

# STANDARD PULSER CAP, Model: MXD-AS



MXD-AS provides pulse output from 1 x Reed switch and 1 x Hall Effect sensors.



Construction	MXD-AS
Material	Polypropylene
Housing Type	Standard
IP rating	IP67
Mounting	Meter Mounted (MX only)
Cable Length <sup>1</sup>	1 meter (non-removable)
Cable Termination	Stripped Leads (crimped with Boot lace pins)

<sup>1</sup>Extended cable may be available, contact Macnaught

Technical Specifications	MXD-AS
Signal outputs	<p>Reed switch (2-wire)                      Maximum voltage: 30 VDC                      Maximum current: 500mA                      Maximum power: 10 Watt</p> <p>Hall effect sensor (3-wire)                      Type: Open collector - NPN                      Operating voltage: 4.5 to 24 VDC                      Maximum supply current: 7.5 mA                      Maximum output current: 25 mA</p>
Temperature <sup>2</sup>	-40°C to 120°C -40°F to 248°F
Ex Approvals	No

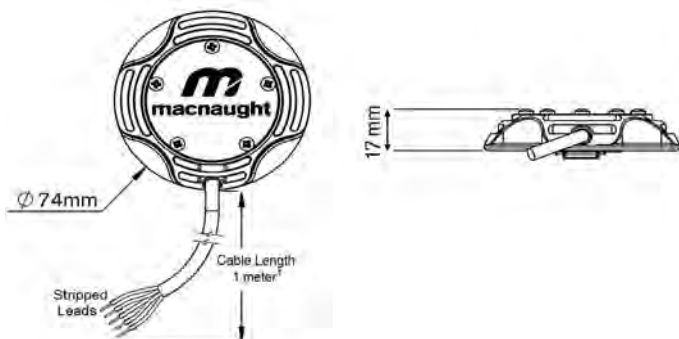
<sup>2</sup>Refer to flow meter's specifications for overall temperature range.

## Application:

MXD-AS can be mounted on MX blind flow meters. It generates non-scalable pulse output from 1 x Reed switch and 1 x Hall Effect sensors.



## Dimensions



Packaging	MXD-AS
Weight (kg)	0.5 kg
Dimensions (mm) L x W x H	220 x 240 x 40

Service Kits	MXD-AS
	PCB Board: MXS-PCB-RH



## STANDARD PULSER CAP, Model: MXD-IS

MXD-IS provides pulse output from 2 x Reed switches.



Construction	MXD-IS
Material	Polypropylene
Housing Type	Standard
IP rating	IP67
Mounting	Meter Mounted (MX only)
Cable Length <sup>1</sup>	1 meter (non-removable)
Cable Termination	Stripped Leads (crimped with Boot lace pins)

<sup>1</sup>Extended cable may be available, contact Macnaught

Technical Specifications	MXD-IS
Signal outputs	Reed switch (2-wire) Maximum voltage: 30 VDC Maximum current: 500mA Maximum power: 10 Watt
Temperature <sup>2</sup>	-40°C to 120°C -40°F to 248°F
Ex Approvals	No

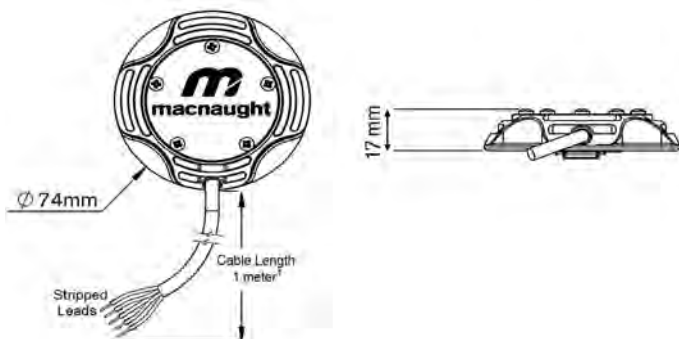
<sup>2</sup>Refer to flow meter's specifications for overall temperature range.

### Application:

MXD-IS can be mounted on MX blind flow meters. It generates non-scalable pulse output from 2 x Reed switches.



### Dimensions



Packaging	MXD-IS
Weight (kg)	0.5 kg
Dimensions (mm) L x W x H	220 x 240 x 40

Service Kits	MXD-IS
	PCB Board: MXS-PCB-RR

## STANDARD PULSER CAP, Model: MXD-JS



MXD-JS provides pulse output from 2 x Hall Effect sensors.



Technical Specifications	MXD-JS
Signal outputs	Hall effect sensor (3-wire) Type: Open collector - NPN Operating voltage: 4.5 to 24 VDC Maximum supply current: 7.5 mA Maximum output current: 25 mA
Temperature <sup>2</sup>	-40°C to 120°C -40°F to 248°F
Ex Approvals	No

Construction	MXD-JS
Material	Polypropylene
Housing Type	Standard
IP rating	IP67
Mounting	Meter Mounted (MX only)
Cable Length <sup>1</sup>	1 meter (non-removable)
Cable Termination	Stripped Leads (crimped with Boot lace pins)

<sup>1</sup>Extended cable may be available, contact Macnaught

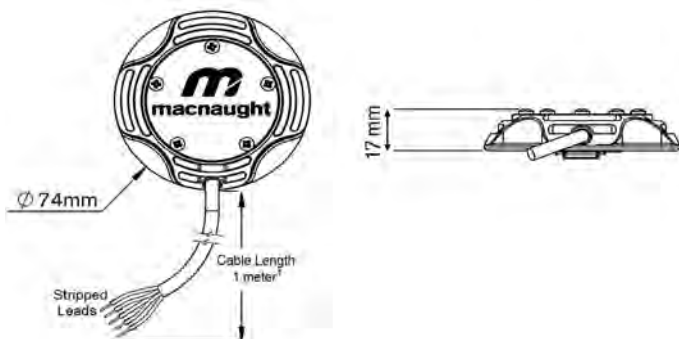
<sup>2</sup>Refer to flow meter's specifications for overall temperature range.

### Application:

MXD-JS can be mounted on MX blind flow meters. It generates non-scalable pulse output from 2 x Hall Effect sensors.



### Dimensions



Packaging	MXD-JS
Weight (kg)	0.5 kg
Dimensions (mm) L x W x H	220 x 240 x 40

Service Kits	MXD-JS
	PCB Board: MXS-PCB-HH

## INDUSTRIAL PULSER CAP, Model: MXD-ACM-RH



Industrial pulse caps are machined from solid billet and designed to offer ultimate mechanical protection in those applications where harsh operating conditions are to be expected.

With IP67 rating, the cable gland entry port enable the installation of 'armoured conduit' to provide further protection to signal cables.

MXD-ACM-RH provides pulse output from 1 x Reed switch and 1 x Hall Effect sensors.



Technical Specifications	MXD-ACM-RH
<b>Signal outputs</b>	<p><u>Reed switch</u> (2-wire)                      Maximum voltage: 30 VDC                      Maximum current: 500mA                      Maximum power: 10 Watt</p> <p><u>Hall effect sensor</u> (3-wire)                      Type: Open collector - NPN                      Operating voltage: 4.5 to 24 VDC                      Maximum supply current: 7.5 mA                      Maximum output current: 25 mA</p>
<b>Temperature<sup>1</sup></b>	-25°C to 120°C -13°F to 248°F
<b>Ex Approvals</b>	No

<sup>1</sup>Refer to flow meter's specifications for overall temperature range.

Construction	MXD-ACM-RH
<b>Material</b>	Aluminium 6061
<b>Housing Type</b>	Industrial
<b>IP rating</b>	IP67
<b>Mounting</b>	Meter Mounted (MX only)
<b>Cable Termination</b>	Terminal Block, mounted on PCB
<b>Conduit Size</b>	M20 x 1.5

### Application:

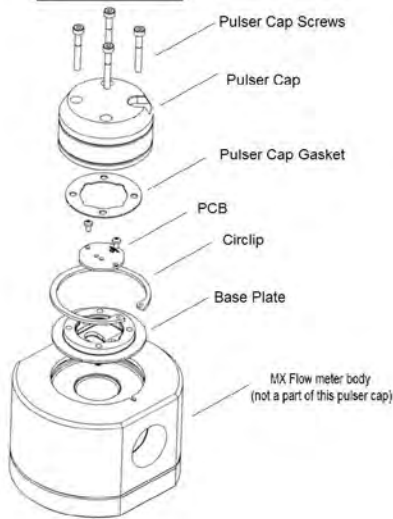
MXD-ACM-RH can be mounted on MX flow meters. It generates non-scalable pulse output from 1 x Reed switch and 1 x Hall Effect sensors.



**AFTER INSTALLATION**



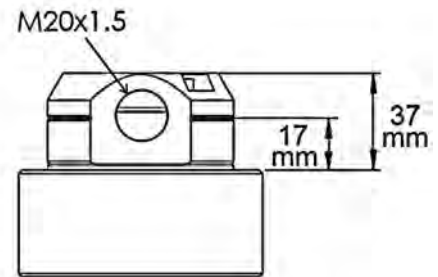
**EXPLODED VIEW**



<b>Service Kits</b>	<b>MXD-ACM-RH</b>
	PCB Board: MXS-PCB-RH

<b>Packaging</b>	<b>MXD-ACM-RH</b>
<b>Weight (kg)</b>	0.5 kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 120

**Dimensions**



Ordering Code					
<b>MXD</b>	<b>MX Series Cap</b>				
	<b>-</b>	<b>Separator</b>			
		<b>A</b>	Housing Material: Aluminium 6061		
		<b>S</b>	Housing Material: Stainless Steel 316		
			<b>CM</b>	Conduit size: M20 x 1.5	
			<b>CN</b>	Conduit size: 1/2" NPT	
			<b>-</b>	<b>Separator</b>	
				<b>RH</b>	1 x Reed and 1 x Hall Effect sensors
				<b>RR</b>	2 x Reed sensors
				<b>HH</b>	2 x Hall Effect sensors
<b>MXD</b>	<b>-</b>	<b>S</b>	<b>CM</b>	<b>-</b>	<b>RH</b>

Example Part Number: MXD-SCM-RH

## INDUSTRIAL PULSER CAP, Model: MXD-ACN-RH



Industrial pulse caps are machined from solid billet and designed to offer ultimate mechanical protection in those applications where harsh operating conditions are to be expected.

With IP67 rating, the cable gland entry port enable the installation of 'armoured conduit' to provide further protection to signal cables.

MXD-ACN-RH provides pulse output from 1 x Reed switch and 1 x Hall Effect sensors.



Technical Specifications	MXD-ACN-RH
<b>Signal outputs</b>	<p><u>Reed switch</u> (2-wire)                      Maximum voltage: 30 VDC                      Maximum current: 500mA                      Maximum power: 10 Watt</p> <p><u>Hall effect sensor</u> (3-wire)                      Type: Open collector - NPN                      Operating voltage: 4.5 to 24 VDC                      Maximum supply current: 7.5 mA                      Maximum output current: 25 mA</p>
<b>Temperature<sup>1</sup></b>	-25°C to 120°C -13°F to 248°F
<b>Ex Approvals</b>	No

<sup>1</sup>Refer to flow meter's specifications for overall temperature range.

Construction	MXD-ACN-RH
<b>Material</b>	Aluminium 6061
<b>Housing Type</b>	Industrial
<b>IP rating</b>	IP67
<b>Mounting</b>	Meter Mounted (MX only)
<b>Cable Termination</b>	Terminal Block, mounted on PCB
<b>Conduit Size</b>	1/2" NPT

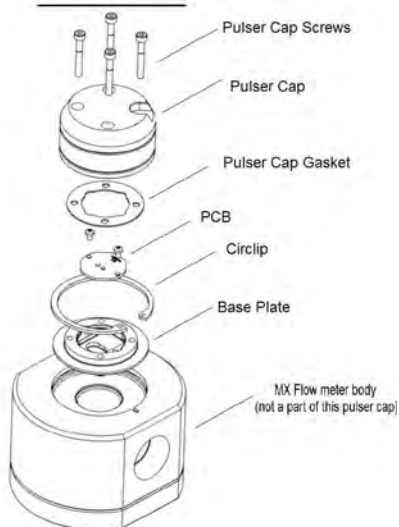
### Application:

MXD-ACN-RH can be mounted on MX flow meters. It generates non-scalable pulse output from 1 x Reed switch and 1 x Hall Effect sensors.

**AFTER INSTALLATION**

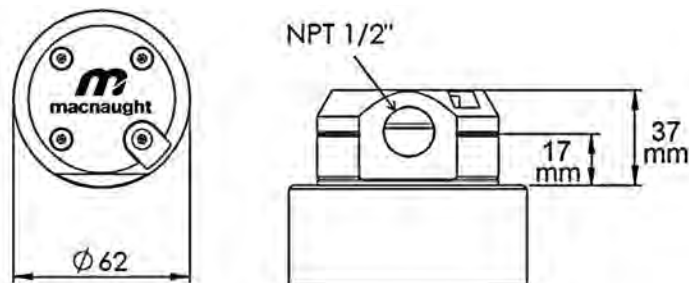


**EXPLODED VIEW**



<b>Service Kits</b>	<b>MXD-ACN-RH</b>
	PCB Board: MXS-PCB-RH
<b>Packaging</b>	<b>MXD-ACN-RH</b>
<b>Weight (kg)</b>	0.5 Kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 120

**Dimensions**



Ordering Code					
<b>MXD</b>	<b>MX Series Cap</b>				
	<b>-</b>	<b>Separator</b>			
		<b>A</b>	Housing Material: Aluminium 6061		
		<b>S</b>	Housing Material: Stainless Steel 316		
			<b>CM</b>	Conduit size: M20 x 1.5	
			<b>CN</b>	Conduit size: 1/2" NPT	
			<b>-</b>	<b>Separator</b>	
				<b>RH</b>	1 x Reed and 1 x Hall Effect sensors
				<b>RR</b>	2 x Reed sensors
				<b>HH</b>	2 x Hall Effect sensors
<b>MXD</b>	<b>-</b>	<b>S</b>	<b>CM</b>	<b>-</b>	<b>RH</b>

Example Part Number: MXD-SCM-RH

## INDUSTRIAL PULSER CAP, Model: MXD-SCM-RH



Industrial pulse caps are machined from solid billet and designed to offer ultimate mechanical protection in those applications where harsh operating conditions are to be expected.

With IP67 rating, the cable gland entry port enable the installation of 'armoured conduit' to provide further protection to signal cables.

MXD-SCM-RH provides pulse output from 1 x Reed switch and 1 x Hall Effect sensors.



Technical Specifications	MXD-SCM-RH
<b>Signal outputs</b>	<p><u>Reed switch</u> (2-wire)            Maximum voltage: 30 VDC            Maximum current: 500mA            Maximum power: 10 Watt</p> <p><u>Hall effect sensor</u> (3-wire)            Type: Open collector - NPN            Operating voltage: 4.5 to 24 VDC            Maximum supply current: 7.5 mA            Maximum output current: 25 mA</p>
<b>Temperature<sup>1</sup></b>	-25°C to 120°C -13°F to 248°F
<b>Ex Approvals</b>	No

<sup>1</sup>Refer to flow meter's specifications for overall temperature range.

Construction	MXD-SCM-RH
<b>Material</b>	Stainless Steel 316
<b>Housing Type</b>	Industrial
<b>IP rating</b>	IP67
<b>Mounting</b>	Meter Mounted (MX only)
<b>Cable Termination</b>	Terminal Block, mounted on PCB
<b>Conduit Size</b>	M20 x 1.5

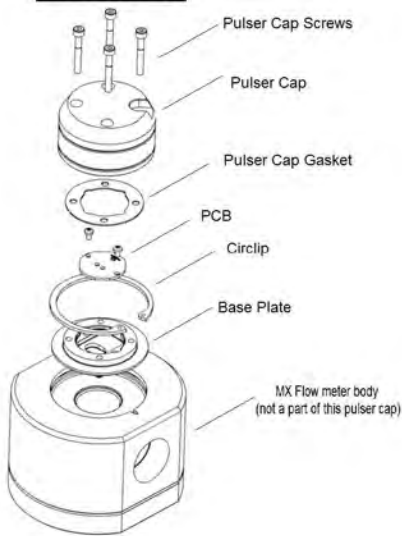
### Application:

MXD-SCM-RH can be mounted on MX flow meters. It generates non-scalable pulse output from 1 x Reed switch and 1 x Hall Effect sensors.

**AFTER INSTALLATION**



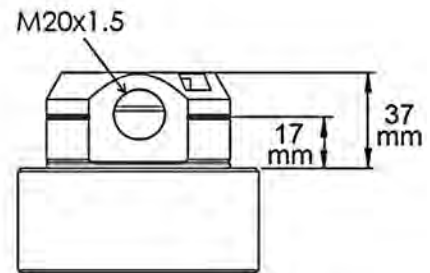
**EXPLODED VIEW**



<b>Service Kits</b>	<b>MXD-SCM-RH</b>
	PCB Board: MXS-PCB-RH

<b>Packaging</b>	<b>MXD-SCM-RH</b>
<b>Weight (kg)</b>	1 kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 120

**Dimensions**



Ordering Code					
<b>MXD</b>	MX Series Cap				
	-	Separator			
		<b>A</b>	Housing Material: Aluminium 6061		
		<b>S</b>	Housing Material: Stainless Steel 316		
			<b>CM</b>	Conduit size: M20 x 1.5	
			<b>CN</b>	Conduit size: 1/2" NPT	
			-	Separator	
				<b>RH</b>	1 x Reed and 1 x Hall Effect sensors
				<b>RR</b>	2 x Reed sensors
				<b>HH</b>	2 x Hall Effect sensors
<b>MXD</b>	-	<b>S</b>	<b>CM</b>	-	<b>RH</b>

Example Part Number: MXD-SCM-RH



## INDUSTRIAL PULSER CAP, Model: MXD-SCN-RH



Industrial pulse caps are machined from solid billet and designed to offer ultimate mechanical protection in those applications where harsh operating conditions are to be expected.

