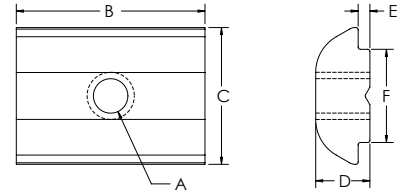


# B-Series Fasteners

## ROLL IN TNUT



- Self-aligning T-nut
- Reduces assembly time
- Easy to drop in slot

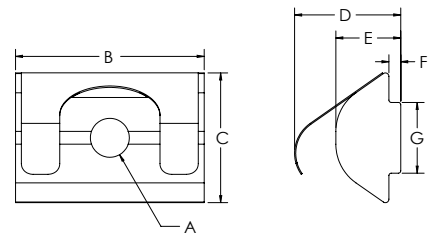


ITEM#	FINISH	SERIES	A	B	C	D	E	F
671068	Zinc Plated Steel	30	M4	16mm	11.6mm	4.6mm	1mm	7.9mm
671069	Zinc Plated Steel	30	M5	16mm	11.6mm	4.6mm	1mm	7.9mm
671070	Zinc Plated Steel	30	M6	16mm	11.6mm	4.6mm	1mm	7.9mm
671071	Zinc Plated Steel	30	M8	16mm	11.6mm	4.6mm	1mm	7.9mm
671064	Zinc Plated Steel	45	M4	19mm	14mm	5.2mm	1.5mm	9.9mm
671065	Zinc Plated Steel	45	M5	19mm	14mm	5.2mm	1.5mm	9.9mm
671066	Zinc Plated Steel	45	M6	19mm	14mm	5.2mm	1.5mm	9.9mm
671067	Zinc Plated Steel	45	M8	19mm	14mm	5.2mm	1.5mm	9.9mm
671317	Zinc Plated Steel	45	10-32	19mm	14mm	5.2mm	1.5mm	9.9mm
671315	Zinc Plated Steel	45	1/4-20	19mm	14mm	5.2mm	1.5mm	9.9mm

## ROLL IN TNUT WITH SPRING LEAF



- Self-aligning T-nut
- Reduces assembly time
- Easy to drop in slot
- Spring leaf holds T-nut in vertical

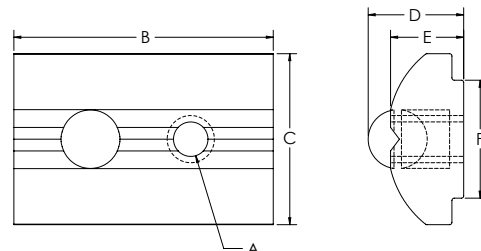


ITEM#	FINISH	SERIES	A	B	C	D	E	F	G
671324	Zinc Plated Steel	30	M4	16mm	11.6mm	9.8mm	4.6mm	1mm	7.9mm
671325	Zinc Plated Steel	30	M5	16mm	11.6mm	9.8mm	4.6mm	1mm	7.9mm
671326	Zinc Plated Steel	30	M6	16mm	11.6mm	9.8mm	4.6mm	1mm	7.9mm
671327	Zinc Plated Steel	30	M8	16mm	11.6mm	9.8mm	4.6mm	1mm	7.9mm

## ROLL IN TNUT WITH BALL BEARING



- Self-aligning T-nut
- Reduces assembly time
- Easy to drop in slot
- Ball bearing holds T-nut in vertical

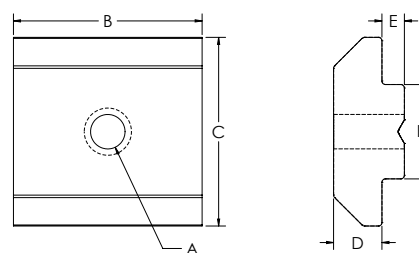


ITEM#	FINISH	SERIES	A	B	C	D	E	F
671060	Zinc Plated Steel	45	M4	22mm	14.5mm	7.1mm	6.2mm	10mm
671061	Zinc Plated Steel	45	M5	22mm	14.5mm	7.1mm	6.2mm	10mm
671062	Zinc Plated Steel	45	M6	22mm	14.5mm	7.1mm	6.2mm	10mm
671063	Zinc Plated Steel	45	M8	22mm	14.5mm	7.1mm	6.2mm	10mm
671307	Stainless Steel	45	M4	22mm	14.5mm	7.1mm	6.2mm	10mm
671308	Stainless Steel	45	M5	22mm	14.5mm	7.1mm	6.2mm	10mm
671309	Stainless Steel	45	M6	22mm	14.5mm <td 7.1mm	6.2mm	10mm	
671310	Stainless Steel	45	M8	22mm	14.5mm	7.1mm	6.2mm	10mm

