

Progressive centralized grease lubricating system

递进式集中油脂润滑系统

递进式集中油脂润滑系统概述

Description of the Progressive centralized grease lubrication system

递进式油脂润滑系统由油脂滤油器、抵抗式油脂润滑泵（或递进式油脂润滑泵）、递进式分配器、铜接头、油管等组成。

Progressive centralized grease lubrication system consists of grease filter, resistance grease lubrication pump (or progressive type grease lubrication pump), the progressive distributor, copper fittings, oil pipe, etc.

1

系统特点

- 系统强制向每个润滑点注油。
- 给油量精准，出油量固定，不因油品黏度、温度变化而变化。
- 循环检测开关可监测润滑系统管路断流、失压、堵塞、卡死等状况。
- 系统中任何一个分配器出油孔出现不工作时，系统循环供油将会产生异常。

System features

- The system forces oil injection to each lubricating point.
- The oil is supplied accurately and ejected oil quantity is constant, which is not changed subject to oil viscosity and temperature.
- The cycle testing switch can monitor the lubricating system out of flow, out of pressure, blocking and sticking etc.
- When oil outlet of any distributor of the system does not work, cycle oil supply of the system may be fault.

2

系统配置注意

- 主管须用铜管或高压橡胶油管。
- 为确保每次循环每个润滑点出油，一个出油口只能对应一个润滑点。

Attentions for system configurations

- The main oil pipe shall be made of copper pipe or high-pressure rubber oil pipe.
- To ensure that oil is ejected to each lubricating point each point, one oil outlet is corresponding to one lubricating point.

3

安装使用注意

- 各连接油管口裁剪平整，确定连接完好不漏油。
- 安装时保证各管路内部清洁。
- 请使用正厂干净无杂质的000-0油脂。
- 适用温度0~50℃。
- 请从正确的加油孔加油，严禁打开抑油块从油杯上方加油。
- 注意使用环境温度变化，适当调整使用油品黏度，建议在15℃以下时用000，25℃以上时用000-0。

Attentions for installation and use

- The oil outlet pipeline orifices shall be cut smooth, make sure the connection is intact and no oil leakage.
- In the process of installing, please ensure that interior of the pipeline is clean.
- Please use the correct, clean and impurity-free 000-0 oil grease. Applicable temperature 0~50℃.
- Please refill oil from the correct oil refilling orifice. Do not open the oil block to refill oil above the oil cup.
- Please notice environmental temperature, adjust viscosity of oil products, 000 oil grease is recommended below 15℃, and 000-0 oil greases are recommended for temperature above 25℃.

4

基本适用范围

广泛适用于润滑点多，管路距离远(高)，给油量精准与每点必须强制给油的机械设备。

Basic scope of application

Extensively used for machinery and equipment with excessive lubricating points, distance pipelines, and accurate oil supply point for compulsory oil supply.

5

系统搭配递进式分配器

GPA、GPB、GPC、GPD递进式黄油分配器。

Systems with progressive distributor

The system is configured with progressive distributor. GPA、GPB、GPC、GPD progressive butter distributor.

6

该系统主机包括

柱塞泵类：GEE、GEB-01、GEC-01、GET
GEN-01、GEO-01、GEP-01
齿轮泵类：GTB-A、GTB-C

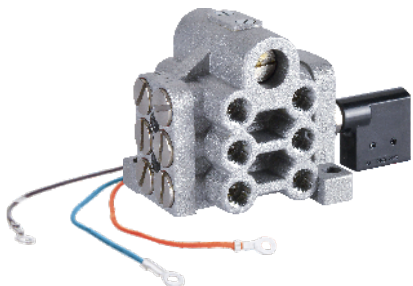
The system is composed of

Plunger pump: GEE、GEB-01、GEC-01、GET、GEN-01、GEO-01、GEP-01
Gear pump: GTB-A、GTB-C

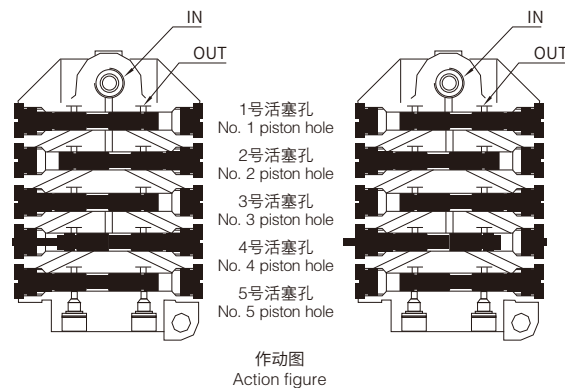
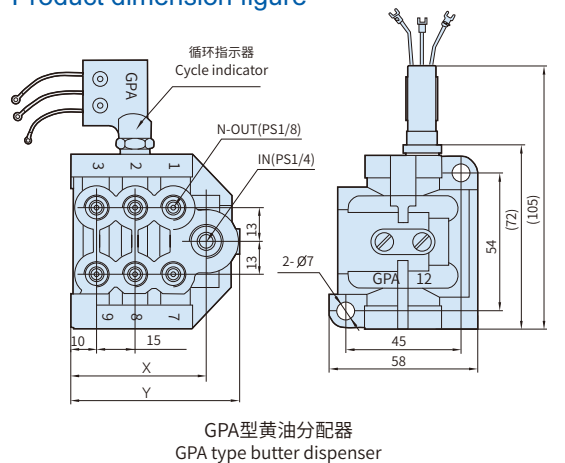
GPA 型(Type)

油脂分配器 Progressive grease distributor

■ 递进式油脂分配器 Butter lubricating system



产品外形尺寸图
Product dimension figure



GPA 型式及技术参数
Model GPA and technical parameters

型式 Model	侦测开关 Detecting switch	出口数 Outlet quantity	X	Y	重量(g) Weight
GPA-2	无 NO	2	38	51	300
GPA-4		4	38	51	300
GPA-6		6	38	51	300
GPA-8		8	38	51	300
GPA-10		10	53	66	400
GPA-12		12	53	66	400

订货编制说明 Order description

GPA- 出口口数 Quantity of oil outlets	空白Blank	不带循环指示器 Without piston detector
	M	带循环指示器 With piston detector
2~12	出口数为2~12位 The oil outlet is at position 2~12.	

概述

递进式分配器，是一款设计先进、结构合理的油量分配器。它能够与手动、电动、气动润滑泵等组成单线润滑系统，适用于各种中小型机床和塑料机械设备，以及相似应用场合的理想产品。一组GPA分配器通常可提供4、6、8、10或12个润滑点的润滑。GPA分配器只有0.3mL/cy一种规格的排量。

※注：对于分配器的出口口，不能堵塞任一出口口，否则会影响其正常工作，损坏分配器。

Overview

The progressive butter dispenser is an oil dispenser with advanced design and reasonable structure. It can form a single-line lubrication system with manual, electric and pneumatic lubrication pumps, etc. It is an ideal product for various small and medium-sized machine tools and plastic machinery and equipment, as well as similar applications. A set of GPA dispensers typically provides 4, 6, 8, 10 or 12 lubrication points for lubrication. The GPA distributor only has a displacement of 0.3mL/cy.

※ Note: For the oil outlet of the distributor, do not block any oil outlet, otherwise it will affect its normal operation and damage the distributor.

GPA 分配器技术参数说明

- 最大公称压力：6MPa。
- 标准排量：0.3mL/cy。
- 适用润滑剂范围(在标准温度下)：稀油润滑油≥R68号，润滑脂NLGI000-0。
- 工作环境温度：-10℃~+60℃。
- 装有机械式循环指示器的柱塞副最高循环速率：60cy/min。
- 柱塞副最高循环速率：200cy/min。
- 每组分配器可供润滑点数：4、6、8、10、12。
- 分配器输出的最佳管径与长度：Φ4mm长0.5~2.5m。
- 壳体材料：铝合金。

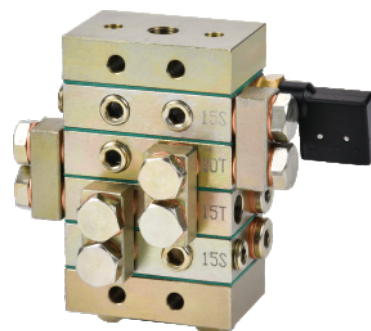
Notes to technical parameters of the GPA distributor

- Maximum nominal pressure:6MPa.
- Standard displacement: 0.3mL/cy.
- Applicable lubricant range (under standard temperature): thin oil lubricating oil ≥ R68, grease NLGI000-0.
- Working environment temperature: -10℃~+60℃.
- The maximum cycle rate of the plunger pair equipped with the mechanical cycle indicator: 60cy/min.
- The maximum circulation rate of the plunger pair: 200cy/min.
- The number of lubrication points available for each group of distributors: 4, 6, 8, 10, 12.
- The optimal diameter and length of the distributor output: Φ4mm, 0.5~2.5m long.
- Housing material: aluminum alloy.

