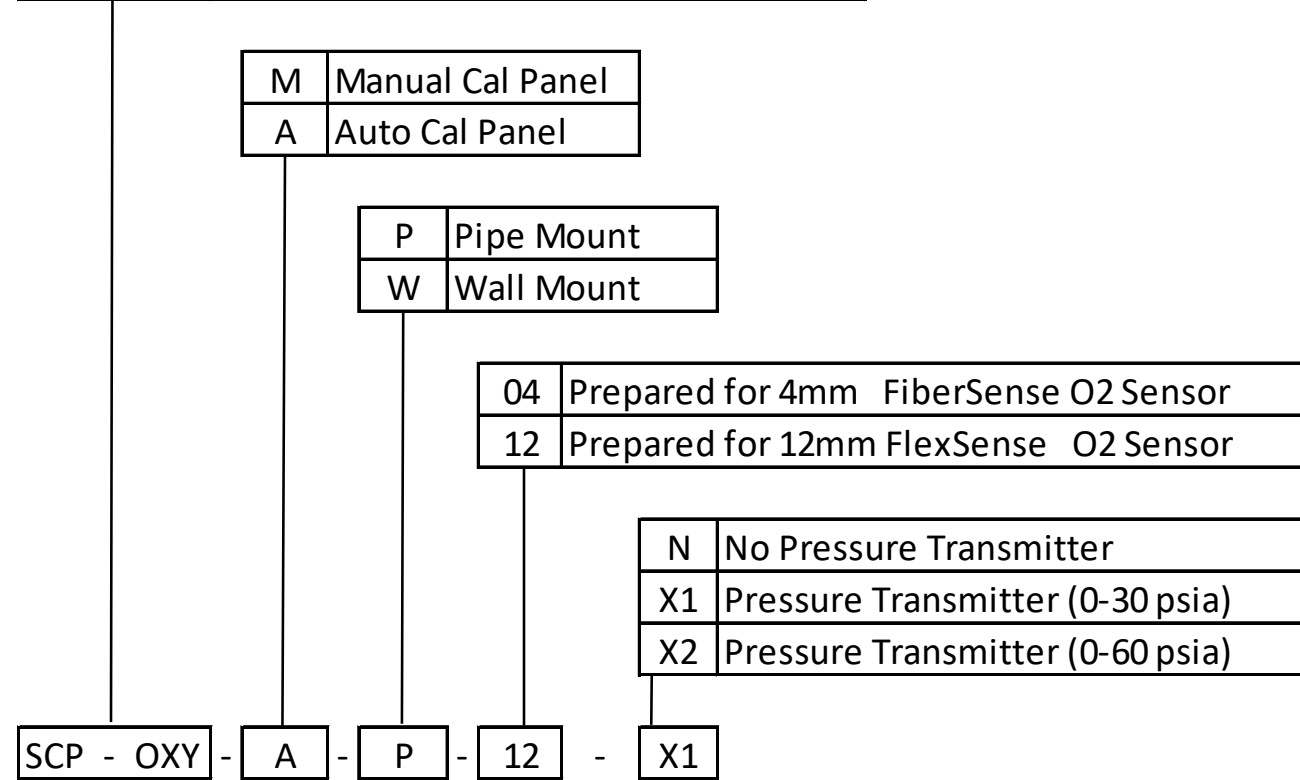


TABLE OF CONTENTS



- Sheet 2: Manual Cal Panel
- Sheet 3: Manual Cal P&ID
- Sheet 4: Autocal Panel
- Sheet 5: Autocal P&ID
- Sheet 6: Wiring - General
- Sheet 7: Pipe Mounting - General
- Sheet 8: Wall Mounting - General