## STANDARD TNUT



- Self-aligning T-nut
- Extrusion end loading



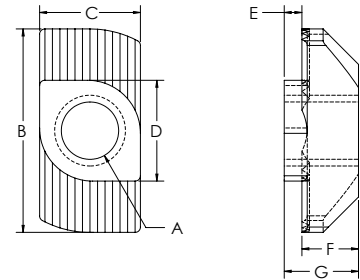
ITEM#	FINISH	SERIES	A	B	C	D	E	F
671052	Zinc Plated Steel	30	M4	16mm	16mm	6mm	1.9mm	8mm
671053	Zinc Plated Steel	30	M5	16mm	16mm	6mm	1.9mm	8mm
671054	Zinc Plated Steel	30	M6	16mm	16mm	6mm	1.9mm	8mm
671055	Zinc Plated Steel	30	M8	16mm	16mm	6mm	1.9mm	8mm
671056	Zinc Plated Steel	45	M4	20mm	19.5mm	10.6mm	5.1mm	9.8mm
671057	Zinc Plated Steel	45	M5	20mm	19.5mm	10.6mm	5.1mm	9.8mm
671058	Zinc Plated Steel	45	M6	20mm	19.5mm	10.6mm	5.1mm	9.8mm
671059	Zinc Plated Steel	45	M8	20mm	19.5mm	10.6mm	5.1mm	9.8mm

# B-Series Fasteners

## HAMMER TNUTS



- Loads from end or from side
- Ridges that penetrate anodic coat
- Strong connection



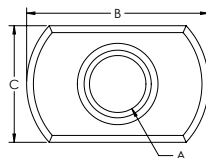
ITEM#	FINISH	SERIES	A	B	C	D	E	F	G
671332	Zinc Plated Steel	20	M4	11.5mm	5.7mm	5.7mm	1mm	3.2mm	4.2mm
671761	Zinc Plated Steel	20	10-32	11.5mm	5.7mm	5.7mm	1mm	3.2mm	4.2mm
671337	Zinc Plated Steel	30	M4	16mm	7.7mm	7.7mm	1.5mm	4.5mm	6mm
671338	Zinc Plated Steel	30	M5	16mm	7.7mm	7.7mm	1.5mm	4.5mm	6mm
671339	Zinc Plated Steel	30	M6	16mm	7.7mm	7.7mm	1.5mm	4.5mm	6mm
671336	Zinc Plated Steel	30	10-32	16mm	7.7mm	7.7mm	1.5mm	4.5mm	6mm
671334	Zinc Plated Steel	30	1/4-20	16mm	7.7mm	7.7mm	1.5mm	4.5mm	6mm
671340	Stainless Steel	30	M6	16mm	7.7mm	7.7mm	1.5mm	4.5mm	6mm
671335	Stainless Steel	30	1/4-20	16mm	7.7mm	7.7mm	1.5mm	4.5mm	6mm
671344	Zinc Plated Steel	45	M4	19mm	9.7mm	9.7mm	3mm	5.8mm	8.8mm
671347	Zinc Plated Steel	45	M5	19mm	9.7mm	9.7mm	3mm	5.8mm	8.8mm
671348	Zinc Plated Steel	45	M6	19mm	9.7mm	9.7mm	3mm	5.8mm	8.8mm
671350	Zinc Plated Steel	45	M8	19mm	9.7mm	9.7mm	3mm	5.8mm	8.8mm
671343	Zinc Plated Steel	45	10-32	19mm	9.7mm	9.7mm	3mm	5.8mm	8.8mm
671341	Zinc Plated Steel	45	1/4-20	19mm	9.7mm	9.7mm	3mm	5.8mm	8.8mm
671345	Steel	45	5/16-18	19mm	9.7mm	9.7mm	3mm	5.8mm	8.8mm
671349	Stainless Steel	45	M6	19mm	9.7mm	9.7mm	3mm	5.8mm	8.8mm
671351	Stainless Steel	45	M8	19mm	9.7mm	9.7mm	3mm	5.8mm	8.8mm
671342	Stainless Steel	45	1/4-20	19mm	9.7mm	9.7mm	3mm	5.8mm	8.8mm
671346	Stainless Steel	45	5/16-18	19mm	9.7mm	9.7mm	3mm	5.8mm	8.8mm

## ECONOMY T-NUTS

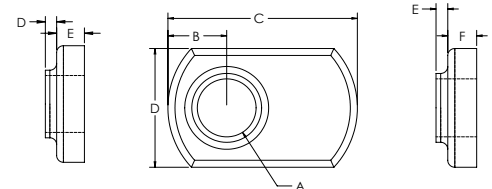


- Economical
- Extrusion end loading

CENTER THREAD



OFFSET THREAD



### CENTER THREAD

ITEM#	FINISH	SERIES	A	B	C	D	E
682888	Bright Zinc	20	M5 x .8	16.00mm	9.60mm	0.80mm	2.40mm
651445	Black Zinc	45	M8 x 1.25	38.00mm	16.00mm	2.00mm	3.60mm

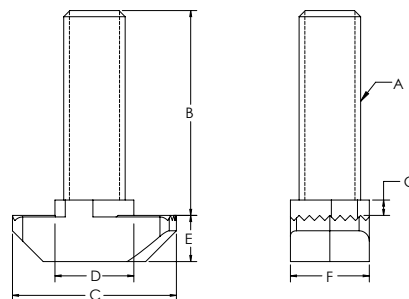
### OFFSET THREAD

ITEM#	FINISH	SERIES	A	B	C	D	E	F
651366	Bright Zinc	30	M6 x 1.0	6.35mm	20.57mm	12.95mm	1.27mm	3.05mm
651367	Bright Zinc	30	M8 x 1.25	7.11mm	25.40mm	16.25mm	2.03mm	3.55mm

