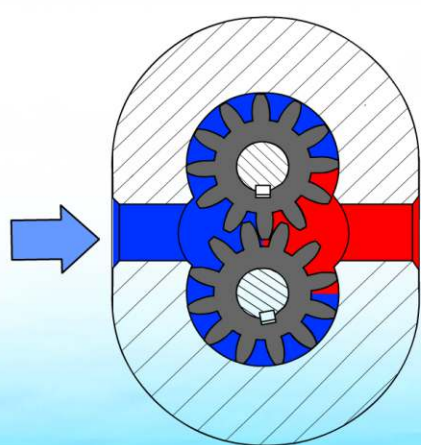


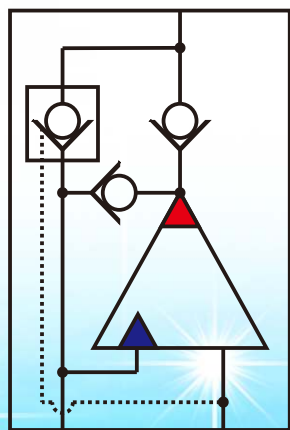
德思宏

压力不够 解决方案

SOLUTIONS OF HIGH PRESSURE
BOOST YOUR LIQUID PRESSURE



低压
LOW



增压
BOOSTER



500bar
700bar
800bar
2000bar
2400bar
2800bar
4000bar

高压
HIGH



高新技术企业
科技型中小企业

版本2027A

公司简介

德思宏液压是中国一家拥有液压增压器自主研发能力的高新技术企业,公司生产基地位于江西宜丰工业园区,占地10亩。德思宏液压工程师对液压增压器的研究发起于2007年,在对国内外各种液压增压器进行深入研究后,充分吸收各家所长,设计研发出具有德思宏特色优势的液压增压器,既大幅度降低了液压增压器的生产升本,同时性能也得到了很大的提升。公司产品有单作用往复增压器、双作用往复增压器、管式液压增压器、法兰式液压增压器、叠加式液压增压器,液压增压集成阀块,超高压动力单元,超高压过滤器,超高压充液卸荷阀等。公司拥有全套生产设备,生产周期短,成本低,质量有保障,同时拥有过硬的技术能力。围绕液压增压器,德思宏还能不同行业提供专业的超高压方案并设计制造相应的专用液压系统。公司集设计研发-生产销售-安装-维护一站式服务,售后有保障。现公司产品广泛应用于工程机械、救援设备、模切、机床设备、测试行业、风电新能源,航空,石油化工、液压工具、以及注塑、锻压等行业及其设备中!



company introduces

Desihon Hydraulic Technology Co.,LTD,which is the manufacturer professional engaged in design, research and manufacture of hydraulic boosters. Our research launched in 2007, on the basis of fully absorbing international and domestic advanced booster technology. Desihon designed products with its own characteristics. reduces the costs and improve the performance.

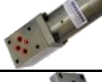
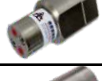
Desihon's product primarily in the area of boost, Now we manufacture a variety of models of integrated hydraulic boosters, Threaded mounting, Flange mounting, Stacking manifold mounting. automation pressure cylinders. Integrated booster, High pressure unit, High pressure system. High pressure filter, High pressure unloading valve, etc. Desihon company has a full set of production equipment, production cycle is short, low cost, quality assurance; At the same time have excellent technical ability.

Around the hydraulic booster, Desihon offer professional solutions of ultra-high pressure for different industries, and design and manufacture special hydraulic system accordingly. Desihon company set design r & d -sales -production -installation-maintenance one-stop service, after-sales guarantee.

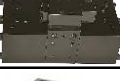
Now our products are widely used in engineering machinery, ship building, wind power, new energy, aerospace, petroleum machinery hydraulic tools, as well as injection molding, forging industry and other equipment.

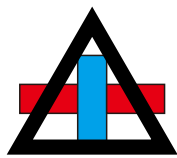


型谱表

系列	型号	图片	安装方式	增压比	压力等级	输入流量	特点	页码
S	BST-SY-*.G		管式	2, 2.4, 3, 4.2, 6.2, 7.5, 9.4	80MPa	8LPM	体积小重量0.7KG, 管式连接	9
	BST-SY-*.CZ		插装	4.2	80MPa	8LPM	体积小重量轻, 插装连接, 适合微型系统	9
T	BST-TY-*.G		管式	1.8, 2.5, 3.4, 4, 5, 7, 10	100MPa	15LPM	管式连接, 应用广泛	10
	BST-TY-*.SG		高压双出口	1.8, 2.5, 3.4, 4, 5, 7, 10	100MPa	15LPM	高压侧一个高压出口, 一个回油口, 适合串联到原有管路中	10
	BST-TY-*.DF(A/B)		低压法兰式	1.8, 2.5, 3.4, 4, 5, 7, 10	100MPa	15LPM	低压法兰安装, 高压螺纹连接	11
	BST-TY-*.RA		救援型1	1.8, 2.5, 3.4, 4, 5, 7, 10	100MPa	15LPM	救援高压双通道快速接头专用	11
	BST-TY-*.RB		救援型2	1.8, 2.5, 3.4, 4, 5, 7, 10	100MPa	15LPM	救援高压双通道快速接头专用	11
	BST-TY-*.G		双高压增压器	1.8, 2.5, 3.4, 4, 5, 7, 10	100MPa	15LPM	两个高压出口, 两出口可以选择不同增压比, 适合两边都需要高压工况。	12
	BST-TY-*.D(A/B/P/G)		叠加式NG6	1.8, 2.5, 3.4, 4, 5, 7, 10	100MPa	15LPM	6通径叠加尺寸, 多种叠加方式可选	13
	BST-TY-*.F		高压法兰式	1.8, 2.5, 3.4, 4, 5, 7, 10	200MPa	15LPM	法兰连接, 适合做批量系统, 集成度高	14
	BST-THN-*.G		高压型2	10, 13, 16	300MPa	10LPM	高压阀体加硬, 体积小巧, 压力高	15
	BST-TGY-*.G		高压型1	7, 10, 13, 16	300MPa	10LPM	高压阀体加大加粗, 多种盖板可选	15
TS	BST-TSY-*.G		双向往复管式	1.8, 2.5, 3.5, 4.6, 5.5, 6.9, 9.5	100MPa	25LPM	双向往复增压, 波动小, 适合有泄漏的系统, 比单向往复增压波动小80%, 流量转化率高, 对标派克液压增压器。	17
	BST-TSY-*.F		双向往复法兰式	1.8, 2.5, 3.5, 4.6, 5.5, 6.9, 9.5	100MPa	25LPM		17
	BST-TSY-*.D(A/P/G)		双向往复叠加式NG6	1.8, 2.5, 3.5, 4.6, 5.5, 6.9, 9.5	100MPa	25LPM		18
M	BST-MY-*.G		管式	1.9, 2.5, 3.4, 4, 5, 7, 10	100MPa	35LPM	管式增压, 流量中等, 适合锁模系统, 液压工具等。	19
	BST-MY-*.SG		高压双出口	1.9, 2.5, 3.4, 4, 5, 7, 10	100MPa	35LPM	高压侧一个高压出口, 一个回油口, 适合串联到原有管路中	19
	BST-MY-*.DF		低压法兰式	1.9, 2.5, 3.4, 4, 5, 7, 10	100MPa	35LPM	低压法兰安装, 高压螺纹连接	20
	BST-MY-*.DB		叠加式NG10	1.9, 2.5, 3.4, 4, 5, 7, 10	100MPa	35LPM	10通径叠加安装	20
	BST-MY-*.F		高压法兰式	1.9, 2.5, 3.4, 4, 5, 7, 10	250MPa	35LPM	法兰式安装, 可以承受更大压力	21
	BST-MGY-*.G		高压型1	7, 10, 13.5, 20	250MPa	25LPM	压力高, 适合短时间高压使用	22
	BST-MGY-*.GHJ		高压加强版	7, 10, 13.5, 20	250MPa	25LPM	高压阀体加硬加粗, 适合频繁高低压切换使用	22

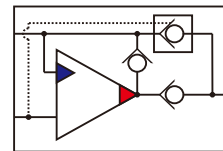
型谱表

系列	型号	图片	安装方式	增压比	压力等级	输入流量	特点	页码
L	BST-LY-*.G		管式	1.4, 2, 3.2, 4.5, 6, 8, 11	100MPa	100LPM	大流量增压器, 适合工程机械使用	23
	BST-LY-*.S		顺序式	1.4, 2, 3.2, 4.5, 6, 8, 11	100MPa	100LPM	低压不启动增压器, 快速充液, 遇到负载后自动切换为增压模式	23
	BST-LY-*.F		法兰式	1.4, 2, 3.2, 4.5, 6, 8, 11	250MPa	100LPM	法兰式安装, 方便集成	24
	BST-LGY-*.G		高压加强版	16, 20	400MPa	50LPM	阀体加硬加粗, 耐高压	25
LS	BST-LSY-*.G		双向往复管式	1.4, 2, 3.2, 4.5, 6, 8, 11	100MPa	100LPM	双向往复增压, 流量大, 波动小	26
	BST-LSY-*.F		双向往复法兰式	1.4, 2, 3.2, 4.5, 6, 8, 11	200MPa	100LPM		26
Z	BST-ZN-*.G		管式	3, 5, 7, 10	200MPa	20LPM	低压零泄漏, 适合长时间蓄能器保压系统	27
X	X60-*.G		双向往复管式	1.8, 2.5, 3.7, 5.7, 6.8, 8, 11	250MPa	150LPM	流量大, 双向增压, 适合大型压机系统	28
	DX60-*.G		双联双向往复管式	1.8, 2.5, 3.7, 5.7, 6.8, 8, 11	250MPa	300LPM	双联错位增压, 波动小	32
	X80-*.G		双向往复管式	3.2, 4.6, 6.7, 10, 14.5, 20	250MPa	200LPM	流量大, 双向增压, 适合大型压机系统, 测试系统	28
	DX80-*.G		双联双向往复管式	3.2, 4.6, 6.7, 10, 14.5, 20	250MPa	400LPM	双联错位增压, 波动小	32
泄荷阀	BV-05		管式, 板式	6通路, 泄荷比6	80MPa	25LPM	快速泄荷阀	34
	BV-14-200		管式	14通路, 泄荷比10、泄荷比3.2	200MPa	150LPM	快速泄荷阀	34
	BM-11		盖板式	11通路	200MPa	100LPM	缓慢泄荷阀	35
单向阀	DV-2		内置	2通路, M8X1螺纹	80MPa	6LPM	反向, 内置	36
	DV-3		内置	3通路, M10X1螺纹	200MPa	10LPM	正向/反向, 内置	36
	DV-6		内置	6通路, M16X1.5螺纹	150MPa	30LPM	正向/反向, 内置	36
	DV-11		管式	11通路, M42X1.5转焊接	200MPa	80LPM	正向管式	36
	DV-30		盖板式	30通路, 盖板式	100MPa	400LPM	盖板	37
超高压附件		超高压过滤器, 超高压快速接头, 超高压软管, 超高压钢管, 超高压接头, 超高压针阀						38
增压阀组								41
超高压液压系统								49



专注于液压增压器的研发

Focus on the research of hydraulic booster



液压增压器选型

BST-TSY-3.5GS

1 2 3 4 5 6

1、型号TYPE

BST:表示BOOSTER, 中文增压的意思。其中X系列省略

2、系列SERIES

SD :Small 小的,表示小流量系列,输入流量最大约8L/min;单作用增压,D省略。

TD :Tiny 微小的,表示小流量系列,输入流量最大约15L/min;单作用增压,D省略。

TS :Tiny 微小的,表示小流量系列,输入流量最大约25L/min;双作用增压。

MD :Middle中等的,表示中流量系列,输入流量最大约35L/min;单作用增压,D省略。

LD :Large大的,表示大流量系列,输入流量最大约100L/min;单作用增压,D省略。

LS :Large大的,表示大流量系列,输入流量最大约100L/min;双作用增压。

ZD :Zero leakage 零泄漏增压,输入流量最大约20L/min;单作用增压,D省略。

XS60 :X large,表示特别大的,输入流量最大约150L/min。双作用增压,大活塞60mm,S省略。

XS80 :X large,表示特别大的,输入流量最大约200L/min。双作用增压,大活塞80mm,S省略。

3、卸荷功能UNLOADING FUNCTION (部分系列无泄荷功能,具体见详情页)

Y :表示集成了卸荷功能(默认为集成卸荷功能);Integrated

N :表示不带卸荷功能。Not Integrated

4、增压比RATIO (具体比例选择见详情页)

输出压力与输入压力的比值,例如:1.8倍,2.5倍,3.4倍,4倍,5倍,7倍,10倍。

The ratio of output pressure to input pressure. e.g. 2.5, 3.4, 4, 5, 7, 10.

5、连接方式MOUNTING MODE (具体选择见详情页)

G :P、T进出口和HP高压输出口为螺纹式连接;Threaded mounting

GZ :P、T进出口和HP高压输出口为插装连接;Cartridge mounting

F :P、T进出口和HP高压输出口为法兰式连接;Flange mounting

D(A/B/P/G) :P、T进出口和HP高压输出口为叠加式连接,其中多种形式可选;Stacking manifold

DF(A/B) :P、T进出口为法兰连接,HP高压输出口为螺纹式连接;Flange and threaded mounting

R(A/B/C) :高压出口救援双通道连接,Rescue manifold

SG :高压侧HP和T双螺纹连接 Threaded mounting

6、其他选项(具体选择见详情页)

S :带顺序功能。低压增压不启动,快速供油,待压力上升,顺序阀打开,增压器开始增压,速度变慢。

HJ :阀体加硬。采用更高强度阀体,更耐压。

TC :阀芯加硬。采用更硬,更耐磨阀芯,更耐用。

5HF4:高压5孔,5孔尺寸HF4标准

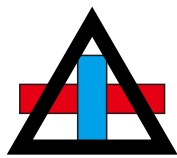
3G :高压3孔,3孔尺寸G螺纹

其他说明

多联增压器在系列前面加D,3,4,表示双联,3联,4联。如DX60-6.8,表示X60系列双联型,6.8倍。

高压型增压器在系列后面加G,H,表示高压型。如BST-TGY-10G,表示T系列高压型,10倍增压比,管式。

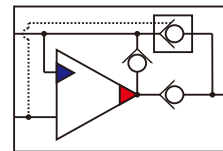
正反都增压型号BST-TY-3.4-3.4G。表示T系列管式正反增压,增压比都为3.4倍。



不断创新

追求卓越

Constant innovation, Striving for excellence



选型方法SELECTION METHOD:

- 1、根据低压输入流量选择增压器系列;
 - 2、根据低压输入压力和高压输出压力选择增压比例;
 - 3、根据系统工况选择单作用增压还是双作用增压方式;双作用波动小, 流量转化率高, 适合高压有泄漏的场合, 如马达增压;
 - 4、根据系统布管要求选择连接方式;
 - 5、其他要求。
1. Select the booster series according to low pressure input flow.
 2. Select the booster ratio according to the output pressure and input pressure.
 3. Select single-acting or dual-acting boosting mode based on system operating conditions. Dual-acting has small fluctuations and high flow conversion rate, more suitable for high-pressure leaky applications such as motor boosting;
 4. Select the mounting mode according to the requirements of system layout.
 5. Other requirements

选型实例EXAMPLE:

- 一、现有一高压油缸需要60Mpa的超高压, 所需超高压流量为1升每分钟, 低压输入压力为0-25Mpa可调。增压器选配步骤如下:
- 第一步: 选定增压比:** 与参数表核对, T系列小流量3.4倍增压比输出压力值与该需求相近, 暂定增压比为3.4倍;
- 第二步: 校核输出流量:** T系列小流量3.4倍增压比的最大流量为2.7升每分钟, 需求流量约为1.2升每分钟, 符合要求;
- 第三步: 校核输入压力:** 该增压比达到60Mpa所需的输入压力值为 $60/3.4=17.6$ Mpa, 此时低压泵工作在高效率区间, 压力适中;
- 第四步: 选定型号:** 根据以上推断, 可选定型号为BST-TY-3.4G, 系统设计时注意连接接头为G1/4。
- 第五步: 系统设计要求:** 根据以上选择, 查看该型号输入流量和输出流量参数, 输入15L/min时候, 输出2.7L/min, 则需要1L/min流量时候, 输入流量需要 $15 \times 1/2.7=5.5$ L/min, 因此系统设计需满足17.65MPa以上压力, 5.5L/min以上流量。
- 二、现有一马达需要增压到40MPa使用, 流量需求40L/min。增压器选配步骤如下:
- 第一步: 选定增压比:** 因输出流量要求比较大, 增压比不宜太大, 暂定增压比为2倍;
- 第二步: 校核输出流量:** LS系列2倍增压比的最大流量为44.6升每分钟, 基本符合要求;
- 第三步: 校核输入压力:** 该增压比达到40Mpa所需的输入压力值为 $40/2=20$ Mpa;
- 第四步: 选定型号:** 根据以上推断, 可选定型号为BST-LSN-2.0G, 系统设计时注意连接接头为G1/2;
- 第五步: 系统设计要求:** 查看参数表的流量关系, 输入流量计算 $100 \times 40/44.6=89.7$ L/min, 输入压力应大于20MPa。

1、One high-pressure cylinder requires 60 Mpa pressure, required ultra-highpressure flow rate of 1L/min, input pressure of 0-25 Mpa adjustable.

The selection steps are as follows:

Step one: select the booster ratio. Check parameter table, The booster which boost ratio of 3.4 of T series is similar to the demand, Temporary select ratio of 3.4.

Step two: Check output flow. The maximum flow of T series rate of 3.4 is 2.7 L/min, and we need the high-pressure output flow rate is 1L/min, so it meets the requirements;

Step three: Check the input pressure. The input pressure required for the boost ratio to reach 60 Mpa is $60/3.4 = 17.65$ Mpa, this pressure is in the high efficiency range of the pump.

Step four: Confirm the selection model. According to the above inference, the optional model is BST-TY-3.4G, the system design should pay attention to the connection of G1/4.

Step five: System design requirements. Based on the above selection, check the input and output flow rate parameters for this model. When the input is 15L/min, the output is 2.7L/min, When a flow rate of 1L/min is required, the input flow rate needs to be $15 \times 1/2.7=5.5$ L/min. Therefore, the system design needs to meet a pressure of over 17.65MPa, Flow rate of 5.5L/min or above.

2、One hydraulic motor requires 40 Mpa pressure, required flow rate of 40L/min.

The selection steps are as follows:

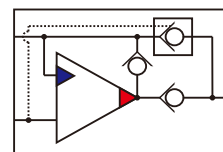
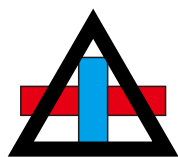
Step one: select the booster ratio. Due to the large output flow requirement, the pressure ratio should not be too high, Temporary select ratio of 2.

Step two: Check output flow. The maximum flow of LS series rate of 2 is 44.6 L/min, so it meets the requirements;

Step three: Check the input pressure. The input pressure required for the boost ratio to reach 40 Mpa is $40/2 = 20$ Mpa.

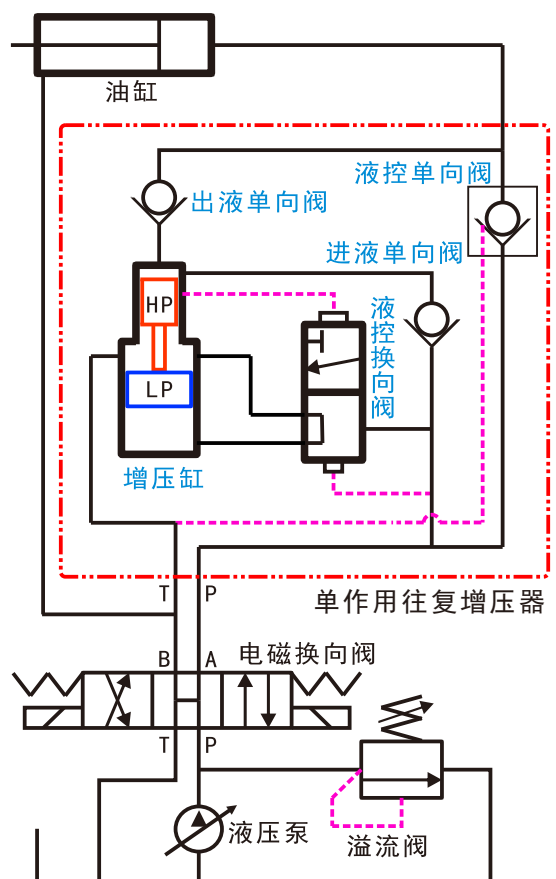
Step four: Confirm the selection model. According to the above inference, the optional model is BST-LSN-2.0G, the system design should pay attention to the connection of G1/2.

Step five: System design requirements. Check the flow relationship in the parameter table. The calculated flow rate is $100 \times 40/44.6=89.7$ L/min, and the input pressure should be greater than 20MPa.



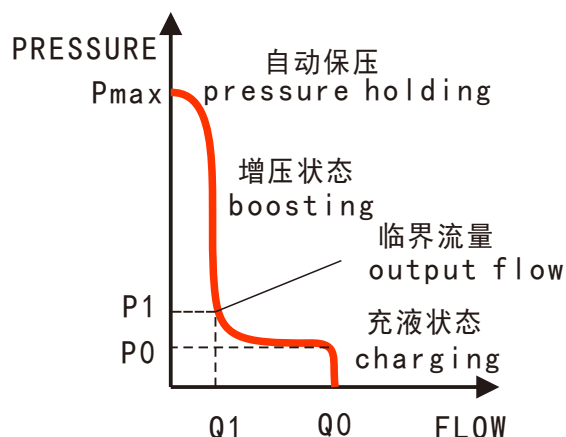
单作用往复增压器

工作原理



液压增压器本质上就是自动化增压缸。

由于低压大活塞LP的面积大于高压小活塞HP的面积，低压压力将推动低压大活塞LP向上运动并压缩高压小活塞HP端的液柱，产生高压，大小活塞面积比即为增压器的增压比。通过小活塞HP位置反馈控制液控换向阀自动换向，实现大小活塞往复运动，连续增压。

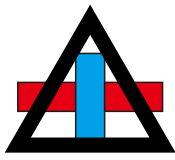


低压充液: 液压油从P口进入增压器，大部分通过液控单向阀直接到油缸无杆腔；其余通过进液单向阀、出液单向阀到达油缸无杆腔，实现快速供油。

增压阶段: 液控单向阀因压力平衡自动关闭，液压油通过进液单向阀到达活塞HP顶端，推动增压缸活塞LP一起下移到底部。活塞HP到底部后，高压油将与增压器换向阀芯上部接通，推动阀芯向下运动。换向后，液压油通过增压器换向阀达到活塞LP底部，推动活塞HP向上运动，输出高压油，通过出液单向阀到达油缸无杆腔；活塞HP到顶部后，增压器换向阀顶部与增压器T口连接，换向阀再次换向，回到图示初始位置。如此自动循环，增压器可以实现高频动作并连续输出高压油。

自动保压: 高压端压力使高压活塞HP与低压活塞LP达到力学平衡后，活塞将停止动作。当高压侧因负载减小或者泄漏等因素造成压力降低时，高低压活塞将失去力学平衡而自动循环补压。

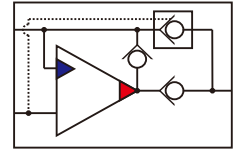
卸荷功能: 电磁换向阀换向，增压器T口的进油将打开液控单向阀，油缸无杆腔的液压油通过液控单向阀流回增压器P口，再通过电磁换向阀回到系统油箱。



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SINGLE-ACTING BOOSTER INTRODUCTION

HOW SINGLE-ACTING BOOSTER WORKS:

Hydraulic booster is based on an auto pressure cylinder.

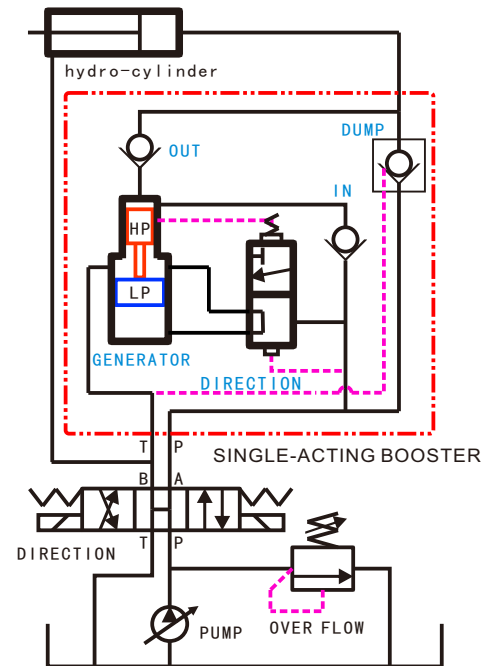
A larger piston LP push a smaller piston LP up, thus increasing the pressure at the head of piston HP to a factor equal to the ratio of area between piston LP and piston HP, we use "I" represent the ratio.

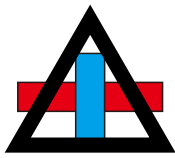
QUICK SUPPLY: The low pressure fluid run into hydraulic booster from port P, through dump valve, most of them reach the hydro-cylinder, the others reach the hydro-cylinder through in valve and outvalve, all the fluid quick supply into hydro-cylinder.

BOOSTING: As the hydro-cylinder meets resistance, the dump valve closed, the low pressure fluid reach the head of piston HP, push the piston HP and LP down. when the piston LP reach the bottom, the low pressure fluid reach the top of auto-direction valve and push it down. After reversing, through auto-direction valve the low pressure fluid reach the bottom of piston LP, push the piston HP up. In the process of moving, the generator generate a continuous high pressure fluid delivering to the hydro-cylinder. when the piston HP reach the top, the top of auto-direction valve connect to port T and the low pressure fluid push it up. After another reversing, return to initial location. as the cycle repeats, the booster output a continuous high pressure fluid with a high-frequency oscillation which can reach 2000 times per minute.

COMPENSATING: The cycle repeat until the high pressure at the head of piston H meet the requirement. At that point the booster stops and will only start again to maintain the pressure.

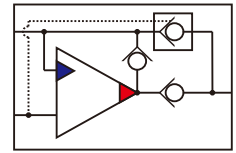
UNLOADING: As the direction valve reverse, the low pressure of the system run into port T, open the dump valve, the high pressure of the hydro-cylinder being relieved to port P, and then back to the tank.





