



Product Overview



Terms of Delivery

General delivery and payment conditions

Applicable to all offers and contract concerning deliveries and/or services to be executed by SMC Pneumatics BV are the ORGALIME (S2000) general terms and conditions for delivery of metal, electro technical and associated electronic products. A copy of these conditions (August 2000 edition) will be sent free on request. In addition, the following conditions apply to all services and supplies, unless otherwise agreed in writing.

Prices

All specified prices in the separate PO pricelist are in euros (excluding VAT). With respect to all prices in all our price list we retain the right to change these without advance notice.

Payment

Payment must be made within 30 days after the invoice date.

Deliveries and order costs

Deliveries will be done by our chosen forwarder and normally will take place within 48 hours. Express or courier delivery in consultation with our sales department. For orders with an invoice value less than 200 euros (excluding VAT), a sum of 12 euros will be charged for shipping and packaging costs. When stocked products are out of stock, standard delivery times will apply.

Return shipments

Return shipments will only be accepted after consulting the sales department. After approval you will receive a completed return form including instructions using our chosen forwarder. Depending on the cause of return, control and processing costs equal to 10% of the net selling price (with a minimum of 25 euros excluding shipping) will be invoiced. Returned items that are damaged and/or not in original packaging cannot be processed. Returning the items with accompanying return form will help reducing the processing time.

Repair orders

Repair orders can only be received after consulting the technical department for failure description, shipment instructions and repair order number. The receipt of the product will then be confirmed with a detailed quotation including the estimated repair cost. If you decide not to have the item repaired, 35 euros investigation cost will be charged. Sending repair order products with accompanying repair number will help reducing the processing time.

Service, overhaul and installation

To perform tasks such as service, overhaul and installation, we have skilled technicians available. Rates and conditions may be obtained from our sales department.

SMC Pneumatics BV De Ruyterkade 120

De Ruyterkade 120 1011 AB Amsterdam Phone: +31 (0)20 531 88 88 Fax: +31 (0)20 531 88 80 info@smcpneumatics.nl www.smcpneumatics.nl



Energy Saving

2

Dear customer,

ost of today's manufacturing processes are fulfilled by using industrial automation equipment, taking over human requirements, improving efficiency, safety, quality and reducing cost.

However, global markets are expanding – especially in emerging economies – so is your competition from these areas. Added value is and remains an important condition to differentiate. It can be created by using industrial automation equipment provided by companies that deliver environmentally responsible products along with local service, education and knowledge. This knowledge for instance could help you to go with today trends on self diagnosing, energy saving and sensor based process control.

At SMC we have acknowledged this change and offer innovative products, expertise, training and services, helping you in the best possible way. Some examples:

- Our extensive global and local sales network with expert engineers is everywhere nearby.
- Our local SMC Industrial Training Program provides you the knowledge and skills needed to apply pneumatics in a comprehensive way.
- Our local SMC Energy Saving Program helps you reducing your carbon footprint, with energy saving audits, leak detection and performing on-site process optimization.
- Our innovative products come from our worldwide production facilities having certified and environmentally conscious production systems.
- We offer environmental friendly products that comply to the Restriction of Hazardous Substances directive (RoHS) and REACH regulations.

Additionally the availability of products is key factor to act fast on customer demands. Time to market is crucial. Therefore we hold a strong stock position in our **SMC European Central Warehouse**. This warehouse – with more than 30 000 individual products – in Antwerp guarantees a direct availability of our generic products. Delivery is direct or through an extensive network of distributors to you or your customer's workspace.

This catalog contains a selection from the total 630 000 products available. Blue marked products in this catalog are in stock. For the full range of our innovative products, please have a look at our **Digital Catalog** at our website, where you will also find documentation, CAD files and configurators for an optimal selection of your requested product.

Sincerely,

© 2011 SMC PNEUMATICS BV

BART TUIJNMAN Managing Director, SMC Pneumatics BV Flow control equipment Solenoid valves, mechanical and manual valves

Air preparation equipment

Fieldbus

Cylinders, rotary actuators and shock absorbers

Electric actuators

Grippers and vacuum

Pressure, vacuum and flow switches

Fittings and tubing

Others

SI units, symbols and dimensioning

Training

Organisation

SMC worldwide

As a worldwide leading expert in pneumatics SMC is counting 260 sales offices in 78 countries. With over 15 000 employees, SMC is never far away from you or your customers. This aligns perfectly with the mission: providing innovative products and services for industrial automation, adding value and fitting the needs of local customers.





SMC Netherlands

The availability of SMC products in the Netherlands goes back to 1968 and has been substantially extended. Today the comprehensive SMC product range and high quality is acknowledged as one of the best of the Dutch market. The unique SMC market approach in the Netherlands is based on a thorough customer support, a comprehensive service and optimal product availability. In addition, SMC is always committed to have intensive and personal collaboration with its customers.

Quality

SMC aims at providing their customers high quality innovative solutions for industrial automation. To do so, SMC is using the latest pneumatic technology available today. With ISO 9001 and ISO 14001 certification, 29 worldwide established manufacturing facilities guarantee the highest long term quality and reliability of products that are produced in an environmentally conscious way.



SMC approach

Customized support and efficient product development

In competitive markets, technical support is not just about solving problems as they arise, but also to avoid them with solid knowledge and good support. SMC invests heavily in training his employees, so you can count on highly skilled and expertised engineers. With over 1 000 fully trained European Sales Engineers SMC is capable of finding customized solutions for the most complex challenges on your or your customer's site.





