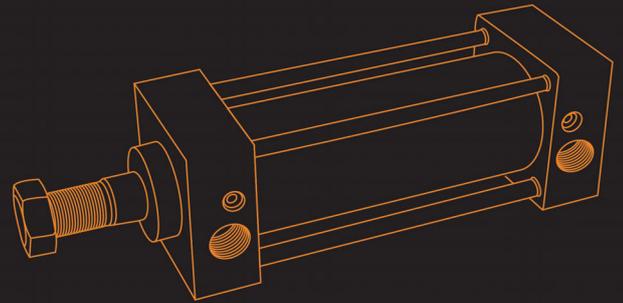


- 本手册仅用于说明产品的相关信息，公司随时可能因技术升级或采用更新的生产工艺而改订本手册有关内容，或对本手册的印刷错误及不准确信息进行必要的更改，恕不另行通知。
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www.voneseals.com

气动密封 解决方案

PNEUMATIC SEALING
SOLUTION



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上海唯万密封科技股份有限公司
VONESEALS TECHNOLOGY (SHANGHAI) INC.

气动密封方案

PNEUMATIC SEALING SOLUTION



前言 Foreword

> 上海唯万密封科技股份有限公司是专业从事密封系统解决方案的公司。公司的目标是：为客户提供增值的、高性价比的、全面的密封系统解决方案。

尽管我们的目标是使本手册覆盖尽量宽的密封件范围，但此手册仅仅涵盖了常用的标准密封件产品。

在实际应用过程中，尤其是在某些特殊工况及环境下，本手册中所涵盖的密封件可能不能完全满足您的实际要求。在此情况下，请与我们的技术人员或指定经销商联系。基于多年提供密封系统解决方案的经验，基于国内外多位资深专家的支持与帮助，基于我公司专业的实验和验证手段，我们一定可以为您提供一套量身定做的密封解决方案。

本手册所提供的资料是根据本公司多年在密封件生产和应用方面取得的经验编辑而成。但密封件的性能并不完全取决于密封件本身，在具体使用过程中，其使用性能还与诸如压力、温度、速度、介质、光洁度等其它许多因素相关。因此我们建议您与我司技术人员联系，在其指导下选型并进行相关的可靠性试验。

此手册的数据都是在2022年前积累的数据，我们保留在不事先通知的前提下更新的权力。本手册所有版权均为公司所有，未经本公司许可，不得擅自复制。

> Voneseals Technology(Shanghai) Inc.(VONE for brief) is a company providing sealing solutions. Though the aim of this catalogue is to cover seals in wide range.It only covers standard parts.

The seals listed in this catalogue may not solve all the problems. In special cases and applications, please contact VONE and/or authorized official distributors. Based on decades of experience, we can offer tailor made sealing solutions just for you.

The information in this catalogue are based on know-how developed over experience in applications and manufacturing of seals. Due to their impact on seals such as pressure,temperature,speed, media,etc.It is recommended that for special applications,the function of our seals is tested under field condition by our instruments.

Data in this catalogue is related to the state of development and production in early 2022.Modification rights reserved.Extracts may only be taken with permission.

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01

材料与产品开发 Materials and Products Development

立足于基础材料的研发，结合多年的密封设计、生产和工程应用方面的经验，通过专业的实验室检测和台架测试的验证，唯万已经为包括液压、气动等众多领域的合作伙伴提供优化的密封系统解决方案。

Based on material development, combined with decades years of experience on seals design, production and application, and verified with professional laboratory and bench testing, VONE has provided partners including hydraulic and pneumatic systems with the optimum sealing solutions.

气动密封方案

PNEUMATIC SEALING SOLUTION

产品开发

没有任何一种材料能适用所有的工况要求，在不同的应用环境和工况下，对密封件要求各有差异，市面上大宗材料并不能完全满足要求，因此产品研发尤为重要。

我们的技术团队在密封件设计及改进过程中就已经将产品形状、材料、相容性、工况等客户应用条件考虑进去了。



产品验证

客户不必为密封方案性能忧心，唯万的材料和产品已经通过实验室和环境测试得到了验证。

各种专业的测试仪器和设备，能对密封材料关键性能诸如硬度、摩擦、压缩形变、拉伸、回弹、耐水解性等进行测试，为客户密封选型、比较等提供可靠的参考依据。

唯万专业的测试台架能模拟各种应用工况，对密封产品在不同工作压力、速度、温度及其它影响因素下的泄漏、摩擦、磨损等进行研究。

测试试验台

- ※ 旋转密封试验台
- ※ 高压偏载试验台
- ※ 液压密封件寿命实验台
- ※ 低温实验台
- ※ 防尘功能实验台
- ※ 气动试验台



若有特殊要求（压力、温度、速度、介质等），请与本公司取得联系，以便为您推荐合适的材料或结构
Other requirements (pressure, temperature, speed, media, etc.), please contact us to recommend the appropriate materials and structures.

Product development

No single material can serve all the applications in different field. For seals commercial compounds are limited in the physical properties.

VONE engineering team developed a series of compounds for different applications. We have taking all the necessary conditions into consideration such as seals profile, material, and working environment.

