












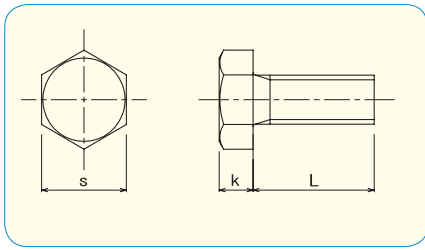
# 6. BOLT

	<b>HEX HEAD CAP SCREW</b> Full Thread	Steel / Zinc 3Cr. Plated , Steel / Zinc Black 3Cr. Plated , Stainless Steel A2	P.2~
	<b>HEX HEAD CAP SCREW</b> Half Thread	Steel / Zinc 3Cr. Plated , Steel / Zinc Black 3Cr. Plated , Stainless Steel A2	P.4~
	<b>HEX HEAD CAP SCREW</b>	SUS 316L (Stainless Steel A4)	P.6~
	<b>HEX HEAD CAP SCREW</b>	SUS 310S (Stainless Steel)	P.8
	<b>HEX HEAD CAP SCREW</b>	Titan	P.9
	<b>HEX HEAD CAP SCREW</b>	DISGO	P.10
	<b>HEX HEAD CAP SCREW</b> Full Thread	VACUUM SCREWS	P.11
	<b>SLOTTED FLAT HEAD BOLT</b>	SUS 316L (Stainless Steel A4)	P.12
	<b>U BOLT</b>	Stainless Steel A2 SUS 316L (Stainless Steel A4)	P.13
	<b>WING BOLT</b>	Steel / Zinc 3Cr. Plated , Steel / Zinc Black 3Cr. Plated	P.14
	<b>THUMB SCREW</b>	Stainless Steel A2	P.14

# HEX HEAD CAP SCREW JIS B1180 appendix I Full Thread I



RoHS Directive Compliance



- Material · plating  
Steel 4.8 / Zinc 3Cr. Plated  
Steel 4.8 / Zinc Black 3Cr. Plated



	M3	M4	M5	M6	M8	M10	M12	M14	M16
s	5.5	7	8	10	13	17	19	22	24
k	2	2.8	3.5	4	5.5	7	8	9	10

BOLT

pcs / Box

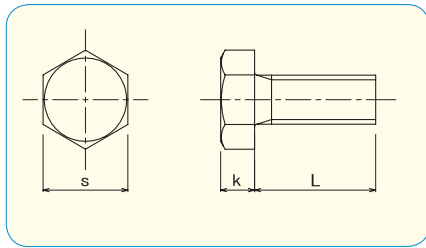
L \ d	M3	M4	M5	M6	M8	M10	M12	M14	M16
6	5000	2000	1000						
8	5000	2000	1000	500					
10	4000	1000	1000	800	300				
12	2000	1000	1000	800	400				
14		1000	1000	800	350				
15	2000	1000	1000	700	350	200			
16	2000	1000	1000	700	350	200			
18		1000	500	700	300				
20	1000	1000	500	600	300	200	100		
22	1000	1000	500	600					
25	1000	1000	500	600	300	200	100	100	70
30	1000	1000	500	500	300	200	100	90	60
35	1000	500	500	450	200	150	100	80	50
40		500	500	400	250	100	100	70	50
45		500	200	350	250	100	100	70	50
50		200	200	300	250	100	100	60	50
55			200	250	200	100	50	50	40
60			200	250	200	100	50	50	40
65			200	250	200	100	50	50	40
70				200	100	100	50	50	40
75				200	100	100	50	50	40
80				250	100	100	50	40	40
85					150				
90				200	150	90	50	40	40
100				200	150	80	50	30	30
110				200	100	70	50		
120				150	100	70	50		
130				150	100	60	40		
140				150	100	60	40		
150				150	100	60	40		



# HEX HEAD CAP SCREW JIS B1180 appendix I Full Thread I



RoHS Directive Compliance



● Material  
Stainless Steel A2



	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24	M30
s	5.5	7	8	10	13	17	19	22	24	27	30	36	46
k	2	2.8	3.5	4	5.5	7	8	9	10	12	13	15	19

