

# Metering Pumps

## KMS Series

Flow rate up to 18 L/hr, working pressure up to 20 bar

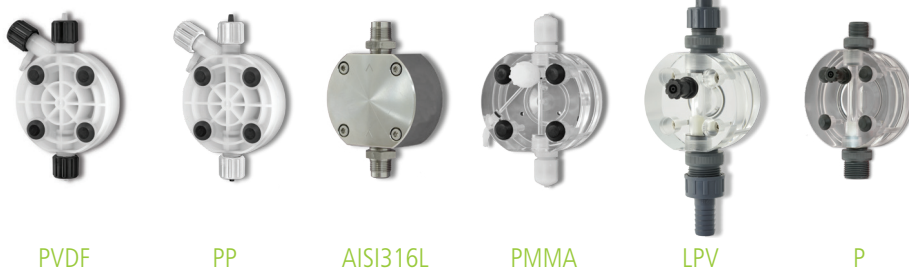
- Manual stroke length adjustment
- Manual or self venting
- High strength membrane -5- year warranty
- Horizontal mounting
- PVDF pump head



- KMS DC** digital constant
- KMS MF** digital multi-function
- KMS PH** built-in pH reading and control
- KMS RH** built-in ORP reading and control
- KMS EN** weekly timer and solenoid valve control
- KMS CL** built-in chlorine reading and control

- K PLUS** constant / constant 1-10 multiplier 1-10 divider 1-10 / 1-100 / 1-1000 mA current signal
- K CO PLUS** constant with divider 1/10
- K CL PLUS** constant with level control and divider 1/10

### PUMP HEADS



PVDF

PP

AISI316L

PMMA

LPV

P

### SUPPLIED ACCESSORIES

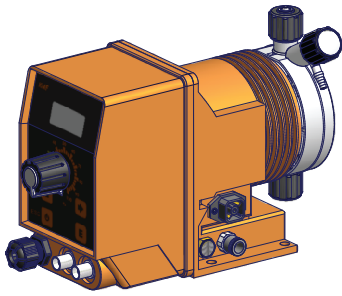


Level Probe with foot filter



1/2" Injection valve

# "KMS" and "KMSA" series metering pumps Data Sheet



- Foot mounted
- Microprocessor technology
- Manual stroke length adjustment
- Manual venting (KMS) or self venting (KMSA) PVDF pump head
- Liquid ends (pump head, injection valve, foot filter, delivery hose) .....PVDF
- Enclosure .....PP
- Environment temperature.....10-45°C (55-113°F)
- Chemical temperature.....0-50°C (32-122°F)
- Transportation and storage temperature.....-10-50°C (14-122°F)
- Installation class .....II
- Pollution level .....2
- Audible noise.....73.4db(A)
- Protection degree .....IP65 (% working RU: 85% T<=40°C; 70% T=50°C - without condensing water)



MODELS			
KMS Code	KMSA Code	MOD.	DESCRIPTION
DC	AD	KMS DC	Digital constant pump, stand-by input and alarm output and level control.
MF	AF	KMS MF	Digital multifunction pump (Constant, Divide, Multiply, PPM, Batch, Volt, mA, %, ml/q) , stand-by and flow sensor input, alarm output and level control. Recovery fault mode, work-pause mode and upkeep mode.
ML	LA	KMS CL	Proportional pump for free chlorine (Cl2) control (from 0 to 10,00 mg/l) with level control, supplied without chlorine probe. It operates with chlorine cells mod. ECL1 and ECL6/7/12 (not provided).
EN	AN	KMS EN	Pump with weekly timer, microprocessor, digital controls, LCD display, level probe and electrovalve control.
PH	MH	KMS PH	Proportional pump driven by internal built-in pH meter (0-14 pH) and level control, supplied without pH probe.
RH	AR	KMS RH	Proportional pump driven by internal built-in ORP meter (0-1000 mV) and level control, supplied without ORP probe.

K MF 2001 K 00 00

CAPACITIES				
	KMS		Hoses	Pump head
2001	1 l/h at 20 bar	0.26 GPH at 290 PSI	1/4"	I
1802	2 l/h at 18 bar	0.53 GPH at 261 PSI	1/4"	L
1504	4 l/h at 15 bar	1.06 GPH at 217 PSI	3/8"	L
1005	5 l/h at 10 bar	1.32 GPH at 102 PSI	3/8"	L
0808	8 l/h at 8 bar	2.11 GPH at 116 PSI	3/8"	L
0510	10 l/h at 5 bar	2.64 GPH at 58 PSI	3/8"	L
0218	18 l/h at 2 bar	4.76 GPH at 29 PSI	1/2"	M
	KMSA		Hoses	Pump head
1801	1 l/h at 18 bar	0.26 GPH at 261 PSI	1/4"	LA
1503	3 l/h at 15 bar	0.79 GPH at 217 PSI	3/8"	LA
103.5	3.5 l/h at 10 bar	0.92 GPH at 102 PSI	3/8"	LA
100.5	0.5 l/h at 10 bar	0.13 GPH at 102 PSI	3/8"	JA
085.5	5.5 l/h at 8 bar	1.45 GPH at 116 PSI	3/8"	LA
057.5	7.5 l/h at 5 bar	1.98 GPH at 58 PSI	3/8"	LA
0213	13 l/h at 2 bar	3.43 GPH at 29 PSI	3/8"	MA

