

Integrated Filling System

DF600IV(servo motor control)

3 years warranty

304 SS Housing



DF350(servo motor control)

3 years warranty

304 SS Housing



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

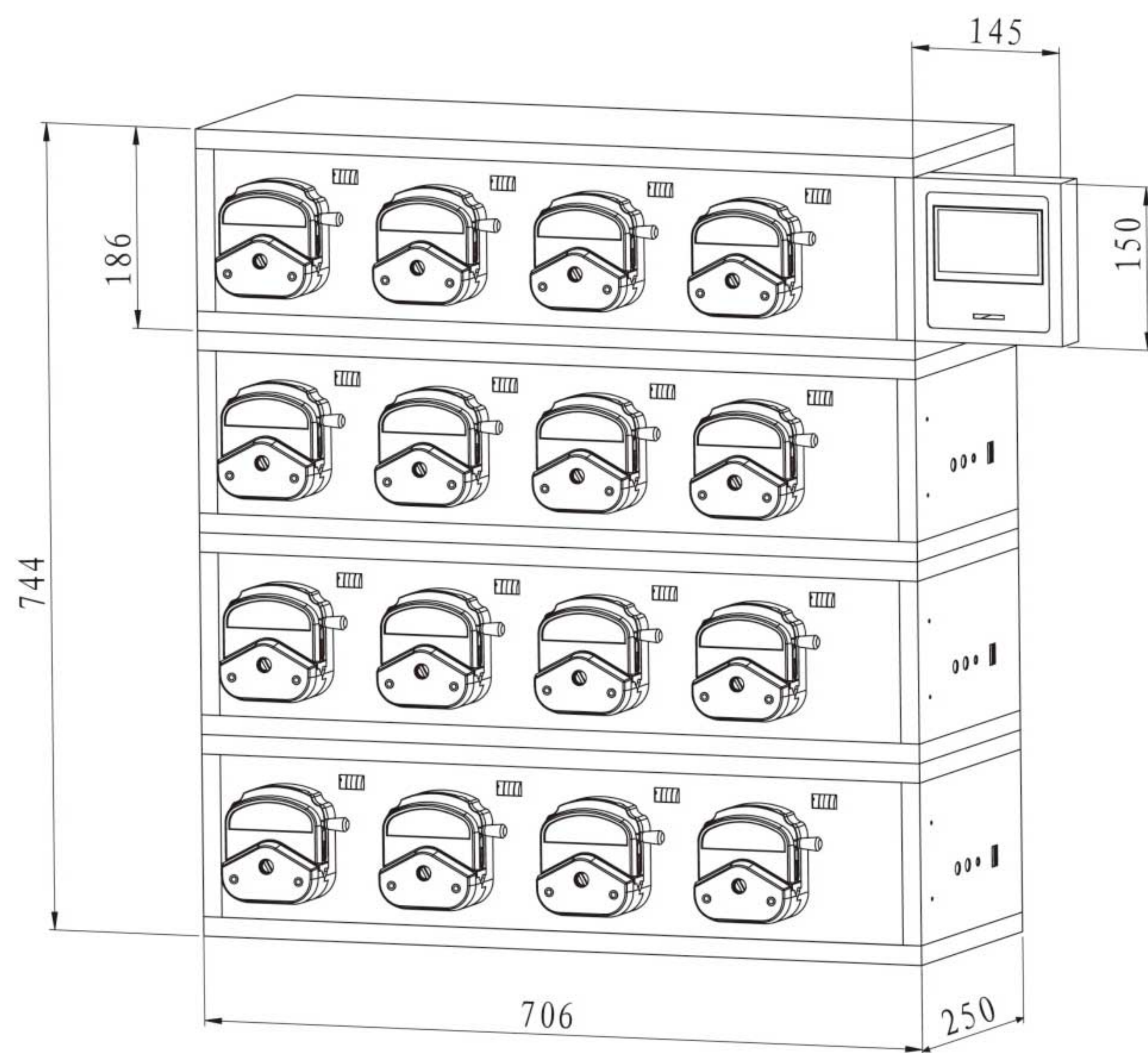
Typical Application

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



Integrated Filling System

Dimension Drawing(Unit: mm)

