Workholding Components

Catalog Pages 116 – 129

Innovative Design Solutions

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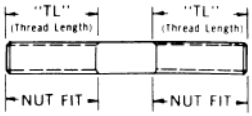
Fixture Studs

Style A



▶ Available in stressproof steel (ASTM A311 Class B) with a black oxide finish or stainless steel

▶ Please specify material when placing an order

PART #	Thread	Overall Length	Thread Length
1/4-20 x 1-1/2	1/4-20	1-1/2	1"
1/4-20 x 2	1/4-20	2	1
1/4-20 x 2-1/2	1/4-20	2-1/2	1
1/4-20 x 3	1/4-20	3	1
1/4-20 x 3-1/2	1/4-20	3-1/2	1
1/4-20 x 4	1/4-20	4	1
5/16-18 x 1-1/2	5/16-18	1-1/2	1-1/8
5/16-18 x 2	5/16-18	2	1-1/8
5/16-18 x 2-1/2	5/16-18	2-1/2	1-1/8
5/16-18 x 3	5/16-18	3	1-1/8
5/16-18 x 3-1/2	5/16-18	3-1/2	1-1/8
5/16-18 x 4	5/16-18	4	1-1/8
5/16-18 x 4-1/2	5/16-18	4-1/2	1-1/8
5/16-18 x 5	5/16-18	5	1-1/8
5/16-18 x 6	5/16-18	6	1-1/8
5/16-18 x 7	5/16-18	7	1-1/8
5/16-18 x 8	5/16-18	8	1-1/8
3/8-16 x 1-1/2	3/8-16	1-1/2	1-1/4
3/8-16 x 2	3/8-16	2	1-1/4
3/8-16 x 2-1/2	3/8-16	2-1/2	1-1/4
3/8-16 x 3	3/8-16	3	1-1/4
3/8-16 x 3-1/2	3/8-16	3-1/2	1-1/4
3/8-16 x 4	3/8-16	4	1-1/4
3/8-16 x 4-1/2	3/8-16	4-1/2	1-1/4
3/8-16 x 5	3/8-16	5	1-1/4
3/8-16 x 5-1/2	3/8-16	5-1/2	1-1/4
3/8-16 x 6	3/8-16	6	1-1/4
3/8-16 x 6-1/2	3/8-16	6-1/2	1-1/4
3/8-16 x 7	3/8-16	7	1-1/4
3/8-16 x 7-1/2	3/8-16	7-1/2	1-1/4
3/8-16 x 8	3/8-16	8	1-1/4
1/2-13 x 1-1/2	1/2-13	1-1/2	1-1/2
1/2-13 x 2	1/2-13	2	1-1/2
1/2-13 x 2-1/2	1/2-13	2-1/2	1-1/2
1/2-13 x 3	1/2-13	3	1-1/2
1/2-13 x 3-1/2	1/2-13	3-1/2	1-1/2
1/2-13 x 4	1/2-13	4	1-1/2
1/2-13 x 4-1/2	1/2-13	4-1/2	1-1/2
1/2-13 x 5	1/2-13	5	1-1/2
1/2-13 x 5-1/2	1/2-13	5-1/2	1-1/2
1/2-13 x 6	1/2-13	6	1-1/2
1/2-13 x 6-1/2	1/2-13	6-1/2	1-1/2
1/2-13 x 7	1/2-13	7	1-1/2
1/2-13 x 7-1/2	1/2-13	7-1/2	1-1/2
1/2-13 x 8	1/2-13	8	1-1/2
1/2-13 x 9	1/2-13	9	1-1/2
1/2-13 x 10	1/2-13	10	1-1/2
1/2-13 x 12	1/2-13	12	1-1/2
1/2-13 x 14	1/2-13	14	1-1/2
5/8-11 x 1-1/2	5/8-11	1-1/2	1-3/4
5/8-11 x 2	5/8-11	2	1-3/4

PART #	Thread	Overall Length	Thread Length
5/8-11 x 2-1/2	5/8-11	2-1/2	1-3/4
5/8-11 x 3	5/8-11	3	1-3/4
5/8-11 x 3-1/2	5/8-11	3-1/2	1-3/4
5/8-11 x 4	5/8-11	4	1-3/4
5/8-11 x 4-1/2	5/8-11	4-1/2	1-3/4
5/8-11 x 5	5/8-11	5	1-3/4
5/8-11 x 5-1/2	5/8-11	5-1/2	1-3/4
5/8-11 x 6	5/8-11	6	1-3/4
5/8-11 x 6-1/2	5/8-11	6-1/2	1-3/4
5/8-11 x 7	5/8-11	7	1-3/4
5/8-11 x 7-1/2	5/8-11	7-1/2	1-3/4
5/8-11 x 8	5/8-11	8	1-3/4
5/8-11 x 9	5/8-11	9	1-3/4
5/8-11 x 10	5/8-11	10	1-3/4
5/8-11 x 12	5/8-11	12	1-3/4
5/8-11 x 14	5/8-11	14	1-3/4
3/4-10 x 3	3/4-10	3	2
3/4-10 x 3-1/2	3/4-10	3-1/2	2
3/4-10 x 4	3/4-10	4	2
3/4-10 x 4-1/2	3/4-10	4-1/2	2
3/4-10 x 5	3/4-10	5	2
3/4-10 x 5-1/2	3/4-10	5-1/2	2
3/4-10 x 6	3/4-10	6	2
3/4-10 x 6-1/2	3/4-10	6-1/2	2
3/4-10 x 7	3/4-10	7	2
3/4-10 x 7-1/2	3/4-10	7-1/2	2
3/4-10 x 8	3/4-10	8	2
3/4-10 x 9	3/4-10	9	2
3/4-10 x 10	3/4-10	10	2
3/4-10 x 12	3/4-10	12	2
3/4-10 x 14	3/4	14	2
7/8-9 x 3	7/8-9	3	2-1/4
7/8-9 x 4	7/8-9	4	2-1/4
7/8-9 x 5	7/8-9	5	2-1/4
7/8-9 x 6	7/8-9	6	2-1/4
7/8-9 x 7	7/8-9	7	2-1/4
7/8-9 x 8	7/8-9	8	2-1/4
7/8-9 x 9	7/8-9	9	2-1/4
7/8-9 x 10	7/8-9	10	2-1/4
7/8-9 x 12	7/8-9	12	2-1/4
7/8-9 x 14	7/8-9	14	2-1/4
1"-8 x 3	1 x 8	3	2-1/2
1"-8 x 4	1 x 8	4	2-1/2
1"-8 x 5	1 x 8	5	2-1/2
1"-8 x 6	1 x 8	6	2-1/2
1"-8 x 7	1 x 8	7	2-1/2
1"-8 x 8	1 x 8	8	2-1/2
1"-8 x 9	1 x 8	9	2-1/2
1"-8 x 10	1 x 8	10	2-1/2
1"-8 x 12	1 x 8	12	2-1/2
1"-8 x 14	1 x 8	14	2-1/2

