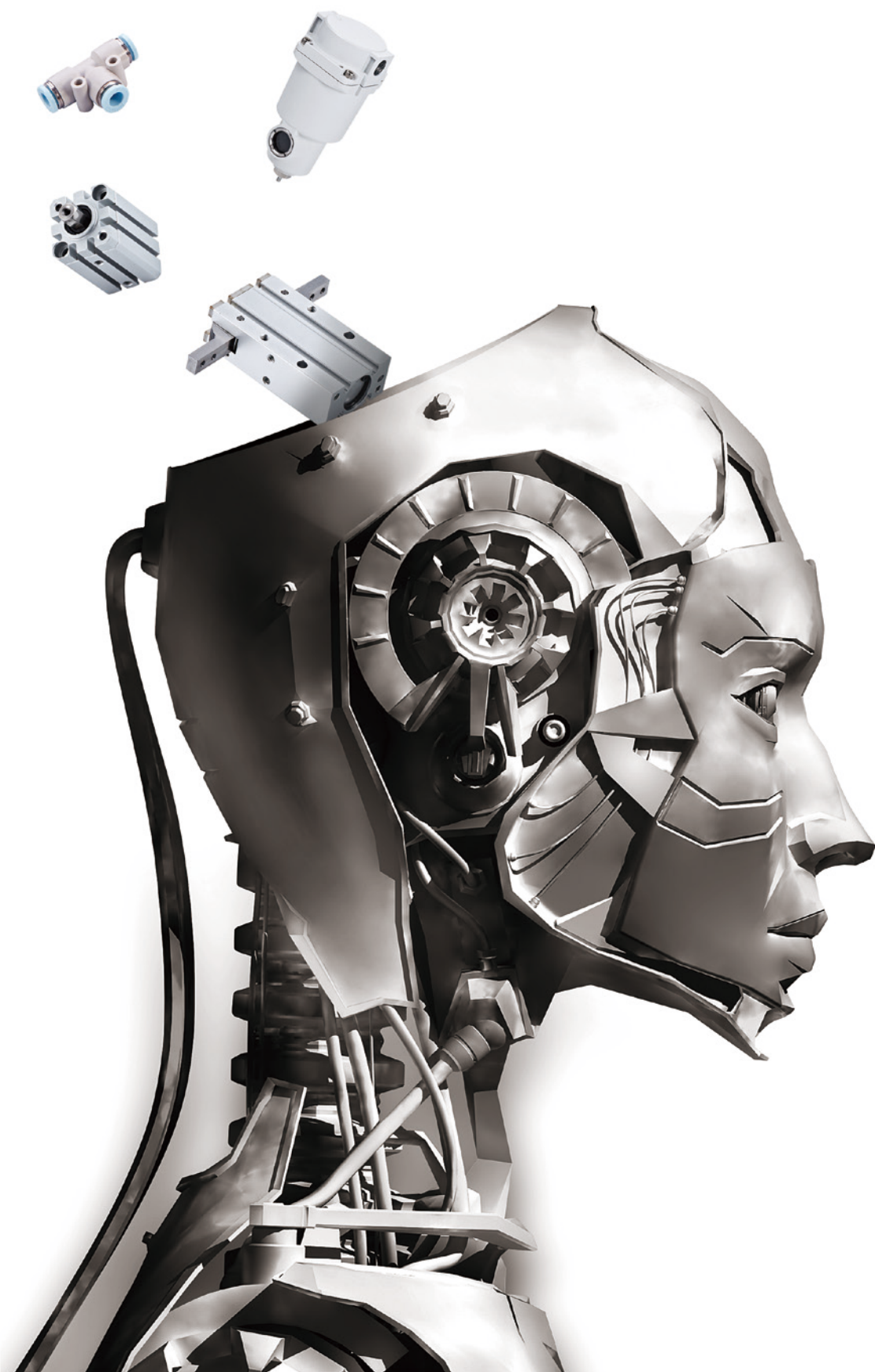
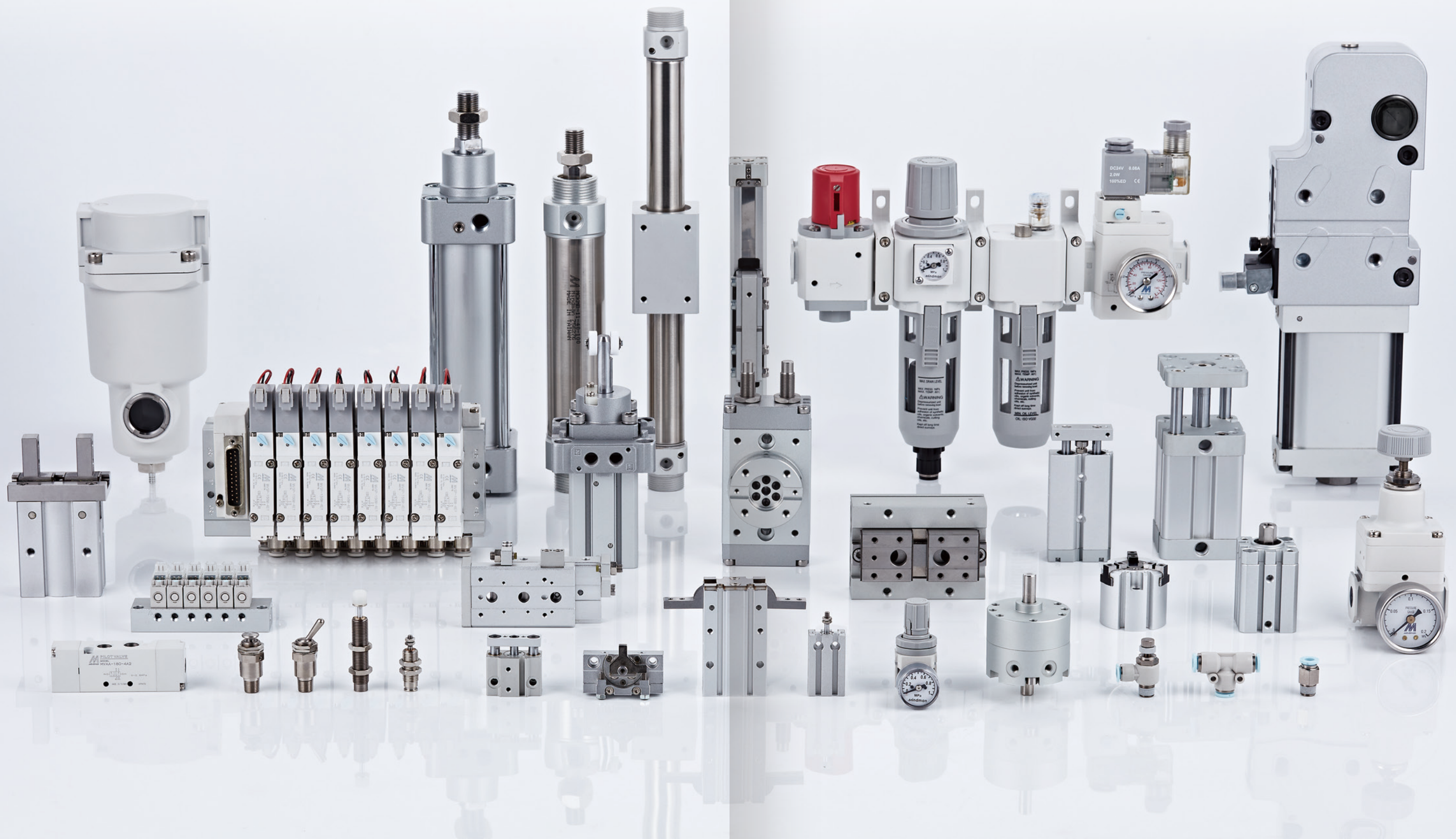




# PRODUCT GUIDE







# MINDMAN.

## GLOBAL VISION AND LOCAL OPERATION

Core Business:  
Manufacture and sale for  
varieties of high quality  
automation components.

**1979**  
FOUNDED



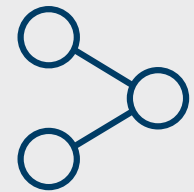
**CHING-CHENG HUANG**  
PRESIDENT



**CAPITAL**  
USD 12,558,000



**600 PEOPLE**  
EMPLOYEES



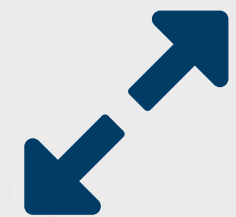
**97 COUNTRIES**  
SALES NETWORK

**No.1**

Quantity supplied of  
pneumatic components in Taiwan.

