

## **Part V Technical Parameters & Machine Outline**

Chapter 1 Machine Parameters .....	1-1
Chapter 2 Structure of the Device Parameters .....	2-1
Chapter 3 Electrical Drawings .....	3-1
Chapter 4 Standard Introduction Appendix of Optional Function .....	4-1
4.1    Hot runner system	
4.2    Programmable io system	
4.3    Valve gate system	
Chapter 5 Special Introduction Appendix of Optional Function .....	5-1

## Chapter 1 Machine Parameters

	Machine Type	ZE600-80				
INJECTION PARAMETERS	Screw Type	A	B	C		
	Screw Diameter mm	19	22	26		
	Screw L/D Ratio	20	20	17		
	Injection Distance mm	75	95			
	Calculated Injection Volume cm <sup>3</sup>	21	36	50		
	Injection Capacity(PS) g	19.1	32.8	45.5		
	Injection Speed mm/s	200				
	Injection Pressure Mpa	260	220	157		
		2650	2240	1600		
	Holding Pressure Mpa	208	175	125		
		2120	1780	1270		
	Screw Speed RPM	400				
	Nozzle Touch Force KN(tf)	14.7 (1.5)				
	Nozzle In Size mm	50				
	Heating Input Power KW	4.1	5.0			
MOLDING PARAMETERS	Clamping Force KN	600				
	Toggle Stroke mm	270				
	Space Between Tie-Bars H*V mm	370*320				
	Minimal Mould Size H*V mm	240*205				
	Mould Height mm	150-370				
	Ejector Stroke mm	70				
	Ejector Force KN(tf)	19.6 (2.0)				
OTHER PARAMETERS	Hopper Capacity L	15				
	Machine Dimension L*W*H m	3.97*1.22*1.81				
	Machine Weight tf	3.3				

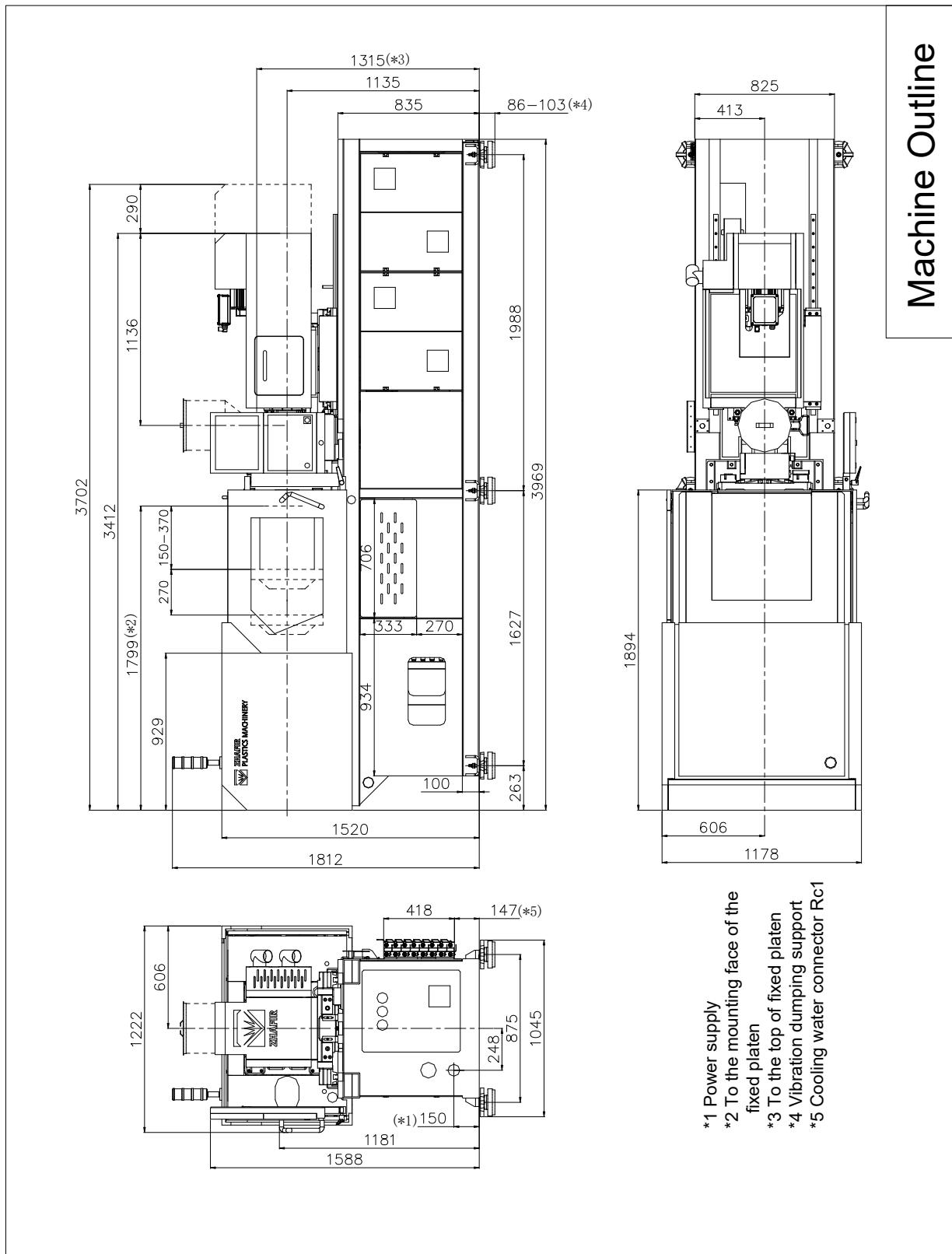
Notes:

