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 Original

About this document

These operating instructions serve as a supplement to the operating instructions for MZM 100 / MZM 100 B. Deviating or additional instructions follow.

Product description

The safety switch with interlock function MZM 100 B-...-2930 or MZM 100 B-...-2930-3215 are a special version for process protection. The differences compared to the standard device MZM 100 B are described below.

Unlike MZM 100 B, the special version MZM 100 B-...-2930 only enable the safety outputs through triggering of the solenoid control (IN).

There is no time of the tampering protection of 10 minutes after forcible interruption of safety switch and actuator.

Unlike the standard version, the special version MZM 100 B-...-2930-3215 has also an inverted diagnostic signal (OUT).

Diagnostic function of the variants MZM 100 B-ST2-1P2P...-2930 or MZM 100 B-ST2-1P2P...-2930-3215

System condition	Solenoid control IN	LED			Safety outputs Y1, Y2	Diagnostic output OUT	
		green	red	yellow		MZM 100 B-...1P2PW/ -1P2PW2 ³⁾ -2930	MZM 100 B-...1P2PW/ -1P2PW2 ³⁾ -2930-3215
Safety guard open	0 V	On	Off	Off	0 V	0 V	24 V
Safety guard closed, actuator in	0 V	On	Off	Flashes	0 V	24 V	0 V
Safety guard closed and locked	24 V	On	Off	On	24 V	24 V	0 V
Solenoid interlock cannot be locked. Safety guard not correctly closed or magnet soiled	24 V	On	Off	Flashes	0 V	0 V	24 V
Error warning ¹⁾ , Safety guard locked	24 V	On	Flashes ²⁾	On	24 V	0 V	no change
Error	0 V / 24 V	On	Flashes ²⁾	Off	0 V	0 V	24 V

Function of the visual diagnostic LED's, the serial status signals and the safety outputs of the variants MZM 100 B-ST2-SD2P...-2930 or MZM 100 B-ST2-SD2P...-2930-3215 by means of an example

System condition	LED			Safety outputs Y1, Y2	Response byte bit n°:							
	green	red	yellow		7	6	5	4	3	2	1	0
Safety guard open	On	Off	Off	0 V	0	0	0	X	0	0	0	0
Safety guard closed, actuator in	On	Off	Flashes	0 V	0	0	0	X	0	0	1	0
Safety guard closed and locked	On	Off	On	24 V	0	0	0	X	0	1	1	1
Solenoid interlock cannot be locked. Safety guard not correctly closed or magnet soiled	On	Off	Flashes	0 V	0	0	0	X	0	0	0/1 ⁴⁾	0
Error warning ¹⁾ , Safety guard locked	On	Flashes ²⁾	On	24 V	0	1	0	X	0	1	1	1
Error	On	Flashes ²⁾	Off	0 V	1	0	0	X	0	X	X	0

¹⁾ after 30 min -> fault

²⁾ refer to flash code

³⁾ -1P2PW2: Version with latching force -R/-RE checks if clamping force can be reached (door can be locked)

⁴⁾ Version with latching force -R/-RE: Bit 1 = 0

Version without latching force: Bit 1 = 1

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