专注于液压增压器的研发

Focus on the research of hydraulic booster

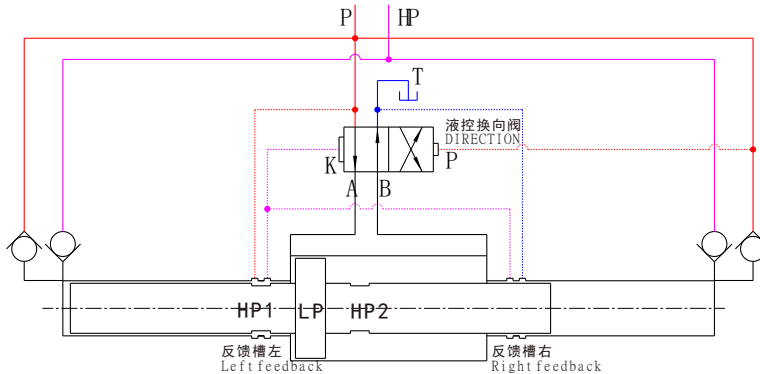


双作用往复增压器 DUAL-ACTING BOOSTER



专利产品 侵权必究

专利号: ZL202211184352.8



X超大流量系列为双向往复增压,其工作原理如上图所示

- 1、图示这个状态下,液控换向阀左侧小面积反馈腔与P口接通,右边大面积反馈腔经过反馈槽左与P口相通,由于液控换向阀右边反馈面积大于左边反馈面积,这时候,液控换向阀将往右边移动。
- 2、液控换向阀往右移动换向后,P口液压油经过液控换向阀,达到增压大活塞LP左腔,推动增压大活塞LP往右边移动,增压大活塞LP右腔液压油则经过液控换向阀后回到T口。增压大活塞LP往右边移动的同时,推动增压小活塞HP2压缩右边高压腔液体,提高压力,再从HP口输出。
- 3、当增压大活塞LP移动到右边后,反馈槽右将连通,液控换向阀右边大面积反馈腔经过反馈槽右与T口接通,这时候将推动液控换向阀往左边移动。
- 4、液控换向阀往左边移动到位后,增压大活塞又开始往左边运动,原理和之前一样,使左边输出高压。

如此往复左右运动,实现连续增压。

德思宏超大流量液压增压器X系列,具有以下特点。

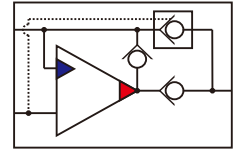
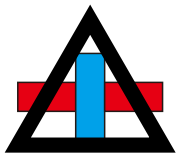
- 1、内部集成液控换向阀,连续增压,液控换向阀**专利技术**,动作无死点。
- 2、双向增压,增压速度快。
- 3、压力自动补偿,当低压压力P与高压压力HP达到压力平衡时候,增压器停止动作,当高压压力泄漏导致压力下降时,增压器又开始动作,继续补偿泄漏压力,实现永不掉压。
- 4、集成度高,体积小,重量轻。
- 5、输出压力高,输出流量大。
- 6、活塞与孔采用间隙密封,寿命长。

X large flow series is dual-acting booster, and its working principle is shown in the above figure

1. In the figure, the small area feedback chamber on the left of the hydraulic control directional valve is connected with port P, and the large area feedback chamber on the left is connected with port P through the left feedback tank. Since the feedback area on the right side of the hydraulic control directional valve is greater than that on the left. At this time, the hydraulic control directional valve will move to the right.
2. When the hydraulic control directional valve moves to the right, the hydraulic oil at port P passes through the hydraulic control directional valve to reach the left chamber of the large piston LP, and pushes the large piston LP to move to the right. The hydraulic oil in the right chamber of the large piston LP returns to port T after passing through the hydraulic control directional valve. While the large piston LP moves to the right, push the small piston HP2 to compress the liquid in the high-pressure chamber on the right, increase the pressure, and then output it from the HP port.
3. When the large piston LP moves to the right, the right side of the feedback tank will be connected, and the large-area feedback chamber on the right side of the hydraulic control directional valve will be connected with port T through the feedback tank, then the hydraulic control directional valve will go to the left.
4. After the hydraulic control directional valve moves to the left in place, the large piston LP starts to move to the left again. The principle is the same as before, making the left output high pressure. Such reciprocating left and right movement realizes continuous pressurization.

The X series booster with extra large flow has the following characteristics:

Internal integrated direction valve, continuous pressurization, **Patented technology**, no stuck design. Dual-acting, fast charging. Pressure auto-compensation, when the low pressure P and high pressure HP reach the pressure balance, the booster stops working, when the high pressure pressure leak causes the pressure to drop, the booster starts to operate again, continue to compensate the leakage pressure, to achieve never drop the pressure. High integration, small size and light weight. High output pressure and large output flow. The piston and the hole are sealed by gaps, the service life is long.



为什么使用液压增压器：

WHY USE THE BOOSTER:

在常见液压系统中，因负载在设计轻量化、安装空间受限制等方面的原因，油缸所需要的工作压力往往会不一致，原始方案是用不同压力等级的液压油泵组成泵组来实现，低压泵实现负载油缸快进快退，高压泵提供小流量液压油驱动负载最后阶段的动作。在系统元器件选型时，都必需按最高压力来进行元器件选配，造价方面居高不下；另外从安全方面考虑，系统总体油路承受的压力越高，其安全性就越低，系统因泄漏产生的发热量也会越大，元件故障率会比低压系统高出很多。

In the common hydraulic system, due to the limited weight of equipment, limited space of installation and other reasons, the hydro-cylinder work in different pressure frequently, the original scheme is use a low and high pressure pump set system, the low pressure pump drive hydro-cylinder fast movement, and the high pressure pump provide greater force. However, in that system, all the hydraulic components must be satisfied the high pressure capacity, so it will be cause high costs, more inner leakage and low security.

德思宏液压增压器在设计上完美地解决了以上的问题，将高压系统与低压系统完全地分开，低压的液压油通过增压器的自运循环增压后，直接进入高压负载，无需任何其它的高压控制元件，大大地降低了系统成本，提高了安全性，减少了系统的能量消耗，是最理想的液压高压乃至超高压解决方案。

Desihom hydraulic booster provide a perfect solution, separate the high pressure and low pressure completely. The hydraulic booster automatically boost the low pressure to higher pressure and then output directly to hydro-cylinder. without any other high pressure components, greatly reducing system costs, also improve safety.

适用工况APPLICABLE:

1、局部高压系统。

High pressure requirement in part of the system.

2、整体高压系统。

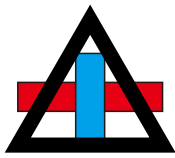
High pressure system.

3、静压高压系统。

Static pressure system.

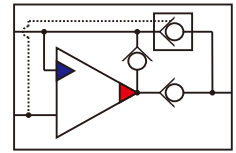
液压增压器是任何实际应用领域最紧凑、最轻便的解决方案。

The hydraulic booster is the smallest and lightest solution in any high pressure industry.



专注于液压增压器的研发

Focus on the research of hydraulic booster



增压器的合理使用

为保证液压增压器的性能，使用工况必须满足以下要求：

In order to ensure the performance of the hydraulic booster, the working conditions must meet the following requirements:

- 1、过滤精度:10um Filtering accuracy: 10um
- 2、介质温度:60度以下 Medium temperature: below 60 degrees.
- 3、流量和压力:低于额定值 Flow and pressure: below rated value.

一个液压增压器的好坏不仅取决于产品本身的质量，还因整个液压系统的合理性，污染程度等有关。其中污染程度是决定液压增压器寿命的主要因素。

The quality of a hydraulic booster depends not only on the quality of the product itself, but also on the rationality of the whole hydraulic system, pollution level and so on. The pollution degree is the main factor determining the life of hydraulic booster.

右图为两种不同工况下适用的液压系统。

The principle diagram is applicable to the hydraulic system under two different working conditions.

一、压力型系统主要用于压力要求高而流量小的系统，它具有结构简单，性能稳定等优点：

Pressure-type system is mainly used in the system with high pressure requirement and low flow rate. It has the advantages of simple structure and stable performance.

二、流量型系统是最常用的系统，它在低压时候能提供较大的流量，同时它还有如下好处：

Flow-type system is the most commonly used system, it can provide a large flow at low pressure, at the same time it has the following advantages:

1、低于顺序阀调定的低压状态下，油液大部分直接通过液控单向阀进入负载油缸，少部分经过液压增压器，这时增压器不动作，可以减少液压增压器的动作时间，延长使用寿命。

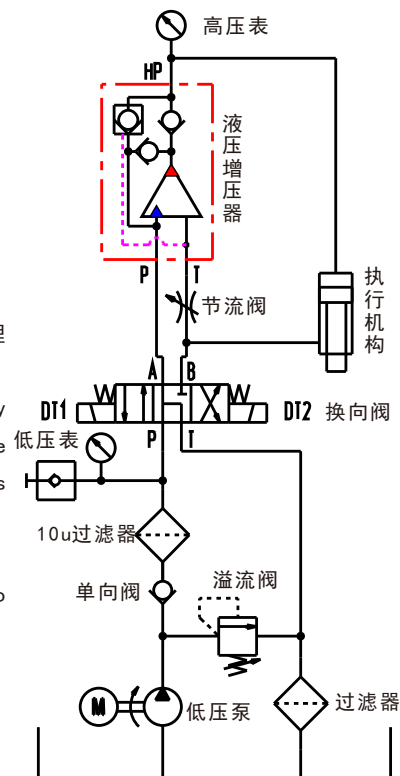
Under the low pressure condition which is lower than the sequence valve, most of the oil enters the load cylinder directly through the pilot operated check valve, a small part passes through the hydraulic booster, at this time the hydraulic booster does not move, which can reduce the action time of the hydraulic booster and prolong the service life.

2、液压油直接通过液控单向阀进入负载油缸，这样比单独通过液压增压器的走的流量大，减少低压充液时间。

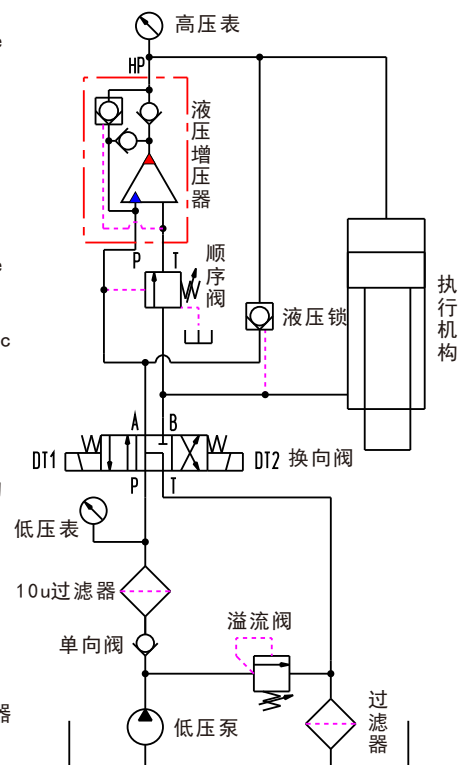
The hydraulic oil enters the load cylinder directly through the pilot operated check valve, so the flow rate is larger than that through the hydraulic booster alone, and the filling time of low pressure is reduced.

3、油缸卸荷时候通过液控单向阀卸荷，不经过液压增压器，始终保证液压增压器清洁。

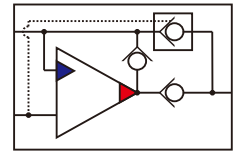
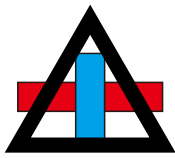
When the cylinder unloads through the pilot operated check valve. It does not pass through the hydraulic booster, ensure the cleanliness of the hydraulic booster.



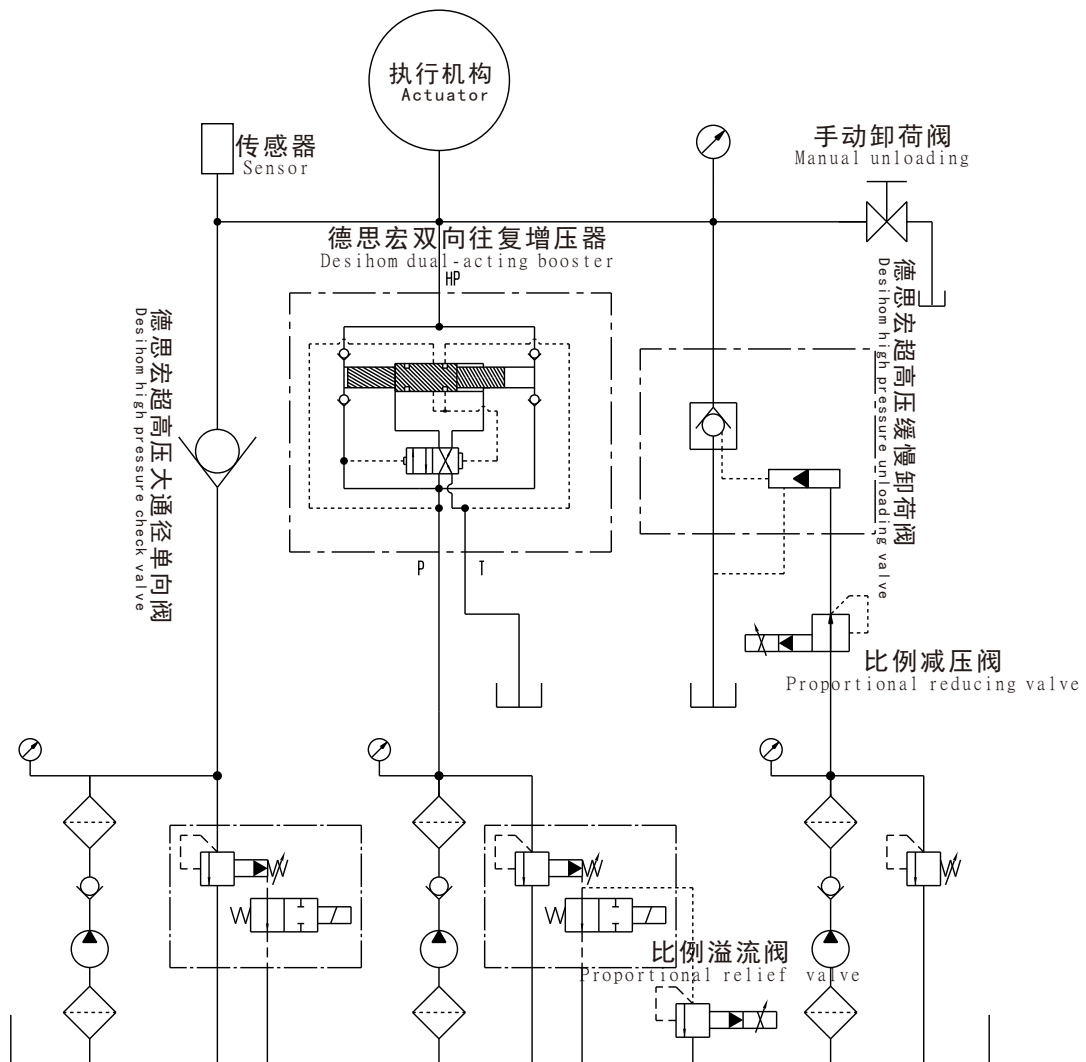
压力型系统
Pressure-type System

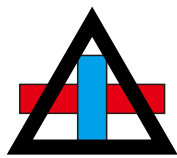


流量型系统
Flow-type System



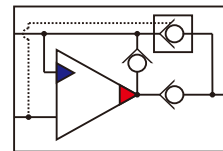
大流量超高压系统 Large flow high pressure





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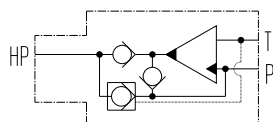


S系列 S Series

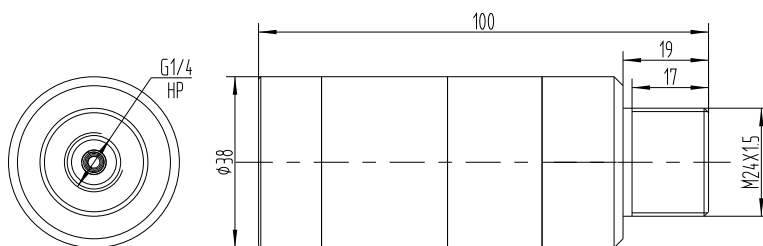
参数表 PARAMETER TABLE

增压比 RATIO	额定输入流量 INPUT LPM	临界输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR	额定频率 FREQUENCY
2	8	2.4	200	400	1900
2.4	8	2.1	200	480	2020
3	8	1.8	200	600	2160
4.2	8	1.3	190	800	2330
6.2	8	1	129	800	2490
7.5	8	0.8	106	800	2550
9.4	8	0.6	85	800	2600

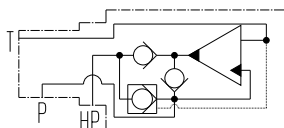
插装



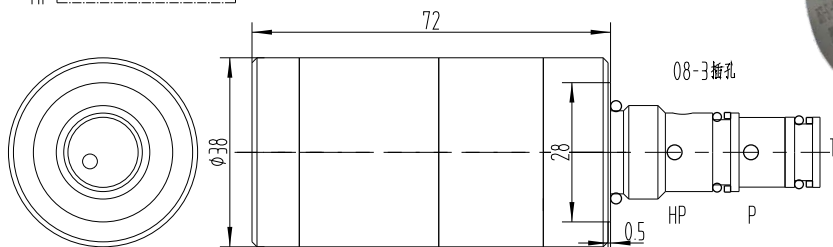
管式安装尺寸(G) Dimensions of Threaded Mounting(G)



重量:0.65KG Weight:0.65KG



插装安装尺寸(CZ) Dimensions of Cartridge Mounting(CZ)



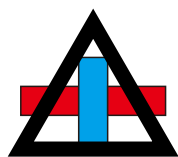
重量:0.6KG Weight:0.6KG

选型示例:BST-SY-4.2G S系列增压器,带卸荷功能,4.2倍率增压比,管式连接

BST-SY-4.2CZ S系列增压器,带卸荷功能,4.2倍率增压比,插装式连接

Example: BST-SY-4.2G S series,with unloading function, intensification factors is 4.2, threaded mounting.

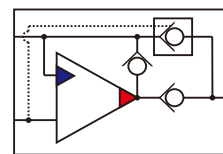
BST-SY-4.2CZ S series,with unloading function, intensification factors is 4.2, cartridge mounting.



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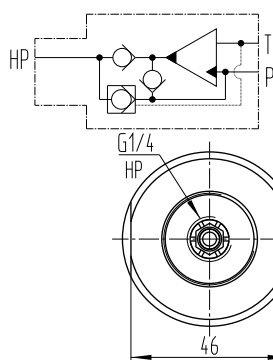


T系列 T Series

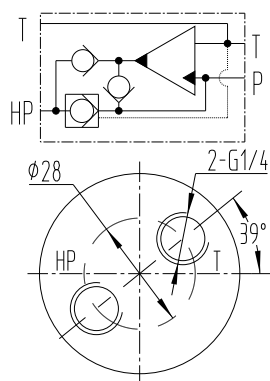
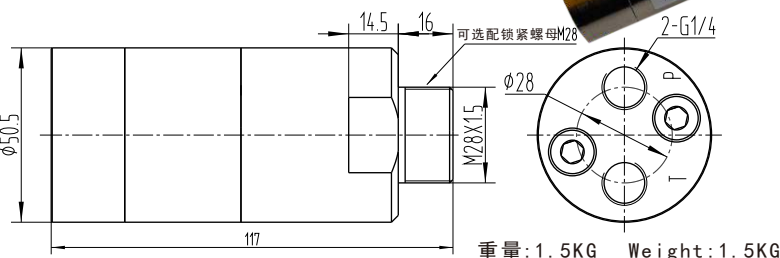
参数表
PARAMETER TABLE

增压比 RATIO	额定输入流量 INPUT LPM	临界输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR	额定频率 FREQUENCY
1.8	16	4.6	250	450	1960
2.5	15	3.45	250	625	2020
3.4	15	2.70	250	850	2160
4.0	14	2.17	250	1000	2100
5.0	14	1.8	200	1000	2190
7.0	13	1.23	144	1000	2120
10.0	8	0.55	100	1000	1360

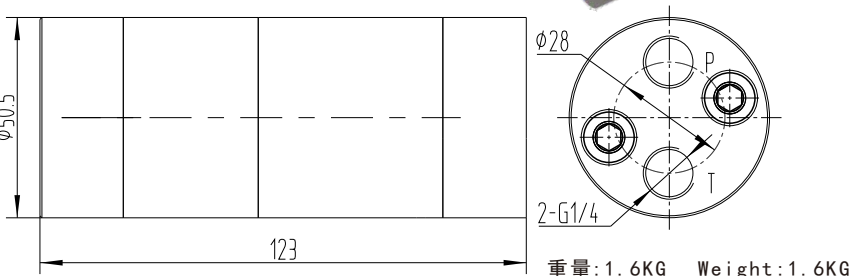
T系列所有型号可选配顺序功能S和阀芯加硬TC，在型号末尾加上相应代码
Optional sequential function S and hardened valve core TC can be equipped, add codes at the end of the model number



管式安装尺寸(G)
Dimensions of Threaded Mounting(G)



双出口安装尺寸(SG)
Dimensions of Threaded Mounting(SG)



选型示例: BST-TY-1.8G T系列增压器，带卸荷功能，1.8倍率增压比，管式连接

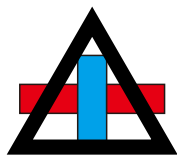
BST-TN-4.0GTC T系列增压器，不带卸荷功能，4倍率增压比，管式连接，阀芯加硬

BST-TY-5.0SG T系列增压器，带卸荷功能，5倍率增压比，双出口螺纹连接

Example: BST-TY-1.8G T series, with unloading function, intensification factors is 1.8, G Manifold

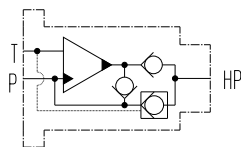
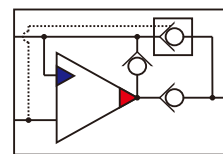
BST-TN-4.0GTC T series, no unloading function, intensification factors is 4, G Manifold, hardened valve spool

BST-TY-5.0SG T series, with unloading function, intensification factors is 5, SG Manifold



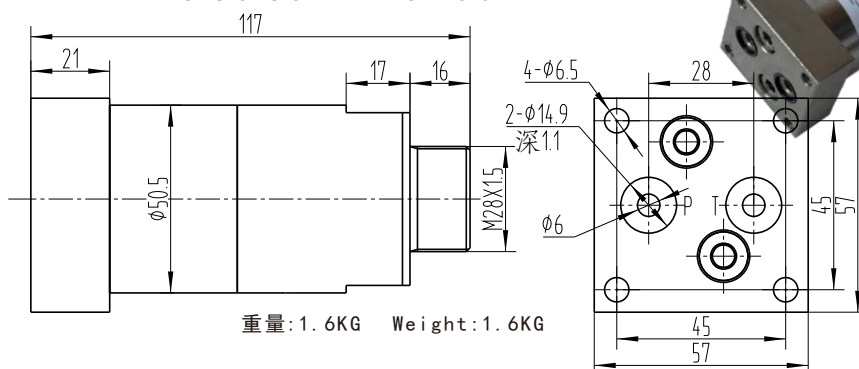
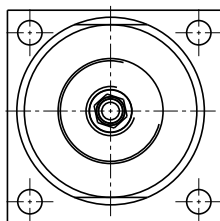
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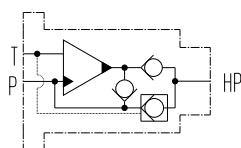


低压法兰式安装尺寸(DFA)

Dimensions of DFA Manifold

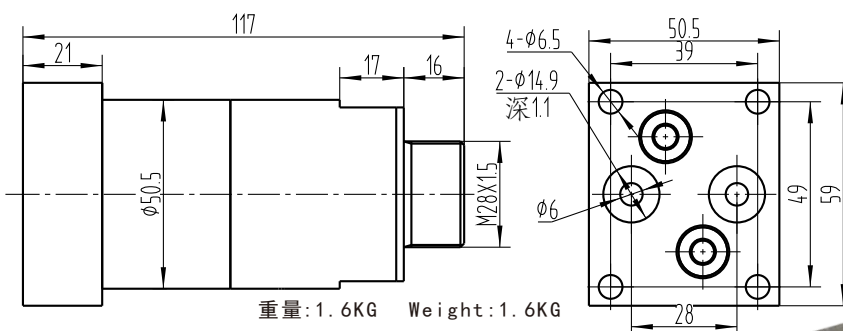
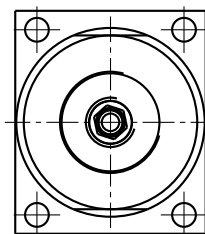


重量: 1.6KG Weight: 1.6KG

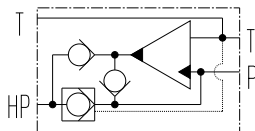


低压法兰式安装尺寸(DFB)

Dimensions of DFB Manifold

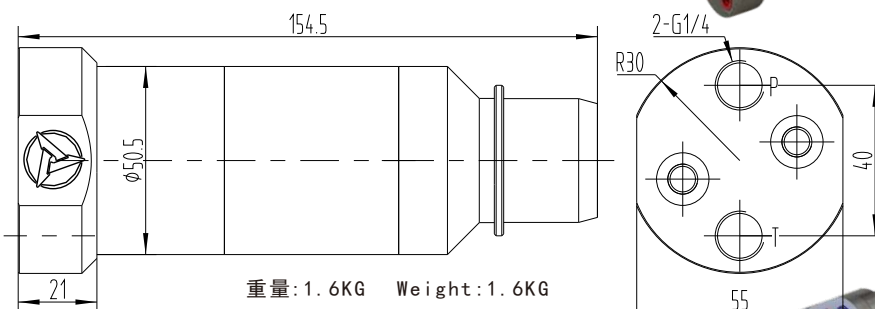
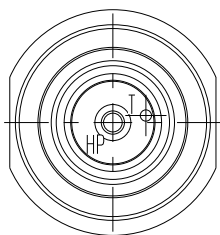


重量: 1.6KG Weight: 1.6KG

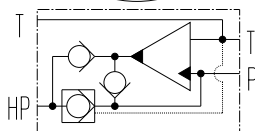


救援型安装尺寸(TRA)

Dimensions of TRA Manifold

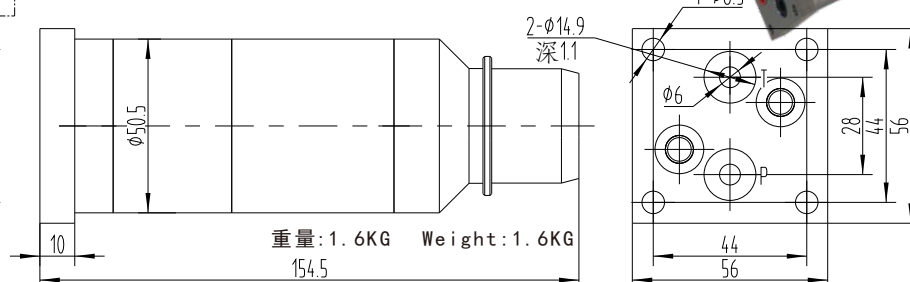
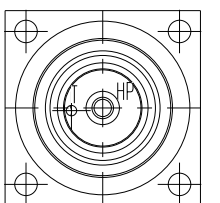


重量: 1.6KG Weight: 1.6KG

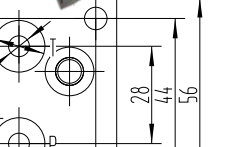


救援型安装尺寸(TRB)

Dimensions of TRB Manifold



重量: 1.6KG Weight: 1.6KG

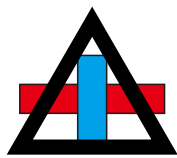


选型示例: BST-TY-1.8DFA T系列增压器, 带卸荷功能, 1.8倍率增压比, 低压法兰A型连接

BST-TY-4.0TRB T系列增压器, 带卸荷功能, 4倍率增压比, 救援B型连接

Example: BST-TY-1.8DFA T series, with unloading function, intensification factors is 1.8, DFA Manifold

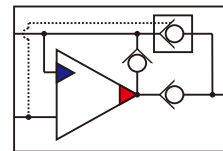
BST-TY-4.0TRB T series, with unloading function, intensification factors is 4, TRB Manifold



不断创新

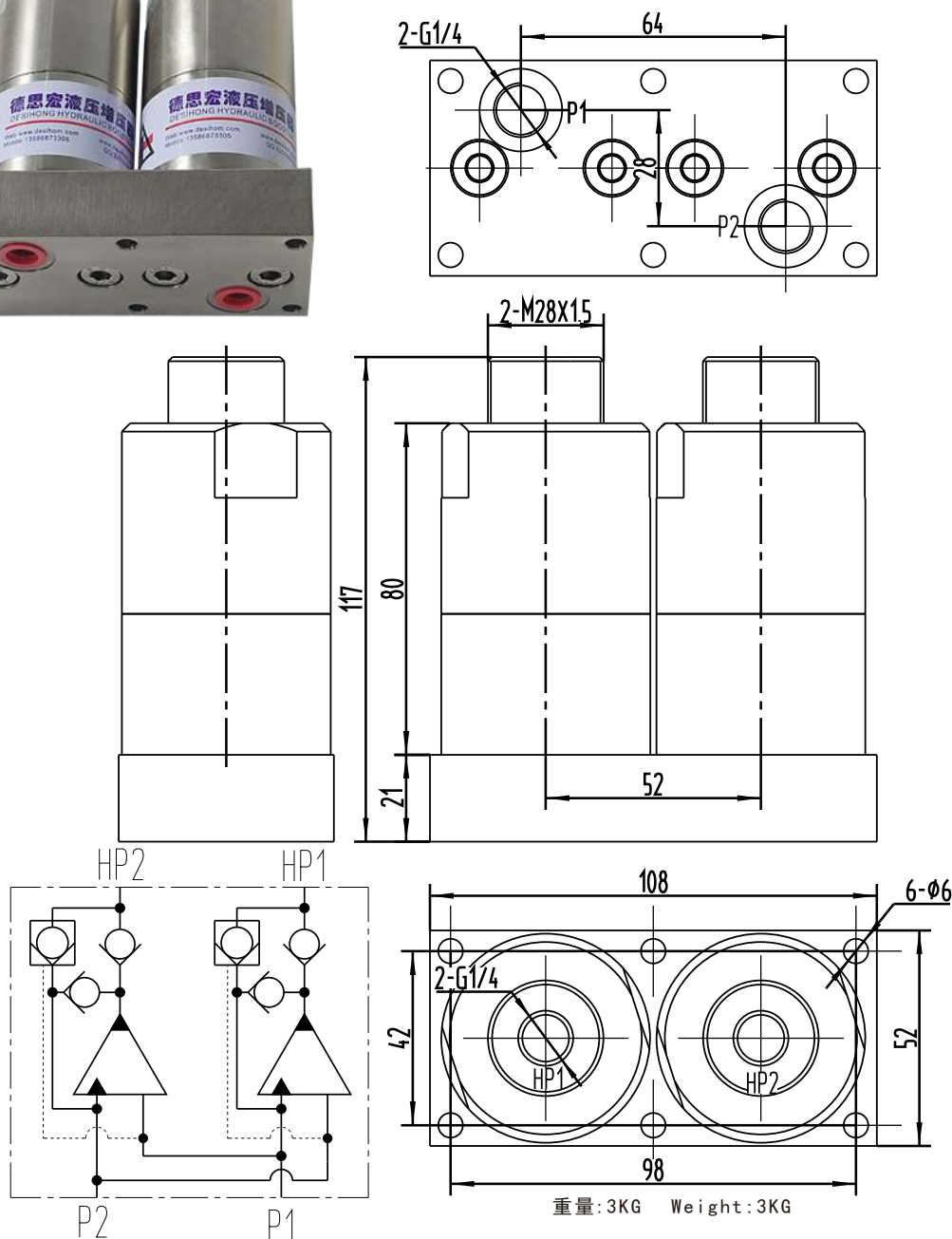
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双高压增压器安装尺寸

Dimensions of two booster Manifold



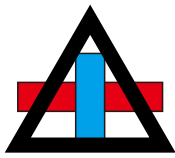
此增压器适合油缸正反都需要增压场合，正反增压比可以选择不同比例，体积小，集成度高

This booster is suitable for applications where both positive and negative pressure boosting of the cylinder are required. The positive and negative pressure boosting ratios can be selected in different ratio. It has a small size and high integration level.

