



Expertise – Passion – Automation



Selected products for the
Food & Packaging Industry

SHOW GUIDE

Air cylinder

CG1 Series



- ∞ Clean line
- ∞ A substantial reduction in overall length compared to tie rod designed cylinders
- ∞ Male and female rod end available as standard

Single acting
CG1 Series



Direct mount
CG1R Series



Water resistant
CG1□_V Series



Non-rotating rod
CG1K Series



With end lock
CG1 Series



Stainless steel cylinder

CJ5/CG5 Series



- ∞ SUS304 - stainless steel
- ∞ Special scrapers provide optimum piston rod sealing
- ∞ Seals either NBR or FKM
- ∞ FDA approved grease suitable for food processing applications
- ∞ CG5 can be disassembled, therefore maintenance-friendly ø20-ø40

Centring unit

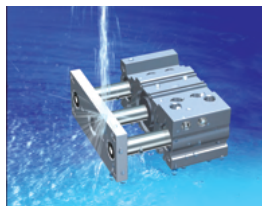
MACM Series



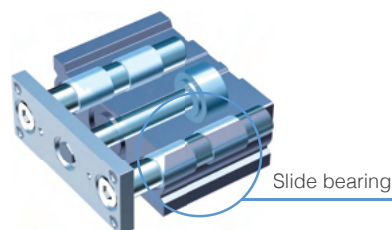
- ∞ Heavy workpieces can be aligned and positioned with small cylinders
- ∞ Max. allowable load weight up to 1000 kg
- ∞ Workpieces can be moved in any direction and even rotated 360°
- ∞ Built-in air locking mechanism
- ∞ External photo sensor can be mounted
- ∞ 4 types of table material can be selected
- ∞ Table centre movable range up to Ø 100 mm.

Compact guide water resistant cylinder

MGPM Series MGPM□_V^R Series



– SLIDE BEARING MGPM Series
Suitable for lateral load applications
such as a stopper where shock is
applied.



Slide bearing

- ∞ Ideal for use in a machine tool environment exposed to coolants.
- Applicable for use in an environment with water splashing such as food processing and car wash equipment, etc.

Hygienic Design Cylinder

HY Series



- ∞ Grease for food (NSF-H1 certified) is available
- ∞ External seal material: Choice of NBR or FKM
- ∞ Mounting section: Conforms to ISO/VDMA standard. (Series HYC)
- ∞ Water resistant cylinder
- ∞ Five times increase in service life compared to conventional model



Series HYB



Series HYC



Series HYQ



Series HYG

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:
 - 10 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:
 - 10 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, body ported bar stock type; Individual wiring

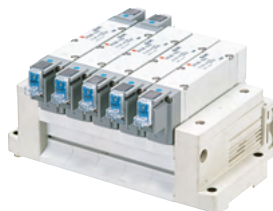
SY3000/5000/7000/9000 Series



- ⊗ Superior service life - at least 50 m. switching cycles
- ⊗ Pilot air model available
- ⊗ Body ported type
- ⊗ With changeable fittings set for port A and B
- ⊗ Low power consumption 0.35 W with 24 VDC
- ⊗ Can be directly controlled by SPS
- ⊗ 10 ms response time
- ⊗ Plug combinations: 2 pin plug model with light/surge voltage suppressor integrated into plug body (miswiring protection) DIN connector for IP65 (only with valve sizes 5000/7000/9000).

5 port solenoid valve, base mounted. Manifold type, stacking type, individual wiring

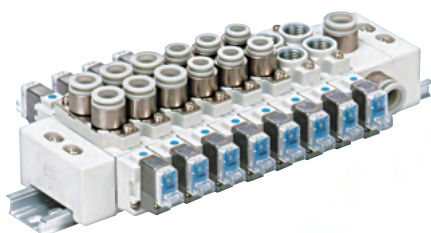
SY3000/5000/7000/9000 Series



- Body design for base mounting
- Low power consumption 0.35 W with 24 VDC (With indicator light: 0.4 W)
- Can be directly controlled by PLC
- 35 ms response type (2 position with light/surge voltage suppressor)
- 2 pin miniature socket protects against miswiring
- Long service life of at least 50 million switching cycles.