With IP67 rating, the cable gland entry port enable the installation of 'armoured conduit' to provide further protection to signal cables.

MXD-SCN-RH provides pulse output from 1 x Reed switch and 1 x Hall Effect sensors.



Technical Specifications	MXD-SCN-RH
<b>Signal outputs</b>	<p><u>Reed switch</u> (2-wire) Maximum voltage: 30 VDC Maximum current: 500mA Maximum power: 10 Watt</p> <p><u>Hall effect sensor</u> (3-wire) Type: Open collector - NPN Operating voltage: 4.5 to 24 VDC Maximum supply current: 7.5 mA Maximum output current: 25 mA</p>
<b>Temperature<sup>1</sup></b>	-25°C to 120°C -13°F to 248°F
<b>Ex Approvals</b>	No

<sup>1</sup>Refer to flow meter's specifications for overall temperature range.

Construction	MXD-SCN-RH
<b>Material</b>	Stainless Steel 316
<b>Housing Type</b>	Industrial
<b>IP rating</b>	IP67
<b>Mounting</b>	Meter Mounted (MX only)
<b>Cable Termination</b>	Terminal Block, mounted on PCB
<b>Conduit Size</b>	1/2" NPT

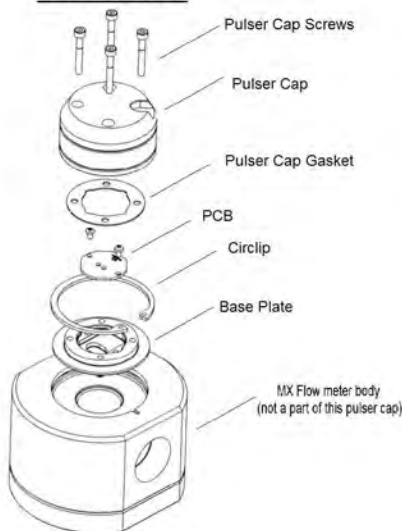
### Application:

MXD-SCN-RH can be mounted on MX flow meters. It generates non-scalable pulse output from 1 x Reed switch and 1 x Hall Effect sensors.

**AFTER INSTALLATION**



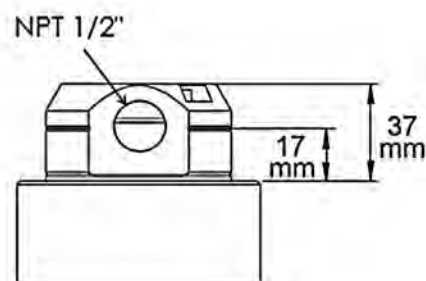
**EXPLODED VIEW**



<b>Service Kits</b>	<b>MXD-SCN-RH</b>
	PCB Board: MXS-PCB-RH

<b>Packaging</b>	<b>MXD-SCN-RH</b>
<b>Weight (kg)</b>	1 Kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 120

**Dimensions**



Ordering Code					
<b>MXD</b>	<b>MX Series Cap</b>				
	<b>-</b>	<b>Separator</b>			
		<b>A</b>	Housing Material: Aluminium 6061		
		<b>S</b>	Housing Material: Stainless Steel 316		
			<b>CM</b>	Conduit size: M20 x 1.5	
			<b>CN</b>	Conduit size: 1/2" NPT	
			<b>-</b>	<b>Separator</b>	
				<b>RH</b>	1 x Reed and 1 x Hall Effect sensors
				<b>RR</b>	2 x Reed sensors
				<b>HH</b>	2 x Hall Effect sensors
<b>MXD</b>	<b>-</b>	<b>S</b>	<b>CM</b>	<b>-</b>	<b>RH</b>

Example Part Number: MXD-SCM-RH

## DIN COMPACT PULSER CAP, Model: MXD-RH



MXD-RH provides pulse output from 1 x Reed switch and 1 x Hall Effect sensors.



**Pulser Module**



**DIN cable  
(sold separately)**

Technical Specifications	MXD-RH
<b>Signal outputs</b>	Reed switch (2-wire) Maximum voltage: 30 VDC Maximum current: 500mA Maximum power: 10 Watt  Hall effect sensor (3-wire) Type: Open collector - NPN Operating voltage: 4.5 to 24 VDC Maximum supply current: 7.5 mA Maximum output current: 25 mA
<b>Temperature<sup>2</sup></b>	-25°C to 80°C -13°F to 176°F
<b>Ex Approvals</b>	No

<sup>2</sup>Refer to flow meter's specifications for overall temperature range.

Construction	MXD-RH
<b>Material</b>	Polypropylene
<b>Housing Type</b>	DIN compact
<b>IP rating</b>	IP67
<b>Mounting</b>	Meter Mounted (MX only)
<b>Cable Length<sup>1</sup></b>	1.5 meters (DIN cable sold separately)
<b>Cable Termination</b>	Stripped Leads (tinned)

<sup>1</sup>Extended cable may be available, contact Macnaught

### Application:

MXD-RH can be mounted on MX flow meters. It generates non-scalable pulse output from 1 x Reed switch and 1 x Hall Effect sensors.

Packaging	MXD-RH
<b>Weight (kg)</b>	0.5 kg
<b>Dimensions (mm) L x W x H</b>	220 x 240 x 40

Service Kits	MXD-RH
	PCB Board: MXS-PCB-RH

## DIN COMPACT PULSER CAP, Model: MXD-RR



MXD-RR provides pulse output from 2 x Reed switches.



**Pulser Module**



**DIN cable  
(sold separately)**

Technical Specifications	MXD-RR
Signal outputs	Reed switch (2-wire) Maximum voltage: 30 VDC Maximum current: 500mA Maximum power: 10 Watt
Temperature <sup>2</sup>	-25°C to 80°C -13°F to 176°F
Ex Approvals	No

<sup>2</sup>Refer to flow meter's specifications for overall temperature range.

### Application:

MXD-RR can be mounted on MX flow meters. It generates non-scalable pulse output from 2 x Reed switches.

Construction	MXD-RR
Material	Polypropylene
Housing Type	DIN compact
IP rating	IP67
Mounting	Meter Mounted (MX only)
Cable Length <sup>1</sup>	1.5 meters (DIN cable sold separately)
Cable Termination	Stripped Leads (tinned)

<sup>1</sup>Extended cable may be available, contact Macnaught

Packaging	MXD-RR
Weight (kg)	0.5 kg
Dimensions (mm) L x W x H	220 x 240 x 40

Service Kits	MXD-RR
	PCB Board: MXS-PCB-RR

## HIGH TEMPERATURE PULSER, Model: MXD-TS



MXD-TS is high temperature rated pulser, provides pulse output from 1 x NPN sensor.



Technical Specifications	MXD-TS
Signal outputs	NPN sensor (3-wire) Operating voltage: 4.5 to 30 VDC Maximum supply current: 18mA
Temperature <sup>2</sup>	-40°C to 150°C -40°F to 302°F
Ex Approvals	No

<sup>2</sup>Refer to flow meter's specifications for overall temperature range.

Construction	MXD-TS
Material	Stainless Steel
Housing Type	Barrel
IP rating	IP54
Mounting	Meter Mounted (MX only)
Cable Length <sup>1</sup>	2 meters
Cable Termination	Stripped Leads (tinned)

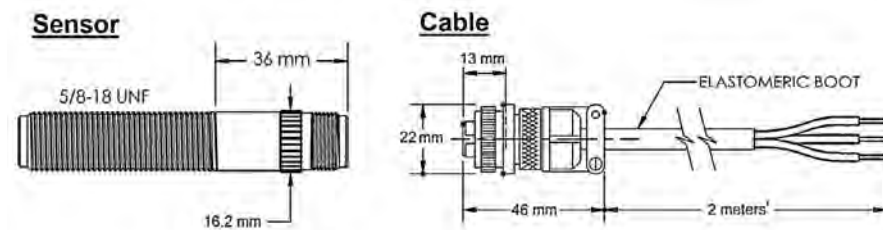
<sup>1</sup>Extended cable may be available, contact Macnaught

### Application:

MXD-TS can be mounted on MX flow meters. It generates non-scalable pulse output from 1 x NPN sensor.



## Dimensions



Service Kits	MXD-TS
	Sensor Socket Kit: MXS-SOCKET

Packaging	MXD-TS
Weight (kg)	0.5 kg
Dimensions (mm) L x W x H	220 x 240 x 40



## DIGITAL DISPLAY, Type: PR, Model: MXD-DS



MXD-DS is a meter mountable digital register with a 12mm LCD display, providing real-time indication of Flow rate, total and accumulated total.



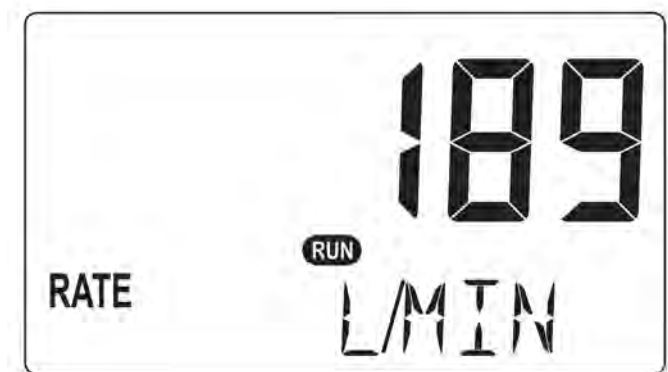
Technical Specifications	MXD-DS
Signal inputs	Reed Switch (can be used with battery)
Signal outputs	None
Power supply	Battery: 3.6 V Lithium External: not available
Temperature <sup>1</sup>	-20°C to 80°C -4°F to 176°F
Backup	EEPROM (Flash memory)
Backlight	No
Ex Approvals	No

Construction	MXD-DS
Material	Polypropylene
IP rating	IP67
Mounting	Meter Mounted (MX only)
Cable Entry	(2) x M12 * 1.5 1 x cable gland included

LC Display	MXD-DS
Digit Size	Upper LCD 7 Digits (12 mm) Lower LCD 7 Digits (8 mm)
Display	Flow Rate (Various units) Totalizer (Resettable) Batch Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)

<sup>1</sup> Refer to flow meter's specifications for overall temperature range

### Display Example



<b>Packaging</b>	<b>MXD-DS</b>
<b>Weight (kg)</b>	0.5 kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 140

<b>Service Kits<sup>2</sup></b>	<b>MXD-DS</b>
<b>Battery</b>	Part number: DR012S

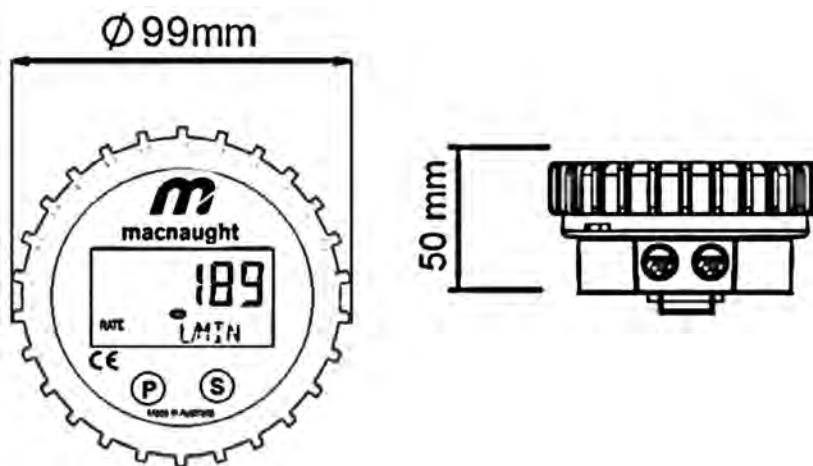
<sup>2</sup> Refer to Instruction Manual or Contact Macnaught for more service kits

### Application:

MXD-DS can be mounted on MX blind flow meters. It shows flow rate and volume on the LC Display.



### Dimensions



## DIGITAL DISPLAY (with outputs), Type: PRA, Model: MXD-ES

MXD-ES is a meter mountable digital register with a 12mm LCD display, providing real-time indication of Flow rate, total and accumulated total. The output include a 4-20mA, programmable pulse output and High & Low flow alarm functions.



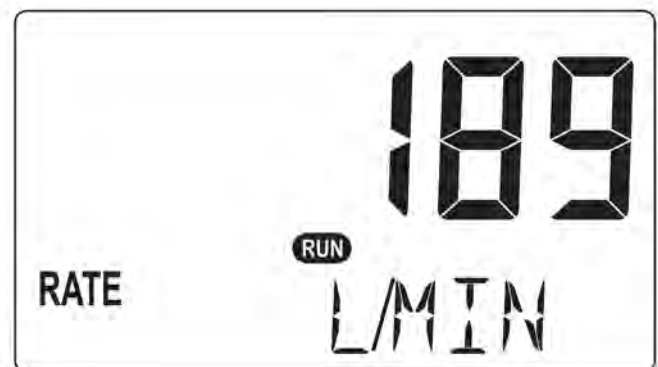
Technical Specifications	MXD-ES
Signal inputs	Reed Switch (can be used with battery)
Signal outputs	4-20mA output (Passive, loop powered) Programmable pulse output (Transistor) High flowrate alarm contact (Transistor) Low flowrate alarm contact (Transistor)
Power supply	Battery: 3.6 V Lithium External: 18 - 30 VDC
Temperature <sup>1</sup>	-20°C to 80°C -4°F to 176°F
Backup	EEPROM (Flash memory)
Backlight	No
Ex Approvals	No

Construction	MXD-ES
Material	Polypropylene
IP rating	IP67
Mounting	Meter Mounted (MX only)
Cable Entry	(2) x M12 * 1.5 1 x cable gland included

LC Display	MXD-ES
Digit Size	Upper LCD 7 Digits (12 mm) Lower LCD 7 Digits (8 mm)
Display	Flow Rate (Various units) Totalizer (Resettable) Batch Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)

<sup>1</sup> Refer to flow meter's specifications for overall temperature range

### Display Example



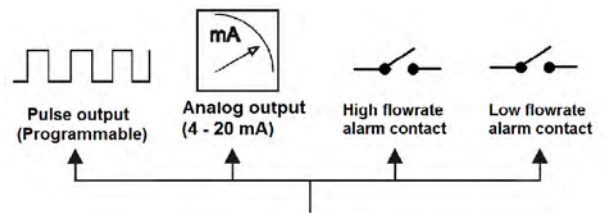
<b>Packaging</b>	<b>MXD-ES</b>
<b>Weight (kg)</b>	0.5 kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 140

<b>Service Kits<sup>2</sup></b>	<b>MXD-ES</b>
<b>Battery</b>	Part number: DR012S

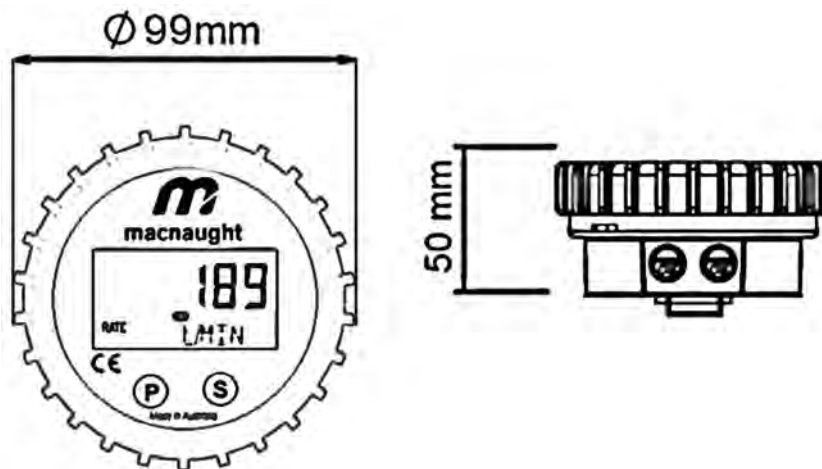
<sup>2</sup> Refer to Instruction Manual or Contact Macnaught for more service kits

### Application:

MXD-ES can be mounted on MX blind flow meters. It shows flow rate and volume on the LC Display. Analog, pulse and alarm options are available as an output.



### Dimensions



## ANALOG OUTPUT, Model: MXD-MS



MXD-MS is a meter mountable unit, transmitting real-time analog signal (4-20mA) for an equivalent Flow rate.



Technical Specifications	MXD-MS
Signal inputs	Reed Switch
Signal outputs	4-20mA output (Passive, loop powered)
Power supply	External: 18 - 30 V DC
Temperature <sup>1</sup>	-20°C to 80°C -4°F to 176°F
Backup	EEPROM (Flash memory)
Backlight	No
Ex Approvals	No

Construction	MXD-MS
Material	Polypropylene
IP rating	IP67
Mounting	Meter Mounted (MX only)
Cable Entry	(2) x M12 * 1.5 1 x cable gland included

LC Display	MXD-MS
Digit Size	Upper LCD 7 Digits (12 mm) Lower LCD 7 Digits (8 mm) (For Programming only)
Display	None

<sup>1</sup> Refer to flow meter's specifications for overall temperature range

### Display Example





Packaging	MXD-MS
Weight (kg)	0.5 kg
Dimensions (mm) L x W x H	340 x 240 x 140

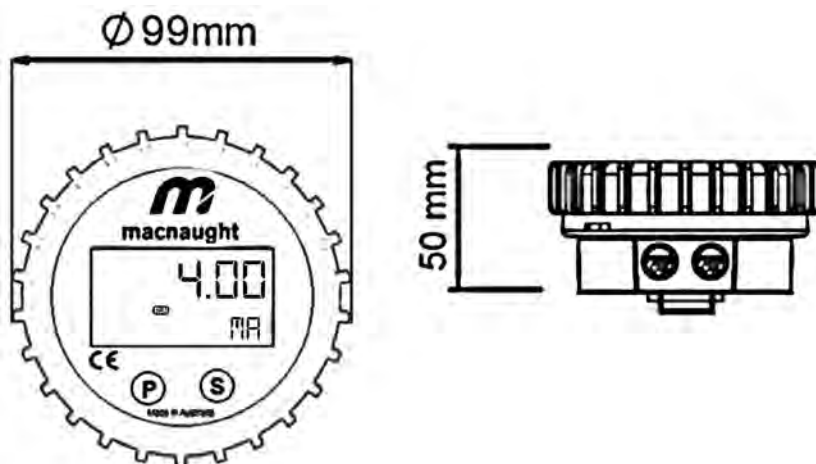
Refer to Instruction Manual or contact Macnaught for service kits

### Application:

MXD-MS can be mounted on MX blind flow meters. It transmits analog signal (in the form of 4-20mA) for an equivalent flow rate.