GPB 型(Type)

油脂分配器 Progressive grease distributor

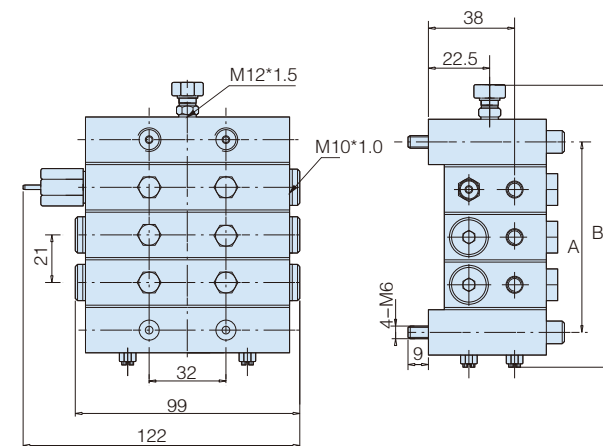
■ 递进式油脂分配器 Butter lubricating system



订货编制说明 Order description

GPB - 实际出口口数 Actual number of oil outlets		出口口管径Outlet pipe diameter	
工作片数 Number of work	03	3片 pieces.	4 接Φ4管Connected to Φ4pipe
	04	4片 pieces.	6 接Φ6管Connected to Φ6pipe
	05	5片 pieces.	入油口管径Enter pipe diameter
注：工作片数可定做3~10片 Note: The number of working pieces can be customized 3~10 pieces		6 接Φ6管Connected to Φ6pipe	8 接Φ8管Connected to Φ8pipe
循环开关方式 Cycle switch mode		工作片规格标记符 Worksheet Spec Marker	
空白 Blank	不带指示棒 Without piston indicator	例：D30SL	
R	带指示棒 With piston indicator		
M	带循环检测微动开关 With piston limit switch		
D	带循环检测电子开关 With piston electric detector		

产品外形尺寸图
Product dimension figure



工作片数 number	A(mm)	B(mm)	工作片数 number	A(mm)	B(mm)
3	89.4	143	7	171.8	223
4	110	163	8	192.4	244
5	130.6	183	9	213	264
6	151.2	203	10	233.6	284

※ 注:A和B为理论值,由于分配器装配存在累计误差,会与实际尺寸有所出入。

※ Note: A and B are theoretical values, due to the cumulative deviation of the distributor assembly, may vary from actual size.

概述

GPB系列递进式分配器，是一种设计先进、结构合理的油量分配器。GPB分配器系列可以用于高压和宽温度变化的工况，它能够与手动、电动、气动泵等组成单线润滑系统，适用于各种中型机床和塑料机械设备，或大型单线润滑系统的子分配器，以及相似应用场合的理想产品。

一组典型的GPB分配器包括由一片“首片”、一片“尾片”和3至10工作片构成。通常一组分配器可提供为3至20个润滑点的润滑。GPB分配器的工作片，有各种规格的排量（详见技术规格）。双出口工作片（在工作片的规格数值后，用T表示双出口），有两个出口口，分别在工作片的两端；单出口工作片（在工作片规格数值后，用S表示单出口）有一个出口口，它可以在工作片的任一端，而另一端出口口处则需要堵塞。注意对于双出口工作片，不能堵塞任一出口口，否则会损坏分配器，影响其正常工作。

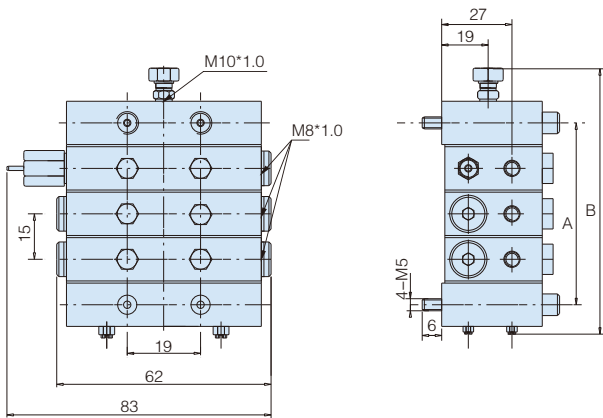
Overview

GPB series progressive distributor is an oil distributor with advanced design and reasonable structure. The GPB distributor series can be used for high pressure and wide temperature change conditions. It can form a single-line lubrication system with manual, electric and pneumatic pumps, etc. It is suitable for various medium-sized machine tools and plastic machinery equipment, or sub-distribution of large single-line lubrication systems. devices, and ideal products for similar applications.

A typical set of GPB distributors consists of a "first piece", a "tail piece" and 3 to 10 working pieces. Typically a set of dispensers provides lubrication for 3 to 20 lubrication points. The working pieces of the GPB distributor are available in various sizes of displacement (see technical specifications for details). Double oil outlet working piece (after the specification value of the working piece, use T to indicate double oil outlet), there are two oil outlets, respectively at both ends of the working piece; single oil outlet working piece (in the working piece specification After the value, use S for single oil outlet) There is an oil outlet, which can be at either end of the working piece, and the oil outlet at the other end needs to be blocked. Note that for the double oil outlet working piece, any oil outlet cannot be blocked, otherwise the distributor will be damaged and its normal operation will be affected.

产品外形尺寸图

Product dimension figure



工作片数 number	A(mm)	B(mm)	工作片数 number	A(mm)	B(mm)
3	59.5	79.5	6	105	124
4	74.5	94.5	7	120	138.5
5	89.5	109	8	135	153.5

※ 注:A和B为理论值,由于分配器装配存在累计误差,会与实际尺寸有所出入。

※ Note: A and B are theoretical values, due to the cumulative deviation of the distributor assembly, may vary from actual size.

技术参数

- 最大工作压力: 16MPa
- 最小启动压力: 1.4MPa
- 单口标准排量: 0.08mL/cy~0.32mL/cy
- 适用润滑剂范围 (在标准温度下): 润滑油 $\geq$ N68号, 润滑脂NLGI 000~2
- 工作环境温度: $-20^{\circ}\text{C}\sim+60^{\circ}\text{C}$ (低温时应使用低温脂)
- 装有机械式循环指示器的柱塞副最高循环速率: 60cy/min
- 柱塞副最高循环速率: 200cy/min
- 每组分配器工作片数: 3~10片
- 每组分配器可供润滑点数: 2~20点
- 分配器输出的最佳管径与长度: $\Phi 4\text{mm}$ 长0.5~2.5m; $\Phi 6\text{mm}$ 长1.2~3.5m
- 阀体材料及镀层: 碳钢表面镀锌

概述

GPD系列递进式分配器,是一种设计先进、结构合理的油量分配器。GPD分配器系列可以用于高压和宽温度变化的工况,它能够与手动、电动、气动泵等组成单线润滑系统,适用于各种中型机床和塑料机械设备,或大型单线润滑系统的子分配器,以及相似应用场合的理想产品。

一组典型的GPD分配器包括由一片“首片”、一片“尾片”和3至8工作片构成。通常一组分配器可提供为3至16个润滑点的润滑。GPD分配器的工作片,有各种规格的排量(详见技术规格)。双出口工作片(在工作片的规格数值后,用T表示双出口),有两个出口,分别在工作片的两端;单出口工作片(在工作片规格数值后,用S表示单出口)有一个出口,它可以在工作片的任一端,而另一端出口处则需要堵塞。注意对于双出口工作片,不能堵塞任一出口,否则会损坏分配器,影响其正常工作。

Overview

GPD series progressive distributor is an oil distributor with advanced design and reasonable structure. The GPD distributor series can be used for high pressure and wide temperature changes. It can form a single-line lubrication system with manual, electric and pneumatic pumps, etc. It is suitable for various medium-sized machine tools and plastic machinery equipment, or sub-distribution of large single-line lubrication systems. devices, and ideal products for similar applications.

A typical set of GPD distributors consists of a "first piece", a "tail piece" and 3 to 8 working pieces. Typically a set of distributors provides lubrication for 3 to 16 lubrication points. The work piece of the GPD distributor is available in various sizes of displacement (see technical specifications for details). Double oil outlet working piece (after the specification value of the working piece, use T to indicate double oil outlet), there are two oil outlets, respectively at both ends of the working piece; single oil outlet working piece (in the working piece specification After the value, use S for single oil outlet) There is an oil outlet, which can be at either end of the working piece, and the oil outlet at the other end needs to be blocked. Note that for the double oil outlet working piece, any oil outlet cannot be blocked, otherwise the distributor will be damaged and its normal operation will be affected.