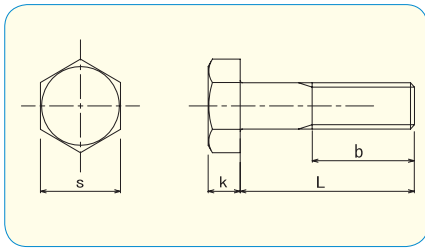
L \ d	pcs / Box												
	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24	M30
6	2000	1000	1000										
8	2000	1000	1000	700									
10	2000	1000	1000	400	200								
12	2000	1000	500	400	200								
14		1000	500	400	200								
15	1500	1000	500	400	200	100							
16	1500	1000	500	400	200	100							
18		500	500	300	200	100							
20	1000	500	500	300	200	100	100						
22			500	300	200								
25	1000	500	300	300	200	100	100	50	50				
30	1000	500	300	300	100	100	100	50	50	40	35		
35	1000	300	300	300	100	100	100	100	50	40	35		
40	1000	300	200	300	100	100	100	50	50	40	35		
45		300	200	200	100	100	100	50	50	30	30		
50		200	200	200	100	100	50	50	50	30	30		12
55		200	200	200	100	100	50	50	40	30	25		12
60		200	200	200	100	100	50	50	30	30	25	20	10
65			200	200	100	100	50	40	30	25	25	20	10
70			150	100	100	50	50	40	30	25	20		10
75			150	100	100	50	50	40	30	25	20		
80			150	100	100	50	50	30	30	25	20		
85			150	100	100	50	50		30		20		
90			100	100	100	50	50	30	30	20	20		
100			100	100	100	50	50	30	30	20	20		
110				150	50	50	25		20		15		
120				150	50	50	40		20		15		
130				150	50	50	30		20		15		
140				150	50	50	30		20		15		
150				150	50	50	30		20		15		
160					50	40	30		15				
170					50	40	30		15				
180					50	40	30		15				
190					50	40	30						
200					50	40	30		15				
210							25						
220							25		10				
230							25						
250						30	25		10				
300						30	25		10				

BOLT

# HEX HEAD CAP SCREW JIS B1180 appendix I Half Thread I



RoHS Directive Compliance



● Material · plating

Steel 4.8 / Zinc 3Cr. Plated

Steel 4.8 / Zinc Black 3Cr. Plated

	M8	M10	M12	M14	M16	M18	M20	M22	M24
s	13	17	19	22	24	27	30	32	36
k	5.5	7	8	9	10	12	13	14	15

BOLT

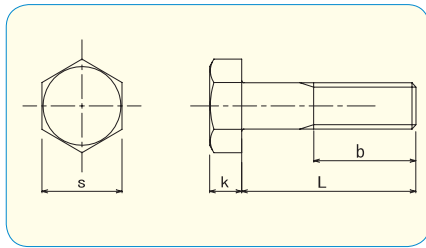
pcs / Box

L \ d	M8	M10	M12	M14	M16	M18	M20	M22	M24
25									
30	300	200							
35	200	150	100						
40	250	100	100	70					
45	250	100	100	70	1				
50	250	100	100	60	1	1			
55	200	100	50	50	1	1	1		
60	200	100	50	50	1	1	1	1	
65	200	100	50	50	1	1	1	1	1
70	100	100	50	50	1	1	1	1	1
75	100	100	50	50	1	1	1	1	1
80	1	1	1	1	1	1	1	1	1
85	1	1	1	1	1	1	1	1	1
90	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1
110	1	1	1	1	1	1	1	1	1
120	1	1	1	1	1	1	1	1	1
130	1	1	1	1	1	1	1	1	1
140	1	1	1	1	1	1	1	1	1
150	1	1	1	1	1	1	1	1	1
160					1			1	1
170	1				1		1	1	1
180					1		1	1	1
190					1		1	1	1
200					1		1	1	1