选型示例: BST-TY-3.4-3.4G T系列增压器，带卸荷功能，3.4和3.4倍率增压比，管式连接

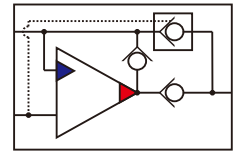
BST-TY-4.0-5.0GSTC T系列增压器，带卸荷功能，4和5倍率增压比，管式连接,带顺序功能，阀芯加硬

Example: BST-TY-3.4-3.4G T series, with unloading function, intensification factors is 3.4 and 3.4, threaded Manifold
BST-TY-4.0-5.0GSTC T series, with unloading function, intensification factors is 4 and 5, threaded Manifold
With sequence function, the valve core is hardened

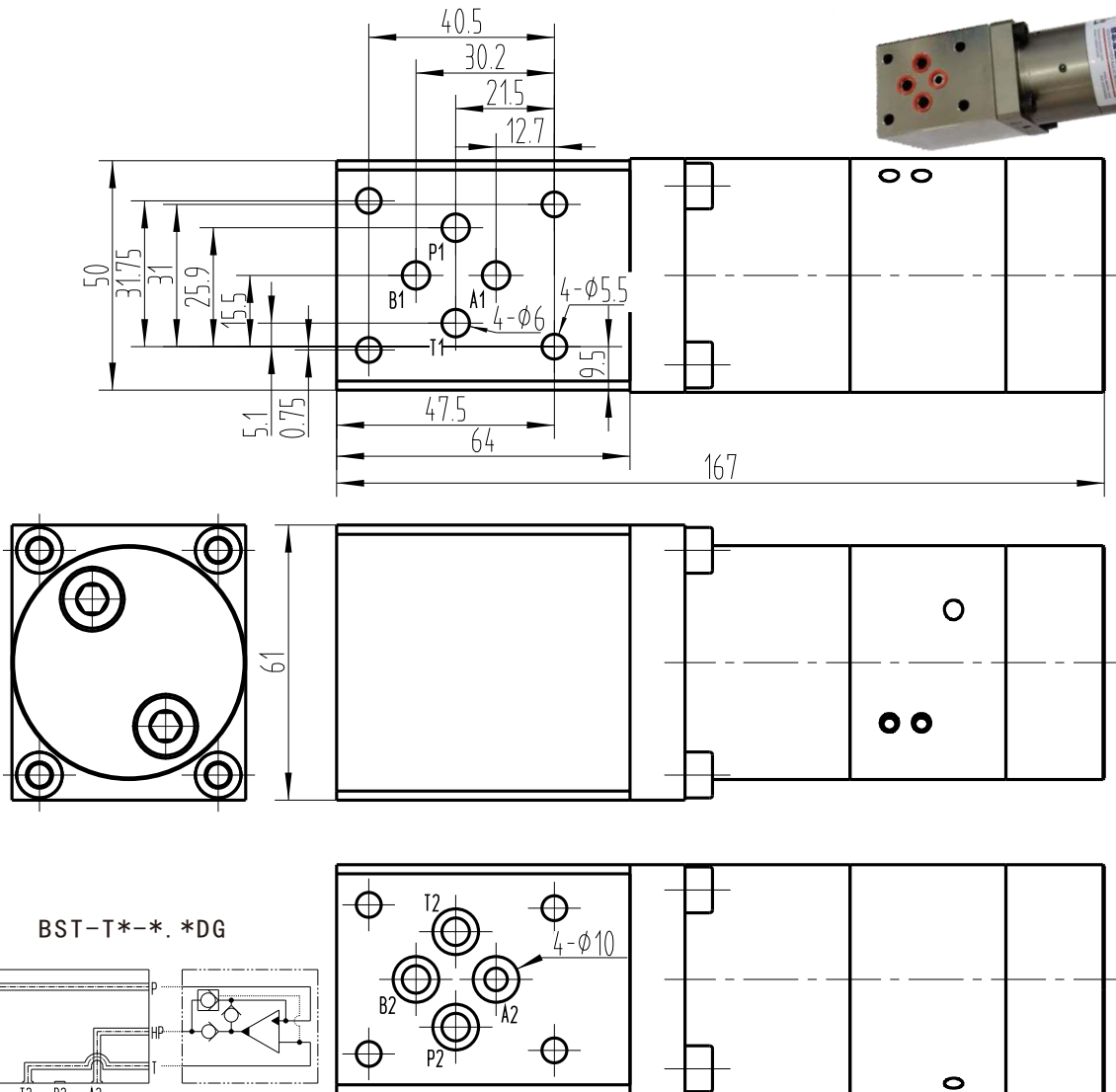


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叠加式安装尺寸 (DA/B/P/G) Dimensions of Stacking Manifold



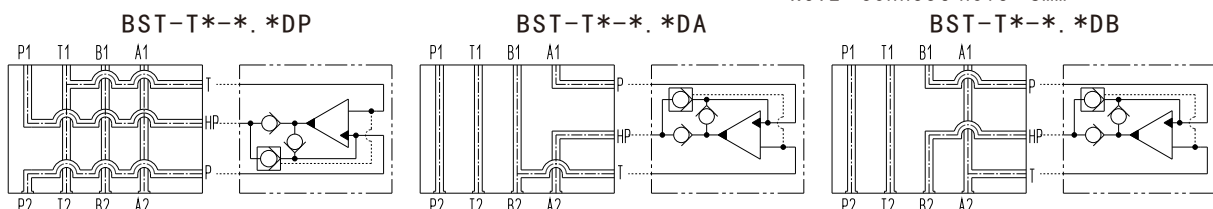
注意：此型号安装尺寸中P1, T1, A1, B1, B2油口未打
NOTE: This type without P1, T1, A1, B1, B2

油路符号 Oil Channels

重量: 3.2KG Weight: 3.2KG

注意：连接孔不得大于6mm

NOTE: connect hole $\leq$ 6mm



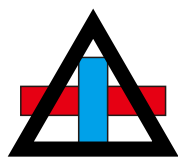
注意：DP型P口增压后，经过换向阀切换，A、B口都输出高压，注意换向阀承受了高压
NOTE: DP type booster P out put the high pressure, after switching by the directional valve, both Port A and Port B output high pressure. Note that the directional valve is subjected to high pressure

选型示例: BST-TY-1.8DP T系列增压器，带卸荷功能，1.8倍率增压比，叠加式连接，P增压

BST-TN-4.0DA T系列增压器，不带卸荷功能，4倍率增压比，叠加式连接，A增压

Example: BST-TY-1.8DP T series, with unloading function, intensification factors is 1.8, Stacking Manifold, P boost

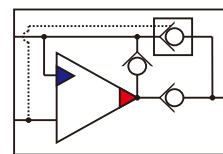
BST-TN-4.0DA T series, no unloading function, intensification factors is 4, Stacking Manifold, A boost



不断创新

追求卓越

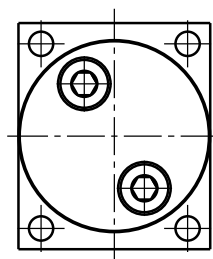
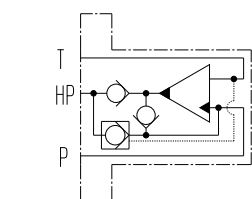
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法兰式参数表(F)

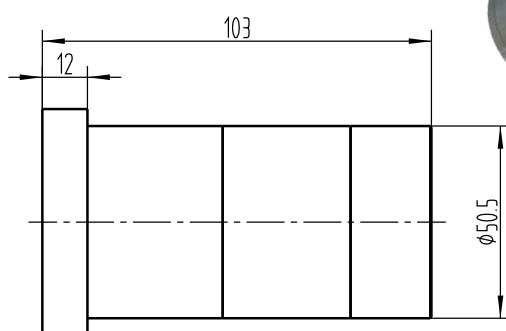
FLANGE MOUNTING PARAMETER TABLE

增压比 RATIO	额定输入流量 INPUT LPM	临界输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR	额定频率 FREQUENCY
1.8	16	4.6	250	450	1960
2.5	15	3.45	250	625	2020
3.4	15	2.70	250	850	2160
4.0	14	2.17	250	1000	2100
5.0	14	1.8	250	1250	2190
7.0	13	1.23	250	1750	2120
10.0	8	0.55	200	2000	1360

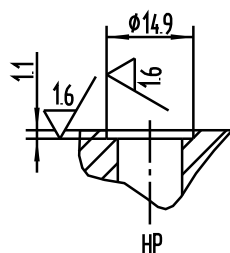
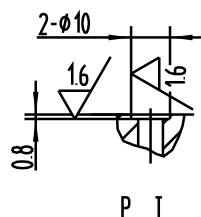
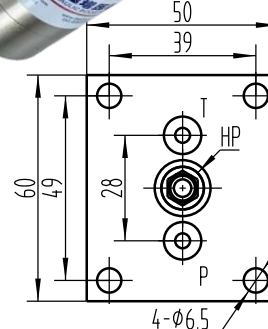


法兰式安装尺寸(F)

Dimensions of Flange Mounting(F)



重量: 1.5KG Weight: 1.5KG



注意: P, T口连接孔不得大于4mm, HP口不得大于10mm.
NOTE: P&T connect hole ≤ 4mm, HP ≤ 10mm.
连接要求: 连接面粗糙度0.8
Others: Required surface finish Ra 0.8

法兰式加叠加块可以组合成叠加式, 详细尺寸见上页

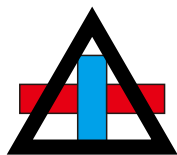
Flange mounting booster add block can be changed Stacking Manifold type, details see previous page

选型示例: BST-TY-1.8F T系列增压器, 带卸荷功能, 1.8倍率增压比, 法兰式连接

BST-TN-10F T系列增压器, 不带卸荷功能, 10倍率增压比, 法兰式连接

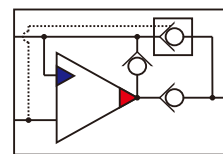
Example: BST-TY-1.8F T series, with unloading function, intensification factors is 1.8, flange mounting.

BST-TN-10F T series, no unloading function, intensification factors is 10, flange mounting.



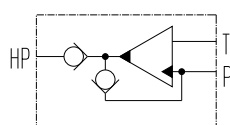
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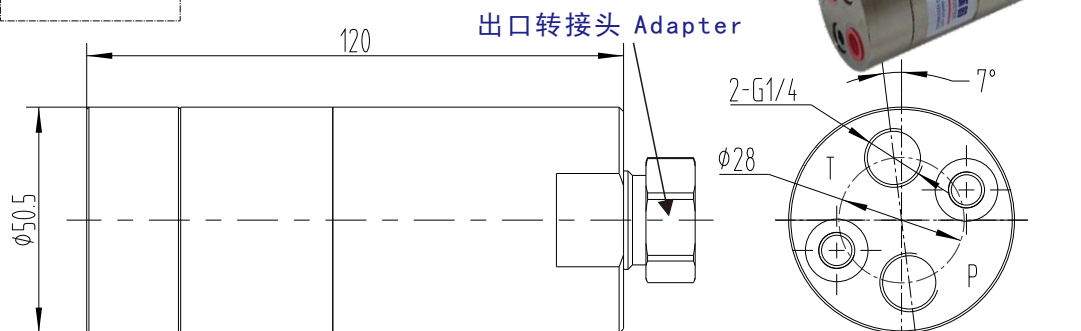


高压型参数表 (TH/TG)
HIGH PRESSURE PARAMETER TABLE

增压比 RATIO	额定输入流量 INPUT LPM	临界输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR	额定频率 FREQUENCY
7.0	13	1.23	250	1750	2120
10	8	0.55	200	2000	1360
13	8	0.42	200	2600	1380
16	8	0.3	163	2600	1400



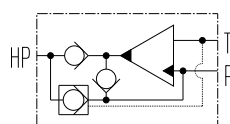
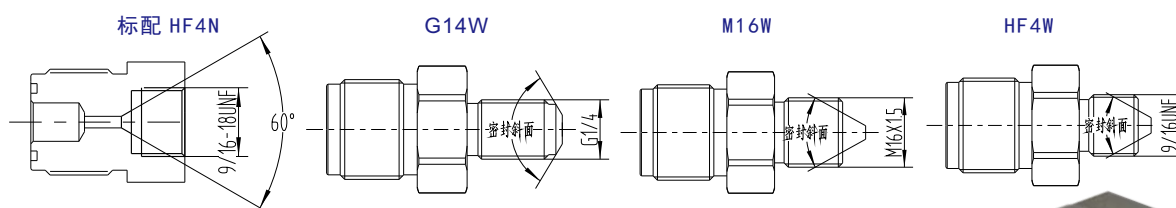
高压型安装尺寸 (TH)
High Pressure Dimensions (TH)



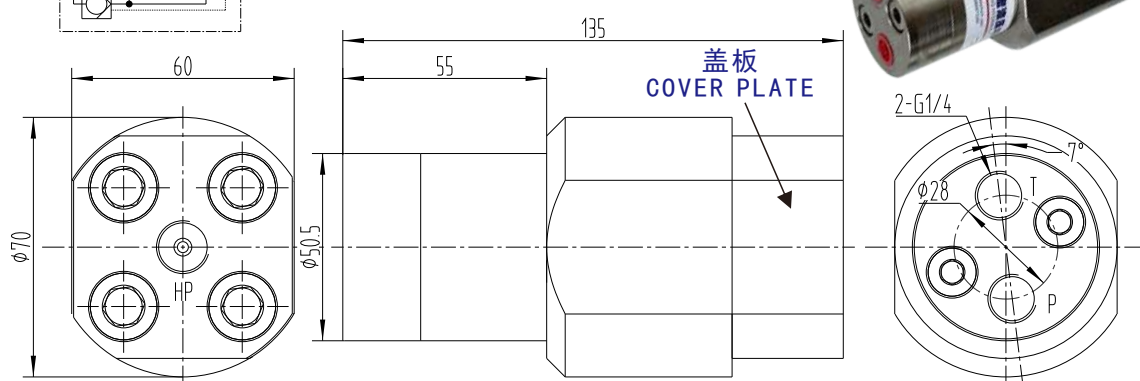
重量: 1.6KG Weight: 1.6KG

TH系列标配TC加硬阀芯HJ加硬阀体, 不可选择泄荷功能, P&T口可以选择低压法兰式连接

出口转接头 Adapter

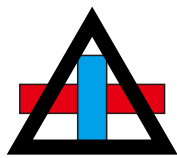


高压型安装尺寸 (TG)
High Pressure Dimensions (TG)



重量: 2.8KG Weight: 2.8KG

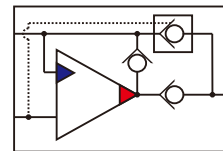
TG系列标配TC加硬阀芯, 10倍以上不可选择泄荷功能, P&T口可以选择低压法兰式连接



不断创新

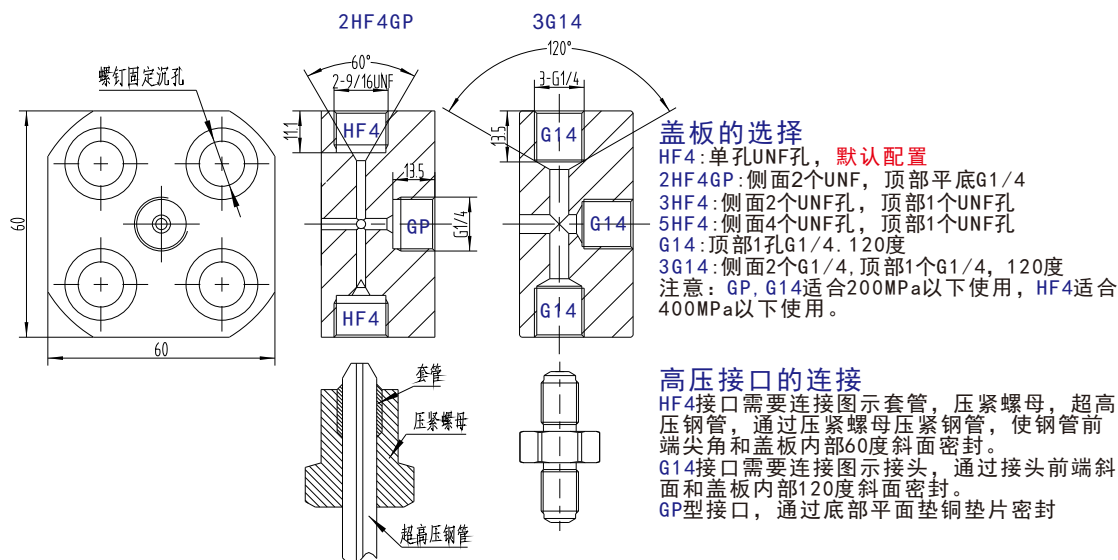
追求卓越

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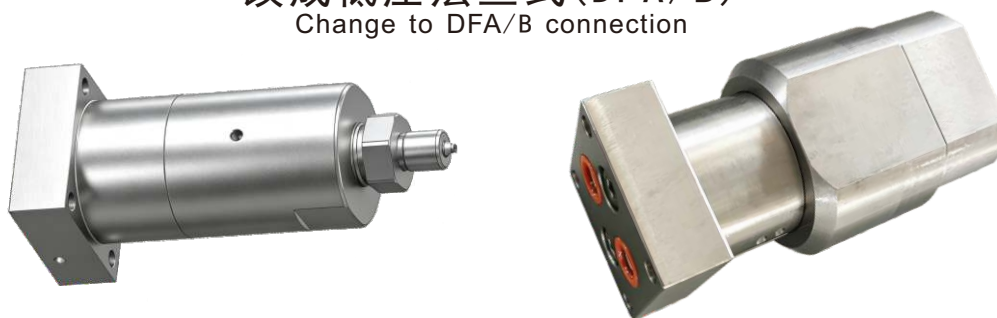
盖板 COVER PLATE

TG型, MG型, LG型盖板通用



改成低压法兰式(DFA/B)

Change to DFA/B connection



TH/TG高压型增压器能输出极高的压力, 适用于压力测试, 井口控制盘, 劈裂机等行业。

TH/TG series booster can output extremely high pressure, suitable for pressure testing, wellhead control panel, splitter and other industries

选型示例 Example:

BST-THN-7.0GN TH高压型增压器, 不带卸荷功能, 7倍率增压比, 管式连接, 默认HF4内螺纹

BST-THN-13G-M16W TH高压型增压器, 不带卸荷功能, 13倍率增压比, 管式连接, M16外螺纹

BST-THN-7.0G TH type booster, no unloading function, intensification factors is 7.0, HF4 adapter.

BST-THN-13G-M16W TH type booster no unloading function, intensification factors is 13, M16W adapter.

BST-TGN-7.0G TG高压型增压器, 不带卸荷功能, 7倍率增压比, 管式连接, 默认单孔HF4盖板

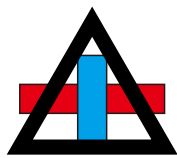
BST-TGY-10G-2HF4GP TG高压型增压器, 带卸荷功能, 10倍率增压比, 管式连接, 2个HF4孔, 一个G1/4平底孔盖板

BST-TGN-10G-DFA TG高压型增压器, 不带卸荷功能, 10倍率增压比, 管式连接, 1个HF4孔盖板, 低压法兰式连接A型。

BST-TGN-7.0G TG type booster, no unloading function, intensification factors is 7.0, one HF4 connection.

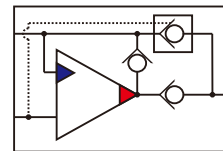
BST-TGY-10G-2HF4GP TG type booster with unloading function, intensification factors is 10, 2HF4GP connection.

BST-TGN-10G-DFA TG type booster, no unloading function, intensification factors is 10, one HF4 connection, DFA connection



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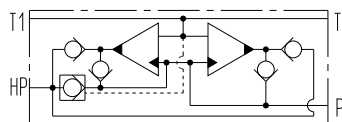
Focus on the research of hydraulic booster



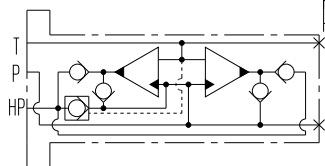
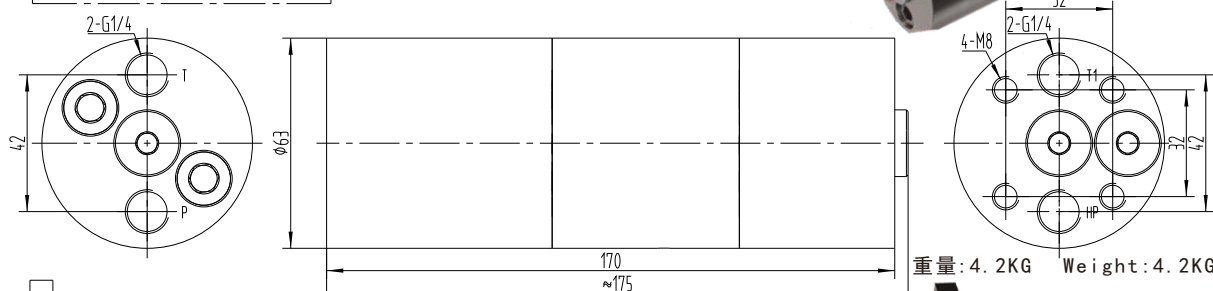
TS系列 TS Series

参数表
PARAMETER TABLE

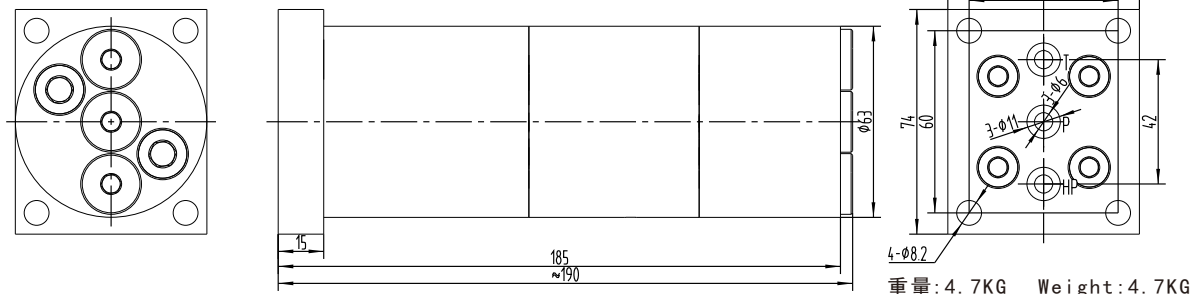
增压比 RATIO	额定输入流量 INPUT LPM	临界输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR	额定频率 FREQUENCY
1.8	25	12.7	250	450	1820
2.5	25	9	250	625	1820
3.5	25	6.1	250	875	1820
4.6	25	4.6	217	1000	1820
5.5	25	3.9	182	1000	1820
6.9	25	2.9	145	1000	1820
9.5	25	2.2	105	1000	1820



管式安装尺寸(G)
Dimensions of Threaded Mounting(G)



法兰式安装尺寸(F)
Dimensions of Flange Mounting(F)



TS系列增压器为双向往复增压器，其输出压力波动小，流量转化率高，反应更灵敏。

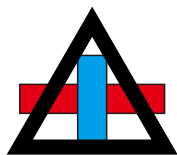
TS series booster is duan-acting booster,Its output pressure fluctuation is small, flow conversion rate is high, and the response is more sensitive.

