ENGLISH

Datasheet

Stock No: 292518

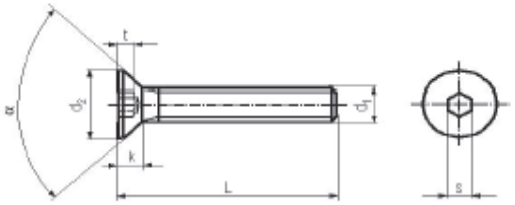
Steel Black Self-Colour, Hexagon Countersunk Socket Screws: Metric Thread

Countersunk socket screws are designed for light duty applications where there is limited space. These screws are widely used in many applications where a strong and reliable joint is required. Typically countersunk socket screws are used to fasten plates and strips of metal to equipment and machinery as their flat head allows a flush flat finish. This range of socket screws are of mild steel and if painted or suitably treated these screws can be used outside.

- Mild Steel
- Threaded in accordance with Din 7991 standard
- Used in applications where a wider head and lower profile is required
- Suitable for light fastening applications
- Typical applications include; machine tooling, security guarding, panel building and general fastening applications
- Also used in many internal joinery applications
- Requires a Hex Key/Allen Key

Head Shape	Material	Thread Size	Length	RS Part No.
Hex Socket Countersunk	Steel	M3	6 mm	281372
Hex Socket Countersunk	Steel	M3	8 mm	281388
Hex Socket Countersunk	Steel	M3	10 mm	281394
Hex Socket Countersunk	Steel	M3	12 mm	281401
Hex Socket Countersunk	Steel	M3	16 mm	292423
Hex Socket Countersunk	Steel	M3	20 mm	292439
Hex Socket Countersunk	Steel	M4	8 mm	281417
Hex Socket Countersunk	Steel	M4	10 mm	281423
Hex Socket Countersunk	Steel	M4	12 mm	281439
Hex Socket Countersunk	Steel	M4	16 mm	281445
Hex Socket Countersunk	Steel	M4	20 mm	292445
Hex Socket Countersunk	Steel	M4	25 mm	292451
Hex Socket Countersunk	Steel	M5	10 mm	281451
Hex Socket Countersunk	Steel	M5	12 mm	281467
Hex Socket Countersunk	Steel	M5	16 mm	281473
Hex Socket Countersunk	Steel	M5	20 mm	281489
Hex Socket Countersunk	Steel	M5	25 mm	292467
Hex Socket Countersunk	Steel	M5	30 mm	292467
Hex Socket Countersunk	Steel	M6	10 mm	281495
Hex Socket Countersunk	Steel	M6	16 mm	281502
Hex Socket Countersunk	Steel	M6	20 mm	281518
Hex Socket Countersunk	Steel	M6	25 mm	281524
Hex Socket Countersunk	Steel	M6	30 mm	292489
Hex Socket Countersunk	Steel	M6	35 mm	292495
Hex Socket Countersunk	Steel	M6	40 mm	8229142
Hex Socket Countersunk	Steel	M6	50 mm	8229145
Hex Socket Countersunk	Steel	M8	16 mm	281546
Hex Socket Countersunk	Steel	M8	20 mm	281552
Hex Socket Countersunk	Steel	M8	25 mm	281568
Hex Socket Countersunk	Steel	M8	30 mm	292502
Hex Socket Countersunk	Steel	M8	35 mm	292518
Hex Socket Countersunk	Steel	M8	40 mm	8229149
Hex Socket Countersunk	Steel	M8	75 mm	8229151
Hex Socket Countersunk	Steel	M8	50 mm	8229158

FLAT HEAD SOCKET CAP SCREWS DIN 7991 / ISO 10642 / ANSI B18.3.5M



**********Notice**********

Lindstrom Metric, LLC will supply all Flat Head Socket Cap Screws With Full Thread, not according to below formulas.

