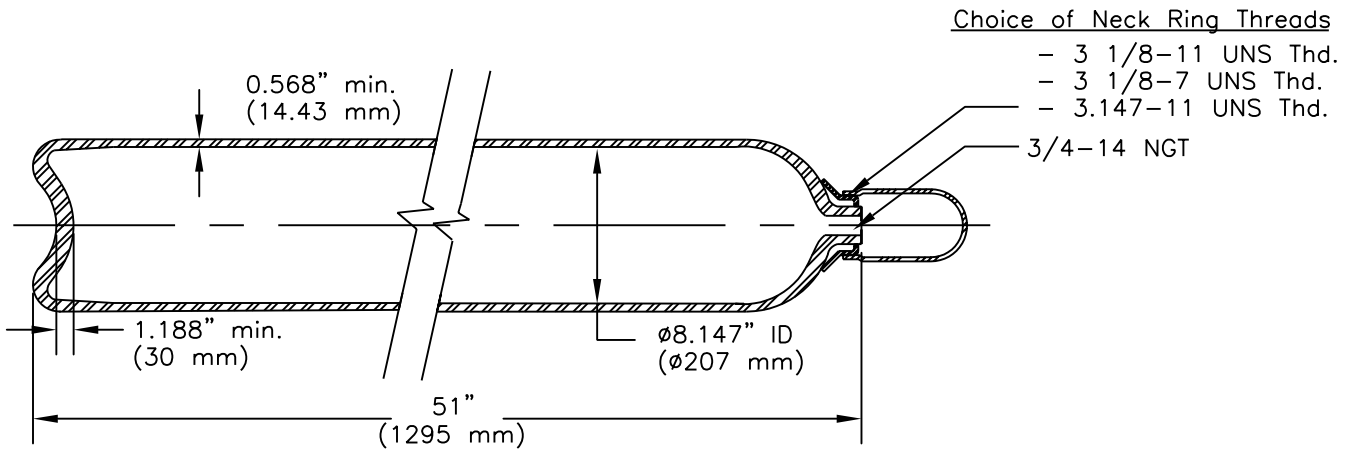



REV.	ECN - DESCRIP.	DATE	DRWN.	CHKD.	APP.
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DRAWING FOR REFERENCE ONLY

SPECIFICATION: DOT 3AA 6000/TC 3AAM 459	
MODEL: 8BC435 /TC	
1. Principal Elements:	3. Manufacture:
- Min. water capacity: 82.4 lb (37.4 kg)	Hot billet pierced followed by
- Min. water volume: 2285 in ³ (37.4 liter)	hot drawing.
- Approx. tareweight: 267 lb (121 kg)	4. Heat Treatment: Q & T
- DOT Service pressure: 6000 psi (413.7 bar)	5. Norris Standard Mechanical Properties:
- TC Service pressure: 459 bar	- Tensile: ≥ 105,000 psi (724 MPa)
- Min Test pressure: 10000 psi (689.7 bar)	- Elong.: ≥ 20% (on 2" gauge)
2. Material:	- Flattening: to 6xt without cracks
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 = Maximum wall stress, psi	$S = \frac{10000 [1.3 (9.283)^2 + 0.4 (8.147)^2]}{(9.283)^2 - (8.147)^2}$
P = Test pressure, psi	
D = Outside diameter, inch	
d = Inside diameter, inch	$S = 69,987 \text{ psi (482.6 MPa)}$
Required Minimum Tensile:	$= \frac{69,987}{0.67} = 104,458 \text{ psi (720.2 MPa)}$

 NORRIS CYLINDER COMPANY P.O. BOX 7486 LONGVIEW, TEXAS 75607			
REFILLABLE SEAMLESS STEEL GAS CYLINDER, MODEL 8BC435 /TC			
SCALE	NOT TO SCALE	DRAWING NO.	REV.
DWN. BY		901A-B-9213	00
CHK'D BY		SHEET NO. 1	OF 1 SHEETS
APP'D BY			