

Inductive proximity switches with long operating distance, series 500



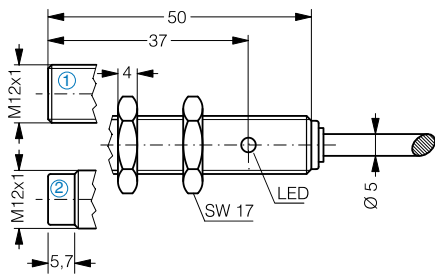
Highlights

- World's longest operating distances on steel
- Sizes $\text{\O} 4 \dots \text{M}30$ embeddable ($\text{\O} 4$ and $\text{M}5$), quasi-embeddable ($\text{M}8 \dots \text{M}30$) and non-embeddable ($\text{M}12 \dots \text{M}30$), PNP and NPN, N.O. and N.C., cable and connector versions, large number of additional executions
- Largely compatible with standard devices

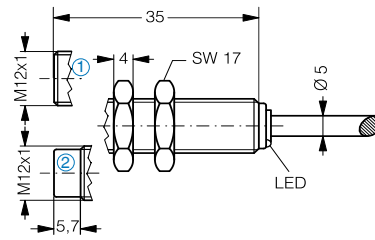
Benefits

- Increased reliability thanks to increased distance from moving parts, and therefore reduced danger of mechanical damages
- Where operating distance is insufficient: easy replacement of standard devices thanks to compatibility
- In limited spaces: For a given operating distance, smaller diameters may be used
- Best results for parts difficult to detect (small, narrow, non-ferrous metal, wire)



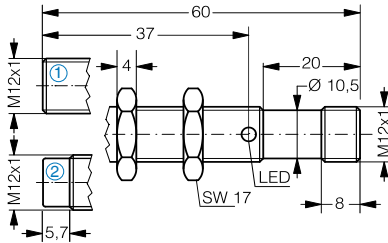


DW-AD-5##-M12

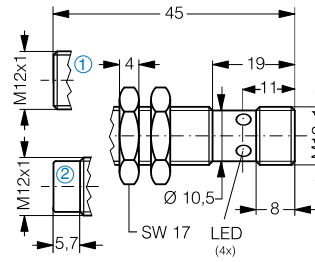


DW-AD-5##-M12-120

- ① quasi-embeddable
- ② non-embeddable



DW-AS-5##-M12



DW-AS-5##-M12-120

Further sizes according to catalog

Technical data:		
(according to IEC 60947-5-2)		
Rated operating distance s_n :		
Ø 4	embeddable	2.5 mm
M5	embeddable	2.5 mm
Ø 6.5	quasi-embeddable	3 mm
M8	quasi-embeddable / non-embeddable	3 mm / 6 mm
C8	quasi-embeddable	3 mm
M12	quasi-embeddable / non-embeddable	6 mm / 10 mm
M18	quasi-embeddable / non-embeddable	12 mm / 20 mm
M30	quasi-embeddable / non-embeddable	22 mm / 40 mm
Hysteresis		$\leq 10\% s_r$
Supply voltage range U_B		10 ... 30 VDC
Output current		≤ 200 mA
No-load supply current		≤ 10 mA
Switching frequency:		
Ø 4, M5	embeddable	≤ 800 Hz
Ø 6.5, M8, C8	quasi-embeddable / non-embeddable	$\leq 1,000$ Hz / 500 Hz
M12	quasi-embeddable / non-embeddable	≤ 800 Hz / 400 Hz
M18	quasi-embeddable / non-embeddable	≤ 500 Hz / 200 Hz
M30	quasi-embeddable / non-embeddable	≤ 200 Hz / 100 Hz
Ambient temperature range T_A		-25 ... +70 °C (-13 ... +158 °F)
Temperature drift of s_r		$\leq 10\%$
Degree of protection		IP 67
EMC protection:		IEC 60947-5-2 / 60947-5-2
Housing material: Ø 4, M5		Stainless steel V2A (AISI 303)
Ø 6.5 ... M30		Chrome-plated brass
Sensing face: Ø 4, M5		PA66
Ø 6.5 ... M30		PBTP
Connection cable (other lengths on request):		2 m
Ø 4, M5, Ø 6.5, M8, C8		PVC 3x0.14mm ² , 18x0.1 mm Ø
M12, M18, M30		PVC 3x0.34mm ² , 7x0.25 mm Ø
Connector:		
Ø 4, M5, Ø 6.5 (-001), M8 (-001), C8		S8
Ø 6.5, M8, M12, M18, M30		S12

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.

Contrinex Inc.

