



Volumetric centralized grease lubricating system

容积式集中油脂润滑系统



容积式集中油脂润滑系统概述

Description of the Volumetric centralized grease lubrication system

容积式油脂润滑系统由油脂滤油器、容积式油脂润滑泵、直通式分油块、容积式油脂分配器、铜接头、油管等配件组成，此润滑系统包括“脱压式定量出油”和“加压式定量出油”两种形式。

The Volumetric grease lubrication system is lubricated by grease oil filter, positive displacement oil pump, straight through the oil, positive displacement oil distributor, copper fittings, tubing and other accessories, the lubrication system includes quantitative oil "to take off the pressure type" and "pressure quantitative oil" two forms.

1 脱压定量出油工作原理

容积式润滑泵工作时，先将润滑油输送到(BTG/BCG型)容积式分配器中，当容积式分配器内储满油后，润滑泵停止工作，同时自动脱压，分配器内的弹簧推动内部活塞，将定量好的润滑油输送到各润滑部位。

2 加压定量出油工作原理

容积式润滑泵工作时，通过输送的压力油推动(BFG型)容积式分配器内部活塞，将容积式分配器内已定量好的润滑油强制性输送到各润滑点。

3 系统配置注意事项

- 在容积式润滑系统中，每一个润滑点必须单独对应容积式分配器的每一个定量出油孔，进行直通式润滑。否则会导致管路无法聚压，使分配器无法正常储油或出油。
- 须搭配容积式润滑泵使用，严禁与抵抗式润滑泵配合使用。

Schematic diagram of de-pressurized quantified oil delivery

When the volumetric lubricating pump is operating, the lubricant is conveyed into the volumetric distributor (model BTG/BCG). When the volumetric distribution is full of oil, the lubricating pump stops operation and depressurizes automatically. The spring in the distributor boosts the piston inside, and quantified lubricant is conveyed to lubricating locations.

Schematic diagram of pressurized quantified oil delivery

When the volumetric lubricating pump is working, the delivered pressurized oil is used to advance the piston inside the volumetric distribution (model BFG), and the lubricant quantified in the volumetric distributor is conveyed to lubricating points compulsorily.

Attentions for system configuration

- In the volumetric lubricating system, each lubricating system shall match each quantified oil outlet of the volumetric distributor for through lubricating. Otherwise, the pipeline cannot stack pressure, and the distributor cannot store or deliver oil as usual.
- It must be used with the volumetric lubricating pump, and cannot be used with the resistible lubricating pump.

4 系统特点

- 每次可将润滑油精准定量地输送到各润滑点。
- 各定量孔出油量不会因油品的黏度、温度变化、注油时间长短而发生变化。
- 同规格的容积式分配器每次出油量不受安装位置的远近、高低等因素影响。
- 按需计量分配各润滑点油量，在实际使用当中，容积式系统更为节能环保，经济实用。

System features

- The lubricant is quantified accurately and delivered to lubricating points.
- Delivered oil volume from quantified orifices is not subject to oil viscosity, temperature and oil injection time.
- Delivered oil volume of the volumetric distributor with the same specifications is not subject to installation location and height.
- Oil volume for lubricating points is distributed according to needs, and the volumetric system is more energy conservation and environmental protection in actual application.

5 系统安装注意事项

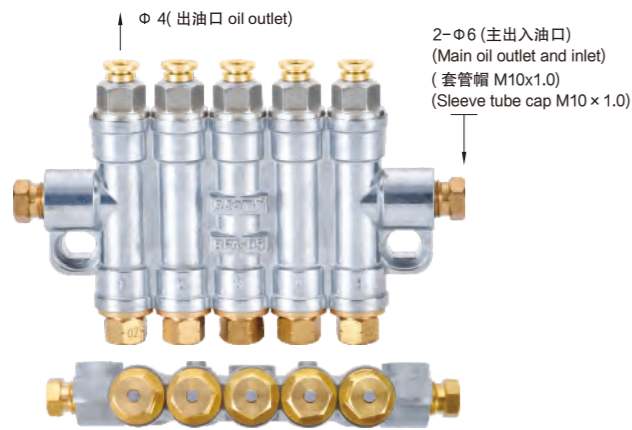
- 各油路管口裁剪平整，确保连接完好不漏油，否则将导致管路有缓慢漏油卸压甚至无法聚压，使分配器无法正常储油或出油。
- 安装时保证各管路内部清洁，润滑泵和主油管路中严禁加装任何止逆装置。
- 请使用优质洁净的新润滑油，最佳通用黏度000#~0#。严禁使用具有高独特性或酸碱性的油品。
- 适用温度0~50°C
- 注意使用环境温度变化，适当调整使用油品黏度值，建议在15°C以下时用000#油品，30°C以上时用00#~0#油品。

Attentions for system installation:

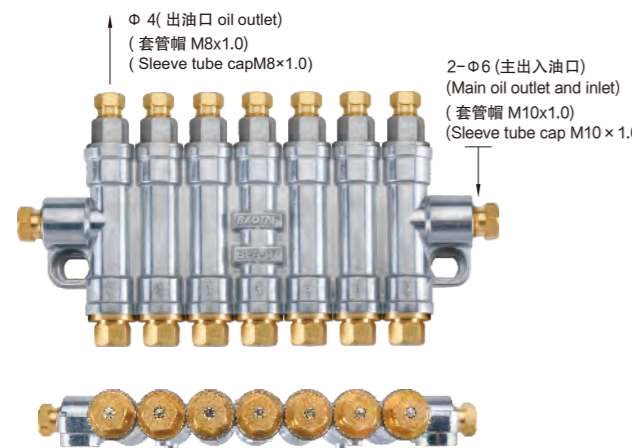
- Oil pipes are cut in orderly to ensure the pipelines are connected well without leakage; otherwise, the pipeline may leak oil slowly, cannot stock pressure, and the distributor cannot store oil or eject oil as usual.
- Keep interior of the pipeline clean in installation, and the lubricating pump and main oil pipe cannot be installed with any check valve devices.
- Please use any high-quality and clean new lubricant, and the best general viscosity is 000#~0#. Oil product with unique feature or alkali or acid features
- Applicable temperature 0~50°C.
- Please notice changes of environmental temperature, adjust oil viscosity, 000# oil product cannot be used under the temperature of 15°C, and 00#~0# oil product shall be used above the temperature of 30°C.