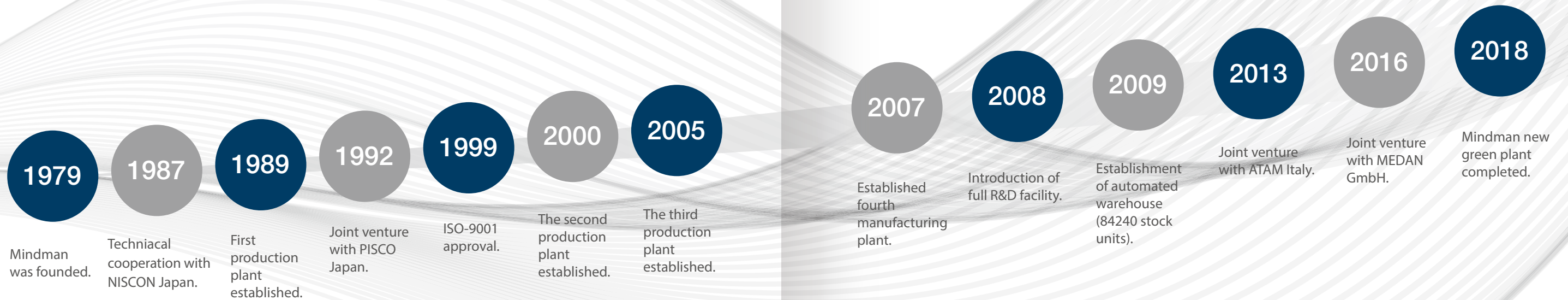
HEADQUARTERS IN  
**TAIPEI**  
CITY, TAIWAN

MANUFACTURE BASE IN  
**TAINAN**  
CITY, TAIWAN



**90,000 m<sup>2</sup>**  
Plant Size

# OUR MILESTONES



Mindman Industrial Co., Ltd. was established in 1979 with a destination to provide high quality automation components for a wide variety of industries.

During the past 40 years, Mindman has devoted to the expansion of our product range. Thanks to our R&D department, we are proud to possess the diversified product lineup includes solenoid valves, air treatment units, pneumatic cylinders, electric actuators and all different types of fluid power accessories.

We always believe that fast delivery of automation components is the key of success in the market. Through the complete vertical integration of all manufacturing processes and automated warehouse, we are confident to achieve on time delivery.

To keep quality high during the whole production process, we implement the strict quality control standard. We thoroughly control the process via standard operation procedure (SOP), statistical process control system (SPC) and total productive management (TPM). Most important of all, Mindman commits to providing the products with 100% inspection after assembly.

Currently, Mindman products are exported to more than 90 countries around the world. We devoted ourselves to building the relationship with customers worldwide and provide them with the strong support, such as online 3D drawing, inventory check and promotional program...etc. In the vast automation market, Mindman will spare no effort in establishing a brand – a world-class premium automation components supplier.



# MINDMAN GROUP

Strategy of diversification is our direction to remain at the forefront in the industry.



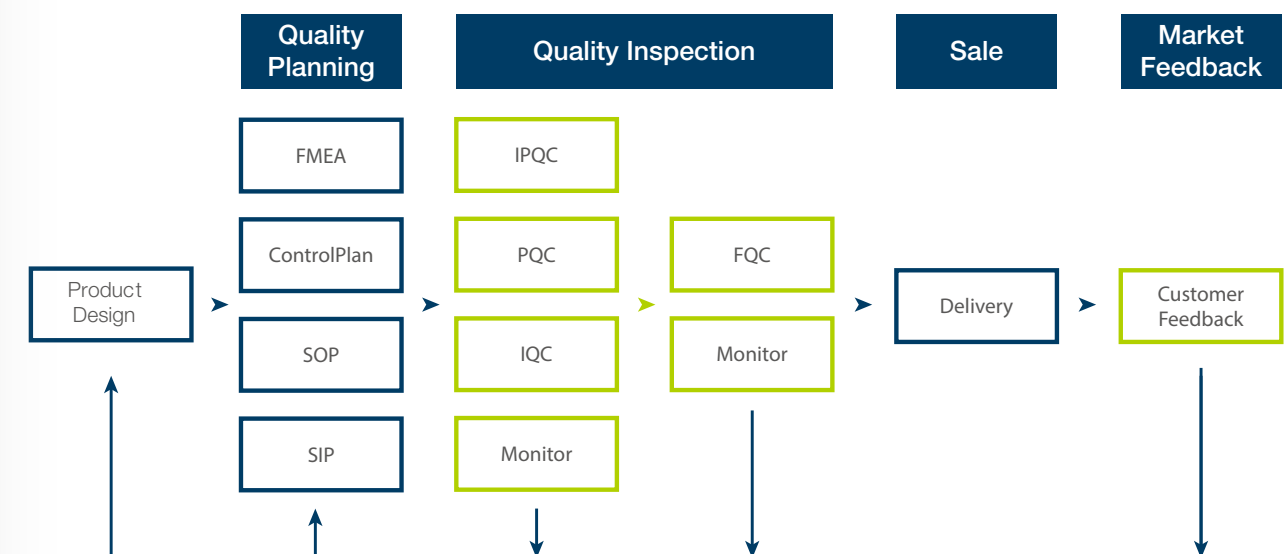
# OUR ADVANTAGE

Nonstop effort and everlasting insistence



## Quality Control Process

Through the complete quality control process, we are confident to provide the highest quality products to our customers.



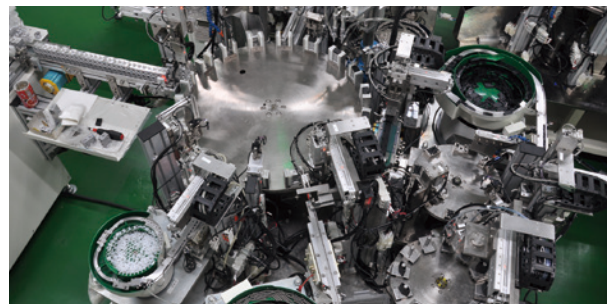
# OUR ENGINEERING TECHNIQUES

100% Vertical integration. Control the quality from commodities to final good.



## 1. Die casting

We strictly control over all process to maintain its quality from mold design to robotic grinding and deburring.



## 5. Product assembling

We applied automated machines for mass production and increase the elasticity of production.



## 2. Machining

There are more than 300 CNC machines in house and they produce more than 100,000 different types of parts currently.



## 6. Quality control

We adopt high precision measure equipment to ensure the size of received product is consist with our catalog.



## 3. Plastic injection

We apply the automation system and high precision measuring tools and AOI are equipped to have dimensions controlled.



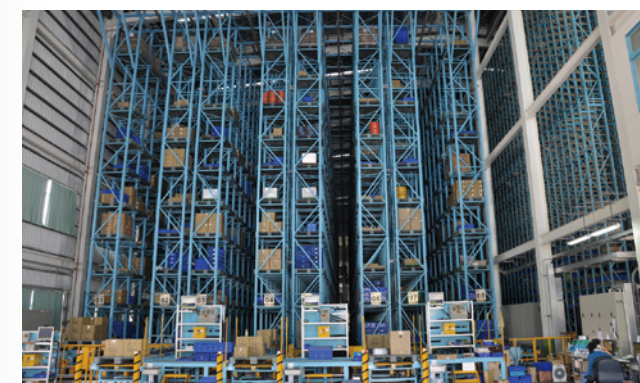
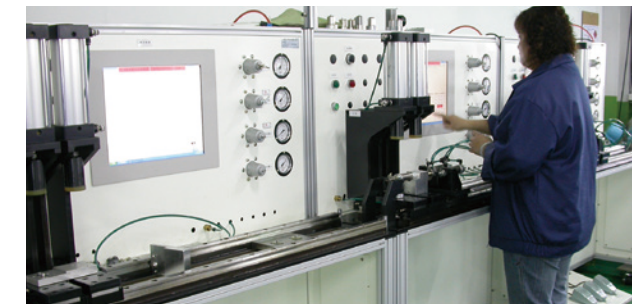
## 7. 100% Inspection

We guarantee 100% inspection for every single piece of product.