Technical parameter

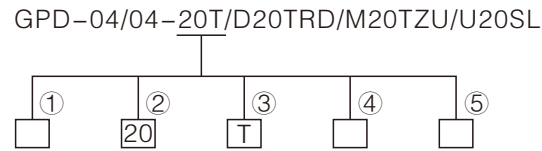
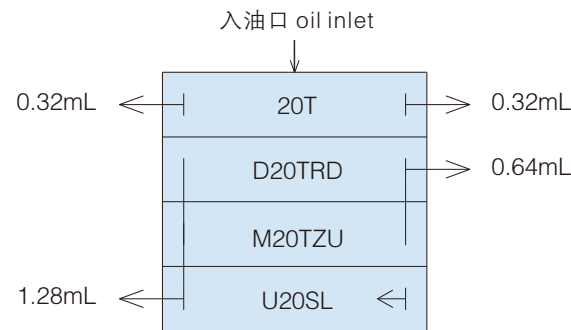
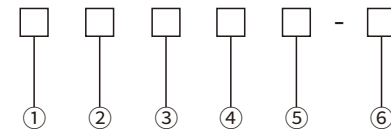
- Maximum working pressure: 16MPa
- Minimum starting pressure: 1.4MPa
- Standard displacement per port: 0.08mL/cy~0.32mL/cy
- Applicable lubricant range (at standard temperature): lubricating oil $\geq$ N68, grease NLGI 000~2
- Working environment temperature: $-20^{\circ}\text{C}\sim+60^{\circ}\text{C}$ (low temperature grease should be used at low temperature)
- Plunger pair with mechanical cycle indicator Maximum cycle rate: 60cy/min
- Maximum circulation rate of plunger pair: 200cy/min
- Number of working pieces of each group of distributors: 3~10 pieces
- The number of lubrication points available for each group of distributors: 2~20 points
- The optimal pipe diameter and length of the distributor output: $\Phi 4\text{mm}$ long 0.5~2.5m; $\Phi 6\text{mm}$ long 1.2~3.5m
- Body material and coating: galvanized carbon steel surface

工作片标记符

- ①⑤分配器(片)相邻给油口上下合并状态标记:
U: 表示该出口与相邻上片给油口合并。
M: 表示该出口与相邻上片、相邻下片给油口同时合并。
D: 表示该给油口与相邻下片给油口合并。
空白: 表示不与相邻下片给油口合并。
- ②GPD分配器(片)给油量规格代号:
05——0.08mL/cy;
10——0.16mL/cy;
15——0.24mL/cy;
20——0.32mL/cy;
- ③分配器(片)左右给油口合并状态标记:
S: 表示该片左右给油口合并。
T: 表示左右油口不合并。
- ④分配器(片)给油口状态标记:
空白: 表示该片左、右侧均设给油口。
Z: 表示该片不设给油口。
L: 表示该片单出口, 左侧设置给油口。
R: 表示该片单出口, 右侧设置给油口。
- ⑥循环指示器组装位置:
L 表示该片设有指示器且装在该片左端。
R: 表示该片设有指示器且装在该片右端。
空白: 表示该片不设指示器。

Worksheet marker

- ①⑤Distributor (slice) adjacent oil supply port upper and lower merge status mark:
U: Indicates that the oil outlet is merged with the oil supply port of the adjacent upper piece.
M: Indicates that the oil outlet is merged with the adjacent upper and lower oil feed ports at the same time.
D: Indicates that the oil supply port is merged with the adjacent lower plate oil supply port.
Blank: Indicates that it is not merged with the oil feed port of the adjacent lower piece.
- ②GPD distributor (piece) specification code for oil supply:
05——0.08mL/cy;
10——0.16mL/cy;
15——0.24mL/cy;
20——0.32mL/cy;
- ③The combined status mark of the left and right oil supply ports of the distributor (piece):
S: Indicates that the left and right oil feed ports of the film are combined.
T: Indicates that the left and right ports are not merged.
- ④Distributor (piece) to oil port status mark:
Blank: Indicates that the left and right sides of the film are provided with oil supply ports.
Z: Indicates that the film has no oil supply port.
L: Indicates that the chip has a single outlet, and the oil supply port is set on the left side.
R: Indicates that the chip has a single outlet, and the oil supply port is set on the right side.
- ⑥Cycle indicator assembly position:
L: Indicates that the piece is equipped with an indicator and is installed at the left end of the piece.
R: Indicates that the sheet is provided with an indicator and is mounted on the right end of the sheet.
Blank: Indicates that there is no indicator for this slice.



※ 注:

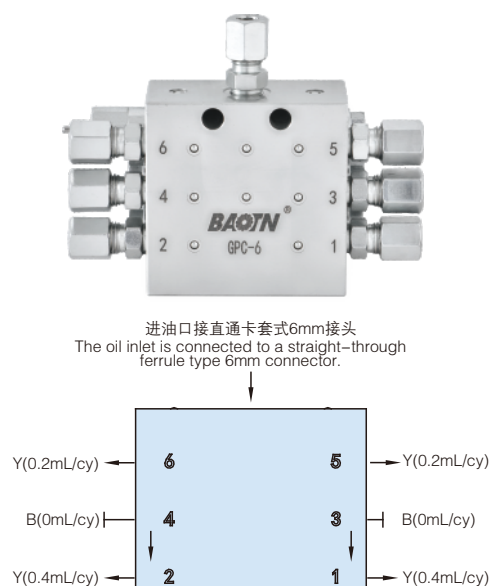
- 大于或等于规格 15T 或 15S 的阀片上, 才可装循环指示器。
- 可用乘积方式表示多个相邻且相同规格的工作片, 如: GPD-07/04-20T*3/20SL-66。
- 用户需改变进、出油管直径, 请在订货时说明。
- 用户在任何情况下, 不得将分配器的出口封堵, 以免超压损坏分配器。
- 工作片最少成组为3片, 最多成组为10片。
- 为保证分配器的标准安装, 请在安装处预留首片(或尾片)上的两个安装螺孔,待现场安装再依据实物配钻其余的两个。

※ Note

- The cycle indicator can only be installed on the valve plate with a size greater than or equal to 15T or 15S.
- Multiple adjacent work pieces of the same specification can be represented by multiplication, such as: GPD-07/04-20T*3/20SL-66.
- Users need to change the diameter of the inlet and outlet pipes, please specify when ordering.
- The user must not block the oil outlet of the distributor under any circumstances, so as not to damage the distributor due to overpressure.
- The minimum grouping of working pieces is 3 pieces, and the maximum grouping is 10 pieces.
- In order to ensure the standard installation of the dispenser, please reserve two mounting screw holes on the first piece (or tail piece) at the installation place, and then drill the remaining two according to the food after on-site installation.

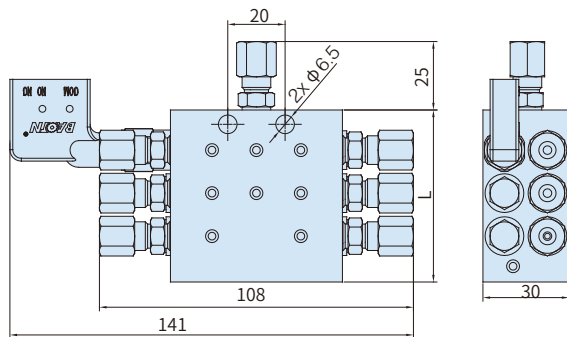
油脂分配器 Progressive grease distributor

■ 递进式油脂分配器 Butter lubricating system



例：GPC-04/06-YYBBYY-6/61
说明：出油口接头为卡套式6mm

产品外形尺寸图
Product dimension figure

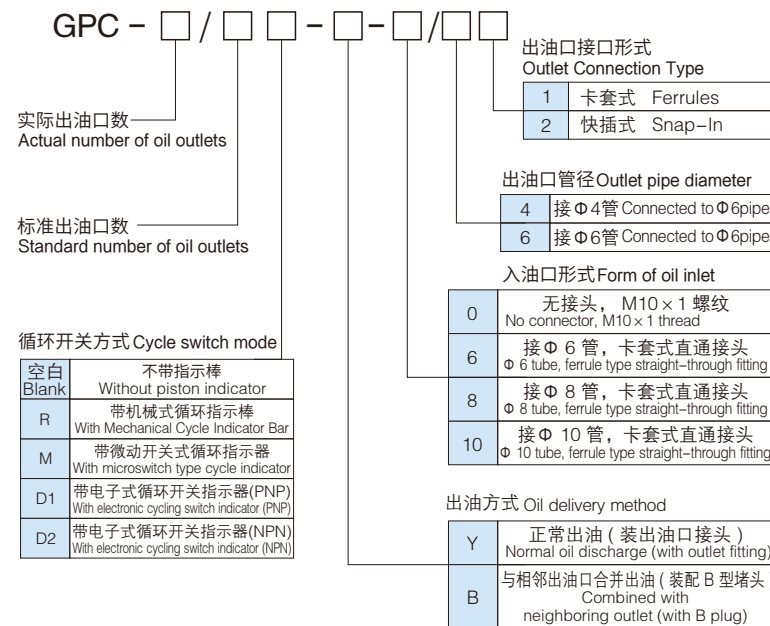


技术参数 Technical parameter

- 最大工作压力: 35MPa
- 标准排量: 0.2mL/cy
- 工作环境温度: -20℃~+80℃
- 适用润滑剂范围(在标准温度下)NLGI 000-2;
≥N68号
- Maximum working pressure: 35MPa
- Standard displacement: 0.2mL/cy
- Working temperature: -20℃~+80℃
- Applicable lubricant range (at standard temperature)
NLGI 000-2; ≥N68

