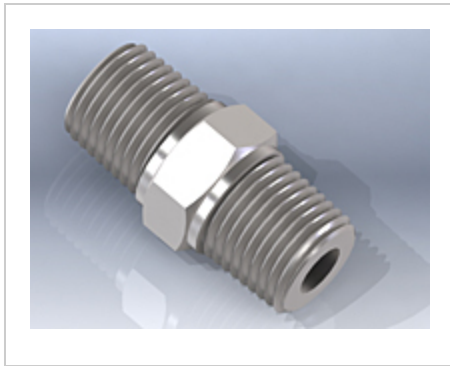




If it's about precision, it's O'Keefe.

Part Number B-28-SS, Orifice Assembly, Type B



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Specifications

Flow Direction

Metal Orifice Assemblies can be used for flow in either direction. The Air Flow and Water Flow data is for a flow direction as shown in the product images.

Material

303 SS

Nominal Orifice Size

28

C_v	0.018
Orifice Geometry	Round
Maximum Operating Pressure	4000 psig
Connection A	1/8" NPT Male
Connection B	1/8" NPT Male
Screened	None

Application

- Precision Flow Control – Gases or Liquids
- Speed Controls – Cylinders and Actuators
- Accurate Timing in Pneumatic or Hydraulic Circuits
- Flow Restriction
- Accurate Throttling
- Snubbers - Gages and Instruments
- Ultrasonic Sound Sources

Advantages

- High Pressure Capability
- Bi-directional Flow Compatibility
- Economical Precision Orifice
- Repeatable Orifice Size and Shape
- Predictable Flow Rate

Air Flow Notes

Standard Conditions 70°F, 14.7 psia
SCFH – Standard Cu. Ft. Per Hour

Air Flow Notes

SLPM – Standard Liters Per Minute
 The Metal Orifice Air Flow data obtained with Type B restrictor.
 Flow rates for other metal restrictors are essentially the same as for Type B.
 The Metal Orifice Air Flow data supercedes previous publications.

Water Flow Notes**Water Flow Notes**

The Metal Orifice Water Flow data calculated based on the Cv for each orifice. $\text{Flow} = C_v \sqrt{\Delta P}$. ΔP = differential pressure in psid. It is assumed that the region on either side of the orifice is fully flooded with no air pockets.

Dimensions**Orifice Diameter**

0.028 in

Width Across Flats (Hex)

7/16 in

Total Length

0.970 in

Flow Data**Air Flow at Pressure - Standard Cu. Ft. Per Hour (SCFH)**

1 psig: 4.68
 5 psig: 10.5
 10 psig: 15.2
 15 psig: 18.6
 20 psig: 21.8
 25 psig: 24.8
 30 psig: 28.0
 40 psig: 34.1
 50 psig: 40.3
 60 psig: 46.4
 70 psig: 52.5
 80 psig: 58.7
 90 psig: 65.0

	100 psig: 71.4
Air Flow at Vacuum - Standard Cu. Ft. Per Hour (SCFH)	5 In. Hg.: 6.7 10 In. Hg.: 8.48
Air Flow at Vacuum, Choked Flow - Standard Cu. Ft. Per Hour (SCFH)	15 In. Hg.: 8.90 20 In. Hg.: 8.9 30 In. Hg.: 8.90
Air Flow at Pressure - Standard Liters Per Minute (SLPM)	1 psig (6.9 kPag): 2.21 5 psig (34.5 kPag): 4.94 10 psig (69.0 kPag): 7.18 15 psig (103.4 kPag): 8.78 20 psig (137.9 kPag): 10.3 25 psig (172.4 kPag): 11.7 30 psig (206.9 kPag): 13.2 40 psig (275.8 kPag): 16.1 50 psig (344.8 kPag): 19.0 60 psig (413.7 kPag): 21.9 70 psig (482.7 kPag): 24.8 80 psig (551.6 kPag): 27.7 90 psig (620.6 kPag): 30.7 100 psig (689.5 kPag): 33.7
Air Flow at Vacuum - Standard Liters Per Minute (SLPM)	5 In. Hg. (127 Mm. Hg.): 3.16 10 In. Hg. (254 Mm. Hg.): 4.00
Air Flow at Vacuum, Choked Flow - Standard Liters Per Minute (SCFH)	15 In. Hg. (381 Mm. Hg.): 4.20 20 In. Hg. (508 Mm. Hg.): 4.20 30 In. Hg. (762 Mm. Hg.): 4.20
Water Flow - Gallons/minute (GPM)	1 psig: 0.018 2 psig: 0.025 3 psig: 0.031 4 psig: 0.036 5 psig: 0.040 6 psig: 0.044 7 psig: 0.048 8 psig: 0.051 9 psig: 0.054 10 psig: 0.057 15 psig: 0.070 20 psig: 0.080