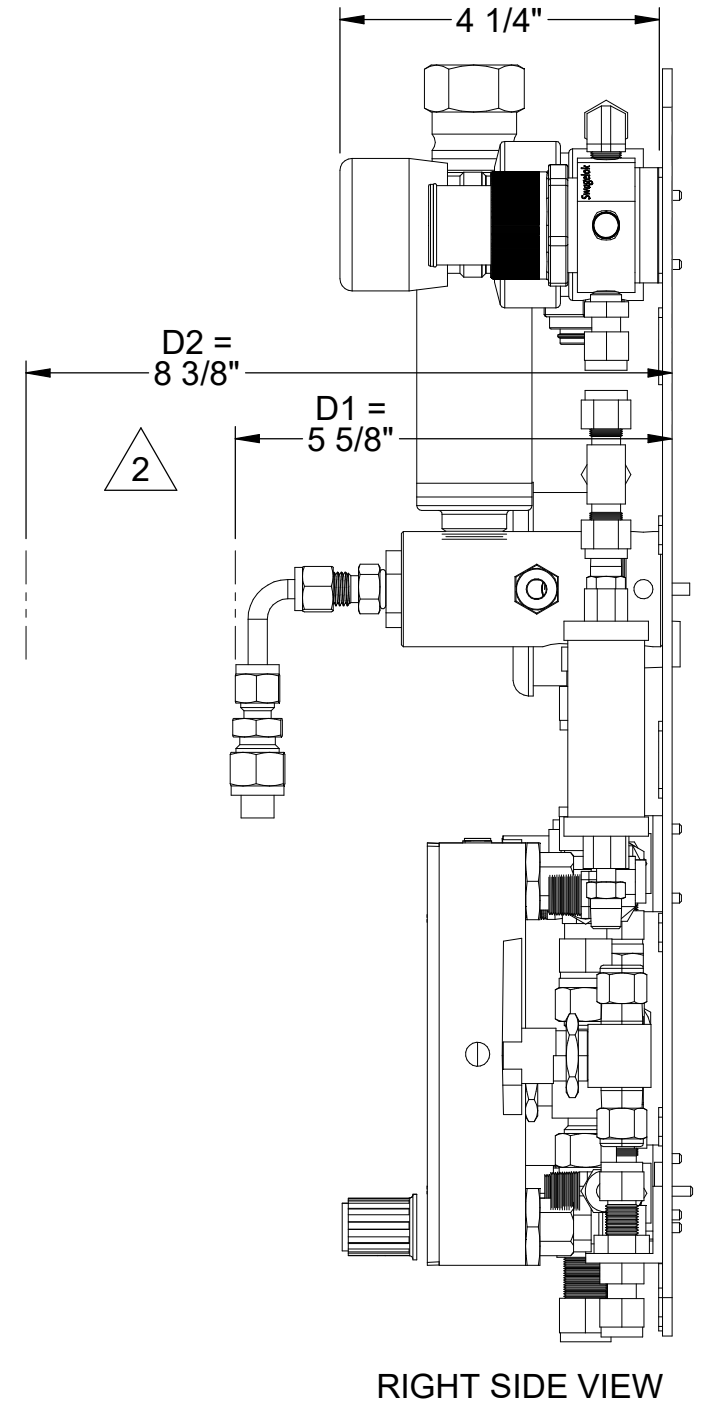
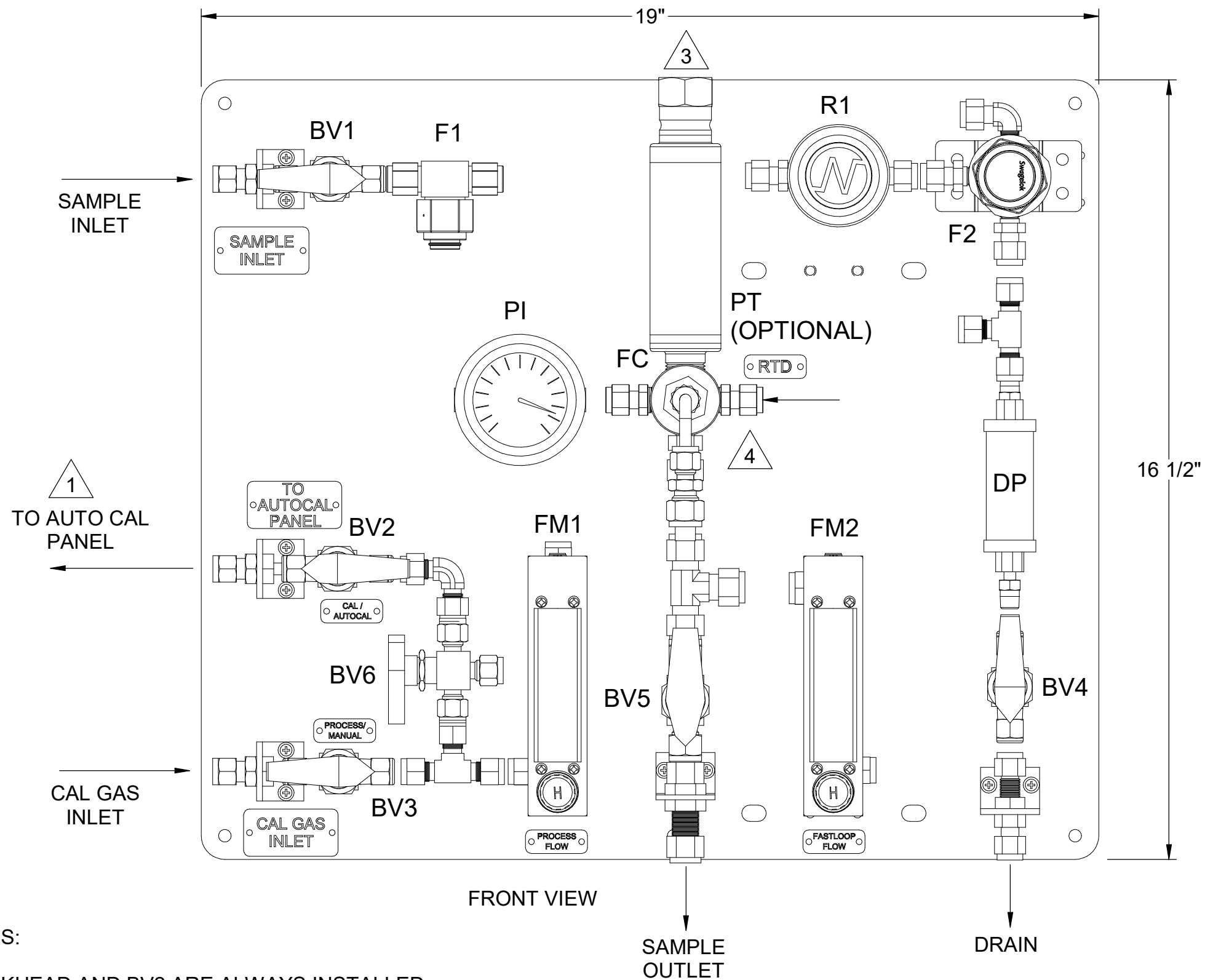
SCP - OXY OXYvisor Sample and Calibration Panel



2	06/28/19	PRODUCTION RELEASE	CS	DR
REV	DATE	DESCRIPTION	DWN	APVD
REVISIONS				

SEE TABLE	SEE TABLE
MATERIAL/DESCRIPTION	PART NO.

DIMENSIONS IN INCHES	SCP - OXY			
TOLERANCES	FOR OXYvisor			
.0 ± .015"	PART NO.		FOR OXYvisor	
.00 ± .010"	-			
.000 ± .005"				
FRACTIONAL ALL ± .015"	 			
ANGLES ± 1/4°	5200 Convair Drive Carson City, NV 89706 PH(775)883-2500 FAX (775)297-4740			
UNLESS OTHERWISE SPECIFIED	DRAWN BY	M. WALSER	ECO#	DRAWING NO
	APVD BY	D. RUSSELL	-	2P0348
	DATE	SCALE	SIZE	SHEET
11/15/2018	NTS	B	1 OF 8	



NOTES:

- 1 BULKHEAD AND BV2 ARE ALWAYS INSTALLED, BUT ONLY USED IN CONJUNCTION WITH AUTOCAL PANEL.
- 2 D1 = PANEL DEPTH WITH SENSOR INSTALLED
D2 = CLEARANCE REQUIRED FOR SENSOR REMOVAL
- 3 PRESSURE TRANSMITTER WIRING CONNECTION 3/4" FNPT
- 4 4mm FIBERSENSE PREP: 1/2" FNPT X 1/4" FNPT REDUCER BUSHING (P/N 4951-1007) AND 1/4" MNPT X 4mm BORED THRU FITTING (P/N 4954-1007) INSTALLED IN FRONT OF FLOW CELL.
12mm FLEXSENSE PREP: PANEL BASE DESIGN MEETS NEEDS FOR 12mm FLEXSENSE CONNECTION.

