



# A first: full-metal housing offers robust safety

Fail-safe inductive sensors for industrial and mobile applications

- Robust full-metal housing
- Wide temperature range of -40...85°C
- Shock and vibration resistance
- TÜV-approved safety
- Safe state if target is absent



PL/SIL

IP69K

**ifm** – close to you!

Type	Total length [mm]	Enable zone [mm]	Safe switch-off distance [mm]	Order no.
4-wire · M12 connector				
M12	60	0...1.5	>6	<b>GF761S</b>
M18	60	0...3.5	>10.5	<b>GG761S</b>
M30	65	0...6	>18	<b>GI761S</b>

**Robust safety**

Fail-safe sensors protect both man and machine. To date, ifm is the only supplier to market fail-safe inductive sensors in a robust full-metal housing in order to ensure maximum reliability even under extreme conditions. The full-metal housing offers optimum protection against permanent moisture. In addition, the sensors are well secured against shock and vibration loads that are particularly prevalent in mobile machines. Due to the extended temperature range of -40 to 85 °C, they can be used in freezing cold and summer heat, indoors and outdoors on vehicles and machines.

**Applications**

Typical applications for fail-safe sensors can be service lids or manholes, where they ensure that the machine cannot start until the lid is closed. On mobile machines such as mobile cranes or cherry pickers, safety sensors often monitor the outriggers that are extended to prevent the vehicle from tipping over.

Common technical data		
Operating voltage	[V DC]	9...32
Housing materials		sensing face: stainless steel housing: stainless steel
Output function		2x OSSD
Safety-related sub-function		target is absent
Ambient temperature	[°C]	-40...85
Safety classification		ISO 13849-1: category 2, PL d IEC 61508: SIL 2, HFT=0, SC 2
Protection rating		IP65, IP66, IP67, IP68, IP69K

**BEST FRIENDS**

We reserve the right to make technical alterations without prior notice. · 11.2024  
ifm electronic gmbh · Friedrichstr. 1 · 45128 Essen



**Safety relay**  
With potential-free relay contacts



**Controller for mobile applications**  
Safety controller with CANopen Safety



**Fail-safe inductive sensors**  
No special target required



For further technical details, please visit: [ifm.com/fs/GF761S](http://ifm.com/fs/GF761S)