



液压自定心中心架

Hydraulic self centering frame

用于车削·铣削·磨削加工

Turning · Milling · Grinding processing

中心架范围：Φ5-1500mm



技术源自于德国

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公司网站



www.wolunbeige.com

» 企业简介

沃伦贝格(上海)自动化有限公司是一家集研发、设计、制造、销售、为一体综合类企业,坐落在美丽海滨城市上海,依托长三角经济区,服务全球市场;全球工业进入4.0时代,制造型企业转型升级,对自动化设备及工装夹具的要求越来越高,公司引进德国专家团队作为公司技术核心力量,立足液压自定心中心架行业,深耕研发,做精、做细、做专为全球制造型企业提供优质完美的自动化替代方案。

主要产品系列有:RC、RX、RM三大系列液压自定心中心架产品,分别用于车床、铣床、磨床等自动化机床。

公司具有独立实验室,配备德国进口三坐标检测设备、二次元检测设备等高端测量设备,为每一套中心架出厂保驾护航。

公司目标“成为国际一流的液压自定心中心架生产商、服务商”为发展目标,持续发展和创新为公司发展方向,并将以严谨的干事作风、一流的产品质量、竭诚为您服务,希望与各界朋友精诚合作、共谋发展!

COMPANY PROFILE

Wallenberg (Shanghai) Automation Co., Ltd. is a comprehensive enterprise that integrates research and development, design, manufacturing, sales, and is located in the beautiful coastal city of Shanghai, relying on the Yangtze River Delta Economic Zone to serve the global market; The global industry has entered the 4.0 era, and manufacturing enterprises are transforming and upgrading. The requirements for automation equipment and fixtures are becoming higher and higher. The company has introduced a German expert team as the core technical force, based on the hydraulic self centering frame industry, deeply cultivating research and development, and providing high-quality and perfect automation alternatives for global manufacturing enterprises with precision, detail, and specialization.

The main product series includes RC, RX, and RM hydraulic self centering frame products, which are used in automated machine tools such as lathes, milling machines, and grinders.

The company has an independent laboratory, equipped with high-end measuring equipment such as German imported CMM testing equipment and anime testing equipment, which guarantees the delivery of each set of center frame.

Our company's goal is to become an international first-class manufacturer and service provider of hydraulic self centering frames, with continuous development and innovation as our development direction. We will serve you with a rigorous work style, first-class product quality, and dedication. We hope to cooperate sincerely with friends from all walks of life and seek common development!

产品核心优势: Product core advantages:

可编程控制液压中心架, 精度更高, 更稳定

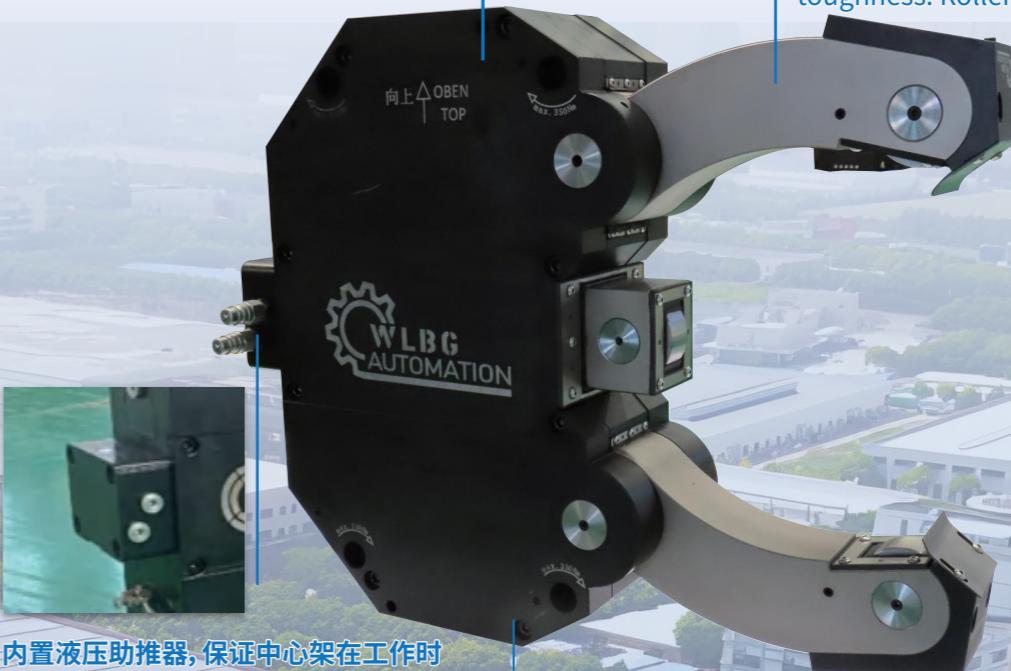
Programmable hydraulic center frame for higher accuracy and stability



壳体采用工具钢锻打成型,三次热处理工艺处理,保证壳体的韧性和强度。
The shell is forged from tool steel and subjected to three heat treatment processes to ensure its toughness and strength.



支臂采用工具钢加工而成,二次热处理+淬火加工而成,表面硬度55HRC以上,及保证硬度又不失韧性。滚轮选用SKF/INA品牌。
The support arm is made of tool steel, processed through secondary heat treatment and quenching, with a surface hardness of 55HRC or above, ensuring both hardness and toughness. Roller selection SKF/INA brand.



内置液压助推器,保证中心架在工作时更加稳定,更加安全。
Built in hydraulic booster to ensure more stable and safe operation of the center frame.

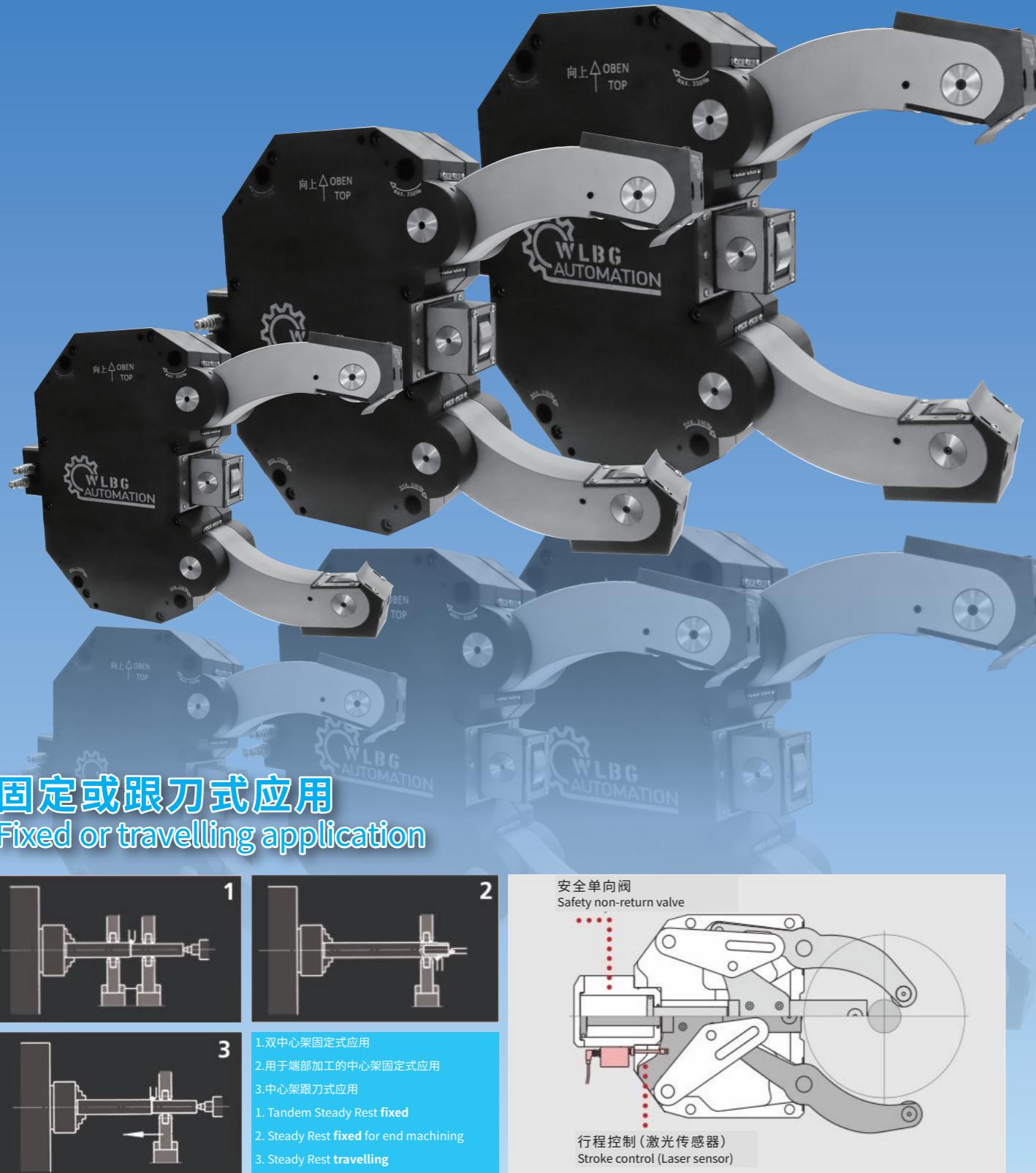


中心架表面涂装,采用德国纳米图层技术,整体表面硬度50HRC以上,耐用度长达10年以上。
The surface coating of the center frame adopts German nano layer technology, with an overall surface hardness of over 50HRC and a durability of over 10 years.

产品外观及各个部位已取得多项发明及实用新型专利!