Your sales agent:



Inductive proximity switches with long operating distance, series 500



Features

- Long operating distances on steel
- Sizes $\varnothing 4 \dots M30$, embeddable ($\varnothing 4$ and M5), quasi-embeddable ($\varnothing 6.5 \dots M30$) and non-embeddable (M8 ... M30), PNP and NPN, N.O. and N.C., cable and connector versions - large variety of executions
- Largely compatible with standard devices

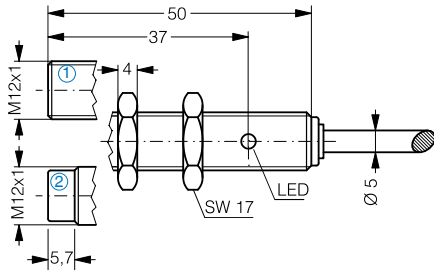
Benefits

- Increased reliability, thanks to increased distance from moving parts, and therefore reduced danger of mechanical damage
- Where the operating distance is insufficient: easy replacement of standard devices, thanks to compatibility
- In limited spaces: for a given operating distance, smaller sizes may be used
- Best results for parts difficult to detect (small, narrow, non-ferrous metal, wire)

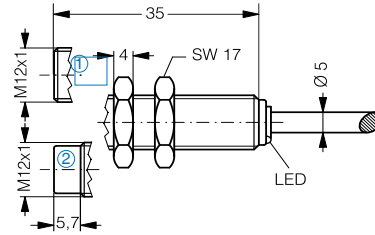


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Dimensions

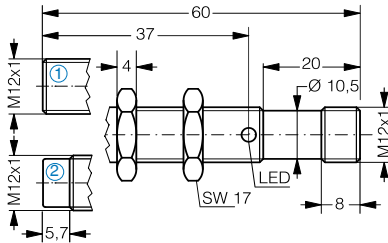


DW-AD-5##-M12

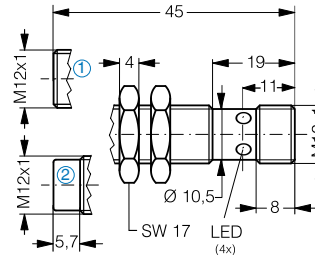


DW-AD-5##-M12-120

- ① quasi-embeddable
- ② non-embeddable



DW-AS-5##-M12



DW-AS-5##-M12-120

Further sizes according to catalog

Technical data:

(according to IEC 60947-5-2)

Rated operating distance s_n :

Ø 4, M5	embeddable	2.5 mm
Ø 6.5	quasi-embeddable	3 mm
M8	quasi-embeddable / non-embeddable	3 mm / 6 mm
C8	quasi-embeddable	3 mm
M12	quasi-embeddable / non-embeddable	6 mm / 10 mm
M18	quasi-embeddable / non-embeddable	12 mm / 20 mm
M30	quasi-embeddable / non-embeddable	22 mm / 40 mm

Hysteresis $\leq 20\% s_r$ (10% typ.)

Supply voltage range U_B 10 ... 30 VDC

Output current ≤ 200 mA

No-load supply current ≤ 10 mA

Switching frequency

Ø 4, M5	embeddable	≤ 800 Hz
Ø 6.5, M8, C8	quasi-embeddable / non-embeddable	≤ 1000 Hz / 500 Hz
M12	quasi-embeddable / non-embeddable	≤ 800 Hz / 400 Hz
M18	quasi-embeddable / non-embeddable	≤ 500 Hz / 200 Hz
M30	quasi-embeddable / non-embeddable	≤ 200 Hz / 100 Hz

Ambient temperature range T_A $-25 \dots +70^\circ\text{C}$ ($-13 \dots +158^\circ\text{F}$)

Temperature drift of s_r $\leq 10\%$

Degree of protection IP 67

EMC protection IEC 60947-5-2 / EN 60947-5-2

Housing material: Ø 4, M5 Stainless steel V2A
 Ø 6.5 ... M30 Chrome-plated brass

Sensing face: Ø 4, M5 PA66
 Ø 6.5 ... M30 PBTP

Connection cable (other lengths on request):

Ø 4, M5, Ø 6.5, M8, C8 2 m
 PVC 3 x 0.14 mm², 18 x 0.1 mm Ø

M12, M18, M30 PVC 3 x 0.34 mm², 7 x 0.25 mm Ø

Connector: Ø 4, M5, Ø 6.5 (-001), M8 (-001), C8 S8
 Ø 6.5, M8, M12, M18, M30 S12

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Your sales agent:

Inductive proximity switches with 4 x operating distance, series 520



Features

- World's longest operating distances on steel across the whole temperature range (-25 ... +70 °C / -13 ... +158 °F)
- Sizes M8 and M12, quasi-embeddable, cable and connector versions
- Largely compatible with standard devices