GFA-05

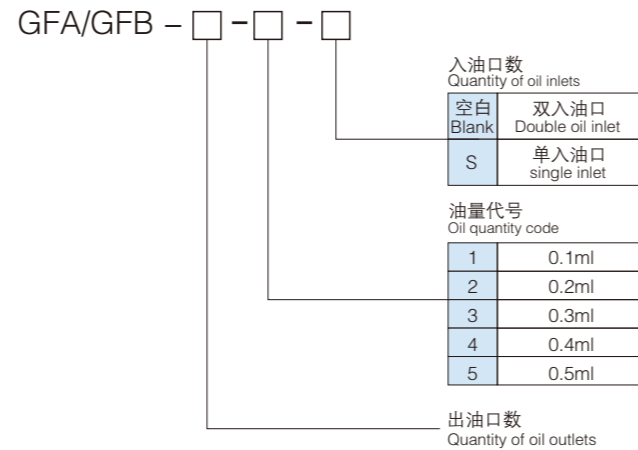


GFB-05



GFA-07

订货编制说明 Order description

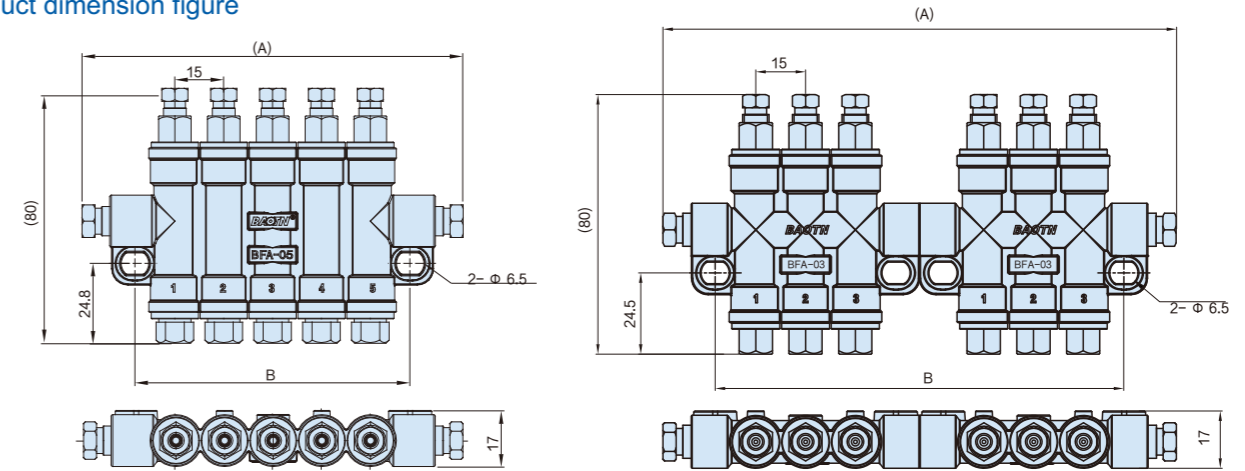


- 油量表示方法:(注:当所有出油口油量值一样时, 只用一个油量值表示)
 - 例1:GFA/GFB-05-2 表示GFA/GFB型5位分配器第1, 2, 3, 4, 5出油口油量全部为0.2毫升/次。
 - 例2:GFA/GFB-05-53235 表示GFA/GFB型5位分配器第1, 2, 3, 4, 5出油口油量分别为0.5; 0.3; 0.2; 0.3; 0.5毫升/次。
- ※注: 8;9;10位, 是GFA/GFB-03;GFA/GFB-04;GFA/GFB-05与GFA/GFB-05分别组合。
6位是GFA/GFB-03与GFA/GFB-03组合。
- Oil volume is indicated as follows (Notes: When oil volume of all oil outlets is the same, only one oil volume level is indicated).
 - Example 1: GFA/GFB-05-02 means the oil ejection volumes of positions 1, 2, 3, 4 and 5 of the 5-position distributor, and oil ejection volume shall be 0.2mg/time.
 - Example 2: GFA/GFB-05-53235 means the oil ejection volumes of positions 1, 2, 3, 4 and 5 of the 5-position distributor, and oil ejection volume shall be 0.5, 0.3, 0.2, 0.3 and 0.5ml/time.
- ※For instance: 8, 9 and 10 are combinations of GFA/GFB-03,GFA/GFB-04,GFA/GFB-05 and GFA/GFB-05.
6 is combination of GFA/GFB-03 and GFA/GFB-03.

规格型号及技术参数: Models, specifications and technical parameters

型号规格 Models and specifications	出口数 Outlet quantity	A	B	吐油量 Throughput (cc/cy)	重量 Weight (g)
GFA/GFB-01	1	69	39	0.1;0.2;0.3;0.4;0.5	168
GFA/GFB-02	2	69	39		168
GFA/GFB-03	3	86	54		232
GFA/GFB-04	4	102	69		299
GFA/GFB-05	5	116.5	84		359
GFA/GFB-06	6	160	123.5		464
GFA/GFB-07	7	144	114		493
GFA/GFB-08	8	186	154		591
GFA/GFB-09	9	202	169.5		658
GFA/GFB-10	10	217	184.5		718

产品外形尺寸图 Product dimension figure

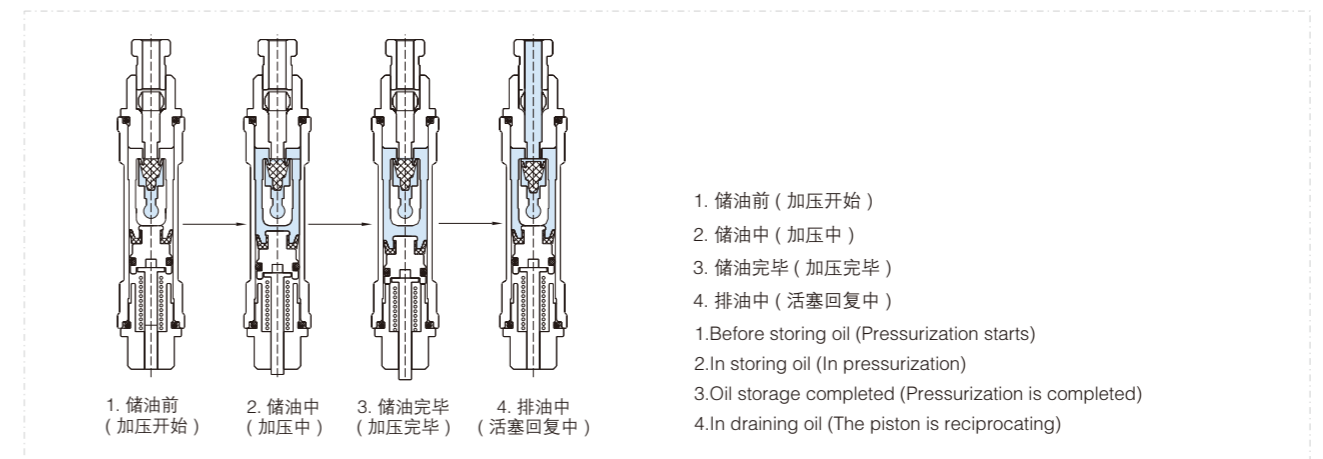


GFA/GFB-05

GFA/GFB-06

- ※ 6位是GFA/GFB-03与GFA/GFB-03组合。
8; 9; 10位是GFA/GFB-03; GFA/GFB-04; GFA/GFB-05与GFA/GFB-05分别组合。

