# **//ALL STAINLESS STEEL SENSORS**

# STAINLESS STEEL V2A / V4A SENSORS

Our inductive sensors made of stainless steel provide an optimal solution for use in environments with higher requirements on the housing material. Variants for the Food & Beverage area (316L) are also available.

#### /// IS 208



V2A sensor for extreme environmental conditions and material-independent switching distance (reduction factor 1).



#### Benefits:

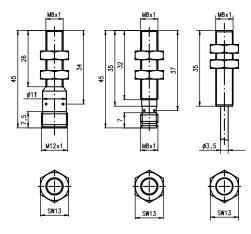
- Sturdy all-metal housing for high, permanent machine availability
- Housing of stainless steel V2A with degrees of protection IP 68 and IP 69K
- Switching distance independent of object property (reduction factor 1)



Direct access to the online product selector at www.leuze.com/en/is208

Part no.	Part description	Operating range Sa Typ. operating range limit Sn	Switching frequency	Type of installation	Switching output 1	Description	Connection	Material
50128179	IS 208FM/4NC.5-2E0-S8.3	0 1.6 mm 2 mm	100 Hz	Embedded	Transistor, PNP, break-contact (NC)	Reduction factor 1, DC	Connector, M8, 3-pin	Stainless steel
50128180	IS 208FM/4NC.5-2E0	0 1.6 mm 2 mm	100 Hz	Embedded	Transistor, PNP, break-contact (NC)	Reduction factor 1, DC	Cable, 2,000 mm, 3-wire	Stainless steel
50128181	IS 208FM/4N0.5-2E0-S8.3	0 1.6 mm 2 mm	100 Hz	Embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Connector, M8, 3-pin	Stainless steel
50128182	IS 208FM/4N0.5-2E0	0 1.6 mm 2 mm	100 Hz	Embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Cable, 2,000 mm, 3-wire	Stainless steel
50128183	IS 208FM/2N0.5-2E0-S8.3	0 1.6 mm 2 mm	100 Hz	Embedded	Transistor, NPN, make-contact (NO)	Reduction factor 1, DC	Connector, M8, 3-pin	Stainless steel
50128184	IS 208FM/2N0.5-2E0	0 1.6 mm 2 mm	100 Hz	Embedded	Transistor, NPN, make-contact (NO)	Reduction factor 1, DC	Cable, 2,000 mm, 3-wire	Stainless steel

## Dimensioned drawings: IS 208



IS 208 ... E ... series

#### /// IS 212



With their robust housing made of stainless steel, these sensors withstand even aggressive cleaning processes encountered in food and pharmaceutical production.



#### Benefits:

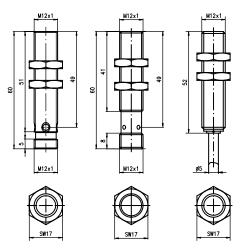
- Sturdy stainless steel housing for high, permanent machine availability
- Housing of stainless steel 316L with degree of protection IP 69K for food & beverage applications as well as V2A housing material with degree of protection IP 68/ IP 69K
- Large ranges on stainless steel objects for reliable detection of machine parts, e.g. on packaging machinery in the foodstuffs sector
- Switching distance independent of object property (reduction factor 1)



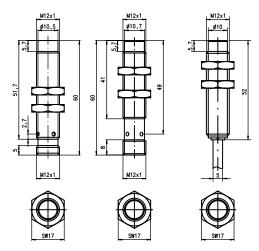
Direct access to the online product selector at www.leuze.com/en/is212

