RH 200 A / B / C
RH - RM 500 A / B / C
METRIC WHEELS

ISO 9001:2000

Main features

Metric 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.). Precise reading and high stress resistance are the main features of these encoders. The body is entirely designed of aluminium and mounted using an oscillating arm pivoted on the shaft. It comes with an integrated self-lubricating compact box to assure a long operation period without any maintenance. The weight of the metric wheel keeps a stable contact with the material, allowing an accurate measurement of both length and speed.
The wheel surface can be in crossed-knurl aluminium, special anti-oil or anti-sliding rubber.

Ordering code

RH	200	A	500	Z	5	N	8	X	3	P	R	.	XXX

full stop to separate special versions

RH series RH
RM series RM

200 mm linear extent 200
500 mm linear extent 500

Wheel type
smooth A
knurled B
rubberized C

Resolution
ppr (RM series) from 1 to 10000
ppr (RH series) from 40 to 1024
please directly contact our offices for pulses availability

Zero pulse
without zero pulse S
with zero pulse Z

Power supply
(RM series) 5÷28 V DC 5/28
(RH series) 5 V DC 5
(RH series) 8÷24 V DC 8/24
line driver available only with 5 V DC or 8÷24 V DC power supply

Output type
N NPN
C NPN open collector
P push-pull
L line driver
please refer to page 92 for optionals about output types

Shaft diameter
8 ø 8 mm (RH 200)
10 ø 10 mm (RH - RM 500)

Enclosure rating
X IP54 standard (RH 200)
IP64 standard (RH - RM 500)
S IP66 optional (RH - RM 500)

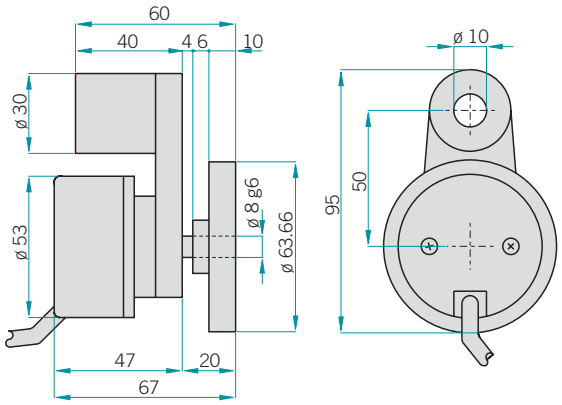
Max. rotation speed
3 3000 RPM

P cable output (standard length 0.5 m) (RH 200)
P cable output (standard length 1.5 m) (RH - RM 500)
M M connector output (RH - RM 500)
J J connector output (RH - RM 500)

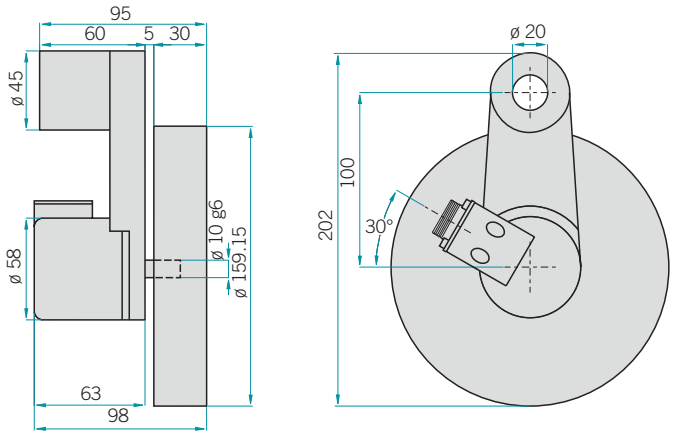
R radial
A axial

special version code numbered from 001 to 999

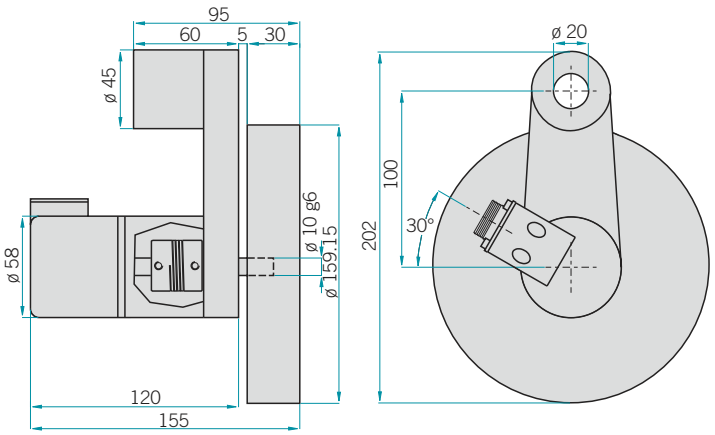
RH **200 A / B / C**



RH **500 A / B / C**



RM **500 A / B / C**



Electrical specifications (RM series)

Resolution	from 1 to 10000 ppr
Power supply	5÷28 V DC line driver available only with 5 V DC or 8÷24 V DC power supply
Current consumption without load	100 mA max.
Max. load current	50 mA for channel 20 mA for channel (line driver)
Output type	NPN / NPN open collector push-pull / line driver
Max. output frequency	300 kHz
Operating frequency	$F = \frac{RPM \cdot Resolution}{60}$

Electrical specifications (RH series)

Resolution	from 40 to 1024 ppr
Power supply	5 V DC 8÷24 V DC
Current consumption without load	100 mA max.
Max. load current	50 mA for channel 20 mA for channel (line driver)
Output type	NPN / NPN open collector push-pull / line driver
Max. output frequency	100 kHz
Operating frequency	$F = \frac{RPM \cdot Resolution}{60}$

Mechanical specifications

Shaft diameter	ø 8 mm (RH 200) ø 10 mm (RH - RM 500)
Enclosure rating	IP54 standard (RH 200) IP64 standard (RH - RM 500) IP66 optional (RH - RM 500)
Max. rotation speed	3000 RPM
Shock	50 G, 11 ms (plastic disc) 20 G, 11 ms (glass disc)
Vibration	10 G, 10÷2000 Hz
Bearing life	10^9 revolutions
Bearings	2 ball bearings 2 ball bearings on support (RM 500)
Shaft material	stainless steel UNI X10CrNiS1809
Housing material	aluminium UNI 5076
Support material	painted aluminium UNI 9002/5
Wheel material	aluminium UNI 9002/5 (RH 200) aluminium UNI 3051 (RH - RM 500)
Operating temperature	0÷60 °C
Storage temperature	-25÷70 °C
Encoder weight + support weight	250 g (RH 200) 1000 g (RH - RM 500)
Wheel weight	100 g (RH 200) 800 g (RH - RM 500)

www.eltra.it e-mail: eltra@eltra.it
Via Monticello di Fara, 32 bis - 36040 - Sarego (VI) - ITALY - Tel. +39 0444 436489 - Fax. +39 0444 835335