5 port solenoid valve, cassette type

SY3060/5060/7060 Series



- ⊗ Valve block easy to expand and disassemble
- ⊗ Reduced cost through a combination of valve and manifold
- ⊗ Valve width 10.5/16/19 mm
- ⊗ Minimal weight means it can be mounted directly to the consumer
- ⊗ 0.35 W power consumption (with indicator light: 0.4 W)
- ⊗ Can be directly controlled by PLC
- ⊗ 10 ms response time (SY3000)
- ⊗ New gasket provides superior condensate resistance
- ⊗ Manual override non-locking type as standard
- ⊗ Replacement fittings mean cylinder ports are easy to change
- ⊗ Minimum operating life of 50 million switching cycles
- ⊗ Common exhaust type pilot air, individual SUP/EXH block assembly, SUP/EXH passage block
- ⊗ Modern design.

Polyurethane tubing

TU Series

Ø : 2 • 4 • 6 • 8 • 10 • 12 • 16 mm.



TU 0425 B - 100
① ② ③

① Tubing model

Symbol	O.D. x I.D.
TU0212	Ø 2 x Ø 1.2
TU0425	Ø 4 x Ø 2.5
TU0604	Ø 6 x Ø 4
TU0805	Ø 8 x Ø 5
TU1065	Ø 10 x Ø 6.5
TU1208	Ø 12 x Ø 8
TU1610	Ø 16 x Ø 10

1) Ø 2 only available in black, blue, white, red, yellow, green and clear.
Ø 16 only available in

Customer benefits

- Maximum design flexibility thanks to a wide range of colours
- Easy use in narrow spaces due to the flexibility.

③ Length per roll

Symbol	Length
20	20 m roll
100	100 m roll

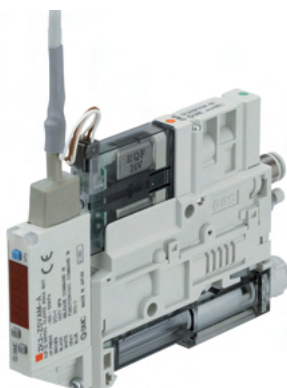
1) TU1610□ - 100 is reel

② Colour

Symbol	Colour	Symbol	Colour
B	Black	G3	Dark green
W	White	GR1	Grey
R	Red	GR2	Light grey
BU	Blue	P1	Neon pink
Y	Yellow	PU1	Solid purple
G	Green	PU2	Clear purple
	Clear	R1	Solid red
YR	Orange	R2	Clear red
BU1	Solid blue	S1	Silver
BU2	Clear blue	Y1	Solid yellow
BU3	Medium blue	Y2	Clear yellow
BR	Brown	Y3	Neon yellow
G1	Solid green	YR1	Clear orange
G2	Clear green	YR2	Neon orange
G3	Neon green		

Vacuum unit

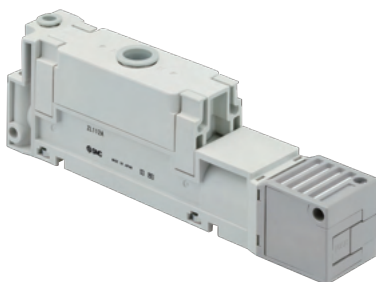
ZK2 Series



- ∞ Energy saving switch turns off supply valve when vacuum level is reached reducing air consumption. Vacuum level is kept by check valve. Supply valve is turned on again when the vacuum lowers to the set pressure
- ∞ Two-stage ejector reduces air consumption and increases suction flow rate
- ∞ Supply valve with self-holding function
- ∞ Interlink between supply valve and release valve
- ∞ High-noise reduction silencer:
 - Noise: As low as 46 dB
 - Suction flow rate: Improved by up to approx. 20 %

Multistage ejector

ZL Series



- ∞ Compact design
- ∞ 3 different pressure sensor options
 - Ejector + vacuum switch (digital)
 - Ejector + vacuum gauge
 - Vacuum port adaptor
- ∞ 3 stage ejector with 10% less air consumption
- ∞ Nozzle diameter 1.2 mm
- ∞ Suction capacity 100 l/min or 200 l/min with ZL212
- ∞ Different mounting options

Blow gun

VMG Series



- ∞ Ergonomically designed body with patented valve design and KN nozzles produces considerably reduction in pressure losses
- ∞ 20 % reduction in power consumption with the SMC "Blow gun" + "S coupler" + "Coil tube"
- ∞ 2 connection options
- ∞ Minimum actuation force required.