1. The above data will be changed when design improves or with other reasons.
2. The maximum injection pressure and holding pressure are limited by different injection molding conditions.
3. The maximum injection capacity is [screw barrel cross-sectional area] × [injection stroke].
4. The injection quality is calculated by polystyrene (PS). There will be different situations because of different material grades, injection conditions, molds and so on.
5. Numerical values in the parentheses are reference values.

1MPa=10.2kgf/cm<sup>2</sup>, 1KN=0.102tf

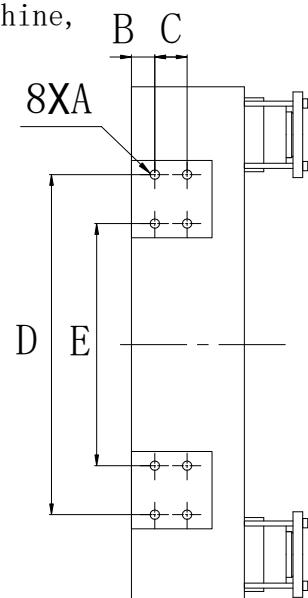
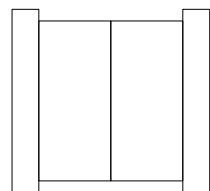
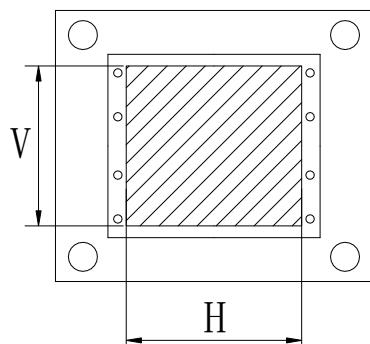
## Chapter 2 Structure of the Device Parameters

### Machine dimensions



## Clamping Unit Mold size parameters

To maintain the properties of injection molding machine,  
 Please be sure the mold size be larger than H.V

