TECHNICAL GUIDANCE

MAGMAX

EGM4010C

Compact Electromagnetic Flowmeter

GENERAL

MAGMAX EGM4010C is a combination of flange type EGS4000 primary head with PFA/PTFE liner and general-purpose / economical converter EGC010.
10 to 1000mm sizes are available. EGM4010C is widely applicable for chemical processes and many other applications.

FEATURES

- ❏ Punched plate reinforced high quality clear PFA is adopted (size : 25 to 150mm) for high anti-corrosive, anti-erosion and anti-penetration capability.
- ❏ Other than PFA/PTFE, different types of lining are also available.
- ❏ High accuracy of ±0.5% of reading.
- ❏ High speed data processing for quick response.
- ❏ Low power consumption of approx. 5VA.
- ❏ Independent output terminals for current, pulse and status (alarm, etc.) output.
- ❏ Forward/Reverse flow can be measured.

STANDARD SPECIFICATION

General Specification

- Excitation : Square wave
- Nominal size : 10, 15, 20, 25, 40, 50, 65, 80, 100, 125, 150, 200, 250 300, 350, 400, 450, 500, 600, 700, 800, 900, and 1000mm
  (For size over 1000mm, consult TOKYO KEISO.)
- Measurement function : Flow rate
- Measuring range : Flow velocity
  Min. 0 to 0.3m/s
  Max. 0 to 12m/s
  Flow rate
  Min. 0 to 0.085m^3/h
  (Minimum flow at 10mm size)
  Max. 0 to 33928m^3/h
  (Maximum flow at 1000mm size)
- Protection class : IP67 (equivalent to NEMA6)
  IP68 (equivalent to NEMA6P)
- Meter body material
  Measuring tube : Stainless steel / SS304
  Primary head housing : Size 20mm or less ; Cast iron (*1)
  Size 25mm or more ; Carbon steel (*1) [Standard]
  [Option] Stainless steel/SS304
  Flanges : Carbon steel (*1) [Standard]
  [Option] Stainless steel/SS316L
  Converter housing : Aluminum alloy (*1)
  (Cover : Polyamide resin)

(*1) Anti-corrosive painting

- Wetted part material
  - Liner : [Standard]
    Size 10 to 20mm ; PTFE
    Size 25 to 150mm ; PFA
    Size 200 to 1000mm ; ETFE
    [Option]
    PTFE, Polyurethane rubber
    * Refer to the "LINER MATERIAL AND FLANGE."
  - Electrode : Hastelloy C4 [Standard]
    [Option]
    Hastelloy B2, Stainless steel/SS316, Titanium, Tantalum, Platinum-Iridium
  - Earth ring : Stainless steel/SS316 [Standard]
    [Option]
    Hastelloy B, Hastelloy C, Titanium, Tantalum
- Painting : Polyurethane resin painting
- Color : Silver (Primary head)
  Jade green (Converter ; Cover excluded)
- Cable entry : 2 × G1/2 female thread
  2 × 1/2 NPT female thread
  2 × M20 with watertight glands
  (Option : Watertight glands for G1/2)
- Supply voltage : 100V AC (85 to 110V)
  115V AC (100 to 130V)
  200V AC (170 to 220V)
  230V AC (200 to 260V)
  24V DC (18 to 32V)
  * ( ) indicates voltage range.
- Supply frequency : 48 to 63 Hz
- Power consumption : AC : approx. 5VA, DC : approx. 4.5W
- Ambient temperature : –25 to +60˚C (For operation)
  –50 to +70˚C (For storage)
- Grounding : Grounding resistance must be less than 100Ω
- Process connection : Flange connection
- Flanges : JIS10K/20K, ANSI class 150/300, DIN PN40/16/10
  * Refer to the "LINER MATERIAL AND FLANGE."

Fluid specification

- Temperature : –25 to +120˚C*
- Pressure : To be within the applicable flange limitation.
  * Refer to "FLUID TEMPERATURE AND PRESSURE RANGE" table as details.
- Conductivity : To be more than 5μS/cm
  (More than 20μS/cm for water flow measurement)
  ✻ In case the fluid temperature of air-conditioning water etc. is less than 10°C as a guide, it is recommended to try "Countermeasure against dew condensation" in the option [Code: HC].

