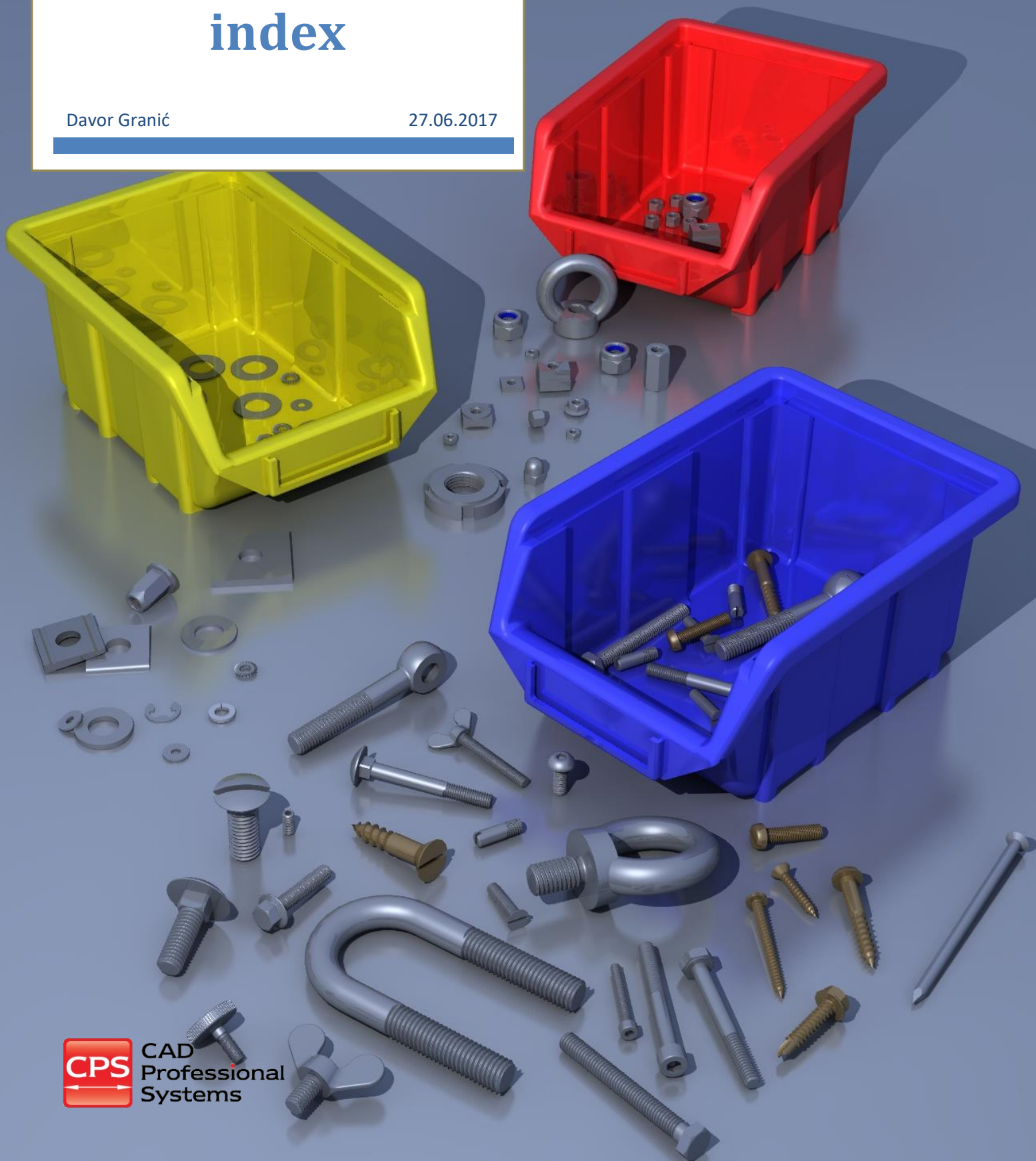


Index of all fastener standards and dimensions that are given in
3 Creo parts that make Fastener library. Creo 2.0 and upward
compatible

