

Differential-pressure-type flowmeter EM2 model series

- Flange insertion type
- DC 4–20mA output

With indicator



Image Model : EML2-B-80A-R-10

- Improved visibility



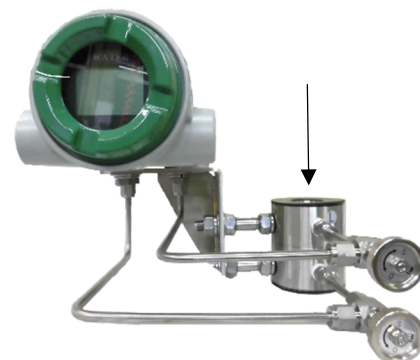
Indicator device part

- Specifications without indicator



EML2-B-80A-R-00

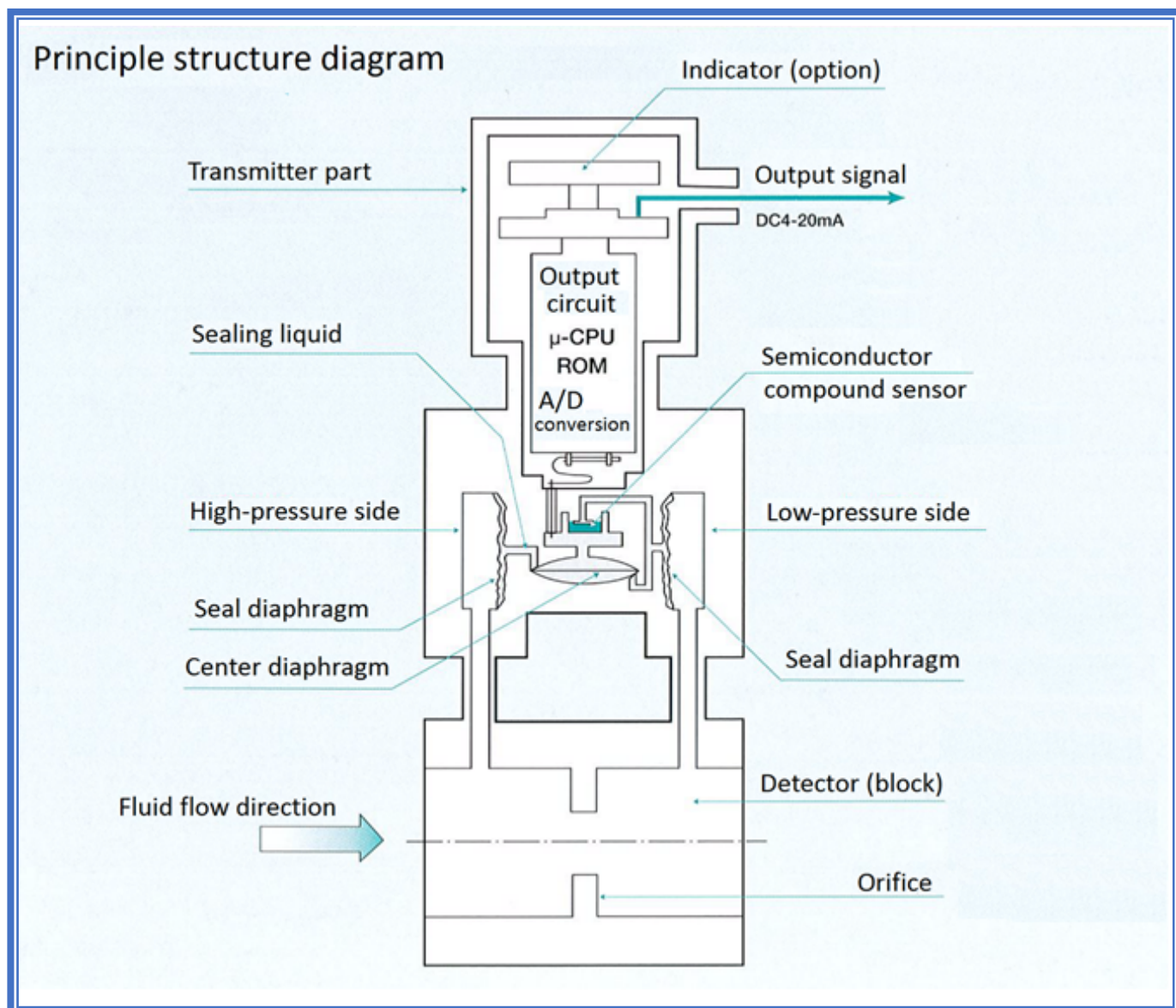
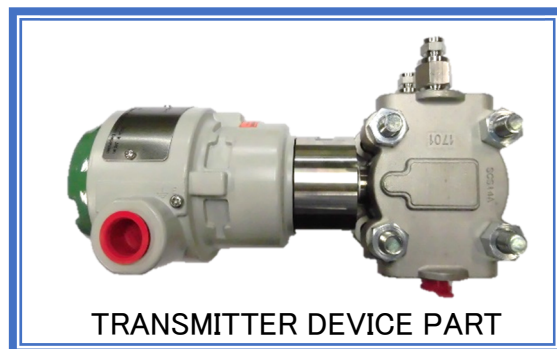
- various flow directions