WLBE-AUTOMATION

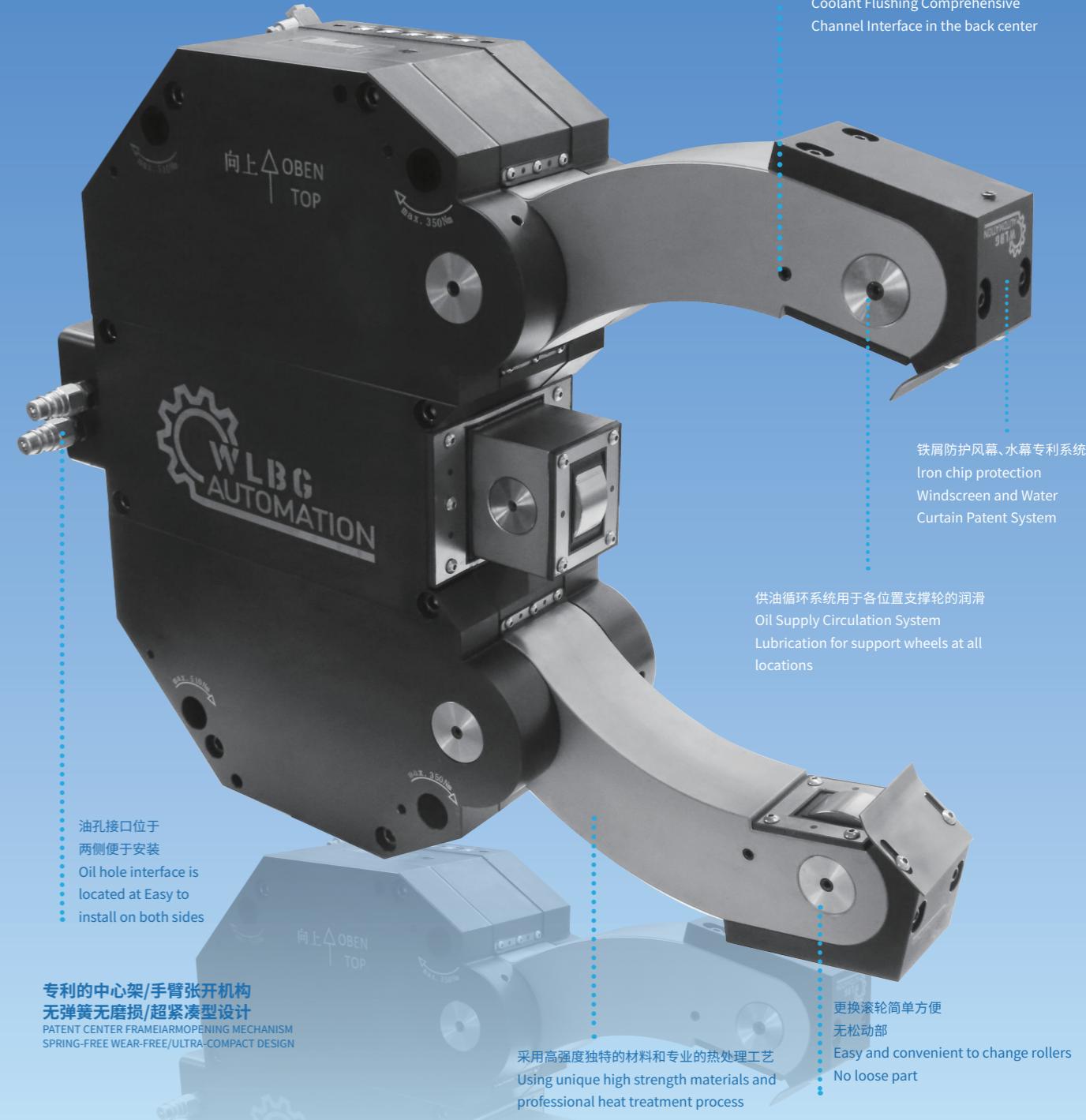
液压自定心中心架全球领航品牌



WLBE-AUTOMATION

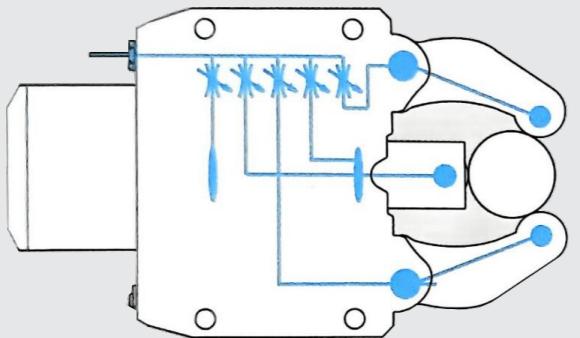
RC系列类超紧凑中心架

RC series ultra compact center frame

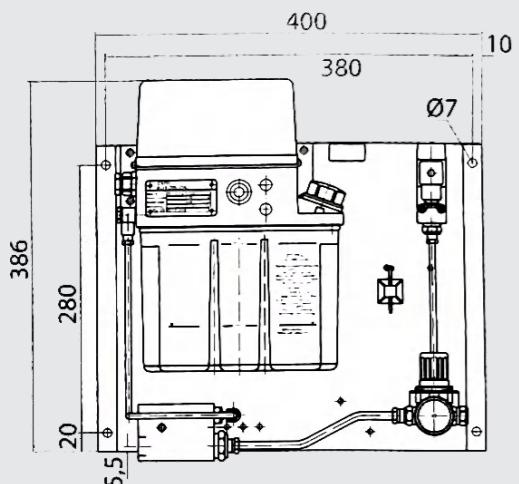




定量分配润滑系统
潤滑接口 G 1/8"
QUANTITATIVE DISTRIBUTION LUBRICATION SYSTEM
CENTRALIZED LUBRICATION G 1/8"



油气润滑单元
潤滑接口 G 1/8"
LUBRICATION UNIT OIL
CENTRALIZED LUBRICATION G 1/8"



滚轮-选配(所有型号)

- 滚子(精度等级P05)是专为中心架设计的
- 特殊的密封保证了最高的精度和使用寿命
- 标准配置:腰鼓型滚轮(可用于跟刀式应用的中心架), 合成材料滚轮
- 选配:圆柱型滚轮

Option of rollers (all types)

- Roller (accuracy class P05) is specially designed for center frame
- Special sealing ensures the highest accuracy and service life
- Standard configuration: waist drum type roller (center frame that can be used for knife following application), Synthetic material roller
- Optional: cylindrical roller

集中油润滑一选配(所有型号)

- 用于恶劣工作条件下, 大切削量
- 用于随动式的中心架应用
- 推荐使用我们带有定时器的完全分离的润滑单元
- 润滑间隔5-20分钟
- 最小/最大操作压力10 to 45bar
- 润滑油:粘度46mm²/s(粘度等级ISO)

Option of central oil Lubrication (all types)

- For heavy working conditions and high build up of swarf
- For travelling Steady Rest applications
- The use of our separate complete lubrication unit with timer control is recommended
- Lubricating intervals 5 -20 min
- Min./max. operating pressure 10 to 45 bar
- Oil: Viscosity of 46 mm²/s (viscosity class ISO)

油气润滑选配(所有型号)

- 用于大切削量, 粉尘或强力冷却的最恶劣条件
- 油气润滑单元内置定时器
- 本润滑单元以可调的间隔(2-12分钟)把油注入气管
- 持续的气流(最小3bar)把油输送到滚子上, 以保证滚子的清洁
- 润滑油:粘度46mm²/s(粘度等级ISO)

Option of central Lubrication oil + air(all types)

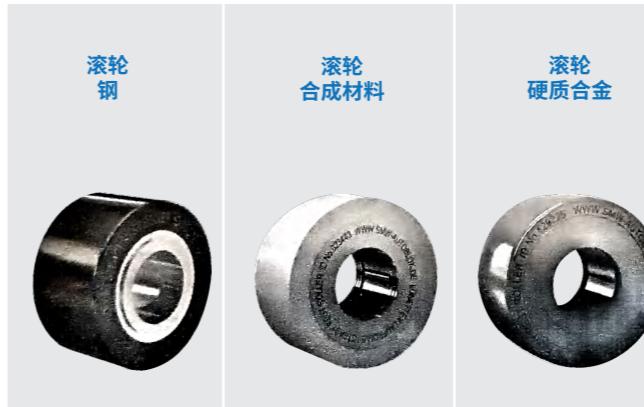
- For heaviest cutting conditions with high built up of swarf, dust or coolant
- The oil + air unit for lubrication with built-in timer control is mandatory
- This unit injects oil for lubrication into the air hose in adjustable intervals (2 -12 min.)
- The permanent air flow (min. 3 bar) feeds the oil to the rollers and keeps them clean
- Oil: Viscosity of 46 mm²/s (viscosity class ISO)

性能特点

- 低噪音、低温升
- 压力稳定性高
- 结构紧凑体积小(粘度等级ISO)

Performance characteristics

- Low noise, low temperature rise N
- Pressure stability and high efficiency
- Compact structure, small volume



滚轮(所有型号)

- 支撑轮(钢材料)(标准):工件表面未硬化处理

Rollers (all types)

- Rollers steel (standard): Surface of workpiece not hardened

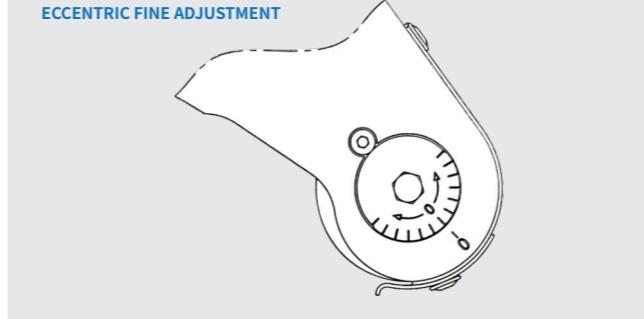
提供可选材料:

- 特殊处理自润滑型:一种特殊的热处理技术使滚轮的寿命大幅度提高

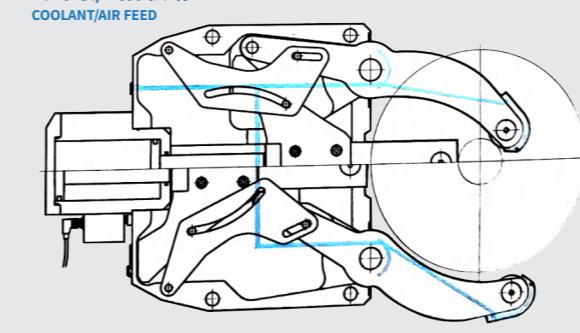
Provide optional materials:

- Special treatment self-lubricating type: A special heat treat ment technology can greatly improve the life of the roller

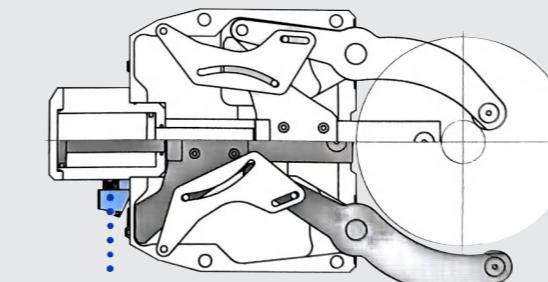
偏心微调 ECCENTRIC FINE ADJUSTMENT



冷却液/气体供给



线性直径监测系统 LINEAR DIAMETER MONITORING SYSTEM



冷却液/气体供给(选配)

- 内置管道, 中央连接冷却剂或空气接口连接到中心架臂上
- 中心架的基本配置

Coolant/air feed (all types)

- Built-in channels to feed coolant or air from a central connecting port to the Steady Rest arms
- Basic equipment for steady rests

