



# Datasheet

### **RS Stock No: 171843**

## A2, 304 Stainless Steel, 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 and flat finish. This range of A2, 304 Stainless Steel countersunk socket screws with hexagon drive offer a good form of corrosion resistance and should be chosen over steel when corrosion resistance is required. However, A4 316 Stainless Steel, which is also available from the RS Pro range should be used in higher corrosion and/or chemical environments.

- Threaded in accordance with DIN 7991 Standard
- A2 grade 304 Stainless Steel
- · 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
- Requires a Hex Key / Allen Key





Please view our full range listing below for all A2, 304 Stainless Steel Hexagon Countersunk Socket Screws:

Head Shape	Material	Thread Size	Length	RS Part No.		
Countersunk Socket	Stainless Steel	M3	10 mm	171792		
Countersunk Socket	Stainless Steel	M3	12 mm	171809		
Countersunk Socket	Stainless Steel	M4	10 mm	171815		
Countersunk Socket	Stainless Steel	M4	12 mm	171821		
Countersunk Socket	Stainless Steel	M4	16 mm	171837		
Countersunk Socket	Stainless Steel	M5	12 mm	171843		
Countersunk Socket	Stainless Steel	M5	16 mm	171859		
Countersunk Socket	Stainless Steel	M5	20 mm	171865		
Countersunk Socket	Stainless Steel	M5	25 mm	171871		
Countersunk Socket	Stainless Steel	M6	12 mm	171887		
Countersunk Socket	Stainless Steel	M6	16 mm	171893		
Countersunk Socket	Stainless Steel	M6	20 mm	171900		
Countersunk Socket	Stainless Steel	M6	25 mm	171916		
Countersunk Socket	Stainless Steel	M6	30 mm	171922		



12

(14)

16

(18)

20

(22)

