



## FD-XA1

Controller DIN rail type, main unit





\*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

## **Specifications**

Model		FD-XA1
Туре		DIN rail type, main unit
Display method		Output indicator, 4-digit 7 segment display, OLED, Stability level display
Display refresh frequency		Instantaneous flow: approx. 5 times/second, Discharge amount/Accumulated flow approx. 30 times/second
Response time		50 ms/100 ms/500 ms/1 s/2.5 s/5 s/10 s/30 s/60 s (selectable, default: 500 ms)
Integration data storage interval		Written to the memory every 10 seconds
Memory back up		EEPROM (data storage period: more than 10 years, number of data rewritable times: 1 million times or more) *1
Detection mode	ch.1	Instantaneous flow rate mode/Area mode/Pulse output (+) mode/Integrated flow mode/Shot mode (selectable)
	ch.2	Instantaneous flow rate mode/Area mode/Pulse output (-) mode/Shot mode/Error output mode/Bubble alert mode/Error + bubble alert mode (selectable)
Input/output	Output	NPN/PNP setting switch Open collector output: 30 V or lower, main unit: 50 mA or lower/ch.*2/expansion unit: 20 mA or lower/ch., residual voltage: 2 V or lower
	Analog output	4-20 mA/0-20 mA (selectable) load resistance: 500 ohms or lower
	External input	Flow rate zero input/shot sampling input/integrated flow reset input/zero shift input (selectable)  Short circuit current: NPN 1 mA or lower/PNP 2 mA or lower, input time: 20 ms or longer
Network support		IO-Link <sup>+3</sup>
Unit expansion		Up to 7*4 per main unit
Protection circuit		Power supply reverse connection protection, power surge protection, output short circuit protection, output surge protection
Power supply	Power voltage	20 to 30 VDC including 10 % ripple (P-P) , Class 2
	Power consumption	195 mA or lower (including the sensor head, excluding the load current)
Environmental resistance	Ambient temperature	-10 to +50 °C (No freezing) 14 to 122 °F
	Relative humidity	35 % to 85 %RH (No condensation)
	Vibration resistance	10 - 55 Hz, double amplitude 1.5 mm 0.06 ", 2 hours each for X,Y,Z direction
	Shock resistance	100 m/s² (approx. 10 G) 16 ms pulse, 1000 times each for X,Y,Z direction
Material		Main body case/front sheet: PC, Key top: POM, Cable: PVC
Weight		Approx. 210 g

<sup>\*1</sup> Internal data from full time recording can be read via USB (Ver.2.0) communication.

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<sup>\*2 20</sup> mA or lower/ch when adding expansion units.

<sup>\*3</sup> IO-Link: Specification v1.1/COM2 (38.4 kbps) is supported. If the end of the cable needs to be an M12 connector when supporting IO-Link communication, connect an M12 conversion connector (OP-88296) to the cable.



FD-XA1

## **Dimensions**

\* Download CAD file or product manual for larger image/text and more detail.

20.6min. (e5.6, Minimum bend radius R10)

<sup>\*4</sup> Refer to the Instruction Manual for the number of connected units to N-bus devices.