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FLK

precision metering

Electromagnetic, Mechanical, Plunger, Hydraulic metering pump

PT. BERKAT SOLUSI PERSADA

KD series
Electromagnetic Metering pump

Main Paramter

[1] Flow range: 38~400ml/min (2.28~24LPH)
[2] Pressure range: 2~10bar
[3] Wide voltage range: AC100~240V@50Hz/60Hz
[4] Fluid chamber: PVC, PP, PVDF, SS304, SS316
[5] Diaphragm material: Teflon
[6] Control way: Manual, 4~20mA signal, 5~24V Pulse signal, RS485
[7] Link: liquid-level detector

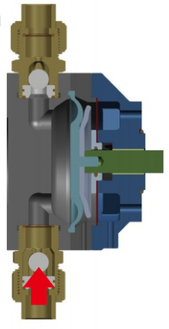
Working Principle

The elctromagnetic metering pump consists of electromagnet, fluid end and controller. Electromagnet equipped with push rod and return spring, and push rod is connected with the diaphragm.

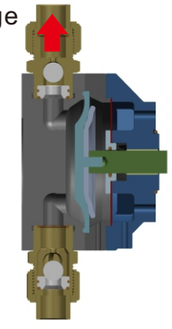
When controller energizes the electromagnet, the push rod drives the diaphragm forward under the force of magnet attraction, then discharge the medium out of fluid chamber though the outlet check valve. After the electromagnet power off, the push rod drives the diaphragm backward under the elastic action of the return spring, the suction the medium into fluid chamber though the inlet check valve.

Continuous suction and discharge to achieve precise transfer of medium. The controller adjusts the flow rate by controlling the power on/of frequency of the electromagnet. The manual knob adjusts the flow rate by controlling the stroke length of the push rod.

Suction



Discharge



Model description

KD-M - B10 VC - W 1

Connection	Size data (Id×odmm)
1	ø4×ø9mm, (PVC transparent braided tube 3m)
2	ø8×ø13mm, (PVC transparent braided tube 3m)
3	ø4×ø6mm, (PVDF transparent tube 3m)
4	ø8×ø10mm, (PVDF transparent tube 3m)

Voltage	Data
W	Wide Voltage AC100-240V @50Hz/60Hz

Flow end material	Pump body	Valve ball	Valve seat	Valve guide	Gasket	O-Ring	Diaphragm
VC	PVC	Ceramic	FKM	PVC	PTFE	FKM	PTFE+EPDM
VH	PVC	Ceramic	EPDM	PVC	PTFE	FKM	PTFE+EPDM
DF	PVDF	Ceramic	PTFE	PVDF	PTFE	PTFE	PTFE+EPDM
SU	SS316	SS316	SS316	SS316	PTFE	PTFE	PTFE+EPDM

Flow code	Pressure (bar)	Flow rate (LPH)	Stroke flow rate (ml/min)	Frequency HZ(Max)	Power (w)	Air exhaust valve
B10	10	2.28	0.05~0.11	360	20	√
B15	7	3.9	0.09~0.18	360	20	√
B20	4	5.7	0.13~0.26	360	20	√
B30	2	12	0.28~0.56	360	20	×
C15	10	4.8	0.09~0.22	360	24	√
C20	7	7.8	0.14~0.36	360	24	√
C30	3.5	16.2	0.30~0.75	360	24	×
C35	2	24	0.44~1.11	360	24	×

Control code	Control mode	
M series	Manual	Manual adjustment
L series	Manual	Manual key adjustment, LED display
V series	Pulse signal	5~24V pulse signal
P series	Pulse signal	LCD display, Manual, 5~24V signal, Liquid level detector
A series	Current signal	LCD display, Manual, 4~20mA signal, Liquid level detector
R series	Rs485	LCD display, Manual, Rs485, Liquid level detector

Control way

Note: Full series pump with manual stroke length adjustment knob.

M series Manual Adjustment

- Manual: through Knob adjust stroke frequency
  through Knob adjust stroke length

L series Manual Adjustment

LED display show the stroke frequency
- Manual: through button adjust stroke frequency
  through knob adjust stroke length

V series Auto Adjustment

- Manual: through knob adjust stroke length
- Auto: 5~24V pulse signal control

P series Manual / Auto Adjustment

LCD display show the stroke frequency
- Manual: through button adjust stroke frequency
  through knob adjust stroke length
- Auto: 5~24V pulse signal control
- Detector: provide water-level sensor connect port

A series Manual / Auto Adjustment

LCD display show the stroke frequency
- Manual: through button adjust stroke frequency
  through knob adjust stroke length
- Auto: 4~20Ma current signal control
- Detector: provide water-level sensor connect port

R series Manual / Auto Adjustment

LCD display show the stroke frequency
- Manual: through button adjust stroke frequency
  through knob adjust stroke length
- Auto: RS485 signal control
- Detector: provide water-level sensor connect port

Product features

1. Modular separation structure design. Fluid end module, electromagnetic module, controller module are isolated and non-interference from each other. Excellent heat dissipation.