选型示例: BST-TSY-2.5G TS系列增压器，带卸荷功能，2.5倍率增压比，管式连接

BST-TSY-2.5F TS系列增压器，带卸荷功能，2.5倍率增压比，法兰式连接

Example: BST-TSY-2.5G TS series,with unloading function, intensification factors is 2.5,threaded Manifold

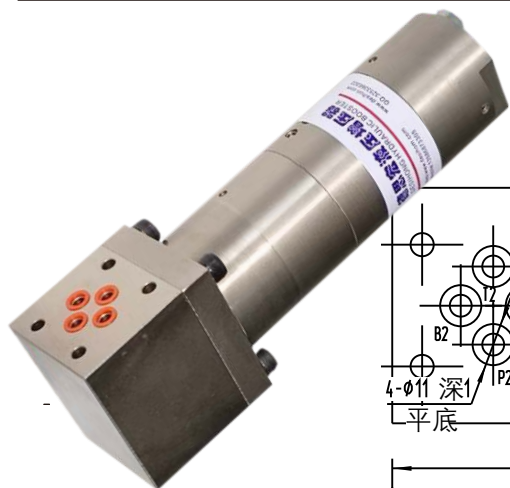
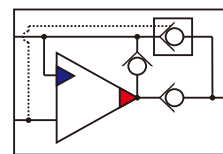
BST-TSY-2.5F TS series,with unloading function, intensification factors is 2.5,Flange Manifold



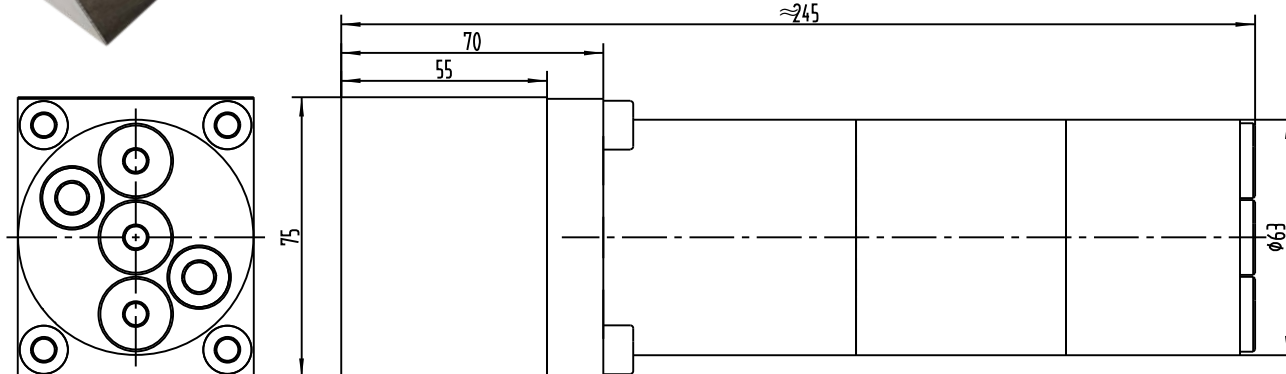
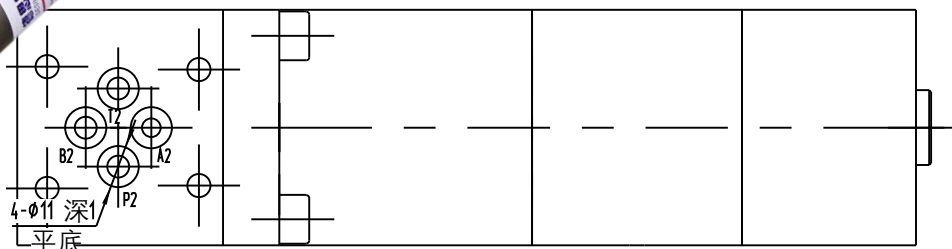
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追求卓越

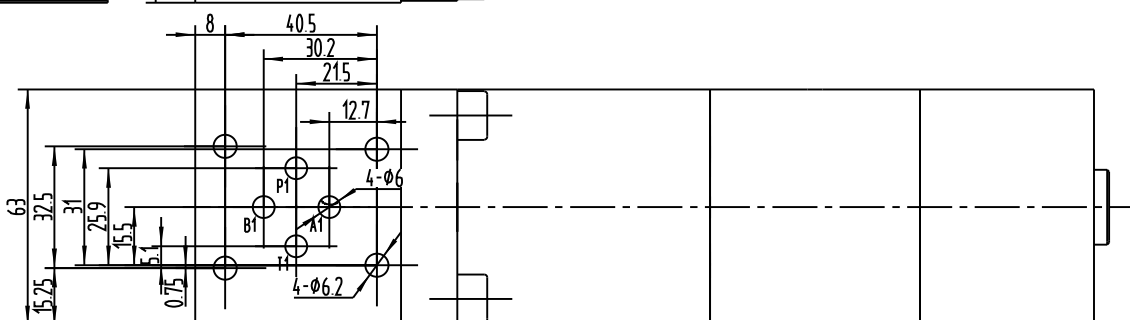
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叠加式安装尺寸(DA/P/G)
Dimensions of Stacking Manifold

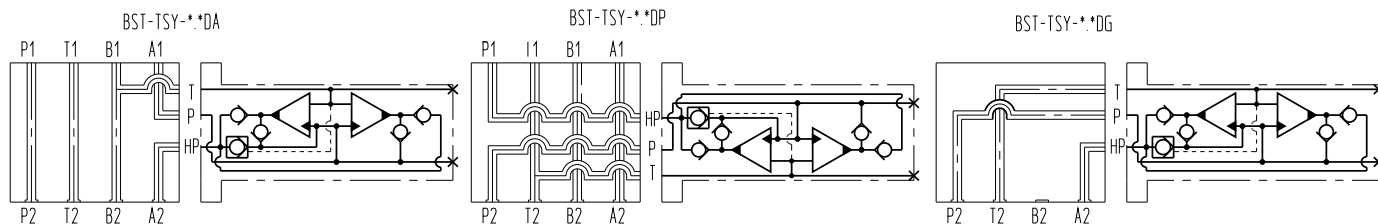


重量: 6.6KG
Weight: 6.6KG



注意: 连接孔不得大于 6mm

NOTE: connect hole $\leq 6\text{mm}$



注意: DP型P口增压后, 经过换向阀切换, A、B口都输出高压, 注意换向阀承受了高压

NOTE: DP type booster P out put the high pressure, after switching by the directional valve, both Port A and Port B output high pressure. Note that the directional valve is subjected to high pressure

选型示例:

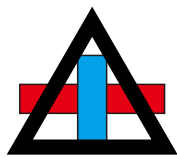
BST-TSY-2.5DA TS系列增压器, 带卸荷功能, 2.5倍率增压比, 叠加式连接, A口增压

BST-TSY-3.5DG TS系列增压器, 带卸荷功能, 3.5倍率增压比, 叠加式连接, G型增压方式

Example:

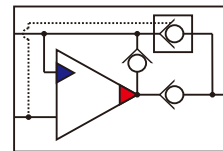
BST-TSY-2.5DA TS series, with unloading function, intensification factors is 2.5, Staking Manifold, A boost

BST-TSY-3.5DG TS series, with unloading function, intensification factors is 3.5, Staking Manifold, G boost



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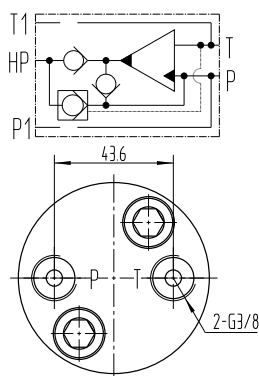
M系列 M Series

参数表 PARAMETER TABLE

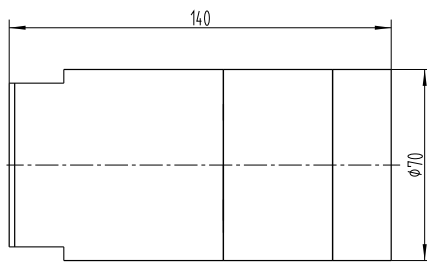
增压比 RATIO	额定输入流量 INPUT LPM	临界输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR	额定频率 FREQUENCY
1.9	35	10	250	475	1730
2.5	35	8.3	250	625	1880
3.4	35	6.4	250	850	2040
4.0	35	5.6	250	1000	2100
5.0	35	4.5	200	1000	2190
7.0	30	2.8	144	1000	1960
10.0	25	1.5	100	1000	1700

M系列所有型号可选配顺序功能S和阀芯加硬TC，在型号末尾加上相应代码

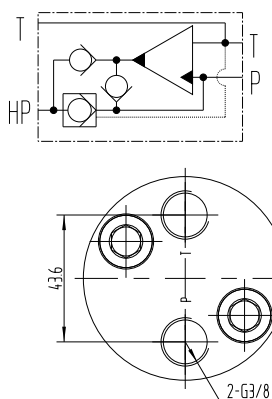
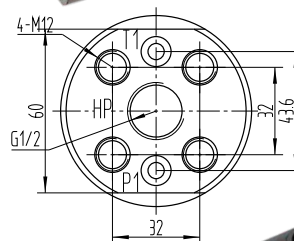
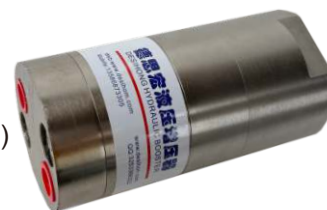
Optional sequential function S and hardened valve core TC can be equipped



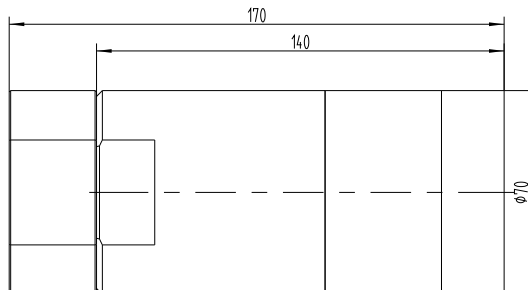
管式安装尺寸(G) Dimensions of Threaded Mounting(G)



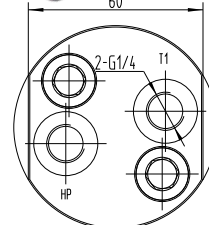
注意：默认P1&T1未打通。重量:3.4KG Weight:3.4KG



双出口安装尺寸(SG) Dimensions of Threaded Mounting(SG)



重量:4KG Weight:4KG



选型示例: BST-MY-1.9GS M系列增压器, 带卸荷功能, 1.9倍率增压比, 管式连接, 顺序功能

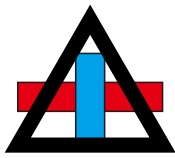
BST-MN-4.0GTC M系列增压器, 不带卸荷功能, 4倍率增压比, 管式连接, 阀芯加硬

BST-MY-5.0SG M系列增压器, 带卸荷功能, 5倍率增压比, 双出口螺纹连接

Example: BST-MY-1.9G M series, with unloading function, intensification factors is 1.9, G Manifold, sequential function

BST-MN-4.0GTC M series, no unloading function, intensification factors is 4, G Manifold, hardened valve spool

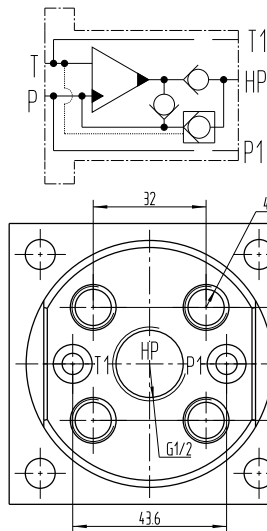
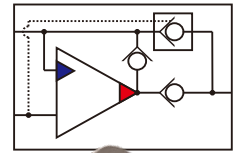
BST-MY-5.0SG M series, with unloading function, intensification factors is 5, SG Manifold



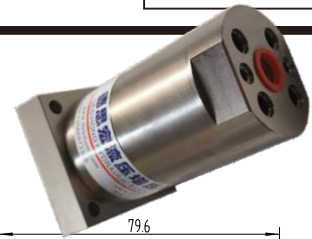
不断创新

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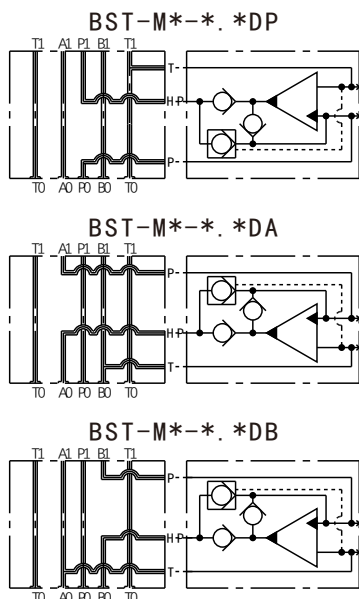
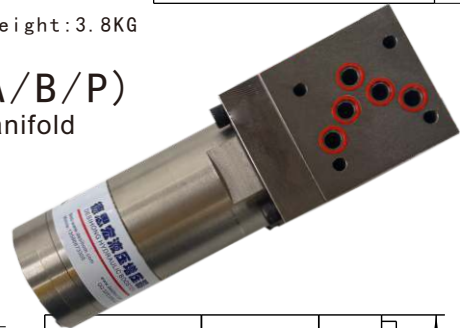
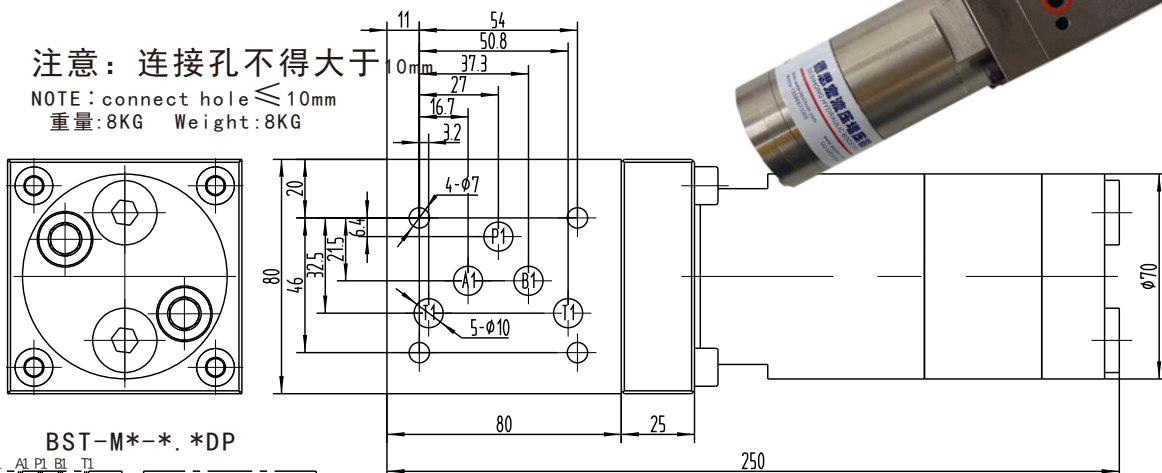
低压法兰式安装尺寸(DF)
Dimensions of DF Manifold



注意：默认P1&T1未打通。重量:3.8KG Weight:3.8KG

叠加式安装尺寸(DA/B/P)
Dimensions of Stacking Manifold

注意：连接孔不得大于
NOTE: connect hole $\leq 10\text{mm}$
重量:8KG Weight:8KG

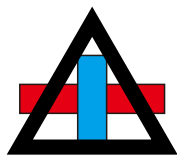


选型示例: BST-MY-1.9DF M系列增压器, 带卸荷功能, 1.9增压比例, 低压法兰连接

BST-MY-1.9DB M系列增压器, 带卸荷功能, 1.9增压比例, 叠加式连接, B增压

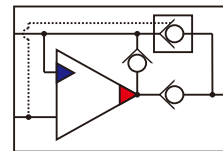
Example: BST-MY-1.9DF M series, with unloading function, intensification factors is 1.9 and DF connection.

BST-MY-1.9DB M series, with unloading function, intensification factors is 1.9, Stacking Manifold, B boost



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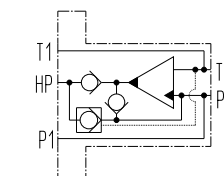
法兰式参数表(F)
FLANGE MOUNTING PARAMETER TABLE

增压比 RATIO	额定输入流量 INPUT LPM	临界输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR	额定频率 FREQUENCY
1.9	35	10	250	475	1730
2.5	35	8.3	250	625	1880
3.4	35	6.4	250	850	2040
4.0	35	5.6	250	1000	2100
5.0	35	4.5	250	1250	2190
7.0	30	2.8	250	1750	1960
10.0	25	1.5	200	2000	1700

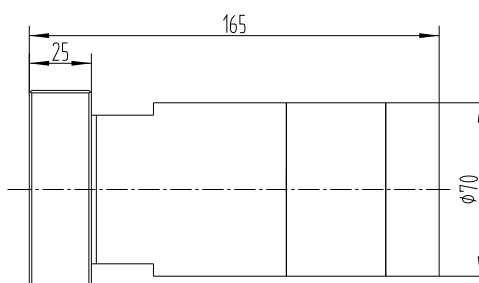
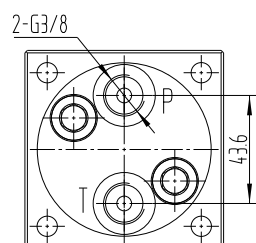
MG

7倍以上标配TC加硬阀芯

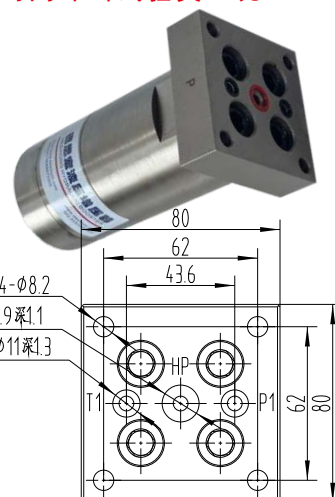
标准的阀体未加硬, 100MPa以上工况可短时间使用, 不可用于长时间冲击试验类工况



法兰式安装尺寸(F)
Dimensions of Flange Mounting(F)



重量: 4.4KG Weight: 4.4KG



注意: 默认T和P采用ED堵头堵上。

Note: T and P is plugged with ed plug.

P1, T1口连接孔不得大于6mm, HP口不得大于10mm.

NOTE: P1&T1 connect hole ≤6mm, HP≤10mm.

管式增压器P1&T1孔打通, 安装法兰板组合成法兰式, 法兰式加叠加块可以组合成叠加式

Through the P1&T1 of Threaded Mounting booster, add flange block can be changed Flange mounting booster.

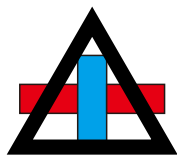
Flange mounting booster add Manifold block can be changed Stacking Manifold type, details see previous page

选型示例: BST-MY-1.9F M系列增压器, 带卸荷功能, 1.9增压比例, 法兰式连接

BST-MY-10F M系列增压器, 带卸荷功能, 10增压比例, 法兰式连接, 标配TC加硬阀芯

Example: BST-MY-1.9F M series with unloading function, intensification factors is 1.9 and Flange Mounting.

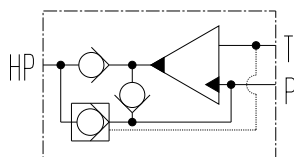
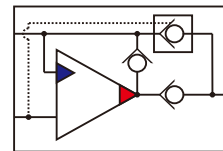
BST-MY-10F M series with unloading function, intensification factors is 10 and Flange Mounting, TC hardened valve spool.



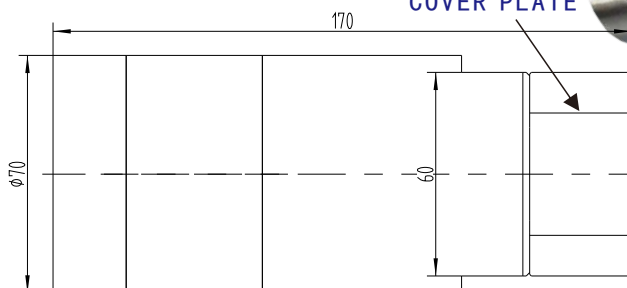
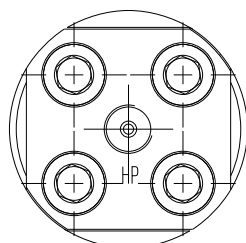
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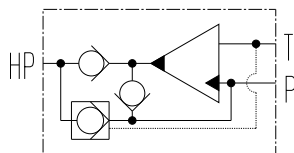
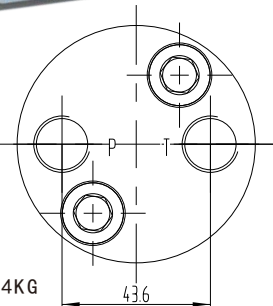


高压型安装尺寸(MG) High Pressure Dimensions (MG)

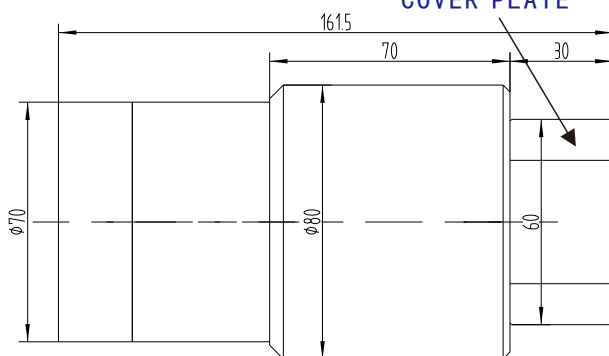
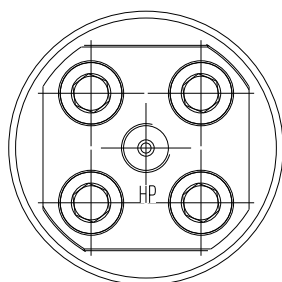


盖板
COVER PLATE

重量: 4KG Weight: 4KG

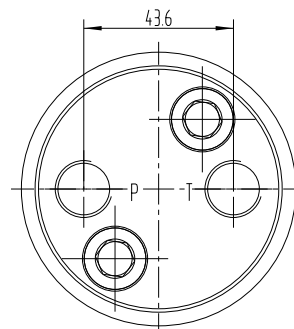


高压型安装尺寸(MG HJ) High Pressure Dimensions (MG HJ)



盖板
COVER PLATE

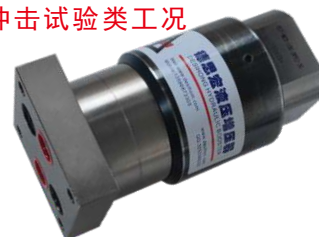
重量: 5KG Weight: 5KG



只有7倍和10倍可选, 标配TC加硬阀芯

MG的阀体未加硬, 100MPa以上工况可短时间使用, 不可用于长时间冲击试验类工况
MGHJ的阀体加硬加粗, 适合100MPa以上长时间冲击试验类工况

低压P&T可更换为低压法兰式连接, 连接尺寸查看DF尺寸, 页面24
盖板的选择查看页面20



MG中流量系列增压器能输出极高的压力, 适用于压力测试, 超高压泵站等行业。

MG series booster can output extremely high pressure, suitable for pressure testing, ultra-high pressure pump station and other industries.

选型示例 Example:

BST-MGN-7.0G MG高压型增压器, 不带卸荷功能, 7倍率增压比, 管式连接, 默认单孔HF4盖板
BST-MGY-10G-2HF4GP MG高压型增压器, 带卸荷功能, 10倍率增压比, 管式连接, 2个HF4孔, 一个G1/4平底孔盖板

BST-MGY-10G-DFHJ MG高压型增压器, 不带卸荷功能, 10倍率增压比, 管式连接, 1个HF4孔盖板, 低压法兰式连接, 加硬阀体。

BST-MGN-7.0G MG type booster, no unloading function, intensification factors is 7.0, one HF4 connection.

BST-MGY-10G-2HF4GP MG type booster with unloading function, intensification factors is 10, 2HF4GP connection.

BST-MGY-10G-DFHJ MG type booster with unloading function, intensification factors is 10, one HF4 connection, DF connection, hardened valve body.

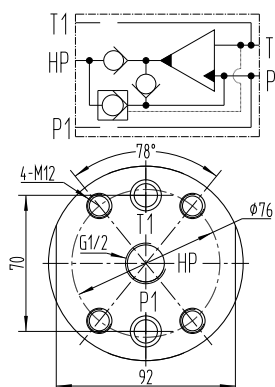


参数表

PARAMETER TABLE

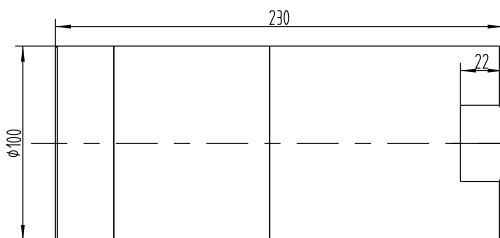
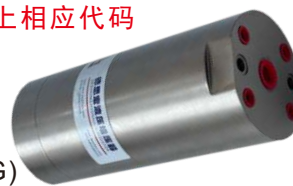
增压比 RATIO	额定输入流量 INPUT LPM	临界输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR	额定频率 FREQUENCY
1.4	100	38.5	250	350	635
2.0	100	30	250	500	727
3.2	100	21.6	250	800	820
4.5	100	16	222	1000	880
6.0	90	10.7	166	1000	833
8.0	80	7.3	125	1000	765
11	50	3.1	91	1000	493

Optional sequential function S and hardened valve core TC can be equipped

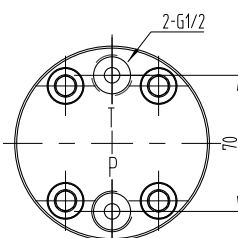


管式安装尺寸(G)

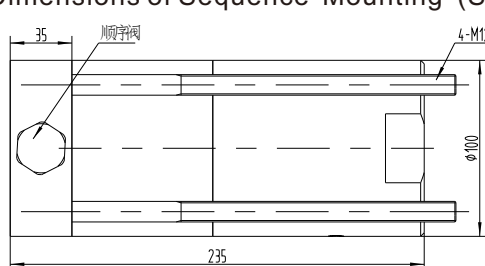
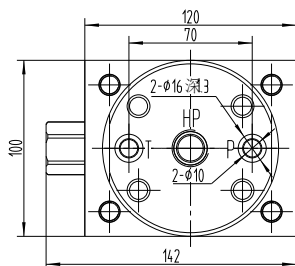
Dimensions of Threaded Mounting(G)



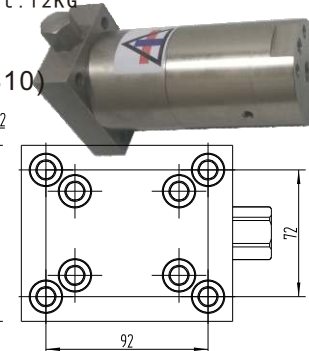
注意：默认P1&T1未打通。 重量:12KG Weight:12KG



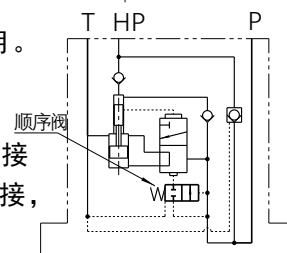
顺序式安装尺寸(S10)



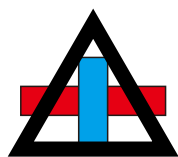
重量:14KG Weight:14KG



顺序阀开启压力10MPa.



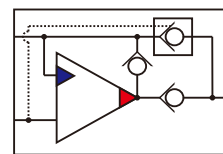
Example: BST-LY-2.0G L series booster with unloading function, intensification factors is 2.0 and threaded connection. BST-LY-2.0GS10 L series booster with unloading function, intensification factors is 2.0 and Sequence Mounting, open pressure 10MPa.



不断创新

追求卓越

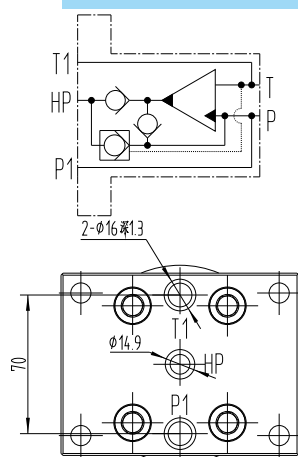
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法兰式参数表(F)

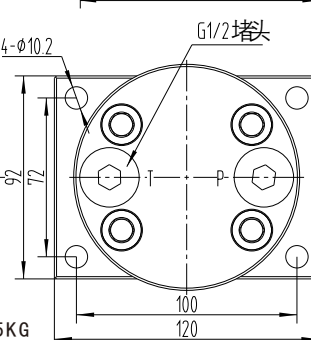
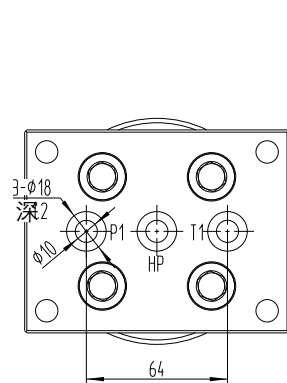
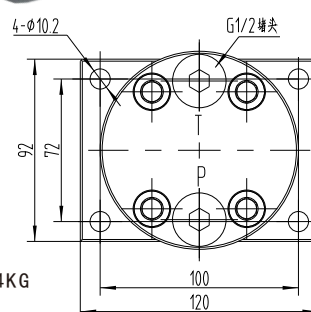
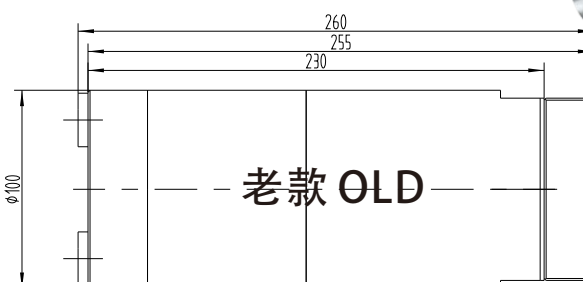
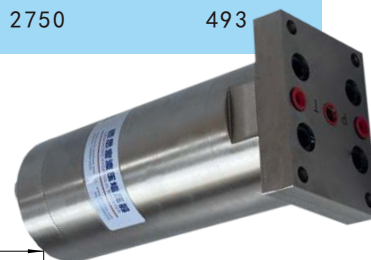
FLANGE MOUNTING PARAMETER TABLE

增压比 RATIO	额定输入流量 INPUT LPM	临界输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR	额定频率 FREQUENCY
1.4	100	38.5	250	350	635
2.0	100	30	250	500	727
3.2	100	21.6	250	800	820
4.5	100	16	250	1125	880
6.0	90	10.7	250	1500	833
8.0	80	7.3	250	2000	765
11	50	3.1	250	2750	493



法兰式安装尺寸(F)

Dimensions of Flange Mounting(F)



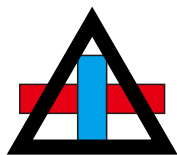
注意：默认T和P采用ED堵头堵上。
Note: T and P is plugged with ed plug .
P1, T1, HP口连接孔不得大于10mm.
NOTE: P1&T1&HP connect hole ≤10mm.