Indication Specification

- Indicator : LCD 2 lines with illumination
  Line 1 : 8 digit numerical figures
  Line 2 : Alphabet for unit indication
  Flow rate or total flow volume indication selectable. Or alternative indication of these two items with approx. 10 sec, intervals.
  - Flow rate indication : By flow unit (m^3/h, L/s, or others) or % of full scale (Bar graph available)
  - Total flow volume : Forward total, reverse total or difference total of forward and reverse. (m^3, L, others)
    * Factory setting : Continuous indication of flow rate

Output Signal

- Current output : 4 to 20mA DC
  Load : Max. 500Ω
  Time constant : 0.2 to 99.9 s adjustable (0.1 s step)

- Pulse output
  Open collector output
  Rating : 5 to 30V DC, 150mA Max.

  Pulse rate (Output pulse at full scale)
  20 to 36,000,000 Pulse/h
  0.0056Hz to 10kHz (full scale)

  Pulse width
  One of the following selectable :
  1) Automatic : Pulse width shall be duty 50% in full scale frequency
  2) Duty factor 1:1 (Constant)
  3) Setup of arbitrary value : 0.01 to 1.00 s (0.01 s step)

- Status output
  Open collector output
  Rating : 5 to 30V DC, 150mA Max.
  Contents of output
  One of the following selectable :
  1) No status output (Factory setting)
  2) Flow direction identification
  3) Error
  4) Flow alarm (1 point)

- Low flow cutoff
  Effective for current output and pulse output
  0 to 19% of full scale adjustable
  (1% step, factory set 1%)

Standard Functions

- Customer's free measuring unit
  Volume (or mass) unit in 5 characters and time unit in 3 characters can be created.

- Automatic zero adjustment
  Zero adjustment is automatically conducted at "ZERO ADJUST MODE" (Subject to zero flow)

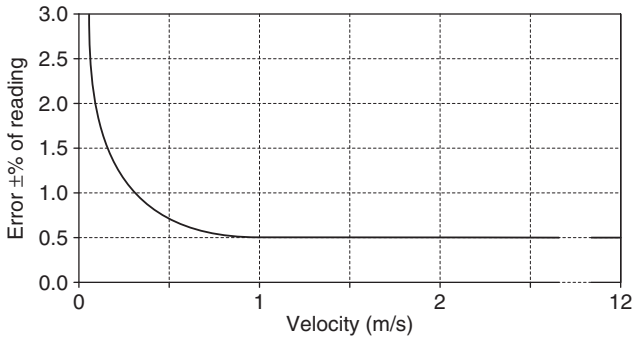
- Self diagnosis function
  The following ERROR MESSAGE is indicated when applicable :
  • Internal error
  • A/D converter error
  • Wrong setting
  • Power fail detection
  • Output over ranged
  • Total counter overflow

- Memory save for power fail
  Operation parameters and totalization figures are stored by EEPROM (Non-volatile memory) for more than 10 years.

- Testing function
  Current and pulse dummy output function provided, loop check can be conducted without calibrator.
  * Current and pulse output correspond to 0, ±10, ±50, ±100, and ±110% of full scale.

Accuracy (*2)

- Pulse output
  For velocity ≥1.0m/s : ±0.5% of reading
  For velocity <1.0m/s :
  $$\pm(0.3\% \text{ of reading} + 0.2\% \times \frac{1}{\text{Velocity (m/s)}})$$



- Current output
  Additional error of ±0.05% of full scale to be added onto above pulse output accuracy

(*2) Basis condition

Fluid	: Water
Fluid temperature	: 10 to 30ºC
Conductivity	: 150µS/cm or more
Supply voltage	: Rated voltage ±2%
Ambient temperature	: 18 to 28ºC
Upstream / Downstream pipe length	: 10D / 2D (D: Diameter)
Warm-up time	: About 10 minutes
Measuring time	: 100s

FLUID TEMPERATURE AND PRESSURE RANGE

Fluid Temperature

Liner	Nominal size (mm)	Fluid temperature	Ambient temperature
PFA	25 to 150	–25 to +120˚C	–25 to +60˚C
PTFE	10 to 600		
ETFE	200 to 1000		
Polyurethane	200 to 1000	–5 to +65˚C	

Maximum Pressure

Liner	Pressure MPa *
PFA	4
PTFE	5
ETFE	15
Polyurethane	150

* Maximum operating pressure must be within the flange rating pressure.
The value on this table indicates maximum pressure which can be manufactured.
Consult TOKYO KEISO for details.

