



## HRC Series

### FEATURES

- Horizontal rotation or unidirectional rotation operation, friction positioning
- Strong hand feeling at the center position or end
- Non-contacting Hall effect sensor, high reliability, long lifetime
- Optional supply voltage 9~32Vdc
- Optional redundant output

### APPLICATIONS

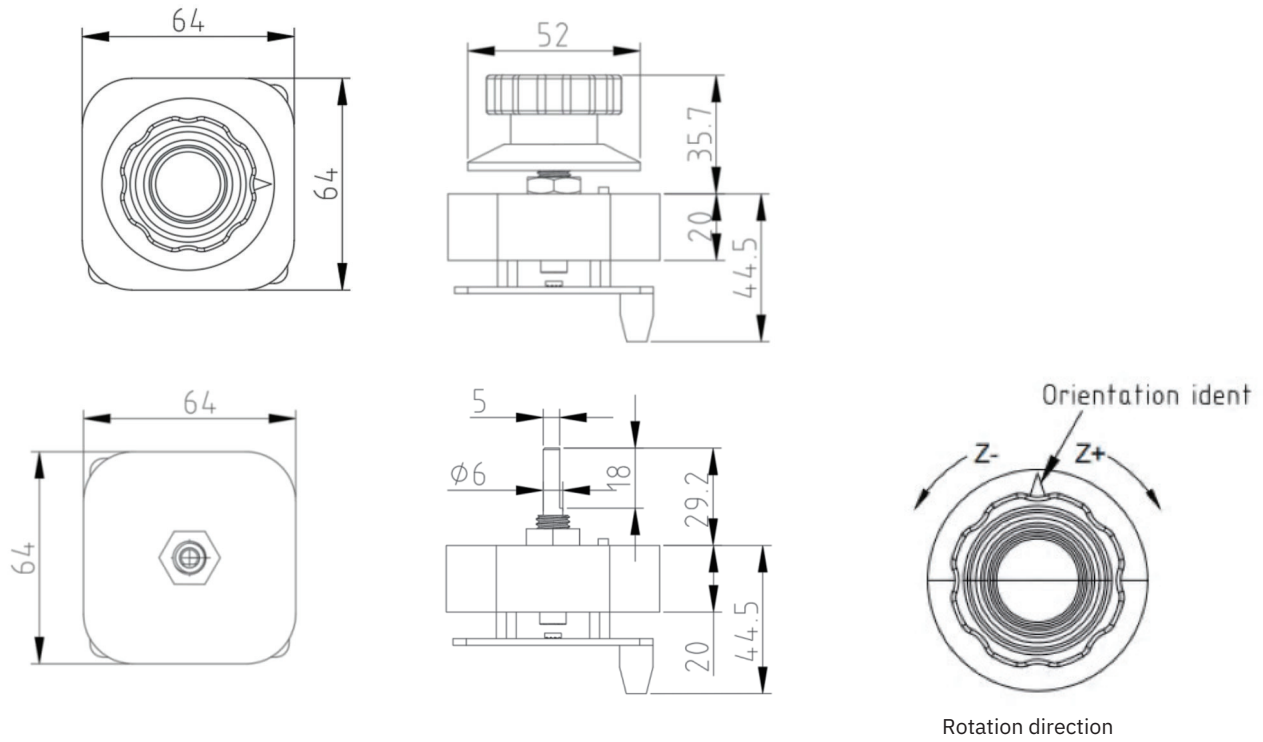
- Velocity transform function of various construction machinery
- Control panel of road machinery
- Control panel or control armrest box of various oil machinery and mining machinery



### SPECIFICATIONS

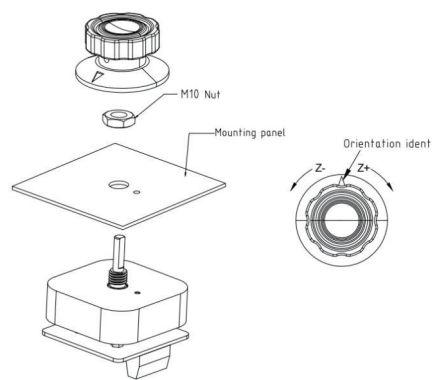
Mechanical data	
Rotation angle	±140° (dual direction operation, customized) 280° (unidirectional operation, customized)
Breakout force	(0.63±0.15) N·M
Operating force	(0.1±0.05) N·M
Maximum allowable force	120N
Mechanical life	>5 million cycles
Product weight	350g
Electrical data	
Supply voltage(Vs)	5.0±0.5Vdc or 9~32Vdc
Power current consumption	<11mA (per channel)
Center voltage	2.5V±0.1V
Output linearity voltage tolerance	±3%
Maximum overload voltage	20Vdc
Maximum Reverse voltage	-10Vdc
Load resistance	>10KΩ
Insulation resistance	>1000MΩ
EMC	100V/m
Environmental data	
Operating temperature	-40°C~+85°C
Storage temperature	-40°C~+85°C

**OUTLINE DIMENSIONS (UNIT:mm)**

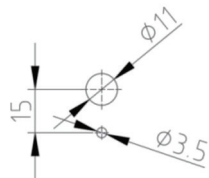


**MECHANICAL INSTALLATIONS**

Note: The thickness of the panel is  $\leq 4\text{mm}$



Mounting diagram



Panel cut-out dimensions

**ELECTRICAL CONNECTIONS**

No.	Wire Map	Function description
1	J1-1	9-32VAdc
2	J1-2	GND
3	J1-3	5Vdc
4	J1-4	A-out
5	J1-5	B-out (Redundant hall)

**ORDER GUIDE**

HRC		Hall Sensor Rotary Controller			
		<b>Code</b>	<b>Operation mode</b>		
		DD	From center position, clockwise and counterclockwise operation		
		SD	Operation from end to end		
		<b>Code</b>	<b>Output signal</b>		
		H11	Supply voltage 5Vdc, 10%~50%~90%Vs output		
		H13	Supply voltage 5Vdc, 20%~50%~80%Vs output		
		H21	Supply voltage 5Vdc, 10%~50%~90%Vs and 90%~50%~10%Vs redundant output		
		H23	Supply voltage 5Vdc, 20%~50%~80%Vs and 80%~50%~20%Vs redundant output		
		W11	Supply voltage 9~32Vdc, 0.5~2.5~4.5V ratiometric output		
		W13	Supply voltage 9~32Vdc, 1~2.5~4V ratiometric output		
		W21	Supply voltage 9~32Vdc, 0.5~2.5~4.5V and 4.5~2.5~0.5V redundant ratiometric output		
		W23	Supply voltage 9~32Vdc, 1~2.5~4V and 4~2.5~1V redundant ratiometric output		
		<b>Code</b>	<b>Rotating wheel</b>		
		NRW	No rotation wheel		
		RW1	Rotation wheel (Ø52mm)		
		RW2	Rotation wheel (Ø66mm)		
		<b>Code</b>	<b>Wiring</b>		
		L	Cable wiring (AF200, AWG28#, length 300mm)		
		T	Terminal block wiring (default)		
<b>HRC</b>	<b>DD</b>	<b>H11</b>	<b>RW1</b>	<b>L</b>	<b>Complete Type Specification</b>

The information provided herein is to the best of our knowledge true and accurate, it is provided for guidance only. All specifications are subject to change without prior notification.

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