25 ... +70°C / -13 ... +158°F	-25 ... +70°C / -13 ... +158°F	-25 ... +70°C / -13 ... +158°F
1 ... 5 mA (-120 only)	1 ... 5 mA / 4 ... 20 mA (-390)	1 ... 5 mA / 4 ... 20 mA (-320)	1 ... 5 mA / 4 ... 20 mA (-390)
DW-AS-509-M12-120	DW-AS-509-M12	DW-AD-509-M18-120	DW-AD-509-M18
DW-AS-509-M12-320			
	DW-AS-509-M12-390	DW-AD-509-M18-320	DW-AD-509-M18-390
			On request

ANALOG OUTPUT

FAMILY

EXTRA DISTANCE

EXTRA DISTANCE

EXTRA DISTANCE

HOUSING SIZE

M18

M18

M30

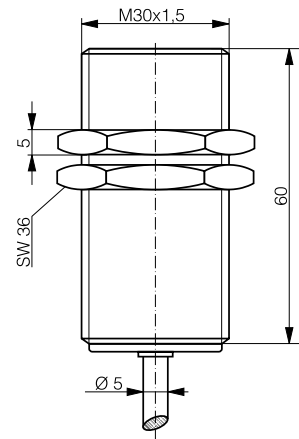
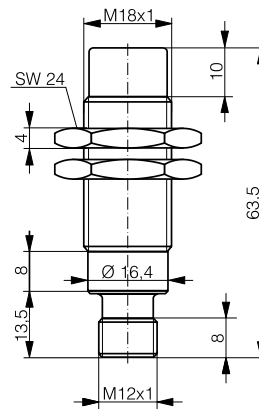
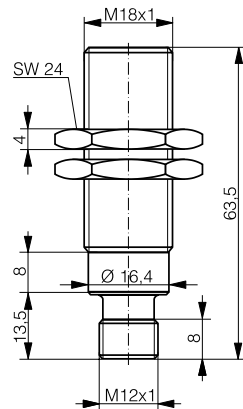
SENSING RANGE MM

0 ... 10

0 ... 20

0 ... 20

INDUCTIVE

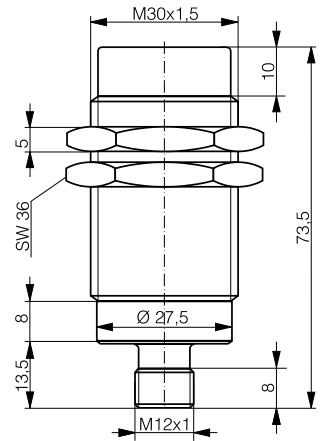
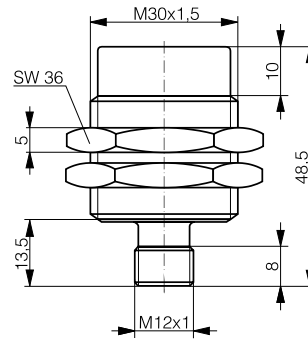
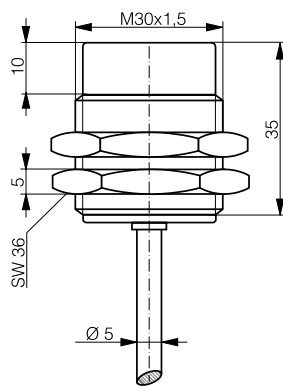
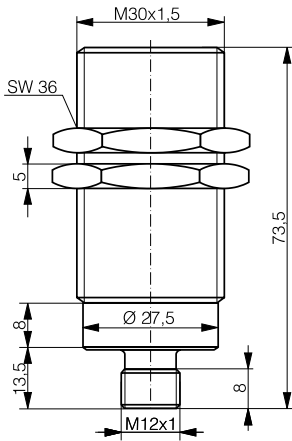


DATA

Bandwidth (-3 dB)	500 Hz (at s = 5 mm)	250 Hz (at s = 10 mm)	200 Hz (at s = 10 mm)
Output voltage	0 ... 5 V / 0 ... 10 V (-390)	0 ... 5 V / 0 ... 10 V (-390)	0 ... 5 V / 0 ... 10 V (-390)
Housing material	Chrome-plated brass	Chrome-plated brass	Chrome-plated brass
Connection	Connector S12	Connector S12	PUR cable
Degree of protection	IP 67	IP 67	IP 67
Mounting	Quasi-embeddable	Non-embeddable	Quasi-embeddable
Supply voltage range	10 ... 30 / 15 ... 30 VDC (-390)	10 ... 30 / 15 ... 30 VDC (-390)	10 ... 30 / 15 ... 30 VDC (-390)
Ambient temperature range	-25 ... +70°C / -13 ... +158°F	-25 ... +70°C / -13 ... +158°F	-25 ... +70°C / -13 ... +158°F
Output current	1 ... 5 mA / 4 ... 20 mA (-390)	1 ... 5 mA / 4 ... 20 mA (-390)	1 ... 5 mA / 4 ... 20 mA (-390)
Outputs 0...5 V / 1...5 mA	DW-AS-509-M18-002	DW-AS-519-M18-002	DW-AD-509-M30
Outputs 0...10 V / 4...20 mA	DW-AS-509-M18-390	DW-AS-519-M18-390	DW-AD-509-M30-390
Other types available	On request	On request	On request

ANALOG OUTPUT

EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE
M30	M30	M30	M30
0 ... 20	0 ... 40	0 ... 40	0 ... 40



200 Hz (at s = 10 mm)	100 Hz (at s = 20 mm)	100 Hz (at s = 20 mm)	100 Hz (at s = 20 mm)
0 ... 5 V / 0 ... 10 V (-390)	0 ... 5 V / 0 ... 10 V (-320)	0 ... 5 V / 0 ... 10 V (-320)	0 ... 5 V / 0 ... 10 V (-390)
Chrome-plated brass	Chrome-plated brass	Chrome-plated brass	Chrome-plated brass
Connector S12	PUR cable	Connector S12	Connector S12
IP 67	IP 67	IP 67	IP 67
Quasi-embeddable	Non-embeddable	Non-embeddable	Non-embeddable
10 ... 30 / 15 ... 30 VDC (-390)	10 ... 30 / 15 ... 30 VDC (-320)	10 ... 30 / 15 ... 30 VDC (-320)	10 ... 30 / 15 ... 30 VDC (-390)
-25 ... +70°C / -13 ... +158°F	-25 ... +70°C / -13 ... +158°F	-25 ... +70°C / -13 ... +158°F	-25 ... +70°C / -13 ... +158°F
1 ... 5 mA / 4 ... 20 mA (-390)	1 ... 5 mA / 4 ... 20 mA (-320)	1 ... 5 mA / 4 ... 20 mA (-320)	1 ... 5 mA / 4 ... 20 mA (-390)
DW-AS-509-M30-002	DW-AD-519-M30-120	DW-AS-519-M30-120	DW-AS-519-M30-002
DW-AS-509-M30-390	DW-AD-519-M30-320	DW-AS-519-M30-320	DW-AS-519-M30-390
On request	On request	On request	On request