



复杂夹具 轻松组建

COMPLEX GRIPPER FLEXIBLE ASSEMBLY

2024 产品目录

PRODUCT CATALOGUE

机器人末端工具

END OF ARM TOOLING

5.1

苏州希瑞格机器人科技有限公司
SUZHOU CRG ROBOTICS TECHNOLOGY CO.,LTD.

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型材 SUS 钢管

支架模组

快换

夹具组件

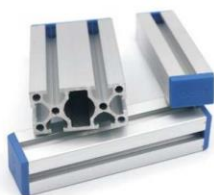
气动剪刀

真空组件

附件

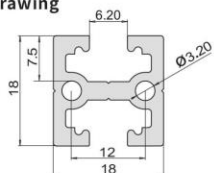
型材

Extruded Profiles

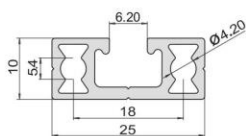


图纸

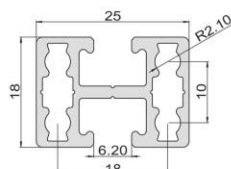
Drawing



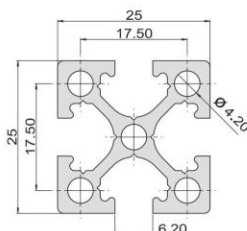
PEP1818



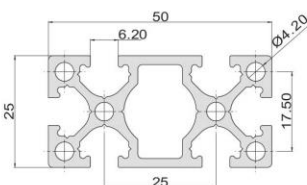
PEP2510



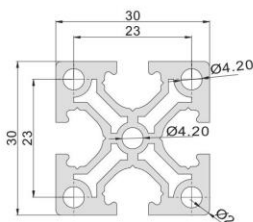
PEP2518



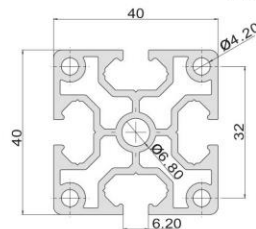
PEP2525



PEP5025



PEP3030



PEP4040

型材端盖

Plugs for profile



产品规格

Product specifications

货号(PN)	型号(Model)	长度(Length)	重量(Weight)	端盖货号(Plugs PN)	端盖型号(Plugs Model)
4.Y00075	PEP1818-1000	1.0m	425g	4.Y00517	P1818
4.Y00076	PEP2510-1000	1.0m	310g	4.Y00518	P2510
4.Y00455	PEP2518-1000	1.0m	400g	4.Y00069	P2518
4.Y00050	PEP2525-1000	1.0m	610g	4.Y00070	P2525
* 4.Y00051	PEP2525-2000	2.0m	1220g		
4.Y00056	PEP5025-1000	1.0m	1040g		
* 4.Y00057	PEP5025-2000	2.0m	2080g	4.Y00071	P5025
4.Y00052	PEP4040-1000	1.0m	1300g		
* 4.Y00053	PEP4040-2000	2.0m	2600g	4.Y00072	P4040
4.Y00540	PEP3030-1000	1.0m	650g		
* 4.Y00541	PEP3030-2000	2.0m	1300g	4.Y10972	P3030

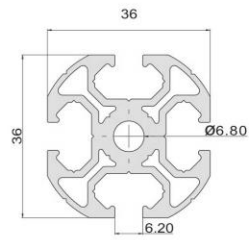
* 选件 Optional

型材 Extruded Profiles



图纸
Drawing

钢管端盖
Tube plugs



PEP-3636

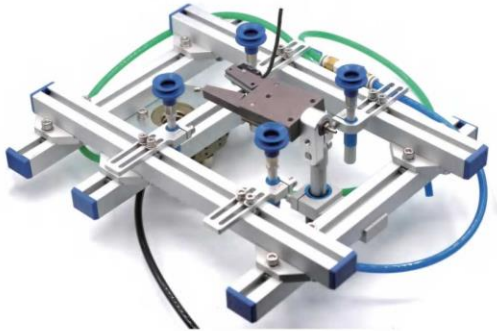


产品规格 Product specifications

货号(PN)	型号(Model)	长度(Length)	重量(Weight)	端盖货号(Plugs PN)	端盖型号(Plugs Model)
4.Y00054	PEP3636-1000	1.0m	1168g	4.Y00073	P3636
4.Y00484	PEP3636-1500	1.5m	1752g		
* 4.Y00055	PEP3636-2000	2.0m	2336g		