2	06/28/19	PRODUCTION RELEASE	CS	DR
REV	DATE	DESCRIPTION	DWN	APVD
REVISIONS				

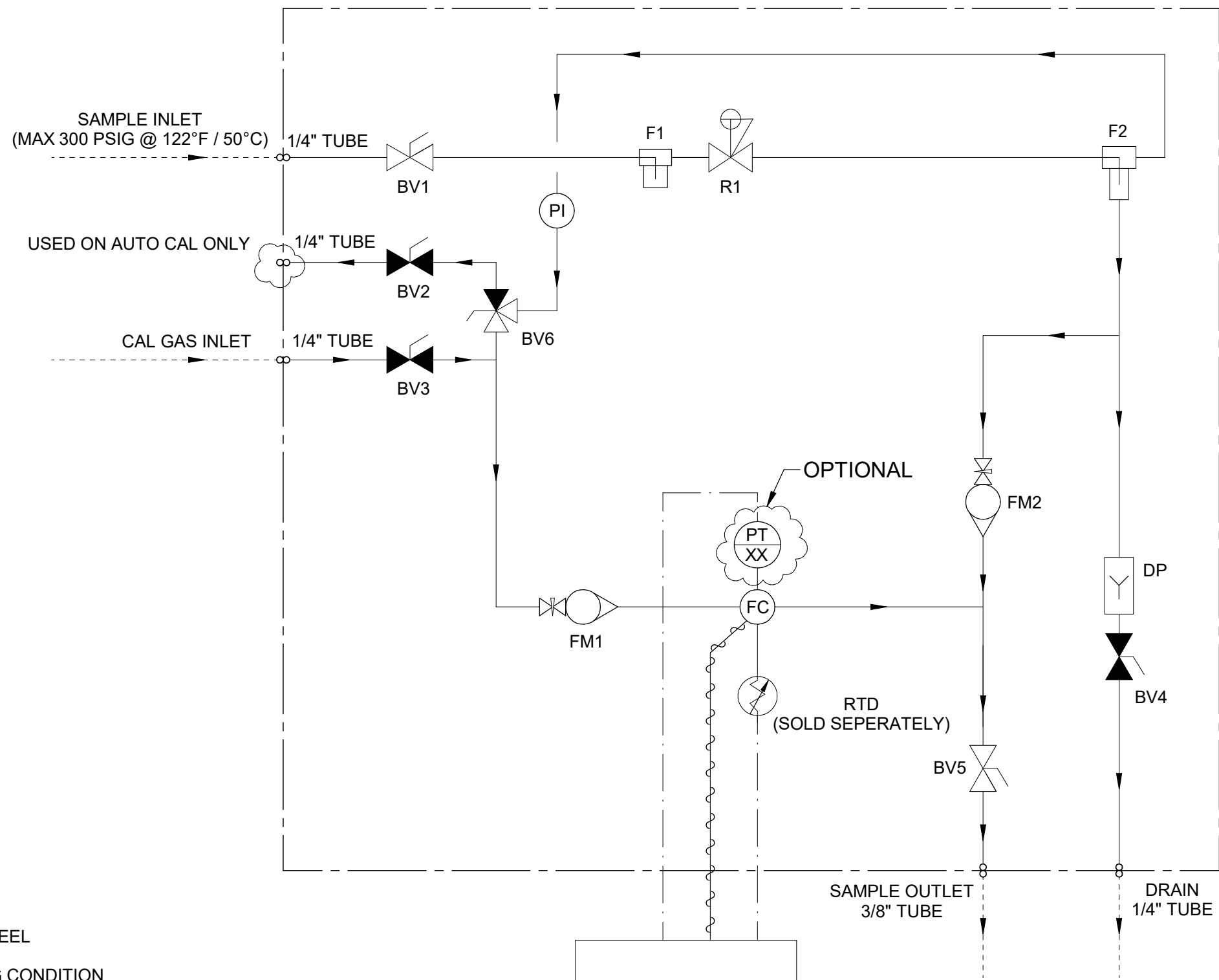
SEE TABLE	SEE TABLE
MATERIAL/DESCRIPTION	PART NO.

MANUAL CAL LAYOUT

DIMENSIONS IN INCHES	FOR OXYvisor			
TOLERANCES	PART NO.	ECO#		
.0 ± .015"	-	-		
.00 ± .010"	DRAWN BY M. WALSER			
.000 ± .005"	APVD BY D. RUSSELL			
FRACTIONAL ALL ± .015"	DATE 11/15/2018		SCALE NTS	SHEET 2 OF 8
ANGLES ± 1/4°	UNLESS OTHERWISE SPECIFIED		SIZE B	



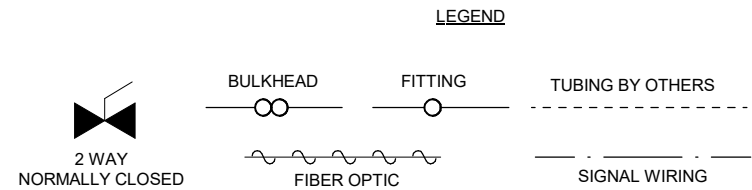
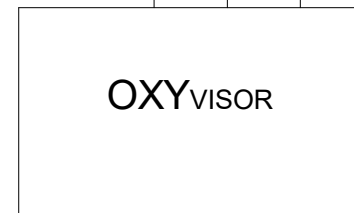
5200 Convair Drive Carson City, NV 89706 PH(775)883-2500 FAX (775)297-4740



NOTES:

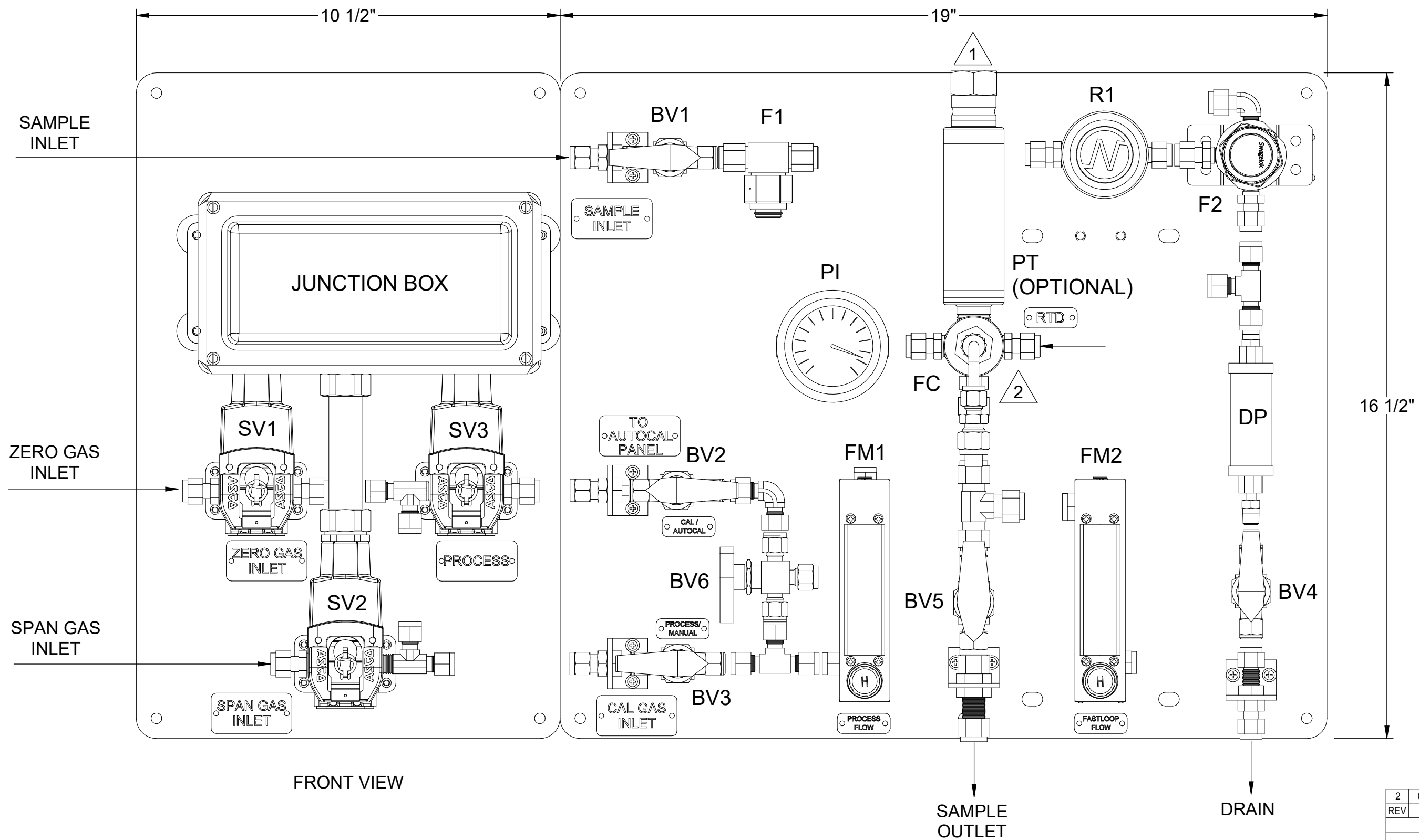
- 1) ALL TUBING TO BE 316SS STAINLESS STEEL
- 2) VALVES SHOWN IN NORMAL OPERATING CONDITION