Fastener library index

Davor Granić

27.06.2017



CAD
Professional
Systems

Contents

Introduction 3

BOLTS / SCREWS (bolt_universal.prt) 4

 DIN 84 / ISO 1207 Slotted cheese head bolt..... 4

 DIN 96 Round head slot screw 5

 DIN 97 Countersunk head screw 5

 DIN 315 Wing bolt 6

 DIN 427 Headless slot bolt with partial thread..... 6

 DIN 444 Eye bolt 7

 DIN 464 Knurled long neck bolt..... 7

 DIN 551 / ISO 7434 Headless slot bolt 7

 DIN 580 / ISO 3266 Lifting eye bolt..... 8

 DIN 603 / ISO 8677 Carriage bolt partial thread..... 8

 DIN 603 / ISO 8677 Carriage bolt..... 8

 DIN 653 Knurled bolt 9

 DIN 912 / ISO 4762 INBUS socket cap bolt with partial thread 9

 DIN 912 / ISO 4762 INBUS socket cap bolt 10

 DIN 913 / ISO 4029 Headless INBUS bolt..... 10

 DIN 931 / ISO 4029 Hex bolt with partial thread 11

 DIN 933 / ISO 4017 Hex bolt 12

 DIN 938 Double sided bolt..... 13

 DIN 963 / ISO 2009 Countersunk slot bolt..... 14

 DIN 964 / ISO 2010 Countersunk dome head slot bolt..... 14

 DIN 975 Threaded rod 14

 DIN 3250-1 Weld bolt (Nelson) 15

 DIN 3570 U bolt 15

 DIN 6921 / ISO 1665 Hex flange bolt 16

 DIN 7337 A Blind rivet 16

 DIN 7337 B Countersunk blind rivet 17

 DIN 7504K / ISO 15480-83 Hex flange self drilling screw 17

 DIN 7504M / ISO 15480-83 Round cross self drilling screw 17

 DIN 7504P / ISO 15480-83 Countersunk cross self drilling screw..... 18

 DIN 7981 / ISO 7049 Pan head cross tapping screw..... 18

 DIN 7982/ ISO 7050 Countersunk cross tapping screw 18

 DIN 7991 / ISO 10642 Countersunk INBUS bolt..... 19

 DIN 7991 / ISO 10642 Countersunk INBUS bolt with partial thread 20

 DIN EN 10230-1 Countersunk head nail 21

 DIN EN 10230-1 Flat head nail..... 22

 ISO 7380 Button head INBUS bolt 22

NUTS / RIVET INSERTS (nut_universal.prt)..... 23

 DIN 315 Wing nut..... 23

 DIN 439B / ISO 4035 Hexagon thin nut 23

 DIN 466 Knurled long neck nut..... 23

 DIN 467 Knurled nut..... 23

 DIN 508 / ISO 299 T nut..... 23

 DIN 555 / ISO 4034 Hexagon nut..... 24

 DIN 562 Square nut 24

 DIN 582 / ISO 3266 Lifting eye nut 24

 DIN 917 Hexagon cap nut..... 24

 DIN 928 Weld square nut 24

 DIN 935 Crown nut..... 24

 DIN 982 Lock nut 25

 DIN 985 / ISO 7040 Thin lock nut 25

 DIN 1587 Acorn nut..... 25

 DIN 1624 Tee nut 25

 DIN 1804 Slotted locknut 25

 DIN 6334 Coupling nut 25

 DIN 6923 Hex flange nut 26

 DIN 7965 Slotted screw insert..... 26

 DIN 32501-5 Weld nut (Nelson) 26

 Hex open threaded insert 26

 Cylindrical open threaded insert..... 27

 Countersunk Cylindrical open threaded insert..... 27

WASHERS (washer_universal.prt) 28

 DIN 125A / ISO 7089 Flat washer 28

 DIN 127 Elastic lock washer..... 28

 DIN 433 / ISO 7092 Reduced diameter washer..... 28

 DIN 435 Square taper washer 28

 DIN 436 Square washer 28

 DIN 462 Internal tap washer 29

 DIN 988 Shim washer 29

 DIN 6796 Disc spring 29

 DIN 6798A Serrated lock washer..... 29

 DIN 6799 Circlip..... 29

 DIN 9021 large washer 30

Introduction

Fastener library consists of 3 files:

- Bolt_universal.prt
- Nut_universal.prt
- Washer_universal.prt

Each of these files are family table parts with different standard fasteners. They are Creo Parametric 2.0 files and will work in newer versions of Creo also.

These fasteners are bundled in Creo Parametric CPS config that can be downloaded also. Parameters in these files are in Serbian and are compatible with drawings/tables given in in Creo Parametric CPS config.

Cosmetic thread is on by default.

To turn on physical thread resume feature “navoj-physical_thread” in bolts, “fizicki_navoj-physical thread” in nuts.

Download locations for these files are:

- <https://www.cadpro.co.rs/cps-creo-config/>
- <https://grabcad.com/library/fastener-parts-library-1>

Video overview of library:

https://youtu.be/0GegwIN_I9U

For any questions or suggestions contact:

Davor Granic at granicd@gmail.com

BOLTS / SCREWS (bolt_universal.prt)



DIN 84 / ISO 1207 Slotted cheese head bolt

76 parts

L\M	M2	M2.5	M3	M4	M5	M6	M8	M10	M14	M16	M20	M24	M30
4	*												
5	*	*	*										
6	*	*	*			*							
8	*	*	*	*		*							
10	*	*	*	*	*	*							
12	*	*	*	*	*	*							
16	*	*	*	*	*	*	*						
20	*		*	*	*	*	*	*					
25			*	*	*	*	*	*					
30			*	*	*	*	*	*					
35			*	*	*	*	*	*					
40			*	*	*	*	*	*					
45				*	*	*	*	*					
50				*	*	*	*	*					
60						*	*	*					



DIN 85 / ISO 1580 Slotted pan head bolt

64 parts

L\M	M2	M2.5	M3	M4	M5	M6	M8	M10	M14	M16	M20	M24	M30
4													
5	*	*	*										
6	*	*	*	*									
8	*	*	*	*	*								
10	*	*	*	*	*	*	*						
12	*	*	*	*	*	*	*						
16	*	*	*	*	*	*	*						
20			*	*	*	*	*	*					
25			*	*	*	*	*	*					
30				*	*	*	*	*					
35				*	*	*	*	*					
40				*	*	*	*	*					
45							*	*					
50							*	*					



