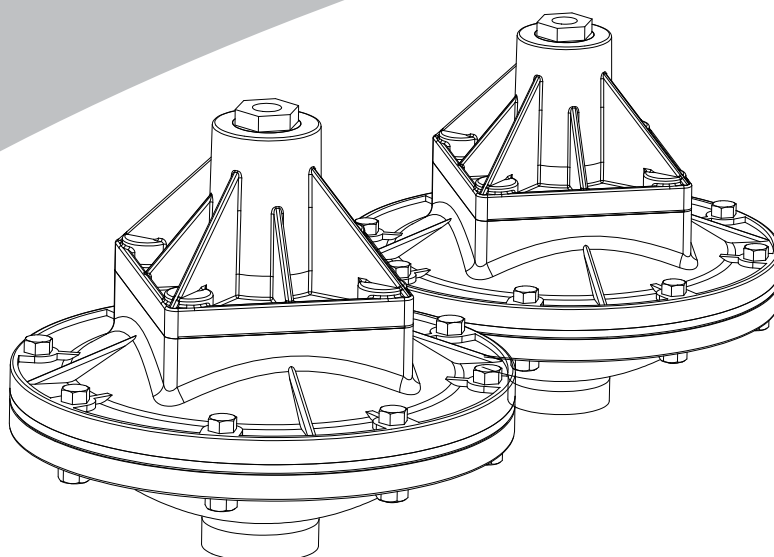




Specialist in Fluid Transfer
致力于流体输送

SKY-SK-E-03-2015



INSTRUCTIONS
操作指南

This manual contains warnings and caution.

本手册包含警告和注意事项

READ AND RETAIN FOR REFERENCE

阅读和保留以供参考

TA SERIES

TA15
TA25
TA40
TA50
TA80

**Operation and
Maintenance Manual**
操作维护手册



Surge Dampener 稳压罐

⚠ IMPORTANT 重要

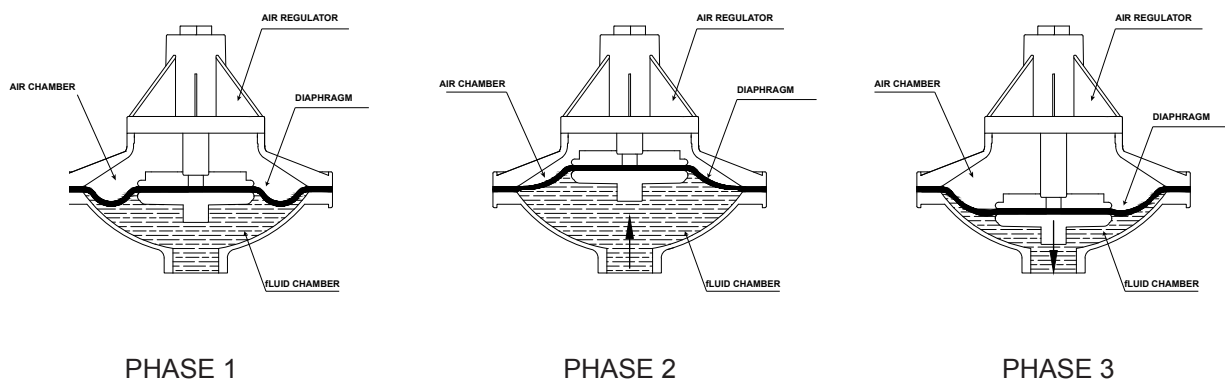
- Do not over-lubricate air supply — excess lubrication will reduce performance.
不要过度润滑空气供应——过度润滑会降低其性能。
- Do not exceed 8.6 bar (125 psig) air supply pressure.
供气压力不得超过8.6 bar (125 psig)
- When choosing dampener materials, be sure to check the temperature limits for all wetted components. Example: Viton has a maximum limit of 177°C (350°F) but polypropylene has a maximum limit of only 79°C (175°F).
选择稳压罐材料时，务必检查所有浸湿部件的温度限制。示例：氟橡胶的最大限值为177°C (350°F)，而聚丙烯的最大限值仅为79°C (175°F)。
- Maximum temperature limits are based upon mechanical stress only. Certain chemicals will significantly reduce maximum safe operating temperatures. Consult Chemical resistance guide for chemical compatibility and temperature limits.
最高温度限值仅基于机械应力。某些化学品会显著降低最高安全工作温度。有关化学兼容性和温度限制，请参阅耐化学性指南。
- Prevent static sparking. If static sparking occurs, explosion could result. dampener, pump, valves and containers must be grounded to a proper grounding point when handling flammable fluids and whenever discharge of static electricity is a hazard.
防止静电火花。如果发生静电火花，可能导致爆炸。在处理易燃液体和静电排放有危险时，稳压罐、泵、阀门和容器必须到适当的接地点正确接地。

⚠ WARNING 警告

- When used for toxic or aggressive fluids, the dampener should always be flushed clean prior to disassembly. 当用于有毒或腐蚀性流体时，稳压罐在拆卸前应冲洗干净。
- Always wear safety glasses when operating dampener. If diaphragm rupture occurs, process fluid may be forced out air exhaust.
操作稳压罐时，请务必戴安全眼镜。如果发生隔膜破裂，则可能会将流体材料排出空气。
- Before any maintenance or repair is attempted, the compressed air line to the dampener and pump should be disconnected and all air pressure allowed to bleed from the system. Disconnect all intake, discharge and air lines. Drain the dampener by allowing any fluid to flow into a suitable container.
在进行任何维护或维修之前，应断开连接到稳压罐和泵的压缩空气管路，并允许所有空气压力从系统中排出。断开所有进气管、排气管和空气管。通过让任何液体流入适当的容器来排空稳压罐。
- Blow out air line for 10 to 20 seconds before attaching to dampener to make sure all pipeline debris is clear. use an in-line air filter. A 5μ (micron) air filter is recommended.
吹扫空气管路10到20秒钟，然后再将其固定在稳压罐上，以确保清除所有管道碎屑。使用排列式空气过滤器。建议使用5 μm (微米) 的空气过滤器。
- Dampeners cannot be used in submersible applications.
稳压罐不能作潜水应用。

All reciprocating pumps experience a pressure fluctuation. The dampener minimizes unwanted pressure fluctuation by providing a supplementary pumping action. This is accomplished by using a diaphragm as a separation membrane within the dampener to trap a given volume of liquid on one side and pressurized air on the other. When the fluid pressure falls in the system, the dampener supplies additional pressure to the discharge line between pump strokes by displacing fluid via diaphragm movement. This movement provides the supplementary pumping action needed to virtually eliminate pressure variation and pulsation.

所有往复泵都会经历压力波动。稳压罐通过提供补充的泵送作用，将不必要的压力波动降至最低。这是通过使用隔膜作为稳压罐内的分离膜来实现的，将一侧的给定体积的液体捕获，而另一侧的是压缩空气，以实现隔离。当系统中的流体压力下降时，稳压罐通过膜片运动来排出流体，从而在泵冲程之间向排出管路提供额外的压力。该运动提供了从根本上消除压力变化和脉动所需的辅助泵送作用。



The dampener automatically sets and maintains the correct air pressure matching the variations in liquid flow or discharge pressure generated by the pump. A shaft attached to the dampener diaphragm triggers the addition or deletion of the air within the non-wetted side of the dampener. The dampener automatically adjusts to any pressure and/or flow setting of the pump with no need for manual adjustment of the unit and/or system. The dampener has proven to be the cost effective choice for protecting your liquid process system from unwanted pulsation or pressure fluctuation. Contact your local Skylink distributor for further information on the dampener and other pumping solutions.

稳压罐会自动设置并保持正确的气压，以匹配泵产生的液体流量或排出压力的变化。附在稳压罐膜片上的轴触发稳压罐非湿润侧内的空气添加或减少。稳压罐可自动调节至泵的任何压力或流量设置，而无需手动调节装置或系统。事实证明，该阻尼器是保护您的液体处理系统免受不必要的脉动或压力波动影响的经济有效选择。请与当地的斯凯力分销商联系，以获取有关稳压罐和其他泵送解决方案的更多信息。

A compressed air line attached to the air regulator body sets and maintains pressure on the air side of the diaphragm. As the reciprocating pump begins its stroke, liquid discharge pressure increases which flexes the dampener diaphragm inward. This action accumulates fluid in the liquid chamber (see Phase 2).

固定在空气调节器主体上的压缩空气管线会固定并保持隔膜的空气侧压力。当往复泵开始其冲程时，液体排出压力增加，从而使稳压罐隔膜向内弯曲。此动作会在液体腔室中积聚液体（请参阅阶段2）。

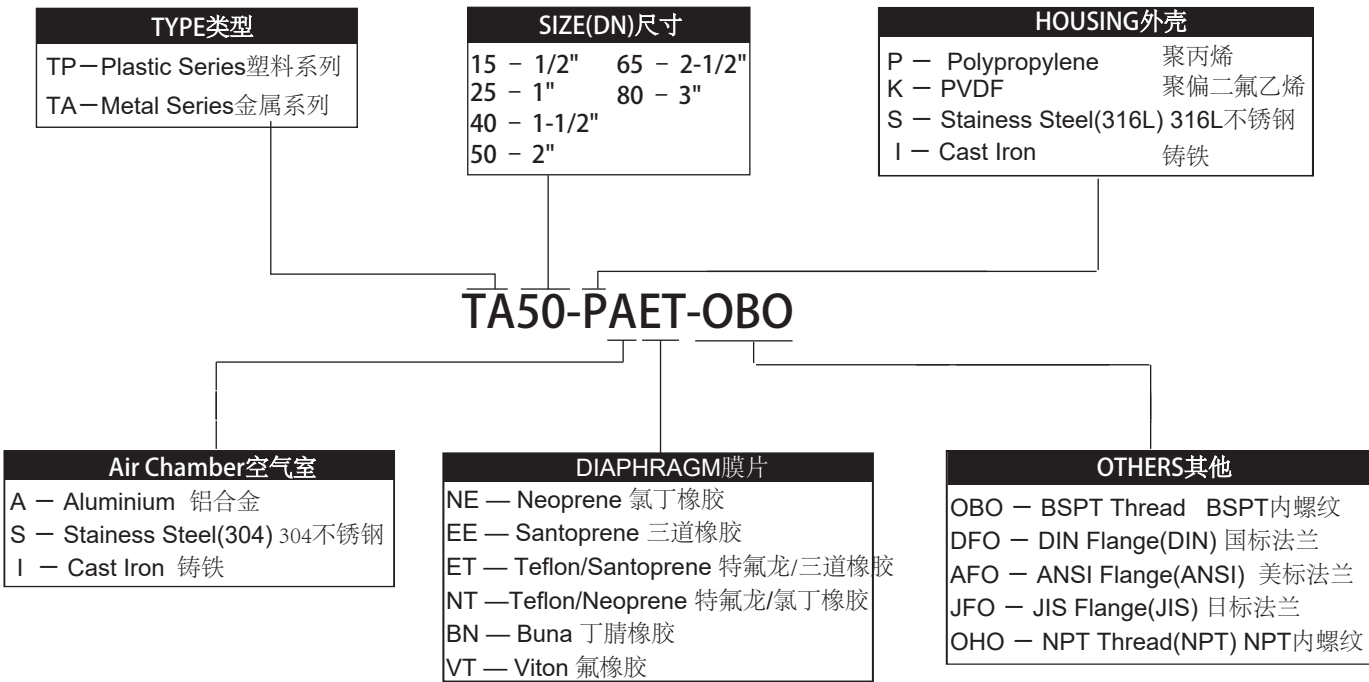
When the pump redirects its motion upon stroke completion, the liquid discharge pressure decreases and compressed air in the air side forces the dampener diaphragm to flex outward displacing the fluid into the discharge line (see Phase 3). This motion provides the supplementary pumping action needed to minimize pressure fluctuation.