## 4. Surface coating

Including product surface treatment, electric static coating, hard anodized process, sand blasting and grinding process.



### Automated warehouse profile

- Plant size: 6600m<sup>2</sup>.
- 84240 stock unit.
- 99.9% accuracy rate.



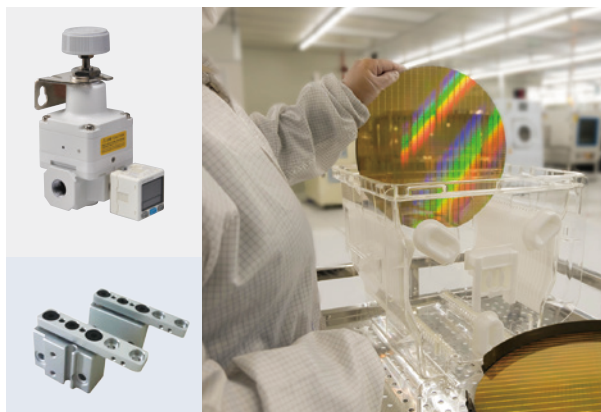
# INDUSTRY



## Machine Tool

Through the integration of air treatment unit and solenoid valves, we make it easier for installment and save the time for wiring and piping work.

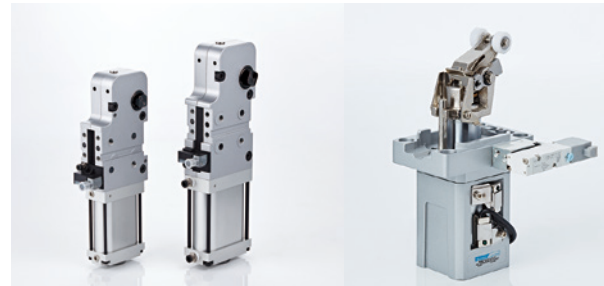
- Modular air treatment unit and valves



## Semiconductor Industry

Semiconductor manufacturing requires high precision during the process. Mindman's MAIR series is able to precisely control pressure under large flow and MCGS series is applied to make a precise lifting or pushing during the process.

- Precision regulator MAIR series
- Guide cylinder MCGS series



## Automotive Industry

Mindman provides various kinds of products for automotive welding process and conveyance.

- Pneumatic clamp cylinder MCKD series
- Stopper cylinder MSB\* series

## Electronic Industry

To meet the requirement of precise assembly of electronic devices, Mindman's linear electric actuator is able to position precisely and move fast.

- Electric actuators METB / METS series



## Medical and Pharmaceutical Industry

Mindman's technologies are applied to the pharmaceutical processing machines to efficiently remove oil mist with an activated carbon element in compressed air. The MAM series filter can be applied to meet the high requirement of pure and oil-free air quality while MJC provides cool air in the cooling system.

- Filter MAM\* series
- Jet cooler MJC series

## Food Industry

To meet the hygiene, environment and safety requirement of food industry, we provide mini cylinder that adequate for food machinery. The cylinder adopts food grade grease (certified by NSF-H1) which prevents the pollution during the process. Hard anodized stainless steel cylinder tubes and piston rod feature high resistance to corrosion and low internal friction. We also provide PISCO vacuum pad with food safe and FDA complied.

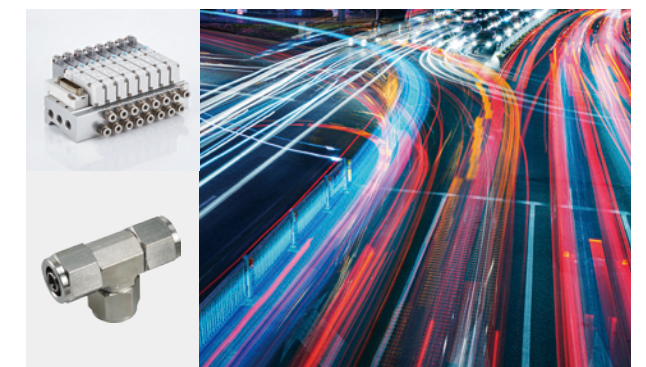
- Rod locking cylinder MCMBL series
- VP for Packing Bag series



## Textile Industry

In connection with textile industry, we launched unique cylinders based on MCJQ series to be applied in the textile machinery. Besides, the modularized valves and manifold features quicker response time and less air consumption which allows the faster movement of the machine.

- Compact cylinder MCJQ series
- Solenoid valve MVSC1-180 with manifold



## New Energy Industry

Due to the requirement of copper forbidden for lithium-ion battery manufacturing, Mindman's stainless fittings MNS\* series and solenoid valve MVSP series are able to be applied in such special environment.

- SUS#304 Fitting MNS\* series
- Solenoid valve MVSP series



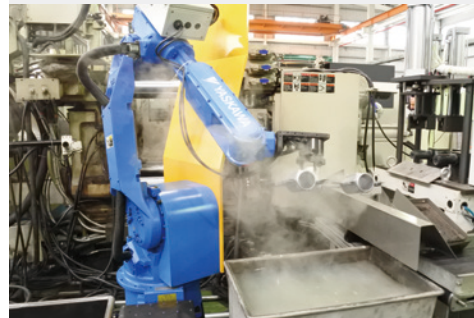
# OUR FUTURE, OUR GOAL

Mindman. Always one step ahead together with our customers.

## INNOVATION

### Department of R&D

Mindman R&D team develops the product through the concept of mechatronics and IoT with the higher level of precision improvement. We apply PLM system to facilitate the sorting and analysis of complicated 3D drawings and product data. Furthermore, we implement multiple testing to insure the product lifespan, load capacity, flow rate, and response time consist with our product catalog.

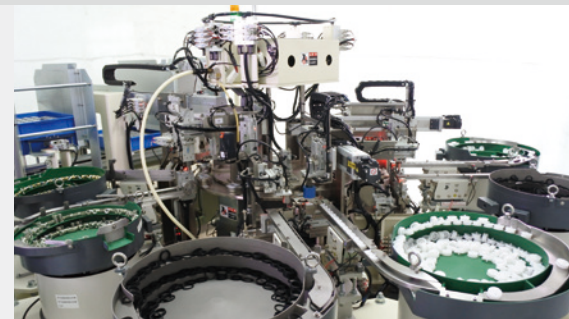


### Department of advanced process

Mindman built an independent team to conquer the process obstacle and design the optimized process. Our department of advanced process provides a continuous improvement of manufacturing via the analysis of daily data collection which helps to minimize the waste of time and maximize the productivity of machines.

### Department of automation

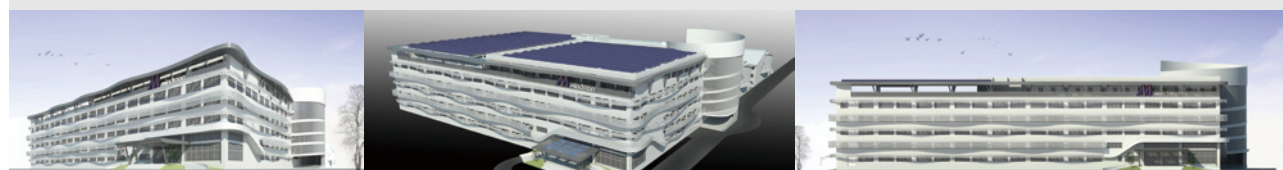
In order to build the highly stable production base in the future, Mindman founded the department to design and provide the solution of automation. Besides, the team designs our own automated machine which enhances our productivity and increases liability of quality.



## SUSTAINABLE DEVELOPMENT

### New green plant

- Green power technology: Daily power generated by the rooftop solar panel reaches 400kWp.
- Energy saving: The special designed structure facilitates the heat emission which reduces energy consumption.
- Friendly environment: Through the greening of the plant, we build a better balance between Mother Nature and human being.



# GLOBAL NETWORK

If you care much about quality, please find our distributors worldwide.



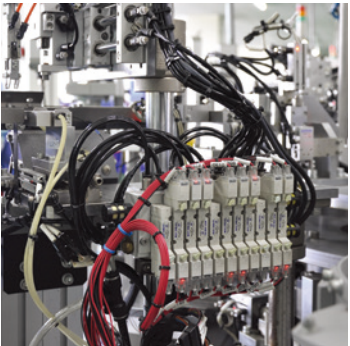


# PRODUCT GUIDE

# DIRECTIONAL CONTROL VALVE AIR TREATMENT UNIT

## SOLENOID VALVE

Mindman provides the solenoid valve with the finest quality of electrical coil and features low power consumption and quick respond time. Besides, the multi connector systems are available in different size and flows to meet the needs of various industries.



