

# Control components

## Rocker Gen 3



- ▶ For use with Rexroth control grip Sense+
- ▶ For all construction, handling or agricultural applications

### Features

- ▶ Two shapes of Rocker available
- ▶ Three stable positions or one stable position
- ▶ Hall-effect proportional control up to:
  - ▶ – PLc capable
  - ▶ – PLd capable
- ▶ Improved integration size
- ▶ Backlighting option available

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## Type code

01	02	03
<b>F</b>	<b>A</b>	<b>A</b>

Rocker Generation		Performance Level	Mechanical stability	
01	Generation 3	PLc capable	3 stable positions	<b>F</b>
			1 stable position	<b>J</b>
		PLd capable	3 stable positions	<b>G</b>
			1 stable position	<b>K</b>

Output Signal		Cap color	
02	Analogic	Black <span style="color: black;">■</span>	<b>A</b>
		Orange <span style="color: orange;">■</span>	<b>B</b>

Backlight		Cap shape	
03	Without Backlight	Symetrical	<b>A</b>
		Asymetrical	<b>B</b>
	With Backlight	Symetrical	<b>C</b>
		Asymetrical	<b>D</b>

## Product description

### Mechanical stability

- ▶ 3 stable positions (FNR type)
- ▶ 1 stable position (directional type)

### Rocker caps shape

#### ▼ Symmetrical – A / C

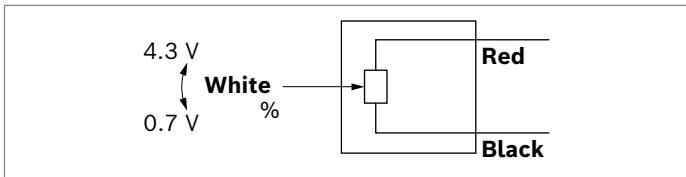


#### ▼ Asymmetrical – B / D

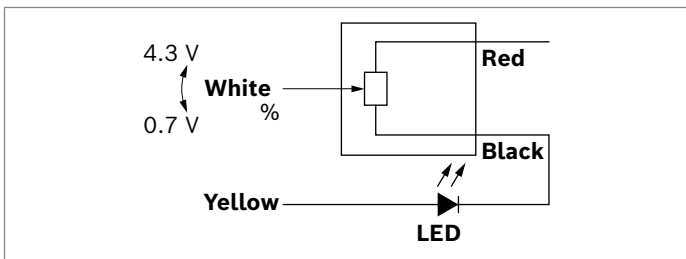


## Electric diagrams

#### ▼ Single output – F / J



#### ▼ Single output – F / J with Backlight

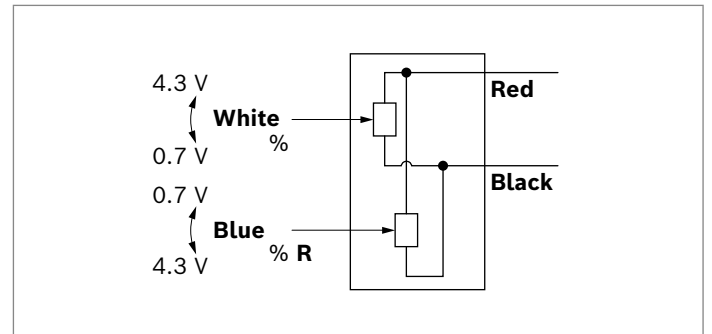


### Electrical architecture for single output Rocker (F / J)

- ▶ Fulfills ISO 13849 Category 1 requirements
- ▶  $MTTF_D = 23331$  years
- ▶ Designed to be implemented in PLC machine functions

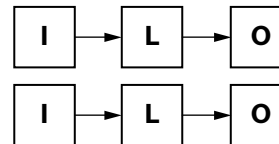


#### ▼ Dual output – G / K



### Electrical architecture for dual output Rocker (G / K)

- ▶ Fulfills ISO 13849 Category 3 requirements
- ▶  $MTTF_D = 13492$  years
- ▶ Designed to be implemented in PLd machine functions



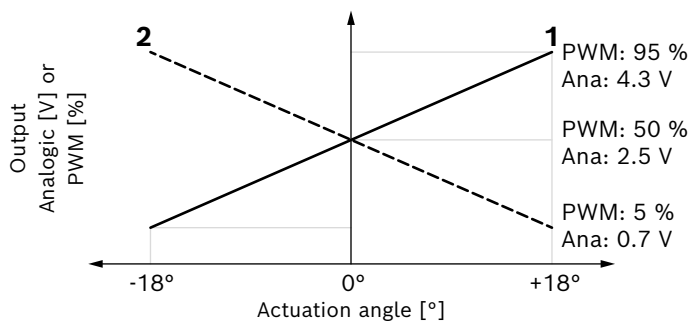
**Cross check to be done externally.**  
Can be done by the 4THE5  
CAN-D joystick.