当泵在冲程完成后改变其运动方向时，液体排出压力降低，空气侧的压缩空气迫使阻尼器隔膜向外弯曲，从而将流体排入排出管线（请参阅阶段3）。该运动提供了使压力波动最小化所需的辅助泵送作用。

How to Order如何命名

The model number of all surge dampeners consists of six alphanumeric clusters. These designate product type, size and material, and inlet/outlet type.
所有稳压罐的型号由六个字母或数字集群组成。这些指定产品类型、尺寸和材料以及进出口类型。

Please refer to the charts below for an example of model number TP50-PAET-OB0. This is a plastic dampener, 2" size, polypropylene fluid chamber,aluminium air chamber, teflon/santoprene diaphragm, and BSPT thread.
关于型号TA50-PAET-OB0的示例，请参考下表。这是一个金属稳压罐，2寸，聚丙烯流体室，铝空气室，聚四氟乙烯/三道橡胶隔膜和BSPT内螺纹。



Chemical Properties are as follows化学特性如下:

Materials材质	Chemical Properties化学特性
Virgin PTFE 聚四氟乙烯	Chemically inert,virtually impervious. Very few chemicals are known to chemically react with PTFE; molten alkali metals, turbulent liquid or gaseous fluorine and few fluorochemicals such as chlorine trifluoride or oxygen difluoride with ready liberate free fluorine at elevated temperatures. 化学惰性，几乎完全不透水。很少有化学品可以与聚四氟乙烯发生化学反应；熔融的碱性金属、湍流液体或气态氟，以及一些在温度升高时易释放的游离氟的氟代化学物质，如三氟化氯或二氟化氧等会迅速腐蚀聚四氟乙烯。
Santoprene 三道橡胶	Injection molded thermoplastic elastomer with no fabric layer,Long mechanical flex life. Excellent abrasion resistance. 注塑成型的热塑性弹性体，无织物层，机械弯曲寿命长。具有优异的耐磨性。
Neoprene 氯丁橡胶	All purpose, Resistant to vegetable oil. Generally not affected by moderate chemicals, fats, greases and many oils and solvents. Generally attacked by strong oxidizing acids, ketones, esters, nitro hydrocarbons and chlorinated aromatic hydrocarbons. 用途广泛，耐植物油。一般不受温和的化学品，脂肪，油脂和许多油和溶剂的影响。通常会受到强氧化酸、酮类、酯类、硝基烃和氯代芳烃的腐蚀。
Buna 丁腈橡胶	General purpose, oil-resistant. Shows good solvent, oil, water and hydraulic fluid resistance. Should not be used with highly polar solvents like acetone and MEK, ozone, chlorinated hydrocarbons and nitro hydrocarbons. 通用，抗油性。具有良好的耐溶剂、油、水和液压特性。不可与强极性溶剂如丙酮和丁酮、臭氧、氯化烃和硝基烃等一起使用。
Viton 氟橡胶	Shows good resistance to a wide range of oils and solvents; especially all aliphatic, aromatic and halogenated hydrocarbons, acids, animal and vegetable oils. 对各种油和溶剂具有良好的抗性，尤其是所有脂肪族、芳香族和卤代烃、酸、动物和植物油。
PVDF 聚偏二氟乙烯	A durable fluoroplastic with excellent chemical resistance. Excellent for UV applications. High tensile strength and resistance. 一种耐用的氟塑料，具有优异的耐化学性，在UV应用方面是最佳选择，具有高拉伸强度和耐冲击性。
Polypropylene 聚丙烯	Thermoplastic polymer. Moderate tensile and flex strength. Resists strong acids and alkalis. Attacked by chlorine,fuming nitric acid and other strong oxidizing agents. 热塑性聚合物。中等拉伸强度和抗弯强度。抗强酸和强碱。易受氯气、发烟硝酸及其他强氧化剂的侵蚀。
Alloy C 合金C	Equal to ASTM494 CW-12M-1 specification for nickel and nickel alloy. 相当于ASTM494 CW-12M-1规格的镍和镍合金。
EPDM 三元乙丙橡胶	Shows very good water and chemical resistance. Has poor resistance to oil and solvents, but is fair in ketones and alcohols. 表现出很好的耐水性和耐化学性，对油和溶剂耐受性差。但在酮和醚中性质不变。
Stainless steel 不锈钢	Equal to exceeding ASTM specification A743CF-BW forcorrosion resistant iron chromium,iron chromium nickel,and nickel based alloy castings for general applications. Commonly referred to as 316 Stainless Steel in the pump industry. 相当于或超过ASTM规范A743CF-BW，适用于一般用途的耐腐蚀的铬铁、铁铬镍和镍基合金铸件。泵行业通常称为316不锈钢。

For specific applications,you can contact us其他特殊应用请联系我司。

SECTION 3

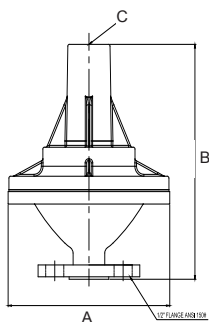
3.3 Temperature limitations温度极限

Operating temperature limitations are as follows工作温度极限如下:

Materials材质	Maximum最高	Minimum最低
Virgin PTFE 聚四氟乙烯	220°F 104°C	-35 °F -37°C
Santoprene 三道橡胶	225 °F 107°C	-10 °F -23°C
Neoprene 氯丁橡胶	177°F 77°C	-10 °F -23°C
Buna 丁腈橡胶	190 °F 88°C	-10 °F -23°C
Viton 氟橡胶	350 °F 177°C	-40 °F -40°C
PVDF 聚偏二氟乙烯	250 °F 121°C	0 °F -18°C
Polypropylene 聚丙烯	150°F 66°C	32 °F 0°C
EPDM 三元乙丙橡胶	280 °F 138°C	-40 °F -40°C
Alloy C 合金C	-	-
Stainless steel 不锈钢	-	-

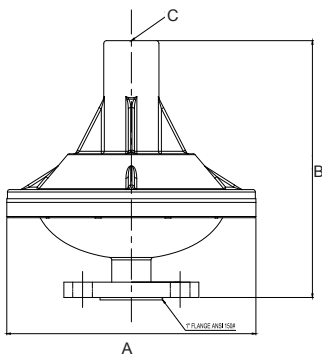
For specific applications,you can contact us其他特殊应用请联系我司。

■ TA15 Surge Dampener



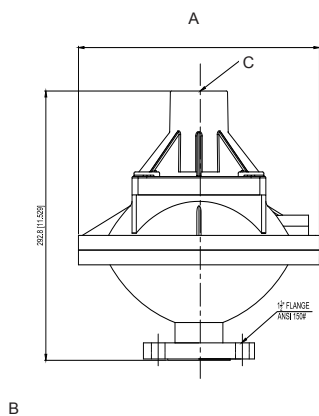
DIMENSION 尺寸	
ITEM	METRIC(MM)
A	143
B	181.1
C	1/4"NPT
R/T	1/2"ANSI

■ TA25 Surge Dampener



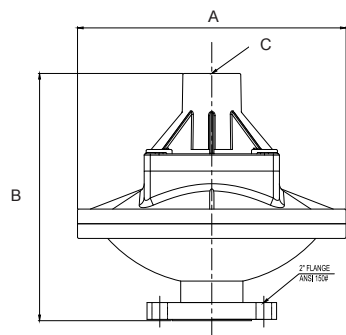
DIMENSION 尺寸	
ITEM	METRIC(MM)
A	203
B	209.3
C	1/2"NPT
R/T	1"ANSI

■ TA40 Surge Dampener



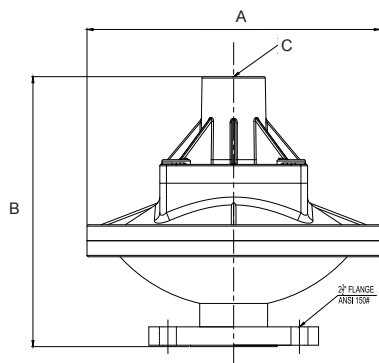
DIMENSION 尺寸	
ITEM	METRIC(MM)
A	282
B	292.8
C	1/2"NPT
R/T	1/2"ANSI

■ TA50 Surge Dampener



DIMENSION尺寸	
ITEM	METRIC(MM)
A	311
B	286.3
C	1/2"NPT
R/T	2"ANSI

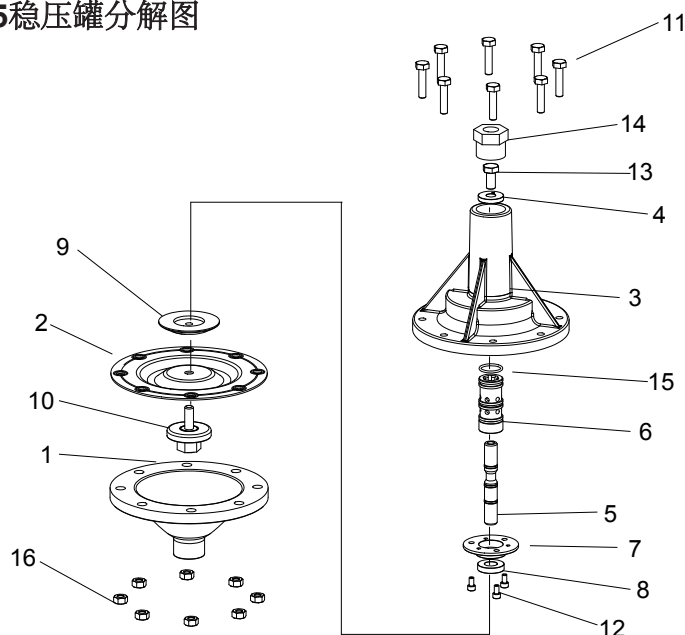
■ TA80 Surge Dampener



DIMENSION尺寸	
ITEM	METRIC(MM)
A	311
B	286.3
C	1/2"NPT
R/T	2-1/2"ANSI

4.1 TA15 Exploded View & Parts List TA15分解图及零件目录

TA15 Surge Dampener Exploded View TA15稳压罐分解图

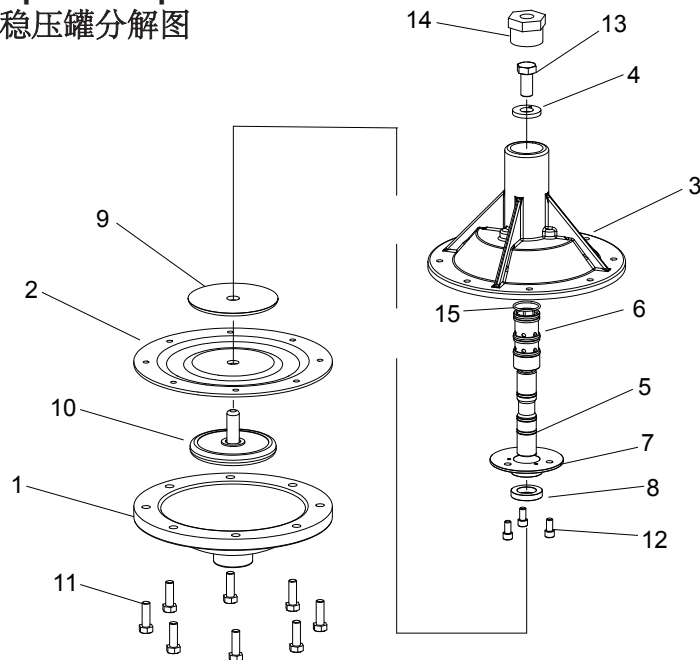


TA15 Parts List TA15零件目录

ITEM项	PART NUMBER零件编号	PART DESCRIPTION零件说明	QTY数量
1	4315.1995	Liquid Chamamber (Cast Iron) 0.5"稳压罐外腔体 铸铁	1
	4315.1990	Liquid Chamamber (304 Stainless Steel) 0.5"稳压罐外腔体 304	
	4315.1993	Liquid Chamamber (316 Stainless Steel) 0.5"稳压罐外腔体 316L	
2	0015.8658	Diaphragm(Santoprene) 0.5"隔膜 三道橡胶	1
	0015.8652	Diaphragm(Neoprene) 0.5"隔膜 氯丁橡胶	
	0015.8654	Diaphragm(Teflon) 0.5"隔膜 特氟龙	
3	4315.3191	Air Chamber 0.5"中间体	1
4	4315.3020	Gasket 0.5"中间轴平垫	1
5	4315.3490	Shaft 0.5"中间轴	1
6	4315.1500	Valve Bushing 0.5"中间轴阀套	1
7	4315.3060	End Cap 0.5"稳压罐挡板	1
8	4315.1610	Check Ring 0.5"挡圈	1
9	0015.3395	Plate Inner Diaphragm (Cast Iron) 0.5"内压板	1
10	0015.3293	Plate Outter Diaphragm (316 Stainless Steel) 0.5"外压板	1
11	1015.7101	Washer (Cast Iron) 0.5"外腔体螺丝	8
	1015.7111	Washer (304 Stainless Steel) 0.5"外腔体螺丝	
12	4315.7211	Socket Hex Bolt 0.5"挡板螺丝	3
13	7315.7311	Bolt 0.5"中间轴螺丝	1
14	4315.2500	Bushing 0.5"稳压罐补心	1
15	4315.1000	"O" Ring 0.5"中间轴阀套O型圈	3