Permissible Vacuum Load

– : Not applicable

Liner	Nominal size (mm)	Minimum pressure kPa (abs) / Fluid temp.				
		40˚C	60˚C	80˚C	100˚C	120˚C
PFA	25 to 150	0	0	0	0	0
PTFE	10 to 20	0	0	0	0	50
	200 to 300	50	75	100	100	100
	350 to 600	80	100	100	100	100
ETFE	200 to 1000	10	10	10	10	10
Polyurethane	200 to 1000	50	60	–	–	–

FLOW RANGE

Nominal size (mm)	Possible setting range (m³/h)	
	Min. (Velocity : 0 to 0.3 m/s)	Max. (Velocity : 0 to 12 m/s)
10	0 to 0.0849	0 to 3.39
15	0 to 0.191	0 to 7.63
20	0 to 0.340	0 to 13.5
25	0 to 0.531	0 to 21.2
40	0 to 1.36	0 to 54.2
50	0 to 2.13	0 to 84.8
65	0 to 3.59	0 to 143
80	0 to 5.43	0 to 217
100	0 to 8.49	0 to 339
125	0 to 13.3	0 to 530
150	0 to 19.1	0 to 763
200	0 to 34.0	0 to 1357

Nominal size (mm)	Possible setting range (m³/h)	
	Min. (Velocity : 0 to 0.3 m/s)	Max. (Velocity : 0 to 12 m/s)
250	0 to 53.1	0 to 2120
300	0 to 76.4	0 to 3053
350	0 to 104	0 to 4156
400	0 to 136	0 to 5428
450	0 to 172	0 to 6870
500	0 to 213	0 to 8482
600	0 to 306	0 to 12214
700	0 to 416	0 to 16624
800	0 to 543	0 to 21714
900	0 to 688	0 to 27481
1000	0 to 849	0 to 33928

