



### GASFENDER™ GSFNP (PP) GAS FILTERS

PTFE membrane filters for use with most speciality gases and low vapor pressure gases

## GASFENDER™ GSFNP (PP) INLINE GAS FILTERS

# PTFE MEMBRANE FILTERS FOR INERT GASES, CDA, AND SOME SPECIALTY GASES

Cobetter's Gasfender™ GSFNP (PP) Series in-line gas filters are compact, yet provide high flow and low pressure drop, making them ideal for CDA, inert gases, and compatible specialty gases and gas mixtures

These cost-effective filters offer high flow and 3nm filtration for a variety of applications.

FEATURE	BENEFIT
Electro-polished 316L stainless steel	Provides superior corrosion resistance
Pleated PTFE membrane and polypropylene support structure	High flow rates & low pressure drops
Industry standard fittings and lengths for easy installation*	Easy installation into new and existing gas panels, gas cabinets, gas supply sticks, equipment, and tools.
Quality manufacturing	100% helium leak tested, 100% integrity tested, cleanroom manufactured and double-bagged packaged

## **MATERIALS AND SPECIFICATIONS**

Filter media	PTFE			
Media support	PP			
Filter area	700 cm <sup>2</sup>			
Internal O-ring	FKM			
Filter housing	Electropolished 316L Stainless Steel			
Internal surface finish	≤ 20 µin Ra			
Removal rating	0.003 μm			
Fittings	SW (Swagelok* compatible), Gasket Seal (VCR* compatible), or NPT			
Fitting size*	1/4", 3/8", or 1/2"			
Max. operating pressure	5.2 MPa (52 bar, 754 psi)			
Max. differential pressure	Forward: 0.69 MPa (6.9 bar, 100 psi) at 21°C Reverse: 0.34 MPa (3.4 bar, 49 psi) at 21°C			
Max. operating temperature	90°C			
Leak rating - helium leak tested	10°Pa m³/s			

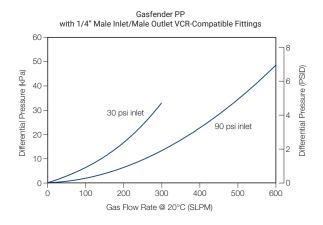
 $<sup>\</sup>ensuremath{^{\star}}$  See ordering information for specific lengths, fitting types, and sizes.

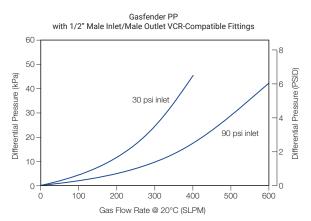


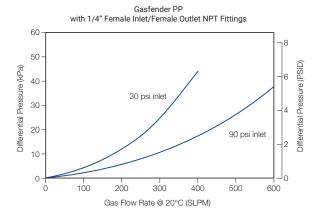
#### **Typical Applications**

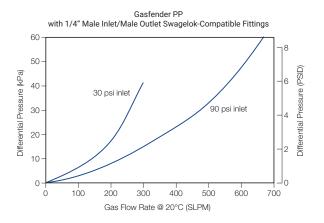
- · Gas panels
- Gas supply sticks
- · Carrier Gases
- Wafer Die Test and Packaging
- CDA

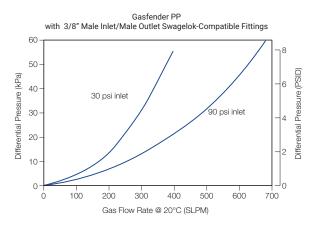
## **FLOW CURVES**

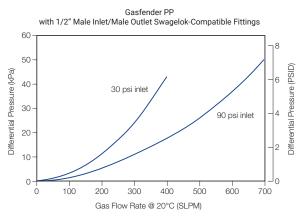












### **ORDERING INFORMATION**

Part Number	Fiittings	Inlet	Outlet	Overall Length
GSFNPNM03NFF4L33	1/4 NPT	Female	Female	133.0 ±1.0 mm (5.24")
GSFNPNM03NFF4L42	1/4 NPT	Female	Female	142.0 ±1.0 mm (5.59")
GSFNPNM03VMM4L41	1/4" Gasket Seal (VCR Compatible)	Male	Male	141.0 ±1.0 mm (5.55")
GSFNPNM03VMM4L28	3/8" Gasket Seal (VCR Compatible)	Male	Male	128.0 ±1.0 mm (5.04")
GSFNPNM03VFM4L48	3/8" Gasket Seal (VCR Compatible)	Female	Male	148.0 ±1.0 mm (5.83")
GSFNPNM03VMM6L49 GSFNPNM03VMM8L49	3/8" Gasket Seal (VCR Compatible)* 1/2" Gasket Seal (VCR Compatible)	Male	Male	149.0 ±1.0 mm (5.87")
GSFNPNM03VMM6L28 GSFNPNM03VMM8L28	3/8" Gasket Seal (VCR Compatible)* 1/2" Gasket Seal (VCR Compatible)	Male	Male	128.0 ±1.0 mm (5.04")
GSFNPNM03SMM4L42	1/4" Gasket Seal (VCR Compatible)	Male	Male	142.0 ±1.0 mm (5.59")
GSFNPNM03SMM4L06	1/4" Gasket Seal (VCR Compatible)	Male	Female	106.0 ±1.0 mm (4.17")
GSFNPNM03SMM6L49	3/8" SW (Swagelok Compatible)	Male	Male	149.0 ±1.0 mm (5.89")
GSFNPNM03SMM6L28	3/8" SW (Swagelok Compatible)	Male	Male	128.0 ±1.0 mm (5.04")
GSFNPNM03SMM6L17	3/8" SW (Swagelok Compatible)	Male	Male	117.9 ±1.0 mm (4.64")
GSFNPNM03SMM8L49	1/2" SW (Swagelok Compatible)	Male	Male	149.0 ±1.0 mm (5.89")
GSFNPNM03SMM8L28	1/2" SW (Swagelok Compatible)	Male	Male	128.0 ±1.0 mm (5.04")
GSFNPNM03SMM8L11	1/2" SW (Swagelok Compatible)	Male	Male	110.0 ±1.0 mm (4.33")

<sup>\*3/8&</sup>quot; gasket seal fittings use 1/2" nuts. Please call your local Banner Industries representative if there are any questions.

