HU 63·100

HILOCK UNITS 气动泵站单元

■概要 Outline

HU型气动泵站单元由SR气动泵、气动电磁阀、气控液压换向阀（无泄漏型）和压力开关组成。电磁阀、换向阀、压力开关、回路功能都安装在一块底板上。

操作方式：HU-S型为电气控制操作，HU-M 型为手动操作，HU-P为外部先导控制。

HU型泵站结构紧凑，适合多种用途。根据需要的油压和流量，有多种型号的SR泵可供选择（HU63系列为标准系列，HU100系列适用于需要流量较大的场合）。另外，油压压力表和气动三联件是气动泵站的标准配置。只需提供压缩空气，HU型系列气动泵站即可产生高压液压油，这种泵站不仅适用于快速换模，也适用于其它液压锁紧系统。

HU type HI-LOCK UNITS are hydraulic units to which a SR pump (pneumaticdriven hydraulic pump) and air pilot type hydraulic selector valve (non-leak type) are built in. Selector valves, pressure switches, optional circuits, and stand-by circuits can be mounted with the manifold. HI-LOCK UNITS are designed to be flexible and compact for various applications.

The SR pump can be selected freely according to the discharge rate (HU63 Series for standard type and HU100 Series for greater discharge rate). In addition, pressure gauges and air filters are standardly equipped. Where there is an air source, there are always HU70 HI-LOCK UNITS with high oil pressure. They can be used not only in clamping systems but also in other lock systems.

■通用参数 Common Specifications

最高使用压力	Max.working pressure	39.2MPa (400kgf/cm²)
最高供气压力	Max.supply air pressure	0.7MPa (7kgf/cm²)
压缩空气 压力范围	SR pump ari pressure range (set by pressure reducing valve)	0.2～0.6MPa (2～6kgf/cm²)
使用温度范围	Working temperature range	-5～60℃
电磁阀 使用 电压	Solenoid valve working voltage	※ AC100V/100V,AC200V/220V,50/60Hz,DC24V
使用油	Hydraulic oil	一般液压油 (ISOVG32～VG56) General hydraulic fluid
油箱涂装颜色	Color of tank	7.5BG4.5/1 MUNSEL 7.5BG 4.5/1

■型号表示方法 Type Designation

HU❶-❷❸❹-❺-A2

❶ 回路数 No. of circuits	
1	1回路 1 circuit
2	2回路 2 circuit
3	3回路 3 circuit
4	4回路 4 circuit

❷ 控制阀数量 No. of operating valve	
1	1個 1 piece
2	2個 2 piece
3	3個 3 piece
4	4個 4 piece

❸ 操作方式 Operating method	
S	电气操作 Electrical
M	手动操作 Manual
P	外部先导 Pilot operate

互锁回路L不能和P一起使用

❹ 回路功能选择 Circuits optional	
無記号 No marking	無 None
R	加溢流阀 with relief valve
L	互锁回路 with interlock circuit
T	1分2回路 with ONE-TWO circuit
O	备用回路 with standby circuit

