


# EXTREME DURABILITY IN HARSH ENVIRONMENTS

# EXTREME

# INDUCTIVE SENSORS

## KEY ADVANTAGES

- ✓ Mechanically and chemically extremely robust
- ✓ Corrosion resistant
- ✓ IP 68 and IP 69K, water resistant
- ✓ Pressure resistant up to 100 bar (1451 psi)
- ✓  IO-Link

## RANGE OVERVIEW

### Housing size

### Full Inox

## EXTREME

M8

p. 83-84

M12

p. 84-86

M18

p. 87-88

M30

p. 89-90

C23

p. 91

FAMILY

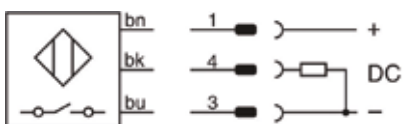
HOUSING SIZE

OPERATING DISTANCE MM

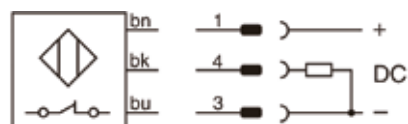
# INDUCTIVE

## WIRING DIAGRAMS

PNP NO



PNP NC



NPN NO



## DATA

Sensing face material

Housing material

Connection

Degree of protection

Mounting

Max. switching frequency

Supply voltage range

Ambient temperature range

Output current

PNP NO

NPN NO

PNP NC

Other types available

# EXTREME

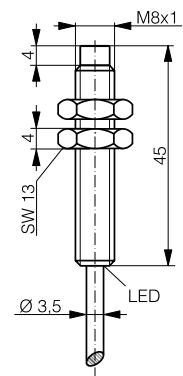
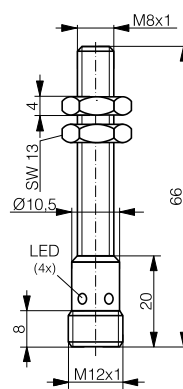
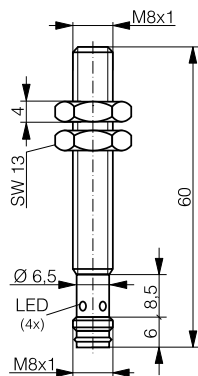
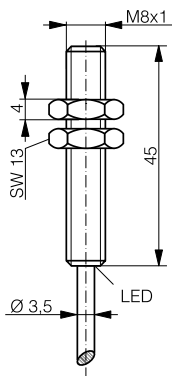
FULL INOX	FULL INOX	FULL INOX	FULL INOX
M8	M8	M8	M8
3	3	3	6

Inductive



Photoelectric

Safety



RFID

Connectivity

IO-Link	IO-Link	IO-Link	IO-Link
Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A
Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A
PUR cable	Connector S8	Connector S12	PUR cable
IP 68	IP 67	IP 67	IP 68
Embeddable	Embeddable	Embeddable	Non-embeddable
1000 Hz	1000 Hz	1000 Hz	700 Hz
10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC
-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F
≤ 200 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA
<b>DW-AD-703-M8</b>	<b>DW-AS-703-M8-001</b>	<b>DW-AS-703-M8</b>	<b>DW-AD-713-M8</b>
<b>DW-AD-701-M8</b>	<b>DW-AS-701-M8-001</b>	<b>DW-AS-701-M8</b>	<b>DW-AD-711-M8</b>
DW-AD-704-M8			DW-AD-714-M8
NPN NC, pigtail	PNP NC, NPN NC	PNP NC, NPN NC	NPN NC

Accessories

Glossary

Index

# EXTREME

FAMILY

FULL INOX

FULL INOX

FULL INOX

HOUSING SIZE

M8

M8

M12

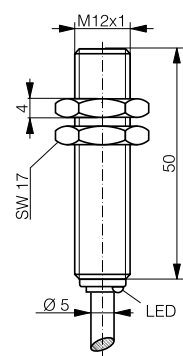
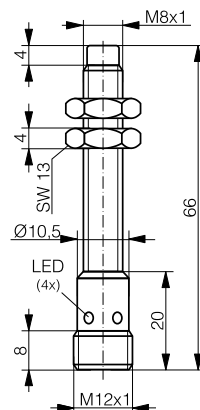
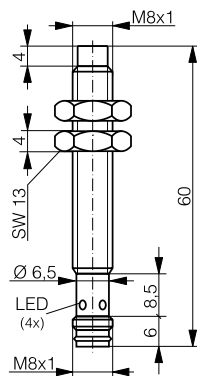
OPERATING DISTANCE MM

