



FEBRUARY  
2021



CYCLING  
SPECIAL BEARINGS



**SPORT BEARINGS**

SEEING IT, ISN'T THE MOST IMPORTANT THING  
IT'S THAT YOU FEEL IT  
**RESISTANCE, PERFORMANCE, RELIABILITY**



**ISB**

**GET TO KNOW US**

## ISB GROUP



ISB Group, specialized in the power transmission sector, has been present in the market since 1981. Internationally, is one of the most relevant Groups in the sector, with a presence in more than 90 countries through Delegations and Distributors, also counting with several own manufacturing centers.

One of the major competitive advantages of the ISB Group comes from the logistical capacity and the volumes of stock that it handles from the different strategic points.

It has 2 divisions: the industrial one, **ISB INDUSTRIES**, whose Headquarters are located in Italy, and the sports division **ISB SPORT**, the latter managed from the headquarters in Spain (Barcelona)



Industrial and sports division



Present in more than 90 countries



+ 70,000 references available (bearings and components)



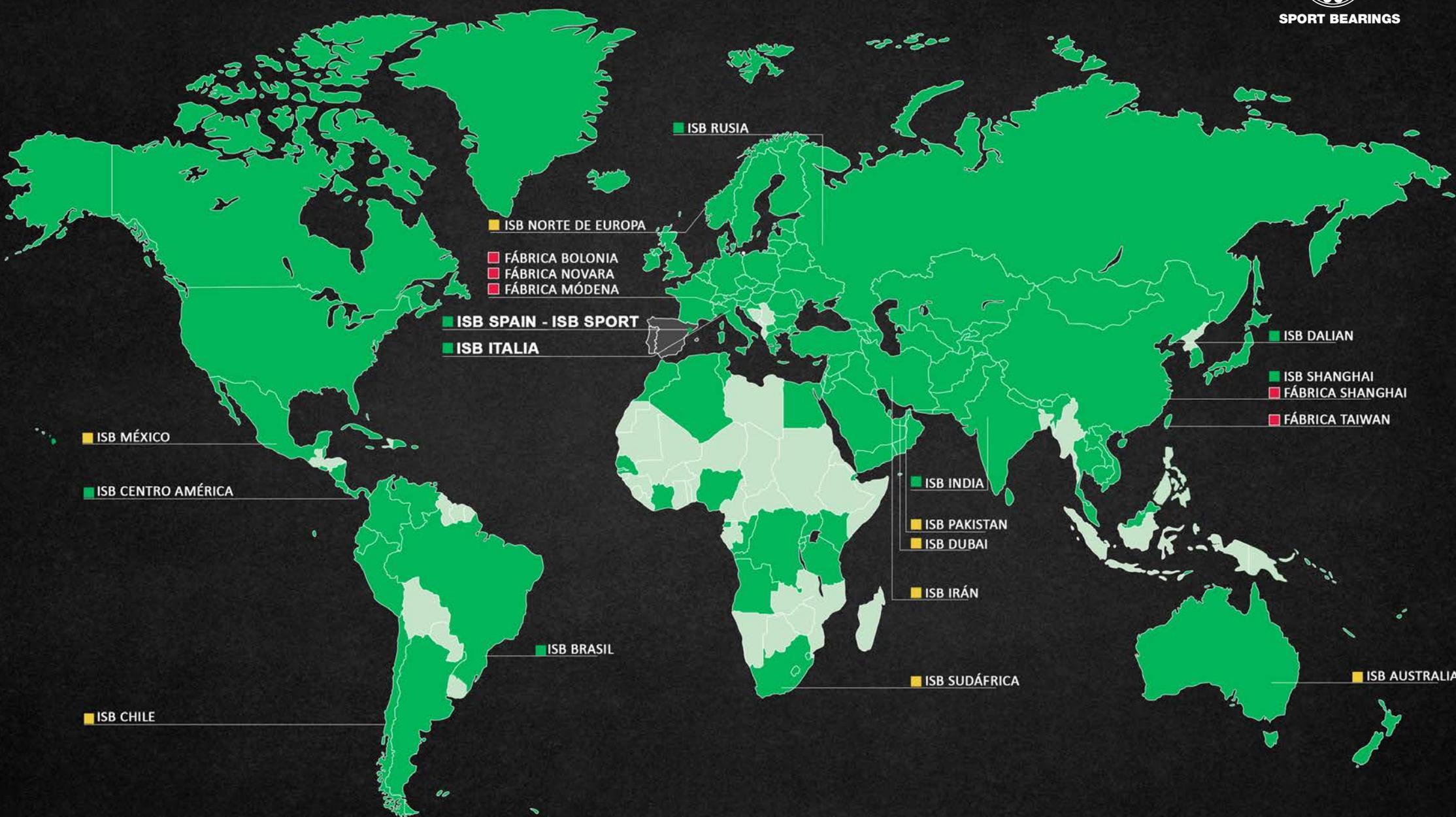
22,000m2 Logistics Hub with 12,000m2 of automated warehouses



Own manufacturing centers (Europe and Asia)



Engineering and Quality Control Departments



## ISB SPORT, BEARINGS FOR SPORT APPLICATIONS

We have transferred all our experience in the industrial sector to a new range of specially designed bearings and components for sports applications.

- **CYCLING bearings:** bicycle, wheelchair, handbike ...
- **ROLLER bearings:** skateboard, scooter ...
- **FISHING bearings:** range for fishing
- **ENGINE components:** components for motorcycle, kart, quad ...

ISB Sport collaborations and sponsorships with ambassadors and first level events allow us to test the products in the more demanding environments of the highest competitions to be able to take the public final bearings and components that stand out for their resistance, performance and reliability



**"HISTORY IS NOT MECHANICAL  
BECAUSE MEN ARE FREE  
TO TRANSFORM IT"** - Ernesto Sábato -

For 3 Generations we have lived the world of cycling from within, competing, winning titles, managing teams, stores and velodromes. Now, 80 years later, we have combined this passion and our profession creating the bearings for cycling leaders

