


**PRESSURE RESISTANT UP TO 200 BAR (2901 PSI)**

# EXTRA PRESSURE

## INDUCTIVE SENSORS

### KEY ADVANTAGES

- ✓ Pressure resistant up to 200 bar (2901 psi)
- ✓ High quality ASIC sensors with  IO-Link interface
- ✓ Mechanically and chemically rugged
- ✓ Impervious: IP 68
- ✓ Gas-tight sensing face
- ✓ Miniature devices

RANGE OVERVIEW	Housing size	Classics	Extra Distance
<b>EXTRA PRESSURE</b>	∅ 3 mm	p. 131	
	∅ 4 mm	p. 131	
	M5	p. 131	
	∅ 6.5 mm		p. 131

FAMILY

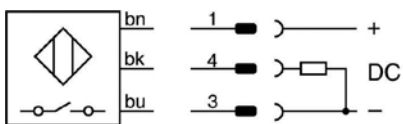
HOUSING SIZE MM

OPERATING DISTANCE MM

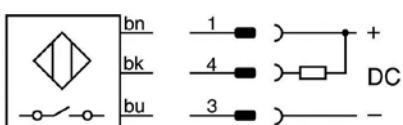
INDUCTIVE

## WIRING DIAGRAMS

PNP NO



NPN NO



## DATA

Sensing face material

Operating pressure

Housing material

Connection

Degree of protection

Mounting

Max. switching frequency

Supply voltage range

Ambient temperature range

Output current

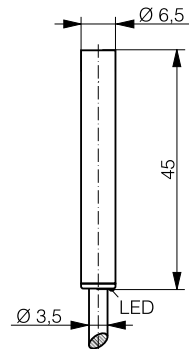
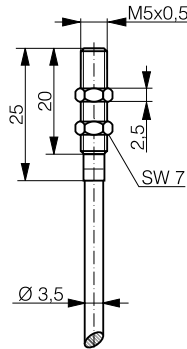
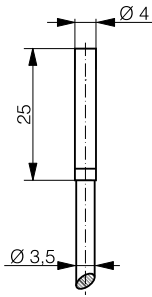
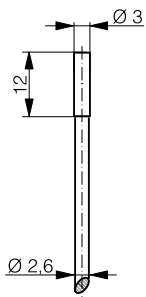
PNP NO

NPN NO

Other types available

# EXTRA PRESSURE

CLASSICS	CLASSICS	CLASSICS	EXTRA DISTANCE
Ø 3	Ø 4	M5	Ø 6.5
0.8	0.6	0.6	2.5



\* IO-Link available from Q4/18

IO-Link	IO-Link	IO-Link	* IO-Link
Ceramic ZrO <sub>2</sub>	Sapphire	Sapphire	Ceramic ZrO <sub>2</sub>
200 bar	20 bar	20 bar	20 bar
Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A
PUR cable	PUR cable	PUR cable	PUR cable
IP 68	IP 68	IP 68	IP 68
Embeddable	Embeddable	Embeddable	Embeddable
8000 Hz	5000 Hz	5000 Hz	1000 Hz
10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	10 ... 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
≤ 100 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA
<b>DW-AD-623-03E-961</b>	<b>DW-AD-603-04E</b>	<b>DW-AD-603-M5E</b>	<b>DW-AD-503-065E</b>
	<b>DW-AD-601-04E</b>	<b>DW-AD-601-M5E</b>	<b>DW-AD-501-065E</b>
PNP NC, NPN NC	PNP NC, NPN NC	PNP NC, NPN NC	PNP NC, NPN NC

Inductive

Photoelectric

Safety

RFID

Connectivity

Accessories


Glossary

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PRESSURE RESISTANT UP TO 500 BAR (7255 PSI)

# HIGH PRESSURE INDUCTIVE SENSORS

## KEY ADVANTAGES

- ✓ Highest operating (500 bar / 7255 psi) and peak pressure (1000 bar / 14510 psi) on the market
- ✓ Resistant to pressure cycles - 50 times longer lifetime under pressure than the market standard
- ✓ Gas-tight sensing face
- ✓ Large temperature range -25°C ... +100°C (-13°F ... +212°F)
- ✓ High quality ASIC sensors with  IO-Link interface

RANGE OVERVIEW	Housing size	Extra Distance	Full Inox
<b>HIGH PRESSURE</b>	M5 / P5	p. 135	
	M8 / P8	p. 135	
	M12 / P12	p. 135-137	p. 137
	M14 / P20	p. 137-138	

FAMILY

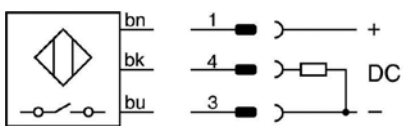
HOUSING SIZE

OPERATING DISTANCE MM

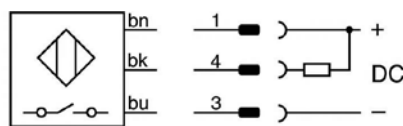
# INDUCTIVE

## WIRING DIAGRAMS

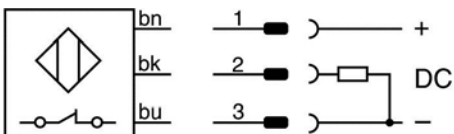
PNP NO



NPN NO



PNP NC



## DATA

Sensing face material

Operating pressure

Peak pressure

Housing material

Connection

Degree of protection

Mounting

Max. switching frequency

Supply voltage range

Ambient temperature range

Output current

PNP NO

NPN NO

PNP NO ( $S_n = 1.5 \text{ mm}$ )

