

Integrated Filling System

DF600



Features

- Integrated design, one controller can control 4 groups (total 16) filling units.
- It can support the production filling line, store 60 commonly used filling modes.
- Each filling unit can independently receive stop filling signal when bottle absent.

Model Number

- DF600, DF600II, DF600 Plus, DF600 PlusII

Typical Application

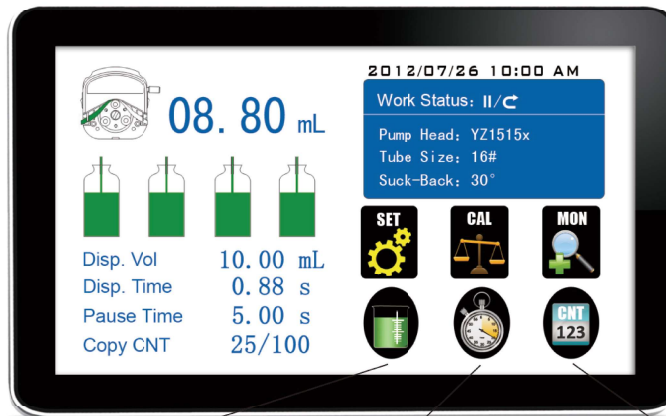
- Pharmaceutical, health product filling, diagnostic reagent dispensing.
- Food, beverage filling.
- Cosmetic filling.

DF600 Plus

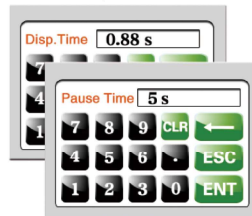


Features

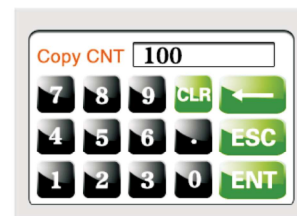
- Connected with HMI, PLC etc, industrial control system, one controller can control 8 groups (total 32) filling units. It can display the details of 16 filling units in the HMI, widely used in industrial control application.



Dispensing volume interface



Dispensing time and pause time interface



Copy numbers interface

Integrated Filling System

DF600IV(servo motor control)



DF350(servo motor control)



Product Introduction

DF servo control series is integrated type intelligent filling system with high precision and low pulsation driven by servo motor. It is composed by control unit and integrated type filling units, each group have 4 filling units, total 16 filling units. This system use imported 4.3" industrial grade true color display with touch screen control, can preset filling volume, filling time, pause time, copy numbers and back-suction angle. Dynamics display working status, filling data, setting parameter, system configuration display at the same screen; with intelligent calibration and online micro adjust function. Can connect foot pedal and receive switch signal, realize long-distance control. With motor working status output signal, can let other equipment realtime monitor the current filling status of peristaltic pump. This filling system use servo motor, and high precision, low pulsation pump head to make the filling precision higher, up to 0.1%-0.6%, make the micro volume and big volume high precision filling come true.

Model Number

- | DF350
- | DF350 Plus
- | DF600III
- | DF600 PlusIII
- | DF600IV
- | DF600 PlusIV

Typical Application

- | Pharmaceutical, health product filling, diagnostic reagent dispensing.
- | Food, beverage filling.
- | Cosmetic filling.

Technical Specifications

Speed range	CF350/DF350	1-350 rpm	Display	4.3" industrial grade true color LCD screen
	CF350 Plus/DF350 Plus	1-350 rpm	Control method	Touch screen and mechanical keypad
	CF600III/DF600III/DF600IV	1-600 rpm	Keypad lifetime	300,000 times
	CF600 PlusIII/DF600 PlusIII/DF600 PlusIV	1-600 rpm	Start/stop, direction signal	Passive switch signal, such as foot pedal switch Active switch signal: 5V, 12V, 24V for option
Filling volume range	0.1-9999.99 mL		Output interface	Output motor working status (Open-Collector output)
Filling time range	0.5-9999.99 s/ DF600 Plus 0.1-9999.99 s			
Pause time range	0.5-9999.99 s/ DF600 Plus 0.1-9999.99 s			
Filling volume resolution	0.01 mL		Power supply	AC 220V±10% 50Hz/60Hz (standard) AC 110V±10% 50Hz/60Hz (optional)
Time resolution	0.01 s			
Copy numbers	1-9999,'0' means unlimited		Condition temperature	0-40°C
Back suction angle	0-360°		Relative humidity	< 80%
Filling accuracy	<±0.5%		IP rate	IP31

