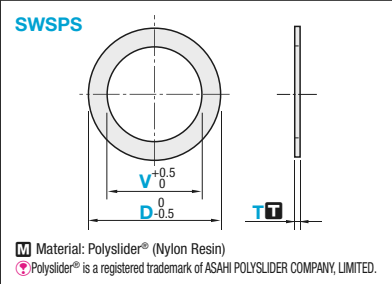


Extra Thin Resin Washers / Extra Thin Resin Washer Bulk Packages

Extra thin washer with excellent low friction and abrasion resistance.

Extra Thin Resin Washers- Abrasion Resistant

RoHS



| Part Number | Type | D | V | T | Unit Price | |
|-------------|------|--------------------|---|------|------------|--|
| SWSPS | 8 | 3 4 5 | | | | |
| | 10 | 4 5 6 | | | | |
| | 12 | 4 5 6 8 | | 0.13 | | |
| | 14 | 5 6 8 10 | | 0.25 | | |
| | 15 | 5 6 8 10 12 | | 0.5 | | |
| | 16 | 6 8 10 12 | | 1.0 | | |
| | 20 | 6 8 10 12 15 16 | | | | |
| | 25 | 6 8 10 12 15 16 20 | | 0.25 | | |
| | | | | 0.5 | | |

Tolerance

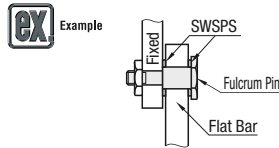
| Thickness (T) Tolerance | 0.13 | 0.25 | 0.5 | 1.0 |
|-------------------------|--------|--------|-------|------|
| | ±0.013 | ±0.025 | ±0.05 | ±0.1 |

Comparison Table

| Item | Polyslider® | Fluororesin |
|----------------------|-------------------------------|---------------------------------------|
| Abrasion Resistance | ○ | ○ |
| Compression Strength | ○ | × |
| Sliding Properties | ○ | ○ |
| Characteristics | Crush and abrasion resistant. | Low friction and not crush resistant. |

Property Data

| Item | Unit | Value |
|-----------------------|-------|----------|
| Tensile Strength | MPa | 98 |
| Elongation | % | 60 |
| Friction Coefficient | μ | 0.16~0.4 |
| Insulation Resistance | kV/mm | 45 |



Extra Thin Resin Washers- Polyacetal, Fluororesin, Polycarbonate

RoHS

| Type | Washer | Washer Package | Material | Color | Thickness (T) Tolerance |
|-------|------------|----------------|---------------|-------------|--|
| SWSJJ | PACK-SWSJJ | | Polyacetal | White | 0.1 ±0.03, 0.2 ±0.04, 0.3 ±0.07, 0.5 ±0.10 |
| SWSPT | PACK-SWSPT | | Fluororesin | White | |
| SWSPS | PACK-SWSPS | | Polycarbonate | Transparent | |

When you need large quantities, Bulk Packages are more economical. *PACK-SWS□□ contains 10 pieces.

| Part Number | Type | D | V Selection | T Selection | Unit Price |
|--|------|-------------------------|----------------------|----------------------------------|------------|
| PACK-SWSJJ PACK-SWSPT SWSJJ SWSPT | 8 | 0 | 3 4 | *0.1 0.2 0.3 0.5 1.0 | |
| | 10 | 0 | 3 4 5 6 | | |
| | 12 | 0 | 4 5 6 8 | | |
| | 14 | 0 | 4 5 6 8 10 | | |
| | 15 | 0 | 4 5 6 8 10 12 | | |
| | 16 | 0 | 4 5 6 8 10 12 | | |
| | 20 | 0 | 5 6 8 10 12 15 16 | | |
| | 25 | 0 | 6 8 10 12 15 16 20 | | |
| | 30 | 0 | 8 10 12 15 16 20 25 | | |
| | 35 | 0 | 10 12 15 16 20 25 30 | | |
| 40 | 0 | 10 12 15 16 20 25 30 | | | |
| 50 | 0 | 12 15 16 20 25 30 35 40 | | | |