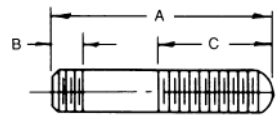
Stainless Steel Fixture Studs

style B fit

- Made from 300 series stainless steel
- Style B studs

PART #	Thread	A	B	C
6140	#6-32	1	7/32	1/2
6141	#6-32	1-1/4	7/32	5/8
6142	#6-32	1-1/2	7/32	3/4
6143	#6-32	1-3/4	7/32	3/4
6144	#6-32	2	7/32	3/4
6165	#8-32	1	7/32	1/2
6166	#8-32	1-1/4	7/32	5/8
6167	#8-32	1-1/2	7/32	3/4
6168	#8-32	1-3/4	7/32	3/4
6169	#8-32	2	7/32	3/4
6194	#10-24	1	7/32	1/2
6195	#10-24	1-1/4	7/32	5/8
6196	#10-24	1-1/2	7/32	3/4
6197	#10-24	1-3/4	7/32	3/4
6198	#10-24	2	7/32	3/4
6199	#10-32	1	7/32	1/2
6200	#10-32	1-1/4	7/32	5/8
6201	#10-32	1-1/2	7/32	3/4
6202	#10-32	1-3/4	7/32	3/4

PART #	Thread	A	B	C
6203	#10-32	2	7/32	3/4
6250	1/4-20	1-1/4	9/32	5/8
6251	1/4-20	1-1/2	9/32	5/8
6252	1/4-20	1-3/4	9/32	3/4
6253	1/4-20	2	9/32	3/4
6254	1/4-20	2-1/2	9/32	3/4
6255	1/4-20	3	9/32	1
6312	5/16-18	1-1/2	11/32	5/8
6313	5/16-18	2	11/32	1
6314	5/16-18	2-1/2	11/32	1-1/4
6315	5/16-18	3	11/32	1-3/8
6316	5/16-18	3-1/2	11/32	1-1/2
6317	5/16-18	4	11/32	1-1/2
6375	3/8-16	1-5/8	11/32	3/4
6376	3/8-16	2	11/32	1
6377	3/8-16	2-1/2	11/32	1-1/4
6378	3/8-16	3	11/32	1-3/8
6379	3/8-16	3-1/2	11/32	1-1/2
6380	3/8-16	4	11/32	1-1/2



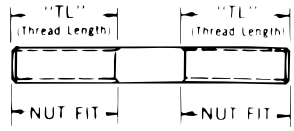
Style B

Fixture Studs

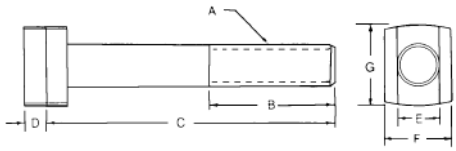
metric

- Carbon steel, black oxide finish
- Dimensions shown in millimeters
- Type A stud only

PART #	Thread	Overall Length	Thread Length
M8 x 80	M8 x 1.25	80mm	31mm
M8 x 110	M8 x 1.25	110	31
M8 x 125	M8 x 1.25	125	31
M10 x 80	M10 x 1.5	80	35
M10 x 110	M10 x 1.5	110	35
M10 x 125	M10 x 1.5	125	35
M10 x 150	M10 x 1.5	150	35
M12 x 80	M12 x 1.75	80	39
M12 x 110	M12 x 1.75	110	39
M12 x 125	M12 x 1.75	125	39
M12 x 150	M12 x 1.75	150	39
M12 x 175	M12 x 1.75	175	39
M16 x 80	M16 x 2.0	80	47
M16 x 110	M16 x 2.0	110	47
M16 x 125	M16 x 2.0	125	47
M16 x 150	M16 x 2.0	150	47
M16 x 175	M16 x 2.0	175	47
M16 x 200	M16 x 2.0	200	47



T-Slot Bolts



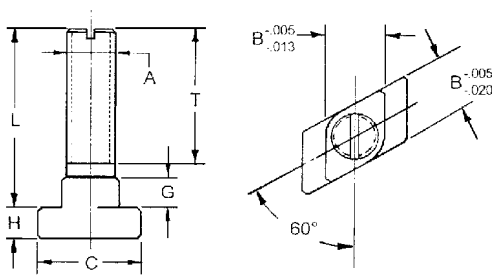
▶ Heads are sized to fit common table slot dimensions

▶ One piece construction prevents damage to table slots

▶ Black oxide finish

PART #	Thread A	B	C	D	E	F	G
TB-3710	3/8-16	5/8	1	13/64	3/8	5/8	3/4
TB-3715	3/8-16	1	1-1/2	13/64	3/8	5/8	3/4
TB-3720	3/8-16	1-1/4	2	13/64	3/8	5/8	3/4
TB-3725	3/8-16	1-1/2	2-1/2	13/64	3/8	5/8	3/4
TB-3730	3/8-16	1-1/2	3	13/64	3/8	5/8	3/4
TB-3735	3/8-16	1-1/2	3-1/2	13/64	3/8	5/8	3/4
TB-3740	3/8-16	1-1/2	4	13/64	3/8	5/8	3/4
TB-5015	1/2-13	1	1-1/2	1/4	1/2	13/16	15/16
TB-5020	1/2-13	1-1/4	2	1/4	1/2	13/16	15/16
TB-5025	1/2-13	1-1/2	2-1/2	1/4	1/2	13/16	15/16
TB-5030	1/2-13	1-1/2	3	1/4	1/2	13/16	15/16
TB-5035	1/2-13	1-1/2	3-1/2	1/4	1/2	13/16	15/16
TB-5040	1/2-13	1-1/2	4	1/4	1/2	13/16	15/16
TB-5050	1/2-13	1-1/2	5	1/4	1/2	13/16	15/16
TB-5060	1/2-13	2	6	1/4	1/2	13/16	15/16
TB-6215	5/8-11	1	1-1/2	5/16	5/8	1-1/64	1-1/8
TB-6220	5/8-11	1-1/4	2	5/16	5/8	1-1/64	1-1/8
TB-6225	5/8-11	1-1/2	2-1/2	5/16	5/8	1-1/64	1-1/8
TB-6230	5/8-11	1-1/2	3	5/16	5/8	1-1/64	1-1/8
TB-6235	5/8-11	1-1/2	3-1/2	5/16	5/8	1-1/64	1-1/8
TB-6240	5/8-11	1-1/2	4	5/16	5/8	1-1/64	1-1/8
TB-6250	5/8-11	1-1/2	5	5/16	5/8	1-1/64	1-1/8
TB-6260	5/8-11	2	6	5/16	5/8	1-1/64	1-1/8
TB-6280	5/8-11	3	8	5/16	5/8	1-1/64	1-1/8
TB-7530	3/4-10	1-1/2	3	3/8	3/4	1-1/4	1-3/8
TB-7535	3/4-10	1-1/2	3-1/2	3/8	3/4	1-1/4	1-3/8
TB-7540	3/4-10	1-1/2	4	3/8	3/4	1-1/4	1-3/8
TB-7550	3/4-10	1-1/2	5	3/8	3/4	1-1/4	1-3/8
TB-7560	3/4-10	2	6	3/8	3/4	1-1/4	1-3/8
TB-7580	3/4-10	3	8	3/8	3/4	1-1/4	1-3/8
TB-1040	1"-8	2	4	1/2	1"	1-11/16	1-7/8
TB-1050	1"-8	2	5	1/2	1"	1-11/16	1-7/8
TB-1060	1"-8	2	6	1/2	1"	1-11/16	1-7/8
TB-1080	1"-8	3	8	1/2	1"	1-11/16	1-7/8
TB-1100	1"-8	3	10	1/2	1"	1-11/16	1-7/8

Rotary T-Slot Bolts



▶ Carbon steel

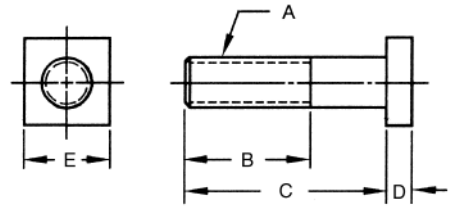
▶ Case hardened, black oxide finish

▶ Unique design allows quick and convenient set-ups and tear down. Lower the T-slot bolt into the table slot and rotate a quarter-turn to engage.

