技术参数 Technical Specifications



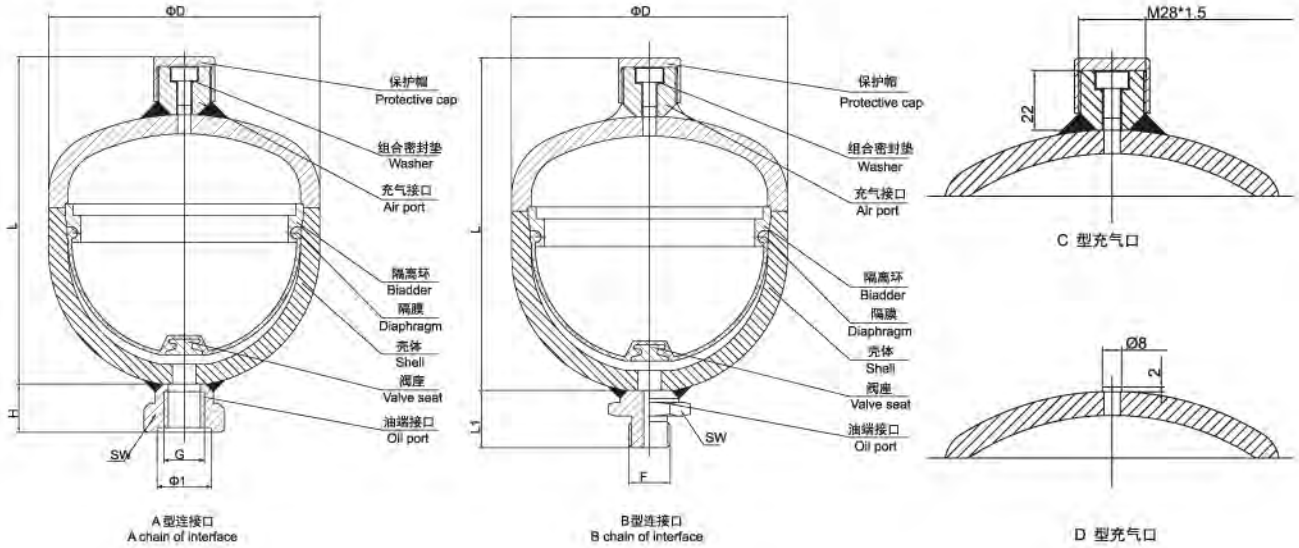
1、型号说明 Description of model

AD – A – 0.75 / 210 – 1 – 1 AK 30

- 30 — 20℃时的氮气预充压力Bar(1)
- AK — 液侧标准连接AK或AB(3)
- 1 — 隔膜材料 Diaphragm Material code
  - 1--丁腈橡胶(NBR)
  - 2--氢化丁腈(HNBR)(2)
  - 3--丁基橡胶(IR)(2)
  - 7--氯醚橡胶(ECO)(2)
- 1 — 壳体材料 Shell Material
  - 1--碳钢 Carbon steel
- 210 — 允许工作压力(Bar) Allowable working pressure
- 0.75 — 公称容积(L) Nominal Volume (L)
- A — 型式 Construction
  - A--可充气(M28X1.5)Rechargeable
  - B--气体侧密封,按要求预充气体。(1) Completely sealed
- AD — 焊接隔膜式蓄能器 Welded diaphragm accumulators

注: (1)只有当A型和B型批量订货时;
(2)只有当批量订货时;
(3)非标准接头另行咨询;