Air nozzles KN Series



Male thread nozzle



High efficiency nozzle



Long copper pipe nozzle



Flat type vacuum pad

ZP3P Series



- ∞ **Material:** Silicone rubber compliant with the FDA 21CFR§177.2600 elution test. Colour: Blue. Easily to distinguishable by colour during contamination inspection
- ∞ **Pad style:** Good for film packaging applications where the shape of the workpiece changes easily when being lifted. Reduced leakage: Sealing skirt design, has better performance even for thin films. Reduction of wrinkles made on thin workpieces (film, vinyl, etc.) during adsorption
- ∞ **Applications:** Food/beverage, medical/pharmaceutical and packaging industries.

Refrigeration air dryer

IDFA Series



- ∞ State of the art design ensures a constant 3 °C pressure dew point
- ∞ High efficiency heat exchanger
- ∞ Environmentally ozone friendly R134a and R407C refrigerant
- ∞ Conforms to stringent ISO 8573-1 standards (-, 4, -)
- ∞ Simple control system, incorporating an easy to read evaporator gauge
- ∞ Stainless steel heat exchanger providing long life and low pressure drops
- ∞ Compact design for ease of installation

Circulating fluid temperature controller, thermo-chiller compact type

HRS Series



- ∞ Temperature stability: ± 0.1 °C
- ∞ Temperature range setting: 5 to 40 °C
- ∞ Lightweight 43 to 73 kg
- ∞ Easy maintenance: tool-less maintenance of filter
- ∞ Self diagnosis function and check display
- ∞ Convenient functions:
 - Timer operation function
 - Low tank level detecting function
 - Power failure auto-restart function
 - Anti-freezing operation function
- ∞ Communication function: RS232C, RS485 and contact I/Os as standard
- ☀ HRS030 and HRS060 models now available.

Air filter + Regulator + Lubricator

AC Series



- ∞ New and existing modular types can be connected
- ∞ Reduced time for mounting
- ∞ Interchangeable with the previous model
- ∞ Transparent bowl protection for a better visibility and security
- ∞ Bowl variations: polycarbonate, nylon, metal and metal with level gauge
- ∞ Max. operating pressure 1.0 MPa
- ∞ Temperature range -5 to 60 °C
- ☀ High and low temperature, high pressure and other options available.

Filter-regulator + Lubricator

AC□□A Series



- ∞ New and existing modular types can be connected
- ∞ Reduced time for mounting
- ∞ Interchangeable with the previous model
- ∞ Transparent bowl protection for a better visibility and security
- ∞ Bowl variations: Polycarbonate, Nylon, Metal and Metal with level gauge
- ∞ Max. operating pressure 1.0 MPa
- ∞ Temperature range -5 to 60 °C.

Booster regulator

VBA Series



- ∞ Increases the main circuit pressure by up 4 times
- ∞ No cooling required
- ∞ Easy installation
- ∞ No other energy source required (no power supply)
- ∞ Operating temperature: 2~50 °C
- ∞ Input pressure: 0.1~1 MPa
- ∞ Mounting position: horizontal.

Fan type ionizer

IZF10/10R Series



- ∞ Offset voltage (ion balance): Within ± 13 V
- ∞ Compact design (Depth x Width x Height): 39 mm x 80 mm x 110 mm
- ∞ Weight: 280 g (IZF10), 260 g (IZF10R)
- ∞ 2 types of fans available (IZF10):
 - Fast deionising type: 1.5 seconds deionising time
 - Low noise type: 48 dB(A)
- ∞ Alarm functions: high-voltage error, electrode needle contamination detector
- ∞ Flow rate adjustment function (IZF10R)

Fan type ionizer

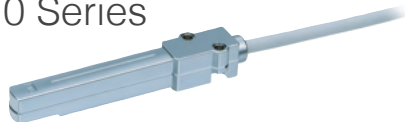
IZF21/31 Series



- ∞ Offset voltage (ion balance): ± 5 V
- ∞ Extensive and rapid static neutralisation:
 - IZF21: up to 1800 l/min (flow rate), as little as 1.0 s (discharge time)
 - IZF31: up to 4400 l/min (flow rate), as little as 0.5 s (discharge time)
- ∞ An optional adjustable louver allows for adjusting the static neutralisation area
- ∞ Improved performance and easier maintenance through several functions and features
- ∞ Modular, compact and slim design - 40 mm thickness.