2. Electromagnetic module full plastic sealed, excellent heat dissipation design and build-in overheat protection sensor.

3. Teflon diaphragm be multilayer design, build-in metal core and reinforced with nylon fabric. Longer service life.

4. 50Hz/60Hz double power frequency and AC100~240V wide voltage design, suitable for most of countries and regions.

5. Max stroke frequency up to 360 times/min. Lower pulsation, higher precise metering.

Performance data

Model	Unit	0Bar	1Bar	2Bar	3Bar	4Bar	5Bar	6Bar	7Bar	8Bar	9Bar	10Bar	11Bar
B10	L/h	5.34	3.42	3.36	3.27	3.18	3.06	3	2.88	2.7	2.52	2.28	1.95
B15	L/h	6.28	5.46	5.34	5.22	4.98	4.74	4.5	4.32	3.66			
B20	L/h	8.34	6.84	6.6	6.18	6	5.85	5.82					
B30	L/h	14.46	13.08	12.12	10.8								
C15	L/h	8.64	6.6	6.54	6.48	6.24	6.07	5.82	5.64	5.52	5.04	4.86	
C20	L/h	14.64	8.76	8.7	8.64	8.52	8.22	8.04	7.8	7.62	7.38	7.02	5.64
C30	L/h	23.52	18.42	17.76	17.04	16.35	12.84						
C35	L/h	27.48	26.06	24.18	22.12								

Mechanical series diaphragm Metering pump

Model description

XX - 120 / 0.7 - P T C P - H S 5 1 - *
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12]

[1] Model code: KS, KM, KB
[2] Flow rate(LPH)
[3] Out pressure(MPA)
[4] Fluid chamber material: P=PVC, K=PVDF, S=SS304, L=SS316
[5] Diaphragm material: T=Teflon
[6] Valve ball material: C=Ceramic, L=SS316
[7] Valve seat material: T=Teflon, P=PP, E=PE, K=PVDF, L=SS316
[8] Connection type: H=Hose, U=Union, F=Flange, T=Thread
[9] Motor: S=Standard IEC motor, B=EX-proof motor, N=NEMA motor, V=Variable Frequency motor, S=Smart motor
[10] Frequency: 5=50Hz, 6=60Hz
[11] Phase: 1= Single phase, 3=Three phase
[12] * indicate a special code, normal models no this code

Working Principle

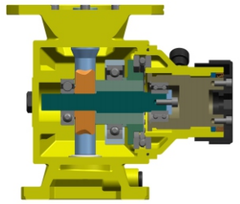
Mechanical metering pump consists of motor, drive end and Fluid end. The electric motor drives the eccentric mechanism to rotate through the worm gear, and the eccentric mechanism drives the diaphragm through the push rod. The regulating mechanism realizes the flow control by adjusting the eccentric distance.

Diaphragm reciprocates with preset stroke distance. The diaphragm is pulled back to allow the medium to flow into the fluid chamber through the check valve. The diaphragm is pushed forward, so that the same amount of medium is discharge from the outlet check valve. Continuous suction and discharge to achieve precise transfer of medium.

Product features

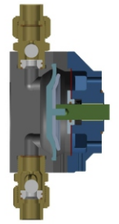
1. More balanced stroke adjusting mechanism

The stroke adjusting rod adjusts the eccentric stroke, and the adjusting rod is newly designed with a sleeve. Due to the number of limited of thread teeth, the thread and teeth bite is not enough to withstand the impact brought by the transmission, resulting in increased wear and decreased accuracy. The new sleeve can make the adjusting rod more stable and reliable.



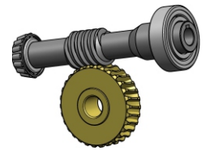
2. Double-diaphragm structure

The fluid chamber be double-diaphragm chamber design, which is independent of the drive end. When the main diaphragm is broken, the back-up diaphragm also can prevent the medium into drive end. The double-diaphragm structure provides convenience for the installation of leaking sensor.



3. High precision worm gear

The worm gear is machined and grinding with high precision by special machinery, with good coupling, low wear and high transmission efficiency.



4. Structural coupling eccentric mechanism

The eccentric sleeve and the eccentric shaft adopt structural coupling. Simple structure, high cohesion and strong impact resistance. Low noise level under the high pressure working conditions.

5. Full closed drive end

The top of the drive end is designed with a bearing and a cover plate, and the worm and bearing are cohesive, with higher concentricity and improve motor output efficiency. At the same time, the closed design can prevent the accumulation of oil at the output end of motor, and prevent the dirt into drive end to make the operation more stable and efficiency.

6. High-strength diaphragm

Diaphragm is made of multilayer composite material. The surface layer is made of high-toughness Teflon material, the middle layer is supported by an iron core which one-piece with bolt, and the back layer be rubber reinforced with nylon fabric, the whole diaphragm durable and stable.