### Dimensions



## DIGITAL DISPLAY, Model: MXD-GS

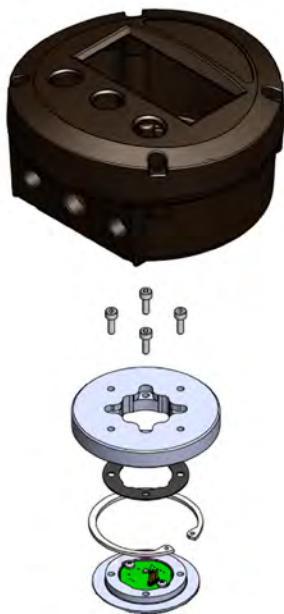


MXD-GS is a meter mountable digital register with a 17mm LCD display, providing real-time indication of flow rate, batch total, accumulated total, scaled pulse and 4-20 mA analogue output.

**FRONT VIEW**



**EXPLODED VIEW**



Technical Specifications	MXD-GS
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power)
<b>Signal outputs</b>	Scaled Pulse, 4-20 mA Output
<b>Power supply</b>	Battery: 3.6 V Lithium External: 16 - 30 VDC
<b>Temperature<sup>1</sup></b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Pass code</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Requires external power)
<b>Approvals</b>	No

<sup>1</sup>Refer to flow meter's specifications for overall temperature range.

LC Display	MXD-GS
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Flow Rate (Various units) Batch Total (Resettable) Accumulated Totalizer (Non-Resettable)

Construction	MXD-GS
<b>Material</b>	Aluminium
<b>IP rating</b>	IP67
<b>Mounting</b>	Fixed - Meter Mounted (MX06 and MX09 only)
<b>Cable Entry</b>	(2) x M16 * 1.5 and (1) x M20 x 1.5

Service Kits <sup>2</sup>	MXD-GS
<b>Battery</b>	Part number: MS493S
<b>Sensor Board</b>	Part number: MXS-PCB-RH
<b>Front fascia (including 3 buttons)</b>	Part number: ER002A-CS

Packaging	MXD-GS
<b>Weight (kg)</b>	2 kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 340

<sup>2</sup>Refer to Instruction Manual or Contact Macnaught for more service kits

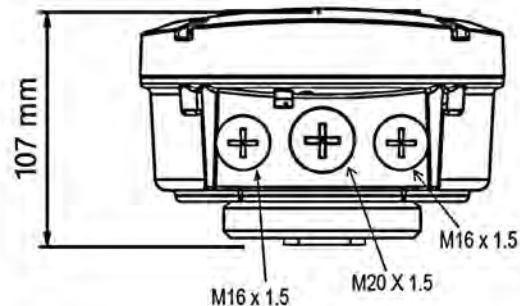
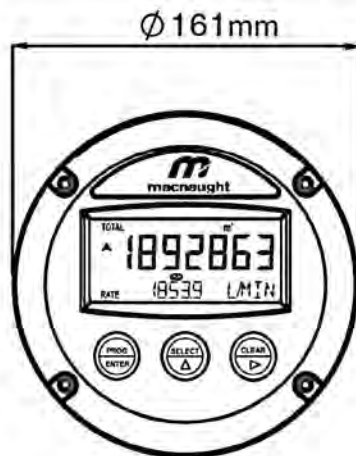
## Display Example



### Application:

MXD-GS can be mounted on 1/4"-4" size MX flow meters. It shows flow rate and volume on the LC Display.

## Dimensions



## DIGITAL DISPLAY, Model: MXD-FS

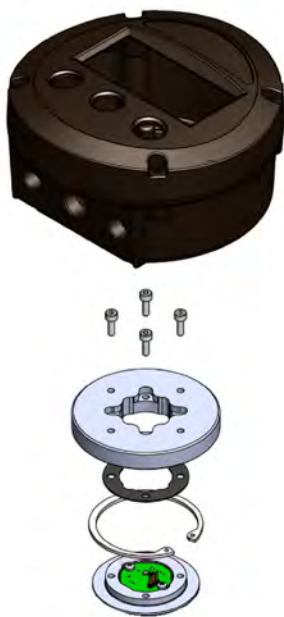


MXD-FS is a meter mountable digital register with a 17mm LCD display, providing real-time indication of flow rate, total and accumulated total.

**FRONT VIEW**



**EXPLODED VIEW**



Technical Specifications	MXD-FS
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power)
<b>Signal outputs</b>	None
<b>Power supply</b>	Battery: 3.6 V Lithium External: 16 - 30 VDC
<b>Temperature<sup>1</sup></b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Pass code</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Requires external power)
<b>Approvals</b>	No

<sup>1</sup>Refer to flow meter's specifications for overall temperature range.

LC Display	MXD-FS
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Flow Rate (Various units) Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)

Construction	MXD-FS
<b>Material</b>	Aluminium
<b>IP rating</b>	IP67
<b>Mounting</b>	Fixed - Meter Mounted (MX06 and MX09 only)
<b>Cable Entry</b>	(2) x M16 * 1.5 and (1) x M20 x 1.5

Service Kits <sup>2</sup>	MXD-FS
<b>Battery</b>	Part number: MS493S
<b>Sensor Board</b>	Part number: MXS-PCB-RH
<b>Front fascia (including 3 buttons)</b>	Part number: ER002A-CS

Packaging	MXD-FS
<b>Weight (kg)</b>	2 kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 340

<sup>2</sup>Refer to Instruction Manual or Contact Macnaught for more service kits

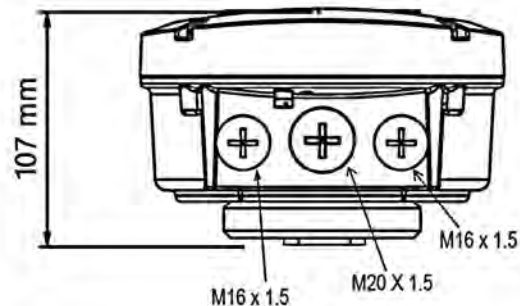
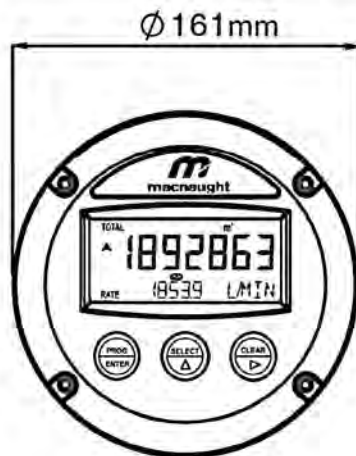
## Display Example



### Application:

MXD-FS can be mounted on 1/4" size MX flow meters. It shows flow rate and volume on the LC Display.

## Dimensions





## DIGITAL DISPLAY, Model: MXD-HS

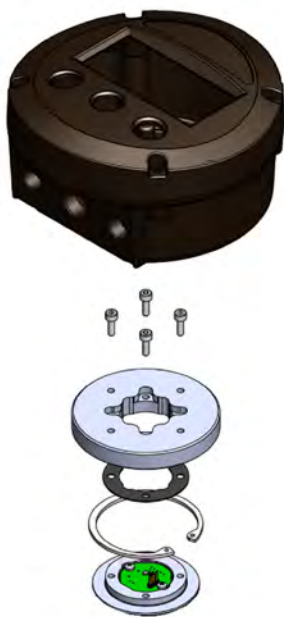


MXD-HS is a meter mountable digital register with a 17mm LCD display, providing real-time indication of flow rate, batch preset, accumulated total.

**FRONT VIEW**



**EXPLODED VIEW**



Technical Specifications	MXD-HS
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power)
<b>Signal outputs</b>	Batch Control
<b>Power supply</b>	Battery: 3.6 V Lithium External: 16 - 30 VDC
<b>Temperature<sup>1</sup></b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Pass code</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Requires external power)
<b>Approvals</b>	No

<sup>1</sup>Refer to flow meter's specifications for overall temperature range.

LC Display	MXD-HS
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Flow Rate (Various units) Batch Control Accumulated Totalizer (Non-Resettable)

Construction	MXD-HS
<b>Material</b>	Aluminium
<b>IP rating</b>	IP67
<b>Mounting</b>	Fixed - Meter Mounted (MX06 and MX09 only)
<b>Cable Entry</b>	(2) x M16 * 1.5 and (1) x M20 x 1.5

Service Kits <sup>2</sup>	MXD-HS
<b>Battery</b>	Part number: MS493S
<b>Sensor Board</b>	Part number: MXS-PCB-RH
<b>Front fascia (including 3 buttons)</b>	Part number: ER002A-CS

Packaging	MXD-HS
<b>Weight (kg)</b>	2 kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 340

<sup>2</sup>Refer to Instruction Manual or Contact Macnaught for more service kits

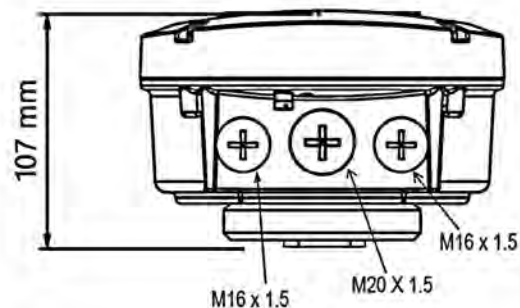
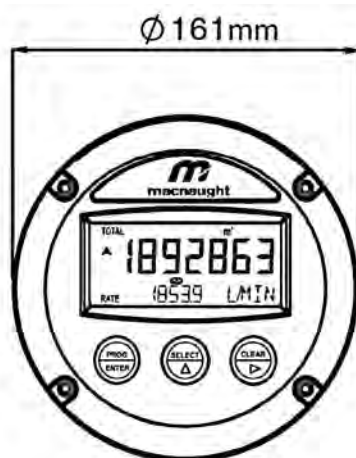
## Display Example



### Application:

MXD-HS can be mounted on 1/4" size MX flow meters. It shows flow rate and volume on the LC Display.

## Dimensions



## DIGITAL DISPLAY, Type: PR, Model: PR-RMP



PR-RMP is a remote mountable digital register with a 12mm LCD display, providing real-time indication of Flow rate, total and accumulated total.



Technical Specifications	PR-RMP
Signal inputs	Reed Switch (can be used with battery)
Signal outputs	None
Power supply	Battery: 3.6 V Lithium External: not available
Temperature <sup>1</sup>	-20°C to 80°C -4°F to 176°F
Backup	EEPROM (Flash memory)
Backlight	No
Ex Approvals	No

Construction	PR-RMP
Material	Display Housing: Polypropylene Wall Mount Plate: Aluminium
IP rating	IP67
Mounting	Wall Mount
Cable Entry	(2) x M12 * 1.5 1 x cable gland included

LC Display	PR-RMP
Digit Size	Upper LCD 7 Digits (12 mm) Lower LCD 7 Digits (8 mm)
Display	Flow Rate (Various units) Totalizer (Resettable) Batch Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)

<sup>1</sup> Refer to flow meter's specifications for overall temperature range

### Display Example



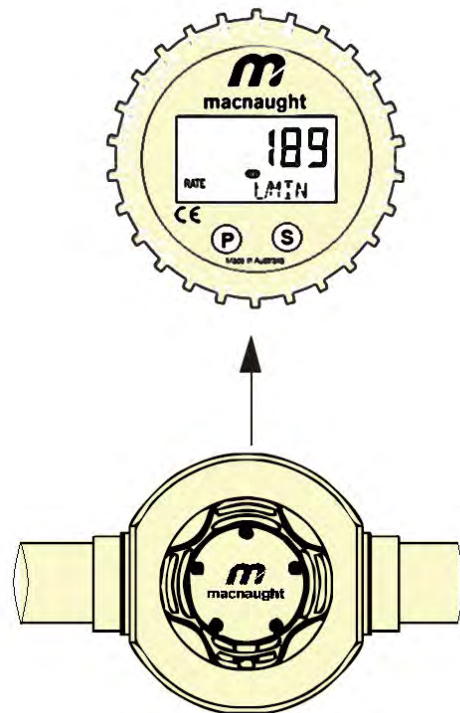
<b>Packaging</b>	<b>PR-RMP</b>
<b>Weight (kg)</b>	0.5 kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 140

<b>Service Kits<sup>2</sup></b>	<b>PR-RMP</b>
<b>Battery</b>	Part number: DR012S

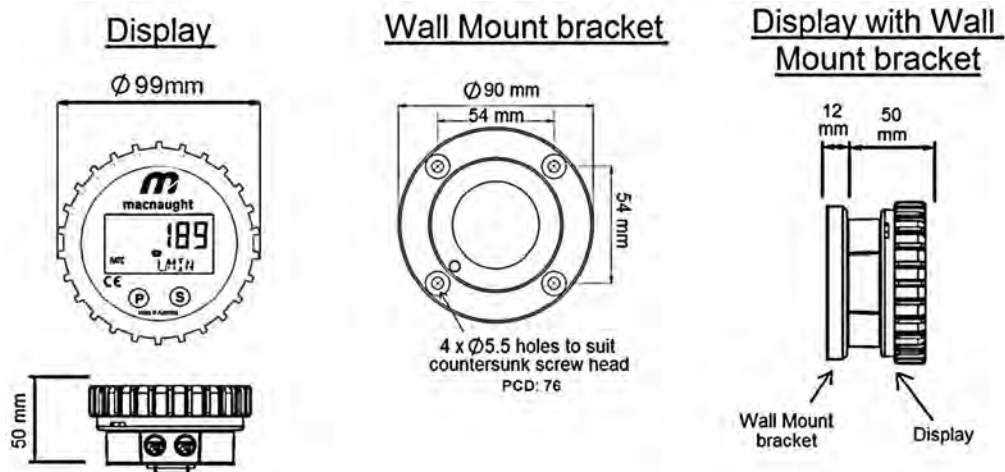
<sup>2</sup> Refer to Instruction Manual or Contact Macnaught for more service kits

### Application:

PR-RMP can be used with flow meters having pulse output. It shows flow rate and volume on the LC Display.



### Dimensions



## DIGITAL DISPLAY (with outputs), Type: PRA, Model: PRA-RMP

PRA-RMP is a remote mountable digital register with a 12mm LCD display, providing real-time indication of Flow rate, total and accumulated total. The output include a 4-20mA, programmable pulse output and High & Low flow alarm functions.



Construction	PRA-RMP
Material	Display Housing: Polypropylene Wall Mount Plate: Aluminium
IP rating	IP67
Mounting	Wall Mount
Cable Entry	(2) x M12 * 1.5 1 x cable gland included

LC Display	PRA-RMP
Digit Size	Upper LCD 7 Digits (12 mm) Lower LCD 7 Digits (8 mm)
Display	Flow Rate (Various units) Totalizer (Resettable) Batch Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)

Technical Specifications	PRA-RMP
Signal inputs	Reed Switch (can be used with battery)
Signal outputs	4-20mA output (Passive, loop powered) Programmable pulse output (Transistor) High flowrate alarm contact (Transistor) Low flowrate alarm contact (Transistor)
Power supply	Battery: 3.6 V Lithium External: 18 – 30 VDC
Temperature <sup>1</sup>	-20°C to 80°C -4°F to 176°F
Backup	EEPROM (Flash memory)
Backlight	No
Ex Approvals	No

<sup>1</sup> Refer to flow meter's specifications for overall temperature range

### Display Example





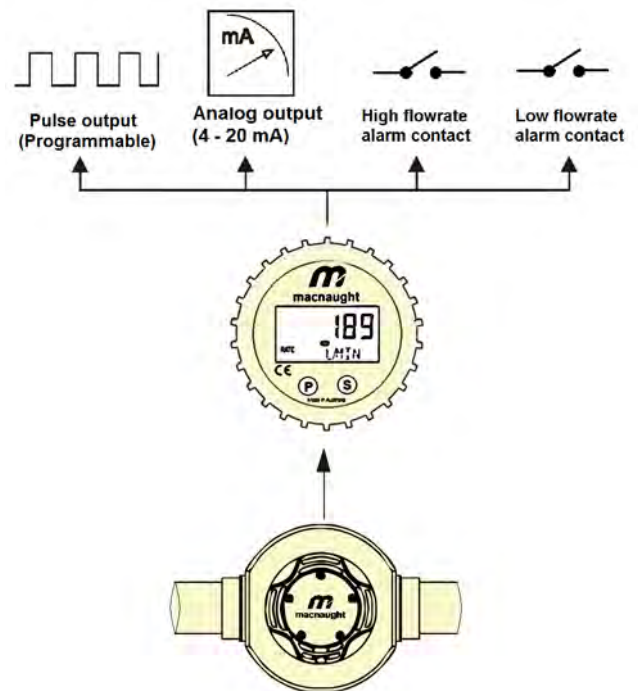
<b>Packaging</b>	<b>PRA-RMP</b>
<b>Weight (kg)</b>	0.5 kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 140

<b>Service Kits<sup>2</sup></b>	<b>PRA-RMP</b>
<b>Battery</b>	Part number: DR012S

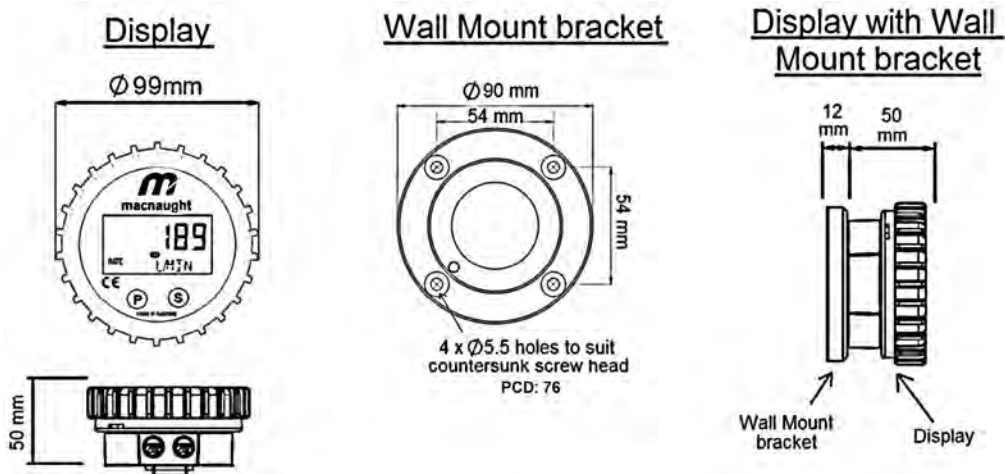
<sup>2</sup> Refer to Instruction Manual or Contact Macnaught for more service kits

### Application:

PRA-RMP can be used with flow meters having pulse output. It shows flow rate and volume on the LC Display. Analog, pulse and alarm options are available as an output.