Case of Top to Bottom

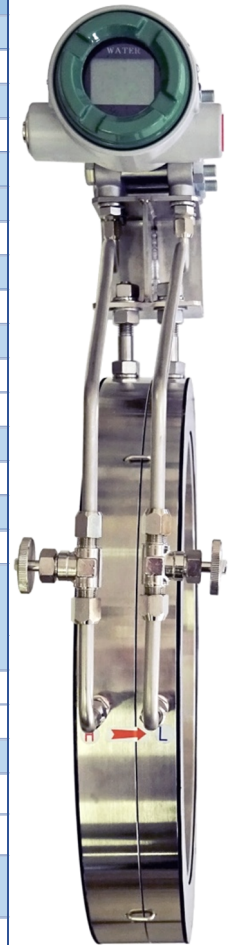
Innovation and abundant features are combined in a compact body.

- Integrating a semiconductor compound sensor and a microcomputer, the product converts measured flow rate into a DC 4–20 mA signal.
- The use of a metal diaphragm for the pressure receiver provides a structure that resists high line pressure.
- With the compact body weighing approximately 4.2 kg, the transmitter part has achieved a reduction in size and weight. * Product with standard specifications.
- It is a two-wire flowmeter that can be wired from both sides.
- Adopting a watertight structure (JIS C0920) that allows it to be temporarily submerged, it has excellent waterproofness.
- It can be easily installed in the middle of piping to determine the flow direction on the spot and for remote transmission.



Specifications

Model		EML2	EMT 2(Transmitter device part only)	EMS (Special specifications)
Item				
Maximum differential pressure		50kPa / 5000mmAq		
Flow rate range		0 - 1 : 5		
Output signal		DC 4-20 mA (Approx. 7.2 mA or below cut off)		
Power source		Two-wire type: DC 16.7-42.0 V, four-wire type: DC 24 V		
Load resistance		250Ω - 1.2 k Ω		
Allowable Load resistance		600Ω (When the Power-supply voltage is 24V)		
Accuracy		FS ±2% or below		
Operating temperature range		-20 to 80°C (No freezing allowed)		
Temperature characteristic		0.02%/°C		
Operating pressure range		Max. 3MPa	Corresponds to EML2	
Indicator Material	diaphragm	HASTELLOY C		
	Wetted part	SUS316L/SCS14A (standard) , SUS316L/SCS16A		
Amplifier material		Aluminum alloy		
Sealing liquid		Silicon oil		
Wiring connection		G1/2		
Structure		JIS C0920 Watertight type		
Arrester		Equipped with surge absorber (protects integrated electronic circuit from external surge) Surge-withstanding voltage: 1000 A		
Paint color of Transmitter	cover	Green / melamine painting		
	housing	Light gray / acid proof painting		
Mass of transmitter part		Approx. 4.2 kg		
Piping connection structure	Insertion	15A ~ 350A		
	Screw	Rc1B ~ 2B		
Detector material (block material)		SUS304,SUS316,SUS316L		
Other		Special specifications: Special explosion proof		
Option		<ul style="list-style-type: none"> • Indicator: Digital 4.5 digits (display on the spot) • Power source distributor (AC 100 V or DC24V) • Integrating meter • Meter relay etc 		



