

# DIRECT EXTRACTIVE FILTER PROBES

General Purpose Model 34C & Model 34C-R

**BALDWIN**<sup>TM</sup> - Series

## Application

The Baldwin<sup>TM</sup>-Series Model 34C Heated Filter Probe is designed to be mounted on a stack or duct for use in high particulate applications. Its primary function is to provide a heated environment to maintain sample gas temperatures above dewpoint and remove particulate material from the gas sample. Models 34C-Z and 34C-R-Z features a standard 10 micron sintered stainless steel filter element, an external (Model 34C) or self (Model 34C-R) regulated heater jacket, an integral calibration gas port on both sides of the filter element, a NEMA 4 enclosure, and a single direct blowback system to clean the filter element.



## General Specifications

Probe	
Calibration	Integral calibration on both sides of filter element
Heater Jacket Temp Control	External regulated (Model 34C) Self regulated (Model 34C-R)
Connections	1¼" male pipe nipple mount; ½" male pipe thread adapter
Tube Connectors	3/8" sample line, 1/4" calibration gas, 3/8" blowback
Thermocouple	Type K
Blowback	Single direct; 2-way solenoid blowback / calibration valve
Blowback Tank	16 ga. SS, 4" x 8", leak checked, pressure tested
Heat-shrink Boot	7" length, 2.75" min expanded I.D. nose
O-rings	Viton®
Gaskets	Graphoil®
Dimensions	14 x 12 x 8 in. HWD (w/o Stinger probe) 36 x 30 x 20 cm HWD
Weight	34 lbs 15 kg

## Operating Specifications

Calibration Gas Requirement	20 psig, 6-10 LPM
Probe Operating Temperature	375°F (190°C)
Blowback Duration	5 sec standard (30 sec maximum)
Blowback Valve	110 standard (220 optional) VAC, 50/60 Hz
Blowback Flowrate	14 scfh
Instrument Air for Blowback	Min 50 psig, Max 90 psig

## Material Specifications

Enclosure Material	NEMA 4 Steel (standard); NEMA 4X Stainless Steel (optional)
Heater Type	Heater bands, 350W (standard on external temp regulated) Silicone rubber blanket w/ metal snap closures, 100W (standard on self regulated)
Enclosure Insulation Material	½" thick silicone, medium density
Filter Chamber Material	316 stainless steel
Filter Element Types	10 micron sintered SS (standard) 5, 20 micron sintered SS 2 micron ceramic 2 micron SS screen mesh