出油口数 Number of oil outlets	6	8	10	12	14	16	18	20
L	60	75	90	105	120	135	150	165

订货编制说明 Order description



概述

整体式递进式分配器GPC可在集中润滑系统中为各润滑点提供计量润滑,具有节能、高效的优点,最多可设20个出油口,工作压力高,防尘防腐蚀,适用于恶劣环境的工况,是车辆、工程机械、机床、风力发电机、塑料机械等集中润滑的理想产品。单出口排量为0.2mL/cy,可以通过拆除堵头和钢球以及更换出油堵塞(B型堵头),提供0.2mL/cy整数倍排量。当润滑剂从进油口进入分配器,分配器就会以递进式的方式连续运行,并以恒定的排量排油。一旦润滑剂停止流动,分配器中的所有柱塞也将停止运动。通过安装特定的指示器观察一个出口柱塞的运动,便可监测整个分配器的运行状况。一旦发生堵塞,便可实现报警。

Overview

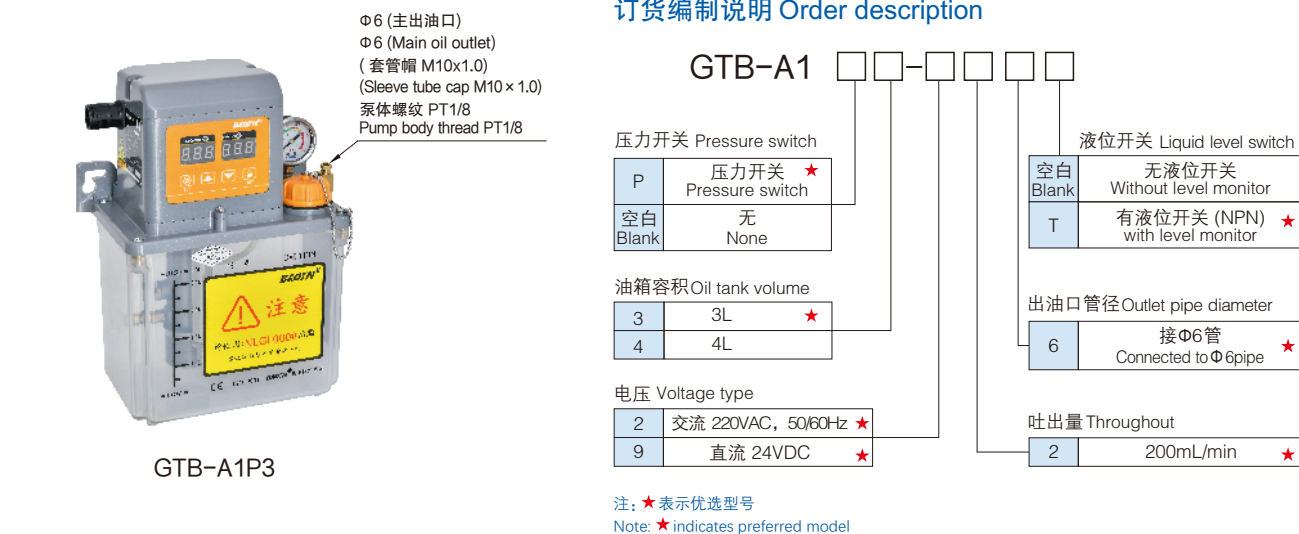
Integral progressive distributor GPC can provide metered lubrication for each lubrication point in the centralized lubrication system, with the advantages of energy saving and high efficiency, up to 20 outlets, high working pressure, dust and corrosion prevention, suitable for harsh environmental conditions, it is the ideal product for centralized lubrication of vehicles, construction machinery, machine tools, wind turbines, plastic machinery and so on. The single outlet displacement is 0.20mL/cy, and it can provide 0.2mL/cy integer multiple displacement by removing the plug and steel ball and replacing the oil outlet plug (B plug). As the lubricant enters the distributor from the inlet, the distributor operates continuously in a progressive manner and discharges oil at a constant displacement. Once the lubricant stops flowing, all plungers in the distributor will also stop moving. The operation of the entire distributor can be monitored by installing a specific indicator to observe the movement of one outlet plunger. In the event of a blockage, an alarm can be realized.

GTB-A1 型(Type)

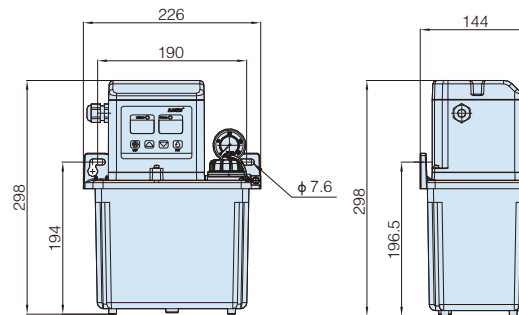
数显油脂润滑泵 Digital Grease lubrication pump

■ 递进式油脂润滑泵(齿轮泵) Progressive-type grease lubrication pump (gear pump)

订货编制说明 Order description



产品外形尺寸图
Product dimension figure



性能与特点

- 系统可设定三种动作模式。
 - a、润滑：开机时先执行润滑时间计时。
 - b、间歇：润滑完成后执行间歇时间计时(时间单位可转换)。
 - c、记忆：断电后再次送电可继续执行之前未完成的间歇时间。
- 润滑时间和间歇时间均可调整。(内设有锁键功能，可锁定设置后的润滑和间歇时间)
- 设有液位开关、压力开关(可选配)。当油量或压力不足时蜂鸣会发出报警、可将异常信号输出。a、压力不足显示Erp。b、液位不足显示Ero。
- 系统时间可设定，LUB润滑时间:1~999(秒)INT间歇时间:1~999(分)。特殊要求可订制，面板指示灯可显示出润滑泵的润滑和间歇状态。
- 系统使用“RST”键，可强制润滑或消除异常报警信号。
- 设有溢流阀，可保护润滑泵及管路由于压力过高而损坏。

Performance and characteristics

- The system is configured with 3 action modes.
 - a Lubricating: when turning on, execute lubricating timing.
 - b Intermittent: execute intermittent timing after lubricating is completed.
 - c Memory: in case of power on after power off, resume incomplete intermittent time.
- Lubricating time and intermittent time can be adjusted. (Built-in locking function, and lubricating and intermittent time after setting is locked).
- Provided with liquid level switch and pressure switch (optional). When oil volume or pressure is insufficient, the beeper makes sound, send alarm and offers abnormal signal output.
 - a When pressure is insufficient, Erp is displayed.
 - b When liquid level is insufficient, Ero is displayed.
- The system time can be configured, LUB lubricating time: 1–999 (seconds), INT intermittent time: 1–999 (minutes) (tailored if specially required) The panel indicator displays lubricating and intermittent status.
- The system uses RST key to force lubricating or eliminate abnormal reporting signal.
- Overflow is provided to protect oil injector and pipeline from being damaged by high pressure.

