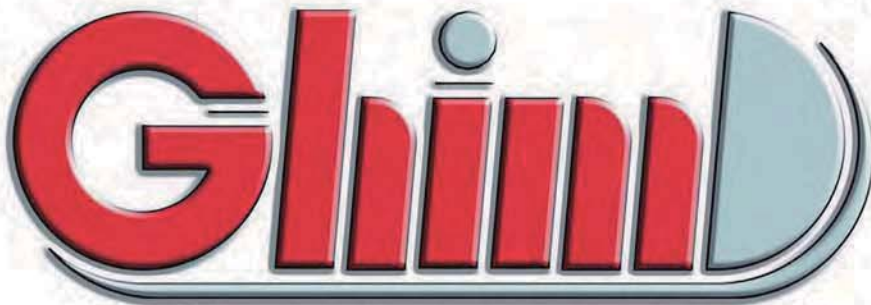
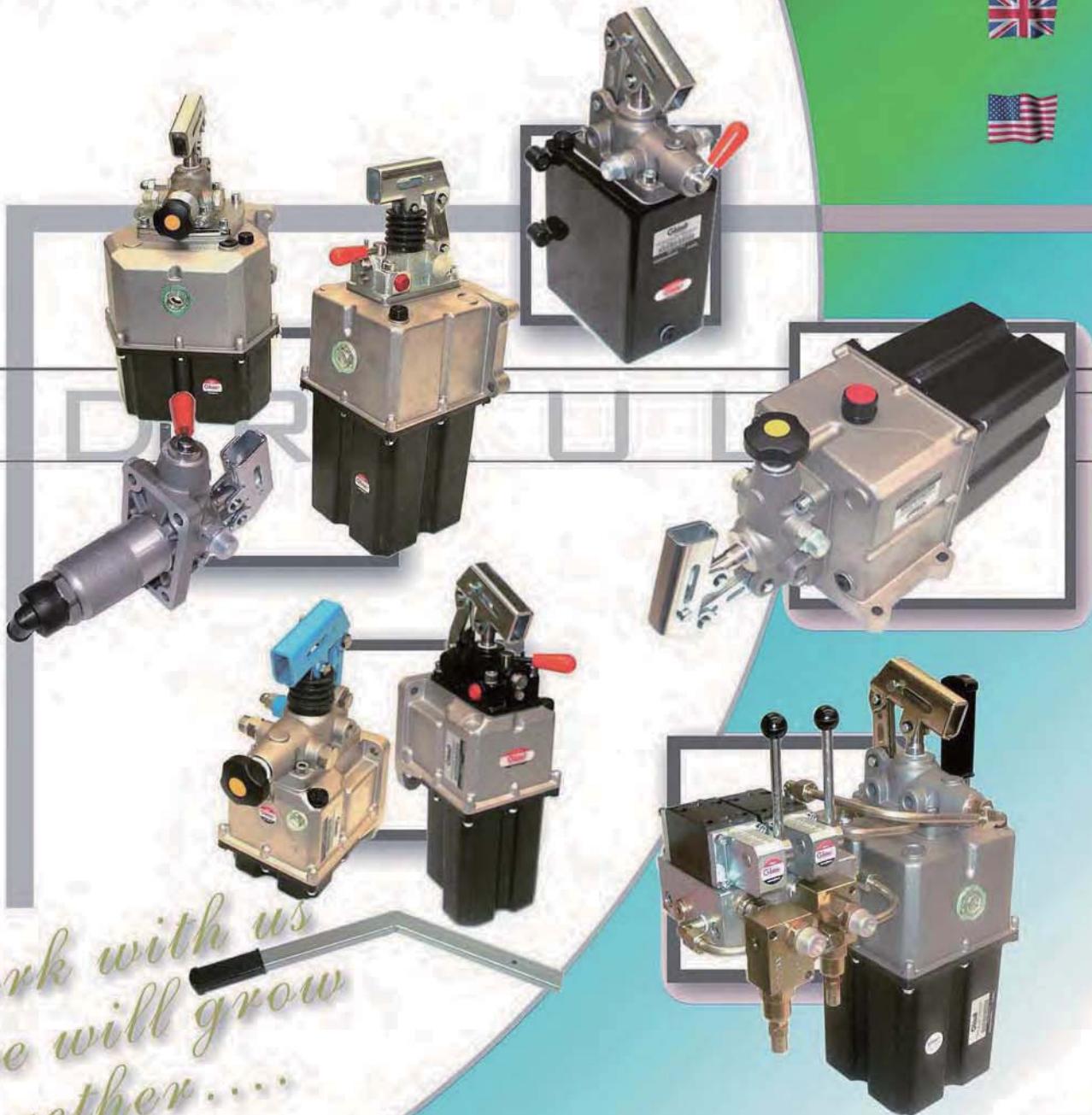


HAND PUMPS
AEP
POMPE A MANO



HYDRAULIC COMPONENTS



*Work with us
and we will grow
Together....*

介绍

Ghim公司在手动泵的研究，应用领域有着丰富的经验，其高效率的产品可以满足高质量客户的要求。该系列泵：“AL”，“GH”和“GW”是通过对市场的需求；实体建模与有限元验证；现代设计的研究，新的加工技术和材料的选择，以便获得高度可靠的品质和使用寿命。

这些高品质的泵，归功于技术解决方案和设计，并采取与市场上同类产品的差异化创新设计，不同的表面处理工艺，其具体局部获得了相关专利。

手动泵的剖析

这些泵基本上是Ghim基于以下参数：

- “SA”（单作用）或“DA”（双作用）
- 操作单作用油缸“SE”或操作双作用油缸“DE”或远程管路安装“DST”。
- 油箱法兰安装“FLG”或管路安装，通过软管连接油箱“LNA”
- 手动操作泵“HND”脚踏泵“FTT”。

双作用“DA”-单作用“SA”

- “DA”（双作用）双作用泵表示泵在拉和压的过程中，都产生排量。
- “SA”（单作用）单作用手动泵只在泵压的时候产生排量，享受向上拉时不产生排量。

单效果“SE”或双效果“DE”或分流阀“DST”

- “SE”泵高压出口连接单作用液压油缸。
- “DE”泵带一个2位4通的换向阀，连接双作用液压油缸。
- “DST”泵直接输出到分流阀或集成块。

“FLG”油箱法兰安装，“LNA”管路安装。

产品范围

根据泵体材料，分为3个系列：

- “AL”系列泵，泵体为铸铝。
- “GW”系列泵，泵体为铸铁，表面电镀处理。
- “GH”系列泵，泵体为铸铁，表面油漆处理。

INTRODUCTION

GHIM Hydraulics Ltd based on the experience gathered in the study and implementation of applications that require the use of hand-pump has created a new series of high-efficiency pumps able to meet the needs of our most qualified customers. The series of pumps "AL", "GH" and "GW" described here are nate uniting the experience; the capabilities exposed by the demands of the market requirements; the solid modeling with finite element verification; the study of modern design; new processing technologies; the choice and the coupling of materials in order to obtain a highly reliable and durable.

These pumps of high quality, thanks to technological solutions and design taken and thanks to innovative content that characterize and differentiate with respect to existing products on the market were "PATENTED" in any section thereof.

SPLITTING BASE PUMPS

The pumps are essentially GHIM based on the following basic parameters:

- *Simple pumps "SA" (Single Acting) or Double "DA" (Double Acting)*
- *Pumps for single-acting cylinders "SE" or double-acting cylinders "DE" or remote mounted Distributors for "DST".*
- *Flangiabile tank "FLG" or for editing in line type "LNA" and connected to the tank through a hose suction Pumps*
- *Operated manually with lever "HND" or footpedal-operated "FTT".*

Double Acting "DA"-Simple Acting "SA"

Double Acting "DA" indicates that the flow of oil pump in pressure when the lever moves both upward (first leg – the stem emerges from the pump body) down (return – the stem falls within the pump casing).

Single Acting "SA" indicates that the flow of oil pump pressure only when the lever moves down (return – the stem falls within the pump casing), while when the lever moves upward (first leg – the stem emerges from the body pump) aspires only oil from the tank.

Simple Effect "SE" or double Effect "DE" or Distributors "DST"

"SE" pumps for single-acting cylinders are equipped with a tap for drainage of oil in pumps

"DE" for double-acting cylinders are equipped with a lever-Distributor distributor 4/2 with shift to the Center closed. to reverse the direction of Output oil pump pumps for

"DST" are a direct exit to the Distributor pump or Manifold.

Flangiabile tank "FLG" or mounted in-line "LNA"

Flangiabili tank "FLG" or mounted in-line "LNA"

PRODUCT RANGE

Each of the families indeed described, in turn can be divided into three major subfamilies depending on the type of material that constitutes the body of the pump.

- *Version "AL" with pump body in cast aluminium integral*
- *Version "GW" with pump body in cast iron with full surface protection through Galvanic treatment.*
- *"GH" version with cast iron pump body painted superficially and sliding seat piston screwed.*

AL 系列泵

AL系列的手动泵，泵体材料全部为铝，有10个不同的类型以满足不同的使用要求，这些高品质的泵，归功于技术解决方案和设计，并采取与市场上同类产品的差异化创新设计，不同的表面处理工艺，其具体局部获得了相关专利。

这个系列的泵有以下特性：

- 泵体为铝。
- 泵柱塞为不锈钢。
- 压力作用在单向阀上（见图：根据CE标准的安全的单向阀）
- 在阀杆上，旋钮上装配有垫圈和密封件，保证泵不会泄露。
- 高强度及高润滑的塑料柱塞阀（Ghim专利），操作省力。
- 对于组件有锁定挂锁，以防止未经授权的使用。
- 特殊密封可使泵耐高压。

AL系列的泵相对于传统的手动泵有以下优点：

- 完全没有腐蚀。
- 由于配有防尘圈，可有效保护手动泵免受灰尘，沙子等异物的进入。
- 重量更轻。
- 由于没有活塞密封件，减少了泵的摩擦内耗，使泵更加省力。
- 始终能够保证泵的连续工作，假设的活塞密封件破裂的情况下，引起的污染物进入油泵，由于单向阀的存在，从双操作的状态工作改变到简单的压力，不改变可达到的最大压力方面的性能。

AL SERIES PUMPS

"AL" range of pumps with full body aluminium represents the flagship series of pumps produced by GHIM. It provides essentially 10 subfamilies of pumps suitable for different types of use. The series "to" high quality, thanks to technological solutions and design taken and thanks to innovative content that characterize and differentiate with respect to existing products on the market were "PATENTED"

The series pumps "AL" are characterized by the following basic content:

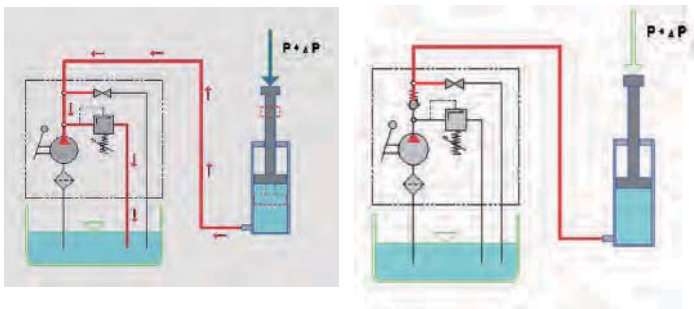
- Full body aluminium
- Rod pumping stainless steel
- check valve pressure (see paragraph: Safety Check Valve according to the standard "CE")
- Gaskets seals on the stem and on Knob
- plastic Piston valve high strength and high slider (Patent GHIM)
- for Assembly with locking the padlock to prevent unauthorized use of
- special Seals resistant pump high pressure

Line "AL" presents the following advantages compared to conventional pumps:

- A total absence of corrosion
- total protection from the inclusion of foreign bodies like sand, dust etc. due to the presence of the rings, dust seals
- Lightness
- less effort to leverage when pumped for reduced internal friction due to the absence of piston seals
- Continuity of service, always guaranteed. In the case of a hypothetical piston seal rupture caused by the presence of contaminants in oil pump type "at", thanks to the presence of non-return valve, (see paragraph: Safety Check Valve according to the standard "CE") change its way of operating from a State of double operation (both pump way back) to that of simple pressure (pump only) without altering performance in terms of maximum pressure attainable. Pumps normally found on the market in case of rupture of piston seal, not with check valve stop working.

液压回路安全

SAFETY ON HYDRAULIC SCHEME



左图是普通手动泵的高压情况， $P + \Delta P$ 直接作用在泵和溢流阀上，存在着泄漏，不能保压。右图为Ghim公司的AL和GW系列的手动泵，泵的出口增加了一个单向阀，高压 $P + \Delta P$ 作用在单向阀上，保压的能力要比普通的手动泵好很多。

The figure on the left you see a sudden and uncontrolled increase of load "P + DP" the safety valve can open allowing the descent of the piston. This can happen when the pressure relief valve is directly connected with the branch in pressure. In the right figure is proper configuration of the circuit where the pumps series "AL" and "GW" acquires fully the conditions required for security.

ORDINAR PUMPS

GHIM PUMPS PATENTED

图1 - PICTURE 1 (GHIM PATENTED SYSTEM)

安全单向阀 - 标准 CE

该类手动泵能直接用于液压回路，完全符合安全标准，在图1中，左图为市场上的普通泵，右图为Ghim专利产品的AL或GW系列手动泵。

Check Safety Valve - The Standard "CE"

This type of pump enables direct hydraulic circuits in compliance with the safety standard. In Figure 1 (System Patented GHIM) are represented respectively a circuit in which is inserted a normal hand pump available on the market, and to the right the same circuit with the hand pump series "AL" or "GW".

AL-MARINE 特殊版本

MARINE版本的手动泵为应用于海洋环境及抗腐蚀性要求较高的场合。这个版本的手动泵金属部分经过抗腐蚀的特别处理，泵在盐雾环境中测试的持续时间超过420小时。AL-MARINE版本的手动泵具有以下优点：

- 全身的阳极氧化铝（抗乙二醇），
- 连杆，别针，卡环，螺钉完全为不锈钢，
- 接头也为不锈钢

Special Version "AL-MARINE"

The pump "MARINE" is a special version for resist in particularly aggressive environments. In this version the metal parts are protected against corrosion with special treatments so that the pump be verified at the test exceed the duration of 420 hours in saline mist.

