

## **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 costeffective custom designs.

AR5 has been designed to simplify the customisation of fingertip rockers in an offroad 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	0.5V 4.5V at 5Vcc
	Output 2*	4.5V 0.5V at 5Vcc
Tatalanan		Output proportional to Vcc
Total error		< 10%
Output current		1 mA max.
Other electrical	EMI	> 100 V/m
Characteristics		
Mechanical Data		
Life: - rocker		> 2 million cycles
- detent / ove	rtravel	> 200k cycles
<ul> <li>latching</li> </ul>		> 100k cycles
Operating temperatu	re	- 40°C to 85°C
- Storage		- 40°C to 65°C
- Working		40 0 10 00 0
Operating force		4-6 N
Vertical load maximu	ım	30 N
Protection Level		IP 65
Rocker deflection an	gle	± 40° max.

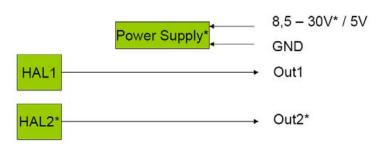
<sup>\*</sup> for redundant version

Or	Ordering code			2	3	4	5	6	7	8	9	10
		Example	AR5	С	40/40	χN	D26/26	L32/32	0	V	2	00
1	Туре	AR5 = analog rocker 5		1	1	Î	,		Î	1	t	t
2	Lever	C = customized lever										
		S = standard lever										
3	Deflection Angle	$40/40 = \pm 40^{\circ}$										
		$x/x = customized \pm 0-40^{\circ}$ (left/right)										
4	Operation Force	xN = operation force depends on lever										
5	Detent	-/- = no detent										
		$D26/26 = standard \pm 26^{\circ} detent$										
		$Dx/x = customized \pm x^{\circ} detent$										
6	Latching	-/- = no latching										
		$L32/32 = standard \pm 32^{\circ} latching$										
		$Lx/x = customized \pm x^{\circ} latching$										
7	Electrical supply	0 = voltage 9 30 V										
		$1 = 5 V \pm 10\%$										
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										



# **Analog Rocker – AR5**

#### **Block Schematic AR5**



### 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**

\* Optional

