

# **NIKKISO EIKO** **ADONY METERING PUMP**

The Best Selection for Injection and Transfer



# ADONY® Metering Pump

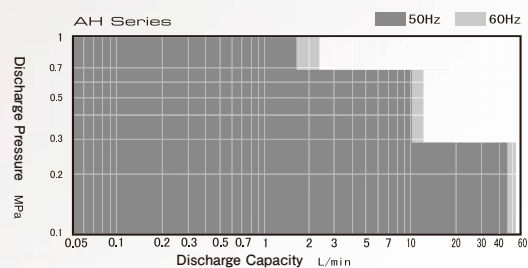


## AH Series

ADONY DIAPHRAGM TYPE  
METERING PUMP

AHA·AHB·AHC·AHD

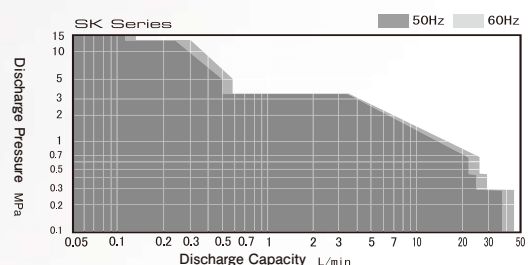
AH with Electro Servo Unit



## SK Series

ADONY PLUNGER TYPE  
METERING PUMP

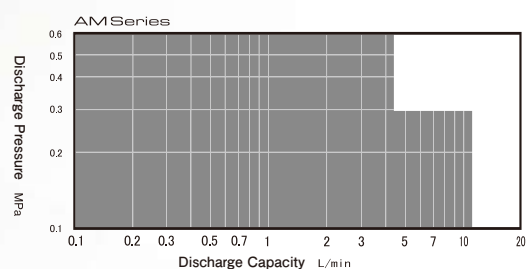
SKA·SKB·SKC



## AM Series

ADONY PULSELESS DIAPHRAGM TYPE  
METERING PUMP

AMA



# Advance & Harmony

Endless progress of the human&Everlasting harmony with nature

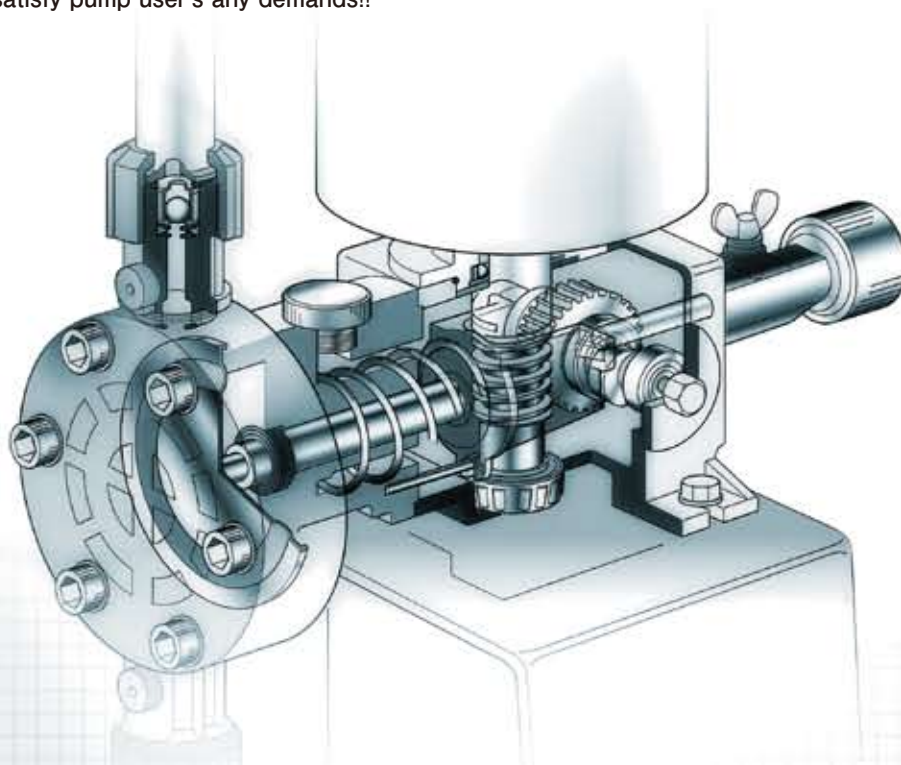
The vertical mounted motor style is required only small space.

