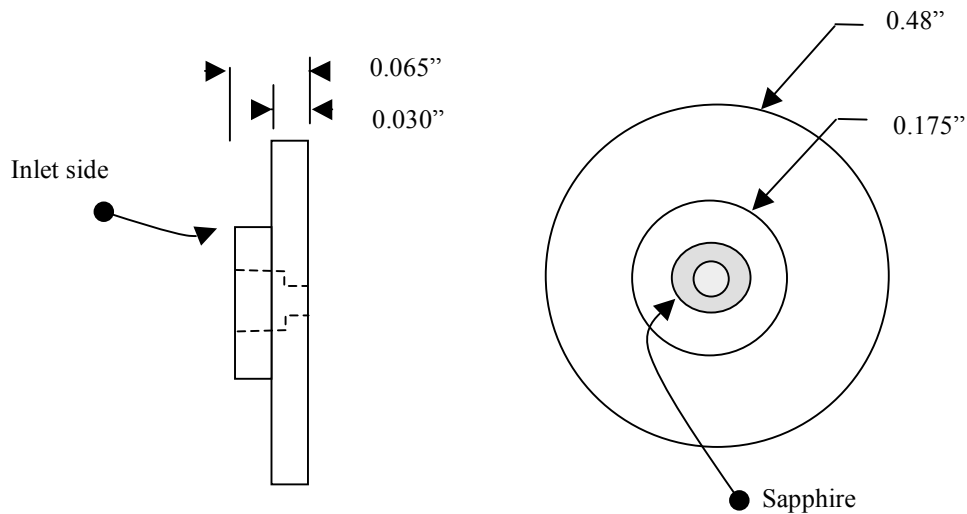


Re-Useable Gasket Restrictors

PCTFE (Kel-F®) body
Diameter from .003" to .100" in steps of .001"



- PCTFE (Kel-F®) for chemical and thermal stability, low gas permeability, low flammability, and zero moisture absorption.
- Low cold flow property for reliable seals
- Refractory super hard Sapphire orifices won't wear out
- PCTFE base for re-uesability
- Each restrictor calibrated to +/- 2% flow accuracy

Applications

- Process development. Insert re-useable gasket in VCR fitting for testing. Return to storage for next application.
- Highly accurate flow source. Use +/- 2% flow vs Pressure accuracy to calibrate flow meters and pressure gauges.

Also available from **UMS**

1/4" VCR SS restrictors M/M, M/F, F/M
1/4" SS tube restrictors
1 1/8" surface mount sandwich restrictors

Orifice ID Calculator

1 _____ Enter gas flow* in sccm units
1 slm = 1000 sccm 1 sfm = 28.3 slm

2 _____ Enter gas K-factor
see table

3 _____ Enter gas pressure in psia units
Add 14.7 to psig value

4 _____ Divide line 1 by line 2 & line 3

5 _____ Multiply line 4 by 34.7

6 Match line 5 to closest value for N₂ sccm from the flow table. Then:

YXX = _____ Orifice ID

* 68°F temperature

K factor for various gases

Gas - K	Gas - K	Gas - K
Air .98	CH ₄ 1.32	NF ₃ .63
Ar .84	Cl ₂ .63	NH ₃ 1.28
Br ₂ .42	H ₂ 3.73	O ₂ .94
CCl ₄ .43	He 2.65	SF ₆ .44
C ₂ H ₂ 1.04	N ₂ 1.00	SiH ₄ .94

K factor calculator-divide 5.29 by (MW)^{1/2}

Gasket Orifice ID & N₂ Flow @20 psig

Outlet Pressure atmosphere or lower

Orifice ID	N ₂ sccm	Orifice ID	N ₂ sccm	Orifice ID	N ₂ slm
R03	109	R15	2710	P40	21.5
N03	114	N15	2960	P45	27.2
R04	185	R16	3080	P50	33.5
N04	191	N16	3370	P55	40.6
R05	309	R17	3480	P60	48.3
N05	327	N17	3800	P65	56.7
R06	442	R18	3900	P70	65.7
N06	475	N18	4260	P75	75.5
R07	604	R19	4350	P80	85.9
N07	652	N19	4750	P85	96.9
R08	845	R20	4820	P90	109
N08	905	N20	5260	P95	121
R09	970	R22	5830	P100	134
N09	1070	N22	6360		
R10	1220	R24	6940		
N10	1340	N24	7570		
R11	1485	R26	8140		
N11	1625	N26	8890		
R12	1765	R28	9450		
N12	1925	N28	10300		
R13	2040	R30	10800		
N13	2220	N30	11800		
R14	2360	R33	13100		
N14	2580	N33	14300		

Standard conditions 14.7 psia and 20°C (68°F)

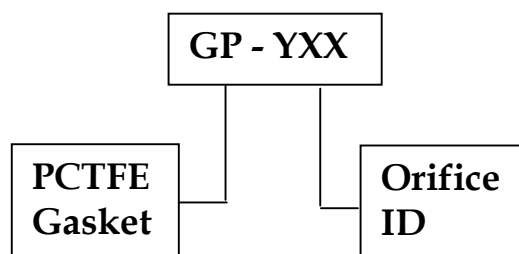
ID is diameter in units of 0.001"

Material Specifications

Wetted Materials	R&N Orifices, Sapphire ,PCTFE
Wetted Materials	P Orifices, PCTFE

www.complast.com/kel-f/neoflon.htm PCTFE properties list
<http://fluorotherm.com/Properties-PCTFE.asp>

P/N Order Information



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www.flowrestrictor.com