M18 Non-Flush Capacitive Proximity Sensors 2–25 mm



M18 non-flush capacitive proximity sensors. Rated sensing distances adjustable 2–15 mm, 2–25 mm; NPN, PNP, AC/DC outputs; 2 m cable, M12 connector. 54 part numbers, each a fixed SEGMENsensor order code.

Sensing distance **2–25 mm** Outputs **NPN • PNP • AC/DC**

Connection **2 m cable • M12 connector** Part numbers **54**

Key facts

- Rated sensing distances: adjustable 2–15 mm, 2–25 mm.
- Supply: 10–30 V DC, 20–250 V AC/DC.
- Outputs: NPN, PNP, AC/DC. 16 NPN/PNP models have complementary NO + NC outputs.
- Connections: 2 m cable (27), M12 connector (27). Housing: Nickel-plated brass (28), PBT (26).
- Qualification samples of 1–5 pcs ship in 5–7 days; production is planned around your annual volume.

Family data

Housing	M18 thread, Nickel-plated brass (28), PBT (26)
Mounting	Non-flush (non-embeddable)
Rated sensing distance	adjustable 2–15 mm, 2–25 mm
Outputs	NPN, PNP, AC/DC
Supply	10–30 V DC, 20–250 V AC/DC
Connection	2 m cable, M12 connector
Targets	Metal and non-metal materials
Other electrical data	Per part-number datasheet, sent with the quotation

Reading the part number

SGC-GP18U-A250PA-C2

SGC SEGMENsensor capacitive

18 · U M18 non-flush (S = flush)

P · A PNP • NO (N = NPN, P = PNP, D = DC 2-wire, J = AC 2-wire, U = AC/DC; A = NO, B = NC, C = NO + NC)

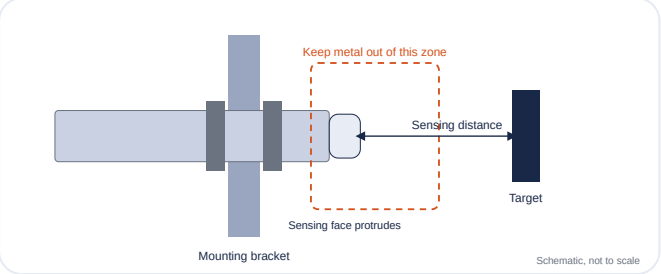
+ PL = plastic housing; 3W = 3-wire cable (AC/DC)

GP General-purpose series

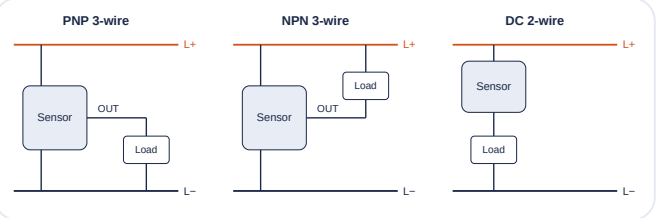
A250 Sensing distance in 0.1 mm: 2–25 mm (adj.); A = adjustable

C2 C2 = 2 m cable, Q4 = M12 connector

Mounting



Wiring



All part numbers

Part number	Sensing distance	Output	Supply	Connection	Housing
SGC-GP18U-A150NA-C2	2–15 mm (adj.)	NPN NO	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GP18U-A150NA-C2-PL	2–15 mm (adj.)	NPN NO	10–30 V DC	2 m cable	PBT
SGC-GP18U-A150NA-Q4	2–15 mm (adj.)	NPN NO	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GP18U-A150NA-Q4-PL	2–15 mm (adj.)	NPN NO	10–30 V DC	M12 connector	PBT
SGC-GP18U-A150NB-C2	2–15 mm (adj.)	NPN NC	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GP18U-A150NB-C2-PL	2–15 mm (adj.)	NPN NC	10–30 V DC	2 m cable	PBT
SGC-GP18U-A150NB-Q4	2–15 mm (adj.)	NPN NC	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GP18U-A150NB-Q4-PL	2–15 mm (adj.)	NPN NC	10–30 V DC	M12 connector	PBT
SGC-GP18U-A150NC-C2	2–15 mm (adj.)	NPN NO + NC	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GP18U-A150NC-C2-PL	2–15 mm (adj.)	NPN NO + NC	10–30 V DC	2 m cable	PBT
SGC-GP18U-A150NC-Q4	2–15 mm (adj.)	NPN NO + NC	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GP18U-A150NC-Q4-PL	2–15 mm (adj.)	NPN NO + NC	10–30 V DC	M12 connector	PBT
SGC-GP18U-A150PA-C2	2–15 mm (adj.)	PNP NO	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GP18U-A150PA-C2-PL	2–15 mm (adj.)	PNP NO	10–30 V DC	2 m cable	PBT
SGC-GP18U-A150PA-Q4	2–15 mm (adj.)	PNP NO	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GP18U-A150PA-Q4-PL	2–15 mm (adj.)	PNP NO	10–30 V DC	M12 connector	PBT
SGC-GP18U-A150PB-C2	2–15 mm (adj.)	PNP NC	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GP18U-A150PB-C2-PL	2–15 mm (adj.)	PNP NC	10–30 V DC	2 m cable	PBT
SGC-GP18U-A150PB-Q4	2–15 mm (adj.)	PNP NC	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GP18U-A150PB-Q4-PL	2–15 mm (adj.)	PNP NC	10–30 V DC	M12 connector	PBT