vegetariano sub-campeón  
del mundo de veteranos  
entrevista a SANTIAGO MOSTAJO





**ISB**

**CYCLING SPECIAL BEARINGS**

## EACH TYPE OF BEARING COVERS DIFFERENT NEEDS

Resistance? Steel bearings

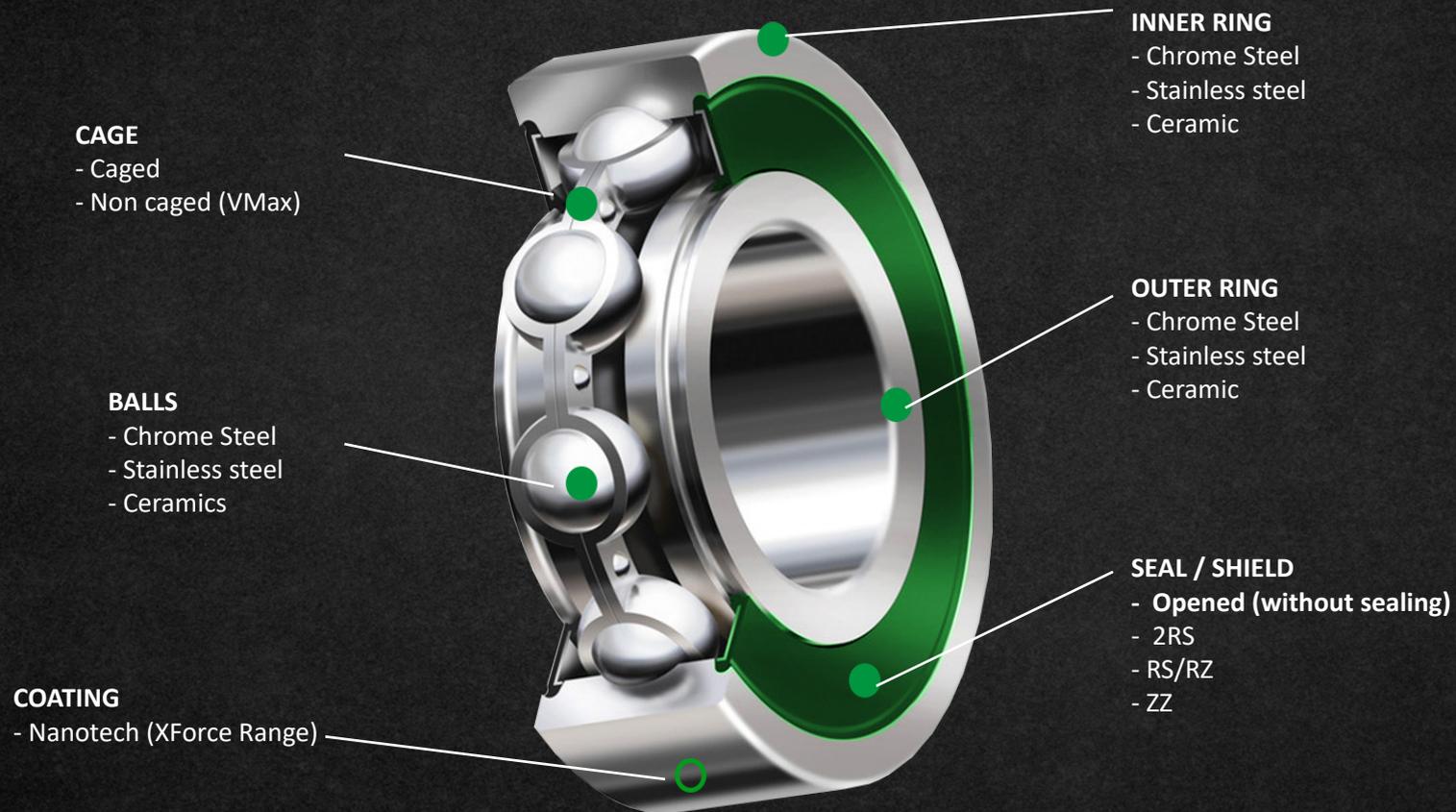
Less friction? Ceramic bearings

Higher performance? XForce bearings



## THE BEARINGS

In general, bearings are basically made up of two rings or rolling elements (in the case of ISB bicycle bearings, these would be balls) and a cage. Some of these elements are those that will serve, among others, to classify them based on their differences in design and structure. The diagram details the main components in ISB cycling bearings and their different variables:



## FEATURES AND MATERIALS

Despite not being visible, the bearings are a fundamental component for the proper functioning of the bicycle, since the performance of the bicycle depends largely on them. They are found in different key parts: in the headset, wheel hubs, bottom bracket, suspension pivots ... and their function is to allow the turning movement between two unit parts by rolling, unlike friction bushings that they do so by displacement of the contact surfaces. This allows a smoother turn with less friction, being able to turn at a higher speed.

These characteristics mean that we find different types of bearings for the different rolling points that we can have on the bicycle since the functional requirements are quite different: high speed in the wheel hubs, high loads capacities and slow speed in the joints of the suspension pivot frame system, angular contact bearings for headset ... At ISB Sport we have developed a range of products that covers the needs of both the location of the bearings and the application to which they are intended (MTB, road bikes ...)



### WHEEL HUB AND BOTTOM BRACKET BEARINGS

- Steel Series
- CB Ceramic Series
- SC Ceramic Series
- Full Ceramic Series
- Xforce Series
- XForce Ceramic Series

### SUSPENSION BEARINGS

- VMax Series

### HEADSET BEARINGS

- Headset Series

## FEATURES AND MATERIALS



### SEAL

Mostly, ISB bicycle bearings are sealed on both sides, this preventing the entry of contaminating particles into the bearing. The execution of these seals can be made of metal or rubber.

#### RS Type Seal

A contact seal that provides optimal protection for the bearing, but limits the potential rolling speed generating friction

#### RZ Type Seal

Low friction non-contact rubber seal that guarantees optimal bearing protection even at high rolling speed without creating friction

#### Z Type Seal

Metal seal that provides basic bearing protection without creating friction or limiting rolling speed

**In the case of ISB bearings, they are sealed on both sides:**

- 2RS: one RS type rubber shield on both sides
- RS/RZ: high precision sealing with a rubber seal type RS on one side (black contact seal to be installed on the outside) and a rubber seal type RZ (green non-contact seal to be installed on the inside)
- ZZ: metal seals on both sides

## FEATURES AND MATERIALS

### LUBRICATION

Lubricant is a vital component for the optimal performance of ball and roller bearings. The choice of the correct lubricant, in its appropriate quantity, is essential for the noise, temperature and useful life of that bearing.

Most **ISB cycling bearings** are lubricated with grease, with exceptions such as **HSP bearings**. In this ones, grease has been replaced by oil, to further reduce friction (necessary for example in the case of competition wheelchairs).

Currently HSP bearings can be found in the SC Ceramic hybrid series and in the XForce Ceramic range.

Full ceramic bearings are also lubricated with oil instead of grease.