规格型号及技术参数 Specifications, models and technical parameters

项目 Item 型号 Models	电压 voltage(V)	功率 Power (W)	润滑时间 Lubricating time (s)	间歇时间 Intermittent time (min)	吐出口径 throughout caliber (mm)	额定吐出压力 Rated throughput pressure (MPa)	最大吐出压力 Maximum throughput pressure (MPa)	吐出量 Throughout (mL/min)	压力 开关 Pressure Switch	油脂 传感器 grease sensor	蜂鸣器 Beeper	油箱容量 Oil tank volume (L)	适用油品 Applicable oils
GTB-A1	AC220 DC24	60 35	1~999	1~999	Φ6	2.0	6.0	200	有 Yes	可选配 Optional	有 Yes	3 4	NLGI 000-0

GTB-C1 型(Type)

PLC 油脂润滑泵 PLC grease pump

■ 递进式油脂润滑泵(齿轮泵) Progressive-type grease lubrication pump (gear pump)



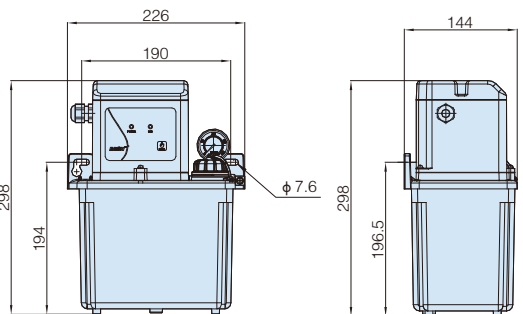
GTB-C1P3

订货编制说明 Order description

GTB-C1						
压力开关 Pressure switch		液位开关 Liquid level switch				
P	压力开关 ★ Pressure switch	空白 无液位开关 Without level monitor				
空白	无 None	T 有液位开关 (NPN) ★ with level monitor				
油箱容积 Oil tank volume		出油口管径 Outlet pipe diameter				
3	3L ★	6 接Φ6管 ★ Connected to Φ6 pipe				
4	4L	吐出量 Throughout				
电压 Voltage type		2 200mL/min ★				
2	交流 220VAC, 50/60Hz ★					
9	直流 24VDC					

注: ★表示优选型号
Note: ★ indicates preferred model

产品外形尺寸图 Product dimension figure



性能与特点

- 设有液位开关、压力开关(可选配)。当油量或压力不足时可将异常信号输出。
- 面板指示灯可显示出润滑泵的通电和润滑状态。系统中设有“FEED”键，可强制润滑。
- 设有溢流阀，可保护润滑泵及管路由于压力过高而损坏。
- 内部配有保险丝防止因短路导致电流过大烧坏IC板和电机

Performance and characteristics

- Provided with liquid level switch and pressure switch (optional). When oil volume or pressure is insufficient, the beeper makes sound, send alarm and offers abnormal signal output.
- The panel indicator light indicates power and lubrication status of the oil injection mold. The system is provided with FEED key, and compulsory lubrication is applied.
- Overflow is provided to protect oil injector and pipeline from being damaged by high pressure.
- Internal fuse is provided to prevent IC board and motor damaged by short circuit.

规格型号及技术参数 Specifications, models and technical parameters

项目 Item 型号 Models	电压 voltage(V)	功率 Power (W)	润滑时间 Lubricating time (s)	间歇时间 Intermittent time (min)	吐出口径 throughout caliber (mm)	额定吐出压力 Rated throughput pressure (MPa)	最大吐出压力 Maximum throughput pressure (MPa)	吐出量 Throughout (mL/min)	压力 开关 Pressure Switch	油脂 传感器 grease sensor	蜂鸣器 Beeper	油箱容量 Oil tank volume (L)	适用油品 Applicable oils
GTB-C1	AC220 DC24	60 35	须和PLC系统连接 Shall be connected to the PLC system		Φ6	2.0	6.0	200	有 Yes	可选配 Optional	无 No	3 4	NLGI 000-0

GEN-1 型(Type)

电动油脂润滑泵 Progressive grease lubrication pump

■ 递进式油脂润滑泵(柱塞泵) Progressive-type grease lubrication pump (piston pump)

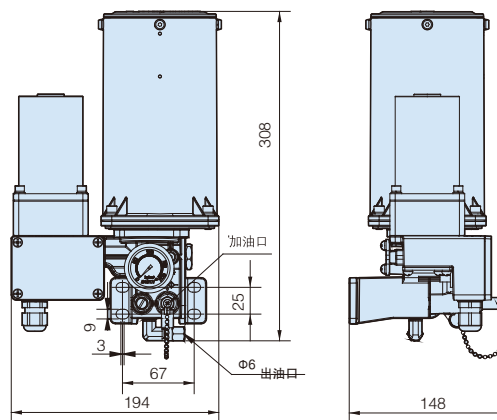


订货编制说明 Order description

GEN-1				
油位检测 Oil level detection		空白 无低油位发讯器 No lowoilleveltransmitter		
T 带低油位发讯器 ★ With lowoilleveltransmitter		输入电压 Input voltage		
		1 单相 1-phase110V		
		2 单相 1-phase220V ★		
		9 DC24V ★		
		油箱容积 Oil tank volume		
		2 2L ★		

注: ★表示优选型号
Note: ★ indicates preferred model

产品外形尺寸图 Product dimension figure



性能与特点

- 可通过主机PLC或独立控制器控制润滑泵工作周期。
- 设有调压阀装置，可自主设定润滑泵的工作压力，保障其工作安全。
- 设有排气阀装置，可排除润滑泵腔内的空气，确保润滑泵排油畅通。
- 设有低油位发讯器，常开触点或常闭触点可根据系统选择。
- 请使用加油枪通过油脂过滤器向润滑泵储油箱内添加油脂，可避免杂质，空气混入润滑系统，从而提高润滑系统使用效果。
- 润滑系统设置压力开关，可有效监控润滑系统管路中断流，渗漏等压力不足现象。
- 采用弹簧式压油盘，真空吸油。
- 在递进式系统中无脱压阀装置，需配合GPA/GPB/GPC/GPD分配器使用（参考63~69页）。

Performance and characteristics

- The lubrication pump duty cycle can be controlled by the host PLC or a separate controller.
- It is equipped with a pressure regulating valve device, which can independently set the working pressure of the lubrication pump to ensure its safety.
- An exhaust valve device is provided to eliminate air from the lubrication pump chamber and ensure lubrication pump drain unblocked.
- With low oil level transmitter, normally open contacts or normally closed contacts can be selected according to the system.
- Use a grease gun to add grease to the lubrication pump reservoir through a grease filter to avoid impurities and air into the lubrication system to improve the lubrication system.
- The lubrication system is equipped with a pressure switch, which can effectively monitor the pipeline system to interrupt the flow, leakage and other pressure shortage phenomenon.
- A spring-loaded oil pan is used for vacuum suction.
- No pressure relief valve device in progressive system, used with GPA/GPB/GPC/GPD distributor(refer to pages 63~69).

规格型号及技术参数 Specifications, models and technical parameters

型式 model	最大吐出压力(MPa) maximum ejection pressure	吐出量 Throughout (mL/min)	出油口径(mm) oil outlet diameter	油箱容量(L) oil tank volume	电机功率(W) motor power	适用油品 Applicable ils
GEN-122	8.0	20	Φ6	2	35	NLGI 000-0
GEN-129	8.0	20	Φ6	2	25	NLGI 000-0

GEO-1 型(Type)

电动油脂润滑泵 Progressive grease lubrication pump

■ 递进式油脂润滑泵(油罐式) Progressive-type grease lubrication pump (oil tank type)

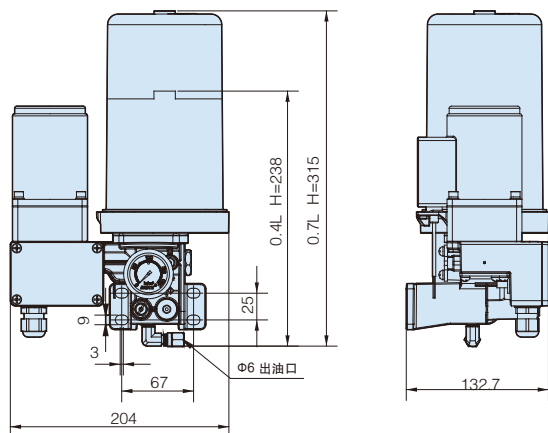
订货编制说明 Order description



GEO -1	
油位检测 Oil level detection	
空白 Blank	无低油位发讯器 No lowoilleveltransmitter
T	带低油位发讯器 With lowoilleveltransmitter ★
输入电压 Input voltage	
1	单相 1-phase110V
2	单相 1-phase220V ★
9	DC24V ★
油箱容积 Oil tank volume	
7	0.7L ★
4	0.4L

注: ★表示优选型号
Note: ★ indicates preferred model

产品外形尺寸图 Product dimension figure



性能与特点

- 可通过主机PLC或独立控制器控制润滑泵工作周期。
- 设有调压阀装置,可自主设定润滑泵的工作压力,保障其工作安全。
- 设有排气阀装置,可排除润滑泵腔内的空气,确保润滑泵 排油畅通。
- 设有低油位发讯器,常开触点或常闭触点可根据系统选择。
- 润滑系统设置压力开关,可有效监控润滑系统管路中断流,渗漏等压力不足现象。
- 采用罐装式油脂,可减少杂质,混入油脂内,更换方便,且不污染环境。
- 在抵抗式系统中无脱压阀装置,需配合GPA/GPB/GPC/GPD分配器使用(参考63~69页)。

Performance and characteristics

- The duty cycle of the lubrication pump can be controlled by the host PLC or a separate controller.
- Equipped with a pressure regulating valve device, the working pressure of the lubrication pump can be independently set to ensure safe operation.
- An exhaust valve arrangement is provided to eliminate lubrication of the air in the pump chamber and to ensure that the lubrication pump drains the oil smoothly.
- For low oil level transmitters, normally open or normally closed contacts can be selected depending on the system.
- The lubrication system is equipped with a pressure switch, which can effectively monitor the pipeline system to interrupt the flow, leakage and other pressure shortages.
- The use of canned grease can reduce impurities, mix in grease, and be easy to replace without polluting the environment.
- No pressure relief valve device in resistance system,used with GPA/GPB/GPC/GPD distributor(refer to pages 63~69).

