

- NOTES:
- REQUIRED REINFORCING BARS ARE NOT SHOWN ON THIS DRAWING.
 - MAXIMUM ANGULAR MISALIGNMENT WHEN USING ANCHOR NUT: ±2°.
 - CENTER TO CENTER, END AND EDGE DISTANCE DEPENDS ON THE LOCATION OF THE BAR AND CONCRETE STRENGTH, (SEE TABLE).
 - C/C DISTANCE = 2 X END DISTANCE - 2 X CONCRETE COVER (2" ASSUMED), TIGHTER C/C DISTANCE SHOULD BE EVALUATED.
 - GTI DUCT IS DELIVERED IN STRAIGHT SECTIONS AND IS NOT INTENDED TO BE COILED.
 - BURSTING REINFORCEMENT IS NOT SHOWN AND WILL BE INCLUDED WITH THE SHOP DRAWINGS.

Plate Type	Concrete strength f _{ci} , ksi	Depth, D (in)	Minimum distances, in	
			End dist, E	c/c dist, C
Square	5.5	9.0	4.50	5.00
	5.0	10.0	5.00	6.00
	4.5	11.0	5.50	7.00
Rectangular	4.0	13.0	6.50	9.00
	5.0	8.0	6.50	9.00
	4.5	9.0	7.31	10.63
	4.0	10.0	8.13	12.25

Plate Type	Part No	Width, in	Length, in	Thickness t, in
Square	B26E22510	5	5	1.25
Rectangular	B26E22610	4	6.5	1.5

APPROVED BY FDOT 9-22-08

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
B26E22510 OR B26E22610	5"x5"x1.25" SQ. OR 4"x6.5"x1.5" RECT. BEARING PL. W/EXIT 2 1/4" x 3/16" WALL 5 1/2" LONG MECHANICAL TUBING PIPE & BOLT HOLES, GALV.	STEEL PLATE, ASTM A36, GALVANIZED
B36E50700	BAR GROUT CAP WITH O-RING	NYLON 6, 20% GLASS FIBER FILLED CAP
00 00 783 00 00 774	3/8"-16UNC HEX BOLT 3-1/4" LONG NARROW WASHER	316L STAINLESS STEEL
B26E24210	1" GROUTABLE ANCHOR NUT	FORGING, NORMALIZED C1045
00 00 647	1/2" BT PLUG (NIAGARA PLASTICS #BT0500)	NYLON
00 00 672/4/6	1/2" NPT NIPPLE, LENGTH AS REQUIRED	SCH 40 BLACK WELDED STEEL
00 00 847	3/4" BT PLUG (NIAGARA PLASTICS #BT0750)	NYLON
00 00 872/4/6	3/4" NPT NIPPLE, LENGTH AS REQUIRED	SCH 40 BLACK WELDED STEEL
00 00 634	1/2" NPT VALVE	PVC
00 00 834	3/4" NPT VALVE	PVC
U00220200	59mm CORRUGATED DUCT	PPEX3 PLASTIC
U00220205	59mm DUCT COUPLER	HDPE
PMA-90/30-150-YE	HEAT SHRINK TUBING, 4" (102mm) LONG	ACCORD. TO FDOT SPEC. P.T. SEC. 462-4.2,6,3
B26E CUT	1" THREADBAR	ASTM A722 TYPE II STEEL

OWNER: _____

CONTRACTOR: _____

PROJECT: **1" THREADBAR PT BAR SYSTEM 100 FOR BLOCKOUT AND/OR SURFACE MOUNT**

DATE: 08-13-07 DWG: A.T./G.M. CHK: S.N. APP: E.A.

THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI'S SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.

DYWIDAG SYSTEMS INTERNATIONAL, USA INC. DOES NOT ASSUME ANY LIABILITY FOR THE DESIGN OF THIS STRUCTURE. THIS SHOP DRAWING IS INTENDED TO PROVIDE POST TENSIONING DETAILS ONLY.

REV.	DATE	ISSUE DESCRIPTION	NAME	CHKD.	JOB NUMBER
1	12-12-07	FOR APPROVAL	G.M.	S.N.	
2	08-15-08	FOR APPROVAL	G.M.	S.N.	

SCALE: 1:3

DRAWING NUMBER: PT 26E 012

DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC.
 POST TENSIONING / REINFORCING UNIT PHONE: 630-739-1100
 320 MARMON DRIVE - BOLINGBROOK, IL FAX: 630-739-6155

CAUTION WHEN USING HIGH STRENGTH DYWIDAG THREADBAR® (GRADE 150,160 & 178) DO NOT WELD TO BAR. DO NOT USE BAR AS GROUND CONNECTION FOR WELDING. DO NOT ALLOW HOT SLAG OR SPARKS TO TOUCH BAR. DO NOT DAMAGE BAR SURFACE. DO NOT USE BARS WITH KINKS OR SHARP BENDS. FAILURE TO HEED THIS WARNING COULD CAUSE BAR TO BREAK RESULTING IN INJURY OR DAMAGE

WARNING: READ AND COMPLY WITH ALL APPLICABLE SAFETY AND OPERATING INSTRUCTIONS AND WARNINGS FOR THREADBAR STRESSING BEFORE STARTING ANY WORK OR OPERATION.

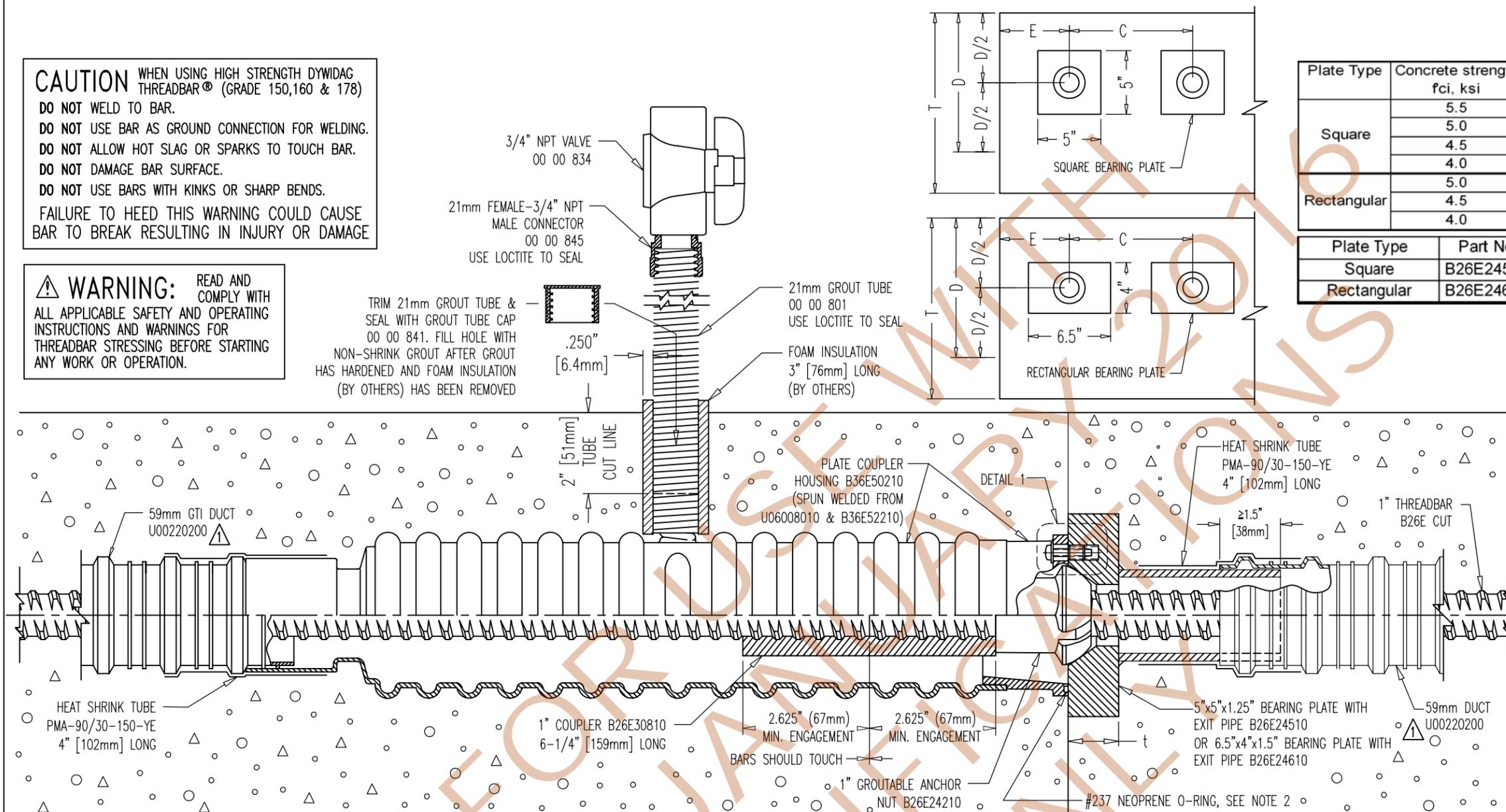
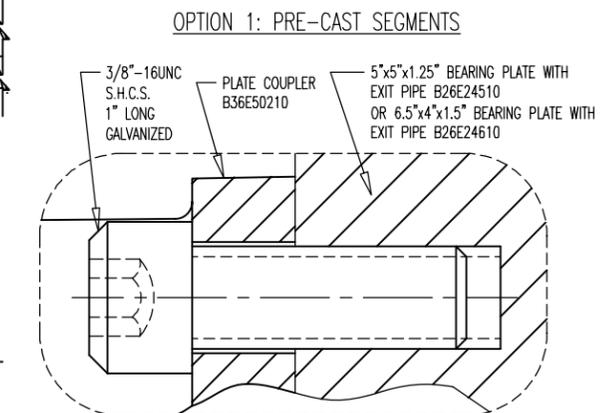
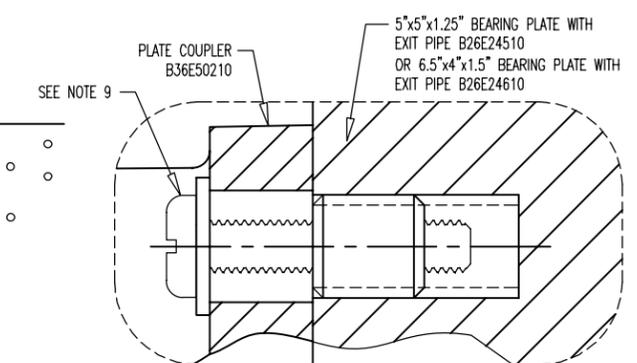


Plate Type	Concrete strength fci, ksi	Depth, D (in)	Minimum distances, in	
			End dist, E	c/c dist, C
Square	5.5	9.0	4.50	5.00
	5.0	10.0	5.00	6.00
	4.5	11.0	5.50	7.00
Rectangular	4.0	13.0	6.50	9.00
	5.0	8.0	6.50	9.00
Rectangular	4.5	9.0	7.31	10.63
	4.0	10.0	8.13	12.25

Plate Type	Part No	Width, in	Length, in	Thickness, in
Square	B26E24510	5	5	1.25
Rectangular	B26E24610	4	6.5	1.5

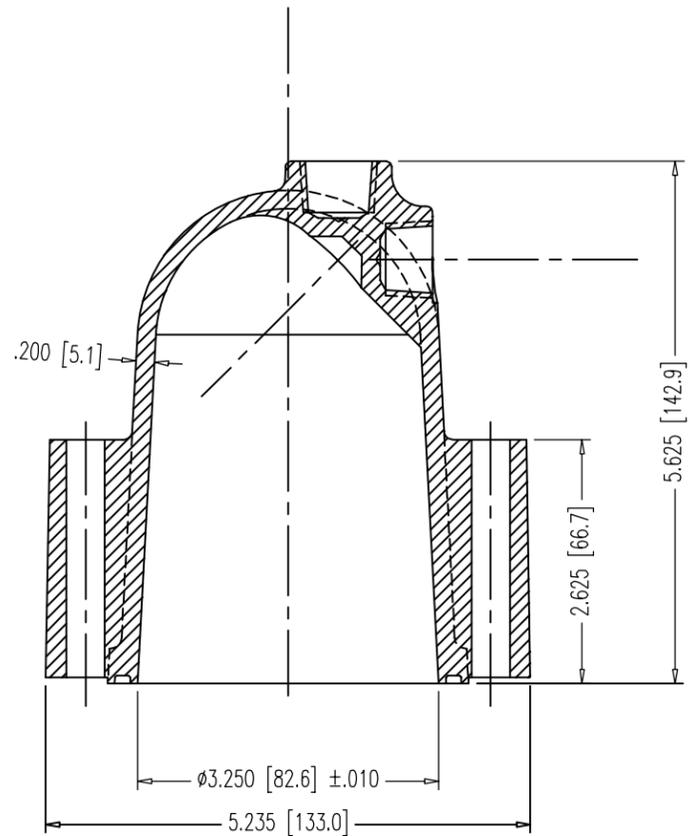


PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
△ B26E CUT	1" Ø THREADBAR △	ASTM A722 TYPE II STEEL
B26E24510 OR B26E24610	5"x5"x1.25" BEARING PLATE W/EXIT PIPE 6.5"x4"x1.5" BEARING PLATE W/EXIT PIPE	STEEL PLATE, ASTM A36, HOT DIPPED GALVANIZED
B36E50210	PLATE COUPLER HOUSING W/O-RING	POLYETHYLENE (U06008010 & B36E52210) W/NEOPRENE O-RING
B26E30810	1" COUPLER	STEEL BAR, COLD DRAWN, AISI 1117
B26E24210	1" GROUTABLE ANCHOR NUT	STEEL FORGING, ASTM A521-76 (1987) NORMALIZED BHN=180-220
△ U00220200	59mm CORRUGATED DUCT	PPEX3 PLASTIC
PMA-90/30-150-YE	HEAT SHRINK TUBING 4" (102mm) LONG	ACCORD. TO FDOT SPEC. P.T. SEC. 462-4,2,6,3
00 00 801	21mm GROUT TUBE	POLYETHYLENE (HARD, BLACK)
00 00 845	21mm FEMALE-3/4" NPT MALE CONNECTOR	20% GLASS FILLED NYLON
00 00 834	3/4" NPT VALVE	PVC
00 00 841	21mm GROUT TUBE CAP	H.D.P.E.
BY OTHERS	FOAM INSULATION	FOAM RUBBER
ANS	THREADED INSERT (2 REQ'D)	BLACK-FINISH STEEL, McMASTER-CARR #90248A068
ANS	10/32 PAN HEAD SLOTTED 1" (2 REQ'D)	NYLON, McMASTER-CARR #93135A833
ANS	3/8"-16UNC S.H.C.S. 1" LONG (4) REQ'D	ULTRA-COATED ALLOY, McM CARR #91274A308 OR EQUIV. (CIP CONCRETE)
ANS	10/32 WASHER (2) REQ'D	NYLON

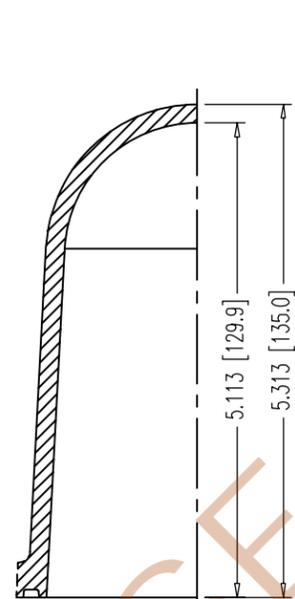
- NOTES:
- REINFORCING BARS ARE NOT SHOWN ON THIS DRAWING.
 - MAXIMUM ANGULAR MISALIGNMENT WHEN USING ANCHOR NUT: ±1°.
 - CENTER TO CENTER, END AND EDGE DISTANCE DEPENDS ON THE LOCATION OF THE BAR AND CONCRETE STRENGTH, (SEE TABLE).
 - C/C DISTANCE = 2 X END DISTANCE - 2 X CONCRETE COVER (2" ASSUMED). TIGHTER C/C DISTANCE SHOULD BE EVALUATED.
 - GTI DUCT IS DELIVERED IN STRAIGHT SECTIONS AND IS NOT INTENDED TO BE COILED.
 - BURSTING REINFORCEMENT IS NOT SHOWN AND WILL BE INCLUDED WITH THE SHOP DRAWINGS.
 - PART B36E52210 IS CONNECTED TO U0600810 TO CREATE PART B36E50210.
 - INSTALL #237 NEOPRENE O-RING IN GROOVE USING DROPS OF LIQUID ADHESIVE BEFORE SHIPPING.
 - FOR PRE-CAST SEGMENTS, USE (2) THREADED INSERTS WITH 3/8"-16UNC OD, 10-32 ID, .406" LONG, McMASTER CARR #90248A068 OR EQUIVALENT. ALSO USE (2) 10-32 NYLON 6/6 PAN HEAD SLOTTED SCREWS, 1" LONG, McMASTER CARR #93135A833 OR EQUIVALENT WITH NYLON WASHERS. THESE SCREWS ARE RIPPED OUT WHEN SEGMENT IS SEPARATED. REMOVE INSERTS AFTER THE SEGMENTS ARE SEPERATED AND RE-USE.

