

SPOT WELD NUT SINGLE TAB WITH TARGET

(BBI Family# W86)



NUT				
Part #	Size	Width	Thickness	Length
W86010	10-24	.433 / .453	.091 / .097	.797 / .827
W86012	10-32	.433 / .453	.091 / .097	.797 / .827
W86014	1/4-20	.428 / .448	.091 / .097	.923 / .953
W86016	5/16-18	.428 / .448	.122 / .128	1.110 / 1.140
W86100	M6x1.0	10.8 / 11.3	3.1 / 3.3	23.6 / 24.4

PILOT							
Part #	Size	Diameter	Height	To End	Pilot Hole	Target	Thickness
W86010	10-24	.224 / .244	.025 / .042	.168 / .208	.250	.266 / .296	.075 / .085
W86012	10-32	.224 / .244	.025 / .042	.168 / .208	.250	.266 / .296	.075 / .085
W86014	1/4-20	.271 / .307	.030 / .047	.230 / .270	.312	.266 / .296	.075 / .085
W86016	5/16-18	.349 / .369	.075 / .092	.261 / .301	.375	.328 / .358	.090 / .100
W86100	M6x1.0	6.9 / 7.4	1.1 / 1.5	6.0 / 6.8	7.6	6.7 / 7.5	1.91 / 2.06



SPOT WELD NUT SINGLE TAB

(BBI Family# W87)



NUT				
Part #	Size	Width	Thickness	Length
W87010	8-32	.433 / .453	.091 / .097	.610 / .640
W87012	10-24	.433 / .453	.091 / .097	.610 / .640
W87014	10-32	.433 / .453	.091 / .097	.610 / .640
W87016	1/4-20	.495 / .520	.122 / .128	.797 / .827
W87018	5/16-18	.620 / .655	.138 / .145	.969 / .999
W87020	3/8-16	.620 / .655	.135 / .145	1.110 / 1.140
W87100	M6x1.0	12.7 / 13.4	3.1 / 3.3	20.2 / 21.0
W87102	M8x1.25	15.7 / 16.4	3.5 / 3.7	24.6 / 25.4

PILOT					
Part #	Size	Diameter	Height	To End	Pilot Hole
W87010	8-32	.193 / .213	.025 / .042	.172 / .202	0.219
W87012	10-24	.224 / .244	.025 / .042	.172 / .202	0.250
W87014	10-32	.224 / .244	.025 / .042	.172 / .202	0.250
W87016	1/4-20	.287 / .307	.045 / .062	.235 / .265	0.312
W87018	5/16-18	.349 / .369	.075 / .092	.266 / .296	0.375
W87020	3/8-16	.428 / .448	.085 / .102	.329 / .359	0.453
W87100	M6x1.0	7.3 / 7.8	1.1 / 1.5	6.0 / 6.8	8.0
W87102	M8x1.25	8.9 / 9.4	1.9 / 2.3	6.7 / 7.5	9.6



SPOT WELD NUT DOUBLE TAB

(BBI Family# W88)



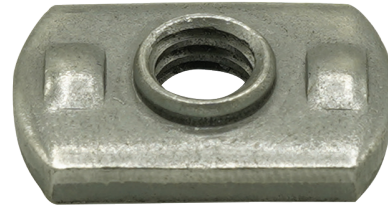
NUT				
Part #	Size	Width	Thickness	Length
W88010	8-32	.433 / .453	.091 / .097	.860 / .890
W88012	10-24	.433 / .453	.091 / .097	.860 / .890
W88014	10-32	.433 / .453	.091 / .097	.860 / .890
W88016	1/4-20	.433 / .453	.091 / .097	.985 / 1.015
W88018	1/4-20 XL	.495 / .520	.122 / .128	1.110 / 1.140
W88020	5/16-18	.620 / .655	.138 / .145	1.485 / 1.515
W88022	3/8-16	.620 / .655	.138 / .145	1.485 / 1.515
W88024	1/2-13	.797 / .827	.178 / .192	1.485 / 1.515
W88100	M6x1.0	12.7 / 13.4	3.1 / 3.3	27.6 / 28.4
W88102	M8x1.25	15.7 / 16.4	3.5 / 3.7	37.6 / 38.4
W88104	M10x1.5	15.7 / 16.4	3.5 / 3.7	37.6 / 38.4

