M16 USIT Rings (Self-Centring Bonded Seals) Dimensions

M16 USIT Rings (Self-Centring Bonded Seals) dimensions to Trade series (self-centring bonded washers, USIT type): coarse thread pitch 2 mm.

Coarse thread pitch

2 mm

Figures are nominal values from the governing standard. Confirm against the tolerance class for your application before machining or ordering.



M16 USIT Rings (Self-Centring Bonded Seals) are manufactured to Trade series (self-centring bonded washers, USIT type). This page lists the controlling dimensions for the M16 size together with the installation notes for this type.

Values are taken from the governing standard rather than from a general machine-thread table, because this type is not selected on one.

M16 Dimensional Row (Trade series (self-centring bonded washers, USIT type))

Thread	Seal element	Metal carrier	Typical service
M16	NBR or FKM inner lip	zinc-plated or stainless	hydraulic and fuel

Custom manufacturing · Made to drawing

Need USIT rings (self-centring bonded seals) in a size this table does not list?

This page covers M16 USIT rings (self-centring bonded seals). A special seal is almost always a compound change rather than a size change — the same dimensions in a material that survives the medium.

Minimum order from 2,000 pieces; samples within 7 days of drawing approval.

Custom seal manufacturing

(https://engineeringhardware.com/custom/seals/)

Send a drawing (https://engineeringhardware.com/custom/seals/#rfq)

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.

Dimensioned line drawing of M16 USIT Rings (Self-Centring Bonded Seals) to Trade series (self-centring bonded washers, USIT type). Side view and top view, drawn to the dimensions in the table below and redrawn for any size selected.

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 (Trade series (self-centring bonded washers, USIT type))

Thread	Seal element	Metal carrier	Typical service
M6	NBR inner lip	zinc-plated steel	hydraulic ports and plugs
M8	NBR inner lip	zinc-plated steel	hydraulic ports and plugs
M10	NBR inner lip	zinc-plated steel	hydraulic ports and plugs
M12	NBR inner lip	zinc-plated steel	hydraulic ports and plugs
M14	NBR or FKM inner lip	zinc-plated or stainless	hydraulic and fuel
M16	NBR or FKM inner lip	zinc-plated or stainless	hydraulic and fuel
M18	NBR or FKM inner lip	zinc-plated or stainless	hydraulic
M20	NBR or FKM inner lip	zinc-plated or stainless	hydraulic
M22	NBR inner lip	zinc-plated steel	hydraulic
M27	NBR inner lip	zinc-plated steel	hydraulic

Product catalog

Related Bonded Seal Rings products



(https://engineeringhardware.com/product/bwg10-galvanized-clouts-ceiling-felt-big-head-nail-flat-head-smooth-shank-zinc/)

Common, Ring-Shank & Specialty Nails

Bwg10 Galvanized Clouts/Ceiling/Felt/Big Head Nail Flat Head Smooth Shank Zinc Coated 1-1/4” (https://engineeringhardware.com/product/bwg10-galvanized-clouts-ceiling-felt-big-head-nail-flat-head-smooth-shank-zinc/)

Connection · International

US$720.00 – 960.00MOQ 2 tons



(https://engineeringhardware.com/product/china-common-nail-sizes-perfect-for-every-project-needs/)

Common, Ring-Shank & Specialty Nails

China Common Nail Sizes: Perfect for Every Project Needs

(https://engineeringhardware.com/product/china-common-nail-sizes-perfect-for-

every-project-needs/)

Common Nail · DIN, GB, ISO

US$18.00MOQ 100 boxes



(https://engineeringhardware.com/product/factory-supply-clavos-1-2-3-4-5-iron-nail-for-wood-common-wire-nails/)

Common, Ring-Shank & Specialty Nails

Factory Supply Clavos 1″ 2″ 3″ 4″ 5″ Iron Nail for Wood Common Wire Nails (https://engineeringhardware.com/product/factory-supply-clavos-1-2-3-4-5-iron-nail-for-wood-common-wire-nails/)

Common Nail · ISO

US$0.48 – 0.72 MOQ 5 tons



(https://engineeringhardware.com/product/horse-box-food-trailer-tack-box-horse/)

Common, Ring-Shank & Specialty Nails

Horse Box Food Trailer Tack Box Horse

(https://engineeringhardware.com/product/horse-box-food-trailer-tack-box-horse/)

Iron

US$480.00MOQ 2 pieces



(https://engineeringhardware.com/product/n-1-19mm-rose-gold-plated-metal-buttons-copper-jeans-buttons-with-brass-cappped-twin/)

