Locally Manufactured and Assembled

High quality components with long life cycle performance now manufactured and assembled in South Africa.

SMC, the global leaders in pneumatic technology and experts in automation has continued to invest in its manufacturing capabilities at its Midrand based South African subsidiary. This coupled with the addition of increased customer specified stockholding ensures that customers can have both standard and special products, including assembled components, with guaranteed fast delivery options.

Great products, excellent prices, no delays – guaranteed peace of mind!

SMC Corporation South Africa (Pty) Ltd.
Unit 4
Midrand Central Business Park
1019 Morkels close
Midrand
Telephone: +27 11 100 5866

Technical: zatechnical@smcza.co.za
Sales: zasales@smcza.co.za
Orders: zaorders@smcza.co.za

www.smcza.co.za
Training Dates and Courses now available!

Accredited pneumatics, hydraulics and mechatronics courses on offer

SMC’s internationally and MERSETA accredited three and four-day courses are comprehensively designed to cover the fundamentals of fluid power whilst remaining competitively priced. Basic pneumatics, electro-pneumatics, basic hydraulics, electro-hydraulics and mechatronics courses will be held in throughout the year and customised courses are available upon request.

Each course covers principles and applications thanks to carefully structured courses designed to incorporate both theory and practical.

Should you be interested in on-site training, or customized training courses, please contact our training manager, Riaan van Eck about options available: rvanbeck@smcza.co.za

Basic Pneumatic Course
This three-day MERSETA accredited course is designed to provide delegates the understanding a basic pneumatic systems, identifying pneumatic components, circuit construction, basic fault finding techniques and how to operate safely around pneumatics systems.

Electro-Pneumatic Course
This three-day MERSETA accredited course deals with the electrical control of pneumatic actuators using electrical sensing and switching devices. Delegates will be able to read and design electro-pneumatic circuits diagrams, and use the diagrams to construct electro-pneumatic systems.

Basic Hydraulic Course
This three-day MERSETA accredited course is designed to provide delegates the understanding a basic hydraulic systems, identifying hydraulic components, circuit construction, and how to operate safely around hydraulic systems.

Electro-Hydraulic Course
This three-day MERSETA accredited course deals with the electrical control of hydraulic actuators using electrical sensing and switching devices. Delegates will be able to read and design electro-hydraulic circuits diagrams, and use the diagrams to construct electro-hydraulic systems.

Mechatronics Course
This four-day course is designed to provide delegates the understanding of how pneumatics, hydraulics, electrical and electronic components (PLC’s) are all integrated into a system used for factory automation. The course is MERSETA accredited.

Contact us now to find out more

3 SMART SOLUTIONS FROM SMC

SMC is promoting Industry 4.0 in the context of flexible customer applications with two new IO-Link devices and a new IO-Link master. What all three have in common is that it is possible to diagnose and change operating parameters during operation. This makes it possible to make machines and systems for batch size more efficient without costly controller-side reprogramming.

The benefits at a glance:
- Simple predictive diagnostics option
- Shorter downtimes
- High flexibility
- Increased productivity

IO-Link device series ITV
- Proportional controller
- Transfer rate COM3 (230 kbps)
- Dynamically adjustable parameters e.g. offset gain
- Pressure setting range: 0-1 MPa, max. supply pressure 1.2 MPa
- Protection rating: IP65
- Flow rate <0.01 l/min at a weight of 750g

IO-Link device series EX260
- Communication module has the highest possible transmission rate according to COM3 (230 kbps)
- Blockable using the new SY valve series
- Integrated cycle counter
- Up to 32 coils can be accessed
- High durability of the new SY valve series
- 70 million cycles with rubber seal, 200 million cycles metal seal
- Protection rating: IP67

IO-Link master series EX600
- Communication platform blockable using the new SY valve series + PROFINET Protocol
- Scalable design: up to four masters blockable
- Number of IO-Link devices: four per master
- Protection rating: IP67

Contact us now to find out more

SMC - more than just pneumatics

Follow us on

Worldwide leading experts in pneumatics and industrial automation

www.smcza.co.za
3 port Solenoid Valve, Safety Standard ISO 13849-1
VPVG Series

Single Residual pressure release valve - 3 port solenoid valve
VP542-X536/VP742-X536 Series

- Safety Standard ISO 13849-1 for Category 2
- This product is designed to be used as a component in a Category 2 safety system.
- The single unit alone cannot be considered as a Category 2 safety system.
- Valve position energised/de-energised can be detected
- The detecting function of the main valve is available to detect error in the input signal and valve operation.
- Base mounted version also available.

