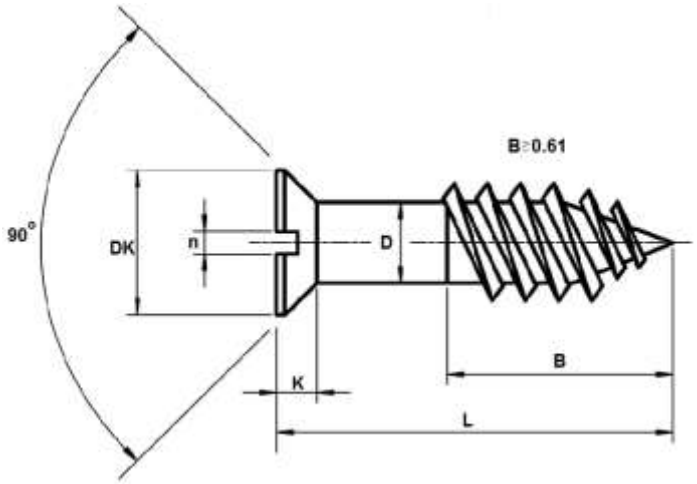
*a Division of Nissen Fasteners Florida LLC

Product Dimensions and Weights **DIN 97 Specifications**

Metric DIN 97 Slotted Flat Countersunk Head Wood Screws

Visit our **online store** for product availability



Dimensions of Metric DIN 97 Slotted Flat Countersunk Head Wood Screws

GAUGE No.	16	18	19	20	21	22	23
D (mm)	2.5	3	3.5	4	4.5	5	6
DK	4,7	5,6	6,5	7,5	8,3	9,2	11
K	1,5	1,65	1,93	2,2	2,35	2,5	3
n	0,6	0,8	0,8	1	1	1,2	1,6
L (mm)	Weight (kg / 1000 pcs)						
10	0.38	0.64	0.84				
12	0.44	0.73	0.97	1.27			
16	0.56	0.92	1.22	1.58	1.89	2.29	
20	0.69	1.10	1.50	1.89	2.27	2.77	
25	0.84	1.35	1.79	2.27	2.76	3.37	
30	1.01	1.59	2.11	2.66	3.26	4.00	
35		1.82	2.44	3.05	3.75	4.56	
40		2.06	2.74	3.45	4.22	5.16	7.60
45		2.29	3.06	3.78	4.73	5.75	8.45
50		2.52	3.37	4.17	5.22	6.35	9.29
60		2.98	3.68	5.04	6.20	7.57	11.00
70		3.44	3.98	5.44	6.70	8.77	12.70

All measurements are in mm

Aspen Fasteners 4807 Rockside Road, Suite 400, Independence, OH 44131 USA
www.aspenfasteners.com | aspensales@aspenfasteners.com | 1-800-479-0056

*a Division of Nissen Fasteners Florida LLC

Metric DIN 97 Slotted Flat Countersunk Wood Screws are the preferred fasteners used to attach wood to wood or hardware to wood. The aggressive self tapping part thread with a sharp point allows for effective penetration and gripping in the wood to form strong joints. The round head is a domed half spherical shaped head. Since they are domed and not countersunk, the entire head will show and can be used only when the heads are permitted to protrude from the surface. The slotted drive is a simple slot cut into the outer surface of the head for a flat blade slot screw driver. Aspen Fasteners offers over 500,000 unique fastener products from stock in inch and metric standard in a variety of materials and finishes. The following sizes DIN 97 Slotted Flat Countersunk Wood Screws are available for immediate shipping from stock: Diameters ranging from M3 to M8 up to 100mm long in stainless steel A2 and A4. View parts by clicking on the following link: DIN 97 Slotted Flat Countersunk Wood Screws

DIN (**D**eutsches **I**nstitut für **N**ormung - German Institute for Standardization) standards are issued for a variety of components including industrial fasteners as Metric DIN 97 Slotted Flat Countersunk Wood Screws. The DIN standards remain common in Germany, Europe and globally even though the transition to ISO standards is taking place. DIN standards continue to be used for parts which do not have ISO equivalents or for which there is no need for standardization as DIN 97 Slotted Flat Countersunk Wood Screws.

1) Mechanical properties of stainless steel for metric DIN 97 Slotted Flat Countersunk Wood Screws

Stainless steels can be divided into three groups of steel - austenitic, ferritic and martensitic. Austenitic steel is by far the most common type (>90% of commercial fasteners). The steel groups and strength classes are designated by a four-digit sequence of letters and numbers (eg A2-70) as shown in the following table. DIN EN ISO 3506 governs screws and nuts made from stainless steel.