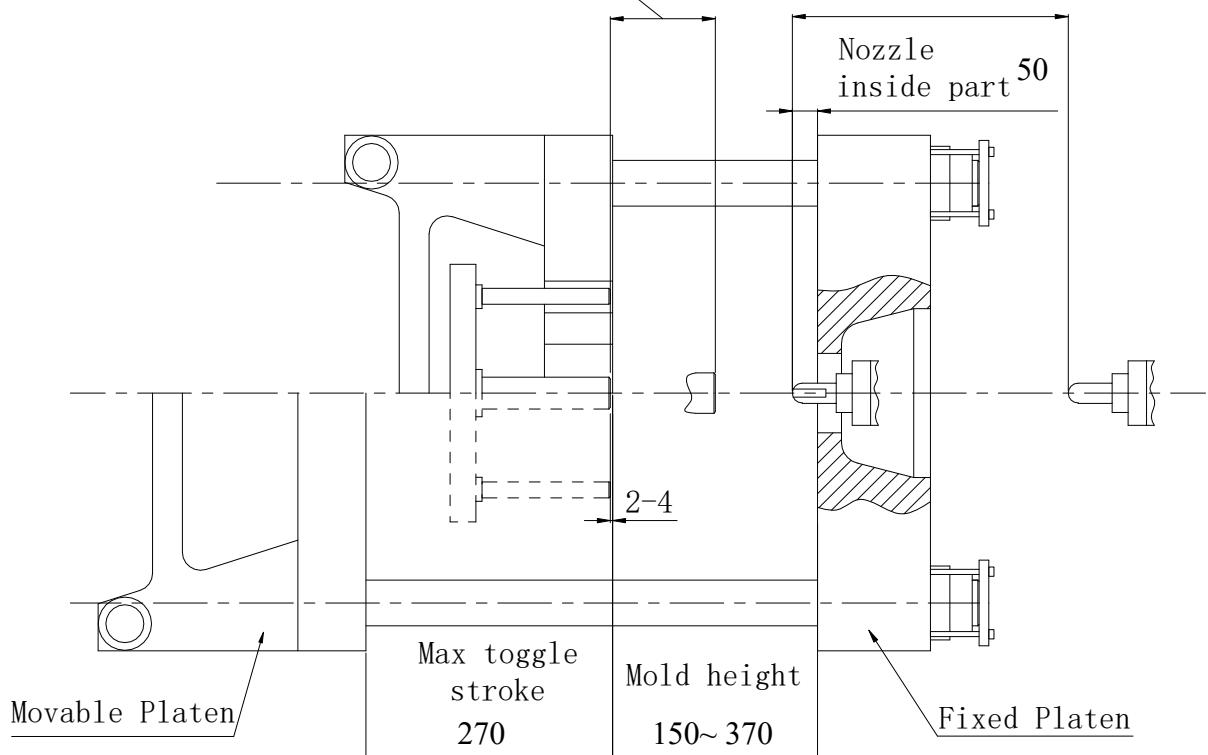


H	V
240	205

A	B	C	D	E
M12	35	35	420	280

