



ISO 9001

E-WHA

METERING PUMPS

BUILT IN AIR CHAMBER
HYDRAULIC DIAPHRAGM TYPE
METERING PUMP

 **JMHN SERIES**



 **JLHN SERIES**



 **JLHND SERIES**



E-WHA CHEMICAL FEEDER CO., LTD.

JMHN / JLHN / JLHND SERIES

E-WHA

FEATURES

EWHA's JMHN / JLHN / JLHND SERIES are operating more stable and accurate because of built in relief valve that releases the excessive over-reverse pressure when it's over than setting pressure.

And also unlike other metering pumps Which require a dampener or multi Installation to lower pulsation, EWHA's Non-pulsation metering pump with a built in air chamber provides the best solution in a very economical way.



Therefore these systems make it more stable, safe and exact working.

SPECIFICATION

■ JMHN SERIES

- DISCHARGE PRESSURE : up to 10 kgf/cm²
- FLOW RATE : 50~8,500 cc/min.

■ JLHN SERIES

- DISCHARGE PRESSURE : up to 10 kgf/cm²
- FLOW RATE : 750~52,500 cc/min.

■ JLHND SERIES

- DISCHARGE PRESSURE : up to 10 kgf/cm²
- FLOW RATE : 1,500~105,000 cc/min.

JMHN / JLHN / JLHND SERIES

E-WHA

MODEL NAME

JMHN/JLHN

D

3000

S6

S6

F

23

①

②

③

④

⑤

⑥

⑦

■ SERIES NAME(BUILT IN AIR CHAMBER)

- ①
- JMHN = HYDRAULIC METERING PUMP LOW FLOW RATE
 - JLHN = HYDRAULIC METERING PUMP HIGH FLOW RATE HIGH POWERED

■ HEAD NUMBER

- ②
- NO = SINGLE HEAD
 - D = DOUBLE HEAD{DUPLEX}

■ MAXIMUM FLOW RATE

- ③
- 3000 = 3,000cc/min.CLASS
 - 30L = 30×1000=30,000cc/min CLASS

■ LIQUID END MATERIAL

- ④
- S4 = SUS304, S6 = SUS316, SL = SUS316L
 - P = PVC, K = PVDF, T = PTFE

■ MATERIALS OF CHECK BALL

- ⑤
- S4 = SUS304
 - S6 = SUS316
 - C = CERAMIC

■ INLET OUTLET CONNECTION

- ⑥
- F = FLANGE
 - H = HOSE
 - T = SCREW

■ MOTOR SPECIFICATION

- ⑦
- 23 = 3PHASE 220V, 33 = 3PHASE 380V, 43 = PHASE 440V

JMHN / JLHN / JLHND SERIES

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LIQUID END MATERIAL (STANDARD)

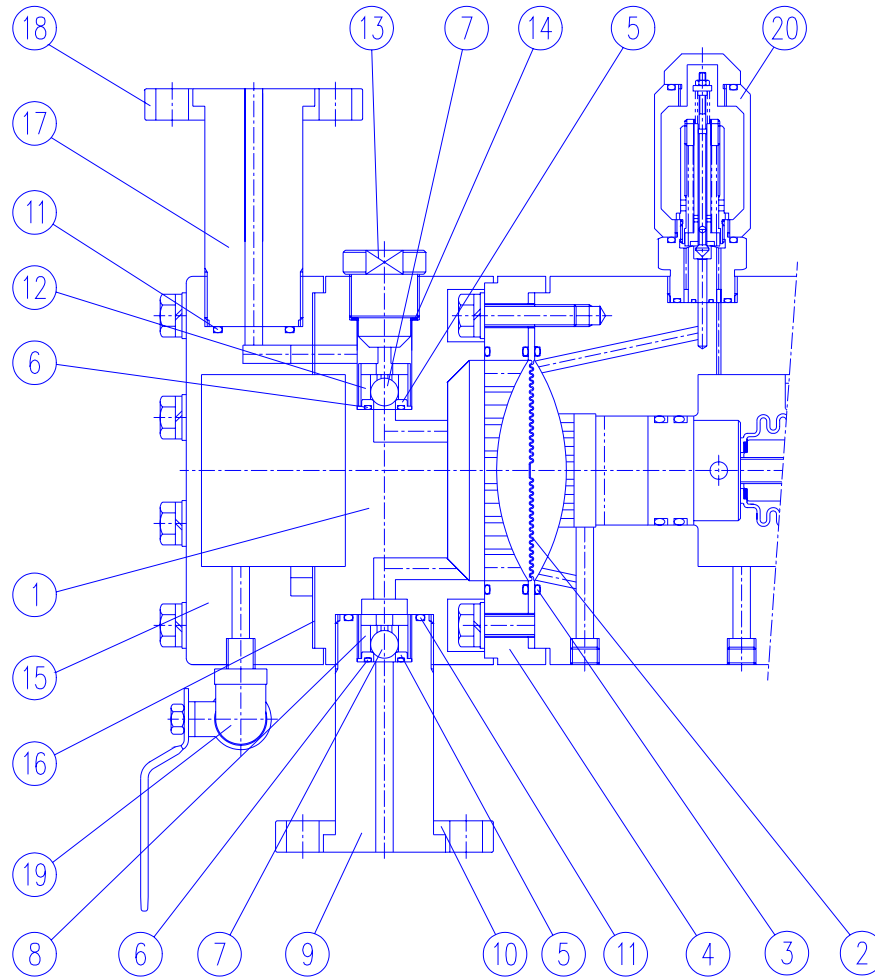
PART \ HEAD	SUS304	SUS316	SUS316L	PVC	PVDF	PTFE
DIAPHRAGM	PTFE					
CHECK BALL	SUS304	SUS316	SUS316L	CERAMICS		
BALL SEAT	SUS304	SUS316	SUS316L	PVC	PVDF	PTFE
BALL GUIDE	SUS304	SUS316	SUS316L	PVC	PVDF	PTFE
CONNECTOR	SUS304	SUS316	SUS316L	PVC	PVDF	PTFE
FLANGE	SUS304	SUS316	SUS316L	PVC	PVDF	PVC
O-RING, GASKET	PTFE					

