

# Evermore®

[www.evermore-tools.com](http://www.evermore-tools.com)

自動化通用機械手指及附件系列



## Evermore®

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— 2018 —



# 科技創新 引領未來

science and technological  
innovation lead the future



## >>> COMPANY INTRODUCTION | 公司簡介

自1979年創立以來，致力於專業生產KEYLESS DRILL CHUCK，高精度自緊式鑽夾頭，並創立了自有品牌“EVERMORE”。

無論在品質維護、技術研發、產能穩定等各方面，多年來始終維持不斷精進的腳步；1992年，成立VDI部門，生產各種車銑複合車床VDI動力刀座和固定刀座；2002年，開始生產CNC刀杆，精鏜粗鏜刀杆，HSK刀杆等精密機械配件；2008年，延續勤堊成功的經驗，開始研發，生產氣動夾爪。無論在品質管理上或是客戶服務都達到一定水準。

本公司最重視的是“品質”及“服務”。在嚴格的品管制度下，所有出廠產品皆採用最精密的“測量儀器”檢驗，希望在未來的機械配件的領域有更高品質展現，提供更精密準確、高速化、複合化產品來滿足客戶的需求、降低客戶的成本、提高效率。

本公司長遠的目標，將所生產產品達到先驅，讓客戶藉由使用我們的產品而改變以往的加工方式，進而提升精度、改善良率、發揮效率，這就是敝公司為本的方針。

Established in 1979 specializing in the manufacture of Keyless Drill Chucks under the brand names Evermore and Golden Goose. The company is always pushing ahead and improving business operations, product quality, developing new technology, and stabilizing production capacity. In 1992 the company set up its VDI department producing VDI turning/milling tool holders, and in 2002 successfully began producing CNC chucks, Boring tooling system, tool holders and other precision machine accessories. In 2008, the company started research and development, production pneumatic grippers. Whether in terms of quality management or customer service has reached the certain level.

Evermore is a trusted supplier to big names in the machine tool industry around the world.

Quality and service are valued most in our company.

Products are rigorously tested throughout. Every area has its own QC lab and products are put through scheduled and random inspections. Finished products are 100% inspected guaranteeing quality, timeliness, and customer specifications. Provide more precision and accuracy, high-speed, modular products to meet the customer demand, reduce customer costs and improve effective.

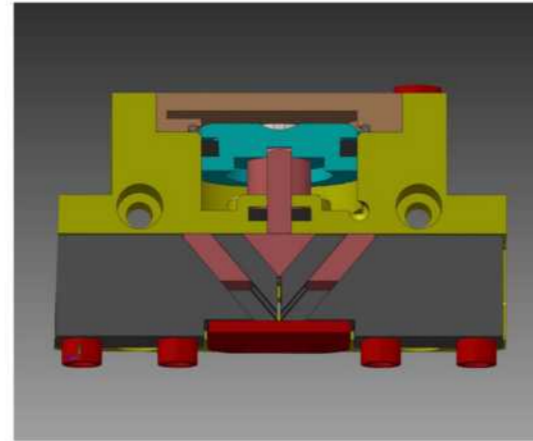
Vanguard products are the long-term objective of our company

Most importantly, Evermore will keep improving product precision and production efficiency. It is Evermore's sincere wish to work with customers to create a better industry with unlimited services and innovations!

EVERMORE EVERMORE

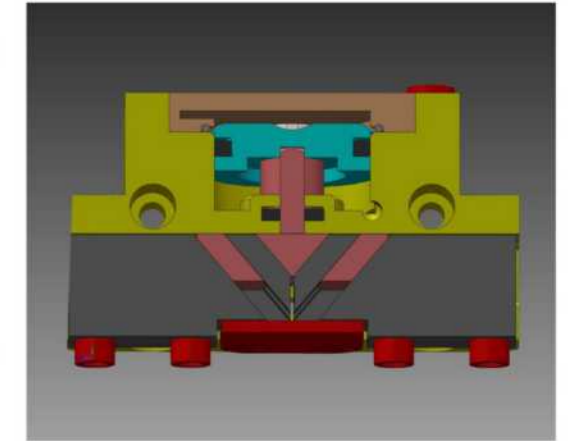


- (1) T型導軌：  
可受載，配合極長夾爪時仍有穩固表現
- (2) 基爪：  
夾持工件專用的夾爪
- (3) 傳感系統：  
無需套件即可安裝傳感器
- (4) 外殼：  
利用超硬陽極處理的高強度合金鋁來減輕重量
- (5) 可自動求心與增配：  
適用各式夾持應用
- (6) 運動力學：  
楔形鉤原理，有良好的力能傳輸與同步夾持表現



壓縮空氣將橢圓形活塞推上或壓下。  
透過傾斜工作面，楔形鉤將運動改向為側向運動，同時作動二個基爪的夾持運動。  
選配與特殊應用是理想的實惠夾持方案，效益比極高

- (1) T-slot guide  
Can bear load and have stable performance when working with an extremely long gripper fingers.
- (2) Gripper:  
Gripper specifically used to gripping workpieces.
- (3) Sensing system:  
Sensors can be installed without installation kit.
- (4) Housing:  
Utilizes super-hard anodized high-strength alloy aluminum to reduce weight.
- (5) automatic alignment and parts addition:  
Fit for various gripping applications.
- (6) Motion mechanics  
Wedge hook principle ensures high power transmission and synchronous gripping performance.



Compressed air pushes the elliptic piston up and down.  
The wedge hook changes the movement to lateral movement and makes two-gripper gripping movement via the inclined work face.  
Options and special applications are ideal and economical.





#### 特點:

- 採用楔式和柱塞的平行開閉氣爪有較佳的動力傳輸與同步夾持表現；
- 緊湊設計，實現輕量化；
- 提供多種安裝類型；
- 發揮強大的夾持力，適于進行重物操作；
- 可安裝開閉檢測磁性開閉和接近開閉；
- 小巧尺寸輕量化，確保夾持有最低尺寸干涉；
- 高同心度；
- 堅固的T型導軌，可精確夾持各式工件；
- 空氣供給，免管路直接連接或螺絲連接，確保在各式自動化系統中皆可彈性供給壓縮空氣直接連接供氣口，壓縮空氣直接供給夾爪使用，無需使用管線，可將壓力介質饋入安裝板上的內孔。

#### ● 選用接近開關

接近開關標配BALLUFF款，BES02ZT,BES02HP,BES02HK

#### ● 選用磁性開關

磁性開關標配SMC,可選擇D-M9N,D-M9NV,D-M9P,D-M9PV,D-M9B,D-M9BV.亦可選用BALLUFF BMF00AR

#### 注意:

- 潔淨空氣：含有3-10 $\mu$ m過濾的99.9%液態油分及過飽和水分0.3%的固態物質的潔淨空氣；
- 重覆定位精度是定義連續100次行程運動的位置散布狀況；
- 工件重量：建議工件重量是由摩擦系數0.1在重力加速度g下工件抗滑落的安全系數（斜坡動摩擦系數）而計算出來的，有相當重量的工件，夾爪可吻合工件形狀；
- 開/關時間：開關時間單指基爪或夾爪運動時間，閥的轉換時間、管線充氣時間或PLC的反應時間皆不含在內，因此估算周期時間需注意；
- 夾爪長度：自機械手主件外殼上端往主軸方向測量。



#### FEATURE

- Adopts the wedge-hook and the parallel plunger opening/closing pneumatic grippers have high power transmission and sync clamping performance
- Compact design to achieve small and light size
- Provides multiple installation heads
- Provides large gripping force and fit for heavy working-piece operation
- Opening/closing detection magnetic switches and proximity switches can be installed
- Compact dimensions and light in weight, for minimal interfering contours in handling
- High concentricity
- Durable T-slot guidance can grip a variety kind of work-pieces accurately
- Air supply via hose-free direct connection or screw connections, for the flexible supply of compressed air in all automation systems
- Connect the air supply inlet directly so that compressed air can be directly supplied to grippers for use without using the pipeline, it can feed pressure medium into the internal hole on the installation plate.

#### ● Proximity switches

Proximity switch standard BALLUFF, BES02ZT, BES02HP, BES02HK

#### ● The Magnetic Switch

The magnetic switch is the standard SMC, can choose D-M9N, D-M9NV, D-M9P, D-M9PV, D-M9B, D-M9BV. can also use BALLUFF BMF00AR

#### NOTE

- Clean air: Clean air containing 3-10 $\mu$ m filtered 99.9% liquid oil content and solid materials with the supersaturated water content of 0.3%.
- Repeat accuracy is defined as the spread of the limit position after 100 consecutive strokes.
- Workpiece weight: The recommended workpiece weight, which is calculated for a force-type connection with a coefficient of friction of 0.1 and a safety factor of 2 against slippage of the workpiece on acceleration due to gravity g. Considerably heavier workpiece weights are permitted with form-fit gripping.
- Closing/Opening times: Closing and opening times are purely the times that the base jaws or fingers are in motion. Valve switching times, hose filling times or PLC reaction times are not included in the above times and must be taken into consideration when determining cycle times.
- Finger length: The finger length is measured from the upper edge of the gripper housing in the direction of the main axis.



## 夾爪周邊配件 Gripper Accessories

接近開關  
Inductive proximity switches



磁性開關  
Magnetic Switches



定位銷  
Locating Pin



感應器固定塊  
Mounting block



調速接頭  
Speed Controller



防塵罩  
Dust protection



### 二指平動機械夾爪系列

Two-Finger Parallel gripper series

夾持力(Gripping force): 123-6000N

單指行程(Stroke per finger): 2.5-35mm

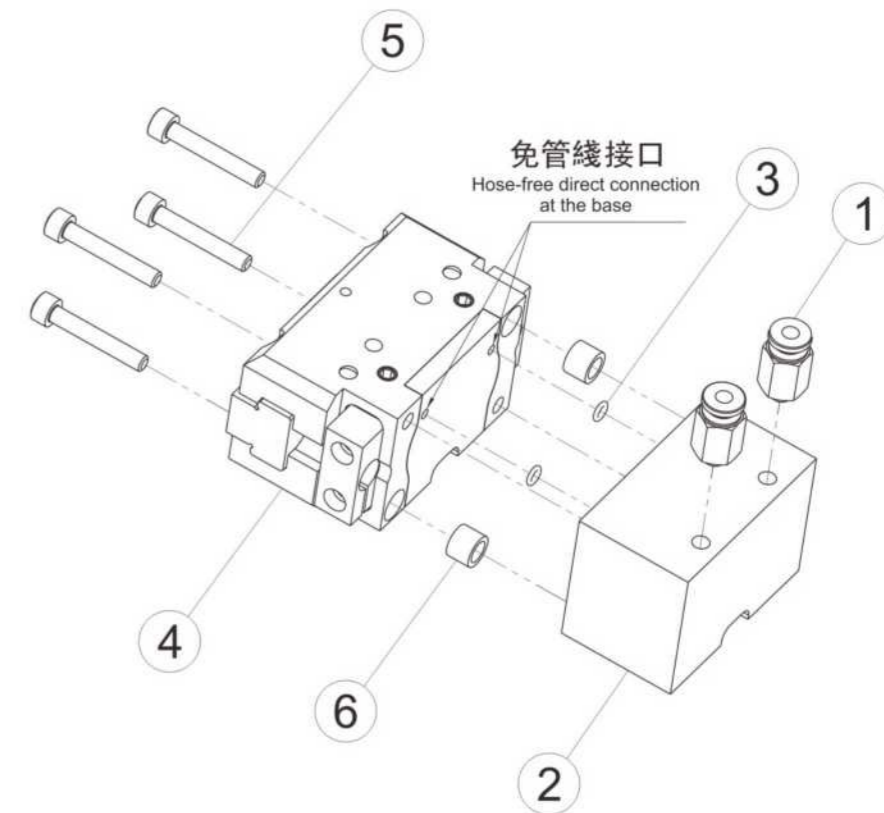
建議工件重量(Recommended workpiece weight): 0.62-30Kg

★:各型號保壓款, 防塵款, 高溫型可諮詢

Optional: (1) Pressure maintenance models (2) Dust Proof models (3) High temperature models available on order.

## 二指免管綫安裝示意圖

Instruction of install hose-free connection for two-finger parallel gripper



① 氣管接頭  
Compressed air main connection

③ O型圈  
O-ring

⑤ 鎖緊螺絲  
Mounting screw

② 轉接塊  
Adapter

④ 本體  
Housing

⑥ 定位銷  
Locating pin

For a hose-free direction connection, use the O-rings from the enclosed pack.

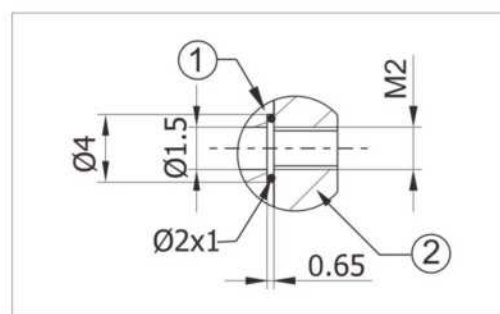


### 直接連接供氣口，免管線

Air export pipeline is directly connected

直接連接供氣口，壓縮空氣直接供給夾爪使用，無需使用管線，可將壓力介質饋入安裝板上的內孔。

Connect the air supply inlet directly so that compressed air can be directly supplied to grippers for use without using the pipeline.



① 轉接器

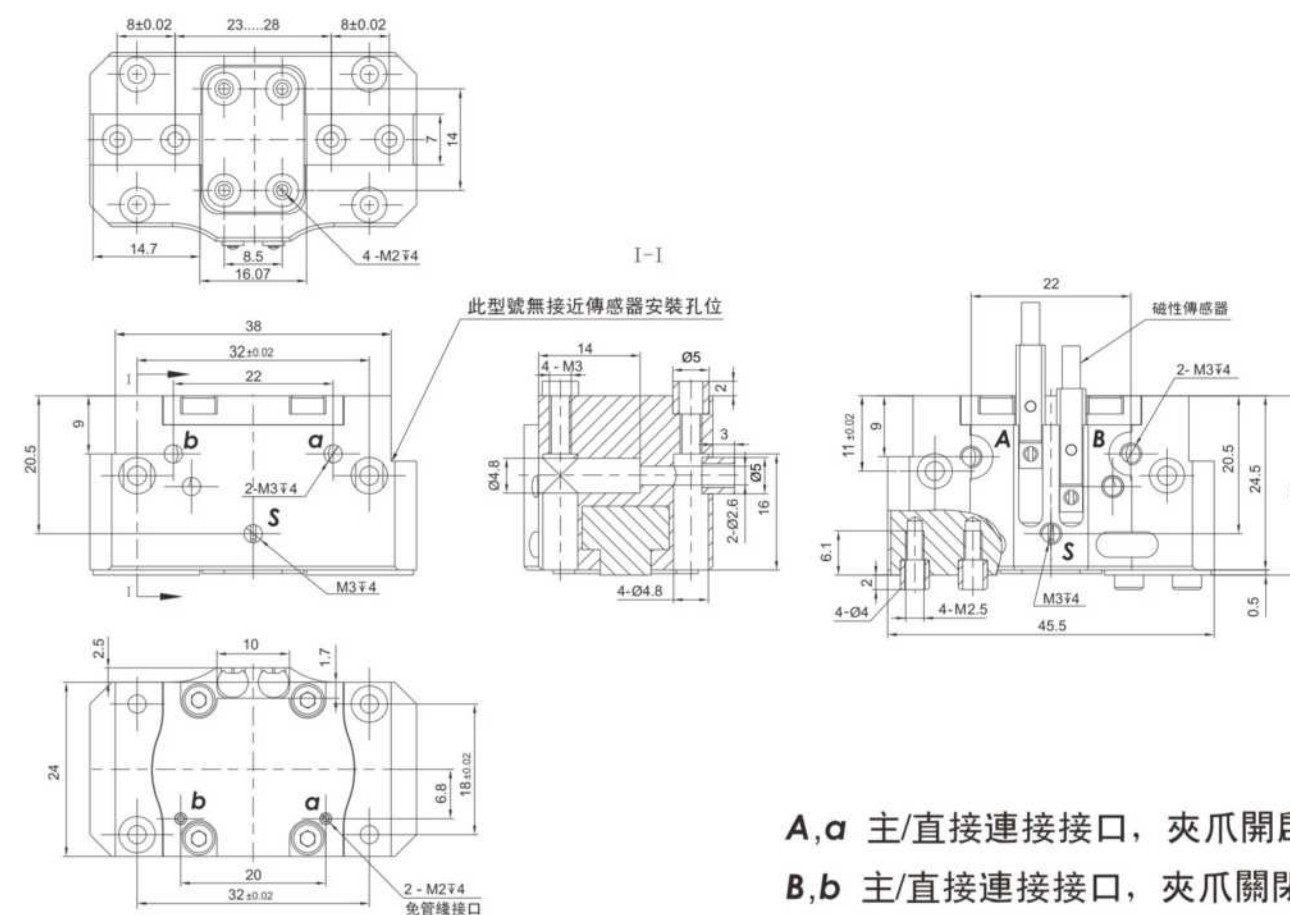
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-EZ-40A
單爪行程 Stroke per finger	[mm]	2.5
關閉力 Closing force	[N]	123
開啓力 Opening force	[N]	132
重量 Weight	[kg]	0.08
建議工件重量 Recommended workpiece weight	[kg]	0.62
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	2.5
最小壓力 Min. operating pressure	[bar]	2.5
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.02
開啓時間 Opening time	[s]	0.02
夾爪長度可允許 Max. permitted finger length	[mm]	47
夾爪重量可允許 Max. permitted weight per finger	[kg]	0.1
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	±0.01

