# Heavy-section plain washer

A heavy-section washer for assemblies using heavy-duty spring pins and applications requiring a specific bearing geometry. Select bore, outside diameter and thickness together; this is not a direct substitute for a normal plain washer.

Dimensional range

M3-M30

Series

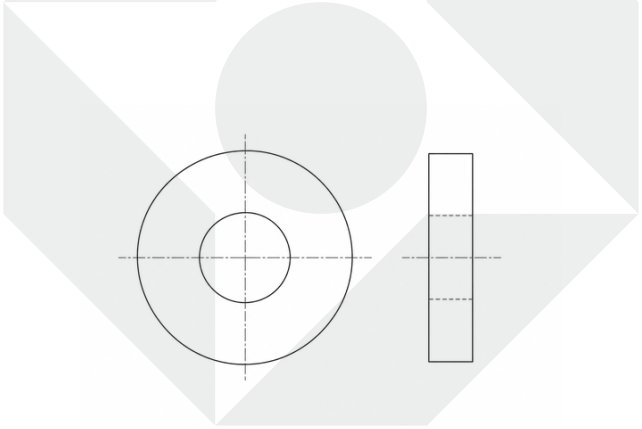
Plain · heavy section

Configuration

A2 / A4 stainless



## Technical drawing



d1

bore

d2

outside diameter

s

thickness

Pin Ø

heavy-duty spring-pin reference. Nominal commercial dimensions.

## Variants and dimensional data

15 commercial sizes M3-M30. Pin Ø is the catalogue dimensional reference for the heavy-duty spring-pin assembly, not the bolt diameter. Other sizes and dedicated production on request.

Dimensions in mm. Identification drawing, not a manufacturing drawing.

| M | d1 | d2 | s | Pin Ø | kg / 1,000 pcs |
|---|---|---|---|---|---|
| 3 | 3.2 | 9 | 1 | 6 | ND |
| 4 | 4.3 | 12 | 1.6 | 8 | ND |
| 5 | 5.3 | 15 | 2 | 10 | ND |
| 6 | 6.4 | 17 | 3 | 12 | ND |
| 8 | 8.4 | 21 | 4 | 16 | ND |
| 10 | 10.5 | 25 | 4 | 18 | ND |
| 12 | 13 | 30 | 6 | 21 | ND |
| 14 | 15 | 36 | 6 | 25 | ND |
| 16 | 17 | 40 | 6 | 28 | ND |
| 18 | 19 | 44 | 8 | 32 | ND |
| 20 | 21 | 44 | 8 | 35 | ND |
| 22 | 23 | 50 | 8 | 38 | ND |
| 24 | 25 | 50 | 10 | 40 | ND |
| 27 | 28 | 60 | 10 | 45 | ND |
| 30 | 31 | 68 | 10 | 50 | ND |

ND: weight per 1,000 pieces has not been verified for this stainless series. Weights for steel versions or different dimensions are not automatically transferred.

A2 and A4 identify the stainless steel group. This selection does not assign a 70/80 property class or an HV hardness not declared for the variant. Tolerances and mechanical requirements are defined in the supply specification.

Table dimensions refer to the stated execution. DIN/UNI, polymer and special variants require verification of their own dimensions; they do not automatically inherit reference geometry, weight or performance.

## Materials, classes, finishes and treatments

Executions are distinguished by reference, material, class and finish. DIN, ISO and UNI references do not imply dimensional equivalence or availability of every size in each material. Supply and batch documents require quotation confirmation.

| Execution reference | Material | Class / hardness | Documented finishes |
|---|---|---|---|
| DIN 7349 | Steel | 100 HV | Black oxide; Plain; Zinc plated |
| DIN 7349 | Stainless A2 | To be specified | To be specified |
| DIN 7349 | Stainless A4 | To be specified | To be specified |

“To be specified” is a requirement not established by this selection; it does not imply class 70/80, HV hardness or an automatic finish. Steel property classes do not apply to nylon/polyamide; PA6 and PA66 are distinguished only where stated. For nuts with non-metallic inserts, the material shown is the body material.

## Documentation

| Document | Status |
|---|---|
| Declaration of conformity | Subject to order agreement |
| Material certificate | Subject to order agreement |
| EN 10204 2.2 test report | Subject to order agreement |
| EN 10204 3.1 inspection certificate | Subject to order agreement |
| Dimensional inspection report | Subject to order agreement |
| Coating report | Subject to order agreement |
| Other documentation | Subject to order agreement |

Batch documents are not automatically included: specify your requirements in the RFQ.

## ISO, DIN and UNI: key differences

### DIN 7349

DIN 7349 identifies a specific washer geometry for heavy-duty spring-pin assemblies. DIN 125 A and DIN 9021 have different geometries and are not automatic equivalents.