选配线性直径监测系统

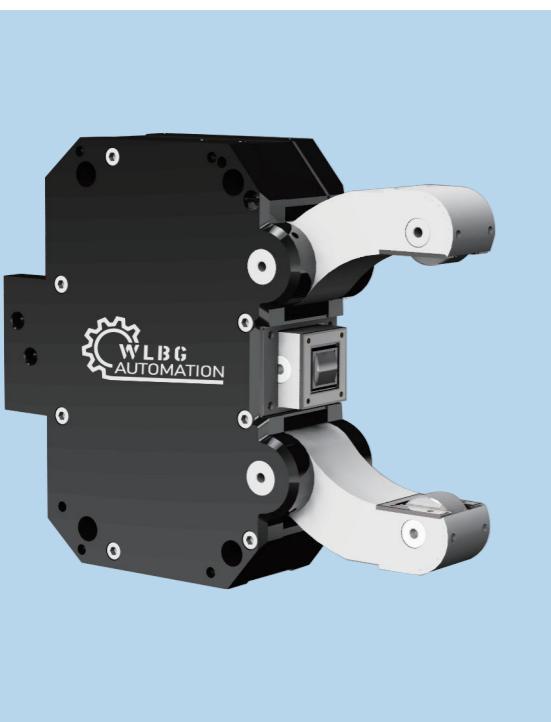
- 夹持臂的位置可由线性测量、激光、接近开关系统监测
- 避免与工件, 转塔, 装载装置等碰撞
- 由于可以控制手臂只张开到需要的位置, 这样能缩短中心架工作循环时间
- 输入:24 V 输出:4-20 mA
- 输入:24 V 输出:0-10 V

Optional Linear diameter monitoring system

- The position of the clamping arm can be monitored by linear measure ment, laser and proximity switch system
- Avoids collision with workpieces, turret, loader etc.
- Reduced cycle time due to position controlled opening of the arms to the requested opening only.
- In: 24 V Out: 4-20 mA
- In: 24 V Out: 0-10 V



车床中心架(油缸内藏式)
超紧凑系列
RC-1(5-70)
LATHE CENTER FRAME (INTERNAL CYLINDER)
ULTRACOMPACT SERIES



技术参数/Technical Parameters

夹持范围 Clamping range	5-70mm
最大夹持力 Maximum clamping force	200 daN
滚子最大线速度 Maximum linear speed of roller	730 m/min
夹持范围内定位精度 Positioning accuracy within the clamping range	0.02 mm
重复定位精度 Repetitive positioning accuracy	0.005 mm
最小工作压力 Minimum working pressure	1 Mpa
最大工作压力 Maximum working pressure	2.5 Mpa
活塞面积 Piston area	310 mm ²
重量 weight	8.6 kg

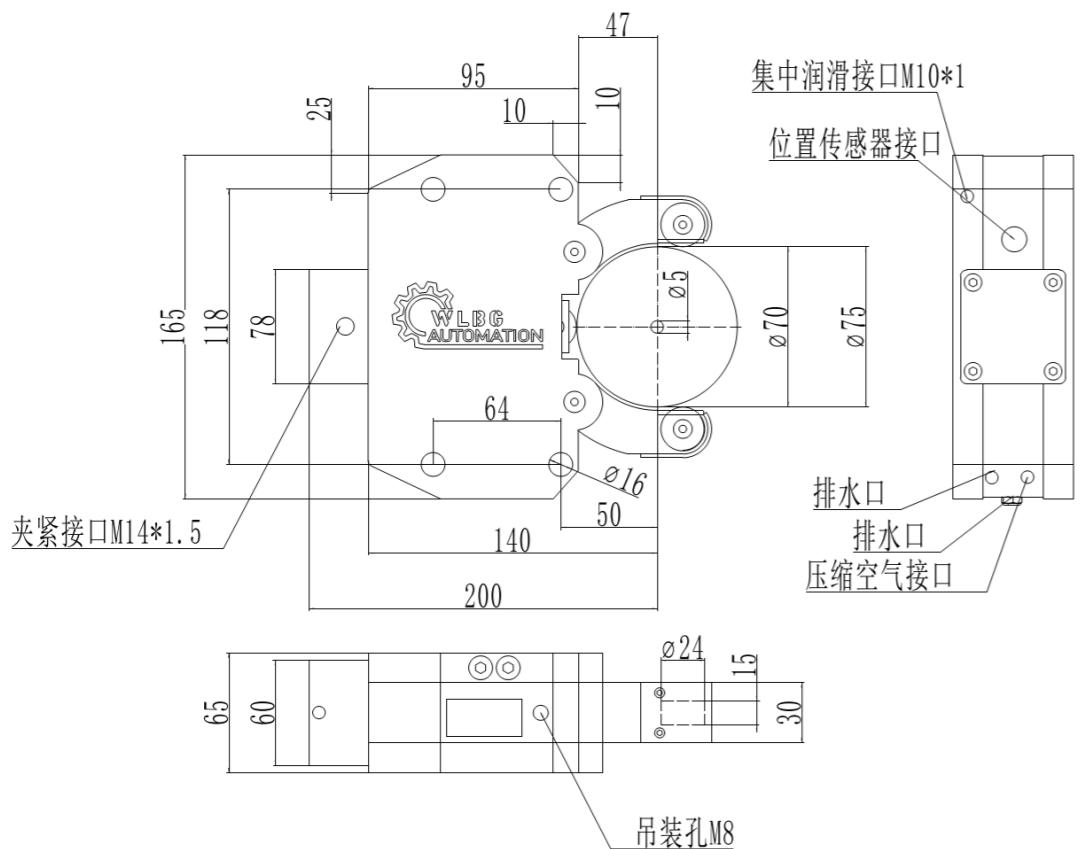
LATHE CENTER FRAME (INTERNAL CYLINDER)
ULTRACOMPACT SERIES
RC-2(7-100)
车床中心架(油缸内藏式)
超紧凑系列



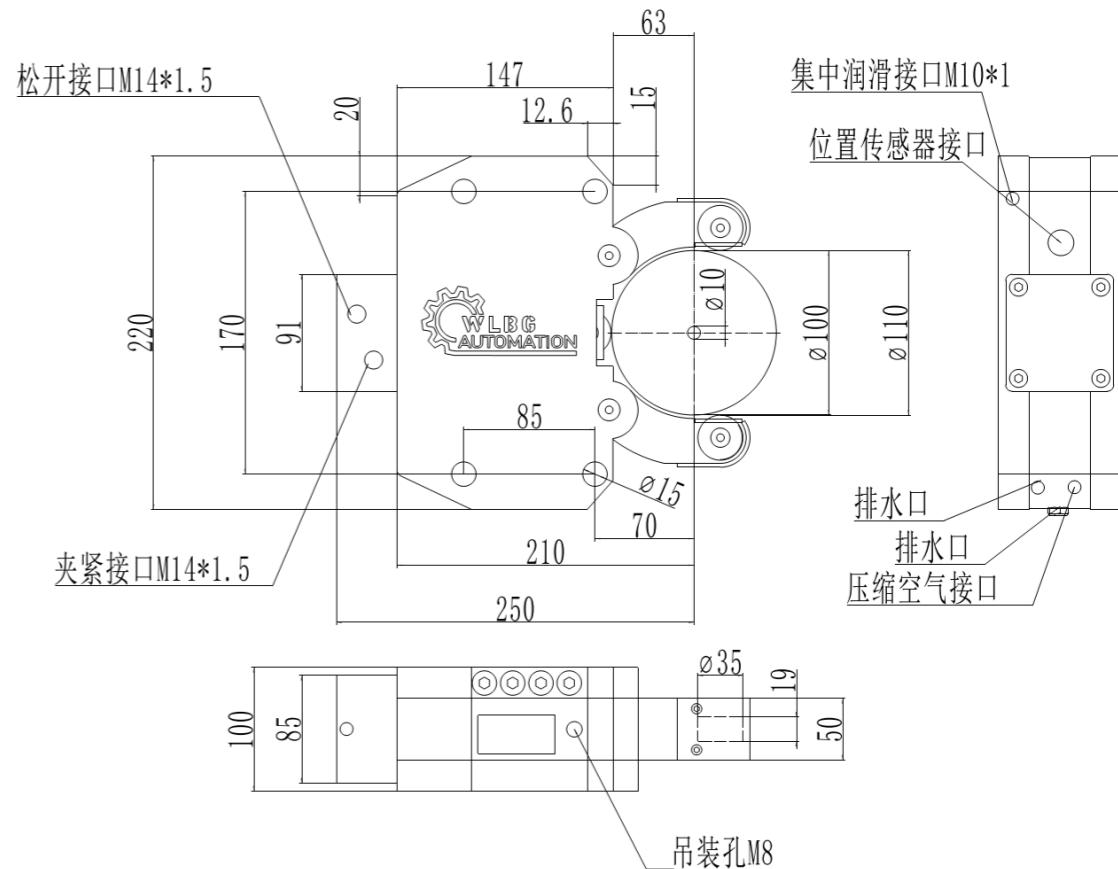
技术参数/Technical Parameters

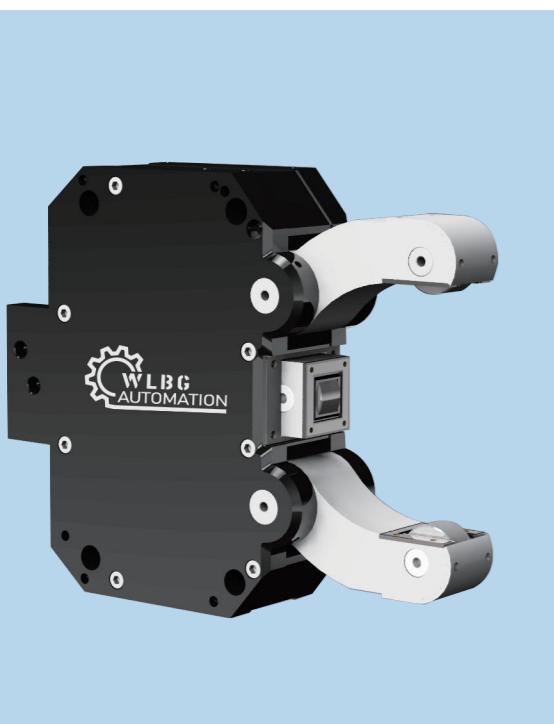
夹持范围 Clamping range	7-100 mm
最大夹持力 Maximum clamping force	830 daN
滚子最大线速度 Maximum linear speed of roller	730 m/min
夹持范围内定位精度 Positioning accuracy within the clamping range	0.03mm
重复定位精度 Repetitive positioning accuracy	0.005mm
最小工作压力 Minimum working pressure	1 Mpa
最大工作压力 Maximum working pressure	6 Mpa
活塞面积 Piston area	700mm ²
重量 weight	28 kg

