









#### Ningbo Jiaerling Pneumatic Machinery Co.,Ltd.

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Official Website

Official Wechat

Pneumatic



To offer customized pneumatic control technology solutions for global customers



#### 2008

Supplier of solenoid valve of drainage system for the usage of Beijing Olympic Games Bird's Nest and Water Cube.

# Before

For years our company has helped the construction of China's rail transit and has been technical support for high-speed rail and electrical engineering and the supporting unit of high-end products.

### 2010

Supporting designated supplier of Shanghai World Expo environmental protection recycling system.

# Now

Present, we concentrate on: "Made In China 2025" development and manufacturing of basic fluid driven components to offer pneumatic control technology solutions for more than 200 global customers.



# We can develop customized system to satisfy your personalized requirements.

Jiaerling has a wide range of core competence, so our experts will participate in the whole process from product development to application and then we can provide you with customized products and system.

With the trend of multi-varieties, small batch, personalization and fast cycle production of industrial products, we make an immediate response. We combine professional technology accumulated in over 20 years with quick reaction to successfully customize and develop accessory products for rail transit, automobile production, Textile industry, medical industry, injection molding rubber equipment, woodworking machinery, packaging machinery, intelligent robot industry and other fields.



#### **Introduction for JELPC**

Ningbo Jiaerling Pneumatic Machinery Co.,Ltd is a professional pneumatic components manufacturer. We take the lead in passing ISO9001 quality and CE certificate. JELPC is the member of China Hydraulic and Pneumatic Seal Industrial Association. The company was founded in 1995, with the workshop area of 50000 square meters. We have 400 employees, among whom more than 1/3 are professional technical personnel. JELPC keeps introducing technical and management specialist from Germany, Japan, Taiwan and other countries.

We are able to design and manufacture pneumatic control components(valves), executive components (cylinders), air treatment units and pneumatic tube. We have the latest CNC machine, automatic assembly

production line, online detection equipment, 3D projection measuring instrument, high-precision flow test board and other advanced production and inspection equipment. We are awarded the honorable title of National high-tech enterprise of China. We have more than 30 national invention patents. JELPC supplied valves of water supply and drainage system for the Bird's Nest stadium and the Water Cube aquatics center in 2008 Beijing Olympic Games and environmental recycling system for 2010 Shanghai World Exposition.

Quality Product and Superior Service are our eternal pursuits.

#### **Our ethic**

#### Mission declaration:

We strongly believe that Jelpc is to create the wealth for society, value for customers to improve automation for industry. We take "Trust, Rigorousness, Innovation, Responsibility" as our principle value, with our passion and wisdom to create difference, pursue perfect, increase core competitiveness to reach outstanding achievement, contribute to society. To establish internationally well-known pneumatic component manufacture base and dedicate to promote the prosperity for China's pneumatic industry.

#### **Company Mission:**

To improve automation for industries with pneumatic technology

#### **Company Value:**

Trust Rigorousness Innovation Responsibility

#### Slogan:

Good pneumatics-Jiaerling

#### **Company Vision:**

To be internationally well-known pneumatic component manufacture basement

#### **Quality Policy:**

Quality is the permanent pursuit of Jelpc

#### **Working Attitude:**

Stick to promise/Serious attitude with speed/ Promise to success/ No excuse





JELPC persists in cooperating with our customers by the concept of both win-win benefits and insists on creating value for customers with high-quality products and professional services! JELPC constantly practices lean management and total quality management, and allocates capital to maintain a strong commitment to R&D, quality and service.

Focusing on the market and catching the tempo of modern era, we firmly believe that JELPC will eventually become a modern enterprise with leading technology and to be respected in the Pneumatic industry. The spirit of the craftsman - highest standard in mind and implementing rigidly in every JELPC employee will make the excellence of China pneumatics and surely be carried forward!

General Manager:

- -Mechanical Engineer
- -Senior economist
- -Executive Director of China Hydraulics
- Pneumatics & Seals Association
- -Representative of Ningbo Municipal People's Congress
- -Member of Standing Committee of Fenghua CPPCC





# Technological development, scientific management

Our company possesses a group of technicians who are brilliant in technique and dedicated to work and are engaged in the research and development of various kinds of new products. The company has many advanced equipments with which we can comprehend our new products very well.









Testing Equipment





Technical research and development discussion

Duration testing

With quick connector direct type solenoid High & low
Pressure switchable
direct type
solenoid valve

otary valve

Quick exhaust With valve close

With storage tank P closed rotary valve V

Pressure switching valve

Hard ceramic seal for solenoid valve



- Participate in the formulation of national industry standards
  - ·Mounting dimensions of the cylinder with single rod (inner diameter 8-25mm).
  - ·Mounting surface of 3/2 way solenoid valve.
  - ·Basic size, installation size, and kits size for cylinder with Removable bore in diameter from 32-320mm. ......
- 4 Invention Patent
  - · Pressure limiting valve & open and close method
  - · An earthquake gas cut off valve
  - · A measuring device of a slide valve pneumatic directional valve transition function

#### 35 Utility Model Patent

- · With quick connector direct type solenoid valve
- · Ceramic seal solenoid valve
- · With storage tank closed rotary valve
- · Manipulator clamp cylinder
- · Handle regulator
- · A double stroke cylinder
- · Pneumatic safely device

#### **9** Appearance Patents

- · Solenoid valve(5V)
- · Solenoid valve(JSY)
- · Packing box(4V210 Solenoid valve)
- · Cylinder(SI32~40)
- · Cylinder(SI32~60)
- · Cylinder(SI80~100)
- · Cylinder(JDNC/SQ)
- Суппа



# Excellent equipment Casting high-quality products

JELPC brings in the world's advanced machining equipment from home and abroad, and adopts the new concept of intelligent manufacturing "digital factory". The establishment of the system will provide a systematic solution for the current production and commercial operation. JELPC has established an overall management system that adapts the flesibility of market economy. So, the market demand is the enterprise orientation. Also, JELPC keeps pace with the development of advanced technologies and constant innovation to let the company continues to grow steadily.









Axle-type automatic lathe.



Automatic assembly line of pilot head for solenoid valves.



■ Turning and milling machine





Focus on quality with meticulosity

The details determine success or failure quality

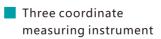
JELPC has a group of highly qualified professional and technical staff who are meticulous to control the process of the products.







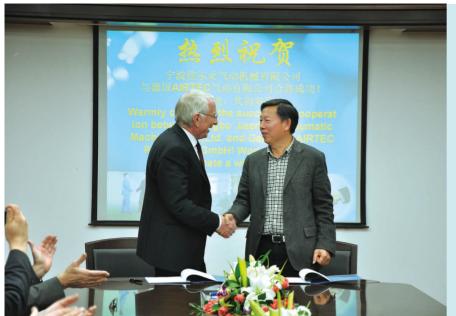






3D projector

PU tube production workshop



6th Dec 2014, JELPC with German famous pneumatic company AIRTEC company formally signed a long-term strategic cooperation agreement, It marked JELPC the internationalization development way up to a new step.







30th Nov., 2015, JELPC dispatch four technical backbone to AIRTEC Germany for technical communication and learning.



Pneumatic Industry is a resounding brand. JELPC has always been based on the concept of "Creating Value for Customers" to delevlop customer relationship and has been recognized

by customers and various industries

by trust.











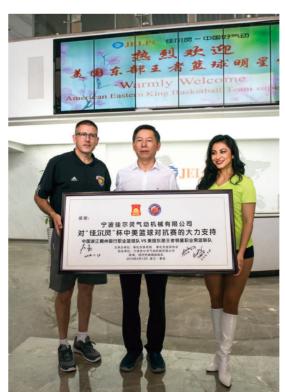
Company holds annual employee recognition meeting and annual celebration meeting



5 million(RMB) donation contributed to charity fund



JELPC celebrated the successful convening of the Beijing Olympic Games on 8th.Aug.2008



■ JELPC cup of China-USA basketball match







Rest area for employee

#### **Customization industry solutions**





#### Door pump system

The customized Pneumatic cylinders and solenoid valves applied to open/close door pump system on high-speed rail trains can sustain to low temperature of minus 40 degrees and to completely replace original imported products.



#### Gas source drying system

Customized locomotive air source system adsorption dryer control valve.



#### ◀ Wiper system

The locomotive wiper system consists of a special swinging cylinder and a control valve to realize the swinging work and speed regulation of the wiper.



#### ◀ Air filtration system

The door system has compressed air filtration, self-contained ball valve, special water cup explosion-proof, high and low temperature resistance.

#### **Automobile**





#### Gearbox system

A customized Pneumatic shifting mechanism for gearbox automatic shifting systems. The mechanism adopts an integrated design of the coil cylinder and is compacted in structure to directly be mounted on the gearbox. The mechanism to have analog output of cylinder position allows the car ECU to accurately track the shift position.



#### ◀ Intelligent brake system

A specific product developed in collaboration with customers for automatic emergency braking system (AEBS) on commercial bus can output different air pressures to control brake cylinders or airbags according to the input signal of the auxiliary brake system, thus, to achieve different braking force for slowing down car speed under different conditions. This product has applied for an innovation patent.





#### Door pump system

Customized commercial vehicle door pump system series pneumatic components, including cylinders, valves, filters, etc. All pneumatic components are normally used in extremes of minus 40 degrees and have good low temperature sealing performance. It also has a one-button start, emergency valve shielding and other derivative functions.



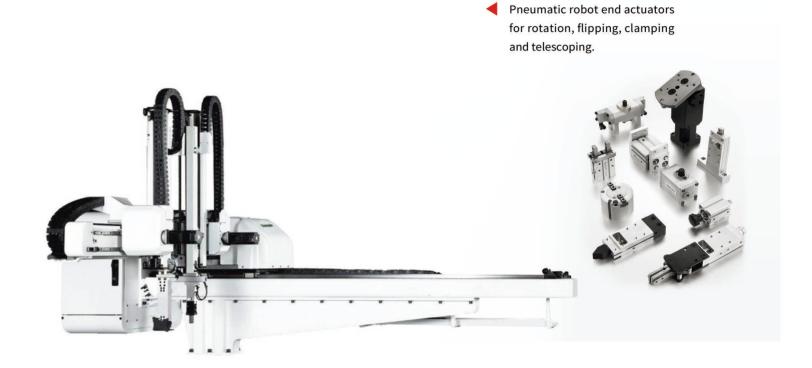
# **Medical industry**

Major gas circuit switching parts of Oxygen machine, suitable for various oxygen generators with 18L/min oxygen production which can achieve PSA and VPSA oxygen production methods.





# **Robot industry**



### **Textile industry**

Specified plastic cylinders and corresponding solenoid valve sets are widely used in spinning machines with high reliability and fast response. Other double-force machine, air-jet looms and Pneumatic components are available.





# Special cylinder for clamping mechanism



A series of customized cylinders, mainly used for pneumatic clamping or gripping fixtures. It is widely used in automation industry, especially in automotive assembly lines.





# **INDEX**

#### **CONTROL COMPONENT**

- J4V Series Solenoid Valve (1-P01)
- J4V100 Series Solenoid Valve, Air Pilot Valve (1-P03)
- J4V200 Series Solenoid Valve, Air Pilot Valve (1-P09)
- J4V300 Series Solenoid Valve, Air Pilot Valve (1-P16)
- J4V400 Series Solenoid Valve, Air Pilot Valve (1-P23)
- 5V Series Solenoid Valve, Air Pilot Valve (1-P27)
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- JSY Series Solenoid Valve, Air piloted Valve (1-P29)
- 5JV Series Solenoid Valve (1-P32)
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- JVT307 High Frequency Valve (1-P38)
- JEL Series Solenoid Valve (1-P40)
- MVSD Series Solenoid Valve (1-P43)
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- VX Series 2/2 Way Solenoid Valve (Direct Operated) (1-P73)
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- AF, BF Series Filter (3-P04)
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- PTH Series Air Filter Combination (3-P27)
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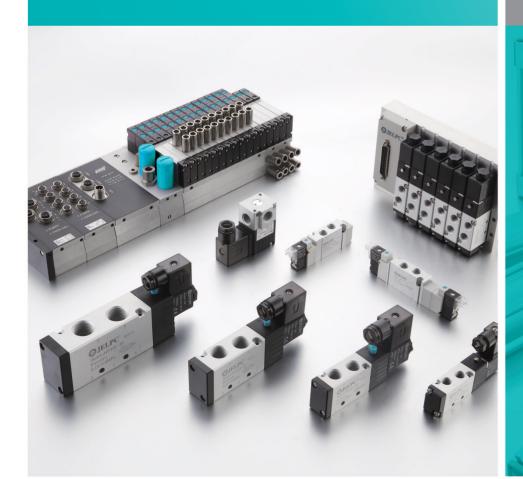
# **PNEUMATIC ACCESSORY**

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# **EFFIC**®

# **CONTROL COMPONENT**



# **CONTENTS OF CONTROL COMPONENT**



J4V Series Solenoid Valve



VF Series Solenoid Valve



J4V100 Series Solenoid Valve, Air Pilot Valve



BM Series Solenoid Valve



J4V200 Series Solenoid Valve, Air Pilot Valve



NAMUR Series Valve



J4V300 Series Solenoid Valve, Air Pilot Valve



551 Series Solenoid Valve



J4V400 Series Solenoid Valve, Air Pilot Valve



JEL10 Series Mini Solenoid



5V Series Solenoid Valve, Air Pilot Valve



3VJZF Series 3/2 Way Stop Solenoid Valve



100-400 Series Manifold



JEL Series Diaphragm Solenoid Valve



JSY Series Solenoid Valve, Air piloted Valve



JELVD Series Rotary Valve



5JV Series Solenoid Valve



3V1 Series Solenoid Valve







Coil, Seal Ring



JVT307 High Frequency



2P Series 2/2 Way Solenoid Valve (Direct Operated)



JEL Series Solenoid Valve



2V Series 2/2 Way Solenoid



1-43 MVSD Series Solenoid Valve



2W Series 2/2 Way Solenoid Valve (Direct Operated)



# **CONTENTS OF CONTROL COMPONENT**





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2L Series 2/2 Way Solenoid



Hand Pull Valve



VX Series 2/2 Way Solenoid Valve (Direct Operated)



Hand Push Valve



PU Series 2/2 Way Solenoid Valve (Direct Operated)



Hand Switching Valve



**PU Series Solenoid Valve** (For Steam)



Hand Draw Valve





PU225 Series Solenoid Valve



Foot Valve





2Q Series 2/2 Way Valve



Mechanical Valve





JEL5404 Series High Pressure and Temperature Solenoid Valve



ASC, RE Series Flow Control





JEL6213 Series Solenoid Valve



QE, QEA Series Quick **Exhaust Valve** 





BU Series 2/2 Way Solenoid



ST Series Shuttle Valve





Vertical type/Pipe connecting type Solenoid Pulse Valve



Hand Sliding Valve





2/2 Viton Type Multimedia **Angle Valve** 







# **Instructions of Control Component**

#### Notices of design usage



#### Warning

- 1. The characteristics of compressed air and the use of this product must be fully understood when the circuit is designed. Please use the specifications according to the specified in the catalogue. Beyond the norms of the pressure, temperature, working medium and other conditions of use, will cause poor operation and affect the safety of the operation.
- 2. Working medium is compressed air, with expansion, the unstable pressure may cause fly out, spray, or leak which need attention.
- 3. Need to take into account if emergency or instant switching power supply when design and selectio, which will cause dislocation or movement of the drive object and influence safety. And need to take into account suited control machine when use it.
- 4. Excessive water in the pipeline will cause the solenoid valve to run bad, please install water removal device.
- 5. When air compressor operation it will cause carbon dust and impurities, excessive adhesion in the solenoid valve will lead to poor operation, therefore the front-end should install filters to avoid internal stuck inside the valve body.
- 6. Surrounding environmental requirements:
- (1) Avoid use in chemicals, flammable, corrosive and sea water, high temperature and other environment
- (2) Avoid use in the heat and heat radiation environment
- (3) The use of the surrounding environment temperature, should according to the scope of the specification parameter list
- (4) Avoid outdoor hot sun, rain, dust and other environment which will cause instability quality
- (5) Should avoid use in the oily, flammable and explosive occasions



#### Caution

- 1. When the middle position in the three position stop and used for pressure maintenance, need to pay attention to the pipeline gas source leakage and supply of air supply has changed, influence of pressure drop caused by position change.
- 2. The operation of the machine needs to worried that the leakage current affects the normal operation of the other controllers, so it is necessary to use the appropriate loop to ensure the device, avoid the wrong action of the solenoid valve.

#### Notices of operation



#### Warning

- 1. When the solenoid valve is electrified, the electromagnetic valve can not be switched by the manual button. After using the manual button it should return to normal position.
- 2. Solenoid valve coil can not be connected to the wrong voltage, to avoid damage to the solenoid valve coil
- 3. The use of the instantaneous power of the double acting solenoid valve should more than 0.1 second.
- 4. Voltage supply need to install voltage stabilizing device, the range of voltage fluctuation should be controlled within 10% to avoid sudden wave generation.

#### Notices of installation



#### Warning

- 1. Installation way need pay attention: the double action type and three position type, please installed horizontally.
- 2. If there is occasions which vibration more than 50m/S2 in the installation position, please do not use. If in a slight vibration occasion, the solenoid valve spool and the vibration direction must be right angle of ninety degrees when installation, avoid loosening and shedding phenomenon.
- 3. Before mate air pipe, need to prevent foreign debris and dust entering the solenoid valve, cause breakdown and wrong actions.
- 4. Before mate air pipe and assembly fittings, need to prevent leakage and paint of raw material belt into the tube. When winding the raw material belt, need reserve 1~1.5 thread, do not winding the raw material belt.
- 5. If using liquid fixing glue (Anaerobic adhesive) to lock fitting, should avoid excess liquid glue inflow, cause parts get stuck and poor operation.
- 6. Should use the appropriate torque to avoid damage to the product during in mating air pipe (lock fitting).
- 7. Solenoid valve exhaust port need to install silencer device to avoid excessive exhaust noise. If do not install silencer device, should avoid inhalation of foreign body in exhaust port perimeter, and exhaust port should be installed downward (foreign body easy to inhale when installed upward).
- 8. When using the base, need to pay attention to the concentration of exhaust, not completely exhausted out can cause backpressure phenomenon, and influence the switching of the solenoid valve and the normal operation.
- 9. After installation, in order to avoid damage of the plastic material and lead to obstruction and poor movement, should avoid contact with water soluble solvents and coating equipment and so on.
- 10. When using base to fix solenoid valve should pre tight positioning and then clamping balanced on both sides to avoid leakage phenomenon.
- 11. The piping distance between solenoid valve and cylinder should avoid influence operation effect and response speed due to the long distance.

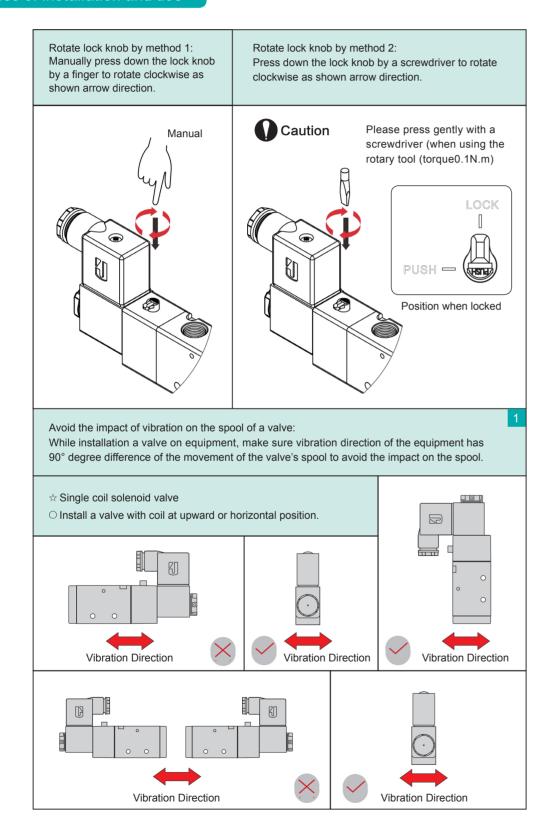


- 1. Please consider the heat dissipation problem when long time power usage
- 2. When use mid-position closed solenoid valve, should pay special attention to whether there is leakage between the solenoid valve and the cylinder, thus causing the error movement or position movement phenomenon.



# **Instructions of Control Component**

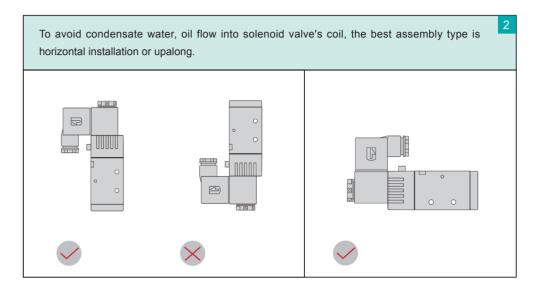
#### Rules of installation and use





# **Instructions of Control Component**

#### Rules of installation and use



#### Notices of maintenance and repairmen



#### Warning

- Before maintenance, please make sure the power and the air-pressure source are closed, confirm that there is no residual voltage, to start work after checking all the things are ok.
- Please make sure all the manual operation are back to the original position before start work
- Only the technicist who is familiar with the structure of the product can dissembly the valve. Must avoid the safety problem caused by the wrong way of dissembly and assembling.



#### Caution

- Please make sure the air source is dry without any moisture or impurity, and pay attention to the front filter and drainer whether they are normal operation.
- 2. The valve is smeared with lubrication oil when assemblying, so do not need to feed oil during normal operation. If you need to smear oil, please use the lubrication oil ISO-VG32, otherwise it may cause bad operation (need to smear oil when the work occasion is micro moisture in the air and fast working)
- 3. During in maintenance and repair, should be regularly scheduled to perform, and confirm do normal operation as follows:
- $\begin{tabular}{ll} \end{tabular} \begin{tabular}{ll} \end{tabular} \beg$
- (2) Whether the front filter and drainer are ok?
- (3) Whether the connect position or tubing are untight? Whether the connect position is ok?
- (4) Whether the condition of the valve is ok? Whether the operation is delay? Whether the condition of exhaust is ok? Whether there is some allophone?
- (5) Whether the pipeline system of the actuator is ok? Whether the start and stop operation of the terminal is ok? Whether the load system is ok?
- (6) Whether the oil feed system is ok? Whether the adjustment of the oil is appropriate?
- (7) Whether the exhaust system is smooth? Whether it is blocking? Whether the speed of the exhaust is ok?

# J4V Series

Solenoid Valve



Features

Valve

J4V300

J4V400

Manifold

5V

JSY

5JV

MCS

JEL

VF

BM

551

JEL10

3VJZF

Diaphragm

JELVD 3V1

Coil 2P

2V

2W

2W(Big) 2L VX PU

PU225 2Q

JEL5404

JEL6213 BU

Pulse

JEL.JZF

4H TSV MPV

4HV

HV, K 4R 4F210

FV

MSV JM

ASC, RE

QE, QEA

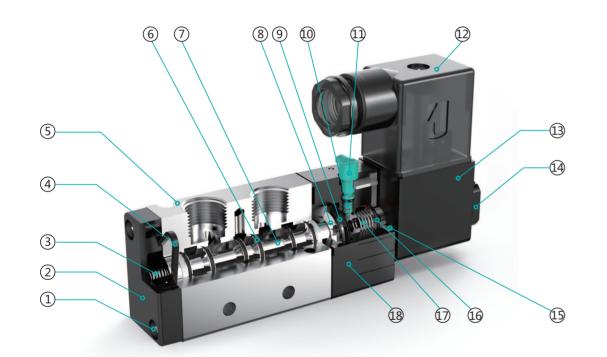
ST

JVT307

MVSD

- 1. The Anti-friction seal is added at both ends of the valve spool to make the valve spool more stable during the switching process and increase the valve life time.
- 2. Seals original imported from Japan; Optimize valve body inner flow path; Maximum increase the air flow area.
- 3. Valve Piloted Seat is from Taiwan, the surface design with 5 pcs stripe; Increased the strength of Mannual ride spindle; The appearance is more distinctive (Applied appearance patent).
- 4. The valve body surface treatment adopts a new environmental protection process.
- 5. Fully automated assembling & test line with good product consistency.

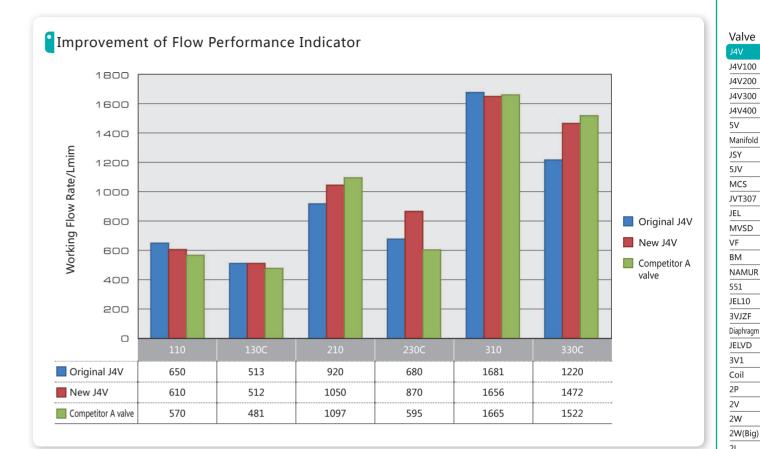
#### Internal Structure

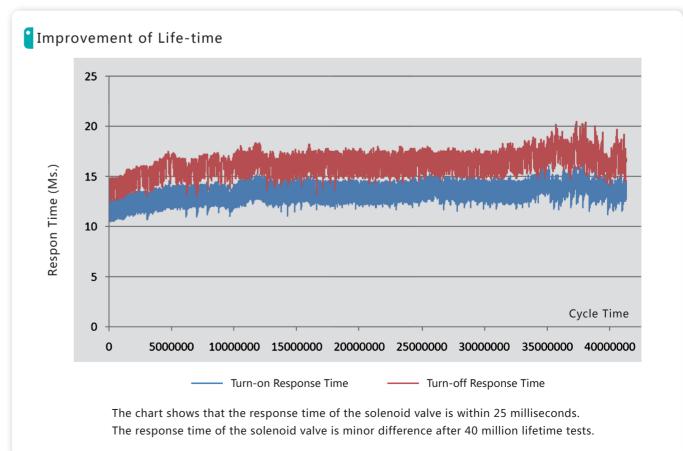


#### Parts

Number	Name	Number	Name	Number	Name
1	Cross slot pan screw	7	Valve spool	13	Coil
2	Back cover	8	Piston	14	Coil nut
3	Spring	9	Y ring	15	Fix plate
4	Anomalous seal	10	Spring	16	O ring
5	Valve body	11	Mannual ride spindle	17	Plunger
6	Flat ring	12	Terminal	18	Pilot seat

# J4V Series Solenoid Valve





1-|P01

PU225

JEL6213

Pulse

JEL.JZF

HV, K

4F210

MSV

ASC, RE

QE, QEA

2Q JEL5404

Valve

5V Manifold

JSY 5JV MCS

JVT307

MVSD VF

JEL

551 JEL10

3VJZF

Diaphragm

JELVD

3V1 Coil 2P

2V

2W

2L

VX PU PU225

2Q

BU Pulse

JEL5404

JEL6213

JEL.JZF

4H TSV

HV, K 4R 4F210

FV MSV

ASC, RE

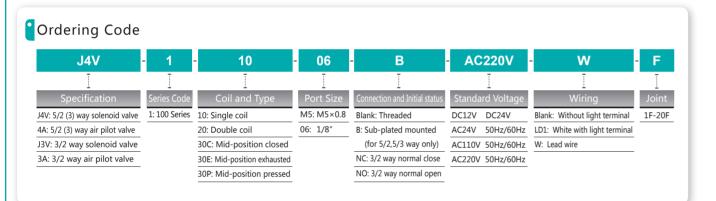
ST

2W(Big)

Solenoid Valve, Air Pilot Valve



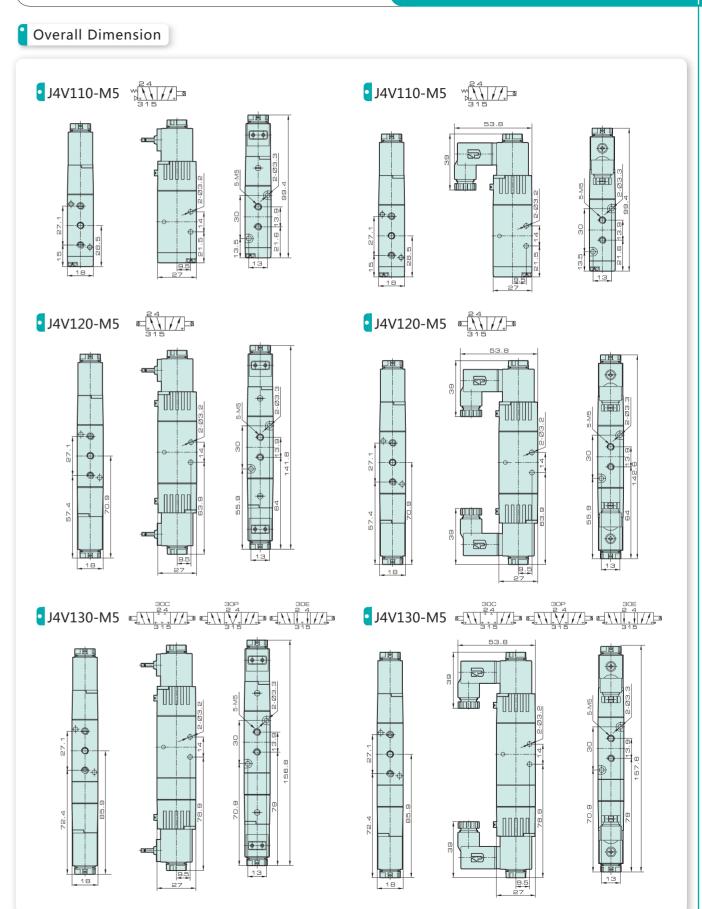




Madal	J4V110-M5 J4V120-M5	J4V130C-M5 J4V130E-	M5 J4V130P-M5	J4V110-06 J	4V120-06	J4V130C-06 J	4V130E-06	J4V130P-06		
Model	4A110-M5 4A120-M5	4A130C-M5 4A130E-	M5 4A130P-M5	4A110-06	4A120-06	4A130C-06	4A130E-06	4A130P-06		
Valve Type	5/2 way	5/3 wa	ıy	5/2 w	ay		5/3 way			
Effective Cross Section Area	10 mm <sup>2</sup> (CV = 0.56)	7 mm <sup>2</sup> (CV	= 0.40)	12 mm² (C\	/ = 0.67)	9 mi	m² (CV =	0.5)		
Model	J3V110-M5   J3V120-	M5 3A110-M5	3A120-M5	J3V110-06	J3V120	-06 3A11	10-06	3A120-06		
Valve Type	·	<u>.</u>	3/2	way	-					
Effective Cross Section Area	10 mr	$m^2$ (CV = 0.56)			12 m	$m^2$ ( $CV = 0$	.67)			
Port Size	Inlet, Outlet, Ex	xhaust Port = M5	× 0.8	Inle	et, Outlet,	Exhaust Po	rt = G 1/	8"		
Working Medium		40 Micron Filtered Air								
Operation			Internal	piloted	•	***************************************	•			
Working-pressure			0.15 ~ 0	.8 MPa		***************************************	***************************************			
Max. Test Pressure			1.2 1	ИPа		***************************************	***************************************			
Ambient Temperature			-20 ~	70°C		***************************************	***************************************			
Operating Voltage Tolerance		-	± 1	0%	-					
Power Consumption		AC: 2.5VA DC: 2.5W								
Connector Protection	F Class, IP 65									
Wiring / Connector		Cable / Lead Wire or DIN Connector								
Switching Frequency			5 Cycle	s / Sec.						
Response Time		_	0.05	Sec.	-					

# J4V100 Series

Solenoid Valve, Air Pilot Valve



1-|P03

JVT307
JEL
MVSD
VF
BM
NAMUR

MCS

Valve

J4V200 J4V300

Manifold

JEL10
3VJZF
Diaphragm
JELVD
3V1
Coil

2L VX PU PU225 2Q JEL5404 JEL6213

2W(Big)

Pulse
JEL.JZF
4H
TSV
MPV
4HV
HV, K

4F210 FV MSV JM ASC, RE

JM ASC, RE QE, QEA ST HSV

Solenoid Valve, Air Pilot Valve



J4V110-06 W 315

J4V120-06

J4V130-06 = J4 | J4V130-06 | J

# J4V100 Series

J4V200

J4V300

JVT307

NAMUR

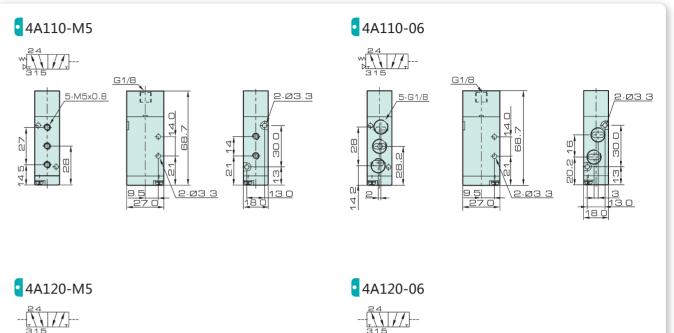
2W(Big)

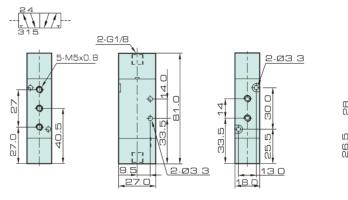
JEL6213

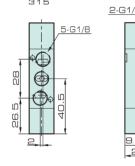
ASC, RE

Solenoid Valve, Air Pilot Valve

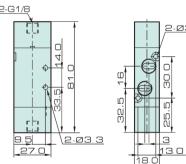
Overall Dimension



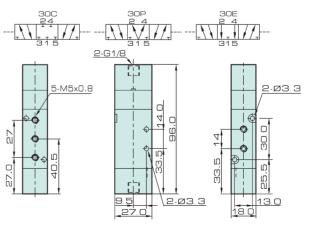


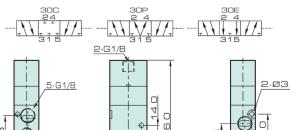


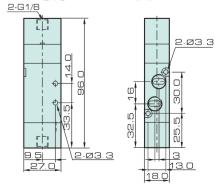
4A130-06











Overall Dimension

J4V110-06

J4V120-06

J4V130-06 = 1 30C 30P 30C 24 30F 24 315 315 315 315 315 315 315

Valve J4V200 Manifold JSY 5JV MCS JVT307 551 JEL10 3VJZF JELVD

2V 2L VX PU225 2Q JEL5404 JEL6213

BU Pulse JEL.JZF 4H TSV HV, K

4F210 MSV

QE, QEA

1-|P05

Solenoid Valve, Air Pilot Valve



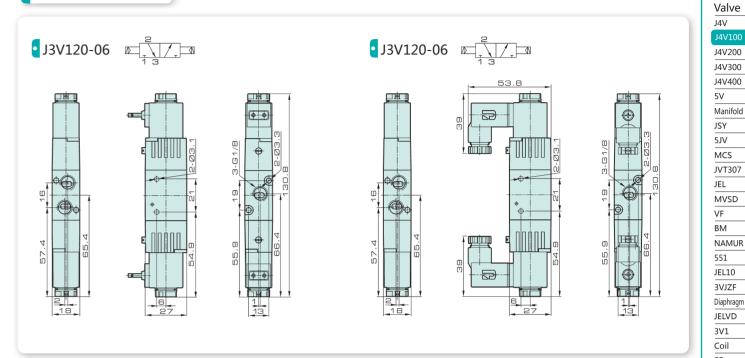
Valve J4V200 Manifold JSY 5JV MCS JEL10 3VJZF Diaphragm JELVD 2P 2V 2W 2L VX PU225 2Q JEL6213 TSV HV, K

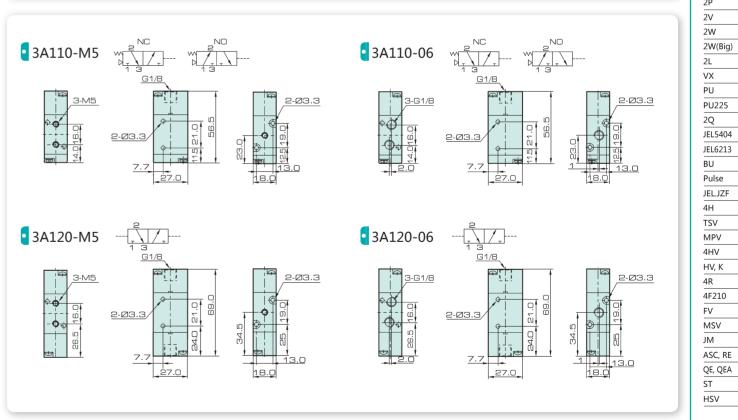
# Overall Dimension J3V120-M5 J3V120-M5 J3V110-06 W NC NC NO

# J4V100 Series

Solenoid Valve, Air Pilot Valve

#### Overall Dimension





1-|P07

4F210

MSV

ASC, RE

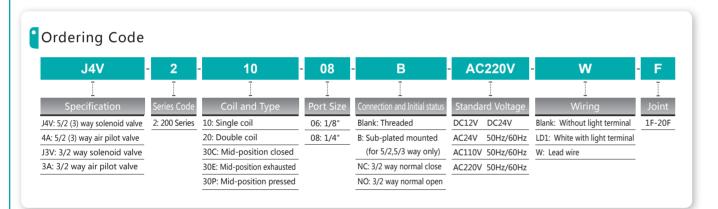
Solenoid Valve, Air Pilot Valve



J4V230C-08

4A210-08

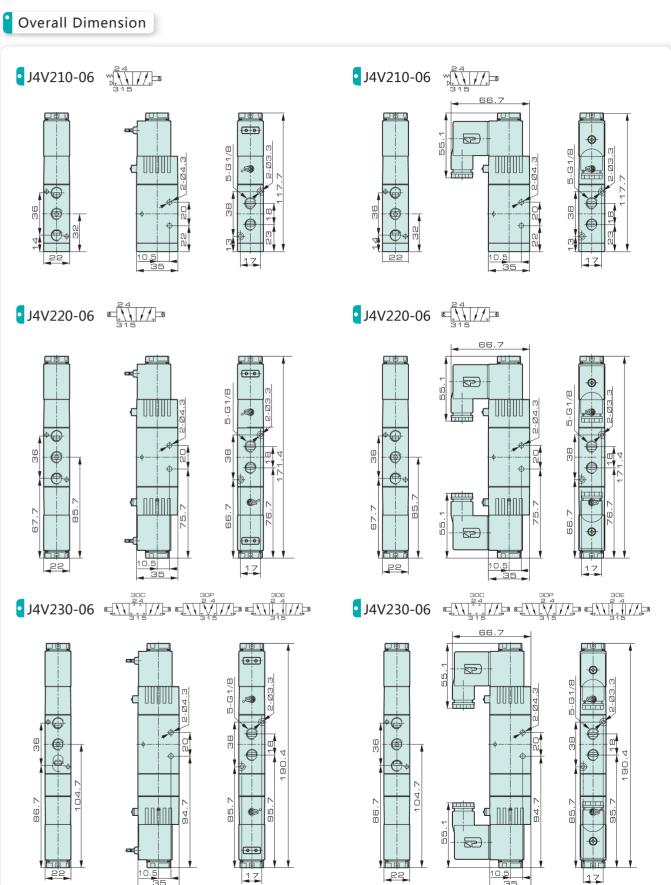
J3V210-08



#### Specification Valve Type 5/2 way 14 mm<sup>2</sup> (CV=0.78) 12 mm<sup>2</sup> (CV=0.67) 12 mm<sup>2</sup> (CV=0.67) **Effective Cross Section Area** 16 mm<sup>2</sup> (CV=0.89) Valve Type 3/2 way $14 \text{ mm}^2 (CV = 0.78)$ **Effective Cross Section Area** $16 \text{ mm}^2 (CV = 0.89)$ Inlet, Outlet, Exhaust Port = G 1/8" Inlet, Outlet = G 1/4", Exhaust Port = G 1/8" Working Medium 40 Micron Filtered Air Operation Internal piloted 0.15 ~ 0.8 MPa Working-pressure Max. Test Pressure 1.2 MPa -20 ~ 70°C **Ambient Temperature** Operating Voltage Tolerance ± 10% AC: 3.5VA DC: 3.0W **Power Consumption Connector Protection** F Class, IP 65 Cable / Lead Wire or DIN Connector Wiring / Connector Switching Frequency 5 Cycles / Sec. Response Time 0.05 Sec.

# J4V200 Series

Solenoid Valve, Air Pilot Valve



Valve J4V J4V100

> J4V300 J4V400 5V Manifold JSY 5JV MCS JVT307 JEL MVSD

> > NAMUR

3VJZF Diaphragm

JELVD

2W(Big)

PU225

JEL6213

JEL.JZF

HV, K

4F210

2Q JEL5404

VF
BM
NAMUR
551
JEL10
3VJZF
Diaphragm
JELVD
3V1
Coil
2P

Valve J4V

J4V100

J4V300

J4V400 5V

Manifold JSY

5JV MCS

JVT307

MVSD

JEL

2W
2W(Big)
2L
VX
PU
PU225
2Q
JEL5404
JEL6213
BU
Pulse
JELJZF
4H
TSV

4H TSV MPV 4HV HV, K 4R 4F210 FV MSV

ASC, RE

QE, QEA

ST

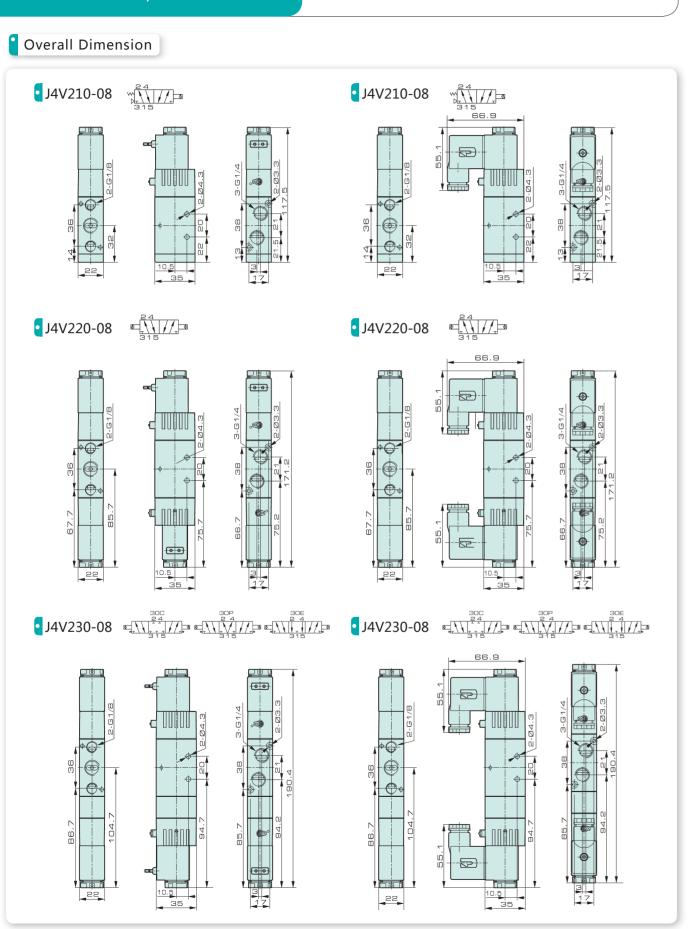
MSV
JM
ASC, RE
QE, QEA
ST
HSV

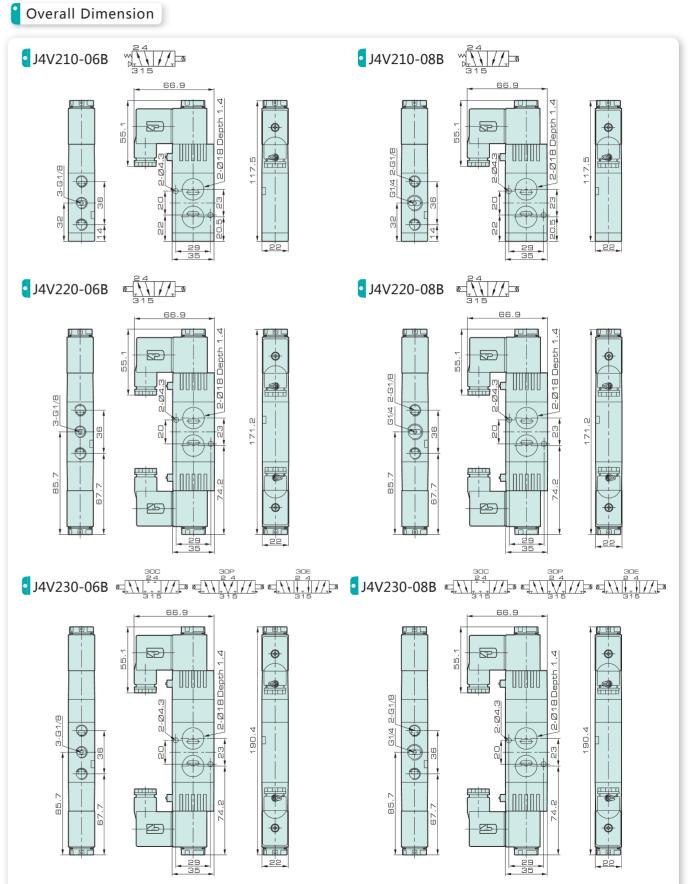
Solenoid Valve, Air Pilot Valve



# J4V200 Series

Solenoid Valve, Air Pilot Valve





J4V100 J4V200 J4V300

JVT307

Valve

Manifold JSY 5JV MCS JVT307

Valve

J4V100

551 JEL10 3VJZF JELVD 2P

2V

2W 2L VX PU PU225 2Q JEL5404 JEL6213 BU

> Pulse JEL.JZF

4H TSV

HV, K

4F210

MSV

ASC, RE QE, QEA

JEL6213

ASC, RE

Solenoid Valve, Air Pilot Valve



# J4V200 Series

Valve

J4V100 J4V200

J4V300

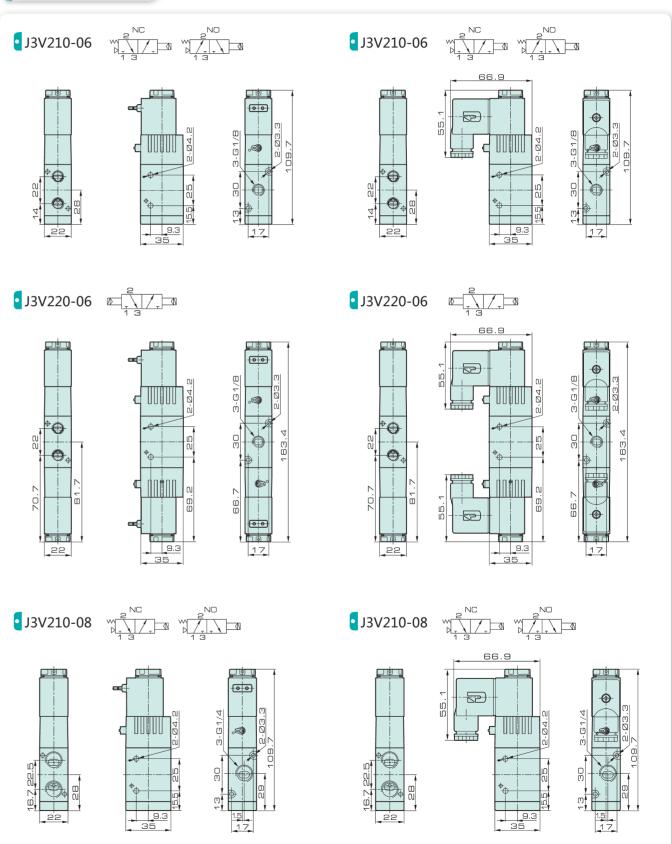
JVT307

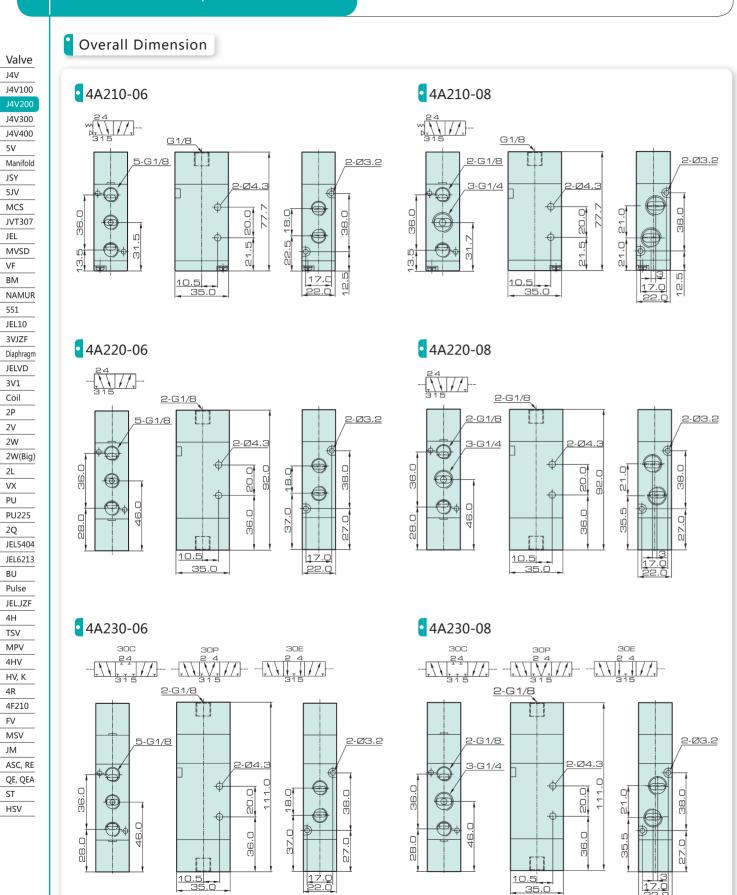
JEL6213

JM ASC, RE

Solenoid Valve, Air Pilot Valve







1-|P13

Valve

J4V100

J4V

5V Manifold

JSY 5JV MCS JVT307

JEL

551 JEL10

3VJZF

Diaphragm JELVD

3V1 Coil 2P

2V

2W

VX PU PU225

2Q

4H TSV

4HV

HV, K 4R 4F210

FV

MSV

ASC, RE QE, QEA ST

JEL5404

JEL6213 BU Pulse

2W(Big) 2L

MVSD VF

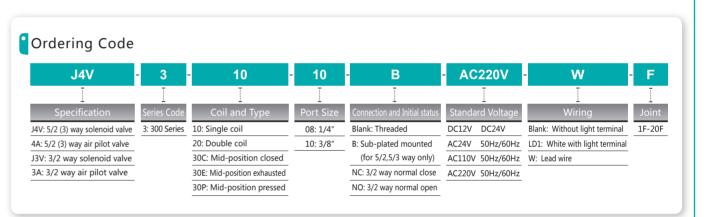
Solenoid Valve, Air Pilot Valve



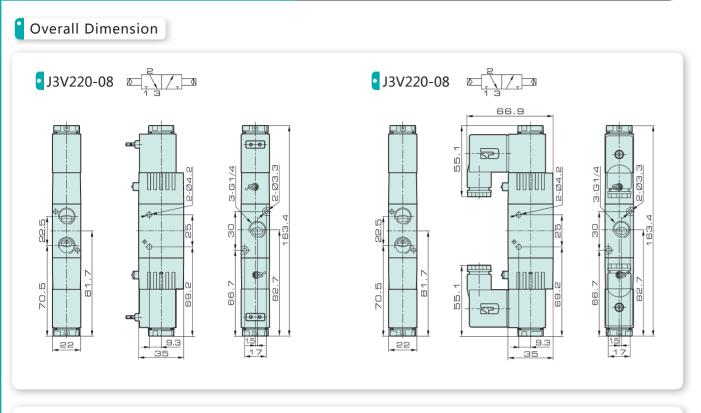
# J4V300 Series

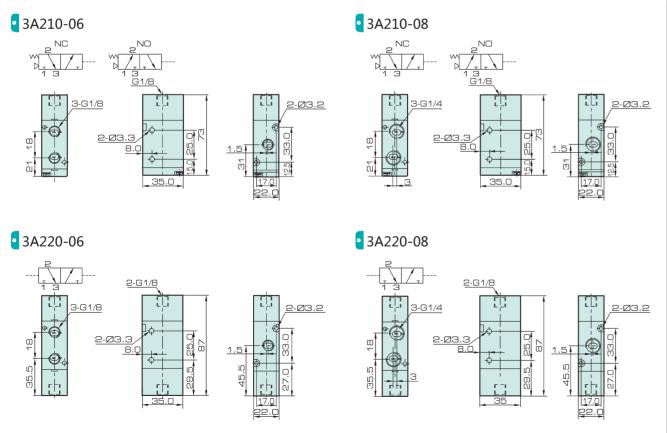
Solenoid Valve, Air Pilot Valve





Mandal	J4V310-08	J4V320-08	J4V330C	C-08 J4V330E-	08 J4V330P-08	J4V310-10	J4V320-10	J4V330C-10	J4V330E-	-10 J4V330P
Model	4A310-08	4A320-08	4A330C	-08 4A330E-	08 4A330P-08	4A310-10	4A320-10	4A330C-10	4A330E-	10 4A330P
Valve Type	5/2	way	İ	5/3 wa	у	5/2 v	/ay		5/3 wa	ıy
Effective Cross Section Area	25mm²(0	25mm²(CV=1.40) 18mm²(CV=1.00)					/=1.68)	18	3mm²(CV	=1.00)
Model	J3V310-0	8 J3V320	0-08	3A310-08	3A320-08	J3V310-10	J3V32	0-10 3A	310-10	3A320-1
Valve Type					3/2	way				
Effective Cross Section Area		25r	nm²(CV	=1.40)			30	mm²(CV=1	L.68)	
Port Size	Ir	let, Outlet,	Exhaus	t Port = G	L/4"	Inlet, O	utlet = G	3/8" Exh	aust Port	= G 1/4"
Working Medium		40 Micron Filtered Air								
Operation		Internal piloted								
Working-pressure			•		0.15 ~ 0	).8 MPa				
Max. Test Pressure			•	•	1.2	MPa				
Ambient Temperature			•	•	-20 ~	70°C				
Operating Voltage Tolerance			•	•	± 1	.0%				
Power Consumption		•	•	•	AC: 3.5VA	DC: 3.0W				
Connector Protection		F Class, IP 65								
Wiring / Connector		Cable / Lead Wire or DIN Connector								
Switching Frequency		-	•	•	5 Cycle	s / Sec.				
Response Time		•	•	•	0.05	Sec.				•





1-|P15

Valve J4V J4V100 J4V200 Manifold

JVT307

MVSD BM

Diaphragm 2V 2W

2W(Big) PU225 2Q JEL5404

JEL6213 JEL.JZF

4F210 MSV ASC, RE

HV, K

Solenoid Valve, Air Piloted Valve



# J4V300 Series

Valve

J4V100

J4V200 J4V300

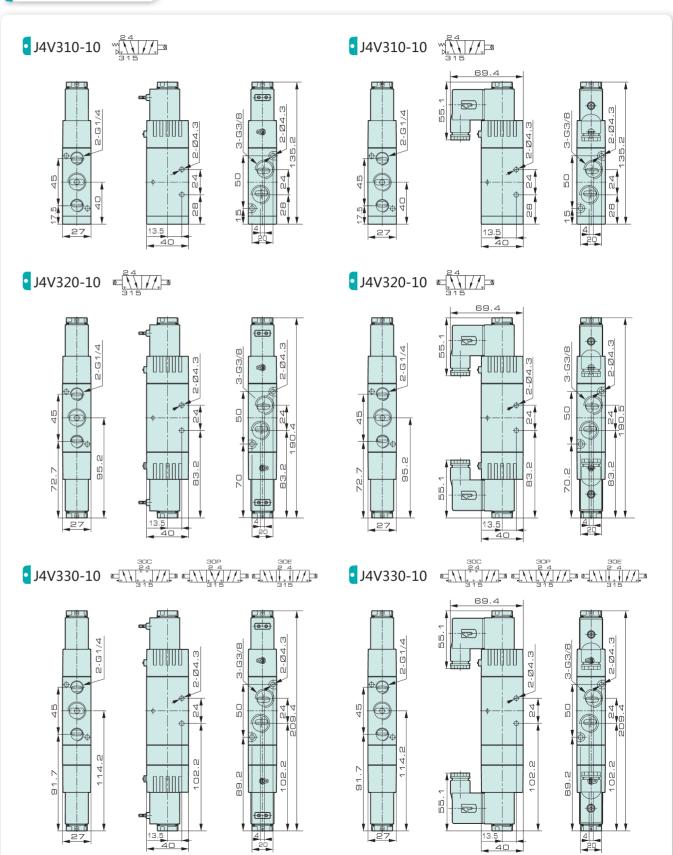
JVT307

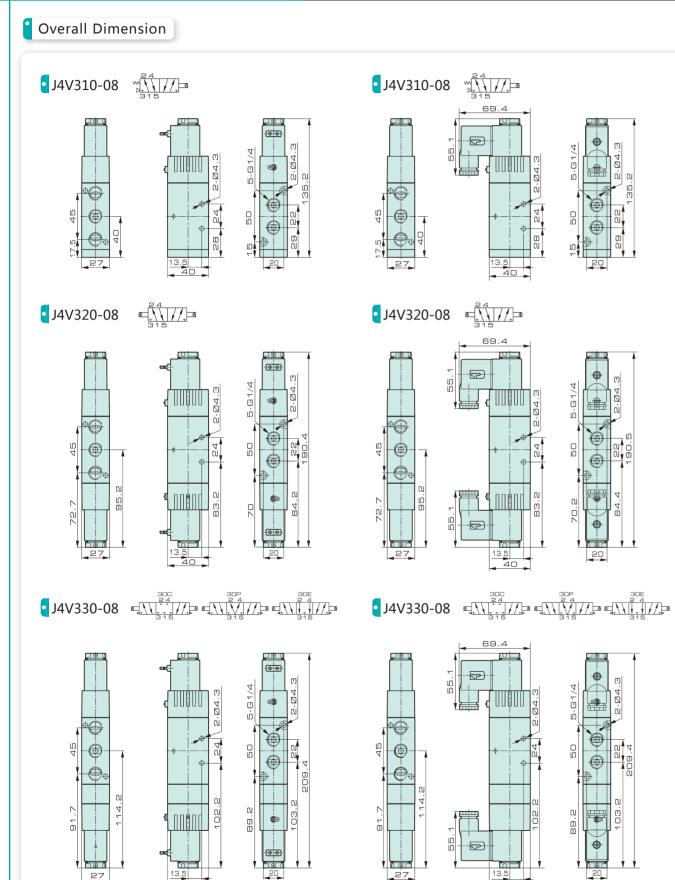
JEL6213

ASC, RE

Solenoid Valve, Air Pilot Valve







2W(Big)
2L
VX
PU
PU225
2Q
JEL5404
JEL6213
BU
Pulse
JELJZF
4H
TSV
MPV
4HV
HV, K
4R

MSV

ASC, RE QE, QEA

Valve

J4V100

J4V200

J4V400 5V Manifold JSY 5JV MCS

JEL10

3VJZF Diaphragm JELVD

2V

J4V310-08B

J4V320-08B

Solenoid Valve, Air Piloted Valve

W 24



J4V310-10B

J4V320-10B

J4V330-08B

# J4V300 Series

Valve

J4V100

J4V200 J4V300

JVT307

2W(Big)

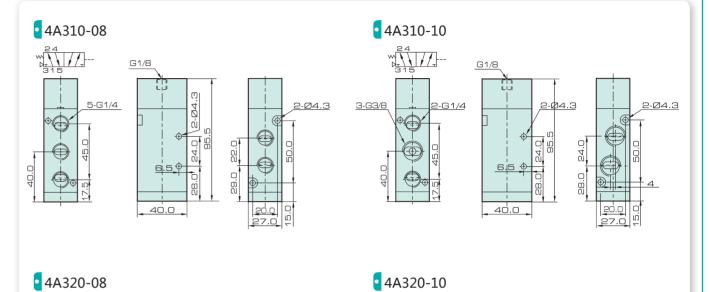
2Q

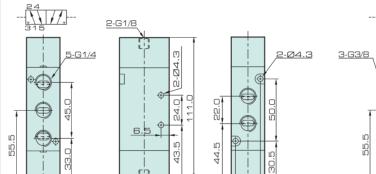
JEL6213

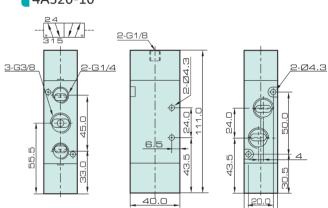
ASC, RE

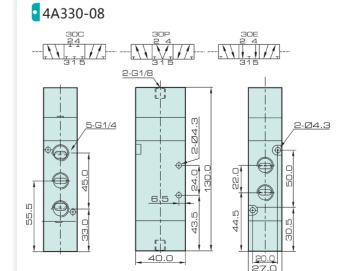
Solenoid Valve, Air Pilot Valve

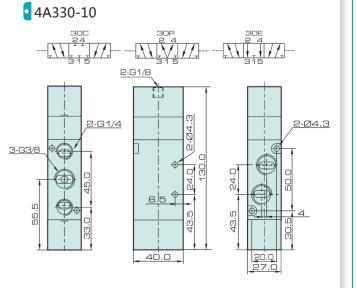


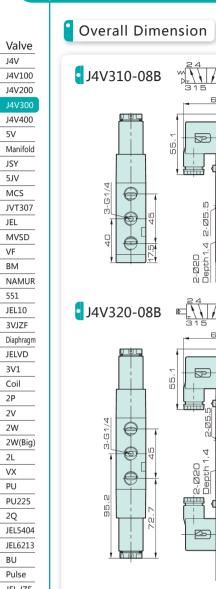














QE, QEA



Solenoid Valve, Air Piloted Valve



# J4V300 Series

Valve

J4V100

J4V200

J4V300

JVT307

Diaphragm

2W(Big)

2Q

JEL6213

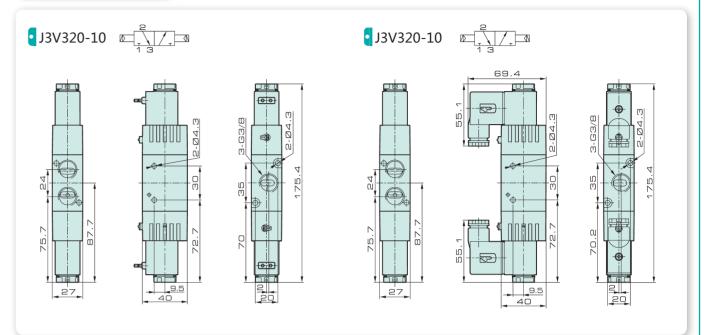
JEL.JZF

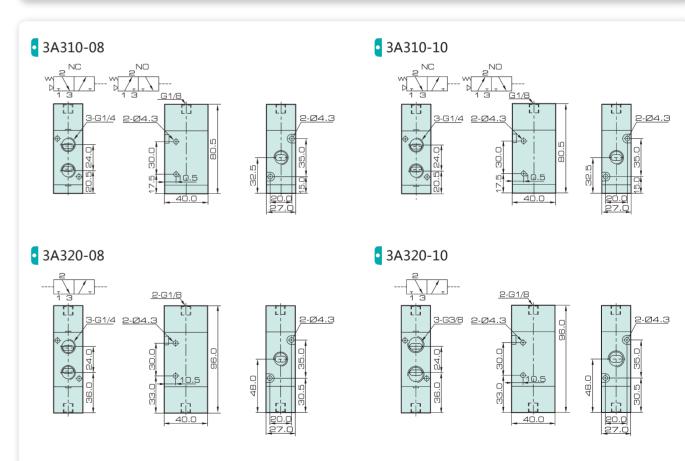
JM ASC, RE

JELVD

Solenoid Valve, Air Pilot Valve

#### Overall Dimension





Overall Dimension

Valve

J4V100

J4V200

5V

JSY 5JV MCS

551 JEL10 3VJZF

JELVD

2P 2V

2W

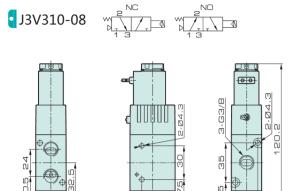
2L VX

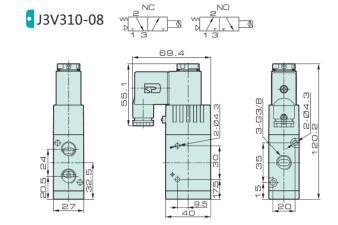
PU225 2Q

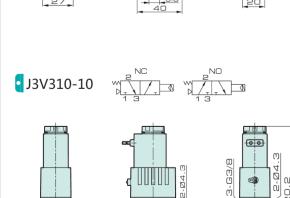
JEL.JZF 4H TSV

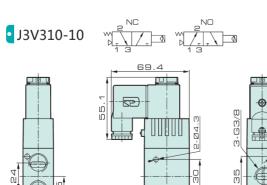
HV, K 4R 4F210 FV MSV

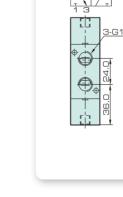
ASC, RE QE, QEA

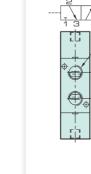


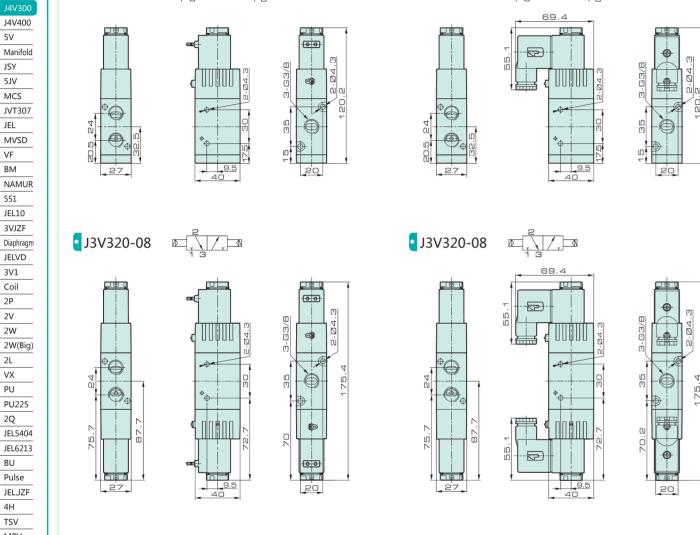












1-|P21

Valve

J4V100

J4V

5V Manifold

JSY 5JV MCS

JVT307

JEL

VF BM

551

3V1 Coil 2P

2V

2W

2L

VX

PU

2Q

BU Pulse

JEL5404

JEL6213

JEL.JZF

4H TSV

HV, K 4R 4F210

FV

MSV

ASC, RE

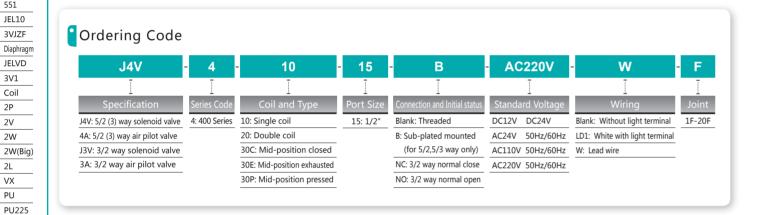
ST

MVSD

Solenoid Valve, Air Piloted Valve



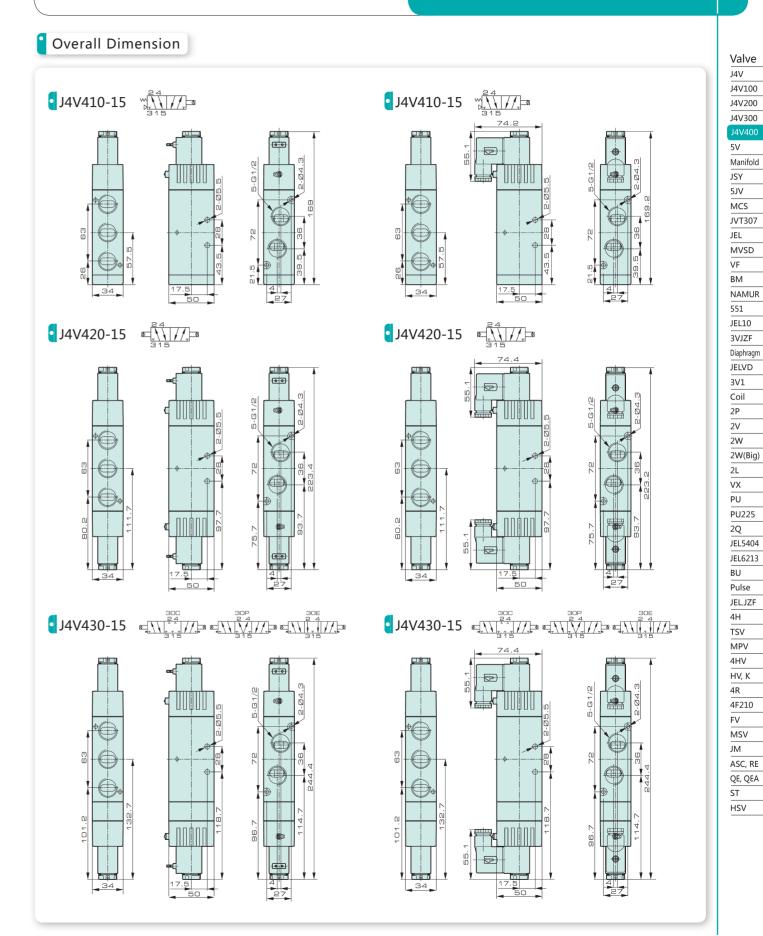




Maralal	4V410-15	4V420-15	4V430C-15	4V430E-15	4V430P-15					
Model	4A410-15	4A420-15	4A430C-15	4A430E-15	4A430P-15					
Valve Type	5/2	Way		5/3 Way	<u>-</u>					
Effective Cross Section Area	50 mm² (	CV=2.79)		30 mm <sup>2</sup> (CV=1.68)						
Model	3V410-15	3V420-	15 3	A410-15	3A420-15					
Valve Type		_	3/2 Way							
Effective Cross Section Area			50mm <sup>2</sup> (CV=2.79)							
Port Size		Inlet, Outlet, Exhaust Port = G1/2"								
Working Medium		40 Micron Filtered Air								
Operation		Internal piloted								
Working-pressure		•	0.15 ~ 0.8 MPa	***************************************						
Max. Test Pressure		•	1.2 MPa	***************************************						
Ambient Temperature		•	-20 ~ 70℃	***************************************						
Operating Voltage Tolerance		••••••	±10%	•						
Power Consumption		•••••	AC: 3.5VA DC: 3.0V	V						
Connector Protection		F Class, IP 65								
Wiring / Connector		Cable /	Lead Wire or DIN Co	onnector						
Switching Frequency			5 Cycles / Sec.	***************************************						
Response Time			0.05 Sec.							

# J4V400 Series

Solenoid Valve, Air Piloted Valve



1-|P23

Valve

J4V100

J4V200

5V Manifold JSY 5JV MCS

JEL10

3VJZF Diaphragm JELVD 3V1

Coil 2P 2V 2W 2W(Big) 2L VX PU PU225 2Q

JEL6213

HV, K 4R 4F210

FV MSV

ASC, RE

Solenoid Valve, Air Piloted Valve

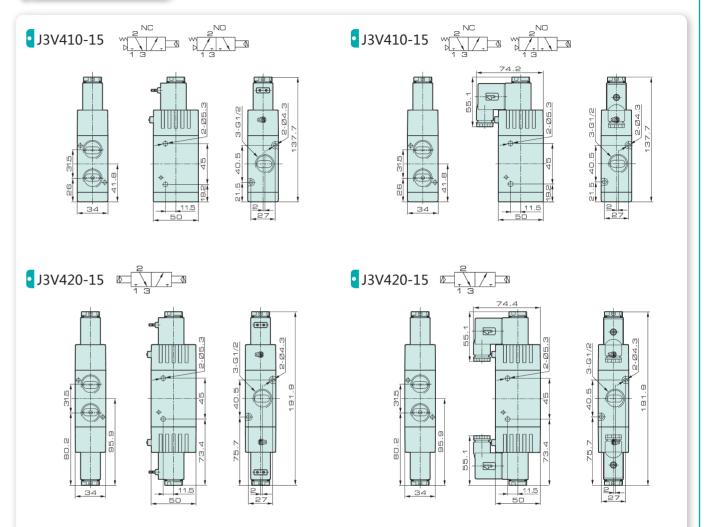


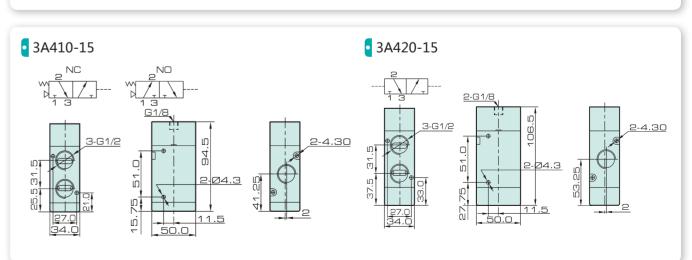
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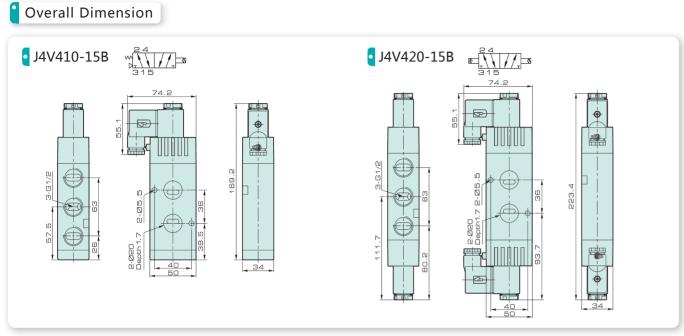
# J4V400 Series

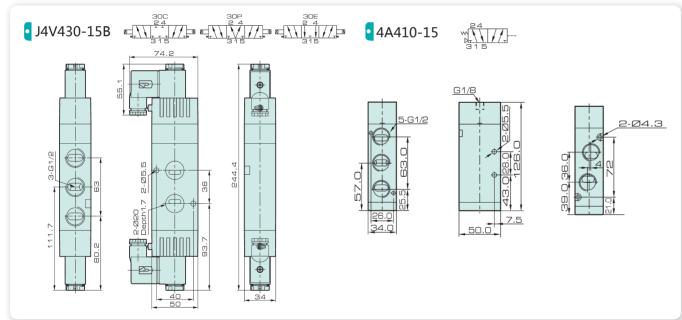
Solenoid Valve, Air Piloted Valve

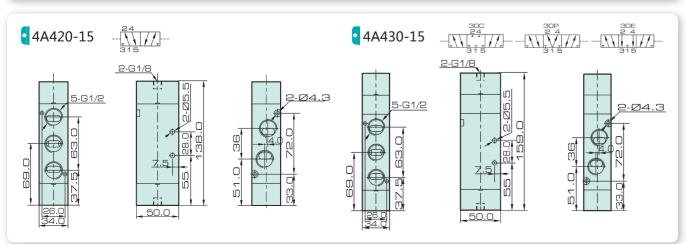
#### Overall Dimension











1-|P25

JM ASC, RE

JVT307 JEL6213

Valve

J4V100

J4V200

# **5V Series**

Valve

J4V100 J4V200

J4V300

J4V400

Manifold

JSY

5JV MCS JVT307

JEL

551

JEL10 3VJZF

Diaphragm JELVD

3V1

Coil

2P

2V

2W

2L

VX PU

PU225

JEL5404

JEL6213

2Q

BU

Pulse

JEL.JZF

4H

TSV

MPV 4HV

HV, K 4R

4F210

FV

MSV

JM

ST

ASC, RE QE, QEA

2W(Big)

MVSD VF

J4V

Solenoid Valve, Air Piloted Valve



# 100-400 Series Manifold











5V310-10-S



5V330C-10

5V210-08-S



5V410-15-S

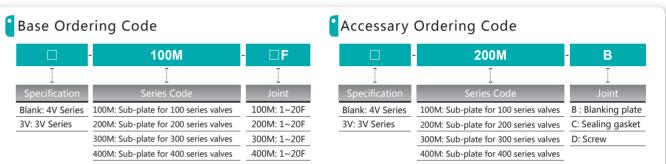
#### Features

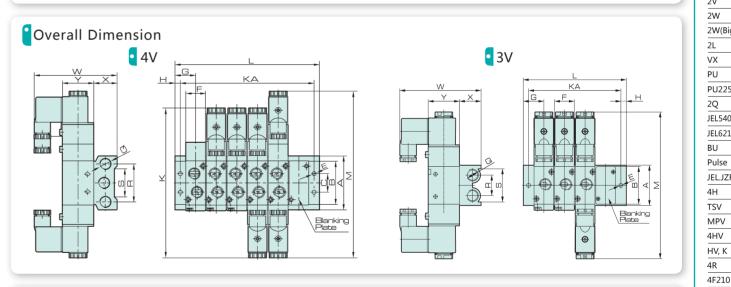
- 1. Single solenoid valve uses new design with piston reset and improve steadiness, functionality and life time.
- 2. We guarantee inner hole with Ra0.1 roughness within our new processing.
- 3. Special treatment to take care of inner hole reduce the
- 4. Valve spool adding anti-friction seal to improve the stability movement to increase the life time.
- 5. For our manufacturing process we use imported HNBR to
- reduce friction.
- 6. To import German high standard special grease which provides film in order to reduce friction.
- 7. To introduce Taiwan high precise injection mould and seals die, to enhance precision and stability.
- 8. New visual style, synchronized with global outstanding product
- 9. Adding the logo on behalf of the company innovation for individual market recognition on the product which has design patent.

#### Ordering Code **AC220V** 06 5V: 2(3) way solenoid valve 100 Series 5A: 2(3) way air pilot valve 200 Series 20: Double coil 5/2 way 06: 1/8" DC24V W: Lead wire AC24V 08: 1/4" 30C: Double coils 5/3 way-closed AC110V 30E: Double coils 5/3 way-exhausted 10: 3/8" 30P: Double coils 5/3 way-pressed AC220V 15: 1/2"

▲ For the 5V series solenoid valve specifications and dimensions, please refer to the corresponding models of J4V series.







Inside Dia./ Symbol	А					G		KA				М	Q			W		
4V-100M-□F	58	43	20	4.2	18.3	19	140	( n-1)*1	9+28	(n-1)*1	9+38	155	G1/4	40	30	78.5	25	27
4V-200M-□F	59	50	21	4.3	22.2	23	170	( n-1)*2	3+34	(n-1)*2	3+46	189	G1/4	43	32	92.5	26	35
4V-300M-□F	75	64	26	4.5	27.3	27	189	( n-1)*2	8+42	( n-1)*2	8+54	208	G3/8	53	48	99	30	40
4V-400M-□F	98	94	32	5.5	34.3	31.5	222	( n-1)*3	5+49	(n-1)*3	5+63	243	G1/2	68	67	112	38	50
Inside Dia./ Symbol	А	В	Е	F	G	Н	ı	KA		L	М	Q	R		S	W	Χ	Υ
3V-100M-□F	31	30	4.5	18	18.5	4.5	(n-1)	*19+28	(n-1)	*19+37	130.8	G1/8	17.5	5 2	25	72.8	19	27
3V-200M-□F	45	43	4.5	22	23	6	(n-1)	*23+34	(n-1)	*23+46	163.4	G1/4	23	1 3	37	90.9	24	35
3V-300M-□F	50	47	4.5	27	27	6	(n-1)	*28+42	(n-1)	*28+54	190.5	G3/8	29	2	12	97.4	28	40
3V-400M-□F	62.5	62.5	5.5	34	31.5	7	(n-1)	*35+49	(n-1)	*35+63	191.9	G1/2	35.5	5 5	1.5	109.4	35	50

1-|P27 1-|P28

Valve J4V J4V100 J4V200 J4V300

> JVT307 JEL

MVSD

NAMUR 551

JEL10

3VJZF Diaphragm

JELVD

3V1

Coil

2W(Big)

PU225

JEL5404

JEL6213

BU

Pulse

JEL.JZF

HV, K

MSV

ASC, RE

VF ВМ

Own Independent Intellectual Property Rights **APPL:** 2013303668314.7

# **JSY Series**

Solenoid Valve / Air piloted Valve



# **JSY Series**

Solenoid Valve / Air piloted Valve

APPL: 201330366828.5

#### Features

Valve

J4V100

J4V200

J4V300 J4V400

5V

5JV

MCS

JVT307

MVSD

JEL

VF

BM

551 JEL10

3VJZF

3V1

Coil

2P 2V

2W

2L

VX

PU

2Q

BU

Pulse

JEL.JZF

HV, K 4R

4F210

FV

MSV

JM

ST

ASC, RE

QE, QEA

4H TSV MPV 4HV

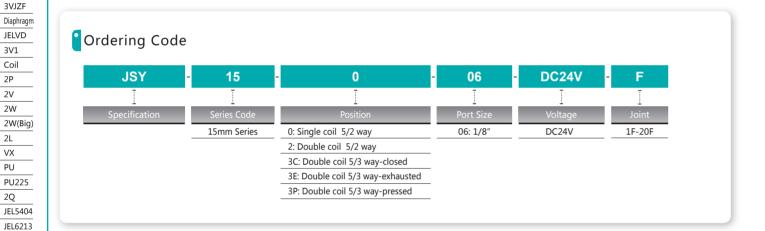
NAMUR

Manifold

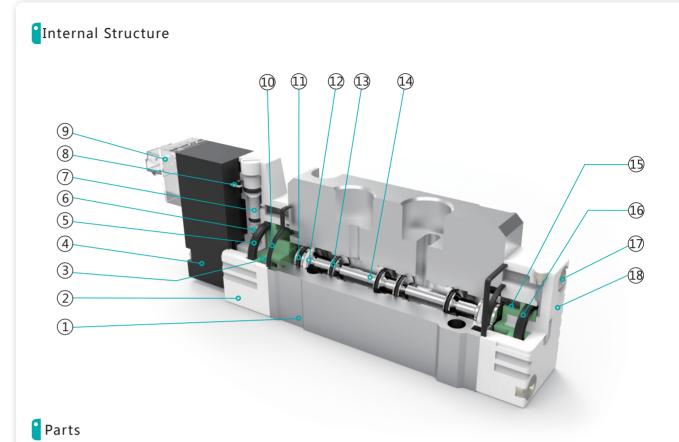
J4V

- 1. Inner exhausting structure and no pollution.
- 2. Low power consumption of 1.2W.
- 3. Sliding structure and special to upgrade flow, life time, seal function and response.
- 4. Special treatment to look after inner hole for less friction, lower starting pressure and long life time.
- 5. Integrated intallation to save space.