KS series
Mechanical Metering pump

Main Paramter

[1] Flow range: 15-130LPH@50Hz,
18-180LPH@60Hz
[2] Pressure range: 4-10bar
[3] Power: 220/380V@50Hz, 230/415@50Hz
220/380V@60Hz, 230/460@60Hz
DC12V or DC24V, others on request
[4] Fluid chamber material: PVC, PP, PVDF, SS304, SS316
[5] Diaphragm material: Teflon
[6] Motor: Gear motor
[7] Frequency: 5=50Hz, 6=60Hz

Combination of material

Material	Pump head	Diaphragm	Check ball	Ball seat	Sealing ring
PVC	PVC	Teflon	Ceramic	PVC	Viton
PVDF	PVDF	Teflon	Ceramic	Teflon	Teflon
SS316	SS316	Teflon	SS316	SS316	Teflon

Connect specification

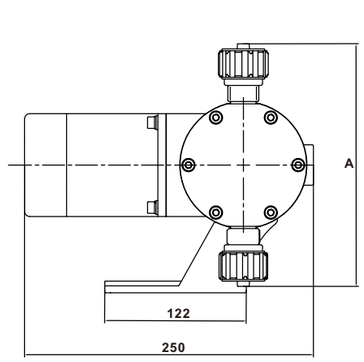
Model	PVC	PVDF	SS316 Welding union
KS15-KS40	6*9mm Hose	1/2" BSP/NPT	8*14mm
KS60-KS130	10*14mm Hose	1/2" BSP/NPT	10*16mm

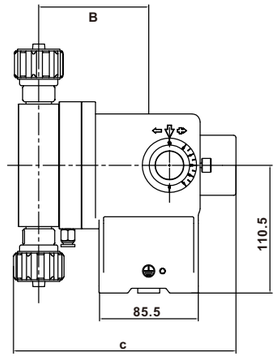
Performance data

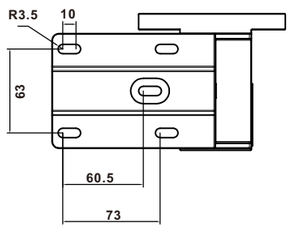
Model	50HZ			60HZ			Diaphragm size (mm)	Motor (w)
	Flow (LPH)	Pressure (Bar)	RPM	Flow (LPH)	Pressure (Bar)	RPM		
KS15/1.0	15	10	100	18	10	120	65	40/60
KS25/1.0	25	10	100	30	10	120		
KS40/0.7	40	7	150	48	7	180		
KS60/0.6	60	6	100	72	6	120	84	60
KS80/0.5	80	5	100	96	5	120		
KS100/0.4	100	4	150	120	4	180		
KS130/0.4	130	4	150	156	4	180		
KS150/0.4	150	4	150	180	4	180		

Note: Above data measured with water of 20℃

Installation dimension







Model	A	B	C
KS15-40	178	93	185
KS60-150	210	95	195

KM series
Mechanical Metering pump

Main Paramter

[1] Flow range: 10-500LPH@50Hz,
12-600LPH@60Hz
[2] Pressure range: 5-12bar
[3] Power: 220/380V@50Hz, 230/415@50Hz
220/380V@60Hz, 230/460@60Hz
others on request
[4] Fluid chamber material: PVC, PP, PVDF, SS304, SS316
[5] Diaphragm material: Teflon
[6] Motor: S=Standard IEC motor, B=EX-proof motor, N=NEMA motor,
V=Variable Frequency motor, S=Smart motor
[7] Frequency: 5=50Hz, 6=60Hz
[8] Phase: 1= Single phase, 3=Three phase

Combination of material

Material	Pump head	Diaphragm	Check ball	Ball seat	Sealing ring
PVC	PVC	Teflon	Ceramic	PVC	Viton
PVDF	PVDF	Teflon	Ceramic	Teflon	Teflon
SS316	SS316	Teflon	SS316	SS316	Teflon

