



## AR5

Analog Rocker

### Introduction

The AR5 Analog Rocker has been developed to provide the reliability required in demanding environments - such as dashboards or armrest controls - for heavy duty industrial and off-road applications.

The unique design makes the rocker module an ideal proportional function solution for off-road machinery for cost-effective custom designs.

The AR5 has been designed to simplify the customization of fingertip rockers in an off-road vehicle application.



### Main Features

- Contactless sensing – Hall effect
- Rocker life > 2 million cycles
- Optional:
  - detent, life > 200K cycles
  - latching, life > 100K cycles
- Single sensor – optional second sensor for redundancy
- Integrated temperature compensation
- Short circuit protection
- Ideal solution for fingertip rocker designs
- Potted electronics

### Custom Modifications

- Deflection angle
- Detent / Latching detent
- Lever design allows for usage of longer levers
- Connector / Harness



## SPECIFICATIONS

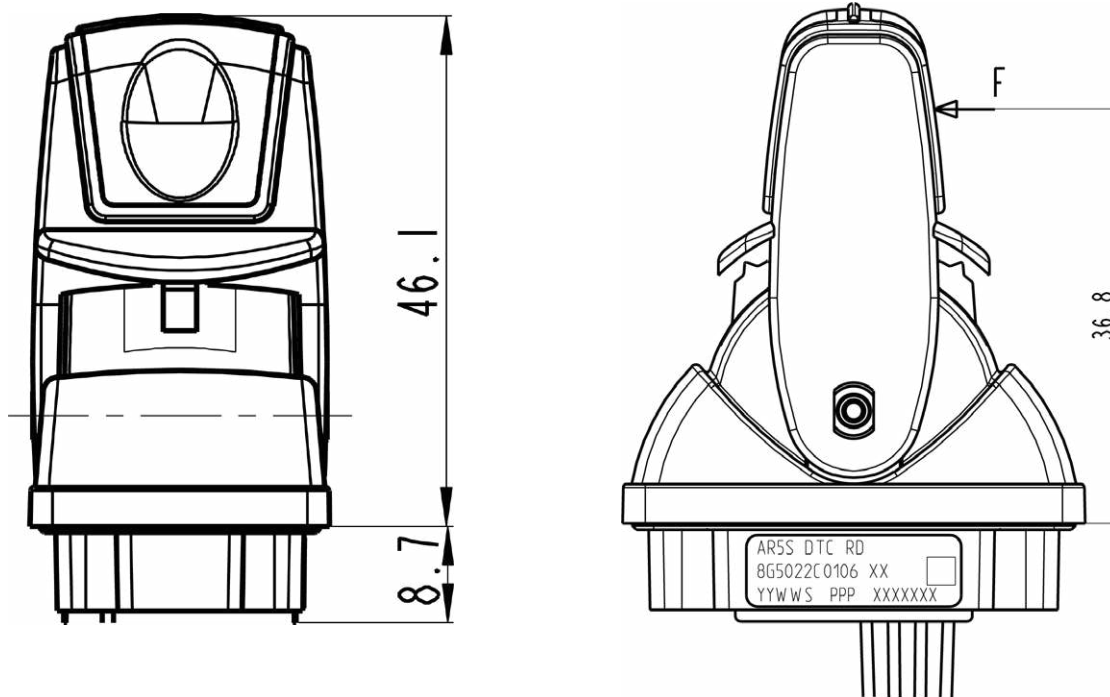
### Electrical

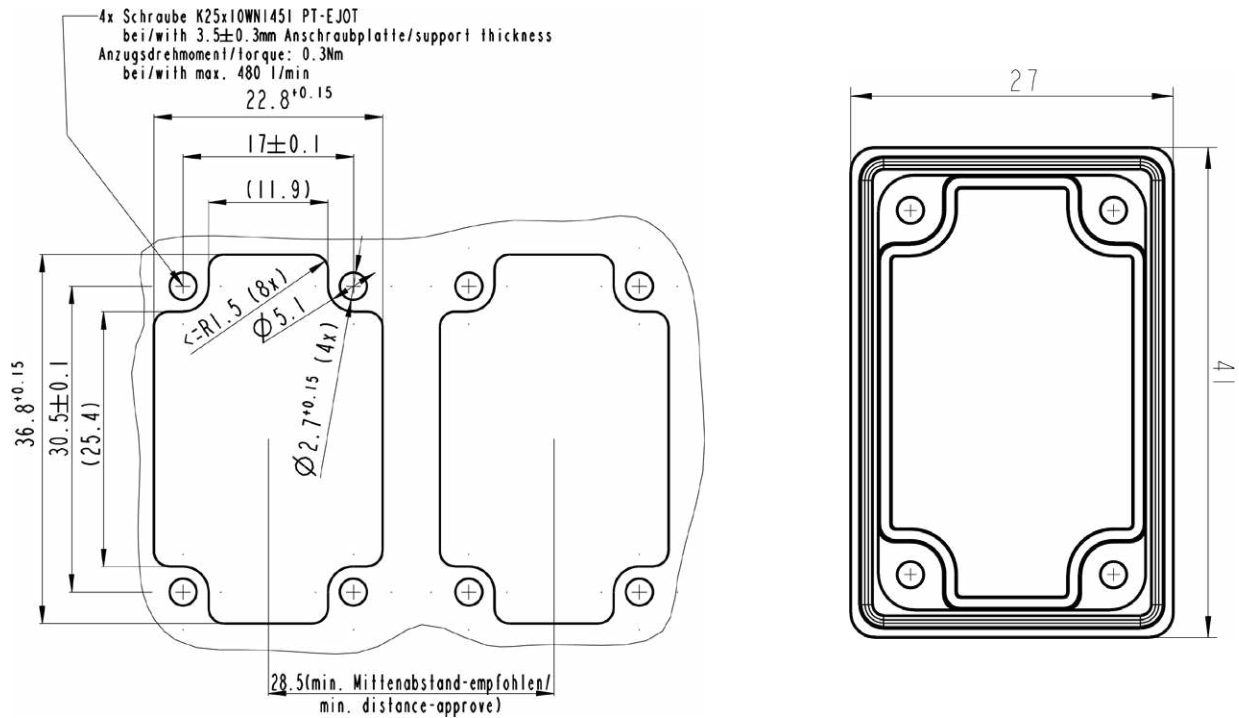
<b>Supply Ratings</b>	Voltage range DC current	9V ... 30V or 5.0 V ± 5% 50 mA at 24V
<b>Voltage Output</b>	Output 1 Output 2 <sup>(A)</sup>	0.5V ... 4.5V at 5Vcc 4.5V ... 0.5V at 5Vcc Output proportional to Vcc
<b>Pull-down resistor</b>	Recommendation	4.7 kΩ
<b>Output current</b>		max. 1 mA
<b>Other electrical Characteristics</b>	EMI	> 100 V/m

## Mechanical

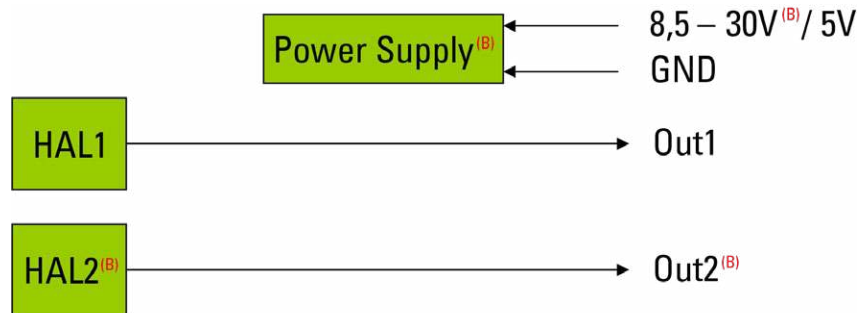
<b>Life</b> - rocker - detent - latching	> 10 million cycles (equivalent > 20 million movements) > 200k cycles > 100k cycles
<b>Operating temperature</b> - Storage - Working	- 40°C to 85°C - 40°C to 85°C
<b>Operating force</b>	4-6 N
<b>Vertical load maximum</b>	30 N
<b>Protection Level</b>	IP 67
<b>Rocker deflection angle</b>	± 40° max.