4.2 TA25 Exploded View & Parts List TA25分解图及零件目录

■ TA25 Surge Dampener Exploded View
TA25稳压罐分解图

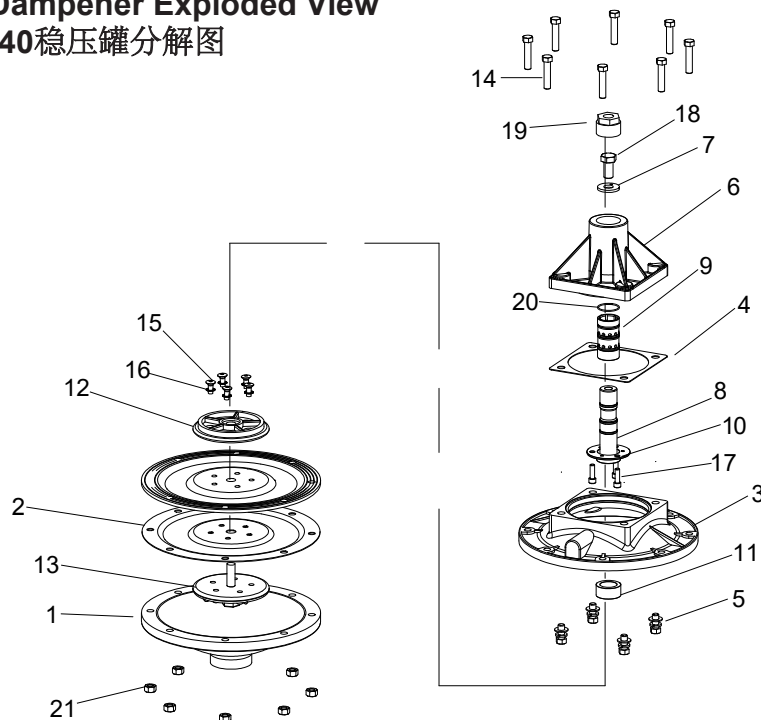


■ TA25 Parts List TA25零件目录

ITEM项	PART NUMBER零件编号	PART DESCRIPTION零件说明	QTY数量
1	4325.1995	Liquid Chamamber (Cast Iron) 1"稳压罐外腔体 铸铁	1
	4325.1990	Liquid Chamamber (304 Stainless Steel) 1"稳压罐外腔体 304不锈钢	
	4325.1993	Liquid Chamamber (316 Stainless Steel) 1"稳压罐外腔体 316L不锈钢	
2	0025.8652	Diaphragm(Santoprene) 1"隔膜 三道橡胶	1
	0025.8658	Diaphragm(Neoprene) 1"隔膜 氯丁橡胶	
	1025.8654	Diaphragm(Teflon) 1"隔膜 特氟龙	
3	4325.3191	Air Chamber 1"中间体	1
4	4325.3020	Gasket 1"中间轴平垫	1
5	4325.3490	Shaft 1"中间轴	1
6	4325.1500	Valve Bushing 1"中间轴阀套	1
7	4325.3060	End Cap 1"稳压罐挡板	1
8	4325.1610	Check Ring 1"挡圈	1
9	1025.3391	Plate Inner Diaphragm (Cast Iron) 1"内压板 铸铁	1
10	1025.3290	Plate Outter Diaphragm (304 Stainless Steel) 1"外压板 304不锈钢	1
	1025.3293	Plate Outter Diaphragm (316 Stainless Steel) 1"外压板 316L不锈钢	
	1025.3295	Plate Outter Diaphragm (Cast Iron) 1"外压板 铸铁	
11	1025.7101	Washer (Cast Iron) 1"外腔体螺丝	8
	1025.7111	Washer (304 Stainless Steel) 1"外腔体螺丝	
12	4325.7211	Socket Hex Bolt 1"挡板螺丝	3
13	4325.7311	Bolt 1"中间轴螺丝	1
14	4325.2500	Bushing 1"稳压罐补心	1
15	4325.1000	"O" Ring 1"中间轴阀套O型圈	3

4.3 TA40 Exploded View & Parts List TA40分解图及零件目录

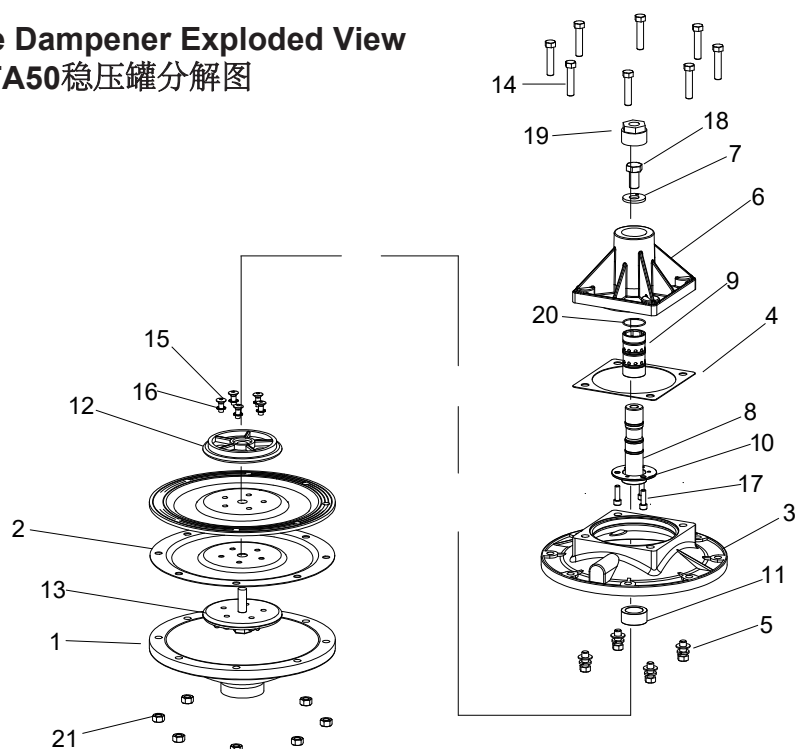
TA40 Surge Dampener Exploded View TA40稳压罐分解图



TA40 Parts List TA40零件目录

ITEM项	PART NUMBER零件编号	PART DESCRIPTION零件说明	QTY数量
1	4340.1995	Fluid Chamber (Aluminium) 1.5"稳压罐外腔体 铝合金	1
	4340.1990	Fluid Chamber (304 Stainless Steel) 1.5"稳压罐外腔体 304不锈钢	
	4340.1993	Fluid Chamber (316L Stainless Steel) 1.5"稳压罐外腔体 316L不锈钢	
2	1040.8668	Diaphragm(Santoprene) 1.5"隔膜 三道橡胶	1
	1040.8662	Diaphragm(Neoprene) 1.5"隔膜 氯丁橡胶	
	1040.8654	Diaphragm(Teflon) 1.5"隔膜 特氟龙	
3	1040.4091	Air Chamber 1.5-2"中间体	1
4	4300.3562	Gasket 1.5-3"中间轴平垫	1
5	1458.7102	Bolt 1.5-3"中间体螺丝	4
6	4300.1591	Air Regulator Body 1.5"中间体	1
7	4300.3020	Washer 1.5-3"中间轴平垫	1
8	4345.3490	Shaft 1.5-3"中间轴	1
9	4300.1500	Valve Bushing 1.5-3"中间轴阀套	1
10	4300.3060	End Cap 1.5-3"稳压罐挡板	1
11	4300.1610	Check Ring 1.5-3"挡圈	1
12	1045.3391	Plate Inner Diaphragm (Aluminium) 1.5-2"内压板 铝合金	1
13	1045.3290	Plate Outer Diaphragm (304) 1.5-2"外压板 304不锈钢	1
	1045.3293	Plate Outer Diaphragm (316L) 1.5-2"外压板 316L不锈钢	
	1045.3295	Plate Outer Diaphragm(Cast Iron) 1.5-2"外压板 铸铁	
14	1045.7101	Bolt (Cast Iron) 1.5-2"外腔体螺丝	8
	1045.7111	Bolt (304 Stainless Steel) 1.5-2"外腔体螺丝	
	1045.7115	Bolt (304 Stainless Steel) 1.5-2"内压板沉头螺钉	
15	1045.7502	Washer (304 Stainless Steel) 1.5-2"内压板沉头螺钉垫片	5
16	4300.7211	Bolt (304 Stainless Steel) 1.5-3"挡板螺钉	3
17	4300.7311	Bolt (304 Stainless Steel) 1.5-3"中间轴螺丝	1
18	4300.2500	Bushing 1.5-3"稳压罐补心 304不锈钢	1
19	4300.1000	"O" Ring 1.5-3"中间轴阀套O型圈	3

TA50 Surge Dampener Exploded View TA50稳压罐分解图

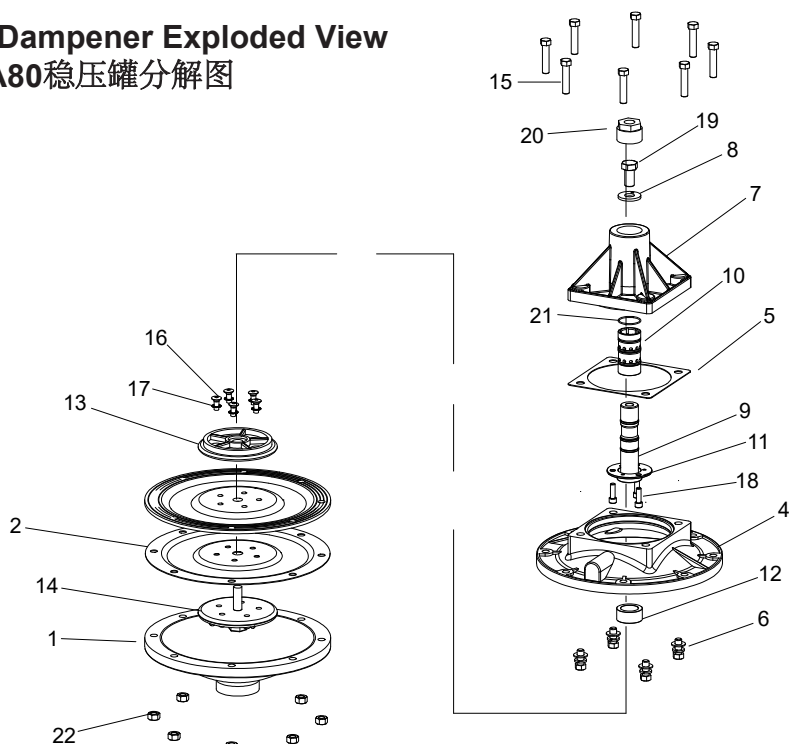


TA50 Parts List TA50零件目录

ITEM项	PART NUMBER零件编号	PART DESCRIPTION零件说明	QTY数量
1	4340.1995	Fluid Chamber (Aluminium) 2"稳压罐外腔体 铝合金	1
	4340.1990	Fluid Chamber (304 Stainless Steel) 2"稳压罐外腔体 304不锈钢	
	4340.1993	Fluid Chamber (316 Stainless Steel) 2"稳压罐外腔体 316L不锈钢	
2	1050.8668	Diaphragm(Santoprene) 2"隔膜 三道橡胶	1
	1050.8662	Diaphragm(Neoprene) 2"隔膜 氯丁橡胶	
	1050.8654	Diaphragm(Teflon) 2"隔膜 特氟龙	
3	1040.4091	Air Chamber 1.5-2"中间体	1
4	4300.3562	Gasket 1.5-3"中间轴平垫	1
5	1458.7102	Bolt 1.5-3"中间体螺丝	4
6	4300.1591	Air Regulator Body 2-3"空气调节器主体	1
7	4300.3020	Washer 1.5-3"中间轴平垫	1
8	4345.3490	Shaft 1.5-3"中间轴	1
9	4300.1500	Bushing 1.5-3"中间轴阀套	1
10	4300.3060	End Cap 1.5-3"稳压罐挡板	1
11	4300.1610	Check Ring 1.5-3"挡圈	1
12	1050.3391	Plate Inner Diaphragm (adc12) 1.5-2"内压板 铸铁	1
13	1050.3290	Plate Outer Diaphragm (304) 1.5-2"外压板 304不锈钢	1
	1050.3293	Plate Outer Diaphragm (316L) 1.5-2"外压板 316L不锈钢	
	1050.3295	Plate Outer Diaphragm (Cast Iron) 1.5-2"外压板 铸铁	
14	1050.7101	Bolt (Cast Iron) 1.5-2"外腔体螺丝	8
	1050.7111	Bolt (304 Stainless Steel) 1.5-2"外腔体螺丝	
15	1050.7115	Bolt (304 Stainless Steel) 1.5-2"内压板沉头螺钉	5
16	1050.7502	Washer (304 Stainless Steel) 1.5-2"内压板沉头螺钉垫片	5
17	4300.7211	Bolt (304 Stainless Steel) 1.5-3"挡板螺钉	3
18	4300.7311	Bolt (304 Stainless Steel) 1.5-3"中间轴螺丝	1
19	4300.2500	Bushing (304 Stainless Steel) 1.5-3"稳压罐补心 304不锈钢	1
20	4300.1000	"O" Ring 1.5-3"中间轴阀套O型圈	3

