

微型液压动力系统 Mini-Hydraulic Power Unit

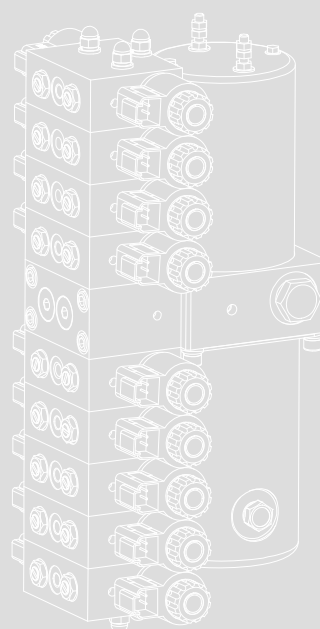
TC(交、直流)和TS(仅交流)系列是我司生产的微型液压动力单元。如果由于安装位置的限制,你需要一款超小型的液压动力源,TC/TS系列微型动力单元将会是你的理想选择。由于采用高功效的永磁直流电机驱动和微型液压阀高度集成的阀块,虽然TC系列微型动力单元的轴向尺寸仅有90X90mm,但却可以提供最高21Mpa的压力,以及最高6LPM的流量;部分型号可提供IP67的防护等级,可以工作于比较恶劣的使用环境。

The Series TC is our new product line of hydraulic power unit which have smallest outline dimensions. It will be your ideal choice if you need an super slim hydraulic power unit due to limited installing space. Because of the RE Permanent Magnet DC motor and highly integrated valve manifold, the TC series has very compact size but powerful output, 230Bar max pressure and 6LPM flow rate. Some of DC model with IP 67 protection grade, will allow it working at tough application.



TC Series

TS Series



TC系列和TS系列 Series TC & TS

- TC系列，有交流和直流两种供电方式
- TS系列，仅有交流供电方式

产品特点：


- 外形小巧，重量轻
- 采用高效永磁直流电机或油浸式交流电机
- 液压阀高度集成，降低故障率，提高使用寿命。
- 防护等级最高可达IP67
- 即可与单作用油缸配合使用，也可以和双作用油缸配合使用

Feature：

- Very compact size, light weight.
- High efficiency Permanent Magnet DC Motor or Oil Immersion AC Motor.
- Highly integrated valve and manifold make high reliability.
- Protection Grade up to IP67
- Working with either double acting cylinder or single acting cylinder

额定流量与压力选型表 Selection Chart (Config. Code)

