

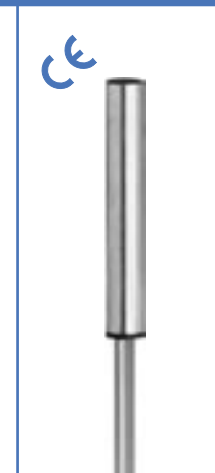

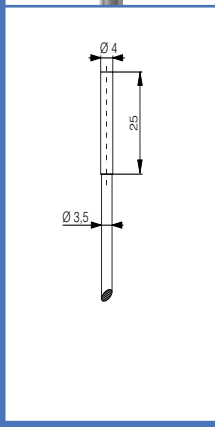
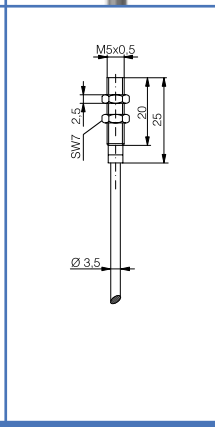
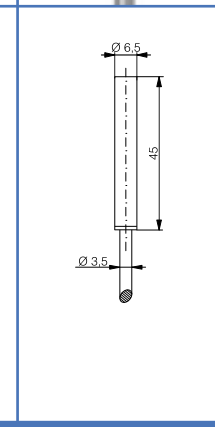
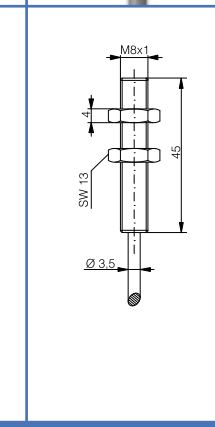


Size	Ø 4	M5	Ø 6.5	M8
Operating distance mm	0.6	0.6	2.5	2.5
Max. operating pressure	20 bars	20 bars	20 bars	20 bars
Housing material	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A
Sensing face	Sapphire	Sapphire	Ceramic ZrO ₂	Ceramic ZrO ₂
Connection ¹⁾	PUR cable type 3	PUR cable type 3	PUR cable type 3	PUR cable type 3
Degree of protection	IP 68	IP 68	IP 68	IP 68
Mounting	Embeddable	Embeddable	Embeddable	Embeddable
Max. switching frequency	5,000 Hz	5,000 Hz	1,000 Hz	1,000 Hz
Technical data ²⁾	Table 1	Table 1	Table 1	Table 1
Wiring ³⁾	Diagram 1	Diagram 1	Diagram 1	Diagram 1
LED	---	---	---	---
Supply voltage range	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC
Ambient temperature range	-25 ... +70 °C	-25 ... +70 °C	-25 ... +70 °C	-25 ... +70 °C
Output current	≤ 200 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA
¹⁾ Standard cable length 2 m. Non-standard cable lengths and types on request. ²⁾ see page 68 ³⁾ see page 69 ⁴⁾ see page 112				
Dimensions:				
Part references: (bold: preferred types)				
NPN N.O.	DW-AD-401-04E	DW-AD-401-M5E	DW-AD-501-065E	DW-AD-501-M8E
NPN N.C.				
PNP N.O.	DW-AD-403-04E	DW-AD-403-M5E	DW-AD-503-065E	DW-AD-503-M8E
PNP N.C.				
NAMUR				
AC/DC 2-wire N.O.				
AC/DC 2-wire N.C.				
Compatible connectors ⁴⁾				

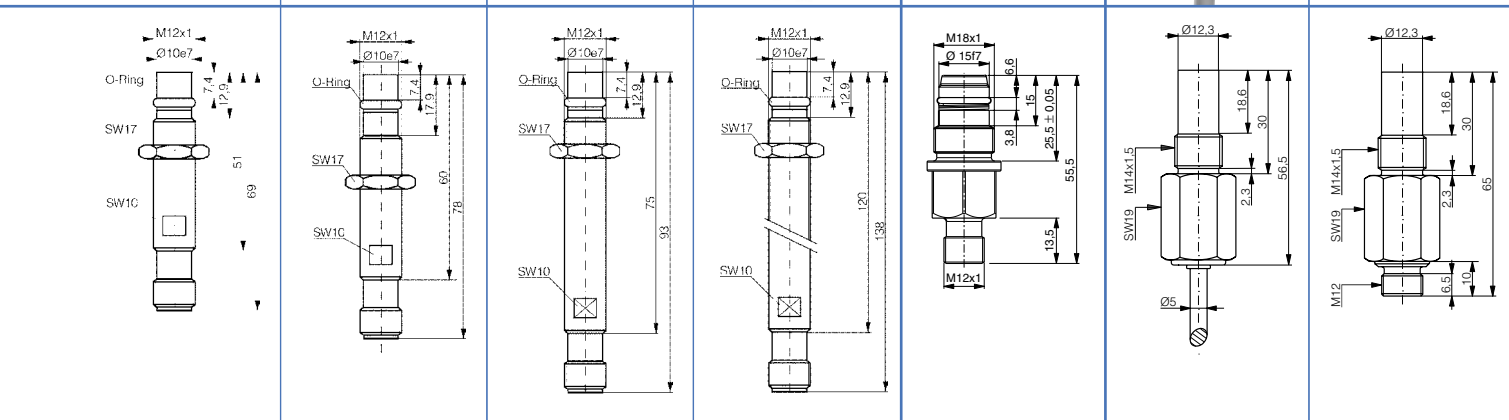
1.5
500 bars
Stainless steel V2A
Ceramic ZrO ₂
Connector S12
IP 68
Embeddable
2,000 Hz
Table 6
Diagram 2

