

FLEXMAG 4050 C

Flowmeter

KROHNE FLEXMAG 4050 C Flowmeter

Features and benefits

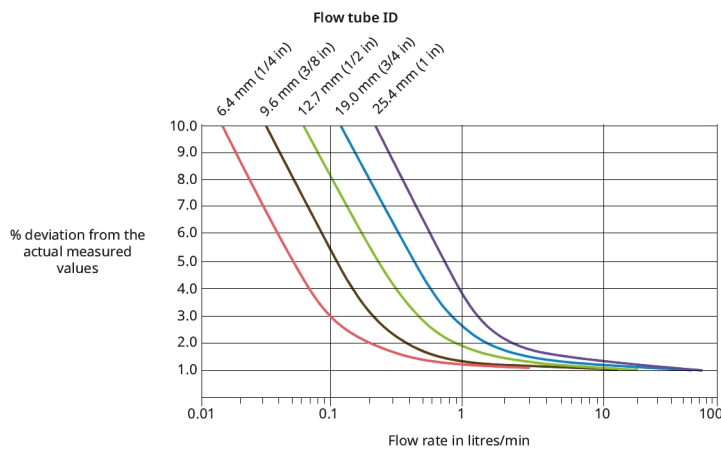
- Electromagnetic flowmeters provide superior accuracy and repeatability
- Verify accurate flow conditions of compatible Watson-Marlow pumps
- Enable easy integration into customised puresu single-use assemblies to ensure product quality



FLEXMAG 4050 C Flowmeter performance

Flow tube ID and tube bore	Transmitter	Flowmeter flow range (l/min)	Flow rate range and flow sensor measuring error	Flow rate range and flow sensor measuring error	Watson-Marlow cased pumps	
ID 6.4 mm (1/4 in)	Small	0.015 to 3 l/min	0.1 to 1 l/min	up to 3.5%	1 to 3 l/min	530
ID 9.6 mm (3/8 in)	Medium	0.07 to 14 l/min	0.2 to 2 l/min		2 to 14 l/min	630
ID 12.7 mm (1/2 in)	Medium	0.1 to 20 l/min	0.4 to 4 l/min		4 to 20 l/min	530
ID 19.0 mm (3/4 in)	Large	0.3 to 62 l/min	0.9 to 8.5 l/min		8.5 to 62 l/min	630
ID 25.4 mm (1 in)	Large	0.5 to 75 l/min	1.5 to 15 l/min		15 to 75 l/min	730
					up to 1.35%	630
						730
						730
						730
						730

Figure 1: Accuracy and Flow Performance



Technical specifications

	FLEXMAG 4050 C Flowmeter
Working temperature range	2 °C to 45 °C
Working temperature range	36 °F to 113 °F
Storage temperature range	-40 °F to 140 °F
Storage temperature range	-40 °C to 60 °C
Max. operating pressure	4 bar
Max. operating pressure	58 psi
Power supply	24 V DC
Weight	0.39 - 0.46 kg
Weight	0.86 - 1.01 lbs
Min. flow rate	0.015 L/min
Max. flow rate	75 L/min
Pulse output	0 to 1000 Hz
Min. fluid conductivity requirement	≥20 µs/cm
Sterility	Flow tubes and bags are gamma sterilisable up to 50kGy and autoclavable up to 121°C for 30 min
Connector	M12 8-pin
Cable	2m cable included. Transmitter end: M12 8-pin connector fitted. Control end: unfinished.
Certification and compliance	BSE/TSE free, FDA 21 CFR 177, USP Class VI
Protection category	IP54

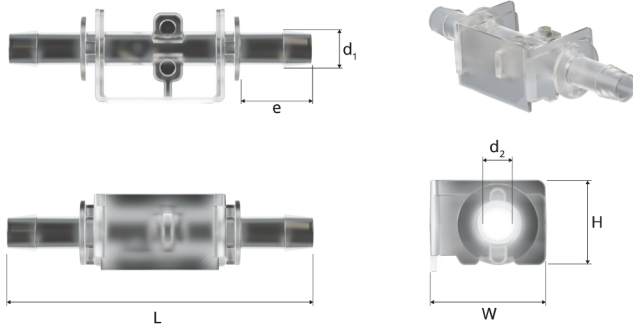
Small: 0.40 kg (0.88 lbs), Medium: 0.39 kg (0.86 lbs), Large: 0.46 kg (1.01 lbs)

