# Analog Rocker – AR5

AR5 Analog Rocker was 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.

AR5 has been designed to simplify the customisation of fingertip rockers in an off-road vehicle application.
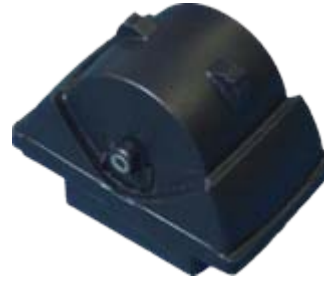
Main Features

- Design allows for usage of longer levers

- Contactless sensing – Hall effect

- Rocker life > 2 million cycles

- Optional detent / over travel, life > 200K cycles; optional latching, life > 100K cycles

- Single sensor - optional second sensor for redundancy

- Integrated temperature compensation

- Short circuit protection

- Ideal solution for fingertip rocker designs

Electrical Data		
Supply Ratings	Voltage range DC current	9V … 30V or 5.0 V ± 5% 50 mA at 24V
Voltage Output	Output 1 Output 2*	0.5V … 4.5V at 5Vcc 4.5V … 0.5V at 5Vcc Output proportional to Vcc
Total error		< 10%
Output current		1 mA max.
Other electrical Characteristics	EMI	> 100 V/m

Mechanical Data	
Life: - rocker - detent / overtravel - latching	> 2 million cycles > 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 65
Rocker deflection angle	± 40° max.

* for redundant version

Ordering code		1	2	3	4	5	6	7	8	9	10
	Example	AR5	C	40/40	xN	D26/26	L32/32	0	V	2	00
1 **Type**	AR5 = analog rocker 5										
2 **Lever**	C = customized lever S = standard lever										
3 **Deflection Angle**	40/40 = ± 40° x/x = customized ± 0-40° (left/right)										
4 **Operation Force**	xN = operation force depends on lever										
5 **Detent**	-/- = no detent D26/26 = standard ± 26° detent Dx/x = customized ± x° detent										
6 **Latching**	-/- = no latching L32/32 = standard ± 32° latching Lx/x = customized ± x° latching										
7 **Electrical supply**	0 = voltage 9 … 30 V 1 = 5 V ± 10%										
8 **Output**	V = voltage										
9 **Sensors**	1 = 1 sensor 2 = 2 sensors (for redundancy)										
10 **Output Voltage Code**	00 = output 1 / 0.5V … 4.5V; 1mA output 2 / 4.5V … 0.5V; 1mA 02 = output 1 / 0.5V … 4.5V; 1mA 03 = output 1 / 4.5V … 0.5V; 1mA										

Block Schematic AR5

Power Supply* → 8,5 – 30V* / 5V
GND

HAL1 → Out1

HAL2* → Out2*
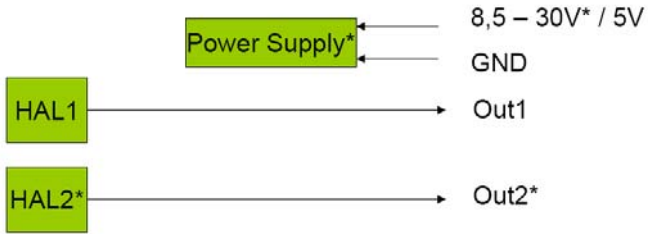
* Optional

Pin Assignment of AR5

Pin	Signal	Function 8,5 -30V	Function 5V
1	Ub *	Supply Voltage	Not connected
2	GND	Reference Ground	Reference Ground
3	Vcc *	Reserved (do not connect)	Supply Voltage
4	Out1	Output Signal	Output Signal
5	Out2*	Optional redundant Output Signal	Optional redundant Output Signal

Install dimensions