Pumps in "AL MARINE" have in addition compared to pumps series "AL" the following benefits:

- full Body in anodised aluminium with hard anodising (resistance to GLYCOL),
- connecting rods, pins, rings seeger and completely screws stainless steel connecting
- Fittings in stainless steel

GAMMA POMPE A MAN 手动泵范围 HAND PUMP - RANGE

IT	MAT	FRZ	MNT	ACT	CYL	DESCRIZIONE DESCRIPTION 描述	VERSION TYPE	
1	AL	HND	FLG	SA	SE	- WITH KNOB - SINGLE ACTING	XY = 98	
2					SE	WITH DISTRIBUTOR - SINGLE ACTING	XY = 94	
3				DE	WITH DISTRIBUTOR - DOUBLE ACTING	XY = 93		
4				DE	WITH DISTRIBUTOR - DOUBLE ACTING	XY = M3		
5			LNA	DA	SE	SE	WITH KNOB - DOUBLE ACTING	XY = 96
6						SE	WITH KNOB - DOUBLE ACTING	XY = 91
7					SE	WITH KNOB - DOUBLE ACTING	XY = M1	
8					DST	FOR MANIFOLD - DOUBLE ACTING	XY = 99	
9					DST	FOR MANIFOLD - DOUBLE ACTING	XY = M9	
10					SE	WITH KNOB - DOUBLE ACTING	XY = 95	
11					SE	WITH KNOB - DOUBLE ACTING	XY = M5	
12					DA/	SE	DOUBLE FLOW BP < 50 - AP>50 BAR	XY = 97
13					SA	DST	FOR MANIFOLD - SINGLE ACTING	XY = 92
14					DA/	DE	DOUBLE FLOW BP < 50 - AP>50 BAR	XY = 90
15	GW	HND	FLG	SA	SE	WITH KNOB - SINGLE ACTING	XY = 88	
16					SE	WITH DISTRIBUTOR - SINGLE ACTING	XY = 84	
17				DE	WITH DISTRIBUTOR - DOUBLE ACTING	XY = 83		
18				DE	WITH DISTRIBUTOR - DOUBLE ACTING	XY = F3		
19			DA	SE	SE	SE	WITH KNOB - DOUBLE ACTING	XY = 81
20						SE	WITH KNOB - DOUBLE ACTING	XY = F1
21					SE	WITH KNOB - DOUBLE ACTING	XY = W1	
22					DST	FOR MANIFOLD - DOUBLE ACTING	XY = 89	
23					SE	WITH KNOB - DOUBLE ACTING	XY = 85	
24					SE	WITH KNOB - DOUBLE ACTING	XY = F5	
25					SE	WITH KNOB - DOUBLE ACTING	XY = W5	
26					DA/	SE	DOUBLE FLOW BP < 50 - AP>50 BAR	XY = 87
27					SA	DST	FOR MANIFOLD - SINGLE ACTING	XY = 82
28					DA/	DE	DOUBLE FLOW BP < 50 - AP>50 BAR	XY = 80
29	DA	DE	WITH DOUBLE PILOT RETAIN VALVE	XY = 79				
30	GH	HND	FLG	SA	SE	WITH KNOB - SINGLE ACTING	XY = 77	
31				DE	WITH DISTRIBUTOR - DOUBLE ACTING	XY = 73		
32			LNA	DA	SE	WITH KNOB - DOUBLE ACTING	XY = 75	
33			FLG	SE	WITH KNOB - DOUBLE ACTING	XY = 71		
34	-	HND	-	SA	SE		XY = PC	
35	-	HND	-	SA	SE		XY = HP	
36	-	FTT	-	SA	SE		XY = PD	

TABELLA 1 (GAMMA POMPE) - CHART 1 (PUMP RANGE)



GW系列手动泵

GW系列的手动泵是铸铁的，有4种不同类型适用于不同的应用场合，它与AL系列的手动泵不同的地方在于泵体是铸铁，并经过电镀表面处理。

特殊版本 "GW"

GW-FROST版本的手动泵用于极寒的温度环境，环境温度为-40°C - +80°C，其操纵杆和阀杆都为不锈钢，仅仅安装在 AEP-6A -XXX类型的钢制油箱或其他金属板材焊接而成的法兰油箱。

GW-FROST型手动泵相比于GW系列手动泵有以下特点：

- 杠杆，连杆，别针，卡环，螺丝完全为不锈钢
- 垫圈在低温环境下使用

特性版本

GW-WITON版本的手动泵适用于高温环境，使用特殊的抗高温垫片，温度范围为-10°C- +110°C，仅仅安装在 AEP-6A -XXX类型的钢制油箱或其他金属板材焊接而成的法兰油箱。

GW-FROST型手动泵相比于GW系列手动泵有以下特点：

- 铜柱塞
- 高温密封件

GH系列手动泵

GH系列的手动泵是Ghim公司生产的经济型手动泵，有4个基本系列可适用于不同的使用场合。

GH型手动泵与市场上普通的手动泵相比，具有以下特点：

- 铸铁泵体，表面油漆
- 拧活塞滑动座
- 活塞杆镀铬
- 杆与接头之间用钢垫片密封。
- 手柄锁定
- 耐高压的特殊密封

泵的构造

AL系列每种泵都有4种不同排量可以选择：06-12-25-45 CC/次。

GH系列和GW系列有3种不同的排量可以选择：12-25-45 cc/次。

以下的产品，所有的泵都可使用：

- 带溢流阀
- 带防护套
- 带铝-塑料油箱或钢制烤漆油箱。
- LLS自动固定的手柄锁定系统。
- 泵安装套件
- 带焊接法兰

GW SERIES PUMPS

"GW" range of pumps in cast iron is the intermediate series of pumps produced by GHIM. It provides essentially 4 of pumps suitable for different types of usage as reported in Table 1 (Range pumps).

They differ from the series "AL" only FULL with galvanic protection on the surface.

Special version "GW-FROST"

The pump "GW FROST" is a special version suitable for withstanding Cold environments.

The line "GW FROST" uses special gaskets that can withstand C

The lever and the stem are fully stainless steel

A F AEP E AEP A

Pumps in "GW FROST" have in addition compared to the series "GW", the following basic content:

- Leverage, connecting rods, pins, rings seeger and completely screws stainless steel
- Gaskets for use in low temperatures

Special version "GW-WITON"

The pump "GW WITON" is a special version suited to withstand hot environments.

The line "GW WITON" uses special gaskets that can withstand C

A F AEP E AEP A

Pumps in "GW WITON" have in addition compared to the series "GW", the following basic content:

- brass Piston
- seals for use at high temperatures

GH SERIES PUMPS

Range "GH" cast iron pumps represents the commercial series of pumps produced by GHIM. It provides essentially of pumps suitable for different types of usage as reported in Table 1 (Range pumps).

The series of pumps "GH" than common pumps on the market has the following additional content:

- body painted cast iron
- piston sliding Seat screwed
- Rod pumping of the Nickel-coated
- steel gaskets seals on the stem and the faucet
- lever locking system
- special Seals resistant to high pressure

CONSTRUCTION PUMPS

Each pump of the series "AL" there are four different displacements: CC/cycle.

For the series "GH" and "GW" there are three different displacements: cm3/cycle.

All pumps are available in the following productions:

- with pressure relief valve
- With stem protection bellows
- with tank with aluminum-plastic or coated metal
- With automatic anchoring "LLS" lever L L S
- with pump Kit
- with flange-welded

最大压力安全阀

安全溢流阀，可调节手动泵的公称压力，标准的设定压力见表2。

Versions which contain the pressure relief valve, calibrated, they will be given to their nominal pressure operating values are shown in Table 2 (Standard Calibration pressure relief Valve).

TARATURA DELLA VALVOLA DI MASSIMA PRESSIONE 溢流阀标准设定压力 STANDARD SETTING RELIEF VALVE

MODEL		PRESSURE (BAR)			
		06	12	25	45
“AL” “GW” “GH”	STANDARD	100	100	100	100
	RANGE	25÷350	25÷300	25÷250	25÷200

表2 TABELLA 2 (TARATURA STANDARD VALVOLA DI MASSIMA) - CHART 2 (STANDARD SETTING RELIEF VALVE)

调节溢流阀最大压力

参照图2（手动泵选项）调节溢流阀的压力是必要的：

- 去掉盖帽
- 顺时针拧紧螺杆增加压力，逆时针拧松螺杆减少压力
- 重新装上密封帽，拧紧。

Changing the Maximum Relief valve Calibration

With reference to the Figure 2 (hand pumps Optionals) for the adjustment of the pressure relief valve is necessary:

- remove the CAP
- screw seal grain clockwise to increase the pressure, or other way unscrew the wheat counterclockwise to reduce pressure
- sealing cap remount the locking torque

手动泵可选项 OPTIONALS HAND PUMPS - OPTIONAL



防护套 BELLOWS
AEP-G1-3050 / 60

LLS锁紧套件
KIT “LLS” LOCK LEVER
SYSTEM - AEP-K6-9100

泵安装支撑
SUPPORT OF PUMPS
AEP-6E-0350

“AL” - “GW” 溢流阀
RELIEF VALVE

“GH”
RELIEF VALVE

FIGURA 2 (POMPE A MANO OPTIONALS) - PICTURE 2 (HAND PUMPS OPTIONALS)

油箱及焊接法兰

如果需要配带油箱，有1-2-3-5-7-10L油箱可供选择。

为了方便泵与任何焊接法兰的油箱安装。图4（焊接法兰-软管点）

如果你想要将泵与油箱分开来安装，你可选用一个泵安装支撑，图2（手动泵可选项）

这些泵可以根据客户的要求定制，液压管件提供商可提供这样的安装套件。

Tanks and welding Flange

Is required if the pump with tank, have the following capacity:
liters.

To facilitate mounting the pump for any tank is the weldable steel flange.
Figure 4 (weld Flange-Hose Position)

If you want to install the pump separately from the tank is provided for a
" " that allows easy installation of the suction pipe of oil. Figure 2
(hand pumps Optionals)

T
IT



特殊设计的版本

我们能够为客户定制特殊动力装置。我们的服务设计配备，以满足客户的需求。我们有一个有限元仿真的，再加上实体建模CAD支持的设计，允许我们定义准确正确的泵尺寸。

SPECIAL DESIGN VERSIONS

We are able to realize special power unit to the customer. Our service design is equipped to meet the demands of the customer. We have a finite element Simulator that, combined with solid modeling CAD support design, allows us to define with accuracy the correct pump sizing.



应用领域

这些手泵的应用领域是多方面的，主要变化在产业，生态，农业，交通，军事，海军和航空等，以及特殊的环境应用，如专门为在低温或高温条件下的应用或用于非常恶劣的环境而设计的特别版。

FIELDS OF APPLICATION

Fields of application of these hand pumps are manifold and vary primarily in the fields of industry, ECOLOGY, agriculture, transport, military, NAVAL and AERONAUTICS and finally, with Special Versions specifically designed for applications at low temperatures or high temperatures or for highly aggressive environments.

耐用性

产品经过在实验室检验测试，获得了高度的可靠性及长久耐用的使用寿命。

RELIABILIT

The curated design followed by experimental tests performed in test laboratories have enabled the creation of a highly reliable product with high yields and durable in time.

组成代码

手动泵的识别码是由三组字母或数字组成的：

AEP - XY - K G NN

如表3所示（一般手动泵）每个字母都有一个确切的含义：

字母“**AEP**”

识别手动泵的系列

字母 **XY**

识别手压泵的子系列。见表（泵范围）。例如，手动泵类型：

- “AL” 铝泵体
- “HND” 手动

COMPOSITION CODE

The identification code of the hand pump is composed of three groups of letters or digits:

AEP

G NN

As indicated in Table 3 (General Hand Pump) every letter has a precise meaning:

Letters: “**AEP**”

Identifies the family of hand pumps

Letters: “ ”

Identifies the subfamily of hand pump. See table 1 (Range pumps).

For example, a hand pump of type:

- “AL” - Body aluminum”
- “HND” - hand drive

- “FLG” 法兰
- “DA” 双作用
- “DE” 操作双作用油缸
- **MARINE** 适用于特殊腐蚀性的环境

按照手动泵系列 **AL-HPI-MARINE** 带换向阀 其子系列 **XY M3**

字母 **K**

根据表3的标识, 识别泵的基本配件, 例如您需要选择带防护套和溢流阀则 “K” =7

字母 **G**

标识特殊版本的手动泵, 标准版的手动泵 “G” =0

字母 **NN**

表示泵的排量, 请参见表3, 例如, 您想选泵的排量为25cc/次, “NN” =25

完整的代码

泵的完整代码描述如下:

- **AEP**
- **XY** = “M3” 泵 **AL-HPI-MARINE**
- **K** = “7” 泵带防护套及溢流阀 **SF VM**

- **G** = “0” 标准版
- **CC** = “25” 排量 2

将有

AEP - M3 - 7 0 25

泵的操作手柄和油箱您必须另行订购, 关于这些, 你可以参考样本, 例如, 600mm长的直手柄的代码如下:

AEP - K6 - 0 6 00

3L铝-塑料油箱的代码

AEP - 6B - 0 3 01

外形尺寸

如果选定型号后, 外形尺寸可参考技术表中的尺寸, 如果选了带油箱, 其外形尺寸应加上油箱的尺寸。

例如: 带600mm直手柄, 手动泵+3L油箱, 代号如下:

AEP-M3-7025 + AEP-K6-0600 + AEP-6B-0301

“AL-HPI” 4/2 Diverter “CC”

- 宽 **70**
- 长 **157**
- 高 **260**
- 安装孔中心距离 **50 x 95**
- 安装螺钉 **M8**

从手柄和油箱尺寸表:

- 手柄长度 **590**
- 油箱高度 **198**
- 油箱宽度 **204**
- 油箱深度 **173**
- 油箱的安装孔中心距 **90 x 180**

- “FLG” - Flangiabile;
- “DA” - Double Acting
- “DE” - For cylinder double-acting
- “MARINE” - suitable for particularly aggressive environments

It follows the pump series “AL HPI MARINE” with Inverter, belonging to the subfamily “ ” = **M**

Letter: “ ”

Identifies the version of pump based on installed components and highlighted in Table 3 (General Hand Pump).

For example, if you want to be the version with accordion “SF” and maximum Pressure relief valve “ M”, from the table they get “ ” =

Letter: “G”

Identifies a special version of the pump. For the Standard version will have “G” =

Letters: “NN”

Identifies the displacement of the pump as evidenziaoi in Table 3 (General Hand Pump)

For example, if you want to pump with a capacity equal to 25 cc/cycle we have “NN” =

Complete Code Resulting

The complete code for the pump previously described as:

- **AEP**
- = “M ” Pump “AL HPI MARINE”
- = “ ” Version with Bellows pump “SF” and maximum Pressure relief valve “ M”
- **G** = “ ” Standard
- **NN** = “ ” (flow pump 25 cc/cycle)

will be:

AEP - M3 - 7 0 25

The **LE ER** for the driving of the pump and the **TAN** must be ordered separately. For these you must refer to the tabs shown in this catalogue. For example, a straight **LEVER** long 600 mm will have as code:

AEP - K6 - 0 6 00

and for a plastic-aluminum tank by 3 litres with oil level we have:

AEP - 6B - 0 3 01

O ERALL DIMENSION

To check the dimensions of the pump, after identifying the code of the same, we must refer to the dimensions given in Tables techniques of this catalog. If the pump must be fitted with the tank, it is necessary to identify the type of vessel chosen and added to the basic dimensions of the pump, the corresponding dimensions.

For example, in case the pump just encoded, associated **AST** straight 600mm long we will have:

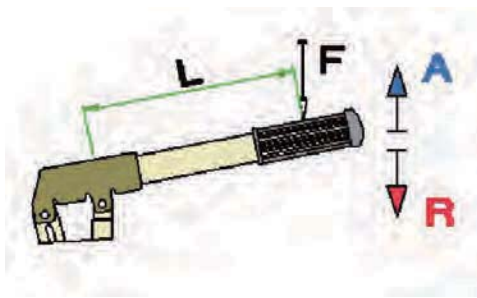
AEP M AEP AEP B

The table “AL HPI **D** **CC**” will:

- **B** = width = mm
- **L** = Length = mm
- **H** = Height = mm
- **Wheel base** = mm
- **Mounting diameter** = **M** fixing screws (4 screws)

from the table of **LE ER** and the table of the **TAN S** will:

- **L** = Lever Length = mm
- **H** = S03 lt Tank height = mm
- **B** = S03 lt Tank Width = mm
- **P** = S03 lt Tank Depth = mm
- **Wheel base** = mm Fixing



LEGENDA

A 上拉 UP

R 下压 DOWN

L 手柄长度

Lever Length 600 mm

F 力作用在手柄的末端

Effort to apply at the end of the lever

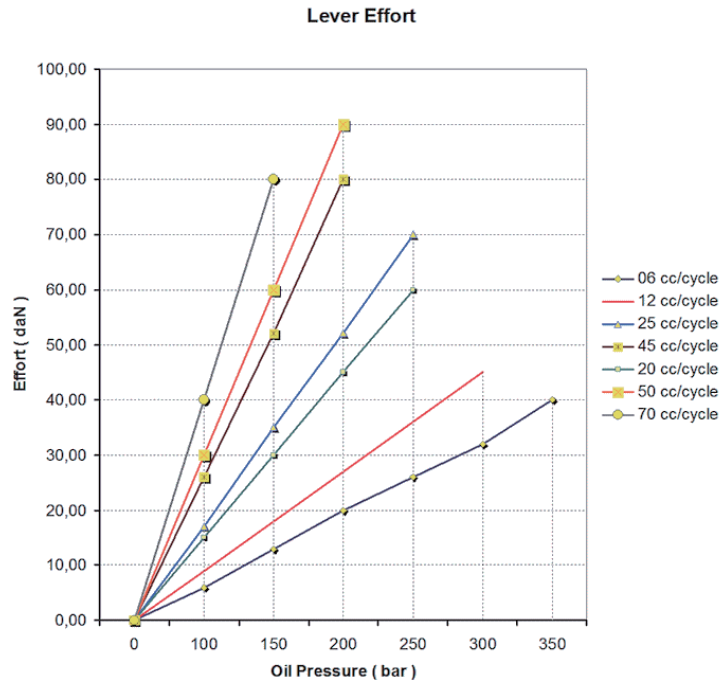


FIGURA 3 (SFORZO ALLA LEVA) - PICTURE 3 (LEVER EFFORT) 图3

公差

图表中呈现的尺寸公差，必须与实现产品的必要的机械操作兼容。

- 机械加工用旋转切割面：中级UNI5307-63
- 表面或焊件中心距配额：+/- 3%
- 成型和锻造的配额：+/- 2%

特性曲线

在图3中（手柄作用力），体现了排量，压力和手柄的操作力之间的关系曲线。

用途及技术数据

手动泵是为液压控制而设计的，所以，流体必须为液压油，其用途为：传递功率和提供润滑保护设备。主要的技术参数已在附表中给出，它们包括：工作压力，最大压力，排量，也包括泵安装的一些相关参数。

在实际的使用中，使用的参数不应超过表中给出的参数，以免过度操作损坏手动泵。

重要注意事项：

手动泵安全系统包括：

- 如果安全溢流阀不是装在泵本身，安全阀最大压力调节取决于泵体安全操作压力。

TOLERANCES

The size tolerances reported in charts have to be intended compatible with the mechanical operations necessary for the realisation of the product.