DIN 96 Round head slot screw

83 parts

L \ Ø	2,5	3	3,5	4	4,5	5	5,5	6	7	8
10	*	*	*	*						
12	*	*	*	*						
16	*	*	*	*	*	*	*			
20	*	*	*	*	*	*	*	*		
25	*	*	*	*	*	*	*	*		
30	*	*	*	*	*	*	*	*	*	*
35			*	*	*	*	*	*	*	*
40			*	*	*	*	*	*	*	*
45				*	*	*	*	*	*	*
50					*	*	*	*	*	*
60					*	*	*	*	*	*
70								*	*	*
80									*	*
100									*	*



DIN 97 Countersunk head screw

75 parts

L \ Ø	3	3,5	4	4,5	5	5,5	6	7	8
10		*	*						
12	*	*	*						
16	*	*	*	*	*	*			
20	*	*	*	*	*	*	*		
25	*	*	*	*	*	*	*		
30	*	*	*	*	*	*	*	*	*
35	*		*	*	*	*	*	*	*
40			*	*	*	*	*	*	*
45			*	*	*	*	*	*	*
50				*	*	*	*	*	*
60				*	*	*	*	*	*
70							*	*	*
80								*	*
100								*	*



DIN 315 Wing bolt

69 parts

L\M	M4	M5	M6	M8	M10	M12	M14	M16	M20	M22	M24	
4												
5												
6												
8	*	*										
10	*	*	*	*								
12	*	*	*	*								
16	*	*	*	*	*	*						
20	*	*	*	*	*	*	*					
25	*	*	*	*	*	*	*					
30	*	*	*	*	*	*	*	*	*			
35		*	*	*	*	*	*	*				
40		*	*	*	*	*	*	*				
50			*	*	*	*	*	*	*			
60				*	*	*		*				
70						*						
80						*			*	*	*	



DIN 427 Headless slot bolt with partial thread

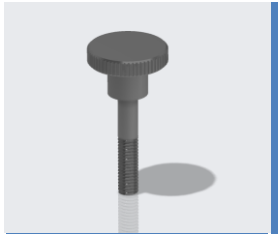
56 parts

L\M	M2	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20
4												
5	*											
6	*	*										
8	*	*	*									
10		*	*	*								
12		*	*	*	*							
14			*	*	*							
16		*	*	*	*	*						
20		*			*	*	*					
25						*	*	*	*			
30							*	*	*	*	*	
35							*	*	*	*	*	*
40								*	*	*	*	*
45									*	*	*	*
50										*	*	*
55											*	*
60											*	*



DIN 444 Eye bolt
17 parts

L\M	M5	M6	M8	M10	M12	M16	M20
50	*	*	*	*			
75	*	*	*	*	*	*	
100					*	*	*
130					*	*	*
160							*



DIN 464 Knurled long neck bolt
42 parts

L\M	M3	M4	M5	M6	M8	M10
8	*	*				
10	*	*	*	*		
12	*	*	*	*		
14	*	*	*	*		
16	*	*	*	*	*	*
20	*	*	*	*	*	*
25		*	*	*	*	*
30		*	*	*	*	*
35				*	*	*
40				*	*	*



DIN 551 / ISO 7434 Headless slot bolt
69 parts

L\M	M2	M3	M4	M5	M6	M8	M10	M12
2	*							
3	*	*						
4	*	*	*					
5	*	*	*	*				
6	*	*	*	*	*			
8	*	*	*	*	*	*		
10	*	*	*	*	*	*	*	
12		*	*	*	*	*	*	*
16		*	*	*	*	*	*	*
20			*	*	*	*	*	*
25				*	*	*	*	*
30					*	*	*	*
35						*	*	*
40						*	*	*
45							*	*
50							*	*
55								*
60								*



DIN 580 / ISO 3266 Lifting eye bolt

11 parts

L\M	M8	M10	M12	M16	M20	M24	M30	M36	M42	M48	M56
13	*										
17		*									
20			*								
27				*							
30					*						
36						*					
45							*				
54								*			
63									*		
68										*	
78											*



DIN 603 / ISO 8677 Carriage bolt partial thread

21 parts

L\M	M5	M6	M8	M10	M12	M14	M16	M18	M20
25	*	*							
30	*	*	*						
35	*	*	*	*					
40	*	*	*	*					
45	*	*	*	*					
50	*	*	*	*					



DIN 603 / ISO 8677 Carriage bolt

30 parts

L\M	M5	M6	M8	M10	M12	M14	M16	M18	M20
16	*	*							
20	*	*	*	*					
25	*	*	*	*					
30	*	*	*	*					
35	*	*	*	*					
40	*	*	*	*					
45	*	*	*	*					
50	*	*	*	*					



DIN 653 Knurled bolt
36 parts

L\M	M3	M4	M5	M6	M8	M10
8	*	*				
10	*	*	*			
12	*	*	*	*		
14	*	*	*	*		
16	*	*	*	*	*	
20	*	*	*	*	*	*
25		*	*	*	*	*
30			*	*	*	*
35					*	*
40						*



DIN 912 / ISO 4762 INBUS socket cap bolt with partial thread
44 parts

L\M	M5	M6	M8	M10	M12	M16
35	*	*				
40	*	*	*			
45	*	*	*	*		
50	*	*	*	*		
55	*	*	*	*	*	
60	*	*	*	*	*	
65	*	*	*	*	*	*
70	*	*	*	*	*	*
80					*	*
90					*	*
100					*	*
110						*
120						*



