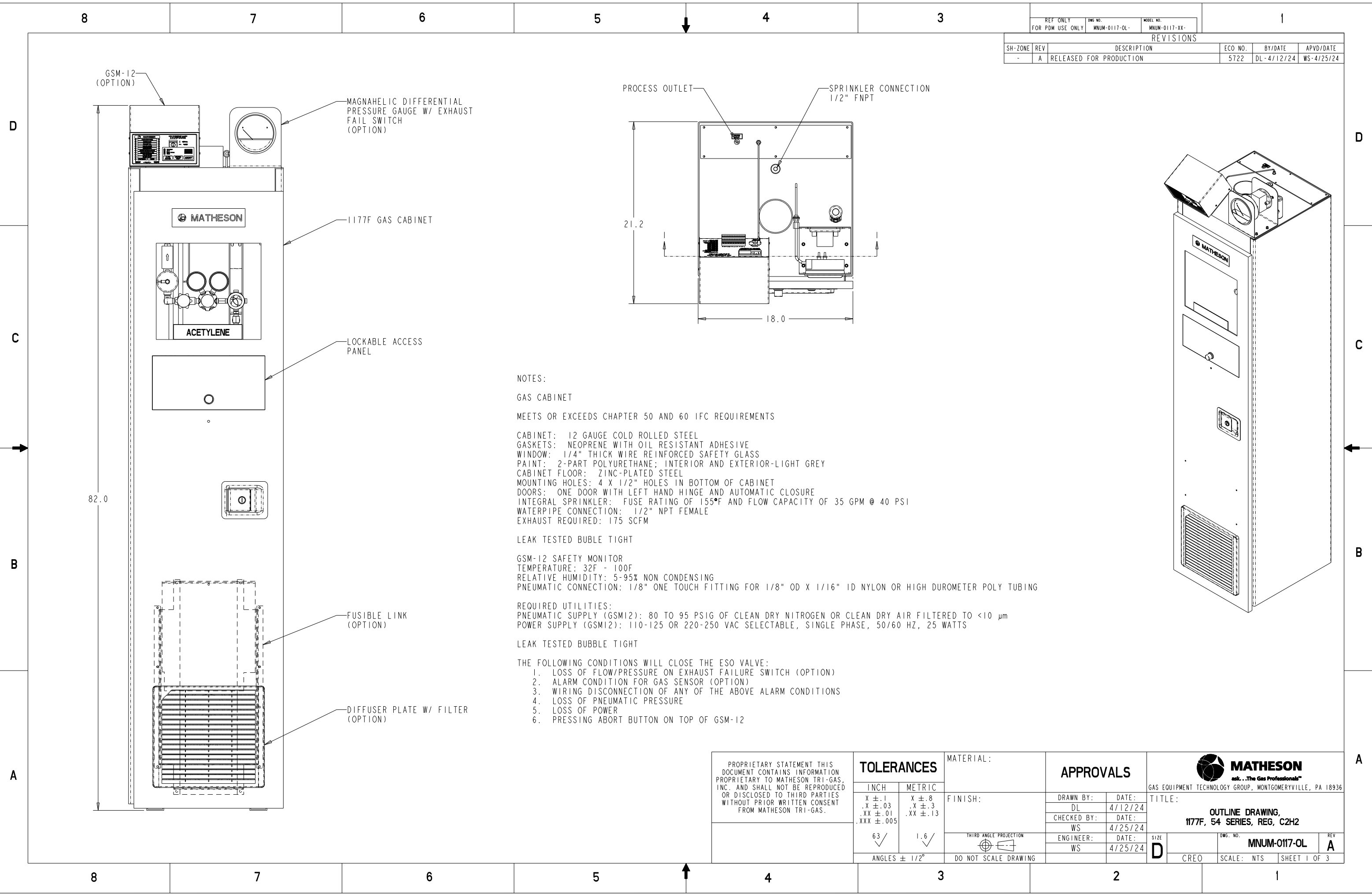


REF ONLY FOR PDM USE ONLY		DWG NO. MNUM-0117-OL-	MODEL NO. MNUM-0117-XX-		
REVISIONS					
SH-ZONE	REV	DESCRIPTION	ECO NO.	BY/DATE	APVD/DATE
-	A	RELEASED FOR PRODUCTION	5722	DL-4/12/24	WS-4/25/24



