Semi-automatic filling packing machine is mainly composed of host, electrical distribution box filling of PLC, touch screen and electronic scale.

The filling packing function complete measuring, filling, etc.The machine all stainless steel, corrosion resistance;PLC touch screen man-machine interface, display in both Chinese and English, the operation is convenient intuitive;Conform to the state "QS" and "GMP" certification requirements;Filling adopts servo motor drive, mixing with Taiwan maintenance-free gear motor, stable performance, high precision packaging;Fully sealed, stainless steel and organic glass container combination, easy unpick and wash.The workbench convenient lift;Using special screw filling, computer real-time tracking, it has high speed and precision;All kinds of packaging parameters can be stored, can store up to 10 formula;For larger dust material packaging, can be added with dust collection system, clean workshop environment;By changing the screw attachment can adapt to milk powder, monosodium glutamate, solid drink, white sugar, glucose, coffee, medicine, pesticide, solid powder, granular additive, dyestuff, veterinary medicine and other packaging specifications for packing powder/granule.

GF series automatic filling metering packaging machine have various models: there are single - machine, fully automatic, semi-automatic, canned, canned, bagged two machine and etc.Can adapt to different production requirements.(for the special materials, our factory can offer a special device.) Would you please read this manual carefully before using machine, so that more standardized maintenance machine, get the best working condition.

2、 Technical parameters

model	GF-1000
Measurement methods	Direct call tracking and feedback
Packing weight	10—5000g（Transform the spiral components）

Packaging accuracy	Packing weight 100 g or less deviation plus or minus 0.5 1 g or less > 100 g - 5000 - g deviation plus or minus 0.5% or less
Packing speed	10—50 Bags/min
Container volume	A30、B50 litre
power supply	Single-phase 220 v three-phase 380 v (or custom)
otal Power	A1KW、B1.9kw
weight	A185kg\B260kg
Overall Dimensions	A800×750×1900mm、B800*850*2120mm