ITEM	Part No.	Description
BV1-4	4955-0090	Valve, Ball, 2-way, 1/4"T, 316SS
F1	B4980-1049	Filter, Particulate, 1/4" Tube, 316SS Body W/ 140 micron Strainer Filter (Filter Replacement Kit B9515-1002)
R1	B8200-1006	Regulator 0 to 25 PSIG SS316, 1/4" FNPT Ports, (1) Inlet (1) Outlet
F2	B4980-1040	Filter, Coalescing, 1/4"NPT, 316SS, Filter Element, 0.3µm Coalescing (Element Sold Separately P/N 4980-1041)
PI	3019-1021	2.5" Back Mount Gauge 0-30 psig
BV5	4955-1019	Valve, Ball, 2-way, 3/8"T, 316SS
BV6	4955-0092	Valve, Ball, 3-way, 1/4"T, 316SS
FM1	B4965-1013	Flowmeter, Glass Tube, 1/4" FNPT Bottom Ports, 316SS, Viton Oring, Range 2.5 LPM
FM2	B4965-1014	Flowmeter, Glass Tube, 1/4" FNPT Bottom Ports, 316SS, Viton Oring, Range 9 LPM
FC	B4992-1013	Flow Cell, Panel Mount, 316SS
ITEM NOT SHOWN	B4952-1012	Ferrule front 1/8" compression Teflon, replaces ss front ferrule for RTD
PT (OPTIONAL)	B3020-0030	Pressure Transducer, 0-30 psia, 4-20mA Output, C1D2 Gr ABCD, T4
	B3020-0060	Pressure Transducer, 0-60 psia, 4-20mA Output, C1D2 Gr ABCD, T4
RTD (SOLD SEPARATELY)	B1150-1012	External Temperature Compensation - PT1000 Sensor - 1/8" Dia x 4" 316SSSS Body - 6ft (2.5m) Cable with Armor
	B1150-1013	External Temperature Compensation - PT1000 Sensor - 1/8" Dia x 4" 316SSSS Body - 16ft (5.0m) Cable with Armor
	B1150-1014	External Temperature Compensation - PT1000 Sensor - 1/8" Dia x 4" 316SSSS Body - 33ft (10m) Cable with Armor
DP	B4980-1050	Drain Pot, Stainless Steel, Visible



2	06/28/19	PRODUCTION RELEASE	CS	DR
REV	DATE	DESCRIPTION	DWN	APVD
REVISIONS				
SEE TABLE		SEE TABLE		
MATERIAL/DESCRIPTION		PART NO.		
MANUAL CAL P&ID				
PART NO.		FOR OXYvisor		
-		-		
5200 Convair Drive Carson City, NV 89706 PH(775)883-2500 FAX (775)297-4740				
DRAWN BY M. WALSER		ECO# -	DRAWING NO 2P0348	
APVD BY D. RUSSELL		-	-	
DATE 11/15/2018		SCALE NTS	SIZE B	SHEET 3 OF 8

DIMENSIONS IN INCHES
TOLERANCES
.0 ± .015"
.00 ± .010"
.000 ± .005"
FRACTIONAL ALL ± .015"
ANGLES ± 1/4°
UNLESS OTHERWISE SPECIFIED



FRONT VIEW

FRONT VIEW

NOTES:

- 1 PRESSURE TRANSMITTER WIRING CONNECTION 3/4" FNPT
- 2 4mm FIBERSENSE PREP: 1/2" FNPT X 1/4" FNPT REDUCER BUSHING (P/N 4951-1007) AND 1/4" MNPT X 4mm BORED THRU FITTING (P/N 4954-1007) INSTALLED IN FRONT OF FLOW CELL. 12mm FLEXSENSE PREP: PANEL BASE DESIGN MEETS NEEDS FOR 12mm FLEXSENSE CONNECTION.

2	06/28/19	PRODUCTION RELEASE	CS	DR
REV	DATE	DESCRIPTION	DWN	APVD
REVISIONS				

SEE TABLE	SEE TABLE
MATERIAL/DESCRIPTION	PART NO.

AUTO CAL PANEL LAYOUT

PART NO. - FOR OXYvisor

BARBEN ANALYTICAL **AMETEK**
 5200 Convair Drive Carson City, NV 89706 PH(775)883-2500 FAX (775)297-4740

DRAWN BY	M. WALSER	ECO#	-	DRAWING NO	2P0348
APVD BY	D. RUSSELL	SCALE	NTS	SIZE	B
DATE	11/15/2018	SHEET	4	OF	8

UNLESS OTHERWISE SPECIFIED

SAMPLE INLET
(MAX 300 PSIG @ 122°F / 50°C)

ZERO GAS

SPAN GAS

1/4" TUBE

OPTIONAL

PT
XX

FC

RTD
(SOLD SEPERATELY)