APPROVED BY FDOT 9-22-08

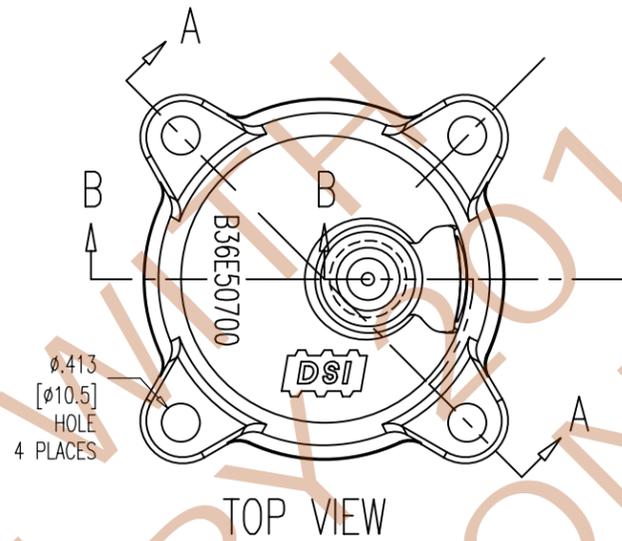
OWNER:	DYWIDAG SYSTEMS INTERNATIONAL, USA INC. DOES NOT ASSUME ANY LIABILITY FOR THE DESIGN OF THIS STRUCTURE. THIS SHOP DRAWING IS INTENDED TO PROVIDE POST TENSIONING DETAILS ONLY.					
CONTRACTOR:	REV.	DATE	ISSUE DESCRIPTION	NAME	CHKD.	JOB NUMBER
PROJECT:	1	08-15-08	FOR APPROVAL	G.M.	S.N.	
DATE: 12-18-07	DWG: G.M.	CHK: S. N.	APP: E. A.	DRAWING NUMBER:		
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI'S SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.				PT 26E 031		
DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. POST TENSIONING / REINFORCING UNIT PHONE: 630-739-1100 320 MARMON DRIVE - BOLINGBROOK, IL FAX: 630-739-6155						



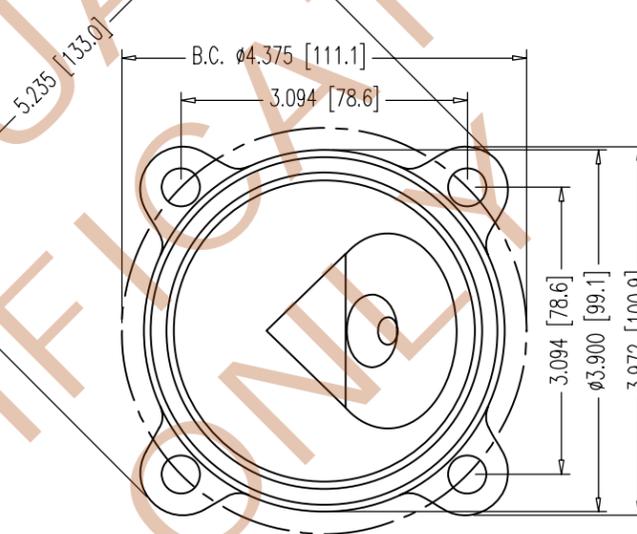
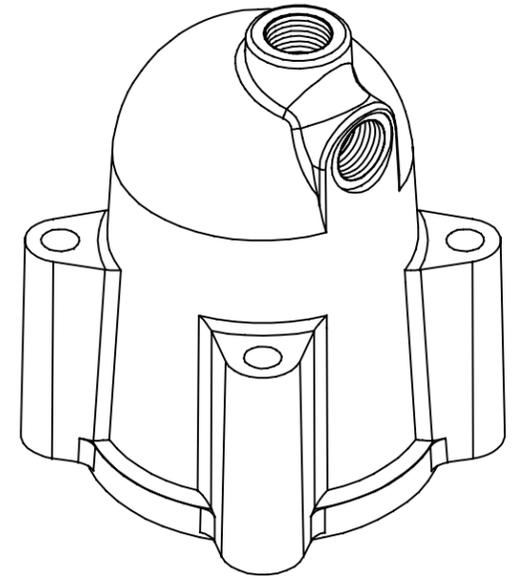
SECTION A-A



SECTION B-B



TOP VIEW



BOTTOM VIEW

NOTES:

1. USE 3/8"-16UNC 316L S.S. HEX BOLTS, 3-1/4" LONG 00 00 783 W/SMALL DIA. WASHER 00 00 774.
2. INSTALL O-RING IN GROOVE USING DROPS OF LIQUID ADHESIVE BEFORE SHIPPING.
3. THE NYLON CELL CLASSIFICATION SHALL CONFORM TO ASTM D5989 AND SHALL BE S-PA0141 (WEATHER RESISTANT), S-PA0231 OR S-PA0401 (TENSILE STRENGTH, YIELD 15000 PSI MIN., WITH UV STABILIZER ADDED).
4. INSTALL #237 O-RING 3-3/8"x3-5/8"x1/8" IN CAP (SEE O-RING SPECIFICATIONS).
5. DRILL 1/2" [12.7] HOLE IN PORT BEING USED-CAUTION-RECOMMEND USING HOLE SAW BIT OR SPADE BIT (BY OTHERS), BE CAREFULL TO PREVENT DAMAGE TO THREADS OR CAP.
6. WHEN PRESSURIZING GROUT CAPS, DO NOT STAND BEHIND CAPS!

Furnish O-ring materials conforming to the following requirements:

Mechanical Properties:

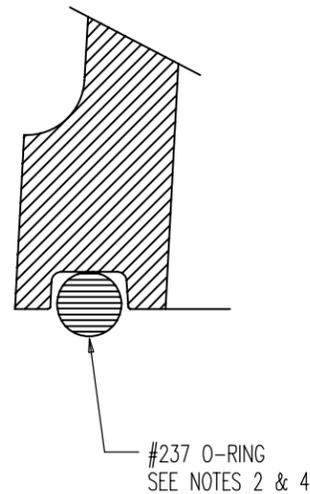
- Shore hardness A ASTM D2240 30 -75
- Ultimate elongation % ASTM D412 > 300
- Tension Set @ 100%, 200% & ultimate elongation ASTM D412 < 5
- Tear Strength Die T , pli ASTM D624 110

Accelerated Testing:

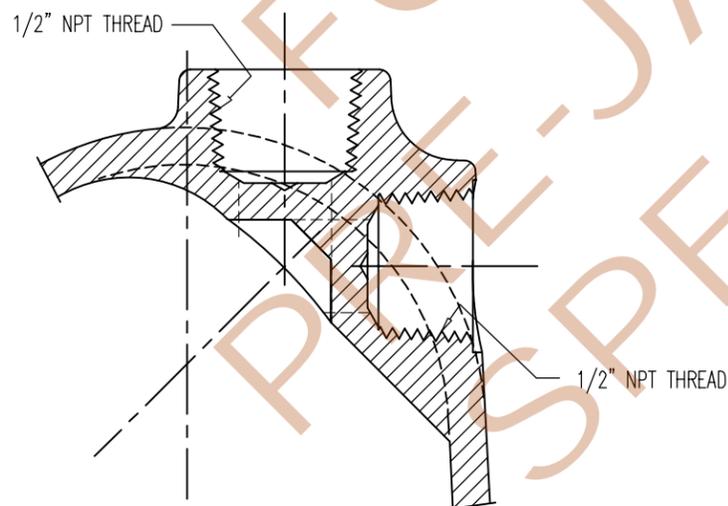
- Thermal Deterioration 70 hours @ 125 C ASTM D573
- Change in tensile strength % < 3
- Change of elongation % < 25
- Change of hardness % < 5
- Compression Set 22 hours @ 125 C % ASTM D573 < 20
- Volume change due to absorption of H₂O for 70 hours @ 257^o F (125^o C) ASTM D471 ≤ 5 percent

Environmental Resistance

- Ozone Resistance 70 hours @ 40 C & 50 MPa partial ozone pressure ASTM D1149 No Cracks
- Low Temp. @ -20 C ASTM D746 Not Brittle Pass



GROOVE DETAIL
SCALE 5:1 IN COMPUTER



GROUT PORT DETAIL
SCALE 2:1 IN COMPUTER

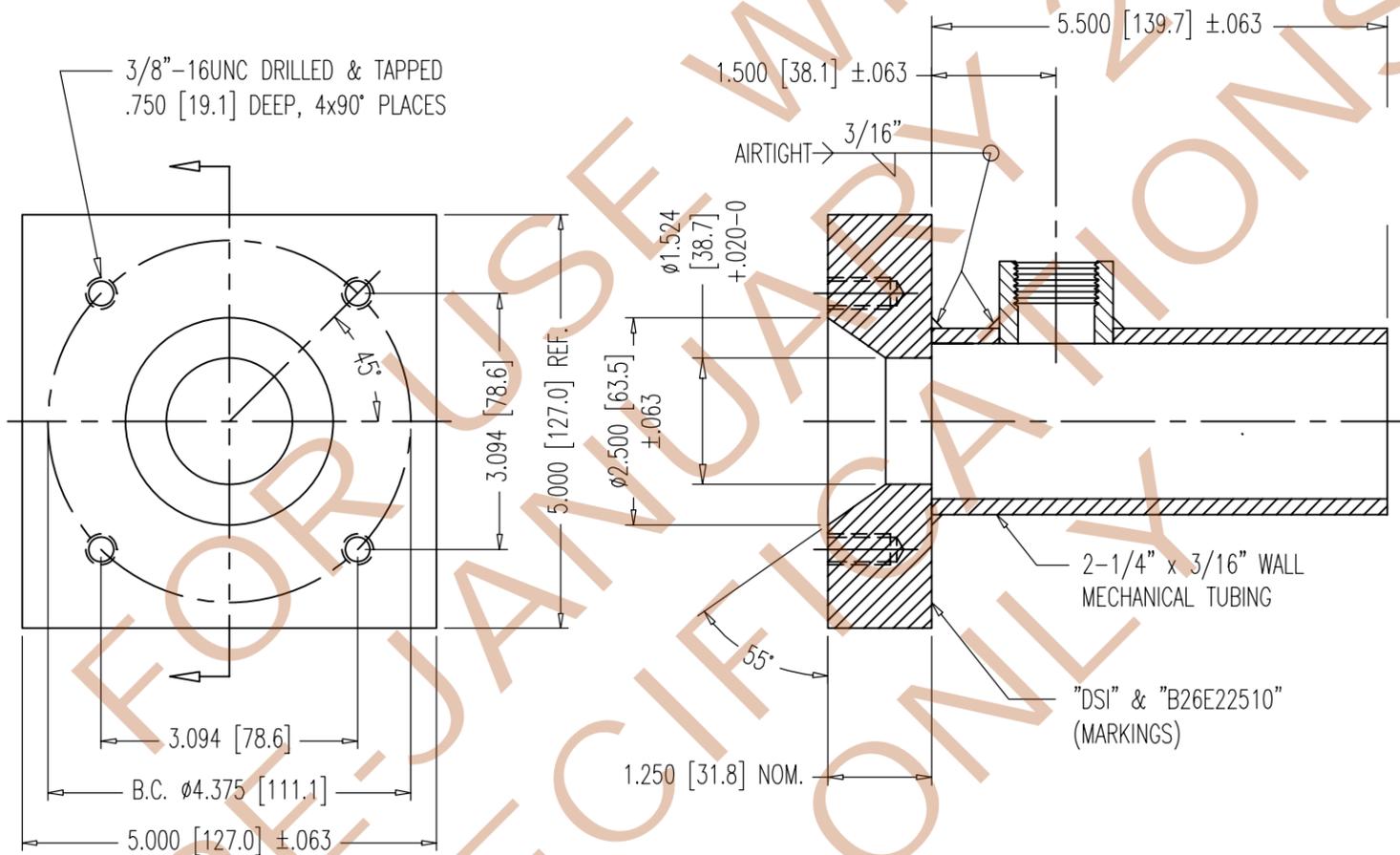
Tolerance Note:
All tolerances are based on SP/SPE and should be as follows unless specified otherwise:

Dim.	Tolerance
0-1" =	+/- 0.005"
1-2" =	+/- 0.007"
2-3" =	+/- 0.009"
3-4" =	+/- 0.011"
4-5" =	+/- 0.013"
5-6" =	+/- 0.015"

APPROVED BY FDOT 9-22-08

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QS60072300P		TOLERANCES: SEE TOLERANCE NOTE			WEIGHT 0.817 LBS.	REV.	DATE	NAME	PART NUMBER: B36E50700
BAR GROUT CAP WITH O-RING FOR ALL 1" & 1-1/4" NUTS AND 1-3/8" ANCHOR NUT				MATERIAL: NYLON 6 20% GLASS FIBER FILLED COLOR: BLACK	SCALE 1:2 UNLESS NOTED						DRAWING NUMBER: B36E50700
				THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI'S SUBMITTAL TO THE ORIGINAL RECEIVER, THEY HAVE TO BE RETURNED UPON REQUEST.							
DATE: 10-02-06		DWG: G. MALECKI		CHK: E.A.		APP: K.S.		DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405			





3/8"-16UNC DRILLED & TAPPED
.750 [19.1] DEEP, 4x90° PLACES

1.500 [38.1] ±.063

AIRTIGHT → 3/16"

5.500 [139.7] ±.063

Ø1.524 [38.7]
+.020-0

Ø2.500 [63.5]
±.063

2-1/4" x 3/16" WALL
MECHANICAL TUBING

"DSI" & "B26E22510"
(MARKINGS)

1.250 [31.8] NOM.

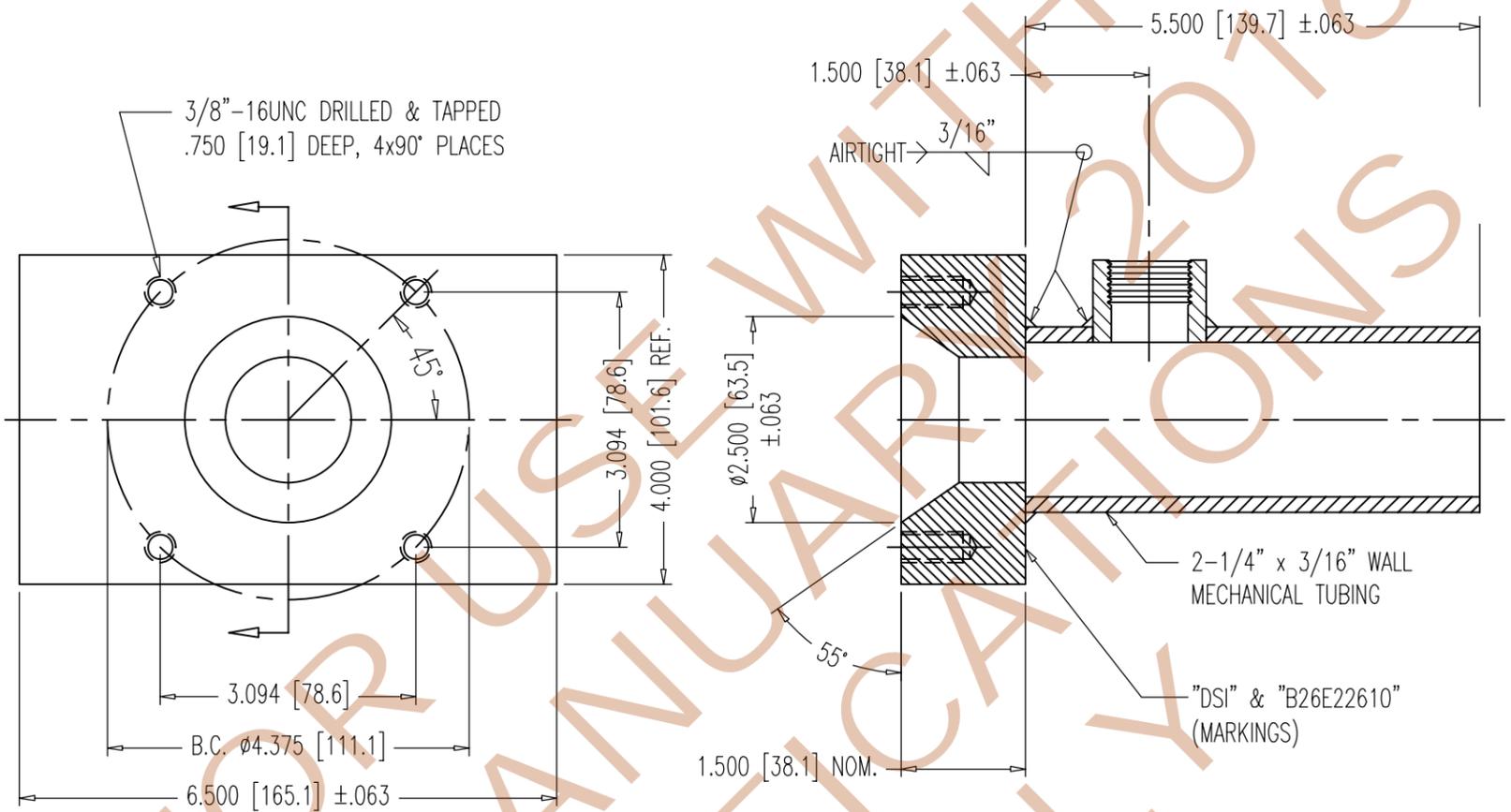
NOTES:

1. ALSO SUITABLE FOR GR 160 THREADBAR.
2. PLATE AND PIPE GALVANIZED ACCORDING TO ASTM A123 AFTER WELDING.
3. 59mm DUCT U00220400 FITS OVER TUBING.
4. SEE DRAWING B00E21191 FOR RAW MATERIAL PLATE WITHOUT HOLES.

MECHANICAL TUBE MATERIAL
SHALL BE A512, A513 OR A519.