DIN 912 / ISO 4762 INBUS socket cap bolt

95 parts

L\M	M2	M3	M4	M5	M6	M8	M10	M12	M16
6	*								
8	*	*	*	*					
10	*	*	*	*	*				
12	*	*	*	*	*				
16		*	*	*	*	*	*	*	
20		*	*	*	*	*	*	*	
25		*	*	*	*	*	*	*	
30		*	*	*	*	*	*	*	
35			*	*	*	*	*	*	
40			*	*	*	*	*	*	
45				*	*	*	*	*	
50				*	*	*	*	*	
55				*	*	*	*	*	
60				*	*	*	*	*	
64				*	*	*	*	*	*
70				*	*	*	*	*	*
80								*	*
90								*	*
100								*	*
110									*
120									*



DIN 913 / ISO 4029 Headless INBUS bolt

68 parts

L\M	M2	M3	M4	M5	M6	M8	M10	M12
3	*	*						
4	*	*	*					
5	*	*	*	*				
6	*	*	*	*	*			
8	*	*	*	*	*	*		
10	*	*	*	*	*	*	*	
12		*	*	*	*	*	*	*
16		*	*	*	*	*	*	*
20			*	*	*	*	*	*
25				*	*	*	*	*
30					*	*	*	*
35						*	*	*
40						*	*	*
45							*	*
50							*	*
55								*
60								*



DIN 931 / ISO 4029 Hex bolt with partial thread

167 parts

L\M	M5	M6	M8	M10	M12	M16	M20	M22	M24	M27	M30	M33	M36
25	*												
30	*	*											
35	*	*	*										
40	*	*	*	*									
45	*	*	*	*	*								
50	*	*	*	*	*								
55						*							
60			*	*	*	*							
65							*						
70			*	*	*	*	*	*					
75								*	*				
80				*	*	*	*	*	*	*			
90				*	*	*	*	*	*	*	*		
100				*	*	*	*	*	*	*	*	*	
110				*	*	*	*	*	*	*	*	*	*
120				*	*	*	*	*	*	*	*	*	*
130				*	*	*	*	*	*	*	*	*	*
140					*	*	*	*	*	*	*	*	*
150					*	*	*	*	*	*	*	*	*
160							*	*	*	*	*	*	*
170							*	*	*	*	*	*	*
180							*	*	*	*	*	*	*
190							*	*	*	*	*	*	*
200							*	*	*	*	*	*	*
210							*	*	*	*	*	*	*
220							*	*	*	*	*	*	*
230											*	*	*
240											*	*	*
250											*	*	*
260											*	*	*



DIN 933 / ISO 4017 Hex bolt

282 parts

L\M	M2	M3	M4	M5	M6	M8	M10	M12	M16	M20	M22	M24	M27	M30	M33	M36
6	*	*	*	*												
8	*	*	*	*												
10	*	*	*	*	*											
12	*	*	*	*	*	*										
16	*	*	*	*	*	*	*									
20	*	*	*	*	*	*	*	*								
25		*	*	*	*	*	*	*								
30		*	*	*	*	*	*	*	*							
35			*	*	*	*	*	*	*							
40			*	*	*	*	*	*	*	*						
45			*	*	*	*	*	*	*	*	*					
50			*	*	*	*	*	*	*	*	*	*	*	*	*	*
55				*	*	*	*	*	*	*	*	*	*	*	*	*
60				*	*	*	*	*	*	*	*	*	*	*	*	*
65					*	*	*	*	*	*	*	*	*	*	*	*
70					*	*	*	*	*	*	*	*	*	*	*	*
75					*	*	*	*	*	*	*	*	*	*	*	*
80					*	*	*	*	*	*	*	*	*	*	*	*
85					*	*	*	*	*	*	*	*	*	*	*	*
90					*	*	*	*	*	*	*	*	*	*	*	*
100						*	*	*	*	*	*	*	*	*	*	*
110						*	*	*	*	*	*	*	*	*	*	*
120							*	*	*	*	*	*	*	*	*	*
130							*	*	*	*	*	*	*	*	*	*
140							*	*	*	*	*	*	*	*	*	*
150							*	*	*	*	*	*	*	*	*	*
160										*	*	*	*	*	*	*
170										*	*	*	*	*	*	*
180										*	*	*	*	*	*	*
190										*	*	*	*	*	*	*
200										*	*	*	*	*	*	*



DIN 938 Double sided bolt
237 parts

L\M	M5	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36
22	*														
25	*	*													
28	*	*													
30	*	*	*												
35	*	*	*	*											
40	*	*	*	*	*										
45	*	*	*	*	*	*									
50	*	*	*	*	*	*	*								
55		*	*	*	*	*	*	*							
60		*	*	*	*	*	*	*	*						
65			*	*	*	*	*	*	*	*					
70			*	*	*	*	*	*	*	*	*				
75			*	*	*	*	*	*	*	*	*				
80			*	*	*	*	*	*	*	*	*	*			
85				*	*	*	*	*	*	*	*	*			
90				*	*	*	*	*	*	*	*	*	*		
95				*	*	*	*	*	*	*	*	*	*	*	
100				*	*	*	*	*	*	*	*	*	*	*	*
110					*	*	*	*	*	*	*	*	*	*	*
120					*	*	*	*	*	*	*	*	*	*	*
130						*	*	*	*	*	*	*	*	*	*
140						*	*	*	*	*	*	*	*	*	*
150							*	*	*	*	*	*	*	*	*
160							*	*	*	*	*	*	*	*	*
170								*	*	*	*	*	*	*	*
180								*	*	*	*	*	*	*	*
190									*	*	*	*	*	*	*
200									*	*	*	*	*	*	*
220												*	*	*	*
240												*	*	*	*
260												*	*	*	*
280												*	*	*	*
300													*	*	*
320														*	*
340														*	*
360															*