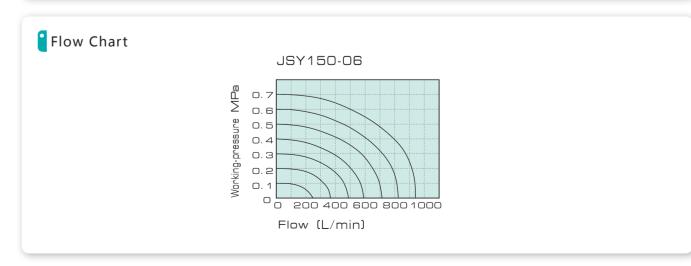




#### Specification Valve type 5/2 way 5/3 way $8.3 \text{mm}^2 \text{ ( CV = 0.49 )}$ 7.2mm $^2$ ( CV = 0.42 ) Effective cross section area Inlet=Outlet=Exhaust=G1/8" Port size Working medium 40 Micron filted air 0.15 ~ 0.7MPa 0.1 ~ 0.7MPa 0.15 ~ 0.7MPa Working pressure Max pressure 1MPa Working temperature 0 ~ 50°C 1.2W Power consumption 5 Cycles/sec Switching frequency



lumber	Name	Number	Name	Number	Name
1	Valve body	7	Mannual ride spindle	13	Flat ring
2	Pilot seat	8	Plug unit	14	Valve spool
3	Pilot piston	9	Armature	15	Reset piston
4	Cross slot pan screw	10	Dysmorphism seal	16	Reset piston Y plug
5	Piston Y ring	11	Valve spool Y ring	17	Cross slot pan screw
6	Spring	12	Anti-friction seal	18	Back cover



J4V J4V100 J4V200 J4V300 J4V400 JVT307 MVSD BM NAMUR

> JEL10 3VJZF

Diaphragm

Valve

JELVD 3V1 Coil 2W 2W(Big) PU225 2Q JEL5404 JEL6213 BU

Pulse JEL.JZF HV, K 4F210

MSV ASC, RE QE, QEA

1-|P29

# JSY Series

Solenoid Valve / Air piloted Valve



# 5JV Series Solenoid Valve

Overall Dimension

Valve

J4V100

J4V200

J4V300 J4V400

5V Manifold

5JV MCS JVT307

JEL

VF

BM

551

JEL10

3VJZF

Diaphragm

JELVD

3V1

Coil 2P

2V 2W 2W(Big)

2L VX PU

PU225

JEL5404

JEL6213

2Q

BU

Pulse

JEL.JZF 4H

TSV

4HV

HV, K 4R 4F210

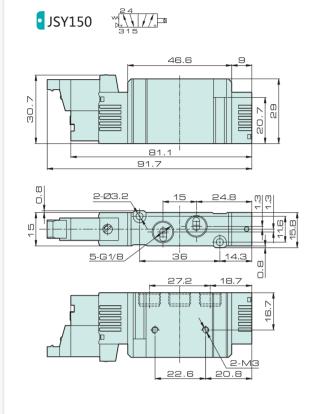
FV

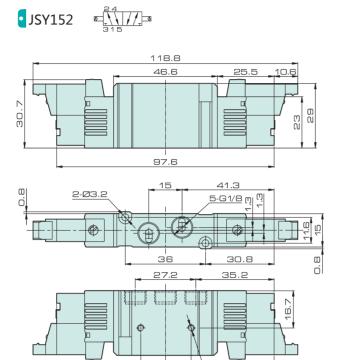
MSV JM

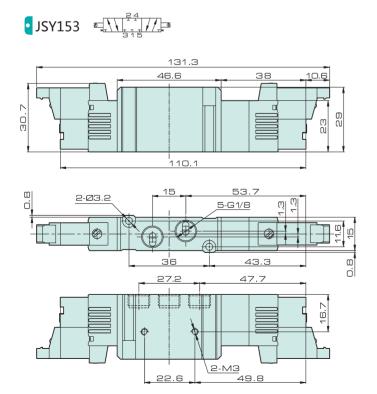
ASC, RE QE, QEA ST

MVSD

J4V



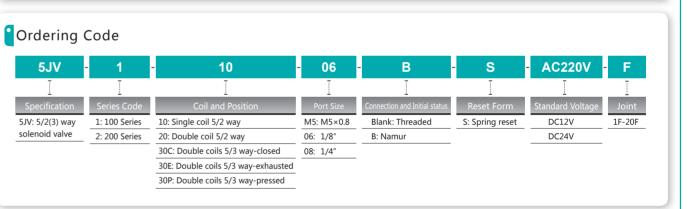






#### Features

- The main body of the solenoid valve is used new structure of 5V, with characteristics of large flow and long life time same as 5V.
- 2. Piloted valve base using 10mm low voltage valve, can effectively save power consumption and lower temperature rise.



#### Specification

Model	5JV110-M5	5JV120-M5	5JV130C-M5	5JV130E-M5	5JV130P-M5	5JV110-06	5JV120-06	5JV130C-06	5JV130E-06	5JV130P-06		
Valve Type	5/2	2 Way		5/3 Way		5/2	Way		5/3 Way			
Effective Cross Section Area	10mm² (	CV=0.56)	71	mm² ( CV=0.	4)	12mm² ( CV=0.67) 9mm² ( CV=				1.5)		
Port Size		Inlet, Outlet, Exhaust Port = M5					Inlet, Outlet, Exhaust Port = G1/8					
Model	5JV210-06	5JV210-06   5JV220-06   5JV230C-06   5JV230E-06   5JV230P-06   5JV210-08   5JV220-08   5JV230C-08						5JV230E-08	5JV230P-08			
Valve Type	5/2	2 Way		5/3 Way	-	5/2	Way		5/3 Way	•		
Effective Cross Section Area	14mm² (	14mm² ( CV=0.78) 12mm² ( CV=0.6				16mm² (	CV=0.89)	12	mm² ( CV=0.	67)		
Port Size		Inlet, Outlet, Exhaust Port = G1/8					Inlet, Ou	tlet, Exhaust	Port =G1/4	•		
Working Medium					40 Micron	Filtered Air						
Working-pressure			-		0.15~0	·0.7MPa						
Max. Test Pressure			•		1N	MPa						
Ambient Temperature			-	•	0~5	~50℃						
Power Consumption					1.2	2W		-				
Switching Frequency			•	•	5 Cycle	s / Sec.		-	•	•		

Valve

J4V

J4V100

J4V200

J4V300

J4V300 J4V400 5V Manifold JSY 5JV

JVT307
JEL
MVSD
VF
BM
NAMUR
551
JEL10

3VJZF
Diaphragm
JELVD
3V1
Coil
2P

2W(Big)
2L
VX
PU
PU225
2Q
JEL5404

JEL6213 BU Pulse JEL.JZF 4H

4HV HV, K 4R 4F210 FV MSV JM

JM ASC, RE QE, QEA ST HSV

# **5JV Series**

Solenoid Valve



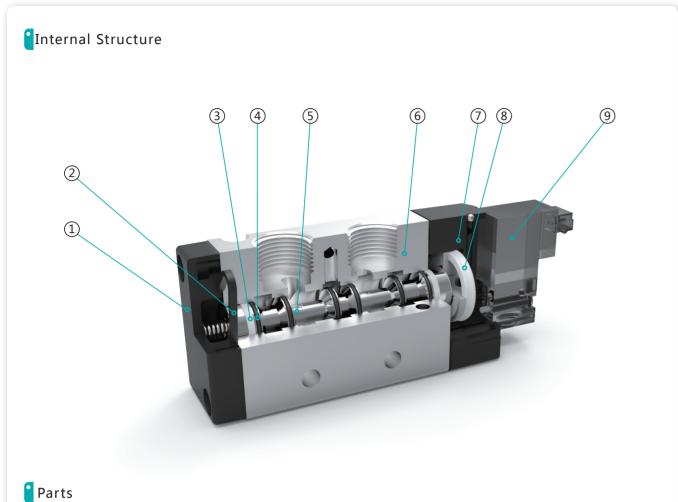
Valve J4V J4V100 J4V400 5V Manifold JSY

MCS JVT307 JEL MVSD 551 JEL10 3VJZF Diaphragm JELVD Coil

2L VX PU 2Q BU Pulse

2P 2V 2W 2W(Big) PU225 JEL5404 JEL6213 JEL.JZF 4H TSV HV, K 4R 4F210 FV MSV

JM ASC, RE



Number	Name	Number	Name
1	Back cover	6	Valve body
2	Diamond ring	7	Pilot seat
3	Anti-friction seal	8	Piston
4	Flat ring	9	Armature
5	Valve spool		

# **5JV Series**

Solenoid Valve

Valve

J4V100

J4V200 J4V300

JVT307

MVSD

NAMUR

Diaphragm

2W(Big) 2L VX PU

PU225

JEL6213

Pulse

JEL.JZF

HV, K

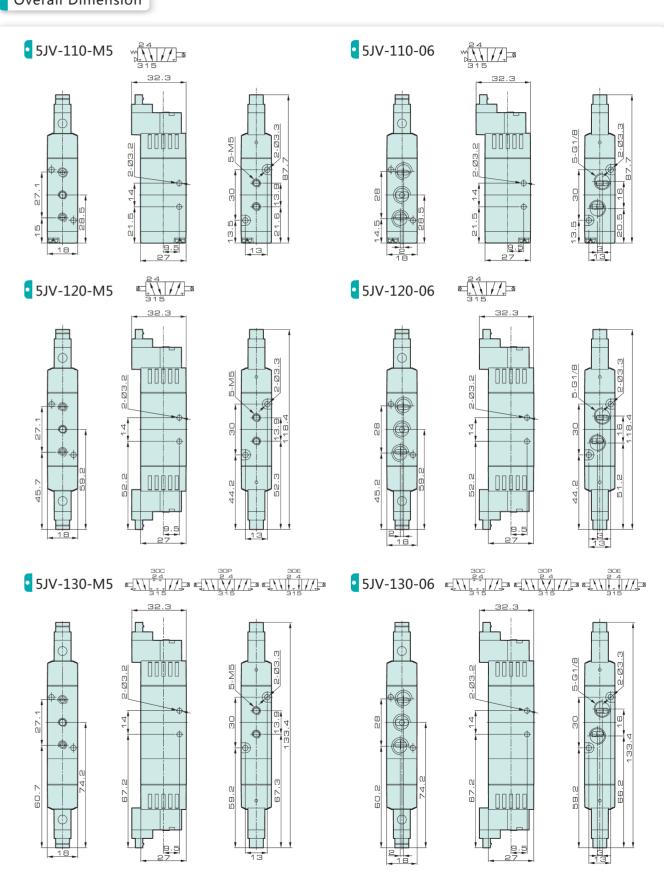
4F210

MSV JM ASC, RE

2Q

J4V





# **5JV Series**

Solenoid Valve



# MCS Series •

Multiple Connection System



#### Feature

- 1. Inlet ports and outlet ports are arranged together to be
- 2. All pneumatic and solenoid parts are tested for better
- 3. Apply 25-DSUB connectors for easier wiring and time saving.
- 4. Comply with IP65 which is suitable for terrible ambient condition.
- 5. 5/2 way and 5/3 way combine with single and coil, doublemulitple combinations are available upon requesting.

#### Ordering Code 100 DC24V Ek E: Double-coil three-position exhausted k-10 single coil solenoid valves negative more choices, please consult F: Public connected the P: Double-coil three-position pressed solenoid valves mixed by single positive and double coil table

# Specification

Model		MCS100	
Valve Type	5/2 Way Single Coil	5/2 Way Double Coil	5/3 Way
Effective Cross Section Area	12 mm² (	CV = 0.67)	9 mm <sup>2</sup> (CV = 0.5)
Port Size		Inlet, Outlet, Exhaust Port = G1/8"	
Working Medium		40 Micron Filtered Air	
Operation		Internal Piloted	
Working-pressure		0.15 ~ 0.8 MPa	
Max. Test Pressure		1.2 MPa	
Max. Ambient Temperature		-20∼70℃	
Rating Voltage Tolerance		± 10%	
Power Consumption		AC: 2.8 VA DC: 2.8 W	
Connector Protection		F Class, IP 65	
Switching Frequency		5 Cycles / Sec.	
Response Time		0.05 Sec.	

Overall Dimension

Valve

J4V100

J4V200

J4V300 J4V400

Manifold JSY

MCS

JEL

VF

BM

551

JEL10

3VJZF

Diaphragm

JELVD

3V1

Coil

2P

2V 2W

2L VX PU

2W(Big)

PU225 2Q

JEL5404

JEL6213

BU

Pulse

JEL.JZF

4H TSV MPV 4HV

HV, K 4R 4F210

FV

MSV JM

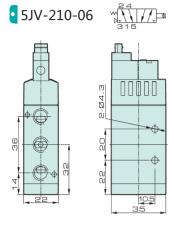
ASC, RE QE, QEA ST

JVT307

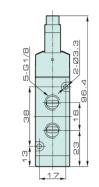
MVSD

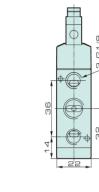
5V

J4V

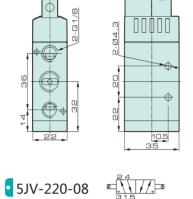


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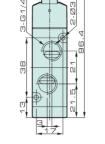




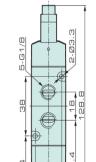
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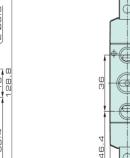


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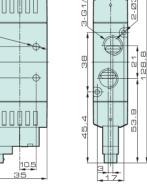




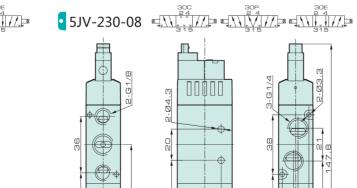




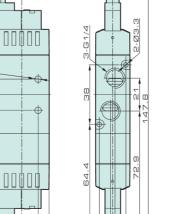


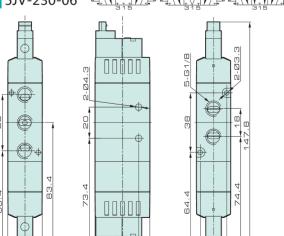


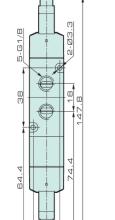




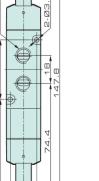


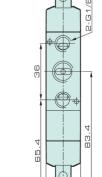


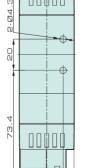


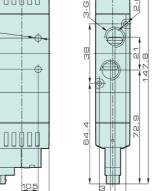












1-|P35

5JV JVT307 MVSD BM NAMUR JEL10 3VJZF Diaphragm JELVD Coil 2P 2V 2W 2W(Big) PU225 2Q JEL5404 JEL6213 BU Pulse JEL.JZF

HV, K

4F210

MSV

ASC, RE

Valve J4V

J4V100

J4V200

J4V300

J4V400

Manifold

# **MCS** Series

Multiple Connection System

B(31.5+19n)

A(41.5+19n)



Overall Dimension

J4V400 5V Manifold JSY 5JV JVT307

Valve

J4V100

J4V200

J4V300

J4V

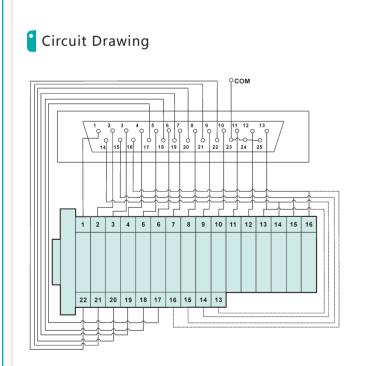
JEL MVSD VF BM 551 JEL10 3VJZF Diaphragm JELVD 3V1

2P 2V 2W 2W(Big) 2L VX PU PU225 2Q JEL5404

Coil

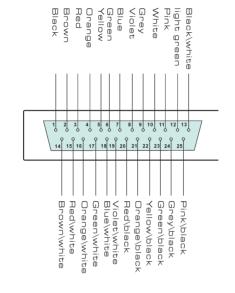
JEL6213 BU Pulse JEL.JZF 4H TSV 4HV HV, K 4R 4F210 FV MSV JM

> ASC, RE QE, QEA ST



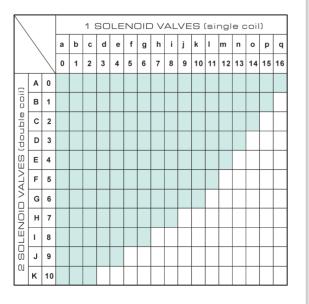
28.1

Pins No. and Color



Note) 23 24 25 PIN is common port, According to the practical circuit requirements, Choose common port connect "positive" or "negative" model. Don't allow to mix.

■ Solenoid Valves Mixed by Single and Double Coil



# **JVT307** High Frequency Valve

Valve

J4V100

J4V200

J4V300

J4V400

Manifold

JSY 5JV

MCS

MVSD

NAMUR

551

JEL10 3VJZF

Diaphragm

JELVD

Coil

2W(Big)

PU225

JEL6213

Pulse

JEL.JZF

HV, K

4F210

MSV

ASC, RE

2Q JEL5404

J4V







#### Features

- 1. Direct-acting type, quick response;
- 3. No lubrication required;
- 5. Many voltage available.

- 2. Poppet design, good sealing;
- 4. Manual Override facilitates machine set up;

#### Ordering Code

JVT307 -	06	DC24V	- W -	V	- 🗆
<u> </u>	Ī	Ī	Ī	Ī	Ī
Specification	Port Size	Voltage	Wiring	Sealing	Thread
JVT307 : Standard type	06: 1/8"	DC12V	Blank: Brown with light	Blank : HNBR	Blank: G
JVT307H : High frequency	08: 1/4"	DC24V	terminal	V : VITON	P: PT
		DC110V	W: Lead wire		N: NPT

#### Specification

Model	JVT307-06	JVT307-08	JVT307H-06	JVT307H-08				
Working Medium		Air ( 40 Micron	dry filtered air )					
Port Size	Inlet, Outlet, Exhaust Port=G1/8"	Inlet, Outlet, Exhaust Port=G1/4"	Inlet, Outlet, Exhaust Port=G1/8"	Inlet, Outlet, Exhaust Port=G1/4"				
Position		3/2 way						
Flow	1801	/min	1201	/min				
Lubrication		No f	Veed	•				
Working Pressure		0~1.	0MPa	-				
Max Pressure		1.51	MPa	•				
Working Temperature		-20 ~	- 80°C					
Body Materials		Alum	inum	•				
Standard Voltage		DC12V、DC2	24V、DC110V	-				
Operating Voltage Range		DC: :	±10%	•				
Power Consumption	DC:	4.5W	DC:	7.2W				
Connector Protection		IP65						
Temperature class	•	Нс	lass	-				
Wiring/Connector		Cable / Lead Wire	or DIN Connector	-				
Response Time	12	ms	71	ns				
Switching Frequency	40 Cyc	les/Sec	70 Cyc	les/Sec				

1-|P37 1-|P38

# JVT307

Valve

J4V100

J4V200

J4V300 J4V400 5V

Manifold

JSY

5JV MCS

JEL

VF

BM

551

JEL10

3VJZF Diaphragm

JELVD 3V1

Coil 2P

2V

2W

2L

VX PU PU225

2Q

JEL5404

JEL6213 BU

Pulse

JEL.JZF 4H TSV MPV 4HV

HV, K 4R 4F210

FV

MSV

JM

ASC, RE QE, QEA ST

2W(Big)

MVSD

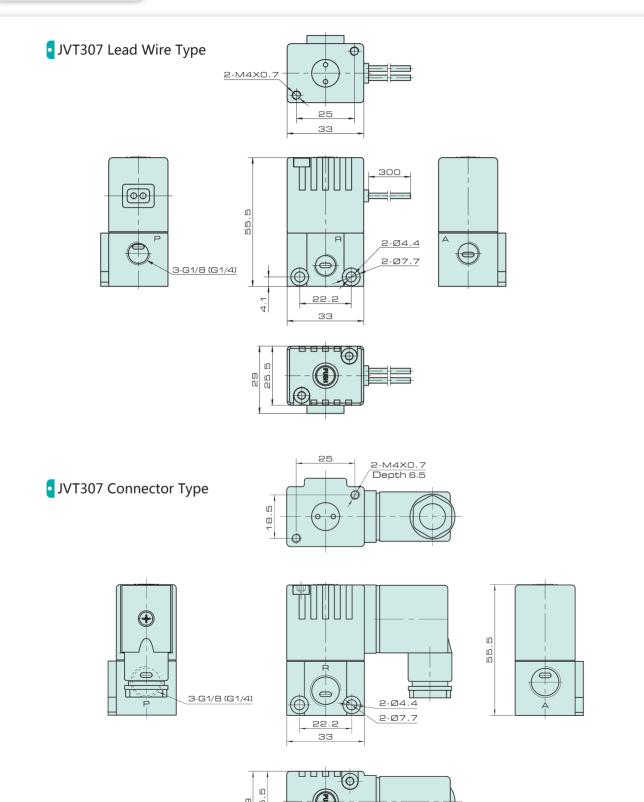
J4V

High Frequency Valve

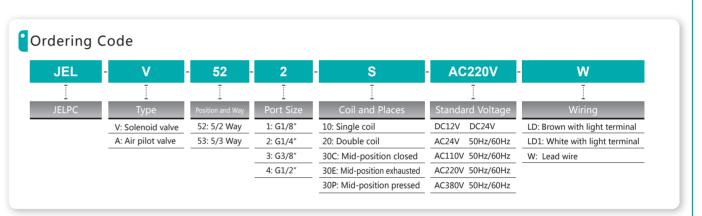


# JEL Series Solenoid Valve

Overall Dimension







Model	JELV521S	JELV521D	JELV531C (E/P)	JELV522S	JELV522D	JELV532C (E/P)	JELV523S	JELV523D	JELV533C (E/P)	JELV524S	JELV524D	JELV534C (E/P)
Model	JELA521S	21S JELA521D JELA531C (E/P) JELA522S JELA522D JELA522D JELA523S JELA523D JELA523D JELA533C (E/P) JELA524S J										JELA534C (E/P)
Valve Type	5/2 V	5/2 Way 5/3 Way 5/2 Way 5/3 Way 5/2 Way 5/3 Way 5/3 Way m² (CV = 0.67) 9 mm² (CV=0.5) 14 mm² (CV = 0.78) 12 mm² (CV=0.69) 25 mm² (CV = 1.40) 18 mm² (CV=1.00) 50 mm² (CV = 2.79) 30 mm² (CV=1.68) 40 Micron Filtered Air										
Effective Cross Section Area	12 mm <sup>2</sup> (C											
Working Medium	-											
Operation	-	Internal piloted										
Working-pressure		0.15~0.8 MPa										
Max. Test Pressure		1.2 MPa										
Max. Ambient Temperature		•		•	•	-20 ~	70℃		-	•	•	
Operating Voltage Tolerance		•		•	•	± 1	0%		-	•	•	
Power Consumption		•		•	•	AC: 5.5 VA	DC: 4.8 V	V	-	•	•	
Connector Protection		•	-	•	•	F Class	, IP 65		•		•	
Wiring / Connector	<u> </u>	•		•	Cable	/ Lead Wire	or DIN Co	nnector			•	
Switching Frequency	·	•		•	•	5 Cycle	s / Sec.	•			•	
Response Time		•			-	0.05	Sec.		•			•

Valve
J4V
J4V100
J4V200
J4V300
J4V400
5V

Manifold
JSY
5JV
MCS
JVT307
JEL
MVSD

BM
NAMUR
551
JEL10
3VJZF
Diaphragm
JELVD
3V1
Coil

Coil
2P
2V
2W
2W(Big)
2L
VX
PU

PU225 2Q JEL5404 JEL6213 BU Pulse JELJZF

MPV 4HV HV, K 4R 4F210 FV MSV

MSV JM ASC, RE QE, QEA ST

# **JEL Series** Solenoid Valve

**JELPC**®

Overall Dimension

Valve

J4V100

J4V200

J4V300 J4V400 5V Manifold

JSY

5JV

MCS JVT307

MVSD VF BM

551 JEL10 3VJZF Diaphragm

JELVD

3V1

Coil 2P

2V 2W

PU

2Q

PU225

JEL5404

JEL6213 BU

Pulse

JEL.JZF 4H TSV

HV, K 4R 4F210

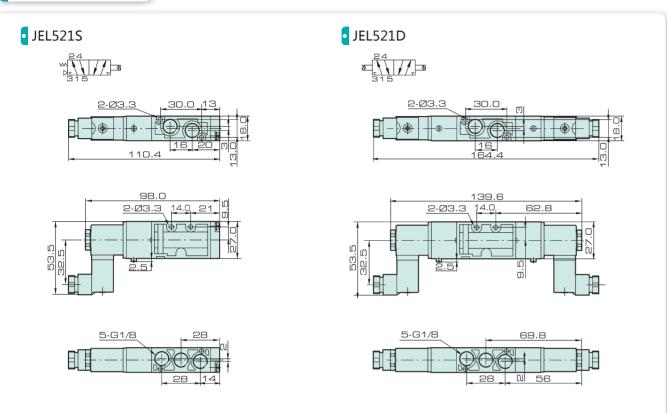
FV

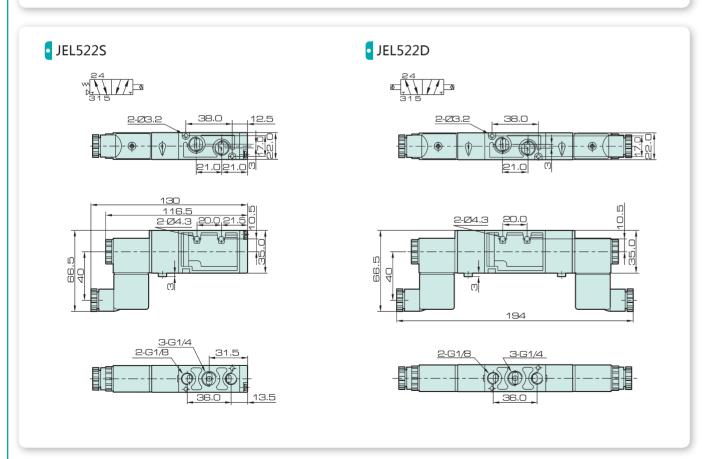
MSV JM

ASC, RE QE, QEA ST

2W(Big) 2L VX

J4V

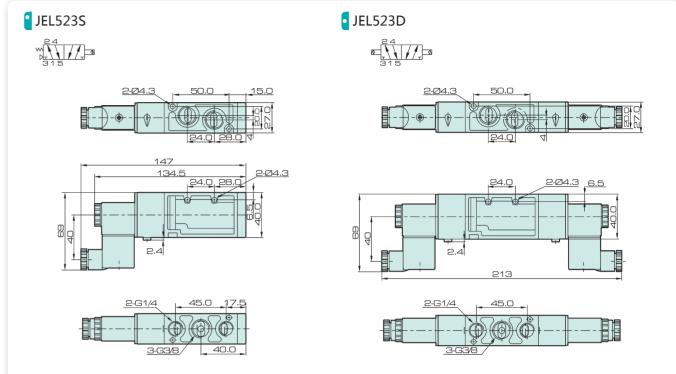


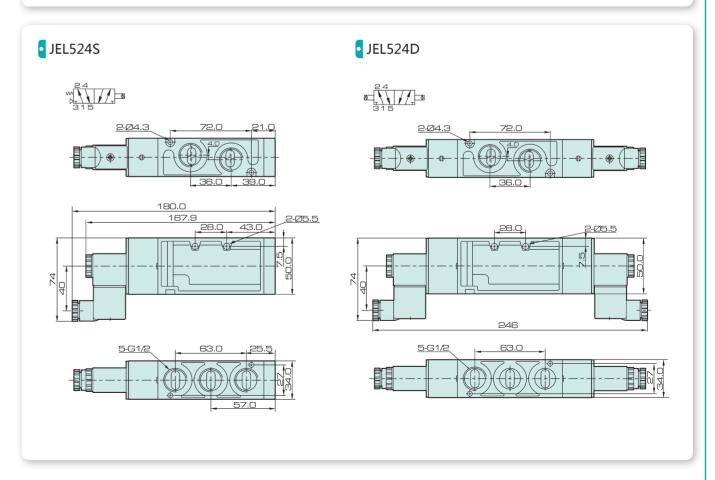


# **JEL Series**

Solenoid Valve







Valve J4V J4V100 J4V200 J4V300

Manifold JSY 5JV MCS JVT307

MVSD

Diaphragm JELVD Coil 2P 2V 2W

PU225 2Q JEL5404 JEL6213 Pulse

2W(Big)

JEL.JZF HV, K 4F210

MSV ASC, RE

# **MVSD Series**

Solenoid Valve

Valve

J4V100

J4V200

J4V300

J4V400 5V Manifold

JSY

5JV MCS

JVT307

JEL

VF BM

551 JEL10

3VJZF

JELVD 3V1 Coil 2P

2V

2W

2L

VX PU

PU225

JEL5404

JEL6213

2Q

BU

Pulse

JEL.JZF 4H TSV

4HV HV, K

4R 4F210

FV

MSV JM

ASC, RE QE, QEA ST

2W(Big)

J4V



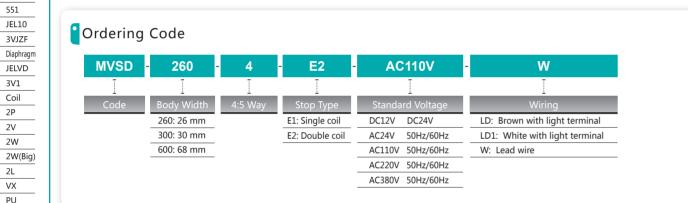
MVSD-260-4E1



MVSD-300-4E1



MVSD-600-4E1



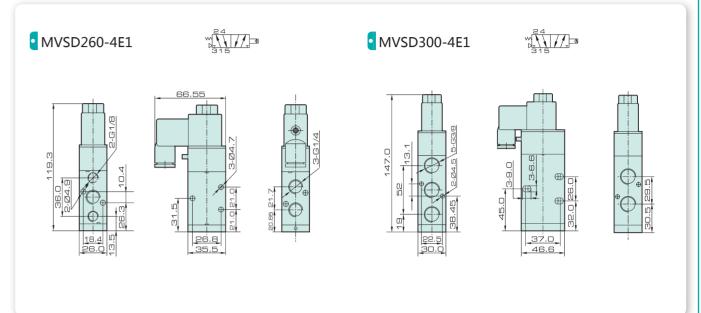
#### Specification

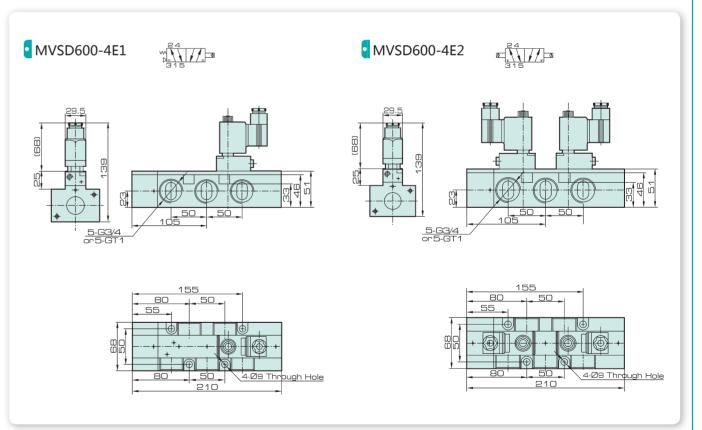
Item	MVSD-260-4E1	MVSD-260-4E2	MVSD-260-4E2 (C.P.E)	MVSD-300-4E1	MVSD-300-4E2	MVSD-300-4E2 (C.P.E)	MVSD-600-4E1	MVSD-600-4E2
No. of Position	2	2	3	2	2	3		2
No. of Port		5		3	Ţ	5		5
Port Size		G1/4"			G3/8"	***************************************	G3/4"	G1"
Working medium				Aiı	·	•		
Working Pressure	0.2 ~ 0	.7 MPa	0.3 ~ 0.7 MPa	0.2 ~ 0	).7 MPa	0.3 ~ 0.7 MPa	0.2 ~ 0	.7 MPa
Max. Test Pressure		10 kgf/cm²						
Effective Cross Section Area	18 1	mm²	16 mm <sup>2</sup> 35 mm <sup>2</sup> 25 mm <sup>2</sup>		20: 11 25: 13	5 mm² 5 mm²		
Ambient Temperature		-20 ~ 70°C (No Freezing)						
Power Consumption		AC: 5.5 VA DC: 4.8 W			AC: 13 VA	DC: 10 W		
Operating Voltage Tolerance		± 10%						
Insulation Class				IP 65, F	Class			

#### 

# **MVSD Series** Solenoid Valve

#### Overall Dimension





Valve J4V J4V100 J4V200 J4V300 J4V400 Manifold JSY 5JV

MCS JVT307

NAMUR 551 JEL10 3VJZF Diaphragm JELVD

2V 2W 2W(Big) PU225 2Q

JEL5404 JEL6213 BU Pulse JEL.JZF

HV, K 4F210 MSV ASC, RE

# **VF Series**

Solenoid Valve

VF3130



Valve
J4V
J4V100
J4V200
J4V300
J4V400
5V
Manifold
JSY
5JV
MCS
JVT307
JEL
MVSD
VF

BM
NAMUR
551
JEL10
3VJZF
Diaphragm
JELVD
3V1
Coil
2P
2V
2W

2W(Big) 2L VX PU PU225 2Q JEL5404 JEL6213 BU Pulse JEL.JZF 4H TSV MPV 4HV HV, K

4R 4F210

FV

MSV

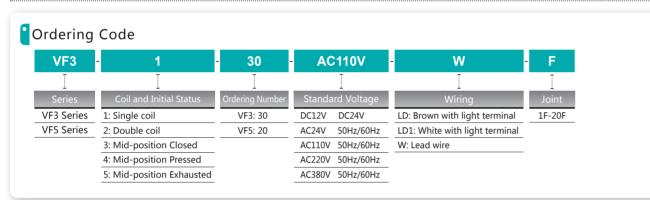
JM

ASC, RE

QE, QEA ST

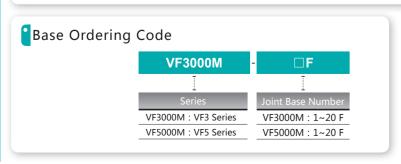


VF5120



VF3230

Model	VF3130	VF3230	VF33(4/5)30	VF5120	VF5220	VF53(4/5)50
Valve Type	5/	2 way	5/3 way	5/	2 way	5/3 way
Effective Cross Section Area	16 mm² (	CV = 0.89)	12mm²(CV=0.67)	25 mm² (	CV = 1.40)	18 mm <sup>2</sup> (CV=1.00)
Working Medium			40 Micron	Filtered Air		
Operation			Interna	l Piloted		
Working-pressure	0.15 ~ 0.8 MPa					
Max. Test Pressure	1.2 MPa					
Ambient Temperature	-20∼70°C					
Operating Voltage Tolerance	± 10%					
Power Consumption	AC: 5.5 VA DC: 4.8 W					
Protect Class	F Class, IP 65					
Wiring / Connector	Cable / Lead Wire or DIN Connector					
Switching Frequency	5 Cycles / Sec.					
Response Time	0.05 Sec.					



#### 

# VF Series Solenoid Valve

Valve <sub>J4V</sub>

J4V100

J4V200

J4V300

J4V400

Manifold

JSY

5JV

MCS

JVT307 JEL

MVSD

NAMUR

551

JEL10

3VJZF

Diaphragm

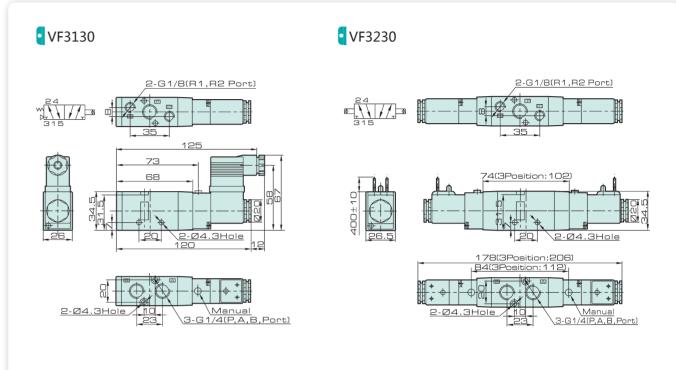
JELVD

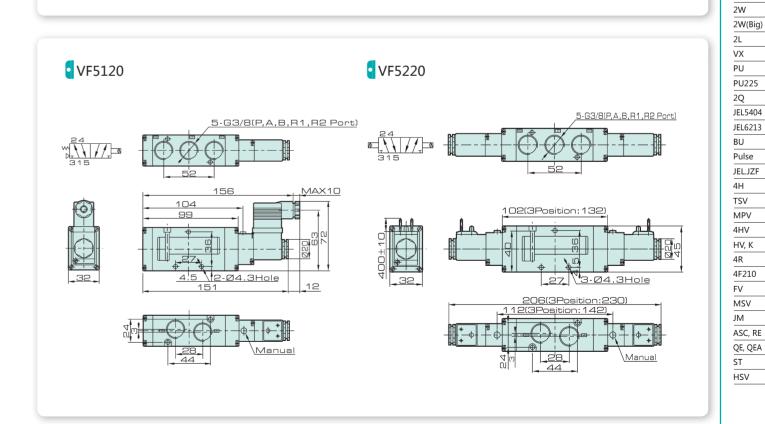
3V1

Coil

2V







# **VF** Series

Solenoid Valve

**JELPC**®

Overall Dimension

VF3000M

Valve

J4V100

J4V200

J4V300 J4V400

5V Manifold

JSY

5JV

MCS JVT307

JEL

MVSD

ВМ

551 JEL10

3VJZF

Diaphragm

JELVD

3V1

Coil

2P

2V

2W

2L VX

PU

2Q

BU

4H

TSV

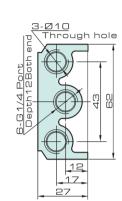
4R

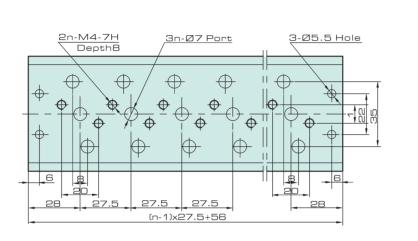
FV

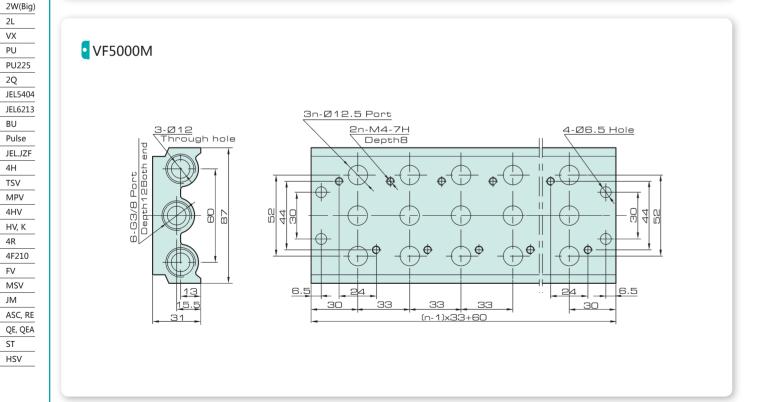
JM

ST

J4V







### **BM Series** Solenoid Valve



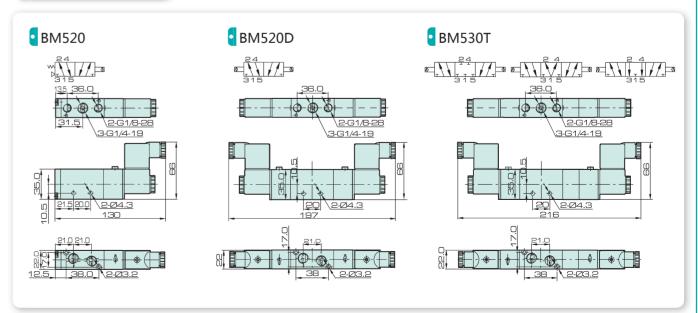
Ordering Code 520 Blank: Single coil and double position 530: 5/3 way D: Double coils and double position T: Double coils triple position

#### Specification

BM520D

Model	BM520	BM520D	BM520T	
Valve Type	5/2	way	5/3 way	
Effective Cross Section Area	16 mm²(	CV=0.89)	12 mm <sup>2</sup> (CV=0.67)	
Working Medium	40	Micron Filt	ered Air	
Operation		Internal Pil	oted	
Working-pressure		0.15 ~ 0.8 MPa		
Max. Test Pressure	1.2 MPa			
Max. Ambient Temperature	-20∼70℃			
Operating Voltage Tolerance	± 10%			
Power Consumption	AC:	5.5 VA D	C: 4.8 W	
Protect Class	F Class, IP 65			
Wiring / Connector	Cable / Lead Wire or DIN Connector			
Switching Frequency	5 Cycles / Sec.			
Response Time	0.05秒			

Overall Dimension



Valve J4V

J4V100 J4V200 J4V300 J4V400 Manifold JSY 5JV MCS JVT307

MVSD

NAMUR JEL10 3VJZF Diaphragm JELVD 3V1 Coil 2W 2W(Big)

> PU225 2Q JEL5404 JEL6213 BU Pulse JEL.JZF

HV, K 4F210

MSV ASC, RE

# **NAMUR Series**

Valve

Valve

J4V100

J4V200

J4V300

J4V400

Manifold

5V

JSY

5JV

MCS

JEL

VF

BM

551

JEL10

3VJZF

JELVD

3V1

Coil

2P

2V

2W

2L VX

PU

2Q

PU225

JEL5404

JEL6213 BU

Pulse

JEL.JZF 4H TSV MPV

4HV

HV, K 4R

4F210

FV

MSV JM

ASC, RE QE, QEA ST

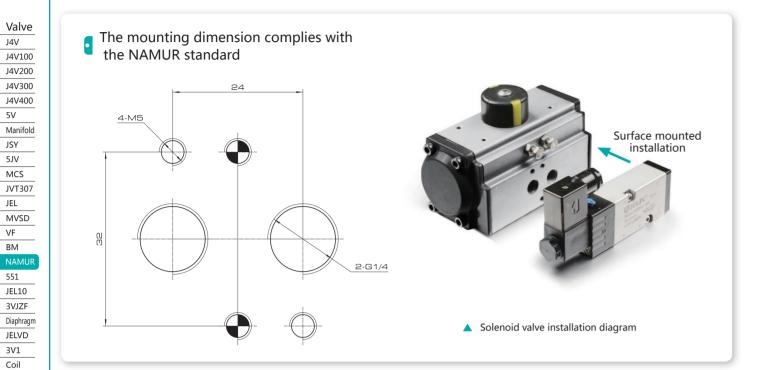
2W(Big)

JVT307

MVSD

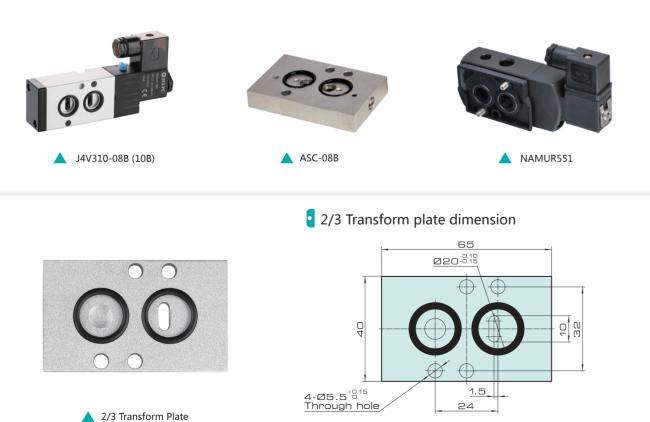
J4V





Comply with the NAMUR standard Products

(for J4V310-08B)



### 551 Series Solenoid Valve

Valve J4V

J4V100

J4V200

J4V300

J4V400

Manifold

JSY

5JV

MCS

JVT307 JEL

MVSD

VF

BM

NAMUR

JEL10 3VJZF

Diaphragm

JELVD

3V1

Coil

2V

2W

VX

PU225

JEL6213

JEL.JZF

HV, K

4F210

MSV

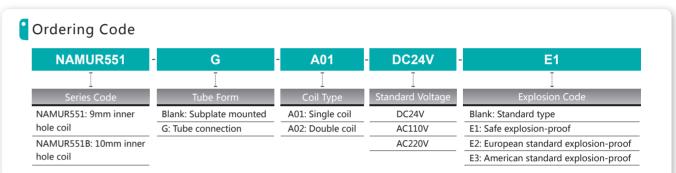
ASC, RE

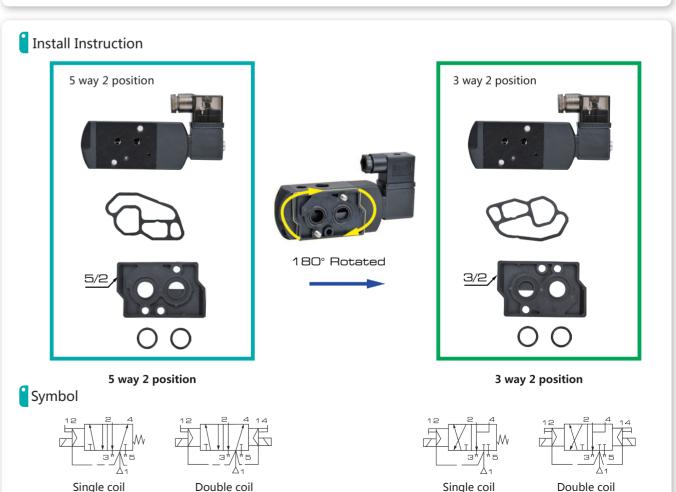
2Q JEL5404

BU Pulse

2W(Big)







# 551 Series

Solenoid Valve



Specification

Valve

J4V100

J4V200

J4V300 J4V400 5V Manifold

JSY 5JV

MCS

JVT307 JEL

MVSD VF BM

JEL10 3VJZF

Diaphragm JELVD

3V1 Coil 2P

2V 2W

2L VX

PU

2Q

BU

Pulse

JEL.JZF 4H

TSV MPV

4HV HV, K

4R 4F210

FV MSV JM ASC, RE QE, QEA ST

PU225

JEL5404

JEL6213

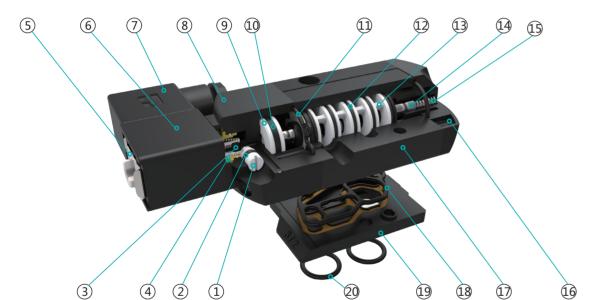
J4V

Working Pressure	2-10bar
Max Pressure	10bar
Flow Rate	700L/min
Medium	Air, Clean air
Ambient Temperature	-25℃ to +60℃
Seal	NBR+PUR
Port Size	Inlet=G1/4" Exhaust=G1/8"

Feature

Coil Power	DC 3W; AC 4VA
Standard Voltage	DC24V; AC220V
Voltage Tolerance	±10%
Insulation Class	F
Protect Class	IP65
Operation	100%

Internal Structure

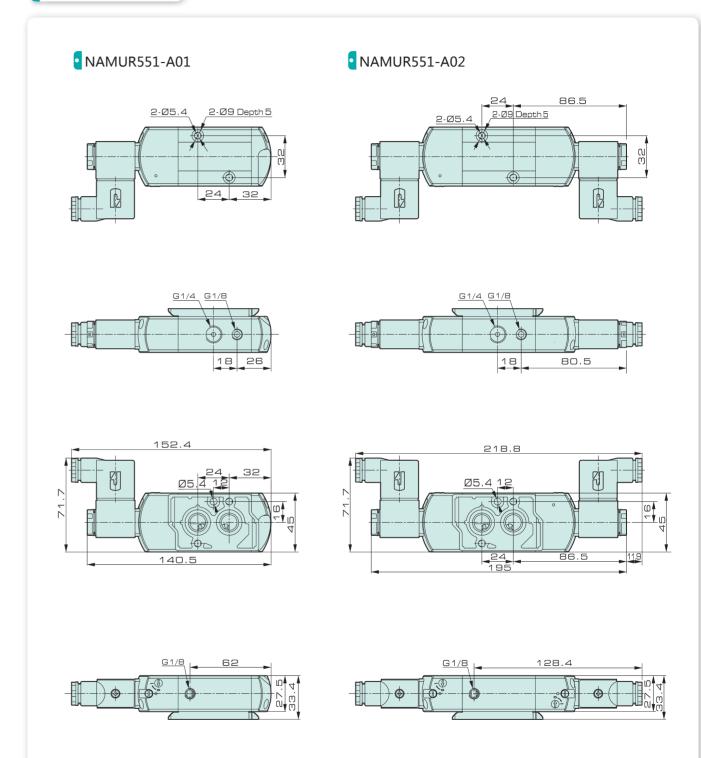


Parts

Number	Name	Number	Name
1	Mannual Ride Spindle	11	Seal
2	O ring	12	O ring
3	Seal	13	Sleeve
4	Spring	14	Spool
5	Clip	15	Spring
6	Coil	16	End-cap
7	Terminal	17	Body
8	Pilot Set	18	Seal
9	Piston	19	Corverting Plate
10	Piston Seal	20	O ring

# 551 Series Solenoid Valve

Overall Dimension



Valve

J4V

J4V100

J4V200

J4V300

J4V400

5V

Manifold

JSY

5JV

MCS

JSY 5JV MCS JVT307 JEL MVSD VF

BM NAMUR 551 JEL10 3VJZF

JELVD
3V1
Coil
2P
2V
2W
2W(Big)
2L
VX
PU
PU225
2Q
JEL5404

JEL6213
BU
Pulse
JELJZF
4H
TSV
MPV
4HV

HV, K

4R

4F210

FV

MSV

JM

ASC, RE

# **JEL10 Series**

Mini Solenoid Valve



### JEL10 Series Mini Solenoid Valve

Valve

J4V200

J4V300

J4V400

Manifold

JSY

5JV

MCS

JVT307

MVSD

NAMUR

3VJZF

Diaphragm

JELVD

3V1

Coil

2W

2W(Big)

PU225

JEL6213

2Q JEL5404

BU

Pulse

JEL.JZF

HV, K

4F210

MSV

ASC, RE

QE, QEA

J4V J4V100



#### Features

of  $\pm$  0.005.

Valve

J4V100

J4V200 J4V300

J4V400

Manifold

5V

JSY

5JV MCS

JVT307

JEL MVSD

VF BM

551

3VJZF

Diaphragm JELVD

3V1

Coil

2P

2V

2W

2L

VX

PU

PU225 2Q

JEL5404

JEL6213

BU

Pulse

JEL.JZF 4H TSV MPV

4HV HV, K

4R

FV

MSV JM

ASC, RE

QE, QEA

4F210

2W(Big)

J4V

- 1. Body material import DuPont high-strength nylon from U.S. with low water absorption and wide temperature range from -40  $^{\circ}$ C ~120  $^{\circ}$ C , to ensure dimensional stability.
- 2. Coil Import lacquer wire from Germany and wind by high precise winding machine to be sure consistency. To use special plastic coating machine and moulds from Germany with segmented pressure control technology for temperature to reach critical dimension within a tolerance
- 3. Seal main seal using deformation resistance of fluoro rubber imported from Japan, so that the entire valve temperature resistance can be -20 ° c ~100 ° c
- 4. Structure non-tube structure with the high-strength

- skeleton material of high and low temperature resistance, low coefficient of anti-friction.
- 5. Assembly semiautomatic assembly, with specially dedicated fixture to get theconsistency, more than 95% of assembly quality rate.
- 6. Leakage Inspection 100% of automatic and manual test for leakage, and total internal and external leakage is less than 2ml/min.
- 7. Through this series of materials, processes and equipment guarantee, JEL10 miniature solenoid valve can be up to 100 million life times. The valve is mostly used in the textile industry, the medical device industry and the electronic industry.

#### Ordering Code **JEL** 10 1.2W A: DC24V 1:300mm L:L B: DC12V 3: Ribbon wire 300mm 4 : Ribbon wire 600mm 5 : Optional

#### Coil Specification Specification

Model	JEL10	
Туре	3/2 Normal close	
Fluid	Air, inert gas	
Ambient And Fluid Temp.	-10℃ ~ +75℃	
Working Pressure	0 ~ 7bar	
Port Size	Ф0.7mm	
$P \rightarrow A$	CV:0.008	
F 7A	b:0.11	
A  o R	CV:0.015	
A 'N	b:0.35	
Lubrication	Without	

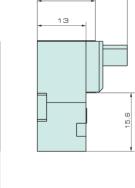
Wiring	Vertical (L) Horizontal (M)
*Standard Voltage	DC24V / 12V
Voltage Pulsation	±10%
Power	1.2W
Insulation Grade	Н
Life Cycle	>5000million times
Indicator	LED
Working Frequency	>30Hz
Response Time	6~8ms
Protection	Dust-proof

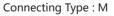
\*Note: The valve won't work when polarity reversed.

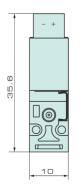
#### Overall Dimension

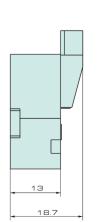


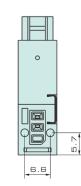
#### Connecting Type: L











# **3VJZF Series**

3/2 Way Stop Solenoid Valve



**JELPC**®

Valve J4V J4V100 J4V200 J4V300 J4V400 5V Manifold JSY 5JV MCS JVT307 JEL MVSD VF BM 551 JEL10 Diaphragm JELVD 3V1 Coil

2P

2V

2W

2W(Big) 2L VX PU

PU225

JEL5404

JEL6213

2Q

BU

Pulse

JEL.JZF 4H TSV

MPV 4HV

HV, K

4R 4F210

FV

MSV

JM

ST

ASC, RE

QE, QEA

Specification

Material of Body



3AJZF-15 3VJZF-25

#### Ordering Code **AC110V** AS DC12V DC24V LD: Brown with light terminal 3V: 3/2 way solenoid valve 10: G3/8" 3A: 3/2 way air pilot valve A: Air pilot valve 15: G1/2" AS: External Piloted AC24V 50Hz/60Hz W: Lead wire 20: G3/4" AC110V 50Hz/60Hz 25: G1" AC220V 50Hz/60Hz AC380V 50Hz/60Hz

#### Working Medium Operation Stop Type 25 mm Orifice 16 mm 25 mm 16 mm G1/2", G3/8" G1", G3/4" G1/2", G3/8" G1", G3/4" Port Size Working-pressure 0 ~ 1.0 MPa Max. Test Pressure 1.5 MPa Operating Voltage Tolerance ± 10%

Aluminum

#### 

# 3VJZF Series •

Valve J4V

J4V100

J4V200

J4V300

J4V400

Manifold

JSY

5JV

MCS

JVT307 JEL

MVSD

BM

NAMUR

JEL10

Diaphragm

JELVD

Coil

2W

2W(Big)

PU225

JEL5404

JEL6213

2Q

BU

Pulse

JEL.JZF

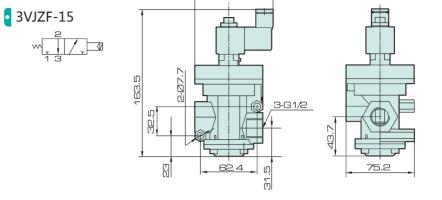
HV, K

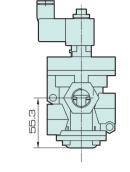
4F210

MSV

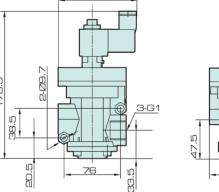
3/2 Way Stop Solenoid Valve

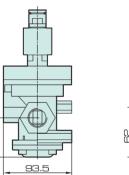
#### Overall Dimension

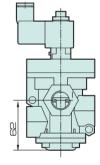




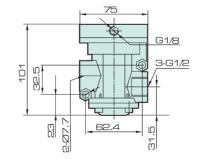


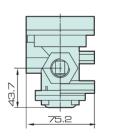


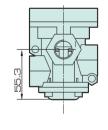






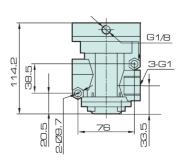


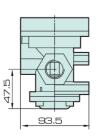


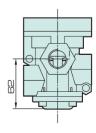












# **JEL Series**



Diaphragm Solenoid Valve

JEL-MP-08-FB2.8W/1.5W

Valve J4V J4V100 J4V200 J4V300 J4V400 5V Manifold JSY 5JV MCS JVT307 JEL MVSD VF BM NAMUR 551 JEL10 3VJZF

JELVD 3V1 Coil 2P 2V 2W 2W(Big) 2L VX PU PU225 2Q JEL5404 JEL6213

BU Pulse JEL.JZF 4H TSV MPV 4HV HV, K 4R 4F210 FV MSV JM ASC, RE QE, QEA ST

JEL-MP-08-BJSR





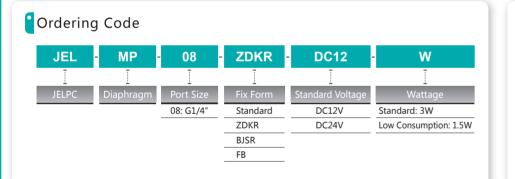
JEL-MP-08

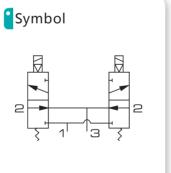
JEL-MP-08-ZDKR

New practical national patent (Patent number: ZL03255648.9) Awarded national new excellent product Low pressure system valve for medical application Special fomular silicone for longer service life.

#### Features

- 1. Adopt new processing, improved inner hole roughness.
- 2. Adopt specially formulated silicone to increase of service life.
- 3. To import German high standard special grease which provides
- film in order to reduce the friction.
- 4. Valve spool material use soft magnetic stainless steel from German, increase the magnetic properties and reduce the coil power to 30%.





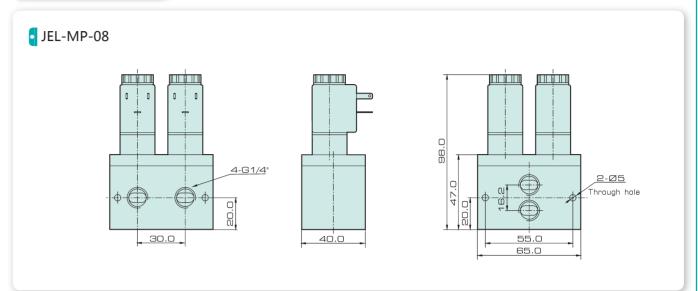
#### Specification

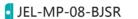
Model	JEL-MP-08
Valve Type	4/2 Way
Working Medium	40 Micron Filtered Air
Operation	Internal Piloted
Working-pressure	0.08 ~ 0.35 MPa
Ambient Temperature	-5 ~ 80 ℃
Protection Class	F Class, IP 65

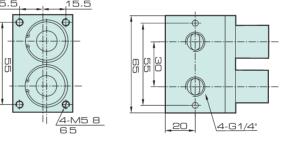
#### 

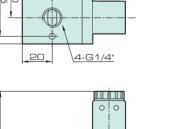
# JEL Series • Diaphragm Solenoid Valve

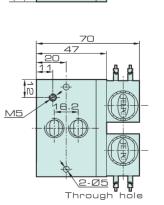
#### Overall Dimension

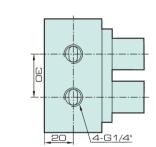




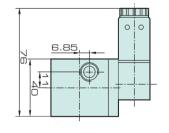


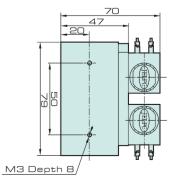






JEL-MP-08-ZDKR





Valve J4V J4V100 J4V200 J4V300 J4V400 Manifold JSY 5JV

MCS JVT307 MVSD BM NAMUR

> 551 3VJZF JELVD

2W(Big) PU225 2Q JEL5404 JEL6213

Pulse JEL.JZF HV, K

4F210 MSV ASC, RE

# JELVD Series

**APPL:** 201320234298.3

**Rotary Valve** 



# **JELVD Series Rotary Valve**

Valve

J4V100 J4V200 J4V300 J4V400 5V Manifold JSY 5JV MCS

JVT307

J4V

JEL MVSD VF BM 551 JEL10 3VJZF Diaphragm

3V1 Coil 2P 2V 2W 2W(Big) 2L VX PU PU225 2Q JEL5404 JEL6213 BU

Pulse

JEL.JZF 4H TSV

4HV HV, K

4R 4F210

FV

MSV

JM ASC, RE QE, QEA Features

1. Body with ceramic sliding structure to be abrasive and long service life.

2. Be able to work with 0 pressure or small flow condition with synchronous motor, without starting pressure.

3. To optimize internal structure to be max flow to satisfy with operating requirements of 0.5 ~ 5L/min oxygen concentrator.

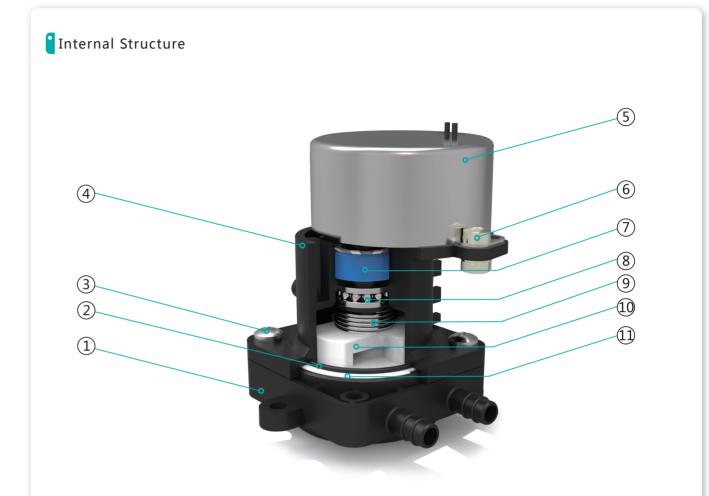
4. Low consumption, to save energy.





#### Specification

Valve type	JELVD Rotary Valve
Fluid	40μm filtered air
Working pressure	0~0.25MPa
Max pressure	0.4MPa
Speed	5r/min 8r/min (optional)
Flow feature	Input: 0.2MPa, Output: 0.1MPa 360L/min ( ANR )
Ambient and fluid temperature	-5 ∼ +80°C (non-frozen)
Fixing form	Optional
Main parts material	6061, PA6, Silicon rubber, NBR, 304
Voltage	AC220V 50Hz
Voltage tolerance	±10%
Humidity	RH20% ~ 80%
Un-loading consumption	≤3W
Insulation grade	E



#### Parts

Number	Name	Number	Name
1	End cap	7	Coupling
2	O ring	8	Bearing
3	Screw	9	Spring
4	Top body	10	Top disc
5	Motor	11	Bottom disc
6	Screw		

Valve J4V J4V100 J4V200 J4V300 J4V400 Manifold JSY 5JV MCS

JVT307 MVSD BM NAMUR

> 3VJZF Diaphragm

2V 2W 2W(Big) PU225 2Q JEL5404 JEL6213 BU

Pulse JEL.JZF HV, K 4F210

MSV JM ASC, RE

# **JELVD Series**

**Rotary Valve** 

Valve

J4V100

J4V200

J4V300 J4V400

Manifold JSY

5V

5JV

MCS

JEL

BM

551

JEL10

3VJZF

Diaphragm

3V1 Coil

2P 2V 2W

2L

VX

PU PU225

2Q

BU

Pulse

JEL.JZF 4H

TSV MPV 4HV

HV, K 4R 4F210

FV

MSV

ASC, RE QE, QEA ST

JEL5404

JEL6213

2W(Big)

JVT307

MVSD VF

J4V

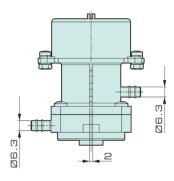


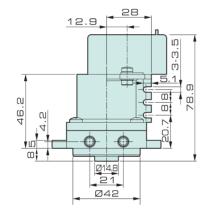
# 3V1 Series Solenoid Valve

Overall Dimension

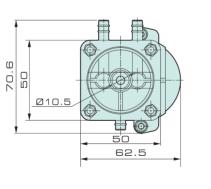
JELVD-J1

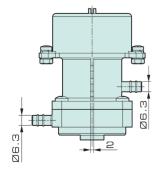
58 Ø4.5 Ø10.5 62.5

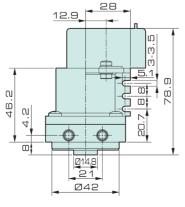




JELVD-J2







DERME SONGE DESCRIPTION OF THE PROPERTY OF THE





3V1-06-4F

3V1-06

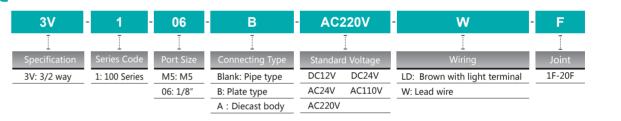
3V1-06A-2F

#### Features

- 1. We guarantee inner hole roughness within our new processing.
- 2. Can be assembling with many joints.

3. To import German soft magnetic stainless steel to improve the magnetic performance and reduce coil capacity 30%.

Ordering Code



Note: Normal Open 3V1 valve' voltage only assembly DC24V 6.5W Coil

#### Specification

Model	3V1-M5	3V1-06(B/A)-NC	
Working Medium	40 Micron Filtered Air		
Operation	Direct		
Port Size	M5 1/8" (Without or G1/8")		
Ambient Temperature	-1	L0∼+60°C	
Gas Temperature		5 ~ 60°C	
Air Outlet Diameter		1.0mm	
Lubrication	No	ot Required	
Working-pressure	0~0.8 MPa		
Max. Test Pressure	1.2 MPa		
Power Consumption	AC: 5.5VA DC: 4.8W		
Protect Class	IP65		
Wiring / Connector	Cable / Lead Wire or DIN Connector		
Material of Body	Aluminum Alloy		
Switching Frequency	10 Cycles / Sec.		
Insulation	F Class		
Operating Voltage Tolerance	±10%		
Response Time	0.05 Sec.		
Flow Aperture	Ø1mm		

id Valve

Valve
J4V
J4V100
J4V200
J4V300
J4V400
5V
Manifold
JSY
5JV

MCS
JVT307
JEL
MVSD
VF
BM
NAMUR

551
JEL10
3VJZF
Diaphragm
JELVD

Coil
2P
2V
2W
2W(Big)
2L
VX

PU225 2Q JEL5404 JEL6213

BU
Pulse
JEL.JZF
4H
TSV
MPV
4HV

HV, K 4R 4F210 FV MSV JM

JM
ASC, RE
QE, QEA
ST

# **3V1 Series**

Solenoid Valve

Internal Structure





2P 2V 2W 2W(Big) 2L VX PU PU225 2Q JEL5404 JEL6213 BU Pulse JEL.JZF 4H TSV

MPV

4HV

HV, K

4R 4F210

FV

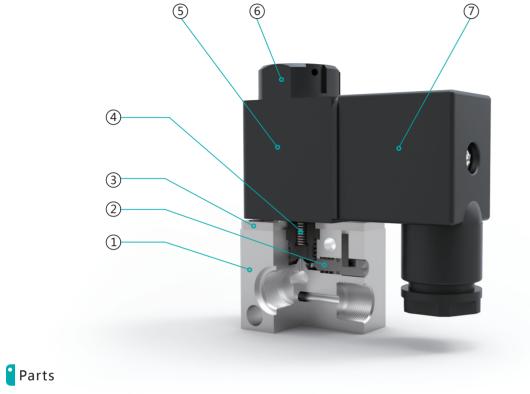
MSV

JM

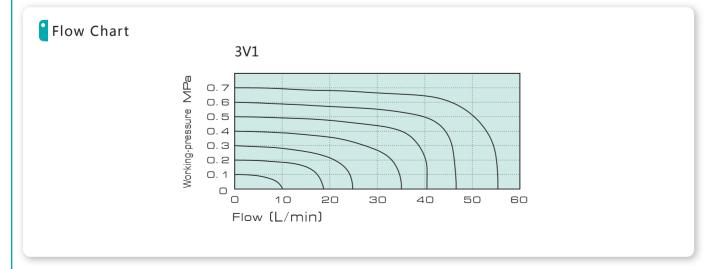
ST

ASC, RE

QE, QEA

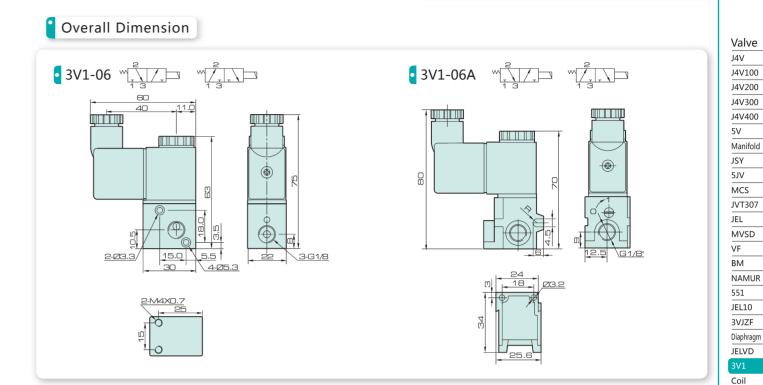


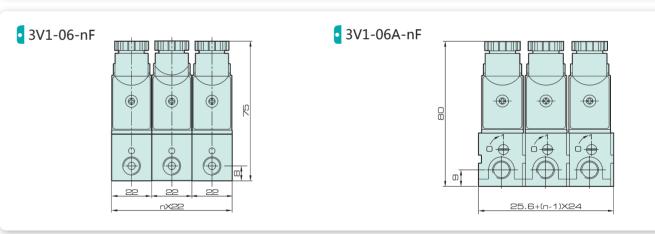
Number	Name	Number	Name
1	Valve body	5	Coil
2	Mannual ride spindle	6	Coil nut
3	Connecting part	7	Terminal
4	Solenoid plunger		

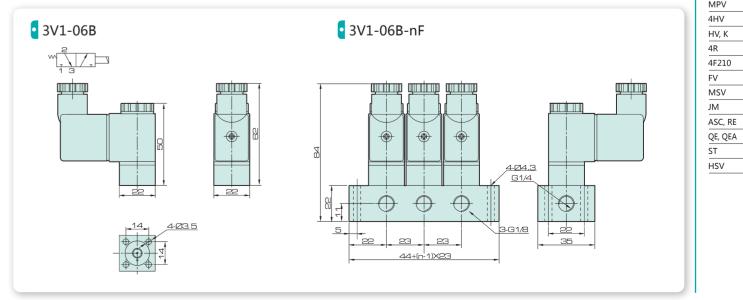


#### 

# **3V1 Series** Solenoid Valve







1-|P63

2W(Big) 2L VX PU

PU225

JEL5404

JEL6213

2Q

BU

Pulse

JEL.JZF

# Coil, Seal Ring



2P Series

2/2 Way Solenoid Valve (Direct Operated)

### Coil

Valve

J4V100 J4V200

J4V300

J4V400

Manifold JSY

5V

5JV

MCS JVT307

JEL

VF

BM

551

JEL10 3VJZF

Diaphragm

JELVD

Coil

2P

2V

2W

2L

VX

PU

2Q

BU

Pulse

JEL.JZF

4H

TSV

MPV 4HV

HV, K

4F210

4R

FV

MSV

JM

ST

ASC, RE

QE, QEA

PU225

JEL5404

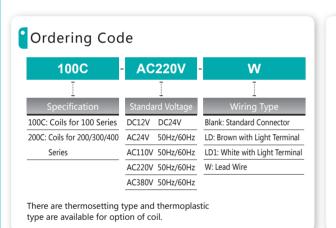
JEL6213

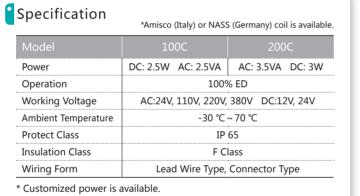
2W(Big)

MVSD

J4V





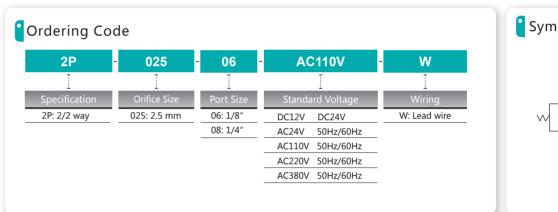


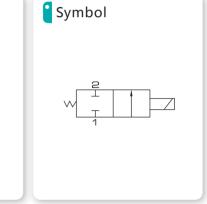
### Seal Ring

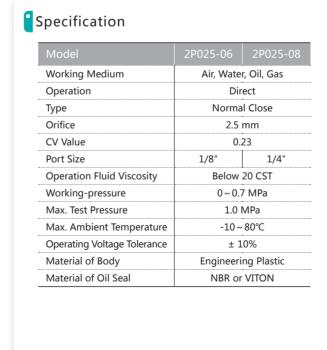


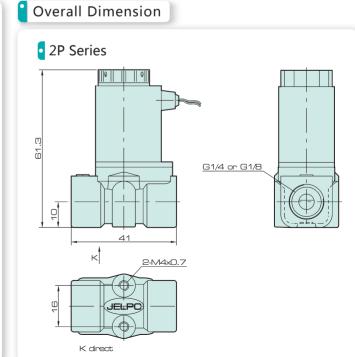


2P025-08-W









J4V300 J4V400 Manifold JSY 5JV MCS JVT307 JEL MVSD VF BM NAMUR 551 JEL10 3VJZF Diaphragm 2W(Big) VX

Valve

J4V200

J4V J4V100

PU225
2Q
JEL5404
JEL6213
BU
Pulse
JELJZF
4H
TSV
MPV
4HV
HV, K

4HV HV, K 4R 4F210 FV MSV JM ASC, RE QE, QEA

# **2V Series**

2/2 Way Solenoid Valve



2V010-M4-W

Valve

J4V100

J4V200 J4V300

J4V400

Manifold JSY

5V

5JV

MCS

JEL

VF

BM NAMUR

551

JEL10

3VJZF Diaphragm

JELVD

3V1 Coil 2P

2W

2L

VX

PU

2Q

BU

Pulse

JEL.JZF

4H

TSV

MPV

4HV

HV, K

4F210

4R

FV

MSV

JM

ST

ASC, RE

QE, QEA

PU225

JEL5404

JEL6213

JVT307

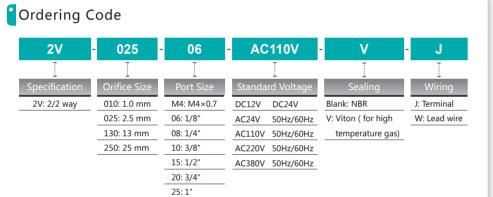
MVSD

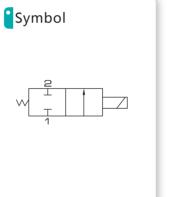
J4V







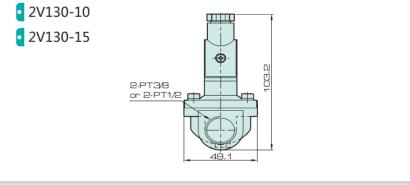


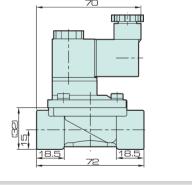


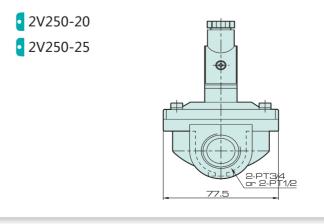
#### Specification Air, Water, Oil Working Medium Operation Direct Internal piloted Normal Close 25mm Orifice 1.0mm 2.5mm 13mm CV Value 0.04 0.23 6.2 23 M4×0.7 1/8" 3/8" 1/2" 3/4" Operation Fluid Viscosity Below 20 CST 0.05 ~ 0.7 MPa Working-pressure Max. Test Pressure 1.6MPa 1.0MPa -10 ~ 80°C Max. Ambient Temperature ± 10% Operating Voltage Tolerance IP 65 **Protect Class Power Consumption** AC: 6.5 VA DC: 6.5 W F Class Insulation Aluminum or Brass (Nickel Plated) Material of Body Brass Material of Oil Seal NBR Or VITON NBR Or VITON Response Time 0.05 Sec.

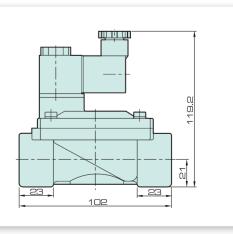
**2V Series** 2/2 Way Solenoid Valve











Valve J4V J4V100 J4V200 J4V300 J4V400 Manifold JSY 5JV MCS JVT307 JEL MVSD BM NAMUR 551 JEL10 3VJZF Diaphragm JELVD

> PU225 2Q JEL5404 JEL6213 BU Pulse JEL.JZF

### **2W Series**

Valve

J4V100

J4V200

J4V300

J4V400 5V Manifold

JSY 5JV MCS JVT307

JEL

VF

BM

551

JEL10

3VJZF

Diaphragm

JELVD

3V1 Coil 2P

2V

2L

VX

PU

2Q

BU

Pulse

JEL.JZF 4H TSV

4HV

HV, K 4R 4F210

FV

MSV JM

ASC, RE QE, QEA ST

PU225

JEL5404

JEL6213

2W(Big)

MVSD

J4V

2/2 Way Solenoid Valve (Direct Operated)



# 2W (Large Port) Series 2/2 Way Solenoid Valve (Direct Operated)



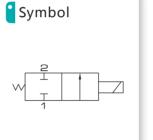


2W025-08-W

2W040-10-W

#### Ordering Code

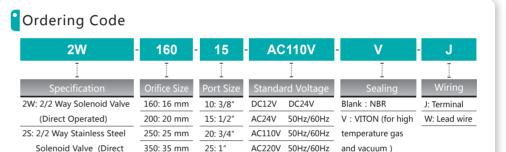
3					
2W	025	08	AC110V	E	- J
<u>.</u>	Ī	Ī	Ī	Ī. 	Ī
Specification	Orifice Size	Port Size	Standard Voltage	Sealing	Wiring
2W: 2/2 way brass body	012: 1.2mm	M4: M4×0.7	DC12V DC24V	Blank: NBR	J: Terminal
2WH: 2/2 way brass body	020: 2mm	06: 1/8"	AC24V 50Hz/60Hz	E: EPDM (for steam)	W: Lead wire
high pressure	025: 2.5mm	08: 1/4"	AC110V 50Hz/60Hz	V: VITON (for high	
2S: 2/2 way stainless steel body	040: 4mm	10: 3/8"	AC220V 50Hz/60Hz	temperature gas	
2SH: 2/2 way stainless steel body high pressure			AC380V 50Hz/60Hz	and vacuum )	



#### Specification

Model	2W025-06	2W025-08	2W040-10	2WH012-06	2WH012-08	2WH020-10
Model	2\$025-06	2\$025-08	2S040-10	2SH012-06	2SH012-08	2SH020-10
Working Medium		Air, Water, Oil, Ga	S		Air, Water, Oil	-
Operation			Dir	rect		•
Туре		•	Norma	al Close		
Orifice	2.5	mm	4 mm	1.2	mm	2 mm
CV Value	0.	0.23 0.60		0.05		0.15
Port Size	1/8"	1/4"	3/8"	1/8"	1/4"	3/8"
Operation Fluid Viscosity			Below	20 CST		
Working-pressure		0~0.7 MPa	-		0 ~ 2.0 MPa	
Max. Test Pressure		1.0 MPa	-	3.5 MPa		
Max. Ambient Temperature		-10∼80 ℃				
Operating Voltage Tolerance		± 10%				
Material of Body		2W: Brass 2S: Stainless Steel				
Material of Oil Seal			NBR, EPDN	or VITON		





AC380V 50Hz/60Hz

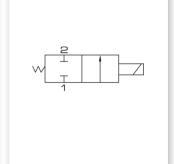
35: 1<sup>1</sup>/4"

40: 1<sup>1</sup>/2"

50: 2"

400: 40 mm

500: 50 mm



Symbol

#### Specification

\* In addition normally open optional.

