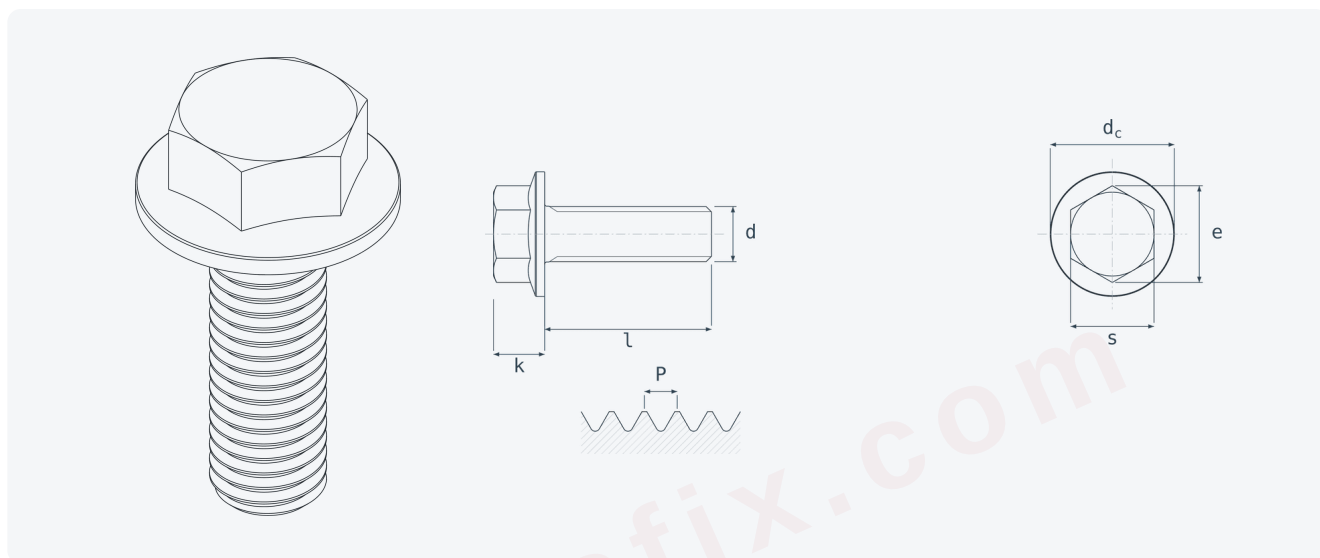


ISO 4162 Hexagon Flange Bolt with Serrated Flange



STANDARD

ISO 4162 Hexagon Flange Bolt

THREAD

ISO metric coarse pitch

SIZES

M5 - M16 · lengths 6 – 300 mm

MATERIAL

Stainless Steel, Alloy Steel, Carbon Steel

PROPERTY CLASS

A2-70, A4-80 (ISO 3506-1) · 10.9, 4.8, 8.8 (ISO 898-1)

SURFACE

Passivated, Plain, Zinc Plated, Dacromet, Blackened, Phosphate, Hot Dip Galvanized

Dimensions follow the standard named on this sheet. Material properties and batch test results come with the order's certificate or test report.

BASIS OF SPECIFICATION

DIMENSIONS

ISO 4162:1990

CARBON STEEL / ALLOY STEEL

ISO 898-1:2013

STAINLESS STEEL

ISO 3506-1:2020

THREAD LENGTH

to be agreed

MINIMUM USABLE THREAD LENGTH

to be agreed

PRODUCT GRADE

to be agreed

DIMENSIONS

mm · ISO 4162

d	P	s max	e min	dc	k nom.	b l ≤ 125	b 125 < l ≤ 200	b l > 200
M5	0.8	7	7.44	11.4	5.6	16	—	—
M6	1	8	8.56	13.6	6.8	18	—	—
M8	1.25	10	10.8	17	8.5	22	28	—
M10	1.5	13	14.08	20.8	9.7	26	32	—
M12	1.75	15	16.32	24.7	11.9	30	36	—
M14	2	18	19.68	28.6	12.9	34	40	—
M16	2	21	22.58	32.8	15.1	38	44	57

P thread pitch s width across flats e width across corners dc flange diameter k nominal head height b thread length

MECHANICAL PROPERTIES

ISO 3506-1

Class	Rm min.	Yield requirement	Elongation requirement	Hardness
A2-70	700 MPa	Rp0.2 min. 450 MPa	0,4d mm	—
A4-80	800 MPa	Rp0.2 min. 600 MPa	0,3d mm	—

MECHANICAL PROPERTIES

ISO 898-1

Class	Rm min.	Yield requirement	Elongation requirement	Hardness
10.9	1040 MPa	Rp0.2 min. 940 MPa	A min. 9 %	320 - 380 HV
4.8	420 MPa	Rpf min. 340 MPa (not a test value)	Af min. 0.24	130 - 220 HV
8.8 up to M16	800 MPa	Rp0.2 min. 640 MPa	A min. 12 %	250 - 320 HV
8.8 over M16	830 MPa	Rp0.2 min. 660 MPa	A min. 12 %	255 - 335 HV

MARKING

Carbon steel / Alloy steel: head marking to ISO 898-1:2013.

Stainless steel: head marking to ISO 3506-1:2020.

Marking requirements are set by the material standard named above.

Confirm the ordered property class before production.

DOCUMENTS

EN 10204 3.1 material certificate, dimensional inspection report and mechanical test report, on request.