3、Names of parts

搅拌电机　　　　　　　　充填电机

料位探口(料位器)　　　　　物料进口

料箱

触摸屏　　　　　　　充填出口（螺旋附件：螺杆、料杯、网罩）

可升降工作台

电 子 秤

底坐

脚踏开关
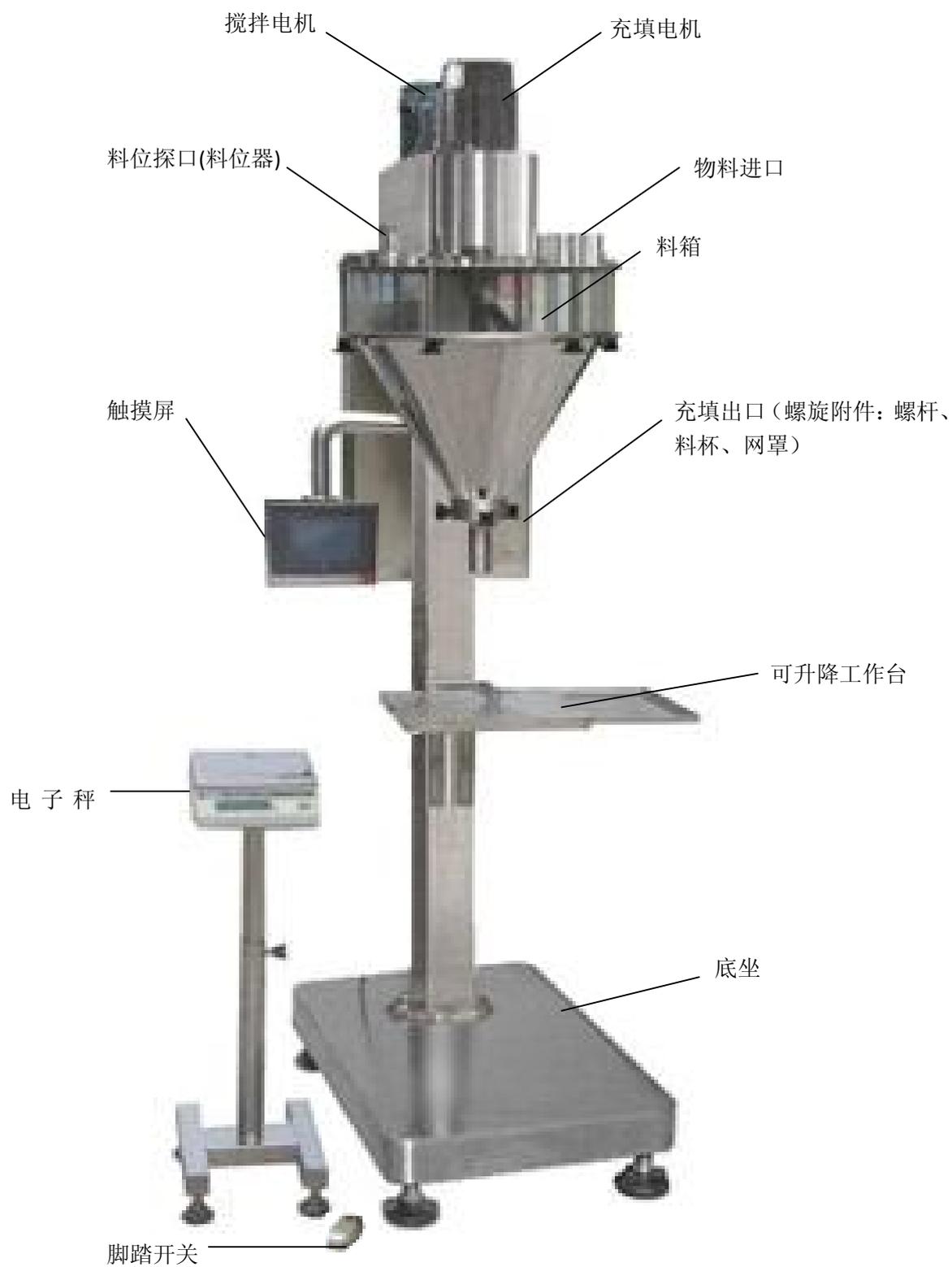
图 1(为 A 型)

4、 Installation and adjustment

4-1． Install generally don't have to establish a base. But casing need safety grounding (after the base to a grounding terminal to ground).

4-2． Move up and down worktable, change its export and filling the relative position, so that container can be easy to pass. Assembled electronic scale, place the electronic scale on the bracket, the cable and plug connected to the column on the left side of the interface electronic scale. Foot switch or infrared light electricity switch wire plug connected to the column on the left side of the interface should be corresponding.

4-3、 Installation material box, screw accessories: material box, screw, material cup must be installed correctly, should according to sequence assembly and disassembly. Assembly sequence is: the container - screw feeding cup - the net. Disassembly sequence is: the net - cup, screw, material box, if not in accordance with the sequence of loading and unloading of the spiral and vulnerable to bending bin card.