管式增压器P1&T1孔打通，安装法兰板组合成法兰式

Through the P1&T1 of Threaded Mounting booster, add flange block can be changed Flange mounting booster.

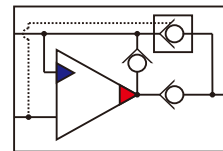
选型示例: BST-LY-8.0F L系列增压器, 带卸荷功能, 8.0增压比例, 法兰式连接, 新款型号末尾加N

Example: BST-LY-8.0F L series booster with unloading function, intensification factors is 8.0 and Flange Mounting. New type add N to the end. such as BST-LY-8.0FN



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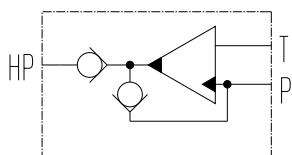
Focus on the research of hydraulic booster



高压型安装尺寸(MG)

High Pressure Dimensions (MG)

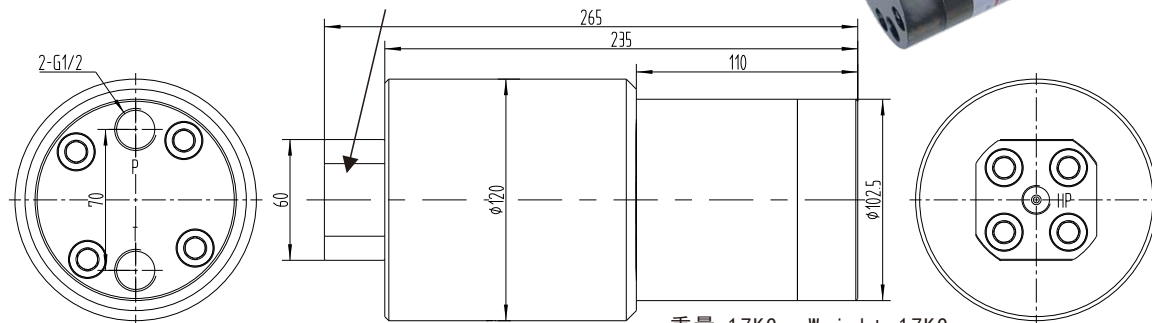
增压比 RATIO	额定输入流量 INPUT LPM	临界输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR	额定频率 FREQUENCY
16	50	2.1	200	3200	500
20	50	1.5	200	4000	510



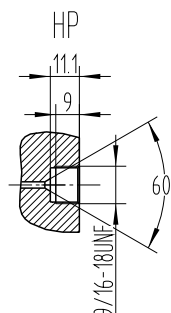
高压型安装尺寸(LG HJ)

High Pressure Dimensions (LG HJ)

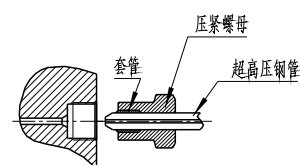
盖板
COVER PLATE



标配TC加硬阀芯, HJ加硬阀体, 可用于长时间冲击试验类工况
盖板的选择查看页面20

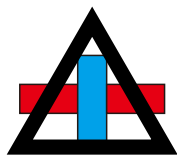


装配示意图



选型示例: BST-LGN-20GHJ LG高压型增压器, 不带卸荷功能, 20增压比例, HF4连接

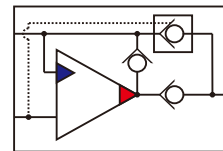
Example: BST-LGN-20GHJ LG type booster no unloading function, intensification factors is 20 and LG Mounting.



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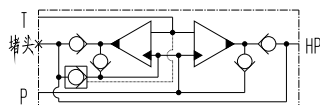
LS系列 LS Series

参数表
PARAMETER TABLE

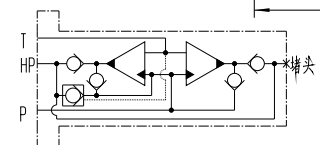
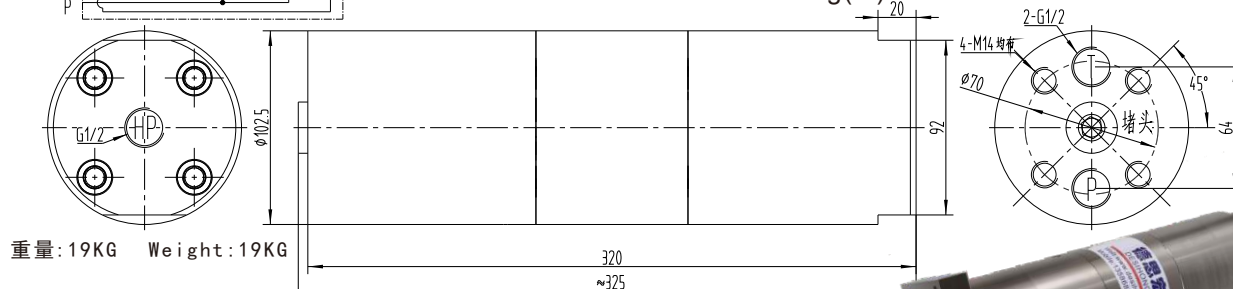
增压比 RATIO	额定输入流量 INPUT LPM	临界输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR	额定频率 FREQUENCY
1.4	100	65	250	350	754
2.0	100	44.6	250	500	754
3.2	100	28.7	250	800	754
4.5	100	19.6	222	1000	754
6.0	100	14.2	166	1000	754
8.0	100	10.4	125	1000	754
11	100	7.9	91	1000	754

LS系列所有型号可选配顺序功能S和阀芯加硬TC，在型号末尾加上相应代码

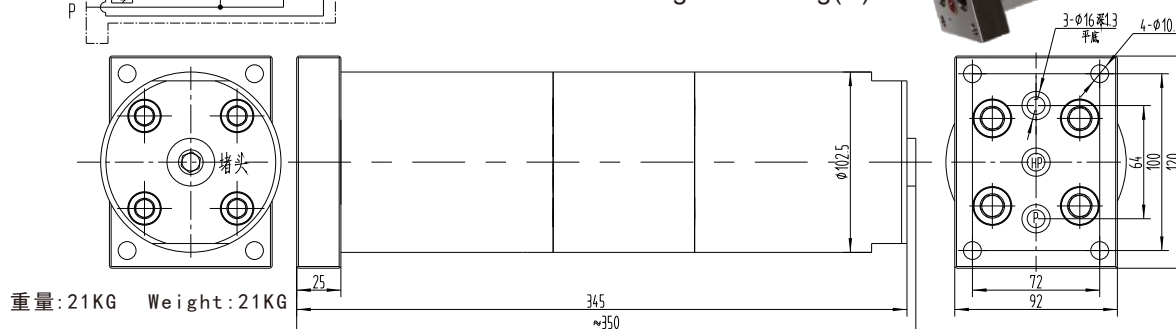
Optional sequential function S and hardened valve core TC can be equipped



管式安装尺寸(G)
Dimensions of Threaded Mounting(G)



法兰式安装尺寸(F)
Dimensions of Flange Mounting(F)



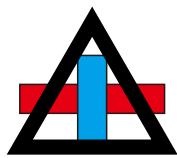
LS系列增压器波动小，输出流量非常大，适合快速大型工程机械，矿山设备，测试设备等的的应用。

LS series booster with larger output flow and small fluctuation, is very suitable for engineering fixture, mining machinery, testing and other applications.

选型示例: BST-LSY-2.0G LS系列增压器, 带卸荷功能, 2.0增压比例, 管式连接

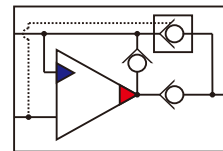
BST-LSY-2.0F LS系列增压器, 带卸荷功能, 2.0增压比例, 法兰式连接

Example: BST-LSY-2.0G LS series booster with unloading function, intensification factors is 2.0 and threaded connection. BST-LSY-2.0F LS series booster with unloading function, intensification factors is 2.0 and flange mounting.



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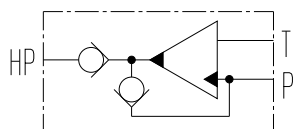


Z零泄漏增压器 Zero Leakage Booster

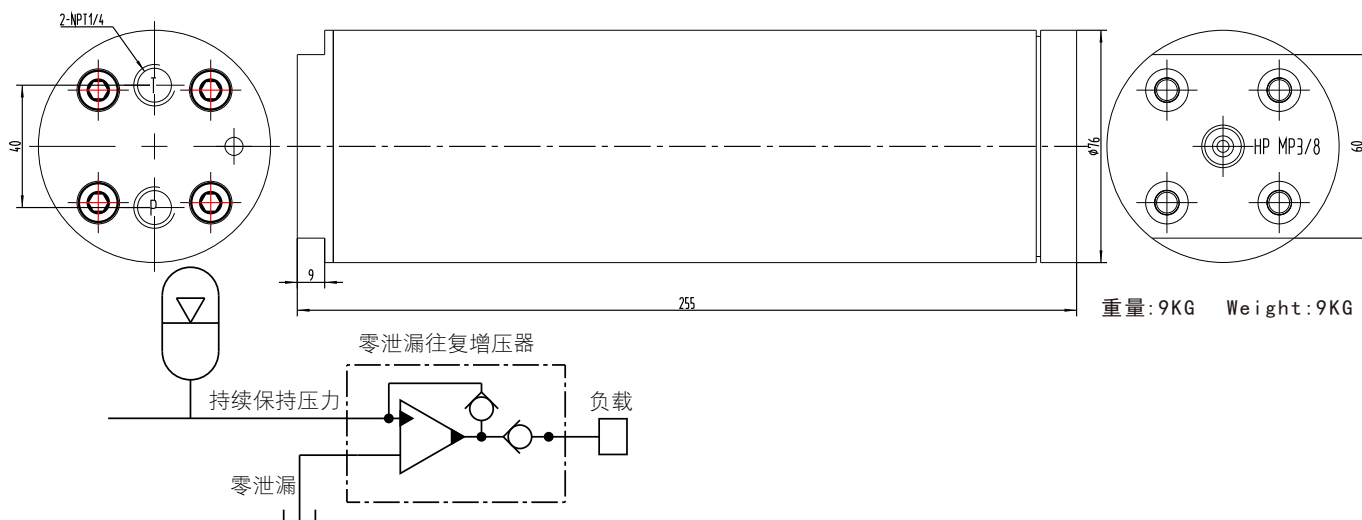
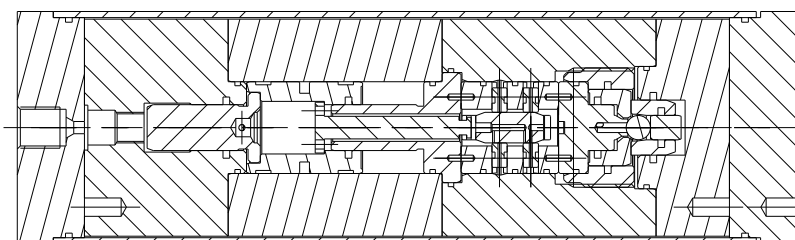
参数表
PARAMETER TABLE

增压比 RATIO	额定输入流量 INPUT LPM	临界输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR
3	20	4.4	300	900
5	20	2.7	300	1500
7	20	2	300	2100
10	20	1.3	200	2000

专利产品
侵权必究



安装尺寸
Dimensions



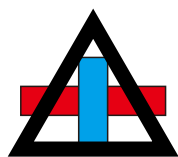
德思宏自主研发的零泄漏往复液压增压器,各个运动副采用密封件或者贴合密封,不同于滑阀结构存在间隙泄漏。通过加装一个低压蓄能器,可以实现超高压长时间保压,特别适合应用于长时间保压小流量系统。

The zero-leakage reciprocating hydraulic booster independently developed by Desihon utilizes seals or conformal sealing for each motion pair, unlike the spool valve structure which has clearance leakage.

By installing a low-pressure accumulator, ultra-high pressure holding for extended periods can be achieved, making it particularly suitable for applications in systems requiring long-term pressure holding and low flow rates.

选型示例: BST-ZN-3.0G, 零泄漏增压器, 3倍增压比, 不带泄荷功能

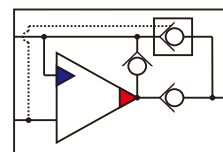
Example: BST-ZN-3.0G, a zero-leakage booster, intensification factors is 3 and no unloading function



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X超大流量系列 X Large Series

X60参数表

X60 PARAMETER TABLE

增压比 RATIO	额定输入流量 INPUT LPM	额定输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR	额定频率 FREQUENCY
1.8	150	80	250	450	355
2.5	150	55	250	625	355
3.7	150	37	250	925	355
5.7	150	23	250	1425	355
6.8	150	18.5	250	1700	355
8	150	15	250	2000	355
11	100	7	250	2750	235

X80参数表

X80 PARAMETER TABLE

增压比 RATIO	额定输入流量 INPUT LPM	额定输出流量 OUTPUT LPM	额定输入压力 INPUT BAR	额定输出压力 OUTPUT BAR	额定频率 FREQUENCY
3.2	200	59	250	800	267
4.6	200	40	250	1150	267
6.7	200	26	250	1675	267
10	200	16	250	2500	267
14.5	150	7.6	172	2500	200
20	100	3.2	125	2500	134

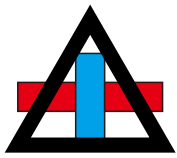
选型示例 Examples:

X60-1.8 X60系列, 双向增压, 不带卸荷功能, 1.8比例。

X80-6.7 X80系列, 双向增压, 不带卸荷功能, 6.7比例。

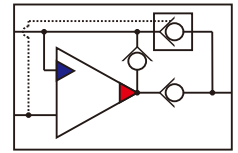
X60-1.8 X60 extra large flow series booster, Dual-acting, without unloading function, intensification factors is 1.8.

X80-6.7 X80 extra large flow series booster, Dual-acting, without unloading function, intensification factors is 6.7.

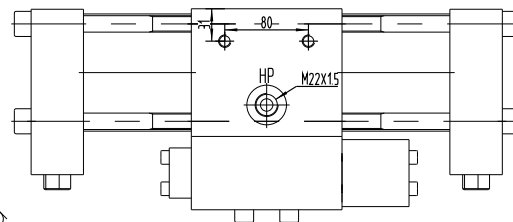
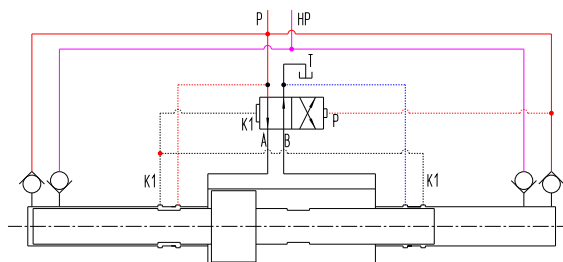
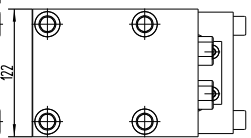
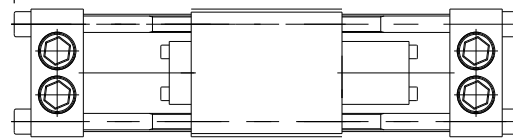
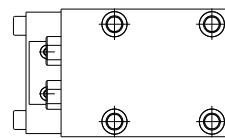
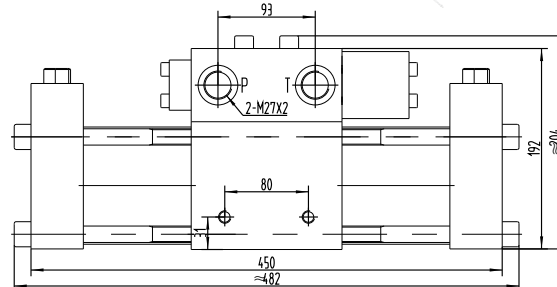
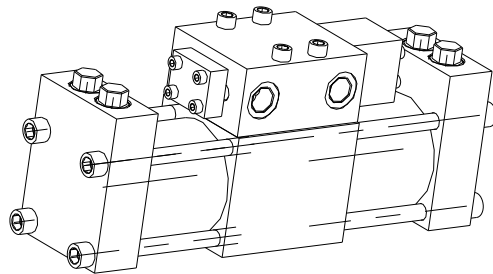


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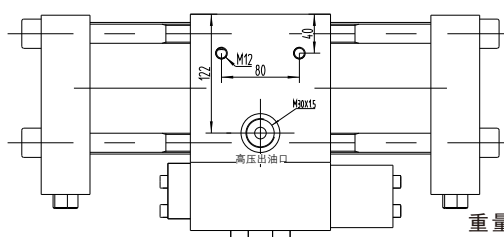
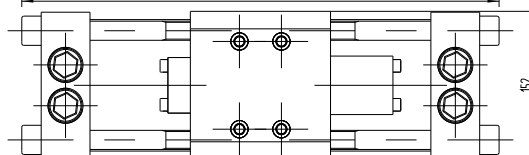
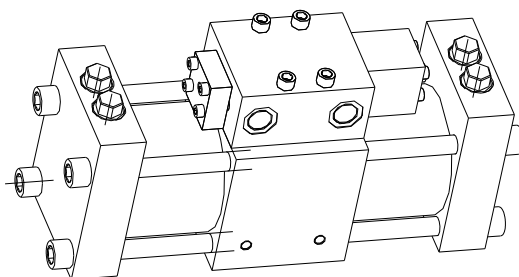
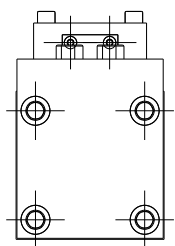
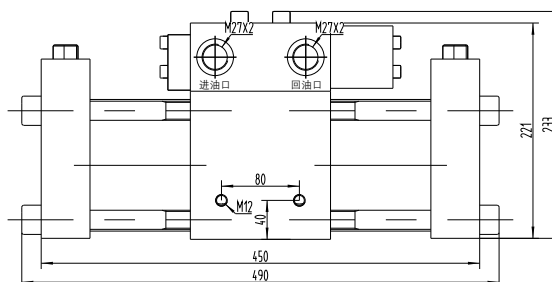
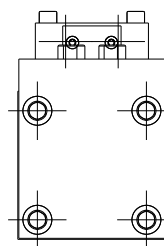


X60 安装尺寸 X60 Dimensions

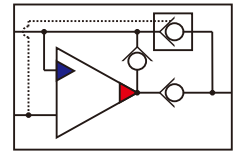
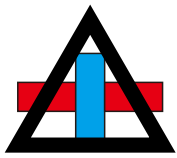


重量: 60KG Weight: 60KG

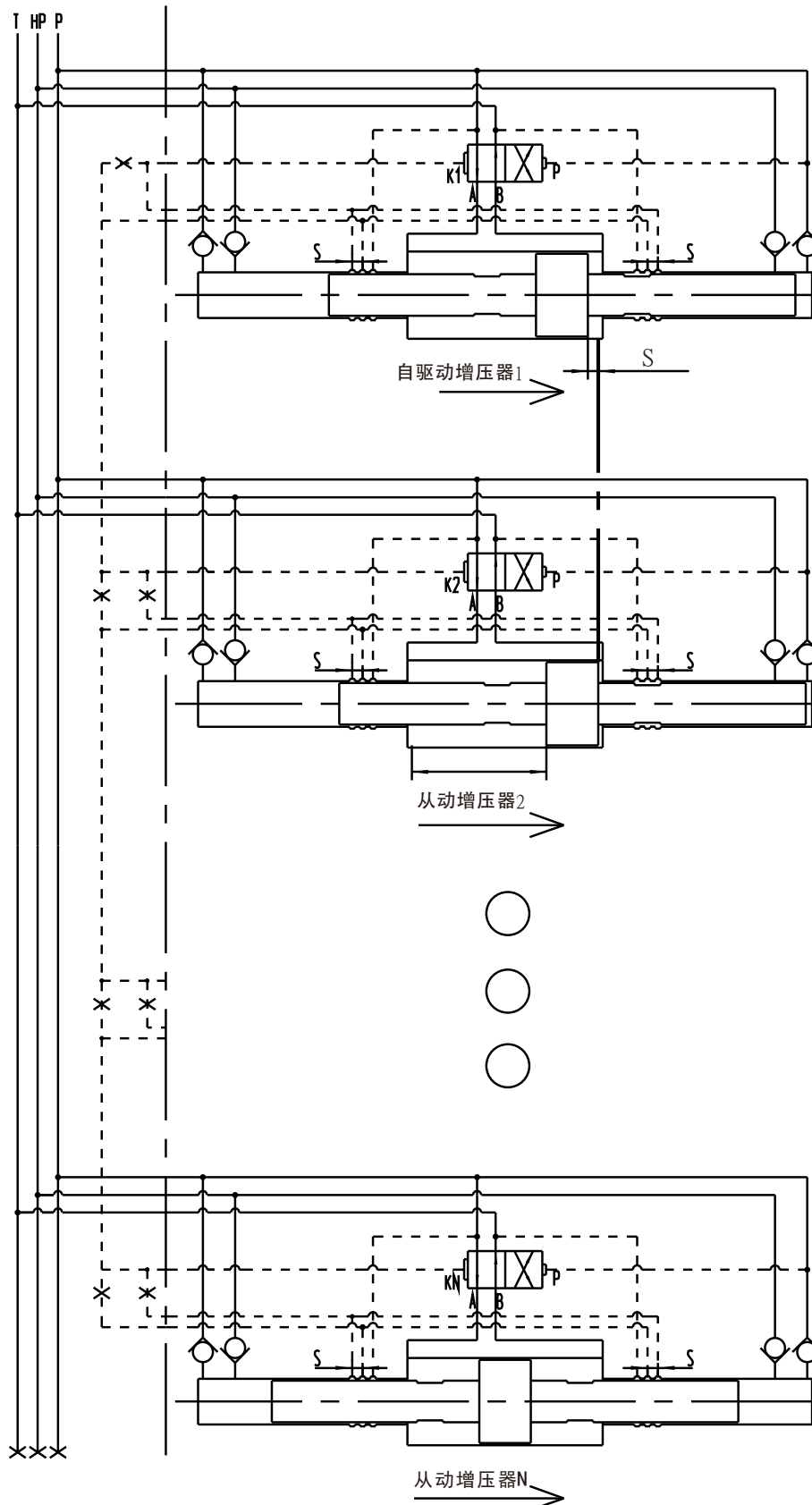
X80 安装尺寸 X80 Dimensions

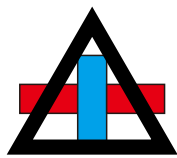


重量: 80KG Weight: 80KG



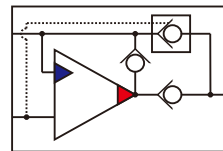
多缸双向增压器组
BOOSTER GROUP





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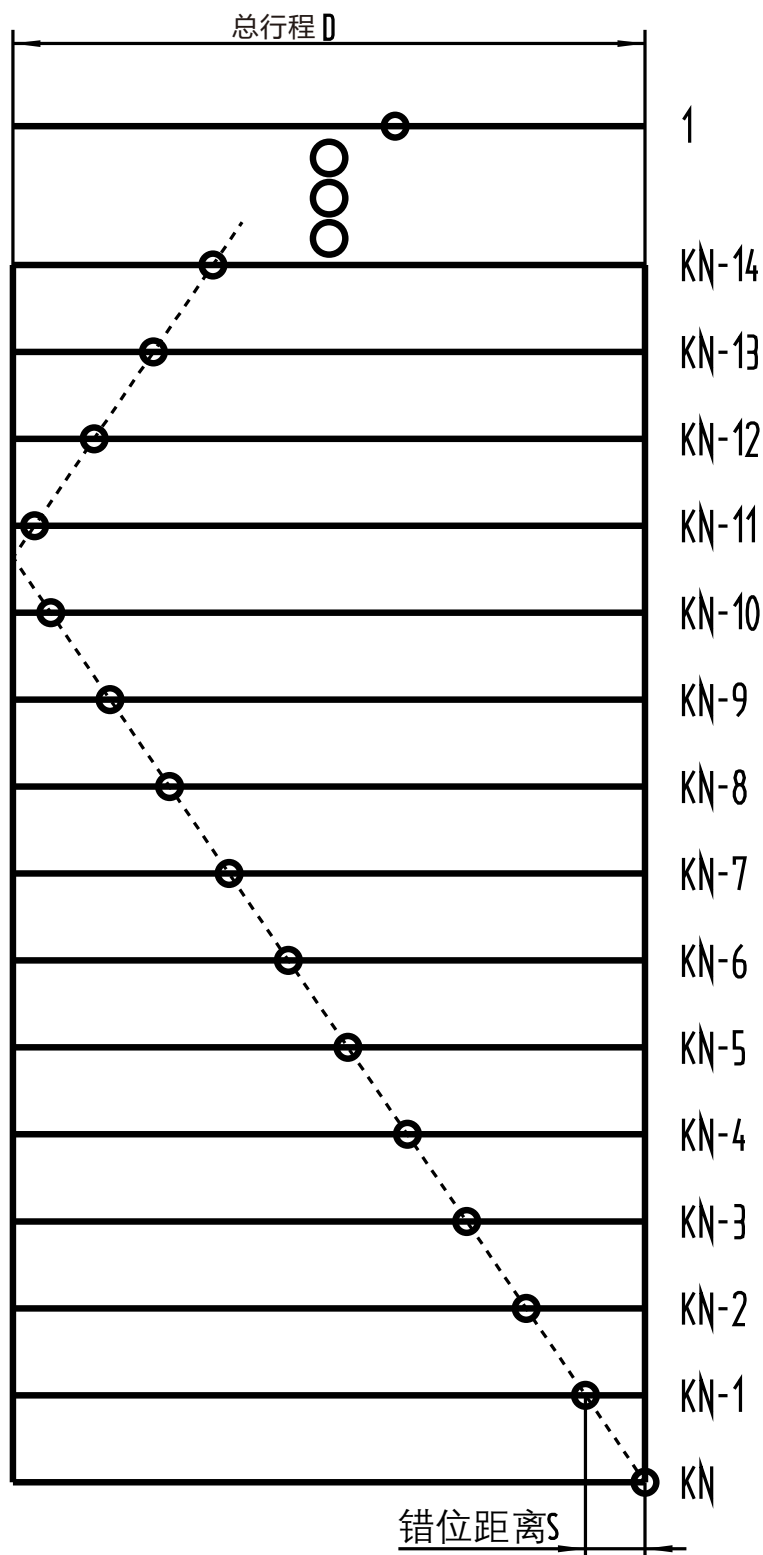
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多缸双向增压器组 BOOSTER GROUP

活塞运动行程位置图

PISTON POSITION



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产品特点

Product Features

低波动, 大流量

Low fluctuation, High flow

单个往复增压器在往复运动过程中, 当液控换向阀换向时候, 高压输出为0, 这时候高压端会产生压力波动。

采用德思宏多缸增压器组, 通过各个增压器活塞运动位置错位, 实现各个增压器错位增压, 从而实现任何时候高压输出都不为0, 减少高压端波动。

采用多个增压器时候, 通过错位距离的调整, 让其换向首尾相接, 可以实现和柱塞泵一样连续输出流量。

During the reciprocating motion of a single-acting booster, when the hydraulic control directional valve changes direction, the high-pressure output becomes zero, causing pressure fluctuations at the high-pressure end. Using the Deshong multi-boosters, by dislocating the piston movement positions of each booster, misaligned boosting is achieved for each booster, thus ensuring that the high-pressure output is never zero at any time and reducing fluctuations at the high-pressure end. When multiple boosters are used, by adjusting the misalignment distance so that their reversing ends are connected end to end, continuous output flow can be achieved similar to that of a piston pump.

具体参数根据选择的单个增压器参数乘以个数计算。

The specific parameters are calculated by multiplying the parameters of the selected individual turbocharger by its quantity.