### Dimensions





## ANALOG OUTPUT, Model: PRM-RMP



PRM-RMP is a remote mountable unit, transmitting real-time analog signal (4-20mA) for a remote Flow rate.



Technical Specifications	PRM-RMP
Signal inputs	Reed Switch
Signal outputs	4-20mA output (Passive, loop powered)
Power supply	External: 18 - 30 V DC
Temperature <sup>1</sup>	-20°C to 80°C -4°F to 176°F
Backup	EEPROM (Flash memory)
Backlight	No
Ex Approvals	No

Construction	PRM-RMP
Material	Display Housing: Polypropylene Wall Mount Plate: Aluminium
IP rating	IP67
Mounting	Wall Mount
Cable Entry	(2) x M12 * 1.5 1 x cable gland included

LC Display	PRM-RMP
Digit Size	Upper LCD 7 Digits (12 mm) Lower LCD 7 Digits (8 mm) (For Programming only)
Display	None

<sup>1</sup> Refer to flow meter's specifications for overall temperature range

### Display Example

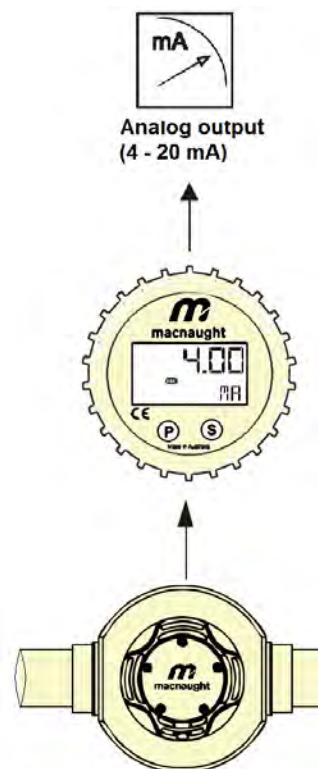


Packaging	PRM-RMP
Weight (kg)	0.5 kg
Dimensions (mm) L x W x H	340 x 240 x 140

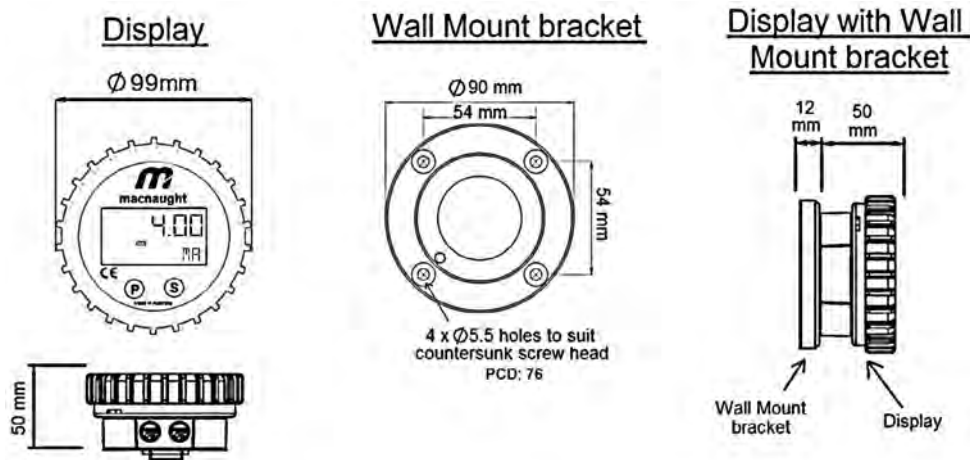
Refer to Instruction Manual or contact Macnaught for service kits

### Application:

PRM-RMP can be used with flow meters having pulse output.. It transmits analog signal (in the form of 4-20mA) for an equivalent flow



### Dimensions



## DIGITAL DISPLAY, Model: ER-RMP



ER-RMP is a remote mountable digital register with a 17mm LCD display, providing real-time indication of Flow rate, total and accumulated total.



Technical Specifications	ER-RMP
Signal inputs	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power) NAMUR (Requires external power)
Signal outputs	None
Power supply	Battery: 3.6 V Lithium External: 16 - 30 VDC
Temperature	-40°C to 80°C -40°F to 176°F
Backup	EEPROM (Flash memory) Data retention at least 10 years
Passcode	Configuration settings can be pass code protected
Backlight	Yes (Only when external DC power supply is connected)
Ex Approvals	No

Construction	ER-RMP
Material	GRP (Glassfibre Reinforced polyamide - a high grade Plastic)
IP rating	IP67
Mounting	Wall mount
Cable Entry	(2) x 16mm and (1) x 20mm

LC Display	ER-RMP
Digital Size	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
Display	Flow Rate (Various units) Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)

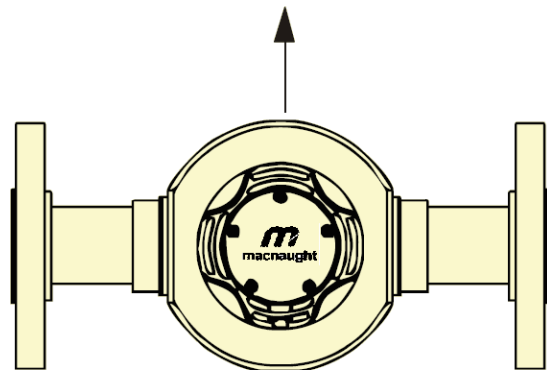
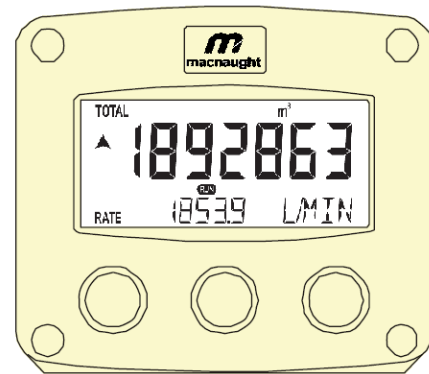
### Display Example



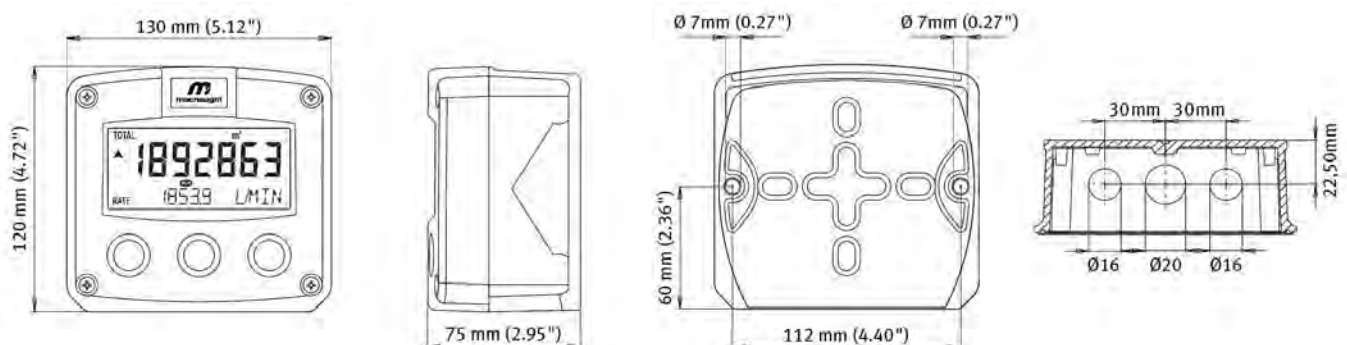
Service Kits	ER-RMP	Packaging	ER-RMP
<b>Battery</b>	Part number: MS493S	<b>Weight (kg)</b>	1 kg
<b>Front fascia (including 3 buttons)</b>	Part number: MS654S	<b>Dimensions (mm) L x W x H</b>	340 x 240 x 140

### Application:

ER-RMP can be used with flow meters having pulse output. It shows flow rate and volume on the LC Display.



### Dimensions



## DIGITAL DISPLAY, Model: ER-RMA



ER-RMA is a remote mountable digital register with a 17mm LCD display, providing real-time indication of Flow rate, total and accumulated total.



Technical Specifications	ER-RMA
Signal inputs	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power) NAMUR (Requires external power)
Signal outputs	None
Power supply	Battery: 3.6 V Lithium External: 16 - 30 VDC
Temperature	-40°C to 80°C -40°F to 176°F
Backup	EEPROM (Flash memory) Data retention at least 10 years
Passcode	Configuration settings can be pass code protected
Backlight	Yes (Only when external DC power supply is connected)
Ex Approvals	No

Construction	ER-RMA
Material	Aluminium
IP rating	IP67
Mounting	Wall mount
Cable Entry	(2) x PG9 and (1) x M20

LC Display	ER-RMA
Digital Size	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
Display	Flow Rate (Various units) Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)

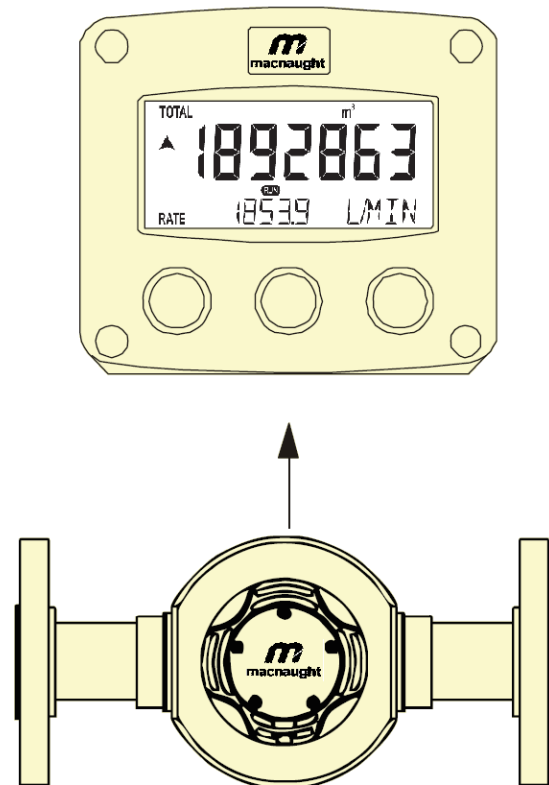
### Display Example



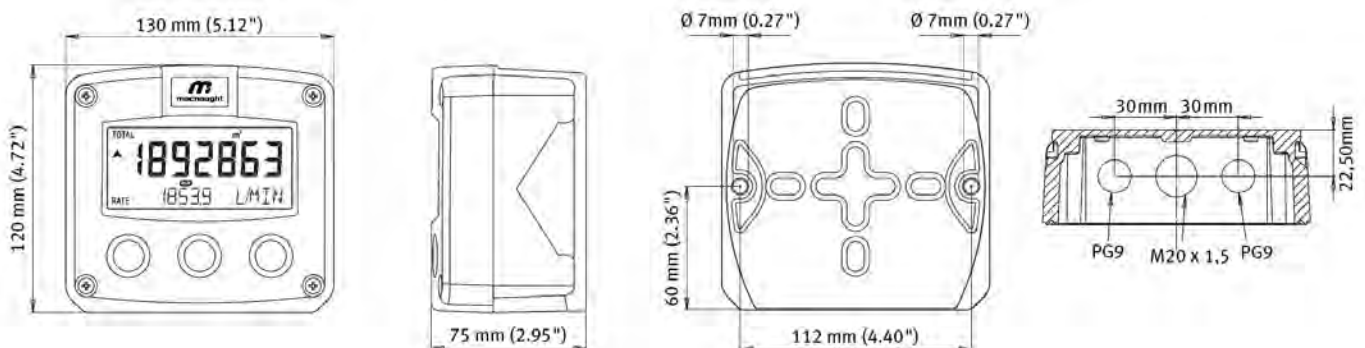
Service Kits	ER-RMA	Packaging	ER-RMA
<b>Battery</b>	Part number: MS493S	<b>Weight (kg)</b>	1.5 kg
<b>Front fascia (including 3 buttons)</b>	Part number: MS639S	<b>Dimensions (mm) L x W x H</b>	340 x 240 x 140

### Application:

ER-RMA can be used with flow meters having pulse output. It shows flow rate and volume on the LC Display.



### Dimensions





## DIGITAL DISPLAY, Model: ERA-RMP



ERA-RMP is a remote mountable digital register with a 17mm LCD display, providing real-time indication of Flow rate, total and accumulated total. The output include a 4-20mA and scaled pulse output.



Technical Specifications	ERA-RMP
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power) NAMUR (Requires external power)
<b>Signal outputs</b>	4-20mA output (Passive, loop powered) Scaled pulse output (Transistor)
<b>Power supply</b>	Battery: 3.6 V Lithium External: 8 - 30 VDC
<b>Temperature</b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Passcode</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Only when external DC power supply is connected)
<b>Ex Approvals</b>	No

Construction	ERA-RMP
<b>Material</b>	GRP (Glassfibre Reinforced polyamide - a high grade Plastic)
<b>IP rating</b>	IP67
<b>Mounting</b>	Wall mount
<b>Cable Entry</b>	(2) x 16mm and (1) x 20mm

LC Display	ERA-RMP
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Flow Rate (Various units) Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)

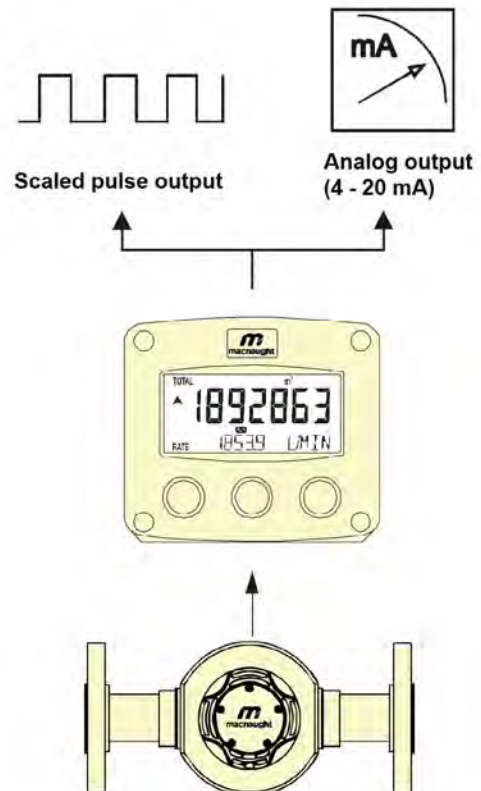
### Display Example



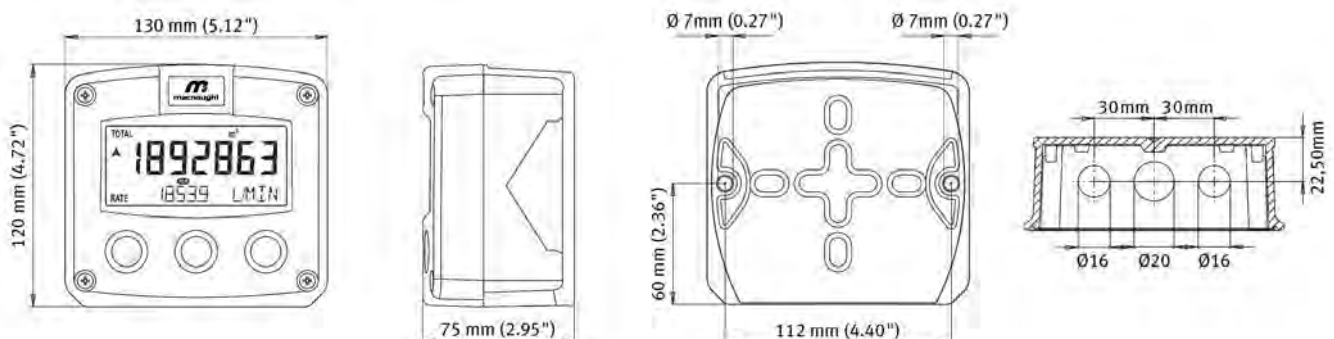
Service Kits	ERA-RMP	Packaging	ERA-RMP
<b>Battery</b>	Part number: MS493S	<b>Weight (kg)</b>	1 kg
<b>Front fascia (including 3 buttons)</b>	Part number: MS654S	<b>Dimensions (mm) L x W x H</b>	340 x 240 x 140

### Application:

ERA-RMP can be used with flow meters having pulse output. It shows flow rate and volume on the LC Display. Analog and pulse outputs are available as an output.