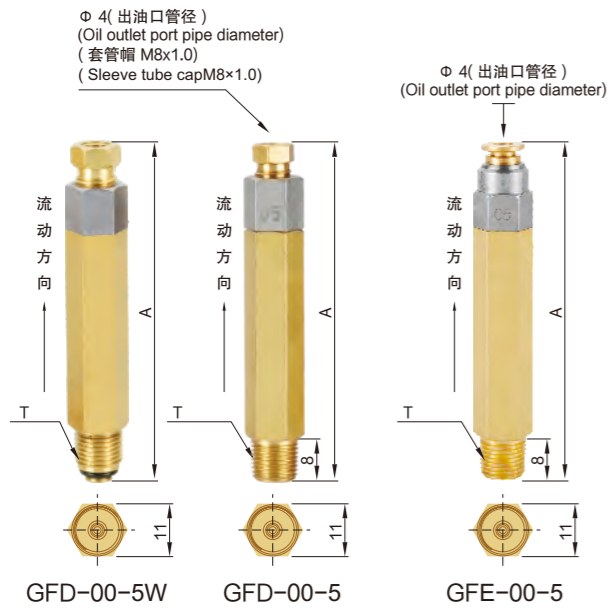
GFA/GFB 分配器工作原理图: Schematic diagram of the GFA/GFB distributor:



GFA/GFB 分配器工作原理说明: Schematic diagram of the GFA/GFB distributor:

- 从注油机输送出的润滑油, 经GFA/GFB分配器中的伞形阀门始往上推动。
 - 当伞形阀门把出油孔封闭后, 油压迫使GFA/GFB储油块克服弹簧力开始下降, 使油腔开始储油。
 - 当GFA/GFB储油块被顶至油腔顶点时, GFA/GFB储油完毕。
 - 当油泵停止供油时, 其卸压阀自动开启, 使主管内润滑油通过卸压阀回油。此时系统压力下降, 同时伞形阀回复封闭进口油, 而GFA/GFB储油块在弹簧力的作用下开始把油腔内的润滑油往出口口压出。
- The lubricant conveyed from the oil injector shall be pulled up from the umbrella valve in the GFA/GFB distributor.
 - When the umbrella valve seals the oil outlet port, the oil pressure forces GFA/GFB oil storage block to overcome the spring force to lower the oil level, and the oil cavity starts to store oil.
 - When GFA/GFB oil storage block is pushed to the top of the oil cavity, oil storage of the GFA/GFB is completed.
 - When the oil pump stops supplying oil, the unloading valve is opened automatically, and the main oil pipe injects oil into it, and the system pressure is lowered down. The umbrella valve reciprocates and seals the oil inlet, and the GFA/GFB oil storage block starts to eject lubricant in the oil cavity.

单支加压式油脂分配器 Single pressurized grease dispenser



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GFD/GFE-00-□□

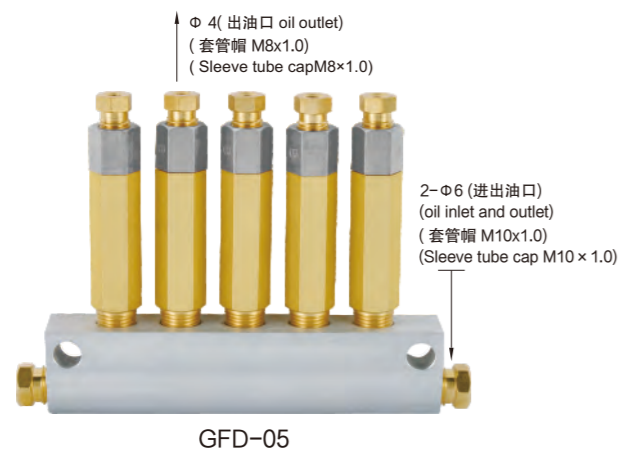
出油口油量值 Oil volume at oil outlet	05	0.05 毫升 / 次 0.05ml/time
1	0.1 毫升 / 次 0.1 ml/time	
2	0.2 毫升 / 次 0.2 ml/time	
3	0.3 毫升 / 次 0.3 ml/time	
4	0.4 毫升 / 次 0.4 ml/time	
5	0.5 毫升 / 次 0.5 ml/time	

螺纹形式 Thread form	空白 Blank	PT1/8
W	M10X1	

规格型号及技术参数: Models, specifications and technical parameters

型号规格 Models and specifications	吐出量 Throughput (cc/cy)	A	记号 Mark	T	重量 Weight (g)
GFD/GFE-00-05	0.05	53	00	PT1/8 M10X1	100
GFD/GFE-00-1	0.1	53	01		100
GFD/GFE-00-2	0.2	60	02		168
GFD/GFE-00-3	0.3	60	03		232
GFD/GFE-00-4	0.4	71	04		299
GFD/GFE-00-5	0.5	71	05	359	

定量加压式油脂分配器 Quantified pressurized oil grease distributor



订货编制说明 Order description

GFD/GFE-□-□-□□□

出油口数 Quantity of oil outlets	05	0.05ml
1	0.1ml	
2	0.2ml	
3	0.3ml	
4	0.4ml	
5	0.5ml	

油量代号 Oil quantity code	05	0.05ml
1	0.1ml	
2	0.2ml	
3	0.3ml	
4	0.4ml	
5	0.5ml	

入口口类型 Inlet type	空白 Blank	设管接头 pipe joint
K	本体螺纹 PT1/8 Body thread PT1/8	

入口口数 Quantity of oil inlets	空白 Blank	双入油口 Double oil inlet
S	单入油口 single inlet	

- 油量表示方法:(注:当所有出油口油量值一样时,只用一个油量值表示)
- 例1:GFD/GFE-05-2 表示GFD/GFE型5位分配器第1,2,3,4,5出油口油量全部为0.2毫升/次。
- 例2:GFD/GFE-05-53235 表示GFD/GFE型5位分配器第1,2,3,4,5出油口油量分别为0.5;0.3;0.2;0.3;0.5毫升/次。
- ※ 注: GFD/GFE分配器有: 7~12位。
进油口螺纹有M10*1及PT1/8可选, 详情可致电咨询
- Oil volume indication: (notes: when oil volume values of all oil outlets are identical, represented with one oil volume).
- Example 1: GFD/GFE-05-02 means 5-position distributor with model of GFD/GFE, oil delivery volume of oil outlets 1, 2, 3, 4 and 5 is 0.2ml/time.
- Example 2: GFD/GFE-05-53235 means that outlet oil volumes of outlets 1, 2, 3, 4 and 5 of 5-position distributors with model of GFD/GFE are 0.5, 0.3, 0.2, 0.3 and 0.5ml/time.
- ※ Note: GFD/GFE distributor has: 7~12 digits. The oil inlet thread has M10*1 and PT1/8 optional, please call for details



