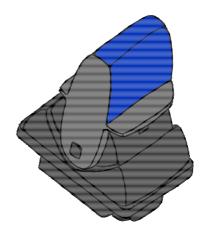


# **Analog Rocker – AR5 (Fingertip)**



AR5



Example AR5 solution (showing custom lever)

DTCs 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.

DTCs 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	ure	- 40°C to 85°C - 40°C to 85°C					

<ul><li>detent / overtravel</li><li>latching</li></ul>	> 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.		

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

#### **Custom modifications**

- Deflection angle
- Detent
- Overtravel
- Lever design
- Redundancy



# **Analog Rocker – AR5**

## **Order Code**

Or	dering code		1	2	3	4	5	6	7	8	9	10
		Example	AR5	С	40/40	χN	D26/26	L32/32	0	٧	2	00
1	Type	AR5 = analog rocker 5		1	Î	T			1	T T	Ť	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										
4.0		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										
L		03 = output 1 / 4.5V 0.5V; 1mA										

## **Block Schematic AR5**

# Power Supply\* GND HAL1 → Out1 HAL2\* Out2\*

## **Pin Assignment of AR5**

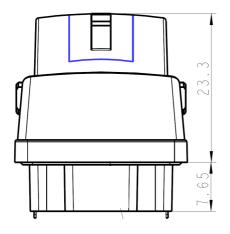
Pin	Signal	Function 8,5 -30V	Function 5V
1	Ub *	Supply Voltage	Not connected
2	GND	Reference Ground	Reference Ground
3	Vcc *	Reserved (do not connect)	Supply Voltage
4	Out1	Output Signal	Output Signal
5	Out2*	Optional redundant Output Signal	Optional redundant Output Signal

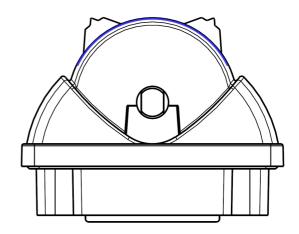
<sup>\*</sup> Optional

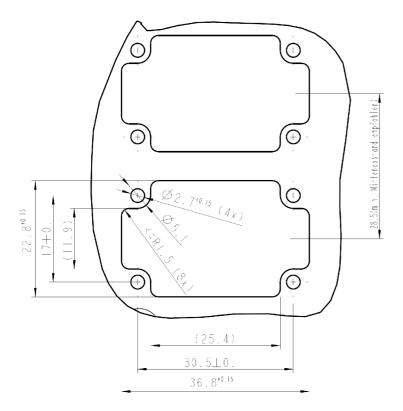


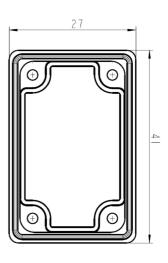
# **Analog Rocker – AR5**

## **Install dimensions**











# Analog Rocker – AR5

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