



2020



FULL PRODUCT
RANGE GUIDE

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C E R T I F I C A T E
of Conformity



Registration No.: AK 50457641 0001

Report No.: 50310491 001

Holder: KING RITZ ENTERPRISE CO., LTD.
No. 11-11, Sihyue Rd.,
Hou Li Dist., Taichung City 42157
Taiwan, R.O.C.

Product: Inductive Sensor
(Speed Sensor for EPAC Bicycles)

Identification: BB-988SSL-X
(X = 114, 120 or 126)

Remark: The product has been EMC tested according to
EN 15194 clause 4.2.15.

Tested acc. to: EN 15194:2017

The certificate of conformity refers to the above mentioned product. This is to certify that the specimen is in conformity with the assessment requirement mentioned above. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.

Date 16.01.2020



Certification Body

Dipl.-Ing. Th. Illing

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg



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DUST & WATER PROTECTION TEST REPORT



Page 1 of 2

Application No : SC99361(E)

Received date : Apr. 06, 2010

Applicant : KING RITZ ENTERPRISE CO., LTD.

Address : 11-11, Sihyue Rd, Hou Li, Taichung 421, Taiwan, ROC.

Sampler : KING RITZ ENTERPRISE CO., LTD.

Job description : IPX5 dust and water protection test.

Sample name : YST BB993 SPEED SENSOR

Test date : Apr. 26, 2010

Test place : Metal Industries Research & Development Center
Regional R&D Service Department (Taichung)
No. 25, 37th road, Industrial park, Taichung 407, Taiwan, R.O.C.

Date issued : Apr. 29, 2010

Note : (1). This report is responsible for designated samples only.
(2). Reproduction of all or parts of this report without a written approval is strictly prohibited.



BB-988SS

• THREADED SPEED SENSOR



BB-988SSL

• LEFT SIDE THREADED SPEED SENSOR

Patent design

Description :

This BB set speed sensor uses infrared sensing technique.

The photodiodes is embedded inside the BB set.

It is fully protected by the shaft case.

Intelligent electric component and circuit design detects only forward movement and generate corresponding speed signal.

This design is fully compatible with the original 68MM length BB shell.

Signals: 10P, 24P, 48P

Left side sensor available (BB-988SSL)

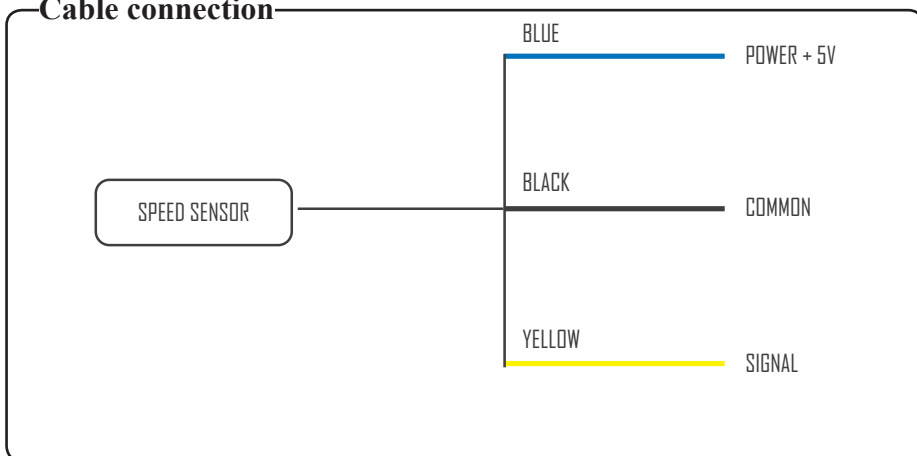
FEATURES :

