Technical Data for CODA K-Series Mass Flow Meters

40 GRAMS per hour full scale to 300 KILOGRAMS per hour full scale

Standard specifications. Consult Alicat for available options.



SENSOR AND CONTROL PERFORMANCE				
Mass flow accuracy ¹	Liquid: $\pm 0.6\%$ of reading or $\pm 0.2\%$ of full scale, whichever is greater Gas: $\pm 1\%$ of reading or $\pm 0.2\%$ of full scale, whichever is greater Liquid with high-accuracy option: $\pm 0.2\%$ of reading or $\pm 0.05\%$ of full scale, whichever is greater Gas with high-accuracy option: $\pm 0.5\%$ of reading or $\pm 0.05\%$ of full scale, whichever is greater			
Flow repeatability (2σ)	$\pm 0.1\%$ of full scale High-accuracy option: $\pm 0.05\%$ of reading or $\pm 0.025\%$ of full scale, whichever is greater			
Flow measurement range	1-100% of full scale High-accuracy option: 0.2-100% of full scale			
Temperature sensitivity	Mass flow zero shift: ±0.02% of full scale per °C from tare temperature ² Mass flow span shift: ±0.01% of reading per °C from 25°C High-accuracy option mass flow zero shift: ±0.01% of full scale per °C from tare temperature ² High-accuracy option mass flow span shift: ±0.005% of reading per °C from 25°C			
Operating temperature range	−35–70°C			
Ambient temperature range	0–60°C Consult Alicat for additional options			
Typical indication response time	40–10,000 g/h: <40 ms (T63) 30,000–300,000 g/h: <60 ms (T63)			
Typical warm-up time	15 minutes			
Density accuracy ³	±5 kg/m³			
Density range	100 – 2,000 kg/m³ measurable			
Viscosity range	0-200 cP			
Zero stability	$\pm 0.2\%$ of full scale (included in mass flow accuracy) High-accuracy option: $\pm 0.05\%$ of full scale (included in mass flow accuracy)			

- 1 Stated accuracy is after tare, under equilibrium conditions, includes repeatability and linearity.
- ${\bf 2}$ Mass flow zero shift for 40 g/h is $\pm 0.025\%$ of full scale per °C from tare temperature.
- 3 Density reading and density accuracy are independent of the mass flow reading and mass flow accuracy.

MECHANICAL				
Wetted materials	316L stainless steel and FKM standard; nickel alloy, FFKM, and EPDM optional Consult Alicat for additional wetted materials options			
Ingress protection	IP40 or IP67			
Mounting orientation sensitivity	None			
Mounting holes	2× M5-0.8 threaded, \$\Pi\$ 0.39" [10 mm]			

POWER AND COMMUNICATION				
Digital input and output options	ASCII and Modbus RTU over RS-232 or RS-485, EtherCAT, EtherNet/IP, PROFINET			
Digital update rate	50 Hz at 19200 baud			
Analog input and output options	0-5 Vdc, 0-10 Vdc, 4-20 mA			
Analog update rate	50 Hz			
Interactive display	Monochrome LCD display with integrated touchpad; simultaneously displays mass flow, volumetric flow, density, and temperature. Also available without display.			
Electrical connection options	USB-C and DB-15, M12, RJ45 (industrial protocol models)			
Power requirements ⁴	9–30 Vdc, 4.7 W via DB15, M12, or power jack (industrial protocol models) 5 Vdc, 4.7 W via USB-C			

⁴ Subtract 1.7W for devices with no integrated display.

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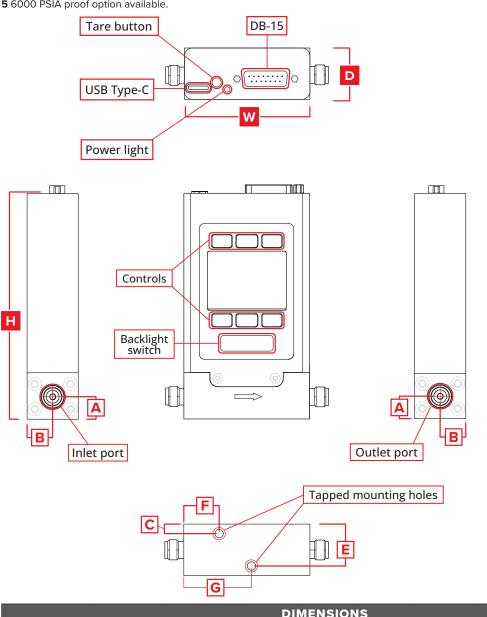
40 GRAMS per hour full scale to 300 KILOGRAMS per hour full scale

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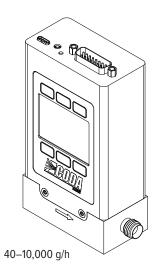


RANGE-SPECIFIC TECHNICAL DATA						
Full scale flow (g/h)	Recommended inlet filter	Nominal pressure drop (H ₂ O)	Proof pressure (PSIA)⁵			
40	2 μm	≥6 PSID	1500			
100-1000	20 μm	≥15 PSID	1500			
3000-10,000	40 μm	≥15 PSID	1500			
30,000-100,000	120 μm	≥15 PSID	1500			
300,000	120 μm	≥110 PSID	1500			

5 6000 PSIA proof option available.



Representative Example



DIMENSIONS							WEIGHT			
Full scale flow	Width	Depth	Height	A	В	С	Е	F	G	
40-10,000 g/h	3.57"	1.49"	5.10"	0.49"	0.75"	0.39"	1.10"	1.02"	1.73"	≈ 3.0 lb
	90.6 mm	37.9 mm	129.4 mm	12.5 mm	18.9 mm	10.0 mm	27.9 mm	26.0 mm	44.0 mm	≈ 1.3 kg
30,000 – 300,000 g/h	4.56"	1.58"	6.19"	0.63"	0.79"	0.43"	1.14"	1.21"	1.92"	≈ 4.2 lb
	115.9 mm	40.0 mm	157.3 mm	16.0 mm	20.0 mm	11.0 mm	29.0 mm	30.8 mm	48.7 mm	≈ 1.9 kg

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