# JAARIS.COM A PNEUMATICS

# JAARIS

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# **AIR FITTINGS & ACCESSORIES**

Air Fittings are essential to any pneumatic circuit, and we carry them all! Whether your system is running pressure or vacuum we carry push-in fittings, connectors, flow controls, and more in a variety of material to suit your application.

### **PUSH-IN Y CONNECTOR**

This Y type connector is used to separate the air-line into branch lines which are in the same direction, and it can also be used to combine two airlines into one line.



Fitting Type	Union Y	
Size	Standard	
Nominal size	0.406 "	
Assembly position	Any	
Design structure	Push / Pull Principal	
Operating pressure complete temperature range	'-13.8 145 Psi	
Temperature dependent operating pressure	'−13.8 145 Psi	
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:-:-]	
Note on operating and pilot medium	Lubricated operation possible	
Corrosion resistance classification CRC	1 – Low corrosion stress	
Ambient temperature	32 140 °F	
Available Sizes	6mm 8mm 10mm	
connection 1	1/2" outside diameter, for tubing	
connection 2	1/2″ outside diameter, for tubing	
Materials note	Contains PWIS substancesConforms to RoHS	
Material housing	РВТ	
Material release ring	POM	
Material of tubing seal	NBR	

# UNION TEE PNEUMATIC PUSH-IN FITTING

The push-in fittings are used for the connection of various pneumatic components such as control valves and pneumatic actuators. Pneumatic tubing such as polyethylene, polyurethane and nylon is typically used, however rigid pipe such as copper and aluminum can also be used.



Fitting Type	Union Tee
Size	Standard
Nominal size	0.354 "
Assembly position	Any
Design structure	Push / Pull Principal
Operating pressure complete temperature range	'-13.8 145 Psi
Temperature dependent operating pressure	'-13.8 145 Psi
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:-:-]
Note on operating and pilot medium	Lubricated operation possible
Corrosion resistance classification CRC	1 – Low corrosion stress
Ambient temperature	32 140 °F
Available Sizes	6mm 8mm 10mm
connection 1	1/2″ outside diameter, for tubing
connection 2	1/2″ outside diameter, for tubing
Colour of release ring	Blue
Materials note	Contains PWIS substancesConforms to RoHS
Material housing	PBT
Material release ring	POM
Material of tubing seal	NBR
Material of tube retaining claw	High alloy steel, non-corrosive

### **90 DEGREE ELBOW PUSH-IN FITTING**

Also known as one touch fittings, these tube fittings are designed to slide into the fitting with an internal grasping ring holding it in place. Intended for low pressure applications and for use with plastic and soft metal tubing.



Fitting Type	Union Elbow
Size	Standard
Nominal size	0.354 "
Assembly position	Any
Design structure	Push / Pull Principal
Operating pressure complete temperature range	'-13.8 145 Psi
Temperature dependent operating pressure	'-13.8 145 Psi
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:-:-]
Note on operating and pilot medium	Lubricated operation possible
Corrosion resistance classification CRC	1 – Low corrosion stress
Ambient temperature	32 140 °F
Available Sizes	6mm 8mm 10mm
connection 1	1/2″ outside diameter, for tubing
connection 2	1/2″ outside diameter, for tubing
Colour of release ring	Blue
Materials note	Contains PWIS substancesConforms to RoHS
Material housing	PBT
Material release ring	POM
Material of tubing seal	NBR
Material of tube retaining claw	High alloy steel, non-corrosive

# PUSH-IN FITTING STRAIGHT CONNECTOR

One touch "push in" fittings are used to connect pneumatic tubing, such as polyurethane and nylon, to various control-valves, cylinders and other associated equipment.



