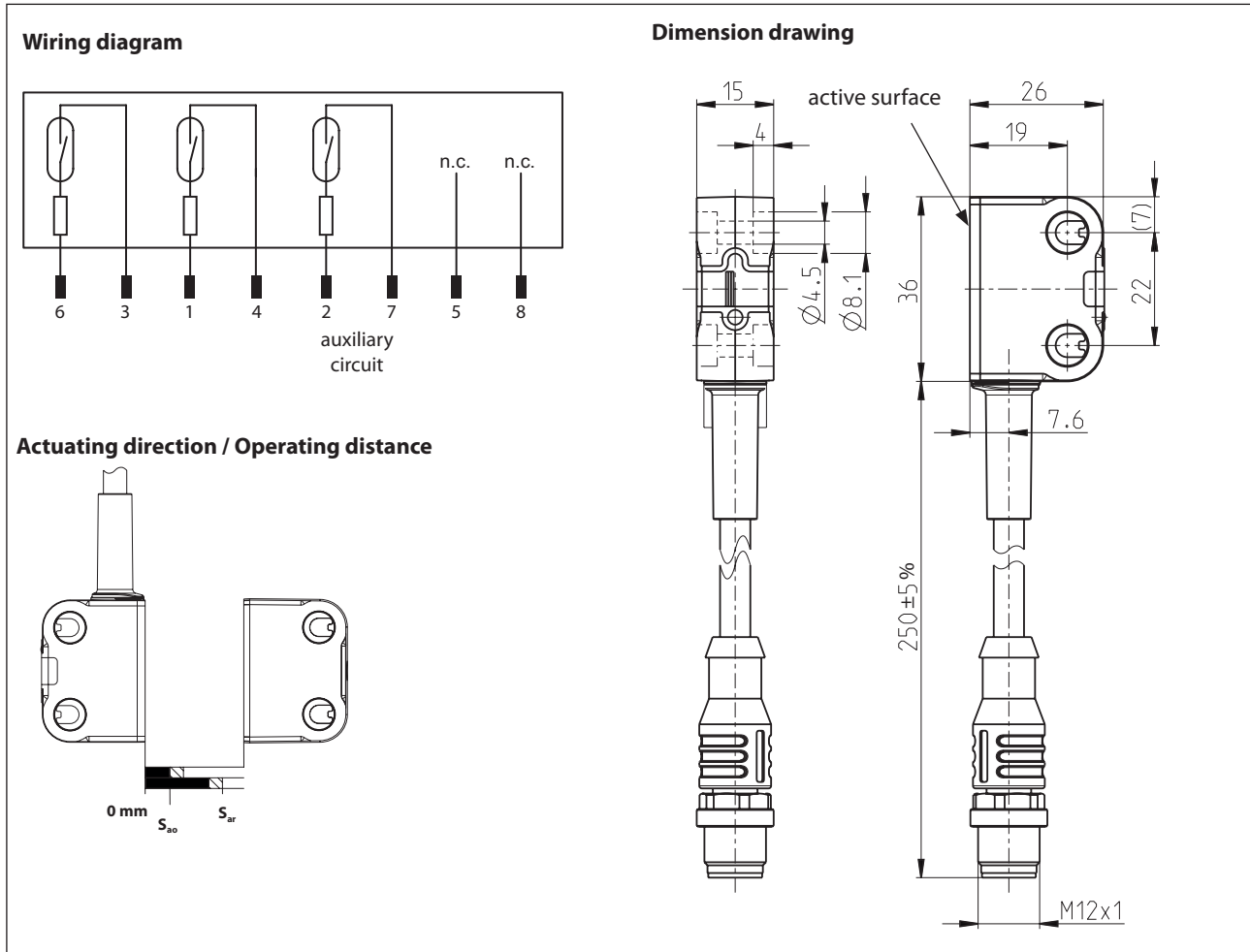


## Coded Magnetic Switch Series MAK-54

Description **MAK-5436-C-0.25-M12-M**

Article number **6490654360**



Technical data	
Switching function	2 x NO contact (safety circuit), 1 x NO (auxiliary circuit)
Reference magnet	TK-54-CD/2 (6402054085)
Assured operating distance - ON	$S_{ao} \geq 6 \text{ mm}$
Assured operating distance - OFF	$S_{ar} \leq 15 \text{ mm}$
Repeat accuracy	R $\pm 0,1 \text{ mm}$ , under same geometrical conditions at the same temperature
Utilization category	DC-12
Frequency of operating cycles	f 1 Hz

Electrical data	
Max. voltage	30 V DC
Max. switching current	0,08 A
Max. switching capacity	0,25 W
Internal series resistor	27 Ω, per channel
Protection class acc. to EN IEC 61558	III (safety extra-low voltage)
Note	Combinations of switching voltage and switching current must not exceed the maximum switching capacity.

Mechanical data	
Enclosure	PA66 + PA6, black; encapsulated reed contact
Tension relief	TPE, black
Mounting	2 holes Ø 4,5 (for M4 screws)
Temperature range	- 5 °C ... + 70 °C (cable not fixed mounted) - 25 °C ... + 70 °C (cable fixed mounted)
Mechanical life	3 x 10 <sup>8</sup> operating cycles
Vibration	10 G (10 - 1200 Hz)
Shock	100 G (11 ms, ½ Sinewave)
Protection type	IP 69 acc. to EN 60529 (only when plugged in with the corresponding counterpart)
Pollution degree	3 acc. to EN 60947-1
Termination type	Cable 8 x 0,25 mm <sup>2</sup> , PUR-Outer jacket with plug connector M12 male, 8-pole, A coded
Assembly position	optional (assembly on ferromagnetic material means reduction of switch distance)

ID for safety engineering	
B10d	20 x 10 <sup>6</sup> cycles (20 % load) 0,4 x 10 <sup>6</sup> cycles (nominal load)
Mission time	20 years

Standards	
	DIN EN ISO 13849-1
	EN 60947-5-3
Note	The EN 60947-5-3 standard is only fulfilled by a complete system that consists of a coded magnetic switch with related actuator and suitable safety controller.

EU Conformity	
	acc. to directive 2006/42/EC (Safety-of-Machinery-Directive)

Approvals	
	
	UL Listed, Ind. Cont. Eq. / Class 2 Power source

Notes	
	Contact protection must be provided for inductive and capacitive loads.