PILOT				
Part #	Size	Diameter	Height	Pilot Hole
W88010	8-32	.193 / .213	.026 / .042	0.219
W88012	10-24	.224 / .244	.026 / .042	0.250
W88014	10-32	.224 / .244	.026 / .042	0.250
W88016	1/4-20	.272 / .307	.026 / .042	0.312
W88018	1/4-20 XL	.287 / .307	.046 / .062	0.312
W88020	5/16-18	.349 / .369	.075 / .092	0.375
W88022	3/8-16	.428 / .448	.085 / .102	0.453
W88024	1/2-13	.569 / .599	.085 / .102	0.609
W88100	M6x1.0	7.3 / 7.8	1.1 / 1.5	8.0
W88102	M8x1.25	8.9 / 9.4	1.9 / 2.3	9.6
W88104	M10x1.5	11.5 / 12.0	2.3 / 2.7	12.2



SPOT WELD NUT DUAL RIB PROJECTION

(BBI Family# W89)



NUT				
Part #	Size	Width	Thickness	Length
W89010	8-32	.370 / .390	.091 / .097	.610 / .640
W89012	10-24	.370 / .390	.091 / .097	.610 / .640
W89014	10-32	.370 / .390	.091 / .097	.610 / .640
W89016	1/4-20	.495 / .520	.122 / .128	.797 / .827
W89018	1/4-28	.495 / .520	.122 / .128	.797 / .827
W89020	5/16-18	.620 / .655	.138 / .145	.969 / .999
W89022	3/8-16	.620 / .655	.138 / .145	.969 / .999
W89024	1/2-13	.734 / .797	.184 / .190	1.110 / 1.140
W89100	M8 x 1.25	15.7 / 16.4	3.5 / 3.7	24.6 / 25.4

PILOT			
Part #	Size	Diameter	Height
W89010	8-32	.193 / .213	.026 / .042
W89012	10-24	.224 / .244	.026 / .042
W89014	10-32	.224 / .244	.026 / .042
W89016	1/4-20	.287 / .307	.046 / .062
W89018	1/4-28	.287 / .307	.046 / .062
W89020	5/16-18	.349 / .369	.076 / .092
W89022	3/8-16	.428 / .448	.086 / .102
W89024	1/2-13	.569 / .599	.086 / .102
W89100	M8 x 1.25	8.9 / 9.4	1.9 / 2.3

PROJECTION					SHEET HOLE
Part #	Size	Width	Height	Length	
W89010	8-32	.089 / .099	.010 / .014	.079 / .109	0.219
W89012	10-24	.089 / .099	.010 / .014	.079 / .109	0.250
W89014	10-32	.089 / .099	.010 / .014	.079 / .109	0.250
W89016	1/4-20	.120 / .130	.021 / .025	.110 / .140	0.312
W89018	1/4-28	.120 / .130	.021 / .025	.110 / .140	0.312
W89020	5/16-18	.120 / .130	.025 / .029	.126 / .156	0.375
W89022	3/8-16	.120 / .130	.025 / .029	.126 / .156	0.453
W89024	1/2-13	.120 / .130	.026 / .010	.141 / .171	0.609
W89100	M8 x 1.25	3.05 / 3.30	0.63 / 0.74	3.2 / 4.0	9.6



SPOT WELD NUT 4 PROJECTIONS

(BBI Family# W90)



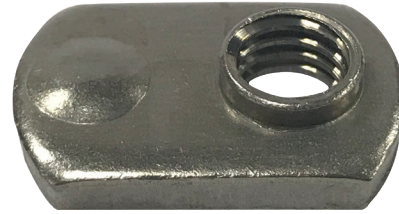
NUT				
Part #	Size	Width	Thickness	Length
W90010	8-32	.433 / .453	.091 / .097	.610 / .640
W90012	10-24	.433 / .453	.091 / .097	.610 / .640
W90014	10-32	.433 / .453	.091 / .097	.610 / .640
W90016	1/4-20	.495 / .520	.1191 / .097	.797 / .827
W90018	5/16-18	.620 / .655	.122 / .128	.969 / .999
W90020	3/8-16	.620 / .655	.122 / .128	.969 / .999
W90022	1/2-13	.734 / .797	.184 / .190	1.214 / 1.266
W90100	M8 x 1.25	15.7 / 16.5	3.1 / 3.3	24.6 / 25.4
W90102	M10 x 1.5	15.7 / 16.5	3.1 / 3.3	24.6 / 25.4