## WHEEL HUB AND BOTTOM BRACKET BEARINGS

STEEL SERIES

CERAMIC SERIES

XFORCE SERIES

XFORCE CERAMIC SERIES



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS

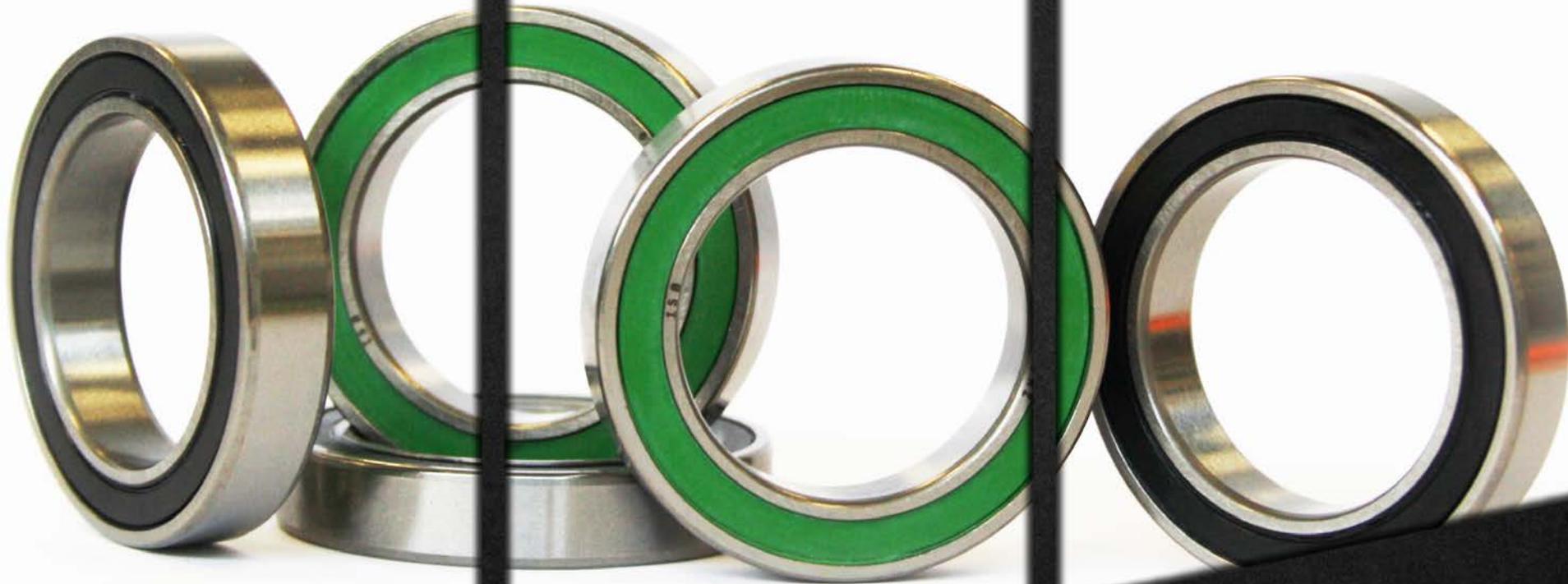


HEADSET  
BEARINGS



WHEEL HUB AND BOTTOM BRACKET BEARINGS

STEEL BEARINGS



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS





WHEEL HUB AND BOTTOM BRACKET BEARINGS

STEEL BEARINGS

DIMENSIONS (mm)

| Code     | Reference              | Inner  | Outer  | Width |
|----------|------------------------|--------|--------|-------|
| 13019645 | 686-2RS P6 ISB         | 6      | 13     | 5     |
| 90070313 | R-4-2RS ISB            | 6.350  | 15.857 | 4.978 |
| 13000229 | 688-2RS P6 ISB         | 8      | 16     | 5     |
| 13000262 | 618/8-2RS P6 ISB       | 8      | 16     | 5     |
| 13019945 | 698-2RS P6 ISB         | 8      | 19     | 6     |
| 13000545 | 608-2RS P6 ISB         | 8      | 22     | 7     |
| 13000549 | SS 608-2RS P6 ISB      | 8      | 22     | 7     |
| 13019705 | 689-2RS P6 ISB         | 9      | 17     | 5     |
| 13000565 | 609-2RS P6 ISB         | 9      | 24     | 7     |
| 90070314 | R-6-2RS ISB            | 9.525  | 22.225 | 7.143 |
| 13025005 | 6700-2RS ISB           | 10     | 15     | 3     |
| 13000010 | 6800-RS/RZ ISB         | 10     | 19     | 5     |
| 13984500 | 3800-2RSV ISB Dual Row | 10     | 19     | 8     |
| 13000110 | 6900-RS/RZ ISB         | 10     | 22     | 6     |
| 13000622 | 6000-2RS P6 ISB        | 10     | 26     | 8     |
| 13003201 | 16100-ZZ P6 ISB        | 10     | 28     | 8     |
| 13001471 | 6200-2RS P6 ISB        | 10     | 30     | 9     |
| 13025010 | 6701-2RS ISB           | 12     | 18     | 4     |
| 13000012 | 6801-RS/RZ ISB         | 12     | 21     | 5     |
| 13984505 | 3801-2RSV ISB Dual Row | 12     | 21     | 8     |
| 13000112 | 6901-RS/RZ ISB         | 12     | 24     | 6     |
| 13000647 | 6001-2RS P6 ISB        | 12     | 28     | 8     |
| 13001496 | 6201-2RS P6 ISB        | 12     | 32     | 10    |
| 90030504 | SS R-8 ZZ ISB          | 12.7   | 28.57  | 7.93  |
| 90070315 | R-8-2RS ISB            | 12.700 | 28.575 | 7.938 |
| 13983209 | 6802-2RS-14 ISB        | 14     | 24     | 5     |
| 13025015 | 6702-2RS ISB           | 15     | 21     | 4     |



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS



WHEEL HUB AND BOTTOM BRACKET BEARINGS

STEEL BEARINGS

DIMENSIONS (mm)

| Code     | Reference                        | Inner | Outer | Width  |
|----------|----------------------------------|-------|-------|--------|
| 13000015 | 6802-RS/RZ ISB                   | 15    | 24    | 5      |
| 13981200 | MR 15267-2RS ISB                 | 15    | 26    | 7      |
| 13981205 | MR 15268-2RS ISB                 | 15    | 26    | 8      |
| 13984100 | DR152610-2RSV ISB Dual Row       | 15    | 26    | 10     |
| 13000115 | 6902-RS/RZ ISB                   | 15    | 28    | 7      |
| 13000676 | 6002-2RS P6 ISB                  | 15    | 32    | 9      |
| 13001526 | 6202-2RS P6 ISB                  | 15    | 35    | 11     |
| 13981250 | MR 16277-2RS ISB                 | 16    | 27    | 7      |
| 13981255 | MR 16287-2RS ISB                 | 16    | 28    | 7      |
| 13984010 | 163110-2RS ISB                   | 16    | 31    | 10     |
| 13025020 | 6703-2RS ISB                     | 17    | 23    | 4      |
| 13000017 | 6803-RS/RZ ISB                   | 17    | 26    | 5      |
| 13983705 | 3803-2RSC3V ISB                  | 17    | 26    | 10     |
| 13981260 | MR 17287-2RSC0V ISB              | 17    | 28    | 7      |
| 13000117 | 6903-RS/RZ ISB                   | 17    | 30    | 7      |
| 13984560 | 3903-2RSV ISB Dual Row           | 17    | 30    | 10     |
| 13000701 | 6003-2RS P6 ISB                  | 17    | 35    | 10     |
| 13981300 | MR 18307-2RS ISB                 | 18    | 30    | 7      |
| 13983220 | 6804-2RS-19 (MR 129) ISB         | 19    | 32    | 7      |
| 13983504 | MR 1937-2RS (6904/19,05-2RS) ISB | 19.05 | 37    | 9      |
| 90070261 | 6704-2RS ISB                     | 20    | 27    | 4      |
| 13984110 | DR203013-2RS ISB Dual Row        | 20    | 30    | 13     |
| 13000020 | 6804-RS/RZ ISB                   | 20    | 32    | 7      |
| 13013593 | 6904-2RS P6 ISB                  | 20    | 37    | 9      |
| 13000726 | 6004-2RS P6 ISB                  | 20    | 42    | 12     |
| 13981310 | MR 22237-2RS ISB                 | 22.2  | 37    | 8/11.5 |
| 13981315 | MR 22237B-2RS ISB                | 22.2  | 37    | 8/11.5 |