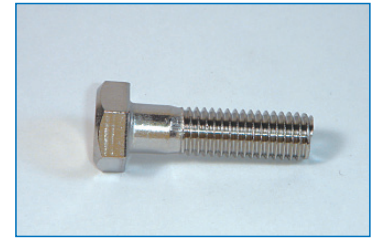
# HEX HEAD CAP SCREW JIS B1180 appendix I Half Thread I



RoHS Directive Compliance



●Material  
Stainless Steel A2

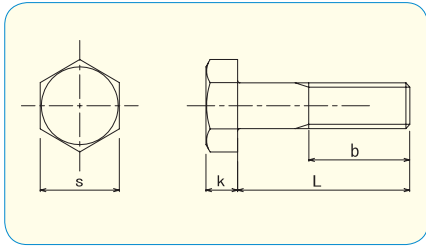


	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M30
s	10	13	17	19	22	24	27	30	32	36	46
k	4	5.5	7	8	9	10	12	13	14	15	19

d		pcs / Box										
L	d	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M30
30			100									
35				100								
40			100	100	100	50				20	15	
45				100	100	50	50			20	15	
50			100	100	50	50	50		30	20	15	
55			100	100	50	40	40		25	20	15	
60			100	100	50	40	30	30	25	20	15	
65			100	100	50	40	30	25	25	20	15	
70			100	50	50	30	30	25	20	15	15	
75			100	50	50	40	30	25	20	15	15	10
80	100	100	100	50	50	30	30	25	20	15	15	10
85	100	100	100	50	50		30	20	20	15	15	8
90	150	100	100	50	50	30	30	20	20	15	10	8
100	150	100	100	50	50	30	30	20	20	15	10	8
110	150	50	100	50	40		20		15	10	10	8
120	150	50	100	50	40		20		15	10	10	8
130	150	50	100	50	40		20		15	10	10	6
140	150	50	100	50	40		20		15	10	10	6
150	150	50	100	50	40		20		15	10	10	6
160		50	100	40	30		20		15	10	10	6
170		50	100	40	30		20		15	10	1	1
180		50	100	40	30		15		15	10	1	1
190		50	100	40	30		20		15	10	1	1
200		50	100	40	30		20		15	10	1	1
210		50	100	30	25		10		1	1	1	1
220		50	100	30	25		10		1	1	1	1
230		50	100	30	25		10		1	1	1	1
240		50	100	30	25		10		1	1	1	1
250		50	100	30	25		10		1	1	1	1
260			100	30	25				1	1	1	1
270			100	30	25				1	1	1	1
280			100	30	25				1	1	1	1
290			100	30	25							
300			100	30	25		10					
310				20								
320				20								
330				20								
340				20								
350				1								

BOLT

# HEX HEAD CAP SCREW JIS B1180 appendix



● Material  
**SUS 316L** Stainless Steel A4



BOLT

	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20
s	5.5	7	8	10	13	17	19	22	24	27	30
k	2	2.8	3.5	4	5.5	7	8	9	10	12	13