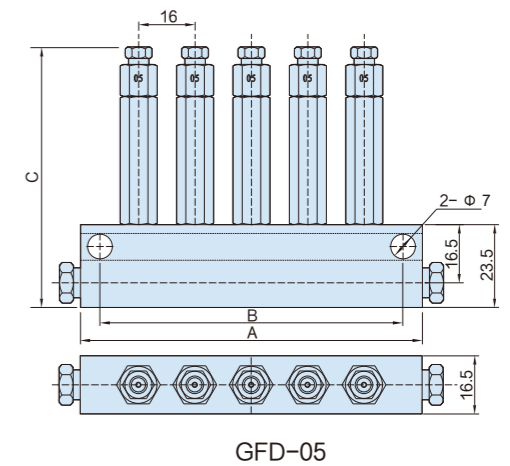
容积式油脂分配器 Volumetric oil dispenser

规格型号及技术参数: Models, specifications and technical parameters

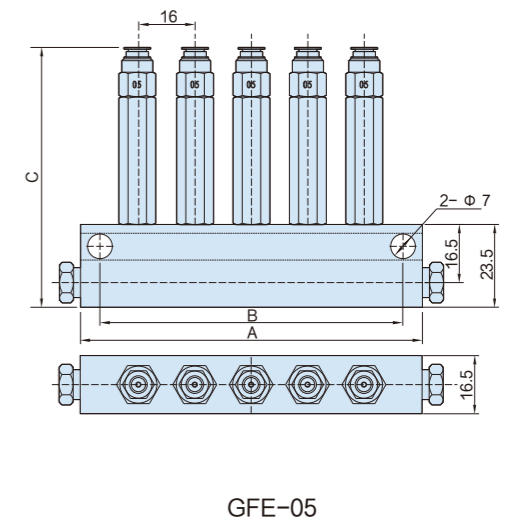
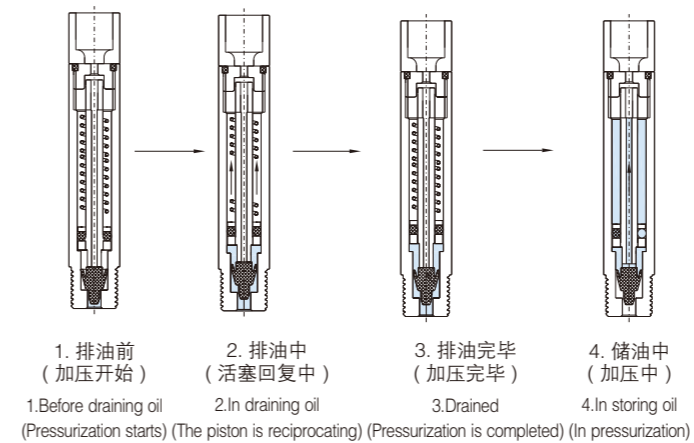
型号规格 Models and specifications	出口数 Outlet quantity	A	B	C	吐出量 Throughput (cc/cy)	重量 Weight (g)
GFD/GFE-02	2	49	38	68-86	0.05; 0.1; 0.2; 0.3;	168
GFD/GFE-03	3	65	54	68-86		232
GFD/GFE-04	4	81	70	68-86	0.4;0.5.	299
GFD/GFE-05	5	97	86	68-86		359

备注: C尺寸0.1cc为68mm, 0.2-0.3cc为75mm, 0.4-0.5cc为86mm。
Remarks: The measurement of C is respectively 68mm, 75mm and 86mm when the throughput is 0.1cc, 0.2-0.3cc, 0.4-0.5cc

产品外形尺寸图 Product dimension figure



GFD/GFE 分配器工作原理图 Schematic diagram of the GFD/GFE distributor



GFD/GFE 分配器工作原理说明 Rationale of the GFD/GFE distributor

- 从油泵中压送出来的润滑油,使GFD/GFE分配器中的伞形胶开始往上推动。
- 当伞形阀把芯杆中心孔封闭后,迫使活塞克服弹簧力开始上升。将油腔原先存储的润滑油排出。
- 当活塞移至油腔顶点时,排油同时完成。
- 油泵停止供油时,其泄压阀自动开启,使主油管内润滑油通过卸压阀回油。此时系统压力下降,分配器中的活塞在弹簧的作用下开始回复,当伞形阀回复封闭分配器进油时,则活塞把存储在油腔的润滑油通过芯杆小孔压送到油腔,同时下次的供油也准备完毕。
- Lubricant delivered from the oil pump makes umbrella valve in the GFD/GFE distributor drive upwards.
- When the umbrella valve closes central hole of the core bar, the piston overcomes the spring force to rise. Lubricant stored in the oil cavity is drained out.
- When piston moves to the top point of oil cavity, oil draining is completed.
- When oil pump stops oil supplying, the pressure release valve is automatically released to make lubricant in the main oil pipe to return through the decompression valve. At this moment, the system pressure is reduced, and piston in the distributor starts reciprocating with the function of spring. When the umbrella valve reciprocates and closes oil outlet of the distributor, the piston delivers lubricant in the lower cavity through the core bar, and oil supply for the next time is ready.

GTB-A2 型(Type)

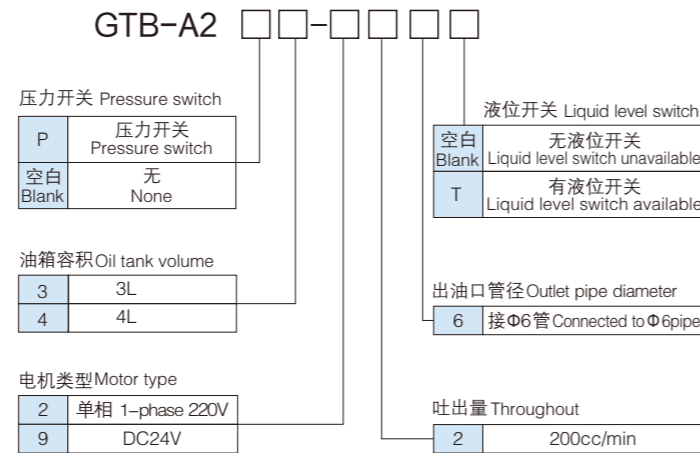
数显油脂润滑泵 Digital Grease lubrication pump

■ 容积式电动油脂润滑泵 (齿轮泵) Volume electric grease lubrication pump (gear pump)

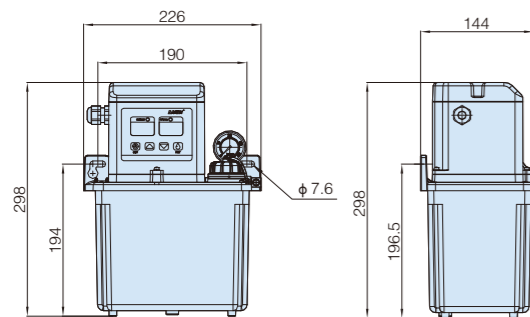


GTB-A2P3

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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。
 - 润滑：开机时先执行润滑时间计时。
 - 间歇：润滑完成后执行间歇时间计时(时间单位可转换)。
 - 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。(内没有锁键功能，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器会发出报警、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注油机的润滑和间歇状态)
- 系统使用“RST”键，可强制润滑或消除异常报警信号。
- 在容积式系统中设有脱压装置，需配合GFA/GFB/GFD/GFE分配器使用(参考37-40页)。
- 设有溢流阀，可保护注油机及管路由于压力过高而损坏。

Performance and characteristics

- The system is configured with 3 action modes.
 - Lubricating: when turning on, execute lubricating timing.
 - Intermittent: execute intermittent timing after lubricating is completed.
 - Memory: in case of power on after power 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.
 - When pressure is insufficient, Erp is displayed.
 - 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.
- Equipped with a pressure relief device in the volumetric system used with GFA/GFB/GFC/GFDE/GFE distributor(refer to pages 37~40).
- 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 (M)	吐出口径 throughout caliber	额定吐出压 Rated throughput pressure (MPa)	最大吐出压 Maximum throughput pressure (MPa)	吐油量 Throughput (cc/min)	脱压装置 de-pressurizing device	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)
GTB-A2	AC220V DC24V	60W 35W	1~999	1~999	Φ6	3.0	6.0	200	有 Yes	有 Yes	可选配 Optional	有 Yes	3 4

