

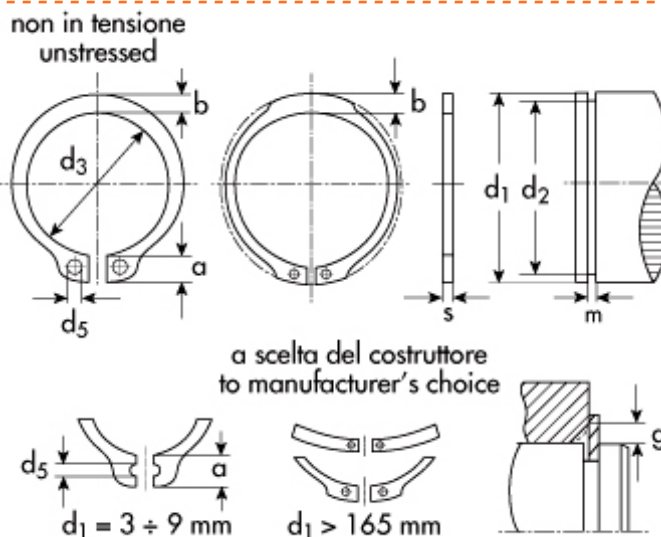
## RETAINING RINGS

**Material:** Spring steel

**Hardness:**

**SURFACE FINISHES**  
**Phosphated and oiled**  
**Blackened and oiled**  
 Manufacturer's choice

**Example of designation:**  
 ring type **A 25**



DIN 471  
 UNI 3653-7435  
 Type **A** - for  
 shafts



**d<sub>1</sub>**=shaft diameter  
**d<sub>2</sub>**=groove diameter  
**d<sub>3</sub>**=ring diameter in the unstressed state  
**s**=thickness

\* **AA**= two holes execution

| d1    | Description | Price<br>euro /100 | % Price Change | Package |
|-------|-------------|--------------------|----------------|---------|
| 63.00 | <b>A 63</b> | <b>11,00</b>       | <b>NET</b>     | 100     |

| RING                      |             | GROOVE                    |       | SUPPLEMENTARY DATA                      |        |
|---------------------------|-------------|---------------------------|-------|-----------------------------------------|--------|
| <b>d<sub>1</sub></b>      | 63.00       | <b>d<sub>2</sub></b>      | 60.0  | <b>n</b>                                | 4.5    |
| <b>s</b>                  | 2.00        | <b>tole d<sub>2</sub></b> | -0.30 | <b>FN (kN)</b>                          | 48.3   |
| <b>tole s</b>             | -0.07       | <b>m</b>                  | 2.15  | <b>FR (kN)</b>                          | 70.20  |
| <b>d<sub>3</sub></b>      | 58.8        | <b>t</b>                  | 1.50  | <b>g</b>                                | 2.5    |
| <b>tole d<sub>3</sub></b> | +0.46 -1.10 |                           |       | <b>FRg (kN)</b>                         | 11.60  |
| <b>a max</b>              | 7.6         |                           |       | <b>AN (mm<sup>2</sup>)</b>              | 290.0  |
| <b>b ~</b>                | 6.2         |                           |       | <b>K (kN.mm)</b>                        | 126.00 |
| <b>d<sub>5</sub> min</b>  | 2.5         |                           |       | <b>n<sub>abl</sub>.x1000 (giri/min)</b> | 7.0    |
| <b>weight kg/1000</b>     | 15.900      |                           |       | <b>plier</b>                            | ZGA 3  |

Technical informations are indicative and can be updated.

Copyright Gandini Fasteners S.r.l. All rights reserved. No part of this web site may be reproduced in any form without express permission.

**GANDINI FASTENERS SRL** viale Pier Paolo Pasolini, 83 - 20099 Sesto S.Giovanni Milano Italy  
 Tel. +39 02 241 047 250 Fax +39 02 241 047 74

Production and distribution  
 of fasteners, fixing elements  
 and mechanical parts  
 machining

**GANDINI FASTENERS SRL**  
 viale Pier Paolo Pasolini, 83  
 Sesto San Giovanni Mi - Italy

**Sales department**  
 250@gandini.it  
 tel +39 02 241 047 250

**Administration**  
 350@gandini.it  
 tel +39 02 241 047 350