

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 1024 ppr
- Power supply up to +30 V DC with several electrical interfaces available
- Up to 105 kHz output frequency
- Compact size
- Cable output

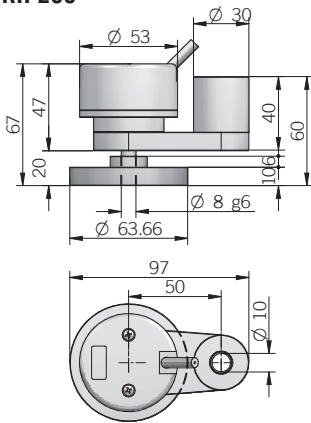


ORDERING CODE

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

MODEL 200 mm measuring wheel	RH200																	
WHEEL SURFACE smooth knurled rubberized without wheel	A B C /																	
RESOLUTION ppr from refer to the available pulses list	50 to 1024																	
ZERO PULSE without zero pulse with zero pulse	S Z																	
POWER SUPPLY (with L electrical interface) 5 V DC 5 ... 28 V DC	5 5/28																	
ELECTRICAL INTERFACE NPN open collector push-pull line driver power supply 5/28V - output RS-422	C P L RS																	
SHAFT DIAMETER mm	8																	
ENCLOSURE RATING IP 54	X																	
MAX ROTATION SPEED rpm	3																	
OUTPUT TYPE cable (standard length 0,5 m) preferred cable lengths 1,5 / 2 / 3 / 5 / 10 m, to be added after DIRECTION TYPE (eg. PR5)	PR																	
VARIANT custom version	XXX																	

RH 200



dimensions in mm

ELECTRICAL SPECIFICATIONS

Resolution	from 50 to 1024 ppr
Power supply¹	5 = 4,5 ... 5,5 V DC 5/28 = 4,5 ... 30 V DC (reverse polarity protection)
Current consumption without load	100 mA max
Max load current	C / P = 50 mA / channel L / RS = 20 mA / channel
Electrical interface²	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 similar)
Max output frequency	105 kHz
Counting direction	A leads B clockwise (shaft view)
Electromagnetic compatibility	according to 2014/30/EU directive
RoHS	according to 2011/65/EU directive
UL / CSA	certificate n. E212495

¹ as measured at the transducer without cable influences² for further details refer to OUTPUT LEVELS on TECHNICAL BASICS section³ measured on the transducer flange⁴ condensation not allowed

MECHANICAL SPECIFICATIONS

Shaft diameter	∅ 8 mm
Enclosure rating	IP 54 (IEC 60529)
Max rotation speed	3000 rpm
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
Starting torque (at +20°C / +68°F)	< 0,01 Nm (1,42 Ozin)
Bearing stage material	EN-AW 2011 aluminum
Housing material	PA66 glass fiber reinforced
Shaft material	1.4305 / AISI 303 stainless steel
Support material	EN-AW 2011 aluminum
Wheel material	EN-AW 2011 aluminum
Surface material	Smooth / Knurled = EN-AW 2011 aluminium Rubberized = Nitrile NBR 80 ± 5 Shore A
Bearings	n.2 ball bearings
Bearings life	10 ⁹ revolutions
Operating temperature^{3,4}	-10° ... +70°C (+14° ... +158°F)
Storage temperature⁴	-25° ... +70°C (-13° ... +158°F)
Encoder + support weight	250 g (8,82 oz)
Wheel weight	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

*available without zero pulse

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