PART #	A	L	T	B	C	G	H
TB-210	1/2-13	1-1/2	1	5/8	1-1/8	11/32	11/32
TB-211	1/2-13	2	1-1/2	5/8	1-1/8	11/32	11/32
TB-212	1/2-13	2-1/2	2	5/8	1-1/8	11/32	11/32
TB-213	1/2-13	3	2-1/2	5/8	1-1/8	11/32	11/32
TB-214	1/2-13	3-1/2	2	5/8	1-1/8	11/32	11/32
TB-215	1/2-13	4	2-1/2	5/8	1-1/8	11/32	11/32
TB-216	1/2-13	4-1/2	2-1/2	5/8	1-1/8	11/32	11/32
TB-217	1/2-13	5	2-1/2	5/8	1-1/8	11/32	11/32
TB-218	1/2-13	6	4-1/2	5/8	1-1/8	11/32	11/32
TB-219	5/8-11	1-1/2	1	3/4	1-1/4	13/32	13/32
TB-220	5/8-11	2	1-1/2	3/4	1-1/4	13/32	13/32
TB-221	5/8-11	2-1/2	2	3/4	1-1/4	13/32	13/32
TB-222	5/8-11	3	2-1/2	3/4	1-1/4	13/32	13/32
TB-223	5/8-11	3-1/2	2	3/4	1-1/4	13/32	13/32
TB-224	5/8-11	4	2-1/2	3/4	1-1/4	13/32	13/32
TB-225	5/8-11	5	2-1/2	3/4	1-1/4	13/32	13/32
TB-226	5/8-11	6	4-1/2	3/4	1-1/4	13/32	13/32

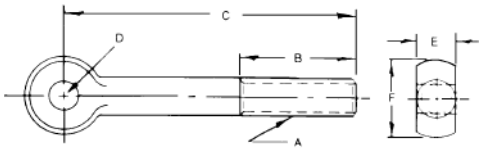
T-Bolts

PART #	Thread	B	C	D	E
TB-2010	3/8-16	1-1/4	1-1/2	1/4	11/16
TB-2011	3/8-16	1-3/4	2	1/4	11/16
TB-2012	3/8-16	2	2-1/2	1/4	11/16
TB-2013	3/8-16	2	3	1/4	11/16
TB-2014	3/8-16	2	3-1/2	1/4	11/16
TB-2015	3/8-16	2	4	1/4	11/16
TB-2016	3/8-16	2	6	1/4	11/16
TB-2110	1/2-13	1-1/4	1-1/2	5/16	7/8
TB-2111	1/2-13	1-3/4	2	5/16	7/8
TB-2112	1/2-13	2	2-1/2	5/16	7/8
TB-2113	1/2-13	2	3	5/16	7/8
TB-2114	1/2-13	2	3-1/2	5/16	7/8
TB-2115	1/2-13	2	4	5/16	7/8
TB-2116	1/2-13	2-1/2	6	5/16	7/8
TB-2210	5/8-11	1-1/4	1-1/2	13/32	1-1/8
TB-2211	5/8-11	1-3/4	2	13/32	1-1/8
TB-2212	5/8-11	2	2-1/2	13/32	1-1/8
TB-2213	5/8-11	2	3	13/32	1-1/8
TB-2214	5/8-11	2	3-1/2	13/32	1-1/8
TB-2215	5/8-11	2	4	13/32	1-1/8
TB-2216	5/8-11	2-1/2	6	13/32	1-1/8
TB-2217	5/8-11	2-1/2	8	13/32	1-1/8
TB-2218	5/8-11	3	10	13/32	1-1/8
TB-2310	3/4-10	2	3	17/32	1-5/16
TB-2311	3/4-10	2	3-1/3	17/32	1-5/16
TB-2312	3/4-10	2	4	17/32	1-5/16
TB-2313	3/4-10	2-1/2	6	17/32	1-5/16
TB-2314	3/4-10	2-1/2	8	17/32	1-5/16
TB-2315	3/4-10	3	10	17/32	1-5/16
TB-2410	1-8	4	4	11/16	1-11/16
TB-2411	1-8	4	6	11/16	1-11/16
TB-2412	1-8	4	8	11/16	1-11/16
TB-2413	1-8	4	10	11/16	1-11/16



- ► Alloy steel, heat-treated black oxide finish
- ► Grade 5 (125,000 psi)
- ► 2A Class standard threads

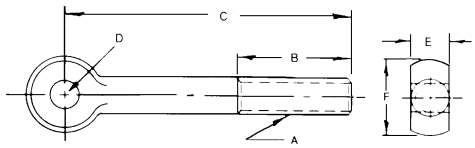
Eye Bolts



- ▶ Available in carbon steel with a black oxide finish, or stainless steel
- ▶ Precision machined from bar stock
- ▶ Eye bolts are not recommended for lifting applications

Steel PART #	Stainless Steel PART #	Thread A	B	C	D	E	F
EB-0	EB-0SS	1/4-20	7/8	2-1/8	3/16	1/4	1/2
EB-05	EB-05SS	1/4-20	7/8	2-1/8	1/4	1/4	1/2
EB-010	EB-010SS	1/4-20	1-1/4	3	3/16	1/4	1/2
EB-020	EB-020SS	1/4-20	1-1/4	3	1/4	1/4	1/2
EB-030	EB-030SS	5/16-18	1-1/4	2-1/2	1/4	5/16	5/8
EB-040	EB-040SS	5/16-18	1-1/4	2-1/2	5/16	5/16	5/8
EB-050	EB-050SS	5/16-18	1-1/2	3-1/2	1/4	5/16	5/8
EB-060	EB-060SS	5/16-18	1-1/2	3-1/2	5/16	5/16	5/8
EB-061	EB-061SS	5/16-18	2	4	1/4	5/16	5/8
EB-062	EB-062SS	5/16-18	2	4	5/16	5/16	5/8
EB-070	EB-070SS	3/8-16	1-1/2	3-1/2	5/16	3/8	3/4
EB-080	EB-080SS	3/8-16	1-1/2	3-1/2	3/8	3/8	3/4
EB-090	EB-090SS	3/8-16	2	3-3/4	5/16	3/8	3/4
EB-100	EB-100SS	3/8-16	2	3-3/4	3/8	3/8	3/4
EB-101	EB-101SS	3/8-16	2-1/2	5	5/16	3/8	3/4
EB-102	EB-102SS	3/8-16	2-1/2	5	3/8	3/8	3/4
EB-1	EB-1SS	1/2-13	1-1/2	3-3/4	3/8	1/2	1
EB-5	EB-5SS	1/2-13	1-1/2	3-3/4	1/2	1/2	1
EB-10	EB-10SS	1/2-13	2	5	3/8	1/2	1
EB-15	EB-15SS	1/2-13	2	5	1/2	1/2	1
EB-16	EB-16SS	1/2-13	2-1/2	5-1/2	3/8	1/2	1
EB-17	EB-17SS	1/2-13	2-1/2	5-1/2	1/2	1/2	1
EB-20	EB-20SS	5/8-11	1-3/4	4-1/2	5/8	5/8	1-1/4
EB-2	EB-2SS	5/8-11	2	4-1/2	5/8	5/8	1-1/4
EB-25	EB-25SS	5/8-11	2-1/2	6	5/8	5/8	1-1/4
EB-26	EB-26SS	5/8-11	3	6	5/8	5/8	1-1/4
EB-30	EB-30SS	3/4-10	2	4-1/2	3/4	3/4	1-1/2
EB-35	EB-35SS	3/4-10	2-1/2	6	3/4	3/4	1-1/2