## Technical data

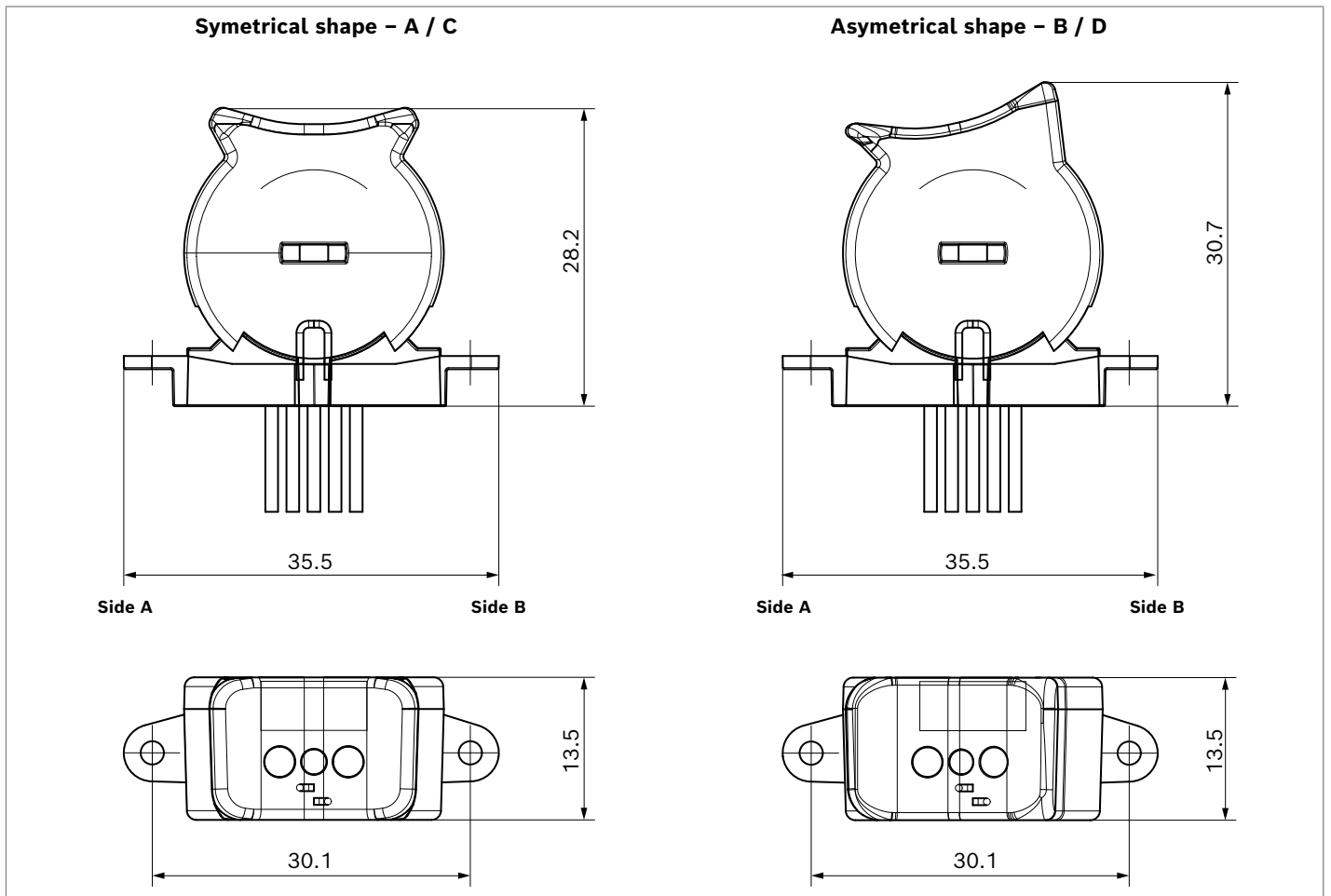
General			
Environmental protection		IP65 (IP69K when installed in control grip)	
Max. permissible force on the electrical functions	N	50	
Actuation angle	°	±18°	
Design life according to wiring recommendations	3 positions stable	Cycles	1 Mio cycles
	1 position stable	Cycles	2 Mio cycles
Diameter of the insulation of each conducting cable	mm	1.45	
Section of each conducting cable	mm <sup>2</sup>	0.25	
Electromagnetic compatibility (EMC)		Qualified to standards ISO 13766 rev. 2 (2018)	
Performance level according to ISO 13849	Single channel	Designed to be implemented in PLc machine functions	
	Double channel (redundancy)	Designed to be implemented in PLd machine functions	

Analogic ratiometric output			
Supply voltage	V	5±5 %	
Drawn current on supply line	Single output	mA	10
	Dual output	mA	20
Output voltage	Minimum	V	0.7
	Neutral	V	2.5
	Maximum	V	4.3
Signal precision	mV	±200	
Maximum output current	mA	2.5	
Wiring recommendations (resistor)	Pull-up	kΩ	One 1 kΩ
	Pull-down	kΩ	One 1 to 5.6 kΩ
Maximum load capacity	nF	42	

## Characteristic curves



## Dimensions



## Cleaning guidelines

- ▶ Never use solvents or aggressive cleaning agents like bleach. Clean the control grip using only water and a plastic cleaning agent if necessary.

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