**NOTES:**

**GAS CABINET**

MEETS OR EXCEEDS CHAPTER 50 AND 60 IFC REQUIREMENTS

- CABINET: 12 GAUGE COLD ROLLED STEEL
- GASKETS: NEOPRENE WITH OIL RESISTANT ADHESIVE
- WINDOW: 1/4" THICK WIRE REINFORCED SAFETY GLASS
- PAINT: 2-PART POLYURETHANE; INTERIOR AND EXTERIOR-LIGHT GREY
- CABINET FLOOR: ZINC-PLATED STEEL
- MOUNTING HOLES: 4 X 1/2" HOLES IN BOTTOM OF CABINET
- DOORS: ONE DOOR WITH LEFT HAND HINGE AND AUTOMATIC CLOSURE
- INTEGRAL SPRINKLER: FUSE RATING OF 155°F AND FLOW CAPACITY OF 35 GPM @ 40 PSI
- WATERPIPE CONNECTION: 1/2" NPT FEMALE
- EXHAUST REQUIRED: 175 SCFM

LEAK TESTED BUBLE TIGHT

- GSM-12 SAFETY MONITOR
- TEMPERATURE: 32F - 100F
- RELATIVE HUMIDITY: 5-95% NON CONDENSING
- PNEUMATIC CONNECTION: 1/8" ONE TOUCH FITTING FOR 1/8" OD X 1/16" ID NYLON OR HIGH DUROMETER POLY TUBING

**REQUIRED UTILITIES:**

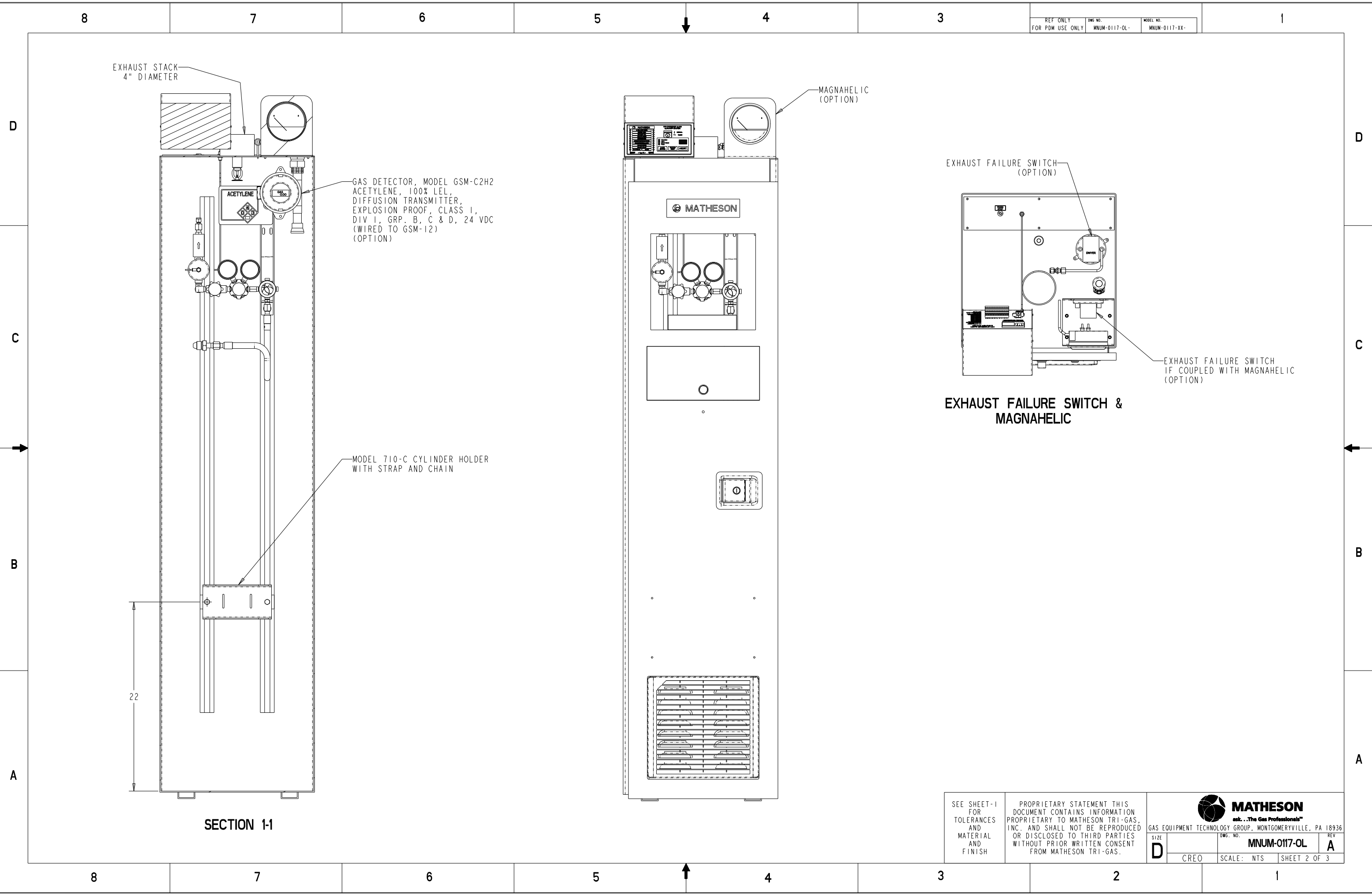
- PNEUMATIC SUPPLY (GSM12): 80 TO 95 PSIG OF CLEAN DRY NITROGEN OR CLEAN DRY AIR FILTERED TO <10 µm
- POWER SUPPLY (GSM12): 110-125 OR 220-250 VAC SELECTABLE, SINGLE PHASE, 50/60 HZ, 25 WATTS

