

# MX 09 – ¼” DIGITAL FLOW METERS

SUITABLE FOR FLOW RANGE 15–500L/HR



**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 Temperature**  
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 ¼” Digital Flow Meters are suitable for flows between 15–500L/hr. The ¼” 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> ¼” G ¼”NPT	<b>Threaded</b> ¼” G ¼”NPT	<b>Threaded</b> ¼” G ¼”NPT
<b>Technical Specifications</b>			
Flow rate	<5cP 25–500L/hr 6.6–132USG/hr	>5cP 15–500L/hr 4–132USG/hr	<5cP 25–500L/hr 6.6–132USG/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	400 Pulses/L	400 Pulses/L	400 Pulses/L

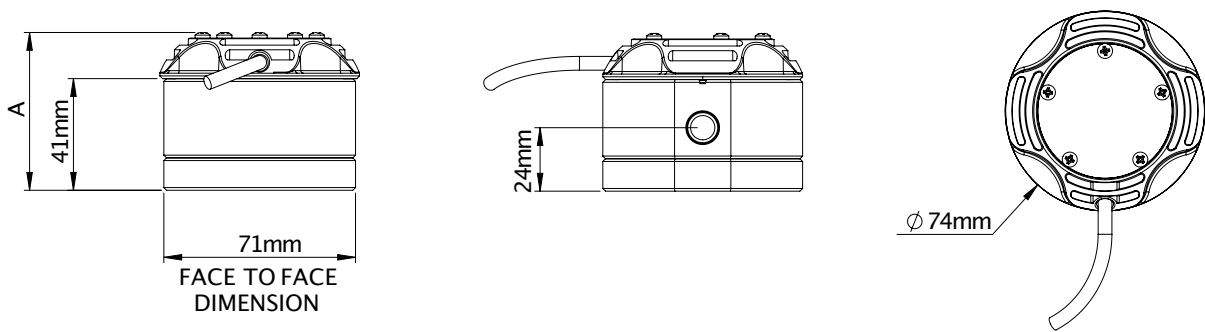
\*Temperature based on standard pulse output –subject to change dependant on rotor and output type, contact Macnaught technical support for further investigations

## OUTPUTS TYPES

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

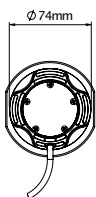
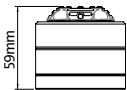
● Available   ✘ Not Available   S Only with stainless steel rotors   — Consult Macnaught Technical regarding availability

## DIMENSIONS

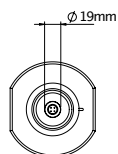
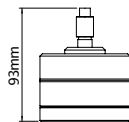


### PULSER AND DISPLAY HEIGHT -A

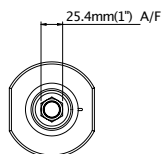
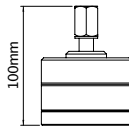
OUTPUT A, I, J, K  
PULSER -Standard



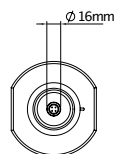
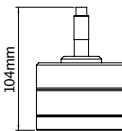
OUTPUT B  
PULSER -Exia



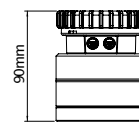
OUTPUT N  
PULSER -Exia



OUTPUT T  
PULSER -High Temp.



OUTPUT D,E  
DISPLAY -LCD 12mm



OUTPUT F,G,H  
DISPLAY -LCD 17mm