Operated)

Madal	2W160-10	2W160-15	2W200-20	2W250-25	2W350-35	2W400-40	2W500-50
Model	2S160-10	2S160-15	2S200-20	2S250-25	2S350-35	2S400-40	2S500-50
Working Medium			-	Air, Water, Oil		-	
Operation			•••	Direct	••••		
Туре		•	Normal Close	e ( Normal ope	en optional )		
Orifice	16	mm	20 mm	25 mm	35 mm	40 mm	50 mm
CV Value	4	.8	7.6	12	24	29	48
Port Size	3/8"	1/2"	3/4"	1"	1 <sup>1</sup> /4"	1 <sup>1</sup> /2"	2"
Operation Fluid Viscosity				Below 20 CST		-	
Working-pressure		Air	0~0.7 MPa; V	Vater 0 ~ 0.5 MF	Pa; Oil 0 ~ 0.5 M	Pa	
Max. Test Pressure		•		1.0 MPa			
Max. Ambient Temperature		-10∼80 ℃					
Operating Voltage Tolerance		± 10%					
Material of Body		2W: Brass 2S: Stainless Steel					
Material of Oil Seal			NBF	R, EPDM or VIT	ON		

Valve J4V J4V100 J4V200 J4V300 J4V400 Manifold

JSY 5JV MCS JVT307 JEL MVSD VF BM NAMUR

551 JEL10 3VJZF Diaphragm JELVD

PU225 2Q JEL5404 JEL6213 BU

Pulse JEL.JZF HV, K 4F210

MSV ASC, RE

# 2W (Large Port) Series 2/2 Way Solenoid Valve (Direct Operated)



Overall Dimension

Valve

J4V100

J4V200

J4V300

J4V400

5V Manifold

JSY

5JV

MCS JVT307

JEL

BM

551 JEL10

3VJZF

Diaphragm

JELVD

3V1

Coil 2P

2L VX PU PU225

2Q

BU

Pulse

JEL.JZF 4H

TSV MPV 4HV

HV, K 4R 4F210

FV

MSV JM ASC, RE

QE, QEA ST

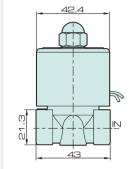
JEL5404

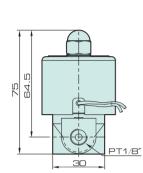
JEL6213

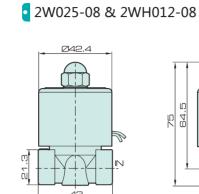
MVSD VF

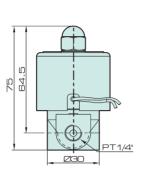
J4V

2W025-06 & 2WH012-06

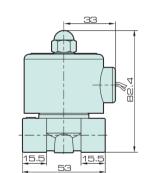


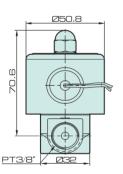


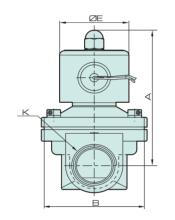




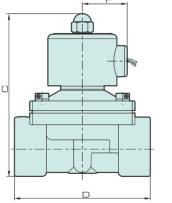
2W040-10 & 2WH20-10







2W Big Caliber

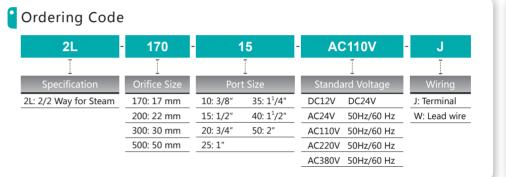


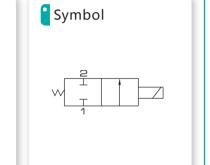
#### Dimension

Model	A		С	D			
2W160-10	101.5	57	117	69	50	36	PT3/8"
2W160-15	101.5	57	117	69	50	36	PT1/2"
2W200-20	107	57	123.5	73	50	36	PT3/4"
2W250-25	111.5	73.5	134.5	99	50	36	PT1"
2W350-35	142	95	172	123	70.5	56	PT1 <sup>1</sup> /4"
2W400-40	142	95	172	123	70.5	56	PT1 <sup>1</sup> /2"
2W500-50	172	123	209	168	70.5	56	PT2"

# 2L Series 2/2 Way Solenoid Valve

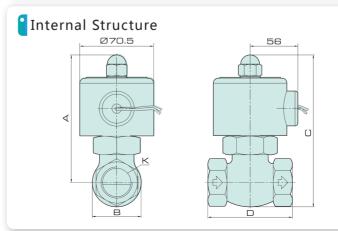






#### Specification

Model	2L170-10	2L170-15	2L170-20	2L200-25	2L300-35	2L300-40	2L500-50	
Working Medium		2		Air, Water, Stear	n		•	
Operation				Direct	•			
Туре		•	•	Normal Close	•	•	•	
Orifice		17 mm		22 mm	30	mm	50 mm	
CV Value		4.8	•	12	2	0	48	
Port Size	3/8"	1/2"	3/4"	1"	1 <sup>1</sup> /4"	1 <sup>1</sup> /2"	2"	
Operation Fluid Viscosity		***************************************	de	Below 20 CST	de	•	•	
Working-pressure				0.1 ~ 1.5 MPa				
Max. Test Pressure		•	•	2.25 MPa	•	•	•	
Max. Ambient Temperature		-10∼180 ℃						
Operating Voltage Tolerance		± 10%						
Material of Body		Brass						
Material of Oil Seal		-	-	PTFE	-	-	•	



#### Dimension

Model	А		С	D	K
2L170-10	125	42	146	82	PT3/8"
2L170-15	125	42	146	82	PT1/2"
2L170-20	125	42	146	82	PT3/4"
2L200-25	136	52	162	90.5	PT1"
2L300-35	148	74	185	111	PT1 <sup>1</sup> /4"
2L300-40	148	74	185	111	PT1 <sup>1</sup> /2"
2L500-50	176	86	223	163	PT2"

Valve J4V J4V100 J4V200 J4V300 J4V400 Manifold JSY 5JV MCS JVT307

JEL MVSD BM NAMUR JEL10

3VJZF Diaphragm JELVD Coil

PU225 2Q JEL5404

JEL6213 BU Pulse JEL.JZF

HV, K 4F210 MSV JM ASC, RE

QE, QEA ST HSV

# VX Series

Valve

J4V100

J4V200

J4V300 J4V400

5V Manifold

JSY

5JV

MCS

JEL

VF

BM

551 JEL10

3VJZF

Diaphragm

JELVD

3V1

Coil

2P

2V

2W

2L

PU PU225

2Q

JEL5404

JEL6213 BU

Pulse

JEL.JZF 4H TSV MPV 4HV

HV, K 4R

4F210

FV

MSV

JM

ST

ASC, RE

QE, QEA

2W(Big)

MVSD

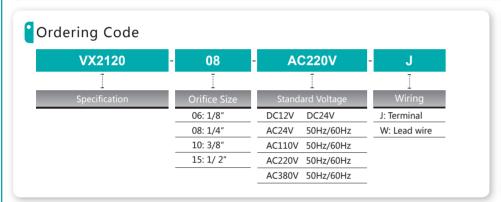
JVT307

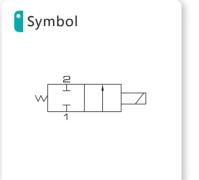
J4V

2/2 Way Solenoid Valve (Direct Operated)



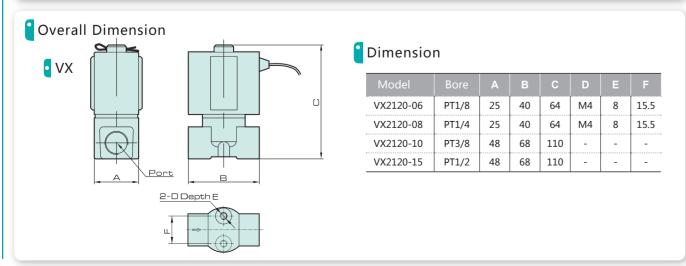
VX2120-08-W VX2120-15-W





#### Specification

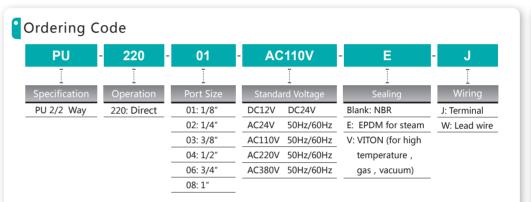
Model	VX2120-06	VX2120-08	VX2120-10	VX2120-15	
Working Medium		Air, Wat	er, Steam		
Operation		Dir	rect		
Туре		Norma	al Close		
Max. Test Pressure		1.05	MPa		
Working-pressure		0 ~1.	0 MPa		
Orifice	3 r	nm	13 r	nm	
Port Size	1/8"	1/4"	3/8"	1/2"	
Max. Ambient Temperature	-10~		-10∼80 ℃		
Material of Oil Seal	VITON NBR			3R	



# **PU Series**

2/2 Way Solenoid Valve (Direct Operated)

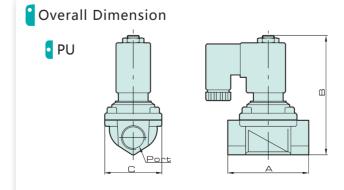




# Symbol

#### Specification

Model	PU220-01	PU220-02	PU220-03	PU220-04	PU220-06	PU220-08	
Working Medium		-	Air, Wa	ater, Oil	-		
Operation			Dir	ect	•	•	
Туре			Norma	al Close	•	•	
Orifice	1.5mm	2.3mm	8.0mm	13mm	20mm	25mm	
CV Value	0.10	0.18	1.00	4.00	8.60	11.00	
Port Size	1/8"	1/4"	3/8"	1/2"	3/4"	1″	
Operation Fluid Viscosity			Below	50 CST			
Working-pressure		0~0.7 MPa					
Max. Test Pressure		1.05 MPa					
Max. Ambient Temperature		-10 ~ 80 ℃					



#### Dimension

	Model	Bore	А	В	С
•	PU220-01	PT1/8	22	72	22
	PU220-02	PT1/4	35	75.5	25.4
	PU220-03	PT3/8	55	79.5	30
	PU220-04	PT1/2	66.5	101	48
	PU220-06	PT3/4	71	107	48
	PU220-08	PT1	96	120	70

Valve J4V J4V100 J4V200 J4V300

J4V400 Manifold JSY 5JV MCS JVT307 MVSD

VF BM NAMUR 551 JEL10 3VJZF Diaphragm JELVD 3V1

2W 2W(Big)

Coil

PU225 2Q JEL5404 JEL6213

BU Pulse JEL.JZF HV, K

4F210 MSV

ASC, RE QE, QEA

# **PU Series** Solenoid Valve (For Steam)

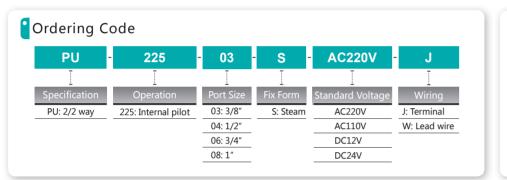


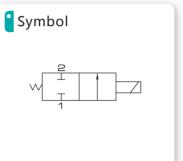
### **PU225 Series** Solenoid Valve

PU225-04S-J









#### Specification

Valve

J4V200

J4V300

J4V400 5V Manifold

JSY 5JV

MCS

JVT307 JEL

MVSD

VF

BM

551 JEL10 3VJZF Diaphragm

JELVD

3V1

Coil

2W(Big)

2L

VX PU PU225 2Q JEL5404

JEL6213 BU Pulse

JEL.JZF 4H TSV MPV 4HV HV, K

4R 4F210

FV

MSV

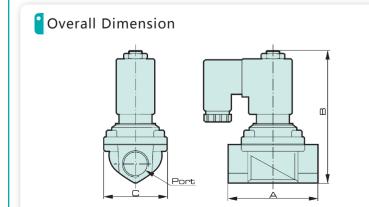
QE, QEA ST

JM ASC, RE

2P 2V 2W

J4V J4V100

Model	PU225-03S	PU225-04S	PU225-06S	PU225-08S		
Working Medium		Air, Water	; Oil, Gas			
Operation		Internal	Piloted			
Туре	•	Norma		•		
Orifice	13mm	13mm	25mm	25mm		
CV Value	4.50	4.50	12.00	12.00		
Port Size	3/8″	1/2"	3/4"	1"		
Operation Fluid Viscosity		50 (		•		
Working-pressure		0.05 ~ 1.0 MPa				
Max. Test Pressure		1.5 MPa				
Ambient Temperature	-10 ~ 185 ℃					



#### Dimension

Model	Bore	А	В	С
PU225-03S	PT3/8"	66.5	122.7	48.0
PU225-04S	PT1/2"	66.5	122.7	48.0
PU225-06S	PT3/4"	100.0	152.0	70.0
PU225-08S	PT1"	100.0	152.0	70.0







PU225-08-J



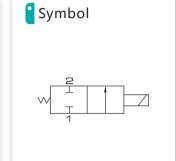


SPU225-06-J

SPU225-20-J

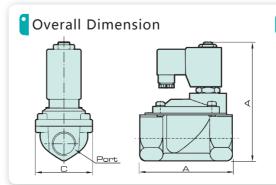
Ordering Code

PU	- 225 -	03	- A	- AC220V	J
Ī	<u> </u>	Ī	Ī	Ī	Ī
Specification	Operation	Port Size	Fix Form	Standard Voltage	Wiring
PU : 2/2 way	225: Internal piloted	03: 3/8"	A: Standard type	AC220V	J: Terminal
SPU : 2/2 way		04: 1/2"	F: Flange install	AC110V	W: Lead wire
Stainless steel		06: 3/4"		DC12V	T: Coil with time
		08: 1"		DC24V	
		12: 1¹/4"			
		14: 1¹/2"			
		20: 2"			



#### Specification

	PU225-03A	PU225-04A	PU225-06A	PU225-08A	PU225-12A	PU225-14A				
Model	SPU225-03A	SPU225-04A	SPU225-06A	SPU225-08A	SPU225-12A	SPU225-14A	PU225-20			
Working Medium				Air, Water, Oil						
Operation		Internal Piloted								
Туре		Normal Close								
Orifice	13mm	13mm	25mm	25mm	38mm	38mm	50mm			
CV Value	4.50	4.50	12.00	12.00	22.00	30.00	48			
Port Size	3/8"	1/2"	3/4"	3/4"	1 <sup>1</sup> /4"	1 <sup>1</sup> /2"	2"			
Medium of Body				Brass or Steel		*				
Operation Fluid Viscosity			***************************************	Below 50 CST	-	•				
Working-pressure			•	0.05 ~ 1.0 MPa		•				
Max. Test Pressure			***************************************	1.5 MPa		•				
Ambient Temperature				-10∼80°C						



1	Dimension

Model	Bore	А		С
PU225-03A	PT3/8"	66	106	48
SPU225-03A	P13/0	00	100	40
PU225-04A	PT1/2"	66	106	48
SPU225-04A	FI1/Z	00	100	40
PU225-06A	PT3/4"	75	112	58
SPU225-06A	F13/4	7.5	112	
PU225-08A	PT1"	97	124.5	70
SPU225-08A	1 11	31	124.3	/ 0

Model	Bore	А	В	
PU225-12A SPU225-12A	PT1 <sup>1</sup> /4"	127	140	95
PU225-14A SPU225-14A	PT1 <sup>1</sup> /2"	127	140	95
PU225-20A	PT2"	160.5	159	114

1-|P75

Valve J4V J4V100

J4V200

J4V300

J4V400

Manifold

JSY 5JV MCS

JVT307

MVSD

2W(Big)

JEL6213

JEL.JZF

# 2Q Series 2/2 Way Valve

Valve

J4V200

J4V300

J4V400 5V Manifold

JSY

5JV

MCS JVT307

JEL

VF

BM

551 JEL10

3VJZF

Diaphragm

JELVD

3V1

Coil 2P

2V

2W

2W(Big) 2L VX PU PU225

JEL5404 JEL6213 BU Pulse

JEL.JZF 4H TSV MPV 4HV HV, K

4R 4F210

FV

MSV

JM

ASC, RE QE, QEA ST

MVSD

J4V J4V100



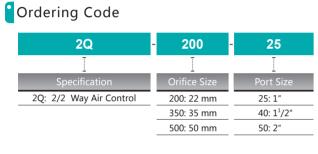
# JEL5404 Series

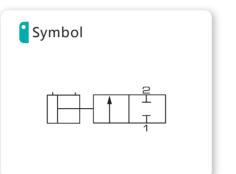
High Pressure and Temperature Solenoid Valve





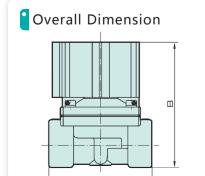


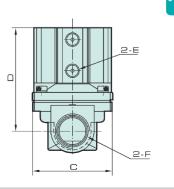




#### Specification

Model	2Q200-20	2Q200-25	2Q350-40	2Q500-50					
Working Medium	Air, Water, Oil, Gas								
Operation		Direct							
Orifice	22mm	50mm							
CV Value	12	12	24	48					
Port Size	3/4"	1"	1 <sup>1</sup> /2"	2"					
Operation Fluid Viscosity	Below 50 CST								
Applied pressure Range		0 ~ 0.	7 MPa						
Max. Test Pressure		1.05	MPa						
Control pressure Range		0.3 ~ 0	).6 MPa						
Ambient Temperature Range		-10 ~	100 ℃						
Material of Body		Bra	ass						
Material of Oil Seal		PT	FE						
Control Port Size	2 - G1/8"	2 - G1/8"	2 - G1/4"	2 - G1/4"					





#### Dimension

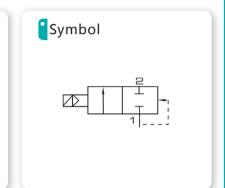
Model	А	В	С	D	Е	F
2Q200-20	99	116	57	95	G1/8"	PT3/4"
2Q200-25	99	116	57	95	G1/8"	PT1"
2Q350-40	123	146	95	116	G1/4"	PT1 <sup>1</sup> /2"
2Q500-50	170	155	118	114	G1/4"	PT2"





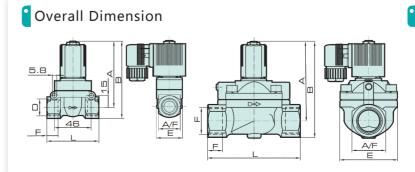


Ordering Code JEL 5404 04 **AC220V** DC12V DC24V AC24V 50/60Hz W: Lead wire 06: 3/4" AC110V 50/60Hz AC220V 50/60Hz AC380V 50/60Hz



#### Specification

Model	JEL5404-04	JEL5404-06	JEL5404-08					
Working Medium	-	Air, Water, Oil						
Operation		Internal Piloted						
Туре		Normal Colse						
Orifice	12mm	12mm 20mm 25mm						
KV Value	2.0	5.0	10.0					
Port Size	1/2"	3/4"	1"					
Applied pressure Range	Gas / Liquid: 0.1 ~ 5.0 MPa	Gas: 0.1 ~ 4.0 MPa Liquid: 0.1 ~ 2.5 MPa	Gas: 0.1 ~ 4.0MPa Liquid: 0.1 ~ 2.5MPa					
Max. Test Pressure	7.5 MPa	6.0	MPa					
Ambient Temperature Range		-10~150 °C						
Applied Voltage Range		± 10%						
Protection		IP 65						
Power Consumption		AC: 5.5VA DC: 9W						
Insulation		F Class						
Material of Body		Brass						
Material of Oil Seal		PTFE	PTFE					



Dimension

Model	Orifice mm	Port Size	А	В	F	D	L	A/F
JEL5404-04	12.0	PT1/2"	83.0	95.5	14	32	65	27
JEL5404-06	20.0	PT3/4"	99.5	119	16	60	92	40
JEL5404-08	25.0	PT1"	99.5	119	16	60	92	40

J4V J4V100 J4V200 J4V300 J4V400 Manifold JSY 5JV MCS JVT307 MVSD 551 JEL10

3VJZF

Diaphragm

Valve

JELVD 3V1 Coil 2V 2W 2W(Big)

PU225 2Q JEL5404 JEL6213

JEL.JZF HV, K 4F210

MSV JM ASC, RE QE, QEA ST HSV

# JEL6213 Series

Solenoid Valve

Valve

J4V100

J4V200

J4V300 J4V400 5V Manifold

JSY

5JV

MCS JVT307

JEL

VF BM

551 JEL10

3VJZF

Diaphragm

JELVD

3V1

Coil 2P 2V 2W

2W(Big) 2L VX PU PU225

2Q

BU

Pulse

JEL.JZF 4H TSV

MPV 4HV

HV, K

4F210

4R

FV

MSV

JM

ST

JEL5404

MVSD

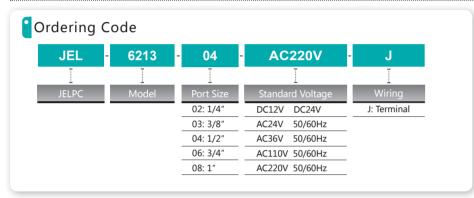
J4V

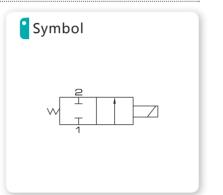


# **BU Series**

2/2 Way Solenoid Valve

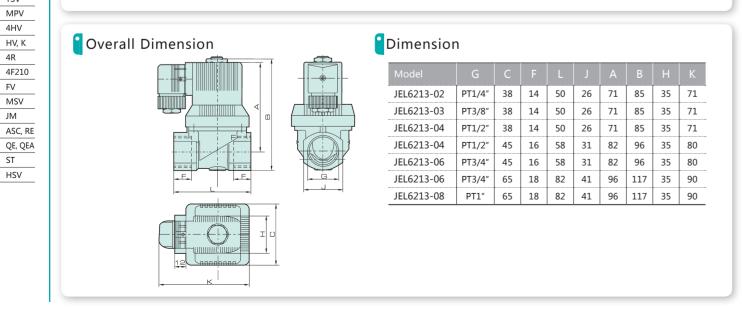




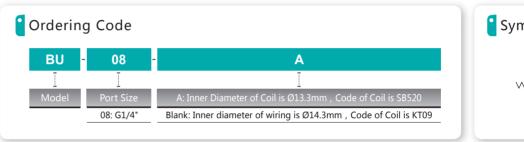


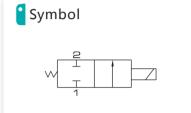
#### Specification

Model		JEL6213-02	JEL6213-03	JEL6213-04	JEL6213-04	JEL6213-06	JEL6213-06	JEL6213-08			
Orifice			10mm		14mm		25r	nm			
Screw Port	Size	PT1/4"	PT3/8"	PT1/2"	PT1/2"	PT3/4"	PT3/4" PT1"				
Working Pr	essure		0.03~1.0MPa								
Ambient Temperature -10 ~ +55°C					-	-					
Medium En	vironment		-		-10 ~ +90°C	-					
KV Valve		2	2	3.6	8.3	8.3	11	11			
Power	AC (VA)		-		14						
Consume	DC (W)		-		8	-	-	-			
Switching F	requency		≥1 Sec		≥0.5 Sec						





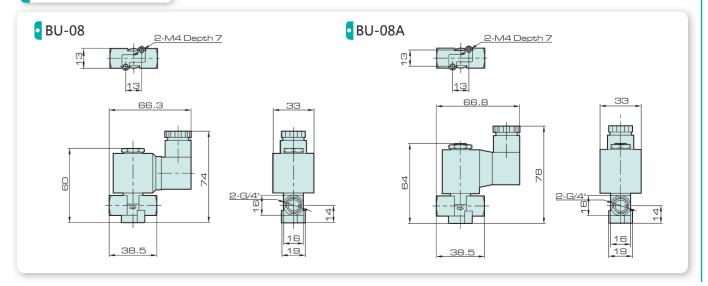




### Specification

Model	BU-08, BU-08A		
Position Number	2/2 Way		
Orifice Size	Ø 2.8 mm		
Operation Direct			
Filter Precision	Air, Water, Oil		
Working Pressure	0 ~ 1.0 MPa		
Working Temperature	-10 ~150 ℃		
Voltage Range	± 10%		
Protection Class	IP 65		
Power Consumption	AC : 13 VA, DC : 9 W		
Insulation	F Class		

#### Overall Dimension



Valve J4V J4V100 J4V200 J4V300 Manifold JVT307

JSY 5JV MCS MVSD

551 JEL10 3VJZF Diaphragm JELVD

2W(Big)

PU225 2Q JEL6213

Pulse JEL.JZF

HV, K 4F210 MSV

JM ASC, RE

# Vertical type/ Pipe connecting type Solenoid Pulse Valve



Viton Type Multimedia Angle Valve

Feature

Valve

J4V100

J4V200

J4V300

J4V400

Manifold

5V

JSY

5JV

MCS

JEL

VF

BM

551

JEL10

3VJZF

Diaphragm

JELVD

3V1

Coil

2W(Big)

2P 2V 2W

2L

VX

PU PU225

2Q

BU

JEL5404

JEL6213

JEL.JZF 4H TSV MPV 4HV

HV, K 4R 4F210

FV

MSV JM

ASC, RE QE, QEA

ST

JVT307

MVSD

J4V

- 1. Brought in advanced design and improved.
- 2. Applied for dust clear of compressed air switch in dust cleaning system.
- 3. Key components materials are imported.
- 4. Air control type, solenoid type and anti explosion solenoid type are available.
- 5. Pipe type connecting ensures firmly and reliable installation.



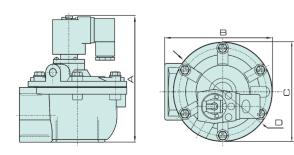


# Ordering Code JEL - Z - 20 - P - J JELPC Z: Vertical type Slenoid Pulse Valve Bore Connection Form Wiring Ø 20 Ø 50 Blank : Normal screw J: Terminal Ø 25 Ø 62 A Tubing+threaded Ø 35 Ø 76 P Screw Ø 40 Ø 100 S Double diaphragm J Threaded (economical type) DD Pipe connecting type

#### Specification

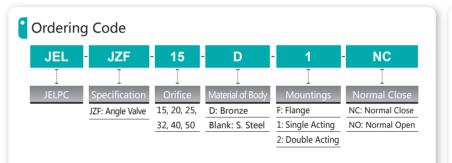
Model	Working- pressure	Ambient Temperature	Humidity	Applied Medium	Voltage	Diaphram life	Orifice	Thread
JEL-Z-20A							Ø20	G3/4"
JEL-Z-20P							Ø20	G3/4"
JEL-Z-20							Ø20	G3/4"
JEL-Z-25							Ø25	G1"
JEL-Z-25P					AC110V		Ø25	G1"
JEL-Z-35P	0.3~0.8MPa	-10~55℃	< 85%	Pure Air	AC220V	Above 1 Million Times	Ø35	G1 <sup>1</sup> /2"
JEL-Z-40S					DC24V	Times	Ø40	G1 <sup>1</sup> /2"
JEL-Z-50S							Ø50	G2"
JEL-Z-62S							Ø62	G1 <sup>1</sup> /2"
JEL-Z-76S								Ø76
JEL-Z-100S							Ø100	Ø100

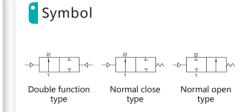
#### Overall Dimension



Model	JEL-Z -20A	JEL-Z -20P	JEL-Z -20	JEL-Z -25	JEL-Z -25P	JEL-Z -35P
Α	173	124	110	110	124	142
В	145	105	90.5	90.5	105	121
С	-	82.5	75	75	82.5	-
D	Ø90	-	-	_	-	Ø112

Model	JEL-Z -40S	JEL-Z -50S	JEL-Z -62S	JEL-Z -76S	JEL-Z -100S
Α	166	202	222	245	356.5
В	132	210	210	230.5	286.5
C	-	-	-	-	-
D	Ø137	Ø185	Ø185	Ø200	Ø221





#### Specification

Orifice size (mm)	Port Thread	Kv (m³/h)	Max. Working Pressure (MPa)	Required Min. Control Pressure (MPa)	PA	Medium Tanperature	Direction
15	PT1/2"	4.2	0~1.6	0.39	50		
20	PT3/4"	8	0~1.1	0.39	50		
25	PT1"	19	0~1.1	0.42	63		
32	PT1 <sup>1</sup> /4"	27.5	0~1.5	0.5	63	-10~+180℃	Direction A or B
40	PT1 <sup>1</sup> /2"	42	0~1.25	0.44	63		AOIB
50	PT2"	55	0~1.0	0.4	80	*	
65	PT2 <sup>1</sup> /2"	65	0~1.0	0.4	100		

#### Fix and Maintain

- 1. Clean the pipes carefully from any residue, dribble or welding residue, to avoid any damage to the seal.
- 2. To be installed as required, preferably with actuator in upright position.
- 3. Connect the pipes according to the reference points (flow direction) found on the valve body. Only disassemble actuator if required by
- 4. Before taking the valve apart, depressurize the medium supply and piloted air supply from piping system.

Valve
J4V
J4V100
J4V200
J4V300
J4V400
5V
Manifold
JSY
5JV
MCS
JVT307
JEL
MVSD

NAMUR
551
JEL10
3VJZF
Diaphragm
JELVD
3V1
Coil
2P
2V
2W
2W(Big)

PU225 2Q JEL5404 JEL6213 BU Pulse JEL, JZF

VX

4H TSV MPV 4HV HV, K 4R 4F210 FV MSV JM

ASC, RE
QE, QEA
ST
HSV

1-|P81 1-|P82

Valve J4V

J4V100

J4V200

J4V300

J4V400

Manifold

5V

JSY

5JV

MCS

JEL

BM

551

JEL10

3VJZF Diaphragm

JELVD

3V1

Coil 2P 2V

2W

2L

VX

PU

2Q

BU

4H

TSV

4HV

HV, K 4R 4F210

FV

MSV JM

ASC, RE

QE, QEA

ST

Pulse

PU225

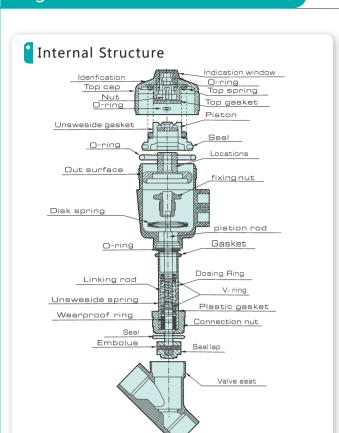
JEL5404

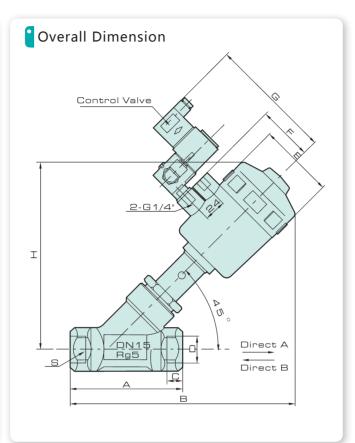
JEL6213

2W(Big)

JVT307

MVSD VF





#### Dimension

Orifice	Port	Dim	on Device ension			В		!	ØE		F		G		Н		
(mm)	Thread D	PA		A			C										
15	PT1/2"	50	-	85	173	-	12	64	-	44	-	112	-	137	-	33	27
20	PT3/4"	50	-	95	178	-	12	64	-	44	-	112	-	145	-	35	32
25	PT1"	63	-	105	212	-	14	80	-	52	-	120	-	173	-	40	41
32	PT1 <sup>1</sup> /4"	63	100	118	236	276	16	80	140	52	70	120	138	189	250	35	55
40	PT1 <sup>1</sup> /2"	63	100	130	230	270	18	80	140	52	70	120	138	189	250	35	55
50	PT2"	80	125	150	238	300	20	100	170	52	83	120	151	250	260	38	70
65	PT2 <sup>1</sup> /2"	100	-	155	300	-	25	125	-	62	-	130	-	265	-	48	80

#### Note

\* Features while select A type flow direction

Increase service life.

Prevent water impact when working medium is liquid.

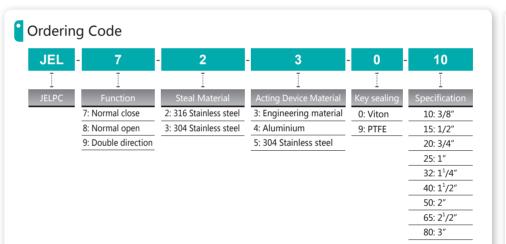
Product with orifice size at Ø15, Ø20 or Ø25, it is necessary to keep working pressure under 0.3 MPa, otherwise double-acting actuators should be adopted. Product with orifice size at Ø32 or Ø40, double-acting actuators should be Ø100.

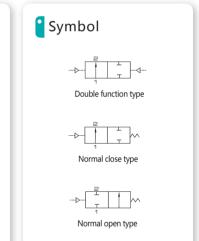
Product with orifice size at Ø50, double-acting actuators should be Ø125.

\* Features while select B type flow direction

Sealing property can be improved under B type flow direction while medium is steam or liquid. If the V shape sealing contact with working medium is too long, and it will influence on service life. Apart from that, the anti-water impact does not exit when working medium is liquid.







#### Specification

Connection Size	DN10 - DN80
Screw	3/8" ~ 3"
Material of Body	Stainless Steel 316/304
Acting Device Material	Stainless Steel 304
Valve Core Seal	PTFE / FPM
Valve Rod Seal	PTFE / FPM
Piston Seal	FPM / NBR
Suitable Medium	Water, Neutral Air (or liquid), Alchohol, Oil, Organic liquid, Steam, Weak Acid or alkalescence
Medium Temperature	PTFE : -10 °C~+200 °C
Stickiness	Max. 600 mm²/ sec.
Installation	Follow flow installation
Control Medium	Air / Neutral Air
Controled Pressure Range	0.3~0.8 MPa
Working-pressure	0~1.6 MPa

Valve J4V J4V100 J4V200 J4V300 J4V400 5V Manifold JSY 5JV MCS JVT307 JEL MVSD

NAMUR 551 JEL10 3VJZF Diaphragm JELVD Coil 2W

VF BM

VX PU225 2Q JEL5404 JEL6213

2W(Big)

BU Pulse

> HV, K 4F210

MSV ASC, RE QE, QEA

# Stainless Steel Series Angle Valve



# 4H Series Hand Pull Valve

Overall Dimension

Valve

J4V100

J4V200

J4V300 J4V400

5V Manifold

JSY

5JV

MCS

JEL

BM

551

JEL10

3VJZF

Diaphragm

JELVD

3V1

Coil 2P

2V

2W

2L

VX

PU PU225

2Q

BU

4H TSV

4HV

HV, K

4R 4F210

FV

MSV

JM

ASC, RE QE, QEA ST

Pulse JEL, JZF

JEL5404

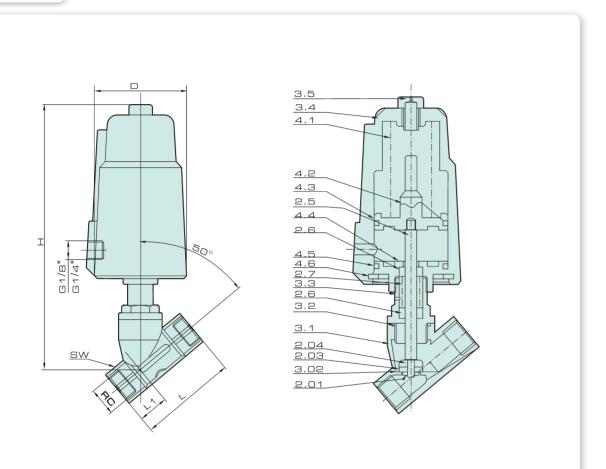
JEL6213

2W(Big)

JVT307

MVSD VF

J4V



#### Specification

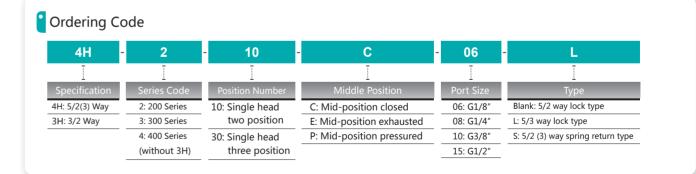
			Overall Dir	mension			
DN	RC	L	L1	SW	Н	D	Acting Device
10	3/8"	55	17	21	120	51	40
15	1/2"	70	21	26.5	138	51	40
20	3/4"	76	23	32	154	62	50
25	1"	90	25	40	168	62	50
32	1 <sup>1</sup> /4"	116	32	50	200	76	63
40	1 <sup>1</sup> /2"	116	32	55.5	215	92	80
50	2"	138	40	68.5	230	92	80
65	2 <sup>1</sup> /2"	168	51	85	268	117	100
80	3″	192	54	100	325	140	125

	Parts	
2.01 Bolt	3.1 Valve body	4.1 Spring
2.02 Hole plate sealing	3.2 O-ring seal	4.2 Piston
2.03 Sealing disk	3.3 Threed connecting accessory	4.3 O-ring
2.04 Valve disk	3.4 Cylinder	4.4 Valve Cover
2.5 Valve spool	3.5 Decorating Cover	4.5 O-ring
2.6 V Shape material		4.6 Pressure receipt ring
2.7 Spring		

4H210-08-S
4H230C-08-L
4H330C-10-L
4H330C-10-S

#### Features

- 1. We guarantee inner hole roughness within our new processing.
- 2. Handle base use high strength plastic to beastifl the
- To import German high standard special grease which provides film in order to reduce friction.
- 4. Valve spool use seals which import from Japan to increase the life time.



Model	4H210-06	4H210-08	4H230-08	4H310-08	4H310-10	4H330-10	4H410-15	4H430-15
Working Medium				40 Micron	Filtered Air			
Operation		-	-	Dir	ect			
Effective Cross Section Area	14mm <sup>2</sup> (CV=0.78)	16mm <sup>2</sup> (CV=0.89)	12mm <sup>2</sup> (CV=0.67)	25mm²(CV=1.4)	30mm <sup>2</sup> (CV=1.68)	18mm²(CV=1.00)	50mm <sup>2</sup> (CV=2.79)	30mm²(CV=1.68
Port Size	Inlet, Outlet, Exhaust Port = G1/8"	Inlet, Outlet = G1/4" Exhaust Port=G1/8"	Inlet, Outlet, Exhaust Port = G1/4"	Inlet, Outlet, Exhaust Port = G1/4"	Inlet, Outl Exhaust P	et = G3/8" ort = G1/4"	Inlet, Outlet, Exh	aust Port = G1/2"
Working Pressure				0 ~ 0.	8MPa			•
Working Temperature		-		-20 ~	-70°C			

Valve
J4V
J4V100
J4V200
J4V300
J4V400
5V
Manifold
JSY
5JV
MCS
JVT307
JEL
MVSD

NAMUR
551
JEL10
3VJZF
Diaphragm
JELVD
3V1
Coil
2P

2W

BM

2W(Big)
2L
VX
PU
PU225
2Q
JEL5404

JEL6213
BU
Pulse
JEL.JZF
4H
TSV

MPV
4HV
HV, K
4R
4F210
FV
MSV

MSV

JM

ASC, RE

QE, QEA

ST

HSV

# **4H Series** Hand Pull Valve

J4V

5V

JSY

5JV

MCS

JEL

VF

BM

551 JEL10 3VJZF

3V1 Coil 2P 2V 2W

2L VX PU

2Q

BU

Pulse

JEL.JZF

TSV

HV, K

4R 4F210

FV

MSV

JM ASC, RE QE, QEA ST



# 4H Series Hand Pull Valve

Valve

J4V100

J4V200

J4V300

J4V400

Manifold

MCS

JVT307

MVSD

NAMUR

3VJZF

Diaphragm

JELVD

2W(Big) 2L VX PU

PU225 2Q

JEL5404

JEL6213

JEL.JZF

HV, K

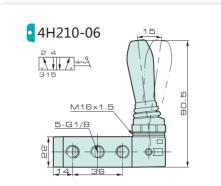
4F210

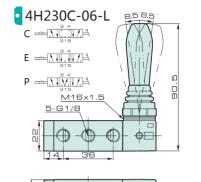
MSV

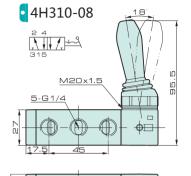
JM ASC, RE

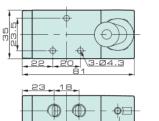
J4V

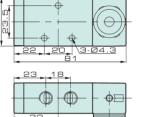
Overall Dimension

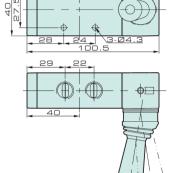


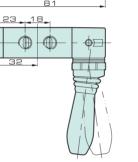


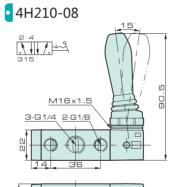


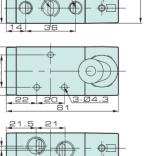


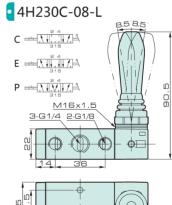


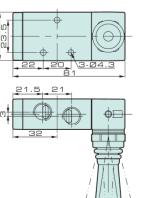


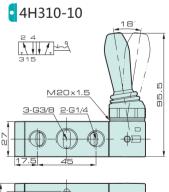


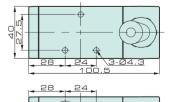


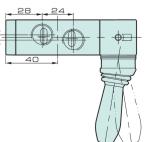


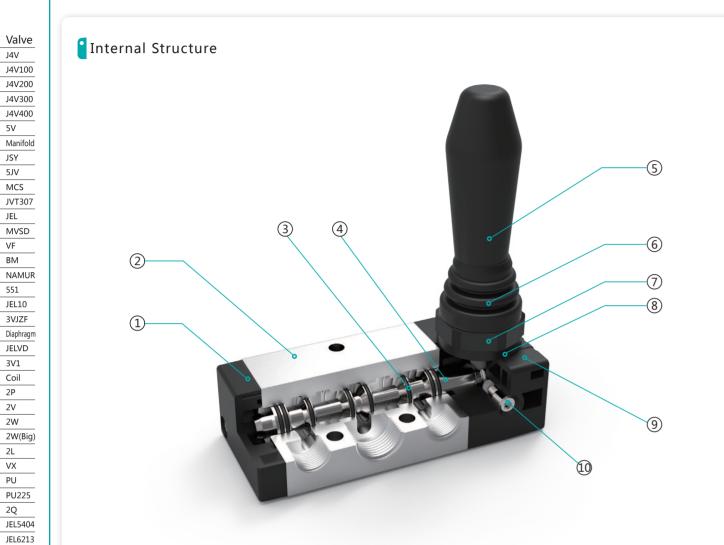












#### Parts

Number	Name	Number	Name
1	Back cover	6	Dirt-proof boot
2	Valve body	7	Lock nut
3	Flat ring	8	Gasket
4	Valve spool	9	Top cover
5	Handle	10	Set screw

# **4H Series** Hand Pull Valve



4H Series

Hand Pull Valve

Valve

J4V100

J4V200

J4V300

J4V400

Manifold

JSY

5JV

MCS

JVT307

MVSD

BM

NAMUR

3VJZF

JELVD

2W

2W(Big)

PU225

JEL5404

JEL6213

JEL.JZF

HV, K

4F210

MSV

ASC, RE

QE, QEA ST HSV

2Q

Diaphragm

J4V

#### Overall Dimension

Valve

J4V100

J4V200

J4V300 J4V400

Manifold

5V

JSY

5JV MCS

JVT307

MVSD VF

JEL

BM

551 JEL10

3VJZF Diaphragm

JELVD

3V1 Coil 2P 2V

2W

2W(Big) 2L VX PU

PU225

JEL5404

JEL6213 BU

Pulse

JEL.JZF

TSV

4HV

HV, K 4R 4F210

FV

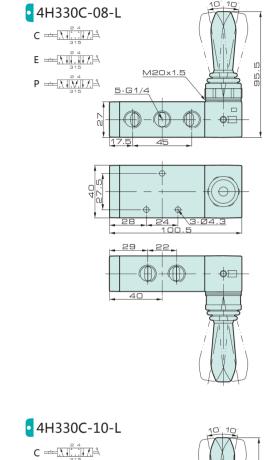
MSV JM

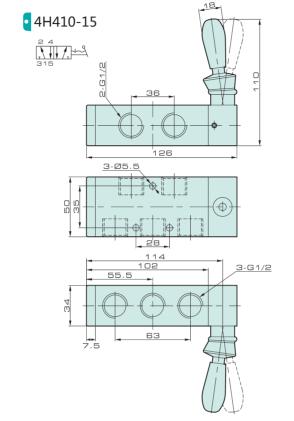
ASC, RE

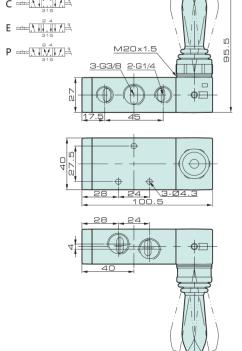
QE, QEA ST

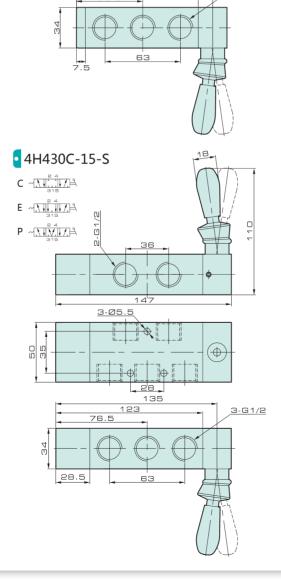
2Q

J4V

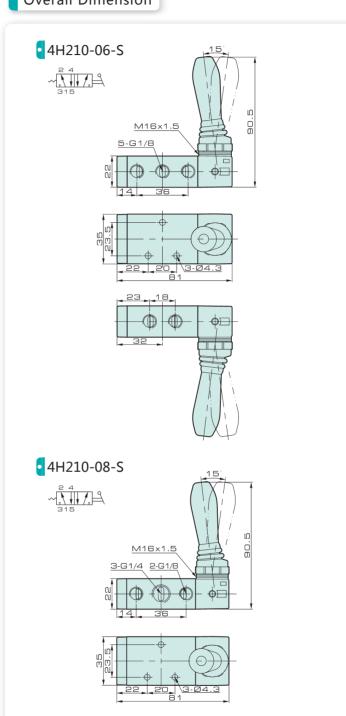


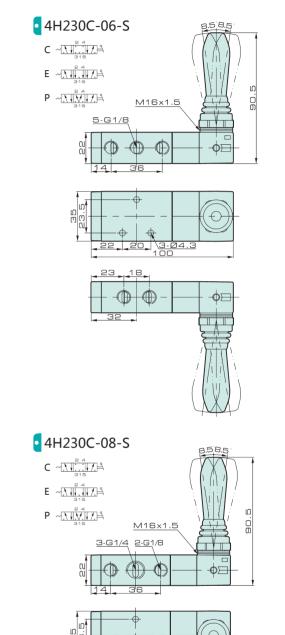


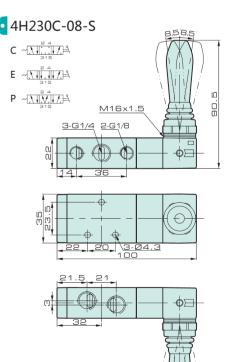




#### Overall Dimension







# **4H Series** Hand Pull Valve



Overall Dimension

Valve

J4V100

J4V200

J4V300

J4V400

Manifold

5V

JSY

5JV

MCS

JEL

551 JEL10

3VJZF

Diaphragm JELVD

3V1 Coil 2P 2V 2W

2W(Big) 2L VX PU

PU225

JEL5404

JEL6213

2Q

BU

Pulse

JEL.JZF

TSV

HV, K 4R 4F210

FV

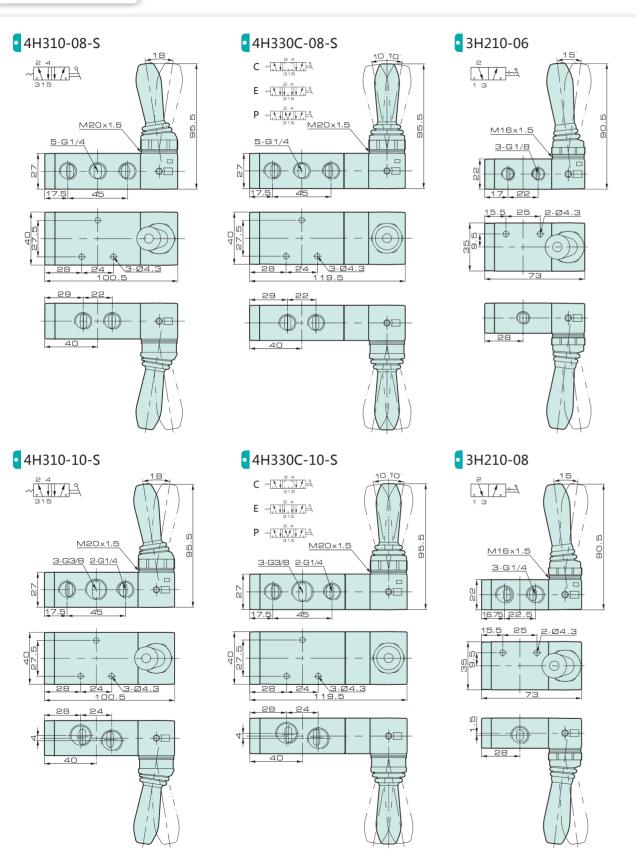
MSV

ASC, RE QE, QEA ST

JVT307

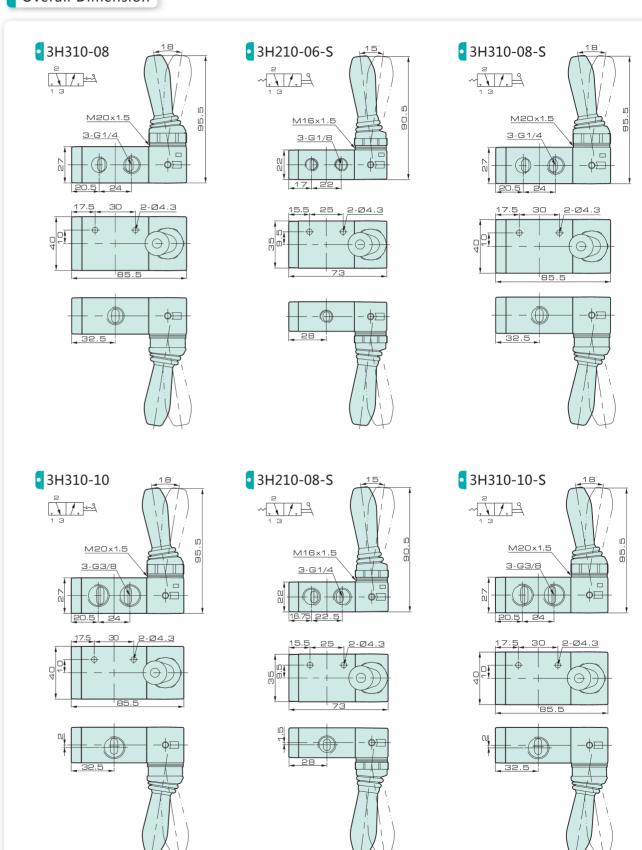
MVSD VF

J4V



### 4H Series Hand Pull Valve

Overall Dimension



Valve J4V J4V100 J4V200 J4V300 J4V400

Manifold MCS JVT307 MVSD NAMUR

3VJZF Diaphragm JELVD

2W(Big)

PU225 2Q JEL5404 JEL6213

JEL.JZF HV, K

4F210 MSV

ASC, RE

# **TSV Series** Hand Pull Valve

Valve

J4V200

J4V300

J4V400 5V Manifold

JSY 5JV

MCS

JEL

VF BM

MVSD

NAMUR

551

JEL10

3VJZF

Diaphragm

JELVD 3V1

Coil

2P

2V 2W

2L VX PU

2Q

BU

4H

MPV 4HV

4R

FV

MSV JM

ST

JVT307

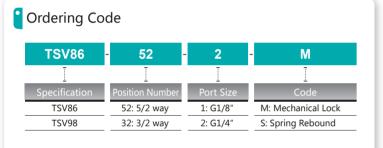
J4V J4V100



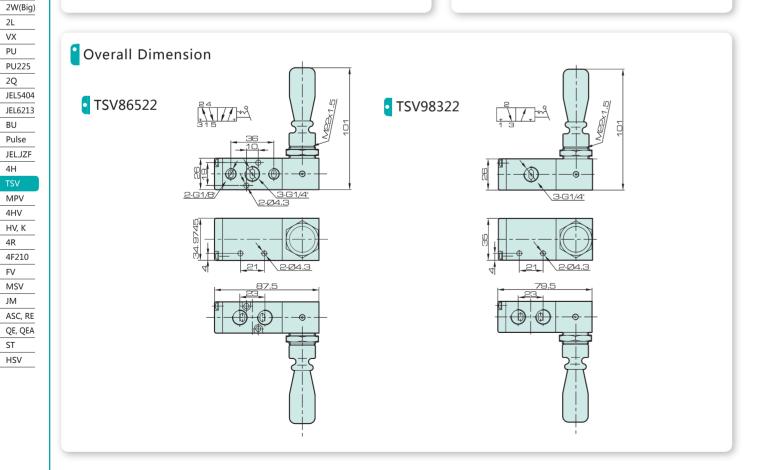
# **MPV Series** Hand Push Valve



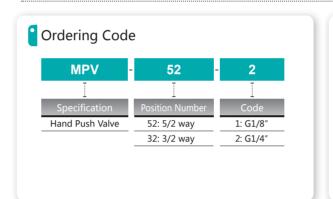




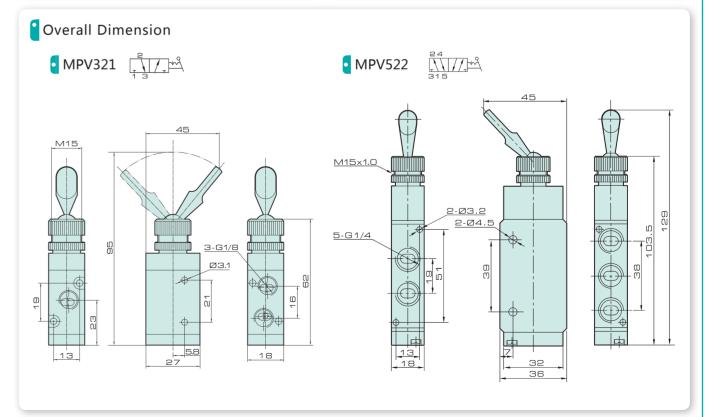
Model	TSV86522 s M	TSV98322 s
Working Medium	40 Micron	Filtered Air
Operation	Dir	ect
Effective Cross Section Area	18n	nm²
Port Size	G1	
Working Pressure	0 ~ 0.	8MPa
Working Temperature	-20~	70°C







Model	MPV522	MPV321
Working Medium	40 Micron	Filtered Air
Port Size	G1/4"	G1/8"
Effective Cross Section Area	18 mm <sup>2</sup> (CV=1.00)	10 mm <sup>2</sup> (CV=0.56
Working Pressure	0~0.	8MPa
Working Temperature	-20~	70℃



MCS JVT307 MVSD VF BM 551 JEL10 3VJZF Diaphragm JELVD 2W(Big)
2L
VX
PU PU225 2Q JEL5404 JEL6213

4F210

FV MSV JM ASC, RE QE, QEA ST HSV

Valve J4V J4V100

J4V200

J4V300

J4V400

Manifold

# **4HV Series Hand Switching Valve**





JEL

BM

551 JEL10

3VJZF

Diaphragm

JELVD

3V1

Coil 2P 2V

2W

VX

PU

2Q

BU

Pulse

JEL.JZF 4H

TSV

MPV

HV, K 4R 4F210

FV

MSV JM

ASC, RE QE, QEA ST

PU225

JEL5404

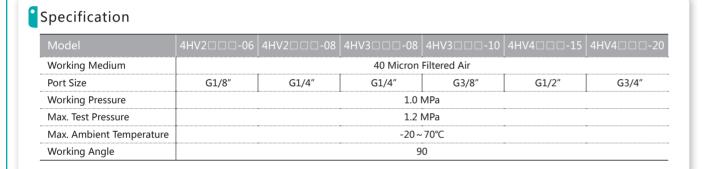
JEL6213

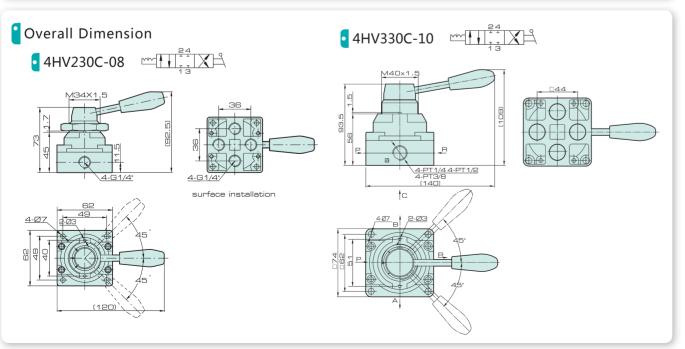
2W(Big) 2L

MVSD VF



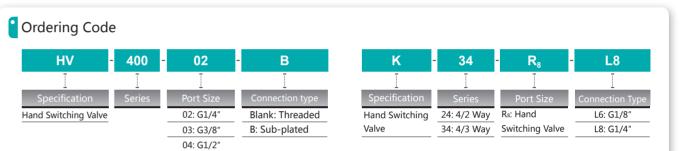


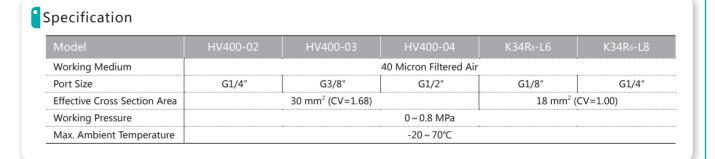


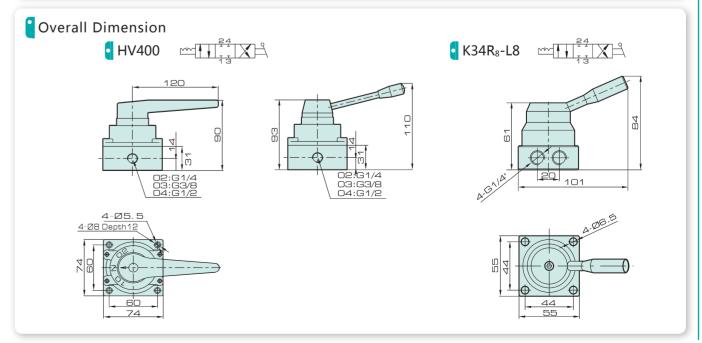


# HV, K Series Hand Switching Valve









Valve J4V J4V100 J4V200 J4V300 Manifold JSY 5JV MCS

JVT307 MVSD JEL10 3VJZF Diaphragm

JELVD Coil 2W

2W(Big) PU225 2Q

JEL5404 JEL6213 BU Pulse JEL.JZF

4F210 MSV ASC, RE

# **4R Series** Hand Draw Valve



4R Series 

Hand Draw Valve

Valve J4V

J4V100

J4V200

J4V300

J4V400

Manifold

JSY

5JV

MCS

JVT307

MVSD

NAMUR

JEL10

3VJZF

JELVD

Diaphragm

2W(Big)

PU225

JEL6213

Pulse

JEL.JZF

HV, K

4F210

MSV

ASC, RE

QE, QEA

2Q JEL5404









Features

Valve

J4V200

J4V300

5V Manifold

JSY

5JV

MCS

JEL

VF BM

551

JEL10

3VJZF

Diaphragm

JELVD

3V1 Coil

2P 2V 2W

2W(Big) 2L VX PU PU225

2Q

JEL5404

JEL6213 BU

Pulse

JEL.JZF 4H TSV

MPV

HV, K

4F210

FV

MSV

JM

ASC, RE

QE, QEA ST

MVSD

JVT307

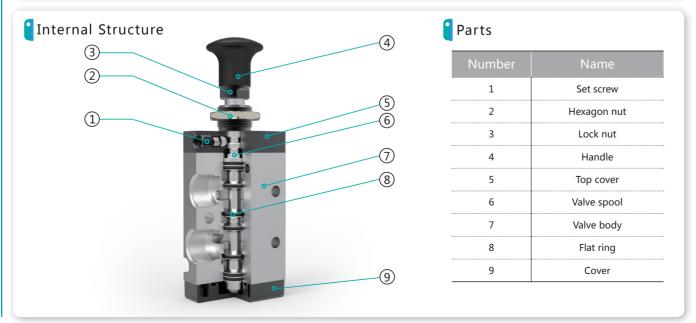
J4V J4V100

- 1. We guarantee inner hole roughness within our new
- 2. New visual style, synchronized with global outstanding
- 3. To import German high standard special grease which provides film in order to reduce friction.
- 4. Valve spool use seals which import from Japan to increase the life time.

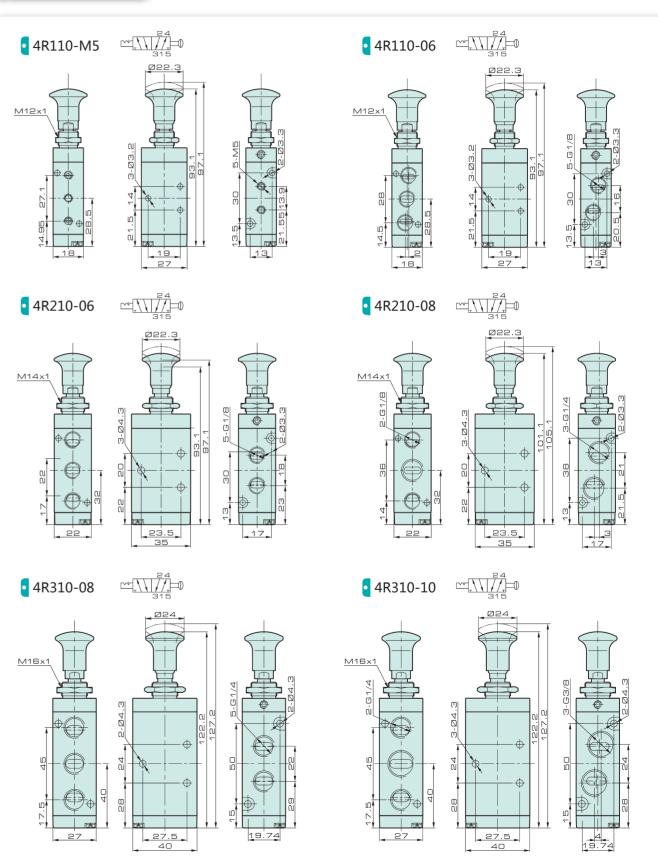
Ordering Code			
4R -	2	- 10 -	06
<u> </u>	- - -	Ī	Ī
Specification	Series	Position Number	Port Size
4R: 5/2 Way Hand	100 Series	10: Single	M5 : M5x0.8
Draw Valve	200 Series	head Double	06 : G1/8"
3R: 3/2 Way Hand	300 Series	Position	08 : G1/4"
Draw Valve			10 : G3/8"

#### Specification

Model	4R110-06	3R110-06	4R210-06	4R210-08	3R210-06	3R210-08	4R310-08	4R310-10	3R310-08	3R310-10	
Working Medium				-	40 Micror	Filtered Air					
Port Size	Inlet, Outlet, Exhaust Port = G1/8"			Inlet, Outlet = G1/4" Exhaust Port = G1/8"	Inlet, Outlet, Exhaust Port =G1/8"	Inlet, Outlet, Exhaust Port = G1/4"	Inlet, Outlet, Exhaust Port = G1/4"	Inlet, Outlet = G3/8" Exhaust Port = G1/4"	Inlet, Outlet, Exhaust Port = G1/4"	Inlet, Outlet, Exhaust Port = G3/8"	
Effective Cross Section Area	10mm²(CV=0.56)   - · · · ·		14mm <sup>2</sup> (CV=0.78)	16mm <sup>2</sup> (CV=0.89)	14mm <sup>2</sup> (CV=0.78)	16mm <sup>2</sup> (CV=0.89)	25mm <sup>2</sup> (CV=1.40)	30mm <sup>2</sup> (CV=1.68)	25mm <sup>2</sup> (CV=1.40)	30mm <sup>2</sup> (CV=1.68)	
Working Pressure				•	0~0	).8MPa	•	•			
Working Temperature		-		-	-20	~ 70°C	-				
Position Number	5/2 way	3/2 way	5/2	way	3/2	way	5/2	5/2 way		3/2 way	



Overall Dimension



# **4R Series**

Hand Draw Valve



Overall Dimension

Valve

J4V100

J4V200

J4V300 J4V400

Manifold

5V

JSY

5JV

MCS JVT307

JEL

551

JEL10

3VJZF

Diaphragm

JELVD

3V1

Coil

2P 2V

2W

2Q

BU

Pulse

JEL.JZF 4H TSV

MPV

4HV

HV, K

4F210 FV MSV JM

ASC, RE

QE, QEA ST

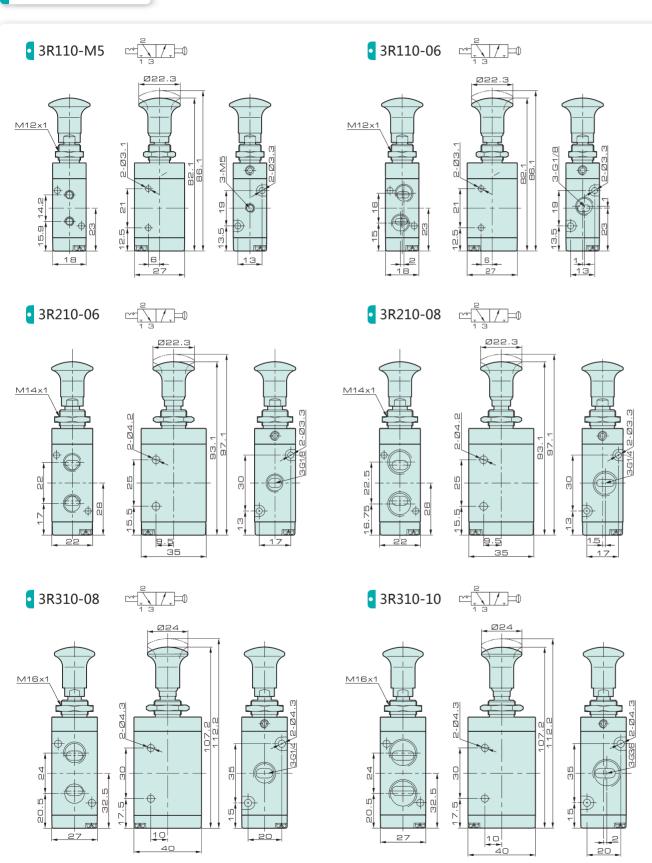
JEL5404

JEL6213

2W(Big) 2L VX PU PU225

MVSD VF BM

J4V



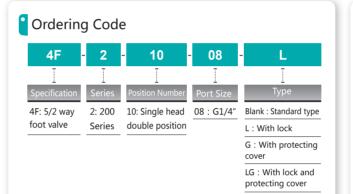
### 4F210 Series **Foot Valve**

#### Features

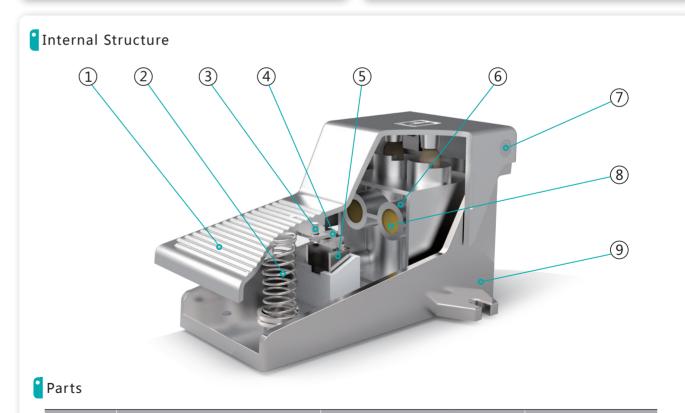
- 1. Renew apprearance to improve sense quality
- 2. Renew the lock structure to improve products reliability.



4F210-08L



#### Specification Working Medium 40 Micron Filtered Air Position Number 5/2 way Port Size Inlet, Outlet, Exhaust Port = G1/4" Direct Operation Working Pressure 0 ~ 0.8MPa Working Temp. -20 ~ 70°C



Number	Name	Number	Name	Number	Name
1	Pedal	4	Hook	7	Screw
2	Spring	5	Lock	8	Sliencer
3	Screw	6	Valve body	9	Valve base

Valve J4V J4V100 J4V200 J4V300 J4V400

Manifold JSY 5JV MCS JVT307 MVSD NAMUR JEL10 3VJZF Diaphragm JELVD Coil 2W 2W(Big)

> PU225 2Q JEL5404 JEL6213 BU Pulse JEL.JZF

HV, K

ASC, RE QE, QEA ST HSV

# 4F210 Series

**Foot Valve** 

J4V J4V100

J4V200

J4V300 J4V400 5V

Manifold

JSY 5JV

MCS

JVT307 JEL

MVSD

VF BM

551

JEL10

3VJZF

JELVD

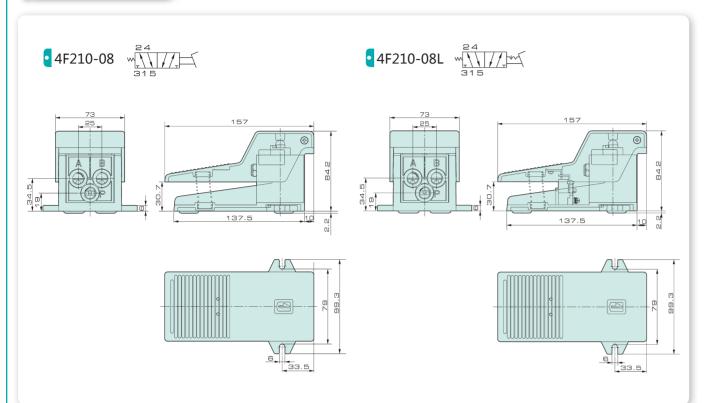
Coil 2P

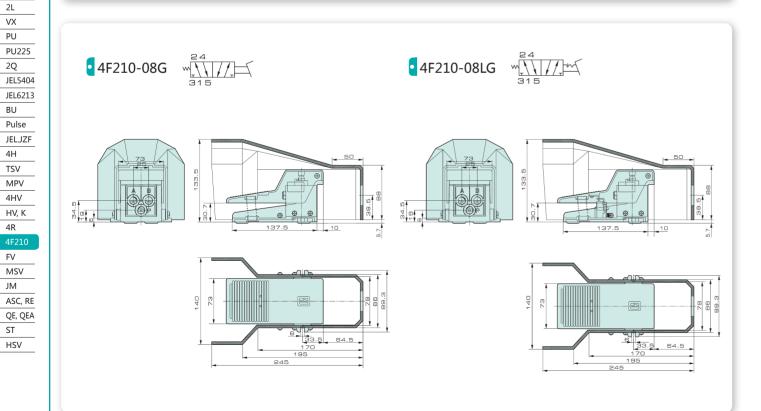
2V 2W

2W(Big)



Overall Dimension





# FV Series Foot Valve

Valve J4V J4V100

J4V200

J4V300

Manifold

JSY 5JV

MCS JVT307

MVSD

3VJZF

JELVD

2W(Big) 2L VX PU

PU225 2Q JEL5404

JEL6213

Pulse

JEL.JZF

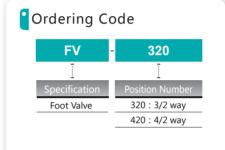
HV, K

4F210

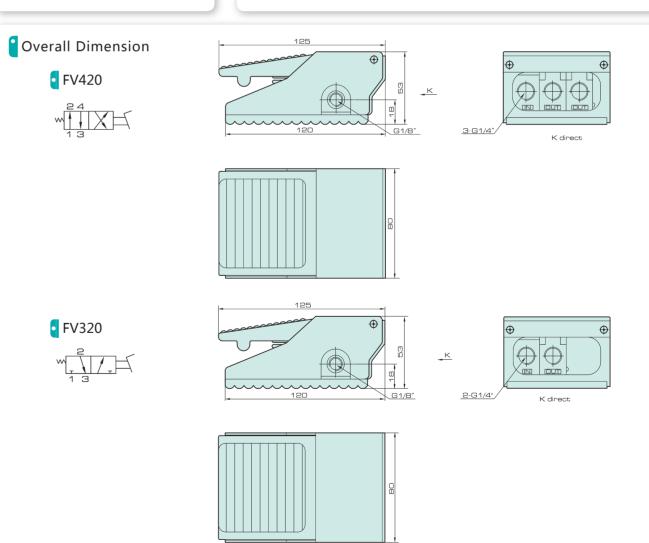
MSV
JM
ASC, RE
QE, QEA
ST
HSV







Model	FV420	FV320				
Working Medium	40 Micron	Filtered Air				
Position Number	4/2 way	3/2 way				
Port Size		Exhaust Port = G1/8"				
Operation		rect				
Working Pressure		0~0.8 MPa				
Working Temperature		-20 ~ 70°C				



# **MSV Series**

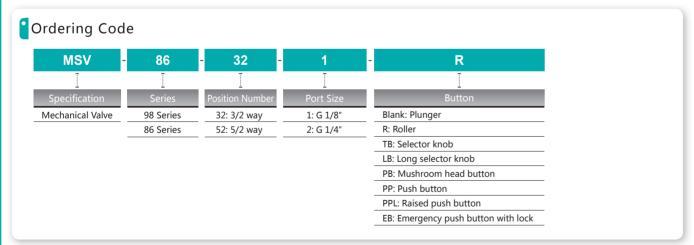
**Mechanical Valve** 



MSV86321 MSV86321EB MSV86321LB MSV86321TB MSV86321PP MSV86321PPL MSV86321PB MSV86321R

MSV86522 MSV86522EB MSV86522LB MSV86522TB MSV86522PP MSV86522PPL MSV86522PB MSV86522R

MSV98322 MSV98322EB MSV98322LB MSV98322TB MSV98322PP MSV98322PPL MSV98322PB MSV9832PB MSV98322PB MSV98322PB MSV98322PB MSV98322PB MSV98322PB MSV98322PB MSV9832PB MSV9832PB MSV98322PB MSV9832PB MSV983P

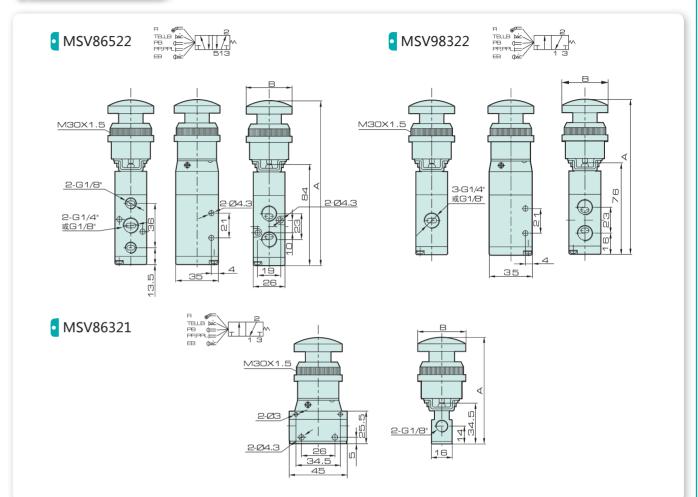


Model	MSV86321	MSV86522	MSV98322
Working Medium		40 Micron Filtered Air	
Valve Type	3/2 Way	5/2 Way	3/2 Way
Working Pressure	0 ~ 0.8 MPa	0 ~ 0.8 MPa	0 ~ 0.8 MPa
Ambient Temperature		-20 ~ 70°C	•
Effective Cross Section Area	12mm <sup>2</sup> (CV=0.67)	16mm²(CV=0.89)	16mm <sup>2</sup> (CV=0.89)
Port Size	G1/8"	G1/4"	G1/4"

# MSV Series

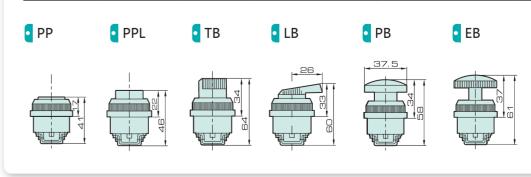
Mechanical Valve





# Dimension

Series	Symbol / Model	PP	PPL	LB	ТВ	EB	РВ	R
MSV86522	A	114	119	133	136.5	134	131	107.5
IVI3V60322	В	39.5	24.5	26.5	36.5	39.5	37.5	42.5
MSV98322	Α	106	111	125	129.5	126	123	99.5
IVI3V96322	В	39.5	24.5	26.5	36.5	39.5	37.5	425.5
MSV86321	Α	66	71	85	88.5	86	83	59.5
1012000221	В	39.5	24.5	26.5	36.5	39.5	37.5	42.5



Valve
J4V
J4V100
J4V200
J4V300
J4V400
5V
Manifold
JSY
5JV
MCS

JVT307

JEL10 3VJZF

Diaphragm

JELVD

2W

2W(Big)

PU225

JSY
5JV
MCS
JVT307
JEL
MVSD
VF
BM
NAMUR

Valve

J4V100

J4V200

J4V300 J4V400

Manifold

5V

J4V

BM
NAMUR
551
JEL10
3VJZF
Diaphragm
JELVD
3V1
Coil

Coil
2P
2V
2W
2W(Big)
2L
VX
PU
PU225

2Q

BU

4H

TSV

4HV

HV, K

4F210

ASC, RE

QE, QEA ST

4R

FV MSV JM

Pulse

JEL.JZF

JEL5404

JEL6213

JEL5404 JEL6213 BU Pulse

JEL.JZF 4H TSV MPV 4HV HV, K

4HV HV, K 4R 4F210 FV

MSV

JM

ASC, RE

QE, QEA

ST HSV

# JM Series Mechanical Valve

Valve

J4V200

J4V300

J4V400 5V Manifold

JSY 5JV MCS

JVT307 JEL

MVSD

VF

BM NAMUR

551

JEL10

3VJZF

Diaphragm

JELVD

3V1

Coil

2P

2V

2W

PU

2Q

BU

Pulse

JEL.JZF 4H TSV MPV 4HV

HV, K

4R 4F210

FV MSV

ASC, RE QE, QEA ST

PU225

JEL5404

JEL6213

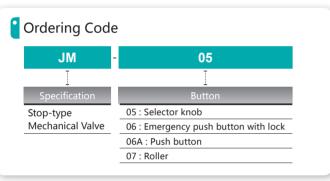
2W(Big) 2L VX

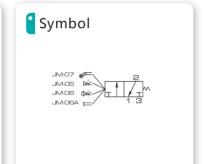
J4V J4V100



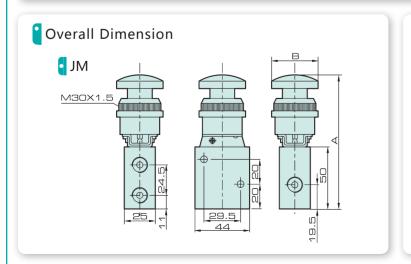
# ASC, RE Series Flow Control Valve





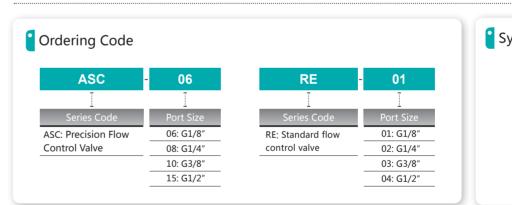


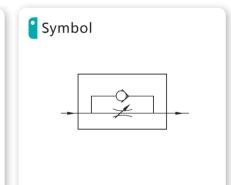
Model	JM-05	JM-06	JM-06A	JM-07					
Working Medium	40 Micron Filtered Air								
Working Pressure	0~0.8MPa								
Ambient Temperature		-20 ~	∙70°C						
Valve Type	3/2 way								
Port Size	G1/4"								



Model	А	В
JM-05	114	36.5
JM-06	111	39.5
JM-06A	96	39.5
JM-07	84.5	42.5







#### Specification

Model		Accura	te Type		Ordinary Type							
Model	ASC-06	ASC-08	ASC-10	ASC-15	RE-01	RE-02	RE-03	RE-04				
Port Size	G1/8"	G1/4"	G3/8"	G1/2"	G1/8"	G1/4"	G3/8"	G1/2"				
Working Medium		Air										
Working Pressure		***************************************		0 ~ 0.9	5MPa		•					
Ambient Temperature		-20∼70°C										

\* ASC-08B installation conforms to NUMAR standard to control the speed of executive unit.

Valve
J4V
J4V100
J4V200
J4V300
J4V400
5V
Manifold
JSY
5JV

JSY
5JV
MCS
JVT307
JEL
MVSD
VF
BM
NAMUR
551
JEL10

3VJZF
Diaphragm
JELVD
3V1
Coil
2P
2V
2W
2W(Big)

2L VX PU PU225 2Q JEL5404 JEL6213

JEL6213
BU
Pulse
JEL.JZF
4H
TSV
MPV

4HV HV, K 4R 4F210 FV

JM ASC,RE

QE, QEA ST HSV

# ASC, RE Series

Flow Control Valve



Overall Dimension

Valve

J4V100

J4V200

J4V300

J4V400 5V Manifold

JSY

5JV MCS

JVT307

JEL

VF BM

551

JEL10

3VJZF

Diaphragm

JELVD

3V1 Coil 2P 2V

2W

2W(Big) 2L VX PU

PU225

JEL5404

JEL6213 BU

Pulse

JEL.JZF

4H

TSV

4HV

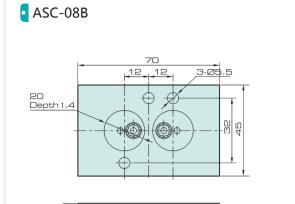
HV, K 4R 4F210

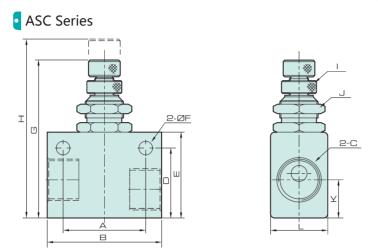
FV MSV

2Q

MVSD

J4V



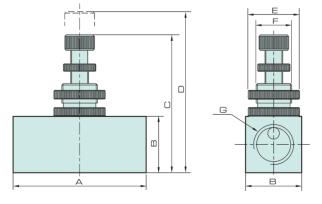


#### Dimension

Model Symbol	А	В	С	D	Е	F	G	Н	I	J	К	L
ASC-06	22	32	G1/8	22	27	4.3	49.7	56.5	M6X0.5	M12X0.75	12	18
ASC-08	26	36	G1/4	22	27	4.3	49.7	56.5	M6X0.5	M12X0.75	12	18
ASC-10	28	40	G3/8	25	30	4.3	52.7	59.5	M6X0.5	M12X0.75	13	22
ASC-15	28	40	G1/2	30	35	4.3	58.7	65.5	M6X0.5	M12X0.75	13.5	26

Overall Dimension





#### Dimension

Model / Symbol	А			D			G
RE-01	45	19	43	50	Ф19	M14×1	G1/8
RE-02	45	19	43	50	Ф19	M14×1	G1/4
RE-03	55	25	55	62	Ф25	M18×1	G3/8
RE-04	55	25	55	62	Ф25	M18×1	G1/2

# QE, QEA Series

Quick Exhaust Valve

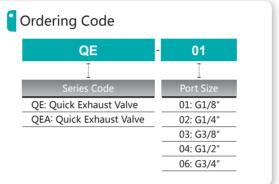


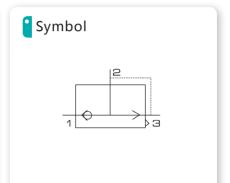






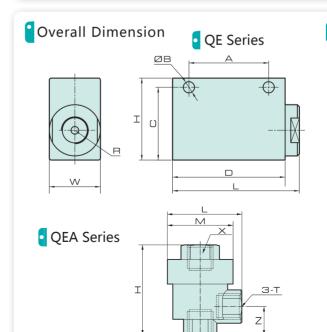
QE-03





#### Specification

Model	QE-01	QE-02	QE-03	QE-04	QE-06					
Port Size	G1/8"	G1/8" G1/4" G3/8" G1/2"								
Effective Cross Section Area	16 mm²	27.5 mm <sup>2</sup>	28 mm²	71 mm²	72.5 mm <sup>2</sup>					
Working Medium	Air									
Working Pressure		•	0 ~ 1.0MPa							
Ambient Temperature	-20 ~ 70°C									



#### Dimension

Symbol		Bore		W			В		D
QE-01	G1/8	G1/4	46	20	32	30	4.3	27	40
QE-02	G1/4	G3/8	61	25	40	39	5.5	33	55
QE-03	G3/8	G3/8	61	25	40	39	5.5	33	55
QE-04	G1/2	G3/8	52.5	28	36	-	-	-	48
QE-06	G3/4	G3/4	98	38	64	60	8.5	51	90

Model/ Symbol		Н		М	N	Х
QEA-01	G1/8	40	32	28	12	14
QEA-02	G1/4	45	38	33.5	14	17
QEA-03	G3/8	55.5	47	39	15.5	22
QEA-04	G1/2	62	55	43	22	24
QEA-06	G3/4	91	66	53	35	34

Valve
J4V
J4V100
J4V200
J4V300
J4V400
5V
Manifold
JSY
5JV

Manifold
JSY
5JV
MCS
JVT307
JEL
MVSD
VF
BM
NAMUR
551

NAMUR
551
JEL10
3VJZF
Diaphragm
JELVD
3V1
Coil
2P
2V

2L VX PU PU225 2Q JEL5404 JEL6213

2W(Big)

Pulse
JEL.JZF
4H
TSV
MPV
4HV
HV, K

4R 4F210 FV MSV JM

ASC, RE QE,QEA

ST HSV

# ST Series Shuttle Valve

Valve

J4V200

J4V300

J4V400 5V Manifold

JSY

5JV

MCS

JEL

VF

BM

551

JEL10

3VJZF

Diaphragm

JELVD

3V1

Coil

2P

2V 2W

PU

PU225 2Q

JEL5404

JEL6213

BU

Pulse

4H

TSV

MPV 4HV

HV, K

4F210

FV

MSV JM

ASC, RE

JEL.JZF

2W(Big) 2L VX

JVT307

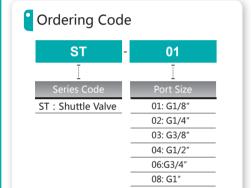
MVSD

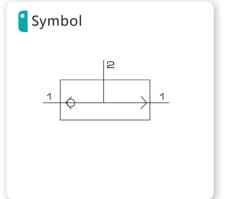
J4V J4V100



# Hand Sliding Valve



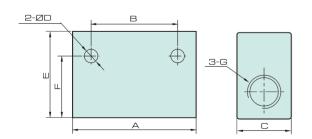




# Model ST-01 ST-02 ST-03 ST-04 ST-06 Working Medium Air Effective Cross Section Area G1/8" G1/4" G3/8" G1/2" G3/4" Port Size 7.5 mm² 21 mm² 40 mm² 60 mm² 110 mm² Working Pressure 0 ~ 1.0MPa



Ambient Temperature



#### Dimension

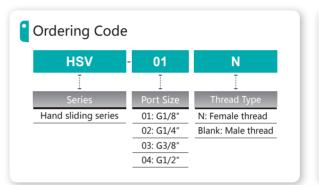
-20 ~ 70°C

Model Symbol	А	В	С	D	Е	F	G
ST-01	40	24	16	4.5	25	20.5	G1/8"
ST-02	50	35	22	5.5	35	25	G1/4"
ST-03	75	48	30	7	50	42	G3/8"
ST-04	75	48	30	7	50	42	G1/2"
ST-06	110	72	40	7	70	58	G3/4"
ST-08	110	72	40	7	70	58	G1"

G1"

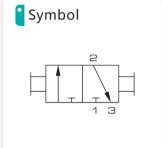
190 mm<sup>2</sup>

HSV-01 HSV-02 HSV-03 HSV-03



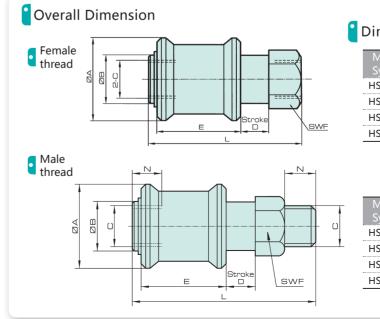
#### Feature

2/3 Hand sliding valve can be used as switch of Air source. When Air source is switched off, the remained air in system can be released.