* 选件 Optional

案例 Case



型材·SUS·Tube
Profile·SUS·Tube

支架模组
Stents Module

快换
Quick Changer

夹具组件
Grip Module

气动剪刀
Air Nipper

真空组件
Vacuum Module

附件
Accessory Components

机器人末端快换装置

A quick changer device at the end of a robot

产品优势

Product advantages

高精度

活塞调节机器人侧与夹具侧起到定位作用，提供了较高重复定位精度。百万次循环测试表明实际精度要远远高于推荐值。

高强度

大缸径设计的锁紧活塞具备强大的锁紧力，CRG机器人末端快速装置具有强大的抗力矩能力。锁紧时不会因为高速的移动产生晃动，避免了锁紧失效，保证了重复定位精度。

高性能

多锥面的设计锁紧机构，选用了长寿命密封组件，采用了高品质的弹性接触式探针，保证了信号模块的紧密接触。

High-precision

The piston adjusting gripper side play the role of positioning, which provides high repeat positioning accuracy. One million cycle tests show that the actual accuracy is much higher than the recommended value.

High strength

The locking piston with large cylinder diameter has strong locking force, CRG robot end fast device has strong anti torque ability. When locking, there will be no shaking due to high-speed movement, thus avoiding locking failure and ensuring repeated positioning accuracy.

High performance

The locking mechanism with multi conical surface design, long life sealing components and high quality elastic contact probe are adopted to ensure the close contact of signal module.



自动快换安装使用示例
Quick Changer Installation example



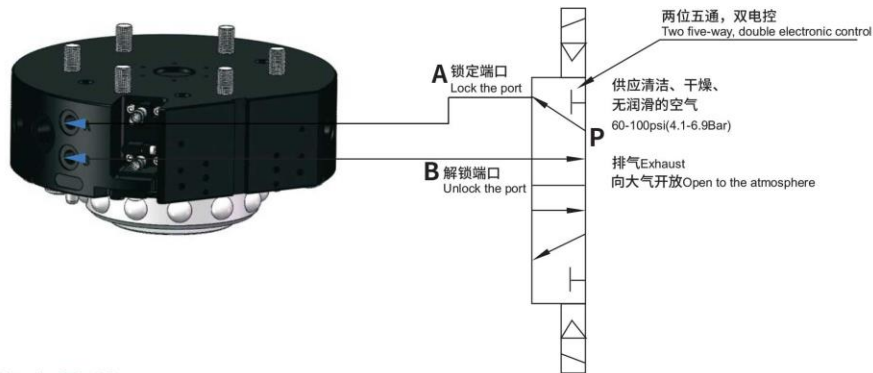
安装示意图

Installation schematic



锁定和解锁气动链接

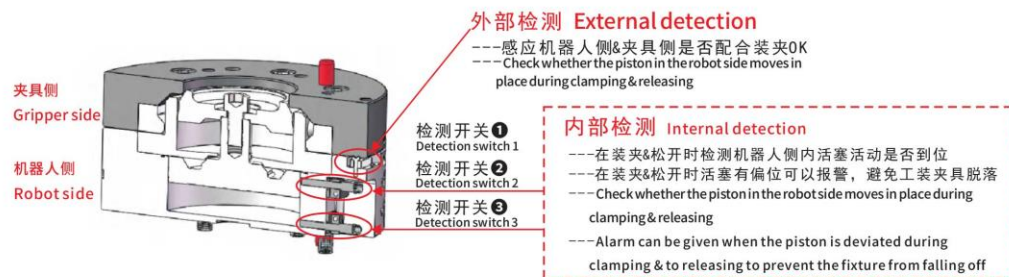
Lock and unlock pneumatic connections



安全性能（选配）

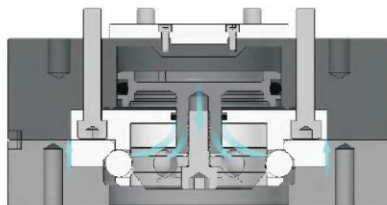
Safety capability (option)