APPROVED BY FDOT 9-22-08

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QBE0021200L		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT: 9.8 LBS.	REV.	DATE	NAME	PART NUMBER: B26E22510
SQUARE BEARING PLATE WITH EXIT PIPE FOR 1" THREADBAR				PLATE MATERIAL: SEE MAT'L SPEC. PME0021100P	SCALE: 1:3				
DATE: 08-15-07	DWG: G. MALECKI	CHK: S.N.	APP: E.A.	TUBE MATERIAL: SEE ABOVE					DRAWING NUMBER: B26E22510
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI 's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.				DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405					



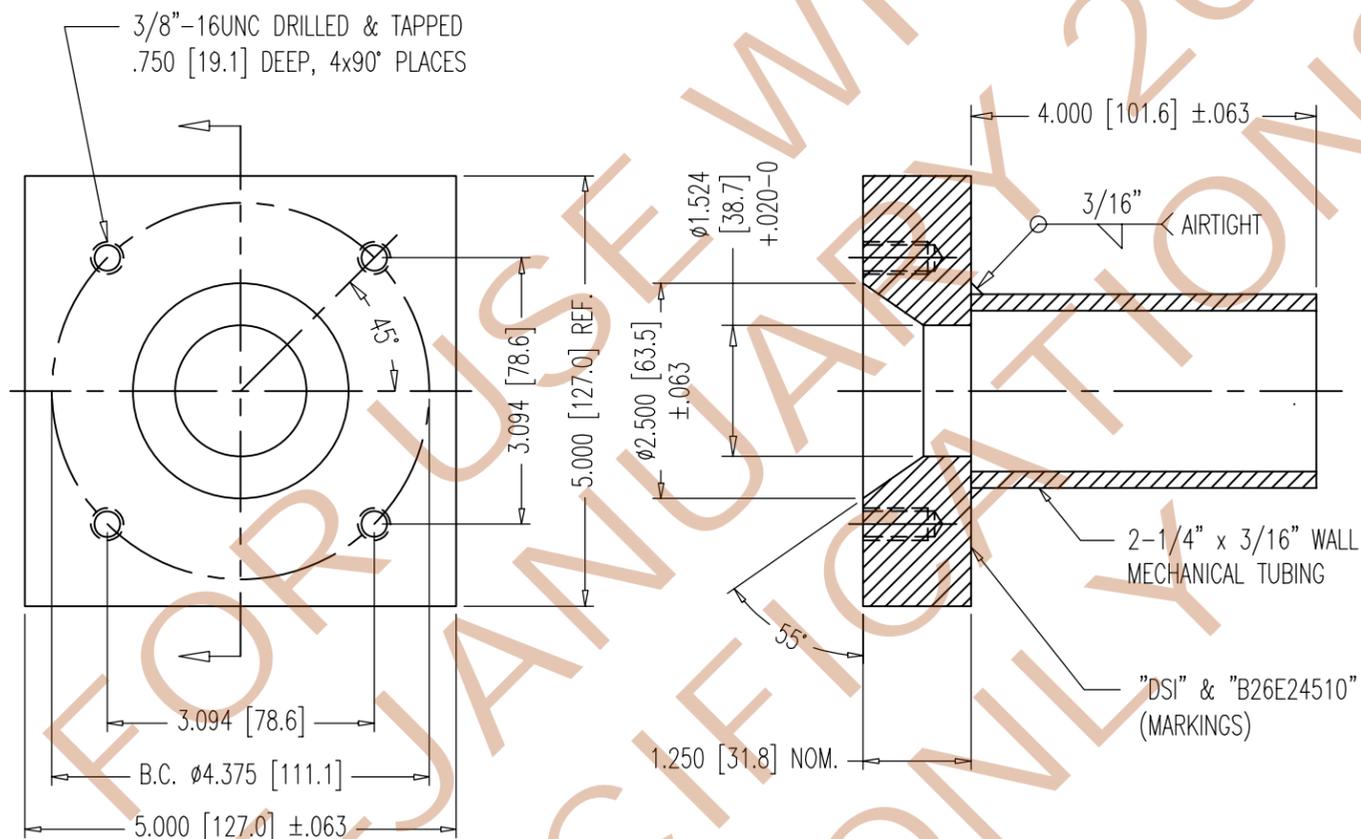
NOTES:

1. ALSO SUITABLE FOR GR 160 THREADBAR.
2. PLATE AND PIPE GALVANIZED ACCORDING TO ASTM A123 AFTER WELDING.
3. 59mm DUCT U00220400 FITS OVER TUBING.
4. SEE DRAWING B00E21292 FOR RAW MATERIAL PLATE WITHOUT HOLES.

MECHANICAL TUBE MATERIAL
SHALL BE A512, A513 OR A519.

APPROVED BY FDOT 9-22-08

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QBE0021200L		TOLERANCES: \pm .020 UNLESS NOTED	WEIGHT: 10.0 LBS.	REV.	DATE	NAME	PART NUMBER: B26E22610	
RECT. BEARING PLATE WITH EXIT PIPE FOR 1" THREADBAR				PLATE MATERIAL: SEE MAT'L SPEC. PME0021100P	SCALE 1:3				DRAWING NUMBER: B26E22610	
DATE: 08-15-07	DWG: G. MALECKI	CHK: S.N.	APP: E.A.	TUBE MATERIAL: SEE ABOVE						
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.					DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405					

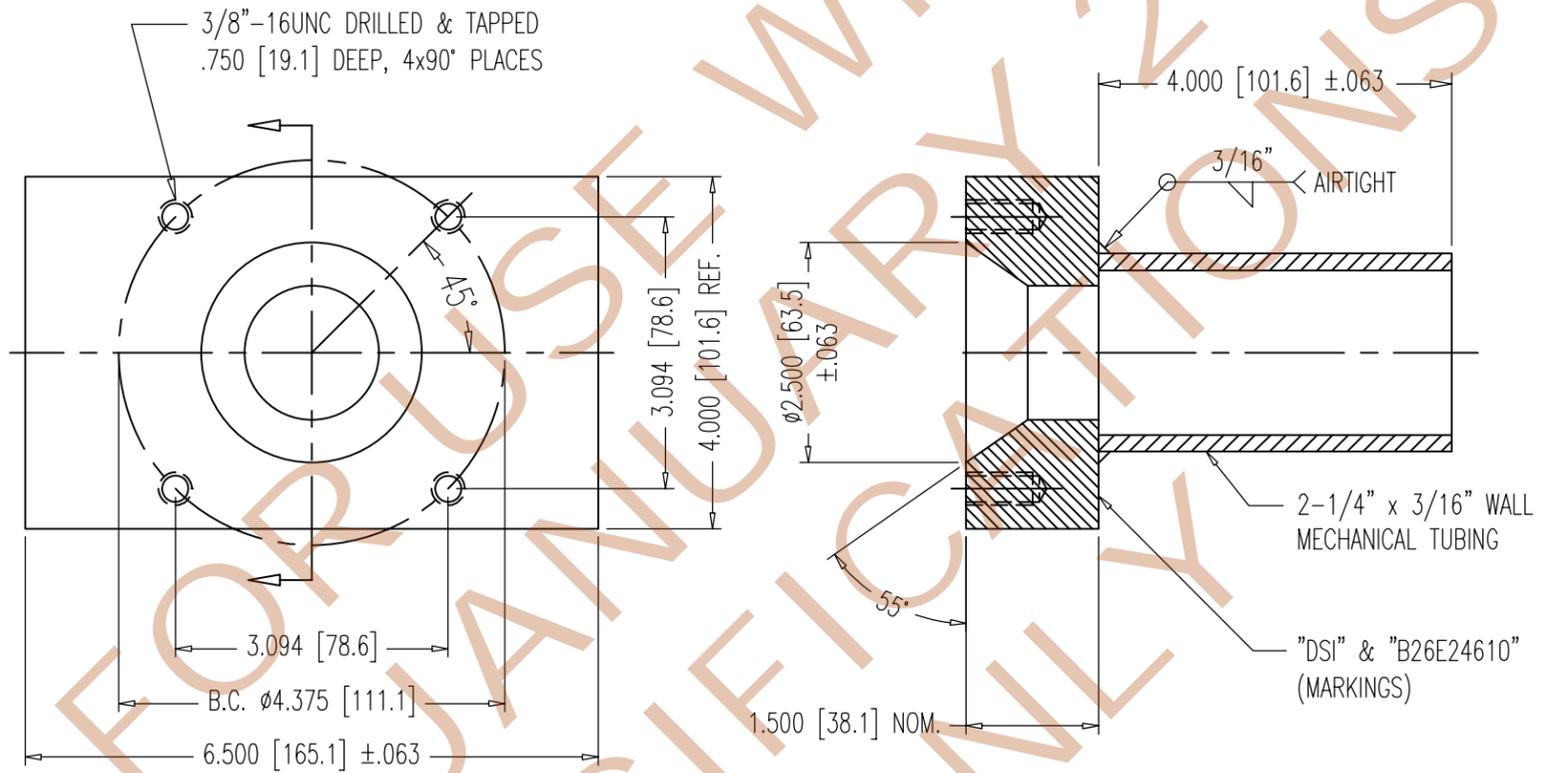


- NOTES:
1. ALSO SUITABLE FOR GR 160 THREADBAR.
 2. PLATE AND PIPE GALVANIZED ACCORDING TO ASTM A123 AFTER WELDING.
 3. 59mm DUCT U00220400 FITS OVER TUBING.
 4. SEE DRAWING B00E21191 FOR RAW MATERIAL PLATE WITHOUT HOLES.

MECHANICAL TUBE MATERIAL SHALL BE A512, A513 OR A519.

APPROVED BY FDOT 9-22-08

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QBE0021200L		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT: 9.3 LBS.	REV.	DATE	NAME	PART NUMBER: B26E24510
SQUARE BEARING PLATE WITH EXIT PIPE FOR 1" THREADBAR				PLATE MATERIAL: SEE MAT'L SPEC. PME0021100P	SCALE 1:3				DRAWING NUMBER: B26E24510
DATE: 12-05-07	DWG: G. MALECKI	CHK: S.N.	APP: E.A.	TUBE MATERIAL: SEE ABOVE					
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.				DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405					

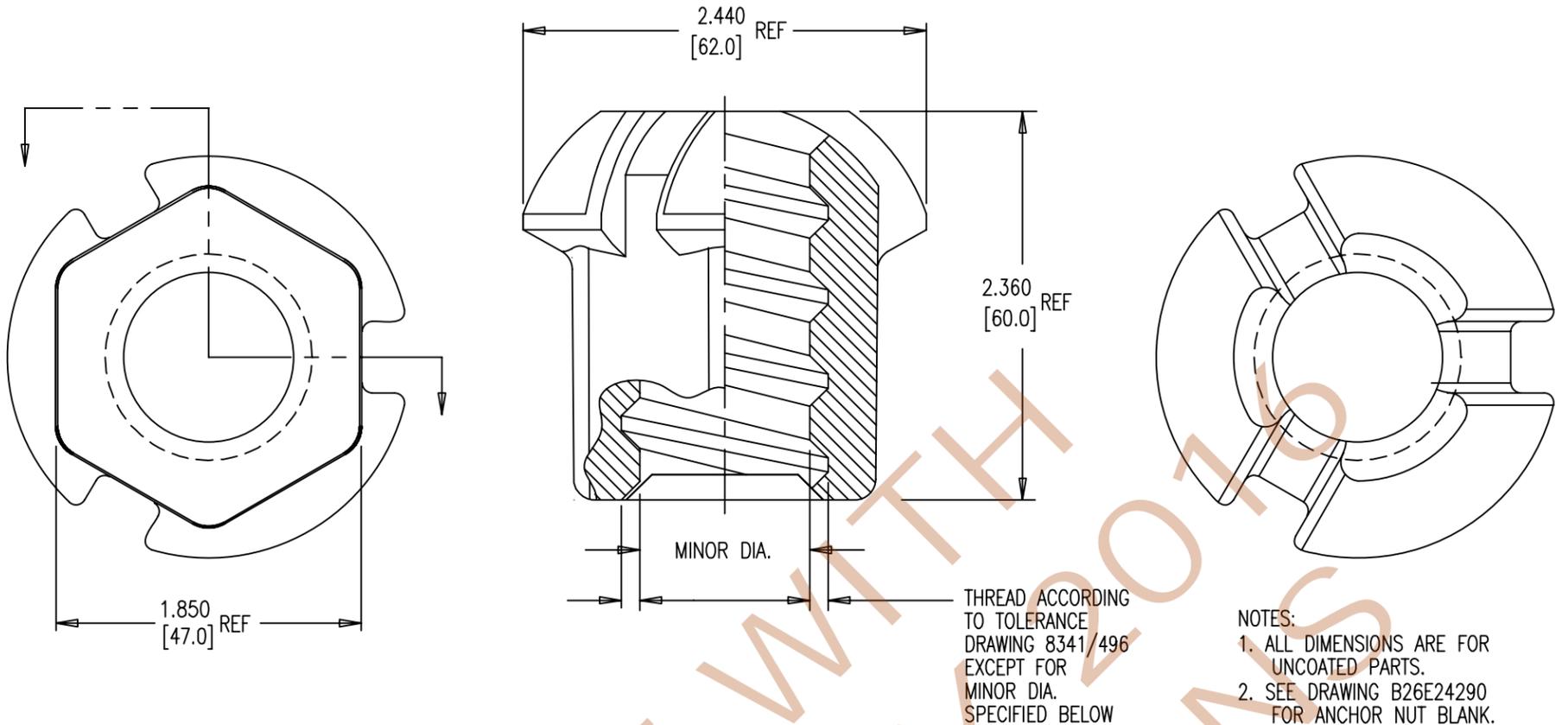


- NOTES:
1. ALSO SUITABLE FOR GR 160 THREADBAR.
 2. PLATE AND PIPE GALVANIZED ACCORDING TO ASTM A123 AFTER WELDING.
 3. 59mm DUCT U00220400 FITS OVER TUBING.
 4. SEE DRAWING B00E21292 FOR RAW MATERIAL PLATE WITHOUT HOLES.

MECHANICAL TUBE MATERIAL
SHALL BE A512, A513 OR A519.

APPROVED BY FDOT 9-22-08

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QBE0021200L		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT: 9.5 LBS.	REV.	DATE	NAME	PART NUMBER: B26E24610	
RECT. BEARING PLATE WITH EXIT PIPE FOR 1" THREADBAR				PLATE MATERIAL: SEE MAT'L SPEC. PME0021100P	SCALE 1:3				DRAWING NUMBER: B26E24610	
DATE: 12-04-07	DWG: G. MALECKI	CHK: S.N.	APP: E.A.	TUBE MATERIAL: SEE ABOVE						
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.				DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405						



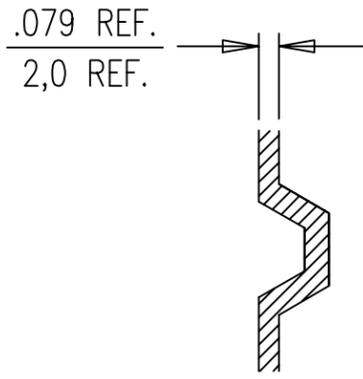
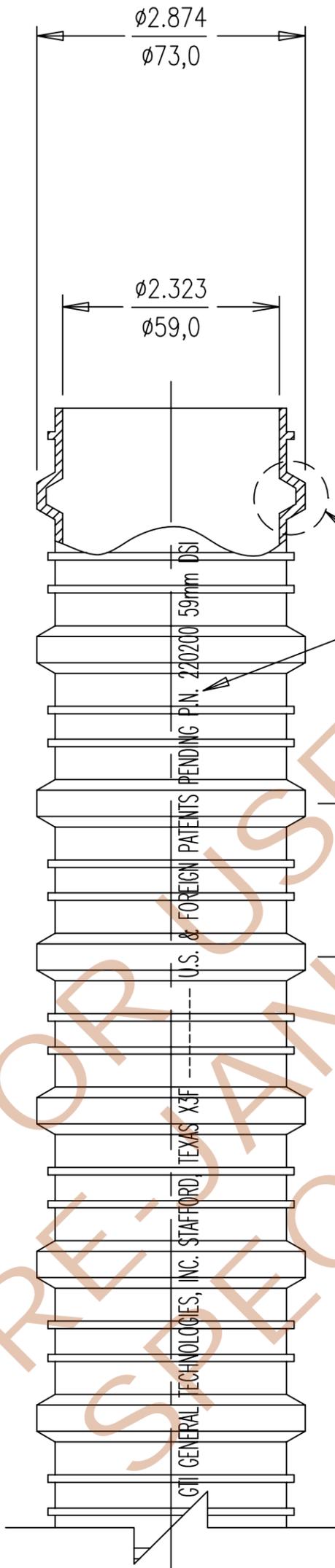
NOTES:
 1. ALL DIMENSIONS ARE FOR UNCOATED PARTS.
 2. SEE DRAWING B26E24290 FOR ANCHOR NUT BLANK.

PART NUMBER	HEAT TREATMENT	APPLICATION	MINOR DIA. MINOR DIA.
B26E24210	NORMALIZED BHN = 180-220	FOR USE WITH UNCOATED BAR NOT REUSABLE	1.045-1.049 (26,54-26,64)
B26E24220	QUENCHED & TEMPERED BHN = 269-302	FOR USE WITH UNCOATED BAR REUSABLE NUT	1.050-1.054 (26,67-26,77)
B26E24251	QUENCHED & TEMPERED BHN = 269-302	RAW MATERIAL FOR B26E24255 & B26E24258	1.068-1.072 (27,13-27,23)
B26E24255	QUENCHED & TEMPERED BHN = 269-302	PART IS EPOXY COATED EXCEPT FOR THREAD, FOR USE WITH EPOXY COATED BAR	1.068-1.072 (27,13-27,23)
B26E24258	QUENCHED & TEMPERED BHN = 269-302	PART IS HOT DIPPED GALVANIZED EXCEPT FOR THREAD, FOR USE WITH GALVANIZED BAR (ASTM A123)	1.068-1.072 (27,13-27,23)

COATING SPECIFICATIONS		
X	EPOXY COATING	GALVANIZING
HARDWARE	ASTM A775 OR AASHTO M284 7-12 MIL	ASTM A153
THREADBAR		ASTM A123

APPROVED BY FDOT 9-22-08

DYWIDAG POST-TENSIONING SYSTEMS				DIMENSIONS: INCH/mm mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QBEO020100F			PART NUMBER B26E24210 B26E24220 B26E24251 B26E24255 B26E24258		
GROUTABLE ANCHOR NUTS FOR 1" Ø BAR, 150 KSI				WEIGHT 1.5 LBS.	REV.	DATE	NAME				
DATE: 06-07-05 DWG: G. MALECKI CHK: H.K. APP: K.S.				SCALE 1:1							
This drawing, the pertinent enclosures, descriptions, calculations etc. and their contents are the property of DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. They are not allowed to be duplicated with-out our permission. They are also not to be shown or explained for any reason to a third party other than for reasons expressly intended by the original receiver. They are to be returned on request.				MATERIAL: SEE DRAWING B26E24290					DRAWING NUMBER B26E24200		
DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC.											



DETAIL
SCALE 1:1

SEE DETAIL

RUNNING LATEX PRINT: 
 "GTI GENERAL TECHNOLOGIES, INC. STAFFORD, TEXAS X3F ----- U.S. & FOREIGN PATENTS PENDING P.N. 220200 59mm DSI"
 (----- = BATCH NUMBER).

MATERIAL SPECIFICATIONS:
 MANUFACTURE DUCTS FROM NON-COLORED, UNFILLED POLYPROPYLENE MEETING THE REQUIREMENTS OF ASTM D4101 WITH A CELL CLASSIFICATION RANGE OF PP0340B14541 TO PP0340B67884. THE DUCT SHALL BE WHITE IN COLOR CONTAINING ANTIOXIDANT(S) WITH A MINIMUM OXIDATION INDUCTION TIME (OIT) ACCORDING TO ASTM D 3895 OF 20 MINUTES AND CONTAINING A NON-YELLOWING LIGHT STABILIZER.

