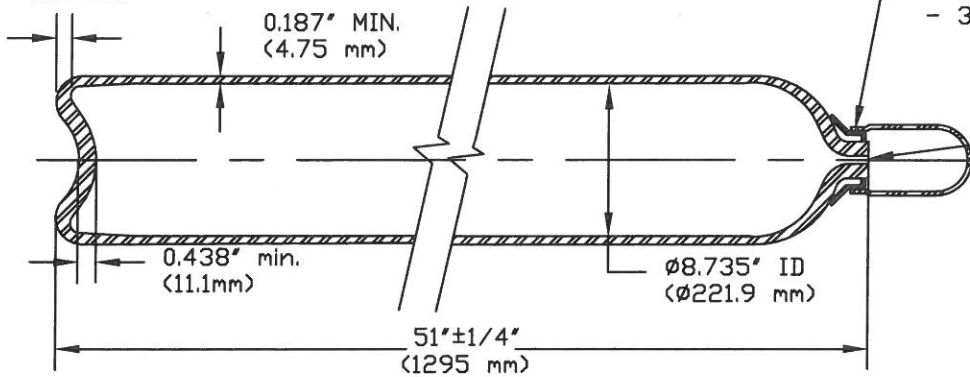


0.438" Min.  
(11.1 mm)

0.187" MIN.  
(4.75 mm)



**Choice of Neck Ring Threads**

- 3 1/8-11 UNS Thd.
- 3 1/8-7 UNS Thd.
- 3.147-11 UNS Thd.

3/4-14 NGT (8BC220-3),  
1 -11 1/2 NGT (8BC220-1),  
25E (8BC220-25E FOR TC-SU10088),  
DIN 477 28,8 (8BC220-D for TC-SU10088),  
OR COMPARABLE

REV.	ECN - DESCRIPT.	DATE	DRWN.	CHKD.	APP.
01	1042 dot/tc	12/14/92	MB	RS	BA
02	2291	3/26/03	RS	RS	JM
03	2299	5/1/03	RS	RS	BA
04	2371	3/17/04	RS	RS	RS
05	2430	10/7/04	RS	RS	RS
06	2528	1/5/06	RS	RS	
07	2896	8/21/09	JJM		

# DRAWING FOR REFERENCE ONLY

SPECIFICATION: DOT 3AA 2015 / TC 3AAM 154 or TC-SU10088-154

MODEL: 8BC220

<b>1. Principal Elements:</b> - Min. water capacity: 95.2 lb (43.2 kg) - Min water volume: 2640 in <sup>3</sup> (43.2 liter) - Approx. cyld. weight: 114 lbs (51.7 kg) - DOT Service pressure: 2015psi (138.9 bar) - TC Service pressure: 154 bar - Test pressure: 3360psi (231.7 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:  $S = P(1.3D^2 + 0.4d^2)/(D^2 - d^2)$

$S = \text{Maximum wall stress, psi}$       $S = \frac{3360 [1.3 (9.109)^2 + 0.4 (8.735)^2]}{(9.109)^2 - (8.735)^2}$   
 $P = \text{Test pressure, psi}$   
 $D = \text{Outside diameter, inch}$   
 $d = \text{Inside diameter, inch}$   
 $S = 69,674 \text{ psi (480.4 MPa)}$   
 Required Minimum tensile:  $= \frac{69,674}{0.67} = 103,991 \text{ psi (717 MPa)}$



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

REFILLABLE SEAMLESS STEEL  
GAS CYLINDER, MODEL 8BC220

SCALE	NOT TO SCALE		DRAWING NO.	REV.
DWN. BY	MB	2/14/92	901A-B-9104	07
CHK'D BY	RS	2/14/92		
APP'D BY	BA	2/14/92	SHEET NO. 1	OF 1 SHEETS