

Maximum Average Pressure (MAP)* = 24,000 psi

Instrumental Velocity: 25-grain @ 1,725 fps

* Refer to SAAMI Z299.1 for pressure guideline interpretation description.

MAXIMUM CARTRIDGE / MINIMUM CHAMBER

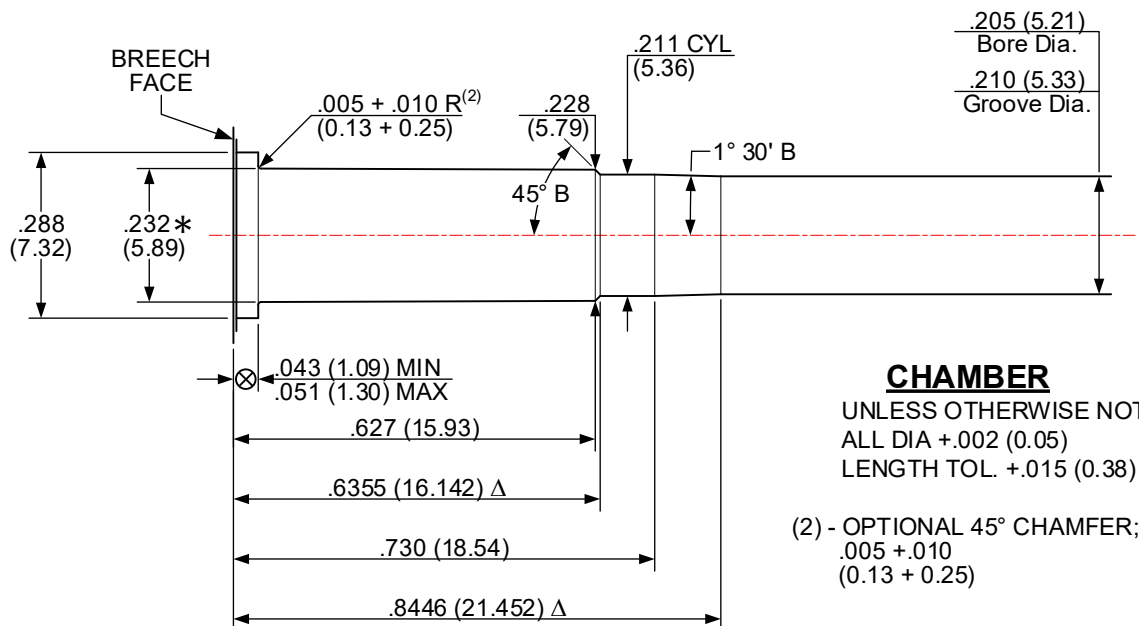
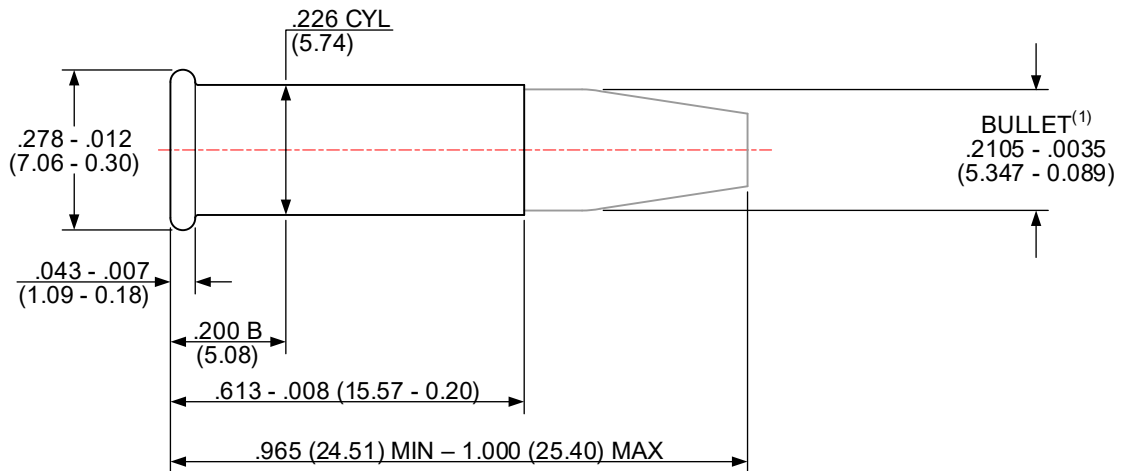
ISSUED: 06/06/2023

21 SHARP [21 SHARP]

REVISED: -/-/-/-

CARTRIDGE

UNLESS OTHERWISE NOTED
BODY DIA. -.004 (0.10)



CHAMBER

UNLESS OTHERWISE NOTED
ALL DIA +.002 (0.05)
LENGTH TOL. +.015 (0.38)

(2) - OPTIONAL 45° CHAMFER;
.005 +.010
(0.13 + 0.25)