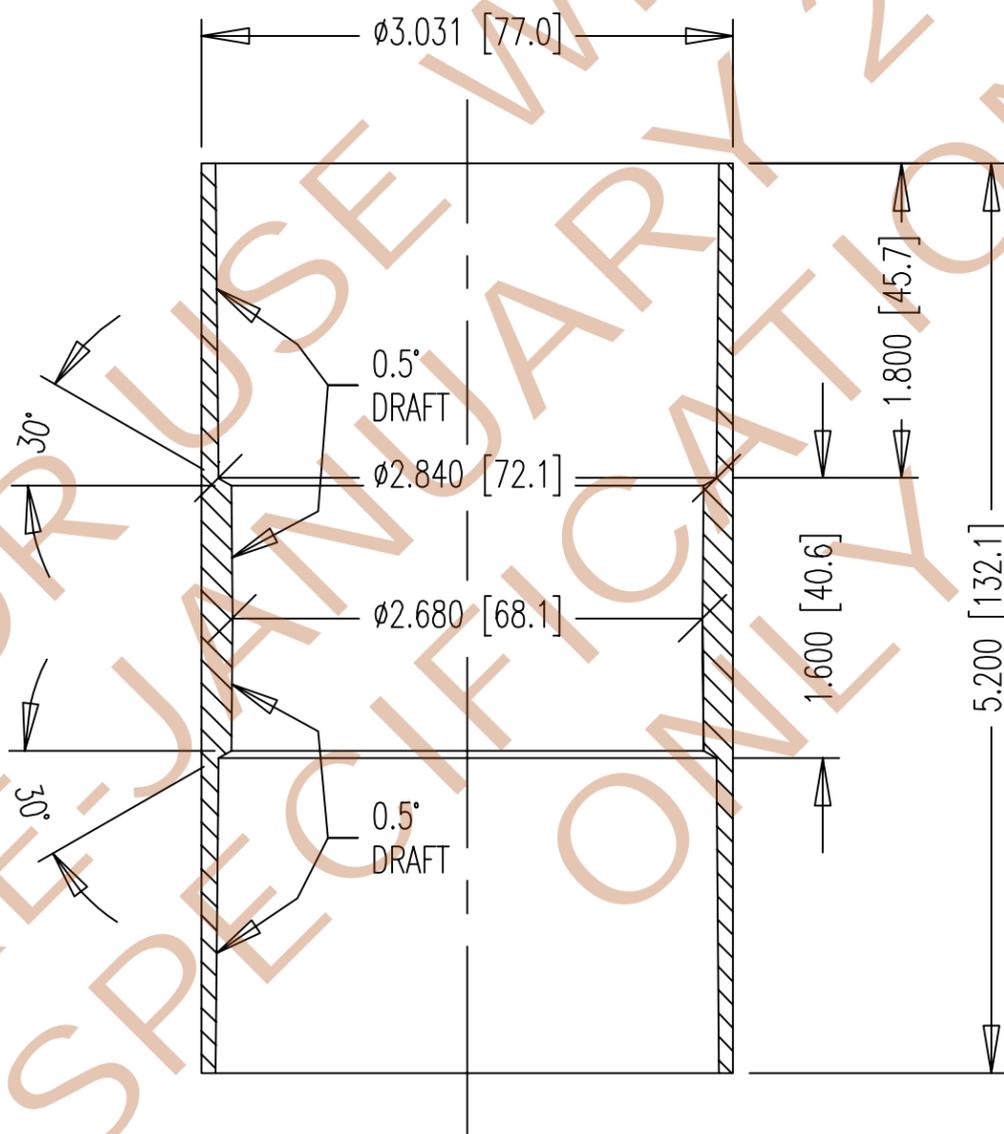
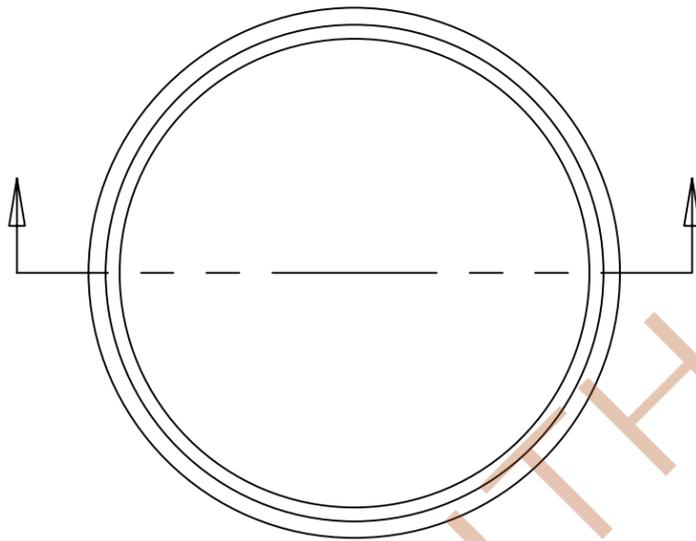
NOTES:

1. GTI GENERAL TECHNOLOGIES, INC. STAFFORD, TEXAS X3F ----- U.S. & FOREIGN PATENTS PENDING P.N. 220200 59mm DSI (----- IS BATCH NO.).
2. REFERENCE GTI DRAWING 220200.
-  3. STANDARD FIT FOR 5-0.6", 7-0.5", 7-0.6" AND 9-0.5" STRANDS.
4. THIS DRAWING IS NOT INTENDED FOR MANUFACTURING PURPOSES.
5. Min. BENDING RADIUS, $R_{min} = 22.8$ FT.
6. DUCT IS DELIVERED IN STRAIGHT SECTIONS AND IS NOT INTENDED TO BE COILED.

 PART WAS U00220400.

APPROVED BY FDOT 9-22-08

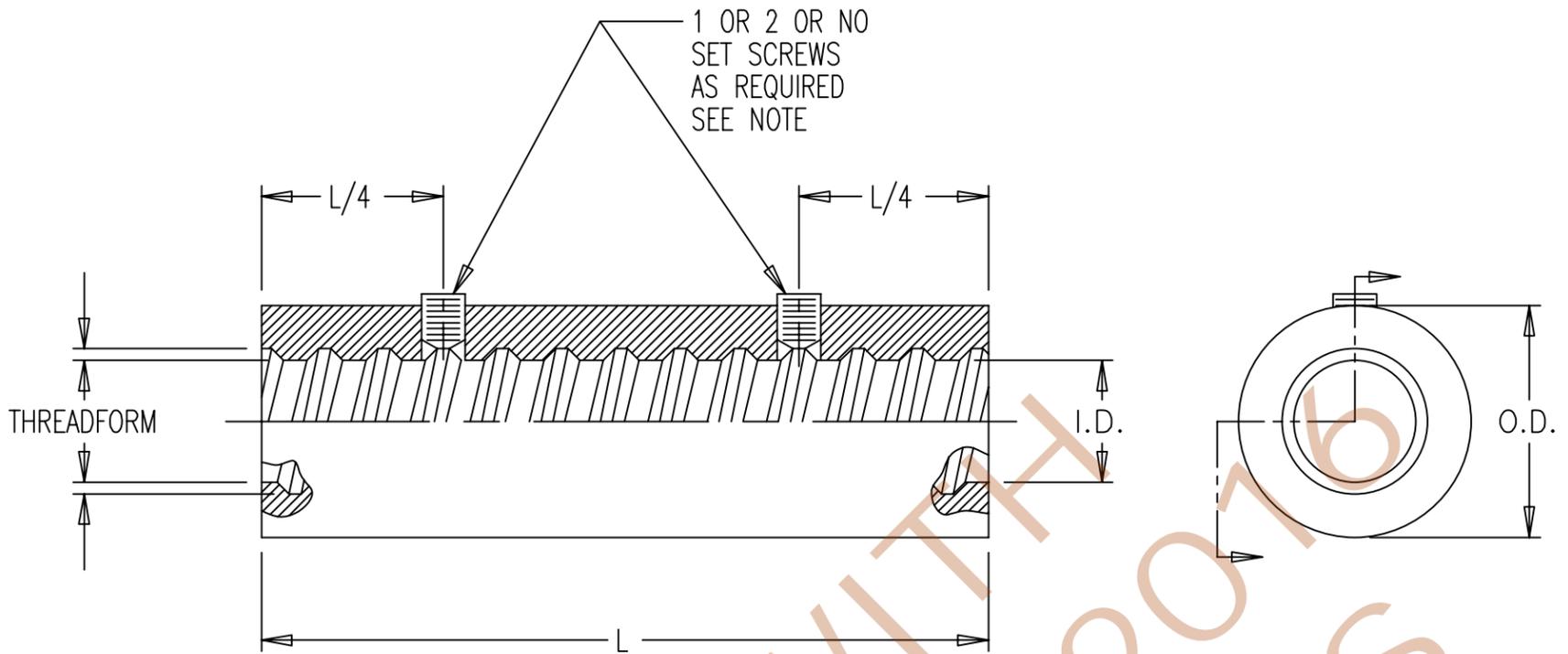
DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QU00041110P		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT 0.296 LBS/FT	REV. 1	DATE 08-04-08	NAME S.N.	PART NUMBER: U00220200
2-3/8" (59mm) CORRUGATED PP DUCT				MATERIAL: SEE ABOVE	SCALE 1:2				DRAWING NUMBER: U00220200
DATE: 09-14-07	DWG: G. MALECKI	CHK: H.K.	APP: K.S.	THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.					
DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. POST TENSIONING / REINFORCING UNIT PHONE: 630-739-1100 320 MARMON DRIVE - BOLINGBROOK, IL FAX: 630-739-1405									



PART WAS U00220440. REFERENCE GTI DWG 220205.

APPROVED BY FDOT 9-22-08

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QSA0028000P		TOLERANCES: ±.005 UNLESS NOTED	WEIGHT 0.23 LBS.	REV. 1	DATE 08-12-08	NAME S.N.	PART NUMBER: U00220205	
Ø2-3/8" (59mm) DUCT COUPLER				MATERIAL: HDPE	SCALE 2:3				DRAWING NUMBER: U00220205	
				DATE: 10-25-99	DWG: G. MALECKI	CHK: S.Y.	APP: K.S.			
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER, THEY HAVE TO BE RETURNED UPON REQUEST.				DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405						



NOTES:

1. ALL COUPLERS ALSO SUITABLE FOR GRADE 160 THREADBARS.
2. LOCATE TAPPED HOLE FOR SET SCREW ON CENTER OF MAJOR DIA OF THREAD.

NOMINAL SIZE	1"	1-1/4"	1-3/8"		
PART NUMBERS FOR COUPLERS:	26mm	32mm	36mm		
WITHOUT SET SCREWS	B26E30810	B32E30810	B36E30810		
WITH 1 SET SCREW	B26E30811	B32E30811	B36E30811		
WITH 2 SET SCREWS	B26E30815	B32E30815	B36E30815		
O.D. (IN./mm)	2.000/50,8	2.375/60,3	2.750/69,9		
I.D. (IN./mm)	1.049/26,6	1.272/32,3	1.433/36,4		
L (IN./mm)	6.250/158,8	6.750/171,4	8.750/222,3		
THREADFORM: 8341/	496	754	722		
SET SCREW SIZE	3/8-16UNC	3/8-16UNC	3/8-16UNC		
TOLERANCE FOR:					
O.D. (IN.)	+0/-0.003	+0/-0.003	+0/-0.004		
I.D. (IN.)	+0/-0.004	+0/-0.004	+0/-0.004		
L (IN.)	±1/16	±1/16	±1/16		
WEIGHT (LBS.)	3.74	5.70	12.20		

APPROVED BY FDOT 9-22-08

DYWIDAG POST-TENSIONING SYSTEMS

DIMENSIONS: INCH/mm
mm FOR REFERENCE ONLY

QUALITY PLAN NUMBER:
QB00030800S

DRAWING NUMBER
B00E30810

FULL LOAD COUPLERS
FOR GRADE 150 THREADBAR

DATE: 04-10-90 | DWG: G. MALECKI | CHK: | APP:

This drawing, the pertinent enclosures, descriptions, calculations etc. and their contents are the property of DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. They are not allowed to be duplicated with-out our permission. They are also not to be shown or explained for any reason to a third party other than for reasons expressly intended by the original receiver. They have to be returned on request.

MATERIAL:
PME0020700B

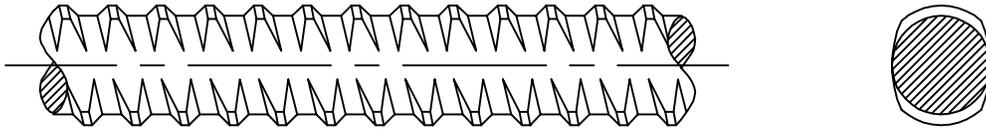
SCALE
1:1
FOR
1"

REV.	DATE	NAME
4	11-15-94	K.L.
5	03-27-96	C.S.
6	08-12-98	A.W.
7	12-14-98	A.W.
8	08-08-00	A.W.
9	08-09-04	H.K.

DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC.



RIGHT HAND THREAD



	<u>PART NUMBERS</u>	<u>SPECIFICATIONS</u>
FOR BARE BAR:	B26E CUT	ASTM A722 TYPE II
FOR EPOXY COATED BAR:	B26E COAT	ASTM A775 OR AASHTO M284
FOR GALVANIZED BAR:	B26E GALV	ASTM A123, A143 AND DWG PME0000058B

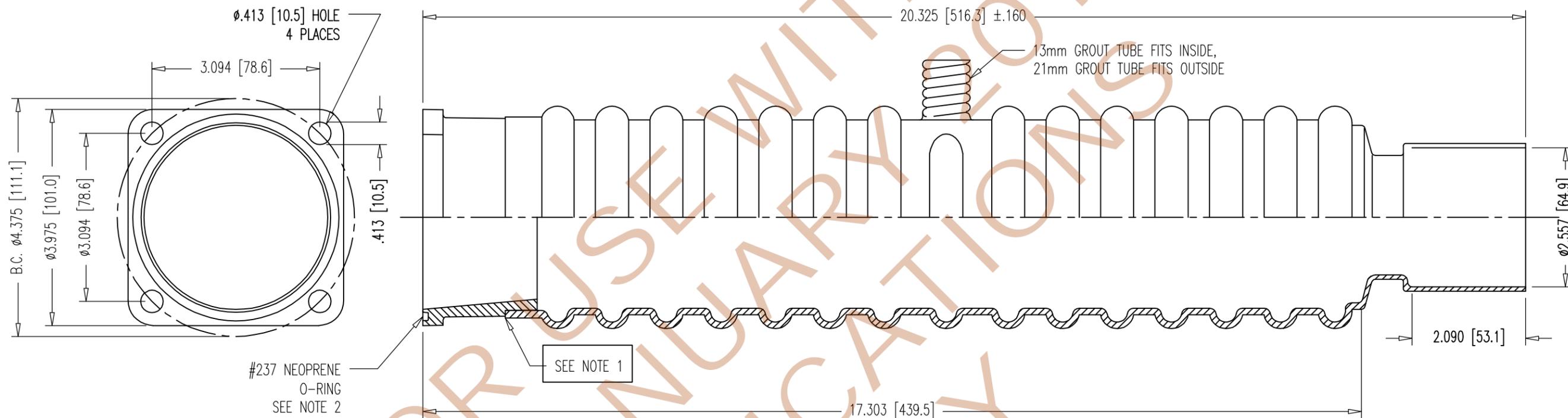
<u>PHYSICAL PROPERTIES</u>
EFFECTIVE AREA: 0.85 SQ.IN.
ULTIMATE STRENGTH: 150 KSI
ULTIMATE LOAD: 127.5 KIPS
YIELD LOAD: 102.8 KIPS
WEIGHT: 3.01 LBS./FT.
MAX. BAR ϕ INCL. RIBS: 1.20 IN.
AVERAGE CORE ϕ : 1.02 IN.
PITCH: 0.510 IN.

NOTE:
ALL DIMENSIONS APPLY TO BARE BARS ONLY.

APPROVED BY FDOT 9-22-08

\triangle \rightarrow ALL PART NUMBERS CHANGED.

DYWIDAG POST-TENSIONING SYSTEMS	DIMENSIONS: INCH/mm mm FOR REFERENCE ONLY	QUALITY PLAN NUMBER:	DRAWING NUMBER B26E00000																
1" ϕ THREADBAR GRADE 150 KSI		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">REV.</th> <th style="width: 10%;">DATE</th> <th style="width: 10%;">NAME</th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">12-11-98</td> <td style="text-align: center;">A.W.</td> <td></td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV.	DATE	NAME		1	12-11-98	A.W.										
REV.	DATE	NAME																	
1	12-11-98	A.W.																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">DATE: 12-22-91</td> <td style="width: 25%;">DRAWN: G. MALECKI</td> <td style="width: 25%;">APPROVED:</td> </tr> </table>	DATE: 12-22-91	DRAWN: G. MALECKI	APPROVED:	MATERIAL: SEE ABOVE	SCALE NTS														
DATE: 12-22-91	DRAWN: G. MALECKI	APPROVED:																	
<p style="font-size: small;">This drawing, the pertinent enclosures, descriptions, calculations etc. and their contents are the property of DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. They are not allowed to be duplicated with-out our permission. They are also not to be shown or explained for any reason to a third party other than for reasons expressly intended by the original receiver. They have to be returned on request.</p>																			
DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC.																			