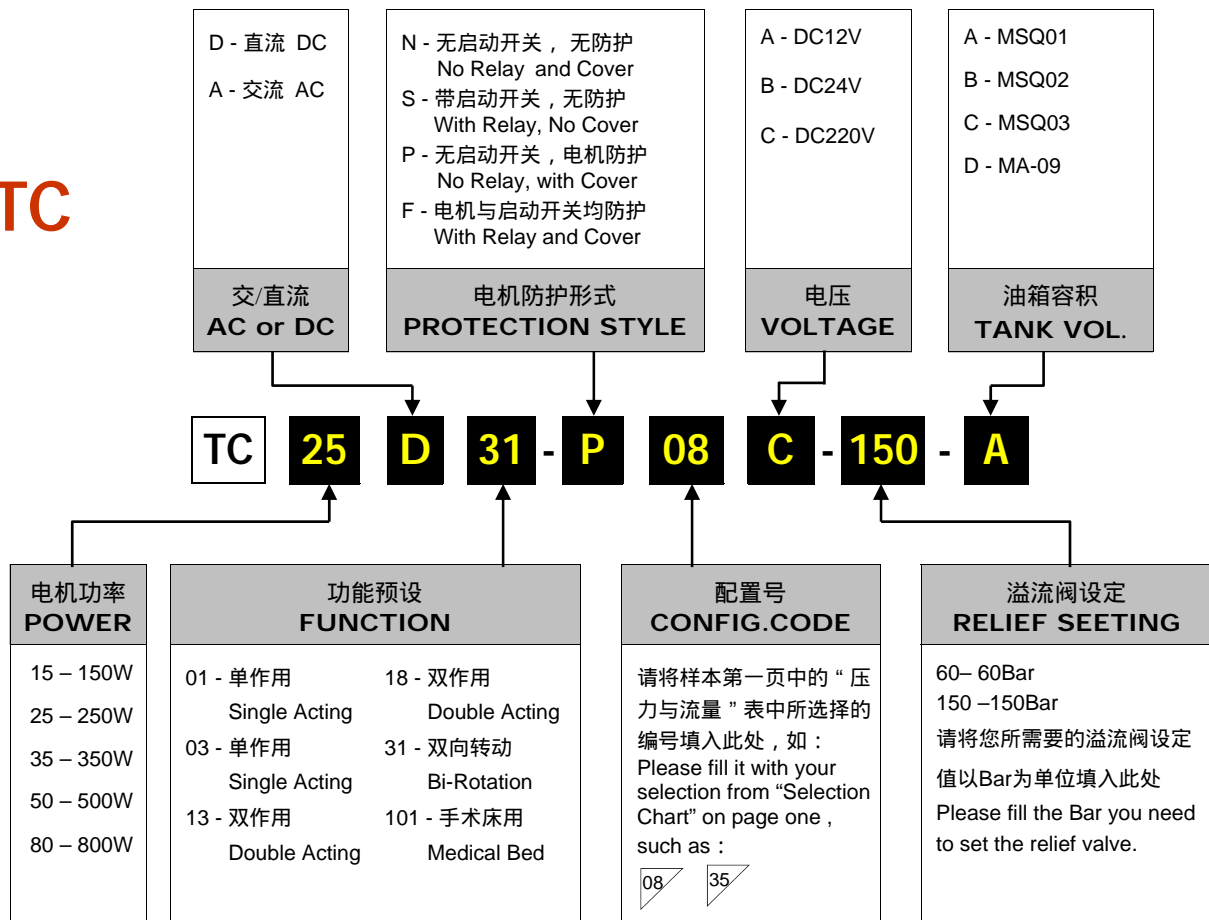
产品组/Group	TC15D	TC25D	TC35D	TC50D	TC80D	TS15A TC15A	TS30A TC30A
功率/Power	150W(DC)	250W(DC)	350W(DC)	500W(DC)	800W(DC)	150W(AC)	300W(AC)
泵排量 / Pump Displacement	01 0.19ml/r 0.38LPM 20MPa	11 0.38LPM 21MPa	21 0.5LPM 21MPa	31 0.6LPM 21MPa	41 0.7LPM 21MPa	51 0.53LPM 18.8MPa	61 0.53LPM 21MPa
	02 0.26ml/r 0.55LPM 13.8MPa	12 0.63LPM 20MPa	22 0.65LPM 21MPa	32 0.8LPM 21MPa	42 0.9LPM 21MPa	52 0.73LPM 13.7MPa	62 0.73LPM 20MPa
	03 0.38ml/r 0.75LPM 12MPa	13 0.7LPM 18MPa	23 0.8LPM 21MPa	33 1.0LPM 21MPa	43 1.2LPM 21MPa	53 1.1LPM 9.4MPa	63 1.1LPM 13.6MPa
	05 0.50ml/r 1.0LPM 7.5MPa	14 1.0LPM 12.5MPa	24 1.1LPM 16MPa	34 1.25LPM 20MPa	44 1.6LPM 21MPa	54 1.4LPM 7.1MPa	64 1.4LPM 10.7MPa
	04 0.63ml/r 1.25LPM 6MPa	15 1.25LPM 10MPa	25 1.3LPM 13.8MPa	35 1.5LPM 17MPa	45 1.85LPM 21MPa	55 1.8LPM 5.7MPa	65 1.8LPM 8.3MPa
	06 0.75ml/r 1.5LPM 5MPa	16 1.5LPM 8.5MPa	26 1.6LPM 11MPa	36 1.9LPM 13MPa	46 2.0LPM 20MPa	56 2.1LPM 4.8MPa	66 2.1LPM 7.1MPa
	07 1.0ml/r 2LPM 3.5MPa	17 2LPM 6MPa	27 2.0LPM 8.5MPa	37 2.5LPM 10MPa	47 2.5LPM 16MPa	57 2.8LPM 3.6MPa	67 2.8LPM 5.4MPa
	08 1.5ml/r 3LPM 2.5MPa	18 3LPM 4.5MPa	28 3.0LPM 5.5MPa	38 3.7LPM 6.5MPa	48 3.8LPM 10MPa	58 4.2LPM 2.4MPa	68 4.2LPM 3.6MPa

1.  配置号：请将您选择的配置中的数字填入“订购编号”中的第6位。
Configuration Code: Please fill the code into the ordering code.
2. 以上数据仅供初步选型参考，准确的数据请咨询我们，并以我司提供给您的确认图纸为准。
Above data for reference purpose and model selection. Please consult us for accurate specifications, it will be showed in our drawing.

