

## 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 |         |
| 215.00 | SP 215      | 1.700,00 •         | -              | - | 25      |

| RING                |         | GROOVE                     |        | SUPPLEMENTARY DATA                 |       |
|---------------------|---------|----------------------------|--------|------------------------------------|-------|
| d <sub>1</sub>      | 215.00  | d <sub>2</sub>             | 208.60 | FN (kN)                            | 376.0 |
| s                   | 3.10    | tole d <sub>2</sub>        | -0.50  | FR (kN)                            | 120.0 |
| tole s              | -0.1    | m                          | 3.50   | g                                  | 6.0   |
| d <sub>3</sub>      | 205.9   | Delta tole di m (solo x S) | 0.3    | FRg (kN)                           | 11.90 |
| tole d <sub>3</sub> | 1.8     |                            |        | K (kN.mm)                          | 288.0 |
| e                   | 10      |                            |        | n <sub>abl.</sub> x1000 (giri/min) | 1.000 |
| r                   | 1.2     |                            |        |                                    |       |
| b ~                 | 9.60    |                            |        |                                    |       |
| tole b              | -0.15   |                            |        |                                    |       |
| d <sub>4</sub>      | 227.8   |                            |        |                                    |       |
| weight kg/1000      | 160.000 |                            |        |                                    |       |

Technical informations are indicative and can be updated.

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