

# Hexagon Socket Head Cap Screws

Fully Thread / High Strength Stainless Steel / Configurable Length

**Hexagon Socket Head Cap Screws – Fully Threaded**

Type	Material	Surface Treatment	Hardness	Strength Class
ACB	4137 Alloy Steel	Black Oxide Coating	32-44 HRC min.	12.9 (M3-M20) 10.9 (M24)
ASCB	304 Stainless Steel	—	—	A2-70

RoHS10

M x P	A	E	B
3 x 0.5	5.5	3	2.5
4 x 0.7	7	4	3
5 x 0.8	8.5	5	4
6 x 1.0	10	6	5
8 x 1.25	13	8	6
10 x 1.5	16	10	8
12 x 1.75	18	12	10
16 x 2.0	24	16	14
20 x 2.5	30	20	17
24 x 3.0	36	24	19

Part Number	
Type	M - L

ACB	3 - 25
	30
	35
	40
	45
	50
	55
	60
	65
	70
	75
	80
	85
	90
	95
	100
	110
	120

ACB	4 - 30
	35
	40
	45
	50
	55
	60
	65
	70
	75
	80
	85
	90
	95
	100
	110
	120

ACB	5 - 30
	35
	40
	45
	50
	55
	60
	65
	70
	75
	80
	85
	90
	95
	100
	110
	120

ACB	6 - 35
	40
	45
	50
	55
	60
	65
	70
	75
	80
	85
	90
	95
	100
	110
	120

ACB	8 - 40
	45
	50
	55
	60
	65
	70
	75
	80
	85
	90
	95
	100

ACB	10 x 1.5
	16
	20
	24
	28
	32
	36
	40
	44
	48
	52
	56
	60
	64
	68
	72
	76
	80
	84
	88
	92
	96
	100

Part Number	
Type	M - L

ACB	10 - 45
	50
	55
	60
	65
	70
	75
	80
	85
	90
	95
	100
	110
	120

ACB	12 - 50
	55
	60
	65
	70
	75
	80
	85
	90
	95
	100
	110
	120

ACB	16 - 60
	65
	70
	75
	80
	85
	90
	95
	100
	110
	120

ACB	20 - 70
	75
	80
	85
	90
	95
	100
	110
	120

ACB	24 - 100
	110
	120

ACB	30 - 120
	130
	140
	150
	160
	170
	180
	190
	200

**Hexagon Socket Head Cap Screws – High Strength Stainless Steel**

**SCBF**

Material: 316 Stainless Steel  
JIS B 1176  
\*Strength Class A4-100 (10.9 equivalent)

RoHS10

**Mechanical Properties (Reference)**

Type	Material	Strength Class	Tensile Strength (N/mm <sup>2</sup> )	0.2% Proof Stress (N/mm <sup>2</sup> )	Corrosion Resistance	Nonmagnetic
SCB	304 Stainless Steel	A2-70	700	450	Good	Good
SSCB	316L Stainless Steel	A4-70	700	450	Excellent	Excellent
SCBF	316L Stainless Steel	A4-100 (10.9 Equivalent)	1000	900	Excellent	Excellent

① SCB P.2379 ② SSCB P.2384

Part Number	
Type	M - L

SCBF	3 - 5
	6
	8
	10
	12
	15
	20
	25
	30
	35
	40
	45
	50
	55
	60
	65
	70
	75
	80
	85
	90
	95
	100
	110
	120

**Hexagon Socket Head Cap Screws – Configurable Length**

**FBAB, FBAM, FBAS**

Type	Material	Surface Treatment	Hardness	Strength Class
FBAB	4137 Alloy Steel	Black Oxide	38-43 HRC min.	12.9
FBAM	4137 Alloy Steel	Electroless Nickel Plating	—	—
FBAS	304 Stainless Steel	—	—	A2-70

RoHS10

M x P	A	E	B
4 x 0.7	7	4	3
5 x 0.8	8.5	5	4
6 x 1.0	10	6	5
8 x 1.25	13	8	6
10 x 1.5	16	10	8

① When  $l=L$ , there is an incomplete threaded portion (max. 2 pitch long) under the head.

Part Number		L	l
Type	M (Coarse)	1 mm Increment	1 mm Increment
FBAB	4	30-100	10-40 ① $l \leq L$
FBAM	5	30-100	
FBAS	6	35-150	
	8	40-150	
	10	45-210	

② FBAB, FBAM, and FBAS are not available for L101 or higher.  
③ FBAM is not available for M10.

