

# ANALOG OUTPUT FOR DISTANCE CONTROL



# ANALOG OUTPUT

## INDUCTIVE SENSORS

### KEY ADVANTAGES

- ✓ Highest sensing ranges
- ✓ Best temperature stability
- ✓ Excellent repeat accuracy
- ✓ Resolution in  $\mu\text{m}$  range

RANGE OVERVIEW	Housing size	Extra Distance
<b>ANALOG</b>	C8	p. 113
	M8	p. 113-114
	M12	p. 114-115
	M18	p. 115-116
	M30	p. 116-117

FAMILY

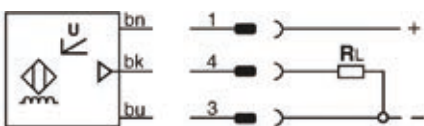
HOUSING SIZE MM

SENSING RANGE MM

# INDUCTIVE

## WIRING DIAGRAMS

Analog C8/M8



Analog M12/M18/M30

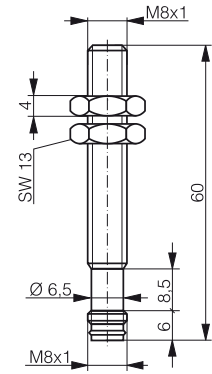
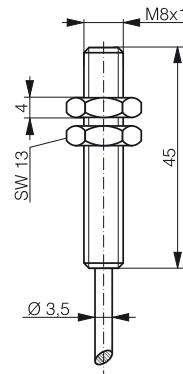
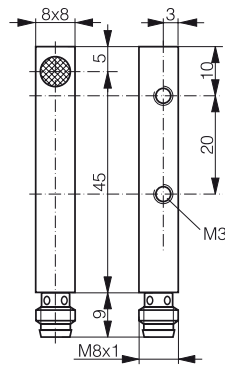
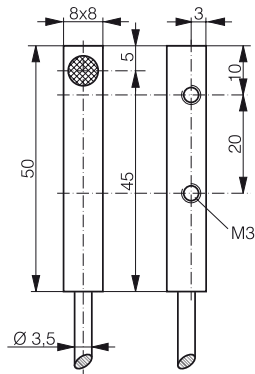


## DATA

- Bandwidth (-3 dB)
- Output voltage
- Housing material
- Connection
- Degree of protection
- Mounting
- Supply voltage range
- Ambient temperature range
- Output current
- Description
- Part reference
- Description
- Part reference
- Description
- Part reference
- 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

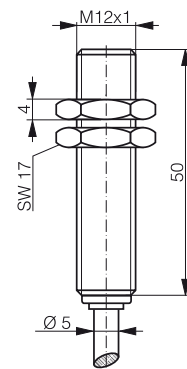
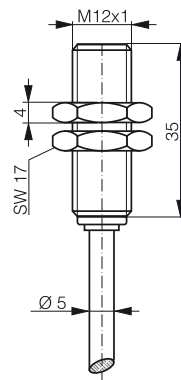
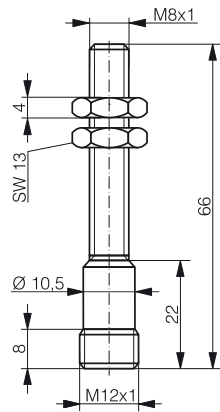





1,600 Hz (at s = 2 mm)	1,600 Hz (at s = 2 mm)	1,600 Hz (at s = 2 mm)	1,600 Hz (at s = 2 mm)
0 ... 10 V	0 ... 10 V	0 ... 5 V / 0 ... 10 V (-390)	0 ... 10 V
Chrome-plated brass	Chrome-plated brass	Chrome-plated brass	Chrome-plated brass
PUR cable	Connector S8	PUR cable	Connector S8
IP 67	IP 67	IP 67	IP 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
-	-	-	-
Output 0...10 V	Output 0...10 V	Output 0...5 V	Output 0...10 V
DW-AD-509-C8-390	DW-AS-509-C8-390	DW-AD-509-M8	DW-AS-509-M8-390
		Output 0...10 V	
		DW-AD-509-M8-390	
-	-	-	On request