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS



WHEEL HUB AND BOTTOM BRACKET BEARINGS

STEEL BEARINGS

DIMENSIONS (mm)

| Code     | Reference                      | Inner | Outer | Width |
|----------|--------------------------------|-------|-------|-------|
| 13981280 | MR 23327-2RSV ISB              | 23    | 32    | 7     |
| 13983505 | MR 2437-2RS ISB                | 24    | 37    | 7     |
| 13981325 | SS MR 2437-2RS ISB             | 24    | 37    | 7     |
| 13983506 | MR 2437H8-2RSV ISB             | 24    | 37    | 8     |
| 13025030 | 6705-2RS ISB                   | 25    | 32    | 4     |
| 13000025 | 6805-RS/RZ ISB                 | 25    | 37    | 7     |
| 13984000 | 7805-2RSV ISB Contacto Angular | 25    | 37    | 7     |
| 13013604 | 6905-2RS P6 ISB                | 25    | 42    | 9     |
| 13981340 | MR 27537-2RSV ISB              | 27.5  | 37    | 7     |
| 90070357 | SS 6806/29-2RS ISB DUB         | 29    | 42    | 7     |
| 13025035 | 6706-2RS ISB                   | 30    | 37    | 4     |
| 13000030 | 6806-RS/RZ ISB                 | 30    | 42    | 7     |
| 13000039 | SS 6806-2RS P6 ISB             | 30    | 42    | 7     |
| 13013622 | 6906-2RS P6 ISB                | 30    | 47    | 9     |
| 13985000 | FD 6806-2RSV ISB con valona    | 31    | 41/44 | 11.2  |
| 13981330 | MR 31437-2RSV ISB              | 31    | 43    | 7     |
| 13981335 | MR 314357-2RSV ISB             | 31    | 43.5  | 7     |
| 13025040 | 6707-2RS ISB                   | 35    | 44    | 5     |
| 13000128 | 6807-2RS P6 ISB                | 35    | 47    | 7     |
| 13025045 | 6708-2RS ISB                   | 40    | 50    | 6     |
| 13000139 | 6808-2RS P6 ISB                | 40    | 52    | 7     |
| 13025047 | 6709-2RS ISB                   | 45    | 55    | 6     |
| 13000091 | 6809-2RS P6 ISB                | 45    | 58    | 7     |
| 13025050 | 6710-2RS ISB                   | 50    | 62    | 6     |
| 13000094 | 6810-2RS P6 ISB                | 50    | 65    | 7     |



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS



WHEEL HUB AND BOTTOM BRACKET BEARINGS

CERAMIC BEARINGS



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS





## WHEEL HUB AND BOTTOM BRACKET BEARINGS

CERAMIC BEARINGS

Chrome Steel and Ceramic balls

DIMENSIONS (mm)

| Code     | Reference           | Inner | Outer | Width  |
|----------|---------------------|-------|-------|--------|
| 13981345 | MR 22237-2RS-CB ISB | 22.2  | 37    | 8/11.5 |
| 13981320 | MR 2437-2RS-CB ISB  | 24    | 37    | 7      |
| 13981350 | MR 31437-2RS-CB ISB | 31    | 43    | 7      |



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS



WHEEL HUB AND BOTTOM BRACKET BEARINGS

CERAMIC BEARINGS

Stainless Steel and Ceramic balls

DIMENSIONS (mm)

| Code     | Reference           | Inner | Outer | Width |
|----------|---------------------|-------|-------|-------|
| 13980002 | SC 608-2RS ISB      | 8     | 22    | 7     |
| 13983202 | SC 6800-2RS ISB     | 10    | 19    | 5     |
| 13983302 | SC 6900-2RS ISB     | 10    | 22    | 6     |
| 13983102 | SC 6000-2RS ISB     | 10    | 26    | 8     |
| 13983152 | SC 6200-2RS ISB     | 10    | 30    | 9     |
| 13983157 | SC 6201-2RS ISB     | 10    | 32    | 10    |
| 13983207 | SC 6801-2RS ISB     | 12    | 21    | 5     |
| 13983307 | SC 6901-2RS ISB     | 12    | 24    | 6     |
| 13983107 | SC 6001-2RS ISB     | 12    | 28    | 8     |
| 13983108 | SC 6001-2RS HSP ISB | 12    | 28    | 8     |
| 13983212 | SC 6802-2RS ISB     | 15    | 24    | 5     |
| 13983214 | SC 6802-2RS HSP ISB | 15    | 24    | 5     |
| 13983312 | SC 6902-2RS ISB     | 15    | 28    | 7     |
| 13983162 | SC 6202-2RS ISB     | 15    | 35    | 11    |
| 13984003 | SC 6803-2RS ISB     | 17    | 26    | 5     |
| 13994003 | SC 6903-2RS ISB     | 17    | 30    | 7     |
| 13984004 | SC 6804-2RS ISB     | 20    | 32    | 7     |
| 13983322 | SC 6904-2RS ISB     | 20    | 37    | 9     |
| 13984005 | SC 6805N-2RS ISB    | 25    | 37    | 6     |
| 13983227 | SC 6805-2RS ISB     | 25    | 37    | 7     |
| 13983232 | SC 6806-2RS ISB     | 30    | 42    | 7     |



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS



## WHEEL HUB AND BOTTOM BRACKET BEARINGS

### FULL CERAMIC BEARINGS

100% ceramic

DIMENSIONS (mm)

| Code     | Reference                      | Inner | Outer | Width |
|----------|--------------------------------|-------|-------|-------|
| 13983213 | 6802-RS ISB Full Ceramic ZrO2  | 15    | 24    | 5     |
| 13983217 | 6803-RS ISB Full Ceramic ZrO2  | 17    | 26    | 5     |
| 13983218 | 6803-2RS ISB Full Ceramic ZrO2 | 17    | 26    | 5     |
| 13983233 | 6806-RS ISB Full Ceramic ZrO2  | 30    | 42    | 7     |



