

PII	PE	IN <sup>-</sup>	<b>FERI</b>	NAL	CON	IFIG	URA	TION

#### NOTE:

- Vent assemblies can be used as inlet, outlet or drain; when elbows are present, the vent cannot be used for injection / inspection;
- Epoxy grout shall be used to fill recessess: make reference to FDoT standard plans index 462-003 for post-tensioning anchorage and tendon filling details
- Concrete cover must meet FDoT Structures Design Guidelines ٠ Section 1.4.2
- Components marked with "T" on the drawing are temporary

	MISCELLANEOUS MATERIALS
ITEM	DESCRIPTION
15	Commercially available thread seal tape

TENSA AMERICA LLC - www.tensaamerica.com - PHONE: +1 305-866-9917 1111 KANE CONCOURSE, S.TE 200 - BAY HARBOR ISLAND - 33154 FL Date : 04/26/2018

\* depending from system dimension

ITEM

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PART #

XX-01-00\*

XX-03-00\*

E-IU-XX-07-08\*

00-01-03-M

00-01-04-M

00-01-05

00-01-06

00-03-01-M

00-03-02-M

00-03-03

00-03-04

00-07-04-EM

00-07-06

00-07-07

DESCRIPTION

Protection Cap

Smooth Plastic Duct

NPT Pipe Nipple 1/2"

NPT Female Plug 1/2"

NPT Pipe Nipple 3/4"

NPT Ball Valve 3/4"

NPT Female Plug 3/4"

Vent Port 3/4" NPT PE

NPT Nipple Coupler 3/4"

NPT Ball Valve 1/2"

NPT Plug 1/2"

NPT Plug 3/4"

NPT Elbow 3/4"

Anchor

BILL OF MATERIALS

SCH40 steel

Nylon S-PA0401 - according to ASTM D5989

High Density Polyethylene - according to ASTM D3350

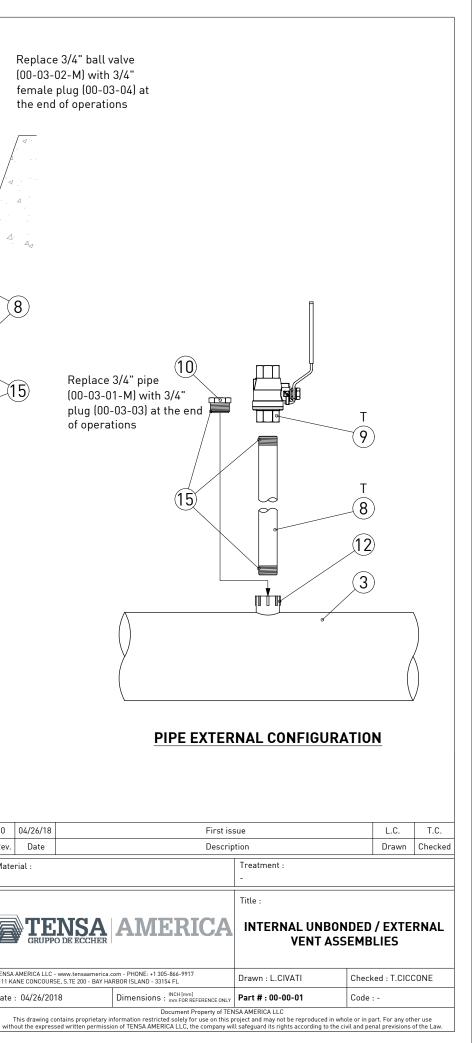
High Density Polyethylene - according to ASTM D3350

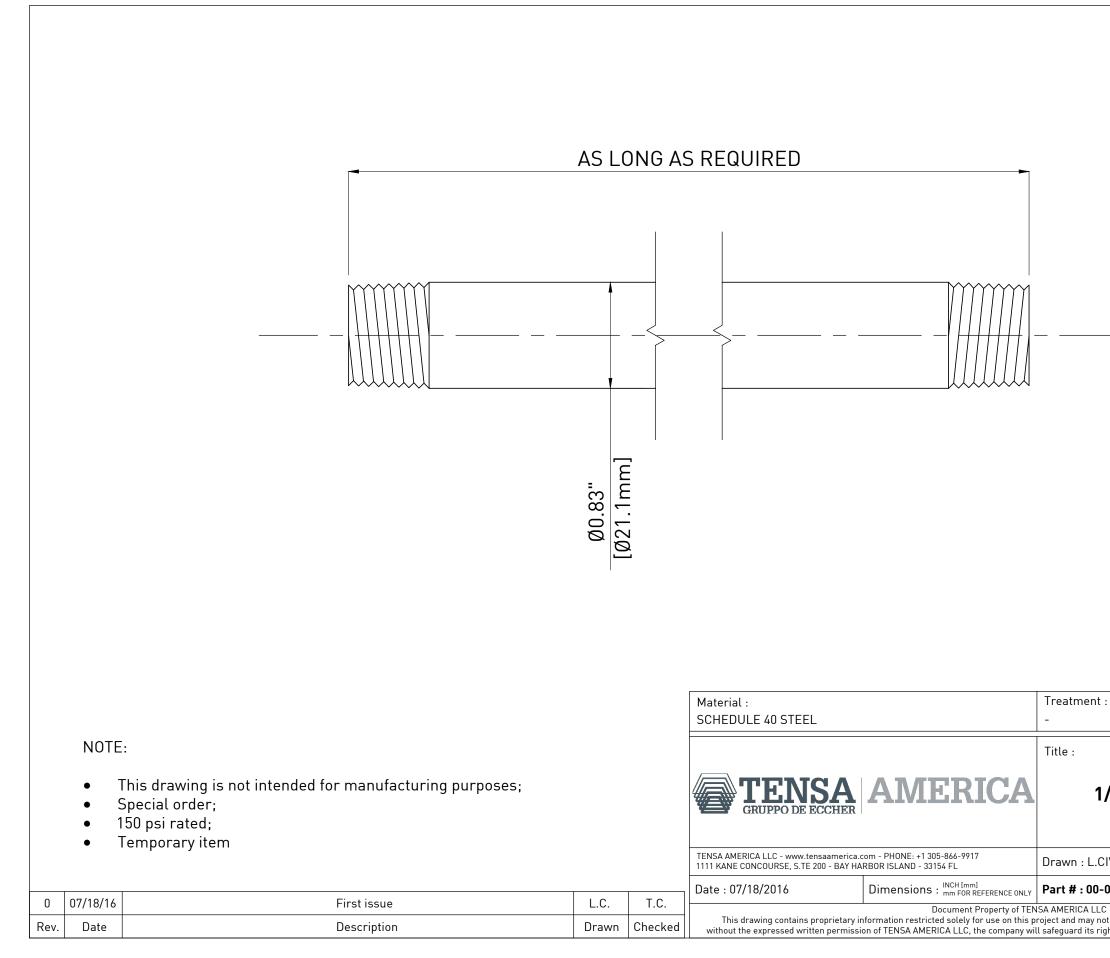
High Density Polyethylene - according to ASTM D3350