# ANALOG OUTPUT

INDUCTIVE

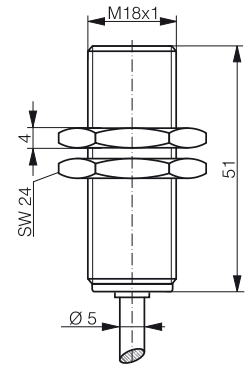
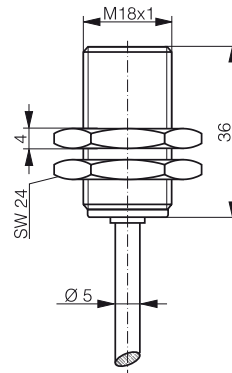
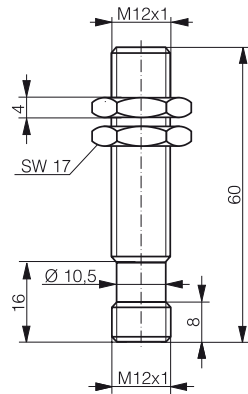
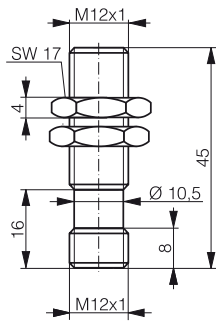
FAMILY	EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE
HOUSING SIZE	M8	M12	M12
SENSING RANGE MM	0 ... 4	0 ... 6	0 ... 6



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)
Description	Output 0...10 V	Outputs 0...5 V / 1...5 mA	Outputs 0...5 V / 1...5 mA
Part reference	DW-AS-509-M8-393	DW-AD-509-M12-120	DW-AD-509-M12
Description		Output 0...10 V	Outputs 0...10 V / 4...20 mA
Part reference		DW-AD-509-M12-320	DW-AD-509-M12-390
Description			
Part reference			
Other types available	On request	-	-

# ANALOG OUTPUT

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

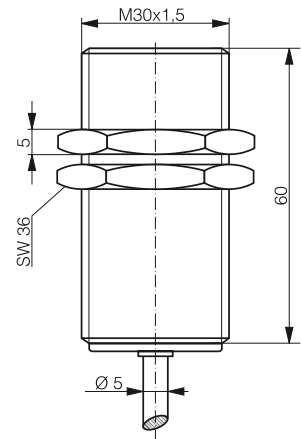
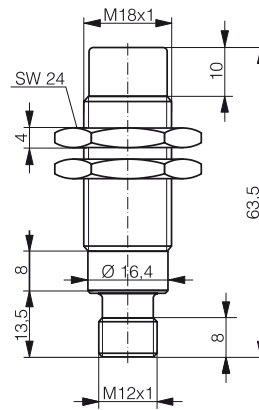
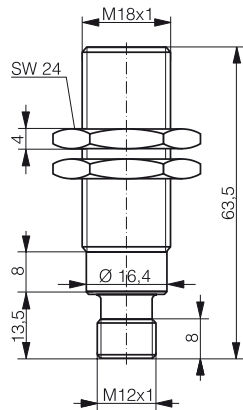