1. SENSOR EMBEDDED
2. FULLY SEALED
3. MOISTURE AND DUST PROOF (PASS IP-X5 TEST)

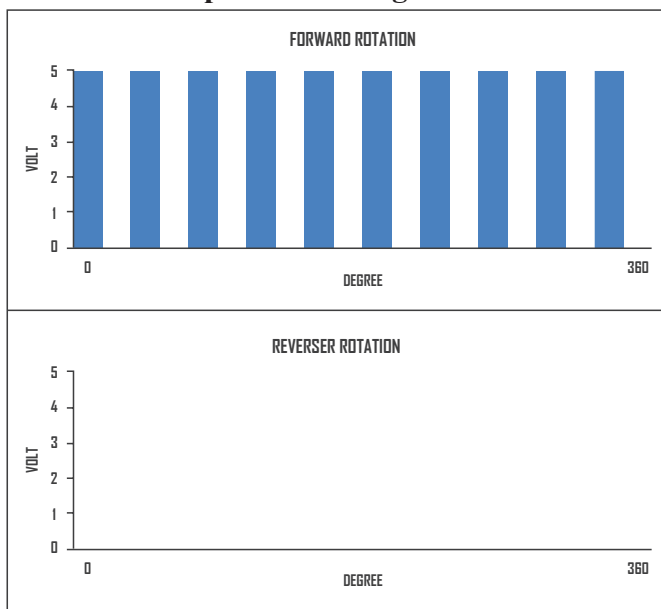
Specifications :

Power	Input Current	Output Signal	Signal High	Signal Low	Output current	Cable Connection
DC4.6-5.4V	Max. 50mA	10 pulses/rev.	>2V , <3.5V	<0.8v	Max. 10mA	Blue : Power (+5V) Yellow : Signal Black : Common 0V

Cable connection



YST BB993 Speed sensor signal - VOLT Sheet



TORQUE SENSOR BB-TS05

Torque Sensor for Spin Bikes
 Discover your Real Limitation!
 Your physical limit can only be captured with the most precise numbers.
 Our torque sensor is designed specifically for the advanced models of spin bikes.
 With the cadence/speed sensor, the users can see an accurate representation of the power they generate!
 The torque sensor, developed by us, is completely customized to meet the customers' needs.
 Maximum Measurable Torque: 200N-m.
 Total Linear Error: +/- 1%



Patent design

BB-TS03

- TORQUE SENSOR
- FOR ORIGINAL FRAME AND STANDARD 68MM BB SHELL.
- TORQUE DETECTION FROM BOTH CRANK.
- CHAIN WHEEL ADAPTER IS AVAILABLE FOR DIFFERENT SPECIFICATION OF CHAIN WHEEL.



CS-101+332A

- THREADLESS HEADSET
- 1 1/8"
- 28.6*34*30
- ALLOY
- SEAL BEARINGS



CS-106G+332A

- THREADLESS SEMI-INTEGRATED
- 1 1/8" ->1.5"
- 28.6*44*56(55)*39.8
- ALLOY
- SEAL BEARINGS
- FOR MTB



CS-105

- THREADLESS INTEGRATED HEADSET
- 1 1/8"
- 28.6*41.8*41.8*30
- ALLOY
- SEAL BEARINGS
- FOR HEAD TUBE 51
- COLOR : AD BLACK



CS-108G+332A

- THREADLESS SEMI-INTEGRATED
- 1 1/8" ->1.5"
- 28.6*44*49.7*39.8
- ALLOY
- SEAL BEARINGS
- FOR DOWN HILL



CS-106

- THREADLESS INTEGRATED HEADSET.
- 1 1/8"
- 28.6*41.8*52*39.8
- ALLOY
- SEAL BEARINGS
- FOR HEAD TUBE 46
- COLOR : AD BLACK



CS-102AH + 332A

- THREADLESS SEMI INTEGRATED ALLOY HEADSET
- 1 1/8"
- 28.6*44*30
- WEIGHT : 130G
- SEAL BEARING
- COLOR : SILVER OR BLACK



CS-568AN + 334A

- THREADLESS HEADSET
- SEALED WATER RESISTANT
- 1 1/8"
- 28.6*34*30
- WEIGHT : 123G
- ALLOY
- UPPER CUP 5/32" X 22 BALL RETAINER
- Ø2.5 X 22 NEEDLE BEARING FOR LOWER RACE
- FOR MTB
- CLIP/ ON STEM
- COLOR : SILVER OR BLACK

Patent design



CS-587E+332

- THREADLESS SEMI-INTEGRATED HEADSET
- ECONOMIC TYPE
- W/PLASTIC CAP
- 1 1/8"
- 28.6*44*30
- WEIGHT:103G
- STEEL
- 5/32" X 22 BALL RETAINER
- COLOR : BLACK

Patent design



CS-568A + 332A

- THREADLESS HEADSET
- SEALED WATER RESISTANT
- 1 1/8"
- 28.6*34*30
- WEIGHT: 133G
- ALLOY
- 5/32" X 22 BALL RETAINER
- FOR MTB
- CLIP/ ON STEM
- COLOR : SILVER OR BLACK

