GR-5™ Structural Drill Screws

The low-cost alternative to Elco® Dril-Flex® drill screws, GR-5 drill screws are made from alloy steel heat treated to Grade 5 specifications (RC 28-34), with a higher hardness on the drill point and lead threads, and coated with our ProCorr™ finish. This creates a drill screw that provides quick, positive drilling while preventing brittle failures (sometimes referred to as "head popping").

Specifications

Diameters: #10 - 1/4"

Points: #3 – #5 self-drilling points

Head/Drive Styles: Hex washer or phillips undercut flat

Thread Style: Type B self-tapping or UNC

Point: #3 - #5 self-drilling

Material: Alloy steel

Heat Treat:

 Load-bearing area: SAE J429 Grade 5 (ASTM A449 Type 1), RC 28-34

• Point and lead threads: RC 52 min.

Finish: ProCorr corrosion-resistant coating (1,000 hours

salt spray)

Identification: Headmark has Brynolf "b" logo within a

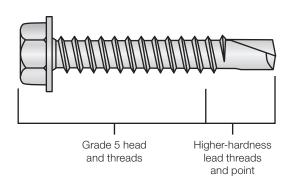
raised circle

Critical Benefit: Because the load-bearing area is heat-treated to Grade 5 specifications, the threat of brittle failures, which can occur with standard drill screws regardless of finish, is virtually eliminated.

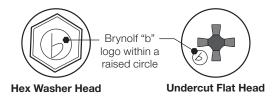
Brynolf Construction Products

- a growing family-owned fastener manufacturing business
- ISO 9001-2008 certified
- deals exclusively with distributors
- has diverse fastener manufacturing capabilities extending well beyond drilling screws
- Pat Monahan, Product Manager, has 37 years of product experience with construction fasteners

We welcome your inquiry for just about any custom-made part!



Identification







Brynolf Construction Products a division of Brynolf Manufacturing Inc.

412 18th Avenue • Rockford, IL 61104 **877-237-4554** • fax: 815.873.8898



Selection Guide

Other head styles and sizes can be produced as needed.

	B A		<u>[</u>	→ B A →	B A			
Dia Thread	#10-16			#12-14			#12-14	#12-24
Brynolf No.	AD240	AD465	AD470	AD480	AD485	AD495	AN200	AD590
Dril-Flex Ref.	EAF621	EAF621	EAF641		EAF681	EAF690	EBL215	EAF755
Nom. Length	3/4"	7/8"	1"	1"	1-3/4"			
Major Dia.	.189" – .183"			.215"209"			.215" – .209"	.208" – .215"
Minor Dia.	.141" – .136"			.164" – .157"			.164" – .157"	.177 REF.
Max. Length "A"	.750"	.890"	1.015"	1.015"	1.515"	2.015"	1.015"	1.800"
Max. Load- Bearing Area "B"	.500	.600"	.500"	1.00"	1.00"	1.50"	.500"	.800"
Head/Drive	Hex Washer	Hex Washer Hex Washer Hex Washer Hex Washer Hex Washer					Phillips Undercut Flat	Hex Washer
Point	#3	#3	#3	#4	#3	#3	#3	#5
Quantity	6000	4500	4000	2500	2500	2000	4000	2000

	B A			B A						
During of No.	1/4"-14			AD705	1/4"-20				A D 000	
Brynolf No. Dril-Flex Ref.	AD665 EAF816	AD685 EAF841	AD705 EAF846	AD765 EAF885	AD785 EAF876	AD790	AD800 EAF886	AD815 EAF890	AD830 EAF590	
Nom. Length	1"	1-1/2"	2"	1-1/8"	1-1/2"	1-3/4"	2"	2-1/2"	3-3/8"	
Major Dia.	ı	.246 – .240		1-1/0	1-1/2		_	2-1/2	3-3/0	
				.2489 – .2408						
Minor Dia.		.192 – .185	T	.186 REF.						
Max. Length "A"	1.015"	1.515"	2.015"	1.235"	1.575"		2.075"	2.575"	3.495"	
Max. Load- Bearing Area "B"	.450"	.950"	1.450"	.500"	.835"		1.335"	1.835"	2.750"	
Head/Drive	Hex Washer	Hex Washer	Hex Washer	Hex Washer	Hex Washer	Hex Washer	Hex Washer	Hex Washer	Hex Washer	
Point	#3	#3	#3	#4	#4	#5	#4	#4	#4	
Quantity	3000	2000	1500	2500	2000	1500	1500	1000	500	

b GR-5[™] Structural Drill Screws

Technical Data

Pullout Test Results - Steel

Screw	Point	Drill	Panel Thickness							
Size	Type	Cap.	18	16	14	12	1/8	3/16	1/4	5/16
10-16	3	.150	390	489	628	1575	1685			
12-14	3	.187	389	515	704	1672	2048	2895		
1/4-14	3	.187	391	525	690	1925	2224	3904	3562	4501
1/4-20	4	.312	_	520	643	1903	2542	4225	5408	6612