LEAK TESTED BUBBLE TIGHT


**THE FOLLOWING CONDITIONS WILL CLOSE THE ESO VALVE:**

1. LOSS OF FLOW/PRESSURE ON EXHAUST FAILURE SWITCH (OPTION)
2. ALARM CONDITION FOR GAS SENSOR (OPTION)
3. WIRING DISCONNECTION OF ANY OF THE ABOVE ALARM CONDITIONS
4. LOSS OF PNEUMATIC PRESSURE
5. LOSS OF POWER
6. PRESSING ABORT BUTTON ON TOP OF GSM-12

PROPRIETARY STATEMENT THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO MATHESON TRI-GAS, INC. AND SHALL NOT BE REPRODUCED OR DISCLOSED TO THIRD PARTIES WITHOUT PRIOR WRITTEN CONSENT FROM MATHESON TRI-GAS.	<b>TOLERANCES</b>		MATERIAL:  FINISH:  THIRD ANGLE PROJECTION DO NOT SCALE DRAWING	<b>APPROVALS</b>		<b>MATHESON</b> <small>ask...The Gas Professionals™</small> GAS EQUIPMENT TECHNOLOGY GROUP, MONTGOMERYVILLE, PA 18936 TITLE: <b>OUTLINE DRAWING,          1177F, 54 SERIES, REG, C2H2</b>
	INCH	METRIC		DRAWN BY:	DATE:	
	x ± .1 .x ± .03 .xx ± .01 .xxx ± .005	x ± .8 .x ± .3 .xx ± .13		DL	4/12/24	
63 ✓      1.6 ✓ ANGLES ± 1/2°		ENGINEER: WS      DATE: 4/25/24		CHECKED BY: WS      DATE: 4/25/24	SIZE: <b>D</b>	
			CREO		DWG. NO.: <b>MNUM-0117-OL</b> REV: <b>A</b> SCALE: NTS      SHEET 1 OF 3	



SECTION 1-1

SEE SHEET-1 FOR TOLERANCES AND MATERIAL AND FINISH	PROPRIETARY STATEMENT THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO MATHESON TRI-GAS, INC. AND SHALL NOT BE REPRODUCED OR DISCLOSED TO THIRD PARTIES WITHOUT PRIOR WRITTEN CONSENT FROM MATHESON TRI-GAS.	 <b>MATHESON</b> <small>ask...The Gas Professionals™</small>	
		GAS EQUIPMENT TECHNOLOGY GROUP, MONTGOMERYVILLE, PA 18936	
SIZE <b>D</b>	DWG. NO. <b>MNUM-0117-OL</b>	REV <b>A</b>	
CREO	SCALE: NTS	SHEET 2 OF 3	