Polyethylene - according to ASTM D3350

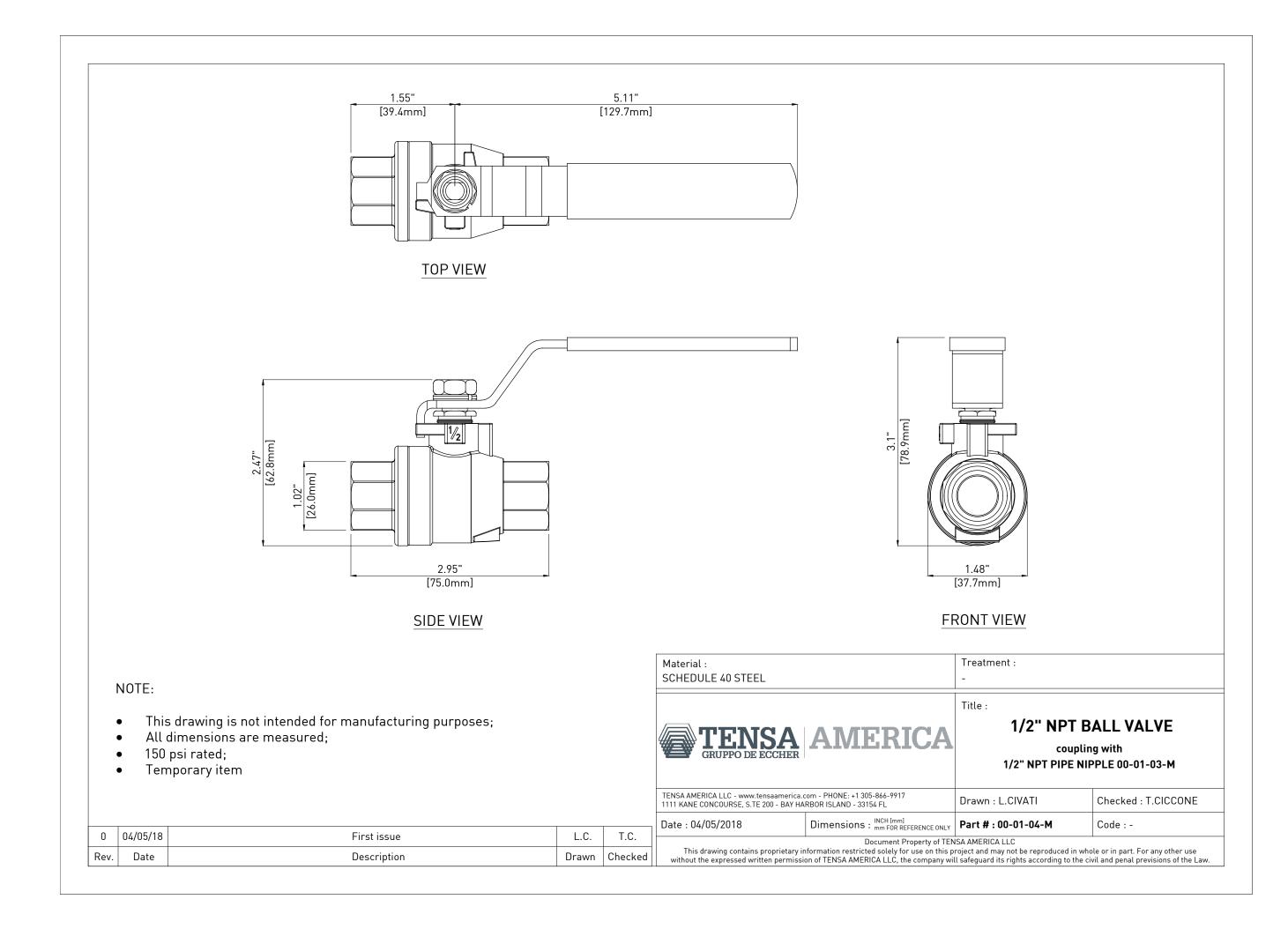
MATERIAL

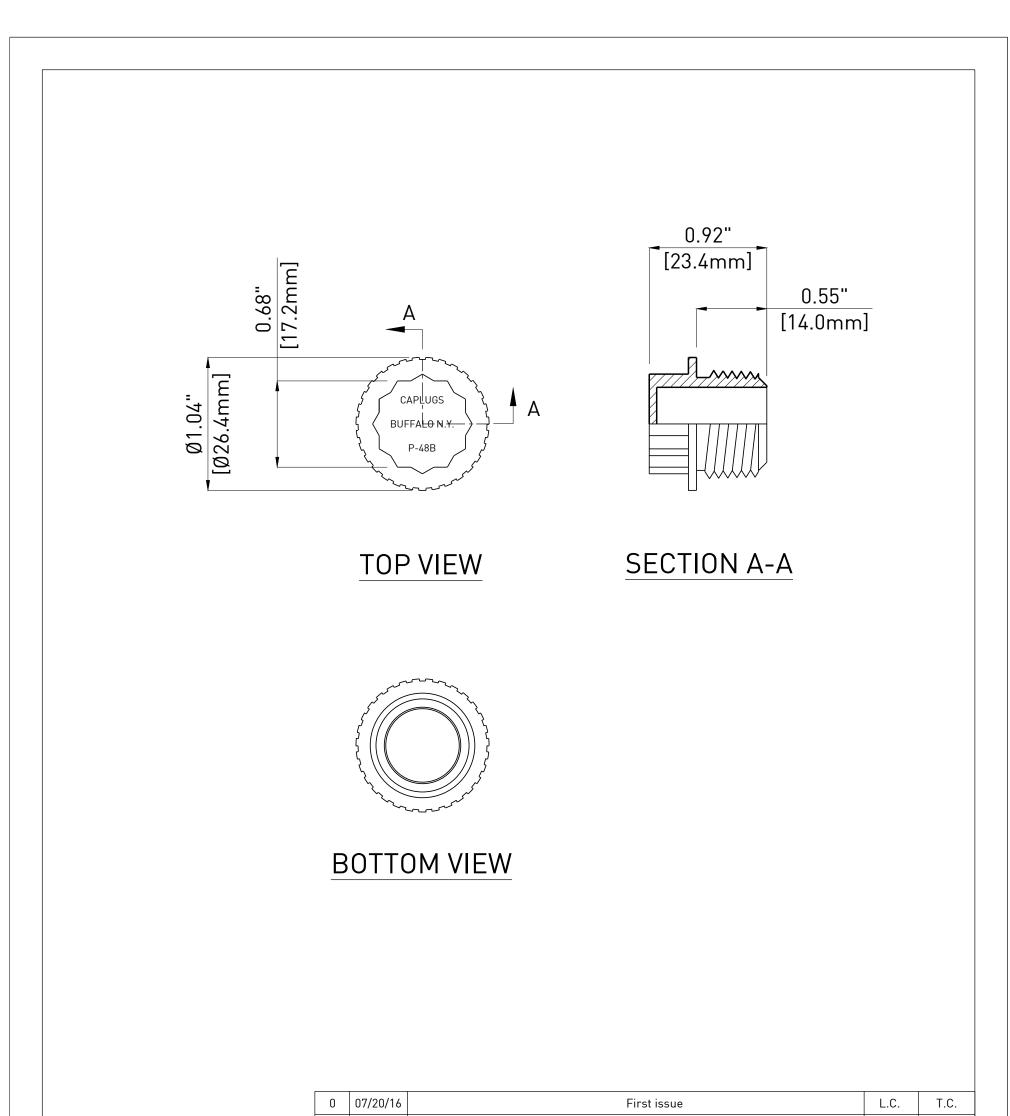
Ductil Iron ASTM A536 GR80-55-06 + Galvanization according to ASTM A123



