6.5 mm Non-Flush Capacitive Proximity Sensors 2–4 mm



6.5 mm non-flush capacitive proximity sensors. Rated sensing distances 2 / 4 mm; NPN, PNP outputs; 2 m cable, M8 connector, M12 connector. 24 part numbers, each a fixed SEGMENsensor order code.

Sensing distance **2–4 mm** Outputs **NPN • PNP**

Connection **2 m cable • M8 connector • M12 connector**

Part numbers **24**

Key facts

- Rated sensing distances: 2 / 4 mm.
- Supply: 10–30 V DC.
- Outputs: NPN, PNP.
- Connections: 2 m cable (8), M8 connector (8), M12 connector (8). Housing: Nickel-plated brass.
- Qualification samples of 1–5 pcs ship in 5–7 days; production is planned around your annual volume.

Family data

Housing	Smooth Ø6.5 mm barrel, Nickel-plated brass
Mounting	Non-flush (non-embeddable)
Rated sensing distance	2 / 4 mm
Outputs	NPN, PNP
Supply	10–30 V DC
Connection	2 m cable, M8 connector, M12 connector
Targets	Metal and non-metal materials
Other electrical data	Per part-number datasheet, sent with the quotation

Reading the part number

SGC-GPD65U-040PA-C2

SGC SEGMENsensor capacitive

GP General-purpose series

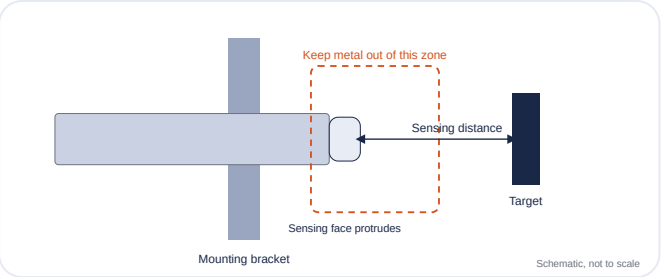
D65 · U 6.5 mm non-flush (S = flush)

040 Sensing distance in 0.1 mm: 4 mm

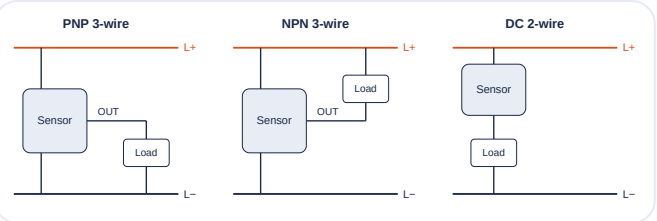
P · A PNP • NO (N = NPN, P = PNP, D = DC 2-wire, J = AC 2-wire, U = AC/DC; A = NO, B = NC, C = NO + NC)

C2 C2 = 2 m cable, Q3 = M8 connector, Q4 = M12 connector

Mounting



Wiring



All part numbers

Part number	Sensing distance	Output	Supply	Connection	Housing
SGC-GPD65U-020NA-C2	2 mm	NPN NO	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GPD65U-020NA-Q3	2 mm	NPN NO	10–30 V DC	M8 connector	Nickel-plated brass
SGC-GPD65U-020NA-Q4	2 mm	NPN NO	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GPD65U-020NB-C2	2 mm	NPN NC	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GPD65U-020NB-Q3	2 mm	NPN NC	10–30 V DC	M8 connector	Nickel-plated brass
SGC-GPD65U-020NB-Q4	2 mm	NPN NC	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GPD65U-020PA-C2	2 mm	PNP NO	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GPD65U-020PA-Q3	2 mm	PNP NO	10–30 V DC	M8 connector	Nickel-plated brass
SGC-GPD65U-020PA-Q4	2 mm	PNP NO	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GPD65U-020PB-C2	2 mm	PNP NC	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GPD65U-020PB-Q3	2 mm	PNP NC	10–30 V DC	M8 connector	Nickel-plated brass
SGC-GPD65U-020PB-Q4	2 mm	PNP NC	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GPD65U-040NA-C2	4 mm	NPN NO	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GPD65U-040NA-Q3	4 mm	NPN NO	10–30 V DC	M8 connector	Nickel-plated brass
SGC-GPD65U-040NA-Q4	4 mm	NPN NO	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GPD65U-040NB-C2	4 mm	NPN NC	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GPD65U-040NB-Q3	4 mm	NPN NC	10–30 V DC	M8 connector	Nickel-plated brass
SGC-GPD65U-040NB-Q4	4 mm	NPN NC	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GPD65U-040PA-C2	4 mm	PNP NO	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GPD65U-040PA-Q3	4 mm	PNP NO	10–30 V DC	M8 connector	Nickel-plated brass
SGC-GPD65U-040PA-Q4	4 mm	PNP NO	10–30 V DC	M12 connector	Nickel-plated brass
SGC-GPD65U-040PB-C2	4 mm	PNP NC	10–30 V DC	2 m cable	Nickel-plated brass
SGC-GPD65U-040PB-Q3	4 mm	PNP NC	10–30 V DC	M8 connector	Nickel-plated brass
SGC-GPD65U-040PB-Q4	4 mm	PNP NC	10–30 V DC	M12 connector	Nickel-plated brass

Questions and answers

What can a 6.5 mm 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 a 6.5 mm 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 24 part numbers with these rated sensing distances: 2 / 4 mm.

Which supply voltages are available?

Supply ranges in this family: 10–30 V DC.

Which connections are available?

Connection options: 2 m cable (8 models), M8 connector (8 models), M12 connector (8 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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