Part Number		Part Number	Part Number
Type	M	L	l
Example	FBAS6	- 100 -	22

Part Number		Part Number	Part Number
Type	M	L	l
Example	FBAS6	- 100 -	22

# Captured Washer Hexagon Socket Head Cap Screws

Flat and Spring / Spring / Large / Thick Washers

**Captured Washer Hexagon Socket Head Cap Screws – Flat and Spring Washers**

**CBST**  
Stainless Steel

Material: Structural Alloy Steel or Equivalent  
Hardness: 32-44 HRC min.  
\*Strength class 10.9 JIS 0209 (6g)

RoHS10

M x P	A	E	b	C	D	(a)
2 x 0.4	3.8	2	1.5	3.8	5	2.1
2.5 x 0.45	4.5	3	2	4.5	6.5	2.7
3 x 0.5	5.5	3	2.5	5.5	7	3
4 x 0.7	7	4	3	7	9	4.4
5 x 0.8	8.5	5	4	8.5	10	5.4
6 x 1.0	10	6	5	11.5	12.5	6.9
8 x 1.25	13	8	6	14.5	17	8.4

**CBST**

Screw	Material: Structural Alloy Steel or Equivalent	Hardness: 32-44 HRC min.	*Strength class 10.9 JIS 0209 (6g)
Washers	Spring Washer JIS B 1251	Flat Washers JIS B 1256	
Surface Treatment	Black Oxide		

① (a) is the max length (reference) between head surface and the complete thread.

Part Number		Quantity	Part Number		Quantity
Type	M - L		Type	M - L	
SCBS	2 - 4	500	CBST	5 - 8	400
	5				
	6				
	8				
	10				
	12				
CBST	2.5 - 5	300	SCBS	6 - 10	200
	6				
	8				
	10				
	12				
	15				
CBST	3 - 5	100	SCBS	8 - 15	100
	6				
	8				
	10				
	12				
	15				

**Captured Washer Hexagon Socket Head Cap Screws – Large Washer / Thick Washer**

**SCBST Large Washer**  
**SCBSA Large Washer Thick**

Material: 304 Stainless Steel or Equivalent  
\*Strength Class A2-70 JIS 0209 (6g)

RoHS10

Part Number		L	M x P	A	E	B	C (Max.)	D (Max.)	t	(a)
Type	M	1 mm Increment								
SCBST	3	10-25	3 x 0.5	5.5	3	2.5	5.5	10	1	5
	4		4 x 0.7	7	4	3	7	12	1	5.4
	5		5 x 0.8	8.5	5	4	8.5	13	1	6.4
	6		6 x 1.0	10	6	5	11.5	16	1	6.9
SCBSA	8	15-35	8 x 1.25	13	8	6	14.5	22	1.5	9.4

① Part Number Example: SCBST4 - L

② Part Number Alterations: SCBST4 - 12 - NSW

Alteration	Code	Spec.
No Spring Washer	NSW	(2) No Spring Washer Only the part (1) + (3)

**Captured Washer Hexagon Socket Head Cap Screws – Spring Washer**

**SCBZ**

Material: 304 Stainless Steel or Equivalent  
\*Strength Class A2-70 JIS 0209 (6g)

RoHS10

M x P	A	E	B	C	(a)
3 x 0.5	5.5	3	2.5	5.5	2.4
4 x 0.7	7	4	3	7	3.5
5 x 0.8	8.5	5	4	8.5	4.3
6 x 1.0	10	6	5	11.5	5.1
8 x 1.25	13	8	6	14.5	6.2

Screw	Material: 304 Stainless Steel or Equivalent	*Strength Class A2-70 JIS 0209 (6g)
Washers	Spring Washer	Spring Lock Washer
Surface Treatment	Barrel, Passivated	

① (a) is the max length (reference) between head surface and the complete thread.

Part Number		Quantity	Part Number		Quantity
Type	M - L		Type	M - L	
SCBZ	3 - 6	500	SCBZ	6 - 12	200
	8				
	10				
	12				
	15				
	20				
SCBZ	4 - 8	300	SCBZ	8 - 20	100
	10				
	12				
	15				
	20				
	25				

① CBST is not available for M2, M2.5, M3-L5, M4-L6, and M5-L8.

Part Number		Part Number	Part Number
Type	M	L	l
Example	SCBST4	- 12 -	NSW

Part Number		Part Number	Part Number
Type	M	L	l
Example	SCBST4	- 12 -	NSW

Alteration	Code	Spec.
No Spring Washer	NSW	(2) No Spring Washer Only the part (1) + (3)