JMHN / JLHN / JLHND SERIES

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LIQUID END CONSTRUCTION

MATERIAL : STAINLESS STEEL

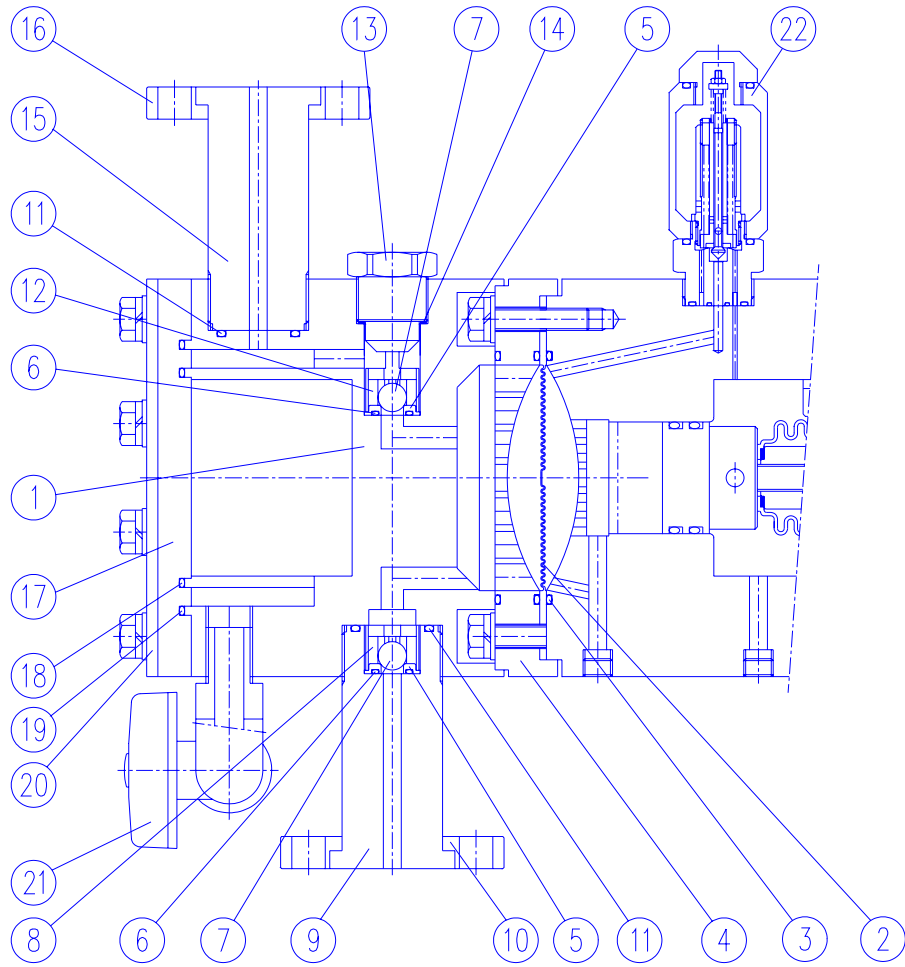


NO.	PARTS NAME	NO.	PARTS NAME	NO.	PARTS NAME	NO.	PARTS NAME
1	PUMP HEAD	2	DIAPHRAGM	3	O-RING	4	RING, CLAMP
5	BALL SEAT	6	O-RING	7	CHECK BALL	8	SUC. B/GUIDE
9	SUC. CONNECTOR	10	SUC. FLANGE	11	O-RING	12	DIS. B/GUIDE
13	HEAD CAP	14	GASKET	15	HEAD CHAMBER	16	GASKET
17	DIS. CONNECTOR	18	DIS. FLANGE	19	DRAIN VALVE	20	RELIEF VALVE

JMHN / JLHN / JLHND SERIES

LIQUID END CONSTRUCTION

MATERIAL : PVC / PVDF / PTFE



NO.	PARTS NAME	NO.	PARTS NAME	NO.	PARTS NAME	NO.	PARTS NAME
1	PUMP HEAD	2	DIAPHRAGM	3	O-RING	4	RING, CLAMP
5	BALL SEAT	6	O-RING	7	CHECK BALL	8	SUC. B/GUIDE
9	SUC. CONNECTOR	10	SUC. FLANGE	11	O-RING	12	DIS. B/GUIDE
13	HEAD CAP	14	GASKET	15	DIS. CONNECTOR	16	DIS. FLANGE
17	HEAD COVER	18	O-RING	19	O-RING	20	REINFORCE PLATE
21	DRAIN VALVE	22	RELIEF VALVE				

JMHN / JLHN / JLHND SERIES

E-WHA

SPECIFICATION (60Hz)

JMHN SERIES

MODEL		JMHN50	JMHN100	JMHN200	JMHN400	JMHN700	JMHN1000
FLOWRATE	cc/min.	50	150	250	450	750	1,500
PRESSURE	Kgf/cm ²	10	10	10	10	10	10
STROKE RATE	spm	111					
CONNECTION	FLANGE	OUTLET : KS 10K 15A					
		INLET : KS 10K 15A					
RELIEF VALVE SETTING		120% OF MAX. PRESSURE					
MOTOR	AC 3PHASE 220/380V, 440V, 0.4kW F CLASS					0.75kW F CLASS	
	Exe II T4, Exed II BT4, 0.4kW					0.75kW	

MODEL		JMHN2000	JMHN3000	JMHN5000	JMHN7000	JMHN8000		
FLOWRATE	cc/min.	2,500	3,500	5,500	7,000	8,500		
PRESSURE	Kgf/cm ²	10	10	10	10	10		
STROKE RATE	spm	111						
CONNECTION	FLANGE	10K 15A	OUTLET KS 10K 20A					
		10K 15A	INLET : KS 10K 20A					
RELIEF VALVE SETTING		120% OF MAX. PRESSURE						
MOTOR	AC 3PHASE 220/380V, 440V, 0.75kW F CLASS							
	Exe II T4, Exed II BT4, 0.75kW							

NOTE

1. All performance curves shown are for water @68°F/20°C and 1.0 S.G..
The performances are subject to change without notice.
2. Pumping Temperature Limit : PVC 0~40°C, STAINLESS STEEL/PTFE/PVDF 0~80°C
3. Slurry Limit : 100µm(0.1mm), Slurry Concentration Limit 10wt(%)
4. Suction Lift : 2m
5. Standard Painting Color : PANTONE 334C(MUNSELL NO. 2.5BG 5/10)