Patent design



HP-250A + 332A

- THREADLESS HEADSET
- SEALED WATER RESISTANT
- 1"
- 25.4*30/30.2*27/26.4
- WEIGHT:106G
- ALLOY
- 5/32" X 20B BALL RETAINER
- FOR MTB
- CLIP/ ON STEM
- COLOR : SILVER OR BLACK

Patent design



CS-N568 + 332

- THREADLESS HEADSET
- WATER RESISTANT
- 1 1/8"
- 28.6*34*30
- WEIGHT:145G
- STEEL
- 5/32" X 22 BALL RETAINER
- FOR MTB, BMX, RACING & CITY BIKE
- COLOR : CP OR BLACK





CS-580

- THREADED HEADSET
- SEALED WATER RESISTANT MECHANISM
- 1 1/8" *26T
- 25.4*34*30
- ALLOY
- SEAL BEARING
- COLOR : RED, BLUE, SILVER, BLACK



HP-233

- THREADED HEADSET
- SEALED WATER RESISTANT MECHANISM
- 1" *24T
- 22.2*30*27/26.4
- HEIGHT:40.7
- ALLOY
- Ø2.5 X 20 NEEDLE RETAINER
- FOR MTB & ATB & ROAD
- COLOR: SILVER, BLACK



CS-727AW

- THREADED HEADSET
- SEALED WATER RESISTANT
- FOR MTB, ATB
- 1 1/8" *26T
- 25.4*34*30
- HEIGHT:35
- ALLOY
- 5/32" X 22 BALL RETAINER
- COLOR: SILVER, BLACK



HP-8311W

- THREADED HEADSET
- WATER RESISTANT
- 1" * 24T
- 22.2*30*27
- HEIGHT:34
- LIGHT ALLOY
- 5/32" X 20 BALL RETAINER
- FOR TRACK OR ROAD
- COLOR: SILVER, BLACK

CS-727N

- 5/32" X 22 BALL RETAINER FOR UPPER CUP
- Ø2.5 X 22 NEEDLE ROLLER BEARING FOR LOWER RACE
- HEIGHT:37.04
- COLOR: SILVER, BLACK
- HIGH GRADE POLISHING

HP-8311N

- ALLOY
- 5/32" X 20 BALL RETAINER FOR UPPER CUP
- STEEL BALL RACES INSIDE CUP
- HEIGHT: 35
- Ø2.5 X 20 NEEDLE BEARING FOR LOWER RACE



CS-560

- THREADED HEADSET
- SEALED WATER RESISTANT
- 1 1/8" * 26T
- 25.4*34*30
- HEIGHT:40.8
- STEEL
- 5/32" X 22 BALL RETAINER
- FOR MTB
- COLOR: CP, BLACK



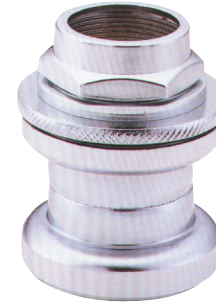
HP-242

- THREADED HEADSET
- SEALED WATER RESISTANT MECHANISM
- 1" *24T
- 22.2*30*27
- HEIGHT: 34.9
- ALLOY
- 5/32" X 20 BALL RETAINER
- FOR MTB & ATB & ROAD
- COLOR : SILVER, BLACK



HP-8002GW

- THREADED HEADSET
- SEALED WATER RESISTANT
- 1" *24T
- 22.2*30*27/26.4
- HEIGHT:35.85
- STEEL
- 5/32" X 16 BALL RETAINER
- FOR MTB & ROAD
- COLOR : CP OR BLACK
- HIGH GRADE POLISHING



HP-N663

- THREADED HEADSET
- 1" *24T
- 22.2*30*27
- HEIGHT: 34.45
- STEEL
- 5/32" X 16 BALL RETAINER
- FOR LIGHT WEIGHT OR MINICYCLE
- COLOR : CP OR BLACK



HP-252

- THREADED HEADSET
- SEALED WATER RESISTANT
- 1" *24T
- 22.2*30*27
- HEIGHT: 36.16
- STEEL
- 5/32" X 16 BALL RETAINER
- FOR SUPER LIGHT OR MINICYCLES
- COLOR : CP OR BLACK



HP-665

- THREADED HEADSET
- 1" *24T
- 21.1*32.5*27
- HEIGHT: 38
- STEEL
- 3/16" X 15" BALL RETAINER
- FOR BMX
- COLOR : CP OR BLACK



HP-662

- THREADED HEADSET
- 1" *24T
- 22.2*30*27
- HEIGHT: 36
- W/THREAD LOCK WASHER
- STEEL
- 5/32" X 16 BALL RETAINER
- FOR LIGHT WEIGHT OR MINICYCLE
- COLOR : CP OR BLACK