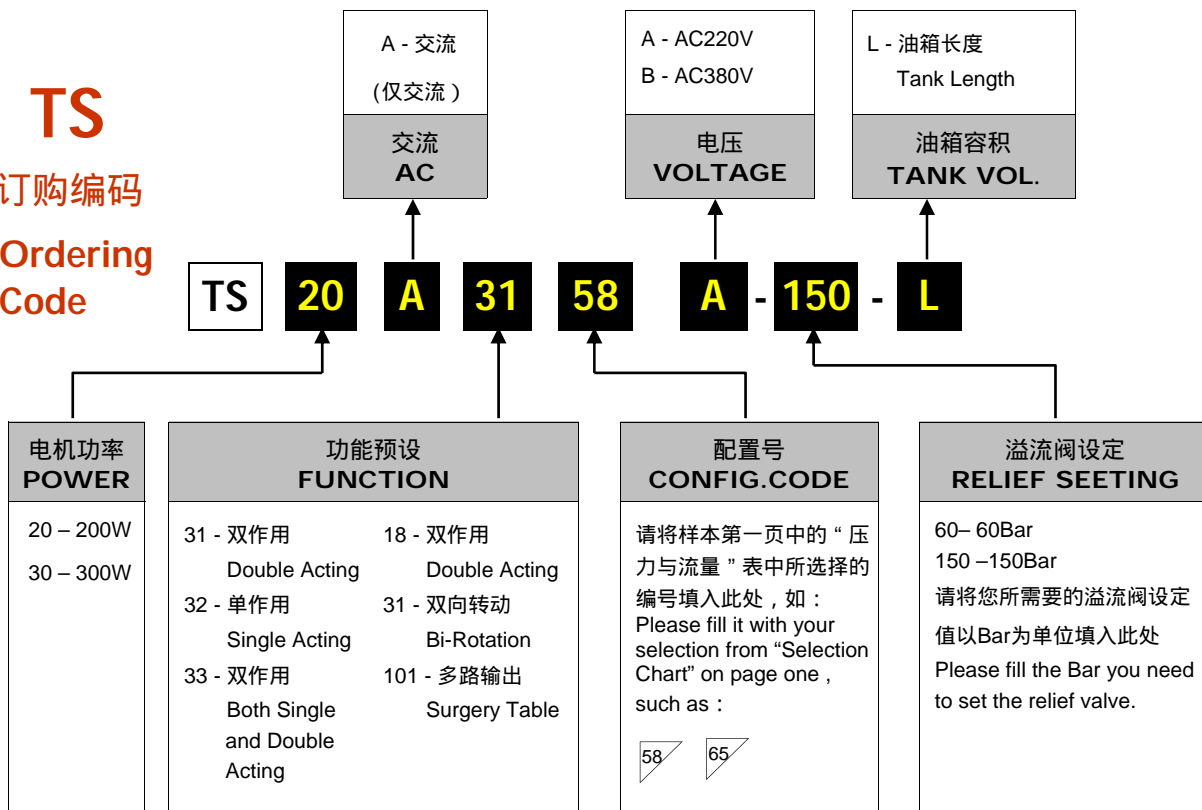
Series TC & TS

订购编码 Ordering Code

TC



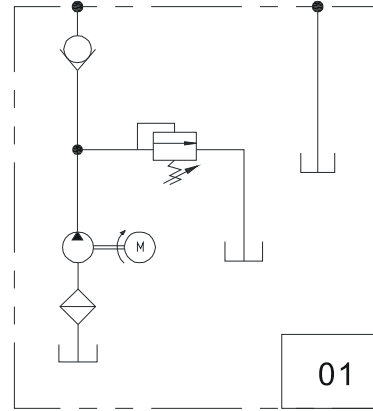
TS 订购编码 Ordering Code



Series TC

微型液压动力系统 Mini Hydraulic Power Unit Circuit #01 油路

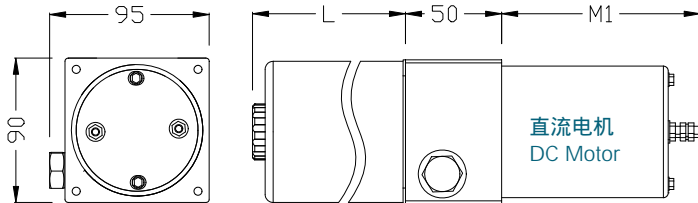
液压原理 Hydraulic Circuit



式样与外形尺寸 Style and Outline Dimensions

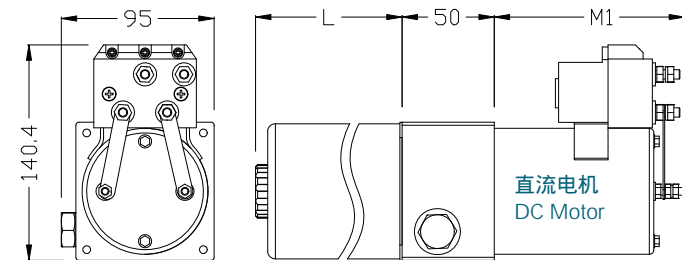
N

型式，不安装直流接触器和防护罩，IP55
No DC Starter Relay, no Motor Cover, IP55



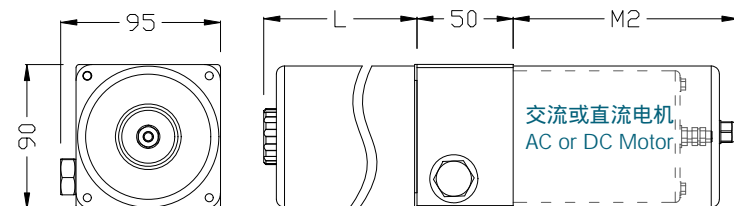
S

型式，安装直流接触器，无防护罩，IP55
With DC Starter Relay, no Motor Cover, IP55



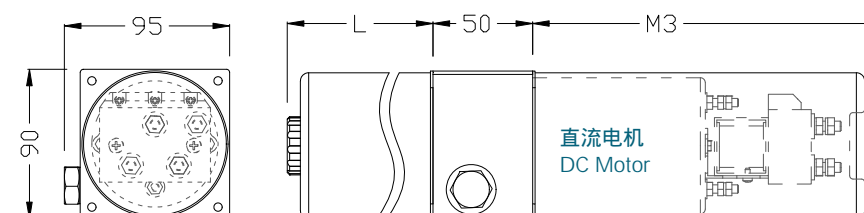
P

型式，交流或直流电机，电机有防护罩，IP67
No DC Starter Relay, with Motor Cover, IP67



F

型式，安装直流接触器，电机有防护罩，IP67
No DC Starter Relay, with Motor Cover, IP67



1. DC12V和24V的直流电机启动和工作时都需要直流接触器，如果您的控制部分有安装接触器，则可选择 N 或 P 型式。

The DC motor with 12V or 24V should works with a starter relay due to high current. You need it if you have no controller or your controller doesn't has a starter relay, the style S or F.