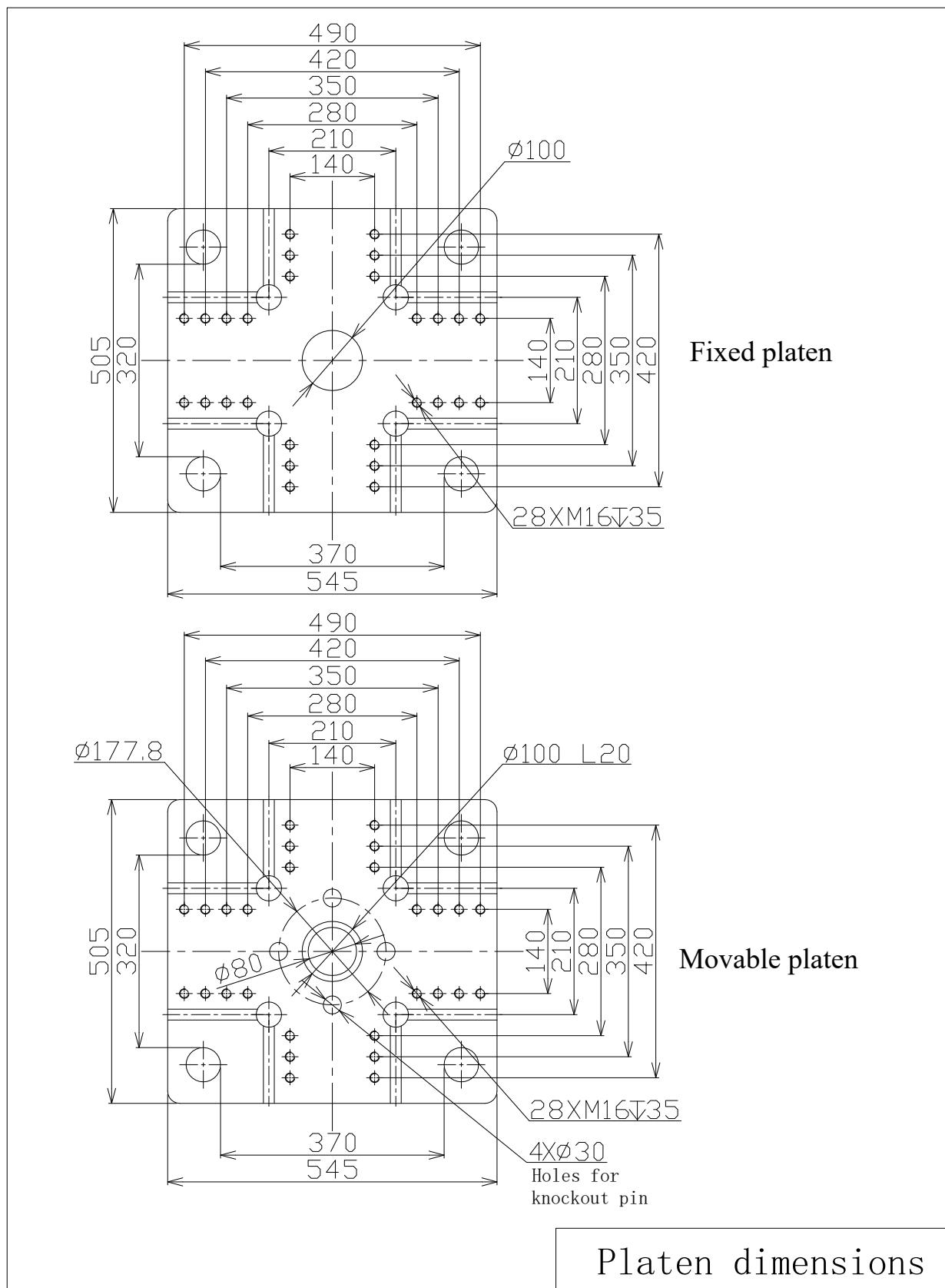
Ejector stroke 70  
 Ejector tonnage 19.6KN