HP-668

- 1" THREADED HEADSET:
- 6061 ALUMINUM
- 21.15x32.5x27x24TPI
- SEALED BEARINGS
- COLOR: ANODIZE
- FOR BMX



HP-669

- 1" THREADED HEADSET:
- 6061 ALUMINUM
- 21.15x32.5x27x24TPI
- SEALED BEARINGS
- COLOR: ANODIZE
- FOR BMX

AHEAD CAP



HP-334A

- 1 1/8" STAR WASHER
- ALLOY CAP FOR THREADLESS HEADSET
- COLOR: SILVER, BLACK



HP-332A

- 1" OR 1 1/8" STAR WASHER
- ALLOY CAP FOR THREADLESS HEADSET
- COLOR: SILVER, BLACK

ALLOY SPACER



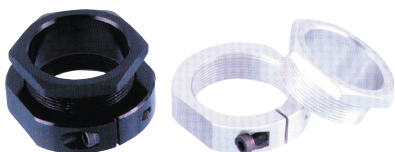
323

- 1"
- ALLOY SPACER FOR THREADLESS HEADSET
- SIZE: 2MM, 5MM, 8MM, 10MM
- COLOR: SILVER, BLACK



324

- 1 1/8"
- ALLOY SPACER FOR THREADLESS HEADSET
- SIZE: 2MM, 5MM, 8MM, 10MM
- COLOR: SILVER, BLACK



HP-325

- 1" HEIGHT ADJUSTER
- ALLOY
- WEIGHT: 20G
- FOR MTB, BMX, RACING
- COLOR: SILVER, BLACK

CS-325 / CS-325-1

- 1" 1/8" HEIGHT ADJUSTER
- ALLOY
- WEIGHT: 25G
- FOR MTB, BMX, RACING
- COLOR: SILVER, BLACK

EXTERNAL BB



BB-0901(2010)

- THREADLESS EXTERNAL BB
- ALLOY
- WIDTH 68L
- SEALED BEARING
- SUIT FOR SHIMANO & SRAM
- COLOR: SILVER, BLACK, RED, BLUE, YELLOW

PAT No. M373870



BB-830

- EXTERNAL BOTTOM BRACKET
- ALUMINUM MATERIAL
- SEALED BEARINGS
- OD Ø46, LENGTH 68-73MM
- FOR Ø24 & Ø24/Ø22

PRESS FIT BB



BB-869

- INTEGRATED BB(PRESS FIT BB)
- FOR 86/92 , OD41
- SUIT FOR 24MM & 22MM
- SEAL BEARINGS, ALLOY.
- WITH 1.5MM SPACERS & 22MM KITS



BB-869N

- INTEGRATED LOCK TYPE BB
- ALUMINUM MATERIAL
- SEALED BEARINGS
- OD Ø41, LENGTH 86-92MM
- FOR Ø24 & Ø24/Ø22

ECCENTRIC BB



PAT No. M326497

BB-2008-1C

- ECCENTRIC BB
- ALLOY
- 54.8 X 68L
- BB RING HARD AD
- WEIGHT: 130G

CARTRIDGE BB



BB-990FC

- THREADED CARTRIDGE BB
- CARBON BB SHELL
- CR-MO AXLE
- SEALED BEARING
- 1.37" X 24T
- AXLE LENGTH: 103MM, 107MM, 110MM



BB-993

- THREADLESS BB SET
- WATER RESISTANT MECHANISM
- PATENT DESIGN CARTRIDGE BB SET FOR MTB OR ROAD
- AXLE LENGTH AVAILABLE ON REQUEST INNOVATIVE DESIGN
- W/DOUBLE SEALED BEARING
- SERVICEABLE FITS ALL THREADED AND UNTHREAD BOTTOM BRACKETS



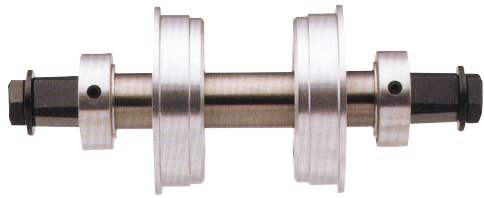
BB-988

- ONE-PIECE CARTRIDGE B.B.
- WATER RESISTANT MECHANISM
- W/DOUBLE SEALED BEARING & CAPS
- AXLE LENGTH AVAILABLE ON REQUEST
- 1.37" X 24T
- FOR E-TYPE

Available Axle Length for Cartridge B.B.