6

6

2 (4)

INDUCTIVE



DATA

IO-Link

IO-Link

IO-Link

Sensing face material

Stainless steel V2A

Stainless steel V2A

Stainless steel V2A

Housing material

Stainless steel V2A

Stainless steel V2A

Stainless steel V2A

Connection

Connector S8

Connector S12

PUR cable

Degree of protection

IP 67

IP 67

IP 68 / IP 69K

Mounting

Non-embeddable

Non-embeddable

Embeddable

Max. switching frequency

700 Hz

700 Hz

850 Hz

Supply voltage range

10 ... 30 VDC

10 ... 30 VDC

10 ... 30 VDC

Ambient temperature range

-25 ... +85°C / -13 ... +185°F

-25 ... +85°C / -13 ... +185°F

-25 ... +85°C / -13 ... +185°F

Output current

≤ 200 mA

≤ 200 mA

≤ 200 mA

PNP NO

**DW-AS-713-M8-001**

**DW-AS-713-M8**

**DW-AD-703-M12-303**

NPN NO

**DW-AS-711-M8-001**

**DW-AS-711-M8**

**DW-AD-701-M12-303**

PNP NC

Other types available

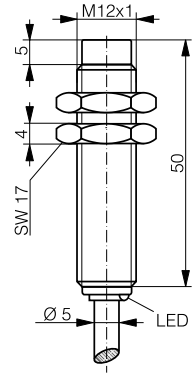
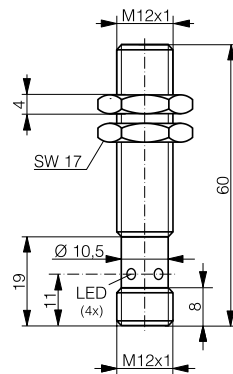
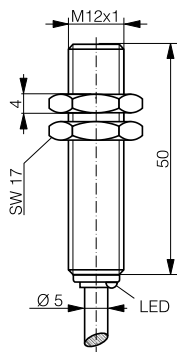
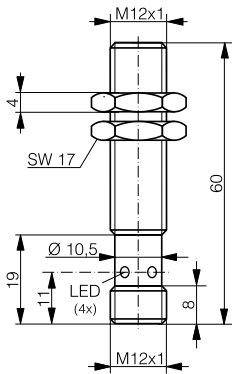
PNP NC, NPN NC

PNP NC, NPN NC

PNP NC, NPN NC,  
non-embeddable (Sn 4 mm)

# EXTREME

FULL INOX	FULL INOX	FULL INOX	FULL INOX	Inductive
M12	M12	M12	M12	
2 (4)	6	6	10	



Photoelectric

Safety

RFID

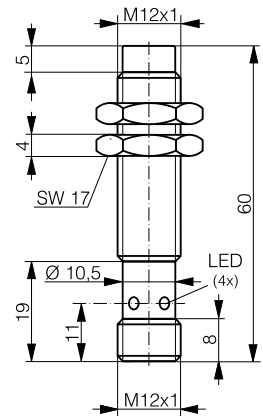
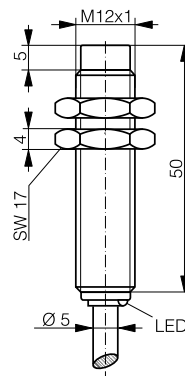
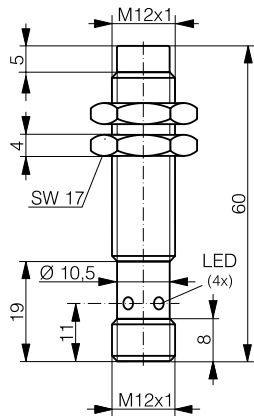
Connectivity

IO-Link	IO-Link	IO-Link	IO-Link	Accessories
Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Glossary
Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	
Connector S12	PUR cable	Connector S12	PUR cable	
IP 68 / IP 69K	IP 68 / IP 69K	IP 68 / IP 69K	IP 68 / IP 69K	
Embeddable	Embeddable	Embeddable	Non-embeddable	
850 Hz	600 Hz	600 Hz	400 Hz	
10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	
-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F	
≤ 200 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA	
<b>DW-AS-703-M12-303</b>	<b>DW-AD-703-M12</b>	<b>DW-AS-703-M12</b>	<b>DW-AD-713-M12</b>	
<b>DW-AS-701-M12-303</b>	<b>DW-AD-701-M12</b>	<b>DW-AS-701-M12</b>	<b>DW-AD-711-M12</b>	
		DW-AS-704-M12		
PNP NC, NPN NC, non-embeddable (Sn 4 mm)	PNP NC, NPN NC	NPN NC	PNP NC, NPN NC	

