

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

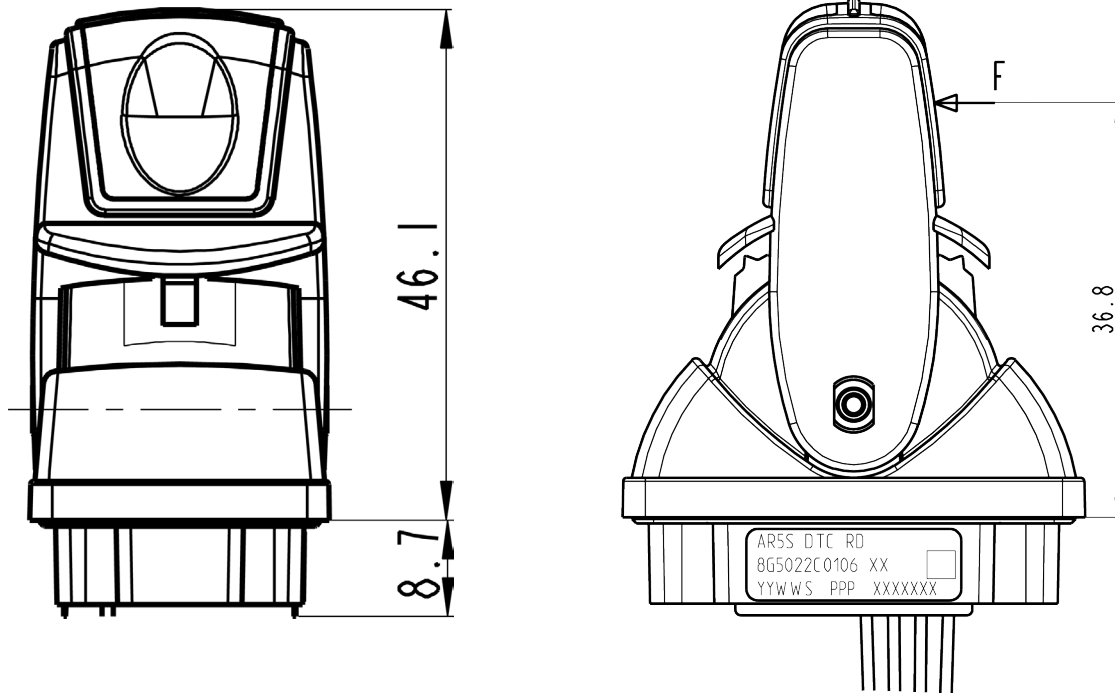
Electrical

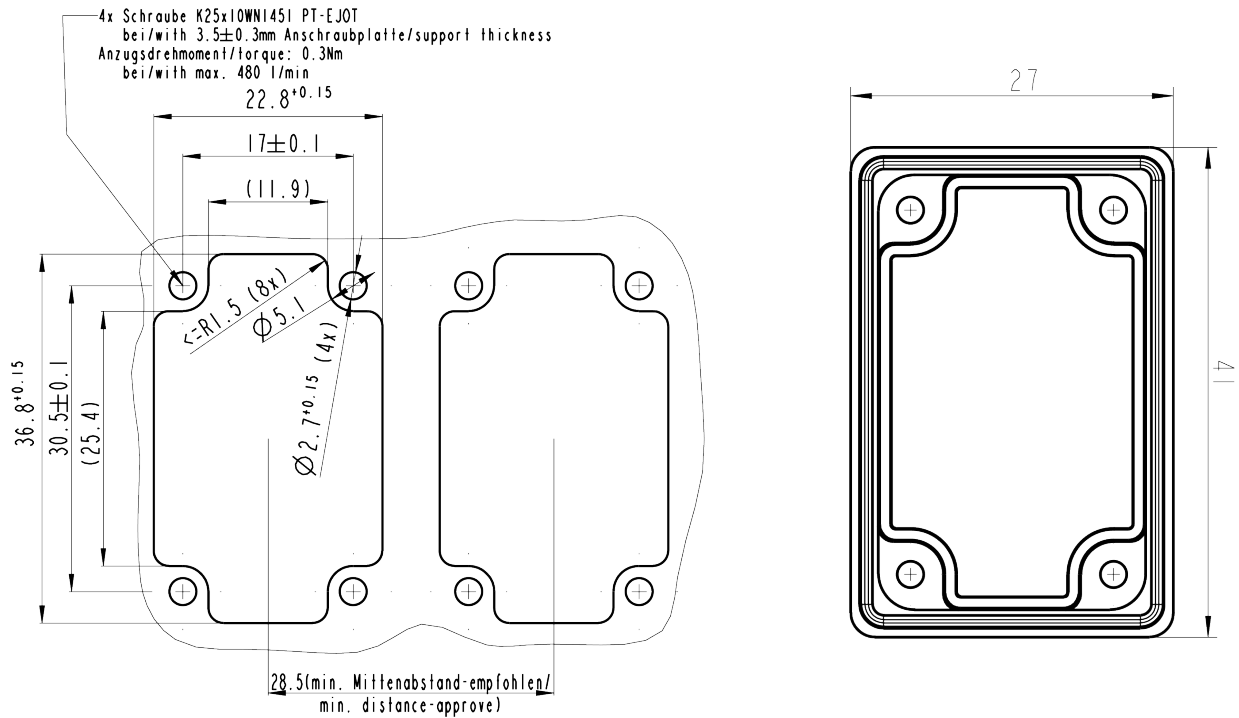
Supply Ratings	Voltage range DC current	9V ... 30V or 5.0 V ± 5% 50 mA at 24V
Voltage Output	Output 1 Output 2 ^(A)	0.5V ... 4.5V at 5Vcc 4.5V ... 0.5V at 5Vcc Output proportional to Vcc
Pull-down resistor	Recommendation	4.7 kΩ
Output current		max. 1 mA
Other electrical Characteristics	EMI	> 100 V/m