Connect specification

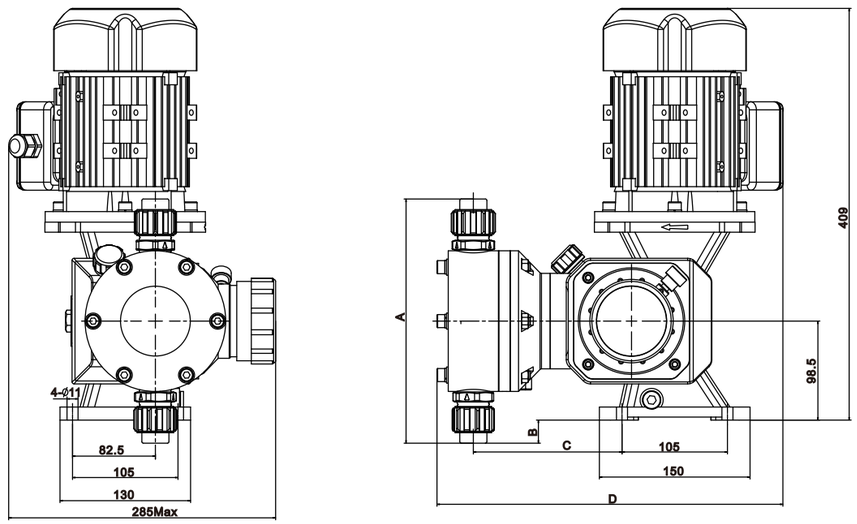
Model	PVC	PVDF	SS304/316 Welding union
KM10-KM25	6*9mm Hose	1/2" BSP/NPT	8*14mm
KM50-KM120	DN15 Glue union	1/2" BSP/NPT	10*16mm
KM170-KM300	DN15 Glue union	1/2" BSP/NPT	15*22mm
KM400-KM500	DN20 Glue union	3/4" BSP/NPT	15*22mm

Performance data

Model	50HZ			60HZ			Diaphragm size (mm)	Motor (kw)
	Flow (LPH)	Pressure (Bar)	RPM	Flow (LPH)	Pressure (Bar)	RPM		
KM10/1.2	10	12	48	12	12	58	60	0.25/0.37
KM25/1.0	25	10	48	30	10	58		
KM50/1.0	50	10	96	60	10	115		
KM90/0.7	90	7	48	108	7	58	112	0.37
KM120/0.7	120	7	48	144	7	58		
KM170/0.7	170	7	96	204	7	115		
KM240/0.7	240	7	96	288	7	115		
KM330/0.5	330	5	144	396	5	173		0.37/0.55
KM400/0.5	400	5	144	480	5	173		
KM500/0.5	500	5	144	600	5	173		

Note: Above data measured with water of 20℃

Installation dimension



Model	A	B	C	D
KM10-50	178	10	135	310
KM90-500	244	23	148	346

KB series
Mechanical Metering pump

Main Paramter

[1] Flow range: 240-1800LPH@50Hz,
288-2160LPH@60Hz
[2] Pressure range: 3-10bar
[3] Power: 220/380V@50Hz, 230/415@50Hz
220/380V@60Hz, 230/460@60Hz
others on request
[4] Fluid chamber material: PVC, PP, PVDF, SS304, SS316
[5] Diaphragm material: Teflon
[6] Motor: S=Standard IEC motor, B=EX-proof motor, N=NEMA motor,
V=Variable Frequency motor, S=Smart motor
[7] Frequency: 5=50Hz, 6=60Hz
[8] Phase: 1= Single phase, 3=Three phase

Combination of material

Material	Pump head	Diaphragm	Check ball	Ball seat	Sealing ring
PVC	PVC	Teflon	Ceramic	PVC	Viton
PVDF	PVDF	Teflon	Ceramic	Teflon	Teflon
SS316	SS316	Teflon	SS316	SS316	Teflon

Connect specification

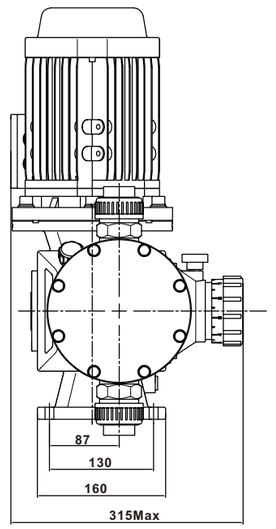
Model	PVC	PVDF	SS316
KB240-KB1000	DN25 Glue union	1"BSP/NPT	1"BSP/NPT
KB1200-KB1800	DN40 Glue union	1-1/2" BSP/NPT	1-1/2"BSP/NPT

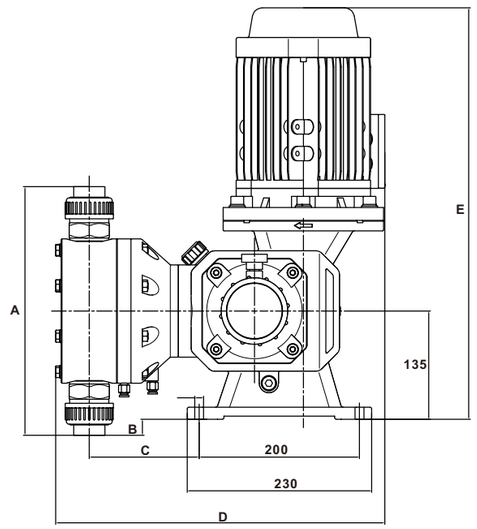
Performance data

Model	50HZ			60HZ			Diaphragm size (mm)	Motor (kw)
	Flow (LPH)	Pressure (Bar)	RPM	Flow (LPH)	Pressure (Bar)	RPM		
KB240/1.0	240	10	48	288	10	58	150	0.75
KB320/1.0	320	10	48	384	10	58		
KB500/1.0	500	10	96	600	10	115		
KB680/0.7	680	7	96	816	7	115		
KB760/0.5	760	5	144	912	5	173		
KB1000/0.4	1000	4	144	1200	4	173		
KB1200/0.4	1200	4	96	1440	4	115	185	1.1
KB1600/0.3	1600	3	144	1920	3	173		
KB1800/0.3	1800	3	144	2160	3	173		