选型示例:

DX60-6.8 双联X60增压器6.8倍

3X60-6.8 三联X60增压器6.8倍

Example:

DX60-6.8 Double integrated boosters, intensification factors is 6.8

3X60-6.8 Triple integrated boosters, intensification factors is 6.8

应用行业

工程机械

万吨压机

压铸机

ENGINEERING

LARGE PRESS

DIE-CASTING

金刚石压机

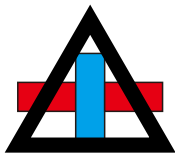
寿命测试台

压力成型机

DIAMOND PRESS

TESTING

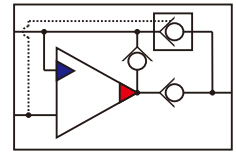
EXPANSION



不断创新

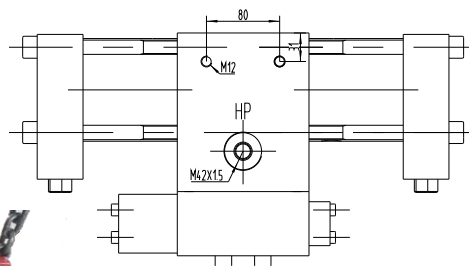
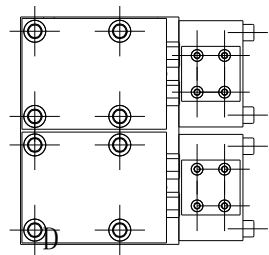
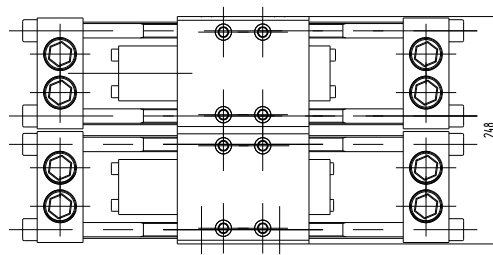
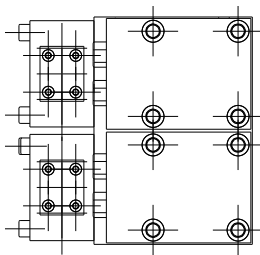
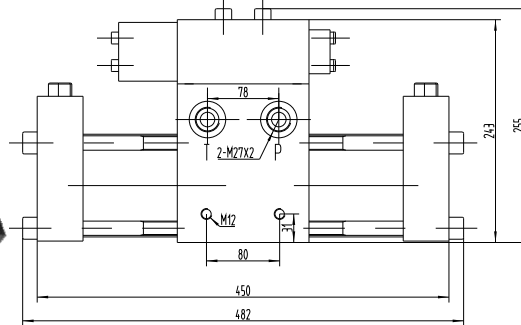
追求卓越

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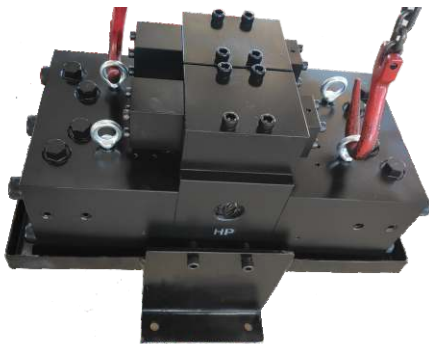


DX60 安装尺寸

DX60 Dimensions

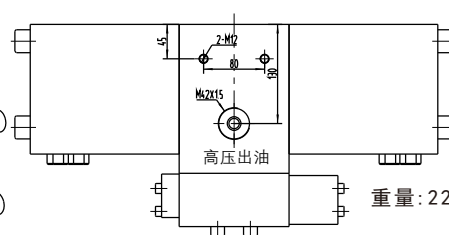
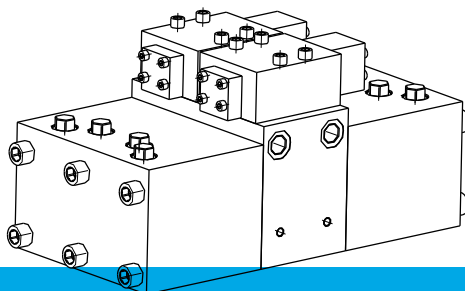
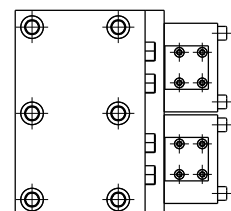
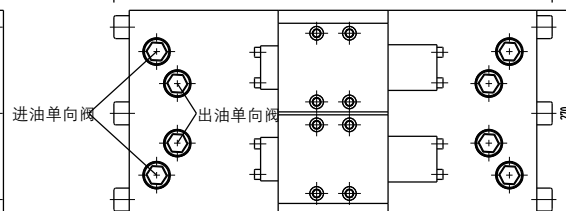
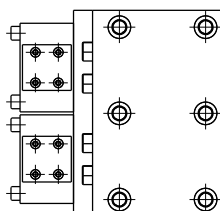
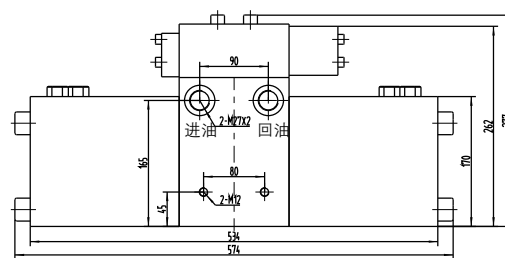


重量: 130KG Weight: 130KG

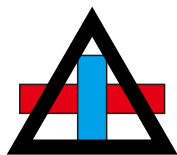


DX80 安装尺寸

DX80 Dimensions

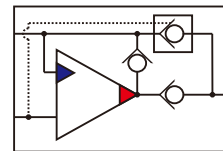


重量: 220KG Weight: 220KG



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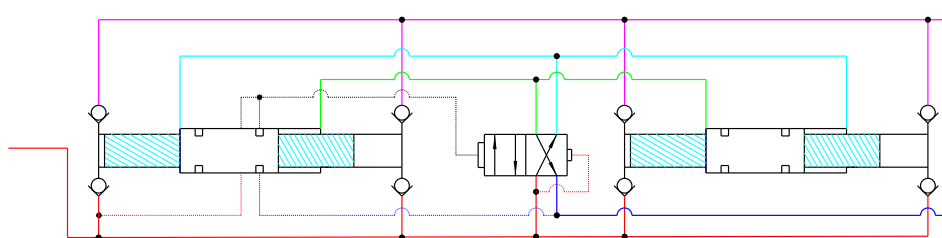
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双向增压器定制 CUSTOMIZATION

54长条形液压增压器

54 LONG BOOSTER



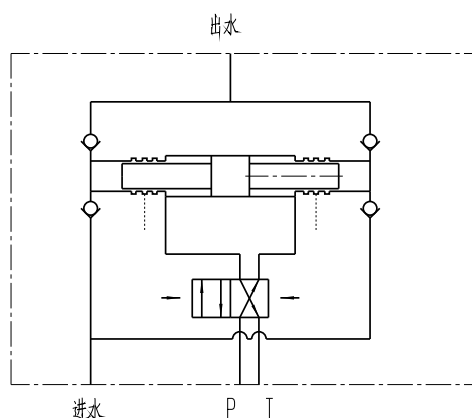
水压增压器

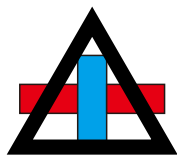
WATER BOOSTER



油水增压器

DUALMEDIA BOOSTER

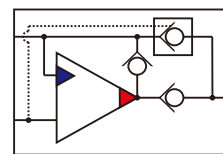




不断创新

追求卓越

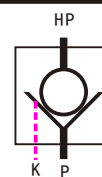
Constant innovation, Striving for excellence



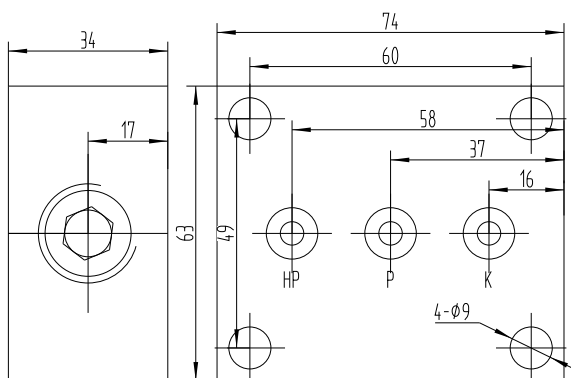
BV超高压泄荷阀 BV UNLOADING VALVE

参数表
PARAMETER TABLE

型号 TYPE	额定输入流量 INPUT LPM	泄荷比 PILOT RATIO	低压额定压力 INPUT BAR	高压额定压力 OUTPUT BAR	通径 SIZE
BV05-80	25	6	250	800	5
BV14-200	150	3.2&10	250	2000	14

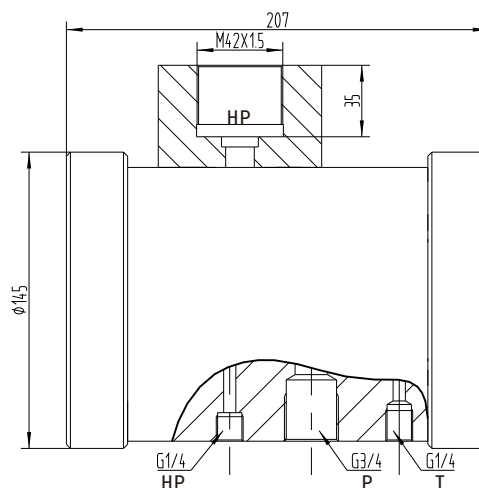


安装尺寸(BV05)
Dimensions (BV05)



重量: 1.2KG Weight: 1.2KG

安装尺寸(BV14)
Dimensions (BV14)

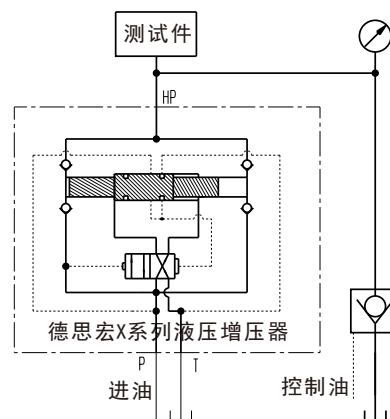


重量: 27KG Weight: 27KG



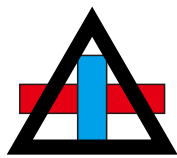
BV05-80超高压泄荷阀，可以叠加在TS法兰增压器下面，加大TS的充液流量。也可单独使用，适合小流量超高压系统。

The BV05-80 ultra-high pressure unloading valve can be stacked under the TS flange booster to increase the TS's charging flow rate. It can also be used standalone, suitable for small flow rate and ultra-high pressure systems.



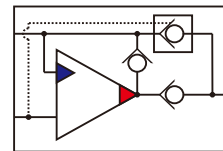
BV16-200超高压泄荷阀，可以快速把高压泄荷，一般和X超大流量增压器配套使用，通过增压器增压，泄荷阀泄荷，非常适合做疲劳试验。

The BV16-200 ultra-high pressure unloading valve can quickly release high pressure. It is typically used in conjunction with the X ultra-high flow booster. Through the boosting effect of the booster and the unloading function of the unloading valve, it is highly suitable for fatigue testing.



专注于液压增压器的研发

Focus on the research of hydraulic booster

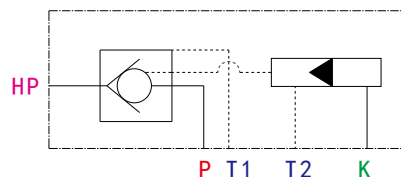


BM超高压缓慢泄荷阀 BM UNLOADING VALVE

参数表

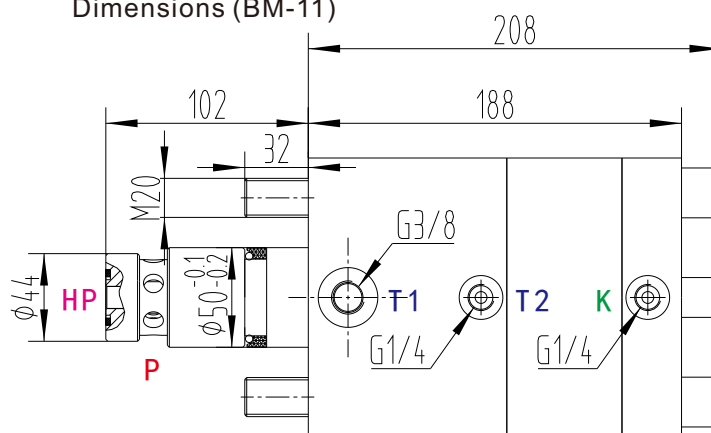
PARAMETER TABLE

型号 TYPE	额定输入流量 INPUT LPM	泄荷比 PILOT RATIO	低压额定压力 INPUT BAR	高压额定压力 OUTPUT BAR	通径 SIZE
BM-11	100	16	200	2000	11



安装尺寸(BM-11)

Dimensions (BM-11)



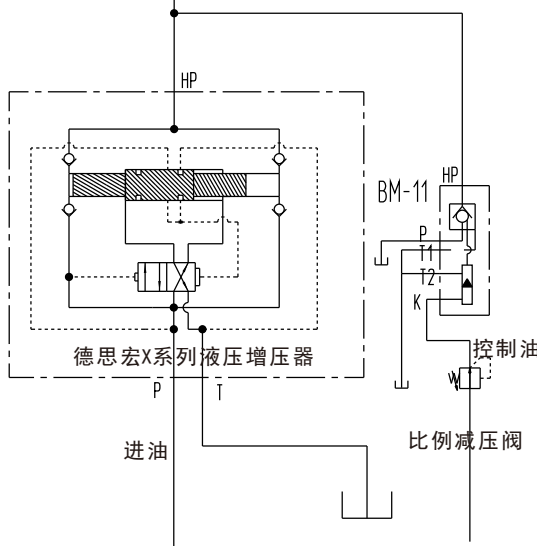
工作原理: K口压力推动内部活塞, 顶住缓慢卸荷阀密封顶针, 使HP口压力油不泄漏, 泄压时候, 缓慢减少K口压力, 使顶针慢慢打开, 实现缓慢卸荷。

Principle: the pressure at port K presses against the sealed pin, so that the pressure oil at HP port does not leak. During slowly reduce the pressure at port K, so that the sealed pin can be opened slowly to realize slow unloading

如左侧所示, 假设系统需要增压到80MPa再缓慢泄荷。

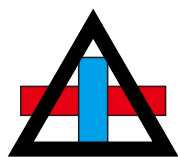
当系统增压时候, 先把比例减压阀压力调节为大于 $80/16=5\text{MPa}$, 暂定为6MPa。这个时候, K压力推动泄荷阀内部活塞, 活塞前端顶针顶住密封面, 使HP压力关闭。这个时候增压器进油打开, 增压器开始增压至所需压力。

当系统需要缓慢泄荷时候, 增压器进油关闭, 通过调节比例减压阀, 使控制油压力K缓慢下降, 当压力低于5MPa时候, 顶针力不足以封闭80MPa压力, HP口油开始泄荷, 直到压力平衡, 再次关闭, 从而实现了缓慢泄荷。



As shown in the figure above, assume that the system needs to be pressurized to 80MPa and then slowly depressurized. When the system is pressurized, first adjust the pressure of the proportional pressure reducing valve to be greater than $80/16=5\text{MPa}$, tentatively set at 6MPa. At this point, the K pressure pushes the internal piston of the unloading valve, and the front end of the piston holds the sealing surface with a needle, causing the HP pressure to close. At this time, the oil inlet of the booster is opened, and the booster starts to pressurize to the required pressure.

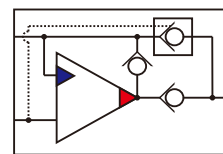
When the system needs to slowly release load, the oil inlet of the booster is closed. By adjusting the proportional pressure reducing valve, the control oil pressure K is gradually decreased. When the pressure drops below 5 MPa, the force of the thimble is insufficient to seal against the 80 MPa pressure, and the HP port begins to release load until the pressure is balanced. Then, it is closed again, thus achieving a slow load release.



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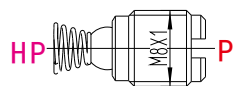
DV超高压单向阀 DV CHECK VALVE



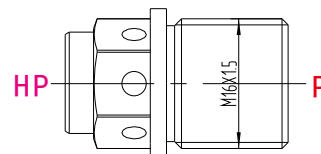
参数表
PARAMETER TABLE

型号 TYPE	额定输入流量 INPUT LPM	额定压力 BAR	通径 SIZE	安装方向 DIRECTION	安装方式 CONNECTION
DV-2F	6	800	2	反向Reverse	内置Built-in
DV-3Z	10	2000	3	正向Positive	内置Built-in
DV-3F	10	2000	3	反向Reverse	内置Built-in
DV-6Z	30	1500	6	正向Positive	内置Built-in
DV-6F	30	1500	6	反向Reverse	内置Built-in
DV-11ZG	80	1500	11	正向Positive	管式Tubular
DV-30ZB	400	1500	30	正向Positive	盖板Cartridge

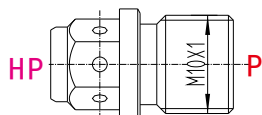
DV-2F



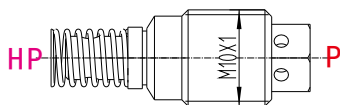
DV-6Z



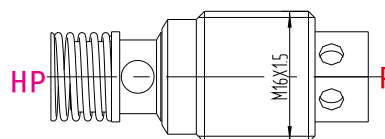
DV-3Z



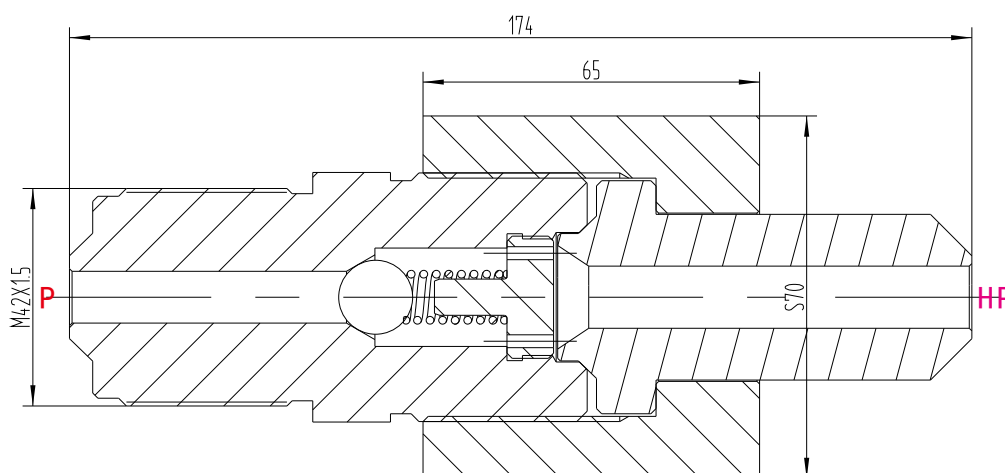
DV-3F

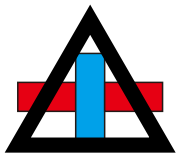


DV-6F



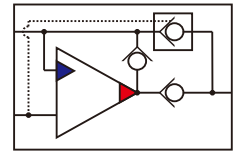
DV-11ZG



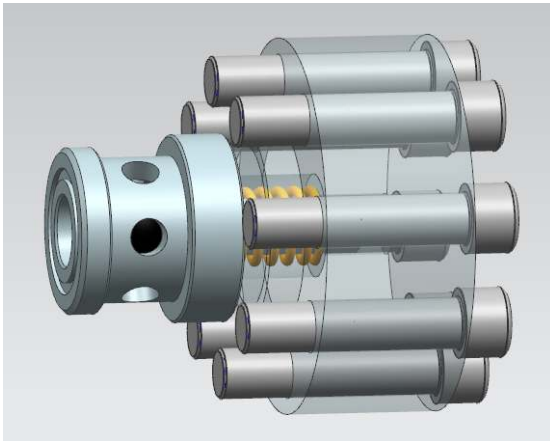
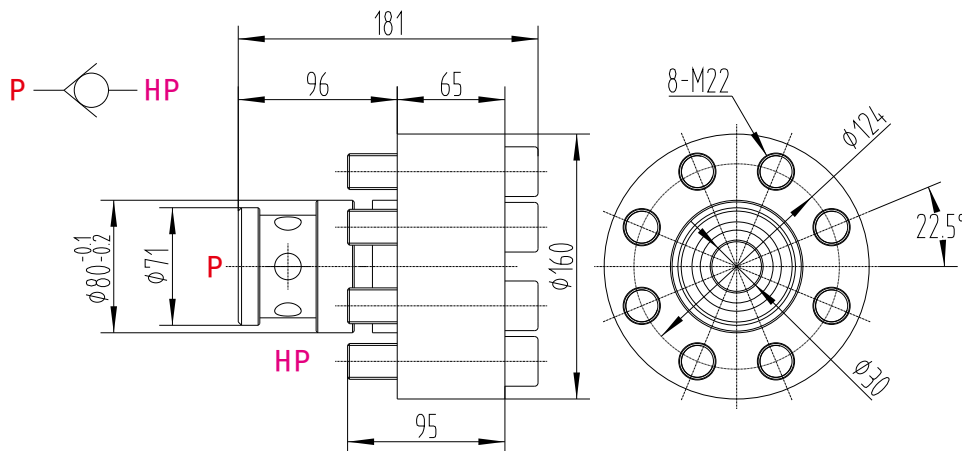


专注于液压增压器的研发

Focus on the research of hydraulic booster

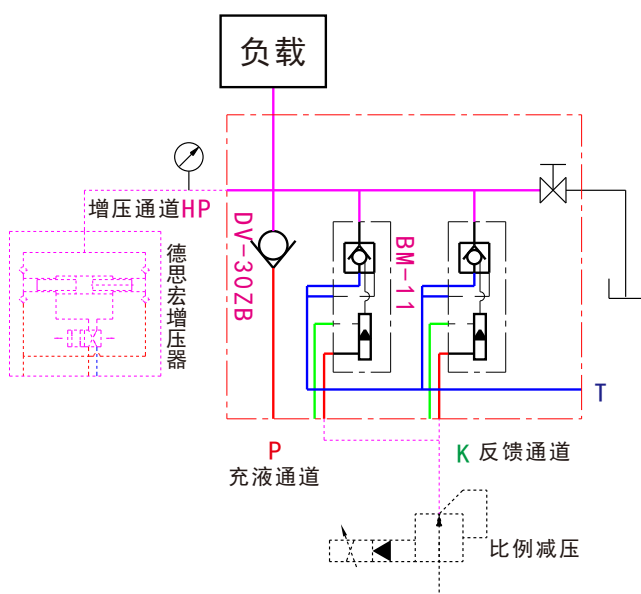


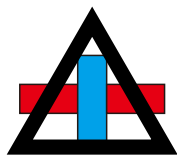
DV-30ZB



DV-30ZB单向阀通常和德思宏X系列增压器配套使用，通过单向阀快速充液，充液结束后，再通过增压器增压，这样可以实现低压快速工作，高压慢速工作，在提高速度的同时，避免了增压器前期的空跑，延长了增压器的使用寿命。再配合德思宏缓慢泄荷阀或者快速泄荷阀，可以实现具备增压泄荷全部功能的超高压大流量系统。

The DV-30ZB check valve is typically used in conjunction with the Deshong X series booster. It allows for rapid liquid filling through the check valve, followed by pressure boosting with the booster after the filling is complete. This approach enables low-pressure rapid operation and high-pressure slow operation, enhancing speed while preventing early idle running of the booster and extending its service life. When paired with Deshong slow or fast unloading valves, it forms a super high-pressure, high-flow system with comprehensive pressure boosting and unloading functions.

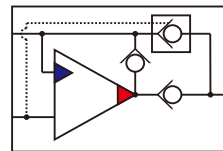




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超高压附件 ACCESSORIES

超高压过滤器 FILTER



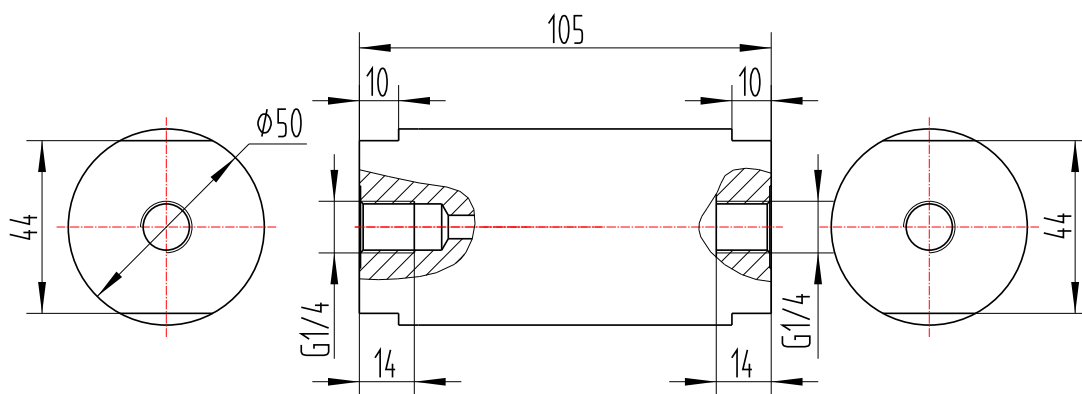
德思宏BLX过滤器是一款专为液压增压器开发的高精度过滤产品。其内部采用特制的高承压烧结青铜滤芯，过滤精度高，耐压能力大。防冲击设计，使滤芯承受的液压冲击力小，使用寿命长。整体采用螺纹连接，更换滤芯方便。

The BLX filter of Desihom is a highly precise filtration product specially developed for hydraulic booster. Specially designed sintered bronze filter core with high filtration precision and high pressure resistance is adopted inside. Anti impact design makes the hydraulic impact force of the filter core small, and the service life is long. The whole thread connection is adopted to replace the filter element conveniently.

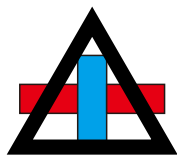
参数表
PARAMETER TABLE

型号 TYPE	额定输入流量 INPUT LPM	过滤精度 μm	额定压力 RATED BAR	最大允许压差 DIFFERENTIAL BAR	重量 WEIGHT KG
BLX-G140	20	10	700	25	1.1

安装尺寸
Dimensions

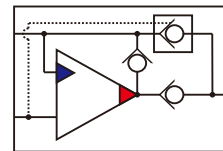


长度单位：毫米
重 量：1.1公斤
安装方式：管式连接
Unit: mm
Weight: 1.1kg
Mounting: Threaded mounting



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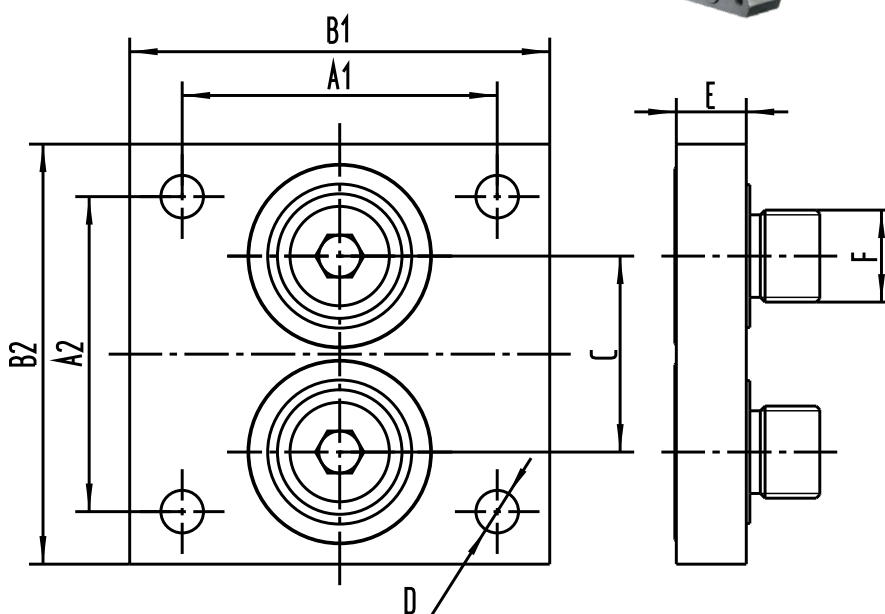
增压器连接件 CONNECTOR

德思宏的安装板AZB系列与管式增压器相连，使增压器的进出油口P和T由螺纹连接转变成法兰式连接，更方便安装。

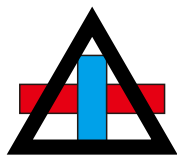
Desihom's installation plate AZB series is connected to the threaded mounting booster, so that the inlet and outlet of the booster P and T from the threaded connection into a flange connection, more convenient for installation.