JMHN / JLHN / JLHND SERIES

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SPECIFICATION (50Hz)

JMHN SERIES

MODEL		JMHN50	JMHN100	JMHN200	JMHN400	JMHN700	JMHN1000
FLOWRATE	cc/min.	40	125	200	375	625	1,250
PRESSURE	Kgf/cm ²	10	10	10	10	10	10
STROKE RATE	spm	97					
CONNECTION	FLANGE	OUTLET : KS 10K 15A					
		INLET : KS 10K 15A					
RELIEF VALVE SETTING		120% OF MAX. PRESSURE					
MOTOR	AC 3PHASE 220/380V, 440V, 0.4kW F CLASS					0.75kW F CLASS	
	Exe II T4, Exed II BT4, 0.4kW					0.75kW	

MODEL		JMHN2000	JMHN3000	JMHN5000	JMHN7000	JMHN8000	
FLOWRATE	cc/min.	2,000	2,900	4,500	5,800	7,000	
PRESSURE	Kgf/cm ²	10	10	10	10	10	
STROKE RATE	spm	97					
CONNECTION	FLANGE	10K 15A	OUTLET : KS 10K 20A				
		10K 15A	INLET : KS 10K 20A				
RELIEF VALVE SETTING		120% OF MAX. PRESSURE					
MOTOR	AC 3PHASE 220/380V, 440V, 0.75kW F CLASS						
	Exe II T4, Exed II BT4, 0.75kW						

NOTE

1. All performance curves shown are for water @68°F/20°C and 1.0 S.G..
The performances are subject to change without notice.
2. Pumping Temperature Limit : PVC 0~40°C, STAINLESS STEEL/PTFE/PVDF 0~80°C
3. Slurry Limit : 100µm(0.1mm), Slurry Concentration Limit 10wt(%)
4. Suction Lift : 2m
5. Standard Painting Color : PANTONE 334C(MUNSELL NO. 2.5BG 5/10)

JMHN / JLHN / JLHND SERIES

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SPECIFICATION (60Hz)

JLHN / JLHND SERIES

MODEL		JLHN700	JLHN1000	JLHN2000	JLHN3000	JLHN5000
		JLHND1400	JLHND2000	JLHND4000	JLHND6000	JLHND10L
FLOWRATE	cc/min.	750	1,500	2,500	3,500	5,500
		1,500	3,000	5,000	7,000	11,000
PRESSURE	Kgf/cm ²	10	10	10	10	10
STROKE RATE	spm	111				
CONNECTION	FLANGE	OUTLET : KS 10K 15A			KS 10K 20A	
		INLET : KS 10K 15A			KS 10K 20A	
RELIEF VALVE SETTING		120% OF MAX. PRESSURE				
MOTOR		AC 3PHASE 220/380V, 440V, 1.5kW F CLASS				
		Exe II T4, Exed II BT4, 1.5kW				

MODEL		JLHN7000	JLHN8000	JLHN10L	JLHN30L	JLHN50L
		JLHND14L	JLHND16L	JLHND20L	JLHND60L	JLHND100L
FLOWRATE	cc/min.	7,000	8,500	11,500	32,000	52,500
		14,000	17,000	23,000	64,000	105,000
PRESSURE	Kgf/cm ²	10	10	10	10	10
STROKE RATE	spm	111				
CONNECTION	FLANGE	OUTLET : KS 10K 20A		KS 10K 25A	KS 10K 40A	KS 10K 50A
		INLET : KS 10K 20A		KS 10K 25A	KS 10K 40A	KS 10K 50A
RELIEF VALVE SETTING		120% OF MAX. PRESSURE				
MOTOR		AC 3PHASE 220/380V, 440V, 1.5kW F CLASS				
		Exe II T4, Exed II BT4, 1.5kW				

NOTE

1. All performance curves shown are for water @68°F/20°C and 1.0 S.G..
The performances are subject to change without notice.
2. Pumping Temperature Limit : PVC 0~40°C, STAINLESS STEEL/PTFE/PVDF 0~80°C
3. Slurry Limit : 100µm(0.1mm), Slurry Concentration Limit 10wt(%)
4. Suction Lift : 2m
5. Standard Painting Color : PANTONE 334C(MUNSELL NO. 2.5BG 5/10)

JMHN / JLHN / JLHND SERIES

SPECIFICATION (50Hz)

JLHN / JLHND SERIES

MODEL		JLHN700	JLHN1000	JLHN2000	JLHN3000	JLHN5000
		JLHND1400	JLHND2000	JLHND4000	JLHND6000	JLHND10L
FLOWRATE	cc/min.	625	1,250	2,000	2,900	4,500
		1,250	2,500	4,000	5,800	9,000
PRESSURE	Kgf/cm ²	10	10	10	10	10
STROKE RATE	spm	97				
CONNECTION	FLANGE	OUTLET : KS 10K 15A			KS 10K 20A	
		INLET : KS 10K 15A			KS 10K 20A	
RELIEF VALVE SETTING		120% OF MAX. PRESSURE				
MOTOR		AC 3PHASE 220/380V, 440V, 1.5kW F CLASS				
		Exe II T4, Exed II BT4, 1.5kW				

MODEL		JLHN7000	JLHN8000	JLHN10L	JLHN30L	JLHN50L
		JLHND14L	JLHND16L	JLHND20L	JLHND60L	JLHND100L
FLOWRATE	cc/min.	5,800	7,000	9,500	26,500	43,500
		11,600	14,000	19,000	53,000	87,000
PRESSURE	Kgf/cm ²	10	10	10	10	10
STROKE RATE	spm	97				
CONNECTION	FLANGE	OUTLET : KS 10K 20A		KS 10K 25A	KS 10K 40A	KS 10K 50A
		INLET : KS 10K 20A		KS 10K 25A	KS 10K 40A	KS 10K 50A
RELIEF VALVE SETTING		120% OF MAX. PRESSURE				
MOTOR		AC 3PHASE 220/380V, 440V, 1.5kW F CLASS				
		Exe II T4, Exed II BT4, 1.5kW				