### 外觀尺寸圖

Dimensional Overview

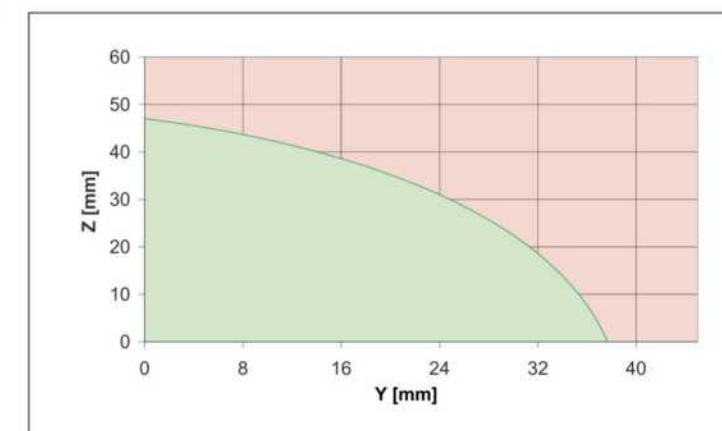
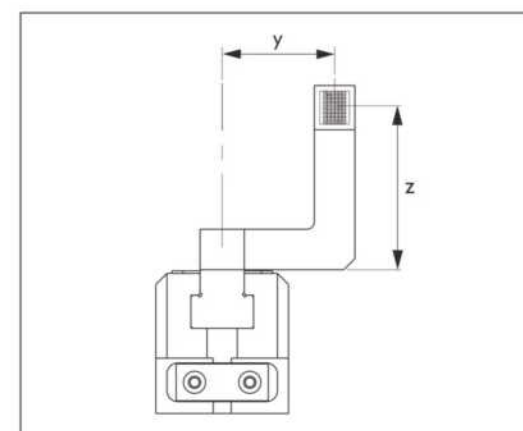


A,a 主/直接連接接口，夾爪開啟

B,b 主/直接連接接口，夾爪關閉

### 最大可允許偏心率

Maximum allowable eccentricity



■ 允許範圍 ■ 不允許範圍



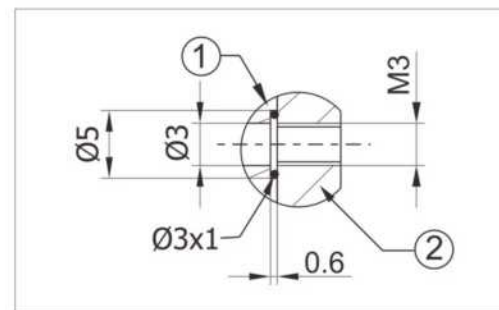


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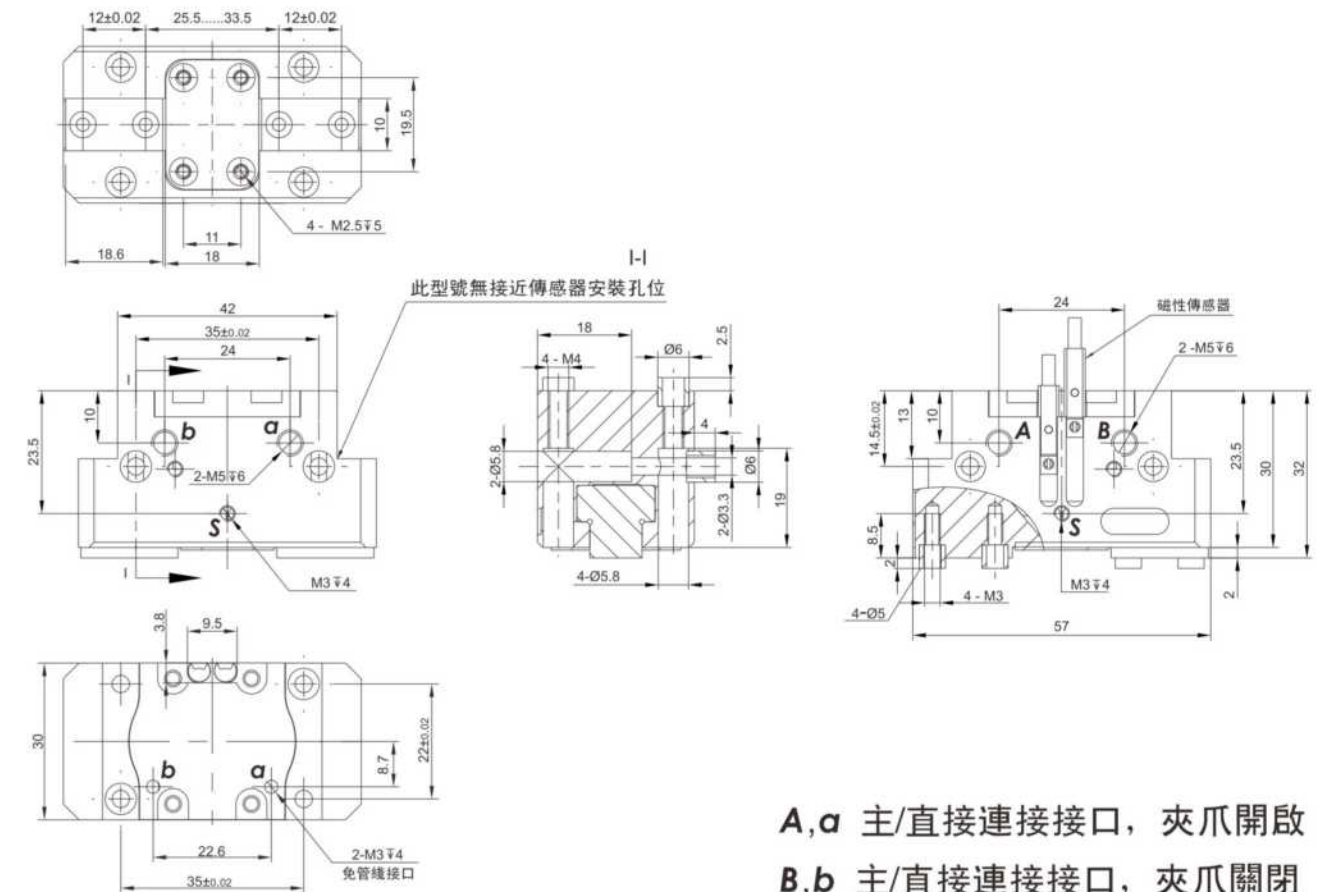
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-EZ-50A
單爪行程 Stroke per finger	[mm]	4
關閉力 Closing force	[N]	140
開啓力 Opening force	[N]	145
重量 Weight	[kg]	0.15
建議工件重量 Recommended workpiece weight	[kg]	0.7
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	5.0
最小壓力 Min. operating pressure	[bar]	2.5
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.03
開啓時間 Opening time	[s]	0.03
夾爪長度可允許 Max. permitted finger length	[mm]	60
夾爪重量可允許 Max. permitted weight per finger	[kg]	0.18
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	±0.01

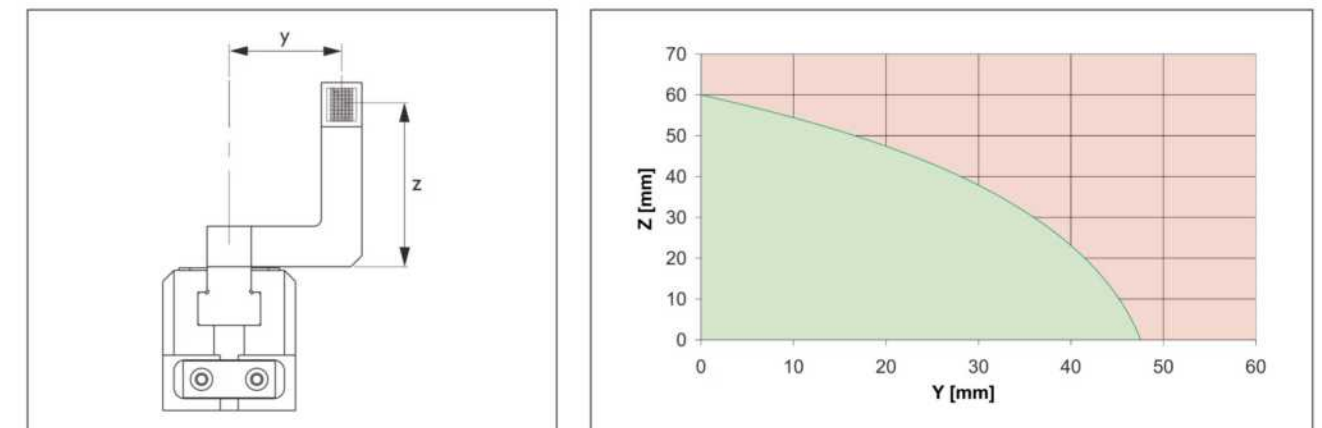
### 外觀尺寸圖

Dimensional Overview



### 最大可允許偏心率

Maximum allowable eccentricity



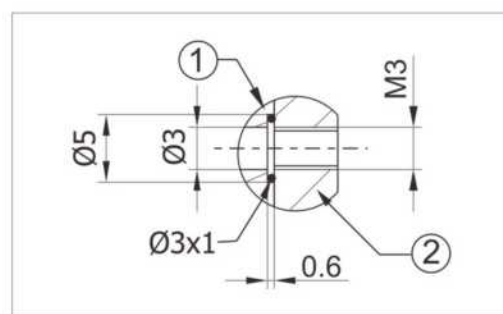


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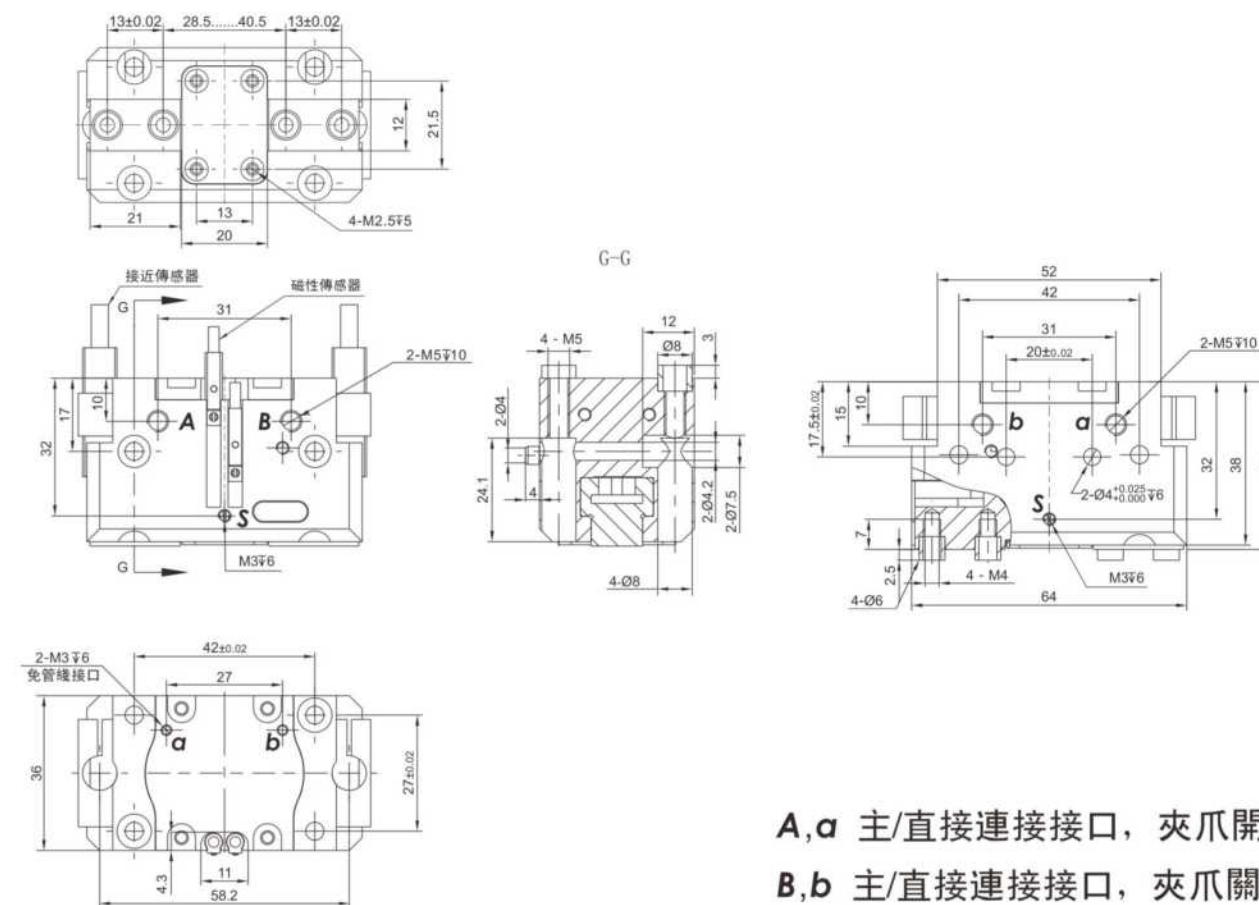
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-EZ-64A
單爪行程 Stroke per finger	[mm]	6
關閉力 Closing force	[N]	220
開啓力 Opening force	[N]	240
重量 Weight	[kg]	0.28
建議工件重量 Recommended workpiece weight	[kg]	1.25
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	9.0
最小壓力 Min. operating pressure	[bar]	2.5
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.03
開啓時間 Opening time	[s]	0.03
夾爪長度可允許 Max. permitted finger length	[mm]	77
夾爪重量可允許 Max. permitted weight per finger	[kg]	0.35
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	±0.01