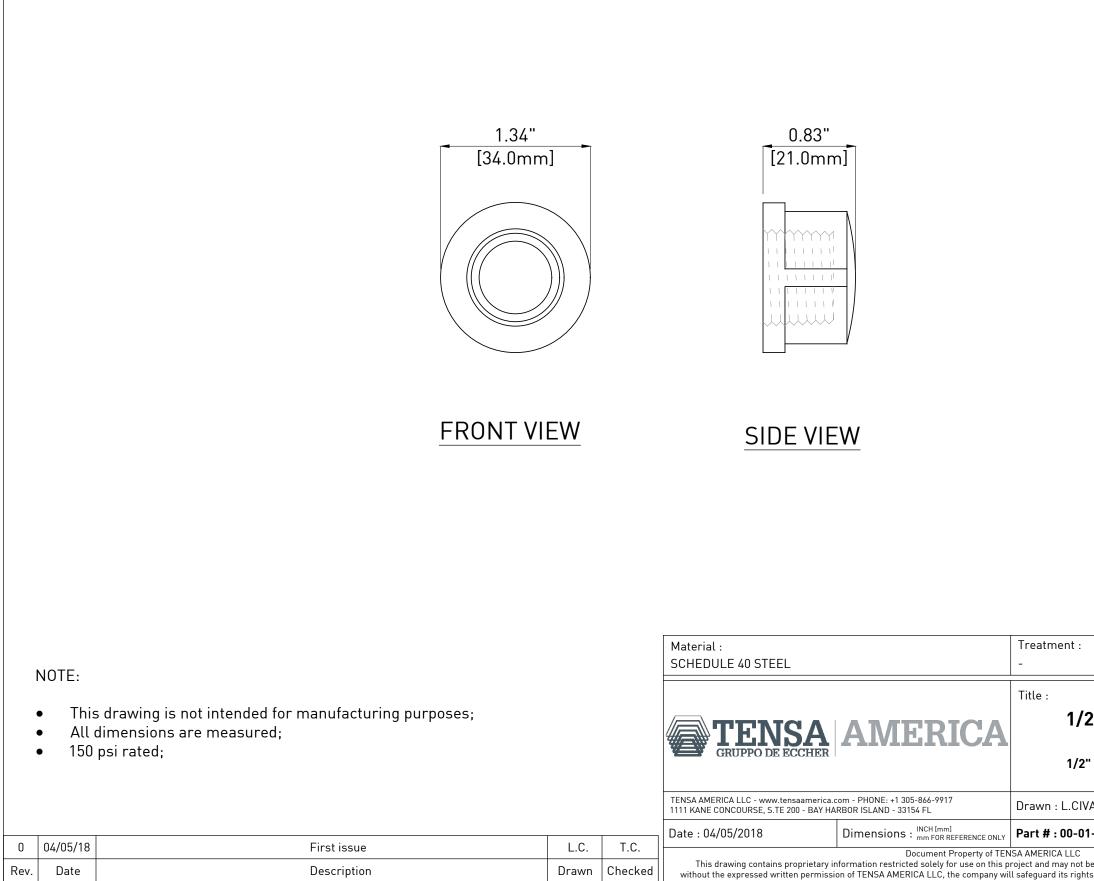


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1/2" NPT PI	PE NIPPLE
n : L.CIVATI	Checked : T.CICCONE
# : 00-01-03-M	Code : -
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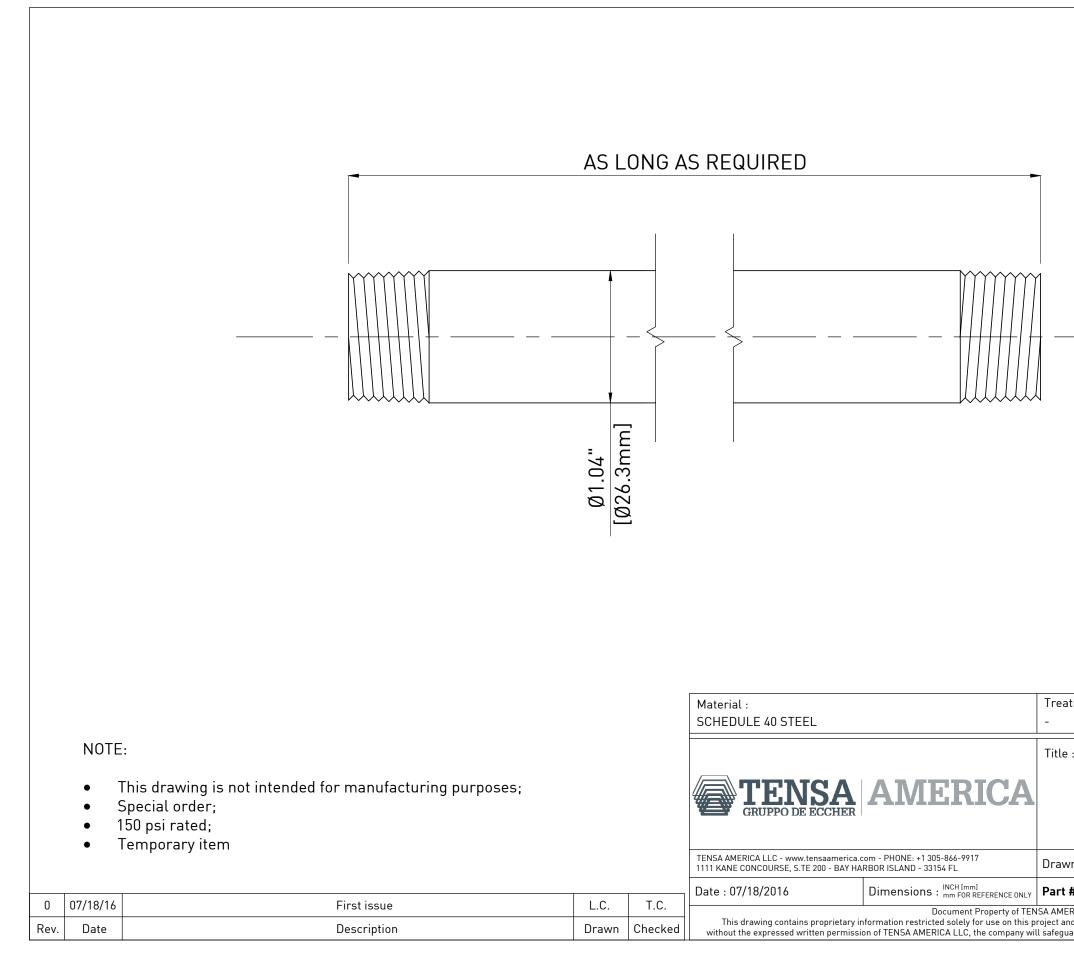
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NOTE:	Mater High		olyethylene- a	ccording to ASTM D3350		Treatment : -		
<ul> <li>This drawing is not intended for manufacturing purposes;</li> <li>All dimensions