

ROCK BOLT ACCESSORIES

PRODUCT GROUP	PRODUCT	PRODUCT CODE PREFIX	DATA SHEET
ROCK BOLT PLATES	Star Plate	STP	B1.1
	Turtle Plate	TDD	B1.2
	Domed Plate	D	B1.3
	Domed Plate for Friction Bolts	D/TDD	B1.4
	Flat Plate	F	B1.5
	Rib Bolt Plate	TDD	B1.6
	Multi-Hole & Slotted Flat Plate	F/FCB	B1.7
	High Angle Deflection Plate	HAD	B1.8
BUTTERFLIES	Butterfly Plate	BUTT	B2.1
DRAGONFLIES	Dragonfly Plate	DF	B3.1
ROCK BOLT FITTINGS	OZ Drive Nut	N	B4.1
	T Drive Nut	N	B4.2
	Hexagonal Nut	N	B4.3
	Dome Ball	B	B4.4
	Anti-Friction Washer	BW	B4.5
	Rock Bolt Coupling	COUP	B4.6
	Rock Bolt Extension Coupling	COUP	B4.7
	Steel Wedges	WE	B4.8
	Expansion Shells	ASES	B4.9
CABLE BOLT FITTINGS	Barrel & Wedge Anchor	BLW	B5.1
	Breather and Grout Tube	BT/GT	B5.2
	Cable Bolt Spacers	CBSPACER	B5.3
	Cable Sling Tension Block	-	B5.4

PHYSICAL DIMENSIONS

Plate Thickness	Diameter	Weight
5mm	150mm	0.72kg

GENERAL FEATURES



STAR PLATE WITH HANGING LOOP

- The Star Plate yield load is close to the yield strength of the most widely used extra high strength bolt.
- The Star Plate has an additional advantage of providing a larger bearing area when heavily loaded compared to traditional domed square plates.
- The Star Plate is lightweight but strong.
- Installation is easy and being of round shape it is user friendly.
- The Star Plate is compatible with all current ball washers.
- Star Plate with hanging loop is also available.
- Corrosion protection may be provided by hot dip galvanizing (refer to Section G).
- The Star Plate is patent pending.

PACKAGING

- Star Plates are packed on special carrying clamps and then palletised.

NOTES

- DSI Arnall Mining Products Division is Quality Assured to AS 9002, License No 406

PHYSICAL DIMENSIONS

DIAMETER	THICKNESS	NETT WEIGHT
mm	mm	kg
100	4	0.26
100	5	0.34

GENERAL FEATURES



- Turtle Plates are the “new generation” of plates which were developed in response to the underground mining industry’s demand for a strong domed plate that was lighter, easy to install and safe to use.
 - Turtle Plates are complementary to DSI Arnall dome balls in overcoming the problems of surface angularity and provide a good torque tension ratio to be obtained.
 - The rounded configuration of the Turtle Plate provides infinite positioning of the washer on the W Strap without infringing upon the W Strap vees.
 - The Turtle Plate and dome ball assembly provides up to 18° angle of tilt.
- Corrosion protection may be provided by hot dip galvanizing (refer to Section G).
 - Australian Patent No. 684644 is applicable to DSI Arnall Turtle Plates.
 - Australian Registered Design Numbers 125582 and 128628 are applicable to the minor bundle plastic clips.

PACKAGING

- Turtle Plates are packed together on special carrying clamps and then palletised.

NOTES

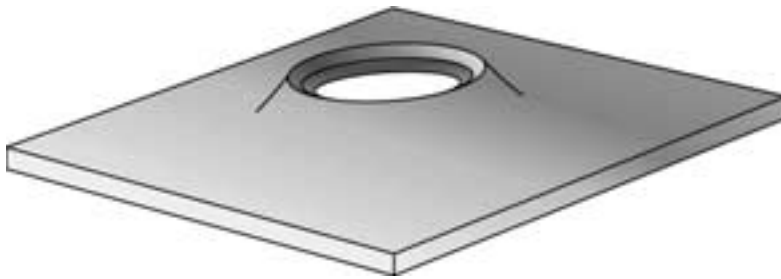
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DOMED PLATE

PHYSICAL DIMENSIONS

LENGTH	WIDTH	THICKNESS	NETT WEIGHT
mm	mm	mm	kg
100	100	8	0.56
150	150	8	1.36
150	150	10	1.68
150	150	12	1.94
200	200	12	3.60
150	150	12	1.96

GENERAL FEATURES



- Domed Plates are compatible with DSI Arnall Rock Bolts fitted with matching dome balls.
- Domed Plates are complimentary to the Dome Ball and overcome the problems of surface angularity and allows development of a good torque tension ratio to be obtained.

- The Domed Plate and Dome Ball assembly provides up to 18° angle of tilt.
- Grout holes can be provided on Domed Plates.
- Corrosion protection may be provided by hot dip galvanizing (refer to Section G).