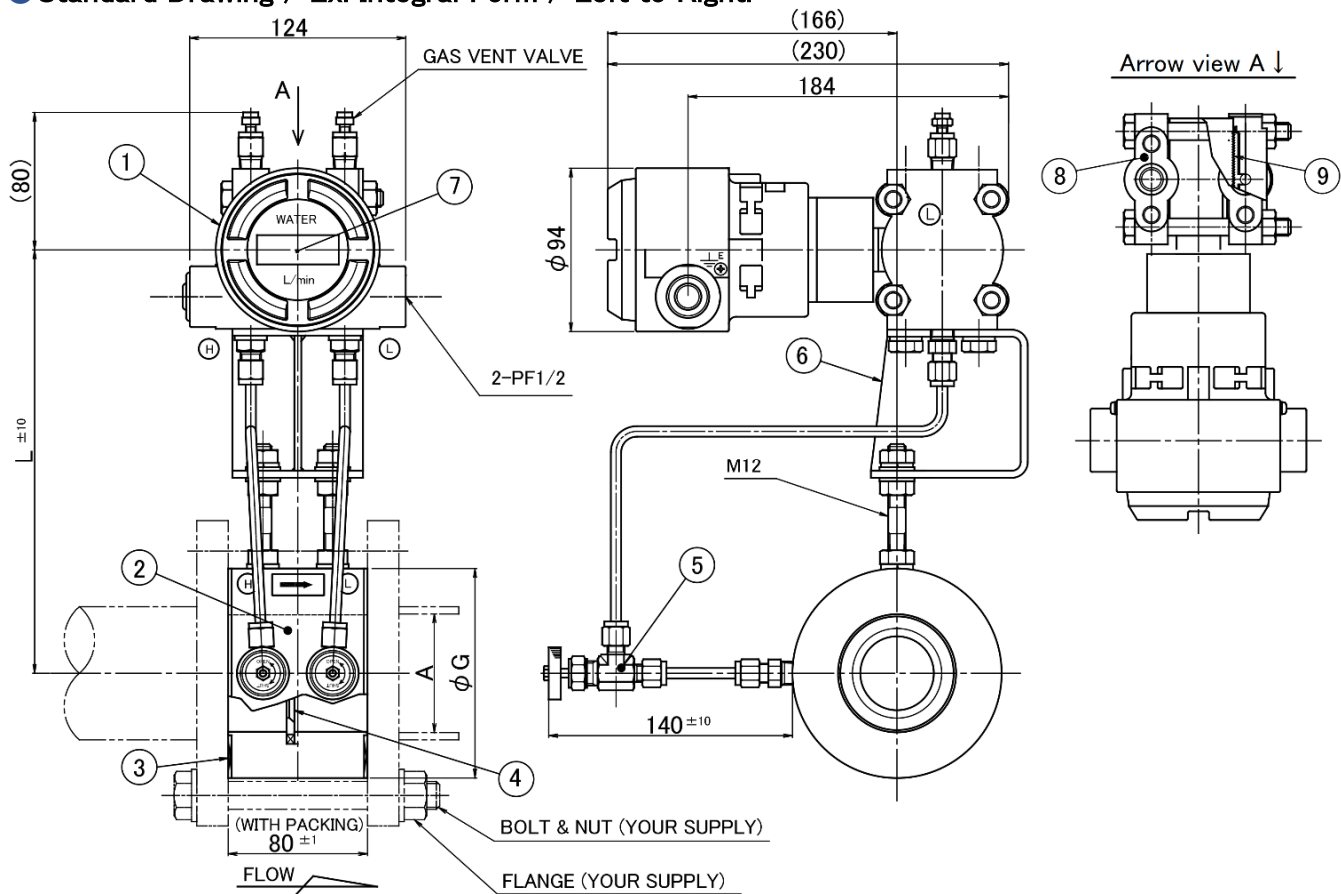
350A

Model Composition

Model cord										Details	
EM	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>	—	<input type="checkbox"/>	<input type="checkbox"/>	
Fluid	L2	—		—		—		—			Water, Liquid
		—		—		—		—			Others
Connection method	A	—		—		—		—			JIS5K Flange insertion type
	B	—		—		—		—			JIS10K Flange insertion type
	C	—		—		—		—			Rc screw
	D	—		—		—		—			Others
Nominal diameter	15A~300A		—		—		—				Flange insertion type
	1B~2B		—		—		—				Rc screw
			—		—		—				Others (ANSI etc)
Flow direction	L	—		—		—		—			Left→Right
	R	—		—		—		—			Right→Left
	U	—		—		—		—			Bottom→Top
	D	—		—		—		—			Top→Bottom
	B	—		—		—		—			Back→Front
	F	—		—		—		—			Front→Back
Material (Block / Cover flanges) If this is blank, it means SUS304/SCS14A.							304	—			SUS304 / SCS14A
							316	—			SUS316 / SCS14A
							316L	—			SUS316L / SCS16A
Indicator									0		Absent
									1		Present
Distributor									0		Absent
									1		Present

Please tell us the flow rate range when making inquiries. (See next section)

● Standard Drawing / Ex. Integral Form / Left to Right.



● Flow rate range at each diameter

SIZE (A)	FLOW RANGE		φ G (mm)		L (mm)
	WATER (L/min)		JIS5K	JIS10K	
15	4 ~ 20		48	52	210
	8 ~ 40				
20	8 ~ 40		52	58	215
	12 ~ 60				
25	12 ~ 60		62	70	220
	20 ~ 100				
32	20 ~ 100		72	80	225