are measured;</li> <li>150 psi rated</li> </ul>	TF.N	NSA o de eccher	AMERICA	Title : CAPLUGS (Buffalo N.Y.) 1/2 NPT PLUG for PROTECTION CAP				
				com - PHONE: +1 305-866-9917 ARBOR ISLAND - 33154 FL	Drawn : L.C	CIVATI Check	ked : T.CICO	CONE
	Date : 07/20/2016 Dimensions : <sup>INCH [mm]</sup> mm FOR REFERENCE ONLY	Part # : 00-	01-05 Code	: P-48B				
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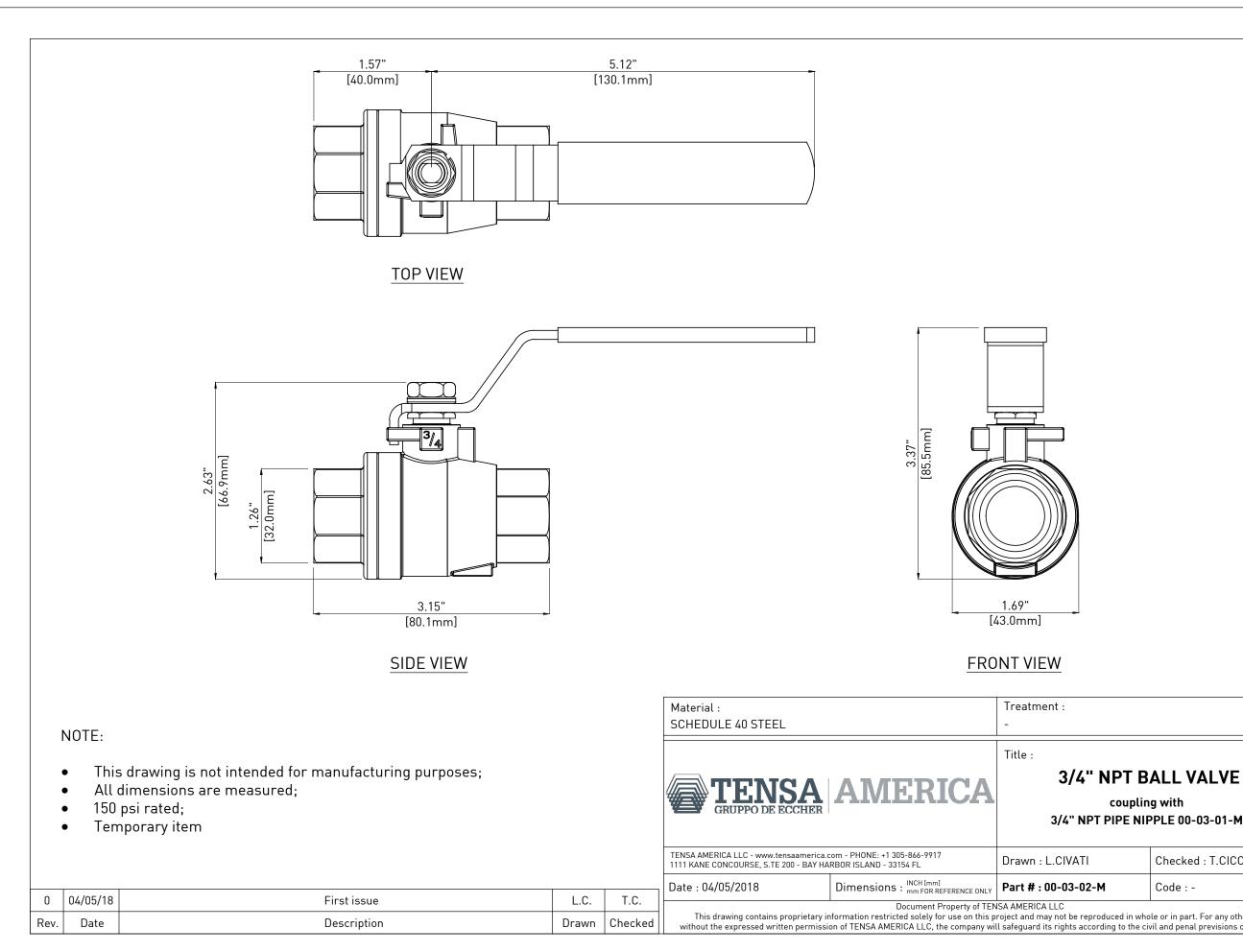
### 1/2" NPT FEMALE PLUG