## HAMMER HEAD SCREW



- Loads from end or from side
- Ridges that penetrate anodic coat to make strong connection



ITEM#	FINISH	SERIES	A	B	C	D	E	F	G
671352	Zinc Plated Steel	30	M6	20mm	16mm	7.7mm	4.5mm	7.7mm	3mm
671354	Zinc Plated Steel	30	M6	25mm	16mm	7.7mm	4.5mm	7.7mm	3mm
671356	Zinc Plated Steel	30	M6	30mm	16mm	7.7mm	4.5mm	7.7mm	3mm
671358	Zinc Plated Steel	30	M6	40mm	16mm	7.7mm	4.5mm	7.7mm	3mm
671360	Zinc Plated Steel	30	M6	60mm	16mm	7.7mm	4.5mm	7.7mm	3mm
671362	Zinc Plated Steel	45	M6	20mm	19mm	9.7mm	5.8mm	9.7mm	3mm
671364	Zinc Plated Steel	45	M6	25mm	19mm	9.7mm	5.8mm	9.7mm	3mm
671366	Zinc Plated Steel	45	M6	30mm	19mm	9.7mm	5.8mm	9.7mm	3mm
671368	Zinc Plated Steel	45	M6	40mm	19mm	9.7mm	5.8mm	9.7mm	3mm
671370	Zinc Plated Steel	45	M6	60mm	19mm	9.7mm	5.8mm	9.7mm	3mm
671372	Zinc Plated Steel	45	M8	20mm	19mm	9.7mm	5.7mm	9.7mm	3mm
671374	Zinc Plated Steel	45	M8	25mm	19mm	9.7mm	5.7mm	9.7mm	3mm
671376	Zinc Plated Steel	45	M8	30mm	19mm	9.7mm	5.7mm	9.7mm	3mm
671378	Zinc Plated Steel	45	M8	40mm	19mm	9.7mm	5.7mm	9.7mm	3mm
671380	Zinc Plated Steel	45	M8	60mm	19mm	9.7mm	5.7mm	9.7mm	3mm
671363	Stainless Steel	45	M6	20mm	19mm	9.7mm	5.8mm	9.7mm	3mm
671365	Stainless Steel	45	M6	25mm	19mm	9.7mm	5.8mm	9.7mm	3mm
671367	Stainless Steel	45	M6	30mm	19mm	9.7mm	5.8mm	9.7mm	3mm
671369	Stainless Steel	45	M6	40mm	19mm	9.7mm	5.8mm	9.7mm	3mm
671371	Stainless Steel	45	M6	60mm	19mm	9.7mm	5.8mm	9.7mm	3mm
671373	Stainless Steel	45	M8	20mm	19mm	9.7mm	5.7mm	9.7mm	3mm
671375	Stainless Steel	45	M8	25mm	19mm	9.7mm	5.7mm	9.7mm	3mm
671377	Stainless Steel	45	M8	30mm	19mm	9.7mm	5.7mm	9.7mm	3mm
671379	Stainless Steel	45	M8	40mm	19mm	9.7mm	5.7mm	9.7mm	3mm
671381	Stainless Steel	45	M8	60mm	19mm	9.7mm	5.7mm	9.7mm	3mm

### HAMMER SCREW COMBINATION PARTS

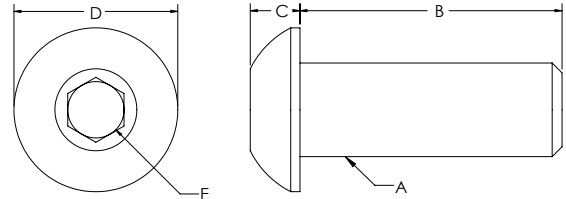
ITEM#	SERIES	BOLT ITEM	FINISH	THREAD	LENGTH	TNUT ITEM	TNUT TYPE	FINISH
651703	45	671372	Zinc Plated Steel	M8	20mm	671610	Flange Nut	Bright Zinc
651704	45	671374	Zinc Plated Steel	M8	25mm	671610	Flange Nut	Bright Zinc
651766	45	671376	Zinc Plated Steel	M8	30mm	671610	Flange Nut	Bright Zinc