		pcs / Box										
L	d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20
6		300	300	200								
8		300	300	200								
10		300	300	200	200	200						
12		300	300	200	200	200						
14			300	200	200	200						
15		300	300	200	200	200	100					
16		300	300	200	200	200	100	50				
18			300	200	200	200						
20		300	300	200	200	200	100	50				
22			300	200	200	200						
25		300	300	200	200	200	100	50	50	50		
30		300	300	200	200	200	100	50	50	50	30	30
35			300	200	200	200	100	50	50	50	30	30
40			300	200	200	200	* 100	* 50	50	50	30	30
45			300	200	200	200	* 100	* 50	* 50	50	30	30
50			300	200	200	200	* 100	* 50	* 50	* 50	30	30
55				200	200	200	* 100	* 50	* 50	* 50	30	30
60				200	200	200	* 100	* 50	* 50	* 50	* 30	* 30
65				200	200	200	* 100	* 50	* 50	* 50	* 30	* 30
70					200	200	* 100	* 50	* 50	* 50	* 30	* 30
75				200	200	200	* 100	* 50	* 50	* 50	* 30	* 30
80					200	* 200	* 100	* 50	* 50	* 50	* 30	* 30
85					200	* 200	* 100	* 50	* 50	* 50	* 30	* 30
90					200	* 200	* 100	* 50	* 50	* 50	* 30	* 30
95					200	* 200	* 100	* 50	* 50	* 50	* 30	* 30
100					200	* 200	* 100	* 50	* 50	* 50	* 30	* 30
105							* 100	* 50		* 50		* 30
110						* 200	* 100	* 50	* 50	* 50	* 30	* 30
115							* 100	* 50		* 50		* 30
120						* 200	* 100	* 50	* 50	* 50	* 30	* 30
125							* 100	* 50		* 50		* 30
130						* 200	* 100	* 50	* 50	* 50	* 30	* 30
135							* 100	* 50		* 50		* 30
140						* 200	* 100	* 50	* 50	* 50	* 30	* 30
150						* 200	* 100	* 50	* 50	* 50	* 30	* 30
160							* 100	* 50	* 50	* 50	* 30	* 30
170							* 100	* 50	* 50	* 50	* 30	* 30
180							* 100	* 50	* 50	* 50	* 30	* 30
190							* 100	* 50	* 50	* 50		* 30
200							* 100	* 50	* 50	* 50	* 30	* 30
210								* 50		* 50		* 30
220								* 50		* 50		* 30
230								* 50		* 50		* 30
250							* 100	* 50	* 50	* 50		* 30
280										* 50		* 30
300										* 50		* 30

\* ... Half thread

**HEX HEAD CAP SCREW JIS B1180 appendix**

	M22	M24	M27	M30
s	32	36	41	46
k	14	15	17	19

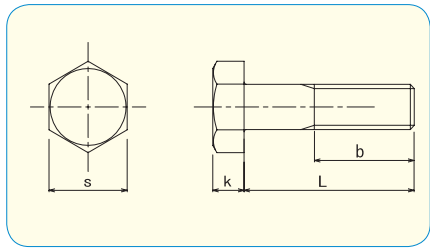
pcs / Box

L \ d	M22	M24	M27	M30
40	30	20		
45	30	20		
50	30	20		
55	30	20		
60	* 30	20	3	3
65	* 30	20	* 3	3
70	* 30	* 20	* 3	3
75	* 30	* 20	* 3	3
80	* 30	* 20	* 3	* 3
85	* 30	* 20	* 3	* 3
90	* 30	* 20	* 3	* 3
95	* 30	* 20	* 3	* 3
100	* 30	* 20	* 3	* 3
105	* 30	* 20	* 3	* 3
110	* 30	* 20	* 3	* 3
115	* 30	* 20	* 3	* 3
120	* 30	* 20	* 3	* 3
125	* 30	* 20	* 3	* 3
130	* 30	* 20	* 3	* 3
135	* 30	* 20		* 3
140	* 30	* 20	* 3	* 3
150	* 30	* 20	* 3	* 3
160	* 30	* 20	* 3	* 3
170	* 30	* 20		* 3
180	* 30	* 20	* 3	* 3
190	* 30	* 20		* 3
200	* 30	* 20	* 3	* 3
210	* 30			
220	* 30			
230	* 30			
250	* 30	* 20		* 3