内部结构与外形尺寸Stucture and Dimension



公称容积(L)	压缩比 P2:P0	设计压力 bar	L mm	ϕD	重量Kg	气端连接	油端连接					
							G	φ1	H	SW	F	L1
0.075	8:1	210	92	63	0.85	C	G1/2	29	25	32	M18x1.5	30
0.16	8:1	210	105	73	1.1	C	G1/2	29	25	32	M18x1.5	30
0.25	8:1	210	107	84	1.4	C/D	G1/2	29	25	32	M18x1.5	30
0.32	8:1	210	115	93	1.75	C/D	G1/2	29	25	32	M18x1.5	30
0.5	8:1	210	132	104	2.35	C	G1/2	29	25	32	M18x1.5	30
0.75	8:1	210	148	123	3.7	C	G1/2	29	25	32	M18x1.5	30
1.0	4:1	210	160	138	4.6	C	G1/2	29	25	32	M18x1.5	30
1.4	4:1	210	173	153	6.3	C	G1/2	29	25	32	M18x1.5	30
2.0	4:1	210	200	173	8.7	C	G3/4	36	30	41	M33x1.5	36
2.8	4:1	210	256	173	11.2	C	G3/4	36	30	41	M33x1.5	36
3.5	4:1	210	292	173	12.8	C	G3/4	36	30	41	M33x1.5	36

订货说明Ordering Note

如有特殊要求，请与本公司商洽。
If you have special requirements,please contact our company for advice

焊接式蓄能器采用钢制冲压外壳,根据充气端是否可装拆分为可充气及不可重复充气(完全密封)两种。

Welded Diaphragm accumulator use steel stamping shell ,They have two typesaccording to the gas side:Rechargeableand completely sealed.



2、概述

2.1 工作压力(见3.0参数表)

2.2 公称容积(见3.0参数表)

2.3 有效气体容积

与隔膜式蓄能器的公称容积相符

2.4 有效容积

最高工作压力P2和最低工作压力P1之间可用的液体容积

2.5 使用介质

矿物油、液压油。其它介质请咨询

2.6 充气

给蓄能器充气只能用高纯度氮气(N2>99%),严禁使用氧气(有爆炸危险)。所有蓄能器供货时都预充1-2Bar氮气,起保护作用。更高的预充气体压力请咨询。B型隔膜式蓄能器按订单要求预充气体压力。

2.7 允许工作温度

NBR隔膜:-20~+80℃

CECO隔膜:-40~+80℃

HNBR隔膜:-20~+100℃

其它请咨询

2.8 允许压缩比

最大工作压力P2与预充气体压力P。之比

2.9 压力介质的最大流量

若要达到表格中给出的最大流量,则应确保蓄能器中的剩余有效气体容积约10%的液体容积。

2、GENERAL

2.1 Permitted operating pressure (see tables 3.0)

2.2 Nominal volume (see tables 3.0)

2.3 Effective gas volume

Corresponds to the nominal volume of the diaphragm accumulator.

2.4 Effective volume

Volume of fluid which is available between the operating pressures p_2, and p_1.

2.5 Fluids

Mineral oils, hydraulic oils. Other fluids on request.

2.6 Gas charging

All accumulators are supplied with a protective pre-charge. Higher gas pre-charge pressures are availableon request (gas charging screw or sealed gas connection). Hydraulic accumulators must only be charged with nitrogen.Never use other gases.Risk of explosion!

2.7 Permitted operating temperature

NBR:-20~+80℃

ECO:-40~+80℃

HNBR :-20~+100℃

Others on request.

2.8 Permitted pressure ratio

Ratio of maximum operating pressure p, to gas pre-charge pressure p.

2.9 Max. flow rate of operating fluid

In order to achieve the max, flow rate given in the tables, a residual fluid volume of approx. 10% of theeffective gas volume must remain in the accumulator.

液压蓄能器作用 Hvdraulicaccumulator action

蓄能器在液压及流体技术中是不可缺少的元件。它在液压回路中有许多用途如:

1)节省驱动功率; 2)能量储备; 3)衰减压力冲击; 4)减小泵的压力脉动; 5)保持衡定压力

上述作用都可由液压蓄能器承担,并因而可得到特殊的利益,如:提高生产能力及总效率、改善其功能、延长寿命、提高安全性、降低工作及维护费用。

An indispensable component in hydraulic and liguid technology. It has many uses in the hydraulic circuit, such as

1) saving driving power; 2) energy reserve; 3) attenuating pressure shock; 4) reducing pump pressure pulsation;5) keeping constant pressure.