PACKAGING

- Domed Plates are tied with wire clips and then palletised.

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DOMED PLATE FOR FRICTION BOLTS

PHYSICAL DIMENSIONS

LENGTH	WIDTH	THICKNESS	NETT WEIGHT	TO SUIT FRICTION BOLT SIZE
mm	mm	mm	kg	mm
120	120	4	0.42	33
150	150	4	0.68	33
150	150	4	0.68	39
150	150	4	0.68	47
150	150	6	1.02	47

GENERAL FEATURES



- Domed Plates are compatible with DSI Arnall Friction Bolts.
- They are complementary products and assists in overcoming the problems of minor surface angularity. The Domed Plate and Friction Bolt assembly allows for up to 3° angle of angular misalignment.
- The DSI Arnall Friction Bolt System utilizes the Domed Plate as a load indicator to complement the Friction Bolts. They are designed to indicate when a load is transferred to the plate approaching the yield strength of the bolt.
- All DSI Arnall Friction Bolt Domed Plates incorporate a generous lug for hanging of service lines.
- Corrosion protection may be provided by hot dip galvanizing (refer to Section G).

PACKAGING

- Domed Plates are tied with wire clips and then palletised.

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PHYSICAL DIMENSIONS

LENGTH	WIDTH	THICKNESS	HOLE DIAMETER	NETT WEIGHT
mm	mm	mm	mm	kg
75	75	6	18	0.24
130	130	6	22	0.76
100	100	8	26	0.58
150	150	8	22	1.34
150	150	8	26	1.34
120	120	10	26	1.08
150	150	10	26	1.66
300	300	10	40	6.86

GENERAL FEATURES



Flat Plate washers are normally used where:-

- Mine has low headroom, or;
 - Rock surfaces are relatively flat, or;
 - Little or no angularity will be required for installation of the bolts, or;
 - A “stiff” rock bolt application is required giving little or no deflection.
-
- Corrosion protection may be provided by hot dip galvanizing (refer to Section G).

PACKAGING

- Flat Plates are tied with wire clips and then palletised.

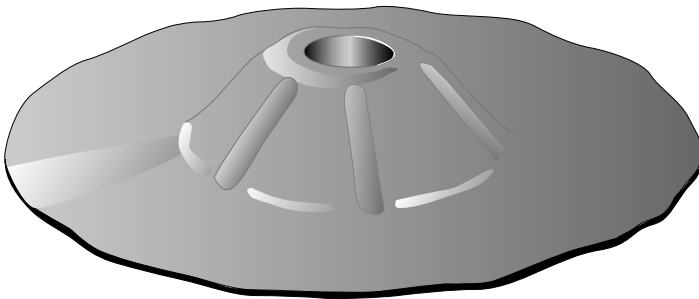
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PHYSICAL DIMENSIONS

DIAMETER	THICKNESS	HOLE DIAMETER	NETT WEIGHT
mm	mm	mm	kg
120	2	18	0.18
120	2	26	0.18
120	3	26	0.26
165	3.5	20	0.80
165	3.5	25	0.80

GENERAL FEATURES



- Rib Bolt Plates are part of the “new generation” of plates which were developed in response to the underground mining industries demand for a strong domed plate that was lighter, easy to install and safe to use.
 - The Rib Bolt Plate was also designed for use with light steel W Straps or cuttable mesh.
 - Used in stabilisation of coal ribs or embankments.
-
- Corrosion protection may be provided by hot dip galvanizing. (Refer to Section G).

PACKAGING

- Plates are tied with wire clips and then palletised.

NOTES

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FLAT PLATE (MULTI-HOLE)

PHYSICAL DIMENSIONS

LENGTH	WIDTH	THICKNESS	HOLE DIAMETER	ADDITIONAL HOLE DIA.	NETT WEIGHT
mm	mm	mm	mm	mm	kg
150	150	12	24	1x19	2.02
150	150	12	24	2x19	2.00
200	200	12	24	1x19	3.79
250	250	12	20	1x20	1.98
300	300	10	20	2x20	7.21

Note: Other plate sizes, hole diameters and placement of holes are available by negotiation.

GENERAL FEATURES



- Multi-hole plates are predominately used with cable bolts.
- The additional holes are used to allow placement of:-
 - a) Multiple cable strands through the plate and/or...
 - b) Placement of grout and/or air breather tube into the bore hole.
- Flat Plates provide a stiff surface confinement on rock surfaces that are relatively flat.
- Corrosion protection may be provided by hot dip galvanizing (refer to Section G).

PACKAGING

- Plates are tied with wire clips and then palletised. Some larger plates are packed individually on pallets.