Note: Above data measured with water of 20℃

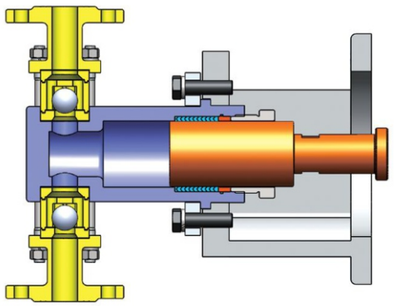
Installation dimension





Model	A	B	C	D	E
KB240-1000	310	20	137	412	513
KB1200-1800	410	70	146	452	560

Plunger Metering pump



Working Principle

Plunger metering pump is a reciprocating positive displacement pump, consists of motor, drive end and fluid end. The electric motor is decelerated by the worm gear and drives the eccentric mechanism to rotate, then the eccentric mechanism drives the plunger reciprocating movement. The stroke mechanism realizes the flow control by adjusting the eccentric distance.

Plunger reciprocates at a preset stroke distance and forms a volumetric cavity. The plunger is pulled back to suck the medium into the fluid chamber through the inlet check valve. Push forward the plunger to discharge the same volume medium through the outlet check valve. Continuous suction and discharge to achieve precise transfer of medium.

Features

[1] High measurement accuracy, 0-100% stepless adjustment of stroke, simple structure and easy maintenance.
[2] The ceramic coating plunger in high hardness, strong corrosion resistance and high surface finish.
[3] The packing seal match with ceramic coating plunger, in good self-sealing performance and longer life time. However, its still necessary to periodically adjust the pre-loading force of the packing seal.
[4] Pump can be customized and fit for high and low temperature, high viscosity and other special media.

KPD series plunger type

Main Paramter

[1] Flow range: 230LPH@50Hz, 276LPH@60Hz
[2] Pressure range: 0~40MPa
[3] Fluid chamber: SS304, SS316, SS316L and other on request
[4] Plunger material: Ceramic (plunger 6-10mm)
SS coated with ceramic (plunger 12-42mm)
[5] Packing seal material: PTFE ring + SS ring
[6] Ball material: Ceramic of DN6, SS316 of DN10/15
[7] Ball quantity: two ball of DN6/10, Single ball of DN15
[8] Gasket material: PP (standard), PTFE (temperature 100-150℃),
Copper (temperature above 150℃)
[9] Motor: S=Standard IEC motor, B=EX-proof motor, N=NEMA motor,
V=Variable Frequency motor, S=Smart motor
[10] Liquid temperature: SS304,SS316,SS316L (-20~+130℃), tube with cooling (130-350℃)

Performance data

Model	Flow(LPH)		Pressure (Mpa)	Plunger (mm)	RPM	Motor (kw)	Connection
	50HZ	60HZ					
KPD1/40	1	1.2	40	6	96	0.37	DN6 Welding union
KPD2/40	2	2.4	40	6			
KPD4/33	4	4.8	33	8			
KPD8/21	8	9.6	21	10			
KPD11/14	11	13.2	14	12			
KPD20/8	20	24	8	16			DN10 Welding union
KPD33/5	33	39.6	5	20			
KPD52/3.3	52	62.4	3.3	25			
KPD65/2.6	65	78	2.6	28			
KPD88/2.0	88	105.6	2	32			
KPD105/1.7	105	126	1.7	35			
KPD125/1.4	125	150	1.4	38			DN15 Welding union
KPD155/1.1	155	186	1.1	42			
KPD190/1.0	190	228	1	38	144		
KPD230/0.8	230	276	0.8	42			

KPM series plunger type

Main Paramter

[1] Flow range: 820LPH@50Hz, 984LPH@60Hz
[2] Pressure range: 0~50MPa
[3] Fluid chamber: SS304, SS316, SS316L and other on request
[4] Plunger material: Ceramic (plunger 6-10mm)
SS coated with ceramic (plunger 12-70mm)
[5] Packing seal material: PTFE ring + SS ring
[6] Ball material: Ceramic of DN6, SS316 of DN10/15
[7] Ball quantity: two ball of DN6/10, Single ball of DN15/25
[8] Gasket material: PP (standard), PTFE (temperature 100-150℃),
Copper (temperature above 150℃)
[9] Motor: S=Standard IEC motor, B=EX-proof motor, N=NEMA motor,
V=Variable Frequency motor, S=Smart motor
[10] Liquid temperature: SS304,SS316,SS316L (-20~+130℃), tube with cooling (130-350℃)