DIN 963 / ISO 2009 Countersunk slot bolt

101 parts

L\M	M2	M3	M4	M5	M6	M8	M10	M12
4	*	*						
5			*					
6	*	*	*	*				
8	*	*	*	*	*			
10	*	*	*	*	*			
12	*	*	*	*	*			
16	*	*	*	*	*	*	*	
20	*	*	*	*	*	*	*	*
25		*	*	*	*	*	*	*
30		*	*	*	*	*	*	*
35		*	*	*	*	*	*	*
40		*	*	*	*	*	*	*
45		*	*	*	*	*	*	*
50		*	*	*	*	*	*	*
55						*	*	*
60						*	*	*
65						*	*	*
70						*	*	*



DIN 964 / ISO 1010 Countersunk dome head slot bolt

101 parts

L\M	M2	M3	M4	M5	M6	M8	M10	M12
4	*	*						
5			*					
6	*	*	*	*				
8	*	*	*	*	*			
10	*	*	*	*	*			
12	*	*	*	*	*			
16	*	*	*	*	*	*	*	
20	*	*	*	*	*	*	*	*
25		*	*	*	*	*	*	*
30		*	*	*	*	*	*	*
35		*	*	*	*	*	*	*
40		*	*	*	*	*	*	*
45		*	*	*	*	*	*	*
50		*	*	*	*	*	*	*
55						*	*	*
60						*	*	*
65						*	*	*
70						*	*	*



DIN 975 Threaded rod

7 parts

L\M	M2	M3	M4	M5	M6	M8	M10
1000	*	*	*	*	*	*	*



DIN 3250-1 Weld bolt (Nelson)
30 parts

L\M	M3	M4	M5	M6	M8
6	*				
8	*	*			
10	*	*	*	*	
12	*	*	*	*	
16	*	*	*	*	*
20	*	*	*	*	*
25		*	*	*	*
30			*	*	*
35				*	*



DIN 3570 U bolt
18 parts

Fi\M	M10	M12	M16	M20	M24
23	*				
30	*				
38	*				
46	*				
52	*				
64		*			
82		*			
94		*			
120			*		
148			*		
176			*		
202			*		
228				*	
282				*	
332				*	
378					*
428					*
530					*



DIN 6921 / ISO 1665 Hex flange bolt

92 parts

L\M	M5	M6	M8	M10	M12	M14	M16
10	*						
12	*	*	*	*			
16	*	*	*	*			
20	*	*	*	*	*		
25	*	*	*	*	*	*	*
30	*	*	*	*	*	*	*
35	*	*	*	*	*	*	*
40	*	*	*	*	*	*	*
45	*	*	*	*	*	*	*
50	*	*	*	*	*	*	*
55	*	*	*	*	*	*	*
60	*	*	*	*	*	*	*
65	*	*	*	*	*	*	*
70	*	*	*	*	*	*	*
80	*	*	*	*	*	*	*
90		*	*	*	*	*	*
100		*	*	*	*	*	*
110				*	*	*	*
120				*	*	*	*
130				*	*	*	*
140					*	*	*
150						*	*



DIN 7337 A Blind rivet

(Compressed to maximum allowed gap)

45 parts

L\Ø	2.4	3	3.2	4	4.8	5	6	6.4
4	*	*	*	*				
6	*	*	*	*				
8	*	*	*	*	*	*		
10		*	*	*	*	*	*	
12		*	*	*	*	*	*	*
16		*	*	*	*	*	*	*
20				*	*	*	*	*
25				*		*	*	*
30							*	*



DIN 7337 B Countersunk blind rivet
(Compressed to maximum allowed gap)
45 parts

L\Ø	2.4	3	3.2	4	4.8	5	6	6.4
4	*	*	*	*				
6	*	*	*	*				
8	*	*	*	*	*	*		
10		*	*	*	*	*	*	
12		*	*	*	*	*	*	*
16		*	*	*	*	*	*	*
20				*	*	*	*	*
25				*		*	*	*
30							*	*



DIN 7504K / ISO 15480-83 Hex flange self drilling screw
34 parts

L\ST	3.5	3.9	4.2	4.8	5.5	6.3
9.5	*					
13	*	*	*	*		
16	*	*	*	*		
19	*	*	*	*	*	*
25	*	*	*	*	*	*
32		*	*	*	*	*
38			*	*	*	*
50				*	*	*
60						*



DIN 7504M / ISO 15480-83 Round cross self drilling screw
34 parts

L\ST	3.5	3.9	4.2	4.8	5.5	6.3
9.5	*					
13	*	*	*	*		
16	*	*	*	*		
19	*	*	*	*	*	*
25	*	*	*	*	*	*
32		*	*	*	*	*
38			*	*	*	*
50				*	*	*
60						*



