TP050

- Shown with RT14 Electrical
Option (TP050S1T1-211R5)

Additional meter configurations available.

TP SERIES TURBINE FLOWMETER

FLOMEC® TP Series Flowmeters measure flows of low viscosity liquids from 0.5 to 2420 gallons/min (1.8 to 9160 litres/min) in a range of sizes from ½ to 6 inches (15 to 150mm). Installation orientation is horizontally or vertically, and they are available with hazardous area ATEX, IECEx, and Intrinsically Safe (IS) certifications.

FEATURES / BENEFITS

- High accuracy and repeatability, direct reading flowmeter
- Wide flow range
- Rugged and compact design
- IS hazardous area versions available
- Integral 4-20mA option

GENERAL SPECIFICATIONS

Suits Pipe Sizes	½ - 6 inches (15-150mm)
Pipe Connections*	NPT, BSP, ANSI #150, ANSI #300, PN16 DIN*
Accuracy (@ cP)	± 0.5% of reading
Viscosity Range	0.5 - 10cP
Temperature Range	-40º to +450º F (-40º to +232º C)**
Wetted Materials	316SS Bearing support & body, 431SS rotor, Tungsten Carbide bearing
Maximum Pressure	3625 psi (250 bar)
Protection Class	IP66/67 (NEMA4X), optional I.S. (Intrinsically Safe) Integral options

*Threaded meters available for ½ – 2 inches only.
**With high temperature pickup option.

PRODUCT CONFIGURATION

1 PRODUCT IDENTIFIER:

TP010 = ½ inch (15mm) 0.5-5 GPM (1.8-18 L/min)
TP012 = ¾ inch (20mm) 1-10 GPM (3.8-37.9 L/min)
TP015 = ¾ inch (20mm) 1.8-18 GPM (6.7-67 L/min)
TP020 = ¾ inch (20mm) 3.6-36 GPM (13-130 L/min)
TP025 = 1 inch (25mm) 7-70 GPM (27-270 L/min)
TP040 = 1 ½ inch (40mm) 15-150 GPM (57-570 L/min)
TP050 = 2 inch (50mm) 30-300 GPM (113-1130 L/min)
TP080 = 3 inch (80mm) 60-600 GPM (225-2250 L/min)
TP0100 = 4 inch (100mm) 120-1200 GPM (450-4500 L/min)
TP0150 = 6 inch (150mm) 242-2420 GPM (916-9160 L/min)

2 BODY MATERIAL:

S = 316 Stainless Steel - 3500 psi (250 bar) max.

3 PROCESS CONNECTIONS:

1T1 = BSPP male threaded / One
2T1 = NPT male threaded / One
4C1 = ANSI-150 RF flanges (Carbon Steel) / One
4S1 = ANSI-150 RF flanges (316SS) / One
5C1 = ANSI-300 RF flanges (Carbon Steel) / One
5S1 = ANSI-300 RF flanges (316SS) / One
7C1 = PN16 DIN flanges (Carbon Steel) / One
7S1 = PN16 DIN flanges (316SS) / One

4 ELECTRICAL CONNECTION:

-1 = Military Style Connector (required for no electrical option)
-2 = Flying Leads (required for electrical options)

5 PICK-OFF TYPE:

11 = Standard (250º F [120º C] max.)
21 = High Temp (450º F [232º C] max.)
31 = ATEX/IECEx approved intrinsically safe 250º F [120º C] max.) (only available with R6, F19 or No Electrical Option)
51 = Amplified (5-30V (dc) supply tracking pulse) 250º F [120º C] max.)

