**Surface Mount Detail**

1. **Users shall refer to FDOT Standard Specifications and Project Specific Criteria for Tendon Installation, Stressing, & Grouting.**
2. **Required reinforcing bars are not shown on this drawing.**
3. **Maximum angular misalignment when using anchor nut ≤ 12°.**
4. **Center to center, end and edge distance depends on the location of the bar and concrete strength.** (See Table)
5. **C/C Distance = 2 x End Distance - 2 x D/2 = Edge Distance**
6. **Duct is delivered in straight sections and stressed from one end only.**

**Notes:**

- **Material List:**
  - **Part NO.**
  - **Material Specification**
  - **Notes:**

**Material List**

<table>
<thead>
<tr>
<th>Part NO.</th>
<th>Description</th>
<th>Material Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>00 00 678</td>
<td>Insulating UO00115, TYP. (CUT BOARD)</td>
<td>PVC</td>
</tr>
</tbody>
</table>
### RIGHT-HAND THREAD

![Thread Diagram]

### PART NUMBERS

<table>
<thead>
<tr>
<th>FOR BARE BAR:</th>
<th>B66E CUT</th>
</tr>
</thead>
</table>

### SPECIFICATIONS

| ASTM A722 TYPE II (STRENGTH REQUIREMENTS) |

### PHYSICAL PROPERTIES

- **Effective Area:** 5.16 sq.in. Nom. (3331 mm²)
- **Ultimate Strength:** 150 KSI (1035 N/mm²)
- **Ultimate Load:** 774 KIPS (3442 kN)
- **Yield Load:** 619.2 KIPS (2754 kN)
- **Weight:** 18.2 lbs./ft. (27.1 kg/m)
- **Max. Major Ø:** 2.790 IN. (70.87mm)
- **Pitch:** 0.315 IN. (8mm)
SQUARE BEARING PLATE WITH EXIT PIPE
FOR 2 1/2" THREADBAR

NOTES:
1. PLATE & PIPE GALVANIZED ACCORDING TO ASTM A123 AFTER WELDING.
2. DIMENSIONS AND TOLERANCES APPLY TO UNCOATED PLATES.
3. ENSURE THREADABILITY OF TAPPED HOLES IN COATED PLATES.
4. 100mm CORR. PP DUCT, U00220400 & 4" SDR HDPE PIPE, U00555119 FITS OVER TUBING.

PLATE MATERIAL: ASTM A36
MECHANICAL TUBE MATERIAL
SHALL BE A512, A513 OR A516.

PLATE & PIPE GALVANIZED ACCORDING TO ASTM A123 AFTER WELDING.
DIMENSIONS AND TOLERANCES APPLY TO UNCOATED PLATES.
ENSURE THREADABILITY OF TAPPED HOLES IN COATED PLATES.
100mm CORR. PP DUCT, U00220400 & 4" SDR HDPE PIPE, U00555119 FITS OVER TUBING.
NOTES:
1. USE 3/8"-16UNC 316L S.S. HEX BOLTS, 3-1/4" LONG 00 00 783 M/SMA. WASHER 00 00 774.
2. INSTALL O-RING IN GROOVE USING DROPS OF LIQUID ADHESIVE BEFORE SHIPPING.
3. THE NYLON CONFORMS TO ASTM D698, WITH CELL CLASSIFICATION 5-PANDER
   (ULTIMATE STRENGTH 15,000 PSI MIN. WITH UV STABILITY ADDED).
4. DRILL 1/2" [12.7] HOLE IN PORT BEING USED—CAUTION—RECOMMEND USING HOLE
   5/32" DR. OR SLIGHT BIT (BY OTHERS), BE CAREFUL TO PREVENT DAMAGE TO
   THREADS OR CAP.
5. WHEN PRESSURIZING GROUT CAPS, DO NOT STAND BEHIND CAPS!

O-RING MATERIAL:
ETFE MEETING MIL SPECIFICATION 860-22.1.2. I.D. 275 [7.3]:

#433 O-RING
5-1/2"x6"x1/4"