2. 尺寸“L”是油箱长度，见下表
Dim “L” is the length of oil tank:

“L”	可用容积 Volume	订购编号 Code
98mm	210ml	02
138mm	340ml	03
178mm	520ml	05
208mm	660ml	06

*更大的油箱容积可定制，请咨询我们

3. 尺寸“M1”与M2和电机功率对照，请参考下表
Dim M1 and M2 vs. motor Power

产品组 Group	M1 (mm)	M2 (mm)	M3 (mm)	可用型式 Style
TC15D	140	170	200	N,S,P,F
TC25D	140	170	200	N,S,P,F
TC35D	140	170	200	N,S,P,F
TC50D	158	170	—	N,S,P
TC80D	158	170	—	N,S,P
TC15A	—	170	—	P
TC30A	—	170	—	P

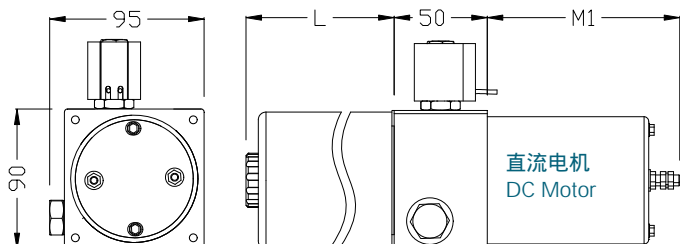
Series TC

微型液压动力单元 Mini Hydraulic Power Unit Circuit #03 油路

N

型式，不安装直流接触器和防护罩，IP55

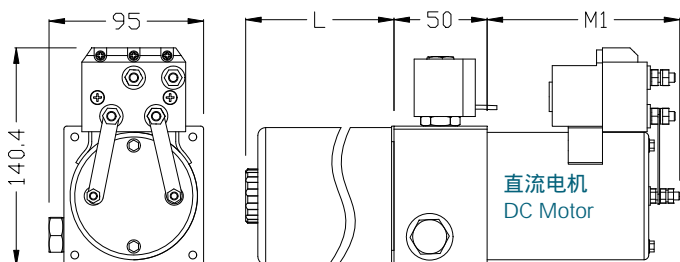
No DC Starter Relay, no Motor Cover, IP55



S

型式，安装直流接触器，无防护罩，IP55

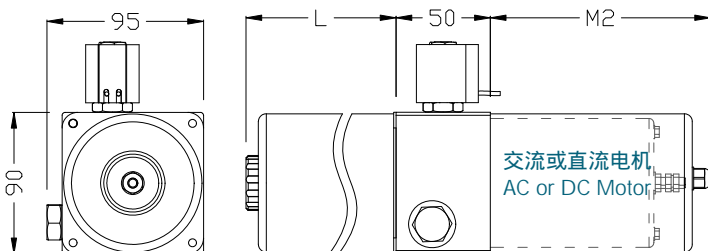
With DC Starter Relay, no Motor Cover, IP55



P

型式，不安装直流接触器，电机有防护罩，IP67

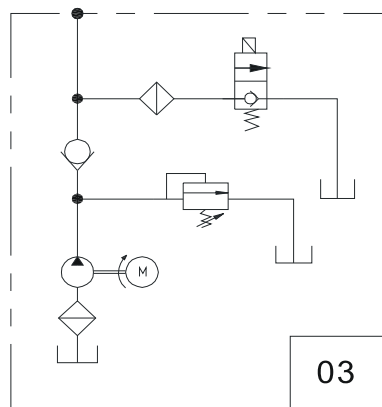
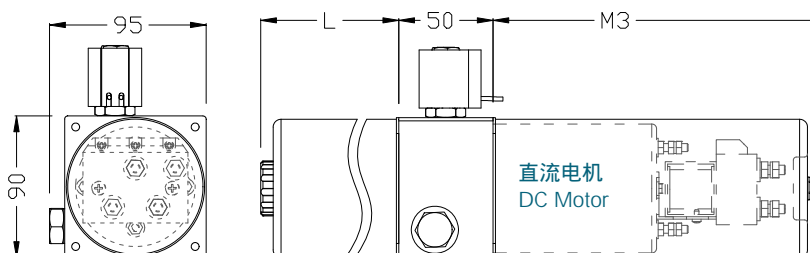
No DC Starter Relay, with Motor Cover, IP67



F

型式，安装直流接触器，电机有防护罩，IP67

No DC Starter Relay, with Motor Cover, IP67



1. 除DC220V电压外，12V和24V的直流电机启动和工作时都需要直流接触器，如果您的控制部分有安装接触器，则可选择 N 或 P 型式。

The DC motor with 12V or 24V should works with a starter relay due to high current. You need it if you have no controller or your controller doesn't has a starter relay, the style S or F.