The above functions can be carried out by the hydraulic accumulator, and thus can obtainspecial benefits, such as: increasing production capacity and total efficiency, improving its function, prolonging life,improving safety, reducing work and maintenance costs.

工作原理 Operating Principle

油液在实际中是不可被压缩,所以不能储存压力能。

液气蓄能器是利用气体的可压缩性来储存油液。

隔膜式蓄能器就是基于这一原理,采用氮气作为可压缩介质。

隔膜式蓄能器由液体部分和气体部分组成,隔膜用作气体密封隔离件。液体部分与液压回路相通,因此压力升高时气体被压缩,油液被吸入隔膜式蓄能器。压力下降时,气体膨胀,从而把油液压入系统回路。当蓄能器完全排空时,隔膜底部的阀座关闭液压出口,防止损坏隔膜。

Fluids are practically incompressible and cannot therefore store pressure energy.

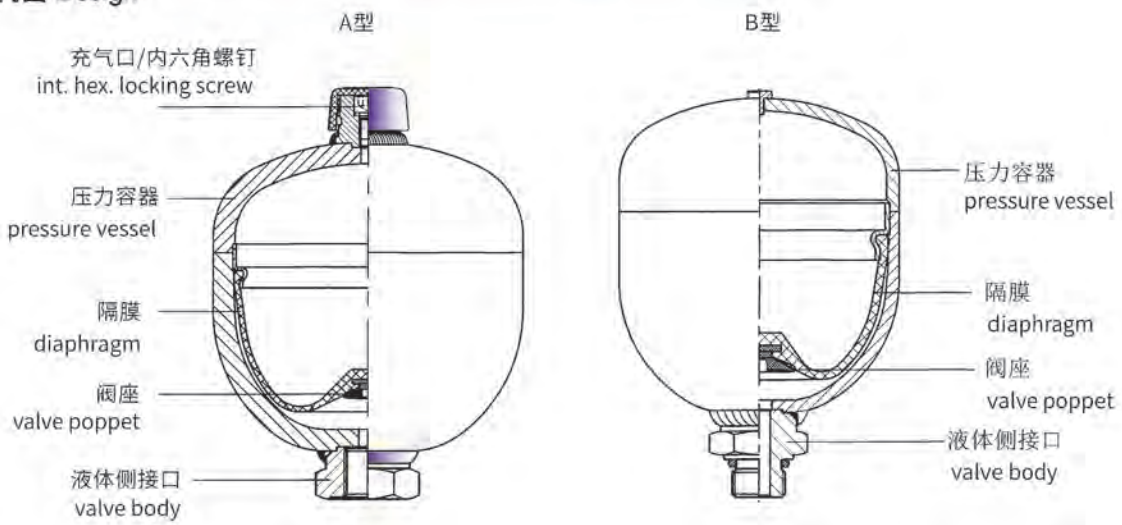
The compressibility of a gas is utilised in hydraulic accumulators for storing fluids.

Diaphragm accumulators are based on this principle, using nitrogen as the compressible medium.

A diaphragm accumulator consists of a fluid section and a gas section with the diaphragm acting as the gas–prootscreen. The fluid section is connected to the hydraulic circuit so that the diaphragm accumulator draws in fluid when thepressure increases and the gas is compressed. When the pressure drops, the compressed gas expands and forces the storetfluid into the circuit. At the base of the diaphragm is a valve poppet, This shuts off the hvdraulic outlet when the accumulatoris completely empty and thus prevents damage to the diaphragm

焊接隔膜式蓄能器结构 Welded diaphragm accumulator structure

1、结构图 Design



2、组成

2.1 焊接隔膜式蓄能器,气体侧可充气(A型)或完全密封(B型)