规格型号及技术参数 Specifications, models and technical parameters

型式 model	最大吐出压力(MPa) maximum ejection pressure	吐出量 Throughout (mL/min)	出油口径(mm) oil outlet diameter	油箱容量(L) oil tank volume	电机功率(W) motor power	适用油品 Applicable ils
GEO-172	8.0	20	Φ6	0.7	35	NLGI 000-0
GEO-179	8.0	20	Φ6	0.7	25	NLGI 000-0

GENH-1 型(Type)

电动油脂润滑泵 Progressive grease lubrication pump

■ 递进式油脂润滑泵(柱塞泵) Progressive-type grease lubrication pump (piston pump)

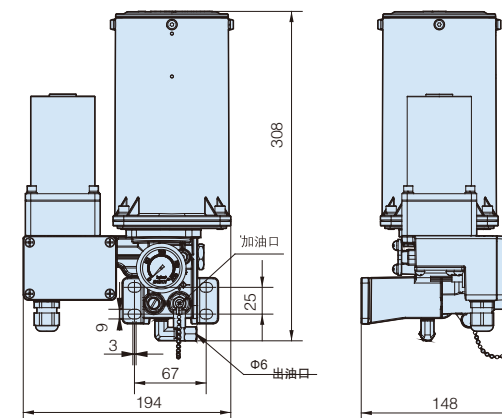
订货编制说明 Order description



GENH -1	
油位检测 Oil level detection	
空白 Blank	无低油位发讯器 No lowoilleveltransmitter
T	带低油位发讯器 With lowoilleveltransmitter ★
输入电压 Input voltage	
2	单相 1-phase220V ★
9	DC24V ★
油箱容积 Oil tank volume	
2	2L ★

注: ★表示优选型号
Note: ★ indicates preferred model

产品外形尺寸图 Product dimension figure



性能与特点

- 可通过主机PLC或独立控制器控制润滑泵工作周期。
- 设有调压阀装置,可自主设定润滑泵的工作压力,保障其工作安全。
- 设有排气阀装置,可排除润滑泵腔内的空气,确保润滑泵排油畅通。
- 设有低油位发讯器,常开触点或常闭触点可根据系统选择。
- 请使用加油枪通过油脂过滤器向润滑泵储油箱内添加油脂,可避免杂质,空气混入润滑系统,从而提高润滑系统使用效果。
- 润滑系统设置压力开关,可有效监控润滑系统管路中断流,渗漏等压力不足现象。
- 采用弹簧式压油盘,真空吸油。
- 在递进式系统中无脱压阀装置,需配合GPA/GPB/GPC/GPD分配器使用(参考63~69页)。

Performance and characteristics

- The lubrication pump duty cycle can be controlled by the host PLC or a separate controller.
- It is equipped with a pressure regulating valve device, which can independently set the working pressure of the lubrication pump to ensure its safety.
- An exhaust valve device is provided to eliminate air from the lubrication pump chamber and ensure lubrication pump drain unblocked.
- With low oil level transmitter, normally open contacts or normally closed contacts can be selected according to the system.
- Use a grease gun to add grease to the lubrication pump reservoir through a grease filter to avoid impurities and air into the lubrication system to improve the lubrication system.
- The lubrication system is equipped with a pressure switch, which can effectively monitor the pipeline system to interrupt the flow, leakage and other pressure shortage phenomenon.
- A spring-loaded oil pan is used for vacuum suction.
- No pressure relief valve device in progressive system, used with GPA/GPB/GPC/GPD distributor(refer to pages 63~69).

规格型号及技术参数 Specifications, models and technical parameters

型式 model	最大吐出压力(MPa) maximum ejection pressure	吐出量 Throughout (mL/min)	出油口径(mm) oil outlet diameter	油箱容量(L) oil tank volume	电机功率(W) motor power	适用油品 Applicable ils
GENH-122	16.0	4.0	Φ6	2	20	NLGI 000-2
GENH-129	16.0	5.0	Φ6	2	20	NLGI 000-2

GEOH-1 型(Type)

电动油脂润滑泵 Progressive grease lubrication pump

■ 递进式油脂润滑泵(油罐式) Progressive-type grease lubrication pump (oil tank type)

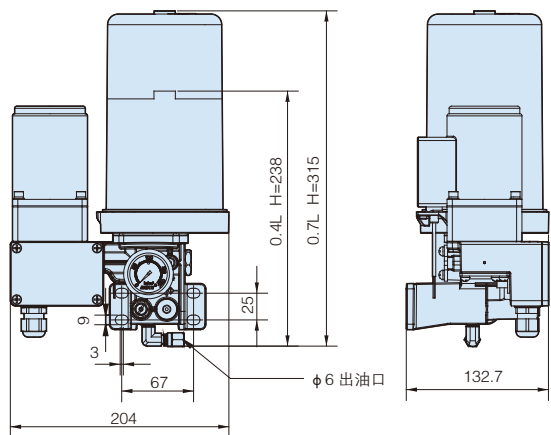
订货编制说明 Order description

GEOH-1

	油位检测	
	Oil level detection	
	空白	无低油位发讯器
	Blank	No lowoilleveltransmitter
	T	带低油位发讯器
		With lowoilleveltransmitter
	输入电压	Input voltage
	2	单相 1-phase220V
	9	DC24V
	油箱容积	Oil tank volume
	7	0.7L
	4	0.4L

注：★表示优选型号
Note: ★ indicates preferred model

产品外形尺寸图 Product dimension figure



性能与特点

- 可通过主机PLC或独立控制器控制润滑泵工作周期。
- 设有调压阀装置,可自主设定润滑泵的工作压力,保障其工作安全。
- 设有排气阀装置,可排除润滑泵腔内的空气,确保润滑泵 排油畅通。
- 设有低油位发讯器,常开触点或常闭触点可根据系统选择。
- 润滑系统设置压力开关,可有效监控润滑系统管路中断流,渗漏等压力不足现象。
- 采用罐装式油脂,可减少杂质,混入油脂内,更换方便,且不污染环境。
- 在抵抗式系统中无脱压阀装置,需配合GPA/GPB/GPC/GPD分配器使用(参考63~69页)。

Performance and characteristics

- The duty cycle of the lubrication pump can be controlled by the host PLC or a separate controller.
- Equipped with a pressure regulating valve device, the working pressure of the lubrication pump can be independently set to ensure safe operation.
- An exhaust valve arrangement is provided to eliminate lubrication of the air in the pump chamber and to ensure that the lubrication pump drains the oil smoothly.
- For low oil level transmitters, normally open or normally closed contacts can be selected depending on the system.
- The lubrication system is equipped with a pressure switch, which can effectively monitor the pipeline system to interrupt the flow, leakage and other pressure shortages.
- The use of canned grease can reduce impurities, mix in grease, and be easy to replace without polluting the environment.
- No pressure relief valve device in resistance system, used with GPA/GPB/GPC/GPD distributor (refer to pages 63~69).

