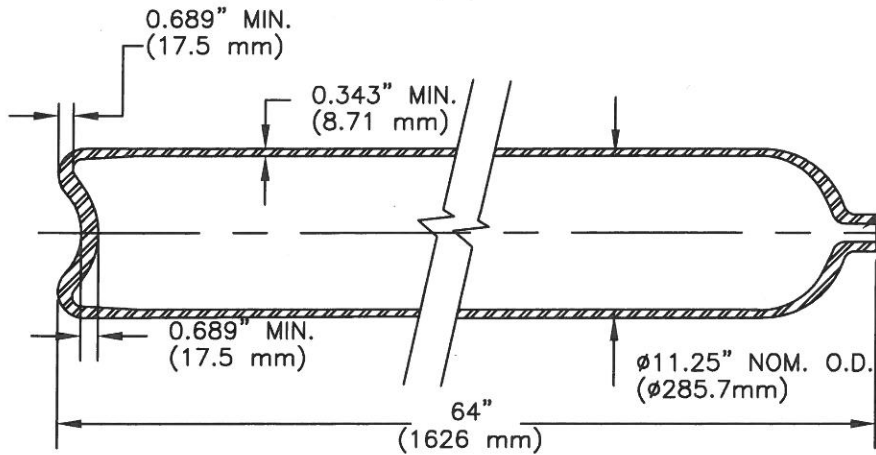


REV.	ECN - DESCRIP.	DATE	DRWN.	CHKD.	APP.
02	2130	4/20/01			
03	2896	8/19/09	JJM		



3/4-14 NGT (11BC615-3),
 1-11 1/2 NGT (11BC615-1),
 25E (11BC615-25E for TC SU10088),
 DIN 477 28,8 (11BC615-D for TC SU10088),
 OR COMPARABLE REQUEST

DRAWING FOR REFERENCE ONLY

SPECIFICATION: DOT 3AA 3000 / TC 3AAM 229 or TC-SU10088-229

MODEL: 11BC615

1. Principal Elements: - Min. water capacity: 176.4 lbs (80.0 kg) - Min. water volume: 4893 in ³ (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)	3. Manufacture: Hot billet pierce followed by hot drawing.
	4. Heat Treatment: Q & T
2. Material: Chrome-Moly steel, (A.I.S.I. 4130X)	5. Norris Standard Mechanical Properties: - Tensile: \geq 105,000 psi (724 MPa) - Elong: \geq 20% (on 2" gauge) - Flattening: to 6xt without cracks

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

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

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

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

S = Maximum wall stress, psi
 P = Test pressure, psi
 D = Outside diameter, inch
 d = Inside diameter, inch
 Required Minimum tensile:



NORRIS CYLINDER COMPANY
 4818 WEST LOOP 281 LONGVIEW, TEXAS 75603 USA

SEAMLESS STEEL
 CYLINDER, MODEL 11BC615

SCALE	NOT TO SCALE	DRAWING NO.	REV.
DWN. BY	DAVID LI	5/23/98	901A-B-9419 03
CHK'D BY	R.S	5/23/98	
APP'D BY	B.A	5/23/98	
		SHEET NO. 1	OF 1 SHEETS