

## Wireless Proximity Switches

Sensor Heads  
WSIF..., WSIN...



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# Sensor Head

## WSIF..., WSIN...

### Technical description

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#### **Please note the following**

##### **Target group**

This description is intended for the use of trained specialists in electrical installation and control and automation engineering, who are familiar with the applicable national standards.

##### **Safety requirements**

The responsible staff must ensure that the application or use of the products described satisfy all the requirements for safety, including all the relevant laws, regulations, guidelines and standards.

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#### **Liability**

The documentation has been prepared with care. The products described are, however, constantly under development. For that reason the documentation is not in every case checked for consistency with performance data, standards or other characteristics, and does not represent an assurance of characteristics in the sense of § 459, Para. 2 of the German Civil Code. In the event that it contains technical or editorial errors, we retain the right to make alterations at any time and without warning.

No claims for the modification of products that have already been supplied may be made on the basis of the data, diagrams and descriptions in this documentation.

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## Sensor Head WSIF..., WSIN... Technical description

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Fig. 1: WSIF..., WSIN...

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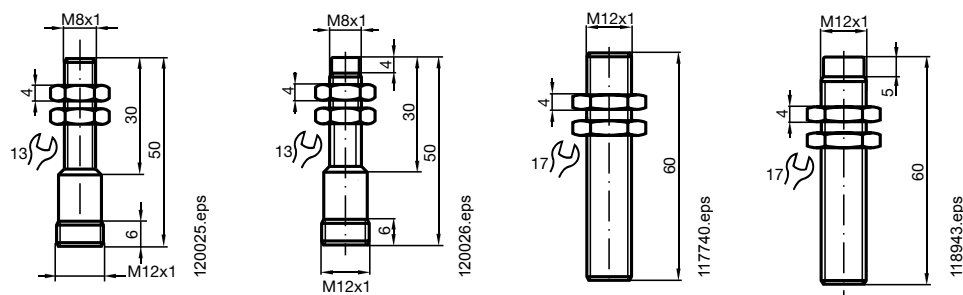
# Sensor Head

## WSIF..., WSIN...

### Technical description

#### Technical data

Switching distance $S_n$ , mounting	1.5 mm flush	2 mm non flush	2 mm flush	4 mm non flush
Type	M8x1 flush	M8x1 non flush	M12x1 flush	M12x1 non flush
Designation	WSIF015-M8N	WSIN020-M8N	WSIF020-M12N	WSIN040-M12N
Ordering number	1SAF108911R3000	1SAF108921R3000	1SAF112911R3000	1SAF112921R3000
EAN number	4013614348303	4013614348310	4013614348327	4013614348334
Operating switching distance $S_a$ [mm]	0 ... 1.21	0 ... 1.62	0 ... 1.62	0 ... 3.24
Derating factors				
$r_{V2A}$	0.75	0.75	0.75	0.8
$r_{Al}$	0.4	0.4	0.3	0.45
$r_{Cu}$	0.4	0.4	0.25	0.4
Switching frequency [Hz]	refer to communication module			
Hysteresis H [%]	$\leq 10$	$\leq 10$	$\leq 10$	$\leq 10$
Repeatability [%]	$\leq 10$	$\leq 10$	$\leq 10$	$\leq 10$
Temperature drift [%]	$\pm 10$	$\pm 10$	$\pm 10$	$\pm 10$
Short-circuit detection	Not necessary. Application exclusively together with the communication module.			
Reversed polarity protection				
Switching state indication	refer to communication module			
Operating temperature range [°C]	-25 ... +70			
Storage temperature range [°C]	-40 ... +70			
Permissible shock and vibration stress	Shock $b \leq 30g$ , $T \leq 11$ ms			
Degree of protection acc. to IEC 60529	IP 67			
EMC compatibility	EN 60947-5-2			
Connection	M12 appliance plug for a communication module			
Material of housing	Nickel-plated brass			
Front face	PBT (Crastin), RAL 7012			
Tightening torque recommended / maximum	3 / 5	3 / 5	10 / 15	10 / 15
Weight incl. mounting nuts	25	25	30	25
Drawing number	120025.eps	120026.eps	117740.eps	118943.eps