SCALE: NOT TO SCALE
WASHER FOR NYLON CAPS

STAINLESS STEEL 316L BOLTS AND WASHER FOR NYLON CAPS

<table>
<thead>
<tr>
<th>POS.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION (ALL PARTS 316L STAINLESS STEEL UNLESS NOTED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>00 00 771</td>
<td>3/8&quot;-16UNC HEX BOLT, 2-3/4&quot; LONG (1&quot; LONG THREAD)</td>
</tr>
<tr>
<td>2</td>
<td>00 00 772</td>
<td>3/8&quot;-16UNC HEX BOLT, 3-1/2&quot; LONG (1&quot; LONG THREAD)</td>
</tr>
<tr>
<td>3</td>
<td>00 00 774</td>
<td>TYPE A NARROW WASHER FOR 3/8&quot;-UNC BOLT</td>
</tr>
<tr>
<td>4</td>
<td>00 00 776</td>
<td>3/8&quot;-16UNC COUPLER, ZINC COATED</td>
</tr>
<tr>
<td>5</td>
<td>00 00 777</td>
<td>3/8&quot;-16UNC HEX NUT</td>
</tr>
<tr>
<td>6</td>
<td>00 00 778</td>
<td>5/16&quot;-18UNC HEX BOLT, 7/8&quot; LONG, ZINC PLATED</td>
</tr>
<tr>
<td>7</td>
<td>00 00 783</td>
<td>3/8&quot;-16UNC HEX BOLT, 3-1/4&quot; LONG (1&quot; LONG THREAD)</td>
</tr>
<tr>
<td>8</td>
<td>00 00 784</td>
<td>3/8&quot;-16UNC HEX BOLT, 4-1/4&quot; LONG (FULL THREAD)</td>
</tr>
<tr>
<td>9</td>
<td>00 00 789</td>
<td>3/8&quot;-16UNC CARRAGE BOLT, 4-1/2&quot; LONG</td>
</tr>
<tr>
<td>10</td>
<td>00 00 790</td>
<td>3/8&quot;-16UNC CARRAGE BOLT, 5-1/2&quot; LONG</td>
</tr>
</tbody>
</table>

NOTE:
The 316L S.S. BOLTS ARE SPECIAL ORDER.
ALL WASHERS, HEX NUTS & COUPLERS HAVE NO MARKINGS.
66mm HEX NUT, FULL LOAD

DIMENSIONS: INCH (mm) [inch (mm)] FOR REFERENCE ONLY

QUALITY PLAN NUMBER: QBD0200700S

TOLERANCES: 0.003 UNLESS NOTED

WEIGHT ~1.8 LBS.

SCALE 1:12

MATERIAL: C1035 CD SEAMLESS MECHANICAL TUBE ASTM A519

REV. DATE NAME

PARTNUMBERS:

DRAWING NUMBER:

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DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC.
320 MARMON DRIVE - BOLINGBROOK, IL 60440
PHONE: 630-739-1100 FAX: 630-739-1405

66mm [166.5] HEX

R .500 MAX

5.000 [127.0]

THREAD FORM ACC. TO Dwg. B341/902
1/2" NPT NYLON PLUG

DIMENSIONS: INCH (mm)

PR: 338 [23.8] HEX

PR: 562 [14.3] 1/2"-NPT THREAD

PR: .500 [12.7]

PRESSURE RATED: 150 PSI

MATERIAL:
NYLON 6
COLOR: WHITE

WEIGHT:
.006 LBS.

DRAWING NUMBER:
00 00 649

REV. DATE NAME EORN

PART NUMBER:
00 00 649

DHWG: G. Malecki CHK: SJ APP: SJ

DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC.
320 MARMON DRIVE - BOLINGBROOK, IL 60440
PHONE: 630-739-1100 FAX: 630-739-1405

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THE ORIGINAL RECEIVER. THEY HAVE TO BE RETURNED UPON REQUEST.
1/2" NPT PIPE NIPPLES

PRESSURE RATED: 150 PSI

LENGTH VARIES

1/2" NPT THREAD TYP.

MATERIAL:
SCH 40
BLACK WELDED STEEL

SCALE 1:1

PART NUMBER: 00 00 678

DYWIDAG-SYSTEMS INTERNATIONAL, USA, INC.
320 MARMONT DRIVE - BOLINGBROOK, IL 60440
PHONE: 630-739-1100 FAX: 630-739-1405
3/4" NPT PIPE NIPPLES

LENGTH VARIES

3/4" NPT THREAD TYP.

PRESSURE RATED: 150 PSI

MATERIAL: SCH 40 BLACK WELDED STEEL

SCALE 1:1
3/4" NPT NYLON PLUG

PRESSURE RATED: 150 PSI

DIMENSIONS: INCH (mm) for reference only

QUALITY PLAN NUMBER:

WEIGHT: .009 lbs.

REV. DATE NAME

MATERIAL: NYLON 6 COLOR: WHITE

SCALE: 1:1

DRAWING NUMBER: 00 00 849

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NOTE:
PRESSURE RATED: 150 PSI.
3/4" NPT BALL VALVE

NOTE:
PRESSURE RATED: 150 PSI.
**Heavy Section**

**Material:** Polypropylene

**Cell Class Range:** PP0340B44541 to PP0340B67884

**Material Meets FDOT Specs. 960-2.4.3.**

**Notes:**

1. Standard Fit for 19-0.6” & 27-0.5” Strands and 2-1/2” Threadbar.
3. Duct is delivered in straight sections and is not intended to be coiled.