S：操作盘上操作

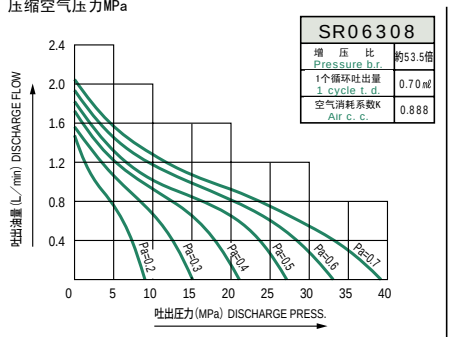
P：推荐和外部先导阀M301一起使用

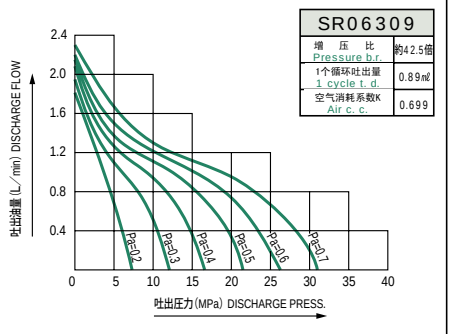
●SR气动泵吐出流量特性

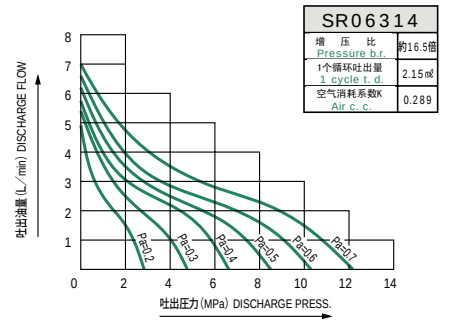
●Discharge fiowrate characteristics of SR pump

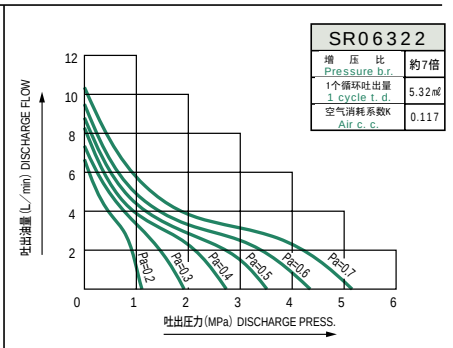
使用条件：
油温20℃ 粘度VG32
压缩空气压力MPa

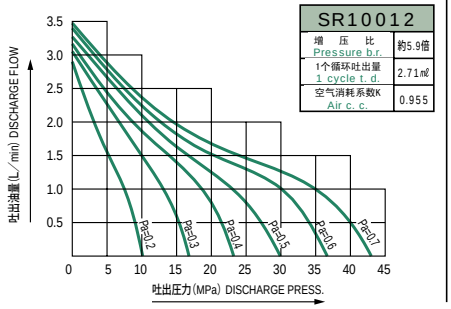
Working condition: Oil temperature 20℃
Viscosity VG32
PA: Supply air pressure MPa (kgf/cm²)

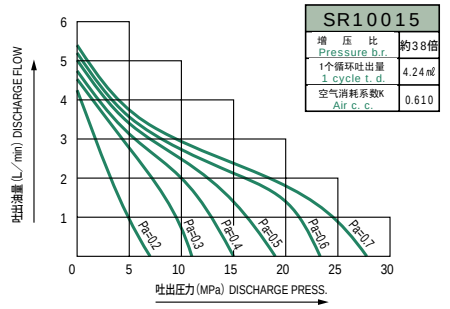


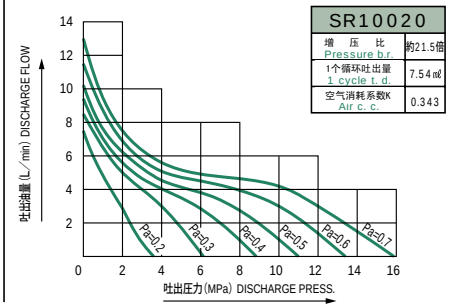






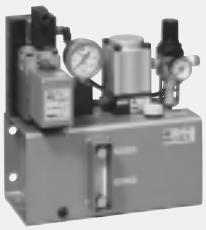






❺ 泵的型号 Pumpe type		吐出压力范围 (MPa) Discharge pressure (Mpa)	无负荷吐出量 (l/min)※1 Free discharge volume (l/min) note 1	压力表量程 (MPa) Pressuregauge scale (Mpa)
06308	SR06308□-A2	9.1～33.0	1.7	60
06309	SR06309□-A2	7.4～26.2	2.1	40
06314	SR06314□-A2	2.9～10.3	5.4	25
06322	SR06322□-A2	1.1～4.3	8.2	10
10012	SR10012□-A2	10.1～36.6	3.2	60
10015	SR10015□-A2	6.6～23.4	4.7	40
10020	SR10020□-A2	3.8～13.4	9.2	25

※1 压缩空气压力：0.4MPa，使用油：ISOVG32，温度：20℃。
note 1 Supply air pressure : 0.4MPa Used oil : General hyd. fluid(iso VG32) at 20℃