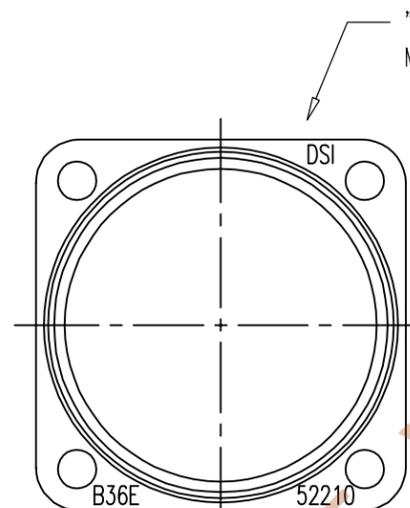
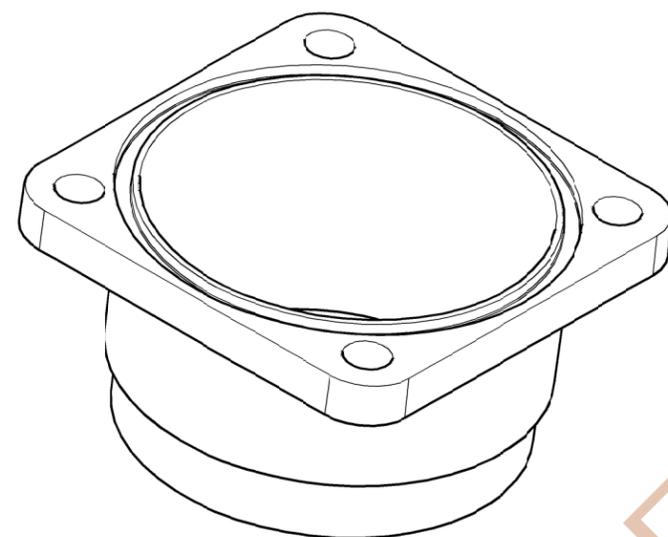
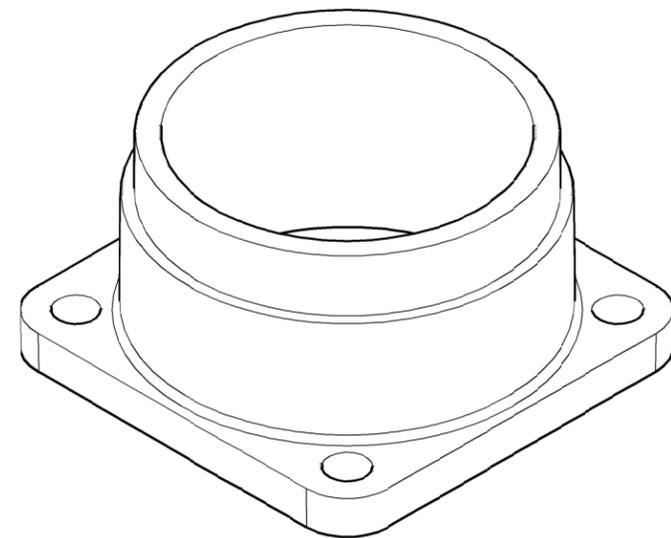


NOTES:

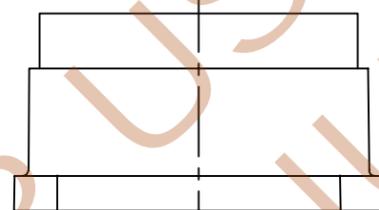
1. PART B36E52210 (PLATE COUPLER CONNECTOR) IS CONNECTED TO U06008010 (CORR. COUPLER HOUSING) TO CREATE PART B36E50210 (PLATE COUPLER HOUSING).
2. INSTALL #237 NEOPRENE O-RING IN GROOVE USING DROPS OF LIQUID ADHESIVE BEFORE SHIPPING.
3. FOR MATERIAL SPECIFICATIONS, SEE DRAWINGS U06008010 AND B36E52210.

APPROVED BY FDOT 9-22-08

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		WEIGHT		REV.	DATE	NAME	PART NUMBER:		
PLATE COUPLER HOUSING				LBS.					B36E50210		
				SCALE					DRAWING NUMBER:		
DATE: 11-21-07	DWG: G. MALECKI	CHK: E.A.	APP: K.S.	MATERIAL: SEE DRAWINGS U06008010 AND B36E52210		1:2			B36E50210		
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI'S SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.				DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405							

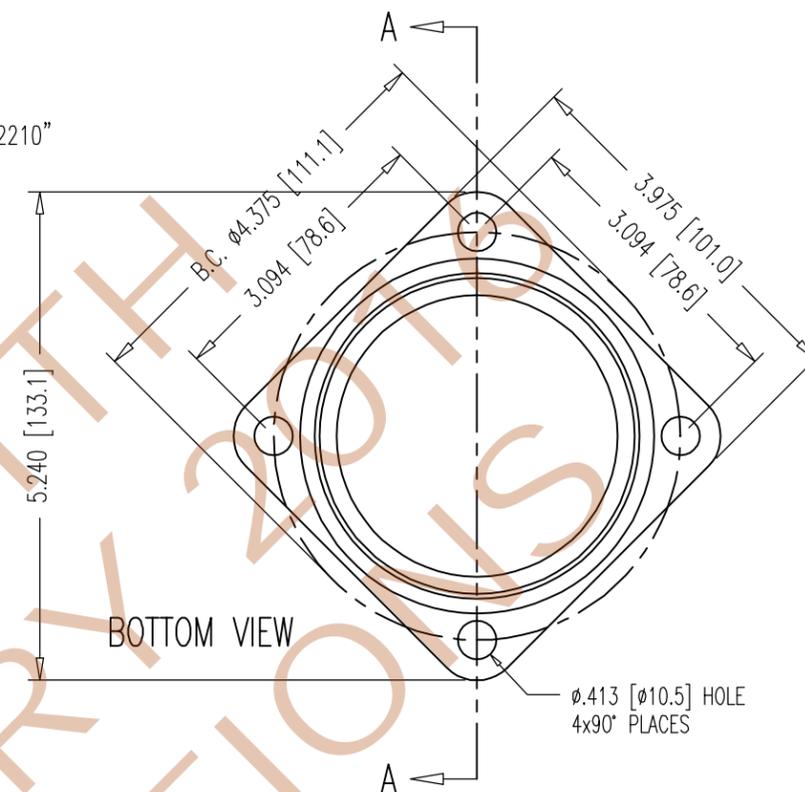


TOP VIEW



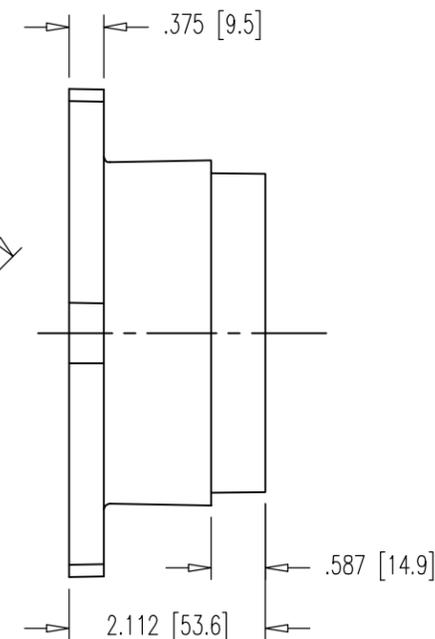
SIDE VIEW

"DSI", "B36E" & "52210"
MARKINGS

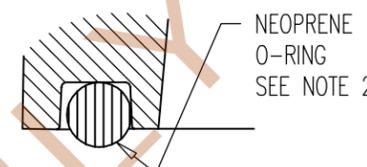


BOTTOM VIEW

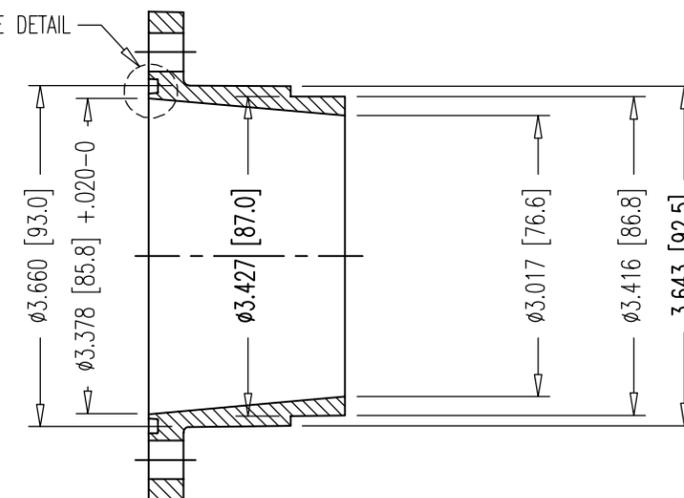
Ø.413 [Ø10.5] HOLE
4x90° PLACES



SEE GROOVE DETAIL



NEOPRENE
O-RING
SEE NOTE 2



GROOVE DETAIL

SECTION A-A

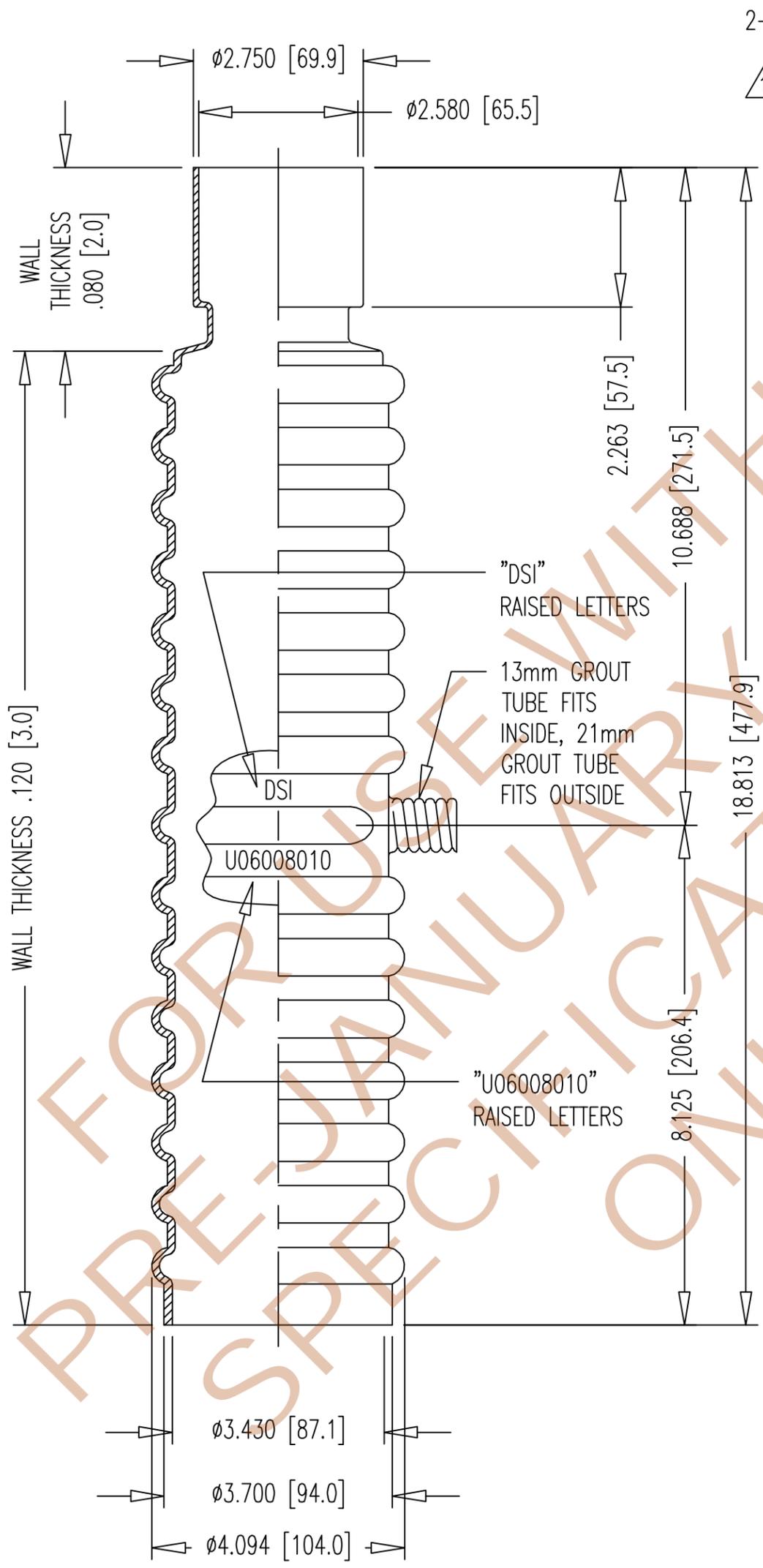
APPROVED BY FDOT 9-22-08

MATERIAL SPECIFICATIONS:
MANUFACTURE PLATE COUPLER CONNECTOR FROM NON-COLORED, UNFILLED POLYETHYLENE MEETING THE REQUIREMENTS OF ASTM D4976. THE PLATE COUPLER CONNECTOR SHALL CONTAIN ANTIOXIDANT(S) WITH A MINIMUM OXIDATION INDUCTION TIME (OIT) ACCORDING TO ASTM D 3895 OF 20 MINUTES AND CONTAINING A NON-YELLOWING LIGHT STABILIZER. THE STRESS CRACK RESISTANCE TEST OF THE PLATE COUPLER CONNECTOR SHALL RESULT IN A MINIMUM FAILURE TIME OF 3 HOURS ACCORDING TO ASTM F 2136 AT AN APPLIED STRESS OF 348 PSI

NOTES:

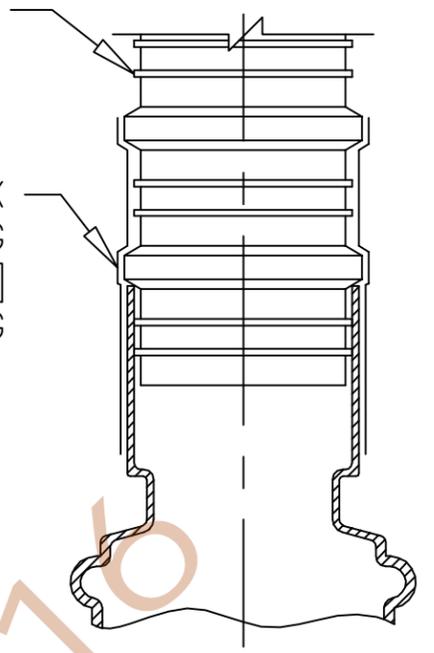
1. USE 3/8"-16UNC GALV. S.H.C.S. BOLTS, 1" LONG.
2. INSTALL #237 NEOPRENE O-RING 3-3/8"x3-5/8"x1/8" IN GROOVE IN CAP USING DROPS OF LIQUID ADHESIVE BEFORE SHIPPING.

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT XX LBS.	REV.	DATE	NAME	PART NUMBER: B36E52210
PLATE COUPLER CONNECTOR				MATERIAL: SEE ABOVE	SCALE 1:2 2:3 5:2 5:1				DRAWING NUMBER: B36E52210
				DATE: 10-15-07 DWG: G. MALECKI CHK: E.A. APP: K.S.		DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405			
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI'S SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.									



2-3/8" [59mm]
PP DUCT
U00220200

HEAT SHRINK TUBING
~4" [102mm] LONG

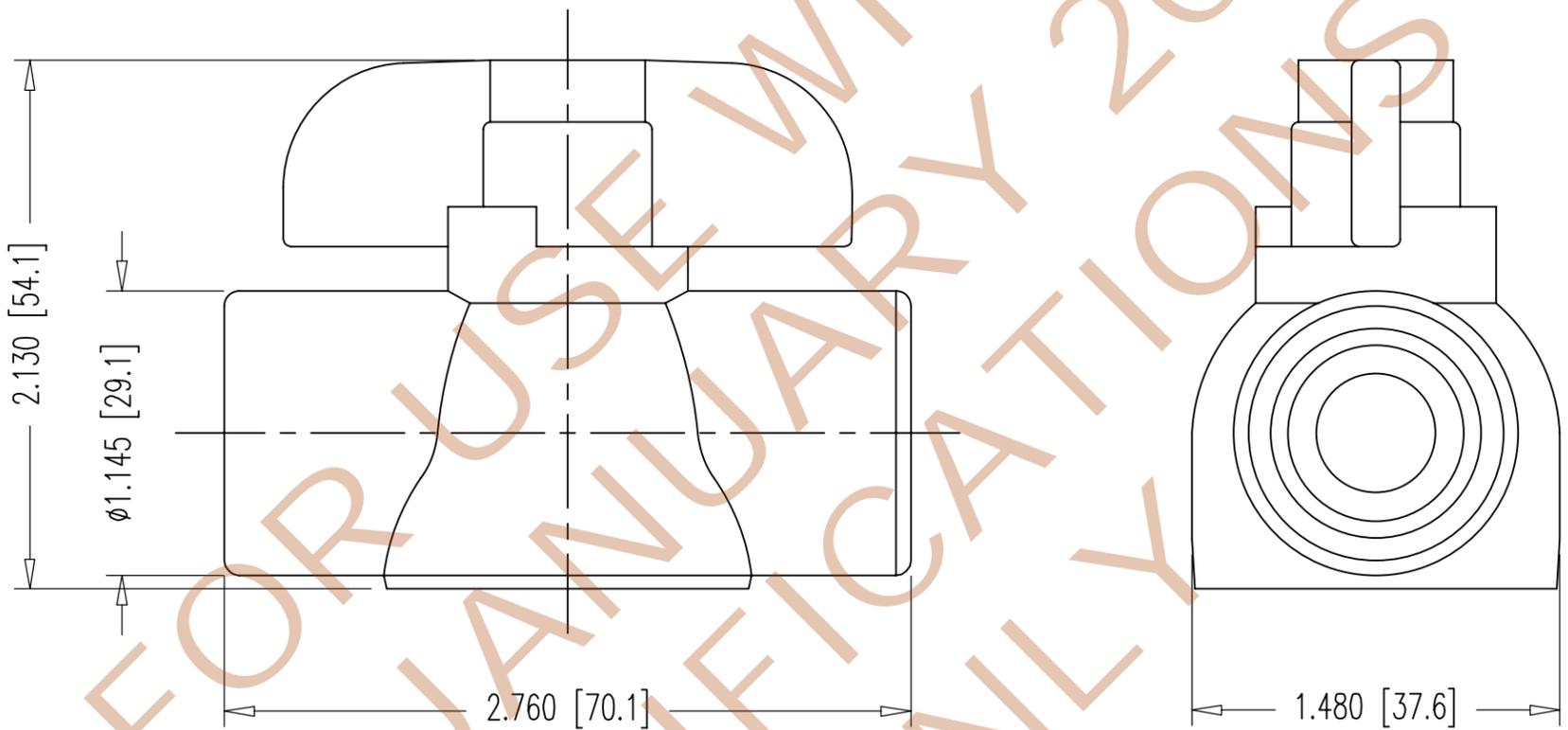
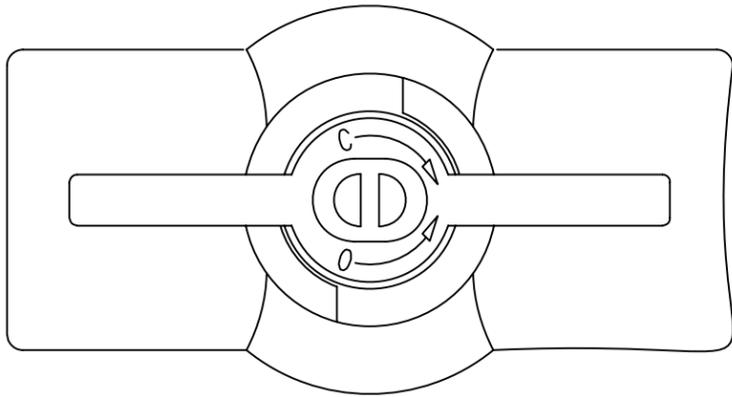


MATERIAL SPECIFICATIONS:
MANUFACTURE COUPLER HOUSING FROM NON-COLORED, UNFILLED POLYETHYLENE MEETING THE REQUIREMENTS OF ASTM D4976. THE COUPLER HOUSING SHALL BE WHITE IN COLOR CONTAINING ANTIOXIDANT(S) WITH A MINIMUM OXIDATION INDUCTION TIME (OIT) ACCORDING TO ASTM D 3895 OF 20 MINUTES AND CONTAINING A NON-YELLOWING LIGHT STABILIZER. THE STRESS CRACK RESISTANCE TEST OF THE COUPLER HOUSING SHALL RESULT IN A MINIMUM FAILURE TIME OF 3 HOURS ACCORDING TO F 2136 AT AN APPLIED STRESS OF 348 PSI

- NOTES:
1. WALL THICKNESS AS SHOWN
2. ALL DIMENSIONS MEASURED.