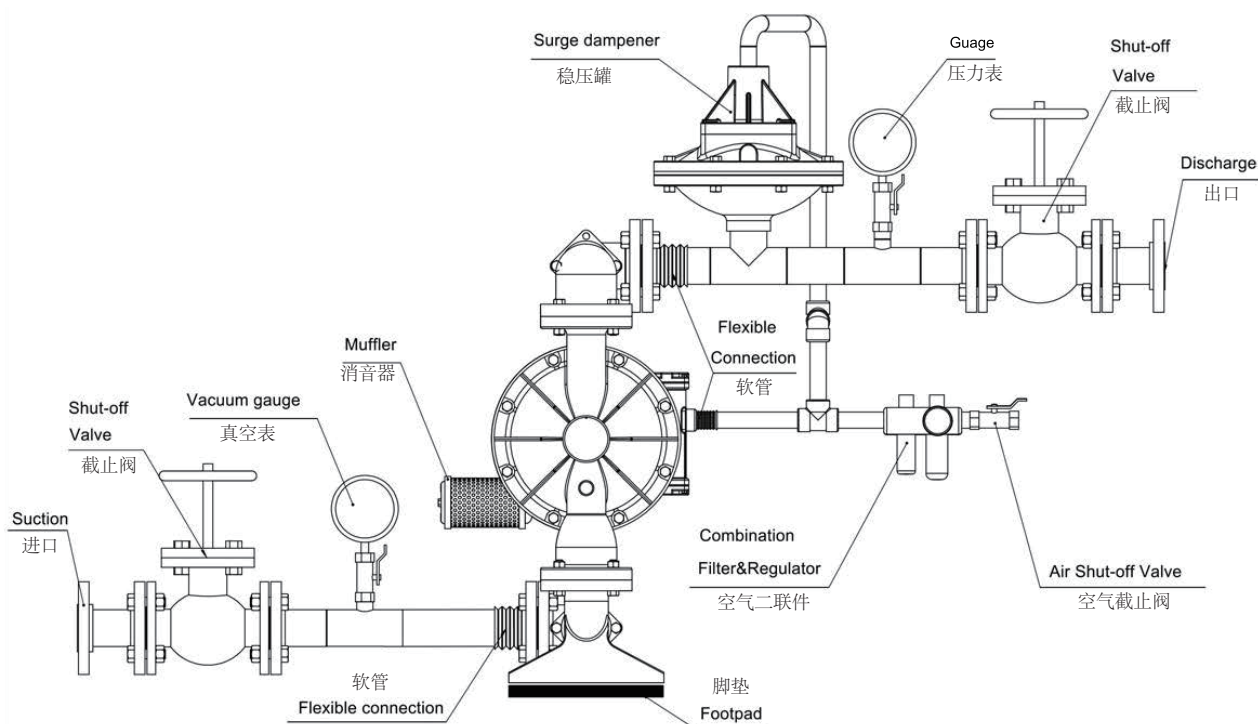
4.5 TA80 Exploded View & Parts List TA80分解图及零件目录

TA80 Surge Dampener Exploded View TA80稳压罐分解图



TA80 Parts List

ITEM项	PART NUMBER零件编号	PART DESCRIPTION零件说明	QTY数量
1	4380.1995	Fluid Chamber (Aluminium) 3"稳压罐外腔体 铝合金	1
	4380.1990	Fluid Chamber (304) 3"稳压罐外腔体 304不锈钢	
	4380.1993	Fluid Chamber (316L) 3"稳压罐外腔体 316L不锈钢	
2	1080.8668	Diaphragm(Santoprene) 3"隔膜 三道橡胶	1
	1080.8662	Diaphragm(Neoprene) 3"隔膜 氯丁橡胶	
	1080.8654	Diaphragm(Teflon) 3"隔膜 特氟龙	
4	1080.4091	Air Chamber 3"中间体	1
5	4300.3562	Gasket 1.5-3"中间轴平垫	1
6	1458.7102	Bolt 1.5-3"中间体螺丝	4
7	4300.1591	Air Regulator Body 2-3"空气调节器主体	1
8	4300.3020	Washer 1.5-3"中间轴平垫	1
9	4345.3490	Shaft 1.5-3"中间轴	1
10	4300.1500	Bushing 1.5-3"中间轴阀套	1
11	4300.3060	End Cap 1.5-3"稳压罐挡板	1
12	4300.1610	Check Ring 1.5-3"挡圈	1
13	1080.3391	Plate Inner Diaphragm (Aluminium) 3"内压板 铝合金	1
14	1080.3290	Plate Outer Diaphragm (304) 3"外压板 304不锈钢	1
	1080.3293	Plate Outer Diaphragm (316L) 3"外压板 304不锈钢	
	1080.3295	Plate Outer Diaphragm (Cast Iron) 3"外压板 304不锈钢	
15	1080.7101	Bolt (Cast Iron) 3"外腔体螺丝	8
	1080.7111	Bolt (304 Stainless Steel) 3"外腔体螺丝	
16	1080.7115	Bolt (304 Stainless Steel) 3"内压板沉头螺钉	5
17	1080.7502	Washer (304 Stainless Steel) 3"内压板沉头螺钉垫片	5
18	4300.7211	Bolt (304 Stainless Steel) 1.5-3"挡板螺钉	3
19	4300.7311	Bolt (304 Stainless Steel) 1.5-3"中间轴螺丝	1
20	4300.2500	Bushing (304 Stainless Steel) 1.5-3"稳压罐补心 304不锈钢	1
21	4300.1000	"O" Ring 1.5-3"中间轴阀套O型圈	3



Install the dampener as shown above. The use of flexible connections and a Filter, regulator, Lubricator (FrL) will extend parts life on the. Shut-off valves on the suction side of pump and the discharge side of dampener will enable maintenance personnel to safely service the equipment. To maximize effectiveness install the dampener as close as possible to the discharge of the pump.

如上所示安装稳压罐。灵活的连接以及过滤器，调节器，润滑器（FrL）的使用将延长零件的使用寿命。泵的吸入侧和稳压罐的排出侧的截止阀将使维护人员能够安全地维修设备。为了最大程度地发挥作用，将稳压罐安装在尽可能靠近泵出口的位置。

It is important to support the pipe immediately downstream from the dampener. use a tee connector on the pump air supply line and connect the line to the dampener regulator body. This tee connector should be installed after the FrL. The dampener consumes very little air, therefore, a 1/4" hose is more than adequate to supply enough air volume. When the air supply to the pump is shut down, the air to the dampener will be shut off as well.

重要的是要在稳压罐的下游直接支撑管道。在泵供气管路上使用三通接头，然后将管路连接至稳压罐调节器主体。此T型连接器应在润滑器之后安装。稳压罐消耗的空气很少，因此，1/4英寸的软管足以提供足够的空气量。当关闭泵的空气供应时，将关闭稳压罐的供气。

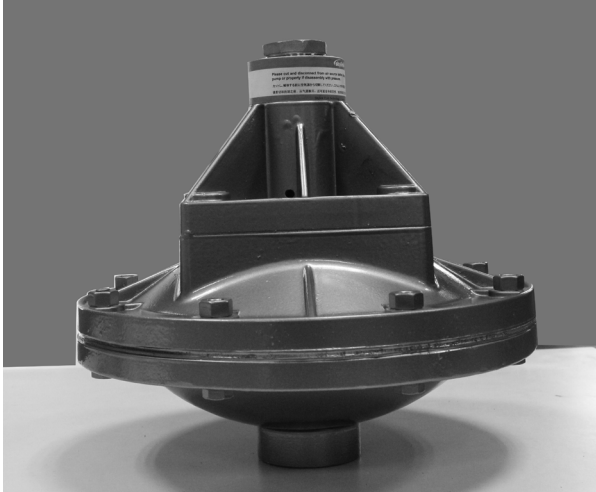


Figure 1



Figure 2

Remove reducer bushing at top
of regulator
拆下调压器顶部的稳压罐补心

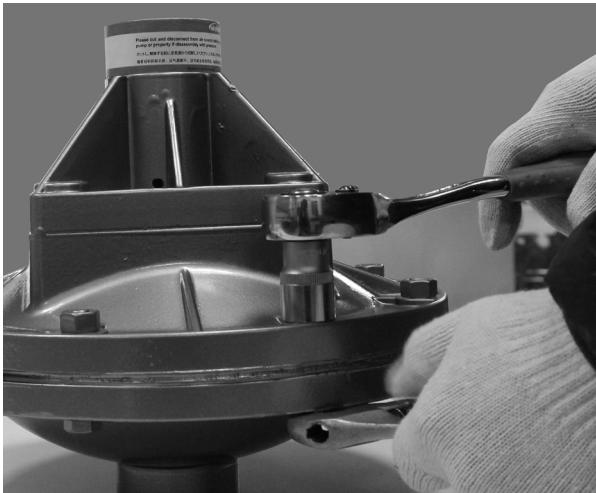


Figure 3

Remove all bolts around dampener
卸下稳压罐周围的所有螺栓



Figure 4

Set Liquid chamber aside
将流体室放至一边

SECTION 6

Disassembly 拆卸



Figure 5

Loosen shaft assembly by using adjustable wrench on plate
使用活动扳手松开轴组件

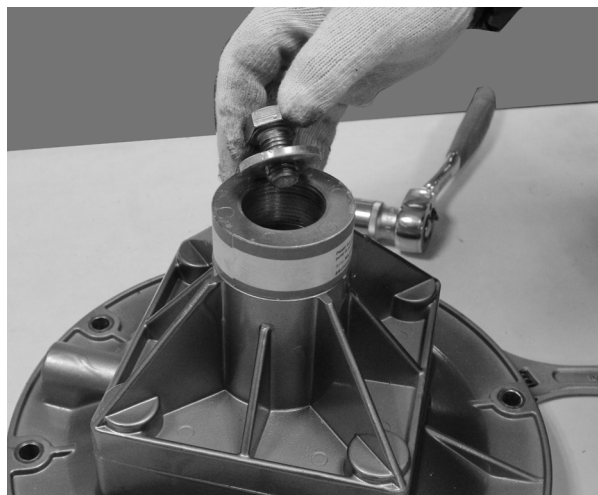


Figure 6

Remove bolt on the shaft
拆下轴上的螺栓



Figure 7

Set Diaphragm assembly aside
将膜片组件放在一旁



Figure 8

Screw out three sockets bolts on shaft assembly
拧下挡板上的三个内六角螺钉



Figure 3

Remove end cup
取下挡板



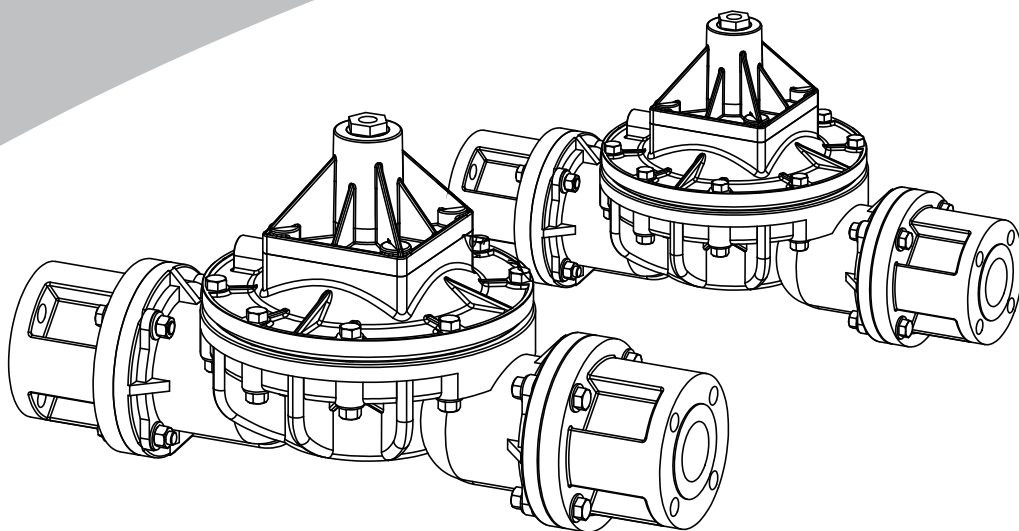
Figure 3

Remove valve bushing
拆下阀套



Specialist in Fluid Transfer
致力于流体输送

SKY-SK-E-03-2015



INSTRUCTIONS
操作指南

This manual contains warnings and caution.