- Machined surfaces with rotary cutting: MIDDLE GRADE UNI 5307-63
- Quotas of surfaces or centre distance with welded parts: +/- 3%
- Quotas of moulding and forging: +/- 2%

CHARACTERISTIC CURVES

In Figure 3 (lever Effort) are the curves represented an effort to LEVER of PRESSURE as a function of the request.

INTENDED USE AND TECHNICAL DATA

Of The hand pump is designed for hydraulic control as it has been designed to be used with hydraulic oil which, in addition to transmit power provides lubrication and protection equipment. The main technical data are given in the tables attached. They contained data on pressure, maximum working pressure and pneumatic power; also included are data relating to other components may be mounted on the pump.

The parameters listed in the tables should not be, for any reason, altered or rejected to avoid badly operations and/or breakages of the pump itself.

Important note

For safety system that will be inserted into the hand pump must absolutely include:

- If not already installed on the pump itself, a safety valve to the maximum pressure MA . "calibrate depending on the parameters of safe operation of the plant where the pump is inserted.

• 就法兰本来说，在油箱到泵之间的吸油回路，应该有一个适当过滤能力的隔膜式过滤器，过滤精度不得小于120微米（就这方面，建议使用Ghim的AVL系列轴向过滤器）

极限工作条件

手动泵被设计适用于以下这些参数：

- 最大使用压力见表2（校准标准溢流阀），更高的压力请联系我们技术支持。
- 无腐蚀的环境。使用在腐蚀性的环境中，可选用订“AL-MARINE”型号。
- **最大工作温度：-10 °C - STANDARD**
- **最小工作温度：-10 °C - AL-MARINE**
- **最大工作温度：40 °C - GW-FROST**
- **最小工作温度：10 °C - GW-WITON**
- **最大温度：70 °C - STANDARD**
- **最大温度：70 °C - AL-MARINE**
- **最大温度：70 °C - GW-FROST**
- **最大温度：110 °C - GW-WITON**
- **海拔高度不超过 1000 m s.l.m**
- **流体：矿物油基液压油 DIN**
- **油的最小粘度：15 cSt**
- **油的最大粘度：100 cSt**
- **油的推荐粘度：32÷68 cSt**
- **最大吸油压力：1bar**
- **允许的油箱最大压力：0.5bar**
- **最大吸入负压：-0,1 bar**

在不同的温度，不同的流体或高腐蚀性的环境使用手动泵，可订购根据不同使用要求设计的特殊版本的手动泵。（例如：低温-40°C，水-乙二醇，高腐蚀性环境。）进行适当的表面处理（氧化等）。见“AL-MARINE”，“GW-FROST”和“GW-WITON”版本手动泵。

随着使用时间的增加，对这些组件进行正确的操作和维护，我们推荐使用按国际标准API，MS，VDMA24828，DIN和DIN1524-51525的液压油。尤其，推荐使用矿物油H-LP DIN 51524。ISO VG粘度等级的选择，依赖于运转温度和年内泵启动时的环境温度。推荐选用的油的粘度大约为28cSt。

寒冷的气候：46 CST
温带气候：68 CST
很热的气候：100 cSt

不合适的使用

标准版的手动泵不能做以下使用：

- 其他用途或超出预期的技术参数使用。
- 水和油以外的其他流体。
- 在防爆环境，耐腐蚀环境，高浓度油性环境或空气中有大量的飞尘环境。你必须选用“MARINE”版本耐腐蚀手动泵和“EXOLOSION”防爆版手动泵。
- 在高火灾危险环境。
- 暴露在恶劣天气或环境条件或安装不符合本章描述的。

- In the case of version **FLANGIABLE**, a suction circuit of oil from the tank to the suction of the pump that has a proper filter capacity parameters of flow pump and filter septum with at least 120 microns (in this regard, it suggests the use of **AL GHIM series FILTERS A L**).

OPERATING LIMITS

The "HAND PUMP" is designed to be used within these parameters:

- **Maximum Usage Pressure** see Table 2 (Calibration Standard Relief valve). For higher pressure contact our design support
- **NOT AGGRESSIVE Environment**. In the case of aggressive environments is available "AL MARINE" by request at order.
- **Minimum working temperature C STANDARD**
- **Minimum working temperature C AL MARINE**
- **Minimum working temperature - C GW FROST**
- **Minimum working temperature - C GW WITON**
- **Maximum temperature of C STANDARD**
- **Temperature maximum C AL MARINE**
- **working temperature C GW FROST**
- **-maximum temperature of C GW WITON**
- **Altitude not exceeding ;**
- **Fluid: base hydraulic DIN**
- **Oil Viscosity minimum S**
- **Hydraulic oil viscosity maximum S**
- **Recommended viscosity S**
- **Maximum suction pressure**
- **Maximum allowable pressure in the tank**
- **Maximum suction intake Depression**

To use the pump at different temperatures than those indicated and/or with different fluids and/or in a highly aggressive, I order special versions of pump specially designed according to operational needs. (for example: low temperatures - 40° C, the use of water-glycol, highly aggressive environments) and with suitable surface treatment (anodizing, etc.). See pumps "AL MARINE" "GW FROST" and pumps "GW WITON".

Oil to be used

For proper operation and maintenance over time of performance of this component, we recommend the use of oils in accordance with international standards API, MS, VDMA 24818, DIN and DIN 51524-51525, in particular, it recommends the use of mineral oils H-LP DIN 51524. The gradation of viscosity ISO VG should be chosen depending on the operating temperature and ambient temperature at startup and during the year. The choice is for the oil temperature regime of the plant has a viscosity around 28 cSt.

22

Temperate climate: 68 cSt - Very hot climate: 100 cSt Very cold

UNSUITABLE FOR USE

Attention: hand pump in the **STANDARD** version should never be used:

- For uses other than those exposed to the chapter "INTENDED USE AND TECHNICAL DATA";
- With water or oil other than those indicated under the heading "OIL FOR USE"
- In environments with potentially explosive, aggressive or high concentration oily substances or dust suspended in air. In this case you must request the "MARINE" for aggressive environments or the "E PLOSION" for explosives;
- In environments with high fire risk;
- Exposed to the weather or environmental conditions or installation do not conform to what is described in the chapter

调试：

- 吸入物质在液态或半固态可能含有固体部分；
- 没有正确连接的吸入和排出管路或其他部件；
- “液压系统”的压力变化；
- 洪水危险的环境中（如：手泵不能在浸泡中工作）；
- 手泵不能在真空中工作；缺少液体的操作对操作者和泵的本身是有害的或存在潜在的危险。

贮存

因长期闲置，应考虑将泵存储，存储应考虑到地点和时间的特性，特别是评估环境的温度，湿度和环境的污染。

存储必须以下列方式进行：存储的泵；应防止冲击和堆压；合适的环境温度应为5°C至50°C，相当湿度在20%至60%非凝结区间和对大气遮蔽，以避免设备的损坏。避免泵与腐蚀性物质接触；避免暴露在光线下。

我们建议您限制闲置时间；保存期限不超过6个月的时间。

"COMMISSIONING";

- To suck substances in liquid or semi-solid state that may contain solid parts;
- Without having properly connected pipelines of suction and discharge or any components;
- Changing pressures indicated in the annex "hydraulic Scheme";
- In environments with danger of flooding (N.B.: the hand pump can not work in immersion);
- The hand pump can not work in a vacuum; the operation in the absence of liquid is harmful and potentially dangerous to exposed persons and the pump itself.

STORAGE

In case of long inactivity, storing the pump taking into account the characteristics of the place and time of storage, in particular assessing the temperature, humidity and environmental pollution. Storage must be carried out in the following way:

Storing the pump in place; Protect the pump from shocks and stresses; Protect the pump but keeps it in a suitable environment with temperature between 5° C and 50° C and relative humidity between 20% and 60% non-condensing and sheltered against atmospheric agents in order to avoid deterioration of equipment. Avoid that the pump is in contact with corrosive substances; Avoid exposure to light.

W

FLANGIA A SALDARE - POSIZIONE TUBO ASPIRAZIONE 焊接法兰 WELDING FLANGE - SUCTION PIPE POSITION 吸入管位置

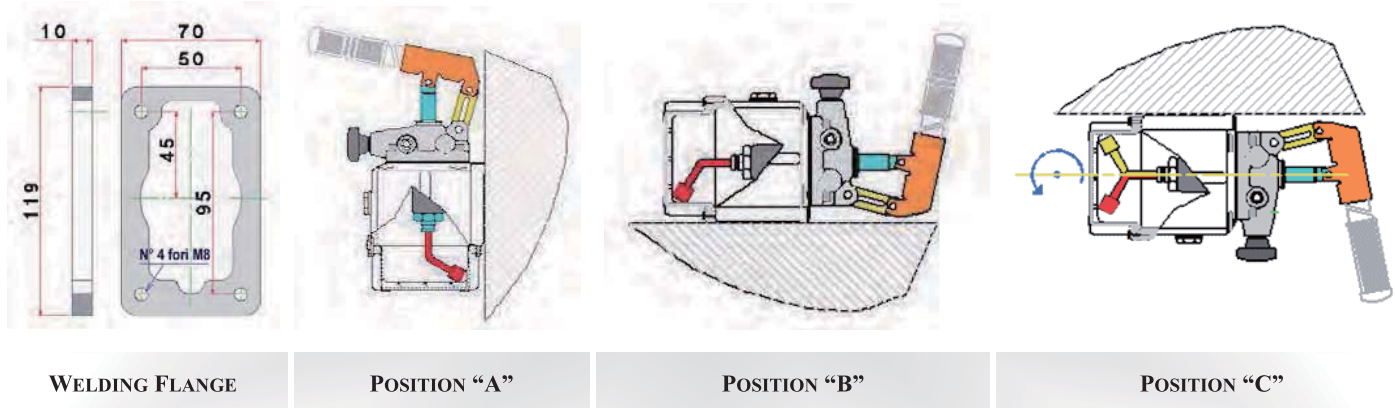


FIGURA 4 (FLANGIA A SALDARE - POSIZIONE TUBO ASPIRAZIONE) - PICTURE 4 (WELDING FLANGE - SUCTION PIPE POSITION)

安装

HP手动泵安装位置：

泵的安装取决于壳体的选择。

泵带油箱：

带油箱的泵标准安装位置为图4中的A和B，（焊接法兰和软管位置），如果你选择C位置，在安装前必须注意以下几点：

- 从油箱法兰上拆掉4个M8的螺栓，卸下手动泵；
- 将吸油管旋转180度；
- 将泵安装到正确位置，取代泵原来的位置。
- 拧紧密封螺钉M8

泵的油箱法兰：

如果手动泵用法兰安装与油箱的钢板上，应使用特殊的焊接法兰。请见图4（焊接法兰-吸油管）

INSTALLATION

Mounting Positions "HP" pump

The pump installation depends on the choice of the shell.

Pump with tank

To the pump with tank are standard positions "A" and "B" in Figure 4 (weld Flange-Hose Position) in case you opt for the position "C", before the installation you must do the following:

- Remove the pump from the flange of the tank by removing the 4 screws M8
- Rotate the suction pipe of 180°
- Replace the pump in the original editing the correct positioning of the pair
- Close seal screws M8

Pump flange to the tank

In case the pump should be flanged to the tank plate, is scheduled the special welding flange, as shown in Figure 4 (weld Flange-Hose)

投入使用

禁止对影响泵的安全的任何操作。

作出任何干预泵，拔下管道和气动，在较高的压力情况下都是危险的。必须遵循制造商的指示恰当的使用手动泵。每一个参与测试，安装，使用和维护的人员必须先阅读本手册。

泵的位置：

为了防止气蚀，泵的吸油位置应低于油箱中液压油为最少量时的油水平位置。泵到油液水平面的高度不得超过0.5m。

液压连接：

对于液压连接，您必须选用高质量的合适的管子和接头，正确的尺寸能够减少压力损失，以防止过度的堵塞。不合适的输入和输出管路连接可能导致手动泵不工作，在这种条件下，可能会对操作者造成安全事故或污染环境。正确的连接输入和输出管路，对手动泵的正常使用寿命具有很重要的作用。

管子：

- 吸，确保低过油速度 $V=0.6-1.2$ 米/秒。
- 压力，确保 $V=6-8$ 米/秒较低的过油速度。

同时应避免泵和油箱的强烈差异，管路冗长，过度的弯曲，直径的变化等。

在任何情况下，在泵的吸入口压力必须满足规定的操作限制条件。

警告

在系统使用之前，建议您用“AKM”系列的GF100过滤器进行一次冲洗。确保输入和输出的接头和阀门都是打开的，在填充流体阶段，通过出口使空气流通，松开高压端的管接头，等待泄漏大量的泡沫和油，在清洗结束时检查油位，可能在上部，把压力逐步进行校正和调整控制阀（在工厂做）。进行工厂测试，然后停下来，清洗过滤网，检查机油油位。

重要：

这一设备只应由有资格的人员使用。安装调试只能在同一个完整的机器，在符合现行规则和法律的情况下进行。

检查与维修

控制启动

刚刚完成安装，在试用前，您必须执行一系列的检查。确保：

- 连接的两端被正确的液压连接。
- 油泵吸入管正确定位。
- 泵正确触发，达到所需的压力。
- 泵从油箱抽吸正确，即无空气。有时，事实上由于吸入管的直径过大或长度太长使泵抽吸油不正确引起的噪声和空气。在有空气的情况下，可能使泵总是没有压力。

PUTTING INTO SERVICE

Is prohibited any operations that affect the safety of pump use. Before making any intervention on the pump, unplug the plumbing and Pneumatic. Employment at pressures higher than those of the plate can be dangerous. For appropriate use should follow the manufacturer's instructions; every person involved in testing, installation, use and maintenance must have previously read this manual.

Positioning the Pump

To avoid cavitation pump must normally be positioned under-batter, i.e. below the level of oil in the tank which sucked. However, in any case the difference in intake must not exceed 0.5 mt. To avoid schiumaggio the return piping should always be below the level of oil even when it is minimized.

Hydraulic Connection

For hydraulic connections, you must use appropriate pipes and fittings and of good quality, correctly sized so as not to cause losses or excessive obstruction. Do not actuate the hand-pump without having properly connected piping input and output of liquids, as in such conditions could cause a risk for the operator and the environment. For a proper functioning have considerable importance both the suction pipe that the delivery pipe.

A pipe:

- **S** to ensure a lower oil speed of
- **P** to ensure a lower oil speed of

Also, avoid strong differences between pump and tank, lengthy, and revitalising as curves, variations in diameter etc.

OPERATING LIMITS

Warning

Before starting up the system it is recommended that you run a flushing system using the filtration system "GF" family "A M". Make sure that taps and gate valves on inlet or outlet are open. During the filling phase of the plant make air bleeding through the vents, or in absence thereof, by loosening the fittings of the highest parts of the plant and waiting for the amount of leakage of foam and the release of oil. At the end of the purge check the oil level, possibly top it up, put pressure progressively the plant and proceed to phase calibration and tuning control valve (do this at the plant). Perform testing of the plant, then stop it, clean the filters and check the oil level.

Important

This plant should be used only by qualified personnel. Commissioning of the installation must be done only in the case where the same complete machine is compliant with rules and laws in force.

CHECKS AND MAINTENANCE

Controls start-up

Just finished with the installation, you must perform a series of checks before commissioning of the plant.

Make sure that:

- links both tires that have been executed in hydraulic correctly.
- The suction pipe of oil in the pump is properly positioned.
- The pump is properly triggered and reaches the desired pressure.
- The pump aspirates from the tank properly, i.e. without cavitation. Sometimes in fact because of a suction pipe diameter or too long the pump aspirates the oil correctly not giving rise to noise, air

- 手动泵的溢流阀是否正确的校准。
- 位于泵法兰下吸油阀功能是否正确
- 安装在进油阀前的过滤器是否干净
- 无特殊要求，溢流阀通常是校准在100bar
- 泵在最大压力下的手柄作用力极限，请见图3（手柄作用力）。

定期检查

你必须定期进行以下检查和维护：

- 每个月定期清洁，为了便于识别可能的损失。
- 清洁泵的靠近吸油阀的吸油过滤器。
- 检查油标，补充失去的油量。
- 检查油液，看看是否存在污染，如果污染严重，请更换液压油。
- 流体中的杂质和污垢的存在降低了系统的寿命和可导致系统不正常工作，我们推荐使用我们的轴向过滤器“AVL”系列。吸滤“为”AS（90微米）-在线过滤器“PR”（10微米）- 滤波器“SC”（25μ米）

bubbles in the oil and in some cases you can arrive at the total absence of oil pressure.

