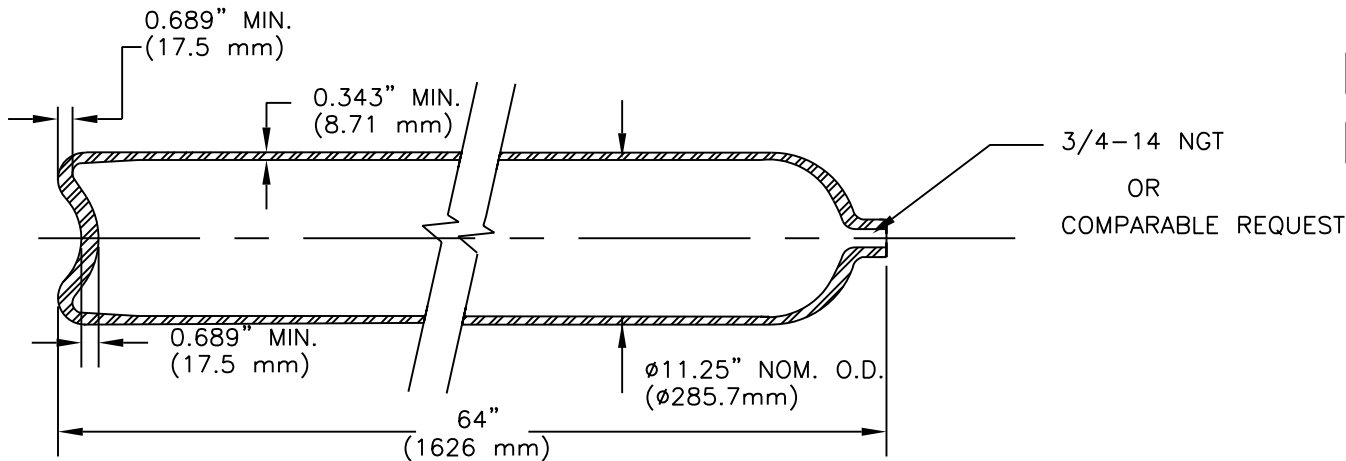


REV.	ECN - DESCRIPT.	DATE	DRWN.	CHKD.	APP.
02	2130	4/20/01			



## DRAWING FOR REFERENCE ONLY

**SPECIFICATION:** DOT 3AA 3000 / TC 3AAM 229

**MODEL:** 11BC615


<b>1. Principal Elements:</b> - Min. water capacity: 176.4 lbs (80.0 kg) - Min. water volume: 4893 in <sup>3</sup> (80.0 liter) - Approx. tareweight: 270 lbs (122.5 kg) - DOT Service pressure: 3000psi (206.8 bar) - TC Service pressure: 229 bar - Test pressure: 5000psi (344.8 bar)	<b>3. Manufacture:</b> Hot billet pierce followed by hot drawing.
	<b>4. Heat Treatment:</b> Q & T
<b>2. Material:</b> Chrome-Moly steel, (A.I.S.I. 4130X)	<b>5. Norris Standard Mechanical Properties:</b> - Tensile: > 105,000 psi (724 MPa) - Elong: > 20% (on 2" gauge) - Flattening: to 6xt without cracks

**D.O.T. Wall Stress Calculations:**  $S = P(1.3D^2 + 0.4d^2)/(D^2 - d^2)$

$$S = \frac{5000 [1.3 (11.25)^2 + 0.4 (10.564)^2]}{(11.25)^2 - (10.564)^2}$$

$$S = 69,889 \text{ psi (481.9 MPa)}$$

$$\text{Required Minimum tensile: } \frac{69,889}{0.67} = 104,313 \text{ psi (719.3 MPa)}$$

		<b>NORRIS CYLINDER COMPANY</b>			
		P.O. BOX 7486 LONGVIEW, TEXAS 75607			
<b>SEAMLESS STEEL CYLINDER, MODEL 11BC615</b>					
SCALE	NOT TO SCALE	DRAWING NO.		REV.	
DWN. BY	DAVID LI	5/23/96	901A-B-9419		02
CHK'D BY	R.S	5/23/96			
APP'D BY	B.A	5/23/96	SHEET NO. 1	OF 1	SHEETS