LINER MATERIAL AND FLANGE

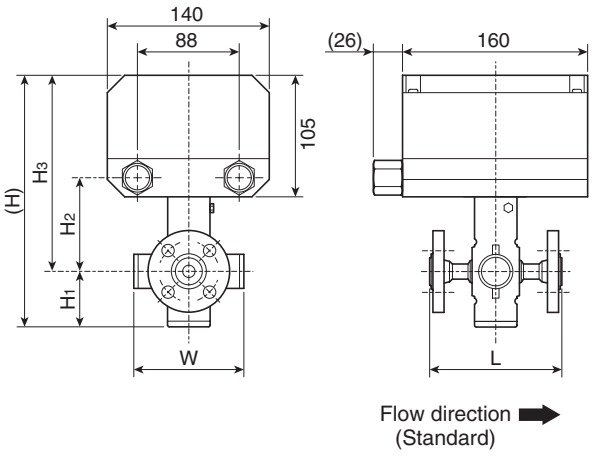
◎: Standard ○: Option –: Not applicable

Flange rating	Liner	Nominal size (mm)																						
		10	15	20	25	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000
JIS10K *	PTFE	◎	◎	◎	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	–	–	–	–
	PFA	–	–	–	◎	◎	◎	◎	◎	◎	◎	◎	–	–	–	–	–	–	–	–	–	–	–	–
	ETFE	–	–	–	–	–	–	–	–	–	–	–	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
	PU	–	–	–	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	○	○	○	○
JIS20K	PTFE	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	○	–	–	–	–
	PFA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	ETFE	–	–	–	–	–	–	–	–	–	–	–	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○
	PU	–	–	–	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	○	○	○	○
ANSI class 150	PTFE	◎	◎	◎	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	–	–	–	–
	PFA	–	–	–	◎	◎	◎	◎	◎	◎	◎	◎	–	–	–	–	–	–	–	–	–	–	–	–
	ETFE	–	–	–	–	–	–	–	–	–	–	–	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
	PU	–	–	–	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	○	○	○	○
ANSI class 300	PTFE	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○	○	○	○	○	–	–	–	–
	PFA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	ETFE	–	–	–	–	–	–	–	–	–	–	–	◎	◎	◎	◎	◎	◎	◎	◎	–	–	–	–
	PU	–	–	–	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	–	–	–	–
DIN PN10	PTFE	–	–	–	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	–	–	–	–
	PFA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	ETFE	–	–	–	–	–	–	–	–	–	–	–	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
	PU	–	–	–	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	○	○	○	○
DIN PN16	PTFE	–	–	–	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	–	–	–	–
	PFA	–	–	–	–	–	–	◎	–	◎	◎	◎	–	–	–	–	–	–	–	–	–	–	–	–
	ETFE	–	–	–	–	–	–	–	–	–	–	–	◎	◎	◎	◎	◎	◎	◎	◎	○	○	○	○
	PU	–	–	–	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	○	○	○	○
DIN PN25	PTFE	–	–	–	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	–	–	–	–
	PFA	–	–	–	–	–	–	○	–	○	○	○	–	–	–	–	–	–	–	–	–	–	–	–
	ETFE	–	–	–	–	–	–	–	–	–	–	–	◎	◎	◎	◎	◎	◎	◎	◎	–	–	–	–
	PU	–	–	–	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	–	–	–	–
DIN PN40	PTFE	◎	◎	◎	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	–	–	–	–
	PFA	–	–	–	◎	◎	◎	○	◎	○	○	○	–	–	–	–	–	–	–	–	–	–	–	–
	ETFE	–	–	–	–	–	–	–	–	–	–	–	◎	◎	◎	◎	◎	◎	◎	◎	–	–	–	–
	PU	–	–	–	–	–	–	–	–	–	–	–	○	○	○	○	○	○	○	○	–	–	–	–

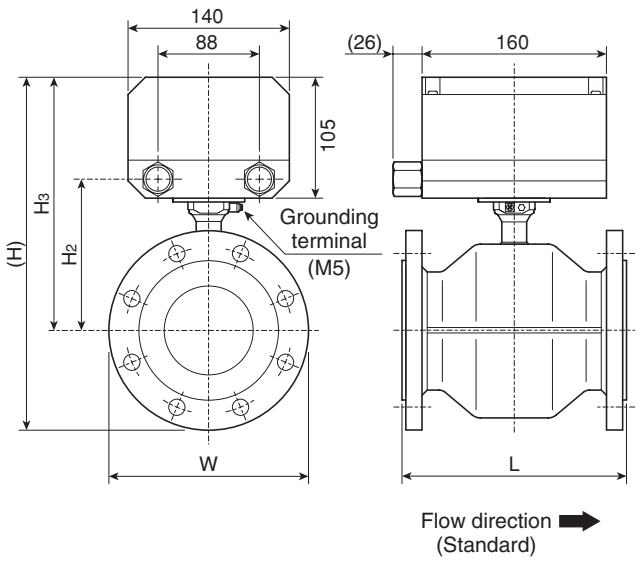
* JIS20K flange is provided for nominal size 10 to 40mm as standard.
(Installation dimensions of JIS20K flange are equal to JIS10K except the flange thickness.)

