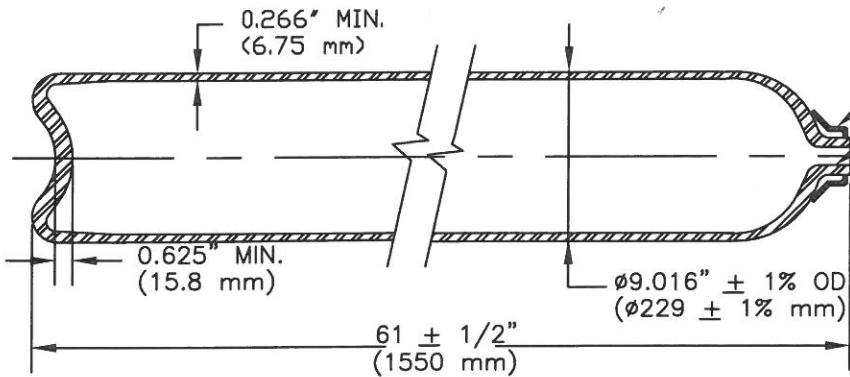


REV.	ECN - DESCRIPT.	DATE	DRWN.	CHKD.	APP.
05	Threads	5/25/10	JJM		



NECK RING:
PER CUSTOMER REQUEST

THREADS:
3/4-14 NGT (8BC370-3),
1 -11 1/2 NGT (8BC370-1),
25E (8BC370-25E FOR TC-SU10088),
DIN 477 28,8 (8BC370-D for TC-SU10088),
OR COMPARABLE

DRAWING FOR REFERENCE ONLY

SPECIFICATION: DOT 3AA 2900/TC3AAM222 or TC-SU10088-222
MODEL: 8BC370

1. Principal Elements: - Min. water capacity: 110.2 lbs (50.0 kg) - Min. water volume: 3058 in ³ (50.0 liter) - Approx. tareweight: 161 lbs (73 kg) (w/o valve & cap) - DOT Service pressure: 2900 psi (200 bar) - TC Service pressure: 222 bar - Test pressure: 4835 psi (333.5 bar)	3. Manufacture: Hot billet pierce 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: $S = P(1.3D^2 + 0.4d^2)/(D^2 - d^2)$

$$S = \frac{4835 [1.3 (9.016)^2 + 0.4 (8.484)^2]}{(9.016)^2 - (8.484)^2}$$

$$S = 69,833 \text{ psi (481.5 MPa)}$$

$$\text{Required Minimum tensile:} = \frac{69,833}{0.67} = 104,229 \text{ psi (718.7 MPa)}$$



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

REFILLABLE SEAMLESS STEEL
GAS CYLINDER, MODEL 8BC370

SCALE	NOT TO SCALE	DRAWING NO.	REV.
DWN. BY	S. JOHNSON	1/28/92	901A-B-9129
CHK'D BY	R. SHAFKEY	1/28/92	
APP'D BY	B. ARNOLD	1/28/92	05
SHEET NO. 1		OF 1	SHEETS