# B-Series Fasteners

## BUTTON HEAD SOCKET CAP SCREW



- Grade 8 or stronger
- Alloy steel
- ANSI B18.3 rating



ITEM#	FINISH	A	B	C	D	E
651615	Black Phosphate	M5	8mm	2.75mm	9.50mm	3.44mm
651625	Bright Zinc	M5	8mm	2.75mm	9.50mm	3.44mm
699939	Black Phosphate	M5	10mm	2.75mm	9.50mm	3.44mm
699936	Black Phosphate	M6	10mm	3.15mm	10.35mm	4.58mm
681430	Stainless Steel	M6	10mm	3.15mm	10.35mm	4.58mm
651333	Black Phosphate	M6	12mm	3.15mm	10.35mm	4.58mm
683512	Stainless Steel	M6	12mm	3.15mm	10.35mm	4.58mm
651570	Black Phosphate	M6	14mm	3.15mm	10.35mm	4.58mm
683210	Stainless Steel	M6	14mm	3.15mm	10.35mm	4.58mm
651335	Black Phosphate	M6	16mm	3.15mm	10.35mm	4.58mm
659232	Stainless Steel	M6	16mm	3.15mm	10.35mm	4.58mm
651579	Black Phosphate	M6	18mm	3.15mm	10.35mm	4.58mm
683044	Stainless Steel	M6	18mm	3.15mm	10.35mm	4.58mm
651340	Black Phosphate	M6	20mm	3.15mm	10.35mm	4.58mm
651661	Bright Zinc	M6	20mm	3.15mm	10.35mm	4.58mm
683163	Stainless Steel	M6	20mm	3.15mm	10.35mm	4.58mm
651341	Black Phosphate	M6	25mm	3.15mm	10.35mm	4.58mm
651343	Black Phosphate	M8	12mm	4.25mm	13.75mm	5.72mm
651580	Black Phosphate	M8	14mm	4.25mm	13.75mm	5.72mm
651345	Black Phosphate	M8	16mm	4.25mm	13.75mm	5.72mm
681883	Stainless Steel	M8	16mm	4.25mm	13.75mm	5.72mm
651581	Black Phosphate	M8	18mm	4.25mm	13.75mm	5.72mm
683164	Stainless Steel	M8	18mm	4.25mm	13.75mm	5.72mm
651347	Black Phosphate	M8	20mm	4.25mm	13.75mm	5.72mm
659929	Stainless Steel	M8	20mm	4.25mm	13.375mm	5.72mm
651351	Black Phosphate	M8	25mm	4.25mm	13.75mm	5.72mm

## BUTTON HEAD SOCKET CAP SCREW COMBINATION PARTS

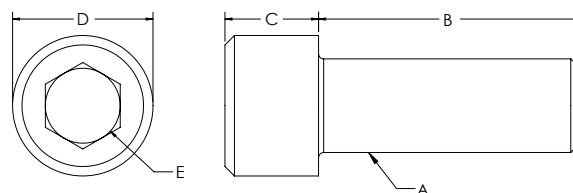
ITEM#	SERIES	BOLT ITEM	FINISH	THREAD	LENGTH	TNUT ITEM	TNUT TYPE	FINISH	WASHER ITEM
651750	30	699938	Black Phosphate	M5	14mm	671338	Hammer Nut	Bright Zinc	--
651783	30	699938	Black Phosphate	M5	14mm	671325	Drop-In	Bright Zinc	--
651706	30	651333	Black Phosphate	M6	12mm	671339	Hammer Nut	Bright Zinc	--
651757	30	651343	Black Phosphate	M6	12mm	671055	Self-Aligning	Bright Zinc	--
651803	30	683512	Stainless Steel	M6	12mm	671340	Hammer Nut	Bright Zinc	--
651747	30	651335	Black Phosphate	M6	16mm	671339	Hammer Nut	Bright Zinc	--
651751	45	699937	Black Phosphate	M5	16mm	671347	Hammer Nut	Bright Zinc	--
651784	45	699133	Black Phosphate	M5	18mm	671347	Hammer Nut	Bright Zinc	--

651753	45	651335	Black Phosphate	M6	16mm	671348	Hammer Nut	Bright Zinc	--
651707	45	651345	Black Phosphate	M6	16mm	671350	Hammer Nut	Bright Zinc	--
651748	45	651579	Black Phosphate	M6	18mm	671348	Hammer Nut	Bright Zinc	--
651749	45	651340	Black Phosphate	M6	20mm	671339	Hammer Nut	Bright Zinc	--
651804	45	681883	Stainless Steel	M8	16mm	671351	Hammer Nut	Bright Zinc	--
651708	45	651581	Black Phosphate	M8	18mm	671350	Hammer Nut	Bright Zinc	--
651805	45	683164	Stainless Steel	M8	18mm	671351	Hammer Nut	Bright Zinc	--

