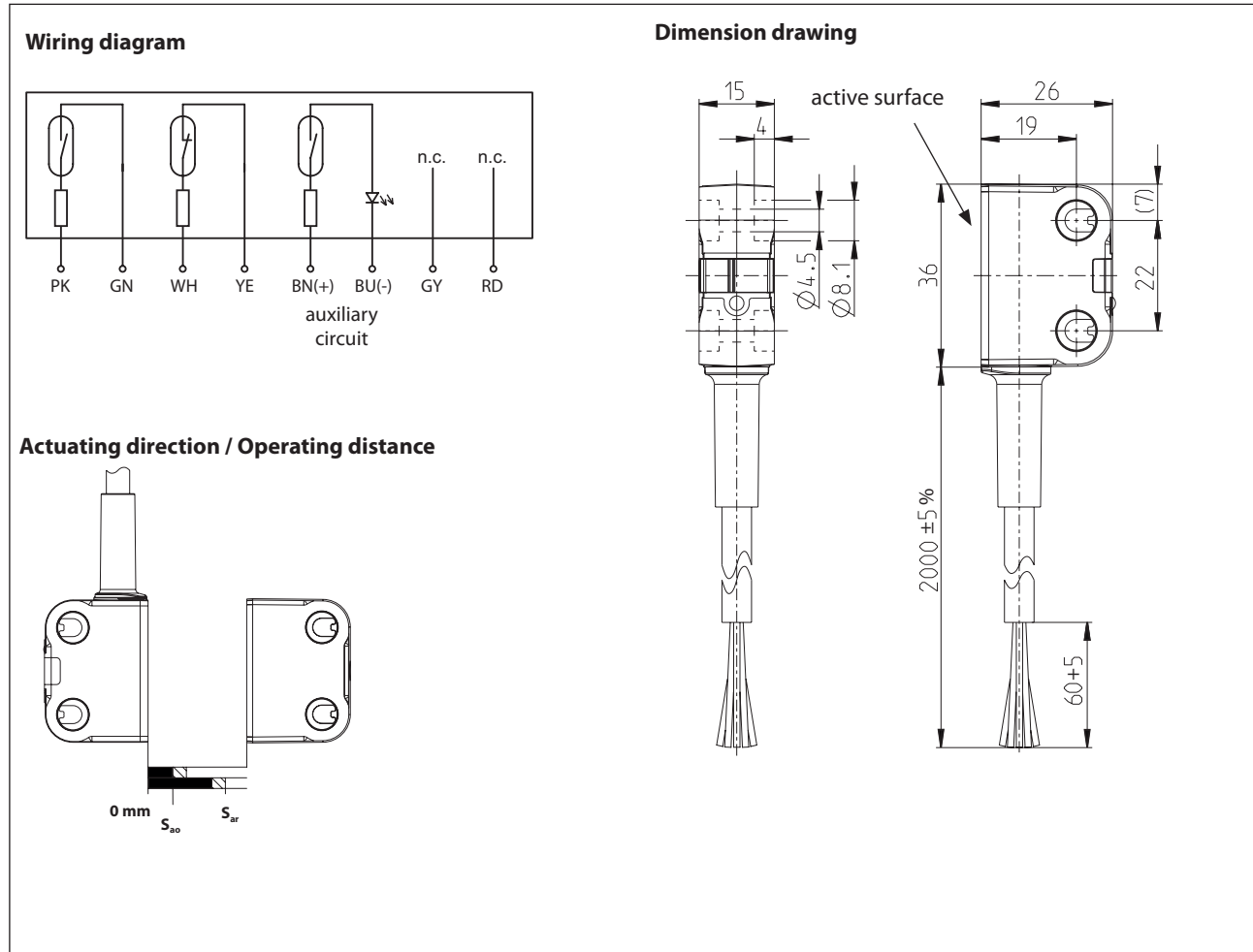


## Coded Magnetic Switch Series MAK-54

Description **MAK-5436-CD-2-LM**

Article number **6490654392**




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

Electrical data	
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.
Safety circuit	
Max. voltage	30 V DC
Max. switching current	0,08 A
Max. switching capacity	0,25 W
Internal series resistor	27 Ω, per channel
Auxiliary circuit	
Max. voltage	30 V DC
Max. switching current	0,02 A
Max. switching capacity	0,25 W
Voltage drop	$U_d \leq 3 \text{ V}$
Internal series resistor	27 Ω

Mechanical data	
Enclosure	PA66 + PA6, black; encapsulated reed contact
Tension relief	TPE, black
Mounting	2 holes Ø 4,5 (for M4 screws)
Indication	1 x LED yellow, actuation status (auxiliary circuit)
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
Pollution degree	3 acc. to EN 60947-1
Termination type	Cable 8 x 0,25 mm <sup>2</sup> , PUR-Outer jacket
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.

<b>EU Conformity</b>	
	acc. to directive 2006/42/EC (Safety-of-Machinery-Directive)
<b>Approvals</b>	
	UL Listed, Ind. Cont. Eq. / Class 2 Power source
<b>Notes</b>	
Contact protection must be provided for inductive and capacitive loads.	