料箱见图 1

| 螺旋附件 | 螺杆 | 料杯 | 网罩 |
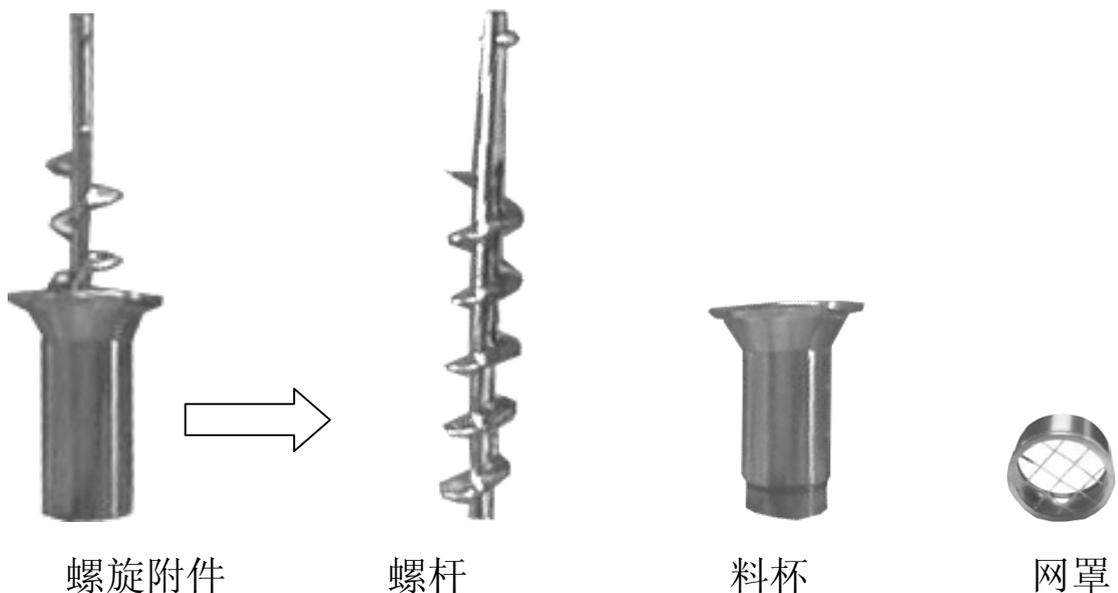
4-4． Close observation of screw and material of the eccentric degree: install screw, set is cup, should be able to easily set feeding cup holder. If there is friction, jam, unilateral by wait for a phenomenon, should increase or decrease suspension column gasket to adjust the concentricity, before that no set of feed cup, spiral around the circle core around, before and after the oscillation amplitude of the basic symmetry.

4-5． Watch stirrer installed correctly: installed container, spiral, cup, start the mixing machine. Agitator in rotation if there is abnormal sound, should immediately stop stirring machine. Observed deformation and container walls or spiral mixing motor whether touch, if touch, should move up blender or on the plastic

repair.

Note: it is strictly prohibited to not installed container will stir outside agitator exposed in the motor start, threatens the safety of operators。

$4-6.$ Check whether the power supply is switched on. Note: empty machine screw can't long time running and observe the screw rotation direction is correct. You must stop if not correct, switching power supply phase.

$4-7.$ Should ensure that sufficient to provide packaging materials, material in the material can not be less than 1/3 of the container to remember degree, otherwise affect precision of packaging. If material shall ensure that there is a certain space, in the material to fill the whole container will lead to the damage of the mixing system. (if the user has no feeding equipment should be matched to our factory form a complete set of automatic feeding equipment)
Note: it is forbidden to install the screw and not installed material cup will start a spiral.

A、Boot to electricity, wait for a few minutes, into the welcome screen

欢迎使用
GF-1000粉末灌装机

ENGLISH

中文
登录

Text

Text

After the successful start, click on the "Chinese" button, enter the Chinese operation main interface; Click on the "ENGLISH" button, enter the ENGLISH operating main interface.

B、 Enter the main interface to operate

生产界面   参数设置   重量校正   生产配方

首页

B.1 Mainly produces operating interface, and interface:

B.2 Production recipe: to save or obtaining production parameters;

B.3 Parameter Settings: view or production parameters Settings interface；

B.4 Weight correction: weight value correction and the related numerical Settings interface；

B.5 Home page: return to the welcome screen;

C、 Production into the interface

C.1 Pulse interface model production

C.1.1 Production for actual said left upper corner of the interface display area of the value。

C.1.2 Peel: the blue area on the left shows the actual said peel value for operation, made according to value of 0.

C.1.3 Filling weight: set the target weight of packaging production value, scope of numerical Settings: 0 ~ 30000 g.

C.1.4 Filling pulse: to set the filling screw motion parameters, set the value, the greater the filling screw motion, the longer the greater the filling weight. After the opening of the feedback function of parameter Settings interface, automatic feedback correction filling pulse number (see note parameter Settings). The scope of values: 0 ~ 65535.

C.1.5 Packing number: display the current total number of times a packaging。

C.1.6 Zero: to put the cumulative number of times a packaging is 0.