三个安全性能开关，多重防护
Three safety capability switch, multiple protection



安全方式

Safe Way



安全回路

1. 多个高强度锁紧钢珠保持机器人和工具的锁紧，更安全、稳定。
2. 得益于精确的重复精度，即使频繁更换，工具也会被带到精准的操作位置。
3. 默认自锁式设计。气压停止供给的情况下，机器人侧与工具侧也不会分离。
1. Multiple high-strength locking balls keep the robot and tools locked, making them safer and more stable.
2. Thanks to the precision of repetition, tools are brought to the precise operating position even if they are changed frequently.
3. Default self-locking design. The robot side and the tool side are not separated when the air pressure is stopped.

型材、钢管
Profile, SUS Tube

支架模组
Stents Module

快换
Quick Changer

夹具组件
Grip Module

气动剪刀
Air Nipper

真空组件
Vacuum Module

附件
Accessory Components

型材 SUS Tube

支架模组

快换

夹具组件

气动剪刀

真空组件

附件

模块类型

Module Type



镀金针脚
Gold-plated stitching

电模块：用于总线信号及伺服电源的传输

- 突起的针状在连接保证接触的稳定性；抗干扰
- 额定电压电流：24V 2.5A~380V 200A（最高标准参数）
- 材质：镀金的针脚
- 弹压接触次数：大于30万次

Electrical module: used for bus signal and servo power transmission

- The needle-like protrusions in the connection to ensure contact stability anti-interference.
- Rated voltage and current: 24V 2.5A~380V 200A (the highest standard parameters)
- Material: gold-plated pin
- Elastic pressure contact number: more than 300,000 times

