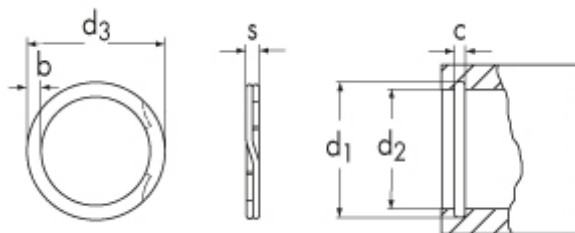


**SMALLEY® SPIRAL RETAINING RINGS**

**SAE 1070-90**  
**Carbon Steel**

surface treatment:  
**Oil dipped**

**Example of designation: DNH-13**



**d1**=shaft diameter  
**d2**=groove diameter  
**d3**=external ring diameter  
**S**=thickness

Medium-heavy  
duty series  
**DNH - for bores  
for groove DIN  
472**



| description   | Price<br>Euro x100 | % Price Change |   | Package |
|---------------|--------------------|----------------|---|---------|
|               |                    | 1              | 2 |         |
| <b>DNH-33</b> | <b>57,00</b>       | + 20%          | - | 500     |

| DESCRIPTION                         | GROOVE          | THRUST CAPACITY                                                                                                            |
|-------------------------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------|
| DNH-33                              | <b>d2</b>       | <b>ring shear</b> Newtons 34.224<br>(safety factor =3)                                                                     |
| <b>d1 mm</b> 33.00                  | mm 34.70        |                                                                                                                            |
|                                     | <b>Toll. d2</b> | <b>groove yield</b> Newtons 13.670<br>(based on a groove material yield<br>strength of 310/mm and a safety factor<br>of 2) |
|                                     | mm +0,250       |                                                                                                                            |
|                                     | <b>c</b>        |                                                                                                                            |
|                                     | mm 1.30         |                                                                                                                            |
|                                     | <b>Toll. c</b>  |                                                                                                                            |
|                                     | mm +0,140       |                                                                                                                            |
| <b>RING IN THE UNSTRESSED STATE</b> |                 |                                                                                                                            |
| <b>d3</b>                           |                 |                                                                                                                            |
| mm 35.05                            |                 |                                                                                                                            |
| <b>Toll. d3</b>                     |                 |                                                                                                                            |
| mm +0,38                            |                 |                                                                                                                            |
| <b>b</b>                            |                 |                                                                                                                            |
| mm 2.41                             |                 |                                                                                                                            |
| <b>Toll. b</b>                      |                 |                                                                                                                            |
| mm +/-0,10                          |                 |                                                                                                                            |
| <b>s</b>                            |                 |                                                                                                                            |
| mm 1.14                             |                 |                                                                                                                            |
| <b>Toll. s</b>                      |                 |                                                                                                                            |
| mm +/-0,05                          |                 |                                                                                                                            |
| <b>Weight Kg/1000</b>               |                 |                                                                                                                            |
| 2.43                                |                 |                                                                                                                            |

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