Dual residual pressure release valve - 3 port solenoid valve
VP544-X538/VP744-X538 Series

- Safety Standard ISO 13849-1 for Category 3 and 4
- The product is designed to be used as a component in a Category 3, 4 safety system.
- The single unit alone cannot be considered as a Category 3, 4 safety system.
- Valve position energised/de-energised can be detected
- Redundancy
- Valve has 2 stations, so if one of them fails to operate, residual pressure is released by the remaining valve.
- Modular connection to PRI unit.

Dual residual pressure release valve - 3 port solenoid valve
VG342-X87 Series

- Safety Standard ISO 13849-1 for Category 3 and 4, compliant with performance level. This product is designed to be used as a component in a Category 3, 4 safety system. The single unit alone cannot be considered as a Category 3, 4 safety system.
- Valve position energised/de-energised can be detected
- Redundancy
- Valve has 2 stations, so if one of them fails to operate, residual pressure is released by the remaining valve.

5 port solenoid valve, manifold type
SY3000/5000/7000 Series

- Energy efficiency
0.1 W with power saving circuit, 0.35 W standard
- Space saving
16 mm width (SY3000)
- Top, bottom, side ported available
- Wiring, piping and operation are integrated in one side
- Direction, size and type of the piping can be changed
- Applicable to various types of serial wiring
- Slide manual override provides better visibility
- Vacuum release valve with restrictor - allows control of both vacuum suction and release with a single valve unit.

5 port solenoid valve, plug-in sub-plate
SY3000/5000/7000 Series

- Possible to be used independently
- Energy efficiency
0.1 W with power saving circuit
0.35 W standard
- Space saving
16 mm width (SY3000)
- Top, bottom, side ported available
- Size SY7000 available
- Easy attach/detach and wiring - M12 waterproof connector type
- IP67 enclosure.

5 port solenoid valve, connector type manifold
Metal seal/Rubber seal
VQC4000/5000 Series

- Compact and large flow capacity
- Power consumption
  - Standard: 0.96 W
  - Low wattage type: 0.4 W
- A wide variety of wiring configurations
- IP67 on/off switch compatible
- On-line configuration tool

For complete units (valves and manifold) please use our Valve Configurator online (available at www.smc.eu)

Positioners

This is an assembly comprising of SMC’s rotary positioner mounted onto an ISO15552 tie-rod cylinder. Ideal for use in advanced cylinder applications that require intermediate positions within the stroke length.

Positioners can be controlled by either an electrical or pneumatic signal, providing the right solution for your requirements.

Electro-pneumatic 4…20mA or Pneumatic positions 20…100kPa (3-15psi).

<table>
<thead>
<tr>
<th>STROKE</th>
<th>Ø50</th>
<th>100</th>
<th>125</th>
<th>150</th>
<th>180</th>
<th>200</th>
<th>250</th>
<th>300</th>
<th>350</th>
<th>400</th>
<th>500</th>
<th>600</th>
<th>700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø250</td>
<td>200</td>
<td>300</td>
<td>400</td>
<td>500</td>
<td>600</td>
<td>700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ø250</td>
<td>200</td>
<td>300</td>
<td>400</td>
<td>500</td>
<td>600</td>
<td>700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Options available via Request For Special
- Reverse operation
- Piping and fittings in stainless steel
- Double rod
- Non-standard strokes
- Rod boot
- YCA Change of rod end shape
- YCA With heavy duty scraper
- XCB8 Hard chrome plated stainless steel piston rod
- L100 booster relay – to increase the speed of large bore actuators
- E200 series lock-up actuators – comply with ISO 13849-2 2012
- Different cylinder series - CP06-C, CS1, CS2

Any intermediate strokes will be handled separately using the RFS process.

Product indications

- New Products – Symbol for all New Products launched to the market in the past 2 years
- Enhanced products – These are improved versions of existing products. Products that our engineers have made more compact, lighter, with improved materials.

- Range extensions – This includes products that incorporate added features to cover more of your applications. New sizes, more mounting options, further communication protocols.

QR Codes
Look for the QR Codes to access additional product information via your smartphone quickly and comfortably.
Customised Complete Solutions from SMC

- Convert fixed costs to variable costs
- Reduce your inventory and supplier list
- Gain time to focus on your core business competencies
- Use SMC’s expertise for a custom-built solution, designed and manufactured in South Africa

When you’ve invested in automation as part of your production system or machine build, you will more than likely need an equally high-quality control system to ensure everything runs smoothly.

You could build it yourself, buying from several suppliers for the different components, employing someone to consolidate the deliveries of components, design, build and test it.

Or you could just let SMC’s dedicated team of control system specialists handle the whole job for you.

We’ll work with you to design and build a complete control solution.

Leave it to us to work with third party suppliers so that you can focus on your core business activities. The unrivalled expertise at our facility in Midrand can deliver the simplest or most complex of assemblies, in the quantities you need.

Every panel is assembled by hand and rigorously tested in our manufacturing facility, to the exacting standards you’d expect from the world-leading expert in pneumatics.