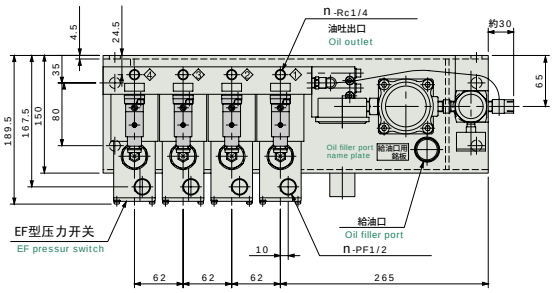
HU1-1S-06308-A2

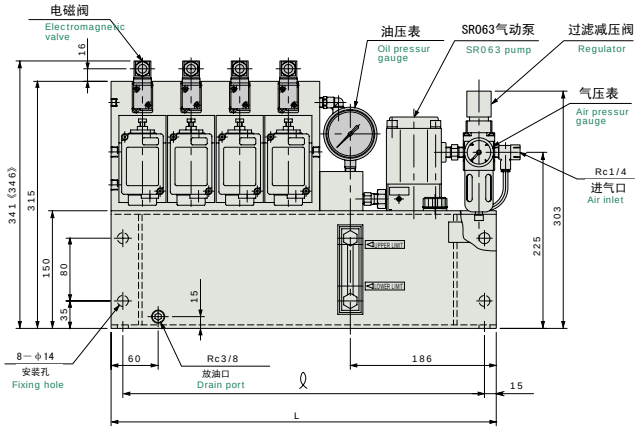
HU2-2S-10012-A2

HU3-3SL-06309-A2

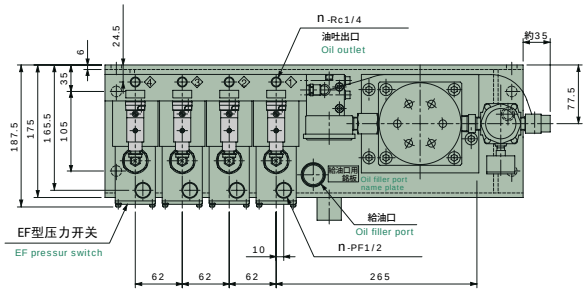
HU4-3STO-10012-A2

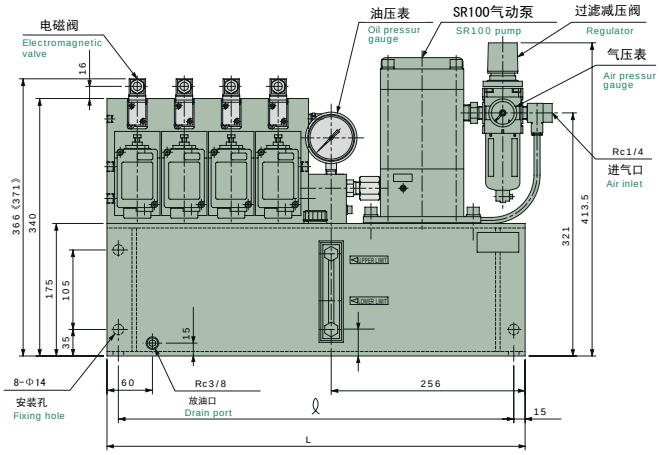
HU□-□S□-063-□-A2





HU□-□S□-100-□-A2





NOTE : 1) Dimensions in bracket 《 》 for double solenoid type. Refer fig.2 for dimensions of light-surge protection circuit or DIN type terminal.