Dimensions in mm

# Sensor Head

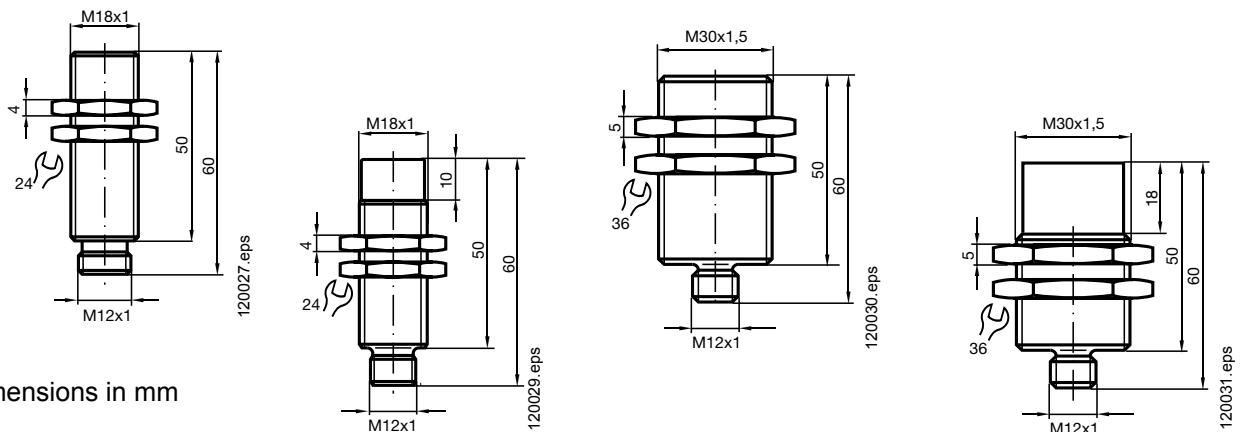
## WSIF..., WSIN...

### Technical description

#### Technical data (continuation)

Switching distance $S_n$ , mounting	5 mm flush	8 mm non flush	10 mm flush	15 mm non flush
Type	M18x1 flush	M18x1 non flush	M30x1.5 flush	M30x1.5 non flush
Designation	WSIF050-M18N	WSIN080-M18N	WSIF100-M30N	WSIN150-M30N
Ordering number	1SAF118911R3000	1SAF118921R3000	1SAF130911R3000	1SAF130921R3000
EAN number	4013614348341	4013614348358	4013614348365	4013614348372
Operating switching distance $S_a$ [mm]	0 ... 4.05	0 ... 6.5	0 ... 8.1	0 ... 12.15
Derating factors				
$r_{VA}$	0.75	0.75	0.75	0.7
$r_{AI}$	0.35	0.45	0.45	0.45
$r_{Cu}$	0.3	0.4	0.25	0.35
Switching frequency [Hz]	refer to communication module			
Hysteresis H [%]	$\leq 10$	$\leq 10$	$\leq 10$	$\leq 10$
Repeatability [%]	$\leq 10$	$\leq 10$	$\leq 10$	$\leq 10$
Temperature drift [%]	$\pm 10$	$\pm 10$	$\pm 10$	$\pm 10$
Short-circuit detection	Not necessary. Application exclusively together with the communication module.			
Reversed polarity protection				
Switching state indication	refer to communication module			
Operating temperature range [°C]	-25 ... +70			
Storage temperature range [°C]	-40 ... +70			
Permissible shock and vibration stress	Shock $b \leq 30g$ , $T \leq 11$ ms			
Degree of protection acc. to IEC 60529	IP 67			
EMC compatibility	EN 60947-5-2			
Connection	M12 appliance plug for a communication module			
Material of housing	Nickel-plated brass			
Front face	PBT (Crastin), RAL 7012			
Tightening torque recommended / maximum	30 / 50	30 / 50	30 / 100	30 / 100
Weight incl. mounting nuts	60	55	140	120
Drawing number	120027.eps	120029.eps	120030.eps	120031.eps

Dimensions in mm



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07.2012

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