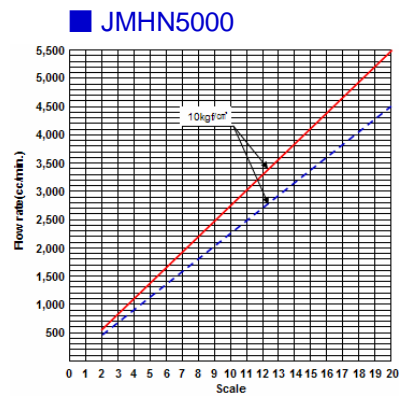
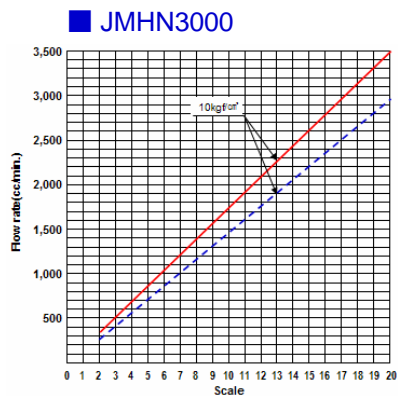
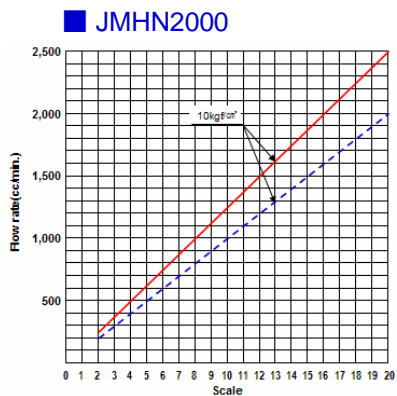
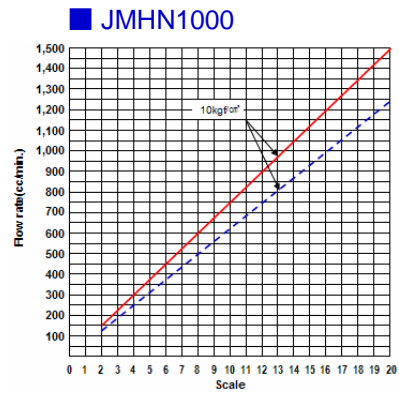
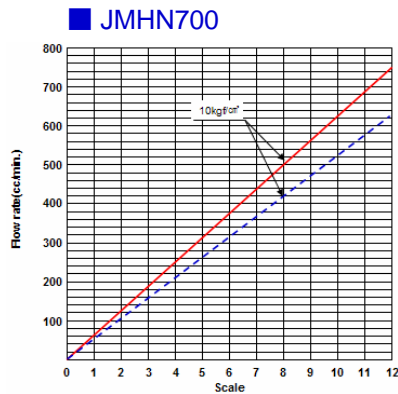
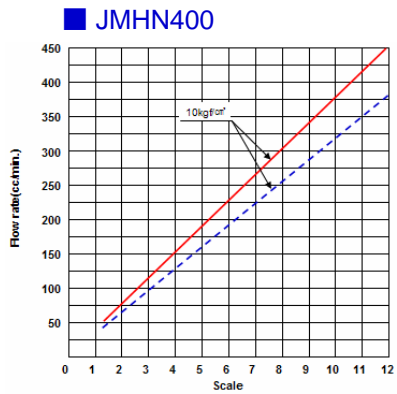
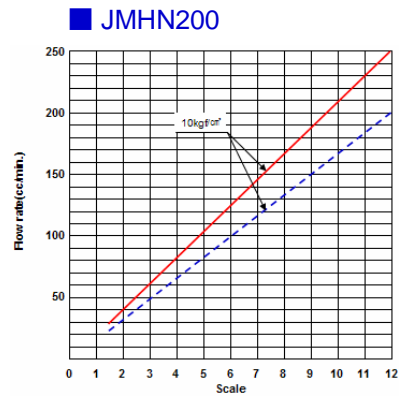
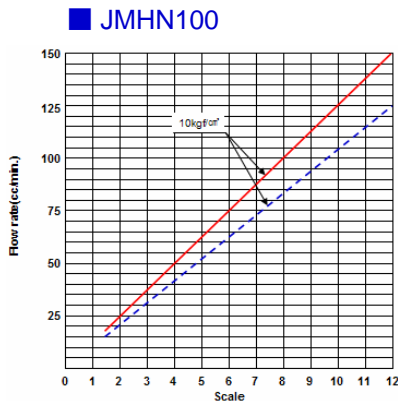
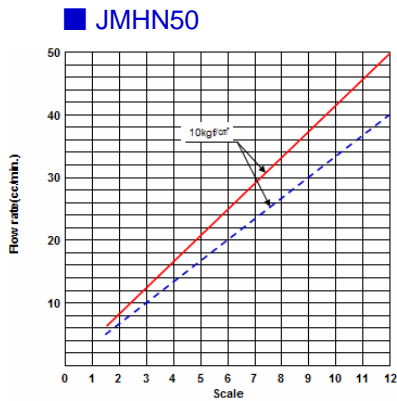
NOTE

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- Pumping Temperature Limit : PVC 0~40°C, STAINLESS STEEL/PTFE/PVDF 0~80°C
- Slurry Limit : 100µm(0.1mm), Slurry Concentration Limit 10wt(%)
- Suction Lift : 2m
- Standard Painting Color : PANTONE 334C(MUNSELL NO. 2.5BG 5/10)

JMHN / JLHN / JLHND SERIES

PERFORMANCE CURVE **—** 60Hz **- - - -** 50Hz

JMHN SERIES



NOTE

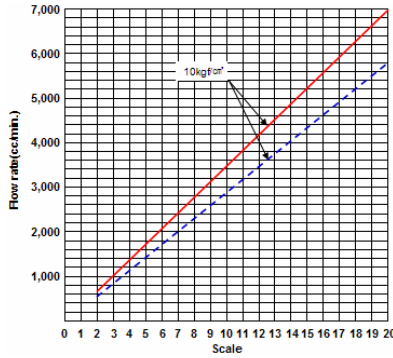
All performance curves shown are for water @68°F/20°C and 1.0 S.G..
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JMHN / JLHN / JLHND SERIES