- Pressure relief valve of the pump is properly calibrated.
- The suction valve positioned under the flange of pump is functioning properly
- The filter positioned ahead of the intake valve is clean
- Without special requirements, pressure relief valve is usually calibrated to 100 bar,
- Effort in pumped at maximum pressure is within the limits of the plate. See Figure 3 (Effort to lever).

Periodic Checks

Periodically you must perform the following checks and maintenance:

- Clean the plant each month in order to facilitate the identification of possible losses.
- Clean the pump suction filter located close to the suction valve.
- Check the oil level in the tank and, where appropriate, provide for the addition of oil missing.
- Verify the cleaning and the level of contamination of the oil. If too much dirt to provide a replacement.
- The presence of impurities and dirt in the fluid reduces the life of the system and can cause seizures, we recommend the use of our axial filters "A L" family. Suction filter "AS" (90 microns)-in-line filter "PR" (10 micron)-filter on "SC" (25 μm)

POSIZIONE FILTRO IN ASPIRAZIONE

SUCTION FILTER 吸油过滤器

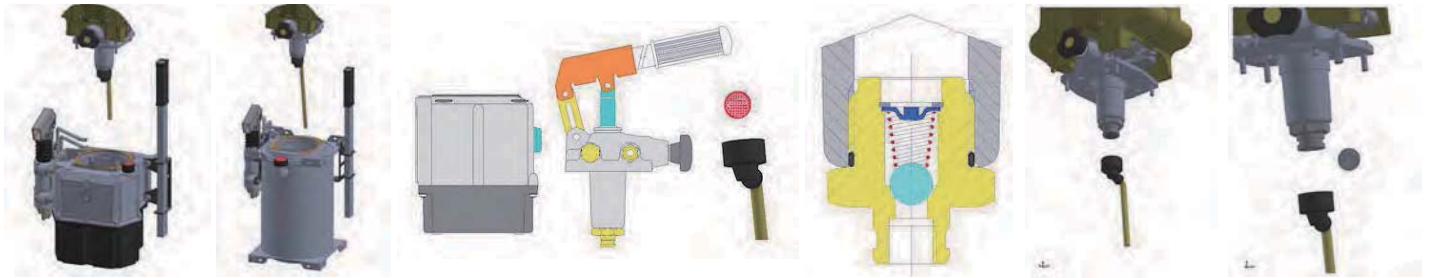


FIGURA 5 (PULIZIA FILTRO ASPIRAZIONE) - PICTURE 5 (SUCTION FILTER CLEANING)

清洁过滤器和单向阀

清洁吸油过滤器必须：

- 拆下橡皮吸油口
- 清洗内部过滤器

清洗吸入单向阀

- 拆下橡胶帽
- 从活塞筒上拧下螺母
- 阀位于螺母帽内部

清洗卸荷阀

- 拧下接头
- 深入的拧下卸荷手轮
- 清洗阀座

环境污染

每次保养维护，请将坏的油和部件置于特定的垃圾箱，不要丢在环境中。

Cleaning of the Filter and check valves

For cleaning the suction filter must be::

- remove the shell rubber suction zone
- Inside of the filter to clean.

Cleaning the suction check valve:

- Remove the rubber cap in the area.
- Unscrew the screw from the cylinder
- The valve is located inside of the CAP.

For cleaning discharge check valve:

- Unscrew the tap should
- Extract the tap from home
- Clean the seat of the valve.

ENVIRONMENTAL POLLUTION

During each maintenance intervention, not to disperse the oil, and components in the environment, but disposed of in bins provided for that purpose.

CODIFICA POMPE A MANO - HAND PUMPS CODING

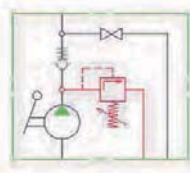
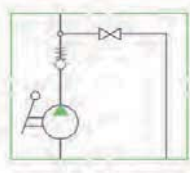
A E P - X Y - K G N N

AEP	XY	K	G	NN	
SERIES 系列	TYPE 型号	CONFIGURATION 配置	SPECIAL OPTIONAL 特殊选项	CAPACITY CC/CYCLE 排量	
AL SERIES	98		G=0 STANDARD	06 = 6 CC	
		- WITH KNOB			12 = 12 CC
	94	WITH DISTRIBUTOR			25 = 25 CC
	93	WITH DISTRIBUTOR			45 = 45 CC
	M3	WITH DISTRIBUTOR			20 = 20 CC
	96	WITH KNOB - DOUBLE ACTING			50 = 50 CC
	91	WITH KNOB - DOUBLE ACTING			70 = 70 CC
	M1	WITH KNOB			
	99	FOR MANIFOLD - DOUBLE ACTING		K = 1 VERSIONE BASE STANDARD ERSION 标准	
	M9	FOR MANIFOLD			
	95	WITH KNOB - DOUBLE ACTING			
	M5	WITH KNOB		K = 3 VERSIONE CON SOFFIETTO VERSION WITH BELLOWS 带防护套	
	97	DOUBLE FLOW BP - AP			
	92	FOR MANIFOLD - SINGLE ACTING			
90	DOUBLE FLOW BP - AP				
GW SERIES	88	WITH KNOB - SINGLE ACTING			
	84	WITH DISTRIBUTOR	K = 5 VERSIONE CON VALVOLA DI MASSIMA VERSION WITH RELIEF VALVE 带溢流阀		
	83	WITH DISTRIBUTOR			
	F3	WITH DISTRIBUTOR			
	W3	WITH DISTRIBUTOR			
	81	WITH KNOB - DOUBLE ACTING			
	F1	WITH KNOB			
	W1	WITH KNOB	K = 7 VERSIONE CON SOFFIETTO E VALVOLA DI MASSIMA VERSION WITH RELIEF VALVE AND BELLOW 带溢流阀和防护套		
	89	FOR MANIFOLD - DOUBLE ACTING			
	85	WITH KNOB - DOUBLE ACTING			
	F5	WITH KNOB			
	W5	WITH KNOB			
	87	DOUBLE FLOW BP - AP			
	82		K = 9 (-) SPECIAL VERSION UNDER CUSTOMER SPECIFICATIONS 特殊要求		
80	DOUBLE FLOW BP - AP				
79	DOUBLE PILOT RETAIN VALVE				
77	WITH KNOB - SINGLE ACTING				
73	WITH DISTRIBUTOR				
GH SERIES	75				
	71	WITH KNOB - DOUBLE ACTING			
	PC				
	HP				
	PD				

TABELLA 3 (CODIFICA GENERALE HAND PUMP) - CHART 3 (HAND PUMP GENERAL CODING)

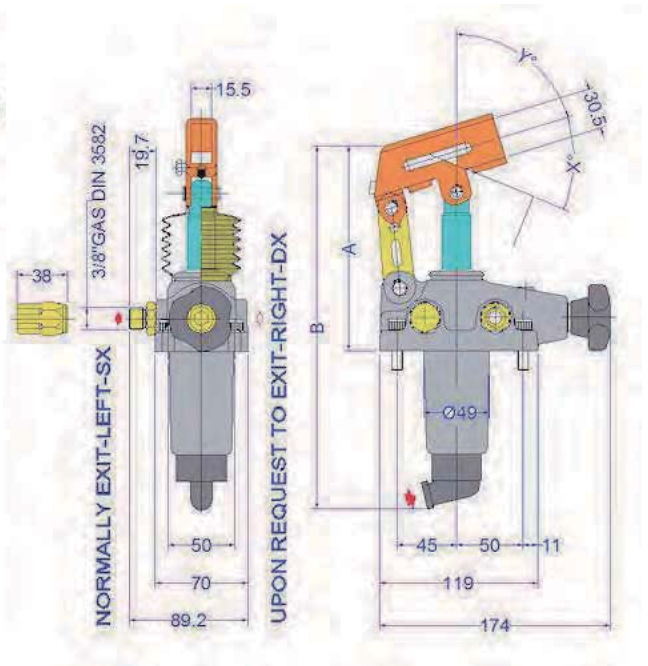
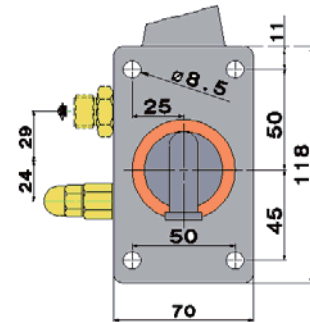
"AL-HPR"

"AL-HPR" - TECHNICAL DATA 技术参数



AL-HPR

AL-HPR-VS



AL-HPR系列手动泵为双作用液压手动泵带卸荷阀，但手柄拉和压的时候都产生排量。

The series "AL HPR", consists of Double Acting "DA" with drain knob. The oil flow pressure (flow) occurs both when the lever is driven downwards and upwards.

"AL-HPR" XY=91 - "AL-HPR-MARINE" XY=M1

订货代码 Codice Code	型号 SIGLA	描述 DESCRIPTION	P.nom - P.max	排量 Delivery	重量 Weight	A	B	X	Y
			bar	cc/cycle	daN	mm	mm	(°)	(°)
AEP-91-1006	AL-HPR-06	-	300	10	2,4	155	260	39°	73°
AEP-91-3006	AL-HPR-06-SF	WITH BELLOW 带防护套							
AEP-91-5006	AL-HPR-06-VS	WITH RELIEF VALVE 带溢流阀	350						
AEP-91-7006	AL-HPR-06-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-91-1012	AL-HPR-12	-	250	15	2,2	155	260	39°	73°
AEP-91-3012	AL-HPR-12-SF	WITH BELLOW 带防护套							
AEP-91-5012	AL-HPR-12-VS	WITH RELIEF VALVE 带溢流阀	300						
AEP-91-7012	AL-HPR-12-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-91-1025	AL-HPR-25	-	200	24,5	2,4	155	260	39°	73°
AEP-91-3025	AL-HPR-25-SF	WITH BELLOW 带防护套							
AEP-91-5025	AL-HPR-25-VS	WITH RELIEF VALVE 带溢流阀	250						
AEP-91-7025	AL-HPR-25-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-91-1045	AL-HPR-45	-	150	43	2,5	155	260	39°	73°
AEP-91-3045	AL-HPR-45-SF	WITH BELLOW 带防护套							
AEP-91-5045	AL-HPR-45-VS	WITH RELIEF VALVE 带溢流阀	200						
AEP-91-7045	AL-HPR-45-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							

NOTE PER L'ORDINE - ORDER NOTE 订货须知

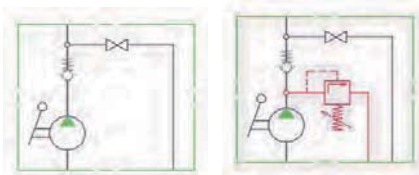
"MARINE" (海洋版)，请改变代码 XY=91为 XY=M1

To order the **MARINE** version please change the order code with the **M**.

TABELLA 4 (CARATTERISTICHE TECNICHE "AL-HPR") - CHART 4 ("AL-HPR" TECHNICAL DATA)

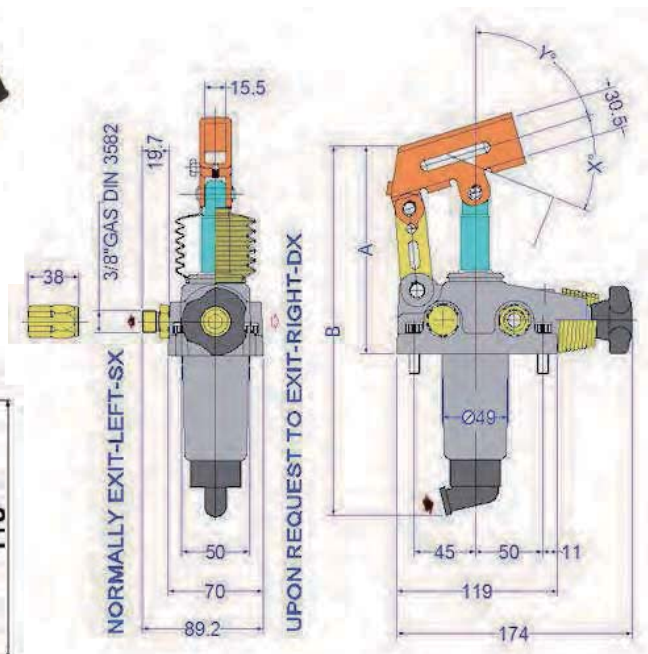
“AL-HPT”

“AL-HPT” - TECHNICAL DATA 技术参数



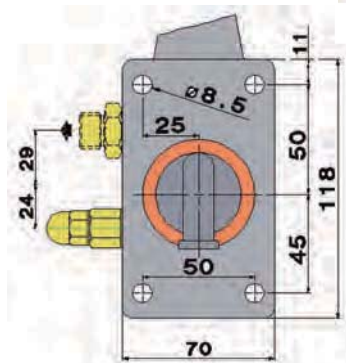
AL-HPT

AL-HPT-VS



AL-HPT系列手动泵为双作用液压手动泵带卸荷阀，但手柄拉和压的时候都产生排量。

The series "AL HPT", consists of hand-pumps-single and Double Acting "DA" with the exhaust valve and start the return spring for closing the drain. The oil flow pressure (flow) occurs both when the lever is driven downwards and upwards.



“AL-HPT” XY=95 - “AL-HPT-MARINE” XY=M5

订货代码 Codice Code	型号 SIGLA	描述 DESCRIPTION	P.nom - P.max	排量 Delivery	重量 Weight	A	B	X	Y
			bar	cc/cycle	daN	mm	mm	(°)	(°)
AEP-95-1006	AL-HPT-06	-	300	10	2,4	155	260	39°	73°
AEP-95-3006	AL-HPT-06-SF	WITH BELLOW 带防护套							
AEP-95-5006	AL-HPT-06-VS	WITH RELIEF VALVE 带溢流阀	350						
AEP-95-7006	AL-HPT-06-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-95-1012	AL-HPT-12	-	250	15	2,2	155	260	39°	73°
AEP-95-3012	AL-HPT-12-SF	WITH BELLOW 带防护套							
AEP-95-5012	AL-HPT-12-VS	WITH RELIEF VALVE 带溢流阀	300						
AEP-95-7012	AL-HPT-12-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-95-1025	AL-HPT-25	-	200	24,5	2,4	155	260	39°	73°
AEP-95-3025	AL-HPT-25-SF	WITH BELLOW 带防护套							
AEP-95-5025	AL-HPT-25-VS	WITH RELIEF VALVE 带溢流阀	250						
AEP-95-7025	AL-HPT-25-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-95-1045	AL-HPT-45	-	150	43	2,5	155	260	39°	73°
AEP-95-3045	AL-HPT-45-SF	WITH BELLOW 带防护套							
AEP-95-5045	AL-HPT-45-VS	WITH RELIEF VALVE 带溢流阀	200						
AEP-95-7045	AL-HPT-45-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							

NOTE PER L'ORDINE - ORDER NOTE

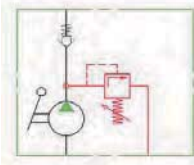
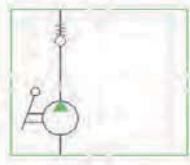
如果您想要从右侧出油，请标明（如果您没有标明，图上的出油口在左边。）
“MARINE”（海洋版），请改变代码 XY=95为 XY=M5

In order to indicate if you want to exit right oil (if you don't indicate is provided as a drawing with oil output on the left).
To order the **MARINE** version please change the order code with the **M**.

TABELLA 5 (CARATTERISTICHE TECNICHE “AL-HPT”) - CHART 5 (“AL-HPT” TECHNICAL DATA)

"AL-HPS"

"AL-HPS" - TECHNICAL DATA 技术参数



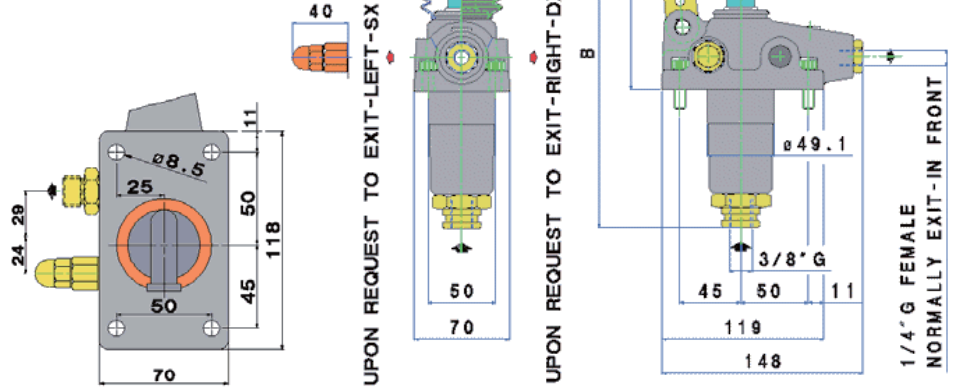
AL-HPS

AL-HPS-VS



AL-HPS系列手动泵为双作用液压手动泵不带卸荷阀，在手柄拉和压的时候都产生排量。

The series "AL HPS", consists of hand-pumps-single and Double Acting "DA" without putting into the exhaust valve. The oil flow pressure (flow) occurs both when the lever is driven downwards and upwards.