2. 尺寸“L”是油箱长度，见下表

Dim “L” is the length of oil tank:

“L”	可用容积 Volume	订购编号 Code
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138mm	340ml	03
178mm	520ml	05
208mm	660ml	06

*更大的油箱容积可定制，请咨询我们

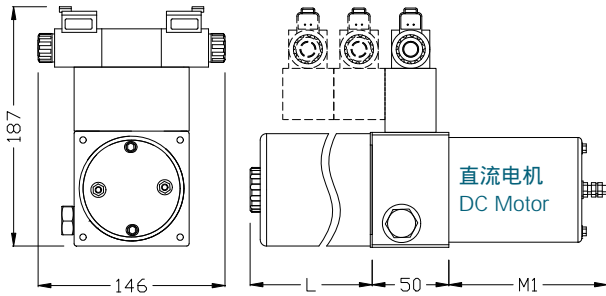
3. 尺寸“M1”与M2和电机功率对照，请参考下表
Dim M1 and M2 vs. motor Power

产品组 Group	M1 (mm)	M2 (mm)	M3 (mm)	型式 Style
TC15D	140	170	200	N,S,P,F
TC25D	140	170	200	N,S,P,F
TC35D	140	170	200	N,S,P,F
TC50D	158	170	—	N,S,P
TC80D	158	170	—	N,S,P
TC15A	—	170	—	P
TC30A	—	170	—	P

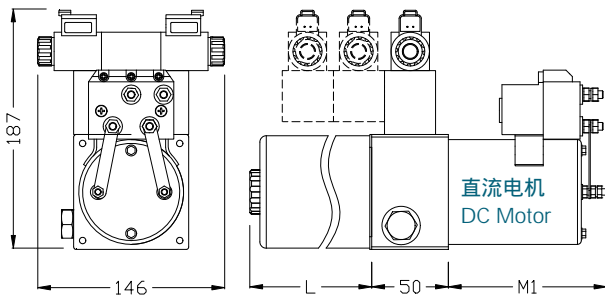
Series TC

微型液压动力系统 Mini Hydraulic Power Unit Circuit #13 油路

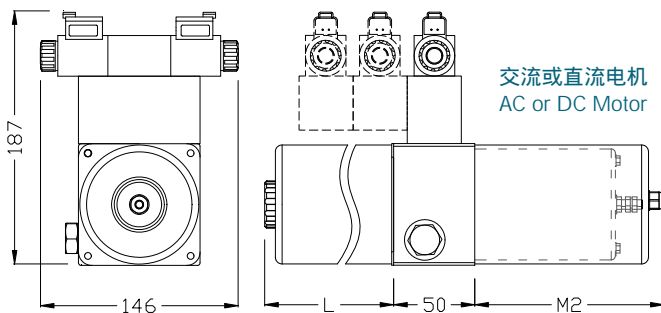
N 型式，不安装直流接触器和防护罩，IP55
No DC Starter Relay, no Motor Cover, IP55



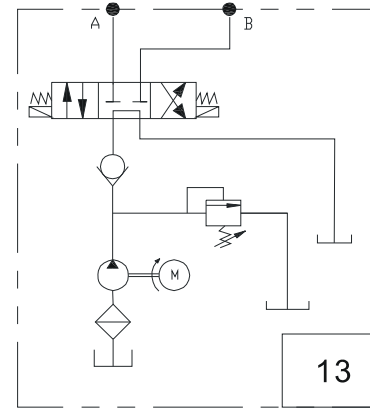
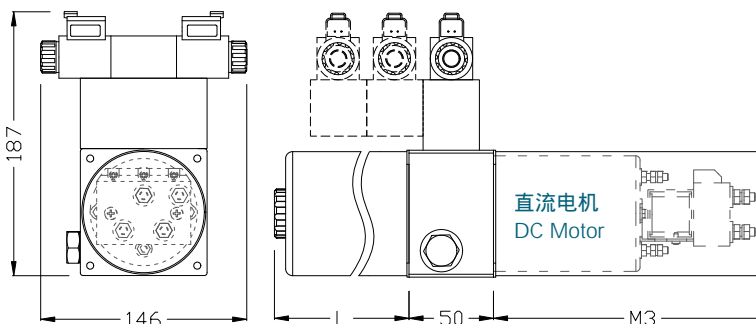
S 型式，安装直流接触器，无防护罩，IP55
With DC Starter Relay, no Motor Cover, IP55



P 型式，不安装直流接触器，电机有防护罩，IP67
No DC Starter Relay, with Motor Cover, IP67



F 型式，安装直流接触器，电机有防护罩，IP67
No DC Starter Relay, with Motor Cover, IP67



1. 除DC220V电压外，12V和24V的直流电机启动和工作时都需要直流接触器，如果您的控制部分有安装接触器，则可选择 N 或 P型式。

The DC motor with 12V or 24V should works with a starter relay due to high current. You need it if you have no controller or your controller doesn't has a starter relay, the style S or F.

2. 尺寸“L”是油箱长度，见下表
Dim “L” is the length of oil tank:

“L”	可用容积 Volume	订购编号 Code
98mm	210ml	02
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178mm	520ml	05
208mm	660ml	06

*更大的油箱容积可定制，请咨询我们

3. 尺寸“M1”与M2和电机功率对照，请参考下表
Dim M1 and M2 vs. motor Power

产品组 Group	M1 (mm)	M2 (mm)	M3 (mm)	可用型式 Style
TC15D	140	170	200	N,S,P,F
TC25D	140	170	200	N,S,P,F
TC35D	140	170	200	N,S,P,F
TC50D	158	170	—	N,S,P
TC80D	158	170	—	N,S,P
TC15A	—	170	—	P
TC30A	—	170	—	P