**Dimensions:**

- \( \phi 3.937 \) [100.0]
- \( \phi 4.567 \) [116.0]
- 0.118 [3.0] Wall

**Drawing Information:**

- **Drawing Number:** U00220400
- **Company:** DYWIDAG-Systems International, USA, Inc.
- **Address:** 320 Marmion Drive, Bolingbrook, IL 60440
- **Phone:** 630-739-1100
- **Fax:** 630-739-1405
MATERIAL: POLYPROPYLENE  
CELL CLASS RANGE: PP0340B44541 TO PP0340B67884  
MATERIAL MEETS FDOT SPECS. 960-2.4.3.

\[ \Phi 4.698 \text{ [119.3]} \]
\[ \Phi 4.538 \text{ [115.3]} \]
\[ 2.500 \text{ [63.5]} \]
\[ 2.000 \text{ [50.8]} \]
\[ 7.000 \text{ [177.8]} \]
**STANDARD ORDERING OPTIONS**

<table>
<thead>
<tr>
<th>Color</th>
<th>Sleeve Width</th>
<th>Sleeve Size</th>
<th>Adhesive (thickness as supplied)</th>
<th>Backing (thickness as supplied)</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE - Yellow</td>
<td>63mm - 315mm</td>
<td>(2-1/2&quot; - 12&quot;)</td>
<td>A - 0.75 mm (30 mils)</td>
<td>L - 0.80 mm (31 mils)</td>
<td>P - Tubular</td>
</tr>
</tbody>
</table>

**TUBULAR SLEEVE**

<table>
<thead>
<tr>
<th>TUBULAR SLEEVE AS SUPPLIED</th>
<th>TUBULAR SLEEVE DIAMETER FULLY RECOVERED</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLA 63-YYY YE</td>
<td>3.5&quot; [90mm] 2.5&quot; [63mm]</td>
</tr>
<tr>
<td>PLA 90-YYY YE</td>
<td>4.8&quot; [120mm] 3.3&quot; [81mm]</td>
</tr>
<tr>
<td>PLA 115-YYY BK</td>
<td>5.5&quot; [145mm] 3.8&quot; [98mm]</td>
</tr>
<tr>
<td>PLA 125-YYY YE</td>
<td>6.3&quot; [160mm] 4.3&quot; [110mm]</td>
</tr>
<tr>
<td>PLA 160-YYY BK</td>
<td>7.5&quot; [190mm] 5.2&quot; [130mm]</td>
</tr>
<tr>
<td>PMA 90/30-YYY BK</td>
<td>3.5&quot; [90mm] 1.2&quot; [30mm]</td>
</tr>
<tr>
<td>PMA 120/40-YYY BK</td>
<td>4.7&quot; [120mm] 1.6&quot; [40mm]</td>
</tr>
</tbody>
</table>

YYYY = SLEEVE WIDTH: 300/450/600/900/1500(mm)

**HEAT SHRINK SLEEVE SIZES FOR INTERNAL GROUTED APPLICATIONS**

<table>
<thead>
<tr>
<th>DUCT SIZE</th>
<th>STRAND SYSTEM</th>
<th>BAR SYSTEM</th>
<th>HEAT SHRINK SLEEVE SIZE</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot; x 3&quot; (25mm x 76mm)</td>
<td>4-0.6&quot;</td>
<td></td>
<td>PLA-63-450 YE</td>
<td>U00044063</td>
</tr>
<tr>
<td>2-3/8&quot; (59mm)</td>
<td>7-0.6&quot;</td>
<td></td>
<td>PLA-63-450 YE</td>
<td>U00044063</td>
</tr>
<tr>
<td>3&quot; (76mm)</td>
<td>1 3/4&quot;</td>
<td></td>
<td>PMA-90/30-450 BK</td>
<td>U00044030</td>
</tr>
<tr>
<td>3-3/8&quot; (85mm)</td>
<td>12-0.6&quot;</td>
<td></td>
<td>PLA-90-450 YE</td>
<td>U00044090</td>
</tr>
<tr>
<td>4&quot; (100mm)</td>
<td>2-1/2&quot;</td>
<td></td>
<td>PLA-90-450 YE</td>
<td>U00044090</td>
</tr>
<tr>
<td>4&quot; (100mm)</td>
<td>19-0.6&quot;</td>
<td></td>
<td>PLA-115-450 BK</td>
<td>U00044115</td>
</tr>
<tr>
<td>4-1/2&quot; (113mm)</td>
<td>27-0.6&quot;</td>
<td></td>
<td>PLA-125-450 YE</td>
<td>U00044125</td>
</tr>
<tr>
<td>5-1/8&quot; (130mm)</td>
<td>31-0.6&quot;, 37-0.6&quot;</td>
<td></td>
<td>PLA-160-450 BK</td>
<td>U00044160</td>
</tr>
</tbody>
</table>

**NOTES:**
1. ORDER DIRECT FROM CANUSA
TEL. 281 367 - 8866
FAX. 281 367 - 4304
2. SELECT ORDER LENGTH AS A MULTIPLE OF THE ACTUAL LENGTH.
3. OTHER COLORS SLEEVE MAY BE AVAILABLE UPON REQUEST.
4. ALWAYS HEAT THE DUCT ENDS FIRST.