Fitting Type	Union Straight
Size	Standard
Nominal size	0.354 "
Assembly position	Any
Design structure	Push / Pull Principal
Operating pressure complete temperature range	'-13.8 145 Psi
Temperature dependent operating pressure	'-13.8 145 Psi
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:-:-]
Note on operating and pilot medium	Lubricated operation possible
Corrosion resistance classification CRC	1 – Low corrosion stress
Ambient temperature	32 140 °F
Available Sizes	6mm 8mm 10mm
connection 1	1/2″ outside diameter, for tubing
connection 2	1/2" outside diameter, for tubing
Colour of release ring	Blue
Materials note	Contains PWIS substancesConforms to RoHS
Material housing	PBT
Material release ring	POM
Material of tubing seal	NBR
Material of tube retaining claw	High alloy steel, non-corrosive

### **PUSH-IN FITTING STRAIGHT TYPE**

Pneumatic push-in fittings, also called push to connect fittings, provide a leakfree means of easily connecting hoses in your compressed air system.



Fitting Type	Male Straight
Size	Standard
Type of seal on screw-in stud	coating
Assembly position	Any
Design structure	Push / Pull Principal
Operating pressure complete temperature range	'-13.8 145 Psi
Temperature dependent operating pressure	'-13.8 145 Psi
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:-:-]
Note on operating and pilot medium	Lubricated operation possible
Corrosion resistance classification CRC	1 – Low corrosion stress
Ambient temperature	32 140 °F
Max. tightening torque	20.652 ft-lbf
Product weight	1.626 oz
Colour of release ring	Blue
Materials note	Contains PWIS substancesConforms to RoHS
Material housing	Nickel-plated brass
Material of threaded seal	PTFE

# PNEUMATIC SPEED-CONTROL VALVE

Pneumatic speed control valve can be used to reduce the rate of flow in a section of a pneumatic circuit, which can help reduce the operating speed of actuators. They regulate air flow in only one direction, which can be checked by the mark of the flow direction on the body.



Valve function	One-way flow control function
connection 1	6mm 8mm 10mm
connection 2	6mm 8mm 10mm
Adjusting element	Knurled screw
Mounting type	Optional Front panel installation with through-hole with accessories
Standard nominal flow rate in flow control direction	245 l/min
Standard nominal flow rate in non- return direction	430 l/min
Operating pressure	0.2 10 bar
Ambient temperature	'−10 60 °C
Material housing	PA-reinforced
Assembly position	Any
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (subsequently required for further operation)
Design	Inline

# PNEUMATIC ONE-WAY FLOW CONTROL VALVE

Flow controls also known as speed controllers are the preferred solution for controlling speed in a single or double acting cylinder application. Flow controls manage the extension and/or retraction speed of the cylinder rod by reducing the exhaust air or the supply air flow directly to the actuator.



Valve function	One-way flow control function for exhaust air
Available Sizes	6mm 8mm 10mm
Type of actuation	manual
Adjusting element	Knurled screw
Mounting type	Threaded
Standard nominal flow rate in flow control direction	650 l/min
Standard nominal flow rate in non- return direction	600 750 l/min
Ambient temperature	'−10 60 °C
Assembly position	Any
Operating pressure complete temperature range	0.2 10 bar
Standard flow rate in direction of flow control: 6 -> 0 bar	1,080 l/min
Standard flow rate in blocked direction: 6 -> 0 bar	800 1250 l/min
Design	Elbow

### **BRASS EXHAUST MUFFLER**

It is used to reduce dynamic noise of the pneumatic components or device exhaust and can be used as filter to protect dirt and foreign particles from entering port. Easy to install and take off with male thread design.



Valve function	Flow control - silencer function
Available Sizes	G1/2 G1/4
Adjusting element	Slotted head screw
Mounting type	Threaded
Standard nominal flow rate in flow control direction	3,600 l/min
Standard flow rate 6 -> 0 bar	0 3,600 l/min
Operating pressure	0 10 bar
Ambient temperature	'−10 70 °C
Assembly position	Any
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:-:-]
Note on operating and pilot medium	Lubricated operation possible (subsequently required for further operation)
Medium temperature	'−10 70 °C
Product weight	75 g
Design	Flow Control Muffler

# PNEUMATIC PLASTIC PIPE PU/PVC/NYLON HOSE TUBE CUTTER

The tube cutter is suitable for cutting various types of pipe tubes. It is durable. Operates by putting the hose in the V slot and pressing the blade down. Gives a clean cut which helps ensure a leak proof fitting of the tube when put into fittings.



