



INDUCTIVE SENSORS: SEALED, SERIES E



- ✓ **Miniature devices**
- ✓ **100 bar** permanent pressure resistant
- ✓ Usable down to **water depths of 1000 m**
- ✓ Operating distances of up to **2.5 mm**
- ✓ **Ceramic** or **sapphire-glass** sensing face
- ✓ **Stainless steel housing**
- ✓ **IP 68**

TECHNICAL DATA

(according to IEC 60947-5-2)	
Housing material	Stainless steel V2A
Degree of protection	IP 68
Supply voltage range U_B	10 ... 30 VDC
Ambient temperature	-25 ... +70 °C
Output current	≤ 200 mA
Max. ripple content	≤ 20 % U_B
No-load supply current	≤ 10 mA
Leakage current at output	≤ 0,1 mA
Voltage drop, switched state	≤ 2,0 V
Temperature drift % s_r	≤ 10 %
Hysteresis % s_r	≤ 10 %
Repeat accuracy	≤ 5 % s_r
Short-circuit protection	Built-in
Polarity reversal protection	Built-in
Power-on reset	Built-in

Pressure resistant miniature sensors in stainless steel housings with ceramic or sapphire-glass sensing face. For demanding environments with permanent pressures of up to 100 bar (sensing face). Usable down to water depths of 1000 m. Particularly suited for

- ✓ **offshore installations**
- ✓ **lubrication systems of motors**
- ✓ **chemical industry**
- ✓ **atomic power plants:** fuel element monitoring
- ✓ **vacuum applications**

Inductive

Photoelectric

Optical fibers

Ultrasonic

Capacitive

Cables & connectors

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HOUSING SIZE	Ø 4	M5	
OPERATING DISTANCE MM	0.6	0.6	0.8



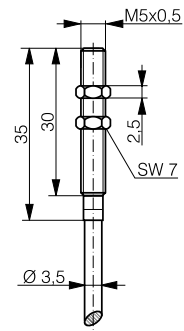
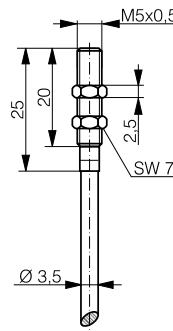
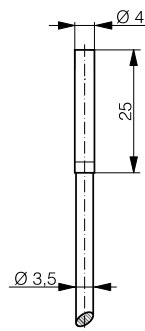
IP 68 / 20 BAR



IP 68 / 20 BAR



IP 68 / 100 BAR



- 1) Standard cable length 2 m. Non-standard cable lengths and types on request. Cable type see page 271.
- 2) see page 133
- 3) see page 268

TECHNICAL DATA			
Max. operating pressure	20 bar	20 bar	100 bar
Sensing face	Sapphire glass	Sapphire glass	Ceramic ZrO ₂
Connection ¹⁾	PUR cable type 3	PUR cable type 3	PUR cable type 3
Mounting	Embeddable	Embeddable	Embeddable
Max. switching frequency	5,000 Hz	5,000 Hz	3,000 Hz
Wiring ²⁾	Diagram 1	Diagram 1	Diagram 1
LED	---	---	---
Approvals	CE, UL, RoHS	CE, UL, RoHS	CE, UL, RoHS

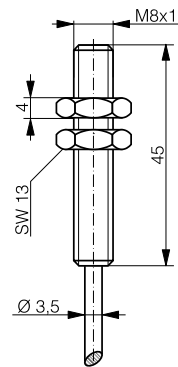
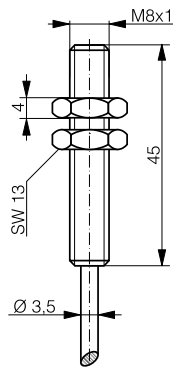
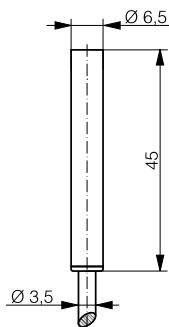
PART REFERENCES: (BOLD: PREFERRED TYPES)			
NPN N.O.	DW-AD-401-04E	DW-AD-401-M5E	
NPN N.C.	DW-AD-402-04E	DW-AD-402-M5E	
PNP N.O.	DW-AD-403-04E	DW-AD-403-M5E	DW-AD-603-M5E-652
PNP N.C.	DW-AD-404-04E	DW-AD-404-M5E	DW-AD-604-M5E-652
Compatible connectors ³⁾			

Ø 6.5	M8	
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2.5	1.5	2.5
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IP 68 / 20 BAR	IP 68 / 100 BAR	IP 68 / 20 BAR
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20 bar	100 bar	20 bar
Ceramic ZrO ₂	Ceramic ZrO ₂	Ceramic ZrO ₂
PUR cable type 3	PUR cable type 3	PUR cable type 3
Embeddable	Embeddable	Embeddable
1,000 Hz	3,000 Hz	1,000 Hz
Diagram 1	Diagram 1	Diagram 1
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CE, UL, RoHS	CE, UL, RoHS	CE, UL, RoHS

DW-AD-501-065E		DW-AD-501-M8E
DW-AD-502-065E		DW-AD-502-M8E
DW-AD-503-065E	DW-AD-603-M8E-652	DW-AD-503-M8E
DW-AD-504-065E	DW-AD-604-M8E-652	DW-AD-504-M8E

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