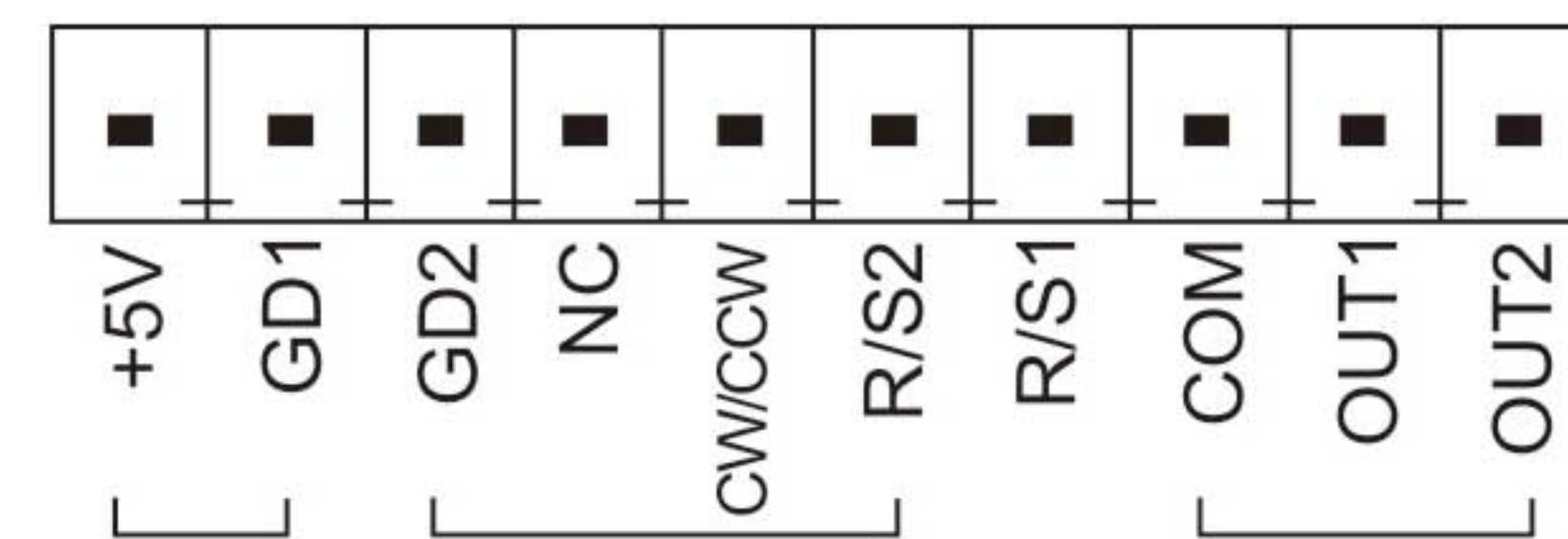


DF600 Dimension

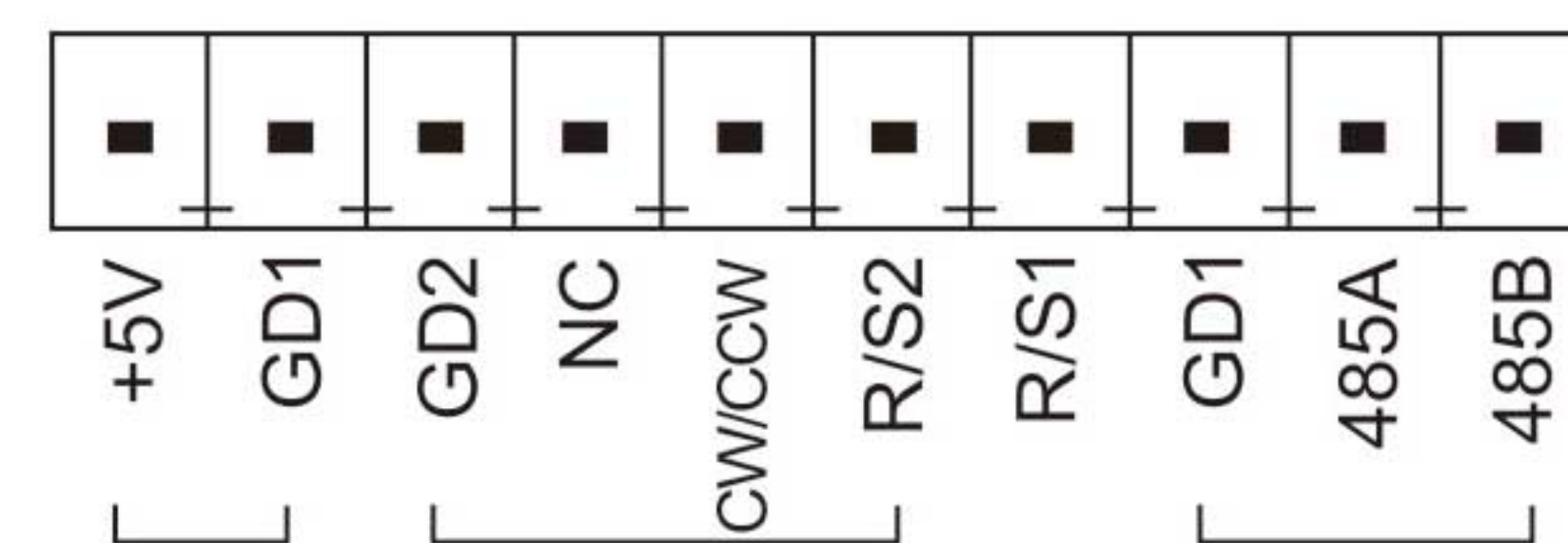
External Control Schematic Diagram

DF600 has filling status output signal, can be monitored by other equipments.

DF600 plus adopt standard MODBUS communication protocol, can be well connected with HMI to achieve logic control.



DF600 External Control Schematic Diagram



DF600plus External Control Schematic Diagram

The pump type suffixed with "Plus" support MODBUS communication protocol

Drive	Pump Head	Flow Rate (mL/min)	Motor Type	Drive Dimension (L×W×H)	Power Consumption	Drive Weight
DF600 DF600Plus	YZ1515x YZ2515x	0.07~2280 1.7~1740	Stepper motor	706×250×186mm	Each Unit < 50W	21.8kg
DF600 II DF600Plus II	DZ25-3L	2.11-3600	Servo motor	706×250×186mm	Each Unit < 80W	21.8kg
DF600 III DF600Plus III	DZ25-6L	3.0-6000	Servo motor	910×290×212mm	Each Unit < 180W	41.45kg
DF350 DF350Plus	DY15 DY25	0.1-3337 4.2-4340	Servo motor	910×290×212mm	Each Unit < 180W	41.45kg
DF600IV DF600Plus IV	YZ35	6.9-12000	Servo motor	1056×310×248m	Each Unit < 300W	58.6kg



Pharmaceutical Filling Machine

Cosmetic Filling Line



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
	CF600 Series	1-600 rpm	Keypad lifetime	300,000 times
	DF600 Series	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		Power supply	AC 220V±10% 50Hz/60Hz (standard) AC 110V±10% 50Hz/60Hz (optional)
Filling volume resolution	0.01 mL			
Time resolution	0.01 s		Condition temperature	0-40°C