本手册包含警告和注意事项

READ AND RETAIN FOR REFERENCE

阅读和保留以供参考

TP SERIES

TP15
TP25
TP40
TP50
TA65

**Operation and
Maintenance Manual**
操作维护手册



Surge Dampener 稳压罐

⚠ IMPORTANT 重要

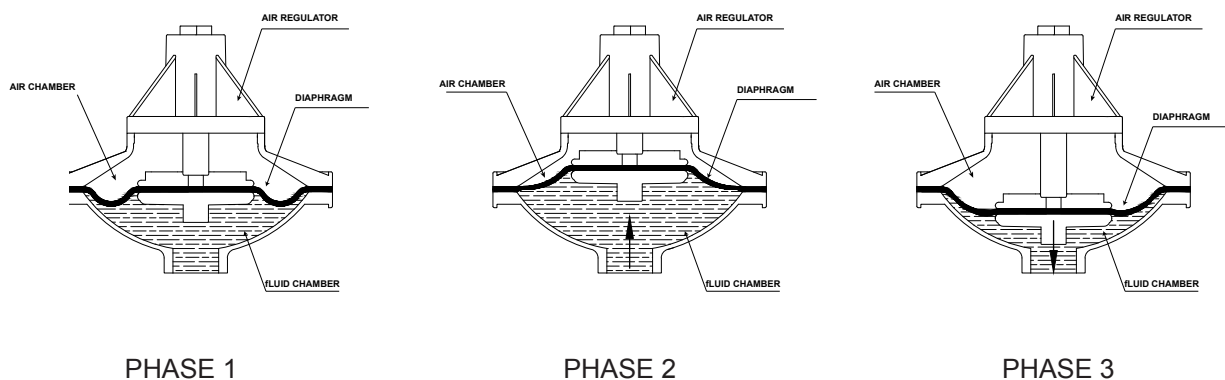
- Do not over-lubricate air supply — excess lubrication will reduce performance.
不要过度润滑空气供应——过度润滑会降低其性能。
- Do not exceed 8.6 bar (125 psig) air supply pressure.
供气压力不得超过8.6 bar (125 psig)
- When choosing dampener materials, be sure to check the temperature limits for all wetted components. Example: Viton has a maximum limit of 177°C (350°F) but polypropylene has a maximum limit of only 79°C (175°F).
选择稳压罐材料时，务必检查所有浸湿部件的温度限制。示例：氟橡胶的最大限值为177°C (350°F)，而聚丙烯的最大限值仅为79°C (175°F)。
- Maximum temperature limits are based upon mechanical stress only. Certain chemicals will significantly reduce maximum safe operating temperatures. Consult Chemical resistance guide for chemical compatibility and temperature limits.
最高温度限值仅基于机械应力。某些化学品会显著降低最高安全工作温度。有关化学兼容性和温度限制，请参阅耐化学性指南。
- Prevent static sparking. If static sparking occurs, explosion could result. dampener, pump, valves and containers must be grounded to a proper grounding point when handling flammable fluids and whenever discharge of static electricity is a hazard.
防止静电火花。如果发生静电火花，可能导致爆炸。在处理易燃液体和静电排放有危险时，稳压罐、泵、阀门和容器必须到适当的接地点正确接地。

⚠ WARNING 警告

- When used for toxic or aggressive fluids, the dampener should always be flushed clean prior to disassembly. 当用于有毒或腐蚀性流体时，稳压罐在拆卸前应冲洗干净。
- Always wear safety glasses when operating dampener. If diaphragm rupture occurs, process fluid may be forced out air exhaust.
操作稳压罐时，请务必戴安全眼镜。如果发生隔膜破裂，则可能会将流体材料排出空气。
- Before any maintenance or repair is attempted, the compressed air line to the dampener and pump should be disconnected and all air pressure allowed to bleed from the system. Disconnect all intake, discharge and air lines. Drain the dampener by allowing any fluid to flow into a suitable container.
在进行任何维护或维修之前，应断开连接到稳压罐和泵的压缩空气管路，并允许所有空气压力从系统中排出。断开所有进气管、排气管和空气管。通过让任何液体流入适当的容器来排空稳压罐。
- Blow out air line for 10 to 20 seconds before attaching to dampener to make sure all pipeline debris is clear. use an in-line air filter. A 5μ (micron) air filter is recommended.
吹扫空气管路10到20秒钟，然后再将其固定在稳压罐上，以确保清除所有管道碎屑。使用排列式空气过滤器。建议使用5 μm (微米) 的空气过滤器。
- Dampeners cannot be used in submersible applications.
稳压罐不能作潜水应用。

All reciprocating pumps experience a pressure fluctuation. The dampener minimizes unwanted pressure fluctuation by providing a supplementary pumping action. This is accomplished by using a diaphragm as a separation membrane within the dampener to trap a given volume of liquid on one side and pressurized air on the other. When the fluid pressure falls in the system, the dampener supplies additional pressure to the discharge line between pump strokes by displacing fluid via diaphragm movement. This movement provides the supplementary pumping action needed to virtually eliminate pressure variation and pulsation.

所有往复泵都会经历压力波动。稳压罐通过提供补充的泵送作用，将不必要的压力波动降至最低。这是通过使用隔膜作为稳压罐内的分离膜来实现的，将一侧的给定体积的液体捕获，而另一侧的是压缩空气，以实现隔离。当系统中的流体压力下降时，稳压罐通过膜片运动来排出流体，从而在泵冲程之间向排出管路提供额外的压力。该运动提供了从根本上消除压力变化和脉动所需的辅助泵送作用。



The dampener automatically sets and maintains the correct air pressure matching the variations in liquid flow or discharge pressure generated by the pump. A shaft attached to the dampener diaphragm triggers the addition or deletion of the air within the non-wetted side of the dampener. The dampener automatically adjusts to any pressure and/or flow setting of the pump with no need for manual adjustment of the unit and/or system. The dampener has proven to be the cost effective choice for protecting your liquid process system from unwanted pulsation or pressure fluctuation. Contact your local Skylink distributor for further information on the dampener and other pumping solutions.

稳压罐会自动设置并保持正确的气压，以匹配泵产生的液体流量或排出压力的变化。附在稳压罐膜片上的轴触发稳压罐非湿润侧内的空气添加或减少。稳压罐可自动调节至泵的任何压力或流量设置，而无需手动调节装置或系统。事实证明，该阻尼器是保护您的液体处理系统免受不必要的脉动或压力波动影响的经济有效选择。请与当地的斯凯力分销商联系，以获取有关稳压罐和其他泵送解决方案的更多信息。

A compressed air line attached to the air regulator body sets and maintains pressure on the air side of the diaphragm. As the reciprocating pump begins its stroke, liquid discharge pressure increases which flexes the dampener diaphragm inward. This action accumulates fluid in the liquid chamber (see Phase 2).

固定在空气调节器主体上的压缩空气管线会固定并保持隔膜的空气侧压力。当往复泵开始其冲程时，液体排出压力增加，从而使稳压罐隔膜向内弯曲。此动作会在液体腔室中积聚液体（请参阅阶段2）。

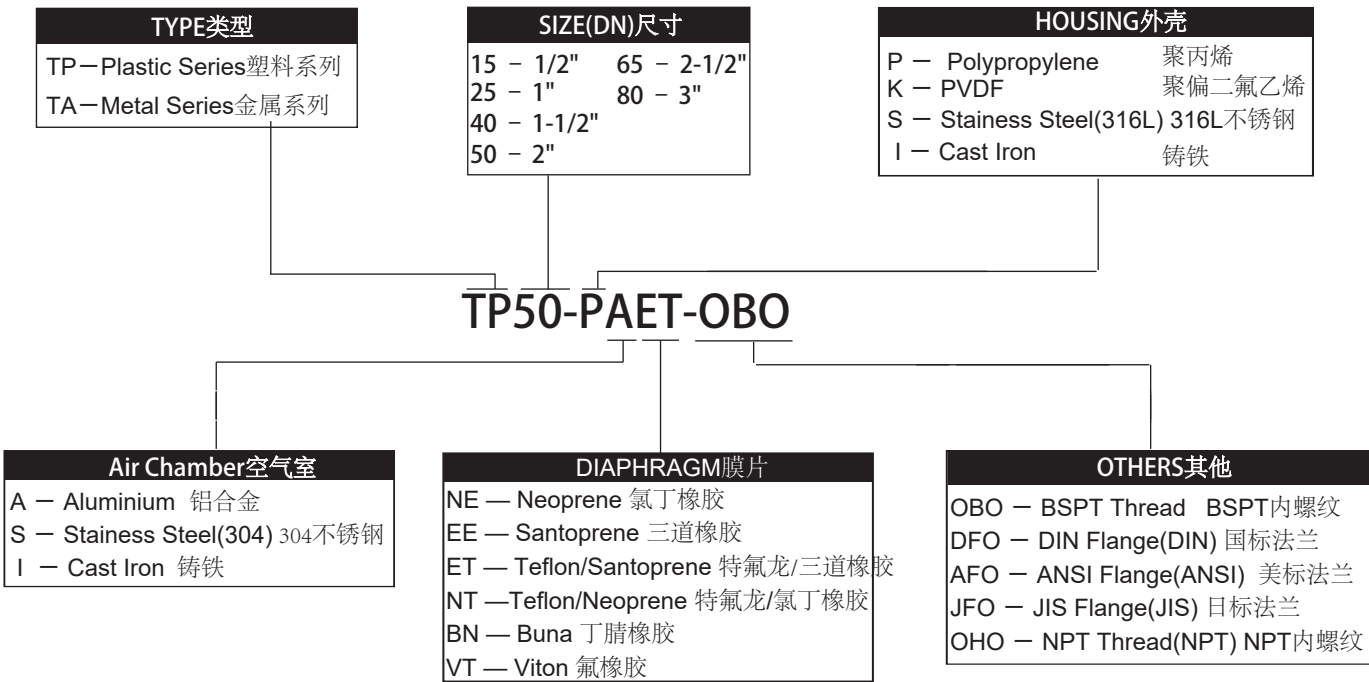
When the pump redirects its motion upon stroke completion, the liquid discharge pressure decreases and compressed air in the air side forces the dampener diaphragm to flex outward displacing the fluid into the discharge line (see Phase 3). This motion provides the supplementary pumping action needed to minimize pressure fluctuation.

