

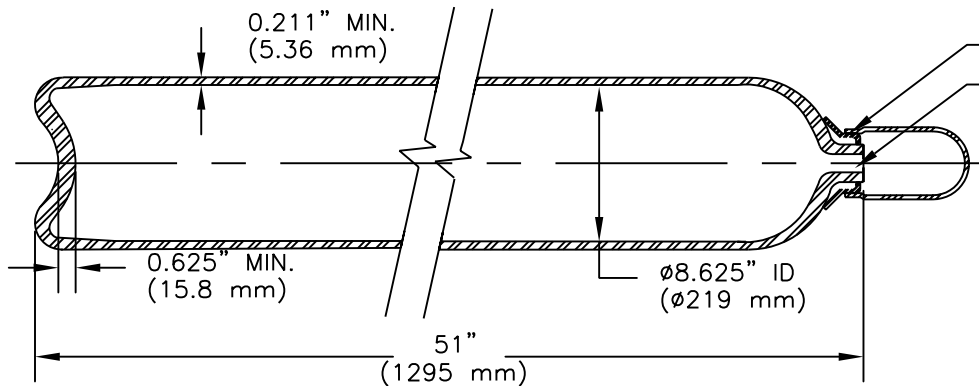
REV.	ECN - DESCRIPT.	DATE	DRWN.	CHKD.	APP.
01	1187 TC	1/10/93	SJ	RS	BA
02	ECN # 1517	6/17/97			

**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

**DRAWING FOR  
REFERENCE ONLY**



<b>SPECIFICATION:</b> DOT-E9370-3280/TC-SU4210-226 <b>MODEL:</b> 8BC360		<b>3. Manufacture:</b> Hot billet pierce followed by hot drawing.
<b>1. Principal Elements:</b> - Min. water capacity: 95.2 lbs (43.2 kg) - Min. water volume: 2640 in <sup>3</sup> (43.2 liter) - Approx. tareweight: 115 lbs (52.2 kg) - DOT Service pressure: 3280 psi - TC Service pressure: 226 bar - Test pressure: 4920 psi (339.3 bar)	<b>4. Heat Treatment:</b> Q & T	
	<b>5. Norris Standard Mechanical Properties:</b> - Tensile: 135,000-155,000psi (930-1069 MPa) - Elong.: ≥ 16% (on 2" gauge) - Hardness ≤ R <sub>c</sub> 36 - Charpy: 25.0 ft-lbs (avg. 3 specimen) 21.0 ft-lbs (individual minimum) (AT -60°F, 1/2 size, longitudinal specimen)	
<b>2. Material:</b> Chrome-Moly steel, (A.I.S.I. 4137)		

<b>D.O.T. Wall Stress Calculations:</b>	$S = P(1.3D^2 + 0.4d^2)/(D^2 - d^2)$	
S = Maximum wall stress, psi	$S = \frac{4920 [1.3(9.047)^2 + 0.4(8.625)^2]}{(9.047)^2 - (8.625)^2}$	
P = Test pressure, psi		
D = Outside diameter, inch	$s = 89,829 \text{ psi (619.4 MPa)}$	
d = Inside diameter, inch		
Required Minimum tensile:	$= \frac{89,829}{0.67} = 134,074 \text{ psi (924.4 MPa)}$	



**NORRIS CYLINDER COMPANY**

P.O. BOX 7486 LONGVIEW, TEXAS 75607

**ULTRALIGHT, REFILLABLE SEAMLESS STEEL  
GAS CYLINDER, MODEL 8BC360**

SCALE	NOT TO SCALE	DRAWING NO.	REV.
DWN. BY	M BENHAM	12/10/91	901A-B-9114
CHK'D BY	R. SHAFKEY	1/28/92	
APP'D BY	B. ARNOLD	1/28/92	SHEET NO. 1 OF 1 SHEETS