### 外觀尺寸圖

Dimensional Overview

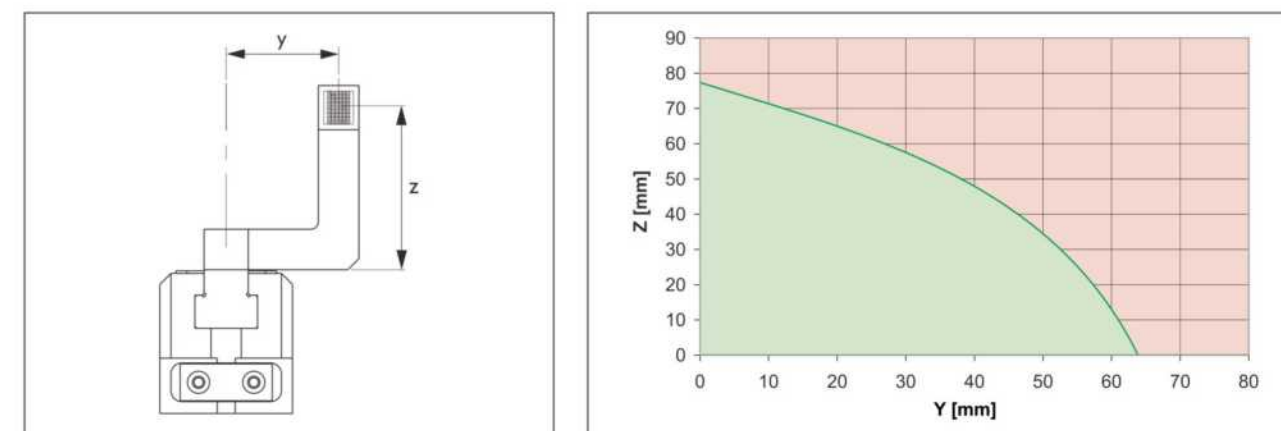


A, a 主/直接連接接口，夾爪開啟

B, b 主/直接連接接口，夾爪關閉

### 最大可允許偏心率

Maximum allowable eccentricity



■ 允許範圍 ■ 不允許範圍



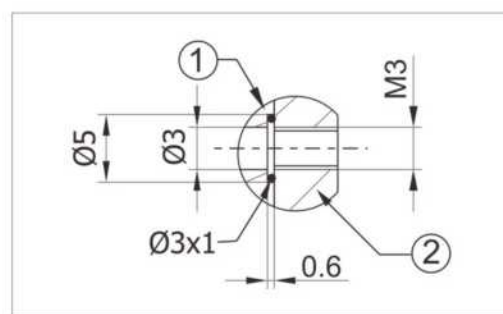


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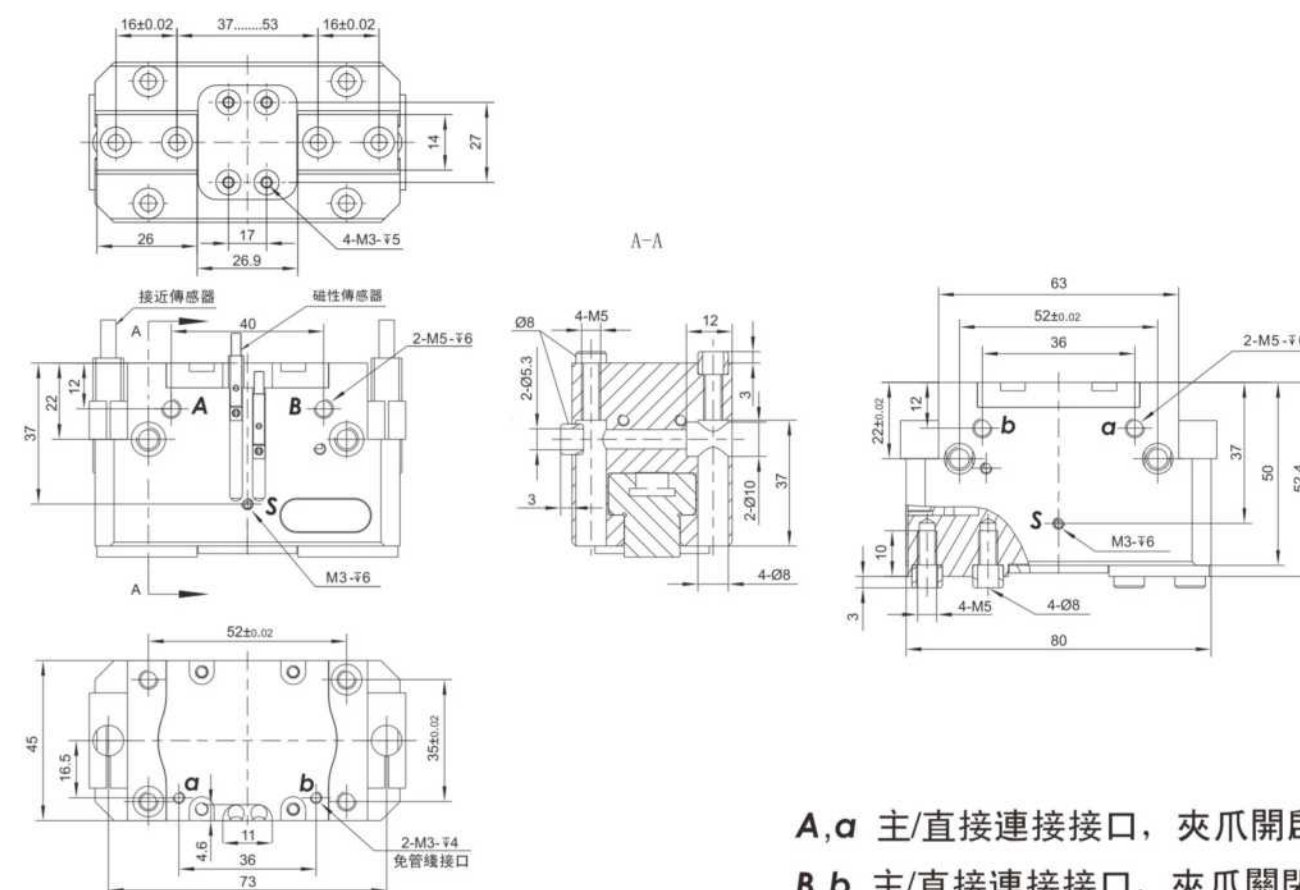
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-EZ-80A
單爪行程 Stroke per finger	[mm]	8
關閉力 Closing force	[N]	400
開啓力 Opening force	[N]	450
重量 Weight	[kg]	0.5
建議工件重量 Recommended workpiece weight	[kg]	2.1
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	21
最小壓力 Min. operating pressure	[bar]	2.5
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.1
開啓時間 Opening time	[s]	0.1
夾爪長度可允許 Max. permitted finger length	[mm]	95
夾爪重量可允許 Max. permitted weight per finger	[kg]	0.6
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	±0.01

### 外觀尺寸圖

Dimensional Overview

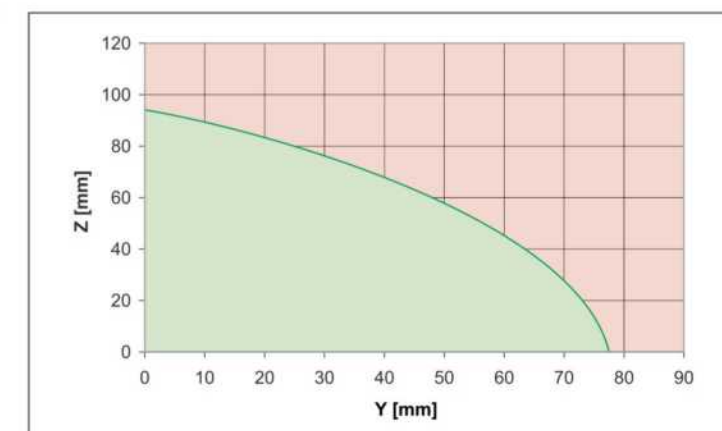
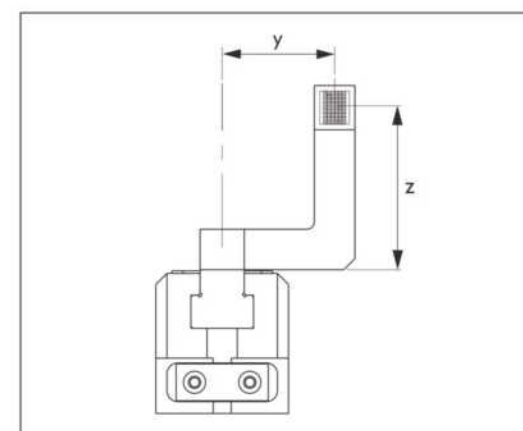


A, a 主/直接連接接口，夾爪開啟

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### 最大可允許偏心率

Maximum allowable eccentricity



■ 允許範圍 ■ 不允許範圍



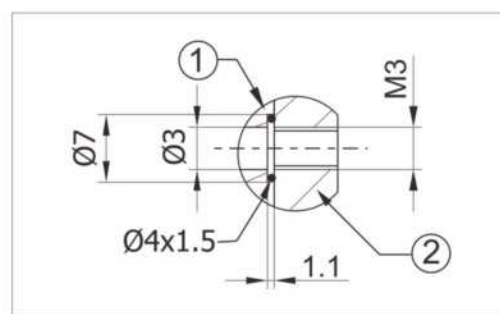


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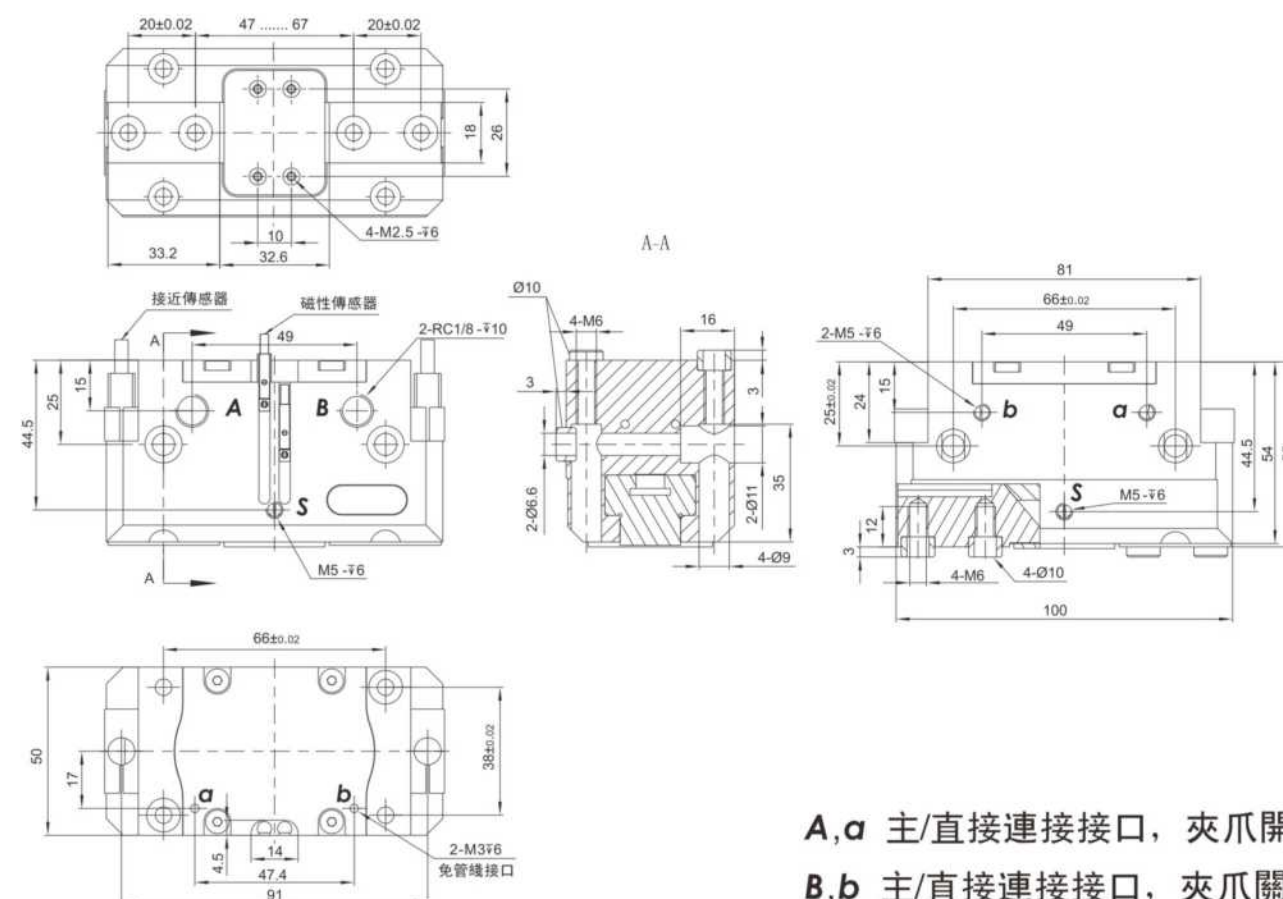
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-EZ-100A
單爪行程 Stroke per finger	[mm]	10
關閉力 Closing force	[N]	700
開啓力 Opening force	[N]	750
重量 Weight	[kg]	0.8
建議工件重量 Recommended workpiece weight	[kg]	3.3
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	40
最小壓力 Min. operating pressure	[bar]	2.5
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.07
開啓時間 Opening time	[s]	0.07
夾爪長度可允許 Max. permitted finger length	[mm]	118
夾爪重量可允許 Max. permitted weight per finger	[kg]	1.1
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	±0.01

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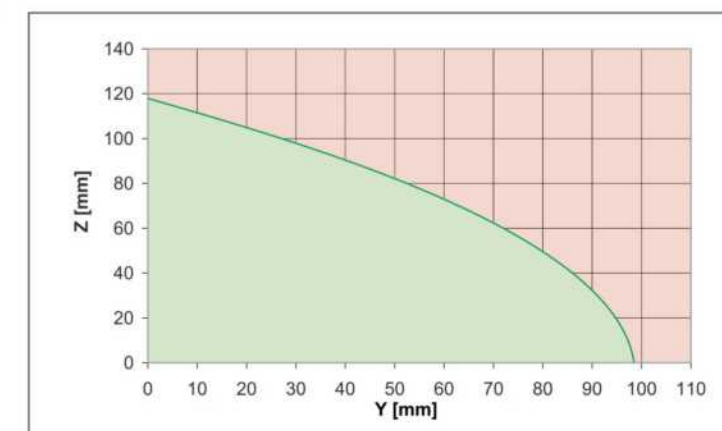
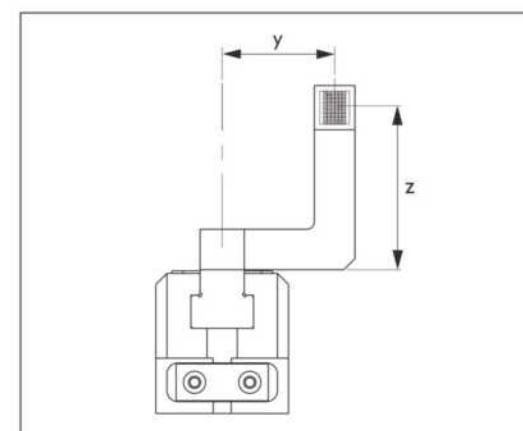
Dimensional Overview



A, a 主/直接連接接口，夾爪開啟  
B, b 主/直接連接接口，夾爪關閉

### 最大可允許偏心率

Maximum allowable eccentricity



■ 允許範圍 ■ 不允許範圍



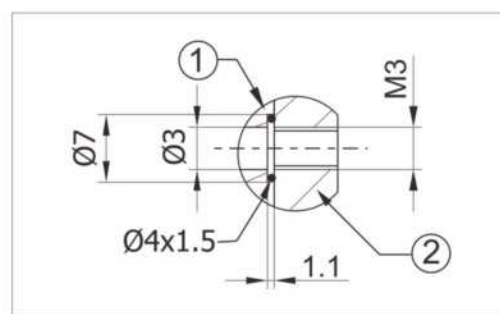


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Connect the air supply inlet directly so that compressed air can be directly supplied to grippers for use without using the pipeline.



① 轉接器

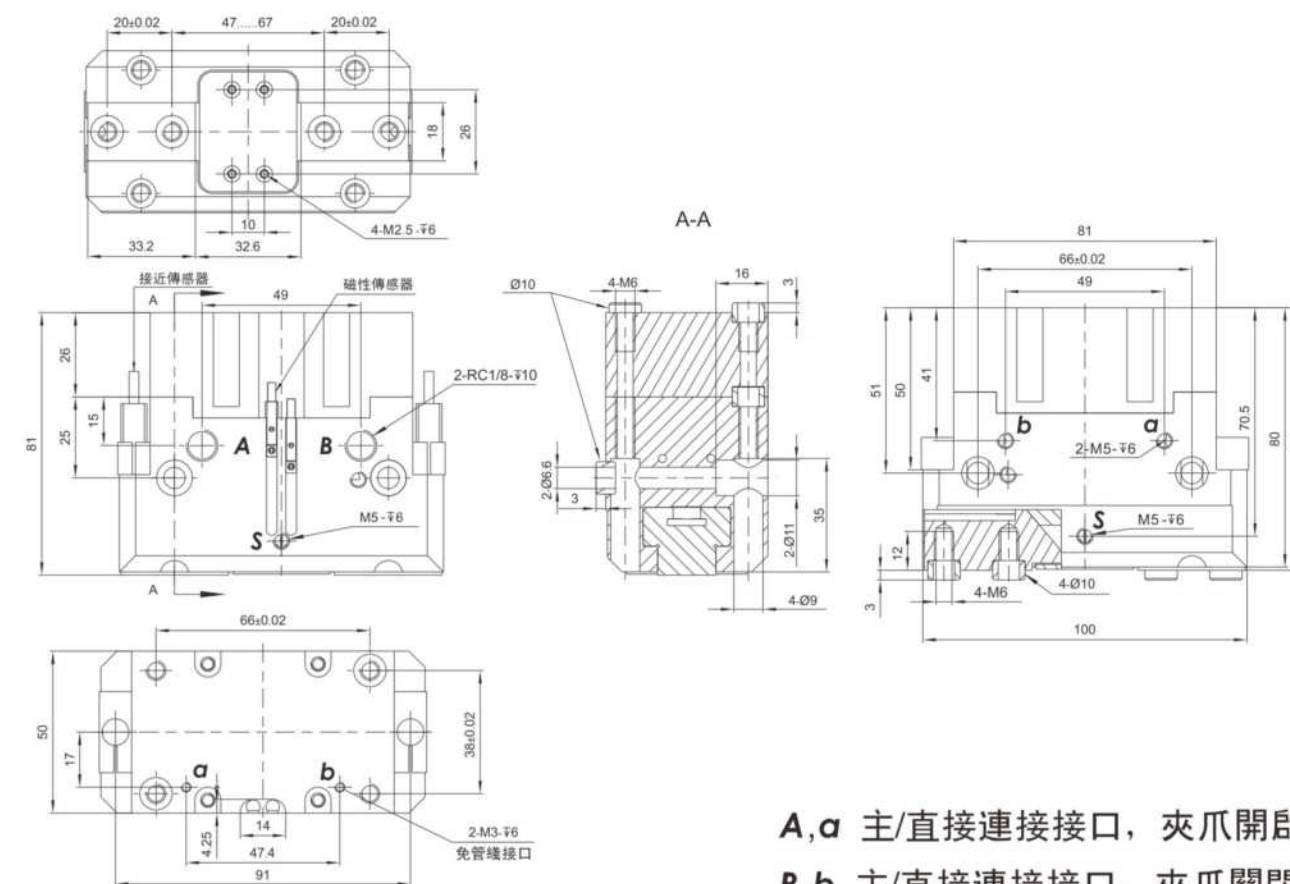
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-EZW-100A	RH-EZN-100A
單爪行程 Stroke per finger	[mm]	10	10
關閉力 Closing force	[N]	920	
開啓力 Opening force	[N]		970
最小彈簧力 The minimum spring force	[N]	220	220
重量 Weight	[kg]	1.0	1.0
建議工件重量 Recommended work piece weight	[kg]	3.3	3.3
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	40	40
最小壓力 Min. operating pressure	[bar]	4.0	4.0
最大壓力 Max. operating pressure	[bar]	6.5	6.5
額定工作壓力 Nominal operating pressure	[bar]	6.0	6.0
關閉時間 Closing time	[s]	0.05	0.09
開啓時間 Opening time	[s]	0.09	0.05
夾爪長度可允許 Max. permitted finger length	[mm]	108	108
夾爪重量可允許 Max. permitted weight per finger	[kg]	0.6	1.1
IP等級 IP class		40	40
最小室溫 Mini. ambient temperature	[°C]	-10	-10
最大室溫 Max. ambient temperature	[°C]	90	90
重複精度 Repeatability accuracy	[mm]	±0.01	±0.01