#### Specification

Model	HSV-01	HSV-04						
Port Size	G1/8"	G1/8" G1/4" G3/8" G3						
Orifice Size	4mm	10mm	12mm					
Working Medium	Filtered and Compressed Air							
Working Pressure	0~1.0MPa							
Ambient Temperature	-20~70℃							
Operating Force	20N							



#### Dimension

Model/ Symbol	А			D			
HSV-01N	20	13	G1/8	5.5	20	14	32
HSV-02N	27	18	G1/4	9.5	32	19	48
HSV-03N	30	21	G3/8	9.5	32	22	48
HSV-04N	38	24	G1/2	17	40	27	70

Model/ Symbol	А		С	D			N	
HSV-01	20	13	G1/8	5.5	20	14	6	38
HSV-02	27	18	G1/4	9.5	32	19	10	58
HSV-03	30	21	G3/8	9.5	32	22	10	58
HSV-04	38	24	G1/2	17	40	27	10	80

J4V300 J4V400 Manifold JSY 5JV MCS JVT307 MVSD BM NAMUR 551 JEL10 3VJZF Diaphragm JELVD 3V1 Coil 2V 2W

Valve J4V J4V100

J4V200

PU PU225 2Q JEL5404 JEL6213 BU Pulse

2W(Big)

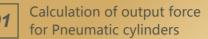
JEL.JZF
4H
TSV
MPV
4HV
HV, K

FV MSV JM ASC, RE

HSV

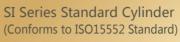
### **CONTENTS OF EXECUTION COMPONENT**







MAL/MALC Series Stainless Steel Mini Cylinder Accessory



SI Series Standard Cylinder Accessory

(Conforms to ISO15552 Standard)

Super Economical Type SQ Series Standard Cylinder (Conforms to ISO15552 Standard)

Large Size SQ Series Standard Cylinder (Conforms to ISO15552 Standard)

**DNT Series Economical Cylinder** 

SC/SU Series Standard Cylinder

SC/SU Series Standard Cylinder & SQ Series Large Bore Cylinder

SL Series Lock Type Cylinder

**DN Series Stainless Steel Mini** 

**DSN Series Stainless Steel Mini** 

**DN/DSN Series Stainless Steel** 

MA Series Stainless Steel Mini

MAC Series Stainless Steel Mini

MA/MAC Series Stainless Steel

MAL Series Aluminum Alloy

MALC Series Aluminum Alloy

Mini Cylinder Accessory

Mini Cylinder

Mini Cylinder

Mini Cylinder Accessory

Cylinder (ISO6432 Standard)

Cylinder (ISO6432 Standard)

**SCT Series Muti-position** 

Cylinder

Accessory

(Conforms to ISO15552 Standard)

SIB Series Double Acting

**Booster Cylinder** 

2-58

SDA Series Compact Cylinder



CQ2 Series Thin Type Cylinder



TCQ2 Series Guide Cylinder



ADN Series New Compact Cylinder (Conforms to ISO21287 Standard)



TADN Series Guide Cylinder



PPRM Series Elbow Cylinder



MHL2 Series Wide Type Gripper (Parallel opening and closing type)



Performing End of The Robot (Pneumatic Fingers)



MXH Series Small Pneumatic Slide (Liner Guide)



**2-102** MXO Series Pneumatic Slide



CJP Series Pin Cylinder (Single



CJ2 Series (Ø6 ~ Ø16) Stainless Steel Mini Cylinder Double Acting



CDU Series Free Installation Cylinder (Ø6~Ø32)



TN Series Double Rod Cylinder



CXS Series (Ø6 ~ Ø32) Twin Rod Cylinder/Basic Type



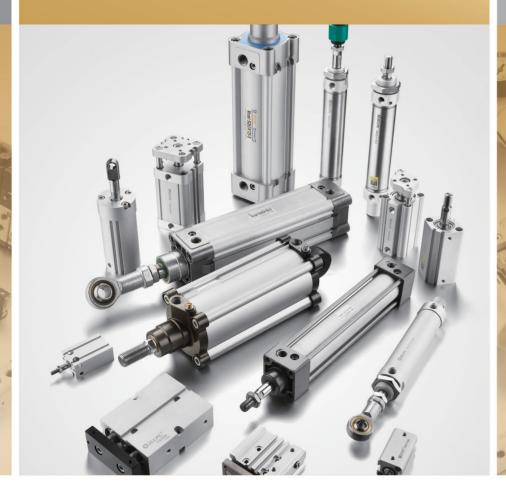
MGP New Compact Tri-rod Cylinder (Ø20 ~ Ø100)



MSQ Series Rotary Platform (Gear Type)

# **EXECUTION COMPONENT**

JELPC STATE



















## How to use Pneumatic cylinders

**JELPC**®

#### Notices of design usage



#### Warning

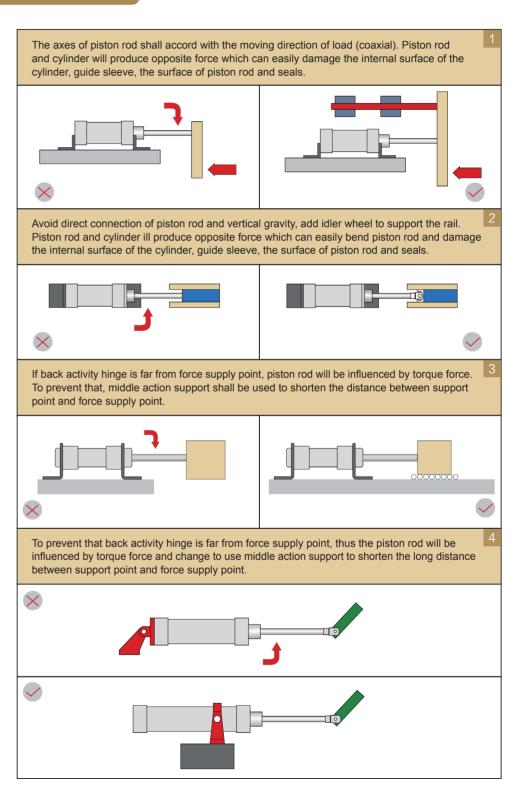
- 1. When designing pneumatic system devices, one must be with the requests and attentions of Pneumatic components and pneumatic system. Use and operate system devices under the situation that necessary examinations have been conducted and the machinery framework, pneumatic control loop and the electrical control system of pneumatic system are ensured to be in safe condition.
- 2. The air used is compressed air, please note that expandable and unstable pressure will fly out, burst out, or leak.
- 3. Due to the mechanical design with the variation of wobbling movement of the cylinder, please pay attention of flying objects and possible crash hazard of your limbs, resulting in body injury and, mechanical damage and so on, so take precaution upon
- 4. The movable range of cylinder may contact our body and cause injury, should be protected by safety guard to prevent direct contact of body hazard
- 5. For larger mechanism or long stroke object, the selected cylinder must equip with buffer device and provide with deceleration circuit to reduce and sooth the rigid impact of the mechanism device.
- 6. Take the emergency or transient cut off power source, or power failure, air source circuit pressure drop causing holding force drop, vertical movement slip and resulting in damage of mechanical device and human safety into account upon designing, so safety countermeasure should be taken in design.
- 7. Take the driving mechanism and circuit control system combination into account upon design to avoid residue pressure in circuit. Failure to completely positioning and lateral pressurized and other factors may cause high speed fly out of the object. These situations are very possible to cause body injury, limbs crashed, and damage of mechanism, countermeasure of protective circuit is necessary.
- 8. Emergency stop device for mechanism is essential. In case of malfunction, in addition to protective device, emergency stop device should be provided in order to prevent body injury and damage of
- 9. Re-start after emergency stop should be confirm safety position of all mechanism, avoid interference and impact due to error position, after human body and damage the equipment, there should have safety precaution countermeasure for restarting after emergency stop upon design.
- 10. While applying three positions intermediate stop control in cylinder, take the expansion property of air and low hydraulic operation, the precise intermediate position difficulty into account. For long period stop position, consider the displacement cause by air leak, Please contact the sale unit of us in case of special application.
- 11. Requests of peripheral environment
  - (1) Avoid to be used in environment with chemical, inflammable, corrosive and sea water, high temperature
  - (2) Avoid to be used in the place with heating and irradiative heat
  - (3) Follow the requirement stated in the specification for ambient
  - (4) Avoid the environment in outdoor with sun and dusty place, which cause unstable in quality
  - (5) Avoid to be used in oily, inflammable and explosion place



How to use Pneumatic cylinders

- 1. Prevent debris and dust from entering the cylinder while laving. which may cause failure and poor movement.
- 2. The use of cylinder should follow the principle of not exceeding max stroke, prevent the momentum force impact the front and rear cap of the piston.
- 3. The in/outlet the cylinder should be equipped with governor for controlling the traveling speed of the cylinder. It is preferable to control the cylinder by check out
- 4. The cylinder with long stroke should design with intermediate support. Arbor and cylinder tube, if support on one side will cause static load deflection, in case of shock and loaded may
- 5. Plural cylinder device simultaneous moving structure, should be designed with guide rod to prevent interference and poor action.
- 6. The axis of the cylinder should be move consistence with load. No lateral load o sallower and will cause surface worn and damage of the arbor, and make the shaft seal packing damage resulting in leakage and poor action
- 7. At the portion of external guide rod or shaft end connection object, the shaft end connection must avoid connection interference, it is preferable to connect to floating coupling or angular adjustable device, prevent damage cause by imbalance action and single side rubbing.
- 8. The inner wall of cylinder and arbor are precise machine, avoid scratch and knock to this portion, especially damage of the outer of the cylinder tube will lead to deformation of tube will lead to deformation of tube wall: this is cause of malfunction and damage
- 9. The cylinder is equipped with adjustment of buffer device, it should be adjusted according to the actual moving speed and max load condition, the adjustment of the needle valve of the buffer device should not be in full closed, this will cause the damage of buffer packing.
- 10. Prevent debris and leak proof tape residue from entering the pipe while pipe laying and assembling, the connector. Reserve 1-1.5 thread not wound with tape while winding the tape.
- 11. If the connector is locked by using anoxic glue, avoid excessive amount and fluid glue from flowing in the body, which may cause iammed and poor movement.
- 12. Caution for installation and application of sensor
  - (1) Confirm the specification and voltage value before usage
  - (2) The fixation of tie band shouldn't be tilted and skew angled
  - (3) When the sensor is connected to load with length of wire exceed 10m. equip one extra induction sensor
- (4) Nearby the sensor in order to prevent pulse and prevent contact fail to release
- (5) Please don't exceed the specified voltage and current
- (6) If the lead wire of the solenoid switch is pulled by force, twisted, wobbled or put heavy object on top. Serious condition will cause short and damage of mechanism
- (7) Please be careful and check all parts for securing before

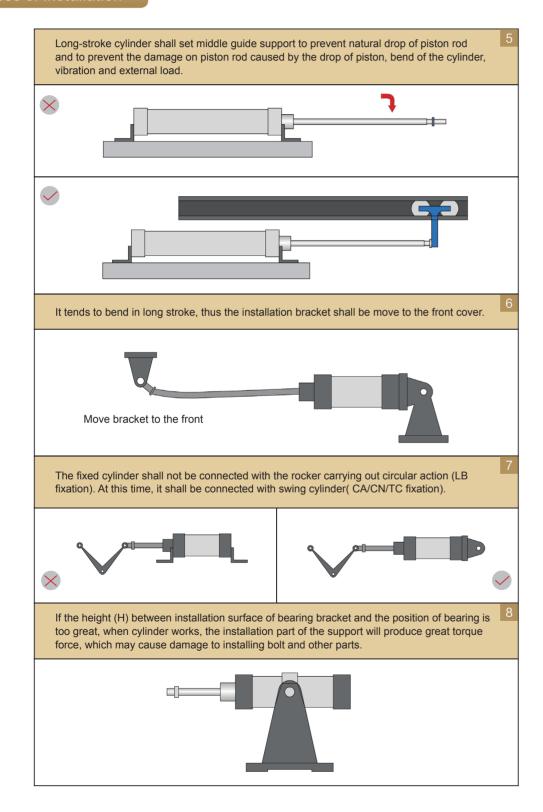
#### Notices of installation





## How to use Pneumatic cylinders

#### Notices of installation





## How to use Pneumatic cylinders

#### Maintenance and service



#### Warning

- Shut off the power switch and air source properly before service and maintenance, confirm that there is no residue pressure in the pipeline and start work after confirming the status is safe.
- 2. The cylinder is coated with small amount of oil at initial using state; it will decrease after a period of usage, and should be added up with appropriate amount of oil according to actual application condition, lubricant is essential in high speed moving. Limit to use ISO-VG32 lubricant, feed by oil applicator, may cause poor action if stop oiled when it is required.
- 3. While removing the cylinder shaft end, it shall work at position with piston pushing in the cylinder (don't pull the cylinder shaft out to serve installing and removing turning), and apply the force evenly to tighten in balance, and push by hand to confirm there is no interference and then start to supply air.

- 4. Service and maintenance should be perform regularly as schedule, and confirm the normal operation of following:
- (1) Is the compressed air supplied stably?
- (2) Is the front filter and strainer normal?
- (3) Is the connection portion or piping loosen accompany moving of object? Is the pipe connection portion normal?
- (4) Is the action condition of the cylinder normally? Is there any delay phenomena and exhaust normal? Any strange noise?
- (5) Whether the piping system connected to solenoid valve (governor) normal? Terminal start and stop movement normal? Is the load system normal?
- (6) Is the lubricant feeding normal? Is the oil amount adjusted properly?

# Calculation of output force for Pneumatic cylinders



Calculations for Air consumption

QA =  $(A1+A2) \times L \times \frac{P+1.033}{1.033} \times 10^{-3}$ QB =  $2 \times A3 \times LH \times \frac{P}{1.033} \times 10^{-3}$ 

 $Qn = (QA + QB) \times n$ 

Cylinder

SI

SIB

SQ

DNT

SCT

SC A.

SL

DN

DSN

DN/DSN A.

MA

MAC

MA/MAC A.

MALC

MAL/MACL A.
SDA

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2

CDU

TN

CXS

MGP

SC / SU

Qn: Air consumption of Cylinder actuating/each time (L/min)

QA: Air volume for cylinder actuating to and back/ each time (L/min)

QB: Air Consumption Valume of Accessaries (Valve the Cylinder) (L/min)

A1: Push Side Pressured Area (cm2)

A2: Pull Side Pressured Area (cm2)

A3: ID of Connecting tube (cm2)

L : Stroke of cylinder (cm)

LH: Length of tube(cm)

P : Operating Pressure (kgf/cm2)

n : Operating Frequency

#### Cylinder Theory Output Sheet

		3			.0	5	0	6	3	8	0	10	00	12	25	16	50	20	00
Extemal Diamete Piston Rod	r	1	2	1	.6	2	0	2	0	2	5	2	5	3	2	4	0	4	0
^ <del>-</del>		Double	Acting																
Operation		Extrusion Side	Pull Side																
Compression Area	(cm²)	8.04	6.90	12.56	10.55	19.63	16.49	31.17	28.03	50.26	45.36	78.53	73.62	122.70	114.60	201.00	188.40	314.20	301.40
	1	8.04	6.90	12.56	10.55	19.63	16.49	31.17	28.03	50.26	45.36	78.53	73.62	122.70	114.60	201.00	188.40	314.20	301.40
	2	16.08	13.80	25.12	21.10	39.26	32.98	62.34	56.06	100.52	90.72	157.06	147.24	245.40	229.20	402.00	376.80	628.40	602.80
	3	24.12	20.70	37.68	31.65	58.89	49.47	93.51	84.09	150.78	136.08	235.59	220.86	368.10	343.80	603.00	565.20	942.60	904.20
Air Pressure	4	32.16	27.60	50.24	42.20	78.52	65.96	124.68	112.12	201.04	181.44	314.12	294.48	490.80	458.40	804.00	753.60	1256.80	1205.60
(Kgf /cm <sup>2</sup> )	5	40.20	34.50	62.80	52.75	98.15	82.45	155.85	140.15	251.30	226.80	392.65	368.10	613.50	573.00	1005.00	942.00	1571.00	1507.00
	6	48.24	41.40	75.36	63.30	117.78	98.94	187.02	168.18	301.56	272.16	471.18	441.72	736.20	687.60	1206.00	1130.40	1885.20	1808.40
	7	56.28	48.30	87.92	73.85	137.41	115.43	218.19	196.21	351.82	317.52	549.71	515.34	858.90	802.20	1407.00	1318.80	2199.40	2109.80
	8	64.32	55.20	100.48	84.40	157.04	131.92	249.36	224.24	402.08	362.88	628.24	588.96	981.60	916.80	1608.00	1507.20	2513.60	2411.20
	9	72.36	62.10	113.04	94.95	176.67	148.41	280.53	252.27	452.34	408.24	706.77	662.58	1104.30	1031.40	1809.00	1695.60	2827.80	2712.60

#### Pressure Factors Convertibel Table

Unit	Pa	KPa	MPa	bar	mbar	kgf/cm²	cmH₂O	mmH₂O	mmHg	p.s.i
Pa	1	10 <sup>-3</sup>	10-6	10-5	10 <sup>-2</sup>	10.2 x 10 <sup>-6</sup>	1.02 x 10 <sup>-3</sup>	101.97 x 10 <sup>-3</sup>	7.5 x 10 <sup>-3</sup>	0.15 x 10 <sup>-3</sup>
KPa	10³	1	10 <sup>-3</sup>	10-2	10	10.2 x 10 <sup>-3</sup>	10.2	101.97	7.5	0.15
МРа	10 <sup>6</sup>	10 <sup>3</sup>	1	10	10 <sup>4</sup>	10.2	1.02 x 10 <sup>3</sup>	101.97 x 10 <sup>3</sup>	7.5 x 10 <sup>3</sup>	0.15 x 10 <sup>3</sup>
bar	10 <sup>5</sup>	10 <sup>2</sup>	10 <sup>-1</sup>	1	10 <sup>3</sup>	1.02	1.02 x 10 <sup>3</sup>	102 x 10 <sup>3</sup>	750.06	14.5
mbar	10 <sup>2</sup>	10 <sup>-1</sup>	10-4	10	1	1.02 x 10 <sup>-3</sup>	1.02	10.2	0.75	14.5 x 10 <sup>-3</sup>
kgf/cm <sup>2</sup>	98066.5	98.07	98.07 x 10 <sup>-3</sup>	0.98	980.67	1	1000	10,000	735.56	14.22
cmH <sub>2</sub> O	98.06	98.07 x 10 <sup>-3</sup>	98.07 x 10 <sup>-6</sup>	0.98 x 10 <sup>-3</sup>	0.98	10 <sup>-</sup> 3	1	10	0.74	14.22 x 10 <sup>3</sup>
mmH <sub>2</sub> O	9.806	9.807 x 10 <sup>-3</sup>	9.807 x 10 <sup>-6</sup>	98.07 x 10 <sup>-6</sup>	98.07 x 10 <sup>-3</sup>	10-4	0.1	1	73.56 x 10 <sup>-3</sup>	1.42 x 10 <sup>-3</sup>
mmHg	133.32	133.32 x 10 <sup>-3</sup>	133.32 x 10 <sup>-6</sup>	1.33 x 10 <sup>-3</sup>	1.33	1.36 x 10 <sup>-3</sup>	1.36	13.6	1	19.34 x 10 <sup>-3</sup>
p.s.i	6894.76	6.89	6.89 x 10 <sup>-3</sup>	68.95 x 10 <sup>-3</sup>	68.95	70.31 x 10 <sup>-3</sup>	70.31	703.07	51.71	1

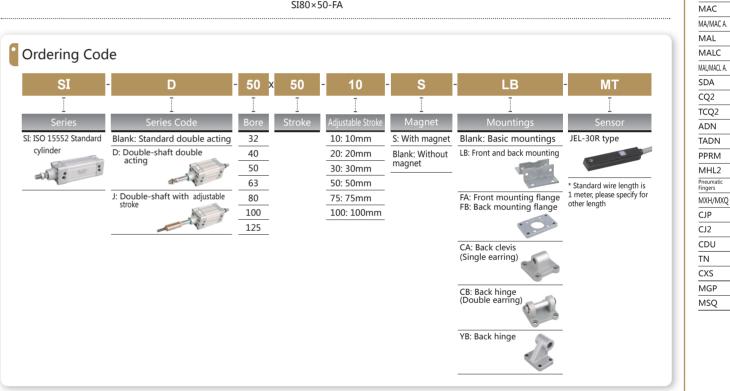
#### 

# SI Series Standard Cylinder (Conforms to ISO15552 Standard)

#### Features

- 1. The cylinder is in accordance with the ISO15552.
- The piston seal adopts two NBR+PA material as Y type one-way sealing structure with compensation function, long service life and low starting pressure.
- 3. The rod seal uses PU material with the characteristics of high strength, good toughness, wear resistance, oil resistance and aging resistance.
- 4. The piston rod material is made by 45C Carbon Steel with hard chrome plating on the surface, and the roughness Ra<0.4, with good wear resistance and rust resistance.





### Specification

Bore (mm)	32	40	50	63	80	100	125
Operation				Double Acting			
Working Medium				Air			
Mountings			Basic F	A FB CA C	B LB YB		
Operating Pressure Range				1 ~ 9.0 Kgf/cm <sup>2</sup>		-	
Proof Pressure				13.5 Kgf/cm <sup>2</sup>		-	
Operating Temperature Range				-20 ~ 80°C		-	
Operating Speed Range				50 ~ 800mm/s		-	
Cushion			A	djustable Cush	ion		
Adjustable Cushion Stroke		20	mm			26 mm	
Port Size	G1/8"	G1	_/4"	G3/	/8"	G1	./2"

2-|P01 2-|P02

DN

DSN

MA

DN/DSN A.

# SI Series Standard Cylinder (Conforms to ISO15552 Standard)

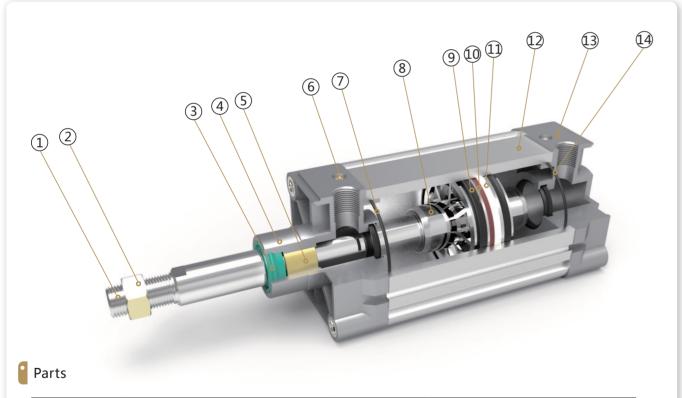


SI Series Standard Cylinder (Conforms to ISO15552 Standard)

Stroke

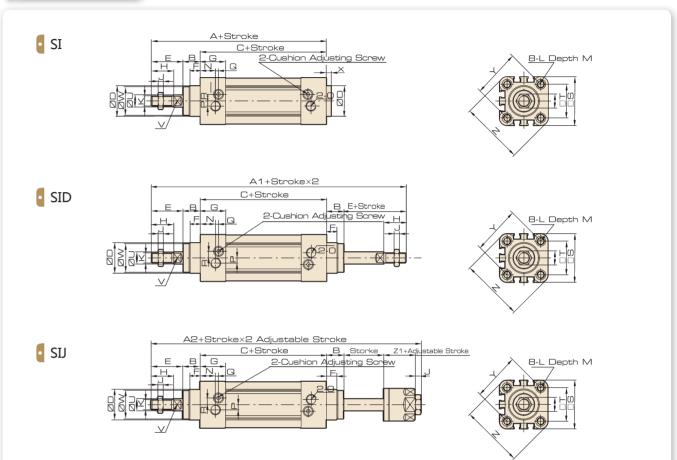
Bore									Sta	ndar	d Stı	roke									Max. Stroke	Allowable Stroke
32	25 5	0 7!	5 80	100	125	150	160	175	200	250	300	350	400	450	500						1000	2000
40 2	25 5	0 7!	5 80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800			1200	2000
50 2	25 5	0 7	5 80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1200	2000
63	25 5	0 7	5 80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
80 2	25 5	0 7	5 80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
100	25 5	0 7!	5 80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
125	25 5	0 7	5 80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000

#### Internal Structure



Number	Name	Number	Name
1	Piston rod	8	Piston
2	Hexagon nut	9	Y ring
3	Shaft seal	10	Magnet
4	Front cover	11	Anti-friction ring
5	Copper tube	12	Barrel
6	Cushion adjust screw	13	Back cover
7	Cushion seal	14	O ring

Overall Dimension



Dimension

Bore/ Symbol	А	A1	A2	В	С	D	Е	F	G	Н	I	J	K	L
32	142	190	185	16	94	30	33	10	25	22	17	6	M10x1.25	M6
40	159	213	207	20	105	35	34	10	29.5	24	17	7	M12x1.25	M6
50	175	244	233	27	106	40	42.5	10	32	32	23	8	M16x1.5	M8
63	190	258	247	26	122	45	42	10	36	32	23	8	M16x1.5	M8
80	214	301	288	35	126	45	53	10	37	40	26	10	M20x1.5	M10
100	229	321	308	40	137	55	52	10	39	40	26	10	M20x1.5	M10
125	277	394	378	47	160	60	71	10	43	54	40	10	M27x2	M12

Bore/ Symbol	М	N	0	P	Q	R			U	V	W		Y		Z1
32	12	15	G1/8	5	3	6.5	45	32.5	12	10	28	4	46	58.7	21
40	12	17.5	G1/4	7	3	7	52	38	16	13	33	4	53.7	68	21
50	12	20	G1/4	7	3	9	65	46.5	20	17	38	4	65.8	84.5	23
63	12	22	G3/8	8	5	9	76	56.5	20	17	38	4	79.9	99.6	23
80	15	23	G3/8	10	5	12	94	72	25	22	43.5	4	101.8	123.8	29
100	15	26	G1/2	10	5	14	112	89	25	22	47	4	125.9	148.9	29
125	20	29	G1/2	10	5	14	134	110	32	27	53	6	156.9	179.6	40.5

Cylinder Calculation

SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA

MAC

MAL

MALC MAL/MACL A

CQ2

MA/MAC A.

MA MAC MA/MAC A. MAL MAL/MACL A. SDA CQ2 TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ CJP CJ2 CDU TN CXS MGP

MSQ

Cylinder

Calculation

SI A.

SIB SQ DNT

SC / SU SCT SC A.

SL DN

DSN

DN/DSN A.

TCQ2 ADN TADN PPRM MHL2 Pneumatic Fingers

MXH/MXQ
CJP
CJ2
CDU
TN
CXS
MGP MSQ

**LB Foot** 

16

50

10.5

24

16

40

8.5

22

Cylinder Calculation SI SQ DNT

SI A. SC / SU SCT SC A. SL DN DSN MA MAC

MAL MALC MAL/MACL A. SDA CQ2 TCQ2 ADN TADN PPRM MHL2 MXH/MXQ CJP CJ2 CDU

TN CXS MGP Overall Dimension

LB

Dimension

D (C	2.2	40	50	63	00	100	4.05
Bore/Symbol	32	40	50	63	80	100	125
AA	32	36	45	50	63	71	90
AB	30	35	40	45	45	55	60
AC	32	36	45	50	63	75	90
AD	32.5	38	46.5	56.5	72	89	110
AE	45	52	65	75	95	115	140
AF	24	28	32	32	41	41	45
AG	11	8	15	13	14	16	18
AH	15.8	17	21.8	21.8	27	26.5	35
AI	4	4	5	5	6	6	8
AJ	142	161	170	186	208	219	250
AK	7	7	9	9	11	11	12.5
AL	7	10	10	10	12	14.5	16.5

### FA / FB Flange

Overall Dimension

FA、FB

AJ+Stroke

Bore/Symbol	32	40	50	63	80	100	125
BA	30.3	35.3	40.3	45.3	45.3	55.3	60.3
BB	10	10	12	12	16	16	20
ВС	45	52	65	76	94	112	140
BD	32	36	45	50	63	75	90
BE	80	90	110	120	150	175	224
BF	64	72	90	100	126	150	180
ВН	6.5	6.5	8.5	8.5	10.5	10.5	15
AJ	10.5	10.5	13.5	13.5	16.5	16.5	19
AK	6.5	6.5	8.5	8.5	10.5	10.5	12.5
ВР	7	9	9	9	12	14	16
T	32.5	38	46.5	56.5	72	89	110

CA Hinge Dimension Overall Dimension **○** CA 52 65 76 94 112 140 45 S 32.5 38 46.5 56.5 72 89 110 11.5 RR 6.5 6.5 9.5 11 12 DB 34 41 54 65 83 101 123 DC 22 25 27 32 36 41 50 DD 10 16 16 20 25 11 13

D

10

26

6.5

14

12

28

6.5

17

12

32

8.5

17

## **CB** Hinge

25

70

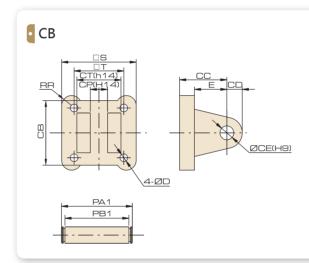
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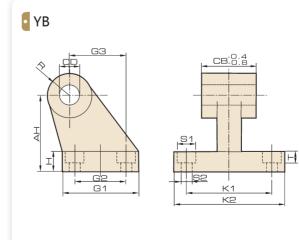
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25



Bore/Symbol	32	40	50	63	80	100	125
S	45	52	65	76	94	112	140
Т	32.5	38	46.5	56.5	72	89	110
D	6.5	6.5	8.5	8.5	10.5	10.5	12.5
E	14	17	17	22	24	25	30
RR	6.5	6.5	9	9.5	11	11.5	12
СВ	34	41	54	65	83	101	123
CC	22	25	27	32	36	41	50
CD	10	11	13	16	46	20	25
CE	10	12	12	16	16	20	25
СР	26	28	32	40	50	60	70
CT	45	52	60	70	90	110	120
PA1	53	60	68	78	100	120	130
PB1	46.5	53.5	61.5	71.5	91.5	111.5	121.5

### **YB** Hinge



Bore/Symbol	32	40	50	63	80	100	125
AH	32	36	45	50	63	71	90
Н	8	10	12	12	14	15	20
CD	10	12	12	16	16	20	25
G1	31	35	45	50	60	70	90
G2	18	22	30	35	40	50	60
G3	21	24	33	37	47	55	70
СВ	26	28	32	40	50	60	70
K1	38	41	50	52	66	76	94
K2	51	54	65	67	86	96	124
S1	11	11	14	14	17	17	20
S2	6.6	6.6	9	9	11	11	14
Т	1.6	1.6	1.6	1.6	2.5	2.5	3.2
R	10	11	13	15	15	19	22.5

SI A.
SIB
SQ
DNT

SC / SU SCT SC A. DSN DN/DSN A. MA MAC MA/MAC A. MAL

MALC CQ2 TCQ2 ADN TADN PPRM MHL2 Pneumatic Fingers

CJP
CJ2
CDU
TN
CXS
MGP MSQ

# SIB Series

Double Acting Booster Cylinder



# SIB Series

Double Acting Booster Cylinder

#### Features

Cylinder

Calculation SI

SI A.

SQ

DNT

SCT

SC A.

SL

DN

DSN

DN/DSN A.

MA

MAC

MAL

MALC

MAL/MACL A.
SDA

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2 CDU

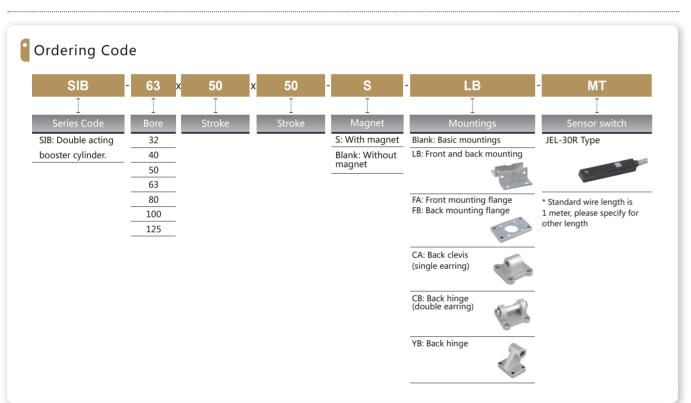
TN

CXS MGP

SC / SU

SIB series booster cylinder is the combination of two ISO15552 standard cylinders which share the same bore size and stroke. Its push and restoring force is two times of the standard cylinder. Two cylinders are linked by the connect base whose material is the same as the cylinder. It is compact in structure and easy for installation.

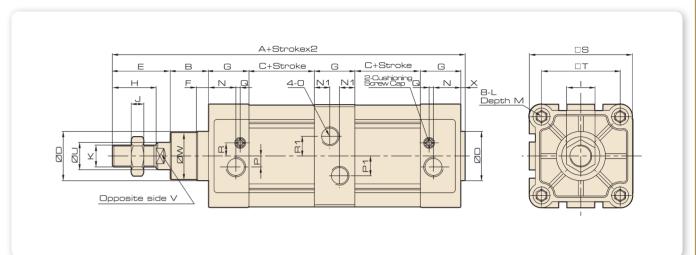




### Specification

Bore (mm)	32	40	50	63	80	100	125
Operation				Double Actin	g		
Working Medium				Air	***************************************		
Mounting			Basic FA	FB CA C	B LB YB		
Operating Pressure Range				1~9.0 kgf/cn	n <sup>2</sup>	-	
Proof Pressure		-		13.5 kgf/cm	2	-	
Operating Temperature Range		-		-20 ~ 80°C		-	
Operating Speed Range		-		50 ~ 500 mm,	/s	-	
Cushion				Air Cushio	1		
Adjustable Cushion Stroke		20 mm			26	mm	-
Port Size	G1/8"	G1	./4"	G	3/8"	G1	./2"

Overall Dimension



Dimension

Model Symbol	А	В	С	D	E	F	G	Н	I	J	K	L	М
32	214	16	43	30	33	10	25	22	17	6	M10X1.25	M6	9.5
40	236.5	20	45	35	34	10	29.5	24	17	7	M12X1.25	M6	9.5
50	252	27	41	40	42.5	10	32	32	23	8	M16X1.5	М6	9.5
63	278	26	49	45	42	10	36	32	23	8	M16X1.5	M8	9.5
80	308	35	52	45	53	10	37	40	26	10	M20X1.5	M10	11.5
100	326	40	59	55	52	10	39	40	26	10	M20X1.5	M10	11.5
125	399	46.5	72	60	71	10	43.5	54	40	10	M27X2	M12	15.5

Model Symbol	N	N1	0	Р	P1	Q	R	R1	S	Т	U	V	W	Х
32	15	7.5	G1/8	5	6	3	6.5	6	45	32.5	12	10	28	4
40	17.5	9.5	G1/4	7	7.5	3	7	7.5	52	38	16	13	33	4
50	20	16	G1/4	7	10.5	3	9	10.5	65	46.5	20	17	38	4
63	22	13	G3/8	8	13	5	9	13	76	56.5	20	17	38	4
80	23	14	G3/8	10	18	5	12	18	94	72	25	22	43.5	4
100	26	19.5	G1/2	10	20	5	14	20	112	89	25	22	47	4
125	29	21.75	G1/2	10	30	5	14	30	134	110	32	27	53	6

Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT

SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN
DSN
DN/DSN A
MA
MAC
MA/MACA
MAL

MALC
MALMACL A
SDA
CQ2
TCQ2
ADN
TADN
PPRM
MHL2
Pneumatic
Fingers
MXH/MXQ

CDU



Patent Product Infringement must be prohibited

Patent No. : ZL 200930344937.0 ZL 200920124808.5

#### Feature

Cylinder

Calculation

SI A.

DNT SC / SU

SCT

SC A.

DN

DSN

MA

MAC

MA/MAC A.

MALC

MAL/MACL A.

SDA

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP CJ2

CDU

TN

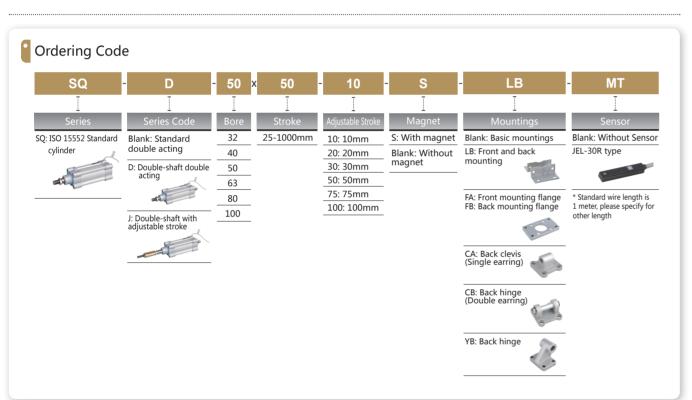
CXS

MGP

DN/DSN A.

SQ Series cylinder is a new super economical cylinder patent product. Body and covers are latest innovated, with new structure, smart, cost reduced, material saved. The installation dimension is the same as SI, conforms to ISO 15552 standard.

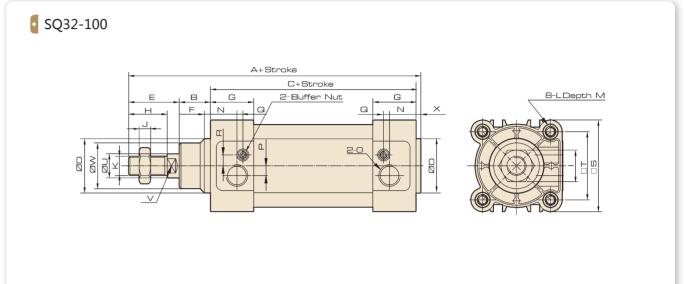




Bore (mm)	32	40	50	63	80	100
Operation			Double	Acting	-	
Working Medium			Ai	r		
Mounting	_		Basic FA FB (	CA CB LB YE	}	-
Operating Pressure Range	_		0.1 ~ 1	.MPa		-
Proof Pressure	_		1.5N	1Pa		-
Operating Temperature Range	_		-20 ~	70℃		-
Operating Speed Range	-		50 ~ 800	Omm/s		-
Cushion	-		Adjustabl	e Cushion		-
Adjustable Cushion Stroke	-	201	mm		26	mm
Port Size	G1/8"	G1	/4"	<b>G</b> 3	/8"	G1/2"

Super Economical Type
SQ Series Standard Cylinder
(Conforms to ISO15552 Standard)

#### Overall Dimension



#### Dimension

Bore / Symbol	А		С	D			G	Н				
32	142	16	94	30	33	4	25	22	17	6	M10x1.25	M6
40	159	20	105	35	34	4	29.5	24	17	7	M12x1.25	М6
50	175	27	106	40	42.5	5	32	32	23	8	M16x1.5	M8
63	190	26	122	45	42	5	36	32	23	8	M16x1.5	M8
80	214	35	127	45	53	6	37	40	26	10	M20x1.5	M10
100	229	40	137	55	52	6	39	40	26	10	M20x1.5	M10

Bore/Symbol	М	N	0		Q				U		W	Х
32	12	15	G1/8	5	3	6.5	45	32.5	12	10	25	4
40	12	17.5	G1/4	7	3	7	52	38	16	13	33	4
50	12	20	G1/4	7	3	9	65	46.5	20	17	36	4
63	12	22	G3/8	8	5	9	76	56.5	20	17	38	4
80	15	23	G3/8	10	5	12	94	72	25	22	43	5
100	15	26	G1/2	10	5	14	112	89	25	22	43.5	6

\*The installation dimension of super economy SQ series cylinder is the same as SI series cylinder and all the cylinder acessories and sensor switch can share with SI cylinder.

Cylinder
Calculation
SI
SI A.
SIB

SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN
DSN
DN/DSN A.
MA
MAC
MA/MAC A.
MAL

MALC
MALCA
SDA
CQ2
TCQ2
ADN
TADN
PPRM

MHL2
Pneumatic
Fingers

MXH/MXQ

CJP

CJ2

CDU

TN

CXS

MGP

MSQ

# Large Size SQ Series Standard Cylinder (Conforms to ISO15552 Standard)



Large Size SQ Series
Standard Cylinder
(Conforms to ISO15552 Standard)

Features

Cylinder

Calculation

SI

SIB

SI A.

DNT

SCT

SC A.

SL

DN

DSN

DN/DSN A.

MA

MAC

MA/MAC A.

MAL

MALC

MAL/MACL A.

SDA

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2

CDU TN

CXS

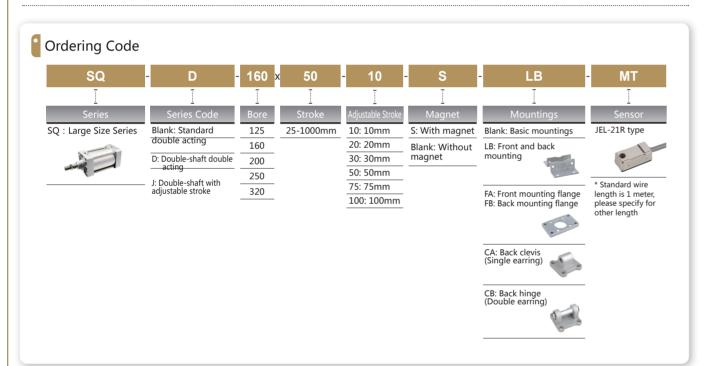
MGP

MSQ

SC / SU

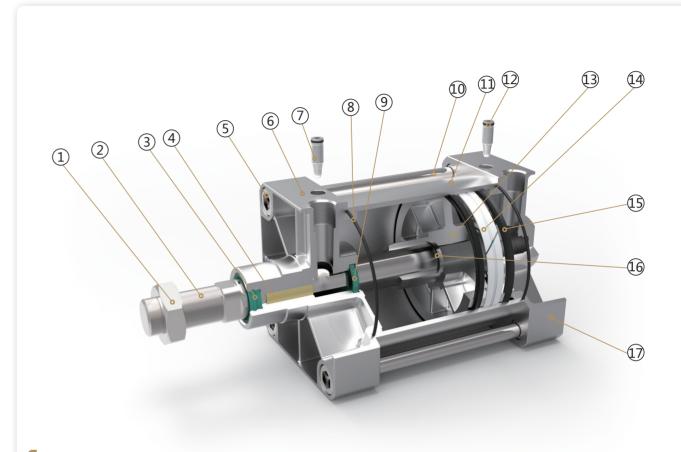
- 1. The cylinder is in accordance with the ISO15552.
- 2. The piston seal adopts two Y type one-way seals with compensation function, long service life and low starting pressure.
- 3. The cylinder cushion adjustment is smooth and the cushioning distance is long.
- 4. The cylinder bearings and wear rings have long distances and better lateral load performance.
- 5. The front and rear cover and piston adopt high pressure casting technology, with beautiful appearance and stronger strength.





Bore (mm)	125	160		200		250	320
Operation			Dou	ıble Actin	g		······································
Working Medium			•	Air	-		
Mounting		Bas	sic FA	FB CA	СВ	LB	
Operating Pressure Range			0.	1 ~ 1MPa	-		
Proof Pressure			•	1.5MPa			
Operating Temperature Range			-2	20 ~ 70°C	-		•
Operating Speed Range			30	-500mm/:	5		*
Cushion			Adjus	stable Cus	hion		•
Adjustable Cushion Stroke	40mm		-		50m	m	•
Port Size	G1/2"	G	3/4"				G1"

Internal Structure



Parts

Number	Name	Number	Name
1	Hexagon nut	10	Tie Rod
2	Piston rod	11	Barrel
3	Shaft seal	12	O ring
4	DU Bearing	13	Piston
5	Cover screw	14	Anti-friction ring
6	Front cover	15	Piston seal
7	Cushion adjust screw	16	O ring
8	O ring	17	Back cover
9	Cushion seal		

Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL

SC / SU
SCT
SC A.
SL
DN
DN/DSN A
MA
MAC
MA/MAC A
MAL
MALC
MA/MAC A
SDA
CQ2
TCQ2
ADN

Pneumatic Fingers
MXH/MXQ
CJP
CJ2
CDU
TN
CXS
MGP
MSQ

TADN

PPRM

MHL2

2-|P11 2-|P12

# Large Size SQ Series Standard Cylinder (Conforms to ISO15552 Standard)



ISO9001:2015 €

# **DNT Series**

Economical Cylinder (Conforms to ISO15552 Standard)

#### Overall Dimension

Cylinder

Calculation

SI

SI A. SIB

DNT

SC / SU SCT

SC A.

SL

DN

DSN

DN/DSN A.

MA

MAC

MAL

MALC

MAL/MACL A.

SDA

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2

CDU

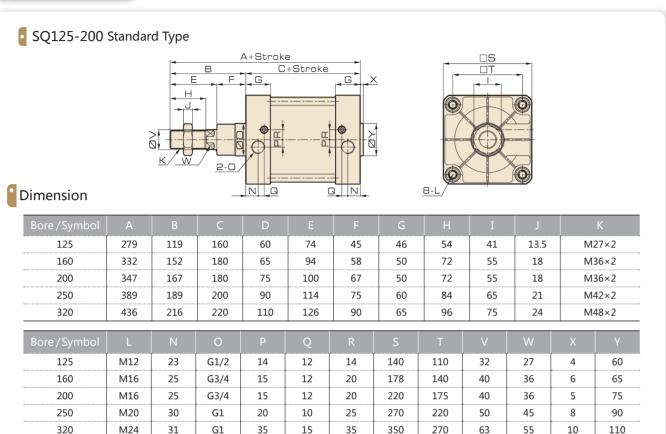
TN

CXS

MGP

MSQ

MA/MAC A.



\* Cylider with or without magnet is the same size.

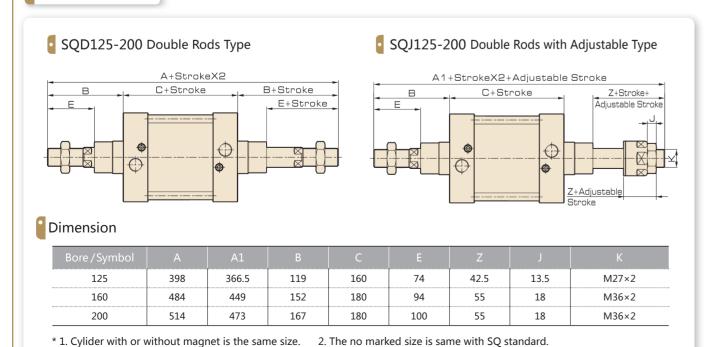
M24

31

G1

#### Overall Dimension

320



15

35

35

350

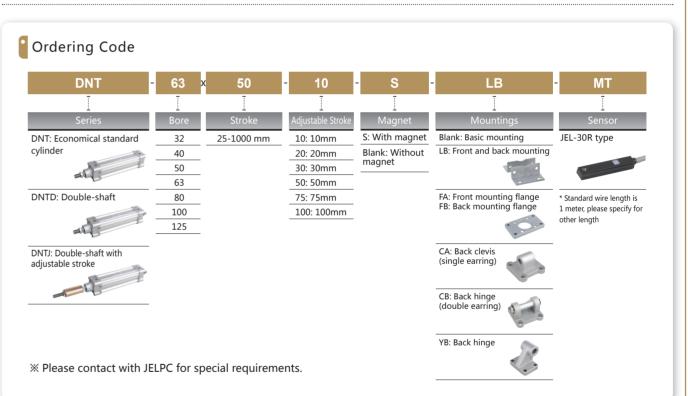
270

55

10

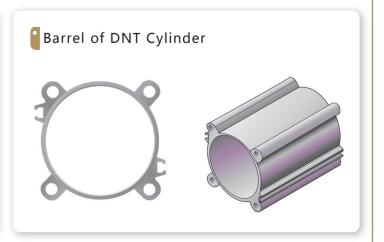
110





#### Installational Dimension

All the dimension of DNT series are the same as SI series. Please consult SI series for accessories and sensor switch for applications.



2-|P13

Cylinder

Calculation

SI A.

SQ

MAC MA/MAC A MAL MALC MAL/MACL A CQ2 TCQ2

ADN TADN PPRM MHL2

MXH/MXQ CJP CJ2 CDU TN CXS

MGP

MSQ

2-|P14

# SC / SU Series Standard Cylinder



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MA/MAC A. MAL MALC MAL/MACL A. SDA

CQ2

TCQ2

ADN

TADN

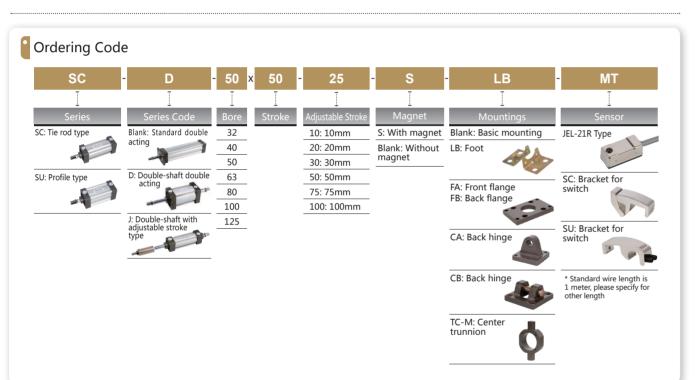
PPRM

MHL2

MXH/MXQ

CJP CJ2 CDU

TN CXS SU50×100-FA SCJ40×75-50 SC40×100-S SC80×50-S SC100×150



Bore (mm)	32	40		0			3	80		100	125
Operation					D	ouble	Acting				
Working Medium		-				Ai	ir		•		
*Mountings		-	Basic I	A	FB	CA	CB LE	TC	TC-M		
Operating Pressure Range					1	~ 9.0K	gf/cm²		•		
Proof Pressure			•		1	L3.5Kg	Jf/cm²		•		
Operating Temperature Range						-20 ~	80°C		•		
Operating Speed Range		-			5(	0 ~ 800	0mm/s		•		
Cushion		-			Adj	ustab	le Cushio	n	•		
Adjustable Cushion Stroke		20	)mm						•	26mm	***************************************
Port Size	G1/8"	G	1/4"				G3/8	n .			G1/2"

# SC / SU Series Standard Cylinder

Cylinder Calculation

MAC

MA/MAC A

MALC

CQ2

TCQ2

ADN

TADN

PPRM

MHL2
Pneumatic
Fingers

MXH/MXQ

CJP

CJ2

CDU

TN

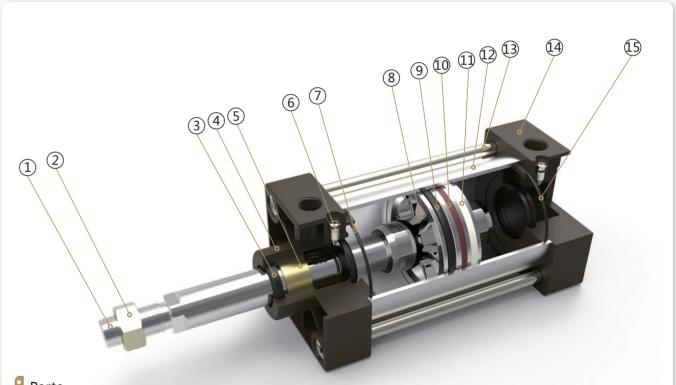
CXS

MGP

#### Stroke

Bore	Standard Stroke	Max. Stroke	Allowable Stroke
32	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500	1000	2000
40	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800	1200	2000
50	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	2000
63	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
80	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
100	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
125	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000

#### Internal Structure



### Parts

Number	Name	Number	Name
1	Piston rod	9	Piston seal
2	Hexagon nut	10	Magnet
3	Shaft seal	11	Anti-friction ring
4	Front cover	12	Barrel
5	Copper tube	13	Pull rod
6	Cushion adjust screw	14	Back cover
7	Cushion seal	15	O ring
8	Piston		

2-|P15 2-|P16

# SC / SU Series

Standard Cylinder



Cylinder Calculation SI SI A. SIB SQ DNT SCT SC A. SL DN DSN DN/DSN A. MA MAC MAL MALC MAL/MACL A. SDA CQ2 TCQ2 ADN TADN PPRM MHL2

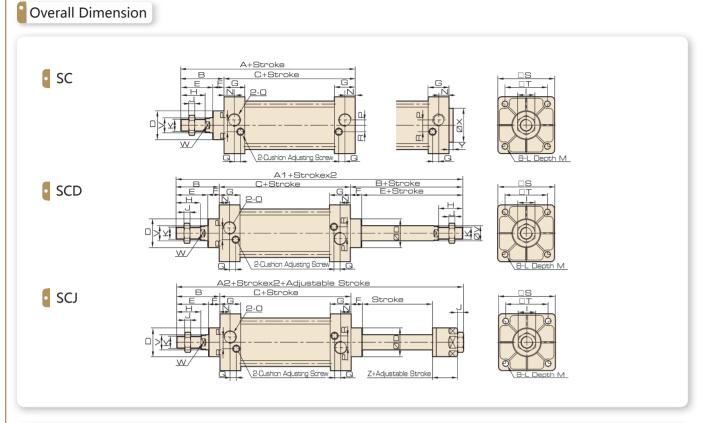
MXH/MXQ

CJP

CJ2

CDU TN

CXS MGP



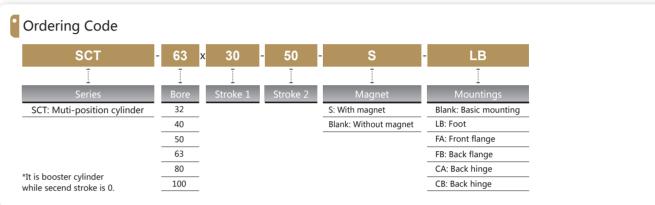
## Dimension

Bore/ Symbol	А	A1	A2			D			G	Н				
32	140	187	182	47	93	28	32	15	27.5	22	17	6	M10×1.25	М6
40	141	191	185	48	93	32	34	15	27.5	24	17	7	M12×1.25	М6
50	150	207	196	57	93	38	42	15	27.5	32	23	8	M16×1.5	М6
63	153	210	199	57	96	38	42	15	27.5	32	23	8	M16×1.5	M8
80	183	258	243	75	108	47	54	21	33	40	26	10	M20×1.5	M10
100	189	264	249	75	114	47	54	21	33	40	26	10	M20×1.5	M10
125	226	330	313	104	122	55	70	34	33	54	40	10	M27×2	M12

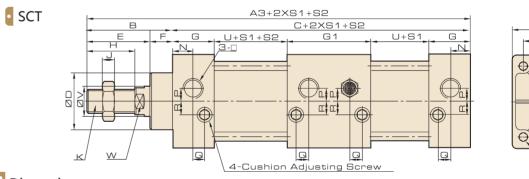
ore/ Symbol	М	N	0	Р	Q	R	S		V	W	Z	X	
32	9.5	13.5	G1/8	3.5	7.5	7	45	33	12	10	21	/	/
40	9.5	1.5	G1/4	6	8.2	9	50	37	16	14	21	/	/
50	9.5	13.5	G1/4	8.5	8.2	9	62	47	20	17	23	/	/
63	9.5	13.5	G3/8	7	8.2	8.5	75	56	20	17	23	/	/
80	11.5	16.5	G3/8	10	9.5	14	94	70	25	22	25.5	/	/
100	11.5	16.5	G1/2	11	9.5	14	112	84	25	22	25.5	/	/
125	15.5	16.5	G1/2	10	10	11	140	110	32	27	30	/	/

# SCT Series Muti-position Cylinder





#### Overall Dimension



### Dimension

Bore/ Symb	ool A3	В	С	D	E	F	G	G1	Н			K
32	233	47	186	28	32	15	27.5	55	22	17	6	M10x1.25
40	235	49	186	32	34	15	27.5	55	24	17	7	M12x1.25
50	243	57	186	38	42	15	27.5	55	32	23	8	M16x1.5
63	249	57	192	38	42	15	27.5	55	32	23	8	M16x1.5
80	296	75	221	47	54	21	33	73	40	26	10	M20x1.5
100	310	75	235	47	54	21	33	73	40	26	10	M20x1.5
125	350	104	122	55	70	34	33	66	54	40	10	M27x2

ore/ Symbol		М	N	0	Р	Q	R	S		V	U	V
32	M6x1	9.5	13.7	G1/8	3.5	7.5	7	45	33	12	38	10
40	M6x1	9.5	13.5	G1/4	6	8.2	9	50	37	16	38	14
50	M6x1	9.5	13.5	G1/4	8.5	8.2	9	62	47	20	38	1
63	M8x1.25	9.5	13.5	G3/8	7	8.2	8.5	75	56	20	41	1
80	M10x1.5	11.5	16.5	G3/8	10	9.5	14	94	70	25	41	2
100	M10x1.5	11.5	16.5	G1/2	10	9.5	14	112	84	25	47	2
125	M12x1.75	15.5	16.5	G1/2	10	10	11	140	110	32	57	2

Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN
DSN
DN/DSN A.
MA
MAC

MA/MAC A
MAL
MALC
MAL/MACL A
SDA
CQ2
TCQ2
ADN
TADN
PPRM
MHL2
Pneumatic
Fingers
MXH/MXQ
CJP
CJ2
CDU
TN
CXS

MSQ

**IDELPC**®

LB Foot

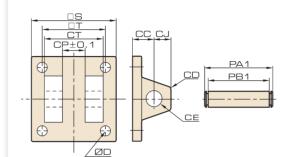
Overall Dimension

SC/SU Series Standard Cylinder & SQ Series Large Size Cylinder Accessory

### CB Double Earring

Dimension

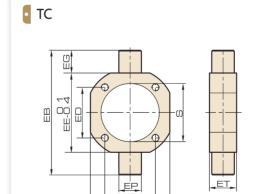
СВ



Bore/Symbol	32	40	50	63	80	100	125	160	200
CC	19	19	19	19	32	32	50	55	60
CD	5	5	3	3	8	8	25	30	35
CE	12	14	14	14	20	20	25	30	30
CJ	13	13	15	15	21	21	25	25	33
CP	16.3	20.5	20.3	20.3	32.3	32.3	70	90	90
CT	32	44	52	52	64	64	120	162	176
PAI	41	53	61	61	75	75	136	176	188
PBI	34	46	54	54	66	66	124	162	177
S	48	50	62	75	94	112	140	176	217
T	33	37	47	56	70	84	110	140	175
D	6.5	6.5	6.5	8.5	10.5	10.5	12.5	18	18

Overall Dimension





Bore/Symbol		40	50	63	80	100	125	160	200
EB	87	113	126	138	164	182	210	270	320
EC	53	63	76	88	114	132	150	203	250
ED	33	37	47	56	70	84	110	140	175
EE	55	63	76	88	114	132	160	204	247
EG	16	25	25	25	25	25	25	33	36.5
EP	16	25	25	25	25	25	30	32	32
ET	30	30	30	30	35	40	36	38	50
S	37.5	45.5	55.5	68.5	87.5	107.5	135	170	218

#### Overall Dimension

Cylinder

Calculation

SI SI A. SIB

SQ

SC / SU SCT

SL DN DSN

MA

MAC

MAL

MAL/MACL A.
SDA

CQ2

TCQ2 ADN

TADN

PPRM MHL2

MXH/MXQ CJP

CJ2

CDU TN CXS MGP

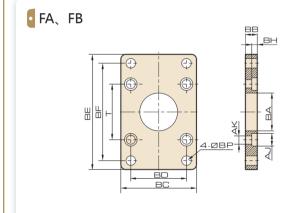
MSQ

Dimension

LB	Cylinder Axial line  AC+Stroke  AA+Stroke
	4-ØAP

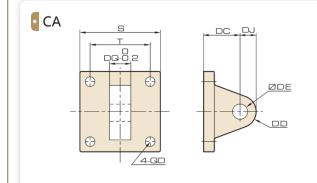
Bore/Symbol	32	40	50	63	80	100	125	160	200
AA	153	169	173	184	200	210	249	328	380
AC	134	140	149	158	168	174	249	288	320
AD	9.5	14.5	12	12	16	18	18	20	28
AE	50	57	68	80	97	112	140	180	220
AF	33	36	47	56	70	84	90	115	135
AG	20.5	23.5	28	31	30	30	45	60	70
AJ	28	30	36.5	41	49	57	90	115	135
AP	9	12	12	12	14	14	16	18	22
AT	3	3	3	3	4	4	7	7	9

## FA / FB Flange



Bore/Symbol	32	40	50	63	80	100	125	160	200
ВА	28.3	32.3	38.3	38.3	47.3	47.3	62	72	82
ВВ	10	10	10	12	16	16	20	20	25
ВС	47	52	65	76	95	115	141	180	220
BD	33	36	47	56	70	84	90	115	135
BE	72	84	104	116	143	162	218	278	322
BF	58	70	86	98	119	138	180	230	270
ВН	6.5	6.5	6.5	8.5	10.5	10.5	13	15	18
AJ	10.5	10.5	10.5	13.5	16.6	16.6	19	25	25
AK	6.5	6.5	6.5	8.5	10.5	10.5	12.5	18	18
BP	7	7	9	9	12	12	16	18	22
Т	33	37	47	56	70	84	110	140	175

### **CA Clevis**



Bore/Symbol			50	63	80	100	125	160	200
S	45	50	62	75	94	112		177	217
Т	33	37	47	56	70	84	110	140	175
DC	34	34	34	34	48	48	50	55	60
DD	14	14	15	15	20	20	25	30	30
DE	12	14	14	14	20	20	25	30	30
DJ	14	14	15	15	20	20	25	28	25
DQ	16	20	20	20	32	32	70	90	90
D	6.5	6.5	6.5	l	10.5	l	l	18	18

Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN

SC A.
SL
DN
DSN
DN/DSN A
MA
MAC
MA/MAC A
MAL
MALC
MAL/MACLA
SDA
CQ2

TCQ2

ADN TADN

PPRM
MHL2
Pneumatic
Fingers
MXH/MXQ
CJP
CJ2
CDU
TN
CXS
MGP
MSQ

SC/SU Series Standard Cylinder & SQ Series Large Size Cylinder Accessory

**IDELPC**®

SC/SU Series Standard Cylinder & SQ Series Large Size Cylinder Accessory

Calculation

SQ

SC / SU

SCT

DN DSN

MAC

MALC

TCQ2

ADN

TADN

PPRM

MHL2

CDU



CJP

CJ2

CDU

TN

CXS MGP 

#### Y/I Knuckle Overall Dimension • Y • I Dimension M10×1.25 15.5 M12×1.25 20.5 M16×1.5

M16×1.5

M20×1.5

M20×1.5

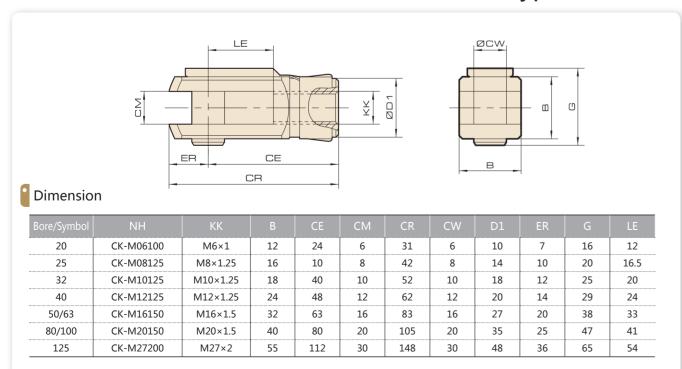
M27×2

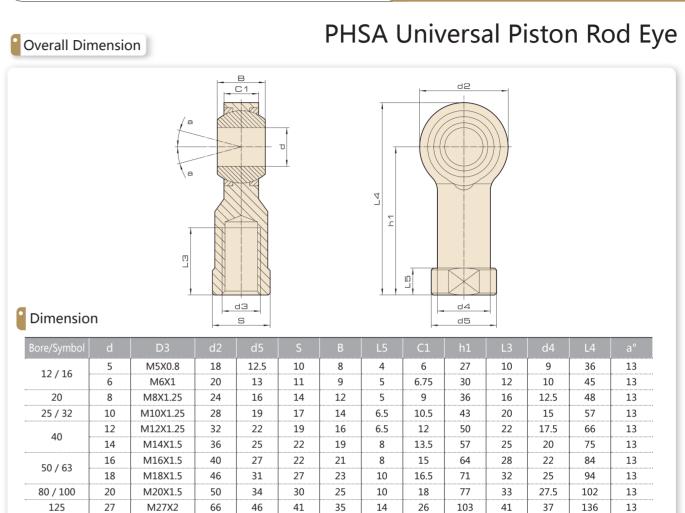
M36×2

39.5

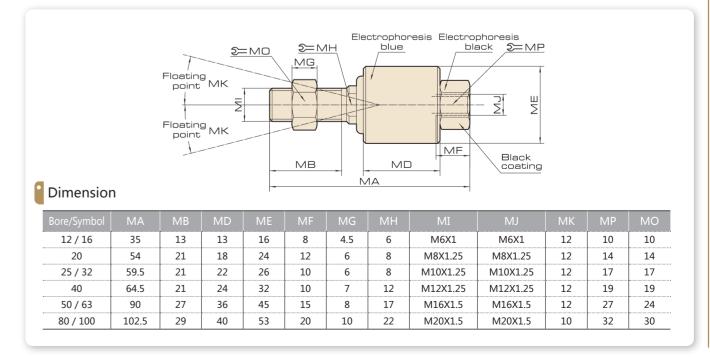
39.5

### CK Type Y Knuckle





### **FDJT Piston Floating Jiont**



2-|P21 2-|P22

## **SL** Series Lock Type Cylinder

Cylinder

Calculation

SI A. SIB

SQ

DNT

SC A.

DN

DSN

DN/DSN A.

MA

MAC

MAL

MALC

MAL/MACL A.

SDA

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2 CDU

TN

CXS

MGP

MSQ

MA/MAC A.

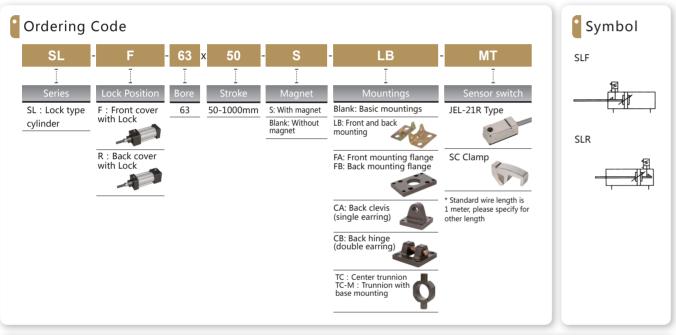
SC / SU SCT

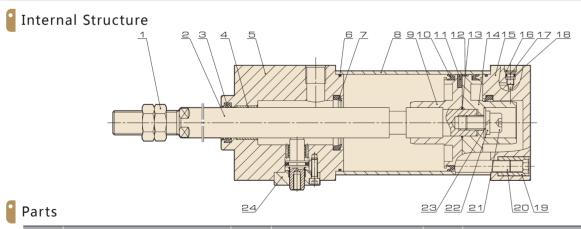
SI



# DN Series Stainless Steel Mini Cylinder (ISO6432 Standard)





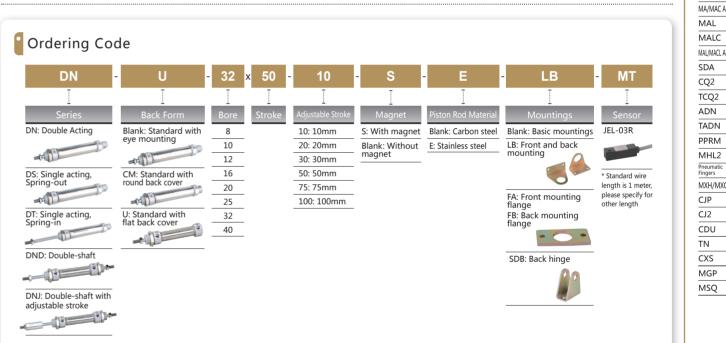


[tem	Name	Item	Name	Item	Name
1	Hexagon thin nut	9	Front piston	17	Regulator pin
2	Piston rod	10	Y ring	18	O ring
3	Anti-dust ring	11	Magnet	19	Tie rod nut
4	DU bearing	12	Lead way bend	20	Tie rod
5	Front cover	13	O ring	21	Inner hexagon pin
6	O ring	14	Back piston	22	Spring washer
7	Cushion ring	15	Backcover	23	Flat washer
8	Barrel	16	Lock slice	24	Lockset

#### Features

- 1. Improving for adapting wide range applications, using precisepolishing of piston rod, more sense of products quality and longer life of front seal.
- 2. Optima design and improve the production efficiency.
- 3. Combined with enterprise color planning and new structure design, stainless steel series cylinder integrated as the semicircular groove cramping.
- 4. Using embedded gasket, increase the pressured area of pistons after collision.





Bore (mm)	08	10	12	16	20	25	32	40					
Operation			D	ouble Acting	or Single Acti	ng							
Working Medium				Д	ir								
Mountings	-	Basic LB FA FB SDB											
Operating Pressure		0.1~1.0MPa											
Proof Pressure	-			1.5	MPa								
Operating Temperature Range				-20 ~	80°C			•					
Operating Speed Range	-			50 ~ 80	0mm/s								
Cushion		Gasket Cushion											
Port Size		M5x0.8	-		-	G1/8"		-					

CDU TN CXS MGP MSQ

Cylinder Calculation

SI A.

SL

DN/DSN A.

MA

MAC

2-|P23

DN Series Stainless Steel Mini Cylinder (ISO6432 Standard)



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DSN DN/DSN A. MA MAC MAL MALC

MAL/MACL A. SDA

CQ2

TCQ2

TADN

PPRM

MHL2

MXH/MXQ

CJP CJ2 CDU

TN

CXS MGP

MSQ

Parts

ADN

Internal Structure 10 6

Number	Name	Number	Name
1	Piston rod	9	O ring
2	Hexagon nut	10	Piston seal
3	Shaft seal	11	Anti-friction seal
4	Hexagon nut	12	Magnet
5	DU bearing	13	Piston
6	Front cover	14	Socket head cap screw
7	Anti-collision gasket	15	Back cover
8	Barrel		

DN Series Stainless Steel Mini Cylinder (ISO6432 Standard)

Cylinder

Calculation

SI A.

SQ DNT

SCT SC A.

SL

DN/DSN A.

MA

MAC

MA/MAC A. MAL

MALC

MAL/MACL A

CQ2

TCQ2

ADN

TADN

PPRM

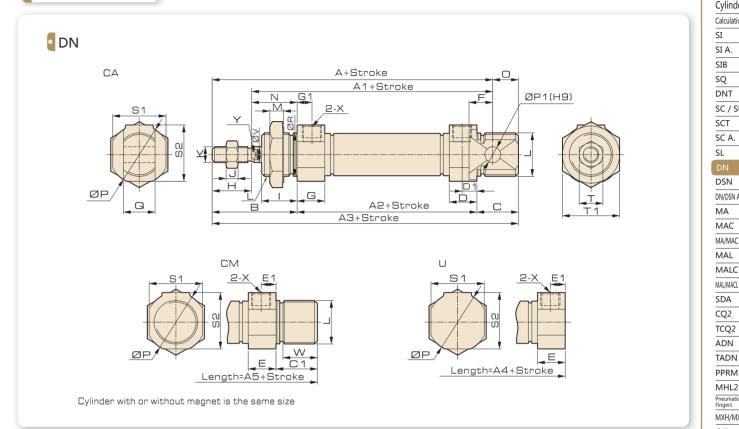
MHL2 Pneumatic Fingers

CJP CJ2 CDU TN CXS MGP

MSQ

SC / SU

#### Overall Dimension



### Dimension

Bore Symbol	A	A1	A2	A3	A4	A5			C1	D	D1		E1		G	G1	Н	
8	76	64	46	86	74	86	28	12	12	10	5.5	10	5.5	6	10	5.5	12	12
10	76	64	46	86	74	86	28	12	12	10	5.5	10	5.5	6	10	5.5	12	12
12	91	74	50	105	88	105	38	17	17	10	6	10	6	9	10	6	16	17
16	98	82	55	111	92	111	37	19	19	10.5	6	10.5	6	9	10.5	6	16	16
20	115	95	64	128	107	128	43	21	21	14	7.5	14	7.5	9	14	7.5	20	18
25	126	104	66	137	116	137	50	21	21	15	8	15	8	12	15	8	22	22
32	135	113	72	147	120	132	48	27	12	17	8.5	17	8.5	15	17	8.5	22	18
40	138	115	72	150	123	136	51	27	14	16	8	16	8	15	16	8	23	20

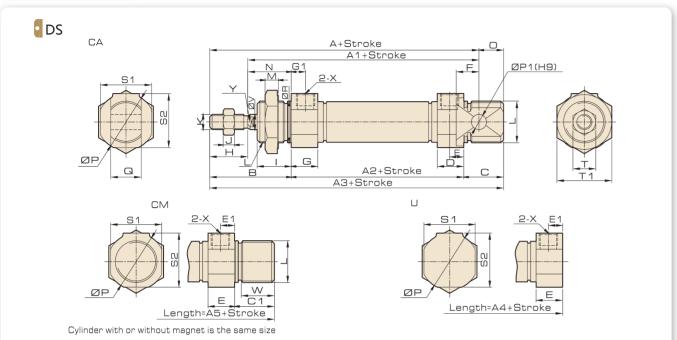
Bore Symbol		K		М	N	0		P1	Q		S1	S2		T1			W	
8	6	M4×0.7	M12×1.25	6	16	10	17	4	8	12	15	15	7	17	M5×0.8	4	9.3	
10	6	M4×0.7	M12×1.25	6	16	10	17	4	8	12	15	15	7	17	M5×0.8	4	9.3	Ī
12	5	M6×1	M16×1.5	6	22	14	21	6	12	16	19	19	10	24	M5×0.8	6	14	
16	5	M6×1	M16×1.5	6	21	13	21	6	12	16	19	19	10	24	M5×0.8	6	15.5	Ī
20	6	M8×1.25	M22×1.5	7	23	13	30	8	16	22	27	28.5	12	29	G1/8	8	17.5	Ī
25	6	M10×1.25	M22×1.5	7	28	11	30	8	16	22	27	28.5	17	29	G1/8	10	17.5	-
32	6	M10×1.25	M27×2	9	26	12	38	10	20	27	35	36.5	17	36	G1/8	12	8	Ī
40	8	M14×1.5	M33×2	9	28	12	45	10	20	33	42	43.5	22	45	G1/4	16	10	

2-|P25

DN Series Stainless Steel Mini Cylinder (ISO6432 Standard)



Overall Dimension



#### Dimension

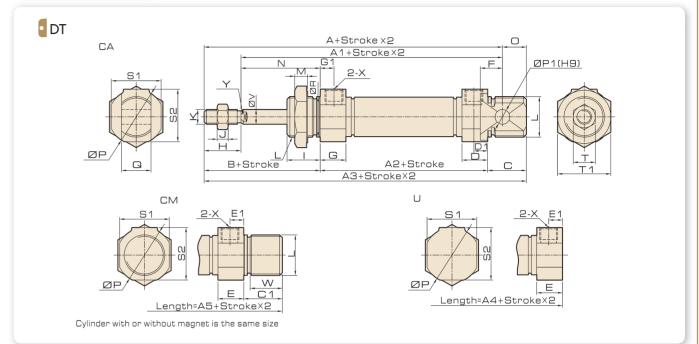
Symbol					A1			A2			А3			A4			A5	
Bore/Stroke	0-50	50-100	100-150	0-50	50-100	100-150		50-100	100-150	0-50	50-100	100-150	0-50	50-100	100-150	0-50	50-100	100-150
8	101	-	-	89	-	-	71	-	-	111	-	-	99	-	-	111	-	-
10	101	-	-	89	-	-	71	-	-	111	-	-	99	-	-	111	-	-
12	116	-	-	99	-	-	75	-	-	130	-	-	113	-	-	130	-	-
16	123	148	-	107	132	-	80	105	-	136	161	-	117	142	-	136	161	-
20	140	165	190	120	145	170	89	114	139	153	178	203	132	157	182	153	178	203
25	151	176	201	129	154	179	91	116	141	162	187	212	141	166	191	162	187	212
32	160	185	210	138	163	188	97	122	147	172	197	222	145	170	195	157	182	207
40	163	188	213	140	165	190	97	122	147	175	200	225	148	173	198	161	186	211

Bore/Symbol			C1	D	D1		E1			G1					
8	28	12	12	10	5.5	10	5.5	6	10	5.5	12	12	6	M4×0.7	M12×1.25
10	28	12	12	10	5.5	10	5.5	6	10	5.5	12	12	6	M4×0.7	M12×1.25
12	38	17	17	10	6	10	6	9	10	6	16	17	5	M6×1	M16×1.5
16	37	19	19	10.5	6	10.5	6	9	10.5	6	16	16	5	M6×1	M16×1.5
20	43	21	21	14	7.5	14	7.5	9	14	7.5	20	16	6	M8×1.25	M22×1.5
25	50	21	21	15	8	15	8	12	15	8	22	22	6	M10×1.25	M22×1.5
32	48	27	12	17	8.5	17	8.5	15	17	8.5	22	18	6	M10×1.25	M27×2
40	51	27	14	16	8	16	8	15	16	8	23	20	8	M14×1.5	M33×2

Bore/Symbol	М		0		P1	Q		S1	S2		T1				
8	6	16	10	17	4	8	12	15	15	7	17	M5×0.8	4	9.3	-
10	6	16	10	17	4	8	12	15	15	7	17	M5×0.8	4	9.3	-
12	6	22	14	21	6	12	16	19	19	10	24	M5×0.8	6	14	5
16	6	21	13	21	6	12	16	19	19	10	24	M5×0.8	6	15.5	5
20	7	23	13	30	8	16	22	27	28.5	12	29	G1/8	8	17.5	6
25	7	28	11	30	8	16	22	27	28.5	17	29	G1/8	10	17.5	8
32	9	26	12	38	10	20	27	35	36.5	17	36	G1/8	12	8	10
40	9	28	12	45	10	20	33	42	43.5	22	45	G1/4	16	10	14

DN Series Stainless Steel Mini Cylinder (ISO6432 Standard)





### Dimension

Symbol					A1			A2			А3			A4			A5	
	0-50		100-150	0-50	50-100	100-150	0-50		100-150	0-50	50-100	100-150		50-100	100-150	0-50	50-100	100-150
8	101	-	-	89	-	-	71	-	-	111	-	-	99	-	-	111	-	-
10	101	-	-	89	-	-	71	-	-	111	-	-	99	-	-	111	-	-
12	116	-	-	99	-	-	75	-	-	130	-	-	113	-	-	130	-	-
16	123	148	-	107	132	-	80	105	-	136	161	-	117	142	-	136	161	-
20	140	165	190	120	145	170	89	114	139	153	178	203	132	157	182	153	178	203
25	151	176	201	129	154	179	91	116	141	162	187	212	141	166	191	162	187	212
32	160	185	210	138	163	188	97	122	147	172	197	222	145	170	195	157	182	207
40	163	188	213	140	165	190	97	122	147	175	200	225	148	173	198	161	186	211

Symbol			C1	D	D1		=1		G	G1	H				
8	28	12	12	10	5.5	10	5.5	6	10	5.5	12	12	6	M4×0.7	M12×1.25
10	28	12	12	10	5.5	10	5.5	6	10	5.5	12	12	6	M4×0.7	M12×1.25
12	38	17	17	10	6	10	6	9	10	6	16	17	5	M6×1	M16×1.5
16	37	19	19	10.5	6	10.5	6	9	10.5	6	16	16	5	M6×1	M16×1.5
20	43	21	21	14	7.5	14	7.5	9	14	7.5	20	16	6	M8×1.25	M22×1.5
25	50	21	21	15	8	15	8	12	15	8	22	22	6	M10×1.25	M22×1.5
32	48	27	12	17	8.5	17	8.5	15	17	8.5	22	18	6	M10×1.25	M27×2
40	51	27	14	16	8	16	8	15	16	8	23	20	8	M14×1.5	M33×2

Symbol	М	N	0		P1	Q		S1	S2		T1		\ \ \	W	
8	6	16	10	17	4	8	12	15	15	7	17	M5×0.8	4	9.3	-
10	6	16	10	17	4	8	12	15	15	7	17	M5×0.8	4	9.3	-
12	6	22	14	21	6	12	16	19	19	10	24	M5×0.8	6	14	5
16	6	21	13	21	6	12	16	19	19	10	24	M5×0.8	6	15.5	5
20	7	23	13	30	8	16	22	27	28.5	12	29	G1/8	8	17.5	6
25	7	28	11	30	8	16	22	27	28.5	17	29	G1/8	10	17.5	8
32	9	26	12	38	10	20	27	35	36.5	17	36	G1/8	12	8	10
40	9	28	12	45	10	20	33	42	43.5	22	45	G1/4	16	10	14

Cylinder Calculation SI A. SQ DNT SC / SU

SCT

SC A.

DSN

DN/DSN A.

MA

MAC

MAL

MALC

MAL/MACL A.

SDA

CQ2

TCQ2

ADN

MA/MAC A.

SL

SC A. SL DSN DN/DSN A. MA MAC MA/MAC A. MAL MALC MAL/MACL A. SDA CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP CJ2

CDU

TN

CXS

MGP

MSQ

Cylinder

Calculation

SI

SIB

SQ

DNT

SC / SU SCT

SI A.

TADN PPRM MHL2 Pneumatic Fingers CJP CJ2 CDU TN CXS

MGP

MSQ

# DN Series

Stainless Steel Mini Cylinder (ISO6432 Standard)



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DSN DN/DSN A. MA MAC MA/MAC A. MAL

MALC

MAL/MACL A.

SDA

CQ2

TCQ2

ADN

TADN

PPRM MHL2

MXH/MXQ

CJP

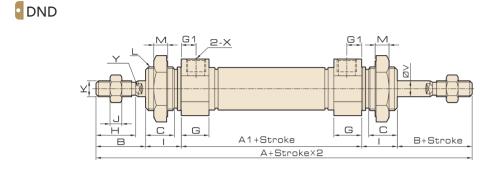
CJ2

CDU

TN

CXS

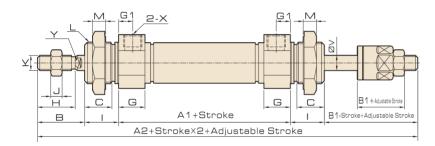
MGP MSQ Overall Dimension





Cylinder with or without magnet is the same size

DNJ





Cylinder with or without magnet is the same size

#### Dimension

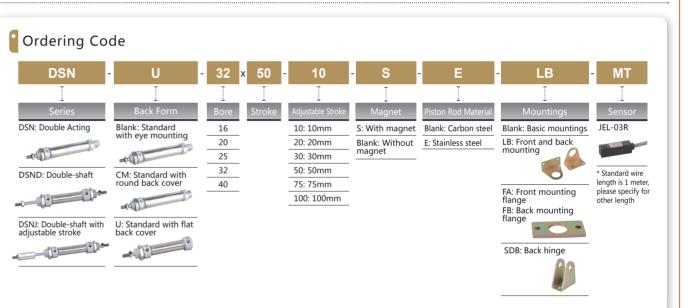
Bore Symbol	А	A1	A2		B1	С	D	G	G1	Н			К		М		T1		
8	102	46	100.5	16	14.5	9.3	-	10	5.5	12	12	6	M4×0.7	M12×1.25	6	7	17	4	M5×0.8
10	102	46	100.5	16	14.5	9.3	-	10	5.5	12	12	6	M4×0.7	M12×1.25	6	7	17	4	M5×0.8
12	126	50	126	21	21	14	5	10	6	16	17	5	M6×1	M16×1.5	6	10	24	6	M5×0.8
16	129	55	129	21	21	13	5	10.5	6	16	16	5	M6×1	M16×1.5	6	10	24	6	M5×0.8
20	150	64	150	27	25	14.5	6	14	7.5	20	18	6	M8×1.25	M22×1.5	7	12	29	8	G1/8
25	166	66	165	28	27	18.5	8	15	8	22	22	6	M10×1.25	M22×1.5	7	17	29	10	G1/8
32	168	72	165	30	27	14	10	17	8.5	22	18	6	M10×1.25	M27×2	9	17	36	12	G1/8
40	174	72	172	31	29	16	14	16	8	23	20	8	M14×1.5	M33×2	9	22	45	16	G1/4

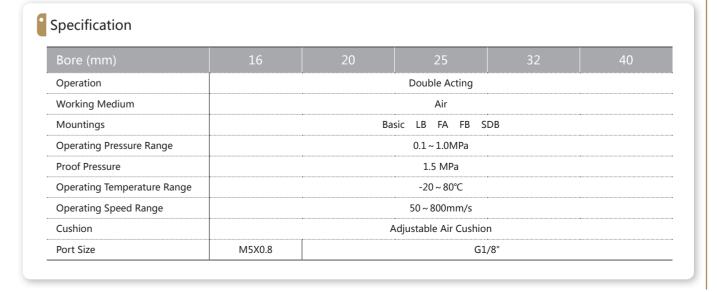
DSN Series Stainless Steel Mini Cylinder (ISO6432 Standard)

#### Features

- 1. Improving for adapting wide range applications, using precise polishing of piston rod, more sense of products quality and longer life of front seal.
- 2. Optima design and improve the production efficiency.
- 3. Combined with enterprise color planning and new structure design, stainless steel series cylinder integrated as the semicircular groove cramping.
- 4. Change processing technology of cylinder cushion structure to ensure buffering function in stabilization.
- 5. Improved the range of buffering fine-tune, enable customers to more easily adjust the buffer throttling speed.







2-|P29 2-|P30

SL DN DN/DSN A. MA MAC MA/MAC A

MAL MALC MAL/MACL A CQ2 TCQ2 ADN TADN

PPRM MHL2 MXH/MXQ CJP

CJ2 CDU TN CXS MGP

MSQ

Internal Structure

1 2

DSN Series Stainless Steel Mini Cylinder (ISO6432 Standard)

3 4 5

6 7

8

9

10 11 12



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DN/DSN A. MA MAC MAL MALC

MAL/MACL A. SDA

CQ2

TCQ2

TADN

PPRM

MHL2

MXH/MXQ

CJP CJ2 CDU

TN

CXS MGP

MSQ

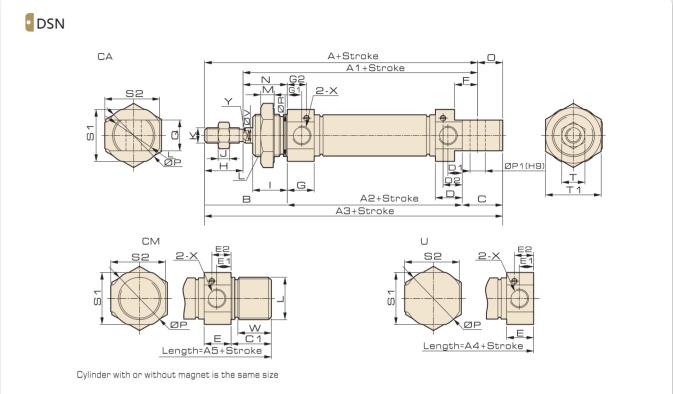
ADN

Parts

Number	Name	Number	Name
1	Piston rod	9	Barrel
2	Hexagon nut	10	Piston
3	Shaft seal	11	Piston seal
4	Hexagon nut	12	Anti-friction seal
5	DU bearing	13	Magnet
6	Front cover	14	Socket head cap screw
7	Anti-collision gasket	15	Cushion
8	Cushion	16	Back cover

DSN Series Stainless Steel Mini Cylinder (ISO6432 Standard)





Dimension

Bore Symbol	А	A1	A2	A3	A4	A5	В	С	C1	D	D1	D2	Е	E1	E2	F	G	G1	G2	Н	I
16	98	82	55	111	92	111	37	19	19	10.5	6	7	10.5	6	7	9	10.5	6	7	16	16
20	115	95	64	128	107	128	43	21	21	14	7.5	10	14	7.5	10	9	14	7.5	10	20	18
25	126	104	66	137	116	137	50	21	21	15	8	10.5	15	8	10.5	12	15	8	10.5	22	22
32	135	113	72	147	120	132	48	27	12	17	8.5	12	17	8.5	12	15	17	8.5	12	22	18
40	138	115	72	150	123	136	51	27	14	16	8	11.5	16	8	11.5	15	16	8	11.5	23	20

	Bore Symbol		K		М	N	0		P1	Q		S1	S2		T1			W	Υ
	16	5	M6×1	M16×1.5	6	21	13	21	6	12	16	19	19	10	24	M5×0.8	6	15.5	5
	20	6	M8×1.25	M22×1.5	7	23	13	30	8	16	22	27	28.5	12	29	G1/8	8	17.5	6
-	25	6	M10×1.25	M22×1.5	7	28	11	30	8	16	22	27	28.5	17	29	G1/8	10	17.5	8
	32	6	M10×1.25	M27×2	9	26	12	38	10	20	27	35	36.5	17	36	G1/8	12	8	10
	40	8	M14×1.5	M33×2	9	28	12	45	10	20	33	42	43.5	22	45	G1/4	16	10	14

Cylinder Calculation

SI A. SQ DNT SC / SU SCT SC A. SL DN

DSN DN/DSN A. MA MAC MA/MAC A. MAL MALC MAL/MACL A. CQ2 TCQ2 ADN TADN

PPRM MHL2 Pneumatic Fingers MXH/MXQ

CJP CJ2 CDU TN CXS MGP MSQ

DSN Series Stainless Steel Mini Cylinder (ISO6432 Standard)



Overall Dimension

Cylinder

Calculation

SI

SIB

SQ DNT

SC / SU SCT

SC A.