Metric Eye Bolts



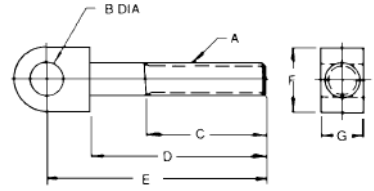
- ▶ Available in carbon steel with a black oxide finish, or stainless steel
- ▶ Precision machined from bar stock
- ▶ Dimensions shown in millimeters

Steel PART #	Stainless Steel PART #	Thread A	B	C	D	E	F
545006	545006S	M6 x 1.0	32mm	50mm	6mm	7mm	14mm
547506	547506S	M6 x 1.0	32	75	6	7	14
545008	545008S	M8 x 1.25	32	50	8	9	18
547508	547508S	M8 x 1.25	32	75	8	9	18
547510	547510S	M10 x 1.5	40	75	10	12	20
5410010	5410010S	M10 x 1.5	40	100	10	12	20
5410012	5410012S	M12 x 1.75	40	100	12	14	25
5413012	5413012S	M12 x 1.75	40	130	12	14	25
5410016	5410016S	M16 x 2.0	50	100	16	17	32
5413016	5413016S	M16 x 2.0	50	130	16	17	32

Swing Bolts

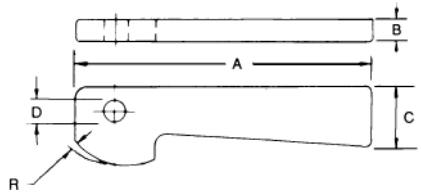
- ► Available in case hardened black oxide finish steel or stainless steel
- ► Precision machined from bar stock
- ► Swing bolts are not recommended for lifting applications

Low Carbon Steel PART #	Stainless Steel PART #	Thread A	B	C	D	E	F	G
SWB-01	SWB-01SS	1/4-20	1/4	3/4	1-3/16	1-1/2	1/2	5/16
SWB-02	SWB-02SS	1/4-20	1/4	1-1/4	2-3/16	2-1/2	1/2	5/16
SWB-03	SWB-03SS	5/16-18	5/16	1	1-5/8	2	5/8	3/8
SWB-04	SWB-04SS	5/16-18	5/16	1-3/8	2-5/8	3	5/8	3/8
SWB-1	SWB-1SS	3/8-16	3/8	1-3/8	2	2-1/2	3/4	1/2
SWB-10	SWB-10SS	3/8-16	3/8	2	3	3-1/2	3/4	1/2
SWB-2	SWB-2SS	1/2-13	1/2	1-5/8	2-1/2	3-1/8	1	5/8
SWB-20	SWB-20SS	1/2-13	1/2	2-1/2	3-1/2	4-1/8	1	5/8
SWB-3	SWB-3SS	5/8-11	5/8	1-5/8	2-3/4	3-1/2	1-1/4	3/4
SWB-30	SWB-30SS	5/8-11	5/8	2-1/2	4	4-3/4	1-1/4	3/4



Single Cams

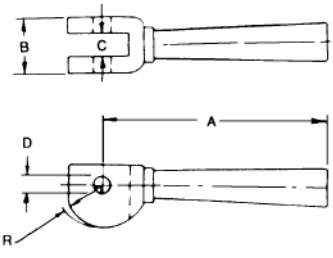
- ► Precision machined from carbon steel
- ► Case hardened, black oxide finish
- ► Used in clamping assemblies

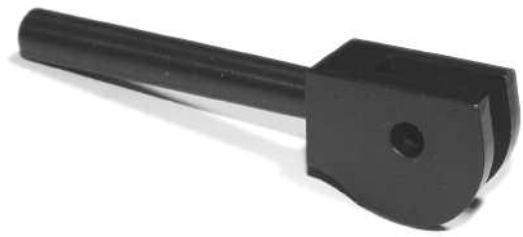


PART #	A	B	C	D	R Rise
SC-0	2-3/8	3/16	1/2	5/32	1/16
SC-15	3-1/4	1/4	11/16	1/4	5/64
SC-1	4-1/2	3/8	7/8	5/16	7/64
SC-2	5	1/2	7/8	3/8	9/64

Double Cams

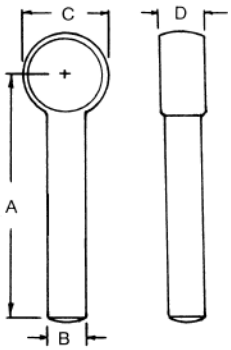
- ► Machined from carbon steel
- ► Case hardened
- ► Black oxide finish
- ► Used in clamping assemblies





PART #	A	B	C	D	R Rise
DC-0	2-11/16	9/16	1/4	3/16	1/16
DC-00	3-7/16	5/8	5/16	1/4	5/64
DC-1	4-15/16	1-1/8	1/2	3/8	7/64
DC-2	5-3/16	1-1/4	5/8	5/8	9/64

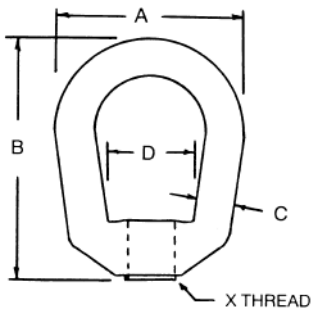
Forged Blank Eye Bolts



- Drop forged steel
- Manufactured from C-1035 steel
- Natural finish
- 75/85,000 lbs. P.S.I tensile
- 40/55,000 lbs. P.S.I. yield
- Some sizes available in 316 stainless steel

Steel PART #	Stainless Steel PART #	A	B	C	D
EB-501	-	3	1/4	1/2	9/32
EB-502	-	6	1/4	1/2	9/32
EB-503	-	3	5/16	5/8	11/32
EB-504	-	6	5/16	5/8	11/32
EB-505	EB-505SS	3	3/8	3/4	7/16
EB-506	-	6	3/8	3/4	7/16
EB-507	-	6	7/16	7/8	1/2
EB-508	-	3-1/2	1/2	1	9/16
EB-509	EB-509SS	6	1/2	1	9/16
EB-510	-	3-1/2	5/8	1-3/16	5/8
EB-511	EB-511SS	6	5/8	1-1/4	11/16
EB-512	-	8	5/8	1-1/4	11/16
EB-513	-	3-1/2	3/4	1-1/2	13/16
EB-514	EB-514SS	6	3/4	1-1/2	13/16
EB-515	-	10	3/4	1-1/2	13/16
EB-516	EB-516SS	6	7/8	1-3/4	15/16
EB-517	-	12	7/8	1-3/4	15/16
EB-518	-	6	1	2	1-1/16
EB-519	-	12	1	2	1-1/16

Drop Forged Eye Nuts

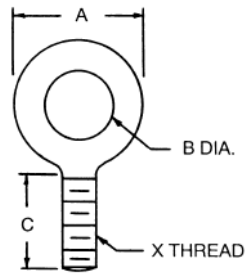


- Drop forged steel
- Manufactured from C-1035 steel
- Natural finish
- Some sizes available in 316 stainless steel