6 ELECTRICAL OPTIONS:

Blank = No Electrical Option
JB = Junction Box
R4 = RT40 Backlit Rate Totalizer (Alloy housing with facia protector) (Requires Pick-off Type 11)
R5 = RT14 Backlit Rate Totalizer with scaled pulse, alarms and 4-20mA (GRN housing) (Requires Pick-off Type 11)
R6 = RT14 IECEx/ATEX Intrinsically Safe Rate Totalizer with 4-20mA and Pulse Outputs (GRN housing) (Requires Pick-off Type 31)
R7 = RT40 Backlit Rate Totalizer (GRN housing with facia protector) (Requires Pick-off Type 11)
F18 = F018 Backlit Rate Totalizer with 4-20mA and Pulse Outputs, and HART (Requires Pick-off Type 11)
F19 = IECEx/ATEX Backlit Rate Totalizer with 4-20mA and Pulse Outputs, and HART (Requires Pick-off Type 31)
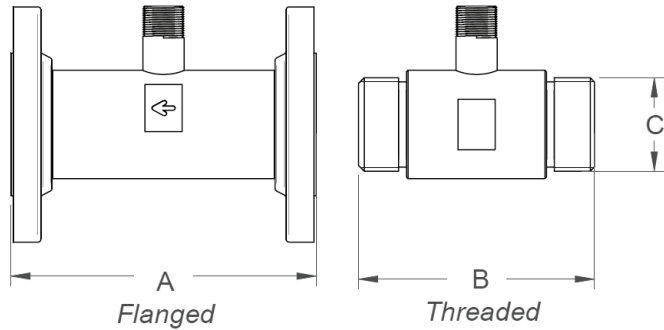
7 CALIBRATION:

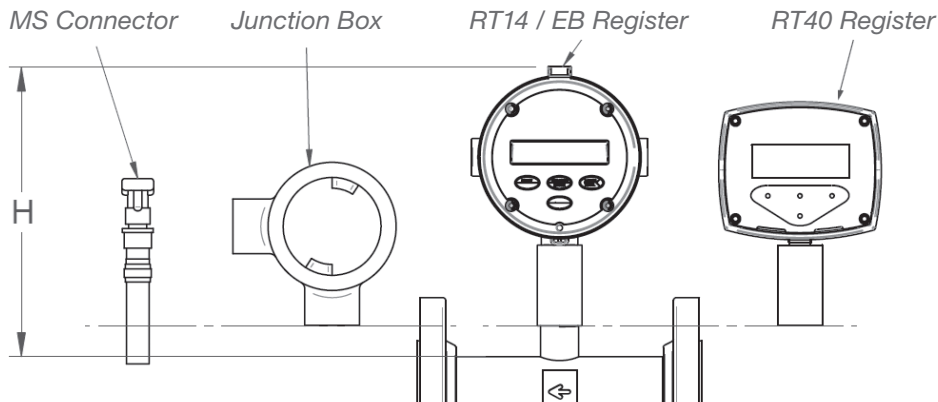**Blank** = Display in Liters (DEFAULT)
G = Display in U.S. Gallons

1	2	3	4	5	6	7
--->>> TP050	S	1T1	-2	11	R5	

DIMENSIONS

Flowmeter Model	A	B	C
TP010	5 in. (127mm)	2.52 in. (64mm)	½ in. (15mm) BSP or NPT
TP012	5 in. (127mm)	2.52 in. (64mm)	¾ in. (20mm) BSP or NPT
TP015	5 in. (127mm)	2.52 in. (64mm)	¾ in. (20mm) BSP or NPT
TP020	5.51 in. (140mm)	3.27 in. (83mm)	¾ in. (20mm) BSP or NPT
TP025	5.98 in. (152mm)	3.50 in. (89mm)	1 in. (25mm) BSP or NPT
TP040	7.01 in. (178mm)	4.52 in. (115mm)	1½ in. (40mm) BSP or NPT
TP050	7.76 in. (197mm)	5.23 in. (133mm)	2 in. (50mm) BSP or NPT
TP080	10 in. (254mm)	–	–
TP0100	14.01 in. (356mm)	–	–
TP0150	14.49 in. (368mm)	–	–

Flanged *Threaded*

APPLICATIONS

- Fuel
- Alcohols
- Solvents
- Insecticides
- Water
- Light Hydraulic Oils

CERTIFICATIONS

ATEX Ⓔx IEC IECEx

MS Connector   Junction Box   RT14 / EB Register   RT40 Register

Options	H
MS Connector	4.64 in. (118mm)
Junction Box	5.91 in. (150mm)
RT14 / EB11	8.27 in. (210mm)
RT40	7.28 in. (185mm)

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