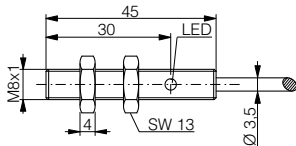
Benefits

- Increased reliability, thanks to increased distance from moving parts, and therefore reduced danger of mechanical damage
- Where operating distance is insufficient: easy replacement of standard devices thanks to compatibility
- In limited spaces: For a given operating distance, smaller diameters may be used
- Best results for parts difficult to detect (small, narrow, non-ferrous metal, wires)

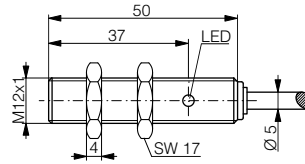


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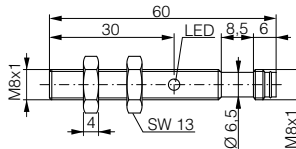
Dimensions



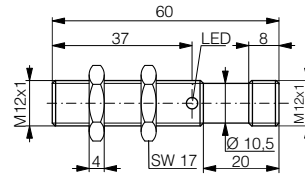
DW-AD-52#-M8



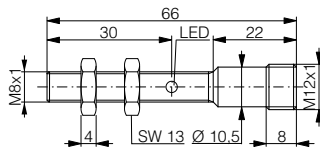
DW-AD-52#-M12



DW-AS-52#-M8-001



DW-AS-52#-M12



DW-AS-52#-M8

Technical data:

(according to IEC 60947-5-2)

Rated operating distance s_n :

M8	quasi-embeddable	4 mm
M12	quasi-embeddable	8 mm

Hysteresis $\leq 20\% s_r$ (10% typ.)

Supply voltage range U_b 10 ... 30 VDC

Output current ≤ 200 mA

No-load supply current ≤ 10 mA

Switching frequency:

M8	quasi-embeddable	≤ 500 Hz
M12	quasi-embeddable	≤ 400 Hz

Ambient temperature range T_A $-25 \dots +70$ °C ($-13 \dots +158$ °F)

Temperature drift of s_r $\leq 10\%$

Degree of protection IP 67

EMC protection:

IEC 60947-5-2	5 kV
IEC 61000-4-2	Level 2
IEC 61000-4-3	Level 3
IEC 61000-4-4	Level 2

Housing material Chrome-plated brass

Sensing face PBTP

Connection cable (other lengths on request):

M8	PVC 3 x 0.14 mm ² , 18 x 0.1 mm Ø
M12	PVC 3 x 0.34 mm ² , 7 x 0.25 mm Ø

* N.C. versions according to catalog

Available types*:

Part number	Part reference	Polarity	Connection
320 120 961	DW-AD-521-M8	NPN N.O.	cable
320 120 963	DW-AD-523-M8	PNP N.O.	cable
320 120 951	DW-AS-521-M8-001	NPN N.O.	connector S8
320 120 953	DW-AS-523-M8-001	PNP N.O.	connector S8
320 120 941	DW-AS-521-M8	NPN N.O.	connector S12
320 120 943	DW-AS-523-M8	PNP N.O.	connector S12
320 120 966	DW-AD-521-M12	NPN N.O.	cable
320 120 968	DW-AD-523-M12	PNP N.O.	cable
320 120 946	DW-AS-521-M12	NPN N.O.	connector S12
320 120 948	DW-AS-523-M12	PNP N.O.	connector S12

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Your sales agent:



Miniature inductive sensors with long operating distance, series 500



Highlights

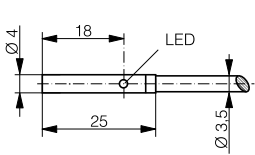
- World's longest operating distance for miniature inductive switches: 2.5 mm on steel
- Miniature sizes: Ø 4 and M5
- Fully embeddable
- Built-in LED, short-circuit, voltage reversal and induction protection
- Largely compatible with standard devices

Benefits

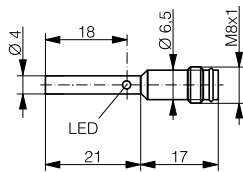
- Increased reliability thanks to increased distance from moving parts, and therefore reduced danger of mechanical damage
- Replace larger sizes when space is limited
- Considerably easier installation, due to greater mechanical tolerance
- Best results for parts difficult to detect (small, narrow, non-ferrous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

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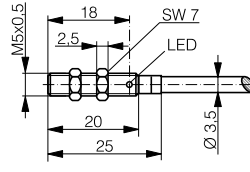
Dimensions:



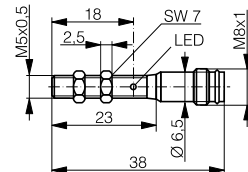
DW-AD-50#-04



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	≤ 200 mA
No-load supply current	≤ 10 mA
Switching frequency	≤ 800 Hz
Time delay before availability	≤ 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 ² / 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.

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