### Dimensions



## DIGITAL DISPLAY, Model: ERA-RMA



ERA-RMA is a remote mountable digital register with a 17mm LCD display, providing real-time indication of Flow rate, total and accumulated total. The output include a 4-20mA and scaled pulse output.

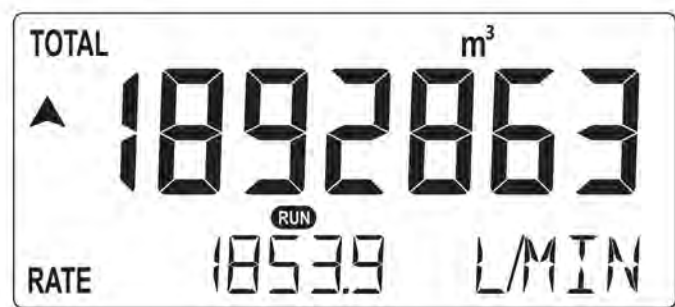


Technical Specifications	ERA-RMA
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power) NAMUR (Requires external power)
<b>Signal outputs</b>	4-20mA output (Passive, loop powered) Scaled pulse output (Transistor)
<b>Power supply</b>	Battery: 3.6 V Lithium External: 8 - 30 VDC
<b>Temperature</b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Passcode</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Requires external power)
<b>Ex Approvals</b>	No

Construction	ERA-RMA
<b>Material</b>	Aluminium
<b>IP rating</b>	IP67
<b>Mounting</b>	Wall mount
<b>Cable Entry</b>	(2) x PG9 and (1) x M20

LC Display	ERA-RMA
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Flow Rate (Various units) Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)

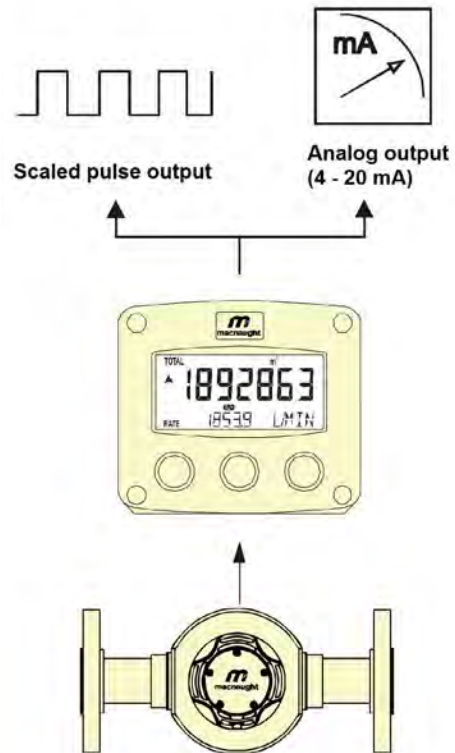
### Display Example



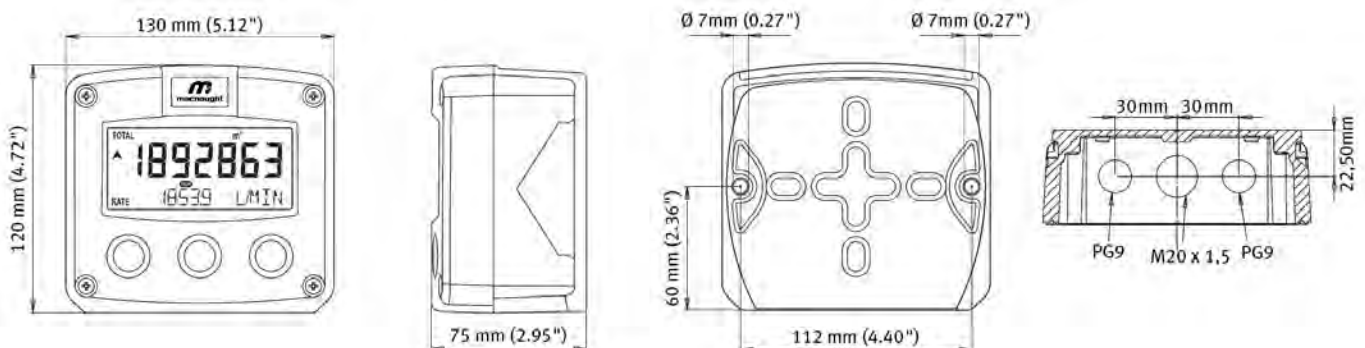
Service Kits	ERA-RMA	Packaging	ERA-RMA
<b>Battery</b>	Part number: MS493S	<b>Weight (kg)</b>	1.5 kg
<b>Front fascia (including 3 buttons)</b>	Part number: MS639S	<b>Dimensions (mm) L x W x H</b>	340 x 240 x 140

### Application:

ERA-RMA can be used with flow meters having pulse output. It shows flow rate and volume on the LC Display. Analog and pulse options are available as an output.



### Dimensions



## DIGITAL DISPLAY, Model: ERB-RMP



ERB-RMP is a remote mountable digital register with a 17mm LCD display, providing a control output for single stage batching applications.

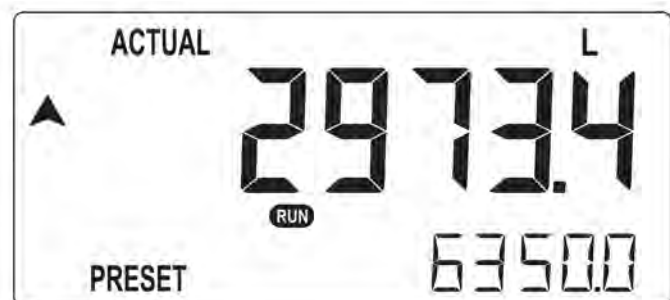


Technical Specifications	ERB-RMP
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power) NAMUR (Requires external power)
<b>Signal outputs</b>	Transistor switch output (Passive, Requires external power)
<b>Power supply</b>	Battery: 3.6 V Lithium External: 16 - 30 VDC
<b>Temperature</b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Passcode</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Requires external power)
<b>Ex Approvals</b>	No

Construction	ERB-RMP
<b>Material</b>	GRP (Glassfibre Reinforced polyamide - a high grade Plastic)
<b>IP rating</b>	IP67
<b>Mounting</b>	Wall mount
<b>Cable Entry</b>	(2) x 16mm and (1) x 20mm

LC Display	ERB-RMP
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Pre-set value Running Batch total Total and Accumulated total

### Display Example

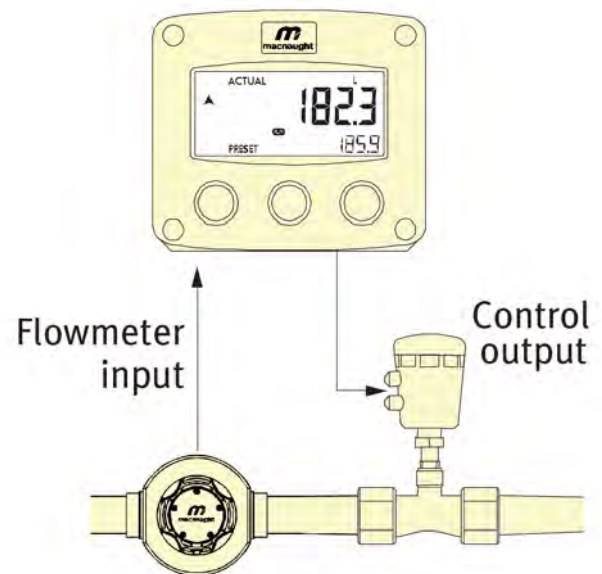




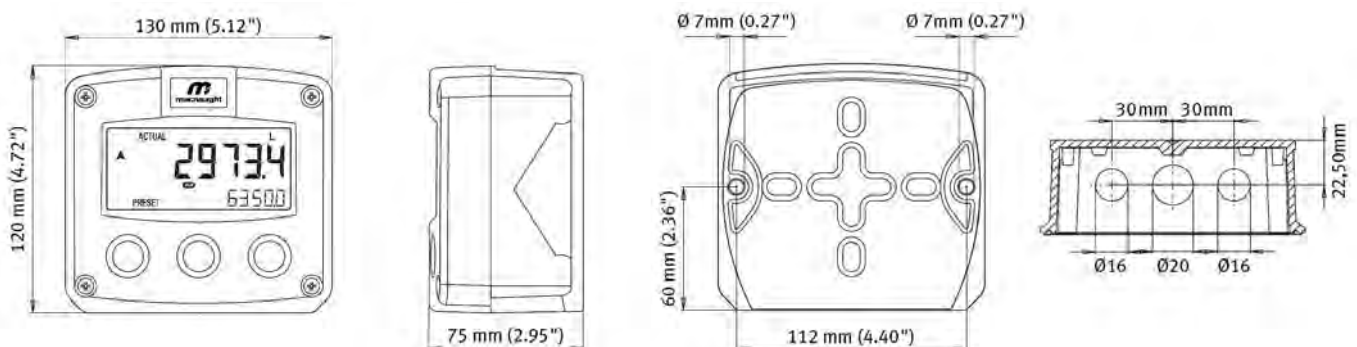
Service Kits	ERB-RMP	Packaging	ERB-RMP
Battery	Part number: MS493S	Weight (kg)	1 kg
Front fascia (including 3 buttons)	None	Dimensions (mm) L x W x H	340 x 240 x 140

### Application:

ERB-RMP can be used for batching small up to large quantities of liquids having single or repeating batches. It can also be used to display Total and Accumulated total.



### Dimensions





## DIGITAL DISPLAY, Model: ERB-RMA



ERB-RMA is a remote mountable digital register with a 17mm LCD display, providing a control output for single stage batching applications.

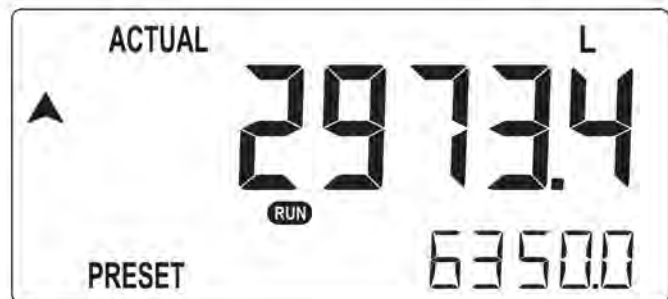


Technical Specifications	ERB-RMA
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power) NAMUR (Requires external power)
<b>Signal outputs</b>	Transistor switch output (Passive, Requires external power)
<b>Power supply</b>	Battery: 3.6 V Lithium External: 16 - 30 VDC
<b>Temperature</b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Passcode</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Requires external power)
<b>Ex Approvals</b>	No

Construction	ERB-RMA
<b>Material</b>	Aluminium
<b>IP rating</b>	IP67
<b>Mounting</b>	Wall mount
<b>Cable Entry</b>	(2) x PG9 and (1) x M20

LC Display	ERB-RMA
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Pre-set value Running Batch total Total and Accumulated total

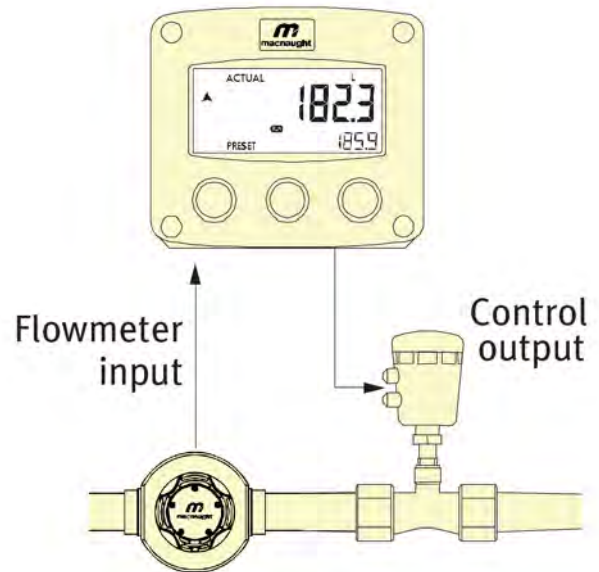
### Display Example



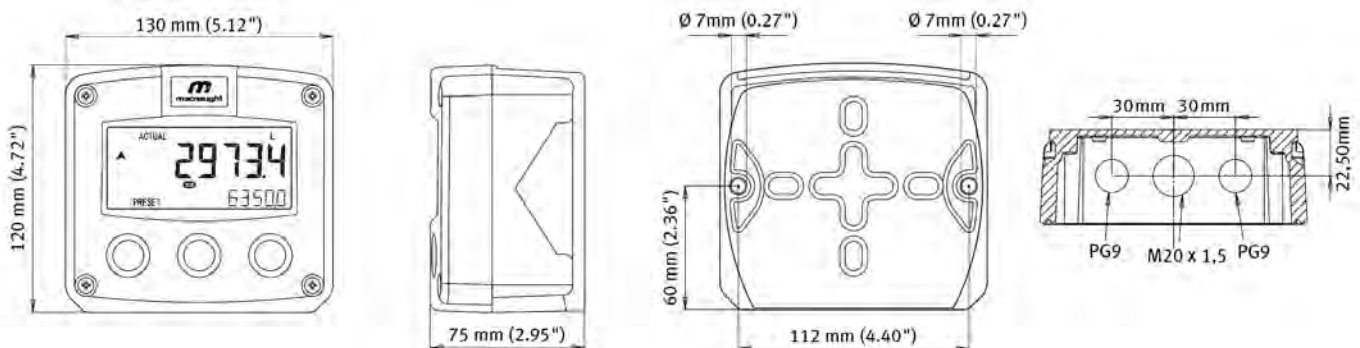
Service Kits	ERB-RMA	Packaging	ERB-RMA
Battery	Part number: MS493S	Weight (kg)	1.5 kg
Front fascia (including 3 buttons)	None	Dimensions (mm) L x W x H	340 x 240 x 140

### Application:

ERB-RMA can be used for batching small up to large quantities of liquids having single or repeating batches. It can also be used to display Total and Accumulated total.



### Dimensions



## DIGITAL DISPLAY, Model: ERAC-RMA



ERAC-RMA is a remote mountable digital register with a 17mm LCD display, providing real-time indication of Flow rate, total and accumulated total. The output include a 4-20mA and scaled pulse output with an option of communication through Modbus RS485 protocol.



Technical Specifications	ERAC-RMA
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power) NAMUR (Requires external power)
<b>Signal outputs</b>	4-20mA output (Passive, loop powered) Scaled pulse output (Transistor) Communication: Modbus RS485
<b>Power supply</b>	Battery: 3.6 V Lithium External: 8 - 30 VDC
<b>Temperature</b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Passcode</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Requires external power)
<b>Ex Approvals</b>	No

Construction	ERAC-RMA
<b>Material</b>	Aluminium
<b>IP rating</b>	IP67
<b>Mounting</b>	Wall mount
<b>Cable Entry</b>	(2) x PG9 and (1) x M20

### Display Example

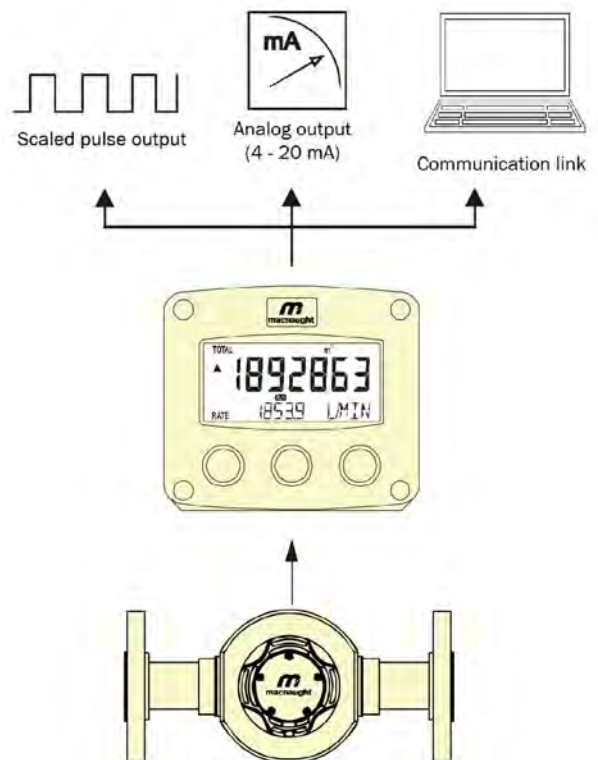
LC Display	ERAC-RMA
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Flow Rate (Various units) Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)



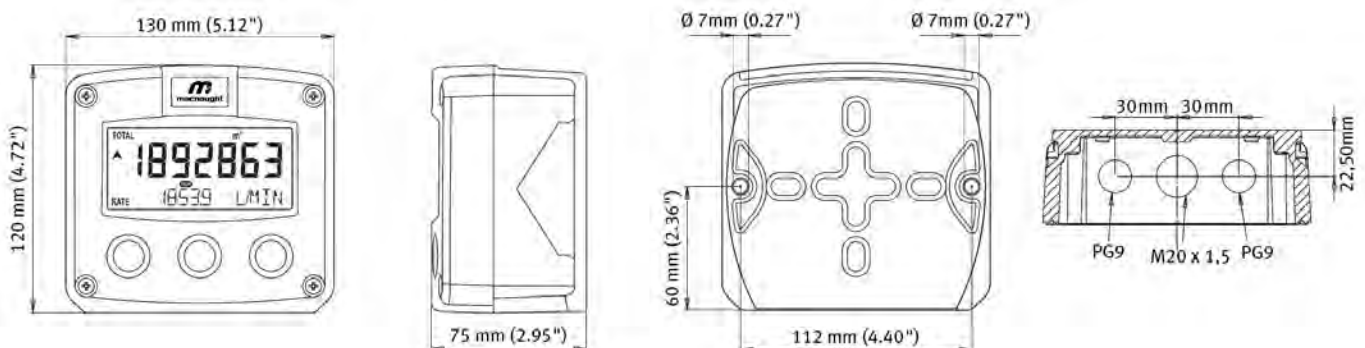
Service Kits	ERAC-RMA	Packaging	ERAC-RMA
<b>Battery</b>	Part number: MS493S	<b>Weight (kg)</b>	1.5 kg
<b>Front fascia (including 3 buttons)</b>	Part number: MS639S	<b>Dimensions (mm) L x W x H</b>	340 x 240 x 140

### Application:

ERAC-RMA can be used with flow meters having pulse output. It shows flow rate and volume on the LC Display. Analog and pulse options are available as an output with an option of communication through Modbus RS485 protocol.