安装方法

Installation method

夹具侧模块安装方式

Module Mounting mode on gripper side



机器人侧模块安装方式

Module Mounting mode on robot side



模块类型

Module Type



镀金针脚
Gold-plated stitching

电模块：用于总线信号及伺服电源的传输

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安装方法

Installation method

夹具侧模块安装方式

Module Mounting mode on gripper side



机器人侧模块安装方式

Module Mounting mode on robot side



型材: SUS 钢管

支架模组

快换

夹具组件

气动剪刀

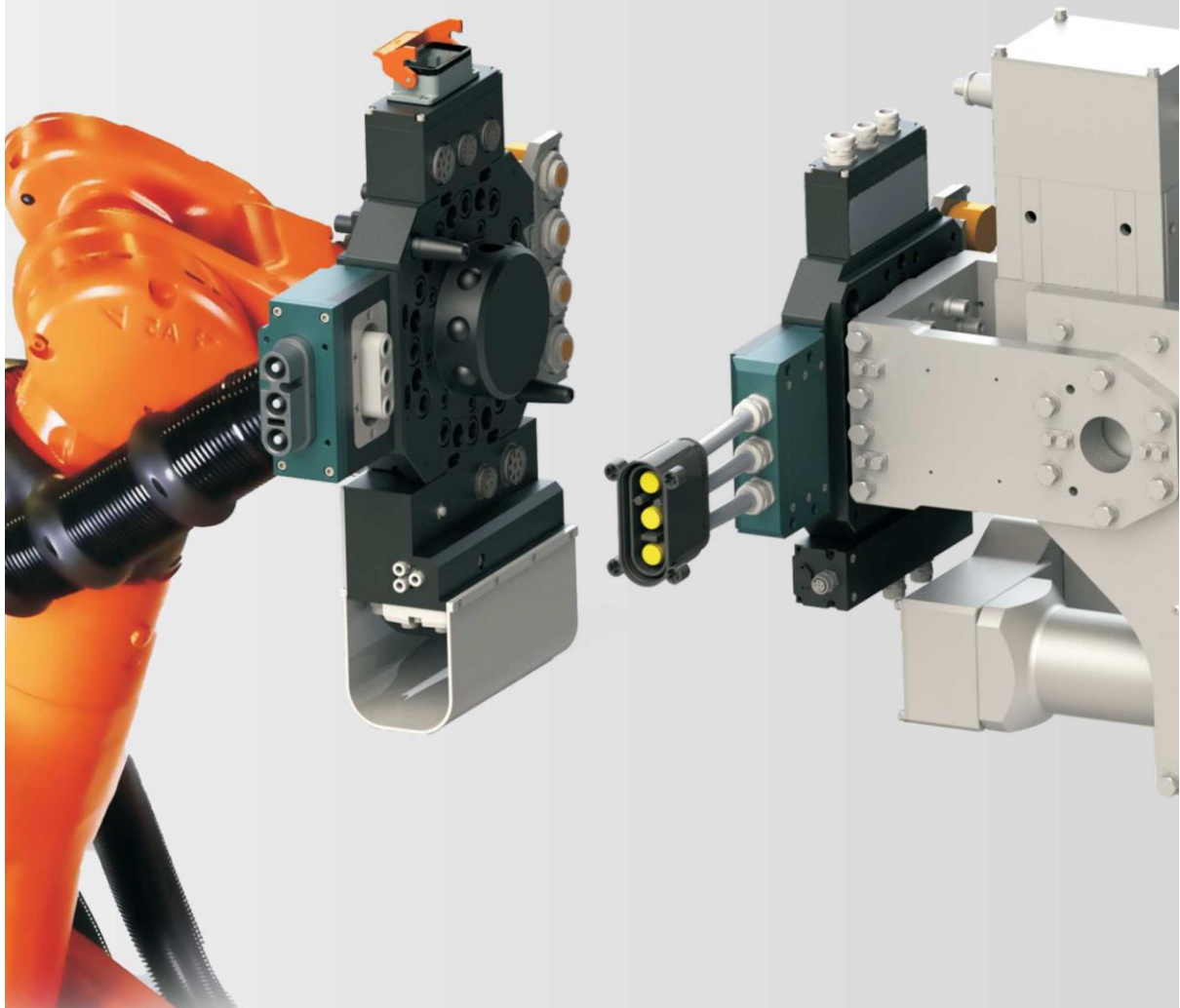
真空组件

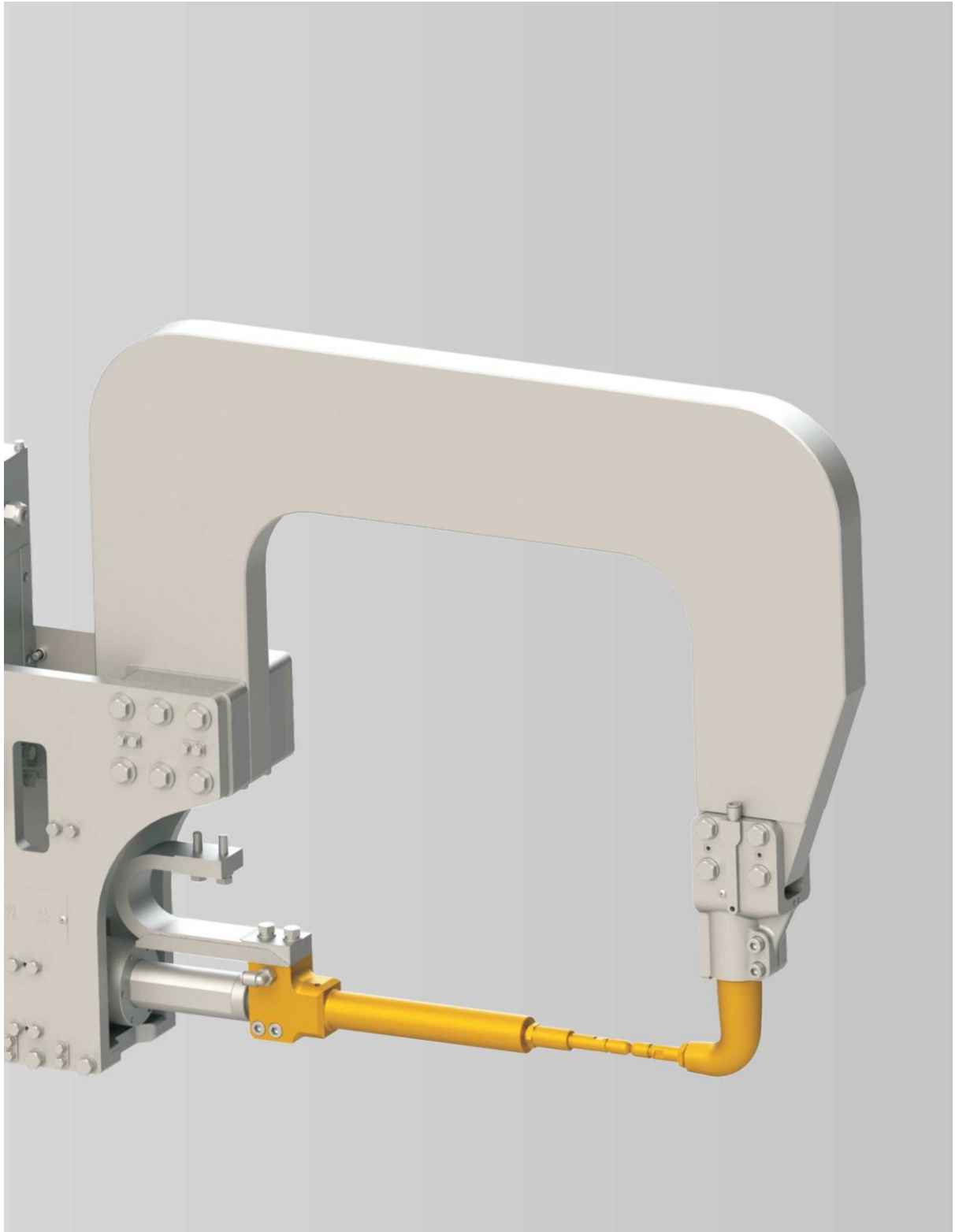
附件

机器人末端快换装置

A quick changer device at the end of a robot

- 适用于汽车行业点焊、大电流对接切换、大负载的搬运、负载可达500kg。
- Quick changer applied in the automotive industry for spot welding, high current docking switching, handling of largepay loads, payloads up to 500kgs.





塑料浇口用气动剪刀

Air Nippers For Resin Gate

这些都是专业的气动剪刀，可安装在精确的浇口切割设备和备用夹具上。
VESSEL 可提供丰富的选择，以满足各种需求。

These are high-class air nippers that can be mounted on gate cutting equipment and standby jigs for accurate, speedy cutting of resin products. VESSEL has a wide selection of items to meet a variety of needs, from around-the-clock operations to high cutting precision.

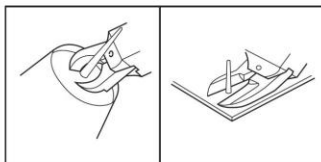


Solution

切断, 抓取, 卷曲和打孔
Cut, grab, crimp and punch.

剪切直浇口树脂产品

Cutting direct gate molded components

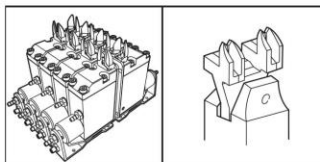


切割服装盒、头盔、管接头部件、垃圾桶、花盆等大口径的浇口。超长的使用寿命。

Cuts large diameter sprues such as garment cases, helmets, pipe joint parts, trash cans, planters. Superb durability in long term use.

