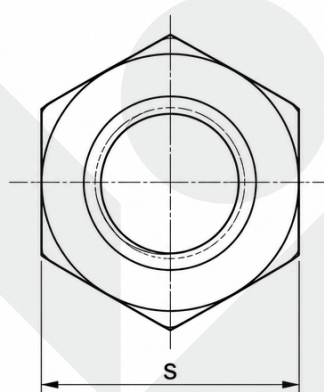
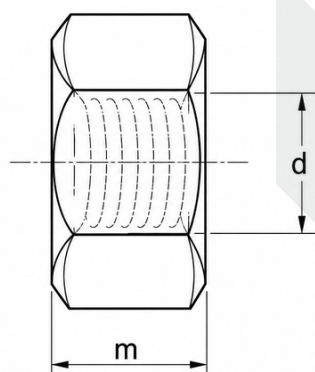


**ISO 4032:2023**

## Hexagon regular nut, style 1

Regular hexagon nut with a coarse metric thread. Select the nut material and property class to suit the joint and its mating bolt.

ISO 4032:2023 dimensional range M5–M39. Material and property-class diameter limits also apply to the enquiry.



d: nominal thread diameter · s: width across flats · m: nut height

Identification drawing, not a manufacturing drawing.

# Dimensional range

Dimensions in millimetres.

| M  | Pitch P | s  | m min. | m max. |
|----|---------|----|--------|--------|
| 5  | 0.8     | 8  | 4.4    | 4.7    |
| 6  | 1       | 10 | 4.9    | 5.2    |
| 7  | 1       | 11 | 6.14   | 6.5    |
| 8  | 1.25    | 13 | 6.44   | 6.8    |
| 10 | 1.5     | 16 | 8.04   | 8.4    |
| 12 | 1.75    | 18 | 10.37  | 10.8   |
| 14 | 2       | 21 | 12.1   | 12.8   |
| 16 | 2       | 24 | 14.1   | 14.8   |
| 18 | 2.5     | 27 | 15.1   | 15.8   |
| 20 | 2.5     | 30 | 16.9   | 18     |
| 22 | 2.5     | 34 | 18.1   | 19.4   |
| 24 | 3       | 36 | 20.2   | 21.5   |
| 27 | 3       | 41 | 22.5   | 23.8   |
| 30 | 3.5     | 46 | 24.3   | 25.6   |
| 33 | 3.5     | 50 | 27.4   | 28.7   |
| 36 | 4       | 55 | 29.4   | 31     |
| 39 | 4       | 60 | 31.8   | 33.4   |

# Materials and classes

| Material                          | Class / hardness | M       | Supply     |
|-----------------------------------|------------------|---------|------------|
| Steel to mechanical specification | 8                | M5–M39  | On request |
| Steel to mechanical specification | 10               | M5–M39  | On request |
| Steel to mechanical specification | 12               | M5–M16  | On request |
| A2 stainless steel                | 70               | M5–M39  | On request |
| A4 stainless steel                | 70               | M5–M39  | On request |
| A4 stainless steel                | 80               | M5–M24  | On request |
| A2 stainless steel                | 50               | M27–M39 | On request |
| A4 stainless steel                | 50               | M27–M39 | On request |

## Finishes and treatments

| Finish                  | Material                          | Class | M       |
|-------------------------|-----------------------------------|-------|---------|
| Plain / as manufactured | Steel to mechanical specification | 8     | M5–M39  |
| Plain / as manufactured | Steel to mechanical specification | 10    | M5–M39  |
| Plain / as manufactured | Steel to mechanical specification | 12    | M5–M16  |
| Electroplated zinc      | Steel to mechanical specification | 8     | M5–M39  |
| Zinc flake              | Steel to mechanical specification | 10    | M6–M30  |
| Plain / as manufactured | A2 stainless steel                | 70    | M5–M39  |
| Plain / as manufactured | A4 stainless steel                | 70    | M5–M39  |
| Plain / as manufactured | A4 stainless steel                | 80    | M5–M24  |
| Plain / as manufactured | A2 stainless steel                | 50    | M27–M39 |
| Plain / as manufactured | A4 stainless steel                | 50    | M27–M39 |

Select the finish for the material/property-class combination. Hydrogen relief and lubrication are separate process requirements, not certificates and not implied by the coating name.

# Standards, documents and enquiry

Classes 8, 10 and 12 are nut property classes, not bolt classes. ISO 4032:2023 limits class 12 to M5–M16 and A4-80 to M5–M24. Do not extend class 80 automatically beyond M24. Fine threads require a separate standard reference. For  $M24 < D \leq M39$ , A2-50 and A4-50 are also specified alongside A2-70 and A4-70; these class-50 combinations are not automatically extended to smaller diameters.

Commercial practice also includes class 8.8 bolts, class 8 nuts and 100 HV washers supplied to DIN 125 A / UNI 6592 references. Suitability must be checked against the joint conditions. For ISO 7089 washers, the reference hardness is 200 HV for bolts up to class 8.8 and nuts up to class 8, and 300 HV for bolts up to class 10.9 and nuts up to class 10. Commercial practice and standard requirements remain distinct.

## DIN 934:1987

Withdrawn standard. At M12: DIN width across flats 19 and nominal height 10 mm; ISO width 18 and maximum height 10.8 mm. Check space requirements before substitution.

## UNI 5588:1965

Withdrawn without replacement on 31 March 1995. Historical hexagon-nut reference; check dimensions against the current ISO edition.

## Supply documentation

Declaration of conformity; Material certificate; EN 10204 2.2 test report; EN 10204 3.1 inspection certificate; Dimensional inspection report; Coating report; Other documentation

Documents are subject to order agreement; no batch certificate is automatically included.

## Related components

ISO 4014, ISO 7089. Match nominal diameter, pitch, strength, material, finish and joint conditions.

## Request a quote

Specify standard, diameter, pitch and length where applicable, material, property class or hardness, finish, quantity and documents. Other sizes and dedicated production can be assessed on request, with agreed minimum quantities.

Reference technical configurations: these do not represent stock quantities.

## Other materials and specifications

For requirements beyond the tabulated combinations, enquire about aluminium, brass, nylon, duplex, superduplex or an ASTM specification. Alloy or grade, dimensions, mechanical requirements and finish are defined for the enquiry; the geometric reference does not automatically imply conformity with the product standard.