当泵在冲程完成后改变其运动方向时，液体排出压力降低，空气侧的压缩空气迫使阻尼器隔膜向外弯曲，从而将流体排入排出管线（请参阅阶段3）。该运动提供了使压力波动最小化所需的辅助泵送作用。

How to Order如何命名

The model number of all surge dampeners consists of six alphanumeric clusters. These designate product type, size and material, and inlet/outlet type.
所有稳压罐的型号由六个字母或数字集群组成。这些指定产品类型、尺寸和材料以及进出口类型。

Please refer to the charts below for an example of model number TP50-PAET-OB0. This is a plastic dampener, 2" size, polypropylene fluid chamber,aluminium air chamber, teflon/santoprene diaphragm, and BSPT thread.
关于型号TP50-PAET-OB0的示例，请参考下表。这是一个塑料稳压罐，2寸，聚丙烯流体室，铝空气室，聚四氟乙烯/三道橡胶隔膜和BSPT内螺纹。



Chemical Properties are as follows 化学特性如下:

Materials 材质	Chemical Properties 化学特性
Virgin PTFE 聚四氟乙烯	Chemically inert, virtually impervious. Very few chemicals are known to chemically react with PTFE; molten alkali metals, turbulent liquid or gaseous fluorine and few fluorochemicals such as chlorine trifluoride or oxygen difluoride with ready liberate free fluorine at elevated temperatures. 化学惰性，几乎完全不透水。很少有化学品可以与聚四氟乙烯发生化学反应；熔融的碱性金属、湍流液体或气态氟，以及一些在温度升高时易释放的游离氟的氟代化学物质，如三氟化氯或二氟化氧等会迅速腐蚀聚四氟乙烯。
Santoprene 三道橡胶	Injection molded thermoplastic elastomer with no fabric layer, Long mechanical flex life. Excellent abrasion resistance. 注塑成型的热塑性弹性体，无织物层，机械弯曲寿命长。具有优异的耐磨性。
Neoprene 氯丁橡胶	All purpose, Resistant to vegetable oil. Generally not affected by moderate chemicals, fats, greases and many oils and solvents. Generally attacked by strong oxidizing acids, ketones, esters, nitro hydrocarbons and chlorinated aromatic hydrocarbons. 用途广泛，耐植物油。一般不受温和的化学品、脂肪、油脂和许多油和溶剂的影响。通常会受到强氧化酸、酮类、酯类、硝基烃和氯代芳烃的腐蚀。
Buna 丁腈橡胶	General purpose, oil-resistant. Shows good solvent, oil, water and hydraulic fluid resistance. Should not be used with highly polar solvents like acetone and MEK, ozone, chlorinated hydrocarbons and nitro hydrocarbons. 通用，抗油性。具有良好的耐溶剂、油、水和液压特性。不可与强极性溶剂如丙酮和丁酮、臭氧、氯化烃和硝基烃等一起使用。
Viton 氟橡胶	Shows good resistance to a wide range of oils and solvents; especially all aliphatic, aromatic and halogenated hydrocarbons, acids, animal and vegetable oils. 对各种油和溶剂具有良好的抗性，尤其是所有脂肪族、芳香族和卤代烃、酸、动物和植物油。
PVDF 聚偏二氟乙烯	A durable fluoroplastic with excellent chemical resistance. Excellent for UV applications. High tensile strength and resistance. 一种耐用的氟塑料，具有优异的耐化学性，在UV应用方面是最佳选择，具有高拉伸强度和耐冲击性。
Polypropylene 聚丙烯	Thermoplastic polymer. Moderate tensile and flex strength. Resists strong acids and alkalis. Attacked by chlorine, fuming nitric acid and other strong oxidizing agents. 热塑性聚合物。中等拉伸强度和抗弯强度。抗强酸和强碱。易受氯气、发烟硝酸及其他强氧化剂的侵蚀。
Alloy C 合金C	Equal to ASTM494 CW-12M-1 specification for nickel and nickel alloy. 相当于ASTM494 CW-12M-1规格的镍和镍合金。
EPDM 三元乙丙橡胶	Shows very good water and chemical resistance. Has poor resistance to oil and solvents, but is fair in ketones and alcohols. 表现出很好的耐水性和耐化学性，对油和溶剂耐受性差。但在酮和醚中性质不变。
Stainless steel 不锈钢	Equal to exceeding ASTM specification A743CF-BW for corrosion resistant iron chromium, iron chromium nickel, and nickel based alloy castings for general applications. Commonly referred to as 316 Stainless Steel in the pump industry. 相当于或超过ASTM规范A743CF-BW，适用于一般用途的耐腐蚀的铬铁、铁铬镍和镍基合金铸件。泵行业通常称为316不锈钢。

For specific applications, you can contact us 其他特殊应用请联系我司。

SECTION 3

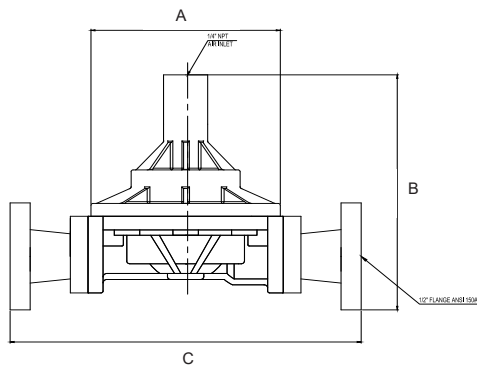
3.3 Temperature limitations 温度极限

Operating temperature limitations are as follows 工作温度极限如下:

Materials 材质	Maximum 最高	Minimum 最低
Virgin PTFE 聚四氟乙烯	220°F 104°C	-35 °F -37°C
Santoprene 三道橡胶	225 °F 107°C	-10 °F -23°C
Neoprene 氯丁橡胶	177°F 77°C	-10 °F -23°C
Buna 丁腈橡胶	190 °F 88°C	-10 °F -23°C
Viton 氟橡胶	350 °F 177°C	-40 °F -40°C
PVDF 聚偏二氟乙烯	250 °F 121°C	0 °F -18°C
Polypropylene 聚丙烯	150°F 66°C	32 °F 0°C
EPDM 三元乙丙橡胶	280 °F 138°C	-40 °F -40°C
Alloy C 合金C	-	-
Stainless steel 不锈钢	-	-

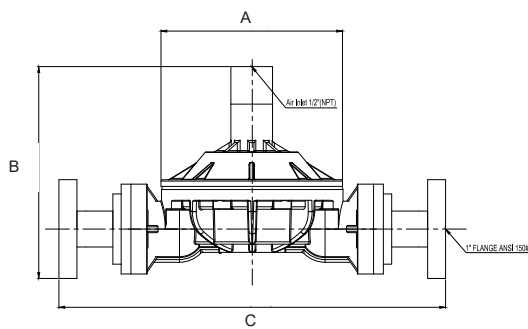
For specific applications, you can contact us 其他特殊应用请联系我司。

TP15 Surge Dampener



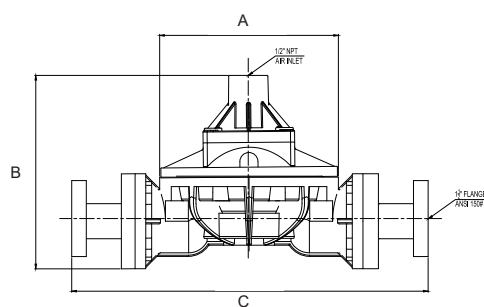
DIMENSION	
ITEM	METRIC(MM)
A	141.5
B	197.7
C	262.4
R/T	1/2"ANSI

TP25 Surge Dampener



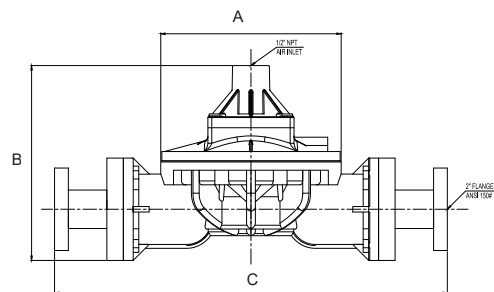
DIMENSION	
ITEM	METRIC(MM)
A	202
B	235.8
C	430.3
R/T	1"ANSI

TP40 Surge Dampener



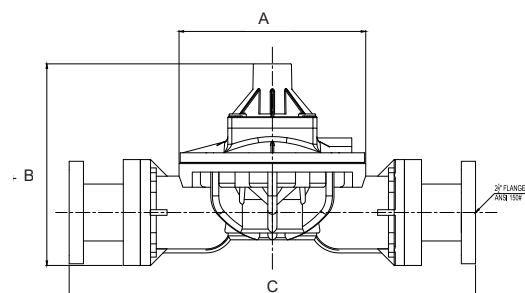
DIMENSION	
ITEM	METRIC(MM)
A	305.8
B	330.9
C	609.8
R/T	1/2"ANSI

■ TP50 Surge Dampener



DIMENSION	
ITEM	METRIC(MM)
A	328
B	354.2
C	714
R/T	2"ANSI

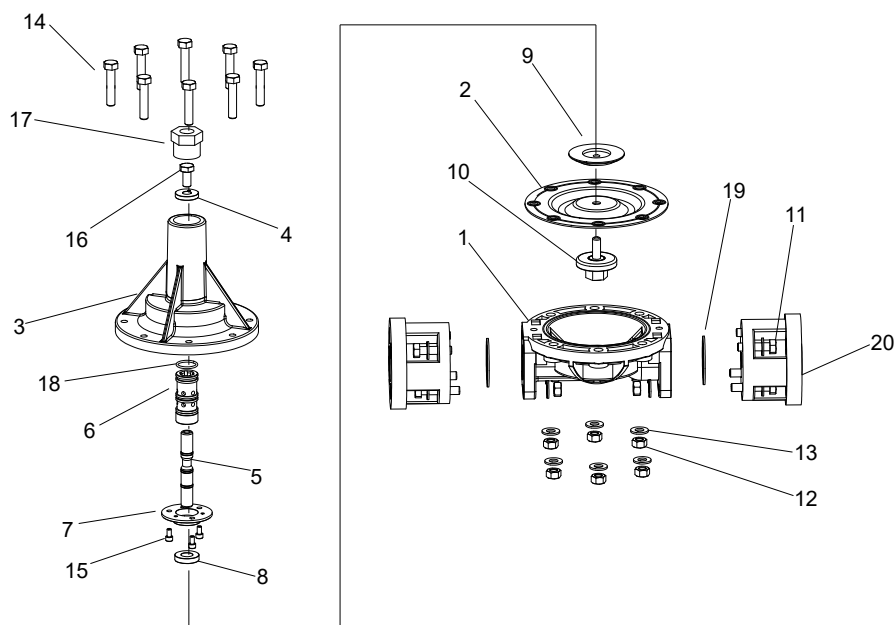
■ TP65 Surge Dampener



DIMENSION	
ITEM	METRIC(MM)
A	328
B	354.2
C	714
R/T	2 1/2"ANSI

4.1 TP15 Exploded View & Parts List TP15分解图及零件目录

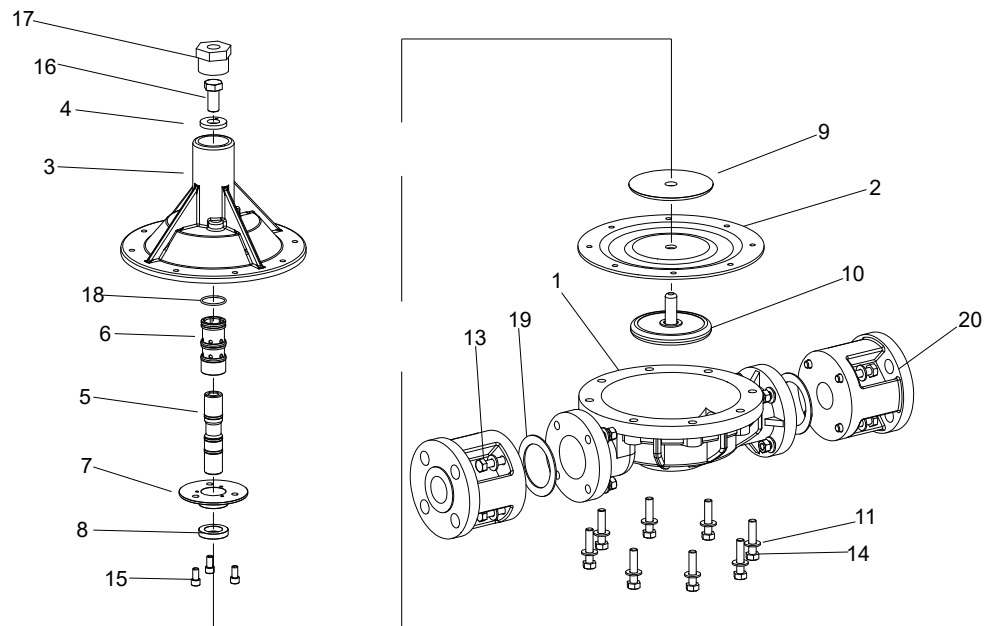
TP15 Surge Dampener Exploded View TP15 稳压罐分解图