\* ... Half thread

BOLT

**HEX HEAD CAP SCREW JIS B1180 appendix**



● Material  
SUS 310S  
 Stainless Steel



	M6	M8	M10	M12	M16	M18	M20	M22	M24	M30
s	10	13	17	19	24	27	30	32	36	46
k	4	5.5	7	8	10	12	13	14	15	19

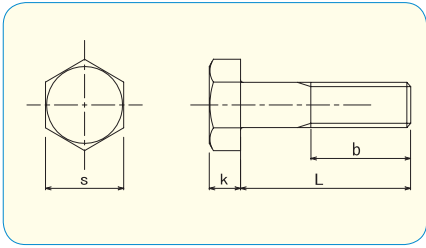
BOLT

		pcs / Box									
L \ d	M6	M8	M10	M12	M16	M18	M20	M22	M24	M30	
10	50										
12	50	50									
15	50	50									
16	50	50	30								
20	50	50	30	30							
25	50	50	30	30	20						
30	50	50	30	30	20						
35	50	50	30	30	20						
40	50	50	* 30	* 30	20	20	20				
45	50	50	* 30	* 30	20	20	20				
50	50	50	* 30	* 30	* 20	20	20	20			
55		* 50	* 30	* 30	* 20		20	20			
60	50	* 50	* 30	* 30	* 20	* 20	* 20	* 20	20	20	
65		* 50	* 30	* 30	* 20		* 20	* 20	20	20	
70	50	* 50	* 30	* 30	* 20	* 20	* 20	* 20	* 20	20	
75		* 50	* 30	* 30	* 20		* 20	* 20	* 20	20	
80		* 50	* 30	* 30	* 20	* 20	* 20	* 20	* 20	* 20	
85		* 50			* 20		* 20	* 20	* 20	* 20	
90		* 50	* 30	* 30	* 20	* 20	* 20	* 20	* 20	* 20	
100		* 50	* 30	* 30	* 20	* 20	* 20	* 20	* 20	* 20	
110			* 30	* 30	* 20		* 20	* 20	* 20	* 20	
120			* 30	* 30	* 20		* 20	* 20	* 20	* 20	
130			* 30	* 30	* 20		* 20	* 20	* 20	* 20	
140			* 30	* 30	* 20		* 20	* 20	* 20	* 20	
150			* 30	* 30	* 20		* 20	* 20	* 20	* 20	
180					* 20		* 20		* 20	* 20	
200					* 20		* 20		* 20	* 20	

\* ... Half thread



**HEX HEAD CAP SCREW JIS B1180 appendix**



●Material  
**TITAN**



	M4	M5	M6	M8	M10	M12	M16	M20
s	7	8	10	13	17	19	24	30
k	2.8	3.5	4	5.5	7	8	10	13

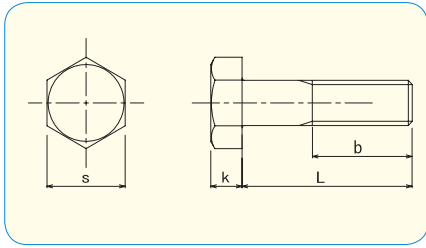


		pcs / Box							
L \ d	M4	M5	M6	M8	M10	M12	M16	M20	
8	200	200							
10	200	200	200						
12	200	200	200						
16	200	200	200	100					
20	200	200	200	100	50	50			
25	200	200	200	100	50	50			
30	200	200	200	100	50	50	20		
35	200	200	200	100	50	50	20		
40	200	200	200	100	50	50	20		
45	200	200	200	100	50	* 50	20		
50	200	200	200	100	50	* 50	* 20	15	
55			200	100	* 50	* 50	* 20	* 15	
60			200	100	* 50	* 50	* 20	* 15	
65				* 100	* 50	* 50	* 20	* 15	
70				* 100	* 50	* 50	* 20	* 15	
75				* 100	* 50	* 50	* 20	* 15	
80				* 100	* 50	* 50	* 20	* 15	
85					* 50			* 15	
90				* 100	* 50	* 50	* 20	* 15	
100				* 100	* 50	* 50	* 20	* 15	
110						* 50	* 20	* 15	
120						* 50	* 20	* 15	
130						* 50	* 20	* 15	
140							* 20	* 15	
150							* 20	* 15	