DIMENSIONS

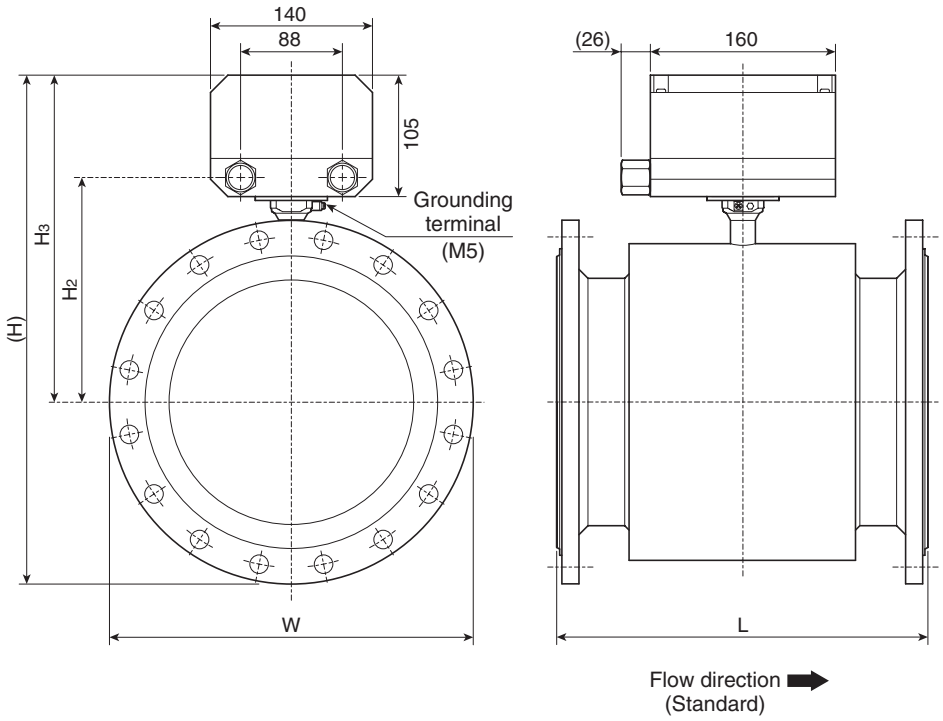
Nominal size: 10/15mm



Nominal size: 25 to 150mm



Nominal size: 200 to 1000mm

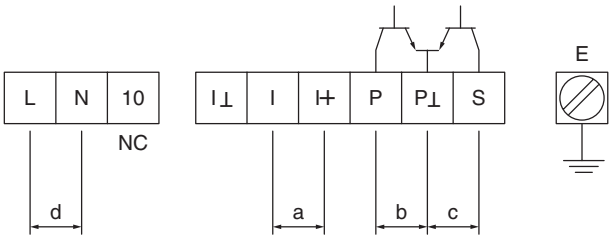


Nominal size (mm)	Dimensions (mm)								Mass (kg)	
	L *1		(H)		H_1	H_2	H_3	W *2		
	JIS 10K	ANSI 150	JIS 10K	ANSI 150					JIS10K	ANSI 150
10	156	156	270	270	62	120	208	121	7	8
15	156	156	270	270	62	120	208	121	7	8
20	156	156	270	270	62	120	208	121	9	10
25	156	156	251	243	–	101	189	90	9	10
40	156	156	266	260	–	108	196	105	10	11
50	206	206	285	284	–	120	208	120	10	11
65	206	206	294	295	–	124	210	140	12	13
80	206	206	307	309	–	126	214	150	14	15
100	256	256	337	346	–	144	232	175	17	20
125	256	256	371	373	–	158	246	210	21	24
150	306	306	402	401	–	174	262	240	24	28
200	356	356	457	463	–	204	292	291	36	45
250	406	406	513	516	–	225	313	331	50	66
300	506	506	560	579	–	250	338	381	60	97
350	506	708	605	626	–	272	360	428	80	131
400	606	808	666	684	–	298	386	483	100	168
450	606	808	721	728	–	323	411	533	119	188
500	606	808	775	786	–	349	437	585	130	225
600	606	808	890	898	–	404	492	694	166	308
700	706	–	1003	–	–	463	551	812	247	–
800	806	–	1117	–	–	519	607	922	330	–
900	906	–	1219	–	–	571	659	1026	427	–
1000	1006	–	1329	–	–	623	711	1132	509	–

*1 1) Dimension L includes earth rings thickness.
In case of tantalum earth ring, total length (L') is as follows
Size 10 to 150mm : L' = (L+7) mm
(For size over 200mm, consult TOKYO KEISO.)
When the liner material is ETFE, the earth rings are not fixed onto the primary head flanges. They are to be installed between primary head and connection flanges on installation.
In case of install the earth ring, gaskets are also needed between the primary head liner side and earth ring. Total 4 pieces of gasket are needed including for connection flanges.
$L' = L + 2 \times t$
t : Gasket thickness between the liner and earth ring
2) Dimension L is for JIS10K and ANSI class150 flange. Consult TOKYO KEISO for other flanges.

