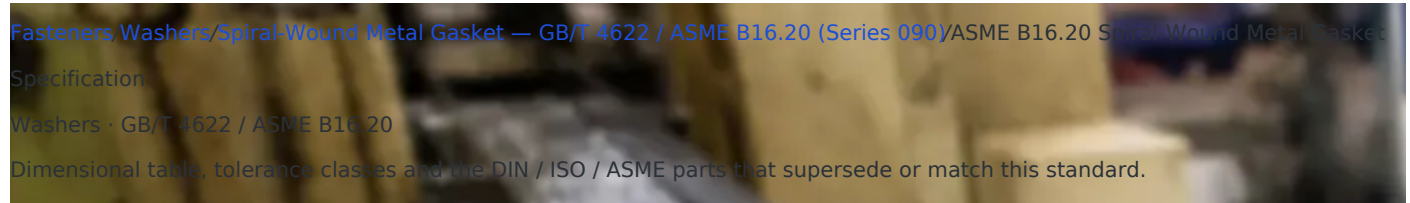


ASME B16.20 Spiral-Wound Metal Gasket Specification

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ASME B16.20 specifies the dimensions and tolerances for spiral-wound metal gasket. The full dimensional table is reproduced below, followed by the DIN, ISO and ASME parts that match or supersede it.

Standard

ASME B16.20

Product

Spiral-Wound Metal Gasket — GB/T 4622 / ASME B16.20 (Series 090)

Governing standards

GB/T 4622 / ASME B16.20

Equivalence between national standards is dimensional, not always metallurgical. Check the property class separately when substituting.



Specification summary of ASME B16.20 as applied to spiral-wound metal gasket: the dimensions the standard fixes, the full size range supplied, and the related designations commonly cross-referenced.

ASME B16.20 — Scope

ASME B16.20 specifies the dimensional requirements for spiral-wound metal gasket — gb/t 4622 / asme b16.20 (series 090). Material, surface condition and any performance rating are set by separate documents specific to this part family — ISO 898-1 and ISO 898-2, which govern bolt and nut property classes, do not apply here.

Tolerance & Product Grades

Tolerances for spiral-wound metal gasket — gb/t 4622 / asme b16.20 (series 090) are given as limits on the individual dimensions in the table rather than as a fastener product grade. Where a general-tolerance class is cited on the drawing instead, it applies to the dimensions not otherwise toleranced.

Dimensions Specified by ASME B16.20

Nominal pipe size	Inner diameter d1 (mm)	Outer diameter d2 (mm)	Thickness t (mm)	Winding material	Reference standard
DN15	22	42	4.5	304SS + flexible graphite	GB/T 4622 / ASME B16.20
DN20	27	49	4.5	304SS + flexible graphite	GB/T 4622 / ASME B16.20
DN25	34	59	4.5	304SS + flexible graphite	GB/T 4622 / ASME B16.20
DN32	43	69	4.5	304SS + flexible graphite	GB/T 4622 / ASME B16.20
DN40	49	75	4.5	304SS + flexible graphite	GB/T 4622 / ASME B16.20
DN50	61	87	4.5	304SS + flexible graphite	GB/T 4622 / ASME B16.20
DN65	77	109	4.5	304SS + flexible graphite	GB/T 4622 / ASME B16.20
DN80	89	121	4.5	304SS + flexible graphite	GB/T 4622 / ASME B16.20
DN100	115	149	4.5	304SS + flexible graphite	GB/T 4622 / ASME B16.20
DN150	169	205	4.5	304SS + flexible graphite	GB/T 4622 / ASME B16.20

Equivalent Standards

Where direct equivalents exist (ISO ↔ DIN, ISO ↔ ASME), they are listed on the parent Spiral-Wound Metal Gasket — GB/T 4622 / ASME B16.20 (Series 090) page. Always confirm against the dimensions on this page, since some "equivalent" standards differ in tolerances and head geometry.

Companion Standards

ASME B16.20 controls only the geometry of spiral-wound metal gasket — gb/t 4622 / asme b16.20 (series 090). Surface finish is governed by separate finish standards (for example ISO 4042 for electroplating), and corrosion testing by ISO 9227 (neutral salt spray). Mechanical performance is set by the standards specific to this part family, not by ISO 898-1 or ISO 898-2, which apply to bolts, screws and nuts.