Performance data

Model	Flow(LPH)		Pressure (Mpa)	Plunger (mm)	RPM	Motor (kw)	Connection
	50HZ	60HZ					
KPM5/50	5	6	50	8	96	0.75	DN6 Welding union
KPM9/44	9	10.8	44	10			
KPM14/30	14	16.8	30	12			
KPM26/17	26	31.2	17	16			DN10 Welding union
KPM42/10	42	50.4	10	20			
KPM66/7	66	79.2	7	25			
KPM85/5.5	85	102	5.5	28			
KPM110/4.0	110	132	4	32			
KPM135/3.3	135	162	3.3	35			DN15 Welding union
KPM160/2.8	160	192	2.8	38			
KPM200/2.3	200	240	2.3	42			
KPM225/2.0	225	270	2	45			
KPM280/1.7	280	336	1.7	50			
KPM335/1.3	335	402	1.3	55			DN25 Flange
KPM400/1.1	400	480	1.1	60			
KPM470/0.9	470	564	0.9	65			
KPM550/0.8	550	660	0.8	70			
KPM600/0.7	600	720	0.7	60	144		
KPM700/0.6	700	840	0.6	65			
KPM820/0.5	820	984	0.5	70			

KPY series plunger type

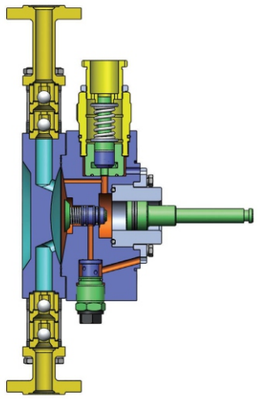
Main Paramter

[1] Flow range: 1620LPH@50Hz, 1944LPH@60Hz
[2] Pressure range: 0~50MPa
[3] Fluid chamber: SS304, SS316, SS316L and other on request
[4] Plunger material: SS coated with ceramic (plunger 12-90mm)
[5] Packing seal material: PTFE ring + SS ring
[6] Ball material: Ceramic of DN6, SS316 of DN10/15
[7] Ball quantity: two ball of DN10, Single ball of DN15/25/40
[8] Gasket material: PP (standard), PTFE (temperature 100-150℃),
Copper (temperature above 150℃)
[9] Motor: S=Standard IEC motor, B=EX-proof motor, N=NEMA motor,
V=Variable Frequency motor, S=Smart motor
[10] Liquid temperature: SS304,SS316,SS316L (-20~+130℃), tube with cooling (130-350℃)

Performance data

Model	Flow(LPH)		Pressure (Mpa)	Plunger (mm)	RPM	Motor (kw)	Connection
	50HZ	60HZ					
KPY15/50	15	18	50	12	96	1.5	DN10 Welding union
KPY30/28	30	36	28	16			
KPY50/18	50	60	18	20			
KPY80/11	80	96	11	25			
KPY100/9	100	120	9	28			
KPY135/7	135	162	7	32			DN15 Welding union
KPY160/5.8	160	192	5.8	35			
KPY190/5.0	190	228	5.0	38			
KPY230/4.0	230	276	4.0	42			
KPY265/3.5	265	318	3.5	45			
KPY330/2.9	330	396	2.9	50			
KPY400/2.3	400	480	2.3	55			DN25 Flange
KPY480/2.0	480	576	2.0	60			
KPY560/1.7	560	672	1.7	65			
KPY650/1.5	650	780	1.5	70			
KPY750/1.3	750	900	1.3	75			
KPY850/1.1	850	1020	1.1	80			DN40 Flange
KPY960/0.9	960	1152	0.9	85			
KPY1080/0.8	1080	1296	0.8	90			
KPY1280/0.8	1280	1536	0.8	80	144		
KPY1450/0.7	1450	1740	0.7	85			
KPY1620/0.6	1620	1944	0.6	90			

Hydraulic Metering pump



Working Principle

Hydraulic diaphragm metering pump is based on the plunger metering pump adding an additional hydraulic system. The electric motor is decelerated by the worm gear and drives the eccentric mechanism to rotate, then the eccentric mechanism drives the plunger, then plunger pushes the hydraulic oil which pushes the diaphragm reciprocating motion to realize the suction and discharge of the medium.

The oil filling valve, limiting valve and overload valve of hydraulic system work together to automatically realize the functions of the oil filling, air exhaust and overload protection, so as to achieve precise transfer of medium.

Features

[1] High measurement accuracy, 0-100% stepless adjustment of stroke.
[2] The fluid end adopts diaphragm seal, no leakage, sealing performance is better than plunger metering pump.
[3] Pump with PTFE diaphragm which in excellent corrosion resistance and good temperature resistance.
[4] Built-in overload valve, with automatic pressure relief protection function, but cant be use for a long time.
[5] Pump can be customized and can fit for high and low temperature, high viscosity and other special medium.