尺寸图/Dimensions



尺寸图/Dimensions





技术参数/Technical Parameters

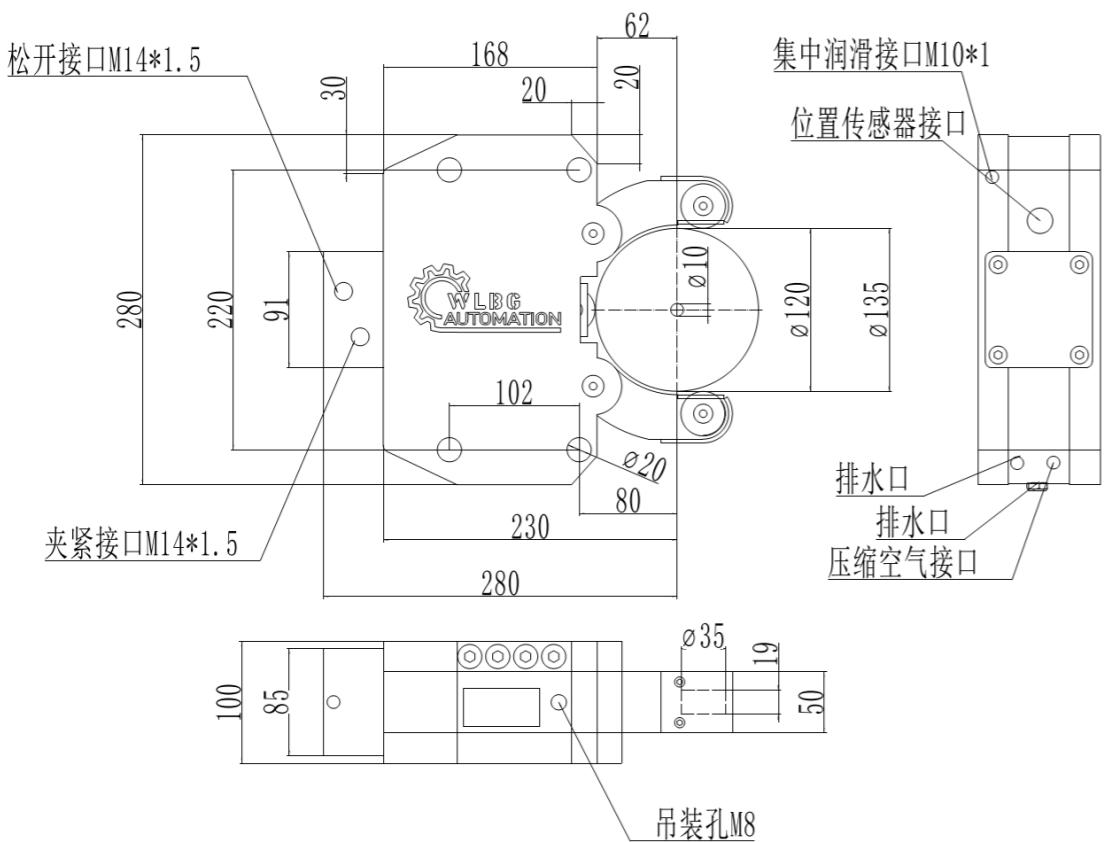
夹持范围 Clamping range	10-120 mm
最大夹持力 Maximum clamping force	1350 daN
滚子最大线速度 Maximum linear speed of roller	930 m/min
夹持范围内定位精度 Positioning accuracy within the clamping range	0.04 mm
重复定位精度 Repetitive positioning accuracy	0.006 mm
最小工作压力 Minimum working pressure	1 Mpa
最大工作压力 Maximum working pressure	6 Mpa
活塞面积 Piston area	960mm ²
重量 weight	34 kg



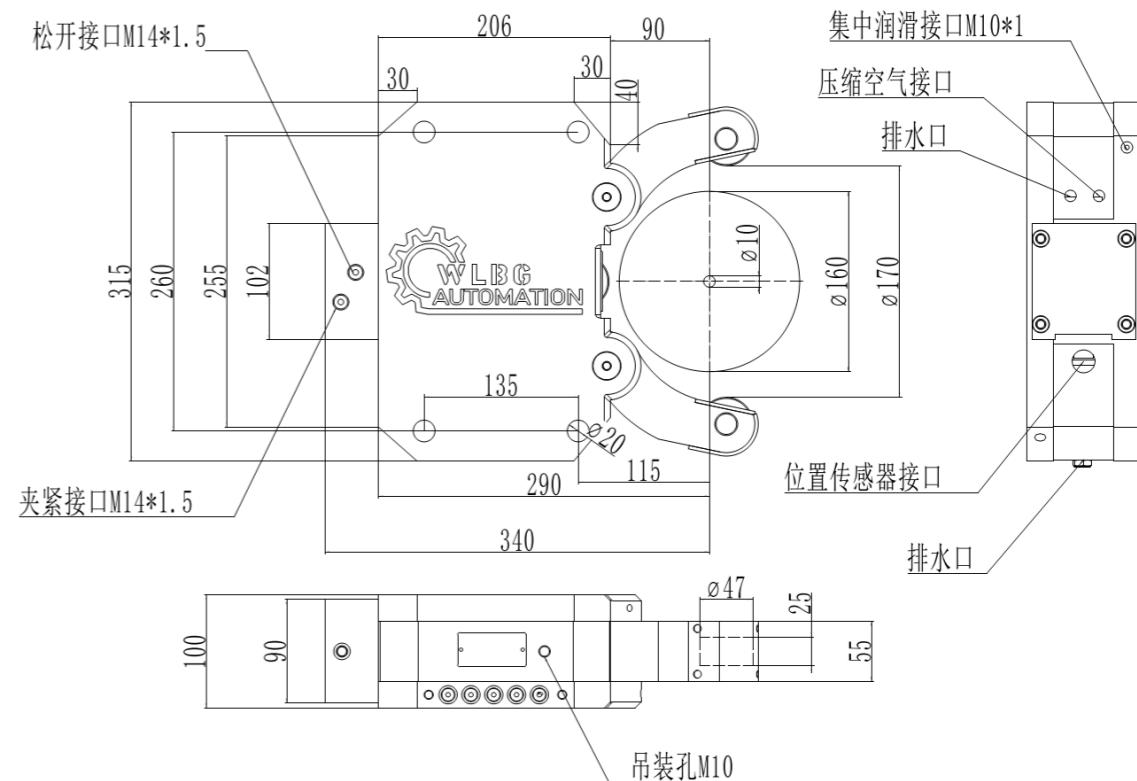
技术参数/Technical Parameters

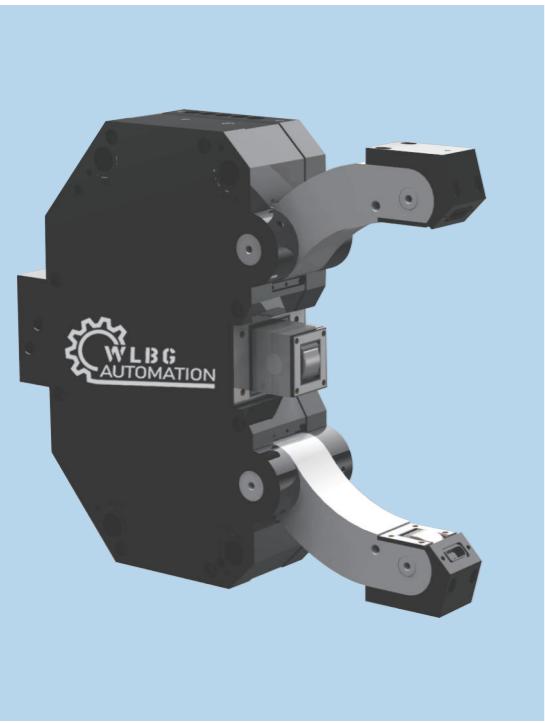
夹持范围 Clamping range	10-160 mm
最大夹持力 Maximum clamping force	3300 daN
滚子最大线速度 Maximum linear speed of roller	805 m/min
夹持范围内定位精度 Positioning accuracy within the clamping range	0.05mm
重复定位精度 Repetitive positioning accuracy	0.007mm
最小工作压力 Minimum working pressure	1 Mpa
最大工作压力 Maximum working pressure	7 Mpa
活塞面积 Piston area	1250mm ²
重量 weight	48 kg