规格型号及技术参数 Specifications, models and technical parameters

型式 model	最大吐出压力(MPa) maximum ejection pressure	吐出量 Throughout (mL/min)	出油口径(mm) oil outlet diameter	油箱容量(L) oil tank volume	电机功率(W) motor power	适用油品 Applicable ils
GEOH-172	16.0	4.0	Φ6	0.7	20	NLGI 000-0
GEOH-179	16.0	5.0	Φ6	0.7	20	NLGI 000-0

GEP-1 型(Type)

电动油脂润滑泵 Progressive grease lubrication pump

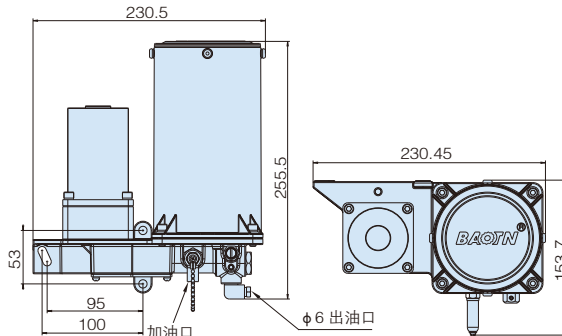
■ 递进式油脂润滑泵(柱塞泵) Progressive-type grease lubrication pump (piston pump)

订货编制说明 Order description

GEP-1

注：★表示优选型号
Note: ★ indicates preferred model

产品外形尺寸图 Product dimension figure



性能与特点

- 可通过主机PLC或独立控制器控制润滑泵工作周期。
- 设有调压阀装置,可自主设定润滑泵的工作压力,保障其工作安全。
- 润滑系统设置压力开关,可有效监控润滑系统管路中断流,渗漏等压力不足现象。
- 设有排气阀装置,可排除润滑泵腔内的空气,确保润滑泵排油畅通。
- 设有低油位发讯器,常开触点或常闭触点可根据系统选择。
- 采用弹簧式压油盘,真空吸油。
- 请使用加油枪通过油脂过滤器向润滑泵储油箱内添加油脂,可避免杂质,空气混入润滑系统,从而提高润滑系统使用效果。
- 在抵抗式系统中无脱压阀装置,需配合GPA/GPB/GPC/GPD分配器使用(参考63~69页)。

Performance and characteristics

- The lubrication pump duty cycle can be controlled by the host PLC or a separate controller.
- It is equipped with a pressure regulating valve device, which can independently set the working pressure of the lubrication pump to ensure its safety.
- The lubrication system is equipped with a pressure switch, which can effectively monitor the pipeline system to interrupt the flow, leakage and other pressure shortage phenomenon.
- An exhaust valve device is provided to eliminate the air in the lubrication pump chamber and ensure that the lubrication pump drains oil smoothly.
- With low oil level transmitter, normally open contacts or normally closed contacts can be selected according to the system.
- A spring-loaded oil pan is used for vacuum suction.
- Use a grease gun to add grease to the lubrication pump reservoir through the grease filter to avoid impurities and air into the lubrication system to improve the lubrication system.
- No pressure relief valve device in resistance system, used with GPA/GPB/GPC/GPD distributor (refer to pages 63~69).

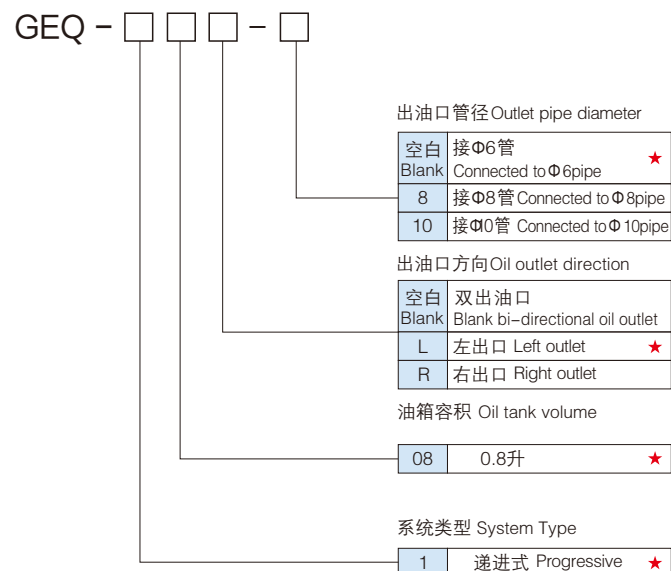
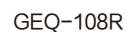
规格型号及技术参数 Specifications, models and technical parameters

型式 Model	流量(mL/min) flow	电压(V) voltage	电机功率(W) Motor Power	油箱容量(L) oil tank volume	出油口径(mm) oil outlet diameter	最大吐出压力(MPa) maximum ejection pressure	适用油品 Applicable ils
GEP-129T	20	单相110	35	2	Φ6	8.0	NLGI 000-0
		单相220	35				
		DC24	25				

手动油脂润滑泵 Manual grease pump

订货编制说明

Order description



Note: ★ indicates preferred model

309

69

75

$\phi 8.5$

黄油嘴
Grease fitting

出油口 Oil outflowing orifice

型号规格 Models and specifications	吐油量 Throughput (mL/min)	最大吐出压 Maximum throughput pressure (MPa)	出油口方向 Oil outlet direction	吐出口径 throughout caliber (mm)	油杯容量 volume of the oil cup (L)	重量 Weight (KG)
GEQ-108L	1.2	8.0	左或右 left or right	Φ 6	0.8	2.0
GEQ-108R				Φ 8 Φ 10		

- 采用压油块，真空吸油，操作简单、方便，设有调压阀，防止润滑泵工作压力超负荷。
- 在抵抗式系统中无脱压阀装置，**需配合GPA/GPB/GPC/GPD分配器使用（参考63~69页）**，设有放气阀，以清理泵内空气，确保排油顺畅。出油口可依据管路的安装，设于左边或右边，使用手动或电动加油枪填充黄油。

- The oil pressurization block is adopted for vacuum oil suction, operation is simple and convenient, and adjustment valve is used to prevent over-pressure of the lubricating pump.
- No pressure relief valve device in resistance system, [used with GPA/GPB/GPC/GPD distributor](#)([refer to pages 63~69](#)). volumetric distributor, and exhausting valve is provided to clear air in the pump to ensure barrier-free oil drainage. The oil outlet is located at the left and right sides of the pipeline, and butter is filled manually or electrically with sprayer gun.

高压润滑泵 High pressure lubrication pump

订货编制说明 Order description



Note: ★ indicates preferred model

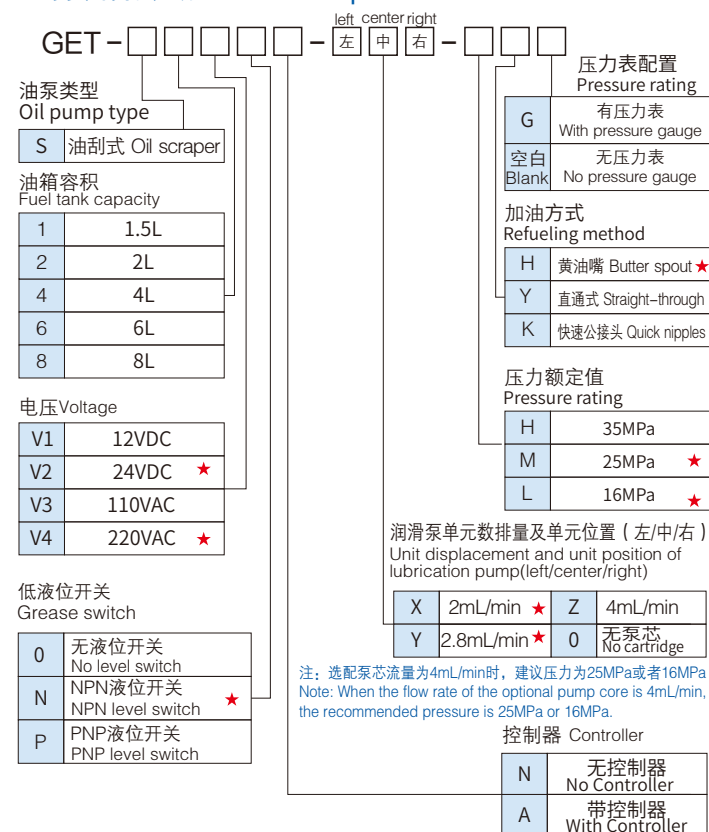
Technical drawing of the H series pump. The front view shows a pump with a main body width of 180mm and a total width of 272.5mm. The side view shows a pump with a main body height of 80mm and a total height of 183(L)mm. The table below provides the capacity for different tank sizes.