APPROVED BY FDOT 9-22-08

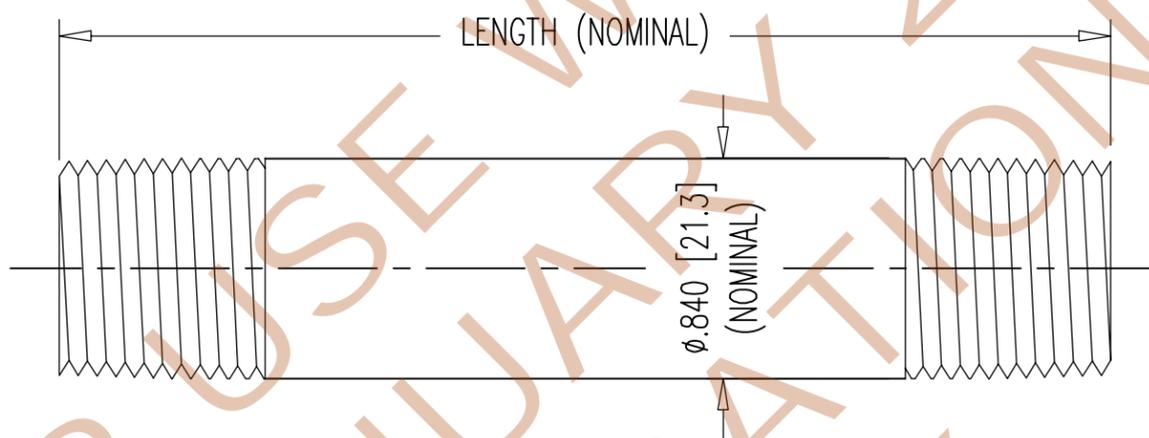
DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: QUA0060810P		TOLERANCES: ±.060 UNLESS NOTED	WEIGHT 0.49 LBS.	REV. 1	DATE 09-23-08	NAME S.N.	PART NUMBER: U06008010
CORRUGATED PE COUPLER HOUSING				MATERIAL: SEE ABOVE	SCALE 1:3				DRAWING NUMBER: U06008010
DATE: 09-04-01	DWG: G. MALECKI	CHK: S.Y.	APP: K.S.	DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405					
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI'S SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.									



NOTE:
 ALL DIMENSION MEASURED.
 SPECIAL ORDER: NO STAMPED PART NUMBER.
 SUPPLIER: KING BROTHERS
 SUPPLIER PART NO. EBV-0500-T

APPROVED BY FDOT 09-14-07

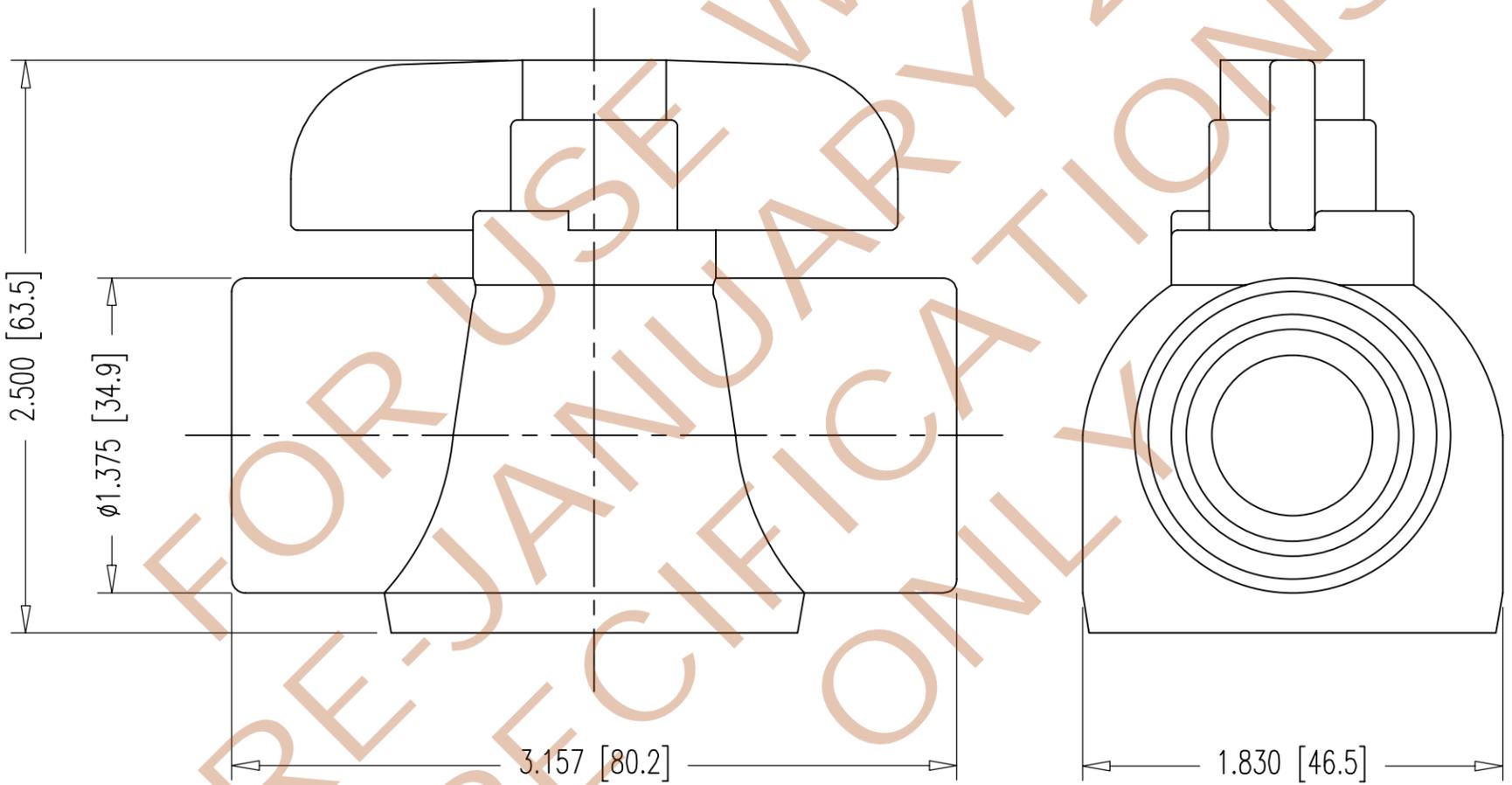
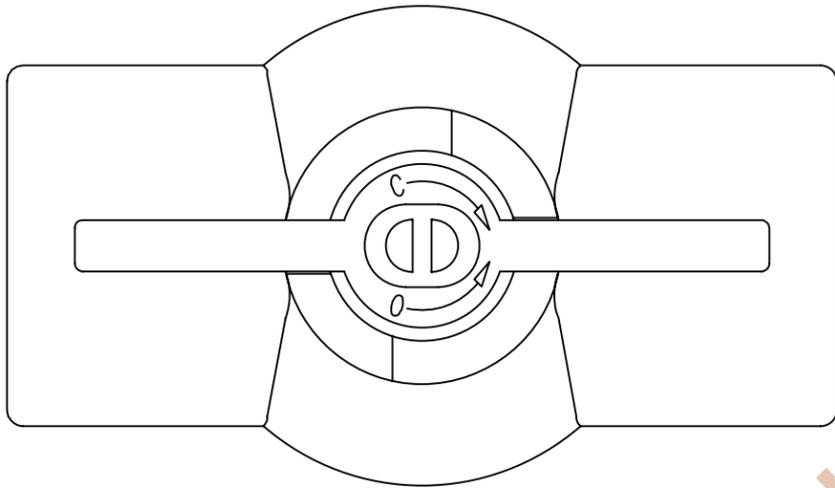
DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		WEIGHT 0.138 LBS.	REV.	DATE	NAME	PART NUMBER: 00 00 634
1/2" NPT BALL VALVE								
DATE: 09-14-07	DWG: G. MALECKI	CHK: S.N.	APP: E.A.	DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405				
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.								



PART NUMBER	LENGTH	WEIGHT
00 00 672	4" [101.6mm]	0.28 LBS.
00 00 674	6" [152.4mm]	0.43 LBS.
00 00 676	12" [304.8mm]	0.85 LBS.

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		REV.	DATE	NAME	PART NUMBER: 00 00 672 00 00 674 00 00 676
1/2" PIPE NIPPLES				MATERIAL: SCH 40 BLACK WELDED STEEL	SCALE 1:1		DRAWING NUMBER: 00 00 676
							DATE: 09-14-07
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER, THEY HAVE TO BE RETURNED UPON REQUEST.				DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405			

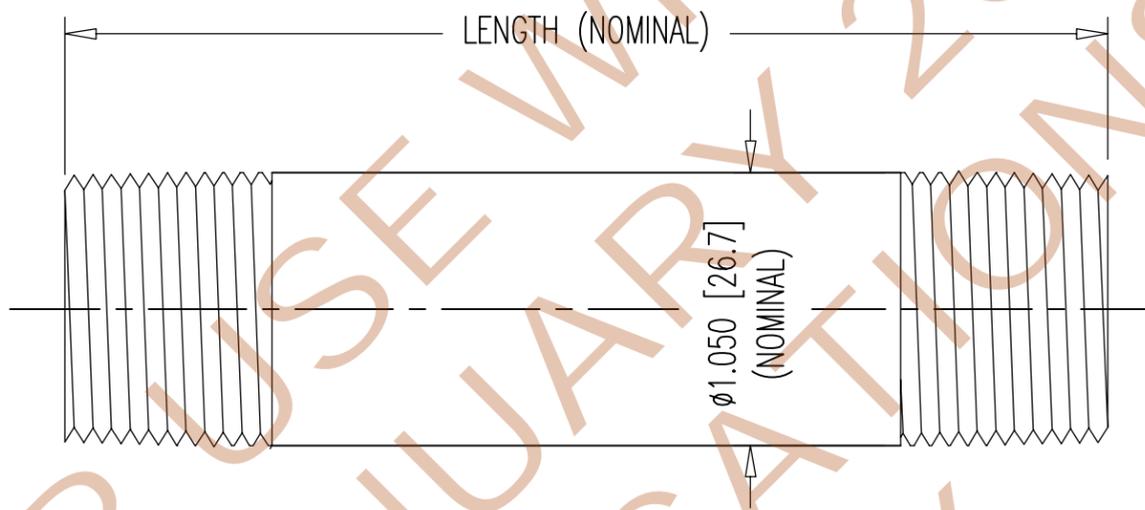


NOTE:
ALL DIMENSION MEASURED.

SUPPLIER: KING BROTHERS
SUPPLIER PART NO. EBV-0750-T

APPROVED BY FDOT 09-14-07

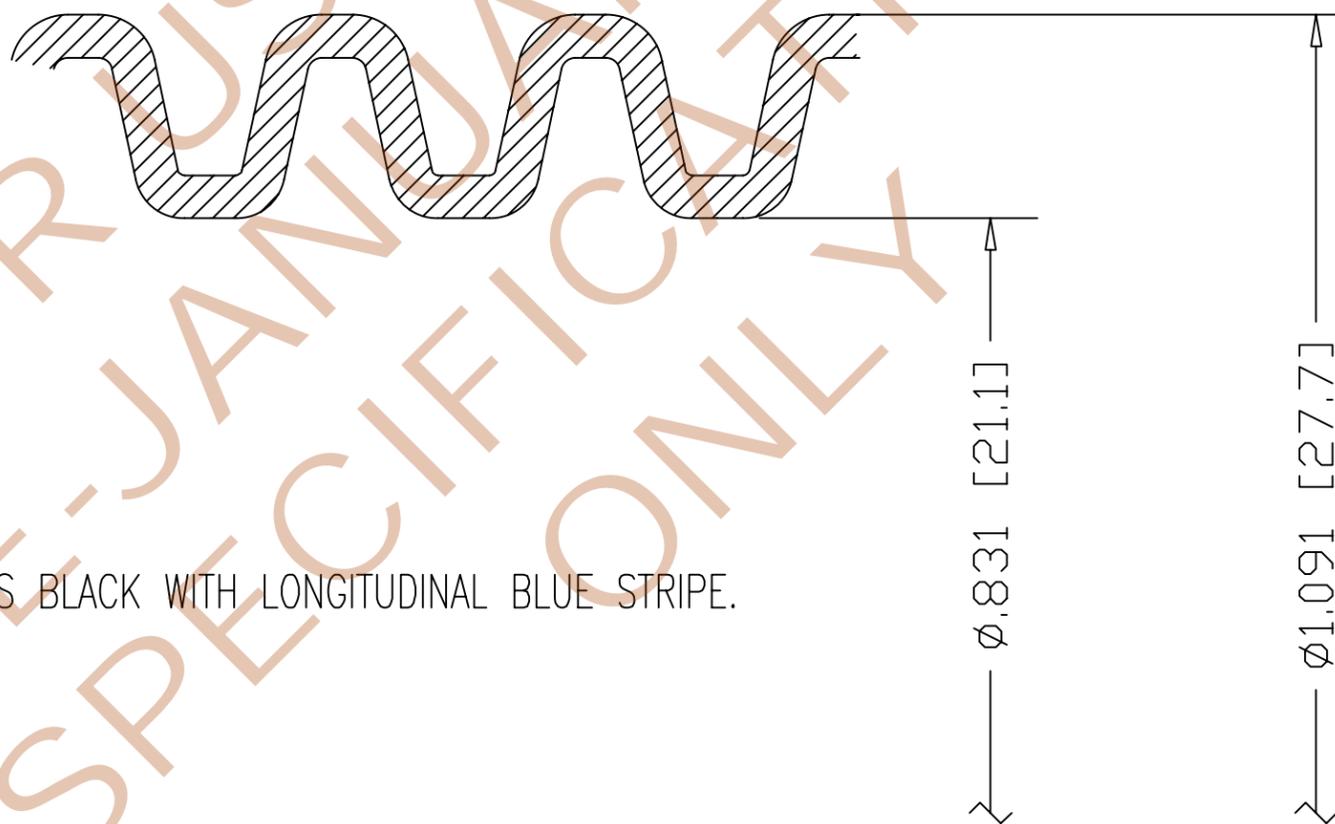
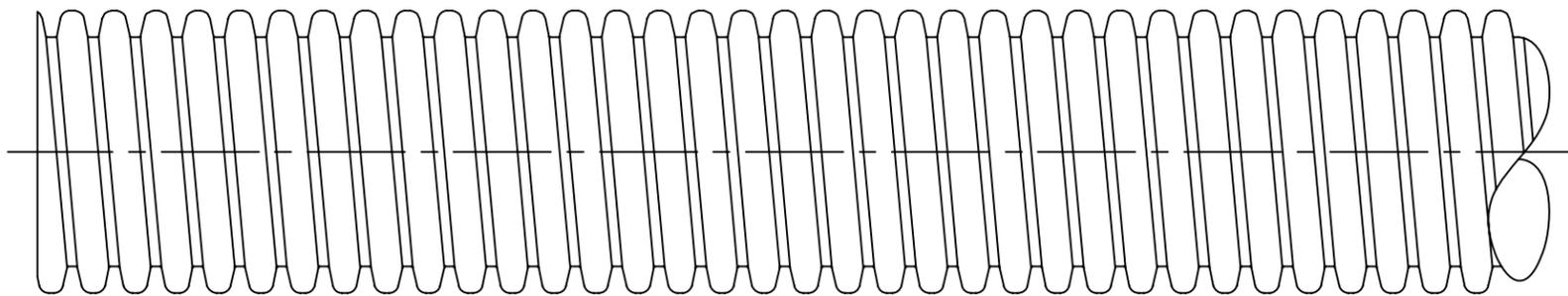
DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		WEIGHT 0.213 LBS.	REV.	DATE	NAME	PART NUMBER: 00 00 834
3/4" NPT BALL VALVE								
DATE: 09-14-07	DWG: G. MALECKI	CHK: S.N.	APP: E.A.	DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405				
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.								



PART NUMBER	LENGTH	WEIGHT
00 00 872	4" [101.6mm]	0.38 LBS.
00 00 874	6" [152.4mm]	0.57 LBS.
00 00 876	12" [304.8mm]	1.13 LBS.

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		REV.	DATE	NAME	PART NUMBER: 00 00 872 00 00 874 00 00 876
3/4" PIPE NIPPLES				MATERIAL: SCH 40 BLACK WELDED STEEL	SCALE 1:1		DRAWING NUMBER: 00 00 876
DATE: 09-14-07	DWG: G. MALECKI	CHK: S.N.	APP: K.S.	DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405			
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.							