NOTES

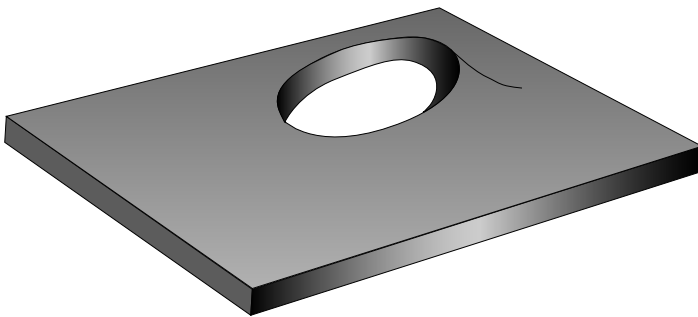
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DEFLECTION PLATE HIGH ANGLE

PHYSICAL DIMENSIONS

LENGTH	WIDTH	THICKNESS	NETT WEIGHT
mm	mm	mm	kg
150	120	8	1.00
150	120	10	1.26

GENERAL FEATURES



- This specialty High Angle Deflection Plate provides the means for correct bolt alignment, with maximised surface restraint, for angles of tilt from 25° towards 45°.
- High Angle Deflection Plates are compatible with DSI Arnall Rock Bolts with Dome Balls.
- The High Angle Deflection Plate can be supplied welded to W Strap to act as a bearing point when trussing is required.
- Corrosion protection may be provided by hot dip galvanizing (refer to Section G).

PACKAGING

- Plates are tied with wire clips and then palletised.
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PHYSICAL DIMENSIONS

LENGTH	WIDTH	THICKNESS	HOLE DIAMETER	NETT WEIGHT BLACK	NETT WEIGHT GALVANISED
mm	mm	mm	mm	kg	kg
300	278	1.9	50	1.30	1.34
400	278	1.9	50	1.69	1.74

GENERAL FEATURES



- DSI Arnall Butterfly Plates feature both longitudinal and transverse vees for added strength and greater ability to conform to irregularities in rock surfaces.
 - Designed with a profile that gives greater strength by strategically pressing the vees, placing the perimeter of the Butterfly Plate in tension.
 - ‘User friendly’ rounded corners.
 - Can be used with both Flat and Domed plates (up to 150mm square).
- Are suitable for use direct to the rock surface or with Welded Mesh.
 - Are supplied with a slot for suspension of light services.
 - Corrosion protection may be provided by hot dip galvanizing (refer to Section G) or supplied from pre-galvanized material.
 - Australian Patent Number 529082 is applicable to DSI Butterflies.

PACKAGING

- Butterfly Plates are tied with wire clips and then palletised.

NOTES

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PHYSICAL DIMENSIONS

DRAGONFLY	PLATE SIZE AND TYPE	NETT WEIGHT BLACK	NETT WEIGHT GALVANIZED
mm	mm	kg	kg
300x280x1.9	120x120x4 Domed	1.72	1.78
300x280x1.9	150x150x10 Flat	2.98	3.04
300x280x1.9	150x150x4 Domed	1.96	1.6
300x280x1.9	100diax4mm Turtle	1.52	2.04
400x280x1.9	120x120x4 Domed	1.96	2.06
400x280x1.9	150x150x4 Domed	2.30	2.36
400x280x1.9	150x150x10 Domed	2.32	3.34

GENERAL FEATURES



- DSI Dragonfly Plates incorporate a plate washer attached to a standard butterfly to give a superior product with enhanced performance.
- Designed with a profile that gives greater strength by strategically pressing the vees, placing the perimeter of the Dragonfly Plate in tension.
- Has 'user friendly' rounded corners.
- Allows faster installation by eliminating the handling of two separate components.
- Can facilitate flat and domed plates (up to 150mm square) to increase rock surface coverage area.
- Can be utilised with lighter domed or flat plates to provide an economic advantage over heavier individual components.
- Is suitable for direct placement onto the rock surface or used against welded mesh.
- Are supplied with a slot for suspension of light services and some domed plates include a services support lug.
- Corrosion protection may be provided by hot dip galvanizing (refer to Section G).
- Australian Patent Application Number 50705/96 and Registered Design No. 127286 are applicable to DSI Dragonflies.

PACKAGING

- Dragonfly Plates are packed on pallets.

NOTES

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OZ DRIVE NUT STANDARD

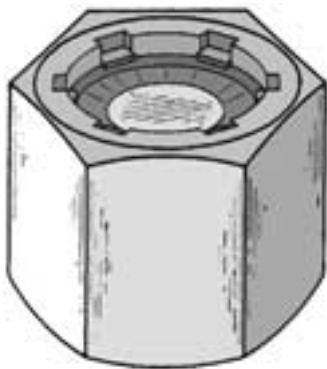
BREAKOUT TORQUE RANGE

INDICATING COLOUR FOR TORQUE RANGE	TYPICAL BREAK-OUT TORQUE RANGE	
WHITE (W)	190Nm+	140ft lbs+
ORANGE (O)	135-190Nm	100-140ft lbs
RED (R)	100-155Nm	75-115ft lbs
YELLOW (Y)	80-110Nm	60-80ft lbs
PURPLE (P)	40-50Nm	25-35ft lbs

The appropriate colour symbol is stamped into each nut disc to indicate the nut torque/colour range setting. e.g. R = Red; P = Purple etc.

