

## RETAINING RINGS

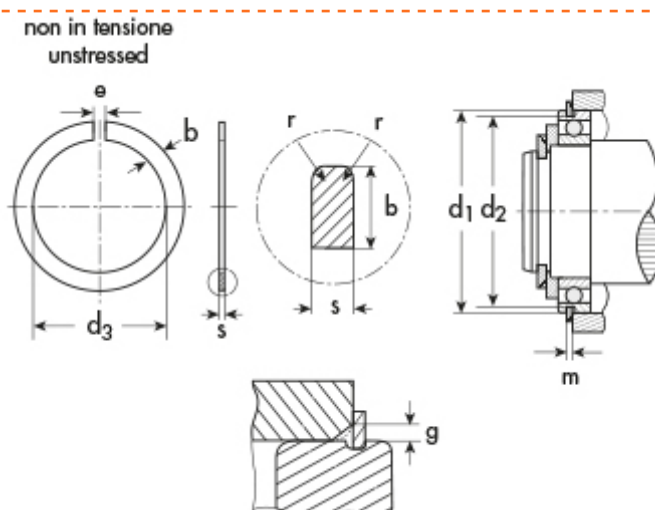
**Material:** Spring steel

**Hardness:**  
45÷50 HRC 450÷520 HV

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

**Example of designation:**  
ring type **SP 30**

**Outer edges sharp or rounded, to manufacturer's choice**



DIN 5417  
circlips for  
bearing type  
**SP** - for shafts



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

| d1     | Description | Price<br>euro /100 | % Price Change |   | Package |
|--------|-------------|--------------------|----------------|---|---------|
|        |             |                    | 1              | 2 |         |
| 310.00 | SP 310      | on demand          | -              | - | 25      |

| RING           |         | GROOVE                     |        | SUPPLEMENTARY DATA                 |       |
|----------------|---------|----------------------------|--------|------------------------------------|-------|
| d1             | 310.00  | d2                         | 300.00 | FN (kN)                            | 800.0 |
| s              | 4.50    | tole d2                    | -0.50  | FR (kN)                            | 320.0 |
| tole s         | -0.2    | m                          | 5.50   | g                                  | 7.0   |
| d3             | 294.0   | Delta tole di m (solo x S) | 0.5    | FRg (kN)                           | 27.30 |
| tole d3        | 3.0     |                            |        | K (kN.mm)                          | 770.0 |
| e              | 10      |                            |        | n <sub>abl</sub> .x1000 (giri/min) | 0.500 |
| r              | 1.5     |                            |        |                                    |       |
| b ~            | 12.00   |                            |        |                                    |       |
| tole b         | -0.30   |                            |        |                                    |       |
| d4             | 324.0   |                            |        |                                    |       |
| weight kg/1000 | 412.000 |                            |        |                                    |       |

Technical informations are indicative and can be updated.

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