

Model GNT NPT Fitting



GNT shown here
with Local Display and
Mag Pick-Up



For complete part number, see
"Meter Number Reference" for this section.

ACCURACY: $\pm 0.5\%$

Select Your Meter Size:

1/2 inch	1 inch	2 inch
3/4 inch	1-1/2 inch	3 inch



For Your Special Application Needs:

Model GNT HT

For High Temperatures

(This model is not available in 3 inch)



Sensor Options:

- Low Drag Pickup (1/2 in. turbines)
- Standard Pickup (3/4 to 3 in. turbines)

Electronics Options:

- GG510 (Display with Pulse Output)
- GX510 (Display with 4-20 mA Output)
- GA510 (4-20 mA Output)
- SC510 (Scaled Pulse Output)

SPECIFICATIONS

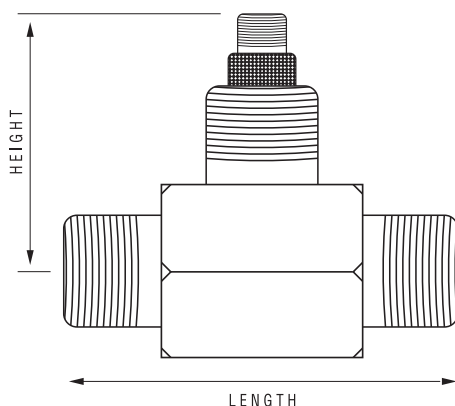
Design Type:	Turbine	
Housing Material:	316 Stainless Steel	
Meter Sizes Available:		
For GNT: NPT Taper (Male)	1/2"	3/4" 1" 1-1/2" 2" 3"
For GBT: BSPP + (Male)	1/2"	3/4" 1" 1-1/2" 2" 3"
For GIT: ISO Taper (Male) ♦	1/2"	3/4" 1" 1-1/2" 2" 3"
For High Temperature*:	1/2"	3/4" 1" 1-1/2" 2" —
Flow Range:	1/2" (051)	0.8 - 6.0 GPM (3.0 - 22 LPM)
	3/4" (075)	1.6 - 16 GPM (6.0 - 60 LPM)
	3/4" (075E)	2.3 - 23 GPM (8.7 - 87 LPM)
	1" (100)	6.7 - 67 GPM (25.2 - 252 LPM)
	1-1/2" (150)	17.7 - 177 GPM (67.0 - 670 LPM)
	2" (200)	33 - 330 GPM (125.0 - 1250 LPM)
	3" (300)	60 - 600 GPM (227.1 - 2271 LPM)
Accuracy (Linearity):	$\pm 0.5\%$	
Repeatability:	$\pm 0.1\%$	
Pressure Rating:	1/2" to 2" = 5,000 PSI / 340 BAR 3" = 2,500 PSI / 170 BAR	
Operating Temperature Range:		
For Tungsten Carbide:	-100° F to +225° F (-74° C to +107° C)	
For High Temperature:	-450° F to +800° F (-268° C to +426° C)	
Typical K-Factor:	1/2" (051)	10,000 PPG / 2642 PPL
PPG (PPL)	3/4" (075)	3,750 PPG / 991 PPL
	3/4" (075E)	2,608 PPG / 689 PPL
	1" (100)	896 PPG / 237 PPL
	1-1/2" (150)	340 PPG / 90 PPL
	2" (200)	181 PPG / 48 PPL
	3" (300)	50 PPG / 13 PPL
Wetted Materials:		
Housing:	316 Stainless Steel	
Sleeve Bearings:	Tungsten Carbide	
Thrust Bearing:	Tungsten Carbide	
Shaft:	Tungsten Carbide	
Rotor:	CD4MCu Stainless Steel	
Rotor Supports:	316 Stainless Steel	
Retaining Rings:	300 Series Stainless Steel	
Recommended Strainer Size:		
	1/2"	40 mesh
	3/4"	40 mesh
	1"	40 mesh
	1-1/2"	18 mesh
	2"	14 mesh
	3"	14 mesh
Frequency Output:	1/2" (051)	125 - 1000 Hz
	3/4" (075)	100 - 1000 Hz
	3/4" (075E)	100 - 1000 Hz
	1" (100)	100 - 1000 Hz
	1-1/2" (150)	100 - 1000 Hz
	2" (200)	100 - 1000 Hz
	3" (300)	50 - 500 Hz
Calibration Report	Comes standard with G Series meters. N.I.S.T. - Certification available.	

APPROVALS



- * Requires High Temp Pickup.
- ♦ ISO 228-1 designation is G.
- ♦ ISO 7-1 BSPT

G Series Precision Meters



Size	NPT		Sanitary Clamp		Flanged*	
	Length inches (mm)	Height inches (mm)	Length inches (mm)	Height inches (mm)	Length inches (mm)	Height inches (mm)
1/2 in.	2.75 (70)	2.56 (65)	2.75 (70)	2.56 (65)	—	—
3/4 in.	3.25 (82)	2.62 (66)	3.25 (82)	2.62 (66)	5.50 (140)	2.00 (51)
1 in.	3.56 (90)	2.75 (70)	3.56 (90)	2.75 (70)	5.50 (140)	2.12 (54)
1-1/2 in.	4.59 (116)	3.00 (76)	4.59 (116)	3.00 (76)	6.00 (152)	2.50 (63)
2 in.	6.06 (154)	3.25 (82)	6.06 (154)	3.25 (82)	6.50 (165)	3.00 (76)
3 in.	10.00 (254)	3.50 (89)	—	—	10.00 (254)	3.75 (95)

* Height on flange meters, measures from center line to top of flange.