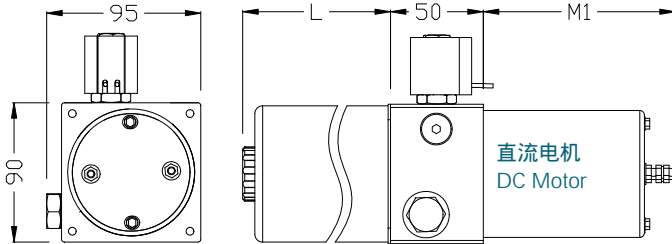
Series TC

微型液压动力单元 Mini Hydraulic Power Unit Circuit #18 油路

N

型式，不安装直流接触器和防护罩，IP55

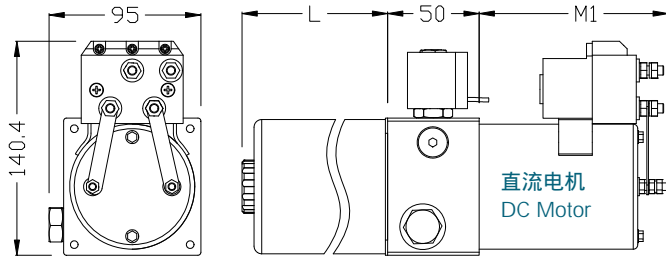
No DC Starter Relay, no Motor Cover, IP55



S

型式，安装直流接触器，无防护罩，IP55

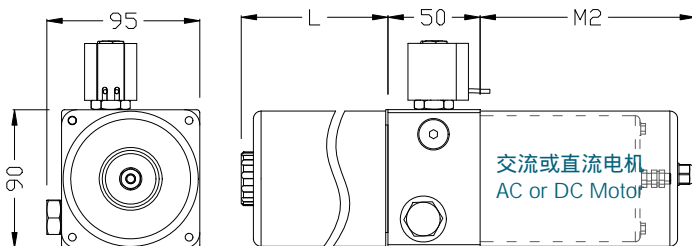
With DC Starter Relay, no Motor Cover, IP55



P

型式，不安装直流接触器，电机有防护罩，IP67

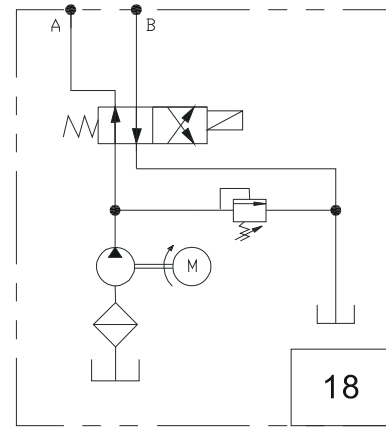
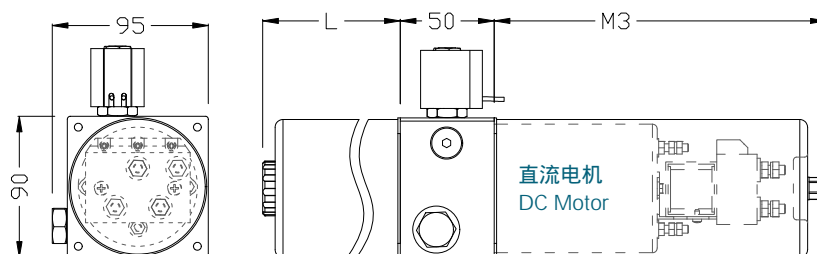
No DC Starter Relay, with Motor Cover, IP67



F

型式，安装直流接触器，电机有防护罩，IP67

No DC Starter Relay, with Motor Cover, IP67



1. 除DC220V电压外，12V和24V的直流电机启动和工作时都需要直流接触器，如果您的控制部分有安装接触器，则可选择 N 或 P型式。

The DC motor with 12V or 24V should works with a starter relay due to high current. You need it if you have no controller or your controller doesn't has a starter relay, the style S or F.

2. 尺寸“L”是油箱长度，见下表

Dim “L” is the length of oil tank:

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*更大的油箱容积可定制，请咨询我们

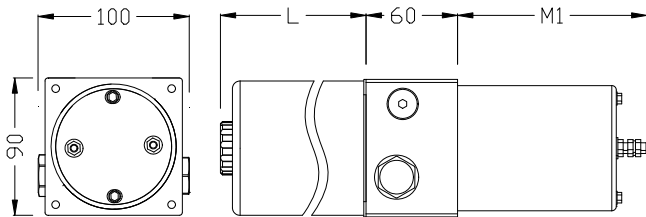
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TC50D	158	170	—	N,S,P
TC80D	158	170	—	N,S,P
TC15A	—	170	—	P
TC30A	—	170	—	P

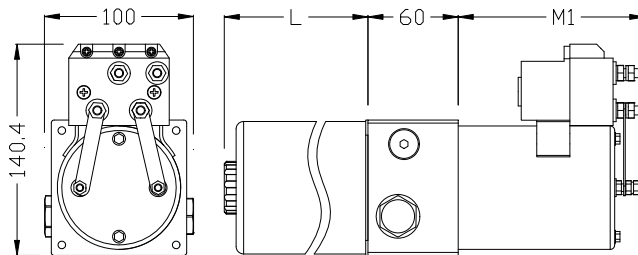
Series TC

微型液压动力系统 Mini Hydraulic Power Unit Circuit #31 油路

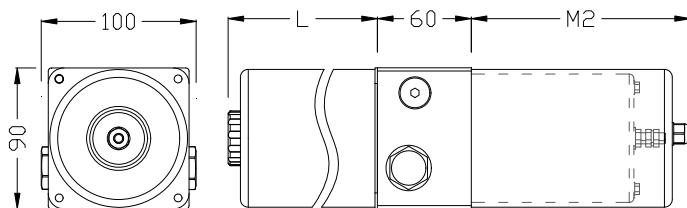
N 型式，不安装直流接触器和防护罩，IP55
No DC Starter Relay, no Motor Cover, IP55