剪切多模成型树脂产品

Gate cut for multiple impression molded components

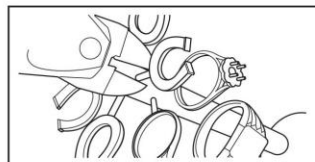


结构紧凑、轻便, 带有报警装置, 易于安装在卡盘和待机夹具上。能有效的削减匹配周期时间。

Compact, lightweight body and with a large selection of blade items, easy mounting on chuck board and standby jig. Achieves efficient cuts matching cycle time.

剪切珠宝饰品

Taking products from a jewelry tree

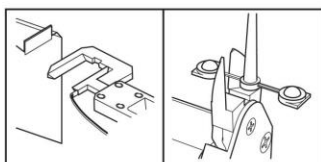


切割戒指、项链等贵金属。超强的耐用性和强大的刀头大大的提高了效率。

Cutting of precious metals for rings, necklaces etc. Superb durability and increased efficiency with powerful nipper blades.

剪切透镜, 导光板等透明产品

Gate cutting for lenses, LGP, and transparent products

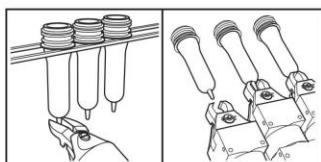


防止剪切浇口纹裂, 卷边, 白化, 采用加热型气动剪刀进行剪切。刀头温度与剪切速度相互配合, 达到高精度剪切效果。

Various heated nippers prevent cracks and whitening, the decisive the blades and cutting speed. factor is the heating temperature of Supports demands for improved flexibility and high precision cutting.

剪切药筒, 食品盒等产品

Pre-form cutting for food and drug cases

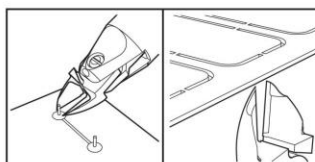


广泛安装于预成型机, 提高生产效率 and 剪切精度, 提升产品质量。

Improved efficiency in pre-forming nippers attached to flat finish pre-form molding machine. Cut precision is linked to product quality.

剪切电子元件和

Cutting electronic components and around boards



最适于手动剪切焊接后的电路引线, 大幅降低手腕疲劳。电路板安装于台式机器人上进行剪切。

Optimal handy nippers for cutting lead lines after soldering to significantly reduce wrist strain. Substrate is attached to the desktop robot...