### 外觀尺寸圖

Dimensional Overview

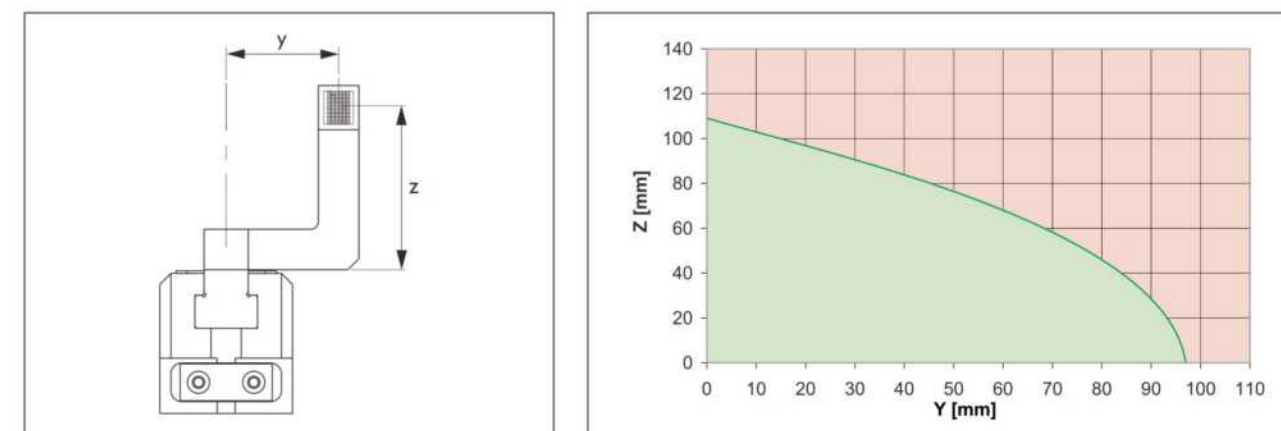


A,a 主/直接連接接口，夾爪開啟

B,b 主/直接連接接口，夾爪關閉

### 最大可允許偏心率

Maximum allowable eccentricity



■ 允許範圍 ■ 不允許範圍







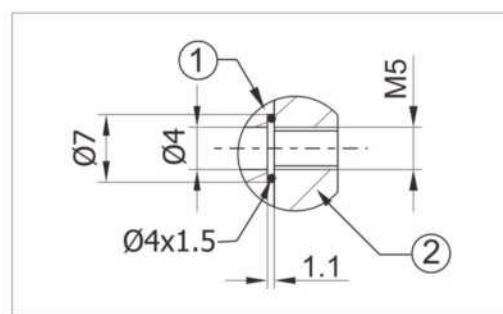


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① 轉接器

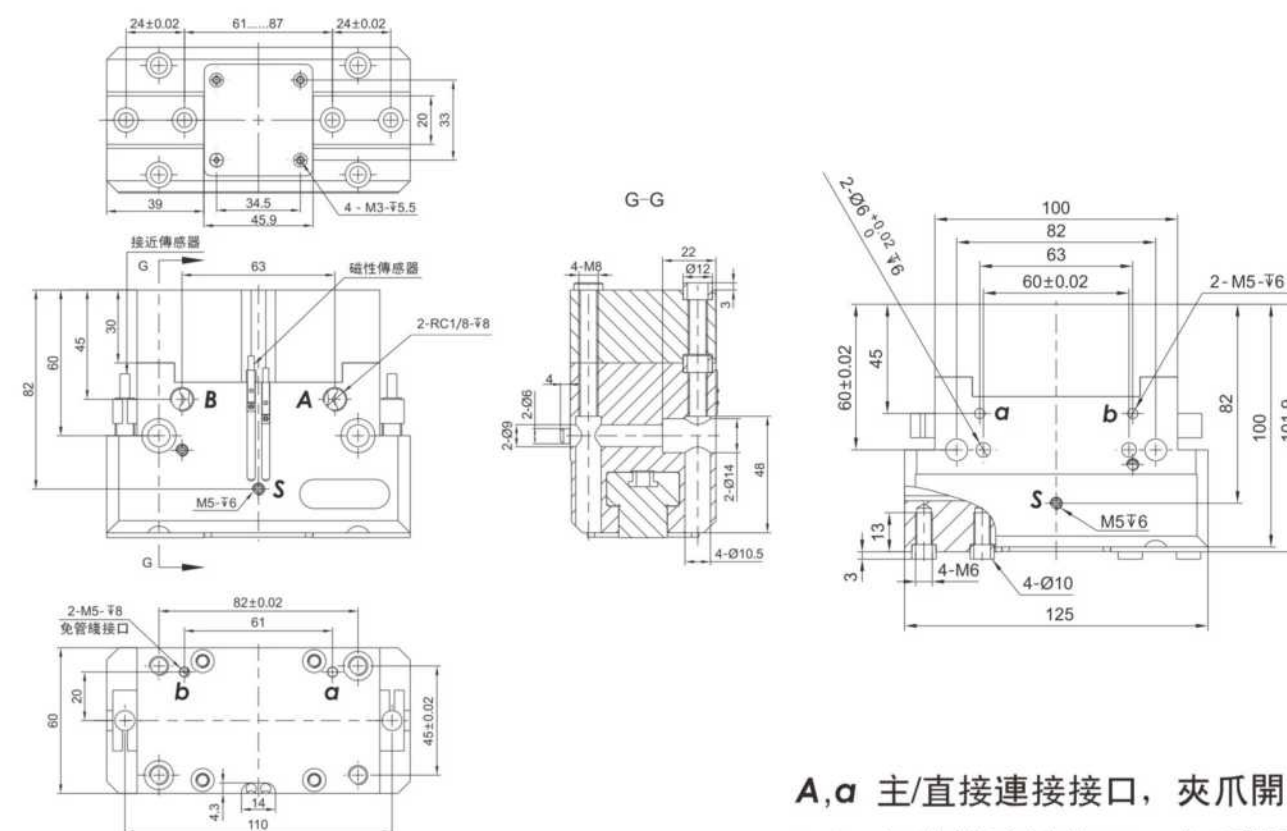
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-EZW-125A	RH-EZN-125A
單爪行程 Stroke per finger	[mm]	13	13
關閉力 Closing force	[N]	1432	
開啓力 Opening force	[N]		1522
最小彈簧力 The minimum spring force	[N]	352	352
重量 Weight	[kg]	1.85	1.85
建議工件重量 Recommended work piece weight	[kg]	5.4	5.4
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	81	81
最小壓力 Min. operating pressure	[bar]	4.0	4.0
最大壓力 Max. operating pressure	[bar]	6.5	6.5
額定工作壓力 Nominal operating pressure	[bar]	6.0	6.0
關閉時間 Closing time	[s]	0.08	0.12
開啓時間 Opening time	[s]	0.12	0.08
夾爪長度可允許 Max. permitted finger length	[mm]	140	140
夾爪重量可允許 Max. permitted weight per finger	[kg]	2.1	2.1
IP等級 IP class		40	40
最小室溫 Min. ambient temperature	[°C]	-10	-10
最大室溫 Max. ambient temperature	[°C]	90	90
重複精度 Repeatability accuracy	[mm]	±0.01	±0.01

### 外觀尺寸圖

Dimensional Overview

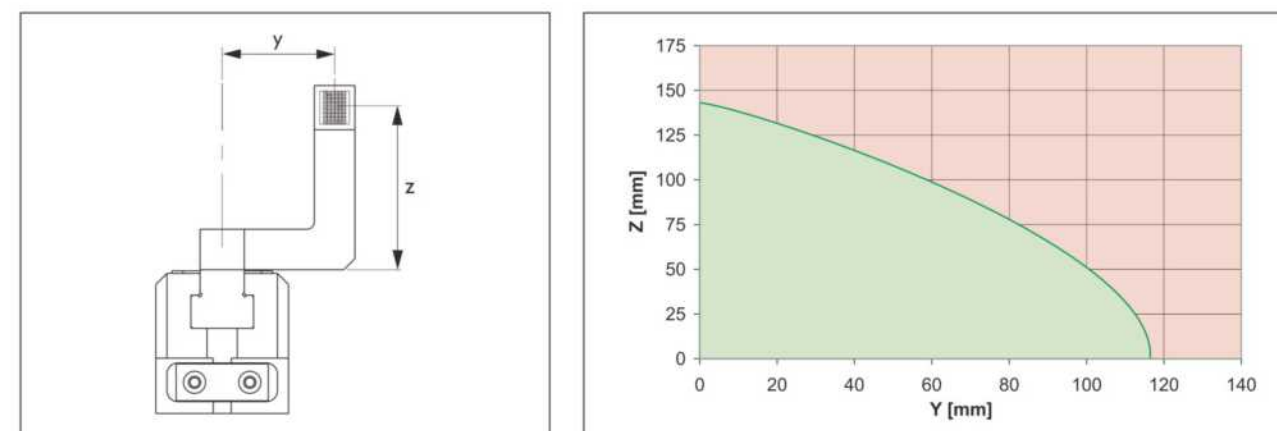


A, a 主/直接連接接口，夾爪開啟

B, b 主/直接連接接口，夾爪關閉

### 最大可允許偏心率

Maximum allowable eccentricity



■ 允許範圍 ■ 不允許範圍



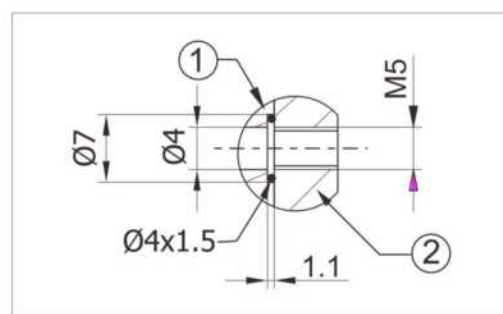


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① 轉接器

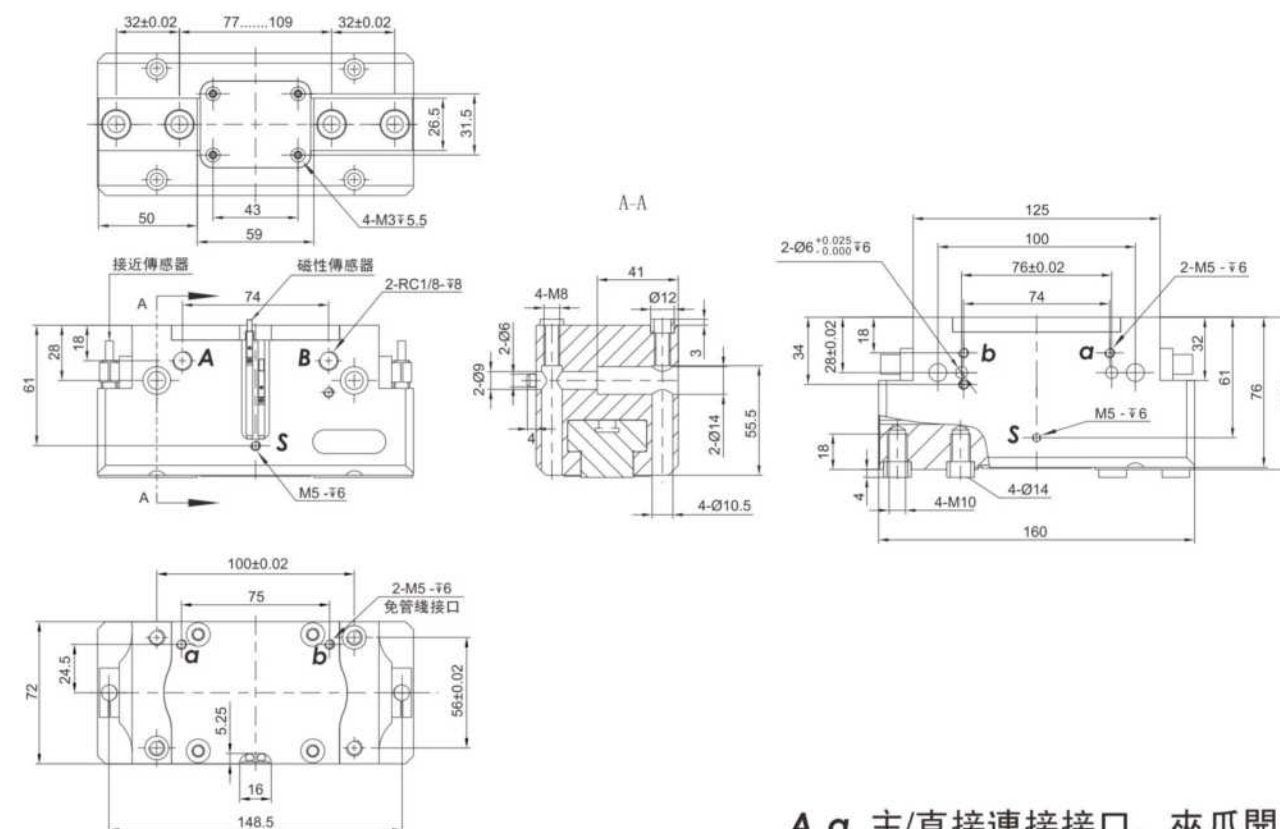
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-EZ-160A
單爪行程 Stroke per finger	[mm]	16
關閉力 Closing force	[N]	1640
開啓力 Opening force	[N]	1770
重量 Weight	[kg]	2.6
建議工件重量 Recommended workpiece weight	[kg]	8.2
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	157
最小壓力 Min. operating pressure	[bar]	2.5
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.15
開啓時間 Opening time	[s]	0.15
夾爪長度可允許 Max. permitted finger length	[mm]	180
夾爪重量可允許 Max. permitted weight per finger	[kg]	3.5
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	±0.01

### 外觀尺寸圖

Dimensional Overview

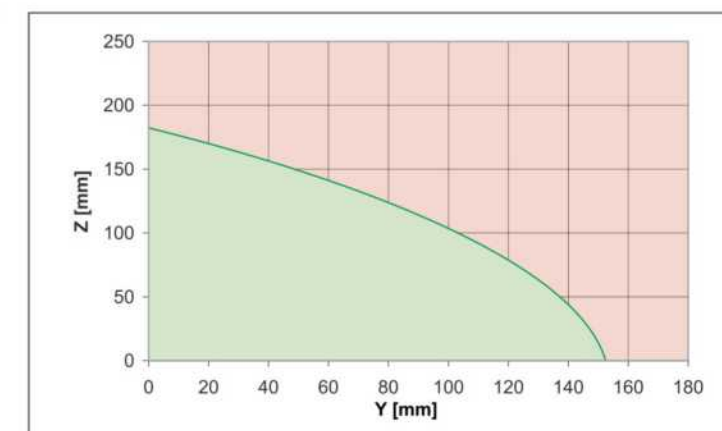
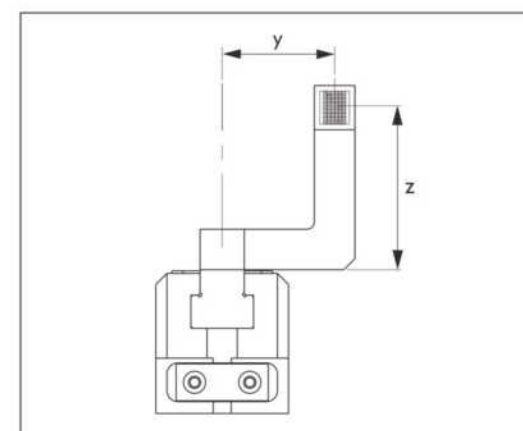