### » SOLENOID VALVE

#### MVSY series

Body width: 10/15/18 (mm)  
Coil size: 10 (mm)  
Port size: M5×0.8, 1/8, 1/4  
Response time: 12~23 (ms)  
Power consumption:  
DC24V=0.55W  
5/2 way, 5/3 way (C/P/R)

#### MVSC1 series

Body width: 15/18/22 (mm)  
Coil size: 15 (mm)  
Port size: M5×0.8, 1/8, 1/4  
Response time: 23~40 (ms)  
Power consumption: DC=0.95W  
3/2 way, 5/2 way, 5/3 way (C/P/R)

#### MVSC series

Body width: 22/26/30/46 (mm)  
Coil size: 22 (mm)  
Port size: 1/8, 1/4, 3/8, 1/2  
Response time: 30~50 (ms)  
Power consumption: DC=2W  
3/2 way, 5/2 way, 5/3 way (C/P/R)



### » MULTI CONNECTOR SYSTEM

#### MVB-156 series

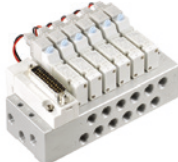
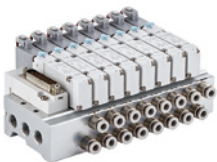
25 Pin D-sub connector  
For MVSY-156 / MVSP-156 series

#### MVB-100 series

25 Pin D-sub connector  
For MVSY-100 series

#### MVB1-100 series

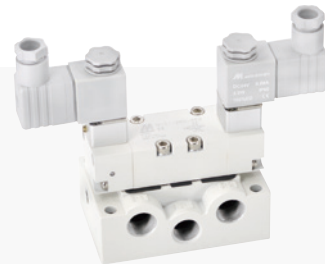
26 Pin flat cable  
For MVSY-100 series



## >> ISO SOLENOID VALVE

### MVSI series ISO-1

Body width: 26/45 (mm)  
Port size: 1/4  
Response time: 40 (ms)  
5/2 way, 5/3 way (C/P/R)



### ISO-3

Body width: 51 (mm)  
Port size: 1/2  
Response time: 40 (ms)  
5/2 way

## >> NAMUR SOLENOID VALVE

### MVSN series

Body width: 22/30 (mm)  
Port size: 1/8, 1/4  
Effective orifice: 18 (mm<sup>2</sup>)  
Response time: 38 (ms)  
5/2 way, 5/3 way (C/P/R)



## >> 2/2, 3/2 WAY SOLENOID VALVE

Piston, Diaphragm, Plunger  
Fluid control: water/air/steam/oil/gas/vacuum  
Port size: 1/8~4

### MUT series



### MUSC series



### MGD series



## PILOT VALVE

### MVAA series

Body width: 15/18/22/26/30/46 (mm)  
Port size: M5×0.8, 1/8, 1/4, 3/8, 1/2  
3/2 way, 5/2 way  
Spring return, Double acting



## MECHANICAL VALVE

### MVMA series

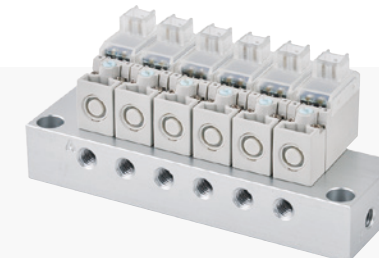
No. of port: 5  
Port size: 1/4, 3/8



## >> DIRECT OPERATED SOLENOID VALVE

### MVDY-100 series

Body width: 10 (mm)  
Port size: M5×0.8  
Effective orifice: 0.09~0.28 (mm<sup>2</sup>)  
Power consumption: DC24=0.55W (A type)  
3/2 way (NC)



### MVDC-220 series

Body width: 22 (mm)  
Port size: 1/8  
Effective orifice: 0.8 (mm<sup>2</sup>)  
Power consumption: DC=2W  
2/2 way (NC), 3/2 way (NC)



## >> DIRECT OPERATED COMPACT SOLENOID VALVE

### MVDA-80 series

No. of port: 2, 3  
Body width: 8 (mm)  
Response time: <1 (ms)  
Power consumption: 0.8W (Hold)  
Voltage: Speed-up: DC24V, Hold: DC5V  
Max. operating frequency: 500 (Hz)



### MVDA-120 series

No. of port: 2, 3  
Body width: 12 (mm)  
Response time: <2 (ms)  
Voltage: Speed-up: DC24V, Hold: DC5V  
Max. operating frequency: 300 (Hz)



## >> FOOT PEDAL VALVE

### MVMB series

No. of port: 2, 3, 5  
Port size: 1/4, 3/8



### MVFA series

No. of port: 3, 4  
Port size: 1/4  
Protection and lock are available





## >> HAND VALVE

### MVHA series

No. of port: 2, 3, 5  
Port size: M5×0.8, 1/8



### MVHB series

No. of port: 5  
Port size: 1/4, 3/8, 1/2



### MVHC series

No. of port: 4  
Port size: 1/8, 1/4, 3/8, 1/2, 3/4



## >> HAND VALVE

### MVHS series

No. of port: 3  
Port size: 1/4, 3/8, 1/2, 3/4



### MVHF series

Port size: 1/8



## >> HAND VALVE

### EPA series

No. of port: 3  
Port size: 1/8



### MVQE series

Port size: 1/8, 1/4, 3/8, 1/2, 3/4, 1



## >> FLOW CONTROL VALVE

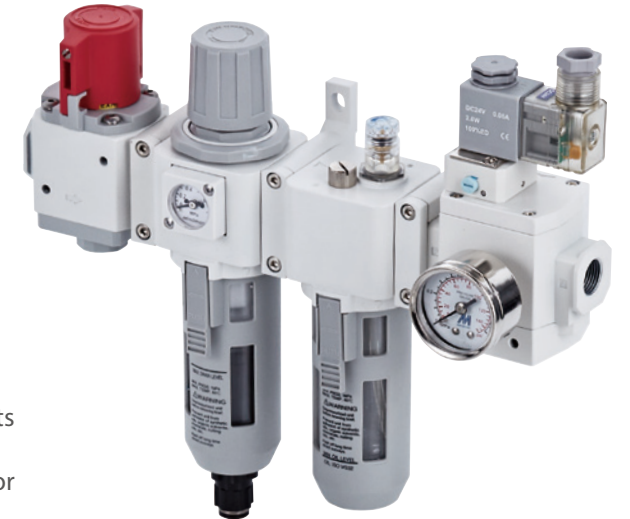
### MSC series

Port size: M3×0.5, M5×0.8, 1/8, 1/4, 3/8, 1/2, 3/4, 1



## AIR TREATMENT UNIT

The purity of compressed air and the stable air pressure are always the key to the efficiency of pneumatic system. Mindman provides modular F.R.L. units with different sizes and flows to suit different conditions. The water removal rate of filter is able to reach above 93% and multiple filter elements are available. Besides, we also provide soft start-up valve, shut-off valve, booster regulator, jet cooler, precision regulator and precision filter to meet the requirement of instance.