*2 Dimension W indicates external dimension of housing

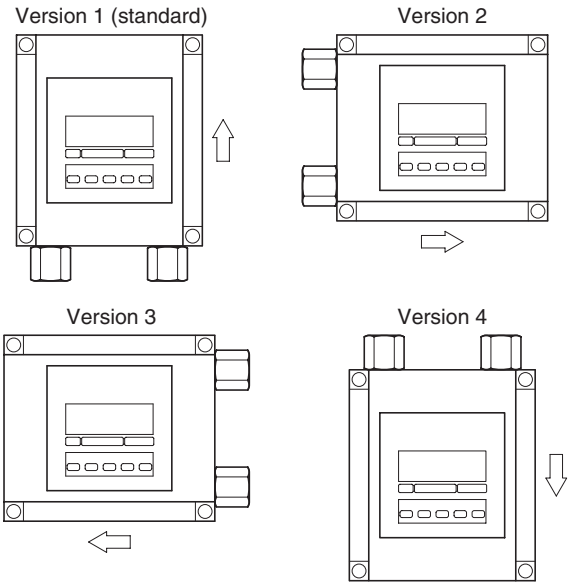
ELECTRICAL CONNECTION



Mark	Terminal symbol	Polarity		Description
a	I+	+		Current output (4 to 20mA DC)
	I	–		
b	P	+		Pulse output (Open collector)
	P⊥	–		
c	S	+		Status output (Open collector)
	P⊥	–		
d	L (L+)	AC	(+)	Power supply ( ) indicates DC type
	N (L–)		(–)	
E	–	–		Grounding

- Terminal type : Plug-in type screw terminal
- Connection capacity : 0.5 to 2.5 mm^2

Mounting position of LCD display



* The arrow indicates standard flow direction.
Flow direction can be changed by data setting.

MODEL AND SPECIFICATION CODE

- Nominal size : 10 to 150mm

Model : EGM4010C

Primary head Spec. code	**V N 0 3**	**4**			**0 1 1**			**1**		**0**	**0 0 0**		**0 2 0 0 0 0 0 0**		**Description**		**Standard**
Primary head code	V N 0 3														Flange type		○
(Fixed code)		4													always 4	Standard liner (For JIS10K) *2	○
Nominal size			1												10mm *1	PTFE	○
			2												15mm	PTFE	○
			3												20mm	PTFE	
			4												25mm	PFA	○
			6												40mm	PFA	○
			7												50mm	PFA	○
			8												65mm	PFA	
			A												80mm	PFA	○
			B												100mm	PFA	○
			C												125mm	PFA	
			D												150mm	PFA	○
Flange				3											DIN PN16		
				4											DIN PN25		
				5											DIN PN40		
				A											ANSI class150		
				B											ANSI class300		
				M											JIS 20K		
				N											JIS10K (For size: More than 50mm) *3		○
				9											Others		
(Fixed code)					0										always 0		○
Type						1 1									Compact version (EGC010 Converter)		○
Liner *4							2								PTFE (For size 10 to 20mm)		○
							S								PFA (For size 25 to 150mm)		○
Electrode material								1							Stainless steel (SS316)		
								3							Hastelloy C4		○ *5
								4							Hastelloy B2		○ *6
								5							Tantalum		
								6							Titanium		
								7							Platinum		
Construction of electrode									1						Fixed mounting		○
Primary head housing / Flange material										1					Carbon steel / Carbon steel		○
										3					Carbon steel / Stainless steel (SS316L)		
										C					Stainless steel (SS304) / Stainless steel (SS316L) *8		
										9					Others		
Protection class											0				IP67		○
(Fixed code)												0 0			always 00		○
Calibration													0		Standard calibration		○
Earth ring														H	Stainless steel (SS316)		○
														K	Hastelloy C		
														L	Hastelloy B		
														M	Tantalum		
														N	Titanium		
														9	Others		
(Fixed code)															0 2 0 0 0 0 0 0	always 02000000	○
Special feature															(Blank)	None	○
															/Z	Involved *7	

Converter Spec. code	**V 3 1 1**	**4**	**4**			**0**	**6**		**2 0 0 0**		**Description**		**Standard**
Converter code	V 3 1 1										Type: EGC010 (square housing)		○
(Fixed code)		4									always 4		○
Type			4								LCD indication / current and pulse output		○
Supply voltage				2							100V AC (85 to 110V)		○
				4							24V DC (18 to 32V)		
				8							115V AC (100 to 130V)		
				B							200V AC (170 to 220V)		
				C							230V AC (200 to 260V)		
Cable entry					3						1/2 NPT female thread		
					4						G1/2 female thread		○
					5						M20 with watertight glands		
Additional function						0					None		○
(Fixed code)							6				always 6		○
Mounting position of LCD display								1			Version 1	Refer to drawing "Mounting position of LCD display" on page 8.	○
								2			Version 2		
								3			Version 3		
								4			Version 4		
(Fixed code)									2 0 0 0		always 2000		○
Special function										(Blank)	None		○
										/Z	Involved *7		