A, a 主/直接連接接口，夾爪開啟

B, b 主/直接連接接口，夾爪關閉

### 最大可允許偏心率

Maximum allowable eccentricity



■ 允許範圍 ■ 不允許範圍



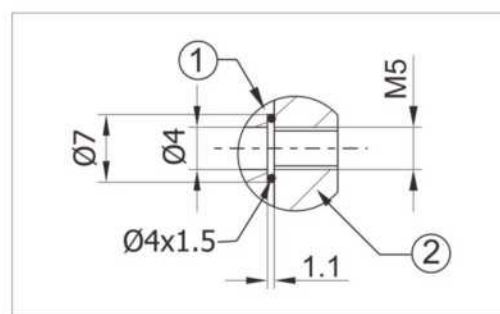


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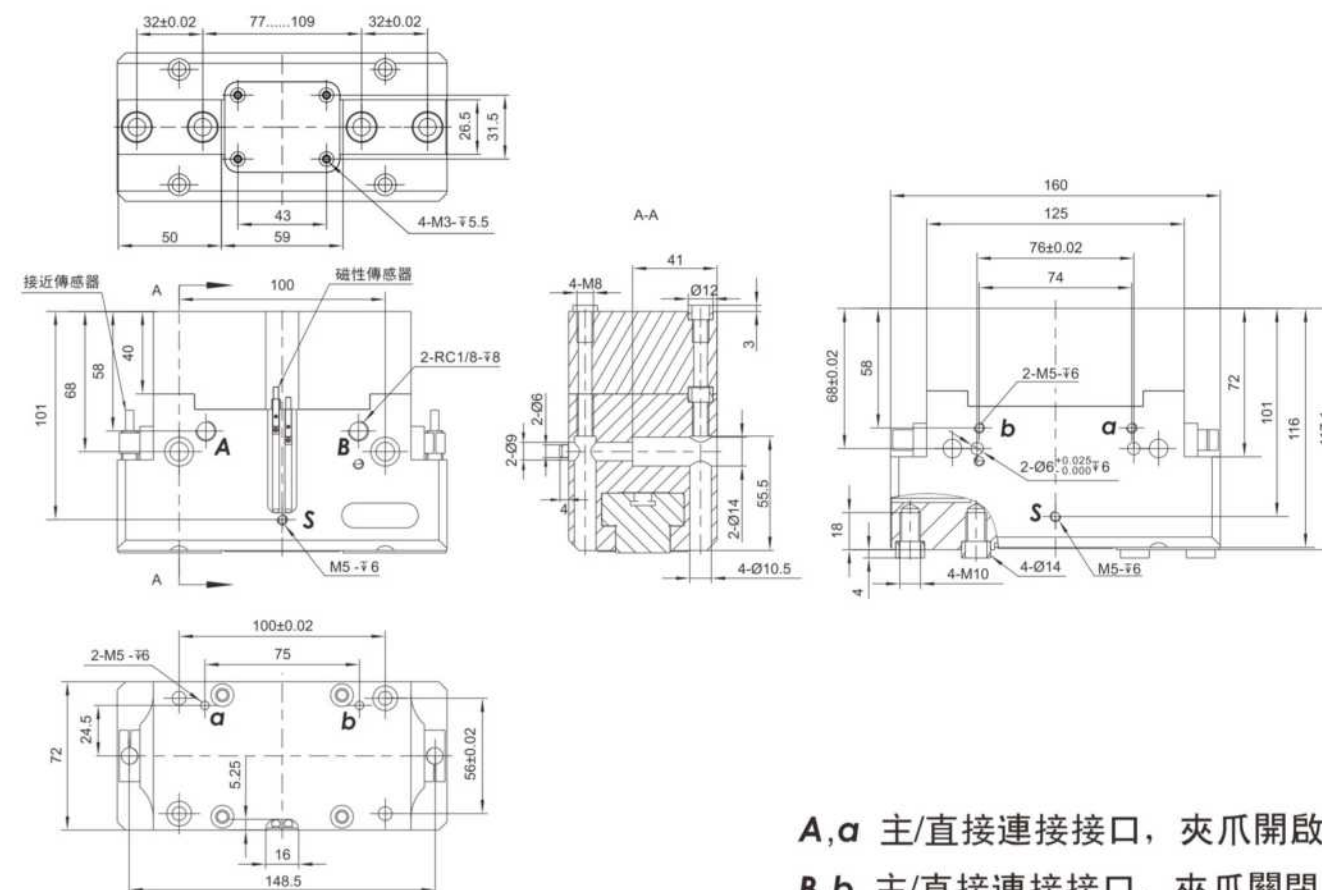
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-EZW-160A	RH-EZN-160A
單爪行程 Stroke per finger	[mm]	16	16
關閉力 Closing force	[N]	2210	
開啓力 Opening force	[N]		2340
最小彈簧力 The minimum spring force	[N]	570	570
重量 Weight	[kg]	3.3	3.3
建議工件重量 Recommended work piece weight	[kg]	8.2	8.2
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	157	157
最小壓力 Min. operating pressure	[bar]	4.0	4.0
最大壓力 Max. operating pressure	[bar]	6.5	6.5
額定工作壓力 Nominal operating pressure	[bar]	6.0	6.0
關閉時間 Closing time	[s]	0.12	0.25
開啓時間 Opening time	[s]	0.25	0.12
夾爪長度可允許 Max. permitted finger length	[mm]	170	170
夾爪重量可允許 Max. permitted weight per finger	[kg]	3.5	3.5
IP等級 IP class		40	40
最小室溫 Mini. ambient temperature	[°C]	-10	-10
最大室溫 Max. ambient temperature	[°C]	90	90
重複精度 Repeatability accuracy	[mm]	±0.01	±0.01

### 外觀尺寸圖

Dimensional Overview

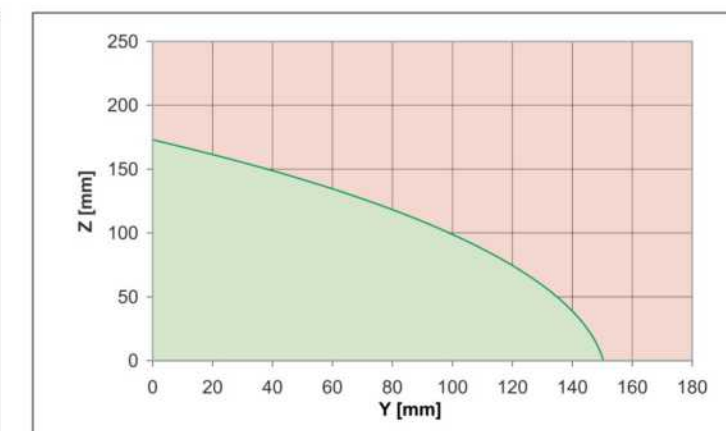
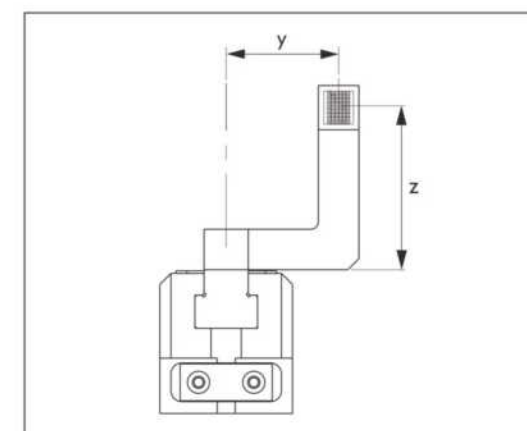


A, a 主/直接連接接口，夾爪開啟

B, b 主/直接連接接口，夾爪關閉

### 最大可允許偏心率

Maximum allowable eccentricity



■ 允許範圍 ■ 不允許範圍



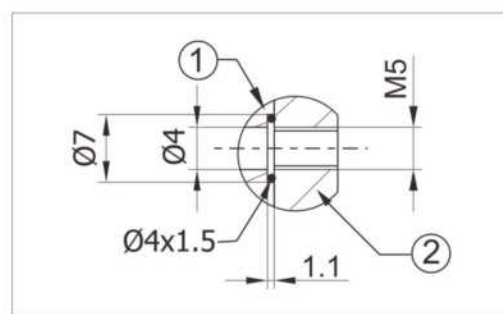


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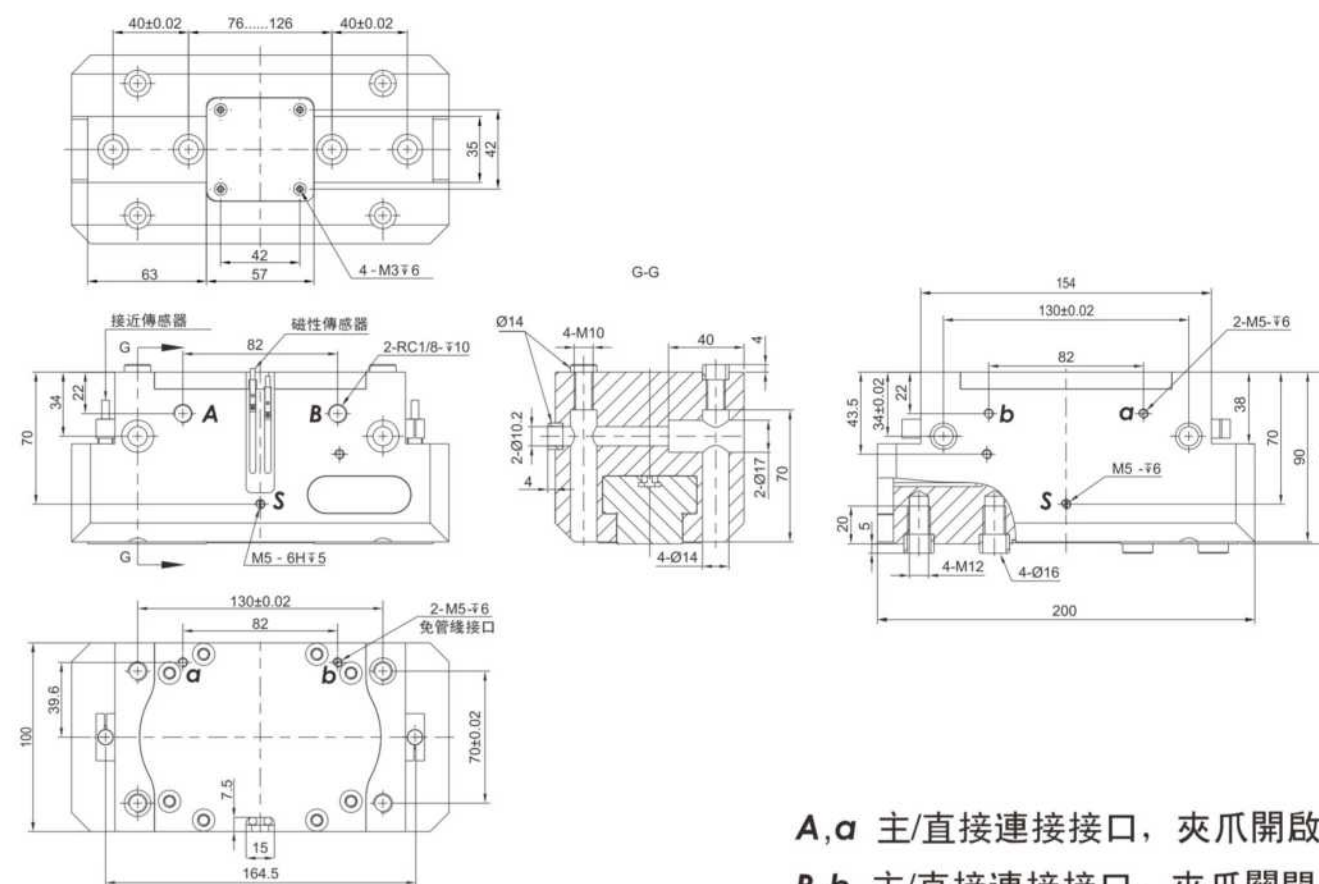
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-EZ-200A
單爪行程 Stroke per finger	[mm]	25
關閉力 Closing force	[N]	2700
開啓力 Opening force	[N]	2900
重量 Weight	[kg]	5.0
建議工件重量 Recommended workpiece weight	[kg]	13.5
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	390
最小壓力 Min. operating pressure	[bar]	2.5
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.35
開啓時間 Opening time	[s]	0.35
夾爪長度可允許 Max. permitted finger length	[mm]	240
夾爪重量可允許 Max. permitted weight per finger	[kg]	6.0
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	±0.01

### 外觀尺寸圖

Dimensional Overview

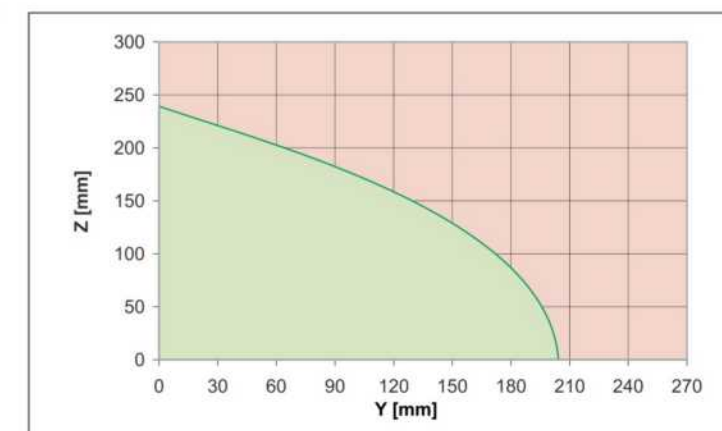
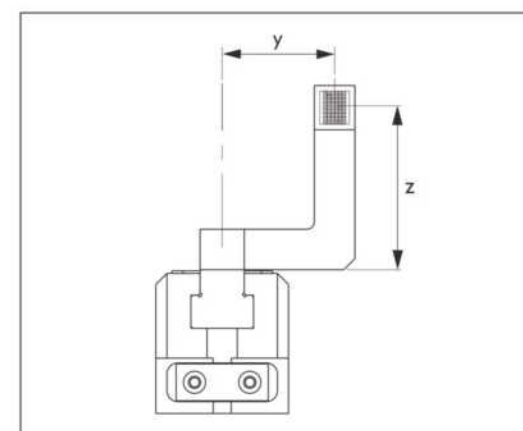