Fitting Type	Tube Cutters
Cuts up to	12mm tube & hose
Material fire test	UL94 V-0 (casing)
Product weight	21 g
Color	Blue
Materials note	Conforms to RoHS

# AIR LINE EQUIPMENT (FRL : FILTERS, REGULATORS, LUBRICATORS)

Ensure your compressed air quality with JAARIS FRL combination units. Filter moisture and particles, regulate with high precision, and lubricate over a wide airflow with our two and three unit modular combinations and individual components. All of JAARIS units come standard with a pressure gauge and bowl guard.

### 1/2 AIR SOURCE TREATMENT UNIT

The unit consists of a filter to remove air borne impurities & moisture, a regulator to control the pressure and a lubricator to introduce controlled amount of lubricant mist into the air stream.



Guaranteed Pressure Resistance	1.5MPa	
Max.Working Pressure	0.85MPa	
Working Temperature	5 <sup>~</sup> 60℃	
Filter Precision	25 (5um is optional)	
Recommended Oil	Turbine No.1 oil ISOVG32	
Bowl Material	Polycarbonate	
Bowl Guard	None	Available
Pressure Adjusting Range	0.05 <sup>~</sup> 0.7MPa	0.05 <sup>~</sup> 0.85MPa
Drain Function	Differential Drain / Automatic Drain	
Valve type	With overflow	

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# 1/4 AIR SOURCE TREATMENT UNIT

The unit consists of a filter to remove air borne impurities & moisture, a regulator to control the pressure and a lubricator to introduce controlled amount of lubricant mist into the air stream.



Filter precision	25um(5,40um is optional)	
Adjusting pressure range	0.05 <sup>~</sup> 0.85Mpa	
Max.Adjusting pressure	0.95Mpa	
Guaranteed.pressure	1.5Mpa	
Working temperature	5~60°C	
Lubricator bowl capacity	25(CC)	90(CC)
Recommended Oil	ISO VG32 or Equivalent Oil	
Weight	0.7KG	

# **DIRECTIONAL VALVES**

Our line of solenoid valves converts electrical signals into pneumatic functions efficiently, directing air through a valve and into the circuit. Compact designs, fast response times and high flow rates backed by robust reliability make our valves ideal for many industries.

# 5-WAY 2-POSITION SOLENOID VALVE

This Electro-Pneumatic Solenoid Valve is a switch for routing air to any pneumatic device, usually an actuator, allowing a relatively small electrical signal to control a large device.



Working Medium	Air (40Micron Filtered)
Acting Type	Inner Guide Type
Working Pressure	0.15 <sup>~</sup> 0.8MPa
Available Sizes	G1/4 G1/2
Max.Pressure Resisance	1.2MPa
Working Temperature	5~50°C
Voltage Range	±10%
Power Consumption	AC:5.5W DC:4.8W
Insulation & Protection Class	F Class IP65
Wiring Form	Lead wire or Connector type
Max.Frequency	5 Cycle/Secretary
Shortest Activation Time	0.05 Second

Our cylinders and actuators are ideal for a variety of applications in a broad range of industries. Our Piston Cylinders are available in single acting and double acting configurations. With many body design variations choose the one that fits your application.

TIE ROD CYLINDER 63MM X 200MM



Stroke	200 mm
Piston Diameter	63 mm
Motion Pattern	Double Action
Working Medium	Air
Assembly position	Any
Conforms to standard	ISO 15552
Piston-rod end	Male thread
Guaranteed Pressure	1.5MPa
Buffer	Adjustable Buffer
Min Operating Pressure	0.1MPa
Operating Speed	300-800mm/s
Condition Temperature	-570°C
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]

Our cylinders and actuators are ideal for a variety of applications in a broad range of industries. Our Piston Cylinders are available in single acting and double acting configurations. With many body design variations choose the one that fits your application.

