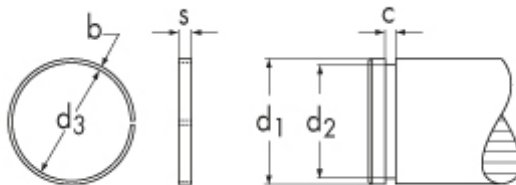


**SMALLEY® SPIRAL RETAINING RINGS**
**SAE 1070-90 Carbon Steel**

surface treatment:  
**Oil dipped**
**Example of designation: HSM-10**

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

**HSM - for shafts**


| description   | Price<br>Euro x100 | % Price Change |        | Package |
|---------------|--------------------|----------------|--------|---------|
| <b>HSM-33</b> | <b>66,00</b>       | 1<br>+ 20%     | 2<br>- | 250     |

| DESCRIPTION                         | GROOVE          | THRUST CAPACITY                                                                                                     |
|-------------------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------|
| HSM-33                              | <b>d2</b>       | <b>groove yield</b> Newtons 6.939<br>(based on a groove material yield strength of 310/mm and a safety factor of 2) |
| <b>d1 mm</b> 33.00                  | mm 32.14        |                                                                                                                     |
|                                     | <b>Toll. d2</b> |                                                                                                                     |
|                                     | mm +/-0,10      |                                                                                                                     |
|                                     | <b>c</b>        |                                                                                                                     |
|                                     | mm 3.94         |                                                                                                                     |
|                                     | <b>Toll. c</b>  |                                                                                                                     |
|                                     | mm +0,100       |                                                                                                                     |
| <b>RING IN THE UNSTRESSED STATE</b> |                 |                                                                                                                     |
| <b>d3</b>                           | mm 31.48        |                                                                                                                     |
| <b>Toll. d3</b>                     | mm -0,51        |                                                                                                                     |
| <b>b</b>                            | mm 0.86         |                                                                                                                     |
| <b>Toll. b</b>                      | mm +/-0,05      |                                                                                                                     |
| <b>s</b>                            | mm 3.81         |                                                                                                                     |
| <b>Toll. s</b>                      | mm +/-0,10      |                                                                                                                     |
| <b>Weight Kg/1000</b>               | 2.59            |                                                                                                                     |

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