A, a 主/直接連接接口，夾爪開啟

B, b 主/直接連接接口，夾爪關閉

### 最大可允許偏心率

Maximum allowable eccentricity



■ 允許範圍 ■ 不允許範圍



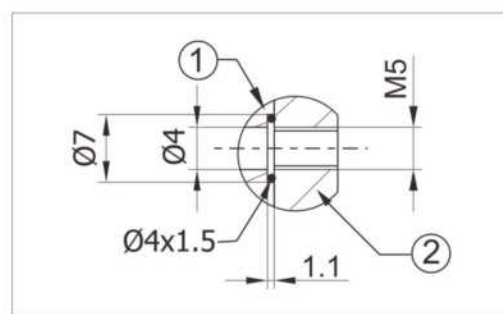


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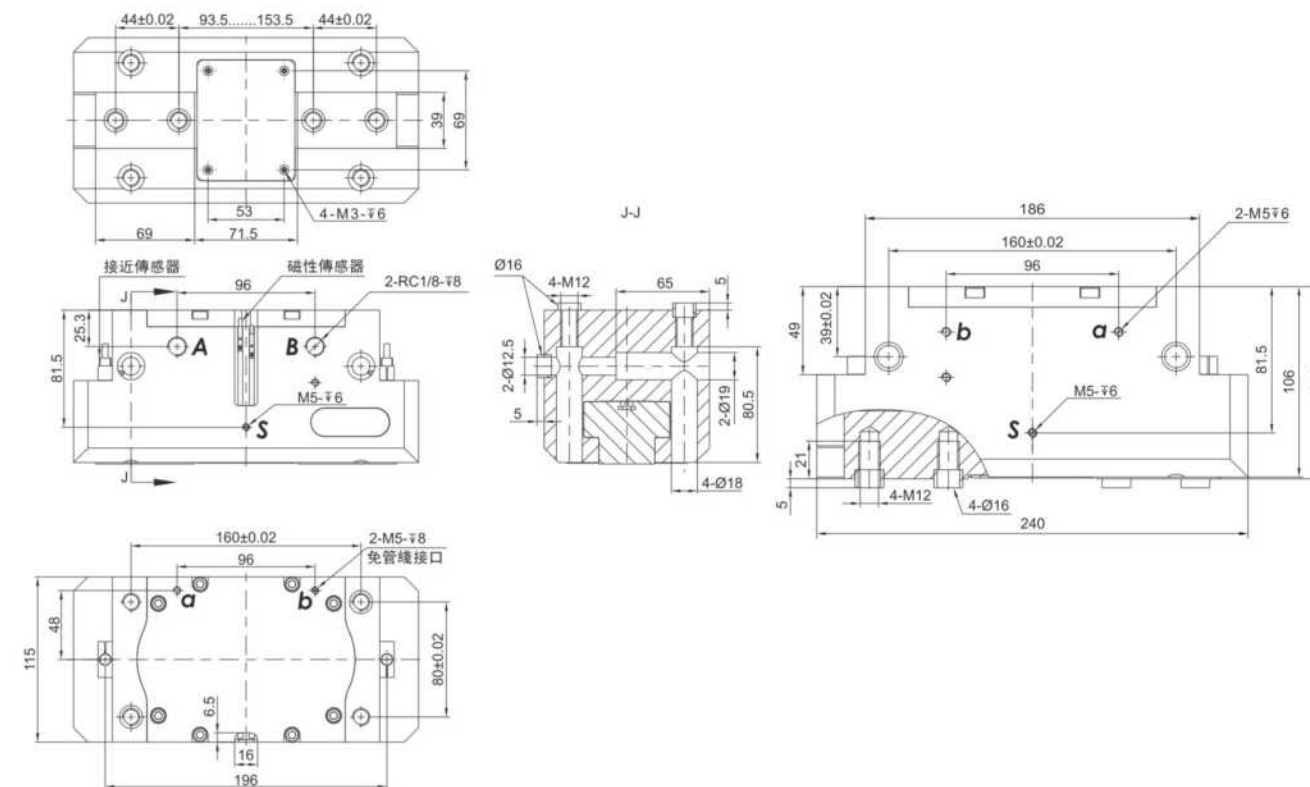
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-EZ-240A
單爪行程 Stroke per finger	[mm]	30
關閉力 Closing force	[N]	4200
開啓力 Opening force	[N]	4440
重量 Weight	[kg]	8.0
建議工件重量 Recommended workpiece weight	[kg]	20
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	646
最小壓力 Min. operating pressure	[bar]	2.5
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.45
開啓時間 Opening time	[s]	0.45
夾爪長度可允許 Max. permitted finger length	[mm]	280
夾爪重量可允許 Max. permitted weight per finger	[kg]	8.5
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	±0.01

### 外觀尺寸圖

Dimensional Overview

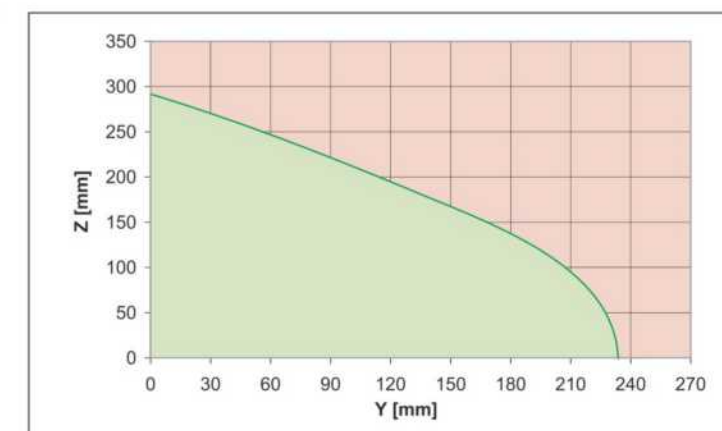
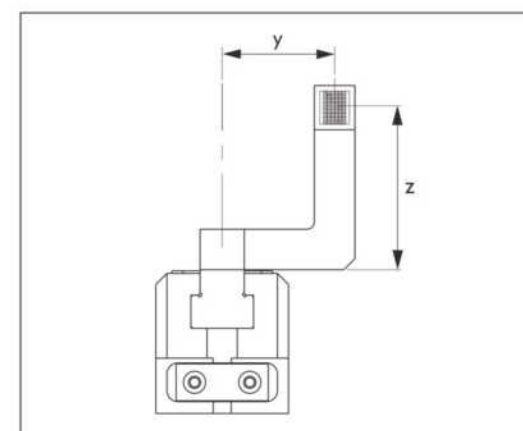


A, a 主/直接連接接口，夾爪開啟

B, b 主/直接連接接口，夾爪關閉

### 最大可允許偏心率

Maximum allowable eccentricity



■ 允許範圍 ■ 不允許範圍



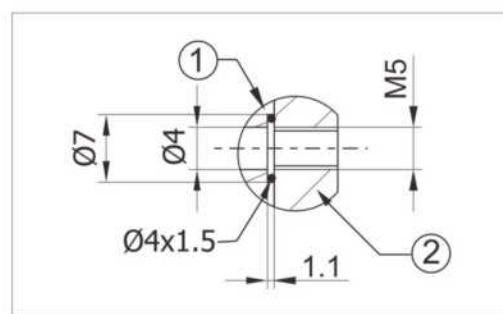


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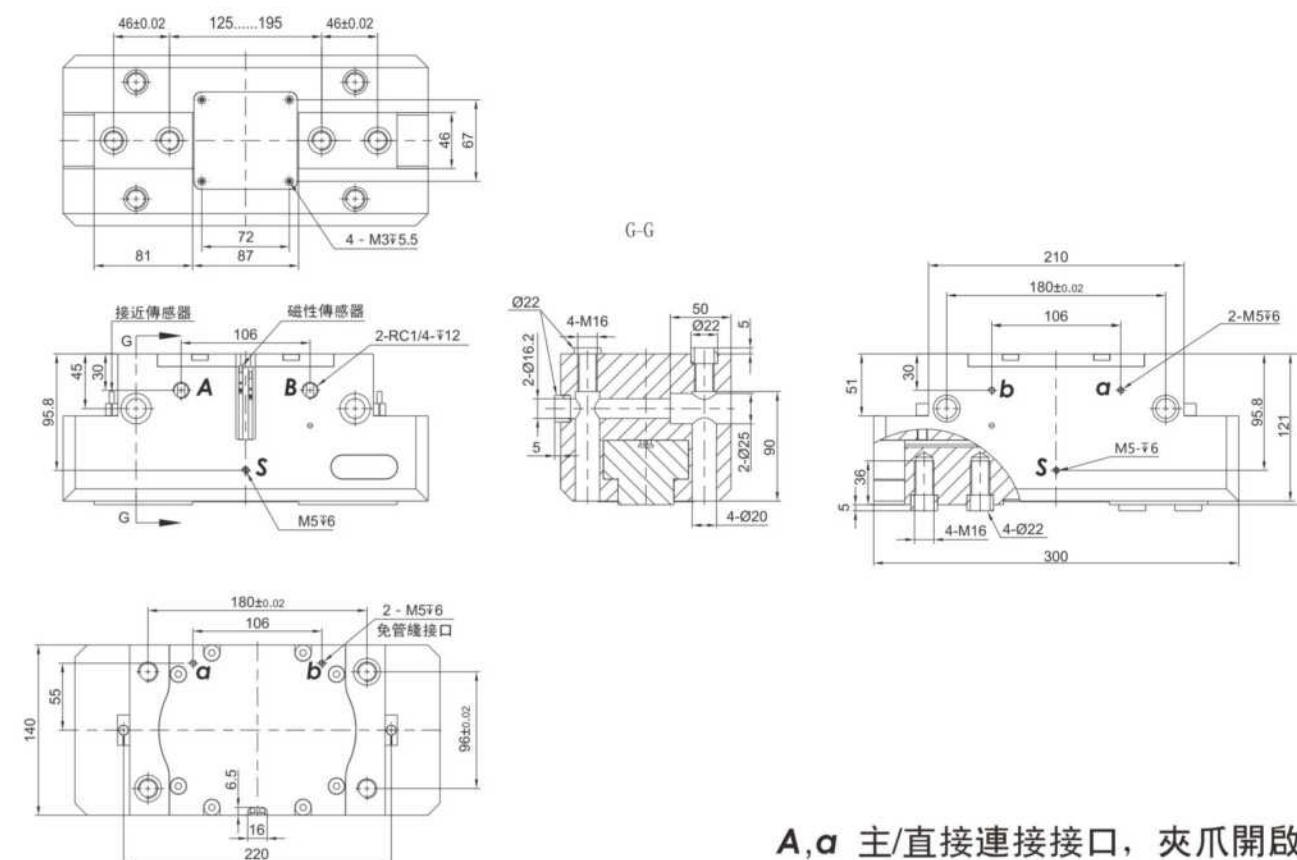
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-EZ-300A
單爪行程 Stroke per finger	[mm]	35
關閉力 Closing force	[N]	6000
開啓力 Opening force	[N]	6200
重量 Weight	[kg]	13.5
建議工件重量 Recommended workpiece weight	[kg]	30
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	1030
最小壓力 Min. operating pressure	[bar]	2.5
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.5
開啓時間 Opening time	[s]	0.5
夾爪長度可允許 Max. permitted finger length	[mm]	300
夾爪重量可允許 Max. permitted weight per finger	[kg]	11.5
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	±0.01

### 外觀尺寸圖

Dimensional Overview

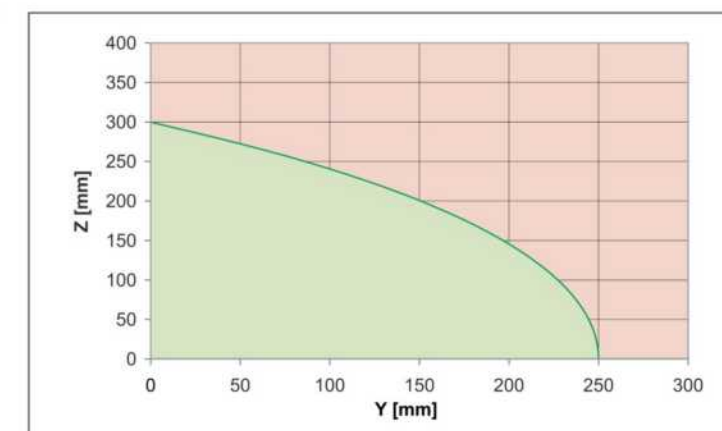
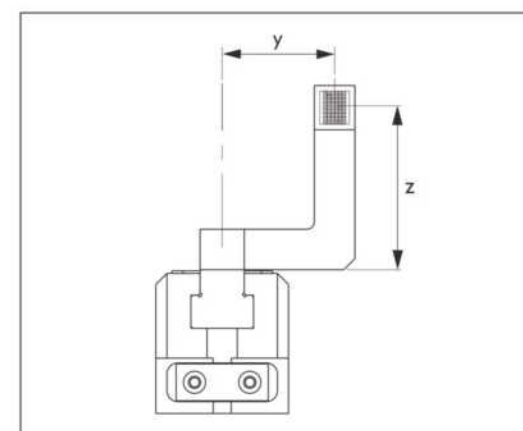


A, a 主/直接連接接口，夾爪開啟

B, b 主/直接連接接口，夾爪關閉

### 最大可允許偏心率

Maximum allowable eccentricity



■ 允許範圍 ■ 不允許範圍



## 夾爪周邊配件 Gripper Accessories

接近開關  
Inductive proximity switches



磁性開關  
Magnetic Switches



定位銷  
Locating Pin



感應器固定塊  
Mounting block



調速接頭  
Speed Controller



防塵罩  
Dust protection



### 三指平動機械夾爪系列

Three-Finger Parallel gripper series

夾持力(Gripping force): 230-6000N

單指行程(Stroke per finger): 2.5-16mm

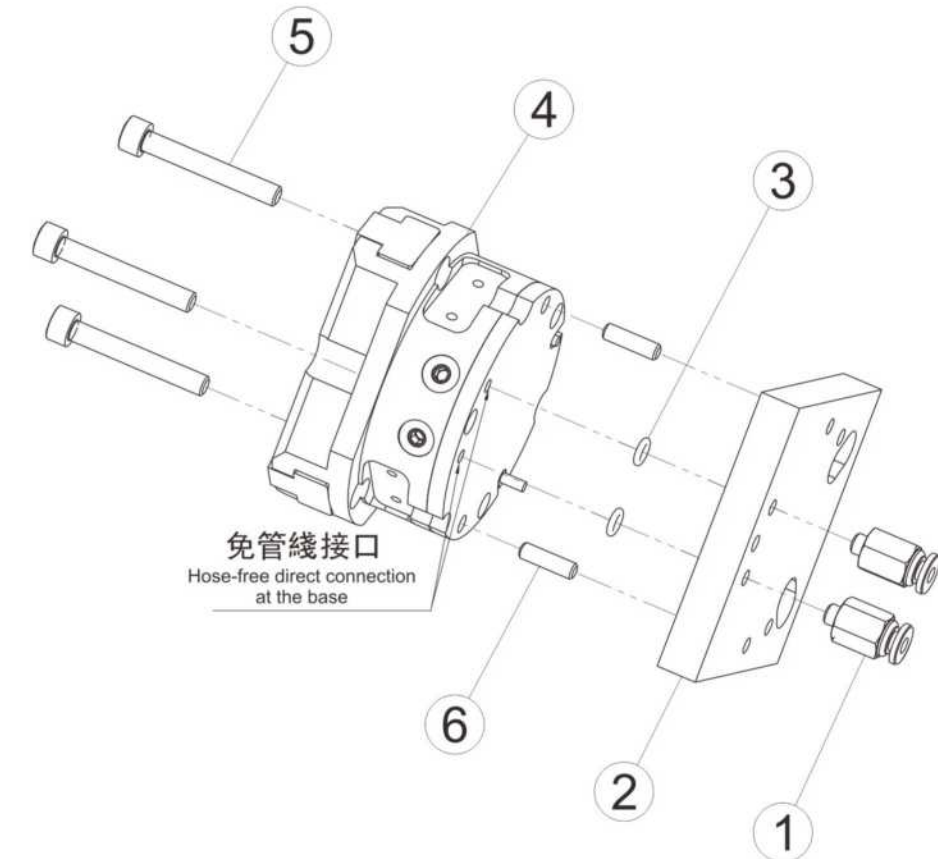
建議工件重量(Recommended workpiece weight): 1.25-30Kg

★:各型號保壓款, 防塵款, 高溫型可諮詢

Optional: (1) Pressure maintenance models (2) Dust Proof models (3) High temperature models available on order.

## ● 三指免管綫安裝示意圖

Instruction of install hose-free connection for three-finger parallel gripper



① 氣管接頭  
Compressed air main connection

③ O型圈  
O-ring

⑤ 鎖緊螺絲  
Mounting screw

② 轉接塊  
Adapter

④ 本體  
Housing

⑥ 定位銷  
Locating pin

For a hose-free direction connection, use the O-rings from the enclosed pack.



