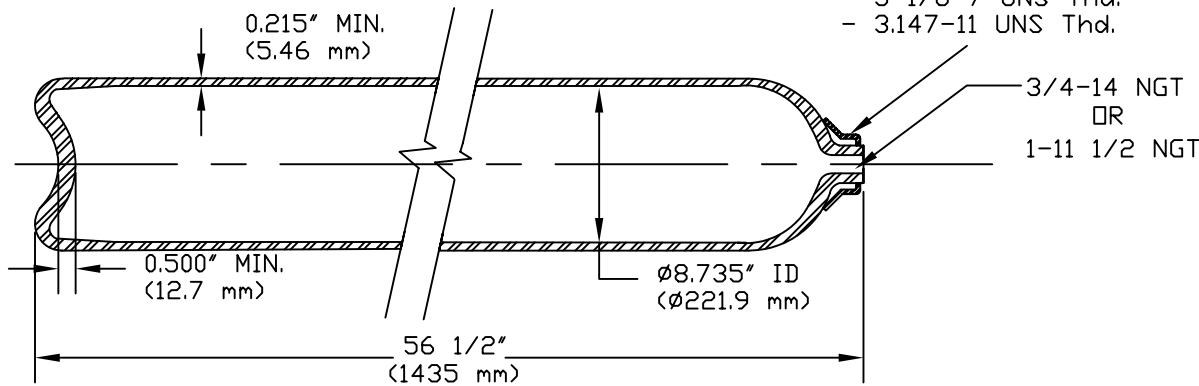


REV.	ECN - DESCRIPT.	DATE	DRWN.	CHKD.	APP.
01	1113 DOT/TC	4/5/93			
02	2308	6/18/03	JM	RS	
03	2437	10/27/04	RS	RS	

Choice of Neck Ring Threads

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



HEAD STAMPING
SEE DUAL DOT/TC MARKING FOR 8BC75A

DRAWING FOR REFERENCE ONLY

SPECIFICATION: DOT 3AA 2300 / TC3AAM176

MODEL: 8BC75A / TC

1. Principal Elements:

- Min. water capacity: 110.3 lbs (50 kg)
- Min. water volume: 3058 in³ (50 liter)
- Approx. tareweight: 136 lbs (61.7 kg)
- DOT Service pressure: 2300psi (158.6 bar)
- TC Service pressure: 176 bar
- Test pressure: 3835psi (264.5 bar)

2. Material:

Chrome-Moly steel, (A.I.S.I. 4130X)

3. Manufacture:

Hot billet pierce followed by hot drawing.

4. Heat Treatment: Q & T

5. Norris Standard Mechanical Properties:

- Tensile: ≥ 105,000 psi (724 MPa)
- Elong: ≥ 20% (on 2" gauge)
- Flattening: to 6xt without cracks

D.O.T. Wall Stress Calculations:

$$S = P(1.3D^2 + 0.4d^2) / (D^2 - d^2)$$

$$S = \frac{3835 [1.3 (9.165)^2 + 0.4 (8.735)^2]}{(9.165)^2 - (8.735)^2}$$

S = Maximum wall stress, psi

P = Test pressure, psi

D = Outside diameter, inch

d = Inside diameter, inch

$$S = 69,614 \text{ psi } (480 \text{ MPa})$$

$$\text{Required Minimum tensile: } = \frac{69,614}{0.67} = 103,902 \text{ psi } (716.4 \text{ MPa})$$



NORRIS CYLINDER COMPANY

P.O. BOX 7486 LONGVIEW, TEXAS 75607

SEAMLESS STEEL
CYLINDER, MODEL 8BC75A /TC

SCALE	NOT TO SCALE		DRAWING NO.	REV.
DWN. BY	S. JOHNSON	11/8/91	901A-B-9118	03
CHK'D BY	R.SHAFFKEY	11/15/91		
APP'D BY	B.ARNDLD	11/25/91	SHEET NO. 1	OF 1 SHEETS