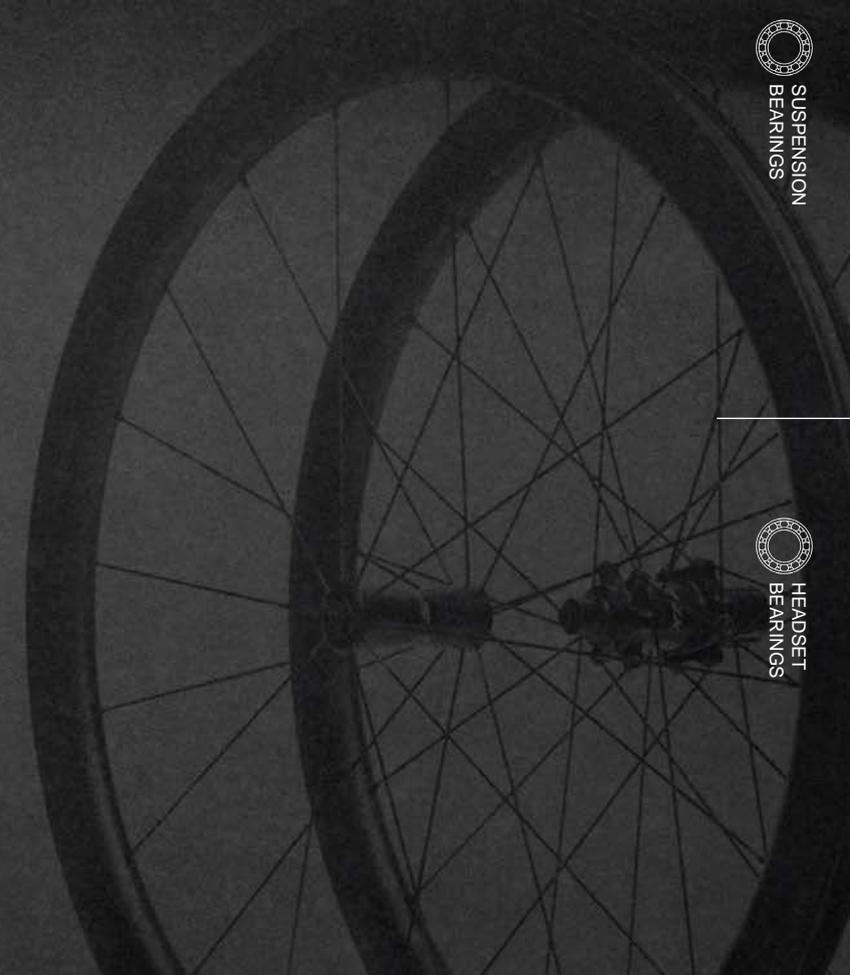
WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS





WHEEL HUB AND BOTTOM BRACKET BEARINGS

XFORCE BEARINGS



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS





## WHEEL HUB AND BOTTOM BRACKET BEARINGS

XFORCE BEARINGS  
with NanoTech coating

DIMENSIONS (mm)

| Code     | Reference                  | Inner | Outer | Width |
|----------|----------------------------|-------|-------|-------|
| 90070234 | 6800-RS/RZ Xforce ISB      | 10    | 19    | 5     |
| 90070242 | 6802-RS/RZ Xforce ISB      | 15    | 24    | 5     |
| 90070512 | MR 15267-2RS Xforce ISB    | 15    | 26    | 7     |
| 90070240 | 6902-RS/RZ Xforce ISB      | 15    | 28    | 7     |
| 90070238 | 6803-RS/RZ Xforce ISB      | 17    | 26    | 5     |
| 90070246 | MR 17287-2RSC0V Xforce ISB | 17    | 28    | 7     |
| 90070236 | 6903-RS/RZ Xforce ISB      | 17    | 30    | 7     |
| 90070247 | MR 2437-2RS Xforce ISB     | 24    | 37    | 7     |
| 90070247 | SS 6806-2RS ISB Xforce ISB | 30    | 42    | 7     |



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS



WHEEL HUB AND BOTTOM BRACKET BEARINGS

XFORCE CERAMIC BEARINGS

Hybrid ceramic with NanoTech coating

DIMENSIONS (mm)

| Code     | Reference                          | Inner | Outer | Width |
|----------|------------------------------------|-------|-------|-------|
| 90070621 | SC 608-2RS Xforce Ceramic ISB      | 8     | 22    | 7     |
| 90070235 | SC 6800-2RS Xforce Ceramic ISB     | 10    | 19    | 5     |
| 90070622 | SC 6900-2RS Xforce Ceramic ISB     | 10    | 22    | 6     |
| 90070623 | SC 6000-2RS Xforce Ceramic ISB     | 10    | 26    | 8     |
| 90070624 | SC 6200-2RS Xforce Ceramic ISB     | 10    | 30    | 9     |
| 90070625 | SC 6201-2RS Xforce Ceramic ISB     | 10    | 32    | 10    |
| 90070626 | SC 6801-2RS Xforce Ceramic ISB     | 12    | 21    | 5     |
| 90070627 | SC 6901-2RS Xforce Ceramic ISB     | 12    | 24    | 6     |
| 90070513 | SC 6001-2RS Xforce Ceramic ISB     | 12    | 28    | 8     |
| 90070628 | SC 6001-2RS HSP Xforce Ceramic ISB | 12    | 28    | 8     |
| 90070243 | SC 6802-2RS Xforce Ceramic ISB     | 15    | 24    | 5     |
| 90070629 | SC 6802-2RS HSP Xforce Ceramic ISB | 15    | 24    | 5     |
| 90070241 | SC 6902-2RS Xforce Ceramic ISB     | 15    | 28    | 7     |
| 90070630 | SC 6202-2RS Xforce Ceramic ISB     | 15    | 35    | 11    |
| 90070239 | SC 6803-2RS Xforce Ceramic ISB     | 17    | 26    | 5     |
| 90070237 | SC 6903-2RS Xforce Ceramic ISB     | 17    | 30    | 7     |
| 90070631 | SC 6804-2RS Xforce Ceramic ISB     | 20    | 32    | 7     |
| 90070632 | SC 6904-2RS Xforce Ceramic ISB     | 20    | 37    | 9     |
| 90070633 | SC 6805N-2RS Xforce Ceramic ISB    | 25    | 37    | 6     |
| 90070634 | SC 6805-2RS Xforce Ceramic ISB     | 25    | 37    | 7     |
| 90070245 | SC 6806-2RS Xforce Ceramic ISB     | 30    | 42    | 7     |



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS

## SERIES COMPARATIVE: ex. BB-30

The 6806-2RS bottom bracket bearing, also known as BB-30, is one of the best sellers on the market since its measurements 30mm x 42mm x 7mm are one of the most used in cycling designs.