GTB-C2 型(Type)

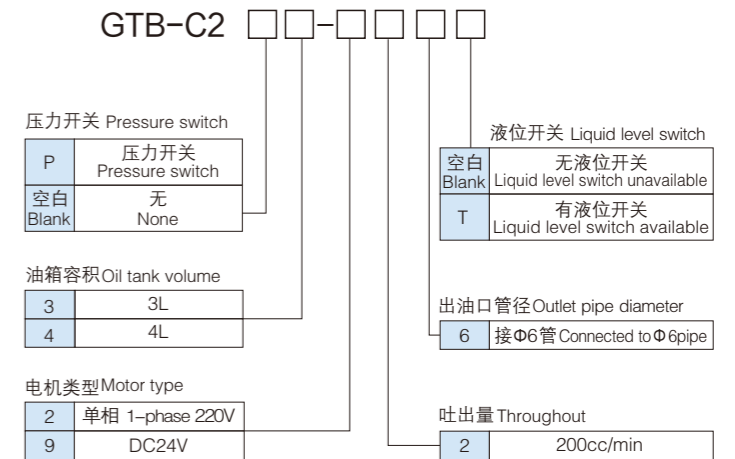
PLC 油脂润滑泵 PLC grease pump

■ 容积式电动油脂润滑泵 (齿轮泵) Volume electric grease lubrication pump (gear pump)

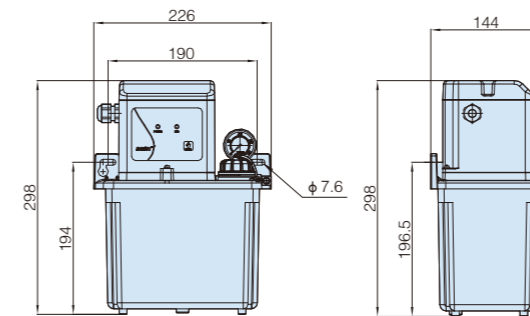


GTB-C2P3

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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注油机的通电和润滑状态。系统中设有“FEED”键，可强制润滑。
- 在容积式系统中设有脱压装置，需配合GFA/GFB/GFC/GFDE/GFE分配器使用(参考37-40页)。
- 设有溢流阀，可保护注油机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.
- Equipped with a pressure relief device in the volumetric system, used with GFA/GFB/GFC/GFDE/GFE distributor(refer to pages 37~40).
- 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 (M)	吐出口径 throughout caliber	额定吐出压 Rated throughput pressure (MPa)	最大吐出压 Maximum throughput pressure (MPa)	吐油量 Throughput (cc/min)	脱压装置 de-pressurizing device	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)
GTB-C2	AC220V DC24V	60W 35W	须和PLC系统连接 Shall be connected to the PLC system		Φ6	3.0	6.0	200	有 Yes	有 Yes	可选配 Optional	无 No	3 4

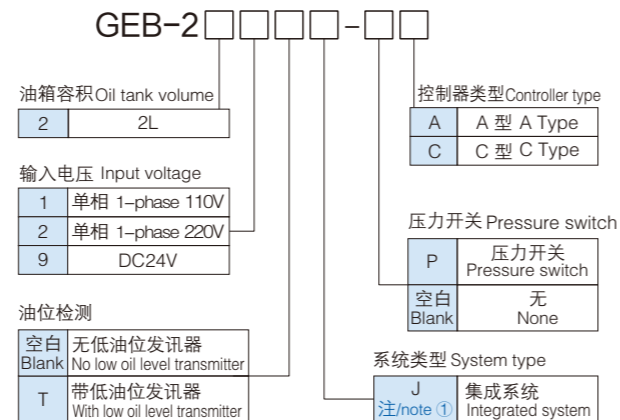
GEB-2 型(Type)

电动油脂润滑泵 Electric grease lubrication pump

■ 容积式油脂润滑泵(柱塞泵) Volumetric grease lubrication pump (plunger pump)

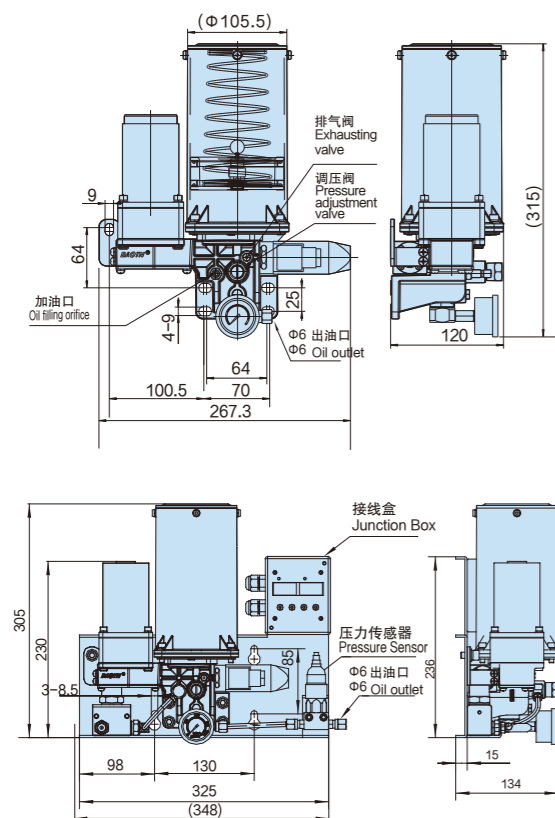


订货编制说明 Order description



注①:非集成式压力开关、控制类型不可选
note①: Non-integrated pressure switch, control type is not selectable

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。
- 设电磁阀泄压装置,当润滑泵停止运行,确保系统自动迅速泄压。
- 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。
- 在容积式系统中设有脱压装置,需配合GFD/GFE分配器使用(参考37-40页)。

Performance and characteristics

- The lubrication pump duty cycle can be controlled by the host PLC or a separate controller.
- Set the solenoid valve pressure relief device, when the lubrication pump stops running, ensure that the system automatically and quickly relieve pressure.
- 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.
- Equipped with a pressure relief device in the volumetric system, used with GFD/GFE distributor (refer to pages 37-40).

