



Capacitive sensors for detecting granulates.



Capacitive sensors especially for the plastics industry.

- Easy adjustment in the application by pressing a pushbutton.
- Automatic detection of PNP or NPN output loads.
- Normally open / normally closed freely selectable.
- Clearly visible indication of the switching status.
- Resistant to electrostatic discharge.



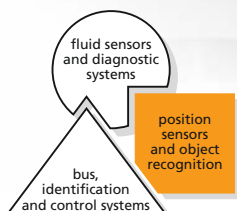
Application

Wherever plastic granulates are conveyed and processed, capacitive sensors monitor the levels in pipes and in silos or through sight glasses in loaders on injection moulding machines.

The sensor must reliably detect a wide range of different plastics.

Set-up

The new operating concept enables setting and adjustment of the output function by pressing a pushbutton. Automatic detection of the load simplifies the connection to common controllers.








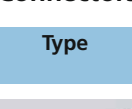



Applications:

Detection of plastic granulates and bulk material through non-metallic vessel walls.

Sensing range [mm]	Temperature of the sensing face [°C]	Teach button	Switching frequency [Hz]	Protection rating / class	Output function	Output stage	Order no.
Type M30 · non-flush mountable · M12 connector · 3-wire							
20	110	•	10	IP 65, IP 67,II	programmable	PNP / NPN*	KI5082
20	110	•	10	IP 65, IP 67,II	programmable	PNP	KI5083
Type M30 · non-flush mountable · 1/2" UNF connector · 2-wire							
20	110	•	10	IP 65, IP 67,II	programmable	AC / DC	KI0054
Type M30 · non-flush mountable · M12 connector · 4-wire							
20	250	•	10	IP 67,III	programmable	PNP	KN5121
Type M18 · non-flush mountable · M12 connector · 3-wire							
12	110	•	10	IP 65, IP 67,II	programmable	PNP / NPN*	KG5065
12	110	•	10	IP 65, IP 67,II	programmable	PNP	KG5066
Type M18 · non-flush mountable · 1/2" UNF connector · 2-wire							
12	110	•	10	IP 65, IP 67,II	programmable	AC / DC	KG0016



* automatic detection of the load



Accessories

Type	Description	Order no.
	Mounting adapter for type M30, G1 1/1", POM	E11033
	Mounting adapter for type M30, G1 1/1", PVDF	E11034
	Lock nut G1 1/2", POM, for mounting adapter E11033	E11031
	Lock nut G1 1/2", POM, for mounting adapter E11034	E11032
	Mounting adapter for type M18, G 3/4", POM	E43900
	Mounting adapter for type M18, G 3/4", PVDF	E43901
	Lock nut G 3/4", POM, for mounting adapter E43900	E43902
	Lock nut G 3/4", PVDF, for mounting adapter E43901	E43903
	Mounting clamp for type M30, PBT	E10077
	Mounting clamp for type M18, PBT	E10076

Common technical data			
Type		KI, KN, KG	KI0054, KG0016
Operating voltage	[V]	10...30 DC	20...250 DC / 30...250 AC
Current rating	[mA]	200	100 (80°C) / 150 (40°C)
Voltage drop	[V]	< 2.5	< 10 AC / < 8 DC
Switch point drift of Sr	[%]	± 20	
Switching hysteresis of Sr	[%]	1...15	
Short-circuit protection, pulsed		•	–
Reverse polarity / overload protection		• / •	• / –
Ambient temperature	[°C]	-25...80	
Material	sleeve connector pushbuttons	PBT reinforced glass-fibre PC reinforced glass-fibre TPE-U	
Switching status	LED	yellow	
EMC		EN 60947-5-2	

Connectors and splitter boxes

Type	Description	Order no.
	Socket, M12, 2 m black, PUR cable	EVC001
	Socket, M12, 2 m black, PUR cable	EVC004

Type	Description	Order no.
	Socket 1/2", UNF, 2m yellow, PVC cable	E10189
	Socket 1/2", UNF, 2m yellow, PVC cable	E10190

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