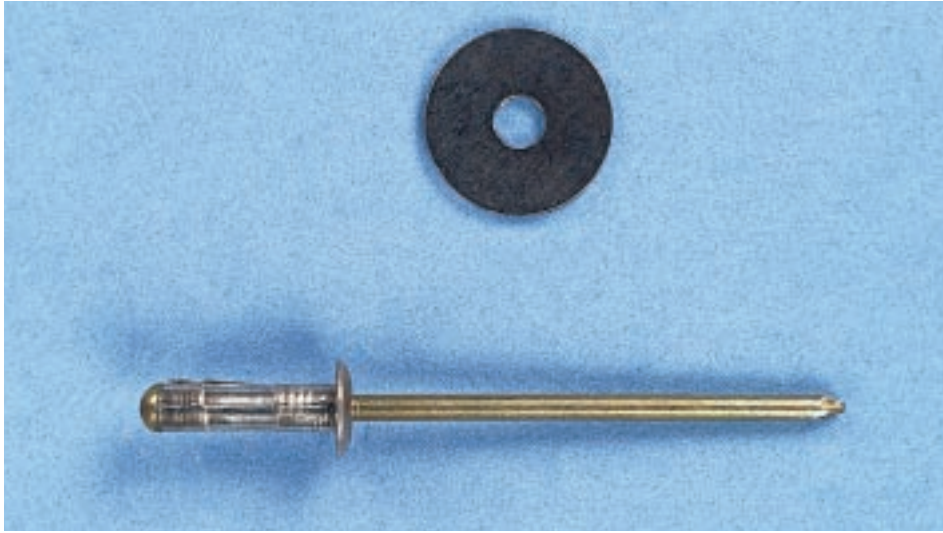


Specialist Washers



Washer for Pop Rivets

Material: steel
Finish: zinc plated

- Specially suited for the use with 1/8" Pop Rivets.

| Size | int. Ø mm | ext. Ø mm | Art. No. | Pack Qty. |
|------|--------------|--------------|-------------------|-----------|
| M 3 | 3.2 | 13 | 1411 32 13 | 100 |

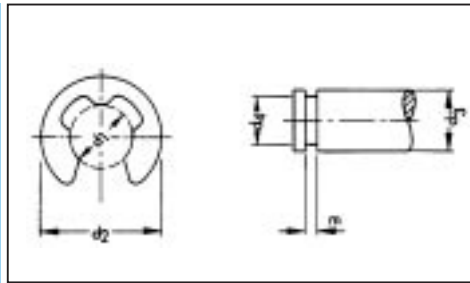


Serrated Conical Washers for Citroen Vehicles

Material: steel
Finish: yellow chromate

- A combination of the serrations and their conical shape ensures an improved and additional grip strength compared to ordinary washers.
- Used on all Citroen cars instead of ordinary washers.

| Size | int. Ø mm | ext. Ø mm | Art. No. | Pack Qty. |
|------|--------------|--------------|-------------------|-----------|
| M4 | 4 | 14 | 1436 4 14 | 100 |
| M5 | 5 | 12 | 1436 5 12 | |
| | 5 | 16 | 1436 5 16 | |
| M6 | 6 | 14 | 1436 6 14 | |
| | 6 | 18 | 1436 6 18 | |
| M 7 | 7 | 14 | 1436 7 14 | |
| | 7 | 18 | 1436 7 18 | |
| M 8 | 8 | 18 | 1436 8 18 | |
| | 8 | 22 | 1436 8 22 | |
| M 9 | 9 | 20 | 1436 9 20 | |
| M 10 | 10 | 22 | 1436 10 22 | |



