


Metal Washers

Standard Grade with Configurable T-Dimension

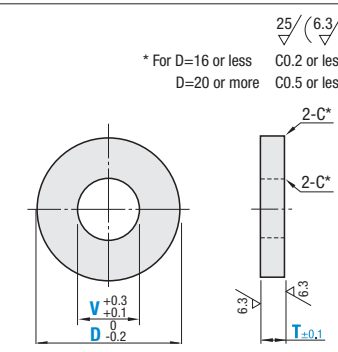


Metal Washers – Standard Grade with Configurable T-Dimension

RoHS 10

| Type | | Material | Surface Treatment |
|------------------------|--------------------------|---------------------------------|----------------------------|
| T Dimension Selectable | T Dimension Configurable | | |
| WSSB | TWSSB | 1045 Carbon Steel or Equivalent | Black Oxide |
| WSSM | TWSSM | | Electroless Nickel Plating |
| WSSS | TWSSS | 304 Stainless Steel | — |

* For D=16 or less C0.2 or less
D=20 or more C0.5 or less



T Dimension Selectable Type (Standard Grade)

| Part Number | V | | | | | | | | | | T | | | | | | | | | | |
|-------------|----------------------|-----|-----|---|---|---|----|----|--|--|---|---|---|---|---|---|----|---|--|--|--|
| Type | D | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | | | | | | | | | | | 1 | 2 | | | | | | | | |
| | | 1.5 | 2.5 | | | | | | | | | | | | | | | | | | |
| 5 | 2 3 | | | | | | | | | | | 1 | 2 | | | | | | | | |
| | | 1.5 | 2.5 | 3 | | | | | | | | | | | | | | | | | |
| 6 | 2 3 4 | | | | | | | | | | | 1 | 2 | | | | | | | | |
| | | 1.5 | 2.5 | 3 | 4 | 5 | 6 | | | | | | | | | | | | | | |
| 8 | 2 3 4 5 6 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| | | 1.5 | 2.5 | 3 | 4 | 5 | 6 | 8 | | | | | | | | | | | | | |
| 10 | 2 3 4 5 6 8 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| | | 1.5 | 2.5 | 3 | 4 | 5 | 6 | 8 | | | | | | | | | | | | | |
| 12 | 3 4 5 6 8 10 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| | | 1.5 | 2.5 | 3 | 4 | 5 | 6 | 8 | | | | | | | | | | | | | |
| 13 | 4 5 6 8 10 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| | | 1.5 | 2.5 | | | | | | | | | | | | | | | | | | |
| 14 | 4 5 6 8 10 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 8 | | | |
| | | 1.5 | 2.5 | | | | | | | | | | | | | | | | | | |
| 15 | 4 5 6 8 10 12 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 8 | | | |
| | | 1.5 | 2.5 | | | | | | | | | | | | | | | | | | |
| 16 | 4 5 6 8 10 12 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 8 | | | |
| | | 1.5 | 2.5 | 3 | 4 | 5 | 6 | 8 | | | | | | | | | | | | | |
| 20 | 4 5 6 8 10 12 15 16 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 8 | | | |
| | | 1.5 | 2.5 | 3 | 4 | 5 | 6 | 8 | | | | | | | | | | | | | |
| 25 | 6 8 10 12 15 16 20 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 8 | | | |
| | | 2 | 3 | 4 | 5 | 6 | 8 | | | | | | | | | | | | | | |
| 30 | 8 10 12 15 16 20 25 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 8 | | | |
| | | 2 | 3 | 4 | 5 | 6 | 8 | 10 | | | | | | | | | | | | | |
| 35 | 10 12 15 16 20 25 | | | | | | | | | | | 3 | 4 | 5 | 6 | 8 | 10 | | | | |
| | | 3 | 4 | 5 | 6 | 8 | 10 | | | | | | | | | | | | | | |
| 40 | 10 12 15 16 20 25 30 | | | | | | | | | | | 3 | 4 | 5 | 6 | 8 | 10 | | | | |
| | | 3 | 4 | 5 | 6 | 8 | 10 | | | | | | | | | | | | | | |
| 50 | 10 12 15 16 20 25 30 | | | | | | | | | | | 3 | 4 | 5 | 6 | 8 | 10 | | | | |
| | | 3 | 4 | 5 | 6 | 8 | 10 | | | | | | | | | | | | | | |
| 60 | 15 16 20 25 30 | | | | | | | | | | | 3 | 4 | 5 | 6 | 8 | 10 | | | | |
| | | 3 | 4 | 5 | 6 | 8 | 10 | | | | | | | | | | | | | | |