*PACK-SWSJJ and SWSJJ are not available for T0.1.

| Part Number | Type | D | V Selection | T Selection | Unit Price |
|---------------------|------|----------|------------------|---------------------------------|------------|
| PACK-SWSPP SWSPS | 8 | 0 | 3 4 | 0.1 0.2 0.3 0.5 1.0 | |
| | 10 | 0 | 3 4 5 6 | | |
| | 12 | 0 | 4 5 6 8 | | |
| | 15 | 0 | 5 6 8 10 | | |
| | 16 | 0 | 5 6 8 10 12 | | |
| | 20 | 0 | 6 8 10 12 15 16 | | |
| | 25 | 0 | 6 8 10 12 15 16 | | |
| | 30 | 0 | 8 10 12 15 16 20 | | |
| | 35 | 0 | 20 25 30 | | |
| | 40 | 0 | 20 25 30 | | |
| 50 | 0 | 30 35 40 | | | |

For package, minimum order unit is 1 pack.

Ordering Example

| Part Number | V | T |
|-------------|---|-----|
| PACK-SWSJJ8 | 3 | 0.5 |
| SWSPS8 | 3 | 0.5 |

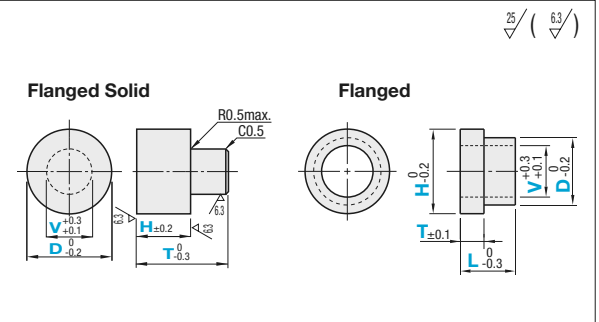
Resin Washer

Flanged Solid / Flanged



| Flanged Solid | Flanged | Material | Color |
|---------------|---------|---------------------------|-------------|
| FWNJJ | FWHJ | Polyacetal | White |
| FWNJK | FWHJK | MC Nylon Standard Grade | Black |
| FWNJM | FWHJM | MC Nylon Standard Grade | Blue |
| FWNJW | FWHJW | MC Nylon Standard Grade | Ivory |
| FWNJD | FWHJD | MC Nylon Conductive Grade | Black |
| FWNJT | FWHJT | MC Nylon Conductive Grade | Black |
| FWNJB | FWHJB | Paper Base | Brown |
| FWNJB | FWHJB | Cruth Base | Light Brown |
| FWNJJ | FWHJJ | Bakelite | Brown |
| FWNJF | FWHJF | Fluororesin | White |
| FWNJP | FWHJP | PEEK | Gray |
| FWNJE | FWHJE | Epoxy Glass | Green |