10 ... 30 VDC
-25 ... +80 °C
≤ 200 mA


DW-AS-501-P12-624
DW-AS-503-P12-624
G ... N

HIGH-PRESSURE-RESISTANT SERIES P

P12				P18	P20	
1.5	1.5	1.5	1.5	1.5	3	3
500 bars	500 bars	500 bars	500 bars	500 bars	500 bars	500 bars
Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V2A	Stainless steel V4A	Stainless steel V4A
Ceramic ZrO ₂	Ceramic ZrO ₂	Ceramic ZrO ₂	Ceramic ZrO ₂	Ceramic ZrO ₂	Ceramic ZrO ₂	Ceramic ZrO ₂
Connector S12	Connector S12	Connector S12	Connector S12	Connector S12	PUR cable type 11	Connector S12
IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Embeddable	Embeddable	Embeddable	Embeddable	Embeddable	Embeddable	Embeddable
2,000 Hz	2,000 Hz	2,000 Hz	2,000 Hz	2,000 Hz	500 Hz	500 Hz
Table 6	Table 6	Table 6	Table 6	Table 6	Table 6	Table 6
Diagram 2	Diagram 2	Diagram 2	Diagram 2	Diagram 2	Diagram 1	Diagram 2
---	---	---	---	---	---	---
10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC
-25 ... +80 °C	-25 ... +80 °C	-25 ... +80 °C	-25 ... +80 °C	-25 ... +80 °C	-25 ... +80 °C	-25 ... +80 °C
≤ 200 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA	≤ 200 mA



DW-AS-501-P12	DW-AS-501-P12-627	DW-AS-501-P12-621	DW-AS-501-P12-622	in preparation	DW-AD-501-P20	DW-AS-501-P20
DW-AS-503-P12	DW-AS-503-P12-627	DW-AS-503-P12-621	DW-AS-503-P12-622	DW-AS-503-P18	DW-AD-503-P20	DW-AS-503-P20
G ... N	G ... N	G ... N	G ... N	G ... N		G ... N

For all these products, you will find detailed data sheets, application notes, dimensional drawings, cross-reference lists, part references, new items, special executions, extensive additional technical information, specifications concerning quality, safety and standards, as well as the addresses of our agents, and much more besides, on our Internet website at www.contrinex.com. The website contents are constantly up-dated and extended.

Technical data

	Table 1	Table 2	Table 3	Table 4	Table 5
Permissible ripple content	≤ 20%	≤ 20%	≤ 20%	---	≤ 20%
No-load supply current	≤ 10 mA	≤ 17 mA (24 V) / ≤ 30 mA (34 V)	≤ 20 mA	≤ 1.5 mA	---
Leakage current at output	≤ 0.1 mA	≤ 0.1 mA	≤ 0.1 mA	---	---
Voltage drop, switched state	≤ 2.0 V	≤ 2.5 V	≤ 2.5 V	≤ 8 V	---
Temperature drift % s_r	≤ 10 %	≤ 10 %	≤ 10 %	≤ 10 %	≤ 10 %
Hysteresis % s_r	1 ... 15% (5% typ.)	≤ 20 %	≤ 20 %	≤ 20 %	---
Repeat accuracy	≤ 5% s_r	≤ 5% s_r	≤ 5% s_r	≤ 5% s_r	≤ 5% s_r
(according to IEC 60947-5-2)					
Short-circuit protection	built-in	built-in	built-in	---	built-in
Polarity reversal protection	built-in	built-in	built-in	built-in	---
Power-on reset	built-in	built-in	built-in	built-in	---

	Table 6	Table 7	Table 8	Table 9	Table 10
Permissible ripple content	≤ 20%	≤ 20%	≤ 20%	≤ 10%	---
No-load supply current	≤ 10 mA	≤ 10 mA	≤ 10 mA	30 mA (24 VDC) 40 mA (34 VDC)	typ 1.5 mA (24 V) ≤ 2.0 mA (U_{max})
Output voltage, damped	---	0 VDC	---	---	---
Output voltage, non-damped	---	5 VDC	---	---	---
Leakage current at output	≤ 0.1 mA	---	≤ 0.1 mA	0.01 mA	< 2.0 mA
Voltage drop, switched state	≤ 2.0 V	---	≤ 2.0 V	≤ 2.5 V	≤ 8 V
Temperature drift % s_r	≤ 10 %	≤ 5 % (0...+70 °C) / ≤ 10 % (-25...0 °C)	≤ 10 %	≤ 10 %	≤ 10 %
Hysteresis % s_r	1 ... 15% (5% typ.)	---	1 ... 15% (5% typ.)	1 ... 15%	1 ... 15%
Repeat accuracy	≤ 5% s_r	---	≤ 5% s_r	≤ 5% s_r	≤ 5% s_r
(according to IEC 60947-5-2)					
Short-circuit protection	built-in	built-in	built-in	built-in	---
Polarity reversal protection	built-in	built-in	built-in	built-in	---
Power-on reset	built-in	built-in	built-in	built-in	built-in

Further data can be obtained from individual data sheets, which may be retrieved from the CONTRINEX website (www.contrinex.com), or ordered from our sales offices.

Wiring diagrams

