



BELUNO

PRODUCT OVERVIEW



Spring Return Motor Driven Diaphragm Metering Pump



Ultra-strong Anticorrosive Multifunctional Check Valve



Check Valve Function: Overcome the leak defect caused by the small pressure difference between gravity check valve system and pump head cavity.

Delivery High Viscosity Liquid: Check valves adopt spring return technology, so the dosing pump can maintain its displacement and linearity better when delivering high viscosity liquid.

Back Pressure Ability: The coefficient of elasticity of elastic part can be properly adjusted according to customer's requirements so that the dosing pump outlet has different back pressure values.

Safety Valve function: The coefficient of elasticity of elastic element can be properly adjusted according to pipeline system pressure to realize the safety valve function needed by the pipeline system.

Anticorrosive ElasticPart: Check valves adopt PTFE elastic components, so as to realize the optimal anticorrosive function.

Up to 3MPa(435psi)

100% PTFE Diaphragm

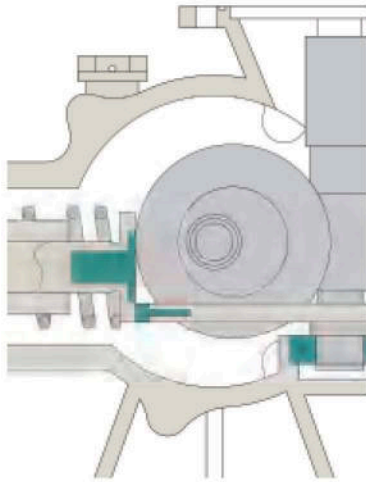
Excellent Diaphragm Assembly

The diaphragm, which is made of high quality modified PTFE material, and, work together with the matched protection assembly, greatly increase the lift of motor driven diaphragm dosing pump.

The maximum lift is up to 3.0Mpa. Thus some hydraulic diaphragm pumps would be replaced by this pump, thereby saving cost.



Spring Return Quiet and Steady



With damping stroke sliding bar, all motor pumps not only reserve the advantages of traditional spring return dosing pumps including simple structure, low failure rate and easy to maintain, but also overcome their fatal shortcomings including large pipe shock, large mechanical vibration, part damage, poor flow linearity and high noise brought by ineffective eccentric travel.

Lightweight Design

Advanced lightweight structure: For energy saving and emission reduction, the pumps adopt many high specific strength materials and smart structural design, so the pumps have very high power–displacement ratio.



Intelligent Stroke Adjuster

End the Age of Variable Frequency

Remote Control Electric Stroke Adjuster: It can receive analog signal (4–20mA) to change the stroke length of dosing pump in real time, further, accurately modify the displacement of dosing pump. The adjuster overcomes all major defects of modifying the capacity of dosing pump by variable frequency speed control.



Manual Control Electric Stroke Adjuster: The stroke length of dosing pump can be accurately set and displayed via the operation panel of the adjuster. With error compensation function, the adjuster overcomes the error between actual displacement and its set value directly caused by the random change of stroke length of dosing pump, because traditional knob adjuster doesn't have the self-lock function.

Model Code

Code	Example	BLWL-410-0.6-PVT-A-H					
Model	BLJS						
	BLJL						
	BLWS						
	BLWL						
	BL1000						
	BL2000						
	HND						
Capacity	L/H						
Pressure	MPa						
Dosing Head Material		Pump Head	Diaphragm	Valve Seat	Valve Ball	Seal Ring	
	PVT----	PVC	PTFE	PTFE	Ceramic	FKM	
	PVDF----	PVDF	PTFE	PTFE	Ceramic	FKM	
	SST----	SS316	PTFE	SS316	SS316	FKM	
	PTF----	PTFE	PTFE	PTFE	Ceramic	---	
Electric power Supply	A-----	3ph 380V 50Hz/60Hz					
	VF----	Variable Frequency Motor					
	EX----	Explosion-proof Motor Exd II BT4					
	B-----	1ph 220v 50Hz/60Hz					
	C-----	Special requirements, otherwise noted					
Control Version	H-----	Manual					
	I-----	Electric stroke adjuster					

*Example

1. Maximum lift is 6kg, Capacity is 370L/h, 380V 50Hz, PVC pump head, 3PH 380V 50Hz, adjustment mode: electric stroke adjustment.