## >> F.R.L. UNIT

### MACT series

Port size: 1/8~1  
Filter element: 40/5 µm  
Max. operating pressure: 1~1.5 MPa  
Set pressure range: 0.05~1.5 MPa



### MACP series

Port size: 1/8~1  
Filter element: 40/5 µm  
Max. operating pressure: 1~1.5 MPa  
Set pressure range: 0.05~1.5 MPa



### MAFR series

Port size: M5~1  
Filter element: 40/5 µm  
Max. operating pressure: 1~1.5 MPa  
Set pressure range: 0.05~1.5 MPa



## >> FILTER

### MAF series

Port size: 1/8~2  
Filter element: 40/5/0.3/0.01 µm  
Max. operating pressure: 1~1.75 MPa



## >> REGULATOR

### MAR series

Port size: M5~2  
Max. operating pressure: 1~3.1 MPa  
Set pressure range: 0.05~1.75 MPa



## >> LUBRICATOR

### MAL series

Port size: 1/8~1 1/2  
Max. operating pressure: 1~1.75 MPa



## » PRECISION REGULATOR

### MAIR series

Port size: 1/8~1/2  
Sensitivity:  $\pm 0.2\%$  F.S.  
Repeatability:  $\pm 0.5\%$  F.S.  
Set pressure range: 0.005~0.8 MPa  
Max. operating pressure: 1 MPa



## » PRECISION FILTER

### MAM\* series

Port size: 3/8~1  
Water removal rate 99%  
Filter element: 3/0.3/0.01/  
0.01  $\mu\text{m}$ + Deodorization  
Max. operating pressure: 1 MPa



## » PROPORTIONAL REGULATOR

### MAER series

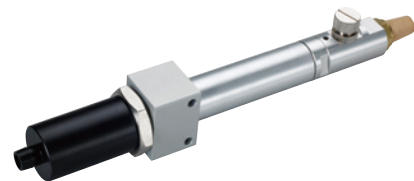
Port size: 1/4, 3/8  
Max. operating pressure: 1 MPa  
Precision control of air pressure by electric signal



## » JET COOLER

### MJC series

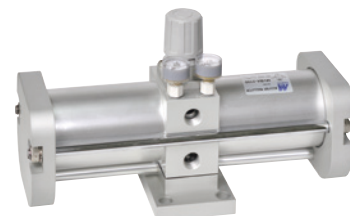
Cool air out port: 1/8, 1/4, 3/8  
Max. temp. drop: 40~60°C  
Max. operating pressure: 0.7 MPa



## » BOOSTER REGULATOR

### MVBA series

Port size: 3/8  
Pressure increase rate: 2 times  
Max. operating pressure: 1 MPa  
Energy-saving  
Achieve high pressure condition in limited space



## » FILTER FOR TURBINE TYPE

### MWC series

Port size: 3/8, 1  
Water removal rate: 99.99%  
Max. operating pressure: 1 MPa  
Applicable in the large flow instance



## » SHUTOFF VALVE

### MVHR series

Port size: 1/4, 3/8, 1/2  
3/2 way  
Combined with air unit  
MA\*\*302, 401, 403 series  
as a module product.



## » SOFT START-UP VALVE

### MAVS series

Port size: 1/4, 3/8, 1/2  
Combined with air unit  
MA\*\*302, 401, 403 series  
as a module product.



# AIR CYLINDER





Mindman possesses the most complete range of cylinders which includes ISO profile cylinders, compact cylinders, miniature cylinders and we offer various kinds of non-rotating feature cylinders, such as guided cylinders, slide cylinders, rodless cylinders...etc. (※1)

## STANDARD CYLINDER

### » ISO-VDMA

#### MCQV\* series

Double acting  
 ø32, 40, 50, 63, 80, 100, 125, 160, 200 (mm)  
 Max. stroke (※2): 1500 (mm)  
 ISO 6431 & VDMA-24562



#### MCQI2 series

Double acting  
 ø32, 40, 50, 63, 80, 100 (mm)  
 Max. stroke: 700 (mm)  
 ISO 6431 & VDMA-24562



#### MCKQI2 series

Double acting  
 ø32, 40 (mm)  
 Max. stroke: 300 (mm)  
 ISO-6431 & VDMA-24562  
 Hexagonal rod design for non-rotation

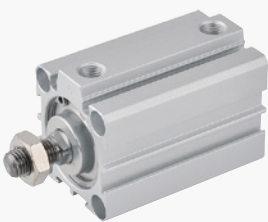
► Non-Rotating



## COMPACT CYLINDER

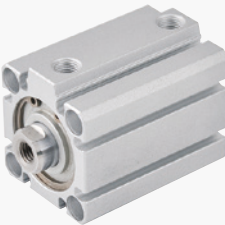
#### MCJA series

Single acting  
 ø12, 16, 20, 25, 32, 40, 50 (mm)  
 Double acting  
 ø12, 16, 20, 25, 32, 40, 50, 63, 80, 100 (mm)  
 Max. stroke: 300 (mm)



#### MCJQ series

Single acting  
 ø12, 16, 20, 25, 32, 40, 50 (mm)  
 Double acting  
 ø12, 16, 20, 25, 32, 40, 50, 63, 80, 100 (mm)  
 Max. stroke: 300 (mm)



#### MCKJQ series

Double acting  
 ø12, 16, 20, 25, 32, 40 (mm)  
 Max. stroke: 100 (mm)  
 Hexagonal rod design for non-rotation

► Non-Rotating



※ 1. General max. operating pressure for cylinder is 0.7 to 1 MPa and max. proof pressure is 1 to 1.5 MPa.  
 ※ 2. Stroke exceed the max. stroke is also available, please consult with us.

### » AIR/OIL CONVERTOR

### » NFPA

#### MCQA series

Double acting  
 ø40, 50, 63, 80, 100, 125, 150, 200 (mm)  
 Max. stroke: 1500 (mm)



#### MCQA-AH series

ø40, 50, 63, 80, 100, 125, 150 (mm)



#### MCQN series

Double acting  
 ø1-1/2", 2", 2-1/2", 3-1/4", 4"  
 Max. stroke: 24"  
 Imperial units



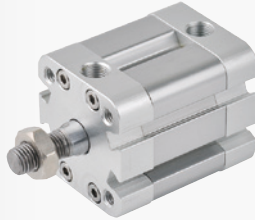
### » ISO

### » PLATE TYPE

### » MULTI-MOUNT

#### MCJI series

Double acting  
 ø20, 25, 32, 40, 50, 63, 80, 100 (mm)  
 Max. stroke: 500 (mm)  
 ISO 21287



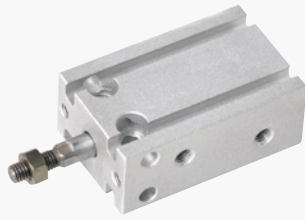
#### MCJU series

Double acting  
 ø25, 32, 40, 50, 63 (mm)  
 Max. stroke: 300 (mm)  
 Oval piston design for non-rotation



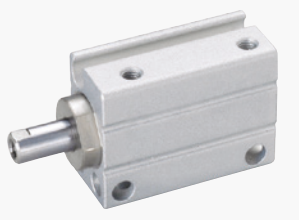
#### MCFA series

Double acting  
 ø6, 10, 16, 20, 25, 32 (mm)  
 Max. stroke: 50 (mm)



#### MCFB series

Single acting  
 ø6, 8, 10 (mm)  
 Double acting  
 ø6, 8, 10, 12, 16, 20 (mm)  
 Max. stroke: 50 (mm)



## MINI. CYLINDER

### » ISO

#### MCMB series

Single and double acting  
 ø20, 25, 32, 40 (mm)  
 Max. stroke: 300 (mm)



#### MCMI series

Single and double acting  
 ø8, 10, 12, 16, 20, 25 (mm)  
 Max. stroke: 500 (mm)  
 ISO 6432



### » PEN CYLINDER

#### MCMA series

Single acting  
 ø16, 20, 25, 32(mm)  
 Double acting  
 ø16, 20, 25, 32, 40 (mm)  
 Max. stroke: 500 (mm)



#### MCMJ series

Single and double acting  
 ø 6, 10, 16 (mm)  
 Max. stroke: 200 (mm)



#### MCMJPB/S series

Single acting  
 ø 6, 10, 15 (mm)  
 Max. stroke: 15 (mm)



## ROUND CYLINDER

### » THE METRIC SYSTEM

#### MCCG series

Double acting  
 ø20, 25, 32, 40, 50, 63, 80, 100 (mm)  
 Max. stroke: 1200 (mm)



### » THE IMPERIAL SYSTEM

#### MCCN series

Double acting  
 ø3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2"  
 Max. stroke: 48"



## GUIDE CYLINDER

#### MCGA-03/13/53 series Stop / Lift type MCGA-23/63 series Push type

Double acting  
 ø20, 32, 40, 50, 63, 80 (mm)  
 Max. stroke: 350 (mm)



#### MCGS-03/07 series Stop / Lift type MCGS-23/27 series Push type

Double acting  
 ø 6, 10, 12, 16, 20, 25, 32, 40, 50, 63 (mm)  
 Max. stroke: 400 (mm)  
 Non-rotating accuracy  $\pm 0.15^\circ$  (ø 6,10 mm)



### » COMPACT TYPE

#### MCGI series

Double acting  
 ø20, 25, 32, 40, 50, 63, 80, 100 (mm)  
 Max. stroke: 300 (mm)