尺寸图/Dimensions



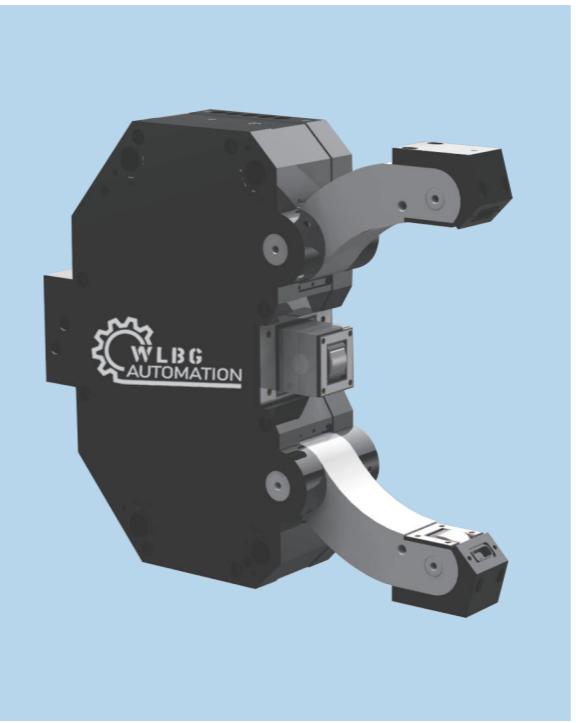
尺寸图/Dimensions





技术参数/Technical Parameters

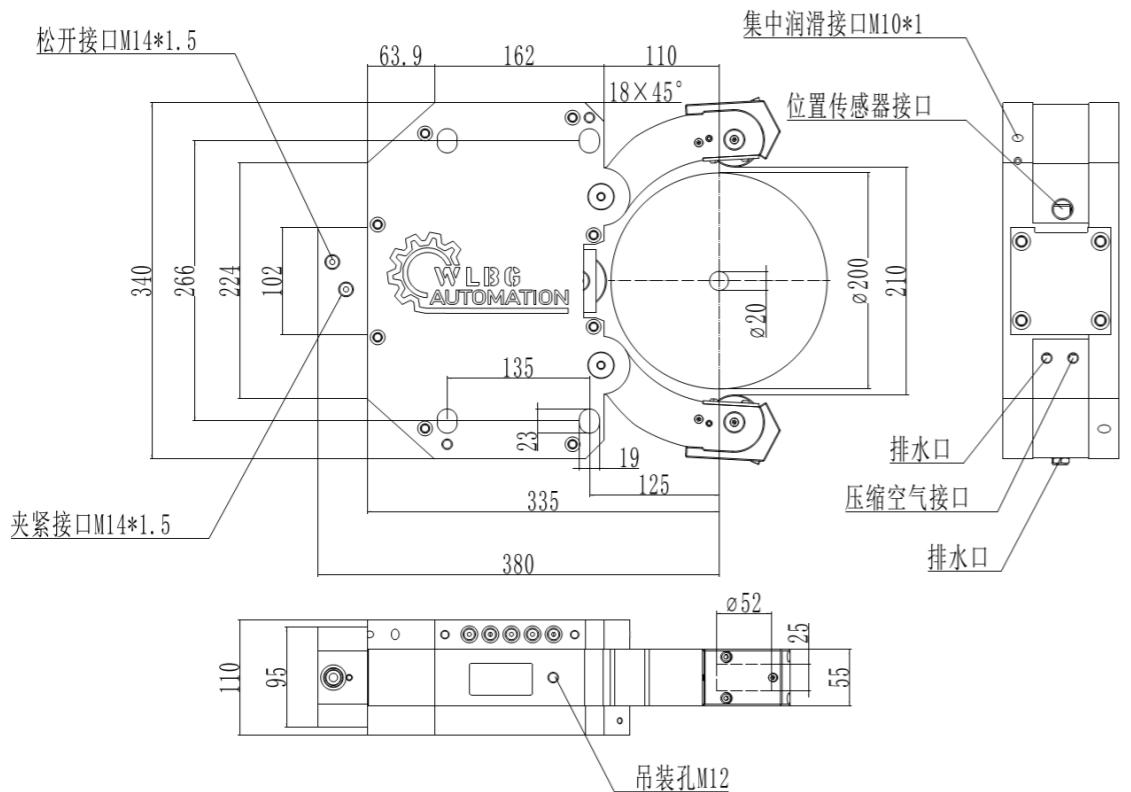
夹持范围 Clamping range	20-200 mm
最大夹持力 Maximum clamping force	3800 daN
滚子最大线速度 Maximum linear speed of roller	890 m/min
夹持范围内定位精度 Positioning accuracy within the clamping range	0.06 mm
重复定位精度 Repetitive positioning accuracy	0.007 mm
最小工作压力 Minimum working pressure	1 Mpa
最大工作压力 Maximum working pressure	7 Mpa
活塞面积 Piston area	1250mm ²
重量 weight	67 kg



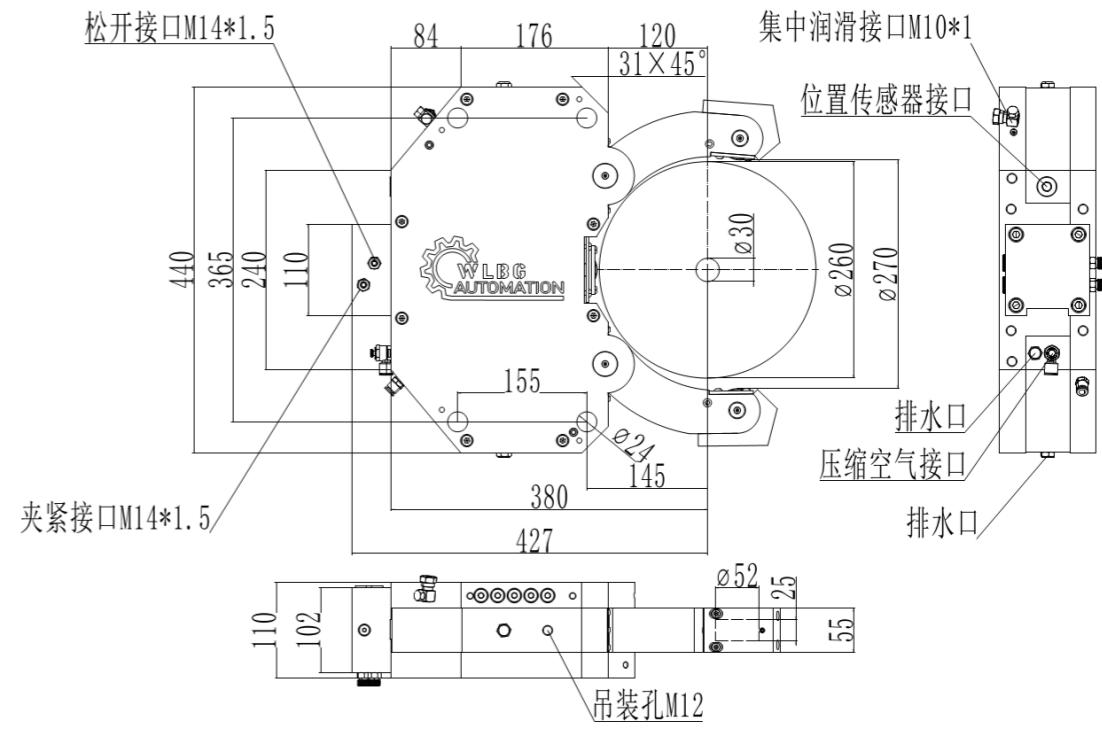
技术参数/Technical Parameters

夹持范围 Clamping range	30-260 mm
最大夹持力 Maximum clamping force	4800 daN
滚子最大线速度 Maximum linear speed of roller	890 m/min
夹持范围内定位精度 Positioning accuracy within the clamping range	0.06mm
重复定位精度 Repetitive positioning accuracy	0.007mm
最小工作压力 Minimum working pressure	1 Mpa
最大工作压力 Maximum working pressure	7 Mpa
活塞面积 Piston area	1250mm ²
重量 weight	87 kg

尺寸图/Dimensions

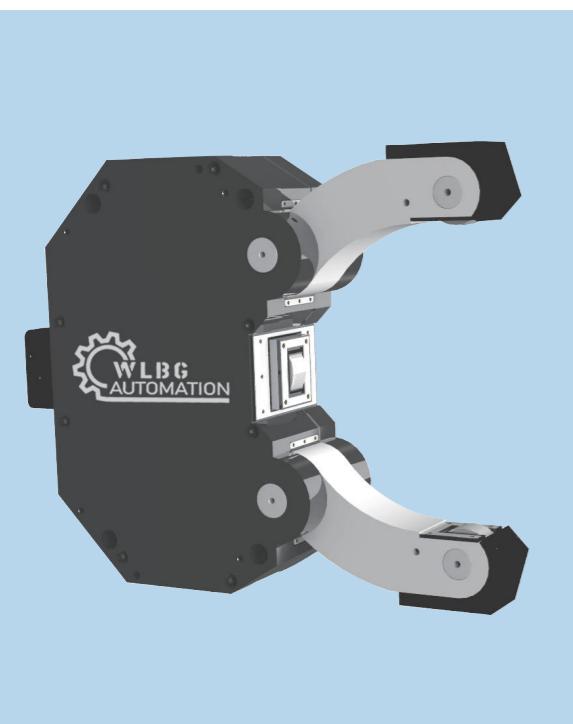


尺寸图/Dimensions





车床中心架(油缸内藏式) LATHE CENTER FRAME (INTERNAL CYLINDER)
超紧凑系列 ULTRACOMPACT SERIES
RC-7[45-320]



技术参数/Technical Parameters

夹持范围 Clamping range	45-320 mm
最大夹持力 Maximum clamping force	5800 daN
滚子最大线速度 Maximum linear speed of roller	655 m/min
夹持范围内定位精度 Positioning accuracy within the clamping range	0.07 mm
重复定位精度 Repetitive positioning accuracy	0.008 mm
最小工作压力 Minimum working pressure	1 Mpa
最大工作压力 Maximum working pressure	7 Mpa
活塞面积 Piston area	1960mm²
重量 weight	162 kg

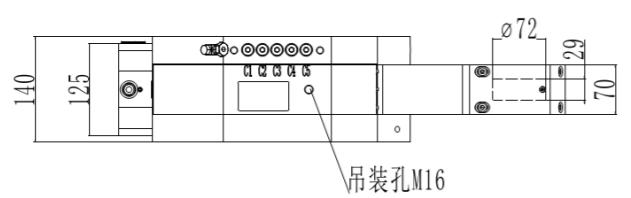
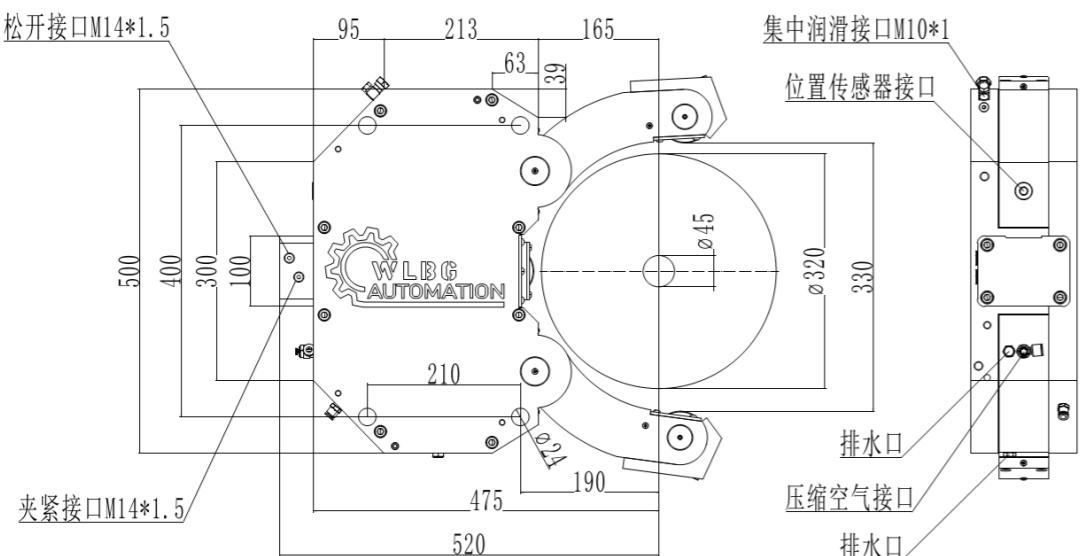
LATHE CENTER FRAME (INTERNAL CYLINDER) 车床中心架(油缸内藏式)
ULTRACOMPACT SERIES 超紧凑系列
RC-8[80-360]