Materials of construction

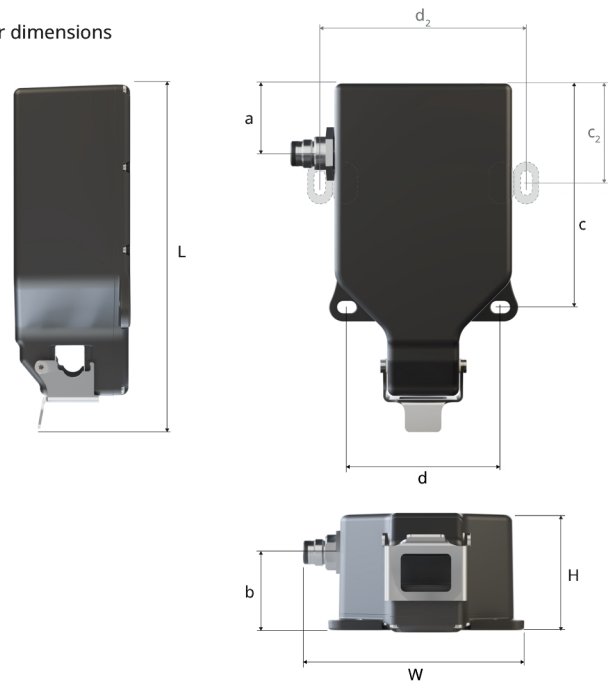
	FLEXMAG 4050 C Flowmeter
Case material	Acrylonitrile butadiene styrene (ABS), Polycarbonate (PC)
Wetted material	Hastelloy C22, Polysulfone (UDEL 1700)

FLEXMAG 4050 C Flowmeter dimensions

Flow tube dimensions



Transmitter dimensions



Dimensions transmitter

Nominal size	L	W	H	a	b	c	d
Large	160 mm (6.30 in)	100 mm (3.94 in)	60 mm (2.36 in)	23 mm (0.91 in)	42 mm (1.65 in)	100 mm (3.94 in)	59 mm (2.32 in)
Medium	139 mm (5.47 in)	90 mm (3.54 in)	48 mm (1.89 in)	23 mm (0.91 in)	33 mm (1.30 in)	82 mm (3.23 in)	66 mm (2.60 in)
Small	144 mm (5.67 in)	90 mm (3.54 in)	48 mm (1.89 in)	28 mm (1.10 in)	33 mm (1.30 in)	94 mm (3.70 in)	66 mm (2.60 in)

All mounting holes diameter: 5.2 mm x 8.2 mm (0.20 in x 0.32 in). 2 additional mounting holes for Large Transmitter: c2 = 41 mm (1.61 in); d2 = 84 mm (3.31 in)

Dimensions flow tube

Nominal size	L	W	H	d1	d2	e
ID 1/4"	70 mm (2.76 in)	22 mm (0.87 in)	17 mm (0.67 in)	8.5 mm (0.33 in)	6.0 mm (0.24 in)	16.6 mm (0.65 in)
ID 3/8"	95 mm (3.74 in)	30 mm (1.18 in)	25 mm (0.98 in)	12.6 mm (0.50 in)	9.2 mm (0.36 in)	25.6 mm (1.01 in)
ID 1/2"	95 mm (3.74 in)	30 mm (1.18 in)	25 mm (0.98 in)	16.9 mm (0.67 in)	12.5 mm (0.49 in)	25.6 mm (1.01 in)
ID 3/4"	125 mm (4.92 in)	45 mm (1.77 in)	41 mm (1.61 in)	23.4 mm (0.92 in)	19.0 mm (0.75 in)	36.0 mm (1.42 in)
ID 1"	140 mm (5.51 in)	45 mm (1.77 in)	41 mm (1.61 in)	29.9 mm (1.18 in)	25.4 mm (1.00 in)	44.0 mm (1.73 in)

Product codes

Transmitter

0 F 9 . 4 0 5 0 . • 1 0

Transmitter size

S: Small
M: Medium
L: Large

Flow tubes (Box of 10)

9 9 1 . 4 0 5 0 . • • •

Flow tube bore

064: 6.4 mm
096: 9.6 mm
127: 12.7 mm
190: 19.0 mm
254: 25.4 mm

FLEXMAG flowmeters are available for order in combination with 530, 630, 730 cased pumps and integrated into WMArchitect assemblies. Additional functionality when used in combination with En/Pn cased pumps. These products are not offered stand-alone.

Disclaimer: The information contained in this document is believed to be correct but Watson-Marlow Limited accepts no liability for any errors it contains and reserves the right to alter specifications without notice. It is the user's responsibility to ensure product suitability for use within their application. Watson-Marlow, Bio Tube and PureWeld XL are trademarks of Watson-Marlow Limited.

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