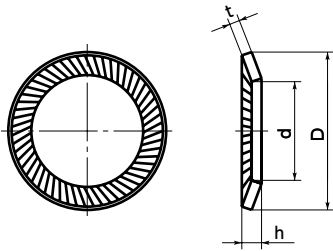




SWR/SWRS Ribbed Lock Washers

WEB Selection Tool
 WEB CAD Download
 Vibration resistant treatment
 SUS Stainless steel



● Material/Finish

RoHS Compliant

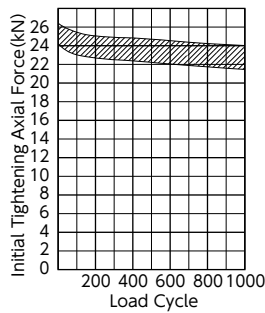
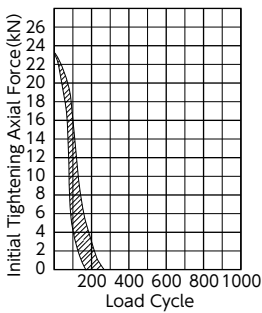
| | SWR | SWRS |
|-----------|---|--------|
| Main Body | SCM435 (Hardness 425 - 495 HV) Ferrosoferric Oxide Coating (Black) | SUS304 |

● Vibration test comparison

Test Hexagon Screws : DIN933 - 8.8-M10 - 35, Vibration : 15Hz, Amplitude : 0.5mm

■ Spring Washer (DIN127)

■ Ribbed Lock Washer (SWR)



- Ribs on both sides of the washer hook onto the bolt bearing surface and intended attachment section to prevent looseness due to vibration.
- Washers for loosing prevention. For connecting locations that cannot use other means such as adhesives.
- More effective for loosing prevention than standard spring washers.

● Application

Vibration Resistant

● Part number specification

SWR-10



Order in number of packs.

The minimum order quantity is 1 piece. ➔ P.794

SWR Steel · Ferrosoferric Oxide Coating

Unit : mm

| Part Number | Nominal | d | D | t | h | Mass (g) | Qty per pack*1 |
|-------------|---------|------------------------------------|----------------------------------|------|-----|----------|----------------|
| SWR-3 | 3 | 3.2 ^{+0.3} ₀ | 5.5 ⁰ _{-0.3} | 0.45 | 0.9 | 0.05 | 20 |
| SWR-4 | 4 | 4.3 ^{+0.3} ₀ | 7 ⁰ _{-0.36} | 0.5 | 1 | 0.08 | 20 |
| SWR-5 | 5 | 5.3 ^{+0.3} ₀ | 9 ⁰ _{-0.36} | 0.6 | 1.1 | 0.14 | 20 |
| SWR-6 | 6 | 6.4 ^{+0.36} ₀ | 10 ⁰ _{-0.36} | 0.7 | 1.2 | 0.23 | 20 |
| SWR-8 | 8 | 8.4 ^{+0.36} ₀ | 13 ⁰ _{-0.43} | 0.8 | 1.4 | 0.43 | 10 |
| SWR-10 | 10 | 10.5 ^{+0.43} ₀ | 16 ⁰ _{-0.43} | 1 | 1.6 | 0.82 | 10 |
| SWR-12 | 12 | 13 ^{+0.43} ₀ | 18 ⁰ _{-0.43} | 1.1 | 1.7 | 0.89 | 10 |
| SWR-16 | 16 | 17 ^{+0.43} ₀ | 24 ⁰ _{-0.52} | 1.3 | 2.1 | 2 | 10 |
| SWR-20 | 20 | 21 ^{+0.52} ₀ | 30 ⁰ _{-0.62} | 1.5 | 2.4 | 3.4 | 5 |

*1 The minimum order quantity is 1 piece. ➔ P.794

SWRS Stainless Steel

Unit : mm

| Part Number | Nominal | d | D | t | h | Mass (g) | Qty per pack*1 |
|-------------|---------|------------------------------------|----------------------------------|------|------|----------|----------------|
| SWRS-3 | 3 | 3.2 ^{+0.3} ₀ | 5.5 ⁰ _{-0.3} | 0.5 | 0.95 | 0.05 | 20 |
| SWRS-4 | 4 | 4.3 ^{+0.3} ₀ | 7 ⁰ _{-0.36} | 0.7 | 1.2 | 0.08 | 20 |
| SWRS-5 | 5 | 5.3 ^{+0.3} ₀ | 9 ⁰ _{-0.36} | 0.7 | 1.2 | 0.14 | 10 |
| SWRS-6 | 6 | 6.4 ^{+0.36} ₀ | 10 ⁰ _{-0.36} | 0.7 | 1.2 | 0.23 | 10 |
| SWRS-8 | 8 | 8.4 ^{+0.36} ₀ | 13 ⁰ _{-0.43} | 1 | 1.6 | 0.43 | 10 |
| SWRS-10 | 10 | 10.5 ^{+0.43} ₀ | 16 ⁰ _{-0.43} | 1 | 1.6 | 0.82 | 5 |
| SWRS-12 | 12 | 13 ^{+0.43} ₀ | 18 ⁰ _{-0.43} | 1.25 | 1.85 | 0.89 | 5 |
| SWRS-16 | 16 | 17 ^{+0.43} ₀ | 24 ⁰ _{-0.52} | 1.5 | 2.3 | 2 | 5 |
| SWRS-20 | 20 | 21 ^{+0.52} ₀ | 30 ⁰ _{-0.62} | 1.8 | 2.8 | 3.4 | 5 |

*1 The minimum order quantity is 1 piece. ➔ P.794

| | | | | |
|--------------------------|------------------------------------|---------------------------------|-----------------------------|--|
| Individual Sales ➔ P.794 | Cleanroom Wash & Packaging ➔ P.792 | Screw Length Adjustment ➔ P.796 | Vibration Resistant ➔ P.795 | Modification process for captive use ➔ P.791 |
| Available / Add'l charge | Available / Add'l charge | Not Available | Not Available | Not Available |