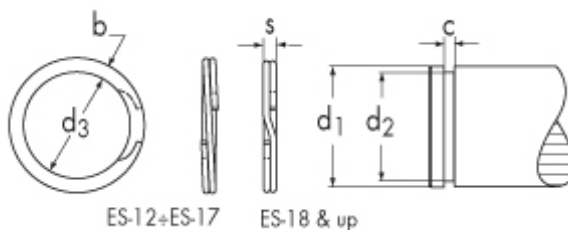


**SMALLEY® SPIRAL RETAINING RINGS**

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

surface treatment:  
**Oil dipped**

**Example of designation: ES-6**



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

Medium duty  
series  
**ES - for shafts**



| description  | Price<br>Euro x100 | % Price Change |   | Package |
|--------------|--------------------|----------------|---|---------|
|              |                    | 1              | 2 |         |
| <b>ES-60</b> | <b>88,00</b>       | + 20%          | - | 100     |

| DESCRIPTION                         | GROOVE          | THRUST CAPACITY                                                                                                      |
|-------------------------------------|-----------------|----------------------------------------------------------------------------------------------------------------------|
| ES-60                               | <b>d2</b>       | <b>ring shear</b> Newtons 68.180<br>(safety factor =3)                                                               |
| <b>d1 mm</b> 60.00                  | mm 58.01        |                                                                                                                      |
|                                     | <b>Toll. d2</b> | <b>groove yield</b> Newtons 29.220<br>(based on a groove material yield strength of 310/mm and a safety factor of 2) |
|                                     | mm +/-0,150     |                                                                                                                      |
| <b>RING IN THE UNSTRESSED STATE</b> | <b>c</b>        |                                                                                                                      |
| <b>d3</b>                           | mm 1.42         |                                                                                                                      |
| mm 57.43                            |                 |                                                                                                                      |
| <b>Toll. d3</b>                     | <b>Toll. c</b>  |                                                                                                                      |
| mm -0,63                            | mm +0,100       |                                                                                                                      |
| <b>b</b>                            |                 |                                                                                                                      |
| mm 3.51                             |                 |                                                                                                                      |
| <b>Toll. b</b>                      |                 |                                                                                                                      |
| mm +.07/-0,13                       |                 |                                                                                                                      |
| <b>s</b>                            |                 |                                                                                                                      |
| mm 1.25                             |                 |                                                                                                                      |
| <b>Toll. s</b>                      |                 |                                                                                                                      |
| mm +/-0,08                          |                 |                                                                                                                      |
| <b>Weight Kg/1000</b>               |                 |                                                                                                                      |
| 5.85                                |                 |                                                                                                                      |

Technical informations are indicative and can be updated.

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