

#### **Grooved Turbine Flowmeters** Product Bulletin HO-GF-105A

# TECHNICAL DATA SHEET

### **Grooved Turbine Flowmeters**

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Flow Range and Model Information						Technical Data							
Flowmeter Size (Inches) Victaulic <sup>®</sup> Size (Inches)				(Refer to Note 1) Linear Flow Range (US GPM) Min. Max.		(Refer to Note 2) Bearing Type	(Refer to Note 3 for coil options) Standard Magnetic Pickup Coil	Victaulic <sup>®</sup> Type End Fitting	Nominal Pulses/Gallon 'K' Factor	Nominal Max. Frequency (Hz)	Length (inches)	Working Pressure (PSI) Victaulic <sup>®</sup> Clamp Type 75 Type 7	
Model HO	1	Х	1	-4	-60	-CB -C -T	-1MX	-VIC	670	670	4.0	500	1000
Model HO	1 1⁄2	х	1 1⁄2	-8	-130	-CB -C -T	-1MX	-VIC	220	500	6.0	500	1000
Model HO	2	Х	2	-15	-225	-CB -C -T	-1MX	-VIC	126	500	6.0	500	1000
Model HO	2 1/2	х	2 1/2	-25	-400	-CB -C -T	-1MX	-VIC	75	500	10.0	500	1000
Model HO	3	х	3	-40	-650	-CB -C -T	-1MX	-VIC	45	500	12.5	500	1000
Model HO	4	х	4	-75	-1250	-CB -C -T	-1MX	-VIC	20	400	12.0	400	1000
Model HO	6	х	6	-200	-2900	-CB -C -T	-1MX	-VIC	8	400	12.0	400	1000
Model HO	8	х	8	-330	-5200	-CB -C -T	-1MX	-VIC	3	250	12.0	350	800
Model HO	10	х	10A	-650	-8000	-CB -C -T	-1MX	-VIC	1.11	150	16.0	N/A	800
Model HO	12	х	12A	-1400	-12000	-CB -C	-1MX	-VIC	.69	140	22.0	N/A	800

FOR COMPLETE MODEL NUMBER INFORMATION, PLEASE SEE REVERSE.

#### FLOW RANGE (Note 1)

Ranges shown are standard ranges - other ranges are available. Contact Hoffer Flow Controls Applications Group.

 BEARING TYPES (Note 2)

 -CB Hybrid Ceramic, Self-lubricating shielded ball bearings. Ball bearings must be used on CO2, may be used on H2O and never on H2O/Sand or CS.

 -C
 Hard Carbon Composite sleeve bearings. For use on H2O only.

 -T
 Tungsten Carbide sleeve bearings. Tungsten Carbide must be used on H2O/Sand and CS, may be used on H2O, and never used on CO2.

PICKUP COILS (Note 3)

-1M	One Magnetic Pickup Coil.	-2HTM	Two High Temp. Magnetic Coils.
-2M	Two Magnetic Coils.	-1ISM	Intrinsically Safe Mag Coil.
-1MC3PA	One RF Coil.	-2ISM	Two Intrinsically Safe Mag Coils.
-2MC3PA	Two RF Coils.	—_(RP)	Redi-Pulse Coil (See Redi-Pulse Technical Data Sheet RP-XXX).
-1MC2PAHT	One High Temp. 6" Pigtail RF coil.	—_()	Intrinsically Safe Redi-Pulse Coil (See I.S. Redi-Pulse Technical Data Sheet IRP-XXX).
-2MC2PAHT	Two High Temp. 6" Pigtail RF coils	— (P)	Pigtail or Flying Leads, Add-P and the Length of leads after any coil except the high temp. coils.
-1HTM	High Temp. Magnetic Coil (+450 to +850°F).		

Please Note: Flowmeter service life is reduced when flows contain particulate.

## GENERAL SPECIFICATIONS

	GENERAL SI		
Linearity: Repeatability: Temperature Ra	$\pm 0.5\%$ of reading ( $\pm 0.25\%$ typical) over tabulated linear flow range. $\pm 0.1\%$ over tabulated useable range. nge: -450°F to +450°F (Standard).	Pressure Drop Characteristics: Overrange: Construction:	Request graphical data. 150% of maximum flow (intermittently). All stainless steel.
Flowmeters are calib	rated and supplied with "K" Factor Tag.		<sup>®</sup> Victaulic is a registered trademark of Victaulic
	<b>GROOVED TURBINE FLOWM</b>	ETER MODEL	NUMBERING SYSTEM
MODEL HO	( <u>A</u> ) X ( <u>B</u> ) - ( <u>C</u> ) -	( <u>D</u> ) - ( <u>E</u> )	- ( <u>F/G/H</u> ) - ( <u>I</u> ) - (_
A. End Fitting Si	ize		
B. Flowmeter Si	ze		
C. Minimum Ope	erating Flow		
D. Maximum Op	erating Flow		
E. Bearing Type			
(CB)	Self-Lubricating, Ceramic Hybrid Ball Bearing		
(C)	Hard Carbon Composite Sleeve Bearing		
(T)	Tungsten Carbide Sleeve Bearing		
F. Pickup Coils			
(1M)	One Magnetic Coil		
(2M)	Two Magnetic Coils		
(1MC3PA)	One RF Coil Two RF Coils		
(2MC3PA)	Une High Temp 6" Pigtail RF coil		
(2MC2PAHT)	High Temperature Magnetic Coil (+450 to +850	°F)	
(1HTM)	Two High Temperature Magnetic Coils	• )	
(2HTM)	Intrinsically Safe Mag Coil		
(1ISM)	Two Intrinsically Safe Mag Coils		
(2ISM)	Redi-Pulse Coil (See Redi-Pulse Technical Data Sheet	t RP-XXX)	
_(RP)	Intrinsically Safe Redi-Pulse Coll (See I.S.	lise Technical Data Sheet	t IRP-XXX)
_(/ (P)	temperature coils.	leads after any con e	xcept the high
G. Coil Spacing,	Mechanical Degrees Apart		
( )	Factory Assigned. Spacing required when meter	r has two pickup coils	
H. Explosion-Pro	oof Coil Enclosure (Rated Class I, Groups C	& D)	
(X)	1" MNPT riser, welded to body. Required for all type	es of enclosures.	
(X3/0)	1" riser with enclosure and without signal condition	er.	
(X3H/U) (X3B/0)	1" riser with enclosure and dome cover for Style 1 s	signal conditioner.	
(X3B/0) (X4H/0)	Same as $(\Lambda S/U)$ with DASEEFA, FW and CENELEU-E 1" riser with dome cover for ACC22 and ACC26	Exu approvais.	
(3B/0)	1" riser with dome cover for Style 1 signal condition	ners to meet Group B.	
(4/0)	1" riser with flat cover for Style 2 signal conditioner	rs to meet Groups C &	D.
(4B/0)	1" riser with dome cover for Style 2 signal condition	ners to meet Group B.	
(X8S)	Add 8S after X riser for a 8" long S/S riser for hot a	nd cold media applicati	ions.
1. End Fitting Ty	rpes		
	Grooved Lind Fittings		
J. Special Featu	res		
( )			

- (CE)CE Mark Required for Europe(PED-CE)PED Mark- Required for Europe(SP)Any special features that are no
  - Any special features that are not covered in the model number, use -SP and a written description.



The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specification 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. The quality system covering the design, manufacture and testing of our products is certified to International Standard ISO 9001.