TP15 Parts List TP15零件目录

ITEM项	PART NUMBER零件编号	PART DESCRIPTION零件说明	QTY数量
1	0015.1995	Liquid Chamber (PVDF) 0.5"稳压罐外腔体 聚偏二氟乙烯	1
	0015.1994	Liquid Chamber (PP) 0.5"稳压罐外腔体 聚丙烯	
2	0015.8658	Diaphragm(SP) 0.5"隔膜 三道橡胶	1
	0015.8654	Diaphragm(PTFE) 0.5"隔膜 特氟龙	
3	4315.3191	Air Chamber 0.5"中间体	1
4	4315.3020	Flat Washer 0.5"中间轴平垫	1
5	4315.3490	Shaft 0.5"中间轴	1
6	4315.4300	Valve Bushing 0.5"中间轴阀套	1
7	4315.3060	End Cap 0.5"稳压罐挡板	1
8	4315.1610	Check Ring 0.5"挡圈	1
9	0015.3395	Plate Inner Diaphragm (Cast Iron) 0.5"内压板 铸铁	1
10	0015.3295	Plate Outer Diaphragm(PVDF) 0.5"外压板 聚偏二氟乙烯	1
	0015.3294	Plate Outer Diaphragm(PP) 0.5"外压板 聚丙烯	
11	4315.7611	Bolt 0.5"连接头螺栓	4
12	4315.7521	Nut 六角螺母	10
13	4315.7632	Washer 平垫	24
14	4315.7511	Bolt 0.5"外腔体螺丝	8
15	4315.7211	Socket Hex Bolt 0.5"挡板螺丝	3
16	4315.7311	Bolt 0.5"中间轴螺丝	1
17	4315.1500	Bushing 0.5"稳压罐补心	1
18	4315.1000	"O" Ring 0.5"中间轴阀套O型圈	3
19	4315.6654	Gasket 连接头密封圈	2
20	4315.1694	Adapter (PP) 连接头 聚丙烯	2
	4315.1696	Adapter (PVDF) 连接头 聚偏二氟乙烯	

TP25 Surge DampenerExploded View
TP25 稳压罐分解图



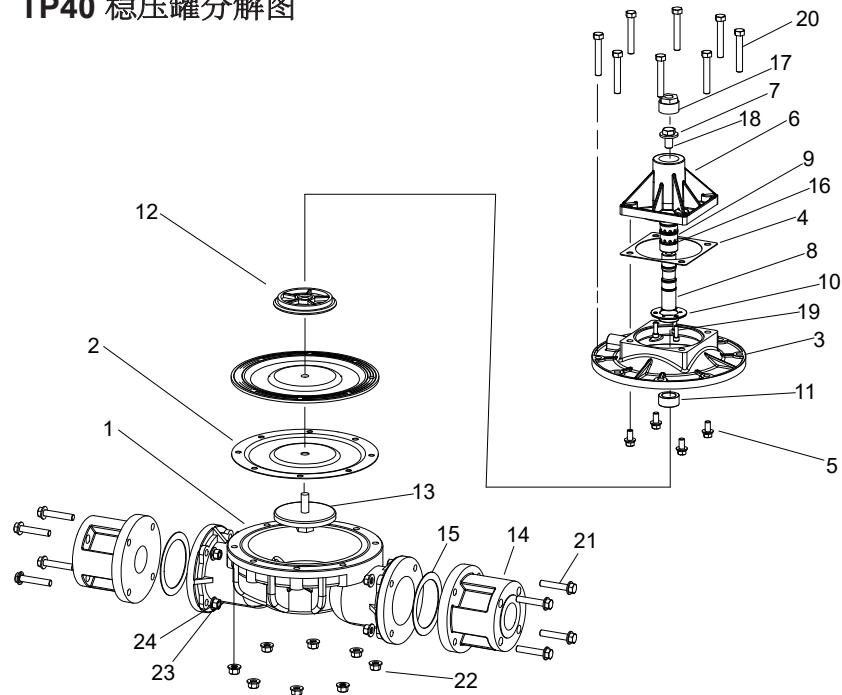
TP25 Parts List TP25零件目录

ITEM项	PART NUMBER零件编号	PART DESCRIPTION零件说明	QTY数量
1	0025.1995	Liquid Chamber (PVDF) 1"稳压罐外腔体 聚偏二氟乙烯	1
	0025.1994	Liquid Chamber (PP) 1"稳压罐外腔体 聚丙烯	
2	0025.8758	Diaphragm (SP) 1"隔膜 三道橡胶	1
	0025.8754	Diaphragm (PTFE) 1"隔膜 特氟龙	
3	4325.3191	Air Chamber 1"中间体	1
4	4325.3020	Flat Washer 1"中间轴平垫	1
5	4325.3490	Shaft 1"中间轴	1
6	4325.1500	Valve Bushing 1"中间轴阀套	1
7	4325.3060	End Cap 1"稳压罐挡板	1
8	4325.1610	Check Ring 1"挡圈	1
9	0025.3391	Plate Inner Diaphragm (Cast Iron) 1"内压板 铸铁	1
10	0025.3295	Plate Outter Diaphragm (PVDF) 1"外压板 聚偏二氟乙烯	1
	0025.3294	Plate Outter Diaphragm (PP) 1"外压板 聚丙烯	
11	4325.7632	Washer 平垫	16
12	4325.7521	Nut 六角螺母	8
13	4325.7611	Bolt 1"连接头螺栓	8
14	4325.7511	Bolt 1"外腔体螺丝	8
15	4325.7211	Socket Hex Bolt 1"挡板螺丝	3
16	4325.7311	Bolt 1"中间轴螺丝	1
17	4325.2500	Bushing 1"稳压罐补心	1
18	4325.1000	"O" Ring 1"中间轴阀套O型圈	3
19	4325.6654	Gasket 连接头密封圈	2
20	4325.1694	Adapter (PP) 连接头 聚丙烯	2
	4325.1696	Adapter (PVDF) 连接头 聚偏二氟乙烯	

4.3 TP40 Exploded View & Parts List TP40分解图及零件目录

■ TP40 Surge Dampener Exploded view

TP40 稳压罐分解图



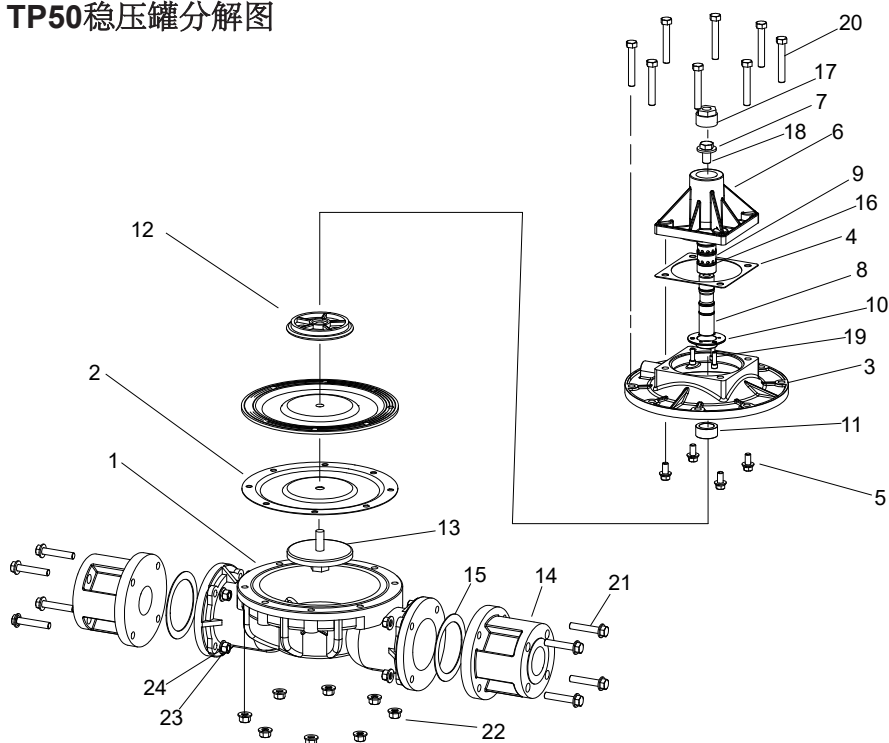
■ TP40 Parts List TP40零件目录

ITEM项	PART NUMBER零件编号	PART DESCRIPTION零件说明	QTY数量
1	0040.1995	Liquid Chamber (PVDF) 1.5"稳压罐外腔体 聚偏二氟乙烯	1
	0040.1994	Liquid Chamber (PP) 1.5"稳压罐外腔体 聚丙烯	
2	0040.8758	Diaphragm 1.5"隔膜 三道橡胶	1
	0040.8754	Diaphragm 1.5"隔膜 特氟龙	
3	1040.4091	Air Chamber 1.5"中间体	1
4	4300.3652	Gasket 1.5-3"中间轴平垫	1
5	1458.7102	Bolt/Washer 1.5-3"中间体螺丝	4
6	4300.1591	Air Regulator Body 1.5"中间体	1
7	4300.3020	Washer 1.5-3"中间轴平垫	1
8	4345.3490	Shaft 1.5-3"中间轴	1
9	4300.1500	Valve Bushing 1.5-3"中间轴阀套	1
10	4300.3060	End Cap 1.5-3"稳压罐挡板	1
11	4300.1610	Check Ring 1.5-3"挡圈	1
12	0450.3391	Plate Inner Diaphragm (Cast Iron) 1.5-2"内压板 铸铁	1
13	0450.3295	Plate Outer Diaphragm(PVDF) 1.5-2"外压板 聚偏二氟乙烯	1
	0450.3294	Plate Outer Diaphragm(PP) 1.5-2"外压板 聚丙烯	
14	4340.1694	Adapter (PP) 连接头 聚丙烯	2
	4340.1695	Adapter (PVDF) 连接头 聚偏二氟乙烯	
15	4340.6654	Gasket 连接头密封圈	2
16	4300.1000	"O"Ring 1.5-3"中间轴阀套O型圈	3
17	4300.2500	Bushing 1.5-3"稳压罐补心 304不锈钢	1
18	4300.7311	Bolt 1.5-3"中间轴螺丝	1
19	4300.7211	Socket Hex Bolt 1.5-3"挡板螺钉	3
20	4325.7511	Bolt 1.5-2"外腔体螺丝	8
21	4340.7611	Bolt 连接头螺丝	8
22	4345.7421	Nut 外腔体六角螺母	8
23	4345.7521	Nut 连接头六角螺母	8
24	4345.7632	Washer 平垫	16

SECTION 4

4.4 TP50 Exploded View & Parts List TP50分解图及零件目录

■ TP50 Surge Dampener Exploded view
TP50稳压罐分解图

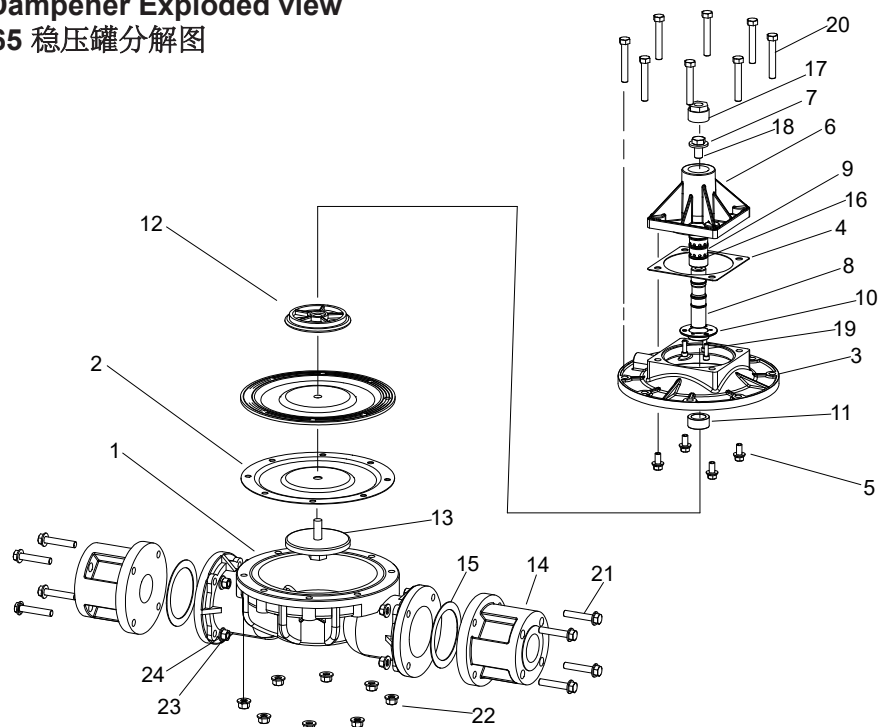


■ TP50 Parts List TP50零件目录

ITEM项	PART NUMBER零件编号	PART DESCRIPTION零件说明	QTY数量
1	0040.1995	Liquid Chamber (PVDF) 2"稳压罐外腔体 聚偏二氟乙烯	1
	0040.1994	Liquid Chamber (PP) 2"稳压罐外腔体 聚丙烯	
2	0040.8758	Diaphragm 2"隔膜 三道橡胶	1
	0040.8754	Diaphragm 2"隔膜 特氟龙	
3	1040.4091	Air Chamber 1.5-2"中间体	1
4	4300.8652	Gasket 1.5-3"中间轴平垫	1
5	1458.7102	Bolt/Washer 1.5-3"中间体螺丝	4
6	4300.1591	Air Regulator Body 2-3"空气调节器主体	1
7	4300.3020	Washer 1.5-3"中间轴平垫	1
8	4345.3490	Shaft 1.5-3"中间轴	1
9	4300.1500	Valve Bushing 1.5-3"中间轴阀套	1
10	4300.3060	End Cap 1.5-3"稳压罐挡板	1
11	4300.1610	Check Ring 1.5-3"挡圈	1
12	0450.3391	Plate Inner Diaphragm (Cast Iron) 1.5-2"内压板 铸铁	1
13	0450.3295	Plate Outer Diaphragm(PVDF) 1.5-2"外压板 聚偏二氟乙烯	1
	0450.3294	Plate Outer Diaphragm(PP) 1.5-2"外压板 聚丙烯	
14	4340.1694	Adapter (PP) 连接头 聚丙烯	2
	4340.1695	Adapter (PVDF) 连接头 聚偏二氟乙烯	
15	4340.6654	Gasket 连接头密封圈	2
16	4300.1000	"O"Ring 1.5-3"中间轴阀套O型圈	3
17	4300.2500	Bushing 1.5-3"稳压罐补心 304不锈钢	1
18	4300.7311	Bolt 1.5-3"中间轴螺丝	1
19	4300.7211	Socket Hex Bolt 1.5-3"挡板螺钉	3
20	4325.7511	Bolt 外腔体螺丝	8
21	4340.7611	Bolt 连接头螺丝	8
22	4345.7421	Nut 外腔体六角螺母	8
23	4345.7521	Nut 连接头六角螺母	8
24	4345.7632	Washer 平垫	16