GENERAL FEATURES

- DSI Arnall Mining Products Division have continued to develop torque resistance nuts which provide greater benefits over and above the hot forged mixing square enabling the use of a single spanner operation in installation of chemical rock bolts. Similarly there has been a continued quest to improve earlier versions of Drive Nuts.



DSI Arnall's OZ Nuts stand out in offering the following:-

- No residual drag from the torque resistant device, hence ability to gain a greater pre-tension of bolt.
- Less strain on operators using hand held roof bolters due to a smooth break-out mode.

The OZ Nut is available to suit the majority of DSI rock bolts including Flexibolts, Threadbar and Universal Bolts.

- Corrosion protection can be provided by zinc plating to AS 1789-1984.
- Australian Patent Number 647259 is applicable to DSI Arnall OZ Nut.

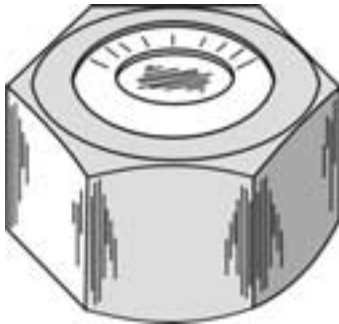
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BREAKOUT TORQUE RANGE

BOLT DIAMETER	TYPICAL BREAK-OUT TORQUE RANGE	
M24	67-88Nm	50-65ft lbs
M20	33-48Nm	24-36ft lbs
M16	20-34Nm	15-25ft lbs
20mm Thread Bar (low torque)	70-100Nm	52-74ft lbs
20mm Thread Bar (high torque)	75-150Nm	56-111ft lbs

GENERAL FEATURES



DSI Arnall have continued to develop torque resisting nuts which provide greater benefits over and above the hot forged mixing square enabling the use of a single spanner operation in installation of chemical rock bolts.

DSI Arnall's T Nut stands out in offering the following:-

- Ability to be economically supplied with low volume bolt types.
 - Consistent break out torque.
 - Low residual drag from the nylon insert.
- Less strain on operators using hand held roof bolters due to a smooth break-out mode.
 - Will not seize on bolt thread.
 - The T Nut is available to suit the following type bolts:-
 - 24mm chemical bolts,
 - 20mm chemical bolts,
 - 16mm chemical bolts and
 - 20mm thread bar chemical bolts.
 - Australian Patent Number 538338 is applicable to the DSI T Drive Nut.

NOTES

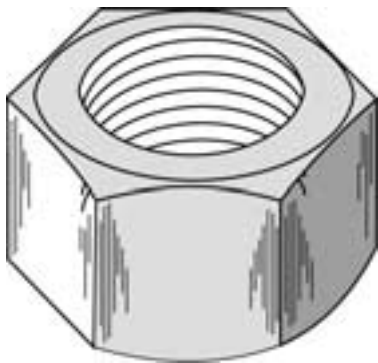
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PHYSICAL DIMENSIONS

BOLT THREAD	HEIGHT	ACROSS FLATS	NETT WEIGHT	QUANTITY PER BAG
mm	mm	kg	kg	
M16x2.0 pitch	20	36	0.14	150
M20x2.5 pitch	25	36	0.12	200
M24x3.0 pitch	24	36	0.12	200
M24x3.0 pitch	30	36	0.16	150
20mm Threadbar	35	36	0.18	100
20mm Threadbar combo*	45	36	0.30	50
22.7mm Universal	33	36	0.16	150
M26 Flexibolt	33	36	0.14	150

The 20mm threadbar “combo” nut is a combination nut and dome ball.

GENERAL FEATURES



- All DSI Arnall Hexagonal Nuts exceed the physical requirements of AS 1112-1980.
- A special combined nut and dome ball (the nut and the dome washer have been pressed together) is also available for 20mm Threadbar Bolts.
- Nominal across flats (A/F) dimensions are standard on rock bolts having M24, M20 or M16 threads as well as specialty products such as 26mm Flexibolts, 24mm Solid Universal bolts and 20mm Threadbar bolts.
- All hexagonal nuts are heat treated to the equivalent of Grade 8.8.
- Corrosion protection may be provided by hot dip galvanizing, (refer to Section G) or zinc plated to AS1789-1984.