注:高压出油口HP不变。

Note: High pressure oil outlet HP remains unchanged



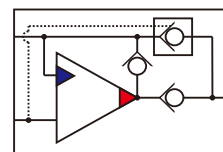
型号 TYPE	A1 mm	A2 mm	B1 mm	B2 mm	C mm	D mm	E mm	F mm
AZB-T	45	45	60	60	28	$\phi 6.1$	10	G1/4
AZBA-T	39	49	50	60	28	$\phi 6.1$	10	G1/4
AZB-M	62	62	80	80	43.6	$\phi 8.2$	15	G3/8



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超高压快速接头

型号: KJ03-200G14

通径: 3通径 压力: 200MPa
螺纹: G1/4, 120度密封



超高压测压软管

型号: CY03-100-长度

通径: 3通径 压力: 100MPa
螺纹: 各种可选



超高压软管

型号: HS03-200-长度

通径: 3通径 压力: 200MPa
螺纹: 各种可选



超高压钢管

型号: GG-HF4-长度

通径: 2.4通径 压力: 400MPa
螺纹: HF4



超高压接头

型号: JT-3HF4

通径: 2.4通径 压力: 400MPa
螺纹: HF4, 三通



超高压针阀

型号: ZF-HF4

通径: 2.4通径 压力: 400MPa
螺纹: HF4



超高压压力表

型号: YN-150-600

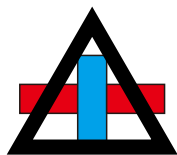
压力: 250Mpa, 400MPa, 600MPa
螺纹: M20X1.5



超高压传感器

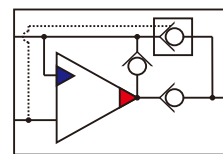
型号: YN-150-600

压力: 200MPa, 400MPa, 600MPa
螺纹: M20X1.5

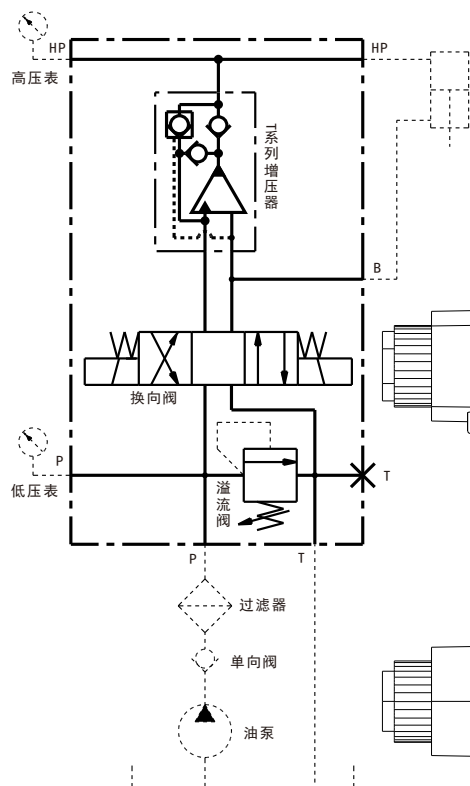


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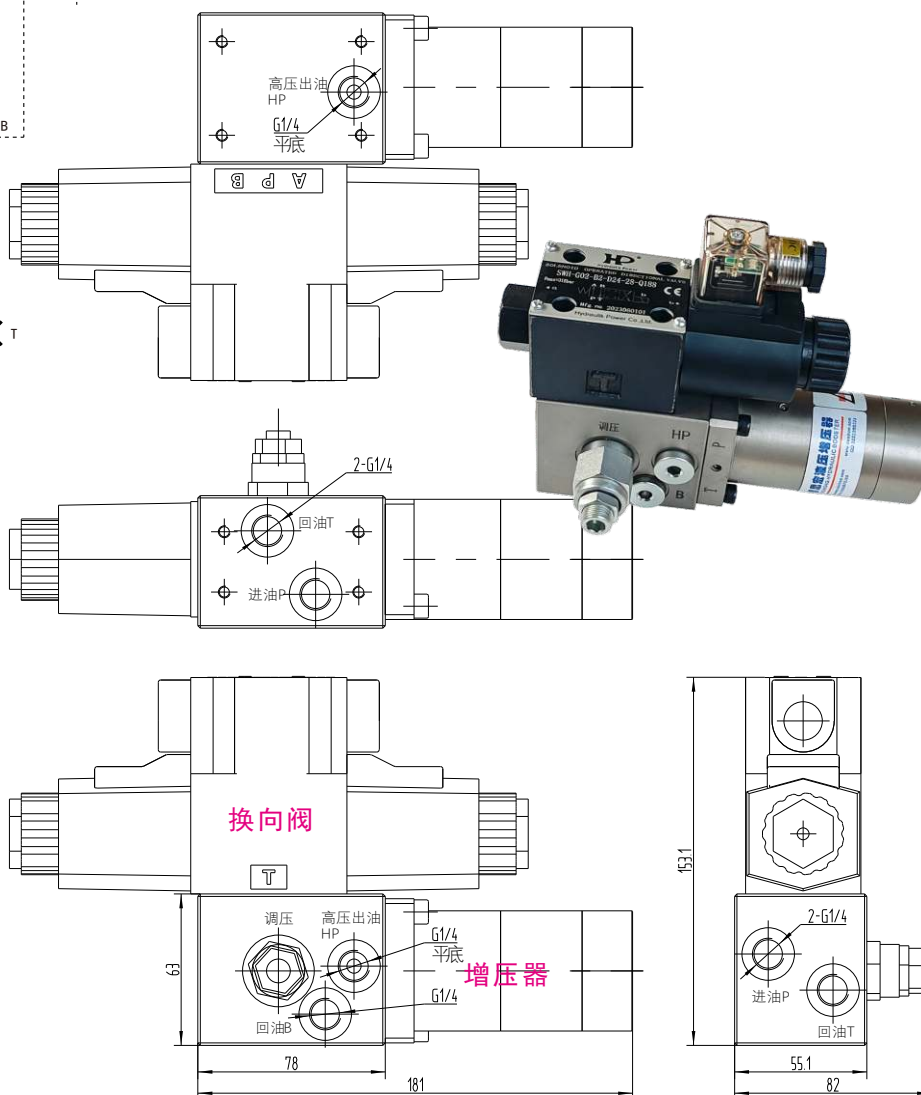
Focus on the research of hydraulic booster



增压阀组 BOOSTER BLOCK



TDJ-01(阀块型号)



TDJ-01为T系列常用阀组，配合低压泵组可以轻松组成超高压泵站,除了高压出口，其他元件全部采用常规低压液压元件，使用非常方便。

可配增压器：

T系列法兰式(高压出口HP在阀块上面)，如BST-TY-7.0F (简写7.0F)

T系列管式+AZBA-T连接件 (高压出口在增压器上面) 如BST-TY-5.0G+AZBA-T (简写5.0G)

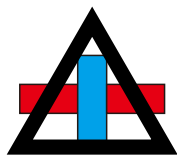
T系列高压式TH和TG+AZBA-T连接件 (高压出口在增压器上面) BST-TGY-10G+AZBA-T (简写5.0HF4) 根据高压盖板或者接头型号简写

调压阀: 标配国产优质插装溢流阀21MPa

换向阀: 根据要求选定NG6 (另外单独购买)

选型示例: TDJ-01-7.0FZT

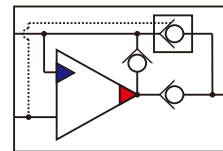
表示TDJ-01阀块, BST-TY-7.0F增压器, 整套安装供货(含阀块, 增压器, 溢流阀)



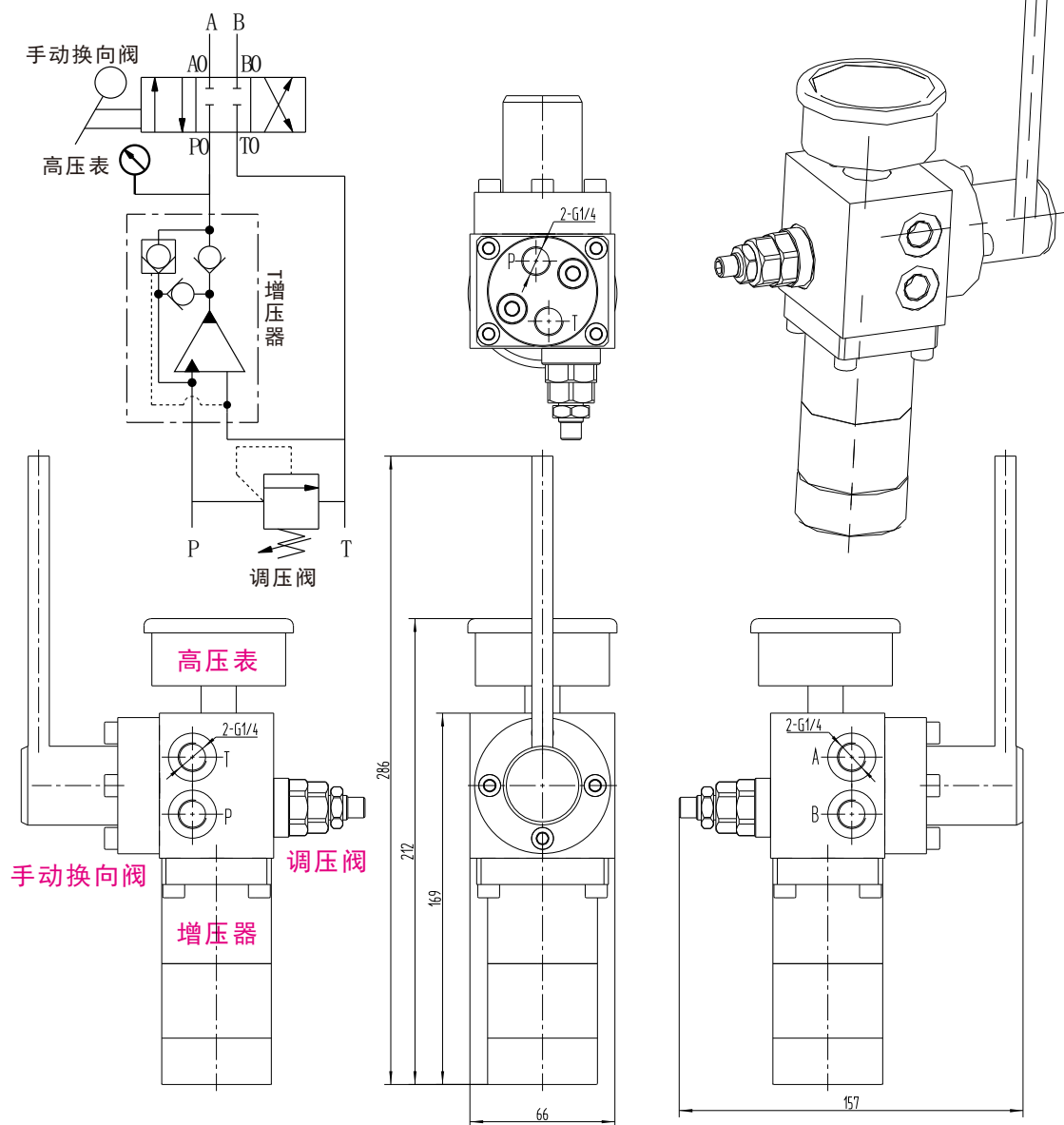
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TDJG-01(阀块型号)



TDJG-01为T系列高压换向阀组，采用先增压后换向方式，一个增压器可以使AB口都输出高压。

注意：手动换向阀必须能承受增压之后的压力。

可配增压器：

T法兰式增压器(低压P&T可选管式)

调压阀：插装式调压阀

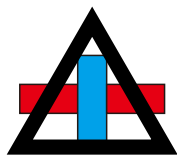
换向阀：超高压手动换向阀O型或者M型

压力表：100MPa（单独购买）

选型示例：

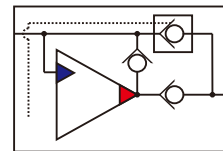
TDJG-01-7.0FZT

表示TDJG-01阀块，BST-TY-7.0F增压器，整套安装供货(含阀块，增压器，调压阀，换向阀)

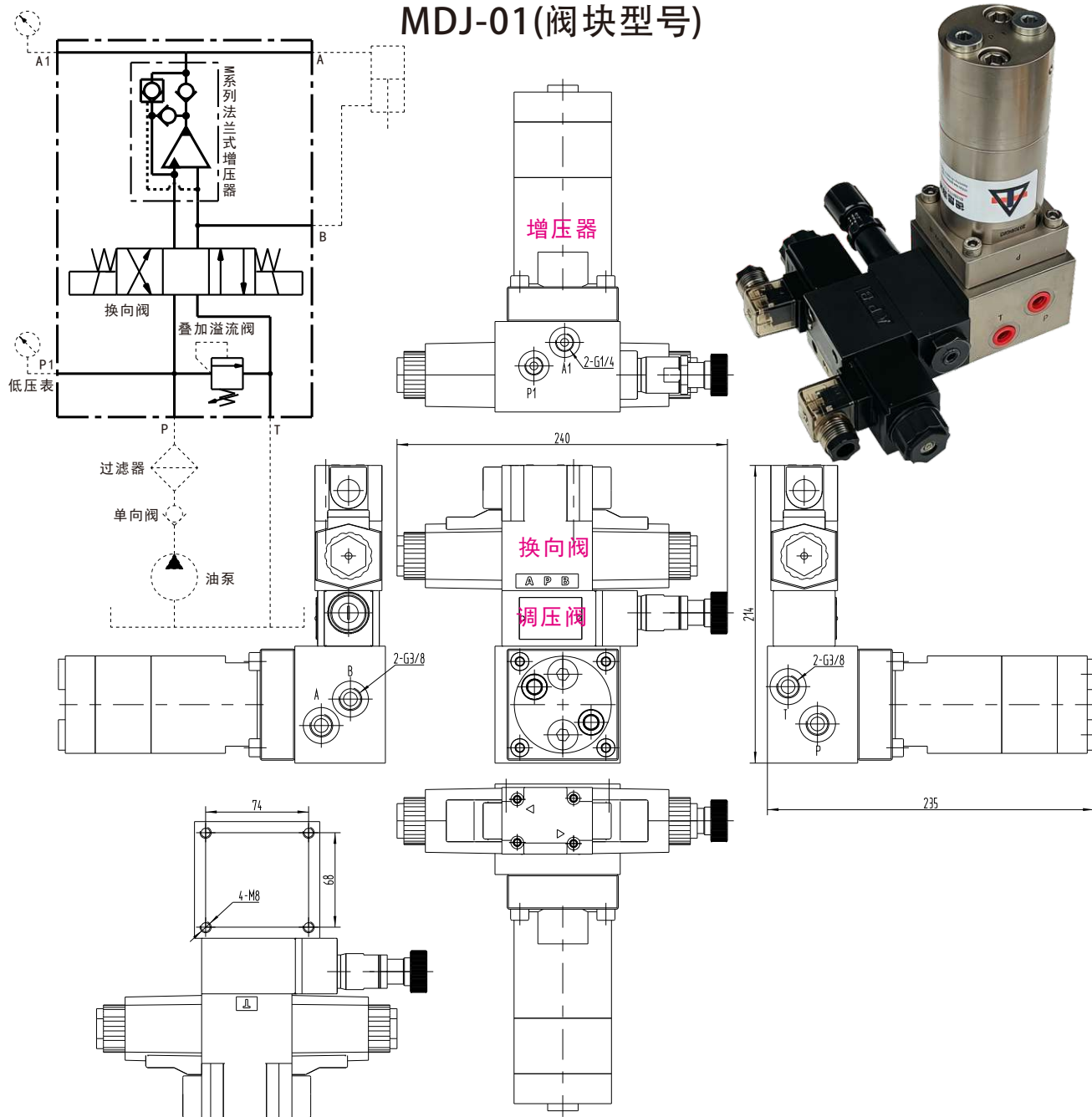


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MDJ-01(阀块型号)



MDJ-01为M系列常用阀组，配合低压泵组可以轻松组成超高压泵站，除了高压出口，其他元件全部采用常规低压液压元件，使用非常方便。

可配增压器：

M法兰式增压器，M低压法兰式增压器或者M管式增压器+AZB-M连接件(HP口在增压器上面)

调压阀：配叠加式调压阀(另外单独购买)

换向阀：根据要求选定NG6(另外单独购买)

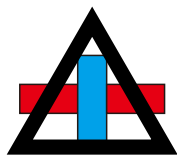
选型示例：

MDJ-01-7.0FZT

表示MDJ-01阀块，BST-MY-7.0F增压器，整套安装供货(含阀块，增压器)

MDJ-01-5.0DFZT

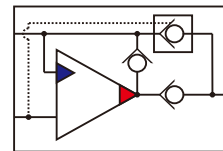
表示MDJ-01阀块，BST-MY-5.0DF增压器，整套安装供货(含阀块，增压器)



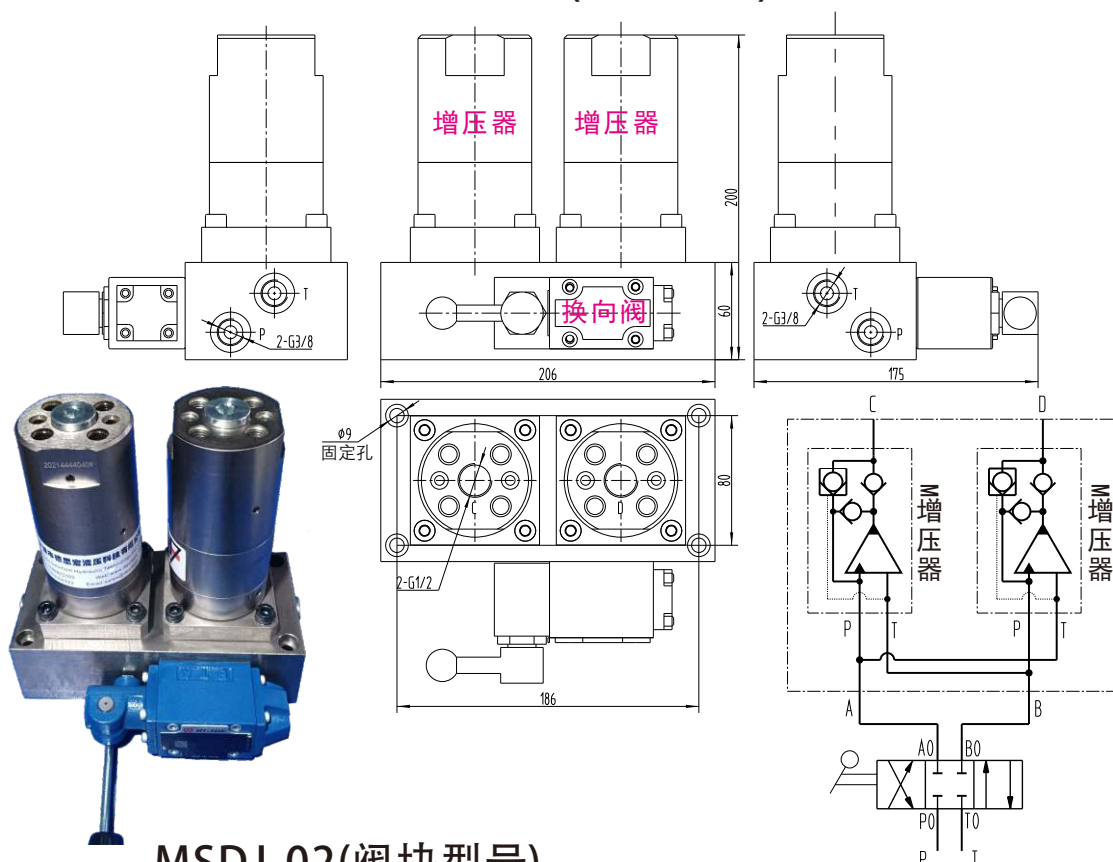
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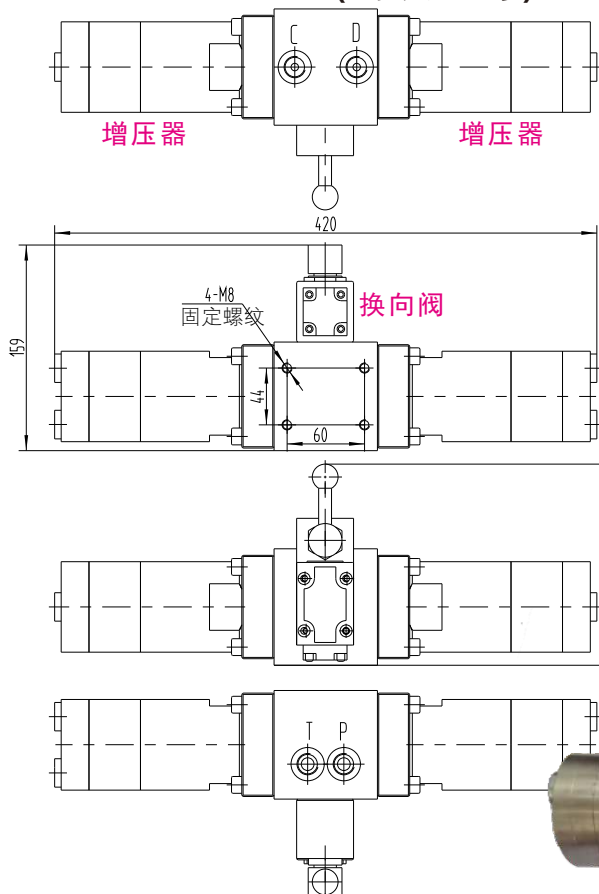
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MSDJ-01(阀块型号)



MSDJ-02(阀块型号)



MSDJ可通过低压换向阀控制，实现C和D口都高压输出，两边也可选择不同增压比
可配增压器：

01阀块可配M低压法兰式增压器或者M管式增压器+AZB-M连接件

02阀块可配M法兰式增压器，M低压法兰式增压器或者M管式增压器+AZB-M连接件

调压阀：配叠加式调压阀(另外单独购买)

换向阀：根据要求选定NG6(另外单独购买)

选型示例：

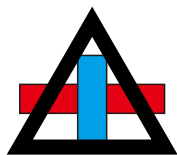
MSDJ-01-7.0-7.0DFZT

表示MSDJ-01阀块，BST-MY-7.0DF增压器两个，整套安装供货(含阀块，增压器)

MSDJ-02-7.0-5.0FZT

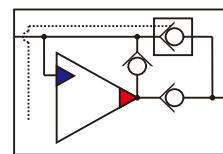
表示MSDJ-02阀块，BST-MY-7.0F和BST-MY-5.0F增压器，整套安装供货(含阀块，增压器)



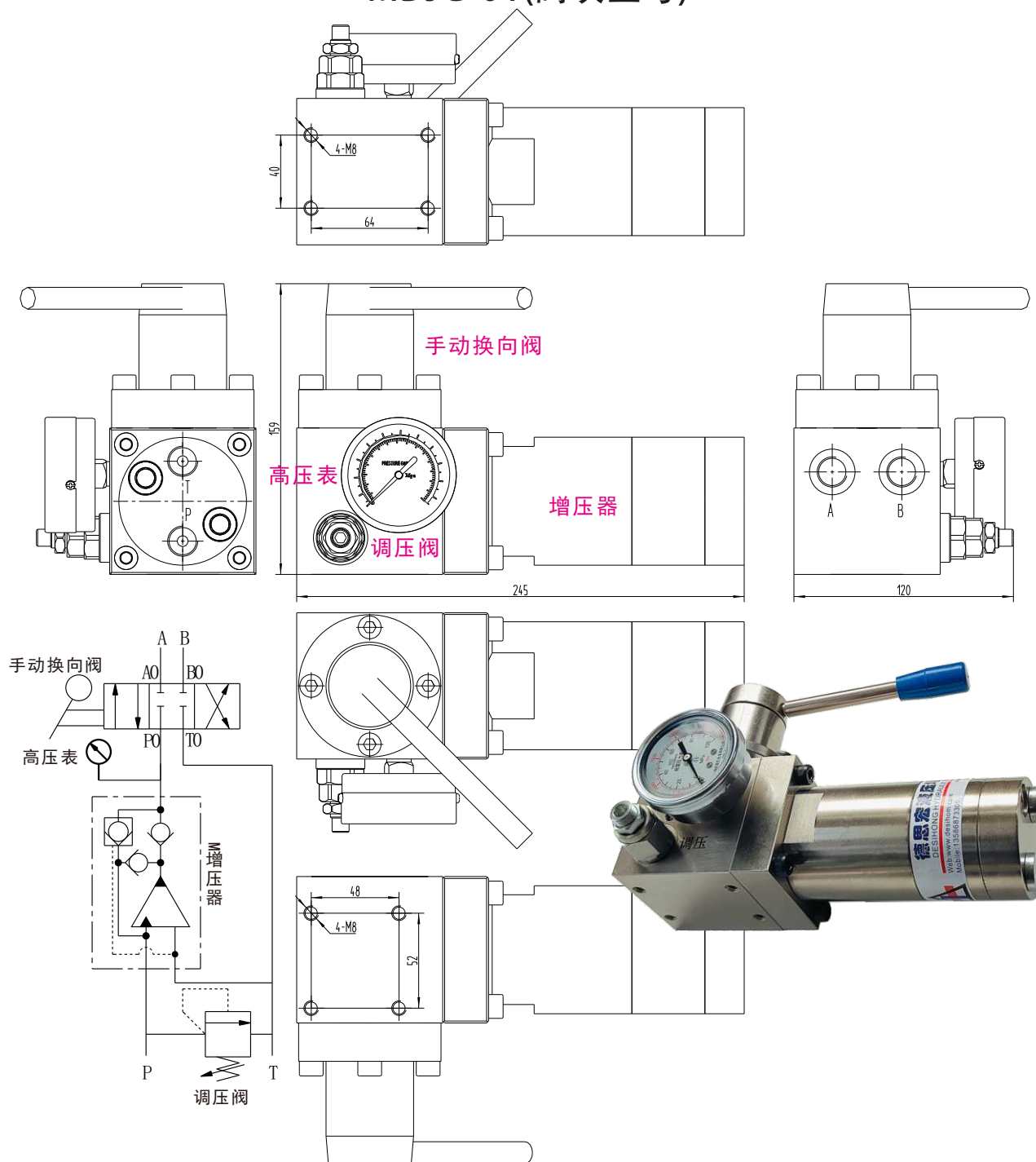


专注于液压增压器的研发

Focus on the research of hydraulic booster



MDJG-01(阀块型号)



MDJG-01为M系列高压换向阀组，采用先增压后换向方式，一个增压器可以使AB口都输出高压。

注意：手动换向阀必须能承受增压之后的压力。

可配增压器：

M法兰式增压器

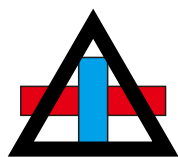
调压阀：插装式调压阀

换向阀：超高压手动换向阀O型或者M型

压力表：100MPa（单独购买）

选型示例：MDJG-01-7.0FZT

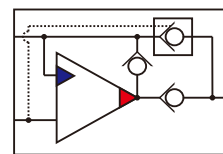
表示MDJG-01阀块，BST-MY-7.0F增压器，整套安装供货(含阀块，增压器，调压阀，换向阀)