E-Clips

DIN 6799

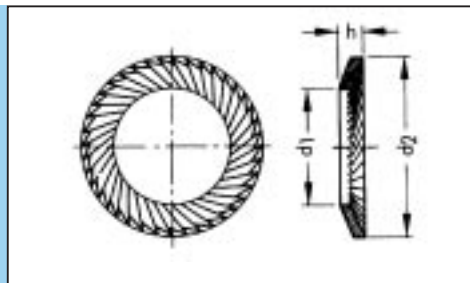
| nom. $\varnothing d_1$ ≅ Shaft End Groove d_4 mm | Shaft End $\varnothing d_3$ mm | d_2 stretched mm | m Groove Width mm | Art. No. | Pack Qty. | Qty. in Assort- ment |
|---|--------------------------------------|--------------------------|----------------------------|-----------------|--------------|-------------------------------|
| 2.3 | 3.0 – 4.0 | 6.0 | 0.64 | 0490 23 | 100 | 100 |
| 3.2 | 4.0 – 5.0 | 7.0 | 0.64 | 0490 32 | | |
| 4.0 | 5.0 – 7.0 | 9.0 | 0.74 | 0490 40 | | |
| 5.0 | 6.0 – 8.0 | 11.0 | 0.74 | 0490 50 | | |
| 6.0 | 7.0 – 9.0 | 12.0 | 0.74 | 0490 60 | | |
| 7.0 | 8.0 – 11.0 | 14.0 | 0.94 | 0490 70 | | |
| 8.0 | 9.0 – 12.0 | 16.0 | 1.05 | 0490 80 | | |
| 9.0 | 10.0 – 14.0 | 18.5 | 1.15 | 0490 90 | | |
| 10.0 | 11.0 – 15.0 | 20.0 | 1.25 | 0490 100 | 50 | |
| 12.0 | 13.0 – 18.0 | 23.0 | 1.35 | 0490 120 | 25 | 50 |
| 15.0 | 16.0 – 24.0 | 29.0 | 1.55 | 0490 150 | 50 | 25 |
| 19.0 | 20.0 – 31.0 | 37.0 | 1.80 | 0490 190 | | 10 |

Assortment



Contents:
12 sizes from 2.3 – 19mm = 985 pcs.

Art. No. 0964 490
 Pack Qty. 1



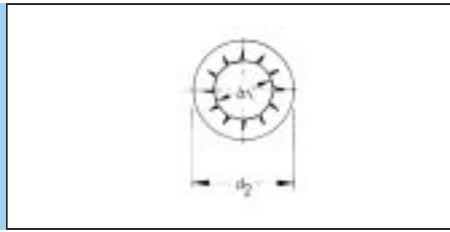
Schnorr Washers

Shakeproof Washers

Material: steel
 Finish: self colour

- The original Schnorr Shakeproof Washer is designed so that it can be used with countersunk and with hexagonal socket head cap screws as well as cheese head screws.

| Size | d_1 mm | d_2 mm | h mm | Art. No. | Pack Qty. |
|------|-------------|-------------|---------|----------------|--------------|
| M4 | 4.3 | 7 | 1.0 | 0493 4 | 100 |
| M5 | 5.3 | 9 | 1.1 | 0493 5 | |
| M6 | 6.4 | 10 | 1.2 | 0493 6 | |
| M7 | 7.4 | 12 | 1.3 | 0493 7 | |
| M8 | 8.4 | 13 | 1.4 | 0493 8 | |
| M10 | 10.5 | 16 | 1.6 | 0493 10 | |
| M12 | 13 | 18 | 1.7 | 0493 12 | |
| M14 | 15 | 22 | 2.0 | 0493 14 | |



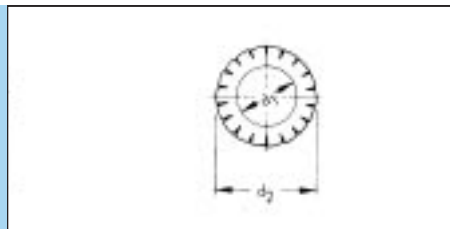
Serrated Lock Washers

acc. to DIN 6798

Material: steel
Finish: zinc plated

| Size | int. Ø mm | ext. Ø mm | Art. No. | Pack Qty. |
|------|--------------|--------------|----------------|-----------|
| M3 | 3.2 | 6 | 0428 3 | 100 |
| M4 | 4.3 | 8 | 0428 4 | |
| M5 | 5.3 | 10 | 0428 5 | |
| M6 | 6.4 | 11 | 0428 6 | |
| M8 | 8.4 | 15 | 0428 8 | |
| M10 | 10.5 | 18 | 0428 10 | |
| M12 | 12.5 | 20.5 | 0428 12 | |
| M14 | 14.5 | 24 | 0428 14 | |
| M16 | 16.5 | 26 | 0428 16 | |