Common, Ring-Shank & Specialty Nails

N-1 19mm Rose Gold Plated Metal Buttons Copper Jeans Buttons with Brass Cappped Twin Prong Tack (https://engineeringhardware.com/product/n-1-

19mm-rose-gold-plated-metal-buttons-copper-jeans-buttons-with-brass-cappped-twin/)

Jeans Button · Metal

US$0.036 – 0.16 MOQ 5,000 pieces



(https://engineeringhardware.com/product/accept-packaging-custom-ordinary-iron-nails-wholesale-and-retail-can-be-galvanized/)

Common, Ring-Shank & Specialty Nails

Accept Packaging Custom Ordinary Iron Nails Wholesale and Retail Can Be Galvanized for Building Materials

(https://engineeringhardware.com/product/accept-packaging-custom-ordinary-iron-nails-wholesale-and-retail-can-be-galvanized/)

Common Nail · GB

US$900.00 – 1,020 MOQ 10 tons

View all Common, Ring-Shank & Specialty Nails →
(https://engineeringhardware.com/fastener-products/nails-staples-tacks/common-ring-shank-specialty-nails/)

Full product catalog (https://engineeringhardware.com/products/)

Applications & Industries for M16 USIT Rings

USIT Rings are bought for a small number of well-defined jobs. These are the ones we ship them for. Stocked from M6 to M27.

Industries that specify USIT Rings

Machine tools **Coolant and hydraulic ports.**

Hydraulics **Port plugs and fittings.**

Mobile plant **Vibration-prone joints.**

Compressors **Sealing under pressure cycling.**

Process & food equipment **Sealing at joints that are cleaned and inspected.**

Hydraulics & pneumatics **Static and dynamic sealing in cylinders and valve bodies.**

Typical applications

- **seating the ring square before tightening**
- **choosing the self-centring form where the seat is imperfect**
- **matching the thread size exactly**
- **selecting FKM where the fluid or temperature demands it**
- **excluding dust and moisture from a housing**
- **sealing a joint against fluid or air pressure**

Service conditions to specify against

Sealed joints

Used where the fixing has to keep water or air out as well as hold — the elastomer, not the fastener, decides service life.

Where to use something else

Do not reuse a bonded or USIT seal after it has been compressed; the elastomer has taken a set and will not seal a second time.

Full application guide: where USIT Rings are used, how to specify them, and the cases they are wrong for (https://engineeringhardware.com/applications/usit-rings/)

Video: M16 USIT Rings (Self-Centring Bonded Seals) Dimensions



(https://www.youtube.com/watch?v=AMh1kRWKxhg)(https://www.youtube.com/watch?v=AMh1kRWKxhg)

► Watch video: https://www.youtube.com/watch?v=AMh1kRWKxhg(https://www.youtube.com/watch?v=AMh1kRWKxhg)

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.



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.



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.



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.



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 clearance and tapping drill suit M16?

Use a 17.5 mm clearance hole (ISO 273 medium) for through-fixing, or a 14 mm tapping drill for a coarse M16 thread.

What is the coarse-thread pitch of M16 for USIT Rings (Self-Centring Bonded Seals)?

For M16 the standard coarse pitch is 2 mm — this is the value used for USIT Rings (Self-Centring Bonded Seals).

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 USIT Rings (Self-Centring Bonded Seals) page (https://engineeringhardware.com/fastener/usit-rings/)

More USIT Rings (Self-Centring Bonded Seals) Guides

- **M6 USIT Rings (Self-Centring Bonded Seals)** (https://engineeringhardware.com/guide/size/m6-usit-rings/)
- **M8 USIT Rings (Self-Centring Bonded Seals)** (https://engineeringhardware.com/guide/size/m8-usit-rings/)
- **M10 USIT Rings (Self-Centring Bonded Seals)** (https://engineeringhardware.com/guide/size/m10-usit-rings/)
- **M12 USIT Rings (Self-Centring Bonded Seals)** (https://engineeringhardware.com/guide/size/m12-usit-rings/)
- **M14 USIT Rings (Self-Centring Bonded Seals)** (https://engineeringhardware.com/guide/size/m14-usit-rings/)
- **M18 USIT Rings (Self-Centring Bonded Seals)** (https://engineeringhardware.com/guide/size/m18-usit-rings/)

- **M20 USIT Rings (Self-Centring Bonded Seals)** **(https://engineeringhardware.com/guide/size/m20-usit-rings/)**
- **M22 USIT Rings (Self-Centring Bonded Seals)** **(https://engineeringhardware.com/guide/size/m22-usit-rings/)**