LIQUID ENDS								
	HEAD	ORINGS	VALVE		DIAPHRAGM	HOSES <sup>1</sup>		VISCOSITY Max CPS
			Body	Balls		Delivery	Suction	
K	PVDF	FKM B	PVDF	Ceramic	PTFE	PVDF	PVC	100
P	PVDF	EPDM	PVDF	Ceramic	PTFE	PVDF	PVC	100
Y	PVDF	Nytrile	PVDF	Ceramic	PTFE	PVDF	PVC	100
V	PP	FKM B	PP	Ceramic	PTFE	PVDF	PVC	100
D	PP	EPDM	PP	Ceramic	PTFE	PE	PVC	100
W	PP	Nytrile	PP	Ceramic	PTFE	PE	PVC	100
J	PVDF	FKM B + PTFE	PVDF	Ceramic	PTFE	PVDF	PVC	100
S	PVDF	Silicone	PVDF	Ceramic	PTFE	PVDF	PVC	100
A	Acrylic	FKM B	PVDF	Ceramic	PTFE	PVDF	PVC	100
Z	SS <sup>3</sup>	FKM B	SS	SS	PTFE	N/A	N/A	100
\$	Acrylic	FKM B	Polypropylene	SS + Hastelloy spring	PTFE	Polyethylen	PVC	8000 <sup>2</sup>

<sup>1</sup> Size may be different from standard.  
<sup>2</sup> Using high viscosity pump head mod. \$, pump output may results lower in some applications.  
<sup>3</sup> Specify on order, the external thread of the valves: conical, cylindrical or NPT. Stainless Steel pump does not fit installation kit (accessories and hoses). Refer to "SS Accessories" table for fittings.

POWER SUPPLY	
00	230 VAC Schuko plug
05	230 VAC australian plug
01	230 VAC without plug
03	115 VAC US plug
04	24 VAC without plug
05	12 VDC *
07	24 VDC

\* On some models only.

SS ACCESSORIES <sup>3</sup>	
Pump head	Fittings
Li	3/8"
Mi	1/2"
Ni	1/2"
Si	3/4"
Ti	3/4"

# "KMS" and "KMSA" series metering pumps Data Sheet

## Technical features

KMS MODELS								
Models	Strokes speed		Stroke length range reliability	Power consumption at max flow (230 VAC)	Power consumption at max flow (115 VAC)	Power consumption at max flow (24 VAC)	Power consumption at max flow (12 VAC)	Weight
	min strokes hour	max strokes minute						
2001	1	180	from 30% to 100%	19 Watt	24 Watt	12 Watt	8.8 Watt	4.1 Kg (9.02 Lbs)
1802	1	180						
1504	1	180						
1005	1	180						
0808	1	180						
0510	1	180						
0218	1	180						
KMSA MODELS								
1801	1	180	from 30% to 100%	19 Watt	24 Watt	12 Watt	8.8 Watt	4.1 Kg (9.02 Lbs)
1503	1	180						
103.5	1	180						
100.5	1	180						
085.5	1	180						
057.5	1	180						
0213	1	180						

CAPACITY KMS MODELS									
Model	FLOW				cc per STROKE		Maximum pressure		Pump Head
	min cc/h	max l/h	Min GPH	Max GPH	min	max	bar	PSI	
2001	0.03	1	0.01	0.26	0.03	0.09	20	290	I
1802	0.06	2	0.02	0.53	0.06	0.19	18	261	L
1504	0.11	4	0.03	1.06	0.11	0.37	15	217	L
1005	0.14	5	0.04	1.32	0.14	0.46	10	145	L
0808	0.22	8	0.06	2.11	0.22	0.74	8	116	L
0510	0.28	10	0.07	2.64	0.28	0.93	5	58	L
0218	0.50	18	0.13	4.75	0.5	1.67	2	29	M

CAPACITY KMSA MODELS									
Model	FLOW				cc per STROKE		Maximum pressure		Pump Head
	min cc/h	max l/h	Min GPH	Max GPH	min	max	bar	PSI	
1801	0.03	1	0.01	0.26	0.03	0.09	18	261	LA
1503	0.08	3	0.02	0.79	0.08	0.28	15	217	LA
103.5	0.10	3.5	0.03	0.92	0.1	0.32	10	145	LA
100.5	0.02	0.5	0.01	0.13	0.02	0.05	10	145	JA
085.5	0.15	5.5	0.04	1.45	0.15	0.51	8	116	LA
057.5	0.21	7.5	0.06	1.98	0.21	0.69	5	58	LA
0213	0.37	13	0.1	3.43	0.36	1.2	2	29	MA

QUANTITY	PACKAGE CONTENT
n. 1	Assembly kit
n. 1	5 X 20 delayed fuse
n. 1	Level probe with axial foot filter (PVDF)
n. 1	0,3 Bar injection valve (PVDF)
m 2	Delivery hose
m 2	Suction hose
m 2	Discharge hose
m 2,5	Input signal cable
m 2	Alarm/Stand-by cable (MF model)
n.1	Operating manual

POWER SUPPLY	FUSE
230 VAC (190-265 VAC) - 50/60 Hz	1 A
115 VAC (90-135 VAC) - 50/60 Hz	500 mA
24 VAC (20-32 VAC) - 50/60 Hz	2A
12 VDC (10-16 VDC)	3.15A

# "KMS" and "KMSA" series metering pumps Data Sheet

## Dimension

mm [inches]