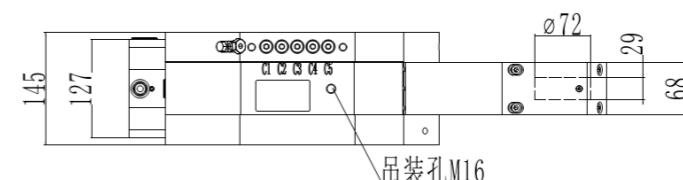
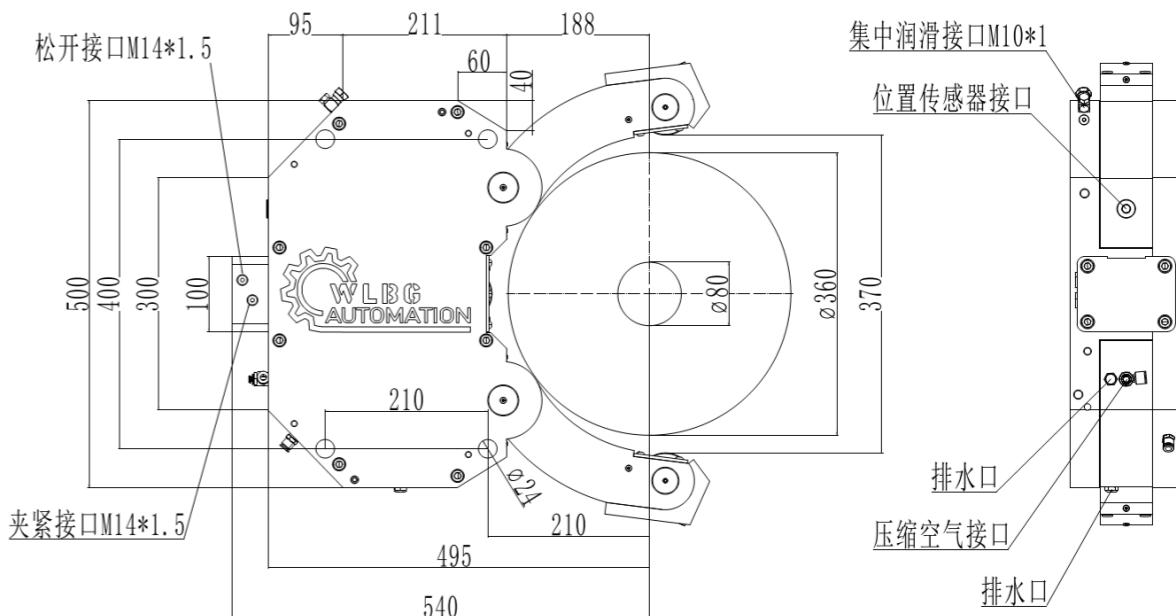
技术参数/Technical Parameters

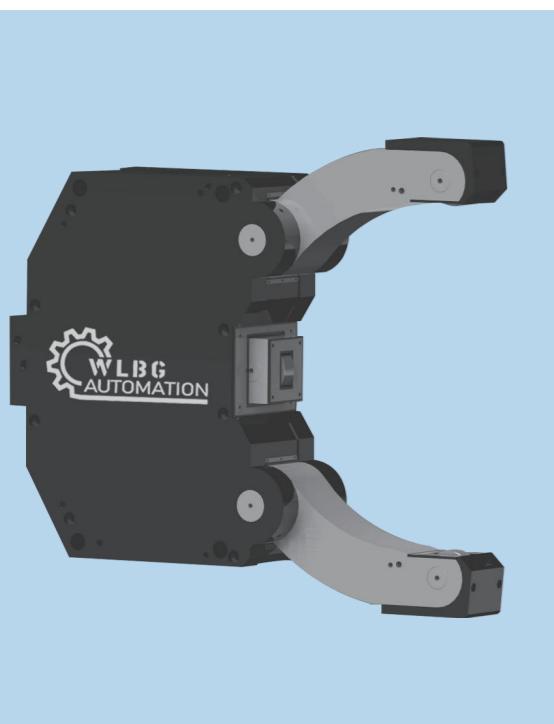
夹持范围 Clamping range	80-360 mm
最大夹持力 Maximum clamping force	5800 daN
滚子最大线速度 Maximum linear speed of roller	765 m/min
夹持范围内定位精度 Positioning accuracy within the clamping range	0.07 mm
重复定位精度 Repetitive positioning accuracy	0.008 mm
最小工作压力 Minimum working pressure	1 Mpa
最大工作压力 Maximum working pressure	7 Mpa
活塞面积 Piston area	1960mm²
重量 weight	165 kg

尺寸图/Dimensions



尺寸图/Dimensions





技术参数/Technical Parameters

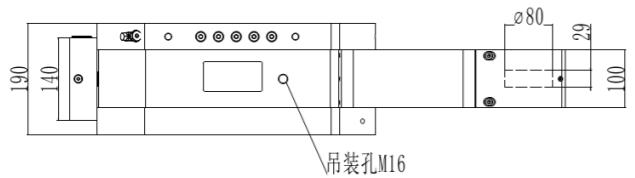
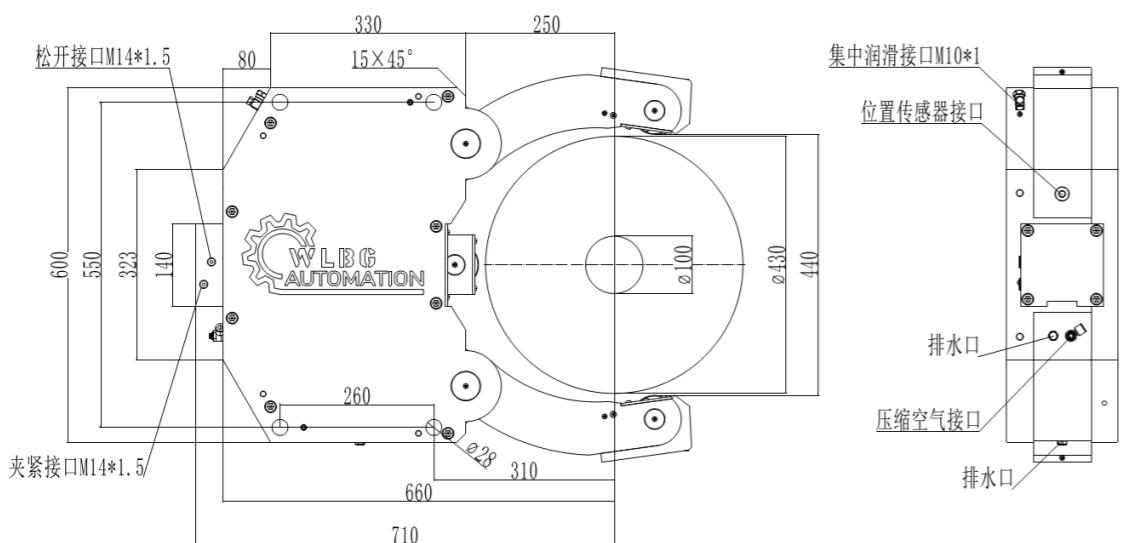
夹持范围 Clamping range	100-430 mm
最大夹持力 Maximum clamping force	6900 daN
滚子最大线速度 Maximum linear speed of roller	685 m/min
夹持范围内定位精度 Positioning accuracy within the clamping range	0.08 mm
重复定位精度 Repetitive positioning accuracy	0.01 mm
最小工作压力 Minimum working pressure	2 Mpa
最大工作压力 Maximum working pressure	8 Mpa
活塞面积 Piston area	4420 mm²
重量 weight	335 kg



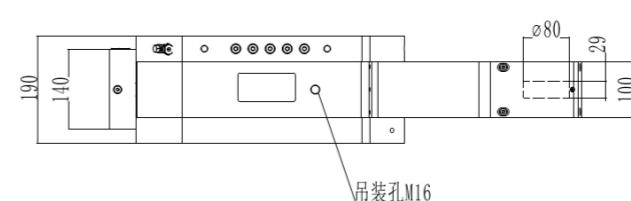
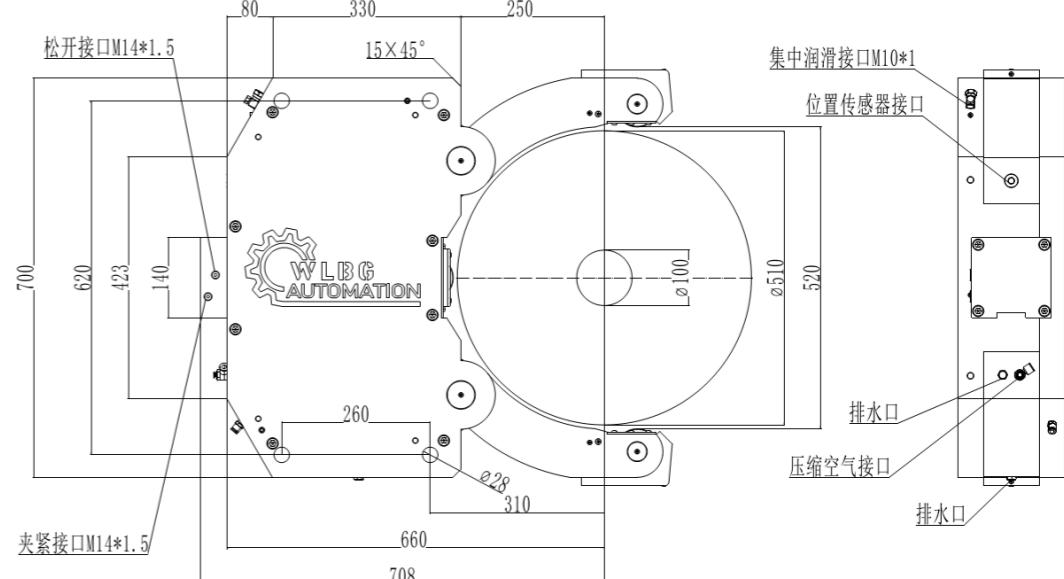
技术参数/Technical Parameters

夹持范围 Clamping range	100-510 mm
最大夹持力 Maximum clamping force	7200 daN
滚子最大线速度 Maximum linear speed of roller	685 m/min
夹持范围内定位精度 Positioning accuracy within the clamping range	0.1 mm
重复定位精度 Repetitive positioning accuracy	0.02 mm
最小工作压力 Minimum working pressure	2 Mpa
最大工作压力 Maximum working pressure	8 Mpa
活塞面积 Piston area	4420 mm²
重量 weight	366 kg