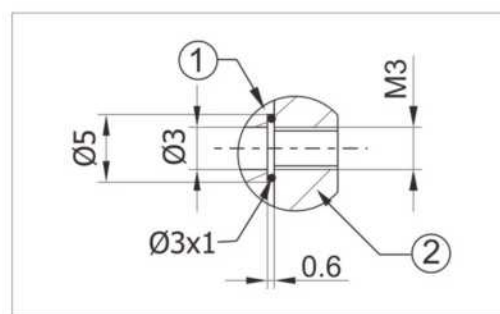


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① 轉接器

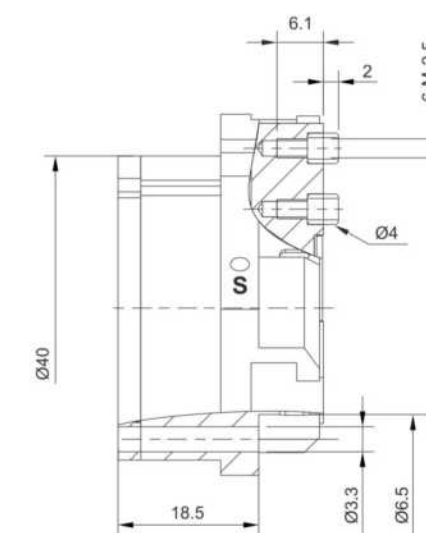
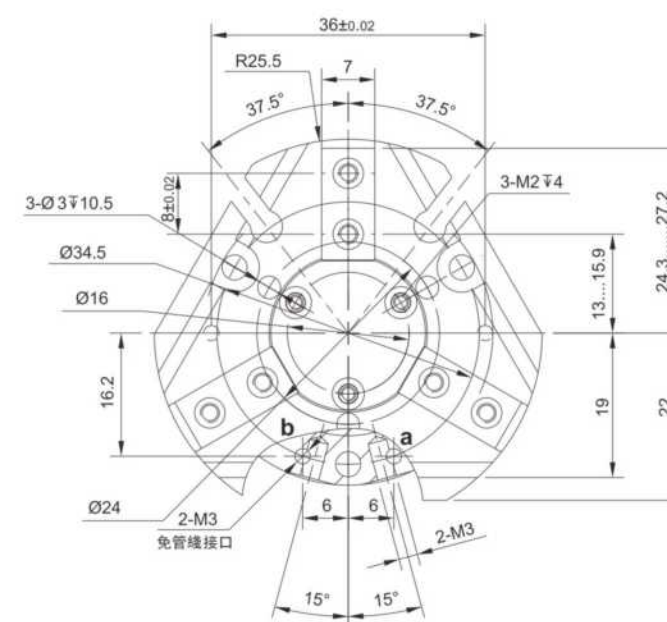
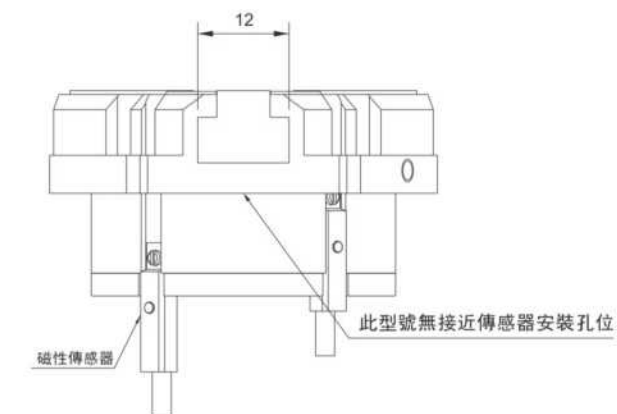
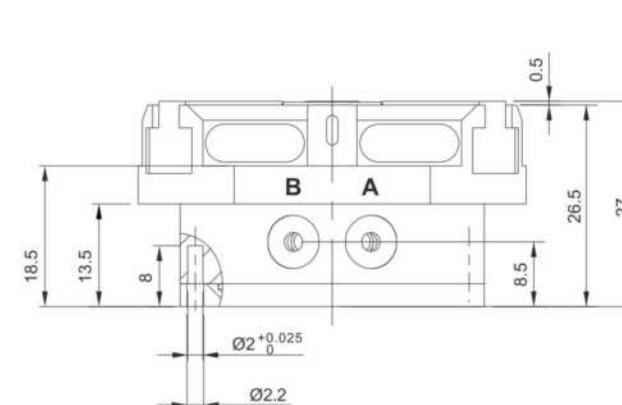
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-SZ-40
單爪行程 Stroke per finger	[mm]	2.5
關閉力 Closing force	[N]	230
開啓力 Opening force	[N]	240
重量 Weight	[kg]	0.12
建議工件重量 Recommended workpiece weight	[kg]	1.25
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	5.0
最小壓力 Min. operating pressure	[bar]	2.0
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.02
開啓時間 Opening time	[s]	0.03
夾爪長度可允許 Max. permitted finger length	[mm]	50
夾爪重量可允許 Max. permitted weight per finger	[kg]	0.1
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	±0.01

### 外觀尺寸圖

Dimensional Overview



A,a 主/直接連接接口，夾爪開啟

B,b 主/直接連接接口，夾爪關閉



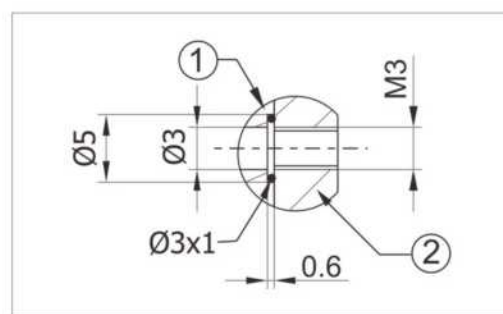


### 直接連接供氣口，免管線

Air export pipeline is directly connected

直接連接供氣口，壓縮空氣直接供給夾爪使用，無需使用管線，可將壓力介質饋入安裝板上的內孔。

Connect the air supply inlet directly so that compressed air can be directly supplied to grippers for use without using the pipeline.



① 轉接器

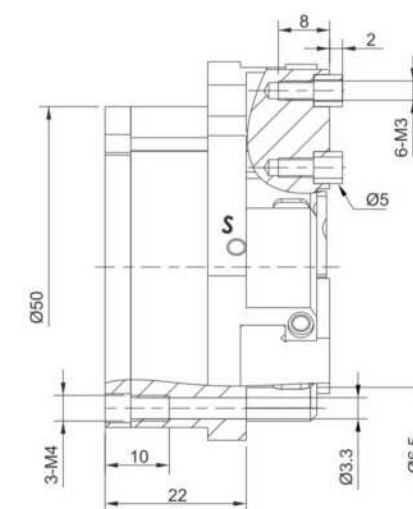
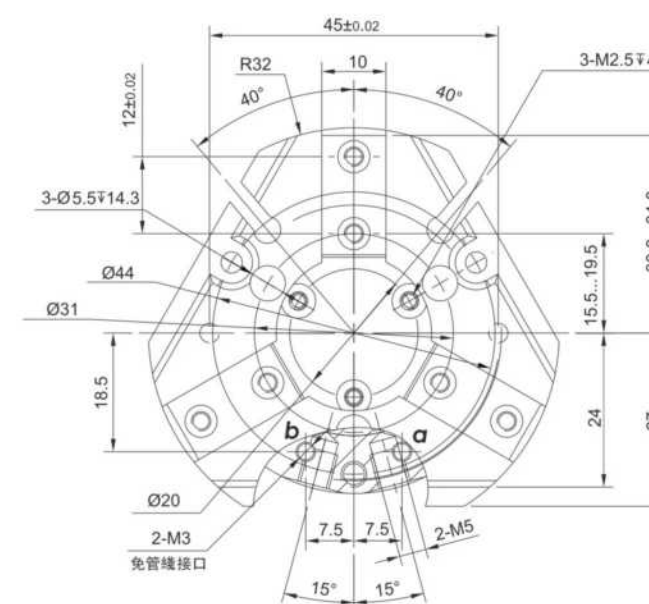
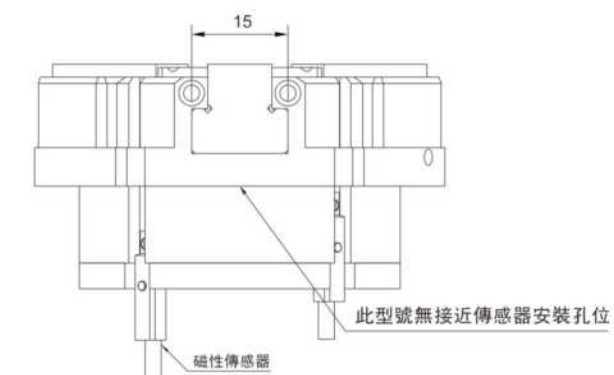
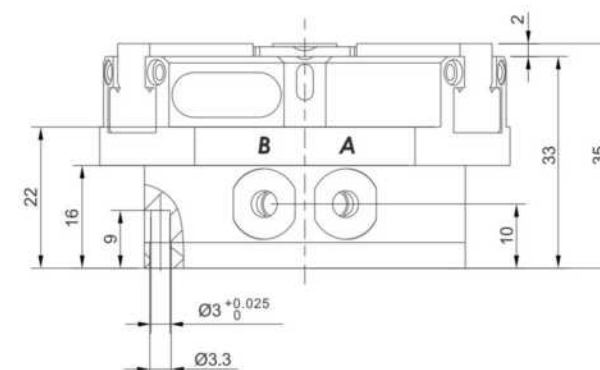
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-SZ-50A
單爪行程 Stroke per finger	[mm]	4
關閉力 Closing force	[N]	325
開啓力 Opening force	[N]	355
重量 Weight	[kg]	0.25
建議工件重量 Recommended workpiece weight	[kg]	1.6
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	9.0
最小壓力 Min. operating pressure	[bar]	2.0
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.03
開啓時間 Opening time	[s]	0.03
夾爪長度可允許 Max. permitted finger length	[mm]	64
夾爪重量可允許 Max. permitted weight per finger	[kg]	0.18
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	± 0.01

### 外觀尺寸圖

Dimensional Overview



A,a 主/直接連接接口，夾爪開啟

B,b 主/直接連接接口，夾爪關閉



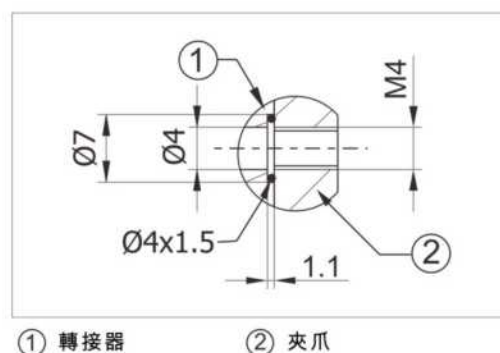


### 直接連接供氣口，免管線

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Connect the air supply inlet directly so that compressed air can be directly supplied to grippers for use without using the pipeline.



① 轉接器

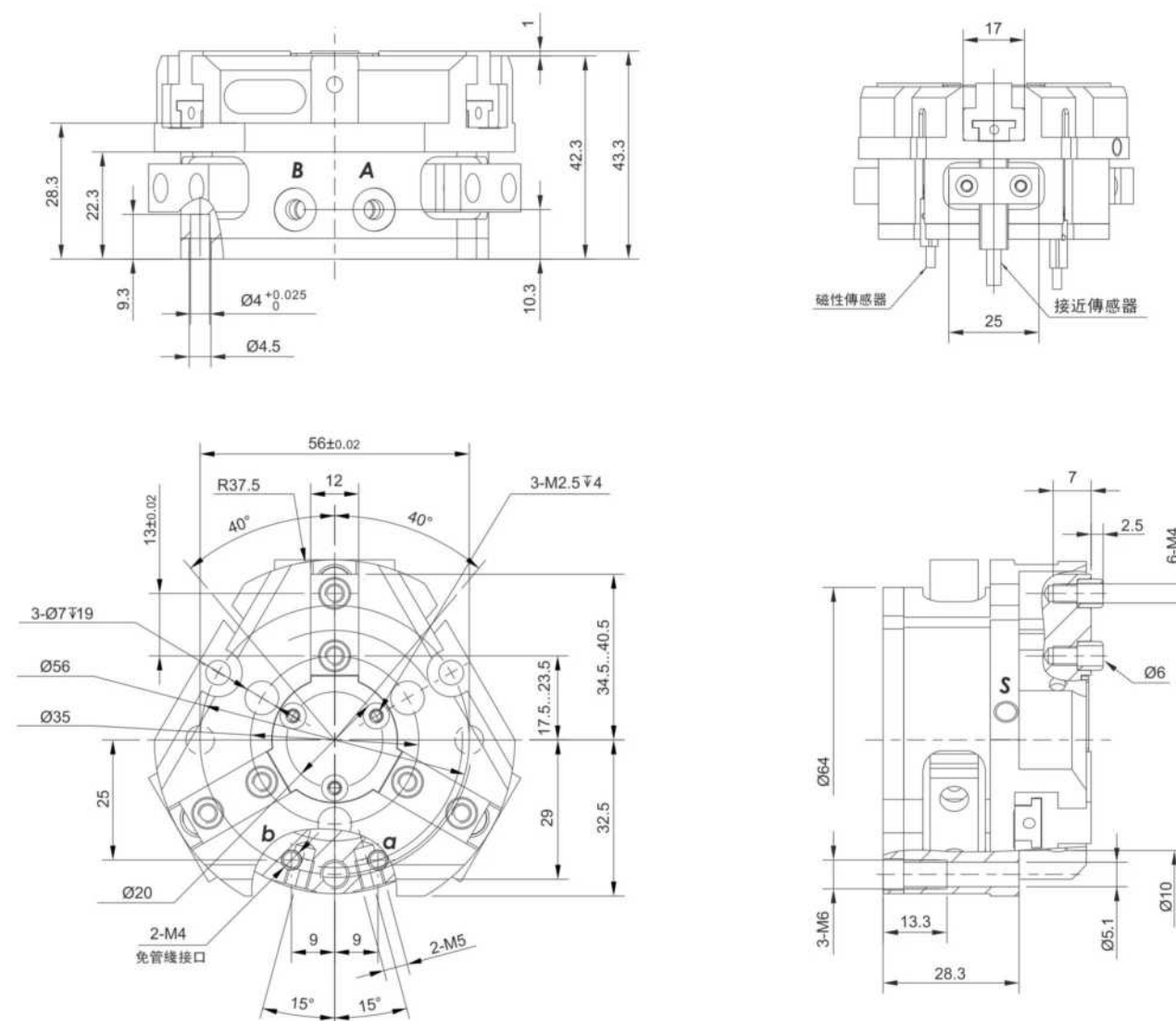
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-SZ-64A
單爪行程 Stroke per finger	[mm]	6
關閉力 Closing force	[N]	580
開啓力 Opening force	[N]	640
重量 Weight	[kg]	0.43
建議工件重量 Recommended workpiece weight	[kg]	2.9
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	25
最小壓力 Min. operating pressure	[bar]	2.0
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.03
開啓時間 Opening time	[s]	0.03
夾爪長度可允許 Max. permitted finger length	[mm]	80
夾爪重量可允許 Max. permitted weight per finger	[kg]	0.35
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	± 0.01