SAMPLE OUTLET
3/8" TUBE

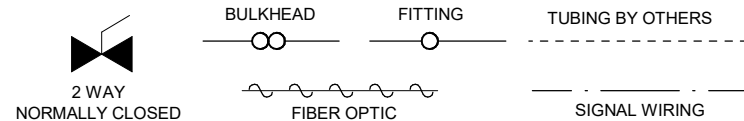
DRAIN
1/4" TUBE

OXYVISOR

- NOTES:
- 1) ALL TUBING TO BE 316SS STAINLESS STEEL
 - 2) VALVES SHOWN IN NORMAL OPERATING CONDITION FOR SAMPLING MODE

ITEM	Part No.	Description
BV1-4	4955-0090	Valve, Ball, 2-way, 1/4"T, 316SS
F1	B4980-1049	Filter, Particulate, 1/4" Tube, 316SS Body W/ 140 micron Strainer Filter (Filter Replacement Kit B9515-1002)
R1	B8200-1006	Regulator 0 to 25 PSIG SS316, 1/4" FNPT Ports, (1) Inlet (1) Outlet
F2	B4980-1040	Filter, Coalescing, 1/4"NPT, 316SS, Filter Element, 0.3µm Coalescing (Element Sold Separately P/N 4980-1041)
PI	3019-1021	2.5" Back Mount Gauge 0-30 psig
BV5	4955-1019	Valve, Ball, 2-Way, 3/8"T, 316SS
BV6	4955-0092	Valve, Ball, 3-Way, 1/4" Tube
FM1	B4965-1013	Flowmeter, Glass Tube, 1/4" FNPT Bottom Ports, 316SS, Viton Oring, Range 2.5 LPM
FC	B4992-1013	Flow Cell, Panel Mount, 316SS
ITEM NOT SHOWN	B4952-1012	Ferrule front 1/8" compression Teflon, replaces ss front ferrule for RTD
PT (OPTIONAL)	B3020-0030	Pressure Transducer, 0-30 psia, 4-20mA Output, C1D2 Gr ABCD, T4
	B3020-0060	Pressure Transducer, 0-60 psia, 4-20mA Output, C1D2 Gr ABCD, T4
RTD (SOLD SEPERATELY)	B1150-1012	External Temperature Compensation - PT1000 Sensor - 1/8" Dia x 4" 316SSS Body - 6ft (2.5m) Cable with Armor
	B1150-1013	External Temperature Compensation - PT1000 Sensor - 1/8" Dia x 4" 316SSS Body - 16ft (5.0m) Cable with Armor
	B1150-1014	External Temperature Compensation - PT1000 Sensor - 1/8" Dia x 4" 316SSS Body - 33ft (10m) Cable with Armor
DP	B4980-1050	Drain Pot, Stainless Steel, Visible
FM2	B4965-1014	Flowmeter, Glass Tube, 1/4" FNPT Bottom Ports, 316SS, Viton Oring, Range 9 LPM
SV1,2	B4955-1145	Solenoid Valve 2way N/C SS/EPDM 12-24VDC 1/4"FNPT 720PSIG max Haz Loc
SV3	B4955-1144	Solenoid Valve 2way N/O SS/EPDM 12-24VDC 1/4"FNPT 90PSIG max Haz Loc

LEGEND



2	06/28/19	PRODUCTION RELEASE	CS	DR
REV	DATE	DESCRIPTION	DWN	APVD

SEE TABLE		SEE TABLE
MATERIAL/DESCRIPTION		PART NO.

P&ID
(SAMPLING MODE)

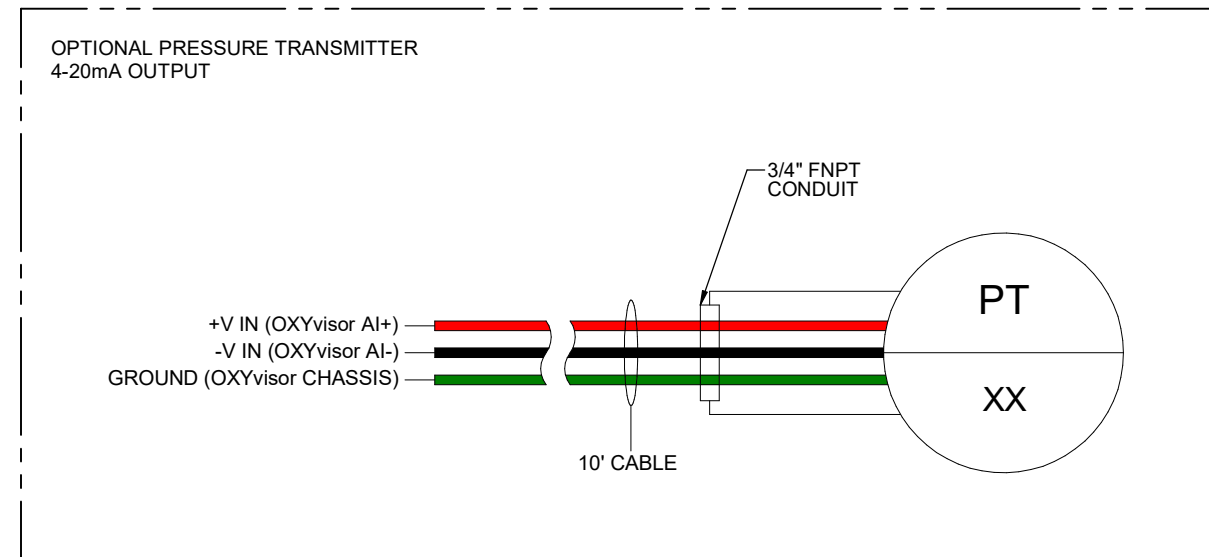
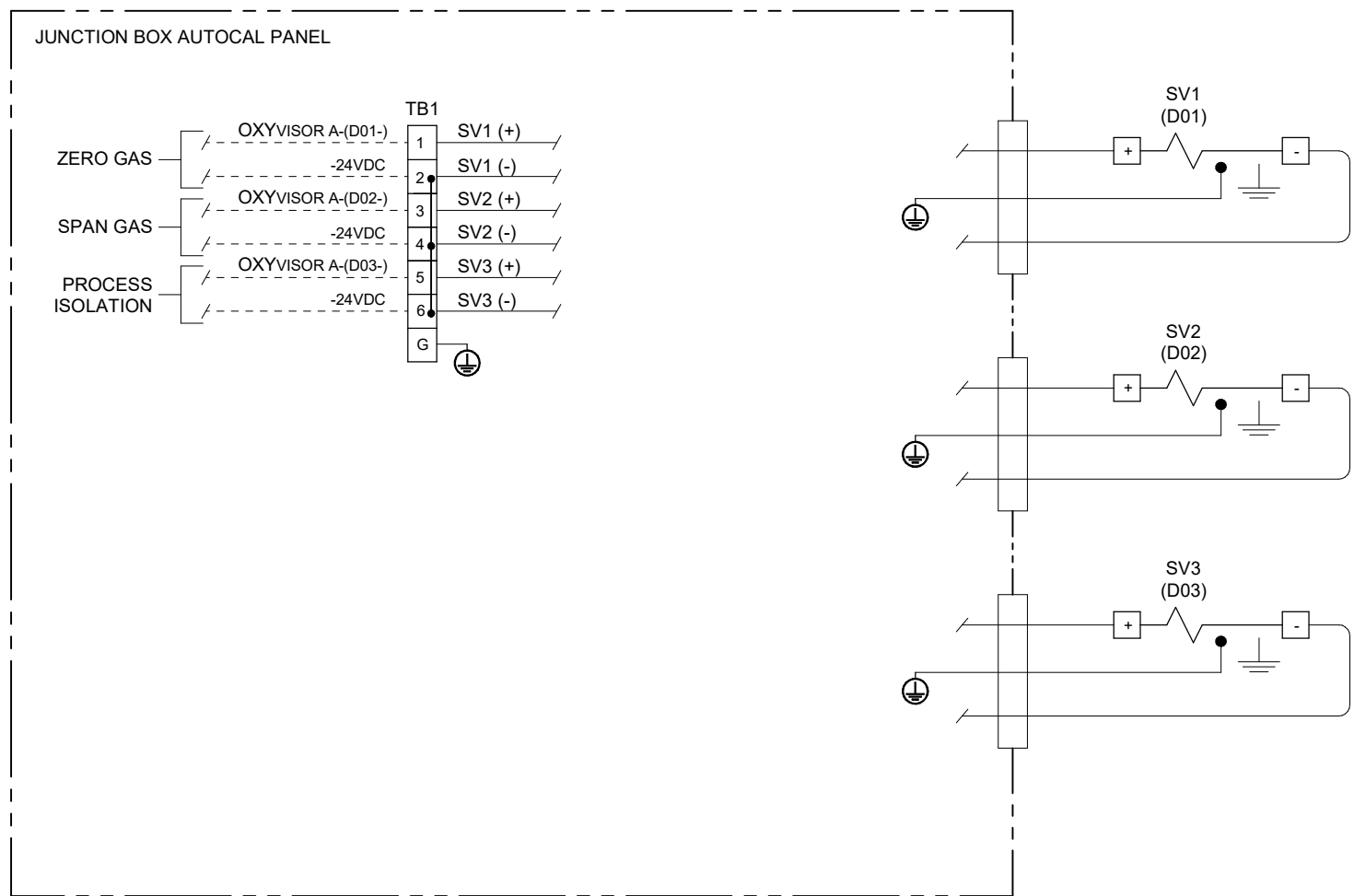
PART NO.	FOR OXYvisor
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5200 Convair Drive Carson City, NV 89706 PH(775)883-2500 FAX (775)297-4740