## SOCKET HEAD CAP SCREW



- Grade 8 or stronger
- Alloy steel
- ANSI B18.3 rating



ITEM#	FINISH	A	B	C	D	E
699933	Black Phosphate	M5	16mm	4.91mm	8.33mm	4.58mm
699932	Black Phosphate	M6	10mm	5.85mm	10.00mm	5.72mm
651332	Black Phosphate	M6	12mm	5.85mm	10.00mm	5.72mm
651546	Black Phosphate	M6	14mm	5.85mm	10.00mm	5.72mm
658467	Stainless Steel	M6	14mm	5.85mm	10.00mm	5.72mm
651334	Black Phosphate	M6	16mm	5.85mm	10.00mm	5.72mm
680015	Stainless Steel	M6	16mm	5.85mm	10.00mm	5.72mm
651573	Black Phosphate	M6	18mm	5.85mm	10.00mm	5.72mm
683159	Stainless Steel	M6	18mm	5.85mm	10.00mm	5.72mm
651337	Black Phosphate	M6	20mm	5.85mm	10.00mm	5.72mm
683162	Stainless Steel	M6	20mm	5.85mm	10.00mm	5.72mm
651338	Black Phosphate	M6	25mm	5.85mm	10.00mm	5.72mm
658592	Black Phosphate	M6	35mm	5.85mm	10.00mm	5.72mm
651342	Black Phosphate	M8	12mm	7.82mm	13.10mm	6.86mm
651575	Black Phosphate	M8	14mm	7.82mm	13.10mm	6.86mm
651344	Black Phosphate	M8	16mm	7.82mm	13.10mm	6.86mm
683160	Stainless Steel	M8	16mm	7.82mm	13.10mm	6.86mm
651577	Black Phosphate	M8	18mm	7.82mm	13.10mm	6.86mm
683161	Stainless Steel	M8	18mm	7.82mm	13.10mm	6.86mm
651346	Black Phosphate	M8	20mm	7.82mm	13.10mm	6.86mm
681379	Stainless Steel	M8	20mm	7.82mm	13.10mm	6.86mm
651350	Black Phosphate	M8	25mm	7.82mm	13.10mm	6.86mm
651616	Black Phosphate	M8	30mm	7.82mm	13.10mm	6.86mm
651354	Bright Zinc	M8	30mm	7.82mm	13.10mm	6.86mm
682660	Black Phosphate	M8	35mm	7.82mm	13.10mm	6.86mm
651542	Black Phosphate	M8	40mm	7.82mm	13.10mm	6.86mm
651562	Black Phosphate	M8	45mm	7.82mm	13.10mm	6.86mm
651553	Black Phosphate	M8	50mm	7.82mm	13.10mm	6.86mm

# B-Series Fasteners

651563	Black Phosphate	M8	60mm	7.82mm	13.10mm	6.86mm
651564	Black Phosphate	M8	80mm	7.82mm	13.10mm	6.86mm
651552	Black Phosphate	M8	90mm	7.82mm	13.10mm	6.00mm
651541	Black Phosphate	M10	40mm	9.82mm	13.10mm	8.10mm

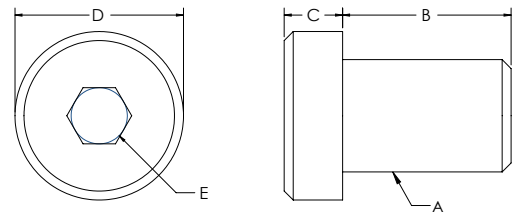
## SOCKET HEAD SOCKET CAP SCREW COMBINATION PARTS

ITEM#	SERIES	BOLT ITEM	FINISH	THREAD	LENGTH	TNUT ITEM	TNUT TYPE	FINISH	WASHER ITEM
651701	20	680748	Black Phosphate	M4	8mm	671332	Hammer Nut	Bright Zinc	--
651754	30	680748	Black Phosphate	M4	8mm	671337	Hammer Nut	Bright Zinc	--
651761	30	699932	Black Phosphate	M6	10mm	671339	Hammer Nut	Bright Zinc	--
651744	30	651546	Black Phosphate	M6	14mm	671339	Hammer Nut	Bright Zinc	--
651702	30	651546	Black Phosphate	M6	14mm	671054	Self-Aligning	Bright Zinc	--
651762	30	651334	Black Phosphate	M6	16mm	671339	Hammer Nut	Bright Zinc	--
651759	30	651342	Black Phosphate	M8	12mm	671055	Self-Aligning	Bright Zinc	--
651763	30	651575	Black Phosphate	M8	14mm	671055	Self-Aligning	Bright Zinc	--
651755	45	651586	Black Phosphate	M4	12mm	671344	Hammer Nut	Bright Zinc	--
651758	45	651332	Black Phosphate	M6	12mm	671348	Hammer Nut	Bright Zinc	--
651791	45	651546	Black Phosphate	M6	14mm	671348	Hammer Nut	Bright Zinc	--
651745	45	651334	Black Phosphate	M6	16mm	671348	Hammer Nut	Bright Zinc	--
651746	45	651573	Black Phosphate	M6	18mm	671348	Hammer Nut	Bright Zinc	--
651743	45	651344	Black Phosphate	M8	16mm	671350	Hammer Nut	Bright Zinc	--
651764	45	651344	Black Phosphate	M8	16mm	671059	Self-Aligning	Bright Zinc	--
651705	45	651346	Black Phosphate	M8	20mm	671059	Self-Aligning	Bright Zinc	--

## LOWHEAD SOCKET CAP SCREW



- Grade 8 or stronger
- Alloy steel
- ANSI B18.3 rating

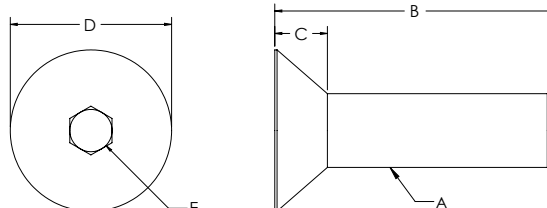


ITEM#	FINISH	A	B	C	D	E
683074	Stainless Steel	M8	25.00mm	5.00mm	13.00mm	5mm
682961	Black Phosphate	M8	30.00mm	4.93mm	12.90mm	5mm