DN/DSN A.

MA

MAC

MAL

MALC

MAL/MACL A.

SDA

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2

CDU TN

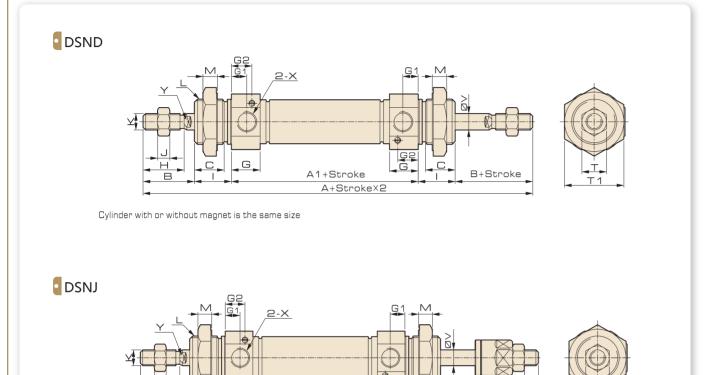
CXS MGP

MSQ

MA/MAC A.

SL DN

SI A.



Dimension

Bore Symbol	А	A1	A2	В	В1	С	D	G	G1	G2	Н	I	J	K	L	М	Т	T1	V	Х
16	129	55	129	21	21	13	5	10.5	6	7	16	16	5	M6×1	M16×1.5	6	10	24	6	M5×0.8
20	150	64	150	27	25	14.5	6	14	7.5	10	20	18	6	M8×1.25	M22×1.5	7	12	29	8	G1/8
25	166	66	165	28	27	18.5	8	15	8	10.5	22	22	6	M10×1.25	M22×1.5	7	17	29	10	G1/8
32	168	72	165	30	27	14	10	17	8.5	12	22	18	6	M10×1.25	M27×2	9	17	36	12	G1/8
40	174	72	172	31	29	16	14	16	8	11.5	23	20	8	M14×1.5	M33×2	9	22	45	16	G1/4

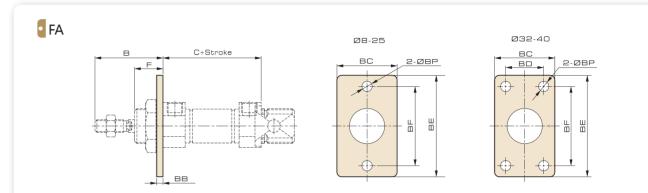
A1+Stroke

Cylinder with or without magnet is the same size

# DN / DSN

Mini Cylinder Accessory

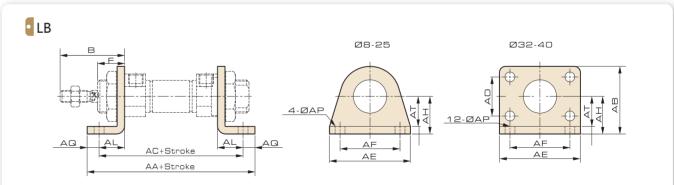
#### Overall Dimension



#### Dimension

Symbol		С	C (	(DS/DT Ser	ies)							
Bore Stroke		(DN, DSN Series)	0-50	50-100	100-150	ВВ	BC	BD	BE	BF	BP	F
8	28	46	71	-	-	3	22	-	40	30	4.5	12
10	28	46	71	-	-	3	22	-	40	30	4.5	12
12	38	50	75	-	-	4	30	-	52	40	5.5	17
16	37	55	80	105	-	4	30	-	52	40	5.5	16
20	43	64	89	114	139	5	40	-	66	50	6.6	16
25	50	66	91	116	141	5	40	-	66	50	6.6	22
32	48	72	97	122	147	5	45	20	80	60	7	18
40	51	72	97	122	147	5	50	30	100	80	9	20

#### Overall Dimension



### Dimension

Symbol		AA	AA (	DS/DT S	Series)		AC	AC (	DS/DT S	series)									
Bore Stroke		(DN、DSN Series)	0-50	50- 100	100- 150	AB	(DN、DSN Series)	0-50	50- 100	100- 150	AD	AE	AF	AH	AL	AP	AQ	AT	F
8	28	78	103	-	-	-	68	93	-	-	-	35	25	16	11	4.5	5	3	12
10	28	78	103	-	-	-	68	93	-	-	-	35	25	16	11	4.5	5	3	12
12	38	90	115	-	-	-	78	103	-	-	-	42	32	20	14	5.5	6	4	17
16	37	95	120	145	-	-	83	108	133	-	-	42	32	20	14	5.5	6	4	16
20	43	114	139	164	189	-	98	123	148	173	-	54	40	25	17	6.6	8	5	16
25	50	116	141	166	191	-	100	125	150	175	-	54	40	25	17	6.6	8	5	22
32	48	118	143	168	193	49	104	129	154	179	28	66	52	28	16	7	7	5	18
40	51	132	157	182	207	58	112	137	162	187	30	80	60	33	20	9	10	5	20

Cylinder Calculation SI A. SQ DNT SC / SU SCT

SC A. SL DN DSN MA MAC MA/MAC A.

MAL MALC MAL/MACL A CQ2 TCQ2 ADN TADN PPRM MHL2 Pneumatic Fingers

CJP
CJ2
CDU
TN
CXS
MGP MSQ

## DN / DSN



Mini Cylinder Accessory

Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN MA MAC MAL MAL/MACL A. SDA CQ2 TCQ2 ADN TADN PPRM MHL2

MXH/MXQ

CJP

CJ2

CDU

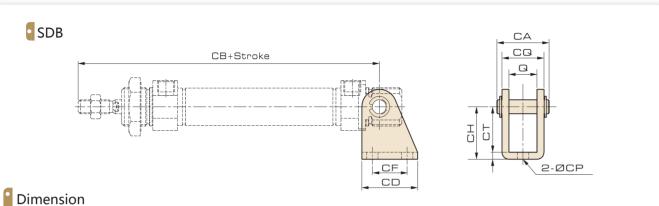
TN

CXS

MGP

MSQ

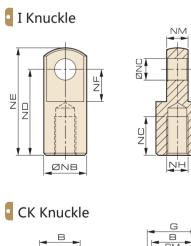




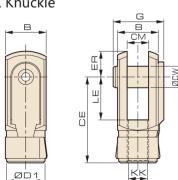
Symbol				СВ	CB (M	SAL/MTAL	Series)						
Bore Stroke	D	Q	CA	(MAL Series)	0-50	50-100	100-150	CD	CF	СН	СТ	СР	CQ
8	11.3	8.1	17.3	76	101	-	-	20	12.5	24	2.5	4.5	13.1
10	11.3	8.1	17.3	76	101	-	-	20	12.5	24	2.5	4.5	13.1
12	13	12.1	23.3	91	116	-	-	25	15	27	3	5.5	18.1
16	13	12.1	23.3	98	123	148	-	25	15	27	3	5.5	18.1
20	16	16.1	30	115	140	165	190	32	20	30	4	6.5	24.1
25	16	16.1	30	126	151	176	201	32	20	30	4	6.5	24.1
32	19.5	20.1	34.6	135	160	185	210	41	24	35	4	9	28.1
40	26	20.1	36.6	138	163	188	213	52	30	40	5	9	30.1

#### Overall Dimension

Dimension



			ND					NM			10						
II-M04070	10	4	16	21	7	6	M4×0.7	4		√	<b>√</b>						
II-M06100	12	5	21	28	8.5	8	M6×1	6				√	√				
II-M08125	16	8	30	40	11	15	M8×1.25	8	Adapted					√			
II-M10125	20	10	40	50	15	18	M10×1.25	10	fitting form						√	√	
II-M12125	24	12	48	62	24	18	M12×1.25	12									
II-M14150	28		56	72	28	21	M14×1.5										√



		CE	СМ	CR	CW	D1			LE	KK	
CK-M04070	8	16	4	21	4	8	5	11	8	M4×0.7	DSN8、DSN10
CK-M06100	12	24	6	31	6	10	7	16	12	M6×1	DSN12、DSN16
CK-M08125	16	10	8	42	8	14	10	20	16.5	M8×1.25	DSN20
CK-M10125	18	40	10	52	10	18	12	25	20	M10×1.25	DSN25、DSN32
CK-M12125	24	48	12	62	12	20	14	29	24	M12×1.25	
CK-M14150	24	48	12	62	12	20	14	29	25	M14×1.5	DSN40
CK-M16150	32	63	16	83	16	27	20	38	33	M16×1.5	
CK-M20150	40	80	20	105	20	35	25	47	41	M20×1.5	

#### 

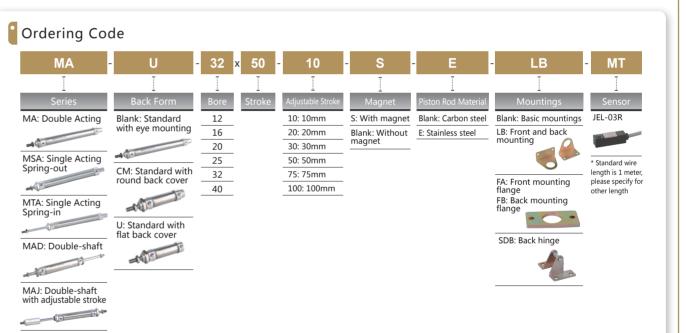
## MA Series Stainless Steel Mini Cylinder

#### Features

- 1. Improving for adapting wide range applications, using precise polishing of piston rod, more sense of products quality and longer life of front seal.
- 2. Optima design and improve the production efficiency.
- 3. Combined with enterprise color planning and new structure design, stainless steel series cylinder integrated as the semicircular groove cramping.
- 4. Using embedded gasket, increase the pressured area of pistons after collision.



G1/8"



#### Specification Operation Double Acting or Single Acting Working Medium Basic LB FA FB SDB Mountings Operating Pressure Range 0.1 ~ 1.0MPa Proof Pressure 1.5 MPa Operating Temperature Range -20 ~ 80°C Operating Speed Range 50 ~ 800mm/s Cushion **Gasket Cushion**

M5×0.8

2-|P35 2-|P36

Port Size

CDU

# MA Series

Stainless Steel Mini Cylinder



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MAC MAL/MACL A. SDA

CQ2

TCQ2

TADN

PPRM

MHL2

MXH/MXQ CJP

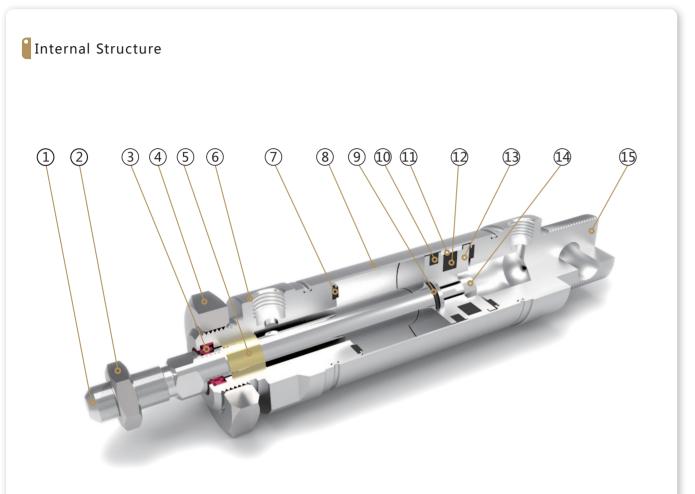
CJ2 CDU TN

CXS MGP

2-|P37

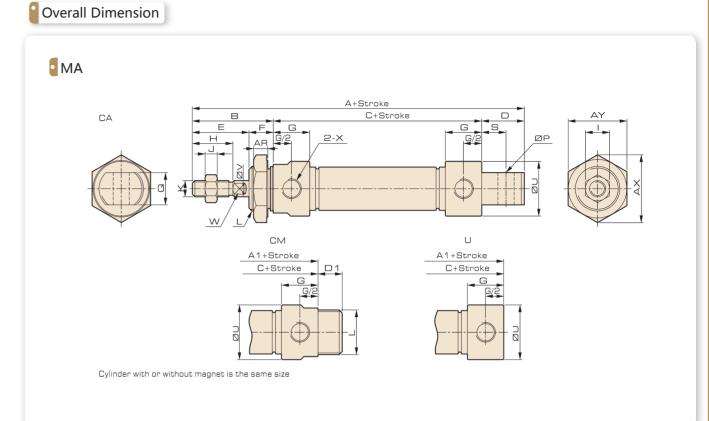
Parts

ADN



Number	Name	Number	Name
1	Piston rod	9	O ring
2	Hexagon nut	10	Piston seal
3	Shaft seal	11	Anti-friction seal
4	Hexagon nut	12	Magnet
5	DU bearing	13	Piston
6	Front cover	14	Socket head cap screw
7	Anti-collision gasket	15	Back cover
8	Barrel		

# MA Series Stainless Steel Mini Cylinder



Dimension
-----------

Bore / Stroke	А	A1		С	D	D1	Е	F	G	н	I	J	K
12	113	97	38	59	16	12	22	16	12	16	10	5	M6×1
16	114	98	38	60	16	12	22	16	12	16	10	5	M6×1
20	137	116	40	76	21	12	28	12	18	20	12	6	M8×1.25
25	141	120	44	76	21	14	30	14	16	22	17	6	M10×1.25
32	147	120	44	76	27	14	30	14	16	22	17	6	M10×1.25
40	150	123	46	77	27	14	32	14	16.7	24	19	7	M12×1.25

ore / Stroke			Q		U		W		AR	AX	AY
12	M16×1.5	6	12	9.5	21	6	5	M5×0.8	6	27.8	24
16	M16×1.5	6	12	9	21	6	5	M5×0.8	6	27.8	24
20	M22×1.5	8	16	12	27	8	6	G1/8	7	33.5	29
25	M22×1.5	8	16	12	30	10	8	G1/8	7	33.5	29
32	M24×2	10	16	15	35	12	10	G1/8	9	37	32
40	M30×2	12	20	15	42	16	14	G1/8	9	46	40

Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN
DSN
DN/DSN A.
MA
MAC

MAL
MALC
MAL/MACLA
SDA
CQ2
TCQ2
ADN
TADN
PPRM
MHL2
Pneumatic
Fingers
MXH/MXQ
CJP
CJ2
CDU
TN
CXS
MGP

MSQ

MA/MAC A.

# MA Series

Stainless Steel Mini Cylinder



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MAC MAL MALC

MAL/MACL A.

SDA

CQ2

TCQ2

ADN

TADN

PPRM MHL2

MXH/MXQ

CJP

CJ2

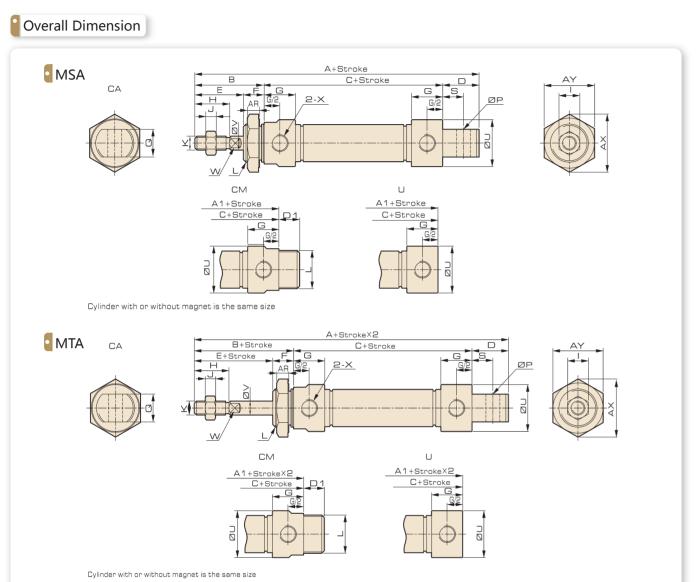
CDU

TN

CXS

MGP

MSQ

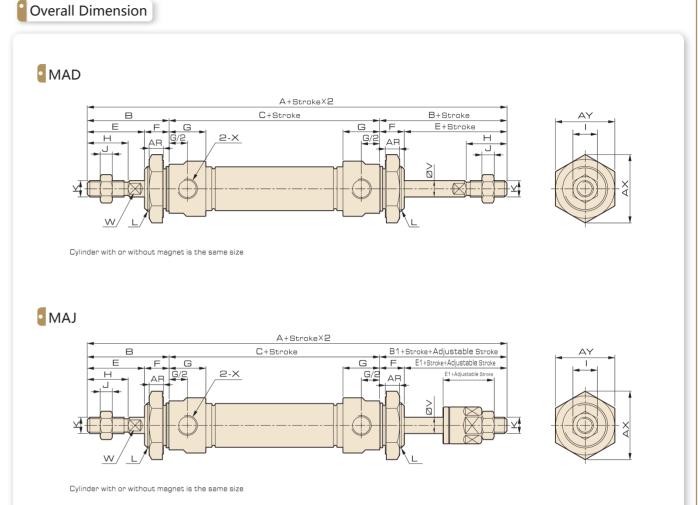


#### Dimension 16.7 27.8 M6×1 M16×1.5 9.5 M5×0.8 M6×1 M16×1.5 27.8 M8×1.25 M22×1.5 G1/8 33.5 M22×1.5 G1/8 33.5 M10×1.25 M10×1.25 M24×2 G1/8

M30×2

G1/8

MA Series
Stainless Steel Mini Cylinder



Bore Symbol	А	A1		В1			E1		G	Н					U		W		AR	AX	AY	
12	135	135	38	38	59	22	21	16	12	16	10	5	M6×1	M16×1.5	21	6	5	M5×0.8	6	27.8	24	6
16	136	135	38	37	60	22	21	16	12	16	10	5	M6×1	M16×1.5	21	6	5	M5×0.8	6	27.8	24	6
20	156	153	40	37	76	28	25	12	18	20	12	6	M8×1.25	M22×1.5	27	8	6	G1/8	7	33.5	29	8.5
25	164	161	44	41	76	30	27	14	16	22	17	6	M10×1.25	M22×1.5	30	10	8	G1/8	7	33.5	29	9.5
32	164	161	44	41	76	30	27	14	16	22	17	6	M10×1.25	M24×2	35	12	10	G1/8	9	37	32	11.5
40	169	166	46	42	77	32	28	14	16.7	24	19	7	M12×1.25	M30×2	42	16	14	G1/8	9	46	40	14

SQ
DNT
SC / SU
SCT
SC A.
SL
DN
DSN
DN/DSN A.
MA
MAC
MA/MAC A.
MAL
MALC
MA/MAC A.
SDA
CQ2
TCQ2

ADN

TADN

PPRM

MHL2

Cylinder

Calculation

SI A.

Preumatic Fingers
MXH/MXQ
CJP
CJ2
CDU
TN
CXS
MGP
MSQ

M12×1.25

# MAC Series Stainless Steel Mini Cylinder



# MAC Series Stainless Steel Mini Cylinder

TN

CXS

MSQ

Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.

SCT
SC A.
SL
DN
DSN
DN/DSN A.
MA

MAC
MA/MACA
MAL
MALC
MAL/MACLA
SDA
CQ2
TCQ2

ADN
TADN
PPRM
MHL2
Pneumatic
Fingers
MXH/MXQ
CJP
CJ2
CDU

CJP
CJ2
CDU
TN
CXS
MGP
MSQ

Features

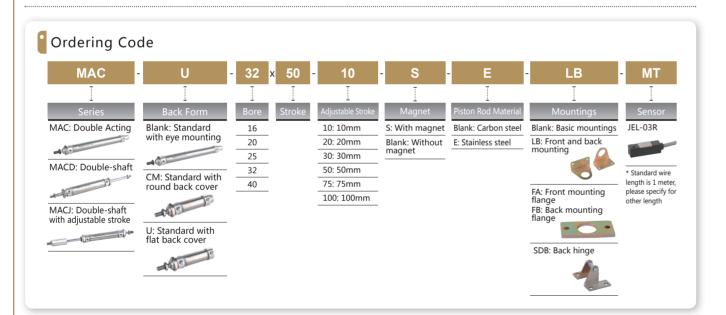
1. Improving for adapting wide range applications, using precise polishing of piston rod, more sense of products quality and longer life of front seal.

2. Optima design and improve the production efficiency.

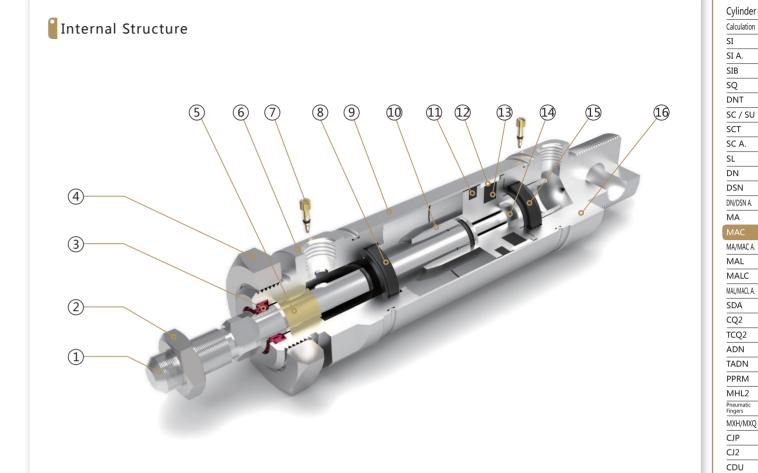
3. Combined with enterprise color planning and new structure design, stainless steel series cylinder integrated as the semicircular groove cramping.

4. Change processing technology of cylinder cushion structure to ensure buffering function in stabilization.

5. Improved the range of buffering fine-tune, enable customers to more easily adjust the buffer throttling speed.



Bore (mm)	16	20	25	32	40
Operation			Double Acting		
Working Medium		-	Air		-
Mountings		Ва	sic LB FA FB SI	DB	
Operating Pressure Range		-	0.1 ~ 1.0MPa		
Proof Pressure		-	1.5 MPa		
Operating Temperature Range			-20 ~ 80°C		
Operating Speed Range		-	50 ~ 800mm/s		
Cushion			Adjustable Air Cushio	1	-
Port Size	M5X0.8		G1,	/8"	•



Parts

Number	Name	Number	Name
1	Piston rod	9	Barrel
2	Hexagon nut	10	Piston
3	Shaft seal	11	Piston seal
4	Hexagon nut	12	Anti-friction seal
5	DU bearing	13	Magnet
6	Front cover	14	Socket head cap screw
7	Anti-collision gasket	15	Cushion
8	Cushion	16	Back cover

# MAC Series

Stainless Steel Mini Cylinder



Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN
DSN
DN/DSN A.
MA

SCT
SC A.
SL
DN
DSN
DN/DSN A
MA
MAC
MALMACA
MALC
MALMACA
SDA
CQ2
TCQ2
ADN

TADN

PPRM MHL2

MXH/MXQ

CJP

CJ2

CDU TN

CXS

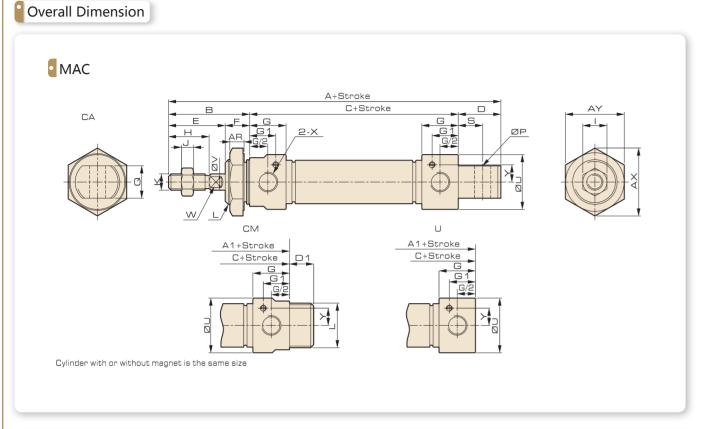
MGP

MSQ

M22×1.5

M24×2

M30×2



#### Dimension M6×1 M8×1.25 M10×1.25 11.5 M10×1.25 16.7 M12×1.25 M16×1.5 M5×0.8 27.8 33.5 8.5 M22×1.5 G1/8

G1/8

G1/8

G1/8

11.5

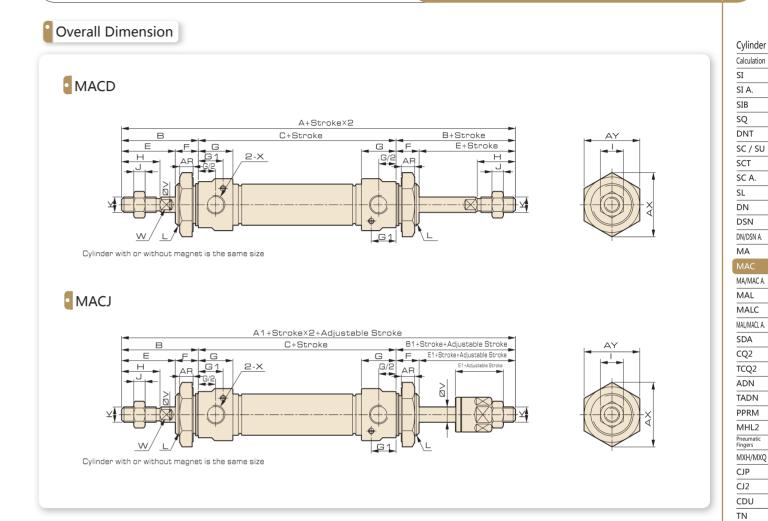
#### 

# MAC Series Stainless Steel Mini Cylinder

CXS

MGP

MSQ



Bore/ Symbol	А	A1		В1			E1		G	G1	Н					U		W		AR	AX	AY	
16	136	135	38	37	60	22	21	16	12	8	16	10	5	M6×1	M16×1.5	21	6	5	M5×0.8	6	27.8	24	6
20	156	153	40	37	76	28	25	12	18	13	20	12	6	M8×1.25	M22×1.5	27	8	6	G1/8	7	33.5	29	8.5
25	164	161	44	41	76	30	27	14	16	11	22	17	6	M10×1.25	M22×1.5	30	10	8	G1/8	7	33.5	29	9.5
32	164	161	44	41	76	30	27	14	16	11.5	22	17	6	M10×1.25	M24×2	35	12	10	G1/8	9	37	32	11.
40	169	166	46	42	77	32	28	14	16.7	12	24	19	7	M12×1.25	M30×2	42	16	14	G1/8	9	46	40	14

40 | 169 | 166 | 46 | 42 | 77 | 32 | 28 | 14 | 16.7 | 12 | 24 | 19 | 7 | M12×1.25 | M30×2 | 42 | 16 | 14 | G1/8 | 9 | 46 | 40 |

# MA / MAC Mini Cylinder Accessory



MA / MAC
Mini Cylinder Accessory

Cylinder

Calculation

SQ

DNT

SCT

SC A. SL DN

DSN

DN/DSN A.

MA

MAC

MALC MAL/MACL A

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

CDU

TN

CXS

MGP

MSQ

5.5

6.5

6.5

6.5

4

22

22

24

SC / SU



Cylinder

Calculation

SI A.

SQ

DNT

SC / SU SCT

SC A.

DSN

MA

MAC

MAL

MAL/MACL A.

SDA

CQ2

TCQ2

ADN

TADN

PPRM MHL2

MXH/MXQ CJP

CJ2

CDU

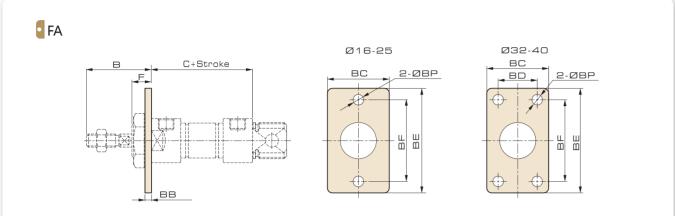
TN

CXS

MGP

MSQ

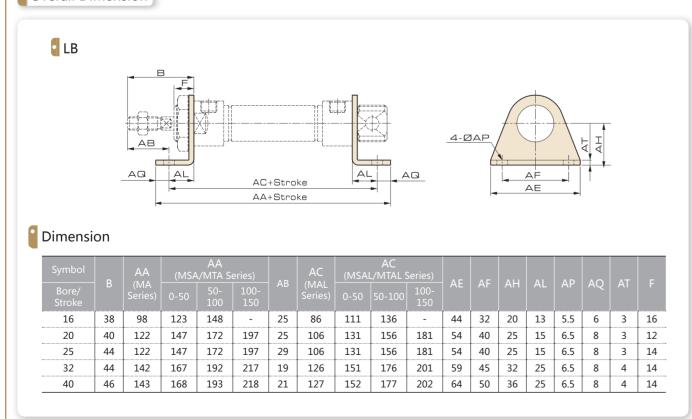
SL DN



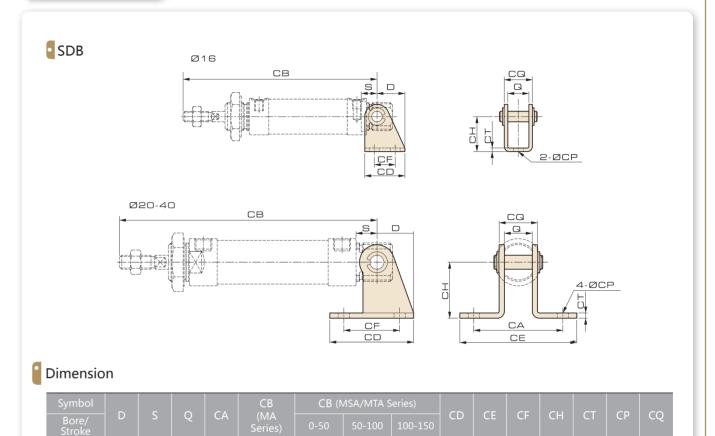
#### Dimension

Symbol		С	C (N	/ISA/MTA S	Series)							
Bore/ Stroke	В	(MA Series)	0-50	50-100	100-150	ВВ	ВС	BD	BE	BF	BP	F
16	38	60	85	110	-	3	26	-	52	40	5.5	16
20	40	76	101	126	151	4	38	-	64	50	6.5	12
25	44	76	101	126	151	4	38	-	64	50	6.5	14
32	44	76	101	126	151	4	47	33	72	58	6.5	14
40	46	77	102	127	152	4	50	36	84	70	6.5	14

#### Overall Dimension



Overall Dimension



107

128

132

135

138

132

153

157

160

163

157

178

182

185

203

207

210

213

67

71

48

48

52

56

32

36

40

32

32

36

Overall Dimension

16

20

25

32

40

16

21

27

27

9

12

12

15

15

12

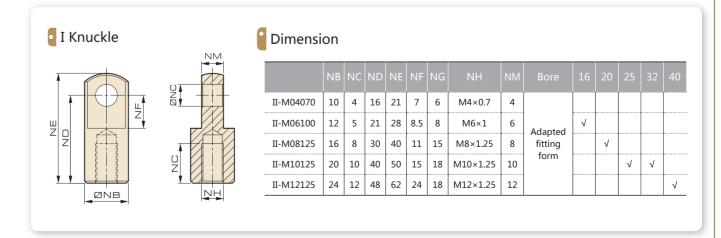
16

16

20

51

51



2-|P45 2-|P46

# **MAL** Series

Aluminum Alloy Mini Cylinder



**IELPC**®

Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MA/MAC A. MALC MAL/MACL A. SDA

CQ2

TCQ2

ADN

TADN

PPRM MHL2

MXH/MXQ

CJP

CJ2

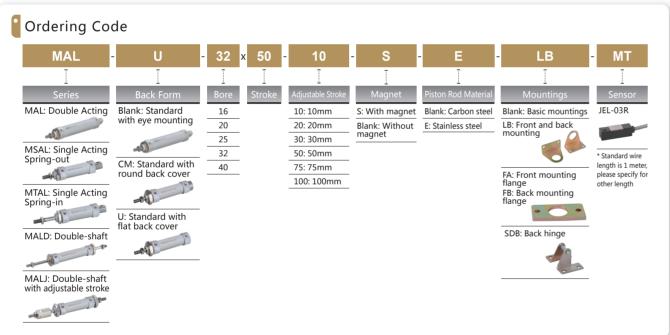
CDU

TN

CXS

MGP

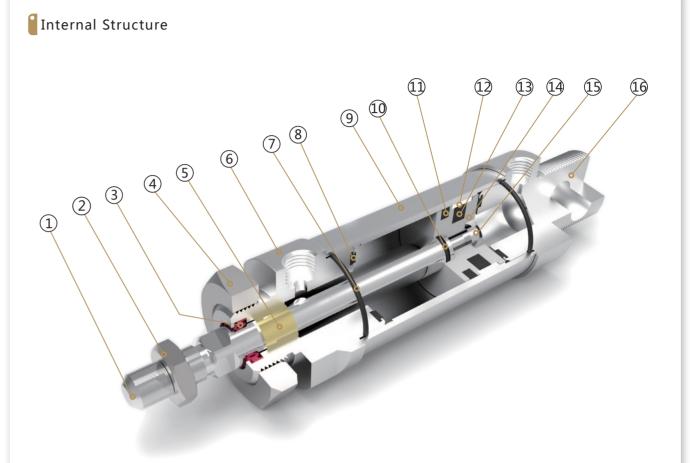




Bore (mm)	16	20	25	32	40
Operation	<u></u>	Doul	ble Acting or Single Ac	ting	
Working Medium			Air		
Mountings		Ва	sic LB FA FB SD	В	
Operating Pressure Range	•		0.1 ~ 1.0MPa		
Proof Pressure			1.5 MPa		
Operating Temperature Range			-20 ~ 80°C		
Operating Speed Range			50 ~ 800mm/s		
Cushion	-		Gasket Cushion		
Port Size	M5×0.8		G1/8"		G1/4"

# MAL Series

Aluminum Alloy Mini Cylinder



Parts

Number	Name	Number	Name
1	Piston rod	9	Barrel
2	Hexagon nut	10	O ring
3	Shaft seal	11	Piston seal
4	Hexagon nut	12	Anti-friction seal
5	DU bearing	13	Magnet
6	Front cover	14	Piston
7	O ring	15	Socket head cap screw
8	Anti-collision gasket	16	Back cover

Cylinder Calculation SQ DNT SCT SC A. DSN DN/DSN A. MA MAC MA/MAC A. MALC MAL/MACL A. CQ2 TCQ2 ADN

> CDU CXS MSQ

TADN

PPRM

MHL2

# **MAL** Series

Aluminum Alloy Mini Cylinder



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN MA MAC MALC MAL/MACL A.

SDA

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

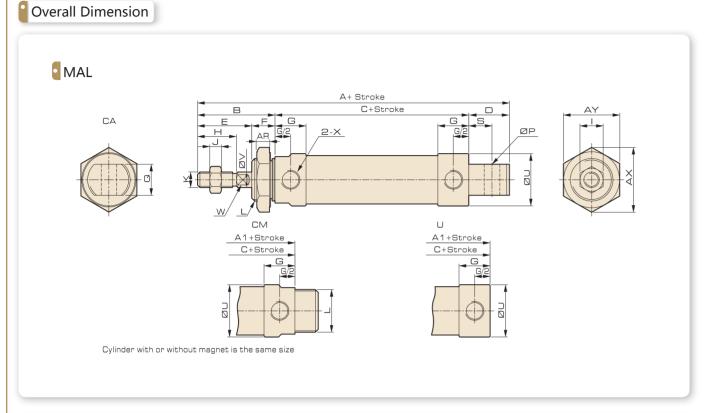
CJ2

CDU

TN

CXS

MGP



#### Dimension

Bore/ Symbol	А	A1		С	D	D1			G	G1	н			
16	105	90	38	52	15	12	24	14	11	6.5	16	10	5	M6×1
20	131	110	40	70	21	12	28	12	16	12	20	12	6	M8×1.25
25	135	114	44	70	21	14	30	14	16	11	22	17	6	M10×1.25
32	141	114	44	70	27	14	30	14	16	11.5	22	17	6	M10×1.25
40	165	138	46	92	27	14	32	14	22	15	24	19	7	M12×1.25

Bore/ Symbol	L	Р	Q	S	U	V	W	Х	AR	AX	AY	Υ
16	M16×1.5	6	12	6	21	6	5	M5×0.8	6	27.8	24	6
20	M22×1.5	8	16	12	27	8	6	G1/8	7	33.5	29	9
25	M22×1.5	8	16	12	32	10	8	G1/8	7	33.5	29	9
32	M24×2	10	16	15	39.5	12	10	G1/8	9	37	32	11.5
40	M30×2	12	20	15	47	16	14	G1/4	9	46	40	14

# MAL Series

Cylinder Calculation

SQ

DNT

SCT

SC A. SL DN

DSN

DN/DSN A.

MAC

MA/MAC A.

MALC

MAL/MACL A.

CQ2

TCQ2

ADN

TADN

PPRM

MHL2 Pneumatic Fingers

CJ2

CDU

TN

CXS

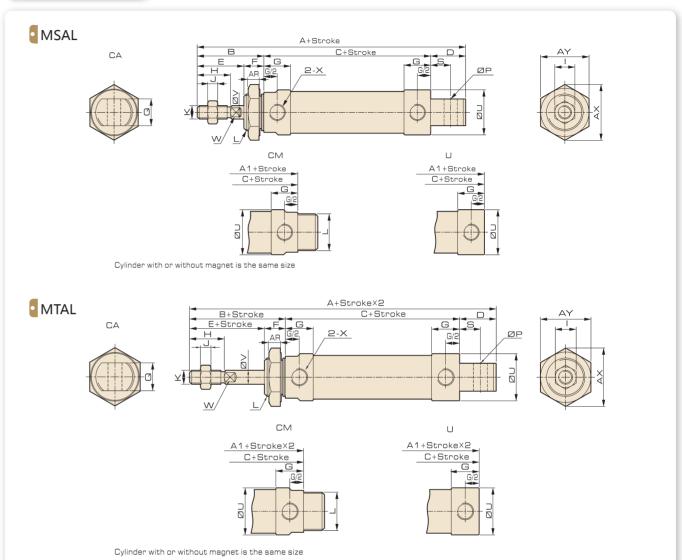
MGP

MSQ

SC / SU

Aluminum Alloy Mini Cylinder





### Dimension

Symbol		А			A1		В		С		D	D1			G
Bore/Stroke			100-150		50-100	100-150			50-100	100-150					
16	130	155	-	115	140	- [	38	77	102	-	15	12	24	14	11
20	156	181	206	135	160	185	40	95	120	145	21	12	28	12	16
25	160	185	210	139	164	189	44	95	120	145	21	14	30	14	16
32	166	191	216	139	164	189	44	95	120	145	27	14	30	14	16
40	190	215	240	163	188	213	46	117	142	167	27	14	32	14	22

Bore/Stroke	Н					Р	Q		U		W		AR	AX	AY
16	16	10	5	M6×1	M16×1.5	6	12	6	21	6	5	M5×0.8	6	27.8	24
20	20	12	6	M8×1.25	M22×1.5	8	16	12	27	8	6	G1/8	7	33.5	29
25	22	17	6	M10×1.25	M22×1.5	8	16	12	32	10	8	G1/8	7	33.5	29
32	22	17	6	M10×1.25	M24×2	10	16	15	39.5	12	10	G1/8	9	37	32
40	24	19	7	M12×1.25	M30×2	12	20	15	47	16	14	G1/4	9	46	40

2-|P49

### **MAL** Series

Aluminum Alloy Mini Cylinder



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MALC MAL/MACL A. SDA CQ2 TCQ2 ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2

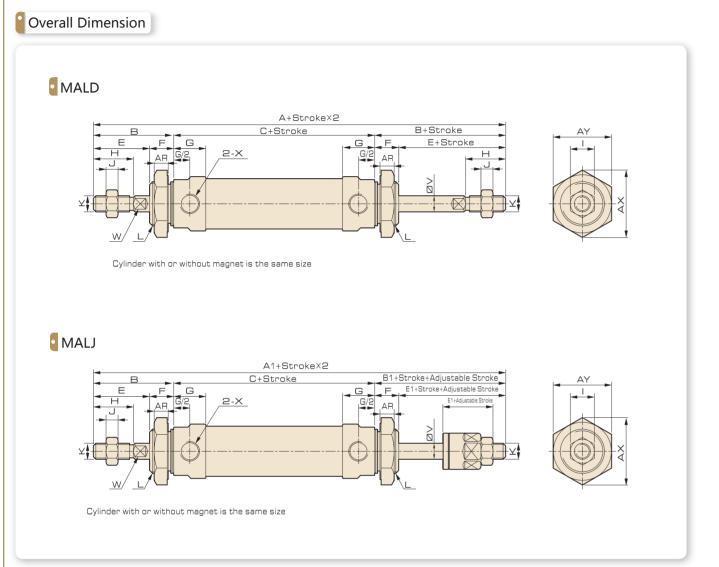
CDU

TN

CXS

MGP

MSQ



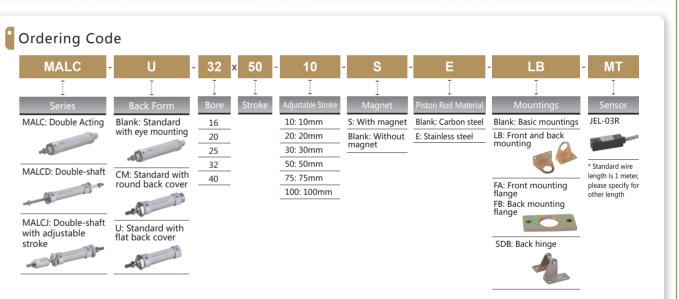
#### Dimension 128 | 125 | 38 | 35 | 52 | 24 | 21 | 14 | 11 | 6.5 | 16 | 10 | 5 | | M16×1.5 | 21 | 6 | 5 | M5×0.8 | 6 | 27.8 | 24 | 6 16 M6×1 150 | 147 | 40 | 37 | 70 | 28 | 25 | 12 | 16 | 12 | 20 | 12 | 6 | M8×1.25 M22×1.5 33.5 29 27 20 158 | 155 | 44 | 41 | 70 | 30 | 27 | 14 | 16 | 11 | 22 | 17 | 6 | M10×1.25 | M22×1.5 | 32 | 10 | 8 25 G1/8 7 | 33.5 | 29 | 9 32 41 | 70 | 30 | 27 | 14 | 16 | 11.5 | 22 | 17 | 6 | M10×1.25 M24×2 39.5 12 10 G1/8 37 32 11.5 184 180 46 42 92 32 28 14 22 15 24 19 46 M12×1.25 M30×2 47 | 16 | 14 G1/4

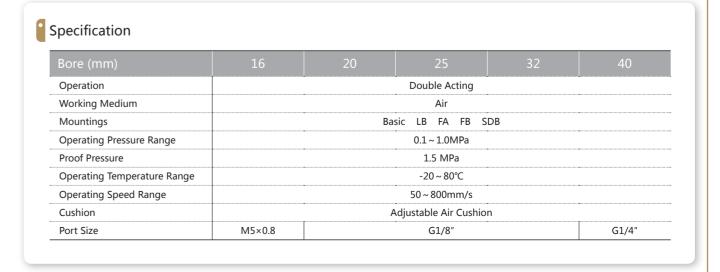
ISO9001:2015 €

# MALC Series

Aluminum Alloy Mini Cylinder







Cylinder Calculation SI A. SIB SQ DNT SC / SU SCT SC A. DN

> DN/DSN A. MA MAC MA/MAC A MAL MAL/MACL A.

DSN

CQ2 TCQ2 ADN TADN PPRM MHL2 MXH/MXQ

CJP CJ2 CDU TN CXS MGP

MSQ

# MALC Series

Internal Structure

Aluminum Alloy Mini Cylinder



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MAC MAL/MACL A.

SDA

CQ2

TCQ2 ADN

TADN

PPRM

MHL2

MXH/MXQ CJP

CJ2 CDU TN

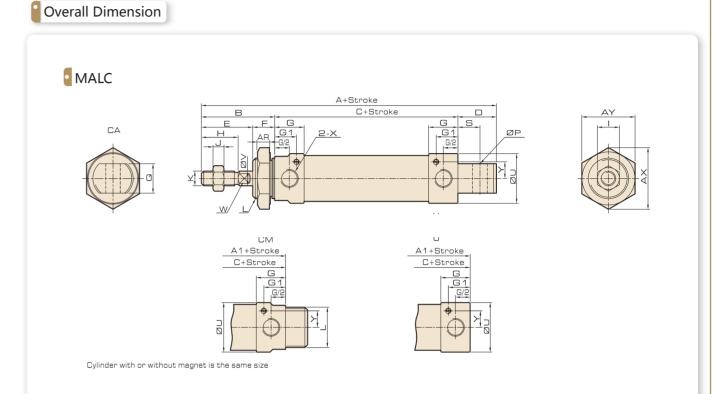
CXS

Parts

Number	Name	Number	Name
1	Piston rod	9	Barrel
2	Hexagon nut	10	Piston
3	Shaft seal	11	Piston seal
4	Hexagon nut	12	Anti-friction seal
5	DU bearing	13	Magnet
6	Front cover	14	Screw
7	Anti-collision gasket	15	O ring
8	Cushion	16	Back cover

# MALC Series

Aluminum Alloy Mini Cylinder



Dimension

Bore/Stroke	А	A1		С	D	D1			G	G1	Н			К
16	105	90	38	52	15	12	24	14	11	6.5	16	10	5	M6×1
20	131	110	40	70	21	12	28	12	16	12	20	12	6	M8×1.25
25	135	114	44	70	21	14	30	14	16	11	22	17	6	M10×1.25
32	141	114	44	70	27	14	30	14	16	11.5	22	17	6	M10×1.25
40	165	138	46	92	27	14	32	14	22	15	24	19	7	M12×1.25

Bore/Stroke	L	Р	Q	S	U	V	W	Х	AR	AX	AY	Υ
16	M16×1.5	6	12	6	21	6	5	M5×0.8	6	27.8	24	6
20	M22×1.5	8	16	12	27	8	6	G1/8	7	33.5	29	9
25	M22×1.5	8	16	12	32	10	8	G1/8	7	33.5	29	9
32	M24×2	10	16	15	39.5	12	10	G1/8	9	37	32	11.5
40	M30×2	12	20	15	47	16	14	G1/4	9	46	40	14

Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN

DN
DSN
DN/DSN A.
MA
MAC
MA/MAC A.
MAL
MALC
MAL/MACL A.

CQ2
TCQ2
ADN
TADN
PPRM
MHL2
Pneumatic
Fingers
MXH/MXQ

MHL2
Pneumatic
Fingers

MXH/MXQ

CJP

CJ2

CDU

TN

CXS

MGP

MSQ

## MALC Series

Aluminum Alloy Mini Cylinder



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MA/MAC A. MAL MAL/MACL A. SDA CQ2 TCQ2

ADN

TADN

PPRM MHL2

MXH/MXQ CJP

CJ2

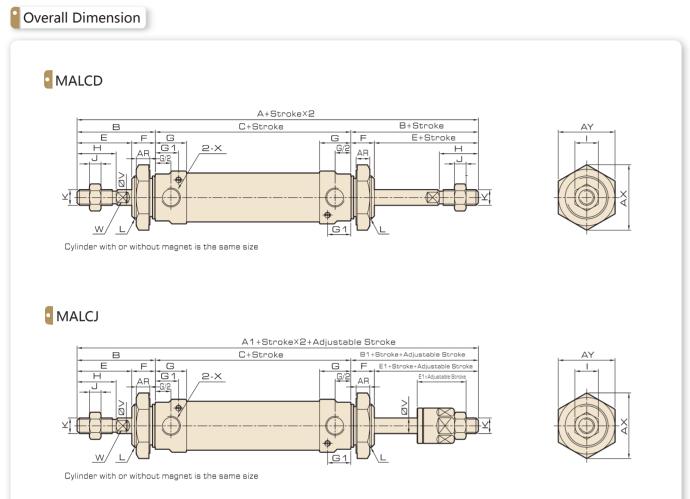
CDU

TN

CXS

MGP

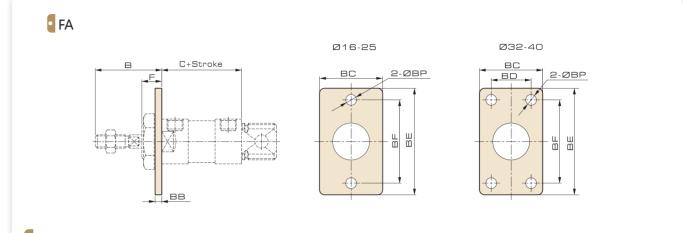
MSQ



#### Dimension 128 125 38 35 52 24 21 14 11 6.5 16 10 5 M6×1 M16×1.5 21 6 5 M5×0.8 | 150 | 147 | 40 | 37 | 70 | 28 | 25 | 12 | 16 | 12 | 20 | 12 | 6 | M8×1.25 | M22×1.5 | 27 | 20 G1/8 7 | 33.5 | 29 | 9 158 | 155 | 44 | 41 | 70 | 30 | 27 | 14 | 16 | 11 | 22 | 17 | 6 | M10×1.25 | M22×1.5 | 32 | 10 | 8 | G1/8 7 | 33.5 | 29 | 9 25 158 | 155 | 44 | 41 | 70 | 30 | 27 | 14 | 16 | 11.5 | 22 | 37 32 6 M10×1.25 M24×2 39.5 12 10 G1/8 32 11.5 184 180 46 42 92 32 28 14 22 15 24 19 7 M12×1.25 M30×2 47 | 16 | 14 | G1/4 9 | 46 | 40 | 14

# MAL / MALC Mini Cylinder Accessory

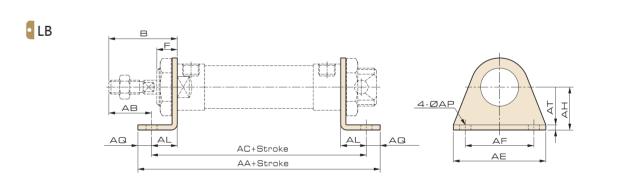




#### Dimension

Symbol	В	С	C (M:	SAL/MTAL S	Series)	BB	ВС	BD	BE	BF	ВР	
Bore/Stroke		(MAL Series)		50-100	100-150	DD	BC.	שם	DE	DF	DP	
16	38	52	77	102	-	3	26	-	52	40	5.5	14
20	40	70	95	120	145	4	38	-	64	50	6.5	12
25	44	70	95	120	145	4	38	-	64	50	6.5	14
32	44	70	95	120	145	4	47	33	72	58	6.5	14
40	46	92	117	142	167	4	50	36	84	70	6.5	14

#### Overall Dimension



#### Dimension

Symbol	В	AA (MAL	(MSAL	AA _/MTAL :	Series)	AB	AC (MAL	(MSAI	AC _/MTAL	Series)	AE	AF	AH	AL	AP	AQ	AT	
Bore/ Stroke		Series)	0-50	50- 100	100- 150	70	Series)	0-50	50- 100	100- 150								
16	38	90	115	140	-	25	78	103	128	-	44	32	20	13	5.5	6	3	14
20	40	116	141	166	191	25	100	125	150	175	54	40	25	15	6.5	8	3	12
25	44	116	141	166	191	29	100	125	150	175	54	40	25	15	6.5	8	3	14
32	44	136	161	186	211	19	120	145	170	195	59	45	32	25	6.5	8	4	14
40	46	158	183	208	233	21	142	167	192	217	64	50	36	25	6.5	8	4	14

P F MALMACLA MALMACLA SDA CQ2 TCQ2 ADN

TADN
PPRM
MHL2
Pneumatic
Fingers
MXH/MXQ
CJP
CJ2

Cylinder

Calculation

SI A.

SQ

DNT

SCT

SC A.

DSN

DN/DSN A.

MA

MAC

SL

SC / SU

CDU
TN
CXS
MGP
MSQ

# MAL / MALC Mini Cylinder Accessory



Cylinder Calculation SI A. SC / SU SC A. DN/DSN A. MAC MALC

SI

SIB

SQ

DNT

SCT

SL DN

DSN

MA

MAL

SDA

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2

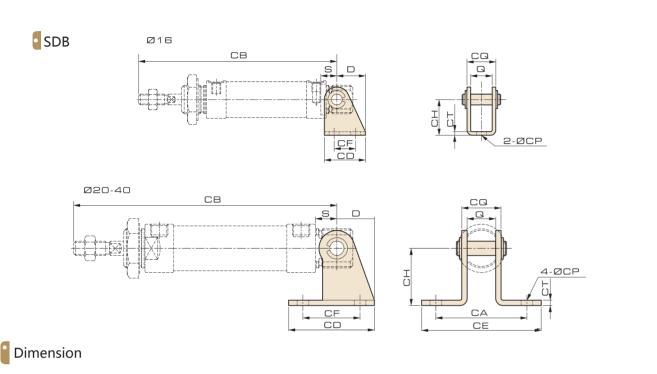
CDU TN

CXS

MGP

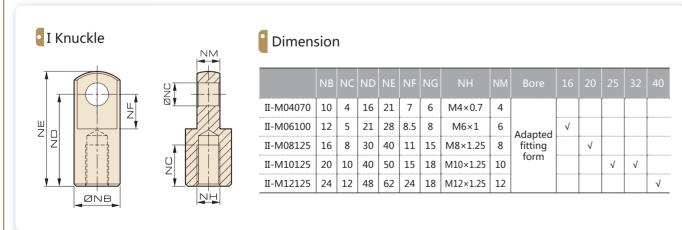
MSQ

Overall Dimension



Symbol					СВ	CB (N	ISAL/MTAI	Series)							60
Bore/ Stroke	D		Q	CA	(MAL Series)		50-100	100-150	CD	CE	CF	СН	СТ	СР	CQ
16	16	9	12	_	96	121	146	_	23	_	12	20	2	5.5	16
20	21	12	16	51	122	147	172	197	48	67	32	32	3	6.5	22
25	21	12	16	51	126	151	176	201	48	67	32	32	3	6.5	22
32	27	15	16	51	129	154	179	204	52	67	36	36	4	6.5	24
40	27	15	20	55	153	178	203	228	56	71	40	40	4	6.5	28

#### Overall Dimension



## SDA Series Compact Cylinder

Cylinder

Calculation

SI A.

SQ

DNT

SCT

SC A.

DN

DSN

MA

MAC

MAL MALC

MA/MAC A.

MAL/MACL A.

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2

CDU

TN

CXS

MGP

MSQ

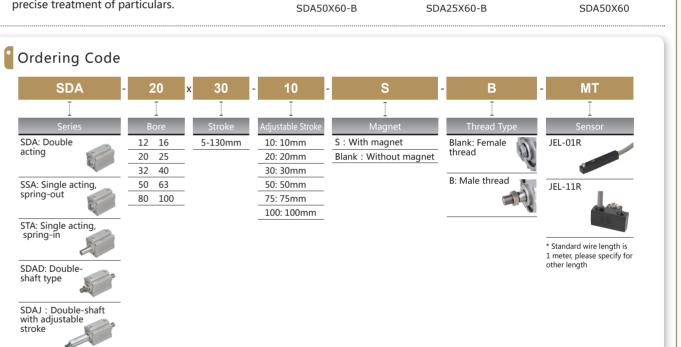
DN/DSN A.

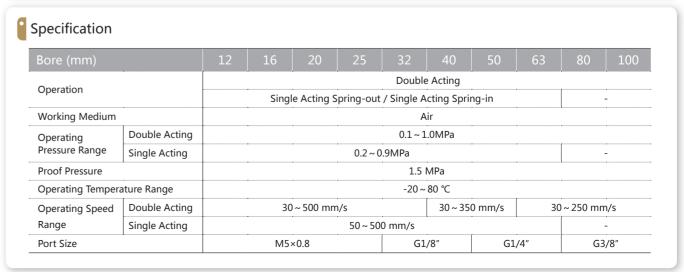
SC / SU

#### Features

- 1. Improving for adapting wide range applications, using precise polishing of piston rod, more sense of products quality and longer life of front seal.
- 2. Adjust the structure to the optimal state, and ensure the smooth operation of the
- 3. The piston rod and the back cover cramping technology, improving product quality.
- 4. Combined with enterprise color planning, it is redesigned by new color system and precise treatment of particulars.







2-|P57 2-|P58



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MAC MAL/MACL A. CQ2 TCQ2 ADN TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2 CDU TN CXS MGP 

#### Parts

Number	Name	Number	Name
1	Piston rod	8	Magnet
2	Front cover	9	Piston seal
3	C clip	10	Anti-friction seal
4	Shaft seal	11	Magnet base
5	DU bearing	12	Anti-collision gasket
6	O ring	13	Back cover
7	Piston	14	Body

#### 

# SDA Series Compact Cylinder

Cylinder Calculation

SQ DNT

SC / SU SCT SC A.

DSN

DN/DSN A.

MA/MAC A.

MAL

MALC

MAL/MACL A.

CQ2 TCQ2

ADN

TADN PPRM

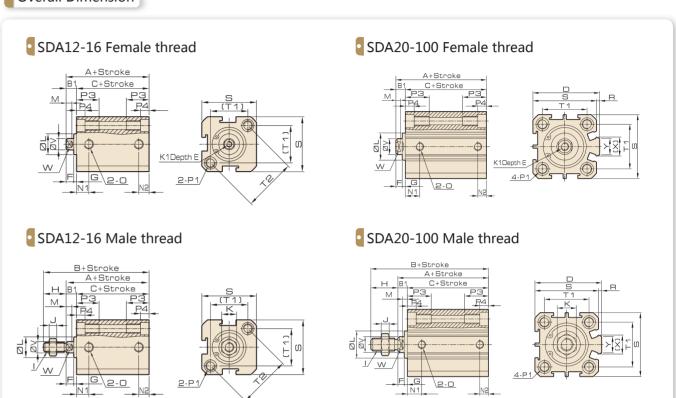
MHL2 Pneumatic Fingers

CJP CJ2 CDU TN CXS MGP

MSQ

MAC





### Dimension

Bore/ Symbol			į į	3	(		B1	D			G	н			K	K1	L	М
Туре		With magnet	Standard	With magnet	Standard	With magnet										IXI		'''
12	22	32	34	44	17	27	5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	10	3
16	24	34	36	46	18.5	28.5	5.5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	11	3
20	25	35	40	50	19.5	29.5	5.5	36	8	4	1.5	15	M6×1.0	5	10	M4×0.7	13	3
25	27	37	44	54	21	31	6	42	10	4	2	17	M8×1.25	6	14	M5×0.8	17	3
32	31.5	41.5	49.5	59.5	24.5	34.5	7	50	12	4	3	18	M10×1.25	6	17	M6×1.0	22	3
40	33	43	61	71	26	36	7	58.5	12	4	3	28	M14×1.5	8	22	M8×1.25	28	3
50	37	47	65	75	28	38	9	71.5	15	5	4	28	M18×1.5	9	27	M10×1.5	38	3
63	41	51	69	79	32	42	9	84.5	15	5	4	28	M18×1.5	9	27	M10×1.5	40	3
80	52	62	85	95	41	51	11	104	20	6	5	33	M22×1.5	13	32	M14×1.5	45	4
100	63	73	101	111	51	61	12	124	20	7	5	38	M26×1.5	12	36	M18×1.5	55	4

Bore/ Symbol		11	N	12	0	P1	P3	P4	R		T1	T2		W	X
				S>5											
12	7	.5		5	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	-	25	16.3	23	6	5	-
16	1	8	5	5.5	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	-	29	19.8	28	6	5	-
20	8	.5	5	.5	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	14	4.5	2	34	24	-	8	6	11.2
25	!	9	5	.5	M5×0.8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6	15	5.5	2	40	28	-	10	8	12
32	!	9	6.5	8	G1/8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6	16	5.5	6	44	34	-	12	10	18
40	[ :	9	7	.5	G1/8	Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7	20	7.5	6.5	52	40	-	16	14	21
50	8	10.5	8	10.5	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	9.5	62	48	-	20	17	29.5
63	9.5	11	9.5	11	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	9.5	75	60	-	20	17	26
80	11.5	14	11.5	14	G3/8	Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3	25	10.5	10	94	74	-	25	22	36
100	15	20	15	18	G3/8	Double Side: Φ17.5, Cog: M14×2, Through Hole: Φ11.3	30	13	10	114	90	-	32	27	35.5



Overall Dimension

Cylinder

Calculation SI

SI A. SIB

SQ

DNT

SC / SU SCT

SC A.

SL DN

DSN

DN/DSN A.

MA

MAC

MAL

MALC

MAL/MACL A.

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2

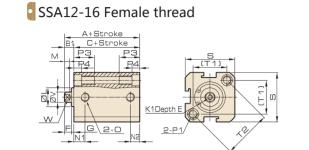
CDU

TN

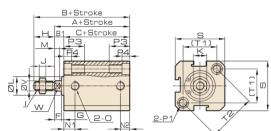
CXS

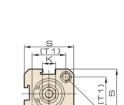
MGP

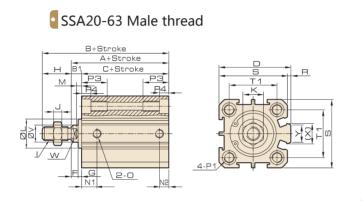
MSQ



SSA12-16 Male thread







SSA20-63 Female thread

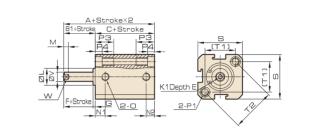
#### Dimension

Symbol			4				3															
Туре	Stan		With n		Stan		With n		Stan		With n		B1	D			G	Н				K1
		10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤30<></th></s≤10<></th></s≤30<></th></s≤10<></th></s≤30<></th></s≤10<></th></s≤30<></th></s≤10<></th></s≤30<>	0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤30<></th></s≤10<></th></s≤30<></th></s≤10<></th></s≤30<></th></s≤10<></th></s≤30<></th></s≤10<>	10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤30<></th></s≤10<></th></s≤30<></th></s≤10<></th></s≤30<></th></s≤10<></th></s≤30<>	0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤30<></th></s≤10<></th></s≤30<></th></s≤10<></th></s≤30<></th></s≤10<>	10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤30<></th></s≤10<></th></s≤30<></th></s≤10<></th></s≤30<>	0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤30<></th></s≤10<></th></s≤30<></th></s≤10<>	10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤30<></th></s≤10<></th></s≤30<>	0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤30<></th></s≤10<>	10 <s≤30< th=""><th></th><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤30<>		10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<>										
12	32	42	42	52	44	54	54	64	27	37	37	47	5	-	6	4	2	12	M5×0.8	4	8	M3×0.5
16	34	44	44	54	46	56	56	66	28.5	38.5	38.5	48.5	5.5	-	6	4	2	12	M5×0.8	4	8	M3×0.5
20	35	45	45	55	50	60	60	70	29.5	39.5	39.5	49.5	5.5	36	8	4	1.5	15	M6×1.0	5	10	M4×0.7
25	37	47	47	57	54	64	64	74	31	41	41	51	6	42	10	4	2	17	M8×1.25	6	14	M5×0.8
32	41.5	51.5	51.5	61.5	59.5	69.5	69.5	79.5	34.5	44.5	44.5	54.5	7	50	12	4	3	18	M10×1.25	6	17	M6×1.0
40	43	53	53	63	71	81	81	91	36	46	46	56	7	58.5	12	4	3	28	M14×1.5	8	22	M8×1.25
50	47	57	57	67	75	85	85	95	38	48	48	58	9	71.5	15	5	4	28	M18×1.5	9	27	M10×1.5
63	51	61	61	71	79	89	89	99	42	52	52	62	9	84.5	15	5	4	28	M18×1.5	9	27	M10×1.5
80	62	72	72	82	95	105	105	115	51	61	61	71	11	104	20	6	5	33	M22×1.5	13	32	M14×1.5
100	73	83	83	93	111	121	121	131	61	71	71	81	12	124	20	7	5	38	M26×1.5	12	36	M18×1.5

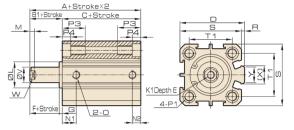
Bore/ Symbol	L	М	N		N	12	0	P1		P3	P4	R	S	T1	T2		w	X	Y
						S>5													
12	10	3	7.	.5		5	M5×0.8	Double Side: Φ6.5, Cog: M5×	0.8, Through Hole: Φ4.2	12	4.5	-	25	16.3	23	6	5	-	-
16	11	3	8	3	5	5.5	M5×0.8	Double Side: Φ6.5, Cog: M5×	0.8, Through Hole: Ф4.2	12	4.5	-	29	19.8	28	6	5	-	-
20	13	3	8.	.5	5.	.5	M5×0.8	Double Side: Φ6.5, Cog: M5×	0.8, Through Hole: Ф4.2	14	4.5	2	34	24	-	8	6	11.2	1
25	17	3	Ç	)	5.	.5	M5×0.8	Double Side: Φ8.2, Cog: M6>	15	5.5	2	40	28	-	10	8	12	1	
32	22	3	ç	)	6.5	8	G1/8	Double Side: Φ8.2, Cog: M6>	16	5.5	6	44	34	-	12	10	18	1	
40	28	3	ç	)	7.	.5	G1/8	Double Side: Φ10, Cog: M8×1	.25, Through Hole: Ф6.7	20	7.5	6.5	52	40	-	16	14	21	1
50	38	3	8	10.5	8	10.5	G1/4	Double Side: Φ11, Cog: M8×1	.25, Through Hole: Ф6.7	25	8.5	9.5	62	48	-	20	17	29.5	1
63	40	3	9.5	11	9.5	11	G1/4	Double Side: Φ11, Cog: M8×1	25, Through Hole: Ф6.7	25	8.5	9.5	75	60	-	20	17	26	1
80	45	4	11.5	14	11.5	14	G3/8	Double Side: Φ15, Cog: M12×1	25	10.5	10	94	74	-	25	22	36	2	
100	55	4	15	20	15	18	G3/8	Double Side: Φ17.5, Cog: M14	×2, Through Hole: Φ11.3	30	13	10	114	90	-	32	27	35.5	2

## SDA Series Compact Cylinder



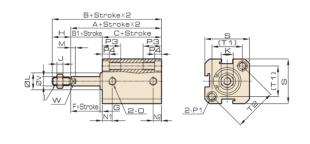




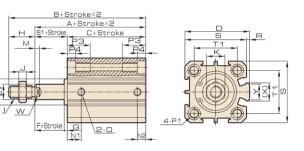


STA12-16 Male thread

STA12-16 Female thread



STA20-63 Male thread



Dimension

Bore/ Symbol							3															
Туре	Stan		With n		Stan		With n	nagnet	Stan		With n		В1	D			G	Н			K	K1
Stroke	0 <s≤10< th=""><th>10 &lt; S≤30</th><th>0 &lt; S≤10</th><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 &lt; S≤30</th><th>0 <s≤10< th=""><th>10 &lt; S≤30</th><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤10<></th></s≤10<></th></s≤10<></th></s≤30<></th></s≤10<></th></s≤30<></th></s≤10<>	10 < S≤30	0 < S≤10	10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 &lt; S≤30</th><th>0 <s≤10< th=""><th>10 &lt; S≤30</th><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤10<></th></s≤10<></th></s≤10<></th></s≤30<></th></s≤10<></th></s≤30<>	0 <s≤10< th=""><th>10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 &lt; S≤30</th><th>0 <s≤10< th=""><th>10 &lt; S≤30</th><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤10<></th></s≤10<></th></s≤10<></th></s≤30<></th></s≤10<>	10 <s≤30< th=""><th>0 <s≤10< th=""><th>10 &lt; S≤30</th><th>0 <s≤10< th=""><th>10 &lt; S≤30</th><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤10<></th></s≤10<></th></s≤10<></th></s≤30<>	0 <s≤10< th=""><th>10 &lt; S≤30</th><th>0 <s≤10< th=""><th>10 &lt; S≤30</th><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤10<></th></s≤10<></th></s≤10<>	10 < S≤30	0 <s≤10< th=""><th>10 &lt; S≤30</th><th>0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤10<></th></s≤10<>	10 < S≤30	0 <s≤10< th=""><th>10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<></th></s≤10<>	10 <s≤30< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></s≤30<>										
12	32	42	42	52	44	54	54	64	27	37	37	47	5	-	6	4	2	12	M5×0.8	4	8	M3×0.5
16	34	44	44	54	46	56	56	66	28.5	38.5	38.5	48.5	5.5	-	6	4	2	12	M5×0.8	4	8	M3×0.5
20	35	45	45	55	50	60	60	70	29.5	39.5	39.5	49.5	5.5	36	8	4	1.5	15	M6×1.0	5	10	M4×0.7
25	37	47	47	57	54	64	64	74	31	41	41	51	6	42	10	4	2	17	M8×1.25	6	14	M5×0.8
32	41.5	51.5	51.5	61.5	59.5	69.5	69.5	79.5	34.5	44.5	44.5	54.5	7	50	12	4	3	18	M10×1.25	6	17	M6×1.0
40	43	53	53	63	71	81	81	91	36	46	46	56	7	58.5	12	4	3	28	M14×1.5	8	22	M8×1.2
50	47	57	57	67	75	85	85	95	38	48	48	58	9	71.5	15	5	4	28	M18×1.5	9	27	M10×1.
63	51	61	61	71	79	89	89	99	42	52	52	62	9	84.5	15	5	4	28	M18×1.5	9	27	M10×1.
80	62	72	72	82	95	105	105	115	51	61	61	71	11	104	20	6	5	33	M22×1.5	13	32	M14×1.
100	73	83	83	93	111	121	121	131	61	71	71	81	12	124	20	7	5	38	M26×1.5	12	36	M18×1.

3 3	S=5 7. 8.	.5		S>5 5	M5×0.8	P1  Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	-	25	16.3	23	V 6	5	[ -	
3	8	3		r		Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	-	25	16.3	23	6	5	-	-
3			5	5.5							1 1	- 1			1	
	8.	г			M5×0.8	Double Side: Ф6.5, Cog: M5×0.8, Through Hole: Ф4.2	12	4.5	-	29	19.8	28	6	5	-	-
		.э	5	.5	M5×0.8	Double Side: Ф6.5, Cog: M5×0.8, Through Hole: Ф4.2	14	4.5	2	34	24	-	8	6	11.2	10
3	9	9	5	.5	M5×0.8	Double Side: Ф8.2, Cog: M6×1, Through Hole: Ф4.6	15	5.5	2	40	28	-	10	8	12	10
3	9	9	6.5	8	G1/8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6	16	5.5	6	44	34	-	12	10	18	14
3	9	9	7	.5	G1/8	Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7	20	7.5	6.5	52	40	-	16	14	21	14
3	8	10.5	8	10.5	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	9.5	62	48	-	20	17	29.5	19
3	9.5	11	9.5	11	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	9.5	75	60	-	20	17	26	19
4	11.5	14	11.5	14	G3/8	Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3	25	10.5	10	94	74	-	25	22	36	26
4	15	20	15	18	G3/8	Double Side: Φ17.5, Cog: M14×2, Through Hole: Φ11.3	30	13	10	114	90	-	32	27	35.5	26
	3 3 3 4	3 9 3 8 3 9.5 4 11.5	3 9 3 9 3 8 10.5 3 9.5 11 4 11.5 14	3 9 6.5 3 9 7 3 8 10.5 8 3 9.5 11 9.5 4 11.5 14 11.5	3 9 6.5 8 3 9 7.5 3 8 10.5 8 10.5 3 9.5 11 9.5 11 4 11.5 14 11.5 14	3 9 6.5 8 G1/8 3 9 7.5 G1/8 3 8 10.5 8 10.5 G1/4 3 9.5 11 9.5 11 G1/4 4 11.5 14 11.5 14 G3/8	3 9 6.5 8 G1/8 Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6 3 9 7.5 G1/8 Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7 3 8 10.5 8 10.5 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 3 9.5 11 9.5 11 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 4 11.5 14 11.5 14 G3/8 Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3	3 9 6.5 8 G1/8 Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6 16 3 9 7.5 G1/8 Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7 20 3 8 10.5 8 10.5 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 3 9.5 11 9.5 11 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 4 11.5 14 11.5 14 G3/8 Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3 25	3 9 6.5 8 G1/8 Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6 16 5.5 3 9 7.5 G1/8 Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7 20 7.5 3 8 10.5 8 10.5 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 3 9.5 11 9.5 11 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 4 11.5 14 11.5 14 G3/8 Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3 25 10.5	3 9 6.5 8 G1/8 Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6 16 5.5 6 3 9 7.5 G1/8 Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7 20 7.5 6.5 3 8 10.5 8 10.5 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 9.5 3 9.5 11 9.5 11 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 9.5 4 11.5 14 11.5 14 G3/8 Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3 25 10.5 10	3 9 6.5 8 G1/8 Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6 16 5.5 6 44 3 9 7.5 G1/8 Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7 20 7.5 6.5 52 3 8 10.5 8 10.5 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 9.5 62 3 9.5 11 9.5 11 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 9.5 75 4 11.5 14 11.5 14 G3/8 Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3 25 10.5 10 94	3 9 6.5 8 G1/8 Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6 16 5.5 6 44 34 34 39 9.7.5 G1/8 Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7 20 7.5 6.5 52 40 3 8 10.5 8 10.5 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 9.5 62 48 3 9.5 11 9.5 11 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 9.5 75 60 4 11.5 14 11.5 14 G3/8 Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3 25 10.5 10 94 74	3 9 6.5 8 G1/8 Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6 16 5.5 6 44 34 - 3 9.5 11 9.5 11 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 9.5 62 48 - 4 11.5 14 11.5 14 G3/8 Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ6.7 25 10.5 10 94 74 -	3 9 6.5 8 G1/8 Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6 16 5.5 6 44 34 - 12 3 9 7.5 G1/8 Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7 20 7.5 6.5 52 40 - 16 3 8 10.5 8 10.5 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 9.5 62 48 - 20 3 9.5 11 9.5 11 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 9.5 75 60 - 20 4 11.5 14 11.5 14 G3/8 Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3 25 10.5 10 94 74 - 25	3 9 6.5 8 G1/8 Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6 16 5.5 6 44 34 - 12 10 3 9.5 17.5 G1/8 Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7 20 7.5 6.5 52 40 - 16 14 3 8 10.5 8 10.5 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 9.5 62 48 - 20 17 3 9.5 11 9.5 11 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 9.5 75 60 - 20 17 4 11.5 14 11.5 14 G3/8 Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3 25 10.5 10 94 74 - 25 22	3 9 6.5 8 G1/8 Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6 16 5.5 6 44 34 - 12 10 18 3 9 7.5 G1/8 Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7 20 7.5 6.5 52 40 - 16 14 21 3 8 10.5 8 10.5 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 9.5 62 48 - 20 17 29.5 3 9.5 11 9.5 11 G1/4 Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7 25 8.5 9.5 75 60 - 20 17 26 4 11.5 14 11.5 14 G3/8 Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3 25 10.5 10 94 74 - 25 22 36

Cylinder Calculation SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MA/MAC A. MAL MALC

MAL/MACL A. CQ2 TCQ2 ADN TADN PPRM MHL2 Pneumatic Fingers CJP CJ2



Cylinder Calculation SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MAL MALC MAL/MACL A. CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ CJP

CJ2

CDU TN CXS MGP

MSQ

SDAD12-16 Female thread

SDAD20-100 Female thread

SDAD20-100 Female thread

SDAD20-100 Male thread

SDAD20-100 Male thread

### Dimension

Bore/ Symbol				3			B1	D			G	Н			K	K1	L	М	N	<b>V</b> 1
Туре	Standard	With magnet	Standard	With magnet	Standard	With magnet										KI			S=5	S>5
12	27	37	51	61	17	27	5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	10	3	5.5	6.5
16	29.5	39.5	53.5	63.5	18.5	28.5	5.5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	11	3	6.5	7.5
20	30.5	40.5	60.5	70.5	19.5	29.5	5.5	36	8	4	1.5	15	M6×1.0	5	10	M4×0.7	13	3	7	7.5
25	33	43	67	77	21	31	6	42	10	4	2	17	M8×1.25	6	14	M5×0.8	17	7 3 8		8
32	38.5	48.5	74.5	84.5	24.5	34.5	7	50	12	4	3	18	M10×1.25	6	17	M6×1.0	22	3	8	9
40	40	50	96	106	26	36	7	58.5	12	4	3	28	M14×1.5	8	22	M8×1.25	28	3	8	10
50	46	56	102	112	28	38	9	71.5	15	5	4	28	M18×1.5	9	27	M10×1.5	38	3	8	10.
63	50	60	106	116	32	42	9	84.5	15	5	4	28	M18×1.5	9	27	M10×1.5	40	3	9.5	11
80	63	73	129	139	41	51	11	104	20	6	5	33	M22×1.5	13	32	M14×1.5	45	4	11.5	14
100	75	85	151	161	51	61	12	124	20	7	5	38	M26×1.5	12	36	M18×1.5	55	4	15	20

Bore/ Symbol	0	P1	Р3	P4			T1	T2		W		
12	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	-	25	16.3	23	6	5	-	-
16	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	-	29	19.8	28	6	5	-	-
20	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	14	4.5	2	34	24	-	8	6	11.2	10
25	M5×0.8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6	15	5.5	2	40	28	-	10	8	12	10
32	G1/8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6	16	5.5	6	44	34	-	12	10	18	14
40	G1/8	Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7	20	7.5	6.5	52	40	-	16	14	21	14
50	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	9.5	62	48	-	20	17	29.5	19
63	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	9.5	75	60	-	20	17	26	19
80	G3/8	Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3	25	10.5	10	94	74	-	25	22	36	26
100	G3/8	Double Side: Φ17.5, Cog: M14×2, Through Hole: Φ11.3	30	13	10	114	90	-	32	27	35.5	26

# SDA Series Compact Cylinder

Cylinder Calculation

SQ

DNT

SCT

SC A. SL DN

DSN

DN/DSN A.

MA

MAC

MAL

MALC

MAL/MACL A.

CQ2

TCQ2

ADN

TADN

PPRM

MHL2 Pneumatic Fingers

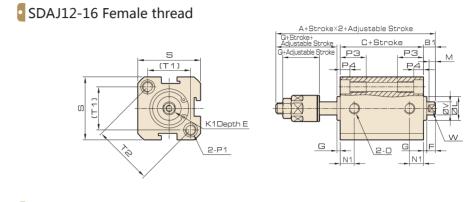
CJP
CJ2
CDU
TN
CXS
MGP

MSQ

MA/MAC A.

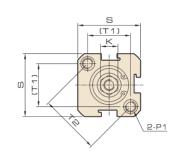
SC / SU

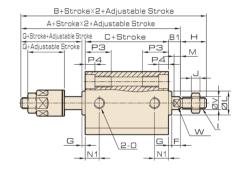
#### Overall Dimension





SDAJ12-16 Male thread







### Dimension

Bore/ Symbol				3			B1	D			G	Н			K	K1	L	М		۱1
Туре	Standard	With magnet	Standard	With magnet	Standard	With magnet	DI					''				KI				
12	41	51	53	63	17	27	5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	10	3	5.5	6.5
16	43	53	55	65	18.5	28.5	5.5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	11	3	6.5	7.5
20	47.5	57.5	62.5	72.5	19.5	29.5	5.5	36	8	4	1.5	15	M6×1.0	5	10	M4×0.7	13	3	7	7.5
25	53	63	70	80	21	31	6	42	10	4	2	17	M8×1.25	6	14	M5×0.8	17	3		8
32	61.5	71.5	79.5	89.5	24.5	34.5	7	50	12	4	3	18	M10×1.25	6	17	M6×1.0	22	3	8	9
40	64	74	92	102	26	36	7	58.5	12	4	3	28	M14×1.5	8	22	M8×1.25	28	3	8	10
50	70	80	98	108	28	38	9	71.5	15	5	4	28	M18×1.5	9	27	M10×1.5	38	3	8	10.5
63	74	84	102	112	32	42	9	84.5	15	5	4	28	M18×1.5	9	27	M10×1.5	40	3	9.5	11
80	92.5	102.5	125.5	135.5	41	51	11	104	20	6	5	33	M22×1.5	13	32	M14×1.5	45	4	11.5	14
100	110.5	120.5	148.5	158.5	51	61	12	124	20	7	5	38	M26×1.5	12	36	M18×1.5	55	4	15	20

Bore/ Symbol	0	P1	Р3	P4	Q	R		T1	T2		W	Х	
12	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	17	-	25	16.3	23	6	5	-	-
16	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	17	-	29	19.8	28	6	5	-	-
20	M5×0.8	Double Side: Ф6.5, Cog: M5×0.8, Through Hole: Ф4.2	14	4.5	21	2	34	24	-	8	6	11.2	1
25	M5×0.8	Double Side: Ф8.2, Cog: M6×1, Through Hole: Ф4.6	15	5.5	24	2	40	28	-	10	8	12	1
32	G1/8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6	16	5.5	27	6	44	34	-	12	10	18	1
40	G1/8	Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7	20	7.5	28	6.5	52	40	-	16	14	21	1
50	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	29	9.5	62	48	-	20	17	29.5	1
63	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	29	9.5	75	60	-	20	17	26	1
80	G3/8	Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3	25	10.5	35.5	10	94	74	-	25	22	36	2
100	G3/8	Double Side: Φ17.5, Cog: M14×2, Through Hole: Φ11.3	30	13	42.5	10	114	90	-	32	27	35.5	2



Overall Dimension

Cylinder

Calculation SI

SI A.

SIB

SQ

DNT SC / SU

SCT

SC A.

SL

DN

DSN

DN/DSN A.

MA

MAC

MAL

MALC

MAL/MACL A.

CQ2

TCQ2

ADN

TADN

PPRM MHL2

MXH/MXQ CJP

CJ2

CDU

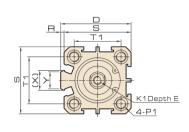
TN

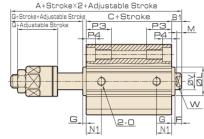
CXS

MGP

MSQ

SDAJ20-100 Female thread









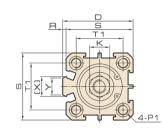


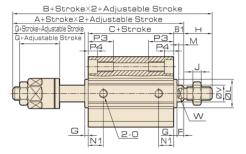


CQ2 Series

Thin Type Cylinder

SDAJ20-100 Male thread







#### Dimension

Symbol	A	7		3			В1	D			G	Н			K	K1	L	М		11
Туре	Standard	With magnet		With magnet		With magnet														
12	41	51	53	63	17	27	5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	10	3	5.5	6.5
16	43	53	55	65	18.5	28.5	5.5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	11	3	6.5	7.5
20	47.5	57.5	62.5	72.5	19.5	29.5	5.5	36	8	4	1.5	15	M6×1.0	5	10	M4×0.7	13	3	7	.5
25	53	63	70	80	21	31	6	42	10	4	2	17	M8×1.25	6	14	M5×0.8	17	3		8
32	61.5	71.5	79.5	89.5	24.5	34.5	7	50	12	4	3	18	M10×1.25	6	17	M6×1.0	22	3	8	9
40	64	74	92	102	26	36	7	58.5	12	4	3	28	M14×1.5	8	22	M8×1.25	28	3	8	10
50	70	80	98	108	28	38	9	71.5	15	5	4	28	M18×1.5	9	27	M10×1.5	38	3	8	10.5
63	74	84	102	112	32	42	9	84.5	15	5	4	28	M18×1.5	9	27	M10×1.5	40	3	9.5	11
80	92.5	102.5	125.5	135.5	41	51	11	104	20	6	5	33	M22×1.5	13	32	M14×1.5	45	4	11.5	14
100	110.5	120.5	148.5	158.5	51	61	12	124	20	7	5	38	M26×1.5	12	36	M18×1.5	55	4	15	20

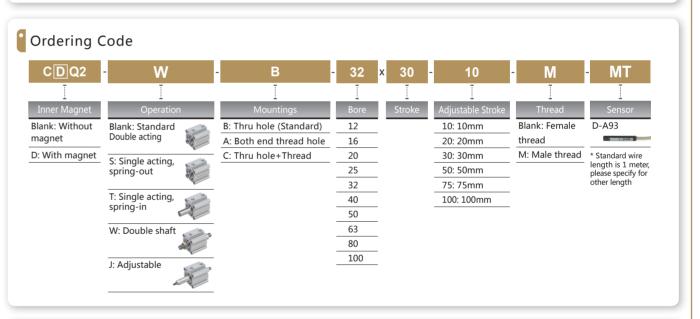
Bore/ Symbol	0	P1	Р3	P4	Q	R	S	T1	T2	V	W	Х	Υ
12	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	17	-	25	16.3	23	6	5	-	-
16	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	17	-	29	19.8	28	6	5	-	-
20	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	14	4.5	21	2	34	24	-	8	6	11.2	10
25	M5×0.8	Double Side: Ф8.2, Cog: M6×1, Through Hole: Ф4.6	15	5.5	24	2	40	28	-	10	8	12	10
32	G1/8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6		5.5	27	6	44	34	-	12	10	18	14
40	G1/8	Double Side: Ф10, Cog: M8×1.25, Through Hole: Ф6.7	20	7.5	28	6.5	52	40	-	16	14	21	14
50	G1/4	Double Side: Ф11, Cog: M8×1.25, Through Hole: Ф6.7	25	8.5	29	9.5	62	48	-	20	17	29.5	19
63	G1/4	Double Side: Ф11, Cog: M8×1.25, Through Hole: Ф6.7	25	8.5	29	9.5	75	60	-	20	17	26	19
80	G3/8	Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3	25	10.5	35.5	10	94	74	-	25	22	36	26
100	G3/8	Double Side: Φ17.5, Cog: M14×2, Through Hole: Φ11.3	30	13	42.5	10	114	90	-	32	27	35.5	26

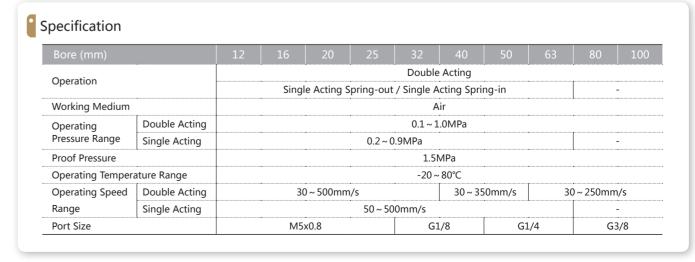
Features

- 1. Changed copper bearing and use DU bearing.
- 2. Changed NBR seal and use PU seal.
- 3. Changed anti-friction seal and use new POM anti-friction seal.
- 4. Using new SDA rolling technique for the piston rod and piston.
- 5. Using SDA rolling technique for the tail barrel (S > 100, end

cover use snap ring structure).