BARBEN ANALYTICAL **AMETEK**

DRAWN BY	M. WALSER	ECO#	-	DRAWING NO	2P0348
APVD BY	D. RUSSELL	DATE	11/15/2018	SCALE	NTS
SIZE	B	SHEET	5 OF 8		

DIMENSIONS IN INCHES
TOLERANCES
.0 ± .015"
.00 ± .010"
.000 ± .005"
FRACTIONAL ALL ± .015"
ANGLES ± 1/4°
UNLESS OTHERWISE SPECIFIED



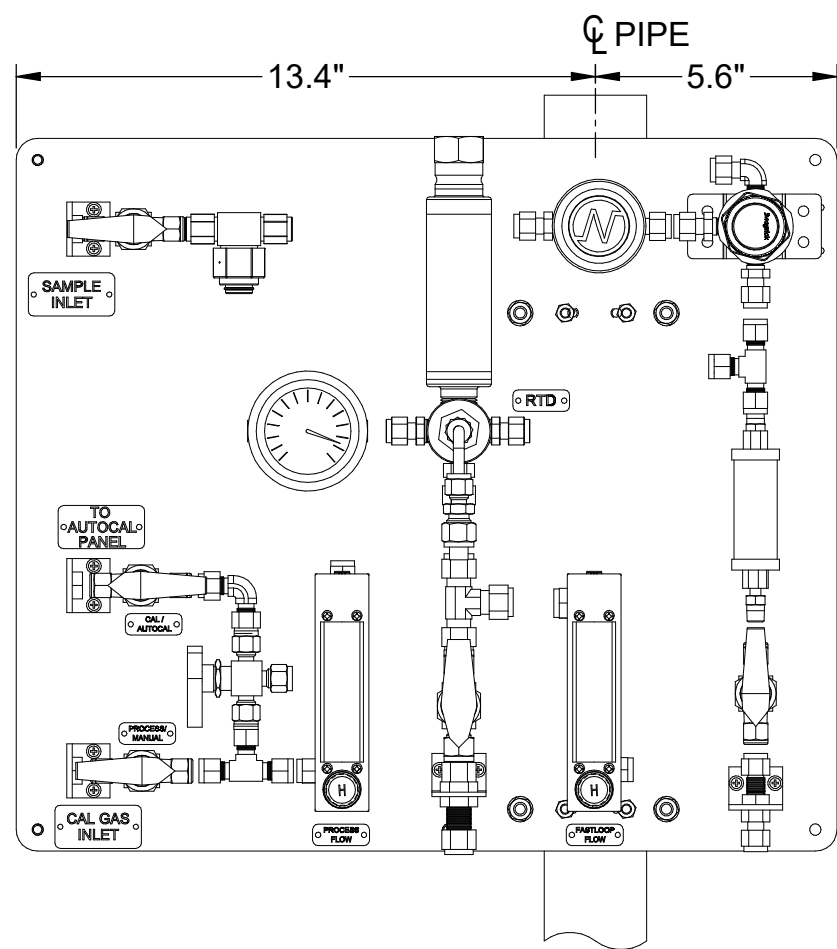
NOTES:

- 1) FIELD WIRING TO BE DONE PER AREA CLASSIFICATION AND LOCAL REGULATIONS.
- 2) PENETRATIONS FOR CUSTOMER CONNECTIONS TO BE DONE IN FIELD
- 3) SOLENOIDS ARE LOW POWER (1.2W) 24VDC
- 4) SEE OXYvisor MANUAL FOR ADDITIONAL DETAILS

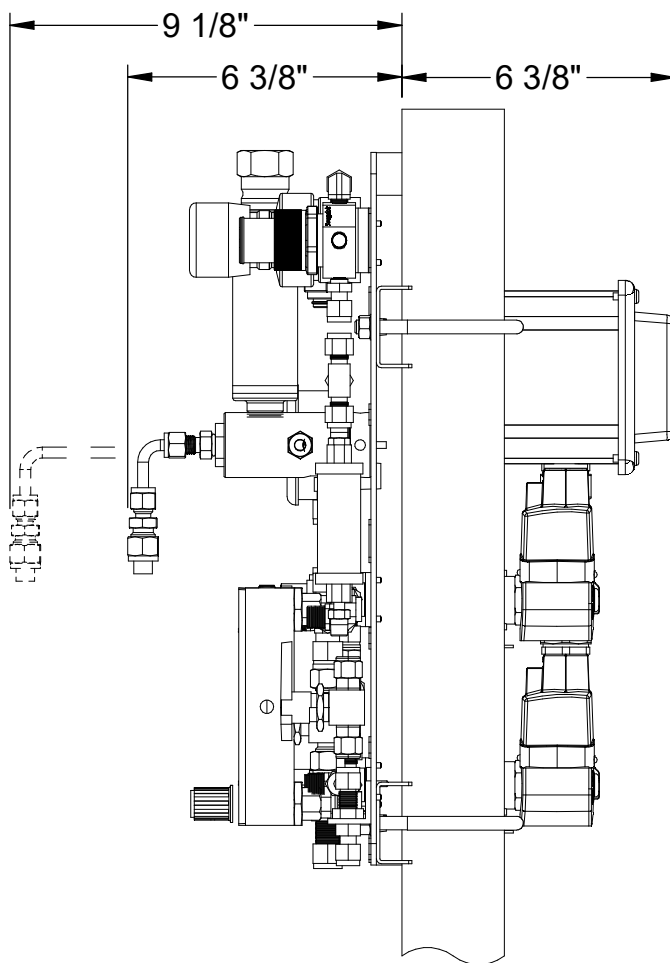
FIELD TO WIRE

2	06/28/19	PRODUCTION RELEASE	CS	DR
REV	DATE	DESCRIPTION	DWN	APVD
REVISIONS				
SEE TABLE			SEE TABLE	
MATERIAL/DESCRIPTION			PART NO.	
WIRING SCHEMATIC				
PART NO.		FOR		
-		OXYvisor		
5200 Convair Drive Carson City, NV 89706 PH(775)883-2500 FAX (775)297-4740				
DRAWN BY M. WALSER		ECO# -	DRAWING NO 2P0348	
APVD BY D. RUSSELL				
DATE 11/15/2018		SCALE NTS	SIZE B	SHEET 6 OF 8