C.1.7 Save: to change the current parameters to save. If after the changes of production parameters, not click save button, cannot be saved when power supply drop.

：Display the current packaging control situation, under the parameters set interface can be changed.

： According to current working status of the machine, main show is: standby and processing in the two states.
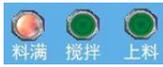
：   According to material level, mixing, feeding working condition. In full, light continue to shine. Mixing and loading in the open, light continue to shine.

：   Packaging machine control button operation, can according to the requirements set up automatic mode or manual mode (see note meet parameter Settings).

：   Mixing and loading function switch.

C.2 Interface with direct said production

C.2.1 Pure bonus: when the actual filling weight reaches the set value, filling screw speed, the

highest speed drop is starting speed。

C.2.2 Gap value: when the actual filling weight reaches the set value, screw filling stop motion,

filling is complete.

The other parameters and pulse mode production the same interface.

D、 Parameter is set into the interface
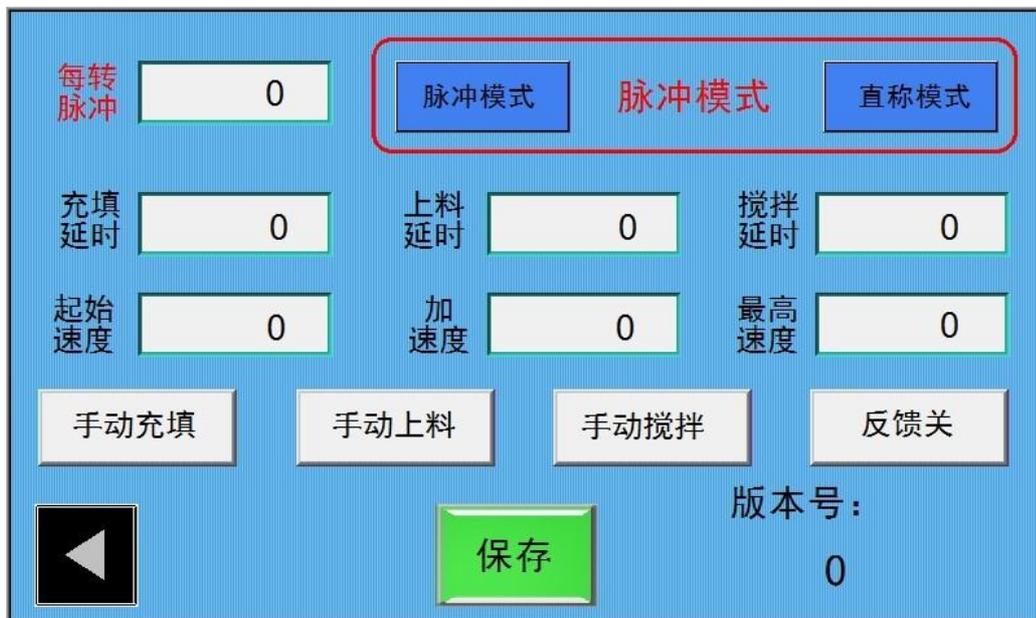
D.1 Every turn pulse: set screw rotation once required pulse value. The default setting is: 200. (not under the guidance of professional and technical personnel, please keep the factory default.)

D.2 Filling delay: hand, since the mode, in the last filling is completed after setting the delay time of the filling operation again. Parameter range: 1 ~ 60000 milliseconds, which is 1000 ms = 1 second, without delay, please set it to 0

D.3 Feeding delay: automatic mode, in the material level switch detects the material under, after setting of delay time, open the feeding motor. Parameter range: 1 ~ 60000 milliseconds, which is 1000 ms = 1 second.

D.4 Mixing time delay: in the filling process or when you start the automatic mixing function, detection to stop feeding or stop filling, after setting the delay time of stop stirring machine. Parameter range: 1 ~ 60000 milliseconds, which is 1000 ms = 1 second。

D.5 Starting speed: servo motor starting speed, as well as the essence of set bonus after the screw speed. Parameter range is: 1 ~ 3000. (not under the guidance of professional and technical personnel, please keep the factory default.)