Steel PART #	Stainless Steel PART #	Thread X	A	B	C	D	Pounds Load
EN-401	EN-401SS	1/4-20	1-1/4	1-11/16	1/4	19/32	520
EN-402	EN-402SS	5/16-18	1-1/4	1-11/16	1/4	19/32	840
EN-403	EN-403SS	3/8-16	1-5/8	2-1/16	5/16	3/4	1240
EN-404	-	7/16-14	2	2-1/2	3/8	1	1700
EN-405	EN-405SS	1/2-13	2	2-1/2	3/8	1	2240
EN-406	EN-406SS	5/8-11	2-1/2	3-3/16	1/2	1-3/16	3600
EN-407	EN-407SS	3/4-10	3	3-7/8	5/8	1-3/8	5200
EN-408	-	7/8-9	3-1/2	4-5/16	3/4	1-5/8	7200
EN-409	-	1-8	3-1/2	4-5/16	3/4	1-5/8	7200

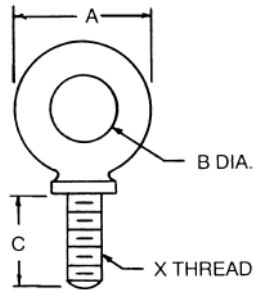
Forged Eye Bolts

- ▶ Drop forged steel
- ▶ Heat treated
- ▶ Manufactured from C-1035 steel
- ▶ Natural finish
- ▶ Load capacity for straight pull only



PART #	Thread X	A	B	C	Pounds Load
EB-150	1/4-20	1-1/4	3/4	1	500
EB-151	5/16-18	1-1/2	7/8	1-1/8	900
EB-152	3/8-16	1-21/32	1	1-1/4	1400
EB-153	7/16-14	1-27/32	1-3/32	1-3/8	2000
EB-154	1/2-13	2-1/16	1-3/16	1-1/2	2600
EB-155	9/16-12	2-9/32	1-9/32	1-5/8	3000
EB-156	5/8-11	2-1/2	1-3/8	1-3/4	4000
EB-157	3/4-10	2-13/16	1-1/2	2	6000
EB-158	7/8-9	3-1/4	1-11/16	2-1/4	7000
EB-159	1-8	3-9/16	1-13/16	2-1/2	9000
EB-160	1-1/8–7	4	2	2-3/4	10000
EB-161	1-1/4–7	4-7/16	2-3/16	3	15000
EB-162	1-1/2–6	5-3/16	2-1/2	3-1/2	19600

Forged Eye Bolts
with shoulder



INCH

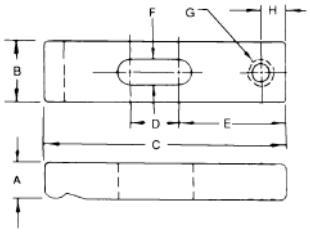
Steel PART #	Stainless Steel PART #	Thread X	A	B	C	Pounds Load
EB-250	EB-250SS	1/4-20	1-1/4	3/4	1	500
EB-251	EB-251SS	5/16-18	1-1/2	7/8	1-1/8	900
EB-252	EB-252SS	3/8-16	1-21/32	1	1-1/4	1400
EB-253	-	7/16-14	1-27/32	1-3/32	1-3/8	2000
EB-254	EB-254SS	1/2-13	2-1/16	1-3/16	1-1/2	2600
EB-255	-	9/16-12	2-9/32	1-9/32	1-5/8	3000
EB-256	EB-256SS	5/8-11	2-1/2	1-3/8	1-3/4	4000
EB-257	EB-257SS	3/4-10	2-13/16	1-1/2	2	6000
EB-258	-	7/8-9	3-1/4	1-11/16	2-1/4	7000
EB-259	-	1-8	3-9/16	1-13/16	2-1/2	9000
EB-260	-	1-1/8-7	4	2	2-3/4	10000
EB-261	-	1-1/4-7	4-7/16	2-3/16	3	15000
EB-262	-	1-1/2-6	5-3/16	2-1/2	3-1/2	19600

METRIC

Steel PART #	Thread X	A	B	C	Kilos Load
EB-270	M6 x 1.0	32mm	19mm	25.4mm	210
EB-271	M7 x 1.0	38.5	22	28.5	370
EB-272	M8 x 1.25	42	25	31.7	450
EB-273	M10 x 1.5	47	28	35	740
EB-274	M12 x 1.75	52.5	30	38	1030
EB-275	M14 x 2.0	58	35	44.5	1600
EB-276	M16 x 2.0	63.5	35	44.5	1600
EB-277	M18 x 2.0	71.5	38	51	2140
EB-278	M20 x 2.5	83	43	57	2860
EB-279	M24 x 3.0	90.5	46	63.5	3850
EB-280	M27 x 3.0	101.5	51	70	5200
EB-281	M30 x 3.5	113	55	76	6400
EB-282	M36 x 4.0	132	63	89	8970

- ▶ Drop forged steel, heat treated
- ▶ Available in inch and metric sizes
- ▶ Manufactured from C-1035 steel
- ▶ Some sizes available in Type 316 stainless steel

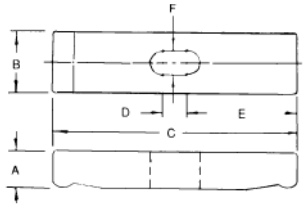
Tapped End Clamps Straps



- ▶ Case hardened, black oxide finish
- ▶ Machined from carbon steel

PART #	A	B	C	D	E	F	G	H
CS-7A	3/8	5/8	2	1/2	1	9/32	1/4-20	7/32
CS-107	3/8	5/8	2-1/2	1/2	1-1/8	9/32	1/4-20	7/32
CS-71	1/2	1	2-3/4	7/16	1-1/2	11/32	5/16-18	9/32
CS-72	1/2	1	3-1/4	13/16	1-1/2	11/32	5/16-18	9/32
CS-73	1/2	1	3-3/4	1-3/16	1-1/2	11/32	5/16-18	9/32
CS-74	5/8	1-1/4	3	3/4	1-11/16	13/32	3/8-16	5/16
CS-75	5/8	1-1/4	4	1	2-3/16	13/32	3/8-16	5/16
CS-76	5/8	1-1/4	5	1-1/2	2-11/16	13/32	3/8-16	5/16
CS-77	5/8	1-1/4	6	2	3-3/16	13/32	3/8-16	5/16
CS-7	5/8	1-1/4	4	1	2-1/4	17/32	1/2-13	7/16
CS-700	5/8	1-1/4	4-1/2	1	2-1/4	17/32	1/2-13	7/16
CS-8	5/8	1-1/4	5	1-1/2	2-1/4	17/32	1/2-13	7/16
CS-9	5/8	1-1/4	6	1-1/2	2-1/4	17/32	1/2-13	7/16
CS-10	3/4	1-1/2	4-1/2	1	2-1/2	21/32	5/8-11	1/2
CS-1000	3/4	1-1/2	5	1-1/2	2-1/2	21/32	5/8-11	1/2
CS-11	3/4	1-1/2	5-1/2	1-1/2	2-1/2	21/32	5/8-11	1/2
CS-12	3/4	1-1/2	6	1-1/2	2-1/2	21/32	5/8-11	1/2