NOTES:

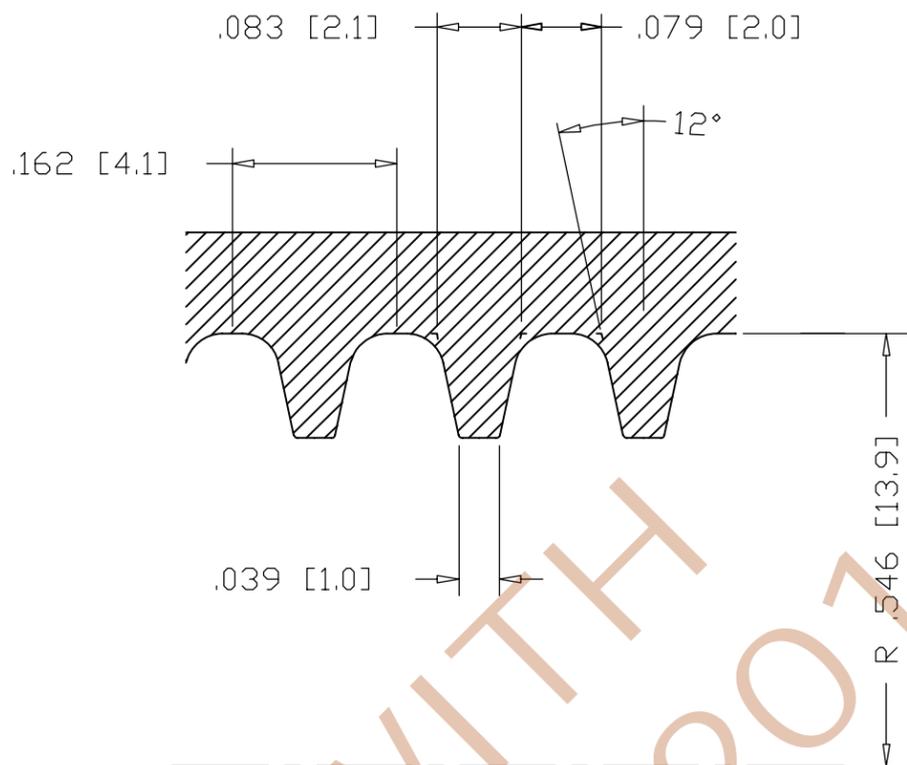
1. GROUT TUBE IS BLACK WITH LONGITUDINAL BLUE STRIPE.

MANUFACTURER: DSI

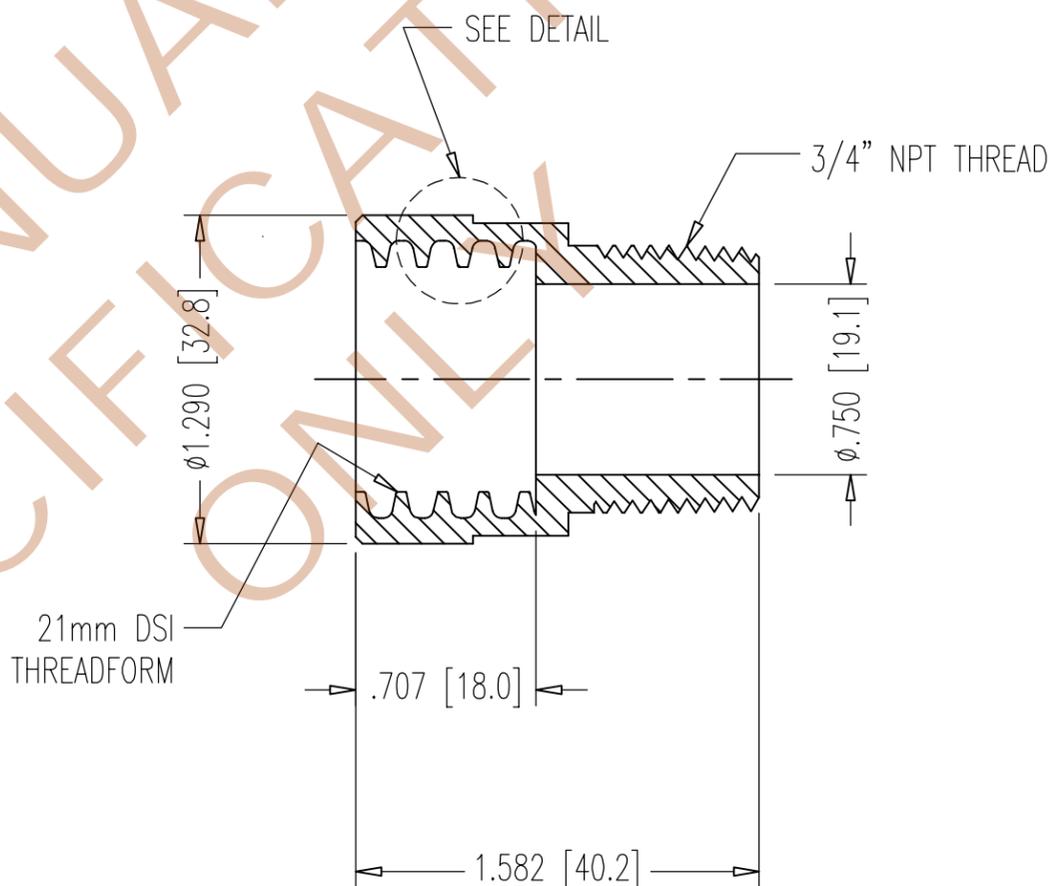
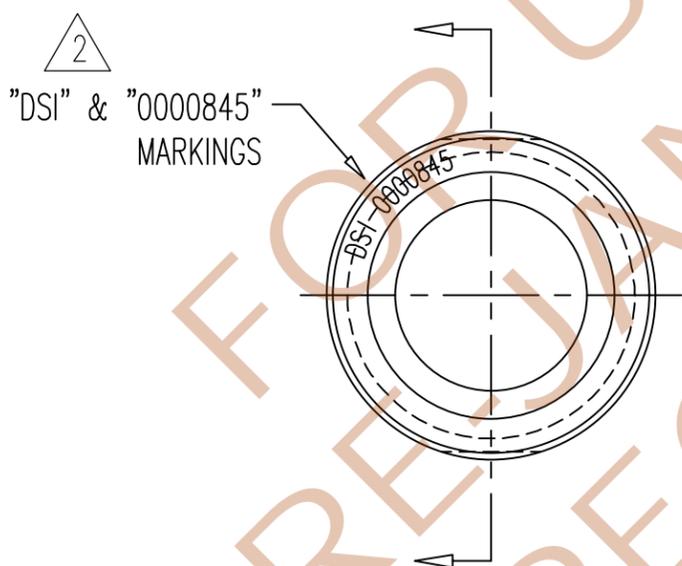
MANUFACTURER'S PART NUMBER: 00 00 801

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH [mm] IN. FOR REFERENCE ONLY		QUALITY PLAN NUMBER:		TOLERANCES: ±.020 UNLESS NOTED		REV.	DATE	NAME	PART NUMBER: 00 00 801	
21mm GROUT TUBE, STANDARD DUTY				MATERIAL: HDPE MEETING OIT REQUIREMENTS		SCALE 1:1 6:1				DRAWING NUMBER: 00 00 801
DATE: 09-14-07	DWG: G. MALECKI	CHK: S.Y.	APP: K.S.	THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER, THEY HAVE TO BE RETURNED UPON REQUEST.				DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405		



20% GLASS FILLED NYLON
 WITH A CELL CLASS S-PA 0141,
 S-PA 0231 OR S-PA 0401
 COLOR: BLACK

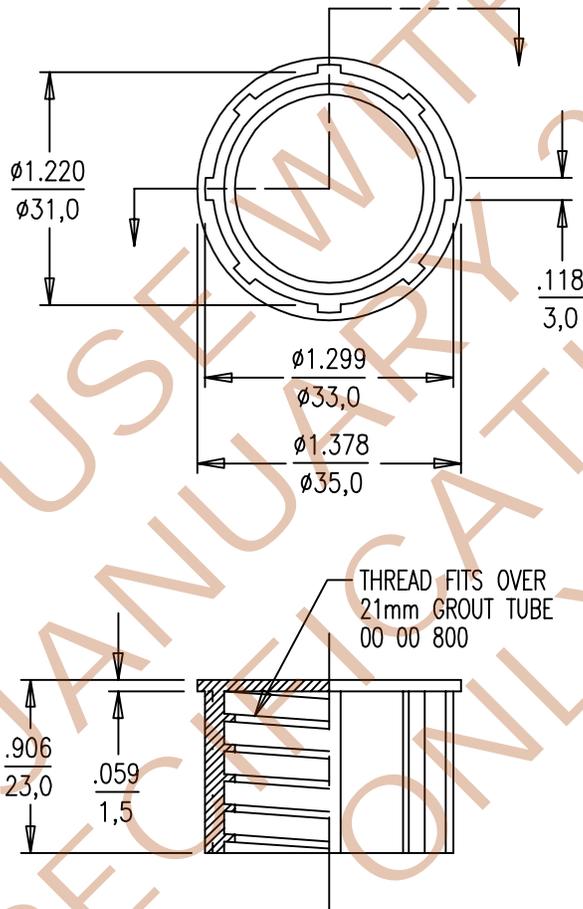


NOTE:
 PART FOR USE WITH 21mm GROUT TUBES
 00 00 801 OR 00 00 802.

MANUFACTURER: DSI
 MANUFACTURER'S PART NUMBER: 00 00 845

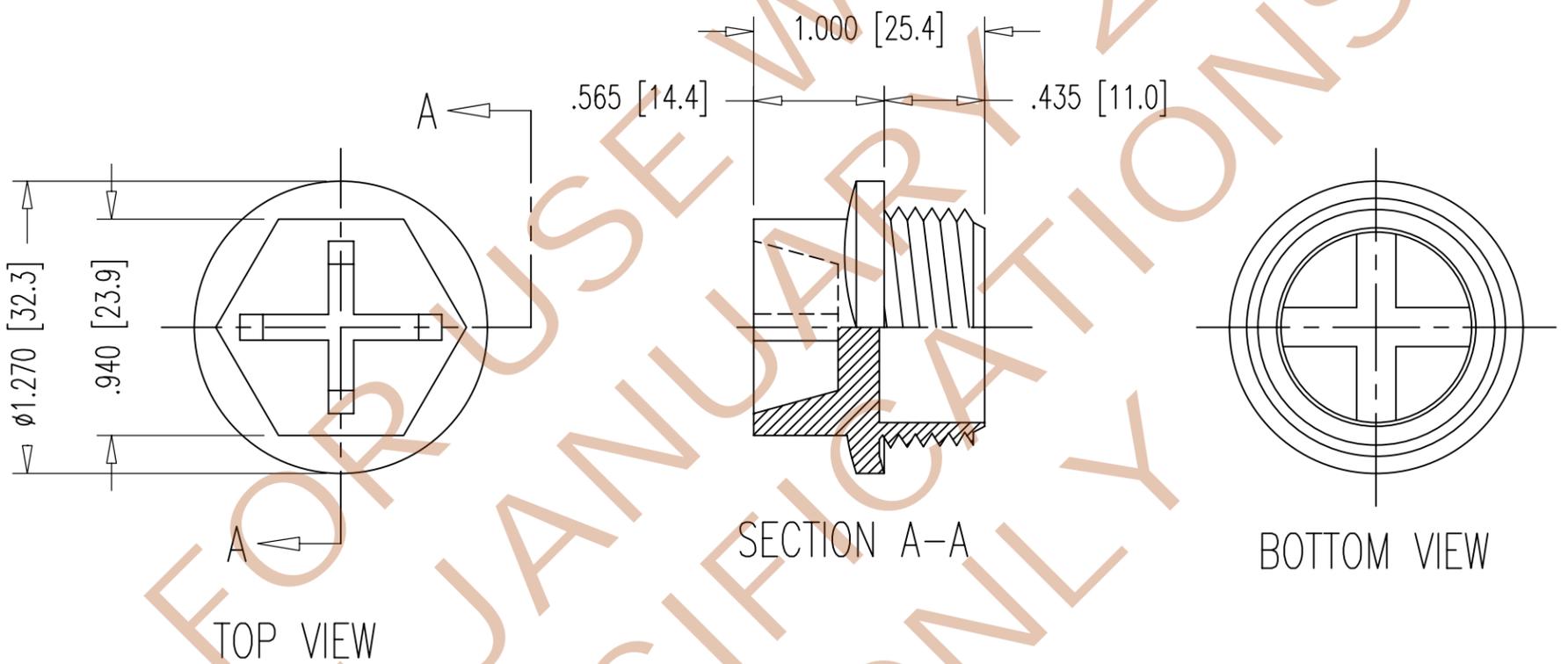
APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: Q00000020P		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT 0.06 LBS.	REV. 1	DATE 12-18-06	NAME S.N.	PART NUMBER: 00 00 845	
21mm FEMALE-3/4" NPT MALE CONNECTOR				MATERIAL: SEE ABOVE	SCALE 1:1 4:1	REV. 2	DATE 05-09-07	NAME S.N.		
						REV. 3	DATE 12-05-07	NAME S.Y.		
DATE: 09-14-07	DWG: G.MALECKI	CHK: E.A.	APP: K.S.						DRAWING NUMBER: 00 00 845	
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.				DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405						



APPROVED BY FDOT 9-22-08

DYWIDAG POST-TENSIONING SYSTEMS		DIMENSIONS: INCH/mm mm FOR REFERENCE ONLY		REV.	DATE	NAME	PART NUMBER 00 00 841
21mm GROUT TUBE CAP		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT				
DATE: 10-19-94 DRAWN: G. MALECKI APPROVED:		MATERIAL: H.D.P.E.	SCALE 1:1				DRAWING NUMBER 00 00 841
This drawing, the pertinent enclosures, descriptions, calculations etc. and their contents are the property of DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. They are not allowed to be duplicated without our permission. They are also not to be shown or explained for any reason to a third party other than for reasons expressly intended by the original receiver. They have to be returned on request.							DYWIDAG SYSTEMS INTERNATIONAL, USA, INC.

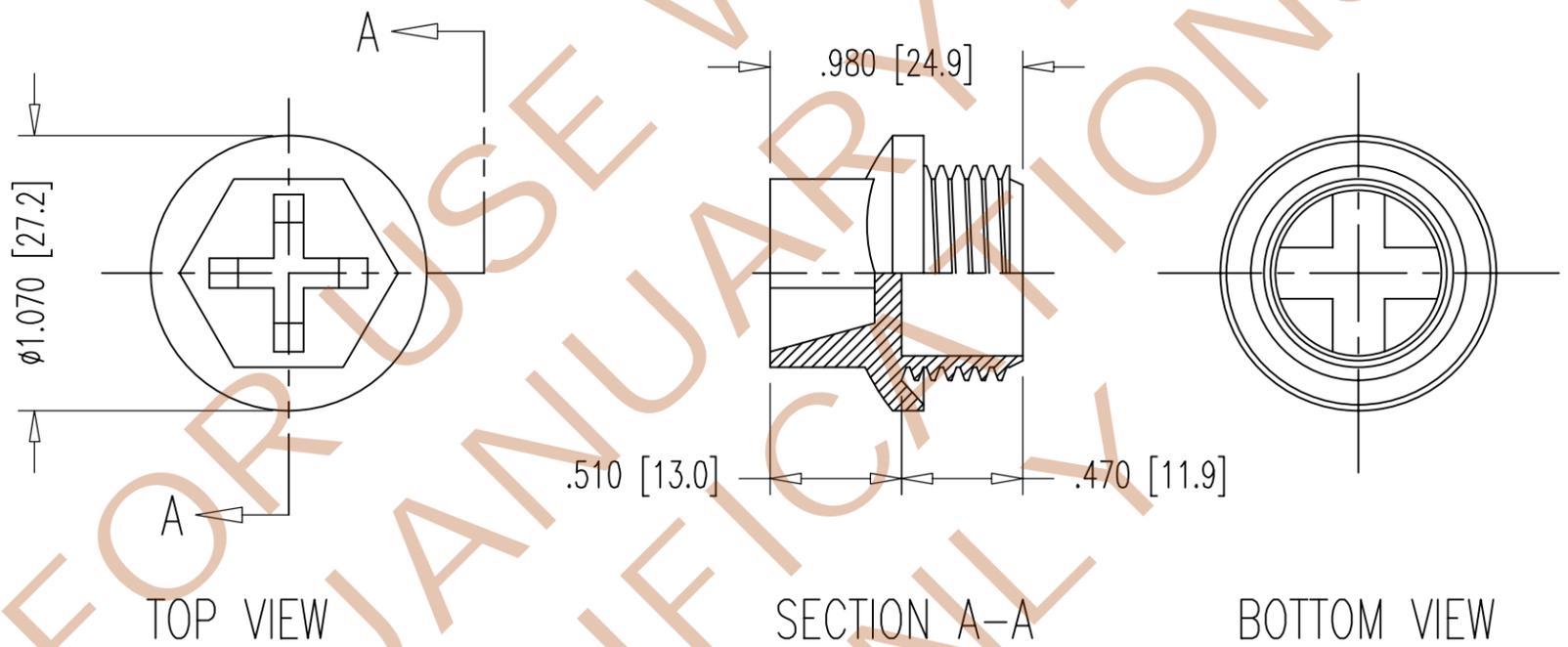


NOTE:
 ALL DIMENSIONS MEASURED.
 SPECIAL ORDER: NO STAMPED PART NUMBER.