Electrostatic sensor

IZD10 Series



- ∞ Potential measurement:
 - ± 20 kV (detected at a 50 mm distance)
 - ± 0.4 kV (detected at a 25 mm distance)
- ∞ Detects the electrostatic potential and outputs an analogue voltage
- ∞ Small and easy to mount.

Electrostatic sensor monitor

IZE11 Series



- ∞ Output: switch output x 2 + Analogue output (1 to 5 V, 4 to 20 mA)
- ∞ 2-colour display (red and green)
- ∞ Display accuracy: ± 0.5 % F.S. ± 1 digit or less
- ∞ Detection distance correction function (adjustable in 1 mm increments)
- ∞ Supports two types of sensors
- ∞ Connection by connector:
 - Connector for power supply/output
 - E-con connector: Connector to sensor.

Handheld electrostatic meter

IZH10 Series



- ∞ Easy to use
- ∞ Compact and lightweight
- ∞ Rated charge amount range: ± 20.0 kV
- ∞ Functions:
 - Peak and bottom display function
 - Zero clear function
 - Auto power-off function
 - Low battery indication
 - Backlight

Nozzle type ionizer

IZN10E Series



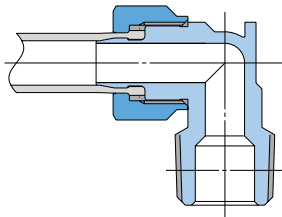
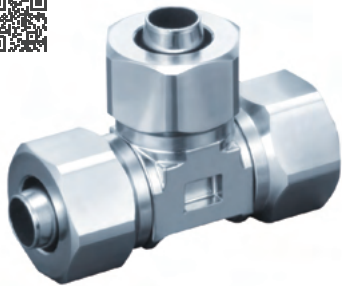
- ∞ Different nozzles to adapt several applications: IZN10E (standard type) and IZN10E-X367 (with right angles and 360° rotation):
 - Energy saving static electricity elimination nozzle
 - High flow static electricity elimination nozzle
- ∞ Offset voltage (ion balance): ± 10 V (Energy saving), ± 15 V (Large flow)
- ∞ Compact and slim design
- ∞ With built-in power supply substrate
- ∞ Easy maintenance: electrode needle contamination detector with easy replacement of the cartridge
- ∞ Mounting variations: direct mount, bracket mount
- ∞ External switch input function (2 inputs). Switch output: PNP/NPN.

Stainless steel 316 insert fittings

KFG2 Series

Tube O.D.: Ø 4 • 6 • 8 • 10 • 12 • 16 mm

Thread: R 1/8 • 1/4 • 3/8 • 1/2



- ≈ Material: Stainless Steel 316
- ≈ Operating fluid temperature - 65 to 260 °C
- ≈ Can be used with steam
- ≈ Grease-free
- ≈ Applicable tubing material: FEP, PFA, modified PTFE nylon, soft nylon, polyolefin, polyurethane, soft polyurethane, hard polyurethane, soft polyolefin, antistatic soft nylon, antistatic polyurethane
- ≈ Swivel elbow rotary seal: Special FKM
- ≈ Operating pressure range -100 KPa to 1 MPa.

Sleeveless sealing structure makes replacement parts for maintenance unnecessary.

Metal one-touch fittings

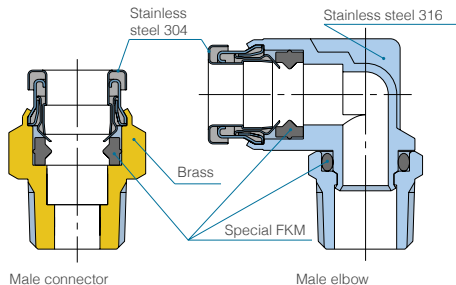
KQB2 Series

Tube O.D.: Ø 3.2 • 4 • 6 • 8 • 10 • 12 • 16 mm

Thread: M5 • R, G, 1/8 • 1/4 • 3/8 • 1/2



- ≈ Material:
 - Metal parts: Stainless steel 304, 316, C3604, brass
 - Seal parts: Special FKM
- ≈ Can be used with air, water
- ≈ Operating fluid temperature: -5 to 150 °C
- ≈ Grease-free
- ≈ Applicable tubing material: FEP, PFA, nylon, soft nylon, polyurethane, polyolefin.