PILOT			
Part #	Size	Diameter	Height
W90010	8-32	.193 / .213	.026 / .042
W90012	10-24	.224 / .244	.026 / .042
W90014	10-32	.224 / .244	.026 / .042
W90016	1/4-20	.272 / .307	.026 / .042
W90018	5/16-18	.349 / .369	.076 / .092
W90020	3/8-16	.428 / .448	.086 / .102
W90022	1/2-13	.569 / .599	.086 / .102
W90100	M8 x 1.25	8.9 / 9.4	1.9 / 2.3
W90102	M10 x 1.5	10.9 / 11.4	2.3 / 2.7

PROJECTION				SHEET HOLE
Part #	Size	Width	Height	
W90010	8-32	.085 / .095	.013 / .017	0.219
W90012	10-24	.085 / .095	.013 / .017	0.250
W90014	10-32	.085 / .095	.013 / .017	0.250
W90016	1/4-20	.120 / .130	.018 / .022	0.312
W90018	5/16-18	.145 / .155	.025 / .035	0.375
W90020	3/8-16	.145 / .155	.025 / .035	0.453
W90022	1/2-13	.166 / .176	.030 / .040	0.609
W90100	M8 x 1.25	3.70 / 3.95	0.71 / 0.82	9.6
W90102	M10 x 1.5	3.70 / 3.95	0.71 / 0.82	12.2



SPOT WELD NUT SINGLE TAB SINGLE PROJECTION (BBI Family# W91)



NUT				
Part #	Size	Width	Thickness	Length
W91010	8-32	.433 / .453	.091 / .097	.610 / .640
W91012	10-24	.433 / .453	.091 / .097	.610 / .640
W91014	10-32	.433 / .453	.091 / .097	.610 / .640
W91016	1/4-20	.495 / .520	.122 / .128	.797 / .827
W91018	5/16-18	.620 / .655	.138 / .145	.969 / .999
W91020	3/8-16	.620 / .655	.138 / .145	1.110 / 1.14
W91100	M6 x 1.0	12.7 / 13.4	3.1 / 3.3	20.2 / 21.0
W91102	M8 x 1.25	15.7 / 16.4	3.5 / 3.7	24.6 / 25.4

PILOT			
Part #	Size	Diameter	Height
W91010	8-32	.193 / .213	.026 / .042
W91012	10-24	.224 / .244	.026 / .042
W91014	10-32	.224 / .244	.026 / .042
W91016	1/4-20	.287 / .307	.046 / .062
W91018	5/16-18	.349 / .369	.076 / .092
W91020	3/8-16	.428 / .448	.086 / .102
W91100	M6 x 1.0	7.3 / 7.8	1.1 / 1.5
W91102	M8 x 1.25	8.9 / 9.4	1.9 / 2.3

PROJECTION					SHEET HOLE
Part #	Size	Width	Height	To End	
W91010	8-32	.183 / .193	.010 / .014	.172 / .202	0.219
W91012	10-24	.183 / .193	.010 / .014	.172 / .202	0.250
W91014	10-32	.183 / .193	.010 / .014	.172 / .202	0.250
W91016	1/4-20	.214 / .224	.021 / .025	.235 / .265	0.312
W91018	5/16-18	.307 / .317	.025 / .029	.266 / .296	0.375
W91020	3/8-16	.307 / .317	.025 / .029	.329 / .359	0.453
W91100	M6 x 1.0	5.45 / 5.70	.053 / .064	6.00 / 6.80	8.0
W91102	M8 x 1.25	7.80 / 8.05	0.63 / 0.74	6.70 / 7.50	9.6



RETAINER WELD NUT

(BBI Family# W92)



NUT / RETAINER			
Part #	Nut Size	Nut Material	Retainer Material
W92010	1/4-20	Steel	Steel
W92012	5/16-18	Steel	Steel
W92014	3/8-16	Steel	Steel
W92016	1/2-13	Steel	Steel