Nozzle stroke 290



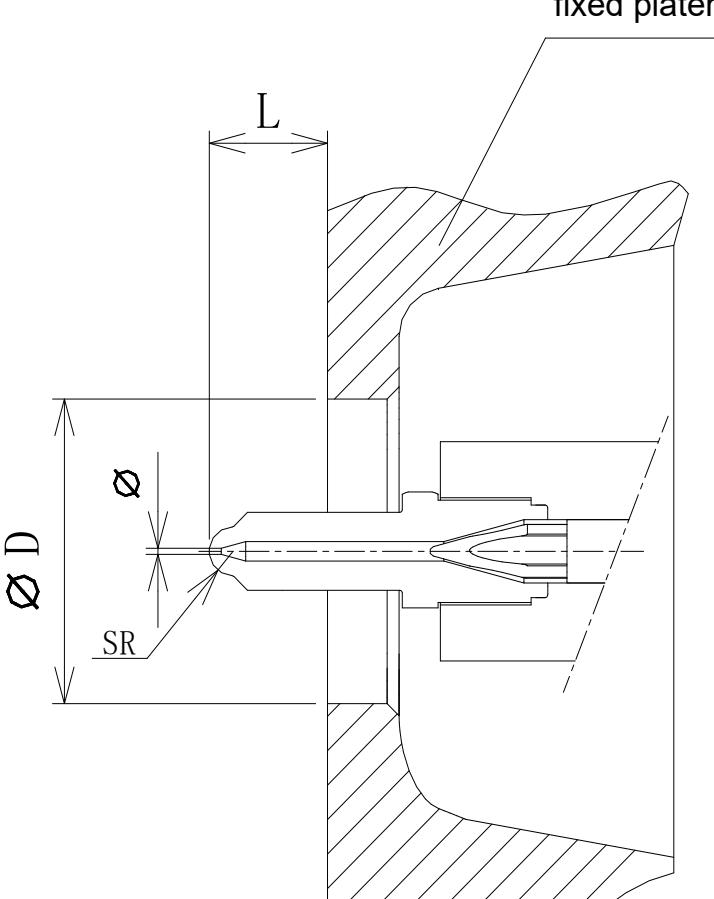
Mold size parameters

Clamping Unit Platen dimensions



Injection Unit Nozzle size parameters

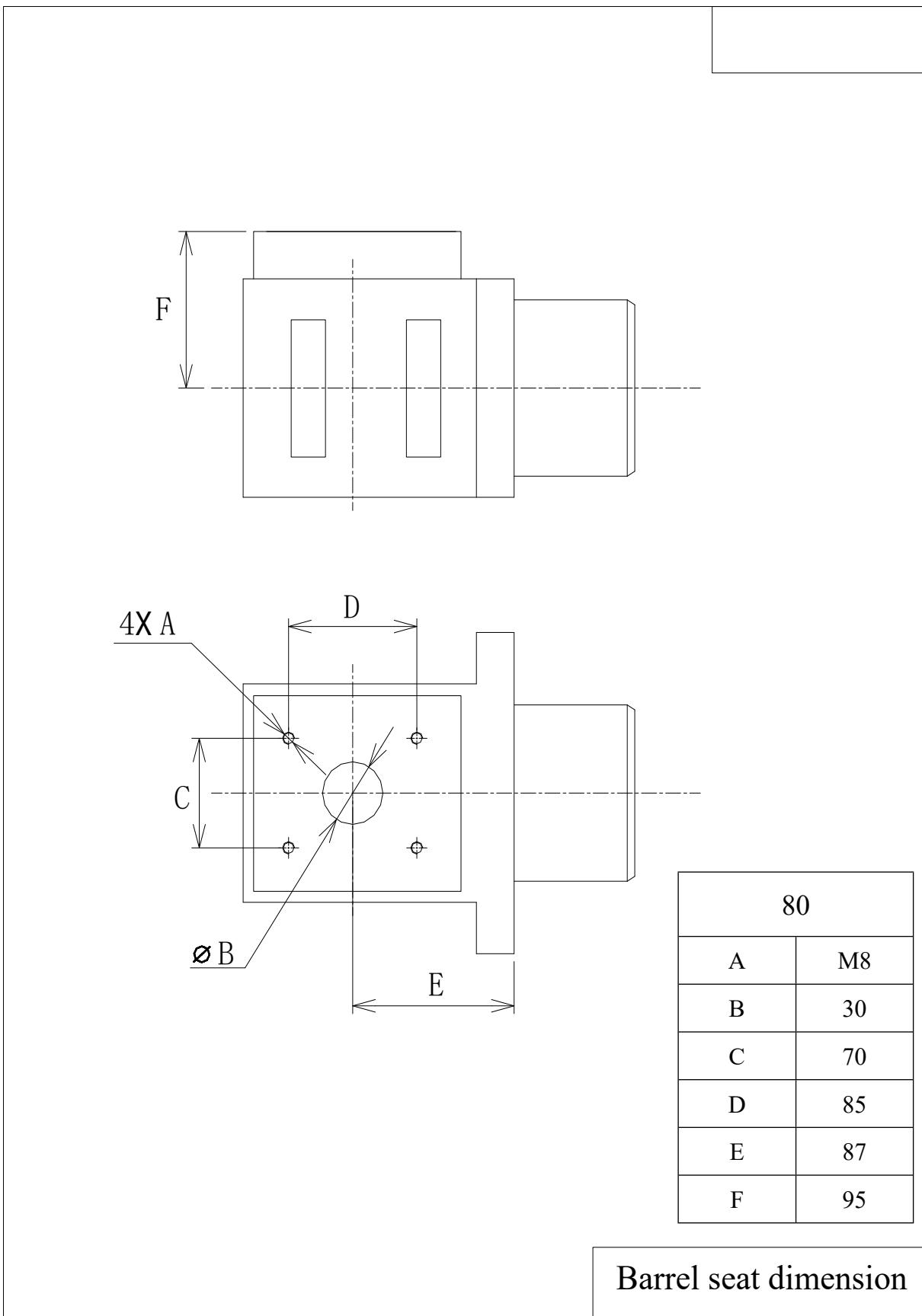
Nozzle hole diameter	$\emptyset$	2.2	80
Sphere diameter of nozzle	SR	10	
Hole diameter	D	$\emptyset 100^{+0.035}_0$	
Injection protrusion	L	50	