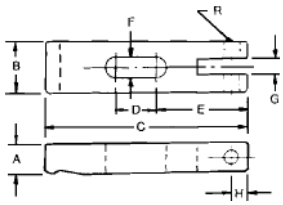
Double End Clamp Straps



- ▶ Case hardened, black oxide finish
- ▶ Machined from carbon steel

PART #	A	B	C	D	E	F
CS-201	5/8	1-1/4	4	1	1-1/2	17/32
CS-202	5/8	1-1/4	5	1	2	17/32
CS-203	5/8	1-1/4	5-1/2	1	2-1/4	17/32
CS-204	3/4	1-1/2	4-1/2	1-1/4	1-5/8	21/32
CS-205	3/4	1-1/2	5-1/2	1-1/4	2-1/8	21/32
CS-206	3/4	1-1/2	6	1-1/4	2-3/8	21/32
CS-228	7/8	1-1/2	4-1/2	1-1/4	1-5/8	21/32
CS-229	7/8	1-1/2	5-1/2	1-1/4	2-1/8	21/32
CS-230	7/8	1-1/2	6	1-1/4	2-3/8	21/32
CS-225	1	1-3/4	6	1-3/4	2-1/8	25/32
CS-226	1	1-3/4	7	1-3/4	2-5/8	25/32
CS-227	1	1-3/4	7-1/2	1-3/4	2-7/8	25/32

Clamp Straps for Single Cams

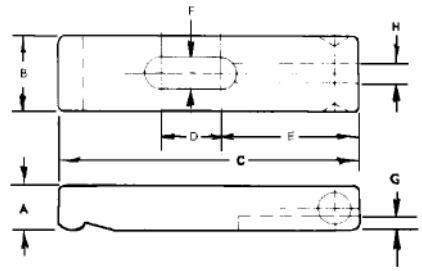


- ▶ Case hardened, black oxide finish
- ▶ Machined from carbon steel

PART #	A	B	C	D	E	F	G	H	R
CS-13A	3/8	5/8	2	1/2	1-1/32	9/32	3/16	3/16	5/32
CS-113	3/8	5/8	2-1/2	1/2	1-1/8	9/32	3/16	3/16	5/32
CS-312	1/2	1	2-3/4	7/16	1-1/2	13/32	1/4	1/4	1/4
CS-313	1/2	1	3-1/4	13/16	1-1/2	13/32	1/4	1/4	1/4
CS-314	1/2	1	3-3/4	1-3/16	1-1/2	13/32	1/4	1/4	1/4
CS-13	5/8	1-1/4	4	1	2-1/4	17/32	3/8	5/16	5/16
CS-1300	5/8	1-1/4	4-1/2	1	2-1/4	17/32	3/8	5/16	5/16
CS-14	5/8	1-1/4	5	1	2-1/4	17/32	3/8	5/16	5/16
CS-15	5/8	1-1/4	6	1	2-1/4	17/32	3/8	5/16	5/16
CS-16	3/4	1-1/2	4-1/2	1	2-1/2	21/32	1/2	3/8	3/8
CS-1600	3/4	1-1/2	5	1-3/8	2-1/2	21/32	1/2	3/8	3/8
CS-17	3/4	1-1/2	5-1/2	1-3/8	2-1/2	21/32	1/2	3/8	3/8
CS-18	3/4	1-1/2	6	1-3/8	2-1/2	21/32	1/2	3/8	3/8

Single End Clamp Straps

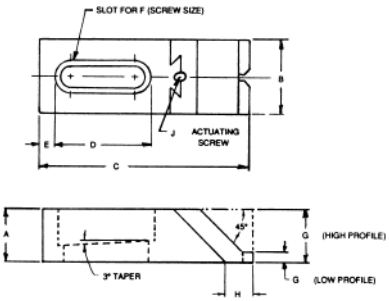
PART #	A	B	C	D	E	F	G	H
CS-1A	3/8	5/8	2	1/2	1-1/32	9/32	1/8	3/16
CS-101 & 119	3/8	5/8	2-1/2	1/2	1-1/8	9/32	1/8	3/16
CS-31	1/2	1	2-3/4	7/16	1-1/2	11/32	3/16	1/4
CS-32	1/2	1	3-1/4	13/16	1-1/2	11/32	3/16	1/4
CS-33	1/2	1	3-3/4	1-3/16	1-1/2	11/32	3/16	1/4
CS-34	5/8	1-1/4	3	3/4	1-11/16	13/32	9/32	3/8
CS-35	5/8	1-1/4	4	1	2-3/16	13/32	9/32	3/8
CS-36	5/8	1-1/4	5	1-1/2	2-11/16	13/32	9/32	3/8
CS-37	5/8	1-1/4	6	2	3-3/16	13/32	9/32	3/8
CS-1 & 19	5/8	1-1/4	4	1	2-1/4	17/32	9/32	3/8
CS-100	5/8	1-1/4	4-1/2	1	2-1/4	17/32	9/32	3/8
CS-2	5/8	1-1/4	5	1-1/2	2-1/4	17/32	9/32	3/8
CS-3	5/8	1-1/4	5-1/2	1-1/2	2-1/4	17/32	9/32	3/8
CS-21	5/8	1-1/4	6	1-1/2	2-1/4	17/32	9/32	3/8
CS-4	3/4	1-1/2	4-1/2	1	2-1/2	21/32	9/32	1/2
CS-400	3/4	1-1/2	5	1-1/2	2-1/2	21/32	9/32	1/2
CS-5 & 23	3/4	1-1/2	5-1/2	1-1/2	2-1/2	21/32	9/32	1/2
CS-6 & 24	3/4	1-1/2	6	1-1/2	2-1/2	21/32	9/32	1/2
CS-28	7/8	1-1/2	4-1/2	1	2-1/2	21/32	9/32	1/2
CS-2800	7/8	1-1/2	5	1-1/2	2-1/2	21/32	9/32	1/2
CS-29	7/8	1-1/2	5-1/2	1-1/2	2-1/2	21/32	9/32	1/2
CS-30	7/8	1-1/2	6	1-1/2	2-1/2	21/32	9/32	1/2
CS-25	1	1-3/4	6	1-3/4	3-1/4	25/32	5/16	1/2
CS-2500	1	1-3/4	6-1/2	1-3/4	3-1/4	25/32	5/16	1/2
CS-26	1	1-3/4	7	1-3/4	3-1/4	25/32	5/16	1/2
CS-27	1	1-3/4	7-1/2	1-3/4	3-1/4	25/32	5/16	1/2



- ► Case hardened, black oxide finish
- ► Machined from carbon steel

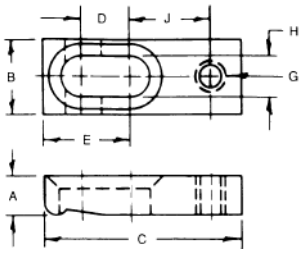
Toe Clamps

- ► Grips the sides of the workpiece to allow for free machining on the surface
- ► Heat treated steel