- 6. Gasket use SDA anti-collision gasket structure.
- 7. Barrel appearance is same with SMC new type-CQ2 series, easy to install the sensor and save material.





2-|P65 2-|P66

MA MAC MA/MAC A

MAL MALC MAL/MACL A

SDA TCQ2 ADN TADN PPRM

MHL2 CDU

TN

CXS

MGP

MSQ

# CQ2 Series Thin Type Cylinder



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MAL MALC MAL/MACL A. SDA TCQ2 ADN TADN

PPRM

MHL2

MXH/MXQ

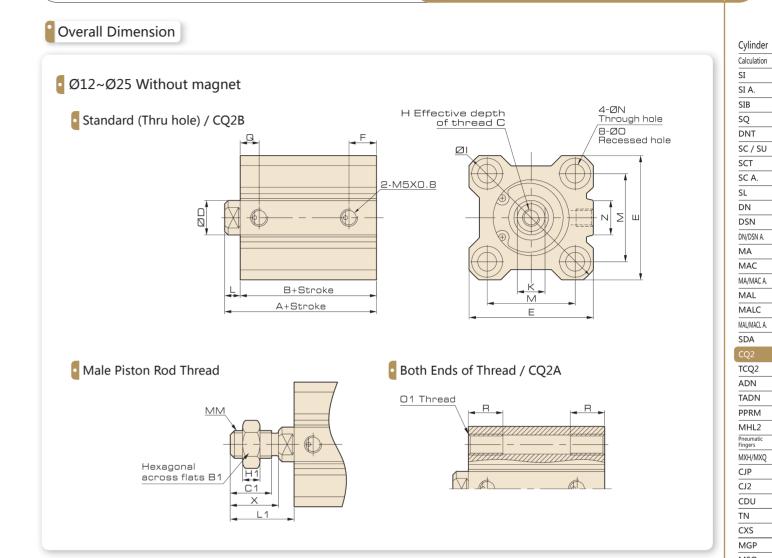
CJP CJ2 CDU TN

CXS MGP 

Number	Name	Number	Name
1	Piston rod	8	Piston
2	Shaft seal	9	Magnet
3	Front cover	10	Magnet base
4	C clip	11	Piston seal
5	DU bearing	12	Anti-friction seal
6	O ring	13	Back cover
7	Anti-collision gasket	14	Body

# CQ2 Series Thin Type Cylinder

MSQ



#### Dimension

Bore/Symbol	Stroke Range (mm)	А	В	С	D	Е	F	Н	I	К	L	М
12	5~30	20.5	17	6	6	25	5	M3×0.5	32	5	3.5	15.5
16	5~30	22	18.5	8	8	29	5.5	M4×0.7	38	6	3.5	20
20	5~50	24	19.5	7	10	36	5.5	M5×0.8	47	8	4.5	25.5
25	5~50	27.5	22.5	12	12	40	5.5	M6×1	52	10	5	28

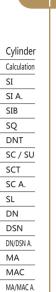
Bore/Symbol	N	0	Q		B1	C1	H1	L1	ММ		01	
12	3.5	6.5 deep 3.5	7.5	-	8	9	4	14	M5×0.8	10.5	M4×0.7	7
16	3.5	6.5 deep 3.5	8	10	10	10	5	15.5	M6×1	12	M4×0.7	7
20	5.5	9 deep 7	8	10	13	12	5	18.5	M8×1.25	14	M6×1	10
25	5.5	9 deep 7	9	10	17	15	6	22.5	M10×1.25	17.5	M6×1	10

2-|P67 2-|P68



ISO9001:2015 C€

# CQ2 Series Thin Type Cylinder



MAL

MALC

MAL/MACL A.

SDA

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2

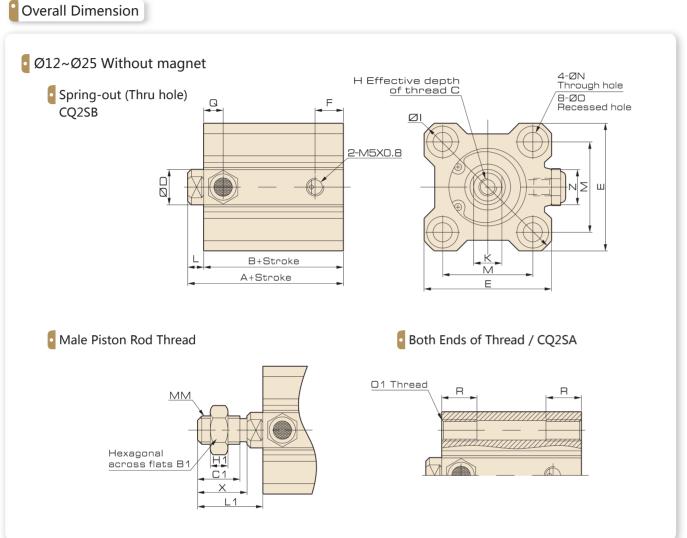
CDU

TN

CXS

MGP

MSQ



# Dimension

Bore/Symbol	Stroke Range (mm)	А	В	С	D			Н				М
12	5/10	30.5	27	6	6	25	5	M3×0.5	32		3.5	15.5
12	15/20	40.5	37		0	23	3	1015 × 0.5	32	)	3.3	15.5
16	5/10	32	28.5	8	8	29	5.5	M4×0.7	38	6	3.5	20
10	15/20	42	38.5	0	0	29	3.3	1014×0.7	36	0	3.3	20
20	5/10	34	29.5	7	10	36	5.5	M5×0.8	47	8	4.5	25.5
20	15/20/25/30	44	39.5	_ ′	10	30	3.3	1013 × 0.8	4/	0	4.5	23.3
25	5/10	37.5	32.5	12	12	40	5.5	M6×1	52	10	5	28
23	15/20/25/30	47.5	42.5	12	12	40	3.5	IVIOXI	32	10	)	20

Bore/Symbol	N	0	Q		В1	C1	H1	L1	MM		01	
12	3.5	6.5 deep 3.5	7.5	-	8	9	4	14	M5×0.8	10.5	M4×0.7	7
16	3.5	6.5 deep 3.5	8	10	10	10	5	15.5	M6×1	12	M4×0.7	7
20	5.5	9 deep 7	8	10	13	12	5	18.5	M8×1.25	14	M6×1	10
25	5.5	9 deep 7	9	10	17	15	6	22.5	M10×1.25	17.5	M6×1	10

#### Dimension

Bore/Symbol	Stroke Range (mm)	А	В	С	D	Е	F	Н	I	К	L	М
12	5/10	30.5	27	6	6	25	5	M3×0.5	32	F	3.5	15.5
12	15/20	40.5	37		0	25	)	IVI5 × U.5	32	3	5.5	15.5
16	5/10	32	28.5	8	8	29	5.5	M4×0.7	38	6	3.5	20
16	15/20	42	38.5	) °	°	29	5.5	IVI4×0.7	30	0	5.5	20
20	5/10	34	29.5	7	10	36	5.5	M5×0.8	47	8	4.5	25.5
20	15/20/25/30	44	39.5	'	10	30	5.5	IVI5×U.6	47	0	4.5	25.5
25	5/10	37.5	32.5	12	12	40	5.5	M6×1	52	10	_	28
25	15/20/25/30	47.5	42.5	12	12	40	5.5	IVIOXI	52	10	)	

L1+Stroke

Bore/Symbol	N	0	Q		В1	C1	H1	L1	ММ		01	
12	3.5	6.5 deep 3.5	7.5	-	8	9	4	14	M5×0.8	10.5	M4×0.7	7
16	3.5	6.5 deep 3.5	8	10	10	10	5	15.5	M6×1	12	M4×0.7	7
20	5.5	9 deep 7	8	10	13	12	5	18.5	M8×1.25	14	M6×1	10
25	5.5	9 deep 7	9	10	17	15	6	22.5	M10×1.25	17.5	M6×1	10

Cylinder
Calculation
SI
SIA.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN

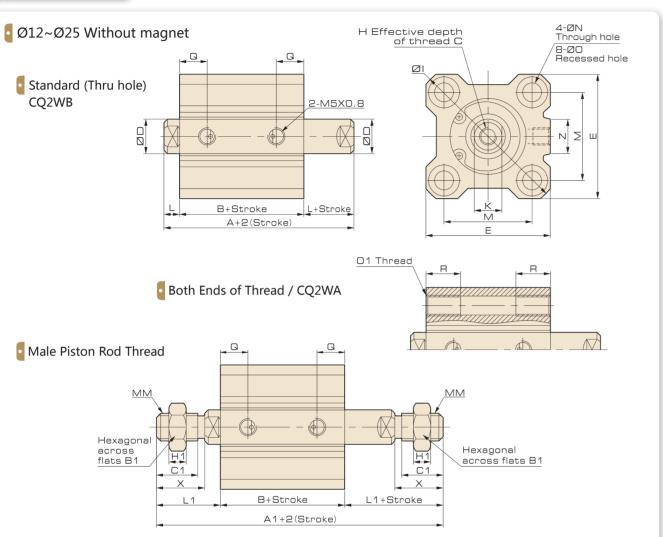
DSN
DN/DSN A.
MA
MAC
MA/MAC A.
MAL

MAL/MACL A
SDA
CQ2
TCQ2
ADN
TADN
PPRM
MHL2
Pneumatic
Fingers
MXH/MXQ

CJP
CJ2
CDU
TN
CXS
MGP
MSQ



Overall Dimension

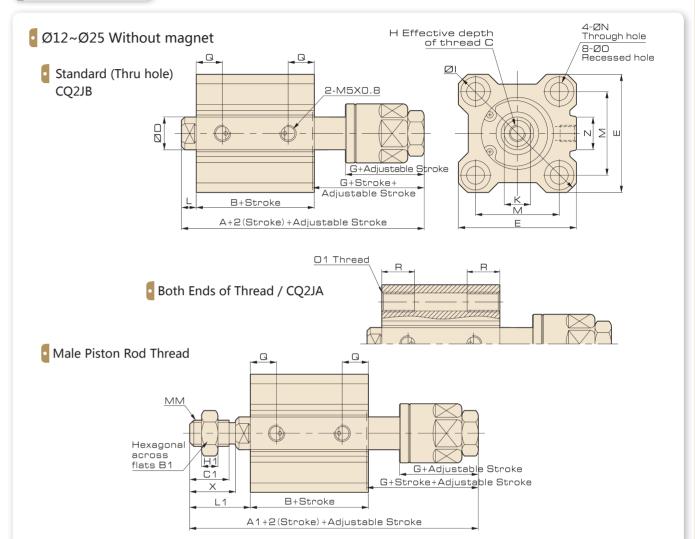


Dimension

Bore/Symbol	Stroke Range (mm)	А	В		D			Н				М	N
12	5~30	32.2	25.2	6	6	25	5 N	/13×0.5	32	5	3.5	15.5	3.5
16	5~30	33	26	8	8	29	)	/14×0.7	38	6	3.5	20	3.5
20	5~50	35	26	7	10	36	5   1	⁄15×0.8	47	8	4.5	25.5	5.5
25	5~50	39	29	12	12	40	)	M6×1	52	10	5	28	5.5
Bore/Symbol	0	Q		A1	В1	C1	H1	L1	MM			01	
12	6.5 deep 3.5	9	- 1	43.2	8	9	4	14	M5×0	).8	10.5	M4×0.7	7
16	6.5 deep 3.5	9.5	10	57	10	10	5	15.5	M6×	1	12	M4×0.7	7
20	9 deep 7	8	10	63	13	12	5	18.5	M8×1	.25	14	M6×1	10
25	9 deep 7	9	10	74	17	15	6	22.5	M10×1	L.25	17.5	M6×1	10

# CQ2 Series Thin Type Cylinder





#### Dimension

Bore/Symbol	Stroke Range (mm)	А	В	С	D	Е	G	Н	I	К	L	М	N
12	5~30	45.2	25.2	6	6	25	17	M3×0.5	32	5	3.5	15.5	3.5
16	5~30	50	26	8	8	29	21	M4×0.7	38	6	3.5	20	3.5
20	5~50	54	26	7	10	36	24	M5×0.8	47	8	4.5	25.5	5.5
25	5~50	60.5	29	12	12	40	27	M6×1	52	10	5	28	5.5

Bore/Symbol	0	Q		A1	В1	C1	H1	L1	MM		01	
12	6.5 deep 3.5	9	-	55.7	8	9	4	14	M5×0.8	10.5	M4×0.7	7
16	6.5 deep 3.5	9.5	10	62	10	10	5	15.5	M6×1	12	M4×0.7	7
20	9 deep 7	8	10	68	13	12	5	18.5	M8×1.25	14	M6×1	10
25	9 deep 7	9	10	78	17	15	6	22.5	M10×1.25	17.5	M6×1	10

Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL

DN

DSN

DN/DSN A.

MA

MAC

MA/MAC A.

MALC

MAL/MACL A.

SC / SU
SCT
SC A.
SL
DN
DSN
DN/DSNA
MA
MAC
MA/MACA
MAL

Cylinder

Calculation

SI

SI A.

SIB

SQ

DNT

MALC
MALMACLA
SDA
CQ2
TCQ2
ADN

TADN

PPRM MHL2

MXH/MXQ CJP

CJ2

CDU

TN

CXS

MGP

MSQ

TCQ2
ADN
TADN
PPRM
MHL2
Pneumatic
Fingers
MXH/MXQ
CJP
CJ2
CDU
TN

CXS

MGP

MSQ



17.5

M10×1.25

Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MAL MALC MAL/MACL A. SDA TCQ2 ADN TADN PPRM MHL2 MXH/MXQ CJP

CJ2

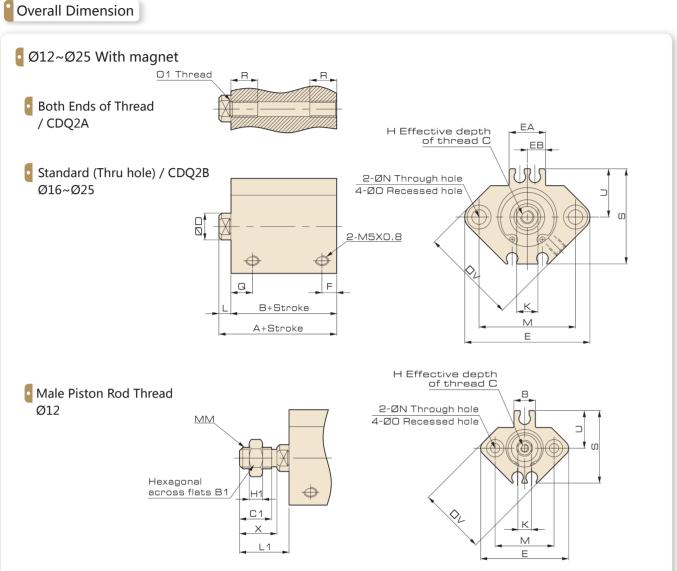
CDU

TN

CXS

MGP

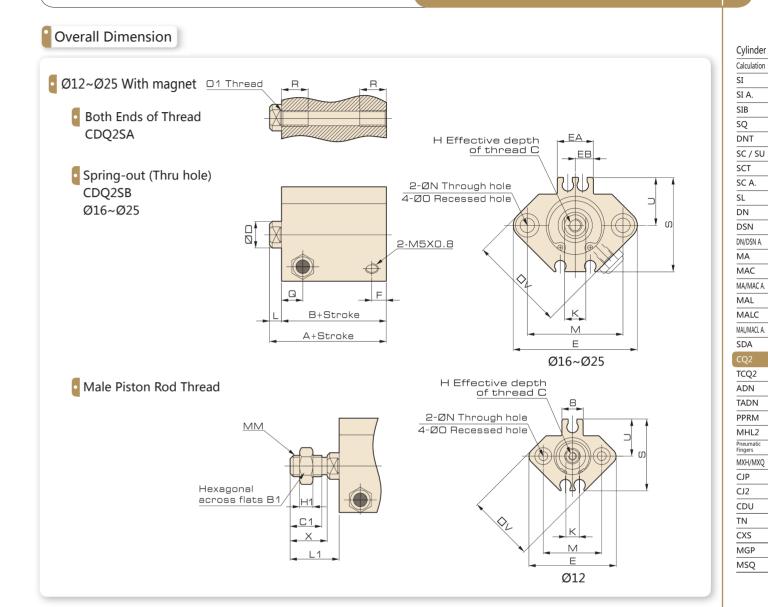
MSQ



#### Dimension 31.5 M3×0.5 3.5 22 3.5 12 5~30 37 13.2 6.6 16 5~30 34 30.5 8 5.5 M4×0.7 3.5 28 3.5 47 20 5~50 36 31.5 7 10 13.6 6.8 5.5 M5×0.8 4.5 36 5.5 25 5~50 37.5 32.5 12 12 52 13.6 6.8 5.5 M6×1 10 5 40 5.5 12 27.5 14 25 14 M5×0.8 10.5 M4×0.7 6.5 deep 3.5 9 4 16 6.5 deep 3.5 9.5 29.5 15 29 10 10 5 15.5 M6×1 12 M4×0.7 20 35.5 18 36 13 12 18.5 M8×1.25 14 10 9 deep 7 5 M6×1

40.5

# CQ2 Series Thin Type Cylinder

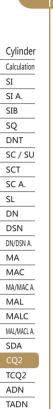


Bore/Symbol		e Range nm)	А	В			D		EA	EB		н			М
12	5	/10	41.5	38	3 6		6	33	_	_	7	M3×0.5	5	3.5	22
12		5/20	51.5	48	3	<b>,</b>	0	33			ļ ,	1013 ~ 0.3	, ,	3.5	
16		/10	44	40.		3	8	37	13.2	6.6	5.5	M4×0.7	6	3.5	28
		5/20	54	50.							<u> </u>		<u> </u>		
20		/10	46 56	41. 51.		7	10	47	13.6	6.8	5.5	M5×0.8	8	4.5	36
		)/25/30 /10	47.5	42.							1		<u> </u>		
25		)/25/30	57.5	52.	1	2	12	52	13.6	6.8	5.5	M6×1	10	5	40
Bore/Symbol	N	0		Q	S	U	V	B1	C1	H1	L1	MM	Χ	01	R
12	3.5	6.5 dee	p 3.5	9	27.5	14	25	8	9	4	14	M5×0.8	10.5	M4×0.7	7
16	3.5	6.5 dee	р 3.5	9.5	29.5	15	29	10	10	5	15.5	M6×1	12	M4×0.7	7
20	5.5	9 dee	р7	8	35.5	18	36	13	12	5	18.5	M8×1.25	14	M6×1	10
25	5.5	9 dee	n 7	9	40.5	21	40	17	15	6	22.5	M10×1.25	17.5	M6×1	10

25



# CQ2 Series Thin Type Cylinder



PPRM

MHL2

MXH/MXQ

CJP

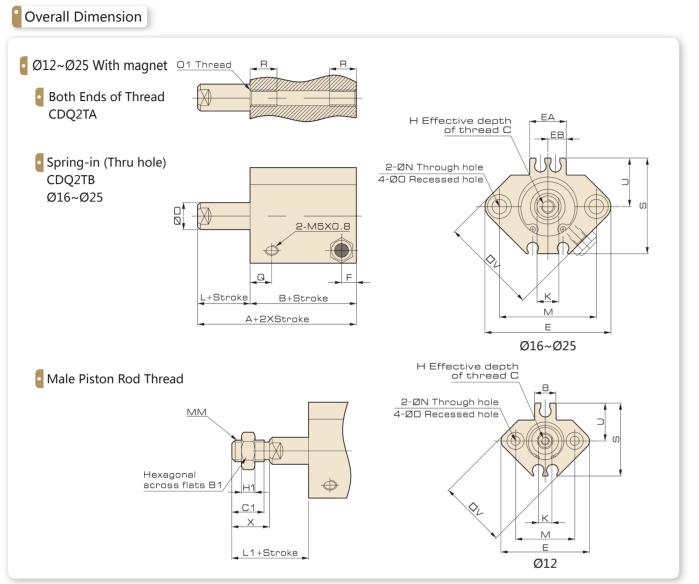
CJ2

CDU

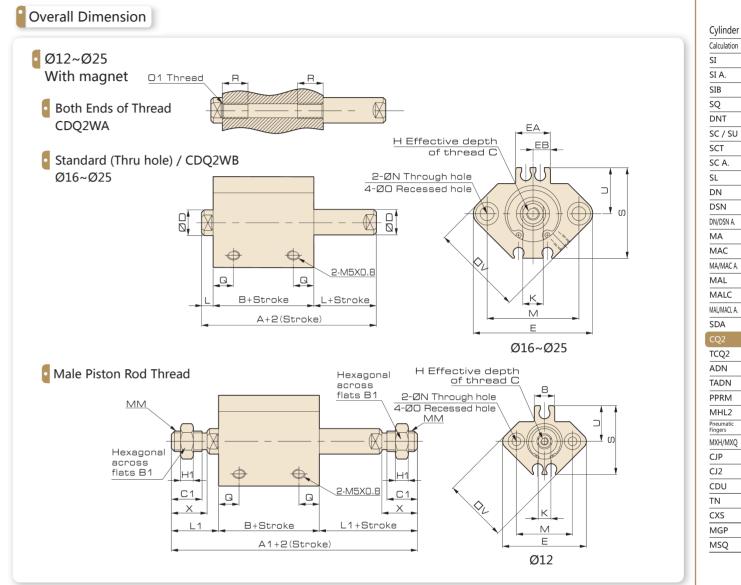
TN

CXS

MGP



Dimension															
Bore/Symbol		e Range mm)	А		В	С	D	Е	EA	EB	F	Н	K	L	М
12	į	5/10	41.	5	38	6	6	33	_	_	7	M3×0.5	5	3.5	22
		.5/20	51.		48							111011010	ļ		
16		5/10 .5/20	44 54		0.5	8	8	37	13.2	6.6	5.5	M4×0.7	6	3.5	28
20		5/10	46	4	1.5	7	10	47	13.6	6.8	5.5	M5×0.8	8	4.5	36
		0/25/30	56		1.5						1 0.0	111011010	ļ		
25		5/10 0/25/30	47. 57.		2.5	12	12	52	13.6	6.8	5.5	M6×1	10	5	40
Bore/Symbol	N	0		Q		U		B1	C1	H1	L1	MM		01	
12	3.5	6.5 deep	3.5	9	27.5	14	25	8	9	4	14	M5×0.8	10.5	M4×0.7	7
16	3.5	6.5 deep	3.5	9.5	29.5	15	29	10	10	5	15.5	M6×1	12	M4×0.7	7
20	5.5	9 deep	7	8	35.5	18	36	13	12	5	18.5	M8×1.25	14	M6×1	10
25	5.5	9 deep	7	9	40.5	21	40	17	15	6	22.5	M10×1.25	17.5	M6×1	10



Bore/Symbol	Stroke (m		А			D		EA	EB	Н	K		М	N	0
12	5~	30	39.4	32.4	6	6	33	-	- [	M3×0.5	5	3.5	22	3.5	6.5 deep 3.
16	5~	30	43	36	8	8	37	13.2	6.6	M4×0.7	6	3.5	28	3.5	6.5 deep 3.
20	5~	50	47	38	7	10	47	13.6	6.8	M5×0.8	8	4.5	36	5.5	9 deep 7
25	5~	50	49	39	12	12	52	13.6	6.8	M6×1	10	5	40	5.5	9 deep 7
Bore/Symbol	Q	S	U	V		A1	B1	C1	H1	L1	MM	1	Х	0	1 R
12	9	27.5	14	25	6	0.4	8	9	4	14	M5×0	).8	10.5	M4>	<0.7 7
16	9.5	29.5	15	29		67	10	10	5	15.5	M6×	1	12	M4>	<0.7 7
20	8	35.5	18	36	5	75	13	12	5	18.5	M8×1	.25	14	M6	×1 10
25	9	40.5	21	40	, T	84	17	15	6	22.5	M10×1	25	17.5	M6	×1 10



Cylinder

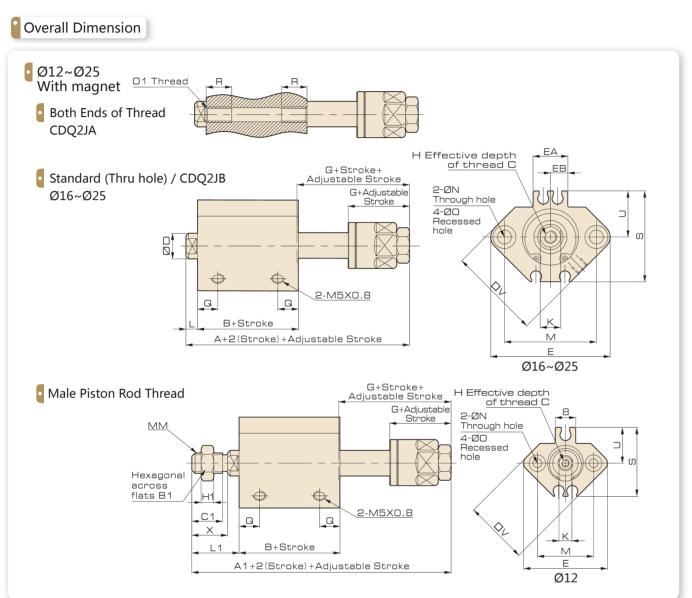
Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MA/MAC A. MAL MALC MAL/MACL A. SDA TCQ2 ADN TADN PPRM MHL2 MXH/MXQ CJP CJ2

CDU TN

CXS

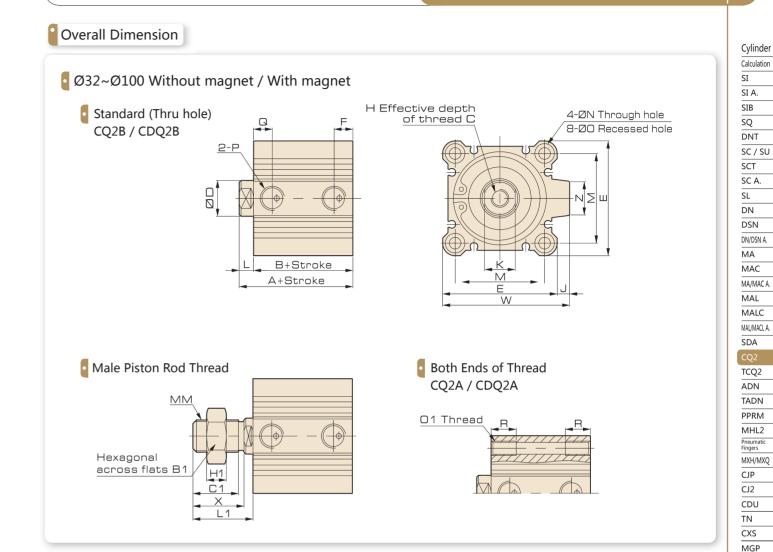
MGP

MSQ



Dimension																	
Bore/Symbol	Stroke Range (mm)	А	В	С	D	Е	E	A	EB		G	Н	K		L	М	N
12	5~30	52.4	32.4	6	6	33	-		-	1	.7	M3×0.5	5	3	.5	22	3.5
16	5~30	60	36	8	8	37	13	.2	6.6	2	21	M4×0.7	6	3	.5	28	3.5
20	5~50	66	38	7	10	47	13	.6	6.8	2	24	M5×0.8	8	4	.5	36	5.5
25	5~50	70.5	39	12	12	52	13	.6	6.8	2	27	M6×1	10		5	40	5.5
Bore/Symbol	0	Q	S	U	V	A1	В1	C1	ŀ	<del>1</del> 1	L1	ММ		Х		01	R
12	6.5 deep 3.5	9	27.5	14	25	62.9	8	9		4	14	M5×0.	3	10.5	M	14×0.7	7
16	6.5 deep 3.5	9.5	29.5	15	29	72	10	10		5	15.5	M6×1		12	M	14×0.7	7
20	9 deep 7	8	35.5	18	36	80	13	12		5	18.5	M8×1.2	5	14	N	И6×1	10
25	9 deep 7	9	40.5	21	40	88	17	15		6	22.5	M10×1.	25	17.5	N	И6×1	10

# CQ2 Series Thin Type Cylinder



	Stroke	Range	١	<b>Without</b>	magne	t		With	magne	t		,   ,	D	Е	Н			IZ.
Bore/Symbol			Α	В	F	Q	Α	В	F	Q			ע	E	Н			K
32	5 10~		30	23	6.5	7.5	40	33	7.5	10	1	2 1	16	45	M8×1.	25	4.5	14
32	50~		40	33	7.5	10	40	33	/.5	10	1.	,   ,	LU	45	IVIO ^ I	23	4.5	14
40	5		36.5	29.5	8	11	46.5	39.5	7.5	12.5	5 1	3 1	16	52	M8×1,	25	5	14
10	50~		46.5	39.5	7.5	12.5	10.5	33.3	7.5	12	´   -			32	1410 11.	23	3	1 .
50	5		38.5	30.5	9	9	48.5	40.5	10.5	10.5	5 1	5 2	20	64	M10×1	15	7	17
30	50~	100	48.5	40.5	10.5	10.5	10.5	10.5	10.5	1 20.0		, l		"			•	
63	5 10~		44	36	9.5	14	54	46	10.5	15	1	5 2	20	77	M10×1	1.5	7	17
	50~	100	54	46	10.5	15												
80	5~ 50~		53.5 63.5	43.5 53.5	12.5	16	63.5	53.5	12.5	16	2:	1 2	25	98	M16×	2	6	22
100	5~ 50~		65 75	53 63	13	23	75	63	13	23	2	7 3	32	117	M20×2	2.5	6.5	27
D (C			NI					- I	D1	C1	111			D 4D 4			-	Б
Bore/Symbol	L	М	N		O	P	W	Z	B1	C1	Н1	L1		MM	X	0	ŀΤ	R
32	7	34	5.5	9 de	еер 7	1/8	49.5	14	22	20.5	8	28.5	M	114×1.5	23.5	M6	5×1	10
40	7	40	5.5	9 de	eep 7	1/8	57	15	22	20.5	8	28.5	M	114×1.5	23.5	M6	5×1	10
50	8	50	6.6	11 d	еер 8	1/4	71	19	27	26	11	33.5	М	118×1.5	28.5	M8×	1.25	14
63	8	60	9	14 de	ep 10.5	1/4	84	19	27	26	11	33.5	M	118×1.5	28.5	M10	×1.5	18
80	10	77	11	<b>+</b>	ep 13.5	3/8	104	25	32	32.5	13	43.5	М	122×1.5	35.5	M12>	×1.75	22
	L	L		1		ļ		25				ļ	+		ļ	ļ <u></u>		

2-|P77

MSQ



Overall Dimension

Cylinder

Calculation SI

SI A.

SIB

SQ

DNT

SC / SU SCT

SC A.

SL DN

DSN

MA

MAC

MAL

MALC

MAL/MACL A.

SDA

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2

CDU

TN

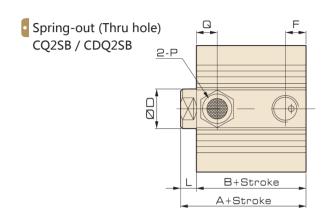
CXS

MGP

MSQ

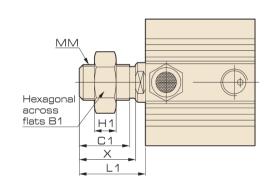
DN/DSN A.

■ Ø32~Ø100 Without magnet / With magnet

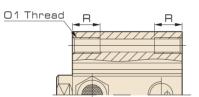


4-ØN Through hole H Effective depth of thread C 8-Ø0 Recessed hole

Male Piston Rod Thread



Both Ends of Thread CQ2SA / CDQ2SA



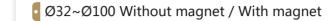
#### Dimension

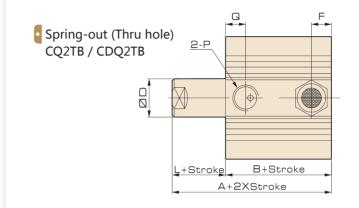
Dara/Cumbal	Stroke Range	\ \	<b>Without</b>	magne	et		With r	nagnet			_		Н		K
Bore/Symbol		А	В		Q	Α			Q		D	[	П		K
32	5/10	40	33	7.5	10	50	43	7.5	10	13	16	45	M8×1.25	4.5	14
32	15/20/25/30	50	43	7.5	10	60	53	7.5	10	13	10	45	1010 × 1.23	4.5	14
40	5/10	36.5	29.5	7.5	12.5	56.5	49.5	7.5	12.5	13	16	52	M8×1.25	5	14
40	15/20/25/30	46.5	39.5	7.5	12.3	66.5	59.5	7.5	12.3	13	10	32	1010 × 1.23	3	14
50	5/10	38.5	30.5	10.5	10.5	58.5	50.5	10.5	10.5	15	20	64	M10×1.5	7	17
30	15/20/25/30	48.5	40.5	10.5	10.5	68.5	60.5	10.5	10.5	13	20	04	IVIIUXI.3	′	1/
63	5/10	44	36	10.5	15	64	56	10.5	15	15	20	77	M10×1.5	7	17
03	15/20/25/30	54	46	10.5	13	74	66	10.5	15	12	20	//	IVIIU×1.5	′	1

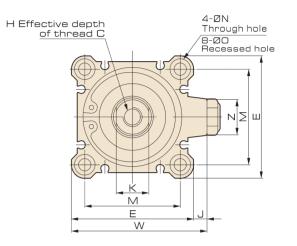
Bore/Symbol		М	N	0	Р	W		В1	C1	H1	L1	MM		01	
12	7	34	5.5	9 deep 7	1/8	49.5	14	22	20.5	8	28.5	M14×1.5	23.5	M6×1	10
16	7	40	5.5	9 deep 7	1/8	57	15	22	20.5	8	28.5	M14×1.5	23.5	M6×1	10
20	8	50	6.6	11 deep 8	1/4	71	19	27	26	11	33.5	M18×1.5	28.5	M8×1.25	14
25	8	60	9	14 deep 10.5	1/4	84	19	27	26	11	33.5	M18×1.5	28.5	M10×1.5	18

# CQ2 Series Thin Type Cylinder

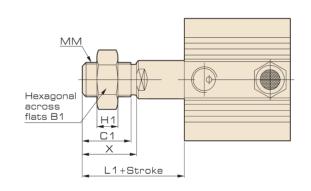


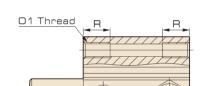






Male Piston Rod Thread





Both Ends of Thread

CQ2TA / CDQ2TA

#### Dimension

Dara/Cumbal	Stroke Range	\	Vithout	magne	et		With n	nagnet			D	F	Н	1	К
Bore/Symbol		Α	В	F	Q	Α	В	F	Q			E			
32	5/10	40	33	7.5	10	50	43	7.5	10	13	16	45	M8×1.25	4.5	14
32	15/20/25/30	50	43	7.5	10	60	53	7.5	10	13	10	43	IVIO × 1.23	4.5	14
40	5/10	36.5	29.5	7.5	12.5	56.5	49.5	7.5	12.5	13	16	52	M8×1.25	_	14
40	15/20/25/30	46.5	39.5	7.5	12.3	66.5	59.5	7.5	12.3	13	10	32	1010 × 1.23	)	14
50	5/10	38.5	30.5	10.5	10.5	58.5	50.5	10.5	10.5	15	20	64	M10×1.5	7	17
30	15/20/25/30	48.5	40.5	10.5	10.5	68.5	60.5	10.5	10.5	13	20	04	10110 ~ 1.3	_ ′	1/
63	5/10	44	36	10.5	15	64	56	10.5	15	15	20	77	M10×1.5	7	17
US	15/20/25/30	54	46	10.5	12	74	66	10.5	12	12	20	''	IVITUX 1.5	′	1/

Bore/Symbol		М	N	0		W		В1	C1	Н1	L1	MM		01	
12	7	34	5.5	9 deep 7	1/8	49.5	14	22	20.5	8	28.5	M14×1.5	23.5	M6×1	10
16	7	40	5.5	9 deep 7	1/8	57	15	22	20.5	8	28.5	M14×1.5	23.5	M6×1	10
20	8	50	6.6	11 deep 8	1/4	71	19	27	26	11	33.5	M18×1.5	28.5	M8×1.25	14
25	8	60	9	14 deep 10.5	1/4	84	19	27	26	11	33.5	M18×1.5	28.5	M10×1.5	18

SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MA/MAC A. MAL MALC MAL/MACL A. SDA TCQ2 ADN TADN PPRM MHL2 Pneumatic Fingers

MXH/MXQ

CJ2

CDU

TN

CXS

MGP

MSQ

Cylinder

Calculation

SI A.

SIB

SQ DNT



Cylinder Calculation SC / SU

SI

SI A.

SIB

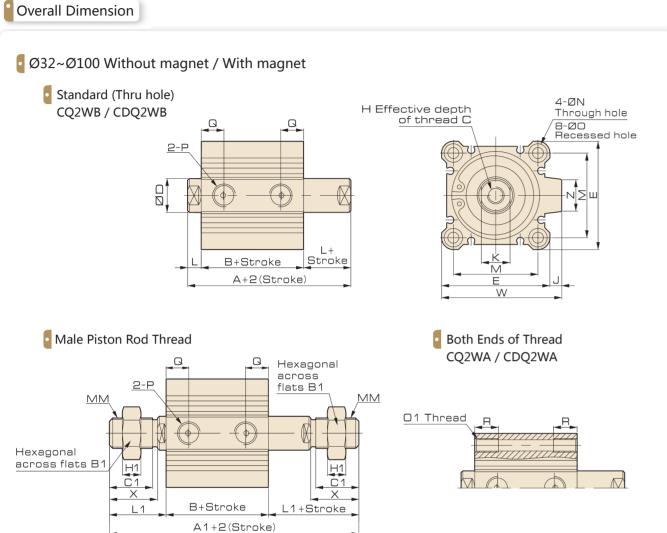
SQ

DNT

SCT

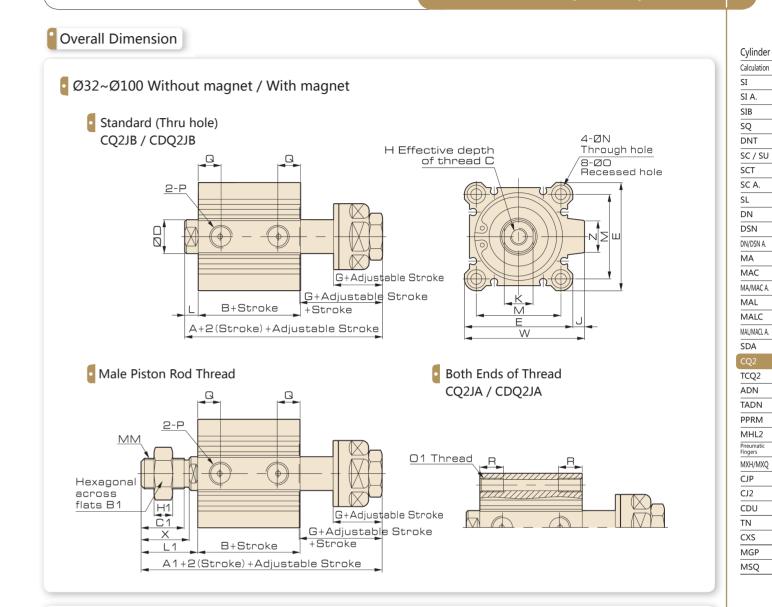
SC A. SL DN DSN DN/DSN A. MA MAC MAL MALC MAL/MACL A. SDA

TCQ2 ADN TADN PPRM MHL2 MXH/MXQ CJP CJ2 CDU TN CXS MGP MSQ



Dimension																			
Dara /Cumbal	Stro	ke	With	out ma	gnet	Wit	th mag	net	C		F	Н		I V	l ,	М	N		
Bore/Symbol	Range		Α	A1	В	Α	A1	В		D	-					IVI	IN		0
32	5~5	0	44.5	87.5	30.5	54.5	97.5	40.5	13	16	45	M8×1.2	25 4.5	14	7	34	5.5	9 44	ep 7
32	50~1		54.5	97.5	40.5	34.3	37.3	40.5	13	10	43	1010 ~ 1.2	-5	1-7	ļ <i>'</i>	1 37	3.3	J 40	.ср /
40	5~5		54	97	40	64	107	50	13	16	52	M8×1.2	25   5	14	7	40	5.5	9 de	ep 7
	50~1		64	107	50	<u> </u>	<u> </u>								ļ	+		ļ	
50	5~5 50~1		56.5 66.5	107.5 117.5	40.5 50.5	66.5	117.5	50.5	15	20	64	M10×1	.5 7	17	8	50	6.6	11 d	eep 8
	5		58	109	42		<b>-</b>	•		-					<b>†</b>	<del> </del>		<del> </del>	
63	10~!					68	119	52	15	20	77	M10×1	.5   7	17	8	60	9	14 de	ep 10.
	50~1		68	119	52	<u> </u>	<u> </u>		ļ						<b>.</b>	<u> </u>	ļ	<u> </u>	
80	5~5 50~1		71 81	138 148	51 61	81	148	61	21	25	98	M16×	2 6	22	10	77	11	17 de	ep 13.
	5~5		84.5	147.5	60.5	<del> </del>	<del> </del>		ļ						+	+	ļ	<del> </del>	
100	50~1		94.5	157.5	70.5	94.5	157.5	70.5	27	32	117	M20×2	.5 6.5	27	12	94	11	17 de	ep 13.
Bore/Symbol	Р			Q			W			В1	C1	H1	L1	M	И			01	
32	1/8	[		10			49.5	14	1	22	20.5	8	28.5	M14×	1.5	23.5	M	6×1	10
40	1/8			13			57	15	;	22	20.5	8	28.5	M14×	1.5	23.5	M	6×1	10
50	1/4			13			71	19	,	27	26	11	33.5	M18×	1.5	28.5	M8	×1.25	14
63	1/4	Stroke		ke 5mm: nm and 5		nm: 16	84	19	,	27	26	11	33.5	M18×	1.5	28.5	M1	0×1.5	18
80	3/8			16			104	25	5	32	32.5	13	43.5	M22×	1.5	35.5	M12	2×1.75	22
100	3/8			20			123.5	25	;	41	32.5	16	43.5	M26×	1.5	35.5	M12	2×1.75	22

# CQ2 Series Thin Type Cylinder



D = /C	Stroke Range	With	out ma	gnet	Wit	:h magi	net		7					1/			l N
Bore/Symbol		А	A1	В	Α	A1	В	С	D		G	Н				М	N
32	5~50	65	86.5	30.5	75	96.5	40.5	13	16	45	28	M8×1.25	4.5	14	7	34	5.5
32	50~100	75	96.5	40.5	/3	30.3	40.5	13	10	43	20	1010 × 1.23	4.3	14	_ ′	34	3.3
40	5~50	74.5	96	40	84.5	106	50	13	16	52	28	M8×1.25	5	14	7	40	5.5
40	50~100	84.5	106	50	04.3	100	30	13	10	32	20	1010 ~ 1.23		14		40	3.3
50	5~50	77	102.5	40.5	87	112.5	50.5	15	20	64	29	M10×1.5	7	17	8	50	6.6
	50~100	87	112.5	50.5		112.5	30.3	13		0.		1111071.5					0.0
63	5~50	78.5	104	42	88.5	114	52	15	20	77	29	M10×1.5	7	17	8	60	9
	50~100	88.5	114	52													
80	5~50	96	129.5	51	106	139.5	61	21	25	98	35.5	M16×2	6	22	10	77	11
	50~100	106	139.5	61													ļ
100	5~50	114.5	146	60.5 70.5	124.5	156	70.5	27	32	117	42.5	M20×2.5	6.5	27	12	94	11
	50~100	124.5	156	70.5													
Bore/Symbol	0	Р		Q		W	Z	В1	C1	H1	1 L:	1 MM		Χ	0	1	R
32	9 deep 7	1/8		10		49.5	14	22	20.5	8	28	.5 M14×1	.5	23.5	M6	×1	10
40	9 deep 7	1/8		13		57	15	22	20.5	8	28	.5 M14×1	.5	23.5	M6	×1	10
50	11 deep 8	1/4		13		71	19	27	26	11	33	.5 M18×1	.5	28.5	M8×	1.25	14
63	14 deep 10.5	1/4		5~50mr 50~100r		84	19	27	26	11	33	.5 M18×1	.5	28.5	M10	×1.5	18
80	17 deep 13.5	3/8		16		104	25	32	32.5	13	3 43	.5 M22×1	.5	35.5	M12>	<1.75	22
100	17 deep 13.5	3/8		20		123.5	25	41	32.5	16	43	.5 M26×1	5	35.5	M12>	<1.75	22



TCQ2 Series Guide Cylinder

Cylinder Calculation

SI A.

SQ

DNT

SCT SC A.

SL

DN DSN

DN/DSN A.

MA

MAC

MA/MAC A

MAL

MALC

MAL/MACL A

CQ2

ADN

TADN

PPRM

MHL2

CJ2

CDU

TN

MGP

MSQ

SC / SU

Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MAL MALC MAL/MACL A. SDA TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

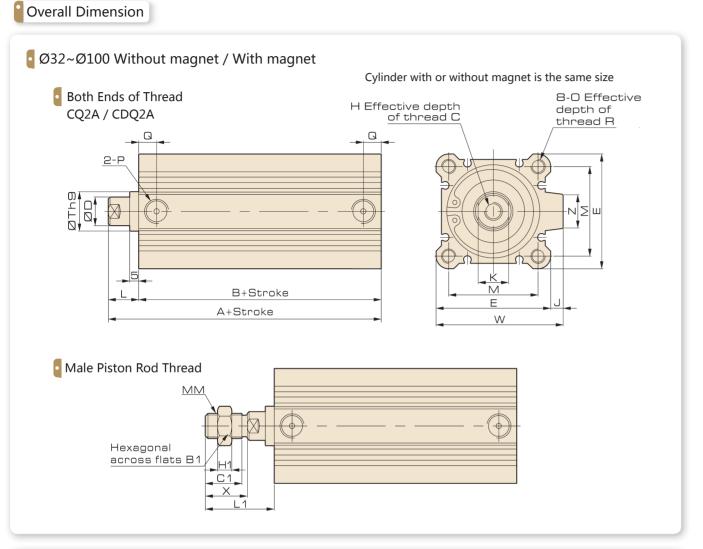
CJ2

CDU TN

CXS

MGP MSQ

2-|P83



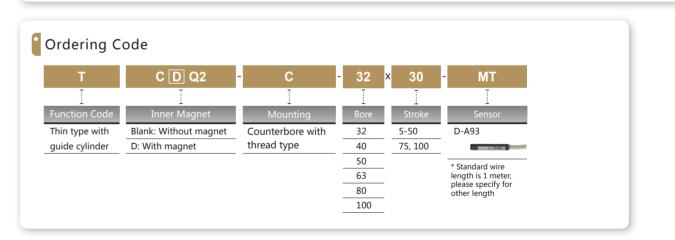
Para/Symbol	Stroke R	ange	А	В	С	D	E	Н		K	L	М	Р	
Bore/Symbol			A					, n						Q
32			62.5	45.5	5 13	16	45	M8×1.25	4.5	14	17	34	1/8	12.
40			72	55	13	16	52	M8×1.25	5	14	17	40	1/8	14
50	100~3	00	73.5	55.5	5 15	20	64	M10×1.5	7	17	18	50	1/4	14
63	100~3		75	57	15	20	77	M10×1.5	7	17	18	60	1/4	16.
80			86	66	21	25	98	M16×2	6	22	20	77	3/8	19
100			97.5	75.5	5 27	32	117	M20×2.5	6.5	27	22	94	3/8	23
Bore/Symbol	W	Z	Е	31	C1	H1	L1	MM	Х		0	R	Т	ħ9
32	49.5	14	2	22	20.5	8	38.5	M14×1.5	23.5	N	16×1	10	22	0 -0.052
40	57	15	2	22	20.5	8	38.5	M14×1.5	23.5	N	16×1	10	28	0 -0.052
50	71	19	2	27	26	11	43.5	M18×1.5	28.5	M8	3×1.25	14	35	0 -0.052
63	84	19	2	27	26	11	43.5	M18×1.5	28.5	M1	L0×1.5	18	35	0 -0.052
80	104	25	3	32	32.5	13	53.5	M22×1.5	35.5	M1.	2×1.75	22	43	0 -0.052
	123.5	25		1	32.5	16	53.5	M26×1.5	35.5		2×1.75	22		0 -0.052

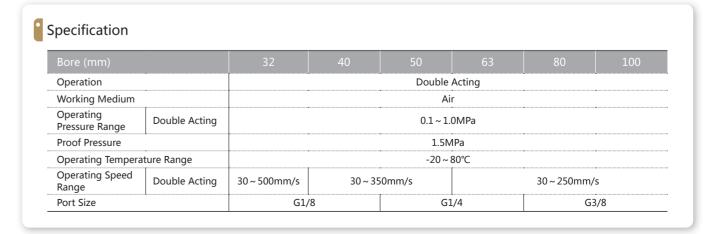




#### Features

- 1. Front cover with DU bearing.good guiding performance and wear resistance.
- The shaft sealing material used PU material, PU material has high strength, good toughness, wear resistance, oil resistance, aging resistance, etc.
- 3. Riveting technology for the piston rod and piston to
- improve concentricity.
- 4. There are two reverse bar positioning on each side to enhance the load capacity for smoother operation.
- 5. Reduced noise when running inside with rubber crash pad.





# TCQ2 Series Guide Cylinder



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MAL MALC MAL/MACL A. SDA CQ2

MXH/MXQ
CJP
CJ2
CDU
TN
CXS

ADN

TADN

PPRM

MHL2

MGP

# Internal Structure 3 4 5 7 8 9 10 11 12 13 13 13 14 14 15 15 15

arts			
Number	Name	Number	Name
1	Copper tube	9	Piston rod
2	Socket head screw	10	Barrel
3	Fixed plate	11	Magnet base
4	Guide rod	12	Back cover
5	Dust ring	13	Piston
6	Circlips for holes	14	Magnet
7	O ring	15	C ring
8	Anti-collision gasket		

# TCQ2 Series Guide Cylinder

Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT

SC / SU SCT SC A. SL

DSN

DN/DSN A.

MA

MAC

MAL

MALC

MAL/MACL A.

CQ2

ADN TADN

PPRM

MHL2
Pneumatic
Fingers

MXH/MXQ

CJP

CJ2

CDU

TN

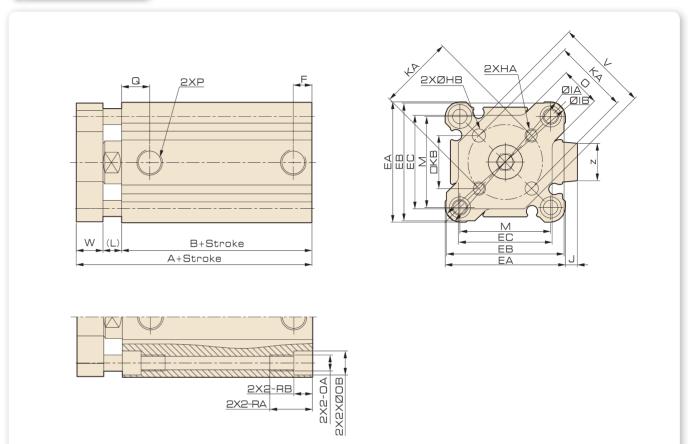
CXS

MGP

MSQ

MA/MAC A.





#### Dimension

Diffierisio																_			
Bore/	Stroke			W	/ithout	t magnet						With r □	magne I				ГΛ	FD	
Symbol	Range (mm)	Α			Q		P	TE	A			Q		P		TT	EA	EB	EC
	5	ſ		5.5	11.5	M5X0.8	IN	TF _	T	T	T	Ī	[	IN		ΤF			T
32	10-50	40	23	5.5	11.5	IVIDAU.6	┼		50	33	7.5	10.5	G1/8	PT1/8	NID	T1/8	45	44	35
52	75. 100	50	33	7.5	10.5	G1/8	PT1	/8 NPT1/8	3	33	7.5	10.5	01/0	111/0	ואר	11/0	45	44	33
	5-50	46.5	29.5		<del> </del>		·			<del> </del>	<b>-</b>	<b></b>	<u></u>						<b>-</b>
40	75、100	56.5	39.5	- 8	11	G1/8	PT1	/8 NPT1/8	56.5	39.5	8	11	G1/8	PT1/8	3 NP	T1/8	52	51.5	38
	5-50	50.5	30.5	<del> </del>	ł		1			<u> </u>		<u></u>	<u></u>	<u> </u>					<b>!</b>
50	75、100	60.5	40.5	10.5	10.5	G1/4	PT1	/4 NPT1/4	56.5	39.5	10.5	10.5	G1/4	PT1/4	1 NP	T1/4	62	61	48.
	5-50	56	36		T		·			<b>†</b>									
63	75、100	66	46	10.5	15	G1/4	PT1	/4   NPT1/4	1 66	46	10.5	15	G1/4	PT1/4	I NP	T1/4	77	76	59
00	5-50	67.5	43.5	12.5	1.0	62.0	DT2	(O NIDTO (	, , , , , ,	-2-	12.5	1-	63.00	DT2 /		T2 (0	00	07	7.
80	75、100	77.5	53.5	12.5	16	G3/8	PT3,	/8 NPT3/8	3 77.5	53.5	12.5	15	G3/8	PT3/8	S   NP	T3/8	98	97	75
100	5-50	79	53	13	23	G3/8	PT3	/8 NPT3/8	89	63	13	23	G3/8	PT3/8	NID.	T3/8	117	116	92.5
100	75、100	89	63	13	25	G3/6	P13,	76 NP13/6	09	03	13	25	G5/6	P15/6	NP	13/0	11/	110	92.3
D /C	110	0.4		ID.	TA	TD		16.0	I/D		3.4	NI.	0.0	D.A	DD		347	7	
Bore/Symbol	НА	OA	······	⊣В	ΙA	IB	J	KA	KB	L	М	N	ОВ	RA	RB	V	W	Z	0
32	M5X0.8	M6X1.0	0   !	5 +0.2	60	58.5	4.5	28±0.02	19.8	7	34	5.5	9	17	7	35	10	14	15
40	M5X0.8	M6X1.0	0 !	5 +0.2	69	67.5	5	33±0.02	23.3	7	40	5.5	9	17	7	42	10	14	15
50	M6X1.0	M8X1.2	.5	5 +0.2	86	84.5	7	42±0.02	29.7	8	50	6.6	11	22	8	54.5	12	19	16
63	M6X1.0	M10X1.	.5 (	5 +0.2	103	100	7	50±0.02	35.4	8	60	9	14	28.5	10.5	68	12	19	19
80	M8X1.25	M12X1.7	75 8	3 +0.2	132	129	6	65±0.02	46	10	77	11	17.5	35.5	13.5	86	14	25	22
100	M10X1.5	M12X1.7	75 10	) +0.2	156	153	6.5	80±0.02	56.6	10	94	11	17	35.5	13.5	108	16	25	25

# ADN Series

New Compact Cylinder (Conforms to ISO21287 Standard)



ADN Series
New Compact Cylinder
(Conforms to ISO21287 Standard)







#### Features

Cylinder

Calculation SI

SI A. SIB

SQ

DNT SC / SU

SCT

SC A.

SL

DN

DSN

DN/DSN A.

MA

MAC

MAL

MALC

MAL/MACL A. SDA

CQ2

TCQ2

TADN

PPRM MHL2

CJP

CJ2

CDU

TN

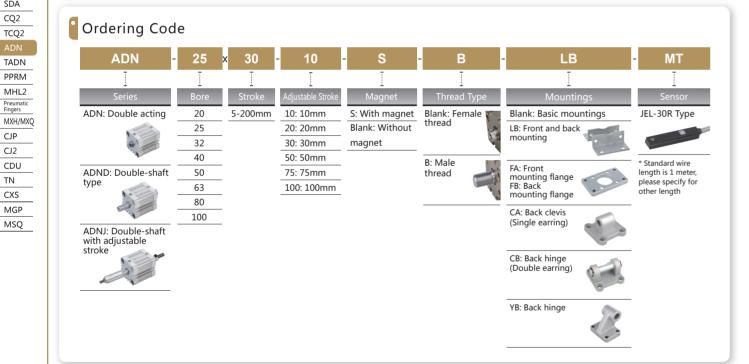
CXS

MGP

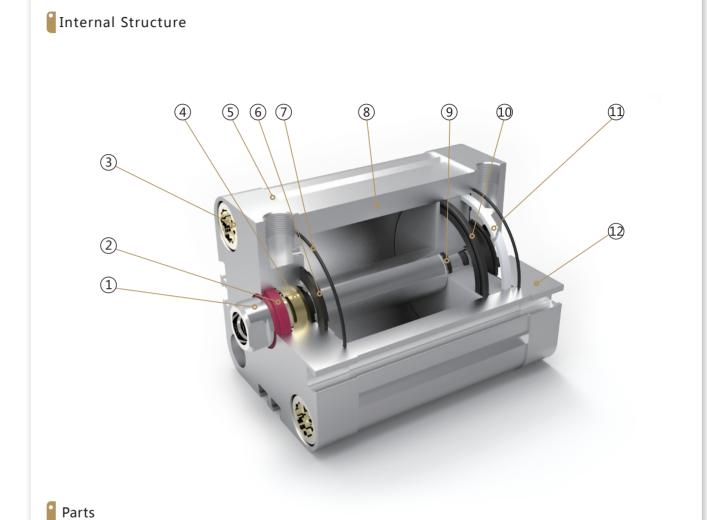
MSQ

MA/MAC A.

- 1. ADN series compact cylinder accord with ISO21287
- 2. ADN series cylinder with compact structure, derived lots of variety types, and wide range of applications.
- 3. Both end use rubber gasket to absorb the remaining energy of the high speed movement and the machine cycle.
- 4. Every ammsebly way has large number of accessories, so it is very sample.



Bore (mm)	20	25	32	40	50	63	80	100
Operation	<u>.</u>			Double	Acting			12
Working Medium			•	Α	ir		-	-
Operating Pressure Range			***************************************	0.1 ~ 1	.0MPa		-	
Proof Pressure			***************************************	1.5N	ЛРа			
Operating Temperature Range	-		-	-20~	80°C			-
Operating Speed Range	-		-	30 ~ 50	0mm/s			-
Port Size	M5x	0.8			G1,	/8"	-	-



Number	Name	Number	Name
1	Piston rod	7	O ring
2	Shaft seal	8	Barrel
3	Cover screw	9	O ring
4	DU bearing	10	Piston seal
5	Front cover	11	Anti-friction seal
6	Anti-collision gasket	12	Back cover

Calculation SI A. SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MA/MAC A MAL MALC MAL/MACL A CQ2 TCQ2

Cylinder

TADN PPRM MHL2 MXH/MXQ CJ2 CDU TN CXS MGP MSQ

## **ADN Series**

New Compact Cylinder (Conforms to ISO21287 Standard)



Cylinder Calculation SC / SU DN/DSN A. MA/MAC A. MALC MAL/MACL A.

SI

SI A.

SIB

SQ

DNT

SCT

SC A.

SL

DN

DSN

MA

MAC

MAL

SDA

CQ2

TCQ2

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2

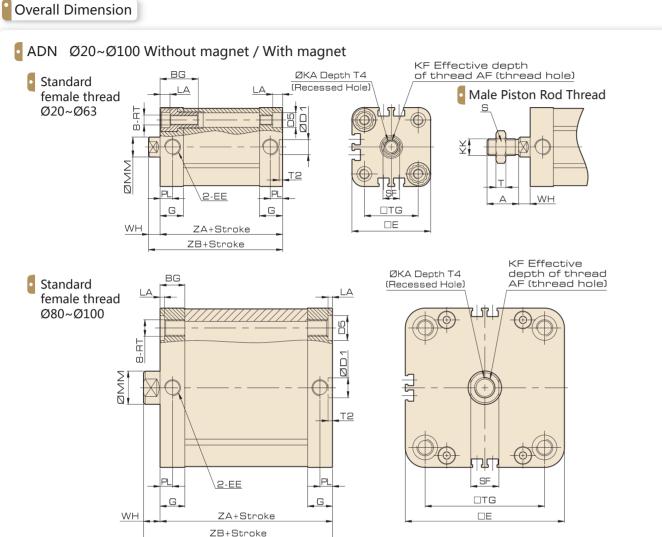
CDU

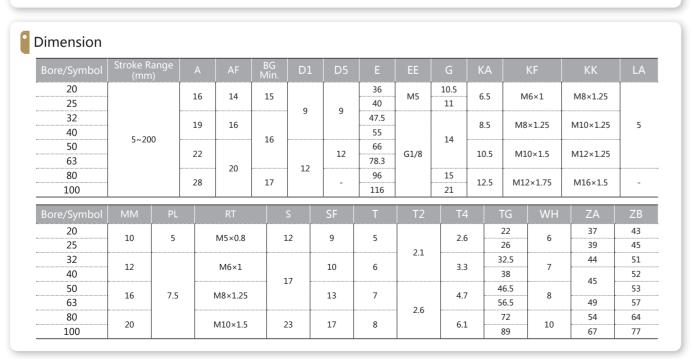
TN

CXS

MGP

MSQ





# **ADN Series**

Cylinder

Calculation

SI A.

SIB

SQ

DNT

SC A.

SL

DN

DSN

MA

MAC

MA/MAC A

MAL

MALC

MAL/MACL A

SDA

CQ2

TCQ2

TADN

PPRM

MHL2

MXH/MXQ

CJP

CJ2 CDU

TN

CXS

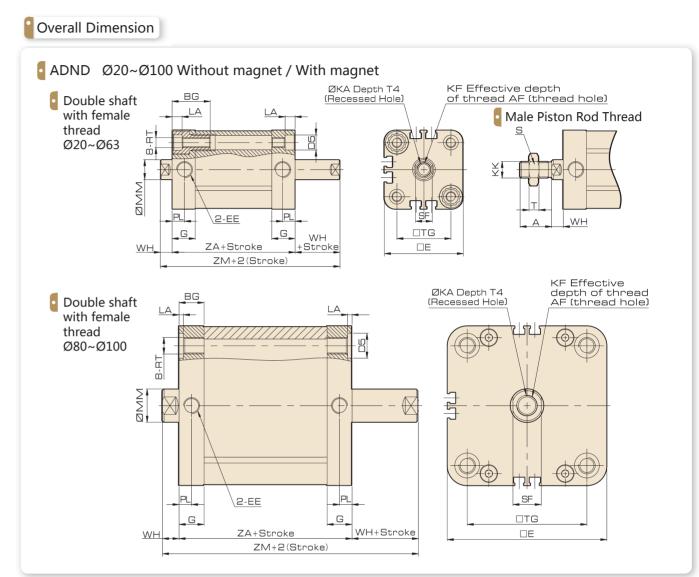
MGP

MSQ

DN/DSN A.

SC / SU SCT

New Compact Cylinder (Conforms to ISO21287 Standard)



Bore/Symbol	Stroke Rai (mm)	nge		AF	BG Min.	D5	E	EE	G	KA	KF	KK	LA
20			16	14	15		36	M5	10.5	6.5	M6×1	M8×1.25	Ī
25			10	14	13	9	40	IVIS	11	0.5	IVIO×I	IVIO×1.23	
32			19	16		"	47.5	_		8.5	M8×1.25	M10×1.25	5
40	5~200			1 10	16		55		14	0.5	1410.1.23	1411071.23	
50	3 200		22			12	66	G1/8	1	10.5	M10×1.5	M12×1.25	
63				20			78.3	,-					
80			28		17	-	96	_	15	12.5	M12×1.75	M16×1.5	_
100							116		21				
Bore/Symbol	MM	PL		RT	9	5	SF	T	T4	TG	WH	ZA	ZM
20	10	5	Ī	M5×0.8	1.		9	5	2.6	22	- 6	37	43
25	10	5		IVI5×0.8	1	<sup>2</sup>	9	5	2.6	26	ь	39	45
32	12			M6×1			10	6	3.3	32.5	7	44	58
40	12			IVIO×I	1	, L	10	0	3.3	38		45	59
50	16	7.5		M8×1.25	1	′	13	7	4.7	46.5	8	45	61
63	10	7.5	' <u> </u>	100~1.23			10	,	7./	56.5		49	65
80	20			M10×1.5	2	3	17	8	6.1	72	10	54	74
							±/	0	U.1	89		67	87

# **ADN Series**

New Compact Cylinder (Conforms to ISO21287 Standard)



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MA/MAC A. MAL MALC MAL/MACL A. SDA CQ2 TCQ2 TADN PPRM

MHL2

MXH/MXQ

CJP

CJ2

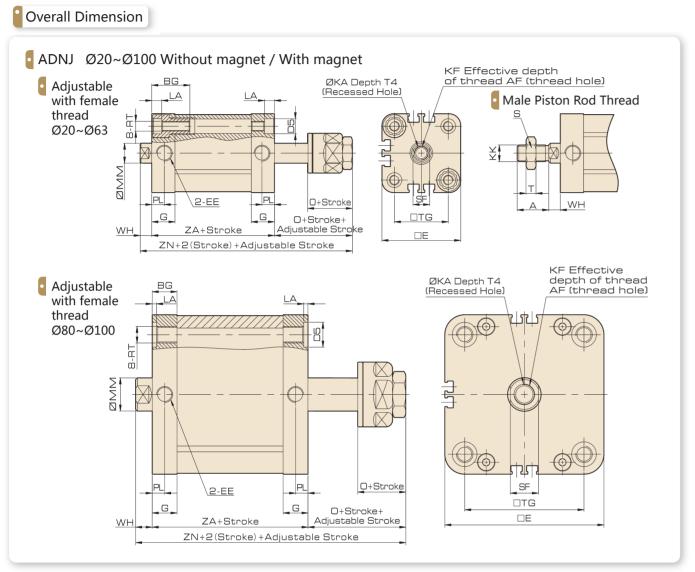
CDU

TN

CXS

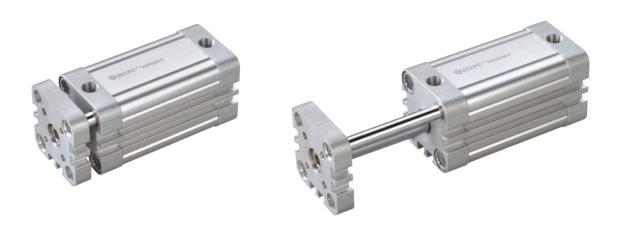
MGP

MSQ



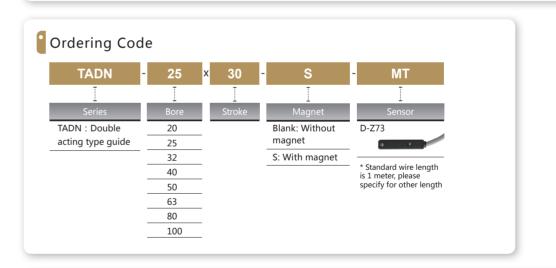
Dimension																
Bore/Symbol	Stroke R (mm			AF	BG Min.	D5			EE	G	KA	KF			KK	LA
20			16	14	15		3		M5	10.5	6.5	M6>	.1	М	18×1.25	
25						9	4	0		11	0.5	11101				
32			19	16			47	.5			8.5	M8×1	.25	M	10×1.25	5
40	5~20	00			16		5			14						
50			22			12	6		G1/8		10.5	M10×	1.5	M:	12×1.25	
63				20			78	3.3								
80		28		17	_	9			15	12.5	M12×	1.75	M16×1.5		_	
100								16		21						
Bore/Symbol	MM	0	PL		RT	9	5	SF		Т	T4	TG W		1	ZA	ZN
20	10	19	5		M5×0.8	1	_ [	9		5	2.6	22			37	62
25	10	19	5		IVI5×U.8	1	۷	9		5	2.6	26	6		39	64
32	12	27			M6×1	<u> </u>		10		6	3.3	32.5	7	Ī	44	78
40	12	2/			INIO×T	1	,	10		0	3.3	38	_ ′		45	79
50	16	28	7.5	7.5 N	M8×1.25		<b>'</b>	13		7	4.7	46.5	8		43	81
63	10	20	/.5	' <u> </u>	IVIO × 1.25			13		′	4./	56.5	°		49	85
80	20	29			M10×1.5	2	2	17		8	6.1	72	10		54	93
100	20				IVITUX 1.3		_	17		0	0.1	89	10	[	67	96

# TADN Series Guide Cylinder



#### Features

- 1. TADN series compact cylinder accord with ISO21287 standard.
- 2. TADN series cylinder with compact structure, derived lots of variety types, and wide range of applications.
- 3. Both end use rubber gasket to absorb the remaining energy of the high speed movement and the machine cycle.
- 4. Every ammsebly way has large number of accessories, so it is very simple.
- 5. There are two reverse bar positioning on each side to enhance the load capacity for smoother operation.



Bore (mm)	20	25	32	40	50	63	80	100
Operation				Double	Acting			<u>-</u>
Working Medium			-	Ai	ir			
Standard Stroke			-	5~10	0mm			
Operating Pressure Range			-	0.1 ~ 1.	.0MPa			-
Proof Pressure			-	1.51	ЛРа			-
Operating Temperature Range			-	-20 ~	80°C			-
Operating Speed Range		•	*	30 ~ 500	0mm/s			•
Port Size			•	G1	/8			

Cylinder
Calculation
SI
SI A.
SIB

SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN
DSN
DN/DSN A
MA
MAC
MA/MAC A.
MAL

MAL
MALC
MAL/MACL A.
SDA
CQ2
TCQ2
ADN

PPRM
MHL2
Pneumatic
Fingers
MXH/MXQ
CJP
CJ2
CDU
TN
CXS

# TADN Series Guide Cylinder



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MAL MALC MAL/MACL A. SDA CQ2 TCQ2 ADN

PPRM

MHL2

MXH/MXQ CJP CJ2 CDU

TN

CXS

MGP

Internal Structure 11 12 13 14 15 16 7 8 9 10 6 3 1 Parts

Number	Name	Number	Name
1	Fixed plate	11	C ring
2	Socket head screw	12	Anti-friction seal
3	Guide rod	13	O ring
4	Piston rod	14	Cover screw
5	Dust ring	15	Small gasket
6	Copper tube	16	Hexagon nut
7	Front cover	17	Piston
8	Bearing	18	Magnet
9	Anti-collision gasket	19	Back cover
10	O ring	20	Barrel

# TADN Series Guide Cylinder

Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT

SC / SU SCT SC A.

SL DN

DSN

DN/DSN A.

MA

MAC

MA/MAC A. MAL

MALC

MAL/MACL A

CQ2

TCQ2

ADN

TADN PPRM

MHL2
Pneumatic
Fingers

MXH/MXQ

CJP

CJ2

CDU

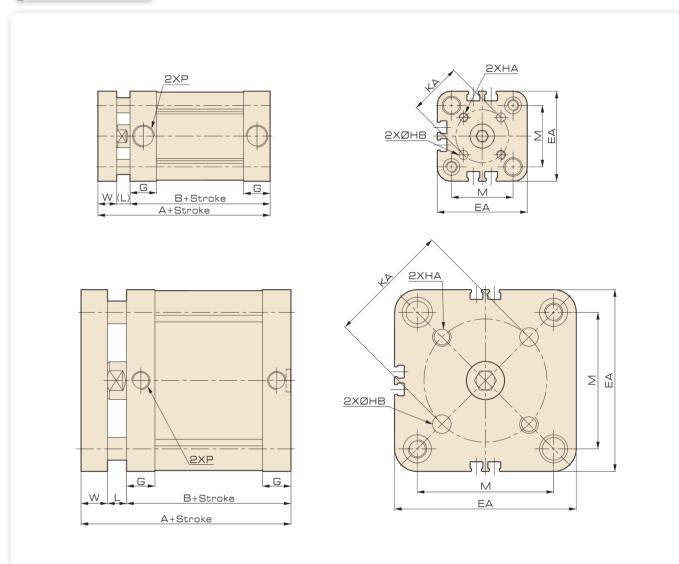
TN

CXS

MGP

MSQ





## Dimension

	Stroke			With ma	agnet								
Bore	Range	_			Р		EA	М	HA	НВ	KA		V
Symbol		A			IN	TF							
20	5-100	51	37		M5X0.8	3	36	22	M4X0.7	4 <sup>+0.2</sup>	17±0.02	6	
25	5-100	53	39		M5X0.8	3	40	26	M5X0.8	5 <sup>+0.2</sup>	22±0.02	6	
32	5-100	61	44	G1/8	PT1/8	NPT1/8	47.5	32.5	M5X0.8	5 <sup>+0.2</sup>	28±0.02	7	1
40	5-100	62	45	G1/8	PT1/8	NPT1/8	55	38	M5X0.8	5 <sup>+0.2</sup>	33±0.02	7	1
50	5-100	65	45	G1/8	PT1/8	NPT1/8	66	46.5	M6X1.0	6 <sup>+0.2</sup>	42±0.02	8	1
63	5-100	69	49	G1/8	PT1/8	NPT1/8	78.3	56.5	M6X1.0	6 <sup>+0.2</sup>	50±0.02	8	1
80	5-100	78	54	G1/8	PT1/8	NPT1/8	96	72	M8X1.25	8 <sup>+0.2</sup>	65±0.02	10	1
100	5-100	91	67	G1/8	PT1/8	NPT1/8	116	89	M10X1.5	10 +0.2	80±0.02	10	1 :

# PPRM Series Elbow Cylinder



# PPRM Series Elbow Cylinder

SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MAL MALC

Cylinder

Calculation

MAL/MACL A.

SDA

CQ2

TCQ2

ADN

TADN

MHL2

MXH/MXQ CJP

CJ2

CDU

TN

CXS

MGP

MSQ





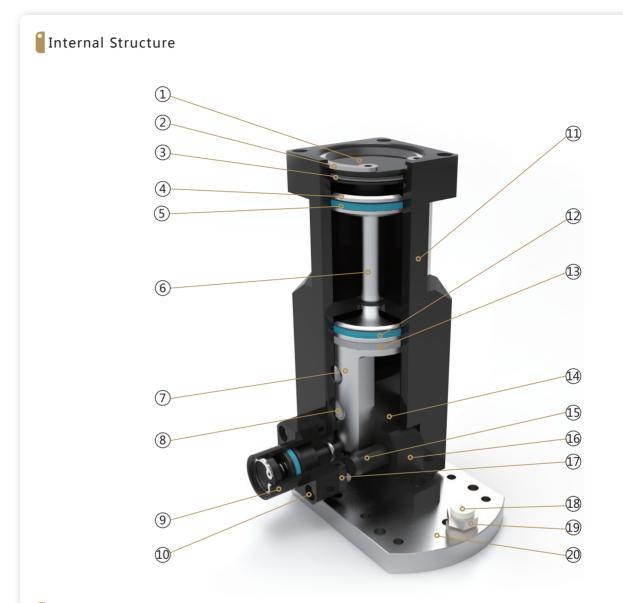
#### Features

- 1. Rotation angle 90+.
- 2. The cylinder stretched out the double force, effectively increase the cylinder output requirements.
- 3. The new power connection mechanism reduces the connecting
- 4. The front piston shaft hole is pressed with an engineering plastic bearing, which can effectively reduce the friction between the shaft and the shaft hole.
- 5. Piston seals adopt special composite materials to provide a longer service life when the cylinder expectancy of the load.
- 6. The connecting plate adopts a stainless steel screw sleeve, which can effectively increase the service life of the screw hole.

PPRM -	32	- WL	- MT
Ī	Ī	Ī	Ī
Specification	Bore	Туре	Sensor
PRM: bow linder	32 40 50	Blank: Without Lock WL: With Lock	* Standard wire length is 1 meter, please specify for other length

#### Specification

Model	PPRM-32WL	PPRM-40WL	PPRM-50WL
Port Size	-	M5×0.8	
Working Medium	•	40 Micron Filtered Air	
Operating Pressure		0.2~0.8MPa	
Max. Test Pressure		20MPa	
Operating Temperature		-20~80℃	
Rotation Angle		90°	
Adjustable Angle	±2°	±4°	±3°
When the pressure 0.6 MPa, the torque of the cylinder	> 9.5Nm	> 24Nm	> 45Nm
Weight	500g	1050g	1635g



#### Parts

Number	Name	Number	Name	Number	Name
1	Back cover	8	Bearing	15	Long pin
2	Circlips for holes	9	Lock	16	Connecting base
3	O ring	10	Socket head cap screw	17	Spacer
4	Small piston	11	Barrel	18	Anti-collision gasket
5	C ring	12	Y ring	19	Anti-collision screw
6	Piston rod	13	Magnet	20	Connecting plate
7	Big piston	14	Pin		

Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT
SC / SU
SCT

DNT
SC / SU
SCT
SC A.
SL
DN
DSN
DN/DSN A
MA
MAC
MA/MAC A
MAL
MALC
MAL/MACL A
SDA
CQ2

ADN
TADN
PPRM
MHL2
Pneumatic
Fingers

TCQ2

CJP
CJ2
CDU
TN
CXS
MGP
MSQ

# **PPRM Series** Elbow Cylinder



Cylinder Calculation SI A.

SI

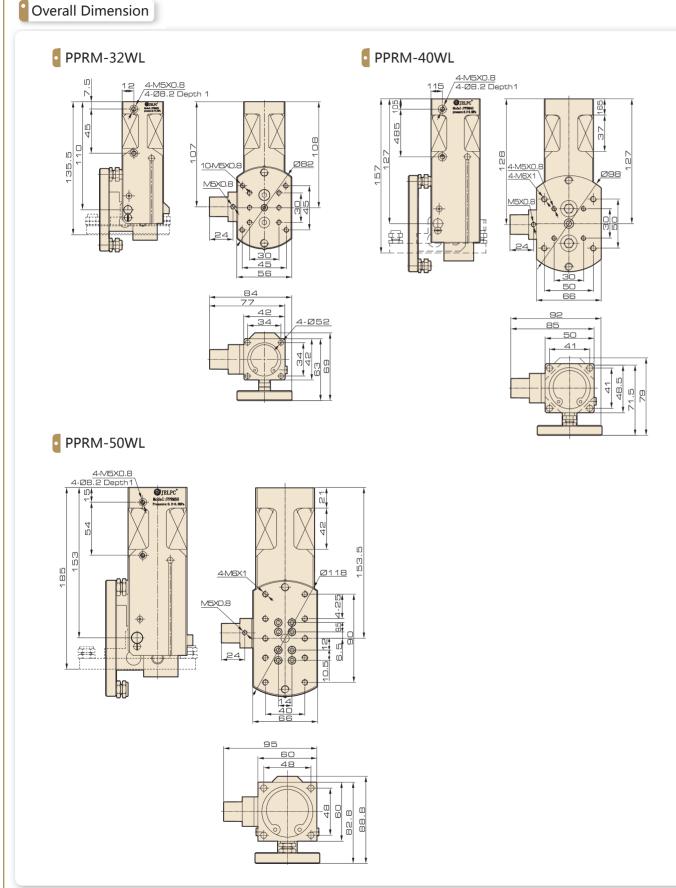
SIB

SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MAL MALC MAL/MACL A. SDA CQ2 TCQ2 ADN TADN MHL2 MXH/MXQ CJP CJ2 CDU TN

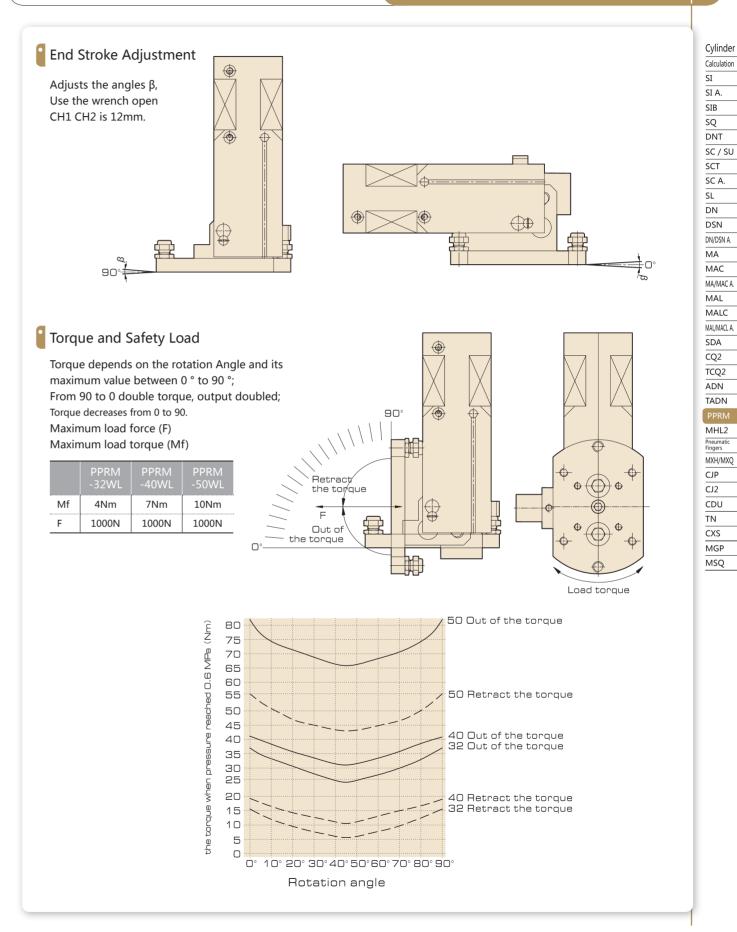
CXS

MGP

MSQ



# **PPRM Series** Elbow Cylinder



# MHL2 Series Wide Type Gripper (Parallel Opening and Closing Type)



Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MAL MAL/MACL A. SDA CQ2

Cylinder

TCQ2

ADN

TADN

PPRM

MXH/MXQ

CJP

CJ2

CDU

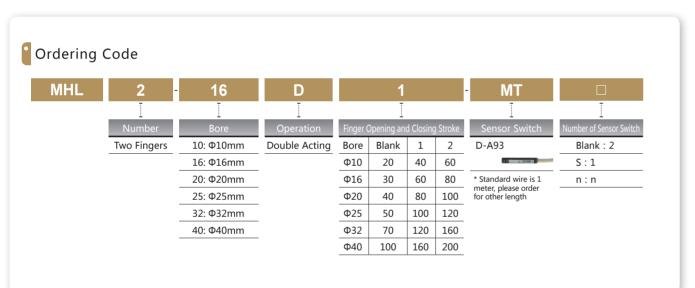
TN

CXS

MGP

MSQ





### Performing End of The Robot **Pneumatic Fingers**

#### Features

- 1. The jaw part adopts powder metallurgy technology, it is not easy to break, it has high toughness and high strength.
- 2. The high rigidity and precision linear guide rail is used in the integral structure
- 3. The bottom of the linear guide rail with a positioning pin to prevent the track and the body offset.
- 4. Open and close stroke has a standard type and long stroke type.