Available wide line-up pumps satisfy various demands of plant for chemical, water supply, water treatment and others.

AH is designed to satisfy every conditions of field.

Nikkiso Eiko is professional manufacturer of handling many kind of liquids based on long history.

"ADONY METERING PUMP" is designed on our long successful experience of the field to satisfy pump user's any demands!!



## AH Series



# ADONY Diaphragm type metering pump Series AH

## SYMPLE STANDARD MODEL

### Direct Mechanical Driven Diaphragm type

- Max. discharge capacity 54.0 L/min per single head
- Wide range of adaptable motors : IEC standard, explosion proof, inverter control etc.

#### Feature

"Space-saving", it's a vertical style  
 Wide selection liquid end materials  
 PVC, Stainless steel, PVDF, PTFE etc...  
 Convenience connection style, Flange (JIS, ANSI, DIN),  
 Hose, Union, Thread, etc  
 Simple structure of "Oil bath style power end"  
 Wide range of discharge capacity  
 0.035 L/min - 54.0 L/min  
 Multiple head available  
 Max. discharge pressure ; 1.0 MPa (AHA01-32)  
 Stability discharge accuracy  $\pm 2\%$  (repeatability)  
 Discharge capacity control : 25 to 100% stroke length  
 10 to 100% number of stroke

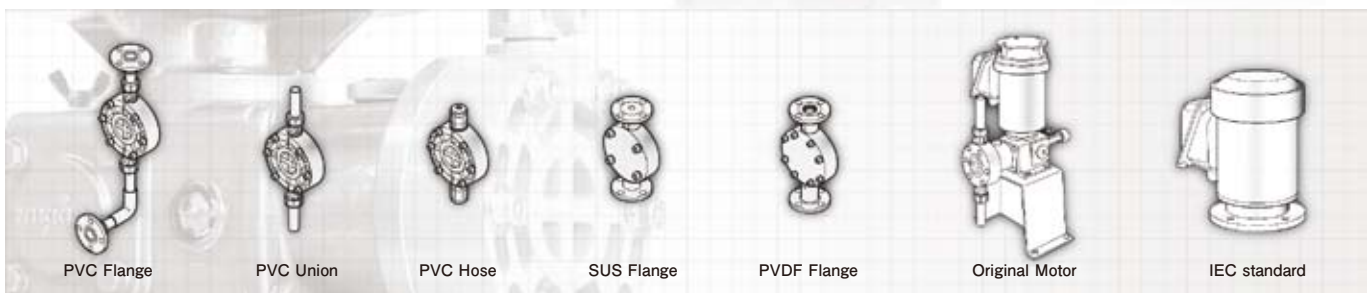
#### Applications

Chemical Injection, Transfer, sampling etc.

- Waste water treatment, pH control
- Clean water supply plant
- Chemical Plant
- Paper manufacturing plant
- Food process plant
- Mining/Iron plant
- Electro plating equipment



### Constriction Diaphragm heads style / Electric motor



### Series AH Model code

Material												
AH	A	3	2	P	C	E	F	N		20		
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬
Series												
Power end size/ motor	D'm dia. (Stroke L)	No. of stroke	D'm head	Ball Valve	Oring/gasket	Connection	Motor	No. of head	Option	Voltage 3phase	Extra	
A 0.18kW- 0.4kW	0 42(2)	1 48/58	P PVC	C Ceramics	E EPDM*	F Flange	N Original AHA,AHB	1 simplex	Standard	20 200V	standard	
B 0.37/ 0.4kW	1 42(4)	2 96/116	S SUS304	S SUS304	F FPM*	U Union*	W IEC std.	2 duplex	E With elector- servo	22 220V	SP Special spec.	
C 0.75/ 1.5kW	2 65		M SUS316	M SUS316	T PTFE	H Hose*	V Inverter		K For High viscosity	38 380V		
D 1.5kW	3 84		D PVDF	H Hastloy-c			E eG3			40 400V		
	4 120		T PTFE				D d2G4			44 440V		
	5 144						G Inverter d2G4					
	6 170											
	7 210											
	8 234											

