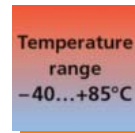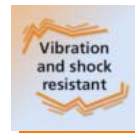ifm electronic

Touch sensor – start, stop and acknowledge

Capacitive touch sensors in compact cylindrical design

● **Dynamic, static function, preset**

● **High IP 69K protection rating and wide temperature range -40...85 °C**

● **Symbols on the sensing face can be selected separately**

● **Easy installation into housing with Ø 22.5 mm bore thanks to M22 x 1.5 thread**

● **Wear-free and maintenance-free thanks to switching without any mechanical pressure**

Vibration and shock resistant

Temperature range −40...+85°C

IP 69 K

Functions and technology

Capacitive touch sensors can be used, for example, as start and stop function on machines, as enable switch and for opening and closing gates. Compared to mechanical switches the sensors operate without wear. Dynamic touch sensors detect an approaching human hand and suppress interference such as water, layers of ice or foreign bodies to a large extent. However, a gloved hand will still trigger them.

Static touch sensors detect hands and objects even through glass for as long as the sensing face is covered which provides, for example, protection against vandalism. With the latching operating principle it is possible to switch the sensor on by touching briefly and to switch it off again by touching briefly again. Furthermore, the housing is resistant to oils and it is also impact and scratch resistant. It offers the protection rating IP 69K. LEDs for optical feedback signal that the sensor has been activated. The green LEDs can be controlled separately and, for example, be used to indicate the status of plant and machinery.

Type	Evaluation principle	Connection	Housing material	Protection	Current rating [mA]	Order no.
Output function NO · DC PNP						
M22	dynamic	0.3 m PUR cable	PA	IP65, IP67, IP69K	500	**KT5101**
M22	dynamic	0.3 m PUR cable with M12 plug	PA	IP65, IP67, IP69K	500	**KT5102**
M22	dynamic	0.3 m PUR cable	Stainless steel	IP65, IP67, IP69K	500	**KT5301**
M22	static	0.3 m PUR cable	Stainless steel	IP65, IP67, IP69K	500	**KT5305**
M22	static	0.3 m PUR cable	PA	IP65, IP67, IP69K	500	**KT5105**
M22	static	0.3 m PUR cable with M12 plug	PA	IP65, IP67, IP69K	500	**KT5106**
Output function NO · DC PNP · green LED can be controlled separately						
M22	dynamic	0.3 m PUR cable	PA	IP65, IP67, IP69K	500	**KT5109**

Symbol disc must be ordered separately

Mounting options

The sensor can be installed in all housings with a Ø 22.5 mm hole. The supplied lock nut is used for fixing.

Thanks to the M22 thread the sensor can be used for screw mounting without lock nut. Installation alignment of the sensor is not necessary since the clip showing the symbol for the sensing face is snapped in as the last step.

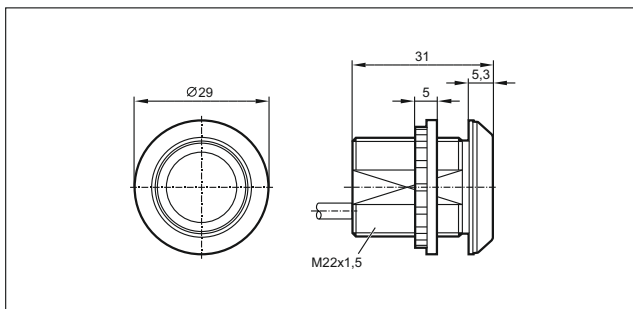Wiring is done via the tried-and-tested 3- or 4-wire technology.

Dimensions

Connection technology

Type	Description	Order no.
	Socket, M12, 2 m black, PUR cable	**EVC001**
	Socket, M12, 5 m black, PUR cable	**EVC002**
	Socket, M12, 2 m black, PUR cable	**EVC004**
	Socket, M12, 5 m black, PUR cable	**EVC005**

Common technical data

Operating voltage	[V DC]	24 (12...30)
Current consumption	[mA]	45
Ambient temperature	[°C]	-40...85

Accessories

Description	Order no.
Symbol disc, lettering: START	**E12377**
Symbol disc, lettering: STOP	**E12378**
Symbol disc, symbol: on	**E12379**
Symbol disc, symbol: off	**E12380**
Symbol disc, transparent	**E12386**

Type	Description	Order no.
Power supplies		
	Plastic housing, 24 V DC, 2.5 A	**DN1031**