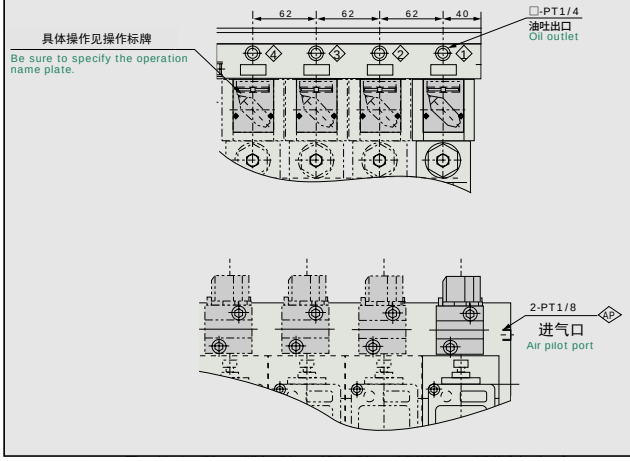
■ 外形尺寸 Common Dimensional Specifications

型号 Type / 尺寸 Dimentions	L (mm)	ℓ (mm)	全容量 Tank vol. (ℓ)	有效变油量 Oil capacity (ℓ)	质量 Mass (kg)
HU1-□□□-063-A2	305	275	4.1	1.5	22.0
HU2-□□□-063-A2	367	337	5.4	2.0	30.7
HU3-□□□-063-A2	429	399	6.6	2.5	39.4
HU4-□□□-063-A2	491	461	7.8	2.9	48.1

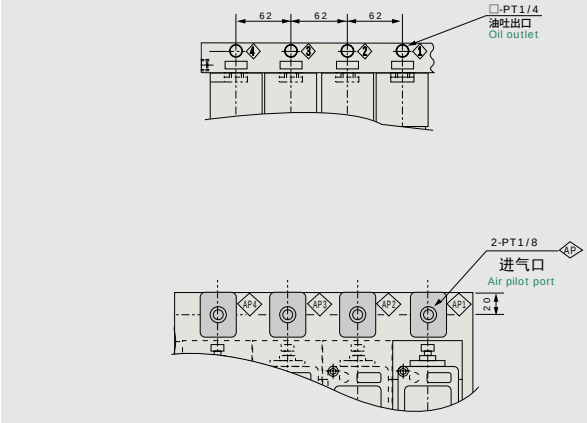
■ 外形尺寸 Common Dimensional Specifications

型号 Type / 尺寸 Dimentions	L (mm)	ℓ (mm)	全容量 Tank vol. (ℓ)	有效变油量 Oil capacity (ℓ)	质量 Mass (kg)
HU1-□□□-100-A2	366	336	7.6	2.5	37.0
HU2-□□□-100-A2	428	398	9.2	3.0	46.4
HU3-□□□-100-A2	490	460	10.9	3.6	55.8
HU4-□□□-100-A2	552	522	12.5	4.1	65.2

HU□-□M□-□-□-A1

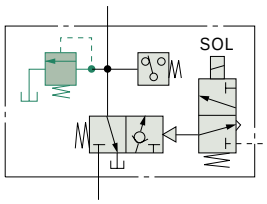


HU□-□P□-□-□-A1

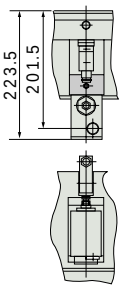


气动泵站单元 – 系列

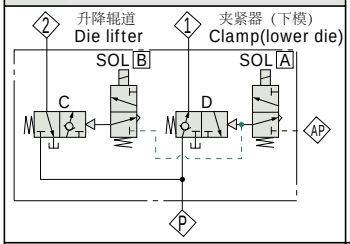
R 溢流阀



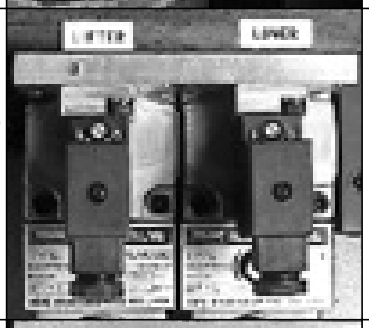
溢流阀是一种高性能直动式的阀，在无泄漏的回路中，由于挤压使油的温度发生变化导致油的膨胀，最终油压升高，溢流阀可使其保持一恒定的压力。 上述情况在回路上选装溢流阀