Products Verification

A diversity of professional instruments and devices are invested for measuring data such as hardness, tensile, friction, compression set, and hydrolysis resistance.

Before a seal will be launched to the market, it will be tested on specially designed test rigs of:

- ※ Rotary
- ※ Guide ring with side load simulation
- ※ Endurance
- ※ Low temperature

TecThane®

唯万密封
VONESEALS

02 密封形式及特点 Seals Type & Feature

缓冲密封 PRP



PRP 型缓冲密封是专门为气缸设计的缓冲密封件。
The profile of PRP pneumatic cushioning seal is specially designed for cushioning in pneumatic cylinders.

Technical parameter:

Working pressure: $\leq 1.6\text{MPa}$
Working temperature: $-35 \sim 80^\circ\text{C}$
Surface speed: $\leq 1.0\text{m/s}$
Working medium: Lubricated as well as dry air
(after initial lubrication during assembly)
Standard materials: Polyurethane P2001

Advantages:

- ※ Since the seal functions as a check valve, no separate valve is necessary
- ※ Optimum use of design-related cushion stroke
- ※ High cushioning consistency due to automatic centering, even in case of misalignment of the cushioning spear to the cylinder head
- ※ Increased reliability due to two independent sealing systems (flexible sealing lips and axial sealing areas).
- ※ Easy manual snap assembly

Installation:

Self-retaining profile of PRP is manually snapped into housing while the piston rod is disassembled. Please pay attention to prevent sharp edges from damaging the wiping and sealing lips during assembly. Initial lubrication is the prerequisite for very long operation life.

技术参数

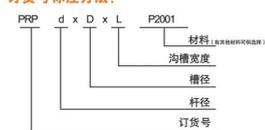
工作压力: $\leq 1.6\text{MPa}$
工作温度: $-35 \sim 80^\circ\text{C}$
工作速度: $\leq 1.0\text{m/s}$
工作介质: 润滑后的空气以及干燥空气 (须初始润滑)
标准材料: 聚氨酯 P2001

PRP 密封件主要特点

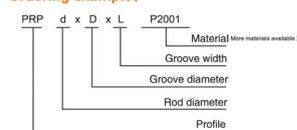
- ※ 在整个密封系统中起单向阀的作用, 从而不再需要在系统中加入其他的单向阀
- ※ 自动选择最佳的缓冲行程
- ※ 在略有偏心的情况下可自动对中, 具有极佳的缓冲效果
- ※ 具有两道互相独立的密封系统, 增加了系统的可靠性
- ※ 易于安装

安装要求

可以人工装入沟槽内。注意装配过程中防止防尘和密封唇部被锐边划伤。初始润滑是保持长期使用寿命的前提。

订货号标注方法:

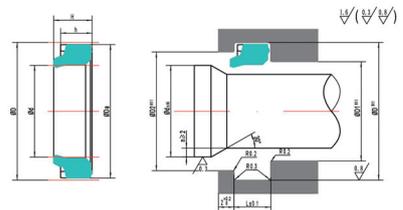
若有特殊要求 (压力、温度、速度等), 请与本公司的技术部联系。

Ordering example:

For special requirements (pressure, temperature, speed etc.), please contact our technical staff.

若有特殊要求 (压力、温度、速度、介质等), 请与本公司技术部联系, 以便为您推荐合适的材料和结构。

Other requirements (pressure, temperature, speed, media, etc.), please contact us to recommend the appropriate materials and structures.



PRP 型标准规格表 (单位: mm)							
订货号	d	D	H	h	D1	D2	L
PRP 7.8X11.6X3.3 P2001	7.8	11.6	3.5	2.8	8.5	10	3.3
PRP 8X11.6X3.3 P2001	8	11.6	3.5	2.8	8.5	10	3.3
PRP 9.5X15X4.5 P2001	9.5	15	4.6	3.7	10	12	4.5
PRP 10X18X7 P2001	10	18	7.8	6.3	10.5	15	7
PRP 12X18X4.8 P2001	12	18	5	4.1	13	15.5	4.8
PRP 16X22X5.2 P2001	16	22	5.5	4.4	17	19.5	5.2
PRP 16X24X7 P2001	16	24	7.8	6.3	17	21	7
PRP 18X26X7 P2001	18	26	7.8	6.3	19	23	7
PRP 20X28X7 P2001	20	28	7.8	6.3	21	24	7
PRP 22X30X7 P2001	22	30	7.8	6.3	23	26	7
PRP 25X33X7 P2001	25	33	7.8	6.3	26	29	7
PRP 28X36X7 P2001	28	36	7.8	6.3	29	32	7
PRP 30X40X7 P2001	30	40	7.8	6.3	31.5	35	7
PRP 32X42X7 P2001	32	42	7.8	6.2	33.5	37	7
PRP 36X46X7 P2001	36	46	7.8	6.2	37.5	41	7
PRP 40X50X7 P2001	40	50	7.8	6.2	41.5	45	7
PRP 50X60X7 P2001	50	60	7.8	6.2	51.5	55	7

* 标注此规格已有模具, 如有其它产品需求, 请与我技术部联系