### » DUAL-ROD CYLINDER

#### MCD A series

Double acting  
 ø 6, 12, 16, 20, 25, 32 (mm)  
 Max. stroke: 150 (mm)

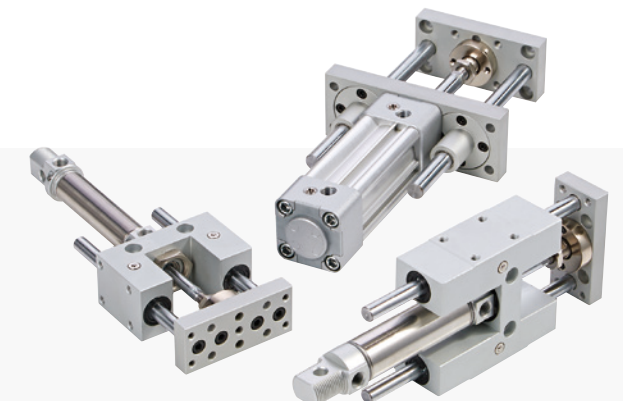
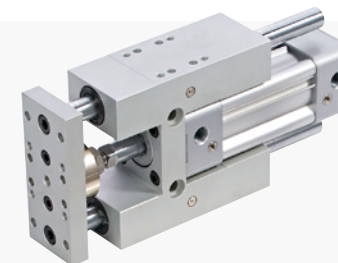


### » ISO 6432 GUIDE UNIT

#### MGT\* series

**MGTK(X):** Light duty type, **MGTB(U):** Heavy duty type

Double acting  
 ø20, 25, 32, 40, 50, 63 (mm)  
 Max. stroke: 600 (mm)



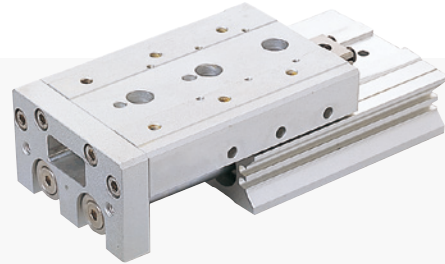


## SLIDE CYLINDER

### » COMPACT SLIDE

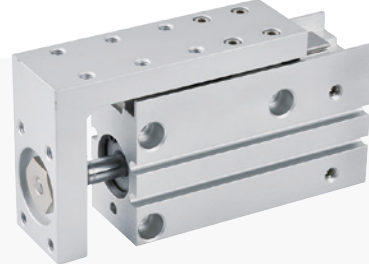
#### MCSS series

Double acting  
 $\phi$  6, 8, 12, 16, 20, 25 (mm)  
 Max. stroke: 150 (mm)



#### MCSH series

Double acting  
 $\phi$  6, 10, 16, 20 (mm)  
 Max. stroke: 60 (mm)



### » LOW PROFILE

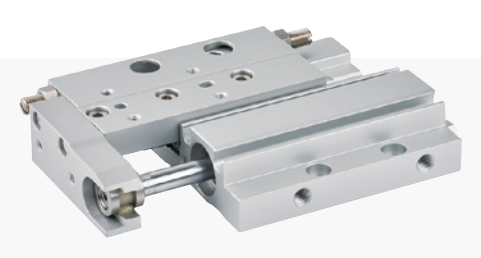
#### MCSQ series

Double acting  
 $\phi$  6, 8 (mm)  
 Max. stroke: 75 (mm)



#### MCSF series

Double acting  
 $\phi$  8, 12, 16, 20 (mm)  
 Max. stroke: 100 (mm)

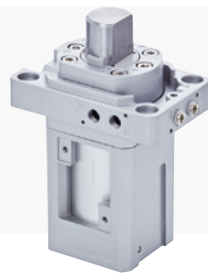


## STOPPER CYLINDER

### » DIRECT STOPPER CYLINDER

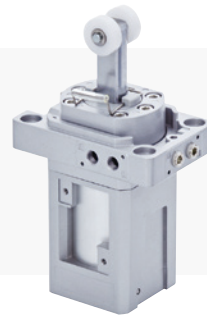
#### MSBS series

Double acting  
 $\phi$  20-10,  $\phi$  32-20,  $\phi$  50-30 (mm)  
 Suitable for heavy work



#### MSBR series

Single and double acting  
 $\phi$  20-20,  $\phi$  32-20,  $\phi$  40-30,  
 $\phi$  50-30 (mm)



#### MSAR series

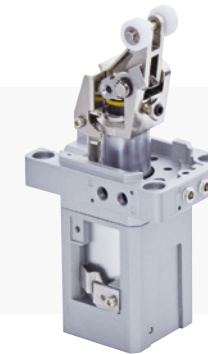
Single acting  
 $\phi$  32-30,  $\phi$  50-30,  $\phi$  80-30 (mm)



### » SHOCKLESS STOPPER CYLINDER

#### MSBD series

$\phi$  32-20,  $\phi$  50-30,  $\phi$  63-30,  $\phi$  80-40 (mm)  
 Built-in shock absorber



### » HORIZONTAL STOPPER CYLINDER

#### MSLD series

Shockless type  $\phi$  50-50 (mm)

#### MSLL series

Roller type  $\phi$  25-30,  $\phi$  40-30 (mm)

#### MSLP series

Push/pull type  $\phi$  32-40 (mm)

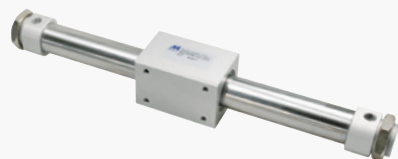


## RODLESS CYLINDER

### » MAGNETICALLY COUPLED

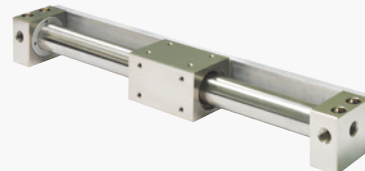
#### MCRPM series

Double acting  
 $\phi$  10, 15, 20, 25, 32, 40 (mm)  
 Max. stroke: 2000 (mm)



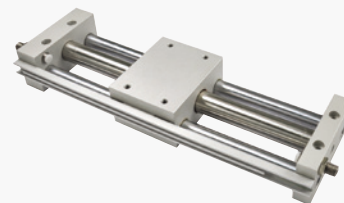
#### MCRPMD series

Double acting  
 $\phi$  10, 15, 20, 25, 32 (mm)  
 Max. stroke: 2000 (mm)



#### MCRPMS series

Double acting  
 $\phi$  10, 15, 20, 25, 32 (mm)  
 Max. stroke: 1500 (mm)



### » MECHANICALLY JOINTED

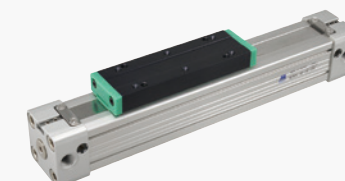
#### MCRPL series

Double acting  
 $\phi$  16, 25, 32, 40 (mm)  
 Stroke range  
 $\phi$  16: 100~3300 (mm) /  
 $\phi$  25~63: 100~5600 (mm)



#### MCRPLF series

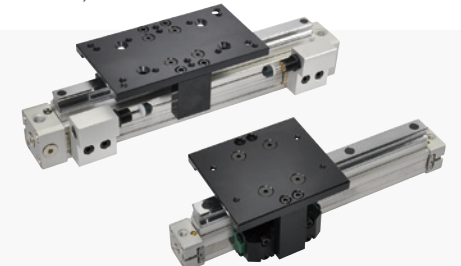
Double acting  
 $\phi$  16, 25, 32, 40, 50, 63 (mm)  
 Stroke range  
 $\phi$  16: 100~3300 (mm) /  
 $\phi$  25~63: 100~5600 (mm)



### » WITH LINEAR GUIDE

#### MCRPLK series

Double acting  
 $\phi$  16, 25, 32, 40 (mm)  
 Stroke range:  $\phi$  16: 100~3300 (mm) /  
 $\phi$  25~40: 100~3600 (mm)  
 Load strength is higher than MCRPLF series  
 (about 4 times)



# GRIPPER ROTARY ACTUATOR CLAMP CYLINDER

## GRIPPER

In the trend of factory automation, application of advanced robot is one of the critical technologies. Therefore, Mindman launched various kinds of lightweight grippers which are able to be applied in different usage.