The main structural characteristics of this bearing in the different series in which it is available from the ISB brand are detailed below:



6806-RS/RZ



SS 6806-2RS



SC 6806-2RS



6806-RS Full Ceramic



6806-RS/RZ XForce



SC 6806-2RS XForce Ceramic

|                     |              |                 |                 |         |              |                 |
|---------------------|--------------|-----------------|-----------------|---------|--------------|-----------------|
| <b>RINGS:</b>       | Chrome Steel | Stainless Steel | Stainless Steel | Ceramic | Chrome Steel | Stainless Steel |
| <b>BALLS:</b>       | Chrome Steel | Stainless Steel | Ceramic         | Ceramic | Chrome Steel | Ceramic         |
| <b>SEAL:</b>        | Rubber RS/RZ | Rubber 2RS      | Rubber 2RS      | Ceramic | Rubber RS/RZ | Rubber 2RS      |
| <b>LUBRICATION:</b> | Grease       | Grease          | Grease          | Oil     | Grease       | Grease          |
| <b>COATING:</b>     | -            | -               | -               | -       | NanoTech     | Nanotech        |





# SUSPENSION BEARINGS

## VMAX SERIES



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS



SUSPENSION  
BEARINGS

VMAX SERIES



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS

SUSPENSION  
BEARINGS

HEADSET  
BEARINGS

## FEATURES AND MATERIALS



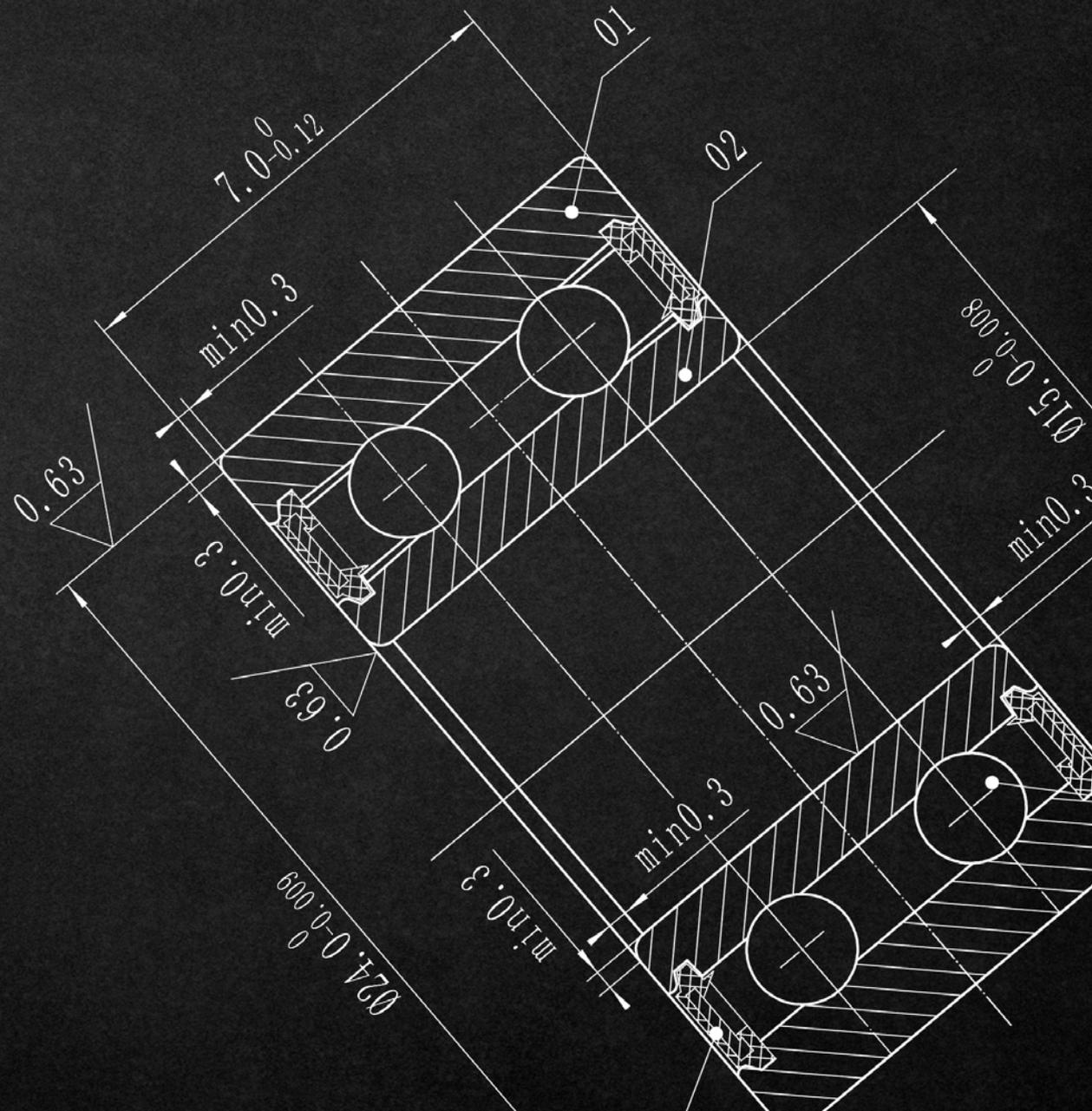
### VMAX BEARINGS

For the suspension area, bearings have been developed to support certain levels of load, without involving a significant increase in weight or size. These are the VMax series bearings that have been specially designed for the entire suspension pivots, connecting rod and shock absorber, to withstand tight turns.

Its main characteristic resides in its special “full ball” design, which consists in the elimination of the usual internal cage or retainer that separates the balls and then allows the insertion of the maximum possible number of balls. The race grooves are deeper on these bearings for more lateral support for the twisting and multiple forces associated with suspension pivots, especially mountain bike.

In addition, in these bearings the amount of grease with which they are lubricated is maximized to avoid “the suspension squeaking”. VMax ISB bearings use Mobil XHP-222 grease and fill from 40% (on some double row models) to 80%, depending on bearing measurements.

VMax bearings have up to 35% -40% higher load capacity than ISB’s standard series steel bearings.