Steel group	Steel grade	Strength class	Screws, Nuts and Bolts			
			Tensile strength N/mm^2	Tensile strength PSI	Dia range	Nut Load N/mm^2
Austenitic	A2 and A4	50	500	70,000	<=M39	500
		70	700	100,000	<=M20	700
		80	800	118,000	<=M20	800

The tensile stress is calculated with reference to the tensile stress area (see DIN EN ISO 3506-1979). Nuts to be paired with same grade of stainless steel screws

Steel group	Property Strength class	Made From	Characteristics
Austenitic	50	A1, A2	Soft; cold worked, turned and soft pressed fasteners
	70	A2, A4	Cold worked, normal strength formed fasteners
	80	A2, A4	Extreme cold worked, high strength, special applications

*a Division of Nissen Fasteners Florida LLC

2) Chemical composition of stainless steel metric DIN 97 Slotted Flat Countersunk Wood Screws

Grade	USA Grade	Material designation	Material no.	C %	Si ≤ %	Mn ≤ %	Cr %	Mo %	Ni %
A 2	**304**	X 5Cr Ni 1810	1.4301	≤ 0.07	1.0	2.0	17.5 to 19.5	-	8.0 to 10.5
		X 2 Cr Ni 1811	1.4306	≤ 0.03	1.0	2.0	18.0 to 20.0	-	10 to 12.0
		X 8 Cr Ni 19/10	1.4303	≤ 0.07	1.0	2.0	17.0 to 19.0	-	11.0 to 13.0
A 4	**316**	X 5 Cr Ni Mo 1712	1.4401	≤ 0.07	1.0	2.0	16.5 to 18.5	2.0 to 2.5	10.0 to 13.0
		X 2 Cr Ni Mo 1712	1.4404	≤ 0.03	1.0	2.0	16.5 to 18.5	2.0 to 2.5	10 to 13

3) Chemical composition of steel metric DIN 97 Slotted Flat Countersunk Wood Screws

PROPERTY CLASS	MATERIAL AND TREATMENT	CHEMICAL COMPOSITION LIMITS %				TEMPERING TEMP ºC MIN.
		C		P	S	
		min.	max.	max.	max.	
4.6, 4.8, 5.8, 6.8	Low or medium carbon steel	-	0.55	0.05	0.06	-
8.8	Medium carbon steel quenched, tempered	0.25	0.55	0.04	0.05	425
9.8	Medium carbon steel quenched, tempered	0.25	0.55	0.04	0.05	425
10.9	Medium carbon steel additives e.g. boron, Mn, Cr or Alloy steel - quenched, tempered	0.20	0.55	0.04	0.05	425
12.9	Alloy steel - quenched, tempered	0.20	0.50	0.035	0.035	380

*a Division of Nissen Fasteners Florida LLC

4) Mechanical properties of steel for metric DIN 97 Slotted Flat Countersunk Wood Screws

MECHANICAL PROPERTY			PROPERTY CLASS								
							8.8				
			4.8	5.6	5.8	6.8	Up to M 16	Over M 16	9.8	10.9	12.9
Tensile Strength (Rm, N/mm²)	nom.		400	500		600	800		900	1000	1200
	min.		420	500	520	600	800	830	900	1040	1220
Vickers Hardness	min.		130	155	160	190	250	255	290	320	385
	max		250				320	336	360	380	435
Brinell Hardness	min.		124	147	152	181	319	242	266	295	353
	max.		238				385	319	342	363	412
Rockwell Hardness	min.	HR	71	79	82	89	-				
		HRC	-	-	-	-	20	23	28	32	39
		HR	95			99	-				
	max.	HRC	-	-	-	-	32	34	37	39	44
Yield Stress ReL. N/mm²	nom.		320	300	400	480	-				
	min.		340	300	420	480	-				
Stress at permanent set limit N/mm²	nom.		-				640		720	900	1080
	min.		-				640	660	720	940	1100

Disclaimer
Dimensional data and technical information for Metric DIN 97 Slotted Flat Countersunk Wood Screws was obtained from publicly available sources and not acquired through standards agencies. It has been completed and compiled for reference purposes only; where discrepancies are found they are subject to change without notice. Aspen Fasteners makes no warranties or representations regarding the accuracy and validity of the compiled information and data. Contact the relevant standards authorities for accurate and detailed information.