"AL-HPS" XY=99 - "AL-HPS-MARINE" XY=M9

订货代码 Codice Code	型号 SIGLA	描述 DESCRIPTION	P.nom - P.max	排量 Delivery	重量 Weight	A	B	X	Y	
			bar	cc/cycle	daN	mm	mm	(°)	(°)	
AEP-99-1006	AL-HPS-06	-	300	÷	10	2,4	155	260	39°	73°
AEP-99-3006	AL-HPS-06-SF	WITH BELLOW 带防护套	350							
AEP-99-5006	AL-HPS-06-VS	WITH RELIEF VALVE 带溢流阀								
AEP-99-7006	AL-HPS-06-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀	250							
AEP-99-1012	AL-HPS-12	-	250	÷	15	2,2	155	260	39°	73°
AEP-99-3012	AL-HPS-12-SF	WITH BELLOW 带防护套	300							
AEP-99-5012	AL-HPS-12-VS	WITH RELIEF VALVE 带溢流阀								
AEP-99-7012	AL-HPS-12-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀	200	÷	24,5	2,3	155	260	39°	73°
AEP-99-1025	AL-HPS-25	-	250							
AEP-99-3025	AL-HPS-25-SF	WITH BELLOW 带防护套	150	÷	43	2,4	155	260	39°	73°
AEP-99-5025	AL-HPS-25-VS	WITH RELIEF VALVE 带溢流阀								
AEP-99-7025	AL-HPS-25-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀	200							
AEP-99-1045	AL-HPS-45	-								
AEP-99-3045	AL-HPS-45-SF	WITH BELLOW 带防护套								
AEP-99-5045	AL-HPS-45-VS	WITH RELIEF VALVE 带溢流阀								
AEP-99-7045	AL-HPS-45-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀								

NOTE PER L'ORDINE - ORDER NOTE

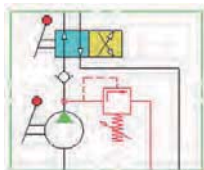
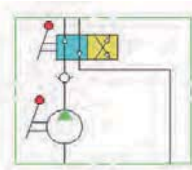
如果您想要从右侧出油，请标明 "DX"，左侧出油标明 "SX"（如果您没有标明，图上的出油口在前面。）
"MARINE"（海洋版），请改变代码 XY=99为 XY=M9

To order the **MARINE** version please change the order code with the **M**.

TABELLA 6 (CARATTERISTICHE TECNICHE "AL-HPS") - CHART 6 ("AL-HPS" TECHNICAL DATA)

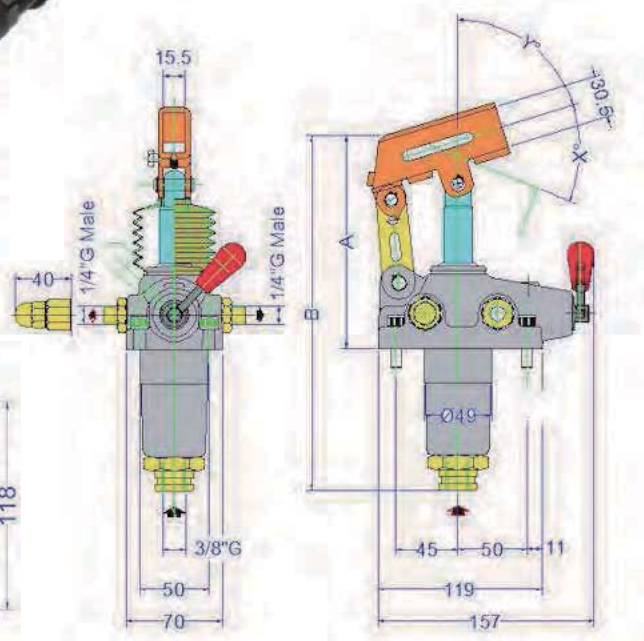
”AL-HPI”

“AL-HPI” - TECHNICAL DATA 技术参数



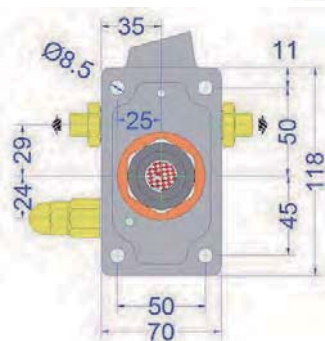
AL-HPI

AL-HPI-VS



AL-HPI系列手动泵为单柱塞双作用液压手动泵带二位四通手动换向阀，在手柄拉和压的时候都产生排量。

The series "AL HPI", is composed of hand pumps single cylinder Double Acting "DA" drawer Distributor 4/2 with shift to the Center closed. The flow of oil under pressure (flow) occurs either when the lever is actuated downwards than upwards.



“AL-HPT” XY=93 - “AL-HPT-MARINE” XY=M3

订货代码 Codice Code	型号 SIGLA	描述 DESCRIPTION	P.nom -	排量	重量	A	B	X	Y
			P.max	Delivery	Weight				
			bar	cc/cycle	daN	mm	mm	(°)	(°)
AEP-93-1006	AL-HPI-06	-	300	10	2.9	155	260	39°	73°
AEP-93-3006	AL-HPI-06-SF	WITH BELLOW 带防护套							
AEP-93-5006	AL-HPI-06-VS	WITH RELIEF VALVE 带溢流阀	350						
AEP-93-7006	AL-HPI-06-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-93-1012	AL-HPI-12	-	250	15	2.8	155	260	39°	73°
AEP-93-3012	AL-HPI-12-SF	WITH BELLOW 带防护套							
AEP-93-5012	AL-HPI-12-VS	WITH RELIEF VALVE 带溢流阀	300						
AEP-93-7012	AL-HPI-12-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-93-1025	AL-HPI-25	-	200	24,5	2.8	155	260	39°	73°
AEP-93-3025	AL-HPI-25-SF	WITH BELLOW 带防护套							
AEP-93-5025	AL-HPI-25-VS	WITH RELIEF VALVE 带溢流阀	250						
AEP-93-7025	AL-HPI-25-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-93-1045	AL-HPI-45	-	150	43	2.9	155	260	39°	73°
AEP-93-3045	AL-HPI-45-SF	WITH BELLOW 带防护套							
AEP-93-5045	AL-HPI-45-VS	WITH RELIEF VALVE 带溢流阀	200						
AEP-93-7045	AL-HPI-45-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							

NOTE PER L'ORDINE - ORDER NOTE

“MARINE” (海洋版)，请改变代码 XY=93为 XY=M3

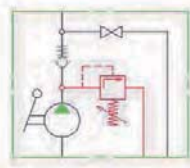
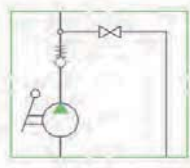
To order the **MARINE** version please change the order code with the **M**.

TABELLA 7 (CARATTERISTICHE TECNICHE “AL-HPI”) - CHART 7 (“AL-HPI” TECHNICAL DATA)

"GW-HPR" - "GW-HPT"

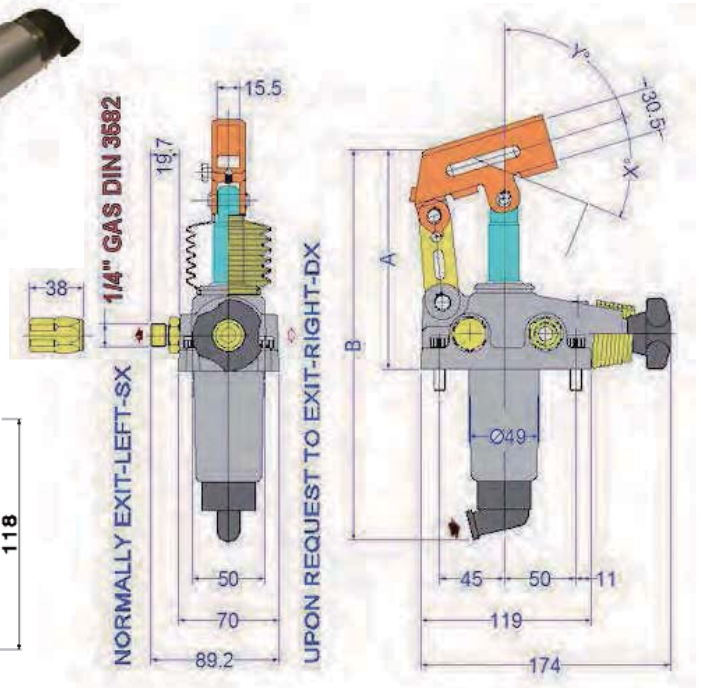
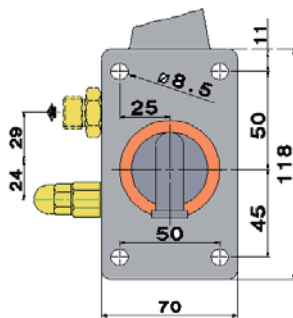
"GW-HPT" AND "GW-HPR" - TECHNICAL DATA

技术参数



GW-HPR

GW-HPR-VS



GW-HPR系列手动泵为双作用液压手动泵带卸荷阀，但手柄拉和压的时候都产生排量。

GW-HPT与GW-HPR一样，但GW-HPT系列的手动泵在卸荷阀上带有弹簧。

The series "GW HPR", consists of Double Acting "DA" with drain knob. The oil flow pressure (flow) occurs both when the lever is driven downwards and upwards.

The "GW HPT" it is same to "GW-GPR" with in addition the spring on the knob

"GW-HPT" XY=85 - "GW-HPR-WITON" XY=W1 - "GW-HPR-FROST" XY=F1

订货代码 Codice Code	型号 SIGLA	描述 DESCRIPTION	P.nom -	排量	重量	A	B	X	Y
			P.max	Delivery	Weight				
			bar	cc/cycle	daN	mm	mm	(°)	(°)
AEP-81-1012	GW-HPR-12	-	250	15	3.2	155	260	39°	73°
AEP-81-3012	GW-HPR-12-SF	WITH BELLOW 带防护套							
AEP-81-5012	GW-HPR-12-VS	WITH RELIEF VALVE 带溢流阀	300						
AEP-81-7012	GW-HPR-12-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-81-1025	GW-HPR-25	-	200	24,5	3.2	155	260	39°	73°
AEP-81-3025	GW-HPR-25-SF	WITH BELLOW 带防护套							
AEP-81-5025	GW-HPR-25-VS	WITH RELIEF VALVE 带溢流阀	250						
AEP-81-7025	GW-HPR-25-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-81-1045	GW-HPR-45	-	150	43	3.3	155	260	39°	73°
AEP-81-3045	GW-HPR-45-SF	WITH BELLOW 带防护套							
AEP-81-5045	GW-HPR-45-VS	WITH RELIEF VALVE 带溢流阀	200						
AEP-81-7045	GW-HPR-45-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							

NOTE PER L'ORDINE - ORDER NOTE

如果您想要从右侧出油，请标明（如果您没有标明，图上的出油口在左边。）

"GW-HPR-WITON"（高温版），请改变代码 XY=81为 XY=W1

"GW-HPR-FROST"（低温版），请改变代码 XY=81为 XY=F1

如果订购GW-HPT型手动泵，请将代码XY=81改为XY=85

"GW-HPT-WITON"（高温版），请改变代码 XY=81为 XY=W5

"GW-HPT-FROST"（低温版），请改变代码 XY=81为 XY=F5

In order to indicate if you want to exit right oil (if you don't indicate is provided as a drawing with oil output on the left).

To order the GW HPR WITON version please change the order code with the W .

To order the GW HPR FROST version please change the order code with the F .

To order the GW HPT version please change the order code with the

To order the GW HPT WITON version please change the order code with the W .

To order the GW HPT FROST version please change the order code with the F .

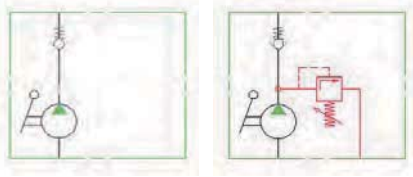


GW-HPT

TABELLA 8 (CARATTERISTICHE TECNICHE "GW-HPR" E "GW-HPT") - CHART 8 ("GW-HPR" - "GW-HPT" - TECHNICAL DATA)

"GW-HPS" 技术参数

"GW-HPS" - TECHNICAL DATA



GW-HPS

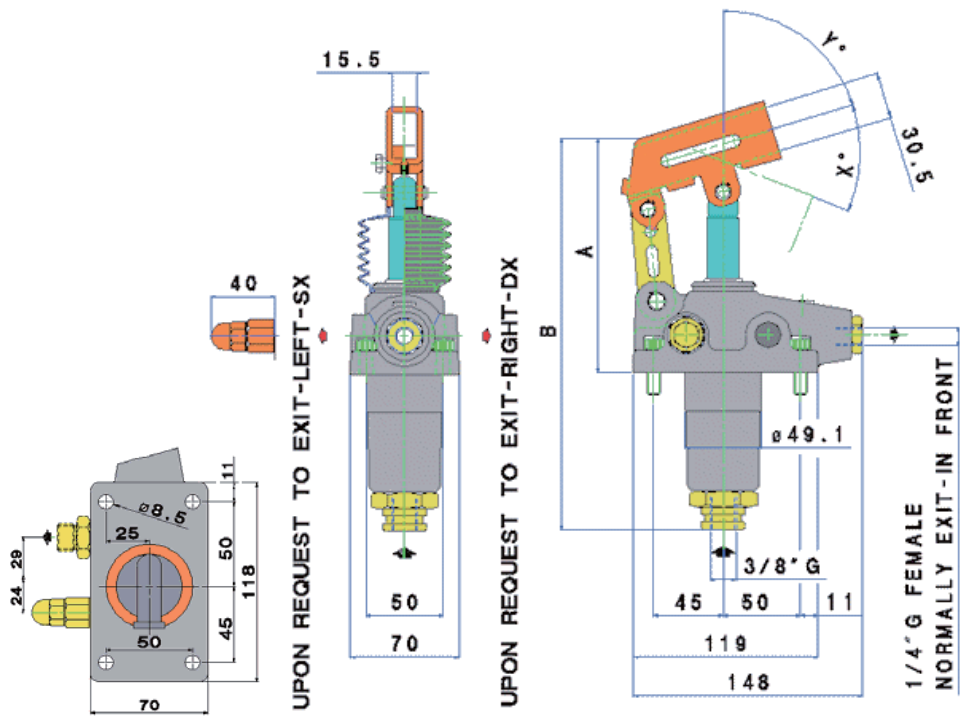
GW-HPS-VS

暂时未能提供

NOT AVAILABLE AT THE MOMENT

GW-HPS系列手动泵为双作用液压手动泵不带卸荷阀，在手柄拉和压的时候都产生排量。

The series "GW HPS", consists of hand-pumps-single and Double Acting "DA" without putting into the exhaust valve. The oil flow pressure (flow) occurs both when the lever is driven downwards and upwards.



"GW-HPS-WITON" XY=W9 - "GW-HPS-FROST" XY=F9

订货代码 Codice Code	型号 SIGLA	描述 DESCRIPTION	P.nom -	排量	重量	A	B	X	Y
			P.max	Delivery	Weight				
			bar	cc/cycle	daN	mm	mm	(°)	(°)
AEP-89-1012	GW-HPS-12	-	250	15	3.1	155	260	39°	73°
AEP-89-3012	GW-HPS-12-SF	WITH BELLOW 带防护套							
AEP-89-5012	GW-HPS-12-VS	WITH RELIEF VALVE 带溢流阀	300						
AEP-89-7012	GW-HPS-12-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-89-1025	GW-HPS-25	-	200	24,5	3.1	155	260	39°	73°
AEP-89-3025	GW-HPS-25-SF	WITH BELLOW 带防护套							
AEP-89-5025	GW-HPS-25-VS	WITH RELIEF VALVE 带溢流阀	250						
AEP-89-7025	GW-HPS-25-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-89-1045	GW-HPS-45	-	150	43	3.2	155	260	39°	73°
AEP-89-3045	GW-HPS-45-SF	WITH BELLOW 带防护套							
AEP-89-5045	GW-HPS-45-VS	WITH RELIEF VALVE 带溢流阀	200						
AEP-89-7045	GW-HPS-45-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							

NOTE PER L'ORDINE - ORDER NOTE

如果您想要从右侧出油，请标明“DX”，左侧出油标明“SX”（如果您没有标明，图上的出油口在前面。）

“GW-HPS-WITON”（高温版），请改变代码 XY=89为 XY=W9

“GW-HPS-FROST”（低温版），请改变代码 XY=89为 XY=F9

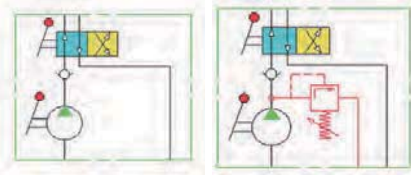
To order the **GW HPS WITON** version please change the order code
To order the **GW HPS FROST** version please change the order code

with the **W**
with the **F**.

