

art.GBA

art.GBI

## STEEL LOCKING RING "GBA" made of R80 zinc coated steel (36SMnPb14), for TR10/80 bars. STAINLESS STEEL LOCKING RING "GBI" made of AISI 303 stainless steel, for TR10/80 bars.

This type of ring, made by us, allows the adjustment of pressure on the bearings by gently screwing down to totally eliminate any axial play, ensuring a smooth support of the load and maintaining perfect rotation of the trapezoidal screw. The locking of the ring, after positioning, occurs gradually by tightening the two countersunk hex socket cap screws (V) located on the side of the ring, which impart pressure on the thread to lock with minimal risk of loosening. This item is outstanding above all for the fact that it allows easy additional adjustments over time by loosening the hex cap socket screws (V) to unlock the ring which allows new positioning. The repetition of adjustments does not cause any failure of the locking system which can be adjusted by a pin wrench to applied to the outside of the ring purposely designed for same. Once the hex socket cap screws (V) are engaged in the GBA/GBI ring it is possible to add ring KM and locking washer for further security against loosening (see ring kit GBA/GBI). On the next page is a chart of the carrying capacity of the rings, their locking torque and their resistance to unscrewing. As previously mentioned, in some circumstances it may be necessary to loosen or tighten the GBA/GBI ring using a pin wrench of the size listed in the chart below.

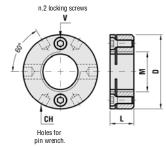
The table below shows the correct GBA/GBI ring required for each specific threaded bar code.











Locking ring GBA in R80 steel with white zinc coating.

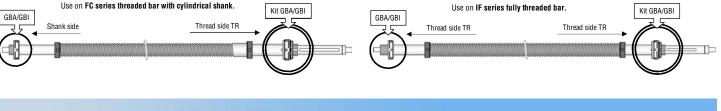
Locking ring GBI in AISI 303 stainless steel.

## **CODIFICATION AND SIZING**

| Use of GBA/GBI rings in reference to the type of threaded bar                       |  |                       |                             |   |                                       | Technical date and dimensions of GBA/GBI rings |     |    |                                 |                              |              |
|---|--|-----------------------|-----------------------------|---|---------------------------------------|--|-----|----|---------------------------------|------------------------------|--------------|
| "FC" series threaded bar<br>(shank side machined with<br>sufficient space for ring) | "IF/BID" series<br>threaded bar<br>(TR threaded side machined<br>to the core diameter) | GBA CODE<br>R80 steel | Usable ring art.GBA (steel) | GBI CODE<br>Stainless steel<br>AISI 303 | Usable ring art.GBI (stainless steel) | М  | D   | L  | CH<br>Pin wrench<br>for GBA/GBI | V<br>2 countersunk<br>screws | Weight<br>Kg |
| * TR10-12   | TR16   | A02AS10               | GBA 10                      | A02IS10                                 | GBI 10                                | M10x0,75                                       | 25  | 10 | 25/28                           | M3x6                         | 0,024        |
| TR14  | TR18   | A02AS12               | GBA 12                      | A02IS12                                 | GBI 12                                | M12x1  | 30  | 14 | 30/32                           | M4x8                         | 0,052        |
| TR16  | TR20-22  | A02AS15               | GBA 15                      | A02IS15                                 | GBI 15                                | M15x1  | 35  | 15 | 34/36                           | M4x10                        | 0,085        |
| TR18-20   | TR24-25  | A02AS17               | GBA 17                      | A02IS17                                 | GBI 17                                | M17x1  | 40  | 16 | 40/42                           | M4x10                        | 0,112        |
| TR22-24-25  | TR26-28-30   | A02AS20               | GBA 20                      | A021S20                                 | GBI 20                                | M20x1  | 45  | 16 | 45/50                           | M5x10                        | 0,147        |
| TR26-28-30  | TR32-35-36   | A02AS25               | GBA 25                      | A021S25                                 | GBI 25                                | M25x1,5  | 50  | 16 | 45/50                           | M5x10                        | 0,174        |
| TR32-35-36  | TR40   | A02AS30               | GBA 30                      | A021S30                                 | GBI 30                                | M30x1,5  | 55  | 16 | 52/55                           | M5x10                        | 0,182        |
| TR40  | TR45-46  | A02AS35               | GBA 35                      | A021S35                                 | GBI 35                                | M35x1,5  | 60  | 16 | 58/62                           | M5x10                        | 0,212        |
| TR45-46   | TR50-55  | A02AS40               | GBA 40                      | A021S40                                 | GBI 40                                | M40x1,5  | 70  | 18 | 68/75                           | M5x12                        | 0,330        |
| TR50  | TR60   | A02AS45               | GBA 45                      | A021S45                                 | GBI 45                                | M45x1,5  | 80  | 20 | 80/90                           | M6x12                        | 0,490        |
| TR55  | TR65   | A02AS50               | GBA 50                      | A021S50                                 | GBI 50                                | M50x1,5  | 80  | 23 | 80/90                           | M6x14                        | 0,510        |
| TR60  | TR70   | A02AS55               | GBA 55                      | A021S55                                 | GBI 55                                | M55x2  | 90  | 25 | 80/90                           | M6x16                        | 0,740        |
| TR65  | TR80   | A02AS60               | GBA 60                      | A021S60                                 | GBI 60                                | M60x2  | 100 | 28 | 95/100                          | M6x20                        | 1,040        |

<sup>\*</sup> To use the GBA 10 ring on the shank side FC series threaded bar TR10 a stop needs to be created by inserting CCA TR10 nut at the end of the thread and pinning or blocking it.

## • EXAMPLES OF APPLICATIONS OF GBA-GBI LOCKING RINGS ON TRAPEZOIDAL SCREWS.





<sup>-</sup> For sufficient quantities, locking rings GBA/GBI of 65, 70, 75, 80, 85, 90, 95, 100 with a threaded pitch of 2 (mm) ISO 965/III, can be made on request.