1,000 Hz (at s = 3 mm)	1,000 Hz (at s = 3 mm)	500 Hz (at s = 5 mm)	500 Hz (at s = 5 mm)
0 ... 5 V / 0 ... 10 V (-320)	0 ... 5 V / 0 ... 10 V (-390)	0 ... 5 V / 0 ... 10 V (-320)	0 ... 10 V
Chrome-plated brass	Chrome-plated brass	Chrome-plated brass	Chrome-plated brass
Connector S12	Connector S12	PUR 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)	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
1 ... 5 mA (-120 only)	1 ... 5 mA / 4 ... 20 mA (-390)	1 ... 5 mA / 4 ... 20 mA (-320)	4 ... 20 mA
Outputs 0...5 V / 1...5 mA	Outputs 0...5 V / 1...5 mA	Outputs 0...5 V / 1...5 mA	Outputs 0...10 V / 4...20 mA
DW-AS-509-M12-120	DW-AS-509-M12	DW-AD-509-M18-120	DW-AD-509-M18-390
Output 0...10 V	Outputs 0...10 V / 4...20 mA	Outputs 0...10 V / 4...20 mA	
DW-AS-509-M12-320	DW-AS-509-M12-390	DW-AD-509-M18-320	
-	-	-	On request

# ANALOG OUTPUT

INDUCTIVE

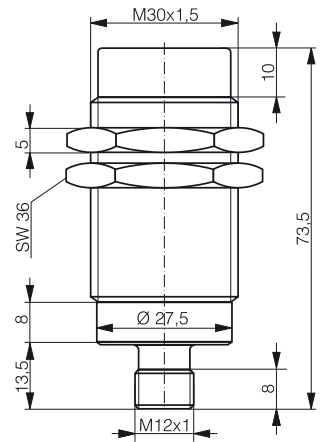
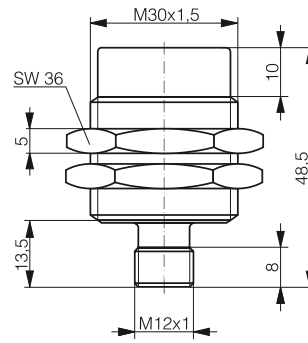
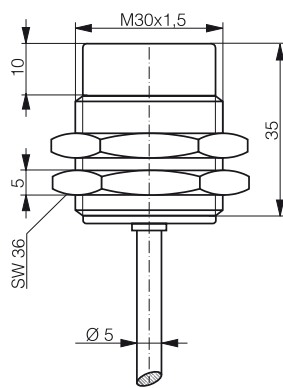
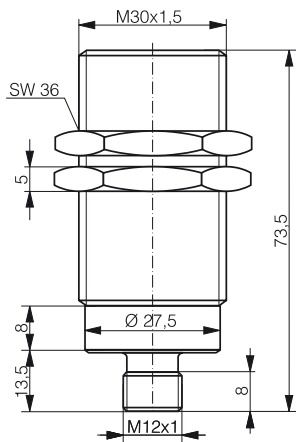
FAMILY	EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE
HOUSING SIZE	M18	M18	M30
SENSING RANGE MM	0 ... 10	0 ... 20	0 ... 20



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 ... 10 V	0 ... 5 V	0 ... 10 V
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	15 ... 30 VDC	10 ... 30 VDC	15 ... 30 VDC
Ambient temperature range	-25 ... +70 °C / -13 ... +158 °F	-25 ... +70 °C / -13 ... +158 °F	-25 ... +70 °C / -13 ... +158 °F
Output current	4 ... 20 mA	1 ... 5 mA	4 ... 20 mA
Description	Outputs 0...10 V / 4...20 mA	Outputs 0...5 V / 1...5 mA	Outputs 0...10 V / 4...20 mA
Part reference	DW-AS-509-M18-390	DW-AS-519-M18-002	DW-AD-509-M30-390
Description			
Part reference			
Description			
Part reference			
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 ... 10 V	0 ... 10 V	0 ... 10 V	0 ... 10 V
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
15 ... 30 VDC	15 ... 30 VDC	15 ... 30 VDC	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
4 ... 20 mA	4 ... 20 mA	4 ... 20 mA	4 ... 20 mA
Outputs 0...10 V / 4...20 mA	Outputs 0...10 V / 4...20 mA	Outputs 0...10 V / 4...20 mA	Outputs 0...10 V / 4...20 mA
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