

# MX09 – 1/4" DIGITAL FLOW METERS

SUITABLE FOR FLOW RANGE 4-132 GPH



**MX09P-1SE**  
Stainless steel body with LCD register

Output variations:



**B - Ex approved (Ex ia)**  
Intrinsically Safe - NPN

**N - Ex approved (Ex ia)**  
Intrinsically Safe - NAMUR

**T - High Temp. Pulse**  
Max temp- 150°C



**F - ER**  
LCD Display (17mm)

**G- ERA**  
LCD Display (17mm)

**H- ERB**  
LCD Display (17mm)  
Batch controller



**D - PR**  
LCD Display (12mm)

**E - PRA**  
LCD Display (12mm)  
with outputs



**A - Standard Pulse**  
Reel/Hall Effect

**I - Standard Pulse**  
Reel/Reed Effect

**J - Standard Pulse**  
Hall/Hall Effect

**K - High Resolution**  
Hall NPN

The MX09 1/4" Digital Flow Meters are suitable for flows between 4-132 GPH. The 1/4" Digital Flow Meters have an accuracy of +/- 0.5% and provides exceptional levels of reliability and durability.

## SPECIFICATIONS

	MX09F		MX09S		MX09P	
<b>Materials of Construction</b>						
Meter Body	Aluminium (6061)		Aluminium (6061)		Stainless Steel (316)	
Rotor	PPS		Stainless Steel (316)		PPS Stainless Steel (316)	
Seals	Fluorocarbon (FKM)		PTFE encapsulated (FEP)		PTFE encapsulated (FEP)	
<b>Design Specifications</b>						
Process Connections	<b>Threaded</b> 1/4" G 1/4" NPT		<b>Threaded</b> 1/4" G 1/4" NPT		<b>Threaded</b> 1/4" G 1/4" NPT	
<b>Technical Specifications</b>						
Flow rate	<b>&lt;5cP</b> 25-500L/hr 6.6-132USG/hr	<b>&gt;5cP</b> 15-500L/hr 4-132USG/hr	<b>&lt;5cP</b> 25-500L/hr 6.6-132USG/hr	<b>&gt;5cP</b> 15-500L/hr 4-132USG/hr	<b>&lt;5cP</b> 25-500L/hr 6.6-132USG/hr	<b>&gt;5cP</b> 15-500L/hr 4-132USG/hr
Operating Temperature Range*	-40 - 80°C -40 - 176°F		-40 - 120°C -40 - 248°F		-40 - 80°C (150°C with high temp. rotors) -40 - 176°F (302°F with high temp. rotors)	
Max. Operating Pressure	1000psi 69bar		1000psi 69bar		1000psi 69bar	
Accuracy	+/- 0.5%		+/- 0.5%		+/- 0.5%	
Repeatability	+/- 0.03%		+/- 0.03%		+/- 0.03%	
Nominal K-Factor	1,514.16 Pulses/Gallon		1,514.16 Pulses/Gallon		1,514.16 Pulses/Gallon	

\*Temperature based on standard pulse output - subject to change dependant on rotor and output type, contact Macnaught technical support for further investigations

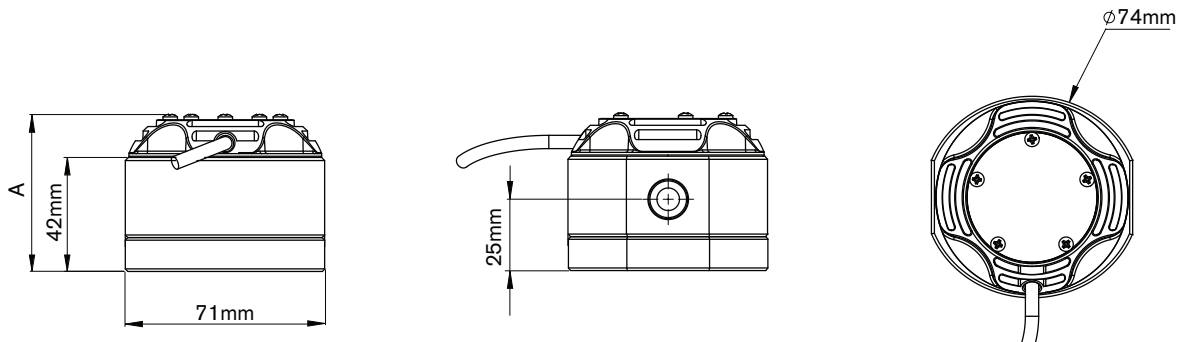
## OUTPUT TYPES

	DESCRIPTION	SWITCH TYPE	OUTPUT TYPE	MX09F	MX09S	MX09P
<b>X</b>	No Output	-	No Output	●	●	●
<b>A</b>	Standard Pulse	Reed /Hall (NPN)	Pulse (1m flying lead)	●	●	●
<b>B</b>	Ex approved (Ex ia)	Hall (NPN)	Pulse (2m DIN cable)	—	●	●
<b>D</b>	PR (LCD 12mm display)	-	Display 12mm	●	●	●
<b>E</b>	PRA (LCD 12mm display)	-	Display 12mm, 4-20mA output, Pulse	●	●	●
<b>F</b>	ER (LCD 17mm display)	-	Display 17mm	●	●	●
<b>G</b>	ERA (LCD 17mm display)	-	Display 17mm, 4-20mA output, Pulse	●	●	●
<b>H</b>	ERB (LCD 17mm display)	-	Display 17mm + Batch Control	●	●	●
<b>N</b>	Ex Approved (Ex ia NAMUR)	NAMUR	Pulse (2m DIN cable)	—	●	●
<b>T</b>	High Temp. Pulseerature	Hall (NPN)	Pulse	✗	S	S
<b>I</b>	Reed/Reed	Reed/Reed	Pulse (1m flying lead)	—	—	—
<b>J</b>	Hall/Hall	Hall/Hall	Pulse (1m flying lead)	—	—	—
<b>K</b>	High Resolution (omnipolar)	Hall (NPN)	Pulse (1m flying lead)	—	—	—

● Available   ✗ Not Available   S Only with stainless steel rotors   — Consult Macnaught Technical regarding availability

MX-SERIES FLOW METERS

## DIMENSIONS



PULSER AND DISPLAY HEIGHT - A

OUTPUT A      OUTPUT B      OUTPUT N      OUTPUT T      OUTPUT D,E      OUTPUT F,G,H  
PULSER - Standard    PULSER - Exia    PULSER - Exia    PULSER - High Temp.    DISPLAY - LCD 12mm    DISPLAY - LCD 17mm