11.65

13.65

15.65

17.65

19.58

21.58

12.35

14.35

16.35

18.35

20.42

22.42

11.7

13.7

15.7

17.5

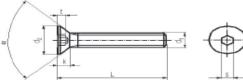
19.5

21.5



# ENGLISH

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





Thread Size d1			(M2)	(M2.5)	M3	M4	MS	МЬ	M8	MID	M12	(M14)	MIE	(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*
	For Lengths	≤125mm	10	11	12	14	16	18	22	26	30	34	38	42	46	50	54
DIN 7991 Thread Length Formula	For Len >125mms							24	28	32	36	40	44	48	52	56	60
-	For Lengths	>200 mm								45	49	53	57	61	65	69	73
	ISO 1064	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.														etalls.	
DIN 7991	min	1.	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
Head Dia. d2	max n	ominal	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	min	1.			5.54	7.53	9.43	11.34	15.24	19.22	23.12	26.52	29.01		36.05		
Head Dia. d2	max the	eoretical			6.72	8.96	11.20	13.44	17.92	22.40	26.88	30.80	33.60		40.32		
ANSI B18.3.5M	min	1.			5.35	7.80	9.75	11.70	15.65	19.50	23.40	26.18	23.76		34.60		
Head Dia, D2	max the	eoretical			6.72	8.96	11.20	13.44	17.92	22,40	26.88	30.24	33.60		40.32		
	ISO 10642 (	& ANSI B											ameter of tandard fo			k to exact	ily 90° in
DIN 7991 Head Height k	max	κ.	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 ret	ference			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 ref	ference			1.86	2.48	3.10	3.72	4.96	6.20	7.44	8.12	8.80		10.16		
		ISO 10	642 & A	NSI B18.	3.5M show Head Height k as a reference point only R							Refer to full ISO or ANSI standard for more details.					
				For DI	N 7991 / IS	O 10642/	ANSI B1	8.3.5M,	the over	all lengt	h of the s	crew Incl	udes the h	lead.			
	Nomina	I Size	1.3	1.5	2	2.5	3	4	5	6	8	10	10	12	12	14	14
DIN 7991 Key Size s	min	1.	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
Key Size 8	map	κ.	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
	Nomina	I Size			2	2.5	3	4	5	6	8	10	10		12		
ISO 10642 Key Size s	min	1.			2.02	2.52	3.02	4.020	5.02	6.02	8.025	10.025	10.025		12.032		
Key Size 8	max	κ.			2.06	2.58	3.08	4.095	5.14	6.14	8.175	10.175	10.175		12.212		
	Nomina	I Size			2	2.5	3	4	5	6	8	10	10		12		
ANSI B18.3.5M Key Size s	min	1.			2.020	2.52	3.020	4.020	5.020	6.020	8.025	10.025	10.025		12.032		
Key Size 8	max	x.			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	L.			1.100	1.50	1.90	2.20	3.0	3.6	4.3	4.5	4.8		5.6		
	min min				1.100 1.100	1.50 1.50	1.90 1.90	2.20 2.20	3.0 3.0	3.6 3.6	4.3 4.3	4.5 4.7	4.8 4.8		5.6 5.6		
Engagement t ANSI B18.3.5M Key		L	ANSI B	18.3.5M		1.50		2.20	3.0								
Engagement t ANSI B18.3.5M Key Engagement t	min	L	ANSI B	18.3.5M max	1.100	1.50 olerance	1.90 DIN 799	2.20	3.0	3.6			4.8	······Noti	5.6		
Engagement ť ANSI B18.3.5M Key Engagement t Length Tolerance	min DIN 7991 / II	1. SO 10642			1.100 Length T	1.50 olerance Length	1.90 DIN 799 106	2.20 1 / ISO 42	3.0 ANSI E	3.6 18.3.5M		4.7	4.8		5.6 Ce*****	with ( ) ar	re not
Engagement ť ANSI B18.3.5M Key Engagement t Length Tolerance Nominal Length	min DIN 7991 / IS min	n. SO 10642 max	min	max	1.100 Length T	1.50 olerance Length	1.90 DIN 799 106 min	2.20 1/ISO 42 max	3.0 ANSI B	3.6 318.3.5M max		4.7 Diam	4.8 ••• eters and ( In some st	or Length tandards	5.6 ce****** s shown are not re		
Engagement É ANSI B18.3.5M Key Engagement t Length Tolerance Nominal Length (4)	min DIN 7991 / I Min 3.76	so 10642 max 4.24	min 3.7	max 4.3	1.100 Length T Nominal 3	1.50 olerance Length 0 5	1.90 DIN 799 106 min 29.58	2.20 1 / ISO 42 max 30.42	3.0 ANSI E min 29.5	3.6 18.3.5M max 30.5		4.7 Diam	4.8 ••• eters and ( In some st	or Length	5.6 ce****** s shown are not re		
Engagement É ANSI B18.3.5M Key Engagement t Length Tolerance Nominal Length (4) (5)	min DIN 7991 / I min 3.76 4.76	so 10642 max 4.24 5.24	min 3.7 4.7	max 4.3 5.3	1.100 Length T Nominai 3	1.50 olerance Length 5 0	1.90 DIN 799 106 min 29.58 34.5	2.20 1 / ISO 42 max 30.42 35.5	3.0 ANSI E min 29.5 34.5	3.6 18.3.5M max 30.5 35.5		4.7 Diam	4.8 ••• eters and ( In some st	or Length tandards	5.6 ce****** s shown are not re		
Engagement t ANSI B18.3.5M Key Engagement t Length Tolerance Nominal Length (4) (5) (6)	min <b>DIN 7991 / I</b> min 3.76 4.76 5.76	so 10642 max 4.24 5.24 6.24	min 3.7 4.7 5.7	max 4.3 5.3 6.3	1.100 Length T Nominal 3 3 4	1.50 olerance Length 5 0 5	1.90 DIN 799 106 min 29.58 34.5 39.5	2.20 1 / ISO 42 max 30.42 35.5 40.5	3.0 ANSI E min 29.5 34.5 39.5	3.6 118.3.5M max 30.5 35.5 40.5		4.7 Diam	4.8 ••• eters and ( In some st	or Length tandards	5.6 ce****** s shown are not re		

\*\*\*\*\*\*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 10.5 or 12.3 is to increase the wear resistance of the socket drive.

24.58 27.58	25.42	24.5	25.5	90	89.3	90.7	80.0	90.8
07.50					05.0	90.7	89.2	90.0
21.00	28.42	27.5	28.5	100	99.3	100.7	99.2	100.8
		DIN 75	91/ISO	10642	ANS			
	Stee	1	S	tainiess Steel				
	10.9	10.9 A2 & A4			12.9			
	Furnace	Black		Plain	Furnace Black			
	6g			6g	4g6g			
		10.9 Furnace	Steel 10.9 Furnace Black	Steel S 10.9 Furnace Black	10.9 A2 & A4 Furnace Black Plain	Steel Stainless Steel   10.9 A2 & A4   Furnace Black Plain	Steel Stainless Steel Steel   10.9 A2 & A4 12.9   Fumace Black Plain Fumace Black	Steel Stainless Steel Steel   10.9 A2 & A4 12.9   Fumace Black Plain Fumace Black

12.3

14.3

16.3

18.5

20.5

22.5

(55)

60

(65)

70

(75)

80

54,4

59.4

64.4

69.4

74.4

79.4

55.6 54.5

60.6 59.5

65.6

70.6

75.6

80.6

64.2

69.2

74.2

79.2

55.5

60.5

65.8

70.8 75.8

80.8