

### **DIRECT EXTRACTIVE FILTER PROBES**

# Hazardous Area Applications Class 1 Division 1 & Class 1 Division 2

The Baldwin<sup>™</sup>-Series direct extractive filter probes feature an advanced design to extract sample gas and remove particulate while preventing condensation prior to the gas sample entering the heated sample line.



Sure-Lock<sup>™</sup> Filter Assembly



### New Machine-Lathed Sure-Lock™ Filter Assembly

The Baldwin-Series Sure-Lock filter assembly is precision machined and features a unique design to help ensure proper insertion into the assembly and to reduce the possibility of leaks. The filter head is inserted into a notch in the assembly to ensure proper alignment before locking it in place. The o-rings are tightened under compression, rather than being located on the sides of the filter head, to reduce the risk of leakage.



Class1 Division 1, Baldwin™-Series Heated Filter Probe



Class1 Division 2, Filter Probe with Z-Purge System

### **Key Features**

- Available for Class 1 Division 2 and Class 1 Division 1 applications
- Sure-Lock filter reduces risk of leakage
- Range of filter elements designed for various applications
- Available with air blowback system
- Backed by our 1-year limited warranty

#### **Options Available**

- Scheudle 40, Schedule 80, Hastelloy®, and Durinert®+ stinger probes
- Sintered stainless steel, screen mesh, ceramic, glass fiber and Teflon® filter elements
- Air blowback system with 110VAC, 220 VAC, 12 VDC or 24VDC solenoid valves
- Solenoid valve to close sample line when blowback is initiated
- Gas cooling spool piece for high temperature gas sources
- Various size flanges
- Durinert or Teflon-coated filter assembly
- NEMA 4X stainless steel or fiberglass enclosure



## **DIRECT EXTRACTIVE FILTER PROBES**

### **Hazardous Area Applications**

#### **Model Specifications**

Model	Area Classification	Blowback	Filter Assembly Temp Control	Enclosure	Dimensions* HWD	Weight
34 C-Z	Class 1, Div 2 Groups B, C, D	2-way Solenoid	External regulated	NEMA 4 Steel	14 x 20 x 8 in 36 x 51 x 20 cm	40 lbs 18 kg
34 C-R-Z	Class 1, Div 2 Groups B, C, D	2-way Solenoid	Self regulated	NEMA 4 Steel	14 x 20 x 8 in 36 x 51 x 20 cm	40 lbs 18 kg
33 XP	Class 1, Div 1 Groups B, C, D	N/A	Self or External regulated	UL® Classified Aluminum	8 x 8 x 11 in 20 x 20 x 28 cm	30 lbs 14 kg
34 XP	Class 1, Div 1 Groups B, C, D	2-way Solenoid	Self or External regulated	UL® Classified Aluminum	8 x 8 x 11 in 20 x 20 x 28 cm	33 lbs 15 kg

<sup>\*</sup> Excludes probe stinger and heat-shrink boot

### **General Specifications**

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Filter assembly	Sure-Lock™, 316 stainless steel			
Filter element types	5, 10, 20 micron sintered stainless steel			
	2 micron ceramic			
	2 micron SS screen mesh			
	0.1 micron glass			
	0.7 micron glass/TFE coated			
Probe length	18in, 1, 2, 3, 4, or 5 foot			
Probe material	Schedule 40, schedule 80, Hastelloy®			
Connections	1-1/4" male pipe nipple mount; ½" male pipe thread adapter			
Connectors	1/4" cal gas, 3/8" blowback, 3/8" sample line			
Thermocouple	Type K			
Heater type	Silicone rubber blanket w/ metal snap closures, 100W standard			
	Heater bands, 350W (optional upgrade)			
Heat-shrink boot**	7" length, 2.75" min expanded i.d. nose			
O-rings	Viton®			
Gaskets	Graphoil			
Enclosure insulation	1/8" thick silicone, medium density			
Calibration gas requirement	20psig, 6-10LPM			
Probe operating temperature	375°F (190°C)			
Input voltage	110 VAC (220 optional), 50/60 Hz			

<sup>\*\*</sup> Class 1, Division 2 probes require air purge line

### **Blowback System Specifications** (Models 34C-Z, 34C-R-Z, 34XP)

Blowback duration	5 sec standard			
Instrument air for blowback	Min 50 psig, Max 90 psig			
Blowback accumulator tank	16 ga. SS, 4 x 8 inch cylinder			
Blowback flowrate	14 scfh			
Blowback valve	110 VAC (standard)			
	220 VAC, 12 VDC, 24 VDC (optional)			

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Tel: 732-244-0010

Tel: 800-337-3762 (toll free US)

Fax: 732-244-8140

Email: info@permapure.com