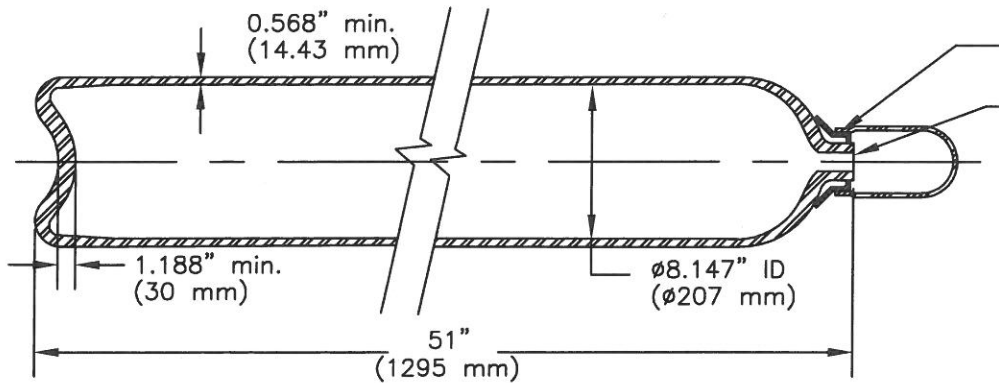


REV.	ECN - DESCRIPT.	DATE	DRWN.	CHKD.	APP.
01	2896	8/25/09	JJM		

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 (8BC435-3),
- 1 -11 1/2 NGT (8BC435-1),
- 25E (8BC435-25E FOR TC-SU10088),
- DIN 477 28,8 (8BC435-D for TC-SU10088),
- OR COMPARABLE



DRAWING FOR REFERENCE ONLY

SPECIFICATION: DOT 3AA 6000/TC 3AAM 459 or TC-SU10088-459

MODEL: 8BC435

1. Principal Elements: - Min. water capacity: 82.4 lb (37.4 kg) - Min. water volume: 2285 in ³ (37.4 liter) - Approx. tareweight: 267 lb (121 kg) - DOT Service pressure: 6000 psi (413.7 bar) - TC Service pressure: 459 bar - Min Test pressure: 10000 psi (689.7 bar)	3. Manufacture: Hot billet pierced followed by hot drawing.
	4. Heat Treatment: Q & T
2. Material: Chrome-Moly steel, (A.I.S.I. 4130X)	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: $S = P(1.3D^2 + 0.4d^2) / (D^2 - d^2)$

$$S = \frac{10000 [1.3 (9.283)^2 + 0.4 (8.147)^2]}{(9.283)^2 - (8.147)^2}$$

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

$$S = 69,987 \text{ psi (482.6 MPa)}$$

$$\text{Required Minimum Tensile: } = \frac{69,987}{0.67} = 104,458 \text{ psi (720.2 MPa)}$$



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

**REFILLABLE SEAMLESS STEEL
 GAS CYLINDER, MODEL 8BC435**

SCALE	NOT TO SCALE	DRAWING NO.	REV.
DWN. BY		901A-B-9213	01
CHK'D BY			
APP'D BY		SHEET NO. 1	OF 1 SHEETS