MCHB series



MCHA series

## » PARALLEL 2-FINGER

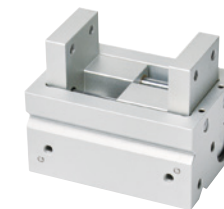
### MCHB series

Double acting  
ø12, 16, 20, 25, 32 (mm)  
Max. holding force (※1): 100 (N)



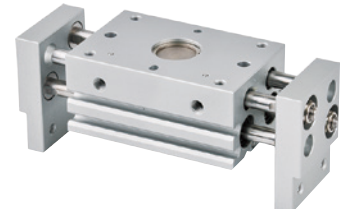
### MCHU series

Double acting  
ø12, 16, 20 (mm)  
Max. holding force: 60 (N)



### MCHX series

Double acting  
ø10, 16, 20, 25, 32 (mm)  
Max. holding force: 250 (N)



### MCHH series

Double acting  
ø20, 25, 40 (mm)  
Max. holding force: 460 (N)



### MCHS series

Double acting  
Size: 50, 66, 80, 100, 125, 200, 300 (mm)  
Max. holding force: 6000 (N)



※1. The largest bore size in the series, gripping point length L=30(mm), setting pressure=0.5 MPa



## » ANGULAR 2-FINGER

### MCHA series

Double acting /  
Single acting (N.O.)  
ø12, 16, 20, 25, 32 (mm)  
Max. holding force: 110 (N)  
Clamp/Release angle:  
-10~+30°



### MCHW series

Double acting  
ø20, 25, 32, 40, 50 (mm)  
Operating angle:  
Opened side: 180°,  
Closed side: -4°~ -6°



## » PARALLEL 3-FINGER

### MCHJ series

Double acting  
Size: 50, 66, 80, 100,  
125, 160, 200, 300 (mm)  
Max. holding force:  
15300 (N)



### MCHK series

Double acting  
Opening/Closing stroke:  
20, 32, 50 (mm)  
Max. holding force:  
2500 (N)



## » PARALLEL 4-FINGER

### MCHGF series

Double acting  
ø50, 64, 80, 100, 125 (mm)  
Max. holding force:  
2700 (N)



1

180° Angular 2-Finger

### MCHY series

Double acting  
ø10, 16, 20, 25 (mm)  
Max. holding force: 90 (N)

2

Parallel 3-Finger

### MCHG2 series

Double acting  
ø16, 20, 25, 32, 40, 50, 63,  
80, 100, 125 (mm)  
Max. holding force: 1320 (N)

3

Parallel 2-Finger

### MCHC series

Single and double acting  
ø10, 16, 20, 25 (mm)  
Max. holding force: 100 (N)  
Repetitive clamping precision:  
below ±0.01mm

4

Parallel 2-Finger

### MCHD series

Double acting  
ø8, 12, 16, 20 (mm)  
Max. holding force: 140 (N)  
Low profile with double  
piston structure

## ROTARY ACTUATOR

## » LOW PROFILE

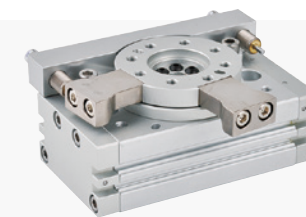
### MCRQ series

Double acting  
ø12, 16, 20, 25, 32, 40 (mm)  
Operating range of table is  
0°~190° by angle adjusting screw



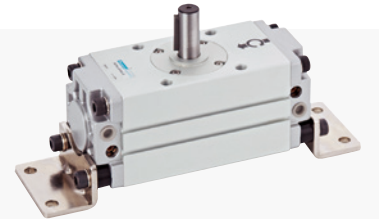
### MCRQ-S series

Double acting  
ø16, 20, 25 (mm)  
4 to 10 times more allowable  
kinetic energy (compared with  
internal shock absorber type)



### MCRA series

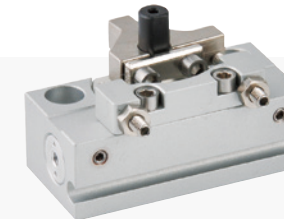
Double acting  
ø63 (mm)  
Rotary angle: 90°, 180°



## » MINI TYPE

### MCRJ series

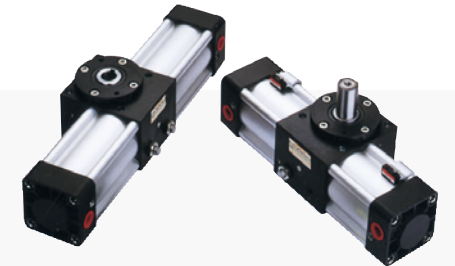
ø 6, 8 (mm)  
Rotary angle: 90°, 180°



## » HIGH TORSIONAL FORCE

### MRTH/MRTF series

ø 40, 63, 80 (mm)  
Rotary angle: 90°, 180°



## CLAMP CYLINDER

## » POWER CLAMP CYLINDER

### MCKD series

ø50, 63 (mm)  
Oval cylinder body to reduce  
the profile thickness



## » SWING CLAMP CYLINDER

### MCKC series

ø12, 16, 20, 25, 32, 40 (mm)



## » LEVER TYPE CLAMP CYLINDER

### MCKB series

ø32 (mm)



## ELECTRIC ACTUATOR

Besides from pneumatic components, Mindman launched all kinds of electric actuators include linear actuator, grippers...etc, which supports all of your demand of automation.ors, slide

### » SLIDER ELECTRIC CYLINDER-BELT DRIVEN

#### MEAT series

With motor  
Size: 25  
Max. stroke 750 (mm)

#### METB series

Without motor  
Size: 42: 42x42, 55: 55x55,  
80: 80x80 (mm)  
Max. stroke 6000 (mm)

#### METG series

Without motor  
Size: 4, 5  
Max. stroke 500 (mm)  
Repetitive precision: below  $\pm 0.01$ mm



### » SLIDER ELECTRIC CYLINDER-

### BALL SCREW DRIVEN-SMALL

#### METGC series

With motor  
Size: 4, 5  
Max. stroke 500 (mm)  
Repetitive precision: below  $\pm 0.01$ mm



### » SLIDER ELECTRIC CYLINDER - BALL SCREW DRIVEN – STANDARD & BIG

#### METS series Without motor

Standard size: 10, 12, 13  
Max. stroke 1050 (mm)  
Big size: 17, 22 ; Max. stroke 1500 (mm)  
Repetitive precision: below  $\pm 0.01$ mm

#### METS2 series Without motor

Standard size: 14 ; Max. stroke 1000 (mm)  
Repetitive precision: below  $\pm 0.01$ mm

#### METSC series

With motor  
Size: 10, 12, 13  
Max. stroke 1050 (mm)  
Repetitive precision: below  $\pm 0.01$ mm



### » ELECTRIC GRIPPER

#### MEHC series

Ball screw driven  
With motor  
Size: 20, 25  
Open and close stroke: 10, 14 (mm)

### » MINIATURE ELECTRIC CYLINDER

#### MESH series

Ball screw driven  
With motor  
Size: 20  
Stroke: 30, 50 (mm)

#### MESS series

Ball screw driven  
With motor  
Size: 20  
Stroke: 30, 50 (mm)



### » ELECTRIC ROD CYLINDER

#### MEQYC series

Ball screw driven  
With motor  
Size: 50  
Max. stroke 300 (mm)  
Size: 65  
Max. stroke 500 (mm)

#### MEQYC-D series

Ball screw driven  
With motor  
Size: 50  
Max. stroke 300 (mm)  
Size: 65  
Max. stroke 500 (mm)

#### MEQYC-L series

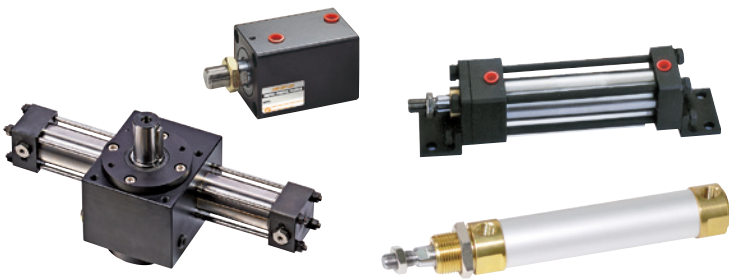
Ball screw driven  
With motor  
Size: 50  
Max. stroke 300 (mm)  
Size: 65  
Max. stroke 500 (mm)





# HYDRAULIC CYLINDER

Besides pneumatic cylinder, we also provides various hydraulic cylinders.