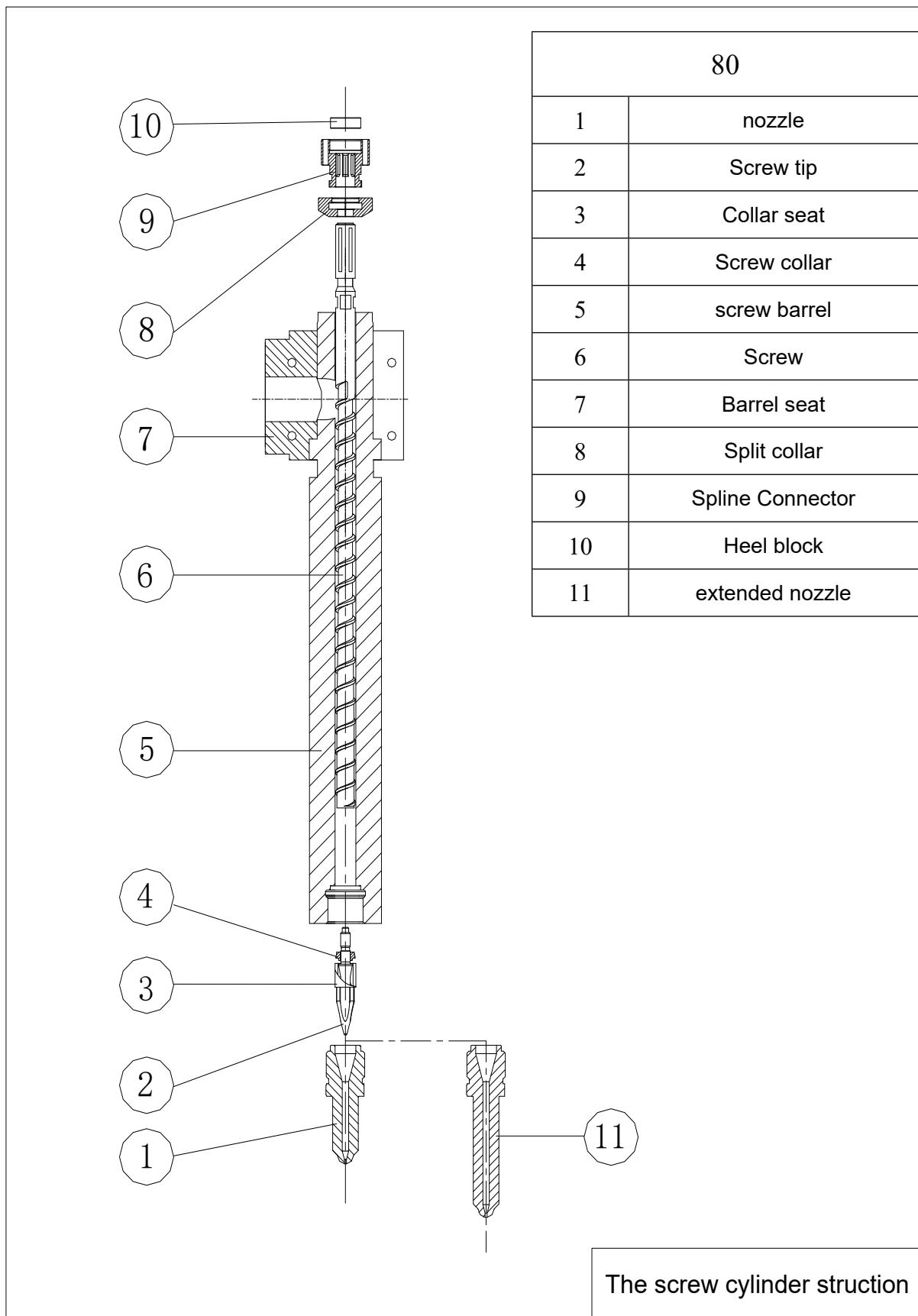
fixed platen

Nozzle size parameters

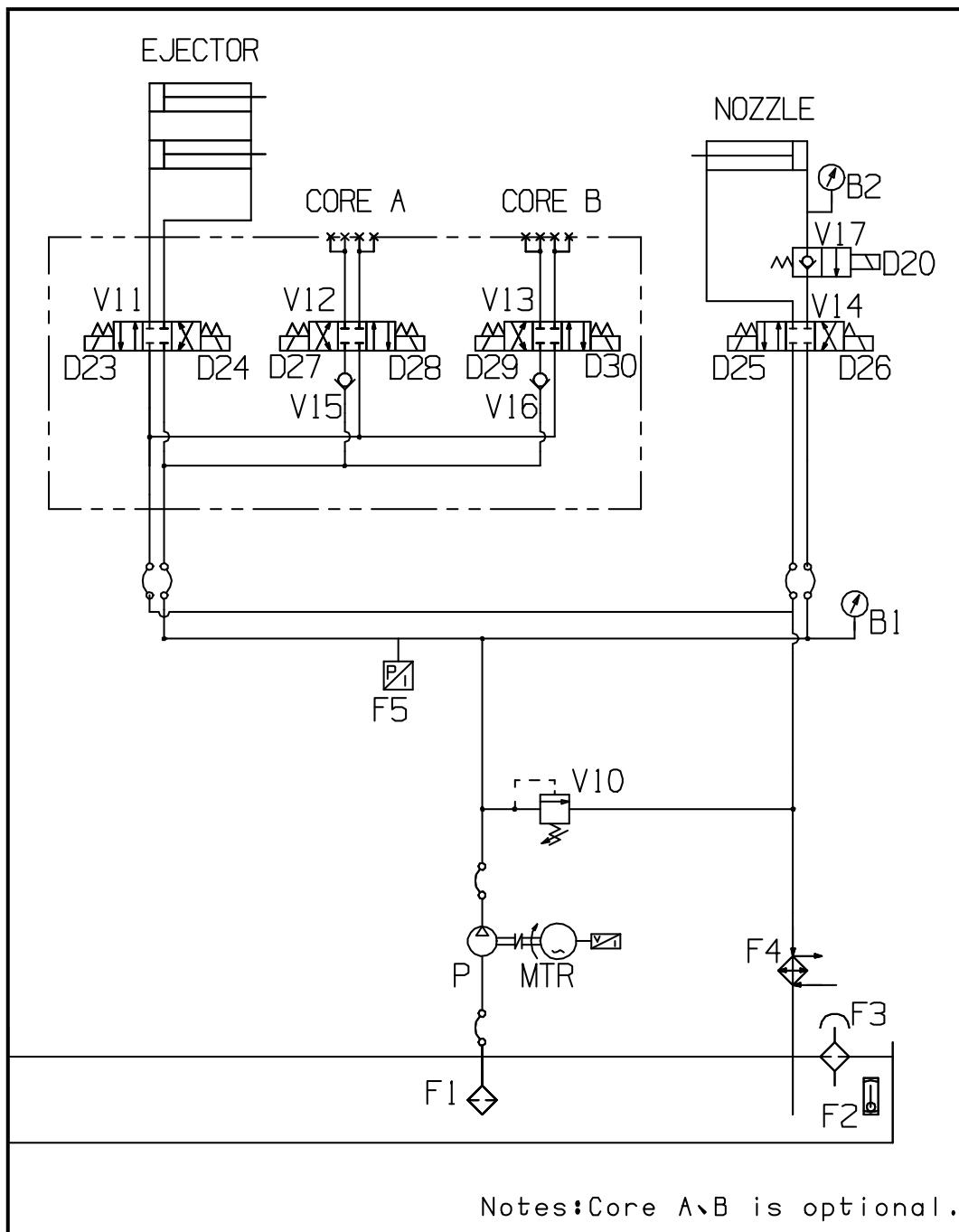
Injection Unit Barrel seat dimension



Injection Unit The screw cylinder struction



## Hydraulic Schematic



## ■ The Adjustment Of The Hydraulic System

The machine's hydraulic system uses the electro-hydraulic proportional control technology which makes the system pressure and speed control more precise

The factory has been finished the debugging of the machine's hydraulic system and the flow linear, so the customer only need according to each pressure of the actions (Top die, core, whole shift) which have been set in computer parameters to meet the technological requirements of the products. Also other hydraulic valve is adjusted to the optimum state in factory, the customer do not need further adjustment.