KHD series hydraulic type

Main Paramter

[1] Flow range: 210LPH@50Hz, 252LPH@60Hz
[2] Pressure range: 0~60MPa
[3] Fluid chamber: SS304, SS316, SS316L and other on request
[4] Diaphragm material: PTFE (pressure 30Mpa and below)
Metal (pressure 30Mpa and above)
[5] Control: Manual stroke
[6] Ball material: Ceramic of DN6, SS316 of DN10/15
[7] Ball quantity: two ball of DN6/10, Single ball of DN15
[8] Gasket material: PP (standard), PTFE (temperature 100-150℃),
Copper (temperature above 150℃)
[9] Motor: S=Standard IEC motor, B=EX-proof motor, N=NEMA motor,
V=Variable Frequency motor, S=Smart motor
[10] Liquid temperature: SS304,SS316,SS316L (-20~+110℃), tube with cooling (110-350℃)

Performance data

Model	Flow(LPH)		Pressure (Mpa)	Plunger (mm)	RPM	Motor (kw)	Connection
	50HZ	60HZ					
KHD1/30	1	1.2	30	6	96	0.37	DN6 Welding union
KHD2/30	2	2.4	30	8			
KHD5/25	5	6	25	10			
KHD8/18	8	9.6	18	10	144		
KHD15/12	15	18	12	12			
KHD20/8	20	24	8	16	96		DN10 Welding union
KHD30/7	30	36	7	16	144		
KHD50/4.3	50	60	4.3	20			
KHD63/3.2	63	75.6	3.2	28	96		
KHD80/2.7	80	96	2.7	25	144		
KHD100/2.1	100	120	2.1	28			
KHD135/1.6	135	162	1.6	32			
KHD160/1.3	160	192	1.3	35	144		DN15 Welding union
KHD190/1.1	190	228	1.1	38			
KHD210/0.9	210	252	0.9	40			

KHM series hydraulic type

Main Paramter

[1] Flow range: 810LPH@50Hz, 972LPH@60Hz
[2] Pressure range: 0~70MPa
[3] Fluid chamber: SS304, SS316, SS316L and other on request
[4] Diaphragm material: PTFE (pressure 30Mpa and below)
Metal (pressure 30Mpa and above)
[5] Control: Manual stroke
[6] Ball material: Ceramic of DN6, SS316 of DN10/15
[7] Ball quantity: two ball of DN6/10, Single ball of Dn15/25
[8] Gasket material: PP (standard), PTFE (temperature 100-150℃),
Copper (temperature above 150℃)
[9] Motor: S=Standard IEC motor, B=EX-proof motor, N=NEMA motor,
V=Variable Frequency motor, S=Smart motor
[10] Liquid temperature: SS304,SS316,SS316L (-20~+110℃), tube with cooling (110-350℃)

Performance data

Model	Flow(LPH)		Pressure (Mpa)	Plunger (mm)	RPM	Motor (kw)	Connection
	50HZ	60HZ					
KHM4/30	4	4.8	30	8	96	0.75	DN6 Welding union
KHM7/30	7	8.4	30	10			
KHM10/30	10	12	30	12			
KHM18/22	18	21.6	22	12	144		
KHM23/17	23	27.6	17	16	96		DN10 Welding union
KHM37/12	37	44.4	12	16	144		
KHM50/10	50	60	10	18			
KHM62/8	62	74.4	8	20			
KHM75/6.5	75	90	6.5	22			
KHM100/5.0	100	120	5	25			
KHM140/3.5	140	168	3.5	30			DN15 Welding union
KHM160/3.2	160	192	3.2	32			
KHM205/2.5	205	246	2.5	36			
KHM260/2.0	260	312	2.0	40			
KHM330/1.6	330	396	1.6	45			DN25 Flange
KHM410/1.3	410	492	1.3	50			
KHM500/1.0	500	600	1.0	55			
KHM600/0.8	600	720	0.8	60			
KHM700/0.7	700	840	0.7	65			
KHM820/0.6	820	984	0.6	70			