DIN 7504P / ISO 15480-83 Countersunk cross self drilling screw

34 parts

L\ST	3.5	3.9	4.2	4.8	5.5	6.3
9.5	*					
13	*	*	*	*		
16	*	*	*	*		
19	*	*	*	*	*	*
25	*	*	*	*	*	*
32		*	*	*	*	*
38			*	*	*	*
50				*	*	*
60						*



DIN 7981 / ISO 7049 Pan head cross tapping screw

69 parts

L\ST	2.2	2.9	3.5	3.9	4.2	4.8	5.5	6.3
4.5	*							
6.5	*	*	*	*				
9.5	*	*	*	*	*	*		
13	*	*	*	*	*	*	*	*
16	*	*	*	*	*	*	*	*
19		*	*	*	*	*	*	*
25		*	*	*	*	*	*	*
32		*	*	*	*	*	*	*
38			*	*	*	*	*	*
50				*	*	*	*	*
60						*	*	*
70						*	*	*
75							*	*
80							*	*



DIN 7982/ ISO 7050 Countersunk cross tapping screw

69 parts

L\ST	2.2	2.9	3.5	3.9	4.2	4.8	5.5	6.3
4.5	*							
6.5	*	*	*	*				
9.5	*	*	*	*	*	*		
13	*	*	*	*	*	*	*	*
16	*	*	*	*	*	*	*	*
19		*	*	*	*	*	*	*
25		*	*	*	*	*	*	*
32		*	*	*	*	*	*	*
38			*	*	*	*	*	*
50				*	*	*	*	*
60						*	*	*
70						*	*	*
75							*	*
80							*	*



DIN 7991 / ISO 10642 Countersunk INBUS bolt

191 parts

L\M	M3	M4	M5	M6	M8	M10	M12	M16	M20	M24
6	*	*	*							
8	*	*	*	*						
10	*	*	*	*	*					
12	*	*	*	*	*	*				
16	*	*	*	*	*	*	*			
20	*	*	*	*	*	*	*	*		
25	*	*	*	*	*	*	*	*		
30	*	*	*	*	*	*	*	*		
35	*	*	*	*	*	*	*	*	*	
40	*	*	*	*	*	*	*	*	*	*
45		*	*	*	*	*	*	*	*	*
50		*	*	*	*	*	*	*	*	*
55			*	*	*	*	*	*	*	*
60			*	*	*	*	*	*	*	*
65			*	*	*	*	*	*	*	*
70			*	*	*	*	*	*	*	*
75			*	*	*	*	*	*	*	*
80			*	*	*	*	*	*	*	*
85				*	*	*	*	*	*	*
90				*	*	*	*	*	*	*
100				*	*	*	*	*	*	*
110					*	*	*	*	*	*
120					*	*	*	*	*	*
130						*	*	*	*	*
140							*	*	*	*
150							*	*	*	*
160								*	*	*
170									*	*
180									*	*
190									*	*
200									*	*



DIN 7991 / ISO 10642 Countersunk INBUS bolt with partial thread 147 parts

L\M	M3	M4	M5	M6	M8	M10	M12	M16	M20	M24
16	*									
20	*	*	*							
25	*	*	*	*						
30	*	*	*	*	*	*				
35	*	*	*	*	*	*	*			
40	*	*	*	*	*	*	*			
45		*	*	*	*	*	*	*		
50		*	*	*	*	*	*	*	*	
55			*	*	*	*	*	*	*	
60			*	*	*	*	*	*	*	*
65			*	*	*	*	*	*	*	*
70			*	*	*	*	*	*	*	*
75			*	*	*	*	*	*	*	*
80			*	*	*	*	*	*	*	*
85				*	*	*	*	*	*	*
90				*	*	*	*	*	*	*
100				*	*	*	*	*	*	*
110					*	*	*	*	*	*
120					*	*	*	*	*	*
130						*	*	*	*	*
140							*	*	*	*
150							*	*	*	*
160								*	*	*
170									*	*
180									*	*
190									*	*
200									*	*



DIN EN 10230-1 Countersunk head nail
61 parts

L\Ø	1.2	1.4	1.6	1.8	2	2.2	2.4	2.5	2.7	3	3.1	3.4	3.5	3.8	4
10	*														
15	*														
20		*													
25		*	*												
30			*	*	*	*	*								
35				*	*										
40				*	*	*	*								
50						*	*		*	*					
55								*							
60							*	*	*	*		*			
65									*		*				
70										*	*	*	*	*	
80										*	*	*	*	*	
90												*	*	*	*
100														*	*
110															*
120															*

L\Ø	4.2	4.6	5	6
90		*		
100	*	*	*	
110	*			
120		*	*	
125		*		
140			*	
150			*	*
160				*
175				*
180				*
200				*



DIN EN 10230-1 Flat head nail

26 parts

L\Ø	1.6	1.8	2	2.2	2.4	2.7	3	3.5	4	4.5	5	5.5	6
30		*											
32	*												
35			*										
40			*	*									
50					*	*							
55						*	*						
60						*	*						
70							*	*					
80								*					
90									*				
100										*			
110											*		
120												*	
125											*	*	
130												*	
140												*	*
150													*
160													*
180													*