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

型式 model	最大吐出压力 maximum ejection pressure	吐出量 Throughout (cc/min)	出油口管径 oil outlet diameter	油箱容量 oil tank volume	电机功率 motor power	油粘度 oil viscosity
GEB-222	8.0MPa	20	Φ6	2L	35W	000#-1#
GEB-229	8.0MPa	20	Φ6	2L	25W	000#-1#

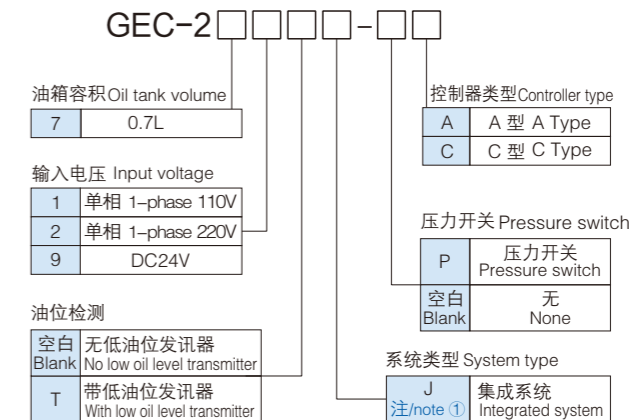
GEC-2 型(Type)

电动油脂润滑泵 Electric grease lubrication pump

■ 容积式油脂润滑泵(油罐式) Volumetric grease lubrication pump (Tank type)

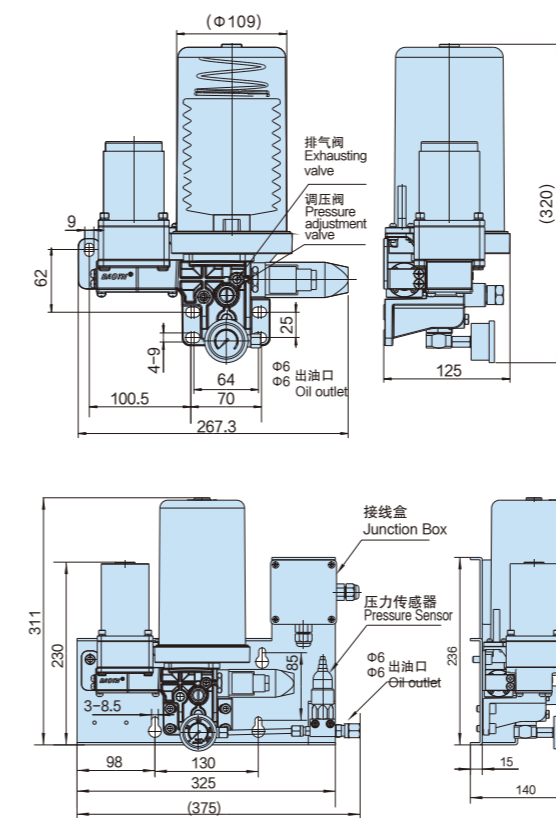


订货编制说明 Order description



注①:非集成式压力开关、控制类型不可选
note①: Non-integrated pressure switch, control type is not selectable

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。
- 内设电磁阀泄压装置,当润滑泵停止运行,确保系统自动迅速泄压。
- 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。
- 在容积式系统中设有脱压装置,需配合GFD/GFE分配器使用(参考37-40页)。

Performance and characteristics

- The duty cycle of the lubrication pump can be controlled by the main PLC or a separate controller.
- Built-in solenoid valve pressure relief device, the system automatically releases pressure quickly when the lubrication pump stops running.
- 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.
- Equipped with a pressure relief device in the volumetric system, used with GFD/GFE distributor (refer to pages 37-40).

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

型式 model	最大吐出压力 maximum ejection pressure	吐出量 Throughout (cc/min)	出油口管径 oil outlet diameter	油箱容量 oil tank volume	电机功率 motor power	油粘度 oil viscosity
GEC-272	8.0MPa	20	Φ6	0.7L	35W	000#-1#
GEC-279	8.0MPa	20	Φ6	0.7L	25W	000#-1#

GEN-2 型(Type)

电动油脂润滑泵 Electric grease lubrication pump

■ 容积式油脂润滑泵(柱塞泵) Volumetric grease lubrication pump (plunger pump)

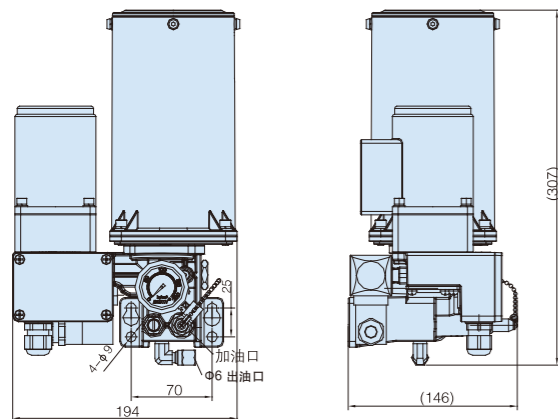
订货编制说明 Order description



GEN-2

油位检测	
空白	无低油位发讯器
Blank	No low oil level transmitter
T	带低油位发讯器
	With low oil level transmitter
输入电压 Input voltage	
1	单相 1-phase 110V
2	单相 1-phase 220V
9	DC24V
油箱容积 Oil tank volume	
2	2L

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。
- 设电磁阀泄压装置,当润滑泵停止运行,确保系统自动迅速泄压。
- 设有调压装置,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。
- 在容积式系统中设有脱压装置,需配合GFD/GFE分配器使用(参考37-40页)。

Performance and characteristics

- The lubrication pump duty cycle can be controlled by the host PLC or a separate controller.
- Set the solenoid valve pressure relief device, when the lubrication pump stops running, ensure that the system automatically and quickly relieve pressure.
- 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.
- Equipped with a pressure relief device in the volumetric system, used with GFD/GFE distributor (refer to pages 37-40).

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

型式 model	最大吐出压力 maximum ejection pressure	吐出量 Throughout (cc/min)	出油口管径 oil outlet diameter	油箱容量 oil tank volume	电机功率 motor power	油粘度 oil viscosity
GEN-222	8.0MPa	20	Φ6	2L	35W	000#-1#
GEN-229	8.0MPa	20	Φ6	2L	25W	000#-1#

GEO-2 型(Type)

电动油脂润滑泵 Electric grease lubrication pump

■ 容积式油脂润滑泵(柱塞泵) Volumetric grease lubrication pump (plunger pump)

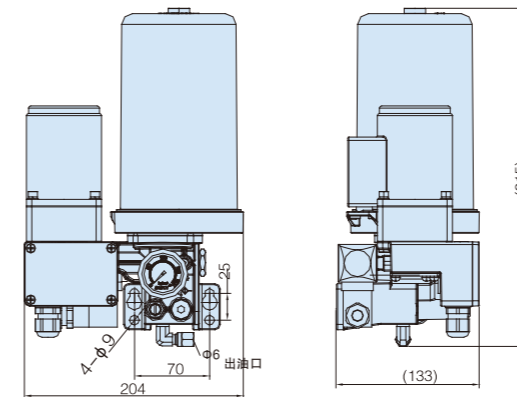
订货编制说明 Order description



GEO-2

油位检测	
空白	无低油位发讯器
Blank	No low oil level transmitter
T	带低油位发讯器
	With low oil level transmitter
输入电压 Input voltage	
1	单相 1-phase 110V
2	单相 1-phase 220V
9	DC24V
油箱容积 Oil tank volume	
7	0.7L

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。
- 内设电磁阀泄压装置,当润滑泵停止运行,确保系统自动迅速泄压。
- 设有调压装置,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。
- 在容积式系统中设有脱压装置,需配合GFD/GFE分配器使用(参考37-40页)。

Performance and characteristics

- The duty cycle of the lubrication pump can be controlled by the main PLC or a separate controller.
- Built-in solenoid valve pressure relief device, the system automatically releases pressure quickly when the lubrication pump stops running.
- 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.
- Equipped with a pressure relief device in the volumetric system, used with GFD/GFE distributor (refer to pages 37-40).