尺寸图/Dimensions

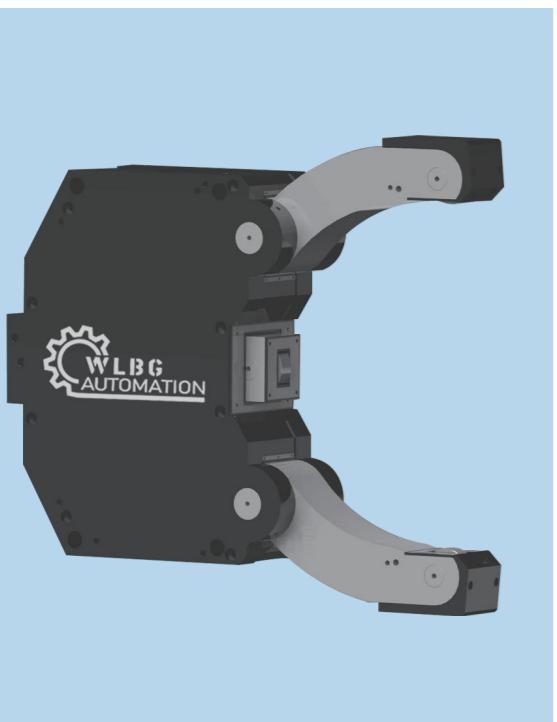


尺寸图/Dimensions





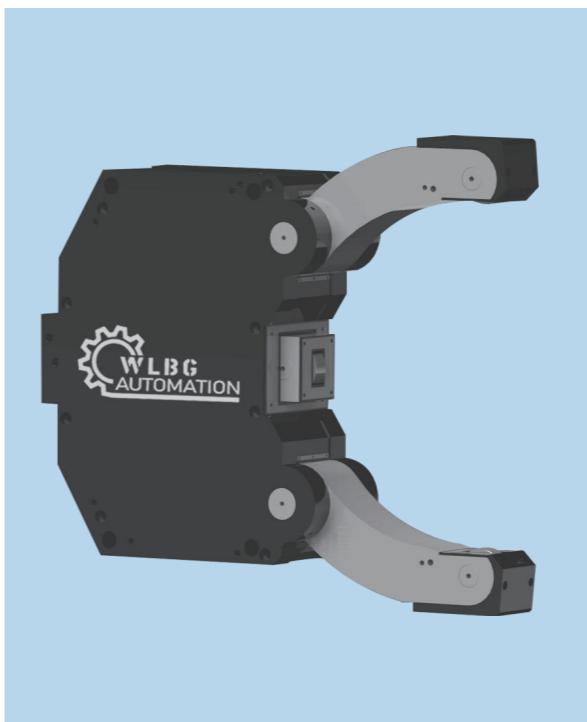
车床中心架(油缸内藏式) LATHE CENTER FRAME (INTERNAL CYLINDER)
超紧凑系列 ULTRACOMPACT SERIES
RC-11[245-680]



技术参数/Technical Parameters

夹持范围 Clamping range	250-680 mm
最大夹持力 Maximum clamping force	7200 daN
滚子最大线速度 Maximum linear speed of roller	685 m/min
夹持范围内定位精度 Positioning accuracy within the clamping range	0.1 mm
重复定位精度 Repetitive positioning accuracy	0.03 mm
最小工作压力 Minimum working pressure	2 Mpa
最大工作压力 Maximum working pressure	8 Mpa
活塞面积 Piston area	5030 mm ²
重量 weight	482 kg

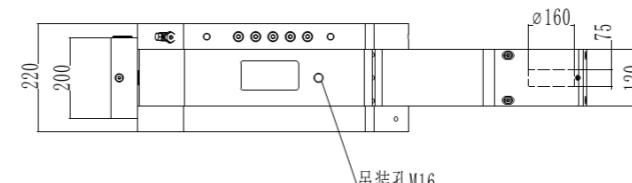
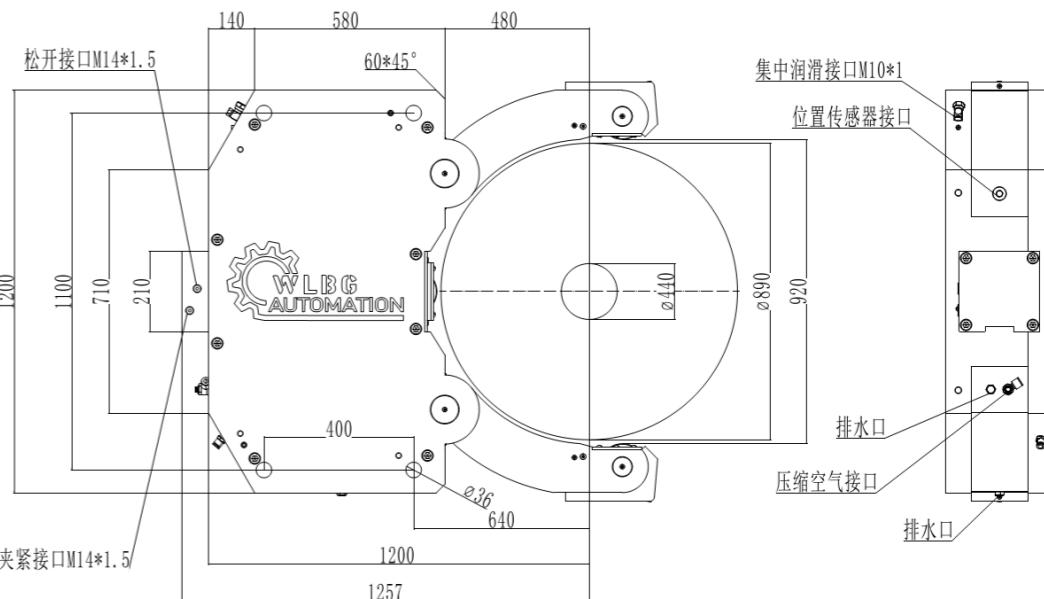
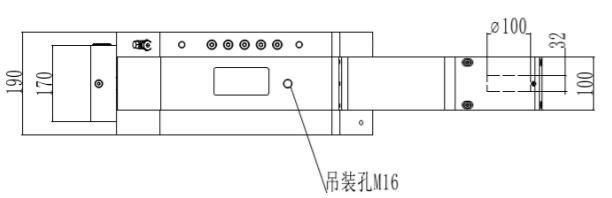
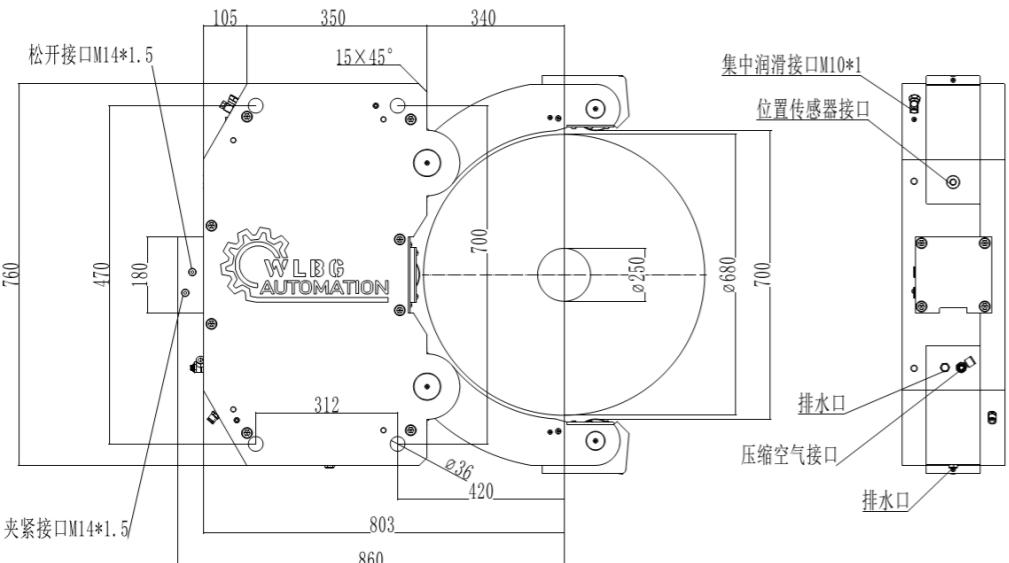
LATHE CENTER FRAME (INTERNAL CYLINDER) 车床中心架(油缸内藏式)
ULTRACOMPACT SERIES 超紧凑系列
RC-12[450-888]

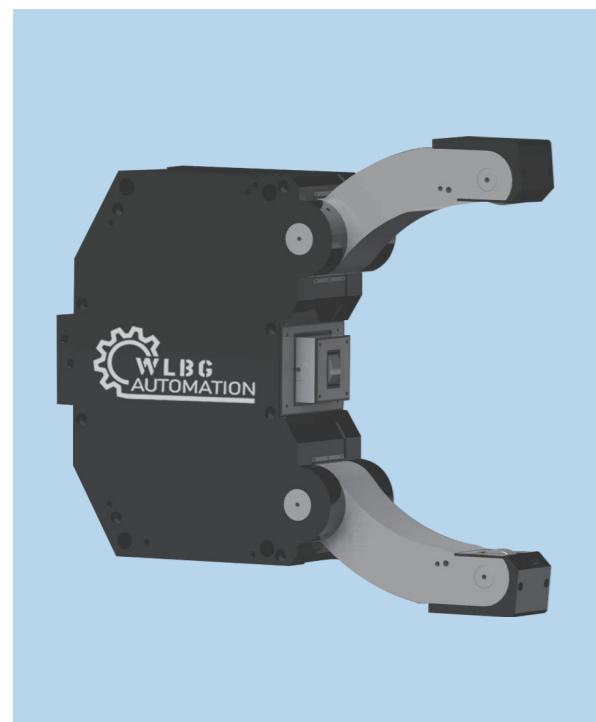


技术参数/Technical Parameters

夹持范围 Clamping range	450-888 mm
最大夹持力 Maximum clamping force	9500 daN
滚子最大线速度 Maximum linear speed of roller	457 m/min
夹持范围内定位精度 Positioning accuracy within the clamping range	0.2 mm
重复定位精度 Repetitive positioning accuracy	0.04 mm
最小工作压力 Minimum working pressure	2 Mpa
最大工作压力 Maximum working pressure	8 Mpa
活塞面积 Piston area	7850mm
重量 weight	1380 kg