Part Number Example: WSSS14 - 10 - 5


T Dimension Configurable Type (Standard Grade)

| Part Number | D | V | | | | | | | | | | T | |
|-------------------------|----|---------------------|--|--|--|--|--|--|--|--|--|-------------|----------|
| Type | D | | | | | | | | | | | 0.5 mm Inc. | |
| TWSSB TWSSM TWSSS | 4 | 2 | | | | | | | | | | | 1.0-10.0 |
| | 5 | 2 3 | | | | | | | | | | | |
| | 6 | 2 3 4 | | | | | | | | | | | |
| | 8 | 2 3 4 5 6 | | | | | | | | | | | |
| | 10 | 2 3 4 5 6 8 | | | | | | | | | | | |
| | 12 | 3 4 5 6 8 10 | | | | | | | | | | | |
| | 13 | 4 5 6 8 10 | | | | | | | | | | | |
| | 14 | 4 5 6 8 10 | | | | | | | | | | | |
| | 15 | 4 5 6 8 10 12 | | | | | | | | | | | |
| | 16 | 4 5 6 8 10 12 | | | | | | | | | | | |
| | 20 | 4 5 6 8 10 12 15 16 | | | | | | | | | | | |
| | 25 | 6 8 10 12 15 16 20 | | | | | | | | | | | |
| | 30 | 8 10 12 15 16 20 25 | | | | | | | | | | | |

Part Number Example: TWSSB30 - 8 - 5.5

Metal Washers

Precision Grade with Configurable T-Dimension

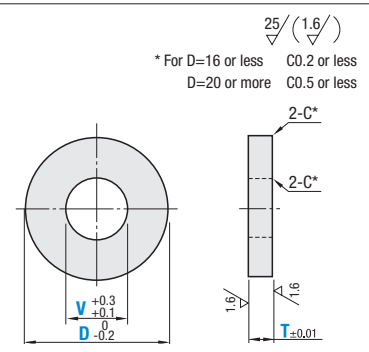


Metal Washers – Precision Grade with Configurable T-Dimension

RoHS 10

| Type | | Material | Surface Treatment |
|------------------------|--------------------------|---------------------------------|----------------------------|
| T Dimension Selectable | T Dimension Configurable | | |
| WASB | TWASB | 1045 Carbon Steel or Equivalent | Black Oxide |
| WASM | TWASM | | Electroless Nickel Plating |
| WASS | TWASS | 304 Stainless Steel | — |

* For D=16 or less C0.2 or less
D=20 or more C0.5 or less



T Dimension Selectable Type (Precision Grade)