Internal



External

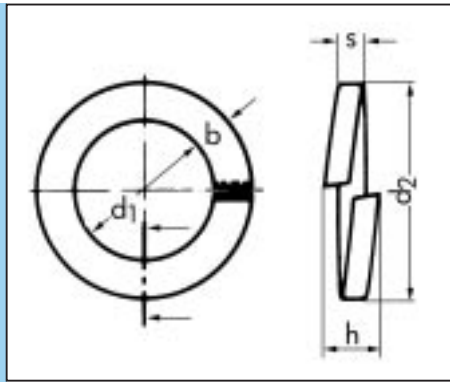
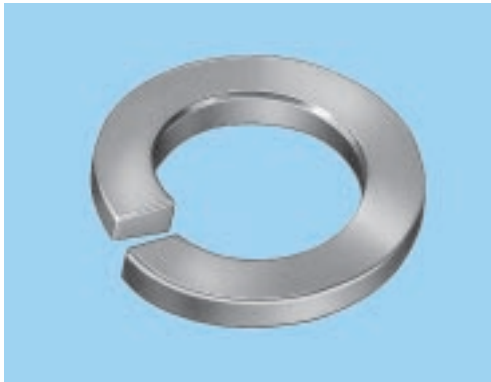
| Size | int. Ø mm | ext. Ø mm | Art. No. | Pack Qty. | Qty. in Asst. |
|------|--------------|--------------|----------------|-----------|------------------|
| M3 | 3.2 | 6 | 0429 3 | 100 | - |
| M4 | 4.3 | 8 | 0429 4 | | 100 |
| M5 | 5.3 | 10 | 0429 5 | | - |
| M6 | 6.4 | 11 | 0429 6 | | 100 |
| M7 | 7.4 | 12.5 | 0429 7 | | - |
| M8 | 8.4 | 15 | 0429 8 | | 100 |
| M10 | 10.5 | 18 | 0429 10 | | - |
| M12 | 12.5 | 20.5 | 0429 12 | | 100 |
| M14 | 14.5 | 24 | 0429 14 | | - |
| M16 | 16.5 | 26 | 0429 16 | - | |

Assortment



Contents:
6 Sizes Spring Washers
from 4.1 – 12.2mm = 600 pcs.
6 Sizes Serrated Washers
from 4.3 – 12.5mm = 600 pcs.

Art. No. 0964 441
Pack Qty. 1



Spring Washers

DIN 127

metric

Material: steel

| Ø for Screw | d ₁ mm | d ₂ mm | h mm | b mm | s mm | Art. No. zinc plated | Pack Qty. | Qty. in Asst. |
|-------------|-------------------|-------------------|------|------|------|----------------------|-----------|---------------|
| M3 | 3.1 | 6.2 | 1.6 | 1.3 | 0.8 | 0441 3 | 250 | – |
| M4 | 4.1 | 7.6 | 1.8 | 1.5 | 0.9 | 0441 4 | | 100 |
| M5 | 5.1 | 9.2 | 2.4 | 1.8 | 1.2 | 0441 5 | | – |
| M6 | 6.1 | 11.8 | 3.2 | 2.5 | 1.6 | 0441 6 | | 100 |
| M7 | 7.1 | 12.8 | 3.2 | 2.5 | 1.6 | 0441 7 | 100 | – |
| M8 | 8.1 | 14.8 | 4.0 | 3.0 | 2.0 | 0441 8 | | 100 |
| M10 | 10.2 | 18.1 | 4.4 | 3.5 | 2.2 | 0441 10 | | – |
| M12 | 12.2 | 21.1 | 5.0 | 4.0 | 2.5 | 0441 12 | | 100 |
| M14 | 14.2 | 24.1 | 6.0 | 4.5 | 3.0 | 0441 14 | | – |
| M16 | 16.2 | 27.4 | 7.0 | 5.0 | 3.5 | 0441 16 | | – |