Remark : 1) Inverter use : AHA41-52 = 0.37/0.4kW, AHC72-82 = 1.5kW  
 2) \*for AHA01-32 PVC head only

P V C : Polyvinyl chloride  
 PVDF : Polyvinylidene fluoride  
 F P M : Fluoro rubber  
 EPDM : Ethylene Propylene Rubber  
 PTFE : Polytetrafluoroethylene



## Series AH Capacity-Pressure Selection Table

Model		D'm dia. mm	Stroke L. mm	No. of Stroke spm		Max. discharge capacity per head L/min		Max. discharge pressure MPa	Motor kW	Connection		
				50Hz	60Hz	50Hz	60Hz			Flange	Union	Hose
AHA	01	φ42	2	48	58	0.035	0.042	1.0	0.2	JIS 10K 15A	VP16	φ6 <sub>ID</sub> × φ11 <sub>OD</sub>
	11		4	48	58	0.07	0.084					
	12			96	116	0.14	0.17					
	21	φ65		48	58	0.23	0.28					
	22		96	116	0.46	0.56						
	31		8	48	58	0.9	1.1					
	32	96		116	1.8	2.2						
	41	φ120		10	48	58	2.3	2.8		0.5	JIS 10K 20A	φ9 <sub>ID</sub> × φ15 <sub>OD</sub>
	42		96		116	4.6	5.6	0.3				
	51		φ144		48	58	3.3			4.0		
	52	96		116	6.6	8.0						
AHB	41	φ120	12	48	58	2.8	3.3	0.7	0.4	JIS 10K 20A		
	42			96	116	5.6	6.6			JIS 10K 40A		
	51	φ144	14	48	58	5.0	6.0	0.5		0.75	JIS 10K 40A	
	52			96	116	10.0	12.0					
AHC	51	φ170	18	48	58	5.0	6.0	0.7	0.3		JIS 10K 50A	
	52			96	116	10.0	12.0					
	61	φ210	20	48	58	9.0	10.8	1.5		JIS 10K 65A		
	62			96	116	18.0	21.6					
AHD	71	φ234	20	48	58	15.5	18.6				1.5	JIS 10K 65A
	72			96	116	31.0	37.2					
	81	φ234	20	48	58	22.5	27.0	1.5		JIS 10K 65A		
	82			96	116	45.0	54.0					

## Series AH Dimensions

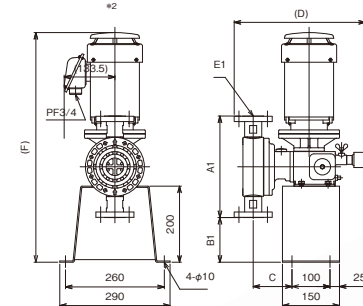
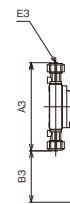
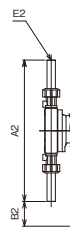
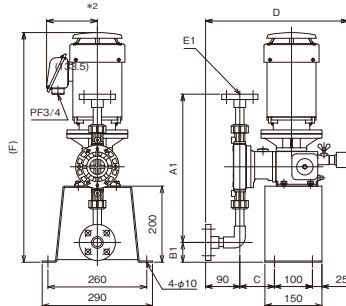
### AHA01~32