coupling with 1/2" NPT PIPE NIPPLE 00-01-03-M

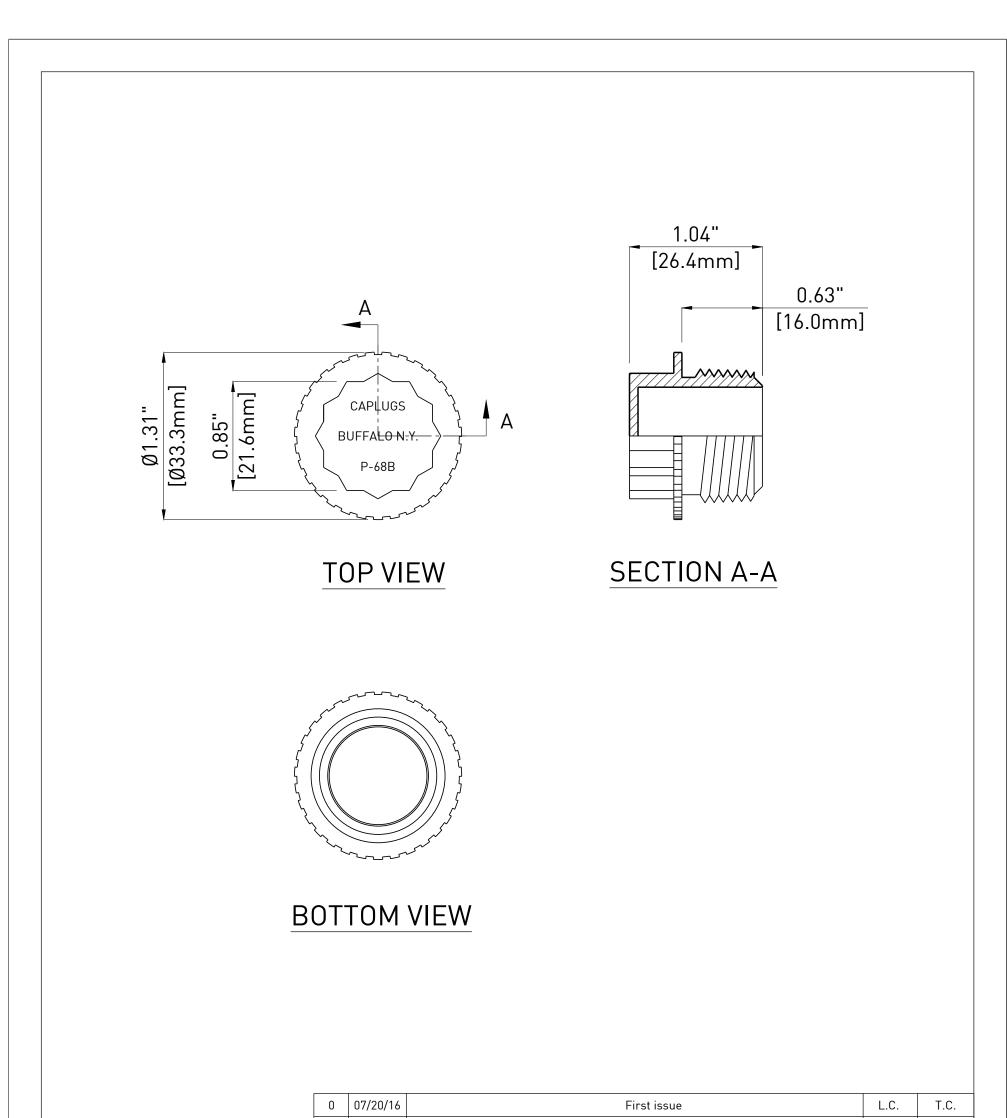
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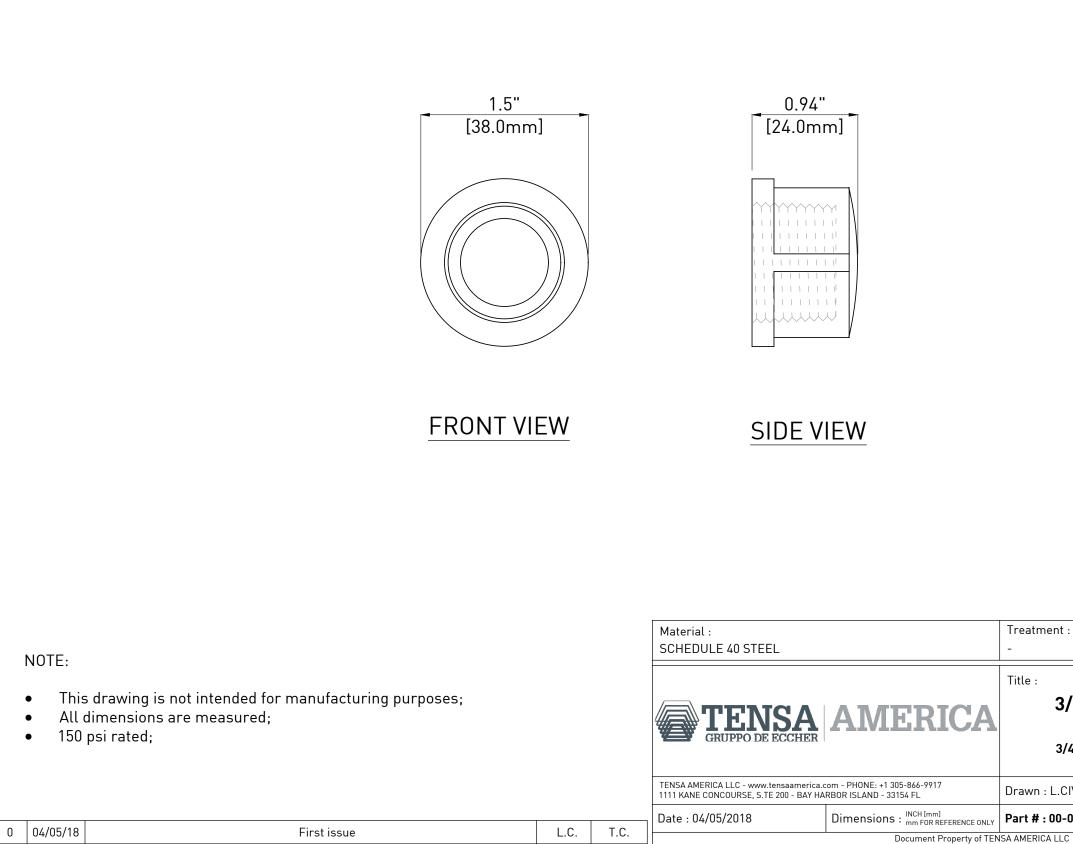
tment :	
:	
3/4" NPT PI	PE NIPPLE
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3/4 NPT B couplin 3/4" NPT PIPE NIF	g with
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NOTE		erial : Density Po	olyethylene- a	ccording to ASTM D3350		Treatment : -		
<ul> <li>NOTE:</li> <li>This drawing is not intended for manufacturing purposes;</li> <li>All dimensions are measured;</li> <li>150 psi rated</li> </ul>	r	GRUPP	<b>NSA</b> o de eccher	AMERICA			Buffalo N.Y.) 3/4" G for ANCHOR	-
				.com - PHONE: +1 305-866-9917 ARBOR ISLAND - 33154 FL	Drawn : L.CIVATI Checked : T.CICCC			CONE
	Date	: 07/20/201	6	Dimensions : INCH [mm] mm FOR REFERENCE ONLY	Part # : 00-	03-03 Code	: P-68B	
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Rev.