| Ø for Screw | d ₁ mm | d ₂ mm | h mm | b mm | s mm | Art. No. ycr | Pack Qty. | Qty. in Asst. |
|-------------|-------------------|-------------------|------|------|------|-----------------|-----------|---------------|
| M3 | 3.1 | 6.2 | 1.6 | 1.3 | 0.8 | – | 250 | – |
| M4 | 4.1 | 7.6 | 1.8 | 1.5 | 0.9 | 0441 04 | | 100 |
| M5 | 5.1 | 9.2 | 2.4 | 1.8 | 1.2 | 0441 05 | | – |
| M6 | 6.1 | 11.8 | 3.2 | 2.5 | 1.6 | 0441 06 | | 100 |
| M7 | 7.1 | 12.8 | 3.2 | 2.5 | 1.6 | 0441 07 | 100 | – |
| M8 | 8.1 | 14.8 | 4.0 | 3.0 | 2.0 | 0441 08 | | 50 |
| M10 | 10.2 | 18.1 | 4.4 | 3.5 | 2.2 | 0441 010 | | – |
| M12 | 12.2 | 21.1 | 5.0 | 4.0 | 2.5 | 0441 012 | | 100 |
| M14 | 14.2 | 24.1 | 6.0 | 4.5 | 3.0 | 0441 014 | | – |
| M16 | 16.2 | 27.4 | 7.0 | 5.0 | 3.5 | – | | – |

Assortment



Contents:
6 Sizes Spring Washers from 4.1 – 12.2mm = 600 pcs.
6 Sizes Serrated Washers from 4.3 – 12.5mm = 600 pcs.

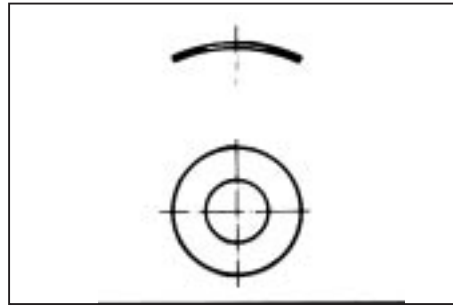
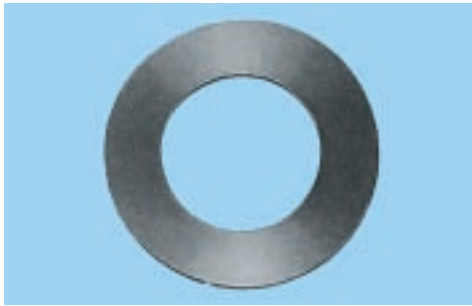
Art. No. 0964 441
 Pack Qty. 1

Assortment



Contents:
8 Sizes Spring Washers from 4.1 – 14.4mm = 700 pcs.
8 Sizes Washers from 4.3 – 15mm = 700 pcs.

Art. No. 0964 407 441
 Pack Qty. 1



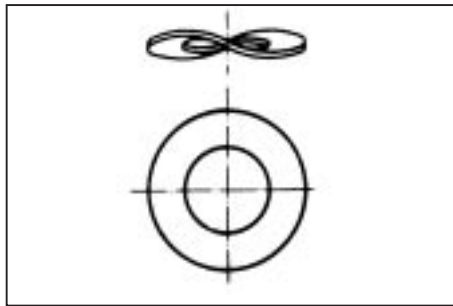
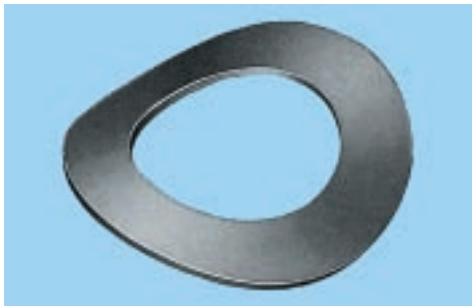
Spring Washers

DIN 137

Material: steel
Finish: zinc plated

| Size | Art. No. | Pack Qty. | Qty. in Assortment |
|------|----------------|-----------|--------------------|
| M3 | 0434 3 | 100 | 100 |
| M4 | 0434 4 | | |
| M5 | 0434 5 | | |
| M6 | 0434 6 | | |
| M7 | 0434 7 | | |
| M8 | 0434 8 | | |
| M10 | 0434 10 | | 100 |

Convex



| Size | Art. No. | Pack Qty. | Qty. in Assortment |
|------|----------------|-----------|--------------------|
| M5 | 0435 5 | 100 | 100 |
| M6 | 0435 6 | | |
| M7 | 0435 7 | | |
| M8 | 0435 8 | | |
| M10 | 0435 10 | | |
| M12 | 0435 12 | | |