	Steel Toe PART #	Brass Tip PART #	A	B	C	D	E	F	G	H	J
LOW PROFILE	TC- 1	TC- 1-BT	5/8	1	2	3/4	1/16	5/16-18	1/8	1/2	5/16-18
	TC- 2	TC- 2-BT	5/8	1	2-1/2	1-1/4	1/16	5/16-18	1/8	1/2	5/16-18
	TC- 3	TC- 3-BT	5/8	1	3	1-3/4	1/16	5/16-18	1/8	1/2	5/16-18
HIGH PROFILE	TC- 4	TC- 4-BT	5/8	1	2	3/4	1/16	5/16-18	5/8	1/2	5/16-18
	TC- 5	TC- 5-BT	5/8	1	2-1/2	1-1/4	1/16	5/16-18	5/8	1/2	5/16-18
	TC- 6	TC- 6-BT	5/8	1	3	1-3/4	1/16	5/16-18	5/8	1/2	5/16-18
LOW PROFILE	TC- 7	TC- 7-BT	7/8	1-1/2	4-1/16	2	1/8	1/2-13	1/4	13/16	1/2-13
	TC- 8	TC- 8-BT	7/8	1-1/2	5-1/2	2-3/4	1/2	1/2-13	1/4	13/16	1/2-13
	TC- 9	TC- 9-BT	7/8	1-1/2	7-7/16	3-3/4	1	1/2-13	1/4	13/16	1/2-13
HIGH PROFILE	TC-10	TC-10-BT	7/8	1-1/2	4-1/16	2	1/8	1/2-13	7/8	13/16	1/2-13
	TC-11	TC-11-BT	7/8	1-1/2	5-1/2	2-3/4	1/2	1/2-13	7/8	13/16	1/2-13
	TC-12	TC-12-BT	7/8	1-1/2	7-7/16	3-3/4	1	1/2-13	7/8	13/16	1/2-13

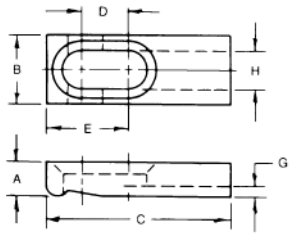
Stainless Steel Clamp Straps



▶ Made from 300 series stainless steel

PART #	A	B	C	D	E	F	G	H	J
1503	1/4	1/2	1-1/2	5/16	5/8	5/64	10-32	7/32	11/16
1504	1/4	1/2	1-3/4	7/16	3/4	5/64	10-32	7/32	13/16
1505	1/4	1/2	2	9/16	7/8	5/64	10-32	7/32	15/16
1628	5/16	5/8	1-3/4	3/8	3/4	3/32	1/4-20	9/32	3/4
1629	5/16	5/8	2	1/2	7/8	3/32	1/4-20	9/32	7/8
1630	5/16	5/8	2-1/2	11/16	1-1/16	3/32	1/4-20	9/32	1-3/16
1753	3/8	3/4	2	1/2	7/8	1/8	5/16-18	11/32	13/16
1754	3/8	3/4	2-1/2	3/4	1-1/8	1/8	5/16-18	11/32	1-1/16
1755	3/8	3/4	3	7/8	1-5/16	1/8	5/16-18	11/32	1-3/8
1878	1/2	7/8	3	3/4	1-5/16	1/8	3/8-16	13/32	1-5/16
1879	1/2	7/8	3-1/2	1	1-1/2	1/8	3/8-16	13/32	1-5/8
1880	1/2	7/8	4	1-1/8	1-5/8	1/8	3/8-16	13/32	2

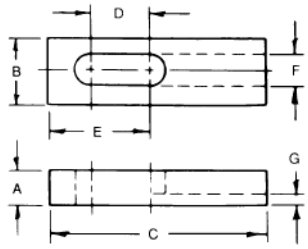
Stainless Steel Clamp Straps



▶ Made from 300 series stainless steel

PART #	A	B	C	D	E	F	G	H
1500	1/4	1/2	1-1/2	5/16	5/8	5/64	3/32	7/32
1501	1/4	1/2	1-3/4	7/16	3/4	5/64	3/32	7/32
1502	1/4	1/2	2	9/16	7/8	5/64	3/32	7/32
1625	5/16	5/8	1-3/4	3/8	3/4	3/32	1/8	9/32
1626	5/16	5/8	2	1/2	7/8	3/32	1/8	9/32
1627	5/16	5/8	2-1/2	11/16	1-1/16	3/32	1/8	9/32
1750	3/8	3/4	2	1/2	7/8	1/8	1/8	11/32
1751	3/8	3/4	2-1/2	3/4	1-1/8	1/8	1/8	11/32
1752	3/8	3/4	3	7/8	1-5/16	1/8	1/8	11/32
1875	1/2	7/8	3	3/4	1-5/16	1/8	1/8	13/32
1876	1/2	7/8	3-1/2	1	1-1/2	1/8	1/8	13/32
1877	1/2	7/8	4	1-1/8	1-5/8	1/8	1/8	13/32

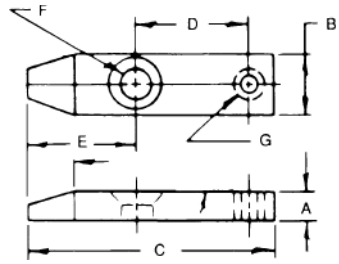
Stainless Steel Clamp Straps



▶ Made from 300 series stainless steel

PART #	A	B	C	D	E	F	G
1506	3/16	1/2	1-1/4	5/16	9/16	7/32	3/32
1507	3/16	1/2	1-1/2	3/8	5/8	7/32	3/32
1508	3/16	1/2	1-3/4	1/2	3/4	7/32	3/32
1509	3/16	1/2	2	5/8	7/8	7/32	3/32
1631	1/4	5/8	1-1/2	3/8	5/8	9/32	1/8
1632	1/4	5/8	1-3/4	1/2	3/4	9/32	1/8
1633	1/4	5/8	2	5/8	7/8	9/32	1/8
1634	5/16	5/8	2	9/16	7/8	9/32	1/8
1635	5/16	5/8	2-1/2	13/16	1-1/8	9/32	1/8
1756	3/8	3/4	2	9/16	15/16	11/32	1/8
1757	3/8	3/4	2-1/2	3/4	1-1/8	11/32	1/8
1881	1/2	7/8	3	1	1-3/8	13/32	1/8
1882	1/2	7/8	3-1/2	1-3/16	1-9/16	13/32	1/8

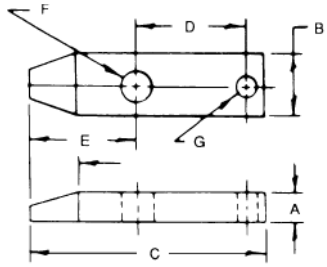
Stainless Steel Clamp Straps



► Made from 300 series stainless steel

PART #	A	B	C	D	E	F	G	H
1513	1/4	1/2	1-1/2	11/16	5/8	7/32	#10-32	5/64
1514	1/4	1/2	2	15/16	7/8	9/32	1/4-20	3/32
1515	5/16	1/2	2-1/2	1-1/8	1-1/8	9/32	1/4-20	3/32

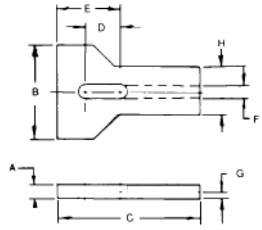
Stainless Steel Clamp Straps



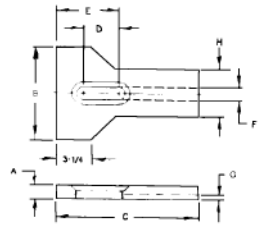
► Made from 300 series stainless steel

PART #	A	B	C	D	E	F	G
1510	1/4	1/2	1-1/2	11/16	5/8	7/32	.1875
1511	1/4	1/2	2	15/16	7/8	9/32	+.001
1512	5/16	1/2	2-1/2	1-1/8	1-1/8	9/32	–.000

