

Macnaught Chemical Flow Meters

The 'CR' range from Macnaught are a family of positive displacement oval gear flowmeters that are optimised for corrosive chemical measurement applications.

Macnaught Corrosive Chemical meters are constructed utilising a PPS blend suitable for use in aggressive chemical environments.

Our unique bearingless Rotor design provides exceptionally low pressure drop and can even be used in gravity fed applications. This unique rotor design utilises PPS blended advanced material, ensuring minimal wear and resulting in many years of reliable service. This approach has proven over time to provide consistently accurate flow measurement that is not affected by variations in temperature, viscosity, or pressure.

Another benefit of our unique rotor design is simplicity of repair. With only 2 moving parts, our meters are simple to repair, require minimal repair parts stock, and can even be repaired inline, resulting in less downtime.

The positive displacement meter technology provides excellent batch accuracy (0.03% repeatability) and is not affected by pulsating flow, high viscosity, or low conductivity. This technology is also ideal for dispensing and dosing at extremely low flow rates and small batch sizes.

Oval Gear flowmeters do not require any flow conditioning or straight piping runs before or after the meter, so they can be installed in tight spaces without any sacrifice in performance.

With 9 digital display options to choose from, Macnaught flowmeters are the perfect choice with outputs and displays to suit virtually any application requirement.

Applications

- Laundry chemicals
- Additive injection
- Water treatment
- Corrosive chemical dispensing
- Chemical batching
- Chemical packaging and blending

Technical Specifications

Materials of construction

- Meter Body
 - PPS Blend (Type CR)
- Rotor Materials
 - PPS Blend (Type CR)
- Seal Material
 - Perfluoro Elastomer

Compliance (as applicable)

- Meters
 - CE (Certificate of Conformity)
- Displays (remote mount only)
 - ATEX
 - IECEx

Display Options

- 12mm LCD digital display
- 17mm LCD digital display

Outputs options

- 4-20mA
- Transistor
- Pulse Output
- Alarm

Total Flow Range

- 0.008 80 L/min
- 0.002 21 USG/min

For pricing or any further information, please contact Omni Instruments Ltd.



Contact Details:

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Mailing Address:



Macnaught Chemical Flow Meters

Series	Model	Nominal	Flow Range		Max Working	Max Working
		Size	LPH	GPH	Pressure (bar)	Pressure (PSI)
CR	006	1/4″	0.5 - 100 LPH	0.13 - 26.4 GPH	5	75
	009	1/4"	15 - 500 LPH	4 - 132 GPH	5	75
	025	1″	3 - 80 LPM	0.8 - 21 GPM	10	150
		Port Type				
		2	NPT			
		4	BSP (Rc)			
			Rotor Type			
			S	Standard		
				Display Type		
				1	Electronic Pulse Meter (Reed & Hall Effect)	
		- 1	- 1	2	Reed Switch Only	(Hazardous Locations)
CR	009 -	4	S	1	CR009-4S1	Example model





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Flow Measurement Solutions





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Macnaught Pulser Output Options

	TYPE A	TYPE B	TYPE N	TYPE T
Pulser	macnaught 6			
Туре	STANDARD PULSE	INTRINSICALLY SAFE	INTRINSICALLY SAFE	HIGH TEMP
Output Type	Pulser	Pulser	Pulser	Pulser
Switch Type	Reed/Hall Effect	NPN open collector	NAMUR	NPN open collector
Construction	PP (polypropylene)	Stainless Steel	CuZn, Chrome Plated	Stainless Steel
IP rating	IP 67	IP 67	IP 67	IP 67
Max Temp	120°C/248°F	85ºC/185ºF	85ºC/185ºF	150ºC/302ºF
Intrinsically Safe (Ex ia)	х	√	√	х
Approvals		ATEX, CSA, FM II I G Ex ia IIC T6	ATEX, IECEx II G Ex ia IIC T4T6 Ga II 1 D E x ia IIIC T115°C Da	

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Dundee, DD4 7RH, UK



Macnaught Digital Display Options

	TYPE D	TYPE E	TYPE F	TYPE G	TYPE H
Meter Mount		The state of the s			
Model	PR	PRA	ER	ERA	ERB
Construction	PP (polypropylene)	PP (polypropylene)	Aluminium	Aluminium	Aluminium
Digits Size	12mm	12mm	17mm	17mm	17mm
IP Rating	IP 67	IP 67	IP 67	IP 67	IP 67
Max Temp	60°C/140°F	60°C/140°F	80°C/176°F	80°C/176°F	80°C/176°F
Accumulated Total	√	√	√	√	√
Resettable Total	√	√	√	√	√
Flow Rate	√	√	√	√	√
4-20 mA (passive)	х	√	Х	√	х
Pulse Output	х	√	Х	√	х
Hi/Low Flow Alarm	Х	√	Х	х	х
Batch Control	х	х	Х	х	√
Remote Mount	maconaght DP	macroaught CE 9 8 9 9	# # # # # # # # # # # # # # # # # # #	9	
Model	PR-WM	PRA-WM	ERX-RMP (RMA)	ERAX-RMP (RMA)	ERBX-RMP (RMA)
Construction	PP (polypropylene)	PP (polypropylene)	Aluminium or PP	Aluminium or PP	Aluminium or PP
IP Rating	IP 67	IP 67	IP 67	IP 67	IP 67
Intrinsically Safe (Ex ia)	х	Х	√	V	V
Approvals			ATEX, IECEx	ATEX, IECEx	ATEX, IECEx

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