## FLATHEAD SOCKET CAP SCREW



- Grade 8 or stronger
- Alloy steel
- ANSI B18.3 rating



ITEM#	FINISH	A	B	C	D	E
651680	Black Phosphate	M4	8mm	2.20mm	8.00mm	2.5mm
651582	Black Phosphate	M5	20mm	3.00mm	9.70mm	3mm
651515	Black Phosphate	M6	12mm	3.72mm	11.78mm	4mm
651571	Black Phosphate	M6	14mm	3.72mm	11.78mm	4mm
651516	Black Phosphate	M6	16mm	3.72mm	11.78mm	4mm
651572	Black Phosphate	M6	18mm	3.72mm	11.78mm	4mm
651549	Black Phosphate	M6	20mm	3.72mm	11.78mm	4mm
683581	Black Phosphate	M6	22mm	3.72mm	11.78mm	4mm
651578	Black Phosphate	M8	12mm	4.96mm	15.66mm	5mm
651574	Black Phosphate	M8	14mm	4.96mm	15.66mm	5mm
651517	Black Phosphate	M8	16mm	4.96mm	15.66mm	5mm
651576	Black Phosphate	M8	18mm	4.96mm	15.85mm	5mm
651518	Bright Zinc	M8	20mm	4.96mm	15.85mm	5mm

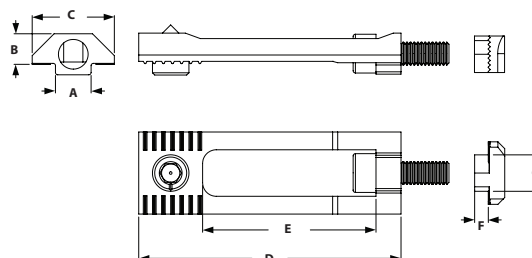
### FLAT HEAD SOCKET CAP SCREW COMBINATION PARTS

ITEM#	SERIES	BOLT ITEM	FINISH	THREAD	LENGTH	TNUT ITEM	TNUT TYPE	FINISH	WASHER ITEM
651728	30	682924	Black Phosphate	M5	16mm	671338	Hammer Nut	Bright Zinc	--
651789	30	651515	Black Phosphate	M6	12mm	671339	Hammer Nut	Bright Zinc	--
651739	30	651571	Black Phosphate	M6	14mm	671339	Hammer Nut	Bright Zinc	--
651760	45	651582	Black Phosphate	M5	20mm	671347	Hammer Nut	Bright Zinc	--
651790	45	651515	Black Phosphate	M6	12mm	671348	Hammer Nut	Bright Zinc	--
651740	45	651572	Black Phosphate	M6	18mm	671348	Hammer Nut	Bright Zinc	--
651742	45	651549	Black Phosphate	M6	20mm	671348	Hammer Nut	Bright Zinc	--
651792	45	651576	Black Phosphate	M8	18mm	671350	Hammer Nut	Bright Zinc	--

## MILLING CONNECTOR



- For fast connection of two tslot profiles, zinc plated
- Requires no machining



ITEM#	FINISH	SERIES	A	B	C	D	E	F	G
671606	Zinc Plated Steel	30	16mm	6.3mm	8mm	57.5mm	38mm	1.5mm	8mm
671607	Zinc Plated Steel	45	9.9mm	7.1mm	19.05mm	59mm	38mm	1.5mm	9.9mm

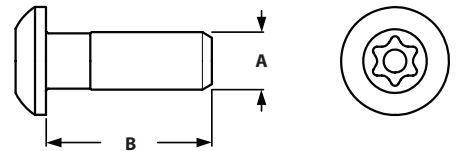


# B-Series Fasteners

## SELF TAPPING SCREW



- No thread cutter necessary
- Special form of head of the screw and self tapping thread
- Connects two profiles, access machining required for tightening
- See page 478 for machining

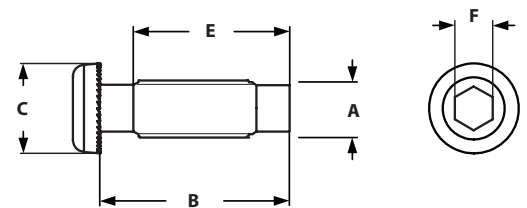


ITEM#	FINISH	SERIES	SOCKET	A	B
671114	Zinc Plated Steel	30/45	T40	S8	25mm
671115	Zinc Plated Steel	45	T50	S12	30mm

## SELF TAPPING SCREW



- No thread cutter necessary
- Special form of head of the screw and self tapping thread
- Connects two profiles, access machining required for tightening
- See page 478 for machining