型材
SUS Tube
钢管

支架模组
Stents Module

快速
Quick Changer

夹具组件
Grip Module

气动剪刀
Air Nipper

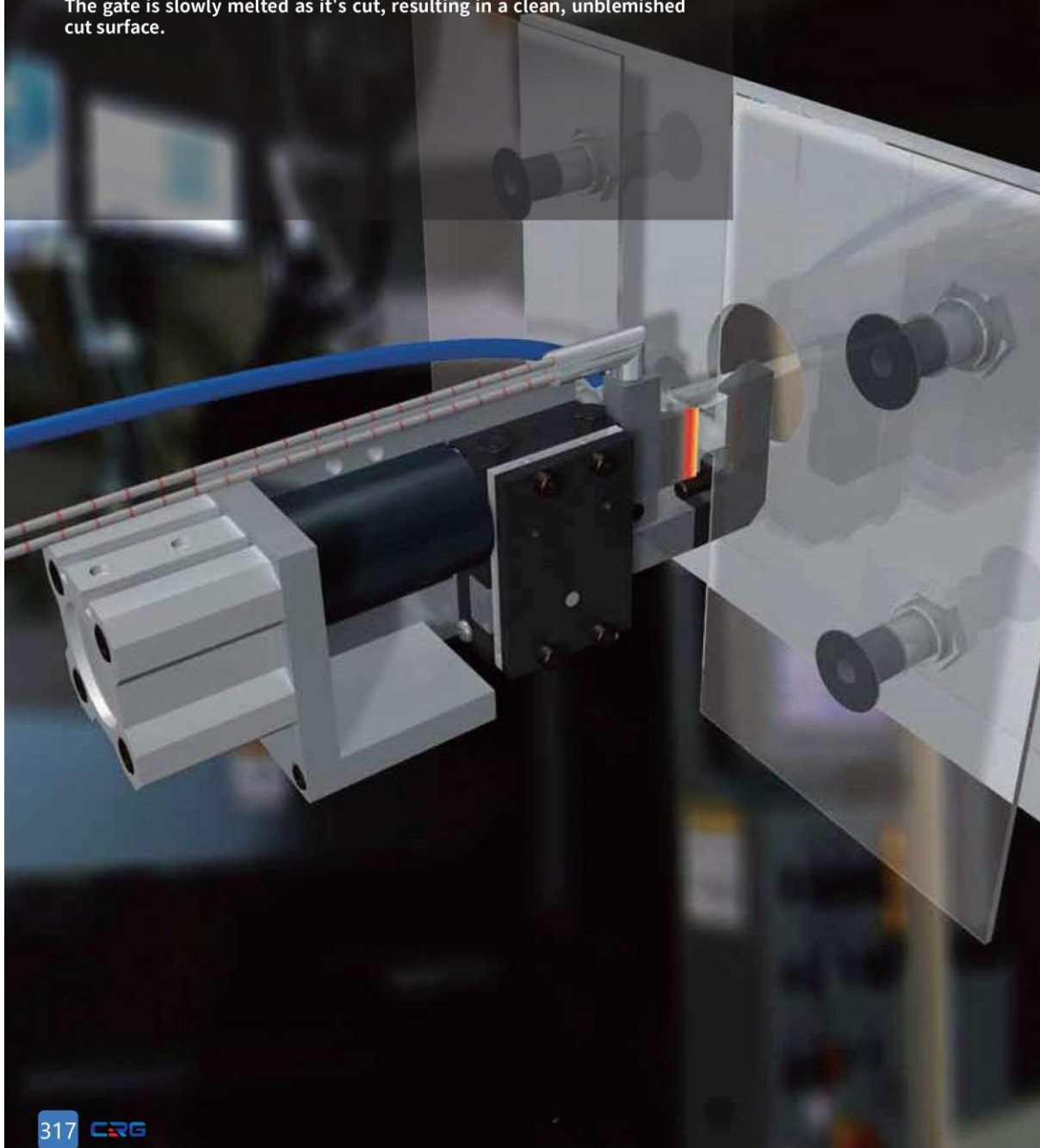
真空组件
Vacuum Module

附件
Accessory Components

气动加热推力
Heat Air Nippers

气动加热推力，切割透明产品时，可以有效的抑制裂纹，使切割面更加美观。

These air nippers are connected to a heater to suppress cracks and whitening of clear materials such as acrylic.
The gate is slowly melted as it's cut, resulting in a clean, unblemished cut surface.



真空吸盘 Vacuum Cups

亮点

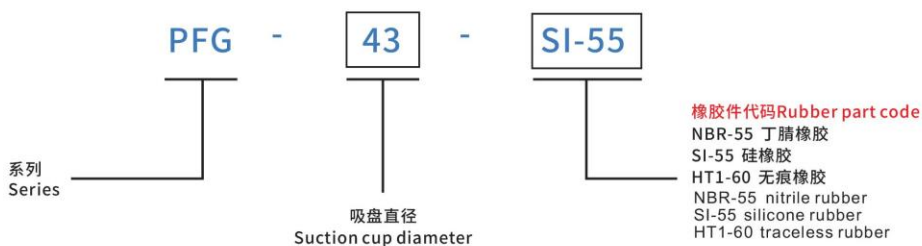
Highlights

尺寸和材质多种规格可选
密封唇柔软且有锥度
吸盘顶部有加强筋结构
最优结构设计
底部支撑结构

Various sizes and materials are available
Soft and tapered sealing lip
Rib structure on the top of the suction cup
Optimum structural design
Bottom support structure