NOTES

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PHYSICAL DIMENSIONS

DIAMETER	HEIGHT	HOLE DIAMETER	NETT WEIGHT	THREAD SIZE
mm	mm	kg		
50	17	22	0.20	M20
50	17	26	0.12	M24
57	20	32	0.18	M30



GENERAL FEATURES

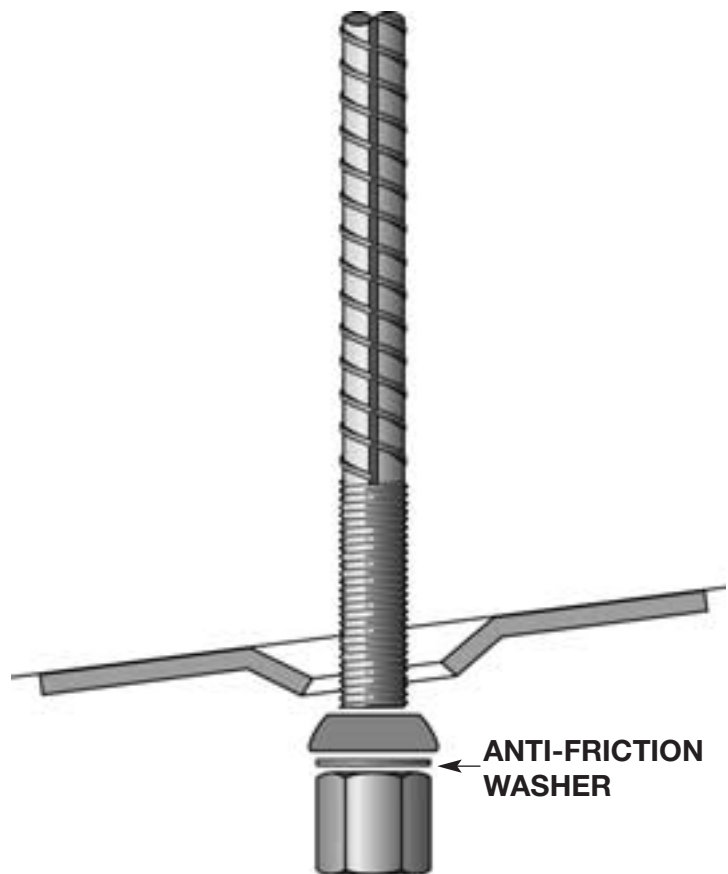
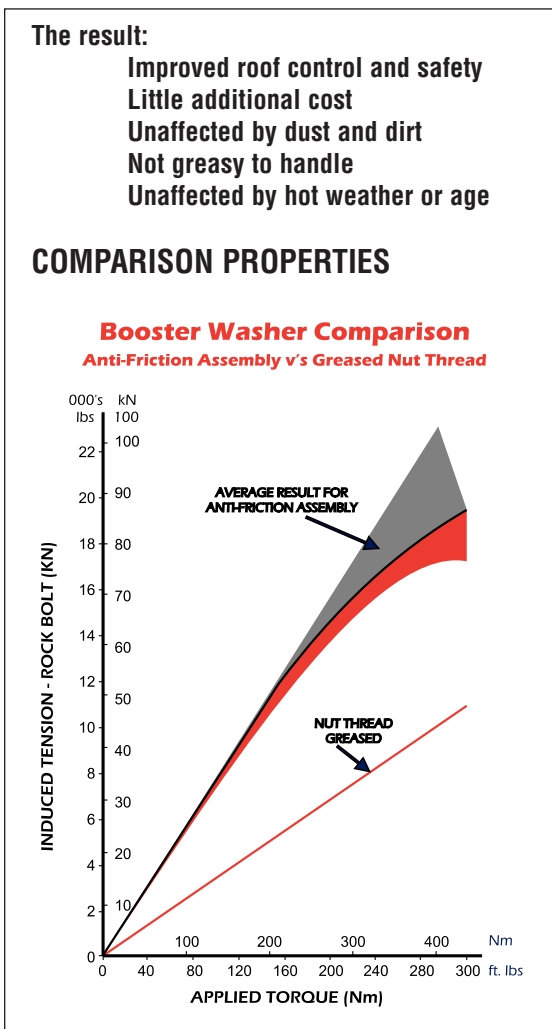
- The use of a Dome Ball, with compatible Domed Plate, generally ensures better alignment of the bolt to the roof and together will maximise load transfer from the bolt to the surrounding rock.
- Without the use of the Dome Ball, bending of the bolt at the collar can occur causing local abnormal loading of the bolt and potential early failure.
- Similarly, without the use of a Dome Ball thread, binding can be a problem during installation limiting the tensioning of the bolt.
- The Dome Ball is suitable for angles of tilt up to 18° with a compatible plate.
- Corrosion protection may be provided by hot dip galvanizing (refer to Section G).