BASE					OVERALL HEIGHT
Part #	Nut Size	Length	Width	Thickness	
W92010	1/4-20	1-3/4	9/16	.050	7/16
W92012	5/16-18	2	25/32	.050	33/64
W92014	3/8-16	2	25/32	.050	33/64
W92016	1/2-13	2-1/4	15/16	.060	33/64



HEX WELD NUT DIN 929 3 PROJECTIONS PLAIN STEEL

(BBI Family# 416)



NUT				
Part #	Thread Size	Width (mm)	Thickness (mm)	Across Corners Min.
416004	M6 x 1.0-6G	11.00	5.0	12.02
416006	M8 x 1.25-6G	14.00	6.5	15.38
416008	M10 x 1.5-6G	17.00	8.0	18.74
416011	M12 x 1.75-6G	19.00	10.0	20.91
416015	M16 x 2.0-6G	24.00	13.0	26.51

PILOT			
Part #	Thread Size	Height (mm)	Diameter (mm)
416004	M6 x 1.0-6G	0.75	8.000
416006	M8 x 1.25-6G	0.90	10.500
416008	M10 x 1.5-6G	1.15	12.500
416011	M12 x 1.75-6G	1.40	14.800
416015	M16 x 2.0-6G	1.80	18.800

PROJECTION		
Part #	Thread Size	Height (mm)
416004	M6 x 1.0-6G	0.45
416006	M8 x 1.25-6G	0.50
416008	M10 x 1.5-6G	0.65
416011	M12 x 1.75-6G	0.80
416015	M16 x 2.0-6G	1.00



HEX WELD NUT SHORT PILOT 3 PROJECTIONS 18-8 STAINLESS STEEL

(BBI Family# V07)



NUT				
Part #	Size	Width	Thickness	Across Corners Min.
V07010	1/4-20	.489 / .500	.177 / .197	0.556
V07012	5/16-18	.551 / .562	.209 / .229	0.624
V07014	3/8-16	.612 / .625	.240 / .260	0.691
V07018	1/2-13	.781 / .813	.365 / .385	0.898

PILOT			
Part #	Size	Height	Diameter
V07010	1/4-20	.035 / .045	.394 / .406
V07012	5/16-18	.035 / .045	.457 / .469
V07014	3/8-16	.045 / .055	.519 / .531
V07018	1/2-13	.055 / .065	.707 / .719

PROJECTION		
Part #	Size	Height
V07010	1/4-20	.022 / .028
V07012	5/16-18	.022 / .028
V07014	3/8-16	.027 / .033
V07018	1/2-13	.027 / .033



HEX WELD NUT SHORT PILOT 3 & 6 PROJECTIONS

(BBI Family# W83 & W85)



W83



W85

NUT					
3 Projections Part #	6 Projections Part #	Size	Width	Thickness	Across Corners Min.
W83010	W85010	1/4-20	.489 / .500	.178 / .198	0.556
W83012	W85012	5/16-18	.551 / .562	.208 / .228	0.624
W83014	W85014	3/8-16	.612 / .625	.240 / .260	0.691
W83016	W85016	7/16-14	.736 / .750	.302 / .322	0.830

PILOT				
3 Projections Part #	6 Projections Part #	Size	Height	Diameter
W83010	W85010	1/4-20	.035 / .045	.394 / .406
W83012	W85012	5/16-18	.035 / .045	.457 / .469
W83014	W85014	3/8-16	.045 / .055	.519 / .531
W83016	W85016	7/16-14	.045 / .055	.644 / .656

PROJECTION				SHEET HOLE
3 Projections Part #	6 Projections Part #	Size	Height	
W83010	W85010	1/4-20	.022 / .028	0.422
W83012	W85012	5/16-18	.022 / .028	0.484
W83014	W85014	3/8-16	.027 / .033	0.547
W83016	W85016	7/16-14	.027 / .033	0.672



METRIC HEX WELD NUT SHORT PILOT 3 & 6 PROJECTIONS

(BBI Family# W83 & W85)