	30 ~ 150				
40	30 ~ 150		78	85	230
	50 ~ 250				
50	50 ~ 250		88	100	235
	80 ~ 400				
65	80 ~ 400		112	120	245
	120 ~ 600				
80	120 ~ 600		125	130	255
	200 ~ 1000				
100	200 ~ 1000		145	155	265
	300 ~ 1500				
125	300 ~ 1500		180	185	280
	500 ~ 2500				
150	500 ~ 2500		210	215	295
	800 ~ 4000				
200	800 ~ 4000		255	265	310
	1200 ~ 6000				
250	1200 ~ 6000		320	325	340
	2000 ~ 10000				
300	2000 ~ 10000		365	370	360
	3000 ~ 15000				

● Part name of standard model

No	Name	MATERIAL	ABSRTACT	Qty
1	Transmitter	AC/ SUS316L etc		1
2	Block	SUS304		1S
3	Packings	NBR		2
4	Orifice Plate	SUS304		1
5	Stop Valve / Union	SUS316	φ 6	2S
6	Standard Bracket	SUS304		1
7	Indicator	AC & OTHER		1
8	Cover Flanges	SCS14A		2
9	Diaphragm	Hastelloy C		2

● Notes

- * The block's outside diameters are the same as JIS flange standard size φ G.
- * ASME size can be manufactured.
- * Please contact our sales representative for the pressure equalizing valve.
- * Straight piping portions must be present before and after the detector.
 - (1) Inlet side: Length of 10 times or more the inner diameter of piping.
 - (2) Outlet side: Length of 5 times or more the inner diameter of piping.
- * Please note that specifications are subject to change without notice for improving products.

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