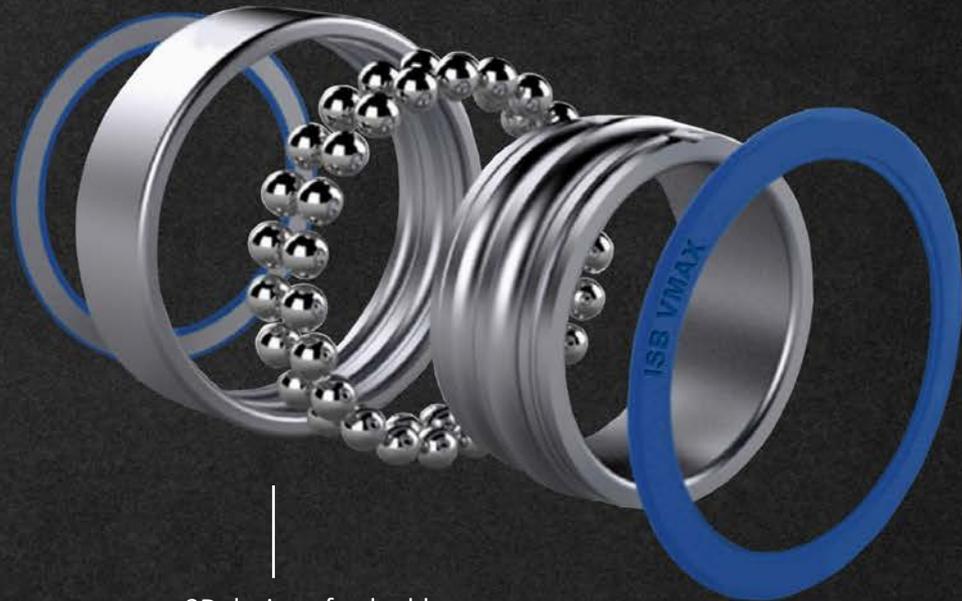


SUSPENSION  
BEARINGS

VMAX SERIES



3D design of a standard single row  
VMAX bearing



3D design of a double row  
VMAX bearing



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS



SUSPENSION  
BEARINGS

VMAX SERIES

non caged / max number of balls

DIMENSIONS (mm)

| Code     | Reference                            | Inner | Outer | Width |
|----------|--------------------------------------|-------|-------|-------|
| 13983005 | 688-2RSC3 VMAX ISB                   | 8     | 16    | 5     |
| 13983006 | 688-2RSC3 EVMAX ISB                  | 8     | 16    | 5/6,5 |
| 13983011 | 698-2RSC3 VMAX ISB                   | 8     | 19    | 6     |
| 13983010 | 698-2RSC3 EVMAX ISB                  | 8     | 19    | 6/7,5 |
| 13983015 | 398-2RS EVMAX ISB Dual Row           | 8     | 19    | 10/11 |
| 13983000 | 608-2RSC3 VMAX ISB                   | 8     | 22    | 7     |
| 13983200 | 6800-2RSC3 VMAX ISB                  | 10    | 19    | 5     |
| 13983800 | 63800-2RSC3 VMAX ISB                 | 10    | 19    | 7     |
| 13983300 | 6900-2RSC3 VMAX ISB                  | 10    | 22    | 6     |
| 13983400 | 7900-2RSC3 VMAX ISB Contacto Angular | 10    | 22    | 6     |
| 13983100 | 6000-2RSC3 VMAX ISB                  | 10    | 26    | 8     |
| 13983205 | 6801-2RSC3 VMAX ISB                  | 12    | 21    | 5     |
| 13983305 | 6901-2RSC3 VMAX ISB                  | 12    | 24    | 6     |
| 13983405 | 7901-2RSC3 VMAX ISB Contacto Angular | 12    | 24    | 6     |
| 13983105 | 6001-2RSC3 VMAX ISB                  | 12    | 28    | 8     |
| 13983210 | 6802-2RSC3 VMAX ISB                  | 15    | 24    | 5     |
| 13983700 | 3802-2RSC3 VMAX ISB Dual Row         | 15    | 24    | 7     |
| 13983310 | 6902-2RSC3 VMAX ISB                  | 15    | 28    | 7     |
| 13983410 | 7902-2RSC3 VMAX ISB Contacto Angular | 15    | 28    | 7     |
| 13983215 | 6803-2RSC3 VMAX ISB                  | 17    | 26    | 5     |
| 13983815 | 63803-2RSC3 VMAX ISB                 | 17    | 26    | 7     |
| 13983600 | 17286-2RSC3 VMAX ISB                 | 17    | 28    | 6     |
| 13983605 | 17287-2RSC3 VMAX ISB                 | 17    | 28    | 7     |
| 13983315 | 6903-2RSC3 VMAX ISB                  | 17    | 30    | 7     |
| 13983320 | 6904-2RSC3 VMAX ISB                  | 20    | 37    | 9     |
| 13983500 | MR 215317-2RSC3 VMAX ISB             | 21.5  | 31    | 7     |
| 13984115 | 2153114-2RSC3 VMAX ISB Dual Row      | 21.5  | 31    | 14    |



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS



SUSPENSION  
BEARINGS

VMAX SERIES

non caged / max number of balls

DIMENSIONS (mm)

| Code     | Reference           | Inner | Outer | Width |
|----------|---------------------|-------|-------|-------|
| 13983225 | 6805-2RSC3 VMAX ISB | 25    | 37    | 7     |
| 13983240 | 6808-2RSC3 VMAX ISB | 40    | 52    | 7     |
| 13983245 | 6809-2RSC3 VMAX ISB | 45    | 58    | 7     |



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS



## HEADSET BEARINGS



WHEEL HUB AND  
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SUSPENSION  
BEARINGS



HEADSET  
BEARINGS



HEADSET BEARINGS



WHEEL HUB AND  
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SUSPENSION  
BEARINGS



HEADSET  
BEARINGS

## FEATURES AND MATERIALS



### HEADSET BEARINGS

The steering of the bicycle is the mechanism housed between the fork and the frame that in turn houses the bearings that allow the fork tube to rotate, allowing the lateral movement of the front wheel and therefore, the change of direction of the bicycle.

To know what type of bearing to use, it is necessary to know that there are 2 types of directions depending on the way it is attached to the frame and the type of power used.

The named “threaded” and the “non-threaded” (threadless) or ahead where the fork tube is completely smooth, without any thread.

When talking about the different types of ahead directions, reference is made to the different ways of housing the bearings in the frame, depending on how it is built, to the headset pipe