Thread Size d1		(M2)	(M2.5)	M3	M4	M5	M6	M8	M10	M12	(M14)	M16	(M18)	M20	(M22)	M24
Thread Pitch		0.4	0.45	0.5	0.7	0.8	1	1.25	1.5	1.75	2	2	2.5	2.5	2.5	3
Head Angle a		90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	60°	60°
DIN 7991 Thread Length Formula	For Lengths ≤125mm	10	11	12	14	16	18	22	26	30	34	38	42	46	50	54
	For Lengths >125mm≤200mm						24	28	32	36	40	44	48	52	56	60
	For Lengths >200 mm								45	49	53	57	61	65	69	73
	ISO 10642 & ANSI B18.3.5M use a shank length / grip length formula to determine thread length. - Refer to full ISO or ANSI standard for more details.															
DIN 7991 Head Dia. d2	min.	3.7	4.7	5.7	7.64	9.64	11.57	15.57	19.48	23.48	26.48	29.48	32.38	35.38	35.38	38.38
	max. = nominal	4.0	5.0	6.0	8.00	10.00	12.00	16.00	20.00	24.00	27.00	30.00	33.00	36.00	36.00	39.00
ISO 10642 Head Dia. d2	min.			5.54	7.53	9.43	11.34	15.24	19.22	23.12	26.52	29.01		36.05		
	max. = theoretical			6.72	8.96	11.20	13.44	17.92	22.40	26.88	30.80	33.60		40.32		
ANSI B18.3.5M Head Dia. D2	min.			5.35	7.80	9.75	11.70	15.65	19.50	23.40	26.18	23.76		34.60		
	max. = theoretical			6.72	8.96	11.20	13.44	17.92	22.40	26.88	30.24	33.60		40.32		
	ISO 10642 & ANSI B18.3.5M use a theoretical value for the max head diameter, which represents the exact diameter of a hole countersunk to exactly 90° in which a screw having the maximum head size will fit flush. - Refer to full ISO or ANSI standard for more details.															
DIN 7991 Head Height k	max.	1.2	1.5	1.7	2.3	2.8	3.3	4.4	5.5	6.5	7	7.5	8	8.5	13.1	14
ISO 10642 Head Height k	max. = reference			1.86	2.48	3.10	3.72	4.96	6.20	7.44	8.40	8.80		10.16		
ANSI B18.3.5M Head Height k	max. = reference			1.86	2.48	3.10	3.72	4.96	6.20	7.44	8.12	8.80		10.16		
	ISO 10642 & ANSI B18.3.5M show Head Height k as a reference point only. - Refer to full ISO or ANSI standard for more details.															
	For DIN 7991 / ISO 10642 / ANSI B18.3.5M, the overall length of the screw includes the head.															
DIN 7991 Key Size s	Nominal Size	1.3	1.5	2	2.5	3	4	5	6	8	10	10	12	12	14	14
	min.	1.275	1.545	2.02	2.52	3.02	4.02	5.02	6.02	8.025	10.025	10.025	12.032	12.032	14.032	14.032
	max.	1.300	1.520	2.10	2.60	3.10	4.12	5.14	6.14	8.175	10.175	10.175	12.212	12.212	14.212	14.212
ISO 10642 Key Size s	Nominal Size			2	2.5	3	4	5	6	8	10	10		12		
	min.			2.02	2.52	3.02	4.020	5.02	6.02	8.025	10.025	10.025		12.032		
	max.			2.06	2.58	3.08	4.095	5.14	6.14	8.175	10.175	10.175		12.212		
ANSI B18.3.5M Key Size s	Nominal Size			2	2.5	3	4	5	6	8	10	10		12		
	min.			2.020	2.52	3.020	4.020	5.020	6.020	8.025	10.025	10.025		12.032		
	max.			2.045	2.56	3.071	4.084	5.084	6.095	8.115	10.115	10.115		12.142		
DIN 7991 Key Engagement t	min.	0.75	0.8	0.950	1.55	2.05	2.25	3.2	4.1	4.3	4.5	5.0	5.2	5.6	8.44	9.87
ISO 10642 Key Engagement t	min.			1.100	1.50	1.90	2.20	3.0	3.6	4.3	4.5	4.8		5.6		
ANSI B18.3.5M Key Engagement t	min.			1.100	1.50	1.90	2.20	3.0	3.6	4.3	4.7	4.8		5.6		

Length Tolerance	DIN 7991 / ISO 10642		ANSI B18.3.5M		Length Tolerance	DIN 7991 / ISO 10642		ANSI B18.3.5M	
Nominal Length	min	max	min	max	Nominal Length	min	max	min	max
(4)	3.76	4.24	3.7	4.3	30	29.58	30.42	29.5	30.5
(5)	4.76	5.24	4.7	5.3	35	34.5	35.5	34.5	35.5
(6)	5.76	6.24	5.7	6.3	40	39.5	40.5	39.5	40.5
8	7.71	8.29	7.7	8.3	45	44.5	45.5	44.5	45.5
10	9.71	10.29	9.7	10.3	50	49.5	50.5	49.5	50.5
12	11.65	12.35	11.7	12.3	(55)	54.4	55.6	54.5	55.5
(14)	13.65	14.35	13.7	14.3	60	59.4	60.6	59.5	60.5
16	15.65	16.35	15.7	16.3	(65)	64.4	65.6	64.2	65.8
(18)	17.65	18.35	17.5	18.5	70	69.4	70.6	69.2	70.8
20	19.58	20.42	19.5	20.5	(75)	74.4	75.6	74.2	75.8
(22)	21.58	22.42	21.5	22.5	80	79.4	80.6	79.2	80.8
25	24.58	25.42	24.5	25.5	90	89.3	90.7	89.2	90.8
(28)	27.58	28.42	27.5	28.5	100	99.3	100.7	99.2	100.8

**********Notice**********

Diameters and or Lengths shown with ( ) are not shown in some standards are not recommended for use in new design.

**********Notice**********

DIN 7991, ISO 10642, and ANSI B18.3.5M are not intended for high strength applications. The only purpose of having them produced in property class 10.9 or 12.9 is to increase the wear resistance of the socket drive.

	DIN 7991 / ISO 10642		ANSI B18.3.5M
Material	Steel	Stainless Steel	Steel
Property Class	10.9	A2 & A4	12.9
Finish	Furnace Black	Plain	Furnace Black
Thread Tolerance	6g	6g	4g6g