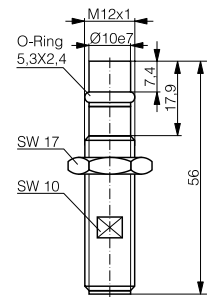
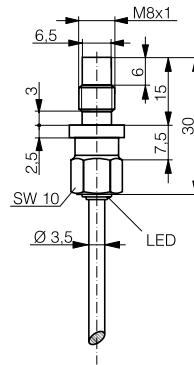
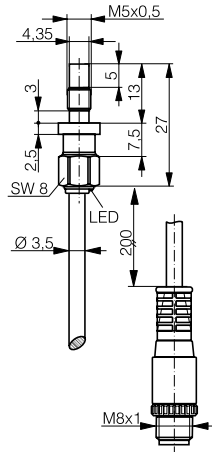
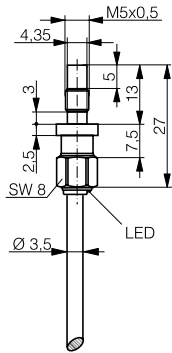
PNP NC ( $S_n = 1.5 \text{ mm}$ )

PNP NO ( $S_n = 2.5 \text{ mm}$ )

Other types available

# HIGH PRESSURE

EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE
M5 (P5)	M5 (P5)	M8 (P8)	M12 (P12)
1	1	1.5	1.5 (2.5)



\* IO-Link available from Q4/18

* IO-Link	* IO-Link	* IO-Link	* IO-Link
Ceramic ZrO <sub>2</sub>	Ceramic ZrO <sub>2</sub>	Ceramic ZrO <sub>2</sub>	Ceramic ZrO <sub>2</sub>
500 bar	500 bar	500 bar	500 bar
1000 bar	1000 bar	1000 bar	1000 bar
Stainless steel V4A / AISI 316L	Stainless steel V4A / AISI 316L	Stainless steel V4A / AISI 316L	Stainless steel V2A
PUR cable	PUR cable / Connector S8	PUR cable	Connector S12
IP 68	IP 68	IP 68	IP 68
Embeddable	Embeddable	Embeddable	Embeddable
1000 Hz	1000 Hz	800 Hz	600 Hz
10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC
-25 ... +100°C / -13 ... +212°F	-25 ... +100°C / -13 ... +212°F	-25 ... +100°C / -13 ... +212°F	-25 ... +100°C / -13 ... +212°F
≤ 200 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA
<b>DW-AD-503-P5</b>	<b>DW-AV-503-P5-276</b>	<b>DW-AD-503-P8</b>	
<b>DW-AD-501-P5</b>	<b>DW-AV-501-P5-276</b>	<b>DW-AD-501-P8</b>	
			<b>DW-AS-503-P12-630</b>
			DW-AS-504-P12-630
			<b>DW-AS-523-P12-630</b>
PNP NC, NPN NC	PNP NC, NPN NC	PNP NC, NPN NC	NPN NO, NPN NC

# HIGH PRESSURE

FAMILY

EXTRA DISTANCE

EXTRA DISTANCE

EXTRA DISTANCE

HOUSING SIZE

M12 (P12)

M12 (P12)

M12 (P12)

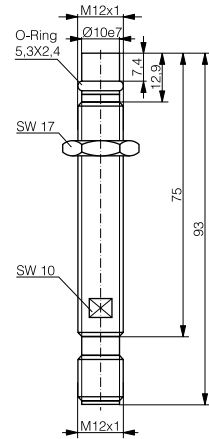
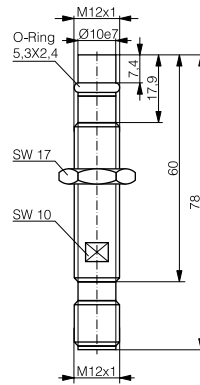
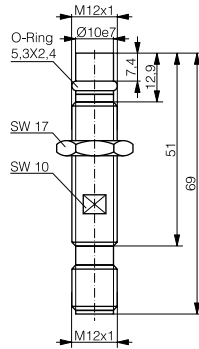
OPERATING DISTANCE MM

1.5 (2.5)

1.5 (2.5)

1.5 (2.5)