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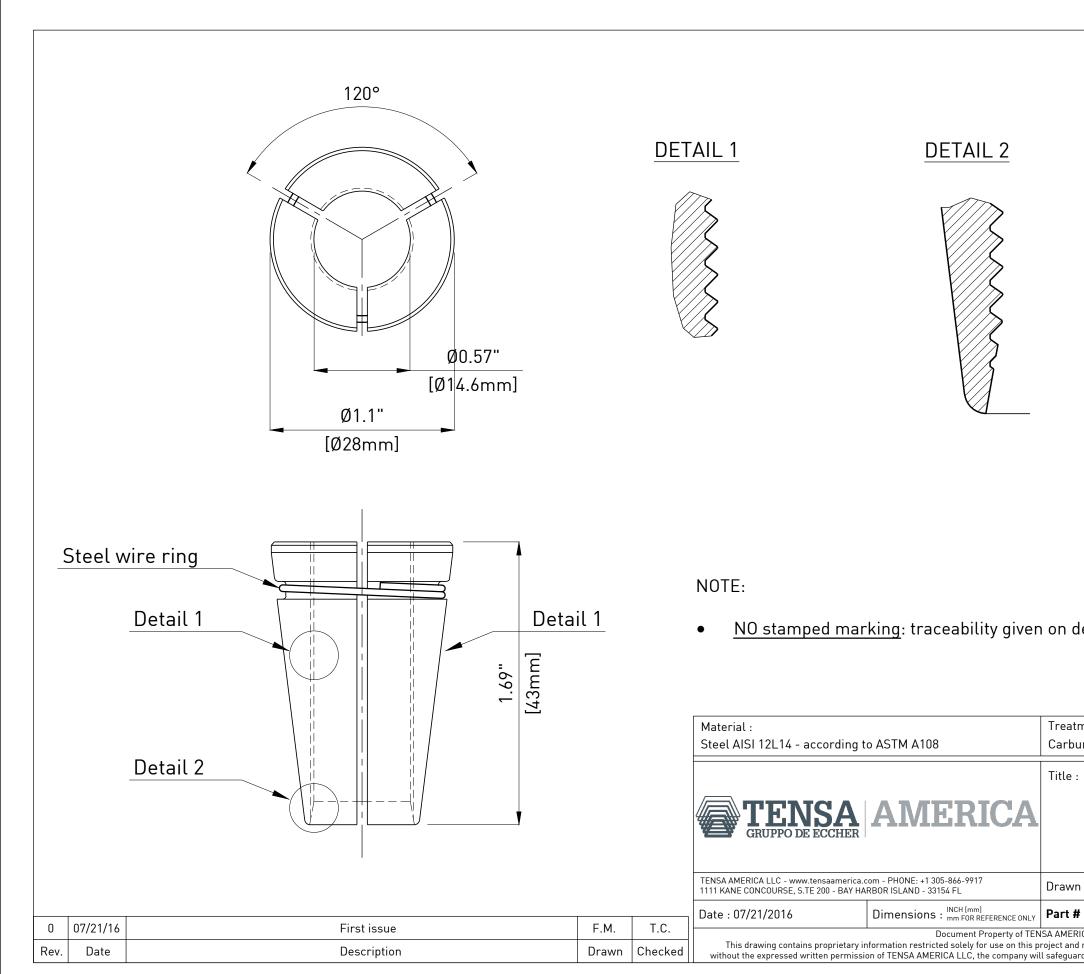
Description

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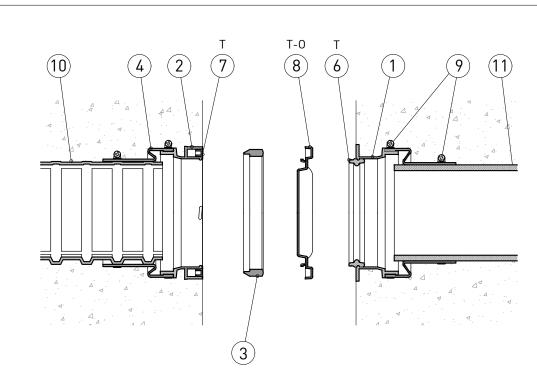
## 3/4" NPT FEMALE PLUG

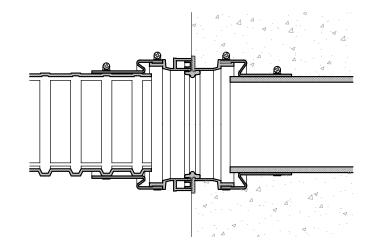
coupling with 3/4" NPT PIPE NIPPLE 00-03-01-M

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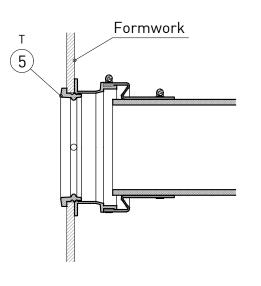


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3-PARTS	WEDGE
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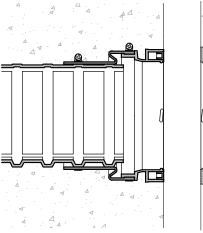


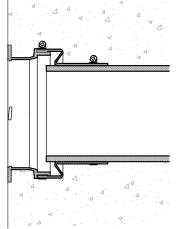
PHASE B match-cast coupler connection

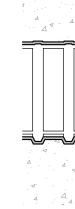


**PHASE A** bulkhead coupler connection

	BILL OF MATERIALS					
ITEM	PART #	DESCRIPTION	MATERIAL			
1	XX-07-03-01	Bulkhead Coupler	Polypropylene - according to ASTM D4101			
2	XX-07-03-02	Match-Cast Coupler	Polypropylene - according to ASTM D4101			
3	XX-07-03-03	Sealing Gasket	TPR Blend - according to FDoT Tab.2.2.1.7-1 Sec.960			
4	XX-07-03-04	Boot	TPR Blend - according to FDoT Tab.2.2.1.7-1 Sec.960			
5	XX-07-03-05	Bulkhead load plug	Nylon			
6	XX-07-03-06	Match-Cast Load Plug	Nylon			
7	XX-07-03-07	Gasket Blockout	Polypropylene - according to ASTM D4101			
8	XX-07-03-08	Storage Cap	Polypropylene - according to ASTM D4101			
9	00-10-00	Band Clamp	Stainless Steel GR316 - according to ASTM A240			
10	I-XX-07-00	Corrugated Duct	Polypropylene - according to ASTM D4101			
11	E-IU-XX-07-08	Smooth Plastic Duct	High Density Polyethylene - according to ASTM D3350			







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**PHASE C** segments detachment

#### NOTE:

- Reference to manifacturer's installation manual for the detailed installation instructions;
- The representetion of both smooth and corrugated duct in the same coupler is purely representative;
- Segmental duct coupler meets FDoT requirements (Par. 2.2.1.6 and 3.2.1 Section 960)
- Components marked with "T" on the drawing are temporary, components marked with "O" are optional
- In the beside table "XX" stands for the system dimension

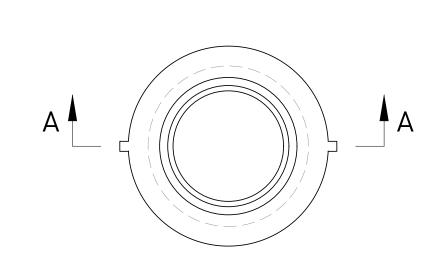
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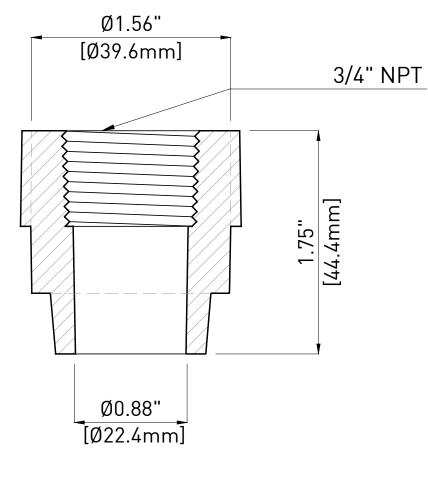


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awing co express	Document Property of TEN ontains proprietary information restricted solely for use on this p sed written permission of TENSA AMERICA LLC, the company wil	ISA AMERICA LLC roject and may not Il safeguard its rig	be reproduced in who hts according to the ci	ole or in par vil and pena	t. For any oth al previsions	ner use of the Law.





# SECTION A-A

### INSTALLATION

#### Preparing the Hole

- 1. Mark the smooth duct with the location of the Grout Port.
- 2. Drill a 7/8" (22mm) hole in the duct.
- 3. Clean hole and Grout Port.