# EXTREME

## INDUCTIVE

FAMILY	FULL INOX	FULL INOX	FULL INOX
HOUSING SIZE	M12	M12	M12
OPERATING DISTANCE MM	10	15	15



DATA	IO-Link	IO-Link	IO-Link
Sensing face material	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A
Housing material	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A
Connection	Connector S12	PUR cable	Connector S12
Degree of protection	IP 68 / IP 69K	IP 68 / IP 69K	IP 68 / IP 69K
Mounting	Non-embeddable	Non-embeddable	Non-embeddable
Max. switching frequency	400 Hz	300 Hz	300 Hz
Supply voltage range	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC
Ambient temperature range	-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F
Output current	≤ 200 mA	≤ 200 mA	≤ 200 mA
PNP NO	<b>DW-AS-713-M12</b>	<b>DW-AD-733-M12</b>	<b>DW-AS-733-M12</b>
NPN NO	<b>DW-AS-711-M12</b>	<b>DW-AD-731-M12</b>	<b>DW-AS-731-M12</b>
PNP NC			
Other types available	PNP NC, NPN NC		

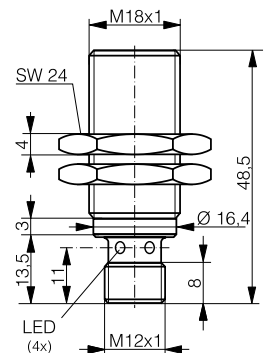
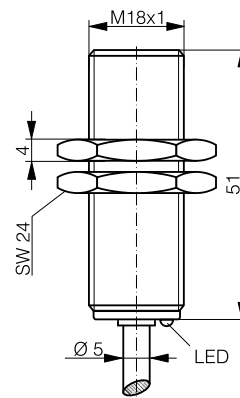
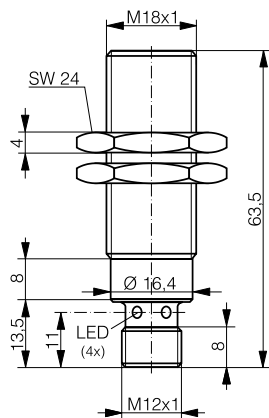
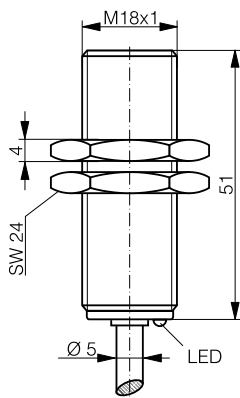
# EXTREME

FULL INOX	FULL INOX	FULL INOX	FULL INOX	Inductive
M18	M18	M18	M18	
5	5 (8)	10	10	



Photoelectric

Safety



RFID

Connectivity

IO-Link	IO-Link	IO-Link	IO-Link	Accessories
Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A
Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	
PUR cable	Connector S12	PUR cable	Connector S12	IP 68 / IP 69K
IP 68 / IP 69K	IP 68 / IP 69K	IP 68 / IP 69K	IP 68 / IP 69K	
Embeddable	Embeddable	Embeddable	Embeddable	Embeddable
500 Hz	500 Hz	200 Hz	200 Hz	
10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC
-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F	
≤ 200 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA
DW-AD-703-M18-303	DW-AS-703-M18-303	DW-AD-703-M18	DW-AS-703-M18-120	
DW-AD-701-M18-303	DW-AS-701-M18-303	DW-AD-701-M18	DW-AS-701-M18-120	
		DW-AD-704-M18		
PNP NC, NPN NC	PNP NC, NPN NC, non-embeddable (Sn 8 mm)	NPN NC, length 35 mm	PNP NC, NPN NC	Index

