

### MAIN FEATURES

Measuring wheel series designed for specific industrial applications where is required to measure a linear movement (i.e. continuous sheet cutting machines of wood, textiles, glass, etc.).

The body is entirely designed of aluminium and mounted using an oscillating arm pivoted on the shaft. The weight of the metric wheel keeps a stable contact with the material, allowing an accurate measurement of both length and speed. Wheel surface can be in crossed-knurl aluminium, special anti-oil or anti-sliding rubber.

- 3 channel encoder (A / B / Z) up to 5000 ppr
- Power supply up to +30 V DC with several electrical interfaces available
- Up to 105 kHz output frequency
- Compact size
- Cable output



### ORDERING CODE

RH200 A 500 S 5/28 P 8 X 3 PR .XXX

**MODEL**  
200 mm measuring wheel RH200

**WHEEL SURFACE**  
smooth A  
knurled B  
rubberized C  
without wheel /

**RESOLUTION**  
ppr from 50 to 5000  
refer to the available pulses list

**ZERO PULSE**  
without zero pulse S  
with zero pulse Z

**POWER SUPPLY**  
(with L electrical interface) 5 V DC 5  
5 ... 28 V DC 5/28

**ELECTRICAL INTERFACE**  
NPN open collector C  
push-pull P  
line driver L  
power supply 5/28V - output RS-422 RS

**SHAFT DIAMETER**  
mm 8

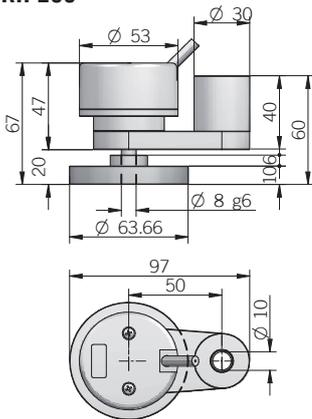
**ENCLOSURE RATING**  
IP 54 X

**MAX ROTATION SPEED**  
3000 rpm 3

**OUTPUT TYPE**  
cable (standard length 0,5 m) PR  
preferred cable lengths 1,5 / 2 / 3 / 5 / 10 m, to be added after DIRECTION TYPE (eg. PR5)

**VARIANT**  
custom version XXX

## RH 200



dimensions in mm

## ELECTRICAL SPECIFICATIONS

<b>Resolution</b>	from 50 to 5000 ppr
<b>Power supply</b> <sup>1</sup>	5 = 4,5 ... 5,5 V DC 5/28 = 4,5 ... 30 V DC (reverse polarity protection)
<b>Current consumption without load</b>	100 mA max
<b>Max load current</b>	C / P = 50 mA / channel L / RS = 20 mA / channel
<b>Electrical interface</b> <sup>2</sup>	NPN open collector (AEIC-7273, pull-up max +30 V DC) push-pull / line driver HTL (AEIC-7272) line driver RS-422 (AELT-5000 or equivalent)
<b>Max output frequency</b>	105 kHz up to 1024 ppr 500 kHz from 2000 ppr
<b>Counting direction</b>	A leads B clockwise (shaft view)
<b>Electromagnetic compatibility</b>	according to 2014/30/EU directive
<b>RoHS</b>	according to 2015/863/EU directive
<b>UL / CSA</b>	certificate n. E212495

<sup>1</sup> as measured at the transducer without cable influences<sup>2</sup> for further details refer to OUTPUT LEVELS on TECHNICAL BASICS section<sup>3</sup> measured on the transducer flange<sup>4</sup> condensation not allowed

## MECHANICAL SPECIFICATIONS

<b>Shaft diameter</b>	∅ 8 mm
<b>Enclosure rating</b>	IP 54 (IEC 60529)
<b>Max rotation speed</b>	3000 rpm
<b>Shock</b>	50 G, 11 ms up to 2500 ppr (IEC 60068-2-27)
<b>Vibration</b>	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
<b>Starting torque (at +20°C / +68°F)</b>	< 0,01 Nm (1,42 Ozin)
<b>Bearing stage material</b>	EN-AW 2011 aluminum
<b>Housing material</b>	PA66 glass fiber reinforced
<b>Shaft material</b>	1.4305 / AISI 303 stainless steel
<b>Support material</b>	EN-AW 2011 aluminum
<b>Wheel material</b>	EN-AW 2011 aluminum
<b>Bearings</b>	n.2 ball bearings
<b>Bearings life</b>	10 <sup>9</sup> revolutions
<b>Operating temperature</b> <sup>3,4</sup>	-10° ... +70°C (+14° ... +158°F)
<b>Storage temperature</b> <sup>4</sup>	-25° ... +70°C (-13° ... +158°F)
<b>Encoder + support weight</b>	250 g (8,82 oz)
<b>Wheel weight</b>	90 g (3,17 oz)

## CONNECTIONS

Function	Cable C / P	Cable L / RS
+V DC	red	red
0 V	black	black
A+	green	green
A-	/	brown or grey
B+	yellow	yellow
B-	/	orange
Z+	blue	blue
Z-	/	white
⊥	shield	shield

## RESOLUTIONS

50\* - 100 - 200 - 250 - 400 - 500 - 512 - 1000 - 1024 - 2000 - 2048 - 2500 - 4096 - 5000

\*available without zero pulse

please directly contact our offices for other pulses, preferred resolutions in bold