## DIMENSIONS





### BLOCK SCHEMATIC



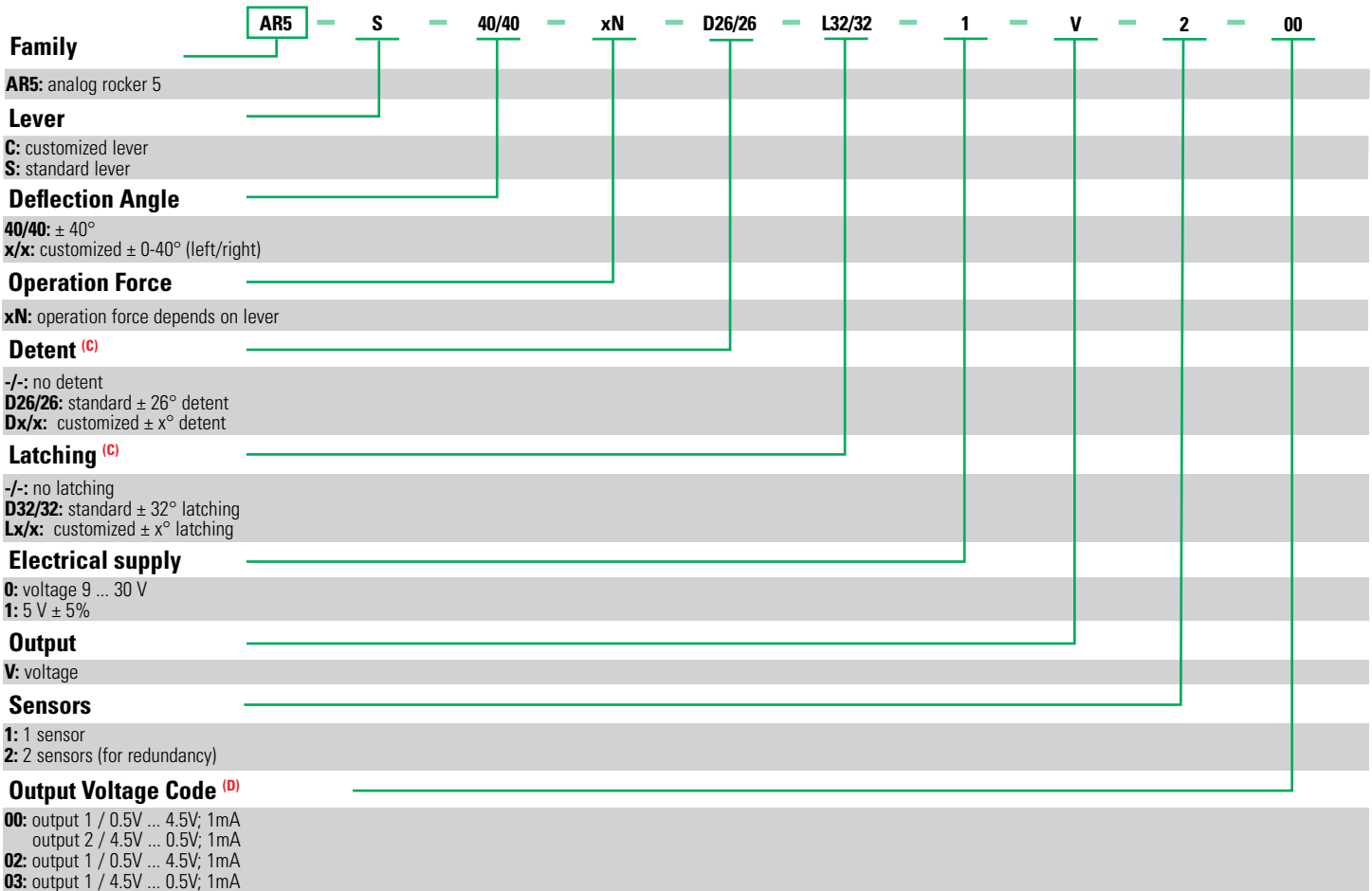
### PIN ASSIGNMENT

PIN	SIGNAL	FUNCTION (9-30V)	FUNCTION (5V)
1	UB (B)	SUPPLY VOLTAGE	NOT CONNECTED
2	GND	REFERENCE GROUND	REFERENCE GROUND
3	VCC (B)	NOT CONNECTED	SUPPLY VOLTAGE
4	OUT	OUTPUT SIGNAL	OUTPUT SIGNAL
5	OUT (B)	OPTIONAL REDUNDANT OUTPUT SIGNAL	OPTIONAL REDUNDANT OUTPUT SIGNAL



# ORDERING OPTIONS

Example : AR5-S-40/40-xN-D26/26-L32/32-1-V-2-00



# GENERAL NOTES

- (A) **for redundant version**
- (B) **optional**
- (C) **detent and latching positions must be teached-in in application**
- (D) **ratiometric to 5V supply**

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