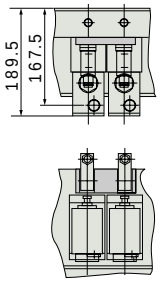


L 互锁回路

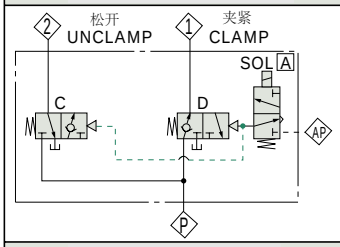


在液压系统中，有些回路相互制约，即在有的回路需要供油时，有的回路必须排油，这些回路在电气控制方面必须是分别操作的，为防止误操作在系统内部增加互锁功能，即互锁回路。

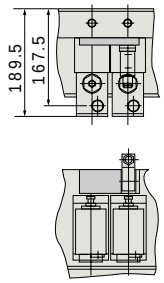




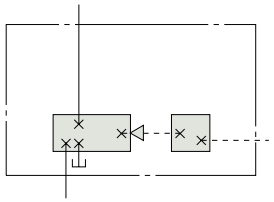
T 1分2回路



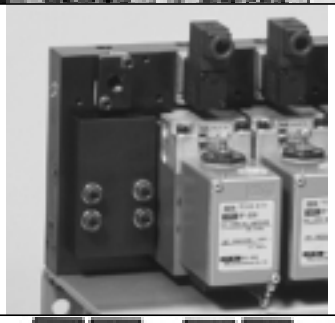
在夹紧系统中，一条回路夹紧，另一条回路必须松开，为保证这两条回路一条夹紧一条松开，选择1分2回路，就是一个电磁阀控制两条回路，当电磁阀A通断时C、D同时动作。 此回路适用于NSY型夹紧器。

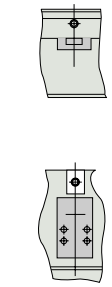


O 备用回路

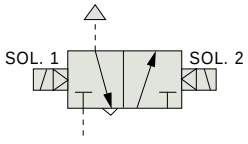


在气动泵站阀板上预留回路接口，不安装电磁阀、换向阀和压力开关，将来需要增加回路时，只需将元气件安装即可，这样既降低了成本又很方便。 将来可能要增加回路的请选择加备用回路。

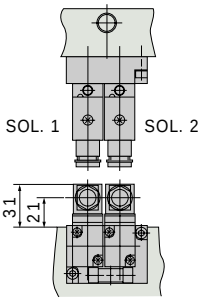




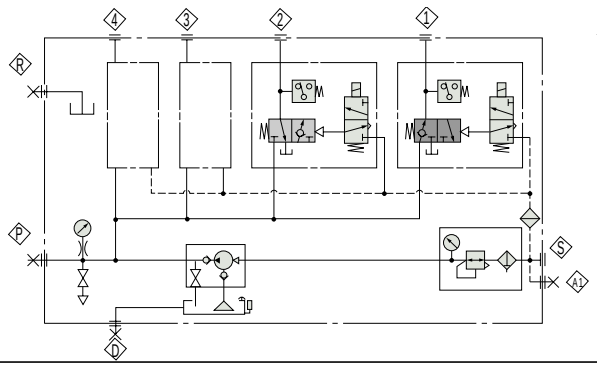
双线圈电磁阀



单线圈电磁阀一般断电夹紧，双线圈电磁阀用于断电时夹紧器保持断电前状态或操作回路需换向阀来保持状态的场合，



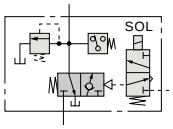
回路和换向阀的类型



2 常闭型

Normal Closed

NC回路



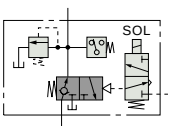
电磁阀SOL通电，压力上升。用于模具升降辊道。

Moving SOL to ON raises pressure. Suited to the die-lifter circuit.

1 常开型

Normal Open

NO回路



电磁阀SOL断电，压力上升。用于模具夹紧回路。（断气和断电情况下可保压）

Moving SOL to OFF raises pressure. Suited to the clamp circuit. (Keeps pressure constant during power failure and air failure.)