

# Miniature inductive sensors with long operating distance, series 500



## Highlights

- World's longest operating distance for miniature inductive switches: 2.5 mm on steel
- Miniature sizes: Ø 4 and M5
- Fully embeddable
- Built-in LED, short-circuit, voltage reversal and induction protection
- Largely compatible with standard devices

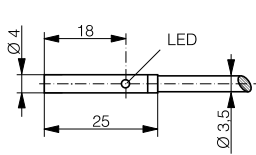
## Benefits

- Increased reliability thanks to increased distance from moving parts, and therefore reduced danger of mechanical damage
- Replace larger sizes when space is limited
- Considerably easier installation, due to greater mechanical tolerance
- Best results for parts difficult to detect (small, narrow, non-ferrous metal, wires)

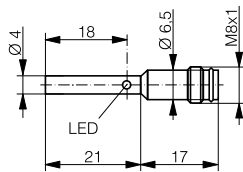
**CONTRINEX**



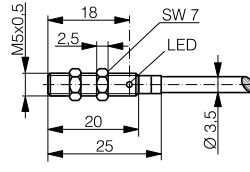
## Dimensions:



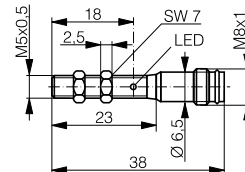
DW-AD-50#-04



DW-AS-50#-04



DW-AD-50#-M5



DW-AS-50#-M5

### Technical data:

(according to IEC 60947-5-2)

Rated operating distance $s_n$	2.5 mm
Hysteresis	$\leq 8\% s_r$ typ.
Standard target	7.5 x 7.5 x 1 mm
Repeat accuracy	0.03 mm ( $U_B = 20 \dots 30$ VDC, $T_A = 23\text{ °C} \pm 5\text{ °C}$ (73.4 °F $\pm$ 9 °F))
Supply voltage range $U_B$	10 ... 30 VDC
Output current	$\leq 200$ mA
No-load supply current	$\leq 10$ mA
Switching frequency	$\leq 800$ Hz
Time delay before availability	$\leq 30$ msec
LED ( $0 \leq s \leq 0.8 s_r$ )	on
LED ( $0.8 s_r < s \leq s_r$ )	blinking
Ambient temperature range $T_A$	-25 ... +70 °C (-13 ... +158 °F)
Temperature drift of $s_r$	$\leq 10\%$
Short-circuit protection	built-in
Voltage reversal protection	built-in
Induction protection	built-in
Degree of protection	IP 67
EMC protection:	
IEC 60947-5-2 (7.2.3.1)	1 kV
IEC 61000-4-2	Level 2
IEC 61000-4-3	Level 3
IEC 61000-4-4	Level 3
Housing material	stainless steel
Sensing face	PPE (Noryl)
Connection cable (other lengths on request)	2 m PVC 3 x 0.14 mm <sup>2</sup> / 18 x 0.1 mm Ø

### Available types:

Part number	Part reference	Polarity	Connection	Output
320 520 001	DW-AD-501-04	NPN	cable 2 m PVC	N.O.
320 520 002	DW-AD-502-04	NPN	cable 2 m PVC	N.C.
320 520 003	DW-AD-503-04	PNP	cable 2 m PVC	N.O.
320 520 004	DW-AD-504-04	PNP	cable 2 m PVC	N.C.
320 520 006	DW-AS-501-04	NPN	connector S8	N.O.
320 520 007	DW-AS-502-04	NPN	connector S8	N.C.
320 520 008	DW-AS-503-04	PNP	connector S8	N.O.
320 520 009	DW-AS-504-04	PNP	connector S8	N.C.
320 520 011	DW-AD-501-M5	NPN	cable 2 m PVC	N.O.
320 520 012	DW-AD-502-M5	NPN	cable 2 m PVC	N.C.
320 520 013	DW-AD-503-M5	PNP	cable 2 m PVC	N.O.
320 520 014	DW-AD-504-M5	PNP	cable 2 m PVC	N.C.
320 520 016	DW-AS-501-M5	NPN	connector S8	N.O.
320 520 017	DW-AS-502-M5	NPN	connector S8	N.C.
320 520 018	DW-AS-503-M5	PNP	connector S8	N.O.
320 520 019	DW-AS-504-M5	PNP	connector S8	N.C.

These devices **must not be used** in applications where the **safety of people** is dependent on their functioning. Terms of delivery and rights to change design reserved.

Your sales agent:



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