Copy numbers	1-9999,'0' means unlimited		Relative humidity	< 80%
Back suction angle	0-360°		IP rate	IP31
Filling accuracy	<±0.5%			

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 CF600PlusII	DZ25-3L	Aluminum alloy/PPS	PP	24 [#]	6.4×2.4 (mm)	2.11~1264
				35 [#]	7.9×2.4 (mm)	3.85~2310
				36 [#]	9.6×2.4 (mm)	5.08~3050
				15 [#]	4.8×2.4 (mm)	6~3600
DF600III CF600III DF600 PlusIII CF600 PlusIII	DZ25-6L	Aluminum alloy/PPS	PP	24 [#]	6.4×2.4 (mm)	3~1800
				35 [#]	7.9×2.4 (mm)	5.5~3300
				36 [#]	9.6×2.4 (mm)	8~4800
				15 [#]	4.8×2.4 (mm)	10~6000
DF600IV CF600IV DF600 PlusIV CF600 PlusIV	YZ35-PPS	PPS	PP	26 [#]	6.4×3.3 (mm)	6.9~4200
				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
				Tubing Size	ID×Wall Thickness	
DF350 CF350 DF350 Plus CF350 Plus	DY15	Aluminum alloy	PP	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
				17 [#]	6.4×1.6 (mm)	6.4~2230
	DY25	Aluminum alloy	PP	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
		18 [#]	100	3	0.5	15	446.583
DF600II CF600II DF600 PlusII CF600PlusII	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
DF600III CF600III DF600 PlusIII CF600 PlusIII	DZ25-6L	36 [#]	100	2	0.2	20	241.935
		15 [#]	80	4	0.4	12	400.000
		24 [#]	150	4	0.4	12	409.090
		35 [#]	200	3.2	0.5	14	468.750
DF600IV CF600IV DF600 PlusIV CF600 PlusIV	YZ35-PPS	36 [#]	300	3.5	0.5	13	514.285
		26 [#]	150	3	0.5	15	428.570
		73 [#]	300	3	0.5	15	486.499
		82 [#]	500	3	0.5	15	500.000