●Flange

●Union

●Hose

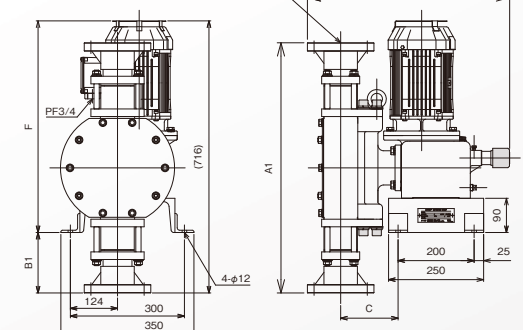
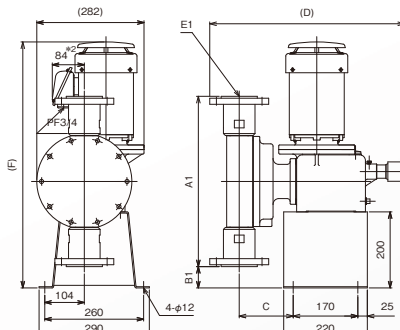
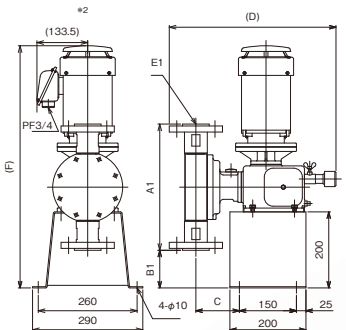
### AHA41~52



### AHB

### AHC

### AHD



Model	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	C	D	E <sub>1</sub>	E <sub>2</sub>	E <sub>3</sub>	F	Weight (kg)
AHA	01, 11, 12	360	342	166	67	80	168	84	360	15A JIS10K Flange	VP16 Union	φ6×φ11 Hose	21.0
	21, 22	372	354	178	61	74	162						22.0
	31, 32	390	372	232	52	65	135						23.0
	41, 42	267			118			100	345	20A JIS10K Flange		φ9×φ15 Hose	25.0
		262			120			95	340				27.0
	51, 52	286			108			110	370				
AHB	41, 42	267			132			99	405	20A JIS10K Flange			28.5
		262			134			94	400				30.0
	51, 52	332			99			115	440				
AHC	51, 52				114			110	435	40A JIS10K Flange			55.0
	61, 62	356			102			115	475				60.0
	71, 72	448			56			110	470				74.0
	81, 82	658			159			142	513				90.0
AHD								151	532	65A JIS10K Flange			

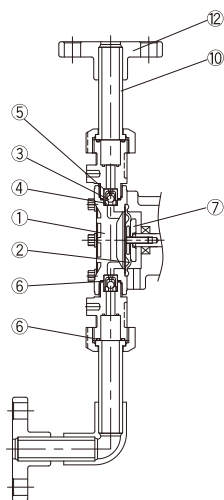
#### Remark

- 1) upper : PVC head, lower : Stainless head
- 2) "F" and "2" are changed against a type of electric motor.
- 3) These dimensions and weight are based on PVC head pumps and with Japanese typical motor.