*1 Nominal size 10mm is provided with size 15mm or 1/2" flanges.
*2 Standard liner material in this table indicates for JIS10K flange. Refer to "LINER MATERIAL AND FLANGE" table as details.
*3 JIS20K flange is provided for nominal size 10 to 40mm as standard. (Installation dimensions of JIS20K flange are equal to JIS10K except the flange thickness.)
Select JIS20K flange (Code: M) for size 10 to 40mm.
*4 Applicable liner material is subject to nominal size and flange rating. Refer to "LINER MATERIAL AND FLANGE" table as details.
*5 Standard electrode material for size 40 to 1000mm is Hastelloy C.
*6 Standard electrode material for size 10 to 25mm is Hastelloy B.
*7 In case that special feature are involved, put [/Z] at the end of spec. code and specify the details. It is recommended to consult TOKYO KEISO for such availability before ordering.
*8 It is selectable for size 25mm and above.

● Nominal size : 200 to 600mm
Model : EGM4010C

Primary head Spec. code	V N 0 4	4			0	1 1			1		0	0 0	0		0 2 0 0 0 0 0 0		Description		Standard
Primary head code	V N 0 4																Flange type		○
(Fixed code)		4															always 4	Standard liner (For JIS10K) *2	○
Nominal size			E														200mm	ETFE	
			F														250mm	ETFE	
			G														300mm	ETFE	
			H														350mm	ETFE	
			K														400mm	ETFE	
			L														450mm	ETFE	
			M														500mm	ETFE	
			N														600mm	ETFE	
Flange				2													DIN PN10		
				3													DIN PN16		
				4													DIN PN25		
				5													DIN PN40		
				A													ANSI class150		
				B													ANSI class300		
				M													JIS 20K		
				N													JIS 10K		○
				9													Others		
(Fixed code)					0												always 0		○
Type						1 1											Compact version (EGC010 Converter)		○
Liner *4							0										ETFE		○
							2										PTFE		
							D										Polyurethane		
Electrode material								1									Stainless steel (SS316)		
								3									Hastelloy C4		○
								4									Hastelloy B2		
								5									Tantalum		
								6									Titanium		
								7									Platinum		
Construction of electrod									1								Fixed mounting		○
Primary head housing / Flange material										1							Carbon steel / Carbon steel		○
										3							Carbon steel / Stainless steel (SS316L)		
										C							Stainless steel (SS304) / Stainless steel (SS316L)		
										9							Others		
Protection class											0						IP67		○
(Fixed code)												0 0					always 00		○
Calibration													0				Standard calibration		○
Earth ring														H			Stainless steel (SS316)		○
														K			Hastelloy C		
														L			Hastelloy B		
														M			Tantalum		
														N			Titanium		
														9			Others		
(Fixed code)															0 2 0 0 0 0 0 0		always 02000000		○
Special feature																(Blank)	None		○
																/Z	Involved *7		

Converter Spec. code	V 3 1 1	4	4			0	6		2 0 0 0		Description		Standard
Converter code	V 3 1 1										Type: EGC010 (square housing)		○
(Fixed code)		4									always 4		○
Type			4								LCD indication / current and pulse output		○
Supply voltage				2							100V AC (85 to 110V)		○
				4							24V DC (18 to 32V)		
				8							115V AC (100 to 130V)		
				B							200V AC (170 to 220V)		
				C							230V AC (200 to 260V)		
Cable entry					3						1/2 NPT female thread		
					4						G1/2 female thread		○
					5						M20 with watertight glands		
Additional function						0					None		○
(Fixed code)							6				always 6		○
Mounting position of LCD display								1			Version 1	Refer to drawing "Mounting position of LCD display" on page 8.	○
								2			Version 2		
								3			Version 3		
								4			Version 4		
(Fixed code)									2 0 0 0		always 2000		○
Special function										(Blank)	None		○
										/Z	Involved *7		

*2 Standard liner material in this table indicates for JIS10K flange. Refer to "LINER MATERIAL AND FLANGE" table as details.
*4 Applicable liner material is subject to nominal size and flange rating. Refer to "LINER MATERIAL AND FLANGE" table as details.
*7 In case that special feature are involved, put [/Z] at the end of spec. code and specify the details.
It is recommended to consult TOKYO KEISO for such availability before ordering.