Selected model:

BLWL-410/0.6-PVT-A-I

2. Maximum lift is 6kg, Capacity is 370L/h, 380V 50Hz, PVDF pump head, 3PH 380V 50Hz variable frequency motor adjustment mode: manual.

Selected model:

BLWL-410/0.6-PVDF-AVF-H

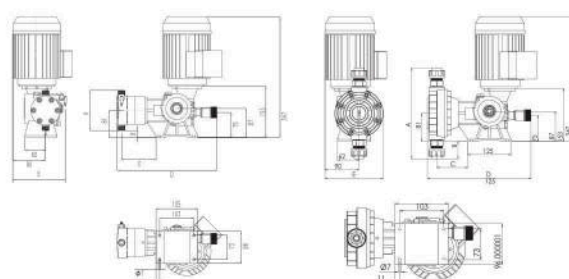
BLWS

- 1.It is equipped with low pressure die-casting aluminum box with high strength, which ensures solidness and firmness, reduces the mass of the dosing pump and the weight of the overall equipment of later stage.
- 2.The precise worm gear can make the transmission efficiency increase significantly, gain the same pressure displacement, make the motor power smaller and more energy- saving.
- 3.High quality modified PTFE diaphragm manufacturing process can make the maximum pressure of mechanical diaphragm dosing pump reach 30 kg, and make the cost of dosing pump under 12-30 kg pressure system substantially decline.
- 4.The pump head of PVC, PVDF, PTFE, SS316 materials complete series of is suitable for conveying various acids, alkali and salt solutions; non-leakage overflow structure can make sure that the process is stable and orderly.
- 5.Can be equipped with electric stroke adjuster (4-20mA).
- 6.Variable frequency motor and explosion-proof motor are optional.



Model	Capacity L/h		Max.Pressure Bar		Stroke Length (mm)	Diaphragm Diameter (mm)	Pump Speed (SPM)		Single-stroke Flow (ml/stroke)	Motor Power (W)
	50hz	60hz	50hz	60hz			50hz	60hz		
BLWS- 8/1.6	8	9.6	16	12.8	2	48	118	142	1.13	180
BLWS- 12/1.6	12	14.4	16	12.8	2	48	177	212	1.13	180
BLWS- 18/1.6	18	21.6	16	12.8	2	60	118	142	2.54	180
BLWS- 24/1.6	24	28.8	16	12.8	2	60	177	212	2.3	180
BLWS- 33/1.0	33	39.6	10	8	4	90	118	142	4.7	180
BLWS- 68/1.0	68	81.6	10	8	6	90	118	142	9.6	180
BLWS- 120/0.7	120	144	7	5.6	4	105	177	212	11	180
BLWS- 143/0.6	143	171.6	6	4.8	6	105	118	142	20.1	180
BLWS- 213/0.5	213	255.6	5	4	6	105	177	212	20.1	180
BLWS- 258/0.4	258	309.6	4	3.2	10	105	118	142	36.4	180
BLWS- 386/0.3	386	463.2	3	2.4	10	105	177	212	36.4	180

Dimensional Drawing



NDWS-8/1.6~24/1.6

NDWS-33/1.0~386/0.3

Pump Head Material and Size

Model	Material	A	B	C	D	E	Connection	
							Thread Size	Socket Pipe Size
BLWS-8/1.6~18/1.6	PVC	95	5	70	290	150	Flexible tube φ6*9 or φ10*14	Hard tube connections
	PVDF	105	10	75	285	150		
	PTFE	105	10	75	285	150		
	SS316	105	10	75	285	150		
BLWS-33/1.0~68/1.0	PVC	224	31	90	310	150	G 1"	G1/2"-DN15
	PVDF	224	31	90	310	150	G 1"	G1/2"-DN15
	PTFE	178	8	90	310	150	G 1"	/
	SS316	178	8	97	310	150	G 1"	/
BLWS-120/0.7~386/0.3	PVC	239	38	90	310	157.5	G 1"	G1/2"-DN15
	PVDF	224	31	90	310	150	G 1"	G1/2"-DN15
	PTFE	193	18	90	310	157.5	G 1"	/
	SS316	193	18	97	310	157.5	G 1"	/

Typical Installation Diagram

