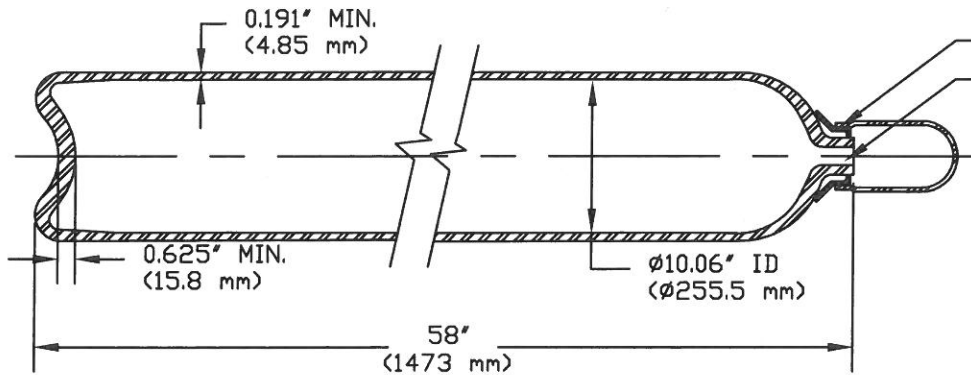


REV.	ECN - DESCRIPT.	DATE	DRWN.	CHKD.	APP.
01	1099 TC	3/4/93	MB	RS	BA
02	1247	3/27/95	MB	RS	BA
03	1641	3/30/98	TC	RS	BA
04	2449	12/10/04	RS		
05	2896	9/04/09	JJM		

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 (10BC100-3),
 1-11 1/2 NGT (10BC100-1),
 25E (10BC100-25E for TC-SU10088),
 DIN 477 28,8 (10BC100-D for TC-SU10088),
 OR COMPARABLE REQUEST



**DRAWING FOR
REFERENCE ONLY**

SPECIFICATION: DOT 3AA 1800 /TC3AAM138 or TC-SU10088-138

MODEL: 10BC100

- | | |
|--|--|
| <p>1. Principal Elements:</p> <ul style="list-style-type: none"> - Min. water capacity: 147.1 lbs (66.7 kg) - Min. water volume: 4079 in³ (66.7 liter) - Approx. tareweight: 180 lbs (81.6 kg) - DOT Service pressure: 1800psi (124 bar) - TC Service pressure: 138 bar - Test pressure: 3000psi (207 bar) | <p>3. Manufacture:
Hot billet pierce followed by hot drawing.</p> |
| <p>2. Material:
Chrome-Moly steel, (A.I.S.I. 4130X)</p> | <p>4. Heat Treatment: Q & T</p> <p>5. Norris Standard Mechanical Properties:</p> <ul style="list-style-type: none"> - Tensile: ≥ 105,000 psi (724 MPa) - Elong: ≥ 20% (on 2" gauge) - Flattening: to 6xt without cracks |

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

$S = \frac{3000 [1.3 (10.442)^2 + 0.4 (10.06)^2]}{(10.442)^2 - (10.06)^2}$
 $S = 69,803 \text{ psi } (481.3 \text{ MPa})$
 Required Minimum tensile: $= \frac{69,803}{0.67} = 104,184 \text{ psi } (718.4 \text{ MPa})$

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



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

**SEAMLESS STEEL CARBON DIOXIDE
CYLINDER, MODEL 10BC100/TC**

SCALE	NOT TO SCALE		DRAWING NO.	REV.
DWN. BY	S. JOHNSON	11/8/91	901A-B-9117	05
CHK'D BY	R.SHAFFEY	11/15/91		
APP'D BY	B. ARNOLD	11/25/91	SHEET NO. 1	OF 1 SHEETS