## >> VACUUM GENERATOR

**Simple vacuum generator**  
Types: Valve direct mounting type, Pipe type, Vacuum pad direct mounting, Box type

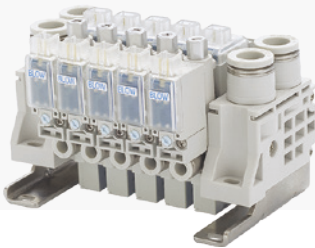
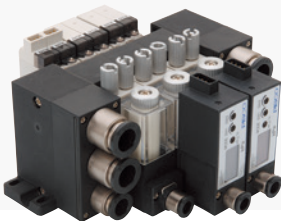
**Complex vacuum generator**  
Vacuum characteristics: High-vacuum type, Large-flow type, High-vacuum at low air pressure type

**External vacuum controller**  
High vacuum response speed, Quick vacuum release, Large blow-off flow, Large vacuum suction flow

Simple vacuum generator

Complex vacuum generator

External vacuum controller



## >> FITTINGS

Tube dia.:  
4, 6, 8, 10, 12, 16 (mm)  
5/32, 3/16, 1/4, 5/16, 3/8, 1/2, 5/8 (inch)

Thread size:  
M5×0.8, M6×1, R1/8, R1/4, R3/8, R1/2  
10-32UNF, NPT1/8, NPT1/4, NPT3/8, NPT1/2, NPT1/16

Straight type  
PC series

Elbow type  
PL series

Union Y type  
PY series

Branch Tee type  
PB series



# AUXILIARY COMPONENT

## >> SHOCK ABSORBERS

MDSC/MDFC series  
MAC/MAD series



## >> PU TUBE

UM series  
UML series (Coiling type)  
O.D.: 4, 6, 8, 10, 12 (mm)  
Available color: Transparent, Black, Blue, Transparent blue, Orange, Green, Yellow, Red



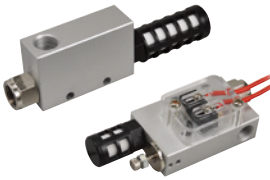
## >> SENSOR SWITCH

Wiring method: 2 wire, 3 wire  
Switch type: Reed switch, NPN current sinking, PNP current sourcing



## >> VACUUM GENERATOR

MVVA series  
Port size: 1/8, 1/4, 3/8  
Final vacuum: -91.8 kPa (-690mmHg)



## >> NO CONTACT TRANSFER

MHPSC series  
Size: 20, 30, 40, 60  
Port size: M3, M5  
Lifting force: 0.9~6 (N) (Pressure of 0.5 MPa)



## >> VACUUM PAD

**Standard series**  
Cup diameter: ø0.7, 1, 1.5, 2, 3, 4, 6, 8, 10, 15, 20, 25, 30, 40, 50, 60, 80, 100, 150, 200 (mm)

**Oval series**  
Pad size (X × Y): 2×4, 3.5×7, 4×10, 4×20, 4 ×30, 5×10, 5×20, 5×30, 6×10, 6×20, 6×30, 8×20, 8×30 (mm)

**Multi-bellows series**  
Pad diameter: ø10, 20, 30, 40, 50 (mm)

**Mark-free series**  
Pad size: ø10, 20, 30 (mm)

Standard series

Oval series

Multi-bellows series

Mark-free series



## >> SPEED CONTROLLER

Tube dia.:  
3, 4, 6, 8, 10, 12 (mm)  
1/8, 1/4, 5/16, 3/8 (inch)

Thread size:  
M3×0.5, M5×0.8, R1/8, R1/4, R3/8, R1/2

2-stage type  
BJSU series

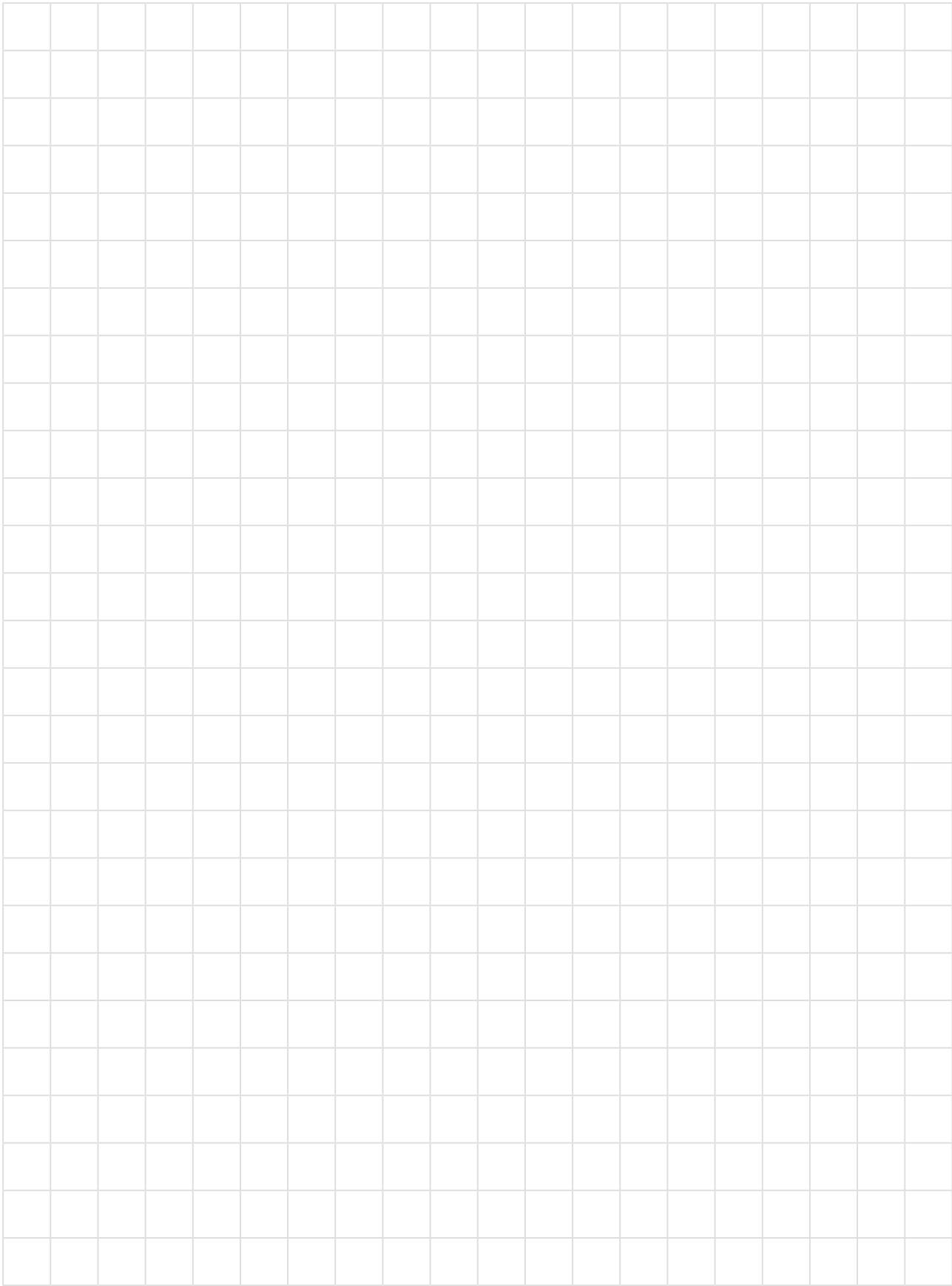
Elbow type  
JSC series

Free type  
JSS series

Small Union Straight type  
JSMU series



# MEMO



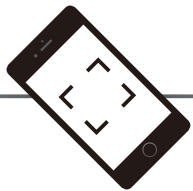
# CONNECTION



Web



2D/3D  
download



Video



Solenoid  
Valve



Air Treatment  
Unit



Gripper





**MINDMAN INDUSTRIAL CO., LTD. | OVERSEAS DEPARTMENT**

No.106, Sec. 3, Chengde Rd., Datong District, Taipei City 103, Taiwan

✉ [mindman@mindman.com.tw](mailto:mindman@mindman.com.tw) 🌐 [www.mindman.com.tw](http://www.mindman.com.tw)

☎ 886-2-25914100 📠 886-2-25957633 886-2-25975522

\* The specifications are subject to change without advance notice.

**CAT. NO: MD-P1810-E**