Product Composition and Flow Rate Range

Drive	Pump Head	Pump Head Material	Tube Clamp Material	Tubing		(Motor Speed 1~600rpm) Flow Rate mL/min
				Tubing size	ID×Wall Thickness	
DF600 CF600 DF600 Plus CF600 Plus	YZ1515x	PSF PPS	————	13 [#]	0.8×1.6 (mm)	0.07~42
				14 [#]	1.6×1.6 (mm)	0.27~162
				19 [#]	2.4×1.6 (mm)	0.55~330
				16 [#]	3.1×1.6 (mm)	0.82~492
				25 [#]	4.8×1.6 (mm)	1.7~1020
				17 [#]	6.4×1.6 (mm)	2.9~1740
	YZ2515x	PSF PPS	————	18 [#]	7.9×1.6 (mm)	3.8~2280
				15 [#]	4.8×2.4 (mm)	1.7~1020
DF600II CF600II DF600 PlusII CF600 PlusII	DZ25-3L	Aluminum alloy/PPS	PP	24 [#]	6.4×2.4 (mm)	2.11~1264
				35 [#]	7.9×2.4 (mm)	5.08~3050
				36 [#]	9.6×2.4 (mm)	6~3600
				15 [#]	4.8×2.4 (mm)	3~1800
DF600III CF600III DF600 PlusIII CF600 PlusIII	DZ25-6L	Aluminum alloy/PPS	PP	24 [#]	6.4×2.4 (mm)	5.5~3300
				35 [#]	7.9×2.4 (mm)	8~4800
				36 [#]	9.6×2.4 (mm)	10~6000
				26 [#]	6.4×3.3 (mm)	6.9~4200
DF600IV CF600IV DF600 PlusIV CF600 PlusIV	YZ35-PPS	PPS	PP	73 [#]	9.6×3.3 (mm)	12.3~7400
				82 [#]	12.7×3.3 (mm)	20~12000
Drive	Pump Head	Pump Head Material	Tube Clamp Material	Tubing		(Motor Speed 1~350rpm) Flow Rate mL/min
DF350 CF350 DF350 Plus CF350 Plus	DY15	Aluminum alloy	PP	Tubing	ID×Wall Thickness	
				13 [#]	0.8×1.6 (mm)	0.1~48
				14 [#]	1.6×1.6 (mm)	0.6~223
				19 [#]	2.4×1.6 (mm)	1.3~448
				16 [#]	3.1×1.6 (mm)	2~723
				25 [#]	4.8×1.6 (mm)	4.7~1626
	DY25	Aluminum alloy	PP	17 [#]	6.4×1.6 (mm)	6.4~2230
				18 [#]	7.9×1.6 (mm)	9.5~3337
				15 [#]	4.8×2.4 (mm)	4.2~1480
				24 [#]	6.4×2.4 (mm)	7.6~2670
				35 [#]	7.9×2.4 (mm)	10~3600
				36 [#]	9.6×2.4 (mm)	12.4~4340

Filling Volume Reference (Media is water)

Drive	Pump Head	Tubing	Filling Volume (mL)	Filling Time (s)	Accuracy (±%)	Output (pcs/min)	Motor Speed (rpm)
DF600 CF600 DF600 Plus CF600 Plus	YZ1515x YZ2515x	13"	0.1	0.5	±5ul	40	204.083
		13"	0.3	0.7	1.5	35	426.251
		13"	0.5	1	0.8	30	516.081
		13"	1	2	0.5	20	517.152
		14"	2	1	1	30	446.724
		14"	3	1.5	0.8	24	446.479
		19"	5	1.2	1	27	454.919
		16"	7	1	0.5	30	457.705
		25"/15"	10	1	1	30	303.426
		25"/15"	15	1	0.8	30	461.273
		25"/15"	20	1.2	0.5	27	518.945
		17"/24"	30	1.2	0.8	27	462.725
		17"/24"	50	2	0.5	20	461.595
		18"	80	2.5	0.5	17	427.274
DF600 II CF600 II DF600 Plus II CF600 Plus II	DZ25-3L	15"	16	1	0.5	30	454.976
		24"	30	1.2	0.5	27	389.610
		35"	150	4	0.5	12	442.913
		36"	200	4	0.5	12	500.000
DF350 CF350 DF350 Plus CF350 Plus	DY15	14"	0.5	0.5	0.3	60	94.1915
		14"	1	1	0.4	30	94.1915
		14"	2	1	0.6	30	188.383
		19"	3	1	0.3	30	140.625
		16"	5	1	0.5	30	145.278
		25"	10	1	0.3	30	129.143
		25"	15	1	0.4	30	193.715
		17"	30	1	0.4	30	282.530
	DY25	18"	100	2.5	0.3	17	251.730
		15"	10	1	0.3	30	141.911
		24"	30	1	0.5	30	235.972
		35"	70	1.2	0.4	27	340.466
		36"	100	2	0.2	20	241.935
		15"	80	4	0.4	12	400.000
DF600 III CF600 III DF600 Plus III CF600 Plus III	DZ25-6L	24"	150	4	0.4	12	409.090
		35"	200	3.2	0.5	14	468.750
		36"	300	3.5	0.5	13	514.285
		26"	150	3	0.5	15	428.570
DF600 IV CF600 IV DF600 Plus IV CF600 Plus IV	YZ35-PPS	73"	300	3	0.5	15	486.499
		82"	500	3	0.5	15	500.000