### Electromagnet Action Figure

Remark:

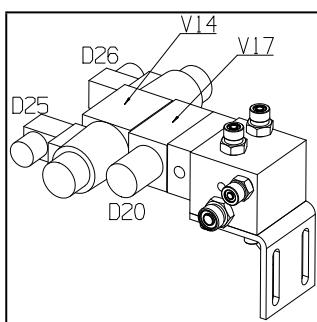
1. "+" is a standard of normal function when power on.

"◎" is a standard of optional function when power on.

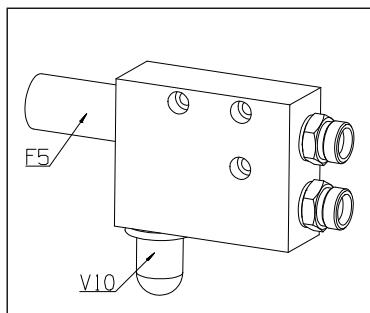
2. D27、D28、D29、D30 is belong to core A 、core B, the function is optional.

electromagnet code	nozzle			ejector		core		core	
	nozzle forward	nozzle retract	release pressure	ejector forward	ejector retract	core A in	core A out	core B in	core B out
D23						+			
D24					+				
D25	+		+						
D26		+							
D27							◎		
D28						◎			◎
D29									◎
D30								◎	
D20		+	+						

Nozzle block



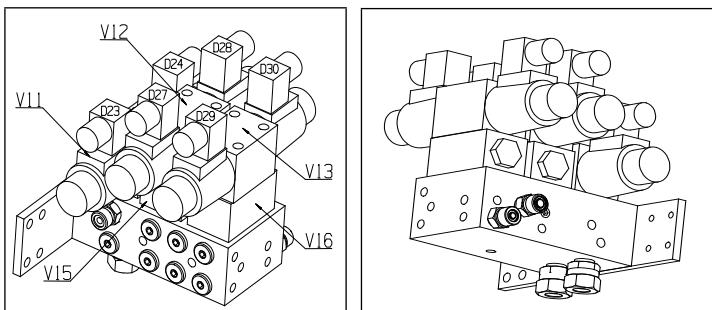
Pressure block



Hydraulic Components Table

NO	Code	Item
1.	MTR/P	pump motor
2.	F1	Suction filter
3.	F2	Level gauge
4.	F3	Breather filter
5.	F4	Oil cooler
6.	F5	Pressure transducer
7.	V10	Overflow valve
8.	V11	Directional Valve
9.	V12	Directional Valve
10.	V13	Directional Valve
11.	V14	Directional Valve
12.	V15	Angle check valve
13.	V16	Angle check valve
14.	V17	Electrically controlled check valve
15.	B1	manometer
16.	B2	manometer

Ejector block



V12、V13、V15、V16 is Core A、Core B (optional)

Core connector :M14X1.5

## Chapter 3 Electrical Drawings

### **ZE600-80 Electrical Drawings**

## Chapter 4 Standard Introduction Appendix of Optional Function

## Chapter 5 Special Introduction Appendix of Optional Function