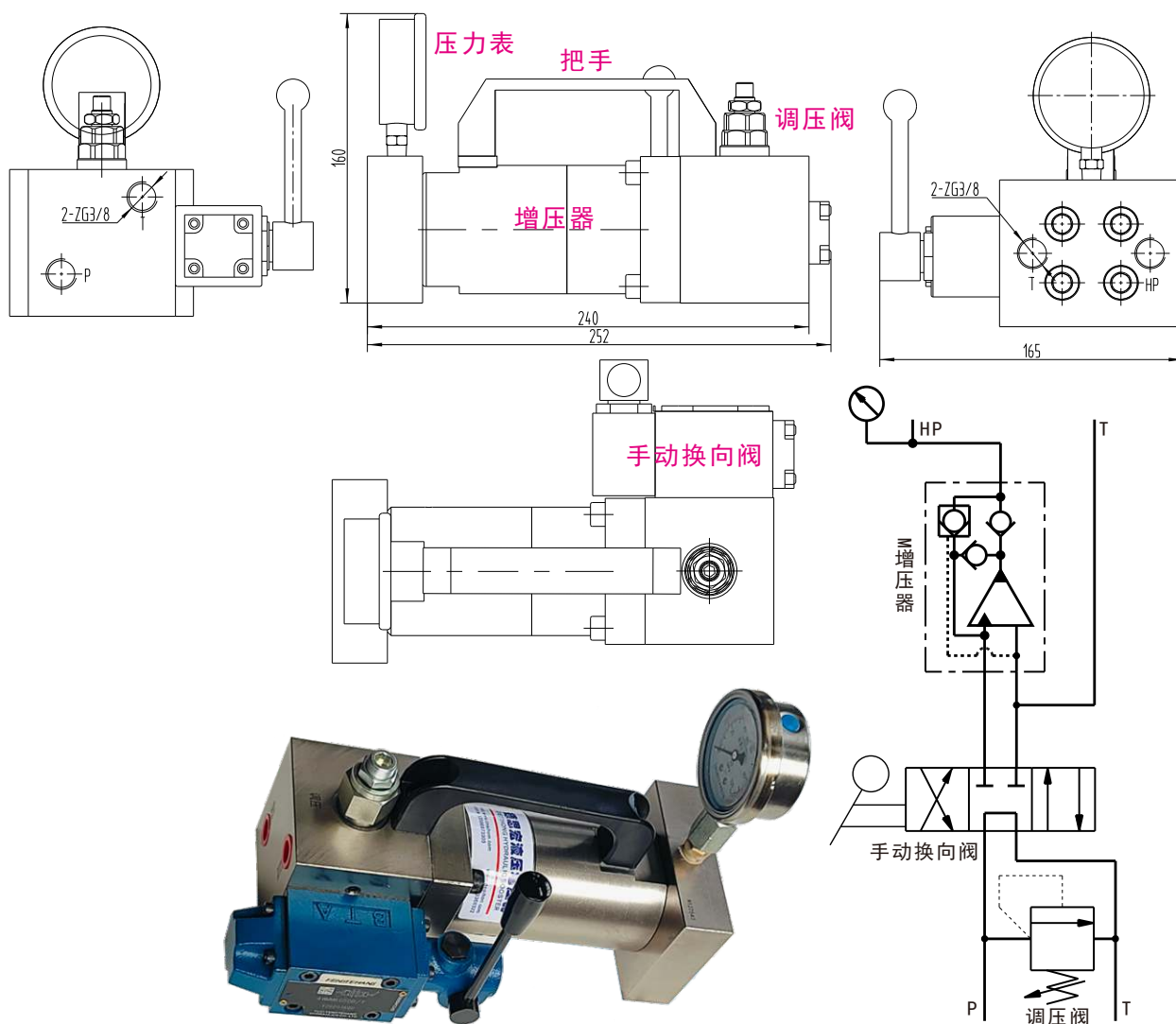
不断创新

追求卓越

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MDJ2-01(阀块型号)



MDJ2-01为M系列增压阀组，阀组一侧接低压油路，一边接高压油路，配合把手，可以快速用于便携增压油路。

可配增压器：

M低压法兰式增压器

调压阀：插装式调压阀

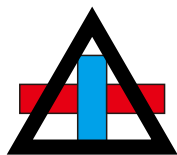
换向阀：低压手动换向阀M型

压力表：100MPa（单独购买）

选型示例：

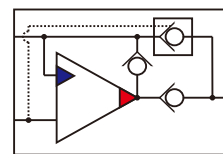
MDJ2-01-5.0DFZT

表示MDJ2-01阀块，BST-MY-5.0DF增压器，整套安装供货(含阀块，增压器，调压阀，换向阀)



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其他定制阀组



M正反增压带手动泄荷



M增压带顺序阀带充液阀



T正反增压带过滤器



L增压带测压口



M正反增压带顺序阀

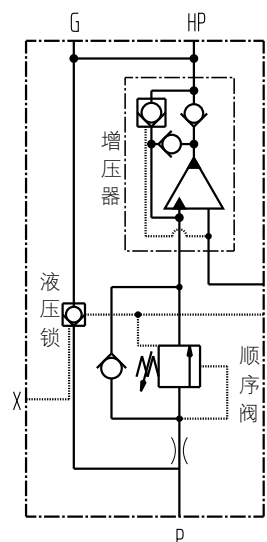
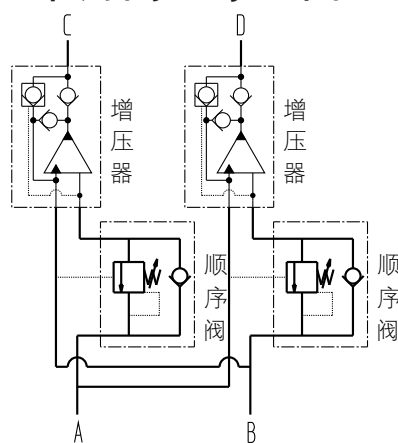
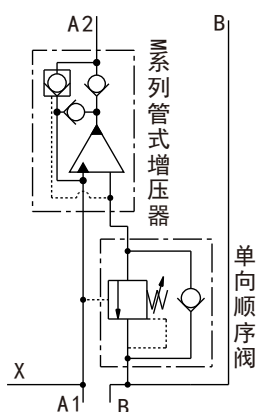


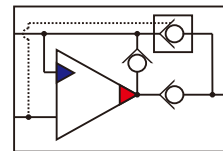
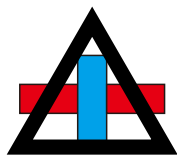
200MPa增压带手动泄荷

便携增压盒子



常用阀组原理图





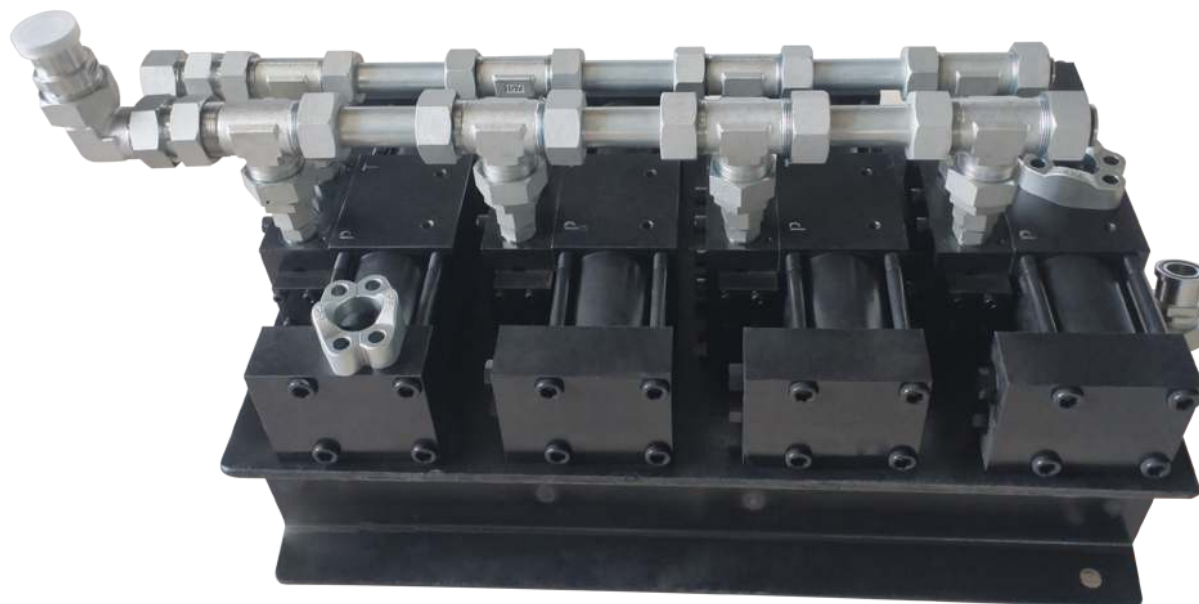
增压器并组



M系列8个集成顺序阀

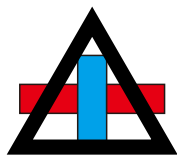


L系列三个集成



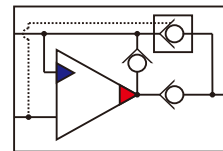
X60集成4个

多个增压器并列使用，增加流量，适合大型压机使用



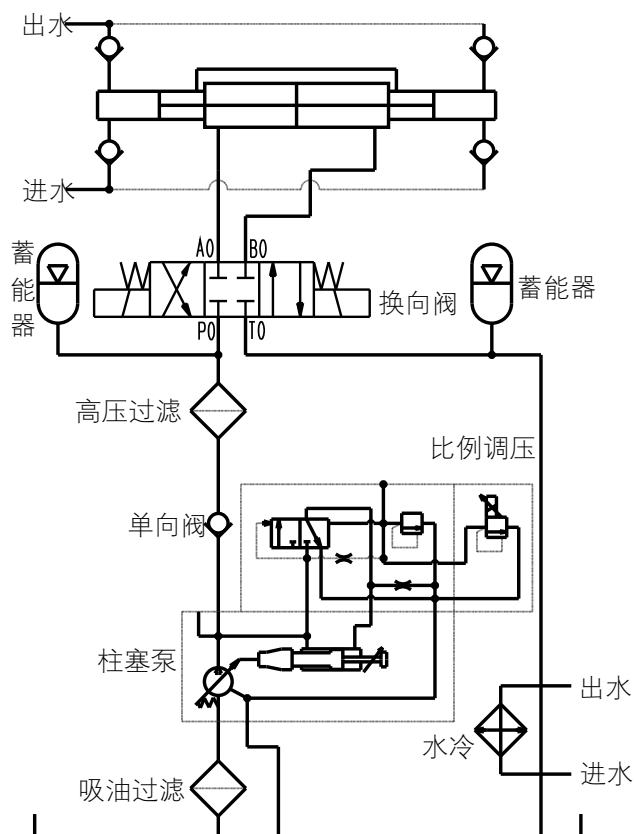
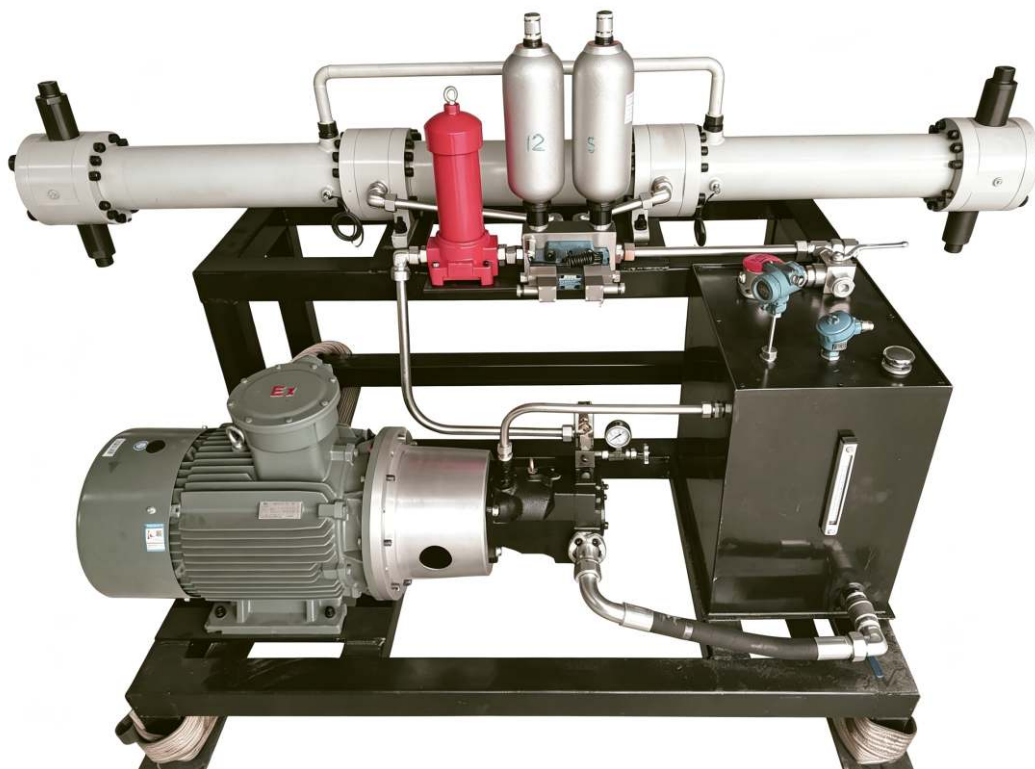
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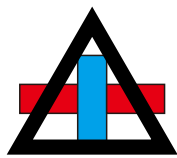
超高压液压系统 HIGH PRESSURE SYSTEM

大型增压系统



通过液压驱动,位置传感器感应,电控换向阀切换,实现左右往复增压,被增压的介质可以为液压油或者其他液体,整机防爆。此系统特别适合油田注水,效率高,寿命长。

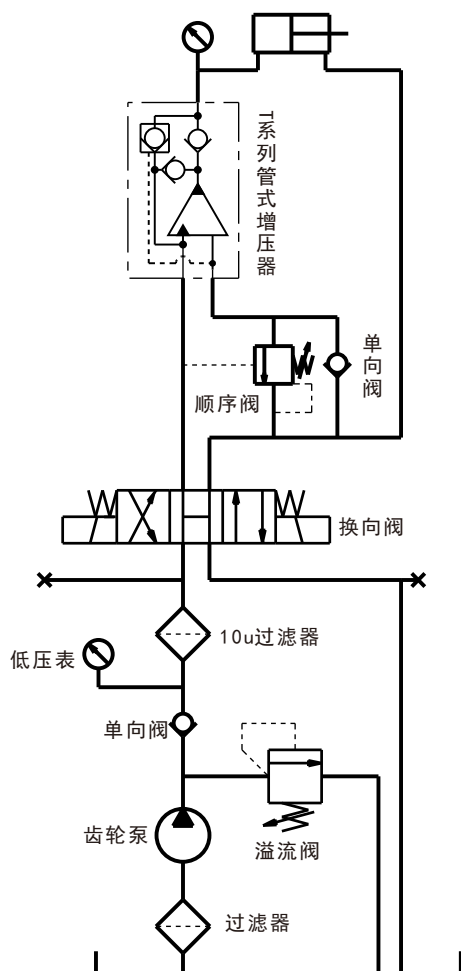
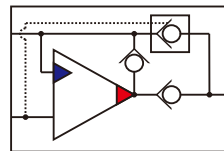
增压缸采用
多重密封设计
密封防偏磨设计
润滑设计



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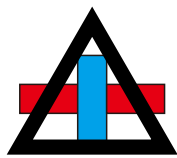


两级压力超高压动力单元

- 型 号: DLD-T*. *-*. *-***-**
- 包含组件: T系列管式增压器, 圆形油箱, 过滤器, 齿轮泵, 溢流阀, 单向阀, 低压表, 10μ过滤器, 电磁换向阀、顺序阀, 高压压力表。
- 型号示例说明: DLD-T3.4-0.8-075-02
- 1、T3.4: T系列增压器, 增压比3.4。
- 2、0.8: 齿轮泵排量0.8CC/rev, 压力21MPa。
- 3、075: 电机功率0.75KW, 转速1450r/min。
- 4、02: 油箱容积2L。
- 5、输出流量和压力:
 - 一级压力0-20MPa (顺序阀调节), 流量1.16L/min
 - 二级压力0-68MPa, 流量0.2L/min
- 6、外形尺寸: 长530X宽285X高200mm
- 7、油口尺寸: A、B口均为G1/4螺纹。

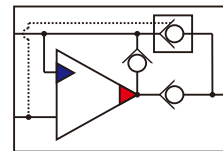
注: 动力单元电机可选最大功率为2.2KW, 请根据电机功率, 输出压力选择合适排量的齿轮泵。

德思宏可以根据客户需求定制各种不同流量和压力以及不同功能的超高压动力单元。



专注于液压增压器的研发

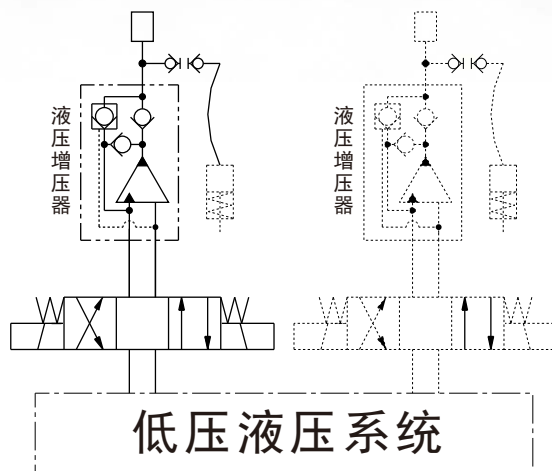
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模内热切系统 IN-MOLD HOT-CUT SYSTEM



手提款
不含低压液压系统

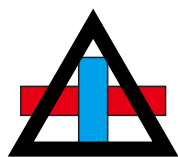


产品介绍

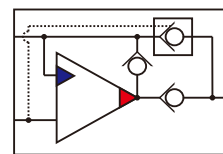
- 1、自主研发液压增压器为增压动力源，体积小，压力高，性能稳定。
- 2、增加节能功能，用电量小，发热少。
- 3、采用触摸屏控制，人性化设计，操作简单明朗。
- 4、可以在触摸屏设置切刀时间，切刀压力等。
- 5、通过程序切换，并增加相应部件，可以自由改装成2-4路模内热切系统。
- 6、整机采用台湾电机泵阀，性能稳定可靠。

设备功能

- 1、 时序设置
- 2、 测试模式
- 3、 点动操作
- 4、 累计/班组模数记录，累计开机时间记录；清零
- 5、 压力触摸屏调节
- 6、 电机温度报警、停机
- 7、 油温报警、停机
- 8、 液位报警、停机
- 9、 相序保护功能
- 10、 输出压力超压报警、停机，输出压力显示
- 11、 触摸屏声音设置、时间日期设置、屏保时间设置、坐标校准、机器重启
- 12、 密码设置
- 13、 压力表开关，保护压力表
- 14、 恢复出厂值设置



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应用案例 APPLICATIONS:

模具合模

Mould Clamping



压滤机

Filter press machine



硫化机

Vulcanizing machine



连续挤压机

Continuous extruder



装载机

Loaders



自卸车

Dump truck



挖墙机

Wall grab crane



粉碎钳

Crushing forceps



消防救援

Fire rescue vehicle



救援机器人

Rescue robot



液压叉车

Hydraulic forklift



高空作业车

Aerial operating truck



顶管机

Pipe jacking



锚杆钻车

Rock bolting rigs



压铸机

Die-casting machines



支护顶升

Support jacking



翻车机



液压测试台

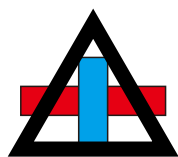


机床夹具



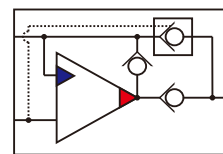
模内切系统





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应用案例 APPLICATIONS:

折弯机

Bender machine



裁剪机

Cutting machine



冲孔机

Punching machine



油压机

Hydraulic press



液压压线钳

Hydraulic line presser



液压剪

Hydraulic shears



扩张钳

Expanding pliers



液压扳手

Hydraulic wrench



锚索张拉

Cable tensioners



螺栓拉伸器

Bolt Tensioners



劈裂枪

Cleavage gun



液压拉马

Hydraulic puller



顶升油缸

Jacking cylinder



液压弯管机

Hydraulic pipe bender



铁轨拉伸

Tracks stretching



液压动力单元

Hydraulic power unit



铁钻工

Iron Driller



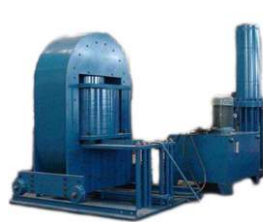
水下机器人

Unmanned Submarines



等静压机

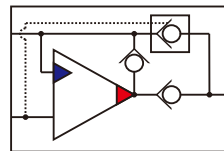
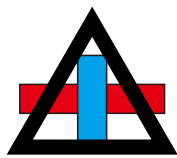
Static Press



金刚石压机

Diamond press





典型案例解析 Analysis of typical cases

一、模具合模应用 Mould Clamping

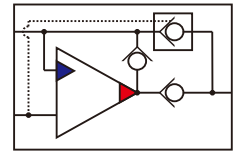
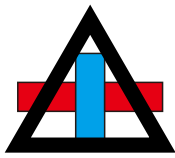
注塑机、压铸机等设备在作业时，常用高低压泵组方案，要求主系统压力等级按最高压力设计。一方面，因主系统压力余量大，在性能上造成了很大的浪费；另一方面，系统工作压力越高，其故障率也会越高，用户使用中的维修工作也就越多，增加了使用成本。德思宏液压增压器在设计上非常完美地解决了这些问题。我们可以在模具开合油缸的入口加装大流量的液控单向阀，将液压增压器与该单向阀并联。当油缸快速动作时，大流量液压油可以通过液控单向阀而不影响其动作性能。油缸到位后，低压油经过增压器后转换成高压油输入油缸，实现锁模功能。当油缸内压力达到设定值后，增压器将自动停止工作，因泄漏造成的压力下降，会由增压器自动补压以维持锁模力不变。

During the operation of injection molding machines, die-casting machines and other equipment, high and low pressure pump sets are commonly used, and the pressure level of the main system is required to be designed according to the highest pressure. On the one hand, due to the high pressure margin of the main system, a great waste of performance is caused. On the other hand, the higher the system pressure is, the higher failure rate will be, and the more maintenance work there will be, and increasing the cost. The Desihom hydraulic booster perfectly solves these problems in design. We can add a high flow pilot-operated check valve at the inlet of tclamping cylinder, and parallel connect the desihom hydraulic booster. When the cylinder moves quickly, the hydraulic oil can pass through the high flow pilot-operated check valve without affecting its performance. when the cylinder is in place, Desihom hydraulic booster boost the low pressure oil to higher one and input to the cylinder ,then achieved mould clamping. When the pressure in the cylinder reaches the set value, the booster will stop working automatically. The pressure will drop due to leakage and the booster will compensate pressure automatically to maintain the clamping force.

二、机床夹具应用 Machine Fixture

随机床自动化技术的普及，液压夹具使用越来越广泛。使用液压增压器的机床夹具，可以在无须加装高压泵的情况下得到液压高压。我们可以将增压器与夹具做成一个集合体，夹具直接使用机床主液压系统3-6MPa的液压油。因夹具在快速动作方面不会有太大的流量需求，所以无需增压保护回路，只要在增压器P口加装精密过滤器即可达到其使用要求。系统中仅增压器一个高压部件，使用成本实现最小化，同时达到了最好的工作可靠性的最高的安全性。

With the popularization of automation machine fixture, hydraulic fixture are used more and more widely. The Desihom hydraulic booster can obtain high pressure without use of the high pressure



pump. Assemble Desihom hydraulic booster to the fixture, and then directly connect the hydraulic oil of 3-6MPa of the main hydraulic system of the machine to the fixture. The hydraulic fixture does not need too much flow there is no need the protection loop, install a filter at the P port of the booster. In the system, there is only one high pressure component, which can minimize the cost and achieve the highest safety and the best working reliability.

三、液压工具应用 Hydraulic Tools

液压工具要求重量轻、体积小，方便携带，并且可靠性高，安全性高。

现用超高压泵直接提供超高压液压油，超高压泵现存在的问题有：

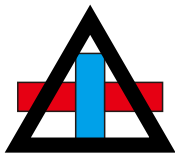
- 1、使用寿命短，一般可累计工作时间仅1000小时左右；
- 2、安全性不高，外接管路都是超高压软管，因频繁拖动容易造成安全隐串，超高压快插接头频繁使用后也是一个危险源；
- 3、成本高，系统里所有元器件，包括换向阀、过滤器、管路、压力表等都是超高压器件，造价是低压系统的3倍以上。

使用德思宏液压增压器，因增压器体积小，可以安装在液压工具上面，所有液压胶管、液压站等全部使用低压器件，可靠性更高、安全性更好、成本更低。因使用低压泵后发热量变小，体积可以做的更小，重量可以更轻。

Hydraulic tools require light weight, small size, easy to carry, and high reliability and safety. The existing ultra-high pressure hydraulic oil is directly provided by the ultra-high pressure pump. The existing problems of the ultra-high pressure pump are as follows:

- 1, Short service life, generally working time is only around 1000 hours;
2. The safety is not high, the external pipes are all ultra-high hoses, which is a potential risk due to frequent movement, and the ultra-high quick connector is also a risk factor;
- 3, High cost. All components in the system, including direction valve, filter, hoses and pressure gauge, are ultra-high pressure, and the cost is more than 3 times of that of low-pressure system.

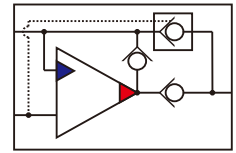
Desihom hydraulic booster, with the small volume, can be installed at the end of the hydraulic tools, all hydraulic hoses, hydraulic system all use low-pressure components, higher reliability, better safety, lower cost, and volume will be smaller, weight will be lighter.



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四、煤矿锚索作业设备 Coal Mine Anchor Cable Operation

煤矿锚索作业设备在功能上即是液压剪与拉伸器的组合，可分为锚索张拉机具及锚索剪切机具，配合矿用锚孔钻机作业。原传统方案都是用超高压手动泵提供液压超高压，每个作业面求要20人以上的班组才能作业。

使用德思宏液压增压器，可以从锚孔钻机底盘上直取16MPa的系统压力，输送给张拉、剪切作业的专用机械臂上的液压增压器，直接给机具输出超高压。因设备自动化程度高，作业面人员可降到10人以下，最大限度地提高了生产效率，降低了生产成本。

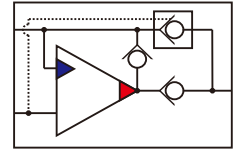
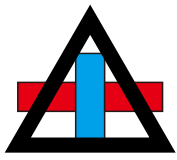
Coal mine anchor cable operation equipment is the combination of hydraulic shear and stretcher in function, which can be divided into anchor cable tensioning machine and anchor cable shearing machine, cooperating with mine anchor hole drilling machine. The traditional scheme is to use ultra-high pressure manual pump to provide hydraulic ultra-high pressure, each operating point requires more than 20 people.

The system pressure of 16 MPa can be directly taken from the chassis of the anchor hole drilling machine by using the Desihom hydraulic booster, which is transported to the hydraulic booster on the special mechanical arm for tension and shearing operation, and the super high pressure can be output directly to the machine tool. Because of the high degree of automation of the equipment, the operating point personnel can be reduced to less than 10 people, maximizing the production efficiency and reducing the production cost.

五、石油钻机-铁钻工应用 Iron Driller

铁钻工作为钻杆夹持机具，要求动作快、效率高，可靠性高。原方案使用高压泵，系统元器件均采购高压配置，系统发热量大，安全性低，成本高。使用德思宏液压增压器后，无需再加装高压泵，而且是瞬间发生高压，能以最小的能量消耗、最低的制做成本来达到使用要求，并且适合高频率的动作使用，提高其工作效率。目前使用液压增压器到铁钻工的公司有：上海国民油井、武汉江汉石油、宝鸡石油机械等。

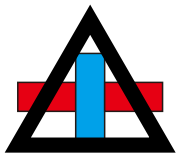
The drill pipe clamping device, which requires fast action, high efficiency and high reliability. The original scheme uses high-pressure pump, system components are purchased high-pressure configuration, system heat, low security, high cost. After using the Desihom hydraulic booster, no need to install a high pressure pump, and is instantaneous high-pressure, with the smallest energy consumption, the lowest manufacturing cost to meet the use requirements, and suitable for high-frequency operation, improve its efficiency. At present, the use of hydraulic booster to iron drilling companies are: Shanghai National Oil Well, Wuhan Jiangnan Oil, Baoji Oil Machinery and so on.



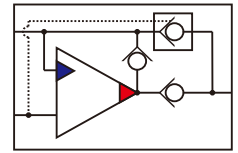
六、矿山应用Mining Equipment

液压劈裂机是矿山应用的典型。液压劈裂机通过70-120Mpa的液压超高压驱动劈裂枪，将大的石料整体劈裂，其设备应用方面有高污染、少保养等特点，超高压泵头在这种作业环境下使用寿命约3个月。通过使用德思宏液压增压器，我们可以设计更适合这种工况的系统，达到更长的使用寿命，并且提高工作效率、减少设备能耗。

Hydraulic splitter is a typical example of mining equipment. Hydraulic splitter splits large stone entirely through 70-120 Mpa hydraulic ultra-high pressure driving splitting gun. Its equipment has the characteristics of high pollution and less maintenance. The service life of ultra-high pressure pump is about 3 months in this operating environment. By using the Desihom hydraulic booster, we can design a system more suitable for this kind of working condition, achieve longer service life, and improve work efficiency, reduce equipment energy consumption.



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