INDUCTIVE

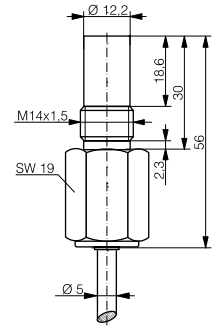
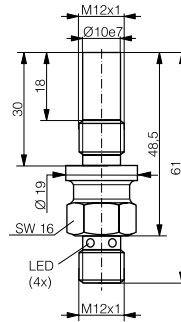
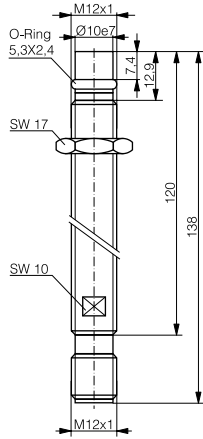
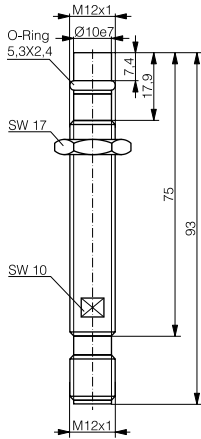


\* IO-Link available from Q4/18

DATA	*  IO-Link	*  IO-Link	*  IO-Link
Sensing face material	Ceramic ZrO <sub>2</sub>	Ceramic ZrO <sub>2</sub>	Ceramic ZrO <sub>2</sub>
Operating pressure	500 bar	500 bar	500 bar
Peak pressure	1000 bar	1000 bar	1000 bar
Housing material	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A
Connection	Connector S12	Connector S12	Connector S12
Degree of protection	IP 68	IP 68	IP 68
Mounting	Embeddable	Embeddable	Embeddable
Max. switching frequency	600 Hz	600 Hz	600 Hz
Supply voltage range	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC
Ambient temperature range	-25 ... +100°C / -13 ... +212°F	-25 ... +100°C / -13 ... +212°F	-25 ... +100°C / -13 ... +212°F
Output current	≤ 200 mA	≤ 200 mA	≤ 200 mA
PNP NO	<b>DW-AS-503-P12</b>	<b>DW-AS-503-P12-627</b>	<b>DW-AS-503-P12-621</b>
NPN NO	<b>DW-AS-501-P12</b>	<b>DW-AS-501-P12-627</b>	<b>DW-AS-501-P12-621</b>
Other types available	PNP NC, NPN NC, 2.5 mm operating distance	PNP NC, NPN NC, 2.5 mm operating distance	PNP NC, NPN NC, 2.5 mm operating distance

# HIGH PRESSURE

EXTRA DISTANCE	EXTRA DISTANCE	FULL INOX	EXTRA DISTANCE
M12 (P12)	M12 (P12)	M12 (P12)	M14 (P20)
1.5 (2.5)	1.5 (2.5)	1.5	3



* IO-Link	* IO-Link	IO-Link	* IO-Link
Ceramic ZrO <sub>2</sub>	Ceramic ZrO <sub>2</sub>	Stainless steel V4A / AISI 316L	Ceramic ZrO <sub>2</sub>
500 bar	500 bar	500 bar	500 bar
1000 bar	1000 bar	800 bar	1000 bar
Stainless steel V2A	Stainless steel V2A	Stainless steel V4A / AISI 316L	Stainless steel V4A / AISI 316L
Connector S12	Connector S12	Connector S12	PUR cable
IP 68	IP 68	IP 68 / IP 69K	IP 68
Embeddable	Embeddable	Embeddable	Embeddable
600 Hz	600 Hz	850 Hz	500 Hz
10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC
-25 ... +100°C / -13 ... +212°F	-25 ... +100°C / -13 ... +212°F	-25 ... +85°C / -13 ... +185°F	-25 ... +100°C / -13 ... +212°F
≤ 200 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA
<b>DW-AS-503-P12-635</b>	<b>DW-AS-503-P12-622</b>	<b>DW-LS-703-P12G</b>	<b>DW-AD-503-P20</b>
<b>DW-AS-501-P12-635</b>	<b>DW-AS-501-P12-622</b>		<b>DW-AD-501-P20</b>
PNP NC, NPN NC, 2.5 mm operating distance	PNP NC, NPN NC, 2.5 mm operating distance	PUR cable, pigtail	PNP NC, NPN NC

Inductive

Photoelectric

Safety

RFID

Connectivity

Accessories

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# HIGH PRESSURE

FAMILY

EXTRA DISTANCE

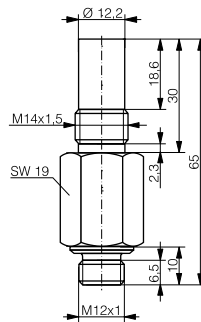
HOUSING SIZE

M14 (P20)

OPERATING DISTANCE MM

3

INDUCTIVE



\* IO-Link available from Q4/18

DATA

\*  IO-Link

Sensing face material	Ceramic ZrO <sub>2</sub>
Operating pressure	500 bar
Peak pressure	1000 bar
Housing material	Stainless steel V4A / AISI 316L
Connection	Connector S12
Degree of protection	IP 68
Mounting	Embeddable
Max. switching frequency	500 Hz
Supply voltage range	10 ... 30 VDC
Ambient temperature range	-25 ... +100°C / -13 ... +212°F
Output current	≤ 200 mA
PNP NO	<b>DW-AS-503-P20</b>
NPN NO	<b>DW-AS-501-P20</b>
Other types available	PNP NC, NPN NC