ISO 7380 Button head INBUS bolt

61 parts

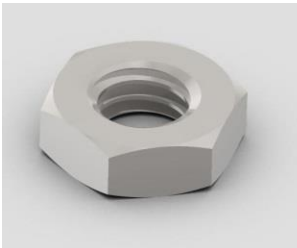
L\M	M3	M4	M5	M6	M8	M10	M12
6	*	*					
8	*	*	*	*			
10	*	*	*	*	*		
12	*	*	*	*	*	*	
16	*	*	*	*	*	*	*
20		*	*	*	*	*	*
25		*	*	*	*	*	*
30			*	*	*	*	*
35			*	*	*	*	*
40			*	*	*	*	*
45			*	*	*	*	*
50			*	*	*	*	*

NUTS / RIVET INSERTS (nut_universal.prt)



DIN 315 Wing nut
11 parts

Thread	M4	M5	M6	M8	M10	M12	M14	M16	M20	M22	M24
--------	----	----	----	----	-----	-----	-----	-----	-----	-----	-----



DIN 439B / ISO 4035 Hexagon thin nut
28 parts

Thread	M1.6	M2	M2.5	M3	M4	M5	M6	M8	M10	M12	M14
	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42
	M45	M48	M52	M56	M60	M64					



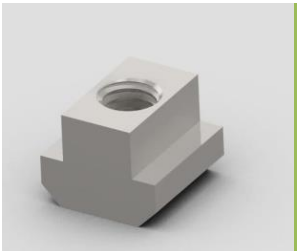
DIN 466 Knurled long neck nut
7 parts

Thread	M2	M3	M4	M5	M6	M8	M10
--------	----	----	----	----	----	----	-----



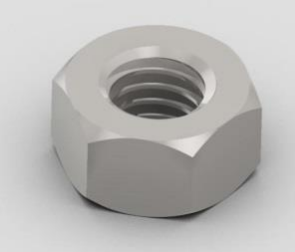
DIN 467 Knurled nut
7 parts

Thread	M2	M3	M4	M5	M6	M8	M10
--------	----	----	----	----	----	----	-----



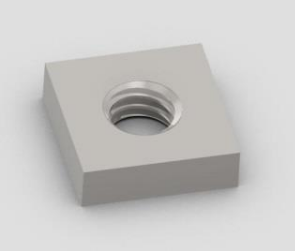
DIN 508 / ISO 299 T nut
13 parts

Thread	M4	M5	M6	M8	M10	M12	M16	M20	M24	M30	M36	M42	M48
--------	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----



DIN 555 / ISO 4034 Hexagon nut
28 parts

Thread	M1.6	M2	M2.5	M3	M4	M5	M6	M8	M10	M12	M14
	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42
	M45	M48	M52	M56	M60	M64					



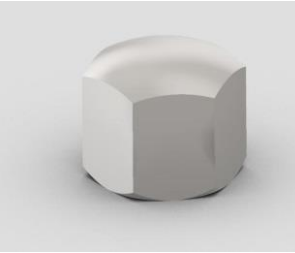
DIN 562 Square nut
6 parts

Thread	M3	M4	M5	M6	M8	M10
--------	----	----	----	----	----	-----



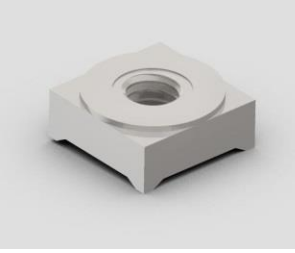
DIN 582 / ISO 3266 Lifting eye nut
15 parts

Thread	M8	M10	M12	M16	M20	M24	M30	M36	M42	M48	M56
	M64	M72	M80	M100							



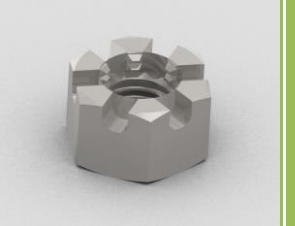
DIN 917 Hexagon cap nut
10 parts

Thread	M3	M4	M5	M6	M8	M10	M12	M16	M20	M24
--------	----	----	----	----	----	-----	-----	-----	-----	-----



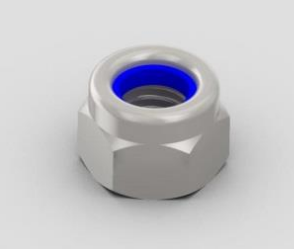
DIN 928 Weld square nut
8 parts

Thread	M4	M5	M6	M8	M10	M12	M14	M16
--------	----	----	----	----	-----	-----	-----	-----



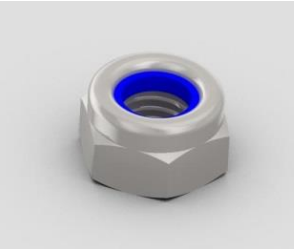
DIN 935 Crown nut
14 parts

Thread	M4	M6	M8	M10	M12	M16	M20	M24	M30	M36	M40	M42	M48	M56
--------	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



DIN 982 Lock nut
10 parts

Thread	M5	M6	M8	M10	M12	M14	M16	M20	M22	M24
--------	----	----	----	-----	-----	-----	-----	-----	-----	-----



DIN 985 / ISO 7040 Thin lock nut
10 parts

Thread	M5	M6	M8	M10	M12	M14	M16	M20	M22	M24
--------	----	----	----	-----	-----	-----	-----	-----	-----	-----