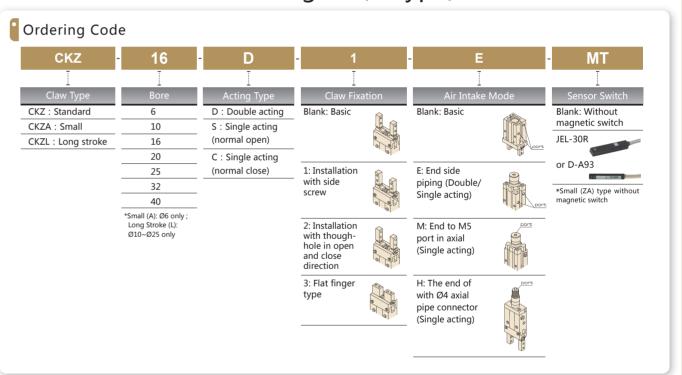
**CKZ** Series



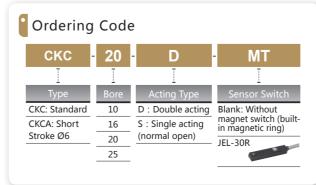
CKC-16D



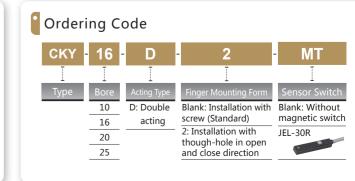
## CKZ Series Pneumatic Fingers (H type)



## **CKC Series Pneumatic** Fingers (Y Type)



### **CKY Series Pneumatic Fingers** (180°)



SQ DNT SC / SU SCT SC A. SL DN DSN **CKY Series** DN/DSN A. MA MAC MA/MAC A

> MAL/MACL A CQ2 TCQ2 ADN TADN PPRM MHL2

MAL MALC

Cylinder Calculation

CDU TN CXS MGP MSQ

#### Performing End of The Robot **Pneumatic Fingers**



**JELPC**®

Cylinder Calculation SI A. SIB SQ DNT SC / SU SCT SC A. SL DN CKS2 Series DSN





CKS3 Series

CKS4 Series

#### Features

DN/DSN A.

MA

MAC

MAL

MALC

MAL/MACL A.

SDA

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP CJ2

CDU

MGP MSQ

2-|P101

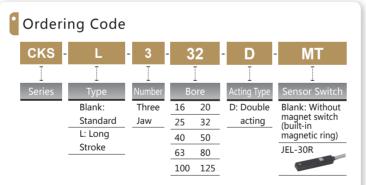
TN CXS

- 1. Internal use of the wedge structure, get a larger clamping
- 2. The front end of the piston is provided with the design of collision proof, which can effectively reduce the metal impact sound when the jaw is released
- 3. Clamp with high precision repeat, convenience for the installation of the animation device.
- 4. A variety of series of pneumatic finger for customers to choose, the clamping of various forms of work

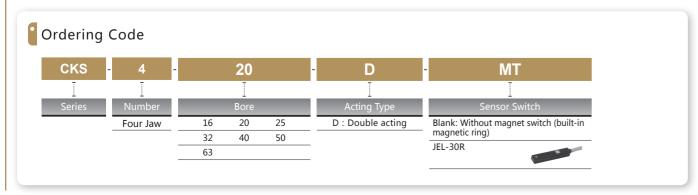
## **CKS2 Series Pneumatic** Finger (Two Jaw)



#### **CKS3 Series Pneumatic Finger** (Three Jaw)



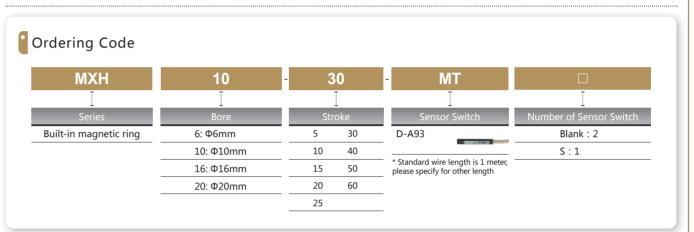
## **CKS4 Series Pneumatic Finger (Four Jaw)**



# MXH/MXQ Series Pneumatic Slide

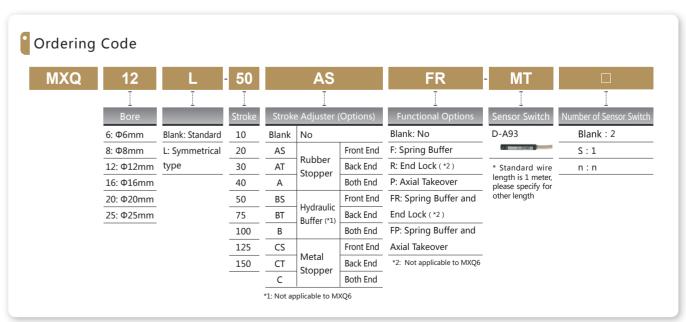


#### **MXH** Series **Small Pneumatic Slide** (Liner Guide)





#### **MXQ** Series **Pneumatic Slide**



2-|P102

SCT SC A. DN DSN DN/DSN A. MA

DNT

SC / SU

Calculation

MAC MA/MAC A MAL MALC MAL/MACL A CQ2 TCQ2

ADN TADN PPRM MHL2

MGP

## CJP Series

Cylinder

Calculation

SI A. SIB

SQ DNT

SC / SU

SCT

SC A.

SL

DN

DSN DN/DSN A.

MA

MAC

MAL

MALC

SDA

CQ2

CJ2

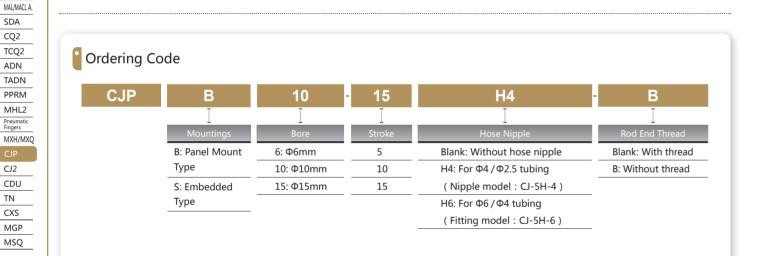
TN

CXS

SI

Pin Cylinder (Single Acting)

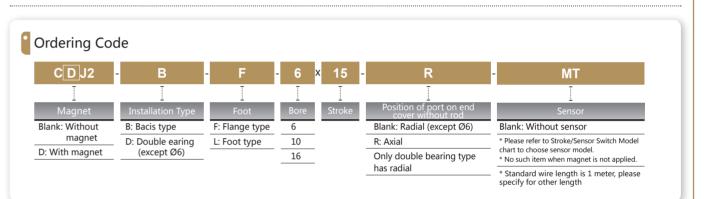




# CJ2 Series (Ø6 ~ Ø16)

Stainless Steel Mini Cylinder Double Acting





#### Stroke/Sensor Switch Model

\* To choose proper sensor switch, please refer to stroke/ sensor switch chart. Lead wire length code: Blank - 0.5 m, L - 3 m. Example: C73, C73L. No additional accessary is required for sliding type of sensor switch installation.

Bore	Standard Stroke	Sensor Switch Code	Sensor Switch Code	Channel installation type Sensor switch
(mm)	Standard Stroke	Tie-up Type Sensor Switch	(Direct installation)	Not Suitable
6	15, 30, 45, 60	D-C73L D-H7A1L	BJ2-006	
10	15, 30, 45, 60, 75, 100, 125, 150	D-C76L DH7BL	BJ2-010	D-A72L D-A73L D-A76L D-A80L D-F79L D-J79L
16	15, 30, 45, 60, 75, 100, 125, 150, 175, 200	D-C80L	BJ2-016	2 7,002 2 1,732 2 3,732

#### Specification

Bore (mm)	10	16
Operation Fluid	Air	
Operation	Double Acting	
Min. Operation Pressure	1.05 MPa	
Max. Operation Pressure	0.7 MPa	
Ambient and fluid temp	5∼60℃	
Cushion	Rubber Gasket Cushion / Air	Cushion
Rod Operation Speed	50 ~ 750 mm/s	
Tolerance Stroke	+1.0 mm 0 mm	
Lubricant	Non-lub	
Port Size	M5 x 0.8	

Cylinder Calculation SI A. SQ DNT SC / SU SCT SC A.

SL DN DSN DN/DSN A. MA MAC MA/MAC A MAL

MAL/MACL A CQ2 TCQ2 ADN TADN PPRM

MALC

MHL2 MXH/MXQ CJP

CDU TN CXS MGP

MSQ

# CJ2 Series (Ø6 ~ Ø16)

Stainless Steel Mini Cylinder Double Acting



# CJ2 Series (Ø6 ~ Ø16)

Stainless Steel Mini Cylinder Double Acting

Cylinder Calculation

SI A.

sQ

DNT

SCT

SC A.

DSN

DN/DSN A.

MA

MAC

MAL

MALC

MAL/MACL A

SDA

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ

CJP

CDU TN

CXS

MGP

MSQ

MA/MAC A.

SL DN

SC / SU



CJ2B Double Acting



Cylinder

Calculation

SI

SQ

DNT

SC / SU SCT

SC A.

SL

DN

DSN

DN/DSN A.

MA

MAC

MA/MAC A.

MAL

MALC

MAL/MACL A.

SDA

CQ2

TCQ2

ADN

TADN

PPRM MHL2

MXH/MXQ

CJP

CDU

TN

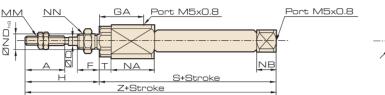
CXS

MGP

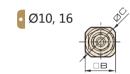
MSQ

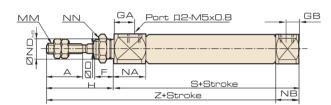
SI A.

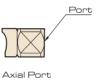








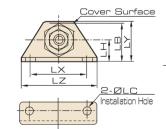


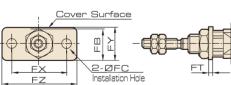


#### Dimension

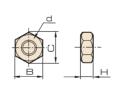
Bore (mm)	А	В	С	D	F	GA	GB	Н	ММ	NA	NB	ND h8	NN	S	Т	Z
6	15	12	14	3	8	14.5	-	28	M3x0.5	16	7	6	M6x1.0	49	3	77
10	15	12	14	4	8	8	5	28	M4x0.7	12.5	9.5	8	M8x1.0	46	-	74
16	15	18	20	5	8	8	5	28	M5x0.8	12.5	9.5	10	M10x1.0	47	-	75









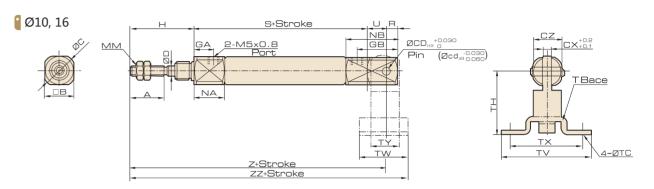


#### Dimension

Bore			Foot S	Seat						Flan	ge				Ins	talla	ation	Nut		F	Rod	end	Nut	
(mm)	Parts No.	LB	ФLС	LH	LX	LY	LZ	Parts No.	FB	ФFС	FX	FY	FZ	FT	Parts No.					Parts No.				
6	CJ-L006B	13	4.5	9	24	16.5	32	CJ-F006B	11	4.5	24	14	32	1.6	SNJ-006B	8	9.2	M6x1	4	NTJ006A	5.5	6.4	M3x0.5	2.4
10	CJ-L010B	15	4.5	9	24	16.5	32	CJ-F010B	13	4.5	24	14	32	1.6	SNJ-010B	11	12.7	M8x1	4	NTJ010A	7	8.1	M4x0.7	3.2
16	CJ-L016B	23	5.5	14	33	25	42	CJ-F016B	19	5.5	33	20	42	2.3	SNJ-016B	14	16.2	M10x1	4	NTJ015A	8	9.2	M5x0.8	4

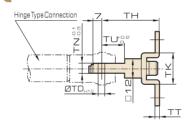


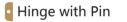


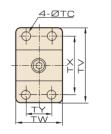


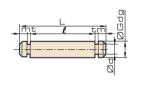
Bore (mm)	А			CD(cd)	СХ	CZ	D	GA	GB	Н	MM	NA	NB			U		ZZ
10	15	12	14	3.3	3.2	12	4	8	18	28	M4x0.7	12.5	22.5	5	46	8	82	93
16	15	18	20	5	6.5	18	5	8	23	28	M5x0.8	12.5	27.5	8	47	10	85	99

#### T Base







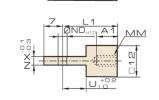


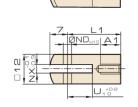
Bore			ΤT	ype p	oisto	n rod	clevi							Pin for	pisto	n rod c	levis		
(mm)	Part Code	TC	TD <sup>H10</sup>	TH	TK	TN	TT	TU	TV	TW	TX	TY	Part Code	Dd9	Φd				t
10	CJ-T010B	4.5	3.3 0 +0.048	29	18	3.1	2	9	40	22	32	12	CD-J010	3.3 -0.03	3	15.2	12.2	1.2	0.3
16	CJ-T016B	5.5	5 <sup>+0.048</sup>	35	20	6.4	2.3	14	48	28	38	16	CD-Z015	5 -0.03 -0.06	4.8	22.7	18.3	1.5	0.7

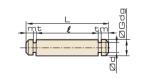
#### I Type Piston rod clevis











Bore		ΙТу	pe pisto		od clevi					Тур	e pistor	ro	d clevis				Pin	for pis	ston	rod	clevis		
(mm)	Part Code	A1	ND <sup>H10</sup>	L1	MM	U1	NX	R1	Part Code	A1	ND <sup>H10</sup>	L1	MM	U1	NX	R1	Part Code	ΦDdg	L				
10	I-J010B	8	3.3 0 +0.048	21	M4x0.7	9	3.1	8	Y-J010B		3.30+0.048		M4x0.7	10	3.2	8	IY-J010	3.3-0.03	10.2	3	12.2		0.3
16	I-J016B	8	5 <sup>+0.048</sup>	25	M5x0.8	14	6.4	12	Y-J016B	11	5 <sup>+0.048</sup>	21	M5x0.8	10	6.5	12	IY-J015	5 -0.03 -0.06	16.6	4.8	12.2	1.5	0.7

# CDU Series

Free Installation Cylinder (Ø6 ~ Ø32)



\_\_\_\_

SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MA/MAC A. MAL MALC MAL/MACL A. SDA CQ2 TCQ2 ADN TADN PPRM MHL2 MXH/MXQ CJP CJ2

TN

CXS

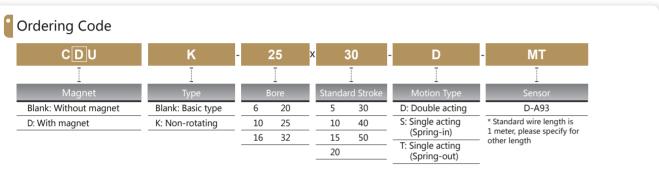
MGP

Cylinder

Calculation SI

SI A.





#### Stroke/Sensoric Switch Model

Bore (mm)	Standard	d Stroke	Stroke Length	*Sensor Switch Model
Dore (IIIII)	Double Acting	Single Acting	(Double Acting)	(Direct mounting)
6	F 10 1F			
10	5, 10, 15, 20, 25, 30		40, 50, 60	
16	20, 23, 30	5, 10, 15,		D-A90L D-A93L
20	F 40 4F 00			D-A96L D-A80L D-F9NL D-F98L
25	5, 10, 15, 20, 25, 30, 40, 50		60, 70, 80, 90, 100	DISINE D-130E
32	25, 50, 40, 50			

#### Specification Operating Fluid Operation D: Double Acting, S: Single Acting (Spring-in), T: Single Acting (Spring-out) Max. Operating Pressure 0.7 MPa **Proof Pressure** 1.0 MPa Ambient and fluid temp 5~60 ℃ Cushion Both end with Rubber Gasket Cushion Lubricant Installation Type Free (Multi- installation) Precision non-rotating rod ± 0.8° ± 0.5° Port Size M5 x 0.8 1/8

#### 

# CDU Series

Cylinder Calculation

SI A.

sQ

DNT

SCT

SC A.

SL

DSN

MA

MAC

MA/MAC A

MAL

MALC

MAL/MACL A

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

CJ2

CXS

MGP

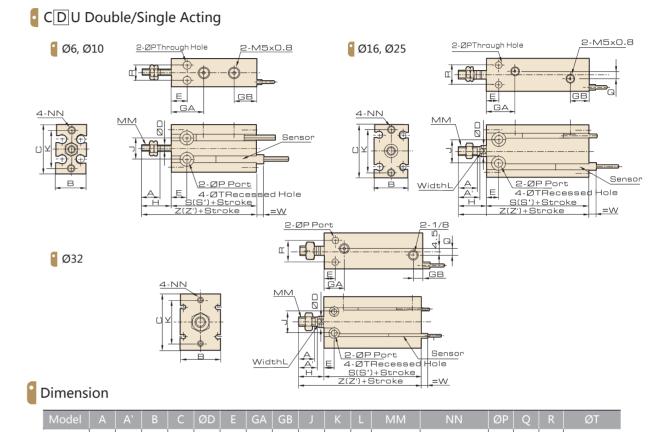
MSQ

DN/DSN A.

SC / SU

Free Installation Cylinder (Ø6 ~ Ø32)

#### Overall Dimension



Model	Α	A'		С	ØD		GA	GB				MM	NN	ØΡ	Q		ØT
C□U6	7	-	13	22	3	7	14.5	10	10	17	-	M3x0.5	M3x0.5deep5	3.4	-	7	6deep4.8
C□U10	10	-	15	24	4	7	15.5	10	11	18	-	M4x0.7	M3x0.5deep5	3.4	-	9	6deep5
C□U16	11	12.5	20	32	6	7	16.5	11.5	14	25	5	M5x0.8	M4x0.7deep6	4.5	4	12	7.6deep6.5
C□U20	12	14	26	40	8	9	19	12.5	16	30	6	M6x1.0	M5x0.8deep8	5.5	9	16	9.5deep8
C□U25	15.5	18	32	50	10	10	21.5	13	20	38	8	M8x1.25	M5x0.8deep8	5.5	9	20	9.5deep9
C□U32	19.5	22	40	62	12	11	23	13	24	48	10	M10x1.25	M6x1.0deep9	6.6	13.5	24	11deep11.5

#### **Double Acting**

	-					
Model	н	Basic	Туре	Wit	h Mag	net
Model						Z'
C□U6-□D	13	33	46	2.5	33	46
C□U10-□D	16	36	52	1	36	52
C□U16-□D	16	30	46	0	40	56
C□U20-□D	19	36	55	1	46	65
C□U25-□D	23	40	63	-1	50	73
C□U32-□D	27	42	69	-4	52	79

#### Single Acting (Spring-in)

			E	3asic	Тур	е				With	ı Ма	gnet		
Model	H							w						
		5st	10st	15st	5st	10st	15st	_ v v	5st	10st	15st	5st	10st	15st
C□U6-□D	13	38	43	48	51	56	61	2.5	38	43	48	51	56	61
C□U10-□D	16	41	46	56	57	62	72	1	41	46	56	57	62	72
C□U16-□D	16	35	40	50	511		66	0	45	50	60	61	66	76
C□U20-□D	19	41	46	56	60	65	75	1	51	56	66	70	75	85
C□U25-□D	23	45	50	60	68	73	83	-1	55	60	70	78	83	93
C□U32-□D	27	47	52	62	74	79	89	-4	57	62	72	84	89	99

#### Single Acting (Spring-out)

		Н				Basic	Туре					Wi	ith Mag	net		
Model		- "								W						
	5st	10st	15st	5st	10st	15st	5st	10st	15st		5st	10st	15st	5st	10st	15st
C□U6-□T	18	23	28	38	43	48	56	66	76	2.5	38	43	48	56	66	76
C□U10-□T	21	26	31	41	46	56	62	72	87	1	41	46	56	62	72	87
C□U16-□T	21	26	31	45	50	60	66	76	91	0	45	50	60	66	76	91
C□U20-□T	24	29	34	41	46	46	65	75	90	1	51	56	66	75	85	100
C□U25-□T	28	33	38	45	50	50	73	73	98	-1	55	60	70	83	93	108
C□U32-□T	32	37	42	47	52	52	79	79	104	-4	57	62	72	89	99	114

# CDU Series

Free Installation Cylinder (Ø6 ~ Ø32)



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MAL MAL/MACL A. SDA CQ2 TCQ2 ADN TADN PPRM MHL2

MXH/MXQ CJP

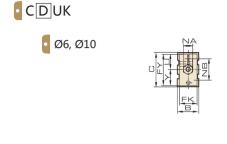
CJ2

TN

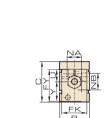
CXS MGP

# Overall Dimension

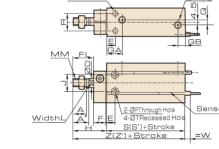
Ø16, Ø25











## Dimension

Ø32

Model			Ь		טש	=		FL	FK	FY	GA	GB	H					INA	INP		אשן	Q				Y
C□UK6	7	-	13	22	3	7	8	9	11	20.5	14.5	10	18	10	17	-	M3x0.5	6	14	M3x0.5 deep5	3.4	-	7	6 deep4.8	10	10.5
C□UK10	10	-	15	24	4	7	8	12	12	22	15.5	10	21	11	18	-	M4x0.7	7	15	M3x0.5 deep5	3.4	-	9	6 deep5	10.5	11.5
C□UK16	11	12.5	20	32	6	7	8	17	13	28	16.5	11.5	26	14	25	5	M5x0.8	6	18	M4x0.7 deep6	4.5	4	12	7.6 deep6.5	12.5	15.5
C□UK20	12	14	26	40	8	9	8	20	16	33	19	12.5	29	16	30	6	M6x1.0	8	20	M5x0.8 deep8	5.5	9	16	9.3 deep8	13.5	19.5
C□UK25	15.5	18	32	50	10	10	10	22	20	43.5	21.5	13	33	20	38	8	M8x1.25	10	28	M5x0.8 deep8	5.5	9	20	9.3 deep9	19	24.5
C□UK32	19.5	22	40	62	12	11	12	29	24	51.5	23	12.5	42	24	48	10	M10x1.25	12	32	M6x1.0 deep9	6.6	13.5	24	11 deep11.5	21	30.5

#### Double Acting

Model	н	Without	Magnet	With	n Mag	gnet
Model			Z	W		Z'
C□UK6-□D	18	33	51	2.5	33	51
C□UK10-□D	21	36	57	1	36	57
C□UK16-□D	26	30	56	0	40	66
C□UK20-□D	29	36	65	1	46	75
C□UK25-□D	33	40	73	-1	50	83
C□UK32-□D	42	42	84	-4	52	94

#### Single Acting (Spring-in)

				Wit	hout	Mag	gnet				With	n Mag	gnet		
	Model	H													
l				10st	15st		10st				10st			10st	15st
	C□UK6-□D	18	38	43	48	56	61	66	2.5	38	43	48	56	61	66
	C□UK10-□D	21	41	46	56	62	67	77	1	41	46	56	62	67	77
	C□UK16-□D	26	35	40	50	61	66	76	0	45	50	60	71	76	86
	C□UK20-□D	29	41	46	56	70	75	85	1	51	56	66	80	85	95
	C□UK25-□D	33	45	50	60	78	83	93	-1	55	60	70	88	93	103
	C□UK32-□D	42	47	52	62	89	94	104	-4	57	62	72	99	104	114

#### Single Acting (Spring-out)

		Н						W	ithout	: Magr	net				Wit	:h Mag	gnet		
Model					U								w						
	5st	10st	15st				5st	10st	15st	5st	10st	15st		5st	10st	15st	5st	10st	15st
C□UK6-□T	23	28	33	6 deep 4.8	10	10.5	38	43	48	61	71	81	2.5	38	43	48	61	71	81
C□UK10-□T	26	31	36	6 deep 5	10.5	11.5	41	46	56	67	77	92	1	41	46	56	67	77	92
C□UK16-□T	31	36	41	7.6 deep 6.5	12.5	15.5	45	50	60	76	86	101	0	45	50	60	76	86	101
C□UK20-□T	34	39	44	9.3 deep 8	13.5	19.5	41	46	56	75	85	100	1	51	56	66	85	95	110
C□UK25-□T	38	43	48	9.3 deep 9	19	24.5	45	50	60	83	93	108	-1	55	60	70	93	103	118
C□UK32-□T	47	52	57	11 deep 11.5	21	30.5	47	52	62	94	104	119	-4	57	62	72	104	114	129

# TN Series Double Rod Cylinder

Cylinder Calculation

SQ DNT

SCT

SC A. SL DN

DSN

DN/DSN A.

MA

MAC

MA/MAC A

MALC

MAL/MACL A

CQ2

TCQ2

ADN

TADN

PPRM

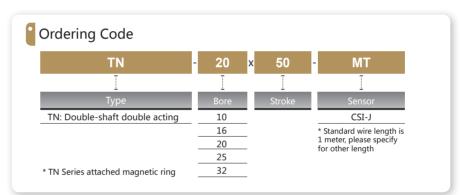
MHL2 Pneumatic Fingers

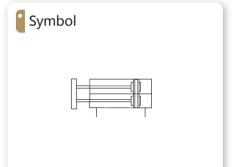
CDU

CXS MGP

SC / SU







#### Specification

Bore (mm)	10	16	20	25	32
Working Medium			Air		J
Operation		•	Double Acting		-
Operation Pressure Range		•	0.1~0.9 MPa		-
Ensure Pressure Resistance		•	1.35 MPa		•
Operation Temperature Range		•	0~70 ℃		•
Operation Speed Range		•	100~500 mm/s		
Adjustable Stroke		•	-10~0 mm		-
Cushion	Not Available		Cushior	Gasket	-
Presion Of Non-rotating	0.4°		0.	3°	
Port Size		M5	x 0.8		PT 1/8"

The Max. operating pressure is subject to the Max. load of hydralic buffer.

#### Stroke

Bore (mm)					tand		Strok					Max. Stroke	Allowable Stroke
10	10 20	30	40	50	60	70						70	100
16	10 20	30	40	50	60	70	80	90	100	125	150	150	200
20	10 20	30	40	50	60	70	80	90	100	125	150	150	200
25	10 20	30	40	50	60	70	80	90	100	125	150	150	200
32	10 20	30	40	50	60	70	80	90	100	125	150	150	200

2-|P109 2-|P110

# TN Series Double Rod Cylinder



Internal Structure

Cylinder Calculation

SI SI A.

SIB

SQ

DNT

SCT SC A.

SL DN

DSN

DN/DSN A.

MA

MAC

MAL

MAL/MACL A.

SDA

CQ2

TCQ2 ADN

TADN

PPRM

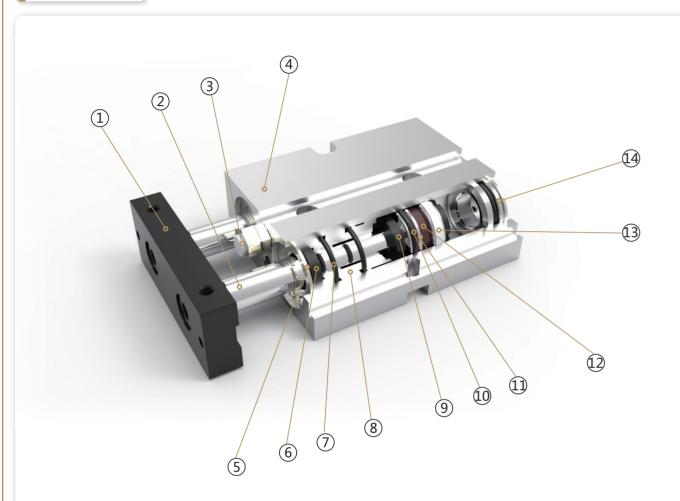
MHL2

MXH/MXQ

CJP CJ2 CDU

CXS MGP

SC / SU

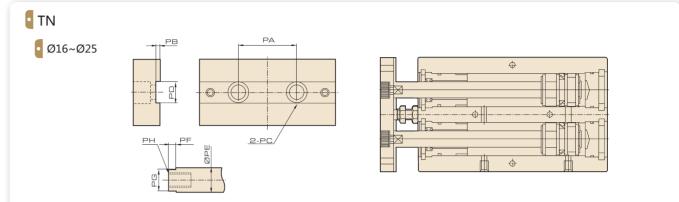


Parts

lumber	Name	Number	Name
1	Fixing plate	8	Front cover
2	Piston rod	9	Anti-collision washer
3	Anti-collision head	10	Piston seal
4	Cylinder body	11	Piston
5	Circlips for holes	12	Magnet
6	Shaft seal	13	Anti-friction ring
7	O ring	14	Back cover

# TN Series Double Rod Cylinder

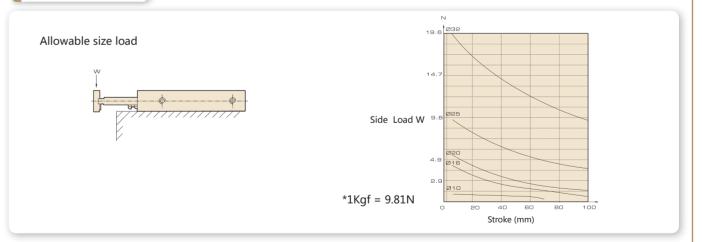
Overall Dimension



Dimension

Bore / Symbol	PA	РВ	PC	PD	PE	PF	PG	PH
10	18	0.5	Ф6.2 deep 3.5 mm, Through Hole: Ф4.5	5.2	6	3	5.2	M3 × 0.5 deep 5 mm
16	24	1	Ф7.8 deep 4.6 mm, Through Hole: Ф4.5	6.2	8	3	6.2	M4 × 0.7 deep 46 mm
20	28	1	Ф11 deep 6.8 mm, Through Hole: Ф4.5	8.2	10	3	8.2	M6 × 1 deep 48 mm
25	34	1	Ф11 deep 6.8 mm, Through Hole: Ф4.5	10.2	12	3	10.2	M6 × 1 deep 48 mm
32	42	2	Ф17 deep 12 mm, Through Hole: Ф4.5	14	16	3	14	M10 × 1.5 deep 14 mm

Overall Dimension



## Dimension

O-ring List

Inner Diameter Quantity	Front cover seal	Piston O-ring	Rear cover O-ring	Piston rod O-ring
	1	2	2	1
10	PDU-6	APA-10	10×1.5	P12
16	PDU-8	APA-16	16×1.5	P16
20	PDU-10	APA-20	20×1.5	P20
25	PDU-12	APA-25	25×1.5	P20
32	PDU-16	APA-32	32×1.5	P25

Cylinder Calculation SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MA/MAC A.

MAL MALC MAL/MACL A CQ2 TCQ2 ADN TADN PPRM

MHL2
Pneumatic
Fingers

MXH/MXQ

CJP

CJ2

CDU TN CXS MGP

MSQ

2-|P111 2-|P112

# TN Series Double Rod Cylinder

Cylinder

Calculation

SI

SI A.

SIB

SQ DNT

SC / SU

SCT

SC A.

SL

DN

DSN

DN/DSN A.

MA

MAC

MAL

MALC

MAL/MACL A.

SDA

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

MXH/MXQ CJP

CJ2

CDU

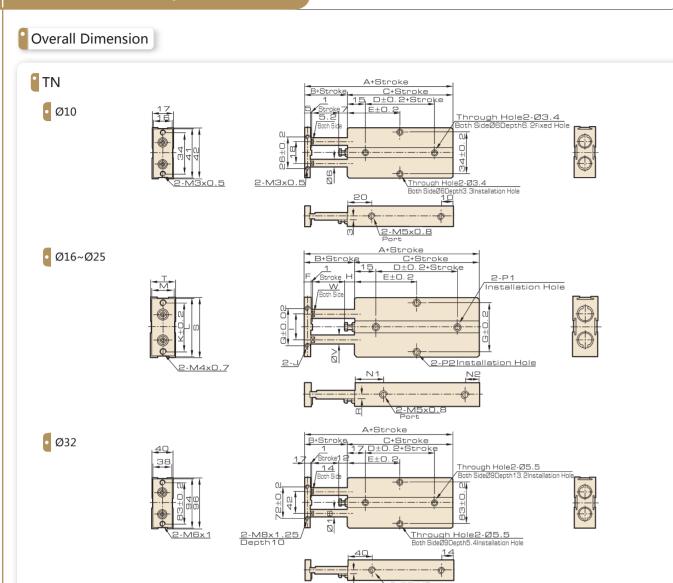
CXS

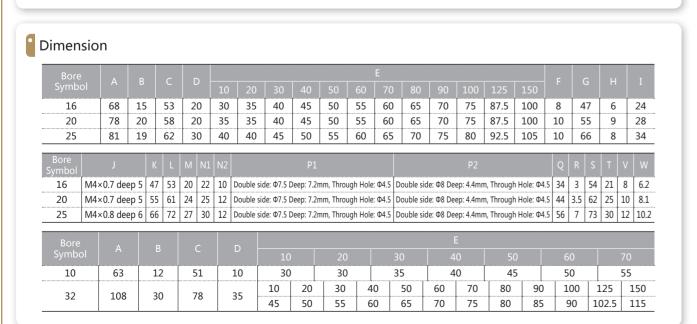
MGP

MSQ

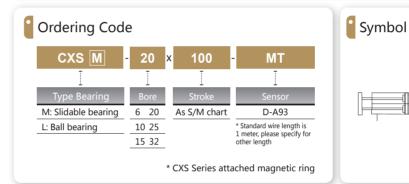


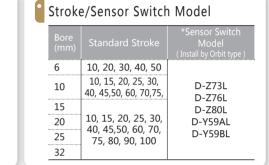
CXS Series (Ø6 ~ Ø32)
Twin Rod Cylinder/Basic Type

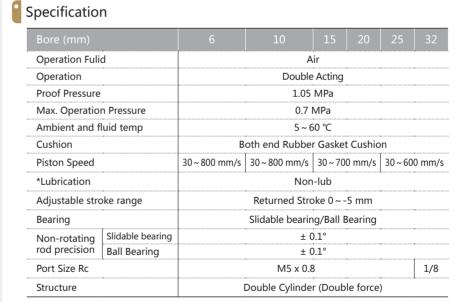


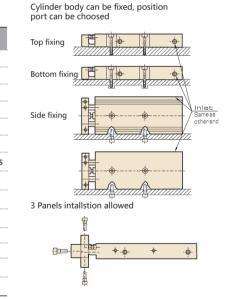






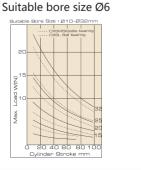


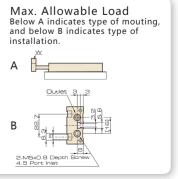




# Suitable Bore Size Ø6 Model Stroke

Model			Stroke		
Model	10	20	30	40	50
CXSM6	0.8	0.66	0.54	0.46	0.40
CXLM6	1.08	0.88	0.69	0.59	0.49





SQ DNT SC / SU SCT SC A. DN DSN DN/DSN A. MA MAC MA/MAC A MAL MALC MAL/MACL A CQ2 TCQ2 ADN TADN PPRM MHL2

CDU

TN

MSQ

Cylinder

Calculation

SI A.

## CXS Series (Ø6 ~ Ø32) Twin Rod Cylinder/Basic Type



Cylinder Calculation SI SI A. SIB SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MAL MALC MAL/MACL A. SDA CQ2 TCQ2 ADN TADN PPRM MHL2

CJP CJ2

CDU TN

MGP MSQ Overall Dimension CXS 58.5+Stroke 45+Stroke 2-Ø3.4Through Hole 2-Ø6.5Recessed Hole3.3 ■ Ø6 M3X0.5X5l 13 10+1/2Stroke Hex Socket Fastening Screv 2-M3x0.5l M3X0.5X12.5l M3X0.5 2-M3x0.5|Z| (Through Hole) (Hex Socket) (Through Hole) 10 13+Stroke 2-M3x0.5thread length4.5 ■ Ø10, Ø15,Ø20, Ø25,Ø32 (L) (Z)

Model	Α	В	С	DΙ	E	F	G	Н	ī		К	L M	N	NN	0	00	Р	PP	0	QQ	R	RR	s s	SS T		U	UU	V	W	Х	V	Ιz
CXS 0 10-10				T	_							-	7	T	7	1			[	~~			rr	55	T	T	4-M5	4-M3				Ţ
CXS 0 10-20	1											2-Ø3.4	2-M3			M4							ļ	75			x0.8 Thread	x0.5 Thread	2-M4	M3	M3	30
CXS 0 10-30	16	17	,, l		, .	2-M4 x0.7	25	20	,		9 2	Port 0 2-Ø6.5	x0.5 Thread	ø6	5	0.7	33.6	M4 x	8.5	7	30	7	}	35 -	5	8	length 4.5	length 4.5	x0.7 Thread	0.5	0.5	-
CXS 010-40	40	1	***	13	رر	(Port)	33	20	4	°	9   2	Thread	length	1 200	,	Х	33.0	0.7	0.3	l ′	30	<i>'</i>	} <del>-</del>	95	,	ľ	( Port ) ( Same	( Same the	length 7	x	x	40
	-											length 3.	3 3			14.5L											the	other	· /	10L	5L	40
CXS 010-50	ļ	ļļ.						ļ						ļ	ļ	ļ	ļ	ļ	ļ				ļ	05	ļ	ļ	side ) 4-M5	side )	ļ	ļ	ļ	ļ
CXS 015-10																							}	70			x0.8	4-M4 x0.7				25
CXS 015-20						2-M5						2-Ø4.3 Port	2-M4 x0.7			M4 X		M4					20	30			Thread length	Thread length	2-M5 x0.8	M5 x	M4 x	ļ
CXS 015-30	58	20	56	L8	9		45	25	5	10	9 3	0 2-Ø8	Thread	Ø8	6	0.7	48	x	10	10	38.5	10	30 9	- 06	5	8	4.5 ( Port )	5 ( Same	Thread length	0.8	0.7	
CXS 015-40						(Port)						Thread length 4.	l č			14.5L		0.7					40 1	00			( Same the	the	8	X 10L	X 4L	35
CXS 015-50																							50 1	10			other side )	side )				
CXS 0 20-10				_											Ì								10 8	30	†	†	4-M5			İ	Ì	30
CXS 0 20-20												2 05 5				NAC.							20 9	90			x0.8 Thread	8-M4 x0.7			M5	1
CXS 0 20-30						2-M5						2-Ø5.5 Port	2-M4 x0.7			M6 x		М6					30 1	00			length	Thread length	2-M6 x1.0	M6 x	X	
CXS 0 20-40	64	25	62 2	23   1	1.5	x0.8 (Port)	50	28	6	12	12 3	1	Thread	Ø10	8	1.0 X	53	1.0	12.5	12.5	45	7.76		10 9.5	6.5	8	4.5 ( Port )	6 (Same	Thread length	1.0 x	0.8 x	40
CXS 0 20-50	-					(POI t)						Thread length 5.	l č			18.5L		1.0						20			( Same the	the	10	12L	5L	-
CXS 0 20-75	-																						ļi	45			other side )	side )				60
CXSO20-100	ļ						ļ								·		ļ		<u>.</u>				100 1	32	+	<del> </del>		<u> </u>		ł	ļ	+
CXSO25-10																							ļi-	92			4-1/8	8-M5				30
CXS 0 25 - 30	1					2 146						2-Ø6.9	2-M5			M6								02			Thread length	x0.8 Thread	2-M8	M6	M6	
CXS 0 25-40	80	30	78 2	28	14	2-M6 x1.0	60	35	6	12	12 3	Port 0 2-Ø11	x0.8 Thread	Ø12	10	1.0	64	M6 x	15	15	46	15	40 1	12 13	9	9	6.5 ( Port )	length 7.5	x1.25 Thread	1.0	1.0	40
CXS 0 25-50	1					(Port)						Thread length 6.	length 7.5			x 18.5L		1.0					50 1	22			( Same the	( Same the	length 12	X 14L	X 5L	
CXS 025-75										-		length 6.	<u> </u>			10.3L							75 1	47			other side )	other side )		146	) JL	60
CXS 025-100	ļ						ļ							ļ	ļ	ļ	L	L	ļ	ļ			100 1	72	ļ	ļ					ļ	100
CXS 0 32-10	-																						ļ	92			4-1/8	8-M5				40
CXS 0 32-20	-											2-Ø6.9	2-M5			M8								02			Thread	x0.8	2.140	M8	M8	'
CXS 0 32-30	0.0		0.		,	2-M6						Port	x0.8	010	1,2	Х	7.	M8	1.0	10	-	10		12	,,,	1.0	length 6.5	Thread length	2-M8 x1.25	X	x	
CXS 0 32-40 CXS 0 32-50	98	38	96 3	36	T8	x1.0 (Port)	/5	44	8	16	14 3	0 2-Ø11 Thread	Thread length	Ø16	13	1.25 X	76	1.25	19	19	56	19	ļ	22 20 32	11.5	10	( Port ) ( Same	7.5 ( Same	Thread length	1.25 x	1.25 x	50
CXSO32-50	-					,						length 6.	3 8			23L								57			the other	the other	12	16L	8L	

# MGP New Compact Tri-rod Cylinder (Ø20 ~ Ø100)

#### Features

- 1. Light weight and compact.
- 2. Strong transverse load capacity.
- 3. Strong torque capacity.
- 4. High Non-rotating precision.
- Either ball joint or slide joint are available for directional bearing for directional rod.
- 6. Easy for installation.
- 7. Position of both side ports are changeable.



#### 

#### Ordering Code: (examples)

- Cylinder dia needed: 12, stroke: 50, slid able bearing. Right model number: MGPM 12-50
- Cylinder dia needed: 40, stroke: 100,
   Ball bearing with two sensor switches,
   lead wire length 0.5 m.
   Right model number: MGPL 40-100-MT2

#### Specification

Bore (mm)		12	16	20	25	32	40	50	63	80	100
Operation Fluid				-		Δ	\ir			2	*
Operation	•	•		-	•	Double	Acting			•	-
Anti-pressure testir	ng pressure	•		•	1.	.5 MPa (1	5.3 kgf/cm	<sup>2</sup> )	•		
Max. Operation Pre	essure				1.	.0 MPa (10	0.2 kgf/cm	<sup>2</sup> )			
Min. Operation Pre	ssure				0	.12 MPa (	1.2 kgf/cm	<sup>2</sup> )			
Ambient and fluid	temperature					5 ~+	-60 °C				
Piston Speed					50~500	0 mm/s				50~40	0 mm/s
Buffer						Rubbe	r Buffer				
Stroke Tolerance						+1.5 i	mm				
*Lubrication		-		•	•	Nor	n-lub				
Bearing					Slida	ble bearir	ng/Ball Bea	aring			
Non-rotating rod	Slidable bearing	± 0.	08°	± 0.	.07°	± 0	.06°	± 0	).05°	± 0	.04°
precision	Ball Bearing	± 0.	10°	± 0.	.09°	± 0	.08°	± 0	).06°	± 0	.05°
Port Size Rc (PT)		M5 >	( 0.8		1/	8"		1/	/4"	3/	8"

<sup>\*</sup> If lubricant is demanded, please choose clear No.1 lubricant, ISOVG32.

#### Stroke

Bore (mm)	Standard Stroke (mm)	** Sensor Switch Optional Model (For slide installation)
12 , 16	10 , 20 , 30 , 40 , 50 , 75 , 100	
20 , 25	20 , 30 , 40 , 50 , 75 , 100 , 125 , 175 , 200	D-Z73L D-Z76L D-Z80L D-Y59AL D-Y59BL
32 , 40 , 50 , 63 , 80 , 100	20 , 50 , 75 , 100 , 125 , 150 , 175 , 200	D-133AL D-133BL

<sup>\*</sup> Strokes (from 5, 10, 20, 30, 35.....) are added with 5, 10, 15, 20 mm thick gasket respectively, ex: MGPM50-10 is with 15 mm thickness gasket (MGPM50-25).

Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN
DSN
DN/DSN A.
MA
MAC

MA/MAC A
MAL
MALC
MAL/MACL A
SDA
CQ2
TCQ2
ADN
TADN
PPRM

MHL2
Pneumatic
Fingers

MXH/MXQ

CJP

CJ2

CDU

TN
CXS
MGP
MSQ

<sup>\*\*</sup> Please refer to sensor switch series pages in this catalog for spec. and characteristic. Code for lead wire length as follow: Blank - 0.5 m, L-3 m. Example: D-Y59AL, D-Y59AL.

# MGP New Compact Tri-rod Cylinder (Ø20 ~ Ø100)



Cylinder Calculation

MA MAC MAL/MACL A. SDA CQ2

SL DN DSN TCQ2 ADN TADN PPRM MHL2 MXH/MXQ

SI A. SIB SQ DNT SC / SU SCT

SC A.

CJP CJ2 CDU TN CXS

Load and Torque Torque: T(N)

						Max. T	ransvers	se Load	F (N)				
	Sreies						Stroke	(mm)					
Bore (mm)  12  16  20  25  32  40  50  63		10	20	25	30	40	50	75	100	125	150	175	200
12	MGPM	24	19	-	17	14	13	26	22	-	-	-	-
12	MGPL	37	27	-	22	35	30	23	18	-	-	-	-
16	MGPM	38	31	-	27	23	21	37	32	-	-	-	-
10	MGPL	54	40		32	54	47	35	28	-	-	-	-
20	MGPM	-	49	-	43	38	35	87	75	66	59	54	49
20	MGPL	-	58	-	48	101	90	70	58	62	54	48	43
25	MGPM	-	69	-	60	54	49	116	100	88	79	71	65
25	MGPL	-	82	-	68	132	118	93	77	80	70	62	55
22	MGPM	-	-	203	-	-	164	182	159	142	127	116	106
52	MGPL	-	-	113	-	-	78	130	107	130	114	101	90
40	MGPM	-	-	203	-	-	164	182	159	142	127	116	106
40	MGPL	-	-	113	-	-	78	129	106	130	114	101	90
FΛ	MGPM	-	-	296	-	-	245	273	241	216	195	179	164
50	MGPL	-	-	120	-	-	83	178	148	148	129	114	102
C	MGPM	-	-	296	-	-	245	273	241	216	195	179	164
03	MGPL	-	-	117	-	-	81	176	145	145	126	111	99
80	MGPM	-	-	352	-	-	297	368	329	298	272	251	232
00	MGPL	-	-	125	-	-	99	281	240	208	184	163	147
100	MGPM	-	-	515	-	-	445	498	450	410	377	349	325
100	MGPL	-	-	138	-	-	108	395	340	297	263	235	211

				ı	Max. Forq	ue T (N*m	)				
					Stroke	(mm)					
10	20	25	30	40	50	75	100	125	150	175	200
0.39	0.32	-	0.27	0.24	0.21	0.43	0.36	_	-	-	_
0.78	0.66	-	0.57	0.93	0.85	0.69	0.58	-	-	-	-
0.69	0.58	-	0.49	0.43	0.38	0.69	0.58	-	-	-	-
1.23	1.06	-	0.92	1.53	1.40	1.16	0.99	-	-	-	-
-	1.05	-	0.93	0.83	0.75	1.88	1.63	1.44	1.28	1.16	1.06
-	1.70	-	1.52	3.06	2.87	2.47	2.17	2.38	2.16	1.98	1.82
-	1.76	-	1.55	1.38	1.25	2.96	2.57	2.26	2.02	1.83	1.67
-	2.80	-	2.53	4.67	4.39	3.81	3.36	3.65	3.31	3.02	2.78
-	-	6.35	-	-	5.13	5.69	4.97	4.42	3.98	3.61	3.31
-	-	4.76	-	-	3.86	6.53	5.75	7.10	6.46	5.92	5.47
-	-	7.00	-	-	5.66	6.27	5.48	4.87	4.38	3.98	3.65
-	-	5.24	-	-	4.25	7.19	6.33	7.81	7.11	6.52	6.02
-	-	13.0	-	-	10.8	12.0	10.6	9.50	8.60	7.86	7.24
-	-	7.02	-	-	5.76	12.3	10.9	11.2	10.2	9.40	8.69
-	-	14.7	-	-	12.1	13.5	12.0	10.7	9.69	8.86	8.16
-	-	77.7	-	-	6.35	13.7	12.2	12.5	11.4	10.5	9.65
-	-	22.0	-	-	18.6	22.9	20.5	18.6	17.0	15.6	14.5
-	-	10.3	-	-	9.35	24.8	22.7	20.9	19.4	18.0	16.9
-	-	38.8	-	-	33.5	37.5	33.8	30.9	28.4	26.2	24.4
-	-	13.6	-	-	12.2	41.1	37.9	35.1	32.7	30.5	28.6

MGP New Compact Tri-rod Cylinder (Ø20 ~ Ø100)

Cylinder

Calculation

SQ

SC / SU

SCT SC A.

SL DN

DSN

DN/DSN A. MA

MAC

MA/MAC A MAL MALC MAL/MACL A

CQ2

TCQ2

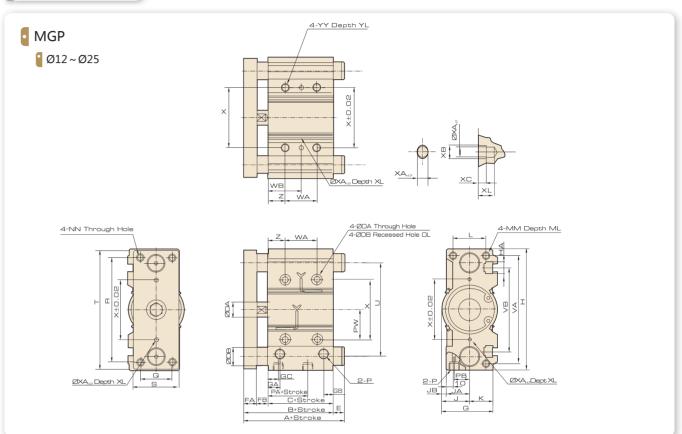
ADN

TADN

PPRM

MHL2
Pneumatic Fingers
MXH/MXQ
CJP
CJ2
CDU
TN
CXS
MGP
MSQ





#### Dimension

#### MGPM, MGPL (Ø12 ~ Ø25)

Bore (mm)	Standard Stroke			DA	FA	FB		GA	GB		НА				ММ	ML		ОА	ОВ	OL		PA	РВ	PW	Q
12	10,20,30,40,	42	29	6	8	5	26	11	7.5	58	M4	13	13	18	M4x0.7	10	M4x0.7	4.3	8	4.5	M5x0.8	13	8	18	14
16	50,75,100	46	33	8	8	5	30	11	8	64	M4	15	15	22	M5x0.8	12	M5x0.8	4.3	8	4.5	M5x0.8	15	10	19	16
20	20,30,40,50,	53	37	10	10	6	36	10.5	8.5	83	M5	18	18	24	M5x0.8	13	M5x0.8	5.6	9.5	5.5	Rc1/8	12.5	10.5	25	18
25	75,100,125, 150,175,200	53.5	37.5	12	10	6	42	11.5	9	93	M5	21	21	30	M6x1.0	15	M6x1.0	5.6	9.5	5.5	Rc1/8	12.5	13.5	28.5	26

-1										WA			WB									
1	Bore (mm)	Standard Stroke				U	VA	VB	Below 30st	40st to	125st or above			125st or below		XA	ХВ	XC	XL	YY	YL	Z
			ļ	ļ	ļ	ļ	ļ		3031	10031	or above	3031	10 10031	OI DEIOW			<b>.</b>	ļ				
	12	10,20,30,40,	48	22	56	41	50	37	20	40	-	15	25	-	23	3	3.5	3	6	M5x0.8	10	5
	16	50,75,100	54	25	62	46	56	38	24	44	-	17	27	-	24	3	3.5	3	6	M5x0.8	10	5
	20	20,30,40,50,75,	70	30	81	54	72	44	24	44	120	29	39	77	28	3	3.5	3	6	M6x1.0	12	17
	25	100.125.150.175.200	78	38	91	64	82	50	24	44	120	29	39	77	34	4	4.5	3	6	M6x1.0	12	17

#### MGPM (Slidable Bearing)

Bore	A	Α		ı	
(mm)	Below 50st	Above 50st	DB	Below 50st	Above 50st
12	42	60.5	8	0	18.5
16	46	64.5	10	0	18.5
20	53	84.5	12	0	31.5
25	53.5	85	16	0	31.5

#### MGPL (Ball Bearing)

Rore							
Bore (mm)	Below 30st	30st to 100st	100st or Above	DB	Below 30s	30st to 100st	100st or Above
12	43	55	85	6	1	13	43
16	49	65	95	8	3	19	49
20	63	80	104	10	10	27	51
25	69.5	80.5	104.5	13	16	32	51

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# MGP New Compact Tri-rod Cylinder (Ø20 ~ Ø100)



Overall Dimension

MGP

Ø32 ~ Ø63

SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN

Cylinder

Calculation

SI

DSN
DN/DSN A
MA
MAC
MA/MAC A
MAL
MALC
MAL/MACL A
SDA
CQ2

TCQ2
ADN
TADN
PPRM
MHL2
Pneumatic
Fingers
MXH/MXQ
CJP

CJP
CJ2
CDU
TN
CXS
MGP
MSQ

MGP

032 ~ 063

ANY Depth YL

2MA, Depth XL

ANN Through Hole

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Dimension

MGPM, MGPL (Ø32 ~ Ø63)

Bore Standard B C DA

	Standard		С	DA	FA	FB	G	GA	GB	GC	н	HA				MM	ML		OA	ОВ	OL		PA	РВ	PW	Q
32	25.50.75.	59.5	37.5	16	12	10	48	12.5	112	9	112	M6	24	24	34	M8x1.25	20	M8x1.25	6.6	11	7.5	Rc1/8	7	15	34	30
40	100,125,	66	44	16	12	10	54	14	120	10	120	M6	27	27	40	M8x1.25	20	M8x1.25	6.6	11	7.5	Rc1/8	13	18	38	30
50	150,175,	72	44	20	16	12	64	12	148	11	148	M8	32	32	46	M10x1.5	22	M10x1.5	8.6	14	9	Rc1/4	9	21.5	47	40
63	200	77	49	20	16	12	78	16.5	162	13.5	162	M10	39	39	58	M10x1.5	22	M10x1.5	8.6	14	9	Rc1/4	14	28	55	50

Bore	Standard	Ь	ر	_		VA	VB		WA			WB		V	V .	ХВ	vc	VI	YY	YL	7
(mm)	Stroke					VA	VB	25st	50,75,100st	Above 100st	25st	50,75,100st	Above 100st		^^	\^B		۸L	11	11	
32	25,50,75,	96	44	110	78	98	63	24	48	124	33	45	83	42	4	4.5	3	6	M8x1.25	16	21
40	100,125,	104	44	118	86	106	72	24	48	124	34	46	84	50	4	4.5	3	6	M8x1.25	16	22
50		130	60	146	110	130	92	24	48	124	36	48	86	66	5	6	4	8	M10x1.5	20	24
63	200	130	70	158	124	142	110	28	52	128	38	50	88	80	5	6	4	8	M10x1.5	20	24

#### MGPM (Slidable Bearing)

Bore					
(mm)	25,50st	Above 50st	DB	Below 25,50st	Above 50st
32	97	102	20	37.5	42.5
40	97	102	20	31	36
50	106.5	118	25	34.5	46
63	106.5	118	25	29.5	41

#### MGPL (Ball Bearing)

Bore -							
(mm)	50st	75,100st	Above 100st	DB	50st	75,100st	Above 100st
32	81	98	118	16	21.5	38.5	58.5
40	81	98	118	16	15	32	52
50	93	114	134	20	21	42	62
63	93	114	134	20	16	37	57

MGP New Compact
Tri-rod Cylinder (Ø20 ~ Ø100)

Cylinder

Calculation

SQ

SCT SC A.

DN DSN

DN/DSN A.

MAC

MA/MAC A

MAL/MACL A

CQ2

TCQ2

ADN

TADN

PPRM

MHL2

CDU

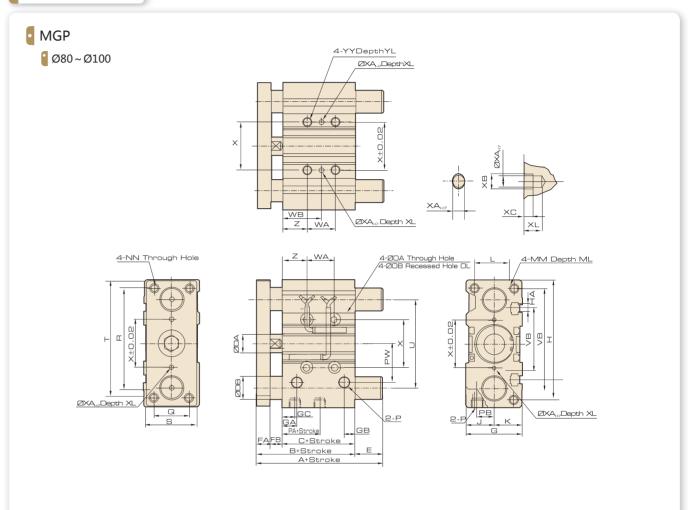
TN

CXS

MSQ

SC / SU







#### MGPM, MGPL Dimension (Ø80 ~ Ø100)

Bore (mm)		В	С	DA	FA	FB	G	GA	GB	GC	н	НА	J	JA	JB	К	L	ММ	ML	NN	ОА	ОВ	OL	Р	PA	РВ	PW	Q
80	25,50,75,	96.5	56.5	25	22	18	91.5	19	15.5	14.5	202	M12	45.5	38	7.5	46	54	M12x1.75	30	M12x1.75	10.6	17.5	8	Rc3/8	14.5	25.5	74	52
100	100,125,150, 175,200	116	66	30	25	25	111.5	23	19	18	240	M14	55.5	45	10.5	56	62	M14x2.0	32	M14x2.0	12.5	20	8	Rc3/8	17.5	32.5	89	64

Bore	Standard					VA	\/D		WA			WB			\\	VD	vc	VI	YY	VI	7
(mm)	Stroke					VA	VB	25st	50,75,100st	Above 100st	25st	50,75,100st	Above 100st		^^	\^B		^L		Ш	
80	25,50,75,	174	75	198	156	180	140	28	52	128	42	54	92	100	6	7	5	10	M12x1.75	24	28
100	100,125,150, 175,200	210	90	236	188	210	166	48	72	148	35	47	85	124	6	7	5	10	M14x2.0	28	11

#### MGPM (Slidable Bearing)

Bore			DB		
(mm)			DP	Below 25,50st	
80	115	142	30	18.5	45.5
100	137	162	36	21	46

#### MGPL (Ball Bearing)

Bore		A		DD.		E	
(mm)	25,50st	75,100st	Above 100st	DR	25,50st	75,100st	Above 100st
80	109.5	130	160	25	13	33.5	63.5
100	121	147	180	30	5	31	64

# MSQ Series Rotary Platform (Gear Type)



Features DNT SC / SU

Cylinder

Calculation SI

SI A. SIB

SQ

SCT

SC A.

SL

DN

DSN

MA

MAC

MAL

MAL/MACL A. SDA

CQ2

TCQ2

ADN

TADN

PPRM MHL2

MXH/MXQ

CJP

CJ2

CDU

TN

CXS

DN/DSN A.

1. High precision balls used in bearing, vertical and horizontal precision are up to ±0.01 mm.

2. Rotational type is easy for installation.

3. Rolling bearing design, load is 3 to 4 times larger than CRQ series.

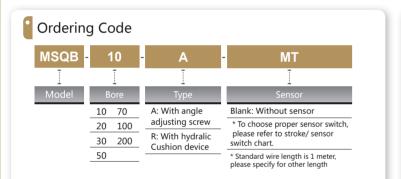
4. Rotation is smooth and accurate.

5. Hollowed center rods for wire or tube to go through.

6. Standard angle adjusting device for wider angle adjustment (0° ~ 190°).

7. With magnet ring for sensor switch application.

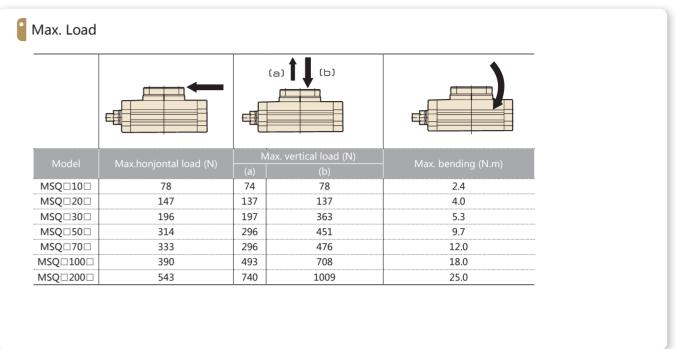




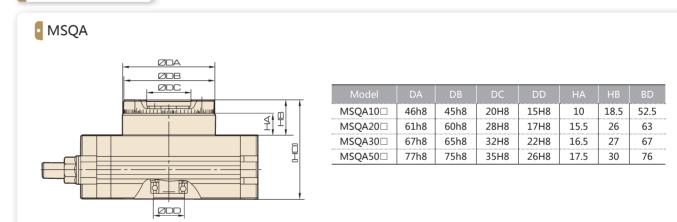
stroke / Se	nsor Switch Model
Model	*Sensor Switch Model ( For Slide Installation )
10	
20	D-A90L
30	D-A93L
50	D-A96L
70	D-F9NL
100	D-F9BL
200	

Bore (mm)		10	20	30	50	70	100	200
Operation Fulid	-				Air ( Non-lub	)		
Operation	•		-		Double Actir	ng	•	
Max. Operation	With angle adjusting screw			•	1 MPa			
Pressure	With hydralic Cushion				0.6 MPa			
Min. Operation I	Pressure		•		0.1 MPa	•	***************************************	•
Ambient and flu	id temperature				0~60 ℃			-
Cushion	shion		Rubber I	Buffer (Standar	d) / Hydralic	Cushion device (	Optional)	-
Function	With angle adjusting screw	0.007J	0025J	0.048 J	0.081J	0.24J	0.32J	0.56J
runction	With hydralic Cushion	0.039J	0.3	116J	0.294J	1.1J	1.6J	2.9J
Angle adjusting	range		•		0~190°	•	•	*
Max. rotating an	gle			-	190°		-	-
Steady rotating	With angle adjusting screw		0.2~1	0s/90°		0.2~1.5s/90°	0.2~2.0s/90°	0.2~2.5s/90°
Time range	With hydralic Cushion		0.2~0	).7s/90°			0.2~1.0s/90°	
Bore		Ф15	Ф18	Ф21	Ф25	Ф28	Ф32	Ф40
Port Size	rt Size		x 0.8			Rc1/8		

# MSQ Series Rotary Platform (Gear Type)







Cylinder Calculation SI A. SQ DNT SC / SU SCT SC A. SL DN DSN DN/DSN A. MA MAC MA/MAC A MAL MALC MAL/MACL A CQ2 TCQ2 ADN TADN PPRM MHL2 CDU

TN

CXS

MGP

2-|P122 2-|P121

# MSQ Series Rotary Platform (Gear Type)



Cylinder Calculation SI A. DNT SC / SU SCT SC A. DSN DN/DSN A. MAC MAL MALC MAL/MACL A. SDA CQ2 TCQ2 ADN

SI

SIB

SQ

SL

DN

MA

TADN

PPRM

MHL2

MXH/MXQ

CJP

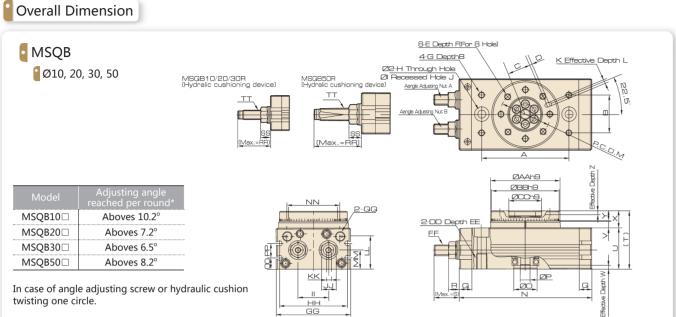
CJ2

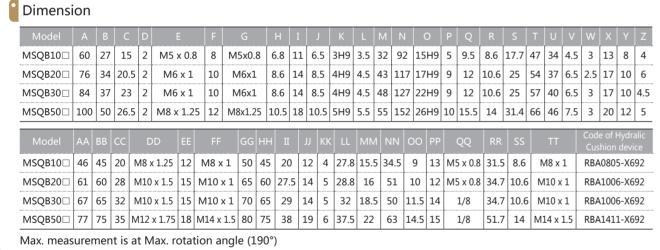
CDU

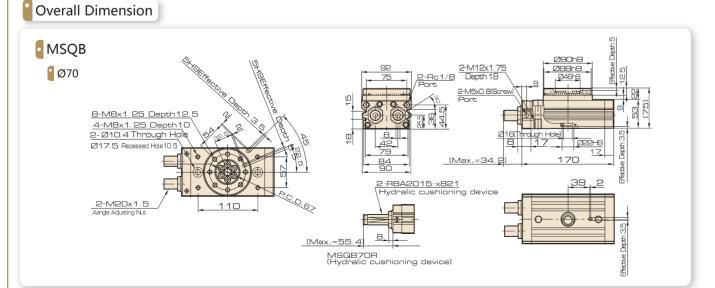
TN

CXS

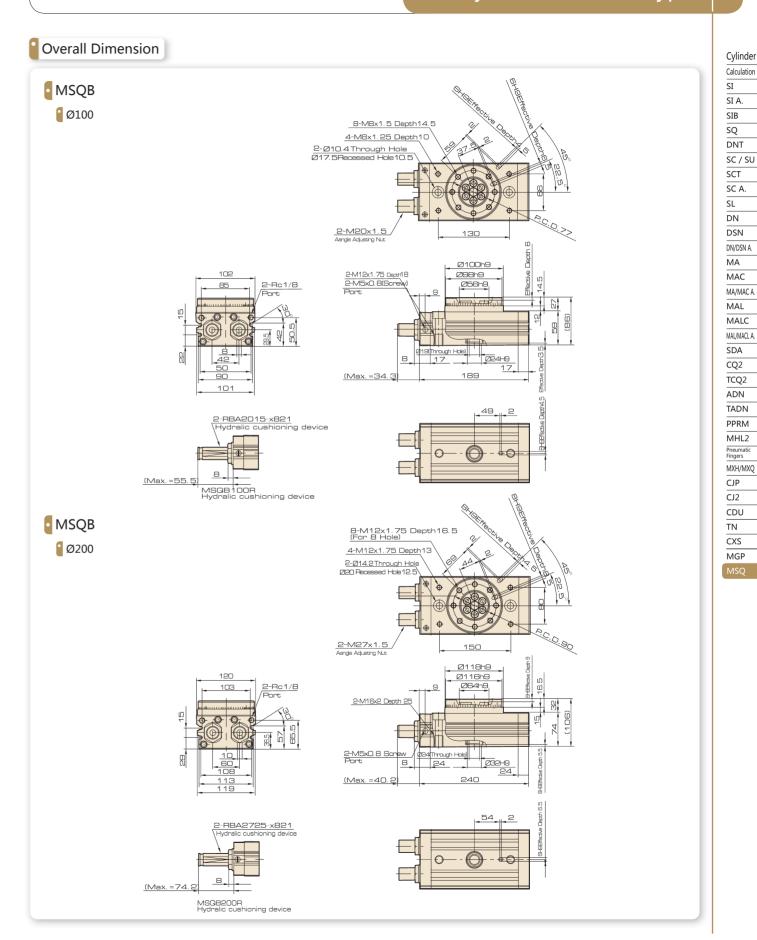
MGP







# MSQ Series Rotary Platform (Gear Type)







# **AIR SOURCE UNIT**





## **CONTENTS OF AIR SOURCE UNIT**



AC, BC Series Three-devices Combination (F.R.L. Combination)



AFC, BFC Series Two-devices Combination (FR.L. Combination)



AF, BF Series Filter



AR, BR Series Regulator



AFR, BFR Series Filter & Regulator



AL, BL Series Lubricator



JAC Series 1000~5000 Air Filter Combination (F.R.L. Combination)



JAC Series 1010~5010 Air Filter Combination (FR.L. Combination)





JAR Series 1000~5000 Regulator



JAW Series 1000~5000 Filter & Regulator





JC Series Air Filter Combination (3 or 2 Combination)



X-FE Series Air Filter Combination (2 Combination)



FE Series Air Filter Combination (2 Combination)



GC Series Air Source Unit (3 or 2 Combination)



ZYR10 Series Oxygen Supply Regulator





PTH Series Air Filter Combination





JAD Series Auto-drain





**DPS Seris Digital Pressure Sensor** 

# AC, BC Series Three-devices Combination

(F.R.L. Combination)



# AFC, BFC Series Two-devices Combination

(FR.L. Combination)

AC, BC

AFC, BFC

AF, BF

AR, BR

AFR, BFR

AL, BL

JAC JAF JAR JAW

JAL JC X-FE

FE GC

ZYR10

DPS

#### FRL AC, BC AFC, BFC AF, BF AR, BR AFR, BFR AL, BL JAC JAF JAR JAW JAL JC X-FE FE GC

ZYR10

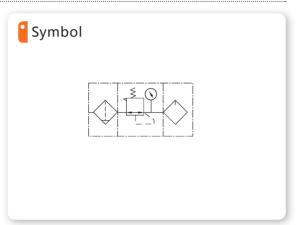
PTH JAD

DPS







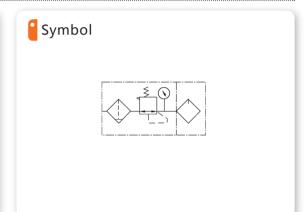


## Specification

Model		AC1500	AC2000	BC2000	BC3000	BC4000				
Operating Flui	id			Air						
Port Size		G1/8"	G1/4"	G1/4"	G3/8"	G1/2"				
Filter Precisio	n			40 μ						
Range of Adju	ustable Pressure			0.05 ~ 0.85 MPa						
Max. Adjustal	ole Pressure		-	0.95 MPa		01/2				
Proof Pressure	e Resistance			1.5 MPa	-					
Operating Ter	mperature Range			5∼60℃	-					
Capacity of Fi	Iter Cup	15	СС		60 cc					
Capacity of oi	il Cup	25	СС		90 cc					
Recommedne	ed Lubricant		ISO V	ISO VG 32 or Same Grade Oil						
Weight		0.7	0.7 KG 0.9 KG							
	Body		Aluminun	n Alloy Die-castin	g Forming					
Material	Container Cup			PC						
	Protective Cover		-		Iron					
	Filter Regulator	AF1500	AF2000	BF2000	BF3000	BF4000				
Components	Regulator	AR1500	AR2000	BR2000	BR3000	BR4000				
	Lubricator	AL1500	AL2000	BL2000	BL3000	BL4000				







#### Specification

Model		AFC1500	AFC2000	BFC2000	BFC3000	BFC4000				
Operating Flui	d			Air						
Port Size		G1/8"	G1/4"	G1/4"	G3/8"	G1/2"				
Filter Precision	1	40 μ								
Range of Adju	stable Pressure			0.05 ~ 0.85 MPa		•				
Max. Adjustab	le Pressure			0.95 MPa		•				
Proof Pressure	Resistance			1.5 MPa		•				
Operating Ten	nperature Range	5 ~ 60 ℃								
Capacity of Fil	ter Cup	15	СС		60 cc	•				
Capacity of oi	Cup	25	СС		90 cc					
Recommedne	d Lubricant		ISO V	G 32 or Same Gra	de Oil	•				
Weight		0.5 KG 0.7 KG								
	Body		Aluminun	n Alloy Die-castin	g Forming	•				
Material	Container Cup			PC						
	Protective Cover	-	•		Iron					
Components	Filter Regulator	AFR1500	AFR2000	BFR2000	BFR3000	BFR4000				
Components	Lubricator	AL1500	AL2000	BL2000	BL3000	BL4000				

3-|P01 3-|P02

# AC, BC Series AFC, BFC Series



## AF, BF Series Filter

FRL AF, BF AR, BR AFR, BFR AL, BL JAC JAF

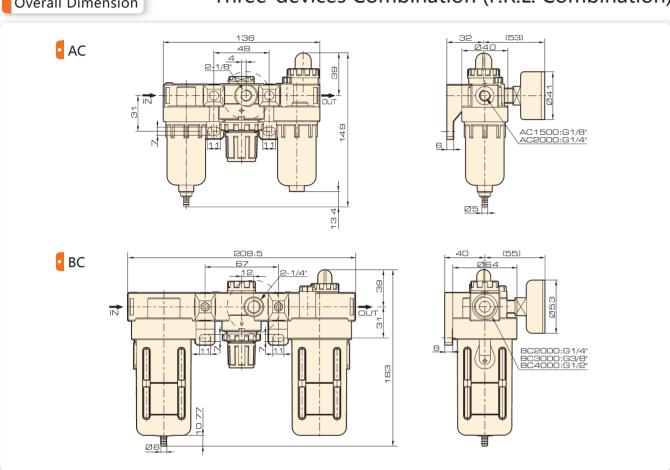
JAR JAW JAL JC X-FE FE

GC

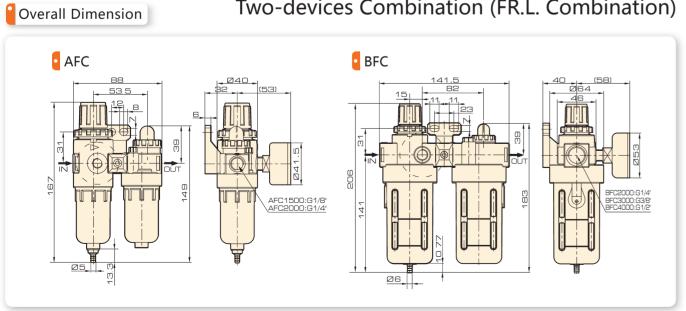
JAD

DPS

AC, BC Series Three-devices Combination (F.R.L. Combination) Overall Dimension

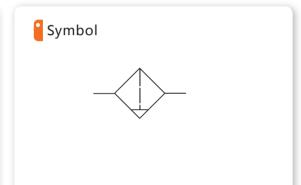


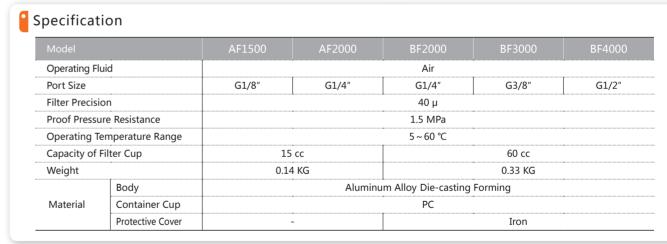
AFC, BFC Series Two-devices Combination (FR.L. Combination)

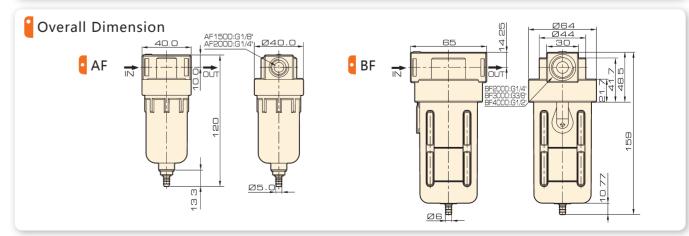












GC

ZYR10

# AR, BR Series

Regulator

FRL

AC, BC

AFC, BFC

AF, BF

AFR, BFR

AL, BL

JAC JAF

JAR

JAW JAL JC

X-FE

ZYR10 PTH JAD

DPS

FE GC

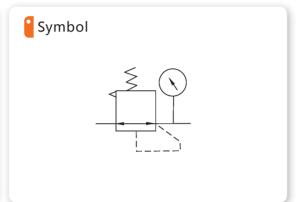


# AFR, BFR Series

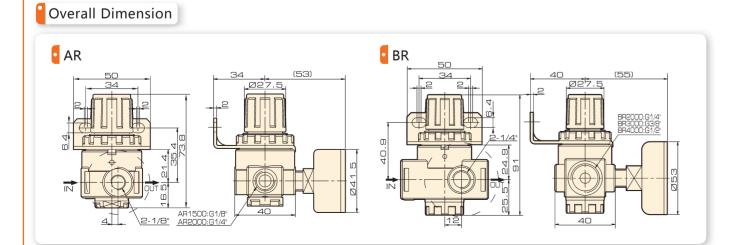
Filter & Regulator





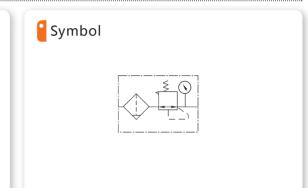


#### Specification Air Operating Fluid G1/8" G1/4" G1/4" G3/8" G1/2" Port Size 0.05 ~ 0.85 MPa Range of Adjustable Pressure 0.95 MPa 1.5 MPa **Proof Pressure Resistance** 5 ~ 60 °C Operating Temperature Range 0.20 KG 0.23 KG Weight Aluminum alloy, Die-casting Forming **Body Material**

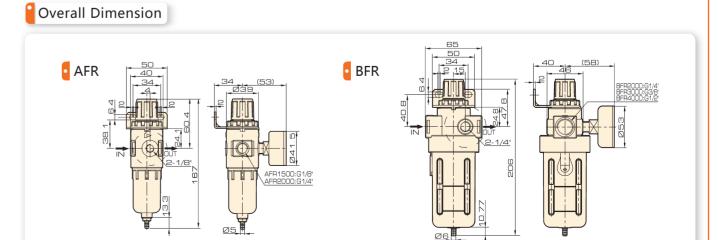








Model		AFR1500	AFR2000	BFR2000	BFR3000	BFR4000		
Operating Flo	uid			Air				
Port Size		G1/8"	G1/4"	G1/4"	G3/8"	G1/2"		
Range of Ad	justable Pressure			0.05 ~ 0.85 MPa	L			
Max. Adjusta	able Pressure			0.95 MPa				
Proof Pressure Resistance		-		1.5 MPa				
Operating Te	emperature Range	5 ~ 60 ℃						
Capacity of I	Filter Cup	15 cc 60 cc						
Weight		0.20	5 KG		0.4 KG			
	Body	Aluminum Alloy , Die-casting Forming						
Material	Container Cup	•		PC				
	Protective Cover		-		Iron			



FRL AC, BC AFC, BFC AF, BF AR, BR AFR, BFR AL, BL JAC JAF

JAR JAW X-FE FE GC ZYR10

# AL, BL Series

Lubricator

FRL

AC, BC

AFC, BFC

AF, BF

AR, BR

AFR, BFR

JAC

JAF JAR

JAW

JAL

JC

FE

GC

ZYR10

PTH JAD

DPS

X-FE



# JAC Series 1000~5000

Air Filter Combination (F.R.L. Combination)

FRL

AC, BC AFC, BFC

AF, BF

AR, BR

AFR, BFR

AL, BL

JAF JAR

JAW

JC X-FE

FE

GC

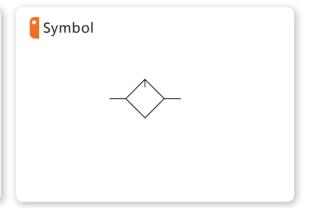
ZYR10

DPS





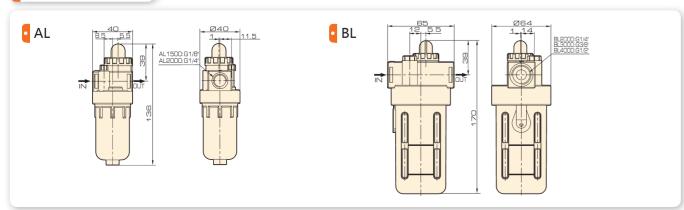




#### Specification

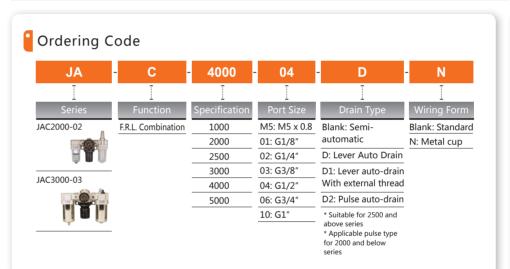
Model		AL1500	AL2000	BL2000	BL3000	BL4000				
Operating Fluid	d			Air		<u> </u>				
Port Size	•	G1/8"	G1/4" G1/4" G3/8"							
Range of Adjustable Pressure			1.5 MPa							
Proof Pressure Resistance			5∼60 ℃							
Operating Ten	Operating Temperature Range		ISO \	/G 32 or Same Grad	e Oil	-				
Capacity of Fil	ter Cup	25 cc 90 cc				•				
Weight	•	0.17 KG 0.25 KG								
	Body	Aluminum Alloy Die-casting Forming								
Material	Container Cup		-	PC						
	Protective Cover		-		Iron	-				

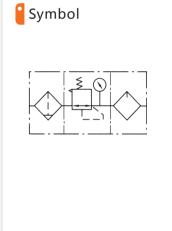
#### Overall Dimension











## Specification

Model		JAC1000-M5	JAC2000-01	JAC2000-02	JAC2500-02	JAC2500-03	JAC3000-02	JAC3000-03	JAC4000-03	JAC4000-04	JAC4000-06	JAC5000-06	JAC5000-10
Rated Flow	1	90	500	500	1500	1500	2000	2000	4000	4000	4500	5000	5000
Port Size		M5	1/8	1/4	1/4	3/8	1/4	3/8	3/8	1/2	3/4	3/4	1
Filter Precis	sion						ا 25	um					
Max. Adjus	table Pressure						1.0 M	ИРа					
Proof Pressu	ıre Resistance						1.5 N	ИPа					
Operating Te	mperature Range		5~60 ℃										
Range of Adjustable Pressure 0.05 ~ 0.7 MPa						0.0	)5 ~ 0.85 N	IPa					
Recommer	nded Lubricant						ISO V	G 32					
Container I	Material						Poly Carbonate						
Protective C	up Cover	l	Jnavailable	!					Iron				
Drain Func	tion	Differential Drain				D	ifferential	Drain, Auto	omatic Dra	in			
Valve Type					With Overflow								
	Filter	JAF1000-M5	JAF2000-01	JAF2000-02	JAF3000-02	JAF3000-02	JAF3000-02	JAF3000-03	JAF4000-03	JAF4000-04	JAF4000-06	JAF5000-06	JAF5000-1
Assembly	Regulator	JAR1000-M5	JAR2000-01	JAR2000-02	JAR2500-02	JAR2500-02	JAR3000-02	JAR3000-03	JAR4000-03	JAR4000-04	JAR4000-06	JAR5000-06	JAR5000-1
	Lubricator	JAL1000-M5	JAL2000-01	JAL2000-02	JAL3000-02	JAL3000-02	JAL3000-02	JAL3000-03	JAL4000-03	JAL4000-04	JAL4000-06	JAL5000-06	JAL5000-1

# JAC Series 1010~5010

**Air Filter Combination** (FR.L. Combination)



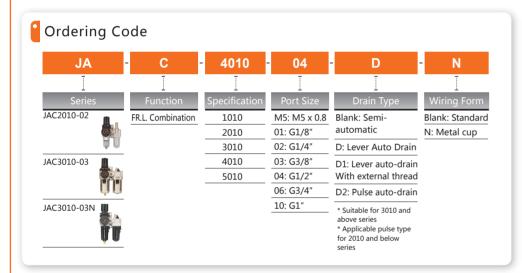
FRL AC, BC AFC, BFC AF, BF AR, BR AFR, BFR AL, BL JAF JAR JAW JAL JC X-FE FE GC

ZYR10

JAD

DPS







#### Specification

Model		JAC1010-M5	JAC2010-01	JAC2010-02	JAC3010-02	JAC3010-03	JAC4010-03	JAC4010-04	JAC4010-06	JAC5010-06	JAC5010-10
Rated Flow	V	90	500	500	1700	1700	3000	3000	3000	4000	4000
Port Size		M5	1/8	1/4	1/4	3/8	3/8	1/2	3/4	3/4	1
Filter Preci	sion		<u></u>			25	μm				***************************************
Max. Adjus	stable Pressure		1.0 MPa								
Proof Pressu	ure Resistance		•			1.5	MPa				
Operating Te	emperature Range		5~60℃								
Range of Ad	justable Pressure	0.05 ~ 0.7 MPa				0.05 ~ 0	0.85 MPa				
Recommer	nded Lubricant					ISO \	/G 32				
Container	Material					Poly Ca	rbonate				
Protective C	Cup Cover	l	Jnavailable		Iron						
Drain Fund	ction	Differential Drain			Semi-automatic Drain, Automatic Drain						
Valve Type	Valve Type			With Overflow							
Assembly	Filter Regulator	JAW1000-M5	JAW2000-01	JAW2000-02	JAW3000-02	JAW3000-03	JAW4000-03	JAW4000-04	JAW4000-06	JAW5000-06	JAW5000-10
Assembly	Lubricator	JAL1000-M5	JAL2000-01	JAL2000-02	JAL3000-02	JAL3000-03	JAL4000-03	JAL4000-04	JAL4000-06	JAL5000-06	JAL5000-10

## **JAC Series**

FRL

AC, BC

AFC, BFC

AF, BF

AR, BR

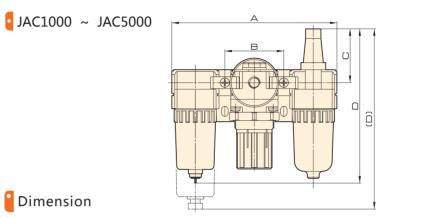
AFR, BFR

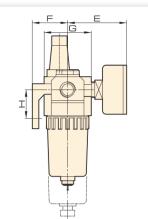
AL, BL

Air Filter Combination (F.R.L. Combination / FR.L. Combination)

#### JAC Series 1000~5000 Air Filter Combination (F.R.L. Combination)

Overall Dimension



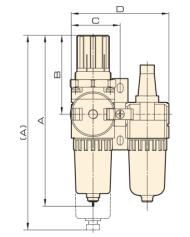


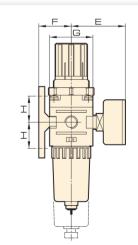
Model	Bore	А			D			G	Н
JAC1000	M5	91	33	25.5	84.5	26	25	25	20
JAC2000	1/8 - 1/4	140	50	45.5	130.5 (152.5)	56.8	30	40	24
JAC2500	1/4 - 3/8	181	64	38	156.5	60.8	41	53	35
JAC3000	1/4 - 3/8	181	64	38	156.5	60.8	41	53	35
JA C4000	3/8 - 1/2	238	84	41	191.5	65.5	50	70	40
JA C4000-06	3/4	253	89	41	193	69.5	50	70	40
JA C5000	3/4 - 1	300	105	48	271.5	75.5	69.8	90	50

#### JAC Series 1010~5010 Air Filter Combination (FR.L. Combination)

JAC1010 ~ JAC5010

Overall Dimension





Dimension

Model	Bore	A			D			G	
JAC1010	M5	109.5	50.5	29	58	26	25	25	2
JAC2010	1/8 - 1/4	158 ( 180 )	73	45	90	56.8	30	40	2
JAC3010	1/4 - 3/8	211	92.5	58.5	117	60.8	41	53	3
JAC4010	3/8 - 1/2	262	112	77	154	70.5	50	70	2
JAC4010-06	3/4	267	114	82	164	70.5	50	70	4
JAC5010	3/4 - 1	338	116	97.5	195	75.5	69.8	90	5

3-|P09 3-|P10

# JAF Series

Ordering Code

JAF2000-02

JAF3000-03

1000~5000 Air Filter

**IFILPC**®

# JAR Series 1000~5000 Regulator

FRL
AC, BC
AFC, BFC
AF, BF
AR, BR
AFR, BFR
AL, BL
JAC
JAF
JAF

JAF JAR JAW JAL JC X-FE FE GC

ZYR10 PTH JAD

DPS



4000

1000

2000

4000

5000

M5: M5 x 0.8

01: G1/8"

02: G1/4"

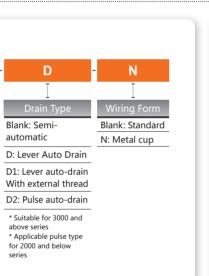
03: G3/8"

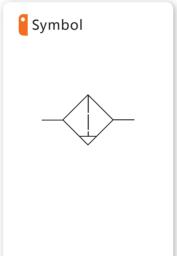
04: G1/2"

06: G3/4"

10: G1"







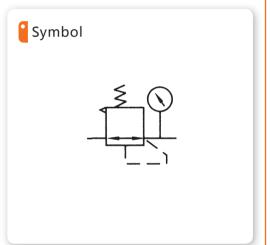
Model	JAF1000-M5	JAF2000-01	JAF2000-02	JAF3000-02	JAF3000-03	JAF4000-03	JAF4000-04	JAF4000-06	JAF5000-06	JAF5000-1
Rated Flow	110	750	750	1500	1500	4000	4000	6000	7000	7000
Port Size	M5	1/8	1/4	1/4	3/8	3/8	1/2	3/4	3/4	1
Filter Precision		25 μm								
Max. Adjustable Pressure		1.0 MPa								
Proof Pressure Resistance		1.5 MPa								
Ambient Temperature Range		-		-	5~6	0 ℃				•
Container Material		-		-	Poly Car	bonate				
Container Cup	Unavailable Iron								•	
Drain Function	Differential Semi-automatic Drain, Automatic Drain									





JAR4000





#### Specification

Model	JAR1000-M5	JAR2000-01	JAR2000-02	JAR2500-02	JAR2500-03		JAR3000-03	JAR4000-03	JAR4000-04	JAR4000-06	JAR5000-06	JAR5000-10
Rated Flow	110	550	550	2000	2000	2500	2500	6000	6000	6000	8000	8000
Port Size	M5	1/8	1/4	1/4	3/8	1/4	3/8	3/8	1/2	3/4	3/4	1
Max. Adjustable Pressure		1.0 MPa										
Proof Pressure Resistance	-	1.5 MPa								•		
Range of Adjustable Pressure	-	5∼60 ℃								•		
Range of Adjustable Pressure	0.05 ~ 0.7 MPa	0.05~0.7 MPa 0.05~0.85 MPa							•			
Valve Type	With Overflow											

FRL
AC, BC
AFC, BFC
AF, BF
AR, BR
AFR, BFR
AL, BL
JAC
JAF

JAR
JAW
JAL
JC
X-FE
FE
GC
ZYR10
PTH

DPS

# JAF/JAR Series

1000~5000 Air Filter



# **JAF Series**



FRL

AC, BC

AFC, BFC

AF, BF

AR, BR

AFR, BFR

AL, BL JAC

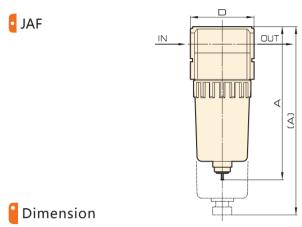
JAW

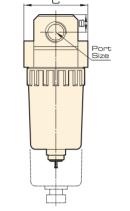
JC

X-FE FE GC

DPS

1000~5000 Air Filter



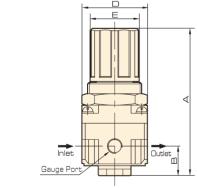


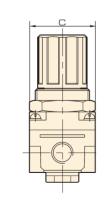
Model	Bore	A			D
JAF1000	M5	66	7	25	_
JAF2000	1/8 - 1/4	96 ( 118 )	11	40	40
JAF3000	1/4 - 3/8	132.5	14	53	53
JAF4000	3/8 - 1/2	168.5	18	70	70
JAF4000-06	3/4	172.5	20	70	70
JA F5000	3/4 - 1	247.5	24	90	90

## **JAR Series** 1000~5000 Regulator



Overall Dimension





•	Dimension

Model	Bore	A			D	
JAR1000	M5	61.5	11	25	25	28
JAR2000	1/8 - 1/4	95	17	40	40	34
JAR2500	1/4 - 3/8	102.5	25	48	53	34
JAR3000	1/4 - 3/8	127.5	35	53	53	40
JAR4000	3/8 - 1/2	149.5	37.5	70	70	54
JAR4000-06	3/4	154	40.5	70	75	54
JA R5000	3/4 - 1	168	48	90	90	54

# **JAW Series**

FRL

AC, BC

AFC, BFC

AF, BF

AR, BR

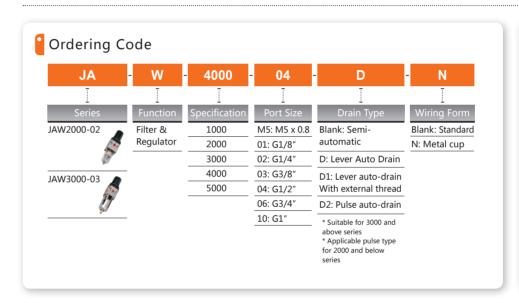
AL, BL

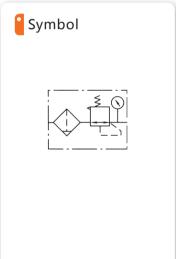
JAL
JC
X-FE
FE
GC

ZYR10

1000~5000 Filter & Regulator







## **Specification**

Model	JAW1000-M5	JAW2000-01	JAW2000-02	JAW3000-02	JAW3000-03	JAW4000-03	JAW4000-04	JAW4000-06	JAW5000-06	JAW5000-10		
Rated Flow	100	550	550	2000	2000	4000	4000	4500	5500	5500		
Port Size	M5	1/8	1/4	1/4	3/8	3/8	1/2	3/4	3/4	1		
Filter Precision	25 μm											
Max. Adjustable Pressure	1.0 MPa											
Proof Pressure Resistance	1.5 MPa											
Operating Temperature Range	5∼60 ℃											
Range of Adjustable Pressure	0.05 ~ 0.7 MPa 0.05 ~ 0.85 MPa											
Container Material	Poly Carbonate											
Container Cup	Unavailable Iron											
Drain Function	Differential Semi-automatic Drain, Automatic Drain											
Valve Type	With Overflow											

3-|P13 3-|P14

## JAL Series

1000~5000 Lubricator



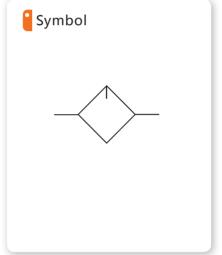
FRL AC, BC AFC, BFC AF, BF AR, BR AFR, BFR AL, BL JAC JAF JAR JAW JC X-FE FE GC ZYR10

JAD

DPS







## Specification

Model	JAL1000-M5	JAL2000-01	JAL2000-02	JAL3000-02	JAL3000-03	JAL4000-03	JAL4000-04	JAL4000-06	JAL5000-06	JAL5000-10
Rated Flow	95	800	800	1700	1700	5000	5000	6300	7000	7000
Port Size	M5	1/8	1/4	1/4	3/8	3/8	1/2	3/4	3/4	1
Max. Adjustable Pressure			L	<b>4</b>	1.0	MPa				
Proof Pressure Resistance		1.5 MPa								
Operating Temperature Range				•	5~	60 °C				
Recommended Lubricant	0.05 ~ 0.7 MPa			•	ISO	VG 32				
Container Material		Poly Carbonate								
Container Cup	1	Jnavailable	-		•	•	Iron	•	•	

Overall Dimension

JAW5000

## JAW/JAL Series

FRL
AC, BC
AFC, BFC
AF, BF
AR, BR
AFR, BFR

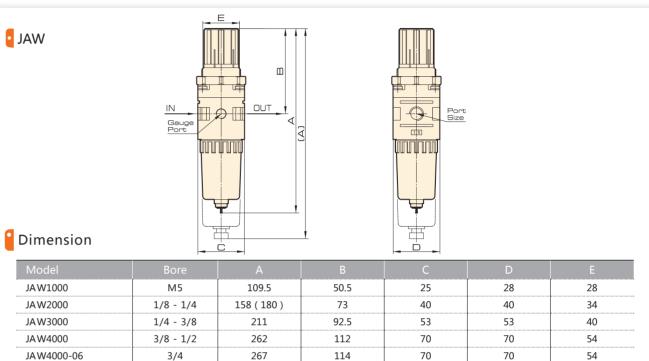
AL, BL

JAR

JC X-FE FE GC

ZYR10





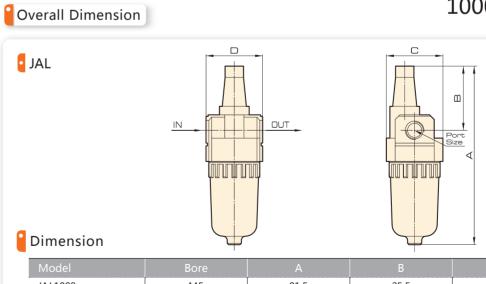
116

90

# JAL Series 1000~5000 Lubricator

54

90



338

3/4 - 1

7111101131011			$\top$		
Model	Bore	А	В	С	D
JAL1000	M5	81.5	25.5	25	-
JAL2000	1/8 - 1/4	126.5	45.5	40	40
JAL3000	1/4 - 3/8	142	38	53	53
JA L4000	3/8 - 1/2	177	41	70	70
JAL4000-06	3/4	177	39	70	70
JAL5000	3/4 - 1	254	45	90	90

## JC Series

Feature

Air Filter Combination (3 or 2 Combination)



FRL AC, BC AFC, BFC AF, BF AR, BR AFR, BFR AL, BL JAC JAF JAR JAW JAL X-FE

FE

GC

ZYR10

PTH

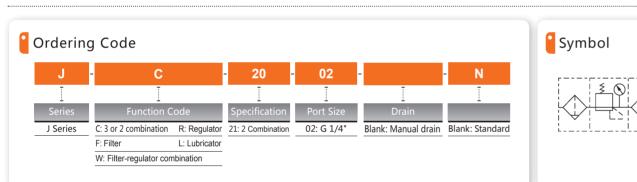
JAD

DPS

JC20-02 JC21-02

- The strength and light valve body is made of quality aluminum alloy.
- The regulator has balanced structure and is featured with good precision and stability.
- The oil cup is more convenient to be oiled.
- The drainage and oil interval is longer depending on the extended type of water cup and oil cup.
- Two combination and three combination share the same bracket and the separated unit including regulator and filter and filter & regulator have their own bracket for easier maintenance.