W83



W85

NUT					
3 Projections Part #	6 Projections Part #	Size	Width (mm)	Thickness (mm)	Across Corners Min. (mm)
W83100	W85100	M6 x 1.0	12.73 / 13.00	5.10 / 5.60	14.38
W83102	W85102	M8 x 1.25	14.73 / 15.00	6.60 / 7.10	16.61
W83104	W85104	M10 x 1.50	17.73 / 18.00	7.70 / 8.20	20.03
W83106	W85106	M12 x 1.75	20.67 / 21.00	9.40 / 9.90	23.35

PILOT				
3 Projections Part #	6 Projections Part #	Size	Height (mm)	Diameter (mm)
W83100	W85100	M6 x 1.0	0.87 / 1.13	8.80 / 9.10
W83102	W85102	M8 x 1.25	0.87 / 1.13	10.80 / 11.10
W83104	W85104	M10 x 1.50	1.03 / 1.29	13.30 / 13.60
W83106	W85106	M12 x 1.75	1.13 / 1.39	15.80 / 16.10

PROJECTION				SHEET HOLE (mm)
3 Projections Part #	6 Projections Part #	Size	Height (mm)	
W83100	W85100	M6 x 1.0	0.36 / 0.52	9.50
W83102	W85102	M8 x 1.25	0.36 / 0.52	11.50
W83104	W85104	M10 x 1.50	0.47 / 0.63	14.00
W83106	W85106	M12 x 1.75	0.57 / 0.73	16.50



HEX WELD NUT LONG PILOT 3 & 6 PROJECTIONS

(BBI Family# W82 & W84)



W82



W84

NUT					
3 Projections Part #	6 Projections Part #	Size	Width	Thickness	Across Corners Min.
W82010	W84010	1/4-20	.489 / .500	.178 / .188	0.556
W82012	W84012	5/16-18	.551 / .562	.209 / .219	0.624
W82014	W84014	3/8-16	.612 / .625	.240 / .260	0.691
W82016	W84016	7/16-14	.736 / .750	.302 / .322	0.830
W82018	W84018	1/2-13	.781 / .812	.302 / .322	0.898

PILOT				
3 Projections Part #	6 Projections Part #	Size	Height	Diameter
W82010	W84010	1/4-20	.080 / .090	.394 / .406
W82012	W84012	5/16-18	.080 / .090	.457 / .469
W82014	W84014	3/8-16	.080 / .090	.519 / .531
W82016	W84016	7/16-14	.080 / .090	.644 / .656
W82018	W84018	1/2-13	.080 / .090	.707 / .719

PROJECTION			
3 Projections Part #	6 Projections Part #	Size	Height
W82010	W84010	1/4-20	.037 / .043
W82012	W84012	5/16-18	.037 / .043
W82014	W84014	3/8-16	.037 / .043
W82016	W84016	7/16-14	.037 / .043
W82018	W84018	1/2-13	.037 / .043



METRIC HEX WELD NUT LONG PILOT 3 & 6 PROJECTIONS

(BBI Family# W82 & W84)



W82



W84

NUT					
3 Projections Part #	6 Projections Part #	Size	Width (mm)	Thickness (mm)	Across Corners Min. (mm)
W82100	W84100	M6 x 1.0	12.73 / 13.00	5.10 / 5.60	14.38
W82102	W84102	M8 x 1.25	14.73 / 15.00	6.60 / 7.10	16.61
W82104	W84104	M10 x 1.50	17.73 / 18.00	7.70 / 8.20	20.03
W82106	W84106	M12 x 1.75	20.67 / 21.00	9.40 / 9.90	23.35

PILOT				
3 Projections Part #	6 Projections Part #	Size	Height (mm)	Diameter (mm)
W82100	W84100	M6 x 1.0	1.47 / 1.73	8.80 / 9.10
W82102	W84102	M8 x 1.25	1.67 / 1.93	10.80 / 11.10
W82104	W84104	M10 x 1.50	1.67 / 1.93	13.30 / 13.60
W82106	W84106	M12 x 1.75	1.67 / 1.93	15.80 / 16.10

PROJECTION				SHEET HOLE (mm)
3 Projections Part #	6 Projections Part #	Size	Height (mm)	
W82100	W84100	M6 x 1.0	0.72 / 0.88	9.50
W82102	W84102	M8 x 1.25	0.92 / 1.08	11.50
W82104	W84104	M10 x 1.50	0.92 / 1.08	14.00
W82106	W84106	M12 x 1.75	0.92 / 1.08	16.50