NOTES

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GENERAL FEATURES

- A lot of mine operators have problems in obtaining rock and roof compression during installation of rock bolts with ply separation and/or roof sag rapidly occurring.
- Research by DSI Arnall proved that the compressive stress induced into the roof could be increased dramatically by reducing the friction at the nut/plate washer interface. Grease on the bolt thread or the nut threads gave minimal performance improvement, was easily contaminated, and was unattractive for the miners to handle.
- A friction reducing assembly was devised which approximately doubles the induced roof compression for an equally applied torque when using low torque drill heads.

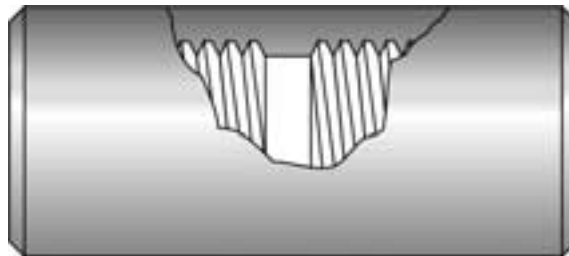


NOTES

- The DSI Arnall anti-friction washer is covered by Australian Patent Number 516762.
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PHYSICAL DIMENSIONS

TYPE THREAD	LENGTH	OUTSIDE DIAMETER	WEIGHT
	mm	mm	kg
M16x2.0 pitch	50	22	0.13
M20x2.5 pitch	60	28	0.25
M24x3.0 pitch	75	33	0.28
U227x8.0 pitch	120	35	0.53
20mm Thread Bar	110	36.5	0.58



GENERAL FEATURES

- Rock Bolt Couplings are used when:-
 1. Head room is limited and prevents the installation of the desired bolt length.
 2. Where longer bolts than those that are practical to manufacture are required.
 3. Multiple bolts can be coupled together to create longer tendons.
- DSI Arnall Rock Bolt Couplings are threaded from each end so that an equal length of bolt thread within the coupling can be reasonably assured.
- DSI Arnall Rock Bolt Couplings are manufactured from higher tensile material and will equal the tensile strength of the bolts if installed correctly.
- Corrosion protection may be provided by hot dip galvanizing (refer to Section G) or zinc plated to AS 1789-1984.

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ROCK BOLT EXTENSION COUPLING B4.7

PHYSICAL DIMENSIONS

THREAD SIZE	LENGTH mm	NETT WEIGHT kg
M24x3.0 pitch	360	1.92

GENERAL FEATURES

- The Rock Bolt Extension Coupling is a specialty product used to extend rock bolts to ensure the bolt end does not protrude from the rock after the bolt has ultimately completed its purpose.
i.e. Securing boot ends, drive heads etc.
This ensures no subsequent damage occurs to rubber tyred vehicles.
- The Rock Bolt Extension coupling was designed to be recoverable after use to allow reinstallation or re-use at other locations.
- Manufactured from higher tensile steel the Extension Coupling will match or better the tensile properties of current 24mm rock bolts.

INSTALLATION GUIDE LINES

- Each bolt hole is drilled 27-28mm diameter and to a depth 150mm longer than the bolt. The hole mouth is reamed out at 36mm for a depth of 200mm to accept the Extension Coupling.
- The Extension Coupling is fitted to the rock bolt, with a domed plate washer.
- After insertion of the chemical anchors rotate the coupling by the nut fitted to the Extension Coupling, through the anchor while pushing the bolt to the back of the hole. A machine capable of minimum 200 r.p.m. should be used for mixing.
- The second nut is then tightened to secure the equipment.
- To remove and reclaim the Extension Coupling for use at another location, undo the tensioning nut then rotate the fixed nut anti-clockwise to remove the unit.

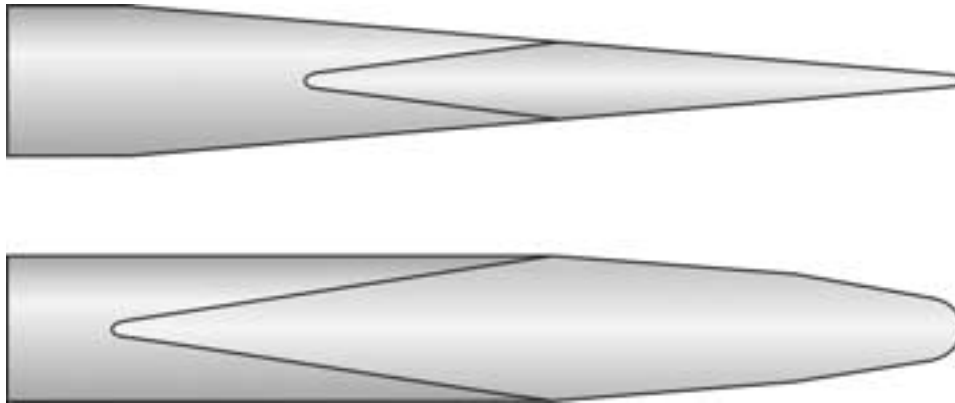
NOTES

- Only DSI Arnall rock bolt components should be used to enable the full performance of the bolt system to be obtained.
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PHYSICAL DIMENSIONS