TABELLA 9 (CARATTERISTICHE TECNICHE "GW-HPS") - CHART 9 ("GW-HPS" TECHNICAL DATA)

"GW-HPI"

"GW-HPI" - TECHNICAL DATA 技术参数



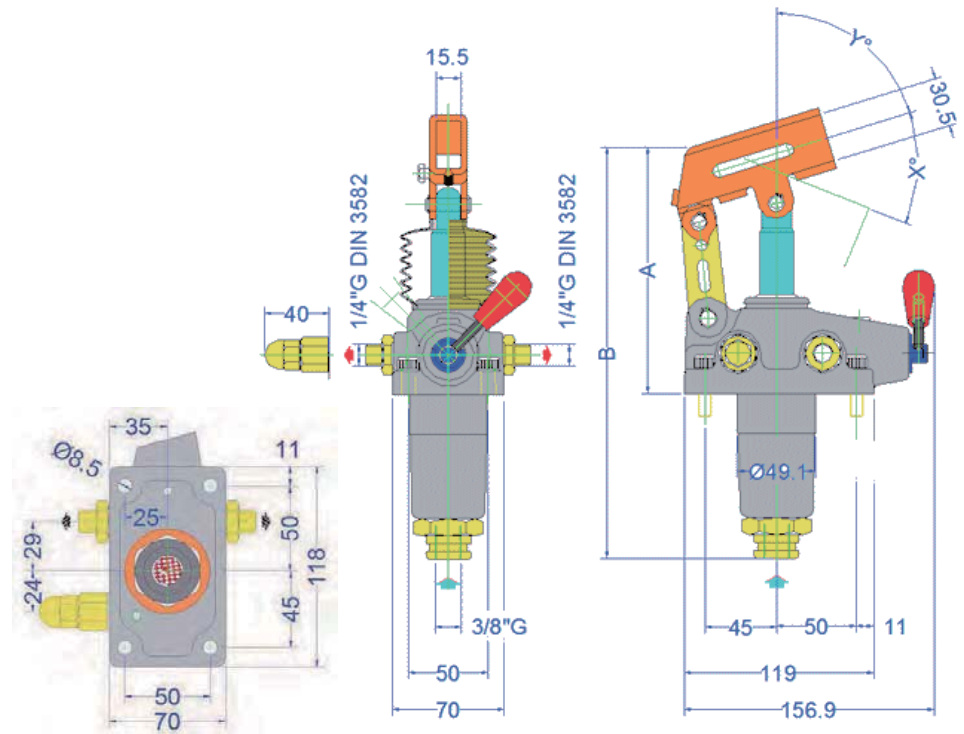
GW-HPI

GW-HPI-VS

暂时未能提供
NOT AVAILABLE AT THE MOMENT

GW-HPI系列手动泵为双作用液压手动泵带2位4通手动换向阀，在手柄拉和压的时候都产生排量。

The series "GW HPI", is composed of hand pumps single cylinder Double Acting "DA" drawer Distributor 4/2 with shift to the Center closed. The flow of oil under pressure (flow) occurs either when the lever is actuated downwards than upwards.



"GW-HPI-WITON" XY=W3 - "GW-HPI-FROST" XY=F3

订货代码 Codice Code	型号 SIGLA	描述 DESCRIPTION	P.nom - P.max	排量 Delivery	重量 Weight	A	B	X	Y
			bar	cc/cycle	daN	mm	mm	(°)	(°)
AEP-83-1012	GW-HPI-12	-	250	15	3.2	155	260	39°	73°
AEP-83-3012	GW-HPI-12-SF	WITH BELLOW 带防护套							
AEP-83-5012	GW-HPI-12-VS	WITH RELIEF VALVE 带溢流阀	300						
AEP-83-7012	GW-HPI-12-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-83-1025	GW-HPI-25	-	200	24,5	3.2	155	260	39°	73°
AEP-83-3025	GW-HPI-25-SF	WITH BELLOW 带防护套							
AEP-83-5025	GW-HPI-25-VS	WITH RELIEF VALVE 带溢流阀	250						
AEP-83-7025	GW-HPI-25-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-83-1045	GW-HPI-45	-	150	43	3.2	155	260	39°	73°
AEP-83-3045	GW-HPI-45-SF	WITH BELLOW 带防护套							
AEP-83-5045	GW-HPI-45-VS	WITH RELIEF VALVE 带溢流阀	200						
AEP-83-7045	GW-HPI-45-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							

NOTE PER L'ORDINE - ORDER NOTE

如果您想要从右侧出油，请标明（如果您没有标明，图上的出油口在左边。）

"GW-HPI-WITON"（高温版），请改变代码 XY=83为 XY=W3

"GW-HPI-FROST"（低温版），请改变代码 XY=83为 XY=F3

In order to indicate if you want to exit right oil (if you don't indicate is provided as a drawing with oil output on the left).

To order the **GW HPI WITON** version please change the order code with the **W**

To order the **GW HPI FROST** version please change the order code with the **F**.

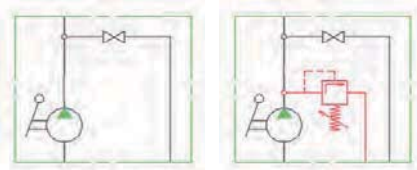
暂时未能提供

NOT AVAILABLE AT THE MOMENT

TABELLA 10 (CARATTERISTICHE TECNICHE "GW-HPI") - CHART 10 ("GW-HPI" TECHNICAL DATA)

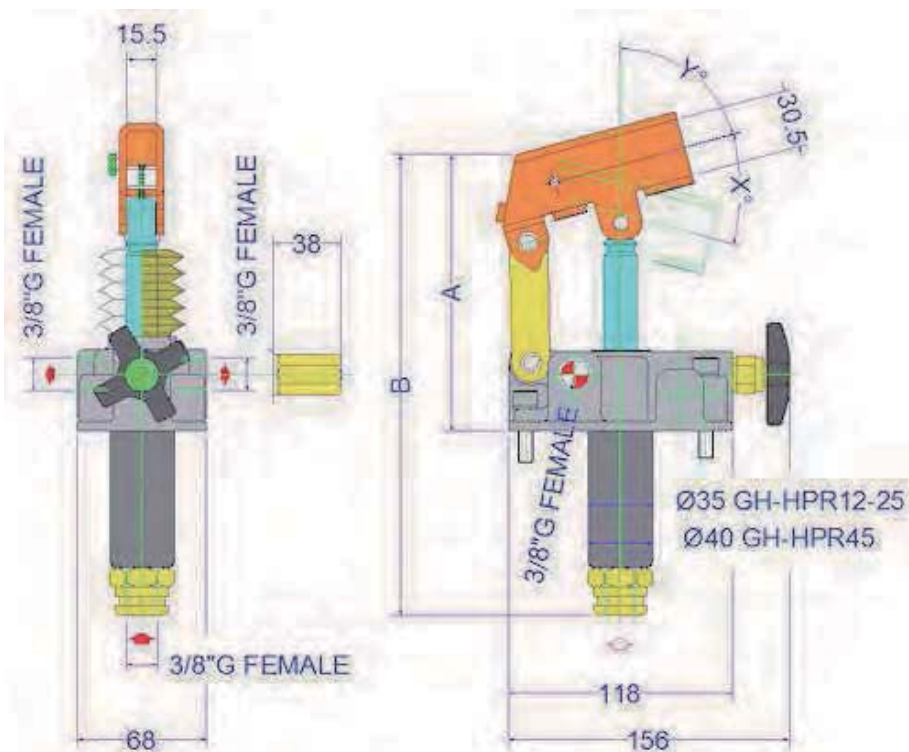
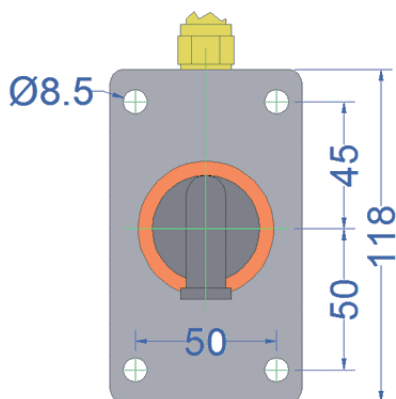
"GH-HPR" 技术参数

"GH-HPR" - TECHNICAL DATA



GH-HPR

GH-HPR-VS



GH-HPR - DOUBLE ACTING "DA" WITH KNOB

订货代码 Codice Code	型号 SIGLA	描述 DESCRIPTION	P.nom -	排量	重量	A	B	X	Y
			P.max	Delivery	Weight	mm	mm	(°)	(°)
			bar	cc/cycle	daN	mm	mm	(°)	(°)
AEP-71-1012	GH-HPR-12	-	250 ÷ 300	12	3,3	140	236	30°	75°
AEP-71-3012	GH-HPR-12-SF	WITH BELLOW 带防护套							
AEP-71-5012	GH-HPR-12-VS	WITH RELIEF VALVE 带溢流阀							
AEP-71-7012	GH-HPR-12-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀	200 ÷ 250	22,5	3,4	140	232	30°	85°
AEP-71-1025	GH-HPR-25	-							
AEP-71-3025	GH-HPR-25-SF	WITH BELLOW 带防护套							
AEP-71-5025	GH-HPR-25-VS	WITH RELIEF VALVE 带溢流阀	150 ÷ 200	43	3,5	160	265	30°	75°
AEP-71-7025	GH-HPR-25-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-71-1045	GH-HPR-45	-							
AEP-71-3045	GH-HPR-45-SF	WITH BELLOW 带防护套							
AEP-71-5045	GH-HPR-45-VS	WITH RELIEF VALVE 带溢流阀							
AEP-71-7045	GH-HPR-45-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							

NOTE PER L'ORDINE - ORDER NOTE

GH系列手动泵需要订购接头、安装套件、手柄和油箱。

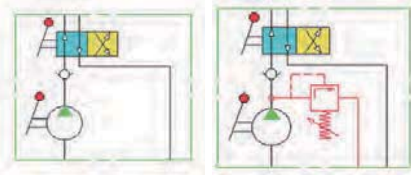
For the "GH" series pumps it is necessary order the FITTINGS, the MOUNTING KIT together the LEVER and the TANK



TABELLA 11 (CARATTERISTICHE TECNICHE "GH-HPR") - CHART 11 ("GH-HPR" - TECHNICAL DATA)

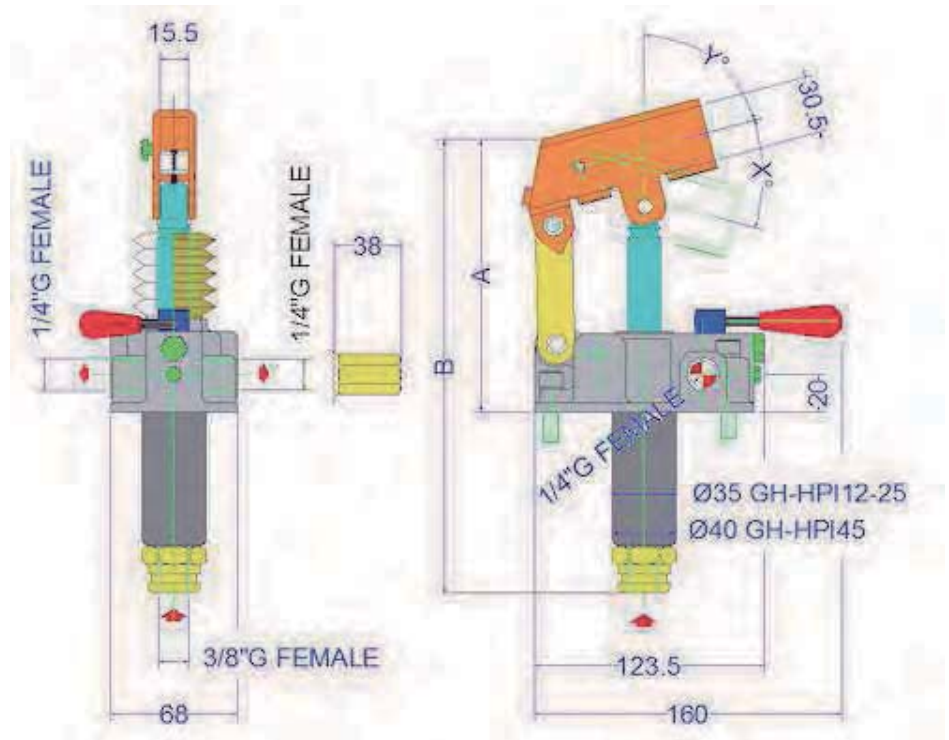
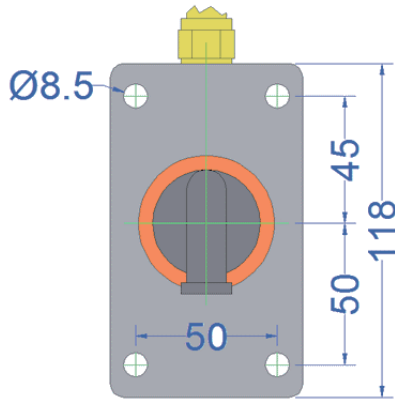
"GH-HPI" 技术参数

"GH-HPI" - TECHNICAL DATA



GH-HPI

GH-HPI-VS



GH-HPI - DOUBLE ACTING "DA" WITH 4/2 DIVERTER

订货代码 Codice Code	型号 SIGLA	描述 DESCRIPTION	P.nom -	排量	重量	A	B	X	Y
			P.max	Delivery	Weight				
			bar	cc/cycle	daN	mm	mm	(°)	(°)
AEP-73-1012	GH-HPI-12	-	250 ÷ 300	15	2,9	155	260	39°	73°
AEP-73-3012	GH-HPI-12-SF	WITH BELLOW 带防护套							
AEP-73-5012	GH-HPI-12-VS	WITH RELIEF VALVE 带溢流阀							
AEP-73-7012	GH-HPI-12-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀	200 ÷ 250	24,5	2,9	155	260	39°	73°
AEP-73-1025	GH-HPI-25	-							
AEP-73-3025	GH-HPI-25-SF	WITH BELLOW 带防护套							
AEP-73-5025	GH-HPI-25-VS	WITH RELIEF VALVE 带溢流阀	150 ÷ 200	43	2,9	155	260	39°	73°
AEP-73-7025	GH-HPI-25-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-73-1045	GH-HPI-45	-							
AEP-73-3045	GH-HPI-45-SF	WITH BELLOW 带防护套	150 ÷ 200	43	2,9	155	260	39°	73°
AEP-73-5045	GH-HPI-45-VS	WITH RELIEF VALVE 带溢流阀							
AEP-73-7045	GH-HPI-45-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							

NOTE PER L'ORDINE - ORDER NOTE

GH系列手动泵需要订购接头、安装套件、手柄和油箱。

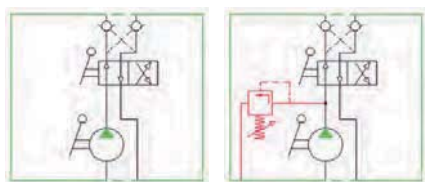
For the "GH" series pumps it is necessary order the FITTINGS, the MOUNTING KIT together the LEVER and the TANK



TABELLA 12 (CARATTERISTICHE TECNICHE "GH-HPI") - CHART 12 ("GH-HPI" TECHNICAL DATA)