Stainless Steel Clamp Straps



1125, 1126, 1127



1128, 1129, 1130

► Made from 300 series stainless steel

PART #	A	B	C	D	E	F	G	H
1125	1/4	1-1/4	2-3/4	5/8	1-1/8	9/32	3/32	3/4
1126	5/16	1-1/2	2-3/4	5/8	1-1/8	9/32	3/32	3/4
1127	5/16	2	3	3/4	1-3/8	9/32	1/8	1
1128	1/4	1-1/4	2-3/4	5/8	1-1/8	9/32	3/32	3/4
1129	5/16	1-1/2	2-3/4	5/8	1-1/8	9/32	3/32	3/4
1130	5/16	2	3	3/4	1-3/8	9/32	1/8	1

Step Clamps

PART #	Bolt Size	Length	Width	Thickness
STC-32	5/16 or 3/8	2-1/2	1"	1/2
STC-34	5/16 or 3/8	4"	1"	5/8
STC-36	5/16 or 3/8	6"	1-1/8	3/4
STC-42	1/2	2-1/2	1-1/8	1/2
STC-44	1/2	4"	1-1/4	3/4
STC-46	1/2	6"	1-1/4	7/8
STC-52	5/8	2-1/2	1-1/4	5/8
STC-54	5/8	4"	1-1/2	3/4
STC-56	5/8	6"	1-1/2	7/8
STC-64	3/4	4"	1-1/2	3/4
STC-66	3/4	6"	1-1/2	1"
STC-68	3/4	8"	1-3/4	1-1/8
STC-76	7/8 or 1"	6"	2"	1-1/4
STC-78	7/8 or 1"	8"	2"	1-3/8
STC-80	7/8 or 1"	10"	2"	1-1/2

- ▶ Heat treated steel, black oxide finish
- ▶ Machined from carbon steel
- ▶ Used in conjunction with step blocks to allow for quicker set-ups. Also eliminates the use of shims.

Step Blocks

STEEL: Heat Treated Steel/Black Oxide Finish

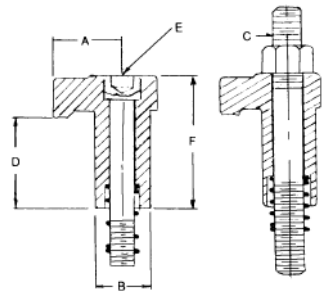
PART #	Capacity of Full Block	Height of 1/2 Block
STANDARD BLOCKS 1" WIDE		
STB-1S	3/4 to 1-1/2	1-1/8
STB-2S	1-1/8 to 2-1/2	1-3/4
STB-3S	2-1/2 to 6"	3-7/8
HEAVY DUTY BLOCKS 1-1/2" WIDE		
STB-4S	1-1/2 to 3-3/4	2-1/2
STB-5S	2-1/2 to 6"	3-7/8
STB-6S	3-1/2 to 9"	5-1/2
DOUBLE DUTY BLOCKS 2" WIDE		
STB-7S	1-1/2 to 3-3/4	2-1/2
STB-8S	2-1/2 to 6"	3-7/8
STB-9S	3-1/2 to 9"	5-1/2

- ▶ One block consists of two pieces
- ▶ All blocks work with step strap clamps
- ▶ A great time saver for frequent set-ups
- ▶ Machined from solid bar stock

6061-T6 ALUMINUM

PART #	Capacity of Full Block	Height of 1/2 Block
STANDARD BLOCKS 1" WIDE		
STB-1A	3/4 to 1-1/2	1-1/8
STB-2A	1-1/8 to 2-1/2	1-3/4
STB-3A	2-1/2 to 6"	3-7/8
HEAVY DUTY BLOCKS 1-1/2" WIDE		
STB-4A	1-1/2 to 3-3/4	2-1/2
STB-5A	2-1/2 to 6"	3-7/8
STB-6A	3-1/2 to 9"	5-1/2

Hook Clamp Assemblies



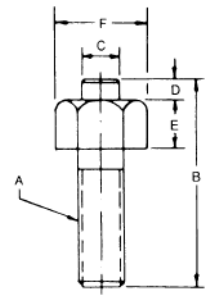
SOCKET HEAD CAP SCREW TYPE

STUD TYPE

Steel Hook PART #	Brass Tip PART #	A	B	C	Socket HD Cap Stud Size D	E	Screw Size F
SCA-5	—	11/16	5/8	5/16-18x3	7/8	—	1-3/8
SCA-500	SCA-500BT	11/16	5/8	—	7/8	5/16-18x2	1-3/8
SCA-7	——	1	7/8	1/2-13x4	1-3/4	—	2-1/4
SCA-700	SCA-700BT	1	7/8	—	1-3/4	3/8-16x3-3/8	2-1/4
SCA-10	—	1-7/16	1-1/8	5/8-11x5-1/2	2	—	2-3/4
SCA-1000	SCA-1000BT	1-7/16	1-1/8	—	2	1/2-13x3-1/2	2-3/4

Clamp Rests

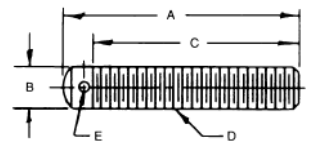
- ► Case hardened, black oxide finish
- ► Jam nut is furnished with each clamp rest
- ► Used on clamp assemblies to support clamping device



PART #	Thread A	B	C	D	E	Hex F
CR-00	1/4-20	1-1/4	5/32	1/8	1/4	7/16
CR-01	5/16-18	1-13/16	15/64	11/64	5/16	9/16
CR-02	5/16-18	3-1/4	15/64	11/64	5/16	9/16
CR-0	3/8-16	2-1/4	11/32	1/4	3/8	5/8
CR-03	3/8-16	3-7/8	11/32	1/4	3/8	5/8
CR-1	1/2-13	2-3/8	11/32	1/4	1/2	7/8
CR-10	1/2-13	3-7/8	11/32	1/4	1/2	7/8
CR-2	5/8-11	2-5/8	15/32	1/4	5/8	1-1/16
CR-20	5/8-11	3-7/8	15/32	1/4	5/8	1-1/16
CR-3	3/4-10	2-3/4	15/32	1/4	3/4	1-1/4
CR-30	3/4-10	3-7/8	15/32	1/4	3/4	1-1/4

Stainless Steel Adjustable Clamp Rests

- ► Made from 300 series stainless steel



PART #	A	B	C	D	E
6204	3/4	.190	1/2	#10-32	1/16
6205	1	.190	3/4	#10-32	1/16
6206	1-1/4	.190	1	#10-32	1/16
6207	1-1/2	.190	1-1/4	#10-32	1/16
6256	1	1/4	11/16	1/4-20	5/64
6257	1-1/4	1/4	15/16	1/4-20	5/64
6258	1-1/2	1/4	1-3/16	1/4-20	5/64
6259	1-3/4	1/4	1-7/16	1/4-20	5/64
6318	1-1/8	5/16	7/8	5/16-18	3/32
6319	1-3/8	5/16	1-1/8	5/16-18	3/32
6320	1-5/8	5/16	1-3/8	5/16-18	3/32
6321	1-7/8	5/16	1-5/8	5/16-18	3/32
6381	1-1/8	3/8	7/8	3/8-16	1/8
6382	1-5/8	3/8	1-3/8	3/8-16	1/8
6383	2-1/8	3/8	1-7/8	3/8-16	1/8
6384	2-5/8	3/8	2-3/8	3/8-16	1/8
6385	3-1/8	3/8	2-7/8	3/8-16	1/8

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