Material Properties P.141



Flanged Solid

| Part Number | D | V 0.5mm Increment | H 0.5mm Increment | T 0.5mm Increment | Unit Price | | | | | | | | | | | | | | | | | | |
|-------------|----------------------------|-------------------|-------------------|-------------------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|--|--|--|--|--|
| | | | | | FWNJJ | FWNJK | FWNJM | FWNJW | FWNJD | FWNJT | FWNJB | FWNJB | FWNJJ | FWNJF | FWNJP | FWNJE | | | | | | | |
| FWNJJ | 6.0-10.0 (0.5mm Increment) | 2.0-8.0 | | | 3.0-10.0 | | | | | | | | | | | | | | | | | | |
| | | | | | 10.5-20 | | | | | | | | | | | | | | | | | | |
| | | | | | 20.5-30 | | | | | | | | | | | | | | | | | | |
| FWNJK | 10.5-20 (0.5mm Increment) | 4.0-18.0 | 2.0-28.0 | | 3.0-10.0 | | | | | | | | | | | | | | | | | | |
| | | | | | 10.5-20 | | | | | | | | | | | | | | | | | | |
| | | | | | 20.5-30 | | | | | | | | | | | | | | | | | | |
| FWNJM | 21-30 (1mm Increment) | 10.0-28.0 | | | 3.0-10.0 | | | | | | | | | | | | | | | | | | |
| | | | | | 10.5-20 | | | | | | | | | | | | | | | | | | |
| | | | | | 20.5-30 | | | | | | | | | | | | | | | | | | |
| FWNJW | 31-40 (1mm Increment) | 15.0-38.0 | 2.0-38.0 | | 5.0-10.0 | | | | | | | | | | | | | | | | | | |
| | | | | | 10.5-20 | | | | | | | | | | | | | | | | | | |
| | | | | | 20.5-30 | | | | | | | | | | | | | | | | | | |
| FWNJD | 41-50 (1mm Increment) | 20.0-48.0 | 2.0-48.0 | | 10.0-20.0 | | | | | | | | | | | | | | | | | | |
| | | | | | 20.5-30 | | | | | | | | | | | | | | | | | | |
| | | | | | 30.5-40 | | | | | | | | | | | | | | | | | | |
| FWNJT | 51-60 (1mm Increment) | 30.0-58.0 | | | 10.0-20.0 | | | | | | | | | | | | | | | | | | |
| | | | | | 20.5-30 | | | | | | | | | | | | | | | | | | |
| | | | | | 30.5-40 | | | | | | | | | | | | | | | | | | |

Machining Conditions: V≤D-2, V×3≥T-H≥1, V≤2.5→T≤10, V=3.0→T≤20

Ordering Example

| Part Number | D | V | H | T |
|-------------|-------|-------|-------|-------|
| FWNJK | D19.5 | V11.5 | H10.5 | T25.0 |

Flanged

| Part Number | D | H | V 0.5mm Increment (V3 or More) | T 0.5mm Increment | L 0.5mm Increment | Unit Price | | | | | | | | | | | | | | | | |
|---|--------------------------|--------------------------|--------------------------------|-------------------|--|---------------------------|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|--|--|--|
| | | | | | | FWHJ | FWHJK | FWHJM | FWHJW | FWHJD | FWHJT | FWHJB | FWHJB | FWHJJ | FWHJF | FWHJP | FWHJE | | | | | |
| FWHJ FWHJK FWHJM FWHJW FWHJD FWHJT FWHJB FWHJB FWHJJ FWHJF FWHJP FWHJE | 4.0-10 (0.5mm Increment) | 6.0-20 (0.5mm Increment) | 0 2.0 2.6 3.0-55.0 | 1.0-8.0 | 2.0-5.5 6.0-10.0 2.0-5.5 6.0-10.0 2.0-5.5 6.0-10.0 2.0-5.5 6.0-10.0 2.0-5.5 6.0-10.0 2.0-5.5 6.0-10.0 | | | | | | | | | | | | | | | | | |
| | | | | | | 10.5-20 (0.5mm Increment) | 12.5-30 (0.5mm Increment) | | | | | | | | | | | | | | | |
| | 21-30 (1mm Increment) | 23-40 (1mm Increment) | | | | | | | | | | | | | | | | | | | | |
| | | | | | | 31-40 (1mm Increment) | 33-50 (1mm Increment) | | | | | | | | | | | | | | | |
| | 41-50 (1mm Increment) | 43-60 (1mm Increment) | | | | | | | | | | | | | | | | | | | | |
| | | | | | | 51-60 (1mm Increment) | 53-70 (1mm Increment) | | | | | | | | | | | | | | | |

Machining Conditions: H-D≥2, D-V≥2, L-T≥1, For FWHJT, FWHJF, FWHJP and FWHJE, H≤50

Ordering Example

| Part Number | D | H | V | T | L |
|-------------|-----|-----|-------|------|------|
| FWHJK | D20 | H30 | V10.5 | T2.5 | L8.5 |