WEDGE SIZE	NETT WEIGHT
mm	kg
150 longx18dia.	0.24
150 longx21.7dia.	0.30



GENERAL FEATURES

- DSI Arnall Steel Wedges were designed for use with slot and wedge type bolts.
- All Steel Wedges are supplied in a nominal length of 150mm.

PACKAGING

- All Steel Wedges are packed in steel cans then packed on pallets.

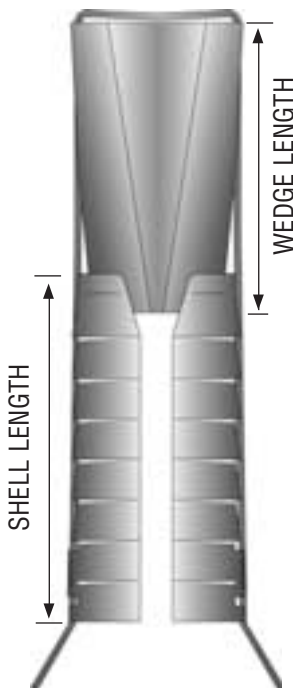
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PHYSICAL DIMENSIONS

BOLT DIAMETER	THREAD FORM	NOMINAL HOLE DIAMETER	SHELL LENGTH	WEDGE LENGTH	NETT WEIGHT
mm		mm	mm	mm	kg
16	M16	26	54	41	0.12
16	M16	30	54	50	0.15
20	M20	35	83	54	0.24
24	M24	45	83	57	0.60
22.7	U227	45	83	57	0.60

GENERAL FEATURES



- DSI Arnall expansion shells hold in any rock strata which is sufficiently competent to provide an adequate anchorage. They are designed to anchor in soft ground or hard rock. In good strata the anchorage exceeds the ultimate strength of the steel bolt. All expansion shells require a competent strata in the anchor zone. The suitability of the anchorage and the specific expansion shell to be used is best determined by physical load testing.
- DSI Arnall expansion shells feature parallel contact with the hole wall with sharp serration's on the outside leaves ensure positive holding power.
- The expansion shell assembly is securely held by a strong protective sleeve, to save installation time and prevent loss of parts while handling. The sleeve must be removed prior to installation.
- Corrosion protection may be provided by hot dip galvanizing (refer to Section G) or zinc plated to AS1789-1984.

PACKAGING

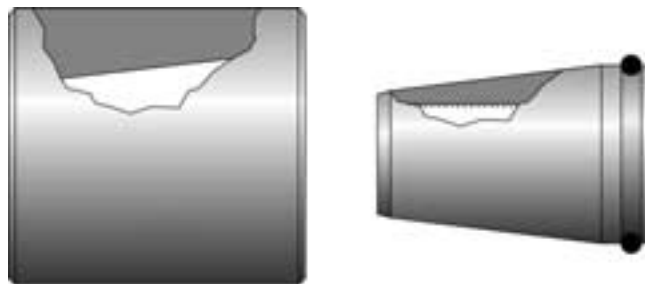
- All 16mm expansion shells are contained in cardboard boxes then packed on pallets.

NOTES

- Only DSI ARNALL rock bolt components should be used to enable the optimum performance of the bolt system to be obtained.
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PHYSICAL DIMENSIONS

LENGTH mm	DIAMETER mm	NETT WEIGHT kg
45.0	42.0	0.40



GENERAL FEATURES

- Barrel and Wedge Anchors are used to secure roof plates on 15.2mm diameter x 7 wire strand cable bolts. They provide positive support to the rock face at the collar of the hole.
- The Barrel and Wedge anchor can be used on one, two or multiple strand (15.2mm) cable bolts in either minicage or plain forms.
- Barrel and wedge anchors suit flat plates commonly used for Cable Bolts.
- The Barrel and Wedge Anchor can be used to pre-stress cable bolts prior to grouting. They can also be fitted to grouted cable bolts to secure additional mesh or W strap.
- The wedge in the anchor has hardened serrations to provide a positive grip on the strand. Each wedge consists of three segments, secured by a ring to ensure wedge alignment and initial clamping.
- The barrel is manufactured from a toughened steel to resist splitting.
- Corrosion protection can be provided on the barrel only by hot dip galvanizing (refer to Section G), or zinc plated to as 1789-1984.

PACKAGING

- Barrel and Wedge anchors are packed in cardboard boxes.