DIN 1587 Acorn nut
9 parts

Thread	M3	M4	M5	M6	M8	M10	M12	M16	M20
--------	----	----	----	----	----	-----	-----	-----	-----



DIN 1624 Tee nut
5 parts

Thread	M4	M5	M6	M8	M10
--------	----	----	----	----	-----



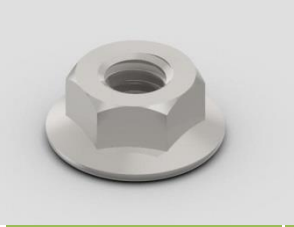
DIN 1804 Slotted locknut
49 parts

Thread	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M26	M28	M30	M32
	M35	M38	M40	M42	M45	M48	M50	M52	M55	M58	M60	M62	M65	M68
	M70	M72	M75	M80	M85	M90	M95	M100	M105	M110	M115	M120	M125	M130
	M140	M150	M160	M170	M180	M190	M200							



DIN 6334 Coupling nut
13 parts

Thread	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M36
--------	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



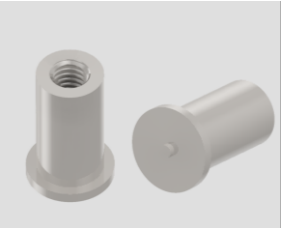
DIN 6923 Hex flange nut
7 parts

Thread	M4	M5	M6	M8	M10	M12	M14
--------	----	----	----	----	-----	-----	-----



DIN 7965 Slotted screw insert
9 parts

L\M	M3	M4	M5	M6	M8	M10	M12	M16	M20
8	*								
10		*							
12			*						
15				*					
18					*				
25						*			
30							*	*	*



DIN 32501-5 Weld nut (Nelson)
24 parts

L\M	M3	M4	M5	M6
8	*			
10	*	*	*	*
12	*	*	*	*
16	*	*	*	*
20	*	*	*	*
25		*	*	*
30			*	*
35				*
40				*



Hex open threaded insert
5 parts

Thread	M4	M5	M6	M8	M10
--------	----	----	----	----	-----



Cylindrical open threaded insert
6 parts

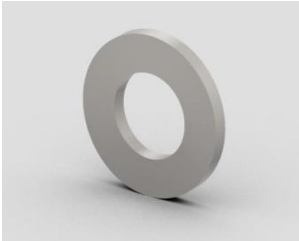
Thread	M3	M4	M5	M6	M8	M10
--------	----	----	----	----	----	-----



Countersunk Cylindrical open threaded insert
6 parts

Thread	M3	M4	M5	M6	M8	M10
--------	----	----	----	----	----	-----

WASHERS (washer_universal.prt)



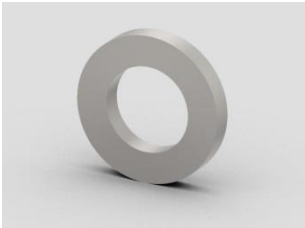
DIN 125A / ISO 7089 Flat washer
25 parts

Thread	M1.6	M2	M2.5	M3	M3.5	M4	M5	M6	M8	M10	M12	M14
	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45
	M48											



DIN 127 Elastic lock washer
24 parts

Thread	M2	M2.5	M3	M3.5	M4	M5	M6	M8	M10	M12	M14
	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42
	M45	M48									



DIN 433 / ISO 7092 Reduced diameter washer
20 parts

Thread	M2	M2.5	M3	M3.5	M4	M5	M6	M8	M10	M12	M14
	M16	M18	M20	M22	M24	M27	M30	M33	M36		



DIN 435 Square taper washer
8 parts

Thread	M8	M10	M12	M16	M20	M22	M24	M27
--------	----	-----	-----	-----	-----	-----	-----	-----



DIN 436 Square washer
16 parts

Thread	M8	M10	M12	M16	M20	M22	M24	M27	M30	M33	M36	M39
	M42	M45	M48	M52								

		DIN 462 Internal tap washer 36 parts												
Intern. Di	8	10	12	14	16	18	20	22	24	26	28	30	32	35
	38	40	42	45	48	50	52	55	58	60	62	65	68	70
	72	75	78	80	85	90	95	100						

		DIN 988 Shim washer 53 parts									
s\M		M3	M4	M5	M6	M8	M10	M12	M16	M20	
0.1		*	*	*	*	*	*	*	*	*	
0.2		*	*	*	*	*	*	*	*	*	
0.3		*	*	*	*	*	*	*	*	*	
0.5		*	*	*	*	*	*	*	*	*	
1		*	*	*	*	*	*	*	*	*	
1.2										*	
1.5										*	
2					*	*	*	*	*	*	

		DIN 6796 Disc spring 11 parts									
Thread	M2	M3	M4	M6	M8	M10	M12	M16	M20	M24	M30



DIN 6798A Serrated lock washer

13 parts

Thread	M2	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M22
--------	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----



DIN 6799 Circlip

18 parts

Fi	0.8	1.2	1.5	1.9	2.3	3.2	4	5	6	7	8	9
	10	12	15	19	24	30						



DIN 9021 large washer

11 parts

Thread	M2.5	M3	M4	M5	M6	M8	M10	M12	M14	M16	M20
--------	------	----	----	----	----	----	-----	-----	-----	-----	-----