### 外觀尺寸圖

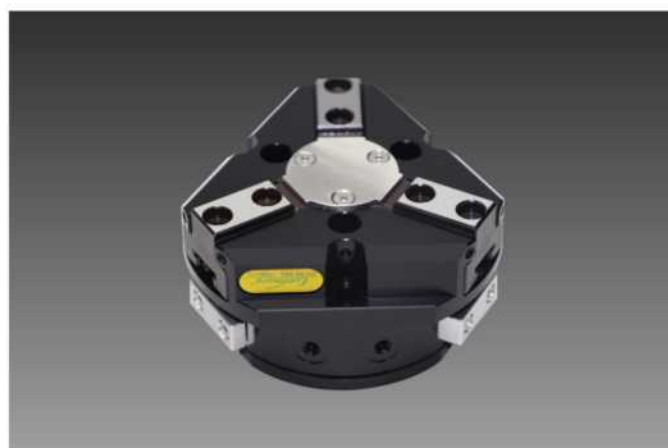
Dimensional Overview



A,a 主/直接連接接口，夾爪開啟

B,b 主/直接連接接口，夾爪關閉



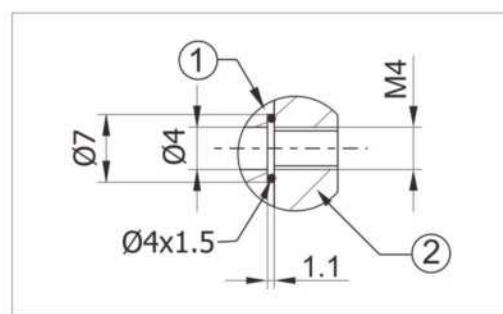


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① 轉接器

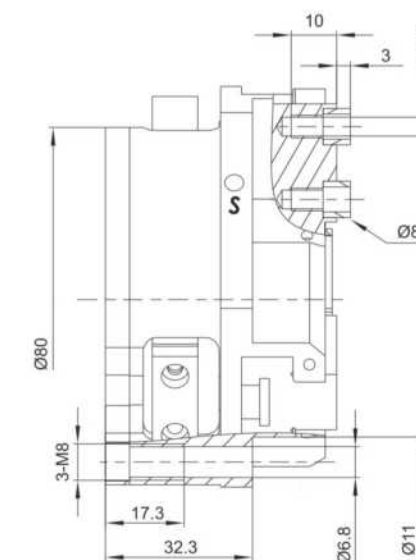
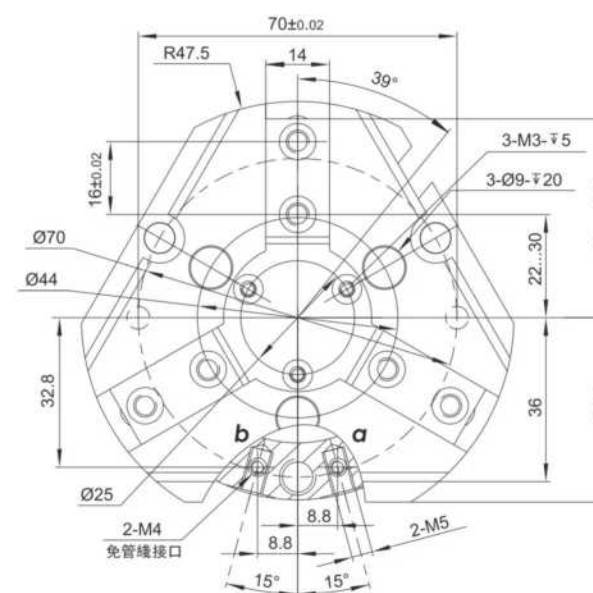
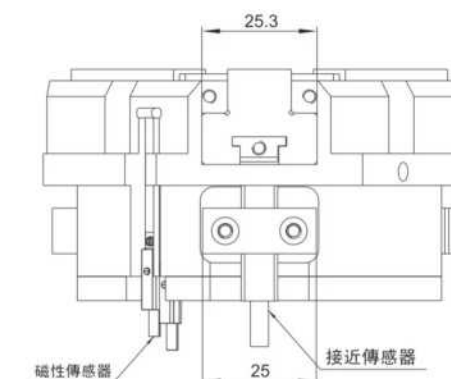
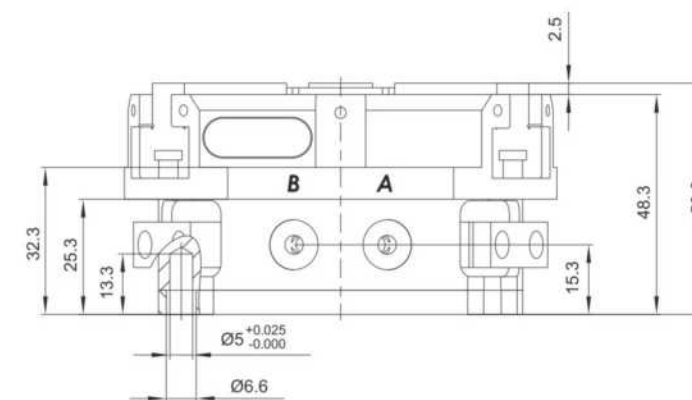
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-SZ-80A
單爪行程 Stroke per finger	[mm]	8
關閉力 Closing force	[N]	1000
開啓力 Opening force	[N]	1080
重量 Weight	[kg]	0.79
建議工件重量 Recommended workpiece weight	[kg]	5.0
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	60
最小壓力 Min. operating pressure	[bar]	2.0
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.05
開啓時間 Opening time	[s]	0.05
夾爪長度可允許 Max. permitted finger length	[mm]	100
夾爪重量可允許 Max. permitted weight per finger	[kg]	0.6
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	± 0.01

### 外觀尺寸圖

Dimensional Overview



A,a 主/直接連接接口，夾爪開啟

B,b 主/直接連接接口，夾爪關閉



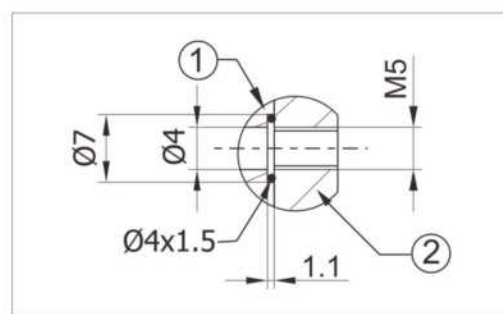


### 直接連接供氣口，免管線

Air export pipeline is directly connected

直接連接供氣口，壓縮空氣直接供給夾爪使用，無需使用管線，可將壓力介質饋入安裝板上的內孔。

Connect the air supply inlet directly so that compressed air can be directly supplied to grippers for use without using the pipeline.



① 轉接器

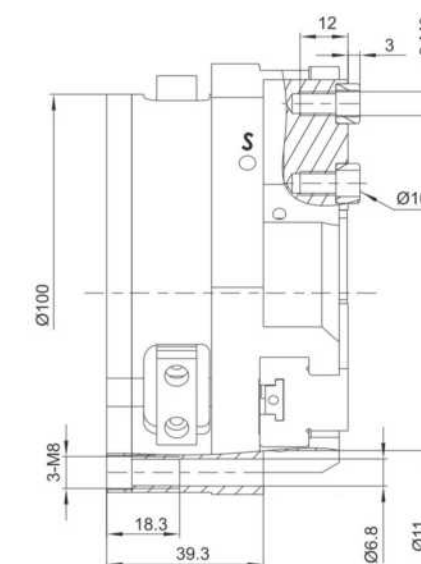
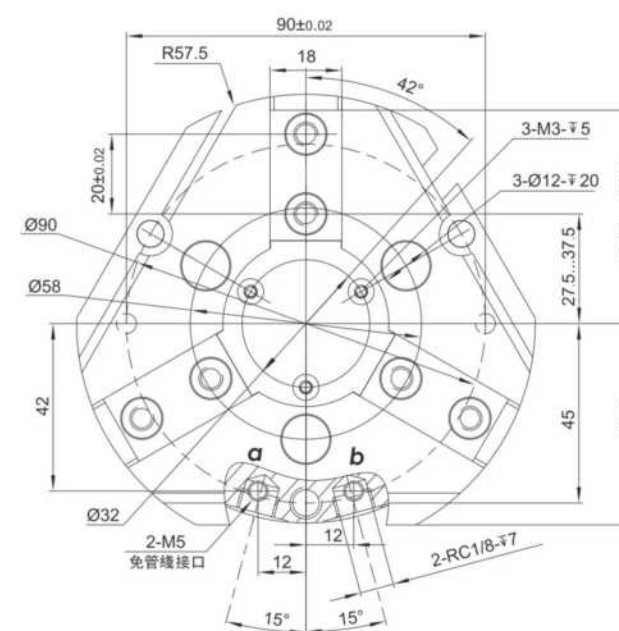
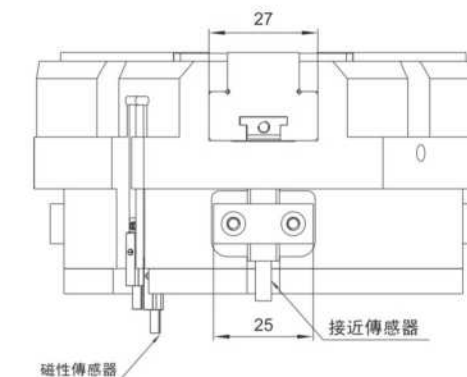
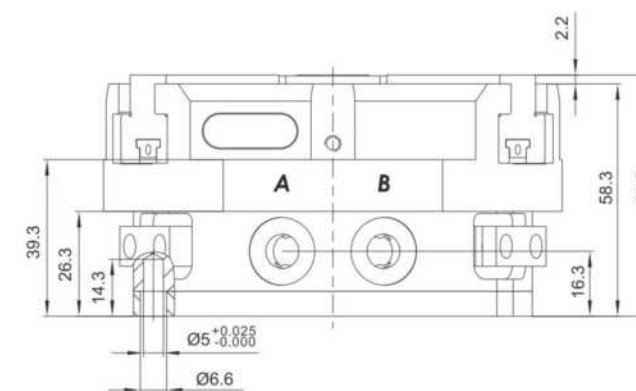
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-SZ-100A
單爪行程 Stroke per finger	[mm]	10
關閉力 Closing force	[N]	1860
開啓力 Opening force	[N]	2000
重量 Weight	[kg]	1.41
建議工件重量 Recommended workpiece weight	[kg]	9.0
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	120
最小壓力 Min. operating pressure	[bar]	2.0
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.1
開啓時間 Opening time	[s]	0.1
夾爪長度可允許 Max. permitted finger length	[mm]	125
夾爪重量可允許 Max. permitted weight per finger	[kg]	1.1
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	± 0.01

### 外觀尺寸圖

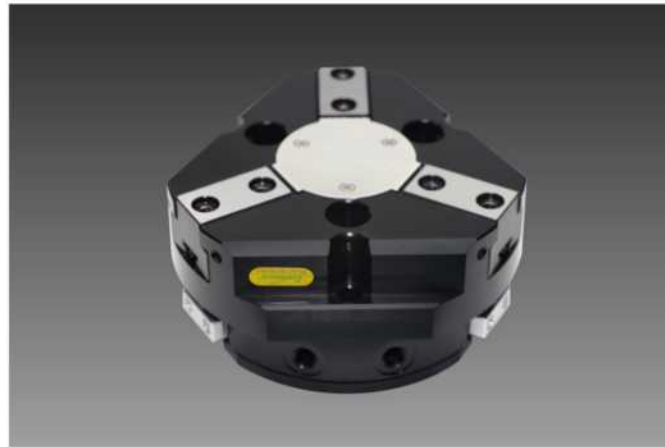
Dimensional Overview



A,a 主/直接連接接口，夾爪開啟

B,b 主/直接連接接口，夾爪關閉



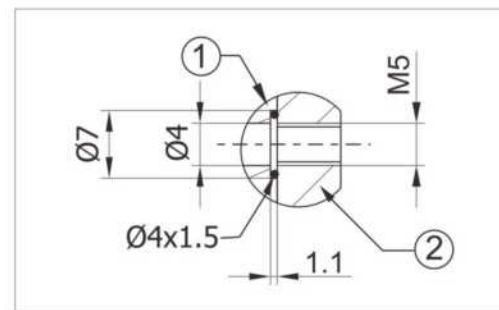


### 直接連接供氣口，免管線

Air export pipeline is directly connected

直接連接供氣口，壓縮空氣直接供給夾爪使用，無需使用管線，可將壓力介質饋入安裝板上的內孔。

Connect the air supply inlet directly so that compressed air can be directly supplied to grippers for use without using the pipeline.



① 轉接器

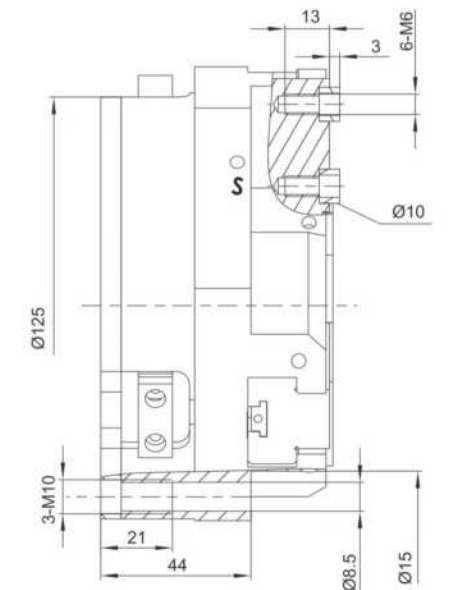
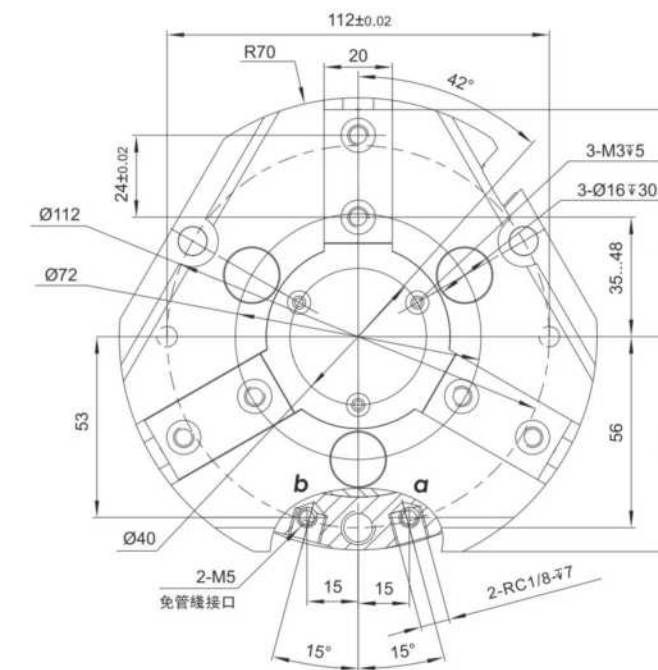
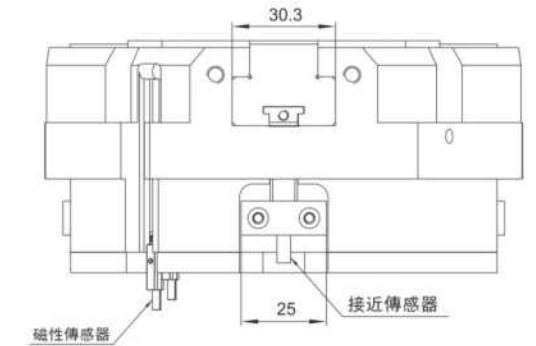
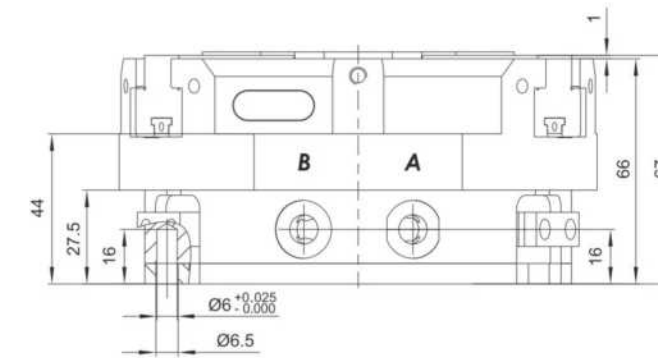
② 夾爪

### 技術資料 Technical data

型號 Type	ID	RH-SZ-125
單爪行程 Stroke per finger	[mm]	13
關閉力 Closing force	[N]	3000
開啓力 Opening force	[N]	3220
重量 Weight	[kg]	2.8
建議工件重量 Recommended workpiece weight	[kg]	15.5
雙行程氣耗量 Air consumption per double stroke	[cm <sup>3</sup> ]	230
最小壓力 Min. operating pressure	[bar]	2.0
最大壓力 Max. operating pressure	[bar]	8.0
額定工作壓力 Nominal operating pressure	[bar]	6.0
關閉時間 Closing time	[s]	0.2
開啓時間 Opening time	[s]	0.2
夾爪長度可允許 Max. permitted finger length	[mm]	160
夾爪重量可允許 Max. permitted weight per finger	[kg]	2.1
IP等級 IP class		40
最小室溫 Min. ambient temperature	[°C]	-10
最大室溫 Max. ambient temperature	[°C]	90
重複精度 Repeatability accuracy	[mm]	± 0.01

### 外觀尺寸圖

Dimensional Overview



A,a 主/直接連接接口，夾爪開啟

B,b 主/直接連接接口，夾爪關閉









- 浮動磨頭RH-FDT-XZ-22可用于修光毛刺金屬以及非金屬部件的毛刺。
- 它允許高的進給速度且倒角大小均勻，可以應用在任何方向，主軸在所有方向自由依從的。對部分邊緣的毛刺可以設置機器人程序。浮動頭擁有的萬向懸架可以在去邊角和角落不改變工具姿態的前提下工作。
- 浮動磨頭可以被固定在工具架或到機器人手臂。如果這些使用工具的機器人想增加自動換刀（改變系統）是可以的。
- 可使用一般銑刀。
- 空氣馬達最好需要油的壓縮空氣

• The filing tool rh-fdt-xz-22 is well suited to remove burrs particularly in narrow slots and grooves. It can be employed for metallic as well as nonmetallic parts. It is also well suited for the deflashing of aluminium diecasting.

• It can be employed in any orientation. The file tip is compliant in all directions using radial arranged springs to provide the filing pressure onto the part edge.

• The filing tool can either be mounted stationary on a tool stand (toolstand) or onto the robot arm. If these tools at the robot have to be changed automatically, a tool changer (changing systems) is available.

• Commercial filing inserts can be used.

• The air motor needs oiled compressed air for optimal life.



## RH-FDT-XZ-22 詳細參數

## Detailed parameters

Type	型號	RH-FDT-XZ-22
Power	功率	240W
Idling speed	空載轉速	21500
Compliance radial in all directions	理論行程範圍	±4.5°
Compliance torque	理論扭矩	0.54N/m
Feed forward rate	進給速度	5-250mm/sec.
Air consumption	耗氣量	5.3l/s
Compressed air pressure	壓縮空氣壓力	0.6-0.8MPa
Air connections	氣管接頭	1/8, 1/8, 1/4
Collet	夾持範圍	Φ3-7
Weight	重量	3.8KG

## RH-FDT-XZ-22 外形尺寸

## Dimensions