2.2 液体侧连接可有多种型式。

2.3 柔性隔膜用以隔离气体和液体。

2.4 设置在隔膜底部的阀座。

2、This consists of :

2.1 Welded pressure vessel, rechargeable on the gas side or, alternatively, completely sealed.

2.2 Fluid connection available in various types.

2.3 Exible diaphragm to separate the uid and gas sections.

2.4 Valve poppet set into the base of the diaphragm.

隔膜材料 Diaphragm materials

可提供下列材料的隔膜:

丁腈橡胶(NBR);氢化丁腈(HNBR);氯醚橡胶(ECO);丁基橡胶(IIR)

以上橡胶材料应根据工作介质及使用温度选用。

The diaphragms are available in the following elastomers:

acrylonitrile butadiene rubber PERB UNAN (NBR) , Hydrogenated nitrile (HNBR) ;

ethylene oxide epichlorohydrin rubber(ECO) , butyl rubber (IR)

The material must be selected according to the particular operating fluid and temperature.

安装位置 Mounting Position

适用任何位置安装,但若有污染物汇集危险,请优先选用垂直安装,液体侧接口置向下

Optional. However, if there is a risk of contamination collecting, a vertical position is preferable fluid connection atthe bottom.

安装型式 Type Mounting

2L以下蓄能器可直接与管路连接。

若在剧烈振动环境下使用,则蓄能器必须固定好,防止松动。建议使用专用卡箍。液体侧附加外螺纹的AB接头,用于拧入安装孔中请勿通过焊接或机械工作方式把蓄能器安装到液压设备上。液压管路连接后须完全放气。

Accumulators up to 2 l can be screwed directly inline.

Where strong vibrations are expected, the accumulator must be secured to prevent it working loose. For weld typaccumulators we recommend support clamps. Additional male threads on the hydraulic connection are available forscrewing into mounting holes. Do not attach the accumulator to the hydraulic equipment by welding or mechanicaoperation. The hydraulic pipe must be completely deflated after connection.

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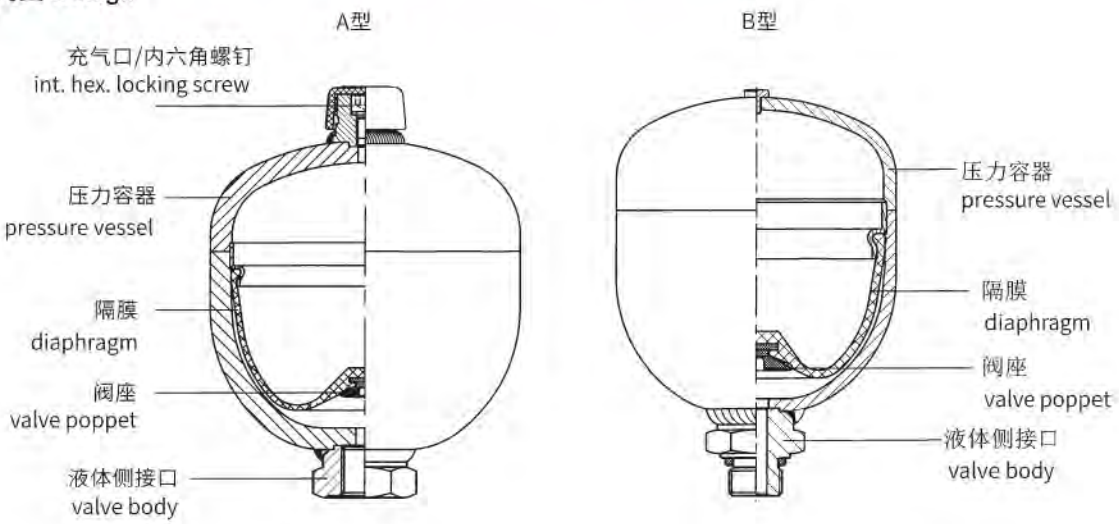
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