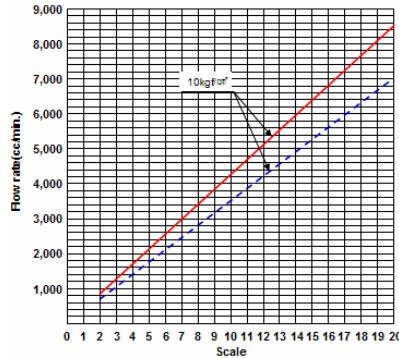
PERFORMANCE CURVE — 60Hz - - - - 50Hz

JMHN SERIES

JMHN7000



JMHN8000



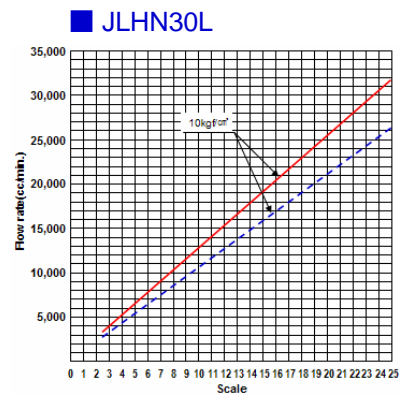
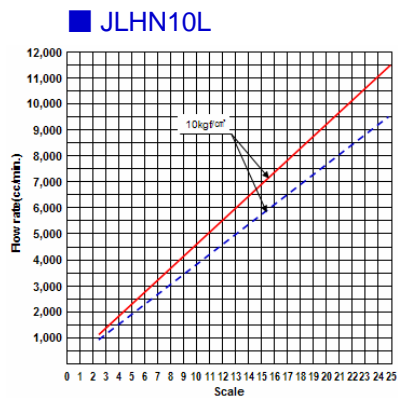
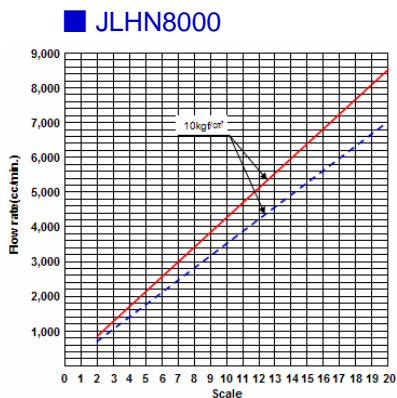
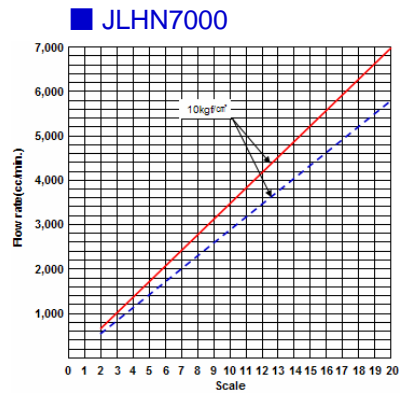
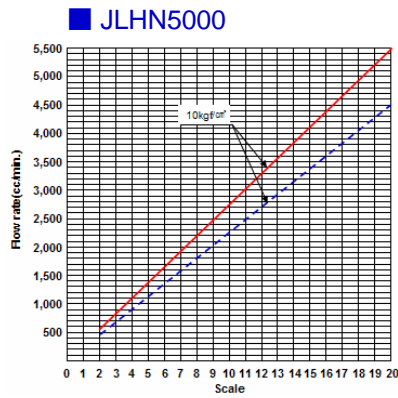
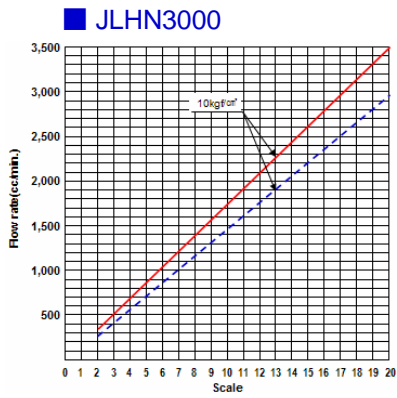
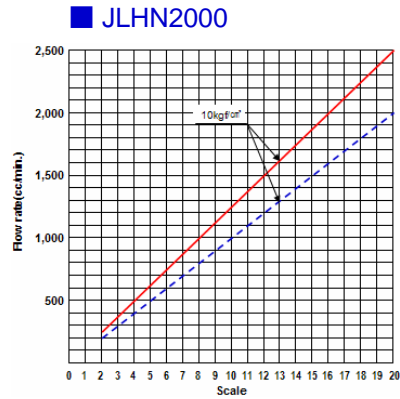
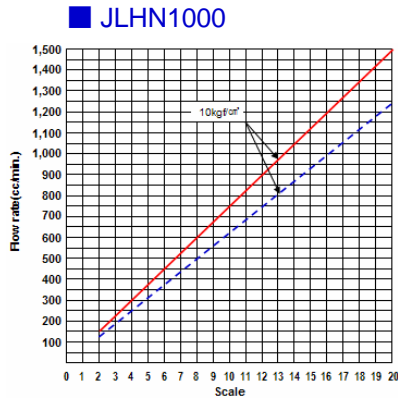
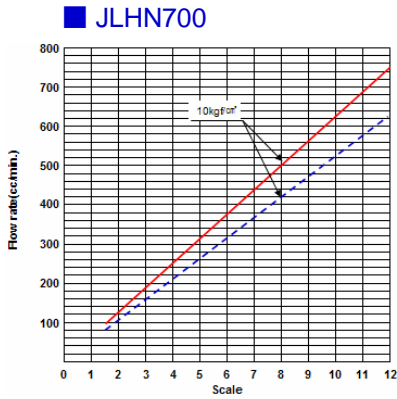
NOTE

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The performances are subject to change without notice.

JMHN / JLHN / JLHND SERIES

PERFORMANCE CURVE — 60Hz - - - - 50Hz

JLHN SERIES



NOTE

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The performances are subject to change without notice.

