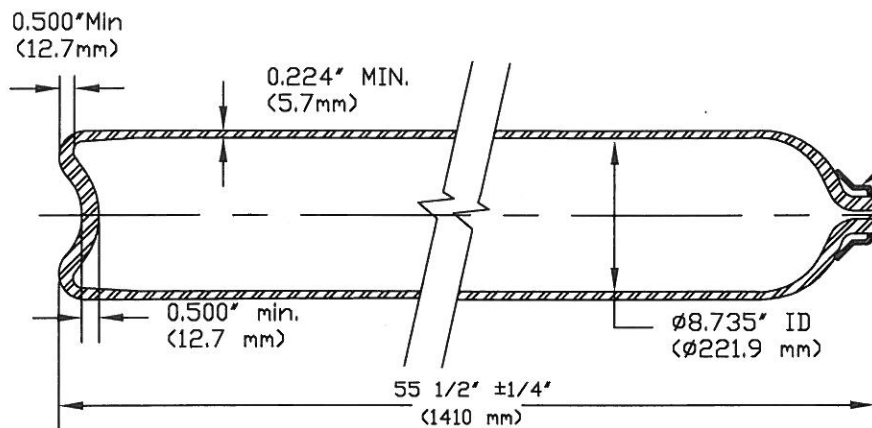


| REV. | ECN - DESCRIPT. | DATE | DRWN. | CHKD. | APP. |
|------|-----------------|---------|-------|-------|------|
| 07 | 2896 | 8/25/09 | JJM | | |



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 (8BC300-3),
 1 -11 1/2 NGT (8BC300-1),
 25E (8BC300-25E FOR TC-SU10088),
 DIN 477 28,8 (8BC300-D for TC-SU10088),
 OR COMPARABLE

DRAWING FOR REFERENCE ONLY

SPECIFICATION: DOT 3AA 2400 / TC 3AAM 183 or TC-SU10088-183

MODEL: 8BC300

1. Principal Elements:

- Min. water capacity: 108 lbs (49 kg)
- Water volume: 2995 in³ (49 liter)
- Approx. cyld. weight: 134 lbs (60.8 kg)
- DOT Service pressure: 2400psi (165.5 bar)
- TC Service pressure: 183 bar
- Test pressure: 4000psi (275.8 bar)

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

2. Material:

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

D.O.T. Wall Stress Calculations:

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

$$S = \text{Maximum wall stress, psi} \quad S = \frac{4000 [1.3 (9.183)^2 + 0.4 (8.735)^2]}{(9.183)^2 - (8.735)^2}$$

P = Test pressure, psi

D = Outside diameter, Inch

d = Inside diameter, Inch

$$S = 69,835 \text{ psi (481.5 MPa)}$$

$$\text{Required Minimum tensile:} = \frac{69,835}{0.67} = 104,231 \text{ psi (718.7 MPa)}$$



NORRIS CYLINDER COMPANY

4818 WEST LOOP 281 LONGVIEW, TEXAS 75603 USA

REFILLABLE SEAMLESS STEEL
 GAS CYLINDER, MODEL 8BC300 /TC

| SCALE | NOT TO SCALE | DRAWING NO. | REV. |
|----------|--------------|-------------|-------------------------|
| DWN. BY | M.BENHAM | 12/16/92 | |
| CHK'D BY | R.SHAFFKEY | 12/16/92 | 901A-B-9106 07 |
| APP'D BY | B.ARNOLD | 12/16/92 | SHEET NO. 1 OF 1 SHEETS |