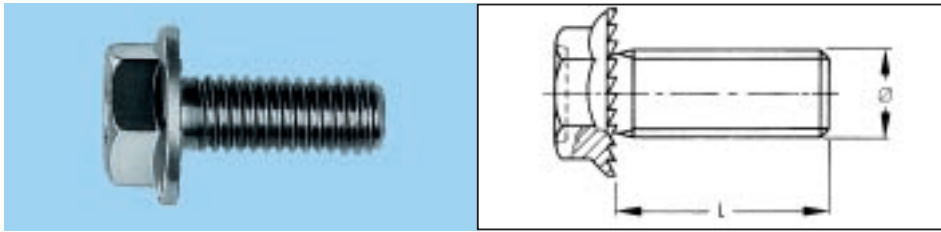
Wavy

Assortment



Contents:
6 Sizes Convex
M3 – M10 = 600 pcs.
6 Sizes Wavy
M5 – M12 = 600 pcs.

Art. No. 0964 434
Pack Qty. 1

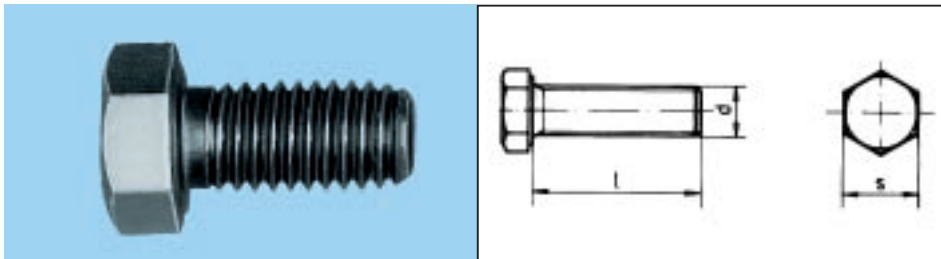


Flange Bolts

Material: steel
 Finish: yellow chromate
 Tensile Strength: 8.8

- For secure connections which are loaded dynamically in axial direction or vertical to the screw axis.
- Self locking screw with serrated bearing surface.

| Ø x pitch x l mm | A/F mm | Art. No. | Pack Qty. |
|------------------|--------|-------------------|-----------|
| 5 x 10 | 8 | 0274 5 10 | 100 |
| 5 x 16 | | 0274 5 16 | |
| 6 x 10 | 10 | 0274 6 10 | |
| 6 x 16 | | 0274 6 16 | |
| 6 x 20 | | 0274 6 20 | |
| 6 x 30 | | 0274 6 30 | |
| 8 x 16 | 13 | 0274 8 16 | |
| 8 x 20 | | 0274 8 20 | |
| 8 x 25 | | 0274 8 25 | |
| 8 x 35 | | 0274 8 35 | |
| 10 x 25 | 15 | 0274 10 25 | |
| 10 x 30 | | 0274 10 30 | |



Bolts and Set Screws with hexagon head for Japanese vehicles

Material: steel
 Finish: yellow chromate
 Tensile Strength: 8.8

| Ø x pitch x l mm | acc. to DIN | A/F mm | Art. No. | Pack Qty. |
|------------------|-------------|--------|-------------------|-----------|
| 8 x 1.25 x 40 | 931 | 12 | 0060 8 40 | 100 |
| 10 x 1.25 x 40 | 960 | 14 | 0060 10 40 | 50 |
| 10 x 1.25 x 50 | | | 0060 10 50 | |
| 10 x 1.25 x 60 | | | 0060 10 60 | |
| 10 x 1.25 x 70 | | | 0060 10 70 | |
| 10 x 1.25 x 80 | | | 0060 10 80 | |

Bolts

| Ø x pitch x l mm | acc. to DIN | A/F mm | Art. No. | Pack Qty. |
|------------------|-------------|--------|-------------------|-----------|
| 8 x 1.25 x 20 | 933 | 12 | 0060 8 20 | 100 |
| 8 x 1.25 x 25 | | | 0060 8 25 | |
| 8 x 1.25 x 30 | | | 0060 8 30 | |
| 10 x 1.25 x 20 | 961 | 14 | 0060 10 20 | |
| 10 x 1.25 x 25 | | | 0060 10 25 | |
| 10 x 1.25 x 30 | | | 0060 10 30 | |
| 10 x 1.25 x 35 | | | 0060 10 35 | |
| 10 x 1.25 x 45 | | | 0060 10 45 | |

Set Screws