Accessories

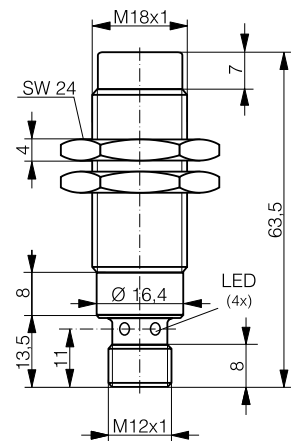
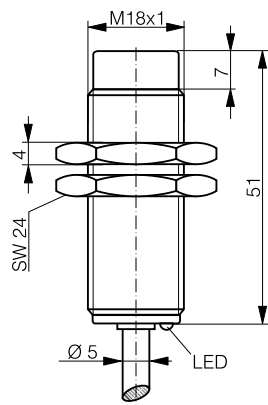
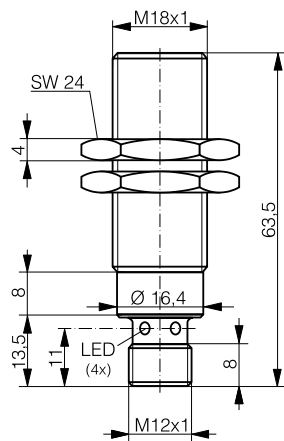
Glossary

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# EXTREME

## INDUCTIVE

FAMILY	FULL INOX	FULL INOX	FULL INOX
HOUSING SIZE	M18	M18	M18
OPERATING DISTANCE MM	10	20	20

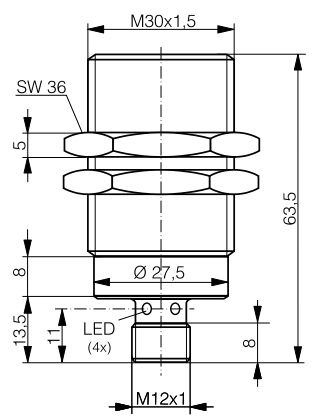
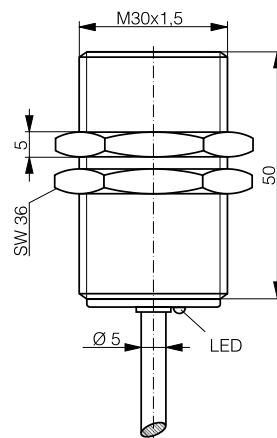
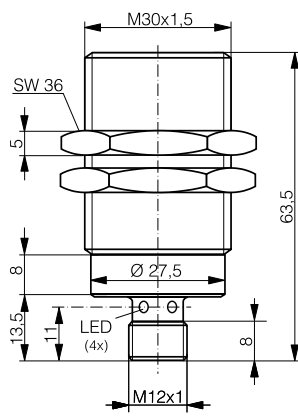
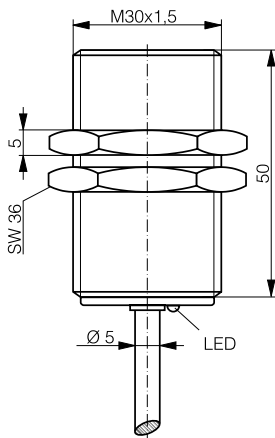


DATA	IO-Link	IO-Link	IO-Link
Sensing face material	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A
Housing material	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A
Connection	Connector S12	PUR cable	Connector S12
Degree of protection	IP 68 / IP 69K	IP 68 / IP 69K	IP 68 / IP 69K
Mounting	Embeddable	Non-embeddable	Non-embeddable
Max. switching frequency	200 Hz	200 Hz	200 Hz
Supply voltage range	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC
Ambient temperature range	-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F
Output current	≤ 200 mA	≤ 200 mA	≤ 200 mA
PNP NO	<b>DW-AS-703-M18-002</b>	<b>DW-AD-713-M18</b>	<b>DW-AS-713-M18-002</b>
NPN NO	<b>DW-AS-701-M18-002</b>	<b>DW-AD-711-M18</b>	<b>DW-AS-711-M18-002</b>
PNP NC	DW-AS-704-M18-002		
Other types available	NPN NC	PNP NC, NPN NC	PNP NC, NPN NC