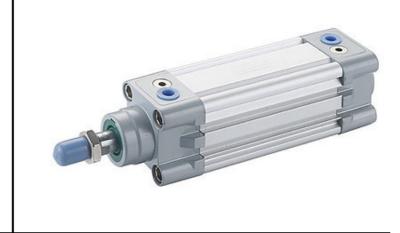
### TIE ROD CYLINDER 50MM X 125MM



Stroke	125 mm
Piston Diameter	50 mm
Motion Pattern	Double Action
Working Medium	Air
Assembly position	Any
Conforms to standard	ISO 15552
Piston-rod end	Male thread
Guaranteed Pressure	1.5MPa
Buffer	Adjustable Buffer
Min Operating Pressure	0.1MPa
Operating Speed	300-800mm/s
Condition Temperature	-570°C
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]

Our cylinders and actuators are ideal for a variety of applications in a broad range of industries. Our Piston Cylinders are available in single acting and double acting configurations. With many body design variations choose the one that fits your application.

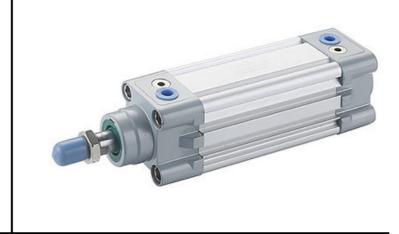
# ISO STANDARD SQUARE TUBE AIR CYLINDER 63MM X 150MM



Stroke	150 mm
Piston Diameter	63 mm
Motion Pattern	Double Action
Cushioning	PPV: Pneumatic cushioning adjustable at both ends
Assembly position	Any
Conforms to standard	ISO 6431
Piston-rod end	Male thread
Guaranteed Pressure	1.5MPa
Max Operating Pressure	1.0MPa
Min Operating Pressure	0.1MPa
Operating Speed	50-800mm/s
Condition Temperature	-570°C
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]

Our cylinders and actuators are ideal for a variety of applications in a broad range of industries. Our Piston Cylinders are available in single acting and double acting configurations. With many body design variations choose the one that fits your application.

# ISO STANDARD SQUARE TUBE AIR CYLINDER 50MM X 100MM



Stroke	100 mm
Piston Diameter	50 mm
Motion Pattern	Double Action
Cushioning	PPV: Pneumatic cushioning adjustable at both ends
Assembly position	Any
Conforms to standard	ISO 6431
Piston-rod end	Male thread
Guaranteed Pressure	1.5MPa
Max Operating Pressure	1.0MPa
Min Operating Pressure	0.1MPa
Operating Speed	50-800mm/s
Condition Temperature	-570°C
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]

# PNEUMATIC TUBING

JAARIS's polyurethane tubing is flexible, kink-resistant and abrasion resistant and exhibits similar characteristics to rubber and have chemical resistance associated with plastics. It is therefore suitable for use with a wide variety of applications across many of the major industrial markets.

### **POLYUTHERANE TUBING**

JAARIS's polyurethane tubing is flexible easy to assemble on to designated fittings. Polyurethane tubing exhibits similar characteristics to rubber and have chemical resistance associated with plastics. It is therefore suitable for use with a wide variety of applications across many of the major industrial markets.



### **Features:**

- The transparent tube has high transparency, and the state of medium flow is clearly visible.
- Made of high resilience polyurethane raw materials; making the pneumatic tube have a smaller bending radius and easier to install.
- Yellowing resistance is above grade 3, and it is not easy to turn yellow.
- The color tube adopts imported weather-resistant toner. The color tube manufactured is standard in color and bright, and will not fade in long-term work.
- On-line pipe diameter control system is adopted, and the tolerance of pipe diameter is controlled within  $\triangle$  ± 0.12mm.
- Made of 100% high-physical plastic polyurethane elastomer (TPU), which is used under a constant working pressure state and has a longer life.
- Passed SGS certification and ROHS certification.

# **EVERYTHING YOU NEED FOR YOUR PNEUMATIC** SYSTEM

# **FEEL FREE TO CONTACT**



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