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

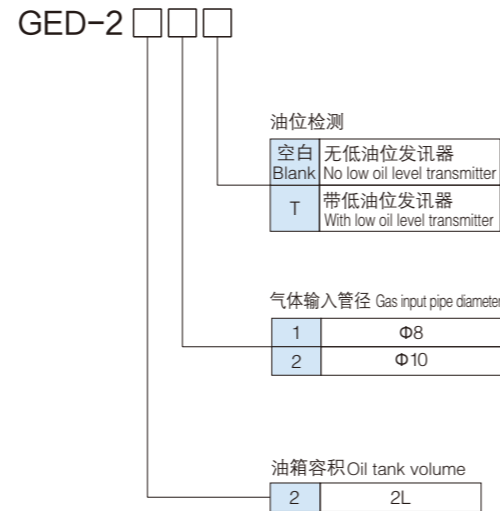
型式 model	最大吐出压力 maximum ejection pressure	吐出量 Throughout (cc/min)	出油口管径 oil outlet diameter	油箱容量 oil tank volume	电机功率 motor power	油粘度 oil viscosity
GEO-272	8.0MPa	20	Φ6	0.7L	35W	000#-1#
GEO-279	8.0MPa	20	Φ6	0.7L	25W	000#-1#

GED-2 型(Type)

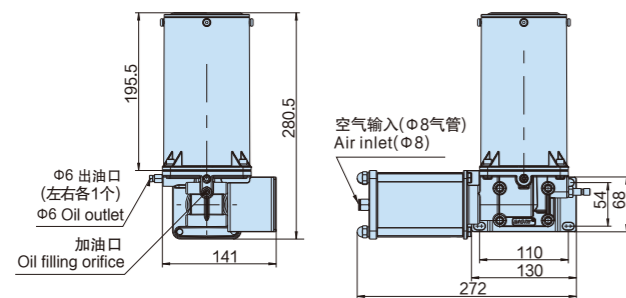
气动油脂润滑泵 Pneumatic grease lubrication pump

■ 容积式油脂润滑泵(柱塞泵) Volumetric grease lubrication pump (plunger pump)

订货编制说明 Order description



产品外形尺寸图 Product dimension figure



性能与特点

- 压力输出方式为可调式的输出结构, 符合各种机器的需求, 可做出相对压力的匹配调整。
- 可使机器在刚开始使用时, 便立即得到应有油量可顺畅启动, 减少不必要摩擦。
- 附有定时控制装置, 能使供油时间及间歇时间可做双段式调整。
- 配有油压检知装置, 可侦测反应下列漏失:
 - (一)管路破裂: 测知管内压力不足。
 - (二)风压不足: 测知风压压力不足。
 - (三)油压不足: 测知零件汰旧, 输出功率不良等致使压力不足的情况。
 - (四)油桶无油: 测知油料不足的情况。
- 附有蜂鸣器装置, 得适时反应回报。
- 在容积式系统中设有脱压装置, 需配合GFA/GFB/GFD/GFE分配器使用(参考37-40页)。

Performance and characteristics

- The pressure output shall be adjustable output structure and in conformity with requirements of machines, and relative pressure adjustment shall be made.
- When the machine is just started to use, the oil volume required shall be available to start smoothly and reduce unnecessary friction.
- When timing controller is configured to achieve variable adjustment for oil supply time and intermittent time.
- Oil pressure detector is provided to detect following losses:
 - (1) pipeline cracking: insufficient pressure inside the pipeline;
 - (2) insufficient air pressure, detecting insufficient air pressure;
 - (3) insufficient oil pressure: outdated oil pressure, and non-conforming output power results in insufficient power;
 - (4) no oil in the oil bucket: insufficient oil materials.
- Beeper is provided to receive timely response.
- Equipped with a pressure relief device in the volumetric system, used with GFA/GFB/GFD/GFE distributor (refer to pages 37-40).

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

型式 Model	流量 flow	电压 voltage	风压压力 air pressure	脱压阀 depressurized valve	油箱容量 oil tank volume	最大吐出压力 maximum ejection pressure	油粘度 oil viscosity
GED	10 cc/cy	24V, 220V	5-7kg/cm ²	有(Yes)	2L	40-50kg/cm ²	00 [#] 以下 below 00 [#]

GED-2 型(Type)

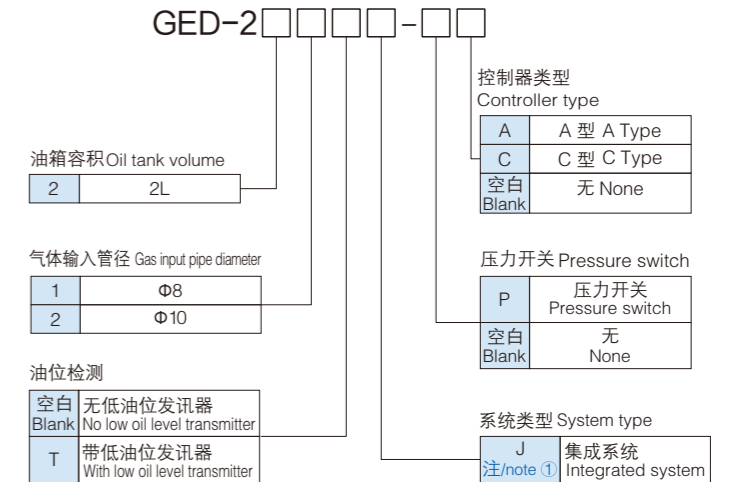
气动油脂润滑泵 Pneumatic grease lubrication pump

■ 容积式油脂润滑泵(集成式) Volumetric grease lubrication pump (Integrated type)

订货编制说明 Order description

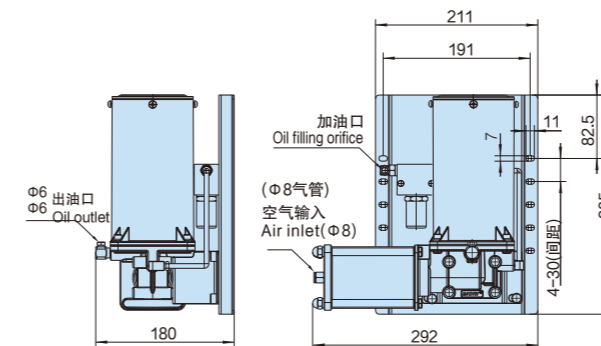


GED-221TJ-P
集成式



注①: 非集成式压力开关、控制类型不可选
note①: Non-integrated pressure switch, control type is not selectable

产品外形尺寸图 Product dimension figure



性能与特点

- 压力输出方式为可调式的输出结构, 符合各种机器的需求, 可做出相对压力的匹配调整。
- 可使机器在刚开始使用时, 便立即得到应有油量可顺畅启动, 减少不必要摩擦。
- 附有定时控制装置, 能使供油时间及间歇时间可做双段式调整。
- 配有油压检知装置, 可侦测反应下列漏失:
 - (一)管路破裂: 测知管内压力不足。
 - (二)风压不足: 测知风压压力不足。
 - (三)油压不足: 测知零件汰旧, 输出功率不良等致使压力不足的情况。
 - (四)油桶无油: 测知油料不足的情况。
- 附有蜂鸣器装置, 得适时反应回报。
- 在容积式系统中设有脱压装置, 需配合GFA/GFB/GFD/GFE分配器使用(参考37-40页)。

Performance and characteristics

- The pressure output shall be adjustable output structure and in conformity with requirements of machines, and relative pressure adjustment shall be made.
- When the machine is just started to use, the oil volume required shall be available to start smoothly and reduce unnecessary friction.
- When timing controller is configured to achieve variable adjustment for oil supply time and intermittent time.
- Oil pressure detector is provided to detect following losses:
 - (1) pipeline cracking: insufficient pressure inside the pipeline;
 - (2) insufficient air pressure, detecting insufficient air pressure;
 - (3) insufficient oil pressure: outdated oil pressure, and non-conforming output power results in insufficient power;
 - (4) no oil in the oil bucket: insufficient oil materials.
- Beeper is provided to receive timely response.
- Equipped with a pressure relief device in the volumetric system, used with GFA/GFB/GFD/GFE distributor (refer to pages 37-40).