\* ... Half thread

**BOLT**

**HEX HEAD CAP SCREW JIS B1180 appendix**



● **Material**  
Steel 10.9 / **DISGO**



	M8	M10	M12	M14	M16	M20	M24
s	13	17	19	22	24	30	36
k	5.5	7	8	9	10	13	15



RoHS Directive Compliance

**BOLT**

L \ d	pcs / Box						
	M8	M10	M12	M14	M16	M20	M24
10	100						
12	100						
15	100						
16	100	100					
20	100	100	100				
25	100	100	100				
30	* 100	100	100	60	80	40	
35	* 100	* 100	50	60	70	40	
40	* 100	* 50	* 50	60	70	30	25
45	* 100	* 50	* 50	* 50	60	30	20
50	* 100	* 50	* 50	* 50	* 60	30	20
55	* 100	* 50	* 50	* 40	* 50	30	20
60	* 100	* 50	* 50	* 40	* 50	* 30	20
65	* 100	* 50	* 50	* 40	* 50	* 30	15
70		* 50	* 50	* 40	* 40	* 25	* 15
75		* 50	* 50	* 30	* 40	* 25	* 15
80		* 50	* 40	* 30	* 40	* 25	* 15
90			* 40	* 30	* 30	* 20	* 15
100			* 40	* 30	* 30	* 20	* 10

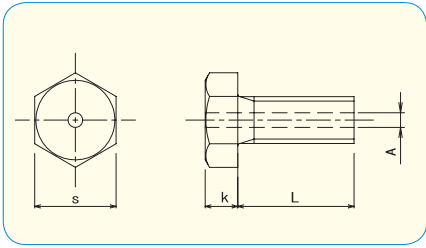
\* ... Half thread

**High Rustproof Plating**



- No Hydrogen-Embrittlement.
- No Cr. contained.
- Special plating for High tensile Fasteners. (class 8.8 / 10.9 / 12.9)

# HEX HEAD CAP SCREW WITH CENTER HOLE [ Full Thread ]



	M4	M5	M6	M8
s	7	8	10	13
k	2.8	3.5	4	5.3
A	1.5	1.5	2	2



● **Material**  
Stainless Steel A2

		pcs / Box			
L \ d		M4	M5	M6	M8
10	10	10	10		
12	10	10	10		
16	10	10	10	10	10
20	10	10	10	10	10
25			10	10	10
30					10

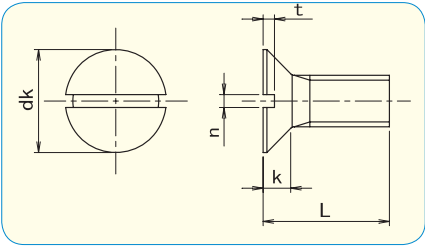
● **Material**  
Stainless Steel A2, Special Chemical Polish

		pcs / Box			
L \ d		M4	M5	M6	M8
10	10	10	10		
12	10	10	10		
16	10	10	10	10	10
20	10	10	10	10	10
25			10	10	10
30					10

BOLT

SUS 316L

# SLOTTED FLAT HEAD BOLT JIS B1179



● Material

SUS 316L Stainless Steel A4



RoHS Directive Compliance

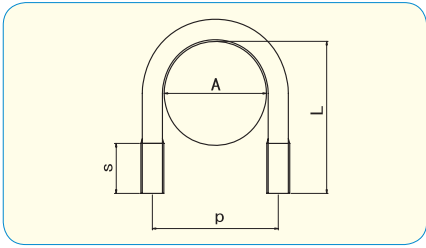


	M10	M12
dk	20	24
k	5.5	6.5

BOLT

		pcs / Box	
L \ d	M10	M12	
20	70	50	
25	70	50	
30	70	50	
35	70	50	
40	70	50	
50	70	50	
60	70	50	
70	70	50	
80	70	50	
100	70	50	

# U BOLT



● **Material**  
Stainless Steel A2

		A	pcs / Box			
		pipe dia mm	M6	M8	M10	M12
8A	for 1/4	13.2	2000			
10A	3/8	16.7	1600	1	1	
15A	1/2	21.2	1400	1	1	
20A	3/4	27.2	1100	1	1	
25A	1"	34.0	1	1	1	
32A	1 1/4	42.7	1	1	1	
40A	1 1/2	48.6	1	1	1	
50A	2"	60.5	1	1	1	
65A	2 1/2	76.3		1	1	1
80A	3"	89.1		1	1	1
100A	4"	114.3			1	1
125A	5"	139.8			1	1
150A	6"	165.2			1	1
200A	8"	216.3				1
250A	10"	267.4				1
300A	12"	318.5				1