Product Identifier

G = G Series Precision Turbine Meter

USE THIS AS A GUIDE – SIZES VARY BY FITTING TYPE.
(Does not apply to model GSCPS - 3A Meters)

See Reference Section for Meter Dimensions.

Fitting Type

- N = NPT (Male)
- I = ISO 7-1 BSPT Taper (Male)
- B = BSPP (Male)
- F = Flanged
- SC = Sanitary Clamp

Shaft / Sleeve Bearing / Thrust Bearing

- T- = Tungsten Carbide / Tungsten Carbide / Tungsten Carbide
- P- = Stainless Steel / PTFE / Stainless Steel

Turbine Size & Flowrate

- 050S = 1/2 in. (0.6 - 6 GPM) Low Flow - Turbine Body Only♦
- 051S = 1/2 in. (0.8 - 6 GPM) Standard - Uses Low Drag Standard Sensor 1
- 051H = 1/2 in. (0.8 - 6 GPM) High Temp - Turbine Body Only♦
- 075S = 3/4 in. (1.6 - 16 GPM) Standard - Uses Standard Sensor 2
- 075H = 3/4 in. (1.6 - 16 GPM) High Temp - Turbine Body Only♦
- 075E = 3/4 in. (2.32 - 23 GPM) Ext-Range - Uses Standard Sensor 2
- 75EH = 3/4 in. (2.32 - 23 GPM) Ext-Range High Temp - Turbine Body Only♦
- 100S = 1 in. (6.7 - 67 GPM) Standard - Uses Standard Sensor 2
- 100H = 1 in. (6.7 - 67 GPM) High Temp - Turbine Body Only♦
- 150S = 1-1/2 in. (17.7 - 177 GPM) Standard - Uses Standard Sensor 2
- 150H = 1-1/2 in. (17.7 - 177 GPM) High Temp - Turbine Body Only♦
- 200S = 2 in. (33 - 330 GPM) Standard - Uses Standard Sensor 2
- 200H = 2 in. (33 - 330 GPM) High Temp - Turbine Body Only♦
- 300S = 3 in. (60-600 GPM) Standard - Uses Standard Sensor 2

♦ Call GPI for Sensor & Electronics

Sensor Choice

- 1 = Low Drag Standard Sensor with 12 inch Lead Wires
- 2 = Standard Sensor with 12 inch Lead Wires
- X = No Sensor - Turbine Body Only

Electronic Choice (Local)*

Turbine Mounted

- 5 = GG510 - Standard Display
- 6 = GX510 - 4-20 mA Transmitter with Display
- 7 = GA510 - 4-20 mA Transmitter
- 8 = SC510 - Scaled Pulse Output
- X = No Electronics - Turbine Body Only










G + I + T- + -075S + 2 + -6 ← (Sample Model Number)

* Electronic Choice not available on all models.

At Great Plains Industries, we've been building rugged, reliable, liquid flowmeters for over 35 years. The GPI Industrial Meter family includes a full line of Precision and Industrial Turbine meters plus Oval Gear meters in various materials, sizes and fitting options.

We design products to meet the needs of our customers. This includes maintaining appropriate, industry standard approvals. Approvals vary by product line and may be dependent on meter application.

The Approval symbol is listed under product specifications on individual product pages. If no approval mark is found, check the chart to the right. For details about specific "Approvals" refer to the chart.

3-A	3-A Sanitary Standards, Inc. "Flowmeters for Milk and Milk Products, Number 28-03" for GSCPS Models and L Option Meters.
ATEX 	Ex II 1 G Per 94/9/EC.
	Product reviewed for EMC Directive 2004/108/EC. Includes: Euro Norms 61000-6-2 (2005) and 61000-6-3 (2007) on A1 and G2 Series Meters. Note: For Oval Gear Meters , the CE Approval is applied when meter is part of a system.
	Factory Mutual Approved Intrinsically Safe for Class I, II, III, Division 1, All Groups. Nonincendive for Class I, II, III, Division 2 Groups A, B, C, D, F, G.
	Factory Mutual Approved Class 1, Div. 1, Group D (01A31GM Only)
	Factory Mutual Approved Intrinsically safe for Class I & II, Div. 1, Groups A, B, C, D, E, F & G, T6 Ta=-40° C to 60° C hazardous locations, and for use in Class I, Zone 0 as Ex is IIC T6 Ta=-40° C to 60° C.
	Federal Communication Commission Industry Canada Approval Class B; digital service, part 15 of FCC Rules.
	Ex ia IIC T6 Ta=60° C
IP44/IP54/IP66	Ingress Protection Code IP44 (Greater than 1 mm and splashed water); IP54 (Dust protected and splashed water); IP66 (Dust-tight and heavy seas).
IP/NEMA	Pulse versions of Oval Gear Meters have enclosure ratings that vary from IP54 / NEMA 13 to IP66 / NEMA 16 depending on the application.
NEMA 4	NEMA Requirements: Enclosure constructed for indoor or outdoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment. Protection against falling dirt, rain, sleet, snow, windblown dust, splashing or hose directed water that will be undamaged by the external formation of ice on the enclosure. <i>GPI products are tested to NEMA requirements.</i>
	Restriction of Hazardous Substances Directive 2002/95/EC and 2011/65/EU
	Indicates that the product was tested and has met the certification requirements for electrical, plumbing and/or mechanical products.