

TECHNICAL DATA SHEET

OUTSTANDING FEATURES

- ◆ Recommended for corrosive service and ultrapure water flow applications.
- ◆ Suitable for clean liquid service at one centistoke.
- ◆ Flow rate capability from 0.35 to 485 GPM, (¼" through 3" sizes).
- ◆ Provides frequency output.
- ◆ Mates with RF flanges per ANSI or DIN flanges.



GENERAL DESCRIPTION

Our standard Teflon® turbines are supplied with PTFE for all wetted parts manufactured from blue-dyed Teflon® with the exception of the shaft which is normally manufactured from poly-ether-ether-ketone (PEEK) and the bearing and thrust washers which are a PEEK/PTFE blend. Please confirm PEEK is compatible with the intended service fluid. Other options are available.

Magnets are embedded in Teflon® blades of rotor assembly. Within the Hoffer turbine flowmeter, the flowing media engages a vaned rotor causing it to rotate at an angular velocity proportional to flow rate. The pickup coil senses the spinning motion of the rotor through the housing and converts it into a pulsing electrical signal. Summation of the pulsing electrical signal relates directly to the total flow, while the frequency is linearly related to flow rate. Available with flanged end fittings including RF per ANSI and DIN types. Size selections available are ¼" to 3". The Teflon® Series offers a linearity of ±1% of reading and a repeatability of ±0.1% of reading. The temperature rating on the Teflon® Series is 35°F minimum and 125°F maximum. Maximum pressure is 300 PSIG.

SIZE SELECTOR CHART FOR TEFLON® SERIES

METER SIZE (IN INCHES)	LINEAR AND REPEATABLE RANGES		TECHNICAL DATA		
	GPM	LPM	Weight (lbs.)	Overall Meter Length	K-Factor (±10%) (Pulses/Gallon)
1/4	.35 - 3.5	1.3 - 13.2	4.5	2.453"	1200
3/8	.75 - 7.5	2.8 - 28.4	4.5	2.453"	1000
1/2	1.25 - 9.5	4.7 - 36	4.5	2.453"	800
5/8	1.75 - 16	6.6 - 60.6	6	3.25"	500
3/4	2.5 - 20	9.5 - 76	6	3.25"	375
1	4 - 45	15 - 170	6	4.437"	124
1¼	6 - 70	23 - 265	8	6"	60
1½	8 - 100	30.3 - 378	8	6"	40
2	15 - 170	56.8 - 643.5	13	6"	17
2½	37.5 - 300	142 - 1135	22	7"	6
3	60 - 485	227 - 1836	27	10"	3.8

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PERFORMANCE SPECIFICATIONS

Linearity:	±1% of reading over linear flow range.
Repeatability:	±0.1 of reading over repeatable flow range.
Temperature & Pressure Limitations:	35°F minimum and 125°F maximum temperature range acceptable. 300 PSIG pressure limitation.
Pressure Drop:	Less than 4 PSI at maximum linear flow rate.
Output:	20 mV RMS or greater into a 10 K ohm load at a minimum flow rate.

NOTE: A complete line of flowmeter signal conditioners (preamplifiers) and flow computers are available. Consult with the applications group at Hoffer for additional information.

ORDERING INFORMATION

Basic Model Number HO (A) X (B) - (C) - (D) - (TFE) - (E/F/G) - (H) - (I) - (J)

A. Process Connection/End Fitting Size

B. Flowmeter Size

C. Minimum Operating Flow (GPM)

D. Maximum Operating Flow (GPM)

Bearing Type

(TFE) PEEK/Teflon® Bearings

E. Pickup Coils

(1M)	One Magnetic Coil
(2M)	Two Magnetic Coils
(1ISM)	Intrinsically Safe Mag Coil
(2ISM)	Two Intrinsically Safe Mag Coils
(1ISM-ATEX)	One ISM ATEX coil
(2ISM-ATEX)	Two ISM ATEX coils
(-ATEX)	Add after coil part No. when using ATEX enclosure mounted on meter.

F. Coil Spacing, Mechanical Degrees apart (Factory Assigned)

G. Riser & Explosion-Proof Coil Enclosures

(X)	1" MNPT riser, welded to body. Required for all types of enclosures.
(X-ATEX)	3/4" MNPT riser, welded to the body.
(XE2)	1" MNPT riser with E2 enclosure. (See Chart)*
(X-ATEX)E2	3/4" MNPT riser with E2 enclosure. (See Chart)*
(X8S)	8" Long S/S 1" MNPT riser. (For fluid temperatures below -40°F (-40°C) or above +140°F +60°C)
(X8S-ATEX)	8" Long S/S 3/4" MNPT riser. (For fluid temperatures below -40°F (-40°C) or above +140°F +60°C)

***E2 EXPLOSION-PROOF/FLAME-PROOF ENCLOSURE WITH 3/4" FNPT MOUNT AND 3/4" CABLE ENTRY RATINGS:**

FM: CLASS I, DIV. 1, GR. ABCD, CLASS II/III, DIV. 1, GR. EFG, TYPE 4X
 CSA: CLASS I, DIV. 1, GR. ABCD, CLASS II, DIV. 1, GR. EFG, CLASS III, TYPE 4X EX D IIC, CLASS I, ZONE 1, IP 66
 ATEX: EX II 2GD Ex d tD IIC, IP66/68
 IEC: EX D IIC IP68

H. Flanged Type Process Connection (Non-wetted)

(F1SS)	150# S/S Raised Face Flanged per ANSI
(F3SS)	300# S/S Raised Face Flanged per ANSI
(F6SS)	600# S/S Raised Face Flanged per ANSI
(DN_PN_SS)	DN = Metric size, PN = flange pressure rating (in DIN Std) and select material.

I. Housing

(TFE) Housing is PTFE and is manufactured from blue-dyed Teflon®. The shaft is normally manufactured from poly-ether-ether-ketone (PEEK) and the bearing and thrust washers which are a PEEK/PTFE blend.

J. Special Features

(CE)	CE Mark required for Europe
(PED-CE)	PED-CE Mark required for Europe
(SEP-CE)	Sound engineering practice
(X)	No Special Features

NOTE: Teflon® meters are supplied with stainless steel housings.

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The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.

HOFFER ESP™

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