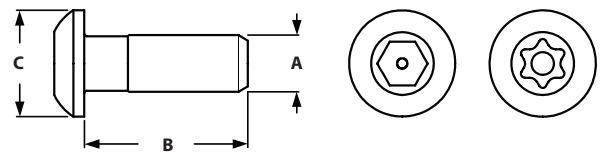


ITEM#	FINISH	SERIES	SOCKET	A	B	C	E	F
671646	Zinc Plated Steel	45	Hex	S12	40mm	19mm	26mm	8mm

## CONNECTION SCREW



- Connects two profiles, access required for tightening
- See page 478 for machining

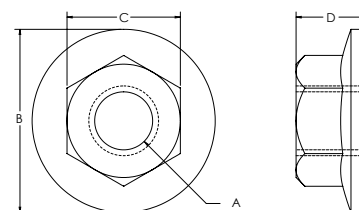


ITEM#	FINISH	SERIES	SOCKET	A	B	C
671112	Zinc Plated Steel	45	Hex	M12	30mm	19mm
671113	Zinc Plated Steel	45	T50	M12	30mm	19mm

## FLANGED NUT

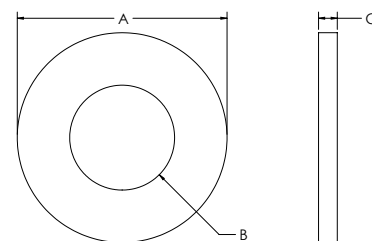


◦ To be used in conjunction with hammer head screw



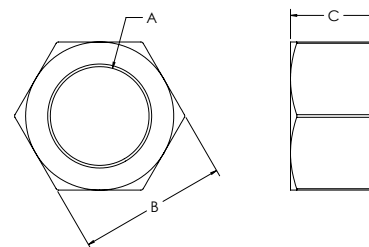
ITEM#	FINISH	A	B	C	D
671682	Zinc Plated Steel	M6	14mm	10mm	6mm
671610	Zinc Plated Steel	M8	21mm	13mm	8mm

## WASHERS



ITEM#	FINISH	TYPE	A	B	C
651550	Bright Zinc	M5	10.00mm	5.20mm	1.00mm
651388	Bright Zinc	M6	11.80mm	6.50mm	1.60mm
651387	Black Zinc	M8	15.70mm	8.50mm	1.75mm
681813	Bright Zinc	M10	19.75mm	10.60mm	2.00mm

## HEX NUTS



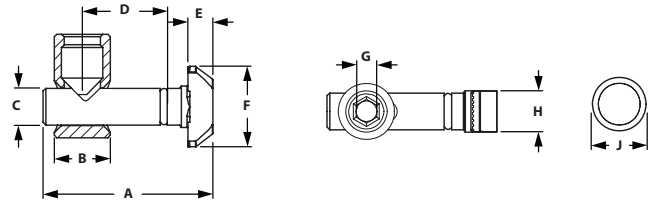
ITEM#	FINISH	A	B	C
651352	Black Zinc	M6	9.80mm	4.80mm
651353	Black Zinc	M8	12.80mm	6.30mm
680597	Bright Zinc	M12	18.80mm	9.80mm

# B-Series Fasteners

## CENTRAL CONNECTORS

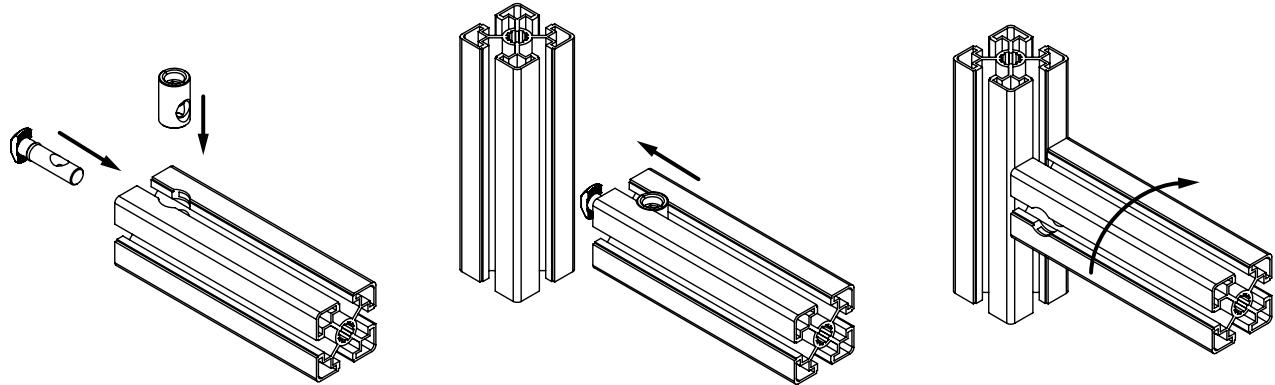


- Connect aluminum profiles at right angles
- Through hole must be drilled on one of the profiles to provide access to tightening screw
- See page 470 for machining