D.6 Highest speed: the highest speed, servo motor for coarse feeding speed. Parameter range is: 1 ~ 3000. (not under the guidance of professional and technical personnel, please keep the factory default.)

D.7 Acceleration: starting speed switch with the highest speed acceleration. Parameter range is: 1 ~ 60000. (not under the guidance of professional and technical personnel, please keep the factory default.)

 Fill the control mode selection, can choose pulse mode and direct said

。

手动充填 **手动上料** **手动搅拌** ： Packing, loading, mixing control mode selection, divided into manual mode and automatic mode. (note: the motor is still in the process of running, switch control mode, the motor is not running or stopping situation may arise, then need to click on the motor control switch, until the normal situation.)

D.8 System plate number: view the current version of the controller, to avoid wrong operation.

Note: after to set each parameter, must save operation, otherwise cannot be saved when power supply drop.

F、 Weight correction into the interface
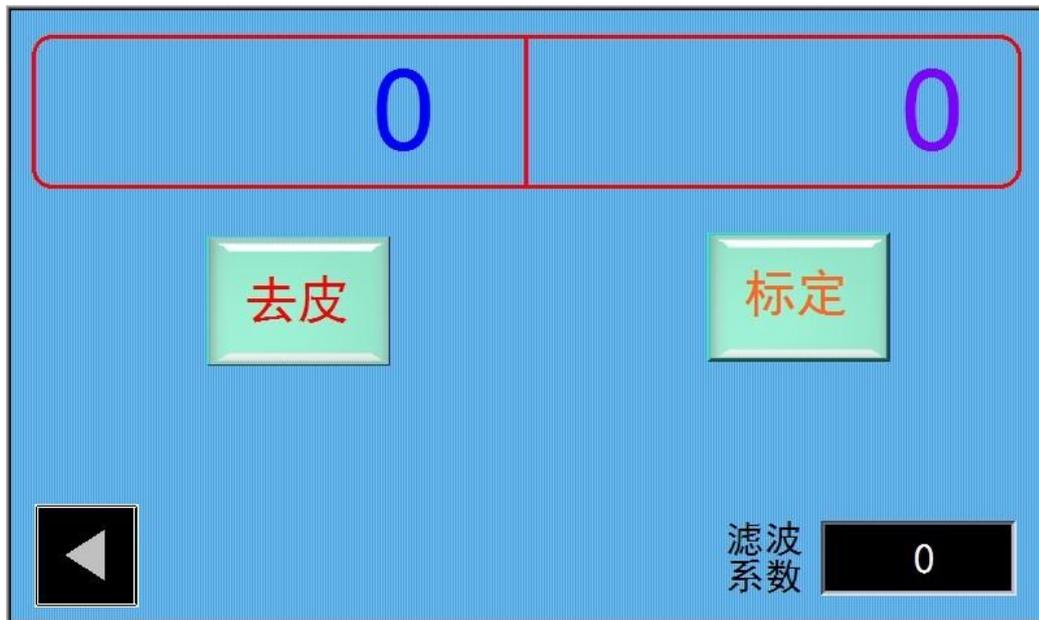
Upper part shows the actual value, this interface can be set to at the upper part is need correction weight value.

F.1 Peel, peel and production in the interface functions are the same.

F.2 Calibration: correction of actual said.

F.3 Scope of filter coefficients: numerical Settings: 1 ~ 20, the smaller the value, the faster the reaction, image stabilization function; The numerical value, the greater the slow reaction, enhanced image stabilization function, numerical display relatively more stable.
Weight correction step

：

1, remove all the things on the scale;

1、   1, click the peel button;

2. place the calibration weight on the scale, and the weight of the weight value is set in the weight of the correction value;

2、 click the calibrate button;

3、 Check whether the correction is successful, if not successful, please repeat the above

steps。

E、 Production recipe interface

Loading: will choose the formula parameters loaded into the production of production.
Archive: to save the parameters of the current production to a specified formula in the group.
The goal of filling weight: according to save the filling weight value.
Control mode: if the display value of 1, is the pulse control mode; If the display value of 3, is the direct call control mode.
Return: return to the function selection interface.

