



| BLIND BOLT ASSEMBLY | | BB301 CORE BOLT | | | | | | | | BB129 SLEEVE | | | | | BB341 EXPANDER | | | | SUGGESTED HOLE PREPARATION | | PROTRUSION AFTER INSTALLATION | | | |
|---------------------|------------------|-------------------|-----------|----------------|----------------|--------------|----------------|---------|----------------|-------------------|---------------------|--------------------|---------------------------|--------------------------|---------------------|----------------|-------------|---------------------|----------------------------|----------------|-------------------------------|-------------------------------|----------------|---------------------------|
| FIRST DASH NUMBER | NOMINAL DIAMETER | FIRST DASH NUMBER | RECESS | A DIA. | D DIA. | H | P ₁ | T (REF) | THREAD | FIRST DASH NUMBER | A ₁ DIA. | B GRIP RANGE 0-3/4 | L GRIP RANGE 1 1/16-1 1/2 | D GRIP RANGE 1 3/4-1 3/4 | D ₁ DIA. | H ₁ | DASH NUMBER | D ₂ DIA. | L (LENGTH) | THREAD | J HOLE DIA. | CORE BOLT INSTALLATION TORQUE | F ₁ | D ₂ DIA. (REF) |
| -5 | 5/32 | -5 | Phillips | .2274 .2226 | .1120 .1100 | .048 .046 | .208 | .274 | 4-40UNJC-3A | -5 | .3310 .3262 | .210 | .225 | .265 | .169 .167 | .0680 .0660 | -5 | .167 | .153 | 4-40UNJC-3B | .173 .170 | 8 10 IN. LBS. | .208 | .210 |
| -6 | 3/16 | -6 | Phillips | .2514 .2466 | .1240 .1220 | .053 .051 | .239 | .304 | 5-40UNJC-3A | -6 | .3813 .3765 | .250 | .265 | .330 | .196 .194 | .0780 .0760 | -6 | .194 | .184 | 5-40UNJC-3B | .201 .197 | 10 14 IN. LBS. | .239 | .253 |
| -8 | 1/4 | -8 | Phillips | .3304 .3256 | .1650 .1630 | .069 .067 | .316 | .397 | 8-32UNJC-3A | -8 | .5066 .5018 | .315 | .330 | .370 | .257 .255 | .1050 .1030 | -8 | .255 | .245 | 8-32UNJC-3B | .264 .258 | 20 30 IN. LBS. | .316 | .335 |
| -10 | 5/16 | -10 | Hi-Torque | .4454 .4406 | .2180 .2160 | .095 .093 | .414 | .498 | 12-28UNJF-3A | -10 | .6335 .6285 | .380 | .400 | .420 | .338 .335 | .1240 .1220 | -10 | .328 | .307 | 12-28UNJF-3B | .345 .339 | 50 80 IN. LBS. | .414 | .438 |
| -12 | 3/8 | -12 | Hi-Torque | .5066 .5018 | .2490 .2470 | .108 .106 | .485 | .567 | 1/4-28UNJF-3A | -12 | .7604 .7556 | .450 | .450 | .450 | .390 .387 | .1554 .1534 | -12 | .383 | .368 | 1/4-28UNJF-3B | .397 .391 | 125 150 IN. LBS. | .485 | .510 |
| -14 | 7/16 | -14 | Hi-Torque | .6335 .6287 | .3110 .3090 | .135 .133 | .543 | .628 | 5/16-24UNJF-3A | -14 | .8884 .8812 | .500 | — | — | .468 .465 | .1764 .1734 | -14 | .458 | .429 | 5/16-24UNJF-3B | .475 .469 | 200 IN. LBS. | .543 | .600 |
| -16 | 1/2 | -16 | Hi-Torque | .7604 .7556 | .3740 .3720 | .163 .160 | .600 | .685 | 3/8-24UNJF-3A | -16 | 1.0139 1.0068 | .550 | — | — | .530 .527 | .2030 .2000 | -16 | .521 | .491 | 3/8-24UNJF-3B | .539 .531 | 300 IN. LBS. | .600 | .662 |

BB129 SLEEVE

- GENERAL NOTES: 1. Concentricity: Hole to "D₁" diameter within .005 FIR; "D₁" diameter to head within .005 FIR.
2. "H₁" is dimensioned from maximum "D₁" diameter.

MATERIAL: 5056 aluminum alloy per QQ-A-430.

HEAT TREAT: Anodize per MIL-A-8625.

CODE: First dash number indicates nominal diameter of sleeve in 32nds. Second dash number indicates mean assembly grip length (thickness of work) in 16ths.

EXAMPLE: BB129-8-12 = 1/4 nominal diameter sleeve, 3/4 mean assembly grip length.

BB341 EXPANDER

- GENERAL NOTES: 1. Threads per MIL-S-8879.

MATERIAL: Type 431 stainless steel per Spec. MIL-S-853, Class 10.

HEAT TREAT: 125,000 psi shear minimum.

FINISH: Solid film lubricant.

CODE: Dash number indicates diameter of Blind Bolt Assembly in 32nds.

EXAMPLE: BB341-8 = 1/4 nominal diameter Blind Bolt Assembly using 8-32 expander.

BB159 BOLT ASSEMBLY

BB159 BLIND BOLT ASSEMBLY

CODE: First dash number indicates nominal diameter of Blind Bolt Assembly in 32nds. Second dash number indicates mean assembly grip length (thickness of work) in 16ths.

EXAMPLE: BB159-8-12
 — 3/4 Mean Assembly Grip Length
 — 1/4 Nominal Diameter Blind Bolt Assembly
 — Blind Bolt Assembly which includes: BB301 Core Bolt, BB129 Sleeve, BB341 Expander

Ⓛ Editorially Updated

U.S. Patent 2,677,985. Other U.S. and foreign patents pending. "Hi-Torque" trademark.

| TITLE | | | | | | |
|-----------------------------------|------|----------|------|----------|---------------|----------------|
| BLIND BOLT™ ASSEMBLY | | | | | | |
| 100° COUNTERSUNK AN509 HEAD STYLE | | | | | | |
| DRAWN | DATE | APPROVED | DATE | REVISION | DATE | DRAWING NUMBER |
| Schad | 58 | M.S. | 58 | ① | DPS 5-4-72 | BB159 |