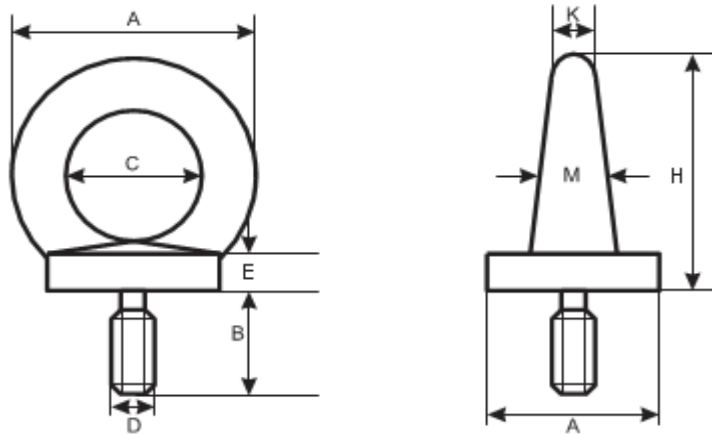


Metric DIN 580 Lifting Eye Bolts

Visit our [online store](#) for product availability



Dimensions of metric DIN 580 lifting eye bolts

D	B	A	H	A1	C	E	K	M	LOAD (KG) (C15 Steel)	Weight KG/1000 pcs
M8	13	20	36	36	20	6	8	10	140	60
M10	17	25	45	45	25	8	10	12	230	110
M12	20.5	30	53	54	30	10	12	14	340	10
M16	27	35	62	63	35	12	14	16	700	280
M20	30	40	71	72	40	14	16	19	1200	450
M24	36	50	90	90	50	18	20	24	1800	740
M27	36	50	90	90	50	18	20	24	1800	740
M30	45	65	109	108	60	22	24	28	3600	1660
M33	45	65	109	108	60	22	24	28	3600	2650
M36	54	75	128	126	70	26	28	32	5100	2650
M39	54	75	128	126	70	26	28	32	5100	2650
M42	63	85	147	144	80	30	32	38	7000	4030
M45	63	85	147	144	80	30	32	38	7000	4030
M48	68	100	168	166	90	35	38	46	8600	6380
M52	68	100	168	168	90	35	38	46	8600	6380
M56	78	110	187	184	100	38	42	50	11500	8800
M64	90	120	208	206	110	42	48	58	16000	12400
M72	100	150	260	260	140	50	60	72	21000	23300
M80	12	170	298	296	160	55	68	80	28000	34200
M100	130	190	330	330	180	60	75	88	38000	49100

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Metric DIN 580 lifting eye bolts are threaded at one end and a loop at the other end. Commonly used in in rigging equipment for vertical or angled loading. Aspen Fasteners offers the following sizes for immediate delivery from stock: Diameters ranging from M6 to M80. View available parts by clicking on the following link: [metric DIN 580 lifting eye bolts](#)

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 580 lifting eye bolts. 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.

1) Mechanical properties of stainless steel for metric DIN 580 lifting eye bolts

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

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2) Chemical composition of stainless steel metric DIN 580 lifting eye bolts

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 580 lifting eye bolts

PROPERTY CLASS	MATERIAL AND TREATMENT	CHEMICAL COMPOSITION LIMITS %				TEMPERING TEMP °C 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

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4) Mechanical properties of steel for metric DIN 580 lifting eye bolts

MECHANICAL PROPERTY		PROPERTY CLASS									
		4.8	5.6	5.8	6.8	8.8		9.8	10.9	12.9	
						Up to M 16	Over M 16				
Tensile Strength (Rm, N/mm ²)	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/mm ²	nom.	320	300	400	480	-					
	min.	340	300	420	480	-					
Stress at permanent set limit N/mm ²	nom.	-				640		720	900	1080	
	min.	-				640	660	720	940	1100	

5) Metric DIN 580 lifting eye bolts available at Aspen Fasteners

(click to view available sizes and prices)



C15 Steel



Drop Forged



Stainless Steel

Disclaimer

Dimensional data and technical information for metric DIN 580 lifting eye bolts 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.

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