### Dimensions



## DIGITAL DISPLAY, Model: ERS-RMP



ERS-RMP is a remote mountable digital register with a 17mm LCD display, providing Differential or Summation flow measurements of two separate flow meters.

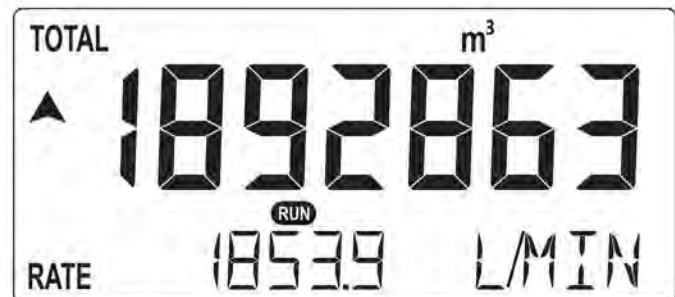


Technical Specifications	ERS-RMP
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power) NAMUR (Requires external power)
<b>Signal outputs</b>	4-20mA output (Passive, loop powered) Scaled pulse output (Transistor) Negative total value indication (Transistor)
<b>Power supply</b>	Battery: 3.6 V Lithium External: 8 - 30 VDC
<b>Temperature</b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Passcode</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Requires external power)
<b>Ex Approvals</b>	No

Construction	ERS-RMP
<b>Material</b>	GRP (Glassfibre Reinforced polyamide - a high grade Plastic)
<b>IP rating</b>	IP67
<b>Mounting</b>	Wall mount
<b>Cable Entry</b>	(2) x 16mm and (1) x 20mm

LC Display	ERS-RMP
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Signal A: Flow rate and Total volume Signal B: Flow rate and Total volume A-B: Differential of two signals A+B: Summation of two signals

### Display Example





Service Kits	ERS-RMP	Packaging	ERS-RMP
<b>Battery</b>	Part number: MS493S	<b>Weight (kg)</b>	1 kg
<b>Front fascia (including 3 buttons)</b>	Part number: MS654S	<b>Dimensions (mm) L x W x H</b>	340 x 240 x 140

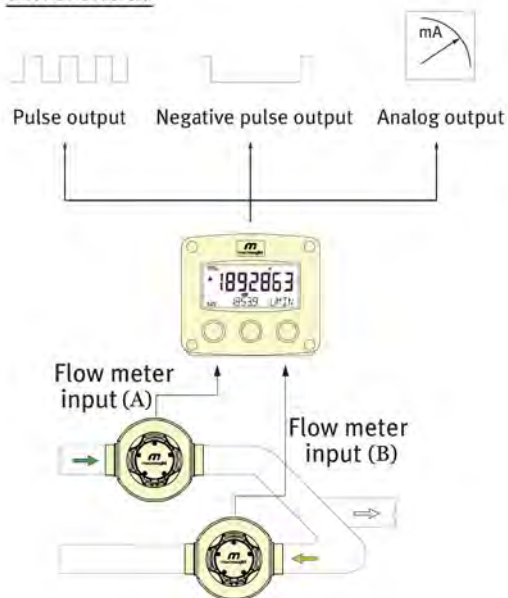
### Application:

ERS-RMP can be used for;

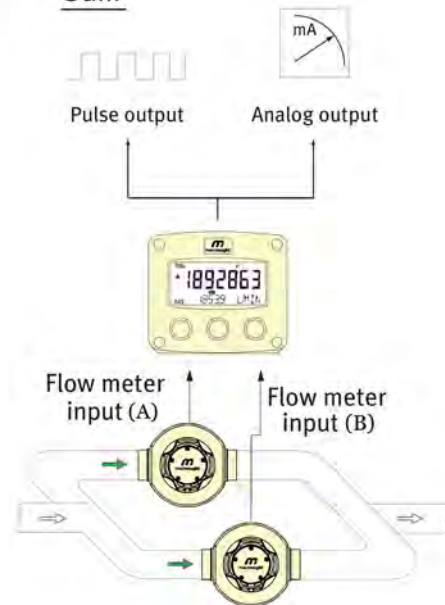
Differential function: For measurement of fuel consumption for diesel/ fuel engines or generators.

Sum function: For calculation of total flow where flows are split-up in two pipe-lines.

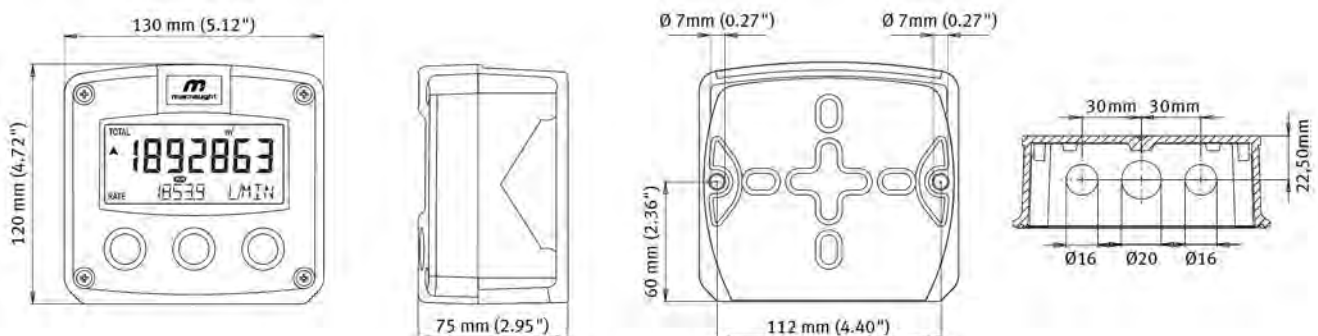
#### Differential



#### Sum



### Dimensions



## DIGITAL DISPLAY, Model: ERS-RMA



ERS-RMA is a remote mountable digital register with a 17mm LCD display, providing Differential or Summation flow measurements of two separate flow meters.

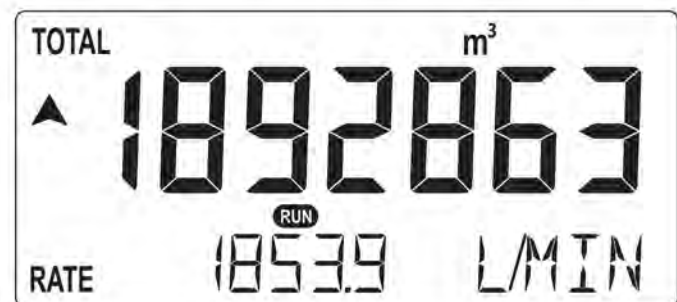


Technical Specifications	ERS-RMA
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power) NAMUR (Requires external power)
<b>Signal outputs</b>	4-20mA output (Passive, loop powered) Scaled pulse output (Transistor) Negative total value indication (Transistor)
<b>Power supply</b>	Battery: 3.6 V Lithium External: 8 - 30 VDC
<b>Temperature</b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Passcode</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Requires external power)
<b>Ex Approvals</b>	No

Construction	ERS-RMA
<b>Material</b>	Aluminium
<b>IP rating</b>	IP67
<b>Mounting</b>	Wall mount
<b>Cable Entry</b>	(2) x PG9 and (1) x M20

LC Display	ERS-RMA
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Signal A: Flow rate and Total volume Signal B: Flow rate and Total volume A-B: Differential of two signals A+B: Summation of two signals

### Display Example



Service Kits	ERS-RMA	Packaging	ERS-RMA
<b>Battery</b>	Part number: MS493S	<b>Weight (kg)</b>	1.5 kg
<b>Front fascia (including 3 buttons)</b>	Part number: MS639S	<b>Dimensions (mm) L x W x H</b>	340 x 240 x 140

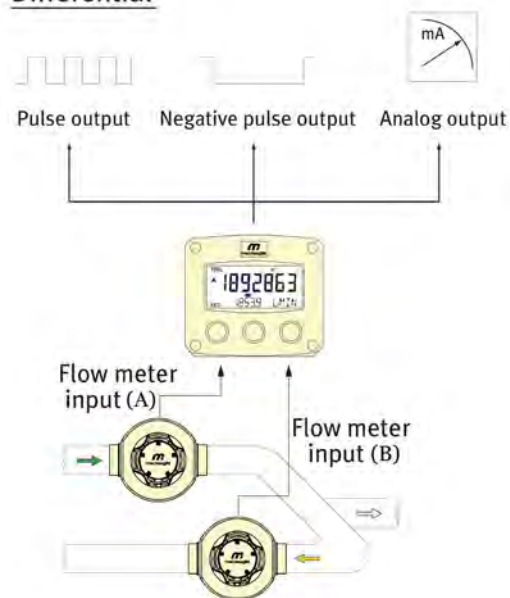
### Application:

ERS-RMA can be used for;

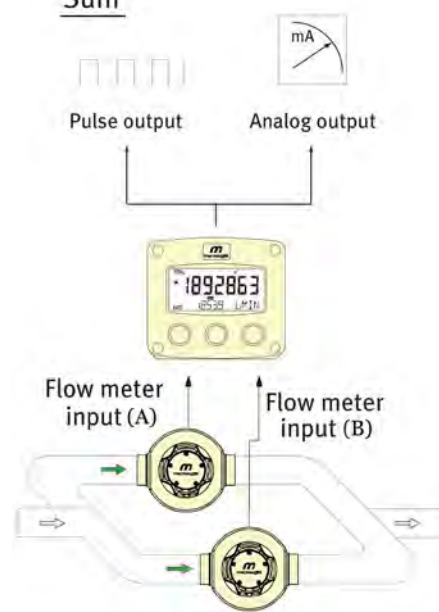
Differential function: For measurement of fuel consumption for diesel/ fuel engines or generators.

Sum function: For calculation of total flow where flows are split-up in two pipe-lines.

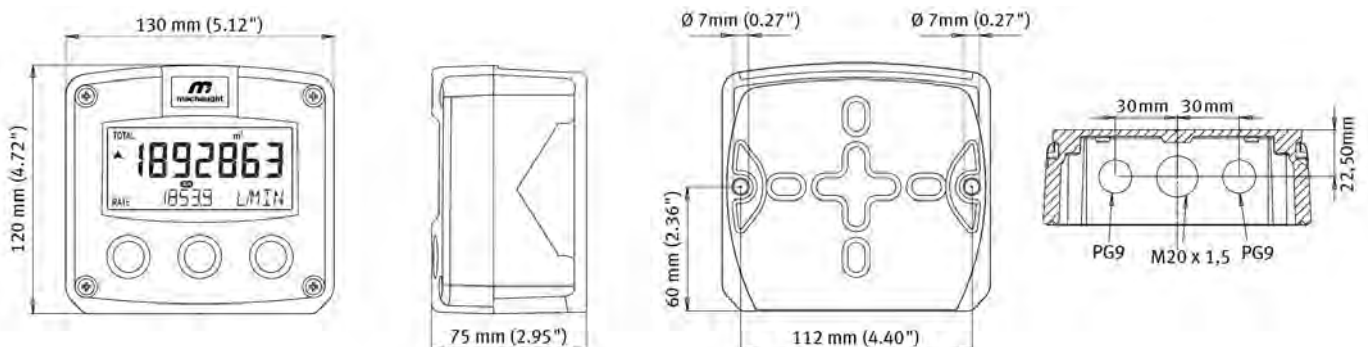
#### Differential



#### Sum



### Dimensions



## DIGITAL DISPLAY, Model: ERST-RMA



ERST-RMA is a remote mountable digital register with a 17mm LCD display, providing Differential flow measurements (Temperature compensated) of two separate flow meters.



Technical Specifications	ERST-RMA
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power) NAMUR (Requires external power) Temperature input signal: PT100
<b>Signal outputs</b>	4-20mA output (Passive, loop powered) Scaled pulse output (Transistor)
<b>Power supply</b>	Battery: 3.6 V Lithium External: 8 - 24 VDC
<b>Temperature</b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Passcode</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Requires external power)
<b>Ex Approvals</b>	No

Construction	ERST-RMA
<b>Material</b>	Aluminium
<b>IP rating</b>	IP67
<b>Mounting</b>	Wall mount
<b>Cable Entry</b>	(2) x PG9 and (1) x M20

LC Display	ERST-RMA
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Inlet line: Flow rate and Temperature Outlet line: Flow rate and Temperature Differential flow rate of two signals Differential total volume of two signals

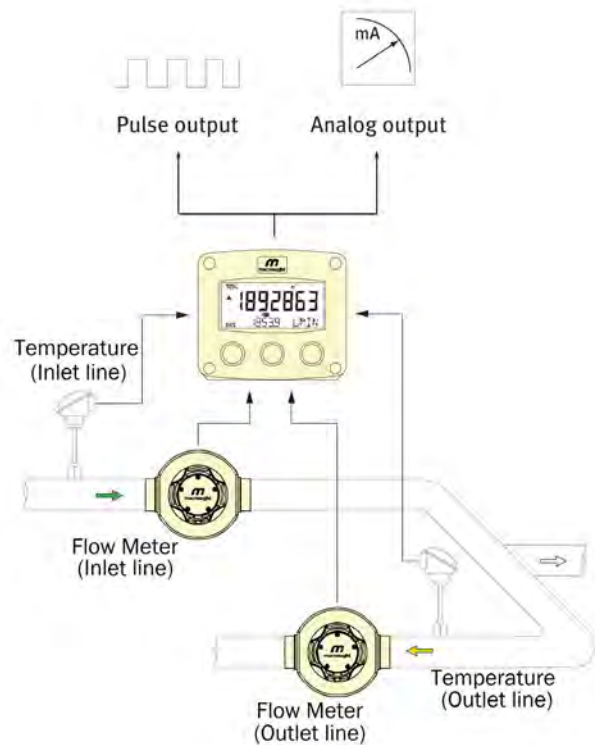
### Display Example



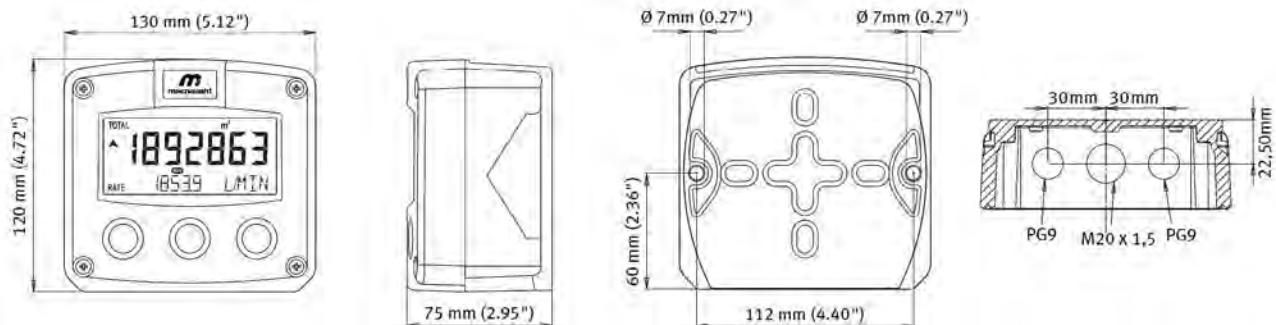
Service Kits	ERST-RMA	Packaging	ERST-RMA
Battery	Part number: MS493S	Weight (kg)	1.5 kg
Front fascia (including 3 buttons)	Part number: MS639S	Dimensions (mm) L x W x H	340 x 240 x 140

### Application:

ERST-RMA can be used for measurement of fuel consumption (Temperature Compensated) for diesel/ fuel engines or generators.



### Dimensions





## INTRINSICALLY SAFE (Ex ia) PULSER, Model: MXD-BS



MXD-BS provides pulse output from 1 x NPN sensor.



Technical Specifications	MXD-BS
Signal outputs	NPN sensor (3-wire) Operating voltage: 5 to 30 VDC Maximum sinking current: 25mA
Temperature <sup>2</sup>	-40°C to 65°C -40°F to 149°F
Ex Approvals	ATEX, IECEX, US & CAN (THROUGH FM)

<sup>2</sup>Refer to flow meter's specifications for overall temperature range.

