

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 (-13°F) ... +100°C (+212°F)

RANGE OVERVIEW	Housing size	Extra Distance	Full Inox
HIGH PRESSURE	M5 / P5	p. 99	
	M8 / P8	p. 99	
	M12 / P12	p. 99-101	p. 101
	M14 / P20	p. 101-102	

FAMILY

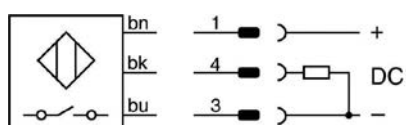
HOUSING SIZE

OPERATING DISTANCE MM

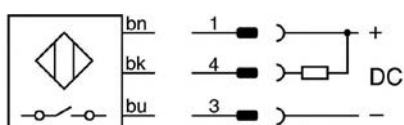
INDUCTIVE

WIRING DIAGRAMS

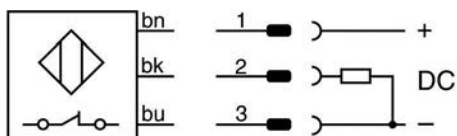
PNP NO



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

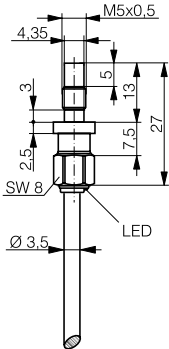
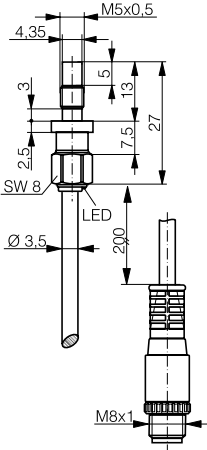
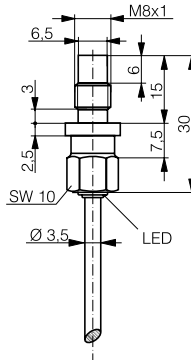
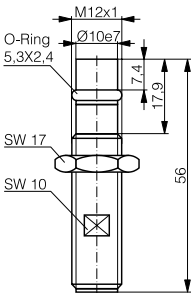
PNP NO ($S_n = 1.5 \text{ mm}$)

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

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

Other types available

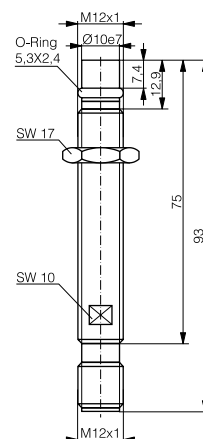
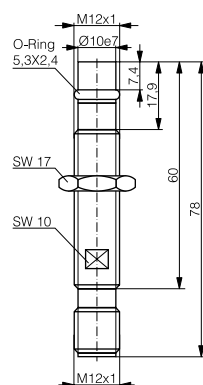
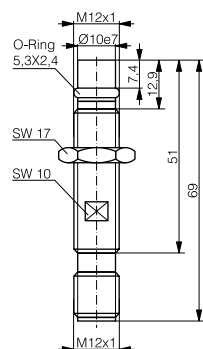
HIGH PRESSURE

EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE	Inductive
M5 (P5)	M5 (P5)	M8 (P8)	M12 (P12)	
1	1	1.5	1.5 / 2.5	Photoelectric
				Ultrasonic
				Capacitive
				Safety
				RFID
				Connectivity
Ceramic ZrO ₂	Ceramic ZrO ₂	Ceramic ZrO ₂	Ceramic ZrO ₂	
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	Accessories
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	Glossary
-25 ... +100°C / -13 ... +212°F	-25 ... +100°C / -13 ... +212°F	-25 ... +100°C / -13 ... +212°F	-25 ... +80°C / -13 ... +176°F	
≤ 200 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA	
DW-AD-503-P5	DW-AV-503-P5-276	DW-AD-503-P8		
DW-AD-501-P5	DW-AV-501-P5-276	DW-AD-501-P8		
			DW-AS-503-P12-630	Index
			DW-AS-504-P12-630	
			DW-AS-523-P12-630	
PNP NC, NPN NC	PNP NC, NPN NC	PNP NC, NPN NC	NPN NO, NPN NC	