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REV#	DATE	DESCRIPTION	DRAWN	APPROVED
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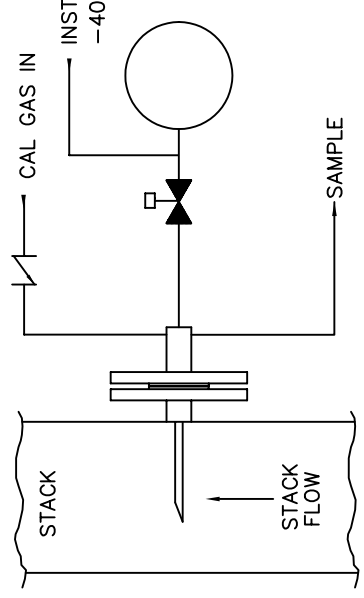
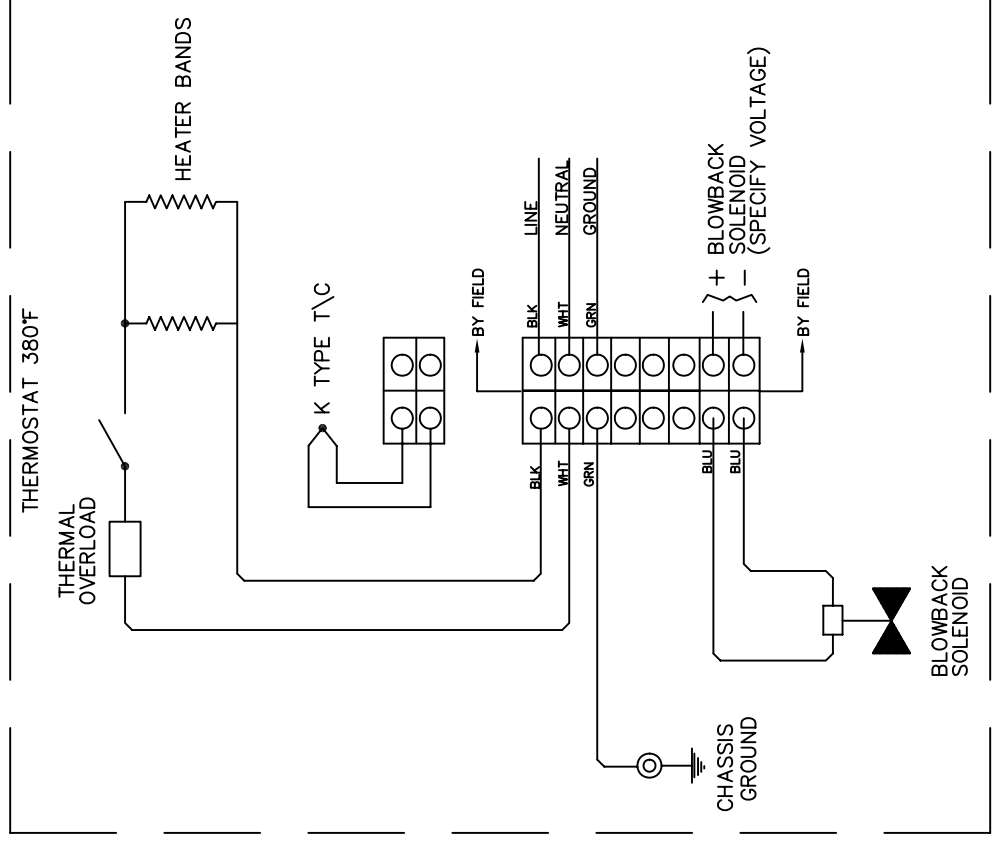
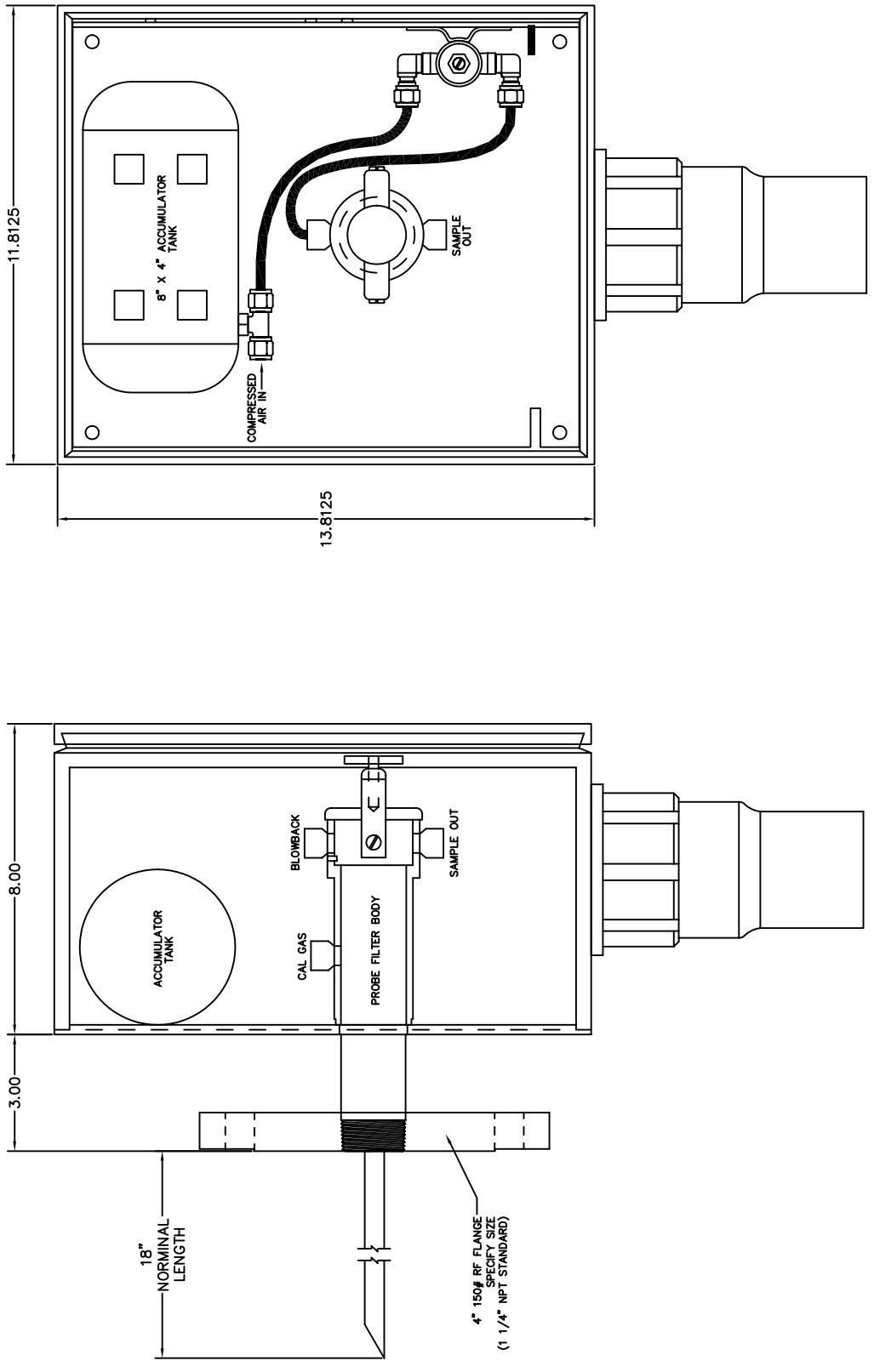
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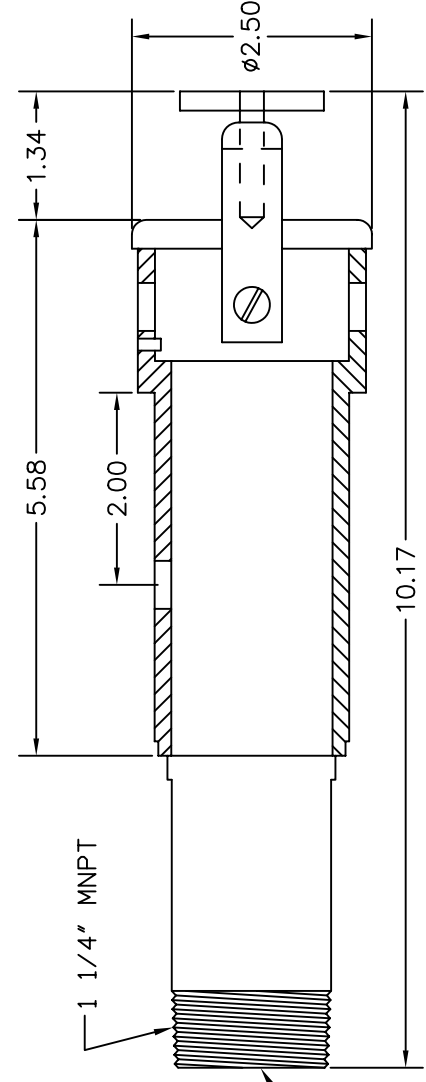
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BLWBK/FLOOD CALIB.

FILTER PROBE  
(SCALE = 1/2")



1/2" FNPT FOR STINGER ATTACHMENT

UNLESS OTHERWISE SPECIFIED	TOLERANCE	DECIMALS
1 PLACE = ±.02	2 PLACE = ±.02	3 PLACE = ±.010
ANGLES = ±5°	HOLES = +.003/-0.01	
www.baldwinUSA.com		

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BALDWIN, INC.

ITEM	QTY	DESCRIPTION	MANUF.
MODEL NUMBER: 02/19/04			
DESCRIPTION:			
RAW	DATE	DATE	
APPD	02/19/04		
PART DESCRIPTION			
MODEL 34C-R HEATED FILTER PROBE ARRANGEMENT DRAWING			
SIZE		SCALE	DRAWING/PART NO.
B		NTS	MODEL 34C-R
DESIGN DIMENSIONS ARE IN INCHES			
() DENOTES MILLIMETER EQUIVALENTS WHEN USED			
CAD DIR: S:\SMA\DWGS\HEATED FIL. PROBE.DWG			
SHEET 1 OF 1			