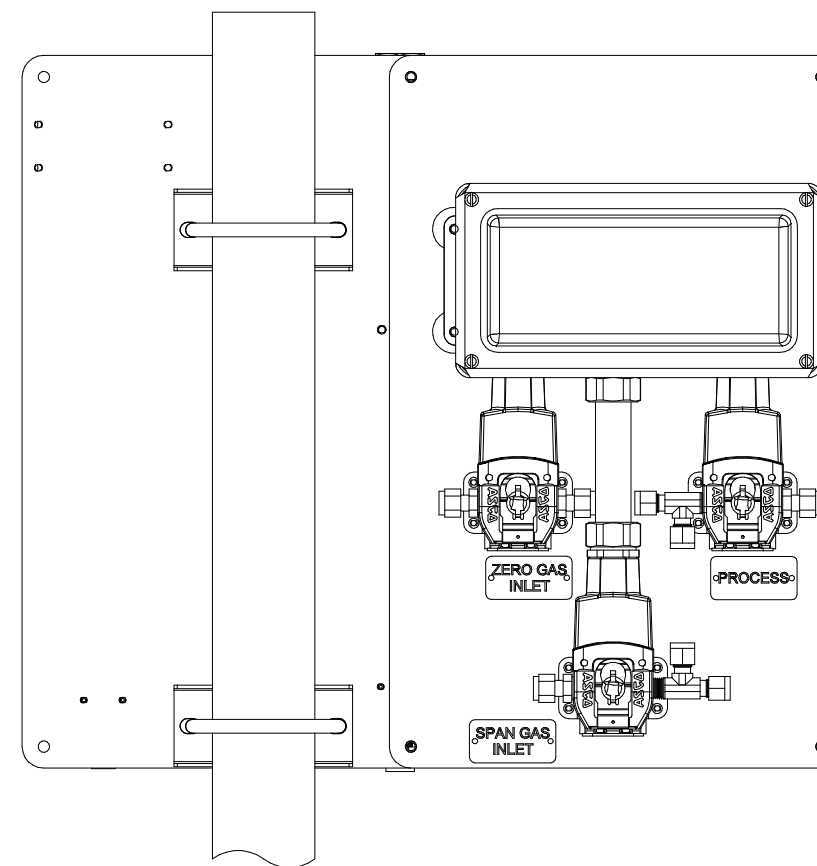
DIMENSIONS IN INCHES
TOLERANCES
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.00 ± .010"
.000 ± .005"
FRACTIONAL ALL ± .015"
ANGLES ± 1/4°
UNLESS OTHERWISE SPECIFIED



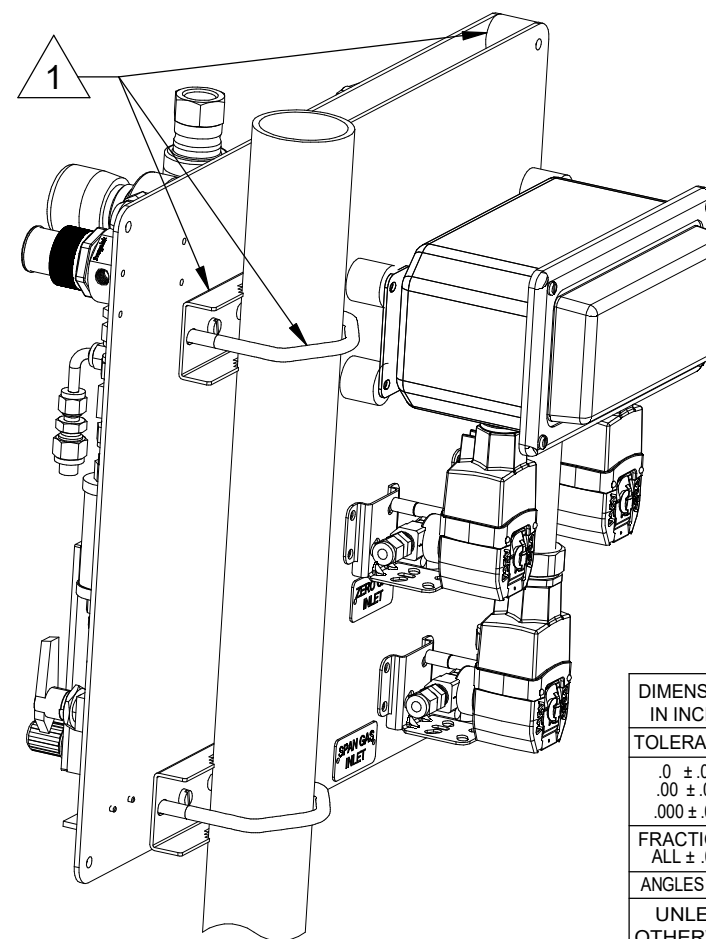
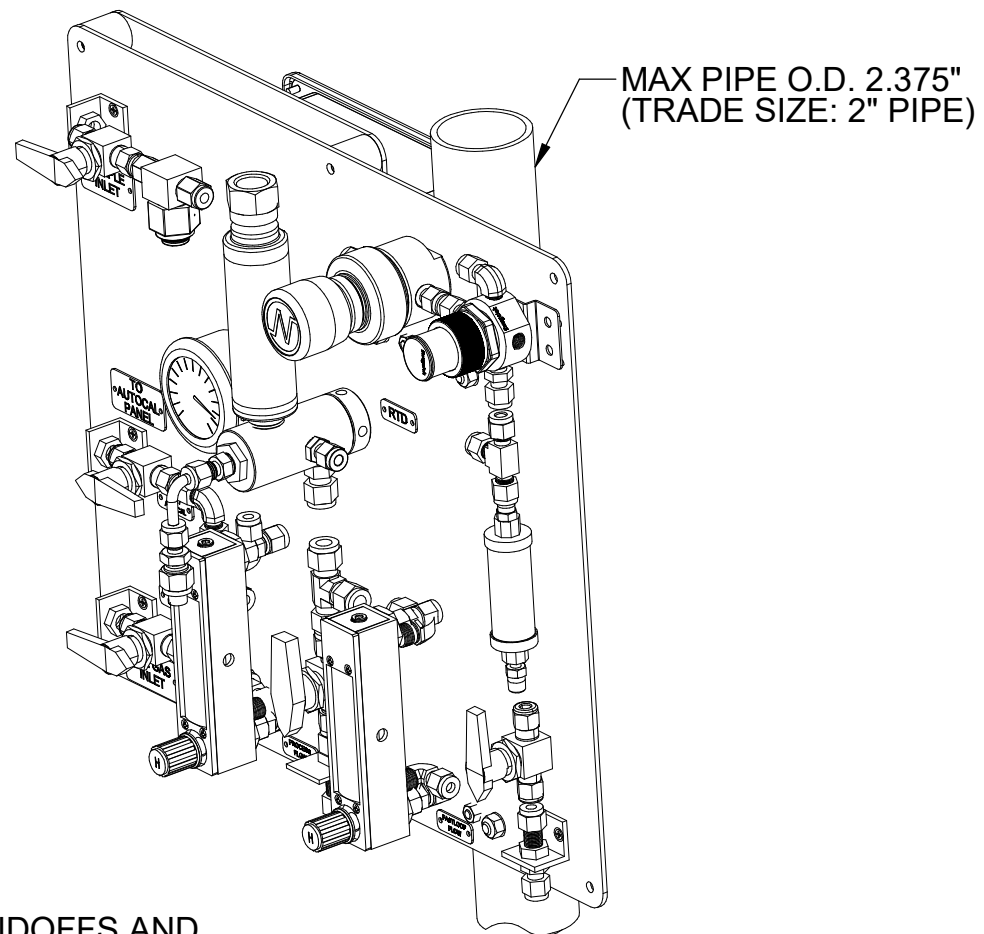
FRONT VIEW