Technical Drawing

Customize the parameters below — every spec field is editable, and the drawing redraws to match the values you choose.

Changing the size will snap the other fields to that size's standard values; you can then override any individual value.

Sends the selected values to the quote form below.

Request a Quote

The form below follows the current technical drawing configuration. Change the drawing values above and the request details update automatically.

Dimensions & Specifications (GB/T 4622 / ASME B16.20)

Nominal pipe size	Inner diameter d1 (mm)	Outer diameter d2 (mm)	Thickness t (mm)	Winding material	Reference standard
DN15	22	42	4.5	304SS + flexible graphite	GB/T 4622 / ASME B16.20
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DN150	169	205	4.5	304SS + flexible graphite	GB/T 4622 / ASME B16.20

Video: ASME B16.20 Spiral-Wound Metal Gasket Specification



► Watch video: <https://www.youtube.com/watch?v=TcUtJC5Y9CI>

Third-party video, selected automatically for this topic. It is not produced by Engineering Hardware and is not a specification source — use the tables on this page for dimensional data.

Inside the plant

Manufactured in our own plant

This part is cold-formed, threaded, heat-treated and finished in-house. The stages below are where its class and finish are actually decided.

1.



01

Cold heading

Wire rod is drawn to size and cold-formed into blanks. Forming rather than cutting keeps the grain flow continuous around the head, which is where a bolt is most likely to fail.

Head dimensions and under-head radius checked at set-up and per shift.



2.

02

Thread rolling

Threads are rolled between hardened dies rather than cut. Rolled threads are stronger in fatigue than cut threads and hold pitch and flank angle far more consistently across a batch.

Go / no-go ring gauges to ISO 965 tolerance class 6g.

3.



03

Heat treatment

Quench-and-temper brings carbon and alloy steel to the property class ordered — 8.8, 10.9 or 12.9 — with the furnace charge tracked so a finished lot can be traced back to it.

Core hardness and tensile tested per lot to ISO 898-1.

4.



04

Surface treatment

Zinc, zinc-nickel, hot-dip galvanizing, black oxide, phosphate and Dacromet, selected against the service environment rather than against the price list.

Coating thickness and neutral salt spray hours to ISO 9227.

Frequently Asked Questions

What does ASME B16.20 specify for Spiral-Wound Metal Gasket — GB/T 4622 / ASME B16.20 (Series 090)?

ASME B16.20 specifies the dimensions and tolerances of spiral-wound metal gasket — gb/t 4622 / asme b16.20 (series 090).

Material and property class are governed by separate standards in the same family.

Does ASME B16.20 specify the mechanical strength?

No. ASME B16.20 controls the dimensional requirements for spiral-wound metal gasket — gb/t 4622 / asme b16.20 (series 090).

Mechanical performance is set by the standards specific to this part family — ISO 898-1 and ISO 898-2 apply to bolts, screws and nuts and do not cover this product.

Can I substitute ASME B16.20 for the corresponding DIN standard on a drawing?

On modern drawings the ISO standard is the master reference; the older DIN equivalent is a cross-reference. For most dimensional purposes the parts are interchangeable, but check tolerance grades and the head height — these are the most common points of divergence.

Which edition of ASME B16.20 does this table follow?

The table reproduces the dimensions we supply spiral-wound metal gasket — gb/t 4622 / asme b16.20 (series 090) to. We do not publish an edition year against it, so where the edition is contractually significant, cite the edition you require on the enquiry and we will confirm it against the table before quoting.

How do I request a quotation?

Use the technical drawing on this page to pick the exact configuration, then submit it with the quote form. We respond within one business day.

Related Pages

[View the full Spiral-Wound Metal Gasket — GB/T 4622 / ASME B16.20 \(Series 090\) page](#)

More Spiral-Wound Metal Gasket — GB/T 4622 / ASME B16.20 (Series 090) Guides

- [GB/T 4622 Spiral-Wound Metal Gasket — GB/T 4622 / ASME B16.20 \(Series 090\)](#)