# EXTREME

FULL INOX	FULL INOX	FULL INOX	FULL INOX
M30	M30	M30	M30
10	10	20	20



IO-Link	IO-Link	IO-Link	IO-Link
Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A
Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A
PUR cable	Connector S12	PUR cable	Connector S12
IP 68 / IP 69K	IP 68 / IP 69K	IP 68 / IP 69K	IP 68 / IP 69K
Embeddable	Embeddable	Embeddable	Embeddable
250 Hz	250 Hz	100 Hz	100 Hz
10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC
-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F
≤ 200 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA
<b>DW-AD-703-M30-303</b>	<b>DW-AS-703-M30-303</b>	<b>DW-AD-703-M30</b>	<b>DW-AS-703-M30-002</b>
		<b>DW-AD-701-M30</b>	<b>DW-AS-701-M30-002</b>
		DW-AD-704-M30	
NPN NC		NPN NC	PNP NC, NPN NC

Inductive

Photoelectric

Safety

RFID

Connectivity

Accessories

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# EXTREME

FAMILY

FULL INOX

FULL INOX

HOUSING SIZE

M30

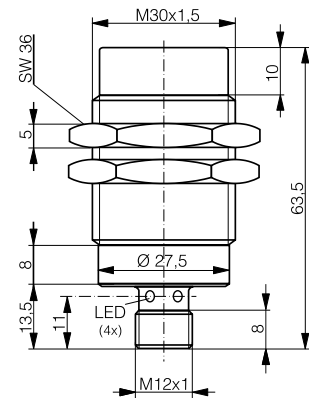
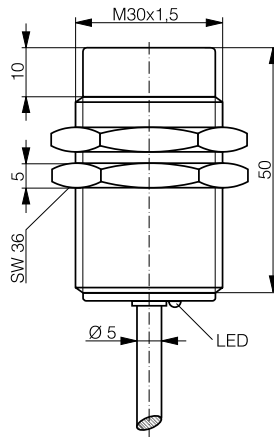
M30

OPERATING DISTANCE MM

40

40

INDUCTIVE



DATA

IO-Link

IO-Link

Housing material

Stainless steel V2A

Stainless steel V2A

Sensing face material

Stainless steel V2A

Stainless steel V2A

Connection

PUR cable

Connector S12

Degree of protection

IP 68 & IP 69K

IP 68 & IP 69K

Mounting

Non-embeddable

Non-embeddable

Max. switching frequency

90 Hz

90 Hz

Supply voltage range

10 ... 30 VDC

10 ... 30 VDC

Ambient temperature range

-25 ... +85°C / -13 ... +185°F

-25 ... +85°C / -13 ... +185°F

Output current

≤ 200 mA

≤ 200 mA

PNP NO

**DW-AD-713-M30**

**DW-AS-713-M30-002**

NPN NO

**DW-AD-711-M30**

**DW-AS-711-M30-002**

Other types available

PNP NC, NPN NC

PNP NC, NPN NC

# EXTREME

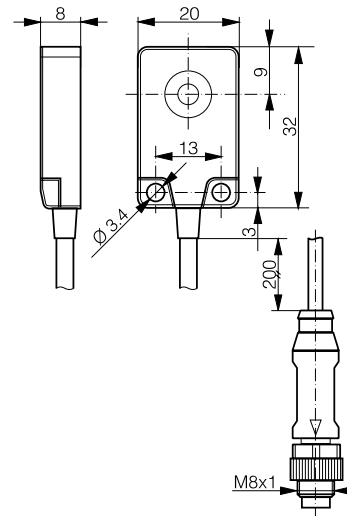
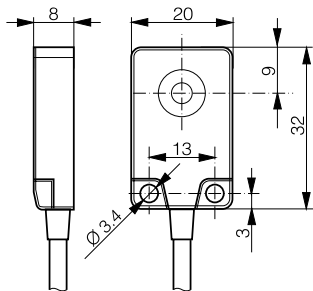
FULL INOX	FULL INOX
C23	C23
7	7

Inductive



Photoelectric

Safety



RFID

Connectivity

Accessories

IO-Link	IO-Link
Stainless steel V4A/AISI/316L	Stainless steel V4A/AISI/316L
Stainless steel V4A/AISI/316L	Stainless steel V4A/AISI/316L
PUR cable	PUR cable / Connector S8
IP 68 & IP 69K	IP 68 & IP 69K
Embeddable	Embeddable
180 Hz	180 Hz
10 ... 30 VDC	10 ... 30 VDC
-25 ... +85°C / -13 ... +185°F	-25 ... +85°C / -13 ... +185°F
≤ 200 mA	≤ 200 mA
<b>DW-AD-703-C23</b>	<b>DW-AV-703-C23-276</b>
<b>DW-AD-701-C23</b>	<b>DW-AV-701-C23-276</b>

Glossary

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