尺寸图/Dimensions

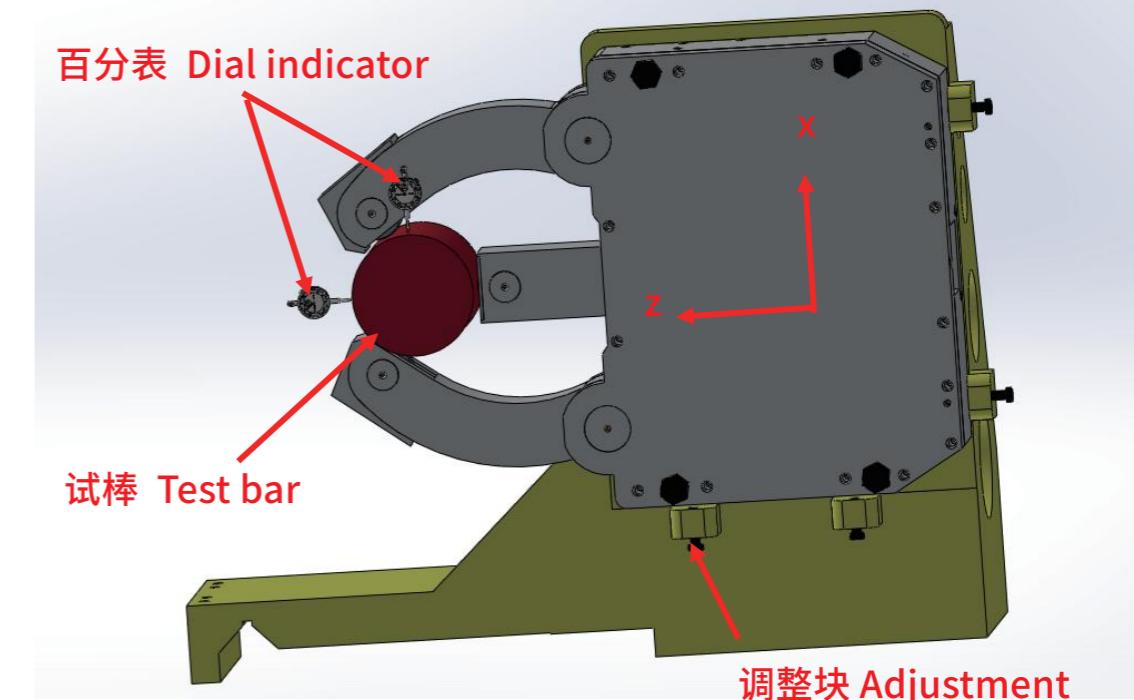
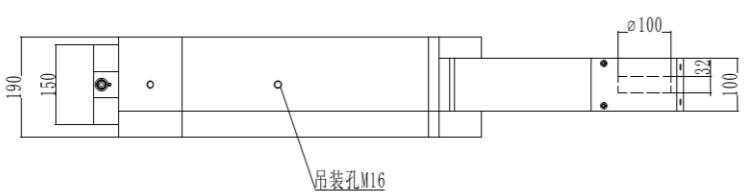
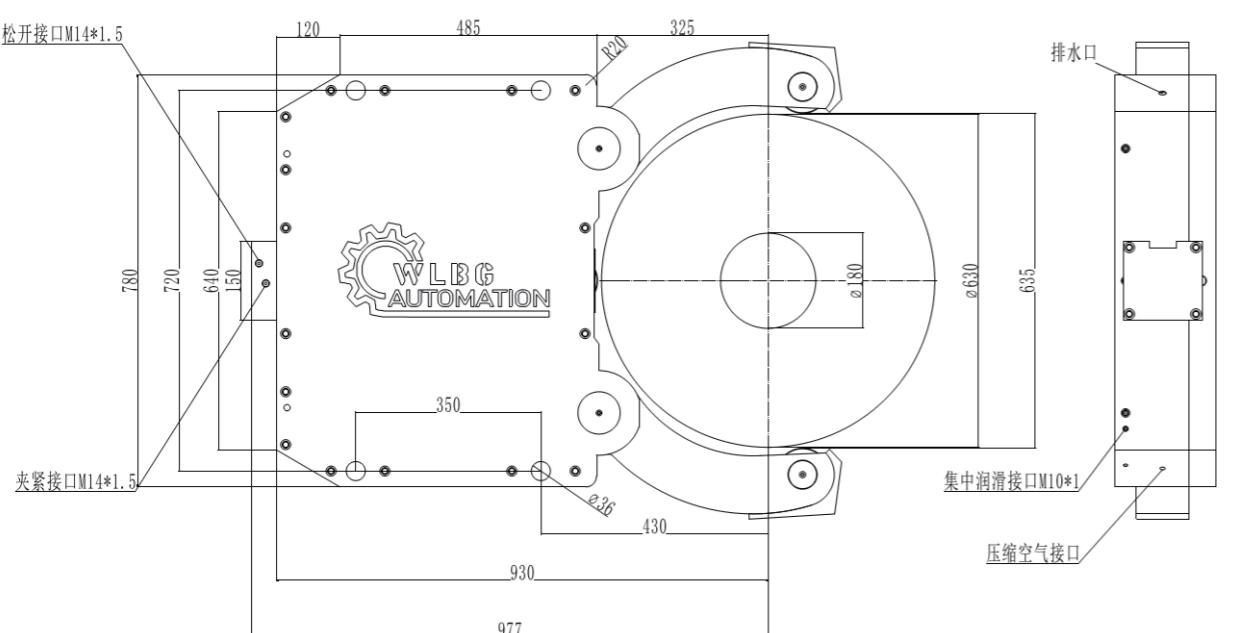




技术参数/Technical Parameters

夹持范围 Clamping range	190-630 mm
最大夹持力 Maximum clamping force	9200 daN
滚子最大线速度 Maximum linear speed of roller	457 m/min
夹持范围内定位精度 Positioning accuracy within the clamping range	0.2 mm
重复定位精度 Repetitive positioning accuracy	0.04 mm
最小工作压力 Minimum working pressure	2 Mpa
最大工作压力 Maximum working pressure	8 Mpa
活塞面积 Piston area	7850 mm ²
重量 weight	693 kg

尺寸图/Dimensions



机床按装液压自定心中心架及调整步骤方法:

Method for installing hydraulic self centering frame and adjusting steps for machine tools:

1、用卡盘夹紧试棒再用顶尖顶紧于机主轴中心(或卡盘夹紧一根棒料用顶尖顶紧后,精车一边,替代试棒也可以)。

Clamp the test bar with a chuck and then tighten it to the center of the machine tool spindle with a tip (or clamp a bar with a chuck and tighten it with a tip, then turn it to one side, or replace the test bar).

2、如图所示将两百分表在X和Z两方向上找试棒最高点并调至零位。

As shown in the figure, locate the highest point of the test bar on the two dial indicators in the X and Z directions and adjust it to the zero position.

3、松开液压中心架与安装架的四个紧固螺钉,让液压中心架夹紧试棒。观察此时两百分表读数是否为零(即试棒是否偏离中心)。若不为零,用手移动中心架,至两表读数恢复零位。

Loosen the four fastening screws between the hydraulic center frame and the mounting bracket, and allow the hydraulic center frame to clamp the test bar. Observe whether the readings on the two dial gauges are zero at this time (i.e. whether the test bar is off center). If it is not zero, move the center frame by hand until the readings of the two meters return to zero.

4、把紧四个紧固螺钉,同时观察两百分表指针是否还指示零位。若不为零,则需再次松开紧固螺钉,上下前后调节调整块螺丝,直至紧固螺钉锁紧后两百分表读数为零为止。

Tighten the four fastening screws and observe whether the two dial indicators still indicate zero position. If it is not zero, loosen the fastening screw again and adjust the adjusting block screw up, down, forward and backward until the two dial indicators read zero after the fastening screw is locked.

5、两个百分表读书为零后,启动机床,再观察动态状况下百分表是否还在零位。

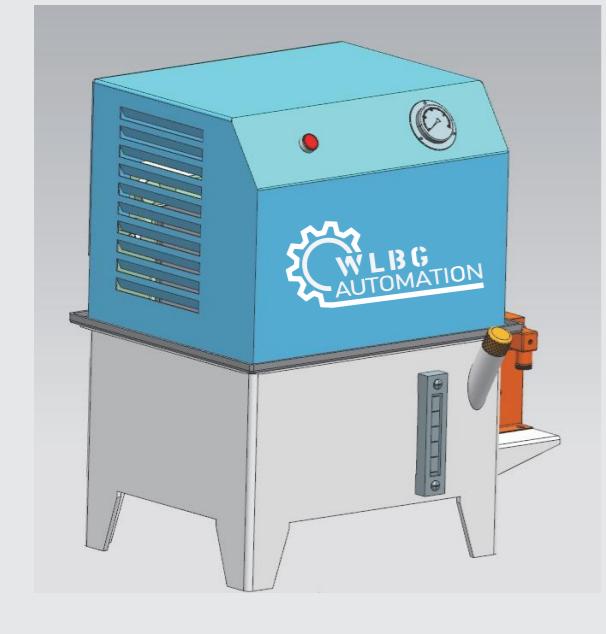
After reading two dial gauges to zero, start the machine tool and observe whether the dial gauge is still at zero position under dynamic conditions.

6、静态、动态两个百分表都再零位,松开试棒,移去百分表、试棒,即可工作。

Both the static and dynamic dial indicators are reset to zero position. Release the test rod, remove the dial indicator and test rod, and it can start working.

选配项目：

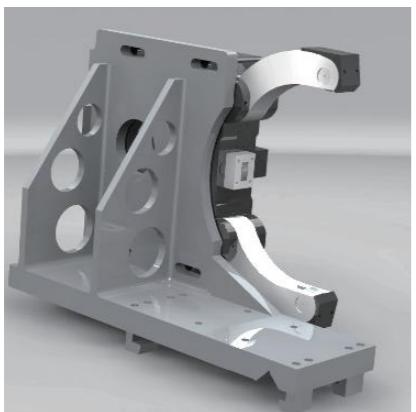
一、液压综合系统



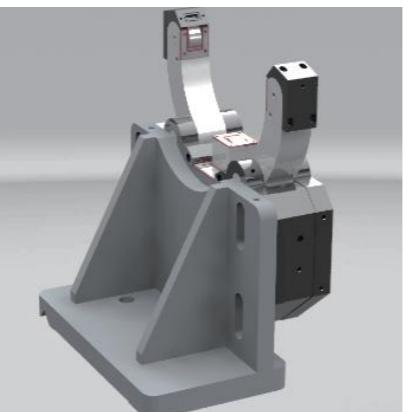
- 1、整体封闭式外观, 干净整洁;
- 2、电磁阀选用台湾朝田品牌, 需用台湾进口叶片泵;
- 3、配置蓄能器, 大溶基风冷系统, 解决油温过高问题;
- 4、内置电器系统, 自动润滑泵组;
- 5、所有液压连接均采用快速接头设计, 方便快捷连接液压中心架;
- 6、液压系统到用户现场后, 只需接三项380V电缆即可。

专利产品, 有防必究

二、固定座种类



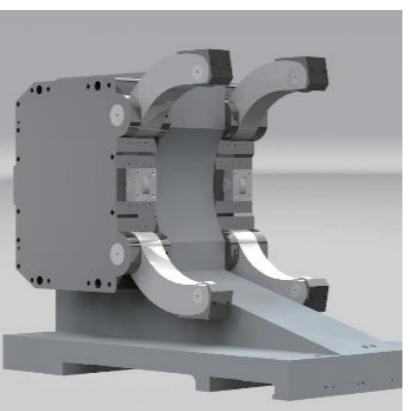
平行安装多应用于平轨车床



垂直安装多应用于油缸专用车床



倾斜安装多应用于30°-45°斜轨车床



双中心架固定式安装多应用于平轨、斜轨车床

备忘录

备忘录

备忘录
