

The Thumbwheel S12 is designed for electro-hydraulic applications. Long life and high reliability is ensured by the latest contactless hall-technology. By the combination of different actuators, lighting options and colours you can customise the appearance.

## Technical data

Mechanical life S12	5 million operating cycles
Operating temperature	-40°C to +85°C
Degree of protection	IP67
Functional safety	PLd compatible (EN ISO 13849, complies SIL2 to DIN EN IEC 61508)



	S12	Example					
		- A	- 2	- 1	- 1	-E1031	-X
<b>Basic unit</b>							
S12 Thumbwheel S12							
S12B Thumbwheel S12 with actuator version B							
S12C Thumbwheel S12 with actuator version C							
<b>Mounting frame</b>							
A with mounting frame							
without mounting frame							
<b>Illumination</b>							
1 Unlighted							
2 Functional lighting 2-colour red-green (separate switchable) U_LED= 4,5 - 5,5 V*							
3 Functional lighting 2-colour white-red (separate switchable) U_LED= 4,5 - 5,5 V*							
4 Functional lighting 2-colour white-green (separate switchable) U_LED= 4,5 - 5,5 V*							
*not possible with S12B and S12C!							
<b>Actuator colour</b>							
	S12	S12B	S12C				
1 Black	√	√	√				
2 Grey	√						
3 Blue	√						
4 Red	√		√				
5 Yellow	√						
6 Orange	√						
7 Green	√						

S12    - A    - 2    - 1    -1    -E1031    -X

### Mechanical function

- 1 T-0-T
- 2 R-0-R\*<sup>1</sup>
- 3 T-0-R\*<sup>1</sup>
- 4 R-0-T\*<sup>1</sup>
- 5 R-R\*<sup>1</sup>
- 6 R-R-0-R-R\*

\*not possible with S12B and S12C!

\*<sup>1</sup> not possible with S12B!

### Interface

0,5...2,5...4,5 V redundant by Ub= 5 V

1 axis

E103 1

0,5...2,5...4,5 V redundant + 2 direction signals by Ub= 5 V

1 axis

E104 1

Output option inverse dual

1

Output option dual

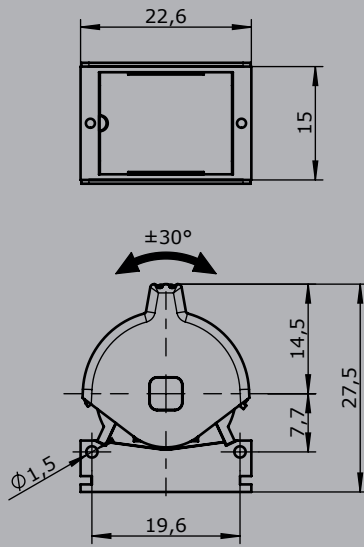
2

SPI - Interface on request

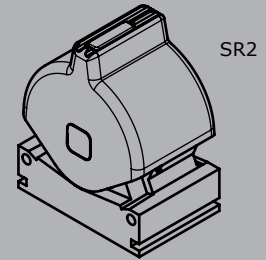
### Special model

- X Special / customer specified

S12 without mounting frame  
Version A

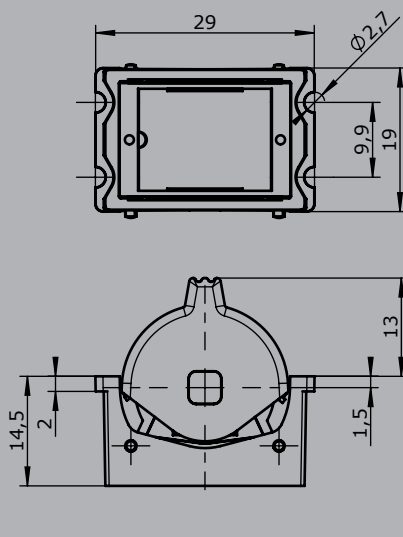


S12 with LED  
SR1

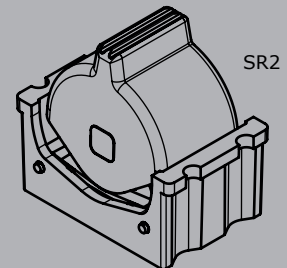


SR2

S12 with mounting frame  
Version A

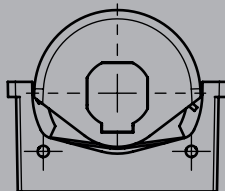


S12 without LED  
SR1



SR2

Version B  
with actuator KBAD 1731



Version C  
with actuator KBAD 1858

