

Model H242 Helix Flow Meter 1 liter/min to 500 liters/min

SPECIFICATIONS

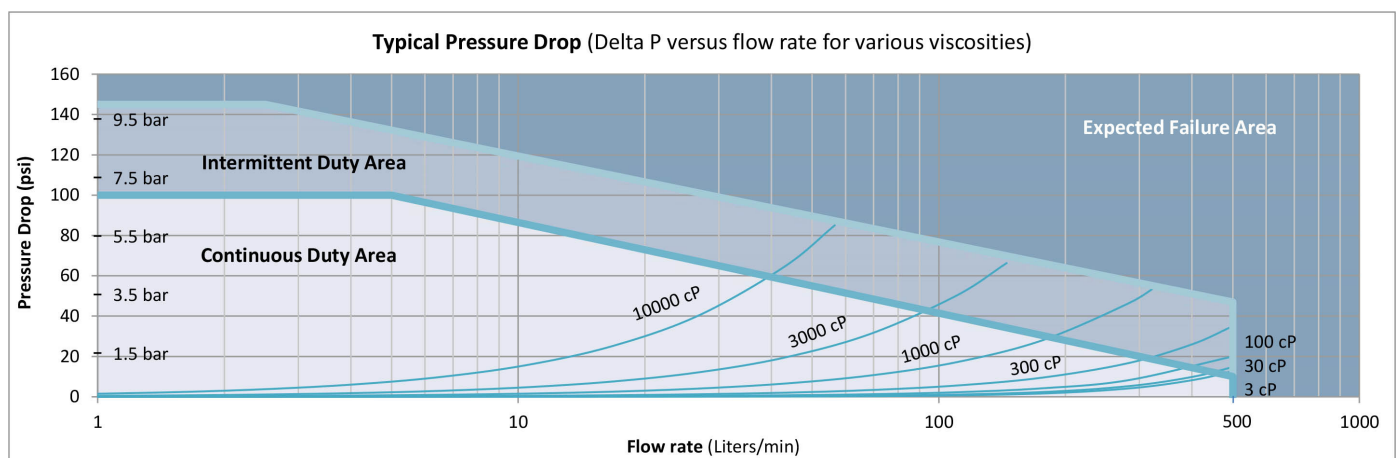
Flow Range	1 liter/min to 500 liters/min
Accuracy (at 30 cP)	±0.2% of reading over a 50:1 range ±0.5% of reading with a non-linearized transmitter
Maximum Operating Pressure	35 or 240 bar (500, 3500 psi)
Displacement	0.182 liters/rev
Weight	18.5 kg
Recommended Filtration	150 micron
Port Size(s)	2 1/2" NPT or 2 1/2" (DN 65) customer supplied ANSI RF flanges
Fluids	Most non-aqueous, organic liquids
Heat Trace	Heat traceable bodies available



Model H242

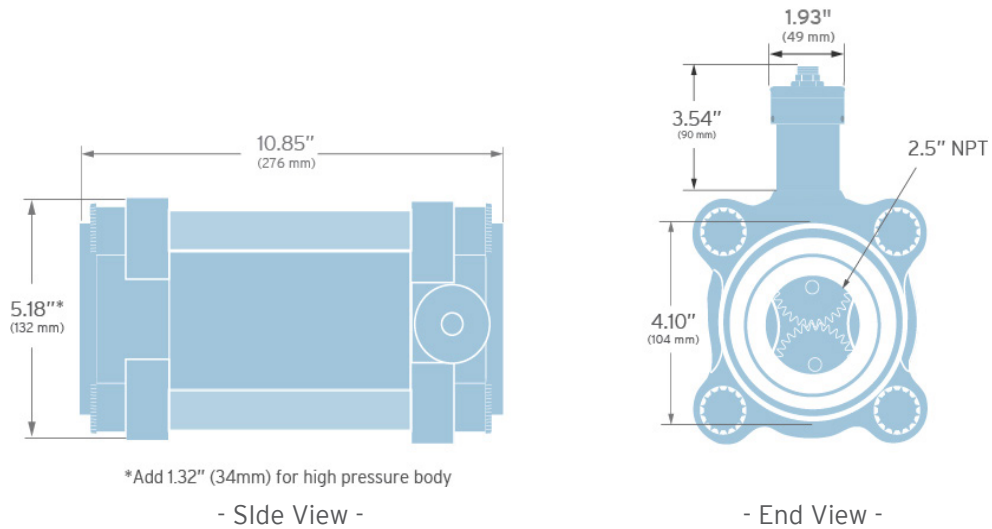
MATERIALS OF CONSTRUCTION

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



Model H242 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				Non-standard options	
Model #								0	
								0	Bi-directional cal: BID
								0	Transmitter Type
									Output Type
Max Flow Range									
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
									Temperature Rating
Pressure									
500 psi (35 bar)	LS							1	90°C
3500 psi (245 bar)	MS							2	130°C - 2 part, Ex-Proof **
Includes Flange Bolt Kit (see below)								1	225° C - 2 part Industrial †
									Electrical Connection
Fluid Connection									
NPT								1	Turck® connector
Wafer-mounted between customer's flanges								2	Hazardous location *
									Signal Type
Seal Selection									
Viton® - FKM								P	Pulse
Teflon® - PTFE								A	Analog
Perfluoroelastomer - FFKM								Q	Quadrature
									Flange Bolt Kit Details
Options									
None									Model H241 bolts
Heat trace option									3500 psi bolt kit for 2500 lb. ANSI Flanges
									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 #: 90824

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: H242LS11NA/P11N/0
Serial Number: D41594

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

Date of Calibration: 11/20/2015
Sales Order: SAMPLE
Procedure Used: LA-P-412
Performed By: JDO

Output Units: Pulses/L
Flow Units: L/min
K-Factor: 5000

Calibration Notes: This document reflects the as received/as left linear calibration.
The as received/as left condition was found to be in tolerance.

Calibration Data

Flow Rate L/min	Output Pulses/L	Frequency Hz	Error % reading	Flow Rate L/min	Output Pulses/L	Frequency Hz	Error % reading
540.62	4999	45042.660	-0.02%				
300.33	4998	25017.490	-0.04%				
101.32	5000	8443.333	0.00%				
60.54	5000	5045.000	0.00%				
30.42	4999	2534.493	-0.02%				
10.06	5000	838.333	0.00%				
5.07	5001	422.585	0.02%				

Equipment Used in the Calibration:

Calibration ID:	Description:	Serial Number:	Cal Due Date:	Certificate Number:
41201	Built in reference meter	B407001	8/31/2017	41200091715
41202	Built in reference meter	B407007	8/31/2017	41201091715
41203	Temperature controller	7084	11/10/2016	41203111015
41206	Multifunction DAQ	15CD165	11/26/2015	41206112614
41207	Counter/timer	165894	11/26/2015	41207112614

QC Approval:

Jane Doe
Jane Doe
Quality Manager
11/20/2015

Calibration Technician

John Doe
John Doe
Lab Technician
11/20/2015

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.