Part number	Sensing distance	Output	Supply	Connection	Housing
SGC-GP18U-A150PC-C2	2–15 mm (adj.)	PNP NO + NC	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GP18U-A150PC-C2-PL	2–15 mm (adj.)	PNP NO + NC	10–30 V DC	2 m cable	PBT
SGC-GP18U-A150PC-Q4	2–15 mm (adj.)	PNP NO + NC	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GP18U-A150PC-Q4-PL	2–15 mm (adj.)	PNP NO + NC	10–30 V DC	M12 connector	PBT
SGC-GP18U-A150UA-C2-3W	2–15 mm (adj.)	AC/DC NO	20–250 V AC/DC	2 m cable (3-wire)	Nickel-plated brass
SGC-GP18U-A150UA-C2-3W-PL	2–15 mm (adj.)	AC/DC NO	20–250 V AC/DC	2 m cable (3-wire)	PBT
SGC-GP18U-A150UA-Q4	2–15 mm (adj.)	AC/DC NO	20–250 V AC/DC	M12 connector	Nickel-plated brass
SGC-GP18U-A150UA-Q4-PL	2–15 mm (adj.)	AC/DC NO	20–250 V AC/DC	M12 connector	PBT
SGC-GP18U-A150UB-C2-3W	2–15 mm (adj.)	AC/DC NC	20–250 V AC/DC	2 m cable (3-wire)	Nickel-plated brass
SGC-GP18U-A150UB-Q4	2–15 mm (adj.)	AC/DC NC	20–250 V AC/DC	M12 connector	Nickel-plated brass
SGC-GP18U-A150UB-Q4-PL	2–15 mm (adj.)	AC/DC NC	20–250 V AC/DC	M12 connector	PBT
SGC-GP18U-A250NA-C2	2–25 mm (adj.)	NPN NO	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GP18U-A250NA-C2-PL	2–25 mm (adj.)	NPN NO	10–30 V DC	2 m cable	PBT
SGC-GP18U-A250NA-Q4	2–25 mm (adj.)	NPN NO	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GP18U-A250NB-C2	2–25 mm (adj.)	NPN NC	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GP18U-A250NB-C2-PL	2–25 mm (adj.)	NPN NC	10–30 V DC	2 m cable	PBT
SGC-GP18U-A250NB-Q4	2–25 mm (adj.)	NPN NC	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GP18U-A250NB-Q4-PL	2–25 mm (adj.)	NPN NC	10–30 V DC	M12 connector	PBT
SGC-GP18U-A250NC-C2	2–25 mm (adj.)	NPN NO + NC	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GP18U-A250NC-C2-PL	2–25 mm (adj.)	NPN NO + NC	10–30 V DC	2 m cable	PBT
SGC-GP18U-A250NC-Q4	2–25 mm (adj.)	NPN NO + NC	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GP18U-A250NC-Q4-PL	2–25 mm (adj.)	NPN NO + NC	10–30 V DC	M12 connector	PBT
SGC-GP18U-A250PA-C2	2–25 mm (adj.)	PNP NO	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GP18U-A250PA-C2-PL	2–25 mm (adj.)	PNP NO	10–30 V DC	2 m cable	PBT
SGC-GP18U-A250PA-Q4	2–25 mm (adj.)	PNP NO	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GP18U-A250PA-Q4-PL	2–25 mm (adj.)	PNP NO	10–30 V DC	M12 connector	PBT

Part number	Sensing distance	Output	Supply	Connection	Housing
SGC-GP18U-A250PB-C2	2–25 mm (adj.)	PNP NC	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GP18U-A250PB-C2-PL	2–25 mm (adj.)	PNP NC	10–30 V DC	2 m cable	PBT
SGC-GP18U-A250PB-Q4	2–25 mm (adj.)	PNP NC	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GP18U-A250PB-Q4-PL	2–25 mm (adj.)	PNP NC	10–30 V DC	M12 connector	PBT
SGC-GP18U-A250PC-C2	2–25 mm (adj.)	PNP NO + NC	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GP18U-A250PC-C2-PL	2–25 mm (adj.)	PNP NO + NC	10–30 V DC	2 m cable	PBT
SGC-GP18U-A250PC-Q4	2–25 mm (adj.)	PNP NO + NC	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GP18U-A250PC-Q4-PL	2–25 mm (adj.)	PNP NO + NC	10–30 V DC	M12 connector	PBT

Questions and answers

What can an M18 capacitive proximity sensor detect?

Capacitive sensors detect both metal and non-metal targets, for example liquids, wood, plastics and paper. The switching distance depends on the target material, so test with your actual material before fixing the position.

What does non-flush mean for an M18 sensor?

A non-flush (unshielded) sensor has a protruding sensing face and needs a metal-free zone around it, but reaches further than a flush model of the same size.

Which sensing distances are available?

This family has 54 part numbers with these rated sensing distances: adjustable 2–15 mm, 2–25 mm.

Which supply voltages are available?

Supply ranges in this family: 10–30 V DC, 20–250 V AC/DC.

Which connections are available?

Connection options: 2 m cable (27 models), M12 connector (27 models).

Can I order with the SEGMENsensor part number?

Yes. Each part number is one fixed configuration. Click Quote in the model table or enter the part number in the form; the datasheet and lead time are confirmed with the quotation.

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