Preparing the Socket Welding Device

- 4. Confirm that Socket Welding Device is cool and unplugged.
- 5. Mount correct adapter on Socket Welding Device.
- 6. Place Socket Welding Device in the cradle.
- 7. Connect the Socket Welding Device to the power source.
- 8. Allow to Socket Welding Device to reach its working temperature.

### The Welding Process

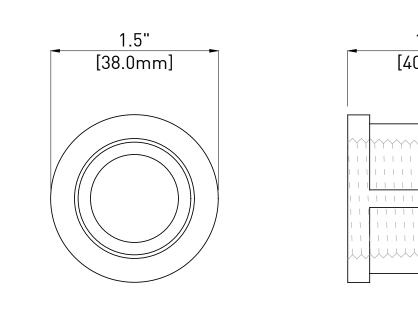
- Simultaneously, insert male adapter of Socket Welding Device into drilled hole and place Grout Port into female adapter.
- 10. Apply light pressure for 20 25 seconds by pushing the Grout Port with the palm of hand.
- 11. Simultaneously, remove Socket Welding Device from drilled hole and Grout Port from female adapter.
- 12. Insert Grout Port into hole until the shoulder is reached. This operation should be carried out as quickly and carefully as possible, within 5 seconds.
- 13. Firmly hold the pieces together for a minimum of 10 seconds. Ensure that the region of the weld is not subjected to any force during this time.

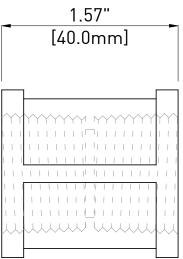
#### Cooling

14. Allow the duct and Grout Port to cool for a minimum of 4 minutes. After the cooling time has finished, the Grout Port is connected.

0 04/05/18
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	Rev. D	Jate	Descri	ption		Drawn	Checked
NOTE:	Material : Polyethyl	ene - according to A	STM D3350	Treatment : -			
		<b>TENSA</b> RUPPO DE ECCHER	AMERICA	Title : GTI 3/4	4" PE INLET/00 for PT SYST		PORT
		ICA LLC - www.tensaamerica.c DNCOURSE, S.TE 200 - BAY HA	om - PHONE: +1 305-866-9917 RBOR ISLAND - 33154 FL	Drawn : L.C	IVATI Chec	ked : T.CICC	CONE
	Date : 04/0	05/2018	Dimensions : INCH [mm] mm FOR REFERENCE ONLY	Part # : 00-	07-04-EM Code	: 220065	
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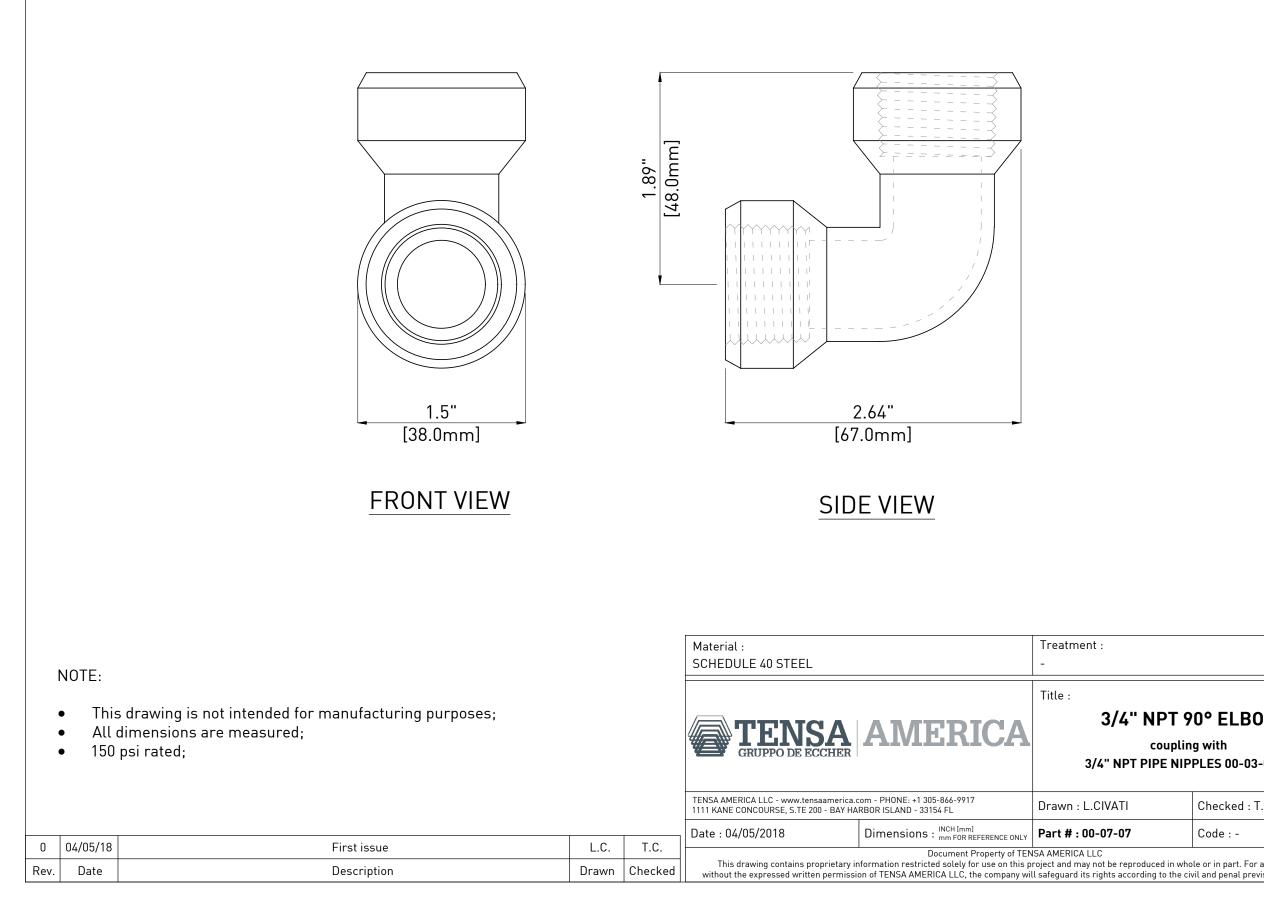