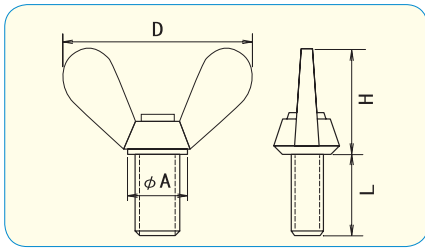
● **Material**  
**SUS 316L** Stainless Steel A4

		A	pcs / Box					
		pipe dia mm	M6	M8	M10	M12	M16	M20
8A	for 1/4	13.2	50					
10A	3/8	16.7	50					
15A	1/2	21.2	50	30	20			
20A	3/4	27.2	50	30	20			
25A	1"	34.0	50	30	20			
32A	1 1/4	42.7	50	30	20			
40A	1 1/2	48.6	50	30	20			
50A	2"	60.5	50	30	20	10		
65A	2 1/2	76.3	50	30	20	10		
80A	3"	89.1	50	30	20	10		
100A	4"	114.3		30	20	10	5	
125A	5"	139.8			20	10	5	
150A	6"	165.2			20	10	5	
200A	8"	216.3				10	5	3
250A	10"	267.4					5	3
300A	12"	318.5					5	3
350A	14"	355.6						3

BOLT

# WING BOLT JIS B1184

sanseisangyouboueki



- **Material · plating**  
Steel / Zinc 3Cr. Plated  
Steel / Zinc Black 3Cr. Plated



RoHS Directive Compliance



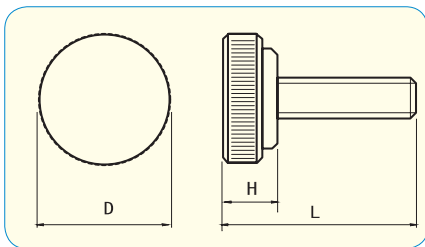
	M6	M8	M10
A	12	15	19
D	32	40	50
H	16	20	25

		pcs / Box		
L \ d	M6	M8	M10	
10	300	* 150		
12	300	* 150		
15	250	* 150	* 80	
20	250	* 120	* 70	
25	200	* 120	* 70	
30	200	* 120	* 60	
35	170	* 100	* 60	
40	170	* 80	* 60	
45	150	* 80	* 50	
50	150	* 80	* 50	

\* ... Zinc 3Cr. Plated only

BOLT

# THUMB SCREWS



- **Material**  
Stainless Steel A2
- **Collor**  
Black , Red



RoHS Directive Compliance

	M4	M5	M6
D	13	16	19
H	5.5	6.5	7.5

		pcs / Box		
L \ d	M4	M5	M6	
8	* 250			
10	* 250			
12		* 200	200	
15		* 200		
20			* 100	
35		200		

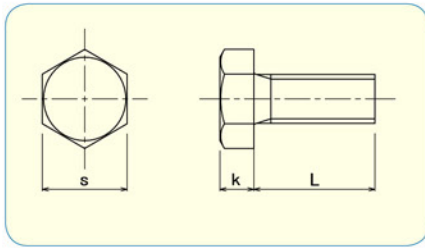
\* ... Black only



# HEX HEAD CAP SCREW JIS B1180 appendix I Full Thread I



RoHS Directive Compliance



• Material · plating  
Aluminium A5056



	M6	M8	M10	M12	M16
k	4	5.5	7	8	10
s	10	13	17	19	24

pcs/Box

	M6	M8	M10	M12	M16
10	400				
12	400	200			
15	400				
16	400	200	100		
20	300	200	100	100	
25	300	200	100	100	
30	300	200	100	100	
35	300	100	100	100	
40	300	100	100	100	50
45	200	100	100	100	50
50	200	100	100	50	50
55		100	100	50	40
60		100	100	50	30
65		100	100	50	30
70		100	50	50	30
75		100	50	50	30
80		100		50	
85		100		50	
90				50	
95				50	
100				50	

BOLT