KHY series hydraulic type

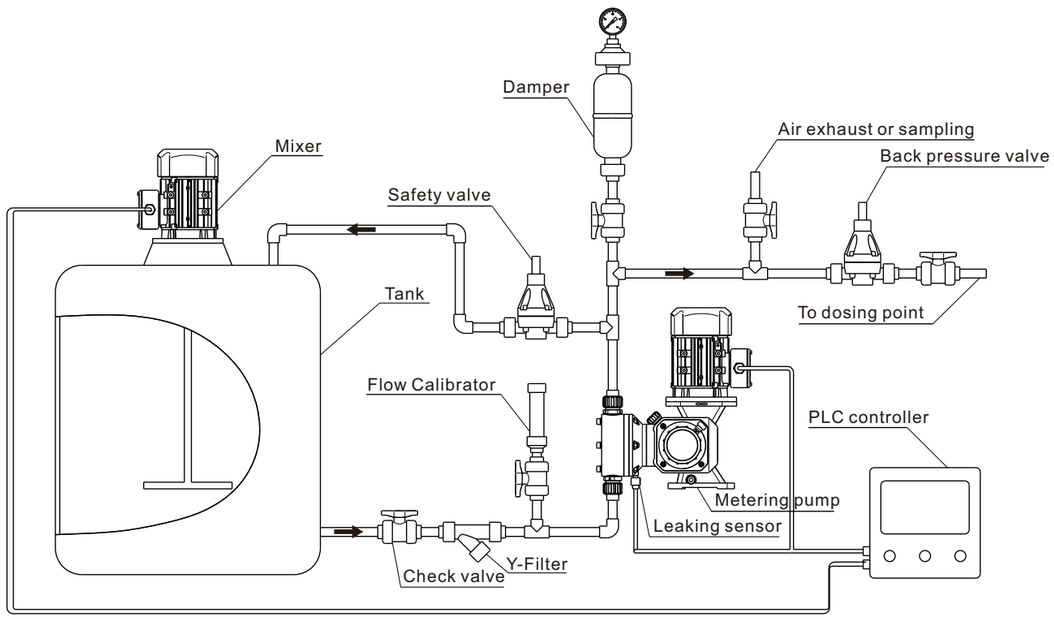
Main Paramter

[1] Flow range: 1600LPH@50Hz, 1920LPH@60Hz
[2] Pressure range: 0~70MPa
[3] Fluid chamber: SS304, SS316, SS316L and other on request
[4] Diaphragm material: PTFE (pressure 30Mpa and below)
Metal (pressure 30Mpa and above)
[5] Control: Manual stroke
[6] Ball material: Ceramic of DN6, SS316 of DN10/15/25/40
[7] Ball quantity: two ball of DN6/10, Single ball of DN15/25/40
[8] Gasket material: PP (standard), PTFE (temperature 100-150℃),
Copper (temperature above 150℃)
[9] Motor: S=Standard IEC motor, B=EX-proof motor, N=NEMA motor,
V=Variable Frequency motor, S=Smart motor
[10] Liquid temperature: SS304,SS316,SS316L (-20~+110℃), tube with cooling (110-350℃)

Performance data

Model	Flow(LPH)		Pressure (Mpa)	Plunger (mm)	RPM	Motor (kw)	Connection
	50HZ	60HZ					
KHY 7/30	7	8.4	30	10	96	1.5	DN6 Welding union
KHY12/30	12	14.4	30	12			
KHY25/30	25	30	30	16			DN10 Welding union
KHY42/22	42	50.4	22	16	144		
KHY56/18	56	67.2	18	18			
KHY72/15	72	86.4	15	20			
KHY90/12.5	90	108	12.5	22			
KHY115/9.5	115	138	9.5	25			
KHY130/8.0	130	156	8	32	96		DN15 Welding union
KHY170/6.5	170	204	6.5	30	144		
KHY200/5.8	200	240	5.8	32			
KHY250/4.5	250	300	4.5	36			
KHY310/3.7	310	372	3.7	40			
KHY400/3.0	400	480	3.0	45			DN25 Flange
KHY500/2.4	500	600	2.4	50			
KHY600/2.0	600	720	2.0	55			
KHY710/1.7	710	852	1.7	60			
KHY830/1.4	830	996	1.4	65			
KHY960/1.2	960	1152	1.2	70			DN40 Flange
KHY1100/1.0	1100	1320	1.0	75			
KHY1250/0.9	1250	1500	0.9	80			
KHY1420/0.8	1420	1704	0.8	85			
KHY1600/0.7	1600	1920	0.7	90			

Typical installation



Accessories

Back pressure valve:
Can avoid the siphon phenomenon when too small pressure difference between the inlet and outlet.

Safety valve:
When exceed safety pressure, safety valve will automatically open to release pressure, avoid equipment or pipeline damage.

Damper:
Installing a damper can control the pulsation variation within +/-5%, or even a smaller range. Damper can reduce the impact on the system and pipeline, and impact on chemical reactions.

Flow calibrator:
Calibrate the flow rate of the metering pump on site. The volume of the flow calibrator shall not less than the 30-second rated flow rate of the metering pump.

Accessories

Y-Filter:
Installed in the inlet pipeline, prevent external impurities and particles into metering pump, and ensure the working accuracy and normal operation of the metering pump.

Conductivity detector:
Matched with the metering pump to form a closed-loop control system. By controlling the conductivity to reduce the metal ions and improve the water quality. Widely use in circulating water treatment systems.

PH detector:
Matched with the metering pump to form a closed-loop control system. By adjusting the PH of the solution to meet the requirements of the PH value. Widely used in municipal water treatment, wastewater treatment systems.

Dissolved oxygen analyzer:
Matched with the metering pump to form a closed-loop control system. By adjusting the dissolved oxygen value to meet the requirements of the setted value. Widely used in swimming pool, water treatment systems.