Part no.	Part description	Operating range Sa Typ. operating range limit Sn	Switching frequency	Type of installation	Switching output 1	Description	Connection	Material
50109738	IS 212FM/4N0.5F-10N-S12	0 8.1 mm 10 mm	400 Hz	Non-embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50109736	IS 212FM/4N0.5F-6E0-S12	0 4.8 mm 6 mm	600 Hz	Embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50117127	IS 212FM/4N0.5W-6E0-S12	0 4.8 mm 6 mm	15 Hz	Embedded	Transistor, PNP, make-contact (NO)	Resistant against welding sparks, DC	Connector, M12, 4-pin	Stainless steel
50128173	IS 212FM/4NC.5-3E0-S12	0 2.4 mm 3 mm	100 Hz	Embedded	Transistor, PNP, break-contact (NC)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50128174	IS 212FM/4NC.5-3E0	02.4 mm 3 mm	100 Hz	Embedded	Transistor, PNP, break-contact (NC)	Reduction factor 1, DC	Cable, 2,000 mm, 3-wire	Stainless steel
50128175	IS 212FM/4N0.5-3E0-S12	0 2.4 mm 3 mm	100 Hz	Embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50128176	IS 212FM/4N0.5-3E0	02.4 mm 3 mm	100 Hz	Embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Cable, 2,000 mm, 3-wire	Stainless steel
50128177	IS 212FM/2N0.5-3E0-S12	0 2.4 mm 3 mm	100 Hz	Embedded	Transistor, NPN, make-contact (NO)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50128178	IS 212FM/2N0.5-3E0	0 2.4 mm 3 mm	100 Hz	Embedded	Transistor, NPN, make-contact (NO)	Reduction factor 1, DC	Cable, 2,000 mm, 3-wire	Stainless steel

## Dimensioned drawings: IS 212







IS 212 ... N ... series

#### /// IS 218



Like the IS 212 series, these sensors are likewise robust with V4A housing and, in addition, offer a larger switching distance.





#### Benefits:

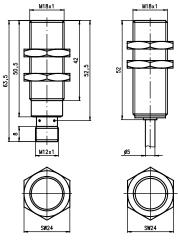
- Sturdy all-metal housing for high, permanent machine availability
- Housing of stainless steel 316L with degree of protection IP 69K for food & beverage applications as well as V2A housing material with degree of protection IP 68/ IP 69K
- Large ranges on stainless steel objects for reliable detection of machine parts, e. g. on packaging machinery in the foodstuffs sector
- Switching distance independent of object property (reduction factor 1)



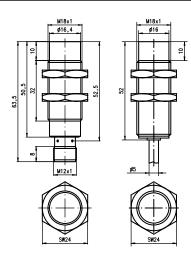
Direct access to the online product selector at www.leuze.com/en/is218

Part no.	Part description	Operating range Sa Typ. operating range limit Sn	Switching frequency	Type of installation	Switching output 1	Description	Connection	Material
50109734	IS 218FM/4N0.5F-20N-S12	0 16.2 mm 20 mm	200 Hz	Non-embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50109732	IS 218FM/4N0.5F-10E-S12	0 8.1 mm 10 mm	300 Hz	Embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50128167	IS 218FM/4NC.5-5E0-S12	0 4 mm 5 mm	100 Hz	Embedded	Transistor, PNP, break-contact (NC)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50128168	IS 218FM/4NC.5-5E0	0 4 mm 5 mm	100 Hz	Embedded	Transistor, PNP, break-contact (NC)	Reduction factor 1, DC	Cable, 2,000 mm, 3-wire	Stainless steel
50128169	IS 218FM/4N0.5-5E0-S12	0 4 mm 5 mm	100 Hz	Embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50128170	IS 218FM/4N0.5-5E0	0 4 mm 5 mm	100 Hz	Embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Cable, 2,000 mm, 3-wire	Stainless steel
50128171	IS 218FM/2N0.5-5E0-S12	0 4 mm 5 mm	100 Hz	Embedded	Transistor, NPN, make-contact (NO)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50128172	IS 218FM/2N0.5-5E0	0 4 mm 5 mm	100 Hz	Embedded	Transistor, NPN, make-contact (NO)	Reduction factor 1, DC	Cable, 2,000 mm, 3-wire	Stainless steel

## Dimensioned drawings: IS 218







IS 218 ... N ... series

Switching sensors

/// IS 230

With a switching distance of up to 40 mm, this series in the M30 stainless steel design offers the greatest possible flexibility during mounting.