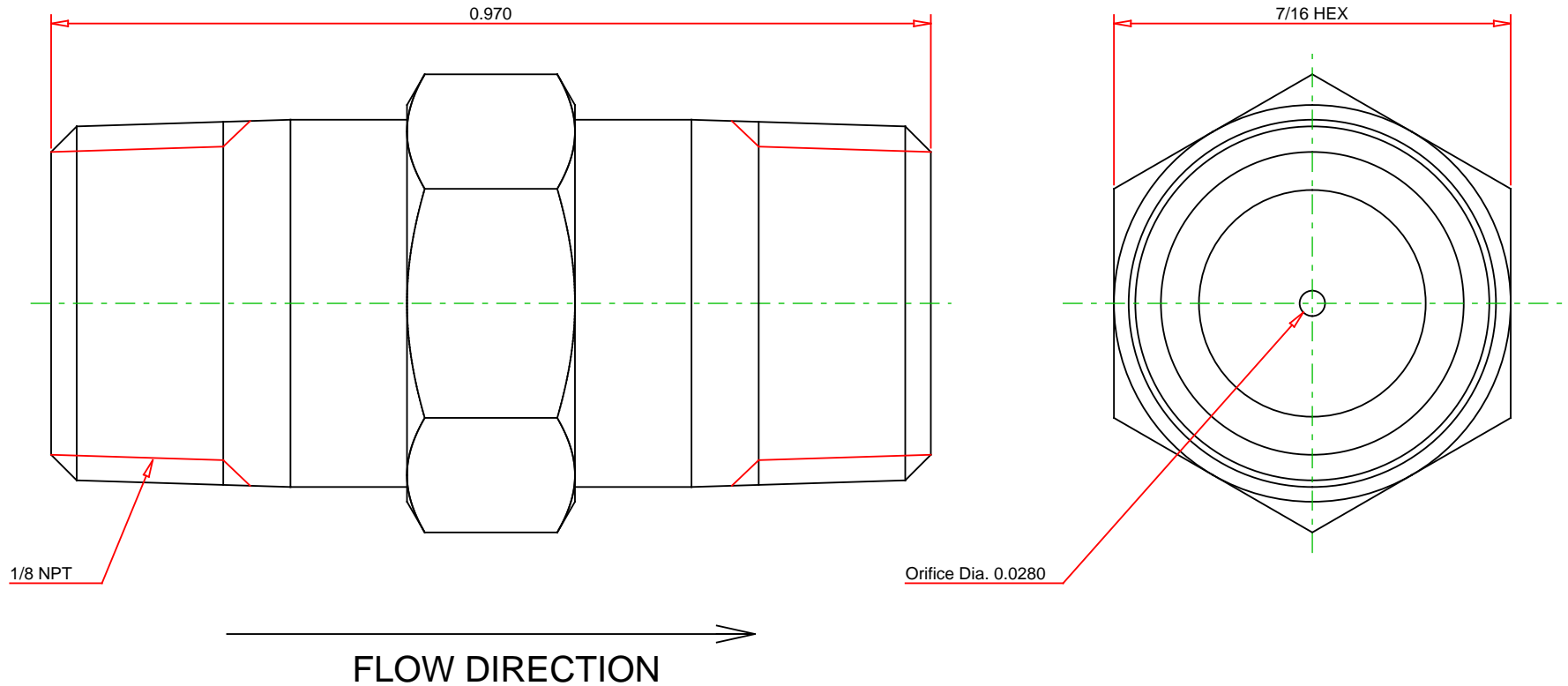
30 psig: 0.099
 40 psig: 0.114
 50 psig: 0.127
 60 psig: 0.139
 70 psig: 0.151
 80 psig: 0.161
 90 psig: 0.171
 100 psig: 0.180

**Water Flow - Liters/minute
(LPM)**

1 psig (6.9 kPag): 0.068
 2 psig (13.8 kPag): 0.096
 3 psig (20.7 kPag): 0.118
 4 psig (27.6 kPag): 0.136
 5 psig (34.5 kPag): 0.152
 6 psig (41.4 kPag): 0.152
 7 psig (48.3 kPag): 0.180
 8 psig (55.2 kPag): 0.193
 9 psig (62.1 kPag): 0.204
 10 psig (69 kPag): 0.215
 15 psig (103.4 kPag): 0.264
 20 psig (137.9 kPag): 0.305
 30 psig (206.9 kPag): 0.373
 40 psig (275.8 kPag): 0.431
 50 psig (344.8 kPag): 0.482
 60 psig (413.7 kPag): 0.528
 70 psig (482.7 kPag): 0.570
 80 psig (551.6 kPag): 0.609
 90 psig (620.6 kPag): 0.646
 100 psig (689.5 kPag): 0.681

Flow Data Status

Generic



Part No.: B-28-SS

Orifice Assembly, Type B

- Drawing Not to Scale
- Dimensions Subject to Change
- Dimensions in Inches

- RoHS Compliant
- REACH Compliant
- Does Not Contain Any Conflict Minerals



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