

# Hexagon flange bolts with reduced shank

**DIN**  
**6922**

Sechskantschrauben mit Flansch und reduziertem Schaft

*As it is current practice in standards published by the International Organization for Standardization (ISO), the comma has been used throughout as a decimal marker.*

This standard incorporates all the essential specifications of an international standard which is in preparation (see Explanatory notes), together with national addenda.

Dimensions in mm

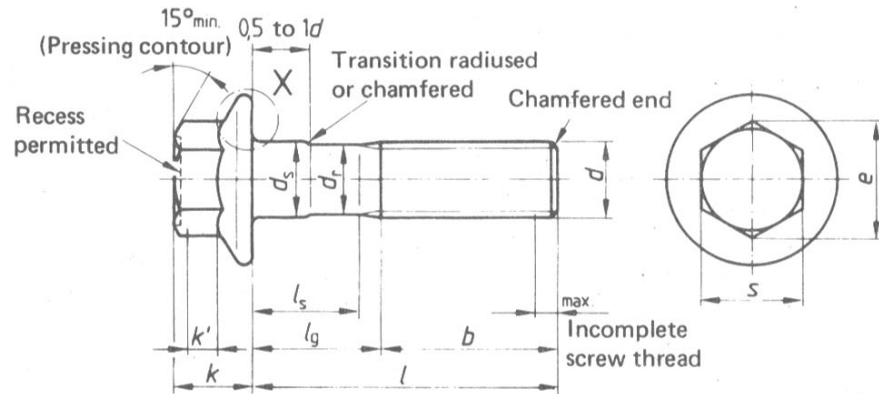
## 1 Field of application

This standard specifies product grade A hexagon flange bolts with metric coarse screw thread or metric fine screw thread from 5 up to and including 20 mm nominal thread diameter. If, in special cases, specifications other than those listed in this standard are required, e.g. different nominal lengths or property classes, these shall be selected in accordance with the appropriate standards.

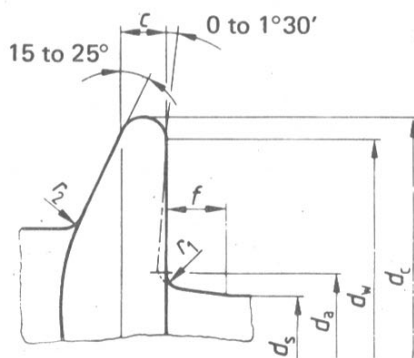
## 2 Reference to other standards

See list of "Standards referred to" on page 5

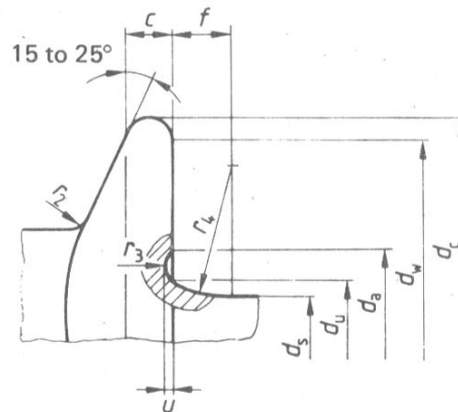
## 3 Dimensions



### Standard design



### Detail X Grooved design (Ho) (only subject to agreement)



$k'$  is the minimum wrenching height  
At least  $e$  shall be available over this height.  
For designation see clause 5.

Continued on pages 2 to 6

Table 1.

Thread <i>d</i>	M 5	M 6	M 8	M 10	M 12	M 14	M 16	M 20	
	—	—	M 8 X 1	M 10 X 1,25	M 12 X 1,5	M 14 X 1,5	M 16 X 1,5	M 20 X 1,5	
	—	—	—	(M 10 X 1)	(M 12 X 1,25)	—	—	—	
<i>P</i> 1)	0,8	1	1,25	1,5	1,75	2	2	2,5	
<i>b</i> Nominal dimension	2)	16	18	22	26	30	34	38	46
	3)	—	—	28	32	36	40	44	52
	4)	—	—	—	—	—	—	57	65
	<i>c</i> min.	1	1,1	1,2	1,5	1,8	2,1	2,4	3
<i>d<sub>a</sub></i> max.	Coarse	5,7	6,8	9,2	11,2	13,7	15,7	17,7	22,4
	Ho	6,2	7,4	10	12,6	15,2	17,7	20,7	25,7
<i>d<sub>c</sub></i> max.	11,8	14,2	18	22,3	26,6	30,5	35	43	
<i>d<sub>r</sub></i>	≈ Pitch diameter of thread								
<i>d<sub>s</sub></i>	max.	5	6	8	10	12	14	16	20
	min.	4,82	5,82	7,78	9,78	11,73	13,73	15,73	19,67
<i>d<sub>u</sub></i> max.	5,5	6,6	9	11	13,5	15,5	17,5	22	
<i>d<sub>w</sub></i> min.	9,8	12,2	15,8	19,6	23,8	27,6	31,9	39,9	
<i>e</i> min.	8,71	10,95	14,26	16,5	17,62	19,86	23,15	29,87	
<i>f</i> max.	1,4	2	2	2	3	3	3	4	
<i>k</i> max.	5,4	6,6	8,1	9,2	11,5	12,8	14,4	17,1	
<i>k'</i> min.	2	2,5	3,2	3,6	4,6	5,1	5,8	6,8	
<i>r<sub>1</sub></i> min.	0,25	0,4	0,4	0,4	0,6	0,6	0,6	0,8	
<i>r<sub>2</sub></i> 5) max.	0,3	0,4	0,5	0,6	0,7	0,9	1	1,2	
<i>r<sub>3</sub></i> min.	0,1	0,1	0,15	0,2	0,25	0,3	0,35	0,4	
<i>r<sub>4</sub></i> ≈	3	3,4	4,3	4,3	6,4	6,4	6,4	8,5	
<i>s</i> Nominal dimension	= max.	8	10	13	15	16	18	21	27
	min.	7,78	9,78	12,73	14,73	15,73	17,73	20,67	26,67
<i>u</i>	max.	0,15	0,2	0,25	0,3	0,35	0,45	0,5	0,65
	min.	0,05	0,05	0,1	0,15	0,15	0,2	0,25	0,3

*e* min. = 1,12 X *s* min.

The screw threads in brackets shall be avoided wherever possible, for functional reasons.

1) *p* = Pitch of coarse thread as specified in DIN 13 Part 12

2) For nominal lengths up to and including 125 mm

3) For nominal lengths over 125 up to 200 mm

4) For nominal lengths exceeding 200 mm

5) Radius *r<sub>2</sub>* shall apply both for the edges of adjoining flats and for the transition between hexagon corners and flange.