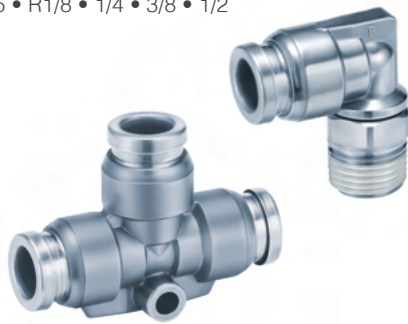


Stainless steel 316 one-touch fittings

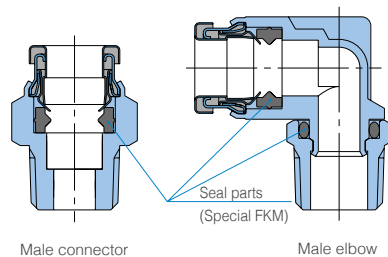
KQG2 Series

Tube O.D.: Ø 3.2 • 4 • 6 • 8 • 10 • 12 • 16 mm

Thread: M5 • R1/8 • 1/4 • 3/8 • 1/2



- ≈ Material:
 - Metal parts: Stainless steel 316
 - Seal parts: Special FKM
- ≈ Can be used with air, water and steam
- ≈ Operating fluid temperature: -5 to 150 °C
- ≈ Grease-free
- ≈ Applicable tubing material: FEP, PFA, nylon, soft nylon, polyurethane, polyolefin
- ≈ Operating pressure range -100 KPa to 1 MPa.



Fluoropolymer tubing (PFA) metric size

TLM Series

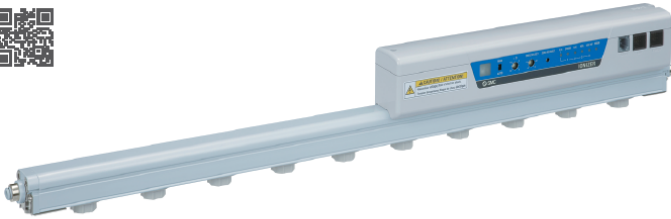
Ø : 2 • 3 • 4 • 6 • 8 • 10 • 12 • 16 • 19 • 25 mm



- ≈ Chemically compatible with more than 250 fluids
- ≈ Compatible with the §177-1550 elution test approved by the United States FDA
- ≈ Max. operating temperature: 260 °C
- ≈ 13 size variations (metric size)
- ≈ 4 Colour variations
- ≈ A simple and visual solution to the maintenance works.

Bar type ionizer

IZS40/41/42 Series



- Standard type Series IZS40
 - Simple operation: Only power ON/OFF required
- Feedback sensor type Series IZS41
 - Feedback sensor enables the rapid elimination of static electricity
 - Energy saving run mode
 - Continuous neutralization run mode
- Dual AC type Series IZS42
 - Reduced potential amplitude: 25 V or less
- Reduction of adjustment and maintenance time using an auto balance sensor:
 - Built-in type (Standard): The sensor is installed within the ionizer body
 - High accuracy type (Option): "Ion balance adjustment at external signal input" or "Ion balance adjustment at any time" can be selectable
- Setting ionizer with remote control
 - Can recognize and control up to 16 ionizers through address setting
- Low maintenance electrode cartridges
- Transition wiring may be used.

Separate controller bar type ionizer

IZT40/41/42 Series



- ∞ Standard type IZT40 Series: Simple operation: Can be controlled by powering the ionizer ON
- ∞ AC Type IZT41 Series: Rapid neutralisation of static electricity, as fast as 0.1 s
- ∞ Dual AC type IZT42 Series: Reduced potential amplitude: 25 V or less
- ∞ Ion balance: Within ± 30 V
- ∞ Separate controller and bar:
 - Bar can be mounted in a limited space
 - Easily monitor and adjust bars installed in a place which cannot be accessed
- ∞ Up to 4 bars can be connected to one controller
- ∞ Compact design (Height x Width): 37 mm x 30 mm
- ∞ Multiple alarms, functions and LED display (IZT41/42)
- ∞ Low maintenance electrode cartridges.

Product indications

- ∞ **New Products** – Symbol for all New Products launched to the market in the past 2 years.
- ∞ **Energy efficiency** – Symbol for those products that save energy and more importantly save money.
- ∞ **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 smart phone quickly and comfortably.

SMC Corporation South Africa (Pty) Ltd.

Unit 4
Midrand Central Business Park
1019 Morkels close
Midrand
Telephone: +27 10 900 1233

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



www.smcza.co.za