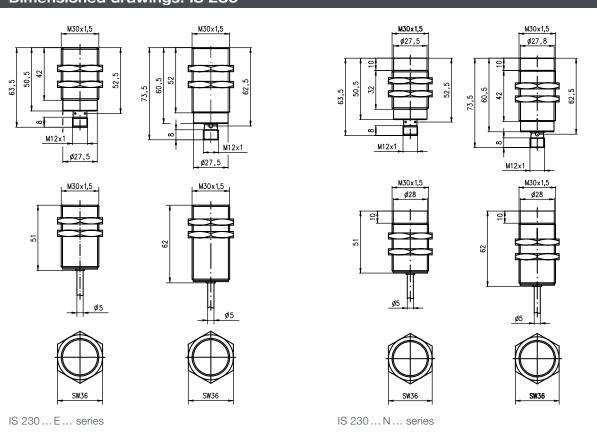
- Sturdy all-metal housing for high, permanent machine availability
- Housing of stainless steel 316L with degree of protection IP 69K for food & beverage applications as well as V2A housing material with degree of protection IP 68/ IP 69K
- Large ranges on stainless steel objects for reliable detection of machine parts, e. g. on packaging machinery in the foodstuffs sector
- Switching distance independent of object property (reduction factor 1)



Direct access to the online product selector at www.leuze.com/en/is230

Part no.	Part description	Operating range Sa Typ. operating range limit Sn	Switching frequency	Type of installation	Switching output 1	Description	Connection	Material
50111436	IS 230FM/4N0.5F-40N-S12	032.4 mm 40 mm	90 Hz	Non-embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50111435	IS 230FM/4N0.5F-20E-S12	0 16.2 mm 20 mm	100 Hz	Embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50128161	IS 230FM/4NC.5-10E-S12	0 8.1 mm 10 mm	50 Hz	Embedded	Transistor, PNP, break-contact (NC)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50128162	IS 230FM/4NC.5-10E	0 8.1 mm 10 mm	50 Hz	Embedded	Transistor, PNP, break-contact (NC)	Reduction factor 1, DC	Cable, 2,000 mm, 3-wire	Stainless steel
50128163	IS 230FM/4N0.5-10E-S12	0 8.1 mm 10 mm	50 Hz	Embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50128164	IS 230FM/4N0.5-10E	0 8.1 mm 10 mm	50 Hz	Embedded	Transistor, PNP, make-contact (NO)	Reduction factor 1, DC	Cable, 2,000 mm, 3-wire	Stainless steel
50128165	IS 230FM/2N0.5-10E-S12	0 8.1 mm 10 mm	50 Hz	Embedded	Transistor, NPN, make-contact (NO)	Reduction factor 1, DC	Connector, M12, 4-pin	Stainless steel
50128166	IS 230FM/2N0.5-10E	0 8.1 mm 10 mm	50 Hz	Embedded	Transistor, NPN, make-contact (NO)	Reduction factor 1, DC	Cable, 2,000 mm, 3-wire	Stainless steel

# Dimensioned drawings: IS 230



# ACCESSORIES: ALL STAINLESS STEEL SENSORS

## **Connection technology**

Connection cables

Part no.	Part description	Connection 1	No. of pins	Cable length	Sheathing material
50104571	K-D M12W-4P-2m-FAB	Connector, M12, angled, female	4-pin	2,000 mm	FAB
50104573	K-D M12W-4P-5m-FAB	Connector, M12, angled, female	4-pin	5,000 mm	FAB
50130690	KD U-M12-4W-V1-050	Connector, M12, angled, female	4-pin	5,000 mm	PVC
50104570	K-D M12A-4P-2m-FAB	Connector, M12, axial, female	4-pin	2,000 mm	FAB
50104572	K-D M12A-4P-5m-FAB	Connector, M12, axial, female	4-pin	5,000 mm	FAB
50130648	KD U-M12-4A-V1-020	Connector, M12, axial, female	4-pin	2,000 mm	PVC
50130652	KD U-M12-4A-V1-050	Connector, M12, axial, female	4-pin	5,000 mm	PVC

Further connection cables can be found on our website

## **Mounting systems**

Mounting brackets

Part no.	Part description	Design	Fastening at device	Fastening at system	Material
50113550	BT D08M.5	Angle, L-shape	Screw type	Through-hole mounting	Stainless steel
50113549	BT D12M.5	Angle, L-shape	Screw type	Through-hole mounting	Stainless steel

Further mounting brackets can be found on our website

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