| Part Number | V | | | | | | | | | | T | | | | | | | | | | |
|-------------|----------------------|-----|-----|---|---|---|----|----|--|--|---|---|---|---|---|---|----|---|--|--|--|
| Type | D | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | | | | | | | | | | | 1 | 2 | | | | | | | | |
| | | 1.5 | 2.5 | | | | | | | | | | | | | | | | | | |
| 5 | 2 3 | | | | | | | | | | | 1 | 2 | | | | | | | | |
| | | 1.5 | 2.5 | 3 | | | | | | | | | | | | | | | | | |
| 6 | 2 3 4 | | | | | | | | | | | 1 | 2 | | | | | | | | |
| | | 1.5 | 2.5 | 3 | 4 | 5 | 6 | | | | | | | | | | | | | | |
| 8 | 2 3 4 5 6 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| | | 1.5 | 2.5 | 3 | 4 | 5 | 6 | 8 | | | | | | | | | | | | | |
| 10 | 2 3 4 5 6 8 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| | | 1.5 | 2.5 | 3 | 4 | 5 | 6 | 8 | | | | | | | | | | | | | |
| 12 | 3 4 5 6 8 10 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| | | 1.5 | 2.5 | 3 | 4 | 5 | 6 | 8 | | | | | | | | | | | | | |
| 13 | 4 5 6 8 10 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| | | 1.5 | 2.5 | | | | | | | | | | | | | | | | | | |
| 14 | 4 5 6 8 10 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 8 | | | |
| | | 1.5 | 2.5 | | | | | | | | | | | | | | | | | | |
| 15 | 4 5 6 8 10 12 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 8 | | | |
| | | 1.5 | 2.5 | | | | | | | | | | | | | | | | | | |
| 16 | 4 5 6 8 10 12 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 8 | | | |
| | | 1.5 | 2.5 | 3 | 4 | 5 | 6 | 8 | | | | | | | | | | | | | |
| 20 | 4 5 6 8 10 12 15 16 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 8 | | | |
| | | 1.5 | 2.5 | 3 | 4 | 5 | 6 | 8 | | | | | | | | | | | | | |
| 25 | 6 8 10 12 15 16 20 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 8 | | | |
| | | 2 | 3 | 4 | 5 | 6 | 8 | | | | | | | | | | | | | | |
| 30 | 8 10 12 15 16 20 25 | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 8 | | | |
| | | 2 | 3 | 4 | 5 | 6 | 8 | 10 | | | | | | | | | | | | | |
| 35 | 10 12 15 16 20 25 | | | | | | | | | | | 3 | 4 | 5 | 6 | 8 | 10 | | | | |
| | | 3 | 4 | 5 | 6 | 8 | 10 | | | | | | | | | | | | | | |
| 40 | 10 12 15 16 20 25 30 | | | | | | | | | | | 3 | 4 | 5 | 6 | 8 | 10 | | | | |
| | | 3 | 4 | 5 | 6 | 8 | 10 | | | | | | | | | | | | | | |
| 50 | 10 12 15 16 20 25 30 | | | | | | | | | | | 3 | 4 | 5 | 6 | 8 | 10 | | | | |
| | | 3 | 4 | 5 | 6 | 8 | 10 | | | | | | | | | | | | | | |
| 60 | 15 16 20 25 30 | | | | | | | | | | | 3 | 4 | 5 | 6 | 8 | 10 | | | | |
| | | 3 | 4 | 5 | 6 | 8 | 10 | | | | | | | | | | | | | | |

Part Number Example: WASB14 - 10 - 5

T Dimension Configurable Type (Precision Grade)

| Part Number | D | V | | | | | | | | | | T | |
|-------------------------|----|---------------------|--|--|--|--|--|--|--|--|--|-------------|----------|
| Type | D | | | | | | | | | | | 0.5 mm Inc. | |
| TWASB TWASM TWASS | 4 | 2 | | | | | | | | | | | 1.0-10.0 |
| | 5 | 2 3 | | | | | | | | | | | |
| | 6 | 2 3 4 | | | | | | | | | | | |
| | 8 | 2 3 4 5 6 | | | | | | | | | | | |
| | 10 | 2 3 4 5 6 8 | | | | | | | | | | | |
| | 12 | 3 4 5 6 8 10 | | | | | | | | | | | |
| | 13 | 4 5 6 8 10 | | | | | | | | | | | |
| | 14 | 4 5 6 8 10 | | | | | | | | | | | |
| | 15 | 4 5 6 8 10 12 | | | | | | | | | | | |
| | 16 | 4 5 6 8 10 12 | | | | | | | | | | | |
| | 20 | 4 5 6 8 10 12 15 16 | | | | | | | | | | | |
| | 25 | 6 8 10 12 15 16 20 | | | | | | | | | | | |
| | 30 | 8 10 12 15 16 20 25 | | | | | | | | | | | |

Part Number Example: TWASB30 - 8 - 5.5