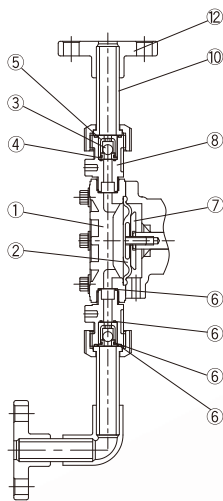
## Series AH Liquid end construction

### ■AHA01~32

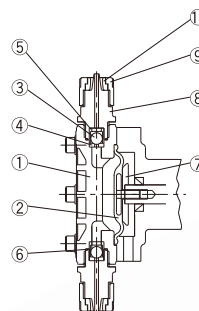
AHA01~22  
PVC Flange (union) type



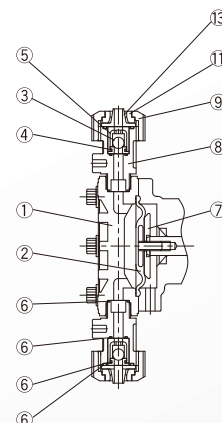
AHA31, 32  
PVC Flange (union) type



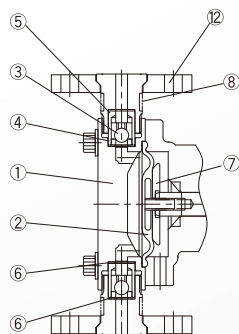
AHA01~22  
PVC Hose type



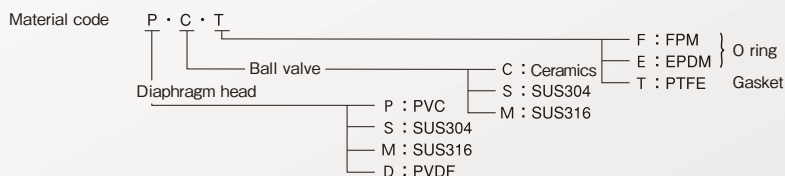
AHA31, 32  
PVC Hose type



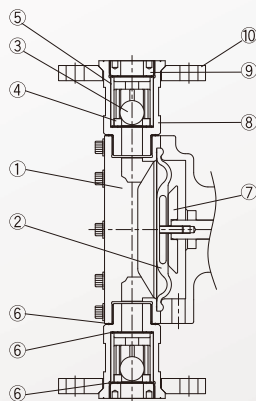
AHA01~32  
Flange type (SUS)



No.	Name	Material code	P·C·F	P·C·E	P·M·E	M·M·T	D·C·T
1	Diaphragm Head		PVC	PVC	PVC	SUS316	PVDF
2	Diaphragm		PTFE/EPDM	PTFE/EPDM	PTFE/EPDM	PTFE/EPDM	PTFE/EPDM
3	Ball Valve		Ceramics	Ceramics	SUS316	SUS316	Ceramics
4	Valve Seat AHA01-22		FPM	EPDM	SUS316	SUS316	PVDF
4	Valve Seat AHA31-32		PVC	PVC	SUS316	SUS316	PVDF
5	Ball Guide		PVC	PVC	PVC	SUS316	PVDF
6	O Ring Gasket		FPM	EPDM	EPDM	PTFE	PTFE
7	Back up plate		SS400	SS400	SS400	SS400	SS400
8	Joint		PVC	PVC	PVC	SUS316	PVDF
9	Union Nut		PVC	PVC	PVC	—	—
10	Union socket		PVC	PVC	PVC	—	—
11	Union nut collar		PVC	PVC	PVC	—	—
12	Flange		PVC	PVC	PVC	SUS316	PVDF/PP

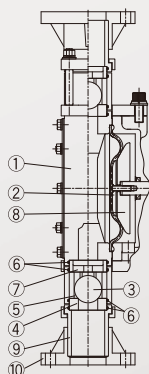


### ■AHA41~52 AHB, AHC



No.	Name	Material code	P·C·T	P·M(S)·T	S·S·T	M·M·T	D·C·T
1	Diaphragm Head		PVC	PVC	SUS304	SUS316	PVDF
2	Diaphragm		PTFE/EPDM	PTFE/EPDM	PTFE/EPDM	PTFE/EPDM	PTFE/EPDM
3	Ball Valve		Ceramics	SUS316(SUS304)	SUS304	SUS316	Ceramics
4	Valve Seat		PVC	SUS316(SUS304)	SUS304	SUS316	PVDF
5	Ball Guide		PVC	SUS316(SUS304)	SUS304	SUS316	PVDF
6	Gasket		PTFE	PTFE	PTFE	PTFE	PTFE
7	Back up plate		SS400	SS400	SS400	SS400	SS400
8	Joint		PVC	PVC	SUS304	SUS316	PVDF
9	Screw		PVC	PVC	SUS304	SUS316	PVDF
10	Flange		PVC	PVC	SUS304	SUS316	PVDF/PP

### ■AHD81, 82



No.	Name	Material code	P·C·F	P·C·E	P·M(S)·E	S·S·T	M·M·T
1	Diaphragm Head		PVC	PVC	PVC	SUS304	SUS316
2	Diaphragm		PTFE/EPDM	PTFE/EPDM	PTFE/EPDM	PTFE/EPDM	PTFE/EPDM
3	Ball Valve		Ceramics	Ceramics	SUS316(SUS304)	SUS304	SUS316
4	Valve Seat		PVC	PVC	SUS316(SUS304)	SUS304	SUS316
5	Ball Guide		PVC	PVC	SUS316(SUS304)	SUS304	SUS316
6	O Ring		FPM	EPDM	PTFE	PTFE	PTFE
7	Lift Piece		PVC	PVC	PVC	SUS304	SUS316
8	Back up plate		SS400	SS400	EPDM	SS400	SS400
9	Joint		PVC	PVC	PVC	SUS304	SUS316
10	Flange		PVC	PVC	PVC	SUS304	SUS316