

Model H241 Helix Flow Meter 100 cc/min to 189 liters/min

SPECIFICATIONS

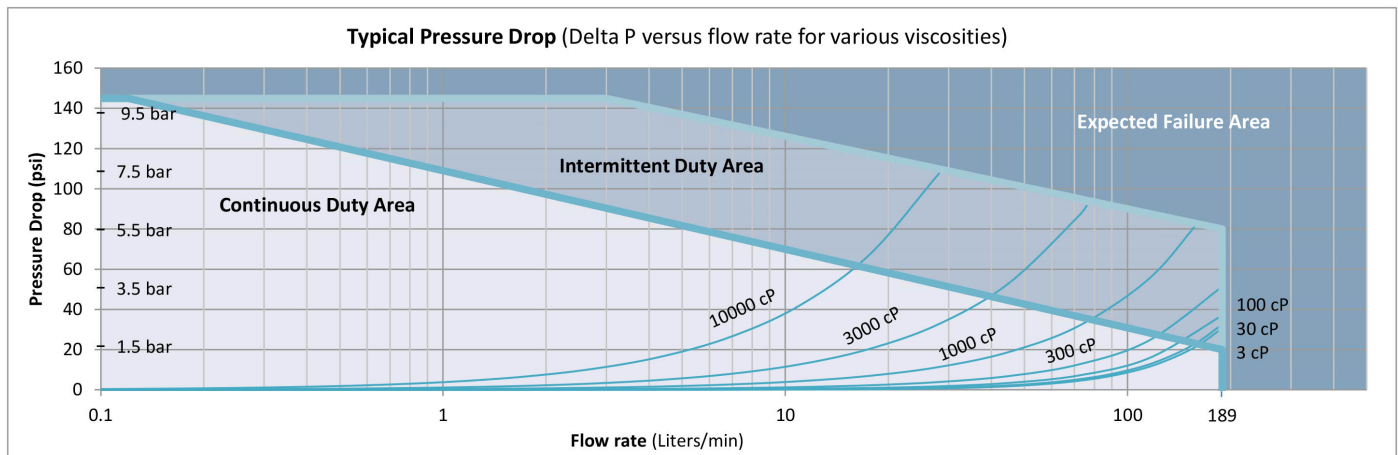
Flow Range	100 cc/min to 189 liters/min
Accuracy (at 30 cP)	±0.2% of reading over a 50:1 range ± 0.5% of reading with a non-linearized transmitter
Maximum Operating Pressure	35 or 240 bar (500, 3500 psi)
Displacement	0.062 liters/rev
Weight	14 kg
Recommended Filtration	150 micron
Port Size(s)	1 1/2" NPT or 1 1/2" (DN 40) customer supplied ANSI RF flanges
Fluids	Most non-aqueous, organic liquids
Heat Trace	Heat traceable bodies available



Model H241

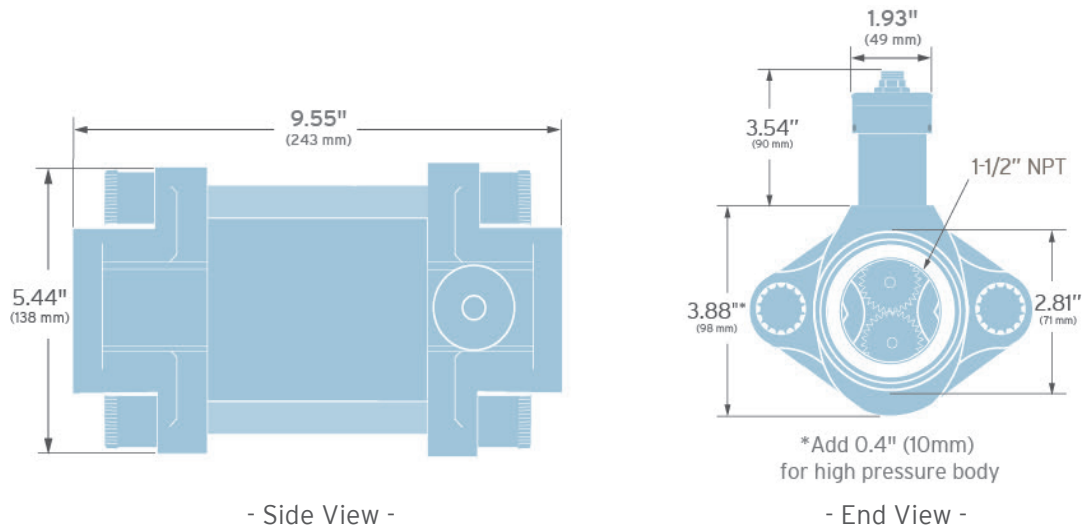
MATERIALS OF CONSTRUCTION

Body	Stainless steel, type 303
Rotors	Stainless steel, type 303
Bearings	All ball bearings, 440C stainless steel
O Rings	Viton®- standard, Teflon® or Perfluoroelastomer - optional