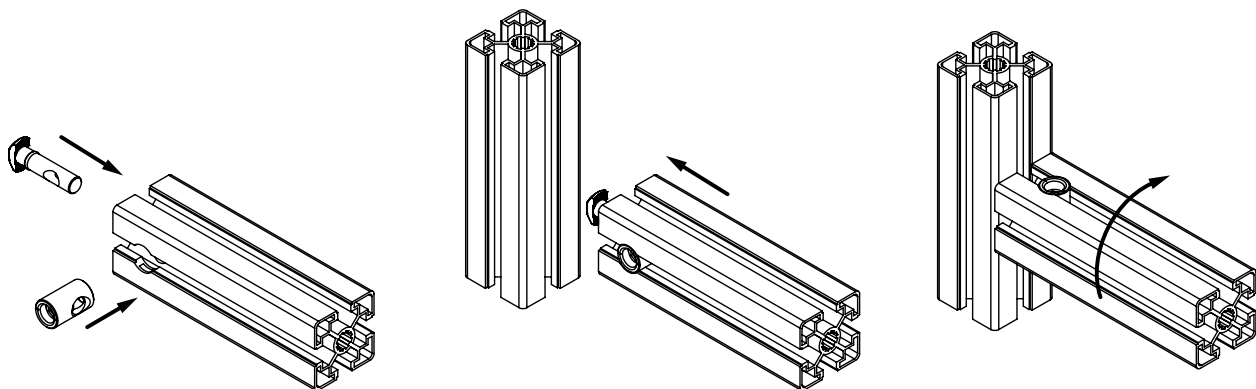


ITEM#	FINISH	SERIES	DEGREE	A	B	C	D	E	F	G	H	J
659893	Zinc Plated Steel	30	0°	33 mm	11 mm	7.1 mm	18 mm	4.8 mm	15.5 mm	4 mm	8 mm	11 mm
682994	Zinc Plated Steel	30	90°	33 mm	11 mm	7.1 mm	18 mm	4.8 mm	15.5 mm	4 mm	8 mm	11 mm
659730	Zinc Plated Steel	45	0°	45.5 mm	17 mm	9.8 mm	22.5 mm	5.5 mm	19.6 mm	6 mm	10 mm	17 mm
659669	Zinc Plated Steel	45	90°	45.5 mm	17 mm	9.8 mm	22.5 mm	5.5 mm	19.6 mm	6 mm	10 mm	17 mm

0° CENTRAL CONNECTOR



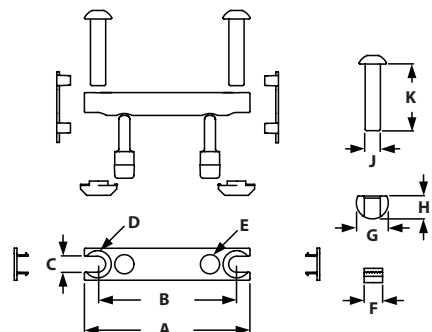
90° CENTRAL CONNECTOR



### BOLT CONNECTOR WITH CAP



- Connect aluminum profiles at right angles
- 8mm or 17mm thru hole must be drilled
- See page 470 for machining

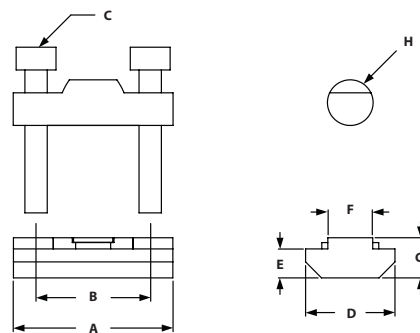


ITEM#	FINISH	SERIES	A	B	C	D	E	F	G	H	J	K
671602	Zinc Plated Steel	45	42mm	27.5mm	8.4mm	14.3mm	8.1mm	10mm	16.8mm	12mm	M8	35mm
671605	Zinc Plated Steel	45	87mm	73mm	8.4mm	14.3mm	8.1mm	10mm	16.8mm	12mm	M9	35mm

### BOLT CONNECTOR



- Connect aluminum profiles at right angles
- A 8mm thru hole must be drilled
- See page 470 for machining

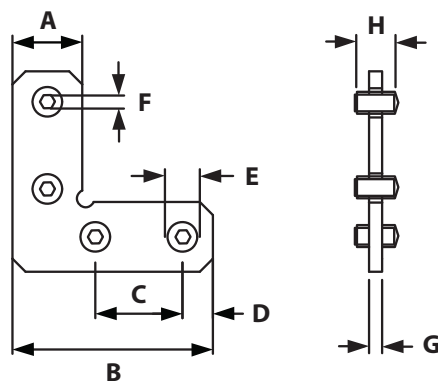


ITEM#	FINISH	SERIES	A	B	C-BOLT	D	E	F	G	H
671600	Zinc Plated Steel	30	28mm	20mm	M4 x 25mm SHCS	15.7mm	5mm	7.8mm	6.7mm	8mm

### 90° MITER CONNECTOR



- Connects two mitered profiles together at a 90 degree angle
- Requires no machining



ITEM#	FINISH	SERIES	A	B	C	D	E	F	G	H
655836	Steel	30	16mm	46mm	20mm	7mm	M8	4mm	3mm	8mm
655837	Steel	45	20.2mm	60mm	20mm	7mm	M10	5mm	3mm	10mm