Short delivery times

The European Central Warehouse (ECW) located in Antwerp has a stock of as many as 30 000 different products. These products can be delivered within 48 hours at any address in the Netherlands. Additional over 30 distributors facilitate local generic and customized stock.

Knowledge transfer

SMC offers the most modern teaching facilities for training employees, distributors and customers. Additionally SMC provides commercial training of a general nature like Introduction in Pneumatics, but also more specific training like Energy Saving, Positioning or Troubleshooting. The courses can be followed in Amsterdam, but there are also possibilities for "in-house" company training that can be customized as well.





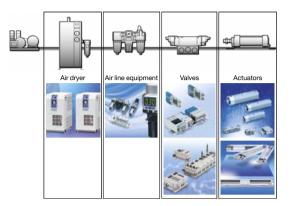
As a result of their approach SMC received the *Dutch Industrial Suppliers Award 2011* and was named the best Dutch industrial supplier in the category Best logistics supplier.

The Dutch Industrial Suppliers Awards is an initiative of Link Magazine in cooperation with ING-Bank and EP&C Patent agency. SMC has been nominated by its customers and was rewarded by an independent jury.

Products

Primary products

The comprehensive SMC product range consists of more than 11 000 products in 630 000 varieties. It includes products for general purpose as well as products for a very specific task. Together with a constant flow of new products, SMC is always able to point you in the right direction.





Products in nearby markets

When the SMC standard product range is not covering the customer needs, customer specific products can be developed. Not only for application in our major industry segments like Electronics, Automotive, Food & Packaging, Life science and Agriculture but any industry where industrial automation is commonplace.

Innovations

More than 1 300 SMC R&D engineers are working globally on designing new products and continuously improving existing products. Every year, 6% of the SMC total turnover is invested in R&D, resulting in the launch of 50 new products each year.







Make things easier!

or the full range of innovative products, please take a look at the SMC website. There you will find the Digital Catalogue that will help you find all product related information. As well as the SMC Model Selection Software and various Product Configurators helping you selecting the right products for your application.

You can also find information on the latest products and services, read or sign-up for the monthly newsletter "e-Matters" or find the latest schedule for the Industrial Training Program.





SMC Digital Catalogue

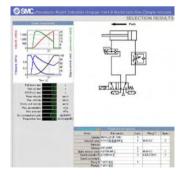
The SMC Digital Catalogue can guide you in finding online product information, download catalogues and CAD files in any required format. You can also export various product data.

SMC Model Selection Software

The SMC Model Selection Software helps you finding products that fit your application. Enter your configuration and the dynamic simulation will help you finding the right components. It is also an easy tool for optimization of existing pneumatic systems.

In the same range the Energy Saving Software and the new developed Energy Saving Assessment Tools help you to reduce your air consumption in factory environments with associated cost savings and reduced CO2 emissions.





SMC Product Configurators

Configure Actuators, Manifolds and Air Line Equipment as you want. The SMC Product Configurators help you select the right products for your application.

SAFETY

Always read before handling

These safety instructions are intended to prevent hazardous situations and/or equipment damage. These instructions indicate the level of potential hazard by labeling \triangle **CAUTION!**, \triangle **WARNING!** or \triangle **DANGER!**. To ensure safety, be sure to observe ISO 4414¹, JIS B 8370² and other safety practices (EN ISO 13849-1³).

▲ CAUTION! Operator error could result in injury or equipment damage.
▲ WARNING! Operator error could result in serious injury or loss of life.
▲ DANGER! In extreme conditions, there is a possible result of serious injury or loss of life.

- 1. ISO 4414: Pneumatic fluid power Recommendations for the application of equipment to transmission and control systems.
- 2. JIS B 8370: Pneumatic system axiom, Japan.
- 3. EN ISO 13849-1: EN ISO 13849-1: Safety of machinery Safety-related parts of control systems.

△ WARNING!

The compatibility of pneumatic equipment is the responsibility of the person who designs the pneumatic system or decides its specifications.

Since the products specified here are used in various operating conditions, their compatibility with the specific pneumatic system must be based on specifications or after analysis and/or tests to meet your specific requirements.

Only trained personnel should operate pneumatically operated machinery and equipment.

Compressed air can be dangerous if an operator is unfamiliar with it. Assembly, handling or repair of pneumatic systems should be performed by trained and experienced operators.

Do not service machinery/equipment or attempt to remove components until safety is confirmed.

- 1. Inspection and maintenance of machinery/equipment should only be performed after confirmation of safe locked-out control positions.
- 2. When equipment is to be removed, confirm the safety process as mentioned above. Cut the supply pressure from the equipment and exhaust all residual compressed air in the system.
- 3. Before machinery/equipment is re-started, take measures to prevent quick extensions of the cylinder piston rod etc. (Bleed air into the system gradually to create back-pressure.) (Use a soft start valve according to EN ISO 13849-1.)

Contact SMC if the product is to be used in any of the following conditions:

- 1. Conditions and environments beyond the given specifications, or if product is used outdoors.
- Installation on equipment in conjunction with atomic energy, railway, air navigation, vehicles, medical equipment, food and beverage, recreation equipment, emergency stop circuits, press applications, or safety equipment.
- 3. An application which has the possibility of having negative effects on people, property, or animals, requiring special safety analysis.