FRONT VIEW

# SIDE VIEW

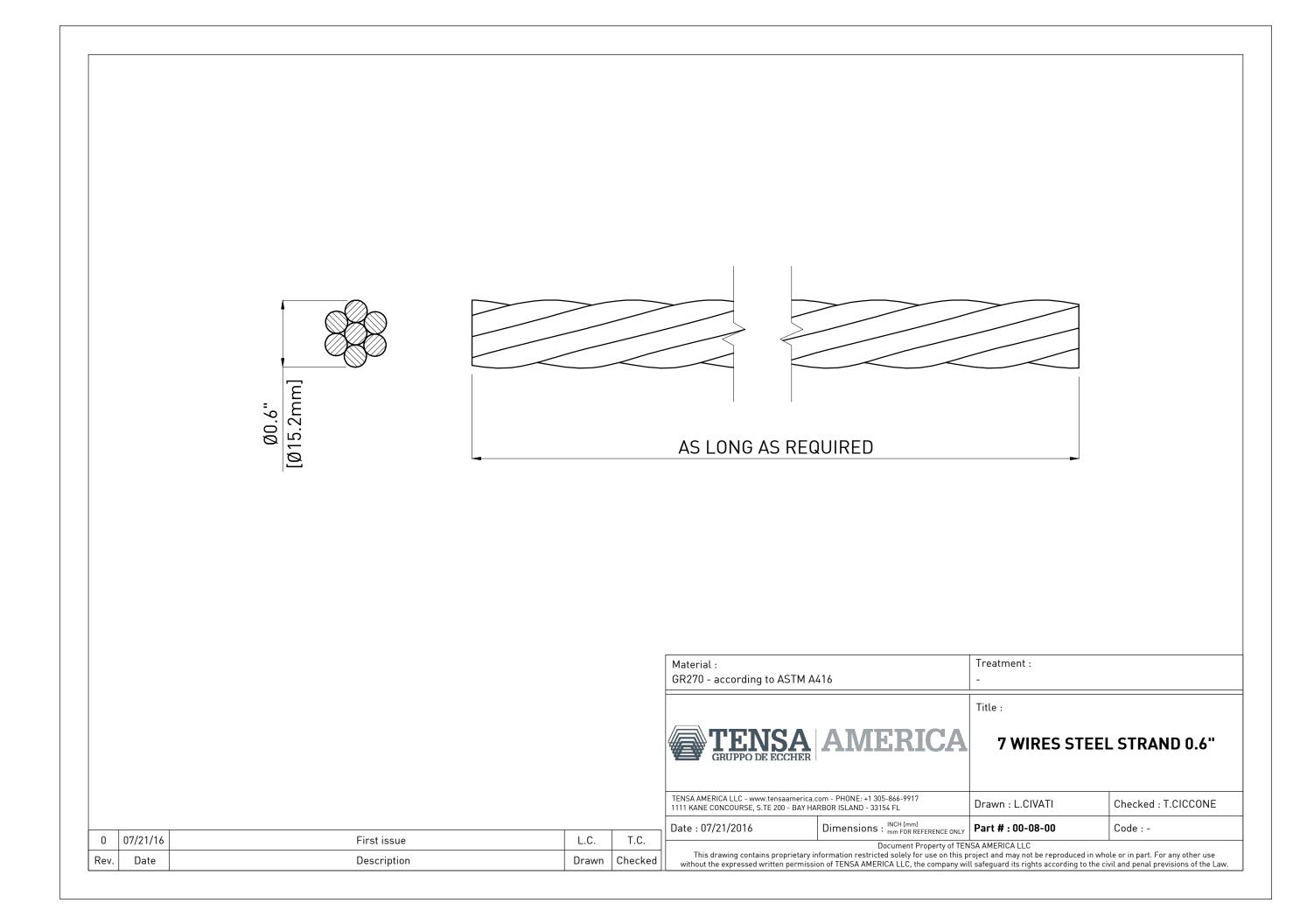
<ul> <li>NOTE:</li> <li>This drawing is not intended for manufacturing purposes;</li> <li>All dimensions are measured;</li> <li>150 psi rated;</li> </ul>				Material : SCHEDULE 40 STEEL TENSA AMERICA		Treatment : - Title : <b>3/4" NPT NIPPLE COUPLER</b> coupling with 3/4" NPT PIPE NIPPLES 00-03-01-M		
								TENSA AMERICA LLC - www.tensaamerica. 1111 KANE CONCOURSE, S.TE 200 - BAY HA
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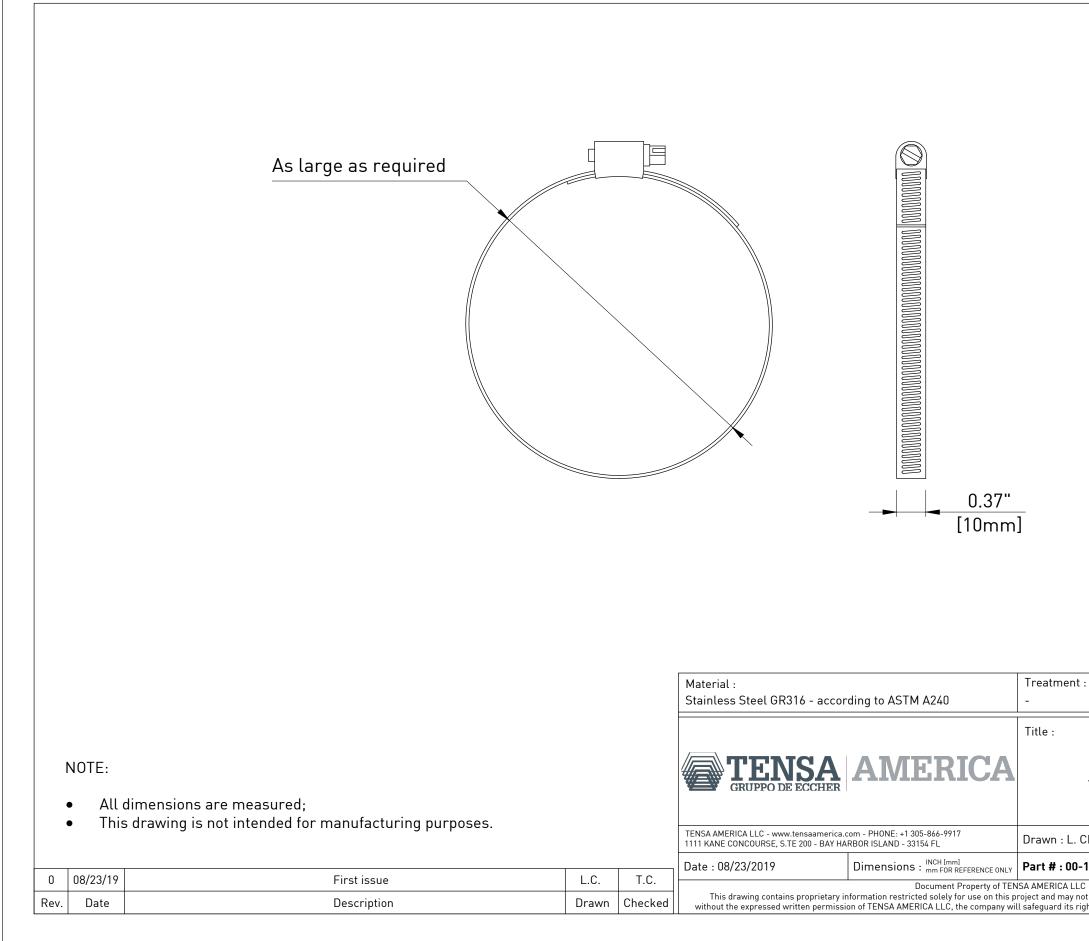


## 3/4" NPT 90° ELBOW

coupling with 3/4" NPT PIPE NIPPLES 00-03-01-M

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### BAND CLAMP for segmental duct coupler

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: 00-10-00	Code : -					
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