SUPPLIER:
 NIAGARA PLASTICS
 SUPPLIER PART # : BT 0750

APPROVED BY FDOT 05-31-07

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: Q000000040P		TOLERANCES: ±.010 UNLESS NOTED		WEIGHT LBS.		REV.		DATE		NAME		PART NUMBER: 00 00 847	
BT 0750 (3/4") NPT NYLON PLUG				MATERIAL: NYLON 6 COLOR: BLACK		SCALE 1:1								DRAWING NUMBER: 00 00 847	
DATE: 05-31-07		DWG: G. MALECKI		CHK: S.Y.		APP: K.S.									
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.								DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405							

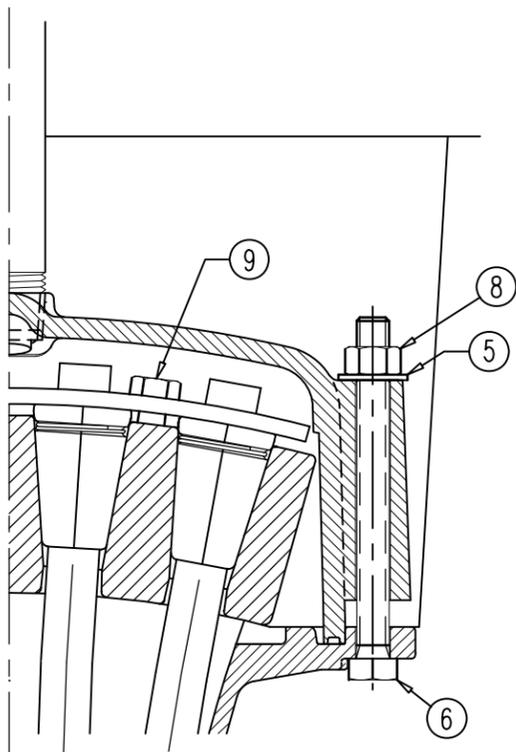


NOTE:
 ALL DIMENSIONS FROM NIAGARA PLASTICS TABLE.
 SPECIAL ORDER: NO STAMPED PART NUMBER.

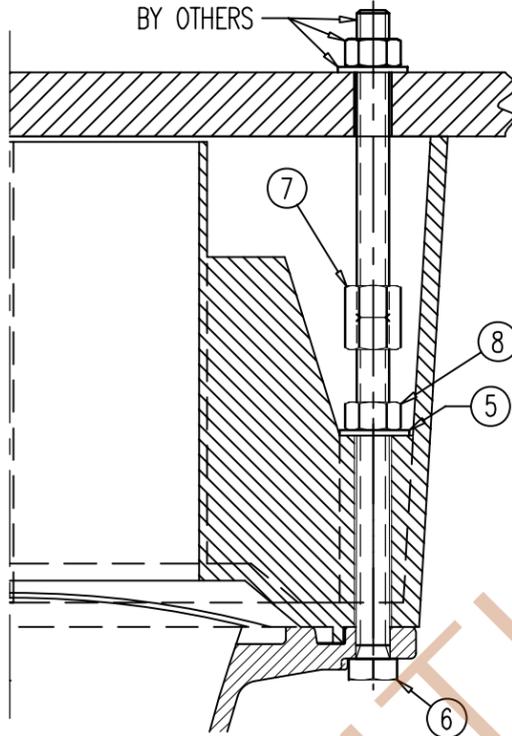
SUPPLIER:
 NIAGARA PLASTICS
 SUPPLIER PART # : BT 0500

APPROVED BY FDOT 12-12-07

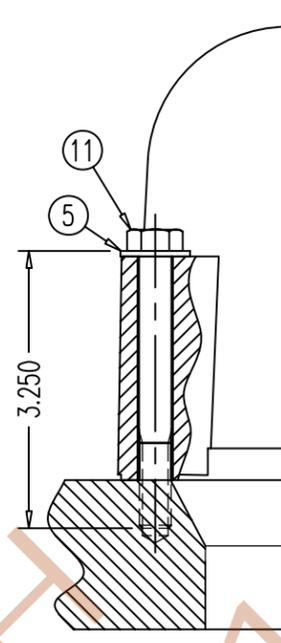
DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		QUALITY PLAN NUMBER: Q000000040P		TOLERANCES: ±.020 UNLESS NOTED	WEIGHT 0.019 LBS.	REV.	DATE	NAME	PART NUMBER: 00 00 647	
BT 0500 (1/2") NYLON PLUG				MATERIAL: NYLON 6 COLOR: YELLOW	SCALE 1:1				DRAWING NUMBER: 00 00 647	
				DATE: 01-17-07	DWG: G. MALECKI	CHK: S.Y.	APP: K.S.			
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DYWIDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI's SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.				DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405						



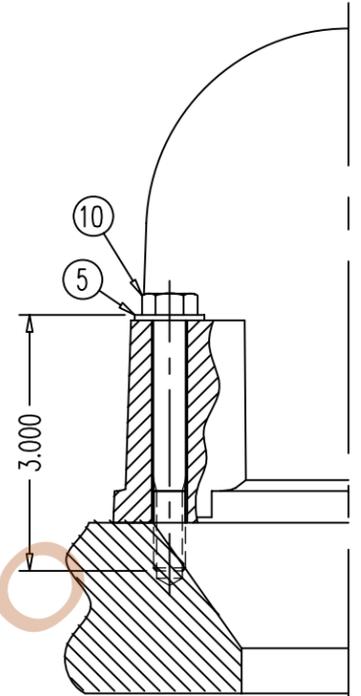
KEEPER PLATE 68 04 2637 ON
WEDGE PLATE 68 04 2534A &
GROUT CAP 68 04 2539 ON Δ
FLAT ANCHOR 68 04 2531



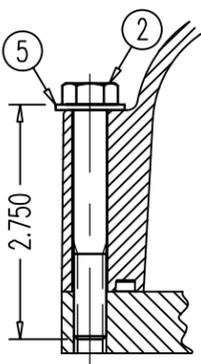
POCKET FORMER 68 04 2640
ON FLAT ANCHOR 68 04 2531



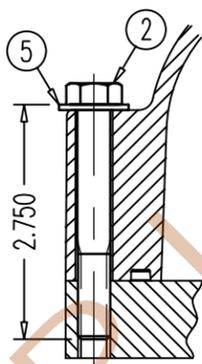
BAR GROUT CAP
B36E50700 & B65E50700



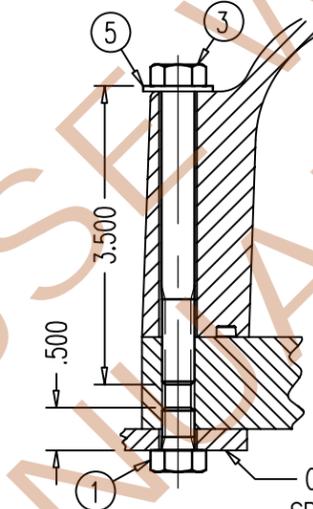
BAR GROUT CAP
B46E50700



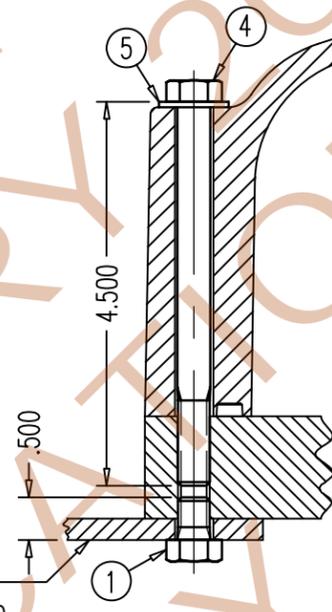
GROUT CAP 68 07 7230
ON MPA 68 07 216



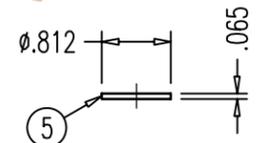
GROUT CAP 68 12 7230
ON MPA 68 12 216



GROUT CAP 68 19 7230
ON MPA 68 19 216



GROUT CAP 68 27 7230
ON MPA 68 27 216



TYPE A NARROW WASHER
FOR 3/8"-UNC BOLT

POS.	PART NUMBER	DISCRIPTION (ALL PARTS 316L STAINLESS STEEL UNLESS NOTED)
①	00 00 770	3/8"-16UNC HEX BOLT, 1/2" LONG, ZINC PLATED
②	00 00 771	3/8"-16UNC HEX BOLT, 2-3/4" LONG (1" LONG THREAD)
③	00 00 772	3/8"-16UNC HEX BOLT, 3-1/2" LONG (1" LONG THREAD)
④	00 00 773	3/8"-16UNC HEX BOLT, 4-1/2" LONG (1" LONG THREAD)
⑤	00 00 774	TYPE A NARROW WASHER FOR 3/8"-UNC BOLT
⑥	00 00 775	3/8"-16UNC HEX BOLT, 4" LONG (FULL THREAD)
⑦	00 00 776	3/8"-16UNC COUPLER, ZINC COATED
⑧	00 00 777	3/8"-16UNC HEX NUT
⑨	00 00 778	5/16"-18UNC HEX BOLT, 7/8" LONG, ZINC PLATED
⑩	00 00 782	3/8"-16UNC HEX BOLT, 3" LONG (1" LONG THREAD)
⑪	00 00 783	3/8"-16UNC HEX BOLT, 3-1/4" LONG (1" LONG THREAD)

NOTE:
THE 316L S.S. BOLTS ARE SPECIAL ORDER.
ALL WASHERS, HEX NUTS & COUPLERS HAVE
NO MARKINGS.

APPROVED BY FDOT 09-14-07

DIMENSIONS: INCH

QUALITY PLAN NUMBER:

STAINLESS STEEL 316L BOLTS AND WASHER FOR PLASTIC GROUT CAPS

DATE: 09-14-07 DWG: G. MALECKI CHK: E.A. APP: K.S.

THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF **DYWIDAG SYSTEMS INTERNATIONAL, USA, INC.** THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY **DSI's** SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.

REV.	DATE	NAME	PART NUMBERS:
			00 00 770 00 00 776
			00 00 771 00 00 777
			00 00 772 00 00 778
			00 00 773 00 00 782
			00 00 774 00 00 783
			00 00 775

SCALE
1:3

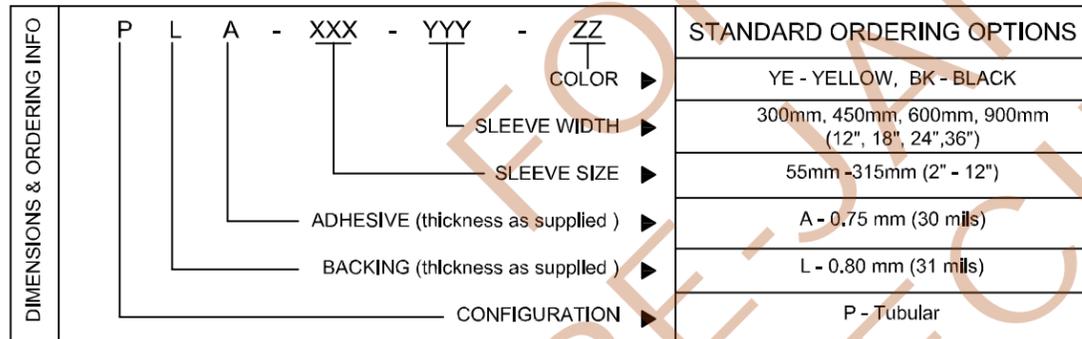
DRAWING NUMBER:
00 00 770

DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC.
POST TENSIONING / REINFORCING UNIT PHONE: 630-739-1100
320 MARMON DRIVE - BOLINGBROOK, IL FAX: 630-739-1405

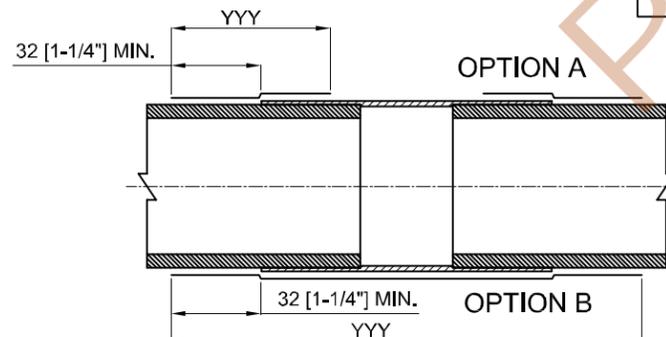


HEAT SHRINK SLEEVES - PLA TYPE UNO

TENDON SIZE		1 x 0.6"	3 x 0.6"	4 x 0.6"	1 x 0.6"	7 x 0.6" 1 3/8"	9 x 0.6" 1 3/4"	12 x 0.6" 1 3/4"	15, 19 x 0.6"	27 x 0.6"	37 x 0.6"
DUCT	ID	0.90" [23 mm] x 1.50" [38 mm]	0.827" [21 mm] x 2.835" [72 mm]	0.984" [25 mm] x 2.992" [76 mm]	Ø 0.94" [23.879 mm]	Ø 2.323" [59 mm]	Ø 2.99" [75.9 mm]	Ø 3.346" [85.0 mm]	Ø 3.937" [100 mm]	Ø 4.528" [115.0 mm]	Ø 5.039" [128.0 mm]
	OD ₁	1.45" [37] x 2.05" [52 mm]	1.378" [35] x 3.386" [86 mm]	1.554" [39.5 mm] x 3.551" [90.2 mm]	Ø 1.48" [37.6 mm]	Ø 2.874" [73 mm]	Ø 3.58" [90.9 mm]	Ø 3.946" [100.2 mm]	Ø 4.573" [116.2 mm]	Ø 5.303" [134.7 mm]	Ø 5.96" [151.0 mm]
	OD ₂		0.984" [25] x 2.992" [76 mm]	1.142" [29 mm] x 3.15" [80 mm]	Ø 1.06" [26.9 mm]	Ø 2.480" [63 mm]	Ø 3.35" [85.1 mm]	Ø 3.546" [90.1 mm]	Ø 4.173" [106.0 mm]	Ø 4.803" [122.0 mm]	Ø 5.36" [136.0 mm]
GTI COUPLER Max. OD		1.63" [41 mm] x 2.23" [57 mm]	1.565" [39.8 mm] x 3.565" [90.55 mm]	1.714" [43.54 mm] x 3.674" [93.32 mm]	Ø 1.7" [43.2 mm]	Ø 3.031" [77 mm]	Ø 3.738" [94.9 mm]	Ø 4.134" [105 mm]	Ø 4.698" [119.3 mm]	Ø 5.599" [142.2 mm]	Ø 6.151" [156.2 mm]
ORDER PART #	OPTION A	N/A	PLA-55-112-YE	PLA-55-112-YE	N/A	PLA-55-112-YE	N/A	N/A	N/A	N/A	N/A
	OPTION B	N/A	PLA-55-225-YE	PLA-55-225-YE	N/A	PLA-55-225-YE	PLA-90-225-YE	N/A	N/A	N/A	N/A
DSI COUPLER Max. OD		N/A	N/A	N/A	N/A	Ø 3.701" [94 mm]	N/A	Ø 4.824" [122.5 mm]	Ø 5.5" [139.7 mm]	Ø 6.278" [159.5 mm]	N/A
ORDER PART #	OPTION A	N/A	N/A	N/A	N/A	PLA-55-150-YE	N/A	PLA-90-150-YE	PLA-100-150-BK	PLA-125-150-YE	N/A
	OPTION B	N/A	N/A	N/A	N/A	PLA-55-450-YE	N/A	PLA-90-450-YE	PLA-100-450-BK	PLA-125-450-YE	N/A
COLOR		YE	YE	YE	BK	YE	YE	YE	BK	YE	BK
SLEEVE SIZE		PMA-90/30	55	55	PMA-70/25	55	90	90	100	125	160



*PMA - HIGH SHRINK SLEEVE.
 - SPCCS. SAME AS PLA.
 - EXPENSIVE THAN PLA (NEEDS LONGER LEAD TIME).
 - HIGH SHRINK TUBULAR BACKING.



MATERIAL:

ACCORDING TO FDOT SPECIFICATION POST TENSIONING, SECTION 462 - 4, 2, 6, 3.

NOTES:

1. ORDER DIRECT FROM CANUSA
TEL. 281 367 - 8866
FAX. 281 367 - 4304
2. ABOVE TABLE APPLIES TO INTERNAL USE ONLY.
3. SELECT ORDER LENGTH AS A MULTIPLE OF THE ACTUAL LENGTH. SEE OPTION A OR B.
4. *NO CONNECTION DETAILS DEVELOPED.
5. OTHER COLORS SLEEVE MAY BE AVAILABLE UPON REQUEST.
6. OD₁ IS MAX. OD W/ RIBS AND OD₂ IS MAX. OD W/O RIBS
7. N/A MEANS NOT AVAILABLE OR NOT ASSIGNED YET.
8. ALWAYS HEAT THE DUCT ENDS FIRST.

APPROVED BY FDOT 05-31-07

TUBULAR SLEEVE	TUBULAR SLEEVE DIAMETER	
	AS SUPPLIED	FULLY RECOVERED
PLA 55-YYY ZZ	3.5" [90mm]	2.3" [55mm]
PLA 63-YYY ZZ	3.5" [90mm]	2.5" [63mm]
PLA 90-YYY ZZ	4.8" [120mm]	3.3" [81mm]
PLA 100-YYY ZZ	5" [130mm]	3.5" [90mm]
PLA 115-YYY ZZ	5.5" [145mm]	3.8" [98mm]
PLA 125-YYY ZZ	6.3" [160mm]	4.3" [110mm]
PLA 160-YYY ZZ	7.5" [190mm]	5.2" [130mm]
PLA 170-YYY ZZ	8" [205mm]	5.5" [140mm]
PLA 230-YYY ZZ	10" [260mm]	7" [180mm]
PLA 280-YYY ZZ	12.3" [315mm]	8.3" [211mm]
PLA 315-YYY ZZ	14" [360mm]	9.5" [245mm]
PMA 90/30	3.5" [90mm]	1.2" [30mm]
PMA 70/25	2.8" [70mm]	1.0" [25mm]

DIMENSIONS: INCH [mm] mm FOR REFERENCE ONLY		REV. DATE NAME		PART NUMBERS:	
HEAT SHRINK SLEEVE SIZES FOR INTERNAL APPLICATIONS				SEE TABLE ABOVE	
DATE: 05-31-07	DWG: I.TIRA	CHK: E.A.	APP: K.S.	DRAWING NUMBER: PLA-0-0-0	
THIS DRAWING, THE PERTINENT ENCLOSURES, DESCRIPTIONS, CALCULATIONS ETC. AND THEIR CONTENTS ARE THE PROPERTY OF DWYDAG SYSTEMS INTERNATIONAL, USA, INC. THEY ARE NOT ALLOWED TO BE DUPLICATED WITHOUT OUR PERMISSION. THEY ARE ALSO NOT TO BE SHOWN OR EXPLAINED FOR ANY REASON TO A THIRD PARTY OTHER THAN FOR REASONS EXPRESSLY INTENDED BY DSI'S SUBMITTAL TO THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.				DWYDAG-SYSTEMS INTERNATIONAL, USA, INC. 320 MARMON DRIVE - BOLINGBROOK, IL 60440 PHONE: 630-739-1100 FAX: 630-739-1405	