Δ 6 GROOVES

Δ .068 + .002 (1.73 + 0.05) WIDE

TWIST: 12.00 (304.8) R.H. OPTIONAL

MINIMUM BORE & GROOVE AREA: .0340 in² (21.935 mm²)

NOTE:

B = BASIC

(XX.XX) = MILLIMETERS

⊗ = HEAD SPACE DIMENSION

Δ = REFERENCE DIMENSION

* = DIMENSIONS ARE TO INTERSECTION OF LINES

ALL CALCULATIONS APPLY AT MAXIMUM MATERIAL CONDITION (MMC)

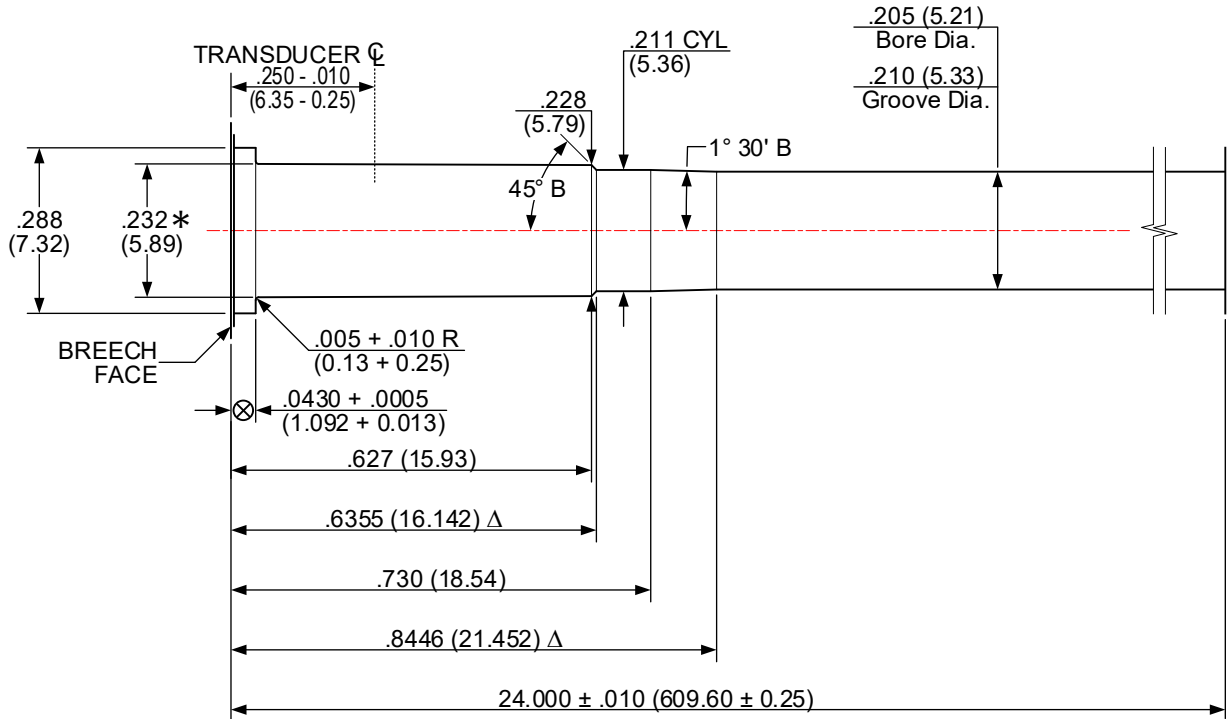
(1) - BULLET PROFILE IS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY

DO NOT SCALE FROM DRAWING

VELOCITY & PRESSURE TEST BARREL

21 SHARP [21 SHARP]

ISSUED: 06/06/2023 V&P TEST BARREL REVISED: -/- -/- -/-



NUMBER OF GROOVES: 6
 WIDTH OF GROOVES: .068 + .002 (1.73 + 0.05)
 TWIST RATE: 12.00 (304.8) R.H.
 DIAMETER OF PISTON HOLE: .206 (5.23)
 TRANSDUCER DIAMETER: .250 (6.35)

LAND AND GROOVE DIMENSIONS TO BE WITHIN TOLERANCES THROUGHOUT LENGTH OF BARREL.

UNLESS OTHERWISE NOTED, ALL DIAMETERS +.0005 (0.013) LENGTH TOLERANCE + .005 (0.13)

DO NOT SCALE FROM DRAWING

NOTE:
 B = BASIC Δ = REFERENCE DIMENSION ⊗ = HEADSPACE DIMENSION
 * DIMENSIONS ARE TO INTERSECTIONS OF LINES (XX.XX) = MILLIMETERS
 ALL CALCULATIONS APPLY AT MAXIMUM MATERIAL CONDITION (MMC)

Support products supplier:

Winchester Division, Olin Corporation

Kevin Winscherph. 618-606-4452 email: KLWinscher@olin.com

Order symbols/part numbers:

Reference rounds: SA21RF25

Dummy rounds: APD21RF25

Proof ammunition: DP21RF37