LEFT SIDE VIEW



REAR VIEW



NOTES:

1 PIPE MOUNT KIT INCLUDES A SET OF (4) STANDOFFS AND 1/4\"-20 HARDWARE AND (2) PIPE MOUNT BRACKETS

2	06/28/19	PRODUCTION RELEASE	CS	DR
REV	DATE	DESCRIPTION	DWN	APVD
REVISIONS				

SEE TABLE	SEE TABLE
MATERIAL/DESCRIPTION	PART NO.

SCP-OXY PIPE MOUNT

PART NO. - FOR OXYvisor

DIMENSIONS IN INCHES

TOLERANCES

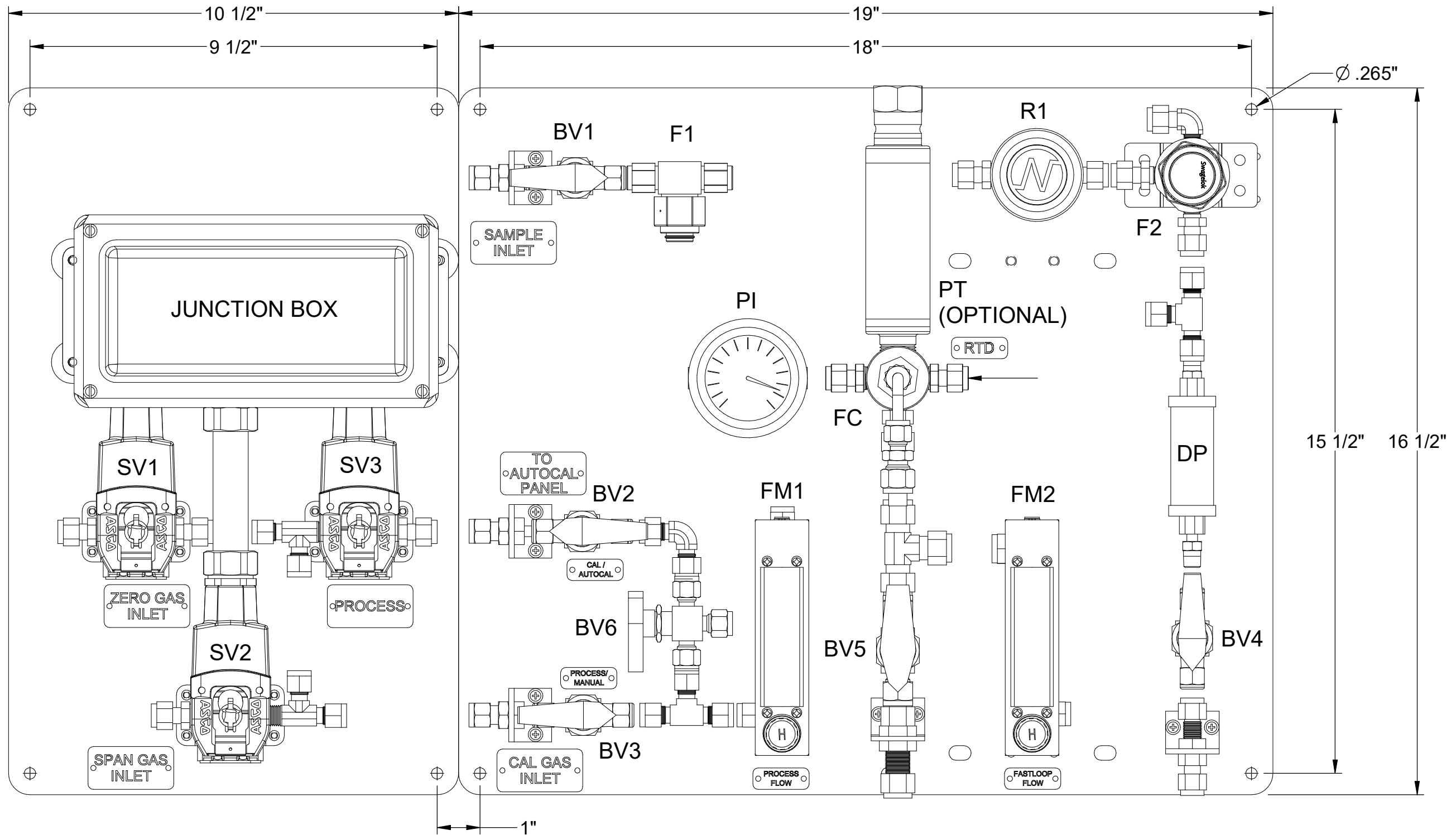
.0 ± .015"
.00 ± .010"
.000 ± .005"

FRACTIONAL ALL ± .015"

ANGLES ± 1/4°

UNLESS OTHERWISE SPECIFIED

5200 Convair Drive Carson City, NV 89706 PH(775)883-2500 FAX (775)297-4740		AMETEK	
DRAWN BY M. WALSER	ECO# -	DRAWING NO 2P0348	
APVD BY D. RUSSELL	DATE 11/15/2018	SCALE NTS	SIZE B
			SHEET 7 OF 8



FRONT VIEW

FRONT VIEW

2	06/28/19	PRODUCTION RELEASE	CS	DR
REV	DATE	DESCRIPTION	DWN	APVD
REVISIONS				

SEE TABLE	SEE TABLE
MATERIAL/DESCRIPTION	PART NO.

SCP-OXY WALL MOUNT

PART NO. - FOR OXYvisor



5200 Convoir Drive Carson City, NV 89706 PH(775)883-2500 FAX (775)297-4740				
DRAWN BY	M. WALSER	ECO#	DRAWING NO	
APVD BY	D. RUSSELL	-	2P0348	
DATE	11/15/2018	SCALE	SIZE	SHEET
		NTS	B	8 OF 8

DIMENSIONS IN INCHES
TOLERANCES
.0 ± .015"
.00 ± .010"
.000 ± .005"
FRACTIONAL ALL ± .015"
ANGLES ± 1/4°
UNLESS OTHERWISE SPECIFIED