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

型式 Model	流量 flow	电压 voltage	风压压力 air pressure	脱压阀 depressurized valve	油箱容量 oil tank volume	最大吐出压力 maximum ejection pressure	油粘度 oil viscosity
GED	10 cc/cy	24V, 220V	5-7kg/cm ²	有(Yes)	2L	40-50kg/cm ²	00 [#] 以下 below 00 [#]

GEE-2 型(Type)

手动油脂润滑泵 Manual grease pump

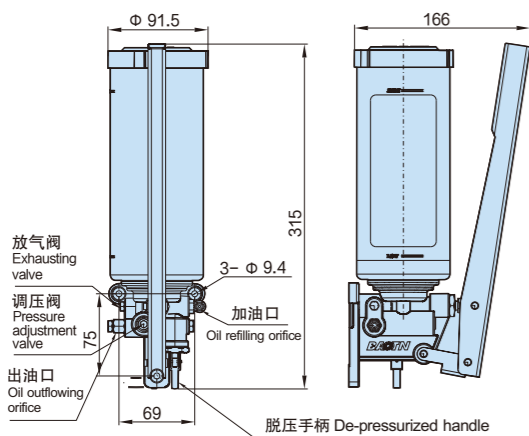
■ 容积式油脂润滑泵(柱塞泵) Volumetric grease lubrication pump (plunger pump)

订货编制说明 Order description



GEE -				
出口管径 Outlet pipe diameter	空白 Blank	接Φ6管 Connected to Φ6 pipe		
	8	接Φ8管 Connected to Φ8 pipe		
	10	接Φ10管 Connected to Φ10 pipe		
出油口方向 Oil outlet direction	空白 Blank	双出油口 Blank bi-directional oil outlet		
	L	左出口 Left outlet		
	R	右出口 Right outlet		
油箱容积 Oil tank volume	08	0.8升		
系统类型 System Type	2	容积式 Volumetric		

产品外形尺寸图 Product dimension figure



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

型号规格 Models and specifications	吐出量 Throughput (cc/cy)	最大吐出压 Maximum throughput pressure (MPa)	出油口方向 Oil outlet direction	吐出口径 throughout caliber	油杯容量 volume of the oil cup (L)	重量 Weight (KG)
GEE-208L	1.2	8	左或右 left or right	Φ 6	0.8	2.0
GEE-208R				Φ 8 Φ 10		

性能与特点

- 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。
- 设有手动脱压阀，当压力达到调节值时，可手动卸压。停止供油，拨动脱压手柄至图二状态即可脱压。
- 在容积式系统中设有脱压装置，需配合GFA/GFB/GFD/GFE分配器使用（参考37-40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。

Performance and characteristics

- 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.
- The manual de-pressurized valve is provided. When the pressure reaches the adjustment valves, pressure is unloaded manually. Pressure fuel cut-off, toggle handle to figure 2 state can take off the pressure.
- Equipped with a pressure relief device in the volumetric system, used with GFA/GFB/GFD/GFE distributor (refer to pages 37-40) 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.

ALA/ALB 型(Type)

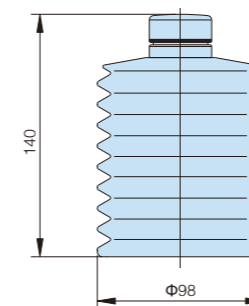
罐装油脂 Canned Grease

订货编制说明 Order description



ALA/ALB -		
罐装油脂容积 Canned grease volume	000	000#油脂(grease)
	00	00#油脂(grease)
	0	0#油脂(grease)
	1	1#油脂(grease)
	2	2#油脂(grease)
	3	3#油脂(grease)
罐装油脂容积 Canned grease volume	07	0.7L

产品外形尺寸图 Product dimension figure



性能与特点

- 油脂适用温度范围零下20至120摄氏度；(低于零下5摄氏度请选用ALB油脂)
- 与传统锂基脂相比，本产品具有滴点，抗压性能强；润滑效果佳，机械安定性和胶体安定性良好；
- 直接更换油脂，操作简单，环保卫生；
- 该罐装油脂适用；塑胶，食品，锻压，切削机床等机械设备的集中润滑系统。

Performance and characteristics

- The grease is suitable for temperatures ranging from minus 20 to 120 degrees Celsius; (Below minus 5 anthracene, please add ALB grease)
- Compared with traditional lithium base grease, this product has a dropping point and strong compression resistance; good lubrication effect, good mechanical stability and good gel stability;
- Direct replacement of grease, easy to operate, environmentally friendly;
- The canned grease is suitable for centralized lubrication of mechanical equipment such as plastics, food, forging and cutting machine tools.

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

型号 Model	Model	ALA			ALB		
		000#	00#	0#	000#	00#	0#
等级 Grease grade		160	165	170	160	165	170
滴点 Dropping Point	不低于	160	165	170	160	165	170
适用温度 Proper temperature		-5°C-120°C			-20°C-120°C		
工作锥入度0.1mm Working cone penetration 0.1mm		445-475	400-430	355-385	445-475	400-430	355-385
腐蚀(T2铜片,100°C,24h) Corrosion (T2 copper, 100 °C, 24 h)		铜片无绿色或黑色色变					
防腐蚀性(52°C,24h) Corrosion resistance (52°C, 24h)		合格					
水流失(38°C,1h),(质量分数)% Water loss (38°C,1 h), (mass fraction)%	不大于	12	8	7	12	8	7
极压性能(四球机法)PB/N Extreme pressure performance (four ball machine method) PB/N	不小于	588					
蒸发量(99S,22h),% Evaporation (99°C, 22 h), %	不低于	不低于2%					
烧结负荷PD值kgf Sintering load PD value kgf		250	250	250	250	250	250
杂质(显微镜法)个/cm³ Impurity (microscopy)/cm³	25 μm	不大于 3000					
	75 μm	不大于 500					
	100 μm	不大于 0					

- 罐装油脂为一次性产品，严禁用完后再次填充使用。
- 储存和使用过程中，应防止灰尘，杂质混入，避免阳光直射。
- 勿与其它润滑脂混合使用，不同润滑脂之间可能会发生物理或化学反应导致性能下降。
- Canned grease is a disposable product, and it is strictly forbidden to refill after use.
- During storage and use, it should be protected from dust and impurities and avoid direct sunlight.
- Do not mix with other greases. Physical or chemical reactions may occur between different greases to reduce performance.