型号表示方法

Model representation methods



HT1-60 无痕橡胶



NBR-55 丁腈橡胶



SI-55 硅橡胶

运用案例

Application example



包装行业
packaging industry



电子行业
Electronics industry



注塑行业
Injection molding industry

真空吸盘悬件

Vacuum Cup Suspensions

当机械手移动时，这些悬件可用来保持吸盘的位置。

CRG 为塑料应用提供了广泛的独特设计。

它们一般通过固定支架安装在治具上。

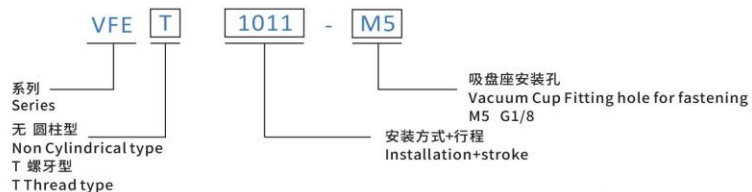
The suspensions (or buffers, or level compensators) are used to keep the suction cups in position as the robot approaches.

CRG offers a range specifically designed for Plastics applications.

They are typically mounted on EAOTs (End Of Arm Toolings) with Mounting brackets.

型号表示方法

Model representation methods



VFE



VFR



VFN



VFET



VFRT



VFNT

带平滑主体的悬件
Suspensions with smooth body

VFR
VFN
VFE



非可旋转悬件
Non-rotative suspensions

VFN
VFNT
VFE
VFET



带螺纹主体的悬件
Suspensions with threaded body

VFRT
VFNT
VFET



可旋转悬件
Rotative suspensions

VFR
VFRT



型材
SUS Tube

支架
Module

快换
Changer

夹具
Module

气动
Nipper

真空
Module

附件
Components

PiINLINE® vacuum generator MINI Si 真空发生器

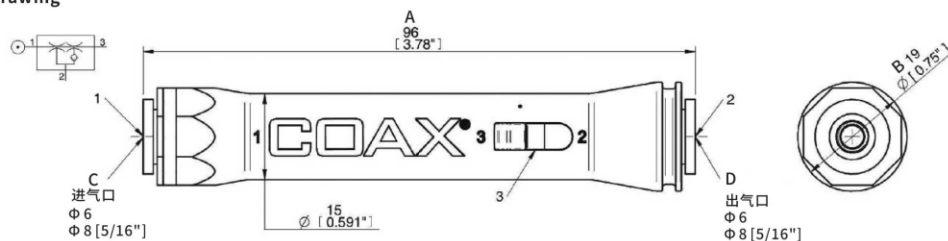
PiINLINE® vacuum generator MINI Si Vacuum Generator



- 获得专利的COAX®盒式磁带技术。
- 与能耗相关的高真空流量。
- 低重量内联设计，带有用于真空和压缩空气的推入式配件。
- 直接在软管上快速方便地安装。
- 用于额外真空流的Si滤筒。
- 用于在低进料压力下实现高性能的Pi滤。
- 需要高流量和深真空时的Xi滤筒。
- Patented COAX® cartridge technology.
- High vacuum flow capacity in relation to energy consumption.
- Low weight inline design with push-in fittings for vacuum and compressed air.
- Quick and easy installation directly on the hose.
- Si cartridge for extra vacuum flow.
- Pi cartridge for high performance at low feed pressures.
- Xi cartridge when high flow and deep vacuum is needed.

图纸

Drawing



产品规格

Product specifications

型号 (Model)	piINLINE® vacuum generator MINI Si, 6-6 mm	piINLINE® vacuum generator MINI Si, 8-8 mm
货号 (PN)	1.Y13066	1.Y13067
直径 Diameter	19 mm (B)	19 mm (B)
进气口直径 Air inlet diameter	6 mm (C)	8 mm (C)
出气口直径 Air outlet diameter	6 mm (D)	8 mm (D)
长度 Length	96 mm (A)	96 mm (A)

概述

Summary

产品编号 (备选) Product number (optional)	E12842188
物料 Material	CuZn, PA, SS, 丁腈橡胶
重量 Weight	21.8 g

性能

Performance

耗气量 Gas consumption	25.7 l/m (.9 scfm) NI/s
最大进气压力 Feed pressure, max.	0.7 MPa



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