

O-Ring Seal

Engineering Hardware & Fasteners · engineeringhardware.com/fastener/cad-svg-159-oring

[Fasteners/Seals](#) O-Ring Seal

Seals · O-Rings

12 catalogued sizes. Pick any row and the technical drawing redraws to it.

O-Ring Seal are catalogued in id 5-100 mm, with od 9-114 mm. 12 sizes are held in the table below, and the technical drawing redraws to whichever row you select.

ID

5-100 mm

OD

9-114 mm

Catalogued sizes

12

Dimensions are nominal values from the governing standard. Confirm the tolerance class for your application before ordering.



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 Quotation for O-Ring Seal

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

Dimensions & Specifications (ISO / DIN)

Every row below is a starting point for the customizer above — pick any size and the drawing will redraw to that row.

Inner diameter d1 (mm)	Outer diameter d2 (mm)	Wire dia (mm)	Material	Working temp range	Reference standard
5	9	2	NBR 70	-30 to +110 C	ISO 3601 / GB/T 3452
8	12	2	NBR 70	-30 to +110 C	ISO 3601 / GB/T 3452
10	16	3	NBR 70	-30 to +110 C	ISO 3601 / GB/T 3452
15	21	3	NBR 70	-30 to +110 C	ISO 3601 / GB/T 3452
20	26	3	NBR 70	-30 to +110 C	ISO 3601 / GB/T 3452
25	33	4	NBR 70	-30 to +110 C	ISO 3601 / GB/T 3452
30	38	4	NBR 70	-30 to +110 C	ISO 3601 / GB/T 3452
40	50	5	NBR 70	-30 to +110 C	ISO 3601 / GB/T 3452
50	60	5	NBR 70	-30 to +110 C	ISO 3601 / GB/T 3452
60	72	6	NBR 70	-30 to +110 C	ISO 3601 / GB/T 3452
80	92	6	NBR 70	-30 to +110 C	ISO 3601 / GB/T 3452
100	114	7	NBR 70	-30 to +110 C	ISO 3601 / GB/T 3452

O-Ring Seal — ISO / DIN (Series 159) conform to ISO / DIN. As seals, they are specified by the dimensions in the table below; this page also covers materials, finishes and typical uses.

What Are O-Ring Seal — ISO / DIN (Series 159)?

O-Ring Seal — ISO / DIN (Series 159) are seals defined by ISO / DIN. They are selected by inside diameter and the dimensional characteristics shown below, and are available in a range of materials and finishes to suit the application and environment.

CAD Source Reference

This page is generated from an original native CAD part model (SolidWorks .SLDPRT) of the o-ring seal — iso / din (series 159) family maintained by our engineering team. The technical drawing shown above is rebuilt parametrically from the dimensional table, so it always reflects the exact size and configuration you select. Native CAD files (STEP / SLDPRPT) can be supplied with your quotation on request.

Materials & Finishes

O-rings and seals are specified by elastomer, not by steel grade: NBR (nitrile) for mineral oil and hydraulic service, FKM for higher temperature and aggressive chemistry, EPDM for water, steam and weathering, silicone for a wide temperature range in static duty, and PTFE where chemical resistance outweighs elastic recovery. Specify the compound, the hardness in Shore A and the temperature range alongside the dimensions.

Typical Applications

Preventing fluid or gas leakage at static and dynamic joints. [Read the full application guide for O-Ring Seal — ISO / DIN \(Series 159\)](#)
→

Pricing

O-Ring Seal — ISO / DIN (Series 159) are supplied to order. Pricing starts from approximately US\$0.050 per piece for standard sizes in standard nitrile (NBR) 70 Shore A; final pricing depends on size, material, finish and order quantity (MOQ applies). Submit your exact configuration with the quote form above.

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.



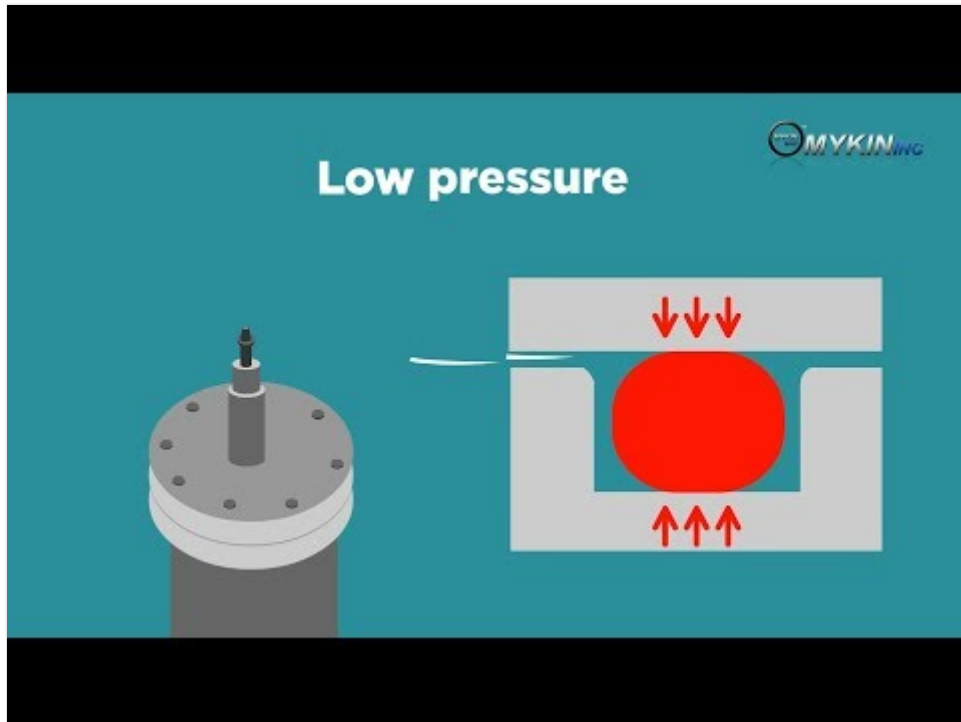
04

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.

Video: O-Ring Seal



► Watch video: <https://www.youtube.com/watch?v=s5nJG0om8KY>

What is an O-ring and How Does it Work?

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.

Frequently Asked Questions

Which standard governs O-Ring Seal — ISO / DIN (Series 159)?

O-Ring Seal — ISO / DIN (Series 159) are manufactured to ISO / DIN. The dimensional values on this page follow that standard.

What sizes are available for O-Ring Seal — ISO / DIN (Series 159)?

The table on this page lists 12 sizes for O-Ring Seal — ISO / DIN (Series 159), ranging from 5 to 100. Sizes outside the table can be quoted on request.

In which materials are O-Ring Seal — ISO / DIN (Series 159) supplied?

O-Ring Seal — ISO / DIN (Series 159) are supplied in NBR (nitrile), FKM, EPDM, silicone and PTFE, selected by fluid and temperature, with finishes including zinc plating, hot-dip galvanizing and black oxide. Choose material and finish to suit the load and the service environment for O-Ring Seal — ISO / DIN (Series 159).

How do I request a quotation?

Use the parametric drawing on this page to set the exact configuration (size, material, finish) and click "Request this configuration" — a specialist from Engineering Hardware will respond within one business day.

More Seals

[← Previous AS568 O-Rings \(Inch Series\)](#)[AS 568 Next →](#)[O-Ring Seal — ISO / DIN \(Series 160\)](#)[ISO / DIN](#)