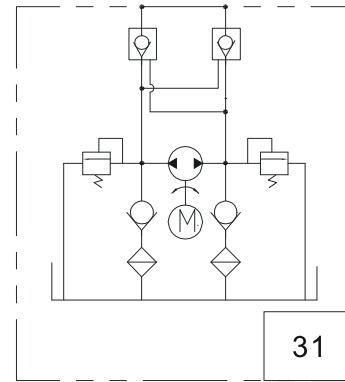
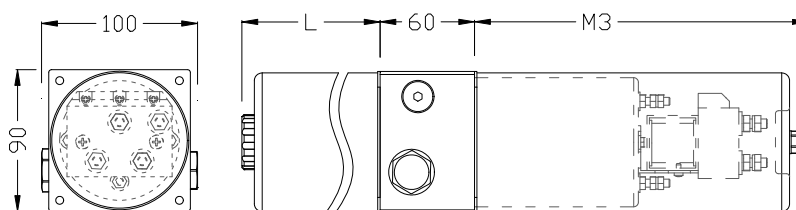
S 型式，安装直流接触器，无防护罩，IP55
With DC Starter Relay, no Motor Cover, IP55



P 型式，不安装直流接触器，电机有防护罩，IP67
No DC Starter Relay, with Motor Cover, IP67



F 型式，安装直流接触器，电机有防护罩，IP67
No DC Starter Relay, with Motor Cover, IP67



1. 除DC220V电压外，12V和24V的直流电机启动和工作时都需要直流接触器，如果您的控制部分有安装接触器，则可选择 N 或 P型式。

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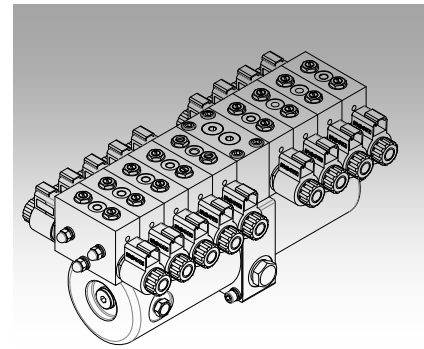
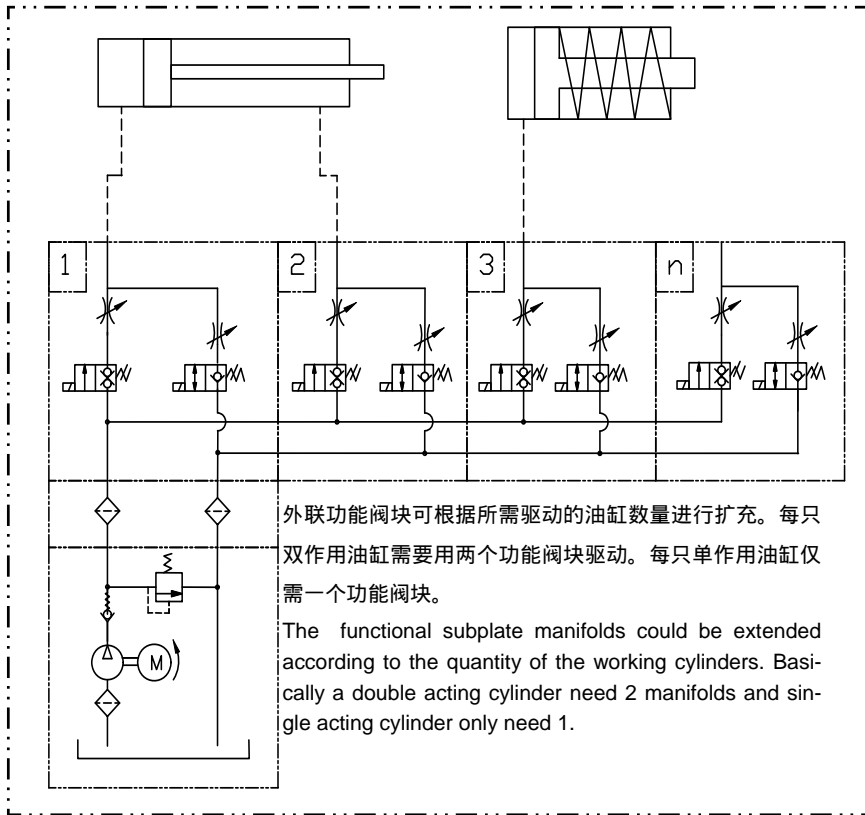
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产品组 Group	M1 (mm)	M2 (mm)	M3 (mm)	可用型式 Style
TC15D	140	170	200	N,S,P,F
TC25D	140	170	200	N,S,P,F
TC35D	140	170	200	N,S,P,F
TC50D	158	170	—	N,S,P
TC80D	158	170	—	N,S,P
TC15A	—	170	—	P
TC30A	—	170	—	P