HIGH PRESSURE

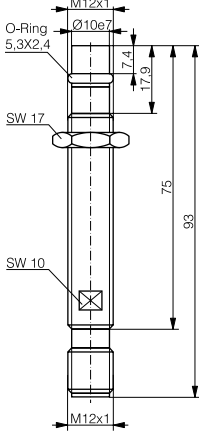
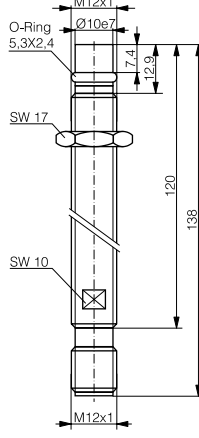
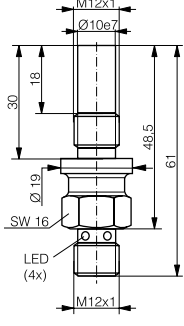
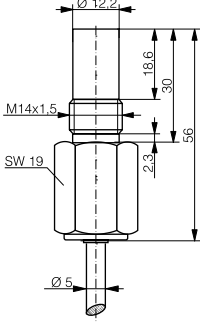
INDUCTIVE

FAMILY	EXTRA DISTANCE	EXTRA DISTANCE	EXTRA DISTANCE
HOUSING SIZE	M12 (P12)	M12 (P12)	M12 (P12)
OPERATING DISTANCE MM	1.5	1.5	1.5



DATA			
Sensing face material	Ceramic ZrO ₂	Ceramic ZrO ₂	Ceramic ZrO ₂
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 ... +80°C / -13 ... +176°F	-25 ... +80°C / -13 ... +176°F	-25 ... +80°C / -13 ... +176°F
Output current	≤ 200 mA	≤ 200 mA	≤ 200 mA
PNP NO	DW-AS-503-P12	DW-AS-503-P12-627	DW-AS-503-P12-621
NPN NO	DW-AS-501-P12	DW-AS-501-P12-627	DW-AS-501-P12-621
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	Inductive
M12 (P12)		M12 (P12)	M12 (P12)	M14 (P20)	
1.5		1.5	1.5	3	
					Photoelectric
					Ultrasonic
					Capacitive
					Safety
					RFID
					Connectivity
Ceramic ZrO ₂		Ceramic ZrO ₂	Stainless steel V4A / AISI 316L	Ceramic ZrO ₂	Accessories
500 bar		500 bar	500 bar	500 bar	
1000 bar		1000 bar	800 bar	1000 bar	Glossary
Stainless steel V2A		Stainless steel V2A	Stainless steel V4A / AISI 316L	Stainless steel V4A / AISI 316L	
Connector S12		Connector S12	Connector S12	PUR cable	Index
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 ... +80°C / -13 ... +176°F		-25 ... +80°C / -13 ... +176°F	-25 ... +85°C / -13 ... +185°F	-25 ... +80°C / -13 ... +176°F	
≤ 200 mA		≤ 200 mA	≤ 200 mA	≤ 200 mA	
DW-AS-503-P12-635		DW-AS-503-P12-622	DW-LS-703-P12G	DW-AD-503-P20	
DW-AS-501-P12-635		DW-AS-501-P12-622	DW-LS-701-P12G	DW-AD-501-P20	
PNP NC, NPN NC,		PNP NC, NPN NC,	PNP NC, NPN NC	PNP NC, NPN NC	
2.5 mm operating distance		2.5 mm operating distance			

HIGH PRESSURE

FAMILY

EXTRA DISTANCE

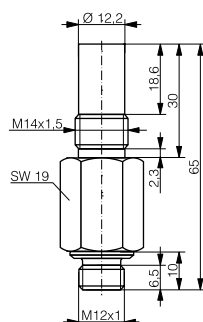
HOUSING SIZE

M14 (P20)

OPERATING DISTANCE MM

3

INDUCTIVE



DATA

Sensing face material

Ceramic ZrO₂

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 ... +80°C / -13 ... +176°F

Output current

≤ 200 mA

PNP NO

DW-AS-503-P20

NPN NO

DW-AS-501-P20

Other types available

PNP NC, NPN NC