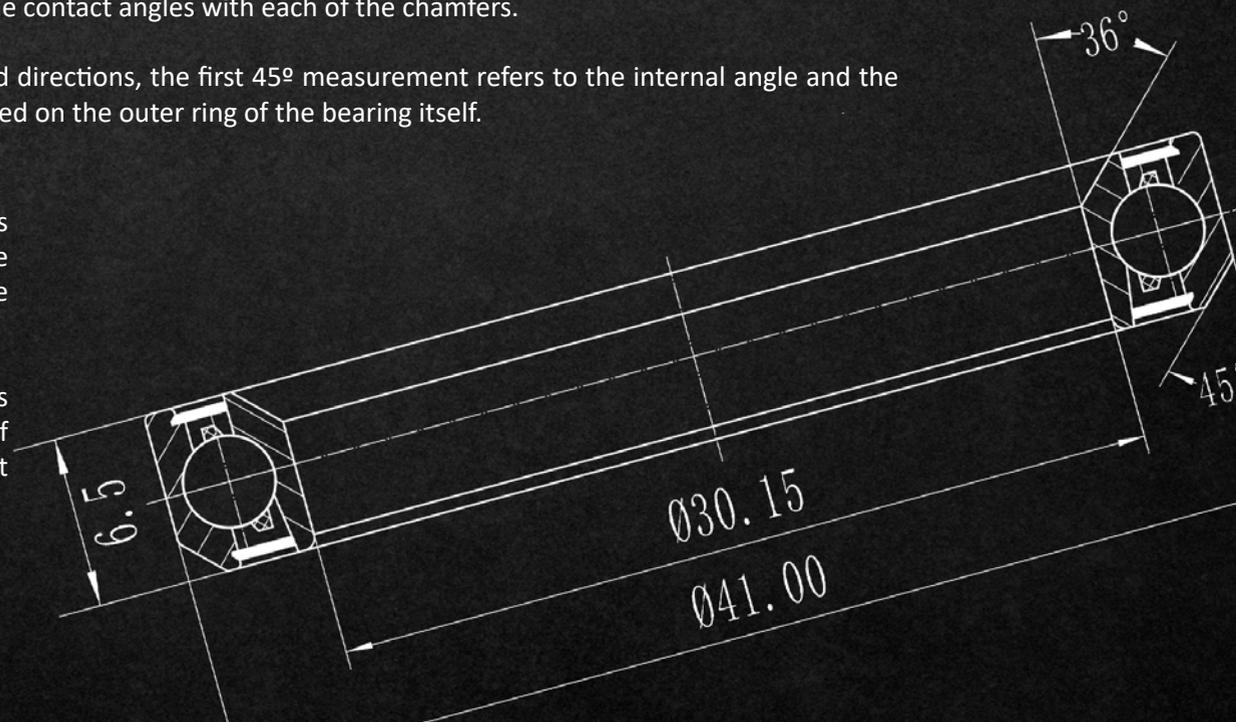
- Conventional directions: in frames without internal space to place the cups in which case the bearings are mounted in the external cups
- Semi-integrated directions: in frames that do allow the steering cups and the bearings to be mounted.
- Integrated directions: in which the bearings are mounted directly, without resorting to the use of cups.

These bearings have a special design different from the conventional one that visibly incorporates slight chamfers both inside and outside, whose measurements are determined by the different angles degrees. Therefore, to choose the most suitable bearings for our headset, it is necessary to take into account the measurements of the inner diameter, the outer diameter, the height and the contact angles with each of the chamfers.

If we take, for example, the ISB 45° / 45° MH-P08 bearings indicated for ahead directions, the first 45° measurement refers to the internal angle and the second 45° to the external angle. In any case, this information is usually engraved on the outer ring of the bearing itself.

Bearings located in these types of directions are usually sealed. This avoids recurring maintenance since the grease remains inside, preventing wear on the balls and extending their useful life. The sealing protects them in addition to the usual pollutants, temperature, dust, humidity, etc ...

Despite the fact that the bicycle market includes a large number of options for different types of directions, the ISB brand offers a wide selection of measurements and contact angles that place it among the favorites of the most demanding specialist workshops.

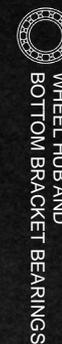




HEADSET  
BEARINGS

DIMENSIONS (mm)

| Code     | Reference              | Inner | Outer | Width | ° Grades |
|----------|------------------------|-------|-------|-------|----------|
| 13980092 | MH-P09H6.3 ISB         | 27.15 | 38    | 6.3   | 45°/45°  |
| 13980040 | MH-P04 (TH-870G) ISB   | 30.15 | 39    | 6.5   | 45°/45°  |
| 13980030 | MH-P03 ISB             | 30.15 | 41    | 6.5   | 45°/45°  |
| 13980035 | MH-P03K (TH-873) ISB   | 30.15 | 41    | 6.5   | 36°/45°  |
| 13980600 | MR 345 ISB             | 30.15 | 41    | 6.5   | 90°/90°  |
| 13980080 | MH-P08 (ACB418) ISB    | 30.15 | 41.8  | 6.5   | 45°/45°  |
| 13980684 | MR 845 ISB             | 30.15 | 41.8  | 6.5   | 90°/90°  |
| 13980081 | ACB845H8-2RS ISB       | 30.15 | 41.8  | 8     | 45°/45°  |
| 13980083 | MH-P08F (TH-870E) ISB  | 30.5  | 41.8  | 8     | 45°/45°  |
| 13980082 | MH-P08H8 (TH-870) ISB  | 30.5  | 41.8  | 8     | 45°/45°  |
| 13980695 | MR 136 (ACB418H6) ISB  | 32.8  | 41.8  | 6     | 45°/45°  |
| 13980643 | MR 438 ISB             | 33.05 | 43.8  | 7     | 90°/90°  |
| 13980172 | MH-P17 ACB468 ISB      | 34.1  | 46.8  | 7     | 45°/45°  |
| 13980170 | MH-P22 (ACB469) ISB    | 34.1  | 46.9  | 7     | 45°/45°  |
| 13980700 | MR 137 ISB             | 37    | 46.9  | 7     | 45°/45°  |
| 13980720 | ACB 3748H7-2RS ISB     | 37    | 48    | 7     | 45°/90°  |
| 13980213 | SS MH-P21 ACB3749S ISB | 37    | 49    | 7     | 45°/45°  |
| 13983900 | B543-2RSC3 VMAX ISB    | 39.7  | 50.8  | 7.14  | 90°/90°  |
| 13980400 | ACB518K (TH-073) ISB   | 40    | 51.8  | 8     | 36°/45°  |
| 13980651 | MR 518H8 ISB           | 40    | 51.8  | 8     | 90°/90°  |
| 13980606 | MR 4052H6.5 ISB        | 40    | 52    | 6.5   | 90°/90°  |
| 13980162 | MH-P16K ISB            | 40    | 52    | 7     | 36°/45°  |
| 13980160 | MH-P16 (TH-070) ISB    | 40    | 52    | 7     | 45°/45°  |
| 13980607 | MR 4052H7 ISB          | 40    | 52    | 7     | 90°/90°  |
| 13980161 | MH-P16H8 (ACB52) ISB   | 40    | 52    | 8     | 45°/45°  |
| 13980500 | T808 ISB               | 40    | 52    | 12    | 45°/45°  |



WHEEL HUB AND  
BOTTOM BRACKET BEARINGS



SUSPENSION  
BEARINGS



HEADSET  
BEARINGS



## ENGINEERING AT THE SERVICE OF SPORTS

We design and manufacture our bearings  
to optimize and guarantee its performance in each application



2019 UEC MTB MARATHON  
EUROPEAN CHAMPIONS



**ISB**  
SPORT BEARINGS

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