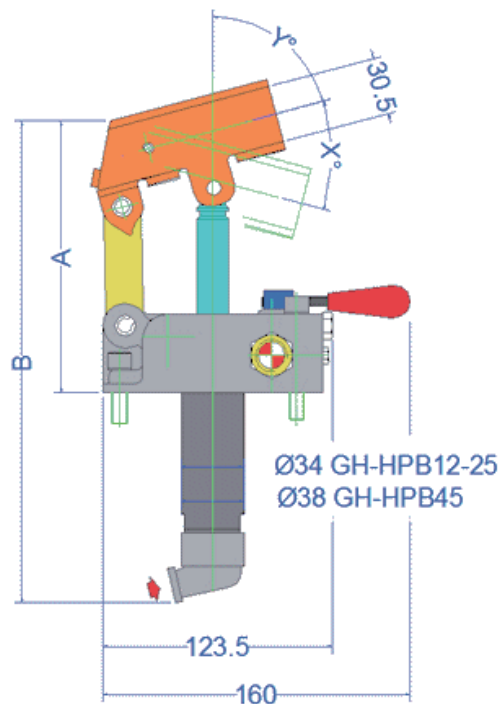
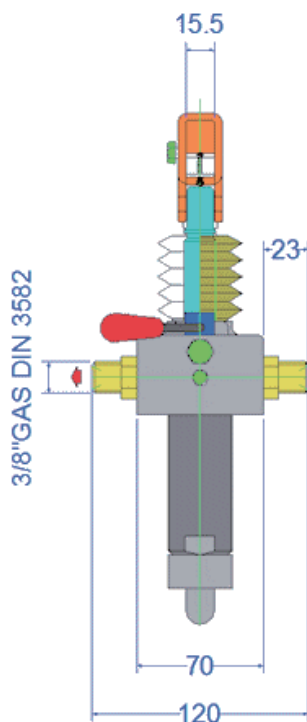
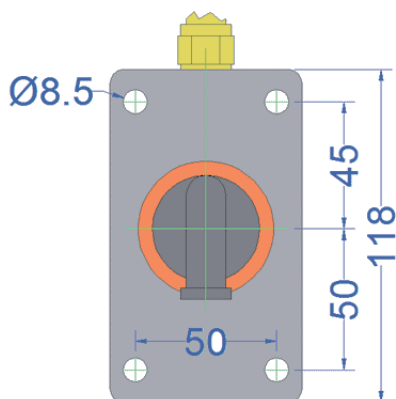
”GH-HPB” 技术参数

“GH-HPB” - TECHNICAL DATA



GH-HPB

GH-HPB-VS



GH-HPB - WITH 4/2 DIVERTER AND DOUBLE PILOT RETAIN VALVE

订货代码 Codice Code	型号 SIGLA	描述 DESCRIPTION	P.nom -	排量	重量	A	B	X	Y
			P.max	Delivery	Weight				
			bar	cc/cycle	daN	mm	mm	(°)	(°)
AEP-79-1012	GH-HPB-12	-	250 ÷ 300	12	3.5	140	236	30°	75°
AEP-79-3012	GH-HPB-12-SF	WITH BELLOW 带防护套							
AEP-79-5012	GH-HPB-12-VS	WITH RELIEF VALVE 带溢流阀							
AEP-79-7012	GH-HPB-12-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀	200 ÷ 250	22,5	3,7	140	232	30°	75°
AEP-79-1025	GH-HPB-25	-							
AEP-79-3025	GH-HPB-25-SF	WITH BELLOW 带防护套							
AEP-79-5025	GH-HPB-25-VS	WITH RELIEF VALVE 带溢流阀	150 ÷ 200	43	3,9	160	265	30°	75°
AEP-79-7025	GH-HPB-25-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							
AEP-79-1045	GH-HPB-45	-							
AEP-79-3045	GH-HPB-45-SF	WITH BELLOW 带防护套							
AEP-79-5045	GH-HPB-45-VS	WITH RELIEF VALVE 带溢流阀							
AEP-79-7045	GH-HPB-45-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀							

NOTE PER L'ORDINE - ORDER NOTE

注意避免错误的应用，该型号的手动泵不能去掉3/8”BSP螺纹的接头，改接头是液压锁的一部分。该型号的手动泵在消耗完库存后将不再生产。

CAUTION T

BSP

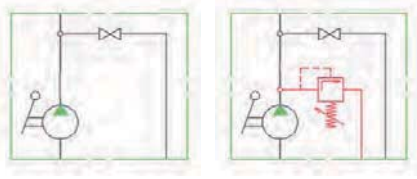
This type of pump will be out of production when will finish the stock



TABELLA 13 (CARATTERISTICHE TECNICHE “GH-HPB”) - CHART 13 (“GH-HPB” - TECHNICAL DATA)

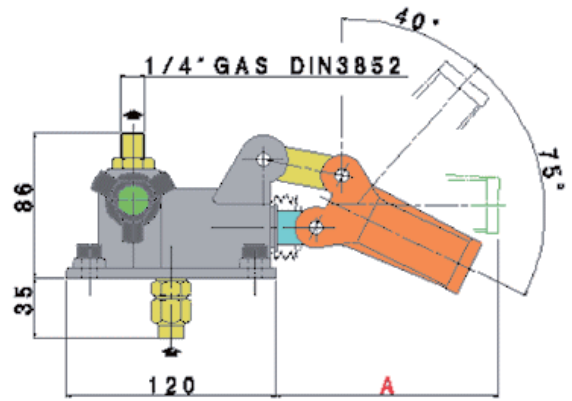
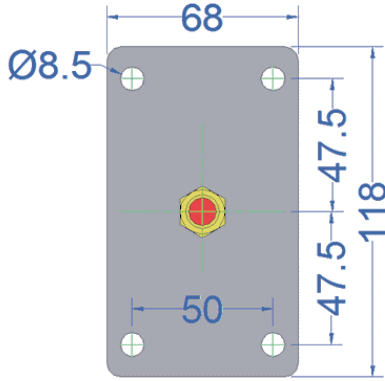
"GH-HPE" 技术参数

"GH-HPE" - TECHNICAL DATA



GH-HPE

GH-HPE-VS



GH-HPE - SINGLE ACTING "SA"

订货代码 Codice Code	型号 SIGLA	描述 DESCRIPTION	P.nom -	排量	重量	A	B	X	Y
			P.max	Delivery	Weight	mm	mm	(°)	(°)
			bar	cc/cycle	daN	mm	mm	(°)	(°)
AEP-77-1012	GH-HPE-12	-	250 ÷ 300	12	2.8	124	-	-	-
AEP-77-3012	GH-HPE-12-SF	WITH BELLOW 带防护套				144			
AEP-77-5012	GH-HPE-12-VS	WITH RELIEF VALVE 带溢流阀				124			
AEP-77-7012	GH-HPE-12-VS-SF	WITH RELIEF VALVE AND BELLOW 带防护套和溢流阀				144			

NOTE PER L'ORDINE - ORDER NOTE

GH-HPE系列的手动泵为单作用手动泵，只有在柱塞进入泵体时才产生排量。

The series "GH HPE", consists of a hand pump in single cylinder single Acting with drain knob. The oil flow pressure (flow) occurs only when the shaft enters the pump body.

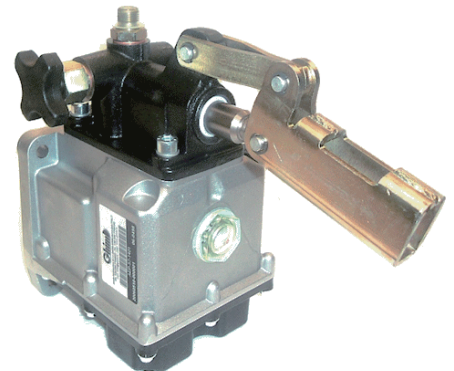
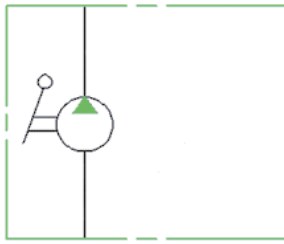


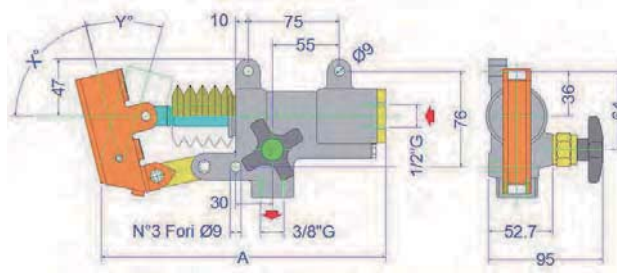
TABELLA 14 (CARATTERISTICHE TECNICHE "GH-HPE") - CHART 14 ("GH-HPE" TECHNICAL DATA)

"GH-HPM" 技术参数

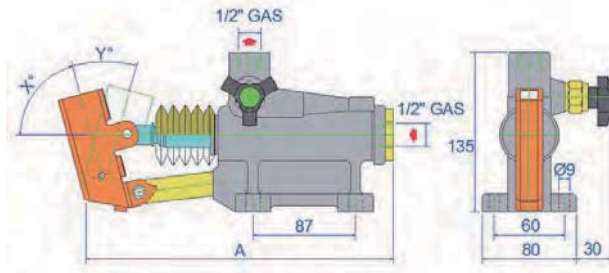
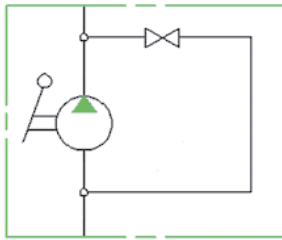
"GH-HPM" - TECHNICAL DATA



GH-HPM

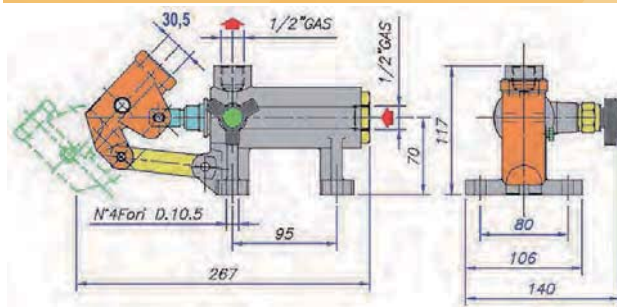
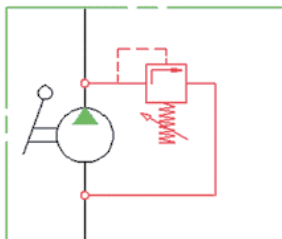


GH-HPM-20 - GH-HPM-20-RB - GH-HPM-20-VS



GH-HPM-RB

GH-HPM-50 - GH-HPM-50-RB



GH-HPM-VS

GH-HPM-70 - GH-HPM-70-RB

订货代码 Codice Code	型号 SIGLA	描述 DESCRIPTION	P.nom	排量	重量	A	B	X	Y
			- P.max	Delivery	Weight				
			bar	cc/cycle	daN	mm	mm	(°)	(°)
AEP-75-1020	GH-HPM-20	-							
AEP-75-3020	GH-HPM-20-SF	WITH BELLOW 带防护套	250						
AEP-75-5020	GH-HPM-20-RB	WITH KNOB 带卸荷阀	÷	20	2,9	-	-	65	60
AEP-75-7020	GH-HPM-20-RB-SF	WITH KNOB AND BELLOW 带防护套和卸荷阀	300						
AEP-75-1050	GH-HPM-50	-							
AEP-75-3050	GH-HPM-50-SF	WITH BELLOW 带防护套	200						
AEP-75-5050	GH-HPM-50-RB	WITH KNOB 带卸荷阀	÷	45	3,8	262	-	50°	70°
AEP-75-7050	GH-HPM-50-RB-SF	WITH KNOB AND BELLOW 带防护套和卸荷阀	250						
AEP-79-1070	GH-HPM-70	-							
AEP-79-3070	GH-HPM-70-SF	WITH BELLOW 带防护套	150						
AEP-79-5070	GH-HPM-70-RB	WITH KNOB 带卸荷阀	÷	69	5,2	-	-	-	-
AEP-79-7070	GH-HPM-70-RB-SF	WITH KNOB AND BELLOW 带防护套和卸荷阀	200						

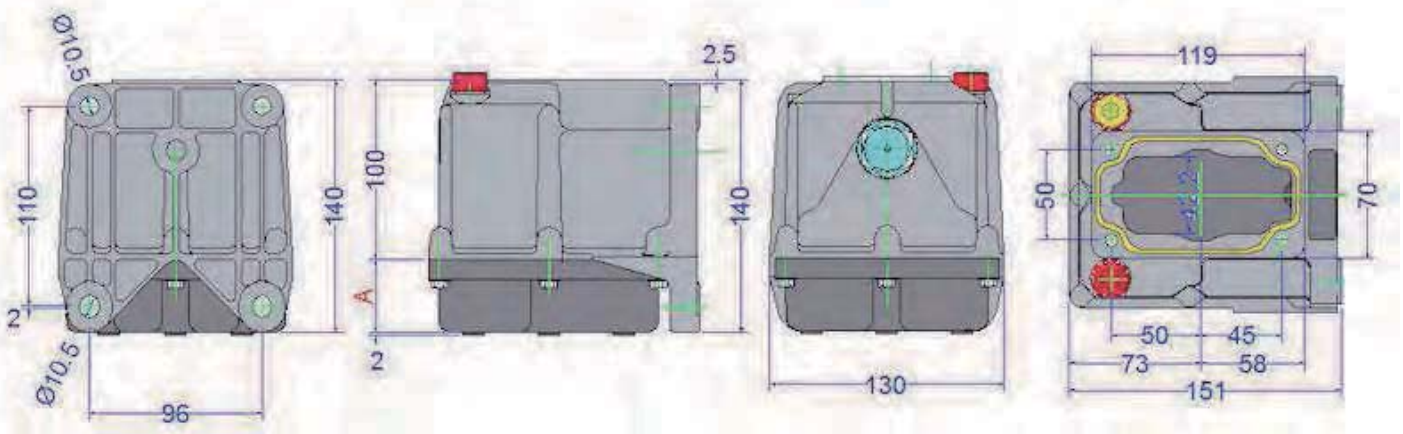
NOTE PER L'ORDINE - ORDER NOTE

TABELLA 15 (CARATTERISTICHE TECNICHE "GH-HPM") - CHART 15 ("GH-HPM" - TECHNICAL DATA)

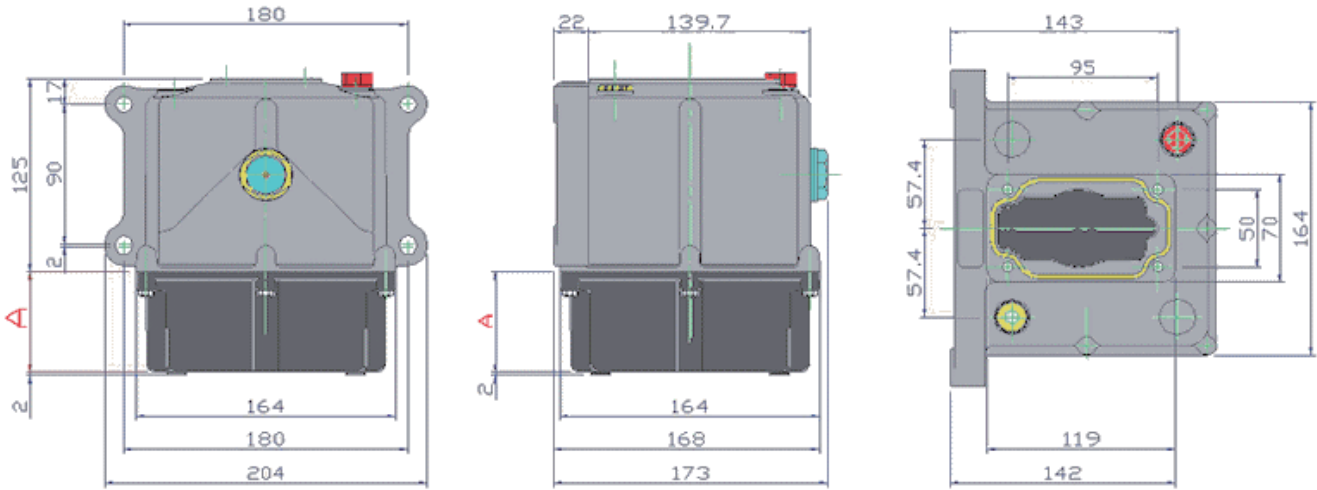
”SERBATOI ALLUMINIO PLASTICA”

“ALUMINIUM PLASTIC TANK” - TECHNICAL DATA

铝-塑料油箱技术参数



Codice Code 代码	SIGLA 描述	容积 Capacity	油标 Oil Level	重量 Weight	A
		Litre		daN	mm
AEP-6S-0100	TANK “SMALL” 01 LITRE	1	否 NO	1,5	40
AEP-6S-0101	TANK “SMALL” 01 LITRE WITH OIL LEVEL		是 SI		
AEP-6S-0200	TANK “SMALL” 02 LITRE	2	否 NO	1,8	162
AEP-6S-0201	TANK “SMALL” 02 LITRE WITH OIL LEVEL		是 SI		