Model H241 Flow Meter

CONNECTIVITY/DIMENSIONS



TRANSMITTER OPTIONS



Ex Proof Housing

Linearized Frequency*

Output Signal: 5V

Output Resolution: 1000 pulses/rev

Temperature rating: 90° or 225°C (220 or 435°F)

Linearized Analog*

Output Signal: ± 20mA or ± 10V

Output Resolution: 16 bit

Temperature rating: 105 or 225°C (220 or 435°F)



Industrial Housing

*CE Certified, Ex-proof version available with ATEX/IECEx II 2 G Ex db IIB Tx Gb as well as UL, cUL certification for Class 1, Division 1, Groups C and D, Tx



Max Machinery, Inc.
an ISO 9001:2008 certified company

Positive Displacement Flow Meters

Helical Rotor Type, H Series

Flow Meter Selections				Transmitter Selections			
Model #				/ / 0 - <input type="checkbox"/> Non-standard options			
				Bi-directional cal: BID			
				0 Transmitter Type			
Max Flow Range				Output Type			
189 Liters/min	H241	LS	1	A	A	4-20mA output - powered by 24Vdc	
189 Liters/min	H241	MS	5	A	B	4-20mA output - powered by 12Vdc	
500 Liters/min	H242	LS	1	A	C	0-10Volt output - powered by 24Vdc	
500 Liters/min	H242	MS	5	A	D	0-10Volt output - powered by 12Vdc	
				P	N	5V Pulse/Quad - powered by 5-26Vdc	
				Q	N	5V Quadrature - powered by 5-26Vdc	
				P	S	Current Sinking, single phase	
Pressure				Temperature Rating			
500 psi (35 bar)	LS			1	1	90°C	
3500 psi (245 bar)	MS			2	2	130°C - 2 part, Ex-Proof **	
Includes Flange Bolt Kit (see below)				1	3	225° C - 2 part Industrial †	
Fluid Connection				Electrical Connection			
NPT 1				1	Turck® connector		
Wafer-mounted between customer's flanges 5				2	Hazardous location *		
Seal Selection				Signal Type			
Viton® - FKM 1				P	Pulse		
Teflon® - PTFE 3				A	Analog		
Perfluoroelastomer - FFKM 5				Q	Quadrature		
Options				Flange Bolt Kit Details			
None NA				Model H241 bolts	3500 psi bolt kit for 2500 lb. ANSI Flanges		
Heat trace option HT				Model H242 bolts	3500 psi bolt kit for 1500 lb. ANSI flanges		

Calibration

Price includes unidirectional calibration

* See temp chart

** Receiver portion of 2 part transmitters are not rated Ex-Proof, consult factory

† Not available for hazardous location use. (Exceeds 130°C temp. limit.)

SAMPLE

CERTIFICATE OF CALIBRATION

Certificate #: 90049

Keep for your records.

Customer: Sample Customer
123 Any Street
Any Town, CA 12345
United States

Laboratory Location: Max Machinery, Inc
33A Healdsburg Ave
Healdsburg, CA 95448
707-433-2662

Type of Device: Flow Meter
Manufacturer: Max Machinery, Inc.
Model Number: H241LS11NA/P11N/0
Serial Number: D12345

Calibration Fluid: Hydra Oil
Fluid Viscosity: 30 cps
Fluid Specific Gravity: 0.85 g/mL
Fluid Temp: 21°C +/- 1°C

Date of Calibration: 7/1/2015
Sales Order: SAMPLE
Procedure Used: LA-P-412
Performed By: JDO

Output Units: Pulses/L
Flow Units: L/min
K-Factor: 15000

Calibration Notes: This document reflects the new linear calibration.
The new condition was found to be in tolerance.

Calibration Data

Flow Rate L/min	Output		Error % reading	Flow Rate L/min	Output		Error % reading
	Pulses/L	Frequency Hz			Pulses/L	Frequency Hz	
180.00	15002	45006.000	0.01%				
100.00	15002	25003.330	0.01%				
60.00	15001	15001.000	0.01%				
20.00	15002	5000.667	0.01%				
10.00	15000	2500.000	0.00%				
5.00	14994	1249.500	-0.04%				
2.00	14999	499.967	-0.01%				

Equipment Used in the Calibration:

Calibration ID:	Description:	Serial Number:	Cal Due Date:	Certificate Number:
41201	Built in reference meter	B407001	8/31/2015	41200083112
41202	Built in reference meter	B407007	8/31/2015	41201083112
41203	Temperature controller	7084	11/12/2015	41203111214
41206	Multifunction DAQ	15CD165	11/26/2015	41206112614
41207	Counter/timer	165894	11/26/2015	41207112614

QC Approval:

Jane Doe 7/1/2015
Jane Doe
Quality Manager

Calibration Technician

John Doe 7/1/2015
John Doe
Lab Technician

This calibration was conducted using standards traceable to NIST.
Measurement uncertainty of the #412 test stand is +/- 0.113% of reading with a 95% confidence (k=2 coverage factor).
Calculations are available upon request.

This Certificate shall not be reproduced, except in full, without written approval by Max Machinery, Inc.