TURBINE FLOWMETERS BY

HOFFER

Perfecting Measurement

NEW 5-year warranty Best Turbine in the Industry

HO SERIES WAFER Turbine Flowmeters For Gas Service

Product Bulletin HO-SWG-100E

TECHNICAL DATA SHEET

OUTSTANDING FEATURES

- Cost effective design eliminates flange on meter.
- Outstanding accuracy.
- Short Wafer Series meters are rated to meet the pressure rating of any flange as listed in ASME B 16.5.
- Provides wide flow ranges 10:1 turndown typical.

GAS SIZE SELECTOR CHART FOR STANDARD HO SERIES TURBINE FLOWMETERS

Flowmeter Size Diameter (inches)	End Fitting Size Diameter (inches)	Repeatable Range** Based on a Gas Density of 1#/Ft³		Repeatable Range** Based on a Gas Density of .25#/Ft³	
		Magnetic Coil (ACF/M)	MCP Coil (ACF/M)	Magnetic Coil (ACF/M)	MCP Coil (ACF/M)
5/8	2	N/A	.5-10	N/A	1-10
3/4	3/4	N/A	.6 – 20	N/A	1.2 – 20
1	1	2.5 – 43	.8 – 43	5 – 43	1.6 – 43
1-1/4	1-1/4	3.5 – 100	1.25 – 100	7 – 100	2.5 – 100
1-1/2	1-1/2	5.0 – 120	1.75 – 120	10 – 120	3.5 – 120
2	2	10 – 200	3.5 – 200	20 – 200	7 – 200
2-1/2	2-1/2	15 – 500	5 – 500	30 – 500	10 – 500
3	3	20 – 600	7.5 – 600	40 – 600	15 – 600
4	4	30 – 1100	N/A	60 – 1100	N/A
5	5	40 – 1800	N/A	80 – 1800	N/A
6	6	50 – 3000	N/A	100 – 3000	N/A
8	8	100 – 4800	N/A	200 – 4800	N/A

This chart is for quick reference only and not for final size. Calculate using actual service conditions. Flow ranges shown for 15-degree blade angle only. Four standard blade angles available. **Lower limit of flow range is dependent on user's operating density.

SPECIFICATIONS

Overrange: 150% of maximum flow (intermittently).

Linearity: ±1% of reading typical.

Repeatability: ±.25% of reading typical.

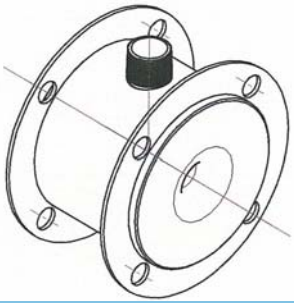
Available Turn Down Range: 10:1 Typical.

Available Temperature Range: -450°F to +350°F . Dependent upon bearing/coil selection.

Pressure Drop Characteristics: 1 to 3 PSI at maximum linear flow rate.

Materials: 316/316L dual rated stainless steel standard. Consult with applications group for corrosive applications. Broad material list available.

Wafer Meter shown with Guide Rings to Mate to Customer's Existing Flange



Hex Nuts per ASTM A 194 Grade 2H with flat washers and guide plates are supplied with the stud bolts.

GAS WAFER TURBINE FLOWMETER MODEL NUMBERING SYSTEM

MODEL HO (A) X (B) - (C) - (D) - (E/F/G) - (H) - (I)

A. End Fitting Size

B. Flowmeter Size

C. Blade Angle (See Note 1)

D. Bearing Type

(BP)	Self-lubricating, ceramic hybrid ball bearings. Sizes 5/8" through 1". (-450 to +300°F)
(CB)	Self-lubricating, ceramic hybrid ball bearings. Sizes 1-1/4" and up. (-400 to +350°F)

E. Pickup Coils

(1M)	One Magnetic Coil
(2M)	Two Magnetic Coils
(1MC3PA)	One RF Coil
(2MC3PA)	Two RF Coils
(1ISM)	Intrinsically Safe Mag Coil
(2ISM)	Two Intrinsically Safe Mag Coils
_(RP___)	Redi-Pulse Coil (See Redi-Pulse Technical Data Sheet RP-XXX)
_(_____)	Intrinsically Safe Redi-Pulse Coil (See I.S. Redi-Pulse Technical Data Sheet IRP-XXX)
(P)	Pigtail or Flying Leads, Add-P and the Length of leads after any coil except the high temperature coils.
(-ATEX)	Add after coil part no. when using ATEX enclosure mounted on meter.

F. Coil Spacing, Mechanical Degrees Apart

( )	Factory Assigned. Spacing required when meter has two pickup coils. If second coil not required skip option (F).

G. Explosion-Proof Coil Enclosure (Rated Class I, Groups C & D)

(X)	1" MNPT riser, welded to body. Required for all types of enclosures.
(X3/0)	1" riser with enclosure and without signal conditioner.
(X3H/0)	1" riser with enclosure and dome cover for Style 1 signal conditioner.
(X3B/O)	Same as (X3/0) with BASEEFA, FM and CENELEC-EExd approvals.
(X4H/0)	1" riser with dome cover for ACC22 and ACC96.
(3B/0)	1" riser with dome cover for Style 1 signal conditioners to meet Group B.
(X3B/0-ATEX)	3/4" Male NPT coil riser with ATEX-approved EExd IIC enclosure.
(4/0)	1" riser with flat cover for Style 2 signal conditioners to meet Groups C & D.
(4B/0)	1" riser with dome cover for Style 2 signal conditioners to meet Group B.
(X8S)	Add 8S after X riser for a 8" long S/S riser for hot and cold media applications.

H. End Fitting Types

(_____)	Enter Class of Customer's Existing Mating Flange. (Example: CLASS150)

I. Special Features

(SW)	Short Wafer.
(CE)	CE Mark - Required for Europe.
(PED-CE)	PED Mark - Required for Europe.
(SP)	Any special features that are not covered in the model number, use a written description of –SP.

Note: Blade Angle determined by density, assigned by factory or use of gas sizing program.

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The quality system covering the design, manufacture and testing of our products is certified to International Standard ISO 9001.

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