## Specification

Model	JC20-02	JC21-02	JW20-02	JR20-02	JF20-02	JL20-02		
Rated Flow	500	500	550	550	750	800		
Port Size	1/4	1/4	1/4	1/4	1/4	1/4		
Filtration			μm					
Maximum Working Pressure			1.0	MPa				
Proof Pressure			1.5	MPa				
Operating Temperature Range				5~60 ℃				
Adjustable Pressure Range		0.05~0.85 MPa						
Recommended Lubricant	ISO	VG 32		-		ISO VG 32		
Bowl Material		Polycarbonate			Polycar	bonate		
Cover			Wit	hout				
Drain Function	Manual Drain	Manual Drain	Manual Drain	-	Manual Drain	-		
Valve Type		Relievir	ng type		-	-		
	Filter	Filter & Regulator		-	-	-		
Components	Regulator	-	-	-	-	-		
	Lubricator	Lubricator	-	-	-	-		

JC Series

FRL

AC, BC

AFC, BFC

AF, BF

AR, BR

AFR, BFR

AL, BL

JAC

JAF

JAR

JAL

X-FE

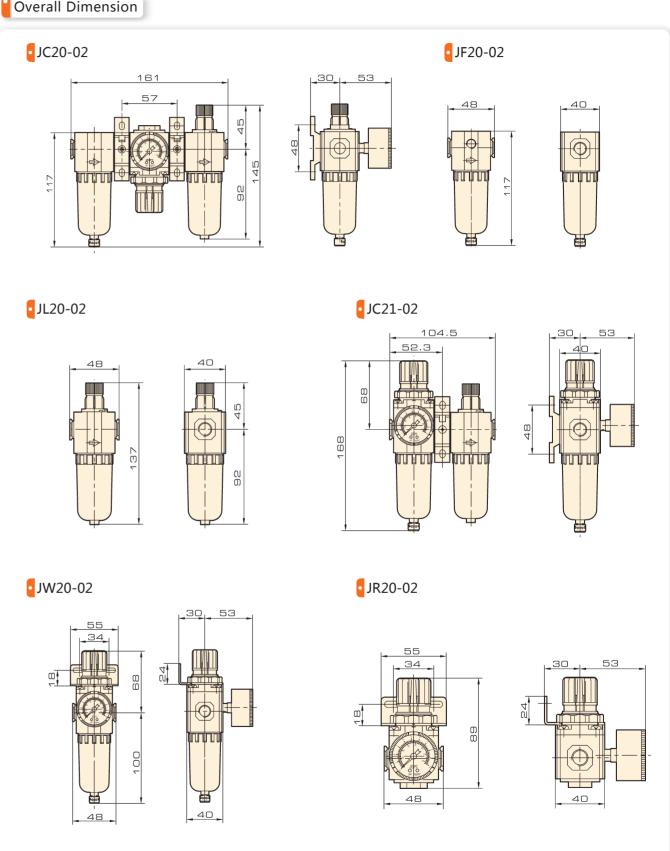
GC

ZYR10

DPS

Air Filter Combination (3 or 2 Combination)





## X-FE Series

Air Filter Combination (2 Combination)



FRL
AC, BC
AFC, BFC
AF, BF
AR, BR
AFR, BFR
AL, BL
JAC
JAF
JAR
JAW
JAL
JC
X-FE
FE

GC

ZYR10

PTH

JAD

DPS

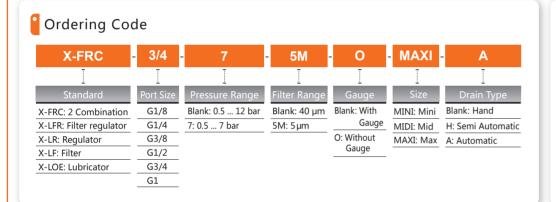


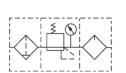




X-LR

Symbol





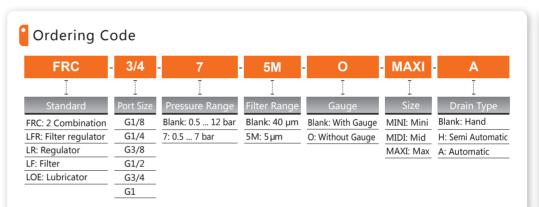
## Specification

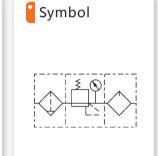
Specificatio			Mini			Midi		Ma	axi		
Port Size	-	G1/8	G1/4	G3/8	G3/8	G1/2	G3/4	G3/4	G1		
Working Me	edium	Compressed Air									
Structure Fe	aaturas		Filter regulator, with/without gauge								
Structure re	eatures		proportional Lubricater								
Install Way			By Accessories								
Ilistali vvay			Tube								
Install Posit	ion				Vertic	al ±5°					
Pogulator I	ock	Rotary handle, with lock				ck					
Regulator L	OCK	Rotary handle, with itergrated locks				ed locks					
Filter Class	[µm]	5 or 40					•				
Max Hyster	esis [bar]		0.2						4		
Drooccuro D	lango [bor]		•		0.5	7	•	•			
Preessure R	lange [bar]	-	•		0.5	12		•			
Preessure D	Nicolay				By G	auge					
rieessule D	rispiay		G1/8 Prese	et	(	31/4 Prese	t	G1/4 I	Preset		
Water Capa	icity [cm³]		22			43		8	0		
Input Pressi	ure [bar]										
Water	Hand				1	. 16					
	Semi Automatic				1.5 .	16					
Exhaust	Automatic		•	•	2	. 12		•			

## 

# FE Series Air Filter Combination (2 Combination)







Specification	
---------------	--

Specificatio			Mini			Midi		Ma	axi		
Port Size	-	G1/8	G1/4	G3/8	G3/8	G1/2	G3/4	G3/4	G1		
Working M	edium		Compressed Air								
Structure Fe	aturoc	Filter regulator, with/without gauge									
Structure re		proportional Lubricater									
Install Way			-		Ву Асс	essories					
Ilistali vvay		Tube									
Install Posit	ion		Vertical ±5°								
Regulator L	ock	Rotary handle, with lock									
negulator L				Rotary	handle, wi	th itergrat	ed locks				
Filter Class	[µm]		5 or 40								
Max Hyster	esis [bar]			0	.2			0.	4		
Preessure R	ange [bar]	0.5 7									
ricessule N	alige [bai]	0.5 12									
Preessure D	nienlav				By G	auge					
ricessure D	rispiay		G1/8 Prese	et	(	G1/4 Prese	t	G1/4 I	Preset		
Water Capa	city [cm³]		22			43		8	0		
Input Press	ure [bar]			_			_				
Water	Hand			-	1	. 16					
Exhaust	Semi Automatic			-	1.5 .	16					
EXIIdUSL	Automatic				2	. 12					

FRL
AC, BC
AFC, BFC
AF, BF
AR, BR
AFR, BFR
AL, BL
JAC
JAF
JAR

JAR
JAW
JAL
JC
X-FE

FE
GC
ZYR10
PTH
JAD
DPS

## **FE Series**

Air Filter Combination (2 Combination)



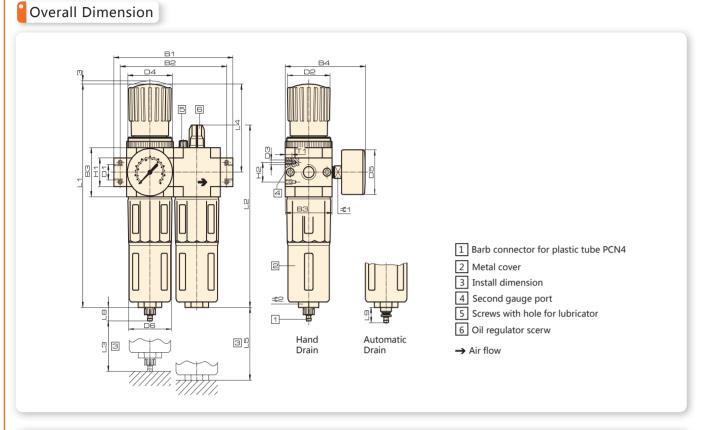
FRL AC, BC AFC, BFC AF, BF

AR, BR AFR, BFR AL, BL JAC JAF JAR JAW JAL JC X-FE GC

PTH

JAD

DPS



#### Dimension FRC-1/8-MINI G1/8 104 FRC-1/4-MINI 92 40 76 G1/4 31 M36x1.5 41 38 110 FRC-3/8-MINI G3/8 Midi FRC-3/8-MIDI G3/8 FRC-1/2-MIDI 140 125 55 95 G1/2 50 M5 M52x1.5 50 52 G3/4 FRC-3/4-MIDI Maxi FRC-3/4-MAXI 162 146 G3/4 66 107 31 M5 M36x1.5 50 65 FRC-1-MAXI 182 157 Mini FRC-1/8-MINI FRC-1/4-MINI 20 11 193 169 60 69 100 15 19 14 22 FRC-3/8-MINI Midi FRC-3/8-MIDI FRC-1/2-MIDI 32 22 250 204 80 99 120 15 19 14 24 FRC-3/4-MIDI Maxi FRC-3/4-MAXI 32 22 252 228 90 82 150 15 19 14 24 40 FRC-1-MAXI

**FE Series** Air Filter Combination (2 Combination)

> FRL AC, BC

AFC, BFC

AF, BF

AR, BR

AFR, BFR

AL, BL

JAC

JAF

JAR

JAW

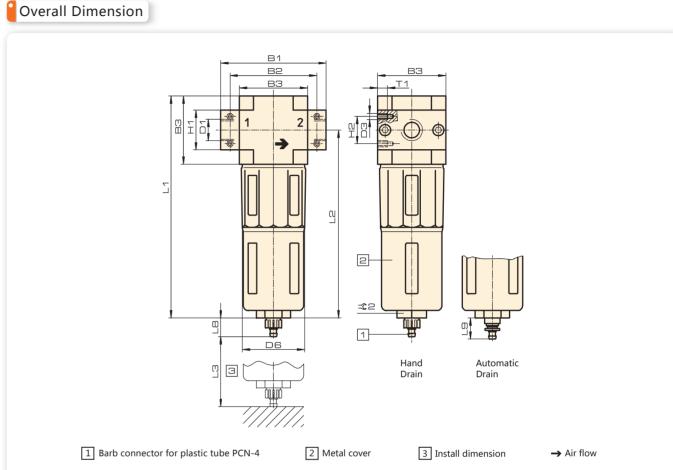
JAL

X-FE

GC ZYR10

DPS





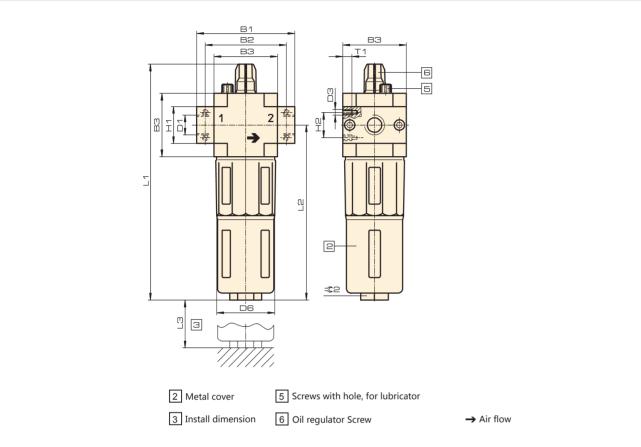
Model	B1	B2	В3	D1	D3	ФD6	H1	H2		L2		L8	L9	T1	T2	=© 2
Mini		-	-			-			-		•			-	-	-
LF-1/8-MINI	64			G1/8												
LF-1/4-MINI	04	52	40	G1/4	M4	38	20	11	144	124	60	15	19	7	-	22
LF-3/8-MINI	70			G3/8												
Midi																
LF-3/8-MIDI				G3/8												
LF-1/2-MIDI	85	70	55	G1/2	M5	52	32	22	179	151	80	15	19	8	-	24
LF-3/4-MIDI				G3/4												
Maxi																
LF-3/4-MAXI	96	80	66	G3/4	ME	6.5	32	22	202	170	00	4 5	10			24
LF-1-MAXI	116	91	66	G1	M5	65	40	22	203	170	90	15	19	8	-	24

## **FE Series**

Air Filter Combination (2 Combination)



Overall Dimension

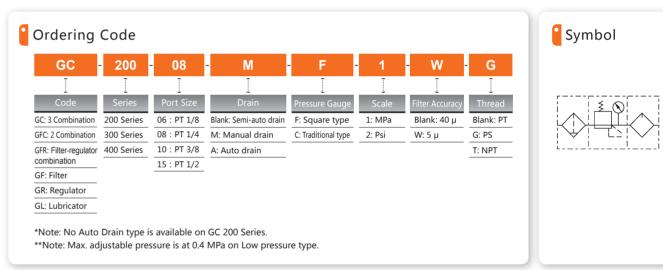


#### Dimension Mini LOE-1/8-MINI G1/8 LOE-1/4-MINI 52 40 30 G1/4 M4 38 20 11 169 124 100 22 70 LOE-3/8-MINI G3/8 Midi LOE-3/8-MIDI G3/8 85 70 55 43 G1/2 M5 52 32 22 204 151 120 24 LOE-1/2-MIDI 8 LOE-3/4-MIDI G3/4 Maxi LOE-3/4-MAXI 80 G3/4 32 М5 22 228 170 150 24 LOE-1-MAXI 116 91

**GC** Series

Air Source Unit (3 or 2 Combination)





Specificatio	n.										
'											
Model		GC200-06	GC200-08	GC300-08	GC300-10	GC300-15	GC400-10	GC400-15			
Working mediu	m		Air								
Port Size		PT1/8	PT1/4	PT1/4	PT3/8	PT1/2	PT3/8	PT1/2			
Filtration			<b>.</b>	<b>.</b>	40 μ or 5 μ						
Adjustable pres	sure range		•	C	).15 ~ 0.9 MPa	•					
Maximum work	ing pressure		-	-	1.0 MPa						
Proof Pressure			-	-	1.5 MPa						
Operating Temp	perature Range		5 ~ 60 ℃								
Capacity of Filte	er Cup	10	CC		80 CC						
Capacity of Oil	Cup	25	CC		75 CC	•	160	CC			
Recommended	Recommended Lubrication			ISO VG 32 or Same Grade							
Weight		58	0 g		1300 g		2358 g				
	Filter	GF 200-06	GF 200-08	GF 300-08	GF 300-10	GF 300-15	GF 400-10	GF 400-15			
Components	Regulator	GR 200-06	GR 200-08	GR 300-08	GR 300-10	GR 300-15	GR 400-10	GR 400-15			
	Lubricator	GL 200-06	GL 200-08	GL 300-08	GL 300-10	GL 300-15	GL 400-10	GL 400-15			

FRL AC, BC AFC, BFC AF, BF AR, BR AFR, BFR AL, BL JAC JAF JAR

JAW

JAL

X-FE

FE

JAW JAL JC X-FE GC

JAD

DPS

FRL

AC, BC

AFC, BFC

AF, BF

AR, BR

AFR, BFR

AL, BL JAC

JAF

JAR

ZYR10 DPS

3-|P23

# GC Series Air Source Unit (3 or 2 Combination)

**IFILPC**®

ISO9001:2015 C€

## **ZYR10** Series

FRL

AC, BC AFC, BFC AF, BF

AR, BR

AFR, BFR

AL, BL

JAC JAF

JAR

JAL
JC
X-FE
FE
GC

Oxygen Supply Regulator

Overall Dimension

FRL

AC, BC AFC, BFC AF, BF

AR, BR

AFR, BFR

AL, BL

JAC JAF JAR

JAW

JAL JC X-FE FE

ZYR10

JAD

DPS

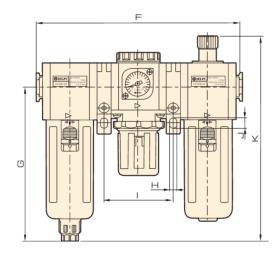
GC 200

"L" Bracket

06:PT1/8

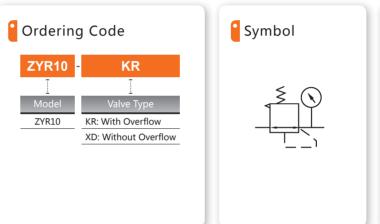
08:PT1/4

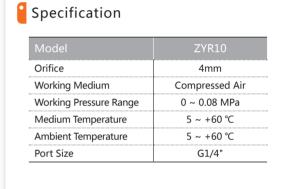
• GC 300 • GC 400 "L" Bracket



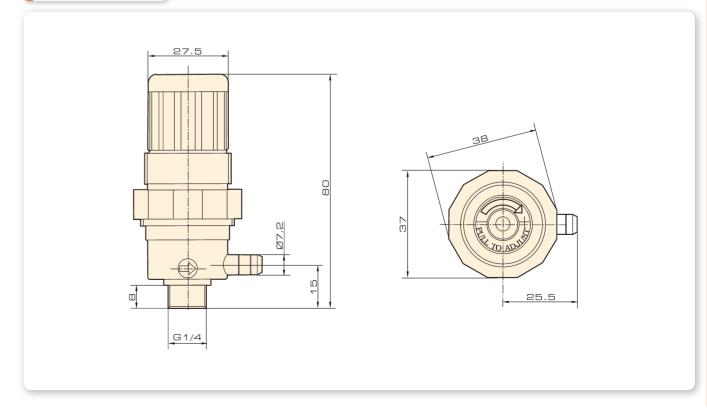
## Dimension

Model / Symbol	А		С	D			G	Н			
GC300-08	71	41.5	35	PT 1/4	PS 1/8	188	143	6.5	64	9	188
GC300-10	71	41.5	35	PT 3/8	PS 1/8	188	143	6.5	64	9	188
GC300-15	71	41.5	35	PT 1/2	PS 1/8	188	143	6.5	64	9	188
GC400-10	85.5	50	40	PT 3/8	PS 1/4	248	166.5	8.6	84	12	216
GC400-15	85.5	50	40	PT 1/2	PS 1/4	248	166.8	8.6	84	12	216





Overall Dimension



3-|P25

## **PTH Series**

Air Filter Combination



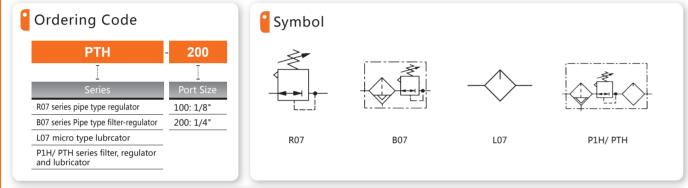
FRL
AC, BC
AFC, BFC
AF, BF
AR, BR
AFR, BFR
AL, BL
JAC
JAF
JAR
JAW
JAL
JC
X-FE
FE

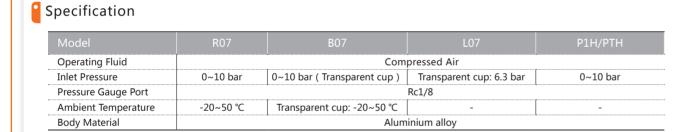
GC

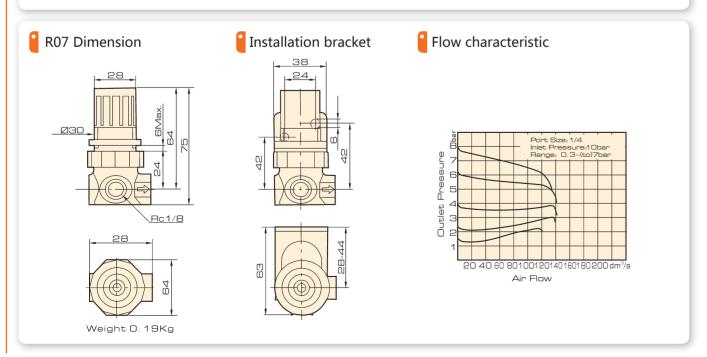
ZYR10

JAD DPS









## PTH Series

FRL AC, BC

AFC, BFC

AF, BF

AR, BR

AFR, BFR

AL, BL

JAC

JAF

JAR

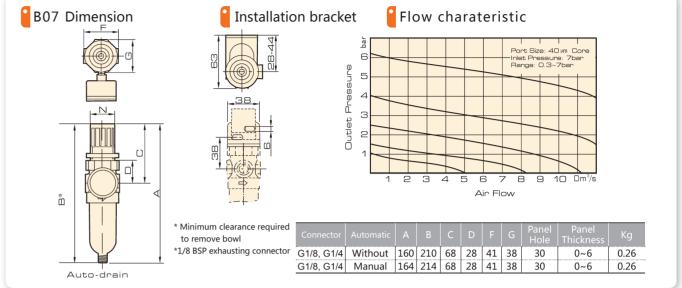
X-FE

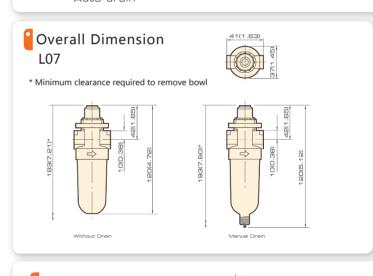
FE

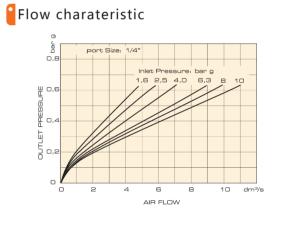
GC

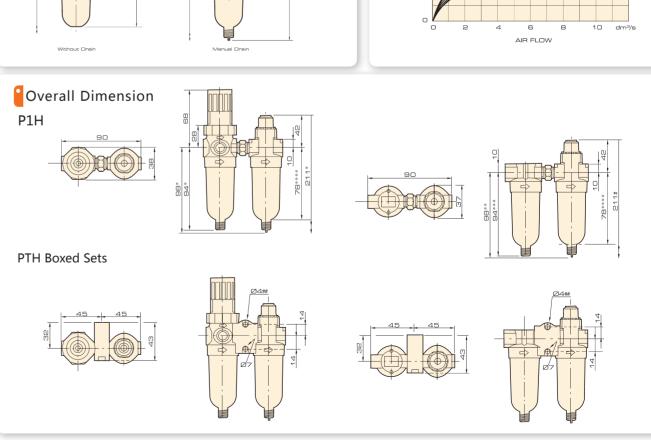
ZYR10

Air Filter Combination









## JAD Series

Auto-drain

FRL AC, BC

AFC, BFC AF, BF AR, BR AFR, BFR AL, BL

JAC JAF JAR JAW

JAL JC X-FE FE

GC ZYR10

PTH

DPS

**JELPC**®

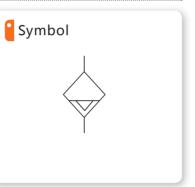
## **DPS Series**

FRL
AC, BC
AFC, BFC
AF, BF
AR, BR
AFR, BFR
AL, BL
JAC
JAF
JAW
JAL
JC
X-FE
FE
GC
ZYR10
PTH
JAD

**Digital Pressure Sensor** 



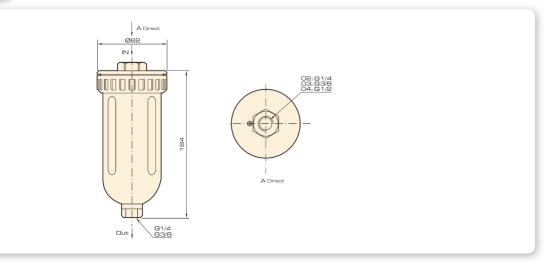
Ordering Code 402 JAD: Auto-drain 03: G3/8 04: G1/2



## Specification

Model	JAD402-02	JAD402-03	JAD402-04
Working Medium		Air	
Inlet Port Size	G1/4	G3/8	G1/2
Outlet Port Size	G1/4	G1/4	G3/8
Proof Pressure		1.5 MPa	
Max. Test Pressure		1.0 MPa	
Ambient Temperature Range		5~60 ℃	

## Overall Dimension



DPS - 3	10	R	N ·		
<u> </u>			Ī	Ī	
Series Code	Measurement Range	Pressure Port Size	Sensor Type	Optional 1	
DPS-3 : 3 Series Digital Pressure	10:-100~1000kPa	R: R1/8 (Female thread M5)	N : Simplex NPT output (*1)	M : Selection panel	
Sensor	01:-100~100kPa	N: NPT1/8 (Female thread M5)	P : Simplex PNP output	N : Selection panel	
		G: G1/8 (Female thread M5)	X : NPT+PNP output	+dust cover	
			*Note: Products with Simplex design,	Z : Selection L bracket	
			NPN or PNP output is available, black wire is NPT, white wire is PNP.	S : Selection S bracket	

## Specification

Model		DPS-301 (Mixed pressure)	DPS-310 (Positive pressure)
	Measuring Range	-100~100kPa	-0.100~1.000MPa
	Predetermined Range	-100~100kPa	0.000~1.000MPa
	Max Pressure	500kPa	1.500MPa
_	Pressure Form	Non-flammable, Non-corrosive g	as, Gauge pressure measurement
Pressure Measurement	Measurement Precision	≤ ±2%F. S. (Environme	ent temperature 25°C )
Measurement	Temperature Error	≤ ±3%F. S. (Tempera	ature range 0~50°C )
		Single po	oint mode
	Measurement Mode	Hysteres	sis mode
		Window	w mode
Pressure Port Size	***************************************	Male thread R1/8, NPT1/8	3, G1/8, Female thread M5
Drosevira Diaplay	Basic Description	LCD display, 4-digit measurement qua	ntity, unit display, output status display
Pressure Display	Display Mode	Adjustable backlight,	total 4 display modes
Input Power	Voltage Range	12~24V	DC±10%
Input Power	Power Consumption	40mA Max	( no load )
		NPN open collector output	PNP open collector output
	Transistor Output	Output Electric current : 80mA Max	Output Electric current : 80mA Max
Output Signal		Internal pressure drop : ≤ 1V	Internal pressure drop : ≤ 1V
	Response Time	Adjustable : 2.5ms, 20ms, 10	0ms, 500ms, 1000ms, 2000ms
	Short circuit Protection	Y	es
	IP Grade	IP.	40
	Environment Temperature	Use environment temperature : 0~50°C , □	Keep environment temperature : -20~60°C
Environmental	Environment Humidity	Use environment hu	ımidity : 35~80%RH
Resistance	Insulation Voltage	1000VAC	1 minute
ricaiataile	Insulation Resistance	≥ 50MΩ	(500VDC)
	Shock Proof	Max 100m/s <sup>2</sup> , 3 axis	& 6 directions/3times
	Resistant to Vibration	Amplitude 1.5mm , 10	OHZ~500HZ , 3axis/2h

3-|P29 3-|P30









## PNEUMATIC ACCESSORY



## **CONTENTS OF PNEUMATIC ACCESSORY**



HAC, HAD Series Shock Absorber



**4-05** HR Series Hydraulic Speed Regulator



**4-06** HAC, HAD Series Shock Absorber Accessories



**4-07** Pneumatic Accessories



**4-13** Metal Fast Fitting



**4-13** Silencer



**4-13** PU Spiral Fitting / Nylon / Polyurethane / PU Tube

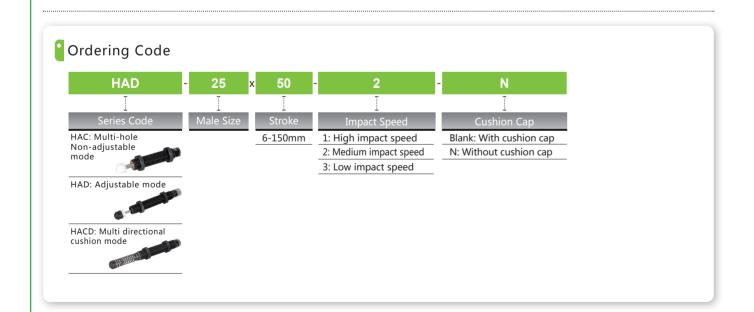
## HAC, HAD Series

**Shock Absorber** 



Accessories
HAC/HAD





# HAC, HAD Series Shock Absorber

## **HAC Series**

Accessories

HAC/ D A.

Specification

Item	Stroke	Max. absorbing	Absorbing Energy/Hour	Max. A	vailability (Kg)	Weight	The high	est impac (m/s)	t Spee
Item	(mm)	Energy (Nm)	(Nm)		2			2	3
HAC-0806	6	2	7,200	0.5	2	6	2	1	0.5
HAC-1005	5	3	10,800	1	3	7	3	1.5	0.8
HAC-1008	8	4	14,400	2	4	9	3	1.5	0.8
HAC-1210	10	5	18,000	5	10	30	2	1.5	0.8
HAC-1412	12	15	36,000	8	50	100	3	1.5	0.8
HAC-1416	16	20	40,000	10	70	150	3	1.5	0.8
HAC-1420	20	25	48,000	12	80	160	3	1.5	0.8
HAC-2020	20	40	48,000	30	200	700	3.5	2	1
HAC-2030	30	50	54,000	30	200	700	3.5	2	1
HAC-2050	50	60	66,000	60	400	1200	3.5	2	1
HAC-2525	25	80	60,000	200	800	1500	4	2.5	1
HAC-2540	40	120	84,000	300	1200	2000	4	2.5	1
HAC-2550	50	98	98,000	15	40	160	4	2.5	1
HAC-2580	80	150	127,500	20	50	200	4	2.5	1
HAC-3660	60	250	125,000	400	1500	2400	4	2.5	1
HACD-2030	30	45	54,000	40	300	900	3.5	2	1
HACD-2035	35	52	62,400	40	200	650	3.5	2	1

<sup>\*</sup> Working Temperature -10 ~ 80 °C

## **HAD Series**

Specification

Item	Stroke (mm)	Max. absorbing Energy (Nm)	Absorbing En- ergy/ Hour (Nm)	Max. Availability Weight (Kg)	The highest impact Speed (m/s)
HAD-1410	10	20	24,000	80	3.2
HAD-1415	15	22	26,400	120	3.2
HAD-2016	16	25	32,000	200	3.6
HAD-2025	25	39	39,000	312	3.6
HAD-2525	25	85	51,000	400	3.6
HAD-2530	30	95	57,000	480	3.6
HAD-2540	40	100	84,000	700	3.6
HAD-2550	50	98	98,000	720	4.2
HAD-2580	80	150	127,500	800	4.2
HAD-3625	25	150	90,000	1,400	3.2
HAD-3650	50	300	108,000	1,400	3.2
HAD-4225	25	260	130,000	3,000	3.6
HAD-4250	50	500	155,000	4,000	4.8
HAD-4275	75	750	187,000	6,000	4.8
HAD-64050	50	12,000	1,560,000	12,727	1.6
HAD-64100	100	24,000	1,920,000	18,181	1.6
HAD-64150	150	36,000	2,520,000	23,636	1.6

<sup>\*</sup> Working Temperature -10 ~ 80 °C

## HAC, HAD Series

**Shock Absorber** 



## HAC, HAD Series

**Shock Absorber** 

Accessories

HR
HAC/ D A.
Accessories

Accessories
HAC/ HAD

HAC/ HAD
HR
HAC/ D A.
Accessories

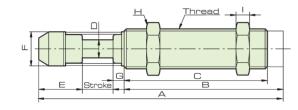
Overall Dimension

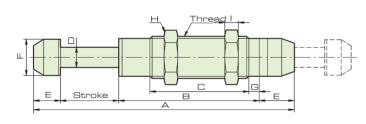
● HAC-2540 ● HAC-3660

HAC-2030

HAC-2035

E Stroke B





## Dimension

Specification/ Symbol	Thread	А	В	С	D	Е	F	G	Н	
HAC-0806	M8×1.0	50	38	33	2.8	6	6.6	-	11	3
HAC-1005	M10×1.0	38.7	27.7	22.9	3	6	8.6	-	12.7	3
HAC-1008	M10×1.0	57	43	38	3	6	8.6	-	12.7	3
HAC-1210	M12×1.0	69.5	50	45.5	3	9.5	10.3	-	14	4
HAC-1412	M14×1.5	102.3	76	67	4	14.3	12	-	19	6
HAC-1416	M14×1.5	125.3	95	86	4	14.3	12	-	19	6
HAC-1420	M14×1.5	129.3	95	86	4	14.3	12	-	19	6
HAC-2020	M20×1.5	148	110	101	6	18	18	-	26	8
HAC-2030	M20×1.5	158	110	101	6	18	18	-	26	8
HAC-2050	M20×1.5	235	167	158	6	18	18	-	26	8
HACD-2030	M20×1.5	189	123	44	6	18	18	5	26	8
HACD-2035	M20×1.5	223	123	40	6	15	18	3	26	8
HAC-2525	M25×1.5	155.5	111	101	6	19.5	22	-	32	10
HAC-2540	M25×1.5	213	137	117	8	36	22	10	32	10
HAC-2550	M25×1.5	240	170.5	100	8	19.5	22	-	32	10
HAC-2580	M25×1.5	336.5	237	100	8	19.5	22	-	32	10
HAC-3660	M36×1.5	248	162	134	10	26	35	17	46	15

Overall Dimension
 HAD-2540
 HAD-3625
 HAD-3650
 HAD-64050
 HAD-64100
 HAD-64150

## Specification

Specification/ Symbol	Thread	А			D			G	H	
HAD-1410-N	M14×1.5	-	88.5	72.5	4	-	-	-	19	6
HAD-1410	M14×1.5	112.8	88.5	72.5	4	14.3	12	-	19	6
HAD-1415-N	M14×1.5	-	88.5	72.5	4	-	-	-	19	6
HAD-1415	M14×1.5	117.8	88.5	72.5	4	14.3	12	-	19	6
HAD-2016-N	M20×1.5	-	117	101	6	-	-	-	26	8
HAD-2016	M20×1.5	151	117	101	6	18	18	-	26	8
HAD-2025-N	M20×1.5	-	117	101	6	-	-	-	26	8
HAD-2025	M20×1.5	160	117	101	6	18	18	-	26	8
HAD-2525-N	M25×1.5	-	118.5	101	8	-	-	-	32	10
HAD-2525	M25×1.5	163	118.5	101	8	19.5	22	-	32	10
HAD-2530-N	M25×1.5	-	118.5	101	8	-	-	-	32	10
HAD-2530	M25×1.5	168	118.8	101	8	19.5	22	-	32	10
HAD-2540	M25×1.5	220	144.5	117	8	36	-	10	32	1(
HAD-2550	M25×1.5	247.5	178	100	8	19.5	22	-	32	10
HAD-2580	M25×1.5	344	244.5	100	8	19.5	-	12.5	32	10
HAD3625	M36×1.5	183.8	133	103	10	25.8	35.5	10	46	10
HAD-3650	M36×1.5	246.8	171	134	10	25.8	35.5	17	46	15
HAD-4225	M42×1.5	186.4	127.5	88	12	33.9	44.5	28.5	50	15
HAD-4250	M42×1.5	240.9	157	117.5	12	33.9	44.5	28.5	50	15
HAD-4275	M42×1.5	301.4	187.5	148	12	33.9	44.5	28.5	50	15
HAD-64050	UNF21/2-12	247.8	146	26	20	51.8	59	23	76.2	9.4
HAD-64100	UNF21/2-12	247.8	196	26	20	51.8	59	23	76.2	9.4
HAD-64150	UNF21/2-12	467.8	256	26	20	51.8	59	23	76.2	9.4

## **HR Series**

Hydraulic Speed Regulator



## 

## HAC, HAD Series

Accessories

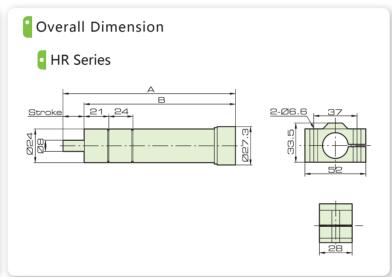
HAC/ HAD

**Shock Absorber Accessories** 



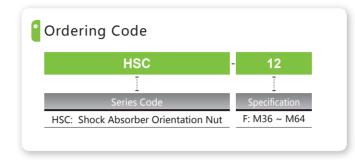






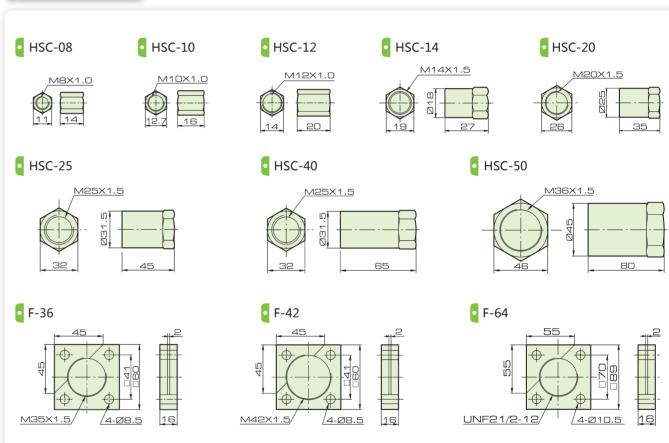
## Dimension

Specification/ Symbol	А	В	Max. Stroke (mm)	Working Temperature (℃)	Max. Charge (kgf)
HR15	151	136	15	-10~85	550
HR30	203	172	30	-10~85	550
HR60	280	219	60	-10~85	550
HR80	336	256	80	-10~85	550
HR100	390	290	100	-10~85	550









## Selection

Specification	HSC-08	HSC-10	HSC-12	HSC-14	HSC-20	HSC-25	HSC-40	HSC-50	F36	F42	F64
Select Item	HAC-0806	HAC-1005 HAC-1007 HAC-1008	HAC-1210	HAC-1412 HAC-1415 HAC-1416 HAC-1420 HAD-1410 HAD-1415	HAC-2015 HAC-2020 HAC-2030 HAC-2050 HACD-2030 HAD-2016 HAD-2025	HAC-2525 HAC-2550 HAC-2580 HAD-2525 HAD-2530 HAD-2550 HAD-2580	HAC-2540 HAD-2540	HAC-3660 HAD-3625 HAD-3650	HAC-3660 HAD-3650	HAD-4225 HAD-4250 HAD-4275	HAD-4601 HAD-6410 HAD-6415

**EFJELPC**® 

## Pneumatic Accessories

HAC/ HAD

HAC/ D A.

Accessories HAC/ HAD HAC/ D A.

## Push-in Fittings Quick Type for Pneumatic Tubing

## PC-(G) Male Straight

		Model (ΦD-T)							
	Tube Dia(m	nm) - Thread :	Size (R)/(G)	Tube Dia(inch) - Thread Size (NPT)					
	PC04-M5	PC06-04 (G)	PC12-02 (G)	PC5/32-N01	PC5/16-N03				
SHIII TO	PC04-M6	PC08-01 (G)	PC12-03 (G)	PC5/32-N02	PC5/16-N04				
	PC04-01 (G)	PC08-02 (G)	PC12-04 (G)	PC3/16-N01	PC3/8-N01				
	PC04-02 (G)	PC08-03 (G)	PC14-03 (G)	PC3/16-N02	PC3/8-N02				
	PC04-03 (G)	PC08-04 (G)	PC14-04 (G)	PC1/4-N01	PC3/8-N03				
	PC06-M5	PC10-01 (G)	PC15-03 (G)	PC1/4-N02	PC3/8-N04				
	PC06-M6	PC10-02 (G)	PC15-04 (G)	PC1/4-N03	PC1/2-N01				
	PC06-01 (G)	PC10-03 (G)	PC16-03 (G)	PC1/4-N04	PC1/2-N02				
	PC06-02 (G)	PC10-04 (G)	PC16-04 (G)	PC5/16-N01	PC1/2-N03				
	PC06-03 (G)	PC12-01 (G)	PC16-06	PC5/16-N02	PC1/2-N04				

## PCF-(G) Female Straight

		Model (ΦD-T)								
	Tube Dia(m	m) - Thread	Tube Dia(inch) -	Thread Size (NPT)						
	PCF04-M5	PCF06-04 (G)	PCF12-02 (G)	PCF5/32-N01	PCF5/16-N03					
	PCF04-M6	PCF08-01 (G)	PCF12-03 (G)	PCF5/32-N02	PCF5/16-N04					
	PCF04-01 (G)	PCF08-02 (G)	PCF12-04 (G)	PCF3/16-N01	PCF3/8-N01					
	PCF04-02 (G)	PCF08-03 (G)		PCF3/16-N02	PCF3/8-N02					
	PCF04-03 (G)	PCF08-04 (G)		PCF1/4-N01	PCF3/8-N03					
	PCF06-M5	PCF10-01 (G)		PCF1/4-N02	PCF3/8-N04					
MARK	PCF06-M6	PCF10-02 (G)		PCF1/4-N03	PCF1/2-N01					
	PCF06-01 (G)	PCF10-03 (G)		PCF1/4-N04	PCF1/2-N02					
	PCF06-02 (G)	PCF10-04 (G)		PCF5/16-N01	PCF1/2-N03					
	PCF06-03 (G)	PCF12-01 (G)		PCF5/16-N02	PCF1/2-N04					

## PB-(G) Male Branch Tee

		Model (ΦD-T)							
6	Tube Dia(m	m) - Thread	Size (R)/(G)	Tube Dia(inch) - Thread Size (NPT					
\$ 90	PB04-M5	PB06-04 (G)	PB12-02 (G)	PB5/32-N01	PB5/16-N03				
Oliver .	PB04-M6	PB08-01 (G)	PB12-03 (G)	PB5/32-N02	PB5/16-N04				
	PB04-01 (G)	PB08-02 (G)	PB12-04 (G)	PB3/16-N01	PB3/8-N01				
	PB04-02 (G)	PB08-03 (G)	PB14-03 (G)	PB3/16-N02	PB3/8-N02				
	PB04-03 (G)	PB08-04 (G)	PB14-04 (G)	PB1/4-N01	PB3/8-N03				
	PB06-M5	PB10-01 (G)	PB15-03 (G)	PB1/4-N02	PB3/8-N04				
	PB06-M6	PB10-02 (G)	PB15-04 (G)	PB1/4-N03	PB1/2-N01				
200	PB06-01 (G)	PB10-03 (G)	PB16-03 (G)	PB1/4-N04	PB1/2-N02				
	PB06-02 (G)	PB10-04 (G)	PB16-04 (G)	PB5/16-N01	PB1/2-N03				
-	PB06-03 (G)	PB12-01 (G)		PB5/16-N02	PB1/2-N04				

## PL-(G) Male Elbow

	Model (ΦD-T)							
10	Tube Dia(m	nm) - Thread	Tube Dia(inch) - Thread Size (NPT					
	PL04-M5	PL06-04 (G)	PL12-02 (G)	PL5/32-N01	PL5/16-N03			
	PL04-M6	PL08-01 (G)	PL12-03 (G)	PL5/32-N02	PL5/16-N04			
-	PL04-01 (G)	PL08-02 (G)	PL12-04 (G)	PL3/16-N01	PL3/8-N01			
75 11	PL04-02 (G)	PL08-03 (G)	PL14-03 (G)	PL3/16-N02	PL3/8-N02			
	PL04-03	PL08-04 (G)	PL14-04 (G)	PL1/4-N01	PL3/8-N03			
	PL06-M5	PL10-01 (G)	PL15-03 (G)	PL1/4-N02	PL3/8-N04			
P. Comment	PL06-M6	PL10-02 (G)	PL15-04 (G)	PL1/4-N03	PL1/2-N01			
\$ 0 A	PL06-01 (G)	PL10-03 (G)	PL16-03 (G)	PL1/4-N04	PL1/2-N02			
	PL06-02 (G)	PL10-04 (G)	PL16-04 (G)	PL5/16-N01	PL1/2-N03			
	PL06-03 (G)	PL12-01 (G)		PL5/16-N02	PL1/2-N04			

## PD-(G) Male Run Tee

		Model (ΦD-T)						
	Tube Dia(m	m) - Thread	Size (R)/(G)	Tube Dia(inch) - Thread Size (NP				
50%	PD04-M5	PD06-04 (G)	PD12-02 (G)	PD5/32-N01	PD5/16-N03			
Of the same	PD04-M6	PD08-01 (G)	PD12-03 (G)	PD5/32-N02	PD5/16-N04			
	PD04-01 (G)	PD08-02 (G)	PD12-04 (G)	PD3/16-N01	PD3/8-N01			
3.0	PD04-02 (G)	PD08-03 (G)	PD14-03 (G)	PD3/16-N02	PD3/8-N02			
100	PD04-03	PD08-04 (G)	PD14-04 (G)	PD1/4-N01	PD3/8-N03			
Mino	PD06-M5	PD10-01 (G)	PD15-03 (G)	PD1/4-N02	PD3/8-N04			
	PD06-M6	PD10-02 (G)	PD15-04 (G)	PD1/4-N03	PD1/2-N01			
	PD06-01 (G)	PD10-03 (G)	PD16-03 (G)	PD1/4-N04	PD1/2-N02			
	PD06-02 (G)	PD10-04 (G)	PD16-04 (G)	PD5/16-N01	PD1/2-N03			
Ch.	PD06-03 (G)	PD12-01 (G)		PD5/16-N02	PD1/2-N04			

## PX-(G) Male Branch Y

		M	lodel (ΦD-	T)		
0	Tube Dia(m	m) - Thread	Size (R)/(G)	Tube Dia(inch) - Thread Size		
~	PX04-M5	PX06-04 (G)	PX12-02 (G)	PX5/32-N01	PX5/16-N04	
	PX04-M6	PX08-01 (G)	PX12-03 (G)	PX5/32-N02	PX3/8-N01	
	PX04-01 (G)	PX08-02 (G)	PX12-04 (G)	PX3/16-N01	PX3/8-N02	
	PX04-02 (G)	PX08-03 (G)		PX3/16-N02	PX3/8-N03	
1	PX04-03 (G)	PX08-04 (G)		PX1/4-N01	PX3/8-N04	
	PX06-M5	PX10-01 (G)		PX1/4-N02	PX1/2-N01	
	PX06-M6	PX10-02 (G)		PX1/4-N03	PX1/2-N02	
	PX06-01 (G)	PX10-03 (G)		PX5/16-N01	PX1/2-N03	
	PX06-02 (G)	PX10-04 (G)		PX5/16-N02	PX1/2-N04	
	PX06-03 (G)	PX12-01 (G)		PX5/16-N03		

## POC-(G) Inner Hex. Straight

		M	lodel (ΦD-	T)		
Contract of the Contract of th	Tube Dia(mm) - Thread Size (R)/(G)					
	POC04-M5	POC06-M6	POC08-01 (G)	POC10-02 (G)	POC12-03 (G)	
	POC04-M6	POC06-01 (G)	POC08-02 (G)	POC10-03 (G)	POC12-04 (G)	
Am	POC04-01 (G)	POC06-02 (G)	POC08-03 (G)	POC10-04 (G)	•	
	POC04-02 (G)	POC06-03 (G)	POC08-04 (G)	POC12-01 (G)		
0	POC06-M5	POC06-04 (G)	POC10-01 (G)	POC12-02 (G)	•	

## PLN-(G) New Elbow

£ n		M	lodel (ΦD-	T)	
	Tube Dia(mm) - Thread Size (R)/(G)				
-	PLN04-M5	PLN06-M5	PLN06-04 (G)	PLN10-01 (G)	PLN12-02 (G)
	PLN04-M6	PLN06-M6	PLN08-01 (G)	PLN10-02 (G)	PLN12-03 (G)
	PLN04-01 (G)	PLN06-01 (G)	PLN08-02 (G)	PLN10-03 (G)	PLN12-04 (G)
	PLN04-02 (G)	PLN06-02 (G)	PLN08-03 (G)	PLN10-04 (G)	
On All	PLN04-03	PLN06-03 (G)	PLN08-04 (G)	PLN12-01 (G)	

#### \*G: G thread with O-ring fittings.

## Push-in Fittings Quick Type for Pneumatic Tubing

### **PY** Union Y

	Model (ΦD)			)
	Tube Dia(mm)		Tube Dia(inch)	
	PY04	PY06-04	PY5/32	PY3/16-5/32
	PY06	PY08-04	PY3/16	PY1/4-3/16
-	PY08	PY08-06	PY1/4	PY3/8-5/16
	PY10	PY10-06	PY5/16	PY1/2-3/8
	PY12	PY10-08	PY3/8	
200		PY12-08	PY1/2	
		PY12-10		

## **PE** Union Tee

	Model (ΦD)			
	Tube Dia(mm)		Tube Dia(inch)	
· ·	PE04	PE06-04-06	PE5/32	PE3/16-5/32-3/16
100	PE06	PE08-04-08	PE3/16	PE1/4-3/16-1/4
	PE08	PE08-06-08	PE1/4	PE5/16-1/4-5/16
	PE10	PE10-06-10	PE5/16	PE3/8-5/16-3/8
50	PE12	PE10-08-10	PE3/8	PE1/2-3/8-1/2
	PE14	PE12-08-12	PE1/2	
	PE15	PE12-10-12		
	PE16			

## **PV** Union Elbow

	Model (ΦD)		
	Tube Dia(mm)	Tube Dia(inch)	
10	PV04	PV5/32	
300	PV06	PV3/16	
	PV08	PV1/4	
	PV10	PV5/16	
	PV12	PV3/8	
000	PV14	PV1/2	
	PV15		
	D\/16		

#### **PMF** Female Bulkhead Straig

	Model	(ΨD-1)
	Tube Dia(mm) -	Thread Size (R)
	PMF04-01	PMF08-04
1	PMF04-02	PMF10-01
	PMF06-01	PMF10-02
	PMF06-02	PMF10-03
	PMF06-03	PMF10-04
	PMF06-04	PMF12-01
	PMF08-01	PMF12-02
	PMF08-02	PMF12-03
	PMF08-03	PMF12-04

#### PKD-(G) Male Triple Run Tee



## **PK** Unequal Triple Tee

	Model (ΦD)			
G)	Tube Dia(mm)	Tube Dia(inch)		
i)	PK04	PK3/16-5/32		
(i)	PK06	PK1/4-3/16		
5)	PK08	PK5/16-1/4		
i)	PK10	PK3/8-5/16		
(i)	PK06-04			
5)	PK08-04			
	PK08-06			
i)	PK10-06			
	PK10-08			

## PXG Unequal Double Branch



## PLL-(G) Male Long Elbow

	Model	(ΦD-1)
1011	Tube Dia(mm) - 1	- Γhread Size (R)/(G
	PLL04-M5	PLL08-02 (G)
	PLL04-M6	PLL08-03 (G)
-	PLL04-01 (G)	PLL08-04 (G)
1	PLL04-02 (G)	PLL10-01 (G)
	PLL06-M5	PLL10-02 (G)
	PLL06-M6	PLL10-03 (G)
	PLL06-01 (G)	PLL10-04 (G)
104	PLL06-02 (G)	PLL12-01 (G)
	PLL06-03 (G)	PLL12-02 (G)
	PLL06-04 (G)	PLL12-03 (G)
	PLL08-01 (G)	PLL12-04 (G)

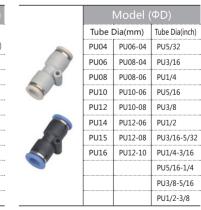
## **PLF** Female Elbow

	Model	(ΦD-T)
	Tube Dia(mm) -	Thread Size (R)
	PLF04-M5	PLF08-02
6011	PLF04-M6	PLF08-03
	PLF04-01	PLF08-04
	PLF04-02	PLF10-01
	PLF06-M5	PLF10-02
	PLF06-M6	PLF10-03
6 11	PLF06-01	PLF10-04
	PLF06-02	PLF12-01
	PLF06-03	PLF12-02
-	PLF06-04	PLF12-03
	PLF08-01	PLF12-04

#### PXT-(G) Male Double Branch \



## **PU** Union Straight



#### **PM** Bulkhead Unior



#### **PZ** Union Cross

	IVIOUCI (+D)
2	Tube Dia(mm)
SHOW	PM4
	PM6
	PM8
	PM10
	PM12

. 0	Mode	(ΦD)
E to	Tube Dia(mm)	Tube Dia(incl
501	PZ04	PZ5/32
	PZ06	PZ1/4
	PZ08	PZ5/16
6.11	PZ10	PZ3/8
200	PZ12	

(ΦD)	0	Model (ΦΙ
Tube Dia(inch)	A)	Tube Dia(mr
PZ5/32		PLM04
PZ1/4	-	PLM06
PZ5/16		PLM08
PZ3/8		PLM10
	-	PLM12

#### **PP** Plug



## **PPF** Cap



\*G: G thread with O-ring fittings.

PPF04

PPF06

PPF08

PPF10

PPF12

4-|P07 4-|P08

# Pneumatic Accessories

HAC/ HAD

HAC/ D A.

Accessories
HAC/ HAD
HR
HAC/ D A.

## Push-in Fittings Quick Type for Pneumatic Tubing

## PH-(G) Single Banjo

	Model (ΦD-T)			
	Tube Dia(mm) - Thread Size (R)/(G)		Tube Dia(inch) - Thread Size (NPT)	
11	PH04-M5	PH08-03 (G)	PH5/32-N01	PH5/16-N04
	PH04-01 (G)	PH08-04 (G)	PH3/16-N01	PH3/8-N01
	PH04-02 (G)	PH10-01 (G)	PH3/16-N02	PH3/8-N02
7 30	PH06-M5	PH10-02 (G)	PH1/4-N01	PH3/8-N03
	PH06-01 (G)	PH10-03 (G)	PH1/4-N02	PH3/8-N04
	PH06-02 (G)	PH10-04 (G)	PH1/4-N03	PH1/2-N02
	PH06-03 (G)	PH12-02 (G)	PH5/16-N01	PH1/2-N03
	PH08-01 (G)	PH12-03 (G)	PH5/16-N02	PH1/2-N04
-	PH08-02 (G)	PH12-04 (G)	PH5/16-N03	

## PHF-(G) Link-up Banjo

	Model (ΦD-T)				
Tube Dia(mm)	- Thread Size (R)/(G)	Tube Dia(inch) - T	hread Size (NPT)		
PHF04-M5	PHF08-03 (G)	PHF5/32-N01	PHF3/8-N02		
PHF04-01 (G	) PHF08-04 (G)	PHF3/16-N01	PHF3/8-N03		
PHF04-02 (G	) PHF10-02 (G)	PHF3/16-N02	PHF3/8-N04		
PHF06-M5	PHF10-03 (G)	PHF1/4-N01	PHF1/2-N02		
PHF06-01 (G	) PHF10-04 (G)	PHF1/4-N02	PHF1/2-N03		
PHF06-02 (G	) PHF12-02 (G)	PHF5/16-N01	PHF1/2-N04		
PHF06-03 (G	) PHF12-03 (G)	PHF5/16-N02			
PHF08-01 (G	) PHF12-04 (G)	PHF5/16-N03			
PHF08-02 (G	)	PHF5/16-N04			

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## PHT(2)-(G) Double Link-up Banjo

	Model (ΦD-T)		
	Tube Dia(mm) - 1	Thread Size (R)/(G)	
	PHT04-01 ( 2 ) (G)	PHT08-04 ( 2 ) (G)	
	PHT04-02 ( 2 ) (G)	PHT10-01 ( 2 ) (G)	
	PHT06-01 ( 2 ) (G)	PHT10-02 ( 2 ) (G)	
	PHT06-02 ( 2 ) (G)	PHT10-03 ( 2 ) (G)	
	PHT06-03 ( 2 ) (G)	PHT10-04 ( 2 ) (G)	
	PHT08-01 ( 2 ) (G)	PHT12-02 ( 2 ) (G)	
	PHT08-02 ( 2 ) (G)	PHT12-03 ( 2 ) (G)	
All and a second	PHT08-03 ( 2 ) (G)	PHT12-04 ( 2 ) (G)	

## PHT(3)-(G) Triple Link-up Banjo

	·	
	Model (ΦD-T)	
1	Tube Dia(mm) -	Thread Size (R)/(G)
	PHT04-01 ( 3 ) (G)	PHT08-04 ( 3 ) (G)
	PHT04-02 ( 3 ) (G)	PHT10-01 ( 3 ) (G)
No.	PHT06-01 ( 3 ) (G)	PHT10-02 ( 3 ) (G)
	PHT06-02 ( 3 ) (G)	PHT10-03 ( 3 ) (G)
	PHT06-03 ( 3 ) (G)	PHT10-04 ( 3 ) (G)
	PHT08-01 ( 3 ) (G)	PHT12-02 ( 3 ) (G)
	PHT08-02 ( 3 ) (G)	PHT12-03 ( 3 ) (G)
	PHT08-03 ( 3 ) (G)	PHT12-04 ( 3 ) (G)

## **PXJ** Plug-in Double Y

	Mode	l (ΦD)	
	Tube Dia(mm)		
	PXJ04-04	PXJ10-04	
	PXJ06-04	PXJ10-06	
	PXJ08-04	PXJ10-08	
	PXJ08-06		
	PXJ08-08		

## **PGJ** Plug-in Reducer

Model (ΦD)	
Tube Dia(mm)	
PGJ06-04	PGJ12-06
PGJ08-04	PGJ12-08
PGJ08-06	PGJ12-10
PGJ10-06	
PGJ10-08	
	Tube E PGJ06-04 PGJ08-04 PGJ08-06 PGJ10-06

## **PYJ** Plug-in Y

	Model (ΦD)	
	Tube Dia(mm)	
	PYJ04	PYJ06-04
	PYJ06	PYJ08-06
	PYJ08	PYJ10-08
170	PYJ10	PYJ12-10
	PYJ12	

## **PDJ** Plug-in Run Tee

	Model (ΦD)	
	Tube Dia(mm)	
	PDJ04	PDJ06-04
	PDJ06	PDJ08-06
	PDJ08	PDJ10-08
10.41	PDJ10	PDJ12-10
	PDJ12	

## PBJ Plug-in Tee



## **PLJ** Plug-in Elbow

	Mod	el (ΦD)
1 m	Tube Dia(mm)	
The All	PLJ04	PLJ06-04
	PLJ06	PLJ08-06
	PLJ08	PLJ10-08
1	PLJ10	PLJ12-10
	PLJ12	

## **PKJ** Plug-in Triple

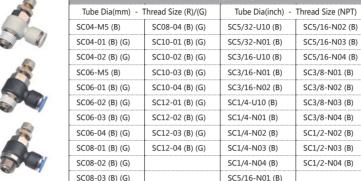
	Mod	el (ΦD)
	Tube Dia(mm)	
	PKJ04	PKJ06-04
1	PKJ06	PKJ08-04
	PKJ08	PKJ08-06
100	PKJ10	PKJ10-06
		PKJ10-08
•		

#### **PGT** Double Banjo

	Model (ΦD)
	Tube Dia(mm) - Thread Size (R)/(G)
	PGT04-01 (G)
	PGT06-01 (G)
	PGT06-02 (G)
	PGT08-01 (G)
	PGT08-02 (G)
	PGT10-02 (G)

## **Speed Controller**

## SC-(G) Male Elbow



## SS-(G) Rotatable Body



## **SU** Rotatable Body

	Model (ΦD)		
TO A	Tube Dia(mm)	Tube Dia(inch)	
0.13	SU04	SU5/32	
	SU06	SU3/16	
	SU08	SU1/4	
	SU10	SU5/16	
	SU12	SU3/8	
		SU1/2	

## SCA-(G) Slot-head Flow Controller

		Model (ΦD-T)	
	Tube Dia(mm) - Thread Size (R)/(G)		
	SCA04-M5 (B)	SCA08-01 (B) (G)	SCA12-01 (B) (G)
	SCA04-01 (B) (G)	SCA08-02 (B) (G)	SCA12-02 (B) (G)
	SCA06-M5 (B)	SCA08-03 (B) (G)	SCA12-03 (B) (G)
	SCA06-01 (B) (G)	SCA10-01 (B) (G)	
The same of the sa	SCA06-02 (B) (G)	SCA10-02 (B) (G)	
	SCA06-03 (B) (G)	SCA10-03 (B) (G)	

## Manual Valve

## **HVFF** Tube type

	Model (ΦD
	Tube Dia(mm) -Tube Dia(mm
	HVFF06-06 (B
	HVFF08-06 (B
	HVFF08-08 (B
	HVFF10-08 (B
	HVFF10-10 (B
	HVFF12-10 (B
	HVFF12-12 (B

#### HVSS-(G) Thread type

)		Model (ΦD-T)
)		Tube Dia(mm) - Thread Size (R)/(G)
)		HVSS01-01 (B) (G)
)	8.0	HVSS02-01 (B) (G)
)		HVSS02-02 (B) (G)
)	000	HVSS03-02 (B) (G)
)		HVSS03-03 (B) (G)
)	00	HVSS04-03 (B) (G)
)		HVSS04-04 (B) (G)
_		

#### HVSF-(G) From thread to tube end

	Model	(ΦT-D)
4	Thread Size (R)/(G	) - Tube Dia(mm)
Son .	HVSF01 (G)-06 (B)	HVSF04 (G)-10 (B)
	HVSF02 (G)-06 (B)	HVSF02 (G)-12 (B)
	HVSF03 (G)-06 (B)	HVSF03 (G)-12 (B)
	HVSF01 (G)-08 (B)	HVSF04 (G)-12 (B)
	HVSF02 (G)-08 (B)	
	HVSF03 (G)-08 (B)	
	HVSF02 (G)-10 (B)	
	HVSF03 (G)-10 (B)	

## ivialiuai vaive

## HVFS-(G) From tube to thread end

	IVIOUCI	(40 1)
	Tube Dia(mm) - T	hread Size (R)/(G)
	HVFS06-01 (B) (G)	HVFS10-04 (B) (G)
	HVFS06-02 (B) (G)	HVFS12-02 (B) (G)
2 2	HVFS06-03 (B) (G)	HVFS12-03 (B) (G)
	HVFS08-01 (B) (G)	HVFS12-04 (B) (G)
	HVFS08-02 (B) (G)	
	HVFS08-03 (B) (G)	
	HVFS10-02 (B) (G)	
	HVFS10-03 (B) (G)	

## **Ball Valve**

#### **BVU** Ball Valve

	Model (ΦD)		
	Tube Dia(mm)		
	BVU06	BVU08-06	
	BVU08	BVU12-10	
	BVU10		
	BVU12		

## BVC-(G) Ball Valve

	Model (ΦD-T)	
	Dia(mm) - Thread Size (R	L)/(G)
BVC06-01 (G)	BVC08-02 (G)	BVC10-04 (G)
BVC06-02 (G)	BVC08-03 (G)	BVC12-02 (G)
BVC06-03 (G)	BVC10-02 (G)	BVC12-03 (G)
BVC08-01 (G)	BVC10-03 (G)	BVC12-04 (G)

\*G: G thread with O-ring fittings.

\*G: G thread with O-ring fittings.

4-|P09 4-|P10



# Pneumatic Accessories

Accessories
HAC/ HAD
HR
HAC/ D A.
Accessories

## Brass Push-In Tube Fitting & Nut Lock Tube Fitting

## PCT-(G) Male Straight

	iviodei (ΨD-1)		
	Tube Dia(mm) - Thread Size (R)/(G)		
	PCT04-M5	PCT08-03 (G)	
	PCT04-01 (G)	PCT08-04 (G)	
S. Sarrey	PCT04-02 (G)	PCT10-01 (G)	
400	PCT06-M5	PCT10-02 (G)	
	PCT06-01 (G)	PCT10-03 (G)	
	PCT06-02 (G)	PCT10-04 (G)	
	PCT06-03 (G)	PCT12-02 (G)	
BHO	PCT06-04 (G)	PCT12-03 (G)	
	PCT08-01 (G)	PCT12-04 (G)	
	PCT08-02 (G)		

## PBT-(G) Male Branch Tee

	Tube Dia(mm) - T PBT04-M5	
	PBT04-M5	DDT00 03 (C)
		PBT08-03 (G)
	PBT04-01 (G)	PBT08-04 (G)
	PBT04-02 (G)	PBT10-01 (G)
24	PBT06-M5	PBT10-02 (G)
	PBT06-01 (G)	PBT10-03 (G)
	PBT06-02 (G)	PBT10-04 (G)
170	PBT06-03 (G)	PBT12-02 (G)
160	PBT06-04 (G)	PBT12-03 (G)
24	PBT08-01 (G)	PBT12-04 (G)
	PBT08-02 (G)	

## PCFT-(G) Female Straight



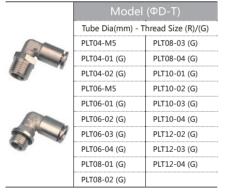
## PDT-(G) Male Run Tee



PDT08-01 (G)

PDT08-02 (G)

## PLT-(G) Male Elbow



#### **PMFT** Bulkhead Female Straight

	Model (ΦD-1)		
	Tube Dia(mm) - Thread Size (R)		
	PMFT04-01	PMFT10-02	
	PMFT04-02	PMFT10-03	
	PMFT06-01	PMFT10-04	
	PMFT06-02	PMFT12-02	
	PMFT06-03	PMFT12-03	
13	PMFT08-01	PMFT12-04	
	PMFT08-02	-	
	PMFT08-03		
	PMFT08-04		
	PMFT10-01	_	

#### **PUT** Union Straight



## **PVT** Union Elbow

PDT12-04 (G)



#### **PET** Union Tee



## **PGJT** Plug-in Reducer

	Model (ΦD)
	Tube Dia(mm)
	PGJT06-04
17	PGJT08-06
	PGJT10-08
~	PGJT12-10

## **PZT** Union Cross

)		Model
)		Tube Dia
		PZT0
		PZT0
		PZT0
	•	PZT1
		PZT1

#### PMT Bulkhead Union



## PKT Union Triple Tee

	Model (ΦD)
	Tube Dia(mm)
100	PKT04
	PKT06
	PKT08
	PKT10
	PKT12

## **BA** Female Screw Union



## **BD** Bush

	Model
	BD01-02
	BD01-03
	BD01-04
A Thurs	BD02-03
	BD02-04
	BD03-04

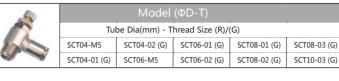
## PHT-(G) Single Banjo

	Model	(ФD-Т)
	Tube Dia(mm) - T	hread Size (R)/(G)
Charles of the Charle	PHT04-M5	PHT06-02 (G)
	PHT04-01 (G)	PHT08-01 (G)
	PHT04-02 (G)	PHT08-02 (G)
	PHT06-M5	PHT08-03 (G)
- 4	PHT06-01 (G)	PHT10-03 (G)

## 03001.2013 (C

## Brass Push-In Tube Fitting & Nut Lock Tube Fitting

## SCT-(G) Flow Controller



## BP-(G) Plug

Мс	del
BP-01 (G)	BP-04 (0
BP-02 (G)	
BP-03 (G)	

## **BZ** Plug



HAC/ HAD

HAC/ D A.

#### **BB** Union Stem

	Model		
	BB01-01	BB02-04	
	BB01-02	BB03-03	
	BB01-03	BB03-04	
A. C.	BB02-02	BB04-04	
	BB02-03		

## **BC** Male Straight

		Model	
Min.	BC04-01	BC08-01	BC10-04
	BC04-02	BC08-02	BC12-02
	BC06-01	BC08-03	BC12-03
	BC06-02	BC10-02	BC12-04
	BC06-03	BC10-03	

## **BU** Union Straight



## **BE** Union Tee



#### **BV** Union Elbow



#### **BT** Branch Tee

	Мо	del
	BT04-01	BT10-02
	BT06-01	BT10-03
	BT06-02	BT10-04
	BT08-01	BT12-02
	BT08-02	BT12-03
	BT08-03	BT12-04

## BF Female Straight

	Model		
	BF04-01	BF10-02	
	BF06-01	BF10-03	
	BF06-02	BF10-04	
	BF08-01	BF12-02	
	BF08-02	BF12-03	
	BF08-03	BF12-04	

#### **BL** Male Elbow



## **KC** Male Straight

		Model	
	KC04-01	KC08-01	KC10-0
	KC04-02	KC08-02	KC10-0
	KC06-01	KC08-03	KC12-0
	KC06-02	KC08-04	KC12-0
	KC06-03	KC10-02	KC12-0

## **KL** Male Union Elbow

		Model	
	KL04-01	KL08-01	KL10-0
T M	KL04-02	KL08-02	KL10-0
	KL06-01	KL08-03	KL12-0
911	KL06-02	KL08-04	KL12-0
	KL06-03	KL10-02	KL12-0

## **KLF** Female Elbow



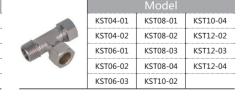
## **KF** Female Straight

		Model	
	KF04-01	KF08-01	KF10-03
	KF04-02	KF08-02	KF10-04
	KF06-01	KF08-03	KF12-02
	KF06-02	KF08-04	KF12-03
	KF06-03	KF10-02	KF12-04

## **KT** Male Branch Tee

		Model	
	KT04-01	KT08-01	KT10-03
	KT04-02	KT08-02	KT10-04
	KT06-01	KT08-03	KT12-02
	KT06-02	KT08-04	KT12-03
	KT06-03	KT10-02	KT12-04

#### **KST** Male Run Tee



#### **KU** Union Straight

The same of the sa	Model		
	KU-04	KU-10	
1	KU-06	KU-12	
	KU-08		

## **KV** Union Elbow

Model		
KV-04	KV-10	
KV-06	KV-12	
KV-08		

#### **KE** Union Tee

	Mo	del
- 1	KE-04	KE-10
	KE-06	KE-12
	KE-08	

\*G: G thread with O-ring fittings.

4-|P11 4-|P12

## Pneumatic Accessories



Accessories HAC/ HAD HAC/ D A.

## Metal Push-In Tube Fitting

CN10×6.5

CN12×8

CN	
	Mode
	CN8×5







Model
HM02
HM03
HM04

## СН





CF





НН

	Model
	HH8×5
	HH10×6.5
•	HH12×8

## HF

Model
HF02
HF03
HF04

## Silencer

Silencer

Model		
BSL-M5	BSL-10	
BSL-01	BSL-12	
BSL-02	BSL-14	
BSL-03	BSL-20	
BSL-04		
BSL-06		

## Flow Control Silencer



Model
BESL-01
BESL-02
BESL-03
BESL-04
BESL-06
BESL-10

## Miniature Silencer



## **Plastic Silencer**

Model	E.33
BSLM-01	
BSLM-02	
BSLM-03	
BSLM-04	
BSLM-06	
BSLM-10	

	Model	
	PSL-01	PAL-01
	PSL-02	PAL-02
	PSL-03	PAL-03
7	PSL-04	PAL-04

## PU/Nylon/PA Tubes

## **PU** Spiral Fitting



Code	EUC8-2	EUC8-4	EUC8-6	EUC8-8
External diameter	8	8	8	8
Length	2	4	6	8
Code	EUC10-2	EUC10-4	EUC10-6	EUC10-8
External diameter	10	10	10	10
Length	2	4	6	8

## Nylon / Polyurethane / PU Tube



Code	0320	0425 0640		0850	0860	1065
External diameter	Ф3.0	Ф4.0	Ф 6.0	Ф8.0	Ф8.0 Ф10.0	
Bore	Ф 2.0	Ф 2.5	Ф4.0	Ф 5.0	Ф 6.0 Ф 6.5	
Code	1070	1280	1290	1611	1613	
External diameter	Ф 10.0	Ф12.0	Ф 12.0	Ф 16.0	Ф 16.0	
Bore	Ф7.0	Ф8.0	Ф 9.0	Ф 11.0	Ф13.0	

## 

# Common Thread & Thread Standard

Thread Name		Thread Code	Thread Type	Thread angle (α)	Matching type	Standard	Standard code	Standard organization
Inch non- threaded Parallel seal pipe threads		G			Column/	ISO 228-1 2003	ISO	ISO International standard organization
						GB/T 7307 2001	GB	GB China national standardization administration
	BSPP	Male thread Female thread	55°	Column coordination	BS 228-1 2003	BS	BS British Standard Institute	
	PF	i ciliale tilleau			JIS B 0202	JIS	JIS Japan industry standards	
	threads	PF				KS B 0221	KS	KS Korea technical standards agency
Inch threaded Taper seal pipe thread		Rp	Female thread		Column/Cone coordination	ISO 7-1	ISO	ISO International standard organization
		Rc		55°	Cone/Cone coordination	GB/T 7306-1987	GB	GB China national standardization administration
	Taper	R	Male thread					
		pipe BSPT	Male thread Female thread			BS 21 1985	BS	BS British Standard Institute
	thread					JIS B 0203	JIS	JIS Japan industry standards
						KS B 0222	KS	KS Korea technical standards agency
American general seal pipe thread integral scr	Parallel		Female thread	60°	Column/Cone coordination	ANSI B1.20.1-1983	ANSI	ANSI American national standards institute
	internal pipe thread	NPSC				GB/T 12716-2002M	GB	GB China national standardization administration
	Taper		Male thread Female thread		Cone/Cone coordination	ANSI B1.20.1-1983	ANSI	ANSI American national standards institute
	screw thread	NPT				GB/T 12716-2002M	GB	GB China national standardization administration
Metric plain thread		ad M	Male thread Female thread	60°	Column/ Column coordination	ISO 261-1998	ISO	ISO International standard organization
						GB/T 1193-2003	GB	GB China national standardization administration

## Product Related Standards

ISO-International standard organization: ISO 6432 ISO 6430 ISO 15552

VDMA-German mechanical engineering association: VDMA 24562

DIN-German standardization institute: DIN 24335 DIN71751 **DIN 648** 

CETOP-European hydraulic and pneumatics commission: CETOP RP52P