Mechanical

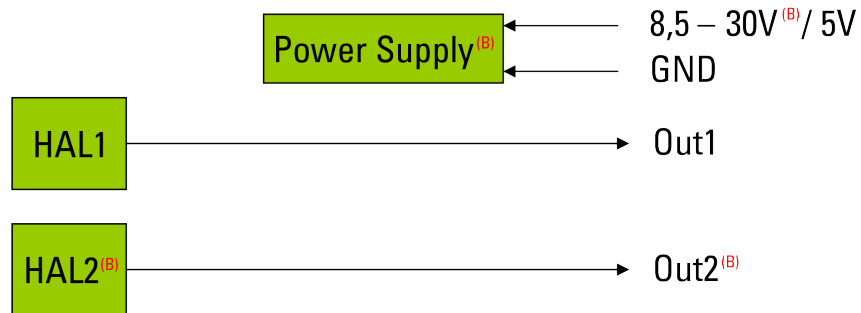
Life - rocker - detent - latching	> 10 million cycles (equivalent > 20 million movements) > 200k cycles > 100k cycles
Operating temperature - Storage - Working	- 40°C to 85°C - 40°C to 85°C
Operating force	4-6 N
Vertical load maximum	30 N
Protection Level	IP 67
Rocker deflection angle	± 40° max.

DIMENSIONS





BLOCK SCHEMATIC



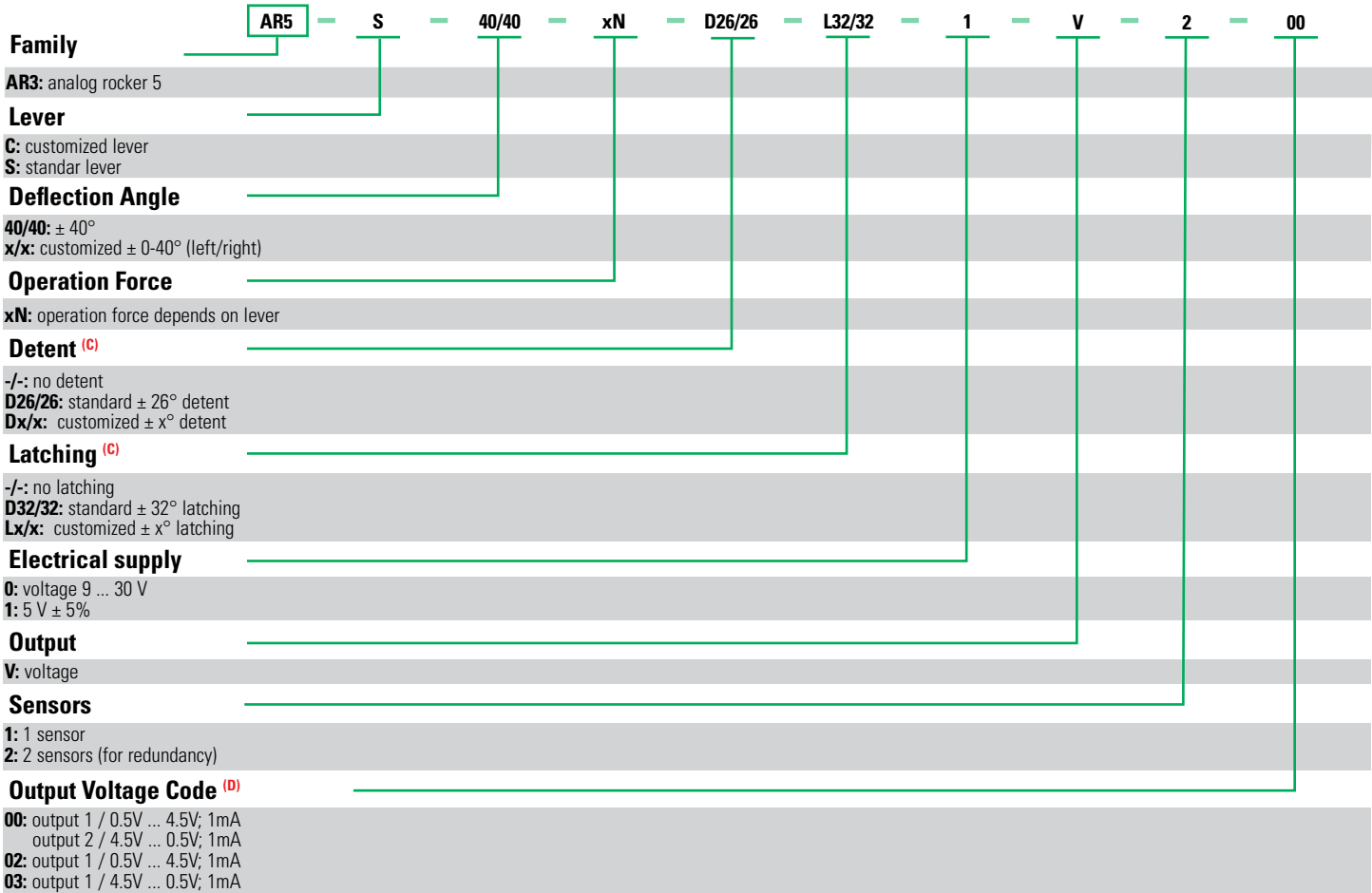
PIN ASSIGNMENT

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 been teached-in in application**
- (D) **ratiometric to 5V supply**

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