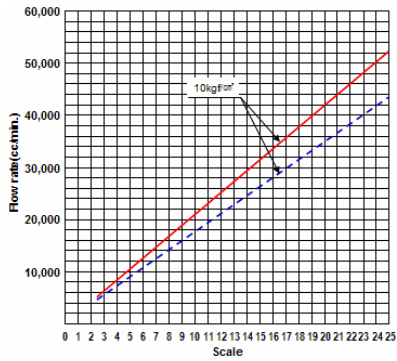
JMHN / JLHN / JLHND SERIES

PERFORMANCE CURVE

— 60Hz ····· 50Hz

JLHN SERIES

JLHN50L



NOTE

All performance curves shown are for water @68°F/20°C and 1.0 S.G..
The performances are subject to change without notice.

JLHND SERIES

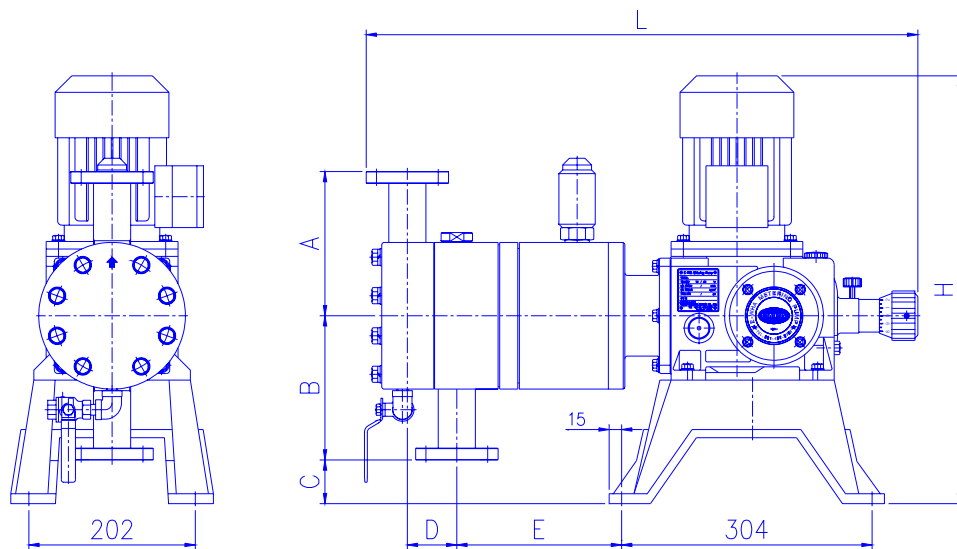
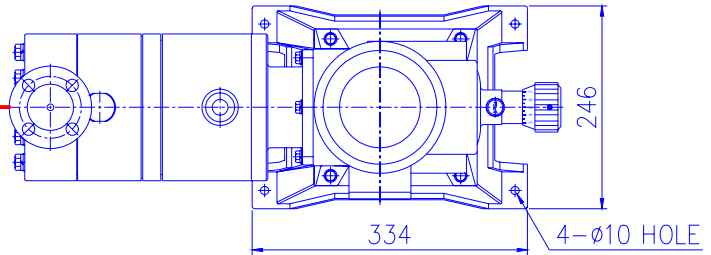
-JLHND SERIES are the same scale as JLHN SERIES,
but the flow rate is twice more than JLHN SERIES.

JMHN / JLHN / JLHND SERIES

DIMENSIONAL OUTLINE

■ MODEL : JMHN50~8000

■ MATERIAL : STAINLESS STEEL



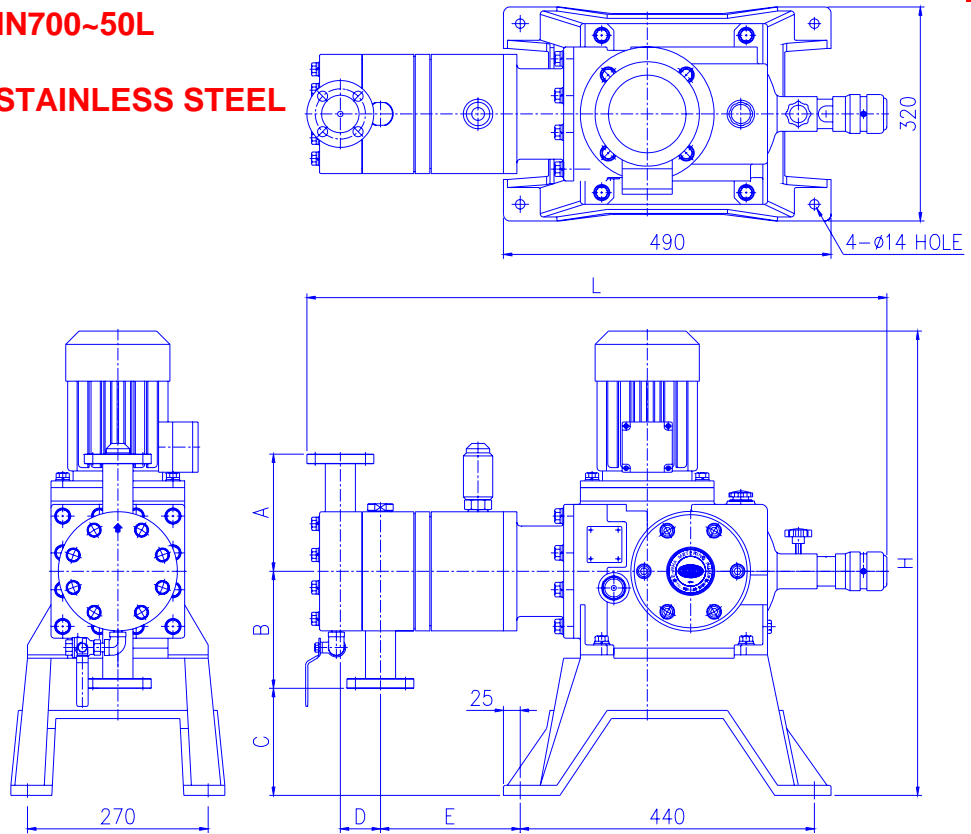
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JMHN50	135	135	93	55	117	575	519
JMHN100	135	135	93	55	123	581	519
JMHN200	140	140	88	55	128	586	519
JMHN400	140	140	88	55	128	586	519
JMHN700	150	150	78	55	170	637	585
JMHN1000	165	165	63	60	190	657	585
JMHN2000	170	170	58	60	200	667	585
JMHN3000	175	175	53	60	200	670	585
JMHN5000	185	185	43	70	210	690	585
JMHN7000	190	190	38	70	215	695	585
JMHN8000	195	195	33	70	215	695	585