Construction	MXD-BS
Material	Stainless Steel
Housing Type	Barrel
IP rating	IP67
Mounting	Meter Mounted (MX only)
Cable Length <sup>1</sup>	2 meters
Cable Termination	Stripped Leads (tinned)

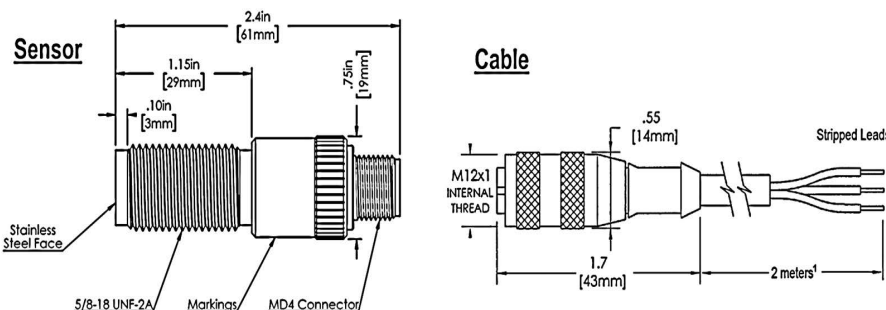
<sup>1</sup>Extended cable may be available, contact Macnaught

### Application:

MXD-BS can be mounted on MX flow meters. It generates non-scalable pulse output from 1 x NPN sensor.



## Dimensions



Service Kits	MXD-BS
	Sensor Socket Kit: MXS-SOCKET
Packaging	MXD-BS
Weight (kg)	0.5 kg
Dimensions (mm) L x W x H	220 x 240 x 40

## FLAME PROOF (Ex D) PULSER, Model: MXD-CS



MXD-CS provides pulse output from 1 x NPN sensor.



Technical Specifications	MXD-CS
Signal outputs	NPN sensor (3-wire) Operating voltage: 5 to 27 VDC Maximum sinking current: 25mA
Temperature <sup>2</sup>	-50°C to 140°C -58°F to 284°F
Ex Approvals	ATEX, IECEX, US & CAN (THROUGH FM)

<sup>2</sup>Refer to flow meter's specifications for overall temperature range.

Construction	MXD-CS
Material	Stainless Steel
Housing Type	Hex
IP rating	IP67
Mounting	Meter Mounted (MX only)
Cable Length <sup>1</sup>	3 meters (non-removable)
Cable Termination	Stripped Leads (tinned) Conduit: M20 x 1.5

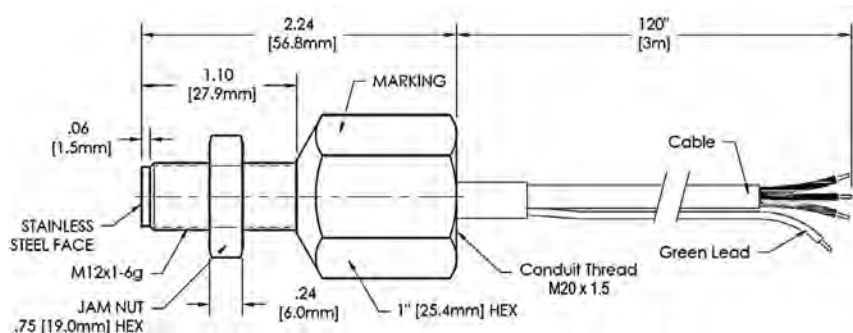
<sup>1</sup>Extended cable may be available, contact Macnaught

### Application:

MXD-CS can be mounted on MX flow meters. It generates non-scalable pulse output from 1 x NPN sensor.



## Dimensions



Service Kits	MXD-CS
	None

Packaging	MXD-CS
Weight (kg)	0.5 kg
Dimensions (mm) L x W x H	220 x 240 x 40

# INTRINSICALLY SAFE (Ex ia) PULSER, Model: MXD-NS



MXD-NS provides pulse output from 1 x NAMUR sensor.



Technical Specifications	MXD-NS
Signal outputs	NAMUR (2-wire) Operating voltage: 8.2 vdc Actuated current consumption: 2.1 mA
Temperature <sup>2</sup>	-25°C to 70°C -13°F to 158°F
Ex Approvals	IECEX, ATEX, US (THROUGH FM)

<sup>2</sup>Refer to flow meter's specifications for overall temperature range.

Construction	MXD-NS
Material	Metal, CuZn, Chrome-plated
Housing Type	Barrel
IP rating	IP67
Mounting	Meter Mounted (MX only)
Cable Length <sup>1</sup>	2 meters
Cable Termination	Stripped Leads (tinned)

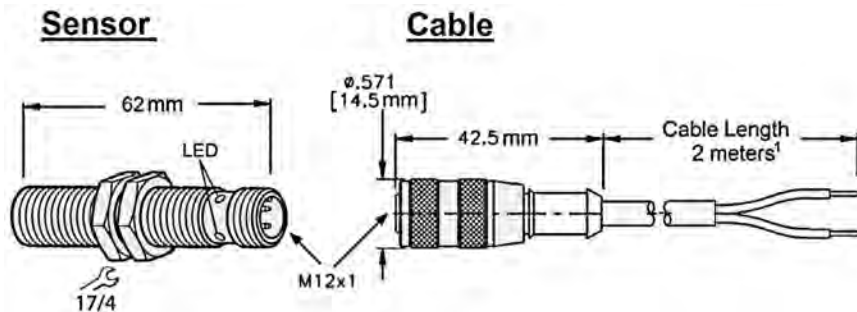
<sup>1</sup>Extended cable may be available, contact Macnaught

## Application:

MXD-NS can be mounted on MX flow meters. It generates non-scalable pulse output from 1 x NAMUR sensor.



## Dimensions



Service Kits	MXD-NS
	Sensor Socket Kit: MXS-SOCKET-NAMUR

Packaging	MXD-NS
Weight (kg)	0.5 kg
Dimensions (mm) L x W x H	220 x 240 x 40

## DIGITAL DISPLAY, Model: ERX-RMA



ERX-RMA is an Intrinsically Safe remote mountable digital register with a 17mm LCD display, providing real-time indication of Flow rate, total and accumulated total.



Technical Specifications	ERX-RMA
Signal inputs*	Reed Switch NPN sensor (Requires external power) NAMUR sensor (Requires external power)
Signal outputs	None
Power supply	Battery: 3.6 V Lithium External: 16 - 30 VDC
Temperature	-40°C to 70°C -40°F to 158°F
Backup	EEPROM (Flash memory) Data retention at least 10 years
Passcode	Configuration settings can be pass code protected
Backlight	Yes (Requires external power)
Ex Approvals	ATEX, IECEx, CSA, FM

Construction	ERX-RMA
Material	Aluminium
IP rating	IP67
Mounting	Wall mount
Cable Entry	(2) x PG9 and (1) x M20

\* Sensor must be installed with an approved safety barrier

LC Display	ERX-RMA
Digital Size	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
Display	Flow Rate (Various units) Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)

### Display Example

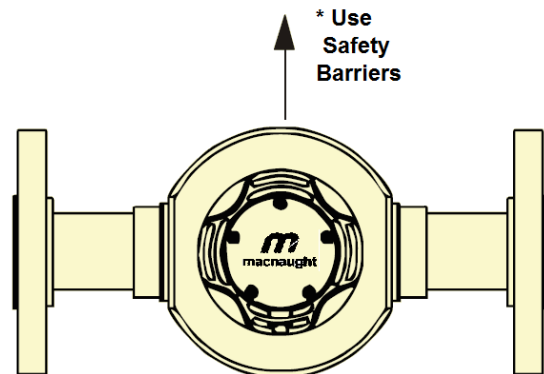
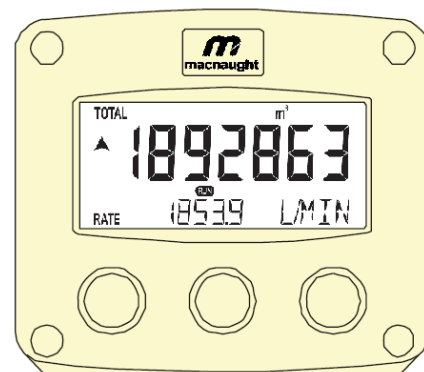


Service Kits	ERX-RMA	Packaging	ERX-RMA
<b>Battery</b>	Part number: MS493XS	<b>Weight (kg)</b>	1.5 kg
<b>Front fascia (including 3 buttons)</b>	Part number: MS639S	<b>Dimensions (mm) L x W x H</b>	340 x 240 x 140

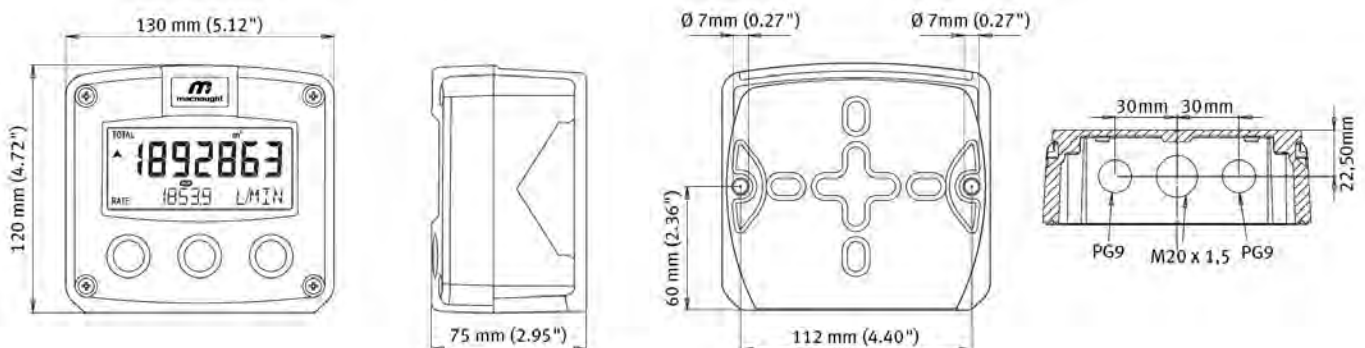
### Application\*:

ERX-RMA can be used with flow meters having pulse output. It shows flow rate and volume on the LC Display.

\*Any external power must be installed with an approved safety barrier



### Dimensions





## DIGITAL DISPLAY, Model: ERAX-RMA



ERAX-RMA is an Intrinsically Safe remote mountable digital register with a 17mm LCD display, providing real-time indication of Flow rate, total and accumulated total. The output include a 4-20mA and scaled pulse output.



Technical Specifications	ERAX-RMA
Signal inputs*	Reed Switch NPN sensor (Requires external power) NAMUR sensor (Requires external power)
Signal outputs	4-20mA output (Passive, loop powered) Scaled pulse output (Transistor)
Power supply	Battery: 3.6 V Lithium External: 16 - 30 VDC
Temperature	-40°C to 70°C -40°F to 158°F
Backup	EEPROM (Flash memory) Data retention at least 10 years
Passcode	Configuration settings can be pass code protected
Backlight	No
Ex Approvals	ATEX, IECEx

Construction	ERAX-RMA
Material	Aluminium
IP rating	IP67
Mounting	Wall mount
Cable Entry	(2) x PG9 and (1) x M20

\* Sensor must be installed with an approved safety barrier

LC Display	ERAX-RMA
Digital Size	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
Display	Flow Rate (Various units) Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)

### Display Example

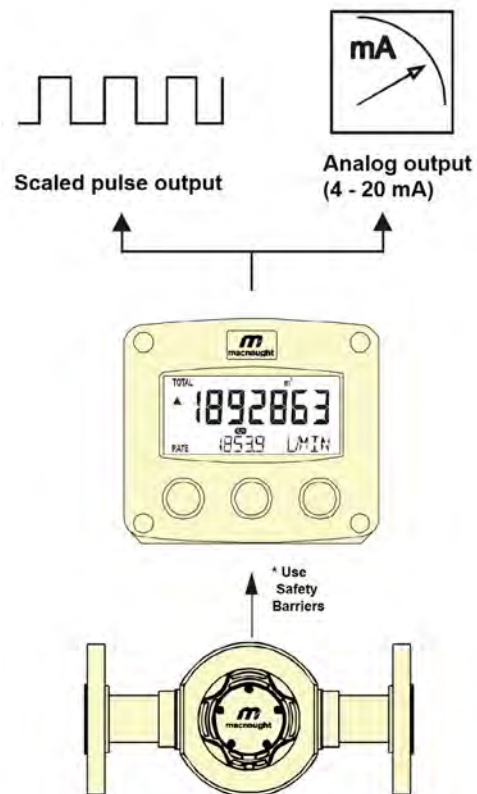


Service Kits	ERAX-RMA	Packaging	ERAX-RMA
<b>Battery</b>	Part number: MS493XS	<b>Weight (kg)</b>	1.5 kg
<b>Front fascia (including 3 buttons)</b>	Part number: MS639S	<b>Dimensions (mm) L x W x H</b>	340 x 240 x 140

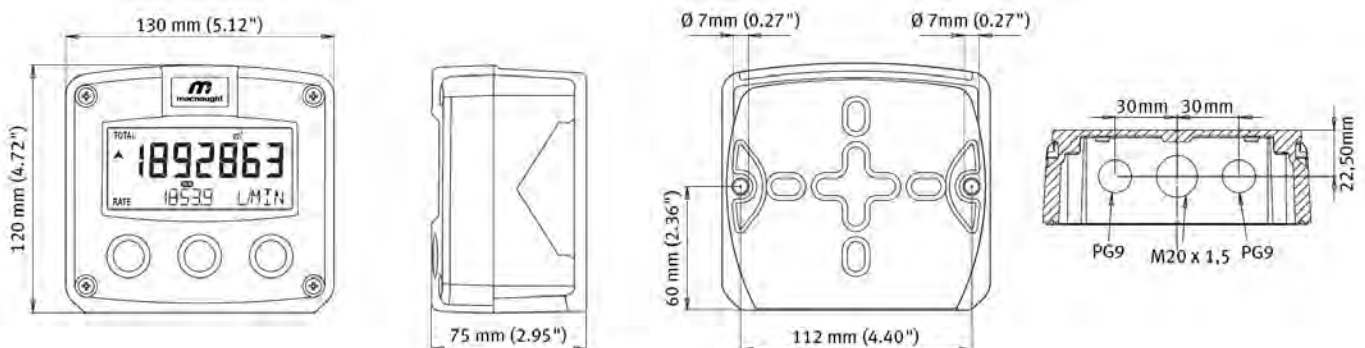
### Application\*:

ERAX-RMA can be used with flow meters having pulse output. It shows flow rate and volume on the LC Display. Analog and pulse options are available as an output.

\*Any external power must be installed with an approved safety barrier



### Dimensions



## DIGITAL DISPLAY, Model: ERAX-RMS



ERAX-RMS is an Intrinsically safe remote mountable digital register with a 17mm LCD display, providing real-time indication of Flow rate, total and accumulated total. The output include a 4-20mA and scaled pulse output.



Technical Specifications	ERAX-RMS
Signal inputs*	Reed Switch NPN sensor (Requires external power) NAMUR sensor (Requires external power)
Signal outputs	4-20mA output (Passive, loop powered) Scaled pulse output (Transistor)
Power supply	Battery: 3.6 V Lithium External: 8 - 30 VDC
Temperature	-40°C to 70°C -40°F to 158°F
Backup	EEPROM (Flash memory) Data retention at least 10 years
Passcode	Configuration settings can be pass code protected
Backlight	No
Ex Approvals	ATEX, IECEx (Group I, Mining)

\* Sensor must be installed with an approved safety barrier

Construction	ERAX-RMS
Material	Stainless Steel
IP rating	IP67
Mounting	Wall mount
Cable Entry	(2) x M20

### Display Example

LC Display	ERAX-RMS
Digital Size	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
Display	Flow Rate (Various units) Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)

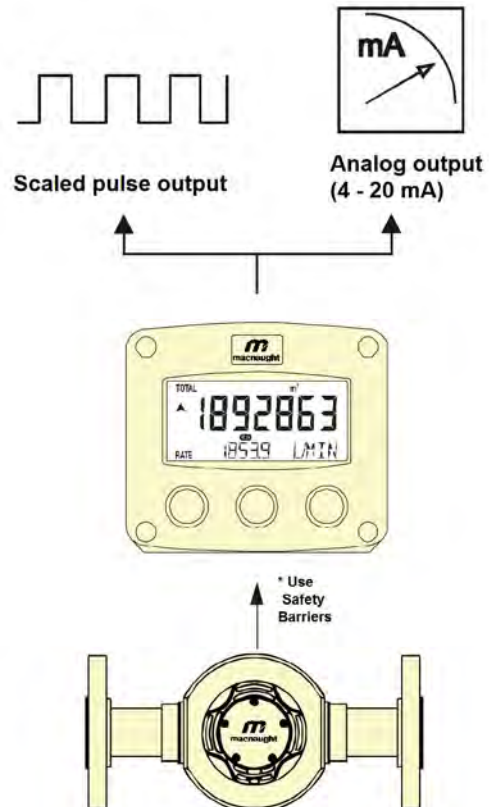


Service Kits	ERAX-RMS	Packaging	ERAX-RMS
Battery	Part number: MS493XS	Weight (kg)	3 kg
Front fascia (including 3 buttons)	None	Dimensions (mm) L x W x H	340 x 240 x 140

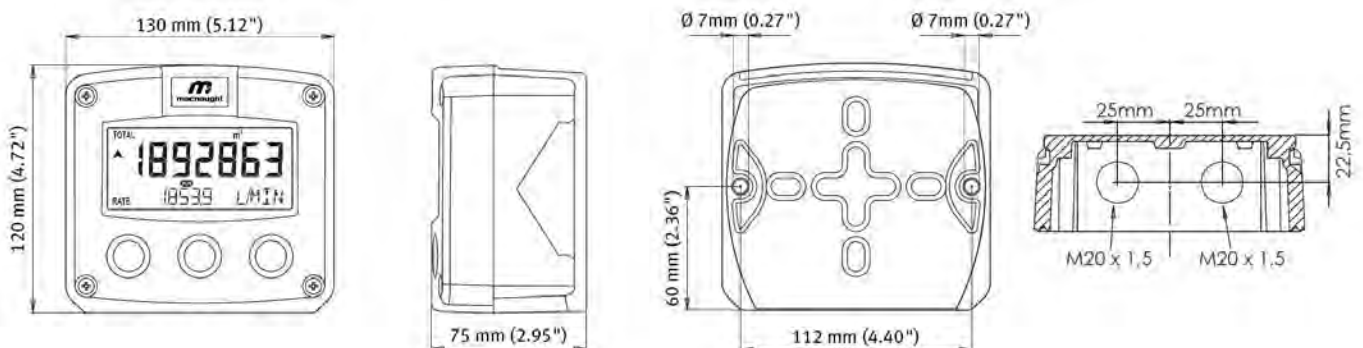
### Application\*:

ERAX-RMS can be used with flow meters having pulse output. It shows flow rate and volume on the LC Display. Analog and pulse options are available as an output.