NOTES

- Only DSI Arnall rock bolt components should be used to enable the optimum performance of the bolt system to be obtained.
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PHYSICAL DIMENSIONS

TUBE TYPE	TUBE INSIDE DIAMETER	TUBE OUTSIDE DIAMETER	COIL LENGTH	SHIPPING WEIGHT
	mm	mm	mm	kg
GROUT	16	20	100	0.11kg/metre
GROUT	17	20	200	0.095kg/metre
AIR BLEED	3	5	200	0.02kg/metre
GROUT/BLEED	10	12.7	300	.0417/kg/metre

GENERAL FEATURES



- Grout tube is normally used to pump cementitious grouts for rock and cable bolt in post grouting applications.
 - Air bleed tube (breather tube) is used to allow the escape of air from the bolt hole. The air bleed tube is also used to provide a positive indication of grouting progress by visual indication of air escape and, eventually, the grout return through the tube when the hole is full.
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- DSI Arnall grout tube is manufactured from polyethylene material.
 - DSI Arnall air bleed tube is manufactured from high density polyethylene to resist crushing or cutting.

PACKAGING

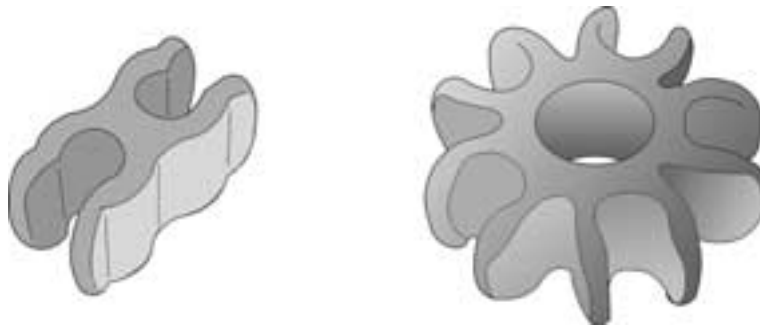
- Single coils as specified.

NOTES

- DSI Arnall Mining Products Division is Quality Assured to AS 9002, License No. 406.

PHYSICAL DIMENSIONS

TYPE SPACER	OUTSIDE DIAMETER	WIDTH (HEIGHT)	NETT WEIGHT
mm	mm	mm	kg
2 STRAND	56.5	30	0.005
4 STRAND	65.0	35	0.02
5 STRAND	75.0	32	0.03



GENERAL FEATURES

- DSI Arnall cable bolt spacers are designed for use with multiple 15.2mm strand plain cable bolts and endeavours to ensure:-
 - a) the cable bolt is located as centrally as practical in the bore hole.
 - b) a consistant annulus of grout surrounds the bolt.
- Three standard sizes of cable bolt spacers are available being 2 strand, 4 strand plus a grout tube hole in the centre and 5 strand plus centre grout tube hole.
- DSI Arnall cable bolt spacers are designed to ensure positive installation.
- Each cable bolt spacer has built-in clips for easier use.

PACKAGING

- Single spacers as required.

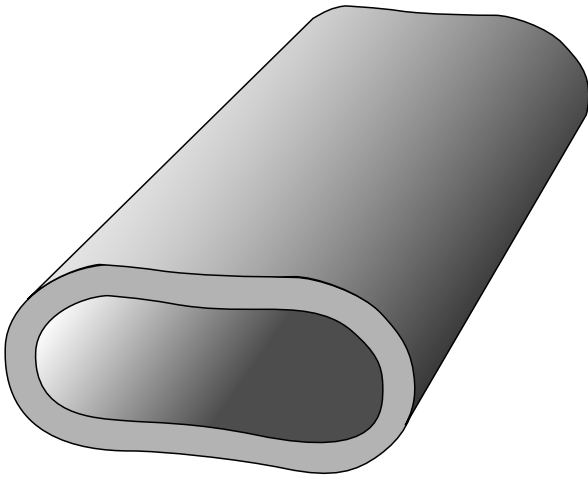
NOTES

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PHYSICAL DIMENSIONS

LENGTH	HEIGHT	WIDTH	WEIGHT
150mm	30mm	60mm	810g

GENERAL FEATURES



Used for Sling System with the 15.2mm Cable Bolt.

The Cable Sling Tension Block optimises the performance of the Cable Bolt by eliminating premature failure due to stress raisers. The twisting of the block when the system is under tension induces these stresses. The factors that contribute to the relief of the stress are:

1. The length of the block. The longer the block, the less twisting results when the system is under load;
2. The radius of curvature of the cable. The greater the radius of curvature, the greater area over which the stress is spread. The pipe yields as the load increases, forming a curve.

- Can be either supplied black or galvanized, (see Section G for details).

PACKAGING

- Pipe Blocks are normally supplied in hessian bags.

NOTES

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