液压原理 Hydraulic Circuit

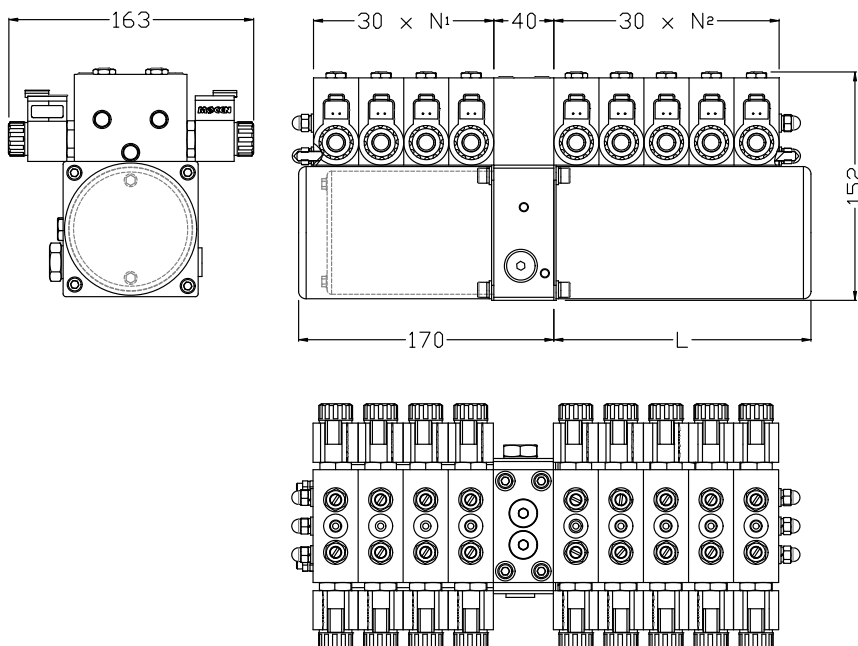


典型应用; 医疗手术床 Application: Medical Surgery Table

产品特点：

- 结构紧凑，系统高度集成
- 采用高效医疗行业专用直流电机，整体噪音低于50dB
- 采用模块式设计，可根据客户产品进行增减，广泛适用于各种不同应用
- 每路执行元件均可实现完全单独控制，互不干扰

外形尺寸 Overall Dimensions



Feature :

- Very compact size, highly integrated valve and manifold
- High efficiency medical DC motor, low noise less than 50dB
- Modular design, configurations are available per customer's application
- Independent control of every actuator.

系统的整体长度根据选用的外联功能阀块的数量和结构形式有所区别。

The total length is depend on the quantity and configuration of the functional subplate manifolds.

Series TS

微型液压动力系统 Micro Hydraulic Power Unit TS 系列

产品特点：

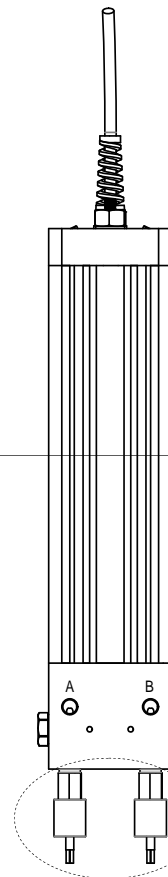
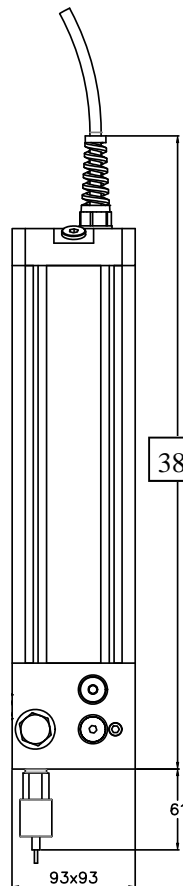
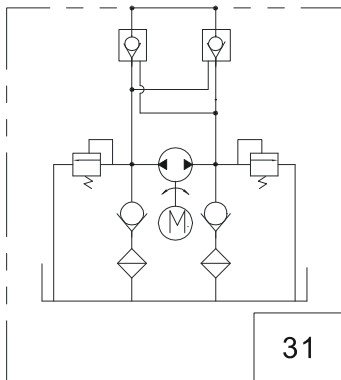
- 一体式设计，外形美观，体积非常小；
- 采用油浸式高效交流电机，最大可输出到300W；
- 防护等级IP67，可浸水使用；
- 整体铝制外壳阳极氧化，有效防锈；
- 电压AC220V, AC380V 等，其他交流电压可定制。



目前仅有交流供电可用

Feature :

- All in One design, super compact.
- High efficiency oil immersed AC motor, power up to 300W.
- Production grade IP67, available working in water
- All Aluminum Body, Rust protection
- Voltage AC220V , AC380V, etc.



总体长度
Total Length
= 388 + L (mm)

油箱有效容积
Available Volume
= 0.005(L/mm) * L (mm)

选项：
可选择性安装压力开关或压力传感器等
Option :
Pressure Switch, Pressure Sensor or other additional parts optional

可选油路 (相关产品细节咨询我司)

Available Hydraulic Circuits (for more details, please consult us)