Shear Test Results - Steel

Screw	Point	Drill				Panel	Thickness		
Size	Type	Cap.	18-8	18-14	16-16	14-14	1/8-3/16	3/16-1/4	1/4-12 ga.
10-16	3	.150	1351	1720	1448	_	_	_	_
12-14	3	.187	1301	2120	1644	1801	_	_	_
1/4-14	3	.187	1391	2322	1664	2401	2549	_	_
1/4-20	4	.312	1341	2062	1577	2455	2820	2801	2711

Pullout Test Results - Aluminum

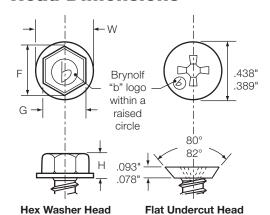
	Point	Point Drill		Panel Thickness			
Screw Size	Туре	Cap.	1/8	1/4	3/8		
10-16	3	.150	893	_	_		
12-14	3	.187	931	2276	_		
1/4-14	3	.187	1001	2412	_		
1/4-20	4	.312	891	2080	3644		

Shear Test Results - Aluminum

	Point	Drill	Panel Th	nickness	
Screw Size	Type	Cap.	1/8-1/8	1/8-1/4	
10-16	3	.150	1429	_	
12-14	3	.187	1793	2503	
1/4-14	3	.187	2002	2874	
1/4-20	4	.312	2006	2913	

NOTE: Third-party testing done by Calumet Associates - Chicago, IL; Reports No. G8290, G8291 and G8440. For more information contact Brynolf Construction Products at 877.237.4554.

Head Dimensions



Hex Washer Head Dimensions

Screw	W				à	ŀ	1
Dia.	max.	min.	F	max.	min.	max.	min.
#10	.414	.384	.340 min.	.312	3.05	.156	.144
#12	.432	.398	.340 min.	.312	3.05	.184	.172
1/4"	.520	.480	.409 min.	.375	.367	.237	.225



Manufacturing Capabilities

We offer a wide variety of high-performance products manufactured in our 40,000 square foot facility in Rockford. Illinois.

Fastener Types

- Flange bolts
- Thread-cutting screws
- Hex cap screws
- Tri-round screws
- Plastic threadforming screws
- Sheet metal screws
- SEMS screws
- Shoulder bolts
- Carriage bolts
- 12-points
- Wheel bolts
- Plow bolts
- Rivets
- Single- & multidie specials
- Self-drilling screws up to #5 point

Drive Styles

- Phillips
- Slotted
- Square
- Hex
- One-way slot
- 6-lobe
- Tamper-proof 6-lobe

Thread Styles

- Machine
- Tri-round
- Type A
- Type B
- Type AB
- Type CA
- Type 1
- Type 23
- Type 25
- Type F
- Type U
- Type SW
- Dual-spaced

Head Styles

- Pan
- Truss
- Hex flange
- Flat
- Round
- Oval
- Binder
- Round washer
- Trimmed hex
- Indented hex
- Button
- Fillister
- Hex washer
- Cheese
- 12 point
- Specials
- External 6-lobe

Materials

- Grades 2, 5, 5.1, 8, 4.8, 8.8, 9.8, 10.9
- Steel, stainless, aluminum, brass, copper, silicon bronze

Secondary Capabilities

- Saw slotting
- Shank slotting
- Trimming
- SEMS assembly
- Pointing & pinch pointing
- Shaving, grinding, drilling and tapping available

Other Services

- Stock and release
- Bar coding
- Expedited delivery

Size Ranges

Nominal Dia.	Max. Len.
M3 – #5	3/4"
#6	4"
M4 – #8	5"
#10	6"
M5 – #12	6"
M6 – 1/4"	6"
M8 – 5/16"	8"
M10 - 3/8"	8"
7/16"	8"
M12 - 1/2"	8"

We welcome your inquiry for just about any custom-made part! 877-237-4554



Made in the U.S.A.

Commitment to Quality



Brynolf Manufacturing, Inc. has implemented a quality management system which has been registered to the ISO 9001:2008 standard and works to continually improve its effectiveness.

Our most important goal is to meet our customers requirements and expectations. We are fully compliant to the Fastener Quality Act and maintain complete lot control and traceability. Our Quality Lab can offer you the following services:

- PPAP's
- First Article / ISIR's
- Certifications Upon Request



Brynolf Construction Products a division of Brynolf Manufacturing Inc.

412 18th Avenue • Rockford, IL 61104 **877-237-4554** • fax: 815.873.8898



www.brynolfconstructionproducts.com

(