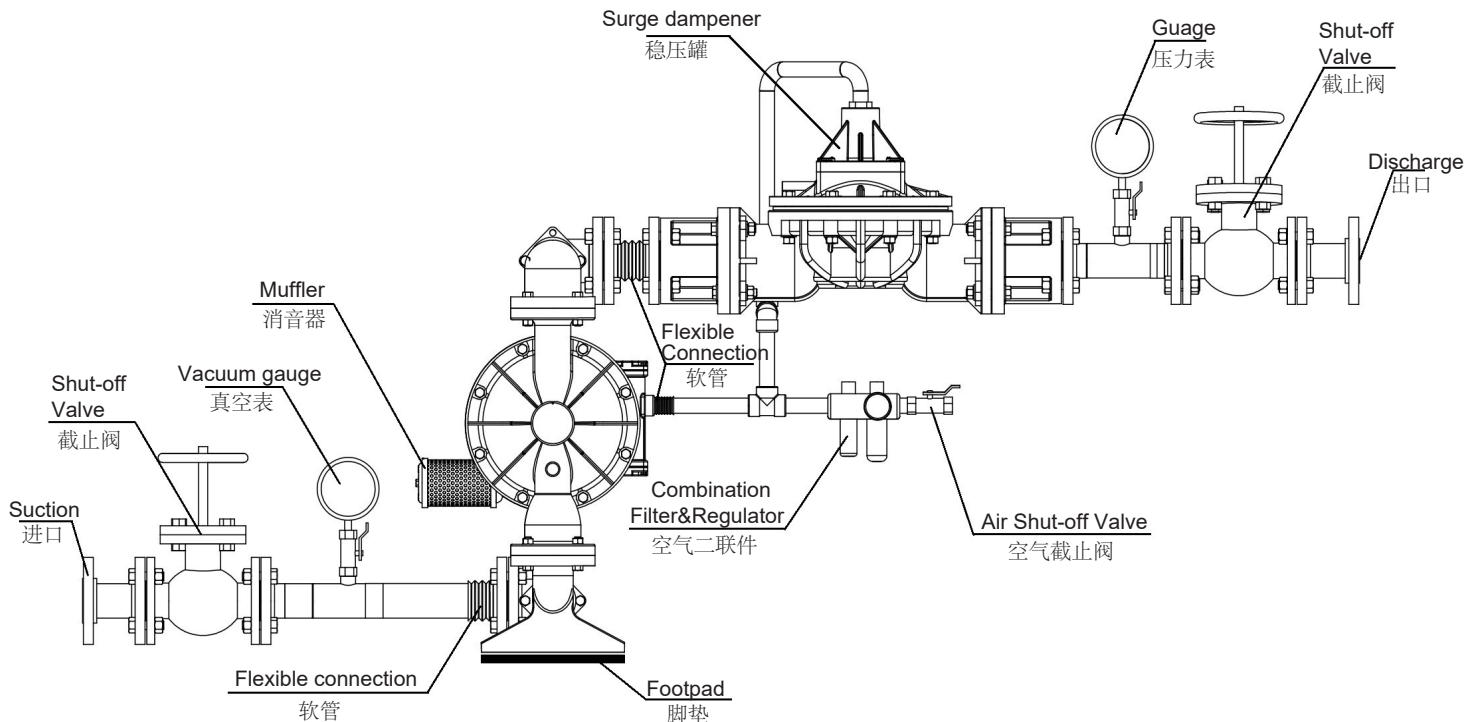
4.5 TP65 Exploded View & Parts List TP65分解图及零件目录

■ TP65 Surge Dampener Exploded view
TP65 稳压罐分解图



■ TP65 Parts List

ITEM项	PART NUMBER零件编号	PART DESCRIPTION零件说明	QTY数量
1	0040.1995	Liquid Chamber (PVDF) 2.5"稳压罐外腔体 聚偏二氟乙烯	1
	0040.1994	Liquid Chamber (PP) 2.5"稳压罐外腔体 聚丙烯	
2	0040.8758	Diaphragm 2.5"隔膜 三道橡胶	1
	0040.8754	Diaphragm 2.5"隔膜 特氟龙	
3	1040.4091	Air Chamber 2.5"中间体	1
4	4300.8652	Gasket 1.5-3"中间轴平垫	1
5	1458.7102	Bolt/Washer 1.5-3"中间体螺丝	4
6	4300.1591	Air Regulator Body 2-3"空气调节器主体	1
7	4300.3020	Washer 1.5-3"中间轴平垫	1
8	4345.3490	Shaft 1.5-3"中间轴	1
9	4300.1500	Valve Bushing 1.5-3"中间轴阀套	1
10	4300.3060	End Cap 1.5-3"稳压罐挡板	1
11	4300.1610	Check Ring 1.5-3"挡圈	1
12	0450.3391	Plate Inner Diaphragm (Cast Iron) 1.5-2"内压板 铸铁	1
13	0450.3295	Plate Outer Diaphragm(PVDF) 1.5-2"外压板 聚偏二氟乙烯	1
	0450.3294	Plate Outer Diaphragm(PP) 1.5-2"外压板 聚丙烯	
14	4340.1694	Adapter (PP) 连接头 聚丙烯	2
	4340.1695	Adapter (PVDF) 连接头 聚偏二氟乙烯	
15	4340.6654	Gasket 连接头密封圈	2
16	4300.1000	"O"Ring 1.5-3"中间轴阀套O型圈	3
17	4300.2500	Bushing 1.5-3"稳压罐补心 304不锈钢	1
18	4300.7311	Bolt 1.5-3"中间轴螺丝	1
19	4300.7211	Socket Hex Bolt 1.5-3"挡板螺钉	3
20	4325.7511	Bolt 外腔体螺丝	8
21	4340.7611	Bolt 连接头螺丝	8
22	4345.7421	Nut 外腔体六角螺母	8
23	4345.7521	Nut 连接头六角螺母	8
24	4345.7632	Washer 平垫	16



Install the dampener as shown above. The use of flexible connections and a Filter, regulator, Lubricator (FrL) will extend parts life on the. Shut-off valves on the suction side of pump and the discharge side of dampener will enable maintenance personnel to safely service the equipment. To maximize effectiveness install the dampener as close as possible to the discharge of the pump.

如上所示安装稳压罐。灵活的连接以及过滤器，调节器，润滑器（FrL）的使用将延长零件的使用寿命。泵的吸入侧和稳压罐的排出侧的截止阀将使维护人员能够安全地维修设备。为了最大程度地发挥作用，将稳压罐安装在尽可能靠近泵出口的位置。

It is important to support the pipe immediately downstream from the dampener. use a tee connector on the pump air supply line and connect the line to the dampener regulator body. This tee connector should be installed after the FrL. The dampener consumes very little air, therefore, a 1/4" hose is more than adequate to supply enough air volume. When the air supply to the pump is shut down, the air to the dampener will be shut off as well.

重要的是要在稳压罐的下游直接支撑管道。在泵供气管路上使用三通接头，然后将管路连接至稳压罐调节器主体。此T型连接器应在FrL之后安装。稳压罐消耗的空气很少，因此，1/4英寸的软管足以提供足够的空气量。当关闭泵的空气供应时，将关闭稳压罐的供气。

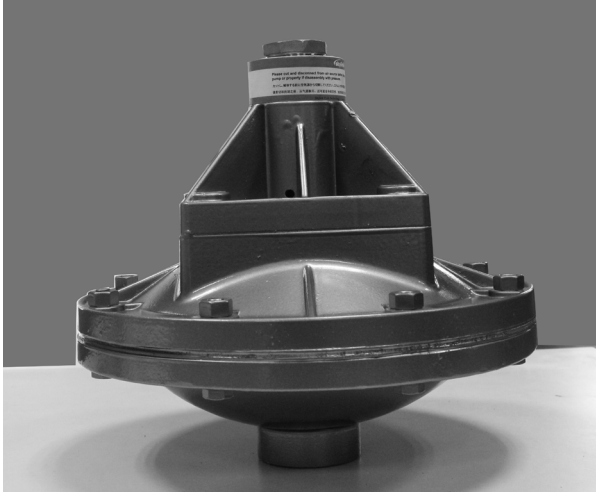


Figure 1



Figure 2

Remove reducer bushing at top
of regulator
拆下调压器顶部的稳压罐补心

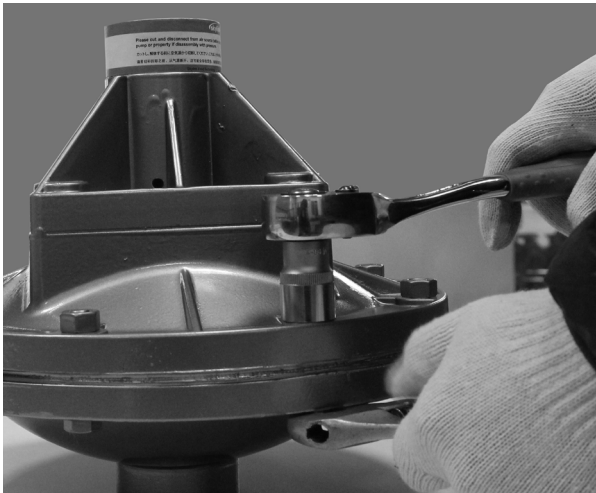


Figure 3

Remove all bolts around dampener
卸下稳压罐周围的所有螺栓



Figure 4

Set Liquid chamber aside
将流体室放至一边

SECTION 6

Disassembly 拆卸



Figure 5

Loosen shaft assembly by using adjustable wrench on plate
使用活动扳手松开轴组件

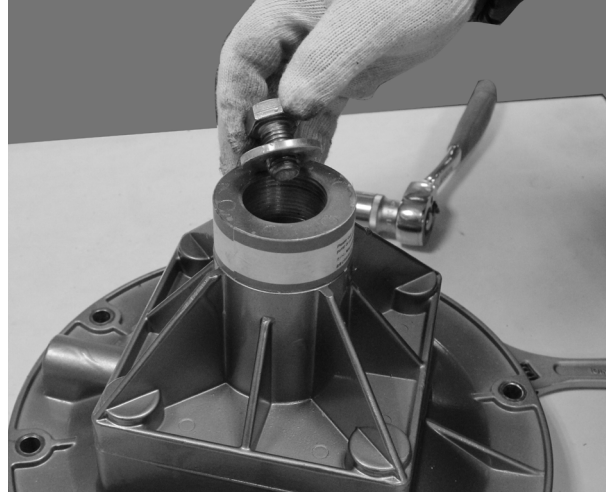


Figure 6

Remove bolt on the shaft
拆下轴上的螺栓



Figure 7

Set Diaphragm assembly aside
将膜片组件放在一旁



Figure 8

Screw out three sockets bolts on shaft assembly
拧下挡板上的三个内六角螺钉



Figure 9

Remove end cup
取下挡板



Figure 10

Remove valve bushing
拆下阀套