Model	L	A	Model	L	A
3M	110	21	3P	119	26.98
3J	113	22.5	3NL	122.5	27.98
3L	116	23.98	3S	124.5	29.48
			3U	127.5	32.48

* This specification drawings and table are only for references!

**BB-8302**

- SEALED BEARING, LIGHT ALLOY, FOR BMX, MTB & ATB.
- LIGHT ALLOY CUPS WITH SEALED BEARING,
- BOLT TYPE COTTERLESS AXLE
- BB-8302 AXLE 127MM FOR SINGLE CHAINWHEEL
- BB-8312 AXLE 131MM FOR DOUBLE CHAINWHEEL
- BB-8322 AXLE 135MM FOR TRIPLE CHAINWHEEL

**BB-621AW**

- WATER RESISTANT WRENCH TYPE
- FOR BMX
- SET OF 12 PCS
- 5/16" X 12 BALL RETAINER
- WITH HEXAGONAL ADJUSTING CONE & FIXED CONE
- CP
- 24T
- PATENT FOR SEALS

**BB-8308**

- BOTTOM BRACKET SET:
- ALUMINUM
- BEARING ID Ø19
- ALUMINUM TUBE IN SILVER COLOR
- SPACERS: OD25.4x1.5 & OD25.4x3
- COLOR: ANODIZE
- FOR BMX

**BB-621**

- FOR BMX ONE PIECE CRANK
- COMPLETE SET OF 9 PCS
- 5/16" X 9 BALL RETAINER
- UCP
- 24T

**BB-BMX-82W**

- WRENCH TYPE WATER PROOF SYSTEM FOR BMX, MTB & ATB
- BOLT TYPE COTTERLESS AXLE & HEXAGONAL CONES
- WITH 5/16" X 12 BALL RETAINER, CP, 24T, PATENT FOR SEALS
- BMX-82W-BY1 AXLE 135MM FOR TRIPLE CHAINWHEEL
- BMX-82W-BY2 AXLE 131MM FOR DOUBLE CHAINWHEEL
- BMX-82W-BY3 AXLE 127MM FOR SINGLE CHAINWHEEL
- Customised axle length available

**BB-612**

- SET OF 5PCS
- CP-UCP
- 1/4" X 9 BALL RETAINER
- 1.37" X 24T



YST-899-1-1

- DIFFERENTIAL GEAR
- SPECS : 22T SPROCKET. SPLINE TYPE.
- DISC BRAKE AND FREEWHEEL MOUNT FUNCTION
- SUITABLE MODEL : ELECTRIC TRICYCLE, MANUAL TRICYCLE, CARGO BIKE, UTILITY BIKE



YST-899-1

- SPROCKET SPEC: 8.0 X 22T
- SUITABLE MODEL RANGE: ELECTRIC VEHICLE, MANUAL TRICYCLE (RECREATION, LOADING) ELECTRIC TRICYCLES, FOUR WHEEL UTILITY VEHICLE, RECUMBENT BIKE, TRICYCLE.

FUNCTIONS:

1. ROTATED DIFFERENTIAL GEAR DEVICE BREAKTHROUGH THE SUSPENSION FUNCTION OF THE TRADITIONAL DIFFERENTIAL GEAR DEVICE.
2. DIFFERENTIAL GEAR DEVICE CAN BALANCE THE BIKE AND THE RIDER DURING RIDING ON THE UNEVEN SURFACE ROAD.
3. ROTATED DIFFERENTIAL GEAR DEVICE CAN KEEP STEADY AND SAFETY DURING TURNING IN HIGH SPEED. THIS IS AN ADVANCED AND PIONEER DESIGN. PATENT IS PENDING NOW.



YST-899-2

- SPROCKET SPEC: 8.0 X 22T
- SUITABLE MODEL RANGE: ELECTRIC VEHICLE, MANUAL TRICYCLE (RECREATION, LOADING) ELECTRIC TRICYCLES, FOUR WHEEL UTILITY VEHICLE, RECUMBENT BIKE, TRICYCLE.

FUNCTIONS:

THE IMPROVED DIFFERENTIAL GEAR DEVICE CAN BE EQUIPPED WITH DISC BRAKE AND FREEWHEEL, INCREASE THE SAFETY, SAVE ONE SET OF BRAKING SYSTEM. IT CAN ASSEMBLE ON THE FREEWHEEL OR REAR GEAR DIRECTLY.



德易昌實業有限公司

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