JMHN / JLHN / JLHND SERIES

DIMENSIONAL OUTLINE

■ MODEL : JLHN700~50L

■ MATERIAL : STAINLESS STEEL



MODEL	A	B	C	D	E	L	H
JLHN700	150	150	185	55	179	826	694
JLHN1000	165	165	170	60	199	855	694
JLHN2000	170	170	165	60	209	865	694
JLHN3000	175	175	160	60	209	868	742
JLHN5000	185	185	150	70	219	888	742
JLHN7000	190	190	145	70	224	893	742
JLHN8000	195	195	140	70	224	893	742
JLHN10L	196	230	105	120	287	1,067	742
JLHN30L	221	255	80	130	325	1,113	742
JLHN50L	241	283	52	140	332	1,124	742

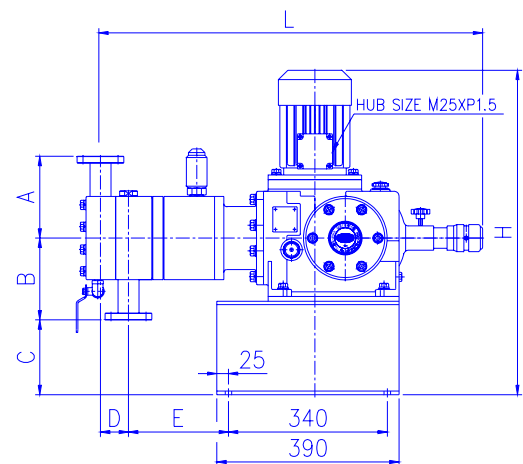
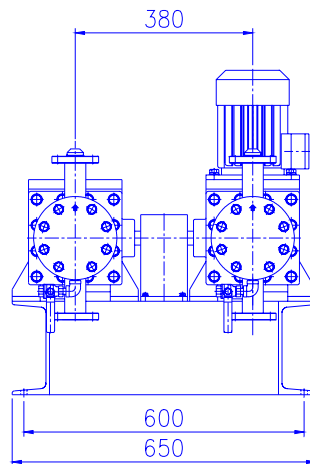
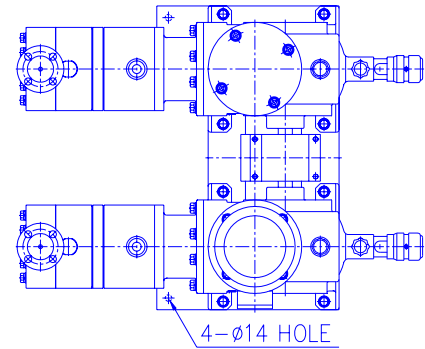
JMHN / JLHN / JLHND SERIES

E-WHA

DIMENSIONAL OUTLINE

■ MODEL : JLHND1400~100L

■ MATERIAL : STAINLESS STEEL



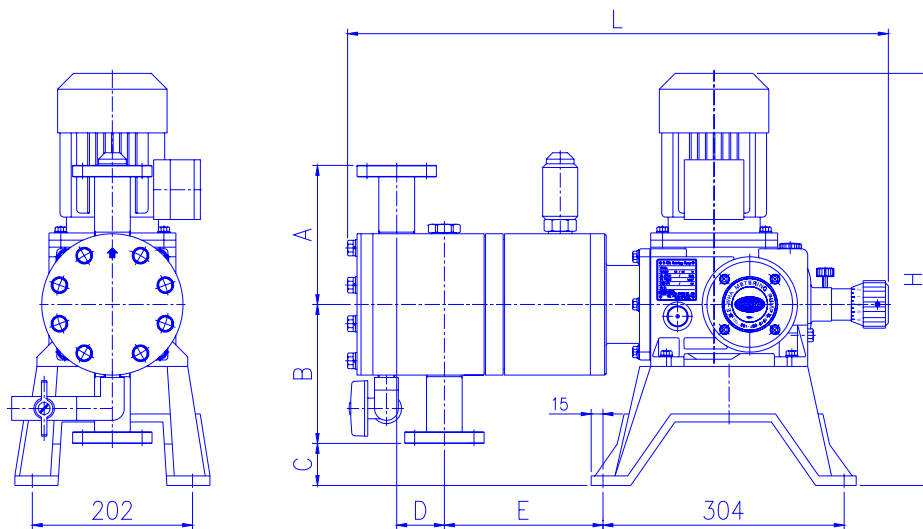
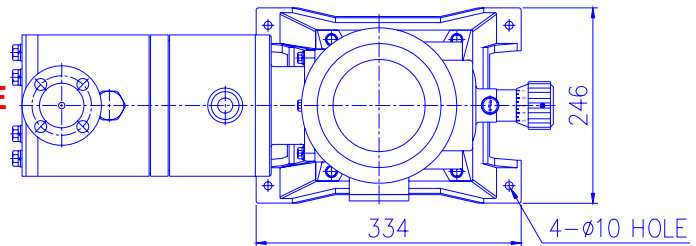
MODEL	A	B	C	D	E	L	H
JLHND1400	150	150	185	55	184	826	694
JLHND2000	165	165	170	60	204	855	694
JLHND4000	170	170	165	60	214	865	694
JLHND6000	175	175	160	60	214	868	742
JLHND10L	185	185	150	70	224	888	742
JLHND14L	190	190	145	70	229	893	742
JLHND16L	195	195	140	70	229	893	742
JLHND20L	196	230	105	120	292	1,067	742
JLHND60L	221	255	80	130	330	1,113	742
JLHND100L	241	283	52	140	337	1,124	742