● Nominal size : 700 to 1000mm
Model : EGM4010C

Primary head Spec. code	**V N 0 5**	**4**			**0**	**1 1**			**1**		**0**	**0 0**	**0**		**0 2 0 0 0 0 0 0**		**Description**		**Standard**
Primary head code	V N 0 5																Flange type		○
(Fixed code)		4															always 4	Standard liner (For JIS10K) *2	○
Nominal size			P														700mm	ETFE	
			R														800mm	ETFE	
			S														900mm	ETFE	
			T														1000mm	ETFE	
Flange				2													DIN PN10		
				3													DIN PN16		
				A													ANSI class150		
				N													JIS 10K		○
				9													Others		
(Fixed code)					0												always 0		○
Type						1 1											Compact version (EGC010 Converter)		○
Liner *4							0										ETFE		○
							D										Polyurethane		
Electrode material								1									Stainless steel (SS316)		
								3									Hastelloy C4		○
								4									Hastelloy B2		
								5									Tantalum		
								6									Titanium		
								7									Platinum		
Construction of electrod									1								Fixed mounting		○
Primary head housing / Flange material										1							Carbon steel / Carbon steel		○
										3							Carbon steel / Stainless steel (SS316L)		
										C							Stainless steel (SS304) / Stainless steel (SS316L)		
										9							Others		
Protection class											0						IP67		○
(Fixed code)												0 0					always 00		○
Calibration													0				Standard calibration		○
Earth ring														H			Stainless steel (SS316)		○
														K			Hastelloy C		
														L			Hastelloy B		
														N			Titanium		
														9			Others		
(Fixed code)															0 2 0 0 0 0 0 0		always 02000000		○
Special feature																(Blank)	None		○
																/Z	Involved *7		

Converter Spec. code	**V 3 1 1**	**4**	**4**			**0**	**6**		**2 0 0 0**		**Description**		**Standard**
Converter code	V 3 1 1										Type: EGC010 (square housing)		○
(Fixed code)		4									always 4		○
Type			4								LCD indication / current and pulse output		○
Supply voltage				2							100V AC (85 to 110V)		○
				4							24V DC (18 to 32V)		
				8							115V AC (100 to 130V)		
				B							200V AC (170 to 220V)		
				C							230V AC (200 to 260V)		
Cable entry					3						1/2 NPT female thread		
					4						G1/2 female thread		○
					5						M20 with watertight glands		
Additional function						0					None		○
(Fixed code)							6				always 6		○
Mounting position of LCD display								1			Version 1	Refer to drawing "Mounting position of LCD display" on page 8.	○
								2			Version 2		
								3			Version 3		
								4			Version 4		
(Fixed code)									2 0 0 0		always 2000		○
Special function										(Blank)	None		○
										/Z	Involved *7		

*2 Standard liner material in this table indicates for JIS10K flange. Refer to "LINER MATERIAL AND FLANGE" table as details.
*4 Applicable liner material is subject to nominal size and flange rating. Refer to "LINER MATERIAL AND FLANGE" table as details.
*7 In case that special feature are involved, put [/Z] at the end of spec. code and specify the details.
It is recommended to consult TOKYO KEISO for such availability before ordering.

STANDARD ACCESSORIES

- Parameter sheet : 1
- Instruction manual : 1

OPTION

- G1/2 watertight glands for cable entry : 1 set [Symbol : WG]
- No converter data (parameter) setting [Symbol : NS]
  We will supply with standard data setting in case you have no request.
  Please set the data of flow range, pulse rate and flow direction etc. that required to operate.
- Countermeasure against dew condensation [Code: HC]
  Reinforce the sealing performance between a converter and a detector inside the flowmeter, with silicon potting.

ORDERING INSTRUCTIONS

Specify the following when ordering :

1. Model and spec. code
   Example : Model : EGM4010C
   Primary head spec. code :
   VN0347N011S3110000H02000000
   Converter spec. code : V31144240612000
2. Flow range (full scale) (Unnecessary when option is NS.)
3. Option (Specify if necessary.)
   Specify the symbol with reference to the option.
4. Fluid name

*Specification is subject to change without notice.

TOKYO KEISO CO., LTD.
Head Office : Shiba Toho Building, 1-7-24 Shibakoen, Minato-ku, Tokyo 105-8558
Tel : +81-3-3431-1625 (KEY) ; Fax : +81-3-3433-4922
e-mail : overseas.sales@tokyokeiso.co.jp ; URL : http://www.tokyokeiso.co.jp