Codice Code 代码	SIGLA 描述	容积 Capacity	油标 Oil Level	重量 Weight	A
		Litre		daN	mm
AEP-6B-0200	TANK “MEDIUM” 02 LITRE	2	否 NO	1,5	25
AEP-6B-0201	TANK “MEDIUM” 02 LITRE WITH OIL LEVEL		是 SI		
AEP-6B-0300	TANK “MEDIUM” 03 LITRE	3	否 NO	1,6	70
AEP-6B-0301	TANK “MEDIUM” 03 LITRE WITH OIL LEVEL		是 SI		
AEP-6B-0500	TANK “MEDIUM” 05 LITRE	5	否 NO	1,8	180
AEP-6B-0501	TANK “MEDIUM” 05 LITRE WITH OIL LEVEL		是 SI		

TABELLA 16 (SERBATOI IN ALLUMINIO-PLASTICA) - CHART 16 (ALUMINIUM - PLASTIC TANKS)

”SERBATOI ALLUMINIO PLASTICA”

“ALUMINIUM PLASTIC TANK” - TECHNICAL DATA

铝-塑料油箱技术参数



Codice Code 代码	SIGLA 描述	容积 Capacity	油标 Oil Level	重量 Weight	A
		Litre		daN	mm
AEP-6W-0400	TANK “LARGE” 04 LITRE	4	否 NO	1,5	10
AEP-6W-0401	TANK “LARGE” 04 LITRE WITH OIL LEVEL		是 SI		
AEP-6W-0700	TANK “LARGE” 07 LITRE	7	否 NO	1,6	115
AEP-6W-0701	TANK “LARGE” 07 LITRE WITH OIL LEVEL		是 SI		
AEP-6W-1000	TANK “LARGE” 10 LITRE	10	否 NO	1,8	180
AEP-6W-1001	TANK “LARGE” 10 LITRE WITH OIL LEVEL		是 SI		

MARINE 版 铝-塑料 油箱技术参数

“MARINE” LINE ALUMINIUM PLASTIC TANK - TECHNICAL DATA

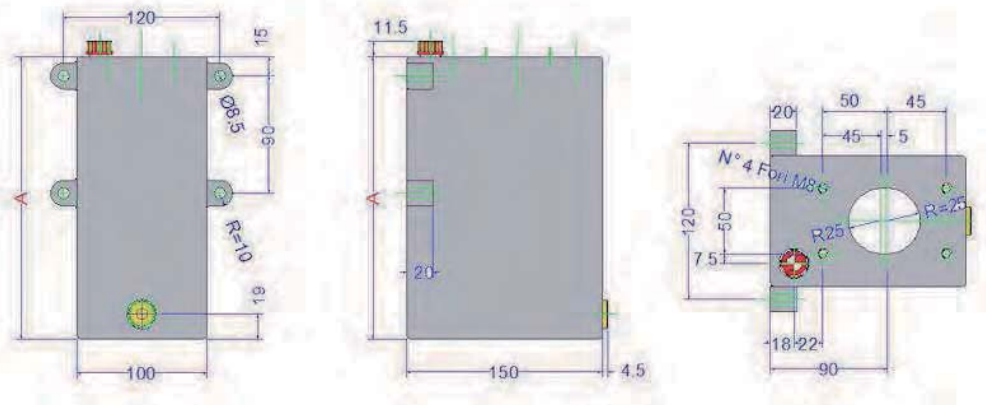
Codice Code 代码	SIGLA 描述	Capacity 容积	油标 Oil Level	“MARINE”
		Litre		
AEP-6D-0100	TANK “SMALL” 01 LITRE ANODIZED	1	否 NO	<p>尺寸与上面相同容量的油箱尺寸一样。</p> <p>The dimensions are the same as the corresponding tanks with equal capacity figures in the above tables.</p> 
AEP-6D-0101	TANK “SMALL” 01 LITRE ANODIZED + OIL LEVEL		是 SI	
AEP-6D-0180	TANK “SMALL” 02 LITRE ANODIZED	2	否 NO	
AEP-6D-0181	TANK “SMALL” 02 LITRE ANODIZED + OIL LEVEL		是 SI	
AEP-6D-0200	TANK “MEDIUM” 02 LITRE ANODIZED	2	否 NO	
AEP-6D-0201	TANK “MEDIUM” 02 LITRE ANODIZED + OIL LEVEL		是 SI	
AEP-6D-0300	TANK “MEDIUM” 03 LITRE ANODIZED	3	否 NO	
AEP-6D-0301	TANK “MEDIUM” 03 LITRE ANODIZED + OIL LEVEL		是 SI	
AEP-6D-0500	TANK “MEDIUM” 05 LITRE ANODIZED	5	否 NO	
AEP-6D-0501	TANK “MEDIUM” 05 LITRE ANODIZED + OIL LEVEL		是 SI	
AEP-6D-0400	TANK “LARGE” 04 LITRE ANODIZED	4	否 NO	
AEP-6D-0401	TANK “LARGE” 04 LITRE ANODIZED + OIL LEVEL		是 SI	
AEP-6D-0700	TANK “LARGE” 07 LITRE ANODIZED	7	否 NO	
AEP-6D-0701	TANK “LARGE” 07 LITRE ANODIZED + OIL LEVEL		是 SI	
AEP-6D-1000	TANK “LARGE” 10 LITRE ANODIZED	10	否 NO	
AEP-6D-1001	TANK “LARGE” 10 LITRE ANODIZED + OIL LEVEL		是 SI	

TABELLA 17 (SERBATOI IN ALLUMINIO-PLASTICA) - CHART 17 (ALUMINIUM - PLASTIC TANKS)

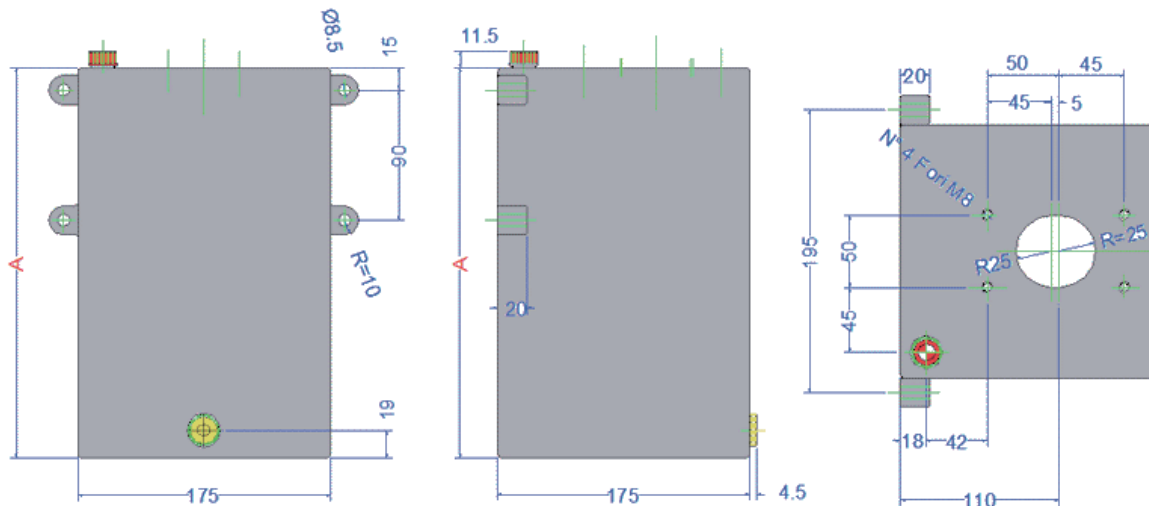
”SERBATOI IN LAMIERA”

“STEEL TANK” - TECHNICAL DATA

钢油箱技术参数



Codice Code 代码	SIGLA 描述	容积 Capacity	重量 Weight	A
		Litre	daN	mm
AEP-6A-0100	TANK “STEEL” 01 LITRE	1	2.0	135
AEP-6A-0200	TANK “STEEL” 02 LITRE	2	2.2	180
AEP-6A-0300	TANK “STEEL” 03 LITRE	3	2.5	247



Codice Code 代码	SIGLA 描述	容积 Capacity	重量 Weight	A
		Litre	daN	mm
AEP-6A-0500	TANK “STEEL” 05 LITRE	5	4.5	200
AEP-6A-0700	TANK “STEEL” 07 LITRE	7	5.4	269
AEP-6A-1000	TANK “STEEL” 10 LITRE	10	6.8	376



TABELLA 18 (SERBATOI IN LAMIERA VERNICIATA) - CHART 18 (STEEL TANKS)

可选附件 "ACCESSORI & OPTIONAL"

"ACCESSORIES AND OPTIONALS"

Codice Code	Description	Weight daN	
AEP-K6-0360	ASTA CON IMPUGNATURA "HPX" - 3015 - L0360 * 规格: 30*15,L=360mm		
AEP-K6-0400	ASTA CON IMPUGNATURA "HPX" - 3015 - L0390 * 规格: 30*15,L=390mm		
AEP-K6-0425	ASTA CON IMPUGNATURA "HPX" - 3015 - L0390 - ZNB-25 规格: 30*15,L=390mm		
AEP-K6-0600	ASTA CON IMPUGNATURA "HPX" - 3015 - L0590 * 规格: 30*15,L=590mm		
AEP-K6-0625	ASTA CON IMPUGNATURA "HPX" - 3015 - L0590 - ZNB-25 规格: 30*15,L=590mm		
AEP-K6-1000	ASTA CON IMPUGNATURA "HPX" - 3015 - L0990 * 规格: 30*15,L=990mm		
AEP-K6-2600	ASTA CON IMPUGNATURA "HPX" - 3015 - L06 - BENDIX45 规格: 30*15,45度弯		
AEP-K6-2650	ASTA CON IMPUGNATURA "HPX" - 3015 - L55 - BENDIX70 规格: 30*15,70度弯		
AEP-K6-2660	ASTA CON IMPUGNATURA "HPX" - 3015 - L42 - BENDIX52 规格: 30*15,52度弯		
AEP-K6-9100	KIT "LLS" LOCK LEVER SYSTEM - BLOCCO ASTA 手柄锁定套件		
AEP-6E-0005	KIT FLANGIA SERBATOIO A SALDARE 油箱焊接法兰套件		
AEP-6E-0010	KIT FLANGIA SERBATOIO A SALDARE 油箱焊接法兰套件		
AEP-6E-0350	KIT SUPPORTO LATERALE "GH-HPX" + GUARNIZ. + VITI 侧向支撑套件		
AEP-G1-0000	GUARNIZIONE SAGOMATA SERBATOIO 01-02-03-05LT 密封条		
AEP-G1-0100	GUARNIZIONE PIATTA POMPA "AL-HPX" E "GH-HPX" 密封垫		
AEP-G1-0110	GUARNIZIONE PIATTA POMPA "AL-HPX" E "GH-HPX" FLEXO 柔性密封垫		
AEP-G1-1014	TAPPO SFIATO G 1/4" - POLIMERO 通气帽		
AEP-G1-2014	TAPPO G 1/4" - POLIMERO 聚合物通气帽		
AEP-G1-1823	FILTRO ASPIRAZIONE D=23MM 吸油过滤器		
AEP-G1-3050	KIT - SOFFIETTO "AL-HPX-12-25-45" E "GH-12-25" 油箱安装套件		
AEP-G1-3060	KIT - SOFFIETTO "GH-HPX-45" E "GH-HPM-20-50-70" 油箱安装套件		
AEP-V1-7010	MOUNTING KIT PMP "GH-HPI" E "GH-HPR" FLANGIA ESTERNA 室外法兰安装套件		
AEP-V1-7020	MOUNTING KIT PMP "GH-HPE" E "AL-HPX" FLANGIA ESTERNA 室外法兰安装套件		
AEP-V1-7030	MOUNTING KIT PMP "GH-HPB" FLANGIA ESTERNA 室外法兰安装套件		
AEP-V1-7510	MOUNTING KIT PMP "GH-HPI" E "GH-HPR" SERBATOIO "SMALL" E "MEDIUM" 小型和中型油箱安装套件		
AEP-V1-7515	MOUNTING KIT PMP "GH-HPI" E "GH-HPR" SERBATOIO "STEEL" 钢油箱安装套件		
AEP-V1-7520	MOUNTING KIT PMP "GH-HPE" E "AL-HPX" SERBATOIO "SMALL" E "MEDIUM" 小型和中型油箱安装套件		
AEP-V1-7525	MOUNTING KIT PMP "GH-HPE" E "AL-HPX" SERBATOIO "STEEL" 钢油箱安装套件		
AEP-V1-7530	MOUNTING KIT PMP "GH-HPB" SERBATOIO "SMALL" E "MEDIUM" 中型油箱安装套件		
AEP-V1-7535	MOUNTING KIT PMP "GH-HPB" SERBATOIO "STEEL" 钢油箱安装套件		

TABELLA 19 (LEVE AZIONAMENTO ED OPTIONALS) - CHART 19 (LEVER AND OPTIONALS)

HAND PUMP - SUPPORT & TANK

手动泵支撑及油箱



AEP
POMPE A MANO - GHIM

AEP手动泵



AEP-6A-XXXX
STEEL TANK

钢油箱

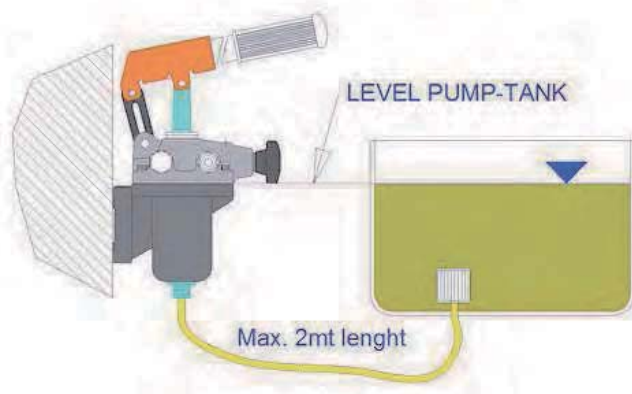


铝油箱

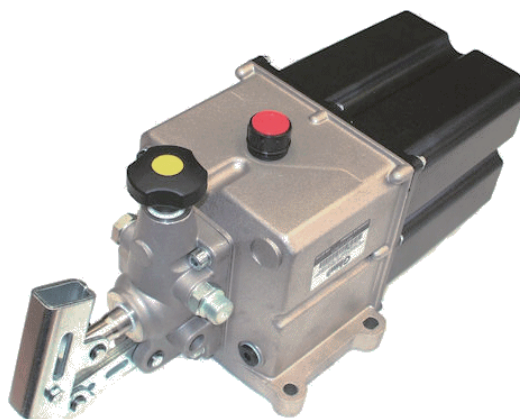
AEP-6B-XXXX - AEP-6S-XXXX - AEP-6W-XXXX - AEP-6B-XXXX -
ALUMINIUM TANK

TABELLA 20 (SUPPORTIO & SERBATOI) - CHART 20 (SUPPORT & TANK)

HAND PUMP - VERSION



AEP-6E-0350 安装支撑套件
 KIT SUPPORTO LATERALE



SPECIAL APPLICATION 特殊应用



特殊应用
SPECIAL APPLICATION

应用于海洋及有腐蚀性的环境
AEP-M5-9263 - AEP-M3-9267
 "AL-HPT" & "AL-HPI" - "MARINE LINE"

TABELLA 21 (VERSIONI - ESEMPI) - CHART 21 (VERSION - EXAMPLES)

ALTRI PRODOTTI "GHIM"

OTHER PRODUCTS BY "GHIM" 其他产品

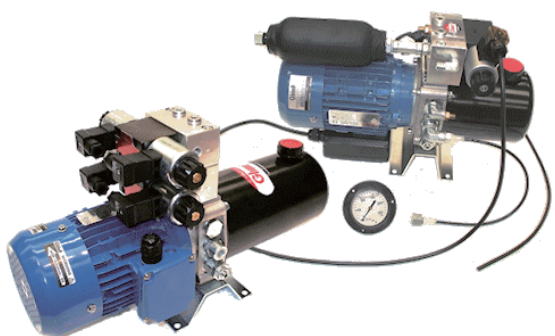


HYDROPUMPS - "AED" 气驱液压泵



直流动力单元

DC - POWER PACKS - "APC"



交流动力单元

AC - POWER PACKS - "APB"



液压系统及电动泵

DC - TESLA UNITS - "APD" - "APT"



方向控制阀

DISTRIBUTORI - VALVE - "ADT"



按压和远程控制

PUSH and REMOTE CONTROL "APA"



气动组件及油箱

AIR COMPRESSOR - TANK - "AZT" - "ATP"



液压缸

CYLINDERS "CYL"

TABELLA 16 (ALTRI PRODOTTI GHIM) - CHART 16 (OTHER GHIM'S PRODUCTS)



GHIM Hydraulics Srl

Authorized Dealer



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