JMHN / JLHN / JLHND SERIES

DIMENSIONAL OUTLINE

■ MODEL : JMHN50~8000

■ MATERIAL : PVC / PVDF / PTFE



MODEL	A	B	C	D	E	L	H
JMHN50	135	135	93	55	117	582	519
JMHN100	135	135	93	56	122	588	519
JMHN200	140	140	88	55	128	593	519
JMHN400	140	140	88	55	128	593	519
JMHN700	150	150	78	55	170	637	150
JMHN1000	165	165	63	60	190	672	165
JMHN2000	170	170	58	60	200	682	170
JMHN3000	175	175	53	60	200	682	175
JMHN5000	185	185	43	70	210	709	185
JMHN7000	190	190	38	70	215	714	190
JMHN8000	195	195	33	70	215	714	195

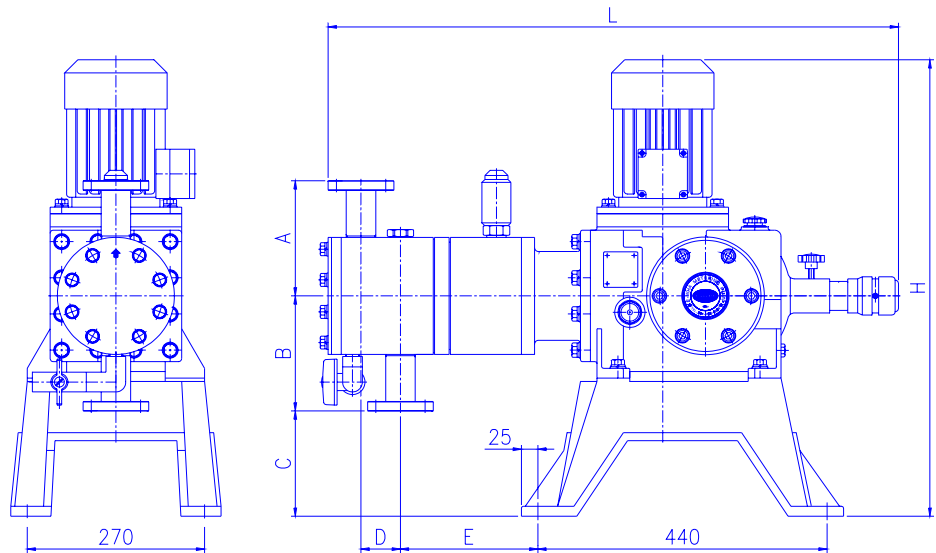
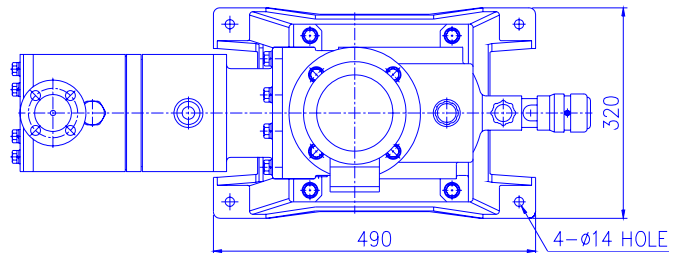
JMHN / JLHN / JLHND SERIES

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DIMENSIONAL OUTLINE

■ MODEL : JLHN1400~100L

■ MATERIAL : PVC / PVDF / PTFE



MODEL	A	B	C	D	E	L	H
JLHN700	150	150	185	55	179	835	694
JLHN1000	165	165	170	60	199	870	694
JLHN2000	170	170	165	60	209	880	694
JLHN3000	175	175	160	60	209	880	742
JLHN5000	185	185	150	70	219	907	742
JLHN7000	190	190	145	70	224	912	742
JLHN8000	195	195	140	70	224	912	742
JLHN10L	196	230	105	120	287	1,072	742
JLHN30L	221	255	80	130	325	1,118	742
JLHN50L	241	283	52	140	332	1,129	742

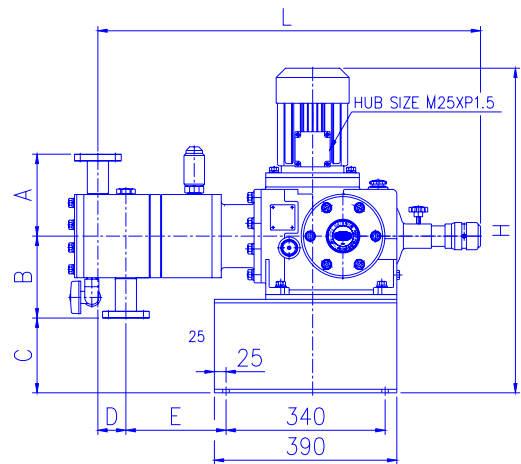
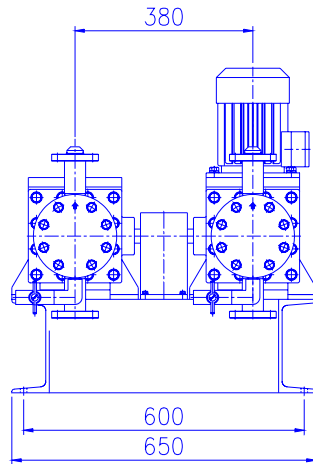
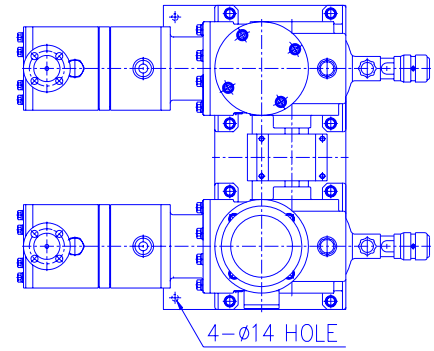
JMHN / JLHN / JLHND SERIES

E-WHA

DIMENSIONAL OUTLINE

■ MODEL : JLHND1400~100L

■ MATERIAL : PVC / PVDF / PTFE



MODEL	A	B	C	D	E	L	H
JLHND1400	150	150	185	55	184	835	694
JLHND2000	165	165	170	60	204	870	694
JLHND4000	170	170	165	60	214	880	694
JLHND6000	175	175	160	60	214	880	742
JLHND10L	185	185	150	70	224	907	742
JLHND14L	190	190	145	70	229	912	742
JLHND16L	195	195	140	70	229	912	742
JLHND20L	196	230	105	120	292	1,072	742
JLHND60L	221	255	80	130	330	1,118	742
JLHND100L	241	283	52	140	337	1,129	742



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