\*Any external power must be installed with an approved safety barrier



### Dimensions



## DIGITAL DISPLAY, Model: ERBX-RMA



ERBX-RMA is an Intrinsically safe remote mountable digital register with a 17mm LCD display, providing a control output for single stage batching applications.



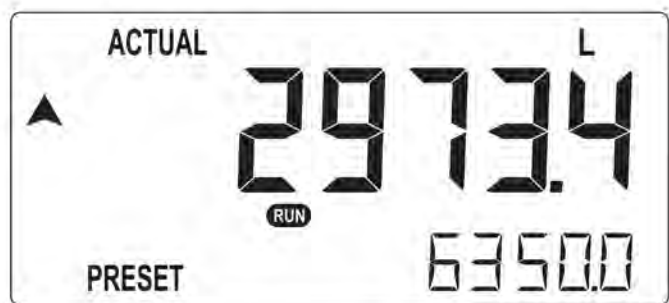
Technical Specifications	ERBX-RMA
Signal inputs*	Reed Switch NPN sensor (Requires external power) NAMUR sensor (Requires external power)
Signal outputs	Transistor switch output (Passive, Requires external power)
Power supply	Battery: 3.6 V Lithium External: 16 - 30 VDC
Temperature	-40°C to 70°C -40°F to 158°F
Backup	EEPROM (Flash memory) Data retention at least 10 years
Passcode	Configuration settings can be pass code protected
Backlight	Yes (Requires external power)
Ex Approvals	ATEX, IECEx, CSA, FM

\* Sensor must be installed with an approved safety barrier

Construction	ERBX-RMA
Material	Aluminium
IP rating	IP67
Mounting	Wall mount
Cable Entry	(2) x PG9 and (1) x M20

### Display Example

LC Display	ERBX-RMA
Digital Size	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
Display	Preset value Running Batch total Total and Accumulated total



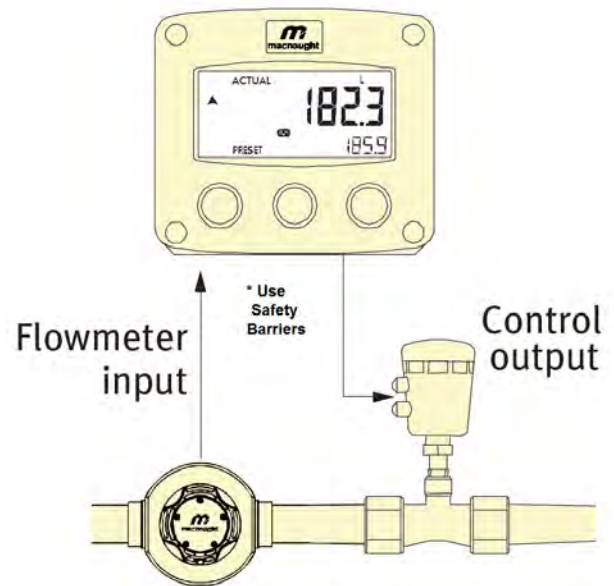


Service Kits	ERBX-RMA	Packaging	ERBX-RMA
Battery	Part number: MS493XS	Weight (kg)	1.5 kg
Front fascia (including 3 buttons)	None	Dimensions (mm) L x W x H	340 x 240 x 140

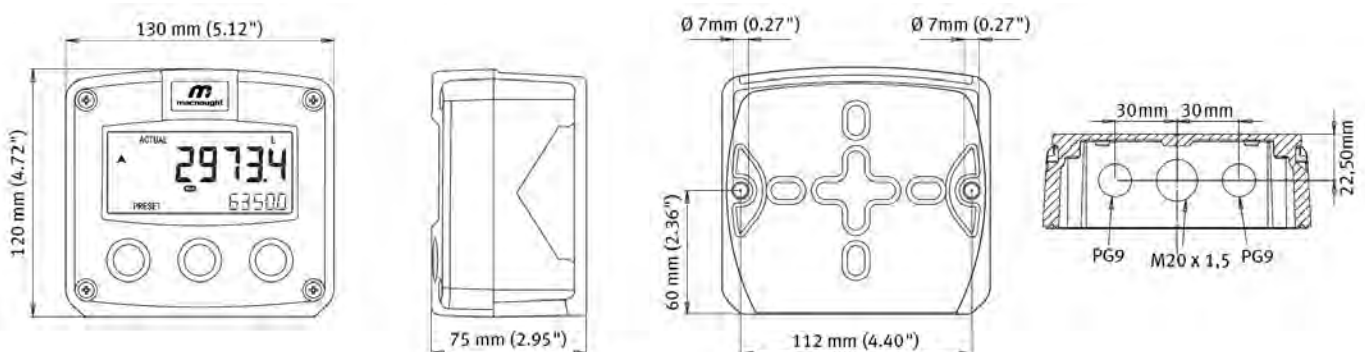
### Application\*:

ERBX-RMA can be used for batching small up to large quantities having single or repeating batches. It can also be used to display Total and Accumulated total.

\*Any external power must be installed with an approved safety barrier



### Dimensions



## DIGITAL DISPLAY, Model: MXD-GXS

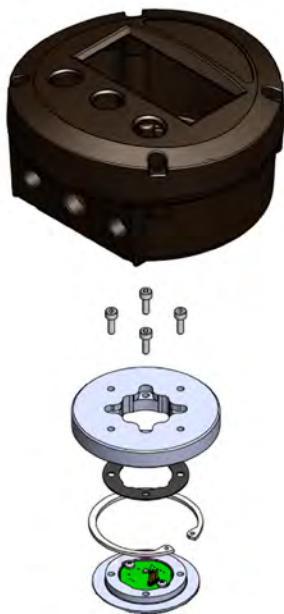


MXD-GXS is a meter mountable digital register with a 17mm LCD display, providing real-time indication of flow rate, batch total, accumulated total, scaled pulse and 4-20 mA analogue output.

**FRONT VIEW**



**EXPLODED VIEW**



Technical Specifications	MXD-GXS
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power)
<b>Signal outputs</b>	Scaled Pulse, 4-20 mA Output
<b>Power supply</b>	Battery: 3.6 V Lithium External: 16 - 30 VDC
<b>Temperature<sup>1</sup></b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Pass code</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Requires external power)
<b>Approvals</b>	EX II 1 GD EEx ia IIC T4 T100C

<sup>1</sup>Refer to flow meter's specifications for overall temperature range.

LC Display	MXD-GXS
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Flow Rate (Various units) Batch Total (Resettable) Accumulated Totalizer (Non-Resettable)

Construction	MXD-GXS
<b>Material</b>	Aluminium
<b>IP rating</b>	IP67
<b>Mounting</b>	Fixed - Meter Mounted (MX06 and MX09 only)
<b>Cable Entry</b>	(2) x M16 * 1.5 and (1) x M20 x 1.5

Service Kits <sup>2</sup>	MXD-GXS
<b>Battery</b>	Part number: MS493S
<b>Sensor Board</b>	Part number: MXS-PCB-RH
<b>Front fascia (including 3 buttons)</b>	Part number: ER002A-CS

Packaging	MXD-GXS
<b>Weight (kg)</b>	2 kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 340

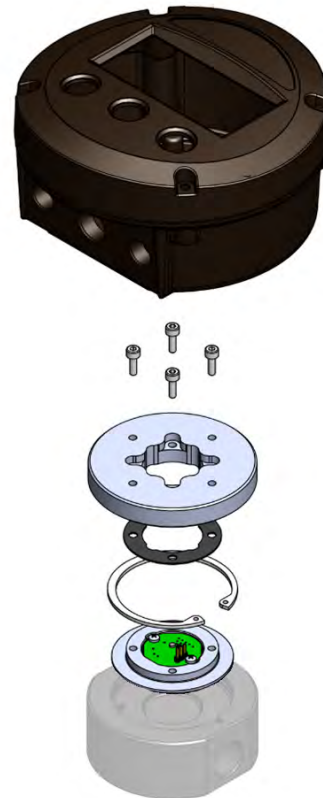
<sup>2</sup>Refer to Instruction Manual or Contact Macnaught for more service kits

## Display Example

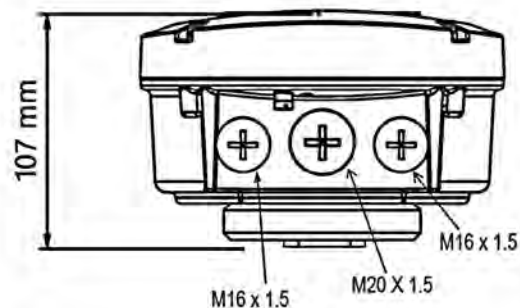
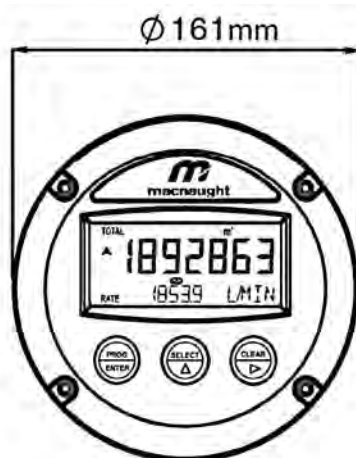


### Application:

MXD-GXS can be mounted on 1/4" size MX flow meters. It shows flow rate and volume on the LC Display.



## Dimensions



## DIGITAL DISPLAY, Model: MXD-FXS

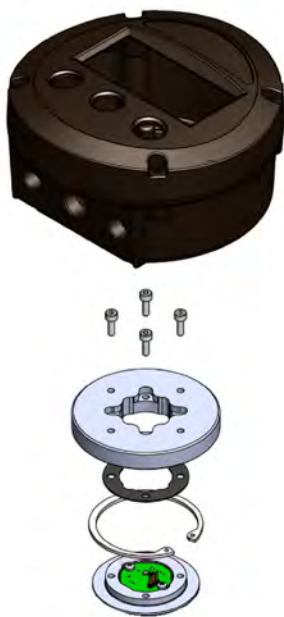


MXD-FXS is a meter mountable digital register with a 17mm LCD display, providing real-time indication of flow rate, total and accumulated total.

**FRONT VIEW**



**EXPLODED VIEW**



Technical Specifications	MXD-FXS
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power)
<b>Signal outputs</b>	None
<b>Power supply</b>	Battery: 3.6 V Lithium External: 16 - 30 VDC
<b>Temperature<sup>1</sup></b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Pass code</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Requires external power)
<b>Approvals</b>	EX II 1 GD EEx ia IIC T4 T100C

<sup>1</sup>Refer to flow meter's specifications for overall temperature range.

LC Display	MXD-FXS
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Flow Rate (Various units) Totalizer (Resettable) Accumulated Totalizer (Non-Resettable)

Construction	MXD-FXS
<b>Material</b>	Aluminium
<b>IP rating</b>	IP67
<b>Mounting</b>	Fixed - Meter Mounted (MX06 and MX09 only)
<b>Cable Entry</b>	(2) x M16 * 1.5 and (1) x M20 x 1.5

Service Kits <sup>2</sup>	MXD-FXS
<b>Battery</b>	Part number: MS493S
<b>Sensor Board</b>	Part number: MXS-PCB-RH
<b>Front fascia (including 3 buttons)</b>	Part number: ER002A-CS

Packaging	MXD-FXS
<b>Weight (kg)</b>	2 kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 340

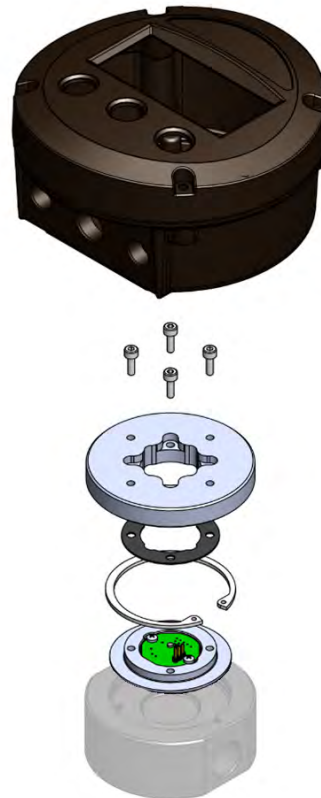
<sup>2</sup>Refer to Instruction Manual or Contact Macnaught for more service kits

## Display Example

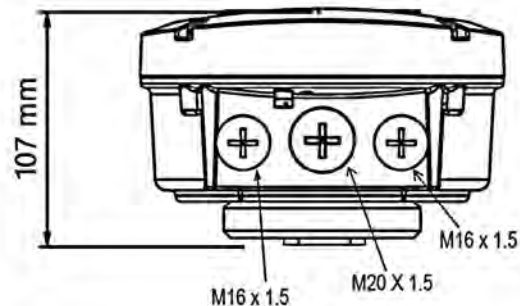
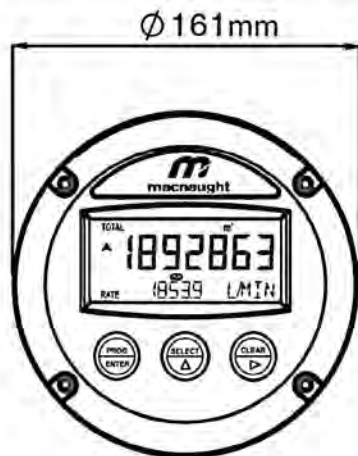


### Application:

MXD-FXS can be mounted on 1/4" size MX flow meters. It shows flow rate and volume on the LC Display.



## Dimensions





## DIGITAL DISPLAY, Model: MXD-HXS

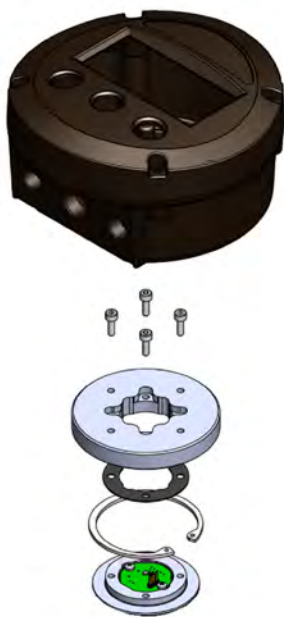


MXD-HXS is a meter mountable digital register with a 17mm LCD display, providing real-time indication of flow rate, batch preset, accumulated total.

**FRONT VIEW**



**EXPLODED VIEW**



Technical Specifications	MXD-HXS
<b>Signal inputs</b>	Reed (Can be used with internal battery) Hall Effect - NPN (Requires external power)
<b>Signal outputs</b>	Batch Control
<b>Power supply</b>	Battery: 3.6 V Lithium External: 16 - 30 VDC
<b>Temperature<sup>1</sup></b>	-40°C to 80°C -40°F to 176°F
<b>Backup</b>	EEPROM (Flash memory) Data retention at least 10 years
<b>Pass code</b>	Configuration settings can be pass code protected
<b>Backlight</b>	Yes (Requires external power)
<b>Approvals</b>	EX II 1 GD EEx ia IIC T4 T100C

<sup>1</sup>Refer to flow meter's specifications for overall temperature range.

LC Display	MXD-HXS
<b>Digital Size</b>	Upper LCD 7 Digits (17mm) Lower LCD 11 Digits (8mm)
<b>Display</b>	Flow Rate (Various units) Batch Control Accumulated Totalizer (Non-Resettable)

Construction	MXD-HXS
<b>Material</b>	Aluminium
<b>IP rating</b>	IP67
<b>Mounting</b>	Fixed - Meter Mounted (MX06 and MX09 only)
<b>Cable Entry</b>	(2) x M16 * 1.5 and (1) x M20 x 1.5

Service Kits <sup>2</sup>	MXD-HXS
<b>Battery</b>	Part number: MS493S
<b>Sensor Board</b>	Part number: MXS-PCB-RH
<b>Front fascia (including 3 buttons)</b>	Part number: ER002A-CS

Packaging	MXD-HXS
<b>Weight (kg)</b>	2 kg
<b>Dimensions (mm) L x W x H</b>	340 x 240 x 340

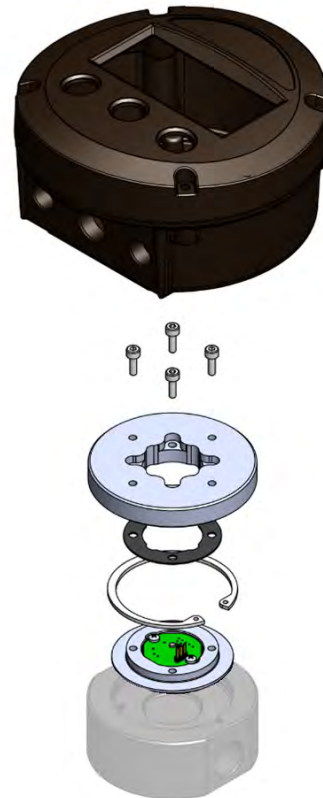
<sup>2</sup>Refer to Instruction Manual or Contact Macnaught for more service kits

## Display Example



### Application:

MXD-HXS can be mounted on 1/4" size MX flow meters. It shows flow rate and volume on the LC Display.



## Dimensions