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REF ONLY FOR PDM USE ONLY	DWG NO. MNUM-0117-OL-	MODEL NO. MNUM-0117-XX-
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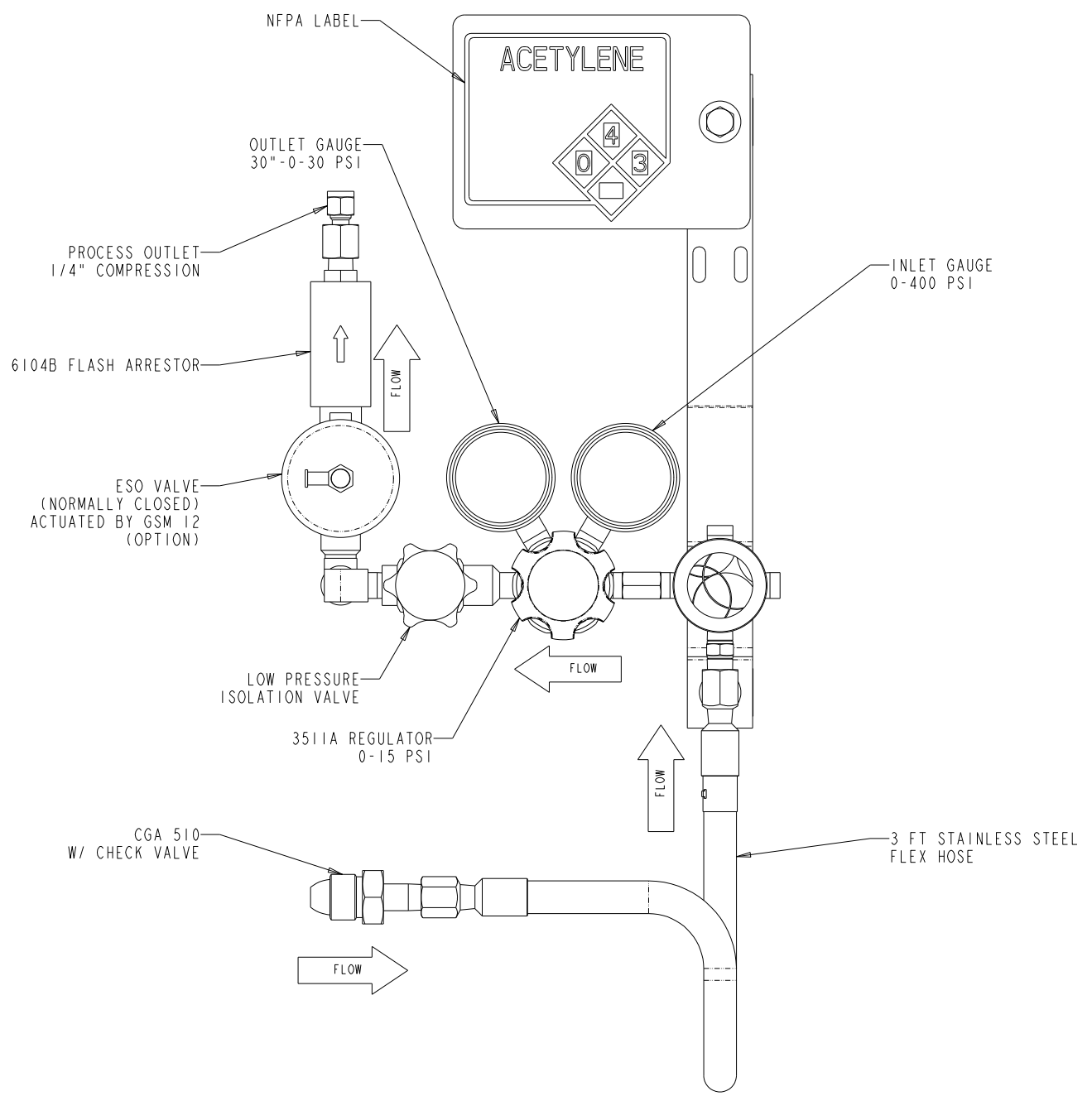
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MATERIALS	
REGULATOR BODY	316L STAINLESS STEEL BARSTOCK
REGULATOR BONNET	CHROME PLATED BRASS BARSTOCK
REGULATOR DIAPHRAGM	316L STAINLESS STEEL
REGULATOR SEAT	TEFLON
REGULATOR SEALS	METAL TO METAL
INLET FILTER	316L STAINLESS STEEL
VALVE BODY	316L STAINLESS STEEL
VALVE DIAPHRAGM	316L STAINLESS STEEL
VALVE SEAT	PCTFE

SPECIFICATIONS	
MAXIMUM INLET PRESSURE	3000 PSI (20,700 kPa)
REGULATOR FLOW CAPACITY (Cv)	0.08
OPERATING TEMPERATURE	-40°F TO 140°F (-40°C TO 60°C)
PORTING (REGULATOR BODY)	1/4" NPT FEMALE
PORTING CONFIGURATION	3 HIGH, 3 LOW
INLET FILTER	10 MICRON - SINTERED
BONNET THREADING	1-3/8"-12
BONNET VENT HOLE	1/8" NPT
VALVE FLOW CAPACITY (Cv)	0.13
LEAK TEST	1 x 10 <sup>-5</sup> SCCM-HE
CLEANING	CGA G 4.1
PRESSURE RATING	PER ANSI/ASME B31.3
TYP MAX FLOW (100 PSI DEL. PRESS.)	8 SCFM-N <sub>2</sub> (230 SLPM)
CONFORMS TO CGA E-4 STANDARD FOR GAS PRESSURE REGULATORS	

SEE SHEET-1  
FOR  
TOLERANCES  
AND  
MATERIAL  
AND  
FINISH

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SIZE <b>D</b>	DWG. NO. <b>MNUM-0117-OL</b>	REV <b>A</b>
CREO	SCALE: NTS	SHEET 3 OF 3

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