故障分析与排除：

fault	The cause of the problem and analysis	Failure analysis
1、When filling the noise is too big	Container, screw, material cup of improper installation	See the instruction
2、The beaters from time to tome noise	Agitator deformation, contact with the container 1、	Adjust the blender
	2、 Noise reduction motor	Repair or change motor
	chain of sound	Adjust the chain
3、Don't feed (there are charging equipment)	1、 Inside the suitcase is material	
	2、 Material level is out of control on material viscosity	Cleaning material level
	3、 Material level, high sensitivity, or damage	Adjust or more refueling position
	4、 Tube wall material, the feed motor is automatically protected	Inversion of spiral feeder, cleaning, feeding tube
	5、 Feeding circuit malfunction	Check, eliminate
	6、 Motor damage	Repair or replace the motor
	7、 Agitator don't start	Start the mixing motor
4、Kept feeding (configuration had charging equipment)	Material level sensitivity was low, low signal or damage 1、	Adjust or more refueling position
	2、 Is a line break	Check, eliminate
	3、 24 v power supply damage	Check, eliminate
	4、 Whether automatic feeding way	Start the automatic feeding
5、Don't pack	The fill motor does not turn: the power switch is damaged, line breaks, fuse, ac contactor is damaged, broken motor damage. 1、	Inspection, maintenance, ruled out
	2、 Filling button or foot switch contact undesirable	Repair or replacement
	3、 Packing damage motor drives	Replace or send factory maintenance
	4、 Materials with other impurities will spiral stuck	Removal of impurities
	5、 Pulse number is set	Set the number of pulses
6、Keep filling	1、 Too large or pulse set disorder	To reset
	2、 Computer controller is damaged, the fill motor drives	Replace or send factory maintenance
7、Packing weight deviation is too large	1、 Works wrong choice	See the instruction
	2、 Some other impurities in the material	Rule out other impurities
	3、 Feed not free to make the material in the material too little or too much	Inspection, maintenance, material feeding device

	4、 Not clean up the container for a long time, the material in the cabinet agglomerate	Clean the container
	Weighing inaccurate: electronic scale come into contact with other objects, empty scale without peeling, vibration, aviation plug-in poor contact, sensor damage, damage of computer controller 5、	Inspection, maintenance, calibration electronic scale, replacement, or to send factory maintenance.

COM
24V开关电源
N
L
+24V

24V开关电源
N L COM +24V

滤波器
L3 N
R S

KM1 KM2
U1 V1 W1 U2 V2 W2
M1 M2
搅拌电机 供料电机

FU1-FU3
N A B C
L3-0 L3
L2-0 L2
L1-0 L1
L1-1 L1-2

L1-2 KA1 L1-3 KM1 FR1 N
KA2 L1-4 KM2 FR2

FR1 X3
FR2 X4
COM电机过载

24V
KA1 Y1
KA2 Y2

专控器AB型电控图
控制器AB型电控图

U Y W S R X1 Y5 COM +24V L1-1 L1-2

空开 2A
滤波器
S R
L3 N

HCC S7-200CPU224 KA1 KA2

KM1 KM2
FR1 FR2

24V开关电源
N L COM +24V

A B C N U2 V2 W2 COM X0 下接线端子

强电箱位置分布图

激信号屏蔽信激
励号正线屏励
正 负 蔽
线 线
E+ IN+ N- E-
称重传感器
1 2 3 4 5 6 7 8 通用输出口
脉搅上
冲拌料
NUMPAN
APM3170V1.0

电源
GND24V
电源24V
电源0V
电源屏蔽线

通用输入口
1 2 3 4 5 6 7 8
料脚
位踏
开开
关关

端口1
RS232通信
与触摸屏连接
5 1
9 6

APM12与触摸屏的连接:
APM12S HMI
2 9
3 6
5 5

15