容积 tank capacity	1.5L	2L	4L	6L	9L
H	333.5	368.5	474.5	584.5	690.5

注：L长度最长为250mm

- 可通过主机PLC或独立控制器控制润滑泵工作周期。
- 设有低油位发讯器，NPN和PNP可根据系统选择。
- 润滑系统设置压力开关，可有效监控润滑系统管路中断流，渗漏等压力不足现象。
- 泵体材料为铝合金，具有强度高，重量轻等优良物理性能。
- 适用润滑剂范围(在标准温度下): 润滑油 $\geq$ N68号，润滑脂NLGI 000 ~ 2。
- 出口脂口既可直接接入润滑点，也可接入递进式分配器以实现多点润滑。
- 采用刮油板压油装置。
- 单个泵体有1~3个出口口，每个出口口可配置不同排量的柱塞，可选择。
- 配备安全溢流阀和压力表，随时监控系统工作状态，保障其工作安全。
- 支持CAN总线功能，实现与整机的通讯。
- 在递进式系统中无脱压阀装置，需配合GPB/GPC/GPD分配器使用。
- 请使用加油枪或加油机向润滑泵储油箱内添加油脂，可避免杂质，空气混入润滑系统，从而提高润滑系统使用效果。

型号 Models	电压 voltage(V)	公称排量(mL/min) Nominal displacement	公称压力(MPa) Nominal pressure	温度(℃) temperature	容积(L) Volume	防护等级 Protection level	出油口数(个) Number of oil outlet
GET	DC12V	2/2.8/4	35、25、16	-40-80	1.5/2/4/6/8	IP65	1-3
	DC24V						
	AC110V						
	AC220V						



- The working cycle of the lubrication pump can be controlled by the host PLC or an independent controller.
- It is equipped with a pressure regulating valve device, which can independently set the working pressure of the lubrication pump to ensure its work safety.
- Equipped with low oil level transmitter, normally open contact or normally closed contact can be selected according to the system.
- Please use a refueling gun or a refueling machine to add grease to the oil storage tank of the lubrication pump to prevent impurities and air from mixing into the lubrication system, thereby improving the use effect of the lubrication system.
- The lubricating system is equipped with a pressure switch, which can effectively monitor the lack of pressure such as interrupted flow and leakage of the lubricating system pipeline.
- The material of the pump body is aluminum alloy, which has excellent physical properties such as high strength and light weight.
- Applicable lubricant range (at standard temperature): lubricating oil $\geq$ N68, grease NLGI 000 ~ 2
- The grease outlet can be directly connected to the lubrication point, or it can be connected to a progressive distributor for multi-point lubrication.
Use oil scraper oil pressure device.
- A single pump body has 1-5 grease outlets to choose from, and the selectivity is large.
- Equipped with safety relief valve and pressure gauge to monitor the working condition of the system at any time.
- There is no pressure relief valve device in the progressive system, it needs to be used with the GPB/GPC/GPD distributor.

GEF 型(Type)

手动加油枪 Manual grease gun



订货编制说明 Order description

GEF-10

性能与特点

- 适用于像各类稀油、油脂润滑泵添加油剂。
- 将加油泵插入标准15Kg桶装商品润滑脂桶内既可操作。
- 携带方便、操作简单，用途广泛。
- 配备1.5米软管与快插接头。
- 使用介质、环境温度：NLGI 000-2、N22-N320机械油-20~+80℃。

Performance and characteristics

- Applicable for various thin oil, oil grease lubricating pump additive oil pump.
- The refilling oil pump is inserted into standard 15Kg bucket commercial lubricating grease then can be operated.
- Portable, simple operating and extensive application,
- Configured with 1.5m flexible pipe and quick plug.
- Media and environmental temperature: NLGI 000-2 and N22-N320 machine, machine oil -20~+80℃

规格型号及技术参数

Specifications, models and technical parameters

技术参数 Technical parameters	型号Model	GEF-10N□	GEF-10Z□
公称流量 Nominal flow mL/cy		10	10
公称压力 Nominal pressure MPa		2.0	1.5
配管型式 Piping model		尼龙管配快速插接头 Nylon piping quick plug	橡胶软管配快速插接头 Rubber flexible pipe quick plug

GEI 型(Type)

手动加油枪 Manual grease gun



订货编制说明 Order description

GEI-50

性能与特点

- 适用于像各类稀油、油脂润滑泵添加油剂。
- 将加油泵插入标准15Kg桶装商品润滑脂桶内既可操作。
- 携带方便、操作简单。
- 配备1.5米软管与快插接头。
- 使用介质：NLGI 00-1、N22-N320。环境温度：-20~+80℃。

Performance and characteristics

- Applicable for various thin oil, oil grease lubricating pump additive oil pump.
- The refilling oil pump is inserted into standard 15Kg bucket commercial lubricating grease then can be operated.
- It is easy to carry and easy to operate.
- Configured with 1.5m flexible pipe and quick plug.
- Use medium: NLGI 00-1, N22-N320. ambient temperature: -20~+80℃.

规格型号及技术参数

Specifications, models and technical parameters

技术参数 Technical parameters	型号Model	GEI-50N□	GEI-50Z□
公称流量 Nominal flow mL/cy		50	50
公称压力 Nominal pressure MPa		1.5	1.5
配管型式 Piping model		尼龙管配快速插接头 Nylon piping quick plug	橡胶软管配快速插接头 Rubber flexible pipe quick plug

GEJ 型(Type)

手动黄油机 Manual grease machine



GEJ-801

性能与特点

- 操作简单，携带方便，使用范围广；
- 设有拉杆锁片，按下拉杆锁扣弹簧快速伸展收缩管内空间，将润滑油挤至出油口；
- 设有排气孔，避免混入大量气团。

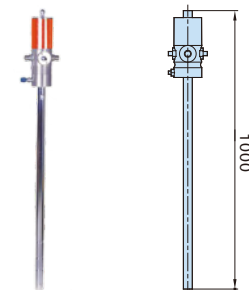
Performance and characteristics

- Simple operation, easy to carry, wide range of use;
- Equipped with a tie rod lock piece, press the tie rod lock spring to quickly expand the space in the contraction tube and squeeze the lubricating oil to the oil outlet;
- Equipped with vent holes to avoid mixing in a large amount of air mass.

项目 project	长度 length (mm)	杆长 Pole length (mm)	管径 Pipe diameter (mm)	容量 capacity (mL)	最大压力 greatest pressure (PSI/MPa)	工作压力 Work pressure (PSI/MPa)	最大出油量 Maximum infestation (mL/cy)	拉杆形式 Tie rod form
GEJ-801	380	320	φ 56	500	10000/69	8000/55	1	加油拉杆 Refueling rod
GEJ-802	430	320	φ 56	600	10000/69	8000/55	2	加油拉杆 Refueling rod
GEJ-803	430	320	φ 56	600	10000/69	8000/55	1	加油拉杆 Refueling rod
GEJ-804	380	320	φ 56	600	10000/69	8000/55	1	链式拉杆 Chain link

GEK 型(Type)

气动黄油机 Pneumatic grease machine



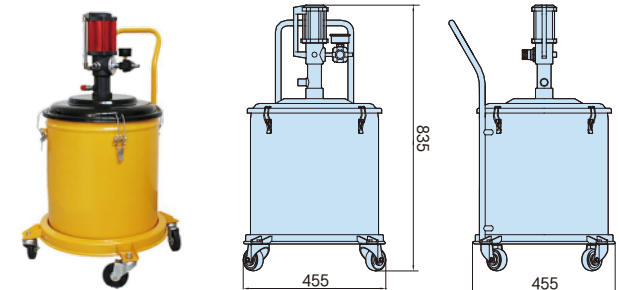
GEK-85

性能与特点

- 贮油筒内装有橡胶密封活塞，在压力作用下，将活塞不断的压向油面，能隔离污染保持油料清洁；
- 使用注油枪将泵排出的高压油料通过高压橡胶管输送到枪，由枪的喷嘴直接与需要的注油点接稳，扣注油枪就把油料注入所需的部位；
- 动力气源设有调压阀，可通过调节气源压力做出相对压力的匹配调整；
- 桶身采用高强度材质制作，坚固耐用。

项目 project	出油压力 Output pressure (MPa)	进气压力 Intake pressure (MPa)	压力比 Pressure ratio	出油量 Oil output (L/min)	容积 Volume (L)	净重 Net weight (KG)	进气管规格 Intake pipe specifications	包装尺寸 Packing size (mm)
GEK-85	30-40	0.6-0.8	50:1	0.85	--	10	四分之一 Quarter	1000*220*150
GEK-85T	30-40	0.6-0.8	50:1	0.85	30	18.8	四分之一 Quarter	455*455*735

注:GHA-85T可直接放置标准黄油桶 note: GHA-85T can be directly placed in a standard butter bucket



GEK-85T

性能与特点

- The oil storage cylinder is equipped with a rubber sealing piston, which continuously presses the piston to the oil surface under the action of pressure, which can isolate pollution and keep the oil clean;
- Use a lubricating gun to deliver the high-pressure oil discharged from the pump to the gun through a high-pressure rubber tube, and the nozzle of the gun directly kisses the required oil injection point, and the trigger is pulled to inject the oil into the required part;
- The power air source is equipped with a pressure regulating valve, which can adjust the relative pressure by adjusting the air source pressure;
- The barrel body is made of high-strength material, which is sturdy and durable.